

# AN *XMM-NEWTON* SURVEY OF THE SOFT X-RAY BACKGROUND. II. AN ALL-SKY CATALOG OF DIFFUSE O VII AND O VIII EMISSION INTENSITIES

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## ABSTRACT

We present an all-sky catalog of diffuse O VII and O VIII line intensities, extracted from archival *XMM-Newton* observations. This catalog supersedes our previous catalog, which covered the sky between  $l = 120^\circ$  and  $l = 240^\circ$ . We attempted to reduce the contamination from near-Earth solar wind charge exchange (SWCX) emission by excluding times of high solar wind proton flux from the data. Without this filtering we were able to extract measurements from 1868 observations. With this filtering, nearly half of the observations became unusable, and only 1003 observations yielded measurements. The O VII and O VIII intensities are typically  $\sim 2$ – $11$  and  $\lesssim 3$  photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$  (line unit, L.U.), respectively, although much brighter intensities were also recorded. Our data set includes 217 directions that have been observed multiple times by *XMM-Newton*. The time variation of the intensities from such directions may be used to constrain SWCX models. The O VII and O VIII intensities typically vary by  $\lesssim 5$  and  $\lesssim 2$  L.U. between repeat observations, although several intensity enhancements of  $> 10$  L.U. were observed. We compared our measurements with models of the heliospheric and geocoronal SWCX. The heliospheric SWCX intensity is expected to vary with ecliptic latitude and solar cycle. We found that the observed oxygen intensities generally decrease from solar maximum to solar minimum, both at high ecliptic latitudes (which is as expected) and at low ecliptic latitudes (which is not as expected). The geocoronal SWCX intensity is expected to depend on the solar wind proton flux incident on the Earth and on the sightline's path through the magnetosheath. The intensity variations seen in directions that have been observed multiple times are in poor agreement with the predictions of a geocoronal SWCX model. We found that the oxygen lines account for  $\sim 40$ – $50\%$  of the  $3/4$  keV X-ray background that is not due to unresolved active galactic nuclei, in good agreement with a previous measurement. However, we found that this fraction is not easily explainable by a combination of SWCX emission and emission from hot plasma in the halo. We also examined the correlations between the oxygen intensities and Galactic longitude and latitude. We found that the intensities tend to increase with longitude toward the inner Galaxy, possibly due to an increase in the supernova rate in that direction or the presence of a halo of accreted material centered on the Galactic Center. The variation of intensity with Galactic latitude differs in different octants of the sky, and cannot be explained by a single simple plane-parallel or constant-intensity halo model.

**Keywords:** Galaxy: halo — solar wind — surveys — X-rays: diffuse background — X-rays: ISM

## 1. INTRODUCTION

The soft X-ray background (SXRb) is the diffuse X-ray emission observed in all directions in the  $\sim 0.1$ – $10$  keV band (McCammon & Sanders 1990). At energies  $\gtrsim 1$  keV, this emission is dominated by unresolved emission from distant active galactic nuclei (AGN; e.g., Brandt & Hasinger 2005). Below  $\sim 1$  keV, Galactic line emission becomes important, and dominates at the lowest energies. Some of this line emission comes from hot interstellar gas – possible unabsorbed emission from  $\sim$ million-degree gas in the Local Bubble (LB; Sanders et al. 1977; Cox & Reynolds 1987; McCammon & Sanders 1990; Snowden et al. 1990; although see also Welsh & Shelton 2009), and emission from  $\sim 1$ – $3$  million-degree gas in the Galactic halo attenuated by the Galaxy's H I (Burrows & Mendenhall 1991; Snowden et al. 1991, 1998, 2000; Wang 1998; Pietz et al. 1998; Kuntz & Snowden 2000; Smith et al. 2007; Galeazzi et al. 2007; Henley & Shelton 2008; Lei et al. 2009; Yoshino et al. 2009; Gupta et al. 2009;

Henley et al. 2010).

In addition to the emission from hot interstellar gas, X-ray line emission is produced within our solar system, as a consequence of charge exchange reactions between solar wind ions and neutral hydrogen and helium atoms. Solar wind charge exchange (SWCX) reactions can occur in the heliosphere between solar wind ions and neutral hydrogen and helium atoms that have entered the heliosphere from interstellar space (e.g., Cravens 2000; Robertson & Cravens 2003a; Koutroumpa et al. 2006). It can also occur in the Earth's exosphere, beyond the magnetopause, between solar wind ions and geocoronal neutral hydrogen atoms (e.g. Robertson & Cravens 2003b). Charge exchange reactions can also occur in the atmospheres of other planets and around comets (e.g., Cravens 2002; Wargelin et al. 2008), but the resulting emission is sufficiently localized as to not affect the *XMM-Newton* data set. The heliospheric emission is in general much brighter than the geocoronal emission, although the geocoronal and/or near-Earth heliospheric SWCX emission can exhibit bright enhancements on timescales of  $\sim$ hours–days, often in association

with variations in the solar wind (Cravens et al. 2001; Snowden et al. 2004; Fujimoto et al. 2007; Carter & Sembay 2008; Carter et al. 2010; Ezoe et al. 2010, 2011). Longer-term variations in SWCX line intensities, on timescales of  $\sim$ days–years, have also been observed (Koutroumpa et al. 2007; Kuntz & Snowden 2008; Henley & Shelton 2008, 2010). These variations may include variations in the global heliospheric SWCX emission, which is expected to vary slowly with the solar cycle (Robertson & Cravens 2003a; Koutroumpa et al. 2006), as well as variations in the geocoronal and near-Earth heliospheric emission. In general it is difficult to disentangle these various effects. From the point of view of someone interested in the hot Galactic gas, the SWCX emission is a time-varying contaminant of the SXRb emission.

The SXRb has been surveyed several times with rocket- and satellite-borne proportional counters (McCammon et al. 1983; Marshall & Clark 1984; Garmire et al. 1992; Snowden et al. 1997). While the data from these surveys were essential to establishing our current picture of the SXRb and the hot interstellar medium (ISM), these data are of rather low spectral resolution ( $E/\Delta E \sim 1\text{--}3$ ). The CCD cameras on board *Chandra*, *XMM-Newton*, and *Suzaku* offer the ability for higher-resolution spectroscopy (e.g.,  $E/\Delta E \sim 15$  at 1 keV for the *XMM-Newton* EPIC-MOS<sup>1</sup>). With these cameras, some emission features in SXRb spectra can be resolved, allowing one to measure SWCX emission line strengths (Wargelin et al. 2004; Snowden et al. 2004; Fujimoto et al. 2007; Henley & Shelton 2008, 2010; Koutroumpa et al. 2009a, 2011; Carter et al. 2010; Ezoe et al. 2011) or the temperature of the halo plasma (Smith et al. 2007; Galeazzi et al. 2007; Henley & Shelton 2008; Lei et al. 2009; Yoshino et al. 2009; Gupta et al. 2009; Henley et al. 2010).

Prior to this project, CCD-resolution spectra of the SXRb had been presented for only a few tens of directions. In order to greatly increase the number of directions for which good-quality SXRb spectra are available, we have carried out a survey of the SXRb using archival data from the EPIC-MOS cameras (Turner et al. 2001) on board *XMM-Newton* (Jansen et al. 2001). A key aspect of this survey is that we do not use only blank-sky observations. Any observation in which the target source is not too bright or too extended can potentially be used – the target source is excised, and an SXRb spectrum extracted from the remainder of the field. The first results from this survey were published in Henley & Shelton (2010, hereafter Paper I). We presented SXRb O VII and O VIII intensities extracted from 590 *XMM-Newton* observations between  $l = 120^\circ$  and  $l = 240^\circ$  (i.e., one third of the sky). We concentrated on these lines as they dominate the Galactic SXRb emission in the *XMM-Newton* bandpass (McCammon et al. 2002). Their intensities showed considerable variation over the sky, emphasizing the importance of extracting SXRb spectra for as many directions as possible. Here, we complete our survey and present an all-sky catalog of SXRb O VII and O VIII intensities, comprising measurements from 1880 *XMM-Newton* observations. Note that, in the course of

completing our survey, we have completely reprocessed the observations that featured in Paper I. We also now include estimates of the systematic errors associated with our spectral analysis. The current catalog therefore supersedes, rather than supplements, Paper I.

The goal of this survey is to improve our understanding of the hot gas in our Galaxy. We have already made progress in this direction by comparing spectra from Paper I with the predictions of various physical models (Henley et al. 2010). These observations favor a Galactic fountain origin for the hot halo gas, in which gas is driven from the disk into the halo by supernovae (SNe; Shapiro & Field 1976; Bregman 1980; Joung & Mac Low 2006). This new, larger data set will allow us to further test halo models, and investigate how the halo emission varies over the sky. In addition, our survey includes 217 sightlines for which there are multiple observations, separated in time by days to years. In a given direction, any variation in the observed SXRb spectrum is due to variation in the SWCX emission. Hence, a set of observations of the same direction can be used to constrain SWCX models, which are essential for obtaining accurate spectra of the hot Galactic gas from SXRb observations.

The remainder of this paper is arranged as follows. In Section 2 we outline the data processing (see Paper I for more details). In Section 3 we present our oxygen intensity measurements. We discuss our results in Section 4. In particular, in Section 4.1 we discuss the implications of our results for SWCX. In Section 4.2 we discuss the oxygen lines’ contribution to the 3/4 keV SXRb, and the implications for the sources of the SXRb emission. In Section 4.3 we discuss the spatial variation of the oxygen intensities, and the implications of these results for the halo. We summarize our results in Section 5.

## 2. DATA REDUCTION

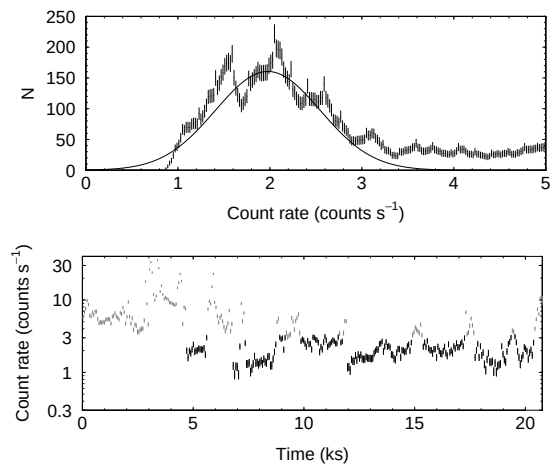
The data reduction procedure is described in full in Paper I, to which the reader is referred for more details. Here, we outline the main steps, and also point out any differences from Paper I. The results presented here were obtained from data reduced with the *XMM-Newton* Science Analysis System<sup>2</sup> (SAS) version 11.0.1, which includes the *XMM-Newton* Extended Source Analysis Software<sup>3</sup> (*XMM-ESAS*; Kuntz & Snowden 2008; Snowden & Kuntz 2011). However, much of the preliminary inspection of the data (e.g., for identifying unusable CCDs and for determining source exclusion regions; see below) was carried out on data processed with earlier versions of SAS. Although the latest version of *XMM-ESAS* can process data from the EPIC-pn camera (Strüder et al. 2001), it only became available after the current data processing was well under way, and so we consider only EPIC-MOS data here.

We used the *XMM-ESAS* calibration files that were current as of 2011 April 01. After we had completed most of the processing, we learned that these files had been superseded. We reprocessed a random subset of our observations with the newer calibration files (released on 2011 May 16), and found that the effect on our oxygen intensity measurements was not significant, compared with the statistical and systematic uncertainties. We there-

<sup>1</sup> [http://xmm.esa.int/external/xmm\\_user\\_support/documentation/uhb/node14.html](http://xmm.esa.int/external/xmm_user_support/documentation/uhb/node14.html)

<sup>2</sup> <http://xmm.esac.esa.int/sas/>

<sup>3</sup> [http://heasarc.gsfc.nasa.gov/docs/xmm/xmmhp\\_xmmesas.html](http://heasarc.gsfc.nasa.gov/docs/xmm/xmmhp_xmmesas.html)



**Figure 1.** Histogram of MOS1 count-rates (top) and MOS1 light curve (bottom) for the 2.5–12 keV band, from obs. 0051760201 (an observation for which `mos-filter` yielded  $\geq 5$  ks of good time, despite the presence of severe soft-proton contamination). The curve in the upper panel is the Gaussian that was fitted to the histogram of count-rates. Times whose count-rates differed by more than  $1.5\sigma$  from the mean of this Gaussian were rejected; such times are plotted in gray in the lower panel.

fore decided not to reprocess our entire data set with the newer calibration files.

### 2.1. Observation Selection and Initial Data Processing

As of 2010 August 04, there were 5698 publicly available *XMM-Newton* observations with at least some MOS exposure. We processed each observation with the SAS `emchain` script, excluding observations that had been rejected in Paper I due to obvious contamination from soft protons impinging upon the detector, or due to bright or extended sources in the field of view. This script produces a calibrated events list for each MOS exposure. We then used the *XMM-ESAS* `mos-filter` script to identify and remove times affected by soft-proton flaring. For each events list, this script creates a histogram of count-rates from the 2.5–12 keV light curve, using 60-s bins, fits a Gaussian to the peak of this histogram, and rejects all times whose count-rates differ by more than  $1.5\sigma$  from the mean of the Gaussian. (Although there are some superficial differences here from the description in Paper I, these are solely due to changes in the way *XMM-ESAS* is organized. These first steps in the processing are essentially identical to those used in Paper I.)

We discarded all exposures that did not have at least 5 ks of good time after the above filtering, and then discarded any observation that did not have at least one good MOS1 exposure and at least one good MOS2 exposure. We then inspected the light curves and histograms of count-rates produced by `mos-filter`, checking for observations that were badly affected by soft protons, but for which `mos-filter` yielded  $\geq 5$  ks of good time. Such observations are generally apparent from the non-Gaussianity of the histogram of count-rates. Figure 1 shows an example – despite the clear soft-proton contamination, `mos-filter` yielded  $\approx 12$  ks of good time for this observation. Observations like this were rejected.

For each remaining observation, we examined the cleaned images produced by `mos-filter`. Because our ultimate goal was to extract SXR spectra, we rejected

observations whose fields contained large diffuse sources (e.g., galaxy clusters) that filled all or most of the field of view, or very bright sources for which the emission in the wings of the point spread function (PSF) would dominate over the SXR emission. We also rejected observations that exhibited bright arcs in the field of view, due to stray-light X-rays from a bright source outside the field of view. The above-described rejections reduced the original set of 5698 observations to 2611, a 54% attrition rate (somewhat higher than the  $\sim 45\%$  rate in Paper I).

### 2.2. Removal of Bright or Extended Sources, and of Unusable CCDs

The visual inspection of the cleaned images served two further purposes. We identified bright and/or extended sources that would not be adequately excised by the automated point source removal procedure described in Section 2.3, below. Such sources were removed using circular exclusion regions. These regions were generally positioned by eye, although if the source to be excluded was the observation target, we used the pointing direction from the events list header to center the exclusion region. The radii of these regions were also chosen by eye, although for some sources we used the radial surface brightness profile to aid us. As noted in Paper I, we erred on the side of choosing larger exclusion radii, at the expense of reducing the number of counts in the SXR spectra.

The final purpose of the visual inspection of the images was to identify CCDs that should be ignored in the subsequent processing. We ignored CCDs that were in window mode, CCDs that were missing from the images (e.g., the MOS1-6 CCD after its failure in 2005 March), and CCDs that clearly exhibited the anomalous state identified by Kuntz & Snowden (2008) – such CCDs appear unusually bright in a soft-band (0.2–0.9 keV) X-ray image.

### 2.3. Automated Source Removal

In Paper I, we ran the SAS `edetect_chain` script on each observation to automatically identify point sources for removal. Here, we instead used data from the Second *XMM-Newton* Serendipitous Source Catalogue (2XMM; Watson et al. 2009), specifically the 2XMMi DR3 data release.<sup>4</sup> The advantage of using 2XMM data for the automated source removal is that it means that exactly the same point sources are removed from a set of observations of the same direction, which is not guaranteed if the source detection is run on an observation-by-observation basis.

For each observation, we removed all the sources listed in the catalog within the field of view with 0.5–2.0 keV fluxes  $F_X^{0.5-2.0} \geq 5 \times 10^{-14}$  erg cm<sup>-2</sup> s<sup>-1</sup>, determined by combining the fluxes for 2XMM bands 2 and 3. This is the same flux level to which sources were removed in Paper I; this flux threshold was originally chosen because it is the approximate level to which Chen et al. (1997) removed sources when they determined the spectrum of the extragalactic background that we used in the Paper I spectral analysis. However, as described in Section 3.1, below, we used a slightly different model for modeling the extragalactic background in this paper.

<sup>4</sup> <http://xmmssc-www.star.le.ac.uk/Catalogue/2XMMi-DR3/>

We used circles of radius  $50''$  to excise the above-detected sources. Such source exclusion regions enclose  $\approx 90\%$  of each source’s flux (calculated from the best-fit King profiles to the MOS telescopes’ PSFs; see the *XMM-Newton* Calibration Access and Data Handbook<sup>5</sup>). Note that, in Paper I, we used the SAS `region` task to define regions that enclosed 90% of each source’s flux. However, this task uses a more centrally peaked model of the PSF than the King profile, and thus appears to underestimate the required source exclusion radii ( $30''$ – $40''$ , versus  $\approx 50''$ ).

#### 2.4. Reducing SWCX Contamination

In an attempt to reduce the contamination from SWCX produced near the Earth, we removed the portions of the *XMM-Newton* data taken when the solar wind proton flux exceeds  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$  (see Paper I). As in Paper I, we used data from OMNIWeb,<sup>6</sup> which combines in situ solar wind measurements from several satellites. The data that we used are mainly from the *Advanced Composition Explorer* (ACE) and *Wind*. The data from OMNIWeb for these satellites have been time-shifted to the Earth. The OMNIWeb data covering the *XMM-Newton* mission also include data from near-Earth satellites that are not time-shifted, but this lack of time-shifting should not adversely affect our results (see Paper I).

As noted in Paper I, this filtering by solar wind proton flux resulted in, for some observations, the amount of usable observation time falling below our 5 ks threshold (see Section 2.1). After carrying out this filtering, the number of usable observations fell from 2611 to 1435. Below, we present the results obtained both with and without this filtering.

Although this proton flux filtering is the only step that we take during our data processing that is aimed at reducing SWCX contamination, we also take steps during our post-processing analysis aimed at culling contaminated observations. For this, we take advantage of the results of Carter et al. (2011), who describe a method for identifying *XMM-Newton* observations that are contaminated by SWCX emission (see also Carter & Sembay 2008). An observation is identified as SWCX-contaminated if it exhibits variation in a narrow energy band spanning the O VII and O VIII lines that is uncorrelated with variation in a higher-energy continuum-dominated band. This method is sensitive in particular to geocoronal SWCX emission that varies significantly during the course of an observation.

Rather than trying to emulate the Carter et al. method, we will make use of Table A.1 in Carter et al. (2011), which identifies 103 *XMM-Newton* observations affected by geocoronal SWCX. When we present our oxygen intensity measurements in Section 3.3, below, we will compare the intensities extracted from the observations flagged by Carter et al. (2011) with those extracted from our survey as a whole. Later, in Section 4, we will discuss various aspects of our results. In certain cases, it will be desirable to reduce the effects of SWCX contamination on our results. In such cases, we will exclude the

observations identified by Carter et al. (2011) as SWCX-contaminated, and will make it clear whether or not we are doing so.

#### 2.5. Spectra, Response Files, and Particle Background

For each exposure of each observation, we extracted an SXR spectrum from the full field of view, minus any excluded sources or CCDs. We extracted the spectra using the *XMM-ESAS mos-spectra* script. This script also created the redistribution matrix files (RMFs) and ancillary response files (ARFs), using the SAS `rmfgen` and `arfgen` tasks, respectively. Note that, because we extract the SXR spectra from the full field of view, our survey is insensitive to structure in the SXR on scales smaller than  $\sim 0.5^\circ$ . Our sensitivity to SXR structure on larger scales depends on the location of the archival *XMM-Newton* observations on the sky, and on our ability to remove the time-variable SWCX contamination.

The extracted spectra consist of the true SXR emission (including SWCX, Galactic, and extragalactic emission), the quiescent particle background (QPB), and residual contamination from soft protons impinging upon the detector that remains despite the cleaning of the data by `mos-filter`. For each extracted spectrum, we subtracted the QPB spectrum, which we calculated using the *XMM-ESAS mos-back* program. The QPB spectra were constructed from a database of filter-wheel-closed data, scaled using data from the regions of the MOS detector outside the field of view (see Kuntz & Snowden 2008 for details). We dealt with the residual soft-proton contamination by including an extra model component in the spectral analysis (see Section 3.1, below).

As noted in Section 2.2, we ignored CCDs that clearly exhibited the anomalous state identified by Kuntz & Snowden (2008). However, it was not always possible to clearly identify anomalous CCDs from a visual inspection of the X-ray images. Originally, we used plots of hardness ratio against count-rate for the unexposed corner pixels (which are produced by the above-described processing) to identify previously unidentified anomalous CCDs (see Paper I). However, the latest version of `mos-back` (included in SAS version 11.0.1) fails if it identifies a CCD in an anomalous state (for some observations, `mos-back` identified anomalous CCDs that we had failed to identify in Paper I). In either case, if a CCD was identified as being in an anomalous state, we ignored that CCD, and re-ran the spectral extraction and QPB calculation for the observation in question.

### 3. OXYGEN LINE INTENSITIES

In this section we present our SXR oxygen intensity measurements. We describe our methods for measuring the oxygen line intensities and for estimating the systematic errors in Sections 3.1 and 3.2, respectively. The main set of results is presented in Section 3.3, while in Section 3.4 we present results for directions that have multiple usable *XMM-Newton* observations. In the subsequent subsections we discuss any differences in our new results from those in Paper I, the possibility of contamination from bright sources and from soft protons, the effect of the proton flux filtering described in Section 2.4, and the sky coverage of our survey.

#### 3.1. Measurement Method

<sup>5</sup> <http://xmm.vilspa.esa.es/external/xmm-sw-cal/calib/documentation/CALHB/node30.html>

<sup>6</sup> <http://omniweb.gsfc.nasa.gov/>

We measured the oxygen line intensities using XSPEC<sup>7</sup> version 12.7.0. The method that we used is almost identical to that used in Paper I. The differences are how we modeled the extragalactic background, and how we modeled the residual soft-proton contamination (see below). We now also include estimates of the systematic errors associated with some of our spectral model assumptions (see Section 3.2, below).

For each observation, we fitted a multicomponent spectral model simultaneously to the 0.4–10.0 keV QPB-subtracted spectra extracted from the usable exposures (in most cases, there was one MOS1 spectrum and one MOS2 spectrum). This model included two  $\delta$ -functions to model the O VII and O VIII  $K\alpha$  emission. The O VII line energy was a free parameter, while the O VIII energy was fixed at 0.6536 keV (from APEC; Smith et al. 2001). This method measures the total observed oxygen line intensities, including foreground SWCX and/or LB emission, and attenuated halo emission, in photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1}$  (hereafter referred to as line units, L.U.). The remaining Galactic line emission was modeled with an absorbed APEC thermal plasma model<sup>8</sup> (Smith et al. 2001) with the oxygen  $K\alpha$  emission disabled (see Lei et al. 2009). We also tried other spectral codes, to estimate the size of the systematic error associated with our choice of code (see Section 3.2, below). The extragalactic background was modeled with an absorbed power-law with a photon index of 1.46 (Chen et al. 1997; see below for discussion of this component’s normalization). From here on we refer to this component as the extragalactic power-law (EPL). The APEC and EPL components were attenuated using the XSPEC *phabs* model (Bałucińska-Church & McCammon 1992; Yan et al. 1998), with the absorbing column  $N_{\text{H}}$  fixed at the H I column density from the LAB H I survey (Kalberla et al. 2005) for the direction of the *XMM-Newton* observation being analyzed. The model also included two Gaussians to model the bright Al-K and Si-K instrumental lines at 1.49 and 1.74 keV (Kuntz & Snowden 2008). See Paper I for more details about these model components. We used Anders & Grevesse (1989) abundances for the APEC and *phabs* model components.

It is possible that, despite the cleaning described in Section 2, some contamination from soft protons impinging upon the detector will remain in the extracted spectra. This contamination manifests itself as excess emission over the EPL at higher energies. Following advice in the *XMM-ESAS* manual (Snowden & Kuntz 2011), we modeled this residual contamination by adding a power-law that was not folded through the instrumental response to the above-described model. We set soft limits on the power-law index at 0.5 and 1.0, and hard limits at 0.2 and 1.3. This is in contrast to Paper I, in which we used a broken power-law with a break at 3.2 keV (Snowden & Kuntz 2007; Kuntz & Snowden 2008) and no constraints on the spectral indices to model the residual soft-proton contamination. This change appeared to have little effect on the results. The parameters of the

soft-proton power-law were independent for each exposure.

The above-described soft-proton contamination makes it difficult to independently constrain the normalization of the EPL, because there is some degeneracy between these two model components at higher energies. In Paper I, we simply fixed the normalization of the EPL at 10.5 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$  (throughout this paper, we specify the normalization of the EPL at 1 keV). This value was found by Chen et al. (1997) from a joint *ROSAT* + *ASCA* spectrum, after a few sources with  $F_{\text{X}}^{0.5-2.0} \gtrsim 5 \times 10^{-14} \text{erg cm}^{-2} \text{s}^{-1}$  were excised from the data. However, as discussed in Paper I, the X-ray source counts from Moretti et al. (2003) imply that the extragalactic background composed of sources with  $F_{\text{X}}^{0.5-2.0} < 5 \times 10^{-14} \text{erg cm}^{-2} \text{s}^{-1}$  should have a lower normalization than this. The integrated 0.5–2.0 keV surface brightness due to sources with  $F_{\text{X}}^{0.5-2.0} < 5 \times 10^{-14} \text{erg cm}^{-2} \text{s}^{-1}$  is  $5.46 \times 10^{-12} \text{erg cm}^{-2} \text{s}^{-1} \text{deg}^{-2}$  (Moretti et al. 2003). Assuming a photon index of 1.46 (Chen et al. 1997), this surface brightness implies a normalization for the EPL of 7.9 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$  (Paper I). In this paper, we used this lower value as the nominal value for the normalization of the EPL.

To allow for field-to-field variation in the number of unresolved sources contributing to the extragalactic background, we experimented with allowing the EPL normalization to be a free parameter, with soft limits at  $\pm 15\%$  and hard limits at  $\pm 30\%$  of the nominal value of 7.9 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$ . To help break the degeneracy between the EPL and the soft-proton power-law, we increased the upper energy limit for the spectral fitting from 5 keV (Paper I) to 10 keV. This should have helped because the EPL falls off more rapidly than the soft-proton power-law above  $\sim 5$  keV, owing to the former having been folded through the instrumental response while the latter was not. However, we found that best-fit EPL normalizations had a tendency to cluster near the soft limits, rather than being distributed approximately symmetrically about the nominal value with a peak at the nominal value. We therefore opted to make the oxygen measurements with the EPL normalization fixed at the nominal value. In the following subsection we describe how we estimated the size of the systematic error associated with our assuming this normalization.

### 3.2. Systematic Errors

We estimated the systematic errors associated with some of the assumptions in our spectral model, specifically, our use of an APEC model for the non-oxygen line emission, and our fixing the EPL normalization at 7.9 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$ . We include these systematic errors alongside the statistical errors in our tables of results, below. In Paper I, we found that any systematic error associated with our choice of EPL normalization was typically smaller than the statistical error on the intensity, but we did not include estimates of the systematic errors in our tables of results. In Paper I, we also considered contamination by bright sources or by soft protons as possible sources of systematic error – we will discuss these in Section 3.6.

To estimate the systematic error associated with our use of an APEC model for the non-oxygen line emis-

<sup>7</sup> <http://heasarc.gsfc.nasa.gov/docs/xanadu/xspec/>

<sup>8</sup> Note that this component of our model also includes some thermal continuum emission, but this is typically much fainter than the line emission.

sion, we repeated the analysis using a MEKAL model (Mewe et al. 1995) or a Raymond & Smith (1977 and updates) model in place of the APEC model. We disabled the oxygen lines for these models by setting the oxygen abundance in XSPEC to zero. Note that this method disables all oxygen emission from the model plasma, whereas in our original method, described above, we disabled only the oxygen K $\alpha$  emission. This means that, in these new measurements, the O VIII line may be contaminated by emission from O VII K $\beta$  at 0.666 keV. However, as the intensity of the O VII K $\beta$  line relative to the O VIII Ly $\alpha$  line is dependent upon the temperature, which is not always well constrained in our models, it is possible that the O VII K $\beta$  emission is not accurately accounted for in our original O VIII Ly $\alpha$  measurements either. Therefore, as well as quantifying the differences between spectral codes, this method should give an estimate of the uncertainty in the O VIII Ly $\alpha$  intensity due to the uncertainty in the O VII K $\beta$  contamination.

We measured the oxygen intensities using the three different codes for all of our observations. For each line in each observation, our estimate of the systematic error associated with our choice of spectral code is

$$\sigma_{\text{sys,code}} = \max \{ |I(\text{APEC}) - I(\text{MEKAL})|, |I(\text{APEC}) - I(\text{Raymond-Smith})| \} (1)$$

where  $I(\text{APEC})$  is the intensity measured using the APEC code, etc.

To estimate the systematic error associated with our fixing the normalization of the EPL, we first used a Monte Carlo simulation to estimate the expected field-to-field variation in the number of sources contributing to the extragalactic background, and thus the variation in the flux and normalization of the EPL. Using source counts from Moretti et al. (2003) and assuming a power-law photon index of 1.46 (Chen et al. 1997), we estimated that the EPL normalization should vary by  $\pm 0.8$  photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$  ( $1\sigma$ ) from its nominal value of 7.9 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$  among our *XMM-Newton* fields.

We therefore repeated the oxygen measurements for each observation with the EPL normalization fixed at 7.1 and 8.7 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$ . For each line in each observation, our estimate of the systematic error associated with our fixing the EPL normalization is

$$\sigma_{\text{sys,EPL}} = \max \{ |I(7.9) - I(7.1)|, |I(7.9) - I(8.7)| \}, \quad (2)$$

where  $I(7.9)$  is the intensity measured with the EPL normalization fixed at 7.9 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$ , etc. We combined  $\sigma_{\text{sys,code}}$  and  $\sigma_{\text{sys,EPL}}$  in quadrature to get our final estimate of the systematic error,  $\sigma_{\text{sys}}$ .

### 3.3. Results

Tables 1 and 2 contain the oxygen intensity measurements, sorted by increasing Galactic longitude,  $l$ . The results in Table 1 were obtained without the proton flux filtering described in Section 2.4, while those in Table 2 were obtained with this additional filtering.

The columns in Tables 1 and 2 contain the following data. Column 1 contains the *XMM-Newton* observation ID. Column 2 contains the observation start date. Columns 3 and 4 contain the Galactic coordinates ( $l, b$ )

of the observation pointing direction. Column 5 contains the usable MOS1 exposure time, and Column 6 contains the solid angle of the MOS1 detector from which the SXR spectrum was extracted. If an observation had more than one usable MOS1 exposure, the values for each exposure are presented as a comma-separated list. Columns 7 and 8 contain the corresponding data for the MOS2 camera. Column 9 contains the O VII line intensity,  $I_{\text{O VII}}$ , measured from the SXR spectrum. Note that this is the observed intensity – it has not been subjected to any deabsorption. The first error is the  $1\sigma$  statistical error from the fitting,  $\sigma_{\text{stat}}$ , calculated with XSPEC’s `error` command using  $\chi^2_{\text{min}} + 2.30$  for two interesting parameters (Lampton et al. 1976; Avni 1976). For a small number of observations, XSPEC’s `error` command was unable to calculate the statistical error. For such observations, we estimated the error by varying the intensity from its best-fit value with the `steppar` command. The second error is the estimated systematic error,  $\sigma_{\text{sys}}$ , described above. For a small number of observations, the different spectral codes and extragalactic normalizations consistently yield oxygen intensities of 0 L.U.. In such cases, the systematic error is quoted as zero. Column 10 contains the photon energy of the  $\delta$ -function used to model the O VII emission,  $E_{\text{O VII}}$ , rounded to the central energy of the 5-eV wide RMF bin in which the line lies (see Paper I). Column 11 contains the O VIII line intensity, again with  $\sigma_{\text{stat}}$  and  $\sigma_{\text{sys}}$  shown separately (note that the energy of this line was fixed at 0.6536 keV). Column 12 contains the average solar wind proton flux at the Earth,  $\langle f_{\text{sw}} \rangle$ , during the *XMM-Newton* observation. These data are from OMNIWeb. If there were no good solar wind data during the observation, this field is blank. Column 13 contains the ratio of the total model flux in the 2–5 keV band,  $F_{\text{total}}^{2-5}$ , to the 2–5 keV flux of the EPL,  $F_{\text{exgal}}^{2-5}$ . We introduced this ratio in Paper I as a measure of the contamination of the count-rate due to soft protons impinging upon the detector – any observation for which this ratio exceeded 2 was rejected. As we are using a lower nominal EPL normalization in this paper (7.9 versus 10.5 photons  $\text{cm}^{-2} \text{s}^{-1} \text{sr}^{-1} \text{keV}^{-1}$ ), we have increased the rejection threshold for  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  by a factor of 10.5/7.9 to 2.7. These additional rejections reduced the number of usable observations from 2611 to 1868 without proton flux filtering, and from 1435 to 1003 with proton flux filtering. Column 14 (Table 2 only) indicates whether or not the observation was affected by the proton flux filtering described in Section 2.4.

It should be noted that the 1003 observations that yielded oxygen line intensities after the proton flux filtering are not a strict subset of the 1868 observations that yielded oxygen line intensities without this filtering. Twelve observations failed the requirement that  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} \leq 2.7$  without the proton flux filtering, and so were rejected, but passed this requirement with the proton flux filtering. These 12 observations are included in Table 1, but the entries in Columns 5 through 13 are blank. Similarly, the 877 observations that yielded oxygen intensities without the proton flux filtering but failed to do so with this filtering are included in Table 2, but with blank entries in Column 5 onward (of these 877 ob-

**Table 1**  
O VII and O VIII Line Intensities (Without Proton Flux Filtering)

| Obs. ID    | Start      | $l$   | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|-------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg) | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0146390201 | 2003-03-29 | 0.005 | -17.799 | 17.1               | 537                    | 17.4               | 474                    | $9.72 \pm 1.03 \pm 1.77$         | 0.5575             | $1.13 \pm 0.49 \pm 0.60$         | 8.55                                                | 2.43                                                    |
| 0050940401 | 2002-03-14 | 0.015 | -12.011 | 8.4                | 583                    | 9.2                | 589                    | $35.17^{+1.55}_{-2.29} \pm 2.52$ | 0.5725             | $15.68^{+1.16}_{-1.35} \pm 6.78$ | 1.14                                                | 2.64                                                    |
| 0402781001 | 2007-01-20 | 0.271 | +48.208 | 16.1               | 421                    | 16.0               | 583                    | $9.34^{+1.03}_{-1.10} \pm 1.72$  | 0.5725             | $3.61^{+0.65}_{-0.67} \pm 1.39$  | 1.27                                                | 2.41                                                    |
| 0021540501 | 2001-08-26 | 0.426 | +48.796 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     |
| 0413780101 | 2007-02-24 | 0.604 | +11.378 | 23.0               | 453                    | 23.4               | 542                    | $3.29^{+0.96}_{-1.00} \pm 1.09$  | 0.5675             | $2.06^{+0.75}_{-0.48} \pm 0.62$  | 2.70                                                | 1.72                                                    |
| 0202190301 | 2004-05-20 | 0.939 | -79.578 | 16.8               | 570                    | 17.0               | 578                    | $5.71^{+0.84}_{-0.89} \pm 0.18$  | 0.5675             | $1.21^{+0.51}_{-0.46} \pm 0.42$  | 3.07                                                | 2.39                                                    |
| 0413780201 | 2007-03-03 | 0.960 | +10.788 | 25.4               | 500                    | 25.0               | 590                    | $4.77^{+0.87}_{-0.86} \pm 0.56$  | 0.5775             | $4.30^{+0.57}_{-0.58} \pm 1.10$  | 1.91                                                | 1.68                                                    |
| 0413780301 | 2007-03-07 | 1.168 | +10.439 | 16.2               | 430                    | 16.6               | 592                    | $5.98^{+1.26}_{-1.53} \pm 0.42$  | 0.5725             | $4.78^{+0.77}_{-0.86} \pm 0.84$  | 0.86                                                | 2.53                                                    |
| 0152750101 | 2002-09-27 | 1.540 | +7.099  | 38.7               | 580                    | 39.0               | 589                    | $8.43^{+0.40}_{-0.97} \pm 2.48$  | 0.5625             | $6.42^{+0.43}_{-0.31} \pm 1.20$  | 3.27                                                | 2.50                                                    |
| 0556210501 | 2008-07-19 | 1.649 | +46.606 | 10.8               | 488                    | 10.9               | 578                    | $12.01^{+1.67}_{-1.22} \pm 0.94$ | 0.5675             | $3.95^{+0.72}_{-0.71} \pm 1.26$  | 1.65                                                | 1.88                                                    |
| 0201903001 | 2004-10-24 | 2.718 | -56.160 | 17.4               | 352                    | 17.8               | 296                    | $5.97^{+1.51}_{-1.31} \pm 0.38$  | 0.5725             | $0.99^{+0.74}_{-0.75} \pm 0.20$  | 3.51                                                | 2.65                                                    |
| 0205390101 | 2005-05-01 | 3.588 | -64.104 | 27.6               | 311                    | 27.6               | 396                    | $7.40^{+0.90}_{-0.96} \pm 0.49$  | 0.5675             | $1.14^{+0.57}_{-0.51} \pm 0.72$  | 1.17                                                | 2.18                                                    |
| 0404910801 | 2006-05-02 | 3.966 | -59.441 | 19.9               | 332                    | 19.4               | 340                    | $6.27^{+0.91}_{-0.91} \pm 1.22$  | 0.5675             | $0.70^{+0.57}_{-0.57} \pm 1.09$  | 3.04                                                | 1.89                                                    |
| 0018741701 | 2001-05-03 | 3.967 | -59.448 | 6.6                | 341                    | 6.6                | 340                    | $11.29 \pm 2.03 \pm 1.31$        | 0.5675             | $5.49 \pm 1.23 \pm 0.55$         | 2.14                                                | 2.18                                                    |
| 0135980201 | 2002-04-30 | 4.693 | -64.122 | 25.5               | 551                    | 25.8               | 559                    | $11.70^{+0.50}_{-0.78} \pm 0.26$ | 0.5625             | $2.77^{+0.42}_{-0.41} \pm 1.28$  | 2.86                                                | 1.65                                                    |
| 0148520101 | 2003-07-22 | 5.456 | +56.770 | 21.6               | 582                    | 21.3               | 588                    | $12.42^{+0.78}_{-0.82} \pm 1.51$ | 0.5675             | $4.47^{+0.47}_{-0.55} \pm 2.52$  | 1.18                                                | 1.74                                                    |
| 0057560301 | 2001-08-09 | 5.457 | +56.766 | 36.6               | 587                    | 36.1               | 514                    | $13.99 \pm 0.63 \pm 1.11$        | 0.5675             | $4.71 \pm 0.39 \pm 2.67$         | 1.77                                                | 1.69                                                    |
| 0302580501 | 2005-06-13 | 5.676 | -77.683 | 36.1               | 394                    | 37.3               | 481                    | $8.46^{+1.33}_{-0.73} \pm 0.85$  | 0.5675             | $2.01^{+0.59}_{-0.40} \pm 1.11$  | 2.10                                                | 2.32                                                    |

**Note.** — This table is available in its entirety in a machine-readable form in the online journal. A portion is shown here for guidance regarding its form and content.

**Table 2**  
O VII and O VIII Line Intensities (With Proton Flux Filtering)

| Obs. ID    | Start      | $l$   | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ | Affected by |
|------------|------------|-------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg) | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0146390201 | 2003-03-29 | 0.005 | -17.799 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0050940401 | 2002-03-14 | 0.015 | -12.011 | 8.4                | 583                    | 9.2                | 589                    | $35.17^{+1.55}_{-2.29} \pm 2.52$ | 0.5725             | $15.68^{+1.16}_{-1.35} \pm 6.78$ | 1.14                                                | 2.64                                                    | N           |
| 0402781001 | 2007-01-20 | 0.271 | +48.208 | 16.1               | 421                    | 16.0               | 583                    | $9.34^{+1.03}_{-1.10} \pm 1.72$  | 0.5725             | $3.61^{+0.65}_{-0.67} \pm 1.39$  | 1.27                                                | 2.41                                                    | N           |
| 0021540501 | 2001-08-26 | 0.426 | +48.796 | 11.0               | 294                    | 11.1               | 354                    | $17.58^{+2.02}_{-2.09} \pm 0.92$ | 0.5675             | $6.19^{+1.18}_{-1.21} \pm 1.10$  | 1.63                                                | 2.69                                                    | ...         |
| 0413780101 | 2007-02-24 | 0.604 | +11.378 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0202190301 | 2004-05-20 | 0.939 | -79.578 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0413780201 | 2007-03-03 | 0.960 | +10.788 | 15.0               | 500                    | 14.8               | 590                    | $4.65^{+1.08}_{-1.02} \pm 0.99$  | 0.5775             | $4.44^{+0.75}_{-0.74} \pm 1.33$  | 1.61                                                | 1.64                                                    | Y           |
| 0413780301 | 2007-03-07 | 1.168 | +10.439 | 16.2               | 430                    | 16.6               | 592                    | $5.98^{+1.26}_{-1.53} \pm 0.42$  | 0.5725             | $4.78^{+0.77}_{-0.86} \pm 0.84$  | 0.86                                                | 2.53                                                    | N           |
| 0152750101 | 2002-09-27 | 1.540 | +7.099  | 12.6               | 580                    | 12.7               | 589                    | $6.11^{+1.53}_{-1.17} \pm 2.80$  | 0.5625             | $5.43^{+0.63}_{-0.64} \pm 1.62$  | 1.82                                                | 2.49                                                    | Y           |
| 0556210501 | 2008-07-19 | 1.649 | +46.606 | 10.8               | 488                    | 10.9               | 578                    | $12.01^{+1.67}_{-1.22} \pm 0.94$ | 0.5675             | $3.95^{+0.72}_{-0.71} \pm 1.26$  | 1.65                                                | 1.88                                                    | N           |
| 0201903001 | 2004-10-24 | 2.718 | -56.160 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0205390101 | 2005-05-01 | 3.588 | -64.104 | 27.6               | 311                    | 27.6               | 396                    | $7.40^{+0.90}_{-0.96} \pm 0.49$  | 0.5675             | $1.14^{+0.57}_{-0.51} \pm 0.72$  | 1.17                                                | 2.18                                                    | N           |
| 0404910801 | 2006-05-02 | 3.966 | -59.441 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0018741701 | 2001-05-03 | 3.967 | -59.448 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0135980201 | 2002-04-30 | 4.693 | -64.122 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0148520101 | 2003-07-22 | 5.456 | +56.770 | 21.6               | 582                    | 21.3               | 588                    | $12.42^{+0.78}_{-0.82} \pm 1.51$ | 0.5675             | $4.47^{+0.47}_{-0.55} \pm 2.52$  | 1.18                                                | 1.74                                                    | N           |
| 0057560301 | 2001-08-09 | 5.457 | +56.766 | 27.1               | 587                    | 26.7               | 514                    | $13.69^{+0.72}_{-0.76} \pm 0.28$ | 0.5725             | $5.07 \pm 0.46 \pm 2.36$         | 1.61                                                | 1.67                                                    | Y           |
| 0302580501 | 2005-06-13 | 5.676 | -77.683 | 20.0               | 394                    | 20.7               | 481                    | $9.70^{+1.13}_{-0.98} \pm 0.43$  | 0.5625             | $1.60^{+0.55}_{-0.50} \pm 1.05$  | 1.43                                                | 2.51                                                    | Y           |

**Note.** — This table is available in its entirety in a machine-readable form in the online journal. A portion is shown here for guidance regarding its form and content.

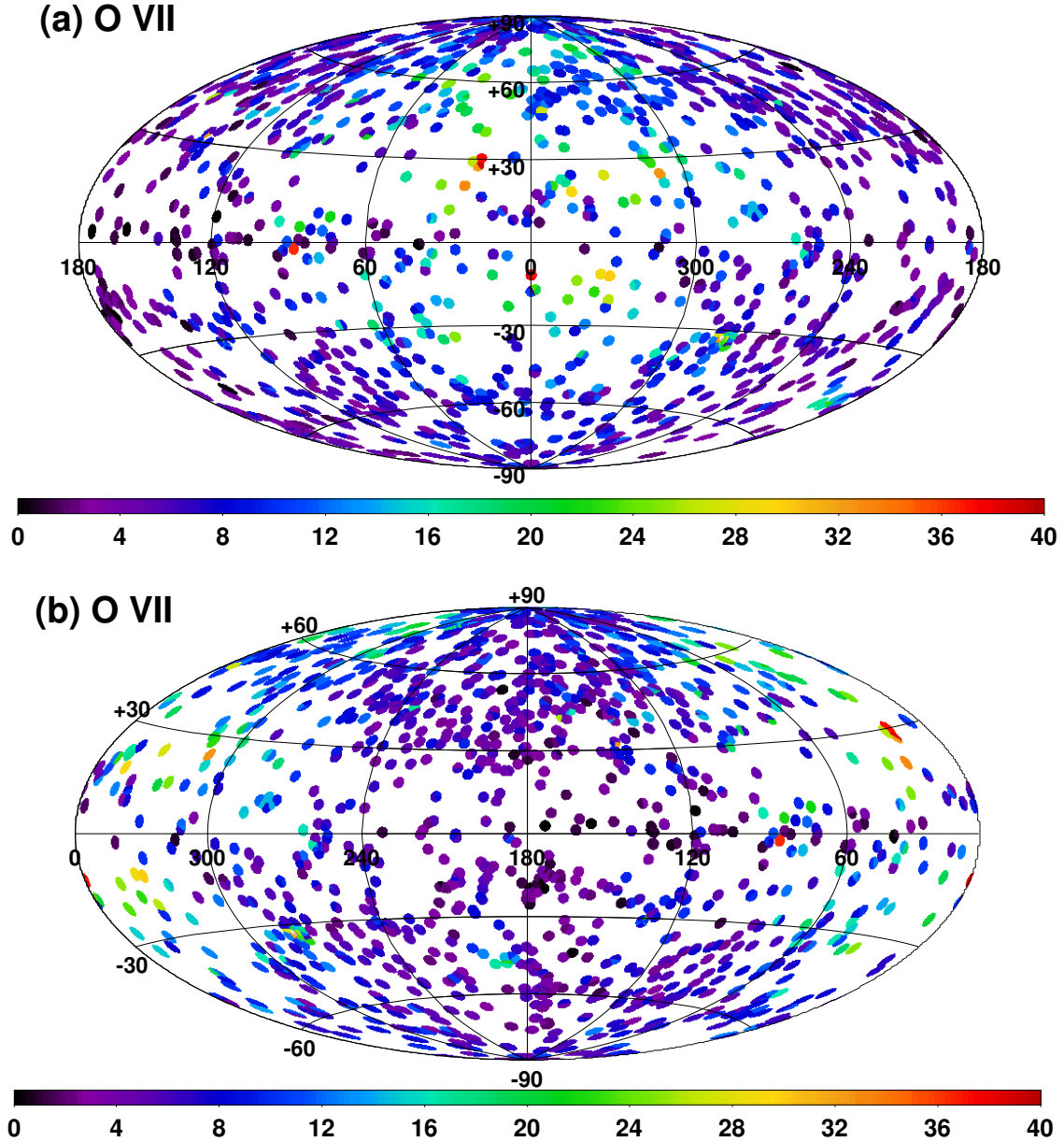
servations, 855 had insufficient exposure after the proton flux filtering, and 22 failed the  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} \leq 2.7$  requirement after the filtering). Thus, both Tables 1 and 2 contain the complete set of 1880 *XMM-Newton* observations that yielded oxygen intensities.

Figure 2 shows all-sky maps of the O VII and O VIII intensities, both without (panels (a) through (d)) and with (panels (e) through (h)) proton flux filtering. For each line, we show projections centered on the Galactic Center and on the Galactic Anticenter. Each colored circle in the maps represents an SXR line intensity measurement. Note that these circles are larger than the *XMM-Newton* field of view (radius = 14'). See Section 3.8 for a discussion of the sky coverage of our survey. We will discuss the variation in the lines' intensities over the sky in more detail in Section 4.3, but we note here that the

diffuse oxygen emission tends to be brighter toward the Galactic Center ( $l < 90^\circ$  or  $l > 270^\circ$ ) than toward the Galactic Anticenter.

Figure 3 shows histograms of the O VII and O VIII intensities, both without (solid black lines) and with (gray area) the proton flux filtering. Table 3 contains the ranges and quartiles of the intensities. The quartiles (including the medians) of the oxygen intensities are generally significantly higher than those in Paper I (see Table 3 of that paper). This is because this paper includes the region around the Galactic Center, where the intensities are generally higher (see Figure 2). The quartiles of the O VII intensities obtained without the proton flux filtering are systematically higher than the corresponding quartiles obtained with the proton flux filtering. For O VIII, there are no significant differences in the intensity quartiles with and without the proton flux filtering.





**Figure 2.** All-sky maps of the oxygen intensities in L.U., plotted in Galactic coordinates. Panels (a) and (b) show the O VII intensities obtained without the solar wind proton flux filtering described in Section 2.4, in Hammer-Aitoff projections centered on the Galactic Center and the Galactic Anticenter, respectively. Panels (c) and (d) show the O VIII intensities obtained without proton flux filtering in the same projections. Panels (e) through (h) show the corresponding intensities obtained with proton flux filtering. Each intensity measurement is plotted as a colored circle of radius  $2^\circ$  centered on the *XMM-Newton* pointing direction. If a point on the sky is within  $2^\circ$  of more than one *XMM-Newton* observation, it is colored according to the nearest observation.

We will discuss the effects of proton flux filtering in more detail in Section 3.7.

We will conclude this subsection by looking at the oxygen intensities from the 103 observations identified as being contaminated by geocoronal SWCX emission by Carter et al. (2011, Table A.1). Of these observations, 61 are in our final sample. Of the other 42, 20 were rejected at an early stage of the processing for a variety of reasons (e.g., the target source being too bright), and 22 failed the  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} \leq 2.7$  requirement. For the remaining 61 observations, the median O VII and O VIII intensities (obtained without proton flux filtering) are 9.83 and 2.19 L.U., respectively, with interquartile ranges of 7.60–

13.63 and 1.07–3.18 L.U., respectively. Comparing these values with the medians and quartiles in Table 3, we see that, unsurprisingly, the SWCX-contaminated observations identified by Carter et al. (2011) yield systematically higher oxygen intensities than our survey as a whole.

### 3.4. Directions with Multiple Observations

Tables 1 and 2 include many directions that have been observed multiple times with *XMM-Newton* (within a few arcmin). The times between observations of a given direction may range from  $\sim 1$  day to several years. Multiple observations in the same direction are useful for



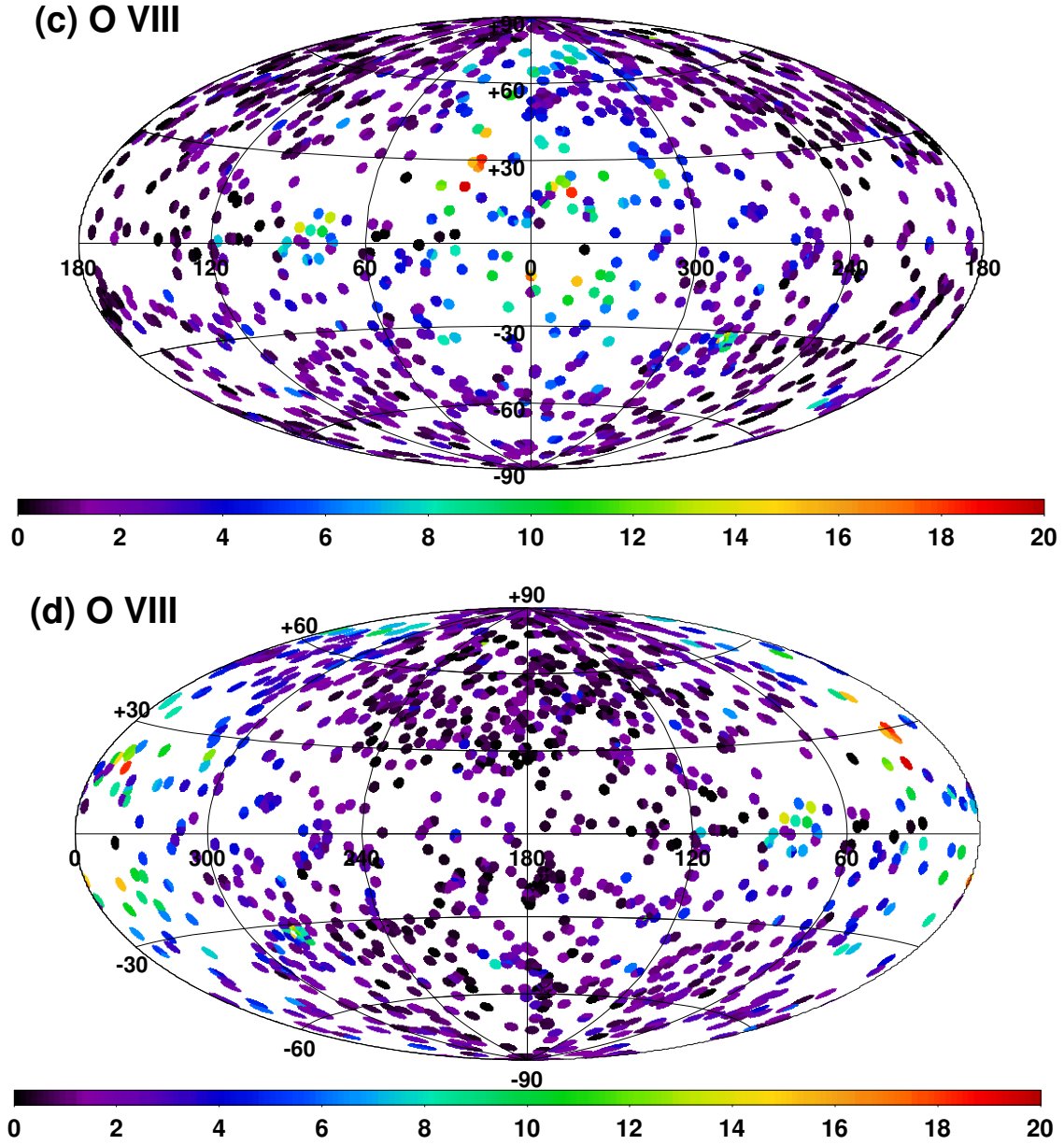
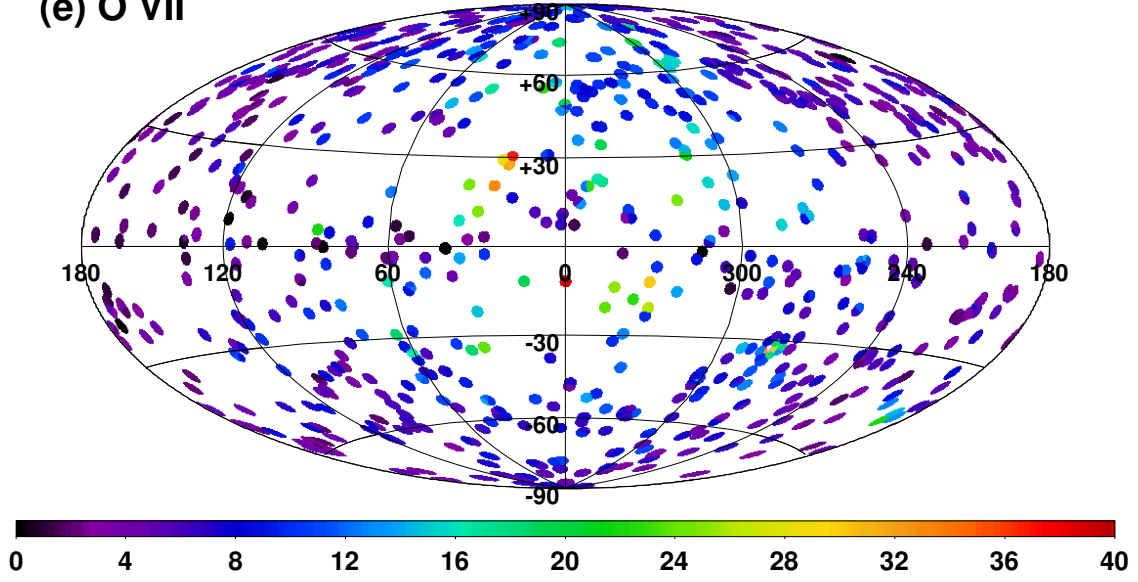
Figure 2. *Continued*

Table 3  
Ranges and Quartiles of the Oxygen Intensities

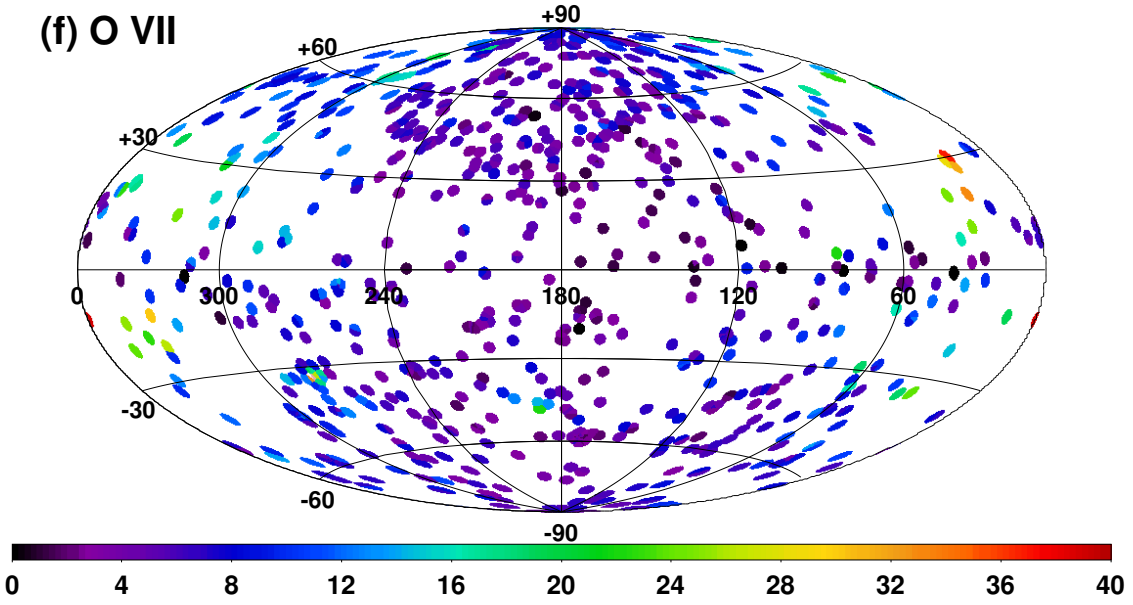
| Line   | Proton flux<br>filtering? | Range<br>(L.U.) | Lower quartile<br>(L.U.) | Median<br>(L.U.) | Upper quartile<br>(L.U.) |
|--------|---------------------------|-----------------|--------------------------|------------------|--------------------------|
| O VII  | N                         | 0.00–50.76      | 3.92 (3.78,4.15)         | 6.00 (5.90,6.14) | 8.74 (8.54,8.97)         |
| O VII  | Y                         | 0.00–48.81      | 3.61 (3.48,3.74)         | 5.60 (5.36,5.80) | 7.95 (7.64,8.29)         |
| O VIII | N                         | 0.00–36.24      | 0.62 (0.59,0.66)         | 1.30 (1.24,1.36) | 2.36 (2.28,2.45)         |
| O VIII | Y                         | 0.00–24.45      | 0.56 (0.52,0.61)         | 1.24 (1.17,1.32) | 2.29 (2.19,2.39)         |

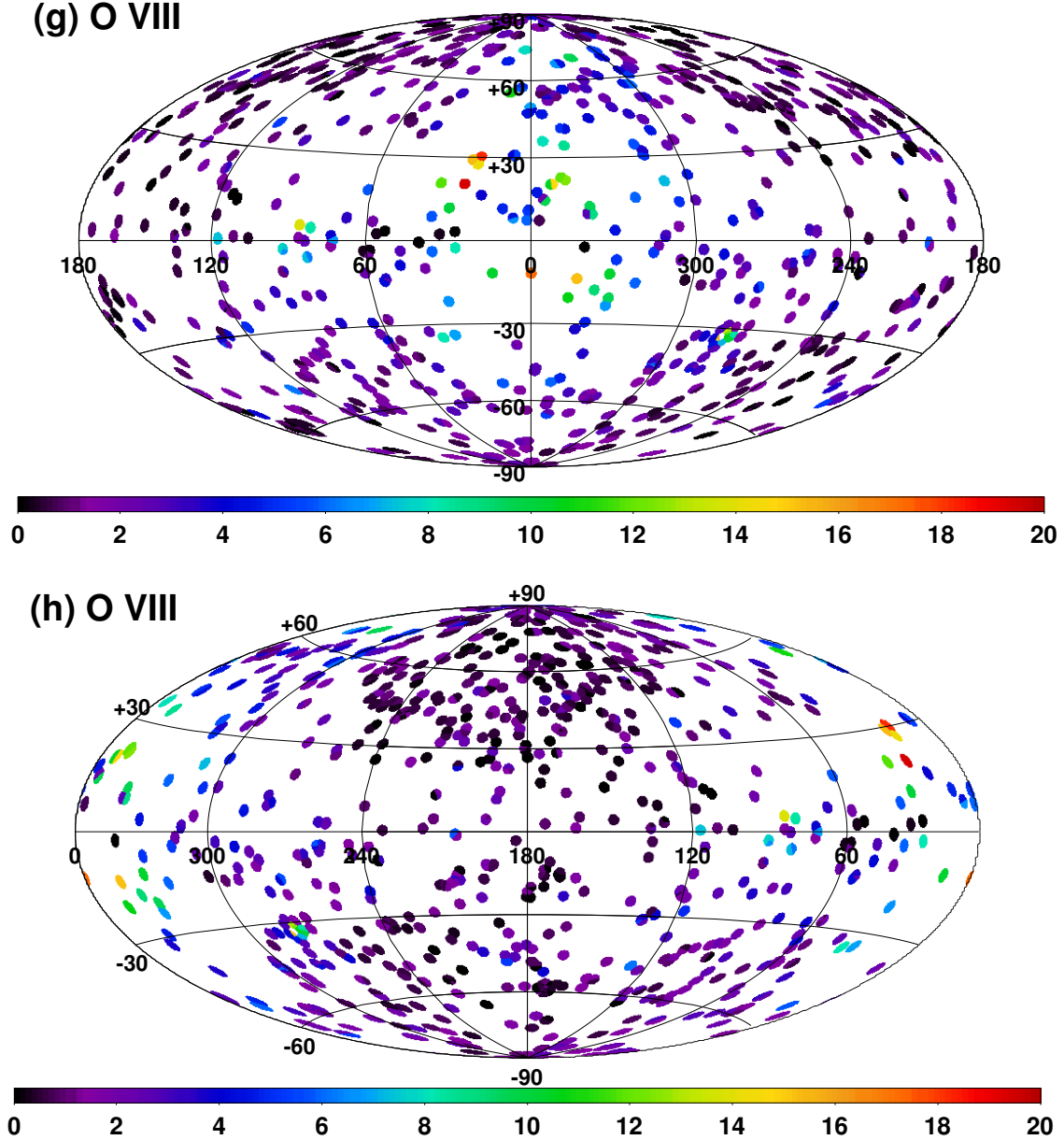
Note. — The numbers in parentheses are the 90% confidence intervals, calculated by bootstrapping.

(e) O VII



(f) O VII

Figure 2. *Continued*

Figure 2. *Continued*

constraining models of SWCX, as only the SWCX component of the SXRb is expected to vary on such a small timescale.

As *XMM-Newton* observations of the same target rarely have identical pointing directions, we searched the 1868 good observations in Table 1 for sets of observations whose pointing directions are within  $0.1^\circ$  of each other (cf. the *XMM-Newton* field of view is  $\approx 0.5^\circ$  across). We found 217 such sets.

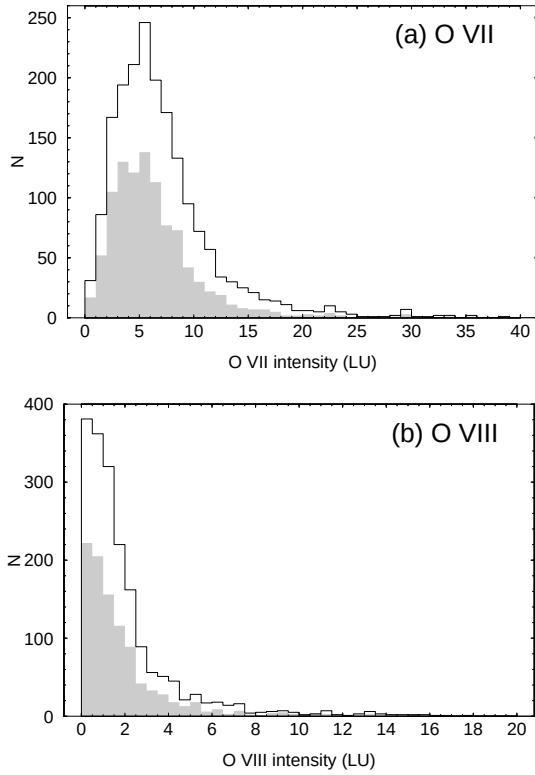
Table 4 contain the oxygen intensity measurements for directions that have been observed multiple times with *XMM-Newton*. The sets of observations are ordered by Galactic longitude,  $l$ . Each set of observations is identified by a unique number (1–217), which is in Column 1, while Column 2 contains the number of observations in each set. Column 3 contains the *XMM-Newton* observation IDs. Column 4 contains the data set number from

Paper I that each observation belonged to, if appropriate (these data sets were numbered from 1 through 69; see Table 5 in Paper I). Note that data set 49 from Paper I is not included in Table 4, because one of the two members of this data set (obs. 0203362201) no longer passes the  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  test, and so is not included in this paper (see Section 3.5, below). Columns 5 and 6 contain the pointing direction in Galactic coordinates. Columns 7 and 8 contain the O VII and O VIII intensities, respectively, measured without the solar wind proton flux filtering described in Section 2.4. As in Tables 1 and 2, the statistical and systematic errors are shown separately. Columns 9 and 10 contain the corresponding measurements obtained with solar wind proton flux filtering. If this filtering rendered an observation unusable, these fields are left blank.

**Table 4**  
Oxygen Line Intensities from Directions with Multiple Observations

| Dataset | $N_{\text{obs}}$ | Obs. ID    | Paper I Dataset | $l$<br>(deg) | $b$<br>(deg) | Without proton flux filtering    |                                  | With proton flux filtering       |                                  |
|---------|------------------|------------|-----------------|--------------|--------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|         |                  |            |                 |              |              | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)    | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)    |
| (1)     | (2)              | (3)        | (4)             | (5)          | (6)          | (7)                              | (8)                              | (9)                              | (10)                             |
| 1       | 2                | 0050940401 | ...             | 0.015        | -12.011      | $35.17^{+1.55}_{-2.29} \pm 2.52$ | $15.68^{+1.16}_{-1.35} \pm 6.78$ | $35.17^{+1.55}_{-2.29} \pm 2.52$ | $15.68^{+1.16}_{-1.35} \pm 6.78$ |
|         |                  | 0203040401 | ...             | 359.985      | -11.990      | $33.54 \pm 1.79 \pm 0.53$        | $13.35 \pm 1.08 \pm 5.71$        | ...                              | ...                              |
| 2       | 2                | 0018741701 | ...             | 3.967        | -59.448      | $11.29 \pm 2.03 \pm 1.31$        | $5.49 \pm 1.23 \pm 0.55$         | ...                              | ...                              |
|         |                  | 0404910801 | ...             | 3.966        | -59.441      | $6.27^{+1.87}_{-0.91} \pm 1.22$  | $0.70^{+0.88}_{-0.57} \pm 1.09$  | ...                              | ...                              |
| 3       | 2                | 0057560301 | ...             | 5.457        | +56.766      | $13.99 \pm 0.63 \pm 1.11$        | $4.71 \pm 0.39 \pm 2.67$         | $13.69^{+0.72}_{-0.76} \pm 0.28$ | $5.07 \pm 0.46 \pm 2.36$         |
|         |                  | 0148520101 | ...             | 5.456        | +56.770      | $12.42^{+0.78}_{-0.82} \pm 1.51$ | $4.47^{+0.47}_{-0.55} \pm 2.52$  | $12.42^{+0.78}_{-0.82} \pm 1.51$ | $4.47^{+0.47}_{-0.55} \pm 2.52$  |
| 4       | 2                | 0400460301 | ...             | 6.230        | -38.240      | $6.14^{+1.08}_{-0.92} \pm 0.72$  | $2.76^{+0.72}_{-0.57} \pm 0.34$  | $7.39^{+1.39}_{-1.36} \pm 0.82$  | $2.14^{+0.83}_{-0.82} \pm 0.66$  |
|         |                  | 0400460401 | ...             | 6.229        | -38.240      | $6.29^{+1.48}_{-1.53} \pm 0.50$  | $1.70^{+0.74}_{-0.73} \pm 0.38$  | $6.29^{+1.48}_{-1.53} \pm 0.50$  | $1.70^{+0.74}_{-0.73} \pm 0.38$  |
| 5       | 3                | 0401660101 | ...             | 6.604        | +7.775       | $7.03^{+1.16}_{-0.78} \pm 0.80$  | $4.21^{+0.61}_{-0.44} \pm 0.72$  | ...                              | ...                              |
|         |                  | 0085582001 | ...             | 6.588        | +7.785       | $3.84^{+1.64}_{-1.28} \pm 1.78$  | $6.01^{+1.28}_{-1.18} \pm 1.17$  | $3.84^{+1.64}_{-1.28} \pm 1.78$  | $6.01^{+1.28}_{-1.18} \pm 1.17$  |
|         |                  | 0085581401 | ...             | 6.588        | +7.786       | $5.15^{+0.82}_{-1.55} \pm 0.99$  | $3.97^{+0.99}_{-0.95} \pm 0.97$  | $5.15^{+0.82}_{-1.55} \pm 0.99$  | $3.97^{+0.99}_{-0.95} \pm 0.97$  |

**Note.** — This table is available in its entirety in a machine-readable form in the online journal. A portion is shown here for guidance regarding its form and content.



**Figure 3.** Histograms of the (a) O VII and (b) O VIII intensities. The solid black lines show the histograms of intensities obtained without the solar wind proton flux filtering described in Section 2.4, and the gray areas show the histograms of intensities obtained with this filtering.

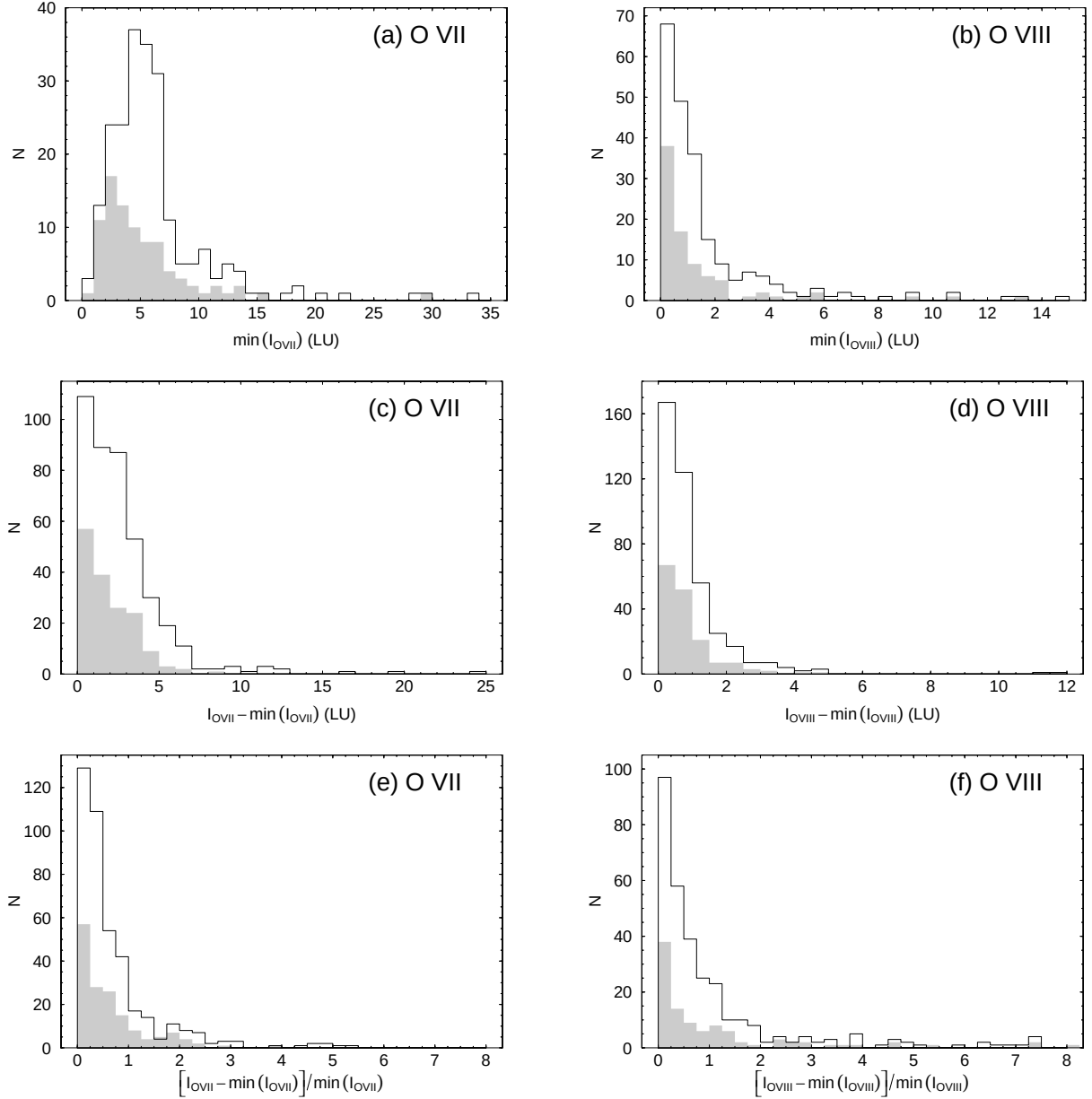
For each of the 217 directions in Table 4, we can place upper limits on the cosmic O VII and O VIII X-ray emission (i.e., the emission that arises beyond the solar system, rather than the emission that is due to SWCX). These upper limits are  $\min(I_{\text{O VII}})$  and  $\min(I_{\text{O VIII}})$ , which are defined as the minimum O VII and O VIII intensities, respectively, measured in a given direction. These quantities are upper limits on the cosmic oxygen intensities because SWCX may also have contributed photons to the  $\min(I)$  measurements. See the top row of Figure 4 for histograms of  $\min(I)$ . Then, with  $\min(I)$  thus defined,  $I - \min(I)$  places a lower limit on the SWCX line intensity for a given observation (again, it is a lower

limit because SWCX may have contributed photons to the  $\min(I)$  measurement).

To show the magnitude of the variability in the oxygen SWCX emission, in the middle row of Figure 4 we plot histograms of  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  and  $I_{\text{O VIII}} - \min(I_{\text{O VIII}})$ , obtained with and without the solar wind proton flux filtering described in Section 2.4. For each set of observations, the observation with  $I - \min(I) = 0$  has been omitted. Similarly to what we found in Paper I, the measured intensity enhancements are typically  $\lesssim 5$  L.U. for O VII (cf.  $\lesssim 4$  L.U. stated in Paper I), and  $\lesssim 2$  L.U. for O VIII (same as stated in Paper I). More quantitatively, the 90th percentile of  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  (excluding the faintest observation from each set) is 5.2 L.U. without proton flux filtering and 3.9 L.U. with. For  $I_{\text{O VIII}} - \min(I_{\text{O VIII}})$ , the 90th percentile of  $I_{\text{O VIII}} - \min(I_{\text{O VIII}})$  is 2.0 L.U. without proton flux filtering and 1.9 L.U. with.

The measured O VII enhancements are generally smaller than the corresponding unenhanced intensity, i.e.,  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  is typically smaller than  $\min(I_{\text{O VII}})$ ; see Figure 4(e) (note that, although we use the term “unenhanced” intensity,  $\min(I)$  may still include some photons due to SWCX). The median value of  $[I_{\text{O VII}} - \min(I_{\text{O VII}})] / \min(I_{\text{O VII}})$  is 0.39 (0.45) without (with) proton flux filtering, and only 19% (22%) of observations have  $[I_{\text{O VII}} - \min(I_{\text{O VII}})] / \min(I_{\text{O VII}}) > 1$  (the observations that yield the  $\min(I_{\text{O VII}})$  measurement have been omitted from these values). In contrast, for O VIII, the intensity enhancements are often somewhat brighter than the typical unenhanced intensity; see Figure 4(f). The median value of  $[I_{\text{O VIII}} - \min(I_{\text{O VIII}})] / \min(I_{\text{O VIII}})$  is 0.82 (1.39) without (with) proton flux filtering, and 46% (57%) of observations have  $[I_{\text{O VIII}} - \min(I_{\text{O VIII}})] / \min(I_{\text{O VIII}}) > 1$ . These results imply that O VIII is typically brighter relative to O VII in the SWCX enhancements than in the baseline SXR emission.

Some of the observations in Table 4 exhibit particularly bright oxygen intensity enhancements due to SWCX. Nine observations have  $I_{\text{O VII}} - \min(I_{\text{O VII}}) > 10$  L.U.; for three of these observations, the enhancement exceeds 15 L.U.. There are two observations with  $I_{\text{O VIII}} - \min(I_{\text{O VIII}}) > 5$  L.U. (in fact, these enhancements both exceed 10 L.U.). The observations with  $I_{\text{O VII}} - \min(I_{\text{O VII}}) > 10$  L.U. or  $I_{\text{O VIII}} - \min(I_{\text{O VIII}}) >$



**Figure 4.** Top row: Histograms of  $\min(I)$  for (a) O VII and (b) O VIII, where  $\min(I)$  is the minimum measured intensity in a given direction, and hence the upper limit on the intensity originating in the ISM. Middle row: Histograms of  $I - \min(I)$  for (c) O VII and (d) O VIII; here,  $\min(I)$  is the minimum measured intensity in the same direction as the  $I$  measurement, and hence  $I - \min(I)$  is the lower limit on the SWCX X-ray intensity. Bottom row: Histograms of  $[I - \min(I)] / \min(I)$  for (e) O VII and (f) O VIII. These histograms were constructed from the data in Table 4. The solid black lines show the results obtained without the solar wind proton flux filtering described in Section 2.4, and the gray areas show the results obtained with this filtering. For each of the 217 sets of observations in Table 4 there is, by definition, an observation with  $I - \min(I) = 0$ ; these observations are omitted from Panels (c)–(f). In Panel (e), three observations for which the corresponding values of  $\min(I_{\text{O VII}})$  are 0 are omitted from both histograms. In Panel (f), nine observations with  $[I_{\text{O VIII}} - \min(I_{\text{O VIII}})] / \min(I_{\text{O VIII}}) > 8$  are omitted from both histograms, while 90 (49) observations for which the corresponding values of  $\min(I_{\text{O VIII}})$  are 0 are omitted from the histogram showing the results obtained without (with) proton flux filtering.

5 L.U. are presented in Table 5, along with the observations that yielded the  $\min(I)$  in each case. Three of the bright SWCX enhancements in Table 4 were also reported in Paper I. The enhancements measured in Paper I are also shown in the table – the new measurements are consistent with the Paper I measurements. Note that in Paper I we also reported an O VIII enhancement of  $\approx 8$  L.U. in obs. 0203362201 relative to obs. 0302352201. This enhancement is not included in Table 4 because, as noted above, obs. 0203362201 is not included in this

paper (see also Section 3.5, below).

As noted in Paper I, the bright O VII enhancements in Table 4 (i.e., those at the bright end of the  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  distribution) are of interest because they are much larger than most measurements of O VII SWCX enhancements ( $\lesssim 7$  L.U.; Snowden et al. 2004; Fujimoto et al. 2007; Henley & Shelton 2008; Gupta et al. 2009; see also Figure 4(c)). However, since Paper I, bright O VII enhancements of 14–21 and 36 L.U. have also been reported by Carter et al. (2011)

**Table 5**  
Directions with the Brightest SWCX Emission

| Dataset <sup>a</sup> | Line   | Faintest   |                        | Brightest  |                         | Difference<br>(L.U.)    | Paper I<br>Difference <sup>b</sup><br>(L.U.) |
|----------------------|--------|------------|------------------------|------------|-------------------------|-------------------------|----------------------------------------------|
|                      |        | Obs. ID    | $I$<br>(L.U.)          | Obs. ID    | $I$<br>(L.U.)           |                         |                                              |
| 12                   | O VII  | 0402080801 | $5.25^{+1.88}_{-1.48}$ | 0096010101 | $15.28^{+0.97}_{-0.97}$ | $10.03^{+1.77}_{-2.12}$ | ...                                          |
| 34                   | O VII  | 0206860101 | $6.76^{+0.99}_{-1.01}$ | 0206860201 | $19.55^{+2.27}_{-1.54}$ | $12.79^{+2.48}_{-1.83}$ | ...                                          |
| 38                   | O VII  | 0550061301 | $6.45^{+1.89}_{-1.39}$ | 0041741101 | $23.07^{+4.80}_{-4.79}$ | $16.62^{+5.00}_{-5.15}$ | ...                                          |
| 40                   | O VII  | 0406421401 | $5.54^{+1.48}_{-0.85}$ | 0406420401 | $17.14^{+1.71}_{-1.62}$ | $11.60^{+1.91}_{-2.20}$ | ...                                          |
| 42                   | O VII  | 0400360301 | $4.85^{+1.82}_{-1.45}$ | 0400360801 | $17.08^{+1.52}_{-1.45}$ | $12.23^{+2.29}_{-2.32}$ | ...                                          |
| 58                   | O VII  | 0305920301 | $5.80^{+1.71}_{-1.42}$ | 0305920601 | $16.83^{+1.70}_{-1.73}$ | $11.03^{+2.21}_{-2.24}$ | ...                                          |
| 83                   | O VII  | 0400560301 | $3.83^{+0.84}_{-0.63}$ | 0059140901 | $15.45^{+1.42}_{-1.48}$ | $11.62^{+1.56}_{-1.70}$ | $10.72^{+0.99}_{-0.96}$                      |
| 90                   | O VII  | 0112520901 | $4.95^{+1.58}_{-1.71}$ | 0112520601 | $29.28^{+1.83}_{-2.03}$ | $24.33^{+2.50}_{-2.57}$ | $26.15^{+1.52}_{-1.41}$                      |
| 107                  | O VII  | 0143150301 | $3.89^{+1.25}_{-1.61}$ | 0143150601 | $23.26^{+1.25}_{-1.38}$ | $19.37^{+2.04}_{-1.86}$ | $18.21^{+0.99}_{-1.13}$                      |
| 38                   | O VIII | 0041740301 | $3.62^{+1.87}_{-1.81}$ | 0041741101 | $15.28^{+1.81}_{-1.80}$ | $11.66^{+2.56}_{-2.59}$ | ...                                          |
| 138                  | O VIII | 0206090101 | $0.02^{+0.88}_{-0.79}$ | 0206090201 | $11.48^{+1.71}_{-1.70}$ | $11.46^{+1.89}_{-1.91}$ | ...                                          |

<sup>a</sup> Dataset number from Table 4

<sup>b</sup>  $I - \min(I)$  from Paper I (see Table 6 of that paper).

and Ezoe et al. (2011), respectively. Note that these enhancements were found by looking at line intensity variations within *XMM-Newton* or *Suzaku* observations, rather than between observations, as we have done. Note also that Koutroumpa et al. (2007) reported O VII enhancements of up to 10 L.U., but we found the observations in question to be badly contaminated by soft protons (see Paper I).

Similarly to the brightest O VII enhancements, the brightest O VIII enhancements (reported in Table 4) are much larger than those that are typically measured ( $\lesssim 2$  L.U.; Henley & Shelton 2008; Gupta et al. 2009; see also Figure 4(d)), although O VIII enhancements of 6.5 and 5.0 L.U. were reported by Snowden et al. (2004) and Fujimoto et al. (2007), respectively. More recently, O VIII enhancements of 26 and 12 L.U. have been reported by Carter et al. (2010) and Ezoe et al. (2011), respectively, in both cases associated with coronal mass ejections.

### 3.5. Differences from Paper I

The main differences in our current methodology from that in Paper I are summarized as follows:

1. We used a more recent version of the SAS software (11.0.1 versus 7.0.0), which incorporates the *XMM-ESAS* software (Section 2). The version of `mos_back` included in SAS version 11.0.1 can automatically detect anomalous CCDs. For some of the observations that were in Paper I, `mos_back` detected anomalous CCDs that we had failed to identify in Paper I (Section 2.5).
2. For the automated source removal, we used data from the *XMM-Newton* Serendipitous Source Catalogue, instead of carrying out source detection ourselves on each observation. We also used larger circles to exclude such sources ( $50''$  versus  $\approx 30''$ – $40''$ ; Section 2.3).
3. In the spectral analysis, we used an unbroken power-law to model the residual soft-proton contamination, as opposed to a broken power-law in

Paper I. Unlike Paper I, we placed constraints on this power-law's spectral index (Section 3.1).

4. We used a lower normalization for the EPL in our spectral model (7.9 versus  $10.5 \text{ photons cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1} \text{ keV}^{-1}$ ; Section 3.1). In addition, we estimated the size of systematic errors associated with our assuming this normalization, and with our assuming that the non-oxygen line emission can be modeled with an APEC model (Section 3.2).
5. We used  $\chi^2_{\min} + 2.30$  (Lampton et al. 1976; Avni 1976) to calculate the statistical errors on the oxygen intensities (although not explicitly stated, we used  $\chi^2_{\min} + 1.0$  in Paper I, which is only valid for the error on a single interesting parameter; Lampton et al. 1976). These larger statistical errors, combined with the systematic errors mentioned above, result in confidence intervals that are typically  $\sim 2$  times wider than those in Paper I.

Because of the improvement in anomalous-CCD detection and the changes in the automated source removal, there are some differences in the solid angles from which the SXR spectra were extracted (columns 6 and 8 in Tables 1 and 2). In addition, because of differences between the OMNIWeb data used in this paper (downloaded on 2011 March 01) and that used in Paper I (downloaded on 2009 February 12), there are, in a few cases, significant differences in the amount of good time that remains after the proton flux filtering has been applied (columns 5 and 7 in Table 2). For example, in obs. 0205590301, the post-filtering good time has decreased from  $\approx 41$  ks per camera in Paper I to  $\approx 9$  ks. This is because the observed solar wind proton flux was close to the threshold of  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$  during this observation. In the OMNIWeb data used in Paper I, the observed solar wind proton flux was generally below this threshold, whereas in the revised proton flux data used in this paper, the observed flux was generally above this threshold. Finally, note that for obs. 0203900101 we used two exposures per camera in Paper I. However, upon reinspecting this observation, we have concluded that the two shorter expo-

**Table 6**

Observations from Paper I that are Missing from the Current Paper

| Obs. ID                       | Reason                                                |
|-------------------------------|-------------------------------------------------------|
| Without Proton Flux Filtering |                                                       |
| 0010620101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0065820101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0099030101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0109270701                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0111490401                    | Diffraction spikes                                    |
| 0128531501                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0134540101                    | Diffraction spikes                                    |
| 0201951701                    | Insufficient good time                                |
| 0203362201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0203610201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0206060201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0206360101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0302260201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0305290201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0405730401                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0411980601                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| With Proton Flux Filtering    |                                                       |
| 0083000101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0099030101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0109270701                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0110950201                    | Insufficient good time                                |
| 0111100101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0134540101                    | Diffraction spikes                                    |
| 0141980601                    | Insufficient good time                                |
| 0141980701                    | Insufficient good time                                |
| 0148560501                    | Insufficient good time                                |
| 0150320201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0158560301                    | Insufficient good time                                |
| 0162160401                    | Insufficient good time                                |
| 0200430401                    | Insufficient good time                                |
| 0200810301                    | Insufficient good time                                |
| 0201040101                    | Insufficient good time                                |
| 0201940201                    | Insufficient good time                                |
| 0203360701                    | Insufficient good time                                |
| 0203361701                    | Insufficient good time                                |
| 0203610201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0203840101                    | Insufficient good time                                |
| 0206360101                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |
| 0305290201                    | $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ |

tures are likely contaminated by soft protons. We have therefore rejected these two exposures, and just use the longer exposures (one per camera) in this paper.

Despite these differences, the new oxygen intensity measurements are generally not significantly different from those in Paper I. Here, we discuss the few observations for which this is not the case.

The current catalog excludes 16 (22) observations that were included in the Paper I results obtained without (with) proton flux filtering. These observations are shown in Table 6, along with the reason for their exclusion. The most common reasons for exclusion are either that the observation now exceeds our  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  threshold for excluding soft-proton-contaminated observations (see Section 3.3), or that the observation no longer has sufficient good time after being reprocessed

**Table 7**

Observations with Oxygen Intensities Significantly Different from Those in Paper I

| Obs. ID    | $I_{\text{O VII}}$<br>(L.U.) |                        |
|------------|------------------------------|------------------------|
|            | Paper I                      | This paper             |
| 0108062101 | $5.96^{+0.19}_{-0.43}$       | $4.61^{+0.49}_{-0.48}$ |
| 0147511801 | $8.04^{+0.41}_{-0.23}$       | $6.58 \pm 0.60$        |
| 0301600101 | $3.69^{+0.42}_{-0.20}$       | $2.39^{+0.52}_{-0.51}$ |

(see Sections 2.1 and 2.4). In two cases (obs. 0111490401 and 0134540101), we found upon reinspection that there are diffraction spikes from the target sources (VY Ari and HR 1099, respectively) visible in the soft band (0.2–0.9 keV) images. As photons in these diffraction spikes would contaminate our SXR measurements, we decided to err on the side of caution and reject these observations.

There are only three observations for which either the O VII or O VIII intensity measurements differs by more than  $2\sigma$  from the Paper I value. In all three cases, it is the O VII intensity measured without proton flux filtering that is different: the intensities measured in this paper are lower than the Paper I values (see Table 7).

For obs. 0147511801 and 0301600101, the difference in O VII intensity from Paper I seems to be mainly due to our using a smaller normalization for the EPL in this paper. Having a smaller normalization for the EPL results in a larger normalization for the soft-proton model. These two model components have different spectra: the soft-proton model increases monotonically with decreasing energy, while the EPL, being subject to Galactic absorption and the response of the X-ray telescope, decreases with decreasing energy below  $\sim 1$  keV. As a result, the net effect of decreasing the normalization of the EPL (and thus increasing that of the soft-proton model) is to increase the combined number of counts from these two components in the vicinity of the oxygen lines. This in turn leads to a decrease in the number of counts attributed to the oxygen lines, and hence a decrease in the oxygen intensity. While this effect should, in principle, affect all observations, clearly in the vast majority of cases the effect is negligible compared with the combined statistical and systematic error.

For obs. 0108062101, the above explanation may partly explain the difference in O VII intensity. In addition, the new version of `mos_back` identified the MOS1.5 chip as being anomalous in this observation, whereas we failed to identify it as such in Paper I. Including an anomalous chip for this observation in Paper I may have led to an inaccurate estimate of the particle background, and hence to an inaccurate measurement of the O VII intensity.

### 3.6. Contamination from Bright Sources and Soft Protons

In Paper I we examined the possibilities that contamination from the wings of the PSF of bright sources and/or contamination from soft protons were biasing our intensity measurements. We came to the conclusion that neither was a significant source of bias. Using the same methods as in Paper I, we come to the same conclusion here.



To examine possible contamination from bright sources, we considered the observations in our sample for which we had excised the target source by hand ( $\sim 30\%$  of our sample).<sup>9</sup> For each observation, we incrementally increased the source exclusion radius (typically in five  $1'$  increments), and remeasured the oxygen intensities each time. If photons in the wings of the PSF were biasing our measurements, we would expect the measured intensity to decrease with increasing source exclusion radius. For each observation, we used  $\chi^2$  to test whether the intensities measured with larger source exclusion radii were consistent with the original intensity measurement.

We found that for  $\approx 6\%$  of the observations, the O VII and/or O VIII intensities measured with larger source exclusion radii were not consistent with the original measurements at the 5% level. However, upon inspecting the intensities as a function of source exclusion radius, we found that in most cases the variation was non-monotonic, or that the intensities increased with source exclusion radius. Neither of these forms of variation is consistent with there being contamination from the target source. For only five observations were there indications of contamination from the target source.<sup>10</sup> For these observations, we simply increased the source exclusion radius to the point where the intensities stopped varying with source exclusion radius (an increase of  $1'$  or  $2'$ ). Having corrected these five observations, we think that our intensity measurements are not seriously contaminated by emission from bright sources.

We also investigated the possibility of contamination from fainter sources, i.e., the sources removed by the automated source removal (Section 2.3) rather than by hand. We reprocessed 100 of our observations, chosen at random, with the source exclusion radius used in the automated source removal increased by 50% from  $50''$  to  $75''$ . The intensities obtained using this larger source exclusion radius were not significantly different from our original measurements, nor was there any systematic shift in the intensities toward larger or smaller values. We therefore conclude that our intensity measurements are not seriously contaminated by emission from fainter, automatically removed sources.

To examine the possibility that soft-proton contamination is biasing our results, we looked for any correlation between  $I - \min(I)$  and  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  (the latter being a measure of the amount of soft-proton contamination). For a given direction, any variation in intensity should be solely due to SWCX, and so, in the absence of any bias, there should be no correlation between  $I - \min(I)$  and  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$ . For O VII and O VIII, the correlation coefficients (specifically, Kendall's  $\tau$ ; e.g., Press et al. 1992) are  $-0.08$  ( $-0.13, -0.04$ ) and  $-0.02$  ( $-0.07, +0.03$ ), respectively (the values in parentheses are the 90% bootstrap confidence intervals). Although the correlation coefficient for  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  against  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  is different from zero at a statistically significant level, it is

still small in magnitude ( $|\tau| \leq 0.1$ ). When we use other measures of the soft-proton contamination (the normalization of the power-law model, or its spectral index), we again find correlation coefficients that are small in magnitude ( $|\tau| \leq 0.1$ ), and that are typically consistent with zero. Hence, soft-proton contamination is unlikely to be seriously biasing our intensity measurements.

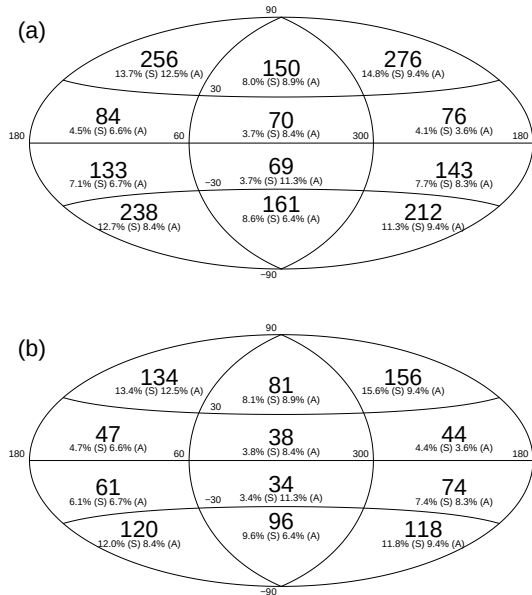
### 3.7. Effect of Proton Flux Filtering

Here we discuss the effects of excluding the portions of the *XMM-Newton* data taken when the solar wind proton flux exceeded  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$ . This filtering was carried out in an attempt to reduce the contamination due to SWCX emission, and is described in Section 2.4. As noted in Section 3.3, the quartiles of the O VII intensities obtained without this filtering are systematically higher than the corresponding quartiles obtained with the filtering, while for O VIII, there are no significant differences in the intensity quartiles with and without the proton flux filtering. However, this does not mean that the proton flux filtering leads to systematically lower O VII intensities being extracted from the SXR spectra. When we look at the 356 observations for which proton flux filtering had some effect, but did not render the observation unusable (denoted by a “Y” in Column 14 of Table 2), we find that the median difference in the O VII intensity without and with proton flux filtering is  $-0.02 \text{ L.U.}$  (90% bootstrap confidence interval:  $-0.10$  to  $0.03 \text{ L.U.}$ ). For O VIII the corresponding difference is  $0.00 \text{ L.U.}$  ( $-0.01$  to  $0.03 \text{ L.U.}$ ). Thus, as we found in Paper I, proton flux filtering does not lead to systematically lower oxygen intensities being extracted from the SXR spectra.

In contrast, proton flux filtering does preferentially remove the observations that yield the largest O VII intensities (i.e., during such observations the solar wind proton flux tended to exceed  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$ ). Of the 336 observations in Table 1 with  $I_{\text{O VII}} > 10 \text{ L.U.}$ , 135 (40%) yield usable spectra after the proton flux filtering, compared with 856 out of 1532 (56%) of the observations with  $I_{\text{O VII}} \leq 10 \text{ L.U.}$ . For  $I_{\text{O VII}} > 15 \text{ L.U.}$ , the fraction is 45 out of 118 observations (38%), compared with 946 out of 1750 (54%) for observations with  $I_{\text{O VII}} \leq 15 \text{ L.U.}$ . This tendency of proton flux filtering to preferentially remove the observations that yield larger O VII intensities explains why there is a significant downward shift in the quartiles of the O VII intensities when proton flux filtering is included (Table 3). However, it should be noted that this tendency is less pronounced than we found in Paper I: in Paper I, only 5 out of 31 observations (16%) with  $I_{\text{O VII}} > 10 \text{ L.U.}$ , and 1 out of 9 observations (11%) with  $I_{\text{O VII}} > 15 \text{ L.U.}$  yielded usable spectra after the proton flux filtering. This difference may be due to the fact that the oxygen intensities in the region covered by Paper I ( $l = 120^\circ$ – $240^\circ$ ) are generally lower than those toward the Galactic Center (see Figure 2), and so a bright O VII line in Paper I was more likely to be due to SWCX, and thus more likely to be associated with a large solar wind proton flux. Despite the fact that a larger fraction of the observations with larger O VII intensities was rejected by the proton flux filtering, in Paper I we did not see a significant downward shift in the O VII intensity quartiles when proton flux filtering was included. Presumably this is because the observations with the largest O VII intensities were a small subset of the Paper I sam-

<sup>9</sup> In Paper I, we considered only observations of stars, as such objects can produce bright line emission that could have contaminated our SXR measurements.

<sup>10</sup> In Paper I, only one of the observations that we examined exhibited significant variation of the O VII or O VIII intensity with exclusion radius. This variation was inconsistent with there being contamination from the target source.



**Figure 5.** All-sky maps in Galactic coordinates showing how our oxygen intensity measurements are distributed on the sky. The large numbers show the number of oxygen intensity measurements in each of 12 equal-area regions of the sky. The small numbers underneath show the percentage of observations in our survey (S), and percentage of the original set of 5698 archival observations (A) that fall within each region (in some cases the percentages do not sum to 100 due to rounding). If the observations were uniformly distributed, each region would have 8.3% of the observations. Panel (a) shows the number intensity measurements obtained without the solar wind proton flux filtering described in Section 2.4, while panel (b) shows the numbers of intensity measurements obtained with this filtering.

ple.

For O VIII, observations with large and small intensities yield usable spectra after the proton flux filtering at similar rates: 81 out of 161 observations (50%) with  $I_{\text{O VIII}} > 5$  L.U., compared with 910 out of 1707 observations (53%) with  $I_{\text{O VIII}} \leq 5$  L.U.. In contrast, in Paper I, only 2 out of 9 observations (22%) with  $I_{\text{O VIII}} > 5$  L.U. yielded usable spectra after the proton flux filtering. The fact that observations with large and small O VIII intensities yield usable spectra after the proton flux filtering at similar rates explains the similarity of the O VIII intensity quartiles in Table 3 with and without proton flux filtering.

### 3.8. Survey Sky Coverage

In general our measurements are well distributed over the sky, albeit with some large scale variation in the sky coverage (see the maps in Figure 2, and also Figure 5, which gives the number of oxygen intensity measurements in 12 equal-area regions of the sky). There appear to be fewer observations at low Galactic latitudes ( $|b| < 30^\circ$ ) than at higher latitudes. We see from Figure 5 that low latitudes away from the Galactic Center ( $l = 60^\circ$ – $300^\circ$  and  $|b| < 30^\circ$ ) are relatively undersampled in our final sample, with 23% of the observations lying in this third of the sky. This is largely due to the relatively lower coverage of this region of the sky in the *XMM-Newton* archive – 25% of the archival observations are toward this third of the sky. Higher latitudes away from the Galactic Center are relatively oversampled in our final sample – 53% of the observations in our final

sample are in the third of the sky with  $l = 60^\circ$ – $300^\circ$  and  $|b| \geq 30^\circ$ . This is partly because this region of the sky is oversampled in the archive, with 40% of the archival observations lying in this third of the sky. It is not clear why a larger fraction of the observations in this region of the sky make it to our final sample.

There also appear to be fewer observations toward the inner Galaxy ( $l < 60^\circ$  or  $l > 300^\circ$ ) than away from the inner Galaxy. Higher latitudes toward the inner Galaxy ( $l < 60^\circ$  or  $l > 300^\circ$ ,  $|b| \geq 30^\circ$ ) may appear undersampled in Figure 2 in comparison to the relative oversampling of the adjacent high-latitude regions.

The region immediately around the Galactic Center ( $l < 60^\circ$  or  $l > 300^\circ$ ,  $|b| < 30^\circ$ ) is undersampled in our final sample – only 7% of our final set of observations lie in this sixth of the sky, compared with 20% of the archival observations. This is for a number of reasons. First, observations in this region of the sky are rejected at a higher rate by the light curve filtering described in Section 2.1, for reasons that are unclear. Second, observations in this region of the sky are rejected at a higher rate due to the presence of bright point sources, bright diffuse emission, or bright arcs in the field of view (see Section 2.1). Finally, observations in this region of the sky are rejected at a higher rate due to  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5}$  exceeding 2.7 (this threshold was introduced in Section 3.3, and is intended for the identification and rejection of observations with excessive soft-proton contamination). Approximately 3/4 of the observations in this region of the sky that were rejected in this way are toward very low latitudes ( $|b| < 3^\circ$ ), and thus their SXR spectra likely exhibit the hard X-ray emission from the Galactic Ridge (e.g., Worrall et al. 1982; Revnivtsev et al. 2006). This additional hard emission would tend to increase  $F_{\text{total}}^{2-5}$  relative to  $F_{\text{exgal}}^{2-5}$ . While such observations are not necessarily badly contaminated by soft protons, we erred on the side of caution and rejected all observations with  $F_{\text{total}}^{2-5}/F_{\text{exgal}}^{2-5} > 2.7$ . Note also that our spectral model (Section 3.1) is designed for the analysis of spectra in which counts above  $\sim 2$  keV are from either the EPL or from residual soft-proton contamination. Re-analyzing the spectra with a model that is better suited to modeling the Galactic Ridge emission is beyond the scope of this survey.

## 4. DISCUSSION

### 4.1. Implications for Solar Wind Charge Exchange

Several factors affect the intensity of the SWCX emission in a given observation of the SXR. The geocoronal SWCX intensity is expected to depend on the solar wind proton flux near the Earth, and on where the sightline passes through the magnetosheath (e.g., Robertson & Cravens 2003a,b; Robertson et al. 2006). The heliospheric SWCX intensity is expected to depend on the phase of the solar cycle, the ecliptic latitude, and the location of the Earth in its orbit (e.g., Robertson & Cravens 2003a; Koutroumpa et al. 2006). Variations in the solar wind ion composition, or the passage of a coronal mass ejection across the line of sight (e.g., Koutroumpa et al. 2007; Henley & Shelton 2008; Carter et al. 2010) can also affect the SWCX intensity.

A detailed study of all the above factors is beyond the

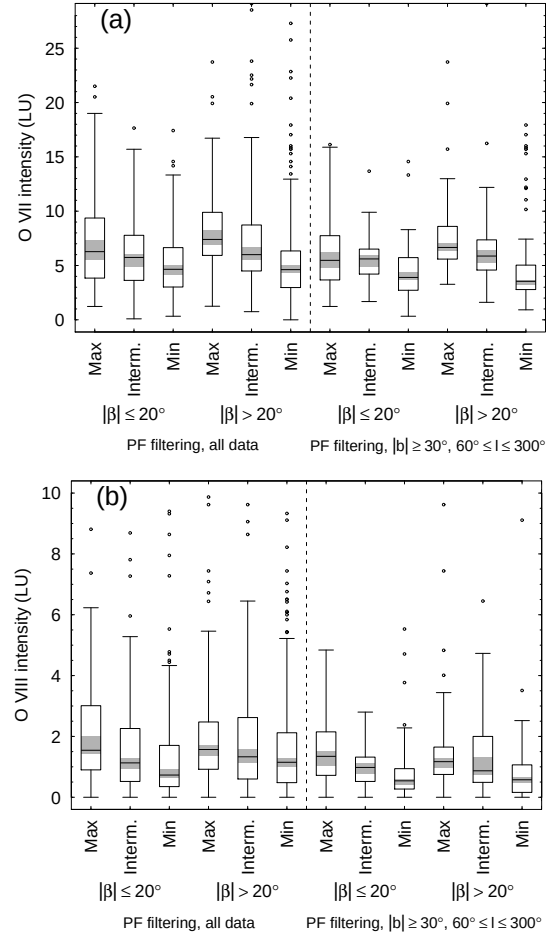
scope of this catalog paper. However, we will point out a few interesting features of our data, and discuss them in the context of simple SWCX models. First, we will consider the heliospheric SWCX emission, and its variation with ecliptic latitude and phase of the solar cycle. Then, in Section 4.1.2, we will consider the geocoronal SWCX emission, and compare the observed variations in intensity with those expected from a simple model of the emission.

#### 4.1.1. Heliospheric SWCX Emission

*Model Expectations* — To determine how the heliospheric SWCX emission is expected to vary with ecliptic latitude and with phase of the solar cycle, we refer to the heliospheric SWCX model of Koutroumpa et al. (2006). Sightlines toward low ecliptic latitudes sample the slow solar wind (and hence approximately the same density of solar wind  $O^{+7}$  and  $O^{+8}$  ions) throughout the solar cycle. During solar minimum, the photoionization of neutral H and He is less efficient, leading to greater densities of these atoms. Hence, the oxygen intensities at low ecliptic latitudes are expected to be higher during solar minimum than at solar maximum (Koutroumpa et al. 2006). In contrast, sightlines toward high ecliptic latitudes only experience the slow solar wind (in which  $O^{+7}$  and  $O^{+8}$  are relatively abundant) during solar maximum; they experience the fast solar wind (in which  $O^{+7}$  and  $O^{+8}$  are less abundant) during solar minimum. Thus, we expect the X-ray intensities at high ecliptic latitudes to be higher during solar maximum. Furthermore, during solar maximum the intensities are not expected to be strongly dependent on ecliptic latitude, whereas during solar minimum the intensities are expected to be higher at low ecliptic latitudes (see Figures 1 and 11–13 in Koutroumpa et al. 2006).

*Comparison with Observations* — In order to test these ideas, we present the distributions of the O VII and O VIII intensities (from the proton-flux-filtered measurements, having excluded the observations identified as SWCX-contaminated by Carter et al. 2011). The boxplots presented in Figure 6 are categorized by ecliptic latitude and by phase of the solar cycle. For example, the first box in each panel shows the intensity distribution for observations toward low ecliptic latitudes made during solar maximum (“Max”). Here, we define solar maximum as being before 00:00UT on 2003 Feb 01 (MJD = 52,671), and solar minimum (“Min”) as being after 00:00UT on 2005 Jun 01 (MJD = 53,522), with an intermediate phase (“Interm.”) between these times.<sup>11</sup> The left-hand regions of the plots show the results for all of the measurements, while in the right-hand regions we have excluded observations toward low Galactic latitudes or toward the inner Galaxy (to reduce the confounding effects of the variation in intensity with Galactic latitude and longitude; see Section 4.3, below).

Although the distributions of the intensities are rather broad, there is a clear systematic decrease in the



**Figure 6.** Boxplots showing the intensity of (a) O VII and (b) O VIII for different ecliptic latitudes ( $|\beta| \leq 20^\circ$  versus  $|\beta| > 20^\circ$ ) and for different phases in the solar cycle (see text for details). Each box indicates the median and the lower and upper quartiles, and the whiskers extend to the most extreme data point that is no more than twice the interquartile range from the box. Outliers are plotted individually with open circles. The gray bands indicate the 90% confidence intervals on the medians, calculated by bootstrap resampling. The boxes in the left-hand region of each panel show the results for measurements obtained with the proton flux (PF) filtering described in Section 2.4, with observations identified as SWCX-contaminated by Carter et al. (2011) excluded. The boxes in the right-hand regions show the same data, but with observations toward low Galactic latitudes ( $|b| < 30^\circ$ ) or toward the inner Galaxy ( $l > 60^\circ$  or  $l < 300^\circ$ ) excluded.

intensities from solar maximum to solar minimum. While this is expected at high ecliptic latitudes, it is the opposite of what is expected at low ecliptic latitudes (Koutroumpa et al. 2006; see *Model Expectations*, above). As we have used the proton-flux-filtered data, the unexpected trend at low ecliptic latitudes is unlikely to be due to systematic differences in the geocoronal SWCX intensity with solar cycle. A possible explanation is that, during solar maximum, observations at all latitudes are more likely to be affected by SWCX emission from a coronal mass ejection moving across the line of sight than during solar minimum.

We searched for systematic differences between the intensities toward high and low ecliptic latitudes, by checking whether or not the confidence intervals on the median intensities overlapped. We considered only the data plotted in right-hand regions of Figures 6(a) and 6(b), to

<sup>11</sup> Similarly to Paper I, these dates were estimated from sunspot data from the National Geophysical Data Center (<http://www.ngdc.noaa.gov/stp/SOLAR/>). Note that in Paper I we did not define an intermediate phase between solar maximum and minimum.

reduce the possibility of the variation with Galactic coordinates affecting the results. The O VII intensities measured during solar minimum tend to be slightly higher toward low ecliptic latitudes. Although the difference is not large, this trend is at least qualitatively as expected (Koutroumpa et al. 2006; see *Model Expectations*, above). During solar maximum, the O VII intensities tend to be higher toward high ecliptic latitudes, which is not as expected (see *Model Expectations*, above). In contrast, for the O VIII measurements in the right-hand region of Figure 6(b), the median intensities measured toward high and low ecliptic latitudes are consistent with each other, for all three phases of the solar cycle (maximum, intermediate, and minimum).

#### 4.1.2. Geocoronal SWCX Emission

We now consider the geocoronal SWCX emission. In Paper I we showed that the solar wind proton flux alone is not a good indicator of the degree of SWCX contamination in an SXR spectrum: for several directions with multiple *XMM-Newton* observations, we found that the oxygen intensity decreased with increasing proton flux. We also found that there was no clear tendency for sightlines that pass close to or through the sub-solar region of the magnetosheath (that is, the region near the Earth-Sun line) to yield systematically higher oxygen intensities, contrary to expectations (Robertson & Cravens 2003b).

Our new, larger dataset leads us to the same conclusions. However, rather than re-creating Figures 13 and 15 from Paper I with our new data, here we will look at the geocoronal SWCX in a different way, using a model that is similar to that described in Robertson & Cravens (2003b).

*Geocoronal SWCX Model*— The geocoronal SWCX intensity is given by

$$I_{\text{geo}} = \frac{1}{4\pi} \int \alpha n_{\text{sw}} \bar{u} n_{\text{H}} dl, \quad (3)$$

where  $\alpha$  is the product of the relevant charge exchange cross-section, line yield, ion fraction, and elemental abundance,  $n_{\text{sw}}$  is the solar wind proton density,  $\bar{u}$  is the mean ion-neutral collision speed (denoted by  $\langle g \rangle$  in Robertson & Cravens 2003b), and  $n_{\text{H}}$  is the hydrogen density in the Earth's exosphere. The integral is carried out along the line of sight. The mean ion-neutral collision speed is given by

$$\bar{u} \approx (u_{\text{sw}}^2 + v_{\text{th}}^2)^{1/2} = (u_{\text{sw}}^2 + 3kT/m)^{1/2}, \quad (4)$$

where  $u_{\text{sw}}$  is the bulk solar wind speed, and  $v_{\text{th}}$  is the thermal speed of an ion of mass  $m$  in solar wind gas of temperature  $T$ .

If we assume that  $\alpha$  is approximately constant along each line of sight, and approximately the same for each observation, then the difference in the geocoronal SWCX intensity between two observations of the same direction would be proportional to the difference in  $\int n_{\text{sw}} \bar{u} n_{\text{H}} dl$  between the two observations. If we also assume for now that the heliospheric SWCX intensity is approximately constant in a given direction, we would expect

$$I - \min(I) \approx \frac{\alpha}{4\pi} \Delta \left\{ \int n_{\text{sw}} \bar{u} n_{\text{H}} dl \right\}, \quad (5)$$

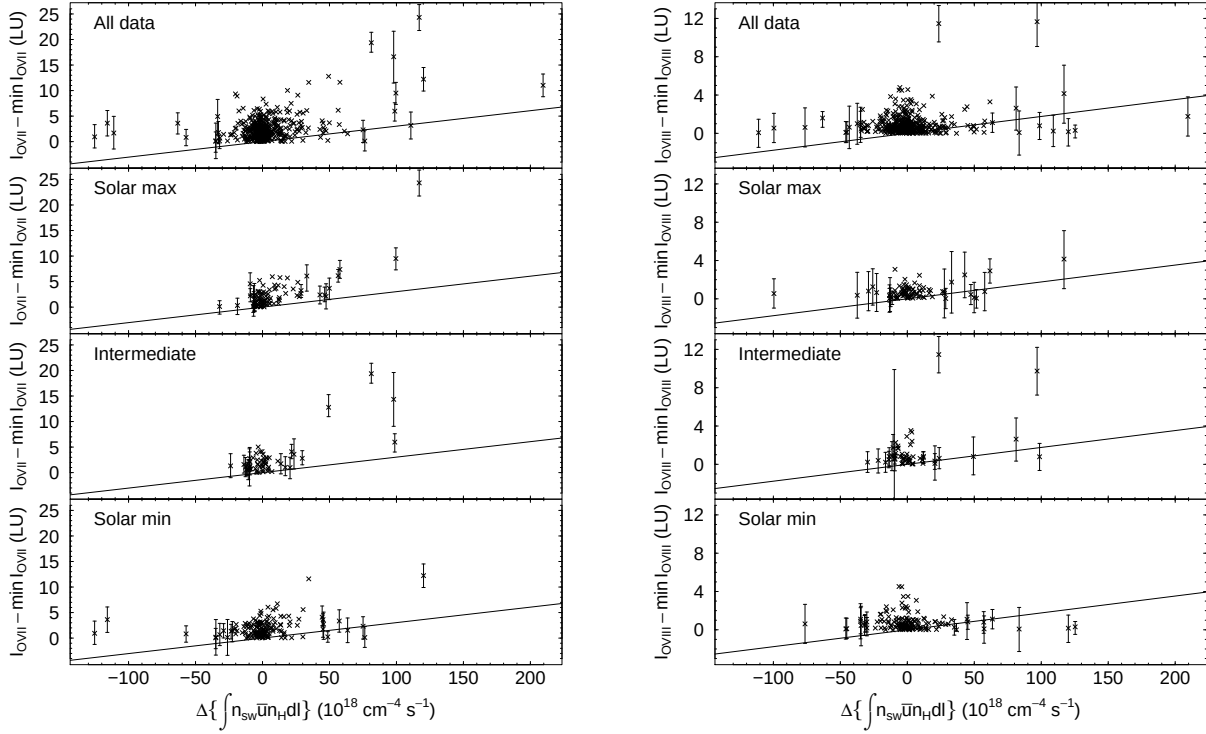
where  $\min(I)$  is as defined in Section 3.4, and the  $\Delta$  indicates the difference in the integral between the observations that yielded  $I$  and  $\min(I)$ .

For comparison with the observed values of  $I - \min(I)$ , we estimated the right-hand side of Equation (5) for each observation in Table 4. In particular, we calculated the time-averaged value of  $\int n_{\text{sw}} \bar{u} n_{\text{H}} dl$  during each observation, including only the good times from our data processing, and taking into account *XMM-Newton*'s changing position and the variation in the incident solar wind. For the exospheric hydrogen density, we assumed  $n_{\text{H}}(r) = (25 \text{ cm}^{-3})(10R_{\text{E}}/r)^3$ , where  $r$  is the distance from the center of the Earth, and  $R_{\text{E}}$  is the radius of the Earth (Cravens et al. 2001). For the solar wind density, speed, and temperature in the magnetosheath, we used the magnetosphere model of Spreiter et al. (1966, Figures 10 and 11), assuming that the distance from the Earth's center to the magnetopause along the Earth-Sun line is  $10R_{\text{E}}$ . For the pre-bowshock solar wind density, speed, and temperature, we used data from OMNIWeb. We assumed that changes in the incident solar wind occurred instantaneously across the domain of the Spreiter et al. (1966) model. As the time-resolution of the solar wind data is 1 h, and the solar wind takes  $\lesssim 30R_{\text{E}}/(400 \text{ km s}^{-1}) = 8 \text{ min}$  to cross the model domain, this is a reasonable approximation. We calculated  $\alpha$  for O VII ( $3.8 \times 10^{-19} \text{ cm}^2$ ) and O VIII ( $2.2 \times 10^{-19} \text{ cm}^2$ ) using the slow solar wind values from Table 1 of Koutroumpa et al. (2006), assuming a line yield of 1.

*Comparison with Observations*— Figure 7 shows  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  and  $I_{\text{O VIII}} - \min(I_{\text{O VIII}})$  against  $\Delta \left\{ \int n_{\text{sw}} \bar{u} n_{\text{H}} dl \right\}$ . As we wish to look at the influence of the solar wind on the geocoronal SWCX, we use the results obtained without proton flux filtering, and do not exclude the observations identified as SWCX-contaminated by Carter et al. (2011). To reduce the effect that the variation of the heliospheric SWCX with solar cycle phase has on  $I - \min(I)$ , and to allow us to concentrate on variations in the geocoronal SWCX, we present various solar cycle phase-based subsets of the data in Figure 7. The top panels show the results for all the observations in Table 4. The other panels show the results for different phases of the solar cycle (as defined earlier). Note that, in the (say) solar maximum panels,  $\min(I)$  means the minimum intensity measured in a given direction *during solar maximum*, which is not necessarily the absolute minimum intensity measured in that direction. Figure 7 also shows the relation expected from Equation (5).

For O VII,  $I_{\text{O VII}} - \min(I_{\text{O VII}})$  is positively correlated with  $\Delta \left\{ \int n_{\text{sw}} \bar{u} n_{\text{H}} dl \right\}$ , as expected. However, the relation is clearly not as expected from Equation (5). Some observations exhibit O VII intensity enhancements much larger than those expected from Equation (5). In particular, some observations exhibit intensity enhancements of up to  $\sim 5 \text{ L.U.}$  while  $\Delta \left\{ \int n_{\text{sw}} \bar{u} n_{\text{H}} dl \right\} \approx 0$ . In contrast,  $I_{\text{O VIII}} - \min(I_{\text{O VIII}})$  is not significantly correlated with  $\Delta \left\{ \int n_{\text{sw}} \bar{u} n_{\text{H}} dl \right\}$ .

Although we have gone beyond a simple examination of the effect of solar wind proton flux on oxygen intensity, our geocoronal SWCX model is still inadequate to



**Figure 7.** Plots of  $I - \min(I)$  against the difference in the time-averaged value of  $\int n_{\text{sw}} \bar{u} n_{\text{H}} dl$  between the observations that yielded  $I$  and  $\min(I)$ . The left and right hand sets of plots show O VII and O VIII, respectively. The top panels show the results for all the observations in Table 4 (without proton flux filtering). The second through fourth panels show the results for different phases of the solar cycle (see text for details). For each set of observations of a given direction, there is, by definition, a data point at the origin; such points have been omitted. For clarity, only the outermost data points' error bars are shown. The solid lines show the relation expected from Equation (5).

describe the observed variations in the oxygen intensities. There are various possible reasons for this. First, despite our dividing up the data by solar cycle phase, it is possible that the heliospheric SWCX is varying significantly between some our observations. Second, some observations may be affected by coronal mass ejections traveling across the line of sight. Third, changes in the solar wind composition would cause the observations to deviate from the relation in Equation (5), as we assumed that  $\alpha$ , and hence the oxygen abundance and the ion fractions, are constant between observations. Fourth, our model does not take into account the variation in the size of the magnetosheath with the incident ram pressure (increasing the ram pressure would tend to move the magnetosheath closer to the Earth, resulting in denser regions of the exosphere being sampled). If we wish to be able to accurately remove the SWCX contamination from SXR spectra, a SWCX model that includes these various effects is needed. Our  $I - \min(I)$  measurements will provide useful constraints on such a model.

#### 4.2. The Oxygen Lines and the 3/4 keV Soft X-ray Background

In this subsection we consider the contribution of the oxygen lines to the 3/4 keV SXR. We will compare our measurements of the fraction of the 3/4 keV emission due to the oxygen lines with a previous measurement from a higher-resolution SXR spectrum (McCammon et al. 2002). In addition, we will compare the observed fraction due to oxygen with model predictions, and discuss the implications for the expected sources of the SXR emission.

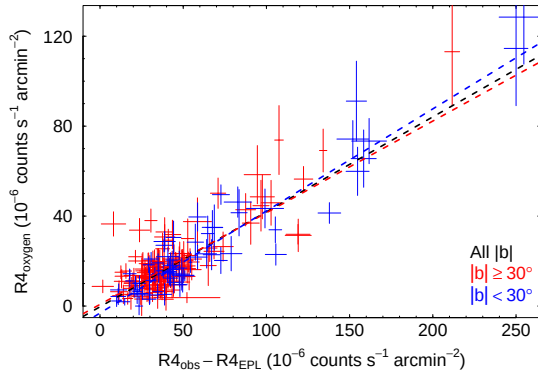
##### 4.2.1. The 3/4 keV SXR Intensity

The *ROSAT* All-Sky Survey (RASS) was conducted in multiple bands, of which the R4 band ( $\approx 0.44\text{--}1.01$  keV) is the most sensitive to the oxygen lines (Snowden et al. 1997). We will take the RASS measurements in this band in the directions of the *XMM-Newton* observations as our measure of the 3/4 keV SXR intensity, to which we will compare our measured O VII and O VIII intensities. We used the `sxbg` tool<sup>12</sup> to extract the observed *ROSAT* count-rates,  $R_{4,\text{obs}}$ , for each *XMM-Newton* observation direction. Note that the RASS was carried out in 1990 and 1991 (Snowden et al. 1995b), during a solar maximum.

The EPL's contributions to the RASS R4 count-rates,  $R_{4,\text{EPL}}$ , must be removed. To this end, we assumed an intrinsic EPL spectrum equal to  $10.5(E/1 \text{ keV})^{-1.46}$  photons  $\text{cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1} \text{ keV}^{-1}$  (Chen et al. 1997)<sup>13</sup> and an absorbing column density from the LAB H I survey (Kalberla et al. 2005). The absorbed spectrum for each *XMM-Newton* observation direction was folded through the *ROSAT* response to yield our estimates of the EPL's contribution to the R4 count-rate. We then subtracted this from the observed count-rate, yielding the non-EPL portion of the R4 count-rate,  $R_{4,\text{obs}} - R_{4,\text{EPL}}$ . This consists of SWCX emission,

<sup>12</sup> [http://heasarc.gsfc.nasa.gov/Tools/xraybg\\_help.html#command](http://heasarc.gsfc.nasa.gov/Tools/xraybg_help.html#command)

<sup>13</sup> Note that the normalization of this spectrum is larger than the value we used in our spectral analysis ( $7.9 \text{ photons cm}^{-2} \text{ s}^{-1} \text{ sr}^{-1} \text{ keV}^{-1}$ ; see Section 3.1). However, this is the extragalactic model that was used by Snowden et al. (2000) and Kuntz & Snowden (2000) in their *ROSAT* analyses.



**Figure 8.** R4 count-rate expected from our measured oxygen intensities against the non-EPL portion of the observed R4 count-rate,  $R4_{\text{obs}} - R4_{\text{EPL}}$ . We show only the results obtained using  $\min(I_{\text{O VII}})$  and  $\min(I_{\text{O VIII}})$  from directions with multiple *XMM-Newton* observations (see text for details). The data points are colored according to the Galactic latitude of the observation direction. The black, red, and blue dashed lines show the best-fit straight lines for all directions that have been observed multiple times, for directions with  $|b| \geq 30^\circ$ , and for directions with  $|b| < 30^\circ$ , respectively.

emission from hot Galactic gas, and possibly emission from the warm-hot intergalactic medium (WHIM; e.g., Cen & Ostriker 1999).

For comparison with  $R4_{\text{obs}} - R4_{\text{EPL}}$ , we calculated the R4 count-rates expected from our oxygen line measurements,  $R4_{\text{oxygen}}$ , by folding  $\delta$  functions with the measured intensities through the *ROSAT* response.

#### 4.2.2. The Fraction of the 3/4 keV SXR Due to Oxygen

Figure 8 shows  $R4_{\text{oxygen}}$  plotted against  $R4_{\text{obs}} - R4_{\text{EPL}}$ . In order to use values of  $R4_{\text{oxygen}}$  that are as close as possible to the interstellar values, we use only results from directions with multiple *XMM-Newton* observations, using the minimum O VII and O VIII intensities measured in each such direction. From here on, when calculating  $\min(I)$  for a given direction, we select the smallest intensity measured in that direction, whether it was measured with proton flux filtering or not. For example, for data set 4 in Table 4, the smallest O VII intensity was obtained from obs. 0400460301 without proton flux filtering, while for data set 19, the smallest O VII intensity was obtained from obs. 0106660401 with proton flux filtering. Because we are using the faintest (and hence least SWCX-contaminated) observation from each direction, here we do not exclude the observations identified as SWCX-contaminated by Carter et al. (2011).

Clearly  $R4_{\text{oxygen}}$  is well correlated with  $R4_{\text{obs}} - R4_{\text{EPL}}$ . We fitted straight lines to the data, using the method described in Section 8 of Hogg et al. (2010) for data with errors on the  $x$  and  $y$  values and intrinsic scatter. We used a Metropolis-Hastings Markov Chain Monte Carlo method (e.g., Press et al. 2007, Section 15.8) to sample the parameter space.<sup>14</sup> We defined the “best-fit” line using the medians of the gradient and the intercept from the marginalized posterior probability distributions, with uncertainties given by the median absolute deviations of these distributions. The best-fit lines for all directions that have been observed multiple times, and for direc-

**Table 8**  
Straight-Line Fit Results for  $R4_{\text{oxygen}}$   
against  $R4_{\text{obs}} - R4_{\text{EPL}}$

| Dataset                                               | Gradient          | Intercept <sup>a</sup> |
|-------------------------------------------------------|-------------------|------------------------|
| $\min(I)^b$                                           |                   |                        |
| All $ b $                                             | $0.422 \pm 0.024$ | $-0.3 \pm 1.1$         |
| $ b  \geq 30^\circ$                                   | $0.408 \pm 0.039$ | $+0.7 \pm 1.6$         |
| $ b  < 30^\circ$                                      | $0.454 \pm 0.032$ | $-3.1 \pm 2.0$         |
| All data <sup>c</sup> , without proton flux filtering |                   |                        |
| All $ b $                                             | $0.485 \pm 0.011$ | $+1.2 \pm 0.5$         |
| $ b  \geq 30^\circ$                                   | $0.509 \pm 0.016$ | $+1.4 \pm 0.7$         |
| $ b  < 30^\circ$                                      | $0.477 \pm 0.014$ | $-0.4 \pm 0.8$         |
| All data <sup>c</sup> , with proton flux filtering    |                   |                        |
| All $ b $                                             | $0.483 \pm 0.012$ | $+0.2 \pm 0.6$         |
| $ b  \geq 30^\circ$                                   | $0.503 \pm 0.017$ | $+0.2 \pm 0.7$         |
| $ b  < 30^\circ$                                      | $0.479 \pm 0.020$ | $-1.1 \pm 1.1$         |

**Note.** — Each value is the median  $\pm$  the median absolute deviation of the relevant marginalized posterior probability distribution.

<sup>a</sup>  $10^{-6}$  counts  $\text{s}^{-1}$   $\text{arcmin}^{-2}$ .

<sup>b</sup> Results obtained using  $\min(I_{\text{O VII}})$  and  $\min(I_{\text{O VIII}})$  from directions with multiple *XMM-Newton* observations (see text for details).

<sup>c</sup> Excluding observations identified as SWCX-contaminated by Carter et al. (2011).

tions with  $|b| \geq 30^\circ$  and with  $|b| < 30^\circ$ , are plotted in Figure 8 in different colors, and the best-fit values are shown in Table 8.

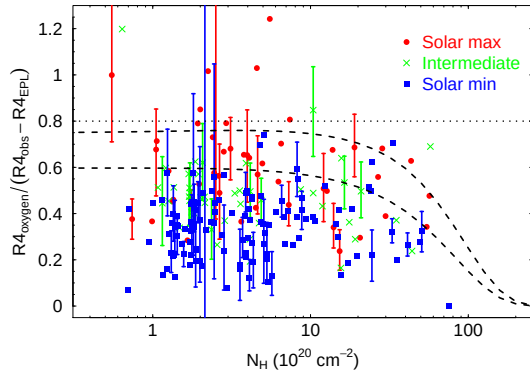
Although not shown in plots (which would be rather crowded), we also fit straight lines to the larger datasets composed of all measurements, except for those from observations identified as SWCX-contaminated by Carter et al. (2011). We carried out two versions of these fits, one using the measurements obtained without proton flux filtering, and the other using measurements obtained with this filtering. Table 8 also contains the best-fit values from these fits.

The gradients in Table 8 imply that  $\sim 40$ – $50\%$  of the non-EPL portion of the R4 count-rate is due to the oxygen K $\alpha$  lines. This fraction is lower when we use the  $\min(I)$  oxygen intensities than when we use all of the oxygen intensities. This is unsurprising, as when we use the  $\min(I)$  measurements we discard the measurements that would yield larger values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$ . For all the fits, the intercepts are generally consistent with zero, implying that the fraction of the non-EPL R4 count-rate due to oxygen is independent of  $R4_{\text{oxygen}}$  and  $R4_{\text{obs}} - R4_{\text{EPL}}$ . This implies that the spectrum of the non-EPL 3/4 keV emission does not vary systematically with its brightness. Finally, we note that the fraction of the non-EPL R4 count-rate due to oxygen is similar for low and high Galactic latitudes.

For comparison, McCammon et al. (2002) obtained a high-spectral-resolution microcalorimeter spectrum of the SXR, and found that 52% of the R4 emission at high Galactic latitudes not due to AGN is due to the oxygen K $\alpha$  lines, which they observed at their laboratory wavelengths. The gradients in Table 8 obtained for all observations with  $|b| \geq 30^\circ$  (with or without proton flux filtering) are in excellent agreement with this fraction. In contrast, the gradient obtained from the  $\min(I)$  measurements with  $|b| \geq 30^\circ$  is significantly smaller

<sup>14</sup> Specifically, we used the `metrop()` function from the R `mcmc` package (Geyer 2010).





**Figure 9.** Fraction of the non-EPL portion of the *ROSAT* R4 count-rate that is due to the oxygen  $K\alpha$  lines, as a function of the H I column density,  $N_H$  (Kalberla et al. 2005). We just show the results obtained using  $\min(I_{O\text{ VII}})$  and  $\min(I_{O\text{ VIII}})$  from directions with multiple *XMM-Newton* observations (see text for details). For clarity, only a subset of the data points’ error bars are plotted. The data are color-coded according to the phases of the solar cycle during which the *XMM-Newton* observations were carried out (see Section 4.1.1). The upper and lower dashed curves show the expected R4 fraction for a single-temperature CIE halo plasma of temperature  $2 \times 10^6$  and  $3 \times 10^6$  K, respectively. The horizontal dotted line shows the approximate R4 fraction expected for SWCX emission.

than the McCammon et al. (2002) fraction. These results most likely mean that the brightness of the SWCX oxygen emission in McCammon et al.’s spectrum is similar to that in a typical *XMM-Newton* spectrum, whereas the *XMM-Newton* spectra that yielded the  $\min(I)$  measurements typically contain less SWCX emission than McCammon et al.’s spectrum.

#### 4.2.3. Implications for Sources of SXR Emission

Here we will compare the observed fraction of the non-EPL 3/4 keV SXR due to the oxygen lines with the fractions expected from different sources. We will show that the observed values are lower than those expected from collisional ionization equilibrium (CIE) plasma in the halo, or from SWCX. Hence, it is possible that the true SWCX emission is harder than the model SWCX spectrum we have used, that the halo is out of equilibrium, and/or that oxygen is depleted in the halo.

For this comparison, it will be helpful to plot the observed fractions against  $N_H$ , as the fraction expected from hot plasma in the halo varies with  $N_H$  (see below). We do this in Figure 9. The *XMM-Newton* observations are color-coded according to solar cycle phase, using the definitions introduced in Section 4.1.1, above (as noted earlier, the RASS was carried out during a solar maximum). As in Figure 8, we just show the results obtained using  $\min(I_{O\text{ VII}})$  and  $\min(I_{O\text{ VIII}})$  from directions with multiple *XMM-Newton* observations.<sup>15</sup>

*Fractions of R4 Emission Due to Oxygen Expected from Halo Plasma and from SWCX*— The dashed curves in Figure 9 show how  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$  would vary with  $N_H$  if the non-EPL 3/4 keV emission were dominated by emission from a 2 or  $3 \times 10^6$  K plasma in CIE in the Galactic halo. Note that these model values decrease

toward large  $N_H$ . This is because the photoelectric absorption cross-section increases with decreasing photon energy, and so as  $N_H$  increases, the lower-energy emission in the R4 band (including the oxygen lines) is attenuated more than the higher-energy emission.

Even though we are using the  $\min(I)$  measurements, SWCX may still be contributing to the 3/4 keV SXR emission. To estimate the fraction of the R4 count-rate from a typical SWCX spectrum due to the oxygen  $K\alpha$  lines, we use the spectrum shown in Figure 2 of Koutroumpa et al. (2009b). The line intensities for both solar minimum and solar maximum shown in this plot imply that  $\approx 80\%$  of the SWCX R4 count-rate is due to the oxygen  $K\alpha$  lines (horizontal dotted line in Figure 9), which is slightly larger than the fraction expected from CIE plasma in the halo for  $N_H \lesssim \text{few} \times 10^{21} \text{ cm}^{-2}$ . We obtain similar fractions if we use the SWCX spectrum shown in Figure 1 of Koutroumpa et al. (2009c), or if we calculate the relative intensities of SWCX lines in the R4 band using cross-sections for C V, C VI, N V, N VII, O VII, O VIII lines from Table 8.2 of Bodewits (2007) and for Ne IX and Mg XI lines from Table 1 of Koutroumpa et al. (2006), with ion abundances also from Table 1 of Koutroumpa et al. (2006).<sup>16</sup>

The observed values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$  are generally much lower than those expected from a  $\sim (2-3) \times 10^6$  K CIE plasma in the halo, or from SWCX emission. Hence, a combination of these two emission mechanisms seems to be unable to explain the observed values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$ . In the remainder of this subsection we will explore possible explanations for the low observed values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$ .

*Is the SWCX Emission Fainter in the XMM-Newton Data than in the ROSAT Data?*— Here, we consider the possibility that the SWCX emission (specifically, the oxygen emission) is typically fainter in the *XMM-Newton* observations than it was during the RASS; i.e., the values of  $R4_{\text{oxygen}}$  derived from the *XMM-Newton* data may be smaller than the values we would have obtained had we been able to measure  $R4_{\text{oxygen}}$  at the same time as  $R4_{\text{obs}} - R4_{\text{EPL}}$ . Such an occurrence would have the effect of lowering the  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$  ratio. This explanation for the low observed ratios is plausible because the *XMM-Newton* observations that yield low values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$  were typically taken during solar minimum, while the RASS was carried out during solar maximum, and, as we showed in Section 4.1.1, the oxygen intensities are typically fainter during solar minimum than during solar maximum (see Figure 6). However, it should be noted that a few *XMM-Newton* observations taken during solar maximum (i.e., the equivalent phase as the RASS) also yield low values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$ . Furthermore, when we examine this explanation more quantitatively, we find that it is unable to reproduce the observed values of  $R4_{\text{oxygen}}/(R4_{\text{obs}} - R4_{\text{EPL}})$  for *XMM-Newton* observations taken during solar minimum, as we will now demon-

<sup>15</sup> Recall that here we are defining  $\min(I)$  as the lowest intensity measured in a given direction, regardless of whether it was obtained with or without proton flux filtering.

<sup>16</sup> For this calculation we consider only ions interacting with H, as Table 8.2 of Bodewits (2007) does not give data for ions interacting with He. However, it should be re-iterated that this calculation yields a similar value to those obtained from the Koutroumpa et al. (2009b,c) SWCX spectra, which do include emission from ion-He interactions.

strate.

We begin by defining  $R_{4\text{SWCX}}$  and  $R_{4\text{halo}}$  as the contributions to the RASS R4 count-rate from SWCX and the halo, respectively; i.e.,  $R_{4\text{obs}} - R_{4\text{EPL}} = R_{4\text{SWCX}} + R_{4\text{halo}}$  (we are assuming the contribution from the LB is negligible). Note that  $R_{4\text{SWCX}}$  is the count-rate due to SWCX during solar maximum. If  $\gamma_{\text{SWCX}}$  and  $\gamma_{\text{halo}}$  are the expected fractions of  $R_{4\text{SWCX}}$  and  $R_{4\text{halo}}$ , respectively, due to oxygen, and  $\xi$  is the typical factor by which oxygen SWCX intensities are reduced in going from solar maximum (epoch of the RASS) to solar minimum (blue data points in Figure 9), then a typical value of  $R_{4\text{oxygen}}$  for an *XMM-Newton* observation taken during solar minimum would be given by

$$R_{4\text{oxygen}} = \xi \gamma_{\text{SWCX}} R_{4\text{SWCX}} + \gamma_{\text{halo}} R_{4\text{halo}}. \quad (6)$$

Since  $\gamma_{\text{SWCX}} \approx 0.8$  and  $\gamma_{\text{halo}} \approx 0.7$  (see Figure 9),

$$\frac{R_{4\text{oxygen}}}{R_{4\text{obs}} - R_{4\text{EPL}}} \approx 0.8(1 - f)\xi + 0.7f, \quad (7)$$

where  $f \equiv R_{4\text{halo}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  is the typical fraction of the EPL-subtracted R4 count-rate that is from the halo. For the R45 band, Table 2 in Kuntz & Snowden (2000) implies that 78% of the count-rate not due to the EPL or point sources is from the halo. An equivalent measurement for the R4 band is not available, but using the temperatures and normalizations of the relevant model components from Kuntz & Snowden (2000), we estimate that  $f \approx 0.7$ .

For the observations taken during solar minimum,  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  is typically 0.24–0.44 (these are the lower and upper quartiles, respectively). For  $f \approx 0.7$ , we find that Equation (7) can only yield  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}}) = 0.24\text{--}0.44$  if  $\xi < 0$ , which is unphysical. Hence, while the lower oxygen SWCX intensities during solar minimum may be partly responsible for the low observed values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$ , they do not fully explain the observations. Also, as noted above, a few *XMM-Newton* observations taken during solar maximum also yield low values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$ .

*Is the Halo Much Hotter than  $\sim 3 \times 10^6$  K?*— For a CIE plasma with  $T \gtrsim 2 \times 10^6$  K,  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  is expected to decrease with increasing temperature (e.g., compare the curves for  $T = 2$  and  $3 \times 10^6$  K in Figure 9). This is because, as the temperature increases, the harder emission in the R4 band brightens relative to the oxygen emission. However, the low observed values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  are unlikely to mean that the halo temperature is much greater than  $3 \times 10^6$  K. Such a high temperature would exceed the Galaxy’s virial temperature (e.g., Bregman 2009), and the hot halo gas would escape from the Galaxy’s potential well.

It should also be noted that some observations that have yielded typical halo temperatures elsewhere yield low values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  here. For example, 22 out of the 26 *XMM-Newton* observations studied by Henley et al. (2010) yielded halo temperatures between  $1.5 \times 10^6$  and  $2.5 \times 10^6$  K, assuming CIE. Of these 22 observations, 14 yield  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}}) < 0.5$ .

We have excluded differences in the SWCX oxygen intensities between the RASS data and the *XMM-Newton* data, and a very high halo temperature as possible explanations for the low observed values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$ . In the following paragraphs, we consider three further explanations that we cannot exclude. Currently, we cannot discriminate between these proposed explanations.

*Is the SWCX Emission Harder than Expected?*— It is possible that the true SWCX spectrum is harder than the model SWCX spectra we have used, which would mean that  $\gamma_{\text{SWCX}} \approx 0.8$  is an overestimate. This could arise from inaccuracies in the assumed charge exchange cross-sections or ion fractions. If there were relatively more flux from lines with energies greater than those of the oxygen  $K\alpha$  lines, it would help explain the low observed values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$ .

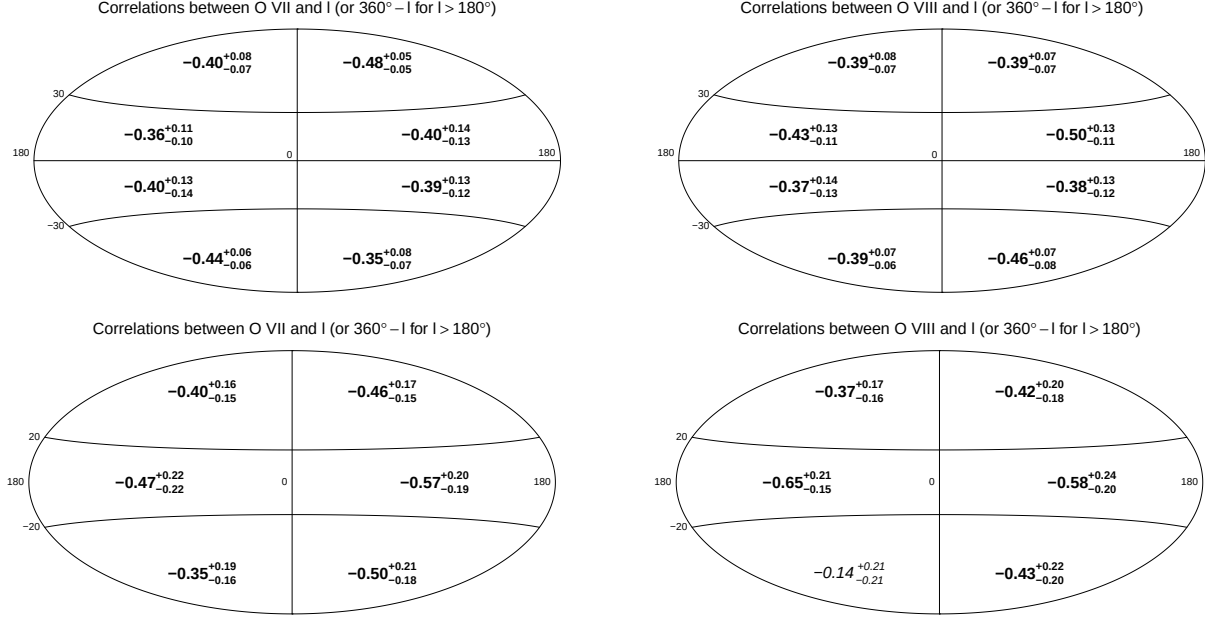
*Is the Halo out of Equilibrium?*— It is also possible that the true halo spectrum is harder than that expected from a  $\sim (2\text{--}3) \times 10^6$  K CIE plasma. We ruled out above the possibility that the halo temperature is much greater than  $3 \times 10^6$  K. Instead, these results may imply that the halo is overionized and recombining (Breitschwerdt & Schmutzler 1994, 1999). The emission from an overionized, recombining plasma may include relatively bright recombination continuum emission at higher energies than the oxygen lines. Hence, the fraction of the EPL-subtracted R4 emission due to oxygen may be lower than that expected from a few-million-degree CIE plasma, as observed. If this is true, it would have important implications for spectral analyses of the halo, as it suggests that CIE halo models with best-fit temperatures of  $\sim (2\text{--}3) \times 10^6$  K (e.g., Galeazzi et al. 2007; Lei et al. 2009; Yoshino et al. 2009; Gupta et al. 2009; Henley et al. 2010) may not accurately model the higher-energy emission from the halo.

*Is Oxygen Depleted in the Halo?*— When calculating the values of  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  expected from a hot halo plasma (Figure 9), we assumed solar abundances (Anders & Grevesse 1989). However, it is possible that oxygen is depleted in the halo. Yoshino et al. (2009) found evidence from a subset of their *Suzaku* observations that neon and iron are enhanced in the halo relative to oxygen. If oxygen were depleted in the halo,  $R_{4\text{oxygen}}/(R_{4\text{obs}} - R_{4\text{EPL}})$  would be lower than expected for a solar-abundance plasma, which is what we observe. If oxygen is underabundant in the halo then, similarly to above, models that assume solar abundances (e.g., Galeazzi et al. 2007; Lei et al. 2009; Gupta et al. 2009; Henley et al. 2010) may not accurately model the halo’s higher-energy emission.

#### 4.3. Spatial Variation of the Oxygen Intensities

The variation of the oxygen intensities with Galactic longitude and latitude can provide information on the general geometry of the halo. This, in turn, provides information on the mechanism responsible for heating the hot halo gas. For example, if the heating of the halo is dominated by SN-driven outflows from the disk (e.g., Shapiro & Field 1976; Bregman 1980; Joung & Mac Low 2006; Henley et al. 2010), and the SN rate per unit area of the disk is fairly uniform in the vicinity of the





**Figure 10.** Kendall's  $\tau$  correlation coefficients for  $I_{\text{O VII}}$  (left) and  $I_{\text{O VIII}}$  (right) against  $l$  for directions with  $0^\circ \leq l < 180^\circ$  or against  $360^\circ - l$  for directions with  $180^\circ \leq l < 360^\circ$ , for different regions of the sky. The upper pair of plots shows the results for intensities obtained with proton flux filtering (observations identified as SWCX-contaminated by Carter et al. (2011) are excluded, as are observations toward the Eridanus enhancement and the Magellanic Clouds). The lower pair of plots show the results for directions with multiple *XMM-Newton* observations, using the minimum intensity measured in each direction (again, observations toward the Eridanus enhancement and the Magellanic Clouds are excluded). The uncertainties indicate the 90% confidence interval on  $\tau$  obtained by bootstrap resampling. The results are generally shown in boldface; the one case for which the confidence interval encompasses zero is shown in italics.

Sun, then we would expect an approximately plane-parallel geometry for the halo, with the same intrinsic halo brightness for all longitudes. If the SN rate increases toward the Galactic Center, we would expect the halo brightness to increase toward the inner Galaxy. An increase in the halo brightness toward the inner Galaxy may also indicate that a halo of accreted extragalactic material centered on the Galactic Center (e.g., Crain et al. 2010) is contributing to the halo emission.

In practice it is difficult to determine the true halo geometry from our intensity measurements, because of the unknown amount of SWCX emission contributing to each measurement. However, we can gain some insight by looking for correlations between the observed intensities and Galactic longitude and latitude. As we do not expect the SWCX intensity to be correlated with Galactic longitude and latitude, any observed correlations most likely reflect variations in the observed halo intensity, which may be due to variations in the intrinsic intensity or in  $N_{\text{H}}$ .

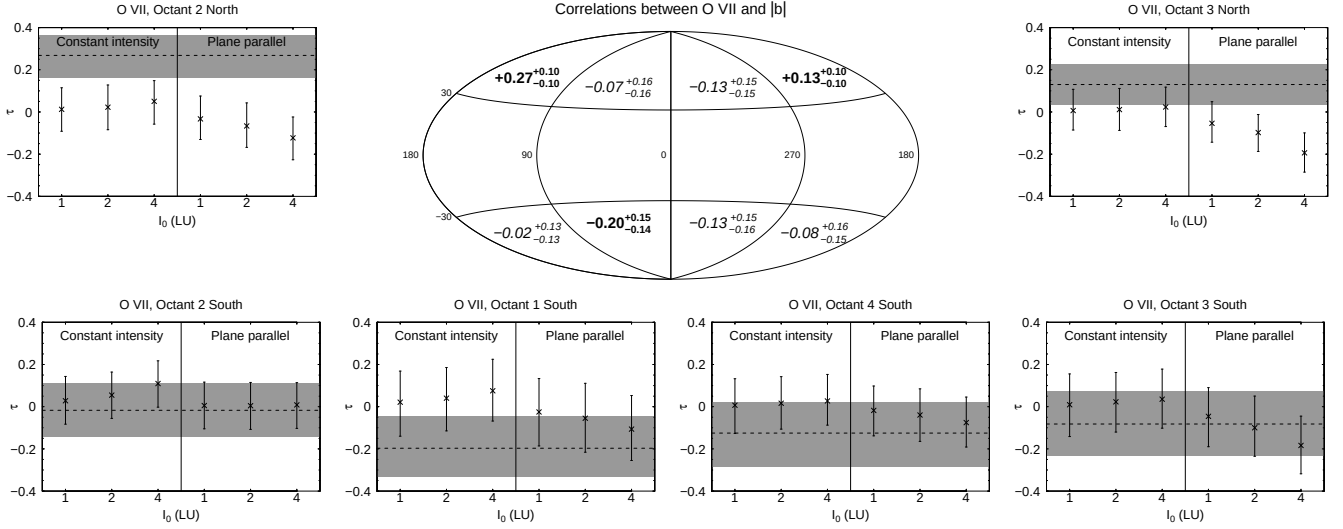
In Sections 4.3.1 and 4.3.2 we will examine the variation of the observed intensities with Galactic longitude and latitude, respectively. Then, in Section 4.3.3, we will compare the observed variation with Galactic latitude with the variation expected from simple models of the intrinsic halo emission, in an attempt to constrain the variation of the intrinsic halo intensity with latitude.

#### 4.3.1. Variation with Galactic Longitude

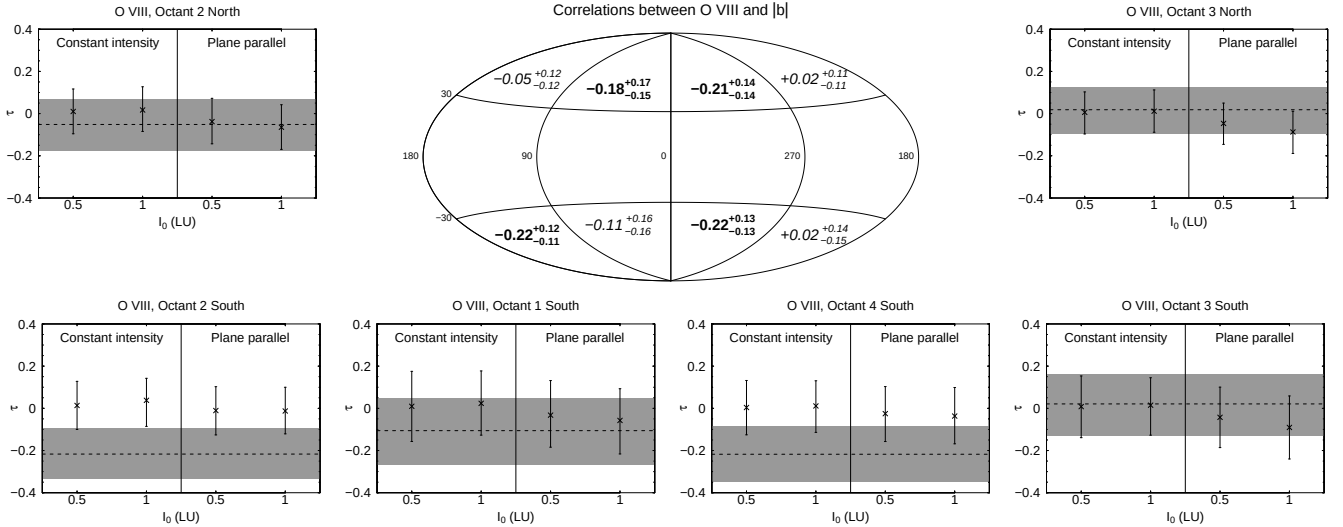
Figure 10 show the correlation coefficients (Kendall's  $\tau$ ; e.g., Press et al. 1992) for the observed intensities against  $l$  for directions with  $0^\circ \leq l < 180^\circ$  or against  $360^\circ - l$  for directions with  $180^\circ \leq l < 360^\circ$ , for different regions of the sky. In the top panels, we use the intensities obtained

with proton flux filtering, and exclude observations identified as SWCX-contaminated by Carter et al. (2011), as well as observations toward the Eridanus enhancement (e.g., Burrows et al. 1993; Snowden et al. 1995a) and the Magellanic Clouds. We calculate the 90% confidence intervals on the correlation coefficients by bootstrap resampling. In the upper pair of plots, all of the correlation coefficients are significantly different from zero; they are shown in boldface print.

There is a clear tendency for the observed O VII and O VIII intensities to increase from the outer Galaxy ( $l = 180^\circ$ ) to the inner Galaxy ( $l = 0^\circ$  or  $360^\circ$ ); see also Figure 2. This trend is seen at all latitudes. However, we discount the trend seen at high latitudes in the northern Galactic hemisphere, as it is likely due to the presence of the Scorpius-Centaurus (Sco-Cen) superbubble (Egger & Aschenbach 1995) toward the inner Galaxy, and so does not tell us anything about the halo. Similarly, the trends at low latitudes reflect variations in the disk, rather than the halo. However, the trends seen toward high southern latitudes most likely reflect real variation in the observed Galactic halo intensity, a conclusion that is supported by the fact that the trends are generally still apparent when we use only  $\min(I_{\text{O VII}})$  or  $\min(I_{\text{O VIII}})$  (the lower pair of panels in Figure 10; in only one case is the correlation coefficient consistent with zero, and this is shown in italics in the figure). As  $N_{\text{H}}$  is not correlated with  $l$  in this region of the sky, these results imply that the intrinsic halo intensity increases from the outer to the inner Galaxy. As noted above, this increase may indicate an increase in the SN rate toward the inner Galaxy or the presence of a halo of accreted extragalactic material centered on the Galactic Center.



**Figure 11.** *Central upper panel:* Kendall's  $\tau$  correlation coefficients for  $I_{\text{O VII}}$  (obtained with proton flux filtering) against  $|b|$ , for different regions of the sky. We consider only sightlines with  $|b| \geq 30^\circ$ , and exclude observations identified as SWCX-contaminated by Carter et al. (2011), or that are toward the Eridanus enhancement or the Magellanic Clouds. The uncertainties indicate the 90% confidence interval on  $\tau$  obtained by bootstrap resampling; if this interval does not (does) encompass zero, the results are shown in boldface (italics). *Surrounding panels:* Comparisons of the observed correlation coefficients with those expected from different halo models, for six different regions of the sky. In each panel, the horizontal dashed line shows the observed value of  $\tau$ , with the gray band indicating the 90% bootstrap confidence interval. The errorbars indicate the 90% confidence intervals on the values of  $\tau$  predicted by different halo models. The left half of each panel shows the predictions for models in which the intrinsic halo intensity is the same in all directions, while the right half of each panel shows the predictions for plane parallel halo models, in which the intrinsic halo intensity varies as  $\text{cosec } |b|$ . For each model, we show predictions for different model normalizations,  $I_0$ , indicated on the  $x$ -axis. See the text for the details of how these model predictions were generated. Note that we do not show results for the 1st and 4th northern octants ( $0^\circ \leq l < 90^\circ$  and  $270^\circ \leq l < 360^\circ$ , respectively), because of the presence of the Sco-Cen superbubble in this region of the sky.



**Figure 12.** As Figure 11, but for O VIII. Note that the values of  $I_0$  used to model the correlation coefficients here are different from those used in Figure 11.

#### 4.3.2. Variation with Galactic Latitude

The central upper panels in Figure 11 (O VII) and Figure 12 (O VIII) show the correlation coefficients for the observed intensities against  $|b|$ , for different regions of the sky with  $|b| \geq 30^\circ$ . As in the upper panels of Figure 10, we use the intensities obtained with proton flux filtering, and exclude observations identified as SWCX-contaminated by Carter et al. (2011), as well as observations toward the Eridanus enhancement and the Magellanic Clouds. As in Figure 10, the correlations that are significantly different from zero are in boldface print, and

those that are consistent with zero are in italics.

The correlations between intensity and  $|b|$  vary significantly across the sky. However, some general trends do emerge. In the 1st and 4th northern octants ( $0^\circ \leq l < 90^\circ$  and  $270^\circ \leq l < 360^\circ$ , respectively), the O VIII intensities are generally anticorrelated with  $|b|$  (i.e., the observed intensities tend to decrease toward the northern Galactic pole), while the O VII intensities are not significantly correlated with  $|b|$ . However, as this region of the sky is dominated by emission from the Sco-Cen superbubble, these trends do not tell us anything about the halo. In the 2nd and 3rd northern octants, the O VII

intensities are positively correlated with  $|b|$ , while the O VIII intensities are not significantly correlated with  $|b|$ . In the southern hemisphere, the intensities are either anticorrelated with  $|b|$  (i.e., they tend to decrease toward the southern Galactic pole), or are not significantly correlated with  $|b|$ . In general, the O VII and O VIII lines behave differently (i.e., in most southern octants, only one of O VII or O VIII is significantly anticorrelated with  $|b|$ ).

#### 4.3.3. Modeling the Variation with Galactic Latitude

In an attempt to constrain the geometry of the intrinsic halo emission, here we compare the observed correlation coefficients with the correlation coefficients that we would expect to observe from each of two different halo models. We use the correlation coefficients, instead of fitting halo models directly to the observed intensities, because the uncertainty in the contribution from SWCX to each intensity measurement prevents us from using standard least-squares fitting techniques.

In brief, we simulated many datasets in which each simulated intensity is the sum of the absorbed model halo emission intensity, a SWCX intensity (which is randomly chosen from the observed  $I - \min(I)$  distribution in order to mimic the unpredictability of time-variable SWCX emission), and a measurement error. See below for details. We then calculate the correlation coefficient between the model intensities and Galactic latitude for each simulated dataset, expecting that the random time-variable SWCX emission will “blur” the correlation coefficient expected from the underlying halo emission. Having done this procedure for many simulated datasets, we obtain a distribution of simulated correlation coefficients, which we then compare with the observed correlation coefficient (in particular, the distribution obtained by bootstrap resampling the observations, which indicates the uncertainty on the observed correlation coefficient). Essentially, we are asking which halo model(s) can reproduce the observed correlation coefficients, in the presence of the “blurring” effect of the time-variable SWCX emission. Our method is described in more detail below.

*Modeling the Correlation Coefficients for Different Halo Models*— For a given region of the sky, and for a given halo model, we generated 1000 sets of simulated intensity measurements for each line (O VII and O VIII). Within each of these sets, the latitudes and column densities of the simulated observations matched those of the actual observations in that region of sky (we restricted ourselves to the observations that yielded oxygen measurements after being subjected to the proton flux filtering; Table 2). As noted above, each simulated intensity measurement was the sum of the absorbed model halo emission, a randomly chosen intensity due to the time-variable SWCX emission, and a randomly chosen positive or negative intensity that mimics the measurement error. We examined two halo models: a plane-parallel model, in which the intrinsic halo intensity is given by  $I_0 \csc |b|$ , and a constant-intensity model, in which the intrinsic halo intensity,  $I_0$ , is independent of  $b$ . For each model we tested different values of  $I_0$  – the smaller the value of  $I_0$ , the more likely it is that any potentially observable correlation due to the halo is obscured by the SWCX emission or the measurement error. We assumed

that the intensity of the time-variable SWCX emission followed the distribution given by our  $I - \min(I)$  measurements from the proton-flux-filtered data (gray histograms in Figures 3(c) and 3(d)). Note that our model considers only the time-variable SWCX emission. We are implicitly assuming that any non-variable SWCX emission does not vary strongly with Galactic latitude, and hence does not affect the correlation coefficient between intensity and latitude.

Therefore, for the plane-parallel model, the  $j$ th simulated O VII or O VIII intensity (for  $j = 1$  to 1000) corresponding to the  $i$ th actual observation (where  $i = 1$  to  $N$ ,  $N$  being the number of observations in the region of the sky being studied) is given by

$$I_{\text{sim},ij} = I_0 \csc |b_i| e^{-\sigma N_{\text{H}i}} + I_{\text{SWCX},ij} + \epsilon_{ij}, \quad (8)$$

and for the constant-intensity model it is given by

$$I_{\text{sim},ij} = I_0 e^{-\sigma N_{\text{H}i}} + I_{\text{SWCX},ij} + \epsilon_{ij}. \quad (9)$$

Here,  $b_i$  is the Galactic latitude of the  $i$ th actual observation,  $N_{\text{H}i}$  is the column density in the direction of this observation (Kalberla et al. 2005),  $\sigma$  is the photoelectric absorption cross-section appropriate for the emission line energy in question (Bałucińska-Church & McCammon 1992; Yan et al. 1998),  $I_{\text{SWCX},ij}$  is the simulated SWCX intensity for this simulated observation, and  $\epsilon_{ij}$  represents the measurement error. As noted above, the values of  $I_{\text{SWCX},ij}$  were drawn randomly from a distribution that follows the observed  $I - \min(I)$  distribution for the line in question (gray histograms in Figures 4(c) and 4(d) for O VII and O VIII, respectively). The values of  $\epsilon_{ij}$  were drawn randomly from a zero-mean normal distribution with standard deviations of 1.7 and 1.2 L.U. for O VII and O VIII, respectively (these are the 75th percentiles of the observed statistical + systematic measurement errors).

We created such datasets for each octant of the sky, except for the 1st and 4th northern octants. We omitted these regions because of the presence of the Sco-Cen superbubble. As we are interested in the halo, we considered only high Galactic latitudes ( $|b| \geq 30^\circ$ ).

For each simulated dataset, we calculated the correlation coefficient for the intensity against  $|b|$ . For each choice of oxygen emission line, halo model, and sky octant, the set of calculated correlation coefficients forms a distribution. These distributions of simulated correlation coefficients for O VII are summarized by the errorbars in Figure 11 – the results for the constant-intensity and plane-parallel halo models are shown in the left and right halves of each panel, respectively, for different values of model  $I_0$ , as indicated on the  $x$ -axes. Each errorbar indicates the 5th and 95th percentile of a given distribution of simulated correlation coefficients, while the crosses indicate the medians. The corresponding results for O VIII are shown in Figure 12. Note that the values of  $I_0$  used to model the O VII and O VIII correlation coefficients differ – larger values of  $I_0$  tend to overpredict the O VIII intensities. For O VIII, we find that we generally cannot distinguish between the models. This is likely because the differences in the intensities predicted by the various models are small compared to the uncertainties due to the SWCX emission and the measurement error. Finally, note that, because the variation of  $N_{\text{H}}$  with  $b$  is not the

same in all octants, the same model may produce different correlation coefficients in different octants.

*Comparison with Observations*— For each octant of the sky in Figures 11 and 12 for which we have calculated model predictions, we have overplotted the observed correlation coefficient as a horizontal dashed line, with a horizontal gray band indicating the 90% confidence interval. Here, we visually compare the above-described model predictions with the observed correlation coefficients.

No single model compares well with the observed correlation coefficients in all octants for both O VII and O VIII. Both halo models are generally in agreement with the observed O VII correlation coefficients in the four southern octants, although in the 1st southern quadrant, the plane-parallel model may be favored over the constant-intensity model, and in the 2nd southern octant, the plane-parallel model with  $I_0 = 4$  L.U. tends to systematically overpredict the intensities at lower latitudes (not plotted). However, only the constant-intensity model is in good agreement with the observed correlation coefficient in the 3rd northern octant, and neither model agrees with the observed correlation coefficient in the 2nd northern octant.

For O VIII, both halo models are generally in agreement with the observed correlation coefficients. The exception is the 2nd southern quadrant, in which neither model agrees well with the observed correlation coefficient.

The most important result from this analysis is that no single halo model seems to be able to account for the observed variation in intensity with Galactic latitude in all directions. Some octants seem to favor the plane-parallel geometry, others seem to favor a constant-intensity model, while in others neither model is in good agreement with the data. Determining the true halo intensity, and hence the true halo geometry, however, will require a better method for disentangling the halo and SWCX contributions to the observed emission.

## 5. SUMMARY

We have presented a new catalog of SXR O VII and O VIII intensities, extracted from 1880 archival *XMM-Newton* observations. This catalog covers the full range of Galactic longitudes, and supersedes our previous catalog (Paper I), which covered  $l = 120^\circ$ – $240^\circ$ . Our new analysis has some improvements over our previous analysis, including the use of more recent software and calibration data, the use of data from the *XMM-Newton* Serendipitous Source Catalogue for point source removal, and the estimation of the systematic errors on the oxygen intensities (see Section 3.5 for more details on the differences from Paper I).

As in Paper I, we attempted to reduce the affects of SWCX contamination by excluding the portions of the *XMM-Newton* observations for which the contemporaneous solar wind proton flux exceeded  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$ . Of the 1880 *XMM-Newton* observations for which we have results, 1868 yielded oxygen intensities without the proton flux filtering, and 1003 yielded results with this filtering. In practice, the proton flux filtering tended to render unusable those observations that yielded particularly bright oxygen intensities (i.e., the solar wind proton

flux tended to exceed our threshold of  $2 \times 10^8 \text{ cm}^{-2} \text{ s}^{-1}$  during such observations). As a result, the set of filtered observations generally yields lower oxygen intensities than the set of unfiltered observations. However, among the set of observations for which the proton flux filtering did remove at least some *XMM-Newton* data, but not so much that the observation became unusable, we found that the filtered observations did not yield systematically lower oxygen intensities than the unfiltered observations (see Section 3.7).

Our main results were presented in Section 3.3. We found a large range of intensities: 0.0–50.8 and 0.0–36.2 L.U. for O VII and O VIII, respectively, for intensities obtained without proton flux filtering (0.0–48.8 and 0.0–24.5 L.U., respectively, for intensities obtained with this filtering). However, the typical O VII and O VIII intensities are  $\sim 2$ –11 and  $\lesssim 3$  L.U., respectively. Note that we excluded bright diffuse objects such as SN remnants or galaxy clusters during our processing, so the brightest intensities that we measured should not be contaminated by emission from such objects. The medians and quartiles of the oxygen intensities are generally significantly higher than those in Paper I, as the current paper includes observations toward the inner Galaxy, which typically yield higher intensities. We also found that the observations identified by Carter et al. (2011) as being contaminated by SWCX emission tended to yield larger-than-typical oxygen intensities.

Our dataset includes measurements for 217 sightlines that have been observed more than once with *XMM-Newton* (see Section 3.4). For a given direction, the differences in the measured oxygen intensities between observations can be attributed to the time-variable SWCX emission. Typically, the variations in the O VII and O VIII intensities are  $\lesssim 5$  and  $\lesssim 2$  L.U., respectively. However, some observations exhibit bright intensity enhancements, the brightest being an O VII enhancement of 24 L.U. over another observation in the same direction (note that this bright enhancement was also reported in Paper I).

We discussed various aspects of our results in Section 4. Some important results are as follows:

1. The oxygen intensities generally decrease from solar maximum to solar minimum, at high and low ecliptic latitudes. While this is as expected for high ecliptic latitudes from heliospheric SWCX models, it is not as expected for low ecliptic latitudes (Koutroumpa et al. 2006). We also found that the O VII intensities during solar maximum are higher toward high ecliptic latitudes, while those during solar minimum are higher toward low ecliptic latitudes (the differences are small but statistically significant). The O VIII intensities, however, do not exhibit clear variation with ecliptic latitude (see Section 4.1.1).
2. The observed variations in oxygen intensity are in poor agreement with the predictions of a geocoronal SWCX model similar to that described in Robertson & Cravens (2003b). This model takes into account the time-variable density of the solar wind in and beyond the magnetosheath, using the Spreiter et al. (1966) magnetosphere model

and solar wind data from OMNIWeb. For each *XMM-Newton* observation, the expected geocoronal SWCX emissivity is integrated along the line of sight, taking into account the position and orientation of *XMM-Newton*. In Section 4.1.2 we discussed various possible reasons for the discrepancy between the model predictions and the observations.

3. Approximately  $\sim 40\text{--}50\%$  of the  $3/4$  keV SXRb (specifically, the *ROSAT* R4 count-rate) that is not due to the extragalactic background is due to the oxygen  $K\alpha$  lines (see Section 4.2.2). This value is similar to the fraction derived from a high-resolution microcalorimeter spectrum of the SXRb (McCammon et al. 2002). The fraction is independent of the oxygen  $K\alpha$  intensity and the non-EPL  $3/4$  keV surface brightness, implying that the spectrum of the non-EPL  $3/4$  keV emission does not vary systematically with its brightness.
4. The above fraction is less than the fraction expected if the non-EPL  $3/4$  keV SXRb were dominated by a combination of unabsorbed SWCX emission and absorbed emission from a  $\sim (2\text{--}3) \times 10^6$  K CIE plasma in the halo. We ruled out the possibilities that the SWCX emission was brighter during the RASS than during the *XMM-Newton* observations, or that the halo is much hotter than  $3 \times 10^6$  K. Instead, these results may indicate that the true SWCX emission is harder than expected, or that the halo is out of equilibrium and overionized, or that oxygen is depleted in the halo (see Section 4.2.3). With our current measurements, we are unable to distinguish between these possibilities. However, we noted that it is possible that solar-abundance CIE models of the halo with  $T \sim (2\text{--}3) \times 10^6$  K underestimate the halo emission at energies greater than those of the oxygen  $K\alpha$  lines.
5. The oxygen intensities tend to increase from the outer to the inner Galaxy, which may indicate either that the SN rate increases toward the inner Galaxy (if the hot halo gas is mainly due to Galactic fountains) or the presence of a halo of accreted material centered on the Galactic Center (see Section 4.3.1).
6. No clear overall picture emerges when we look at the variation of the intensities with Galactic latitude: some regions of the sky exhibit a statistically significant positive correlation between intensity and latitude, some regions exhibit a statistically significant anticorrelation, and some regions exhibit no significant correlation or anticorrelation (see Section 4.3.2). We compared the observed correlation coefficients with those expected from two models of the intrinsic halo emission (a constant-intensity model (intrinsic intensity independent of  $b$ ), and a plane-parallel model) and found that no one halo model appears to be able to explain the observations in all octants. Indeed, in some octants, neither model is in good agreement with the observations (see Section 4.3.3).

Our catalog of oxygen intensities will provide useful constraints on models of the heliospheric and geocoronal SWCX emission – as noted above, the variation in the oxygen intensities measured from different observations of the same direction can be attributed to the time-variable SWCX emission. Then, equipped with suitable models of the SWCX emission, one can subtract the estimated SWCX intensity for each observation, revealing the O VII and O VIII intensities due to the hot gas in our Galaxy. From these intensities, the temperature and distribution on the sky of this hot gas can be inferred.

An alternative method for constraining the halo oxygen emission, which we are currently investigating, is to use Bayesian analysis. The observed  $I - \min(I)$  distributions (Figure 3) can be used to specify the prior probability distribution for the SWCX intensity in an arbitrary *XMM-Newton* spectrum. Using this prior, one can then, in principle, calculate the posterior probability distribution for the halo emission intensity.

Finally, it should be noted that the *XMM-Newton* SXRb spectra that we have extracted contain more information than just the diffuse oxygen line intensities. For example, by fitting appropriate models to the spectra one can constrain the temperature and emission measure of the halo, and use these results to test physical models for the hot halo gas (as in Henley et al. 2010)

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Table 1. O VII and O VIII Line Intensities (Without Proton Flux Filtering)

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0146390201 | 2003-03-29 | 0.005  | -17.799 | 17.1               | 537                    | 17.4               | 474                    | $9.72 \pm 1.03 \pm 1.77$         | 0.5575             | $1.13 \pm 0.49 \pm 0.60$         | 8.55                                                | 2.43                                                    |
| 0050940401 | 2002-03-14 | 0.015  | -12.011 | 8.4                | 583                    | 9.2                | 589                    | $35.17^{+1.55}_{-2.29} \pm 2.52$ | 0.5725             | $15.68^{+1.16}_{-1.35} \pm 6.78$ | 1.14                                                | 2.64                                                    |
| 0402781001 | 2007-01-20 | 0.271  | +48.208 | 16.1               | 421                    | 16.0               | 583                    | $9.34^{+1.03}_{-1.10} \pm 1.72$  | 0.5725             | $3.61^{+0.65}_{-0.67} \pm 1.39$  | 1.27                                                | 2.41                                                    |
| 0021540501 | 2001-08-26 | 0.426  | +48.796 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     |
| 0413780101 | 2007-02-24 | 0.604  | +11.378 | 23.0               | 453                    | 23.4               | 542                    | $3.29^{+0.96}_{-1.00} \pm 1.09$  | 0.5675             | $2.06^{+0.75}_{-0.48} \pm 0.62$  | 2.70                                                | 1.72                                                    |
| 0202190301 | 2004-05-20 | 0.939  | -79.578 | 16.8               | 570                    | 17.0               | 578                    | $5.71^{+0.89}_{-0.84} \pm 0.18$  | 0.5675             | $1.21^{+0.51}_{-0.46} \pm 0.42$  | 3.07                                                | 2.39                                                    |
| 0413780201 | 2007-03-03 | 0.960  | +10.788 | 25.4               | 500                    | 25.0               | 590                    | $4.77^{+0.87}_{-0.86} \pm 0.56$  | 0.5775             | $4.30^{+0.57}_{-0.58} \pm 1.10$  | 1.91                                                | 1.68                                                    |
| 0413780301 | 2007-03-07 | 1.168  | +10.439 | 16.2               | 430                    | 16.6               | 592                    | $5.98^{+1.26}_{-1.53} \pm 0.42$  | 0.5725             | $4.78^{+0.77}_{-0.86} \pm 0.84$  | 0.86                                                | 2.53                                                    |
| 0152750101 | 2002-09-27 | 1.540  | +7.099  | 38.7               | 580                    | 39.0               | 589                    | $8.43^{+0.40}_{-0.97} \pm 2.48$  | 0.5625             | $6.42^{+0.43}_{-0.31} \pm 1.20$  | 3.27                                                | 2.50                                                    |
| 0556210501 | 2008-07-19 | 1.649  | +46.606 | 10.8               | 488                    | 10.9               | 578                    | $12.01^{+1.67}_{-1.22} \pm 0.94$ | 0.5675             | $3.95^{+0.72}_{-0.71} \pm 1.26$  | 1.65                                                | 1.88                                                    |
| 0201903001 | 2004-10-24 | 2.718  | -56.160 | 17.4               | 352                    | 17.8               | 296                    | $5.97^{+1.51}_{-1.31} \pm 0.38$  | 0.5725             | $0.99^{+0.74}_{-0.75} \pm 0.20$  | 3.51                                                | 2.65                                                    |
| 0205390101 | 2005-05-01 | 3.588  | -64.104 | 27.6               | 311                    | 27.6               | 396                    | $7.40^{+0.90}_{-0.96} \pm 0.49$  | 0.5675             | $1.14^{+0.57}_{-0.51} \pm 0.72$  | 1.17                                                | 2.18                                                    |
| 0404910801 | 2006-05-02 | 3.966  | -59.441 | 19.9               | 332                    | 19.4               | 340                    | $6.27^{+1.87}_{-0.91} \pm 1.22$  | 0.5675             | $0.70^{+0.88}_{-0.57} \pm 1.09$  | 3.04                                                | 1.89                                                    |
| 0018741701 | 2001-05-03 | 3.967  | -59.448 | 6.6                | 341                    | 6.6                | 340                    | $11.29 \pm 2.03 \pm 1.31$        | 0.5675             | $5.49 \pm 1.23 \pm 0.55$         | 2.14                                                | 2.18                                                    |
| 0135980201 | 2002-04-30 | 4.693  | -64.122 | 25.5               | 551                    | 25.8               | 559                    | $11.70^{+0.50}_{-0.89} \pm 0.26$ | 0.5625             | $2.77^{+0.42}_{-0.41} \pm 1.28$  | 2.86                                                | 1.65                                                    |
| 0148520101 | 2003-07-22 | 5.456  | +56.770 | 21.6               | 582                    | 21.3               | 588                    | $12.42^{+0.78}_{-0.82} \pm 1.51$ | 0.5675             | $4.47^{+0.47}_{-0.55} \pm 2.52$  | 1.18                                                | 1.74                                                    |
| 0057560301 | 2001-08-09 | 5.457  | +56.766 | 36.6               | 587                    | 36.1               | 514                    | $13.99 \pm 0.63 \pm 1.11$        | 0.5675             | $4.71 \pm 0.39 \pm 2.67$         | 1.77                                                | 1.69                                                    |
| 0302580501 | 2005-06-13 | 5.676  | -77.683 | 36.1               | 394                    | 37.3               | 481                    | $8.46^{+1.33}_{-0.73} \pm 0.85$  | 0.5675             | $2.01^{+0.59}_{-0.40} \pm 1.11$  | 2.10                                                | 2.32                                                    |
| 0094401201 | 2001-12-22 | 5.853  | +72.730 | 24.9               | 421                    | 24.9               | 568                    | $17.26 \pm 0.94 \pm 1.68$        | 0.5675             | $6.72 \pm 0.57 \pm 3.31$         | 1.96                                                | 1.70                                                    |
| 0400460401 | 2006-10-14 | 6.229  | -38.240 | 16.5               | 314                    | 16.0               | 399                    | $6.29^{+1.48}_{-1.53} \pm 0.50$  | 0.5625             | $1.70^{+0.74}_{-0.73} \pm 0.38$  | 1.71                                                | 2.63                                                    |
| 0400460301 | 2006-10-13 | 6.230  | -38.240 | 21.6               | 314                    | 21.9               | 399                    | $6.14^{+1.08}_{-0.92} \pm 0.72$  | 0.5725             | $2.76^{+0.72}_{-0.57} \pm 0.34$  | 1.93                                                | 1.60                                                    |
| 0112231001 | 2000-09-08 | 6.464  | +30.298 | 23.2               | 589                    | 22.9               | 588                    | $9.72^{+0.77}_{-0.74} \pm 0.84$  | 0.5675             | $4.47^{+0.32}_{-0.44} \pm 0.15$  | 1.45                                                | 2.22                                                    |
| 0550460801 | 2008-11-16 | 6.479  | -55.914 | 24.9               | 414                    | 25.4               | 502                    | $5.63^{+0.92}_{-1.23} \pm 1.36$  | 0.5625             | $1.43^{+0.50}_{-0.52} \pm 0.74$  | 1.39                                                | 1.95                                                    |
| 0112230901 | 2000-08-31 | 6.537  | +30.716 | 8.6                | 587                    | 9.1                | 516                    | $10.25^{+1.46}_{-1.11} \pm 3.12$ | 0.5625             | $5.64^{+0.98}_{-0.60} \pm 1.03$  | 1.89                                                | 2.53                                                    |
| 0085582001 | 2002-09-24 | 6.588  | +7.785  | 7.2                | 328                    | 7.0                | 475                    | $3.84^{+1.64}_{-1.28} \pm 1.78$  | 0.5925             | $6.01^{+1.28}_{-1.18} \pm 1.17$  | 0.40                                                | 2.50                                                    |
| 0085581401 | 2001-09-05 | 6.588  | +7.786  | 7.2                | 471                    | 7.3                | 401                    | $5.15^{+0.82}_{-1.55} \pm 0.99$  | 0.5675             | $3.97^{+0.99}_{-0.95} \pm 0.97$  | 0.67                                                | 2.23                                                    |
| 0401660101 | 2007-03-24 | 6.604  | +7.775  | 32.8               | 387                    | 33.3               | 474                    | $7.03^{+1.16}_{-0.78} \pm 0.80$  | 0.5625             | $4.21^{+0.61}_{-0.44} \pm 0.72$  | 7.52                                                | 2.41                                                    |
| 0112230801 | 2000-08-30 | 7.024  | +30.655 | 16.9               | 479                    | 17.1               | 405                    | $8.63^{+0.91}_{-0.94} \pm 1.12$  | 0.5625             | $4.24^{+0.53}_{-0.54} \pm 0.35$  | 2.07                                                | 2.13                                                    |
| 0404520201 | 2006-10-14 | 8.253  | -35.208 | 31.9               | 268                    | 32.4               | 337                    | $6.21^{+1.16}_{-1.05} \pm 1.30$  | 0.5725             | $3.68 \pm 0.67 \pm 0.24$         | 1.66                                                | 2.62                                                    |
| 0306700201 | 2006-04-01 | 8.631  | -4.930  | 8.0                | 498                    | 8.0                | 591                    | $11.37^{+1.88}_{-1.74} \pm 3.19$ | 0.5675             | $9.12^{+1.13}_{-1.05} \pm 3.32$  | 2.15                                                | 2.60                                                    |
| 0111300101 | 2001-10-17 | 8.779  | -23.257 | 20.4               | 512                    | 20.3               | 591                    | $18.34^{+1.18}_{-0.77} \pm 2.13$ | 0.5725             | $7.53^{+0.73}_{-0.54} \pm 3.94$  | 2.32                                                | 1.69                                                    |
| 0042340101 | 2001-05-30 | 9.056  | -81.261 | 13.9               | 336                    | 14.1               | 339                    | $5.63^{+1.33}_{-1.82} \pm 1.52$  | 0.5675             | $1.27^{+0.81}_{-0.67} \pm 1.30$  | 0.39                                                | 2.00                                                    |
| 0501580101 | 2007-09-12 | 10.391 | +11.164 | 82.0               | 312                    | 83.1               | 395                    | $3.17^{+0.71}_{-0.56} \pm 1.35$  | 0.5675             | $4.40^{+0.40}_{-0.37} \pm 0.72$  | 2.05                                                | 2.68                                                    |
| 0501580201 | 2007-09-14 | 10.391 | +11.163 | 80.7               | 242                    | 81.9               | 468                    | $3.24^{+0.56}_{-0.58} \pm 0.78$  | 0.5675             | $4.43^{+0.37}_{-0.39} \pm 1.08$  | 5.47                                                | 2.70                                                    |
| 0041160101 | 2001-02-26 | 10.406 | +11.152 | 42.4               | 377                    | 42.7               | 383                    | $10.51 \pm 0.77 \pm 1.79$        | 0.5625             | $7.48 \pm 0.48 \pm 0.99$         | 3.14                                                | 2.29                                                    |
| 0112910201 | 2001-01-13 | 11.225 | +54.617 | 7.6                | 469                    | 8.4                | 472                    | $20.53^{+1.95}_{-1.97} \pm 2.84$ | 0.5675             | $9.87^{+1.16}_{-1.23} \pm 0.91$  | 1.71                                                | 2.58                                                    |
| 0201130301 | 2004-10-30 | 11.489 | -46.911 | 26.6               | 473                    | 29.8               | 464                    | $6.79^{+0.96}_{-0.84} \pm 0.71$  | 0.5675             | $1.28^{+0.47}_{-0.31} \pm 0.53$  | 3.47                                                | 2.18                                                    |
| 0504370701 | 2007-06-02 | 12.842 | -78.035 | 83.1               | 241                    | 87.2               | 398                    | $6.10^{+0.43}_{-0.75} \pm 0.44$  | 0.5675             | $0.63^{+0.28}_{-0.35} \pm 0.30$  | 3.43                                                | 2.68                                                    |
| 0304080501 | 2005-06-13 | 12.896 | -78.051 | 16.9               | 380                    | 17.0               | 400                    | $8.78^{+1.23}_{-1.37} \pm 0.56$  | 0.5625             | $2.26^{+0.63}_{-0.68} \pm 0.57$  | 1.13                                                | 2.02                                                    |
| 0404720201 | 2006-10-11 | 13.686 | -4.424  | 28.2               | 426                    | 28.3               | 517                    | $5.07^{+0.89}_{-0.87} \pm 2.12$  | 0.5625             | $5.01^{+0.64}_{-0.37} \pm 0.64$  | 2.60                                                | 2.68                                                    |
| 0303230501 | 2006-04-04 | 13.946 | +9.404  | 14.5               | 393                    | 14.6               | 481                    | $5.72^{+1.23}_{-1.16} \pm 0.89$  | 0.5625             | $5.14^{+0.74}_{-0.68} \pm 0.46$  | 4.23                                                | 2.11                                                    |
| 0204690101 | 2004-09-30 | 14.108 | -11.866 | 18.4               | 469                    | 18.7               | 469                    | $17.06^{+1.46}_{-1.10} \pm 1.50$ | 0.5675             | $9.35^{+0.87}_{-0.67} \pm 1.40$  | 2.11                                                | 2.52                                                    |
| 0304720101 | 2006-03-28 | 14.140 | -11.887 | 14.4               | 312                    | 14.1               | 468                    | $17.42^{+2.03}_{-1.61} \pm 1.90$ | 0.5675             | $9.32^{+1.00}_{-0.99} \pm 1.54$  | 1.78                                                | 2.10                                                    |
| 0147920601 | 2002-11-18 | 15.128 | -53.066 | 12.9               | 497                    | 13.2               | 430                    | $10.40^{+2.22}_{-1.23} \pm 0.52$ | 0.5675             | $5.14^{+1.11}_{-0.74} \pm 0.56$  | 1.86                                                | 2.33                                                    |
| 0414580101 | 2007-04-24 | 15.157 | -53.076 | 33.4,8.7           | 304,304                | 33.7,8.7           | 465,465                | $6.42^{+1.17}_{-1.09} \pm 0.25$  | 0.5675             | $1.30^{+0.57}_{-0.56} \pm 0.33$  | 2.65                                                | 2.40                                                    |
| 0201902601 | 2004-11-29 | 16.581 | -50.201 | 23.7               | 404                    | 24.0               | 340                    | $7.61^{+0.96}_{-0.99} \pm 0.81$  | 0.5725             | $0.41^{+0.55}_{-0.41} \pm 0.72$  | 3.95                                                | 2.47                                                    |
| 0100240201 | 2001-01-21 | 17.035 | +80.677 | 33.5               | 407                    | 33.8               | 479                    | $8.20^{+0.48}_{-0.73} \pm 0.92$  | 0.5725             | $1.17^{+0.39}_{-0.40} \pm 0.98$  | 8.51                                                | 1.99                                                    |
| 0500910601 | 2007-12-27 | 18.069 | +67.696 | 8.3                | 482                    | 7.8                | 572                    | $11.40^{+1.64}_{-1.56} \pm 0.35$ | 0.5675             | $3.44^{+0.84}_{-0.89} \pm 2.26$  | 2.21                                                | 1.42                                                    |
| 0500910901 | 2007-12-29 | 18.070 | +67.695 | 10.9               | 481                    | 11.2               | 573                    | $10.20^{+1.38}_{-1.60} \pm 0.40$ | 0.5675             | $4.04^{+0.72}_{-0.78} \pm 2.10$  | 2.15                                                | 1.44                                                    |
| 0500911001 | 2007-12-31 | 18.071 | +67.695 | 13.7               | 480                    | 13.5               | 573                    | $11.30^{+1.13}_{-1.16} \pm 0.39$ | 0.5675             | $3.54^{+0.66}_{-0.68} \pm 2.18$  | 2.03                                                | 1.58                                                    |
| 0085280501 | 2001-09-18 | 18.396 | +16.048 | 24.2               | 581                    | 25.1               | 590                    | $8.74^{+1.14}_{-0.60} \pm 1.21$  | 0.5625             | $3.14^{+0.50}_{-0.38} \pm 0.44$  | 2.34                                                | 1.89                                                    |
| 0085280201 | 2002-02-24 | 18.426 | +16.024 | 7.7                | 518                    | 8.1                | 592                    | $5.05^{+1.54}_{-0.70} \pm 0.85$  | 0.5725             | $3.00^{+0.92}_{-0.85} \pm 1.16$  | 2.01                                                | 2.03                                                    |
| 0085281001 | 2002-02-20 | 18.426 | +16.025 | 11.8               | 584                    | 12.2               | 516                    | $7.85^{+1.50}_{-1.52} \pm 1.15$  | 0.5575             | $4.47^{+0.76}_{-0.77} \pm 0.69$  | 1.77                                                | 2.41                                                    |



Table 1—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-9}^{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0067340501 | 2001-02-28 | 20.015 | +29.987 | 11.8               | 591                    | 12.2               | 517                    | $33.72^{+1.49}_{-1.87} \pm 1.66$ | 0.5675             | $16.59^{+0.97}_{-1.13} \pm 5.76$ | 1.80                                                | 1.86                                                    |
| 0067340601 | 2001-03-04 | 20.020 | +39.988 | 13.4               | 579                    | 13.5               | 586                    | $22.07^{+1.71}_{-1.12} \pm 2.22$ | 0.5675             | $13.74^{+0.58}_{-1.34} \pm 2.45$ | 2.92                                                | 2.09                                                    |
| 0402080301 | 2006-07-16 | 20.559 | +79.334 | 50.5               | 303                    | 52.8               | 400                    | $8.44 \pm 0.66 \pm 0.41$         | 0.5675             | $0.85^{+0.35}_{-0.36} \pm 0.94$  | 1.97                                                | 1.72                                                    |
| 0402080201 | 2006-07-15 | 20.563 | +79.334 | 27.9               | 304                    | 28.6               | 399                    | $7.87^{+0.97}_{-1.41} \pm 0.25$  | 0.5625             | $0.98^{+0.59}_{-0.46} \pm 1.11$  | 1.46                                                | 1.86                                                    |
| 0096010101 | 2000-06-20 | 20.591 | +79.318 | 36.2               | 373                    | 33.4               | 377                    | $15.28 \pm 0.87 \pm 0.42$        | 0.5675             | $3.88 \pm 0.47 \pm 1.76$         | 3.49                                                | 1.79                                                    |
| 0402080801 | 2006-12-19 | 20.625 | +79.299 | 9.3                | 307                    | 9.8                | 398                    | $5.25^{+1.84}_{-1.43} \pm 0.40$  | 0.5725             | $0.00^{+0.52}_{-0.00} \pm 0.78$  | 2.33                                                | 1.70                                                    |
| 0101640101 | 2000-09-22 | 20.712 | +27.303 | 9.8                | 474                    | 10.2               | 396                    | $35.09 \pm 2.28 \pm 0.39$        | 0.5675             | $15.86^{+1.40}_{-1.41} \pm 6.31$ | 2.18                                                | 2.21                                                    |
| 0147420401 | 2003-08-13 | 20.728 | +27.290 | 7.0                | 436                    | 7.4                | 513                    | $29.08^{+2.19}_{-4.00} \pm 2.28$ | 0.5675             | $14.63^{+1.45}_{-1.65} \pm 5.20$ | 1.99                                                | 2.46                                                    |
| 0302380401 | 2005-10-31 | 22.355 | -56.585 | 24.0               | 348                    | 24.2               | 497                    | $7.70^{+1.41}_{-0.69} \pm 1.32$  | 0.5675             | $2.01^{+0.58}_{-0.43} \pm 1.25$  | 3.28                                                | 1.60                                                    |
| 0401730301 | 2006-09-16 | 23.032 | +28.958 | 36.4               | 260                    | 36.3               | 402                    | $23.75^{+1.36}_{-1.20} \pm 4.28$ | 0.5675             | $13.92^{+0.93}_{-0.81} \pm 5.67$ | 2.35                                                | 2.23                                                    |
| 0404800101 | 2006-09-10 | 23.793 | +41.323 | 24.2               | 420                    | 24.2               | 592                    | $18.05 \pm 0.97 \pm 1.28$        | 0.5675             | $8.12^{+0.64}_{-0.63} \pm 3.82$  | 3.16                                                | 1.72                                                    |
| 0067340401 | 2001-02-28 | 25.015 | +19.988 | 13.1               | 536                    | 13.4               | 463                    | $29.79^{+1.63}_{-1.74} \pm 3.61$ | 0.5625             | $17.55^{+1.12}_{-1.10} \pm 4.49$ | 1.84                                                | 2.04                                                    |
| 0406620201 | 2007-04-27 | 25.153 | -9.587  | 42.1               | 416                    | 44.8               | 590                    | $9.47^{+0.76}_{-0.74} \pm 1.16$  | 0.5625             | $4.46^{+0.48}_{-0.42} \pm 0.77$  | 3.11                                                | 2.16                                                    |
| 0111970101 | 2001-11-28 | 25.863 | -62.987 | 12.1               | 483                    | 12.2               | 473                    | $5.91^{+0.99}_{-1.11} \pm 0.35$  | 0.5725             | $1.97^{+0.64}_{-0.59} \pm 1.41$  | 1.30                                                | 1.69                                                    |
| 0311190101 | 2006-05-03 | 27.261 | -59.645 | 73.6               | 454                    | 73.8               | 497                    | $7.29^{+0.55}_{-0.53} \pm 0.21$  | 0.5675             | $0.89^{+0.31}_{-0.30} \pm 0.64$  | 4.46                                                | 2.33                                                    |
| 0553510801 | 2008-10-15 | 27.290 | -2.767  | 24.5               | 316                    | 24.0               | 484                    | $9.02^{+1.01}_{-1.10} \pm 2.05$  | 0.5575             | $7.28^{+0.58}_{-0.69} \pm 0.70$  | 1.48                                                | 2.29                                                    |
| 0112490301 | 2003-09-19 | 27.489 | +2.906  | 16.9               | 591                    | 18.9               | 592                    | $2.07^{+0.61}_{-0.71} \pm 0.66$  | 0.5625             | $0.00^{+0.11}_{-0.00} \pm 0.00$  | 1.47                                                | 2.69                                                    |
| 0049340201 | 2001-11-13 | 28.407 | -56.141 | 23.5               | 501                    | 23.7               | 578                    | $10.41^{+1.01}_{-0.58} \pm 0.88$ | 0.5675             | $3.60^{+0.53}_{-0.37} \pm 1.22$  | 4.00                                                | 2.12                                                    |
| 0206490301 | 2005-05-11 | 28.874 | -57.937 | 23.1               | 444                    | 23.0               | 467                    | $7.27^{+0.44}_{-0.87} \pm 0.49$  | 0.5675             | $1.99 \pm 0.47 \pm 0.75$         | 2.72                                                | 2.58                                                    |
| 0044741401 | 2003-09-13 | 29.891 | +11.366 | 8.9                | 539                    | 8.9                | 541                    | $22.52^{+2.74}_{-1.99} \pm 2.49$ | 0.5675             | $9.06^{+1.56}_{-1.20} \pm 4.20$  | 1.05                                                | 2.52                                                    |
| 0204670101 | 2004-01-03 | 30.239 | -81.438 | 44.0               | 573                    | 43.9               | 498                    | $4.81^{+0.46}_{-0.66} \pm 0.38$  | 0.5675             | $1.46^{+0.32}_{-0.35} \pm 0.46$  | 3.39                                                | 1.80                                                    |
| 0108670201 | 2002-08-03 | 30.376 | +61.114 | 34.3               | 339                    | 33.8               | 290                    | $22.31^{+1.13}_{-1.37} \pm 0.13$ | 0.5675             | $5.64^{+0.66}_{-0.70} \pm 3.17$  | 2.99                                                | 2.22                                                    |
| 0044350501 | 2002-10-21 | 31.334 | -21.949 | 8.7                | 554                    | 9.6                | 487                    | $13.33^{+1.46}_{-1.39} \pm 1.06$ | 0.5675             | $6.00^{+0.86}_{-0.85} \pm 1.66$  | 0.78                                                | 2.06                                                    |
| 0083210101 | 2001-05-02 | 31.546 | -34.224 | 7.4                | 577                    | 7.8                | 503                    | $22.58^{+1.51}_{-1.75} \pm 1.30$ | 0.5675             | $6.50^{+0.85}_{-0.96} \pm 3.11$  | 1.78                                                | 1.91                                                    |
| 0109464901 | 2003-01-21 | 31.724 | +47.692 | 6.9                | 588                    | 7.0                | 590                    | $17.30^{+1.55}_{-1.56} \pm 0.42$ | 0.5675             | $4.31 \pm 0.88 \pm 3.54$         | 2.50                                                | 1.34                                                    |
| 0400200101 | 2006-12-21 | 32.954 | +73.438 | 21.9               | 379                    | 21.7               | 398                    | $4.80^{+1.15}_{-0.81} \pm 0.38$  | 0.5725             | $0.60^{+0.54}_{-0.48} \pm 0.80$  | 1.39                                                | 1.31                                                    |
| 0109081001 | 2002-01-27 | 32.983 | +73.440 | 11.7               | 468                    | 11.6               | 471                    | $11.27^{+0.65}_{-1.88} \pm 2.15$ | 0.5675             | $2.13^{+0.77}_{-0.45} \pm 1.10$  | 1.28                                                | 1.48                                                    |
| 0017740601 | 2003-10-11 | 32.984 | +2.009  | 21.4               | 592                    | 21.3               | 592                    | $2.46^{+0.75}_{-0.67} \pm 0.28$  | 0.5625             | $0.17^{+0.35}_{-0.17} \pm 0.10$  | 0.47                                                | 2.67                                                    |
| 0403570201 | 2006-09-30 | 33.994 | +20.278 | 24.1               | 462                    | 24.3               | 485                    | $22.12^{+1.14}_{-1.15} \pm 2.86$ | 0.5725             | $11.32^{+0.75}_{-0.74} \pm 5.10$ | 6.39                                                | 2.22                                                    |
| 0403570101 | 2006-09-28 | 33.994 | +20.279 | 38.5               | 461                    | 38.4               | 484                    | $22.26^{+0.88}_{-0.89} \pm 1.44$ | 0.5725             | $10.62 \pm 0.58 \pm 4.54$        | 1.19                                                | 2.15                                                    |
| 0103860201 | 2001-05-25 | 34.631 | -59.154 | 7.3                | 471                    | 7.4                | 401                    | $8.08^{+1.35}_{-1.62} \pm 0.33$  | 0.5675             | $0.92^{+0.78}_{-0.83} \pm 1.09$  | 0.69                                                | 1.94                                                    |
| 0092850501 | 2001-12-22 | 34.673 | +72.588 | 36.0               | 403                    | 35.9               | 479                    | $10.56^{+0.98}_{-0.48} \pm 0.74$ | 0.5675             | $1.16^{+0.41}_{-0.30} \pm 1.00$  | 1.74                                                | 2.02                                                    |
| 0136040101 | 2002-02-18 | 34.963 | +49.142 | 16.8               | 579                    | 16.7               | 513                    | $18.01^{+1.24}_{-0.87} \pm 0.59$ | 0.5675             | $4.07^{+0.60}_{-0.52} \pm 3.07$  | 4.30                                                | 1.50                                                    |
| 0205190201 | 2004-01-25 | 35.157 | +77.040 | 22.3               | 325                    | 22.6               | 344                    | $5.44^{+0.99}_{-0.82} \pm 0.22$  | 0.5675             | $1.34^{+0.53}_{-0.45} \pm 0.52$  | 2.70                                                | 2.09                                                    |
| 0203450201 | 2005-05-06 | 35.596 | -50.561 | 20.6               | 461                    | 21.3               | 485                    | $14.64 \pm 1.02 \pm 0.24$        | 0.5675             | $2.07^{+0.54}_{-0.53} \pm 1.61$  | 5.91                                                | 1.98                                                    |
| 0112440301 | 2002-10-15 | 35.701 | -4.135  | 6.8                | 568                    | 6.9                | 502                    | $16.81^{+1.53}_{-2.58} \pm 2.26$ | 0.5575             | $6.84^{+0.89}_{-1.38} \pm 0.26$  | 3.71                                                | 1.92                                                    |
| 0112440401 | 2002-10-17 | 35.702 | -4.135  | 11.1               | 558                    | 11.3               | 495                    | $12.48^{+1.23}_{-1.07} \pm 0.38$ | 0.5675             | $5.46^{+0.71}_{-0.70} \pm 0.49$  | 1.52                                                | 2.27                                                    |
| 0556180201 | 2008-05-03 | 35.705 | -54.773 | 6.0                | 418                    | 6.1                | 511                    | $7.31^{+1.53}_{-1.70} \pm 0.27$  | 0.5625             | $1.79^{+0.88}_{-1.00} \pm 1.08$  | 3.45                                                | 1.40                                                    |
| 0502510501 | 2007-10-11 | 35.989 | -20.787 | 26.3               | 427                    | 26.5               | 592                    | $12.49^{+0.92}_{-1.41} \pm 0.80$ | 0.5675             | $3.34^{+0.54}_{-0.62} \pm 1.74$  | 5.67                                                | 1.65                                                    |
| 0103060301 | 2002-06-25 | 36.001 | -79.217 | 32.9               | 569                    | 33.3               | 503                    | $5.63^{+0.48}_{-0.97} \pm 0.72$  | 0.5675             | $1.51^{+0.42}_{-0.27} \pm 0.74$  | 1.86                                                | 1.87                                                    |
| 0201730201 | 2004-10-12 | 36.077 | +8.299  | 20.2               | 592                    | 20.3               | 518                    | $13.20 \pm 0.90 \pm 0.80$        | 0.5675             | $4.30 \pm 0.53 \pm 2.00$         | 2.46                                                | 1.91                                                    |
| 0201730101 | 2004-10-10 | 36.078 | +8.299  | 10.0               | 592                    | 10.1               | 518                    | $14.65^{+1.26}_{-1.33} \pm 0.57$ | 0.5675             | $5.11 \pm 0.75 \pm 2.83$         | 1.78                                                | 1.49                                                    |
| 0201730301 | 2004-10-14 | 36.078 | +8.299  | 15.4               | 591                    | 15.2               | 517                    | $10.85^{+2.08}_{-0.97} \pm 2.16$ | 0.5675             | $4.72^{+0.67}_{-0.58} \pm 1.48$  | 2.49                                                | 2.32                                                    |
| 0125911001 | 2002-11-26 | 36.174 | -57.142 | 12.6               | 504                    | 12.8               | 580                    | $8.16^{+1.35}_{-0.91} \pm 0.40$  | 0.5725             | $1.39^{+0.56}_{-0.53} \pm 1.52$  | 1.91                                                | 2.46                                                    |
| 0101640801 | 2002-08-11 | 36.616 | +53.048 | 12.2               | 408                    | 12.3               | 408                    | $19.41^{+1.69}_{-1.48} \pm 0.54$ | 0.5675             | $6.03^{+0.94}_{-0.88} \pm 3.10$  | 3.73                                                | 1.41                                                    |
| 0205510201 | 2005-01-14 | 36.633 | +53.011 | 7.0                | 483                    | 6.6                | 408                    | $15.44^{+1.73}_{-2.46} \pm 0.59$ | 0.5725             | $5.94^{+1.12}_{-1.31} \pm 2.96$  | 3.92                                                | 1.20                                                    |
| 0038540301 | 2001-04-30 | 36.768 | -35.097 | 14.2               | 561                    | 14.1               | 562                    | $16.86^{+1.17}_{-1.16} \pm 0.32$ | 0.5675             | $7.37 \pm 0.70 \pm 2.03$         | 0.40                                                | 2.50                                                    |
| 0111290601 | 2002-07-28 | 36.853 | +68.592 | 27.9               | 463                    | 27.1               | 463                    | $11.23^{+0.74}_{-0.77} \pm 0.34$ | 0.5675             | $2.38^{+0.40}_{-0.41} \pm 1.26$  | 2.73                                                | 2.35                                                    |
| 0150480401 | 2003-02-04 | 37.075 | +70.866 | 16.9               | 391                    | 17.7               | 487                    | $9.50^{+1.20}_{-0.96} \pm 0.78$  | 0.5675             | $1.97^{+0.65}_{-0.51} \pm 0.90$  | 1.61                                                | 1.76                                                    |
| 0554934101 | 2008-12-01 | 37.380 | -57.671 | 15.9               | 306                    | 16.9               | 543                    | $3.71^{+0.97}_{-1.07} \pm 0.69$  | 0.5725             | $1.14^{+0.60}_{-0.61} \pm 0.21$  | 1.28                                                | 2.56                                                    |
| 0143650101 | 2003-08-03 | 37.703 | +53.915 | 5.2                | 530                    | 5.2                | 538                    | $15.25^{+2.40}_{-1.91} \pm 1.40$ | 0.5675             | $3.00^{+0.99}_{-1.01} \pm 2.80$  | 1.26                                                | 1.49                                                    |
| 0151450101 | 2003-05-15 | 37.821 | -59.073 | 34.4               | 476                    | 34.6               | 475                    | $6.43^{+1.34}_{-0.74} \pm 0.84$  | 0.5675             | $2.29^{+0.60}_{-0.42} \pm 0.53$  | 1.73                                                | 2.35                                                    |
| 0305590401 | 2005-05-05 | 38.192 | -7.688  | 20.3               | 492                    | 20.1               | 513                    | $14.34^{+0.79}_{-1.60} \pm 2.38$ | 0.5625             | $4.34^{+0.39}_{-0.67} \pm 0.43$  | 2.89                                                | 1.85                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0021740201 | 2002-12-12 | 38.470 | +85.606 | 42.0               | 579                    | 41.9               | 580                    | $9.21^{+0.53}_{-0.54} \pm 0.43$  | 0.5675             | $1.88 \pm 0.30 \pm 1.18$        | 1.43                                                | 1.59                                                    |
| 0211080201 | 2005-11-04 | 38.594 | −10.029 | 7.3                | 421                    | 7.2                | 518                    | $4.06^{+1.48}_{-1.04} \pm 0.29$  | 0.5725             | $1.80^{+0.40}_{-0.66} \pm 0.31$ | 1.11                                                | 2.03                                                    |
| 0505460501 | 2007-05-27 | 38.726 | −53.041 | 16.8               | 427                    | 18.0               | 518                    | $9.05^{+1.08}_{-1.02} \pm 0.67$  | 0.5625             | $2.13^{+0.57}_{-0.52} \pm 1.21$ | 0.83                                                | 1.95                                                    |
| 0505460201 | 2007-05-07 | 38.852 | −52.642 | 21.9               | 419                    | 22.7               | 515                    | $7.82^{+1.44}_{-1.11} \pm 1.06$  | 0.5675             | $2.37^{+0.56}_{-0.44} \pm 0.65$ | 2.56                                                | 2.30                                                    |
| 0505460101 | 2007-05-07 | 39.197 | −53.307 | 21.3               | 420                    | 23.0               | 518                    | $6.29^{+1.30}_{-0.93} \pm 0.86$  | 0.5625             | $1.50^{+0.54}_{-0.49} \pm 0.45$ | 4.53                                                | 2.24                                                    |
| 0106660601 | 2001-11-17 | 39.266 | −52.928 | 81.6               | 482                    | 82.5               | 560                    | $10.18^{+0.39}_{-0.46} \pm 0.47$ | 0.5675             | $2.80^{+0.21}_{-0.27} \pm 1.05$ | 2.14                                                | 2.01                                                    |
| 0106660501 | 2001-11-17 | 39.268 | −52.930 | 7.6                | 485                    | 7.3                | 562                    | $10.72^{+1.30}_{-1.75} \pm 1.01$ | 0.5675             | $2.37^{+0.71}_{-0.78} \pm 1.31$ | 1.55                                                | 1.58                                                    |
| 0106660201 | 2000-11-18 | 39.268 | −52.930 | 38.7               | 560                    | 38.1               | 561                    | $13.63^{+0.66}_{-0.60} \pm 0.28$ | 0.5675             | $3.27^{+0.35}_{-0.33} \pm 1.20$ | 2.75                                                | 2.16                                                    |
| 0106660401 | 2001-11-16 | 39.268 | −52.930 | 18.6               | 483                    | 19.5               | 561                    | $9.61^{+0.95}_{-0.71} \pm 0.51$  | 0.5675             | $2.29^{+0.50}_{-0.43} \pm 1.51$ | 1.22                                                | 2.18                                                    |
| 0106660101 | 2000-11-17 | 39.269 | −52.930 | 54.7               | 561                    | 54.5               | 561                    | $11.84^{+0.47}_{-0.53} \pm 0.34$ | 0.5675             | $2.82^{+0.27}_{-0.28} \pm 1.64$ | 2.03                                                | 1.67                                                    |
| 0200020301 | 2004-05-14 | 39.648 | −51.748 | 27.3               | 577                    | 27.6               | 585                    | $10.92^{+0.65}_{-0.66} \pm 0.98$ | 0.5675             | $1.95 \pm 0.36 \pm 1.99$        | 2.67                                                | 1.17                                                    |
| 0505460301 | 2007-11-04 | 39.853 | −53.053 | 26.5               | 318                    | 26.3               | 481                    | $6.01^{+1.03}_{-1.09} \pm 0.94$  | 0.5625             | $1.58^{+0.48}_{-0.49} \pm 0.17$ | 3.16                                                | 2.05                                                    |
| 0152660101 | 2003-02-08 | 39.963 | +63.416 | 19.6               | 464                    | 19.2               | 395                    | $6.86^{+0.95}_{-0.97} \pm 0.34$  | 0.5725             | $1.61^{+0.58}_{-0.59} \pm 0.96$ | 1.86                                                | 1.89                                                    |
| 0125310101 | 2000-06-01 | 40.025 | −78.395 | 15.2               | 585                    | 15.2               | 584                    | $6.85^{+0.96}_{-0.93} \pm 0.57$  | 0.5625             | $1.95^{+0.51}_{-0.48} \pm 0.46$ | 1.22                                                | 2.03                                                    |
| 0302440301 | 2005-11-02 | 40.159 | −52.413 | 14.5               | 307                    | 17.2               | 400                    | $7.37^{+1.33}_{-0.88} \pm 0.67$  | 0.5875             | $2.00^{+0.89}_{-0.62} \pm 1.01$ | 3.27                                                | 1.80                                                    |
| 0553640701 | 2009-03-19 | 40.296 | −0.757  | 6.9                | 429                    | 6.6                | 518                    | $1.20 \pm 1.16 \pm 1.02$         | 0.5725             | $0.00^{+0.35}_{-0.00} \pm 0.00$ | 2.68                                                | 2.29                                                    |
| 0553640201 | 2008-10-03 | 40.380 | −0.956  | 17.1               | 420                    | 15.7               | 589                    | $0.00^{+0.66}_{-0.00} \pm 0.00$  | 0.5425             | $0.00^{+0.14}_{-0.00} \pm 0.00$ | 1.27                                                | 2.67                                                    |
| 0553640101 | 2008-09-27 | 40.602 | −0.841  | 16.5               | 352                    | 16.1               | 513                    | $0.00^{+0.84}_{-0.00} \pm 0.00$  | 0.5425             | $0.00^{+0.30}_{-0.00} \pm 0.00$ | 1.74                                                | 2.47                                                    |
| 0110940101 | 2003-01-11 | 40.958 | +79.512 | 18.0               | 590                    | 18.1               | 590                    | $8.94^{+0.79}_{-0.75} \pm 0.57$  | 0.5675             | $2.38 \pm 0.43 \pm 1.14$        | 1.12                                                | 1.57                                                    |
| 0140960101 | 2003-01-31 | 41.880 | +73.234 | 12.5               | 498                    | 12.2               | 498                    | $6.69^{+0.93}_{-1.06} \pm 0.28$  | 0.5675             | $1.82 \pm 0.56 \pm 0.68$        | 0.95                                                | 1.80                                                    |
| 0553790201 | 2008-05-18 | 41.952 | −32.800 | 11.1               | 422                    | 11.3               | 588                    | $10.04^{+1.17}_{-1.10} \pm 0.93$ | 0.5725             | $2.54^{+0.72}_{-0.70} \pm 1.82$ | 1.94                                                | 1.41                                                    |
| 0203050501 | 2004-10-18 | 41.983 | −28.913 | 10.1               | 561                    | 10.4               | 488                    | $13.69^{+1.36}_{-1.29} \pm 0.25$ | 0.5675             | $3.65 \pm 0.71 \pm 1.63$        | 3.76                                                | 2.11                                                    |
| 0125910301 | 2002-06-17 | 42.384 | −77.438 | 8.4                | 582                    | 8.5                | 588                    | $10.12^{+2.02}_{-1.16} \pm 0.59$ | 0.5675             | $3.33^{+0.79}_{-0.68} \pm 0.98$ | 3.24                                                | 2.08                                                    |
| 0302261001 | 2006-08-21 | 42.695 | +41.157 | 9.6                | 341                    | 9.3                | 356                    | $7.76^{+1.72}_{-1.75} \pm 0.64$  | 0.5775             | $3.17^{+0.53}_{-1.10} \pm 0.37$ | 0.82                                                | 1.77                                                    |
| 0302260701 | 2006-08-15 | 42.698 | +41.157 | 14.3               | 340                    | 14.3               | 359                    | $8.13^{+1.21}_{-1.89} \pm 0.96$  | 0.5725             | $1.97^{+0.69}_{-0.92} \pm 0.67$ | 2.21                                                | 1.68                                                    |
| 0146500101 | 2003-01-20 | 42.757 | +46.759 | 5.7                | 398                    | 6.1                | 473                    | $9.05^{+1.76}_{-1.77} \pm 0.19$  | 0.5675             | $2.28^{+0.97}_{-1.09} \pm 1.86$ | 1.97                                                | 1.62                                                    |
| 0146500201 | 2003-01-22 | 42.757 | +46.760 | 7.3                | 397                    | 7.4                | 472                    | $12.02^{+1.76}_{-1.60} \pm 0.39$ | 0.5675             | $3.37^{+1.04}_{-0.93} \pm 1.95$ | 2.26                                                | 1.69                                                    |
| 0201900301 | 2004-05-26 | 42.990 | −82.985 | 14.4               | 337                    | 14.3               | 398                    | $4.43^{+1.56}_{-1.11} \pm 3.45$  | 0.5725             | $1.18^{+0.76}_{-0.65} \pm 1.36$ | 1.46                                                | 1.97                                                    |
| 0306050801 | 2005-11-19 | 43.216 | −23.440 | 10.9               | 423                    | 11.1               | 511                    | $9.12^{+1.19}_{-1.18} \pm 0.34$  | 0.5675             | $1.30 \pm 0.65 \pm 1.67$        | 4.44                                                | 1.62                                                    |
| 0111870601 | 2002-09-06 | 43.338 | +50.676 | 9.0                | 581                    | 9.4                | 588                    | $10.32^{+1.56}_{-1.27} \pm 0.66$ | 0.5725             | $0.83^{+0.66}_{-0.64} \pm 1.37$ | 1.59                                                | 2.15                                                    |
| 0148680101 | 2003-07-20 | 43.491 | +85.408 | 39.1               | 528                    | 40.1               | 539                    | $7.34^{+0.95}_{-0.74} \pm 0.60$  | 0.5725             | $1.02^{+0.24}_{-0.41} \pm 1.38$ | 1.35                                                | 1.74                                                    |
| 0112600501 | 2001-11-15 | 44.224 | −26.711 | 9.8                | 328                    | 9.8                | 471                    | $14.97^{+2.03}_{-1.49} \pm 0.92$ | 0.5675             | $4.24^{+1.00}_{-0.92} \pm 1.24$ | 4.12                                                | 2.65                                                    |
| 0502950101 | 2007-11-07 | 44.535 | −24.310 | 50.9               | 398                    | 50.4               | 564                    | $7.44^{+0.65}_{-0.67} \pm 0.23$  | 0.5675             | $1.99 \pm 0.37 \pm 0.72$        | 2.85                                                | 1.78                                                    |
| 0103060201 | 2002-08-01 | 44.644 | +64.992 | 19.6               | 573                    | 21.1               | 502                    | $15.40^{+1.12}_{-0.74} \pm 0.59$ | 0.5725             | $6.80^{+0.61}_{-0.55} \pm 1.93$ | 4.21                                                | 2.43                                                    |
| 0153090101 | 2003-05-20 | 44.784 | −32.643 | 6.2                | 402                    | 6.0                | 472                    | $14.69^{+2.59}_{-2.06} \pm 1.77$ | 0.5675             | $2.38^{+1.04}_{-1.05} \pm 2.26$ | 3.21                                                | 2.07                                                    |
| 0103860501 | 2001-11-27 | 44.889 | −46.304 | 6.0                | 328                    | 6.3                | 473                    | $8.38^{+1.79}_{-1.90} \pm 0.41$  | 0.5675             | $3.01^{+1.08}_{-1.11} \pm 1.33$ | 1.22                                                | 2.62                                                    |
| 0089940101 | 2003-10-17 | 44.914 | −6.552  | 10.9               | 592                    | 11.0               | 593                    | $7.91^{+1.60}_{-1.06} \pm 0.54$  | 0.5625             | $2.55^{+0.66}_{-0.60} \pm 1.17$ | 2.59                                                | 1.61                                                    |
| 0089940801 | 2003-10-19 | 44.915 | −6.552  | 8.0                | 593                    | 8.0                | 593                    | $5.87^{+1.59}_{-1.25} \pm 0.74$  | 0.5625             | $3.35^{+0.92}_{-0.73} \pm 1.12$ | 2.13                                                | 1.82                                                    |
| 0081340901 | 2001-05-24 | 45.221 | −60.957 | 21.6               | 582                    | 21.3               | 514                    | $8.91^{+1.02}_{-0.92} \pm 1.22$  | 0.5625             | $2.39^{+0.41}_{-0.42} \pm 0.94$ | 0.48                                                | 1.85                                                    |
| 0113051301 | 2003-11-10 | 47.361 | −3.877  | 10.3               | 582                    | 10.3               | 588                    | $9.04^{+1.03}_{-1.16} \pm 1.54$  | 0.5625             | $3.14^{+0.54}_{-0.60} \pm 0.59$ | 2.95                                                | 1.96                                                    |
| 0304071801 | 2006-08-19 | 47.362 | +37.999 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0113051401 | 2004-04-27 | 47.397 | −3.887  | 11.0               | 511                    | 12.5               | 585                    | $7.72^{+1.13}_{-1.38} \pm 0.58$  | 0.5625             | $3.77^{+0.56}_{-0.57} \pm 0.48$ | 1.82                                                | 2.25                                                    |
| 0502360201 | 2007-10-31 | 47.744 | −8.911  | 20.8,41.5          | 345,342                | 19.5,41.2          | 567,566                | $11.13^{+1.05}_{-1.01} \pm 0.69$ | 0.5625             | $3.93^{+0.37}_{-0.44} \pm 0.97$ | 1.65                                                | 1.69                                                    |
| 0502360101 | 2007-10-17 | 47.745 | −8.911  | 29.1,29.0          | 484,483                | 29.6,28.8          | 493,493                | $9.03^{+1.21}_{-0.45} \pm 1.73$  | 0.5625             | $3.71^{+0.49}_{-0.32} \pm 1.48$ | 3.53                                                | 1.97                                                    |
| 0039340101 | 2002-07-08 | 47.948 | +54.663 | 10.7               | 433                    | 10.9               | 364                    | $13.18^{+1.45}_{-1.48} \pm 0.88$ | 0.5675             | $1.80 \pm 0.77 \pm 2.21$        | 2.47                                                | 1.39                                                    |
| 0304160401 | 2006-02-18 | 48.100 | +22.895 | 7.8                | 269                    | 7.9                | 341                    | $15.53^{+2.67}_{-2.19} \pm 0.56$ | 0.5625             | $0.00^{+0.95}_{-0.00} \pm 1.50$ | 4.68                                                | 1.68                                                    |
| 0301040101 | 2005-12-19 | 48.839 | +80.843 | 30.6               | 422                    | 30.5               | 513                    | $6.73^{+0.85}_{-0.57} \pm 0.31$  | 0.5675             | $0.27^{+0.45}_{-0.27} \pm 1.12$ | 4.80                                                | 1.49                                                    |
| 0500670401 | 2007-08-15 | 49.213 | +30.874 | 15.4               | 175                    | 16.4               | 342                    | $5.02^{+1.78}_{-1.57} \pm 0.67$  | 0.5725             | $1.57^{+0.92}_{-0.87} \pm 0.38$ | 2.47                                                | 2.69                                                    |
| 0150680101 | 2003-07-26 | 49.599 | +57.935 | 29.0               | 524                    | 29.2               | 532                    | $22.60^{+0.92}_{-0.91} \pm 0.73$ | 0.5675             | $3.05 \pm 0.45 \pm 2.96$        | 12.28                                               | 2.00                                                    |
| 0603590101 | 2009-06-07 | 51.002 | −42.028 | 56.9               | 408                    | 59.5               | 505                    | $6.81^{+0.69}_{-0.68} \pm 0.91$  | 0.5675             | $0.80 \pm 0.39 \pm 1.09$        | 2.14                                                | 2.11                                                    |
| 0404190201 | 2006-11-21 | 51.352 | −42.033 | 48.6               | 471                    | 46.0               | 494                    | $8.85^{+0.63}_{-0.67} \pm 0.23$  | 0.5675             | $1.50^{+0.35}_{-0.36} \pm 1.19$ | 0.57                                                | 1.55                                                    |
| 0603590201 | 2009-06-01 | 51.403 | −42.038 | 60.3               | 479                    | 63.7               | 569                    | $6.22^{+0.61}_{-0.63} \pm 0.46$  | 0.5675             | $1.05^{+0.35}_{-0.36} \pm 0.60$ | 1.35                                                | 1.96                                                    |
| 0551020201 | 2008-11-14 | 51.967 | −59.630 | 27.4               | 499                    | 27.3               | 516                    | $3.34^{+0.89}_{-0.70} \pm 0.49$  | 0.5825             | $1.09^{+0.61}_{-0.48} \pm 0.67$ | 2.57                                                | 1.61                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0305590301 | 2005-09-28 | 52.320 | +5.799  | 26.9               | 422                    | 26.9               | 517                    | $3.18^{+0.72}_{-0.86} \pm 0.16$  | 0.5625             | $1.18^{+0.38}_{-0.41} \pm 0.25$ | 5.38                                                | 2.03                                              |
| 0554501101 | 2008-07-22 | 52.468 | +78.648 | 12.7               | 413                    | 13.8               | 580                    | $3.91^{+1.58}_{-1.11} \pm 0.40$  | 0.5625             | $0.47^{+0.76}_{-0.47} \pm 0.16$ | 3.46                                                | 2.29                                              |
| 0157360401 | 2003-01-17 | 52.877 | +47.990 | 25.1               | 502                    | 25.8               | 503                    | $10.72^{+0.77}_{-1.10} \pm 0.27$ | 0.5675             | $2.46^{+0.42}_{-0.40} \pm 1.33$ | 4.33                                                | 1.44                                              |
| 0073140501 | 2002-01-19 | 52.877 | +47.990 | 21.2               | 424                    | 21.1               | 500                    | $16.43^{+1.01}_{-0.96} \pm 0.25$ | 0.5675             | $2.19^{+0.50}_{-0.49} \pm 1.89$ | 8.58                                                | 2.24                                              |
| 0157360601 | 2003-02-26 | 52.877 | +47.991 | 5.2                | 503                    | 5.2                | 435                    | $13.00^{+2.10}_{-2.04} \pm 0.49$ | 0.5625             | $2.01^{+1.00}_{-0.93} \pm 1.16$ | 9.23                                                | 1.74                                              |
| 0073140201 | 2002-01-15 | 52.878 | +47.989 | 26.1               | 425                    | 25.7               | 435                    | $12.93 \pm 0.80 \pm 0.23$        | 0.5675             | $1.63^{+0.40}_{-0.41} \pm 1.59$ | 1.89                                                | 2.19                                              |
| 0073140301 | 2002-01-09 | 52.878 | +47.989 | 17.4               | 496                    | 16.8               | 434                    | $12.77^{+0.83}_{-1.09} \pm 0.70$ | 0.5625             | $1.97^{+0.46}_{-0.52} \pm 1.60$ | 2.32                                                | 1.32                                              |
| 0503670201 | 2007-05-09 | 53.002 | +3.045  | 8.5                | 355                    | 9.5                | 516                    | $1.20^{+1.35}_{-1.20} \pm 0.62$  | 0.5475             | $0.00^{+0.16}_{-0.00} \pm 0.00$ | 1.28                                                | 2.66                                              |
| 0304801201 | 2005-10-29 | 53.355 | -35.773 | 10.4               | 422                    | 10.8               | 518                    | $10.68^{+1.42}_{-1.24} \pm 0.33$ | 0.5625             | $1.03^{+0.68}_{-0.60} \pm 1.04$ | 3.65                                                | 1.83                                              |
| 0112960601 | 2002-10-25 | 53.638 | -13.628 | 7.7                | 583                    | 7.4                | 515                    | $11.21^{+1.59}_{-1.26} \pm 1.46$ | 0.5725             | $2.32^{+0.97}_{-0.73} \pm 1.65$ | 1.71                                                | 2.04                                              |
| 0112960301 | 2002-10-19 | 53.638 | -13.627 | 11.9               | 582                    | 12.1               | 517                    | $9.90^{+1.03}_{-1.10} \pm 1.26$  | 0.5675             | $3.18 \pm 0.61 \pm 0.80$        | 1.43                                                | 2.12                                              |
| 0112960501 | 2002-10-23 | 53.638 | -13.627 | 11.6               | 583                    | 12.3               | 516                    | $12.65^{+1.28}_{-1.20} \pm 0.75$ | 0.5625             | $3.57^{+0.65}_{-0.62} \pm 0.57$ | 2.11                                                | 2.50                                              |
| 0202360101 | 2005-05-17 | 53.785 | -63.355 | 68.8               | 468                    | 69.1               | 559                    | $5.77^{+0.85}_{-0.47} \pm 0.42$  | 0.5675             | $2.56^{+0.37}_{-0.27} \pm 0.59$ | 0.56                                                | 2.20                                              |
| 0600690101 | 2009-05-22 | 54.291 | -14.453 | 58.6               | 400                    | 59.9               | 577                    | $7.93^{+0.68}_{-0.79} \pm 1.14$  | 0.5675             | $4.12^{+0.38}_{-0.40} \pm 0.55$ | 1.37                                                | 2.68                                              |
| 0556210301 | 2008-09-17 | 54.428 | +42.051 | 10.3               | 479                    | 11.3               | 499                    | $3.49^{+1.36}_{-1.25} \pm 0.69$  | 0.5625             | $0.80^{+0.64}_{-0.68} \pm 0.24$ | 0.43                                                | 2.22                                              |
| 0601930501 | 2009-06-05 | 55.323 | -35.819 | 85.3               | 308                    | 90.7               | 392                    | $4.88^{+0.67}_{-0.56} \pm 0.33$  | 0.5675             | $0.97^{+0.30}_{-0.31} \pm 0.51$ | 1.86                                                | 1.85                                              |
| 0505880101 | 2007-08-09 | 55.564 | +42.457 | 13.5               | 355                    | 14.6               | 510                    | $4.13^{+1.50}_{-1.06} \pm 0.51$  | 0.5625             | $0.78^{+0.70}_{-0.54} \pm 0.69$ | 1.44                                                | 1.53                                              |
| 0300880301 | 2005-09-24 | 56.083 | +2.107  | 16.2               | 415                    | 15.9               | 509                    | $2.24^{+0.96}_{-0.74} \pm 0.39$  | 0.5725             | $0.05^{+0.47}_{-0.05} \pm 0.07$ | 1.76                                                | 2.25                                              |
| 0401270101 | 2007-04-24 | 56.146 | -26.492 | 7.8                | 430                    | 7.8                | 593                    | $6.22^{+1.30}_{-1.31} \pm 0.68$  | 0.5625             | $0.30^{+0.68}_{-0.30} \pm 1.13$ | 2.70                                                | 1.46                                              |
| 0505011201 | 2007-08-19 | 56.663 | +43.826 | 15.4               | 405                    | 15.5               | 565                    | $4.67^{+1.18}_{-1.06} \pm 0.24$  | 0.5675             | $0.65^{+0.55}_{-0.51} \pm 0.29$ | 2.07                                                | 1.76                                              |
| 0505010501 | 2007-08-17 | 56.664 | +43.826 | 10.7               | 404                    | 12.3               | 565                    | $5.11^{+1.41}_{-1.24} \pm 0.43$  | 0.5675             | $0.52^{+0.34}_{-0.52} \pm 0.15$ | 1.90                                                | 2.04                                              |
| 0503490201 | 2007-12-06 | 56.910 | -55.091 | 102.7              | 280                    | 103.5              | 365                    | $4.66^{+0.58}_{-0.50} \pm 0.41$  | 0.5725             | $1.57^{+0.34}_{-0.28} \pm 0.49$ | 1.98                                                | 1.95                                              |
| 0500500901 | 2007-11-05 | 57.019 | -28.010 | 48.3               | 416                    | 49.6               | 584                    | $5.36^{+0.75}_{-0.69} \pm 1.35$  | 0.5675             | $1.39 \pm 0.40 \pm 0.33$        | 2.32                                                | 1.73                                              |
| 0300310201 | 2005-11-20 | 57.019 | -28.013 | 68.5               | 416                    | 71.0               | 504                    | $7.97^{+0.57}_{-0.61} \pm 0.71$  | 0.5675             | $1.53^{+0.32}_{-0.33} \pm 0.65$ | 1.69                                                | 1.74                                              |
| 0500500701 | 2007-05-19 | 57.060 | -28.017 | 49.7               | 417                    | 68.6               | 511                    | $5.36^{+0.75}_{-0.69} \pm 0.41$  | 0.5625             | $0.91^{+0.40}_{-0.36} \pm 0.07$ | 1.35                                                | 2.20                                              |
| 0500500801 | 2007-05-21 | 57.060 | -28.017 | 72.9               | 422                    | 85.9               | 511                    | $9.67^{+0.69}_{-0.66} \pm 0.58$  | 0.5625             | $0.71^{+0.36}_{-0.34} \pm 0.66$ | 2.47                                                | 2.11                                              |
| 0500500601 | 2007-05-03 | 57.061 | -28.019 | 22.3               | 347                    | 22.7               | 511                    | $6.20^{+1.16}_{-1.14} \pm 0.48$  | 0.5625             | $0.89^{+0.53}_{-0.66} \pm 0.24$ | 1.86                                                | 1.95                                              |
| 0150610201 | 2003-05-14 | 57.061 | -28.017 | 6.7                | 584                    | 6.2                | 585                    | $8.85^{+1.34}_{-1.22} \pm 1.75$  | 0.5725             | $1.34 \pm 0.74 \pm 0.53$        | 1.42                                                | 2.35                                              |
| 0025740201 | 2001-12-12 | 57.505 | +82.046 | 36.0               | 510                    | 35.8               | 585                    | $10.65^{+0.59}_{-0.61} \pm 0.46$ | 0.5625             | $2.20^{+0.31}_{-0.34} \pm 1.21$ | 4.43                                                | 2.28                                              |
| 0551860501 | 2008-11-12 | 57.709 | +6.402  | 12.8               | 374                    | 12.8               | 465                    | $1.07^{+1.12}_{-0.65} \pm 0.55$  | 0.5825             | $1.62^{+0.82}_{-0.59} \pm 0.68$ | 1.64                                                | 1.94                                              |
| 0109500101 | 2003-11-09 | 57.709 | +6.403  | 8.9                | 470                    | 9.0                | 475                    | $3.61^{+1.58}_{-1.31} \pm 0.90$  | 0.5675             | $1.08 \pm 0.70 \pm 0.85$        | 2.77                                                | 1.99                                              |
| 0105460801 | 2004-10-02 | 57.713 | +6.412  | 17.9               | 538                    | 17.8               | 465                    | $2.72^{+0.88}_{-0.74} \pm 0.70$  | 0.5625             | $0.99^{+0.40}_{-0.41} \pm 0.22$ | 4.75                                                | 1.91                                              |
| 0105460201 | 2004-09-28 | 57.714 | +6.413  | 14.1               | 538                    | 14.0               | 539                    | $2.40^{+0.94}_{-0.86} \pm 0.19$  | 0.5625             | $1.45^{+0.50}_{-0.46} \pm 0.19$ | 3.95                                                | 1.88                                              |
| 0081341101 | 2002-02-22 | 57.826 | +55.926 | 17.7               | 517                    | 17.3               | 589                    | $8.04^{+0.98}_{-1.00} \pm 0.51$  | 0.5725             | $1.90^{+0.47}_{-0.49} \pm 1.26$ | 1.52                                                | 1.59                                              |
| 0012440301 | 2001-05-24 | 58.090 | -42.907 | 25.0               | 533                    | 25.6               | 465                    | $6.94^{+0.72}_{-0.61} \pm 0.50$  | 0.5675             | $1.17^{+0.32}_{-0.33} \pm 0.71$ | 0.48                                                | 1.57                                              |
| 0555691401 | 2008-11-10 | 58.613 | -3.614  | 10.6               | 494                    | 10.9               | 507                    | $3.09^{+1.62}_{-1.48} \pm 3.78$  | 0.5425             | $0.12^{+0.63}_{-0.12} \pm 0.17$ | 1.05                                                | 2.22                                              |
| 0502510601 | 2007-05-17 | 58.674 | -31.817 | 11.1               | 351                    | 11.2               | 515                    | $9.23^{+1.21}_{-1.16} \pm 0.47$  | 0.5725             | $2.29^{+0.71}_{-0.69} \pm 0.56$ | 2.23                                                | 2.15                                              |
| 0204910201 | 2004-10-31 | 59.179 | -4.692  | 24.5               | 589                    | 24.5               | 516                    | $4.60^{+0.62}_{-0.81} \pm 1.24$  | 0.5675             | $1.79^{+0.35}_{-0.39} \pm 0.62$ | 1.86                                                | 1.85                                              |
| 0107660201 | 2001-12-23 | 59.214 | +65.019 | 14.7               | 397                    | 14.8               | 473                    | $13.91^{+1.13}_{-1.21} \pm 0.23$ | 0.5625             | $1.52 \pm 0.56 \pm 1.13$        | 1.56                                                | 1.68                                              |
| 0203050601 | 2004-05-19 | 59.223 | -22.570 | 5.8                | 502                    | 5.8                | 579                    | $13.84^{+1.56}_{-1.65} \pm 0.61$ | 0.5675             | $4.45^{+0.90}_{-0.95} \pm 1.88$ | 3.82                                                | 1.86                                              |
| 0005010301 | 2003-01-07 | 59.227 | +65.017 | 25.3               | 477                    | 24.8               | 474                    | $12.08^{+0.84}_{-0.85} \pm 0.46$ | 0.5675             | $2.27^{+0.43}_{-0.44} \pm 1.09$ | 5.02                                                | 1.51                                              |
| 0005010101 | 2003-01-01 | 59.232 | +65.017 | 19.4               | 476                    | 19.6               | 474                    | $10.89^{+1.52}_{-0.90} \pm 0.74$ | 0.5675             | $1.39^{+0.49}_{-0.46} \pm 1.26$ | 1.88                                                | 1.50                                              |
| 0005010201 | 2003-01-04 | 59.233 | +65.016 | 7.9                | 476                    | 7.8                | 474                    | $8.67^{+1.59}_{-2.19} \pm 0.58$  | 0.5625             | $2.41^{+0.86}_{-0.99} \pm 1.09$ | 3.03                                                | 1.69                                              |
| 0401180101 | 2006-11-24 | 59.904 | -42.064 | 32.9               | 502                    | 32.7               | 517                    | $6.16^{+0.93}_{-0.88} \pm 0.34$  | 0.5675             | $1.59^{+0.45}_{-0.43} \pm 0.64$ | 1.52                                                | 1.28                                              |
| 0155560401 | 2002-11-26 | 60.051 | -37.767 | 5.4                | 515                    | 5.4                | 430                    | $7.76^{+1.70}_{-1.88} \pm 0.47$  | 0.5625             | $1.39 \pm 0.90 \pm 1.13$        | 1.28                                                | 2.03                                              |
| 0033540901 | 2002-01-06 | 60.332 | +42.923 | 13.1               | 508                    | 12.9               | 575                    | $13.36^{+1.16}_{-1.04} \pm 0.74$ | 0.5675             | $2.76^{+0.60}_{-0.55} \pm 1.16$ | 2.36                                                | 2.61                                              |
| 0302580701 | 2005-06-10 | 60.860 | -35.291 | 20.2               | 471                    | 20.4               | 560                    | $14.57^{+0.93}_{-0.88} \pm 0.85$ | 0.5675             | $3.77^{+0.50}_{-0.49} \pm 1.92$ | 1.64                                                | 1.30                                              |
| 0600970201 | 2009-05-18 | 60.982 | -3.923  | 34.7               | 399                    | 34.8               | 573                    | $1.43^{+1.09}_{-0.60} \pm 0.83$  | 0.5475             | $0.44^{+0.44}_{-0.32} \pm 0.23$ | 2.68                                                | 1.89                                              |
| 0304201001 | 2006-04-24 | 61.175 | -11.481 | 10.2               | 389                    | 9.9                | 401                    | $14.57^{+1.11}_{-3.47} \pm 1.84$ | 0.5675             | $1.96^{+1.33}_{-0.73} \pm 2.88$ | 0.82                                                | 1.39                                              |
| 0149410401 | 2003-05-17 | 61.181 | -52.196 | 20.4               | 577                    | 20.6               | 577                    | $10.31^{+0.83}_{-0.79} \pm 0.30$ | 0.5625             | $1.94^{+0.43}_{-0.39} \pm 1.19$ | 1.97                                                | 1.55                                              |
| 0506120101 | 2008-04-28 | 61.323 | +17.447 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               |
| 0403500101 | 2006-09-08 | 61.739 | +31.174 | 15.0               | 499                    | 14.8               | 517                    | $5.05^{+1.41}_{-0.84} \pm 0.58$  | 0.5675             | $1.05^{+0.67}_{-0.49} \pm 0.74$ | 2.17                                                | 1.24                                              |
| 0090050601 | 2001-12-06 | 61.839 | -46.712 | 21.8               | 400                    | 21.8               | 472                    | $7.67^{+0.97}_{-0.85} \pm 1.19$  | 0.5675             | $1.67^{+0.59}_{-0.47} \pm 0.60$ | 2.31                                                | 2.29                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0093550401 | 2000-12-23 | 62.180 | -68.394 | 21.1               | 587                    | 21.1               | 511                    | $8.44^{+0.69}_{-0.79} \pm 0.36$  | 0.5675             | $2.03^{+0.40}_{-0.42} \pm 0.98$  | 3.75                                                | 1.68                                                    |
| 0204340101 | 2004-08-20 | 62.321 | +41.191 | 13.8               | 503                    | 14.5               | 582                    | $14.09^{+1.15}_{-1.12} \pm 0.39$ | 0.5675             | $0.82^{+0.54}_{-0.56} \pm 1.40$  | 3.24                                                | 1.95                                                    |
| 0504100401 | 2007-12-16 | 62.380 | +65.692 | 7.9                | 416                    | 8.1                | 503                    | $7.24^{+1.47}_{-1.72} \pm 0.25$  | 0.5675             | $0.62^{+0.81}_{-0.62} \pm 0.86$  | 1.44                                                | 1.82                                                    |
| 0502041201 | 2007-11-08 | 62.633 | -33.137 | 8.8                | 313                    | 9.0                | 465                    | $8.22^{+2.31}_{-1.50} \pm 1.95$  | 0.5625             | $1.16^{+1.04}_{-0.81} \pm 1.80$  | 2.93                                                | 1.65                                                    |
| 0502041001 | 2007-11-03 | 62.633 | -33.135 | 8.2                | 314                    | 8.3                | 465                    | $8.19^{+1.75}_{-1.74} \pm 0.30$  | 0.5725             | $2.14^{+0.54}_{-1.40} \pm 1.10$  | 1.42                                                | 1.27                                                    |
| 0502041101 | 2007-11-07 | 62.633 | -33.136 | 10.6               | 314                    | 10.8               | 465                    | $9.12^{+1.40}_{-1.78} \pm 0.14$  | 0.5675             | $1.04^{+0.74}_{-0.86} \pm 1.77$  | 3.22                                                | 1.08                                                    |
| 0502041401 | 2007-12-10 | 62.633 | -33.140 | 7.6                | 312                    | 7.3                | 391                    | $8.38^{+1.77}_{-1.90} \pm 0.39$  | 0.5675             | $1.72^{+0.92}_{-1.10} \pm 0.90$  | 2.13                                                | 1.17                                                    |
| 0201150101 | 2004-05-31 | 62.675 | -33.133 | 20.6               | 395                    | 21.2               | 393                    | $11.94^{+0.98}_{-1.25} \pm 0.22$ | 0.5675             | $1.93^{+0.52}_{-0.51} \pm 1.80$  | 2.63                                                | 1.34                                                    |
| 0502040901 | 2007-06-12 | 62.677 | -33.137 | 6.7                | 372                    | 6.8                | 394                    | $11.98^{+2.23}_{-2.10} \pm 0.79$ | 0.5675             | $1.83^{+1.14}_{-0.85} \pm 1.66$  | 1.79                                                | 1.01                                                    |
| 0502041801 | 2008-05-19 | 62.677 | -33.140 | 7.5                | 233                    | 7.5                | 466                    | $5.93^{+1.60}_{-1.42} \pm 0.22$  | 0.5825             | $0.77^{+1.04}_{-0.77} \pm 1.59$  | 2.59                                                | 1.39                                                    |
| 0502040701 | 2007-05-17 | 62.677 | -33.140 | 12.3               | 300                    | 12.1               | 393                    | $11.46^{+2.02}_{-1.50} \pm 1.00$ | 0.5675             | $2.66^{+0.45}_{-0.79} \pm 2.01$  | 2.79                                                | 1.14                                                    |
| 0143650801 | 2003-01-25 | 62.994 | +74.970 | 7.9                | 582                    | 8.0                | 583                    | $4.56^{+1.54}_{-1.20} \pm 1.25$  | 0.5675             | $2.05^{+0.81}_{-0.72} \pm 0.75$  | 2.18                                                | 2.30                                                    |
| 0094310201 | 2002-12-15 | 63.028 | -44.013 | 61.2               | 589                    | 61.3               | 590                    | $10.53^{+0.47}_{-0.41} \pm 0.34$ | 0.5675             | $2.32^{+0.26}_{-0.23} \pm 1.40$  | 1.59                                                | 1.49                                                    |
| 0094310101 | 2002-11-18 | 63.029 | -44.012 | 55.6               | 579                    | 55.8               | 589                    | $10.59^{+0.52}_{-0.49} \pm 0.33$ | 0.5675             | $2.76^{+0.29}_{-0.28} \pm 1.68$  | 2.17                                                | 2.09                                                    |
| 0150470701 | 2003-05-16 | 63.691 | -29.066 | 31.4               | 472                    | 27.9               | 485                    | $16.78^{+0.94}_{-0.96} \pm 0.34$ | 0.5675             | $3.43 \pm 0.50 \pm 2.27$         | 1.76                                                | 1.60                                                    |
| 0556212601 | 2008-08-12 | 63.988 | +42.878 | 6.3                | 353                    | 5.6                | 591                    | $5.73^{+1.55}_{-1.84} \pm 1.58$  | 0.5625             | $1.47^{+0.83}_{-0.91} \pm 0.90$  | 1.17                                                | 1.81                                                    |
| 0205910101 | 2005-01-12 | 64.899 | +85.605 | 44.7               | 515                    | 44.8               | 441                    | $5.41 \pm 0.59 \pm 0.33$         | 0.5675             | $0.57 \pm 0.34 \pm 0.54$         | 3.21                                                | 2.06                                                    |
| 0148620101 | 2003-08-03 | 65.190 | +70.082 | 13.5               | 572                    | 13.5               | 579                    | $9.35^{+1.02}_{-0.97} \pm 0.69$  | 0.5675             | $1.68^{+0.54}_{-0.53} \pm 1.09$  | 1.71                                                | 2.02                                                    |
| 0304050101 | 2005-06-30 | 66.520 | -70.324 | 34.0               | 408                    | 39.1               | 508                    | $5.48^{+0.83}_{-0.78} \pm 0.31$  | 0.5575             | $0.67^{+0.41}_{-0.38} \pm 0.13$  | 3.22                                                | 2.64                                                    |
| 0501230101 | 2007-08-31 | 66.842 | +25.804 | 17.8               | 245                    | 18.4               | 480                    | $6.78^{+1.24}_{-1.28} \pm 0.67$  | 0.5725             | $1.22^{+0.66}_{-0.76} \pm 0.65$  | 2.12                                                | 1.79                                                    |
| 0304070801 | 2006-01-16 | 66.881 | +76.681 | 8.8                | 423                    | 8.6                | 590                    | $2.36^{+1.08}_{-1.07} \pm 0.54$  | 0.5725             | $0.00^{+0.39}_{-0.00} \pm 0.00$  | 4.35                                                | 1.97                                                    |
| 0502510301 | 2007-12-05 | 67.149 | +81.034 | 23.5               | 423                    | 23.7               | 515                    | $3.23^{+0.93}_{-0.84} \pm 0.27$  | 0.5725             | $0.21^{+0.50}_{-0.21} \pm 0.37$  | 1.92                                                | 1.71                                                    |
| 0602840101 | 2009-05-16 | 67.599 | +7.593  | 12.6               | 421                    | 12.5               | 585                    | $7.88^{+1.31}_{-1.26} \pm 0.40$  | 0.5675             | $3.15^{+0.77}_{-0.79} \pm 0.11$  | 1.57                                                | 2.57                                                    |
| 0553561001 | 2008-12-03 | 68.117 | +82.734 | 7.2                | 343                    | 7.4                | 505                    | $1.63^{+2.10}_{-1.63} \pm 0.39$  | 0.5425             | $1.36^{+0.88}_{-0.86} \pm 0.06$  | 3.48                                                | 2.36                                                    |
| 0025740401 | 2002-02-10 | 68.251 | +48.101 | 12.4               | 586                    | 12.4               | 587                    | $10.03^{+0.95}_{-1.29} \pm 0.30$ | 0.5675             | $1.29 \pm 0.49 \pm 0.95$         | 3.26                                                | 2.29                                                    |
| 0147570601 | 2003-07-31 | 69.340 | +67.586 | 12.1               | 577                    | 12.1               | 582                    | $12.19^{+0.91}_{-1.02} \pm 0.54$ | 0.5625             | $1.78^{+0.54}_{-0.51} \pm 1.48$  | 1.46                                                | 1.45                                                    |
| 0109080601 | 2002-08-11 | 69.897 | +62.736 | 17.3               | 476                    | 17.1               | 400                    | $12.02^{+1.05}_{-1.04} \pm 0.35$ | 0.5675             | $2.19 \pm 0.57 \pm 1.81$         | 3.59                                                | 1.62                                                    |
| 0203390601 | 2004-08-28 | 70.335 | +56.505 | 8.9                | 588                    | 8.8                | 589                    | $6.93^{+1.16}_{-1.21} \pm 0.29$  | 0.5625             | $1.33^{+0.57}_{-0.55} \pm 0.13$  | 1.92                                                | 1.92                                                    |
| 0200430201 | 2004-05-20 | 70.446 | -35.378 | 11.6               | 576                    | 11.4               | 583                    | $5.26 \pm 0.86 \pm 0.34$         | 0.5725             | $1.10 \pm 0.52 \pm 0.58$         | 2.64                                                | 2.22                                                    |
| 0204400201 | 2004-11-29 | 70.649 | -15.884 | 26.7               | 590                    | 27.0               | 514                    | $5.72^{+0.79}_{-0.61} \pm 0.26$  | 0.5625             | $2.04^{+0.34}_{-0.37} \pm 0.09$  | 5.05                                                | 1.92                                                    |
| 0055990301 | 2001-11-28 | 70.899 | -67.617 | 13.3               | 483                    | 13.6               | 561                    | $5.07^{+0.69}_{-0.80} \pm 0.32$  | 0.5725             | $1.18^{+0.44}_{-0.47} \pm 0.82$  | 0.88                                                | 1.84                                                    |
| 0206860101 | 2004-08-30 | 71.257 | +37.471 | 18.2               | 476                    | 18.3               | 401                    | $6.76^{+0.90}_{-0.92} \pm 0.41$  | 0.5725             | $1.00^{+0.51}_{-0.52} \pm 0.32$  | 3.74                                                | 2.13                                                    |
| 0206860201 | 2004-09-05 | 71.257 | +37.471 | 8.0                | 477                    | 9.3                | 401                    | $19.55^{+2.07}_{-1.24} \pm 0.92$ | 0.5675             | $1.81^{+1.01}_{-0.70} \pm 1.67$  | 6.00                                                | 2.20                                                    |
| 0402250201 | 2006-06-27 | 71.408 | +59.566 | 25.3               | 232                    | 25.0               | 296                    | $18.79^{+1.57}_{-1.49} \pm 0.32$ | 0.5625             | $2.32^{+0.74}_{-0.69} \pm 1.80$  | 5.97                                                | 1.55                                                    |
| 0135940101 | 2003-01-05 | 71.495 | +84.739 | 13.7               | 582                    | 14.1               | 584                    | $6.08^{+1.03}_{-1.01} \pm 0.48$  | 0.5675             | $1.69^{+0.50}_{-0.52} \pm 1.04$  | 1.86                                                | 1.37                                                    |
| 0110960101 | 2002-05-28 | 71.823 | -46.107 | 11.4               | 575                    | 11.8               | 576                    | $7.15^{+1.02}_{-1.00} \pm 0.35$  | 0.5625             | $0.92^{+0.55}_{-0.50} \pm 0.34$  | 0.78                                                | 2.31                                                    |
| 0152200101 | 2002-12-21 | 72.243 | -67.305 | 51.4               | 510                    | 51.3               | 508                    | $7.33^{+0.55}_{-0.52} \pm 0.62$  | 0.5675             | $2.82^{+0.32}_{-0.31} \pm 0.73$  | 2.15                                                | 1.97                                                    |
| 0212481201 | 2005-10-12 | 72.288 | -0.057  | 24.5               | 428                    | 24.2               | 516                    | $4.71^{+0.82}_{-0.89} \pm 1.91$  | 0.5625             | $6.11^{+0.56}_{-0.40} \pm 0.44$  | 0.82                                                | 2.31                                                    |
| 0501621601 | 2007-10-03 | 72.954 | +38.208 | 8.7                | 421                    | 8.8                | 510                    | $4.51^{+1.71}_{-1.17} \pm 0.33$  | 0.5675             | $0.84^{+0.67}_{-0.66} \pm 0.92$  | 1.49                                                | 1.58                                                    |
| 0501620301 | 2007-08-07 | 72.974 | +38.214 | 6.7                | 419                    | 6.8                | 510                    | $4.21^{+1.62}_{-1.76} \pm 0.60$  | 0.5575             | $1.20^{+0.88}_{-0.84} \pm 0.21$  | 2.18                                                | 2.24                                                    |
| 0500680201 | 2008-04-02 | 73.006 | +1.423  | 22.1               | 397                    | 22.3               | 485                    | $6.77^{+0.99}_{-1.00} \pm 1.34$  | 0.5725             | $5.06^{+0.69}_{-0.61} \pm 0.88$  | 1.72                                                | 2.61                                                    |
| 0304000201 | 2005-11-08 | 73.101 | -2.088  | 33.5               | 409                    | 33.1               | 511                    | $1.83^{+0.73}_{-0.65} \pm 0.25$  | 0.5625             | $1.23^{+0.37}_{-0.36} \pm 0.26$  | 1.73                                                | 1.85                                                    |
| 0305361601 | 2006-01-18 | 73.737 | +79.307 | 29.2               | 492                    | 29.4               | 516                    | $3.98^{+0.66}_{-0.55} \pm 0.37$  | 0.5725             | $0.54^{+0.40}_{-0.34} \pm 0.57$  | 1.75                                                | 1.54                                                    |
| 0205330501 | 2004-06-05 | 73.871 | -54.920 | 9.0                | 410                    | 9.3                | 399                    | $3.79^{+1.24}_{-1.15} \pm 0.43$  | 0.5625             | $0.02^{+0.39}_{-0.02} \pm 0.79$  | 2.48                                                | 1.55                                                    |
| 0553510201 | 2008-05-18 | 73.997 | +8.482  | 20.7               | 355                    | 22.0               | 582                    | $19.46^{+1.74}_{-1.67} \pm 3.21$ | 0.5675             | $11.97^{+0.66}_{-1.05} \pm 1.18$ | 2.24                                                | 2.64                                                    |
| 0112551701 | 2002-06-14 | 74.414 | +76.261 | 15.6               | 469                    | 15.2               | 476                    | $9.74^{+0.88}_{-1.04} \pm 0.27$  | 0.5675             | $1.49^{+0.49}_{-0.53} \pm 1.11$  | 1.86                                                | 1.63                                                    |
| 0204790101 | 2003-12-23 | 75.788 | -73.628 | 5.3                | 444                    | 5.5                | 485                    | $7.78^{+1.15}_{-2.53} \pm 2.69$  | 0.5675             | $1.28^{+1.15}_{-0.76} \pm 0.34$  | 1.14                                                | 1.69                                                    |
| 0111260701 | 2003-01-17 | 75.851 | +64.877 | 13.8               | 535                    | 13.7               | 535                    | $7.74^{+0.83}_{-0.95} \pm 1.08$  | 0.5725             | $1.07^{+0.72}_{-0.54} \pm 1.45$  | 3.18                                                | 1.82                                                    |
| 0212480701 | 2005-06-05 | 75.906 | +64.905 | 13.5               | 395                    | 13.5               | 557                    | $5.95 \pm 0.99 \pm 1.33$         | 0.5675             | $0.52^{+0.54}_{-0.52} \pm 0.72$  | 1.51                                                | 2.38                                                    |
| 0405600401 | 2006-10-20 | 76.389 | +3.684  | 13.3               | 313                    | 14.1               | 398                    | $10.75^{+1.51}_{-1.80} \pm 1.23$ | 0.5675             | $9.06^{+0.92}_{-1.09} \pm 1.16$  | 5.33                                                | 2.15                                                    |
| 0404450101 | 2006-11-14 | 76.732 | -28.526 | 30.8               | 315                    | 30.8               | 399                    | $7.87^{+0.99}_{-0.84} \pm 0.29$  | 0.5725             | $2.72^{+0.53}_{-0.48} \pm 0.91$  | 2.26                                                | 1.67                                                    |
| 0130920101 | 2000-11-29 | 76.753 | -28.526 | 14.1               | 582                    | 15.9               | 587                    | $14.22^{+0.98}_{-1.13} \pm 0.54$ | 0.5675             | $5.36^{+0.58}_{-0.61} \pm 1.50$  | 2.32                                                | 1.85                                                    |
| 0403750101 | 2006-06-05 | 77.264 | +43.321 | 5.8                | 486                    | 5.3                | 506                    | $7.72^{+1.87}_{-1.74} \pm 0.32$  | 0.5675             | $0.77^{+0.99}_{-0.77} \pm 0.69$  | 2.98                                                | 2.04                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0072340701 | 2002-12-10 | 77.279 | +72.311 | 7.3                | 473                    | 7.2                | 467                    | $7.32^{+1.72}_{-1.35} \pm 0.77$  | 0.5725             | $1.01^{+0.64}_{-0.78} \pm 1.05$  | 1.29                                                | 1.58                                                    |
| 0148742601 | 2003-12-18 | 77.317 | +65.767 | 7.3                | 581                    | 7.3                | 583                    | $9.28^{+1.46}_{-1.32} \pm 0.31$  | 0.5675             | $0.27^{+0.61}_{-0.27} \pm 1.16$  | ...                                                 | 1.46                                                    |
| 0604920301 | 2009-05-02 | 77.854 | -5.480  | 41.4               | 502                    | 43.2               | 591                    | $12.98^{+1.03}_{-0.82} \pm 1.19$ | 0.5625             | $6.38^{+0.72}_{-0.49} \pm 0.19$  | 2.94                                                | 2.69                                                    |
| 0135940201 | 2002-07-10 | 78.293 | +81.975 | 8.6                | 510                    | 8.6                | 511                    | $7.44^{+1.18}_{-1.41} \pm 0.33$  | 0.5675             | $0.99^{+0.64}_{-0.57} \pm 1.02$  | 2.74                                                | 1.61                                                    |
| 0033541001 | 2001-11-29 | 78.427 | -50.234 | 11.8               | 426                    | 11.6               | 567                    | $6.28^{+1.48}_{-1.23} \pm 0.48$  | 0.5675             | $0.82^{+0.57}_{-0.63} \pm 0.63$  | 1.31                                                | 1.72                                                    |
| 0550451901 | 2008-11-20 | 78.623 | +9.733  | 16.5               | 454                    | 16.6               | 468                    | $8.99^{+1.26}_{-1.21} \pm 0.73$  | 0.5575             | $5.37 \pm 0.68 \pm 0.65$         | 2.41                                                | 1.81                                                    |
| 0153220601 | 2003-05-28 | 79.922 | -37.583 | 5.6                | 557                    | 5.7                | 487                    | $5.31^{+1.55}_{-1.71} \pm 0.36$  | 0.5625             | $0.89^{+0.85}_{-0.77} \pm 1.11$  | 2.08                                                | 1.73                                                    |
| 0305600601 | 2006-06-14 | 80.100 | -54.735 | 15.6               | 230                    | 15.2               | 390                    | $7.02^{+1.72}_{-2.09} \pm 0.24$  | 0.5525             | $1.16^{+0.81}_{-0.80} \pm 0.08$  | 4.53                                                | 1.93                                                    |
| 0201230101 | 2003-12-15 | 80.163 | -18.771 | 23.7               | 592                    | 24.1               | 592                    | $11.17^{+0.49}_{-1.07} \pm 1.27$ | 0.5675             | $2.77^{+0.37}_{-0.44} \pm 1.07$  | 1.49                                                | 1.97                                                    |
| 0555471101 | 2009-04-06 | 80.945 | +4.166  | 22.8               | 268                    | 22.6               | 405                    | $7.46^{+1.70}_{-1.98} \pm 0.99$  | 0.5625             | $7.44^{+0.95}_{-1.16} \pm 0.41$  | 1.61                                                | 2.23                                                    |
| 0301900501 | 2006-01-12 | 81.383 | +83.543 | 18.3               | 415                    | 18.3               | 505                    | $5.24^{+0.80}_{-0.84} \pm 0.23$  | 0.5675             | $0.60^{+0.44}_{-0.49} \pm 0.68$  | 2.86                                                | 1.43                                                    |
| 0041740301 | 2002-11-17 | 82.300 | -5.822  | 8.9                | 471                    | 8.9                | 403                    | $11.63^{+2.14}_{-1.63} \pm 0.43$ | 0.5675             | $3.62^{+1.12}_{-1.02} \pm 1.50$  | 3.25                                                | 2.11                                                    |
| 0143630101 | 2004-11-02 | 82.301 | -5.814  | 14.5               | 477                    | 14.8               | 402                    | $8.72^{+1.69}_{-1.54} \pm 1.47$  | 0.5625             | $5.54^{+0.97}_{-0.85} \pm 1.46$  | 1.63                                                | 1.78                                                    |
| 0401880801 | 2006-10-29 | 82.309 | -5.818  | 14.1               | 417                    | 14.3               | 505                    | $8.23^{+2.33}_{-1.07} \pm 1.70$  | 0.5625             | $5.30^{+1.29}_{-0.67} \pm 0.74$  | 2.26                                                | 1.69                                                    |
| 0550061301 | 2008-11-06 | 82.310 | -5.819  | 15.7               | 410                    | 15.8               | 498                    | $6.45^{+1.64}_{-1.02} \pm 0.94$  | 0.5775             | $5.74^{+0.87}_{-0.89} \pm 0.16$  | ...                                                 | 1.47                                                    |
| 0501930601 | 2007-11-03 | 82.312 | -5.820  | 13.8               | 413                    | 13.6               | 576                    | $9.96^{+1.65}_{-1.37} \pm 2.19$  | 0.5625             | $6.42^{+0.96}_{-0.77} \pm 0.72$  | 1.50                                                | 1.52                                                    |
| 0041741101 | 2004-05-01 | 82.336 | -5.825  | 13.5               | 397                    | 13.7               | 473                    | $23.07^{+2.09}_{-2.06} \pm 4.32$ | 0.5575             | $15.28^{+1.18}_{-1.16} \pm 1.37$ | 3.88                                                | 1.96                                                    |
| 0401880901 | 2007-04-30 | 82.346 | -5.828  | 7.2                | 408                    | 6.8                | 577                    | $9.19^{+1.77}_{-2.20} \pm 0.68$  | 0.5625             | $6.40^{+1.07}_{-1.17} \pm 0.93$  | 2.45                                                | 1.38                                                    |
| 0550060801 | 2009-04-27 | 82.347 | -5.828  | 10.9               | 407                    | 11.3               | 569                    | $9.12^{+1.70}_{-1.85} \pm 0.90$  | 0.5675             | $6.51^{+0.82}_{-0.97} \pm 0.63$  | 1.35                                                | 1.34                                                    |
| 0041180401 | 2002-06-02 | 82.640 | +71.663 | 19.8               | 476                    | 20.0               | 482                    | $8.66^{+1.62}_{-1.11} \pm 0.74$  | 0.5725             | $1.33^{+0.67}_{-0.65} \pm 1.43$  | 3.53                                                | 1.94                                                    |
| 0032140201 | 2001-06-10 | 82.684 | -45.569 | 7.4                | 582                    | 7.7                | 583                    | $6.86^{+1.17}_{-1.06} \pm 0.53$  | 0.5675             | $1.65^{+0.64}_{-0.60} \pm 0.89$  | 2.44                                                | 1.97                                                    |
| 0093640401 | 2001-01-09 | 82.933 | +80.599 | 18.9               | 498                    | 18.8               | 574                    | $6.85^{+0.68}_{-1.23} \pm 0.64$  | 0.5675             | $1.62^{+0.38}_{-0.49} \pm 1.17$  | 1.34                                                | 1.70                                                    |
| 0553110401 | 2008-11-14 | 83.039 | -0.342  | 14.6               | 503                    | 14.7               | 517                    | $1.36^{+0.96}_{-0.47} \pm 0.31$  | 0.5725             | $1.89^{+0.56}_{-0.61} \pm 0.14$  | 2.05                                                | 2.05                                                    |
| 0147890101 | 2003-11-18 | 83.284 | -31.045 | 22.9               | 403                    | 22.9               | 402                    | $6.14^{+0.96}_{-1.11} \pm 0.32$  | 0.5675             | $1.28 \pm 0.55 \pm 0.39$         | 1.66                                                | 2.56                                                    |
| 0011830201 | 2001-12-08 | 83.775 | +52.108 | 27.6               | 501                    | 27.2               | 578                    | $9.18^{+0.61}_{-0.99} \pm 0.32$  | 0.5675             | $2.29^{+0.34}_{-0.38} \pm 0.99$  | 0.83                                                | 1.71                                                    |
| 0103660101 | 2002-07-10 | 83.855 | +66.368 | 29.5               | 495                    | 29.5               | 503                    | $8.53^{+0.65}_{-0.68} \pm 0.61$  | 0.5675             | $0.63^{+0.34}_{-0.35} \pm 0.91$  | 2.49                                                | 1.87                                                    |
| 0109080501 | 2002-12-08 | 84.684 | +65.316 | 21.5               | 465                    | 21.9               | 464                    | $7.48^{+1.14}_{-0.83} \pm 0.25$  | 0.5725             | $0.75^{+0.55}_{-0.49} \pm 0.93$  | 0.99                                                | 2.07                                                    |
| 0201200201 | 2003-12-09 | 85.213 | +5.043  | 7.6                | 402                    | 7.7                | 477                    | $19.90^{+1.68}_{-2.18} \pm 1.88$ | 0.5725             | $12.62^{+1.25}_{-1.43} \pm 4.49$ | 1.87                                                | 1.86                                                    |
| 0307130301 | 2005-10-27 | 85.392 | +0.745  | 16.2               | 291                    | 16.1               | 378                    | $1.90^{+0.95}_{-0.98} \pm 0.34$  | 0.5775             | $1.39^{+0.72}_{-0.69} \pm 0.27$  | 1.64                                                | 2.13                                                    |
| 0109660901 | 2001-06-22 | 85.622 | +75.921 | 12.7               | 574                    | 11.5               | 582                    | $6.48^{+0.80}_{-0.78} \pm 0.32$  | 0.5725             | $0.84 \pm 0.46 \pm 0.88$         | 0.29                                                | 1.47                                                    |
| 0109660801 | 2001-06-12 | 85.622 | +75.921 | 40.5               | 582                    | 42.8               | 581                    | $6.92^{+0.52}_{-0.49} \pm 0.57$  | 0.5675             | $0.81^{+0.29}_{-0.26} \pm 0.99$  | 1.63                                                | 1.84                                                    |
| 0109661001 | 2001-06-23 | 85.623 | +75.921 | 60.5               | 572                    | 60.7               | 581                    | $6.22 \pm 0.40 \pm 0.44$         | 0.5675             | $0.89 \pm 0.22 \pm 0.75$         | 0.82                                                | 1.88                                                    |
| 0550871001 | 2008-12-01 | 85.938 | -18.782 | 13.2               | 328                    | 13.0               | 564                    | $6.34^{+1.29}_{-1.41} \pm 1.10$  | 0.5675             | $1.76^{+0.88}_{-0.67} \pm 0.88$  | 1.12                                                | 2.45                                                    |
| 0401700201 | 2006-07-02 | 86.132 | -38.176 | 15.3               | 310                    | 15.4               | 399                    | $4.40^{+1.40}_{-1.24} \pm 0.58$  | 0.5575             | $0.70^{+0.73}_{-0.64} \pm 0.76$  | 2.38                                                | 1.45                                                    |
| 0025541001 | 2001-06-19 | 86.295 | -42.837 | 6.8                | 463                    | 6.8                | 540                    | $5.44^{+1.97}_{-1.23} \pm 0.78$  | 0.5675             | $2.81^{+0.84}_{-0.74} \pm 0.30$  | 1.81                                                | 2.13                                                    |
| 0553440201 | 2008-11-20 | 86.341 | -30.586 | 6.2                | 430                    | 6.2                | 518                    | $3.93^{+1.64}_{-1.51} \pm 0.69$  | 0.5675             | $0.99^{+0.92}_{-0.88} \pm 1.03$  | 2.44                                                | 1.31                                                    |
| 0020540401 | 2002-12-10 | 86.507 | +83.387 | 46.3               | 431                    | 46.3               | 357                    | $8.55^{+0.68}_{-0.61} \pm 0.55$  | 0.5675             | $2.18^{+0.39}_{-0.33} \pm 0.87$  | 1.05                                                | 1.72                                                    |
| 0049540401 | 2003-08-19 | 86.567 | +40.932 | 16.2               | 485                    | 16.3               | 560                    | $11.16^{+1.04}_{-0.98} \pm 0.23$ | 0.5725             | $5.95^{+0.67}_{-0.66} \pm 1.52$  | 1.95                                                | 2.01                                                    |
| 0300310301 | 2006-01-16 | 86.902 | +49.378 | 5.7                | 300                    | 7.8                | 462                    | $5.26^{+1.85}_{-1.41} \pm 0.44$  | 0.5925             | $0.11^{+1.22}_{-0.11} \pm 1.05$  | 2.90                                                | 1.98                                                    |
| 0110930901 | 2003-01-08 | 86.956 | +60.471 | 6.6                | 563                    | 6.6                | 565                    | $8.78^{+1.42}_{-1.29} \pm 0.71$  | 0.5675             | $1.90^{+0.82}_{-0.64} \pm 0.79$  | 5.41                                                | 2.07                                                    |
| 0042341301 | 2001-12-06 | 86.995 | -57.367 | 12.6               | 373                    | 12.8               | 444                    | $5.72^{+1.42}_{-1.10} \pm 0.42$  | 0.5775             | $2.11^{+0.40}_{-0.74} \pm 0.51$  | 2.50                                                | 2.63                                                    |
| 0550190501 | 2008-12-21 | 87.356 | -2.366  | 17.9               | 314                    | 18.2               | 399                    | $32.79^{+1.93}_{-1.94} \pm 4.58$ | 0.5725             | $36.24 \pm 1.56 \pm 10.13$       | 1.82                                                | 2.67                                                    |
| 0406421401 | 2006-09-17 | 87.472 | +34.704 | 7.0                | 412                    | 7.7                | 580                    | $5.54^{+1.41}_{-0.72} \pm 0.45$  | 0.5725             | $1.00^{+0.85}_{-0.88} \pm 0.67$  | 3.55                                                | 2.61                                                    |
| 0406420401 | 2006-09-01 | 87.477 | +34.706 | 6.5                | 419                    | 6.3                | 506                    | $17.14^{+1.69}_{-1.60} \pm 0.26$ | 0.5725             | $0.55^{+0.84}_{-0.55} \pm 1.60$  | 4.13                                                | 1.93                                                    |
| 0044350101 | 2002-05-29 | 87.586 | -83.083 | 13.5               | 500                    | 13.7               | 576                    | $6.58^{+1.06}_{-1.22} \pm 0.37$  | 0.5675             | $1.55^{+0.49}_{-0.59} \pm 0.97$  | 0.73                                                | 1.97                                                    |
| 0149240101 | 2003-12-16 | 87.623 | -48.341 | 38.0               | 380                    | 37.6               | 379                    | $4.67^{+0.88}_{-0.81} \pm 0.89$  | 0.5675             | $2.17^{+0.53}_{-0.37} \pm 0.20$  | 1.53                                                | 2.23                                                    |
| 0070340701 | 2002-06-08 | 87.761 | +72.961 | 31.9               | 474                    | 31.1               | 557                    | $12.18^{+0.77}_{-0.70} \pm 0.38$ | 0.5675             | $1.36^{+0.38}_{-0.36} \pm 1.04$  | 6.10                                                | 2.19                                                    |
| 0302820101 | 2005-11-28 | 88.144 | -51.963 | 18.9               | 429                    | 18.9               | 516                    | $3.65^{+1.04}_{-0.76} \pm 0.30$  | 0.5675             | $0.49^{+0.41}_{-0.42} \pm 0.11$  | 2.28                                                | 1.68                                                    |
| 0112522601 | 2002-12-08 | 88.190 | -55.573 | 15.0               | 576                    | 15.3               | 502                    | $5.55^{+1.00}_{-0.90} \pm 0.44$  | 0.5675             | $1.42^{+0.47}_{-0.51} \pm 0.70$  | 1.37                                                | 1.58                                                    |
| 0112521301 | 2002-06-07 | 88.253 | -55.561 | 12.9               | 496                    | 13.5               | 576                    | $7.60^{+1.30}_{-1.03} \pm 0.44$  | 0.5625             | $2.19^{+0.53}_{-0.56} \pm 0.55$  | 3.24                                                | 2.30                                                    |
| 0152860101 | 2002-12-28 | 88.473 | -60.823 | 25.1               | 431                    | 25.9               | 431                    | $5.25^{+0.72}_{-0.87} \pm 0.74$  | 0.5675             | $1.71^{+0.45}_{-0.46} \pm 0.49$  | 1.82                                                | 2.14                                                    |
| 0109463401 | 2002-11-02 | 89.806 | -0.067  | 6.2                | 558                    | 5.9                | 491                    | $10.17 \pm 1.54 \pm 5.01$        | 0.5775             | $6.79^{+1.22}_{-1.20} \pm 7.15$  | 3.27                                                | 2.51                                                    |
| 0111970901 | 2001-12-06 | 90.032 | -71.762 | 11.4               | 327                    | 11.5               | 471                    | $6.57^{+1.35}_{-1.29} \pm 0.30$  | 0.5675             | $1.92^{+0.75}_{-0.38} \pm 0.90$  | 2.88                                                | 1.78                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0551020901 | 2008-06-01 | 90.085  | -34.722 | 41.1               | 409                    | 42.8               | 573                    | $3.87^{+1.08}_{-1.14} \pm 1.42$  | 0.5625             | $1.92^{+0.51}_{-0.52} \pm 0.42$ | 1.28                                                | 2.46                                                    |
| 0556210201 | 2008-06-03 | 90.207  | -68.635 | 6.1                | 426                    | 5.6                | 590                    | $2.70^{+1.58}_{-1.60} \pm 1.16$  | 0.5475             | $0.77^{+0.83}_{-0.69} \pm 0.31$ | 1.32                                                | 1.55                                                    |
| 0400360301 | 2006-05-02 | 91.516  | +47.948 | 7.4                | 385                    | 7.6                | 395                    | $4.85^{+1.72}_{-1.60} \pm 0.59$  | 0.5625             | $0.69^{+0.96}_{-0.69} \pm 0.13$ | 3.10                                                | 1.83                                                    |
| 0400360601 | 2006-05-04 | 91.517  | +47.949 | 15.2               | 312                    | 15.3               | 394                    | $8.20^{+1.35}_{-1.19} \pm 0.21$  | 0.5675             | $0.79^{+0.65}_{-0.64} \pm 0.95$ | 6.75                                                | 1.38                                                    |
| 0400360801 | 2006-05-06 | 91.518  | +47.950 | 15.0               | 384                    | 15.8               | 395                    | $17.08^{+1.44}_{-1.36} \pm 0.49$ | 0.5675             | $0.86^{+0.69}_{-0.62} \pm 0.95$ | 10.21                                               | 1.99                                                    |
| 0147580401 | 2002-12-28 | 91.532  | -58.027 | 14.0               | 464                    | 14.2               | 539                    | $6.04 \pm 0.92 \pm 0.32$         | 0.5625             | $1.53 \pm 0.50 \pm 0.41$        | 1.51                                                | 2.14                                                    |
| 0502460101 | 2007-11-29 | 91.560  | -3.038  | 39.5               | 421                    | 39.2               | 581                    | $6.94^{+0.70}_{-0.72} \pm 0.98$  | 0.5625             | $6.76^{+0.43}_{-0.44} \pm 0.35$ | 1.32                                                | 1.86                                                    |
| 0502460201 | 2007-12-20 | 91.561  | -3.045  | 42.8               | 420                    | 43.1               | 509                    | $6.49^{+1.24}_{-0.77} \pm 0.61$  | 0.5675             | $5.95^{+0.78}_{-0.49} \pm 0.85$ | 1.56                                                | 2.27                                                    |
| 0502460301 | 2008-01-04 | 91.563  | -3.048  | 39.5               | 492                    | 39.6               | 583                    | $8.42^{+0.74}_{-0.71} \pm 0.88$  | 0.5625             | $6.05^{+0.44}_{-0.42} \pm 0.30$ | 4.14                                                | 1.90                                                    |
| 0502460401 | 2008-01-18 | 91.566  | -3.051  | 13.9               | 425                    | 15.7               | 512                    | $5.50^{+1.68}_{-1.18} \pm 0.63$  | 0.5675             | $5.93^{+0.85}_{-0.73} \pm 0.93$ | 1.46                                                | 2.64                                                    |
| 0307120201 | 2005-06-06 | 91.595  | -3.031  | 13.6               | 495                    | 14.3               | 585                    | $9.21^{+1.01}_{-1.16} \pm 0.97$  | 0.5675             | $7.29^{+0.67}_{-0.74} \pm 0.40$ | 1.99                                                | 2.30                                                    |
| 0560191901 | 2009-07-11 | 91.811  | +20.134 | 21.4               | 342                    | 21.9               | 579                    | $3.91^{+1.21}_{-1.18} \pm 0.49$  | 0.5625             | $1.50^{+0.54}_{-0.49} \pm 0.42$ | 1.14                                                | 2.03                                                    |
| 0203460101 | 2004-12-22 | 91.860  | -76.177 | 39.1               | 588                    | 38.8               | 514                    | $5.24^{+0.73}_{-0.61} \pm 1.14$  | 0.5475             | $0.10^{+0.34}_{-0.10} \pm 0.14$ | 2.36                                                | 2.18                                                    |
| 0202100101 | 2004-06-27 | 92.207  | +34.848 | 7.0                | 580                    | 7.5                | 586                    | $6.24^{+1.15}_{-1.16} \pm 0.26$  | 0.5675             | $1.11 \pm 0.64 \pm 0.52$        | ...                                                 | 1.82                                                    |
| 0502500101 | 2007-12-02 | 92.525  | -38.187 | 33.6               | 415                    | 35.0               | 504                    | $2.12^{+0.87}_{-0.75} \pm 0.49$  | 0.5625             | $1.32^{+0.45}_{-0.40} \pm 0.27$ | 2.21                                                | 1.30                                                    |
| 0501660301 | 2007-12-05 | 92.571  | -10.445 | 18.6               | 310                    | 18.5               | 397                    | $2.88^{+1.09}_{-0.90} \pm 0.21$  | 0.5725             | $2.79^{+0.65}_{-0.59} \pm 0.15$ | 2.08                                                | 1.45                                                    |
| 0501660401 | 2008-01-08 | 92.575  | -10.453 | 20.8               | 237                    | 21.0               | 398                    | $1.26^{+0.83}_{-0.81} \pm 0.11$  | 0.5925             | $0.95^{+0.65}_{-0.64} \pm 0.23$ | 0.73                                                | 1.90                                                    |
| 0504370401 | 2008-05-16 | 92.590  | -10.440 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0021140201 | 2001-12-07 | 93.270  | -20.986 | 37.9               | 368                    | 37.4               | 510                    | $9.16^{+0.74}_{-0.65} \pm 0.99$  | 0.5675             | $3.22^{+0.42}_{-0.38} \pm 0.94$ | 1.46                                                | 1.86                                                    |
| 0111260201 | 2002-05-11 | 93.281  | +51.334 | 9.4                | 550                    | 9.8                | 558                    | $11.28^{+1.49}_{-1.27} \pm 0.60$ | 0.5625             | $1.98^{+0.56}_{-0.63} \pm 0.86$ | 5.28                                                | 2.17                                                    |
| 0306700301 | 2005-04-19 | 93.286  | +6.721  | 11.6               | 376                    | 11.9               | 540                    | $14.57^{+1.61}_{-1.42} \pm 1.01$ | 0.5625             | $0.37^{+0.79}_{-0.37} \pm 1.61$ | 5.58                                                | 2.50                                                    |
| 0103863101 | 2002-12-08 | 93.712  | -20.727 | 8.0                | 554                    | 8.2                | 483                    | $8.26^{+2.27}_{-1.41} \pm 0.35$  | 0.5575             | $3.56^{+0.79}_{-0.76} \pm 0.89$ | 2.51                                                | 1.73                                                    |
| 0402840201 | 2006-07-22 | 93.769  | -4.622  | 29.7               | 498                    | 29.6               | 591                    | $1.02^{+0.78}_{-0.63} \pm 0.19$  | 0.5675             | $0.44^{+0.40}_{-0.37} \pm 0.18$ | 3.74                                                | 2.13                                                    |
| 0502430301 | 2007-12-01 | 94.916  | -43.439 | 84.5               | 469                    | 87.3               | 489                    | $2.88^{+0.56}_{-0.50} \pm 0.81$  | 0.5625             | $0.38^{+0.26}_{-0.25} \pm 0.19$ | 2.81                                                | 1.93                                                    |
| 0302582301 | 2006-06-02 | 94.955  | -43.442 | 24.3               | 424                    | 24.9               | 514                    | $3.58^{+0.82}_{-0.75} \pm 1.28$  | 0.5625             | $0.80^{+0.42}_{-0.41} \pm 0.40$ | 1.32                                                | 1.82                                                    |
| 0303110801 | 2006-06-20 | 95.469  | -60.152 | 9.2                | 497                    | 8.9                | 518                    | $4.53^{+1.03}_{-1.15} \pm 0.81$  | 0.5775             | $0.80^{+0.71}_{-0.80} \pm 1.47$ | 1.79                                                | 1.39                                                    |
| 0109080201 | 2002-06-10 | 95.599  | +80.740 | 25.1               | 375                    | 24.6               | 453                    | $10.28^{+0.81}_{-0.86} \pm 0.26$ | 0.5675             | $1.84 \pm 0.46 \pm 1.36$        | 2.51                                                | 1.70                                                    |
| 0500730201 | 2007-11-02 | 95.700  | +11.676 | 30.0               | 347                    | 29.4               | 513                    | $3.19^{+0.75}_{-0.74} \pm 0.34$  | 0.5725             | $1.79^{+0.40}_{-0.41} \pm 0.27$ | 1.82                                                | 1.71                                                    |
| 0500730101 | 2007-11-08 | 95.700  | +11.676 | 20.1               | 279                    | 22.4               | 439                    | $3.11^{+1.00}_{-0.99} \pm 0.64$  | 0.5675             | $1.88^{+0.53}_{-0.56} \pm 0.45$ | 3.72                                                | 1.71                                                    |
| 0202140301 | 2003-12-16 | 95.770  | -38.387 | 32.6               | 535                    | 33.0               | 536                    | $6.82^{+0.63}_{-0.58} \pm 0.29$  | 0.5675             | $2.15^{+0.37}_{-0.34} \pm 0.56$ | 1.45                                                | 1.75                                                    |
| 0202100301 | 2004-05-14 | 95.892  | +32.129 | 17.1               | 576                    | 17.7               | 585                    | $12.00^{+0.69}_{-0.87} \pm 1.15$ | 0.5625             | $0.97^{+0.41}_{-0.43} \pm 0.98$ | 4.14                                                | 1.91                                                    |
| 0127921101 | 2000-07-23 | 96.402  | +60.095 | 7.0                | 588                    | 7.2                | 517                    | $12.54^{+1.42}_{-1.43} \pm 0.39$ | 0.5625             | $3.82^{+0.80}_{-0.82} \pm 1.88$ | 4.58                                                | 2.27                                                    |
| 0127921201 | 2000-07-23 | 96.402  | +60.095 | 17.5               | 586                    | 17.5               | 517                    | $10.14^{+0.91}_{-0.83} \pm 0.33$ | 0.5675             | $1.32^{+0.43}_{-0.42} \pm 1.14$ | 1.15                                                | 2.01                                                    |
| 0202100201 | 2004-03-11 | 96.748  | +33.262 | 5.3                | 574                    | 5.4                | 501                    | $8.63^{+1.64}_{-1.63} \pm 0.36$  | 0.5775             | $2.63^{+1.10}_{-1.15} \pm 1.56$ | 1.76                                                | 2.25                                                    |
| 0304850901 | 2006-01-02 | 96.866  | -87.971 | 10.9               | 255                    | 11.1               | 395                    | $6.18^{+1.72}_{-0.70} \pm 0.57$  | 0.5775             | $2.30^{+1.03}_{-0.95} \pm 1.37$ | 0.56                                                | 1.95                                                    |
| 0304851001 | 2006-01-06 | 96.873  | -87.971 | 10.9               | 255                    | 10.9               | 396                    | $10.00^{+1.61}_{-1.89} \pm 0.21$ | 0.5725             | $1.03^{+0.92}_{-0.90} \pm 1.56$ | 2.17                                                | 1.46                                                    |
| 0404550101 | 2006-08-16 | 97.626  | +29.492 | 17.4               | 316                    | 17.3               | 401                    | $16.73^{+1.40}_{-1.72} \pm 1.02$ | 0.5675             | $0.82^{+0.63}_{-0.65} \pm 1.41$ | 3.60                                                | 1.93                                                    |
| 0094360501 | 2002-12-18 | 97.967  | +79.441 | 11.1               | 486                    | 11.3               | 486                    | $12.72^{+1.33}_{-1.75} \pm 0.48$ | 0.5675             | $2.49^{+0.69}_{-0.74} \pm 1.59$ | 5.15                                                | 1.54                                                    |
| 0552580201 | 2008-11-30 | 98.112  | -17.062 | 67.6               | 302                    | 67.9               | 539                    | $4.71^{+0.39}_{-0.87} \pm 0.94$  | 0.5625             | $3.05^{+0.31}_{-0.34} \pm 0.23$ | 1.39                                                | 1.85                                                    |
| 0203610401 | 2004-10-03 | 98.279  | +32.006 | 21.8               | 472                    | 22.4               | 403                    | $9.16^{+1.02}_{-1.03} \pm 1.49$  | 0.5675             | $0.59 \pm 0.54 \pm 1.22$        | 5.50                                                | 2.34                                                    |
| 0032140701 | 2001-07-05 | 98.449  | -39.414 | 8.1                | 588                    | 8.3                | 514                    | $6.99^{+1.22}_{-1.23} \pm 1.30$  | 0.5625             | $1.75 \pm 0.64 \pm 0.36$        | 3.54                                                | 2.17                                                    |
| 0147580301 | 2002-12-27 | 98.502  | -39.334 | 10.0               | 490                    | 10.0               | 563                    | $4.89^{+1.10}_{-1.15} \pm 1.26$  | 0.5625             | $1.30^{+0.57}_{-0.56} \pm 0.49$ | 1.55                                                | 2.13                                                    |
| 0149170101 | 2003-07-03 | 98.561  | -47.320 | 5.2                | 577                    | 5.2                | 582                    | $5.88^{+1.29}_{-1.33} \pm 0.42$  | 0.5675             | $1.70^{+0.75}_{-0.76} \pm 0.64$ | 2.84                                                | 1.67                                                    |
| 0206060101 | 2004-06-14 | 98.567  | -54.267 | 16.3               | 485                    | 17.1               | 487                    | $6.44^{+1.03}_{-0.89} \pm 0.51$  | 0.5625             | $2.27^{+0.46}_{-0.49} \pm 0.31$ | 2.98                                                | 2.33                                                    |
| 0503960101 | 2007-06-21 | 99.493  | +60.674 | 15.8               | 416                    | 16.1               | 586                    | $5.67^{+1.11}_{-0.96} \pm 0.34$  | 0.5625             | $0.92^{+0.50}_{-0.49} \pm 0.39$ | 3.16                                                | 1.68                                                    |
| 0201900101 | 2004-06-24 | 99.642  | -58.628 | 25.3               | 437                    | 25.4               | 441                    | $2.72^{+0.68}_{-0.69} \pm 2.29$  | 0.5925             | $1.18^{+0.53}_{-0.52} \pm 1.24$ | ...                                                 | 2.63                                                    |
| 0151530501 | 2006-07-27 | 100.301 | +40.987 | 23.5               | 306                    | 23.6               | 401                    | $11.71^{+1.14}_{-1.66} \pm 0.26$ | 0.5625             | $0.78^{+0.47}_{-0.53} \pm 0.72$ | 5.50                                                | 1.82                                                    |
| 0147131001 | 2005-07-25 | 100.301 | +40.987 | 12.3               | 306                    | 12.4               | 473                    | $13.56^{+1.34}_{-1.36} \pm 1.08$ | 0.5625             | $2.40 \pm 0.69 \pm 1.43$        | 3.25                                                | 1.68                                                    |
| 0147130101 | 2004-06-15 | 100.311 | +40.978 | 12.9               | 404                    | 13.0               | 513                    | $4.22^{+0.88}_{-1.02} \pm 0.40$  | 0.5775             | $0.57^{+0.55}_{-0.57} \pm 0.32$ | 3.79                                                | 2.01                                                    |
| 0147130901 | 2005-06-11 | 100.313 | +40.970 | 20.0               | 387                    | 19.9               | 511                    | $13.14^{+1.01}_{-1.13} \pm 0.35$ | 0.5625             | $1.86^{+0.51}_{-0.56} \pm 0.97$ | 2.48                                                | 1.95                                                    |
| 0200630201 | 2004-12-20 | 100.482 | -70.223 | 40.5               | 584                    | 40.6               | 509                    | $6.51^{+0.68}_{-0.61} \pm 1.07$  | 0.5675             | $0.59^{+0.31}_{-0.26} \pm 0.48$ | 4.90                                                | 1.84                                                    |
| 0205320101 | 2004-04-30 | 100.900 | +29.190 | 10.9               | 508                    | 11.1               | 585                    | $3.57^{+0.74}_{-0.73} \pm 0.22$  | 0.5775             | $0.67^{+0.49}_{-0.50} \pm 0.91$ | 3.70                                                | 1.24                                                    |
| 0553870101 | 2008-12-15 | 100.901 | -30.679 | 50.7               | 349                    | 54.6               | 511                    | $1.13 \pm 0.58 \pm 0.35$         | 0.5725             | $0.71 \pm 0.36 \pm 0.06$        | 3.42                                                | 2.35                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0205320201 | 2004-06-09 | 100.901 | +29.200 | 10.3               | 512                    | 10.8               | 511                    | $7.66^{+1.17}_{-1.06} \pm 0.37$  | 0.5675             | $0.26^{+0.60}_{-0.26} \pm 0.54$ | 2.98                                                | 1.70                                                    |
| 0555321001 | 2008-05-11 | 100.949 | +5.425  | 7.2                | 306                    | 7.3                | 471                    | $2.10^{+0.86}_{-1.25} \pm 0.24$  | 0.5825             | $0.00^{+1.07}_{-0.00} \pm 0.95$ | 3.92                                                | 1.84                                                    |
| 0110930501 | 2002-12-12 | 101.521 | +79.244 | 12.6               | 485                    | 12.8               | 412                    | $8.62^{+1.25}_{-1.14} \pm 0.30$  | 0.5625             | $0.86^{+0.62}_{-0.56} \pm 1.35$ | 1.92                                                | 1.36                                                    |
| 0403760301 | 2006-07-10 | 102.232 | -60.384 | 23.9               | 426                    | 23.7               | 513                    | $7.59^{+0.82}_{-0.44} \pm 0.29$  | 0.5725             | $2.58^{+0.52}_{-0.47} \pm 1.19$ | 2.13                                                | 2.46                                                    |
| 0055990501 | 2002-05-15 | 102.770 | +66.970 | 16.2               | 558                    | 15.7               | 559                    | $8.39 \pm 0.76 \pm 0.17$         | 0.5725             | $1.03 \pm 0.44 \pm 1.24$        | 1.59                                                | 1.74                                                    |
| 0143150101 | 2002-11-22 | 102.819 | +36.646 | 14.8               | 537                    | 14.7               | 544                    | $4.95^{+1.05}_{-0.96} \pm 0.54$  | 0.5675             | $0.49^{+0.53}_{-0.47} \pm 0.63$ | 1.86                                                | 1.85                                                    |
| 0404050301 | 2006-08-08 | 103.190 | +49.106 | 6.3                | 489                    | 6.4                | 582                    | $3.59^{+1.95}_{-1.41} \pm 0.65$  | 0.5525             | $0.00^{+0.54}_{-0.00} \pm 0.00$ | 1.47                                                | 2.18                                                    |
| 0093190301 | 2002-06-21 | 104.267 | -40.576 | 30.5               | 564                    | 30.2               | 564                    | $7.11^{+0.57}_{-0.56} \pm 0.98$  | 0.5675             | $1.32 \pm 0.32 \pm 1.22$        | 1.58                                                | 1.45                                                    |
| 0403760701 | 2007-07-14 | 104.272 | -62.562 | 27.8               | 370                    | 29.5               | 466                    | $5.06^{+1.10}_{-0.97} \pm 0.78$  | 0.5675             | $1.39^{+0.55}_{-0.40} \pm 0.19$ | 3.30                                                | 2.01                                                    |
| 0203390801 | 2004-06-15 | 104.483 | -40.115 | 13.6               | 586                    | 13.9               | 585                    | $6.10^{+0.92}_{-1.09} \pm 0.29$  | 0.5675             | $0.70 \pm 0.46 \pm 0.78$        | 4.10                                                | 1.58                                                    |
| 0301010101 | 2005-09-25 | 104.640 | +46.027 | 17.3               | 307                    | 17.9               | 399                    | $5.43^{+1.25}_{-1.15} \pm 0.25$  | 0.5575             | $0.38^{+0.59}_{-0.38} \pm 0.31$ | 4.94                                                | 2.18                                                    |
| 0112840201 | 2003-01-15 | 104.820 | +68.546 | 19.8               | 354                    | 19.7               | 354                    | $10.13^{+1.26}_{-1.34} \pm 0.57$ | 0.5625             | $1.70 \pm 0.61 \pm 0.25$        | 2.40                                                | 2.40                                                    |
| 0303420101 | 2006-05-20 | 104.889 | +68.578 | 31.9               | 231                    | 31.7               | 353                    | $6.70^{+1.44}_{-1.53} \pm 2.76$  | 0.5625             | $1.21^{+0.30}_{-0.72} \pm 1.15$ | 1.40                                                | 2.69                                                    |
| 0303420201 | 2006-05-24 | 104.889 | +68.579 | 22.0               | 181                    | 22.9               | 307                    | $6.52^{+1.50}_{-1.46} \pm 0.28$  | 0.5575             | $0.10^{+0.70}_{-0.10} \pm 0.10$ | 3.21                                                | 2.33                                                    |
| 0204400301 | 2004-02-02 | 104.904 | +49.952 | 14.0               | 507                    | 14.7               | 511                    | $5.02^{+1.05}_{-0.75} \pm 0.27$  | 0.5675             | $0.22^{+0.42}_{-0.22} \pm 0.29$ | 2.94                                                | 2.10                                                    |
| 0552410401 | 2008-06-05 | 105.212 | +0.535  | 23.9               | 502                    | 24.9               | 584                    | $0.56^{+0.96}_{-0.56} \pm 0.54$  | 0.5625             | $0.32^{+0.50}_{-0.32} \pm 0.24$ | 1.87                                                | 1.87                                                    |
| 0111530101 | 2000-12-30 | 105.515 | +49.038 | 49.5               | 455                    | 49.4               | 373                    | $5.66^{+0.80}_{-0.68} \pm 0.32$  | 0.5675             | $1.40 \pm 0.34 \pm 0.58$        | 1.31                                                | 1.47                                                    |
| 0202140201 | 2004-01-03 | 105.647 | -63.932 | 19.8               | 590                    | 19.9               | 516                    | $5.06^{+0.65}_{-0.83} \pm 0.21$  | 0.5675             | $1.38^{+0.38}_{-0.39} \pm 0.50$ | 2.49                                                | 1.64                                                    |
| 0603980101 | 2009-06-19 | 105.722 | -55.991 | 49.5               | 401                    | 52.3               | 489                    | $2.52^{+0.95}_{-0.56} \pm 1.16$  | 0.5675             | $0.88^{+0.56}_{-0.32} \pm 0.49$ | 2.03                                                | 2.70                                                    |
| 0405080501 | 2007-06-19 | 106.062 | +74.293 | 6.4                | 319                    | 6.7                | 475                    | $5.56^{+2.28}_{-1.85} \pm 0.54$  | 0.5575             | $0.48^{+1.31}_{-0.48} \pm 0.84$ | 1.16                                                | 1.74                                                    |
| 0111160101 | 2001-06-07 | 106.575 | +65.226 | 35.2               | 489                    | 36.4               | 432                    | $10.38^{+0.62}_{-1.12} \pm 2.13$ | 0.5675             | $0.76^{+0.56}_{-0.27} \pm 1.20$ | 3.68                                                | 2.34                                                    |
| 0042340201 | 2002-01-04 | 106.614 | -83.250 | 10.7               | 477                    | 10.7               | 403                    | $4.95^{+1.46}_{-1.04} \pm 0.43$  | 0.5775             | $2.21^{+0.83}_{-0.78} \pm 1.13$ | 1.69                                                | 2.67                                                    |
| 0125920201 | 2000-06-05 | 106.739 | -74.448 | 20.7               | 506                    | 8.6, 7.6           | 585, 586               | $11.39^{+0.85}_{-0.96} \pm 0.64$ | 0.5625             | $2.91^{+0.42}_{-0.46} \pm 1.65$ | 8.62                                                | 2.28                                                    |
| 0305570101 | 2006-01-02 | 106.976 | -21.114 | 29.6               | 401                    | 31.0               | 572                    | $4.74^{+0.89}_{-0.50} \pm 0.41$  | 0.5675             | $2.27^{+0.47}_{-0.34} \pm 0.39$ | 1.85                                                | 1.79                                                    |
| 0127110201 | 2000-07-04 | 107.006 | -50.617 | 7.2                | 373                    | 7.2                | 518                    | $5.16^{+1.61}_{-1.23} \pm 0.86$  | 0.5575             | $2.03^{+0.80}_{-0.71} \pm 0.36$ | 2.93                                                | 2.01                                                    |
| 0084190201 | 2002-06-12 | 107.072 | +63.799 | 37.1               | 490                    | 38.6               | 571                    | $9.15^{+0.64}_{-0.57} \pm 0.56$  | 0.5675             | $1.38^{+0.44}_{-0.24} \pm 0.87$ | 1.58                                                | 2.28                                                    |
| 0300490501 | 2005-08-06 | 107.538 | +14.028 | 33.2               | 307                    | 34.4               | 474                    | $4.92^{+0.99}_{-0.89} \pm 0.57$  | 0.5625             | $1.04^{+0.46}_{-0.42} \pm 0.21$ | 2.97                                                | 1.63                                                    |
| 0300490301 | 2005-07-29 | 107.538 | +14.027 | 37.8               | 313                    | 37.8               | 399                    | $3.64^{+0.84}_{-1.06} \pm 0.54$  | 0.5625             | $0.81^{+0.56}_{-0.61} \pm 0.16$ | 3.40                                                | 2.48                                                    |
| 0300490201 | 2005-07-27 | 107.539 | +14.028 | 36.9               | 238                    | 37.4               | 399                    | $8.46 \pm 0.91 \pm 0.32$         | 0.5675             | $0.66^{+0.54}_{-0.46} \pm 1.09$ | 3.56                                                | 1.77                                                    |
| 0553230201 | 2008-12-30 | 108.006 | -60.639 | 57.8               | 352                    | 57.1               | 440                    | $3.82^{+0.83}_{-0.69} \pm 1.76$  | 0.5475             | $1.14^{+0.39}_{-0.33} \pm 0.75$ | 6.88                                                | 2.28                                                    |
| 0101640401 | 2002-05-07 | 108.134 | +59.669 | 21.1               | 566                    | 21.1               | 572                    | $11.83^{+0.94}_{-1.01} \pm 0.29$ | 0.5675             | $0.86^{+0.48}_{-0.49} \pm 1.69$ | 3.68                                                | 1.52                                                    |
| 0600450101 | 2009-06-24 | 108.280 | +42.188 | 14.7               | 400                    | 15.8               | 490                    | $5.26^{+1.37}_{-1.13} \pm 0.44$  | 0.5625             | $0.68^{+0.68}_{-0.63} \pm 0.54$ | 7.69                                                | 2.39                                                    |
| 0411980501 | 2006-07-15 | 108.730 | +67.786 | 6.3                | 423                    | 6.3                | 518                    | $4.17^{+1.00}_{-1.85} \pm 1.17$  | 0.5725             | $1.31^{+0.99}_{-1.01} \pm 0.73$ | 0.91                                                | 1.28                                                    |
| 0600540601 | 2009-06-11 | 108.761 | -41.422 | 101.9              | 290                    | 103.7              | 370                    | $2.76^{+0.53}_{-0.65} \pm 1.14$  | 0.5675             | $0.97^{+0.37}_{-0.24} \pm 0.31$ | 1.90                                                | 2.26                                                    |
| 0600540501 | 2009-06-13 | 108.762 | -41.423 | 72.2               | 291                    | 74.4               | 370                    | $2.03^{+0.60}_{-0.50} \pm 0.42$  | 0.5625             | $1.00^{+0.33}_{-0.30} \pm 0.07$ | 2.24                                                | 2.02                                                    |
| 0510010701 | 2007-07-10 | 108.782 | -41.412 | 19.3               | 359                    | 19.4               | 370                    | $5.65^{+0.81}_{-0.91} \pm 0.47$  | 0.5775             | $0.88^{+0.50}_{-0.59} \pm 0.85$ | 6.59                                                | 1.24                                                    |
| 0307002401 | 2005-06-23 | 109.032 | +38.920 | 11.8               | 473                    | 12.7               | 497                    | $6.01^{+1.64}_{-1.07} \pm 0.30$  | 0.5675             | $1.71^{+0.60}_{-0.65} \pm 0.46$ | 6.08                                                | 1.83                                                    |
| 0201160501 | 2004-02-02 | 109.121 | +1.109  | 33.2               | 397                    | 34.1               | 406                    | $1.76^{+0.68}_{-0.59} \pm 0.11$  | 0.5675             | $0.00^{+0.28}_{-0.00} \pm 0.01$ | 2.70                                                | 2.21                                                    |
| 0112250201 | 2001-06-06 | 109.228 | +57.391 | 28.0               | 568                    | 28.1               | 502                    | $9.66^{+0.65}_{-0.60} \pm 0.21$  | 0.5675             | $0.67 \pm 0.31 \pm 0.99$        | 2.07                                                | 2.02                                                    |
| 0100240901 | 2001-01-10 | 109.284 | -24.806 | 5.9                | 429                    | 5.6                | 505                    | $7.05^{+2.69}_{-1.79} \pm 0.90$  | 0.5725             | $1.90^{+1.34}_{-1.06} \pm 0.79$ | 3.62                                                | 2.02                                                    |
| 0071340501 | 2001-12-24 | 110.247 | +55.489 | 16.1               | 486                    | 15.8               | 562                    | $10.09^{+0.92}_{-0.85} \pm 0.30$ | 0.5625             | $0.85^{+0.45}_{-0.40} \pm 0.96$ | 1.89                                                | 1.74                                                    |
| 0202190201 | 2003-12-17 | 110.810 | -44.708 | 21.0               | 508                    | 21.1               | 509                    | $4.09^{+0.92}_{-0.85} \pm 1.14$  | 0.5625             | $1.42 \pm 0.45 \pm 0.55$        | 1.33                                                | 1.92                                                    |
| 0203130201 | 2003-12-18 | 111.117 | +1.125  | 21.6               | 589                    | 21.7               | 591                    | $2.16^{+0.62}_{-0.60} \pm 0.57$  | 0.5575             | $1.03^{+0.32}_{-0.31} \pm 0.24$ | 1.28                                                | 1.84                                                    |
| 0303360401 | 2005-06-11 | 111.196 | +47.015 | 9.2                | 314                    | 9.0                | 473                    | $9.03^{+1.46}_{-1.88} \pm 1.30$  | 0.5775             | $0.58^{+0.90}_{-0.58} \pm 0.92$ | 2.99                                                | 1.67                                                    |
| 0112880601 | 2002-01-07 | 111.230 | -80.692 | 12.1               | 334                    | 11.8               | 338                    | $5.65^{+1.87}_{-1.83} \pm 1.57$  | 0.5575             | $1.52^{+1.00}_{-0.95} \pm 1.36$ | 2.09                                                | 1.86                                                    |
| 0400920201 | 2007-02-17 | 111.311 | +33.345 | 10.3               | 318                    | 10.3               | 481                    | $2.52^{+0.98}_{-0.96} \pm 0.36$  | 0.5775             | $0.97^{+0.65}_{-0.64} \pm 0.25$ | 1.34                                                | 2.02                                                    |
| 0400920101 | 2007-02-15 | 111.311 | +33.346 | 8.8                | 389                    | 9.2                | 479                    | $2.51^{+1.09}_{-1.10} \pm 0.29$  | 0.5775             | $1.05^{+0.71}_{-0.79} \pm 0.23$ | 1.47                                                | 2.35                                                    |
| 0502860101 | 2007-12-14 | 111.512 | -46.051 | 39.4               | 310                    | 40.8               | 462                    | $2.15^{+0.81}_{-0.58} \pm 0.28$  | 0.5675             | $0.90^{+0.44}_{-0.39} \pm 0.15$ | 1.30                                                | 1.76                                                    |
| 0111000101 | 2000-12-29 | 111.583 | -45.721 | 29.2               | 494                    | 28.7               | 420                    | $5.57^{+0.44}_{-0.66} \pm 1.45$  | 0.5675             | $1.68^{+0.41}_{-0.38} \pm 0.75$ | 1.96                                                | 1.86                                                    |
| 0111000201 | 2000-12-30 | 111.583 | -45.721 | 5.3                | 497                    | 5.4                | 422                    | $5.99^{+1.97}_{-0.80} \pm 0.40$  | 0.5725             | $2.38^{+1.04}_{-1.01} \pm 1.02$ | 1.71                                                | 1.57                                                    |
| 0205390301 | 2004-06-23 | 111.923 | +52.027 | 48.1               | 542                    | 48.4               | 543                    | $4.09^{+0.50}_{-0.48} \pm 0.45$  | 0.5675             | $0.44^{+0.28}_{-0.27} \pm 0.18$ | ...                                                 | 1.77                                                    |
| 0556230201 | 2008-06-10 | 111.924 | +52.023 | 15.9               | 394                    | 15.9               | 565                    | $2.01^{+0.77}_{-0.67} \pm 0.21$  | 0.5875             | $0.21^{+0.58}_{-0.21} \pm 0.04$ | 2.02                                                | 1.99                                                    |
| 0556230101 | 2008-06-08 | 111.925 | +52.021 | 10.6               | 328                    | 10.5               | 565                    | $1.97^{+1.19}_{-1.20} \pm 0.22$  | 0.5525             | $0.39^{+0.61}_{-0.39} \pm 0.09$ | 1.28                                                | 2.07                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0402530201 | 2006-06-04 | 111.986 | +12.883 | 82.6               | 416                    | 84.1               | 515                    | $3.18^{+0.53}_{-0.47} \pm 0.10$  | 0.5625             | $0.00^{+0.10}_{-0.00} \pm 0.00$ | 1.99                                                | 1.92                                                    |
| 0164571001 | 2005-07-13 | 112.152 | +18.830 | 12.4               | 344                    | 13.9               | 516                    | $3.06^{+0.88}_{-1.02} \pm 0.43$  | 0.5775             | $1.95^{+0.63}_{-0.73} \pm 0.55$ | 2.77                                                | 2.43                                                    |
| 0305920301 | 2005-04-04 | 112.288 | +50.307 | 15.6               | 392                    | 15.6               | 561                    | $5.80^{+1.00}_{-0.99} \pm 1.01$  | 0.5625             | $0.40^{+0.48}_{-0.40} \pm 0.60$ | 3.34                                                | 2.04                                                    |
| 0305920601 | 2005-06-23 | 112.300 | +50.328 | 14.3               | 464                    | 14.2               | 490                    | $16.83^{+1.17}_{-1.21} \pm 1.23$ | 0.5675             | $2.17 \pm 0.59 \pm 1.81$        | 19.70                                               | 1.62                                                    |
| 0202500201 | 2004-06-25 | 112.601 | +1.270  | 11.7               | 396                    | 11.6               | 591                    | $2.19^{+1.04}_{-0.92} \pm 0.35$  | 0.5625             | $0.71 \pm 0.49 \pm 0.13$        | ...                                                 | 1.99                                                    |
| 0147540101 | 2002-10-29 | 112.732 | +51.459 | 20.0               | 554                    | 19.9               | 486                    | $12.19^{+1.04}_{-0.88} \pm 0.56$ | 0.5675             | $2.63^{+0.56}_{-0.47} \pm 1.64$ | 3.85                                                | 1.64                                                    |
| 0008220201 | 2001-01-09 | 112.738 | +89.579 | 38.3               | 395                    | 38.3               | 474                    | $7.50^{+0.81}_{-0.82} \pm 1.23$  | 0.5675             | $1.59^{+0.43}_{-0.44} \pm 0.63$ | 1.80                                                | 2.04                                                    |
| 0001930101 | 2001-01-10 | 112.844 | -51.699 | 14.4               | 580                    | 14.7               | 587                    | $4.78^{+0.74}_{-0.98} \pm 1.06$  | 0.5725             | $1.56^{+0.46}_{-0.45} \pm 0.51$ | 2.64                                                | 1.72                                                    |
| 0311791601 | 2006-05-10 | 112.906 | +34.673 | 20.3               | 419                    | 19.7               | 510                    | $6.16^{+1.03}_{-0.91} \pm 0.41$  | 0.5675             | $1.13^{+0.50}_{-0.52} \pm 0.97$ | 3.86                                                | 1.41                                                    |
| 0502290101 | 2007-12-12 | 113.116 | -57.622 | 86.6               | 406                    | 85.7               | 498                    | $3.87^{+0.55}_{-0.47} \pm 0.36$  | 0.5675             | $0.42^{+0.16}_{-0.27} \pm 0.51$ | 0.96                                                | 1.65                                                    |
| 0112320101 | 2001-06-19 | 113.167 | -57.599 | 15.9               | 566                    | 15.5               | 575                    | $7.40^{+0.76}_{-0.81} \pm 1.28$  | 0.5725             | $2.36^{+0.47}_{-0.48} \pm 0.64$ | 0.81                                                | 2.44                                                    |
| 0094740101 | 2001-12-08 | 113.393 | +61.622 | 16.4               | 329                    | 16.7               | 475                    | $8.60^{+1.22}_{-1.25} \pm 0.37$  | 0.5575             | $0.93^{+0.60}_{-0.59} \pm 0.84$ | 1.28                                                | 2.05                                                    |
| 0405690501 | 2006-11-25 | 113.457 | +58.007 | 23.3               | 426                    | 23.5               | 441                    | $3.35^{+0.91}_{-0.85} \pm 0.18$  | 0.5625             | $0.20^{+0.45}_{-0.20} \pm 0.12$ | 1.82                                                | 1.99                                                    |
| 0405690101 | 2006-11-16 | 113.459 | +58.010 | 8.3                | 354                    | 8.2                | 441                    | $6.29 \pm 1.65 \pm 0.69$         | 0.5625             | $0.00^{+0.81}_{-0.00} \pm 0.37$ | 2.39                                                | 2.04                                                    |
| 0405690201 | 2006-11-19 | 113.460 | +58.010 | 29.3               | 417                    | 33.5               | 440                    | $4.33^{+1.02}_{-0.82} \pm 1.04$  | 0.5475             | $0.26^{+0.44}_{-0.26} \pm 0.32$ | 0.72                                                | 2.43                                                    |
| 0142770101 | 2003-01-06 | 113.461 | +57.995 | 17.4               | 515                    | 17.2               | 515                    | $7.60^{+1.16}_{-1.29} \pm 0.35$  | 0.5625             | $1.08^{+0.54}_{-0.59} \pm 0.30$ | 1.86                                                | 2.48                                                    |
| 0050140201 | 2001-01-06 | 114.464 | -45.314 | 45.4               | 495                    | 45.1               | 422                    | $4.98^{+0.51}_{-0.48} \pm 0.40$  | 0.5675             | $1.20^{+0.31}_{-0.28} \pm 0.56$ | 1.92                                                | 1.75                                                    |
| 0201540101 | 2003-12-29 | 114.578 | +14.551 | 19.1               | 487                    | 19.1               | 561                    | $0.75^{+0.73}_{-0.70} \pm 0.15$  | 0.5625             | $0.04^{+0.37}_{-0.04} \pm 0.05$ | 0.76                                                | 1.87                                                    |
| 0145240101 | 2003-08-18 | 115.291 | +38.313 | 25.7               | 592                    | 27.3               | 517                    | $6.27^{+0.90}_{-0.69} \pm 0.60$  | 0.5725             | $4.29^{+0.44}_{-0.46} \pm 0.64$ | 2.33                                                | 2.20                                                    |
| 0553510301 | 2008-06-21 | 115.549 | -5.376  | 9.1                | 425                    | 8.8                | 512                    | $4.08^{+1.45}_{-1.17} \pm 0.66$  | 0.5675             | $2.25^{+0.74}_{-0.70} \pm 0.27$ | 0.71                                                | 1.91                                                    |
| 0556212201 | 2008-06-29 | 115.680 | -48.807 | 8.0                | 493                    | 8.0                | 511                    | $2.31^{+1.07}_{-1.17} \pm 0.41$  | 0.5675             | $1.04^{+0.67}_{-0.72} \pm 0.48$ | 2.24                                                | 1.44                                                    |
| 0403000101 | 2006-07-31 | 116.654 | +21.440 | 8.8                | 419                    | 8.5                | 515                    | $6.43^{+1.37}_{-1.55} \pm 0.21$  | 0.5675             | $1.29^{+0.72}_{-0.76} \pm 0.11$ | 4.25                                                | 2.37                                                    |
| 0305360501 | 2005-12-11 | 116.949 | +86.010 | 13.5               | 490                    | 13.3               | 580                    | $5.35^{+1.07}_{-0.88} \pm 0.40$  | 0.5725             | $0.71^{+0.50}_{-0.48} \pm 0.82$ | 1.37                                                | 1.21                                                    |
| 0305361501 | 2006-01-10 | 116.966 | +86.004 | 17.8               | 413                    | 17.9               | 509                    | $5.23^{+0.84}_{-0.87} \pm 0.36$  | 0.5675             | $0.28^{+0.44}_{-0.28} \pm 0.82$ | 2.38                                                | 1.39                                                    |
| 0402750601 | 2006-12-19 | 117.095 | -36.327 | 27.1               | 324                    | 27.8               | 484                    | $2.94^{+0.83}_{-0.36} \pm 0.31$  | 0.5675             | $0.63^{+0.50}_{-0.48} \pm 0.26$ | 2.36                                                | 2.06                                                    |
| 0402750201 | 2006-07-27 | 117.135 | -36.316 | 26.7               | 389                    | 26.7               | 489                    | $5.28^{+1.05}_{-0.93} \pm 0.68$  | 0.5625             | $0.67^{+0.47}_{-0.37} \pm 0.76$ | 2.66                                                | 1.89                                                    |
| 0056021001 | 2002-12-18 | 117.267 | +63.235 | 26.1               | 490                    | 26.8               | 495                    | $9.79^{+0.56}_{-0.95} \pm 0.82$  | 0.5675             | $3.29^{+0.48}_{-0.38} \pm 1.32$ | 5.47                                                | 1.85                                                    |
| 0016140101 | 2001-08-22 | 117.420 | +0.439  | 10.0               | 510                    | 10.3               | 586                    | $8.45^{+1.35}_{-0.77} \pm 0.86$  | 0.5725             | $6.72^{+0.89}_{-0.67} \pm 2.53$ | 1.49                                                | 2.66                                                    |
| 0206180201 | 2004-04-30 | 117.472 | +50.913 | 27.7               | 501                    | 28.2               | 503                    | $4.37^{+0.56}_{-0.59} \pm 0.39$  | 0.5725             | $0.42^{+0.34}_{-0.35} \pm 0.61$ | 1.28                                                | 1.70                                                    |
| 0109462201 | 2001-12-08 | 117.522 | +63.099 | 7.3                | 396                    | 7.1                | 471                    | $8.75^{+1.65}_{-1.47} \pm 0.29$  | 0.5625             | $0.81^{+0.73}_{-0.79} \pm 1.16$ | 1.76                                                | 1.32                                                    |
| 0205180101 | 2004-01-08 | 117.780 | -27.721 | 10.5               | 510                    | 11.0               | 516                    | $9.10^{+1.18}_{-1.29} \pm 0.42$  | 0.5625             | $4.49^{+0.70}_{-0.64} \pm 0.61$ | 1.48                                                | 2.33                                                    |
| 0301340501 | 2006-04-22 | 118.151 | +59.393 | 23.3               | 503                    | 24.1               | 517                    | $3.34^{+0.93}_{-0.80} \pm 0.79$  | 0.5625             | $0.44^{+0.44}_{-0.40} \pm 0.29$ | 3.02                                                | 2.19                                                    |
| 0602830501 | 2009-07-11 | 118.410 | -14.579 | 6.2                | 424                    | 6.2                | 593                    | $5.04^{+2.32}_{-1.28} \pm 1.61$  | 0.5625             | $1.80^{+1.03}_{-0.93} \pm 1.06$ | 1.02                                                | 2.08                                                    |
| 0203060101 | 2003-12-27 | 118.463 | +16.938 | 23.4               | 389                    | 23.9               | 444                    | $2.84^{+1.79}_{-0.81} \pm 0.39$  | 0.5675             | $1.87^{+0.86}_{-0.49} \pm 0.10$ | 1.60                                                | 2.43                                                    |
| 0303562201 | 2005-12-15 | 118.511 | -62.800 | 6.4                | 495                    | 6.2                | 584                    | $5.92^{+1.78}_{-1.40} \pm 0.81$  | 0.5725             | $0.00^{+0.36}_{-0.00} \pm 0.22$ | 1.66                                                | 1.48                                                    |
| 0090070201 | 2002-01-04 | 118.588 | -61.962 | 19.4               | 461                    | 19.7               | 391                    | $6.99^{+0.81}_{-1.07} \pm 0.55$  | 0.5675             | $2.38^{+0.49}_{-0.59} \pm 0.37$ | 1.46                                                | 2.25                                                    |
| 0312192001 | 2006-06-23 | 118.853 | +63.239 | 9.8                | 291                    | 10.7               | 378                    | $6.41^{+2.13}_{-1.78} \pm 0.51$  | 0.5525             | $1.25^{+1.03}_{-0.91} \pm 0.45$ | 2.27                                                | 2.02                                                    |
| 0550450101 | 2008-12-29 | 118.913 | +7.809  | 16.6               | 401                    | 15.9               | 490                    | $0.00^{+0.48}_{-0.00} \pm 0.00$  | 0.5425             | $0.54^{+0.49}_{-0.45} \pm 0.12$ | 1.64                                                | 2.53                                                    |
| 0148500501 | 2003-02-06 | 118.939 | -6.878  | 5.5                | 588                    | 5.3                | 516                    | $1.76^{+1.33}_{-1.34} \pm 0.35$  | 0.5925             | $1.21^{+1.03}_{-0.95} \pm 0.25$ | 2.15                                                | 1.90                                                    |
| 0152260101 | 2003-07-03 | 118.996 | -3.342  | 31.7               | 460                    | 32.6               | 537                    | $3.29^{+0.57}_{-0.52} \pm 1.99$  | 0.5625             | $0.70^{+0.29}_{-0.28} \pm 0.97$ | 3.17                                                | 1.97                                                    |
| 0065770101 | 2001-01-11 | 119.010 | -23.166 | 6.9                | 512                    | 6.9                | 589                    | $8.24 \pm 1.25 \pm 0.40$         | 0.5625             | $1.68 \pm 0.65 \pm 1.21$        | 1.48                                                | 1.42                                                    |
| 0151581101 | 2003-02-06 | 119.180 | -23.239 | 9.1                | 510                    | 9.3                | 516                    | $8.05^{+1.35}_{-0.67} \pm 0.39$  | 0.5675             | $1.34^{+0.69}_{-0.67} \pm 0.76$ | 2.46                                                | 1.80                                                    |
| 0501230201 | 2007-07-10 | 119.575 | -0.987  | 23.7               | 376                    | 24.2               | 466                    | $0.86^{+0.56}_{-0.59} \pm 0.10$  | 0.5925             | $0.76 \pm 0.43 \pm 0.17$        | 2.41                                                | 2.31                                                    |
| 0204790201 | 2003-12-31 | 119.801 | -14.266 | 11.1               | 590                    | 11.2               | 513                    | $7.01^{+1.09}_{-1.34} \pm 0.43$  | 0.5675             | $0.87^{+0.57}_{-0.66} \pm 0.52$ | 3.64                                                | 1.94                                                    |
| 0153030101 | 2003-07-04 | 120.057 | -37.320 | 5.8                | 471                    | 6.6                | 476                    | $8.92^{+0.94}_{-1.84} \pm 0.73$  | 0.5525             | $2.80^{+1.00}_{-0.84} \pm 0.61$ | 1.55                                                | 2.66                                                    |
| 0551090101 | 2008-12-18 | 120.126 | +69.460 | 17.5               | 428                    | 17.6               | 513                    | $3.08^{+0.88}_{-1.03} \pm 0.09$  | 0.5675             | $0.00^{+0.32}_{-0.00} \pm 0.09$ | 1.86                                                | 1.62                                                    |
| 0413380601 | 2007-05-26 | 120.207 | +69.447 | 8.2                | 489                    | 8.4                | 514                    | $4.81 \pm 1.28 \pm 0.18$         | 0.5725             | $0.83^{+0.69}_{-0.70} \pm 0.05$ | 1.93                                                | 2.07                                                    |
| 0300890101 | 2005-06-15 | 120.246 | -58.654 | 28.2               | 420                    | 30.0               | 591                    | $6.33^{+1.32}_{-0.72} \pm 0.56$  | 0.5725             | $1.46 \pm 0.42 \pm 0.64$        | 1.71                                                | 2.54                                                    |
| 0511380101 | 2008-01-02 | 120.324 | -22.572 | 43.8               | 476                    | 43.9               | 570                    | $4.46^{+0.73}_{-0.77} \pm 0.49$  | 0.5675             | $1.38 \pm 0.39 \pm 0.49$        | 4.07                                                | 1.54                                                    |
| 0505760101 | 2007-07-24 | 120.349 | -22.543 | 24.9               | 353                    | 29.9               | 586                    | $6.13^{+0.79}_{-0.96} \pm 0.88$  | 0.5625             | $1.92^{+0.46}_{-0.43} \pm 0.20$ | 2.24                                                | 2.14                                                    |
| 0505760501 | 2007-12-31 | 120.377 | -22.193 | 32.6               | 497                    | 33.3               | 588                    | $3.77^{+1.03}_{-0.54} \pm 0.56$  | 0.5675             | $0.93^{+0.51}_{-0.37} \pm 0.38$ | 4.30                                                | 1.97                                                    |
| 0556180101 | 2008-09-29 | 120.381 | +17.345 | 20.7               | 410                    | 20.5               | 506                    | $1.92^{+0.98}_{-0.68} \pm 0.36$  | 0.5775             | $0.88^{+0.57}_{-0.48} \pm 0.16$ | 0.57                                                | 1.93                                                    |
| 0402560701 | 2006-07-23 | 120.404 | -22.166 | 26.0               | 500                    | 27.9               | 588                    | $5.12^{+1.18}_{-0.59} \pm 0.56$  | 0.5675             | $1.58^{+0.52}_{-0.33} \pm 0.21$ | 3.33                                                | 2.26                                                    |



Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0511380301 | 2008-01-06 | 120.528 | -21.851 | 31.0               | 493                    | 31.1               | 567                    | $4.63^{+0.74}_{-0.84} \pm 0.22$  | 0.5675             | $1.44^{+0.42}_{-0.41} \pm 0.26$ | 1.75                                                | 2.17                                              |
| 0402560501 | 2006-07-20 | 120.554 | -21.822 | 50.5               | 379                    | 53.6               | 500                    | $5.32^{+0.66}_{-0.73} \pm 0.26$  | 0.5625             | $1.47 \pm 0.36 \pm 0.19$        | 3.12                                                | 2.56                                              |
| 0304570101 | 2006-04-20 | 120.580 | +58.034 | 10.7               | 473                    | 10.1               | 488                    | $5.76^{+1.30}_{-1.39} \pm 0.27$  | 0.5625             | $0.24^{+0.58}_{-0.24} \pm 0.60$ | 2.95                                                | 1.57                                              |
| 0402560801 | 2006-12-25 | 120.591 | -22.242 | 46.8               | 406                    | 46.9               | 580                    | $5.89^{+0.73}_{-0.80} \pm 1.24$  | 0.5575             | $1.75^{+0.36}_{-0.40} \pm 0.41$ | 0.95                                                | 2.10                                              |
| 0112570301 | 2002-01-24 | 120.595 | -22.245 | 25.4               | 495                    | 25.9               | 580                    | $7.45^{+0.71}_{-0.56} \pm 1.16$  | 0.5725             | $2.15^{+0.37}_{-0.39} \pm 0.60$ | 2.58                                                | 2.54                                              |
| 0505760401 | 2007-12-25 | 120.715 | -22.488 | 27.0               | 342                    | 26.7               | 509                    | $5.75^{+0.75}_{-0.87} \pm 1.13$  | 0.5675             | $1.40^{+0.47}_{-0.53} \pm 0.98$ | 1.46                                                | 1.58                                              |
| 0402560601 | 2006-07-28 | 120.742 | -22.461 | 29.4               | 356                    | 30.3               | 505                    | $4.99^{+1.10}_{-0.86} \pm 2.02$  | 0.5625             | $1.22^{+0.42}_{-0.45} \pm 1.27$ | 0.84                                                | 1.90                                              |
| 0402560301 | 2006-07-01 | 120.784 | -21.514 | 45.4               | 412                    | 47.4               | 513                    | $4.99^{+0.90}_{-0.73} \pm 0.25$  | 0.5625             | $1.91^{+0.41}_{-0.37} \pm 0.10$ | 1.52                                                | 2.44                                              |
| 0410582001 | 2007-07-25 | 120.820 | -21.564 | 13.7               | 339                    | 14.5               | 568                    | $4.31^{+1.19}_{-1.18} \pm 1.61$  | 0.5625             | $1.40^{+0.62}_{-0.32} \pm 0.83$ | 2.86                                                | 2.60                                              |
| 0402560901 | 2006-12-26 | 121.001 | -21.239 | 43.5               | 352                    | 44.5               | 518                    | $4.62^{+0.96}_{-0.72} \pm 0.32$  | 0.5675             | $2.02^{+0.43}_{-0.38} \pm 0.06$ | 1.03                                                | 2.38                                              |
| 0505760301 | 2007-12-28 | 121.039 | -22.231 | 40.6               | 490                    | 42.1               | 581                    | $5.92^{+0.64}_{-0.67} \pm 0.29$  | 0.5675             | $1.61^{+0.38}_{-0.39} \pm 0.47$ | 1.08                                                | 1.81                                              |
| 0402561101 | 2007-01-01 | 121.270 | -20.939 | 44.8               | 425                    | 45.2               | 589                    | $5.20^{+0.65}_{-0.98} \pm 0.23$  | 0.5625             | $1.70^{+0.33}_{-0.44} \pm 0.11$ | 4.53                                                | 2.43                                              |
| 0511380601 | 2008-02-09 | 121.303 | -21.944 | 15.7               | 484                    | 17.3               | 570                    | $8.73^{+1.15}_{-1.53} \pm 0.79$  | 0.5675             | $1.60^{+0.64}_{-0.59} \pm 1.16$ | 2.16                                                | 2.41                                              |
| 0402561001 | 2006-12-30 | 121.542 | -21.667 | 49.2               | 417                    | 50.3               | 579                    | $6.18^{+0.69}_{-0.68} \pm 1.62$  | 0.5625             | $2.21 \pm 0.37 \pm 0.89$        | 2.37                                                | 2.25                                              |
| 0402561301 | 2007-01-03 | 121.597 | -20.708 | 33.4               | 489                    | 33.9               | 587                    | $5.02^{+0.63}_{-0.70} \pm 0.31$  | 0.5675             | $0.95^{+0.35}_{-0.42} \pm 0.60$ | 1.93                                                | 2.06                                              |
| 0112620201 | 2001-08-23 | 121.616 | +18.819 | 15.8               | 484                    | 15.9               | 556                    | $5.23^{+0.87}_{-1.02} \pm 0.52$  | 0.5575             | $1.30^{+0.45}_{-0.58} \pm 0.39$ | 1.52                                                | 2.20                                              |
| 0081340201 | 2001-06-07 | 121.647 | +60.240 | 20.5               | 576                    | 20.1               | 501                    | $6.94^{+1.13}_{-0.77} \pm 0.59$  | 0.5675             | $0.31^{+0.38}_{-0.31} \pm 0.80$ | 2.84                                                | 2.08                                              |
| 0402561501 | 2007-01-05 | 121.703 | -20.934 | 41.1               | 409                    | 40.8               | 498                    | $4.45^{+0.67}_{-0.66} \pm 0.34$  | 0.5675             | $2.07^{+0.38}_{-0.36} \pm 0.34$ | 1.00                                                | 2.13                                              |
| 0404060201 | 2006-07-03 | 121.704 | -21.881 | 20.4               | 420                    | 21.3               | 518                    | $7.66^{+0.86}_{-0.85} \pm 0.49$  | 0.5675             | $1.42^{+0.48}_{-0.47} \pm 0.66$ | 2.46                                                | 2.12                                              |
| 0109270301 | 2002-01-26 | 121.707 | -20.938 | 25.4               | 500                    | 25.2               | 582                    | $8.29^{+0.63}_{-0.77} \pm 1.35$  | 0.5625             | $2.67^{+0.36}_{-0.39} \pm 0.41$ | 1.42                                                | 1.98                                              |
| 0402561201 | 2007-01-02 | 121.769 | -21.342 | 39.2               | 462                    | 38.6               | 561                    | $4.73^{+0.96}_{-0.78} \pm 0.91$  | 0.5675             | $1.45^{+0.39}_{-0.41} \pm 0.49$ | 2.85                                                | 2.29                                              |
| 0403530501 | 2006-07-14 | 121.807 | -21.183 | 7.5                | 379                    | 8.4                | 398                    | $6.47^{+2.15}_{-1.68} \pm 1.07$  | 0.5625             | $0.33^{+0.85}_{-0.33} \pm 1.08$ | 1.53                                                | 2.51                                              |
| 0403530401 | 2006-07-12 | 121.808 | -21.183 | 6.4                | 307                    | 6.4                | 398                    | $7.54^{+2.48}_{-1.68} \pm 1.80$  | 0.5625             | $3.80^{+1.30}_{-1.00} \pm 0.69$ | 1.17                                                | 2.28                                              |
| 0151580401 | 2003-02-06 | 121.850 | -21.528 | 12.5               | 510                    | 12.2               | 517                    | $7.41^{+1.10}_{-0.86} \pm 0.42$  | 0.5725             | $0.77^{+0.53}_{-0.51} \pm 1.43$ | 2.46                                                | 1.59                                              |
| 0402561401 | 2007-01-04 | 121.962 | -20.976 | 44.2               | 474                    | 43.6               | 574                    | $4.59^{+0.91}_{-0.60} \pm 0.28$  | 0.5675             | $1.94^{+0.35}_{-0.34} \pm 0.14$ | 1.33                                                | 1.92                                              |
| 0109270401 | 2002-06-29 | 121.998 | -20.577 | 46.6               | 473                    | 46.3               | 476                    | $7.20^{+0.58}_{-0.56} \pm 1.31$  | 0.5625             | $2.09^{+0.31}_{-0.30} \pm 0.23$ | 1.75                                                | 2.26                                              |
| 0100640201 | 2000-10-29 | 122.774 | +22.471 | 54.5               | 564                    | 54.0               | 570                    | $9.66^{+0.52}_{-0.49} \pm 1.12$  | 0.5675             | $3.31^{+0.29}_{-0.28} \pm 0.86$ | 1.81                                                | 2.63                                              |
| 0100640101 | 2000-10-29 | 122.774 | +22.470 | 28.6               | 565                    | 29.7               | 571                    | $8.15^{+0.62}_{-0.64} \pm 0.60$  | 0.5675             | $2.12^{+0.34}_{-0.35} \pm 0.42$ | 1.25                                                | 2.40                                              |
| 0404980101 | 2006-11-27 | 123.290 | +76.012 | 37.1               | 395                    | 37.8               | 411                    | $4.62^{+0.79}_{-0.96} \pm 1.54$  | 0.5675             | $1.24^{+0.38}_{-0.32} \pm 0.47$ | 1.01                                                | 1.74                                              |
| 0503140401 | 2008-04-29 | 123.297 | +26.449 | 16.5               | 502                    | 16.5               | 516                    | $1.48^{+1.18}_{-1.05} \pm 0.24$  | 0.5525             | $1.03^{+0.56}_{-0.55} \pm 0.06$ | 0.99                                                | 1.54                                              |
| 0094360601 | 2002-05-23 | 123.442 | +76.002 | 7.5                | 541                    | 7.8                | 542                    | $11.06^{+1.38}_{-1.53} \pm 0.21$ | 0.5675             | $1.66^{+0.72}_{-0.77} \pm 1.12$ | 3.46                                                | 2.45                                              |
| 0306680201 | 2005-11-29 | 123.482 | +49.740 | 45.6               | 408                    | 46.1               | 491                    | $2.39^{+0.70}_{-0.55} \pm 0.37$  | 0.5725             | $0.00^{+0.33}_{-0.00} \pm 0.06$ | 4.68                                                | 1.93                                              |
| 0300470101 | 2005-07-18 | 123.767 | -50.161 | 67.0               | 377                    | 68.2               | 471                    | $6.22^{+0.66}_{-0.73} \pm 0.38$  | 0.5675             | $3.76^{+0.40}_{-0.38} \pm 0.56$ | 3.27                                                | 2.59                                              |
| 0110890301 | 2002-06-22 | 123.770 | -50.163 | 19.6               | 400                    | 20.1               | 396                    | $6.61^{+1.26}_{-0.91} \pm 0.54$  | 0.5675             | $1.50^{+0.30}_{-0.50} \pm 0.53$ | 1.74                                                | 1.95                                              |
| 0304070501 | 2005-11-08 | 124.223 | +60.304 | 11.8               | 419                    | 11.9               | 515                    | $3.16^{+0.83}_{-0.80} \pm 0.33$  | 0.5725             | $0.63^{+0.52}_{-0.50} \pm 0.57$ | 1.25                                                | 1.45                                              |
| 0505900401 | 2007-08-12 | 124.420 | -24.785 | 11.1               | 424                    | 11.5               | 513                    | $7.07^{+0.67}_{-0.96} \pm 0.32$  | 0.5675             | $1.31^{+0.51}_{-0.62} \pm 0.77$ | 2.01                                                | 1.24                                              |
| 0554500101 | 2008-06-28 | 124.481 | +62.583 | 16.2               | 492                    | 16.4               | 515                    | $3.08^{+1.39}_{-0.77} \pm 0.88$  | 0.5625             | $0.29^{+0.68}_{-0.29} \pm 0.41$ | 0.94                                                | 2.33                                              |
| 0500910101 | 2007-09-01 | 124.491 | +23.745 | 16.9               | 322                    | 18.2               | 483                    | $6.98^{+1.37}_{-1.29} \pm 0.21$  | 0.5625             | $0.65^{+0.62}_{-0.54} \pm 0.39$ | 3.58                                                | 2.04                                              |
| 0555020101 | 2008-05-15 | 125.320 | +46.291 | 14.4               | 307                    | 14.8               | 471                    | $3.71^{+1.28}_{-1.29} \pm 1.18$  | 0.5575             | $0.56^{+0.66}_{-0.56} \pm 0.46$ | 3.33                                                | 2.64                                              |
| 0124110101 | 2000-05-07 | 125.467 | +41.661 | 16.2               | 441                    | 16.0               | 444                    | $12.94^{+1.17}_{-1.35} \pm 0.77$ | 0.5625             | $2.43^{+0.59}_{-0.63} \pm 0.91$ | 2.37                                                | 2.03                                              |
| 0162160601 | 2003-12-14 | 125.846 | +54.826 | 10.1               | 577                    | 9.8                | 577                    | $4.58^{+0.81}_{-0.78} \pm 0.56$  | 0.5725             | $0.00^{+0.39}_{-0.00} \pm 0.69$ | 1.52                                                | 1.40                                              |
| 0162160401 | 2003-12-06 | 125.848 | +54.828 | 9.6                | 576                    | 10.3               | 577                    | $7.08^{+1.06}_{-0.92} \pm 0.42$  | 0.5725             | $0.65^{+0.47}_{-0.51} \pm 1.05$ | 1.99                                                | 1.29                                              |
| 0162160201 | 2003-11-24 | 125.849 | +54.831 | 13.0               | 508                    | 12.4               | 577                    | $8.67^{+1.18}_{-1.27} \pm 0.80$  | 0.5625             | $2.41^{+0.59}_{-0.89} \pm 0.62$ | 2.16                                                | 1.95                                              |
| 0111550401 | 2001-06-01 | 125.892 | +54.815 | 79.5               | 575                    | 80.7               | 500                    | $9.93^{+0.46}_{-0.42} \pm 0.47$  | 0.5675             | $3.29^{+0.25}_{-0.24} \pm 1.15$ | 5.46                                                | 1.87                                              |
| 0111550301 | 2001-05-27 | 125.907 | +54.819 | 13.8               | 569                    | 13.5               | 419                    | $3.78^{+0.92}_{-0.87} \pm 0.57$  | 0.5625             | $0.37^{+0.45}_{-0.37} \pm 0.21$ | 0.73                                                | 1.93                                              |
| 0111550201 | 2001-05-18 | 125.917 | +54.818 | 35.0               | 568                    | 35.3               | 574                    | $6.37^{+0.50}_{-0.56} \pm 0.40$  | 0.5625             | $0.72^{+0.27}_{-0.25} \pm 0.63$ | 1.31                                                | 1.73                                              |
| 0111550101 | 2001-05-18 | 125.917 | +54.822 | 39.4               | 567                    | 39.4               | 574                    | $6.16^{+0.91}_{-0.35} \pm 0.67$  | 0.5675             | $0.43^{+0.15}_{-0.43} \pm 0.79$ | 2.57                                                | 1.80                                              |
| 0112200201 | 2002-07-09 | 126.298 | -3.444  | 6.9                | 511                    | 6.8                | 591                    | $1.33^{+1.16}_{-1.03} \pm 1.02$  | 0.5575             | $0.00^{+0.45}_{-0.00} \pm 0.33$ | 3.28                                                | 2.12                                              |
| 0158560301 | 2003-05-01 | 126.526 | +52.738 | 9.7                | 476                    | 10.4               | 474                    | $4.75^{+1.13}_{-1.24} \pm 0.46$  | 0.5625             | $0.31^{+0.58}_{-0.31} \pm 0.19$ | 2.17                                                | 2.38                                              |
| 0124900101 | 2000-05-21 | 126.530 | +52.742 | 23.7               | 488                    | 23.4               | 562                    | $8.77^{+0.84}_{-0.80} \pm 0.39$  | 0.5625             | $0.76^{+0.39}_{-0.38} \pm 0.78$ | 1.27                                                | 2.54                                              |
| 0111520101 | 2001-09-11 | 127.061 | +15.005 | 38.2               | 467                    | 38.5               | 474                    | $8.55^{+0.76}_{-0.87} \pm 0.49$  | 0.5625             | $0.71^{+0.34}_{-0.42} \pm 0.11$ | 2.21                                                | 2.08                                              |
| 0202520101 | 2004-01-09 | 127.190 | -23.611 | 15.4               | 583                    | 15.8               | 516                    | $8.56^{+1.11}_{-0.78} \pm 0.40$  | 0.5675             | $2.66^{+0.52}_{-0.45} \pm 1.25$ | 3.95                                                | 2.11                                              |
| 0207380101 | 2004-10-07 | 127.821 | +37.342 | 16.6               | 592                    | 17.2               | 518                    | $4.88^{+0.86}_{-0.87} \pm 0.56$  | 0.5675             | $0.94^{+0.46}_{-0.45} \pm 0.95$ | 2.55                                                | 1.69                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{OVII}}$                | $E_{\text{OVII}}$ | $I_{\text{OVIII}}$               | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-9}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|-------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)             | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0555880101 | 2008-09-03 | 128.049 | -4.051  | 24.4               | 501                    | 25.4               | 512                    | $0.54^{+0.89}_{-0.54} \pm 0.39$  | 0.5475            | $0.14^{+0.42}_{-0.14} \pm 0.12$  | 4.87                                                | 2.17                                                    |
| 0305920101 | 2005-07-22 | 128.725 | -48.533 | 14.7               | 387                    | 16.1               | 502                    | $6.54 \pm 1.16 \pm 0.67$         | 0.5575            | $5.53 \pm 0.67 \pm 0.29$         | 1.10                                                | 2.27                                                    |
| 0200430301 | 2004-01-09 | 128.859 | -29.513 | 11.0               | 498                    | 10.7               | 508                    | $7.86^{+1.06}_{-1.08} \pm 0.62$  | 0.5675            | $3.49^{+0.66}_{-0.65} \pm 0.79$  | 1.75                                                | 2.44                                                    |
| 0304070901 | 2006-01-10 | 128.970 | +82.996 | 11.0               | 418                    | 11.1               | 516                    | $4.72^{+0.93}_{-1.17} \pm 0.52$  | 0.5725            | $1.18^{+0.54}_{-0.61} \pm 0.38$  | 2.50                                                | 1.85                                                    |
| 0094382101 | 2002-01-06 | 130.332 | -28.082 | 5.6                | 398                    | 5.6                | 396                    | $4.90^{+2.27}_{-1.67} \pm 1.23$  | 0.5675            | $1.54^{+1.23}_{-1.02} \pm 0.82$  | 1.75                                                | 2.37                                                    |
| 0153751801 | 2002-09-11 | 130.675 | +3.052  | 17.7               | 439                    | 17.9               | 443                    | $3.47^{+1.12}_{-0.81} \pm 0.48$  | 0.5675            | $1.23^{+0.51}_{-0.44} \pm 0.34$  | 3.00                                                | 2.36                                                    |
| 0004010201 | 2001-02-22 | 130.715 | +3.066  | 20.8               | 377                    | 21.3               | 375                    | $3.60^{+0.61}_{-0.86} \pm 0.08$  | 0.5625            | $1.36^{+0.43}_{-0.42} \pm 0.20$  | 1.52                                                | 2.07                                                    |
| 0153752001 | 2002-09-14 | 130.716 | +3.202  | 24.4               | 371                    | 24.7               | 447                    | $2.95^{+0.79}_{-0.65} \pm 1.04$  | 0.5625            | $0.00^{+0.31}_{-0.00} \pm 0.00$  | 1.60                                                | 1.95                                                    |
| 0301150401 | 2006-01-28 | 130.727 | -28.588 | 5.7                | 413                    | 6.2                | 501                    | $4.32^{+1.49}_{-1.25} \pm 1.57$  | 0.5775            | $0.57^{+0.88}_{-0.57} \pm 0.55$  | 0.83                                                | 2.47                                                    |
| 0153752501 | 2002-09-11 | 130.728 | +3.002  | 16.9               | 441                    | 17.4               | 443                    | $3.79^{+0.64}_{-0.95} \pm 0.87$  | 0.5675            | $1.02^{+0.43}_{-0.52} \pm 0.26$  | 1.78                                                | 2.23                                                    |
| 0153751901 | 2002-09-13 | 130.769 | +3.152  | 16.1               | 445                    | 15.9               | 371                    | $3.02^{+0.76}_{-0.66} \pm 0.26$  | 0.5725            | $0.56^{+0.45}_{-0.41} \pm 0.19$  | 1.55                                                | 2.01                                                    |
| 0153752401 | 2002-09-12 | 130.825 | +3.104  | 12.9               | 438                    | 12.8               | 444                    | $3.15^{+1.27}_{-0.90} \pm 0.45$  | 0.5675            | $0.58^{+0.60}_{-0.52} \pm 0.50$  | 1.21                                                | 2.57                                                    |
| 0112650501 | 2000-07-03 | 131.839 | -69.340 | 17.6               | 400                    | 19.0               | 590                    | $7.07^{+0.87}_{-0.81} \pm 0.60$  | 0.5625            | $2.92 \pm 0.45 \pm 0.45$         | 3.69                                                | 1.76                                                    |
| 0112650401 | 2000-12-17 | 131.944 | -69.061 | 20.4               | 591                    | 22.0               | 516                    | $4.48^{+0.43}_{-0.79} \pm 1.36$  | 0.5625            | $1.43^{+0.26}_{-0.37} \pm 0.32$  | 2.54                                                | 1.66                                                    |
| 0200431001 | 2004-01-12 | 132.454 | -26.438 | 9.9                | 511                    | 10.0               | 517                    | $8.33^{+1.18}_{-1.15} \pm 0.43$  | 0.5675            | $2.15^{+0.67}_{-0.65} \pm 0.76$  | 2.27                                                | 2.46                                                    |
| 0149040201 | 2003-08-22 | 132.891 | +9.084  | 45.5               | 476                    | 45.2               | 399                    | $2.06^{+0.55}_{-0.47} \pm 0.22$  | 0.5725            | $0.30^{+0.30}_{-0.29} \pm 0.09$  | 1.46                                                | 1.98                                                    |
| 0094400101 | 2001-09-11 | 133.178 | +22.628 | 30.4               | 565                    | 30.6               | 496                    | $8.79^{+0.63}_{-0.64} \pm 0.48$  | 0.5675            | $1.60 \pm 0.34 \pm 0.78$         | 4.46                                                | 1.90                                                    |
| 0401210601 | 2006-10-10 | 133.225 | +42.419 | 46.3               | 311                    | 41.7               | 396                    | $1.79^{+0.76}_{-0.72} \pm 0.34$  | 0.5625            | $0.20^{+0.40}_{-0.20} \pm 0.09$  | 2.19                                                | 2.53                                                    |
| 0402070201 | 2007-01-08 | 133.353 | -59.969 | 29.2               | 423                    | 29.6               | 513                    | $4.31^{+1.10}_{-0.88} \pm 0.33$  | 0.5625            | $0.78^{+0.59}_{-0.54} \pm 0.15$  | 3.73                                                | 1.74                                                    |
| 0141980601 | 2003-01-23 | 133.363 | -31.433 | 11.9               | 552                    | 12.3               | 556                    | $8.62^{+0.57}_{-1.71} \pm 2.04$  | 0.5675            | $2.21^{+0.71}_{-0.44} \pm 0.48$  | 2.15                                                | 2.29                                                    |
| 0147450301 | 2003-03-26 | 133.392 | +40.179 | 6.0                | 572                    | 6.4                | 576                    | $13.01^{+1.67}_{-1.42} \pm 0.91$ | 0.5625            | $1.43^{+0.77}_{-0.65} \pm 1.42$  | 4.88                                                | 1.58                                                    |
| 0102641101 | 2001-07-08 | 133.398 | -31.546 | 9.9                | 503                    | 9.8                | 573                    | $11.37^{+1.49}_{-1.11} \pm 0.47$ | 0.5675            | $3.38^{+0.63}_{-0.62} \pm 1.03$  | 3.64                                                | 1.63                                                    |
| 0141980101 | 2003-07-11 | 133.422 | -31.256 | 5.7                | 552                    | 6.0                | 555                    | $9.07^{+1.67}_{-1.98} \pm 0.80$  | 0.5625            | $3.10^{+0.88}_{-0.91} \pm 0.52$  | 5.80                                                | 2.68                                                    |
| 0102641001 | 2001-07-08 | 133.424 | -31.258 | 6.2                | 429                    | 6.5                | 500                    | $11.20^{+2.76}_{-1.97} \pm 0.60$ | 0.5625            | $3.76^{+0.86}_{-0.88} \pm 1.03$  | 2.90                                                | 2.01                                                    |
| 0102640501 | 2001-07-05 | 133.490 | -31.648 | 11.5               | 576                    | 11.3               | 501                    | $7.73 \pm 0.94 \pm 1.08$         | 0.5675            | $2.24 \pm 0.53 \pm 0.70$         | 1.42                                                | 1.66                                                    |
| 0102642301 | 2002-01-27 | 133.551 | -31.466 | 11.7               | 543                    | 11.9               | 552                    | $9.91^{+1.14}_{-1.10} \pm 0.48$  | 0.5675            | $3.46^{+0.67}_{-0.66} \pm 1.29$  | 1.36                                                | 2.39                                                    |
| 0141980801 | 2003-02-12 | 133.602 | -31.348 | 9.2                | 540                    | 9.7                | 542                    | $17.55^{+1.48}_{-1.54} \pm 4.14$ | 0.5675            | $5.02^{+0.81}_{-0.80} \pm 2.23$  | 4.45                                                | 2.17                                                    |
| 0141980201 | 2003-07-11 | 133.609 | -31.015 | 13.7               | 429                    | 13.9               | 569                    | $19.10^{+1.51}_{-1.22} \pm 1.37$ | 0.5675            | $10.07^{+0.90}_{-0.82} \pm 2.91$ | 6.67                                                | 2.47                                                    |
| 0141980701 | 2003-01-24 | 133.612 | -31.647 | 5.6                | 581                    | 5.5                | 581                    | $7.31^{+1.45}_{-1.59} \pm 0.60$  | 0.5625            | $3.06 \pm 0.83 \pm 0.61$         | 2.12                                                | 1.62                                                    |
| 0141980301 | 2003-07-25 | 133.668 | -31.197 | 7.3                | 322                    | 7.6                | 546                    | $15.73^{+2.08}_{-1.63} \pm 2.83$ | 0.5675            | $4.90^{+1.57}_{-0.93} \pm 1.37$  | 3.73                                                | 2.56                                                    |
| 0102640701 | 2001-07-05 | 133.750 | -31.509 | 10.4               | 558                    | 10.1               | 482                    | $11.20^{+1.30}_{-1.09} \pm 1.03$ | 0.5625            | $4.24^{+0.69}_{-0.63} \pm 0.59$  | 1.92                                                | 2.11                                                    |
| 0102640201 | 2000-08-04 | 133.753 | -30.982 | 14.2               | 499                    | 14.6               | 503                    | $7.92^{+0.93}_{-0.80} \pm 0.55$  | 0.5675            | $2.06^{+0.50}_{-0.44} \pm 0.31$  | 2.28                                                | 1.97                                                    |
| 0102642101 | 2002-01-25 | 133.798 | -31.406 | 11.6               | 427                    | 12.0               | 556                    | $7.91^{+1.13}_{-1.05} \pm 0.52$  | 0.5625            | $2.46^{+0.60}_{-0.59} \pm 0.71$  | 6.97                                                | 2.15                                                    |
| 0102642201 | 2002-01-25 | 133.827 | -31.120 | 13.1               | 568                    | 13.4               | 576                    | $7.41^{+1.23}_{-0.89} \pm 0.37$  | 0.5625            | $1.56 \pm 0.46 \pm 0.47$         | 3.44                                                | 1.75                                                    |
| 0102642001 | 2001-08-15 | 133.856 | -31.227 | 10.7               | 481                    | 10.5               | 556                    | $9.59^{+1.20}_{-1.06} \pm 0.98$  | 0.5675            | $3.17^{+0.67}_{-0.60} \pm 0.90$  | 0.91                                                | 1.84                                                    |
| 0094800201 | 2000-10-05 | 133.866 | +49.465 | 11.2               | 573                    | 11.4               | 579                    | $11.34 \pm 1.04 \pm 0.57$        | 0.5675            | $2.43 \pm 0.56 \pm 1.54$         | 6.20                                                | 2.13                                                    |
| 0600920201 | 2009-06-14 | 134.495 | +57.735 | 7.1                | 429                    | 7.3                | 518                    | $4.64^{+0.65}_{-1.89} \pm 1.27$  | 0.5775            | $0.05^{+0.73}_{-0.05} \pm 0.08$  | 2.59                                                | 2.22                                                    |
| 0201160201 | 2004-01-19 | 134.614 | -3.736  | 33.5               | 430                    | 33.6               | 439                    | $1.29^{+0.75}_{-0.65} \pm 0.83$  | 0.5625            | $1.34^{+0.38}_{-0.20} \pm 0.20$  | 2.09                                                | 2.69                                                    |
| 0311200201 | 2006-01-21 | 134.620 | +0.314  | 26.2               | 493                    | 28.2               | 517                    | $0.87^{+0.72}_{-0.71} \pm 0.17$  | 0.5625            | $0.33^{+0.37}_{-0.33} \pm 0.12$  | 1.84                                                | 2.54                                                    |
| 0201160301 | 2004-02-04 | 135.018 | -3.615  | 25.7               | 371                    | 26.6               | 376                    | $1.18^{+0.68}_{-0.72} \pm 0.28$  | 0.5725            | $0.63^{+0.41}_{-0.42} \pm 0.09$  | 1.04                                                | 2.45                                                    |
| 0502940301 | 2008-04-15 | 135.043 | +36.037 | 15.3               | 321                    | 15.1               | 482                    | $0.94^{+0.79}_{-0.81} \pm 2.50$  | 0.5925            | $0.00^{+0.42}_{-0.00} \pm 0.59$  | 1.89                                                | 2.21                                                    |
| 0305980501 | 2005-11-01 | 135.227 | +63.762 | 7.4                | 459                    | 7.4                | 481                    | $1.70^{+1.38}_{-0.94} \pm 0.91$  | 0.5775            | $0.01^{+0.71}_{-0.01} \pm 0.35$  | 2.34                                                | 2.33                                                    |
| 0311200101 | 2006-01-22 | 135.260 | +1.174  | 29.7               | 490                    | 31.1               | 517                    | $0.80 \pm 0.65 \pm 0.43$         | 0.5625            | $0.32^{+0.35}_{-0.32} \pm 0.08$  | 2.31                                                | 2.47                                                    |
| 0503690401 | 2008-08-18 | 135.635 | +2.432  | 6.8                | 291                    | 7.0                | 378                    | $0.68^{+1.35}_{-0.68} \pm 0.18$  | 0.5925            | $0.20^{+0.99}_{-0.20} \pm 0.16$  | 3.39                                                | 2.41                                                    |
| 0505980901 | 2007-09-06 | 135.676 | +1.105  | 7.8                | 231                    | 8.1                | 391                    | $0.70^{+1.30}_{-0.70} \pm 0.23$  | 0.5925            | $2.27^{+1.03}_{-1.02} \pm 0.32$  | 1.39                                                | 2.01                                                    |
| 0505981101 | 2007-09-08 | 135.677 | +1.105  | 10.9               | 231                    | 10.6               | 390                    | $3.06^{+1.67}_{-1.49} \pm 0.29$  | 0.5475            | $0.39^{+0.80}_{-0.39} \pm 0.33$  | 1.32                                                | 1.81                                                    |
| 0505981301 | 2007-09-10 | 135.677 | +1.105  | 13.8               | 302                    | 12.5               | 314                    | $0.00^{+1.20}_{-0.00} \pm 0.74$  | 0.5425            | $0.00^{+0.52}_{-0.00} \pm 0.03$  | 1.40                                                | 2.02                                                    |
| 0505980801 | 2007-09-04 | 135.677 | +1.105  | 11.7               | 231                    | 11.7               | 391                    | $0.43^{+1.00}_{-0.43} \pm 0.09$  | 0.5975            | $0.98^{+0.72}_{-0.75} \pm 0.22$  | 0.78                                                | 1.66                                                    |
| 0404220101 | 2006-11-01 | 135.974 | +55.981 | 16.4               | 422                    | 17.1               | 511                    | $3.70^{+0.99}_{-0.91} \pm 1.06$  | 0.5575            | $0.61^{+0.54}_{-0.46} \pm 0.39$  | 1.55                                                | 2.05                                                    |
| 0312190301 | 2006-01-24 | 136.163 | -9.247  | 11.4               | 388                    | 10.8               | 486                    | $2.78^{+1.26}_{-1.31} \pm 0.25$  | 0.5575            | $0.51^{+0.63}_{-0.51} \pm 0.08$  | 1.43                                                | 2.10                                                    |
| 0300000301 | 2006-01-11 | 136.507 | -54.621 | 20.2               | 306                    | 22.7               | 395                    | $6.30^{+1.54}_{-1.53} \pm 0.62$  | 0.5625            | $1.11^{+0.66}_{-0.74} \pm 0.24$  | 5.37                                                | 2.66                                                    |
| 0601670101 | 2009-06-27 | 136.631 | -58.697 | 52.1               | 376                    | 54.0               | 465                    | $1.13^{+0.76}_{-0.73} \pm 0.73$  | 0.5475            | $0.78^{+0.37}_{-0.36} \pm 0.16$  | 2.08                                                | 2.56                                                    |
| 0112521701 | 2002-06-02 | 136.934 | +72.398 | 13.8               | 533                    | 14.0               | 539                    | $9.44^{+1.38}_{-1.02} \pm 0.32$  | 0.5675            | $1.17^{+0.51}_{-0.54} \pm 1.19$  | 3.18                                                | 2.52                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0149780101 | 2003-02-05 | 137.102 | −23.259 | 31.6               | 502                    | 32.1               | 510                    | $5.61^{+0.66}_{-0.83} \pm 0.62$  | 0.5575             | $1.44^{+0.33}_{-0.37} \pm 0.09$ | 2.73                                                | 2.64                                                    |
| 0506130201 | 2008-03-26 | 137.206 | +47.402 | 14.5               | 249                    | 14.8               | 236                    | $3.90^{+1.52}_{-1.57} \pm 0.21$  | 0.5675             | $0.66^{+0.88}_{-0.66} \pm 0.16$ | 2.93                                                | 1.49                                                    |
| 0204400101 | 2004-05-24 | 137.446 | +77.229 | 25.9               | 518                    | 27.1               | 517                    | $4.51 \pm 0.65 \pm 0.24$         | 0.5675             | $0.46 \pm 0.36 \pm 0.31$        | 1.49                                                | 1.50                                                    |
| 0400570301 | 2006-07-26 | 137.538 | −61.441 | 17.6               | 419                    | 17.4               | 515                    | $5.09^{+0.82}_{-0.75} \pm 0.37$  | 0.5725             | $0.00^{+0.38}_{-0.00} \pm 0.85$ | 3.22                                                | 1.47                                                    |
| 0556300101 | 2008-05-19 | 138.057 | +74.858 | 20.7               | 314                    | 22.2               | 481                    | $5.45^{+0.83}_{-1.47} \pm 2.71$  | 0.5625             | $0.65^{+0.72}_{-0.37} \pm 0.64$ | 4.53                                                | 2.38                                                    |
| 0112280201 | 2002-05-27 | 138.058 | +74.859 | 16.0               | 482                    | 15.9               | 482                    | $7.14^{+0.99}_{-1.27} \pm 0.38$  | 0.5625             | $0.72 \pm 0.46 \pm 1.10$        | 1.81                                                | 1.29                                                    |
| 0206890201 | 2004-08-17 | 138.101 | +10.587 | 22.9               | 474                    | 22.4               | 481                    | $2.63^{+0.78}_{-0.90} \pm 0.38$  | 0.5625             | $0.77^{+0.37}_{-0.43} \pm 0.13$ | 2.90                                                | 2.02                                                    |
| 0093640901 | 2001-02-11 | 138.175 | +10.579 | 9.3                | 479                    | 9.1                | 424                    | $1.25^{+1.18}_{-0.88} \pm 0.24$  | 0.5675             | $0.35^{+0.60}_{-0.35} \pm 0.07$ | 1.75                                                | 2.31                                                    |
| 0110920101 | 2000-12-08 | 138.271 | +68.851 | 16.1               | 475                    | 17.0               | 474                    | $8.07^{+0.86}_{-1.00} \pm 0.33$  | 0.5725             | $1.46^{+0.50}_{-0.55} \pm 1.01$ | 2.45                                                | 2.50                                                    |
| 0400560301 | 2006-11-17 | 138.279 | +68.853 | 50.1               | 379                    | 50.9               | 402                    | $3.83^{+0.80}_{-0.58} \pm 0.25$  | 0.5725             | $0.92^{+0.36}_{-0.32} \pm 0.57$ | 0.94                                                | 1.65                                                    |
| 0059140101 | 2001-05-06 | 138.358 | +68.829 | 10.5               | 404                    | 10.7               | 400                    | $12.93^{+1.38}_{-1.45} \pm 0.26$ | 0.5675             | $2.22^{+0.70}_{-0.72} \pm 1.17$ | 2.23                                                | 1.47                                                    |
| 0059140901 | 2002-05-22 | 138.365 | +68.832 | 12.3               | 474                    | 12.4               | 473                    | $15.45^{+1.38}_{-1.44} \pm 0.34$ | 0.5625             | $2.21 \pm 0.68 \pm 1.50$        | 7.69                                                | 2.28                                                    |
| 0203170101 | 2004-05-16 | 138.505 | +65.396 | 33.9               | 548                    | 33.3               | 557                    | $7.27^{+0.60}_{-0.64} \pm 0.30$  | 0.5675             | $0.67 \pm 0.32 \pm 0.80$        | 2.07                                                | 1.48                                                    |
| 0154350201 | 2003-01-07 | 138.516 | −45.768 | 23.5               | 560                    | 23.4               | 559                    | $6.59^{+0.65}_{-0.90} \pm 0.29$  | 0.5625             | $1.68 \pm 0.34 \pm 0.35$        | 2.97                                                | 1.69                                                    |
| 0154350101 | 2002-02-02 | 138.516 | −45.770 | 26.6               | 479                    | 26.7               | 559                    | $10.13^{+0.51}_{-0.92} \pm 0.50$ | 0.5675             | $4.14^{+0.33}_{-0.52} \pm 1.15$ | 3.29                                                | 2.10                                                    |
| 0203270201 | 2004-06-01 | 138.910 | +68.927 | 32.1               | 450                    | 32.8               | 467                    | $5.77^{+1.11}_{-0.60} \pm 0.33$  | 0.5675             | $0.54^{+0.41}_{-0.34} \pm 0.39$ | 2.54                                                | 2.06                                                    |
| 0110890401 | 2000-12-14 | 138.930 | −85.088 | 27.6               | 469                    | 28.8               | 396                    | $6.93^{+0.78}_{-1.26} \pm 1.76$  | 0.5675             | $1.31^{+0.23}_{-0.65} \pm 0.40$ | 1.82                                                | 2.12                                                    |
| 0110890701 | 2002-06-30 | 139.077 | −85.054 | 17.0               | 461                    | 17.3               | 393                    | $5.85^{+1.47}_{-0.98} \pm 0.38$  | 0.5775             | $0.18^{+0.78}_{-0.18} \pm 0.93$ | 2.31                                                | 2.00                                                    |
| 0025540401 | 2001-09-19 | 139.680 | +33.892 | 6.0                | 581                    | 6.9                | 587                    | $5.36^{+1.58}_{-1.40} \pm 0.83$  | 0.5625             | $1.19^{+0.71}_{-0.66} \pm 0.69$ | 1.55                                                | 2.57                                                    |
| 0147390701 | 2003-11-24 | 140.154 | +78.949 | 11.2               | 584                    | 11.1               | 584                    | $5.00^{+1.16}_{-0.89} \pm 0.43$  | 0.5725             | $1.66^{+0.57}_{-0.59} \pm 1.10$ | 2.48                                                | 2.62                                                    |
| 0084140501 | 2002-02-04 | 140.203 | −24.899 | 12.6               | 552                    | 13.2               | 559                    | $8.99^{+1.21}_{-1.29} \pm 0.36$  | 0.5675             | $2.75^{+0.57}_{-0.55} \pm 0.69$ | 7.76                                                | 2.10                                                    |
| 0084140101 | 2001-02-14 | 140.204 | −24.899 | 36.6               | 559                    | 36.4               | 558                    | $6.30^{+0.45}_{-0.57} \pm 1.47$  | 0.5675             | $1.89^{+0.39}_{-0.21} \pm 0.21$ | 1.60                                                | 2.13                                                    |
| 0026340301 | 2002-04-11 | 140.222 | +43.587 | 19.0               | 565                    | 19.4               | 571                    | $8.11^{+0.58}_{-0.95} \pm 0.81$  | 0.5675             | $0.95^{+0.68}_{-0.30} \pm 0.68$ | 4.38                                                | 2.11                                                    |
| 0049340301 | 2002-04-27 | 140.271 | +59.959 | 23.3               | 430                    | 23.6               | 433                    | $9.13^{+0.91}_{-0.96} \pm 0.32$  | 0.5675             | $1.31^{+0.52}_{-0.51} \pm 1.20$ | 3.57                                                | 1.86                                                    |
| 0123100201 | 2000-04-12 | 140.277 | +29.552 | 17.3               | 387                    | 16.3               | 474                    | $7.24^{+1.64}_{-0.98} \pm 0.65$  | 0.5675             | $1.81^{+0.69}_{-0.53} \pm 0.71$ | 2.25                                                | 2.15                                                    |
| 0144230101 | 2003-04-26 | 140.340 | +26.092 | 8.6,20.7           | 439,438                | 9.3,21.7           | 512,512                | $7.04^{+0.58}_{-1.16} \pm 1.79$  | 0.5575             | $1.28^{+0.53}_{-0.35} \pm 0.24$ | 2.97                                                | 2.38                                                    |
| 0504100901 | 2007-06-21 | 140.811 | +62.383 | 23.9               | 352                    | 24.1               | 590                    | $4.62^{+0.80}_{-0.69} \pm 0.91$  | 0.5675             | $0.00^{+0.25}_{-0.00} \pm 0.16$ | 4.60                                                | 1.77                                                    |
| 0203160601 | 2004-04-19 | 141.027 | +43.911 | 7.6                | 400                    | 8.0                | 402                    | $7.61^{+1.69}_{-1.68} \pm 0.68$  | 0.5725             | $0.01^{+0.93}_{-0.01} \pm 1.35$ | 2.40                                                | 1.71                                                    |
| 0560590201 | 2009-04-17 | 141.420 | +40.547 | 14.5               | 216                    | 15.9               | 330                    | $3.41^{+1.52}_{-1.42} \pm 0.28$  | 0.5775             | $1.70^{+0.91}_{-0.89} \pm 0.07$ | 1.69                                                | 1.72                                                    |
| 0560590301 | 2009-04-29 | 141.428 | +40.549 | 16.1               | 233                    | 16.5               | 330                    | $2.74^{+1.65}_{-1.28} \pm 1.20$  | 0.5675             | $1.62^{+0.90}_{-0.75} \pm 0.70$ | 1.55                                                | 1.79                                                    |
| 0093641001 | 2001-01-07 | 141.608 | −47.353 | 10.5               | 581                    | 10.9               | 506                    | $6.27^{+1.07}_{-1.10} \pm 0.46$  | 0.5625             | $1.12^{+0.47}_{-0.53} \pm 0.55$ | 1.60                                                | 1.84                                                    |
| 0112810101 | 2001-05-06 | 141.931 | +55.390 | 18.6               | 542                    | 18.9               | 468                    | $5.96^{+1.17}_{-0.72} \pm 0.77$  | 0.5625             | $0.58^{+0.50}_{-0.39} \pm 0.71$ | 1.55                                                | 1.76                                                    |
| 0112521001 | 2002-04-10 | 141.946 | +41.055 | 9.6                | 397                    | 9.9                | 468                    | $21.08^{+1.47}_{-1.62} \pm 0.24$ | 0.5675             | $2.81^{+0.75}_{-0.76} \pm 0.73$ | 7.05                                                | 2.59                                                    |
| 0112521101 | 2002-04-16 | 141.948 | +41.056 | 8.5                | 468                    | 8.5                | 469                    | $11.57^{+1.47}_{-1.45} \pm 0.23$ | 0.5675             | $3.36^{+0.80}_{-0.76} \pm 0.79$ | 2.51                                                | 2.35                                                    |
| 0504101001 | 2007-12-15 | 141.982 | +57.293 | 20.5               | 418                    | 20.6               | 509                    | $5.01^{+0.79}_{-1.27} \pm 2.54$  | 0.5525             | $0.96^{+0.55}_{-0.35} \pm 0.65$ | 1.03                                                | 1.92                                                    |
| 0201980101 | 2004-03-26 | 142.086 | +41.527 | 26.0               | 573                    | 25.8               | 497                    | $3.04^{+0.80}_{-0.72} \pm 0.29$  | 0.5675             | $0.68^{+0.36}_{-0.51} \pm 0.17$ | 2.67                                                | 2.05                                                    |
| 0504390201 | 2007-09-18 | 142.330 | +37.420 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0400570201 | 2006-11-25 | 142.370 | +51.705 | 22.2               | 468                    | 22.3               | 480                    | $3.81^{+0.92}_{-0.46} \pm 0.14$  | 0.5675             | $0.59^{+0.54}_{-0.38} \pm 0.27$ | 1.71                                                | 1.37                                                    |
| 0553650101 | 2008-09-03 | 142.802 | +0.919  | 21.7               | 502                    | 22.5               | 516                    | $5.46^{+0.67}_{-0.86} \pm 1.53$  | 0.5625             | $0.00^{+0.25}_{-0.00} \pm 0.00$ | 5.29                                                | 1.93                                                    |
| 0303110201 | 2005-11-03 | 143.027 | +47.176 | 10.0               | 354                    | 10.5               | 516                    | $3.23^{+1.26}_{-1.13} \pm 0.30$  | 0.5575             | $0.87^{+0.65}_{-0.60} \pm 0.16$ | 2.38                                                | 2.34                                                    |
| 0056020901 | 2002-06-03 | 143.027 | +83.892 | 16.9               | 508                    | 16.9               | 514                    | $9.51^{+1.02}_{-1.24} \pm 0.27$  | 0.5675             | $1.38^{+0.48}_{-0.60} \pm 1.26$ | 2.12                                                | 1.69                                                    |
| 0110900201 | 2002-06-28 | 143.046 | +84.218 | 42.6               | 439                    | 42.9               | 376                    | $9.89^{+0.59}_{-1.06} \pm 1.22$  | 0.5675             | $1.86^{+0.48}_{-0.32} \pm 1.03$ | 1.97                                                | 1.63                                                    |
| 0400570401 | 2006-05-06 | 143.276 | +46.214 | 19.9               | 425                    | 20.6               | 515                    | $5.10^{+0.91}_{-0.98} \pm 0.26$  | 0.5725             | $0.26^{+0.55}_{-0.26} \pm 0.65$ | 3.55                                                | 1.86                                                    |
| 0111220201 | 2000-10-19 | 143.295 | +22.715 | 36.1               | 549                    | 36.7               | 557                    | $4.90 \pm 0.52 \pm 0.30$         | 0.5625             | $0.65 \pm 0.26 \pm 0.12$        | 2.67                                                | 2.08                                                    |
| 0140160101 | 2003-02-12 | 143.646 | −15.576 | 17.9               | 589                    | 18.4               | 517                    | $8.65^{+1.16}_{-1.25} \pm 2.04$  | 0.5575             | $4.72^{+0.88}_{-0.51} \pm 0.89$ | 4.30                                                | 2.11                                                    |
| 0551630101 | 2009-01-26 | 143.850 | −24.855 | 28.6               | 428                    | 32.7               | 591                    | $0.53^{+0.60}_{-0.53} \pm 1.70$  | 0.5925             | $0.30^{+0.44}_{-0.30} \pm 0.29$ | 2.97                                                | 2.51                                                    |
| 0504101401 | 2008-04-21 | 143.936 | +61.973 | 12.5               | 418                    | 13.9               | 589                    | $2.19^{+1.10}_{-0.96} \pm 0.63$  | 0.5675             | $0.00^{+0.32}_{-0.00} \pm 0.00$ | 1.42                                                | 2.68                                                    |
| 0505400101 | 2008-01-20 | 144.013 | −54.568 | 49.0               | 427                    | 51.7               | 513                    | $1.77^{+0.69}_{-0.74} \pm 0.37$  | 0.5675             | $0.60^{+0.37}_{-0.39} \pm 0.13$ | 1.46                                                | 2.64                                                    |
| 0200250101 | 2004-10-10 | 144.038 | +38.064 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0610000201 | 2009-06-27 | 144.038 | −54.534 | 28.3               | 425                    | 28.3               | 514                    | $2.83^{+0.90}_{-0.70} \pm 0.69$  | 0.5725             | $1.33^{+0.47}_{-0.44} \pm 0.54$ | 1.56                                                | 1.36                                                    |
| 0012850701 | 2002-03-26 | 144.187 | +27.902 | 8.1                | 438                    | 8.3                | 512                    | $7.79^{+1.41}_{-1.31} \pm 0.69$  | 0.5625             | $1.86^{+0.68}_{-0.64} \pm 0.66$ | 2.48                                                | 1.55                                                    |
| 0112520901 | 2002-09-18 | 144.286 | +32.742 | 5.5                | 505                    | 5.5                | 514                    | $4.95^{+1.20}_{-1.36} \pm 1.03$  | 0.5875             | $0.33^{+0.91}_{-0.33} \pm 0.51$ | 2.62                                                | 2.06                                                    |
| 0112520601 | 2002-04-10 | 144.294 | +32.706 | 9.0                | 434                    | 9.3                | 512                    | $29.28^{+1.78}_{-1.98} \pm 0.44$ | 0.5625             | $4.48^{+0.84}_{-0.85} \pm 2.78$ | 6.63                                                | 1.88                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0200470101 | 2004-04-15 | 144.296 | +32.707 | 37.6               | 464                    | 39.7               | 471                    | $6.89^{+0.67}_{-0.91} \pm 0.56$ | 0.5625             | $0.95^{+0.32}_{-0.19} \pm 0.07$ | 3.07                                                | 2.30                                              |
| 0551851301 | 2009-03-04 | 144.821 | +25.102 | 31.9               | 421                    | 34.9               | 504                    | $4.00^{+0.63}_{-0.69} \pm 2.18$ | 0.5675             | $1.12^{+0.45}_{-0.31} \pm 0.81$ | 3.63                                                | 2.29                                              |
| 0551850401 | 2008-10-09 | 144.864 | +25.128 | 51.8               | 406                    | 54.1               | 440                    | $2.46^{+0.74}_{-0.70} \pm 0.33$ | 0.5525             | $0.00^{+0.38}_{-0.00} \pm 0.38$ | 1.96                                                | 2.08                                              |
| 0028540601 | 2002-03-10 | 145.083 | +29.427 | 30.9               | 586                    | 30.5               | 586                    | $7.10^{+0.54}_{-0.53} \pm 0.38$ | 0.5675             | $1.24^{+0.30}_{-0.29} \pm 0.52$ | 2.87                                                | 2.13                                              |
| 0028540201 | 2001-09-19 | 145.084 | +29.465 | 29.4               | 578                    | 29.7               | 586                    | $8.15 \pm 0.59 \pm 0.21$        | 0.5675             | $1.04 \pm 0.31 \pm 0.63$        | 3.23                                                | 2.19                                              |
| 0025540101 | 2001-06-26 | 145.211 | -79.648 | 6.9                | 499                    | 7.3                | 500                    | $5.37^{+1.25}_{-1.33} \pm 0.37$ | 0.5675             | $1.25^{+0.69}_{-0.65} \pm 0.55$ | 1.19                                                | 1.56                                              |
| 0502430701 | 2007-10-26 | 145.828 | +43.062 | 8.6                | 417                    | 9.2                | 577                    | $2.44^{+1.52}_{-0.95} \pm 0.23$ | 0.5625             | $0.62^{+1.01}_{-0.55} \pm 0.10$ | 1.43                                                | 1.64                                              |
| 0502430201 | 2007-09-30 | 145.830 | +43.062 | 38.1               | 342                    | 40.6               | 575                    | $1.18^{+0.85}_{-0.58} \pm 0.17$ | 0.5575             | $0.14^{+0.42}_{-0.14} \pm 0.06$ | 1.05                                                | 2.34                                              |
| 0112550201 | 2002-02-01 | 146.396 | -20.388 | 8.6                | 582                    | 8.0                | 589                    | $6.63^{+1.21}_{-0.95} \pm 1.44$ | 0.5625             | $1.31^{+0.58}_{-0.54} \pm 0.47$ | 4.85                                                | 2.28                                              |
| 0510010801 | 2007-08-21 | 146.403 | -20.350 | 6.2                | 425                    | 6.4                | 591                    | $4.18^{+1.58}_{-1.45} \pm 0.87$ | 0.5575             | $1.46^{+0.81}_{-0.88} \pm 0.66$ | 2.64                                                | 2.00                                              |
| 0141150201 | 2002-10-31 | 146.432 | +28.541 | 30.8               | 579                    | 31.1               | 513                    | $5.52^{+0.64}_{-0.67} \pm 0.37$ | 0.5625             | $1.48^{+0.19}_{-0.32} \pm 0.51$ | 2.42                                                | 1.93                                              |
| 0147920101 | 2003-06-15 | 147.050 | -76.656 | 21.6               | 532                    | 21.2               | 542                    | $4.88^{+0.76}_{-0.77} \pm 0.77$ | 0.5675             | $2.54 \pm 0.47 \pm 0.53$        | 4.46                                                | 2.44                                              |
| 0200431301 | 2004-11-04 | 147.117 | +60.334 | 8.6                | 582                    | 8.5                | 508                    | $5.62^{+1.54}_{-1.20} \pm 0.44$ | 0.5675             | $1.09^{+0.69}_{-0.67} \pm 0.17$ | 4.65                                                | 2.47                                              |
| 0200430501 | 2004-05-02 | 147.160 | +60.303 | 11.8               | 507                    | 11.8               | 584                    | $6.17^{+1.43}_{-0.98} \pm 0.46$ | 0.5625             | $2.83^{+0.69}_{-0.54} \pm 0.97$ | 2.73                                                | 1.70                                              |
| 0556211401 | 2008-11-20 | 147.500 | +51.579 | 9.7                | 486                    | 9.7                | 501                    | $1.97^{+0.86}_{-0.87} \pm 0.80$ | 0.5925             | $0.07^{+0.65}_{-0.07} \pm 0.83$ | 2.38                                                | 1.36                                              |
| 0156360101 | 2003-06-11 | 147.793 | +70.373 | 21.1               | 506                    | 22.5               | 584                    | $8.57^{+1.14}_{-0.77} \pm 0.78$ | 0.5675             | $1.44^{+0.42}_{-0.43} \pm 1.24$ | 1.58                                                | 2.06                                              |
| 0112551501 | 2002-07-14 | 147.891 | -54.139 | 13.3               | 581                    | 13.9               | 588                    | $7.40^{+0.74}_{-0.75} \pm 0.96$ | 0.5725             | $1.20^{+0.43}_{-0.44} \pm 1.28$ | 1.74                                                | 1.40                                              |
| 0302400301 | 2005-04-11 | 148.018 | +28.400 | 8.5                | 420                    | 9.9                | 587                    | $3.71^{+1.28}_{-1.09} \pm 0.37$ | 0.5675             | $0.67^{+0.71}_{-0.65} \pm 0.38$ | 4.17                                                | 2.45                                              |
| 0200430701 | 2004-01-15 | 148.222 | -57.936 | 11.1               | 493                    | 11.4               | 498                    | $4.41^{+1.12}_{-1.14} \pm 0.36$ | 0.5675             | $1.05^{+0.60}_{-0.54} \pm 0.88$ | 1.40                                                | 1.41                                              |
| 0554121301 | 2008-11-10 | 148.476 | +51.459 | 35.4               | 502                    | 35.9               | 517                    | $3.34^{+0.80}_{-0.81} \pm 0.51$ | 0.5625             | $0.64^{+0.41}_{-0.35} \pm 0.11$ | 0.72                                                | 1.64                                              |
| 0554121001 | 2008-10-15 | 148.484 | +51.462 | 13.0               | 427                    | 12.7               | 592                    | $2.72^{+1.26}_{-0.86} \pm 0.63$ | 0.5725             | $0.69^{+0.65}_{-0.54} \pm 0.52$ | 1.71                                                | 1.42                                              |
| 0554120101 | 2008-10-11 | 148.487 | +51.462 | 22.6               | 425                    | 24.3               | 518                    | $3.24^{+0.87}_{-1.07} \pm 0.20$ | 0.5625             | $0.00^{+0.42}_{-0.00} \pm 0.00$ | 1.07                                                | 2.49                                              |
| 0554120701 | 2009-04-11 | 148.499 | +51.426 | 12.8               | 429                    | 14.7               | 591                    | $1.90^{+0.97}_{-0.96} \pm 0.36$ | 0.5725             | $0.36^{+0.60}_{-0.36} \pm 0.17$ | 1.35                                                | 2.09                                              |
| 0554500601 | 2008-10-06 | 148.553 | +19.658 | 12.4               | 491                    | 13.3               | 510                    | $1.32^{+1.26}_{-1.08} \pm 0.48$ | 0.5525             | $0.43^{+0.58}_{-0.43} \pm 0.19$ | 0.89                                                | 1.55                                              |
| 0306050701 | 2005-04-04 | 148.730 | +49.638 | 11.1               | 421                    | 10.4               | 591                    | $4.67^{+1.19}_{-1.09} \pm 0.50$ | 0.5675             | $1.23 \pm 0.60 \pm 0.18$        | 2.54                                                | 1.98                                              |
| 0606320401 | 2009-05-11 | 148.917 | +70.070 | 15.3               | 386                    | 15.6               | 474                    | $3.65^{+1.83}_{-0.86} \pm 2.67$ | 0.5675             | $0.02^{+0.86}_{-0.02} \pm 1.20$ | 0.81                                                | 1.60                                              |
| 0606321401 | 2009-05-17 | 148.921 | +70.071 | 14.6               | 314                    | 15.1               | 473                    | $2.95^{+1.36}_{-1.10} \pm 0.98$ | 0.5725             | $0.24^{+0.74}_{-0.24} \pm 0.77$ | 1.02                                                | 1.75                                              |
| 0606321901 | 2009-06-02 | 148.926 | +70.074 | 19.3               | 314                    | 21.9               | 473                    | $1.88 \pm 0.92 \pm 0.24$        | 0.5775             | $0.87^{+0.58}_{-0.71} \pm 0.25$ | 1.63                                                | 2.47                                              |
| 0606322201 | 2009-06-10 | 148.932 | +70.076 | 19.9               | 314                    | 21.0               | 399                    | $4.91^{+1.17}_{-1.36} \pm 2.36$ | 0.5625             | $0.62^{+0.78}_{-0.51} \pm 0.67$ | 2.07                                                | 2.55                                              |
| 0147511301 | 2002-10-27 | 148.971 | +53.326 | 13.1               | 557                    | 14.8               | 489                    | $4.60^{+1.09}_{-0.83} \pm 0.75$ | 0.5725             | $0.39^{+0.54}_{-0.39} \pm 0.58$ | 2.89                                                | 2.25                                              |
| 0556211201 | 2008-05-09 | 149.033 | +50.968 | 8.0                | 491                    | 8.3                | 492                    | $5.33^{+0.97}_{-1.89} \pm 0.83$ | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.00$ | 1.14                                                | 1.34                                              |
| 0139760101 | 2003-02-24 | 149.173 | +4.114  | 20.2               | 581                    | 21.2               | 514                    | $1.76^{+0.82}_{-0.78} \pm 0.33$ | 0.5525             | $0.60^{+0.38}_{-0.40} \pm 0.25$ | 1.64                                                | 1.88                                              |
| 0147511801 | 2002-12-06 | 149.242 | +53.157 | 68.1               | 541                    | 72.1               | 548                    | $6.58 \pm 0.47 \pm 0.37$        | 0.5675             | $0.82 \pm 0.25 \pm 0.45$        | 6.42                                                | 2.48                                              |
| 0147511701 | 2002-12-04 | 149.267 | +53.157 | 88.9               | 544                    | 89.5               | 476                    | $5.26^{+0.72}_{-0.42} \pm 0.78$ | 0.5675             | $0.91^{+0.30}_{-0.23} \pm 0.38$ | 2.21                                                | 1.91                                              |
| 0123700101 | 2000-04-27 | 149.294 | +53.130 | 31.0               | 545                    | 32.5               | 557                    | $8.47^{+0.64}_{-0.70} \pm 0.29$ | 0.5625             | $1.41^{+0.33}_{-0.37} \pm 0.61$ | 3.41                                                | 1.75                                              |
| 0123700401 | 2000-05-02 | 149.296 | +53.130 | 11.7               | 554                    | 13.3               | 555                    | $5.22^{+1.09}_{-0.87} \pm 0.32$ | 0.5775             | $0.98^{+0.56}_{-0.55} \pm 0.62$ | 0.79                                                | 2.14                                              |
| 0147511001 | 2002-10-21 | 149.358 | +53.109 | 58.8               | 557                    | 60.0               | 494                    | $5.97^{+0.48}_{-0.65} \pm 0.56$ | 0.5625             | $0.87 \pm 0.25 \pm 0.17$        | 1.14                                                | 2.39                                              |
| 0556211301 | 2008-11-20 | 149.405 | +51.459 | 8.2                | 430                    | 8.3                | 518                    | $3.37^{+0.99}_{-1.00} \pm 0.18$ | 0.5825             | $0.02^{+0.75}_{-0.02} \pm 0.61$ | 2.27                                                | 1.09                                              |
| 0147510101 | 2002-10-15 | 149.534 | +53.009 | 51.9               | 569                    | 56.9               | 507                    | $6.08 \pm 0.48 \pm 0.30$        | 0.5675             | $0.68 \pm 0.27 \pm 0.38$        | 2.19                                                | 2.52                                              |
| 0201770201 | 2005-02-20 | 149.740 | -19.289 | 9.4                | 513                    | 8.8                | 513                    | $4.70^{+1.36}_{-1.04} \pm 1.61$ | 0.5675             | $0.96^{+0.64}_{-0.51} \pm 0.49$ | 2.26                                                | 2.46                                              |
| 0164560901 | 2004-09-12 | 150.573 | +29.230 | 56.0               | 526                    | 55.5               | 526                    | $4.49^{+0.39}_{-0.77} \pm 0.33$ | 0.5625             | $0.58^{+0.28}_{-0.21} \pm 0.14$ | 0.33                                                | 1.87                                              |
| 0406630201 | 2007-04-12 | 151.186 | +48.245 | 7.7                | 272                    | 8.0                | 428                    | $0.92^{+1.97}_{-0.92} \pm 1.06$ | 0.5425             | $0.61^{+0.94}_{-0.61} \pm 0.19$ | 1.29                                                | 2.08                                              |
| 0075940101 | 2001-01-17 | 151.478 | -32.311 | 17.2               | 401                    | 17.1               | 471                    | $3.35^{+1.25}_{-0.90} \pm 0.46$ | 0.5675             | $1.72^{+0.56}_{-0.26} \pm 0.13$ | 2.98                                                | 2.50                                              |
| 0303260201 | 2005-04-07 | 151.607 | +51.006 | 43.3               | 415                    | 43.6               | 590                    | $5.15^{+0.65}_{-0.51} \pm 0.51$ | 0.5625             | $0.72^{+0.32}_{-0.29} \pm 0.49$ | 1.55                                                | 1.82                                              |
| 0303260501 | 2005-05-20 | 151.620 | +51.011 | 20.8               | 502                    | 21.7               | 590                    | $7.98^{+0.77}_{-1.38} \pm 1.09$ | 0.5675             | $4.08^{+0.42}_{-0.71} \pm 0.85$ | 4.18                                                | 1.91                                              |
| 0150180101 | 2003-07-25 | 151.793 | -38.770 | 20.9               | 398                    | 20.6               | 555                    | $6.52^{+0.73}_{-0.79} \pm 1.27$ | 0.5625             | $2.39^{+0.24}_{-0.41} \pm 0.37$ | 4.38                                                | 1.99                                              |
| 0306060201 | 2005-11-13 | 151.829 | +70.103 | 53.0               | 413                    | 54.2               | 512                    | $4.90^{+0.64}_{-0.57} \pm 0.52$ | 0.5625             | $0.00^{+0.26}_{-0.00} \pm 0.34$ | 1.60                                                | 1.92                                              |
| 0306060301 | 2005-11-15 | 151.831 | +70.103 | 15.0               | 418                    | 15.5               | 512                    | $3.47^{+1.41}_{-0.70} \pm 0.57$ | 0.5725             | $0.15^{+0.62}_{-0.15} \pm 0.15$ | 1.35                                                | 2.05                                              |
| 0148590301 | 2003-08-31 | 151.832 | +15.690 | 6.7                | 398                    | 7.0                | 475                    | $2.92^{+1.00}_{-1.34} \pm 0.30$ | 0.5725             | $0.00^{+0.61}_{-0.00} \pm 0.40$ | 1.30                                                | 2.29                                              |
| 0553790401 | 2009-01-08 | 152.010 | -45.189 | 22.3               | 414                    | 22.2               | 517                    | $1.96^{+1.01}_{-0.74} \pm 1.08$ | 0.5675             | $0.75^{+0.50}_{-0.26} \pm 0.41$ | 4.18                                                | 1.69                                              |
| 0094360201 | 2001-02-10 | 152.295 | -18.069 | 6.0                | 513                    | 6.1                | 517                    | $2.78^{+0.97}_{-1.01} \pm 0.25$ | 0.5675             | $1.39^{+0.61}_{-0.62} \pm 0.13$ | 2.01                                                | 1.77                                              |
| 0553880301 | 2008-11-18 | 154.514 | +77.171 | 38.6               | 412                    | 40.1               | 502                    | $3.66^{+0.63}_{-0.69} \pm 0.23$ | 0.5675             | $0.00^{+0.39}_{-0.00} \pm 0.27$ | 2.08                                                | 1.75                                              |
| 0553880201 | 2008-11-16 | 154.517 | +77.171 | 25.6               | 486                    | 26.9               | 502                    | $2.84^{+0.87}_{-0.68} \pm 0.28$ | 0.5675             | $0.13^{+0.44}_{-0.13} \pm 0.13$ | 1.66                                                | 1.84                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{OVII}}$                | $E_{\text{OVII}}$ | $I_{\text{OVIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|-------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)             | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0109661101 | 2002-12-25 | 155.030 | -64.048 | 43.0               | 588                    | 43.8               | 589                    | $3.87^{+0.40}_{-0.47} \pm 0.28$  | 0.5675            | $1.10^{+0.25}_{-0.28} \pm 0.70$ | 3.39                                                | 1.63                                                    |
| 0109661201 | 2002-07-16 | 155.049 | -64.011 | 45.9               | 577                    | 45.5               | 511                    | $6.56^{+0.44}_{-0.48} \pm 0.29$  | 0.5725            | $1.13 \pm 0.27 \pm 0.70$        | 7.10                                                | 1.59                                                    |
| 0551200301 | 2008-05-09 | 155.329 | +45.507 | 22.5               | 380                    | 25.0               | 385                    | $2.85^{+1.21}_{-0.98} \pm 0.84$  | 0.5575            | $0.00^{+0.30}_{-0.00} \pm 0.25$ | 1.38                                                | 2.54                                                    |
| 0206530201 | 2005-02-11 | 156.316 | -22.120 | 9.9                | 473                    | 10.4               | 398                    | $2.04^{+0.89}_{-0.91} \pm 0.33$  | 0.5925            | $0.59^{+0.67}_{-0.59} \pm 0.16$ | 2.39                                                | 2.15                                                    |
| 0110990101 | 2002-02-10 | 156.761 | -39.129 | 17.3               | 557                    | 17.9               | 559                    | $3.35^{+1.04}_{-0.58} \pm 0.57$  | 0.5675            | $1.14^{+0.47}_{-0.32} \pm 0.29$ | 3.07                                                | 2.11                                                    |
| 0085170101 | 2001-11-11 | 156.809 | +49.507 | 27.4               | 511                    | 27.4               | 589                    | $6.93 \pm 0.63 \pm 0.52$         | 0.5675            | $1.51^{+0.34}_{-0.33} \pm 1.21$ | 1.09                                                | 2.68                                                    |
| 0401790201 | 2007-02-26 | 157.250 | +3.401  | 11.4               | 425                    | 11.8               | 513                    | $0.00^{+0.52}_{-0.00} \pm 0.00$  | 0.5425            | $0.35^{+0.58}_{-0.35} \pm 0.07$ | 1.90                                                | 2.62                                                    |
| 0504101301 | 2007-06-11 | 158.152 | +63.571 | 17.6               | 420                    | 17.7               | 513                    | $3.23^{+1.47}_{-0.92} \pm 0.23$  | 0.5625            | $0.34^{+0.68}_{-0.34} \pm 0.04$ | 1.09                                                | 2.02                                                    |
| 0503670101 | 2007-07-31 | 158.776 | -21.557 | 20.8               | 422                    | 23.0               | 588                    | $3.81^{+0.78}_{-0.77} \pm 0.43$  | 0.5725            | $0.73^{+0.43}_{-0.44} \pm 0.42$ | 0.90                                                | 2.45                                                    |
| 0556214801 | 2008-11-04 | 159.477 | +46.743 | 8.4                | 429                    | 8.3                | 517                    | $3.85 \pm 1.34 \pm 0.22$         | 0.5625            | $0.47^{+0.71}_{-0.47} \pm 0.66$ | 1.22                                                | 1.57                                                    |
| 0503480401 | 2007-08-16 | 159.648 | -43.611 | 7.2                | 425                    | 9.4                | 590                    | $0.33^{+1.85}_{-0.33} \pm 0.68$  | 0.5475            | $0.00^{+0.82}_{-0.00} \pm 0.20$ | 2.67                                                | 2.57                                                    |
| 0500940201 | 2007-11-01 | 159.718 | +50.442 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                             | ...                                                 | ...                                                     |
| 0554920301 | 2008-08-07 | 159.827 | +57.683 | 15.8               | 316                    | 15.8               | 476                    | $1.81^{+1.12}_{-1.01} \pm 0.10$  | 0.5725            | $0.30^{+0.61}_{-0.30} \pm 0.03$ | 1.13                                                | 2.15                                                    |
| 0070340201 | 2001-05-10 | 159.911 | +50.084 | 18.6               | 575                    | 18.7               | 501                    | $10.28^{+0.92}_{-0.82} \pm 0.62$ | 0.5675            | $3.18^{+0.44}_{-0.48} \pm 1.19$ | 1.35                                                | 1.78                                                    |
| 0550960101 | 2008-12-16 | 160.327 | -73.373 | 28.0               | 341                    | 28.1               | 416                    | $1.77^{+1.04}_{-0.98} \pm 0.50$  | 0.5475            | $0.53^{+0.48}_{-0.47} \pm 0.18$ | 6.47                                                | 1.82                                                    |
| 0112520101 | 2002-04-10 | 160.534 | +44.824 | 26.4               | 577                    | 26.2               | 585                    | $14.46^{+0.94}_{-1.45} \pm 0.64$ | 0.5625            | $1.97^{+0.42}_{-0.17} \pm 1.26$ | 5.55                                                | 1.68                                                    |
| 0112520201 | 2002-04-17 | 160.536 | +44.825 | 10.1               | 580                    | 10.2               | 585                    | $12.17 \pm 1.08 \pm 0.30$        | 0.5625            | $3.23 \pm 0.56 \pm 1.26$        | 4.17                                                | 1.41                                                    |
| 0200340101 | 2004-06-02 | 160.579 | +81.664 | 64.0               | 484                    | 65.0               | 488                    | $5.34^{+0.51}_{-0.65} \pm 0.25$  | 0.5675            | $0.09^{+0.26}_{-0.09} \pm 0.65$ | 1.77                                                | 1.74                                                    |
| 0556214701 | 2008-11-04 | 161.392 | +45.658 | 8.2                | 422                    | 8.2                | 500                    | $3.53^{+1.09}_{-1.12} \pm 0.66$  | 0.5725            | $0.86^{+0.61}_{-0.67} \pm 0.51$ | 1.07                                                | 1.33                                                    |
| 0083950101 | 2002-02-12 | 161.410 | -13.654 | 13.0               | 535                    | 13.7               | 537                    | $2.42^{+1.08}_{-0.79} \pm 0.49$  | 0.5675            | $1.40^{+0.57}_{-0.48} \pm 0.16$ | 2.12                                                | 2.36                                                    |
| 0303720601 | 2005-04-25 | 161.440 | +54.439 | 22.7               | 380                    | 23.3               | 396                    | $4.15^{+1.39}_{-0.81} \pm 0.41$  | 0.5725            | $0.16^{+0.49}_{-0.16} \pm 0.31$ | 1.26                                                | 2.28                                                    |
| 0303720201 | 2005-04-13 | 161.441 | +54.439 | 33.6               | 309                    | 34.2               | 470                    | $5.14^{+1.03}_{-0.70} \pm 1.48$  | 0.5625            | $0.50^{+0.42}_{-0.33} \pm 0.55$ | 1.98                                                | 2.26                                                    |
| 0303720301 | 2005-04-19 | 161.441 | +54.439 | 60.7               | 314                    | 61.9               | 469                    | $10.12^{+0.71}_{-0.56} \pm 1.16$ | 0.5625            | $0.95^{+0.40}_{-0.23} \pm 1.29$ | 6.29                                                | 2.14                                                    |
| 0100240301 | 2000-09-04 | 161.481 | +5.043  | 12.5               | 578                    | 13.5               | 584                    | $2.06^{+0.86}_{-0.84} \pm 0.26$  | 0.5775            | $0.80^{+0.47}_{-0.55} \pm 0.28$ | 1.44                                                | 2.36                                                    |
| 0404050101 | 2006-10-18 | 161.902 | +30.062 | 12.1               | 489                    | 11.9               | 512                    | $2.61 \pm 0.91 \pm 1.16$         | 0.5675            | $0.97 \pm 0.53 \pm 0.49$        | 3.03                                                | 1.89                                                    |
| 0112522701 | 2003-01-03 | 162.003 | +81.540 | 7.6                | 528                    | 7.6                | 530                    | $8.45^{+1.63}_{-1.14} \pm 0.73$  | 0.5625            | $1.46^{+0.61}_{-0.68} \pm 0.72$ | 4.50                                                | 1.66                                                    |
| 0142830101 | 2003-11-30 | 162.015 | +81.547 | 92.9               | 526                    | 93.6               | 529                    | $7.51^{+0.49}_{-0.71} \pm 0.26$  | 0.5625            | $0.81^{+0.22}_{-0.17} \pm 0.72$ | 2.72                                                | 2.42                                                    |
| 0201550201 | 2004-02-13 | 162.286 | -16.709 | 28.7               | 576                    | 29.7               | 502                    | $2.52^{+0.89}_{-0.72} \pm 0.38$  | 0.5675            | $1.29^{+0.42}_{-0.39} \pm 0.11$ | 1.44                                                | 2.35                                                    |
| 0502020201 | 2007-06-22 | 162.512 | -72.072 | 35.1               | 154                    | 36.9               | 350                    | $1.88^{+0.90}_{-0.98} \pm 0.26$  | 0.5625            | $0.56 \pm 0.50 \pm 0.07$        | 2.46                                                | 2.51                                                    |
| 0502020101 | 2007-06-18 | 162.597 | -72.142 | 20.6               | 203                    | 22.2               | 344                    | $2.85^{+1.34}_{-1.20} \pm 0.60$  | 0.5725            | $0.43^{+0.71}_{-0.43} \pm 0.19$ | 1.54                                                | 2.27                                                    |
| 0556213401 | 2008-06-02 | 162.661 | +57.453 | 10.2               | 429                    | 10.3               | 590                    | $3.13^{+1.34}_{-0.53} \pm 1.30$  | 0.5675            | $0.48^{+0.68}_{-0.48} \pm 0.64$ | 1.01                                                | 1.67                                                    |
| 0200960101 | 2005-03-28 | 162.721 | +41.656 | 56.3               | 458                    | 56.0               | 471                    | $3.25^{+0.59}_{-0.46} \pm 0.49$  | 0.5675            | $0.29^{+0.30}_{-0.29} \pm 0.26$ | 1.32                                                | 1.55                                                    |
| 0560181001 | 2009-03-02 | 162.786 | +1.160  | 28.5               | 502                    | 28.9               | 591                    | $1.05^{+1.07}_{-1.05} \pm 0.57$  | 0.5525            | $1.19^{+0.52}_{-0.53} \pm 0.17$ | 1.08                                                | 1.74                                                    |
| 0112190101 | 2002-08-23 | 162.794 | -34.818 | 11.0               | 431                    | 11.8               | 577                    | $3.33^{+1.11}_{-1.25} \pm 0.50$  | 0.5625            | $1.18^{+0.60}_{-0.65} \pm 0.43$ | 2.49                                                | 2.30                                                    |
| 0201860301 | 2004-07-18 | 163.308 | -45.346 | 20.8               | 581                    | 20.9               | 589                    | $3.19^{+0.81}_{-0.89} \pm 0.30$  | 0.5575            | $1.18^{+0.44}_{-0.46} \pm 0.10$ | 2.03                                                | 1.59                                                    |
| 0201020201 | 2004-07-04 | 163.503 | -56.923 | 44.0               | 463                    | 45.6               | 485                    | $2.31^{+0.73}_{-0.60} \pm 0.18$  | 0.5625            | $0.36^{+0.34}_{-0.28} \pm 0.05$ | 1.37                                                | 2.20                                                    |
| 0201230301 | 2004-02-14 | 164.144 | -34.474 | 10.9               | 513                    | 10.7               | 515                    | $1.95^{+0.93}_{-1.03} \pm 0.55$  | 0.5625            | $1.02^{+0.50}_{-0.52} \pm 0.18$ | 1.62                                                | 1.69                                                    |
| 0143150301 | 2003-04-17 | 164.587 | +42.392 | 5.9                | 573                    | 6.0                | 580                    | $3.89^{+1.18}_{-1.56} \pm 0.40$  | 0.5725            | $0.42^{+0.71}_{-0.42} \pm 0.48$ | 1.44                                                | 2.37                                                    |
| 0143150601 | 2003-05-18 | 164.594 | +42.394 | 15.8               | 578                    | 16.1               | 578                    | $23.26^{+1.09}_{-1.23} \pm 0.62$ | 0.5675            | $3.05^{+0.52}_{-0.57} \pm 2.05$ | 4.97                                                | 1.76                                                    |
| 0109080801 | 2002-05-14 | 164.695 | +64.478 | 34.9               | 474                    | 34.7               | 470                    | $7.81^{+0.62}_{-0.68} \pm 0.27$  | 0.5675            | $0.59 \pm 0.32 \pm 0.74$        | 2.04                                                | 1.95                                                    |
| 0201130501 | 2004-11-15 | 165.010 | +44.364 | 44.2               | 295                    | 44.7               | 247                    | $5.06^{+0.87}_{-1.07} \pm 0.47$  | 0.5575            | $2.07^{+0.55}_{-0.49} \pm 0.18$ | 2.08                                                | 2.59                                                    |
| 0110660401 | 2000-11-23 | 165.095 | +66.599 | 10.0               | 519                    | 10.4               | 591                    | $6.67^{+0.90}_{-0.95} \pm 0.38$  | 0.5675            | $0.34^{+0.46}_{-0.34} \pm 0.65$ | 2.38                                                | 1.74                                                    |
| 0300170101 | 2006-02-19 | 165.238 | -31.433 | 21.3               | 422                    | 22.4               | 511                    | $2.62^{+0.79}_{-0.87} \pm 1.50$  | 0.5675            | $0.36^{+0.44}_{-0.36} \pm 0.36$ | 5.81                                                | 2.41                                                    |
| 0206340201 | 2004-04-23 | 165.505 | +52.435 | 17.4               | 463                    | 17.2               | 469                    | $6.95^{+0.87}_{-1.13} \pm 0.49$  | 0.5625            | $0.00^{+0.38}_{-0.00} \pm 1.01$ | 2.93                                                | 1.53                                                    |
| 0502220301 | 2007-10-22 | 165.745 | +36.257 | 69.0               | 452                    | 69.1               | 549                    | $2.61^{+0.55}_{-0.61} \pm 0.27$  | 0.5575            | $0.27^{+0.28}_{-0.27} \pm 0.07$ | 2.50                                                | 1.92                                                    |
| 0092800101 | 2001-10-30 | 165.749 | +36.259 | 15.6               | 503                    | 15.8               | 581                    | $4.63^{+0.73}_{-0.78} \pm 0.42$  | 0.5725            | $1.22^{+0.45}_{-0.43} \pm 0.79$ | 1.08                                                | 2.10                                                    |
| 0502220201 | 2007-10-06 | 165.759 | +36.259 | 49.0               | 475                    | 55.7               | 493                    | $1.48^{+0.80}_{-0.47} \pm 0.45$  | 0.5575            | $0.00^{+0.17}_{-0.00} \pm 0.00$ | 1.21                                                | 2.47                                                    |
| 0092800201 | 2002-04-28 | 165.763 | +36.223 | 65.8               | 566                    | 66.6               | 580                    | $4.23^{+0.33}_{-0.60} \pm 0.59$  | 0.5625            | $0.95^{+0.25}_{-0.20} \pm 0.35$ | 1.49                                                | 1.99                                                    |
| 0107860201 | 2001-05-08 | 165.788 | +65.445 | 17.5               | 499                    | 18.0               | 497                    | $6.16^{+0.40}_{-0.74} \pm 0.27$  | 0.5725            | $0.96 \pm 0.43 \pm 0.72$        | 1.37                                                | 1.54                                                    |
| 0109461701 | 2002-05-01 | 165.840 | +62.130 | 6.5                | 471                    | 6.4                | 476                    | $6.92^{+1.39}_{-1.32} \pm 0.35$  | 0.5675            | $0.07^{+0.75}_{-0.07} \pm 1.74$ | 1.24                                                | 1.42                                                    |
| 0502640201 | 2008-04-07 | 166.007 | +13.799 | 20.7               | 315                    | 19.3               | 400                    | $1.39^{+1.01}_{-0.92} \pm 0.21$  | 0.5725            | $0.74^{+0.56}_{-0.59} \pm 0.11$ | 1.74                                                | 2.39                                                    |
| 0404968601 | 2007-01-16 | 166.366 | -59.239 | 12.6               | 500                    | 12.3               | 515                    | $2.88^{+1.08}_{-1.17} \pm 0.51$  | 0.5475            | $1.16 \pm 0.54 \pm 0.14$        | 3.16                                                | 1.77                                                    |
| 0304070101 | 2005-11-01 | 166.398 | +63.649 | 9.9                | 417                    | 10.8               | 511                    | $4.38^{+1.28}_{-1.02} \pm 0.79$  | 0.5775            | $0.22^{+0.67}_{-0.22} \pm 0.30$ | 2.67                                                | 2.57                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0094780101 | 2000-09-01 | 166.440 | -23.265 | 29.2               | 565                    | 29.6               | 567                    | $3.78^{+0.70}_{-0.78} \pm 0.63$ | 0.5625             | $3.07^{+0.39}_{-0.41} \pm 0.13$ | 1.21                                                | 1.99                                              |
| 0404968501 | 2007-01-20 | 166.876 | -59.034 | 11.9               | 423                    | 12.8               | 585                    | $2.27^{+1.15}_{-0.91} \pm 1.14$ | 0.5675             | $0.38^{+0.56}_{-0.38} \pm 0.35$ | 1.11                                                | 2.12                                              |
| 0556210401 | 2008-10-15 | 166.882 | +45.200 | 13.1               | 409                    | 12.9               | 579                    | $2.72^{+1.14}_{-0.53} \pm 0.21$ | 0.5775             | $0.63^{+0.57}_{-0.58} \pm 0.27$ | 1.22                                                | 1.69                                              |
| 0148742101 | 2003-04-27 | 166.894 | +33.568 | 5.6                | 517                    | 5.7                | 592                    | $6.50^{+1.40}_{-1.39} \pm 0.28$ | 0.5625             | $0.92 \pm 0.72 \pm 0.77$        | 2.87                                                | 1.49                                              |
| 0411980201 | 2006-07-03 | 167.357 | -64.183 | 10.8               | 412                    | 11.1               | 505                    | $3.97^{+1.19}_{-1.08} \pm 1.12$ | 0.5725             | $0.67^{+0.67}_{-0.65} \pm 0.47$ | 2.31                                                | 2.56                                              |
| 0553911901 | 2008-07-04 | 167.384 | -58.791 | 10.9               | 414                    | 10.9               | 575                    | $1.66^{+0.87}_{-0.68} \pm 0.55$ | 0.5775             | $0.00^{+0.40}_{-0.00} \pm 0.00$ | 2.52                                                | 1.68                                              |
| 0404968001 | 2007-01-10 | 167.537 | -59.192 | 14.1               | 428                    | 14.1               | 512                    | $3.55^{+0.94}_{-0.90} \pm 0.25$ | 0.5725             | $0.26^{+0.56}_{-0.26} \pm 0.50$ | 2.18                                                | 1.51                                              |
| 0301340101 | 2006-04-12 | 167.648 | +37.517 | 12.8               | 491                    | 12.9               | 515                    | $3.39^{+1.23}_{-1.07} \pm 0.29$ | 0.5675             | $1.10 \pm 0.67 \pm 0.32$        | 0.83                                                | 2.11                                              |
| 0404967601 | 2007-01-10 | 167.694 | -59.556 | 10.4               | 428                    | 11.2               | 514                    | $2.87^{+1.41}_{-1.02} \pm 0.33$ | 0.5625             | $0.00^{+0.46}_{-0.00} \pm 0.01$ | 1.94                                                | 2.25                                              |
| 0148500201 | 2003-07-23 | 167.757 | -57.964 | 11.2               | 513                    | 11.2               | 591                    | $3.02^{+1.40}_{-1.07} \pm 0.52$ | 0.5625             | $2.00^{+0.76}_{-0.58} \pm 0.24$ | 3.41                                                | 1.74                                              |
| 0553911401 | 2008-07-03 | 167.851 | -59.882 | 21.3               | 249                    | 23.5               | 400                    | $1.57^{+1.14}_{-1.12} \pm 1.00$ | 0.5475             | $0.15^{+0.57}_{-0.15} \pm 0.27$ | 2.04                                                | 2.23                                              |
| 0404968301 | 2007-01-12 | 167.881 | -58.619 | 8.9                | 503                    | 8.6                | 518                    | $1.44^{+1.31}_{-1.13} \pm 0.34$ | 0.5675             | $0.26^{+0.67}_{-0.26} \pm 0.38$ | 0.47                                                | 1.77                                              |
| 0205370201 | 2004-05-10 | 168.040 | +65.136 | 26.8               | 504                    | 27.8               | 581                    | $5.68 \pm 0.63 \pm 0.21$        | 0.5675             | $0.75^{+0.35}_{-0.34} \pm 0.64$ | 1.16                                                | 1.89                                              |
| 0404967901 | 2007-01-10 | 168.041 | -58.983 | 14.2               | 426                    | 14.0               | 514                    | $2.69^{+1.10}_{-1.11} \pm 0.21$ | 0.5525             | $0.72^{+0.53}_{-0.52} \pm 0.06$ | 2.20                                                | 1.84                                              |
| 0203540601 | 2004-08-25 | 168.067 | -19.150 | 28.5               | 580                    | 28.8               | 587                    | $3.36^{+0.56}_{-0.56} \pm 0.06$ | 0.5625             | $1.53^{+0.32}_{-0.42} \pm 0.14$ | 2.73                                                | 1.66                                              |
| 0147110201 | 2003-07-24 | 168.071 | -57.643 | 10.3               | 587                    | 10.1               | 593                    | $3.04^{+0.93}_{-0.88} \pm 0.71$ | 0.5725             | $1.57^{+0.56}_{-0.68} \pm 0.61$ | 3.59                                                | 1.62                                              |
| 0201040101 | 2004-10-22 | 168.111 | +55.051 | 27.1               | 591                    | 28.4               | 518                    | $7.62^{+1.26}_{-0.45} \pm 0.88$ | 0.5625             | $0.70^{+0.49}_{-0.26} \pm 0.34$ | 2.41                                                | 2.00                                              |
| 0553911601 | 2008-07-03 | 168.199 | -59.309 | 12.5               | 427                    | 12.7               | 587                    | $1.83^{+1.19}_{-0.78} \pm 0.55$ | 0.5725             | $0.00^{+0.34}_{-0.00} \pm 0.00$ | 2.12                                                | 1.56                                              |
| 0203542001 | 2004-09-12 | 168.218 | -16.321 | 29.8               | 571                    | 30.2               | 468                    | $1.48^{+0.60}_{-0.57} \pm 0.22$ | 0.5525             | $0.14^{+0.31}_{-0.14} \pm 0.08$ | 0.21                                                | 1.90                                              |
| 0200370101 | 2004-08-15 | 168.334 | -14.914 | 112.4              | 571                    | 115.2              | 495                    | $2.04^{+0.64}_{-0.58} \pm 0.36$ | 0.5625             | $0.38^{+0.30}_{-0.29} \pm 0.14$ | 1.22                                                | 2.37                                              |
| 0404967101 | 2007-01-08 | 168.366 | -59.709 | 10.5               | 425                    | 11.3               | 514                    | $3.76^{+1.00}_{-1.21} \pm 0.64$ | 0.5575             | $0.62^{+0.56}_{-0.57} \pm 0.35$ | 1.86                                                | 1.34                                              |
| 0404967801 | 2007-01-10 | 168.538 | -58.772 | 14.0               | 427                    | 13.6               | 510                    | $3.27^{+0.81}_{-1.25} \pm 0.60$ | 0.5625             | $0.38^{+0.57}_{-0.38} \pm 0.17$ | 2.19                                                | 1.42                                              |
| 0147110101 | 2003-07-24 | 168.550 | -57.432 | 10.9               | 510                    | 11.1               | 591                    | $2.59^{+0.79}_{-0.80} \pm 0.38$ | 0.5675             | $1.22^{+0.48}_{-0.51} \pm 0.50$ | 4.58                                                | 1.71                                              |
| 0400070301 | 2006-11-01 | 168.597 | +28.401 | 19.2               | 310                    | 18.8               | 398                    | $0.93^{+0.98}_{-0.93} \pm 0.20$ | 0.5725             | $0.58 \pm 0.58 \pm 0.09$        | 2.40                                                | 2.17                                              |
| 0404966801 | 2007-01-06 | 168.598 | -60.045 | 14.0               | 413                    | 14.0               | 501                    | $2.06^{+0.83}_{-0.79} \pm 0.30$ | 0.5725             | $0.57^{+0.59}_{-0.52} \pm 0.75$ | 1.23                                                | 1.37                                              |
| 0400070201 | 2006-09-30 | 168.602 | +28.401 | 12.0               | 378                    | 12.9               | 399                    | $5.02^{+1.87}_{-1.19} \pm 0.65$ | 0.5575             | $0.00^{+0.66}_{-0.00} \pm 0.04$ | 6.99                                                | 2.25                                              |
| 0103862101 | 2001-04-26 | 168.608 | +28.364 | 5.7                | 473                    | 5.6                | 397                    | $5.13^{+1.76}_{-1.55} \pm 1.25$ | 0.5475             | $1.61^{+0.87}_{-0.80} \pm 0.52$ | 1.19                                                | 1.77                                              |
| 0502091001 | 2008-04-26 | 168.609 | +28.364 | 61.6               | 313                    | 62.2               | 471                    | $2.26^{+0.61}_{-0.55} \pm 1.05$ | 0.5675             | $0.00^{+0.14}_{-0.00} \pm 0.00$ | 1.34                                                | 2.13                                              |
| 0404967401 | 2007-01-08 | 168.701 | -59.134 | 14.2               | 427                    | 13.7               | 513                    | $4.65^{+1.32}_{-1.95} \pm 1.31$ | 0.5475             | $1.23^{+0.63}_{-0.48} \pm 0.42$ | 2.33                                                | 1.36                                              |
| 0086360301 | 2001-03-11 | 168.711 | -15.484 | 34.3               | 555                    | 33.7               | 563                    | $3.13^{+0.56}_{-0.57} \pm 0.24$ | 0.5625             | $0.10^{+0.26}_{-0.10} \pm 0.06$ | 1.78                                                | 2.49                                              |
| 0404967001 | 2007-01-08 | 168.767 | -59.433 | 14.2               | 428                    | 14.0               | 514                    | $2.74^{+0.82}_{-0.87} \pm 0.18$ | 0.5775             | $0.49^{+0.58}_{-0.49} \pm 0.66$ | 1.72                                                | 1.48                                              |
| 0401270401 | 2007-04-18 | 168.871 | +32.951 | 10.2               | 496                    | 10.7               | 585                    | $1.94^{+1.20}_{-1.14} \pm 1.14$ | 0.5475             | $0.27^{+0.57}_{-0.27} \pm 0.41$ | 2.25                                                | 1.94                                              |
| 0203840101 | 2004-01-19 | 168.965 | -65.882 | 9.2                | 583                    | 9.4                | 514                    | $2.27^{+0.98}_{-0.93} \pm 0.14$ | 0.5725             | $0.13^{+0.56}_{-0.13} \pm 0.30$ | 2.04                                                | 1.72                                              |
| 0112372001 | 2003-01-07 | 169.015 | -59.636 | 26.0               | 589                    | 25.4               | 589                    | $3.54^{+0.59}_{-0.55} \pm 0.65$ | 0.5625             | $0.49^{+0.31}_{-0.29} \pm 0.45$ | 2.55                                                | 1.86                                              |
| 0112371701 | 2000-08-08 | 169.020 | -59.598 | 17.2               | 581                    | 14.5               | 590                    | $3.72^{+0.82}_{-0.83} \pm 0.32$ | 0.5625             | $0.42^{+0.41}_{-0.39} \pm 0.25$ | 1.20                                                | 2.46                                              |
| 0404967701 | 2007-01-10 | 169.030 | -58.559 | 13.1               | 426                    | 12.7               | 515                    | $2.11^{+1.01}_{-1.00} \pm 0.26$ | 0.5575             | $0.78 \pm 0.54 \pm 0.09$        | 2.11                                                | 1.62                                              |
| 0112370601 | 2002-08-12 | 169.161 | -59.993 | 29.5               | 588                    | 29.9               | 514                    | $6.17^{+0.43}_{-0.78} \pm 1.24$ | 0.5625             | $1.85^{+0.23}_{-0.45} \pm 0.50$ | 1.91                                                | 1.91                                              |
| 0037981101 | 2002-07-15 | 169.180 | -57.583 | 11.6               | 508                    | 11.5               | 512                    | $5.62 \pm 0.89 \pm 0.53$        | 0.5675             | $1.68 \pm 0.53 \pm 1.03$        | 6.14                                                | 1.59                                              |
| 0404966701 | 2006-07-04 | 169.196 | -60.300 | 9.6                | 352                    | 9.5                | 512                    | $4.51^{+1.45}_{-0.58} \pm 0.65$ | 0.5675             | $0.26^{+0.88}_{-0.26} \pm 0.31$ | 4.67                                                | 1.85                                              |
| 0404967301 | 2007-01-08 | 169.198 | -58.921 | 13.0               | 424                    | 13.3               | 512                    | $3.19^{+0.99}_{-0.90} \pm 0.38$ | 0.5725             | $0.21^{+0.61}_{-0.21} \pm 0.48$ | 2.13                                                | 1.49                                              |
| 0404966901 | 2007-01-07 | 169.263 | -59.219 | 5.6                | 425                    | 6.0                | 513                    | $2.15^{+1.52}_{-1.35} \pm 0.31$ | 0.5675             | $0.00^{+0.47}_{-0.00} \pm 0.00$ | 1.17                                                | 1.58                                              |
| 0553911501 | 2009-01-01 | 169.265 | -59.220 | 12.8               | 425                    | 13.0               | 587                    | $3.11^{+1.07}_{-0.93} \pm 0.23$ | 0.5675             | $0.27^{+0.60}_{-0.27} \pm 0.38$ | 0.83                                                | 1.16                                              |
| 0404960301 | 2006-07-06 | 169.488 | -57.006 | 5.3                | 425                    | 5.6                | 510                    | $2.54^{+1.83}_{-1.47} \pm 0.75$ | 0.5575             | $0.00^{+0.45}_{-0.00} \pm 0.00$ | 1.17                                                | 2.15                                              |
| 0037982501 | 2003-01-25 | 169.511 | -58.344 | 9.7                | 587                    | 10.4               | 587                    | $2.60^{+1.33}_{-1.02} \pm 0.17$ | 0.5475             | $1.46^{+0.51}_{-0.63} \pm 0.55$ | 1.94                                                | 1.86                                              |
| 0200480401 | 2005-01-28 | 169.519 | -54.635 | 12.8               | 583                    | 12.8               | 590                    | $3.25^{+1.36}_{-0.92} \pm 0.35$ | 0.5575             | $0.66^{+0.58}_{-0.50} \pm 0.16$ | 2.59                                                | 2.33                                              |
| 0112370401 | 2000-08-06 | 169.619 | -59.340 | 10.3               | 585                    | 10.7               | 590                    | $2.94^{+0.93}_{-0.89} \pm 0.27$ | 0.5625             | $0.38^{+0.46}_{-0.38} \pm 0.20$ | 1.55                                                | 2.26                                              |
| 0146990201 | 2003-04-25 | 169.622 | +60.666 | 10.4               | 586                    | 10.5               | 509                    | $5.34^{+1.08}_{-1.01} \pm 0.44$ | 0.5625             | $1.02^{+0.59}_{-0.50} \pm 0.74$ | 1.91                                                | 1.94                                              |
| 0037981201 | 2002-07-15 | 169.654 | -57.368 | 10.0               | 576                    | 10.0               | 507                    | $8.60^{+1.17}_{-1.72} \pm 0.85$ | 0.5625             | $2.04^{+0.61}_{-0.74} \pm 1.17$ | 7.81                                                | 1.62                                              |
| 0037982401 | 2003-01-25 | 169.683 | -58.705 | 17.6               | 587                    | 17.5               | 588                    | $1.80^{+0.61}_{-0.70} \pm 0.30$ | 0.5675             | $0.89^{+0.44}_{-0.36} \pm 0.58$ | 1.76                                                | 1.69                                              |
| 0556213601 | 2008-08-08 | 169.747 | -52.929 | 11.5               | 354                    | 11.3               | 592                    | $1.68^{+1.32}_{-1.21} \pm 0.55$ | 0.5475             | $0.00^{+0.56}_{-0.00} \pm 0.33$ | 2.26                                                | 1.51                                              |
| 0112370101 | 2000-07-31 | 169.763 | -59.733 | 33.8               | 580                    | 36.7               | 580                    | $3.77^{+0.50}_{-0.48} \pm 0.27$ | 0.5625             | $1.53 \pm 0.27 \pm 0.13$        | 2.10                                                | 2.30                                              |
| 0112371001 | 2000-08-02 | 169.763 | -59.732 | 39.2               | 573                    | 39.2               | 506                    | $3.69^{+0.43}_{-0.48} \pm 0.98$ | 0.5725             | $0.58^{+0.30}_{-0.36} \pm 0.16$ | 2.68                                                | 2.11                                              |
| 0404966501 | 2006-08-09 | 169.896 | -60.446 | 8.8                | 419                    | 9.1                | 590                    | $2.99^{+1.50}_{-1.18} \pm 2.01$ | 0.5625             | $0.39^{+0.72}_{-0.39} \pm 0.50$ | 1.03                                                | 2.54                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0112370701 | 2002-08-08 | 169.913 | -60.127 | 45.9               | 587                    | 46.3               | 513                    | $6.90^{+0.59}_{-0.38} \pm 0.21$  | 0.5675             | $1.78^{+0.32}_{-0.22} \pm 0.89$ | 6.60                                                | 1.53                                              |
| 0037981801 | 2002-08-16 | 169.958 | -56.789 | 15.5               | 503                    | 15.1               | 511                    | $3.40^{+1.24}_{-0.80} \pm 0.28$  | 0.5675             | $1.24^{+0.60}_{-0.48} \pm 0.32$ | 0.93                                                | 2.14                                              |
| 0553910201 | 2008-08-06 | 170.123 | -57.151 | 10.7               | 388                    | 11.0               | 535                    | $1.37^{+0.87}_{-0.90} \pm 0.16$  | 0.5825             | $0.00^{+0.35}_{-0.00} \pm 0.00$ | 2.17                                                | 2.52                                              |
| 0404960601 | 2006-07-07 | 170.168 | -58.451 | 9.4                | 425                    | 9.6                | 516                    | $2.29^{+1.40}_{-0.85} \pm 0.35$  | 0.5775             | $0.28^{+0.68}_{-0.28} \pm 0.29$ | 0.84                                                | 1.92                                              |
| 0037980801 | 2002-07-13 | 170.292 | -57.512 | 9.5                | 583                    | 10.0               | 515                    | $4.82^{+0.69}_{-1.45} \pm 0.72$  | 0.5675             | $0.87^{+0.67}_{-0.54} \pm 0.69$ | 1.72                                                | 1.56                                              |
| 0148742401 | 2003-06-30 | 170.347 | +77.117 | 6.6                | 511                    | 6.8                | 514                    | $6.25^{+1.54}_{-1.46} \pm 0.85$  | 0.5575             | $1.62^{+0.78}_{-0.74} \pm 0.55$ | 1.29                                                | 2.56                                              |
| 0304071601 | 2005-12-11 | 170.351 | +66.150 | 7.3                | 499                    | 7.1                | 589                    | $4.30^{+1.26}_{-1.09} \pm 0.31$  | 0.5675             | $0.61^{+0.66}_{-0.61} \pm 0.69$ | 1.76                                                | 1.38                                              |
| 0037982101 | 2002-08-14 | 170.351 | -58.811 | 13.9               | 588                    | 14.1               | 513                    | $2.46^{+0.76}_{-0.71} \pm 0.40$  | 0.5675             | $0.43^{+0.45}_{-0.43} \pm 0.68$ | 0.52                                                | 2.59                                              |
| 0112370301 | 2000-08-04 | 170.359 | -59.471 | 33.4               | 577                    | 34.5               | 512                    | $2.93^{+0.50}_{-0.47} \pm 0.40$  | 0.5725             | $0.57 \pm 0.27 \pm 0.25$        | 2.64                                                | 1.79                                              |
| 0203541101 | 2004-08-18 | 170.379 | -15.939 | 31.3               | 508                    | 31.3               | 587                    | $3.11^{+0.58}_{-0.65} \pm 0.24$  | 0.5625             | $0.61^{+0.31}_{-0.37} \pm 0.24$ | 3.52                                                | 1.55                                              |
| 0037981901 | 2002-08-16 | 170.416 | -56.572 | 11.9               | 504                    | 12.3               | 511                    | $3.46^{+0.80}_{-0.78} \pm 0.35$  | 0.5675             | $0.85^{+0.47}_{-0.46} \pm 0.38$ | 0.93                                                | 2.27                                              |
| 0306370601 | 2005-04-24 | 170.477 | +53.178 | 9.4                | 427                    | 10.5               | 590                    | $3.79^{+1.33}_{-1.20} \pm 0.49$  | 0.5625             | $0.27^{+0.59}_{-0.27} \pm 0.12$ | 1.41                                                | 2.30                                              |
| 0112370801 | 2002-08-09 | 170.515 | -59.865 | 33.8               | 516                    | 34.4               | 513                    | $6.18^{+0.41}_{-0.68} \pm 0.63$  | 0.5675             | $1.45^{+0.37}_{-0.25} \pm 1.03$ | 3.76                                                | 1.54                                              |
| 0037982001 | 2002-08-14 | 170.535 | -59.172 | 16.1               | 586                    | 16.2               | 508                    | $3.08^{+0.71}_{-0.76} \pm 0.34$  | 0.5625             | $0.47^{+0.40}_{-0.41} \pm 0.30$ | 0.65                                                | 2.00                                              |
| 0553910901 | 2008-07-04 | 170.604 | -60.471 | 22.7               | 427                    | 23.0               | 585                    | $2.34^{+0.63}_{-0.60} \pm 0.26$  | 0.5875             | $0.10^{+0.51}_{-0.10} \pm 0.39$ | 2.72                                                | 1.19                                              |
| 0109520101 | 2002-01-29 | 170.643 | -58.270 | 25.1               | 580                    | 24.9               | 590                    | $3.21^{+0.52}_{-0.61} \pm 0.25$  | 0.5675             | $0.72^{+0.30}_{-0.29} \pm 0.40$ | 0.85                                                | 1.70                                              |
| 0037980901 | 2002-01-27 | 170.754 | -57.330 | 13.6               | 507                    | 13.5               | 585                    | $2.33^{+0.85}_{-0.82} \pm 0.43$  | 0.5625             | $0.26^{+0.44}_{-0.26} \pm 0.39$ | 1.36                                                | 1.65                                              |
| 0404966201 | 2006-07-04 | 170.800 | -60.830 | 9.8                | 355                    | 9.6                | 516                    | $2.94^{+1.22}_{-1.14} \pm 0.50$  | 0.5725             | $0.12^{+0.73}_{-0.12} \pm 0.47$ | 4.66                                                | 1.63                                              |
| 0109520601 | 2002-01-31 | 170.826 | -58.630 | 21.4               | 579                    | 21.6               | 587                    | $3.63^{+0.75}_{-0.64} \pm 0.21$  | 0.5675             | $2.06^{+0.37}_{-0.38} \pm 0.12$ | 1.48                                                | 2.36                                              |
| 0404966601 | 2007-01-06 | 170.837 | -59.584 | 13.0               | 424                    | 13.2               | 513                    | $3.07 \pm 0.99 \pm 0.11$         | 0.5675             | $0.10^{+0.53}_{-0.10} \pm 0.43$ | 1.29                                                | 1.15                                              |
| 0553560801 | 2009-04-29 | 170.874 | +48.873 | 6.1                | 503                    | 6.2                | 586                    | $1.74^{+1.08}_{-1.09} \pm 3.52$  | 0.5925             | $0.60^{+0.84}_{-0.60} \pm 1.24$ | 2.97                                                | 1.93                                              |
| 0210490101 | 2005-01-01 | 170.925 | -58.172 | 78.4               | 574                    | 79.0               | 502                    | $1.80 \pm 0.38 \pm 0.30$         | 0.5675             | $0.88 \pm 0.23 \pm 0.11$        | 2.33                                                | 2.15                                              |
| 0112680801 | 2002-01-31 | 171.012 | -58.990 | 12.3               | 584                    | 13.1               | 591                    | $4.17^{+0.81}_{-0.76} \pm 0.41$  | 0.5725             | $2.05^{+0.51}_{-0.45} \pm 0.45$ | 3.40                                                | 2.14                                              |
| 0404966301 | 2006-07-31 | 171.024 | -59.953 | 11.0               | 353                    | 10.9               | 514                    | $4.02^{+1.06}_{-1.29} \pm 0.29$  | 0.5675             | $0.20^{+0.62}_{-0.20} \pm 0.92$ | 5.11                                                | 1.51                                              |
| 0404965701 | 2006-07-14 | 171.105 | -60.250 | 13.5               | 349                    | 13.4               | 509                    | $2.65^{+1.20}_{-0.58} \pm 1.45$  | 0.5575             | $1.30 \pm 0.61 \pm 0.51$        | 2.50                                                | 2.16                                              |
| 0110661101 | 2000-08-20 | 171.113 | -37.358 | 11.2               | 588                    | 11.2               | 589                    | $1.98 \pm 0.73 \pm 0.15$         | 0.5625             | $0.73^{+0.37}_{-0.36} \pm 0.04$ | 1.53                                                | 1.62                                              |
| 0112680301 | 2003-01-19 | 171.118 | -58.050 | 20.8               | 588                    | 19.9               | 588                    | $2.87 \pm 0.59 \pm 0.35$         | 0.5675             | $0.85 \pm 0.35 \pm 0.39$        | 2.87                                                | 1.75                                              |
| 0402780701 | 2007-03-28 | 171.132 | +32.731 | 13.0               | 428                    | 13.7               | 585                    | $1.04^{+1.03}_{-1.04} \pm 0.32$  | 0.5625             | $0.05^{+0.54}_{-0.05} \pm 0.14$ | 1.11                                                | 2.16                                              |
| 0037981001 | 2002-07-15 | 171.214 | -57.071 | 12.2               | 577                    | 12.1               | 512                    | $5.32^{+1.05}_{-1.06} \pm 0.35$  | 0.5675             | $2.30^{+0.62}_{-0.55} \pm 0.78$ | 5.70                                                | 1.67                                              |
| 0147111301 | 2003-07-24 | 171.217 | -59.307 | 11.8               | 512                    | 12.0               | 589                    | $3.68^{+0.89}_{-1.02} \pm 0.26$  | 0.5675             | $0.98^{+0.49}_{-0.64} \pm 0.84$ | 1.87                                                | 1.35                                              |
| 0553910101 | 2008-08-06 | 171.400 | -57.431 | 10.7               | 430                    | 11.3               | 591                    | $1.50^{+0.77}_{-0.79} \pm 0.37$  | 0.5975             | $0.00^{+0.53}_{-0.00} \pm 0.06$ | 2.31                                                | 1.59                                              |
| 0147111401 | 2003-07-24 | 171.415 | -59.665 | 10.3               | 583                    | 10.4               | 589                    | $6.03^{+1.02}_{-0.76} \pm 0.30$  | 0.5725             | $1.44^{+0.60}_{-0.47} \pm 0.80$ | 1.97                                                | 1.75                                              |
| 0203050701 | 2004-05-12 | 171.479 | +46.502 | 7.5                | 511                    | 7.8                | 589                    | $6.25^{+1.35}_{-1.20} \pm 0.68$  | 0.5575             | $1.16^{+0.63}_{-0.62} \pm 0.67$ | 2.40                                                | 1.61                                              |
| 0109520501 | 2001-07-03 | 171.490 | -58.730 | 23.6               | 515                    | 23.6               | 514                    | $3.93^{+0.59}_{-0.60} \pm 0.45$  | 0.5625             | $0.63^{+0.31}_{-0.34} \pm 0.47$ | 1.77                                                | 1.62                                              |
| 0112680201 | 2002-07-14 | 171.583 | -57.791 | 7.4                | 580                    | 7.5                | 512                    | $3.33^{+1.09}_{-0.89} \pm 0.28$  | 0.5725             | $0.55^{+0.65}_{-0.55} \pm 0.88$ | 1.01                                                | 1.64                                              |
| 0106460101 | 2000-11-06 | 171.619 | +48.316 | 40.9               | 515                    | 38.4               | 440                    | $9.19^{+0.63}_{-0.59} \pm 1.20$  | 0.5675             | $2.78^{+0.35}_{-0.33} \pm 1.26$ | 3.29                                                | 2.27                                              |
| 0300630101 | 2005-04-01 | 171.649 | +7.266  | 12.5               | 417                    | 13.2               | 589                    | $1.96^{+0.81}_{-0.96} \pm 0.07$  | 0.5675             | $0.52^{+0.45}_{-0.52} \pm 0.02$ | 2.15                                                | 2.41                                              |
| 0111110501 | 2001-07-04 | 171.684 | -59.089 | 21.5               | 508                    | 21.5               | 510                    | $4.43^{+0.48}_{-0.63} \pm 0.62$  | 0.5725             | $0.43^{+0.30}_{-0.35} \pm 0.53$ | 1.52                                                | 1.51                                              |
| 0112681001 | 2002-01-30 | 171.770 | -58.186 | 19.9               | 507                    | 20.1               | 585                    | $3.04^{+1.20}_{-0.41} \pm 0.36$  | 0.5675             | $0.60^{+0.37}_{-0.45} \pm 0.26$ | 1.71                                                | 2.07                                              |
| 0553911101 | 2008-08-06 | 171.811 | -60.387 | 20.8               | 427                    | 21.2               | 587                    | $2.27^{+0.82}_{-0.66} \pm 0.09$  | 0.5675             | $0.49^{+0.42}_{-0.39} \pm 0.41$ | 2.86                                                | 1.46                                              |
| 0037980501 | 2002-01-25 | 171.854 | -57.245 | 15.2               | 580                    | 15.4               | 589                    | $3.29^{+0.77}_{-0.62} \pm 0.30$  | 0.5625             | $0.26^{+0.37}_{-0.26} \pm 0.48$ | 1.93                                                | 1.54                                              |
| 0404960401 | 2006-07-06 | 171.884 | -59.447 | 10.9               | 412                    | 10.8               | 508                    | $3.18^{+1.13}_{-1.08} \pm 0.88$  | 0.5675             | $0.54^{+0.64}_{-0.54} \pm 0.36$ | 1.01                                                | 1.78                                              |
| 0203541501 | 2005-02-09 | 171.901 | -14.957 | 18.9               | 581                    | 18.5               | 508                    | $1.53^{+0.69}_{-0.66} \pm 0.18$  | 0.5625             | $0.41 \pm 0.35 \pm 0.07$        | 2.21                                                | 1.87                                              |
| 0404960501 | 2006-07-06 | 171.964 | -58.508 | 9.7                | 495                    | 10.4               | 516                    | $2.47^{+0.97}_{-0.86} \pm 1.09$  | 0.5825             | $0.25^{+0.65}_{-0.25} \pm 0.52$ | 0.78                                                | 1.78                                              |
| 0112680101 | 2002-01-28 | 172.043 | -57.604 | 23.5               | 510                    | 23.8               | 584                    | $3.04^{+0.54}_{-0.56} \pm 0.26$  | 0.5675             | $0.47^{+0.31}_{-0.32} \pm 0.13$ | 1.00                                                | 1.74                                              |
| 0401790101 | 2007-03-18 | 172.088 | -11.015 | 9.7                | 484                    | 9.9                | 505                    | $0.96^{+1.14}_{-0.96} \pm 0.42$  | 0.5475             | $0.54^{+0.56}_{-0.54} \pm 0.10$ | 1.25                                                | 1.82                                              |
| 0111200101 | 2000-07-29 | 172.105 | -51.933 | 31.7               | 439                    | 32.5               | 437                    | $4.77^{+0.67}_{-0.73} \pm 0.23$  | 0.5675             | $2.40^{+0.47}_{-0.44} \pm 0.60$ | 5.02                                                | 2.53                                              |
| 0111200201 | 2000-07-30 | 172.105 | -51.933 | 28.3               | 439                    | 27.0               | 437                    | $7.88^{+0.94}_{-0.88} \pm 0.69$  | 0.5625             | $3.52^{+0.53}_{-0.49} \pm 0.60$ | 1.74                                                | 2.50                                              |
| 0111110401 | 2001-07-03 | 172.163 | -58.866 | 26.4               | 518                    | 26.3               | 516                    | $3.93^{+0.74}_{-0.61} \pm 0.39$  | 0.5625             | $0.88^{+0.33}_{-0.28} \pm 0.51$ | 1.59                                                | 1.64                                              |
| 0109520301 | 2002-02-02 | 172.430 | -58.319 | 20.9               | 582                    | 21.3               | 588                    | $7.67^{+0.69}_{-0.64} \pm 0.71$  | 0.5675             | $4.05^{+0.50}_{-0.36} \pm 0.63$ | 5.17                                                | 1.94                                              |
| 0101440801 | 2001-09-21 | 172.516 | -7.934  | 116.3              | 549                    | 118.3              | 492                    | $3.18^{+0.48}_{-0.46} \pm 0.50$  | 0.5625             | $0.77 \pm 0.23 \pm 0.27$        | 4.25                                                | 2.05                                              |
| 0404965401 | 2006-07-11 | 172.571 | -59.579 | 13.9               | 416                    | 14.4               | 439                    | $10.81^{+1.73}_{-1.17} \pm 0.58$ | 0.5675             | $1.03^{+0.57}_{-0.58} \pm 1.01$ | 6.17                                                | 2.04                                              |
| 0111110301 | 2001-07-03 | 172.633 | -58.639 | 20.4               | 591                    | 19.9               | 516                    | $5.13^{+0.66}_{-0.63} \pm 0.34$  | 0.5625             | $1.35^{+0.36}_{-0.35} \pm 0.78$ | 3.14                                                | 1.43                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}^{\text{2-5}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|----------------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                           |
| 0112680401 | 2002-02-02 | 172.692 | -57.736 | 21.7               | 507                    | 21.9               | 588                    | $6.70^{+0.57}_{-0.74} \pm 0.60$ | 0.5675             | $2.65^{+0.36}_{-0.43} \pm 0.68$ | 6.92                                                | 1.68                                                           |
| 0203541801 | 2004-08-13 | 172.797 | -14.421 | 26.3               | 501                    | 26.2               | 584                    | $2.75^{+0.42}_{-0.46} \pm 0.20$ | 0.5775             | $0.63^{+0.25}_{-0.32} \pm 0.15$ | 5.37                                                | 1.57                                                           |
| 0553910501 | 2008-08-09 | 172.844 | -58.997 | 11.3               | 422                    | 11.1               | 589                    | $3.99^{+1.01}_{-1.18} \pm 0.48$ | 0.5625             | $0.33^{+0.53}_{-0.33} \pm 0.29$ | 9.27                                                | 1.33                                                           |
| 0203541901 | 2004-08-14 | 172.888 | -14.852 | 24.8               | 582                    | 25.1               | 590                    | $3.27^{+0.48}_{-0.27} \pm 0.18$ | 0.5675             | $0.25^{+0.26}_{-0.25} \pm 0.11$ | 3.81                                                | 1.76                                                           |
| 0109520201 | 2002-01-29 | 172.893 | -58.093 | 23.8               | 503                    | 23.9               | 584                    | $2.79^{+0.53}_{-0.51} \pm 1.61$ | 0.5725             | $0.64^{+0.35}_{-0.31} \pm 0.88$ | 0.89                                                | 1.78                                                           |
| 0112300101 | 2002-07-13 | 173.017 | -70.337 | 17.4               | 525                    | 18.0               | 463                    | $4.59^{+0.90}_{-0.88} \pm 0.96$ | 0.5625             | $1.85^{+0.50}_{-0.52} \pm 0.85$ | 1.76                                                | 2.33                                                           |
| 0404965301 | 2006-07-11 | 173.048 | -59.353 | 11.2               | 420                    | 11.1               | 513                    | $6.43^{+1.27}_{-1.32} \pm 0.76$ | 0.5675             | $1.56^{+0.60}_{-0.61} \pm 0.89$ | 5.13                                                | 2.00                                                           |
| 0553440101 | 2008-05-07 | 173.086 | +43.961 | 9.3                | 351                    | 9.6                | 514                    | $3.58^{+1.39}_{-1.32} \pm 0.89$ | 0.5625             | $0.57^{+0.71}_{-0.57} \pm 0.39$ | 1.39                                                | 1.65                                                           |
| 0111110701 | 2001-08-14 | 173.104 | -58.412 | 10.3               | 514                    | 10.6               | 590                    | $1.45^{+0.73}_{-0.70} \pm 1.44$ | 0.5925             | $0.44^{+0.59}_{-0.44} \pm 0.87$ | 0.77                                                | 1.96                                                           |
| 0404969201 | 2006-07-26 | 173.307 | -58.769 | 6.3                | 420                    | 6.7                | 516                    | $5.19^{+1.54}_{-1.48} \pm 0.11$ | 0.5625             | $0.22^{+0.81}_{-0.22} \pm 0.04$ | 2.83                                                | 2.34                                                           |
| 0553910401 | 2008-08-06 | 173.311 | -58.770 | 10.8               | 427                    | 10.8               | 590                    | $2.61^{+1.29}_{-1.19} \pm 1.04$ | 0.5475             | $0.01^{+0.61}_{-0.01} \pm 0.44$ | 1.67                                                | 1.80                                                           |
| 0109540101 | 2002-12-24 | 173.355 | -70.588 | 48.8               | 384                    | 49.8               | 385                    | $3.11^{+0.63}_{-0.73} \pm 0.51$ | 0.5625             | $1.02^{+0.33}_{-0.38} \pm 0.81$ | 2.93                                                | 2.04                                                           |
| 0501500101 | 2008-02-22 | 173.510 | -13.706 | 17.4               | 414                    | 18.4               | 510                    | $1.18^{+0.95}_{-0.84} \pm 0.18$ | 0.5525             | $0.00^{+0.36}_{-0.00} \pm 0.00$ | 1.46                                                | 1.63                                                           |
| 0404965201 | 2006-07-11 | 173.518 | -59.125 | 11.0               | 441                    | 11.0               | 482                    | $5.80^{+0.68}_{-1.22} \pm 1.16$ | 0.5625             | $2.02^{+0.65}_{-0.66} \pm 0.58$ | 2.17                                                | 1.86                                                           |
| 0406610501 | 2007-05-04 | 173.552 | +65.922 | 14.6               | 344                    | 14.7               | 439                    | $4.31^{+1.65}_{-1.08} \pm 2.29$ | 0.5675             | $0.00^{+0.31}_{-0.00} \pm 0.27$ | 1.49                                                | 2.15                                                           |
| 0111110101 | 2001-07-06 | 173.552 | -58.184 | 17.8               | 442                    | 18.2               | 514                    | $3.05^{+1.01}_{-0.79} \pm 0.31$ | 0.5525             | $0.28^{+0.40}_{-0.28} \pm 0.25$ | 1.50                                                | 1.90                                                           |
| 0503630201 | 2007-11-11 | 173.662 | +56.052 | 21.4               | 350                    | 22.2               | 512                    | $3.44^{+0.76}_{-1.14} \pm 0.48$ | 0.5675             | $0.04^{+0.51}_{-0.04} \pm 0.31$ | 1.60                                                | 1.85                                                           |
| 0404964801 | 2006-07-07 | 173.765 | -58.540 | 9.6                | 355                    | 9.6                | 517                    | $3.74 \pm 1.26 \pm 0.18$        | 0.5625             | $0.30^{+0.67}_{-0.30} \pm 0.52$ | 1.38                                                | 1.31                                                           |
| 0202520201 | 2004-03-22 | 173.791 | +22.181 | 13.1               | 515                    | 13.4               | 588                    | $2.50^{+0.77}_{-0.89} \pm 1.32$ | 0.5675             | $0.24^{+0.42}_{-0.24} \pm 0.31$ | 1.63                                                | 1.64                                                           |
| 0553650201 | 2008-09-23 | 173.801 | +2.618  | 27.2               | 332                    | 27.8               | 443                    | $0.00^{+0.76}_{-0.00} \pm 0.00$ | 0.5425             | $0.35^{+0.40}_{-0.35} \pm 0.04$ | 2.08                                                | 1.78                                                           |
| 0203540301 | 2004-08-22 | 174.008 | -15.899 | 15.0               | 514                    | 15.3               | 588                    | $2.61 \pm 0.69 \pm 0.11$        | 0.5625             | $0.38^{+0.33}_{-0.34} \pm 0.09$ | 1.85                                                | 1.58                                                           |
| 0201360201 | 2004-02-29 | 174.042 | -19.847 | 28.6               | 586                    | 28.4               | 511                    | $0.09^{+0.77}_{-0.09} \pm 0.17$ | 0.5475             | $0.16^{+0.38}_{-0.16} \pm 0.07$ | 1.40                                                | 2.13                                                           |
| 0203540501 | 2005-02-21 | 174.057 | -13.826 | 15.2               | 437                    | 15.6               | 510                    | $1.59^{+0.54}_{-0.52} \pm 0.11$ | 0.5875             | $0.97^{+0.41}_{-0.45} \pm 0.13$ | 1.19                                                | 1.37                                                           |
| 0203390501 | 2004-06-01 | 174.208 | +63.971 | 9.5                | 517                    | 10.3               | 593                    | $4.38^{+1.12}_{-0.91} \pm 0.46$ | 0.5775             | $0.66^{+0.59}_{-0.57} \pm 0.67$ | 2.59                                                | 1.57                                                           |
| 0203540401 | 2005-02-21 | 174.215 | -15.732 | 26.4               | 509                    | 26.7               | 510                    | $4.98^{+0.58}_{-0.57} \pm 0.50$ | 0.5625             | $0.73^{+0.28}_{-0.29} \pm 0.17$ | 1.07                                                | 1.23                                                           |
| 0404964701 | 2006-07-07 | 174.220 | -58.309 | 9.6                | 495                    | 9.5                | 518                    | $3.68^{+1.24}_{-1.16} \pm 0.56$ | 0.5625             | $0.00^{+0.71}_{-0.00} \pm 0.48$ | 1.40                                                | 1.63                                                           |
| 0203540701 | 2005-02-24 | 174.233 | -13.492 | 25.3               | 514                    | 26.3               | 517                    | $3.22^{+0.56}_{-0.63} \pm 0.04$ | 0.5625             | $0.36^{+0.28}_{-0.27} \pm 0.08$ | 3.69                                                | 1.33                                                           |
| 0204340201 | 2004-01-12 | 174.274 | -64.682 | 10.1               | 575                    | 10.1               | 507                    | $4.73 \pm 1.17 \pm 0.87$        | 0.5675             | $2.68^{+0.68}_{-0.67} \pm 0.83$ | 2.27                                                | 1.85                                                           |
| 0152680201 | 2003-02-14 | 174.325 | -15.413 | 14.1               | 510                    | 14.2               | 516                    | $4.90^{+0.88}_{-1.13} \pm 0.45$ | 0.5625             | $1.04^{+0.39}_{-0.57} \pm 0.09$ | 4.79                                                | 1.78                                                           |
| 0152680501 | 2003-02-18 | 174.325 | -15.413 | 11.0               | 514                    | 10.9               | 591                    | $2.65^{+0.83}_{-0.96} \pm 0.28$ | 0.5625             | $0.68^{+0.43}_{-0.48} \pm 0.15$ | 4.23                                                | 1.95                                                           |
| 0152680901 | 2003-02-28 | 174.325 | -15.413 | 8.0                | 590                    | 8.7                | 591                    | $3.39^{+0.75}_{-0.76} \pm 0.30$ | 0.5725             | $0.21^{+0.42}_{-0.21} \pm 0.19$ | 2.69                                                | 2.06                                                           |
| 0152680301 | 2003-02-16 | 174.325 | -15.413 | 13.6               | 582                    | 13.4               | 510                    | $3.43^{+0.80}_{-0.82} \pm 0.22$ | 0.5575             | $0.53 \pm 0.39 \pm 0.09$        | 2.93                                                | 2.31                                                           |
| 0152680401 | 2003-02-20 | 174.326 | -15.413 | 11.9               | 584                    | 12.1               | 590                    | $2.81^{+0.73}_{-0.75} \pm 0.29$ | 0.5575             | $0.30^{+0.35}_{-0.30} \pm 0.14$ | 4.11                                                | 1.49                                                           |
| 0203542101 | 2005-03-04 | 174.585 | -15.470 | 28.5               | 436                    | 28.8               | 511                    | $3.84^{+0.56}_{-0.78} \pm 0.30$ | 0.5625             | $0.11^{+0.28}_{-0.11} \pm 0.21$ | 3.25                                                | 1.45                                                           |
| 0402830101 | 2006-06-29 | 174.644 | +83.169 | 19.1               | 336                    | 18.8               | 501                    | $5.77^{+1.42}_{-0.94} \pm 0.55$ | 0.5725             | $0.37^{+0.60}_{-0.37} \pm 1.05$ | 2.85                                                | 1.61                                                           |
| 0052140201 | 2001-12-02 | 174.694 | +68.510 | 23.4               | 461                    | 23.3               | 537                    | $7.86^{+0.86}_{-0.79} \pm 0.40$ | 0.5625             | $1.96 \pm 0.42 \pm 0.81$        | 4.91                                                | 2.02                                                           |
| 0203542201 | 2005-03-05 | 174.747 | -13.569 | 25.2               | 510                    | 25.7               | 514                    | $4.06^{+0.61}_{-1.04} \pm 0.16$ | 0.5625             | $0.34^{+0.29}_{-0.28} \pm 0.08$ | 5.83                                                | 1.31                                                           |
| 0304202901 | 2006-04-10 | 175.340 | +17.353 | 5.1                | 389                    | 5.0                | 402                    | $3.64^{+2.33}_{-2.03} \pm 0.18$ | 0.5475             | $0.13^{+1.15}_{-0.13} \pm 0.50$ | 1.26                                                | 1.39                                                           |
| 0203541701 | 2005-02-11 | 175.355 | -16.723 | 19.7               | 583                    | 19.6               | 585                    | $0.26^{+0.44}_{-0.26} \pm 0.46$ | 0.5925             | $0.00^{+0.11}_{-0.00} \pm 0.00$ | 2.18                                                | 2.52                                                           |
| 0111430101 | 2001-07-07 | 175.480 | -75.700 | 16.8               | 474                    | 16.9               | 397                    | $3.27^{+0.98}_{-1.00} \pm 0.28$ | 0.5575             | $0.51^{+0.57}_{-0.51} \pm 0.27$ | 1.63                                                | 2.29                                                           |
| 0556213301 | 2008-10-09 | 175.520 | +28.120 | 10.1               | 503                    | 9.9                | 518                    | $2.25^{+1.08}_{-0.91} \pm 0.16$ | 0.5725             | $1.73^{+0.65}_{-0.64} \pm 0.26$ | 1.42                                                | 1.26                                                           |
| 0085150101 | 2001-10-15 | 175.735 | +39.195 | 37.6               | 514                    | 38.7               | 590                    | $6.95^{+0.56}_{-0.95} \pm 0.85$ | 0.5625             | $2.13^{+0.30}_{-0.46} \pm 0.77$ | 3.72                                                | 1.90                                                           |
| 0304203401 | 2006-06-11 | 175.807 | +63.353 | 8.4                | 376                    | 8.3                | 395                    | $7.43^{+1.58}_{-1.56} \pm 0.11$ | 0.5725             | $0.75^{+0.80}_{-0.75} \pm 1.10$ | 1.36                                                | 1.11                                                           |
| 0312190401 | 2006-01-28 | 175.875 | -49.907 | 11.1               | 426                    | 10.8               | 514                    | $1.90^{+1.28}_{-1.04} \pm 0.51$ | 0.5675             | $0.03^{+0.62}_{-0.03} \pm 0.26$ | 0.83                                                | 1.64                                                           |
| 0056020301 | 2001-02-14 | 175.924 | -49.466 | 10.4               | 563                    | 10.1               | 565                    | $2.83^{+1.09}_{-0.65} \pm 1.19$ | 0.5775             | $0.74^{+0.56}_{-0.47} \pm 0.60$ | 1.08                                                | 1.84                                                           |
| 0203540901 | 2005-02-25 | 175.927 | -16.410 | 14.9               | 502                    | 16.6               | 507                    | $1.51^{+0.82}_{-0.74} \pm 0.12$ | 0.5725             | $0.50 \pm 0.44 \pm 0.05$        | 3.65                                                | 2.00                                                           |
| 0301500101 | 2005-08-15 | 176.231 | -20.868 | 39.0               | 311                    | 42.1               | 472                    | $2.50^{+0.66}_{-0.63} \pm 0.26$ | 0.5525             | $0.26^{+0.33}_{-0.26} \pm 0.14$ | 3.79                                                | 2.11                                                           |
| 0151490101 | 2003-07-16 | 176.451 | -51.053 | 20.3               | 371                    | 20.6               | 446                    | $5.18^{+1.09}_{-0.88} \pm 1.46$ | 0.5675             | $3.00^{+0.62}_{-0.55} \pm 0.61$ | 4.91                                                | 2.25                                                           |
| 0141960201 | 2003-02-15 | 176.479 | -21.080 | 8.6                | 472                    | 8.5                | 399                    | $2.43^{+0.91}_{-0.99} \pm 0.17$ | 0.5725             | $0.98^{+0.65}_{-0.43} \pm 0.08$ | 2.49                                                | 2.51                                                           |
| 0551630301 | 2008-06-06 | 176.503 | +76.992 | 34.8               | 476                    | 35.7               | 565                    | $3.60^{+0.77}_{-0.92} \pm 0.64$ | 0.5575             | $0.04^{+0.41}_{-0.04} \pm 0.09$ | 3.20                                                | 1.90                                                           |
| 0407030201 | 2006-09-02 | 176.810 | -18.538 | 12.3               | 498                    | 13.9               | 511                    | $0.96^{+0.93}_{-0.83} \pm 0.34$ | 0.5625             | $0.02^{+0.47}_{-0.02} \pm 0.03$ | 2.54                                                | 2.12                                                           |
| 0556215201 | 2009-04-17 | 177.334 | +28.397 | 5.3                | 497                    | 5.7                | 593                    | $2.49^{+1.98}_{-1.38} \pm 0.76$ | 0.5675             | $0.13^{+0.86}_{-0.13} \pm 0.38$ | 2.13                                                | 1.63                                                           |
| 0041170101 | 2001-02-16 | 177.510 | -48.355 | 44.9               | 587                    | 45.3               | 587                    | $4.49^{+0.47}_{-0.46} \pm 0.23$ | 0.5625             | $0.79 \pm 0.25 \pm 0.26$        | 0.81                                                | 1.86                                                           |



Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0503600101 | 2007-11-06 | 178.076 | +38.357 | 16.5               | 294                    | 17.6               | 446                    | $2.80^{+1.40}_{-1.35} \pm 0.34$ | 0.5625             | $0.07^{+0.67}_{-0.07} \pm 0.08$ | 2.77                                                | 2.53                                                    |
| 0203160201 | 2004-07-19 | 178.203 | -47.949 | 14.6               | 471                    | 14.6               | 476                    | $2.15^{+1.03}_{-0.78} \pm 0.30$ | 0.5675             | $0.43^{+0.50}_{-0.43} \pm 0.39$ | 1.98                                                | 1.52                                                    |
| 0111410101 | 2002-02-09 | 178.224 | -43.073 | 25.7               | 400                    | 18.6               | 474                    | $3.92^{+0.95}_{-0.98} \pm 0.25$ | 0.5625             | $1.07^{+0.44}_{-0.49} \pm 0.04$ | 2.09                                                | 2.17                                                    |
| 0028740301 | 2001-11-02 | 178.312 | +55.728 | 16.9               | 495                    | 17.2               | 569                    | $5.27^{+0.88}_{-0.77} \pm 0.34$ | 0.5725             | $1.05^{+0.37}_{-0.43} \pm 0.13$ | 2.74                                                | 2.57                                                    |
| 0142610101 | 2003-02-11 | 178.660 | -47.691 | 33.1               | 438                    | 34.1               | 440                    | $5.53^{+0.89}_{-0.68} \pm 0.33$ | 0.5675             | $0.55^{+0.40}_{-0.35} \pm 0.48$ | 3.44                                                | 2.64                                                    |
| 0200811101 | 2004-03-09 | 178.909 | -20.031 | 9.1                | 571                    | 9.4                | 495                    | $2.03^{+0.99}_{-0.98} \pm 0.34$ | 0.5625             | $0.09^{+0.50}_{-0.09} \pm 0.24$ | 1.10                                                | 1.51                                                    |
| 0200810301 | 2004-03-05 | 178.909 | -20.031 | 5.3                | 501                    | 5.1                | 499                    | $2.74^{+1.53}_{-1.33} \pm 0.43$ | 0.5675             | $0.00^{+0.78}_{-0.00} \pm 0.08$ | 1.99                                                | 2.17                                                    |
| 0200810701 | 2004-03-07 | 178.909 | -20.030 | 7.5                | 575                    | 8.1                | 498                    | $2.31^{+1.03}_{-0.96} \pm 0.72$ | 0.5625             | $0.17^{+0.50}_{-0.17} \pm 0.24$ | 1.86                                                | 1.33                                                    |
| 0109060301 | 2000-09-09 | 178.916 | -19.992 | 51.7               | 549                    | 51.6               | 489                    | $3.89^{+0.39}_{-0.67} \pm 0.40$ | 0.5625             | $0.84^{+0.20}_{-0.30} \pm 0.09$ | 1.70                                                | 1.84                                                    |
| 0024140101 | 2001-03-13 | 179.085 | -23.816 | 45.0               | 569                    | 45.9               | 576                    | $2.13 \pm 0.50 \pm 0.23$        | 0.5625             | $0.43 \pm 0.26 \pm 0.08$        | 2.29                                                | 2.06                                                    |
| 0307000701 | 2006-02-19 | 179.180 | -48.979 | 14.9               | 498                    | 15.1               | 513                    | $3.05^{+1.28}_{-0.74} \pm 0.56$ | 0.5675             | $0.61^{+0.49}_{-0.44} \pm 0.28$ | 7.79                                                | 1.75                                                    |
| 0094810301 | 2000-03-16 | 179.196 | -20.185 | 7.3                | 504                    | 7.5                | 582                    | $3.79^{+1.42}_{-0.83} \pm 0.58$ | 0.5625             | $2.33^{+0.65}_{-0.48} \pm 0.17$ | 2.75                                                | 1.75                                                    |
| 0554770101 | 2009-02-10 | 179.255 | -19.630 | 41.4               | 397                    | 42.9               | 545                    | $0.25^{+0.83}_{-0.25} \pm 0.27$ | 0.5475             | $0.01^{+0.39}_{-0.01} \pm 0.06$ | 2.52                                                | 2.30                                                    |
| 0501620101 | 2007-08-16 | 179.321 | -25.647 | 10.7               | 426                    | 10.6               | 588                    | $0.70^{+1.07}_{-0.70} \pm 0.72$ | 0.5575             | $0.00^{+0.46}_{-0.00} \pm 0.00$ | 2.19                                                | 1.31                                                    |
| 0406610101 | 2006-11-05 | 179.356 | +59.942 | 10.0               | 404                    | 10.2               | 485                    | $3.84^{+1.58}_{-1.23} \pm 0.35$ | 0.5675             | $0.86^{+0.72}_{-0.73} \pm 0.32$ | 1.88                                                | 2.32                                                    |
| 0556212801 | 2008-05-15 | 179.480 | +43.333 | 8.3                | 423                    | 8.0                | 591                    | $4.27^{+1.15}_{-1.41} \pm 1.02$ | 0.5575             | $1.23^{+0.74}_{-0.66} \pm 0.56$ | 3.94                                                | 1.42                                                    |
| 0207130201 | 2004-04-20 | 179.517 | +53.131 | 33.2               | 548                    | 34.5               | 486                    | $7.54^{+0.56}_{-0.59} \pm 0.20$ | 0.5725             | $0.62 \pm 0.31 \pm 1.03$        | 2.34                                                | 1.46                                                    |
| 0141400301 | 2003-02-17 | 179.955 | -24.550 | 8.3                | 516                    | 8.4                | 517                    | $1.56^{+1.02}_{-1.01} \pm 0.21$ | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.00$ | 3.51                                                | 1.97                                                    |
| 0551851201 | 2009-03-21 | 180.103 | +26.641 | 59.7               | 352                    | 64.9               | 441                    | $0.79^{+0.45}_{-0.40} \pm 0.26$ | 0.5825             | $0.00^{+0.24}_{-0.00} \pm 0.03$ | 1.18                                                | 2.59                                                    |
| 0551850101 | 2008-10-17 | 180.147 | +26.661 | 40.1               | 345                    | 42.3               | 516                    | $1.06^{+0.75}_{-0.70} \pm 0.96$ | 0.5475             | $0.00^{+0.36}_{-0.00} \pm 0.00$ | 1.92                                                | 2.47                                                    |
| 0101440501 | 2000-09-03 | 180.258 | -21.968 | 34.7               | 563                    | 37.1               | 570                    | $2.25^{+0.66}_{-0.69} \pm 0.42$ | 0.5625             | $1.29 \pm 0.34 \pm 0.19$        | 1.97                                                | 2.15                                                    |
| 0506440101 | 2007-05-31 | 180.288 | +59.048 | 77.3               | 257                    | 79.0               | 337                    | $8.50^{+0.43}_{-1.22} \pm 1.40$ | 0.5625             | $0.28^{+0.37}_{-0.28} \pm 0.87$ | 3.47                                                | 1.76                                                    |
| 0561580201 | 2009-05-31 | 180.293 | +59.048 | 45.2               | 330                    | 48.2               | 403                    | $4.21^{+1.25}_{-0.52} \pm 0.43$ | 0.5775             | $0.04^{+0.50}_{-0.04} \pm 0.74$ | 1.83                                                | 1.89                                                    |
| 0101440601 | 2000-09-09 | 180.555 | -23.543 | 37.3               | 546                    | 37.6               | 479                    | $2.78^{+0.46}_{-0.56} \pm 0.28$ | 0.5625             | $1.21 \pm 0.26 \pm 0.13$        | 2.67                                                | 2.29                                                    |
| 0101441501 | 2002-03-05 | 180.557 | -23.544 | 30.2               | 472                    | 30.9               | 485                    | $2.11^{+0.67}_{-0.60} \pm 0.43$ | 0.5675             | $0.15^{+0.32}_{-0.15} \pm 0.16$ | 1.70                                                | 2.45                                                    |
| 0200750401 | 2004-01-30 | 180.833 | -41.576 | 43.8               | 559                    | 43.4               | 562                    | $4.48^{+0.61}_{-0.48} \pm 0.27$ | 0.5675             | $1.70^{+0.28}_{-0.26} \pm 0.67$ | 2.38                                                | 1.73                                                    |
| 0150470601 | 2003-07-15 | 180.839 | -59.471 | 27.9               | 392                    | 20.7               | 539                    | $5.07^{+1.36}_{-0.84} \pm 0.47$ | 0.5675             | $2.37^{+0.67}_{-0.47} \pm 0.59$ | 4.11                                                | 2.01                                                    |
| 0553790101 | 2008-10-03 | 180.875 | +31.230 | 11.2               | 377                    | 11.0               | 552                    | $2.48^{+0.99}_{-1.12} \pm 0.46$ | 0.5725             | $0.00^{+0.27}_{-0.00} \pm 0.00$ | 1.18                                                | 1.99                                                    |
| 0406740101 | 2006-10-22 | 180.920 | +29.107 | 13.4               | 336                    | 13.8               | 426                    | $3.47^{+1.42}_{-1.22} \pm 0.46$ | 0.5675             | $0.15^{+0.62}_{-0.15} \pm 0.21$ | 1.36                                                | 1.66                                                    |
| 0147671001 | 2003-04-27 | 181.009 | +43.608 | 11.3               | 491                    | 11.6               | 565                    | $5.25^{+0.99}_{-0.90} \pm 0.31$ | 0.5675             | $0.90^{+0.49}_{-0.53} \pm 0.52$ | 2.29                                                | 1.79                                                    |
| 0112860101 | 2000-07-31 | 181.163 | -61.438 | 5.5                | 584                    | 5.7                | 584                    | $5.25^{+1.23}_{-1.24} \pm 0.41$ | 0.5675             | $2.69^{+0.75}_{-0.70} \pm 0.51$ | 3.37                                                | 1.64                                                    |
| 0553790701 | 2009-03-24 | 181.222 | +29.913 | 14.4               | 421                    | 14.6               | 462                    | $1.23^{+1.19}_{-1.22} \pm 1.16$ | 0.5475             | $0.87^{+0.62}_{-0.58} \pm 0.38$ | 1.98                                                | 1.81                                                    |
| 0504160101 | 2007-12-03 | 181.277 | -88.431 | 48.7               | 260                    | 49.5               | 335                    | $3.74^{+0.87}_{-0.88} \pm 0.64$ | 0.5625             | $0.55 \pm 0.41 \pm 0.11$        | 3.03                                                | 1.97                                                    |
| 0138951401 | 2003-05-05 | 181.760 | +30.835 | 6.5                | 589                    | 6.6                | 515                    | $6.14^{+1.49}_{-1.22} \pm 0.36$ | 0.5675             | $1.91^{+0.72}_{-0.70} \pm 0.76$ | 5.43                                                | 1.55                                                    |
| 0093630101 | 2001-08-15 | 182.022 | -57.907 | 13.8               | 484                    | 13.9               | 561                    | $4.05^{+0.97}_{-1.03} \pm 0.46$ | 0.5675             | $1.37^{+0.51}_{-0.52} \pm 0.67$ | 0.81                                                | 1.58                                                    |
| 0306230101 | 2006-01-12 | 182.026 | -57.944 | 49.7               | 388                    | 50.9               | 485                    | $4.12^{+0.58}_{-0.57} \pm 0.40$ | 0.5625             | $1.07^{+0.32}_{-0.31} \pm 0.36$ | 4.10                                                | 1.96                                                    |
| 0406570701 | 2007-02-13 | 182.297 | -17.856 | 11.7               | 421                    | 11.9               | 584                    | $1.08^{+1.08}_{-0.93} \pm 0.38$ | 0.5475             | $0.64^{+0.54}_{-0.47} \pm 0.09$ | 2.77                                                | 1.59                                                    |
| 0551630601 | 2009-04-09 | 182.437 | +40.510 | 16.5               | 421                    | 17.8               | 579                    | $2.59^{+1.20}_{-0.97} \pm 0.46$ | 0.5625             | $0.42^{+0.56}_{-0.42} \pm 0.16$ | 2.26                                                | 1.82                                                    |
| 0205980101 | 2004-04-24 | 182.556 | +57.673 | 29.0               | 391                    | 29.2               | 397                    | $5.27^{+1.04}_{-0.76} \pm 1.15$ | 0.5675             | $0.25^{+0.44}_{-0.25} \pm 0.95$ | 2.52                                                | 1.62                                                    |
| 0400830301 | 2006-10-30 | 182.658 | +42.566 | 42.3               | 426                    | 42.9               | 517                    | $3.00^{+0.67}_{-0.79} \pm 0.23$ | 0.5625             | $0.29^{+0.45}_{-0.29} \pm 0.06$ | 0.89                                                | 2.60                                                    |
| 0553561201 | 2009-04-29 | 183.033 | +51.279 | 6.2                | 416                    | 6.2                | 581                    | $4.49^{+1.64}_{-1.61} \pm 0.45$ | 0.5675             | $1.22^{+0.63}_{-0.82} \pm 0.38$ | 2.55                                                | 1.77                                                    |
| 0503601301 | 2007-11-11 | 183.245 | +56.906 | 11.3               | 221                    | 11.0               | 334                    | $3.51^{+1.78}_{-1.72} \pm 0.22$ | 0.5775             | $1.16^{+1.06}_{-1.11} \pm 0.47$ | 1.10                                                | 2.15                                                    |
| 0307000201 | 2005-08-05 | 183.333 | -48.230 | 11.7               | 420                    | 12.2               | 588                    | $4.45^{+1.08}_{-0.97} \pm 0.32$ | 0.5625             | $1.53^{+0.62}_{-0.59} \pm 0.16$ | 2.80                                                | 2.64                                                    |
| 0200630101 | 2004-04-13 | 183.403 | +40.982 | 13.7               | 581                    | 13.6               | 588                    | $3.92^{+0.97}_{-0.79} \pm 0.35$ | 0.5775             | $0.28^{+0.51}_{-0.28} \pm 0.68$ | 0.62                                                | 1.94                                                    |
| 0502060201 | 2007-10-16 | 183.454 | +37.153 | 18.4               | 313                    | 18.5               | 400                    | $6.67^{+0.71}_{-1.91} \pm 2.80$ | 0.5525             | $1.76^{+0.82}_{-0.51} \pm 1.15$ | 1.78                                                | 1.53                                                    |
| 0203270101 | 2004-05-17 | 183.836 | +49.003 | 37.7               | 581                    | 38.1               | 588                    | $6.35^{+0.60}_{-0.64} \pm 0.72$ | 0.5675             | $1.23^{+0.35}_{-0.31} \pm 0.65$ | 2.92                                                | 1.96                                                    |
| 0554932801 | 2009-03-24 | 183.857 | +25.000 | 10.2               | 353                    | 10.2               | 440                    | $2.45^{+1.02}_{-0.93} \pm 0.21$ | 0.5725             | $0.00^{+0.43}_{-0.00} \pm 0.39$ | 2.19                                                | 1.00                                                    |
| 0554540201 | 2008-11-08 | 183.871 | +35.023 | 46.1               | 413                    | 46.3               | 505                    | $2.22^{+0.80}_{-0.64} \pm 0.43$ | 0.5675             | $0.52^{+0.38}_{-0.33} \pm 0.14$ | 1.38                                                | 1.64                                                    |
| 0103262801 | 2003-10-09 | 184.363 | -3.300  | 6.5                | 592                    | 6.8                | 594                    | $2.66^{+1.90}_{-0.80} \pm 0.59$ | 0.5675             | $0.50^{+0.84}_{-0.48} \pm 0.27$ | 0.62                                                | 1.93                                                    |
| 0302581801 | 2005-10-10 | 184.774 | +40.088 | 20.4               | 372                    | 21.9               | 465                    | $4.81^{+0.90}_{-0.84} \pm 0.55$ | 0.5675             | $1.15^{+0.49}_{-0.44} \pm 0.22$ | 1.26                                                | 2.66                                                    |
| 0402320201 | 2007-02-02 | 184.948 | -42.338 | 7.1                | 424                    | 7.3                | 586                    | $6.08^{+1.56}_{-1.46} \pm 1.26$ | 0.5675             | $1.81^{+0.91}_{-0.78} \pm 0.99$ | 1.13                                                | 2.22                                                    |
| 0205370101 | 2004-05-11 | 185.152 | +65.494 | 33.8               | 535                    | 34.7               | 543                    | $5.69^{+0.62}_{-0.51} \pm 0.19$ | 0.5675             | $0.57^{+0.33}_{-0.28} \pm 0.68$ | 2.69                                                | 1.88                                                    |
| 0070340301 | 2001-05-15 | 185.207 | +65.480 | 7.0                | 470                    | 6.8                | 468                    | $4.53^{+1.34}_{-1.15} \pm 1.23$ | 0.5675             | $0.98^{+0.72}_{-0.67} \pm 0.42$ | 1.62                                                | 2.39                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0502060901 | 2008-03-26 | 185.451 | +28.381 | 21.5               | 305                    | 21.6               | 401                    | $0.74^{+0.87}_{-0.67} \pm 0.63$  | 0.5925             | $0.00^{+0.53}_{-0.00} \pm 0.78$ | 7.01                                                | 1.74                                              |
| 0504101701 | 2007-05-18 | 185.477 | +56.285 | 7.8                | 420                    | 8.3                | 513                    | $5.09^{+1.48}_{-1.40} \pm 0.81$  | 0.5625             | $0.18^{+0.72}_{-0.18} \pm 0.24$ | 4.59                                                | 2.21                                              |
| 0502090501 | 2007-08-21 | 186.114 | -13.481 | 49.1               | 242                    | 51.1               | 473                    | $1.99^{+0.67}_{-0.58} \pm 0.97$  | 0.5725             | $0.99^{+0.36}_{-0.35} \pm 0.26$ | 2.94                                                | 2.52                                              |
| 0149010201 | 2003-04-15 | 186.300 | +44.831 | 49.9               | 547                    | 50.8               | 555                    | $4.87^{+0.46}_{-0.44} \pm 0.35$  | 0.5675             | $1.45 \pm 0.26 \pm 0.58$        | 3.14                                                | 1.83                                              |
| 0405240201 | 2006-08-06 | 186.353 | -46.138 | 13.4               | 418                    | 13.7               | 507                    | $12.10^{+1.14}_{-1.83} \pm 0.91$ | 0.5675             | $2.51^{+0.62}_{-0.78} \pm 1.91$ | 1.62                                                | 1.82                                              |
| 0411980301 | 2006-11-01 | 186.492 | +48.600 | 6.0                | 418                    | 6.1                | 506                    | $4.12^{+1.66}_{-1.39} \pm 0.39$  | 0.5725             | $1.09^{+0.90}_{-0.81} \pm 0.43$ | 1.89                                                | 1.52                                              |
| 0553510101 | 2008-09-20 | 186.592 | +2.210  | 8.1                | 500                    | 8.2                | 590                    | $1.20^{+0.94}_{-0.90} \pm 1.43$  | 0.5925             | $2.42 \pm 0.74 \pm 0.90$        | 1.93                                                | 2.01                                              |
| 0089370501 | 2002-10-01 | 186.989 | -1.553  | 19.8               | 573                    | 21.2               | 504                    | $9.83 \pm 0.75 \pm 1.11$         | 0.5675             | $2.24^{+0.41}_{-0.38} \pm 1.04$ | 6.13                                                | 1.88                                              |
| 0089370601 | 2002-10-01 | 186.991 | -1.550  | 21.5               | 465                    | 21.5               | 471                    | $11.52^{+0.86}_{-0.87} \pm 2.51$ | 0.5675             | $1.88 \pm 0.45 \pm 1.66$        | 7.36                                                | 1.57                                              |
| 0089370701 | 2002-10-02 | 186.994 | -1.547  | 19.7               | 465                    | 19.3               | 398                    | $5.56^{+0.80}_{-0.88} \pm 0.68$  | 0.5675             | $1.38^{+0.46}_{-0.55} \pm 0.36$ | 5.43                                                | 1.95                                              |
| 0112880801 | 2000-09-29 | 187.464 | +22.499 | 47.4               | 490                    | 48.1               | 422                    | $4.50^{+0.99}_{-0.65} \pm 0.65$  | 0.5675             | $2.04^{+0.45}_{-0.36} \pm 0.38$ | 1.46                                                | 2.02                                              |
| 0123710201 | 2000-04-24 | 187.465 | +22.477 | 18.0               | 389                    | 17.8               | 461                    | $5.04^{+1.11}_{-1.23} \pm 0.83$  | 0.5625             | $1.03^{+0.57}_{-0.61} \pm 0.37$ | 1.10                                                | 1.85                                              |
| 0123710101 | 2000-04-25 | 187.465 | +22.477 | 40.4               | 389                    | 40.6               | 460                    | $2.66^{+0.89}_{-0.91} \pm 0.34$  | 0.5575             | $1.17 \pm 0.41 \pm 0.17$        | 0.84                                                | 2.57                                              |
| 0402370101 | 2006-11-23 | 187.503 | +46.029 | 34.0               | 482                    | 34.0               | 505                    | $5.99^{+1.19}_{-0.58} \pm 2.81$  | 0.5525             | $1.15^{+0.51}_{-0.32} \pm 1.26$ | 3.02                                                | 2.58                                              |
| 0200430401 | 2004-01-19 | 187.723 | -45.057 | 11.2               | 577                    | 11.2               | 510                    | $9.18^{+0.99}_{-1.01} \pm 0.38$  | 0.5725             | $1.91^{+0.62}_{-0.57} \pm 1.63$ | 2.14                                                | 1.48                                              |
| 0201690301 | 2004-06-20 | 187.766 | +83.058 | 14.5               | 577                    | 15.3               | 578                    | $4.64^{+1.14}_{-0.85} \pm 0.67$  | 0.5675             | $0.87 \pm 0.49 \pm 0.70$        | 1.27                                                | 1.85                                              |
| 0094790201 | 2002-08-22 | 188.307 | -37.087 | 20.1               | 568                    | 20.5               | 569                    | $4.81 \pm 0.66 \pm 0.18$         | 0.5725             | $1.56^{+0.24}_{-0.44} \pm 1.03$ | 1.39                                                | 2.64                                              |
| 0602290101 | 2009-05-06 | 188.500 | +47.781 | 53.6               | 430                    | 55.4               | 515                    | $4.85 \pm 0.74 \pm 0.45$         | 0.5625             | $0.65 \pm 0.38 \pm 0.30$        | 1.72                                                | 1.78                                              |
| 0554710101 | 2009-05-03 | 188.565 | +37.946 | 13.7               | 316                    | 14.0               | 473                    | $4.35^{+1.39}_{-1.15} \pm 0.43$  | 0.5675             | $1.27^{+0.75}_{-0.66} \pm 0.48$ | 2.40                                                | 1.62                                              |
| 0403750701 | 2007-03-23 | 188.945 | +22.573 | 9.0                | 349                    | 9.1                | 513                    | $4.19^{+1.30}_{-1.42} \pm 0.57$  | 0.5675             | $0.40^{+0.90}_{-0.40} \pm 1.15$ | 5.01                                                | 1.38                                              |
| 0554180101 | 2009-04-19 | 190.063 | +41.482 | 35.3               | 416                    | 37.1               | 584                    | $3.76^{+0.72}_{-0.57} \pm 0.86$  | 0.5625             | $0.97^{+0.38}_{-0.31} \pm 0.37$ | 1.22                                                | 1.90                                              |
| 0502760101 | 2008-04-09 | 190.070 | +41.483 | 20.3               | 486                    | 21.6               | 584                    | $2.89^{+0.85}_{-0.84} \pm 0.29$  | 0.5675             | $0.70^{+0.46}_{-0.48} \pm 0.28$ | 1.25                                                | 1.99                                              |
| 0400850101 | 2007-04-18 | 190.071 | +41.482 | 18.1               | 500                    | 18.2               | 590                    | $4.36^{+1.03}_{-0.81} \pm 0.13$  | 0.5625             | $0.49^{+0.47}_{-0.40} \pm 0.20$ | 3.24                                                | 1.54                                              |
| 0103861001 | 2002-08-13 | 190.169 | -47.827 | 8.7                | 400                    | 8.6                | 397                    | $19.92^{+1.51}_{-2.13} \pm 2.43$ | 0.5675             | $4.83^{+0.91}_{-1.02} \pm 2.67$ | 1.29                                                | 1.39                                              |
| 0402110201 | 2007-01-27 | 190.184 | -47.865 | 18.9               | 341                    | 19.1               | 576                    | $14.99^{+1.10}_{-1.08} \pm 1.34$ | 0.5725             | $2.33^{+0.65}_{-0.57} \pm 2.91$ | 4.15                                                | 1.56                                              |
| 0401650101 | 2006-10-04 | 190.270 | +14.322 | 11.9               | 307                    | 11.6               | 541                    | $4.99^{+1.21}_{-1.24} \pm 0.65$  | 0.5625             | $1.66^{+0.66}_{-0.68} \pm 0.89$ | 1.59                                                | 1.69                                              |
| 0301650201 | 2005-08-30 | 190.591 | -45.540 | 11.7               | 423                    | 11.5               | 513                    | $12.95^{+1.22}_{-1.96} \pm 0.90$ | 0.5725             | $2.30^{+0.80}_{-0.85} \pm 2.21$ | 1.60                                                | 1.69                                              |
| 0304203201 | 2006-04-16 | 191.409 | +11.451 | 5.1                | 242                    | 5.1                | 475                    | $4.31^{+1.51}_{-1.86} \pm 0.57$  | 0.5775             | $2.19^{+1.72}_{-1.90} \pm 0.58$ | 0.91                                                | 1.75                                              |
| 0161160101 | 2003-09-01 | 191.813 | -33.159 | 38.5               | 457                    | 40.5               | 380                    | $7.95^{+0.72}_{-0.89} \pm 0.31$  | 0.5675             | $1.10^{+0.40}_{-0.38} \pm 0.92$ | 2.06                                                | 1.95                                              |
| 0203060501 | 2004-01-20 | 192.077 | -58.254 | 34.7               | 393                    | 35.5               | 400                    | $2.07^{+0.99}_{-0.89} \pm 0.29$  | 0.5725             | $0.99 \pm 0.51 \pm 0.20$        | 1.78                                                | 2.44                                              |
| 0006010301 | 2001-04-26 | 192.227 | +23.387 | 32.9               | 543                    | 32.7               | 470                    | $3.05^{+0.84}_{-0.69} \pm 0.58$  | 0.5725             | $1.45^{+0.43}_{-0.38} \pm 0.26$ | 0.91                                                | 1.98                                              |
| 0405210101 | 2006-08-29 | 192.572 | -11.806 | 25.5               | 488                    | 25.6               | 503                    | $2.30^{+0.86}_{-0.69} \pm 0.23$  | 0.5725             | $0.64^{+0.41}_{-0.39} \pm 0.09$ | 1.09                                                | 2.10                                              |
| 0504102001 | 2007-11-03 | 192.993 | +32.232 | 21.9               | 420                    | 21.8               | 585                    | $3.15^{+0.93}_{-0.97} \pm 0.96$  | 0.5475             | $0.00^{+0.42}_{-0.00} \pm 0.03$ | 1.46                                                | 1.61                                              |
| 0405210201 | 2006-08-30 | 193.604 | -12.457 | 19.9               | 500                    | 20.2               | 516                    | $3.76 \pm 0.91 \pm 0.16$         | 0.5675             | $0.60 \pm 0.47 \pm 0.06$        | 1.71                                                | 2.31                                              |
| 0503600301 | 2007-05-26 | 193.763 | +53.223 | 8.9                | 319                    | 8.3                | 336                    | $0.28^{+2.29}_{-0.28} \pm 0.38$  | 0.5425             | $1.44^{+1.04}_{-0.98} \pm 0.15$ | 1.84                                                | 2.42                                              |
| 0205010101 | 2004-05-23 | 193.799 | +82.754 | 23.8               | 514                    | 24.2               | 438                    | $6.00^{+0.52}_{-0.90} \pm 0.75$  | 0.5675             | $1.24 \pm 0.44 \pm 1.09$        | 1.60                                                | 1.86                                              |
| 0152530101 | 2002-10-05 | 194.085 | +28.828 | 13.7               | 551                    | 14.0               | 484                    | $5.57^{+0.97}_{-0.92} \pm 0.47$  | 0.5625             | $2.37 \pm 0.53 \pm 0.44$        | 1.19                                                | 2.41                                              |
| 0504120101 | 2008-04-11 | 194.185 | +35.368 | 21.1               | 423                    | 21.2               | 510                    | $1.87 \pm 0.85 \pm 0.22$         | 0.5575             | $0.39^{+0.44}_{-0.39} \pm 0.26$ | 1.24                                                | 1.65                                              |
| 0550960301 | 2008-11-26 | 194.874 | +72.188 | 22.2               | 388                    | 21.7               | 489                    | $2.71^{+1.42}_{-0.80} \pm 0.65$  | 0.5625             | $0.00^{+0.23}_{-0.00} \pm 0.00$ | 1.49                                                | 2.06                                              |
| 0300100201 | 2005-10-01 | 194.881 | -12.250 | 16.4               | 414                    | 15.8               | 504                    | $2.53^{+1.37}_{-0.44} \pm 0.28$  | 0.5775             | $0.78 \pm 0.44 \pm 0.30$        | 1.99                                                | 2.24                                              |
| 0504101201 | 2007-10-28 | 194.904 | +26.119 | 20.3               | 305                    | 20.8               | 468                    | $2.90^{+0.88}_{-0.44} \pm 0.38$  | 0.5725             | $0.13^{+0.49}_{-0.13} \pm 0.15$ | 1.56                                                | 1.72                                              |
| 0405211001 | 2007-03-31 | 194.912 | -15.542 | 7.5                | 350                    | 7.7                | 513                    | $4.02^{+1.53}_{-1.38} \pm 0.51$  | 0.5675             | $0.00^{+0.65}_{-0.00} \pm 0.05$ | 2.82                                                | 1.90                                              |
| 0402050101 | 2006-09-28 | 195.051 | -11.995 | 46.3               | 390                    | 46.6               | 475                    | $5.49^{+0.84}_{-1.00} \pm 0.52$  | 0.5575             | $3.19^{+0.45}_{-0.48} \pm 0.17$ | 4.00                                                | 2.22                                              |
| 0111170101 | 2002-04-04 | 195.127 | +4.249  | 70.1               | 568                    | 71.4               | 580                    | $5.02^{+0.37}_{-0.36} \pm 0.40$  | 0.5625             | $1.83 \pm 0.21 \pm 0.30$        | 1.38                                                | 1.99                                              |
| 0400260301 | 2007-03-11 | 195.133 | +4.248  | 19.6               | 406                    | 19.8               | 496                    | $5.08^{+0.89}_{-0.87} \pm 0.27$  | 0.5525             | $1.47^{+0.46}_{-0.44} \pm 0.09$ | 5.99                                                | 1.70                                              |
| 0201350101 | 2004-03-13 | 195.133 | +4.248  | 14.0               | 570                    | 14.5               | 496                    | $3.42^{+1.04}_{-0.78} \pm 0.12$  | 0.5675             | $1.39^{+0.51}_{-0.47} \pm 0.17$ | 1.16                                                | 2.39                                              |
| 0501270301 | 2008-03-08 | 195.134 | +4.248  | 10.1               | 370                    | 10.3               | 466                    | $8.15^{+1.49}_{-1.66} \pm 0.49$  | 0.5625             | $1.97^{+0.68}_{-0.72} \pm 0.13$ | 6.04                                                | 1.99                                              |
| 0550410301 | 2009-03-10 | 195.134 | +4.248  | 9.1                | 444                    | 9.2                | 466                    | $4.54^{+1.46}_{-1.51} \pm 0.50$  | 0.5675             | $1.16^{+0.83}_{-0.76} \pm 1.03$ | 2.13                                                | 1.49                                              |
| 0550410201 | 2008-10-03 | 195.134 | +4.286  | 15.8               | 443                    | 17.0               | 539                    | $3.01^{+0.99}_{-1.08} \pm 0.33$  | 0.5675             | $0.92^{+0.53}_{-0.57} \pm 0.19$ | 1.38                                                | 2.30                                              |
| 0501270201 | 2007-09-18 | 195.135 | +4.286  | 20.8               | 305                    | 20.8               | 539                    | $2.57^{+1.06}_{-0.97} \pm 1.70$  | 0.5575             | $1.47^{+0.54}_{-0.52} \pm 0.54$ | 1.75                                                | 1.94                                              |
| 0400260201 | 2006-10-02 | 195.135 | +4.285  | 16.7               | 400                    | 17.0               | 495                    | $4.95^{+1.15}_{-1.06} \pm 0.48$  | 0.5625             | $1.95^{+0.27}_{-0.50} \pm 0.31$ | 1.53                                                | 1.76                                              |
| 0405210601 | 2006-08-31 | 195.219 | -11.732 | 36.3               | 483                    | 36.9               | 499                    | $4.50^{+0.73}_{-0.67} \pm 0.33$  | 0.5625             | $1.55^{+0.37}_{-0.32} \pm 0.10$ | 3.92                                                | 2.43                                              |
| 0150620301 | 2003-04-22 | 195.510 | +43.156 | 8.8                | 586                    | 8.7                | 514                    | $7.15^{+1.39}_{-1.14} \pm 0.29$  | 0.5625             | $1.07^{+0.57}_{-0.62} \pm 1.02$ | 1.63                                                | 1.41                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0553440601 | 2008-11-22 | 195.818 | +44.793 | 6.4                | 430                    | 6.2                | 517                    | $2.47^{+1.71}_{-1.92} \pm 0.63$  | 0.5475             | $0.22^{+0.85}_{-0.22} \pm 0.81$ | 2.76                                                | 1.87                                                    |
| 0201950301 | 2005-03-31 | 195.844 | −11.966 | 8.0                | 310                    | 7.8                | 475                    | $4.59^{+2.04}_{-0.82} \pm 0.60$  | 0.5775             | $0.61^{+1.06}_{-0.61} \pm 0.61$ | 4.63                                                | 1.73                                                    |
| 0112880501 | 2003-01-19 | 195.856 | −48.068 | 12.6               | 561                    | 12.9               | 561                    | $15.08^{+1.45}_{-1.43} \pm 0.68$ | 0.5675             | $7.21^{+0.85}_{-0.86} \pm 2.09$ | 2.75                                                | 1.74                                                    |
| 0150620101 | 2003-04-23 | 196.040 | +44.206 | 12.1               | 592                    | 12.7               | 517                    | $6.71^{+0.99}_{-0.87} \pm 1.05$  | 0.5675             | $1.28^{+0.51}_{-0.52} \pm 1.23$ | 1.71                                                | 1.79                                                    |
| 0093190501 | 2002-03-25 | 196.223 | +12.981 | 27.1               | 581                    | 27.2               | 581                    | $6.32^{+0.89}_{-0.40} \pm 0.50$  | 0.5675             | $1.16^{+0.39}_{-0.29} \pm 0.93$ | 4.74                                                | 2.28                                                    |
| 0501600101 | 2008-03-14 | 196.319 | −17.049 | 5.6                | 414                    | 5.4                | 582                    | $4.90^{+2.23}_{-1.61} \pm 1.83$  | 0.5675             | $0.52^{+0.97}_{-0.52} \pm 0.95$ | 1.74                                                | 1.87                                                    |
| 0303820301 | 2006-04-15 | 196.693 | +42.920 | 19.8               | 390                    | 21.0               | 561                    | $3.90^{+1.39}_{-0.65} \pm 0.99$  | 0.5625             | $0.79^{+0.64}_{-0.35} \pm 0.35$ | 0.97                                                | 2.11                                                    |
| 0405210301 | 2006-09-02 | 196.730 | −10.400 | 10.0               | 483                    | 10.6               | 507                    | $4.51^{+1.21}_{-1.15} \pm 0.34$  | 0.5575             | $1.25^{+0.53}_{-0.56} \pm 0.14$ | 2.45                                                | 1.73                                                    |
| 0304202701 | 2006-02-15 | 196.901 | −19.824 | 7.9                | 305                    | 8.2                | 397                    | $5.72^{+1.85}_{-1.58} \pm 0.74$  | 0.5775             | $0.26^{+1.12}_{-0.26} \pm 0.94$ | 3.41                                                | 2.32                                                    |
| 0103260601 | 2002-04-26 | 196.960 | +31.723 | 15.5, 27.7         | 581, 465               | 44.3               | 587                    | $3.84^{+0.62}_{-0.28} \pm 0.29$  | 0.5625             | $0.69^{+0.32}_{-0.30} \pm 0.34$ | 2.19                                                | 1.95                                                    |
| 0302640101 | 2005-04-03 | 197.107 | −10.269 | 29.0               | 350                    | 29.0               | 588                    | $2.95^{+0.65}_{-0.73} \pm 0.31$  | 0.5675             | $0.32^{+0.42}_{-0.32} \pm 0.19$ | 5.99                                                | 1.70                                                    |
| 0102040301 | 2000-12-06 | 197.128 | +59.195 | 24.1               | 472                    | 25.0               | 470                    | $7.82^{+0.98}_{-0.78} \pm 1.02$  | 0.5675             | $1.73^{+0.52}_{-0.44} \pm 0.19$ | 4.21                                                | 2.02                                                    |
| 0301651701 | 2006-06-20 | 197.309 | +81.121 | 12.0               | 476                    | 12.2               | 498                    | $5.81^{+1.13}_{-1.22} \pm 0.61$  | 0.5675             | $0.47^{+0.63}_{-0.47} \pm 1.26$ | 1.26                                                | 1.58                                                    |
| 0602490101 | 2009-06-17 | 197.430 | −74.039 | 47.2               | 290                    | 48.0               | 376                    | $2.09^{+0.92}_{-0.71} \pm 0.83$  | 0.5675             | $0.99^{+0.46}_{-0.40} \pm 0.23$ | 1.86                                                | 2.11                                                    |
| 0112880401 | 2000-09-03 | 197.636 | −23.741 | 18.0               | 505                    | 17.5               | 583                    | $6.38^{+1.47}_{-0.85} \pm 0.73$  | 0.5675             | $2.17^{+0.62}_{-0.46} \pm 0.49$ | 1.55                                                | 2.39                                                    |
| 0210280101 | 2005-04-09 | 197.760 | +38.760 | 69.8               | 420                    | 69.4               | 590                    | $7.36^{+0.50}_{-0.81} \pm 0.25$  | 0.5625             | $0.80 \pm 0.27 \pm 0.53$        | 3.76                                                | 1.90                                                    |
| 0205180601 | 2004-08-18 | 197.909 | −22.797 | 9.2                | 512                    | 9.3                | 588                    | $7.66^{+1.06}_{-0.95} \pm 0.30$  | 0.5725             | $1.71^{+0.62}_{-0.57} \pm 1.09$ | 2.94                                                | 1.59                                                    |
| 0203280201 | 2004-05-02 | 197.914 | +26.392 | 8.2                | 510                    | 8.0                | 588                    | $4.26^{+1.14}_{-1.19} \pm 0.49$  | 0.5625             | $2.01 \pm 0.62 \pm 0.33$        | 3.39                                                | 1.77                                                    |
| 0504102101 | 2007-11-09 | 198.207 | +25.948 | 21.6               | 286                    | 21.8               | 405                    | $3.54^{+1.05}_{-0.88} \pm 0.80$  | 0.5575             | $0.42^{+0.55}_{-0.42} \pm 0.33$ | 4.62                                                | 1.73                                                    |
| 0554500401 | 2008-10-16 | 198.215 | +24.969 | 14.8               | 385                    | 15.3               | 555                    | $3.66^{+1.28}_{-1.11} \pm 0.26$  | 0.5475             | $0.00^{+0.45}_{-0.00} \pm 0.02$ | 1.48                                                | 2.33                                                    |
| 0025540301 | 2001-04-27 | 198.835 | +33.952 | 9.5                | 514                    | 9.8                | 509                    | $4.29^{+0.83}_{-0.91} \pm 1.18$  | 0.5725             | $0.69^{+0.51}_{-0.50} \pm 0.46$ | 0.88                                                | 1.81                                                    |
| 0152170501 | 2003-05-27 | 198.925 | +86.436 | 35.3               | 404                    | 35.6               | 476                    | $6.61^{+0.75}_{-0.65} \pm 0.48$  | 0.5675             | $1.61^{+0.41}_{-0.37} \pm 0.69$ | 2.08                                                | 1.90                                                    |
| 0503350201 | 2007-10-31 | 199.124 | +55.021 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0110070401 | 2002-04-13 | 199.221 | +23.376 | 21.3               | 466                    | 21.2               | 472                    | $6.35^{+0.87}_{-0.84} \pm 0.28$  | 0.5675             | $1.44^{+0.47}_{-0.46} \pm 0.45$ | 2.80                                                | 1.89                                                    |
| 0406740201 | 2007-04-10 | 199.489 | +33.128 | 18.2               | 353                    | 18.1               | 516                    | $2.31^{+0.76}_{-0.66} \pm 0.45$  | 0.5925             | $0.00^{+0.41}_{-0.00} \pm 0.42$ | 3.14                                                | 1.58                                                    |
| 0301650401 | 2005-10-30 | 200.115 | +58.772 | 9.6                | 422                    | 10.1               | 518                    | $6.65^{+1.00}_{-1.04} \pm 0.77$  | 0.5725             | $0.00^{+0.54}_{-0.00} \pm 0.76$ | 2.17                                                | 1.81                                                    |
| 0405340101 | 2006-04-24 | 200.203 | +52.687 | 28.9               | 367                    | 29.8               | 378                    | $3.69^{+0.84}_{-0.82} \pm 0.19$  | 0.5675             | $0.12^{+0.44}_{-0.12} \pm 0.46$ | 1.48                                                | 1.65                                                    |
| 0203460201 | 2004-01-31 | 200.666 | −44.050 | 13.0               | 587                    | 12.6               | 587                    | $11.68^{+1.52}_{-0.98} \pm 0.71$ | 0.5725             | $3.68^{+0.60}_{-0.59} \pm 1.98$ | 2.05                                                | 2.51                                                    |
| 0203160101 | 2004-03-06 | 200.992 | −28.891 | 7.3                | 478                    | 7.4                | 403                    | $7.52^{+1.83}_{-1.28} \pm 0.93$  | 0.5775             | $1.28^{+1.00}_{-0.79} \pm 1.68$ | 2.22                                                | 1.32                                                    |
| 0307002501 | 2006-02-15 | 201.503 | −27.760 | 17.0               | 416                    | 17.1               | 514                    | $7.16^{+1.05}_{-1.00} \pm 1.61$  | 0.5625             | $2.42^{+0.55}_{-0.54} \pm 1.01$ | 4.01                                                | 1.83                                                    |
| 0550270101 | 2008-06-12 | 201.546 | +69.008 | 16.5               | 333                    | 14.7               | 339                    | $5.17^{+1.32}_{-1.48} \pm 1.23$  | 0.5725             | $1.38^{+0.72}_{-0.76} \pm 0.60$ | 2.08                                                | 2.20                                                    |
| 0502211401 | 2008-06-16 | 201.757 | +83.270 | 8.5                | 313                    | 8.8                | 468                    | $6.28^{+1.81}_{-1.73} \pm 1.43$  | 0.5625             | $0.02^{+0.89}_{-0.02} \pm 0.39$ | 1.46                                                | 1.98                                                    |
| 0502211301 | 2008-06-14 | 201.757 | +83.270 | 22.9               | 376                    | 23.7               | 467                    | $2.66^{+1.09}_{-0.88} \pm 0.20$  | 0.5675             | $0.31^{+0.55}_{-0.31} \pm 0.07$ | 8.28                                                | 2.31                                                    |
| 0502211201 | 2008-06-18 | 201.765 | +83.269 | 6.1                | 385                    | 6.5                | 467                    | $3.60^{+2.08}_{-1.71} \pm 0.76$  | 0.5675             | $0.00^{+0.72}_{-0.00} \pm 0.00$ | 1.09                                                | 2.54                                                    |
| 0404240301 | 2006-11-29 | 202.394 | +51.284 | 17.0               | 421                    | 17.2               | 517                    | $5.96^{+1.18}_{-0.94} \pm 0.37$  | 0.5725             | $1.06^{+0.50}_{-0.52} \pm 0.05$ | 1.27                                                | 1.66                                                    |
| 0108860501 | 2001-10-15 | 202.529 | +28.632 | 19.8               | 405                    | 20.0               | 481                    | $5.26^{+1.12}_{-0.95} \pm 1.20$  | 0.5575             | $2.53^{+0.62}_{-0.47} \pm 0.37$ | 3.51                                                | 2.45                                                    |
| 0505930301 | 2008-04-04 | 202.657 | +28.582 | 36.1               | 359                    | 39.1               | 471                    | $2.49^{+1.17}_{-0.54} \pm 1.35$  | 0.5725             | $1.04^{+0.54}_{-0.37} \pm 0.46$ | 3.74                                                | 2.48                                                    |
| 0111100301 | 2000-10-01 | 202.732 | +21.104 | 21.5               | 589                    | 20.3               | 515                    | $7.50^{+0.69}_{-0.71} \pm 0.48$  | 0.5675             | $1.72^{+0.38}_{-0.39} \pm 0.50$ | 2.67                                                | 2.08                                                    |
| 0104860501 | 2002-06-26 | 202.853 | +83.300 | 32.0               | 543                    | 32.9               | 498                    | $5.97^{+0.57}_{-0.59} \pm 1.01$  | 0.5725             | $0.65 \pm 0.34 \pm 0.87$        | 1.04                                                | 1.66                                                    |
| 0202210301 | 2005-02-02 | 204.928 | −41.756 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     |
| 0202210401 | 2005-02-04 | 204.928 | −41.756 | 53.5               | 388                    | 53.8               | 460                    | $8.86^{+0.61}_{-0.63} \pm 0.24$  | 0.5675             | $1.02 \pm 0.33 \pm 0.77$        | 2.02                                                | 2.64                                                    |
| 0201530101 | 2005-03-30 | 205.109 | −14.127 | 28.1               | 380                    | 28.3               | 550                    | $3.03^{+0.64}_{-0.80} \pm 0.30$  | 0.5575             | $0.15^{+0.31}_{-0.15} \pm 0.12$ | 1.52                                                | 1.98                                                    |
| 0112400101 | 2002-03-06 | 205.212 | −17.245 | 11.8               | 388                    | 11.7               | 391                    | $4.92^{+1.70}_{-1.84} \pm 1.05$  | 0.5525             | $2.57^{+0.84}_{-0.83} \pm 0.84$ | 1.56                                                | 1.89                                                    |
| 0301600101 | 2005-03-24 | 205.426 | −14.535 | 74.0               | 404                    | 75.8               | 581                    | $2.39^{+0.48}_{-0.47} \pm 0.21$  | 0.5675             | $0.18^{+0.25}_{-0.18} \pm 0.18$ | 3.59                                                | 2.60                                                    |
| 0153150101 | 2003-09-03 | 205.475 | −14.547 | 22.9               | 591                    | 22.9               | 516                    | $3.66^{+0.82}_{-0.67} \pm 0.47$  | 0.5675             | $0.70^{+0.37}_{-0.35} \pm 0.15$ | 2.66                                                | 2.16                                                    |
| 0505200101 | 2007-09-17 | 205.659 | −1.423  | 29.0               | 350                    | 31.0               | 587                    | $5.38^{+0.68}_{-1.00} \pm 0.98$  | 0.5675             | $1.18^{+0.40}_{-0.50} \pm 0.47$ | 1.34                                                | 2.67                                                    |
| 0041170201 | 2000-11-05 | 205.844 | +51.845 | 39.9               | 511                    | 40.6               | 584                    | $8.56^{+0.52}_{-0.55} \pm 0.61$  | 0.5675             | $2.51 \pm 0.30 \pm 0.87$        | 0.92                                                | 1.90                                                    |
| 0001730601 | 2003-03-16 | 205.874 | −0.331  | 12.3               | 501                    | 12.4               | 581                    | $6.42^{+1.51}_{-1.57} \pm 1.16$  | 0.5625             | $4.43^{+0.73}_{-0.81} \pm 1.37$ | 2.35                                                | 2.42                                                    |
| 0149890301 | 2003-09-17 | 206.007 | −15.463 | 5.5, 6.2           | 587, 515               | 5.8, 6.3           | 588, 588               | $4.36^{+0.94}_{-0.78} \pm 0.28$  | 0.5675             | $1.23^{+0.55}_{-0.52} \pm 0.43$ | 1.91                                                | 2.34                                                    |
| 0101440401 | 2000-11-07 | 206.021 | +32.362 | 43.8               | 579                    | 43.7               | 506                    | $8.57^{+0.56}_{-0.75} \pm 0.55$  | 0.5625             | $3.50^{+0.36}_{-0.35} \pm 0.39$ | 3.45                                                | 1.63                                                    |
| 0146870101 | 2003-09-11 | 206.150 | −1.024  | 7.1                | 590                    | 7.4                | 516                    | $7.79^{+1.25}_{-1.26} \pm 1.55$  | 0.5625             | $5.20 \pm 0.75 \pm 1.05$        | 1.94                                                | 2.39                                                    |
| 0146870201 | 2003-09-15 | 206.151 | −1.024  | 5.0                | 591                    | 5.1                | 591                    | $7.99^{+1.85}_{-1.56} \pm 3.22$  | 0.5675             | $3.29^{+1.05}_{-0.91} \pm 1.15$ | 5.11                                                | 2.39                                                    |
| 0402250701 | 2007-04-13 | 206.416 | +37.354 | 15.0               | 303                    | 15.2               | 463                    | $4.72^{+1.19}_{-1.17} \pm 0.31$  | 0.5625             | $1.49^{+0.63}_{-0.60} \pm 0.52$ | 1.08                                                | 1.55                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0112530101 | 2002-09-15 | 206.451 | -16.584 | 39.7               | 433                    | 39.8               | 433                    | $7.65^{+0.45}_{-1.36} \pm 2.30$  | 0.5625             | $3.65^{+0.51}_{-0.33} \pm 0.67$ | 2.02                                                | 2.03                                              |
| 0554700101 | 2008-08-28 | 206.461 | -26.085 | 24.9               | 497                    | 24.5               | 511                    | $2.98^{+0.94}_{-0.93} \pm 0.25$  | 0.5625             | $1.04^{+0.45}_{-0.47} \pm 0.07$ | 1.92                                                | 1.98                                              |
| 0148300101 | 2003-08-30 | 206.630 | -17.569 | 15.2               | 491                    | 15.5               | 571                    | $2.89^{+0.67}_{-0.70} \pm 1.42$  | 0.5675             | $1.46^{+0.56}_{-0.43} \pm 0.96$ | 1.56                                                | 1.94                                              |
| 0502630201 | 2008-04-22 | 206.808 | +35.803 | 38.7               | 306                    | 42.1               | 469                    | $3.82^{+0.65}_{-0.69} \pm 0.17$  | 0.5725             | $1.02^{+0.38}_{-0.44} \pm 0.09$ | 4.19                                                | 2.31                                              |
| 0300480201 | 2005-04-12 | 206.809 | +35.803 | 6.1                | 382                    | 6.2                | 475                    | $3.90^{+1.72}_{-1.39} \pm 0.74$  | 0.5775             | $0.09^{+0.90}_{-0.09} \pm 0.97$ | 3.02                                                | 1.58                                              |
| 0401060201 | 2006-11-17 | 206.815 | +35.839 | 44.7               | 380                    | 44.2               | 398                    | $3.58 \pm 0.70 \pm 0.32$         | 0.5675             | $0.75^{+0.36}_{-0.37} \pm 0.59$ | 1.28                                                | 1.51                                              |
| 0206100101 | 2004-11-05 | 206.923 | +23.396 | 41.4               | 469                    | 41.9               | 395                    | $6.29^{+0.81}_{-0.73} \pm 1.22$  | 0.5725             | $3.59^{+0.37}_{-0.54} \pm 0.65$ | 1.76                                                | 2.49                                              |
| 0551860101 | 2008-10-05 | 206.926 | +23.413 | 10.4               | 448                    | 10.8               | 458                    | $2.20^{+1.41}_{-1.34} \pm 0.51$  | 0.5475             | $0.39^{+0.37}_{-0.39} \pm 0.27$ | 0.90                                                | 2.36                                              |
| 0150800101 | 2002-11-02 | 206.928 | +23.414 | 15.0               | 463                    | 16.5               | 467                    | $2.81^{+1.17}_{-0.44} \pm 0.28$  | 0.5725             | $0.00^{+0.56}_{-0.00} \pm 0.29$ | 3.68                                                | 2.54                                              |
| 0303360101 | 2005-11-15 | 207.698 | +41.531 | 20.7               | 239                    | 20.4               | 396                    | $5.43 \pm 1.14 \pm 0.39$         | 0.5725             | $0.00^{+0.58}_{-0.00} \pm 0.65$ | 1.49                                                | 1.35                                              |
| 0554700301 | 2009-02-10 | 207.926 | -27.541 | 17.8               | 428                    | 18.4               | 588                    | $3.68^{+0.99}_{-1.04} \pm 0.26$  | 0.5625             | $0.72 \pm 0.52 \pm 0.07$        | 3.97                                                | 2.61                                              |
| 0406570401 | 2007-03-19 | 208.298 | -18.278 | 11.3               | 275                    | 11.5               | 511                    | $2.73^{+1.33}_{-1.00} \pm 0.25$  | 0.5675             | $1.17^{+0.65}_{-0.63} \pm 0.23$ | 1.25                                                | 1.75                                              |
| 0556280301 | 2009-04-20 | 208.713 | +44.540 | 59.9               | 320                    | 61.8               | 482                    | $3.75^{+0.59}_{-0.68} \pm 0.30$  | 0.5625             | $0.64^{+0.31}_{-0.32} \pm 0.27$ | 1.20                                                | 1.87                                              |
| 0305480301 | 2005-10-28 | 209.053 | +34.708 | 24.7               | 411                    | 25.3               | 509                    | $5.76^{+0.97}_{-1.13} \pm 0.46$  | 0.5575             | $1.18^{+0.48}_{-0.49} \pm 0.43$ | 2.11                                                | 1.96                                              |
| 0300630301 | 2006-01-19 | 209.821 | -65.146 | 15.6               | 482                    | 15.1               | 503                    | $2.35^{+0.86}_{-0.76} \pm 0.74$  | 0.5675             | $0.00^{+0.35}_{-0.00} \pm 0.00$ | 1.80                                                | 2.55                                              |
| 0304070201 | 2005-12-05 | 210.318 | +57.711 | 8.3                | 486                    | 8.4                | 577                    | $4.48^{+1.10}_{-1.09} \pm 0.34$  | 0.5725             | $0.54^{+0.61}_{-0.54} \pm 1.06$ | 0.68                                                | 1.12                                              |
| 0406620301 | 2007-03-22 | 210.412 | -9.323  | 61.4               | 423                    | 60.5               | 513                    | $2.80^{+0.63}_{-0.61} \pm 0.62$  | 0.5575             | $0.25^{+0.32}_{-0.25} \pm 0.19$ | 3.92                                                | 1.77                                              |
| 0503560601 | 2007-09-08 | 210.515 | -19.459 | 47.2               | 346                    | 49.6               | 497                    | $1.90^{+0.83}_{-0.70} \pm 0.23$  | 0.5625             | $1.09^{+0.41}_{-0.36} \pm 0.05$ | 1.18                                                | 2.15                                              |
| 0556560101 | 2008-12-10 | 210.550 | +74.590 | 31.2               | 241                    | 30.4               | 393                    | $4.02 \pm 0.97 \pm 0.27$         | 0.5625             | $0.05^{+0.61}_{-0.05} \pm 0.61$ | 2.59                                                | 1.51                                              |
| 0205150501 | 2004-08-25 | 210.928 | -19.433 | 5.9                | 499                    | 6.4                | 573                    | $1.69^{+1.49}_{-1.23} \pm 0.23$  | 0.5675             | $1.42^{+0.78}_{-0.74} \pm 0.10$ | 2.19                                                | 2.51                                              |
| 0503560101 | 2007-08-27 | 211.374 | -19.286 | 30.2               | 416                    | 33.6               | 583                    | $1.84^{+0.78}_{-0.71} \pm 0.24$  | 0.5525             | $0.46^{+0.36}_{-0.37} \pm 0.10$ | 1.78                                                | 2.41                                              |
| 0203900201 | 2004-08-23 | 211.398 | -36.545 | 54.3               | 580                    | 59.8               | 592                    | $1.61^{+0.38}_{-0.39} \pm 0.36$  | 0.5675             | $0.27^{+0.22}_{-0.23} \pm 0.14$ | 1.26                                                | 2.26                                              |
| 0503560401 | 2007-08-31 | 211.772 | -19.202 | 44.4               | 414                    | 46.8               | 579                    | $3.78^{+0.68}_{-0.84} \pm 0.30$  | 0.5625             | $0.63^{+0.30}_{-0.43} \pm 0.15$ | 2.58                                                | 2.37                                              |
| 0109461801 | 2002-05-13 | 211.792 | +66.197 | 10.5               | 470                    | 10.5               | 469                    | $10.19^{+1.59}_{-1.34} \pm 0.69$ | 0.5725             | $2.14^{+0.69}_{-0.70} \pm 1.63$ | 5.28                                                | 1.76                                              |
| 0109462801 | 2004-05-08 | 211.793 | +66.197 | 9.4                | 471                    | 9.3                | 470                    | $4.43^{+1.20}_{-0.98} \pm 0.23$  | 0.5725             | $0.49^{+0.67}_{-0.49} \pm 0.98$ | 1.39                                                | 1.59                                              |
| 0503560201 | 2007-09-20 | 212.195 | -19.083 | 52.8               | 353                    | 55.5               | 580                    | $1.97^{+0.58}_{-0.61} \pm 0.09$  | 0.5625             | $0.29^{+0.31}_{-0.29} \pm 0.03$ | 5.03                                                | 2.45                                              |
| 0304190101 | 2006-01-15 | 212.203 | -54.381 | 53.7               | 368                    | 53.9               | 468                    | $3.67^{+0.63}_{-0.68} \pm 0.34$  | 0.5625             | $0.25^{+0.33}_{-0.25} \pm 0.22$ | 5.29                                                | 2.06                                              |
| 0150320201 | 2003-06-17 | 212.450 | +64.667 | 24.6               | 577                    | 24.7               | 585                    | $10.32^{+0.90}_{-0.64} \pm 0.43$ | 0.5675             | $3.31^{+0.49}_{-0.39} \pm 1.15$ | 2.18                                                | 2.69                                              |
| 0503560301 | 2007-09-20 | 212.628 | -18.949 | 27.2               | 301                    | 32.5               | 523                    | $0.00^{+0.26}_{-0.00} \pm 0.00$  | 0.5425             | $0.00^{+0.35}_{-0.00} \pm 0.00$ | 4.09                                                | 2.67                                              |
| 0503560501 | 2008-02-23 | 212.928 | -19.128 | 39.8               | 383                    | 41.2               | 479                    | $1.76^{+0.79}_{-0.73} \pm 0.26$  | 0.5575             | $0.49^{+0.40}_{-0.37} \pm 0.16$ | 1.54                                                | 1.76                                              |
| 0111320501 | 2003-02-14 | 212.950 | -57.423 | 6.3                | 586                    | 6.2                | 516                    | $5.25^{+1.53}_{-1.25} \pm 0.33$  | 0.5675             | $0.00^{+0.68}_{-0.00} \pm 0.52$ | 3.89                                                | 2.40                                              |
| 0406541101 | 2007-05-06 | 213.199 | +55.721 | 16.1               | 355                    | 15.6               | 517                    | $5.78^{+1.15}_{-1.16} \pm 0.35$  | 0.5625             | $0.20^{+0.62}_{-0.20} \pm 0.25$ | 3.43                                                | 1.87                                              |
| 0406540401 | 2006-11-23 | 213.211 | +55.757 | 10.2               | 428                    | 10.2               | 517                    | $3.24^{+1.43}_{-1.03} \pm 1.06$  | 0.5675             | $0.00^{+0.15}_{-0.00} \pm 0.00$ | 3.85                                                | 1.77                                              |
| 0112552001 | 2001-05-07 | 213.212 | +54.684 | 13.3               | 508                    | 13.3               | 508                    | $5.68^{+0.68}_{-0.80} \pm 0.54$  | 0.5775             | $0.99^{+0.45}_{-0.50} \pm 0.98$ | 2.17                                                | 1.70                                              |
| 0203900101 | 2004-08-09 | 213.422 | -39.074 | 72.7               | 588                    | 74.1               | 518                    | $5.00^{+0.40}_{-0.42} \pm 0.37$  | 0.5675             | $0.79^{+0.23}_{-0.24} \pm 0.59$ | 2.38                                                | 1.54                                              |
| 0123940101 | 2000-10-23 | 213.700 | +13.021 | 37.0               | 538                    | 36.8               | 474                    | $8.50^{+0.87}_{-1.18} \pm 0.43$  | 0.5625             | $1.94^{+0.41}_{-0.53} \pm 0.25$ | 1.96                                                | 2.11                                              |
| 0123940201 | 2000-10-23 | 213.700 | +13.020 | 43.7               | 536                    | 44.5               | 474                    | $7.37^{+1.72}_{-0.63} \pm 0.43$  | 0.5625             | $2.23^{+0.44}_{-0.31} \pm 0.37$ | 1.35                                                | 2.05                                              |
| 0415580201 | 2007-04-08 | 213.703 | +13.019 | 31.6               | 241                    | 32.3               | 401                    | $6.10^{+1.11}_{-0.65} \pm 0.46$  | 0.5675             | $1.48^{+0.60}_{-0.62} \pm 0.13$ | 2.26                                                | 1.72                                              |
| 0502091601 | 2008-11-02 | 213.830 | +39.743 | 81.4               | 351                    | 80.3               | 378                    | $2.60^{+0.49}_{-0.57} \pm 0.52$  | 0.5625             | $0.66^{+0.27}_{-0.29} \pm 0.21$ | 0.94                                                | 1.85                                              |
| 0312190601 | 2006-01-28 | 213.849 | -50.846 | 10.8               | 322                    | 11.3               | 407                    | $2.73^{+1.25}_{-1.06} \pm 0.28$  | 0.5825             | $0.00^{+0.63}_{-0.00} \pm 0.00$ | 0.85                                                | 1.88                                              |
| 0202730101 | 2004-05-30 | 213.946 | +55.697 | 31.1               | 481                    | 31.3               | 552                    | $4.58^{+0.52}_{-0.77} \pm 0.43$  | 0.5625             | $0.00^{+0.22}_{-0.00} \pm 0.57$ | 4.41                                                | 1.71                                              |
| 0510181401 | 2007-04-28 | 214.027 | +4.466  | 13.8               | 493                    | 14.1               | 590                    | $5.12^{+0.95}_{-0.60} \pm 0.73$  | 0.5625             | $0.46^{+0.48}_{-0.46} \pm 0.46$ | 2.27                                                | 1.63                                              |
| 0203450101 | 2005-04-23 | 214.192 | +34.342 | 36.5               | 396                    | 36.4               | 561                    | $3.53^{+0.66}_{-0.60} \pm 0.73$  | 0.5575             | $0.60^{+0.32}_{-0.33} \pm 0.05$ | 1.65                                                | 1.98                                              |
| 0303562101 | 2005-11-23 | 214.205 | +36.004 | 5.9                | 427                    | 5.4                | 517                    | $3.64^{+1.84}_{-1.26} \pm 0.24$  | 0.5725             | $0.26^{+0.86}_{-0.26} \pm 0.11$ | 0.58                                                | 1.42                                              |
| 0551950401 | 2008-08-24 | 214.291 | -24.791 | 14.0               | 488                    | 14.0               | 502                    | $1.79^{+0.75}_{-0.76} \pm 0.77$  | 0.5775             | $0.00^{+0.52}_{-0.00} \pm 0.01$ | 2.59                                                | 1.70                                              |
| 0312191501 | 2006-06-15 | 214.716 | +62.125 | 7.5                | 419                    | 7.9                | 513                    | $4.01^{+1.22}_{-1.21} \pm 0.06$  | 0.5725             | $0.56^{+0.68}_{-0.56} \pm 0.25$ | 2.43                                                | 1.89                                              |
| 0200240501 | 2004-09-20 | 215.699 | +3.640  | 15.4               | 585                    | 15.7               | 510                    | $2.09^{+0.91}_{-0.76} \pm 0.23$  | 0.5725             | $1.18^{+0.48}_{-0.47} \pm 0.12$ | 2.35                                                | 2.45                                              |
| 0109461001 | 2001-10-21 | 215.738 | +31.939 | 8.7                | 505                    | 8.8                | 583                    | $5.40^{+1.08}_{-1.24} \pm 0.36$  | 0.5675             | $1.53^{+0.60}_{-0.61} \pm 0.08$ | 1.35                                                | 2.08                                              |
| 0560191801 | 2009-04-25 | 215.937 | +48.650 | 8.8                | 424                    | 9.3                | 590                    | $2.82^{+1.21}_{-0.86} \pm 0.80$  | 0.5825             | $0.38^{+0.85}_{-0.38} \pm 0.11$ | 1.49                                                | 2.32                                              |
| 0502670101 | 2007-10-13 | 216.064 | -5.636  | 14.4               | 380                    | 14.4               | 469                    | $2.19^{+0.99}_{-0.94} \pm 0.23$  | 0.5725             | $0.21^{+0.54}_{-0.21} \pm 0.12$ | 2.39                                                | 1.55                                              |
| 0305930101 | 2005-07-24 | 216.192 | -52.106 | 41.7               | 223                    | 42.8               | 445                    | $5.34 \pm 0.85 \pm 1.65$         | 0.5575             | $0.97^{+0.50}_{-0.41} \pm 0.74$ | 3.06                                                | 2.08                                              |
| 0552510101 | 2009-02-07 | 216.325 | -44.952 | 96.0               | 366                    | 99.1               | 527                    | $2.21^{+0.51}_{-0.50} \pm 0.85$  | 0.5625             | $0.50^{+0.24}_{-0.26} \pm 0.31$ | 2.43                                                | 2.14                                              |
| 0046940401 | 2001-11-02 | 216.366 | +45.529 | 13.6               | 442                    | 14.0               | 523                    | $6.79^{+1.33}_{-0.95} \pm 3.26$  | 0.5625             | $1.59 \pm 0.56 \pm 1.00$        | 2.42                                                | 2.25                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0112850101 | 2001-05-10 | 216.446 | +48.346 | 16.1               | 495                    | 16.1               | 492                    | $4.48^{+0.82}_{-0.84} \pm 0.55$  | 0.5675             | $1.37^{+0.47}_{-0.44} \pm 0.20$  | 0.90                                                | 2.05                                                    |
| 0128531401 | 2003-05-05 | 216.975 | +60.681 | 29.2               | 580                    | 30.0               | 507                    | $7.69^{+0.79}_{-0.62} \pm 0.83$  | 0.5675             | $0.41^{+0.32}_{-0.31} \pm 0.98$  | 5.03                                                | 1.78                                                    |
| 0128531501 | 2003-05-28 | 216.975 | +60.682 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     |
| 0128531601 | 2003-12-12 | 216.992 | +60.718 | 68.7               | 582                    | 69.4               | 582                    | $4.89^{+0.31}_{-0.68} \pm 0.67$  | 0.5625             | $0.64^{+0.25}_{-0.18} \pm 0.25$  | 1.76                                                | 2.01                                                    |
| 0143370101 | 2003-03-23 | 217.252 | -28.907 | 37.7               | 553                    | 38.9               | 562                    | $2.59 \pm 0.61 \pm 0.28$         | 0.5675             | $0.93 \pm 0.35 \pm 0.08$         | 2.02                                                | 1.93                                                    |
| 0500240101 | 2008-03-17 | 217.797 | +1.034  | 61.9               | 488                    | 62.5               | 513                    | $2.47^{+0.55}_{-0.63} \pm 0.18$  | 0.5675             | $0.88 \pm 0.31 \pm 0.07$         | 2.55                                                | 1.98                                                    |
| 0555740101 | 2008-11-04 | 218.178 | +40.023 | 43.7               | 405                    | 44.2               | 488                    | $2.32^{+0.59}_{-0.54} \pm 0.60$  | 0.5775             | $0.44^{+0.36}_{-0.35} \pm 0.26$  | 0.94                                                | 1.75                                                    |
| 0551022401 | 2008-09-19 | 218.716 | -0.462  | 9.2                | 423                    | 8.8                | 518                    | $2.98^{+1.17}_{-1.37} \pm 0.96$  | 0.5725             | $1.71^{+0.80}_{-0.84} \pm 0.30$  | 2.54                                                | 1.46                                                    |
| 0148740101 | 2003-04-14 | 219.365 | +32.049 | 5.0                | 515                    | 5.0                | 594                    | $7.47^{+1.56}_{-1.64} \pm 1.54$  | 0.5625             | $1.46^{+0.76}_{-0.80} \pm 0.69$  | 2.42                                                | 2.17                                                    |
| 0501040101 | 2007-11-17 | 219.728 | +26.290 | 47.2               | 350                    | 48.1               | 512                    | $3.09^{+0.77}_{-0.66} \pm 0.14$  | 0.5625             | $0.15^{+0.39}_{-0.15} \pm 0.19$  | 0.93                                                | 1.66                                                    |
| 0405950401 | 2007-02-07 | 220.107 | -32.012 | 24.6               | 502                    | 25.1               | 592                    | $2.71^{+0.77}_{-0.72} \pm 0.47$  | 0.5625             | $0.13^{+0.44}_{-0.13} \pm 0.19$  | 2.38                                                | 2.30                                                    |
| 0111320101 | 2002-08-08 | 220.297 | -53.398 | 16.8               | 472                    | 16.6               | 396                    | $9.34^{+1.21}_{-0.94} \pm 0.20$  | 0.5725             | $2.10 \pm 0.52 \pm 1.15$         | 5.46                                                | 1.38                                                    |
| 0560191701 | 2008-09-17 | 223.044 | -42.846 | 12.2               | 424                    | 12.6               | 515                    | $3.01 \pm 1.27 \pm 0.45$         | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.22$  | 0.84                                                | 1.37                                                    |
| 0554380201 | 2008-12-14 | 223.356 | +68.210 | 66.8               | 309                    | 67.4               | 397                    | $1.93^{+0.61}_{-0.51} \pm 0.83$  | 0.5725             | $0.00^{+0.23}_{-0.00} \pm 0.07$  | 1.31                                                | 2.02                                                    |
| 0554380301 | 2008-12-20 | 223.357 | +68.210 | 65.2               | 313                    | 66.7               | 398                    | $2.06^{+0.66}_{-0.51} \pm 0.78$  | 0.5775             | $0.25^{+0.41}_{-0.25} \pm 0.46$  | 2.22                                                | 2.62                                                    |
| 0201940101 | 2004-12-17 | 223.358 | +68.210 | 77.5               | 385                    | 78.2               | 397                    | $3.53^{+0.49}_{-0.54} \pm 0.32$  | 0.5675             | $0.11^{+0.26}_{-0.11} \pm 0.22$  | 3.97                                                | 2.48                                                    |
| 0201940201 | 2004-12-19 | 223.358 | +68.210 | 6.8                | 474                    | 6.7                | 400                    | $6.42^{+1.86}_{-1.45} \pm 0.54$  | 0.5725             | $0.32^{+0.93}_{-0.32} \pm 1.02$  | 2.10                                                | 1.33                                                    |
| 0554380101 | 2008-05-26 | 223.362 | +68.208 | 68.5               | 313                    | 68.1               | 472                    | $6.13^{+0.57}_{-0.60} \pm 0.31$  | 0.5575             | $0.69^{+0.28}_{-0.29} \pm 0.11$  | 1.40                                                | 2.19                                                    |
| 0111290401 | 2001-12-02 | 223.378 | +68.227 | 7.8                | 397                    | 8.2                | 472                    | $7.27^{+1.88}_{-1.39} \pm 0.69$  | 0.5725             | $1.99^{+1.29}_{-0.85} \pm 1.18$  | 6.32                                                | 2.16                                                    |
| 0555780401 | 2008-07-11 | 223.464 | -54.373 | 69.0               | 349                    | 75.4               | 511                    | $2.10^{+0.97}_{-0.50} \pm 0.87$  | 0.5725             | $0.00^{+0.63}_{-0.00} \pm 0.00$  | 3.30                                                | 2.42                                                    |
| 0555780101 | 2008-07-05 | 223.465 | -54.365 | 80.7               | 413                    | 87.7               | 509                    | $1.54^{+0.43}_{-0.67} \pm 0.64$  | 0.5675             | $0.11^{+0.29}_{-0.11} \pm 0.14$  | 2.43                                                | 2.31                                                    |
| 0555780301 | 2008-07-09 | 223.477 | -54.374 | 88.3               | 490                    | 94.6               | 513                    | $2.23 \pm 0.52 \pm 0.42$         | 0.5625             | $0.23^{+0.32}_{-0.23} \pm 0.13$  | 2.52                                                | 2.05                                                    |
| 0604960201 | 2009-07-17 | 223.478 | -54.372 | 87.3               | 423                    | 92.9               | 513                    | $1.59^{+0.66}_{-0.56} \pm 0.11$  | 0.5725             | $0.09^{+0.34}_{-0.09} \pm 0.08$  | 1.38                                                | 2.53                                                    |
| 0555780201 | 2008-07-07 | 223.481 | -54.365 | 93.2               | 413                    | 99.3               | 512                    | $2.40^{+0.46}_{-0.86} \pm 0.87$  | 0.5625             | $0.33^{+0.40}_{-0.27} \pm 0.22$  | 1.66                                                | 2.45                                                    |
| 0108060401 | 2001-07-27 | 223.542 | -54.431 | 21.0               | 584                    | 20.5               | 513                    | $4.65^{+0.66}_{-0.70} \pm 0.37$  | 0.5675             | $0.68^{+0.32}_{-0.38} \pm 0.39$  | 1.48                                                | 1.69                                                    |
| 0108060501 | 2001-07-27 | 223.553 | -54.422 | 36.9               | 584                    | 37.3               | 511                    | $4.48^{+0.60}_{-0.35} \pm 0.67$  | 0.5675             | $0.49^{+0.27}_{-0.23} \pm 0.65$  | 1.12                                                | 1.52                                                    |
| 0504100201 | 2007-11-25 | 223.557 | +47.429 | 20.8               | 388                    | 20.7               | 468                    | $4.13^{+1.57}_{-0.69} \pm 0.29$  | 0.5625             | $0.40^{+0.61}_{-0.30} \pm 0.20$  | 1.65                                                | 1.76                                                    |
| 0108061901 | 2002-01-17 | 223.586 | -54.449 | 40.7               | 507                    | 41.0               | 583                    | $6.17^{+0.46}_{-0.47} \pm 0.35$  | 0.5675             | $1.02 \pm 0.26 \pm 0.76$         | 3.38                                                | 1.68                                                    |
| 0108062301 | 2002-01-23 | 223.589 | -54.449 | 72.0               | 506                    | 72.5               | 508                    | $4.62^{+0.36}_{-0.35} \pm 0.38$  | 0.5675             | $0.82 \pm 0.21 \pm 0.71$         | 1.73                                                | 1.55                                                    |
| 0108062101 | 2002-01-20 | 223.593 | -54.445 | 41.4               | 508                    | 41.3               | 583                    | $4.61^{+0.42}_{-0.40} \pm 0.26$  | 0.5725             | $0.83^{+0.26}_{-0.24} \pm 0.75$  | 3.04                                                | 1.59                                                    |
| 0108061801 | 2002-01-16 | 223.596 | -54.451 | 39.3               | 505                    | 42.9               | 584                    | $5.85^{+0.82}_{-0.80} \pm 0.39$  | 0.5675             | $0.82^{+0.35}_{-0.28} \pm 0.49$  | 2.60                                                | 2.39                                                    |
| 0108060701 | 2002-01-14 | 223.599 | -54.455 | 71.1               | 506                    | 71.3               | 508                    | $4.81^{+0.36}_{-0.35} \pm 0.41$  | 0.5725             | $0.48 \pm 0.22 \pm 0.89$         | 1.68                                                | 2.11                                                    |
| 0108060601 | 2002-01-13 | 223.606 | -54.451 | 46.1               | 506                    | 46.1               | 508                    | $5.29^{+0.32}_{-0.58} \pm 0.32$  | 0.5675             | $0.36^{+0.22}_{-0.26} \pm 0.87$  | 2.20                                                | 2.32                                                    |
| 0555780801 | 2009-01-16 | 223.616 | -54.472 | 72.5               | 493                    | 75.0               | 585                    | $2.58^{+0.54}_{-0.60} \pm 0.29$  | 0.5625             | $0.55^{+0.30}_{-0.14} \pm 0.28$  | 1.23                                                | 1.50                                                    |
| 0555780501 | 2009-01-06 | 223.620 | -54.464 | 86.1               | 420                    | 88.3               | 510                    | $2.24^{+0.46}_{-0.48} \pm 0.60$  | 0.5675             | $0.31 \pm 0.28 \pm 0.33$         | 1.83                                                | 1.68                                                    |
| 0555780901 | 2009-01-18 | 223.631 | -54.473 | 77.1               | 417                    | 78.8               | 511                    | $2.42^{+0.69}_{-0.54} \pm 0.27$  | 0.5675             | $0.00^{+0.27}_{-0.00} \pm 0.24$  | 2.40                                                | 1.72                                                    |
| 0555780601 | 2009-01-10 | 223.632 | -54.463 | 72.7               | 496                    | 77.2               | 511                    | $1.95^{+0.60}_{-0.47} \pm 0.33$  | 0.5725             | $0.24^{+0.35}_{-0.24} \pm 0.31$  | 1.50                                                | 1.51                                                    |
| 0555781001 | 2009-01-22 | 223.645 | -54.475 | 95.7               | 423                    | 98.4               | 583                    | $2.53^{+0.83}_{-0.46} \pm 0.53$  | 0.5675             | $0.30^{+0.48}_{-0.24} \pm 0.22$  | 2.00                                                | 1.79                                                    |
| 0555782301 | 2009-01-24 | 223.645 | -54.474 | 90.6               | 423                    | 95.6               | 584                    | $2.49^{+0.59}_{-0.27} \pm 0.27$  | 0.5625             | $0.26^{+0.31}_{-0.24} \pm 0.09$  | 3.00                                                | 1.85                                                    |
| 0555780701 | 2009-01-12 | 223.650 | -54.467 | 91.7               | 484                    | 94.1               | 585                    | $2.96^{+0.78}_{-0.57} \pm 0.73$  | 0.5625             | $0.29^{+0.42}_{-0.18} \pm 0.30$  | 2.15                                                | 1.68                                                    |
| 0042340501 | 2001-02-16 | 223.929 | -60.111 | 12.3               | 446                    | 12.4               | 446                    | $5.88^{+1.23}_{-1.05} \pm 0.28$  | 0.5625             | $1.48^{+0.60}_{-0.59} \pm 0.41$  | 0.79                                                | 2.26                                                    |
| 0556214901 | 2008-11-22 | 224.568 | +32.511 | 10.5               | 428                    | 10.6               | 517                    | $3.48^{+1.28}_{-1.25} \pm 0.39$  | 0.5625             | $0.66^{+0.71}_{-0.66} \pm 0.76$  | 2.73                                                | 1.52                                                    |
| 0110950201 | 2003-01-07 | 225.107 | -83.172 | 5.3                | 478                    | 5.3                | 477                    | $5.93^{+1.86}_{-1.69} \pm 0.29$  | 0.5725             | $0.33^{+0.99}_{-0.33} \pm 0.75$  | 1.82                                                | 1.20                                                    |
| 0140550601 | 2003-05-04 | 225.113 | +49.102 | 20.9               | 574                    | 20.7               | 500                    | $7.41^{+0.76}_{-0.74} \pm 0.31$  | 0.5675             | $0.77^{+0.39}_{-0.40} \pm 0.93$  | 3.25                                                | 1.69                                                    |
| 0110870101 | 2002-03-27 | 225.210 | -34.335 | 22.2               | 478                    | 22.5               | 479                    | $6.10^{+0.73}_{-1.24} \pm 0.59$  | 0.5625             | $0.88^{+0.48}_{-0.44} \pm 0.44$  | 1.59                                                | 2.41                                                    |
| 0305800901 | 2006-01-20 | 225.377 | -68.338 | 20.1               | 452                    | 20.2               | 481                    | $4.16^{+0.48}_{-0.99} \pm 1.21$  | 0.5725             | $0.35^{+0.52}_{-0.35} \pm 0.39$  | 2.17                                                | 2.12                                                    |
| 0150970301 | 2003-12-02 | 225.421 | +43.142 | 22.6               | 586                    | 22.2               | 587                    | $5.74^{+0.56}_{-0.86} \pm 0.93$  | 0.5675             | $1.71^{+0.40}_{-0.42} \pm 0.80$  | 0.93                                                | 1.88                                                    |
| 0502920101 | 2007-11-09 | 225.427 | +36.410 | 16.5               | 344                    | 19.0               | 509                    | $3.40^{+0.77}_{-1.20} \pm 1.61$  | 0.5625             | $0.27^{+0.50}_{-0.27} \pm 0.38$  | 2.72                                                | 2.11                                                    |
| 0202940201 | 2004-10-26 | 225.475 | +24.523 | 21.6               | 591                    | 21.8               | 518                    | $4.97^{+0.69}_{-0.68} \pm 0.30$  | 0.5675             | $1.06^{+0.40}_{-0.36} \pm 0.55$  | 1.97                                                | 1.33                                                    |
| 0206090201 | 2005-05-20 | 225.966 | +72.498 | 9.3                | 370                    | 9.3                | 447                    | $10.00^{+1.93}_{-1.70} \pm 2.18$ | 0.5675             | $11.48^{+1.18}_{-1.16} \pm 1.24$ | 3.82                                                | 2.15                                                    |
| 0555870201 | 2008-11-24 | 225.996 | +49.130 | 76.0               | 412                    | 77.4               | 516                    | $1.38 \pm 0.54 \pm 1.17$         | 0.5675             | $0.53 \pm 0.30 \pm 0.34$         | 4.93                                                | 1.94                                                    |
| 0206090101 | 2004-12-21 | 226.007 | +72.533 | 26.0               | 568                    | 26.1               | 494                    | $6.41^{+0.69}_{-0.74} \pm 0.27$  | 0.5675             | $0.02^{+0.38}_{-0.02} \pm 0.79$  | 5.23                                                | 1.67                                                    |
| 0601780401 | 2009-06-14 | 226.817 | +72.061 | 10.5               | 352                    | 10.7               | 441                    | $6.61^{+1.69}_{-1.67} \pm 0.93$  | 0.5475             | $1.56 \pm 0.76 \pm 0.14$         | 2.74                                                | 1.98                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0301330401 | 2006-02-13 | 226.946 | -45.906 | 20.7               | 418                    | 20.7               | 588                    | $1.90^{+0.97}_{-0.66} \pm 0.74$  | 0.5775             | $0.44^{+0.45}_{-0.44} \pm 0.22$ | 1.57                                                | 1.93                                                    |
| 0146990101 | 2003-05-05 | 227.204 | +52.329 | 17.3               | 573                    | 17.4               | 502                    | $4.36^{+0.92}_{-0.81} \pm 0.37$  | 0.5675             | $0.64^{+0.46}_{-0.45} \pm 0.37$ | 3.67                                                | 2.08                                                    |
| 0502690601 | 2007-11-23 | 227.355 | +76.300 | 35.1               | 351                    | 35.0               | 517                    | $3.64^{+0.80}_{-0.66} \pm 0.96$  | 0.5675             | $0.28^{+0.54}_{-0.28} \pm 0.92$ | 1.11                                                | 2.04                                                    |
| 0085640101 | 2001-03-17 | 227.892 | -30.311 | 8.9                | 573                    | 8.6                | 573                    | $6.64^{+0.65}_{-1.11} \pm 1.72$  | 0.5625             | $0.61^{+0.63}_{-0.30} \pm 0.46$ | 1.64                                                | 2.31                                                    |
| 0302310301 | 2005-12-18 | 228.221 | -88.599 | 34.3               | 498                    | 38.8               | 589                    | $3.78^{+0.73}_{-0.59} \pm 1.20$  | 0.5675             | $0.02^{+0.38}_{-0.02} \pm 0.60$ | 6.92                                                | 2.36                                                    |
| 0501210501 | 2007-10-14 | 228.363 | +17.821 | 10.9               | 343                    | 10.9               | 580                    | $2.82^{+1.00}_{-1.03} \pm 0.42$  | 0.5725             | $0.00^{+0.39}_{-0.00} \pm 0.40$ | 2.52                                                | 1.17                                                    |
| 0071340301 | 2001-12-04 | 228.673 | +85.331 | 27.3               | 481                    | 27.8               | 558                    | $7.37^{+0.58}_{-0.68} \pm 0.99$  | 0.5725             | $1.94 \pm 0.38 \pm 1.29$        | 1.68                                                | 2.04                                                    |
| 0111280301 | 2001-07-05 | 228.772 | -88.279 | 7.2                | 590                    | 7.3                | 589                    | $5.20^{+0.99}_{-1.02} \pm 0.46$  | 0.5725             | $0.12^{+0.58}_{-0.12} \pm 1.03$ | 3.35                                                | 1.62                                                    |
| 0402780801 | 2007-04-20 | 228.916 | +30.113 | 6.7                | 425                    | 7.7                | 588                    | $4.40^{+1.28}_{-0.72} \pm 0.52$  | 0.5675             | $0.35^{+0.66}_{-0.35} \pm 0.18$ | 3.10                                                | 2.22                                                    |
| 0411980101 | 2006-06-23 | 230.067 | +66.120 | 5.3                | 411                    | 5.5                | 503                    | $7.36^{+1.56}_{-1.42} \pm 0.90$  | 0.5775             | $0.00^{+0.64}_{-0.00} \pm 0.58$ | 2.35                                                | 1.47                                                    |
| 0556090101 | 2008-12-02 | 230.102 | +66.156 | 41.0               | 341                    | 41.8               | 578                    | $3.32^{+0.54}_{-0.51} \pm 0.29$  | 0.5775             | $0.62^{+0.35}_{-0.34} \pm 0.42$ | 2.15                                                | 1.47                                                    |
| 0111160201 | 2001-09-01 | 230.649 | -34.597 | 26.5               | 527                    | 27.1               | 535                    | $5.03^{+0.89}_{-0.80} \pm 2.88$  | 0.5625             | $0.18^{+0.35}_{-0.18} \pm 1.18$ | 1.07                                                | 2.69                                                    |
| 0112550301 | 2001-07-01 | 230.658 | +86.418 | 13.7               | 406                    | 13.6               | 475                    | $10.72^{+1.20}_{-1.11} \pm 0.40$ | 0.5675             | $1.86^{+0.64}_{-0.60} \pm 1.56$ | 2.98                                                | 1.56                                                    |
| 0601780301 | 2009-05-29 | 230.877 | +69.095 | 9.4                | 427                    | 10.1               | 515                    | $3.16^{+1.22}_{-0.96} \pm 0.28$  | 0.5925             | $0.00^{+0.71}_{-0.00} \pm 0.18$ | 1.74                                                | 2.09                                                    |
| 0153100101 | 2003-09-09 | 231.123 | -37.568 | 8.9                | 532                    | 9.0                | 465                    | $5.08^{+1.40}_{-1.17} \pm 0.42$  | 0.5725             | $0.54^{+0.77}_{-0.54} \pm 0.75$ | 3.08                                                | 2.13                                                    |
| 0551201001 | 2008-11-06 | 231.489 | +33.770 | 25.5               | 316                    | 25.7               | 401                    | $4.49^{+1.14}_{-1.23} \pm 0.65$  | 0.5675             | $0.30^{+0.59}_{-0.30} \pm 0.38$ | 7.25                                                | 2.35                                                    |
| 0306050201 | 2005-10-30 | 231.698 | +38.785 | 25.6               | 417                    | 25.2               | 514                    | $5.47^{+0.80}_{-0.81} \pm 0.25$  | 0.5625             | $0.32^{+0.40}_{-0.32} \pm 0.37$ | 2.64                                                | 2.19                                                    |
| 0201290301 | 2004-05-18 | 231.930 | +39.786 | 17.6               | 533                    | 17.4               | 539                    | $5.94^{+0.49}_{-0.84} \pm 0.26$  | 0.5675             | $1.15^{+0.44}_{-0.42} \pm 0.62$ | 3.07                                                | 1.56                                                    |
| 0553650301 | 2008-05-06 | 232.592 | +0.383  | 15.0               | 419                    | 15.6               | 518                    | $1.12^{+1.12}_{-1.03} \pm 0.26$  | 0.5525             | $0.52 \pm 0.50 \pm 0.10$        | 0.80                                                | 2.39                                                    |
| 0204791101 | 2005-05-04 | 233.189 | +43.767 | 14.6               | 485                    | 14.9               | 507                    | $4.83^{+1.53}_{-0.89} \pm 0.39$  | 0.5675             | $0.52^{+0.53}_{-0.45} \pm 0.73$ | 0.94                                                | 1.23                                                    |
| 0404920201 | 2006-11-03 | 233.213 | +24.181 | 32.0               | 312                    | 32.5               | 398                    | $5.66^{+1.05}_{-1.04} \pm 0.48$  | 0.5625             | $0.97^{+0.60}_{-0.36} \pm 0.74$ | 2.99                                                | 1.37                                                    |
| 0111282001 | 2002-06-22 | 233.341 | -88.673 | 7.6                | 513                    | 7.6                | 512                    | $7.14^{+1.16}_{-1.34} \pm 0.23$  | 0.5725             | $0.34^{+0.69}_{-0.34} \pm 0.71$ | 1.94                                                | 1.86                                                    |
| 0093640301 | 2001-05-26 | 233.587 | +49.522 | 9.6                | 423                    | 9.4                | 497                    | $8.55^{+1.06}_{-1.31} \pm 0.38$  | 0.5575             | $1.52^{+0.54}_{-0.61} \pm 0.37$ | 1.03                                                | 1.79                                                    |
| 0301900601 | 2006-05-27 | 233.724 | +73.627 | 19.5               | 390                    | 19.5               | 412                    | $6.91^{+0.67}_{-1.46} \pm 1.43$  | 0.5625             | $1.71^{+0.40}_{-0.68} \pm 0.53$ | 2.37                                                | 2.38                                                    |
| 0150610101 | 2003-05-04 | 234.149 | +44.606 | 10.1               | 584                    | 10.0               | 511                    | $15.50 \pm 1.20 \pm 0.28$        | 0.5675             | $3.35 \pm 0.62 \pm 1.78$        | 3.79                                                | 1.52                                                    |
| 0079570201 | 2001-10-23 | 234.496 | -10.123 | 19.2               | 225                    | 20.0               | 225                    | $6.05^{+1.93}_{-1.03} \pm 1.63$  | 0.5675             | $2.93^{+0.82}_{-0.70} \pm 0.50$ | 1.15                                                | 2.46                                                    |
| 0204850401 | 2004-03-15 | 234.684 | -10.275 | 9.0                | 580                    | 9.2                | 588                    | $4.34^{+1.59}_{-1.46} \pm 0.36$  | 0.5675             | $0.00^{+0.09}_{-0.00} \pm 0.24$ | 1.46                                                | 2.26                                                    |
| 0600920301 | 2009-05-26 | 234.752 | +47.113 | 6.4                | 418                    | 6.9                | 579                    | $4.80^{+1.40}_{-1.41} \pm 0.32$  | 0.5575             | $0.41^{+0.71}_{-0.41} \pm 0.11$ | 1.69                                                | 1.70                                                    |
| 0204850501 | 2004-03-14 | 234.925 | -9.916  | 12.4               | 584                    | 12.8               | 588                    | $5.99^{+1.04}_{-1.37} \pm 1.82$  | 0.5675             | $0.00^{+0.19}_{-0.00} \pm 1.44$ | 1.24                                                | 2.06                                                    |
| 0201290201 | 2004-08-21 | 235.632 | -34.077 | 14.5               | 506                    | 16.1               | 580                    | $4.38^{+0.88}_{-0.86} \pm 0.70$  | 0.5625             | $0.68^{+0.46}_{-0.44} \pm 0.35$ | 1.94                                                | 1.83                                                    |
| 0203362101 | 2004-12-09 | 235.886 | +42.012 | 59.5               | 580                    | 59.3               | 509                    | $4.93^{+0.46}_{-0.47} \pm 0.38$  | 0.5675             | $0.61 \pm 0.27 \pm 0.46$        | 2.54                                                | 1.61                                                    |
| 0312190701 | 2006-01-28 | 236.040 | -32.583 | 10.9               | 412                    | 10.8               | 501                    | $5.58^{+1.13}_{-1.14} \pm 0.69$  | 0.5625             | $0.55^{+0.54}_{-0.55} \pm 0.51$ | 0.73                                                | 1.38                                                    |
| 0302351601 | 2005-11-27 | 236.064 | +42.203 | 30.0               | 416                    | 31.4               | 499                    | $4.97^{+1.15}_{-0.66} \pm 0.46$  | 0.5675             | $0.31^{+0.47}_{-0.31} \pm 0.60$ | 2.80                                                | 1.78                                                    |
| 0302352201 | 2006-05-11 | 236.149 | +41.850 | 8.1                | 419                    | 8.1                | 510                    | $3.06^{+1.66}_{-1.32} \pm 0.80$  | 0.5775             | $0.01^{+0.89}_{-0.01} \pm 0.31$ | 1.82                                                | 2.22                                                    |
| 0302351101 | 2006-05-12 | 236.229 | +42.398 | 16.3               | 487                    | 16.1               | 508                    | $2.64^{+0.85}_{-0.69} \pm 0.37$  | 0.5775             | $0.00^{+0.45}_{-0.00} \pm 0.31$ | 1.43                                                | 1.94                                                    |
| 0203361101 | 2004-12-01 | 236.272 | +42.422 | 18.9               | 581                    | 20.1               | 508                    | $3.65^{+0.84}_{-0.69} \pm 0.56$  | 0.5675             | $0.51^{+0.44}_{-0.41} \pm 0.55$ | 1.34                                                | 2.18                                                    |
| 0302351701 | 2006-05-17 | 236.311 | +42.050 | 18.8               | 484                    | 18.8               | 577                    | $7.37^{+1.07}_{-0.84} \pm 0.69$  | 0.5675             | $0.14^{+0.47}_{-0.14} \pm 0.83$ | 6.87                                                | 1.70                                                    |
| 0203361701 | 2004-12-11 | 236.354 | +42.072 | 30.2               | 579                    | 30.3               | 501                    | $6.13^{+0.71}_{-0.80} \pm 1.00$  | 0.5625             | $0.10^{+0.35}_{-0.10} \pm 1.01$ | 2.44                                                | 1.66                                                    |
| 0302352301 | 2006-05-12 | 236.392 | +41.702 | 5.1                | 485                    | 5.3                | 505                    | $4.65^{+1.48}_{-1.62} \pm 0.44$  | 0.5725             | $0.24^{+0.90}_{-0.24} \pm 0.25$ | 1.38                                                | 2.15                                                    |
| 0501170201 | 2007-05-18 | 236.393 | +41.702 | 30.8               | 398                    | 31.0               | 495                    | $4.90^{+0.95}_{-0.84} \pm 1.07$  | 0.5675             | $0.05^{+0.47}_{-0.05} \pm 0.57$ | 7.54                                                | 1.94                                                    |
| 0302350601 | 2006-06-01 | 236.428 | +42.580 | 17.0               | 352                    | 16.8               | 513                    | $4.62^{+1.10}_{-0.94} \pm 0.84$  | 0.5675             | $0.32^{+0.55}_{-0.32} \pm 0.80$ | 2.85                                                | 1.47                                                    |
| 0203360601 | 2004-05-30 | 236.441 | +42.593 | 21.9               | 586                    | 22.5               | 587                    | $6.06^{+0.77}_{-0.91} \pm 0.26$  | 0.5725             | $0.12^{+0.41}_{-0.12} \pm 0.61$ | 4.67                                                | 1.64                                                    |
| 0203361201 | 2003-12-08 | 236.549 | +42.277 | 25.1               | 586                    | 25.4               | 511                    | $6.63^{+1.20}_{-1.31} \pm 0.83$  | 0.5675             | $1.27^{+0.46}_{-0.41} \pm 0.81$ | 1.45                                                | 1.86                                                    |
| 0302351201 | 2005-11-23 | 236.560 | +42.291 | 15.1               | 425                    | 15.3               | 510                    | $7.23^{+0.90}_{-0.91} \pm 0.30$  | 0.5725             | $1.02^{+0.52}_{-0.47} \pm 1.15$ | 1.10                                                | 1.48                                                    |
| 0302351801 | 2006-05-17 | 236.590 | +41.883 | 17.9               | 418                    | 18.2               | 581                    | $8.21^{+0.51}_{-0.93} \pm 0.24$  | 0.5675             | $0.77 \pm 0.49 \pm 0.74$        | 3.82                                                | 1.81                                                    |
| 0505880301 | 2007-06-09 | 236.617 | +65.632 | 11.0               | 495                    | 11.0               | 518                    | $6.08^{+1.04}_{-1.22} \pm 0.36$  | 0.5725             | $0.00^{+0.32}_{-0.00} \pm 0.29$ | 3.40                                                | 1.45                                                    |
| 0203361801 | 2003-12-11 | 236.630 | +41.929 | 27.1               | 581                    | 26.5               | 582                    | $5.53^{+0.66}_{-1.00} \pm 0.78$  | 0.5625             | $1.03^{+0.36}_{-0.35} \pm 0.72$ | 1.52                                                | 1.77                                                    |
| 0203360101 | 2004-12-11 | 236.664 | +42.829 | 29.3               | 582                    | 28.5               | 511                    | $6.70^{+1.23}_{-0.69} \pm 0.45$  | 0.5675             | $1.19^{+0.54}_{-0.37} \pm 0.46$ | 6.83                                                | 2.58                                                    |
| 0302353201 | 2006-06-09 | 236.695 | +41.562 | 11.6               | 419                    | 11.9               | 437                    | $4.34^{+1.07}_{-1.15} \pm 0.24$  | 0.5725             | $0.71^{+0.65}_{-0.67} \pm 0.36$ | 1.58                                                | 1.69                                                    |
| 0302352401 | 2006-05-09 | 236.697 | +41.561 | 18.8               | 428                    | 19.1               | 512                    | $5.41 \pm 0.78 \pm 0.32$         | 0.5725             | $0.71 \pm 0.47 \pm 0.75$        | 3.23                                                | 1.31                                                    |
| 0302350701 | 2005-11-23 | 236.724 | +42.492 | 18.3               | 417                    | 18.3               | 500                    | $7.84^{+0.84}_{-0.78} \pm 0.70$  | 0.5725             | $0.56^{+0.46}_{-0.44} \pm 1.08$ | 1.93                                                | 1.46                                                    |
| 0203360701 | 2003-12-06 | 236.743 | +42.482 | 32.6               | 576                    | 32.6               | 575                    | $6.20^{+0.63}_{-0.59} \pm 0.80$  | 0.5675             | $1.67^{+0.38}_{-0.32} \pm 1.07$ | 2.19                                                | 1.92                                                    |
| 0302351301 | 2005-11-23 | 236.804 | +42.142 | 18.6               | 428                    | 18.9               | 515                    | $5.80^{+0.82}_{-0.80} \pm 0.24$  | 0.5675             | $0.68^{+0.46}_{-0.44} \pm 0.80$ | 0.74                                                | 1.56                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0203361301 | 2003-12-10 | 236.824 | +42.133 | 25.1               | 588                    | 25.6               | 589                    | $5.58^{+0.61}_{-0.62} \pm 0.50$ | 0.5675             | $1.92 \pm 0.35 \pm 0.61$        | 1.87                                                | 1.96                                                    |
| 0202870201 | 2004-12-10 | 236.847 | +54.285 | 16.9               | 591                    | 17.0               | 517                    | $5.36^{+0.83}_{-0.76} \pm 0.25$ | 0.5625             | $0.85^{+0.45}_{-0.40} \pm 0.39$ | 2.79                                                | 1.43                                                    |
| 0302351901 | 2006-05-15 | 236.859 | +41.761 | 11.3               | 423                    | 11.7               | 586                    | $5.81^{+1.11}_{-1.13} \pm 0.24$ | 0.5625             | $1.08^{+0.62}_{-0.61} \pm 0.35$ | 0.96                                                | 1.68                                                    |
| 0203361901 | 2004-12-12 | 236.902 | +41.783 | 23.1               | 584                    | 23.3               | 513                    | $5.97^{+0.66}_{-0.76} \pm 0.43$ | 0.5625             | $0.79^{+0.34}_{-0.33} \pm 0.71$ | 1.44                                                | 1.35                                                    |
| 0302350201 | 2006-06-08 | 236.928 | +42.666 | 14.0               | 351                    | 14.4               | 511                    | $5.10^{+1.14}_{-1.05} \pm 0.27$ | 0.5625             | $0.44^{+0.56}_{-0.44} \pm 0.49$ | 1.97                                                | 1.77                                                    |
| 0302353301 | 2006-06-09 | 236.935 | +41.413 | 12.1               | 348                    | 12.1               | 512                    | $5.17^{+1.45}_{-0.91} \pm 0.46$ | 0.5675             | $0.07^{+0.60}_{-0.07} \pm 0.87$ | 1.79                                                | 1.40                                                    |
| 0203360201 | 2004-12-11 | 236.941 | +42.684 | 14.9               | 579                    | 15.0               | 504                    | $9.25^{+0.58}_{-1.05} \pm 0.40$ | 0.5625             | $0.73^{+0.45}_{-0.48} \pm 0.79$ | 6.66                                                | 2.14                                                    |
| 0206630101 | 2004-02-28 | 236.961 | -16.775 | 36.2               | 508                    | 36.4               | 510                    | $6.35^{+0.72}_{-0.53} \pm 0.83$ | 0.5675             | $1.06^{+0.44}_{-0.28} \pm 0.40$ | 2.66                                                | 1.84                                                    |
| 0302350801 | 2005-11-25 | 237.005 | +42.323 | 18.8               | 421                    | 18.6               | 506                    | $6.32^{+1.15}_{-0.76} \pm 0.51$ | 0.5725             | $0.38^{+0.46}_{-0.38} \pm 0.86$ | 1.55                                                | 1.45                                                    |
| 0302500101 | 2005-08-09 | 237.074 | -65.638 | 64.5               | 341                    | 66.0               | 588                    | $4.80^{+0.66}_{-0.71} \pm 0.39$ | 0.5625             | $1.67^{+0.31}_{-0.32} \pm 0.24$ | 2.08                                                | 1.98                                                    |
| 0302351401 | 2006-05-24 | 237.085 | +41.968 | 16.9               | 341                    | 17.0               | 505                    | $6.73^{+0.83}_{-1.36} \pm 0.46$ | 0.5675             | $0.76^{+0.55}_{-0.28} \pm 0.90$ | 2.43                                                | 1.47                                                    |
| 0203361401 | 2003-12-10 | 237.099 | +41.987 | 30.2               | 576                    | 30.0               | 578                    | $4.46^{+0.46}_{-0.52} \pm 0.41$ | 0.5775             | $1.13^{+0.31}_{-0.33} \pm 1.10$ | 2.06                                                | 1.52                                                    |
| 0302353401 | 2006-11-27 | 237.110 | +42.001 | 9.6                | 491                    | 10.0               | 503                    | $3.58^{+1.22}_{-1.13} \pm 0.30$ | 0.5675             | $0.19^{+0.31}_{-0.19} \pm 0.39$ | 1.54                                                | 1.56                                                    |
| 0302352001 | 2006-05-15 | 237.135 | +41.592 | 5.1                | 423                    | 5.5                | 586                    | $7.70^{+1.94}_{-1.56} \pm 0.29$ | 0.5675             | $0.37^{+0.86}_{-0.37} \pm 0.75$ | 0.99                                                | 1.74                                                    |
| 0501170101 | 2007-05-06 | 237.136 | +41.592 | 31.9               | 410                    | 32.6               | 501                    | $5.53^{+0.83}_{-0.70} \pm 0.22$ | 0.5725             | $0.19^{+0.38}_{-0.19} \pm 1.09$ | 2.61                                                | 1.23                                                    |
| 0203362001 | 2005-05-14 | 237.149 | +41.606 | 8.3                | 425                    | 8.0                | 585                    | $6.18^{+1.15}_{-1.29} \pm 0.42$ | 0.5725             | $1.47^{+0.74}_{-0.84} \pm 0.97$ | 1.59                                                | 2.09                                                    |
| 0302353101 | 2006-06-01 | 237.172 | +42.516 | 17.9               | 411                    | 17.3               | 508                    | $5.36^{+0.98}_{-0.84} \pm 0.47$ | 0.5725             | $0.82^{+0.51}_{-0.50} \pm 1.18$ | 4.22                                                | 1.31                                                    |
| 0203360301 | 2005-05-14 | 237.192 | +42.506 | 30.3               | 492                    | 30.3               | 580                    | $5.18^{+0.86}_{-0.69} \pm 0.09$ | 0.5625             | $1.01^{+0.36}_{-0.35} \pm 0.30$ | 1.26                                                | 2.03                                                    |
| 0203360901 | 2004-11-20 | 237.293 | +42.190 | 21.3               | 585                    | 21.2               | 512                    | $7.11^{+0.79}_{-0.86} \pm 0.33$ | 0.5625             | $0.97 \pm 0.40 \pm 0.32$        | 4.70                                                | 1.95                                                    |
| 0302351501 | 2006-05-18 | 237.328 | +41.818 | 14.9               | 483                    | 14.7               | 576                    | $6.06^{+0.94}_{-0.47} \pm 0.40$ | 0.5675             | $0.45^{+0.53}_{-0.45} \pm 1.08$ | 6.23                                                | 1.50                                                    |
| 0203361501 | 2004-11-19 | 237.369 | +41.841 | 23.9               | 577                    | 24.1               | 504                    | $9.00^{+0.89}_{-0.74} \pm 0.25$ | 0.5625             | $0.32^{+0.38}_{-0.32} \pm 0.87$ | 9.15                                                | 1.80                                                    |
| 0144920201 | 2003-04-23 | 237.432 | +16.293 | 15.2               | 589                    | 15.4               | 515                    | $6.06^{+0.80}_{-1.08} \pm 0.31$ | 0.5625             | $0.31^{+0.40}_{-0.31} \pm 0.60$ | 2.57                                                | 1.83                                                    |
| 0203360401 | 2004-11-21 | 237.491 | +42.393 | 27.0               | 588                    | 26.9               | 515                    | $5.02^{+0.97}_{-0.61} \pm 0.48$ | 0.5725             | $0.39^{+0.46}_{-0.39} \pm 0.53$ | 4.25                                                | 2.52                                                    |
| 0149501201 | 2003-08-08 | 237.542 | -31.685 | 6.8                | 489                    | 6.8                | 489                    | $5.01^{+1.16}_{-1.32} \pm 0.25$ | 0.5725             | $0.82^{+0.68}_{-0.72} \pm 0.47$ | 1.88                                                | 1.59                                                    |
| 0302351001 | 2005-11-17 | 237.554 | +42.030 | 37.0               | 404                    | 38.8               | 506                    | $5.43^{+0.77}_{-0.93} \pm 0.38$ | 0.5675             | $0.19^{+0.36}_{-0.19} \pm 0.45$ | 2.13                                                | 1.68                                                    |
| 0149500701 | 2003-02-24 | 237.565 | -31.715 | 8.9                | 555                    | 8.7                | 488                    | $4.53^{+1.14}_{-1.07} \pm 1.12$ | 0.5625             | $0.49^{+0.58}_{-0.49} \pm 0.52$ | 1.33                                                | 2.07                                                    |
| 0149500601 | 2003-02-14 | 237.565 | -31.716 | 10.4               | 556                    | 10.3               | 488                    | $6.27^{+0.97}_{-0.92} \pm 0.73$ | 0.5725             | $0.00^{+0.24}_{-0.00} \pm 0.39$ | 5.95                                                | 1.88                                                    |
| 0149500801 | 2003-03-06 | 237.566 | -31.715 | 6.0                | 556                    | 6.1                | 488                    | $7.45^{+1.54}_{-1.32} \pm 0.23$ | 0.5575             | $1.16^{+0.75}_{-0.66} \pm 0.30$ | 2.93                                                | 2.29                                                    |
| 0203361001 | 2004-11-21 | 237.566 | +42.043 | 14.4               | 580                    | 13.7               | 506                    | $6.51^{+0.97}_{-0.86} \pm 0.24$ | 0.5725             | $0.29^{+0.50}_{-0.29} \pm 0.51$ | 2.96                                                | 1.97                                                    |
| 0307001401 | 2006-02-13 | 237.615 | -34.679 | 11.1               | 420                    | 11.5               | 516                    | $2.12^{+0.76}_{-0.94} \pm 0.32$ | 0.5825             | $0.44^{+0.62}_{-0.44} \pm 0.23$ | 1.92                                                | 2.47                                                    |
| 0140950201 | 2002-12-29 | 237.695 | -53.973 | 15.8               | 576                    | 15.8               | 576                    | $5.31^{+0.89}_{-0.94} \pm 0.52$ | 0.5525             | $2.94^{+0.47}_{-0.54} \pm 0.19$ | 2.22                                                | 2.25                                                    |
| 0302350501 | 2005-11-19 | 237.745 | +42.256 | 19.1               | 430                    | 19.1               | 517                    | $8.71^{+0.81}_{-0.88} \pm 0.22$ | 0.5625             | $0.70^{+0.41}_{-0.43} \pm 0.43$ | 5.31                                                | 1.74                                                    |
| 0203360501 | 2004-11-21 | 237.765 | +42.245 | 26.8               | 590                    | 27.1               | 517                    | $6.72^{+0.67}_{-0.84} \pm 0.25$ | 0.5625             | $0.70 \pm 0.33 \pm 0.50$        | 3.59                                                | 1.95                                                    |
| 0205650401 | 2004-04-27 | 237.818 | -5.386  | 25.4               | 504                    | 26.0               | 578                    | $3.65^{+0.83}_{-0.85} \pm 0.57$ | 0.5625             | $1.82^{+0.47}_{-0.39} \pm 0.50$ | 1.22                                                | 1.66                                                    |
| 0205650601 | 2004-10-22 | 237.829 | -5.350  | 20.6               | 577                    | 20.6               | 503                    | $4.73^{+0.90}_{-1.03} \pm 0.51$ | 0.5625             | $1.22^{+0.45}_{-0.48} \pm 0.64$ | 1.82                                                | 1.71                                                    |
| 0205650701 | 2004-10-24 | 237.829 | -5.350  | 13.7               | 577                    | 13.3               | 504                    | $2.57^{+1.11}_{-1.13} \pm 1.11$ | 0.5675             | $1.84^{+0.63}_{-0.62} \pm 0.50$ | 4.43                                                | 1.83                                                    |
| 0505140501 | 2007-07-04 | 237.924 | -54.593 | 48.3               | 329                    | 52.5               | 430                    | $2.98^{+0.65}_{-0.92} \pm 0.28$ | 0.5575             | $0.88^{+0.49}_{-0.29} \pm 0.39$ | 1.56                                                | 2.68                                                    |
| 0505140201 | 2007-06-30 | 237.924 | -54.594 | 45.8               | 400                    | 47.7               | 502                    | $3.92^{+0.68}_{-0.71} \pm 0.39$ | 0.5525             | $1.31^{+0.34}_{-0.36} \pm 0.13$ | 1.55                                                | 2.07                                                    |
| 0151370701 | 2003-08-13 | 237.970 | -54.589 | 6.9                | 388                    | 7.0                | 459                    | $6.94^{+2.16}_{-2.00} \pm 2.50$ | 0.5625             | $1.31^{+1.09}_{-0.87} \pm 0.12$ | 2.17                                                | 2.44                                                    |
| 0205590301 | 2004-01-17 | 237.985 | -54.608 | 52.7               | 380                    | 53.3               | 386                    | $5.41^{+0.54}_{-0.89} \pm 1.76$ | 0.5575             | $1.14^{+0.39}_{-0.28} \pm 1.03$ | 2.11                                                | 2.14                                                    |
| 0151370101 | 2003-01-16 | 238.014 | -54.617 | 15.2               | 458                    | 15.3               | 458                    | $6.37^{+0.92}_{-0.98} \pm 2.13$ | 0.5725             | $0.63^{+0.53}_{-0.56} \pm 1.42$ | 2.49                                                | 1.82                                                    |
| 0500760101 | 2007-12-25 | 238.792 | +63.245 | 49.5               | 176                    | 49.3               | 297                    | $3.61^{+1.09}_{-0.94} \pm 0.34$ | 0.5675             | $0.68^{+0.54}_{-0.48} \pm 0.09$ | 1.19                                                | 1.92                                                    |
| 0206430101 | 2004-12-13 | 238.821 | +39.855 | 25.1               | 485                    | 25.3               | 411                    | $6.81^{+0.91}_{-1.05} \pm 0.52$ | 0.5625             | $1.39^{+0.40}_{-0.39} \pm 1.00$ | 1.58                                                | 1.44                                                    |
| 0555320301 | 2008-07-28 | 239.040 | -33.596 | 6.6                | 312                    | 6.6                | 474                    | $2.88^{+1.63}_{-1.57} \pm 0.27$ | 0.5725             | $1.48^{+0.97}_{-0.99} \pm 0.41$ | 1.79                                                | 1.76                                                    |
| 0032342201 | 2002-06-06 | 239.132 | +30.631 | 5.2                | 466                    | 5.3                | 471                    | $7.79^{+1.93}_{-1.85} \pm 1.45$ | 0.5675             | $0.00^{+0.57}_{-0.00} \pm 0.57$ | 1.11                                                | 1.88                                                    |
| 0501930501 | 2008-05-14 | 239.135 | +30.631 | 15.6               | 343                    | 15.8               | 578                    | $4.33^{+2.67}_{-1.06} \pm 0.98$ | 0.5525             | $0.26^{+1.06}_{-0.26} \pm 0.35$ | 2.22                                                | 1.71                                                    |
| 0202611001 | 2005-05-03 | 239.135 | +30.629 | 17.5               | 485                    | 17.7               | 509                    | $4.88^{+1.33}_{-1.18} \pm 0.16$ | 0.5625             | $0.00^{+0.70}_{-0.00} \pm 0.53$ | 0.68                                                | 1.89                                                    |
| 0032342301 | 2003-05-03 | 239.136 | +30.629 | 7.1                | 472                    | 7.1                | 471                    | $6.07^{+1.62}_{-1.85} \pm 0.71$ | 0.5625             | $0.80^{+0.82}_{-0.80} \pm 1.12$ | 2.35                                                | 1.52                                                    |
| 0143630801 | 2004-04-29 | 239.136 | +30.630 | 20.5               | 398                    | 21.3               | 470                    | $3.29^{+1.13}_{-1.17} \pm 0.35$ | 0.5625             | $0.65^{+0.61}_{-0.60} \pm 0.44$ | 1.29                                                | 1.83                                                    |
| 0401880701 | 2007-05-04 | 239.136 | +30.630 | 14.7               | 407                    | 16.5               | 505                    | $5.01^{+1.46}_{-1.42} \pm 0.35$ | 0.5575             | $0.65^{+0.74}_{-0.65} \pm 0.16$ | 1.77                                                | 2.03                                                    |
| 0550061201 | 2009-04-27 | 239.136 | +30.630 | 15.6               | 491                    | 15.8               | 578                    | $2.56^{+1.38}_{-1.32} \pm 0.22$ | 0.5475             | $0.95^{+0.64}_{-0.62} \pm 0.07$ | 0.85                                                | 1.55                                                    |
| 0202611601 | 2005-10-30 | 239.153 | +30.664 | 29.0               | 412                    | 28.1               | 511                    | $7.97^{+1.11}_{-0.99} \pm 0.95$ | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.43$ | 5.36                                                | 1.75                                                    |
| 0550061101 | 2008-11-06 | 239.154 | +30.665 | 15.8               | 417                    | 16.1               | 506                    | $7.07^{+1.22}_{-1.25} \pm 0.80$ | 0.5575             | $0.70^{+0.58}_{-0.59} \pm 0.31$ | 5.78                                                | 1.49                                                    |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{O VII}}^{2-5}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
|            | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) |                                                   |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                            | (12)                                                | (13)                                              |
| 0401880601 | 2006-11-05 | 239.154 | +30.664 | 20.7               | 419                    | 20.7               | 506                    | $4.18^{+1.74}_{-1.28} \pm 0.21$  | 0.5575             | $0.03^{+0.66}_{-0.03} \pm 0.50$ | 1.72                                                | 2.18                                              |
| 0501930401 | 2007-11-09 | 239.154 | +30.664 | 16.0               | 347                    | 15.4               | 505                    | $1.25^{+1.17}_{-0.82} \pm 1.05$  | 0.5925             | $0.00^{+0.64}_{-0.00} \pm 0.22$ | 3.80                                                | 1.52                                              |
| 0103861801 | 2002-05-23 | 239.342 | +59.463 | 8.5                | 473                    | 8.7                | 472                    | $10.66^{+1.60}_{-1.55} \pm 0.33$ | 0.5675             | $2.72^{+0.84}_{-0.88} \pm 1.38$ | 7.88                                                | 2.44                                              |
| 0108670101 | 2000-12-05 | 239.399 | +47.965 | 51.2               | 446                    | 51.6               | 375                    | $7.55^{+0.60}_{-0.56} \pm 0.21$  | 0.5675             | $1.54^{+0.32}_{-0.30} \pm 0.62$ | 4.21                                                | 1.88                                              |
| 0201130101 | 2004-03-09 | 239.419 | -48.295 | 16.6               | 469                    | 17.3               | 477                    | $4.59^{+0.90}_{-0.96} \pm 0.51$  | 0.5625             | $1.36^{+0.48}_{-0.51} \pm 0.47$ | 2.18                                                | 1.98                                              |
| 0502510201 | 2007-06-13 | 239.423 | +65.240 | 18.3               | 423                    | 19.4               | 516                    | $5.80^{+1.06}_{-0.91} \pm 0.76$  | 0.5675             | $0.00^{+0.52}_{-0.00} \pm 0.65$ | 2.38                                                | 1.77                                              |
| 0148560501 | 2003-05-22 | 239.441 | +50.035 | 56.4               | 582                    | 57.7               | 592                    | $4.22^{+0.33}_{-0.54} \pm 0.69$  | 0.5675             | $0.06^{+0.26}_{-0.06} \pm 0.44$ | 2.26                                                | 2.14                                              |
| 0556200301 | 2008-05-23 | 239.573 | +25.083 | 27.9               | 476                    | 30.2               | 570                    | $2.15^{+1.00}_{-1.08} \pm 0.55$  | 0.5675             | $0.00^{+0.30}_{-0.00} \pm 0.00$ | 1.14                                                | 2.65                                              |
| 0300930201 | 2005-09-27 | 239.639 | -8.495  | 8.1                | 351                    | 8.6                | 514                    | $4.62^{+1.65}_{-1.05} \pm 0.79$  | 0.5675             | $0.92^{+0.98}_{-0.56} \pm 0.37$ | 4.03                                                | 2.69                                              |
| 0501750801 | 2007-10-20 | 239.655 | +8.731  | 44.0               | 241                    | 44.9               | 467                    | $3.27^{+0.78}_{-0.77} \pm 1.79$  | 0.5625             | $0.91^{+0.42}_{-0.36} \pm 0.42$ | 1.45                                                | 2.42                                              |
| 0069750101 | 2001-03-19 | 239.832 | -11.330 | 43.4               | 560                    | 43.0               | 489                    | $7.89^{+0.86}_{-0.71} \pm 1.24$  | 0.5625             | $2.39^{+0.40}_{-0.32} \pm 0.37$ | 4.66                                                | 1.61                                              |
| 0502481901 | 2007-10-16 | 239.982 | -10.399 | 13.5               | 470                    | 13.2               | 488                    | $4.69^{+1.00}_{-0.93} \pm 0.74$  | 0.5675             | $2.05^{+0.58}_{-0.55} \pm 0.60$ | 2.11                                                | 1.78                                              |
| 0066950201 | 2002-06-13 | 240.105 | +70.525 | 6.0                | 558                    | 6.0                | 563                    | $7.42^{+1.88}_{-1.36} \pm 0.51$  | 0.5725             | $1.27^{+0.84}_{-0.81} \pm 1.30$ | 1.83                                                | 2.05                                              |
| 0092360101 | 2001-10-29 | 240.189 | -20.907 | 10.9               | 511                    | 10.8               | 587                    | $6.37^{+1.39}_{-0.94} \pm 0.37$  | 0.5725             | $3.63^{+0.83}_{-0.65} \pm 0.33$ | 0.98                                                | 2.46                                              |
| 0302580901 | 2005-08-14 | 240.511 | -32.838 | 18.2               | 382                    | 18.8               | 477                    | $4.43^{+0.79}_{-1.13} \pm 0.21$  | 0.5625             | $0.70^{+0.51}_{-0.45} \pm 0.38$ | 2.27                                                | 2.07                                              |
| 0065760201 | 2002-10-09 | 240.609 | -32.698 | 29.8               | 380                    | 30.2               | 399                    | $7.04^{+0.78}_{-0.80} \pm 0.91$  | 0.5675             | $1.27 \pm 0.44 \pm 0.77$        | 1.75                                                | 1.90                                              |
| 0111280601 | 2002-06-19 | 240.713 | -88.139 | 10.1               | 468                    | 10.0               | 547                    | $5.90 \pm 0.92 \pm 0.40$         | 0.5725             | $0.95^{+0.55}_{-0.54} \pm 0.96$ | 1.43                                                | 1.55                                              |
| 0402121401 | 2007-04-11 | 240.833 | -23.502 | 8.2                | 306                    | 8.1                | 399                    | $3.51^{+2.33}_{-2.28} \pm 1.92$  | 0.5475             | $2.54^{+1.14}_{-1.23} \pm 1.04$ | 1.68                                                | 1.53                                              |
| 0151390101 | 2003-05-18 | 241.098 | +52.636 | 42.0               | 512                    | 42.7               | 510                    | $7.42^{+0.49}_{-0.60} \pm 0.39$  | 0.5675             | $1.07^{+0.27}_{-0.31} \pm 0.81$ | 3.88                                                | 1.69                                              |
| 0082140301 | 2002-05-22 | 241.303 | +64.204 | 31.2               | 508                    | 31.3               | 508                    | $10.84^{+0.75}_{-0.73} \pm 0.24$ | 0.5675             | $2.57^{+0.40}_{-0.41} \pm 0.91$ | 4.94                                                | 2.05</                                            |



Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0550460201 | 2008-06-04 | 246.360 | +37.380 | 10.9               | 481                    | 11.5               | 569                    | $2.97^{+1.01}_{-0.94} \pm 0.48$  | 0.5725             | $0.00^{+0.33}_{-0.00} \pm 0.01$ | 0.85                                                | 1.61                                                    |
| 0554740801 | 2009-03-12 | 246.767 | -39.142 | 24.9               | 334                    | 25.0               | 498                    | $3.36^{+0.96}_{-0.89} \pm 0.31$  | 0.5675             | $0.53^{+0.53}_{-0.43} \pm 0.07$ | 2.91                                                | 1.62                                                    |
| 0201690201 | 2005-01-03 | 247.558 | -57.045 | 16.7               | 538                    | 16.9               | 467                    | $4.39^{+0.87}_{-0.36} \pm 0.47$  | 0.5825             | $0.62^{+0.61}_{-0.47} \pm 0.73$ | 1.97                                                | 1.59                                                    |
| 0302580301 | 2006-05-07 | 247.633 | +36.008 | 44.3               | 329                    | 45.4               | 419                    | $4.19^{+0.78}_{-0.64} \pm 0.29$  | 0.5675             | $0.30^{+0.34}_{-0.30} \pm 0.35$ | 1.37                                                | 1.81                                                    |
| 0104860201 | 2002-04-06 | 248.411 | -41.584 | 11.5               | 555                    | 11.8               | 561                    | $6.44 \pm 0.86 \pm 0.57$         | 0.5675             | $0.46 \pm 0.46 \pm 1.31$        | 1.22                                                | 1.48                                                    |
| 0202650101 | 2004-05-27 | 248.560 | +8.564  | 27.9               | 499                    | 29.5               | 498                    | $5.92 \pm 0.72 \pm 0.31$         | 0.5625             | $1.22 \pm 0.37 \pm 0.16$        | 1.44                                                | 2.59                                                    |
| 0305800101 | 2005-12-12 | 248.606 | +43.836 | 15.8               | 476                    | 16.0               | 565                    | $4.30^{+0.96}_{-0.92} \pm 1.07$  | 0.5675             | $0.28^{+0.47}_{-0.28} \pm 0.49$ | 1.00                                                | 2.45                                                    |
| 0404840201 | 2007-06-08 | 248.998 | +44.408 | 41.9               | 353                    | 42.4               | 444                    | $6.04^{+0.84}_{-1.10} \pm 0.17$  | 0.5675             | $0.86^{+0.38}_{-0.50} \pm 0.71$ | 2.42                                                | 1.65                                                    |
| 0501210701 | 2007-07-07 | 249.135 | -47.779 | 21.2               | 422                    | 21.3               | 518                    | $4.27^{+0.96}_{-0.98} \pm 0.13$  | 0.5625             | $0.77^{+0.47}_{-0.46} \pm 0.24$ | 1.72                                                | 1.59                                                    |
| 0311792101 | 2006-11-21 | 249.356 | +30.120 | 35.8               | 384                    | 36.1               | 403                    | $4.22^{+0.87}_{-0.72} \pm 0.29$  | 0.5675             | $0.60^{+0.43}_{-0.42} \pm 0.56$ | 1.90                                                | 1.82                                                    |
| 0203560201 | 2004-06-10 | 249.862 | +60.631 | 63.0               | 466                    | 64.4               | 539                    | $5.38^{+0.49}_{-0.50} \pm 0.81$  | 0.5675             | $0.46^{+0.25}_{-0.24} \pm 0.46$ | 1.95                                                | 1.80                                                    |
| 0203560401 | 2004-06-26 | 249.864 | +60.631 | 67.1               | 523                    | 69.3               | 539                    | $4.79^{+0.50}_{-0.49} \pm 0.33$  | 0.5625             | $1.16^{+0.28}_{-0.26} \pm 0.10$ | 1.62                                                | 2.55                                                    |
| 0125300101 | 2000-05-28 | 250.851 | +48.190 | 27.8               | 589                    | 28.4               | 588                    | $5.65 \pm 0.60 \pm 0.22$         | 0.5675             | $1.00 \pm 0.33 \pm 0.34$        | 1.98                                                | 2.13                                                    |
| 0150870401 | 2002-12-20 | 251.130 | +45.146 | 29.6               | 589                    | 29.6               | 589                    | $6.33^{+0.56}_{-0.55} \pm 0.30$  | 0.5625             | $1.63 \pm 0.31 \pm 0.52$        | 2.61                                                | 1.70                                                    |
| 0206390101 | 2005-01-14 | 251.620 | -34.636 | 44.1               | 370                    | 44.1               | 366                    | $2.92^{+1.14}_{-0.57} \pm 0.59$  | 0.5675             | $0.14^{+0.39}_{-0.14} \pm 0.27$ | 1.77                                                | 2.36                                                    |
| 0109460701 | 2002-03-16 | 252.592 | -32.684 | 5.3                | 468                    | 5.5                | 474                    | $4.26^{+1.67}_{-1.64} \pm 0.40$  | 0.5725             | $1.87^{+0.96}_{-0.99} \pm 0.26$ | 4.47                                                | 2.49                                                    |
| 0304010101 | 2005-06-04 | 252.914 | -0.850  | 30.4               | 366                    | 30.6               | 448                    | $8.84^{+0.71}_{-0.91} \pm 0.65$  | 0.5625             | $2.55^{+0.41}_{-0.42} \pm 0.15$ | 3.46                                                | 2.29                                                    |
| 0204220101 | 2004-05-28 | 253.179 | -1.729  | 19.7               | 504                    | 19.6               | 508                    | $7.34^{+0.82}_{-0.64} \pm 1.70$  | 0.5675             | $2.53^{+0.58}_{-0.28} \pm 0.54$ | 3.20                                                | 1.93                                                    |
| 0201290401 | 2004-06-21 | 253.315 | +44.695 | 8.1                | 589                    | 8.1                | 590                    | $5.99^{+1.82}_{-0.94} \pm 0.85$  | 0.5675             | $0.44^{+0.54}_{-0.44} \pm 1.10$ | 1.47                                                | 1.29                                                    |
| 0112320201 | 2002-10-09 | 253.401 | -41.946 | 54.8               | 458                    | 54.8               | 396                    | $4.74^{+0.49}_{-0.50} \pm 0.73$  | 0.5675             | $0.75^{+0.24}_{-0.32} \pm 0.41$ | 1.73                                                | 2.07                                                    |
| 0550120501 | 2008-06-08 | 253.582 | +2.916  | 13.4               | 401                    | 13.4               | 563                    | $5.68^{+1.07}_{-1.21} \pm 0.38$  | 0.5575             | $2.21^{+0.54}_{-0.56} \pm 0.15$ | 1.09                                                | 1.55                                                    |
| 0555460201 | 2008-05-10 | 253.696 | -19.157 | 37.9               | 397                    | 38.8               | 565                    | $5.37^{+0.70}_{-1.13} \pm 0.23$  | 0.5625             | $0.51 \pm 0.40 \pm 0.65$        | 3.47                                                | 1.84                                                    |
| 0112450301 | 2002-05-03 | 253.698 | -19.158 | 7.0                | 562                    | 6.7                | 567                    | $10.54^{+1.89}_{-1.58} \pm 0.62$ | 0.5625             | $1.08^{+0.77}_{-0.73} \pm 1.53$ | 1.60                                                | 1.27                                                    |
| 0032140501 | 2001-10-17 | 253.847 | -19.429 | 11.6               | 512                    | 11.8               | 589                    | $5.94^{+0.84}_{-0.85} \pm 0.52$  | 0.5725             | $1.27^{+0.53}_{-0.52} \pm 1.39$ | 0.99                                                | 1.42                                                    |
| 0153290101 | 2003-06-13 | 253.912 | +40.156 | 16.5               | 397                    | 16.2               | 565                    | $10.82^{+1.39}_{-0.93} \pm 0.71$ | 0.5725             | $1.86^{+0.70}_{-0.53} \pm 1.64$ | 3.60                                                | 1.63                                                    |
| 0400020101 | 2006-11-13 | 253.975 | +2.578  | 36.9               | 425                    | 37.6               | 513                    | $7.52 \pm 0.67 \pm 0.60$         | 0.5625             | $2.15 \pm 0.36 \pm 0.04$        | 1.20                                                | 2.07                                                    |
| 0200480101 | 2004-12-07 | 253.984 | -65.769 | 30.3               | 547                    | 30.2               | 482                    | $4.46^{+0.55}_{-0.33} \pm 0.28$  | 0.5725             | $0.77^{+0.33}_{-0.37} \pm 0.59$ | 2.34                                                | 2.08                                                    |
| 0504101801 | 2007-06-10 | 254.365 | +55.580 | 8.6                | 354                    | 9.1                | 514                    | $6.32^{+1.29}_{-1.43} \pm 0.37$  | 0.5625             | $0.79 \pm 0.70 \pm 0.48$        | 1.11                                                | 1.85                                                    |
| 0303230101 | 2006-04-08 | 254.495 | -4.697  | 15.5               | 444                    | 15.8               | 458                    | $3.34^{+1.08}_{-0.91} \pm 0.93$  | 0.5625             | $0.91^{+0.51}_{-0.50} \pm 0.62$ | 3.38                                                | 2.13                                                    |
| 0083000301 | 2001-12-15 | 254.829 | +59.862 | 22.9               | 486                    | 22.9               | 556                    | $9.97^{+0.80}_{-0.70} \pm 0.30$  | 0.5625             | $1.82^{+0.39}_{-0.37} \pm 1.19$ | 4.99                                                | 1.80                                                    |
| 0401130101 | 2006-12-04 | 254.996 | -69.454 | 31.4               | 350                    | 32.4               | 507                    | $3.91^{+0.88}_{-0.84} \pm 0.49$  | 0.5625             | $1.01^{+0.48}_{-0.38} \pm 0.12$ | 1.81                                                | 1.97                                                    |
| 0303340101 | 2005-12-14 | 255.411 | -77.394 | 39.4               | 448                    | 41.5               | 537                    | $4.05^{+0.53}_{-0.54} \pm 0.24$  | 0.5725             | $0.24^{+0.33}_{-0.24} \pm 0.55$ | 1.55                                                | 1.70                                                    |
| 0201901101 | 2004-04-26 | 255.654 | -25.331 | 5.6                | 353                    | 5.9                | 354                    | $5.23^{+2.67}_{-2.23} \pm 0.34$  | 0.5525             | $1.40^{+1.16}_{-1.14} \pm 0.11$ | 1.61                                                | 2.22                                                    |
| 0406541301 | 2007-06-04 | 255.674 | +51.269 | 32.4               | 484                    | 32.8               | 509                    | $5.65^{+0.80}_{-0.86} \pm 0.49$  | 0.5575             | $0.50 \pm 0.40 \pm 0.46$        | 1.05                                                | 1.74                                                    |
| 0302610401 | 2006-01-05 | 255.681 | -25.314 | 21.6               | 229                    | 21.6               | 352                    | $7.33^{+1.50}_{-1.36} \pm 0.55$  | 0.5625             | $0.42^{+0.64}_{-0.42} \pm 0.51$ | 2.85                                                | 2.56                                                    |
| 0163360201 | 2003-12-06 | 255.886 | -4.727  | 35.5               | 482                    | 36.2               | 479                    | $9.46^{+0.77}_{-1.09} \pm 3.41$  | 0.5625             | $2.75^{+0.39}_{-0.52} \pm 1.39$ | 1.69                                                | 2.21                                                    |
| 0561380101 | 2009-11-03 | 255.974 | -4.705  | 60.0               | 310                    | 60.4               | 467                    | $5.98^{+0.83}_{-0.76} \pm 1.77$  | 0.5525             | $1.33^{+0.42}_{-0.37} \pm 0.75$ | 1.32                                                | 1.86                                                    |
| 0159361301 | 2008-10-13 | 255.975 | -4.705  | 52.4               | 308                    | 52.2               | 392                    | $6.47^{+0.83}_{-0.87} \pm 0.62$  | 0.5575             | $1.85 \pm 0.41 \pm 0.24$        | 0.89                                                | 1.69                                                    |
| 0095810401 | 2000-10-15 | 255.975 | -4.705  | 36.1               | 395                    | 36.6               | 466                    | $9.56^{+0.82}_{-0.81} \pm 1.02$  | 0.5625             | $2.82 \pm 0.41 \pm 0.40$        | 2.38                                                | 2.08                                                    |
| 0157160501 | 2002-11-17 | 255.975 | -4.705  | 28.5               | 459                    | 29.8               | 468                    | $8.91^{+0.69}_{-1.19} \pm 0.33$  | 0.5675             | $2.96^{+0.45}_{-0.55} \pm 0.16$ | 3.57                                                | 2.21                                                    |
| 0157160901 | 2002-11-24 | 255.976 | -4.704  | 40.7               | 457                    | 41.4               | 393                    | $10.22^{+0.99}_{-0.67} \pm 0.59$ | 0.5625             | $3.70^{+0.49}_{-0.37} \pm 0.21$ | 2.00                                                | 1.82                                                    |
| 0159360901 | 2005-12-03 | 255.976 | -4.704  | 43.1               | 302                    | 44.1               | 393                    | $7.05^{+0.73}_{-1.05} \pm 1.22$  | 0.5625             | $1.94^{+0.44}_{-0.51} \pm 0.69$ | 1.56                                                | 1.86                                                    |
| 0159361101 | 2006-04-17 | 255.977 | -4.707  | 34.0               | 381                    | 35.7               | 393                    | $4.30^{+1.45}_{-0.71} \pm 0.75$  | 0.5725             | $1.96^{+0.70}_{-0.39} \pm 0.30$ | 1.51                                                | 1.97                                                    |
| 0159360501 | 2005-04-16 | 255.977 | -4.707  | 25.5               | 309                    | 25.8               | 467                    | $4.44^{+1.15}_{-1.07} \pm 1.26$  | 0.5625             | $1.67 \pm 0.55 \pm 0.44$        | 1.21                                                | 1.89                                                    |
| 0159360401 | 2004-11-13 | 255.990 | -4.694  | 31.4,16.9          | 463,463                | 30.0,18.1          | 390,390                | $8.06^{+0.70}_{-0.69} \pm 0.71$  | 0.5625             | $2.74^{+0.42}_{-0.30} \pm 0.23$ | 2.37                                                | 2.20                                                    |
| 0141170101 | 2003-05-08 | 256.293 | +26.085 | 28.9               | 584                    | 28.5               | 513                    | $5.74^{+0.59}_{-0.55} \pm 0.96$  | 0.5675             | $1.00^{+0.34}_{-0.31} \pm 0.92$ | 1.57                                                | 1.90                                                    |
| 0094800101 | 2001-06-21 | 256.553 | +48.660 | 21.7               | 452                    | 22.2               | 532                    | $6.84^{+1.24}_{-0.75} \pm 0.32$  | 0.5675             | $1.63^{+0.45}_{-0.42} \pm 0.53$ | 0.63                                                | 2.13                                                    |
| 0401790401 | 2006-12-12 | 256.600 | +3.241  | 7.6                | 318                    | 8.2                | 411                    | $4.52^{+2.01}_{-1.91} \pm 0.37$  | 0.5575             | $2.84^{+0.99}_{-1.07} \pm 0.29$ | 0.94                                                | 2.55                                                    |
| 0201900601 | 2004-12-27 | 256.608 | -68.877 | 27.9               | 482                    | 27.6               | 408                    | $5.17^{+0.73}_{-0.71} \pm 0.44$  | 0.5675             | $0.75 \pm 0.42 \pm 0.70$        | 2.84                                                | 2.09                                                    |
| 0550452501 | 2008-11-18 | 256.665 | -6.710  | 20.4               | 472                    | 20.1               | 487                    | $7.10^{+1.49}_{-0.71} \pm 0.43$  | 0.5625             | $2.51^{+0.50}_{-0.48} \pm 0.43$ | 1.57                                                | 1.96                                                    |
| 0109461201 | 2001-12-10 | 256.993 | +27.983 | 5.7                | 415                    | 5.6                | 561                    | $8.52^{+1.55}_{-1.96} \pm 0.51$  | 0.5625             | $2.25^{+0.90}_{-0.81} \pm 1.02$ | 1.50                                                | 1.80                                                    |
| 0403400101 | 2006-11-09 | 257.215 | +9.723  | 25.4               | 426                    | 25.4               | 515                    | $5.57^{+0.72}_{-0.70} \pm 0.57$  | 0.5675             | $1.52 \pm 0.39 \pm 0.38$        | 7.21                                                | 2.11                                                    |
| 0552210301 | 2008-05-15 | 257.416 | -4.999  | 9.3                | 309                    | 9.2                | 474                    | $8.84^{+1.49}_{-1.66} \pm 1.00$  | 0.5675             | $3.05^{+0.88}_{-0.81} \pm 1.69$ | 2.98                                                | 1.29                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              |
| 0141750501 | 2003-04-24 | 257.421 | -5.003  | 16.6               | 440                    | 16.9               | 439                    | $9.84^{+0.94}_{-0.97} \pm 1.58$  | 0.5675             | $1.76^{+0.53}_{-0.52} \pm 1.65$ | 2.56                                                | 1.98                                              |
| 0552210201 | 2008-05-11 | 257.426 | -4.983  | 8.3                | 242                    | 8.3                | 474                    | $8.53^{+1.51}_{-2.11} \pm 0.93$  | 0.5625             | $3.41^{+0.82}_{-1.03} \pm 0.32$ | 1.81                                                | 1.85                                              |
| 0552210401 | 2008-05-29 | 257.426 | -4.983  | 5.2                | 387                    | 5.2                | 475                    | $9.02^{+1.81}_{-2.20} \pm 0.79$  | 0.5675             | $2.91^{+0.98}_{-1.11} \pm 0.26$ | 2.13                                                | 1.67                                              |
| 0552210901 | 2008-11-04 | 257.426 | -4.983  | 5.3                | 314                    | 5.5                | 402                    | $11.00^{+2.28}_{-2.51} \pm 0.41$ | 0.5625             | $5.10^{+1.24}_{-1.30} \pm 0.22$ | 0.99                                                | 1.39                                              |
| 0552211101 | 2009-03-31 | 257.426 | -4.983  | 7.6                | 316                    | 7.6                | 475                    | $9.84^{+1.95}_{-1.64} \pm 0.42$  | 0.5675             | $0.61^{+0.90}_{-0.61} \pm 0.52$ | 1.63                                                | 1.74                                              |
| 0552210601 | 2008-10-15 | 257.428 | -4.964  | 9.1                | 306                    | 9.1                | 474                    | $11.30^{+1.65}_{-2.22} \pm 4.01$ | 0.5575             | $5.13^{+0.69}_{-1.19} \pm 1.98$ | 1.07                                                | 1.57                                              |
| 0106260201 | 2000-11-08 | 257.435 | -4.968  | 8.0                | 541                    | 8.7                | 469                    | $14.53^{+1.36}_{-1.34} \pm 2.52$ | 0.5675             | $5.18^{+0.81}_{-0.82} \pm 3.24$ | 3.43                                                | 2.08                                              |
| 0552211001 | 2008-12-10 | 257.441 | -4.971  | 9.1                | 311                    | 9.0                | 400                    | $8.42^{+2.07}_{-0.82} \pm 0.53$  | 0.5675             | $3.69^{+0.95}_{-0.92} \pm 0.87$ | 3.34                                                | 1.39                                              |
| 0303820201 | 2005-12-01 | 257.481 | +47.340 | 31.7               | 416                    | 31.5               | 497                    | $5.97^{+0.71}_{-0.79} \pm 0.49$  | 0.5675             | $0.28^{+0.40}_{-0.28} \pm 0.48$ | 2.02                                                | 2.05                                              |
| 0304201301 | 2006-04-08 | 257.610 | -1.692  | 13.0               | 389                    | 13.1               | 401                    | $4.15^{+1.33}_{-0.88} \pm 1.26$  | 0.5725             | $1.61^{+1.01}_{-0.55} \pm 0.60$ | 3.99                                                | 2.00                                              |
| 0111282201 | 2002-06-30 | 257.647 | -88.779 | 7.5                | 582                    | 7.7                | 514                    | $7.53 \pm 1.03 \pm 0.36$         | 0.5725             | $0.75 \pm 0.58 \pm 1.27$        | 2.54                                                | 1.39                                              |
| 0552860101 | 2008-12-24 | 257.890 | +46.561 | 33.9               | 411                    | 36.1               | 499                    | $3.74^{+0.82}_{-0.79} \pm 0.30$  | 0.5725             | $0.22^{+0.43}_{-0.22} \pm 0.51$ | 1.45                                                | 2.20                                              |
| 0141751201 | 2003-07-25 | 258.110 | -44.380 | 20.5               | 575                    | 21.0               | 584                    | $5.90^{+0.64}_{-0.60} \pm 0.27$  | 0.5675             | $1.10^{+0.36}_{-0.35} \pm 1.09$ | 4.01                                                | 1.24                                              |
| 0141750101 | 2002-12-30 | 258.162 | -44.385 | 20.8               | 583                    | 20.8               | 582                    | $5.65^{+0.53}_{-0.70} \pm 0.63$  | 0.5675             | $0.34^{+0.30}_{-0.34} \pm 0.49$ | 1.97                                                | 1.45                                              |
| 0141751001 | 2002-12-31 | 258.162 | -44.385 | 15.8               | 583                    | 16.0               | 582                    | $6.02^{+0.85}_{-0.73} \pm 0.29$  | 0.5625             | $0.00^{+0.28}_{-0.00} \pm 0.20$ | 2.38                                                | 1.85                                              |
| 0141751101 | 2003-01-19 | 258.163 | -44.386 | 20.3               | 583                    | 19.7               | 583                    | $4.56^{+0.94}_{-0.58} \pm 0.48$  | 0.5725             | $0.78 \pm 0.36 \pm 0.70$        | 2.25                                                | 1.69                                              |
| 0044740601 | 2004-01-04 | 258.364 | -30.611 | 62.3               | 589                    | 62.6               | 514                    | $2.03^{+0.58}_{-0.45} \pm 0.98$  | 0.5625             | $0.64^{+0.30}_{-0.25} \pm 0.29$ | 2.41                                                | 2.11                                              |
| 0148790101 | 2003-08-08 | 258.479 | -63.415 | 24.3               | 397                    | 23.0               | 394                    | $5.96^{+1.38}_{-1.02} \pm 0.36$  | 0.5675             | $1.22^{+0.70}_{-0.61} \pm 0.70$ | 2.37                                                | 1.78                                              |
| 0153350101 | 2002-10-14 | 258.502 | -3.916  | 11.9               | 562                    | 11.9               | 496                    | $14.95^{+1.33}_{-1.20} \pm 3.92$ | 0.5675             | $2.09^{+0.65}_{-0.63} \pm 3.07$ | 7.11                                                | 1.87                                              |
| 0111280801 | 2002-06-30 | 258.605 | -88.232 | 5.8                | 586                    | 5.7                | 591                    | $10.44^{+1.36}_{-1.33} \pm 1.77$ | 0.5725             | $1.15^{+0.76}_{-0.75} \pm 1.44$ | 2.88                                                | 2.04                                              |
| 0551021201 | 2008-06-19 | 259.251 | +58.495 | 22.7               | 419                    | 23.7               | 577                    | $6.04^{+1.19}_{-1.18} \pm 1.36$  | 0.5575             | $1.12^{+0.57}_{-0.67} \pm 0.42$ | 1.15                                                | 2.24                                              |
| 0201330101 | 2005-05-19 | 259.554 | +39.674 | 26.8               | 494                    | 26.6               | 586                    | $7.36^{+0.74}_{-0.69} \pm 0.24$  | 0.5675             | $1.66^{+0.41}_{-0.38} \pm 0.57$ | 5.77                                                | 1.89                                              |
| 0145750101 | 2003-06-23 | 259.567 | +56.884 | 21.8               | 564                    | 22.6               | 572                    | $5.59^{+0.84}_{-0.55} \pm 0.67$  | 0.5675             | $2.31^{+0.47}_{-0.36} \pm 0.91$ | 2.14                                                | 2.68                                              |
| 0042340301 | 2002-07-11 | 259.921 | -63.450 | 11.7               | 441                    | 12.2               | 377                    | $10.18^{+1.51}_{-1.36} \pm 0.34$ | 0.5625             | $1.71^{+0.76}_{-0.70} \pm 0.98$ | 2.56                                                | 2.14                                              |
| 0205800301 | 2004-06-12 | 260.085 | +14.198 | 13.7               | 516                    | 13.9               | 591                    | $4.19^{+0.89}_{-0.80} \pm 0.20$  | 0.5675             | $1.31^{+0.45}_{-0.44} \pm 0.04$ | ...                                                 | 1.87                                              |
| 0506200301 | 2007-05-14 | 260.159 | -17.689 | 38.5               | 304                    | 38.4               | 396                    | $4.15^{+1.02}_{-0.79} \pm 0.43$  | 0.5625             | $1.02^{+0.51}_{-0.34} \pm 0.20$ | 2.57                                                | 1.79                                              |
| 0148010301 | 2002-10-13 | 260.169 | -17.655 | 69.5               | 525                    | 70.7               | 461                    | $7.09^{+0.59}_{-0.62} \pm 0.26$  | 0.5625             | $2.02^{+0.17}_{-0.41} \pm 0.22$ | 3.37                                                | 2.56                                              |
| 0110890201 | 2000-10-21 | 260.170 | -17.655 | 39.6               | 460                    | 40.7               | 468                    | $7.43^{+0.67}_{-0.68} \pm 0.49$  | 0.5625             | $1.50 \pm 0.34 \pm 0.21$        | 1.43                                                | 2.44                                              |
| 0112650301 | 2001-07-02 | 260.903 | +82.947 | 18.1               | 585                    | 17.8               | 585                    | $8.76^{+0.78}_{-0.74} \pm 0.40$  | 0.5675             | $1.85^{+0.43}_{-0.40} \pm 1.11$ | 2.83                                                | 1.57                                              |
| 0140190101 | 2003-08-16 | 260.909 | -53.351 | 27.7               | 330                    | 27.5               | 402                    | $5.75^{+1.25}_{-0.76} \pm 0.56$  | 0.5625             | $0.00^{+0.71}_{-0.00} \pm 0.46$ | 2.85                                                | 1.89                                              |
| 0148650101 | 2003-01-30 | 261.101 | -38.750 | 40.8               | 505                    | 41.2               | 578                    | $5.20^{+0.56}_{-0.49} \pm 0.24$  | 0.5675             | $0.76^{+0.31}_{-0.28} \pm 0.60$ | 1.89                                                | 1.84                                              |
| 0312190201 | 2006-06-26 | 261.584 | -77.008 | 11.8               | 489                    | 11.9               | 511                    | $4.19^{+1.13}_{-1.14} \pm 0.38$  | 0.5625             | $0.70^{+0.59}_{-0.60} \pm 0.07$ | 3.17                                                | 2.68                                              |
| 0303560201 | 2005-12-19 | 261.797 | -73.461 | 6.1                | 498                    | 6.1                | 589                    | $4.98^{+1.44}_{-1.22} \pm 0.27$  | 0.5725             | $0.85^{+0.84}_{-0.76} \pm 1.04$ | 5.92                                                | 1.34                                              |
| 0401050201 | 2007-03-16 | 262.065 | -10.440 | 53.1               | 420                    | 53.1               | 510                    | $2.39^{+0.78}_{-0.89} \pm 0.61$  | 0.5625             | $0.81^{+0.40}_{-0.43} \pm 0.20$ | 1.18                                                | 1.84                                              |
| 0304200501 | 2005-04-28 | 262.204 | +1.072  | 8.7                | 383                    | 8.5                | 402                    | $14.45^{+1.57}_{-2.07} \pm 1.35$ | 0.5625             | $4.21^{+0.91}_{-1.07} \pm 1.12$ | 2.50                                                | 1.93                                              |
| 0205330301 | 2004-01-13 | 262.264 | -35.364 | 10.5               | 339                    | 10.7               | 346                    | $4.04^{+1.50}_{-1.59} \pm 1.24$  | 0.5475             | $0.25^{+0.73}_{-0.25} \pm 0.50$ | 5.97                                                | 2.56                                              |
| 0604010701 | 2009-05-30 | 262.359 | -32.678 | 6.3                | 418                    | 6.3                | 580                    | $2.04^{+1.68}_{-1.46} \pm 1.40$  | 0.5525             | $0.94^{+0.83}_{-0.82} \pm 0.46$ | 2.16                                                | 1.98                                              |
| 0112670601 | 2001-05-04 | 262.804 | -7.687  | 56.0               | 373                    | 56.2               | 368                    | $10.93^{+0.91}_{-0.64} \pm 0.77$ | 0.5625             | $4.06^{+0.45}_{-0.36} \pm 0.89$ | 2.48                                                | 1.95                                              |
| 0305750601 | 2005-11-29 | 262.941 | +57.416 | 6.2                | 423                    | 6.2                | 512                    | $5.21^{+1.28}_{-1.58} \pm 0.65$  | 0.5675             | $0.54^{+0.76}_{-0.54} \pm 1.10$ | 1.69                                                | 1.44                                              |
| 0201330201 | 2004-12-29 | 262.992 | +41.853 | 29.4               | 579                    | 29.4               | 506                    | $7.52 \pm 0.61 \pm 0.25$         | 0.5675             | $1.42 \pm 0.33 \pm 1.10$        | 3.49                                                | 1.22                                              |
| 0112650201 | 2001-07-02 | 263.387 | +82.556 | 23.4               | 589                    | 23.6               | 587                    | $9.75^{+0.64}_{-0.69} \pm 0.27$  | 0.5625             | $1.50^{+0.33}_{-0.34} \pm 1.23$ | 3.02                                                | 1.36                                              |
| 0090070101 | 2002-06-17 | 263.418 | -73.273 | 31.5               | 457                    | 31.0               | 465                    | $10.76^{+0.81}_{-0.72} \pm 0.17$ | 0.5675             | $2.58^{+0.44}_{-0.40} \pm 1.36$ | 2.88                                                | 1.27                                              |
| 0301830101 | 2005-06-16 | 263.619 | +39.359 | 9.3                | 410                    | 10.7               | 579                    | $8.06^{+1.23}_{-1.47} \pm 0.39$  | 0.5675             | $1.44^{+0.64}_{-0.72} \pm 0.56$ | 3.06                                                | 2.52                                              |
| 0109130201 | 2002-06-30 | 263.654 | -79.462 | 9.8                | 469                    | 9.9                | 398                    | $5.47^{+1.33}_{-1.58} \pm 0.25$  | 0.5625             | $1.38^{+0.73}_{-0.77} \pm 0.91$ | 2.54                                                | 1.85                                              |
| 0401790301 | 2006-03-25 | 264.257 | -10.042 | 7.3                | 379                    | 7.1                | 541                    | $7.54^{+1.38}_{-1.69} \pm 1.97$  | 0.5525             | $2.65^{+0.82}_{-0.79} \pm 1.04$ | 2.84                                                | 2.15                                              |
| 0305920201 | 2005-12-03 | 264.519 | +60.567 | 36.7               | 367                    | 37.1               | 458                    | $6.33^{+0.33}_{-0.63} \pm 0.52$  | 0.5725             | $1.24^{+0.37}_{-0.39} \pm 1.12$ | 1.53                                                | 1.55                                              |
| 0550453201 | 2009-04-28 | 264.520 | -13.517 | 7.0                | 503                    | 7.9                | 592                    | $2.01^{+1.42}_{-0.66} \pm 0.31$  | 0.5525             | $0.00^{+0.68}_{-0.00} \pm 0.06$ | 2.77                                                | 2.14                                              |
| 0111971001 | 2001-12-06 | 264.919 | -7.874  | 20.1               | 384                    | 19.8               | 465                    | $5.07^{+0.83}_{-0.88} \pm 1.09$  | 0.5575             | $1.47^{+0.44}_{-0.46} \pm 0.53$ | 2.77                                                | 2.31                                              |
| 0205090201 | 2004-01-06 | 265.431 | -43.799 | 8.2                | 550                    | 7.9                | 473                    | $8.30^{+2.03}_{-1.24} \pm 0.73$  | 0.5675             | $3.20^{+1.03}_{-0.75} \pm 1.37$ | 1.88                                                | 1.78                                              |
| 0112650101 | 2001-07-01 | 265.613 | +82.153 | 18.1               | 519                    | 21.0               | 589                    | $9.78^{+0.78}_{-0.68} \pm 0.41$  | 0.5675             | $2.05^{+0.41}_{-0.38} \pm 1.41$ | 2.90                                                | 1.31                                              |
| 0148000601 | 2003-09-16 | 266.973 | -41.980 | 12.6               | 473                    | 12.4               | 472                    | $8.81^{+1.89}_{-1.30} \pm 0.62$  | 0.5625             | $4.47^{+1.02}_{-0.92} \pm 0.76$ | 3.85                                                | 2.24                                              |
| 0148000201 | 2002-09-25 | 266.977 | -41.977 | 12.0               | 465                    | 12.3               | 471                    | $9.06^{+1.31}_{-1.28} \pm 0.30$  | 0.5675             | $1.43^{+0.65}_{-0.68} \pm 0.99$ | 1.18                                                | 2.06                                              |
| 0148000401 | 2003-03-30 | 266.993 | -42.014 | 12.4               | 467                    | 12.6               | 397                    | $5.89^{+1.35}_{-1.52} \pm 0.28$  | 0.5625             | $0.94^{+0.71}_{-0.37} \pm 1.04$ | 3.37                                                | 1.85                                              |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{OVII}}$                | $E_{\text{OVII}}$ | $I_{\text{OVIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-9}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|-------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)             | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0551022701 | 2008-06-15 | 267.186 | +61.039 | 14.7               | 493                    | 15.4               | 583                    | $4.21^{+0.83}_{-0.82} \pm 0.25$  | 0.5775            | $0.05^{+0.53}_{-0.05} \pm 0.75$ | 1.98                                                | 1.36                                                    |
| 0208020101 | 2004-06-21 | 267.497 | +74.304 | 32.9               | 473                    | 33.3               | 471                    | $5.25^{+0.63}_{-0.60} \pm 0.25$  | 0.5725            | $0.38^{+0.38}_{-0.36} \pm 0.68$ | 1.53                                                | 2.14                                                    |
| 0502050201 | 2007-12-23 | 267.600 | +74.324 | 26.3               | 241                    | 26.5               | 399                    | $4.53^{+1.14}_{-0.88} \pm 0.22$  | 0.5575            | $0.75^{+0.55}_{-0.48} \pm 0.13$ | 1.26                                                | 2.02                                                    |
| 0502050101 | 2007-12-21 | 267.601 | +74.324 | 46.8               | 311                    | 46.2               | 398                    | $6.18^{+0.80}_{-0.71} \pm 0.51$  | 0.5575            | $0.77^{+0.40}_{-0.35} \pm 0.34$ | 1.34                                                | 1.97                                                    |
| 0606150101 | 2009-06-21 | 267.605 | +52.735 | 85.8               | 410                    | 89.7               | 495                    | $2.67^{+0.56}_{-0.63} \pm 0.77$  | 0.5675            | $0.31^{+0.35}_{-0.31} \pm 0.26$ | 2.22                                                | 2.13                                                    |
| 0201670101 | 2004-07-07 | 267.648 | +79.226 | 16.3               | 441                    | 16.2               | 448                    | $5.04^{+1.19}_{-0.87} \pm 0.38$  | 0.5725            | $0.43^{+0.61}_{-0.43} \pm 1.07$ | 1.25                                                | 1.62                                                    |
| 0202060201 | 2004-12-31 | 267.656 | +52.756 | 29.9               | 473                    | 30.9               | 400                    | $6.07^{+0.69}_{-1.00} \pm 0.49$  | 0.5675            | $0.80^{+0.38}_{-0.41} \pm 0.72$ | 1.78                                                | 1.41                                                    |
| 0112550501 | 2001-12-04 | 267.717 | +73.343 | 21.5               | 405                    | 21.3               | 553                    | $8.25^{+0.66}_{-0.74} \pm 0.46$  | 0.5725            | $1.31^{+0.40}_{-0.42} \pm 1.26$ | 2.48                                                | 1.67                                                    |
| 0203880101 | 2004-11-27 | 268.800 | -38.976 | 45.8               | 537                    | 45.7               | 466                    | $5.40^{+0.41}_{-0.59} \pm 0.53$  | 0.5725            | $1.86^{+0.28}_{-0.34} \pm 0.78$ | 2.20                                                | 1.65                                                    |
| 0601560201 | 2009-06-03 | 269.081 | +48.345 | 13.6               | 316                    | 13.8               | 476                    | $5.87^{+1.52}_{-1.43} \pm 0.95$  | 0.5475            | $1.06^{+0.68}_{-0.65} \pm 0.17$ | 2.25                                                | 1.65                                                    |
| 0203890101 | 2003-12-26 | 269.440 | +19.035 | 78.4               | 490                    | 78.4               | 564                    | $9.01^{+0.43}_{-0.45} \pm 0.90$  | 0.5675            | $0.97 \pm 0.23 \pm 1.32$        | 1.45                                                | 1.78                                                    |
| 0305801101 | 2006-06-10 | 269.443 | +54.225 | 16.9               | 493                    | 17.1               | 515                    | $5.60 \pm 0.78 \pm 0.63$         | 0.5725            | $0.33^{+0.46}_{-0.33} \pm 1.00$ | 1.21                                                | 1.55                                                    |
| 0151230101 | 2003-07-05 | 269.722 | +56.549 | 7.1                | 587                    | 7.3                | 592                    | $6.00^{+0.98}_{-0.99} \pm 0.32$  | 0.5775            | $1.08 \pm 0.63 \pm 1.12$        | 1.14                                                | 1.53                                                    |
| 0551760601 | 2008-05-29 | 269.729 | +83.155 | 10.9               | 503                    | 11.2               | 592                    | $5.60^{+1.14}_{-1.28} \pm 0.53$  | 0.5625            | $0.15^{+0.60}_{-0.15} \pm 0.81$ | 3.09                                                | 1.20                                                    |
| 0501110201 | 2007-05-29 | 269.794 | -63.469 | 40.5               | 261                    | 40.8               | 338                    | $4.03^{+1.22}_{-0.79} \pm 2.04$  | 0.5625            | $0.58^{+0.56}_{-0.48} \pm 1.40$ | 1.23                                                | 2.15                                                    |
| 0129320901 | 2000-08-22 | 269.888 | -51.720 | 9.7                | 590                    | 9.4                | 589                    | $5.95^{+0.96}_{-1.05} \pm 0.60$  | 0.5675            | $1.49^{+0.51}_{-0.57} \pm 0.84$ | 2.96                                                | 1.57                                                    |
| 0110970501 | 2000-08-26 | 270.036 | -51.864 | 5.1                | 587                    | 5.3                | 587                    | $4.80^{+1.10}_{-1.27} \pm 0.63$  | 0.5725            | $0.70^{+0.66}_{-0.64} \pm 1.06$ | 1.39                                                | 1.59                                                    |
| 0312191701 | 2006-06-26 | 270.077 | +66.396 | 12.1               | 392                    | 12.1               | 413                    | $3.65^{+1.04}_{-0.95} \pm 0.37$  | 0.5775            | $0.15^{+0.65}_{-0.15} \pm 1.15$ | 3.36                                                | 1.40                                                    |
| 0129320801 | 2000-08-22 | 270.122 | -51.628 | 9.7                | 515                    | 9.6                | 585                    | $7.38^{+1.67}_{-0.96} \pm 0.80$  | 0.5675            | $1.07^{+0.55}_{-0.51} \pm 1.04$ | 2.13                                                | 1.39                                                    |
| 0110970601 | 2000-08-26 | 270.153 | -51.818 | 6.8                | 585                    | 6.8                | 586                    | $6.48^{+1.67}_{-1.08} \pm 1.20$  | 0.5675            | $1.26^{+0.70}_{-0.57} \pm 0.86$ | 1.22                                                | 1.46                                                    |
| 0110970101 | 2000-08-24 | 270.196 | -52.090 | 9.3                | 583                    | 9.1                | 583                    | $6.80^{+1.03}_{-0.97} \pm 0.39$  | 0.5675            | $1.78^{+0.58}_{-0.54} \pm 0.63$ | 7.34                                                | 1.87                                                    |
| 0110970201 | 2000-08-24 | 270.228 | -51.890 | 7.0                | 515                    | 7.0                | 586                    | $5.82^{+1.70}_{-0.97} \pm 0.67$  | 0.5725            | $1.82^{+0.81}_{-0.64} \pm 1.04$ | 2.69                                                | 1.52                                                    |
| 0110970301 | 2000-08-24 | 270.345 | -51.844 | 7.9                | 587                    | 7.8                | 586                    | $6.85^{+0.87}_{-1.64} \pm 0.50$  | 0.5675            | $2.19^{+0.56}_{-0.66} \pm 0.81$ | 1.79                                                | 1.43                                                    |
| 0110970401 | 2000-08-24 | 270.462 | -51.798 | 8.1                | 587                    | 8.1                | 586                    | $7.35^{+1.53}_{-1.01} \pm 0.24$  | 0.5625            | $1.48^{+0.62}_{-0.54} \pm 0.81$ | 1.82                                                | 1.49                                                    |
| 0044740201 | 2001-06-05 | 270.524 | +60.755 | 46.4               | 535                    | 46.3               | 532                    | $7.76^{+1.10}_{-0.73} \pm 0.57$  | 0.5675            | $1.29^{+0.30}_{-0.36} \pm 0.32$ | 1.48                                                | 1.88                                                    |
| 0140950601 | 2003-07-05 | 270.639 | +29.881 | 10.6               | 500                    | 10.4               | 581                    | $9.45^{+0.64}_{-1.41} \pm 0.63$  | 0.5675            | $1.60^{+0.61}_{-0.70} \pm 0.93$ | 0.92                                                | 1.89                                                    |
| 0112630101 | 2001-06-14 | 270.813 | +37.882 | 11.3               | 571                    | 11.6               | 571                    | $11.37^{+1.10}_{-0.96} \pm 0.80$ | 0.5675            | $2.18^{+0.57}_{-0.52} \pm 1.48$ | 1.27                                                | 2.12                                                    |
| 0403072201 | 2007-01-20 | 270.992 | -28.819 | 13.8               | 422                    | 13.7               | 576                    | $6.25^{+1.19}_{-1.11} \pm 1.06$  | 0.5625            | $1.10^{+0.61}_{-0.55} \pm 0.62$ | 1.14                                                | 1.82                                                    |
| 0552410101 | 2008-06-23 | 271.714 | -32.781 | 32.9               | 356                    | 32.1               | 524                    | $3.41^{+1.08}_{-1.13} \pm 1.83$  | 0.5625            | $1.40^{+0.54}_{-0.59} \pm 0.47$ | 1.05                                                | 2.56                                                    |
| 0112630201 | 2001-06-04 | 271.940 | -74.432 | 19.8               | 584                    | 20.7               | 511                    | $6.33^{+1.50}_{-0.78} \pm 0.92$  | 0.5675            | $1.20^{+0.46}_{-0.41} \pm 0.51$ | 0.88                                                | 2.47                                                    |
| 0207210101 | 2004-02-09 | 272.135 | -57.023 | 31.6               | 379                    | 31.3               | 474                    | $3.26^{+0.71}_{-0.77} \pm 1.51$  | 0.5625            | $0.58^{+0.37}_{-0.36} \pm 0.56$ | 1.54                                                | 2.55                                                    |
| 0098810101 | 2000-12-04 | 272.230 | -58.107 | 22.5               | 557                    | 22.9               | 556                    | $7.25^{+0.69}_{-0.68} \pm 0.37$  | 0.5675            | $2.31 \pm 0.39 \pm 0.43$        | 1.77                                                | 1.95                                                    |
| 0306060101 | 2005-12-05 | 272.586 | +75.693 | 74.7               | 451                    | 74.5               | 543                    | $7.27^{+0.57}_{-0.80} \pm 0.37$  | 0.5625            | $1.48^{+0.23}_{-0.33} \pm 0.24$ | 1.19                                                | 2.50                                                    |
| 0550460101 | 2008-05-13 | 273.303 | -21.029 | 19.4               | 408                    | 19.6               | 577                    | $4.23^{+1.01}_{-0.75} \pm 0.59$  | 0.5675            | $0.74^{+0.48}_{-0.46} \pm 0.62$ | 1.81                                                | 1.31                                                    |
| 0126511201 | 2000-06-10 | 273.824 | -15.836 | 18.6               | 551                    | 18.8               | 551                    | $9.07^{+0.98}_{-1.04} \pm 2.31$  | 0.5625            | $5.13^{+0.71}_{-0.45} \pm 0.59$ | 0.50                                                | 2.68                                                    |
| 0134531501 | 2001-10-29 | 273.844 | -15.808 | 19.6               | 477                    | 19.6               | 548                    | $8.52^{+1.05}_{-0.68} \pm 2.38$  | 0.5625            | $6.15 \pm 0.62 \pm 1.00$        | 3.58                                                | 2.61                                                    |
| 0134531201 | 2001-01-29 | 273.860 | -15.827 | 20.2               | 542                    | 19.9               | 550                    | $9.74^{+1.00}_{-1.11} \pm 0.40$  | 0.5675            | $4.62 \pm 0.58 \pm 0.53$        | 6.55                                                | 2.21                                                    |
| 0134531301 | 2001-01-29 | 273.860 | -15.827 | 8.8                | 549                    | 8.2                | 482                    | $7.86^{+1.83}_{-1.26} \pm 2.85$  | 0.5625            | $4.49^{+0.90}_{-0.81} \pm 1.40$ | 2.64                                                | 2.19                                                    |
| 0113890601 | 2000-03-12 | 273.950 | -15.897 | 6.7                | 487                    | 6.8                | 488                    | $7.40^{+1.67}_{-1.89} \pm 2.20$  | 0.5625            | $3.83 \pm 0.92 \pm 1.02$        | 1.39                                                | 2.03                                                    |
| 0501210101 | 2007-06-14 | 273.962 | +10.783 | 20.0               | 469                    | 20.9               | 498                    | $8.49^{+1.06}_{-0.96} \pm 0.38$  | 0.5675            | $3.10^{+0.63}_{-0.55} \pm 0.58$ | 3.10                                                | 2.04                                                    |
| 0148580201 | 2003-10-19 | 274.429 | -24.534 | 8.7                | 512                    | 8.9                | 513                    | $7.36^{+1.77}_{-0.86} \pm 0.98$  | 0.5675            | $2.84^{+0.97}_{-0.55} \pm 0.49$ | 2.71                                                | 2.24                                                    |
| 0106061301 | 2002-06-10 | 274.554 | +79.605 | 14.7               | 510                    | 14.8               | 592                    | $11.61^{+0.70}_{-1.52} \pm 0.79$ | 0.5675            | $1.62^{+0.63}_{-0.38} \pm 1.24$ | 3.33                                                | 1.83                                                    |
| 0143150201 | 2003-06-18 | 275.202 | +89.313 | 19.3               | 494                    | 19.1               | 575                    | $8.23^{+0.84}_{-0.86} \pm 0.86$  | 0.5675            | $1.04^{+0.46}_{-0.45} \pm 0.74$ | 4.96                                                | 2.31                                                    |
| 0073340201 | 2002-05-30 | 275.865 | +9.334  | 16.8               | 506                    | 16.7               | 513                    | $12.93^{+1.04}_{-1.07} \pm 0.32$ | 0.5675            | $3.55 \pm 0.58 \pm 1.21$        | 1.76                                                | 2.10                                                    |
| 0104060201 | 2000-10-07 | 275.866 | -32.704 | 19.5               | 566                    | 20.2               | 571                    | $15.71^{+0.77}_{-1.11} \pm 2.04$ | 0.5675            | $7.44^{+0.37}_{-0.79} \pm 0.51$ | 1.35                                                | 2.65                                                    |
| 0551020701 | 2008-06-10 | 275.884 | -61.971 | 15.8               | 410                    | 15.9               | 579                    | $3.60^{+1.00}_{-0.80} \pm 0.33$  | 0.5925            | $0.35^{+0.85}_{-0.35} \pm 1.11$ | 1.39                                                | 1.18                                                    |
| 0149630301 | 2003-09-16 | 275.969 | -35.805 | 15.2               | 515                    | 16.3               | 590                    | $20.33^{+2.04}_{-1.17} \pm 0.82$ | 0.5675            | $8.58^{+0.70}_{-0.69} \pm 3.43$ | 4.26                                                | 1.71                                                    |
| 0205260201 | 2004-01-16 | 276.075 | -35.318 | 9.1                | 407                    | 9.3                | 412                    | $5.61^{+1.52}_{-1.60} \pm 0.34$  | 0.5675            | $2.84^{+0.71}_{-1.00} \pm 0.23$ | 2.54                                                | 2.48                                                    |
| 0505310101 | 2007-11-10 | 276.095 | -33.229 | 66.3               | 211                    | 67.2               | 368                    | $11.10 \pm 0.99 \pm 0.94$        | 0.5625            | $7.26 \pm 0.57 \pm 1.04$        | 2.02                                                | 2.47                                                    |
| 0301410601 | 2005-10-02 | 276.396 | -32.033 | 19.4               | 370                    | 20.2               | 462                    | $15.07^{+1.05}_{-2.07} \pm 2.75$ | 0.5625            | $6.40^{+0.66}_{-0.68} \pm 1.93$ | 2.22                                                | 2.42                                                    |
| 0162160101 | 2003-11-24 | 276.396 | -29.796 | 11.9               | 590                    | 12.3               | 592                    | $6.14^{+0.85}_{-0.97} \pm 0.37$  | 0.5725            | $1.33^{+0.52}_{-0.49} \pm 0.90$ | 2.20                                                | 2.39                                                    |
| 0162160301 | 2003-12-05 | 276.399 | -29.799 | 8.5                | 517                    | 8.5                | 591                    | $7.18^{+1.61}_{-1.09} \pm 0.80$  | 0.5725            | $1.39^{+0.86}_{-0.65} \pm 1.20$ | 5.51                                                | 1.90                                                    |
| 0162160501 | 2003-12-14 | 276.402 | -29.801 | 9.3                | 590                    | 9.3                | 591                    | $7.71^{+0.99}_{-1.58} \pm 0.93$  | 0.5625            | $1.30^{+0.58}_{-0.60} \pm 0.91$ | 1.47                                                | 1.77                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0610000301 | 2009-05-06 | 276.596 | -31.735 | 13.0               | 380                    | 14.5               | 463                    | $13.54^{+1.57}_{-1.96} \pm 1.83$ | 0.5625             | $7.35^{+0.91}_{-0.85} \pm 0.96$  | 2.35                                                | 2.50                                                    |
| 0550350101 | 2008-12-11 | 276.987 | -71.915 | 20.7               | 399                    | 22.1               | 491                    | $2.86^{+0.97}_{-1.03} \pm 0.30$  | 0.5675             | $0.83^{+0.48}_{-0.56} \pm 0.10$  | 1.32                                                | 2.61                                                    |
| 0148450101 | 2003-05-25 | 277.215 | +8.628  | 24.6               | 514                    | 25.1               | 586                    | $7.80^{+0.64}_{-0.65} \pm 1.48$  | 0.5725             | $2.39 \pm 0.40 \pm 1.30$         | 1.48                                                | 1.74                                                    |
| 0201901601 | 2004-07-09 | 277.327 | +47.084 | 27.6               | 348                    | 27.0               | 354                    | $4.90^{+0.94}_{-0.73} \pm 0.21$  | 0.5725             | $0.33^{+0.55}_{-0.33} \pm 0.60$  | ...                                                 | 2.10                                                    |
| 0300430101 | 2005-12-06 | 277.373 | +11.728 | 92.2               | 393                    | 94.7               | 484                    | $12.87^{+0.49}_{-0.47} \pm 1.09$ | 0.5675             | $2.79^{+0.27}_{-0.26} \pm 1.68$  | 1.56                                                | 1.80                                                    |
| 0071940101 | 2001-10-31 | 277.755 | -33.030 | 29.3               | 305                    | 29.0               | 333                    | $23.85^{+1.48}_{-1.18} \pm 0.64$ | 0.5675             | $11.05^{+0.88}_{-0.73} \pm 2.82$ | 2.31                                                | 2.69                                                    |
| 0602920101 | 2009-07-10 | 277.794 | +81.431 | 28.3               | 458                    | 29.1               | 550                    | $4.91^{+1.05}_{-0.69} \pm 0.32$  | 0.5675             | $0.85^{+0.48}_{-0.43} \pm 0.45$  | 3.24                                                | 2.06                                                    |
| 0106061201 | 2002-06-09 | 277.822 | +78.243 | 14.0               | 550                    | 13.9               | 557                    | $9.30^{+1.15}_{-0.84} \pm 0.65$  | 0.5675             | $1.05^{+0.58}_{-0.50} \pm 1.27$  | 3.50                                                | 2.44                                                    |
| 0111130201 | 2000-07-04 | 278.143 | -34.590 | 29.5               | 470                    | 29.1               | 473                    | $21.12^{+1.42}_{-0.92} \pm 0.80$ | 0.5675             | $7.47^{+0.71}_{-0.67} \pm 2.50$  | 4.17                                                | 1.81                                                    |
| 0205740101 | 2004-10-04 | 278.354 | -33.301 | 22.3               | 300                    | 22.6               | 235                    | $21.25 \pm 1.69 \pm 1.31$        | 0.5675             | $9.61 \pm 1.01 \pm 2.11$         | 2.24                                                | 2.33                                                    |
| 0402000501 | 2007-01-28 | 278.468 | -34.769 | 19.3               | 355                    | 20.5               | 531                    | $17.11^{+0.75}_{-1.99} \pm 3.18$ | 0.5625             | $7.37^{+0.49}_{-1.16} \pm 1.15$  | 3.81                                                | 2.59                                                    |
| 0604310201 | 2009-06-20 | 278.485 | +68.657 | 26.0               | 421                    | 27.4               | 510                    | $5.29^{+0.89}_{-1.02} \pm 0.56$  | 0.5675             | $0.56^{+0.48}_{-0.52} \pm 0.48$  | 2.85                                                | 1.61                                                    |
| 0500860201 | 2007-05-13 | 278.555 | -31.323 | 10.9               | 299                    | 10.7               | 376                    | $12.66^{+2.26}_{-2.74} \pm 0.99$ | 0.5625             | $14.40^{+1.62}_{-1.22} \pm 0.94$ | 2.25                                                | 2.50                                                    |
| 0506531401 | 2008-04-29 | 278.560 | -31.325 | 11.6               | 373                    | 11.7               | 376                    | $15.30^{+1.73}_{-1.76} \pm 0.19$ | 0.5675             | $11.21^{+1.14}_{-1.16} \pm 0.98$ | 1.33                                                | 2.38                                                    |
| 0500860901 | 2008-04-21 | 278.562 | -31.325 | 9.5                | 295                    | 9.2                | 449                    | $17.04^{+3.10}_{-1.94} \pm 3.17$ | 0.5625             | $13.17^{+1.43}_{-1.29} \pm 2.16$ | 1.82                                                | 2.09                                                    |
| 0506530901 | 2008-04-20 | 278.562 | -31.325 | 10.1               | 295                    | 10.3               | 449                    | $15.83^{+2.07}_{-1.16} \pm 0.99$ | 0.5625             | $11.43^{+1.17}_{-1.30} \pm 1.31$ | 1.65                                                | 2.07                                                    |
| 0506530601 | 2008-04-17 | 278.565 | -31.326 | 10.0               | 238                    | 10.1               | 450                    | $15.70^{+1.66}_{-2.46} \pm 1.59$ | 0.5725             | $10.91^{+1.15}_{-1.56} \pm 0.93$ | 1.27                                                | 1.79                                                    |
| 0500860601 | 2007-11-24 | 278.576 | -31.291 | 16.3               | 287                    | 16.3               | 451                    | $16.01^{+1.54}_{-2.00} \pm 1.39$ | 0.5675             | $11.62^{+1.01}_{-1.23} \pm 2.92$ | 1.53                                                | 2.70                                                    |
| 0500860701 | 2008-01-16 | 278.585 | -31.306 | 9.6                | 306                    | 9.8                | 450                    | $17.93^{+1.99}_{-2.11} \pm 1.28$ | 0.5675             | $12.15^{+1.27}_{-1.30} \pm 1.07$ | 1.51                                                | 2.37                                                    |
| 0084960201 | 2002-05-03 | 278.623 | -45.323 | 11.7               | 578                    | 11.7               | 583                    | $11.63^{+1.21}_{-1.25} \pm 0.53$ | 0.5625             | $2.93^{+0.58}_{-0.53} \pm 1.28$  | 1.50                                                | 1.54                                                    |
| 0201840101 | 2003-12-13 | 278.643 | -34.872 | 52.5               | 382                    | 53.9               | 379                    | $16.24^{+0.81}_{-0.80} \pm 0.71$ | 0.5625             | $6.45 \pm 0.48 \pm 1.63$         | 1.38                                                | 2.30                                                    |
| 0112880201 | 2001-07-09 | 278.661 | +22.950 | 27.5               | 499                    | 27.7               | 504                    | $16.39^{+1.05}_{-0.72} \pm 0.40$ | 0.5675             | $3.76^{+0.50}_{-0.44} \pm 2.33$  | 3.35                                                | 1.80                                                    |
| 0111130701 | 2002-10-07 | 278.841 | -34.806 | 16.5               | 422                    | 16.8               | 354                    | $20.54^{+3.15}_{-0.96} \pm 1.37$ | 0.5675             | $7.00 \pm 0.90 \pm 3.50$         | 3.55                                                | 2.31                                                    |
| 0111130101 | 2000-07-06 | 278.843 | -34.808 | 13.7               | 425                    | 13.5               | 427                    | $22.13^{+1.63}_{-1.45} \pm 1.03$ | 0.5675             | $6.79^{+0.87}_{-0.92} \pm 3.55$  | 2.21                                                | 1.90                                                    |
| 0106061001 | 2002-06-06 | 279.051 | +77.627 | 8.7                | 504                    | 8.5                | 582                    | $16.13^{+1.43}_{-1.44} \pm 2.08$ | 0.5625             | $4.14 \pm 0.71 \pm 1.38$         | 1.76                                                | 2.34                                                    |
| 0092970201 | 2001-05-30 | 279.073 | -64.549 | 12.5               | 514                    | 12.1               | 512                    | $6.71^{+0.89}_{-0.94} \pm 0.51$  | 0.5675             | $1.73^{+0.51}_{-0.53} \pm 0.70$  | 0.29                                                | 1.94                                                    |
| 0555690801 | 2008-09-03 | 279.089 | -30.064 | 6.0                | 501                    | 6.1                | 516                    | $5.88^{+1.75}_{-1.50} \pm 0.67$  | 0.5675             | $0.63^{+0.93}_{-0.63} \pm 1.04$  | 3.71                                                | 1.67                                                    |
| 0092970301 | 2001-06-30 | 279.102 | +9.932  | 8.9                | 517                    | 8.8                | 589                    | $13.23^{+1.42}_{-1.27} \pm 1.23$ | 0.5675             | $2.34^{+0.62}_{-0.65} \pm 1.94$  | 4.27                                                | 1.50                                                    |
| 0204650201 | 2004-06-09 | 279.137 | +68.460 | 10.1               | 391                    | 10.1               | 388                    | $7.67^{+1.45}_{-1.82} \pm 0.42$  | 0.5625             | $1.59^{+0.78}_{-0.83} \pm 1.18$  | 2.24                                                | 1.74                                                    |
| 0056020701 | 2001-12-11 | 279.243 | +57.064 | 27.7               | 410                    | 28.4               | 480                    | $9.60^{+0.95}_{-0.91} \pm 0.68$  | 0.5625             | $1.70^{+0.34}_{-0.45} \pm 1.02$  | 2.40                                                | 1.71                                                    |
| 0106060901 | 2002-06-10 | 279.619 | +77.317 | 11.3               | 579                    | 11.1               | 588                    | $10.81^{+1.13}_{-1.18} \pm 5.43$ | 0.5625             | $2.11^{+0.59}_{-0.58} \pm 2.79$  | 3.08                                                | 2.47                                                    |
| 0113000501 | 2001-09-17 | 279.699 | -33.369 | 23.2,10.5          | 389,363                | 34.4               | 396                    | $38.01^{+0.90}_{-2.15} \pm 7.28$ | 0.5675             | $21.92^{+0.63}_{-1.31} \pm 6.29$ | 1.56                                                | 2.64                                                    |
| 0008020101 | 2001-11-01 | 279.872 | -37.078 | 11.2               | 463                    | 11.3               | 539                    | $10.04^{+0.63}_{-1.05} \pm 0.38$ | 0.5675             | $2.49 \pm 0.58 \pm 1.17$         | 1.49                                                | 1.76                                                    |
| 0560180701 | 2008-11-06 | 279.974 | -19.811 | 27.9               | 443                    | 28.1               | 455                    | $5.12^{+0.59}_{-0.83} \pm 0.88$  | 0.5625             | $1.99^{+0.44}_{-0.45} \pm 0.55$  | 2.52                                                | 1.66                                                    |
| 0510010501 | 2007-06-19 | 280.134 | -29.188 | 5.8                | 414                    | 6.6                | 582                    | $5.53^{+1.63}_{-1.45} \pm 0.38$  | 0.5725             | $2.20^{+0.84}_{-0.86} \pm 0.72$  | 1.43                                                | 1.98                                                    |
| 0106061401 | 2002-06-13 | 280.162 | +77.006 | 7.9                | 580                    | 7.9                | 585                    | $15.89^{+1.42}_{-2.39} \pm 1.03$ | 0.5625             | $2.34^{+0.61}_{-0.94} \pm 1.36$  | 2.32                                                | 2.55                                                    |
| 0204770101 | 2004-01-17 | 280.185 | -33.275 | 11.2               | 531                    | 11.2               | 464                    | $50.76^{+2.54}_{-1.87} \pm 6.09$ | 0.5675             | $26.99^{+1.44}_{-1.32} \pm 4.83$ | 1.93                                                | 2.39                                                    |
| 0501470201 | 2007-05-14 | 280.344 | -35.608 | 14.6               | 417                    | 14.7               | 515                    | $11.07 \pm 1.13 \pm 1.19$        | 0.5675             | $4.79 \pm 0.69 \pm 1.32$         | 3.00                                                | 2.16                                                    |
| 0550452601 | 2008-12-14 | 280.626 | -9.185  | 16.1               | 378                    | 16.0               | 469                    | $4.77^{+1.18}_{-1.07} \pm 0.92$  | 0.5625             | $2.40^{+0.67}_{-0.57} \pm 0.24$  | 0.89                                                | 2.18                                                    |
| 0401791201 | 2006-11-29 | 280.634 | +10.706 | 12.7               | 284                    | 12.6               | 205                    | $10.80^{+2.13}_{-1.96} \pm 2.59$ | 0.5575             | $4.15^{+1.07}_{-1.04} \pm 1.46$  | 2.60                                                | 2.31                                                    |
| 0151412801 | 2004-05-28 | 280.779 | -33.699 | 14.8               | 401                    | 14.5               | 401                    | $31.32^{+1.68}_{-1.82} \pm 1.86$ | 0.5675             | $14.16^{+1.07}_{-1.11} \pm 4.55$ | 1.87                                                | 1.82                                                    |
| 0151412701 | 2004-05-26 | 280.779 | -33.699 | 16.3               | 400                    | 16.3               | 401                    | $29.11^{+1.58}_{-1.62} \pm 0.82$ | 0.5725             | $14.79^{+1.07}_{-1.08} \pm 4.80$ | 1.34                                                | 1.87                                                    |
| 0151412601 | 2004-05-18 | 280.786 | -33.704 | 11.5               | 468                    | 11.6               | 473                    | $28.42^{+1.78}_{-1.67} \pm 1.50$ | 0.5725             | $12.51 \pm 1.18 \pm 6.51$        | 4.16                                                | 2.08                                                    |
| 0151412501 | 2004-05-16 | 280.786 | -33.705 | 12.8               | 467                    | 12.9               | 472                    | $29.21^{+1.68}_{-1.67} \pm 0.74$ | 0.5725             | $13.33^{+1.14}_{-1.13} \pm 6.62$ | 2.66                                                | 1.99                                                    |
| 0151412401 | 2004-05-12 | 280.787 | -33.705 | 5.4                | 399                    | 5.6                | 474                    | $32.54^{+2.91}_{-2.75} \pm 2.85$ | 0.5675             | $15.42^{+1.82}_{-1.74} \pm 6.09$ | 1.87                                                | 1.86                                                    |
| 0151412301 | 2004-05-09 | 280.788 | -33.706 | 15.9               | 396                    | 16.0               | 473                    | $29.47^{+1.48}_{-1.62} \pm 2.31$ | 0.5725             | $13.41^{+1.01}_{-1.09} \pm 6.01$ | 0.99                                                | 1.97                                                    |
| 0151412201 | 2004-05-05 | 280.790 | -33.706 | 12.8               | 469                    | 12.9               | 473                    | $30.11^{+1.68}_{-1.72} \pm 0.91$ | 0.5675             | $12.54^{+1.09}_{-1.12} \pm 5.26$ | 2.85                                                | 2.17                                                    |
| 0151412101 | 2004-05-02 | 280.792 | -33.706 | 11.5               | 470                    | 11.0               | 474                    | $28.46 \pm 1.79 \pm 0.57$        | 0.5675             | $13.15 \pm 1.20 \pm 5.99$        | 3.61                                                | 2.14                                                    |
| 0205260101 | 2004-02-24 | 280.935 | -35.860 | 6.9                | 586                    | 7.2                | 517                    | $8.79^{+1.83}_{-1.36} \pm 1.36$  | 0.5675             | $3.95 \pm 0.81 \pm 1.55$         | 1.73                                                | 1.64                                                    |
| 0111291101 | 2002-12-18 | 281.117 | +68.151 | 9.7                | 470                    | 10.5               | 472                    | $11.09^{+0.80}_{-2.61} \pm 2.77$ | 0.5725             | $1.76^{+0.97}_{-0.60} \pm 0.92$  | 4.60                                                | 2.29                                                    |
| 0110980401 | 2000-07-07 | 281.349 | -40.733 | 28.6               | 556                    | 29.7               | 565                    | $10.70^{+0.64}_{-0.68} \pm 0.56$ | 0.5625             | $2.17^{+0.35}_{-0.36} \pm 1.17$  | 1.94                                                | 1.95                                                    |
| 0153250101 | 2003-04-18 | 281.760 | -30.772 | 43.1               | 459                    | 42.9               | 541                    | $6.62^{+0.77}_{-0.53} \pm 0.45$  | 0.5675             | $2.71^{+0.33}_{-0.31} \pm 0.28$  | 1.72                                                | 2.12                                                    |
| 0089210101 | 2001-12-01 | 281.772 | -31.983 | 8.1                | 406                    | 8.1                | 483                    | $24.58^{+2.06}_{-3.19} \pm 1.95$ | 0.5675             | $7.64^{+1.15}_{-1.42} \pm 3.35$  | 9.21                                                | 1.92                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{OVII}}$                | $E_{\text{OVII}}$ | $I_{\text{OVIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|-------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)             | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0205840101 | 2005-02-01 | 282.211 | -11.257 | 30.1               | 588                    | 32.6               | 515                    | $3.75^{+0.94}_{-0.53} \pm 0.59$  | 0.5675            | $1.33^{+0.37}_{-0.31} \pm 0.26$ | 0.91                                                | 2.29                                                    |
| 0402970201 | 2006-08-05 | 282.494 | -33.853 | 17.1               | 421                    | 18.1               | 510                    | $11.05^{+1.24}_{-1.08} \pm 0.40$ | 0.5675            | $3.51^{+0.80}_{-0.61} \pm 0.82$ | 1.66                                                | 2.50                                                    |
| 0404120101 | 2006-12-19 | 282.938 | +77.625 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                             | ...                                                 | ...                                                     |
| 0550950101 | 2008-12-07 | 283.259 | -78.254 | 91.0               | 312                    | 91.0               | 399                    | $2.67^{+0.61}_{-0.57} \pm 0.31$  | 0.5575            | $1.19^{+0.33}_{-0.29} \pm 0.28$ | 0.82                                                | 1.79                                                    |
| 0002942301 | 2001-12-10 | 283.264 | -78.255 | 7.3                | 418                    | 7.4                | 568                    | $5.28^{+1.61}_{-0.99} \pm 0.26$  | 0.5625            | $2.47^{+0.71}_{-0.72} \pm 1.21$ | 2.13                                                | 1.38                                                    |
| 0405090101 | 2006-10-15 | 283.360 | -44.625 | 82.9               | 389                    | 84.9               | 474                    | $6.03^{+0.51}_{-0.69} \pm 0.82$  | 0.5625            | $2.25^{+0.36}_{-0.23} \pm 0.21$ | 1.67                                                | 2.39                                                    |
| 0106860101 | 2000-10-17 | 283.361 | -44.627 | 14.7               | 546                    | 14.8               | 473                    | $9.11^{+0.90}_{-0.95} \pm 0.38$  | 0.5675            | $3.84^{+0.53}_{-0.55} \pm 0.43$ | 1.79                                                | 2.16                                                    |
| 0205230301 | 2004-06-05 | 283.439 | -44.584 | 10.6               | 474                    | 10.8               | 547                    | $8.15^{+1.29}_{-1.12} \pm 0.41$  | 0.5675            | $2.71^{+0.59}_{-0.60} \pm 1.00$ | 2.47                                                | 1.27                                                    |
| 0205230201 | 2004-05-01 | 283.445 | -44.586 | 5.3                | 477                    | 5.7                | 546                    | $7.47^{+1.84}_{-1.89} \pm 0.53$  | 0.5675            | $3.54^{+1.01}_{-0.81} \pm 0.59$ | 3.08                                                | 2.13                                                    |
| 0205230501 | 2004-11-23 | 283.469 | -44.553 | 15.1               | 547                    | 15.0               | 474                    | $8.13^{+0.93}_{-0.88} \pm 0.40$  | 0.5675            | $2.45^{+0.52}_{-0.51} \pm 0.52$ | 2.21                                                | 1.72                                                    |
| 0150280301 | 2003-12-21 | 283.477 | -44.558 | 9.1                | 548                    | 9.3                | 549                    | $8.66^{+1.55}_{-1.23} \pm 0.47$  | 0.5625            | $1.84^{+0.85}_{-0.63} \pm 0.64$ | 4.99                                                | 2.08                                                    |
| 0150280601 | 2004-01-08 | 283.481 | -44.564 | 7.6                | 541                    | 8.0                | 477                    | $6.41^{+1.12}_{-1.08} \pm 1.00$  | 0.5775            | $2.74^{+0.75}_{-0.73} \pm 0.88$ | 1.55                                                | 2.26                                                    |
| 0301860101 | 2006-03-06 | 283.491 | -44.667 | 20.0               | 373                    | 20.6               | 461                    | $8.48^{+1.52}_{-1.02} \pm 0.71$  | 0.5675            | $2.51^{+0.58}_{-0.50} \pm 0.29$ | 8.52                                                | 1.89                                                    |
| 0202140101 | 2003-12-30 | 283.577 | +53.427 | 31.9               | 591                    | 31.7               | 592                    | $9.31^{+0.63}_{-0.61} \pm 0.28$  | 0.5675            | $1.42^{+0.34}_{-0.33} \pm 1.17$ | 3.17                                                | 1.86                                                    |
| 0555880201 | 2008-06-13 | 283.654 | +25.306 | 33.1               | 491                    | 33.1               | 591                    | $10.93^{+1.18}_{-0.57} \pm 0.38$ | 0.5675            | $1.98^{+0.47}_{-0.34} \pm 1.13$ | 2.54                                                | 1.88                                                    |
| 0205090101 | 2004-12-23 | 283.854 | +69.188 | 24.5               | 442                    | 24.6               | 371                    | $7.85^{+1.17}_{-0.84} \pm 4.10$  | 0.5725            | $0.80^{+0.56}_{-0.47} \pm 2.47$ | 1.12                                                | 2.08                                                    |
| 0550450701 | 2009-01-20 | 283.872 | -6.506  | 16.2               | 404                    | 16.0               | 577                    | $4.77^{+1.02}_{-1.18} \pm 0.87$  | 0.5675            | $2.08^{+0.60}_{-0.63} \pm 0.62$ | 1.16                                                | 2.54                                                    |
| 0200020101 | 2004-07-01 | 284.125 | +80.229 | 10.7               | 579                    | 10.8               | 587                    | $5.98^{+0.96}_{-0.91} \pm 0.38$  | 0.5725            | $0.42^{+0.55}_{-0.42} \pm 0.63$ | 1.77                                                | 2.11                                                    |
| 0205360101 | 2004-07-02 | 284.328 | +66.271 | 16.8               | 502                    | 18.2               | 509                    | $9.60^{+2.54}_{-1.38} \pm 0.91$  | 0.5675            | $1.32^{+0.70}_{-0.82} \pm 1.76$ | 1.45                                                | 2.27                                                    |
| 0502430401 | 2007-12-09 | 284.424 | +52.419 | 28.0               | 339                    | 27.7               | 328                    | $8.78^{+0.98}_{-1.16} \pm 0.23$  | 0.5675            | $1.47^{+0.47}_{-0.55} \pm 1.02$ | 3.13                                                | 1.44                                                    |
| 0111970301 | 2001-10-19 | 284.890 | -38.138 | 17.4               | 378                    | 17.4               | 453                    | $6.40^{+1.04}_{-0.90} \pm 0.64$  | 0.5775            | $1.02^{+0.57}_{-0.56} \pm 0.63$ | 3.49                                                | 2.31                                                    |
| 0112880101 | 2003-01-09 | 284.893 | +25.466 | 28.8               | 483                    | 28.4               | 482                    | $13.67 \pm 0.85 \pm 0.34$        | 0.5675            | $2.67 \pm 0.45 \pm 1.84$        | 4.31                                                | 1.72                                                    |
| 0200770101 | 2005-02-06 | 285.291 | -26.619 | 31.8               | 478                    | 34.2               | 488                    | $4.57^{+0.52}_{-0.72} \pm 0.47$  | 0.5625            | $1.27^{+0.37}_{-0.40} \pm 0.17$ | 5.23                                                | 2.19                                                    |
| 0103860901 | 2000-12-18 | 285.967 | -72.021 | 21.0               | 471                    | 20.7               | 392                    | $9.45^{+1.66}_{-1.05} \pm 0.83$  | 0.5625            | $2.44^{+0.62}_{-0.54} \pm 0.68$ | 2.50                                                | 1.90                                                    |
| 0113050101 | 2000-12-14 | 285.999 | +6.658  | 19.8               | 503                    | 20.5               | 437                    | $13.82^{+0.94}_{-1.04} \pm 0.69$ | 0.5625            | $3.97 \pm 0.52 \pm 1.69$        | 1.17                                                | 1.86                                                    |
| 0113050201 | 2000-12-15 | 285.999 | +6.658  | 51.8               | 503                    | 51.8               | 437                    | $13.28^{+0.61}_{-0.58} \pm 0.89$ | 0.5675            | $4.42 \pm 0.33 \pm 1.46$        | 1.87                                                | 1.68                                                    |
| 0305800701 | 2005-12-16 | 286.103 | +58.330 | 7.9                | 501                    | 7.8                | 587                    | $9.48^{+1.68}_{-1.28} \pm 0.66$  | 0.5675            | $1.16^{+0.79}_{-0.67} \pm 1.65$ | 2.56                                                | 1.46                                                    |
| 0301650801 | 2006-01-08 | 286.153 | +66.946 | 11.8               | 404                    | 12.1               | 503                    | $8.85^{+1.16}_{-1.12} \pm 0.25$  | 0.5675            | $1.32 \pm 0.64 \pm 1.67$        | 2.13                                                | 1.46                                                    |
| 0601781001 | 2009-07-09 | 286.352 | +64.641 | 10.8               | 333                    | 10.8               | 404                    | $7.57^{+1.05}_{-2.05} \pm 0.69$  | 0.5675            | $1.76^{+0.98}_{-1.00} \pm 1.00$ | 5.42                                                | 1.90                                                    |
| 0500070201 | 2007-06-09 | 286.928 | +42.462 | 11.0               | 280                    | 11.5               | 442                    | $9.47^{+2.27}_{-1.72} \pm 0.74$  | 0.5675            | $0.65^{+0.91}_{-0.65} \pm 1.87$ | 2.44                                                | 1.70                                                    |
| 0500070301 | 2007-06-24 | 286.928 | +42.463 | 22.4               | 346                    | 22.7               | 516                    | $8.30 \pm 1.01 \pm 0.45$         | 0.5625            | $1.09^{+0.53}_{-0.51} \pm 1.09$ | 1.19                                                | 1.59                                                    |
| 0500070601 | 2007-12-18 | 286.974 | +42.475 | 20.3               | 352                    | 20.4               | 442                    | $7.43^{+1.57}_{-0.95} \pm 0.54$  | 0.5625            | $1.07^{+0.76}_{-0.51} \pm 0.52$ | 1.52                                                | 1.96                                                    |
| 0500070701 | 2007-12-26 | 286.975 | +42.474 | 25.4               | 281                    | 26.5               | 442                    | $9.75^{+1.21}_{-1.64} \pm 0.90$  | 0.5625            | $0.73^{+0.57}_{-0.59} \pm 0.92$ | 5.74                                                | 2.03                                                    |
| 0085220201 | 2002-01-08 | 286.980 | +42.468 | 34.9               | 510                    | 35.3               | 440                    | $11.02^{+0.54}_{-0.85} \pm 1.15$ | 0.5675            | $2.46^{+0.62}_{-0.36} \pm 1.07$ | 1.37                                                | 1.90                                                    |
| 0602010301 | 2009-06-23 | 287.257 | +32.217 | 84.6               | 324                    | 88.6               | 410                    | $5.15^{+0.49}_{-0.50} \pm 0.25$  | 0.5675            | $0.89 \pm 0.28 \pm 0.26$        | 8.06                                                | 1.92                                                    |
| 0137160201 | 2001-10-05 | 287.410 | -33.243 | 79.9               | 456                    | 80.3               | 464                    | $9.09^{+0.55}_{-0.62} \pm 0.48$  | 0.5625            | $3.91^{+0.31}_{-0.37} \pm 0.16$ | 3.42                                                | 2.59                                                    |
| 0305060101 | 2005-11-19 | 288.109 | -61.112 | 30.0               | 269                    | 30.0               | 316                    | $7.69^{+1.53}_{-1.03} \pm 1.00$  | 0.5675            | $0.58^{+0.58}_{-0.52} \pm 1.05$ | 4.60                                                | 1.70                                                    |
| 0303560101 | 2005-07-10 | 288.741 | +62.730 | 6.0                | 419                    | 6.4                | 515                    | $17.71^{+1.83}_{-1.80} \pm 0.31$ | 0.5675            | $3.96^{+1.01}_{-0.97} \pm 2.93$ | 9.98                                                | 1.69                                                    |
| 0110990201 | 2001-06-23 | 289.172 | +63.713 | 8.9                | 511                    | 9.1                | 592                    | $14.17^{+1.26}_{-1.33} \pm 1.27$ | 0.5725            | $2.46 \pm 0.69 \pm 2.31$        | 0.41                                                | 2.07                                                    |
| 0306560301 | 2005-09-30 | 289.178 | -22.066 | 64.8               | 239                    | 67.8               | 398                    | $6.00^{+0.92}_{-0.70} \pm 0.94$  | 0.5625            | $1.31^{+0.43}_{-0.33} \pm 0.57$ | 5.31                                                | 2.32                                                    |
| 0205770101 | 2003-12-19 | 289.203 | -22.072 | 93.4               | 472                    | 94.5               | 471                    | $9.19^{+0.47}_{-0.45} \pm 0.61$  | 0.5625            | $2.59^{+0.24}_{-0.25} \pm 0.57$ | 6.80                                                | 2.42                                                    |
| 0101440201 | 2002-08-13 | 289.535 | -4.866  | 31.6               | 543                    | 31.5               | 469                    | $8.84^{+0.62}_{-1.08} \pm 0.65$  | 0.5575            | $3.78^{+0.50}_{-0.39} \pm 0.93$ | 1.25                                                | 1.93                                                    |
| 0143210801 | 2003-07-06 | 289.654 | +49.952 | 23.2               | 530                    | 23.5               | 537                    | $9.84^{+0.89}_{-0.84} \pm 0.37$  | 0.5675            | $1.58^{+0.41}_{-0.46} \pm 1.25$ | 1.69                                                | 1.96                                                    |
| 0128320301 | 2000-08-07 | 289.766 | -11.705 | 12.2               | 567                    | 11.9               | 499                    | $10.27^{+1.00}_{-1.11} \pm 0.43$ | 0.5625            | $2.46^{+0.51}_{-0.54} \pm 0.51$ | 1.36                                                | 2.55                                                    |
| 0205010201 | 2004-06-05 | 290.105 | +70.135 | 19.8               | 565                    | 20.4               | 491                    | $7.08^{+0.83}_{-1.21} \pm 0.63$  | 0.5675            | $0.46^{+0.45}_{-0.46} \pm 0.91$ | 2.58                                                | 2.33                                                    |
| 0206540101 | 2004-12-10 | 290.562 | -70.982 | 6.9                | 589                    | 6.9                | 515                    | $7.16^{+1.44}_{-1.61} \pm 0.38$  | 0.5625            | $0.97^{+0.73}_{-0.71} \pm 0.62$ | 2.19                                                | 1.70                                                    |
| 0103861701 | 2000-09-29 | 291.055 | -33.308 | 7.6                | 398                    | 7.5                | 472                    | $12.99^{+1.63}_{-1.67} \pm 0.44$ | 0.5625            | $2.29^{+0.79}_{-0.84} \pm 1.42$ | 1.15                                                | 1.52                                                    |
| 0403070801 | 2007-02-11 | 291.164 | -15.364 | 12.4               | 491                    | 12.5               | 580                    | $5.06^{+1.34}_{-1.08} \pm 0.18$  | 0.5675            | $1.75^{+0.62}_{-0.60} \pm 0.08$ | 0.23                                                | 2.16                                                    |
| 0067170101 | 2002-05-26 | 291.268 | -71.105 | 41.1               | 585                    | 41.4               | 585                    | $8.60^{+0.55}_{-0.57} \pm 0.22$  | 0.5675            | $2.69 \pm 0.32 \pm 1.00$        | 2.09                                                | 1.87                                                    |
| 0510181701 | 2008-04-12 | 292.093 | -43.650 | 41.2               | 379                    | 39.8               | 477                    | $7.16^{+0.98}_{-0.66} \pm 0.61$  | 0.5675            | $2.16^{+0.49}_{-0.37} \pm 0.33$ | 1.83                                                | 2.10                                                    |
| 0605950101 | 2009-06-03 | 292.491 | -21.558 | 44.4               | 416                    | 45.2               | 567                    | $5.33^{+0.94}_{-1.25} \pm 0.42$  | 0.5625            | $2.75^{+0.50}_{-0.59} \pm 0.15$ | 4.08                                                | 2.04                                                    |
| 0504100601 | 2007-12-09 | 292.753 | +72.082 | 20.5               | 358                    | 20.7               | 375                    | $11.83^{+1.20}_{-1.13} \pm 0.46$ | 0.5675            | $1.74^{+0.67}_{-0.62} \pm 2.03$ | 2.69                                                | 1.46                                                    |
| 0203170301 | 2004-12-25 | 292.777 | +62.619 | 72.7               | 440                    | 76.0               | 371                    | $15.46^{+0.82}_{-0.66} \pm 1.46$ | 0.5725            | $2.71^{+0.33}_{-0.36} \pm 2.58$ | 4.17                                                | 2.14                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0302581501 | 2005-06-22 | 292.933 | +79.621 | 27.7               | 418                    | 28.2               | 441                    | $13.45^{+0.86}_{-0.87} \pm 0.46$ | 0.5675             | $1.10^{+0.44}_{-0.41} \pm 1.60$ | 4.16                                                | 1.73                                                    |
| 0504240101 | 2007-06-06 | 293.356 | +77.007 | 72.4               | 259                    | 75.4               | 335                    | $8.63^{+0.71}_{-1.16} \pm 1.02$  | 0.5625             | $0.74^{+0.53}_{-0.27} \pm 0.61$ | 1.48                                                | 2.37                                                    |
| 0202730301 | 2004-06-13 | 293.361 | +77.007 | 31.9               | 376                    | 32.3               | 374                    | $11.21^{+1.05}_{-0.99} \pm 0.32$ | 0.5625             | $1.21^{+0.50}_{-0.41} \pm 1.42$ | ...                                                 | 1.78                                                    |
| 0122520201 | 2000-03-31 | 293.438 | -37.549 | 25.1               | 466                    | 24.6               | 546                    | $10.72 \pm 0.94 \pm 0.65$        | 0.5675             | $5.31 \pm 0.54 \pm 0.37$        | 2.43                                                | 2.05                                                    |
| 0205680101 | 2003-12-21 | 293.723 | -80.896 | 91.1               | 476                    | 92.5               | 475                    | $5.70^{+0.31}_{-0.46} \pm 0.66$  | 0.5675             | $1.32^{+0.21}_{-0.23} \pm 0.69$ | 2.32                                                | 1.67                                                    |
| 0102040701 | 2000-07-05 | 293.725 | -80.899 | 5.0                | 402                    | 5.2                | 477                    | $8.97^{+2.01}_{-2.38} \pm 0.35$  | 0.5675             | $0.57^{+1.07}_{-0.57} \pm 1.37$ | 2.81                                                | 1.56                                                    |
| 0406210201 | 2006-07-21 | 293.750 | +50.871 | 27.5               | 424                    | 29.8               | 513                    | $10.85^{+0.82}_{-0.83} \pm 0.43$ | 0.5675             | $1.27 \pm 0.44 \pm 0.97$        | 2.43                                                | 1.91                                                    |
| 0401930101 | 2006-11-26 | 293.787 | -80.881 | 39.8               | 388                    | 39.5               | 401                    | $3.07^{+0.82}_{-0.58} \pm 1.15$  | 0.5725             | $0.75^{+0.43}_{-0.38} \pm 0.33$ | 1.32                                                | 1.64                                                    |
| 0405020801 | 2006-11-23 | 294.064 | -70.335 | 20.6               | 297                    | 20.6               | 390                    | $6.41^{+1.41}_{-1.29} \pm 2.50$  | 0.5675             | $1.61^{+0.77}_{-0.67} \pm 1.48$ | 4.52                                                | 1.98                                                    |
| 0112550401 | 2002-06-14 | 294.333 | +88.355 | 16.4               | 475                    | 16.6               | 483                    | $9.39^{+1.29}_{-0.76} \pm 0.73$  | 0.5725             | $1.22^{+0.60}_{-0.59} \pm 1.86$ | 1.28                                                | 1.65                                                    |
| 0205470301 | 2004-05-15 | 294.635 | -69.772 | 10.6               | 576                    | 10.7               | 577                    | $6.39^{+1.01}_{-1.02} \pm 0.37$  | 0.5725             | $0.47^{+0.62}_{-0.47} \pm 1.27$ | 2.42                                                | 2.15                                                    |
| 0205330101 | 2004-01-15 | 294.689 | -37.045 | 11.2               | 395                    | 11.1               | 337                    | $5.31^{+1.48}_{-1.44} \pm 0.49$  | 0.5675             | $0.70^{+0.79}_{-0.70} \pm 0.15$ | 1.80                                                | 2.51                                                    |
| 0113041301 | 2003-11-14 | 294.766 | -36.850 | 16.0               | 516                    | 16.1               | 529                    | $3.84^{+1.01}_{-0.76} \pm 0.61$  | 0.5675             | $1.83^{+0.50}_{-0.46} \pm 0.22$ | 2.48                                                | 2.58                                                    |
| 011040201  | 2000-07-05 | 295.071 | -57.827 | 26.9               | 329                    | 27.7               | 473                    | $7.68^{+0.95}_{-0.79} \pm 0.84$  | 0.5625             | $1.12^{+0.43}_{-0.39} \pm 0.85$ | 2.18                                                | 1.78                                                    |
| 0202130201 | 2004-11-29 | 295.260 | -41.879 | 17.3               | 581                    | 17.4               | 508                    | $6.32^{+0.76}_{-0.86} \pm 0.37$  | 0.5625             | $1.73^{+0.42}_{-0.53} \pm 0.15$ | 4.08                                                | 2.01                                                    |
| 0099840101 | 2000-07-05 | 295.294 | -41.873 | 11.7               | 580                    | 11.2               | 582                    | $10.39^{+0.97}_{-0.96} \pm 0.99$ | 0.5625             | $3.03 \pm 0.50 \pm 0.55$        | 2.64                                                | 1.74                                                    |
| 0049150301 | 2002-06-16 | 295.297 | -41.858 | 17.6               | 573                    | 17.7               | 579                    | $14.67^{+2.11}_{-0.58} \pm 0.33$ | 0.5675             | $3.12^{+0.51}_{-0.41} \pm 1.44$ | 3.48                                                | 1.70                                                    |
| 0148440101 | 2002-12-16 | 295.942 | -48.543 | 27.8               | 577                    | 27.9               | 578                    | $8.44^{+0.90}_{-0.47} \pm 0.53$  | 0.5675             | $1.65^{+0.50}_{-0.25} \pm 1.13$ | 1.74                                                | 1.67                                                    |
| 0109460101 | 2001-11-29 | 296.321 | -50.668 | 6.8                | 513                    | 7.0                | 589                    | $8.93^{+1.57}_{-1.19} \pm 0.67$  | 0.5725             | $1.69^{+0.66}_{-0.64} \pm 1.51$ | 1.52                                                | 1.55                                                    |
| 0067140201 | 2001-02-24 | 296.639 | -15.551 | 35.6               | 472                    | 36.0               | 398                    | $4.68^{+0.62}_{-0.70} \pm 0.20$  | 0.5625             | $0.85 \pm 0.33 \pm 0.06$        | 1.52                                                | 2.03                                                    |
| 0067140101 | 2001-02-23 | 296.639 | -15.552 | 13.4               | 402                    | 13.7               | 399                    | $5.98^{+1.34}_{-1.20} \pm 0.35$  | 0.5525             | $1.55^{+0.53}_{-0.56} \pm 0.11$ | 2.41                                                | 2.35                                                    |
| 0152460301 | 2003-08-18 | 296.875 | -15.923 | 28.3               | 571                    | 28.9               | 501                    | $3.73^{+0.88}_{-0.50} \pm 0.75$  | 0.5625             | $2.32^{+0.45}_{-0.30} \pm 0.22$ | 2.54                                                | 1.68                                                    |
| 0604830201 | 2009-07-09 | 296.962 | +48.764 | 36.5               | 482                    | 36.7               | 547                    | $7.67^{+1.59}_{-0.77} \pm 0.70$  | 0.5625             | $1.51^{+0.54}_{-0.42} \pm 0.97$ | 2.41                                                | 2.21                                                    |
| 0203810101 | 2004-09-28 | 297.076 | -14.777 | 16.9               | 513                    | 17.2               | 447                    | $1.64 \pm 0.78 \pm 0.15$         | 0.5675             | $0.58^{+0.44}_{-0.43} \pm 0.12$ | 2.88                                                | 1.97                                                    |
| 0203810201 | 2004-02-27 | 297.083 | -15.532 | 23.8               | 576                    | 24.4               | 576                    | $2.05^{+0.62}_{-0.69} \pm 0.17$  | 0.5625             | $0.16^{+0.32}_{-0.16} \pm 0.07$ | 3.56                                                | 1.83                                                    |
| 0085580101 | 2000-12-28 | 297.270 | -3.305  | 7.0                | 478                    | 6.9                | 402                    | $6.55^{+1.36}_{-1.32} \pm 0.58$  | 0.5625             | $2.93 \pm 0.76 \pm 0.25$        | 1.66                                                | 1.87                                                    |
| 0002740501 | 2002-04-09 | 297.349 | -15.899 | 15.3               | 552                    | 16.0               | 562                    | $3.52^{+0.78}_{-0.86} \pm 0.17$  | 0.5625             | $1.04 \pm 0.41 \pm 0.09$        | 2.80                                                | 2.32                                                    |
| 0302160401 | 2006-01-07 | 297.605 | +60.776 | 14.5               | 419                    | 15.0               | 517                    | $11.13^{+1.09}_{-1.15} \pm 0.29$ | 0.5675             | $4.76^{+0.65}_{-0.67} \pm 0.87$ | 2.04                                                | 2.06                                                    |
| 0554500201 | 2008-06-21 | 298.568 | -69.256 | 14.5               | 445                    | 15.7               | 466                    | $4.46^{+0.85}_{-0.95} \pm 0.41$  | 0.5775             | $0.44^{+0.59}_{-0.44} \pm 0.72$ | 0.67                                                | 2.00                                                    |
| 0305860401 | 2005-05-22 | 298.845 | -79.468 | 29.7               | 452                    | 29.9               | 537                    | $5.98^{+1.15}_{-0.69} \pm 1.45$  | 0.5675             | $1.27^{+0.42}_{-0.37} \pm 0.77$ | 1.96                                                | 2.23                                                    |
| 0305860301 | 2005-11-25 | 298.924 | -79.434 | 35.1               | 370                    | 35.1               | 467                    | $5.10^{+0.70}_{-0.68} \pm 0.95$  | 0.5675             | $1.08 \pm 0.40 \pm 0.94$        | 1.13                                                | 1.82                                                    |
| 0551430401 | 2009-01-05 | 298.985 | +13.800 | 27.1               | 324                    | 26.5               | 484                    | $6.47^{+0.91}_{-0.81} \pm 0.46$  | 0.5675             | $2.30^{+0.55}_{-0.48} \pm 0.56$ | 1.50                                                | 1.85                                                    |
| 0112800201 | 2000-12-26 | 299.255 | -79.406 | 28.9               | 556                    | 29.8               | 488                    | $7.61^{+0.63}_{-0.58} \pm 0.39$  | 0.5675             | $2.34^{+0.35}_{-0.34} \pm 0.75$ | 2.47                                                | 1.84                                                    |
| 0112800101 | 2001-01-01 | 299.261 | -79.408 | 41.3               | 557                    | 42.1               | 489                    | $8.35 \pm 0.53 \pm 0.31$         | 0.5675             | $2.54 \pm 0.30 \pm 0.68$        | 3.30                                                | 1.83                                                    |
| 0136950201 | 2001-06-21 | 299.437 | +51.488 | 28.2               | 294                    | 28.2               | 290                    | $10.57^{+0.98}_{-0.99} \pm 0.63$ | 0.5725             | $3.17^{+0.61}_{-0.60} \pm 1.60$ | 0.44                                                | 1.72                                                    |
| 0103861601 | 2001-05-03 | 299.454 | -58.616 | 6.9                | 403                    | 6.9                | 400                    | $10.86^{+2.33}_{-1.86} \pm 0.36$ | 0.5675             | $1.05^{+0.90}_{-0.94} \pm 1.51$ | 2.52                                                | 1.44                                                    |
| 0301890101 | 2005-11-10 | 299.461 | -58.578 | 83.2               | 242                    | 86.1               | 399                    | $5.96^{+0.72}_{-0.63} \pm 0.71$  | 0.5625             | $0.96^{+0.35}_{-0.15} \pm 0.34$ | 2.04                                                | 2.06                                                    |
| 0302610701 | 2006-01-20 | 299.473 | +28.870 | 23.3               | 220                    | 23.6               | 304                    | $16.56^{+1.53}_{-1.48} \pm 0.27$ | 0.5675             | $4.29^{+0.84}_{-0.83} \pm 2.63$ | 2.47                                                | 1.90                                                    |
| 0110980201 | 2002-06-27 | 299.502 | +62.368 | 53.0               | 421                    | 53.1               | 433                    | $15.89^{+0.69}_{-0.58} \pm 0.37$ | 0.5725             | $3.59^{+0.40}_{-0.35} \pm 2.21$ | 1.03                                                | 1.70                                                    |
| 0312191801 | 2006-01-24 | 299.537 | +35.481 | 9.6                | 394                    | 10.1               | 491                    | $10.16^{+1.26}_{-1.33} \pm 0.45$ | 0.5725             | $1.70^{+0.72}_{-0.75} \pm 1.29$ | 1.66                                                | 1.84                                                    |
| 0006220201 | 2001-01-04 | 299.651 | +22.856 | 40.3               | 517                    | 40.6               | 444                    | $12.81^{+1.42}_{-0.75} \pm 1.02$ | 0.5625             | $3.91 \pm 0.41 \pm 1.68$        | 2.84                                                | 1.51                                                    |
| 0112551101 | 2001-12-16 | 300.615 | +71.345 | 13.6               | 489                    | 13.5               | 566                    | $18.15^{+1.15}_{-1.17} \pm 0.27$ | 0.5675             | $4.81 \pm 0.66 \pm 3.38$        | 1.12                                                | 2.53                                                    |
| 0500440101 | 2007-06-28 | 300.659 | +17.251 | 54.4               | 399                    | 58.0               | 569                    | $7.72^{+0.60}_{-0.70} \pm 0.59$  | 0.5675             | $1.51^{+0.33}_{-0.34} \pm 0.68$ | 3.83                                                | 2.03                                                    |
| 0404680501 | 2007-04-12 | 301.226 | -44.589 | 21.6               | 347                    | 21.6               | 493                    | $8.92^{+1.07}_{-1.02} \pm 0.47$  | 0.5625             | $3.74^{+0.54}_{-0.51} \pm 0.54$ | 2.06                                                | 2.03                                                    |
| 0203270301 | 2004-07-15 | 301.894 | +56.877 | 38.8               | 527                    | 39.8               | 537                    | $11.78^{+0.59}_{-0.82} \pm 0.65$ | 0.5675             | $5.12^{+0.38}_{-0.42} \pm 1.17$ | 1.68                                                | 1.94                                                    |
| 0501470101 | 2007-06-04 | 301.992 | -45.492 | 8.9                | 414                    | 9.7                | 505                    | $7.87^{+1.29}_{-1.33} \pm 0.45$  | 0.5725             | $2.93 \pm 0.90 \pm 0.72$        | 1.40                                                | 2.53                                                    |
| 0503610101 | 2007-12-22 | 301.996 | +68.181 | 58.2               | 340                    | 60.5               | 499                    | $9.21^{+0.63}_{-0.67} \pm 0.27$  | 0.5725             | $3.80 \pm 0.41 \pm 1.26$        | 1.30                                                | 1.98                                                    |
| 0553030101 | 2008-12-17 | 302.055 | +51.460 | 74.6               | 403                    | 76.1               | 487                    | $7.49^{+0.50}_{-0.51} \pm 0.54$  | 0.5675             | $2.53^{+0.31}_{-0.32} \pm 1.31$ | 1.94                                                | 1.43                                                    |
| 0110000201 | 2000-10-17 | 302.064 | -44.945 | 11.0               | 533                    | 10.7               | 463                    | $16.47^{+1.36}_{-1.39} \pm 2.70$ | 0.5675             | $6.44^{+0.81}_{-0.82} \pm 3.10$ | 1.72                                                | 2.65                                                    |
| 0304250401 | 2005-11-27 | 302.075 | -44.932 | 16.6               | 376                    | 16.2               | 464                    | $13.18^{+1.17}_{-1.18} \pm 0.50$ | 0.5725             | $5.92^{+0.74}_{-0.72} \pm 1.63$ | 1.86                                                | 2.10                                                    |
| 0304250501 | 2005-11-29 | 302.076 | -44.933 | 15.8               | 376                    | 15.6               | 464                    | $14.45^{+1.24}_{-1.27} \pm 0.84$ | 0.5675             | $6.84^{+0.73}_{-0.74} \pm 0.96$ | 2.06                                                | 2.32                                                    |
| 0145540101 | 2003-04-21 | 302.116 | -36.814 | 24.2               | 427                    | 24.6               | 469                    | $8.88^{+0.80}_{-0.75} \pm 0.84$  | 0.5725             | $2.21^{+0.47}_{-0.45} \pm 1.40$ | 2.44                                                | 1.93                                                    |
| 0142660401 | 2003-11-16 | 302.266 | -42.011 | 12.5               | 563                    | 13.0               | 562                    | $8.44^{+0.93}_{-1.13} \pm 0.53$  | 0.5675             | $2.23^{+0.55}_{-0.57} \pm 0.66$ | 1.88                                                | 2.66                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0301151601 | 2006-04-22 | 302.637 | -46.511 | 11.1               | 413                    | 10.9               | 501                    | $7.62^{+1.16}_{-1.25} \pm 0.39$  | 0.5675             | $2.22^{+0.66}_{-0.61} \pm 0.76$  | 3.71                                                | 1.40                                                    |
| 0301150101 | 2006-03-22 | 302.649 | -46.507 | 7.4                | 413                    | 7.3                | 576                    | $5.19^{+1.52}_{-1.20} \pm 0.37$  | 0.5725             | $1.15^{+0.68}_{-0.73} \pm 1.31$  | 1.15                                                | 1.82                                                    |
| 0500980101 | 2007-06-23 | 302.744 | -44.703 | 22.8               | 342                    | 22.5               | 570                    | $10.26^{+1.11}_{-1.02} \pm 2.11$ | 0.5625             | $5.42^{+0.58}_{-0.57} \pm 1.16$  | 1.53                                                | 2.43                                                    |
| 0112880901 | 2000-11-30 | 302.795 | -42.458 | 35.3               | 533                    | 35.2               | 466                    | $8.38^{+0.61}_{-0.69} \pm 0.44$  | 0.5675             | $1.83 \pm 0.33 \pm 0.82$         | 1.79                                                | 2.62                                                    |
| 0404680201 | 2006-11-01 | 302.827 | -44.239 | 30.3               | 422                    | 30.3               | 514                    | $7.61^{+1.08}_{-0.58} \pm 1.75$  | 0.5675             | $5.08^{+0.44}_{-0.45} \pm 0.57$  | 1.75                                                | 2.10                                                    |
| 0301170201 | 2006-03-23 | 302.864 | -45.115 | 15.1               | 418                    | 16.1               | 580                    | $7.27^{+1.18}_{-0.65} \pm 0.45$  | 0.5675             | $3.02^{+0.77}_{-0.65} \pm 0.37$  | 1.22                                                | 2.55                                                    |
| 0404680301 | 2007-04-11 | 302.983 | -43.741 | 16.1               | 309                    | 17.0               | 442                    | $5.54^{+1.20}_{-1.25} \pm 0.34$  | 0.5675             | $2.77^{+0.67}_{-0.65} \pm 0.31$  | 1.82                                                | 2.32                                                    |
| 0200030101 | 2004-01-11 | 303.101 | -13.958 | 46.1               | 581                    | 46.3               | 517                    | $1.40^{+0.45}_{-0.43} \pm 0.11$  | 0.5575             | $0.63^{+0.23}_{-0.22} \pm 0.03$  | 2.30                                                | 2.04                                                    |
| 0092360601 | 2001-03-23 | 303.131 | -20.897 | 8.6                | 591                    | 9.0                | 592                    | $11.06^{+1.58}_{-0.93} \pm 0.79$ | 0.5725             | $2.50^{+0.66}_{-0.56} \pm 1.26$  | 4.88                                                | 2.07                                                    |
| 0601210301 | 2009-05-18 | 303.191 | -45.200 | 26.6               | 422                    | 26.5               | 591                    | $7.41^{+1.19}_{-0.96} \pm 0.35$  | 0.5625             | $2.46^{+0.68}_{-0.49} \pm 0.23$  | 2.50                                                | 2.67                                                    |
| 0503000201 | 2007-10-28 | 303.223 | -43.424 | 18.8               | 424                    | 18.4               | 515                    | $6.86^{+0.91}_{-1.01} \pm 1.08$  | 0.5625             | $3.11^{+0.51}_{-0.52} \pm 0.78$  | 1.36                                                | 1.76                                                    |
| 0057740401 | 2003-01-11 | 303.336 | +33.420 | 63.2               | 402                    | 64.2               | 402                    | $12.30^{+0.49}_{-0.80} \pm 1.02$ | 0.5675             | $2.35^{+0.31}_{-0.36} \pm 0.76$  | 1.80                                                | 2.26                                                    |
| 0125320701 | 2001-05-12 | 303.434 | -64.989 | 11.5               | 506                    | 11.9               | 584                    | $8.29^{+0.98}_{-1.24} \pm 0.30$  | 0.5675             | $1.12^{+0.51}_{-0.50} \pm 1.13$  | 3.96                                                | 2.48                                                    |
| 0125320401 | 2000-11-23 | 303.435 | -64.988 | 20.7               | 512                    | 20.9               | 584                    | $9.08^{+1.30}_{-0.71} \pm 0.45$  | 0.5675             | $2.47^{+0.42}_{-0.40} \pm 1.03$  | 2.55                                                | 1.61                                                    |
| 0125320501 | 2000-11-24 | 303.435 | -64.988 | 6.1                | 513                    | 6.0                | 586                    | $6.15^{+1.62}_{-1.40} \pm 0.70$  | 0.5725             | $2.63^{+0.83}_{-0.81} \pm 0.43$  | 3.35                                                | 2.15                                                    |
| 0133120401 | 2000-12-12 | 303.439 | -64.952 | 10.1               | 586                    | 10.3               | 584                    | $9.20^{+1.19}_{-1.15} \pm 0.58$  | 0.5675             | $1.58 \pm 0.51 \pm 1.39$         | 1.36                                                | 1.21                                                    |
| 0133120301 | 2000-12-12 | 303.458 | -64.977 | 10.3               | 513                    | 10.3               | 585                    | $8.45^{+1.01}_{-1.15} \pm 0.41$  | 0.5675             | $2.00^{+0.57}_{-0.61} \pm 1.11$  | 1.02                                                | 1.82                                                    |
| 0301170301 | 2006-04-06 | 303.786 | -43.537 | 15.1               | 428                    | 15.4               | 590                    | $5.93^{+1.18}_{-0.97} \pm 1.89$  | 0.5625             | $2.45^{+0.63}_{-0.46} \pm 0.91$  | 2.45                                                | 2.07                                                    |
| 0551021801 | 2008-12-02 | 304.065 | -51.445 | 10.0               | 356                    | 10.0               | 593                    | $4.89^{+1.61}_{-1.64} \pm 0.30$  | 0.5725             | $1.21^{+0.46}_{-0.86} \pm 1.18$  | 0.99                                                | 1.29                                                    |
| 0301170601 | 2006-03-27 | 304.089 | -44.337 | 12.1               | 430                    | 11.9               | 590                    | $6.66^{+1.16}_{-1.13} \pm 1.60$  | 0.5475             | $1.79^{+0.56}_{-0.55} \pm 0.61$  | 2.66                                                | 2.44                                                    |
| 0203390901 | 2004-06-28 | 304.544 | +33.083 | 10.8               | 583                    | 11.6               | 591                    | $18.22^{+1.13}_{-2.82} \pm 1.45$ | 0.5625             | $2.16^{+0.89}_{-0.43} \pm 1.80$  | ...                                                 | 2.31                                                    |
| 0006010401 | 2002-03-15 | 304.790 | -39.795 | 33.7               | 577                    | 33.2               | 587                    | $14.57^{+0.86}_{-0.81} \pm 0.55$ | 0.5675             | $4.07^{+0.47}_{-0.43} \pm 1.35$  | 6.18                                                | 1.71                                                    |
| 0556030101 | 2009-01-21 | 305.137 | +57.063 | 20.7               | 302                    | 20.3               | 468                    | $4.83^{+1.56}_{-1.00} \pm 0.60$  | 0.5725             | $2.92^{+0.82}_{-0.62} \pm 0.78$  | 1.84                                                | 1.85                                                    |
| 0112310301 | 2001-01-21 | 305.287 | +13.337 | 21.3               | 402                    | 21.5               | 401                    | $11.28^{+0.87}_{-1.60} \pm 1.45$ | 0.5625             | $3.47^{+0.49}_{-0.61} \pm 0.79$  | 6.08                                                | 1.94                                                    |
| 0204870101 | 2004-01-10 | 305.287 | +13.339 | 24.1               | 331                    | 24.2               | 338                    | $11.86^{+1.77}_{-1.21} \pm 0.74$ | 0.5625             | $4.13^{+0.77}_{-0.65} \pm 0.86$  | 1.83                                                | 2.42                                                    |
| 0082990101 | 2002-12-10 | 305.590 | +78.567 | 28.4               | 591                    | 28.6               | 517                    | $11.44^{+0.68}_{-0.66} \pm 0.47$ | 0.5675             | $1.91^{+0.35}_{-0.34} \pm 1.32$  | 1.14                                                | 1.70                                                    |
| 0406030101 | 2006-08-19 | 305.613 | -6.926  | 76.0               | 449                    | 75.3               | 466                    | $5.48^{+0.54}_{-0.76} \pm 0.32$  | 0.5625             | $2.12^{+0.29}_{-0.32} \pm 0.31$  | 5.95                                                | 2.55                                                    |
| 0164570701 | 2005-03-26 | 305.654 | -45.626 | 10.3               | 490                    | 9.3                | 587                    | $4.28^{+0.89}_{-0.84} \pm 0.41$  | 0.5775             | $0.25^{+0.56}_{-0.25} \pm 0.58$  | 2.09                                                | 2.48                                                    |
| 0406450101 | 2006-07-16 | 306.409 | +4.699  | 17.9               | 308                    | 17.7               | 401                    | $2.96^{+0.94}_{-1.01} \pm 0.77$  | 0.5725             | $1.50^{+0.74}_{-0.63} \pm 0.77$  | 1.78                                                | 2.34                                                    |
| 0203391001 | 2005-01-01 | 306.804 | +47.024 | 8.4                | 589                    | 9.6                | 515                    | $8.67^{+2.27}_{-1.12} \pm 0.70$  | 0.5775             | $2.05^{+0.95}_{-0.71} \pm 1.00$  | 2.40                                                | 2.68                                                    |
| 0002940101 | 2001-01-05 | 307.576 | +39.056 | 6.8                | 581                    | 6.9                | 509                    | $14.25^{+1.55}_{-0.83} \pm 0.26$ | 0.5625             | $4.12^{+0.79}_{-0.78} \pm 1.68$  | 0.95                                                | 1.40                                                    |
| 0604310101 | 2009-07-14 | 308.190 | +43.309 | 14.4               | 352                    | 15.2               | 591                    | $7.99^{+1.07}_{-1.66} \pm 1.17$  | 0.5625             | $2.20^{+0.66}_{-0.57} \pm 1.00$  | 1.39                                                | 1.51                                                    |
| 0302160201 | 2005-07-20 | 309.236 | +39.251 | 18.2               | 323                    | 18.6               | 565                    | $8.58^{+0.87}_{-0.93} \pm 1.06$  | 0.5725             | $3.64^{+0.55}_{-0.59} \pm 1.50$  | 3.80                                                | 1.71                                                    |
| 0502350101 | 2008-01-25 | 309.387 | +20.724 | 17.6               | 425                    | 18.2               | 588                    | $14.11^{+1.03}_{-1.37} \pm 0.64$ | 0.5675             | $6.50^{+0.63}_{-0.70} \pm 1.48$  | 1.52                                                | 2.25                                                    |
| 0110890101 | 2002-01-19 | 310.211 | +23.977 | 53.8               | 398                    | 54.1               | 472                    | $29.62^{+0.73}_{-1.10} \pm 0.41$ | 0.5675             | $11.25^{+0.75}_{-0.39} \pm 4.93$ | 8.98                                                | 2.03                                                    |
| 0550970101 | 2008-09-21 | 311.166 | -19.455 | 54.1               | 303                    | 55.1               | 400                    | $3.72^{+0.72}_{-0.61} \pm 0.31$  | 0.5675             | $1.39 \pm 0.37 \pm 0.10$         | 2.64                                                | 1.93                                                    |
| 0007422101 | 2001-02-08 | 311.269 | +1.662  | 11.1               | 591                    | 11.4               | 591                    | $11.26^{+1.07}_{-0.62} \pm 3.81$ | 0.5675             | $2.67 \pm 0.59 \pm 3.29$         | 1.96                                                | 2.65                                                    |
| 0007422301 | 2001-02-08 | 311.269 | +2.495  | 14.2               | 589                    | 14.4               | 589                    | $10.56^{+0.75}_{-0.86} \pm 0.61$ | 0.5675             | $5.13 \pm 0.54 \pm 0.92$         | 2.67                                                | 1.97                                                    |
| 0007422001 | 2001-02-08 | 311.476 | +1.246  | 9.6                | 517                    | 9.8                | 589                    | $6.26^{+2.11}_{-1.17} \pm 0.84$  | 0.5675             | $3.07^{+0.70}_{-0.62} \pm 0.78$  | 1.62                                                | 2.43                                                    |
| 0201903301 | 2004-05-15 | 311.674 | -42.323 | 9.7                | 349                    | 10.1               | 353                    | $9.99^{+1.64}_{-2.17} \pm 0.16$  | 0.5675             | $2.09^{+0.91}_{-1.04} \pm 1.37$  | 3.07                                                | 1.67                                                    |
| 0502430101 | 2007-07-26 | 312.023 | +56.673 | 32.9               | 344                    | 34.8               | 505                    | $9.09^{+1.08}_{-0.76} \pm 1.32$  | 0.5725             | $1.32 \pm 0.43 \pm 1.56$         | 8.21                                                | 1.88                                                    |
| 0302582201 | 2006-01-17 | 312.072 | +56.658 | 24.7               | 341                    | 25.3               | 432                    | $8.97^{+1.01}_{-1.12} \pm 0.65$  | 0.5675             | $1.94^{+0.51}_{-0.50} \pm 1.13$  | 2.56                                                | 2.06                                                    |
| 0148960901 | 2003-06-04 | 312.698 | -73.182 | 20.0               | 574                    | 20.3               | 580                    | $8.08^{+0.80}_{-0.72} \pm 0.83$  | 0.5675             | $2.00^{+0.41}_{-0.40} \pm 1.09$  | 1.44                                                | 1.60                                                    |
| 0148960801 | 2003-06-03 | 312.698 | -73.182 | 12.7               | 574                    | 12.6               | 581                    | $6.94^{+0.97}_{-1.23} \pm 0.85$  | 0.5625             | $2.51^{+0.49}_{-0.67} \pm 0.70$  | 1.72                                                | 1.67                                                    |
| 0307000901 | 2006-01-10 | 312.808 | +28.052 | 15.1               | 401                    | 15.0               | 497                    | $20.53^{+2.77}_{-1.13} \pm 2.71$ | 0.5675             | $4.96^{+0.71}_{-0.80} \pm 3.73$  | 2.43                                                | 1.90                                                    |
| 0110980601 | 2002-07-05 | 312.912 | +47.486 | 22.6               | 501                    | 22.0               | 503                    | $12.58^{+0.55}_{-0.59} \pm 0.44$ | 0.5725             | $3.17^{+0.40}_{-0.40} \pm 2.38$  | 5.63                                                | 2.55                                                    |
| 0148960101 | 2003-05-12 | 312.972 | -73.525 | 38.8               | 591                    | 39.4               | 590                    | $7.67^{+0.53}_{-0.94} \pm 0.98$  | 0.5675             | $1.73^{+0.59}_{-0.23} \pm 0.97$  | 1.94                                                | 1.94                                                    |
| 0506340101 | 2008-01-24 | 313.537 | +45.521 | 63.2               | 374                    | 63.9               | 463                    | $6.15^{+1.04}_{-0.29} \pm 0.42$  | 0.5725             | $2.67^{+0.41}_{-0.33} \pm 0.40$  | 2.24                                                | 2.54                                                    |
| 0206580101 | 2005-01-24 | 313.567 | +45.502 | 32.6               | 525                    | 34.2               | 451                    | $8.62^{+0.85}_{-0.72} \pm 0.35$  | 0.5675             | $3.15^{+0.51}_{-0.43} \pm 0.72$  | 1.50                                                | 2.45                                                    |
| 0402121801 | 2007-01-25 | 313.859 | +14.412 | 8.0                | 313                    | 8.3                | 474                    | $9.47^{+2.58}_{-2.50} \pm 2.45$  | 0.5625             | $3.16^{+1.90}_{-1.43} \pm 1.03$  | 2.78                                                | 2.59                                                    |
| 0551120201 | 2009-03-12 | 313.947 | -1.932  | 29.3               | 310                    | 28.6               | 399                    | $0.69^{+0.93}_{-0.69} \pm 0.88$  | 0.5725             | $2.60^{+0.56}_{-0.54} \pm 0.18$  | 1.85                                                | 2.24                                                    |
| 0148961201 | 2003-06-05 | 314.201 | -73.442 | 15.6               | 541                    | 16.5               | 546                    | $6.43^{+0.79}_{-0.74} \pm 0.34$  | 0.5725             | $1.85^{+0.48}_{-0.47} \pm 1.02$  | 1.87                                                | 1.70                                                    |
| 0148961301 | 2003-06-06 | 314.201 | -73.442 | 33.9               | 538                    | 36.2               | 546                    | $6.42^{+0.61}_{-0.57} \pm 0.65$  | 0.5675             | $1.88^{+0.35}_{-0.33} \pm 0.79$  | 2.26                                                | 1.85                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$                             | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$                           | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|------------------------------------------------|--------------------|-----------------------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                                         | (keV)              | (L.U.)                                        | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0402070301 | 2006-12-28 | 314.457 | +50.547 | 38.6               | 408                    | 39.8               | 582                    | 10.29 <sup>+0.75</sup> <sub>-0.77</sub> ± 0.31 | 0.5675             | 2.54 <sup>+0.42</sup> <sub>-0.43</sub> ± 1.27 | 3.77                                                | 1.99                                                    |
| 0552080101 | 2008-08-16 | 314.493 | +31.785 | 25.3               | 307                    | 26.4               | 508                    | 14.76 <sup>+0.75</sup> <sub>-1.24</sub> ± 2.80 | 0.5675             | 3.35 <sup>+0.69</sup> <sub>-0.41</sub> ± 0.61 | 3.17                                                | 2.14                                                    |
| 0503230101 | 2008-01-16 | 314.536 | +31.779 | 15.9               | 484                    | 16.5               | 509                    | 12.92 <sup>+1.39</sup> <sub>-0.99</sub> ± 0.65 | 0.5675             | 3.25 <sup>+0.73</sup> <sub>-0.56</sub> ± 1.59 | 1.49                                                | 1.82                                                    |
| 0035940301 | 2001-08-08 | 314.841 | +30.109 | 33.0               | 579                    | 33.2               | 503                    | 18.99 <sup>+0.81</sup> <sub>-0.75</sub> ± 0.34 | 0.5675             | 4.85 <sup>+0.45</sup> <sub>-0.41</sub> ± 2.61 | 1.81                                                | 1.70                                                    |
| 0206300101 | 2004-01-27 | 315.680 | +43.953 | 15.7               | 516                    | 15.5               | 516                    | 13.26 <sup>+0.87</sup> <sub>-1.67</sub> ± 1.02 | 0.5625             | 3.61 <sup>+0.68</sup> <sub>-0.47</sub> ± 1.50 | 4.72                                                | 2.09                                                    |
| 0103261001 | 2001-02-28 | 315.749 | -4.436  | 5.5                | 520                    | 5.4                | 517                    | 8.05 <sup>+1.80</sup> <sub>-1.67</sub> ± 2.07  | 0.5625             | 4.77 <sup>+0.96</sup> <sub>-0.89</sub> ± 1.17 | 1.91                                                | 2.02                                                    |
| 0152330101 | 2002-12-24 | 316.121 | -67.696 | 20.3               | 577                    | 21.6               | 578                    | 7.58 <sup>+0.77</sup> <sub>-0.75</sub> ± 0.29  | 0.5675             | 2.00 <sup>+0.43</sup> <sub>-0.42</sub> ± 0.76 | 2.75                                                | 1.92                                                    |
| 0110950401 | 2002-06-13 | 316.729 | +70.712 | 10.4               | 468                    | 10.4               | 473                    | 15.81 <sup>+1.59</sup> <sub>-1.52</sub> ± 0.49 | 0.5625             | 6.67 <sup>+0.96</sup> <sub>-0.93</sub> ± 0.58 | 2.01                                                | 2.41                                                    |
| 0165570101 | 2004-07-10 | 317.052 | +84.749 | 15.6,13.9,14.8     | 398,398,398            | 16.1,14.7,15.0     | 403,403,403            | 7.59 <sup>+0.77</sup> <sub>-0.54</sub> ± 0.46  | 0.5675             | 0.96 <sup>+0.37</sup> <sub>-0.32</sub> ± 1.33 | 6.45                                                | 1.59                                                    |
| 0092970801 | 2003-01-04 | 317.115 | +34.188 | 5.2                | 501                    | 5.1                | 571                    | 11.26 <sup>+1.75</sup> <sub>-0.95</sub> ± 0.37 | 0.5725             | 5.12 <sup>+1.16</sup> <sub>-1.10</sub> ± 3.14 | 1.86                                                | 1.37                                                    |
| 0125910501 | 2002-07-08 | 317.252 | +84.747 | 9.0                | 397                    | 9.3                | 337                    | 8.50 <sup>+1.73</sup> <sub>-1.50</sub> ± 0.50  | 0.5725             | 1.97 <sup>+0.90</sup> <sub>-0.93</sub> ± 1.36 | 2.12                                                | 1.87                                                    |
| 0125911101 | 2003-01-01 | 317.260 | +84.749 | 12.4               | 403                    | 12.6               | 403                    | 6.76 <sup>+1.08</sup> <sub>-1.14</sub> ± 0.69  | 0.5725             | 1.60 <sup>+0.64</sup> <sub>-0.73</sub> ± 1.60 | 2.12                                                | 1.28                                                    |
| 0201751301 | 2004-12-31 | 317.513 | +61.161 | 17.3               | 436                    | 18.7               | 376                    | 10.79 <sup>+1.24</sup> <sub>-0.71</sub> ± 0.51 | 0.5675             | 4.15 <sup>+0.70</sup> <sub>-0.67</sub> ± 1.49 | 2.03                                                | 1.87                                                    |
| 0312192101 | 2006-06-27 | 318.696 | +73.965 | 15.3               | 416                    | 15.4               | 511                    | 18.79 <sup>+2.22</sup> <sub>-1.12</sub> ± 0.59 | 0.5675             | 7.04 <sup>+0.83</sup> <sub>-0.71</sub> ± 3.35 | 8.10                                                | 1.66                                                    |
| 0604010201 | 2009-05-22 | 319.163 | -55.047 | 18.3               | 392                    | 19.3               | 551                    | 2.78 <sup>+1.11</sup> <sub>-1.02</sub> ± 1.02  | 0.5725             | 1.39 <sup>+0.58</sup> <sub>-0.59</sub> ± 0.45 | 1.83                                                | 2.48                                                    |
| 0147670201 | 2003-01-31 | 320.052 | +48.371 | 13.2               | 434                    | 12.9               | 502                    | 8.91 <sup>+1.89</sup> <sub>-1.11</sub> ± 0.54  | 0.5675             | 2.93 <sup>+0.91</sup> <sub>-0.65</sub> ± 1.19 | 1.03                                                | 1.91                                                    |
| 0109462901 | 2002-03-16 | 320.390 | -25.607 | 5.4                | 459                    | 5.7                | 463                    | 13.86 <sup>+1.96</sup> <sub>-1.88</sub> ± 2.67 | 0.5675             | 5.31 <sup>+1.14</sup> <sub>-1.11</sub> ± 1.64 | 3.82                                                | 2.23                                                    |
| 0300960201 | 2005-07-03 | 321.338 | +51.891 | 5.3                | 495                    | 5.3                | 517                    | 7.64 <sup>+1.99</sup> <sub>-1.69</sub> ± 0.25  | 0.5675             | 1.98 <sup>+0.92</sup> <sub>-0.85</sub> ± 1.57 | 1.29                                                | 1.63                                                    |
| 0140950101 | 2003-02-08 | 321.461 | +15.023 | 8.2                | 389                    | 8.2                | 414                    | 22.17 <sup>+2.18</sup> <sub>-2.15</sub> ± 0.36 | 0.5675             | 5.48 <sup>+1.21</sup> <sub>-1.20</sub> ± 3.54 | 1.68                                                | 2.22                                                    |
| 0021750701 | 2001-03-04 | 321.536 | -15.258 | 26.5               | 544                    | 26.5               | 552                    | 13.05 <sup>+1.01</sup> <sub>-0.95</sub> ± 0.60 | 0.5675             | 5.63 <sup>+0.56</sup> <sub>-0.55</sub> ± 1.21 | 1.47                                                | 1.93                                                    |
| 0021750601 | 2001-03-04 | 321.536 | -15.258 | 5.9                | 479                    | 5.9                | 555                    | 10.88 <sup>+2.68</sup> <sub>-2.08</sub> ± 0.59 | 0.5625             | 5.47 <sup>+1.24</sup> <sub>-1.16</sub> ± 0.28 | 2.63                                                | 2.66                                                    |
| 0021750501 | 2001-03-03 | 321.536 | -15.258 | 23.6               | 545                    | 23.9               | 553                    | 14.57 <sup>+1.33</sup> <sub>-1.03</sub> ± 0.72 | 0.5675             | 5.28 ± 0.57 ± 0.62                            | 4.04                                                | 2.10                                                    |
| 0021750101 | 2001-03-03 | 321.537 | -15.258 | 8.9                | 547                    | 8.9                | 553                    | 14.44 <sup>+2.20</sup> <sub>-1.77</sub> ± 0.75 | 0.5675             | 4.82 <sup>+0.97</sup> <sub>-0.92</sub> ± 1.23 | 3.70                                                | 2.62                                                    |
| 0021750401 | 2001-03-03 | 321.537 | -15.258 | 9.5                | 548                    | 9.5                | 554                    | 16.67 <sup>+1.69</sup> <sub>-1.64</sub> ± 0.59 | 0.5675             | 5.43 <sup>+1.00</sup> <sub>-0.90</sub> ± 1.42 | 3.46                                                | 1.91                                                    |
| 0083210201 | 2001-11-28 | 322.122 | -57.873 | 9.2                | 513                    | 9.0                | 590                    | 10.24 <sup>+1.10</sup> <sub>-1.09</sub> ± 0.55 | 0.5675             | 2.44 <sup>+0.61</sup> <sub>-0.62</sub> ± 1.30 | 1.68                                                | 1.50                                                    |
| 0201751201 | 2004-12-31 | 322.786 | +62.824 | 17.0               | 341                    | 17.3               | 340                    | 9.41 <sup>+1.29</sup> <sub>-1.26</sub> ± 0.36  | 0.5675             | 2.35 <sup>+0.68</sup> <sub>-0.70</sub> ± 0.91 | 2.04                                                | 1.80                                                    |
| 0505382101 | 2007-12-05 | 323.123 | -58.759 | 6.2                | 353                    | 7.3                | 516                    | 5.90 <sup>+1.41</sup> <sub>-1.63</sub> ± 0.17  | 0.5725             | 2.08 <sup>+0.91</sup> <sub>-1.03</sub> ± 0.75 | 3.44                                                | 1.49                                                    |
| 0017940101 | 2001-01-03 | 323.558 | +80.313 | 41.3               | 472                    | 42.1               | 396                    | 10.48 <sup>+0.66</sup> <sub>-0.70</sub> ± 0.67 | 0.5675             | 2.32 <sup>+0.34</sup> <sub>-0.40</sub> ± 0.87 | 3.50                                                | 2.42                                                    |
| 0505381201 | 2007-10-23 | 323.586 | -58.139 | 12.3               | 424                    | 12.7               | 588                    | 6.22 <sup>+1.13</sup> <sub>-1.36</sub> ± 0.77  | 0.5625             | 1.89 <sup>+0.60</sup> <sub>-0.59</sub> ± 0.63 | 2.76                                                | 1.67                                                    |
| 0081340301 | 2002-11-19 | 323.721 | -54.023 | 9.5                | 525                    | 9.7                | 455                    | 12.21 ± 1.44 ± 0.55                            | 0.5625             | 6.05 <sup>+0.83</sup> <sub>-0.82</sub> ± 1.34 | 2.65                                                | 1.57                                                    |
| 0505382001 | 2007-12-04 | 323.734 | -58.550 | 12.0               | 350                    | 13.1               | 511                    | 4.61 <sup>+0.99</sup> <sub>-0.95</sub> ± 0.65  | 0.5725             | 1.10 <sup>+0.61</sup> <sub>-0.59</sub> ± 0.72 | 3.85                                                | 1.59                                                    |
| 0505382901 | 2007-12-05 | 323.834 | -58.973 | 9.6                | 355                    | 9.7                | 517                    | 6.03 <sup>+1.81</sup> <sub>-1.29</sub> ± 0.63  | 0.5675             | 1.32 <sup>+0.89</sup> <sub>-0.75</sub> ± 0.70 | 2.74                                                | 1.57                                                    |
| 0505381101 | 2007-10-22 | 324.176 | -57.925 | 9.4                | 494                    | 9.6                | 584                    | 5.65 <sup>+1.01</sup> <sub>-0.97</sub> ± 0.27  | 0.5775             | 1.56 <sup>+0.69</sup> <sub>-0.65</sub> ± 1.06 | 1.49                                                | 1.35                                                    |
| 0505381901 | 2007-11-29 | 324.332 | -58.336 | 9.7                | 355                    | 9.4                | 592                    | 5.19 <sup>+1.18</sup> <sub>-1.09</sub> ± 0.22  | 0.5775             | 1.03 <sup>+0.73</sup> <sub>-0.71</sub> ± 1.07 | 1.40                                                | 1.39                                                    |
| 0505382801 | 2007-12-05 | 324.441 | -58.760 | 8.5                | 499                    | 9.4                | 515                    | 5.12 <sup>+1.52</sup> <sub>-1.26</sub> ± 0.25  | 0.5675             | 2.33 ± 0.75 ± 0.76                            | 3.61                                                | 1.51                                                    |
| 0505383601 | 2007-11-27 | 324.580 | -59.171 | 11.5               | 427                    | 11.6               | 592                    | 5.85 <sup>+1.04</sup> <sub>-1.05</sub> ± 0.62  | 0.5725             | 1.27 <sup>+0.64</sup> <sub>-0.59</sub> ± 1.00 | 1.87                                                | 1.47                                                    |
| 0505381001 | 2007-10-21 | 324.759 | -57.704 | 12.5               | 491                    | 12.2               | 583                    | 7.01 <sup>+1.17</sup> <sub>-1.02</sub> ± 0.32  | 0.5675             | 2.51 <sup>+0.57</sup> <sub>-0.61</sub> ± 1.00 | 1.28                                                | 1.42                                                    |
| 0505381801 | 2007-11-30 | 324.919 | -58.115 | 14.2               | 427                    | 14.5               | 592                    | 5.03 <sup>+0.94</sup> <sub>-0.93</sub> ± 0.42  | 0.5725             | 1.89 <sup>+0.54</sup> <sub>-0.57</sub> ± 0.65 | 1.85                                                | 1.53                                                    |
| 0505382701 | 2007-11-28 | 325.034 | -58.540 | 10.1               | 355                    | 11.1               | 583                    | 6.03 <sup>+1.32</sup> <sub>-1.27</sub> ± 0.51  | 0.5625             | 1.48 <sup>+0.74</sup> <sub>-0.70</sub> ± 0.33 | 1.50                                                | 2.16                                                    |
| 0554560601 | 2008-12-04 | 325.188 | -58.954 | 10.8               | 352                    | 11.4               | 513                    | 4.16 <sup>+1.37</sup> <sub>-1.06</sub> ± 0.50  | 0.5775             | 1.15 <sup>+0.83</sup> <sub>-0.77</sub> ± 0.17 | 2.48                                                | 2.21                                                    |
| 0554560201 | 2008-11-18 | 325.220 | -57.049 | 12.7               | 502                    | 13.1               | 517                    | 4.60 <sup>+1.14</sup> <sub>-0.84</sub> ± 0.38  | 0.5775             | 1.17 <sup>+0.66</sup> <sub>-0.57</sub> ± 1.24 | 1.54                                                | 1.18                                                    |
| 0505380901 | 2007-11-15 | 325.338 | -57.477 | 5.8                | 356                    | 5.7                | 518                    | 6.92 <sup>+1.77</sup> <sub>-1.82</sub> ± 0.16  | 0.5625             | 2.19 <sup>+0.97</sup> <sub>-0.95</sub> ± 0.69 | 1.64                                                | 1.42                                                    |
| 0505384801 | 2007-11-29 | 325.344 | -57.475 | 9.6                | 354                    | 9.3                | 592                    | 5.94 <sup>+1.11</sup> <sub>-1.40</sub> ± 0.42  | 0.5725             | 0.97 <sup>+0.64</sup> <sub>-0.83</sub> ± 0.96 | 1.64                                                | 1.17                                                    |
| 0505381701 | 2007-12-03 | 325.498 | -57.890 | 9.5                | 425                    | 9.7                | 516                    | 4.92 <sup>+1.07</sup> <sub>-1.76</sub> ± 0.31  | 0.5625             | 1.71 <sup>+0.58</sup> <sub>-0.73</sub> ± 0.93 | 2.38                                                | 1.00                                                    |
| 0505382601 | 2007-11-27 | 325.620 | -58.316 | 12.0               | 421                    | 12.0               | 579                    | 5.43 <sup>+0.93</sup> <sub>-0.92</sub> ± 0.35  | 0.5725             | 1.51 <sup>+0.57</sup> <sub>-0.61</sub> ± 0.70 | 1.79                                                | 1.38                                                    |
| 0554561001 | 2008-11-16 | 325.770 | -56.815 | 10.1               | 502                    | 10.1               | 518                    | 4.55 <sup>+1.09</sup> <sub>-0.94</sub> ± 0.15  | 0.5775             | 1.25 <sup>+0.64</sup> <sub>-0.67</sub> ± 0.35 | 1.33                                                | 1.54                                                    |
| 0505383401 | 2007-11-27 | 325.777 | -58.729 | 11.4               | 400                    | 11.8               | 565                    | 5.23 <sup>+0.90</sup> <sub>-1.00</sub> ± 0.44  | 0.5725             | 2.23 <sup>+0.59</sup> <sub>-0.64</sub> ± 1.12 | 1.70                                                | 1.26                                                    |
| 0505380801 | 2007-10-20 | 325.885 | -57.246 | 8.8                | 351                    | 8.8                | 589                    | 5.06 ± 1.03 ± 0.16                             | 0.5725             | 1.48 ± 0.66 ± 1.24                            | 1.57                                                | 1.05                                                    |
| 0505384101 | 2007-11-27 | 325.906 | -59.152 | 12.6               | 354                    | 12.0               | 591                    | 6.60 <sup>+1.08</sup> <sub>-1.13</sub> ± 0.17  | 0.5675             | 2.45 <sup>+0.62</sup> <sub>-0.61</sub> ± 0.88 | 1.63                                                | 1.04                                                    |
| 0300780301 | 2006-02-09 | 325.964 | +47.529 | 27.2               | 415                    | 28.1               | 590                    | 10.11 <sup>+0.78</sup> <sub>-0.93</sub> ± 1.48 | 0.5675             | 3.16 <sup>+0.47</sup> <sub>-0.51</sub> ± 0.47 | 5.00                                                | 2.51                                                    |
| 0505381601 | 2007-11-16 | 326.056 | -57.659 | 7.0                | 356                    | 9.0                | 518                    | 4.73 <sup>+1.83</sup> <sub>-1.46</sub> ± 0.35  | 0.5675             | 4.08 <sup>+0.95</sup> <sub>-0.87</sub> ± 0.14 | 1.40                                                | 2.44                                                    |
| 0401790901 | 2006-08-07 | 326.095 | +13.990 | 9.0                | 403                    | 8.8                | 488                    | 18.19 <sup>+1.71</sup> <sub>-1.66</sub> ± 0.73 | 0.5725             | 6.07 <sup>+1.05</sup> <sub>-1.04</sub> ± 3.22 | 2.34                                                | 2.55                                                    |
| 0406410101 | 2006-08-15 | 326.102 | +13.990 | 23.4               | 374                    | 23.0               | 391                    | 18.29 <sup>+1.60</sup> <sub>-1.46</sub> ± 1.32 | 0.5625             | 6.56 <sup>+0.91</sup> <sub>-0.87</sub> ± 3.84 | 3.65                                                | 2.06                                                    |



Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0505382501 | 2007-11-20 | 326.192 | -58.086 | 18.6               | 353                    | 19.1               | 515                    | $6.07^{+1.55}_{-1.02} \pm 0.34$  | 0.5625             | $1.63^{+0.71}_{-0.54} \pm 0.60$ | 1.44                                                | 2.64                                                    |
| 0200800201 | 2005-05-21 | 326.316 | -82.796 | 44.6               | 364                    | 45.2               | 444                    | $6.86^{+0.58}_{-0.96} \pm 0.79$  | 0.5675             | $2.65^{+0.33}_{-0.40} \pm 0.99$ | 2.53                                                | 1.64                                                    |
| 0200800101 | 2004-12-14 | 326.337 | -82.760 | 25.5               | 445                    | 25.9               | 375                    | $4.69^{+0.77}_{-0.68} \pm 0.62$  | 0.5775             | $0.61^{+0.50}_{-0.48} \pm 0.83$ | 1.84                                                | 1.68                                                    |
| 0505383301 | 2007-11-28 | 326.360 | -58.499 | 15.0               | 428                    | 15.3               | 592                    | $5.56^{+0.90}_{-1.04} \pm 0.73$  | 0.5725             | $1.38^{+0.53}_{-0.59} \pm 0.60$ | 1.37                                                | 1.63                                                    |
| 0505384001 | 2007-11-27 | 326.495 | -58.924 | 12.0               | 353                    | 11.7               | 590                    | $6.14^{+1.21}_{-1.17} \pm 0.36$  | 0.5725             | $2.05^{+0.66}_{-0.69} \pm 0.40$ | 1.84                                                | 1.49                                                    |
| 0505381501 | 2007-11-15 | 326.611 | -57.423 | 9.8                | 427                    | 10.0               | 592                    | $7.21^{+1.04}_{-1.16} \pm 0.26$  | 0.5675             | $1.52^{+0.57}_{-0.62} \pm 0.86$ | 1.46                                                | 1.46                                                    |
| 0505382401 | 2007-11-15 | 326.752 | -57.851 | 9.8                | 356                    | 9.5                | 514                    | $7.10^{+1.84}_{-1.43} \pm 0.76$  | 0.5675             | $1.65^{+0.87}_{-0.66} \pm 0.73$ | 1.53                                                | 1.72                                                    |
| 0505384901 | 2008-04-17 | 327.095 | -58.724 | 6.5                | 414                    | 6.7                | 581                    | $5.57^{+1.39}_{-1.33} \pm 0.26$  | 0.5775             | $1.58^{+0.94}_{-0.89} \pm 0.97$ | 1.06                                                | 1.67                                                    |
| 0505381401 | 2007-10-26 | 327.145 | -57.183 | 13.6               | 352                    | 13.8               | 589                    | $5.91^{+1.00}_{-0.97} \pm 0.31$  | 0.5725             | $1.81^{+0.63}_{-0.61} \pm 0.88$ | 1.81                                                | 1.52                                                    |
| 0505382301 | 2007-11-14 | 327.302 | -57.610 | 8.6                | 424                    | 8.9                | 591                    | $5.50^{+1.73}_{-0.64} \pm 0.33$  | 0.5625             | $2.02^{+0.84}_{-0.77} \pm 0.34$ | 1.62                                                | 2.39                                                    |
| 0300930301 | 2005-09-24 | 327.341 | -35.685 | 21.3               | 419                    | 21.2               | 513                    | $11.55^{+0.95}_{-0.99} \pm 0.31$ | 0.5625             | $6.86^{+0.57}_{-0.58} \pm 0.84$ | 2.65                                                | 1.32                                                    |
| 0505383101 | 2007-11-15 | 327.480 | -58.024 | 9.7                | 425                    | 9.8                | 590                    | $5.03^{+1.40}_{-1.16} \pm 0.77$  | 0.5725             | $1.54^{+0.79}_{-0.67} \pm 1.00$ | 1.42                                                | 1.23                                                    |
| 0200730201 | 2003-12-28 | 327.588 | +68.922 | 30.6               | 512                    | 30.7               | 586                    | $10.95^{+1.04}_{-0.80} \pm 1.53$ | 0.5675             | $8.69^{+0.70}_{-0.53} \pm 0.39$ | 1.37                                                | 1.85                                                    |
| 0505383801 | 2007-11-15 | 327.636 | -58.450 | 11.2               | 355                    | 11.1               | 501                    | $6.11^{+1.16}_{-1.44} \pm 0.47$  | 0.5675             | $2.03^{+0.59}_{-0.80} \pm 1.16$ | 1.46                                                | 1.21                                                    |
| 0505382201 | 2007-10-25 | 327.832 | -57.366 | 13.1               | 335                    | 13.1               | 570                    | $6.53^{+1.19}_{-1.44} \pm 0.28$  | 0.5675             | $1.88^{+0.67}_{-0.61} \pm 0.28$ | 1.75                                                | 2.49                                                    |
| 0505383001 | 2007-10-27 | 328.020 | -57.780 | 15.7               | 427                    | 15.1               | 516                    | $5.05^{+1.29}_{-0.98} \pm 0.33$  | 0.5625             | $1.98^{+0.60}_{-0.53} \pm 0.83$ | 1.34                                                | 1.60                                                    |
| 0305750901 | 2005-06-28 | 328.042 | +59.613 | 12.7               | 465                    | 12.6               | 485                    | $9.24^{+1.37}_{-1.10} \pm 0.37$  | 0.5725             | $2.51^{+0.77}_{-0.66} \pm 1.36$ | 1.84                                                | 1.68                                                    |
| 0505383701 | 2007-11-15 | 328.189 | -58.206 | 9.5                | 345                    | 9.8                | 582                    | $7.27^{+2.01}_{-1.83} \pm 1.36$  | 0.5725             | $1.46^{+0.96}_{-0.53} \pm 1.10$ | 1.27                                                | 1.42                                                    |
| 0094383201 | 2002-12-12 | 328.753 | +86.767 | 5.8                | 477                    | 5.5                | 402                    | $10.00^{+1.31}_{-2.04} \pm 0.77$ | 0.5725             | $0.76^{+0.92}_{-0.76} \pm 1.94$ | 1.95                                                | 1.15                                                    |
| 0302380201 | 2005-07-05 | 329.122 | +56.042 | 16.0               | 495                    | 17.1               | 517                    | $11.23^{+1.65}_{-0.97} \pm 0.28$ | 0.5675             | $2.75^{+0.54}_{-0.53} \pm 0.98$ | 1.44                                                | 1.99                                                    |
| 0111281001 | 2002-07-12 | 329.126 | +60.707 | 9.7                | 578                    | 9.8                | 510                    | $9.79^{+1.57}_{-1.10} \pm 0.90$  | 0.5725             | $1.93^{+0.66}_{-0.62} \pm 1.92$ | 4.98                                                | 1.43                                                    |
| 0307001901 | 2006-02-13 | 329.147 | -7.103  | 20.4               | 401                    | 20.3               | 499                    | $9.00^{+1.09}_{-1.04} \pm 1.95$  | 0.5625             | $4.67 \pm 0.57 \pm 0.90$        | 1.00                                                | 1.89                                                    |
| 0304200401 | 2005-08-07 | 329.788 | +3.381  | 15.3               | 307                    | 15.3               | 472                    | $8.95^{+1.53}_{-1.10} \pm 1.67$  | 0.5575             | $3.99^{+1.02}_{-0.43} \pm 0.79$ | 0.56                                                | 2.23                                                    |
| 0202460101 | 2004-01-29 | 329.864 | +60.146 | 17.1               | 584                    | 17.9               | 584                    | $5.65^{+0.96}_{-0.77} \pm 0.28$  | 0.5725             | $1.89^{+0.48}_{-0.46} \pm 0.23$ | 3.35                                                | 2.67                                                    |
| 0111282401 | 2003-01-01 | 329.943 | +60.536 | 6.4                | 588                    | 6.4                | 588                    | $10.81^{+1.37}_{-1.45} \pm 0.48$ | 0.5675             | $1.44^{+0.59}_{-0.91} \pm 1.01$ | 2.11                                                | 1.69                                                    |
| 0111282501 | 2003-01-15 | 330.029 | +59.644 | 8.1                | 583                    | 8.0                | 584                    | $10.41^{+1.22}_{-1.23} \pm 0.67$ | 0.5675             | $2.50 \pm 0.67 \pm 1.34$        | 2.32                                                | 1.73                                                    |
| 0200000101 | 2004-06-28 | 330.566 | +79.254 | 28.7               | 576                    | 30.4               | 583                    | $15.25^{+0.81}_{-0.86} \pm 0.36$ | 0.5675             | $1.78 \pm 0.40 \pm 1.90$        | 6.16                                                | 1.52                                                    |
| 0146340601 | 2003-04-16 | 330.862 | -20.778 | 6.5                | 543                    | 6.1                | 550                    | $23.81^{+1.60}_{-4.38} \pm 5.33$ | 0.5625             | $8.64^{+1.59}_{-0.92} \pm 1.37$ | 1.45                                                | 2.37                                                    |
| 0152940101 | 2003-07-18 | 331.257 | +64.809 | 31.6               | 507                    | 33.0               | 514                    | $8.86^{+0.82}_{-0.66} \pm 0.48$  | 0.5675             | $2.20^{+0.44}_{-0.39} \pm 0.83$ | 1.94                                                | 2.67                                                    |
| 0402380101 | 2007-02-19 | 331.328 | -12.171 | 23.3               | 353                    | 24.3               | 510                    | $27.14^{+1.74}_{-1.71} \pm 1.74$ | 0.5675             | $8.68^{+1.28}_{-0.55} \pm 4.92$ | 1.90                                                | 2.68                                                    |
| 0551022901 | 2008-09-06 | 331.504 | -23.504 | 8.8                | 348                    | 10.0               | 505                    | $8.59^{+1.54}_{-1.89} \pm 3.00$  | 0.5675             | $5.87^{+1.00}_{-1.02} \pm 1.53$ | 1.94                                                | 2.41                                                    |
| 0028740201 | 2001-11-14 | 332.154 | -75.759 | 31.1               | 429                    | 30.7               | 505                    | $8.59^{+0.78}_{-1.04} \pm 0.91$  | 0.5625             | $4.10^{+0.45}_{-0.39} \pm 1.01$ | ...                                                 | 2.19                                                    |
| 0067750101 | 2001-08-20 | 332.224 | +23.890 | 22.3               | 439                    | 22.7               | 515                    | $25.00^{+1.18}_{-2.53} \pm 1.14$ | 0.5675             | $9.56^{+0.71}_{-0.70} \pm 3.33$ | 4.30                                                | 2.60                                                    |
| 0028740101 | 2001-11-15 | 333.118 | -75.688 | 25.5               | 451                    | 26.1               | 521                    | $9.18^{+0.73}_{-0.76} \pm 0.46$  | 0.5675             | $4.93^{+0.45}_{-0.46} \pm 0.82$ | ...                                                 | 2.18                                                    |
| 0200780201 | 2004-11-05 | 333.317 | -65.023 | 24.6               | 576                    | 25.4               | 503                    | $6.26^{+0.83}_{-0.70} \pm 0.96$  | 0.5675             | $1.59^{+0.44}_{-0.35} \pm 0.60$ | 1.38                                                | 2.28                                                    |
| 0203770201 | 2004-07-14 | 333.484 | +44.436 | 18.1               | 382                    | 18.4               | 397                    | $8.23^{+1.00}_{-1.22} \pm 0.98$  | 0.5675             | $3.64^{+0.60}_{-0.68} \pm 0.17$ | 0.98                                                | 2.15                                                    |
| 0151590101 | 2003-07-05 | 333.853 | +50.288 | 9.1                | 486                    | 9.3                | 563                    | $11.40^{+1.37}_{-1.35} \pm 1.02$ | 0.5675             | $2.36^{+0.75}_{-0.74} \pm 1.79$ | 1.26                                                | 2.15                                                    |
| 0201550101 | 2004-02-22 | 334.663 | -11.485 | 25.5               | 496                    | 25.5               | 501                    | $25.74 \pm 1.30 \pm 0.61$        | 0.5675             | $9.44 \pm 0.75 \pm 4.30$        | 2.67                                                | 1.83                                                    |
| 0200430901 | 2004-07-02 | 335.502 | +56.510 | 10.6               | 583                    | 10.6               | 591                    | $7.46^{+1.28}_{-0.87} \pm 0.80$  | 0.5725             | $1.54^{+0.64}_{-0.55} \pm 1.58$ | 1.66                                                | 1.53                                                    |
| 0505930401 | 2008-01-10 | 335.792 | +56.619 | 18.5               | 353                    | 19.0               | 590                    | $7.01^{+0.86}_{-1.01} \pm 0.48$  | 0.5625             | $1.88^{+0.50}_{-0.57} \pm 1.41$ | 1.12                                                | 1.24                                                    |
| 0061940101 | 2001-01-03 | 335.872 | +71.510 | 6.8                | 577                    | 6.7                | 503                    | $13.06^{+2.21}_{-2.65} \pm 1.63$ | 0.5625             | $6.46^{+1.10}_{-1.07} \pm 1.04$ | 3.50                                                | 2.20                                                    |
| 0550460601 | 2009-04-13 | 336.556 | -17.926 | 15.7               | 409                    | 16.4               | 573                    | $20.40^{+1.38}_{-1.59} \pm 0.83$ | 0.5675             | $8.22^{+0.82}_{-0.79} \pm 3.55$ | 0.75                                                | 2.03                                                    |
| 0111251701 | 2002-04-02 | 337.043 | -41.456 | 6.7                | 461                    | 6.8                | 464                    | $10.86^{+2.53}_{-1.83} \pm 0.84$ | 0.5675             | $3.17^{+1.23}_{-1.11} \pm 2.03$ | 1.61                                                | 2.50                                                    |
| 0111251501 | 2002-03-29 | 337.045 | -41.455 | 14.9               | 465                    | 14.6               | 465                    | $16.95^{+0.81}_{-1.25} \pm 0.27$ | 0.5675             | $4.92^{+0.69}_{-0.71} \pm 2.08$ | 5.62                                                | 1.63                                                    |
| 0503590101 | 2007-08-13 | 337.896 | +9.209  | 15.7               | 343                    | 15.4               | 505                    | $7.09 \pm 1.34 \pm 2.45$         | 0.5625             | $7.95^{+0.85}_{-0.82} \pm 1.19$ | 0.56                                                | 2.68                                                    |
| 0406620401 | 2007-04-19 | 338.021 | -43.585 | 51.5               | 427                    | 52.0               | 591                    | $7.99^{+0.67}_{-0.64} \pm 0.74$  | 0.5675             | $2.44^{+0.39}_{-0.37} \pm 1.11$ | 2.71                                                | 1.83                                                    |
| 0109070401 | 2000-10-26 | 338.493 | -56.614 | 11.1               | 464                    | 11.5               | 466                    | $10.38^{+2.14}_{-1.35} \pm 0.24$ | 0.5675             | $2.74^{+0.41}_{-0.69} \pm 0.35$ | 1.10                                                | 2.15                                                    |
| 0510380101 | 2007-05-15 | 338.529 | -56.621 | 46.9               | 233                    | 48.6               | 397                    | $4.90^{+1.28}_{-0.83} \pm 2.98$  | 0.5625             | $1.73^{+0.65}_{-0.44} \pm 0.97$ | 2.31                                                | 2.47                                                    |
| 0205220101 | 2004-04-25 | 338.591 | -29.610 | 23.6               | 489                    | 24.1               | 564                    | $11.52^{+0.97}_{-0.75} \pm 1.78$ | 0.5725             | $4.25^{+0.55}_{-0.49} \pm 1.02$ | 1.08                                                | 2.10                                                    |
| 0305900301 | 2005-06-27 | 338.602 | +83.092 | 13.2               | 302                    | 13.1               | 398                    | $9.20^{+1.36}_{-1.28} \pm 0.31$  | 0.5675             | $1.92^{+0.76}_{-0.70} \pm 1.29$ | 0.87                                                | 1.61                                                    |
| 0402850401 | 2006-06-16 | 338.604 | +83.093 | 6.7                | 307                    | 6.4                | 399                    | $7.36^{+1.80}_{-1.93} \pm 0.30$  | 0.5725             | $0.02^{+1.02}_{-0.02} \pm 1.45$ | 0.87                                                | 1.39                                                    |
| 0303900301 | 2005-08-08 | 338.630 | +11.892 | 25.2               | 396                    | 25.5               | 553                    | $9.55^{+1.07}_{-0.67} \pm 1.96$  | 0.5625             | $8.64^{+0.61}_{-0.48} \pm 1.38$ | 0.78                                                | 2.14                                                    |
| 0303900401 | 2005-08-17 | 338.631 | +11.893 | 9.5                | 471                    | 9.8                | 480                    | $7.54^{+1.36}_{-0.72} \pm 0.43$  | 0.5575             | $6.55^{+0.82}_{-0.83} \pm 0.28$ | 2.15                                                | 2.14                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0157360101 | 2003-01-01 | 338.755 | +83.083 | 27.5               | 474                    | 27.1               | 472                    | $9.51^{+0.75}_{-0.76} \pm 0.80$  | 0.5675             | $1.51^{+0.40}_{-0.39} \pm 1.56$  | 2.27                                                | 1.43                                                    |
| 0402850701 | 2006-12-27 | 338.859 | +83.072 | 9.5                | 242                    | 9.7                | 473                    | $4.90^{+1.76}_{-1.43} \pm 0.43$  | 0.5725             | $0.92^{+0.86}_{-0.85} \pm 1.11$  | 1.08                                                | 1.25                                                    |
| 0305900601 | 2006-01-10 | 338.871 | +83.074 | 15.8               | 307                    | 15.6               | 398                    | $6.24^{+1.28}_{-1.09} \pm 0.45$  | 0.5725             | $0.90^{+0.71}_{-0.64} \pm 1.26$  | 3.07                                                | 1.49                                                    |
| 0163560101 | 2003-12-30 | 338.872 | +83.072 | 24.5               | 400                    | 24.5               | 398                    | $6.48^{+0.88}_{-0.82} \pm 0.44$  | 0.5725             | $1.26^{+0.53}_{-0.52} \pm 1.11$  | 1.12                                                | 1.94                                                    |
| 0550120301 | 2008-08-16 | 338.908 | +14.518 | 8.0                | 348                    | 8.3                | 510                    | $3.54^{+1.15}_{-1.13} \pm 0.49$  | 0.5775             | $2.90^{+0.83}_{-0.82} \pm 0.47$  | 2.66                                                | 1.64                                                    |
| 0146310201 | 2003-09-06 | 339.518 | +9.394  | 13.8               | 467                    | 13.7               | 469                    | $2.70^{+1.03}_{-1.04} \pm 0.23$  | 0.5675             | $2.46^{+0.63}_{-0.64} \pm 0.15$  | 1.23                                                | 1.94                                                    |
| 0405950501 | 2006-12-23 | 339.692 | +66.614 | 40.1               | 498                    | 40.4               | 514                    | $10.07 \pm 0.70 \pm 0.29$        | 0.5625             | $4.00^{+0.42}_{-0.41} \pm 1.22$  | 1.32                                                | 1.55                                                    |
| 0404240101 | 2007-01-16 | 340.563 | +63.459 | 12.4               | 495                    | 12.5               | 512                    | $7.17^{+1.30}_{-1.25} \pm 0.50$  | 0.5575             | $2.34^{+0.67}_{-0.63} \pm 0.21$  | 3.09                                                | 2.06                                                    |
| 0510990101 | 2008-03-22 | 340.828 | -2.498  | 31.8               | 414                    | 33.5               | 505                    | $1.53^{+0.78}_{-0.76} \pm 0.71$  | 0.5625             | $0.00^{+0.28}_{-0.00} \pm 0.00$  | 2.19                                                | 2.52                                                    |
| 0202890201 | 2003-12-28 | 341.008 | +66.478 | 15.8               | 540                    | 16.3               | 466                    | $10.11^{+1.10}_{-1.50} \pm 0.42$ | 0.5675             | $5.96^{+0.67}_{-0.85} \pm 2.08$  | 1.61                                                | 1.39                                                    |
| 0200230201 | 2004-05-13 | 341.307 | -45.402 | 8.5                | 544                    | 9.2                | 551                    | $9.19^{+1.37}_{-1.34} \pm 0.40$  | 0.5675             | $1.76^{+0.78}_{-0.75} \pm 1.28$  | 2.15                                                | 2.23                                                    |
| 0406610301 | 2006-06-01 | 341.992 | +88.984 | 10.2               | 415                    | 10.3               | 512                    | $5.07^{+1.50}_{-1.01} \pm 1.26$  | 0.5775             | $0.09^{+0.84}_{-0.09} \pm 0.82$  | 3.61                                                | 1.89                                                    |
| 0551150101 | 2009-04-14 | 342.164 | -32.242 | 74.8               | 394                    | 79.4               | 563                    | $7.20^{+0.59}_{-0.58} \pm 0.53$  | 0.5725             | $2.88^{+0.36}_{-0.37} \pm 0.50$  | 2.69                                                | 2.22                                                    |
| 0145480101 | 2003-02-08 | 342.412 | +55.943 | 10.8               | 433                    | 11.7               | 415                    | $9.14^{+1.55}_{-1.42} \pm 1.74$  | 0.5575             | $3.88^{+0.80}_{-0.77} \pm 0.95$  | 1.46                                                | 2.31                                                    |
| 0302020201 | 2005-10-12 | 343.317 | -13.805 | 66.4               | 396                    | 67.4               | 484                    | $22.85^{+0.91}_{-0.99} \pm 1.94$ | 0.5675             | $13.75^{+0.57}_{-0.58} \pm 2.16$ | 1.17                                                | 2.55                                                    |
| 0012850201 | 2002-06-06 | 343.811 | +88.446 | 22.6               | 454                    | 22.8               | 534                    | $13.15^{+0.93}_{-0.86} \pm 0.23$ | 0.5675             | $3.50^{+0.51}_{-0.48} \pm 1.63$  | 1.29                                                | 1.67                                                    |
| 0152630101 | 2003-08-13 | 344.982 | +12.007 | 8.1                | 588                    | 8.3                | 589                    | $11.69^{+1.51}_{-1.31} \pm 2.12$ | 0.5675             | $7.63^{+0.85}_{-0.86} \pm 1.08$  | 2.02                                                | 1.78                                                    |
| 0152630301 | 2003-08-11 | 344.982 | +24.008 | 6.4                | 520                    | 6.4                | 592                    | $7.95^{+1.54}_{-1.30} \pm 0.98$  | 0.5725             | $5.64^{+0.92}_{-0.83} \pm 0.75$  | 1.99                                                | 1.88                                                    |
| 0152630201 | 2003-08-10 | 344.983 | +18.008 | 5.9                | 589                    | 6.2                | 589                    | $26.20^{+2.11}_{-2.08} \pm 2.58$ | 0.5625             | $16.42 \pm 1.40 \pm 3.34$        | 1.65                                                | 1.75                                                    |
| 0555970301 | 2008-08-12 | 345.371 | +40.503 | 12.9               | 351                    | 12.6               | 587                    | $8.17^{+1.30}_{-1.17} \pm 0.55$  | 0.5675             | $4.00^{+0.79}_{-0.69} \pm 0.68$  | 1.27                                                | 1.65                                                    |
| 0555970401 | 2008-08-26 | 345.372 | +40.503 | 36.6               | 495                    | 39.0               | 512                    | $7.34^{+0.81}_{-0.39} \pm 0.56$  | 0.5675             | $4.80 \pm 0.46 \pm 0.23$         | 3.70                                                | 2.22                                                    |
| 0302540201 | 2005-05-02 | 345.386 | -51.102 | 11.7               | 375                    | 12.8               | 469                    | $8.74^{+1.45}_{-1.89} \pm 0.89$  | 0.5625             | $4.36^{+0.79}_{-0.87} \pm 0.21$  | 1.22                                                | 2.67                                                    |
| 0402250301 | 2006-12-21 | 345.816 | +83.123 | 15.2               | 410                    | 15.1               | 423                    | $8.18^{+1.26}_{-1.32} \pm 0.79$  | 0.5675             | $1.35^{+0.62}_{-0.55} \pm 0.92$  | 1.38                                                | 1.70                                                    |
| 0203060201 | 2004-04-07 | 346.152 | -20.754 | 39.5               | 463                    | 40.1               | 471                    | $21.43^{+1.10}_{-1.07} \pm 0.82$ | 0.5675             | $9.57 \pm 0.63 \pm 1.47$         | 1.72                                                | 2.11                                                    |
| 0164570401 | 2004-08-27 | 346.461 | +34.153 | 35.2               | 582                    | 34.2               | 509                    | $17.14^{+0.77}_{-0.78} \pm 0.34$ | 0.5675             | $7.42 \pm 0.47 \pm 2.25$         | 1.47                                                | 1.79                                                    |
| 0511581401 | 2008-01-23 | 346.899 | +40.675 | 11.5               | 381                    | 13.1               | 469                    | $7.72^{+1.64}_{-1.25} \pm 0.40$  | 0.5725             | $3.60^{+0.94}_{-0.85} \pm 1.41$  | 3.07                                                | 2.32                                                    |
| 0511581601 | 2008-01-26 | 346.899 | +40.675 | 26.1               | 379                    | 26.3               | 542                    | $7.78^{+0.84}_{-0.86} \pm 0.98$  | 0.5675             | $4.50^{+0.59}_{-0.51} \pm 0.52$  | 1.51                                                | 1.93                                                    |
| 0142630301 | 2003-09-05 | 347.106 | +21.521 | 15.2               | 505                    | 16.0               | 586                    | $15.70^{+1.40}_{-1.27} \pm 1.00$ | 0.5675             | $11.24 \pm 0.85 \pm 0.90$        | 1.27                                                | 2.04                                                    |
| 0502060301 | 2007-08-03 | 347.235 | +53.199 | 8.2                | 379                    | 8.6                | 474                    | $7.81^{+1.78}_{-1.94} \pm 0.46$  | 0.5675             | $0.99^{+1.01}_{-0.99} \pm 1.15$  | 1.05                                                | 2.22                                                    |
| 0501540201 | 2008-01-06 | 348.092 | +53.757 | 14.3               | 418                    | 14.6               | 582                    | $6.87^{+1.39}_{-0.94} \pm 1.36$  | 0.5675             | $2.33^{+0.68}_{-0.56} \pm 0.93$  | 1.32                                                | 1.94                                                    |
| 0112310201 | 2001-05-25 | 348.097 | -65.712 | 20.3               | 483                    | 21.0               | 470                    | $6.33^{+0.84}_{-0.97} \pm 0.50$  | 0.5575             | $2.35^{+0.56}_{-0.40} \pm 0.45$  | 0.64                                                | 2.60                                                    |
| 0204610101 | 2005-04-29 | 348.106 | -65.712 | 64.3               | 447                    | 65.4               | 471                    | $8.11^{+0.59}_{-0.57} \pm 1.86$  | 0.5675             | $1.19^{+0.33}_{-0.30} \pm 1.10$  | 6.64                                                | 2.14                                                    |
| 0501650201 | 2008-05-01 | 348.170 | -65.252 | 25.9               | 380                    | 27.9               | 484                    | $6.39^{+0.91}_{-0.85} \pm 1.32$  | 0.5675             | $0.94^{+0.44}_{-0.45} \pm 0.90$  | 2.33                                                | 2.01                                                    |
| 0405380701 | 2007-04-30 | 348.256 | -65.861 | 5.8                | 375                    | 6.0                | 540                    | $8.74^{+1.83}_{-1.91} \pm 3.68$  | 0.5575             | $4.76^{+1.31}_{-0.80} \pm 1.23$  | 1.63                                                | 2.60                                                    |
| 0112380101 | 2000-08-26 | 348.620 | +22.412 | 33.1               | 528                    | 32.8               | 523                    | $14.98^{+0.67}_{-0.88} \pm 2.04$ | 0.5675             | $10.75^{+0.55}_{-0.47} \pm 1.27$ | 1.39                                                | 2.22                                                    |
| 0504630101 | 2008-04-30 | 349.503 | -59.948 | 25.4               | 286                    | 26.5               | 374                    | $6.53^{+1.45}_{-0.70} \pm 1.57$  | 0.5675             | $1.30^{+0.68}_{-0.47} \pm 0.72$  | 3.85                                                | 2.44                                                    |
| 0111810101 | 2001-05-28 | 349.589 | -52.579 | 45.3               | 260                    | 46.1               | 221                    | $12.41^{+1.02}_{-1.01} \pm 0.37$ | 0.5675             | $5.30 \pm 0.60 \pm 1.21$         | 1.31                                                | 2.35                                                    |
| 0306080101 | 2005-11-05 | 350.213 | -61.785 | 39.1               | 398                    | 40.1               | 499                    | $6.16^{+0.64}_{-0.72} \pm 0.35$  | 0.5675             | $1.88^{+0.38}_{-0.41} \pm 0.24$  | 1.66                                                | 2.35                                                    |
| 0304080401 | 2005-09-28 | 350.355 | -32.590 | 21.9               | 242                    | 22.8               | 401                    | $13.34^{+1.99}_{-1.27} \pm 2.94$ | 0.5675             | $4.80^{+0.82}_{-0.74} \pm 1.61$  | 4.85                                                | 2.69                                                    |
| 0304080301 | 2005-09-26 | 350.355 | -32.590 | 15.7               | 309                    | 16.4               | 401                    | $13.69^{+1.43}_{-2.31} \pm 0.60$ | 0.5675             | $5.93^{+0.86}_{-1.14} \pm 0.99$  | 4.63                                                | 2.33                                                    |
| 0205920401 | 2004-10-04 | 350.356 | -32.589 | 10.6               | 477                    | 11.3               | 401                    | $13.83^{+2.07}_{-1.22} \pm 1.71$ | 0.5625             | $4.59^{+0.82}_{-0.88} \pm 1.02$  | 2.69                                                | 1.68                                                    |
| 0303561501 | 2006-01-08 | 350.742 | +65.040 | 6.4                | 495                    | 6.2                | 518                    | $13.40^{+1.62}_{-3.01} \pm 1.29$ | 0.5675             | $6.06^{+1.03}_{-1.23} \pm 1.16$  | 2.02                                                | 1.18                                                    |
| 0551200101 | 2008-07-22 | 351.377 | +52.666 | 20.1               | 311                    | 21.1               | 474                    | $8.62^{+0.94}_{-0.65} \pm 1.18$  | 0.5675             | $1.64^{+0.59}_{-0.71} \pm 0.47$  | 2.43                                                | 2.00                                                    |
| 0504480301 | 2008-02-08 | 351.416 | +51.410 | 23.3               | 475                    | 24.6               | 562                    | $8.26^{+1.70}_{-0.83} \pm 1.06$  | 0.5725             | $1.83^{+0.77}_{-0.48} \pm 0.82$  | 1.68                                                | 2.37                                                    |
| 0553790301 | 2008-07-20 | 351.859 | +54.922 | 18.1               | 500                    | 19.4               | 589                    | $7.35^{+1.00}_{-1.18} \pm 0.74$  | 0.5675             | $0.94^{+0.49}_{-0.50} \pm 0.86$  | 1.80                                                | 1.77                                                    |
| 0109060201 | 2000-08-24 | 352.134 | +19.971 | 45.9               | 371                    | 44.8               | 367                    | $20.52^{+0.85}_{-1.60} \pm 2.67$ | 0.5675             | $13.35^{+0.54}_{-0.68} \pm 0.88$ | 1.11                                                | 2.10                                                    |
| 0404710401 | 2006-09-30 | 352.437 | -27.054 | 19.9               | 309                    | 20.4               | 401                    | $13.70^{+1.17}_{-1.25} \pm 0.38$ | 0.5725             | $5.99 \pm 0.75 \pm 1.23$         | 3.54                                                | 1.76                                                    |
| 0303670101 | 2005-07-07 | 352.626 | +60.628 | 39.6               | 314                    | 41.3               | 336                    | $17.80 \pm 1.07 \pm 0.63$        | 0.5625             | $4.33 \pm 0.55 \pm 1.94$         | 3.36                                                | 2.37                                                    |
| 0555650301 | 2008-09-01 | 352.636 | +19.889 | 77.8               | 365                    | 83.5               | 443                    | $11.65^{+0.78}_{-0.57} \pm 1.89$ | 0.5675             | $9.96^{+0.44}_{-0.42} \pm 1.75$  | 2.21                                                | 2.66                                                    |
| 0555650201 | 2008-08-30 | 352.637 | +19.889 | 96.6               | 440                    | 97.2               | 442                    | $11.04^{+0.62}_{-0.54} \pm 2.57$ | 0.5675             | $9.45^{+0.42}_{-0.33} \pm 1.33$  | 2.19                                                | 2.26                                                    |
| 0109060101 | 2000-09-11 | 352.967 | +17.198 | 46.0               | 512                    | 45.5               | 524                    | $10.00 \pm 0.53 \pm 0.71$        | 0.5625             | $1.79 \pm 0.25 \pm 0.13$         | 3.35                                                | 1.88                                                    |
| 0304200901 | 2005-07-21 | 353.190 | +50.902 | 6.0                | 385                    | 5.9                | 477                    | $11.55^{+2.32}_{-2.16} \pm 0.57$ | 0.5625             | $2.29^{+1.07}_{-1.24} \pm 1.52$  | 2.60                                                | 1.92                                                    |
| 0305920401 | 2005-08-18 | 353.859 | +55.933 | 16.5               | 393                    | 17.0               | 488                    | $8.69 \pm 1.25 \pm 2.31$         | 0.5675             | $2.13^{+0.63}_{-0.64} \pm 2.16$  | 1.66                                                | 2.41                                                    |

Table 1—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F^{2-5}_{\text{total}}}{F^{2-5}_{\text{exgal}}}$ |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    |
| 0400570101 | 2006-08-07 | 354.513 | +54.392 | 15.4               | 492                    | 16.0               | 590                    | $8.85^{+1.20}_{-1.32} \pm 0.76$  | 0.5675             | $0.79^{+0.55}_{-0.59} \pm 0.81$  | 1.11                                                | 2.52                                                    |
| 0502780601 | 2007-08-06 | 355.016 | +48.582 | 10.3               | 351                    | 10.2               | 513                    | $24.36^{+1.67}_{-1.66} \pm 2.47$ | 0.5675             | $3.31^{+0.83}_{-0.84} \pm 3.13$  | 6.99                                                | 1.57                                                    |
| 0112480301 | 2002-02-24 | 355.049 | +14.220 | 12.8               | 576                    | 13.7               | 578                    | $12.07^{+1.03}_{-1.02} \pm 0.82$ | 0.5675             | $8.81^{+0.69}_{-0.70} \pm 0.48$  | 1.84                                                | 2.38                                                    |
| 0401040101 | 2007-01-22 | 355.078 | +46.199 | 36.7               | 230                    | 35.6               | 294                    | $9.16^{+1.06}_{-1.35} \pm 0.45$  | 0.5625             | $4.11^{+0.79}_{-0.52} \pm 0.37$  | 1.49                                                | 2.19                                                    |
| 0201951801 | 2004-08-08 | 355.218 | +35.800 | 6.3                | 402                    | 6.2                | 477                    | $12.05^{+2.67}_{-2.22} \pm 1.77$ | 0.5675             | $7.27^{+1.38}_{-1.23} \pm 1.27$  | 0.86                                                | 1.39                                                    |
| 0112480201 | 2001-09-09 | 355.254 | +14.429 | 16.3               | 501                    | 16.4               | 577                    | $6.10^{+0.71}_{-0.72} \pm 0.46$  | 0.5675             | $3.75 \pm 0.45 \pm 0.40$         | ...                                                 | 1.33                                                    |
| 0403040101 | 2006-12-29 | 355.273 | +83.945 | 52.5               | 419                    | 53.3               | 589                    | $6.87^{+0.56}_{-0.58} \pm 0.24$  | 0.5675             | $0.88 \pm 0.32 \pm 0.64$         | 3.28                                                | 1.67                                                    |
| 0112480101 | 2001-09-09 | 355.494 | +14.619 | 17.6               | 511                    | 17.8               | 587                    | $4.25^{+0.95}_{-0.64} \pm 0.25$  | 0.5625             | $1.83^{+0.40}_{-0.37} \pm 0.21$  | 1.40                                                | 1.59                                                    |
| 0100240701 | 2000-08-19 | 356.220 | +37.172 | 17.0               | 442                    | 17.0               | 513                    | $15.25^{+1.08}_{-1.07} \pm 0.40$ | 0.5725             | $7.10^{+0.69}_{-0.67} \pm 1.90$  | ...                                                 | 1.74                                                    |
| 0203050801 | 2005-01-12 | 356.703 | +53.236 | 6.6                | 570                    | 7.3                | 498                    | $8.31^{+1.41}_{-1.35} \pm 1.92$  | 0.5675             | $2.61^{+0.90}_{-0.74} \pm 0.74$  | 7.05                                                | 2.56                                                    |
| 0206610101 | 2004-08-29 | 357.105 | +7.009  | 45.4               | 510                    | 45.6               | 505                    | $1.66^{+0.60}_{-0.53} \pm 0.44$  | 0.5625             | $0.70^{+0.32}_{-0.29} \pm 0.15$  | 3.07                                                | 2.33                                                    |
| 0556212301 | 2008-07-21 | 357.525 | +50.983 | 9.7                | 420                    | 9.7                | 588                    | $9.72^{+1.02}_{-1.87} \pm 1.27$  | 0.5725             | $1.32^{+0.83}_{-0.63} \pm 1.87$  | 2.06                                                | 1.57                                                    |
| 0404520101 | 2006-11-28 | 357.613 | -87.492 | 21.7               | 194                    | 22.1               | 245                    | $3.02^{+1.96}_{-1.33} \pm 1.63$  | 0.5725             | $1.10^{+0.92}_{-0.80} \pm 0.93$  | 2.02                                                | 2.22                                                    |
| 0550451301 | 2009-03-15 | 357.745 | +17.010 | 10.8               | 366                    | 11.0               | 378                    | $3.76^{+1.43}_{-1.42} \pm 0.89$  | 0.5775             | $4.13^{+0.96}_{-1.07} \pm 0.89$  | 0.86                                                | 1.62                                                    |
| 0201860101 | 2004-08-05 | 357.926 | +64.122 | 19.6               | 543                    | 20.6               | 543                    | $16.08^{+0.97}_{-1.19} \pm 0.60$ | 0.5675             | $8.15^{+0.70}_{-0.63} \pm 1.11$  | 4.82                                                | 2.23                                                    |
| 0402460201 | 2006-11-13 | 357.988 | -47.159 | 28.4               | 415                    | 28.9               | 502                    | $6.42^{+0.80}_{-0.91} \pm 0.35$  | 0.5675             | $2.41^{+0.42}_{-0.49} \pm 0.80$  | 0.71                                                | 1.80                                                    |
| 0200780301 | 2004-10-28 | 358.108 | -46.896 | 29.7               | 572                    | 30.2               | 499                    | $8.99^{+0.41}_{-1.17} \pm 0.76$  | 0.5675             | $2.01^{+0.52}_{-0.29} \pm 0.97$  | 2.81                                                | 2.15                                                    |
| 0553561101 | 2008-11-02 | 358.305 | -48.311 | 7.4                | 488                    | 7.2                | 505                    | $3.87^{+1.72}_{-1.58} \pm 1.14$  | 0.5475             | $2.49^{+0.87}_{-0.82} \pm 0.40$  | 1.18                                                | 2.50                                                    |
| 0415180101 | 2007-03-25 | 358.590 | -17.237 | 19.4               | 382                    | 20.1               | 462                    | $18.30 \pm 1.23 \pm 1.80$        | 0.5725             | $8.21 \pm 0.79 \pm 2.30$         | 2.92                                                | 2.20                                                    |
| 0201590101 | 2004-04-17 | 358.614 | -17.226 | 29.9               | 401                    | 29.8               | 472                    | $21.14^{+1.32}_{-1.05} \pm 1.51$ | 0.5675             | $8.32 \pm 0.64 \pm 3.22$         | 3.14                                                | 2.24                                                    |
| 0112251301 | 2002-08-02 | 358.694 | +64.785 | 27.9               | 581                    | 28.3               | 508                    | $17.61^{+0.48}_{-1.47} \pm 1.56$ | 0.5675             | $10.12^{+0.74}_{-0.41} \pm 1.25$ | 2.76                                                | 1.73                                                    |
| 0112250301 | 2001-07-29 | 358.696 | +64.786 | 24.0               | 582                    | 24.4               | 508                    | $13.04^{+0.56}_{-1.21} \pm 0.68$ | 0.5675             | $7.04^{+0.36}_{-0.76} \pm 1.02$  | 4.52                                                | 1.71                                                    |
| 0150350101 | 2003-07-28 | 359.410 | +52.435 | 20.3               | 476                    | 21.0               | 483                    | $11.09^{+0.99}_{-1.02} \pm 0.35$ | 0.5675             | $3.54^{+0.59}_{-0.58} \pm 1.39$  | 3.07                                                | 2.35                                                    |
| 0403460201 | 2007-03-21 | 359.890 | -17.723 | 15.1               | 401                    | 15.7               | 471                    | $1.32^{+1.10}_{-0.90} \pm 0.20$  | 0.5775             | $1.50^{+0.61}_{-0.62} \pm 0.14$  | 2.96                                                | 2.14                                                    |
| 0203040401 | 2004-10-04 | 359.985 | -11.990 | 10.4               | 590                    | 12.3               | 516                    | $33.54 \pm 1.79 \pm 0.53$        | 0.5675             | $13.35 \pm 1.08 \pm 5.71$        | 2.65                                                | 2.18                                                    |

Table 2. O VII and O VIII Line Intensities (With Proton Flux Filtering)

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| (1)        | (2)        | (3)    | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                             | (12)                                                | (13)                                                    | (14)        |
| 0146390201 | 2003-03-29 | 0.005  | -17.799 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0050940401 | 2002-03-14 | 0.015  | -12.011 | 8.4                | 583                    | 9.2                | 589                    | $35.17^{+1.55}_{-2.29} \pm 2.52$ | 0.5725             | $15.68^{+1.16}_{-1.35} \pm 6.78$ | 1.14                                                | 2.64                                                    | N           |
| 0402781001 | 2007-01-20 | 0.271  | +48.208 | 16.1               | 421                    | 16.0               | 583                    | $9.34^{+1.03}_{-1.10} \pm 1.72$  | 0.5725             | $3.61^{+0.65}_{-0.67} \pm 1.39$  | 1.27                                                | 2.41                                                    | N           |
| 0021540501 | 2001-08-26 | 0.426  | +48.796 | 11.0               | 294                    | 11.1               | 354                    | $17.58^{+2.02}_{-2.09} \pm 0.92$ | 0.5675             | $6.19^{+1.18}_{-1.21} \pm 1.10$  | 1.63                                                | 2.69                                                    | ...         |
| 0413780101 | 2007-02-24 | 0.604  | +11.378 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0202190301 | 2004-05-20 | 0.939  | -79.578 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0413780201 | 2007-03-03 | 0.960  | +10.788 | 15.0               | 500                    | 14.8               | 590                    | $4.65^{+1.08}_{-1.02} \pm 0.99$  | 0.5775             | $4.44^{+0.75}_{-0.74} \pm 1.33$  | 1.61                                                | 1.64                                                    | Y           |
| 0413780301 | 2007-03-07 | 1.168  | +10.439 | 16.2               | 430                    | 16.6               | 592                    | $5.98^{+1.26}_{-1.53} \pm 0.42$  | 0.5725             | $4.78^{+0.77}_{-0.86} \pm 0.84$  | 0.86                                                | 2.53                                                    | N           |
| 0152750101 | 2002-09-27 | 1.540  | +7.099  | 12.6               | 580                    | 12.7               | 589                    | $6.11^{+1.14}_{-1.17} \pm 2.80$  | 0.5625             | $5.43^{+0.63}_{-0.64} \pm 1.62$  | 1.82                                                | 2.49                                                    | Y           |
| 0556210501 | 2008-07-19 | 1.649  | +46.606 | 10.8               | 488                    | 10.9               | 578                    | $12.01^{+1.67}_{-1.22} \pm 0.94$ | 0.5675             | $3.95^{+0.72}_{-0.71} \pm 1.26$  | 1.65                                                | 1.88                                                    | N           |
| 0201903001 | 2004-10-24 | 2.718  | -56.160 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0205390101 | 2005-05-01 | 3.588  | -64.104 | 27.6               | 311                    | 27.6               | 396                    | $7.40^{+0.90}_{-0.96} \pm 0.49$  | 0.5675             | $1.14^{+0.57}_{-0.51} \pm 0.72$  | 1.17                                                | 2.18                                                    | N           |
| 0404910801 | 2006-05-02 | 3.966  | -59.441 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0018741701 | 2001-05-03 | 3.967  | -59.448 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0135980201 | 2002-04-30 | 4.693  | -64.122 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0148520101 | 2003-07-22 | 5.456  | +56.770 | 21.6               | 582                    | 21.3               | 588                    | $12.42^{+0.78}_{-0.82} \pm 1.51$ | 0.5675             | $4.47^{+0.47}_{-0.55} \pm 2.52$  | 1.18                                                | 1.74                                                    | N           |
| 0057560301 | 2001-08-09 | 5.457  | +56.766 | 27.1               | 587                    | 26.7               | 514                    | $13.69^{+0.72}_{-0.98} \pm 0.28$ | 0.5725             | $5.07 \pm 0.46 \pm 2.36$         | 1.61                                                | 1.67                                                    | Y           |
| 0302580501 | 2005-06-13 | 5.676  | -77.683 | 20.0               | 394                    | 20.7               | 481                    | $9.70^{+1.13}_{-0.98} \pm 0.43$  | 0.5625             | $1.60^{+0.55}_{-0.50} \pm 1.05$  | 1.43                                                | 2.51                                                    | Y           |
| 0094401201 | 2001-12-22 | 5.853  | +72.730 | 18.3               | 421                    | 18.4               | 568                    | $16.72^{+1.12}_{-1.05} \pm 1.65$ | 0.5625             | $7.09^{+0.68}_{-0.65} \pm 3.19$  | 1.87                                                | 1.67                                                    | Y           |
| 0400460401 | 2006-10-14 | 6.229  | -38.240 | 16.5               | 314                    | 16.0               | 399                    | $6.29^{+1.48}_{-1.53} \pm 0.50$  | 0.5625             | $1.70^{+0.74}_{-0.73} \pm 0.38$  | 1.71                                                | 2.63                                                    | N           |
| 0400460301 | 2006-10-13 | 6.230  | -38.240 | 11.7               | 314                    | 11.8               | 399                    | $7.39^{+1.39}_{-1.36} \pm 0.82$  | 0.5725             | $2.14^{+0.83}_{-0.82} \pm 0.66$  | 1.81                                                | 1.58                                                    | Y           |
| 0112231001 | 2000-09-08 | 6.464  | +30.298 | 15.1               | 589                    | 14.8               | 588                    | $7.81^{+1.11}_{-0.94} \pm 1.32$  | 0.5625             | $4.85^{+0.47}_{-0.57} \pm 0.56$  | 0.89                                                | 2.15                                                    | Y           |
| 0550460801 | 2008-11-16 | 6.479  | -55.914 | 24.9               | 414                    | 25.4               | 502                    | $5.63^{+0.92}_{-1.23} \pm 1.36$  | 0.5625             | $1.43^{+0.50}_{-0.52} \pm 0.74$  | 1.39                                                | 1.95                                                    | N           |
| 0112230901 | 2000-08-31 | 6.537  | +30.716 | 6.0                | 587                    | 6.4                | 516                    | $8.19^{+1.74}_{-1.43} \pm 0.67$  | 0.5625             | $4.92 \pm 0.81 \pm 0.17$         | 1.78                                                | 2.45                                                    | Y           |
| 0085582001 | 2002-09-24 | 6.588  | +7.785  | 7.2                | 328                    | 7.0                | 475                    | $3.84^{+1.64}_{-1.28} \pm 1.78$  | 0.5925             | $6.01^{+1.28}_{-1.18} \pm 1.17$  | 0.40                                                | 2.50                                                    | N           |
| 0085581401 | 2001-09-05 | 6.588  | +7.786  | 7.2                | 471                    | 7.3                | 401                    | $5.15^{+0.82}_{-1.55} \pm 0.99$  | 0.5675             | $3.97^{+0.99}_{-0.95} \pm 0.97$  | 0.67                                                | 2.23                                                    | N           |
| 0401660101 | 2007-03-24 | 6.604  | +7.775  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0112230801 | 2000-08-30 | 7.024  | +30.655 | 6.3                | 479                    | 6.2                | 405                    | $9.78^{+0.90}_{-1.91} \pm 1.60$  | 0.5625             | $3.66 \pm 0.84 \pm 0.26$         | 1.87                                                | 2.27                                                    | Y           |
| 0404520201 | 2006-10-14 | 8.253  | -35.208 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0306700201 | 2006-04-01 | 8.631  | -4.930  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0111300101 | 2001-10-17 | 8.779  | -23.257 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0042340101 | 2001-05-30 | 9.056  | -81.261 | 13.9               | 336                    | 14.1               | 339                    | $5.63^{+1.33}_{-1.82} \pm 1.52$  | 0.5675             | $1.27^{+0.81}_{-0.67} \pm 1.30$  | 0.39                                                | 2.00                                                    | N           |
| 0501580101 | 2007-09-12 | 10.391 | +11.164 | 34.1               | 312                    | 34.0               | 395                    | $5.03^{+0.69}_{-1.06} \pm 0.98$  | 0.5675             | $4.33^{+0.49}_{-0.60} \pm 0.68$  | 1.74                                                | 1.97                                                    | Y           |
| 0501580201 | 2007-09-14 | 10.391 | +11.163 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0041160101 | 2001-02-26 | 10.406 | +11.152 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0112910201 | 2001-01-13 | 11.225 | +54.617 | 7.6                | 469                    | 8.4                | 472                    | $20.53^{+1.95}_{-1.97} \pm 2.84$ | 0.5675             | $9.87^{+1.16}_{-1.23} \pm 0.91$  | 1.71                                                | 2.58                                                    | N           |
| 0201130301 | 2004-10-30 | 11.489 | -46.911 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0504370701 | 2007-06-02 | 12.842 | -78.035 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0304080501 | 2005-06-13 | 12.896 | -78.051 | 16.9               | 380                    | 17.0               | 400                    | $8.78^{+1.23}_{-1.37} \pm 0.56$  | 0.5625             | $2.26^{+0.63}_{-0.68} \pm 0.57$  | 1.13                                                | 2.02                                                    | N           |
| 0404720201 | 2006-10-11 | 13.686 | -4.424  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0303230501 | 2006-04-04 | 13.946 | +9.404  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0204690101 | 2004-09-30 | 14.108 | -11.866 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0304720101 | 2006-03-28 | 14.140 | -11.887 | 14.4               | 312                    | 14.1               | 468                    | $17.42^{+2.03}_{-1.61} \pm 1.90$ | 0.5675             | $9.32^{+1.00}_{-0.99} \pm 1.54$  | 1.78                                                | 2.10                                                    | N           |
| 0147920601 | 2002-11-18 | 15.128 | -53.066 | 9.5                | 497                    | 9.6                | 430                    | $9.67^{+2.21}_{-1.53} \pm 1.44$  | 0.5675             | $5.22^{+1.26}_{-0.91} \pm 0.46$  | 1.78                                                | 2.28                                                    | Y           |
| 0414580101 | 2007-04-24 | 15.157 | -53.076 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0201902601 | 2004-11-29 | 16.581 | -50.201 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0100240201 | 2001-01-21 | 17.035 | +80.677 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0500910601 | 2007-12-27 | 18.069 | +67.696 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0500910901 | 2007-12-29 | 18.070 | +67.695 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0500911001 | 2007-12-31 | 18.071 | +67.695 | 8.6                | 480                    | 8.6                | 573                    | $11.81^{+1.79}_{-1.96} \pm 0.90$ | 0.5675             | $4.19^{+0.96}_{-0.87} \pm 2.42$  | 1.89                                                | 1.42                                                    | Y           |
| 0085280501 | 2001-09-18 | 18.396 | +16.048 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0085280201 | 2002-02-24 | 18.426 | +16.024 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0085281001 | 2002-02-20 | 18.426 | +16.025 | 11.4               | 584                    | 11.4               | 516                    | $6.79^{+1.35}_{-1.51} \pm 1.01$  | 0.5575             | $3.57^{+0.72}_{-0.70} \pm 1.14$  | 1.75                                                | 2.49                                                    | Y           |

Table 2—Continued

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{OVII}}$                | $E_{\text{OVII}}$ | $I_{\text{OVIII}}$               | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{H I}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|-------------------|----------------------------------|-----------------------------------------------------|-------------------------------------------------|-------------|
|            | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)             | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                            | filtering?  |
| (1)        | (2)        | (3)    | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)              | (11)                             | (12)                                                | (13)                                            | (14)        |
| 0067340501 | 2001-02-28 | 20.015 | +29.987 | 10.8               | 591                    | 11.1               | 517                    | $33.36^{+2.28}_{-1.34} \pm 1.80$ | 0.5675            | $16.45^{+1.14}_{-1.06} \pm 6.15$ | 1.78                                                | 1.84                                            | Y           |
| 0067340601 | 2001-03-04 | 20.020 | +39.988 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0402080301 | 2006-07-16 | 20.559 | +79.334 | 25.4               | 303                    | 26.3               | 400                    | $8.29^{+1.26}_{-0.85} \pm 0.51$  | 0.5675            | $0.45^{+0.68}_{-0.45} \pm 1.32$  | 1.83                                                | 1.42                                            | Y           |
| 0402080201 | 2006-07-15 | 20.563 | +79.334 | 27.9               | 304                    | 28.6               | 399                    | $7.87^{+0.97}_{-1.41} \pm 0.25$  | 0.5625            | $0.98^{+0.59}_{-0.46} \pm 1.11$  | 1.46                                                | 1.86                                            | N           |
| 0096010101 | 2000-06-20 | 20.591 | +79.318 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0402080801 | 2006-12-19 | 20.625 | +79.299 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0101640101 | 2000-09-22 | 20.712 | +27.303 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0147420401 | 2003-08-13 | 20.728 | +27.290 | 5.2                | 436                    | 5.6                | 513                    | $28.52^{+2.54}_{-3.66} \pm 1.82$ | 0.5675            | $12.86^{+1.34}_{-2.59} \pm 6.14$ | 1.96                                                | 2.23                                            | Y           |
| 0302380401 | 2005-10-31 | 22.355 | -56.585 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0401730301 | 2006-09-16 | 23.032 | +28.958 | 14.1               | 260                    | 13.8               | 402                    | $25.76^{+2.05}_{-1.99} \pm 2.51$ | 0.5725            | $13.94^{+1.41}_{-1.38} \pm 6.61$ | 1.75                                                | 1.55                                            | Y           |
| 0404800101 | 2006-09-10 | 23.793 | +41.323 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0067340401 | 2001-02-28 | 25.015 | +19.988 | 13.1               | 536                    | 13.4               | 463                    | $29.79^{+1.63}_{-1.74} \pm 3.61$ | 0.5625            | $17.55^{+1.12}_{-1.10} \pm 4.49$ | 1.84                                                | 2.04                                            | N           |
| 0406620201 | 2007-04-27 | 25.153 | -9.587  | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0111970101 | 2001-11-28 | 25.863 | -62.987 | 12.1               | 483                    | 12.2               | 473                    | $5.91^{+0.99}_{-1.11} \pm 0.35$  | 0.5725            | $1.97^{+0.64}_{-0.59} \pm 1.41$  | 1.30                                                | 1.69                                            | N           |
| 0311190101 | 2006-05-03 | 27.261 | -59.645 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0553510801 | 2008-10-15 | 27.290 | -2.767  | 24.5               | 316                    | 24.0               | 484                    | $9.02^{+1.01}_{-1.10} \pm 2.05$  | 0.5575            | $7.28^{+0.58}_{-0.69} \pm 0.70$  | 1.48                                                | 2.29                                            | N           |
| 0112490301 | 2003-09-19 | 27.489 | +2.906  | 16.9               | 591                    | 18.9               | 592                    | $2.07^{+0.61}_{-0.71} \pm 0.66$  | 0.5625            | $0.00^{+0.11}_{-0.00} \pm 0.00$  | 1.47                                                | 2.69                                            | N           |
| 0049340201 | 2001-11-13 | 28.407 | -56.141 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0206490301 | 2005-05-11 | 28.874 | -57.937 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0044741401 | 2003-09-13 | 29.891 | +11.366 | 8.9                | 539                    | 8.9                | 541                    | $22.52^{+2.74}_{-1.99} \pm 2.49$ | 0.5675            | $9.06^{+1.56}_{-1.20} \pm 4.20$  | 1.05                                                | 2.52                                            | N           |
| 0204670101 | 2004-01-03 | 30.239 | -81.438 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0108670201 | 2002-08-03 | 30.376 | +61.114 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0044350501 | 2002-10-21 | 31.334 | -21.949 | 8.7                | 554                    | 9.6                | 487                    | $13.33^{+1.46}_{-1.39} \pm 1.06$ | 0.5675            | $6.00^{+0.86}_{-0.85} \pm 1.66$  | 0.78                                                | 2.06                                            | N           |
| 0083210101 | 2001-05-02 | 31.546 | -34.224 | 5.9                | 577                    | 6.2                | 503                    | $21.50^{+1.86}_{-1.79} \pm 0.93$ | 0.5675            | $6.23^{+1.02}_{-1.01} \pm 2.95$  | 1.70                                                | 1.83                                            | Y           |
| 0109464901 | 2003-01-21 | 31.724 | +47.692 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0400200101 | 2006-12-21 | 32.954 | +73.438 | 21.9               | 379                    | 21.7               | 398                    | $4.80^{+1.15}_{-0.81} \pm 0.38$  | 0.5725            | $0.60^{+0.54}_{-0.48} \pm 0.80$  | 1.39                                                | 1.31                                            | N           |
| 0109081001 | 2002-01-27 | 32.983 | +73.440 | 11.7               | 468                    | 11.6               | 471                    | $11.27^{+0.65}_{-1.88} \pm 2.15$ | 0.5675            | $2.13^{+0.77}_{-0.45} \pm 1.10$  | 1.28                                                | 1.48                                            | N           |
| 0017740601 | 2003-10-11 | 32.984 | +2.009  | 21.4               | 592                    | 21.3               | 592                    | $2.46^{+0.75}_{-0.67} \pm 0.28$  | 0.5625            | $0.17^{+0.35}_{-0.17} \pm 0.10$  | 0.47                                                | 2.67                                            | N           |
| 0403570201 | 2006-09-30 | 33.994 | +20.278 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0403570101 | 2006-09-28 | 33.994 | +20.279 | 38.5               | 461                    | 38.4               | 484                    | $22.26^{+0.88}_{-0.89} \pm 1.44$ | 0.5725            | $10.62 \pm 0.58 \pm 4.54$        | 1.19                                                | 2.15                                            | N           |
| 0103860201 | 2001-05-25 | 34.631 | -59.154 | 7.3                | 471                    | 7.4                | 401                    | $8.08^{+1.35}_{-1.62} \pm 0.33$  | 0.5675            | $0.92^{+0.78}_{-0.83} \pm 1.09$  | 0.69                                                | 1.94                                            | N           |
| 0092850501 | 2001-12-22 | 34.673 | +72.588 | 36.0               | 403                    | 35.9               | 479                    | $10.56^{+0.98}_{-0.48} \pm 0.74$ | 0.5675            | $1.16^{+0.41}_{-0.30} \pm 1.00$  | 1.74                                                | 2.02                                            | N           |
| 0136040101 | 2002-02-18 | 34.963 | +49.142 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0205190201 | 2004-01-25 | 35.157 | +77.040 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0203450201 | 2005-05-06 | 35.596 | -50.561 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0112440301 | 2002-10-15 | 35.701 | -4.135  | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0112440401 | 2002-10-17 | 35.702 | -4.135  | 11.1               | 558                    | 11.3               | 495                    | $12.48^{+1.23}_{-1.07} \pm 0.38$ | 0.5675            | $5.46^{+0.71}_{-0.70} \pm 0.49$  | 1.52                                                | 2.27                                            | N           |
| 0556180201 | 2008-05-03 | 35.705 | -54.773 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0502510501 | 2007-10-11 | 35.989 | -20.787 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0103060301 | 2002-06-25 | 36.001 | -79.217 | 25.2               | 569                    | 25.7               | 503                    | $5.46^{+0.90}_{-0.44} \pm 0.29$  | 0.5675            | $1.52^{+0.43}_{-0.33} \pm 0.71$  | 1.78                                                | 1.92                                            | Y           |
| 0201730201 | 2004-10-12 | 36.077 | +8.299  | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0201730101 | 2004-10-10 | 36.078 | +8.299  | 9.4                | 592                    | 9.5                | 518                    | $14.65^{+1.31}_{-1.34} \pm 0.57$ | 0.5625            | $5.24^{+0.79}_{-0.77} \pm 2.70$  | 1.75                                                | 1.45                                            | Y           |
| 0201730301 | 2004-10-14 | 36.078 | +8.299  | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0125911001 | 2002-11-26 | 36.174 | -57.142 | 8.9                | 504                    | 8.8                | 580                    | $7.88^{+1.23}_{-1.01} \pm 0.48$  | 0.5675            | $1.34^{+0.65}_{-0.58} \pm 1.06$  | 1.79                                                | 1.94                                            | Y           |
| 0101640801 | 2002-08-11 | 36.616 | +53.048 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0205510201 | 2005-01-14 | 36.633 | +53.011 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0038540301 | 2001-04-30 | 36.768 | -35.097 | 14.2               | 561                    | 14.1               | 562                    | $16.86^{+1.17}_{-1.16} \pm 0.32$ | 0.5675            | $7.37 \pm 0.70 \pm 2.03$         | 0.40                                                | 2.50                                            | N           |
| 0111290601 | 2002-07-28 | 36.853 | +68.592 | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |
| 0150480401 | 2003-02-04 | 37.075 | +70.866 | 16.9               | 391                    | 17.7               | 487                    | $9.50^{+1.20}_{-0.96} \pm 0.78$  | 0.5675            | $1.97^{+0.65}_{-0.51} \pm 0.90$  | 1.61                                                | 1.76                                            | N           |
| 0554934101 | 2008-12-01 | 37.380 | -57.671 | 15.9               | 306                    | 16.9               | 543                    | $3.71^{+0.97}_{-1.07} \pm 0.69$  | 0.5725            | $1.14^{+0.60}_{-0.61} \pm 0.21$  | 1.28                                                | 2.56                                            | N           |
| 0143650101 | 2003-08-03 | 37.703 | +53.915 | 5.2                | 530                    | 5.2                | 538                    | $15.25^{+2.40}_{-1.91} \pm 1.40$ | 0.5675            | $3.00^{+0.99}_{-1.01} \pm 2.80$  | 1.26                                                | 1.49                                            | N           |
| 0151450101 | 2003-05-15 | 37.821 | -59.073 | 34.4               | 476                    | 34.6               | 475                    | $6.43^{+1.34}_{-0.74} \pm 0.84$  | 0.5675            | $2.29^{+0.60}_{-0.42} \pm 0.53$  | 1.73                                                | 2.35                                            | N           |
| 0305590401 | 2005-05-05 | 38.192 | -7.688  | ...                | ...                    | ...                | ...                    | ...                              | ...               | ...                              | ...                                                 | ...                                             | ...         |

[illegible]

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{2-5 keV}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|-----------------------------------------------|-------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                          | filtering?  |
| 0305590301 | 2005-09-28 | 52.320 | +5.799  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0554501101 | 2008-07-22 | 52.468 | +78.648 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0157360401 | 2003-01-17 | 52.877 | +47.990 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0073140501 | 2002-01-19 | 52.877 | +47.990 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0157360601 | 2003-02-26 | 52.877 | +47.991 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0073140201 | 2002-01-15 | 52.878 | +47.989 | 22.8               | 425                    | 22.3               | 435                    | $12.89^{+0.93}_{-0.85} \pm 0.18$ | 0.5675             | $1.65^{+0.47}_{-0.43} \pm 1.52$ | 1.87                                                | 2.18                                          | Y           |
| 0073140301 | 2002-01-09 | 52.878 | +47.989 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0503670201 | 2007-05-09 | 53.002 | +3.045  | 8.5                | 355                    | 9.5                | 516                    | $1.20^{+1.35}_{-1.20} \pm 0.62$  | 0.5475             | $0.00^{+0.16}_{-0.00} \pm 0.00$ | 1.28                                                | 2.66                                          | N           |
| 0304801201 | 2005-10-29 | 53.355 | -35.773 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0112960601 | 2002-10-25 | 53.638 | -13.628 | 7.7                | 583                    | 7.4                | 515                    | $11.21^{+1.59}_{-1.26} \pm 1.46$ | 0.5725             | $2.32^{+0.97}_{-0.73} \pm 1.65$ | 1.71                                                | 2.04                                          | N           |
| 0112960301 | 2002-10-19 | 53.638 | -13.627 | 11.9               | 582                    | 12.1               | 517                    | $9.90^{+1.03}_{-1.10} \pm 1.26$  | 0.5675             | $3.18 \pm 0.61 \pm 0.80$        | 1.43                                                | 2.12                                          | N           |
| 0112960501 | 2002-10-23 | 53.638 | -13.627 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0202360101 | 2005-05-17 | 53.785 | -63.355 | 68.8               | 468                    | 69.1               | 559                    | $5.77^{+0.85}_{-0.47} \pm 0.42$  | 0.5675             | $2.56^{+0.37}_{-0.27} \pm 0.59$ | 0.56                                                | 2.20                                          | N           |
| 0600690101 | 2009-05-22 | 54.291 | -14.453 | 53.2               | 400                    | 54.2               | 577                    | $7.90^{+0.69}_{-0.75} \pm 1.06$  | 0.5675             | $3.87^{+0.41}_{-0.43} \pm 0.43$ | 1.25                                                | 2.59                                          | Y           |
| 0556210301 | 2008-09-17 | 54.428 | +42.051 | 10.3               | 479                    | 11.3               | 499                    | $3.49^{+1.36}_{-1.25} \pm 0.69$  | 0.5625             | $0.80^{+0.64}_{-0.68} \pm 0.24$ | 0.43                                                | 2.22                                          | N           |
| 0601930501 | 2009-06-05 | 55.323 | -35.819 | 65.7               | 308                    | 70.3               | 392                    | $5.41^{+0.70}_{-0.57} \pm 1.13$  | 0.5675             | $0.99^{+0.38}_{-0.34} \pm 0.52$ | 1.79                                                | 1.88                                          | Y           |
| 0505880101 | 2007-08-09 | 55.564 | +42.457 | 13.5               | 355                    | 14.6               | 510                    | $4.13^{+1.50}_{-1.06} \pm 0.51$  | 0.5625             | $0.78^{+0.70}_{-0.54} \pm 0.69$ | 1.44                                                | 1.53                                          | N           |
| 0300880301 | 2005-09-24 | 56.083 | +2.107  | 11.2               | 415                    | 11.1               | 509                    | $2.20^{+1.09}_{-0.80} \pm 0.23$  | 0.5725             | $0.21^{+0.54}_{-0.21} \pm 0.09$ | 1.45                                                | 2.21                                          | Y           |
| 0401270101 | 2007-04-24 | 56.146 | -26.492 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0505011201 | 2007-08-19 | 56.663 | +43.826 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0505010501 | 2007-08-17 | 56.664 | +43.826 | 10.7               | 404                    | 12.3               | 565                    | $5.11^{+1.41}_{-1.24} \pm 0.43$  | 0.5675             | $0.52^{+0.34}_{-0.52} \pm 0.15$ | 1.90                                                | 2.04                                          | N           |
| 0503490201 | 2007-12-06 | 56.910 | -55.091 | 65.5               | 280                    | 65.6               | 365                    | $5.03^{+0.71}_{-0.60} \pm 0.20$  | 0.5675             | $1.94^{+0.37}_{-0.34} \pm 0.44$ | 1.89                                                | 1.82                                          | Y           |
| 0500500901 | 2007-11-05 | 57.019 | -28.010 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                           | ...         |
| 0300310201 | 2005-11-20 | 57.019 | -28.013 | 60.6               | 416                    | 61.7               | 504                    | $8.63^{+0.44}_{-1.00} \pm 0.69$  | 0.5625             | $1.75^{+0.28}_{-0.37} \pm 0.61$ | 1.62                                                | 1.70                                          | Y           |
| 0500500701 | 2007-05-19 | 57.060 | -28.017 | 49.7               | 417                    | 68.6               | 511                    | $5.36^{+0.75}_{-0.69} \pm 0.41$  | 0.5625             |                                 |                                                     |                                               |             |

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{2-5 keV}}^{2-5 \text{ keV}}}{F_{\text{2-5 keV}}^{\text{exgal}}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------|-------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                                             | filtering?  |
| 0093550401 | 2000-12-23 | 62.180 | -68.394 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0204340101 | 2004-08-20 | 62.321 | +41.191 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0504100401 | 2007-12-16 | 62.380 | +65.692 | 7.9                | 416                    | 8.1                | 503                    | $7.24^{+1.47}_{-1.72} \pm 0.25$  | 0.5675             | $0.62^{+0.81}_{-0.62} \pm 0.86$ | 1.44                                                | 1.82                                                                             | N           |
| 0502041201 | 2007-11-08 | 62.633 | -33.137 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502041001 | 2007-11-03 | 62.633 | -33.135 | 8.2                | 314                    | 8.3                | 465                    | $8.19^{+1.75}_{-1.74} \pm 0.30$  | 0.5725             | $2.14^{+0.54}_{-1.40} \pm 1.10$ | 1.42                                                | 1.27                                                                             | N           |
| 0502041101 | 2007-11-07 | 62.633 | -33.136 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502041401 | 2007-12-10 | 62.633 | -33.140 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0201150101 | 2004-05-31 | 62.675 | -33.133 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502040901 | 2007-06-12 | 62.677 | -33.137 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502041801 | 2008-05-19 | 62.677 | -33.140 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502040701 | 2007-05-17 | 62.677 | -33.140 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0143650801 | 2003-01-25 | 62.994 | +74.970 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0094310201 | 2002-12-15 | 63.028 | -44.013 | 61.2               | 589                    | 61.3               | 590                    | $10.53^{+0.47}_{-0.41} \pm 0.34$ | 0.5675             | $2.32^{+0.26}_{-0.23} \pm 1.40$ | 1.59                                                | 1.49                                                                             | N           |
| 0094310101 | 2002-11-18 | 63.029 | -44.012 | 16.3               | 579                    | 16.3               | 589                    | $11.29^{+0.89}_{-0.88} \pm 0.24$ | 0.5625             | $2.82 \pm 0.47 \pm 1.58$        | 1.82                                                | 2.15                                                                             | Y           |
| 0150470701 | 2003-05-16 | 63.691 | -29.066 | 31.4               | 472                    | 27.9               | 485                    | $16.78^{+0.94}_{-0.96} \pm 0.34$ | 0.5675             | $3.43 \pm 0.50 \pm 2.27$        | 1.76                                                | 1.60                                                                             | N           |
| 0556212601 | 2008-08-12 | 63.988 | +42.878 | 6.3                | 353                    | 5.6                | 591                    | $5.73^{+1.55}_{-1.84} \pm 1.58$  | 0.5625             | $1.47^{+0.83}_{-0.91} \pm 0.90$ | 1.17                                                | 1.81                                                                             | N           |
| 0205910101 | 2005-01-12 | 64.899 | +85.605 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0148620101 | 2003-08-03 | 65.190 | +70.082 | 11.6               | 572                    | 11.8               | 579                    | $8.79^{+1.07}_{-1.04} \pm 0.79$  | 0.5675             | $1.85^{+0.59}_{-0.57} \pm 0.90$ | 1.59                                                | 2.11                                                                             | Y           |
| 0304050101 | 2005-06-30 | 66.520 | -70.324 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0501230101 | 2007-08-31 | 66.842 | +25.804 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0304070801 | 2006-01-16 | 66.881 | +76.681 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0502510301 | 2007-12-05 | 67.149 | +81.034 | 18.6               | 423                    | 18.8               | 515                    | $3.29^{+0.83}_{-0.78} \pm 0.42$  | 0.5825             | $0.01^{+0.52}_{-0.01} \pm 0.21$ | 1.86                                                | 1.66                                                                             | Y           |
| 0602840101 | 2009-05-16 | 67.599 | +7.593  | 12.6               | 421                    | 12.5               | 585                    | $7.88^{+1.31}_{-1.26} \pm 0.40$  | 0.5675             | $3.15^{+0.77}_{-0.79} \pm 0.11$ | 1.57                                                | 2.57                                                                             | N           |
| 0553561001 | 2008-12-03 | 68.117 | +82.734 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0025740401 | 2002-02-10 | 68.251 | +48.101 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0147570601 | 2003-07-31 | 69.340 | +67.586 | 12.1               | 577                    | 12.1               | 582                    | $12.19^{+0.91}_{-1.02} \pm 0.54$ | 0.5625             | $1.78^{+0.54}_{-0.51} \pm 1.48$ | 1.46                                                | 1.45                                                                             | N           |
| 0109080601 | 2002-08-11 | 69.897 | +62.736 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0203390601 | 2004-08-28 | 70.335 | +56.505 | 8.9                | 588                    | 8.8                | 589                    | $6.93^{+1.16}_{-1.21} \pm 0.29$  | 0.5625             | $1.33^{+0.57}_{-0.55} \pm 0.13$ | 1.92                                                | 1.92                                                                             | N           |
| 0200430201 | 2004-05-20 | 70.446 | -35.378 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0204400201 | 2004-11-29 | 70.649 | -15.884 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0055990301 | 2001-11-28 | 70.899 | -67.617 | 13.3               | 483                    | 13.6               | 561                    | $5.07^{+0.69}_{-0.80} \pm 0.32$  | 0.5725             | $1.18^{+0.44}_{-0.47} \pm 0.82$ | 0.88                                                | 1.84                                                                             | N           |
| 0206860101 | 2004-08-30 | 71.257 | +37.471 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0206860201 | 2004-09-05 | 71.257 | +37.471 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0402250201 | 2006-06-27 | 71.408 | +59.566 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0135940101 | 2003-01-05 | 71.495 | +84.739 | 10.4               | 582                    | 10.6               | 584                    | $5.92^{+0.94}_{-0.89} \pm 0.42$  | 0.5675             | $1.51^{+0.55}_{-0.51} \pm 0.91$ | 1.72                                                | 1.35                                                                             | Y           |
| 0110960101 | 2002-05-28 | 71.823 | -46.107 | 11.4               | 575                    | 11.8               | 576                    | $7.15^{+1.02}_{-1.00} \pm 0.35$  | 0.5625             | $0.92^{+0.55}_{-0.50} \pm 0.34$ | 0.78                                                | 2.31                                                                             | N           |
| 0152200101 | 2002-12-21 | 72.243 | -67.305 | 20.7               | 510                    | 20.6               | 508                    | $7.26^{+0.82}_{-0.80} \pm 0.28$  | 0.5675             | $2.69^{+0.48}_{-0.47} \pm 0.81$ | 1.84                                                | 1.79                                                                             | Y           |
| 0212481201 | 2005-10-12 | 72.288 | -0.057  | 24.5               | 428                    | 24.2               | 516                    | $4.71^{+0.82}_{-0.89} \pm 1.91$  | 0.5625             | $6.11^{+0.56}_{-0.40} \pm 0.44$ | 0.82                                                | 2.31                                                                             | N           |
| 0501621601 | 2007-10-03 | 72.954 | +38.208 | 8.7                | 421                    | 8.8                | 510                    | $4.51^{+1.71}_{-1.17} \pm 0.33$  | 0.5675             | $0.84^{+0.67}_{-0.66} \pm 0.92$ | 1.49                                                | 1.58                                                                             | N           |
| 0501620301 | 2007-08-07 | 72.974 | +38.214 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0500680201 | 2008-04-02 | 73.006 | +1.423  | 10.9               | 397                    | 10.9               | 485                    | $4.78^{+1.45}_{-1.19} \pm 0.65$  | 0.5725             | $3.52^{+0.78}_{-0.84} \pm 1.42$ | 1.22                                                | 2.39                                                                             | Y           |
| 0304000201 | 2005-11-08 | 73.101 | -2.088  | 30.2               | 409                    | 29.7               | 511                    | $1.96^{+0.67}_{-0.74} \pm 0.35$  | 0.5575             | $1.21^{+0.37}_{-0.39} \pm 0.28$ | 1.68                                                | 1.87                                                                             | Y           |
| 0305361601 | 2006-01-18 | 73.737 | +79.307 | 23.9               | 492                    | 24.2               | 516                    | $3.56^{+0.74}_{-0.69} \pm 0.26$  | 0.5675             | $0.51^{+0.39}_{-0.43} \pm 0.36$ | 1.67                                                | 1.61                                                                             | Y           |
| 0205330501 | 2004-06-05 | 73.871 | -54.920 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0553510201 | 2008-05-18 | 73.997 | +8.482  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0112551701 | 2002-06-14 | 74.414 | +76.261 | 10.7               | 469                    | 10.3               | 476                    | $8.79^{+2.11}_{-1.25} \pm 0.67$  | 0.5725             | $1.57^{+0.72}_{-0.70} \pm 1.45$ | 1.64                                                | 1.48                                                                             | Y           |
| 0204790101 | 2003-12-23 | 75.788 | -73.628 | 5.3                | 444                    | 5.5                | 485                    | $7.78^{+1.15}_{-2.53} \pm 2.69$  | 0.5675             | $1.28^{+1.15}_{-0.76} \pm 0.34$ | 1.14                                                | 1.69                                                                             | N           |
| 0111260701 | 2003-01-17 | 75.851 | +64.877 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0212480701 | 2005-06-05 | 75.906 | +64.905 | 13.5               | 395                    | 13.5               | 557                    | $5.95 \pm 0.99 \pm 1.33$         | 0.5675             | $0.52^{+0.54}_{-0.52} \pm 0.72$ | 1.51                                                | 2.38                                                                             | N           |
| 0405600401 | 2006-10-20 | 76.389 | +3.684  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0404450101 | 2006-11-14 | 76.732 | -28.526 | 5.6                | 315                    | 6.0                | 399                    | $10.23^{+2.73}_{-2.23} \pm 0.28$ | 0.5725             | $3.34^{+1.36}_{-1.20} \pm 1.20$ | 1.85                                                | 2.06                                                                             | Y           |
| 0130920101 | 2000-11-29 | 76.753 | -28.526 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |
| 0403750101 | 2006-06-05 | 77.264 | +43.321 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                                              | ...         |



| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
|            | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| (1)        | (2)        | (3)    | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                             | (12)                                                | (13)                                                    | (14)        |
| 0072340701 | 2002-12-10 | 77.279 | +72.311 | 7.3                | 473                    | 7.2                | 467                    | $7.32^{+1.72}_{-1.35} \pm 0.77$  | 0.5725             | $1.01^{+0.64}_{-0.78} \pm 1.05$  | 1.29                                                | 1.58                                                    | N           |
| 0148742601 | 2003-12-18 | 77.317 | +65.767 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0604920301 | 2009-05-02 | 77.854 | -5.480  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0135940201 | 2002-07-10 | 78.293 | +81.975 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0033541001 | 2001-11-29 | 78.427 | -50.234 | 11.8               | 426                    | 11.6               | 567                    | $6.28^{+1.48}_{-1.23} \pm 0.48$  | 0.5675             | $0.82^{+0.57}_{-0.63} \pm 0.63$  | 1.31                                                | 1.72                                                    | N           |
| 0550451901 | 2008-11-20 | 78.623 | +9.733  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0153220601 | 2003-05-28 | 79.922 | -37.583 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0305600601 | 2006-06-14 | 80.100 | -54.735 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0201230101 | 2003-12-15 | 80.163 | -18.771 | 23.7               | 592                    | 24.1               | 592                    | $11.17^{+0.49}_{-1.07} \pm 1.27$ | 0.5675             | $2.77^{+0.37}_{-0.44} \pm 1.07$  | 1.49                                                | 1.97                                                    | N           |
| 0555471101 | 2009-04-06 | 80.945 | +4.166  | 22.8               | 268                    | 22.6               | 405                    | $7.46^{+1.70}_{-1.98} \pm 0.99$  | 0.5625             | $7.44^{+0.95}_{-1.16} \pm 0.41$  | 1.61                                                | 2.23                                                    | N           |
| 0301900501 | 2006-01-12 | 81.383 | +83.543 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0041740301 | 2002-11-17 | 82.300 | -5.822  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0143630101 | 2004-11-02 | 82.301 | -5.814  | 14.5               | 477                    | 14.8               | 402                    | $8.72^{+1.69}_{-1.54} \pm 1.47$  | 0.5625             | $5.54^{+0.97}_{-0.85} \pm 1.46$  | 1.63                                                | 1.78                                                    | N           |
| 0401880801 | 2006-10-29 | 82.309 | -5.818  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0550061301 | 2008-11-06 | 82.310 | -5.819  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0501930601 | 2007-11-03 | 82.312 | -5.820  | 13.8               | 413                    | 13.6               | 576                    | $9.96^{+1.65}_{-1.37} \pm 2.19$  | 0.5625             | $6.42^{+0.96}_{-0.77} \pm 0.72$  | 1.50                                                | 1.52                                                    | N           |
| 0041741101 | 2004-05-01 | 82.336 | -5.825  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0401880901 | 2007-04-30 | 82.346 | -5.828  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0550060801 | 2009-04-27 | 82.347 | -5.828  | 10.9               | 407                    | 11.3               | 569                    | $9.12^{+1.70}_{-1.85} \pm 0.90$  | 0.5675             | $6.51^{+0.82}_{-0.97} \pm 0.63$  | 1.35                                                | 1.34                                                    | N           |
| 0041180401 | 2002-06-02 | 82.640 | +71.663 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0032140201 | 2001-06-10 | 82.684 | -45.569 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0093640401 | 2001-01-09 | 82.933 | +80.599 | 18.9               | 498                    | 18.8               | 574                    | $6.85^{+0.68}_{-1.23} \pm 0.64$  | 0.5675             | $1.62^{+0.38}_{-0.49} \pm 1.17$  | 1.34                                                | 1.70                                                    | N           |
| 0553110401 | 2008-11-14 | 83.039 | -0.342  | 5.0                | 503                    | 5.0                | 517                    | $0.00^{+1.73}_{-0.00} \pm 0.54$  | 0.5425             | $2.29^{+1.03}_{-0.93} \pm 0.25$  | 1.99                                                | 2.01                                                    | Y           |
| 0147890101 | 2003-11-18 | 83.284 | -31.045 | 22.9               | 403                    | 22.9               | 402                    | $6.14^{+0.96}_{-1.11} \pm 0.32$  | 0.5675             | $1.28 \pm 0.55 \pm 0.39$         | 1.66                                                | 2.56                                                    | N           |
| 0011830201 | 2001-12-08 | 83.775 | +52.108 | 27.6               | 501                    | 27.2               | 578                    | $9.18^{+0.61}_{-0.99} \pm 0.32$  | 0.5675             | $2.29^{+0.34}_{-0.38} \pm 0.99$  | 0.83                                                | 1.71                                                    | N           |
| 0103660101 | 2002-07-10 | 83.855 | +66.368 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0109080501 | 2002-12-08 | 84.684 | +65.316 | 21.5               | 465                    | 21.9               | 464                    | $7.48^{+1.14}_{-0.83} \pm 0.25$  | 0.5725             | $0.75^{+0.55}_{-0.49} \pm 0.93$  | 0.99                                                | 2.07                                                    | N           |
| 0201200201 | 2003-12-09 | 85.213 | +5.043  | 7.6                | 402                    | 7.7                | 477                    | $19.90^{+1.68}_{-2.18} \pm 1.88$ | 0.5725             | $12.62^{+1.25}_{-1.43} \pm 4.49$ | 1.87                                                | 1.86                                                    | N           |
| 0307130301 | 2005-10-27 | 85.392 | +0.745  | 16.2               | 291                    | 16.1               | 378                    | $1.90^{+0.95}_{-0.98} \pm 0.34$  | 0.5775             | $1.39^{+0.72}_{-0.69} \pm 0.27$  | 1.64                                                | 2.13                                                    | N           |
| 0109660901 | 2001-06-22 | 85.622 | +75.921 | 12.7               | 574                    | 11.5               | 582                    | $6.48^{+0.80}_{-0.78} \pm 0.32$  | 0.5725             | $0.84 \pm 0.46 \pm 0.88$         | 0.29                                                | 1.47                                                    | N           |
| 0109660801 | 2001-06-12 | 85.622 | +75.921 | 37.3               | 582                    | 39.3               | 581                    | $6.99^{+0.57}_{-0.55} \pm 0.21$  | 0.5675             | $0.78^{+0.29}_{-0.30} \pm 0.98$  | 1.59                                                | 1.87                                                    | Y           |
| 0109661001 | 2001-06-23 | 85.623 | +75.921 | 60.5               | 572                    | 60.7               | 581                    | $6.22 \pm 0.40 \pm 0.44$         | 0.5675             | $0.89 \pm 0.22 \pm 0.75$         | 0.82                                                | 1.88                                                    | N           |
| 0550871001 | 2008-12-01 | 85.938 | -18.782 | 13.2               | 328                    | 13.0               | 564                    | $6.34^{+1.29}_{-1.41} \pm 1.10$  | 0.5675             | $1.76^{+0.88}_{-0.67} \pm 0.88$  | 1.12                                                | 2.45                                                    | N           |
| 0401700201 | 2006-07-02 | 86.132 | -38.176 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0025541001 | 2001-06-19 | 86.295 | -42.837 | 5.9                | 463                    | 6.0                | 540                    | $4.85^{+1.73}_{-1.51} \pm 0.59$  | 0.5625             | $2.68^{+0.84}_{-0.83} \pm 0.17$  | 1.75                                                | 2.02                                                    | Y           |
| 0553440201 | 2008-11-20 | 86.341 | -30.586 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0020540401 | 2002-12-10 | 86.507 | +83.387 | 46.3               | 431                    | 46.3               | 357                    | $8.55^{+0.68}_{-0.61} \pm 0.55$  | 0.5675             | $2.18^{+0.39}_{-0.33} \pm 0.87$  | 1.05                                                | 1.72                                                    | N           |
| 0049540401 | 2003-08-19 | 86.567 | +40.932 | 9.1                | 485                    | 9.3                | 560                    | $9.67^{+1.71}_{-1.23} \pm 0.63$  | 0.5725             | $2.98^{+0.78}_{-0.76} \pm 1.70$  | 1.10                                                | 1.58                                                    | Y           |
| 0300310301 | 2006-01-16 | 86.902 | +49.378 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0110930901 | 2003-01-08 | 86.956 | +60.471 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0042341301 | 2001-12-06 | 86.995 | -57.367 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0550190501 | 2008-12-21 | 87.356 | -2.366  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0406421401 | 2006-09-17 | 87.472 | +34.704 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0406420401 | 2006-09-01 | 87.477 | +34.706 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0044350101 | 2002-05-29 | 87.586 | -83.083 | 13.5               | 500                    | 13.7               | 576                    | $6.58^{+1.06}_{-1.22} \pm 0.37$  | 0.5675             | $1.55^{+0.49}_{-0.59} \pm 0.97$  | 0.73                                                | 1.97                                                    | N           |
| 0149240101 | 2003-12-16 | 87.623 | -48.341 | 38.0               | 380                    | 37.6               | 379                    | $4.67^{+0.88}_{-0.81} \pm 0.89$  | 0.5675             | $2.17^{+0.53}_{-0.37} \pm 0.20$  | 1.53                                                | 2.23                                                    | N           |
| 0070340701 | 2002-06-08 | 87.761 | +72.961 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0302820101 | 2005-11-28 | 88.144 | -51.963 | 6.8                | 429                    | 6.9                | 516                    | $5.28^{+1.42}_{-1.18} \pm 0.29$  | 0.5675             | $1.64^{+0.72}_{-0.70} \pm 0.46$  | 1.88                                                | 1.14                                                    | Y           |
| 0112522601 | 2002-12-08 | 88.190 | -55.573 | 15.0               | 576                    | 15.3               | 502                    | $5.55^{+1.00}_{-0.90} \pm 0.44$  | 0.5675             | $1.42^{+0.47}_{-0.51} \pm 0.70$  | 1.37                                                | 1.58                                                    | N           |
| 0112521301 | 2002-06-07 | 88.253 | -55.561 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0152860101 | 2002-12-28 | 88.473 | -60.823 | 25.1               | 431                    | 25.9               | 431                    | $5.25^{+0.72}_{-0.87} \pm 0.74$  | 0.5675             | $1.71^{+0.45}_{-0.46} \pm 0.49$  | 1.82                                                | 2.14                                                    | N           |
| 0109463401 | 2002-11-02 | 89.806 | -0.067  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0111970901 | 2001-12-06 | 90.032 | -71.762 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |

| Obs. ID    | Start      | $l$    | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{O VIII}}}{F_{2-5}^{\text{O VII}}}$ | Affected by |
|------------|------------|--------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|----------------------------------------------------------|-------------|
| (1)        | Date       | (deg)  | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                     | filtering?  |
| (1)        | (2)        | (3)    | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                             | (10)               | (11)                            | (12)                                                | (13)                                                     | (14)        |
| 0551020901 | 2008-06-01 | 90.085 | -34.722 | 41.1               | 409                    | 42.8               | 573                    | $3.87^{+1.08}_{-1.14} \pm 1.42$ | 0.5625             | $1.92^{+0.51}_{-0.52} \pm 0.42$ | 1.28                                                | 2.46                                                     | N           |
| 0556210201 | 2008-06-03 | 90.207 | -68.635 | 6.1                | 426                    | 5.6                | 590                    | $2.70^{+1.58}_{-1.60} \pm 1.16$ | 0.5475             | $0.77^{+0.83}_{-0.69} \pm 0.31$ | 1.32                                                | 1.55                                                     | N           |
| 0400360301 | 2006-05-02 | 91.516 | +47.948 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0400360601 | 2006-05-04 | 91.517 | +47.949 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0400360801 | 2006-05-06 | 91.518 | +47.950 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0147580401 | 2002-12-28 | 91.532 | -58.027 | 14.0               | 464                    | 14.2               | 539                    | $6.04 \pm 0.92 \pm 0.32$        | 0.5625             | $1.53 \pm 0.50 \pm 0.41$        | 1.51                                                | 2.14                                                     | N           |
| 0502460101 | 2007-11-29 | 91.560 | -3.038  | 39.5               | 421                    | 39.2               | 581                    | $6.94^{+0.70}_{-0.72} \pm 0.98$ | 0.5625             | $6.76^{+0.43}_{-0.44} \pm 0.35$ | 1.32                                                | 1.86                                                     | N           |
| 0502460201 | 2007-12-20 | 91.561 | -3.045  | 41.9               | 420                    | 42.1               | 509                    | $6.42^{+1.03}_{-0.75} \pm 0.60$ | 0.5675             | $5.84 \pm 0.45 \pm 0.96$        | 1.55                                                | 2.25                                                     | Y           |
| 0502460301 | 2008-01-04 | 91.563 | -3.048  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0502460401 | 2008-01-18 | 91.566 | -3.051  | 13.6               | 425                    | 15.3               | 512                    | $5.87^{+1.38}_{-1.46} \pm 0.69$ | 0.5625             | $6.00^{+0.78}_{-0.83} \pm 0.94$ | 1.45                                                | 2.57                                                     | Y           |
| 0307120201 | 2005-06-06 | 91.595 | -3.031  | 6.2                | 495                    | 6.2                | 585                    | $8.59^{+1.40}_{-1.36} \pm 0.89$ | 0.5725             | $7.03^{+0.99}_{-0.97} \pm 0.73$ | 1.52                                                | 2.32                                                     | Y           |
| 0560191901 | 2009-07-11 | 91.811 | +20.134 | 21.4               | 342                    | 21.9               | 579                    | $3.91^{+1.21}_{-1.18} \pm 0.49$ | 0.5625             | $1.50^{+0.54}_{-0.49} \pm 0.42$ | 1.14                                                | 2.03                                                     | N           |
| 0203460101 | 2004-12-22 | 91.860 | -76.177 | 5.4                | 588                    | 5.3                | 514                    | $6.51^{+1.55}_{-1.65} \pm 0.72$ | 0.5575             | $0.53^{+0.75}_{-0.53} \pm 0.50$ | 1.70                                                | 1.73                                                     | Y           |
| 0202100101 | 2004-06-27 | 92.207 | +34.848 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0502500101 | 2007-12-02 | 92.525 | -38.187 | 10.3               | 415                    | 10.3               | 504                    | $2.27^{+1.04}_{-1.19} \pm 0.08$ | 0.5625             | $1.44^{+0.61}_{-0.67} \pm 0.08$ | 1.69                                                | 1.18                                                     | Y           |
| 0501660301 | 2007-12-05 | 92.571 | -10.445 | 9.4                | 310                    | 9.2                | 397                    | $4.40^{+1.73}_{-1.54} \pm 0.51$ | 0.5675             | $3.10^{+0.86}_{-0.88} \pm 0.14$ | 1.81                                                | 1.32                                                     | Y           |
| 0501660401 | 2008-01-08 | 92.575 | -10.453 | 20.8               | 237                    | 21.0               | 398                    | $1.26^{+0.83}_{-0.81} \pm 0.11$ | 0.5925             | $0.95^{+0.65}_{-0.64} \pm 0.23$ | 0.73                                                | 1.90                                                     | N           |
| 0504370401 | 2008-05-16 | 92.590 | -10.440 | 46.0               | 307                    | 49.4               | 470                    | $2.18^{+0.67}_{-0.63} \pm 0.24$ | 0.5675             | $1.01^{+0.39}_{-0.36} \pm 0.22$ | 0.97                                                | 2.54                                                     | ...         |
| 0021140201 | 2001-12-07 | 93.270 | -20.986 | 37.9               | 368                    | 37.4               | 510                    | $9.16^{+0.74}_{-0.65} \pm 0.99$ | 0.5675             | $3.22^{+0.42}_{-0.38} \pm 0.94$ | 1.46                                                | 1.86                                                     | N           |
| 0111260201 | 2002-05-11 | 93.281 | +51.334 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0306700301 | 2005-04-19 | 93.286 | +6.721  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0103863101 | 2002-12-08 | 93.712 | -20.727 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0402840201 | 2006-07-22 | 93.769 | -4.622  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0502430301 | 2007-12-01 | 94.916 | -43.439 | 13.9               | 469                    | 13.6               |                        |                                 |                    |                                 |                                                     |                                                          |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0205320201 | 2004-06-09 | 100.901 | +29.200 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0555321001 | 2008-05-11 | 100.949 | +5.425  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0110930501 | 2002-12-12 | 101.521 | +79.244 | 12.6               | 485                    | 12.8               | 412                    | $8.62^{+1.25}_{-1.14} \pm 0.30$ | 0.5625             | $0.86^{+0.62}_{-0.56} \pm 1.35$ | 1.92                                                | 1.36                                              | N           |
| 0403760301 | 2006-07-10 | 102.232 | -60.384 | 6.9                | 426                    | 7.0                | 513                    | $5.88^{+1.11}_{-1.26} \pm 0.32$ | 0.5825             | $2.38^{+0.83}_{-0.90} \pm 0.97$ | 1.83                                                | 1.95                                              | Y           |
| 0055990501 | 2002-05-15 | 102.770 | +66.970 | 16.2               | 558                    | 15.7               | 559                    | $8.39 \pm 0.76 \pm 0.17$        | 0.5725             | $1.03 \pm 0.44 \pm 1.24$        | 1.59                                                | 1.74                                              | N           |
| 0143150101 | 2002-11-22 | 102.819 | +36.646 | 14.8               | 537                    | 14.7               | 544                    | $4.95^{+1.05}_{-0.96} \pm 0.54$ | 0.5675             | $0.49^{+0.53}_{-0.47} \pm 0.63$ | 1.86                                                | 1.85                                              | N           |
| 0404050301 | 2006-08-08 | 103.190 | +49.106 | 6.3                | 489                    | 6.4                | 582                    | $3.59^{+1.95}_{-1.41} \pm 0.65$ | 0.5525             | $0.00^{+0.54}_{-0.00} \pm 0.00$ | 1.47                                                | 2.18                                              | N           |
| 0093190301 | 2002-06-21 | 104.267 | -40.576 | 30.5               | 564                    | 30.2               | 564                    | $7.11^{+0.57}_{-0.56} \pm 0.98$ | 0.5675             | $1.32 \pm 0.32 \pm 1.22$        | 1.58                                                | 1.45                                              | N           |
| 0403760701 | 2007-07-14 | 104.272 | -62.562 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203390801 | 2004-06-15 | 104.483 | -40.115 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0301010101 | 2005-09-25 | 104.640 | +46.027 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112840201 | 2003-01-15 | 104.820 | +68.546 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0303420101 | 2006-05-20 | 104.889 | +68.578 | 31.9               | 231                    | 31.7               | 353                    | $6.70^{+1.44}_{-1.53} \pm 2.76$ | 0.5625             | $1.21^{+0.30}_{-0.72} \pm 1.15$ | 1.40                                                | 2.69                                              | N           |
| 0303420201 | 2006-05-24 | 104.889 | +68.579 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0204400301 | 2004-02-02 | 104.904 | +49.952 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0552410401 | 2008-06-05 | 105.212 | +0.535  | 20.4               | 502                    | 21.4               | 584                    | $0.27^{+0.93}_{-0.27} \pm 0.29$ | 0.5775             | $0.37^{+0.52}_{-0.37} \pm 0.21$ | 1.84                                                | 1.97                                              | Y           |
| 0111530101 | 2000-12-30 | 105.515 | +49.038 | 49.5               | 455                    | 49.4               | 373                    | $5.66^{+0.80}_{-0.68} \pm 0.32$ | 0.5675             | $1.40 \pm 0.34 \pm 0.58$        | 1.31                                                | 1.47                                              | N           |
| 0202140201 | 2004-01-03 | 105.647 | -63.932 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0603980101 | 2009-06-19 | 105.722 | -55.991 | 31.5               | 401                    | 33.9               | 489                    | $1.80^{+1.15}_{-0.61} \pm 0.30$ | 0.5775             | $0.56^{+0.58}_{-0.42} \pm 0.13$ | 1.73                                                | 2.65                                              | Y           |
| 0405080501 | 2007-06-19 | 106.062 | +74.293 | 6.4                | 319                    | 6.7                | 475                    | $5.56^{+2.28}_{-1.85} \pm 0.54$ | 0.5575             | $0.48^{+1.31}_{-0.48} \pm 0.84$ | 1.16                                                | 1.74                                              | N           |
| 0111160101 | 2001-06-07 | 106.575 | +65.226 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0042340201 | 2002-01-04 | 106.614 | -83.250 | 10.7               | 477                    | 10.7               | 403                    | $4.95^{+1.46}_{-1.04} \pm 0.43$ | 0.5775             | $2.21^{+0.83}_{-0.78} \pm 1.13$ | 1.69                                                | 2.67                                              | N           |
| 0125920201 | 2000-06-05 | 106.739 | -74.448 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0305570101 | 2006-01-02 | 106.976 | -21.114 | 24.2               | 401                    | 25.7               | 572                    | $5.53^{+0.44}_{-1.07} \pm 0.83$ | 0.5625             | $2.31^{+0.31}_{-0.47} \pm 0.34$ | 1.70                                                | 1.77                                              | Y           |
| 0127110201 | 2000-07-04 | 107.006 | -50.617 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0084190201 | 2002-06-12 | 107.072 | +63.799 | 35.0               | 490                    | 36.6               | 571                    | $8.31^{+0.56}_{-0.58} \pm 0.81$ | 0.5725             | $1.20 \pm 0.33 \pm 1.11$        | 1.56                                                | 2.15                                              | Y           |
| 0300490501 | 2005-08-06 | 107.538 | +14.028 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0300490301 | 2005-07-29 | 107.538 | +14.027 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0300490201 | 2005-07-27 | 107.539 | +14.028 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553230201 | 2008-12-30 | 108.006 | -60.639 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0101640401 | 2002-05-07 | 108.134 | +59.669 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0600450101 | 2009-06-24 | 108.280 | +42.188 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0411980501 | 2006-07-15 | 108.730 | +67.786 | 6.3                | 423                    | 6.3                | 518                    | $4.17^{+1.00}_{-1.85} \pm 1.17$ | 0.5725             | $1.31^{+0.99}_{-1.01} \pm 0.73$ | 0.91                                                | 1.28                                              | N           |
| 0600540601 | 2009-06-11 | 108.761 | -41.422 | 58.1               | 290                    | 57.9               | 370                    | $1.18^{+0.53}_{-0.52} \pm 1.13$ | 0.5925             | $0.41^{+0.39}_{-0.38} \pm 0.41$ | 1.72                                                | 2.13                                              | Y           |
| 0600540501 | 2009-06-13 | 108.762 | -41.423 | 28.0               | 291                    | 30.4               | 370                    | $1.96^{+1.02}_{-1.00} \pm 0.63$ | 0.5675             | $1.08^{+0.55}_{-0.53} \pm 0.15$ | 1.72                                                | 2.28                                              | Y           |
| 0510010701 | 2007-07-10 | 108.782 | -41.412 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0307002401 | 2005-06-23 | 109.032 | +38.920 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0201160501 | 2004-02-02 | 109.121 | +1.109  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112250201 | 2001-06-06 | 109.228 | +57.391 | 10.5               | 568                    | 10.5               | 502                    | $8.22^{+0.66}_{-1.20} \pm 0.52$ | 0.5725             | $0.56^{+0.41}_{-0.54} \pm 1.10$ | 1.64                                                | 1.68                                              | Y           |
| 0100240901 | 2001-01-10 | 109.284 | -24.806 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0071340501 | 2001-12-24 | 110.247 | +55.489 | 13.4               | 486                    | 13.1               | 562                    | $9.40^{+0.93}_{-0.96} \pm 0.23$ | 0.5625             | $0.78^{+0.45}_{-0.46} \pm 1.05$ | 1.86                                                | 1.66                                              | Y           |
| 0202190201 | 2003-12-17 | 110.810 | -44.708 | 21.0               | 508                    | 21.1               | 509                    | $4.09^{+0.92}_{-0.85} \pm 1.14$ | 0.5625             | $1.42 \pm 0.45 \pm 0.55$        | 1.33                                                | 1.92                                              | N           |
| 0203130201 | 2003-12-18 | 111.117 | +1.125  | 21.6               | 589                    | 21.7               | 591                    | $2.16^{+0.62}_{-0.60} \pm 0.57$ | 0.5575             | $1.03^{+0.32}_{-0.31} \pm 0.24$ | 1.28                                                | 1.84                                              | N           |
| 0303360401 | 2005-06-11 | 111.196 | +47.015 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112880601 | 2002-01-07 | 111.230 | -80.692 | 7.9                | 334                    | 7.7                | 338                    | $5.29^{+2.62}_{-2.41} \pm 1.65$ | 0.5475             | $1.65^{+1.25}_{-1.14} \pm 1.10$ | 1.52                                                | 1.87                                              | Y           |
| 0400920201 | 2007-02-17 | 111.311 | +33.345 | 10.3               | 318                    | 10.3               | 481                    | $2.52^{+0.98}_{-0.96} \pm 0.36$ | 0.5775             | $0.97^{+0.65}_{-0.64} \pm 0.25$ | 1.34                                                | 2.02                                              | N           |
| 0400920101 | 2007-02-15 | 111.311 | +33.346 | 8.8                | 389                    | 9.2                | 479                    | $2.51^{+1.09}_{-1.10} \pm 0.29$ | 0.5775             | $1.05^{+0.71}_{-0.79} \pm 0.23$ | 1.47                                                | 2.35                                              | N           |
| 0502860101 | 2007-12-14 | 111.512 | -46.051 | 39.4               | 310                    | 40.8               | 462                    | $2.15^{+0.81}_{-0.58} \pm 0.28$ | 0.5675             | $0.90^{+0.44}_{-0.39} \pm 0.15$ | 1.30                                                | 1.76                                              | N           |
| 0111000101 | 2000-12-29 | 111.583 | -45.721 | 20.0               | 494                    | 19.6               | 420                    | $6.12^{+0.93}_{-1.14} \pm 0.62$ | 0.5675             | $1.51^{+0.46}_{-0.54} \pm 0.53$ | 1.86                                                | 1.68                                              | Y           |
| 0111000201 | 2000-12-30 | 111.583 | -45.721 | 5.3                | 497                    | 5.4                | 422                    | $5.99^{+1.97}_{-0.80} \pm 0.40$ | 0.5725             | $2.38^{+1.04}_{-1.01} \pm 1.02$ | 1.71                                                | 1.57                                              | N           |
| 0205390301 | 2004-06-23 | 111.923 | +52.027 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0556230201 | 2008-06-10 | 111.924 | +52.023 | 7.6                | 394                    | 7.4                | 565                    | $2.45^{+1.10}_{-0.93} \pm 0.51$ | 0.5925             | $0.49^{+0.78}_{-0.49} \pm 0.13$ | 1.39                                                | 1.67                                              | Y           |
| 0556230101 | 2008-06-08 | 111.925 | +52.021 | 10.6               | 328                    | 10.5               | 565                    | $1.97^{+1.19}_{-1.20} \pm 0.22$ | 0.5525             | $0.39^{+0.61}_{-0.39} \pm 0.09$ | 1.28                                                | 2.07                                              | N           |

[illegible]

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0511380301 | 2008-01-06 | 120.528 | -21.851 | 31.0               | 493                    | 31.1               | 567                    | $4.63^{+0.74}_{-0.84} \pm 0.22$ | 0.5675             | $1.44^{+0.42}_{-0.41} \pm 0.26$ | 1.75                                                | 2.17                                              | N           |
| 0402560501 | 2006-07-20 | 120.554 | -21.822 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0304570101 | 2006-04-20 | 120.580 | +58.034 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402560801 | 2006-12-25 | 120.591 | -22.242 | 46.8               | 406                    | 46.9               | 580                    | $5.89^{+0.73}_{-0.80} \pm 1.24$ | 0.5575             | $1.75^{+0.36}_{-0.40} \pm 0.41$ | 0.95                                                | 2.10                                              | N           |
| 0112570301 | 2002-01-24 | 120.595 | -22.245 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505760401 | 2007-12-25 | 120.715 | -22.488 | 25.8               | 342                    | 25.5               | 509                    | $5.56^{+1.09}_{-0.80} \pm 1.20$ | 0.5675             | $1.37^{+0.45}_{-0.46} \pm 0.97$ | 1.43                                                | 1.55                                              | Y           |
| 0402560601 | 2006-07-28 | 120.742 | -22.461 | 29.4               | 356                    | 30.3               | 505                    | $4.99^{+1.10}_{-0.86} \pm 2.02$ | 0.5625             | $1.22^{+0.42}_{-0.45} \pm 1.27$ | 0.84                                                | 1.90                                              | N           |
| 0402560301 | 2006-07-01 | 120.784 | -21.514 | 45.4               | 412                    | 47.4               | 513                    | $4.99^{+0.90}_{-0.73} \pm 0.25$ | 0.5625             | $1.91^{+0.41}_{-0.37} \pm 0.10$ | 1.52                                                | 2.44                                              | N           |
| 0410582001 | 2007-07-25 | 120.820 | -21.564 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402560901 | 2006-12-26 | 121.001 | -21.239 | 43.5               | 352                    | 44.5               | 518                    | $4.62^{+0.96}_{-0.72} \pm 0.32$ | 0.5675             | $2.02^{+0.43}_{-0.38} \pm 0.06$ | 1.03                                                | 2.38                                              | N           |
| 0505760301 | 2007-12-28 | 121.039 | -22.231 | 40.6               | 490                    | 42.1               | 581                    | $5.92^{+0.64}_{-0.67} \pm 0.29$ | 0.5675             | $1.61^{+0.38}_{-0.39} \pm 0.47$ | 1.08                                                | 1.81                                              | N           |
| 0402561101 | 2007-01-01 | 121.270 | -20.939 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0511380601 | 2008-02-09 | 121.303 | -21.944 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402561001 | 2006-12-30 | 121.542 | -21.667 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402561301 | 2007-01-03 | 121.597 | -20.708 | 26.4               | 489                    | 26.6               | 587                    | $5.23^{+0.79}_{-0.78} \pm 0.46$ | 0.5675             | $1.11^{+0.38}_{-0.46} \pm 0.40$ | 1.83                                                | 1.97                                              | Y           |
| 0112620201 | 2001-08-23 | 121.616 | +18.819 | 15.8               | 484                    | 15.9               | 556                    | $5.23^{+0.87}_{-1.02} \pm 0.52$ | 0.5575             | $1.30^{+0.45}_{-0.58} \pm 0.39$ | 1.52                                                | 2.20                                              | N           |
| 0081340201 | 2001-06-07 | 121.647 | +60.240 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402561501 | 2007-01-05 | 121.703 | -20.934 | 41.1               | 409                    | 40.8               | 498                    | $4.45^{+0.67}_{-0.66} \pm 0.34$ | 0.5675             | $2.07^{+0.38}_{-0.36} \pm 0.34$ | 1.00                                                | 2.13                                              | N           |
| 0404060201 | 2006-07-03 | 121.704 | -21.881 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0109270301 | 2002-01-26 | 121.707 | -20.938 | 25.4               | 500                    | 25.2               | 582                    | $8.29^{+0.63}_{-0.77} \pm 1.35$ | 0.5625             | $2.67^{+0.36}_{-0.39} \pm 0.41$ | 1.42                                                | 1.98                                              | N           |
| 0402561201 | 2007-01-02 | 121.769 | -21.342 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0403530501 | 2006-07-14 | 121.807 | -21.183 | 7.5                | 379                    | 8.4                | 398                    | $6.47^{+2.15}_{-1.78} \pm 1.07$ | 0.5625             | $0.33^{+0.85}_{-0.33} \pm 1.08$ | 1.53                                                | 2.51                                              | N           |
| 0403530401 | 2006-07-12 | 121.808 | -21.183 | 6.4                | 307                    | 6.4                | 398                    | $7.54^{+2.48}_{-1.68} \pm 1.80$ | 0.5625             | $3.80^{+1.30}_{-1.00} \pm 0.69$ | 1.17                                                | 2.28                                              | N           |
| 0151580401 | 2003-02-06 | 121.850 | -21.528 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402561401 | 2007-01-04 | 121.962 | -20.976 | 44.2               | 474                    | 43.6               | 574                    | $4.59^{+0.91}_{-$               |                    |                                 |                                                     |                                                   |             |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0555880101 | 2008-09-03 | 128.049 | -4.051  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0305920101 | 2005-07-22 | 128.725 | -48.533 | 14.7               | 387                    | 16.1               | 502                    | $6.54 \pm 1.16 \pm 0.67$        | 0.5575             | $5.53 \pm 0.67 \pm 0.29$        | 1.10                                                | 2.27                                              | N           |
| 0200430301 | 2004-01-09 | 128.859 | -29.513 | 9.3                | 498                    | 9.1                | 508                    | $6.88^{+1.54}_{-1.23} \pm 0.42$ | 0.5675             | $3.60^{+0.84}_{-0.75} \pm 0.73$ | 1.69                                                | 2.48                                              | Y           |
| 0304070901 | 2006-01-10 | 128.970 | +82.996 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0094382101 | 2002-01-06 | 130.332 | -28.082 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0153751801 | 2002-09-11 | 130.675 | +3.052  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0004010201 | 2001-02-22 | 130.715 | +3.066  | 20.8               | 377                    | 21.3               | 375                    | $3.60^{+0.61}_{-0.86} \pm 0.08$ | 0.5625             | $1.36^{+0.43}_{-0.42} \pm 0.20$ | 1.52                                                | 2.07                                              | N           |
| 0153752001 | 2002-09-14 | 130.716 | +3.202  | 24.4               | 371                    | 24.7               | 447                    | $2.95^{+0.79}_{-0.65} \pm 1.04$ | 0.5625             | $0.00^{+0.31}_{-0.00} \pm 0.00$ | 1.60                                                | 1.95                                              | N           |
| 0301150401 | 2006-01-28 | 130.727 | -28.588 | 5.7                | 413                    | 6.2                | 501                    | $4.32^{+1.49}_{-1.25} \pm 1.57$ | 0.5775             | $0.57^{+0.88}_{-0.57} \pm 0.55$ | 0.83                                                | 2.47                                              | N           |
| 0153752501 | 2002-09-11 | 130.728 | +3.002  | 13.6               | 441                    | 14.1               | 443                    | $3.04^{+0.61}_{-0.87} \pm 0.27$ | 0.5775             | $0.79^{+0.46}_{-0.52} \pm 0.30$ | 1.72                                                | 2.29                                              | Y           |
| 0153751901 | 2002-09-13 | 130.769 | +3.152  | 16.1               | 445                    | 15.9               | 371                    | $3.02^{+0.76}_{-0.66} \pm 0.26$ | 0.5725             | $0.56^{+0.45}_{-0.41} \pm 0.19$ | 1.55                                                | 2.01                                              | N           |
| 0153752401 | 2002-09-12 | 130.825 | +3.104  | 12.9               | 438                    | 12.8               | 444                    | $3.15^{+1.27}_{-0.90} \pm 0.45$ | 0.5675             | $0.58^{+0.60}_{-0.52} \pm 0.50$ | 1.21                                                | 2.57                                              | N           |
| 0112650501 | 2000-07-03 | 131.839 | -69.340 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112650401 | 2000-12-17 | 131.944 | -69.061 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200431001 | 2004-01-12 | 132.454 | -26.438 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0149040201 | 2003-08-22 | 132.891 | +9.084  | 44.3               | 476                    | 44.1               | 399                    | $2.23^{+0.56}_{-0.44} \pm 0.24$ | 0.5725             | $0.21^{+0.33}_{-0.21} \pm 0.14$ | 1.44                                                | 1.98                                              | Y           |
| 0094400101 | 2001-09-11 | 133.178 | +22.628 | 8.8                | 565                    | 8.7                | 496                    | $5.79^{+1.28}_{-1.10} \pm 0.35$ | 0.5725             | $1.58^{+0.62}_{-0.64} \pm 0.79$ | 1.69                                                | 1.62                                              | Y           |
| 0401210601 | 2006-10-10 | 133.225 | +42.419 | 17.5               | 311                    | 16.9               | 396                    | $2.42^{+1.04}_{-0.94} \pm 0.14$ | 0.5775             | $0.59^{+0.60}_{-0.59} \pm 0.05$ | 1.79                                                | 2.13                                              | Y           |
| 0402070201 | 2007-01-08 | 133.353 | -59.969 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0141980601 | 2003-01-23 | 133.363 | -31.433 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147450301 | 2003-03-26 | 133.392 | +40.179 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0102641101 | 2001-07-08 | 133.398 | -31.546 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0141980101 | 2003-07-11 | 133.422 | -31.256 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0102641001 | 2001-07-08 | 133.424 | -31.258 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0102640501 | 2001-07-05 | 133.490 | -31.648 | 11.5               | 576                    | 11.3               | 501                    | $7.73 \pm 0.94 \pm 1.08$        | 0.5675             | $2.24 \pm 0.53 \pm 0.70$        | 1.42                                                | 1.66                                              | N           |
| 0102642301 | 2002-01-27 | 133.551 | -31.466 | 11.7               | 543                    | 11.9               | 552                    | $9.91^{+1.14}_{-1.10} \pm $     |                    |                                 |                                                     |                                                   |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{2-5}}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|----------------------------------------------------------|-------------|
|            | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                     | filtering?  |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                             | (10)               | (11)                            | (12)                                                | (13)                                                     | (14)        |
| 0149780101 | 2003-02-05 | 137.102 | -23.259 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0506130201 | 2008-03-26 | 137.206 | +47.402 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0204400101 | 2004-05-24 | 137.446 | +77.229 | 25.9               | 518                    | 27.1               | 517                    | $4.51 \pm 0.65 \pm 0.24$        | 0.5675             | $0.46 \pm 0.36 \pm 0.31$        | 1.49                                                | 1.50                                                     | N           |
| 0400570301 | 2006-07-26 | 137.538 | -61.441 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0556300101 | 2008-05-19 | 138.057 | +74.858 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0112280201 | 2002-05-27 | 138.058 | +74.859 | 10.0               | 482                    | 9.9                | 482                    | $6.57^{+1.02}_{-1.54} \pm 0.40$ | 0.5675             | $0.46^{+0.60}_{-0.46} \pm 1.33$ | 1.61                                                | 1.13                                                     | Y           |
| 0206890201 | 2004-08-17 | 138.101 | +10.587 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0093640901 | 2001-02-11 | 138.175 | +10.579 | 9.3                | 479                    | 9.1                | 424                    | $1.25^{+1.18}_{-0.88} \pm 0.24$ | 0.5675             | $0.35^{+0.60}_{-0.35} \pm 0.07$ | 1.75                                                | 2.31                                                     | N           |
| 0110920101 | 2000-12-08 | 138.271 | +68.851 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0400560301 | 2006-11-17 | 138.279 | +68.853 | 50.1               | 379                    | 50.9               | 402                    | $3.83^{+0.80}_{-0.58} \pm 0.25$ | 0.5725             | $0.92^{+0.36}_{-0.32} \pm 0.57$ | 0.94                                                | 1.65                                                     | N           |
| 0059140101 | 2001-05-06 | 138.358 | +68.829 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0059140901 | 2002-05-22 | 138.365 | +68.832 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0203170101 | 2004-05-16 | 138.505 | +65.396 | 10.4               | 548                    | 9.9                | 557                    | $6.85^{+0.97}_{-1.69} \pm 0.71$ | 0.5675             | $0.32^{+0.64}_{-0.32} \pm 1.02$ | 1.78                                                | 1.33                                                     | Y           |
| 0154350201 | 2003-01-07 | 138.516 | -45.768 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0154350101 | 2002-02-02 | 138.516 | -45.770 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0203270201 | 2004-06-01 | 138.910 | +68.927 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0110890401 | 2000-12-14 | 138.930 | -85.088 | 15.8               | 469                    | 16.1               | 396                    | $6.32^{+0.97}_{-1.09} \pm 0.25$ | 0.5675             | $0.97^{+0.54}_{-0.53} \pm 0.48$ | 1.50                                                | 2.16                                                     | Y           |
| 0110890701 | 2002-06-30 | 139.077 | -85.054 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0025540401 | 2001-09-19 | 139.680 | +33.892 | 5.8                | 581                    | 6.5                | 587                    | $5.04^{+1.43}_{-1.58} \pm 0.39$ | 0.5625             | $1.26^{+0.73}_{-0.74} \pm 0.32$ | 1.44                                                | 2.49                                                     | Y           |
| 0147390701 | 2003-11-24 | 140.154 | +78.949 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0084140501 | 2002-02-04 | 140.203 | -24.899 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0084140101 | 2001-02-14 | 140.204 | -24.899 | 36.6               | 559                    | 36.4               | 558                    | $6.30^{+0.45}_{-0.57} \pm 1.47$ | 0.5675             | $1.89^{+0.39}_{-0.21} \pm 0.21$ | 1.60                                                | 2.13                                                     | N           |
| 0026340301 | 2002-04-11 | 140.222 | +43.587 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0049340301 | 2002-04-27 | 140.271 | +59.959 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0123100201 | 2000-04-12 | 140.277 | +29.552 | 7.2                | 387                    | 6.2                | 474                    | $5.69^{+1.88}_{-1.78} \pm 0.68$ | 0.5625             | $2.08^{+0.96}_{-0.89} \pm 0.61$ | 1.34                                                | 2.63                                                     | Y           |
| 0144230101 | 2003-04-26 | 140.340 | +26.092 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                      | ...         |
| 0504100901 | 2007-06-21 | 140.811 | +62.383 | 5.6                | 352                    | 5.4                | 590                    | $6.17^{+1.98}_{-1.36} \pm 0.31$ | 0.5725             | $0.00^{+0.66}_{$                |                                                     |                                                          |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0200470101 | 2004-04-15 | 144.296 | +32.707 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551851301 | 2009-03-04 | 144.821 | +25.102 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551850401 | 2008-10-09 | 144.864 | +25.128 | 28.8               | 406                    | 28.6               | 440                    | $1.25^{+0.57}_{-0.29} \pm 0.22$ | 0.5825             | $0.16^{+0.41}_{-0.16} \pm 0.19$ | 1.92                                                | 1.34                                              | Y           |
| 0028540601 | 2002-03-10 | 145.083 | +29.427 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0028540201 | 2001-09-19 | 145.084 | +29.465 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0025540101 | 2001-06-26 | 145.211 | -79.648 | 6.9                | 499                    | 7.3                | 500                    | $5.37^{+1.25}_{-1.33} \pm 0.37$ | 0.5675             | $1.25^{+0.69}_{-0.65} \pm 0.55$ | 1.19                                                | 1.56                                              | N           |
| 0502430701 | 2007-10-26 | 145.828 | +43.062 | 8.6                | 417                    | 9.2                | 577                    | $2.44^{+1.52}_{-0.95} \pm 0.23$ | 0.5625             | $0.62^{+1.01}_{-0.55} \pm 0.10$ | 1.43                                                | 1.64                                              | N           |
| 0502430201 | 2007-09-30 | 145.830 | +43.062 | 38.1               | 342                    | 40.6               | 575                    | $1.18^{+0.85}_{-0.58} \pm 0.17$ | 0.5575             | $0.14^{+0.42}_{-0.14} \pm 0.06$ | 1.05                                                | 2.34                                              | N           |
| 0112550201 | 2002-02-01 | 146.396 | -20.388 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0510010801 | 2007-08-21 | 146.403 | -20.350 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0141150201 | 2002-10-31 | 146.432 | +28.541 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147920101 | 2003-06-15 | 147.050 | -76.656 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200431301 | 2004-11-04 | 147.117 | +60.334 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200430501 | 2004-05-02 | 147.160 | +60.303 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0556211401 | 2008-11-20 | 147.500 | +51.579 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0156360101 | 2003-06-11 | 147.793 | +70.373 | 21.1               | 506                    | 22.5               | 584                    | $8.57^{+1.14}_{-0.77} \pm 0.78$ | 0.5675             | $1.44^{+0.42}_{-0.43} \pm 1.24$ | 1.58                                                | 2.06                                              | N           |
| 0112551501 | 2002-07-14 | 147.891 | -54.139 | 13.3               | 581                    | 13.9               | 588                    | $7.40^{+0.74}_{-0.75} \pm 0.96$ | 0.5725             | $1.20^{+0.43}_{-0.44} \pm 1.28$ | 1.74                                                | 1.40                                              | N           |
| 0302400301 | 2005-04-11 | 148.018 | +28.400 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200430701 | 2004-01-15 | 148.222 | -57.936 | 10.1               | 493                    | 10.3               | 498                    | $4.21^{+1.19}_{-0.95} \pm 0.57$ | 0.5675             | $1.21^{+0.69}_{-0.55} \pm 0.99$ | 1.34                                                | 1.38                                              | Y           |
| 0554121301 | 2008-11-10 | 148.476 | +51.459 | 35.4               | 502                    | 35.9               | 517                    | $3.34^{+0.80}_{-0.81} \pm 0.51$ | 0.5625             | $0.64^{+0.41}_{-0.35} \pm 0.11$ | 0.72                                                | 1.64                                              | N           |
| 0554121001 | 2008-10-15 | 148.484 | +51.462 | 13.0               | 427                    | 12.7               | 592                    | $2.72^{+1.26}_{-0.86} \pm 0.63$ | 0.5725             | $0.69^{+0.65}_{-0.54} \pm 0.52$ | 1.71                                                | 1.42                                              | N           |
| 0554120101 | 2008-10-11 | 148.487 | +51.462 | 22.6               | 425                    | 24.3               | 518                    | $3.24^{+0.87}_{-1.07} \pm 0.20$ | 0.5625             | $0.00^{+0.42}_{-0.00} \pm 0.00$ | 1.07                                                | 2.49                                              | N           |
| 0554120701 | 2009-04-11 | 148.499 | +51.426 | 12.8               | 429                    | 14.7               | 591                    | $1.90^{+0.97}_{-0.96} \pm 0.36$ | 0.5725             | $0.36^{+0.60}_{-0.36} \pm 0.17$ | 1.35                                                | 2.09                                              | N           |
| 0554500601 | 2008-10-06 | 148.553 | +19.658 | 12.4               | 491                    | 13.3               | 510                    | $1.32^{+1.26}_{-1.08} \pm 0.48$ | 0.5525             | $0.43^{+0.58}_{-0.43} \pm 0.19$ | 0.89                                                | 1.55                                              | N           |
| 0306050701 | 2005-04-04 | 148.730 | +49.638 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0606320401 | 2009-05-11 | 148.917 | +70.070 | 15.3               | 386                    | 15.6               | 474                    | $3.65^{+1.83}_{-0.86} \pm 2.67$ | 0.5675             | $0.02^{+0.86}_{-0.02} \pm 1.20$ | 0.81                                                | 1.60                                              | N           |
| 0606321401 | 2009-05-17 | 148.921 | +70.071 | 14.6               | 314                    | 15.1               | 473                    | $2.95^{+1.36}_{-1.10} \pm 0.98$ | 0.5725             | $0.24^{+0.74}_{-0.24} \pm 0.77$ | 1.02                                                | 1.75                                              | N           |
| 0606321901 | 2009-06-02 | 148.926 | +70.074 | 19.3               | 314                    | 21.9               | 473                    | $1.88 \pm 0.92 \pm 0.24$        | 0.5775             | $0.87^{+0.58}_{-0.71} \pm 0.25$ | 1.63                                                | 2.47                                              | N           |
| 0606322201 | 2009-06-10 | 148.932 | +70.076 | 8.3                | 314                    | 8.3                | 399                    | $4.71^{+2.08}_{-1.86} \pm 0.63$ | 0.5525             | $0.26^{+1.00}_{-0.26} \pm 0.26$ | 1.91                                                | 2.32                                              | Y           |
| 0147511301 | 2002-10-27 | 148.971 | +53.326 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0556211201 | 2008-05-09 | 149.033 | +50.968 | 8.0                | 491                    | 8.3                | 492                    | $5.33^{+0.97}_{-1.89} \pm 0.83$ | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.00$ | 1.14                                                | 1.34                                              | N           |
| 0139760101 | 2003-02-24 | 149.173 | +4.114  | 15.7               | 581                    | 16.8               | 514                    | $1.74^{+0.77}_{-0.80} \pm 0.43$ | 0.5575             | $0.44^{+0.40}_{-0.43} \pm 0.12$ | 1.51                                                | 1.97                                              | Y           |
| 0147511801 | 2002-12-06 | 149.242 | +53.157 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147511701 | 2002-12-04 | 149.267 | +53.157 | 17.5               | 544                    | 17.5               | 476                    | $5.94^{+0.93}_{-0.77} \pm 1.11$ | 0.5675             | $0.86^{+0.40}_{-0.46} \pm 0.17$ | 1.91                                                | 1.99                                              | Y           |
| 0123700101 | 2000-04-27 | 149.294 | +53.130 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0123700401 | 2000-05-02 | 149.296 | +53.130 | 11.7               | 554                    | 13.3               | 555                    | $5.22^{+1.09}_{-0.87} \pm 0.32$ | 0.5775             | $0.98^{+0.56}_{-0.55} \pm 0.62$ | 0.79                                                | 2.14                                              | N           |
| 0147511001 | 2002-10-21 | 149.358 | +53.109 | 58.8               | 557                    | 60.0               | 494                    | $5.97^{+0.48}_{-0.65} \pm 0.56$ | 0.5625             | $0.87 \pm 0.25 \pm 0.17$        | 1.14                                                | 2.39                                              | N           |
| 0556211301 | 2008-11-20 | 149.405 | +51.459 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147510101 | 2002-10-15 | 149.534 | +53.009 | 23.3               | 569                    | 25.8               | 507                    | $5.60 \pm 0.68 \pm 0.30$        | 0.5675             | $0.45 \pm 0.37 \pm 0.38$        | 1.23                                                | 2.50                                              | Y           |
| 0201770201 | 2005-02-20 | 149.740 | -19.289 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0164560901 | 2004-09-12 | 150.573 | +29.230 | 52.5               | 526                    | 52.0               | 526                    | $4.48^{+0.57}_{-0.54} \pm 0.29$ | 0.5625             | $0.60^{+0.27}_{-0.24} \pm 0.06$ | 0.33                                                | 1.85                                              | Y           |
| 0406630201 | 2007-04-12 | 151.186 | +48.245 | 7.7                | 272                    | 8.0                | 428                    | $0.92^{+1.97}_{-0.92} \pm 1.06$ | 0.5425             | $0.61^{+0.94}_{-0.61} \pm 0.19$ | 1.29                                                | 2.08                                              | N           |
| 0075940101 | 2001-01-17 | 151.478 | -32.311 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0303260201 | 2005-04-07 | 151.607 | +51.006 | 43.3               | 415                    | 43.6               | 590                    | $5.15^{+0.65}_{-0.51} \pm 0.51$ | 0.5625             | $0.72^{+0.32}_{-0.29} \pm 0.49$ | 1.55                                                | 1.82                                              | N           |
| 0303260501 | 2005-05-20 | 151.620 | +51.011 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0150180101 | 2003-07-25 | 151.793 | -38.770 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0306060201 | 2005-11-13 | 151.829 | +70.103 | 53.0               | 413                    | 54.2               | 512                    | $4.90^{+0.64}_{-0.57} \pm 0.52$ | 0.5625             | $0.00^{+0.26}_{-0.00} \pm 0.34$ | 1.60                                                | 1.92                                              | N           |
| 0306060301 | 2005-11-15 | 151.831 | +70.103 | 15.0               | 418                    | 15.5               | 512                    | $3.47^{+1.41}_{-0.70} \pm 0.57$ | 0.5725             | $0.15^{+0.62}_{-0.15} \pm 0.15$ | 1.35                                                | 2.05                                              | N           |
| 0148590301 | 2003-08-31 | 151.832 | +15.690 | 6.7                | 398                    | 7.0                | 475                    | $2.92^{+1.00}_{-1.34} \pm 0.30$ | 0.5725             | $0.00^{+0.61}_{-0.00} \pm 0.40$ | 1.30                                                | 2.29                                              | N           |
| 0553790401 | 2009-01-08 | 152.010 | -45.189 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0094360201 | 2001-02-10 | 152.295 | -18.069 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553880301 | 2008-11-18 | 154.514 | +77.171 | 12.1               | 412                    | 12.0               | 502                    | $3.60^{+1.01}_{-0.98} \pm 0.22$ | 0.5675             | $0.00^{+0.55}_{-0.00} \pm 0.78$ | 1.76                                                | 1.17                                              | Y           |
| 0553880201 | 2008-11-16 | 154.517 | +77.171 | 25.6               | 486                    | 26.9               | 502                    | $2.84^{+0.87}_{-0.68} \pm 0.28$ | 0.5675             | $0.13^{+0.44}_{-0.13} \pm 0.13$ | 1.66                                                | 1.84                                              | N           |



| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
|            | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                            | (12)                                                | (13)                                              | (14)        |
| 0109661101 | 2002-12-25 | 155.030 | -64.048 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0109661201 | 2002-07-16 | 155.049 | -64.011 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551200301 | 2008-05-09 | 155.329 | +45.507 | 22.5               | 380                    | 25.0               | 385                    | $2.85^{+1.21}_{-0.98} \pm 0.84$  | 0.5575             | $0.00^{+0.30}_{-0.00} \pm 0.25$ | 1.38                                                | 2.54                                              | N           |
| 0206530201 | 2005-02-11 | 156.316 | -22.120 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0110990101 | 2002-02-10 | 156.761 | -39.129 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0085170101 | 2001-11-11 | 156.809 | +49.507 | 27.4               | 511                    | 27.4               | 589                    | $6.93 \pm 0.63 \pm 0.52$         | 0.5675             | $1.51^{+0.34}_{-0.33} \pm 1.21$ | 1.09                                                | 2.68                                              | N           |
| 0401790201 | 2007-02-26 | 157.250 | +3.401  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0504101301 | 2007-06-11 | 158.152 | +63.571 | 17.6               | 420                    | 17.7               | 513                    | $3.23^{+1.47}_{-0.92} \pm 0.23$  | 0.5625             | $0.34^{+0.68}_{-0.34} \pm 0.04$ | 1.09                                                | 2.02                                              | N           |
| 0503670101 | 2007-07-31 | 158.776 | -21.557 | 20.8               | 422                    | 23.0               | 588                    | $3.81^{+0.78}_{-0.77} \pm 0.43$  | 0.5725             | $0.73^{+0.43}_{-0.44} \pm 0.42$ | 0.90                                                | 2.45                                              | N           |
| 0556214801 | 2008-11-04 | 159.477 | +46.743 | 8.4                | 429                    | 8.3                | 517                    | $3.85 \pm 1.34 \pm 0.22$         | 0.5625             | $0.47^{+0.71}_{-0.47} \pm 0.66$ | 1.22                                                | 1.57                                              | N           |
| 0503480401 | 2007-08-16 | 159.648 | -43.611 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0500940201 | 2007-11-01 | 159.718 | +50.442 | 9.3                | 352                    | 9.4                | 589                    | $3.02^{+1.30}_{-1.35} \pm 0.33$  | 0.5625             | $1.02 \pm 0.74 \pm 0.31$        | 1.79                                                | 2.02                                              | ...         |
| 0554920301 | 2008-08-07 | 159.827 | -57.683 | 15.8               | 316                    | 15.8               | 476                    | $1.81^{+1.12}_{-1.01} \pm 0.10$  | 0.5725             | $0.30^{+0.61}_{-0.30} \pm 0.03$ | 1.13                                                | 2.15                                              | N           |
| 0070340201 | 2001-05-10 | 159.911 | +50.084 | 18.6               | 575                    | 18.7               | 501                    | $10.28^{+0.92}_{-0.82} \pm 0.62$ | 0.5675             | $3.18^{+0.44}_{-0.48} \pm 1.19$ | 1.35                                                | 1.78                                              | N           |
| 0550960101 | 2008-12-16 | 160.327 | -73.373 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112520101 | 2002-04-10 | 160.534 | +44.824 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112520201 | 2002-04-17 | 160.536 | +44.825 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200340101 | 2004-06-02 | 160.579 | +81.664 | 64.0               | 484                    | 65.0               | 488                    | $5.34^{+0.51}_{-0.65} \pm 0.25$  | 0.5675             | $0.09^{+0.26}_{-0.09} \pm 0.65$ | 1.77                                                | 1.74                                              | N           |
| 0556214701 | 2008-11-04 | 161.392 | +45.658 | 8.2                | 422                    | 8.2                | 500                    | $3.53^{+1.09}_{-1.12} \pm 0.66$  | 0.5725             | $0.86^{+0.61}_{-0.67} \pm 0.51$ | 1.07                                                | 1.33                                              | N           |
| 0083950101 | 2002-02-12 | 161.410 | -13.654 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0303720601 | 2005-04-25 | 161.440 | +54.439 | 22.7               | 380                    | 23.3               | 396                    | $4.15^{+1.39}_{-0.81} \pm 0.41$  | 0.5725             | $0.16^{+0.49}_{-0.16} \pm 0.31$ | 1.26                                                | 2.28                                              | N           |
| 0303720201 | 2005-04-13 | 161.441 | +54.439 | 25.5               | 309                    | 25.6               | 470                    | $5.65^{+1.31}_{-0.83} \pm 2.39$  | 0.5625             | $0.56^{+0.65}_{-0.41} \pm 0.72$ | 1.64                                                | 2.10                                              | Y           |
| 0303720301 | 2005-04-19 | 161.441 | +54.439 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0100240301 | 2000-09-04 | 161.481 | +5.043  | 12.5               | 578                    | 13.5               | 584                    | $2.06^{+0.86}_{-0.84} \pm 0.26$  | 0.5775             | $0.80^{+0.47}_{-0.55} \pm 0.28$ | 1.44                                                | 2.36                                              | N           |
| 0404050101 | 2006-10-18 | 161.902 | +30.062 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112522701 | 2003-01-03 | 162.003 | +81.540 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0142830101 | 2003-11-30 | 162.015 | +81.547 | 43.2               | 526                    | 43.1               | 529                    | $6.54^{+0.56}_{-0.86} \pm 0.31$  | 0.5625             | $0.66^{+0.27}_{-0.35} \pm 0.55$ | 1.67                                                | 1.94                                              | Y           |
| 0201550201 | 2004-02-13 | 162.286 | -16.709 | 28.7               | 576                    | 29.7               | 502                    | $2.52^{+0.89}_{-0.72} \pm 0.38$  | 0.5675             | $1.29^{+0.42}_{-0.39} \pm 0.11$ | 1.44                                                | 2.35                                              | N           |
| 0502020201 | 2007-06-22 | 162.512 | -72.072 | 5.4                | 154                    | 5.3                | 350                    | $3.73^{+2.75}_{-2.44} \pm 1.43$  | 0.5475             | $0.11^{+1.40}_{-0.11} \pm 0.97$ | 1.83                                                | 1.56                                              | Y           |
| 0502020101 | 2007-06-18 | 162.597 | -72.142 | 20.6               | 203                    | 22.2               | 344                    | $2.85^{+1.34}_{-1.20} \pm 0.60$  | 0.5725             | $0.43^{+0.71}_{-0.43} \pm 0.19$ | 1.54                                                | 2.27                                              | N           |
| 0556213401 | 2008-06-02 | 162.661 | +57.453 | 10.2               | 429                    | 10.3               | 590                    | $3.13^{+1.34}_{-0.53} \pm 1.30$  | 0.5675             | $0.48^{+0.68}_{-0.48} \pm 0.64$ | 1.01                                                | 1.67                                              | N           |
| 0200960101 | 2005-03-28 | 162.721 | +41.656 | 56.3               | 458                    | 56.0               | 471                    | $3.25^{+0.59}_{-0.46} \pm 0.49$  | 0.5675             | $0.29^{+0.30}_{-0.29} \pm 0.26$ | 1.32                                                | 1.55                                              | N           |
| 0560181001 | 2009-03-02 | 162.786 | +1.160  | 28.5               | 502                    | 28.9               | 591                    | $1.05^{+1.07}_{-1.05} \pm 0.57$  | 0.5525             | $1.19^{+0.52}_{-0.53} \pm 0.17$ | 1.08                                                | 1.74                                              | N           |
| 0112190101 | 2002-08-23 | 162.794 | -34.818 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0201860301 | 2004-07-18 | 163.308 | -45.346 | 7.0                | 581                    | 6.9                | 589                    | $3.99^{+1.03}_{-1.26} \pm 0.70$  | 0.5575             | $1.43^{+0.59}_{-0.64} \pm 0.48$ | 1.92                                                | 1.44                                              | Y           |
| 0201020201 | 2004-07-04 | 163.503 | -56.923 | 44.0               | 463                    | 45.6               | 485                    | $2.31^{+0.73}_{-0.60} \pm 0.18$  | 0.5625             | $0.36^{+0.34}_{-0.28} \pm 0.05$ | 1.37                                                | 2.20                                              | N           |
| 0201230301 | 2004-02-14 | 164.144 | -34.474 | 10.9               | 513                    | 10.7               | 515                    | $1.95^{+0.93}_{-1.03} \pm 0.55$  | 0.5625             | $1.02^{+0.50}_{-0.52} \pm 0.18$ | 1.62                                                | 1.69                                              | N           |
| 0143150301 | 2003-04-17 | 164.587 | +42.392 | 5.9                | 573                    | 6.0                | 580                    | $3.89^{+1.18}_{-1.56} \pm 0.40$  | 0.5725             | $0.42^{+0.71}_{-0.42} \pm 0.48$ | 1.44                                                | 2.37                                              | N           |
| 0143150601 | 2003-05-18 | 164.594 | +42.394 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0109080801 | 2002-05-14 | 164.695 | +64.478 | 15.0               | 474                    | 15.2               | 470                    | $8.47^{+0.99}_{-0.95} \pm 0.24$  | 0.5675             | $0.57^{+0.52}_{-0.48} \pm 0.87$ | 1.85                                                | 1.70                                              | Y           |
| 0201130501 | 2004-11-15 | 165.010 | +44.364 | 11.0               | 295                    | 11.1               | 247                    | $7.06^{+2.86}_{-2.03} \pm 1.13$  | 0.5525             | $1.98^{+1.11}_{-1.04} \pm 0.32$ | 1.89                                                | 2.36                                              | Y           |
| 0110660401 | 2000-11-23 | 165.095 | +66.599 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0300170101 | 2006-02-19 | 165.238 | -31.433 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0206340201 | 2004-04-23 | 165.505 | +52.435 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0502220301 | 2007-10-22 | 165.745 | +36.257 | 9.1                | 452                    | 8.9                | 549                    | $3.20^{+1.50}_{-1.44} \pm 0.40$  | 0.5475             | $0.92^{+0.75}_{-0.71} \pm 0.41$ | 1.82                                                | 1.61                                              | Y           |
| 0092800101 | 2001-10-30 | 165.749 | +36.259 | 15.6               | 503                    | 15.8               | 581                    | $4.63^{+0.73}_{-0.76} \pm 0.42$  | 0.5725             | $1.22^{+0.45}_{-0.43} \pm 0.79$ | 1.08                                                | 2.10                                              | N           |
| 0502220201 | 2007-10-06 | 165.759 | +36.259 | 49.0               | 475                    | 55.7               | 493                    | $1.48^{+0.80}_{-0.47} \pm 0.45$  | 0.5575             | $0.00^{+0.17}_{-0.00} \pm 0.00$ | 1.21                                                | 2.47                                              | N           |
| 0092800201 | 2002-04-28 | 165.763 | +36.223 | 51.3               | 566                    | 51.7               | 580                    | $4.52^{+0.45}_{-0.49} \pm 0.48$  | 0.5625             | $1.00^{+0.23}_{-0.27} \pm 0.54$ | 1.30                                                | 1.90                                              | Y           |
| 0107860201 | 2001-05-08 | 165.788 | +65.445 | 17.5               | 499                    | 18.0               | 497                    | $6.16^{+0.40}_{-0.74} \pm 0.27$  | 0.5725             | $0.96 \pm 0.43 \pm 0.72$        | 1.37                                                | 1.54                                              | N           |
| 0109461701 | 2002-05-01 | 165.840 | +62.130 | 6.5                | 471                    | 6.4                | 476                    | $6.92^{+1.39}_{-1.32} \pm 0.35$  | 0.5675             | $0.07^{+0.75}_{-0.07} \pm 1.74$ | 1.24                                                | 1.42                                              | N           |
| 0502640201 | 2008-04-07 | 166.007 | +13.799 | 15.0               | 315                    | 13.8               | 400                    | $1.37^{+1.26}_{-1.08} \pm 0.19$  | 0.5675             | $0.99^{+0.69}_{-0.71} \pm 0.06$ | 1.55                                                | 2.19                                              | Y           |
| 0404968601 | 2007-01-16 | 166.366 | -59.239 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0304070101 | 2005-11-01 | 166.398 | +63.649 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0094780101 | 2000-09-01 | 166.440 | -23.265 | 29.2               | 565                    | 29.6               | 567                    | $3.78^{+0.70}_{-0.78} \pm 0.63$ | 0.5625             | $3.07^{+0.39}_{-0.41} \pm 0.13$ | 1.21                                                | 1.99                                              | N           |
| 0404968501 | 2007-01-20 | 166.876 | -59.034 | 11.9               | 423                    | 12.8               | 585                    | $2.27^{+1.15}_{-0.91} \pm 1.14$ | 0.5675             | $0.38^{+0.56}_{-0.38} \pm 0.35$ | 1.11                                                | 2.12                                              | N           |
| 0556210401 | 2008-10-15 | 166.882 | +45.200 | 13.1               | 409                    | 12.9               | 579                    | $2.72^{+1.14}_{-0.53} \pm 0.21$ | 0.5775             | $0.63^{+0.57}_{-0.58} \pm 0.27$ | 1.22                                                | 1.69                                              | N           |
| 0148742101 | 2003-04-27 | 166.894 | +33.568 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0411980201 | 2006-07-03 | 167.357 | -64.183 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553911901 | 2008-07-04 | 167.384 | -58.791 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404968001 | 2007-01-10 | 167.537 | -59.192 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0301340101 | 2006-04-12 | 167.648 | +37.517 | 12.8               | 491                    | 12.9               | 515                    | $3.39^{+1.23}_{-1.07} \pm 0.29$ | 0.5675             | $1.10 \pm 0.67 \pm 0.32$        | 0.83                                                | 2.11                                              | N           |
| 0404967601 | 2007-01-10 | 167.694 | -59.556 | 7.7                | 428                    | 8.4                | 514                    | $2.66^{+1.58}_{-1.28} \pm 1.18$ | 0.5625             | $0.00^{+0.62}_{-0.00} \pm 0.17$ | 1.83                                                | 2.19                                              | Y           |
| 0148500201 | 2003-07-23 | 167.757 | -57.964 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553911401 | 2008-07-03 | 167.851 | -59.882 | 11.2               | 249                    | 13.3               | 400                    | $2.51^{+1.59}_{-1.42} \pm 2.28$ | 0.5475             | $0.00^{+0.46}_{-0.00} \pm 0.31$ | 1.72                                                | 2.63                                              | Y           |
| 0404968301 | 2007-01-12 | 167.881 | -58.619 | 8.9                | 503                    | 8.6                | 518                    | $1.44^{+1.31}_{-1.13} \pm 0.34$ | 0.5675             | $0.26^{+0.67}_{-0.26} \pm 0.38$ | 0.47                                                | 1.77                                              | N           |
| 0205370201 | 2004-05-10 | 168.040 | +65.136 | 26.8               | 504                    | 27.8               | 581                    | $5.68 \pm 0.63 \pm 0.21$        | 0.5675             | $0.75^{+0.35}_{-0.34} \pm 0.64$ | 1.16                                                | 1.89                                              | N           |
| 0404967901 | 2007-01-10 | 168.041 | -58.983 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203540601 | 2004-08-25 | 168.067 | -19.150 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147110201 | 2003-07-24 | 168.071 | -57.643 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0201040101 | 2004-10-22 | 168.111 | +55.051 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553911601 | 2008-07-03 | 168.199 | -59.309 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203542001 | 2004-09-12 | 168.218 | -16.321 | 29.8               | 571                    | 30.2               | 468                    | $1.48^{+0.60}_{-0.57} \pm 0.22$ | 0.5525             | $0.14^{+0.31}_{-0.14} \pm 0.08$ | 0.21                                                | 1.90                                              | N           |
| 0200370101 | 2004-08-15 | 168.334 | -14.914 | 85.4               | 571                    | 87.8               | 495                    | $2.20 \pm 0.63 \pm 0.48$        | 0.5575             | $0.46 \pm 0.31 \pm 0.18$        | 0.71                                                | 2.37                                              | Y           |
| 0404967101 | 2007-01-08 | 168.366 | -59.709 | 10.5               | 425                    | 11.3               | 514                    | $3.76^{+1.00}_{-1.21} \pm 0.64$ | 0.5575             | $0.62^{+0.56}_{-0.57} \pm 0.35$ | 1.86                                                | 1.34                                              | N           |
| 0404967801 | 2007-01-10 | 168.538 | -58.772 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147110101 | 2003-07-24 | 168.550 | -57.432 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0400070301 | 2006-11-01 | 168.597 | +28.401 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404966801 | 2007-01-06 | 168.598 | -60.045 | 14.0               | 413                    | 14.0               | 501                    | $2.06^{+0.83}_{-0.79} \pm 0.30$ | 0.5725             | $0.57^{+0.59}_{-0.52} \pm 0.75$ | 1.23                                                | 1.37                                              | N           |
| 0400070201 | 2006-09-30 | 168.602 | +28.401 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0103862101 | 2001-04-26 | 168.608 | +28.364 | 5.7                | 473                    | 5.6                | 397                    | $5.13^{+1.76}_{-1.55} \pm 1.25$ | 0.5475             | $1.61^{+0.87}_{-0.80} \pm 0.52$ | 1.19                                                | 1.77                                              | N           |
| 0502091001 | 2008-04-26 | 168.609 | +28.364 | 61.6               | 313                    | 62.2               | 471                    | $2.26^{+0.61}_{-0.55} \pm 1.05$ | 0.5675             | $0.00^{+0.14}_{-0.00} \pm 0.00$ | 1.34                                                | 2.13                                              | N           |
| 0404967401 | 2007-01-08 | 168.701 | -59.134 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0086360301 | 2001-03-11 | 168.711 | -15.484 | 23.2               | 555                    | 22.7               | 563                    | $2.90^{+0.44}_{-0.68} \pm 0.18$ | 0.5625             | $0.06^{+0.37}_{-0.06} \pm 0.07$ | 1.12                                                | 2.64                                              | Y           |
| 0404967001 | 2007-01-08 | 168.767 | -59.433 | 14.2               | 428                    | 14.0               | 514                    | $2.74^{+0.82}_{-0.87} \pm 0.18$ | 0.5775             | $0.49^{+0.58}_{-0.49} \pm 0.66$ | 1.72                                                | 1.48                                              | N           |
| 0401270401 | 2007-04-18 | 168.871 | +32.951 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203840101 | 2004-01-19 | 168.965 | -65.882 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112372001 | 2003-01-07 | 169.015 | -59.636 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112371701 | 2000-08-08 | 169.020 | -59.598 | 17.2               | 581                    | 14.5               | 590                    | $3.72^{+0.82}_{-0.83} \pm 0.32$ | 0.5625             | $0.42^{+0.41}_{-0.39} \pm 0.25$ | 1.20                                                | 2.46                                              | N           |
| 0404967701 | 2007-01-10 | 169.030 | -58.559 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112370601 | 2002-08-12 | 169.161 | -59.993 | 19.1               | 588                    | 19.6               | 514                    | $5.63^{+0.78}_{-0.87} \pm 0.33$ | 0.5625             | $1.63^{+0.40}_{-0.38} \pm 0.62$ | 1.82                                                | 1.74                                              | Y           |
| 0037981101 | 2002-07-15 | 169.180 | -57.583 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404966701 | 2006-07-04 | 169.196 | -60.300 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404967301 | 2007-01-08 | 169.198 | -58.921 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404966901 | 2007-01-07 | 169.263 | -59.219 | 5.6                | 425                    | 6.0                | 513                    | $2.15^{+1.52}_{-1.35} \pm 0.31$ | 0.5675             | $0.00^{+0.47}_{-0.00} \pm 0.00$ | 1.17                                                | 1.58                                              | N           |
| 0553911501 | 2009-01-01 | 169.265 | -59.220 | 12.8               | 425                    | 13.0               | 587                    | $3.11^{+1.07}_{-0.93} \pm 0.23$ | 0.5675             | $0.27^{+0.60}_{-0.27} \pm 0.38$ | 0.83                                                | 1.16                                              | N           |
| 0404960301 | 2006-07-06 | 169.488 | -57.006 | 5.3                | 425                    | 5.6                | 510                    | $2.54^{+1.83}_{-1.47} \pm 0.75$ | 0.5575             | $0.00^{+0.45}_{-0.00} \pm 0.00$ | 1.17                                                | 2.15                                              | N           |
| 0037982501 | 2003-01-25 | 169.511 | -58.344 | 5.9                | 587                    | 5.8                | 587                    | $3.61^{+1.43}_{-1.27} \pm 0.57$ | 0.5475             | $1.52^{+0.71}_{-0.67} \pm 0.61$ | 1.85                                                | 1.66                                              | Y           |
| 0200480401 | 2005-01-28 | 169.519 | -54.635 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112370401 | 2000-08-06 | 169.619 | -59.340 | 10.3               | 585                    | 10.7               | 590                    | $2.94^{+0.93}_{-0.89} \pm 0.27$ | 0.5625             | $0.38^{+0.46}_{-0.38} \pm 0.20$ | 1.55                                                | 2.26                                              | N           |
| 0146990201 | 2003-04-25 | 169.622 | +60.666 | 10.4               | 586                    | 10.5               | 509                    | $5.34^{+1.08}_{-1.01} \pm 0.44$ | 0.5625             | $1.02^{+0.59}_{-0.50} \pm 0.74$ | 1.91                                                | 1.94                                              | N           |
| 0037981201 | 2002-07-15 | 169.654 | -57.368 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0037982401 | 2003-01-25 | 169.683 | -58.705 | 14.2               | 587                    | 14.1               | 588                    | $1.23^{+0.61}_{-0.59} \pm 0.76$ | 0.5925             | $0.89^{+0.47}_{-0.48} \pm 0.82$ | 1.69                                                | 1.70                                              | Y           |
| 0556213601 | 2008-08-08 | 169.747 | -52.929 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112370101 | 2000-07-31 | 169.763 | -59.733 | 28.6               | 580                    | 31.2               | 580                    | $4.30^{+0.49}_{-0.75} \pm 1.29$ | 0.5625             | $1.62^{+0.30}_{-0.28} \pm 0.16$ | 1.69                                                | 2.32                                              | Y           |
| 0112371001 | 2000-08-02 | 169.763 | -59.732 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404966501 | 2006-08-09 | 169.896 | -60.446 | 8.8                | 419                    | 9.1                | 590                    | $2.99^{+1.50}_{-1.18} \pm 2.01$ | 0.5625             | $0.39^{+0.72}_{-0.39} \pm 0.50$ | 1.03                                                | 2.54                                              | N           |

[illegible]

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0112680401 | 2002-02-02 | 172.692 | -57.736 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203541801 | 2004-08-13 | 172.797 | -14.421 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0553910501 | 2008-08-09 | 172.844 | -58.997 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203541901 | 2004-08-14 | 172.888 | -14.852 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0109520201 | 2002-01-29 | 172.893 | -58.093 | 23.8               | 503                    | 23.9               | 584                    | $2.79^{+0.53}_{-0.51} \pm 1.61$ | 0.5725             | $0.64^{+0.35}_{-0.31} \pm 0.88$ | 0.89                                                | 1.78                                                    | N           |
| 0112300101 | 2002-07-13 | 173.017 | -70.337 | 15.8               | 525                    | 16.5               | 463                    | $4.52^{+0.82}_{-0.90} \pm 0.84$ | 0.5675             | $1.66^{+0.51}_{-0.53} \pm 0.05$ | 1.71                                                | 2.34                                                    | Y           |
| 0404965301 | 2006-07-11 | 173.048 | -59.353 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0553440101 | 2008-05-07 | 173.086 | +43.961 | 9.3                | 351                    | 9.6                | 514                    | $3.58^{+1.39}_{-1.32} \pm 0.89$ | 0.5625             | $0.57^{+0.71}_{-0.57} \pm 0.39$ | 1.39                                                | 1.65                                                    | N           |
| 0111110701 | 2001-08-14 | 173.104 | -58.412 | 10.3               | 514                    | 10.6               | 590                    | $1.45^{+0.73}_{-0.70} \pm 1.44$ | 0.5925             | $0.44^{+0.59}_{-0.44} \pm 0.87$ | 0.77                                                | 1.96                                                    | N           |
| 0404969201 | 2006-07-26 | 173.307 | -58.769 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0553910401 | 2008-08-06 | 173.311 | -58.770 | 10.8               | 427                    | 10.8               | 590                    | $2.61^{+1.29}_{-1.19} \pm 1.04$ | 0.5475             | $0.01^{+0.61}_{-0.01} \pm 0.44$ | 1.67                                                | 1.80                                                    | N           |
| 0109540101 | 2002-12-24 | 173.355 | -70.588 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0501500101 | 2008-02-22 | 173.510 | -13.706 | 17.4               | 414                    | 18.4               | 510                    | $1.18^{+0.95}_{-0.84} \pm 0.18$ | 0.5525             | $0.00^{+0.36}_{-0.00} \pm 0.00$ | 1.46                                                | 1.63                                                    | N           |
| 0404965201 | 2006-07-11 | 173.518 | -59.125 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0406610501 | 2007-05-04 | 173.552 | +65.922 | 14.6               | 344                    | 14.7               | 439                    | $4.31^{+1.65}_{-1.08} \pm 2.29$ | 0.5675             | $0.00^{+0.31}_{-0.00} \pm 0.27$ | 1.49                                                | 2.15                                                    | N           |
| 0111110101 | 2001-07-06 | 173.552 | -58.184 | 17.8               | 442                    | 18.2               | 514                    | $3.05^{+1.01}_{-0.79} \pm 0.31$ | 0.5525             | $0.28^{+0.40}_{-0.28} \pm 0.25$ | 1.50                                                | 1.90                                                    | N           |
| 0503630201 | 2007-11-11 | 173.662 | +56.052 | 14.6               | 350                    | 15.1               | 512                    | $3.24^{+1.30}_{-0.85} \pm 0.87$ | 0.5675             | $0.00^{+0.49}_{-0.00} \pm 0.01$ | 1.36                                                | 1.87                                                    | Y           |
| 0404964801 | 2006-07-07 | 173.765 | -58.540 | 9.6                | 355                    | 9.6                | 517                    | $3.74 \pm 1.26 \pm 0.18$        | 0.5625             | $0.30^{+0.67}_{-0.30} \pm 0.52$ | 1.38                                                | 1.31                                                    | N           |
| 0202520201 | 2004-03-22 | 173.791 | +22.181 | 13.1               | 515                    | 13.4               | 588                    | $2.50^{+0.77}_{-0.89} \pm 1.32$ | 0.5675             | $0.24^{+0.42}_{-0.24} \pm 0.31$ | 1.63                                                | 1.64                                                    | N           |
| 0553650201 | 2008-09-23 | 173.801 | +2.618  | 5.4                | 332                    | 5.4                | 443                    | $1.27^{+1.01}_{-0.97} \pm 0.16$ | 0.5925             | $0.85^{+0.74}_{-0.75} \pm 0.11$ | 1.49                                                | 1.25                                                    | Y           |
| 0203540301 | 2004-08-22 | 174.008 | -15.899 | 15.0               | 514                    | 15.2               | 588                    | $2.60^{+0.68}_{-0.70} \pm 0.15$ | 0.5625             | $0.42^{+0.33}_{-0.34} \pm 0.08$ | 1.84                                                | 1.57                                                    | Y           |
| 0201360201 | 2004-02-29 | 174.042 | -19.847 | 28.6               | 586                    | 28.4               | 511                    | $0.09^{+0.77}_{-0.70} \pm 0.17$ | 0.5475             | $0.16^{+0.38}_{-0.16} \pm 0.07$ | 1.40                                                | 2.13                                                    | N           |
| 0203540501 | 2005-02-21 | 174.057 | -13.826 | 15.2               | 437                    | 15.6               | 510                    | $1.59^{+0.54}_{-0.52} \pm 0.11$ | 0.5875             | $0.97^{+0.41}_{-0.45} \pm 0.13$ | 1.19                                                | 1.37                                                    | N           |
| 0203390501 | 2004-06-01 | 174.208 | +63.971 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203540401 | 2005-02-21 | 174.215 | -15.732 | 26.4               | 509                    | 26.7               | 510                    | $4.98^{+0.58}_{-0.57} \pm 0.50$ | 0.5625             | $0.73^{+0.28}_{-0.29} \pm 0.17$ | 1.07                                                | 1.23                                                    | N           |
| 0404964701 | 2006-07-07 | 174.220 | -58.309 | 9.6                | 495                    | 9.5                | 518                    | $3.68^{+1.24}_{-1.16} \pm 0.56$ | 0.5625             | $0.00^{+0.71}_{-0.00} \pm 0.48$ | 1.40                                                | 1.63                                                    | N           |
| 0203540701 | 2005-02-24 | 174.233 | -13.492 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0204340201 | 2004-01-12 | 174.274 | -64.682 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152680201 | 2003-02-14 | 174.325 | -15.413 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152680501 | 2003-02-18 | 174.325 | -15.413 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152680901 | 2003-02-28 | 174.325 | -15.413 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152680301 | 2003-02-16 | 174.325 | -15.413 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152680401 | 2003-02-20 | 174.326 | -15.413 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203542101 | 2005-03-04 | 174.585 | -15.470 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0402830101 | 2006-06-29 | 174.644 | +83.169 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0052140201 | 2001-12-02 | 174.694 | +68.510 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203542201 | 2005-03-05 | 174.747 | -13.569 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0304202901 | 2006-04-10 | 175.340 | +17.353 | 5.1                | 389                    | 5.0                | 402                    | $3.64^{+2.33}_{-2.03} \pm 0.18$ | 0.5475             | $0.13^{+1.15}_{-0.13} \pm 0.50$ | 1.26                                                | 1.39                                                    | N           |
| 0203541701 | 2005-02-11 | 175.355 | -16.723 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0111430101 | 2001-07-07 | 175.480 | -75.700 | 16.8               | 474                    | 16.9               | 397                    | $3.27^{+0.98}_{-1.00} \pm 0.28$ | 0.5575             | $0.51^{+0.57}_{-0.51} \pm 0.27$ | 1.63                                                | 2.29                                                    | N           |
| 0556213301 | 2008-10-09 | 175.520 | +28.120 | 10.1               | 503                    | 9.9                | 518                    | $2.25^{+1.08}_{-0.91} \pm 0.16$ | 0.5725             | $1.73^{+0.65}_{-0.64} \pm 0.26$ | 1.42                                                | 1.26                                                    | N           |
| 0085150101 | 2001-10-15 | 175.735 | +39.195 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0304203401 | 2006-06-11 | 175.807 | +63.353 | 8.4                | 376                    | 8.3                | 395                    | $7.43^{+1.58}_{-1.56} \pm 0.11$ | 0.5725             | $0.75^{+0.80}_{-0.75} \pm 1.10$ | 1.36                                                | 1.11                                                    | N           |
| 0312190401 | 2006-01-28 | 175.875 | -49.907 | 11.1               | 426                    | 10.8               | 514                    | $1.90^{+1.28}_{-1.04} \pm 0.51$ | 0.5675             | $0.03^{+0.62}_{-0.03} \pm 0.26$ | 0.83                                                | 1.64                                                    | N           |
| 0056020301 | 2001-02-14 | 175.924 | -49.466 | 10.4               | 563                    | 10.1               | 565                    | $2.83^{+1.09}_{-0.65} \pm 1.19$ | 0.5775             | $0.74^{+0.56}_{-0.47} \pm 0.60$ | 1.08                                                | 1.84                                                    | N           |
| 0203540901 | 2005-02-25 | 175.927 | -16.410 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0301500101 | 2005-08-15 | 176.231 | -20.868 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0151490101 | 2003-07-16 | 176.451 | -51.053 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0141960201 | 2003-02-15 | 176.479 | -21.080 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0551630301 | 2008-06-06 | 176.503 | +76.992 | 10.1               | 476                    | 10.4               | 565                    | $3.52^{+1.20}_{-1.14} \pm 0.52$ | 0.5575             | $0.02^{+0.62}_{-0.02} \pm 0.03$ | 1.83                                                | 1.92                                                    | Y           |
| 0407030201 | 2006-09-02 | 176.810 | -18.538 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0556215201 | 2009-04-17 | 177.334 | +28.397 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0041170101 | 2001-02-16 | 177.510 | -48.355 | 44.9               | 587                    | 45.3               | 587                    | $4.49^{+0.47}_{-0.46} \pm 0.23$ | 0.5625             | $0.79 \pm 0.25 \pm 0.26$        | 0.81                                                | 1.86                                                    | N           |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0503600101 | 2007-11-06 | 178.076 | +38.357 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203160201 | 2004-07-19 | 178.203 | -47.949 | 7.0                | 471                    | 7.0                | 476                    | $2.57^{+1.65}_{-1.35} \pm 0.48$ | 0.5575             | $0.80^{+0.73}_{-0.75} \pm 0.39$ | 1.77                                                | 1.56                                              | Y           |
| 0111410101 | 2002-02-09 | 178.224 | -43.073 | 8.0                | 400                    | 5.7                | 474                    | $4.49^{+2.08}_{-2.01} \pm 0.68$ | 0.5475             | $1.52 \pm 0.92 \pm 0.07$        | 1.77                                                | 2.27                                              | Y           |
| 0028740301 | 2001-11-02 | 178.312 | +55.728 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0142610101 | 2003-02-11 | 178.660 | -47.691 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200811101 | 2004-03-09 | 178.909 | -20.031 | 9.1                | 571                    | 9.4                | 495                    | $2.03^{+0.99}_{-0.98} \pm 0.34$ | 0.5625             | $0.09^{+0.50}_{-0.09} \pm 0.24$ | 1.10                                                | 1.51                                              | N           |
| 0200810301 | 2004-03-05 | 178.909 | -20.031 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200810701 | 2004-03-07 | 178.909 | -20.030 | 7.5                | 575                    | 8.1                | 498                    | $2.31^{+1.03}_{-0.96} \pm 0.72$ | 0.5625             | $0.17^{+0.50}_{-0.17} \pm 0.24$ | 1.86                                                | 1.33                                              | N           |
| 0109060301 | 2000-09-09 | 178.916 | -19.992 | 42.7               | 549                    | 42.6               | 489                    | $3.63^{+0.40}_{-0.41} \pm 0.30$ | 0.5625             | $0.95 \pm 0.22 \pm 0.07$        | 1.51                                                | 1.80                                              | Y           |
| 0024140101 | 2001-03-13 | 179.085 | -23.816 | 19.4               | 569                    | 19.8               | 576                    | $2.33^{+0.76}_{-0.71} \pm 0.21$ | 0.5725             | $0.00^{+0.35}_{-0.00} \pm 0.06$ | 1.88                                                | 2.05                                              | Y           |
| 0307000701 | 2006-02-19 | 179.180 | -48.979 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0094810301 | 2000-03-16 | 179.196 | -20.185 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0554770101 | 2009-02-10 | 179.255 | -19.630 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0501620101 | 2007-08-16 | 179.321 | -25.647 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0406610101 | 2006-11-05 | 179.356 | +59.942 | 10.0               | 404                    | 10.2               | 485                    | $3.84^{+1.38}_{-1.23} \pm 0.35$ | 0.5675             | $0.86^{+0.72}_{-0.73} \pm 0.32$ | 1.88                                                | 2.32                                              | N           |
| 0556212801 | 2008-05-15 | 179.480 | +43.333 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0207130201 | 2004-04-20 | 179.517 | +53.131 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0141400301 | 2003-02-17 | 179.955 | -24.550 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551851201 | 2009-03-21 | 180.103 | +26.641 | 59.7               | 352                    | 64.9               | 441                    | $0.79^{+0.45}_{-0.40} \pm 0.26$ | 0.5825             | $0.00^{+0.24}_{-0.00} \pm 0.03$ | 1.18                                                | 2.59                                              | N           |
| 0551850101 | 2008-10-17 | 180.147 | +26.661 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0101440501 | 2000-09-03 | 180.258 | -21.968 | 23.6               | 563                    | 24.3               | 570                    | $2.52^{+0.81}_{-0.75} \pm 0.41$ | 0.5625             | $1.29^{+0.40}_{-0.39} \pm 0.18$ | 1.68                                                | 2.07                                              | Y           |
| 0506440101 | 2007-05-31 | 180.288 | +59.048 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0561580201 | 2009-05-31 | 180.293 | +59.048 | 32.4               | 330                    | 35.4               | 403                    | $3.63^{+0.72}_{-0.68} \pm 0.20$ | 0.5775             | $0.14^{+0.49}_{-0.14} \pm 0.44$ | 1.74                                                | 1.91                                              | Y           |
| 0101440601 | 2000-09-09 | 180.555 | -23.543 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0101441501 | 2002-03-05 | 180.557 | -23.544 | 30.0               | 472                    | 30.4               | 485                    | $2.07 \pm 0.49 \pm 0.35$        | 0.5675             | $0.15^{+0.28}_{-0.15} \pm 0.12$ | 1.70                                                | 2.42                                              | Y           |
| 0200750401 | 2004-01-30 | 180.833 | -41.576 | 5.5                | 559                    | 5.4                | 562                    | $4.43^{+1.17}_{-1.15} \pm 0.25$ | 0.5775             | $2.38^{+0.82}_{-0.84} \pm 0.46$ | 1.72                                                | 1.84                                              | Y           |
| 0150470601 | 2003-07-15 | 180.839 | -59.471 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553790101 | 2008-10-03 | 180.875 | +31.230 | 11.2               | 377                    | 11.0               | 552                    | $2.48^{+0.99}_{-1.12} \pm 0.46$ | 0.5725             | $0.00^{+0.27}_{-0.00} \pm 0.00$ | 1.18                                                | 1.99                                              | N           |
| 0406740101 | 2006-10-22 | 180.920 | +29.107 | 13.4               | 336                    | 13.8               | 426                    | $3.47^{+1.42}_{-1.10} \pm 0.46$ | 0.5675             | $0.15^{+0.62}_{-0.15} \pm 0.21$ | 1.36                                                | 1.66                                              | N           |
| 0147671001 | 2003-04-27 | 181.009 | +43.608 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112860101 | 2000-07-31 | 181.163 | -61.438 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553790701 | 2009-03-24 | 181.222 | +29.913 | 6.8                | 421                    | 6.6                | 462                    | $3.03^{+1.19}_{-1.31} \pm 0.89$ | 0.5675             | $1.51^{+0.76}_{-0.79} \pm 0.26$ | 1.61                                                | 1.54                                              | Y           |
| 0504160101 | 2007-12-03 | 181.277 | -88.431 | 7.6                | 260                    | 7.5                | 335                    | $5.22^{+1.91}_{-1.59} \pm 0.63$ | 0.5775             | $1.12^{+1.07}_{-0.99} \pm 0.22$ | 1.52                                                | 1.47                                              | Y           |
| 0138951401 | 2003-05-05 | 181.760 | +30.835 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0093630101 | 2001-08-15 | 182.022 | -57.907 | 13.8               | 484                    | 13.9               | 561                    | $4.05^{+0.97}_{-1.03} \pm 0.46$ | 0.5675             | $1.37^{+0.51}_{-0.52} \pm 0.67$ | 0.81                                                | 1.58                                              | N           |
| 0306230101 | 2006-01-12 | 182.026 | -57.944 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0406570701 | 2007-02-13 | 182.297 | -17.856 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551630601 | 2009-04-09 | 182.437 | +40.510 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0205980101 | 2004-04-24 | 182.556 | +57.673 | 9.8                | 391                    | 10.2               | 397                    | $5.63^{+1.20}_{-1.39} \pm 0.23$ | 0.5725             | $0.83^{+0.73}_{-0.37} \pm 1.00$ | 1.93                                                | 1.46                                              | Y           |
| 0400830301 | 2006-10-30 | 182.658 | +42.566 | 42.3               | 426                    | 42.9               | 517                    | $3.00^{+0.67}_{-0.79} \pm 0.23$ | 0.5625             | $0.29^{+0.45}_{-0.29} \pm 0.06$ | 0.89                                                | 2.60                                              | N           |
| 0553561201 | 2009-04-29 | 183.033 | +51.279 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0503601301 | 2007-11-11 | 183.245 | +56.906 | 11.3               | 221                    | 11.0               | 334                    | $3.51^{+1.78}_{-1.72} \pm 0.22$ | 0.5775             | $1.16^{+1.06}_{-1.11} \pm 0.47$ | 1.10                                                | 2.15                                              | N           |
| 0307000201 | 2005-08-05 | 183.333 | -48.230 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200630101 | 2004-04-13 | 183.403 | +40.982 | 13.7               | 581                    | 13.6               | 588                    | $3.92^{+0.97}_{-0.79} \pm 0.35$ | 0.5775             | $0.28^{+0.51}_{-0.28} \pm 0.68$ | 0.62                                                | 1.94                                              | N           |
| 0502060201 | 2007-10-16 | 183.454 | +37.153 | 18.4               | 313                    | 18.5               | 400                    | $6.67^{+0.71}_{-1.91} \pm 2.80$ | 0.5525             | $1.76^{+0.82}_{-0.51} \pm 1.15$ | 1.78                                                | 1.53                                              | N           |
| 0203270101 | 2004-05-17 | 183.836 | +49.003 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0554932801 | 2009-03-24 | 183.857 | +25.000 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0554540201 | 2008-11-08 | 183.871 | +35.023 | 46.1               | 413                    | 46.3               | 505                    | $2.22^{+0.80}_{-0.64} \pm 0.43$ | 0.5675             | $0.52^{+0.38}_{-0.33} \pm 0.14$ | 1.38                                                | 1.64                                              | N           |
| 0103262801 | 2003-10-09 | 184.363 | -3.300  | 6.5                | 592                    | 6.8                | 594                    | $2.66^{+1.90}_{-0.80} \pm 0.59$ | 0.5675             | $0.50^{+0.84}_{-0.48} \pm 0.27$ | 0.62                                                | 1.93                                              | N           |
| 0302581801 | 2005-10-10 | 184.774 | +40.088 | 20.4               | 372                    | 21.9               | 465                    | $4.81^{+0.90}_{-0.84} \pm 0.55$ | 0.5675             | $1.15^{+0.49}_{-0.44} \pm 0.22$ | 1.26                                                | 2.66                                              | N           |
| 0402320201 | 2007-02-02 | 184.948 | -42.338 | 7.1                | 424                    | 7.3                | 586                    | $6.08^{+1.56}_{-1.46} \pm 1.26$ | 0.5675             | $1.81^{+0.91}_{-0.78} \pm 0.99$ | 1.13                                                | 2.22                                              | N           |
| 0205370101 | 2004-05-11 | 185.152 | +65.494 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0070340301 | 2001-05-15 | 185.207 | +65.480 | 7.0                | 470                    | 6.8                | 468                    | $4.53^{+1.34}_{-1.15} \pm 1.23$ | 0.5675             | $0.98^{+0.72}_{-0.67} \pm 0.42$ | 1.62                                                | 2.39                                              | N           |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0502060901 | 2008-03-26 | 185.451 | +28.381 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0504101701 | 2007-05-18 | 185.477 | +56.285 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0502090501 | 2007-08-21 | 186.114 | -13.481 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0149010201 | 2003-04-15 | 186.300 | +44.831 | 9.9                | 547                    | 10.2               | 555                    | $5.17^{+0.93}_{-1.04} \pm 0.38$  | 0.5625             | $0.83^{+0.50}_{-0.54} \pm 0.69$ | 1.86                                                | 1.73                                              | Y           |
| 0405240201 | 2006-08-06 | 186.353 | -46.138 | 13.4               | 418                    | 13.7               | 507                    | $12.10^{+1.14}_{-1.83} \pm 0.91$ | 0.5675             | $2.51^{+0.62}_{-0.78} \pm 1.91$ | 1.62                                                | 1.82                                              | N           |
| 0411980301 | 2006-11-01 | 186.492 | +48.600 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0553510101 | 2008-09-20 | 186.592 | +2.210  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0089370501 | 2002-10-01 | 186.989 | -1.553  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0089370601 | 2002-10-01 | 186.991 | -1.550  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0089370701 | 2002-10-02 | 186.994 | -1.547  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112880801 | 2000-09-29 | 187.464 | +22.499 | 40.4               | 490                    | 41.2               | 422                    | $4.63^{+0.82}_{-0.85} \pm 0.35$  | 0.5625             | $2.47^{+0.41}_{-0.39} \pm 0.17$ | 1.30                                                | 2.01                                              | Y           |
| 0123710201 | 2000-04-24 | 187.465 | +22.477 | 18.0               | 389                    | 17.8               | 461                    | $5.04^{+1.11}_{-1.23} \pm 0.83$  | 0.5625             | $1.03^{+0.57}_{-0.61} \pm 0.37$ | 1.10                                                | 1.85                                              | N           |
| 0123710101 | 2000-04-25 | 187.465 | +22.477 | 40.4               | 389                    | 40.6               | 460                    | $2.66^{+0.89}_{-0.91} \pm 0.34$  | 0.5575             | $1.17 \pm 0.41 \pm 0.17$        | 0.84                                                | 2.57                                              | N           |
| 0402370101 | 2006-11-23 | 187.503 | +46.029 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200430401 | 2004-01-19 | 187.723 | -45.057 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0201690301 | 2004-06-20 | 187.766 | +83.058 | 14.5               | 577                    | 15.3               | 578                    | $4.64^{+1.14}_{-0.85} \pm 0.67$  | 0.5675             | $0.87 \pm 0.49 \pm 0.70$        | 1.27                                                | 1.85                                              | N           |
| 0094790201 | 2002-08-22 | 188.307 | -37.087 | 20.1               | 568                    | 20.5               | 569                    | $4.81 \pm 0.66 \pm 0.18$         | 0.5725             | $1.56^{+0.24}_{-0.44} \pm 1.03$ | 1.39                                                | 2.64                                              | N           |
| 0602290101 | 2009-05-06 | 188.500 | +47.781 | 43.8               | 430                    | 45.1               | 515                    | $4.99 \pm 0.89 \pm 0.76$         | 0.5625             | $1.02^{+0.47}_{-0.48} \pm 0.37$ | 1.62                                                | 1.68                                              | Y           |
| 0554710101 | 2009-05-03 | 188.565 | +37.946 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0403750701 | 2007-03-23 | 188.945 | +22.573 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0554180101 | 2009-04-19 | 190.063 | +41.482 | 35.3               | 416                    | 37.1               | 584                    | $3.76^{+0.72}_{-0.57} \pm 0.86$  | 0.5625             | $0.97^{+0.38}_{-0.31} \pm 0.37$ | 1.22                                                | 1.90                                              | N           |
| 0502760101 | 2008-04-09 | 190.070 | +41.483 | 20.3               | 486                    | 21.6               | 584                    | $2.89^{+0.85}_{-0.84} \pm 0.29$  | 0.5675             | $0.70^{+0.46}_{-0.48} \pm 0.28$ | 1.25                                                | 1.99                                              | N           |
| 0400850101 | 2007-04-18 | 190.071 | +41.482 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0103861001 | 2002-08-13 | 190.169 | -47.827 | 8.7                | 400                    | 8.6                | 397                    | $19.92^{+1.51}_{-2.13} \pm 2.43$ | 0.5675             | $4.83^{+0.91}_{-1.02} \pm 2.67$ | 1.29                                                | 1.39                                              | N           |
| 0402110201 | 2007-01-27 | 190.184 | -47.865 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0401650101 | 2006-10-04 | 190.270 | +14.322 | 11.9               | 307                    | 11.6               | 541                    | $4.99^{+1.21}_{-1.24} \pm 0.65$  | 0.5625             | $1.66^{+0.66}_{-0.68} \pm 0.89$ | 1.59                                                | 1.69                                              | N           |
| 0301650201 | 2005-08-30 | 190.591 | -45.540 | 11.7               | 423                    | 11.5               | 513                    | $12.95^{+1.22}_{-1.96} \pm 0.90$ | 0.5725             | $2.30^{+0.80}_{-0.85} \pm 2.21$ | 1.60                                                | 1.69                                              | N           |
| 0304203201 | 2006-04-16 | 191.409 | +11.451 | 5.1                | 242                    | 5.1                | 475                    | $4.31^{+1.51}_{-1.86} \pm 0.57$  | 0.5775             | $2.19^{+1.72}_{-1.90} \pm 0.58$ | 0.91                                                | 1.75                                              | N           |
| 0161160101 | 2003-09-01 | 191.813 | -33.159 | 11.0               | 457                    | 11.5               | 380                    | $7.40^{+1.01}_{-1.14} \pm 0.96$  | 0.5725             | $0.08^{+0.76}_{-0.08} \pm 1.45$ | 1.79                                                | 1.77                                              | Y           |
| 0203060501 | 2004-01-20 | 192.077 | -58.254 | 34.7               | 393                    | 35.5               | 400                    | $2.07^{+0.99}_{-0.89} \pm 0.29$  | 0.5725             | $0.99 \pm 0.51 \pm 0.20$        | 1.78                                                | 2.44                                              | N           |
| 0006010301 | 2001-04-26 | 192.227 | +23.387 | 32.9               | 543                    | 32.7               | 470                    | $3.05^{+0.84}_{-0.69} \pm 0.58$  | 0.5725             | $1.45^{+0.43}_{-0.38} \pm 0.26$ | 0.91                                                | 1.98                                              | N           |
| 0405210101 | 2006-08-29 | 192.572 | -11.806 | 25.5               | 488                    | 25.6               | 503                    | $2.30^{+0.86}_{-0.69} \pm 0.23$  | 0.5725             | $0.64^{+0.41}_{-0.39} \pm 0.09$ | 1.09                                                | 2.10                                              | N           |
| 0504102001 | 2007-11-03 | 192.993 | +32.232 | 15.6               | 420                    | 15.9               | 585                    | $2.99^{+1.14}_{-0.98} \pm 0.52$  | 0.5475             | $0.02^{+0.55}_{-0.02} \pm 0.04$ | 1.46                                                | 1.65                                              | Y           |
| 0405210201 | 2006-08-30 | 193.604 | -12.457 | 17.4               | 500                    | 17.7               | 516                    | $3.80^{+1.12}_{-0.88} \pm 0.24$  | 0.5725             | $0.63^{+0.52}_{-0.48} \pm 0.07$ | 1.64                                                | 2.14                                              | Y           |
| 0503600301 | 2007-05-26 | 193.763 | +53.223 | 5.2                | 319                    | 5.0                | 336                    | $0.33^{+2.96}_{-0.33} \pm 2.31$  | 0.5425             | $0.94^{+1.32}_{-0.94} \pm 0.79$ | 1.72                                                | 2.40                                              | Y           |
| 0205010101 | 2004-05-23 | 193.799 | +82.754 | 23.8               | 514                    | 24.2               | 438                    | $6.00^{+0.52}_{-0.80} \pm 0.75$  | 0.5675             | $1.24 \pm 0.44 \pm 1.09$        | 1.60                                                | 1.86                                              | N           |
| 0152530101 | 2002-10-05 | 194.085 | +28.828 | 13.7               | 551                    | 14.0               | 484                    | $5.57^{+0.97}_{-0.92} \pm 0.47$  | 0.5625             | $2.37 \pm 0.53 \pm 0.44$        | 1.19                                                | 2.41                                              | N           |
| 0504120101 | 2008-04-11 | 194.185 | +35.368 | 21.1               | 423                    | 21.2               | 510                    | $1.87 \pm 0.85 \pm 0.22$         | 0.5575             | $0.39^{+0.44}_{-0.39} \pm 0.26$ | 1.24                                                | 1.65                                              | N           |
| 0550960301 | 2008-11-26 | 194.874 | +72.188 | 21.6               | 388                    | 21.1               | 489                    | $3.16^{+1.01}_{-0.99} \pm 1.14$  | 0.5625             | $0.00^{+0.51}_{-0.00} \pm 0.00$ | 1.48                                                | 2.11                                              | Y           |
| 0300100201 | 2005-10-01 | 194.881 | -12.250 | 9.2                | 414                    | 8.8                | 504                    | $3.51^{+1.71}_{-0.94} \pm 0.21$  | 0.5725             | $1.45^{+0.78}_{-0.57} \pm 0.26$ | 1.84                                                | 2.04                                              | Y           |
| 0504101201 | 2007-10-28 | 194.904 | +26.119 | 20.3               | 305                    | 20.8               | 468                    | $2.90^{+0.88}_{-0.44} \pm 0.38$  | 0.5725             | $0.13^{+0.49}_{-0.13} \pm 0.15$ | 1.56                                                | 1.72                                              | N           |
| 0405211001 | 2007-03-31 | 194.912 | -15.542 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0402050101 | 2006-09-28 | 195.051 | -11.995 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0111170101 | 2002-04-04 | 195.127 | +4.249  | 70.1               | 568                    | 71.4               | 580                    | $5.02^{+0.37}_{-0.36} \pm 0.40$  | 0.5625             | $1.83 \pm 0.21 \pm 0.30$        | 1.38                                                | 1.99                                              | N           |
| 0400260301 | 2007-03-11 | 195.133 | +4.248  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0201350101 | 2004-03-13 | 195.133 | +4.248  | 14.0               | 570                    | 14.5               | 496                    | $3.42^{+1.04}_{-0.78} \pm 0.12$  | 0.5675             | $1.39^{+0.51}_{-0.47} \pm 0.17$ | 1.16                                                | 2.39                                              | N           |
| 0501270301 | 2008-03-08 | 195.134 | +4.248  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0550410301 | 2009-03-10 | 195.134 | +4.248  | 5.4                | 444                    | 5.3                | 466                    | $5.62^{+1.82}_{-1.64} \pm 0.91$  | 0.5725             | $2.07^{+1.19}_{-1.26} \pm 0.94$ | 1.91                                                | 1.30                                              | Y           |
| 0550410201 | 2008-10-03 | 195.134 | +4.286  | 15.8               | 443                    | 17.0               | 539                    | $3.01^{+0.99}_{-1.08} \pm 0.33$  | 0.5675             | $0.92^{+0.53}_{-0.57} \pm 0.19$ | 1.38                                                | 2.30                                              | N           |
| 0501270201 | 2007-09-18 | 195.135 | +4.286  | 20.8               | 305                    | 20.8               | 539                    | $2.57^{+1.06}_{-0.97} \pm 1.70$  | 0.5575             | $1.47^{+0.54}_{-0.52} \pm 0.54$ | 1.75                                                | 1.94                                              | N           |
| 0400260201 | 2006-10-02 | 195.135 | +4.285  | 16.7               | 400                    | 17.0               | 495                    | $4.95^{+1.15}_{-1.06} \pm 0.48$  | 0.5625             | $1.95^{+0.27}_{-0.50} \pm 0.31$ | 1.53                                                | 1.76                                              | N           |
| 0405210601 | 2006-08-31 | 195.219 | -11.732 | 16.7               | 483                    | 17.0               | 499                    | $2.29^{+0.91}_{-1.02} \pm 1.01$  | 0.5625             | $1.62^{+0.52}_{-0.53} \pm 0.18$ | 1.62                                                | 2.41                                              | Y           |
| 0150620301 | 2003-04-22 | 195.510 | +43.156 | 8.8                | 586                    | 8.7                | 514                    | $7.15^{+1.39}_{-1.14} \pm 0.29$  | 0.5625             | $1.07^{+0.57}_{-0.62} \pm 1.02$ | 1.63                                                | 1.41                                              | N           |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                            | (12)                                                | (13)                                                    | (14)        |
| 0553440601 | 2008-11-22 | 195.818 | +44.793 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201950301 | 2005-03-31 | 195.844 | -11.966 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0112880501 | 2003-01-19 | 195.856 | -48.068 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0150620101 | 2003-04-23 | 196.040 | +44.206 | 12.1               | 592                    | 12.7               | 517                    | $6.71^{+0.99}_{-0.87} \pm 1.05$  | 0.5675             | $1.28^{+0.51}_{-0.52} \pm 1.23$ | 1.71                                                | 1.79                                                    | N           |
| 0093190501 | 2002-03-25 | 196.223 | +12.981 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0501600101 | 2008-03-14 | 196.319 | -17.049 | 5.6                | 414                    | 5.4                | 582                    | $4.90^{+2.23}_{-1.61} \pm 1.83$  | 0.5675             | $0.52^{+0.97}_{-0.52} \pm 0.95$ | 1.74                                                | 1.87                                                    | N           |
| 0303820301 | 2006-04-15 | 196.693 | +42.920 | 19.8               | 390                    | 21.0               | 561                    | $3.90^{+1.39}_{-0.65} \pm 0.99$  | 0.5625             | $0.79^{+0.64}_{-0.35} \pm 0.35$ | 0.97                                                | 2.11                                                    | N           |
| 0405210301 | 2006-09-02 | 196.730 | -10.400 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0304202701 | 2006-02-15 | 196.901 | -19.824 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0103260601 | 2002-04-26 | 196.960 | +31.723 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302640101 | 2005-04-03 | 197.107 | -10.269 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0102040301 | 2000-12-06 | 197.128 | +59.195 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0301651701 | 2006-06-20 | 197.309 | +81.121 | 12.0               | 476                    | 12.2               | 498                    | $5.81^{+1.13}_{-1.22} \pm 0.61$  | 0.5675             | $0.47^{+0.63}_{-0.47} \pm 1.26$ | 1.26                                                | 1.58                                                    | N           |
| 0602490101 | 2009-06-17 | 197.430 | -74.039 | 29.9               | 290                    | 30.7               | 376                    | $3.28^{+0.87}_{-1.02} \pm 2.19$  | 0.5675             | $1.44^{+0.71}_{-0.38} \pm 0.71$ | 1.69                                                | 2.27                                                    | Y           |
| 0112880401 | 2000-09-03 | 197.636 | -23.741 | 18.0               | 505                    | 17.5               | 583                    | $6.38^{+1.47}_{-0.85} \pm 0.73$  | 0.5675             | $2.17^{+0.62}_{-0.46} \pm 0.49$ | 1.55                                                | 2.39                                                    | N           |
| 0210280101 | 2005-04-09 | 197.760 | +38.760 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0205180601 | 2004-08-18 | 197.909 | -22.797 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203280201 | 2004-05-02 | 197.914 | +26.392 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0504102101 | 2007-11-09 | 198.207 | +25.948 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0554500401 | 2008-10-16 | 198.215 | +24.969 | 14.8               | 385                    | 15.3               | 555                    | $3.66^{+1.28}_{-1.11} \pm 0.26$  | 0.5475             | $0.00^{+0.45}_{-0.00} \pm 0.02$ | 1.48                                                | 2.33                                                    | N           |
| 0025540301 | 2001-04-27 | 198.835 | +33.952 | 9.5                | 514                    | 9.8                | 509                    | $4.29^{+0.83}_{-0.91} \pm 1.18$  | 0.5725             | $0.69^{+0.51}_{-0.50} \pm 0.46$ | 0.88                                                | 1.81                                                    | N           |
| 0152170501 | 2003-05-27 | 198.925 | +86.436 | 13.5               | 404                    | 13.5               | 476                    | $7.09^{+1.54}_{-1.08} \pm 1.11$  | 0.5725             | $1.44^{+0.74}_{-0.63} \pm 1.18$ | 1.76                                                | 1.71                                                    | Y           |
| 0503350201 | 2007-10-31 | 199.124 | +55.021 | 5.4                | 424                    | 5.3                | 514                    | $1.50^{+1.70}_{-1.50} \pm 0.30$  | 0.5725             | $1.22^{+0.94}_{-1.12} \pm 0.16$ | 1.80                                                | 2.48                                                    | ...         |
| 0110070401 | 2002-04-13 | 199.221 | +23.376 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0406740201 | 2007-04-10 | 199.489 | +33.128 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0301650401 | 2005-10-30 | 200.115 | +58.772 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0405340101 | 2006-04-24 | 200.203 | +52.687 | 28.9               | 367                    | 29.8               | 378                    | $3.69^{+0.84}_{-0.82} \pm 0.19$  | 0.5675             | $0.12^{+0.44}_{-0.12} \pm 0.46$ | 1.48                                                | 1.65                                                    | N           |
| 0203460201 | 2004-01-31 | 200.666 | -44.050 | 6.5                | 587                    | 6.5                | 587                    | $11.88^{+1.40}_{-1.39} \pm 0.58$ | 0.5725             | $3.18^{+0.85}_{-0.90} \pm 2.06$ | 1.95                                                | 2.20                                                    | Y           |
| 0203160101 | 2004-03-06 | 200.992 | -28.891 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0307002501 | 2006-02-15 | 201.503 | -27.760 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0550270101 | 2008-06-12 | 201.546 | +69.008 | 6.7                | 333                    | 6.7                | 339                    | $6.40^{+1.74}_{-1.81} \pm 1.05$  | 0.5925             | $0.00^{+1.15}_{-0.00} \pm 0.66$ | 1.94                                                | 2.13                                                    | Y           |
| 0502211401 | 2008-06-16 | 201.757 | +83.270 | 8.5                | 313                    | 8.8                | 468                    | $6.28^{+1.81}_{-1.73} \pm 1.43$  | 0.5625             | $0.02^{+0.89}_{-0.02} \pm 0.39$ | 1.46                                                | 1.98                                                    | N           |
| 0502211301 | 2008-06-14 | 201.757 | +83.270 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0502211201 | 2008-06-18 | 201.765 | +83.269 | 6.1                | 385                    | 6.5                | 467                    | $3.60^{+2.08}_{-1.71} \pm 0.76$  | 0.5675             | $0.00^{+0.72}_{-0.00} \pm 0.00$ | 1.09                                                | 2.54                                                    | N           |
| 0404240301 | 2006-11-29 | 202.394 | +51.284 | 17.0               | 421                    | 17.2               | 517                    | $5.96^{+1.18}_{-0.94} \pm 0.37$  | 0.5725             | $1.06^{+0.50}_{-0.52} \pm 0.05$ | 1.27                                                | 1.66                                                    | N           |
| 0108860501 | 2001-10-15 | 202.529 | +28.632 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0505930301 | 2008-04-04 | 202.657 | +28.582 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0111100301 | 2000-10-01 | 202.732 | +21.104 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0104860501 | 2002-06-26 | 202.853 | +83.300 | 32.0               | 543                    | 32.9               | 498                    | $5.97^{+0.57}_{-0.59} \pm 1.01$  | 0.5725             | $0.65 \pm 0.34 \pm 0.87$        | 1.04                                                | 1.66                                                    | N           |
| 0202210301 | 2005-02-02 | 204.928 | -41.756 | 41.2               | 526                    | 41.5               | 460                    | $8.33^{+0.69}_{-0.95} \pm 0.55$  | 0.5625             | $2.00 \pm 0.35 \pm 0.38$        | 1.57                                                | 2.68                                                    | ...         |
| 0202210401 | 2005-02-04 | 204.928 | -41.756 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201530101 | 2005-03-30 | 205.109 | -14.127 | 28.1               | 380                    | 28.3               | 550                    | $3.03^{+0.64}_{-0.80} \pm 0.30$  | 0.5575             | $0.15^{+0.31}_{-0.15} \pm 0.12$ | 1.52                                                | 1.98                                                    | N           |
| 0112400101 | 2002-03-06 | 205.212 | -17.245 | 11.8               | 388                    | 11.7               | 391                    | $4.92^{+1.70}_{-1.84} \pm 1.05$  | 0.5525             | $2.57^{+0.84}_{-0.83} \pm 0.84$ | 1.56                                                | 1.89                                                    | N           |
| 0301600101 | 2005-03-24 | 205.426 | -14.535 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0153150101 | 2003-09-03 | 205.475 | -14.547 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0505200101 | 2007-09-17 | 205.659 | -1.423  | 29.0               | 350                    | 31.0               | 587                    | $5.38^{+0.68}_{-1.00} \pm 0.98$  | 0.5675             | $1.18^{+0.40}_{-0.50} \pm 0.47$ | 1.34                                                | 2.67                                                    | N           |
| 0041170201 | 2000-11-05 | 205.844 | +51.845 | 39.2               | 511                    | 39.1               | 584                    | $8.32^{+0.56}_{-0.51} \pm 0.43$  | 0.5675             | $2.56^{+0.31}_{-0.29} \pm 0.93$ | 0.86                                                | 1.85                                                    | Y           |
| 0001730601 | 2003-03-16 | 205.874 | -0.331  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0149890301 | 2003-09-17 | 206.007 | -15.463 | 5.5,5.3            | 587,515                | 5.8,5.4            | 588,588                | $4.21^{+0.78}_{-1.20} \pm 0.27$  | 0.5725             | $1.19^{+0.49}_{-0.77} \pm 0.56$ | 1.89                                                | 2.33                                                    | Y           |
| 0101440401 | 2000-11-07 | 206.021 | +32.362 | 10.5               | 579                    | 10.4               | 506                    | $6.96^{+1.17}_{-1.15} \pm 0.81$  | 0.5675             | $2.06 \pm 0.65 \pm 0.53$        | 1.55                                                | 1.49                                                    | Y           |
| 0146870101 | 2003-09-11 | 206.150 | -1.024  | 6.6                | 590                    | 6.8                | 516                    | $7.79^{+1.19}_{-1.41} \pm 0.62$  | 0.5625             | $5.20^{+0.74}_{-0.81} \pm 0.52$ | 1.93                                                | 2.39                                                    | Y           |
| 0146870201 | 2003-09-15 | 206.151 | -1.024  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0402250701 | 2007-04-13 | 206.416 | +37.354 | 15.0               | 303                    | 15.2               | 463                    | $4.72^{+1.19}_{-1.17} \pm 0.31$  | 0.5625             | $1.49^{+0.63}_{-0.60} \pm 0.52$ | 1.08                                                | 1.55                                                    | N           |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{H I}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|-------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                            | filtering?  |
| 0112530101 | 2002-09-15 | 206.451 | -16.584 | 22.4               | 433                    | 22.2               | 433                    | $6.47^{+1.16}_{-1.21} \pm 0.91$ | 0.5625             | $2.93^{+0.58}_{-0.59} \pm 0.87$ | 1.70                                                | 1.98                                            | Y           |
| 0554700101 | 2008-08-28 | 206.461 | -26.085 | 22.5               | 497                    | 22.1               | 511                    | $2.97 \pm 0.96 \pm 0.61$        | 0.5625             | $1.15^{+0.44}_{-0.49} \pm 0.16$ | 1.86                                                | 1.96                                            | Y           |
| 0148300101 | 2003-08-30 | 206.630 | -17.569 | 15.2               | 491                    | 15.5               | 571                    | $2.89^{+0.67}_{-0.70} \pm 1.42$ | 0.5675             | $1.46^{+0.56}_{-0.43} \pm 0.96$ | 1.56                                                | 1.94                                            | N           |
| 0502630201 | 2008-04-22 | 206.808 | +35.803 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0300480201 | 2005-04-12 | 206.809 | +35.803 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0401060201 | 2006-11-17 | 206.815 | +35.839 | 44.7               | 380                    | 44.2               | 398                    | $3.58 \pm 0.70 \pm 0.32$        | 0.5675             | $0.75^{+0.36}_{-0.37} \pm 0.59$ | 1.28                                                | 1.51                                            | N           |
| 0206100101 | 2004-11-05 | 206.923 | +23.396 | 41.4               | 469                    | 41.9               | 395                    | $6.29^{+0.81}_{-0.73} \pm 1.22$ | 0.5725             | $3.59^{+0.37}_{-0.54} \pm 0.65$ | 1.76                                                | 2.49                                            | N           |
| 0551860101 | 2008-10-05 | 206.926 | +23.413 | 10.4               | 448                    | 10.8               | 458                    | $2.20^{+1.41}_{-1.34} \pm 0.51$ | 0.5475             | $0.39^{+0.37}_{-0.39} \pm 0.27$ | 0.90                                                | 2.36                                            | N           |
| 0150800101 | 2002-11-02 | 206.928 | +23.414 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0303360101 | 2005-11-15 | 207.698 | +41.531 | 20.7               | 239                    | 20.4               | 396                    | $5.43 \pm 1.14 \pm 0.39$        | 0.5725             | $0.00^{+0.58}_{-0.00} \pm 0.65$ | 1.49                                                | 1.35                                            | N           |
| 0554700301 | 2009-02-10 | 207.926 | -27.541 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0406570401 | 2007-03-19 | 208.298 | -18.278 | 11.3               | 275                    | 11.5               | 511                    | $2.73^{+1.33}_{-1.00} \pm 0.25$ | 0.5675             | $1.17^{+0.65}_{-0.63} \pm 0.23$ | 1.25                                                | 1.75                                            | N           |
| 0556280301 | 2009-04-20 | 208.713 | +44.540 | 59.9               | 320                    | 61.8               | 482                    | $3.75^{+0.59}_{-0.68} \pm 0.30$ | 0.5625             | $0.64^{+0.31}_{-0.32} \pm 0.27$ | 1.20                                                | 1.87                                            | N           |
| 0305480301 | 2005-10-28 | 209.053 | +34.708 | 7.8                | 411                    | 8.0                | 509                    | $5.98^{+1.96}_{-1.60} \pm 1.53$ | 0.5625             | $2.05^{+0.96}_{-0.78} \pm 0.57$ | 1.73                                                | 1.93                                            | Y           |
| 0300630301 | 2006-01-19 | 209.821 | -65.146 | 14.2               | 482                    | 14.1               | 503                    | $2.49^{+0.98}_{-0.88} \pm 0.23$ | 0.5725             | $0.00^{+0.36}_{-0.00} \pm 0.00$ | 1.78                                                | 2.40                                            | Y           |
| 0304070201 | 2005-12-05 | 210.318 | +57.711 | 8.3                | 486                    | 8.4                | 577                    | $4.48^{+1.10}_{-1.09} \pm 0.34$ | 0.5725             | $0.54^{+0.61}_{-0.54} \pm 1.06$ | 0.68                                                | 1.12                                            | N           |
| 0406620301 | 2007-03-22 | 210.412 | -9.323  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0503560601 | 2007-09-08 | 210.515 | -19.459 | 47.2               | 346                    | 49.6               | 497                    | $1.90^{+0.83}_{-0.70} \pm 0.23$ | 0.5625             | $1.09^{+0.41}_{-0.36} \pm 0.05$ | 1.18                                                | 2.15                                            | N           |
| 0556560101 | 2008-12-10 | 210.550 | +74.590 | 6.9                | 241                    | 6.5                | 393                    | $5.06^{+2.10}_{-2.14} \pm 0.21$ | 0.5575             | $0.00^{+0.47}_{-0.00} \pm 0.19$ | 1.79                                                | 1.11                                            | Y           |
| 0205150501 | 2004-08-25 | 210.928 | -19.433 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0503560101 | 2007-08-27 | 211.374 | -19.286 | 23.7               | 416                    | 27.1               | 583                    | $1.47^{+0.80}_{-0.81} \pm 0.31$ | 0.5475             | $0.35^{+0.39}_{-0.35} \pm 0.11$ | 1.72                                                | 2.53                                            | Y           |
| 0203900201 | 2004-08-23 | 211.398 | -36.545 | 54.3               | 580                    | 59.8               | 592                    | $1.61^{+0.38}_{-0.39} \pm 0.36$ | 0.5675             | $0.27^{+0.22}_{-0.23} \pm 0.14$ | 1.26                                                | 2.26                                            | N           |
| 0503560401 | 2007-08-31 | 211.772 | -19.202 | 15.3               | 414                    | 15.7               | 579                    | $4.80^{+0.79}_{-0.80} \pm 0.17$ | 0.5675             | $0.76 \pm 0.44 \pm 0.41$        | 1.71                                                | 1.91                                            | Y           |
| 0109461801 | 2002-05-13 | 211.792 | +66.197 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0109462801 | 2004-05-08 | 211.793 | +66.197 | 9.4                | 471                    | 9.3                | 470                    | $4.43^{+1.20}_{-0.98} \pm 0.23$ | 0.5725             | $0.49^{+0.67}_{-0.49} \pm 0.98$ | 1.39                                                | 1.59                                            | N           |
| 0503560201 | 2007-09-20 | 212.195 | -19.083 | 14.5               | 353                    | 14.3               | 580                    | $2.22^{+1.00}_{-0.96} \pm 0.12$ | 0.5625             | $0.78^{+0.51}_{-0.49} \pm 0.05$ | 1.40                                                | 1.95                                            | Y           |
| 0304190101 | 2006-01-15 | 212.203 | -54.381 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0150320201 | 2003-06-17 | 212.450 | +64.667 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0503560301 | 2007-09-20 | 212.628 | -18.949 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0503560501 | 2008-02-23 | 212.928 | -19.128 | 39.8               | 383                    | 41.2               | 479                    | $1.76^{+0.79}_{-0.73} \pm 0.26$ | 0.5575             | $0.49^{+0.40}_{-0.37} \pm 0.16$ | 1.54                                                | 1.76                                            | N           |
| 0111320501 | 2003-02-14 | 212.950 | -57.423 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0406541101 | 2007-05-06 | 213.199 | +55.721 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0406540401 | 2006-11-23 | 213.211 | +55.757 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0112552001 | 2001-05-07 | 213.212 | +54.684 | 6.8                | 508                    | 6.7                | 508                    | $6.09^{+0.90}_{-1.21} \pm 0.61$ | 0.5775             | $0.90^{+0.52}_{-0.81} \pm 0.91$ | 1.73                                                | 1.61                                            | Y           |
| 0203900101 | 2004-08-09 | 213.422 | -39.074 | 35.9               | 588                    | 36.4               | 518                    | $5.01^{+0.51}_{-0.78} \pm 0.36$ | 0.5675             | $0.60^{+0.33}_{-0.30} \pm 0.73$ | 1.14                                                | 1.48                                            | Y           |
| 0123940101 | 2000-10-23 | 213.700 | +13.021 | 21.3               | 538                    | 21.3               | 474                    | $8.89^{+0.98}_{-0.99} \pm 0.59$ | 0.5675             | $1.50 \pm 0.50 \pm 0.26$        | 1.63                                                | 2.16                                            | Y           |
| 0123940201 | 2000-10-23 | 213.700 | +13.020 | 43.7               | 536                    | 44.5               | 474                    | $7.37^{+1.72}_{-0.63} \pm 0.43$ | 0.5625             | $2.23^{+0.44}_{-0.31} \pm 0.37$ | 1.35                                                | 2.05                                            | N           |
| 0415580201 | 2007-04-08 | 213.703 | +13.019 | 12.6               | 241                    | 13.0               | 401                    | $4.71^{+1.78}_{-1.59} \pm 0.36$ | 0.5725             | $0.00^{+0.84}_{-0.00} \pm 0.59$ | 1.63                                                | 1.66                                            | Y           |
| 0502091601 | 2008-11-02 | 213.830 | +39.743 | 81.4               | 351                    | 80.3               | 378                    | $2.60^{+0.49}_{-0.57} \pm 0.52$ | 0.5625             | $0.66^{+0.27}_{-0.29} \pm 0.21$ | 0.94                                                | 1.85                                            | N           |
| 0312190601 | 2006-01-28 | 213.849 | -50.846 | 10.8               | 322                    | 11.3               | 407                    | $2.73^{+1.25}_{-1.06} \pm 0.28$ | 0.5825             | $0.00^{+0.63}_{-0.00} \pm 0.00$ | 0.85                                                | 1.88                                            | N           |
| 0202730101 | 2004-05-30 | 213.946 | +55.697 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0510181401 | 2007-04-28 | 214.027 | +4.466  | 7.2                | 493                    | 7.2                | 590                    | $5.70^{+1.93}_{-1.23} \pm 0.51$ | 0.5675             | $1.05^{+0.78}_{-0.59} \pm 0.46$ | 1.86                                                | 1.67                                            | Y           |
| 0203450101 | 2005-04-23 | 214.192 | +34.342 | 35.2               | 396                    | 35.1               | 561                    | $3.62^{+0.66}_{-0.69} \pm 0.28$ | 0.5575             | $0.61^{+0.32}_{-0.33} \pm 0.11$ | 1.64                                                | 1.97                                            | Y           |
| 0303562101 | 2005-11-23 | 214.205 | +36.004 | 5.9                | 427                    | 5.4                | 517                    | $3.64^{+1.84}_{-1.26} \pm 0.24$ | 0.5725             | $0.26^{+0.86}_{-0.26} \pm 0.11$ | 0.58                                                | 1.42                                            | N           |
| 0551950401 | 2008-08-24 | 214.291 | -24.791 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0312191501 | 2006-06-15 | 214.716 | +62.125 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0200240501 | 2004-09-20 | 215.699 | +3.640  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0109461001 | 2001-10-21 | 215.738 | +31.939 | 8.7                | 505                    | 8.8                | 583                    | $5.40^{+1.08}_{-1.24} \pm 0.36$ | 0.5675             | $1.53^{+0.60}_{-0.61} \pm 0.08$ | 1.35                                                | 2.08                                            | N           |
| 0560191801 | 2009-04-25 | 215.937 | +48.650 | 8.8                | 424                    | 9.3                | 590                    | $2.82^{+1.21}_{-0.86} \pm 0.80$ | 0.5825             | $0.38^{+0.85}_{-0.38} \pm 0.11$ | 1.49                                                | 2.32                                            | N           |
| 0502670101 | 2007-10-13 | 216.064 | -5.636  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0305930101 | 2005-07-24 | 216.192 | -52.106 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0552510101 | 2009-02-07 | 216.325 | -44.952 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0046940401 | 2001-11-02 | 216.366 | +45.529 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |



| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{2-5}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|-------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                      | filtering?  |
| 0112850101 | 2001-05-10 | 216.446 | +48.346 | 16.1               | 495                    | 16.1               | 492                    | $4.48^{+0.82}_{-0.84} \pm 0.55$ | 0.5675             | $1.37^{+0.47}_{-0.44} \pm 0.20$ | 0.90                                                | 2.05                                      | N           |
| 0128531401 | 2003-05-05 | 216.975 | +60.681 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0128531501 | 2003-05-28 | 216.975 | +60.682 | 26.1               | 572                    | 26.3               | 507                    | $5.95^{+0.84}_{-0.67} \pm 0.54$ | 0.5725             | $0.32^{+0.38}_{-0.32} \pm 0.88$ | 1.60                                                | 2.58                                      | ...         |
| 0128531601 | 2003-12-12 | 216.992 | +60.718 | 59.0               | 582                    | 59.6               | 582                    | $4.66^{+0.40}_{-0.41} \pm 0.21$ | 0.5625             | $0.47 \pm 0.22 \pm 0.31$        | 1.72                                                | 1.97                                      | Y           |
| 0143370101 | 2003-03-23 | 217.252 | -28.907 | 22.3               | 553                    | 23.6               | 562                    | $3.43^{+0.91}_{-0.71} \pm 0.20$ | 0.5625             | $1.13^{+0.47}_{-0.40} \pm 0.08$ | 1.81                                                | 1.98                                      | Y           |
| 0500240101 | 2008-03-17 | 217.797 | +1.034  | 18.4               | 488                    | 18.6               | 513                    | $2.78^{+0.82}_{-0.89} \pm 0.18$ | 0.5675             | $0.91^{+0.46}_{-0.48} \pm 0.08$ | 1.76                                                | 1.89                                      | Y           |
| 0555740101 | 2008-11-04 | 218.178 | +40.023 | 43.7               | 405                    | 44.2               | 488                    | $2.32^{+0.59}_{-0.54} \pm 0.60$ | 0.5775             | $0.44^{+0.36}_{-0.35} \pm 0.26$ | 0.94                                                | 1.75                                      | N           |
| 0551022401 | 2008-09-19 | 218.716 | -0.462  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0148740101 | 2003-04-14 | 219.365 | +32.049 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0501040101 | 2007-11-17 | 219.728 | +26.290 | 47.2               | 350                    | 48.1               | 512                    | $3.09^{+0.77}_{-0.66} \pm 0.14$ | 0.5625             | $0.15^{+0.39}_{-0.15} \pm 0.19$ | 0.93                                                | 1.66                                      | N           |
| 0405950401 | 2007-02-07 | 220.102 | -32.012 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0111320101 | 2002-08-08 | 220.297 | -53.398 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0560191701 | 2008-09-17 | 223.044 | -42.846 | 12.2               | 424                    | 12.6               | 515                    | $3.01 \pm 1.27 \pm 0.45$        | 0.5625             | $0.00^{+0.50}_{-0.00} \pm 0.22$ | 0.84                                                | 1.37                                      | N           |
| 0554380201 | 2008-12-14 | 223.356 | +68.210 | 60.5               | 309                    | 60.6               | 397                    | $1.28^{+0.50}_{-0.45} \pm 2.97$ | 0.5925             | $0.00^{+0.19}_{-0.00} \pm 0.62$ | 1.20                                                | 1.96                                      | Y           |
| 0554380301 | 2008-12-20 | 223.357 | +68.210 | 30.4               | 313                    | 30.5               | 398                    | $2.18^{+0.86}_{-0.92} \pm 0.47$ | 0.5675             | $0.55^{+0.46}_{-0.52} \pm 0.11$ | 1.36                                                | 2.65                                      | Y           |
| 0201940101 | 2004-12-17 | 223.358 | +68.210 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0201940201 | 2004-12-19 | 223.358 | +68.210 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0554380101 | 2008-05-26 | 223.362 | +68.208 | 61.8               | 313                    | 61.1               | 472                    | $6.17^{+0.65}_{-0.64} \pm 0.38$ | 0.5575             | $0.59^{+0.35}_{-0.30} \pm 0.09$ | 1.29                                                | 2.15                                      | Y           |
| 0111290401 | 2001-12-02 | 223.378 | +68.227 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0555780401 | 2008-07-11 | 223.464 | -54.373 | 5.5                | 349                    | 5.9                | 511                    | $1.74^{+1.21}_{-1.19} \pm 0.64$ | 0.5925             | $0.00^{+0.33}_{-0.00} \pm 0.00$ | 1.52                                                | 2.53                                      | Y           |
| 0555780101 | 2008-07-05 | 223.465 | -54.365 | 34.2               | 413                    | 34.7               | 509                    | $3.05^{+0.53}_{-0.96} \pm 0.99$ | 0.5525             | $0.44^{+0.38}_{-0.36} \pm 0.20$ | 1.82                                                | 1.77                                      | Y           |
| 0555780301 | 2008-07-09 | 223.477 | -54.374 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                       | ...         |
| 0604960201 | 2009-07-17 | 223.478 | -54.372 | 72.1               | 423                    | 77.3               | 513                    | $2.14^{+0.70}_{-0.81} \pm 0.36$ | 0.5675             | $0.17^{+0.50}_{-0.17} \pm 0.06$ | 1.22                                                | 2.59                                      | Y           |
| 0555780201 | 2008-07-07 | 223.481 | -54.365 | 73.1               | 413                    | 78.3               | 512                    | $1.61^{+0.63}_{-0.59} \pm 0.54$ | 0.5625             |                                 |                                                     |                                           |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0301330401 | 2006-02-13 | 226.946 | −45.906 | 19.4               | 418                    | 19.4               | 588                    | $1.54^{+0.76}_{-0.57} \pm 0.62$ | 0.5925             | $0.40^{+0.46}_{-0.40} \pm 0.25$ | 1.54                                                | 1.95                                                    | Y           |
| 0146990101 | 2003-05-05 | 227.204 | +52.329 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0502690601 | 2007-11-23 | 227.355 | +76.300 | 35.1               | 351                    | 35.0               | 517                    | $3.64^{+0.80}_{-0.66} \pm 0.96$ | 0.5675             | $0.28^{+0.54}_{-0.28} \pm 0.92$ | 1.11                                                | 2.04                                                    | N           |
| 0085640101 | 2001-03-17 | 227.892 | −30.311 | 8.9                | 573                    | 8.6                | 573                    | $6.64^{+0.65}_{-1.11} \pm 1.72$ | 0.5625             | $0.61^{+0.63}_{-0.30} \pm 0.46$ | 1.64                                                | 2.31                                                    | N           |
| 0302310301 | 2005-12-18 | 228.221 | −88.599 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0501210501 | 2007-10-14 | 228.363 | +17.821 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0071340301 | 2001-12-04 | 228.673 | +85.331 | 27.3               | 481                    | 27.8               | 558                    | $7.37^{+0.58}_{-0.68} \pm 0.99$ | 0.5725             | $1.94 \pm 0.38 \pm 1.29$        | 1.68                                                | 2.04                                                    | N           |
| 0111280301 | 2001-07-05 | 228.772 | −88.279 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0402780801 | 2007-04-20 | 228.916 | +30.113 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0411980101 | 2006-06-23 | 230.067 | +66.120 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0556090101 | 2008-12-02 | 230.102 | +66.156 | 18.9               | 341                    | 19.3               | 578                    | $3.54^{+0.80}_{-0.69} \pm 0.36$ | 0.5825             | $0.27^{+0.55}_{-0.27} \pm 0.64$ | 1.75                                                | 1.38                                                    | Y           |
| 0111160201 | 2001-09-01 | 230.649 | −34.597 | 26.5               | 527                    | 27.1               | 535                    | $5.03^{+0.89}_{-0.80} \pm 2.88$ | 0.5625             | $0.18^{+0.35}_{-0.18} \pm 1.18$ | 1.07                                                | 2.69                                                    | N           |
| 0112550301 | 2001-07-01 | 230.658 | +86.418 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0601780301 | 2009-05-29 | 230.877 | +69.095 | 9.4                | 427                    | 10.1               | 515                    | $3.16^{+1.22}_{-0.96} \pm 0.28$ | 0.5925             | $0.00^{+0.71}_{-0.00} \pm 0.18$ | 1.74                                                | 2.09                                                    | N           |
| 0153100101 | 2003-09-09 | 231.123 | −37.568 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0551201001 | 2008-11-06 | 231.489 | +33.770 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0306050201 | 2005-10-30 | 231.698 | +38.785 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201290301 | 2004-05-18 | 231.930 | +39.786 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0553650301 | 2008-05-06 | 232.592 | +0.383  | 15.0               | 419                    | 15.6               | 518                    | $1.12^{+1.12}_{-1.03} \pm 0.26$ | 0.5525             | $0.52 \pm 0.50 \pm 0.10$        | 0.80                                                | 2.39                                                    | N           |
| 0204791101 | 2005-05-04 | 233.189 | +43.767 | 14.6               | 485                    | 14.9               | 507                    | $4.83^{+1.53}_{-0.89} \pm 0.39$ | 0.5675             | $0.52^{+0.53}_{-0.45} \pm 0.73$ | 0.94                                                | 1.23                                                    | N           |
| 0404920201 | 2006-11-03 | 233.213 | +24.181 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0111282001 | 2002-06-22 | 233.341 | −88.673 | 6.3                | 513                    | 6.3                | 512                    | $6.91^{+1.31}_{-1.33} \pm 0.54$ | 0.5725             | $0.47^{+0.74}_{-0.47} \pm 0.73$ | 1.83                                                | 1.84                                                    | Y           |
| 0093640301 | 2001-05-26 | 233.587 | +49.522 | 9.6                | 423                    | 9.4                | 497                    | $8.55^{+1.06}_{-1.31} \pm 0.38$ | 0.5575             | $1.52^{+0.54}_{-0.61} \pm 0.37$ | 1.03                                                | 1.79                                                    | N           |
| 0301900601 | 2006-05-27 | 233.724 | +73.627 | 9.3                | 390                    | 9.2                | 412                    | $5.24^{+1.52}_{-1.58} \pm 1.21$ | 0.5625             | $1.33^{+0.79}_{-0.73} \pm 0.23$ | 1.87                                                | 2.38                                                    | Y           |
| 0150610101 | 2003-05-04 | 234.149 | +44.606 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0079570201 | 2001-10-23 | 234.496 | −10.123 | 19.2               | 225                    | 20.0               | 225                    | $6.05^{+1.93}_{-1.03} \pm 1.63$ | 0.5675             | $2.93^{+0.82}_{-0.70} \pm 0.50$ | 1.15                                                | 2.46                                                    | N           |
| 0204850401 | 2004-03-15 | 234.684 | −10.275 | 9.0                | 580                    | 9.2                | 588                    | $4.34^{+1.59}_{-1.46} \pm 0.36$ | 0.5675             | $0.00^{+0.09}_{-0.00} \pm 0.24$ | 1.46                                                | 2.26                                                    | N           |
| 0600920301 | 2009-05-26 | 234.752 | +47.113 | 6.4                | 418                    | 6.9                | 579                    | $4.80^{+1.40}_{-1.41} \pm 0.32$ | 0.5575             | $0.41^{+0.71}_{-0.41} \pm 0.11$ | 1.69                                                | 1.70                                                    | N           |
| 0204850501 | 2004-03-14 | 234.925 | −9.916  | 12.4               | 584                    | 12.8               | 588                    | $5.99^{+1.04}_{-1.37} \pm 1.82$ | 0.5675             | $0.00^{+0.19}_{-0.00} \pm 1.44$ | 1.24                                                | 2.06                                                    | N           |
| 0201290201 | 2004-08-21 | 235.632 | −34.077 | 9.9                | 506                    | 11.4               | 580                    | $4.74^{+1.64}_{-0.94} \pm 0.74$ | 0.5675             | $0.34^{+0.70}_{-0.34} \pm 0.61$ | 1.87                                                | 1.83                                                    | Y           |
| 0203362101 | 2004-12-09 | 235.886 | +42.012 | 6.9                | 580                    | 6.9                | 509                    | $3.63^{+1.63}_{-1.19} \pm 0.39$ | 0.5575             | $1.26^{+0.70}_{-0.68} \pm 0.23$ | 1.88                                                | 1.63                                                    | Y           |
| 0312190701 | 2006-01-28 | 236.040 | −32.583 | 10.9               | 412                    | 10.8               | 501                    | $5.58^{+1.13}_{-1.14} \pm 0.69$ | 0.5625             | $0.55^{+0.54}_{-0.55} \pm 0.51$ | 0.73                                                | 1.38                                                    | N           |
| 0302351601 | 2005-11-27 | 236.064 | +42.203 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302352201 | 2006-05-11 | 236.149 | +41.850 | 6.6                | 419                    | 6.7                | 510                    | $3.72^{+1.93}_{-1.67} \pm 1.12$ | 0.5675             | $0.00^{+0.87}_{-0.00} \pm 0.65$ | 1.74                                                | 2.32                                                    | Y           |
| 0302351101 | 2006-05-12 | 236.229 | +42.398 | 15.0               | 487                    | 14.6               | 508                    | $2.87^{+0.88}_{-0.79} \pm 0.24$ | 0.5775             | $0.08^{+0.51}_{-0.08} \pm 0.54$ | 1.37                                                | 1.88                                                    | Y           |
| 0203361101 | 2004-12-01 | 236.272 | +42.422 | 18.9               | 581                    | 20.1               | 508                    | $3.65^{+0.84}_{-0.69} \pm 0.56$ | 0.5675             | $0.51^{+0.44}_{-0.47} \pm 0.55$ | 1.34                                                | 2.18                                                    | N           |
| 0302351701 | 2006-05-17 | 236.311 | +42.050 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203361701 | 2004-12-11 | 236.354 | +42.072 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302352301 | 2006-05-12 | 236.392 | +41.702 | 5.1                | 485                    | 5.3                | 505                    | $4.65^{+1.48}_{-1.62} \pm 0.44$ | 0.5725             | $0.24^{+0.90}_{-0.24} \pm 0.25$ | 1.38                                                | 2.15                                                    | N           |
| 0501170201 | 2007-05-18 | 236.393 | +41.702 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302350601 | 2006-06-01 | 236.428 | +42.580 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203360601 | 2004-05-30 | 236.441 | +42.593 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203361201 | 2003-12-08 | 236.549 | +42.277 | 19.3               | 586                    | 19.5               | 511                    | $6.64^{+0.82}_{-0.81} \pm 0.42$ | 0.5675             | $1.13^{+0.43}_{-0.41} \pm 0.81$ | 1.14                                                | 1.83                                                    | Y           |
| 0302351201 | 2005-11-23 | 236.560 | +42.291 | 15.1               | 425                    | 15.3               | 510                    | $7.23^{+0.90}_{-0.91} \pm 0.30$ | 0.5725             | $1.02^{+0.52}_{-0.47} \pm 1.15$ | 1.10                                                | 1.48                                                    | N           |
| 0302351801 | 2006-05-17 | 236.590 | +41.883 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0505880301 | 2007-06-09 | 236.617 | +65.632 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203361801 | 2003-12-11 | 236.630 | +41.929 | 27.1               | 581                    | 26.5               | 582                    | $5.53^{+0.66}_{-1.00} \pm 0.78$ | 0.5625             | $1.03^{+0.36}_{-0.35} \pm 0.72$ | 1.52                                                | 1.77                                                    | N           |
| 0203360101 | 2004-12-11 | 236.664 | +42.829 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302353201 | 2006-06-09 | 236.695 | +41.562 | 11.6               | 419                    | 11.9               | 437                    | $4.34^{+1.07}_{-1.15} \pm 0.24$ | 0.5725             | $0.71^{+0.65}_{-0.67} \pm 0.36$ | 1.58                                                | 1.69                                                    | N           |
| 0302352401 | 2006-05-09 | 236.697 | +41.561 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302350701 | 2005-11-23 | 236.724 | +42.492 | 8.4                | 417                    | 8.2                | 500                    | $7.45^{+1.22}_{-1.45} \pm 0.69$ | 0.5725             | $0.14^{+0.69}_{-0.14} \pm 1.33$ | 1.71                                                | 1.30                                                    | Y           |
| 0203360701 | 2003-12-06 | 236.743 | +42.482 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302351301 | 2005-11-23 | 236.804 | +42.142 | 18.6               | 428                    | 18.9               | 515                    | $5.80^{+0.82}_{-0.80} \pm 0.24$ | 0.5675             | $0.68^{+0.46}_{-0.44} \pm 0.80$ | 0.74                                                | 1.56                                                    | N           |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{H I}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|-------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                            | filtering?  |
| 0203361301 | 2003-12-10 | 236.824 | +42.133 | 22.5               | 588                    | 22.9               | 589                    | $5.85^{+0.66}_{-0.64} \pm 0.49$ | 0.5675             | $2.04^{+0.41}_{-0.37} \pm 0.34$ | 1.85                                                | 1.93                                            | Y           |
| 0202870201 | 2004-12-10 | 236.847 | +54.285 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0302351901 | 2006-05-15 | 236.859 | +41.761 | 11.3               | 423                    | 11.7               | 586                    | $5.81^{+1.11}_{-1.13} \pm 0.24$ | 0.5625             | $1.08^{+0.62}_{-0.61} \pm 0.35$ | 0.96                                                | 1.68                                            | N           |
| 0203361901 | 2004-12-12 | 236.902 | +41.783 | 21.2               | 584                    | 21.1               | 513                    | $5.80^{+0.69}_{-1.02} \pm 0.43$ | 0.5625             | $0.52^{+0.35}_{-0.40} \pm 0.86$ | 1.03                                                | 1.27                                            | Y           |
| 0302350201 | 2006-06-08 | 236.928 | +42.666 | 9.4                | 351                    | 9.4                | 511                    | $4.75^{+1.14}_{-1.36} \pm 0.54$ | 0.5625             | $0.73^{+0.71}_{-0.35} \pm 0.56$ | 1.93                                                | 1.63                                            | Y           |
| 0302353301 | 2006-06-09 | 236.935 | +41.413 | 8.8                | 348                    | 9.0                | 512                    | $5.16^{+1.27}_{-1.46} \pm 0.21$ | 0.5675             | $0.23^{+0.72}_{-0.23} \pm 0.75$ | 1.72                                                | 1.45                                            | Y           |
| 0203360201 | 2004-12-11 | 236.941 | +42.684 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0206630101 | 2004-02-28 | 236.961 | -16.775 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0302350801 | 2005-11-25 | 237.005 | +42.323 | 18.8               | 421                    | 18.6               | 506                    | $6.32^{+1.15}_{-0.76} \pm 0.51$ | 0.5725             | $0.38^{+0.46}_{-0.38} \pm 0.86$ | 1.55                                                | 1.45                                            | N           |
| 0302500101 | 2005-08-09 | 237.074 | -65.638 | 22.1               | 341                    | 23.7               | 588                    | $6.22^{+0.87}_{-1.11} \pm 0.52$ | 0.5625             | $2.25^{+0.45}_{-0.48} \pm 0.40$ | 1.73                                                | 2.04                                            | Y           |
| 0302351401 | 2006-05-24 | 237.085 | +41.968 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0203361401 | 2003-12-10 | 237.099 | +41.987 | 10.4               | 576                    | 10.4               | 578                    | $5.82 \pm 0.87 \pm 0.29$        | 0.5725             | $0.95^{+0.52}_{-0.51} \pm 1.17$ | 1.83                                                | 1.46                                            | Y           |
| 0302353401 | 2006-11-27 | 237.110 | +42.001 | 9.6                | 491                    | 10.0               | 503                    | $3.58^{+1.22}_{-1.13} \pm 0.30$ | 0.5675             | $0.19^{+0.31}_{-0.19} \pm 0.39$ | 1.54                                                | 1.56                                            | N           |
| 0302352001 | 2006-05-15 | 237.135 | +41.592 | 5.1                | 423                    | 5.5                | 586                    | $7.70^{+1.94}_{-1.56} \pm 0.29$ | 0.5675             | $0.37^{+0.86}_{-0.37} \pm 0.75$ | 0.99                                                | 1.74                                            | N           |
| 0501170101 | 2007-05-06 | 237.136 | +41.592 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0203362001 | 2005-05-14 | 237.149 | +41.606 | 8.3                | 425                    | 8.0                | 585                    | $6.18^{+1.15}_{-1.29} \pm 0.42$ | 0.5725             | $1.47^{+0.74}_{-0.84} \pm 0.97$ | 1.59                                                | 2.09                                            | N           |
| 0302353101 | 2006-06-01 | 237.172 | +42.516 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0203360301 | 2005-05-14 | 237.192 | +42.506 | 30.3               | 492                    | 30.3               | 580                    | $5.18^{+0.86}_{-0.69} \pm 0.09$ | 0.5625             | $1.01^{+0.36}_{-0.35} \pm 0.30$ | 1.26                                                | 2.03                                            | N           |
| 0203360901 | 2004-11-20 | 237.293 | +42.190 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0302351501 | 2006-05-18 | 237.328 | +41.818 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0203361501 | 2004-11-19 | 237.369 | +41.841 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0144920201 | 2003-04-23 | 237.432 | +16.293 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0203360401 | 2004-11-21 | 237.491 | +42.393 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0149501201 | 2003-08-08 | 237.542 | -31.685 | 6.8                | 489                    | 6.8                | 489                    | $5.01^{+1.16}_{-1.32} \pm 0.25$ | 0.5725             | $0.82^{+0.68}_{-0.72} \pm 0.47$ | 1.88                                                | 1.59                                            | N           |
| 0302351001 | 2005-11-17 | 237.554 | +42.030 | 13.9               | 404                    | 14.0               | 506                    | $5.93^{+1.01}_{-1.25} \pm $     |                    |                                 |                                                     |                                                 |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$              | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|---------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                          | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0401880601 | 2006-11-05 | 239.154 | +30.664 | 13.9               | 419                    | 13.7               | 506                    | $3.96^{+1.39}_{-1.21} \pm 0.34$ | 0.5625             | $0.27^{+0.68}_{-0.27} \pm 0.64$ | 1.56                                                | 2.03                                                    | Y           |
| 0501930401 | 2007-11-09 | 239.154 | +30.664 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0103861801 | 2002-05-23 | 239.342 | +59.463 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0108670101 | 2000-12-05 | 239.399 | +47.965 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201130101 | 2004-03-09 | 239.419 | -48.295 | 11.7               | 469                    | 11.9               | 477                    | $4.53^{+1.20}_{-1.03} \pm 0.88$ | 0.5575             | $1.33^{+0.65}_{-0.50} \pm 0.40$ | 1.61                                                | 2.00                                                    | Y           |
| 0502510201 | 2007-06-13 | 239.423 | +65.240 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0148560501 | 2003-05-22 | 239.441 | +50.035 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0556200301 | 2008-05-23 | 239.573 | +25.083 | 27.9               | 476                    | 30.2               | 570                    | $2.15^{+1.00}_{-1.08} \pm 0.55$ | 0.5675             | $0.00^{+0.30}_{-0.00} \pm 0.00$ | 1.14                                                | 2.65                                                    | N           |
| 0300930201 | 2005-09-27 | 239.639 | -8.495  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0501750801 | 2007-10-20 | 239.655 | +8.731  | 44.0               | 241                    | 44.9               | 467                    | $3.27^{+0.78}_{-0.77} \pm 1.79$ | 0.5625             | $0.91^{+0.42}_{-0.36} \pm 0.42$ | 1.45                                                | 2.42                                                    | N           |
| 0069750101 | 2001-03-19 | 239.832 | -11.330 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0502481901 | 2007-10-16 | 239.982 | -10.399 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0066950201 | 2002-06-13 | 240.105 | +70.525 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0092360101 | 2001-10-29 | 240.189 | -20.907 | 10.9               | 511                    | 10.8               | 587                    | $6.37^{+1.39}_{-0.94} \pm 0.37$ | 0.5725             | $3.63^{+0.83}_{-0.65} \pm 0.33$ | 0.98                                                | 2.46                                                    | N           |
| 0302580901 | 2005-08-14 | 240.511 | -32.838 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0065760201 | 2002-10-09 | 240.609 | -32.698 | 24.4               | 380                    | 24.6               | 399                    | $7.09^{+0.87}_{-0.89} \pm 0.21$ | 0.5675             | $1.19 \pm 0.49 \pm 0.80$        | 1.61                                                | 1.81                                                    | Y           |
| 0111280601 | 2002-06-19 | 240.713 | -88.139 | 10.1               | 468                    | 10.0               | 547                    | $5.90 \pm 0.92 \pm 0.40$        | 0.5725             | $0.95^{+0.55}_{-0.54} \pm 0.96$ | 1.43                                                | 1.55                                                    | N           |
| 0402121401 | 2007-04-11 | 240.833 | -23.502 | 8.2                | 306                    | 8.1                | 399                    | $3.51^{+2.33}_{-2.28} \pm 1.92$ | 0.5475             | $2.54^{+1.14}_{-1.23} \pm 1.04$ | 1.68                                                | 1.53                                                    | N           |
| 0151390101 | 2003-05-18 | 241.098 | +52.636 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0082140301 | 2002-05-22 | 241.303 | +64.204 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201951901 | 2004-08-21 | 241.329 | -27.043 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0405240901 | 2007-06-05 | 241.449 | +53.598 | 29.9               | 480                    | 30.0               | 504                    | $3.23 \pm 0.72 \pm 0.33$        | 0.5675             | $0.07^{+0.42}_{-0.07} \pm 0.38$ | 1.38                                                | 1.92                                                    | N           |
| 0042341801 | 2002-10-07 | 241.748 | -30.860 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0104860101 | 2003-01-14 | 241.790 | -44.918 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0093641101 | 2001-05-26 | 241.964 | +64.418 | 9.3                | 471                    | 9.0                | 403                    | $6.28^{+1.62}_{-1.42} \pm 1.06$ | 0.5625             | $1.46^{+0.72}_{-0.73} \pm 1.29$ | 0.61                                                | 1.74                                                    | N           |
| 0402781401 | 2006-12-02 | 242.810 | +44.357 | 6.6                | 308                    | 6.7                | 455                    | $4.63^{+2.11}_{-1.59} \pm 0.72$ | 0.5675             | $0.17^{+0.95}_{-0.17} \pm 0.59$ | 1.92                                                | 2.23                                                    | Y           |
| 0112271001 | 2003-06-09 | 242.935 | +77.157 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203050201 | 2004-05-12 | 243.475 | +45.767 | 8.8                | 572                    | 8.8                | 579                    | $5.68^{+0.88}_{-0.89} \pm 0.20$ | 0.5725             | $0.76 \pm 0.51 \pm 0.78$        | 1.73                                                | 1.45                                                    | Y           |
| 0560180801 | 2008-11-26 | 243.505 | +45.798 | 32.2               | 404                    | 32.6               | 500                    | $4.22^{+1.08}_{-0.72} \pm 0.34$ | 0.5675             | $0.94^{+0.55}_{-0.38} \pm 0.36$ | 1.38                                                | 1.65                                                    | N           |
| 0200530801 | 2006-05-23 | 244.033 | +56.096 | 14.0               | 376                    | 14.0               | 464                    | $5.55^{+2.07}_{-0.93} \pm 1.33$ | 0.5725             | $1.04^{+0.50}_{-0.66} \pm 0.77$ | 1.54                                                | 2.12                                                    | N           |
| 0200530501 | 2006-05-19 | 244.034 | +56.097 | 22.1               | 438                    | 21.7               | 536                    | $3.99^{+0.86}_{-0.69} \pm 0.31$ | 0.5725             | $0.43^{+0.47}_{-0.40} \pm 0.61$ | 1.05                                                | 1.73                                                    | N           |
| 0200530401 | 2005-12-13 | 244.075 | +56.135 | 15.6               | 448                    | 16.0               | 537                    | $4.39 \pm 0.81 \pm 0.76$        | 0.5725             | $0.59 \pm 0.48 \pm 0.66$        | 0.80                                                | 1.88                                                    | N           |
| 0200530301 | 2005-12-11 | 244.075 | +56.135 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0400140301 | 2006-05-22 | 244.146 | -8.178  | 18.2               | 289                    | 18.6               | 367                    | $6.12^{+1.46}_{-0.95} \pm 2.18$ | 0.5625             | $2.41^{+0.71}_{-0.54} \pm 1.01$ | 1.82                                                | 2.10                                                    | N           |
| 0132520301 | 2000-11-21 | 244.157 | -8.163  | 17.3               | 369                    | 17.1               | 366                    | $6.87^{+0.91}_{-1.05} \pm 0.78$ | 0.5625             | $1.18^{+0.51}_{-0.54} \pm 0.39$ | 0.94                                                | 1.82                                                    | N           |
| 0300520301 | 2005-09-22 | 244.157 | -8.164  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0311590101 | 2005-11-12 | 244.158 | -8.163  | 27.8               | 279                    | 28.0               | 370                    | $5.72^{+0.95}_{-0.97} \pm 1.35$ | 0.5575             | $0.90^{+0.51}_{-0.50} \pm 0.62$ | 1.64                                                | 1.70                                                    | Y           |
| 0164560501 | 2004-05-22 | 244.158 | -8.165  | 23.7               | 432                    | 23.2               | 439                    | $5.47^{+0.79}_{-0.81} \pm 0.97$ | 0.5675             | $0.76 \pm 0.45 \pm 0.55$        | 1.47                                                | 1.97                                                    | N           |
| 0300520201 | 2005-04-28 | 244.159 | -8.165  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0554510101 | 2009-03-21 | 244.161 | -8.183  | 11.1               | 290                    | 11.0               | 372                    | $3.55^{+1.14}_{-1.09} \pm 0.65$ | 0.5925             | $0.00^{+0.56}_{-0.00} \pm 0.36$ | 1.68                                                | 1.47                                                    | N           |
| 0400140401 | 2006-11-05 | 244.166 | -8.147  | 11.8               | 289                    | 11.6               | 370                    | $2.14^{+1.03}_{-1.08} \pm 1.38$ | 0.5925             | $0.43^{+0.75}_{-0.43} \pm 0.42$ | 1.74                                                | 2.08                                                    | Y           |
| 0502710301 | 2007-11-17 | 244.168 | -8.149  | 23.5               | 222                    | 23.9               | 371                    | $5.85^{+1.43}_{-1.04} \pm 0.37$ | 0.5675             | $2.00^{+0.62}_{-0.54} \pm 0.12$ | 1.01                                                | 1.67                                                    | N           |
| 0042340801 | 2001-09-15 | 244.361 | -32.112 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0404260301 | 2006-11-03 | 244.526 | -26.361 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0148880101 | 2003-05-09 | 244.588 | +28.400 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0301450301 | 2005-08-28 | 244.612 | -50.715 | 18.5               | 291                    | 18.4               | 389                    | $3.84^{+1.26}_{-1.00} \pm 1.10$ | 0.5675             | $0.57^{+0.67}_{-0.57} \pm 0.75$ | 1.57                                                | 1.86                                                    | N           |
| 0017540101 | 2001-12-02 | 244.717 | +32.496 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0405100201 | 2006-10-26 | 245.241 | -4.487  | 56.4               | 309                    | 56.2               | 396                    | $5.07^{+0.75}_{-0.64} \pm 0.32$ | 0.5675             | $1.24 \pm 0.32 \pm 0.26$        | 1.23                                                | 1.93                                                    | Y           |
| 0405100101 | 2006-10-28 | 245.241 | -4.487  | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0305980401 | 2005-12-15 | 245.343 | +46.280 | 8.3                | 499                    | 8.4                | 588                    | $4.55^{+0.85}_{-1.05} \pm 0.90$ | 0.5875             | $0.53^{+0.66}_{-0.53} \pm 0.77$ | 1.58                                                | 1.51                                                    | Y           |
| 0149160201 | 2003-05-20 | 245.348 | +10.040 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0305750501 | 2005-12-11 | 245.812 | +47.765 | ...                | ...                    | ...                | ...                    | ...                             | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0201900801 | 2004-03-05 | 246.023 | -51.777 | 8.4                | 348                    | 8.4                | 290                    | $4.63^{+1.93}_{-1.74} \pm 0.51$ | 0.5725             | $0.73^{+1.09}_{-0.73} \pm 0.69$ | 1.80                                                | 2.53                                                    | ...         |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{2-5}}^{\text{4+8}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|--------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                   | filtering?  |
| 0550460201 | 2008-06-04 | 246.360 | +37.380 | 10.9               | 481                    | 11.5               | 569                    | $2.97^{+1.01}_{-0.94} \pm 0.48$  | 0.5725             | $0.00^{+0.33}_{-0.00} \pm 0.01$ | 0.85                                                | 1.61                                                   | N           |
| 0554740801 | 2009-03-12 | 246.767 | -39.142 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0201690201 | 2005-01-03 | 247.558 | -57.045 | 8.6                | 538                    | 9.0                | 467                    | $4.18^{+0.91}_{-0.92} \pm 0.34$  | 0.5825             | $0.56^{+0.70}_{-0.56} \pm 0.61$ | 1.79                                                | 1.61                                                   | Y           |
| 0302580301 | 2006-05-07 | 247.633 | +36.008 | 44.3               | 329                    | 45.4               | 419                    | $4.19^{+0.78}_{-0.64} \pm 0.29$  | 0.5675             | $0.30^{+0.34}_{-0.30} \pm 0.35$ | 1.37                                                | 1.81                                                   | N           |
| 0104860201 | 2002-04-06 | 248.411 | -41.584 | 11.5               | 555                    | 11.8               | 561                    | $6.44 \pm 0.86 \pm 0.57$         | 0.5675             | $0.46 \pm 0.46 \pm 1.31$        | 1.22                                                | 1.48                                                   | N           |
| 0202650101 | 2004-05-27 | 248.560 | +8.564  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0305800101 | 2005-12-12 | 248.606 | +43.836 | 15.8               | 476                    | 16.0               | 565                    | $4.30^{+0.96}_{-0.92} \pm 1.07$  | 0.5675             | $0.28^{+0.47}_{-0.28} \pm 0.49$ | 1.00                                                | 2.45                                                   | N           |
| 0404840201 | 2007-06-08 | 248.998 | +44.408 | 13.8               | 353                    | 13.8               | 444                    | $6.44^{+1.26}_{-1.43} \pm 0.66$  | 0.5625             | $0.67^{+0.61}_{-0.67} \pm 1.18$ | 1.80                                                | 1.43                                                   | Y           |
| 0501210701 | 2007-07-07 | 249.135 | -47.779 | 21.2               | 422                    | 21.3               | 518                    | $4.27^{+0.96}_{-0.98} \pm 0.13$  | 0.5625             | $0.77^{+0.47}_{-0.46} \pm 0.24$ | 1.72                                                | 1.59                                                   | N           |
| 0311792101 | 2006-11-21 | 249.356 | +30.120 | 17.8               | 384                    | 18.1               | 403                    | $2.38^{+0.78}_{-0.81} \pm 0.99$  | 0.5925             | $0.36^{+0.61}_{-0.36} \pm 0.91$ | 1.63                                                | 1.68                                                   | Y           |
| 0203560201 | 2004-06-10 | 249.862 | +60.631 | 36.2               | 466                    | 37.7               | 539                    | $4.98^{+0.63}_{-0.58} \pm 0.57$  | 0.5675             | $0.45^{+0.34}_{-0.16} \pm 0.61$ | 1.71                                                | 1.78                                                   | Y           |
| 0203560401 | 2004-06-26 | 249.864 | +60.631 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0125300101 | 2000-05-28 | 250.851 | +48.190 | 10.0               | 589                    | 10.2               | 588                    | $5.19^{+1.25}_{-1.03} \pm 0.67$  | 0.5675             | $1.02^{+0.65}_{-0.54} \pm 0.57$ | 1.51                                                | 1.98                                                   | Y           |
| 0150870401 | 2002-12-20 | 251.130 | +45.146 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0206390101 | 2005-01-14 | 251.620 | -34.636 | 29.7               | 370                    | 30.0               | 366                    | $3.14^{+0.83}_{-0.75} \pm 0.48$  | 0.5675             | $0.35^{+0.45}_{-0.35} \pm 0.16$ | 1.43                                                | 2.31                                                   | Y           |
| 0109460701 | 2002-03-16 | 252.592 | -32.684 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0304010101 | 2005-06-04 | 252.914 | -0.850  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0204220101 | 2004-05-28 | 253.179 | -1.729  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0201290401 | 2004-06-21 | 253.315 | +44.695 | 8.1                | 589                    | 8.1                | 590                    | $5.99^{+1.82}_{-0.94} \pm 0.85$  | 0.5675             | $0.44^{+0.54}_{-0.44} \pm 1.10$ | 1.47                                                | 1.29                                                   | N           |
| 0112320201 | 2002-10-09 | 253.401 | -41.946 | 44.5               | 458                    | 44.2               | 396                    | $4.73^{+0.90}_{-0.51} \pm 0.20$  | 0.5725             | $0.98^{+0.33}_{-0.30} \pm 0.59$ | 1.64                                                | 1.95                                                   | Y           |
| 0550120501 | 2008-06-08 | 253.582 | +2.916  | 13.4               | 401                    | 13.4               | 563                    | $5.68^{+1.07}_{-1.21} \pm 0.38$  | 0.5575             | $2.21^{+0.54}_{-0.56} \pm 0.15$ | 1.09                                                | 1.55                                                   | N           |
| 0555460201 | 2008-05-10 | 253.696 | -19.157 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                    | ...         |
| 0112450301 | 2002-05-03 | 253.698 | -19.158 | 7.0                | 562                    | 6.7                | 567                    | $10.54^{+1.89}_{-1.58} \pm 0.62$ | 0.5625             | $1.08^{+0.77}_{-0.73} \pm 1.53$ | 1.60                                                | 1.27                                                   | N           |
| 0032140501 | 2001-10-17 | 253.847 | -19.42  |                    |                        |                    |                        |                                  |                    |                                 |                                                     |                                                        |             |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{Ly}\alpha}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                 | filtering?  |
| 0141750501 | 2003-04-24 | 257.421 | -5.003  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0552210201 | 2008-05-11 | 257.426 | -4.983  | 7.5                | 242                    | 7.5                | 474                    | $7.46^{+1.64}_{-2.01} \pm 0.64$  | 0.5575             | $3.41^{+0.89}_{-1.02} \pm 0.32$ | 1.68                                                | 1.92                                                 | Y           |
| 0552210401 | 2008-05-29 | 257.426 | -4.983  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0552210901 | 2008-11-04 | 257.426 | -4.983  | 5.3                | 314                    | 5.5                | 402                    | $11.00^{+2.28}_{-2.51} \pm 0.41$ | 0.5625             | $5.10^{+1.24}_{-1.30} \pm 0.22$ | 0.99                                                | 1.39                                                 | N           |
| 0552211101 | 2009-03-31 | 257.426 | -4.983  | 7.6                | 316                    | 7.6                | 475                    | $9.84^{+1.95}_{-1.64} \pm 0.42$  | 0.5675             | $0.61^{+0.90}_{-0.61} \pm 0.52$ | 1.63                                                | 1.74                                                 | N           |
| 0552210601 | 2008-10-15 | 257.428 | -4.964  | 9.1                | 306                    | 9.1                | 474                    | $11.30^{+1.65}_{-2.22} \pm 4.01$ | 0.5575             | $5.13^{+0.69}_{-1.19} \pm 1.98$ | 1.07                                                | 1.57                                                 | N           |
| 0106260201 | 2000-11-08 | 257.435 | -4.968  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0552211001 | 2008-12-10 | 257.441 | -4.971  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0303820201 | 2005-12-01 | 257.481 | +47.340 | 17.8               | 416                    | 17.7               | 497                    | $5.09^{+0.75}_{-0.81} \pm 0.41$  | 0.5725             | $0.42^{+0.49}_{-0.42} \pm 0.68$ | 1.69                                                | 2.04                                                 | Y           |
| 0304201301 | 2006-04-08 | 257.610 | -1.692  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0111282201 | 2002-06-30 | 257.647 | -88.779 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0552860101 | 2008-12-24 | 257.890 | +46.561 | 32.0               | 411                    | 34.2               | 499                    | $3.69^{+0.79}_{-0.81} \pm 0.29$  | 0.5725             | $0.41^{+0.44}_{-0.41} \pm 0.42$ | 1.42                                                | 2.23                                                 | Y           |
| 0141751201 | 2003-07-25 | 258.110 | -44.380 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0141750101 | 2002-12-30 | 258.162 | -44.385 | 16.1               | 583                    | 16.2               | 582                    | $5.51^{+0.80}_{-0.67} \pm 0.42$  | 0.5675             | $0.43^{+0.41}_{-0.32} \pm 0.61$ | 1.93                                                | 1.47                                                 | Y           |
| 0141751001 | 2002-12-31 | 258.162 | -44.385 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0141751101 | 2003-01-19 | 258.163 | -44.386 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0044740601 | 2004-01-04 | 258.364 | -30.611 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0148790101 | 2003-08-08 | 258.479 | -63.415 | 6.9                | 397                    | 6.5                | 394                    | $6.45^{+2.01}_{-1.70} \pm 0.46$  | 0.5725             | $0.63^{+1.12}_{-0.63} \pm 1.23$ | 1.91                                                | 1.67                                                 | Y           |
| 0153350101 | 2002-10-14 | 258.502 | -3.916  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0111280801 | 2002-06-30 | 258.605 | -88.232 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0551021201 | 2008-06-19 | 259.251 | +58.495 | 22.7               | 419                    | 23.7               | 577                    | $6.04^{+1.19}_{-1.18} \pm 1.36$  | 0.5575             | $1.12^{+0.57}_{-0.67} \pm 0.42$ | 1.15                                                | 2.24                                                 | N           |
| 0201330101 | 2005-05-19 | 259.554 | +39.674 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0145750101 | 2003-06-23 | 259.567 | +56.884 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0042340301 | 2002-07-11 | 259.921 | -63.450 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0205800301 | 2004-06-12 | 260.085 | +14.198 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0506200301 | 2007-05-14 | 260.159 | -17.689 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0148010301 | 2002-10-13 | 260.169 | -17.655 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0110890201 | 2000-10-21 | 260.170 | -17.655 | 39.6               | 460                    | 40.7               | 468                    | $7.43^{+0.67}_{-0.68} \pm 0.49$  | 0.5625             | $1.50 \pm 0.34 \pm 0.21$        | 1.43                                                | 2.44                                                 | N           |
| 0112650301 | 2001-07-02 | 260.903 | +82.947 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0140190101 | 2003-08-16 | 260.909 | -53.351 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0148650101 | 2003-01-30 | 261.101 | -38.750 | 28.3               | 505                    | 28.1               | 578                    | $4.57^{+0.82}_{-0.60} \pm 0.46$  | 0.5675             | $0.53^{+0.51}_{-0.32} \pm 0.69$ | 1.78                                                | 1.76                                                 | Y           |
| 0312190201 | 2006-06-26 | 261.584 | -77.008 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0303560201 | 2005-12-19 | 261.797 | -73.461 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0401050201 | 2007-03-16 | 262.065 | -10.440 | 53.1               | 420                    | 53.1               | 510                    | $2.39^{+0.78}_{-0.89} \pm 0.61$  | 0.5625             | $0.81^{+0.40}_{-0.43} \pm 0.20$ | 1.18                                                | 1.84                                                 | N           |
| 0304200501 | 2005-04-28 | 262.204 | +1.072  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0205330301 | 2004-01-13 | 262.264 | -35.364 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0604010701 | 2009-05-30 | 262.359 | -32.678 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0112670601 | 2001-05-04 | 262.804 | -7.687  | 10.0               | 373                    | 9.7                | 368                    | $10.96^{+1.71}_{-2.20} \pm 1.68$ | 0.5575             | $3.14^{+0.85}_{-1.04} \pm 1.02$ | 1.96                                                | 1.91                                                 | Y           |
| 0305750601 | 2005-11-29 | 262.941 | +57.416 | 6.2                | 423                    | 6.2                | 512                    | $5.21^{+1.28}_{-1.58} \pm 0.65$  | 0.5675             | $0.54^{+0.76}_{-0.54} \pm 1.10$ | 1.69                                                | 1.44                                                 | N           |
| 0201330201 | 2004-12-29 | 262.992 | +41.853 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0112650201 | 2001-07-02 | 263.387 | +82.556 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0090070101 | 2002-06-17 | 263.418 | -73.273 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0301830101 | 2005-06-16 | 263.619 | +39.359 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0109130201 | 2002-06-30 | 263.654 | -79.462 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0401790301 | 2006-03-25 | 264.257 | -10.042 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0305920201 | 2005-12-03 | 264.519 | +60.567 | 36.7               | 367                    | 37.1               | 458                    | $6.33^{+0.33}_{-0.63} \pm 0.52$  | 0.5725             | $1.24^{+0.37}_{-0.39} \pm 1.12$ | 1.53                                                | 1.55                                                 | N           |
| 0550453201 | 2009-04-28 | 264.520 | -13.517 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0111971001 | 2001-12-06 | 264.919 | -7.874  | 7.0                | 384                    | 7.1                | 465                    | $7.42^{+1.42}_{-1.72} \pm 0.57$  | 0.5625             | $1.71^{+0.83}_{-0.80} \pm 0.83$ | 1.83                                                | 1.70                                                 | Y           |
| 0205090201 | 2004-01-06 | 265.431 | -43.799 | 6.2                | 550                    | 5.9                | 473                    | $9.54^{+1.68}_{-1.67} \pm 0.28$  | 0.5675             | $3.57^{+0.94}_{-0.90} \pm 1.07$ | 1.83                                                | 1.79                                                 | Y           |
| 0112650101 | 2001-07-01 | 265.613 | +82.153 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0148000601 | 2003-09-16 | 266.973 | -41.980 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |
| 0148000201 | 2002-09-25 | 266.977 | -41.977 | 5.3                | 465                    | 5.8                | 471                    | $10.92^{+2.71}_{-2.10} \pm 1.26$ | 0.5675             | $0.91^{+1.26}_{-0.91} \pm 1.50$ | 1.18                                                | 1.86                                                 | Y           |
| 0148000401 | 2003-03-30 | 266.993 | -42.014 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                  | ...         |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0551022701 | 2008-06-15 | 267.186 | +61.039 | 9.9                | 493                    | 10.4               | 583                    | $4.84^{+1.04}_{-0.94} \pm 0.08$  | 0.5775             | $0.37^{+0.61}_{-0.37} \pm 1.02$ | 1.87                                                | 1.09                                                    | Y           |
| 0208020101 | 2004-06-21 | 267.497 | +74.304 | 32.9               | 473                    | 33.3               | 471                    | $5.25^{+0.63}_{-0.60} \pm 0.25$  | 0.5725             | $0.38^{+0.38}_{-0.36} \pm 0.68$ | 1.53                                                | 2.14                                                    | N           |
| 0502050201 | 2007-12-23 | 267.600 | +74.324 | 26.3               | 241                    | 26.5               | 399                    | $4.53^{+1.14}_{-0.88} \pm 0.22$  | 0.5575             | $0.75^{+0.55}_{-0.48} \pm 0.13$ | 1.26                                                | 2.02                                                    | N           |
| 0502050101 | 2007-12-21 | 267.601 | +74.324 | 46.8               | 311                    | 46.2               | 398                    | $6.18^{+0.80}_{-0.71} \pm 0.51$  | 0.5575             | $0.77^{+0.40}_{-0.35} \pm 0.34$ | 1.34                                                | 1.97                                                    | N           |
| 0606150101 | 2009-06-21 | 267.605 | +52.735 | 30.7               | 410                    | 32.2               | 495                    | $2.13^{+0.93}_{-0.75} \pm 0.94$  | 0.5725             | $0.23^{+0.51}_{-0.23} \pm 0.45$ | 1.32                                                | 2.38                                                    | Y           |
| 0201670101 | 2004-07-07 | 267.648 | +79.226 | 16.3               | 441                    | 16.2               | 448                    | $5.04^{+1.19}_{-0.87} \pm 0.38$  | 0.5725             | $0.43^{+0.61}_{-0.43} \pm 1.07$ | 1.25                                                | 1.62                                                    | N           |
| 0202060201 | 2004-12-31 | 267.656 | +52.756 | 29.9               | 473                    | 30.9               | 400                    | $6.07^{+0.69}_{-1.00} \pm 0.49$  | 0.5675             | $0.80^{+0.38}_{-0.41} \pm 0.72$ | 1.78                                                | 1.41                                                    | N           |
| 0112550501 | 2001-12-04 | 267.717 | +73.343 | 6.9                | 405                    | 6.8                | 553                    | $8.55^{+1.72}_{-1.36} \pm 0.47$  | 0.5775             | $0.56^{+0.89}_{-0.56} \pm 1.53$ | 1.88                                                | 1.98                                                    | Y           |
| 0203880101 | 2004-11-27 | 268.800 | -38.976 | 8.9                | 537                    | 9.3                | 466                    | $5.87^{+1.61}_{-1.12} \pm 0.51$  | 0.5725             | $2.78^{+0.82}_{-0.67} \pm 0.86$ | 1.87                                                | 1.50                                                    | Y           |
| 0601560201 | 2009-06-03 | 269.081 | +48.345 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203890101 | 2003-12-26 | 269.440 | +19.035 | 73.4               | 490                    | 73.4               | 564                    | $8.93^{+0.44}_{-0.48} \pm 0.27$  | 0.5675             | $0.97^{+0.23}_{-0.24} \pm 1.07$ | 1.41                                                | 1.77                                                    | Y           |
| 0305801101 | 2006-06-10 | 269.443 | +54.225 | 16.9               | 493                    | 17.1               | 515                    | $5.60 \pm 0.78 \pm 0.63$         | 0.5725             | $0.33^{+0.46}_{-0.33} \pm 1.00$ | 1.21                                                | 1.55                                                    | N           |
| 0151230101 | 2003-07-05 | 269.722 | +56.549 | 7.1                | 587                    | 7.3                | 592                    | $6.00^{+0.98}_{-0.99} \pm 0.32$  | 0.5775             | $1.08 \pm 0.63 \pm 1.12$        | 1.14                                                | 1.53                                                    | N           |
| 0551760601 | 2008-05-29 | 269.729 | +83.155 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0501110201 | 2007-05-29 | 269.794 | -63.469 | 40.5               | 261                    | 40.8               | 338                    | $4.03^{+1.22}_{-0.79} \pm 2.04$  | 0.5625             | $0.58^{+0.56}_{-0.48} \pm 1.40$ | 1.23                                                | 2.15                                                    | N           |
| 0129320901 | 2000-08-22 | 269.888 | -51.720 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0110970501 | 2000-08-26 | 270.036 | -51.864 | 5.1                | 587                    | 5.3                | 587                    | $4.80^{+1.10}_{-1.27} \pm 0.63$  | 0.5725             | $0.70^{+0.66}_{-0.64} \pm 1.06$ | 1.39                                                | 1.59                                                    | N           |
| 0312191701 | 2006-06-26 | 270.077 | +66.396 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0129320801 | 2000-08-22 | 270.122 | -51.628 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0110970601 | 2000-08-26 | 270.153 | -51.818 | 6.8                | 585                    | 6.8                | 586                    | $6.48^{+1.67}_{-1.08} \pm 1.20$  | 0.5675             | $1.26^{+0.70}_{-0.57} \pm 0.86$ | 1.22                                                | 1.46                                                    | N           |
| 0110970101 | 2000-08-24 | 270.196 | -52.090 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0110970201 | 2000-08-24 | 270.228 | -51.890 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0110970301 | 2000-08-24 | 270.345 | -51.844 | 7.9                | 587                    | 7.8                | 586                    | $6.85^{+0.87}_{-1.64} \pm 0.50$  | 0.5675             | $2.19^{+0.56}_{-0.66} \pm 0.81$ | 1.79                                                | 1.43                                                    | N           |
| 0110970401 | 2000-08-24 | 270.462 | -51.798 | 8.1                | 587                    | 8.1                | 586                    | $7.35^{+1.53}_{-1.01} \pm 0.24$  | 0.5625             | $1.48^{+0.62}_{-0.54} \pm 0.81$ | 1.82                                                | 1.49                                                    | N           |
| 0044740201 | 2001-06-05 | 270.524 | +60.755 | 46.4               | 535                    | 46.3               | 532                    | $7.76^{+1.10}_{-0.73} \pm 0.57$  | 0.5675             | $1.29^{+0.30}_{-0.36} \pm 0.32$ | 1.48                                                | 1.88                                                    | N           |
| 0140950601 | 2003-07-05 | 270.639 | +29.881 | 10.6               | 500                    | 10.4               | 581                    | $9.45^{+0.64}_{-1.41} \pm 0.63$  | 0.5675             | $1.60^{+0.61}_{-0.70} \pm 0.93$ | 0.92                                                | 1.89                                                    | N           |
| 0112630101 | 2001-06-14 | 270.813 | +37.882 | 11.3               | 571                    | 11.6               | 571                    | $11.37^{+1.10}_{-0.96} \pm 0.80$ | 0.5675             | $2.18^{+0.57}_{-0.52} \pm 1.48$ | 1.27                                                | 2.12                                                    | N           |
| 0403072201 | 2007-01-20 | 270.992 | -28.819 | 13.8               | 422                    | 13.7               | 576                    | $6.25^{+1.19}_{-1.11} \pm 1.06$  | 0.5625             | $1.10^{+0.61}_{-0.55} \pm 0.62$ | 1.14                                                | 1.82                                                    | N           |
| 0552410101 | 2008-06-23 | 271.714 | -32.781 | 32.9               | 356                    | 32.1               | 524                    | $3.41^{+1.08}_{-1.13} \pm 1.83$  | 0.5625             | $1.40^{+0.54}_{-0.59} \pm 0.47$ | 1.05                                                | 2.56                                                    | N           |
| 0112630201 | 2001-06-04 | 271.940 | -74.432 | 19.8               | 584                    | 20.7               | 511                    | $6.33^{+1.50}_{-0.74} \pm 0.92$  | 0.5675             | $1.20^{+0.46}_{-0.41} \pm 0.51$ | 0.88                                                | 2.47                                                    | N           |
| 0207210101 | 2004-02-09 | 272.135 | -57.023 | 29.0               | 379                    | 28.7               | 474                    | $3.22^{+0.84}_{-0.74} \pm 0.31$  | 0.5625             | $0.58^{+0.44}_{-0.38} \pm 0.13$ | 1.49                                                | 2.52                                                    | Y           |
| 0098810101 | 2000-12-04 | 272.230 | -58.107 | 18.9               | 557                    | 19.3               | 556                    | $7.50^{+0.69}_{-0.75} \pm 0.85$  | 0.5625             | $1.98^{+0.41}_{-0.38} \pm 0.59$ | 1.69                                                | 1.92                                                    | Y           |
| 0306060101 | 2005-12-05 | 272.586 | +75.693 | 74.7               | 451                    | 74.5               | 543                    | $7.27^{+0.57}_{-0.80} \pm 0.37$  | 0.5625             | $1.48^{+0.23}_{-0.33} \pm 0.24$ | 1.19                                                | 2.50                                                    | N           |
| 0550460101 | 2008-05-13 | 273.303 | -21.029 | 11.6               | 408                    | 11.5               | 577                    | $4.58^{+1.12}_{-1.19} \pm 0.57$  | 0.5675             | $1.17^{+0.61}_{-0.69} \pm 0.71$ | 1.51                                                | 1.26                                                    | Y           |
| 0126511201 | 2000-06-10 | 273.824 | -15.836 | 18.6               | 551                    | 18.8               | 551                    | $9.07^{+0.98}_{-1.04} \pm 2.31$  | 0.5625             | $5.13^{+0.71}_{-0.45} \pm 0.59$ | 0.50                                                | 2.68                                                    | N           |
| 0134531501 | 2001-10-29 | 273.844 | -15.808 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0134531201 | 2001-01-29 | 273.860 | -15.827 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0134531301 | 2001-01-29 | 273.860 | -15.827 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0113890601 | 2000-03-12 | 273.950 | -15.897 | 6.7                | 487                    | 6.8                | 488                    | $7.40^{+1.67}_{-1.89} \pm 2.20$  | 0.5625             | $3.83 \pm 0.92 \pm 1.02$        | 1.39                                                | 2.03                                                    | N           |
| 0501210101 | 2007-06-14 | 273.962 | +10.783 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0148580201 | 2003-10-19 | 274.429 | -24.534 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0106061301 | 2002-06-10 | 274.554 | +79.605 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0143150201 | 2003-06-18 | 275.202 | +89.313 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0073340201 | 2002-05-30 | 275.865 | +9.334  | 15.0               | 506                    | 14.7               | 513                    | $13.17^{+2.01}_{-1.22} \pm 1.57$ | 0.5675             | $3.61^{+0.60}_{-0.64} \pm 1.16$ | 1.70                                                | 2.06                                                    | Y           |
| 0104060201 | 2000-10-07 | 275.866 | -32.704 | 19.5               | 566                    | 20.2               | 571                    | $15.71^{+0.77}_{-1.11} \pm 2.04$ | 0.5675             | $7.44^{+0.37}_{-0.79} \pm 0.51$ | 1.35                                                | 2.65                                                    | N           |
| 0551020701 | 2008-06-10 | 275.884 | -61.971 | 15.8               | 410                    | 15.9               | 579                    | $3.60^{+1.00}_{-0.80} \pm 0.33$  | 0.5925             | $0.35^{+0.85}_{-0.35} \pm 1.11$ | 1.39                                                | 1.18                                                    | N           |
| 0149630301 | 2003-09-16 | 275.969 | -35.805 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0205260201 | 2004-01-16 | 276.075 | -35.318 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0505310101 | 2007-11-10 | 276.095 | -33.229 | 15.9               | 211                    | 16.7               | 368                    | $12.20^{+2.17}_{-2.44} \pm 1.37$ | 0.5625             | $9.11^{+1.24}_{-0.97} \pm 1.06$ | 1.62                                                | 2.31                                                    | Y           |
| 0301410601 | 2005-10-02 | 276.396 | -32.033 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0162160101 | 2003-11-24 | 276.396 | -29.796 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0162160301 | 2003-12-05 | 276.399 | -29.799 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0162160501 | 2003-12-14 | 276.402 | -29.801 | 9.3                | 590                    | 9.3                | 591                    | $7.71^{+0.99}_{-1.58} \pm 0.93$  | 0.5625             | $1.30^{+0.58}_{-0.60} \pm 0.91$ | 1.47                                                | 1.77                                                    | N           |

[illegible]



Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| 0205840101 | 2005-02-01 | 282.211 | -11.257 | 30.1               | 588                    | 32.6               | 515                    | $3.75^{+0.94}_{-0.53} \pm 0.59$  | 0.5675             | $1.33^{+0.37}_{-0.31} \pm 0.26$ | 0.91                                                | 2.29                                              | N           |
| 0402970201 | 2006-08-05 | 282.494 | -33.853 | 17.1               | 421                    | 18.1               | 510                    | $11.05^{+1.24}_{-1.08} \pm 0.40$ | 0.5675             | $3.51^{+0.80}_{-0.61} \pm 0.82$ | 1.66                                                | 2.50                                              | N           |
| 0404120101 | 2006-12-19 | 282.938 | +77.625 | 20.5               | 261                    | 20.3               | 337                    | $6.86^{+1.33}_{-1.48} \pm 2.49$  | 0.5675             | $2.28^{+0.73}_{-0.70} \pm 0.65$ | 1.85                                                | 2.67                                              | ...         |
| 0550950101 | 2008-12-07 | 283.259 | -78.254 | 91.0               | 312                    | 91.0               | 399                    | $2.67^{+0.61}_{-0.57} \pm 0.31$  | 0.5575             | $1.19^{+0.33}_{-0.29} \pm 0.28$ | 0.82                                                | 1.79                                              | N           |
| 0002942301 | 2001-12-10 | 283.264 | -78.255 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0405090101 | 2006-10-15 | 283.360 | -44.625 | 76.1               | 389                    | 78.2               | 474                    | $4.32^{+0.59}_{-0.82} \pm 2.18$  | 0.5625             | $1.92^{+0.31}_{-0.36} \pm 0.73$ | 1.63                                                | 2.37                                              | Y           |
| 0106860101 | 2000-10-17 | 283.361 | -44.627 | 12.0               | 546                    | 12.1               | 473                    | $9.08^{+1.25}_{-0.83} \pm 0.39$  | 0.5675             | $4.01^{+0.67}_{-0.52} \pm 0.34$ | 1.72                                                | 2.15                                              | Y           |
| 0205230301 | 2004-06-05 | 283.439 | -44.584 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0205230201 | 2004-05-01 | 283.445 | -44.586 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0205230501 | 2004-11-23 | 283.469 | -44.553 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0150280301 | 2003-12-21 | 283.477 | -44.558 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0150280601 | 2004-01-08 | 283.481 | -44.564 | 7.6                | 541                    | 8.0                | 477                    | $6.41^{+1.12}_{-1.08} \pm 1.00$  | 0.5775             | $2.74^{+0.75}_{-0.73} \pm 0.88$ | 1.55                                                | 2.26                                              | N           |
| 0301860101 | 2006-03-06 | 283.491 | -44.667 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0202140101 | 2003-12-30 | 283.577 | +53.427 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0555880201 | 2008-06-13 | 283.654 | +25.306 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0205090101 | 2004-12-23 | 283.854 | +69.188 | 24.5               | 442                    | 24.6               | 371                    | $7.85^{+1.17}_{-0.84} \pm 4.10$  | 0.5725             | $0.80^{+0.56}_{-0.47} \pm 2.47$ | 1.12                                                | 2.08                                              | N           |
| 0550450701 | 2009-01-20 | 283.872 | -6.506  | 16.2               | 404                    | 16.0               | 577                    | $4.77^{+1.02}_{-1.18} \pm 0.87$  | 0.5675             | $2.08^{+0.60}_{-0.63} \pm 0.62$ | 1.16                                                | 2.54                                              | N           |
| 0200020101 | 2004-07-01 | 284.125 | +80.229 | 10.7               | 579                    | 10.8               | 587                    | $5.98^{+0.96}_{-0.91} \pm 0.38$  | 0.5725             | $0.42^{+0.55}_{-0.42} \pm 0.63$ | 1.77                                                | 2.11                                              | N           |
| 0205360101 | 2004-07-02 | 284.328 | +66.271 | 16.8               | 502                    | 18.2               | 509                    | $9.60^{+2.54}_{-1.38} \pm 0.91$  | 0.5675             | $1.32^{+0.70}_{-0.82} \pm 1.76$ | 1.45                                                | 2.27                                              | N           |
| 0502430401 | 2007-12-09 | 284.424 | +52.419 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0111970301 | 2001-10-19 | 284.890 | -38.138 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0112880101 | 2003-01-09 | 284.893 | +25.466 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0200770101 | 2005-02-06 | 285.291 | -26.619 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0103860901 | 2000-12-18 | 285.967 | -72.021 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0113050101 | 2000-12-14 | 285.999 | +6.658  | 19.8               | 503                    | 20.5               | 437                    | $13.82^{+0.94}_{-1.04} \pm 0.69$ | 0.5625             | $3.97 \pm 0.52 \pm 1.69$        | 1.17                                                | 1.86                                              | N           |
| 0113050201 | 2000-12-15 | 285.999 | +6.658  | 27.4               | 503                    | 27.9               | 437                    | $13.90^{+0.91}_{-0.69} \pm 1.96$ | 0.5625             | $4.13^{+0.49}_{-0.42} \pm 2.22$ | 1.38                                                | 1.68                                              | Y           |
| 0305800701 | 2005-12-16 | 286.103 | +58.330 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0301650801 | 2006-01-08 | 286.153 | +66.946 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0601781001 | 2009-07-09 | 286.352 | +64.641 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0500070201 | 2007-06-09 | 286.928 | +42.462 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0500070301 | 2007-06-24 | 286.928 | +42.463 | 22.4               | 346                    | 22.7               | 516                    | $8.30 \pm 1.01 \pm 0.45$         | 0.5625             | $1.09^{+0.53}_{-0.51} \pm 1.09$ | 1.19                                                | 1.59                                              | N           |
| 0500070601 | 2007-12-18 | 286.974 | +42.475 | 20.3               | 352                    | 20.4               | 442                    | $7.43^{+1.57}_{-0.95} \pm 0.54$  | 0.5625             | $1.07^{+0.76}_{-0.51} \pm 0.52$ | 1.52                                                | 1.96                                              | N           |
| 0500070701 | 2007-12-26 | 286.975 | +42.474 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0085220201 | 2002-01-08 | 286.980 | +42.468 | 34.9               | 510                    | 35.3               | 440                    | $11.02^{+0.54}_{-0.85} \pm 1.15$ | 0.5675             | $2.46^{+0.62}_{-0.36} \pm 1.07$ | 1.37                                                | 1.90                                              | N           |
| 0602010301 | 2009-06-23 | 287.257 | +32.217 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0137160201 | 2001-10-05 | 287.410 | -33.243 | 10.3               | 456                    | 10.2               | 464                    | $9.39^{+1.94}_{-1.85} \pm 0.48$  | 0.5625             | $3.44^{+0.98}_{-0.99} \pm 0.06$ | 1.43                                                | 2.57                                              | Y           |
| 0305060101 | 2005-11-19 | 288.109 | -61.112 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0303560101 | 2005-07-10 | 288.741 | +62.730 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0110990201 | 2001-06-23 | 289.172 | +63.713 | 8.9                | 511                    | 9.1                | 592                    | $14.17^{+1.26}_{-1.33} \pm 1.27$ | 0.5725             | $2.46 \pm 0.69 \pm 2.31$        | 0.41                                                | 2.07                                              | N           |
| 0306560301 | 2005-09-30 | 289.178 | -22.066 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0205770101 | 2003-12-19 | 289.203 | -22.072 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0101440201 | 2002-08-13 | 289.535 | -4.866  | 31.6               | 543                    | 31.5               | 469                    | $8.84^{+0.62}_{-1.08} \pm 0.65$  | 0.5575             | $3.78^{+0.50}_{-0.39} \pm 0.93$ | 1.25                                                | 1.93                                              | N           |
| 0143210801 | 2003-07-06 | 289.654 | +49.952 | 23.2               | 530                    | 23.5               | 537                    | $9.84^{+0.89}_{-0.84} \pm 0.37$  | 0.5675             | $1.58^{+0.41}_{-0.46} \pm 1.25$ | 1.69                                                | 1.96                                              | N           |
| 0128320301 | 2000-08-07 | 289.766 | -11.705 | 12.2               | 567                    | 11.9               | 499                    | $10.27^{+1.00}_{-1.11} \pm 0.43$ | 0.5625             | $2.46^{+0.51}_{-0.54} \pm 0.51$ | 1.36                                                | 2.55                                              | N           |
| 0205010201 | 2004-06-05 | 290.105 | +70.135 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0206540101 | 2004-12-10 | 290.562 | -70.982 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0103861701 | 2000-09-29 | 291.055 | -33.308 | 7.6                | 398                    | 7.5                | 472                    | $12.99^{+1.63}_{-1.67} \pm 0.44$ | 0.5625             | $2.29^{+0.79}_{-0.84} \pm 1.42$ | 1.15                                                | 1.52                                              | N           |
| 0403070801 | 2007-02-11 | 291.164 | -15.364 | 12.4               | 491                    | 12.5               | 580                    | $5.06^{+1.34}_{-1.08} \pm 0.18$  | 0.5675             | $1.75^{+0.62}_{-0.60} \pm 0.08$ | 0.23                                                | 2.16                                              | N           |
| 0067170101 | 2002-05-26 | 291.268 | -71.105 | 19.1               | 585                    | 19.6               | 585                    | $9.89^{+0.56}_{-0.98} \pm 0.82$  | 0.5675             | $2.49^{+0.42}_{-0.47} \pm 1.11$ | 1.39                                                | 1.90                                              | Y           |
| 0510181701 | 2008-04-12 | 292.093 | -43.650 | 21.4               | 379                    | 20.5               | 477                    | $7.10^{+1.36}_{-1.00} \pm 0.54$  | 0.5725             | $2.52^{+0.69}_{-0.59} \pm 0.26$ | 1.57                                                | 2.27                                              | Y           |
| 0605950101 | 2009-06-03 | 292.491 | -21.558 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0504100601 | 2007-12-09 | 292.753 | +72.082 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203170301 | 2004-12-25 | 292.777 | +62.619 | 7.1                | 440                    | 6.9                | 371                    | $13.68^{+2.12}_{-2.35} \pm 0.78$ | 0.5675             | $2.70^{+1.06}_{-1.05} \pm 1.81$ | 1.91                                                | 2.16                                              | Y           |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{2-5}^{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0302581501 | 2005-06-22 | 292.933 | +79.621 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0504240101 | 2007-06-06 | 293.356 | +77.007 | 70.4               | 259                    | 72.6               | 335                    | $8.21^{+0.72}_{-0.78} \pm 0.25$  | 0.5625             | $0.71 \pm 0.38 \pm 0.55$        | 1.46                                                | 2.26                                                    | Y           |
| 0202730301 | 2004-06-13 | 293.361 | +77.007 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0122520201 | 2000-03-31 | 293.438 | -37.549 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0205680101 | 2003-12-21 | 293.723 | -80.896 | 7.9                | 476                    | 7.7                | 475                    | $5.20^{+1.25}_{-1.24} \pm 0.59$  | 0.5725             | $0.97 \pm 0.75 \pm 1.15$        | 1.93                                                | 1.43                                                    | Y           |
| 0102040701 | 2000-07-05 | 293.725 | -80.899 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0406210201 | 2006-07-21 | 293.750 | +50.871 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0401930101 | 2006-11-26 | 293.787 | -80.881 | 39.8               | 388                    | 39.5               | 401                    | $3.07^{+0.82}_{-0.58} \pm 1.15$  | 0.5725             | $0.75^{+0.43}_{-0.38} \pm 0.33$ | 1.32                                                | 1.64                                                    | N           |
| 0405020801 | 2006-11-23 | 294.064 | -70.335 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0112550401 | 2002-06-14 | 294.333 | +88.355 | 16.4               | 475                    | 16.6               | 483                    | $9.39^{+1.29}_{-0.76} \pm 0.73$  | 0.5725             | $1.22^{+0.60}_{-0.59} \pm 1.86$ | 1.28                                                | 1.65                                                    | N           |
| 0205470301 | 2004-05-15 | 294.635 | -69.772 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0205330101 | 2004-01-15 | 294.689 | -37.045 | 8.1                | 395                    | 8.1                | 337                    | $5.26^{+1.64}_{-1.92} \pm 0.62$  | 0.5625             | $0.79^{+0.84}_{-0.79} \pm 0.22$ | 1.60                                                | 2.46                                                    | Y           |
| 0113041301 | 2003-11-14 | 294.766 | -36.850 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0101040201 | 2000-07-05 | 295.071 | -57.827 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0202130201 | 2004-11-29 | 295.260 | -41.879 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0099840101 | 2000-07-05 | 295.294 | -41.873 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0049150301 | 2002-06-16 | 295.297 | -41.858 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0148440101 | 2002-12-16 | 295.942 | -48.543 | 27.8               | 577                    | 27.9               | 578                    | $8.44^{+0.90}_{-0.47} \pm 0.53$  | 0.5675             | $1.65^{+0.50}_{-0.25} \pm 1.13$ | 1.74                                                | 1.67                                                    | N           |
| 0109460101 | 2001-11-29 | 296.321 | -50.668 | 6.8                | 513                    | 7.0                | 589                    | $8.93^{+1.57}_{-1.19} \pm 0.67$  | 0.5725             | $1.69^{+0.66}_{-0.64} \pm 1.51$ | 1.52                                                | 1.55                                                    | N           |
| 0067140201 | 2001-02-24 | 296.639 | -15.551 | 35.6               | 472                    | 36.0               | 398                    | $4.68^{+0.62}_{-0.70} \pm 0.20$  | 0.5625             | $0.85 \pm 0.33 \pm 0.06$        | 1.52                                                | 2.03                                                    | N           |
| 0067140101 | 2001-02-23 | 296.639 | -15.552 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0152460301 | 2003-08-18 | 296.875 | -15.923 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0604830201 | 2009-07-09 | 296.962 | +48.764 | 25.0               | 482                    | 24.9               | 547                    | $8.27^{+0.92}_{-1.23} \pm 0.44$  | 0.5625             | $1.71^{+0.53}_{-0.50} \pm 0.97$ | 1.70                                                | 2.18                                                    | Y           |
| 0203810101 | 2004-09-28 | 297.076 | -14.777 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0203810201 | 2004-02-27 | 297.083 | -15.532 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0085580101 | 2000-12-28 | 297.270 | -3.305  | 6.5                | 478                    | 6.3                | 402                    | $7.17^{+1.53}_{-1.89} \pm 1.44$  | 0.5625             | $2.82^{+0.77}_{-0.89} \pm 0.47$ | 1.45                                                | 1.82                                                    | Y           |
| 0002740501 | 2002-04-09 | 297.349 | -15.899 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0302160401 | 2006-01-07 | 297.605 | +60.776 | 5.8                | 419                    | 5.8                | 517                    | $13.33^{+1.85}_{-1.79} \pm 0.46$ | 0.5675             | $4.71 \pm 0.97 \pm 0.95$        | 1.99                                                | 1.63                                                    | Y           |
| 0554500201 | 2008-06-21 | 298.568 | -69.256 | 14.5               | 445                    | 15.7               | 466                    | $4.46^{+0.85}_{-0.95} \pm 0.41$  | 0.5775             | $0.44^{+0.59}_{-0.44} \pm 0.72$ | 0.67                                                | 2.00                                                    | N           |
| 0305860401 | 2005-05-22 | 298.845 | -79.468 | 15.2               | 452                    | 15.2               | 537                    | $6.66^{+1.04}_{-1.11} \pm 2.00$  | 0.5675             | $1.45^{+0.54}_{-0.49} \pm 1.17$ | 1.77                                                | 1.94                                                    | Y           |
| 0305860301 | 2005-11-25 | 298.924 | -79.434 | 35.1               | 370                    | 35.1               | 467                    | $5.10^{+0.70}_{-0.68} \pm 0.95$  | 0.5675             | $1.08 \pm 0.40 \pm 0.94$        | 1.13                                                | 1.82                                                    | N           |
| 0551430401 | 2009-01-05 | 298.985 | +13.800 | 27.1               | 324                    | 26.5               | 484                    | $6.47^{+0.91}_{-0.81} \pm 0.46$  | 0.5675             | $2.30^{+0.55}_{-0.48} \pm 0.56$ | 1.50                                                | 1.85                                                    | N           |
| 0112800201 | 2000-12-26 | 299.255 | -79.406 | 8.0                | 556                    | 8.9                | 488                    | $7.71^{+1.17}_{-1.04} \pm 0.58$  | 0.5675             | $2.13^{+0.64}_{-0.63} \pm 1.00$ | 1.71                                                | 1.86                                                    | Y           |
| 0112800101 | 2001-01-01 | 299.261 | -79.408 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0136950201 | 2001-06-21 | 299.437 | +51.488 | 28.2               | 294                    | 28.2               | 290                    | $10.57^{+0.98}_{-0.99} \pm 0.63$ | 0.5725             | $3.17^{+0.61}_{-0.60} \pm 1.60$ | 0.44                                                | 1.72                                                    | N           |
| 0103861601 | 2001-05-03 | 299.454 | -58.616 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0301890101 | 2005-11-10 | 299.461 | -58.578 | 62.2               | 242                    | 64.2               | 399                    | $6.24^{+0.61}_{-0.67} \pm 0.21$  | 0.5675             | $0.73^{+0.34}_{-0.35} \pm 0.39$ | 1.65                                                | 1.92                                                    | Y           |
| 0302610701 | 2006-01-20 | 299.473 | +28.870 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0110980201 | 2002-06-27 | 299.502 | +62.368 | 53.0               | 421                    | 53.1               | 433                    | $15.89^{+0.69}_{-0.58} \pm 0.37$ | 0.5725             | $3.59^{+0.40}_{-0.35} \pm 2.21$ | 1.03                                                | 1.70                                                    | N           |
| 0312191801 | 2006-01-24 | 299.537 | +35.481 | 9.6                | 394                    | 10.1               | 491                    | $10.16^{+1.26}_{-1.33} \pm 0.45$ | 0.5725             | $1.70^{+0.72}_{-0.75} \pm 1.29$ | 1.66                                                | 1.84                                                    | N           |
| 0006220201 | 2001-01-04 | 299.651 | +22.856 | 26.9               | 517                    | 27.3               | 444                    | $12.45^{+1.03}_{-0.90} \pm 0.76$ | 0.5675             | $4.15 \pm 0.51 \pm 1.84$        | 1.37                                                | 1.49                                                    | Y           |
| 0112551101 | 2001-12-16 | 300.615 | +71.345 | 13.5               | 489                    | 13.4               | 566                    | $18.07^{+1.19}_{-1.15} \pm 0.31$ | 0.5675             | $4.82^{+0.68}_{-0.65} \pm 3.38$ | 1.11                                                | 2.56                                                    | Y           |
| 0500440101 | 2007-06-28 | 300.659 | +17.251 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0404680501 | 2007-04-12 | 301.226 | -44.589 | 9.3                | 347                    | 8.9                | 493                    | $9.10^{+1.54}_{-1.53} \pm 1.05$  | 0.5625             | $2.99^{+0.85}_{-0.81} \pm 1.28$ | 1.92                                                | 1.88                                                    | Y           |
| 0203270301 | 2004-07-15 | 301.894 | +56.877 | 24.2               | 527                    | 24.4               | 537                    | $11.44^{+1.03}_{-0.78} \pm 1.31$ | 0.5625             | $5.28^{+0.56}_{-0.45} \pm 0.97$ | 1.35                                                | 1.98                                                    | Y           |
| 0501470101 | 2007-06-04 | 301.992 | -45.492 | 8.9                | 414                    | 9.7                | 505                    | $7.87^{+1.29}_{-1.33} \pm 0.45$  | 0.5725             | $2.93 \pm 0.90 \pm 0.72$        | 1.40                                                | 2.53                                                    | N           |
| 0503610101 | 2007-12-22 | 301.996 | +68.181 | 58.2               | 340                    | 60.5               | 499                    | $9.21^{+0.63}_{-0.67} \pm 0.27$  | 0.5725             | $3.80 \pm 0.41 \pm 1.26$        | 1.30                                                | 1.98                                                    | N           |
| 0553030101 | 2008-12-17 | 302.055 | +51.460 | 59.9               | 403                    | 61.4               | 487                    | $8.01^{+0.74}_{-0.72} \pm 0.27$  | 0.5725             | $2.58^{+0.44}_{-0.42} \pm 1.23$ | 1.83                                                | 1.40                                                    | Y           |
| 0110000201 | 2000-10-17 | 302.064 | -44.945 | 11.0               | 533                    | 10.7               | 463                    | $16.47^{+1.36}_{-1.39} \pm 2.70$ | 0.5675             | $6.44^{+0.81}_{-0.82} \pm 3.10$ | 1.72                                                | 2.65                                                    | N           |
| 0304250401 | 2005-11-27 | 302.075 | -44.932 | 12.3               | 376                    | 11.9               | 464                    | $13.43^{+1.31}_{-1.39} \pm 0.38$ | 0.5725             | $5.16 \pm 0.84 \pm 1.48$        | 1.69                                                | 2.11                                                    | Y           |
| 0304250501 | 2005-11-29 | 302.076 | -44.933 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0145540101 | 2003-04-21 | 302.116 | -36.814 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                                     | ...         |
| 0142660401 | 2003-11-16 | 302.266 | -42.011 | 12.5               | 563                    | 13.0               | 562                    | $8.44^{+0.93}_{-1.13} \pm 0.53$  | 0.5675             | $2.23^{+0.55}_{-0.57} \pm 0.66$ | 1.88                                                | 2.66                                                    | N           |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
|            | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                              | filtering?  |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                            | (12)                                                | (13)                                              | (14)        |
| 0301151601 | 2006-04-22 | 302.637 | -46.511 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0301150101 | 2006-03-22 | 302.649 | -46.507 | 7.4                | 413                    | 7.3                | 576                    | $5.19^{+1.52}_{-1.20} \pm 0.37$  | 0.5725             | $1.15^{+0.68}_{-0.73} \pm 1.31$ | 1.15                                                | 1.82                                              | N           |
| 0500980101 | 2007-06-23 | 302.744 | -44.703 | 22.8               | 342                    | 22.5               | 570                    | $10.26^{+1.11}_{-1.02} \pm 2.11$ | 0.5625             | $5.42^{+0.58}_{-0.57} \pm 1.16$ | 1.53                                                | 2.43                                              | N           |
| 0112880901 | 2000-11-30 | 302.795 | -42.458 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0404680201 | 2006-11-01 | 302.827 | -44.239 | 20.1               | 422                    | 20.0               | 514                    | $8.01^{+1.05}_{-1.16} \pm 1.10$  | 0.5625             | $5.44^{+0.56}_{-0.64} \pm 0.48$ | 1.49                                                | 2.05                                              | Y           |
| 0301170201 | 2006-03-23 | 302.864 | -45.115 | 15.1               | 418                    | 16.1               | 580                    | $7.27^{+1.18}_{-0.65} \pm 0.45$  | 0.5675             | $3.02^{+0.77}_{-0.65} \pm 0.37$ | 1.22                                                | 2.55                                              | N           |
| 0404680301 | 2007-04-11 | 302.983 | -43.741 | 13.6               | 309                    | 14.2               | 442                    | $5.76^{+1.66}_{-1.15} \pm 0.43$  | 0.5675             | $2.58^{+0.91}_{-0.71} \pm 0.37$ | 1.77                                                | 2.35                                              | Y           |
| 0200030101 | 2004-01-11 | 303.101 | -13.958 | 11.4               | 581                    | 11.4               | 517                    | $0.92^{+0.84}_{-0.77} \pm 0.32$  | 0.5675             | $0.38^{+0.44}_{-0.38} \pm 0.10$ | 1.91                                                | 1.95                                              | Y           |
| 0092360601 | 2001-03-23 | 303.131 | -20.897 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0601210301 | 2009-05-18 | 303.191 | -45.200 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0503000201 | 2007-10-28 | 303.223 | -43.424 | 18.8               | 424                    | 18.4               | 515                    | $6.86^{+0.91}_{-1.01} \pm 1.08$  | 0.5625             | $3.11^{+0.51}_{-0.52} \pm 0.78$ | 1.36                                                | 1.76                                              | N           |
| 0057740401 | 2003-01-11 | 303.336 | +33.420 | 39.2               | 402                    | 39.6               | 402                    | $11.94^{+0.83}_{-0.75} \pm 0.45$ | 0.5675             | $2.08^{+0.45}_{-0.41} \pm 1.14$ | 1.55                                                | 2.18                                              | Y           |
| 0125320701 | 2001-05-12 | 303.434 | -64.989 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0125320401 | 2000-11-23 | 303.435 | -64.988 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0125320501 | 2000-11-24 | 303.435 | -64.988 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0133120401 | 2000-12-12 | 303.439 | -64.952 | 10.1               | 586                    | 10.3               | 584                    | $9.20^{+1.19}_{-1.02} \pm 0.58$  | 0.5675             | $1.58 \pm 0.51 \pm 1.39$        | 1.36                                                | 1.21                                              | N           |
| 0133120301 | 2000-12-12 | 303.458 | -64.977 | 10.3               | 513                    | 10.3               | 585                    | $8.45^{+1.01}_{-1.15} \pm 0.41$  | 0.5675             | $2.00^{+0.57}_{-0.61} \pm 1.11$ | 1.02                                                | 1.82                                              | N           |
| 0301170301 | 2006-04-06 | 303.786 | -43.537 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551021801 | 2008-12-02 | 304.065 | -51.445 | 10.0               | 356                    | 10.0               | 593                    | $4.89^{+1.61}_{-1.64} \pm 0.30$  | 0.5725             | $1.21^{+0.46}_{-0.86} \pm 1.18$ | 0.99                                                | 1.29                                              | N           |
| 0301170601 | 2006-03-27 | 304.089 | -44.337 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0203390901 | 2004-06-28 | 304.544 | +33.083 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0006010401 | 2002-03-15 | 304.790 | -39.795 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0556030101 | 2009-01-21 | 305.137 | +57.063 | 10.9               | 302                    | 10.8               | 468                    | $7.20^{+1.51}_{-2.75} \pm 2.16$  | 0.5625             | $4.01^{+0.97}_{-0.89} \pm 0.77$ | 1.58                                                | 2.14                                              | Y           |
| 0112310301 | 2001-01-21 | 305.287 | +13.337 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0204870101 | 2004-01-10 | 305.287 | +13.339 | 18.5               | 331                    | 18.8               | 338                    | $13.11^{+1.90}_{-1.23} \pm 1.37$ | 0.5675             | $4.54^{+0.57}_{-1.22} \pm 0.73$ | 1.76                                                | 2.58                                              | Y           |
| 0082990101 | 2002-12-10 | 305.590 | +78.567 | 28.4               | 591                    | 28.6               | 517                    | $11.44^{+0.68}_{-0.66} \pm 0.47$ | 0.5675             | $1.91^{+0.35}_{-0.34} \pm 1.32$ | 1.14                                                | 1.70                                              | N           |
| 0406030101 | 2006-08-19 | 305.613 | -6.926  | 13.8               | 449                    | 13.5               | 466                    | $5.53^{+1.16}_{-0.90} \pm 0.66$  | 0.5725             | $2.12 \pm 0.58 \pm 1.08$        | 1.65                                                | 1.55                                              | Y           |
| 0164570701 | 2005-03-26 | 305.654 | -45.626 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0406450101 | 2006-07-16 | 306.409 | +4.699  | 17.9               | 308                    | 17.7               | 401                    | $2.96^{+0.94}_{-1.01} \pm 0.77$  | 0.5725             | $1.50^{+0.74}_{-0.63} \pm 0.77$ | 1.78                                                | 2.34                                              | N           |
| 0203391001 | 2005-01-01 | 306.804 | +47.024 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0002940101 | 2001-01-05 | 307.576 | +39.056 | 6.8                | 581                    | 6.9                | 509                    | $14.25^{+1.55}_{-0.83} \pm 0.26$ | 0.5625             | $4.12^{+0.79}_{-0.78} \pm 1.68$ | 0.95                                                | 1.40                                              | N           |
| 0604310101 | 2009-07-14 | 308.190 | +43.309 | 14.4               | 352                    | 15.2               | 591                    | $7.99^{+1.07}_{-1.66} \pm 1.17$  | 0.5625             | $2.20^{+0.66}_{-0.57} \pm 1.00$ | 1.39                                                | 1.51                                              | N           |
| 0302160201 | 2005-07-20 | 309.236 | +39.251 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0502350101 | 2008-01-25 | 309.387 | +20.724 | 17.6               | 425                    | 18.2               | 588                    | $14.11^{+1.03}_{-1.37} \pm 0.64$ | 0.5675             | $6.50^{+0.63}_{-0.70} \pm 1.48$ | 1.52                                                | 2.25                                              | N           |
| 0110890101 | 2002-01-19 | 310.211 | +23.977 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0550970101 | 2008-09-21 | 311.166 | -19.455 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0007422101 | 2001-02-08 | 311.269 | +1.662  | 11.1               | 591                    | 11.4               | 591                    | $11.26^{+1.07}_{-0.62} \pm 3.81$ | 0.5675             | $2.67 \pm 0.59 \pm 3.29$        | 1.96                                                | 2.65                                              | N           |
| 0007422301 | 2001-02-08 | 311.269 | +2.495  | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0007422001 | 2001-02-08 | 311.476 | +1.246  | 9.6                | 517                    | 9.8                | 589                    | $6.26^{+2.11}_{-1.17} \pm 0.84$  | 0.5675             | $3.07^{+0.70}_{-0.62} \pm 0.78$ | 1.62                                                | 2.43                                              | N           |
| 0201903301 | 2004-05-15 | 311.674 | -42.323 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0502430101 | 2007-07-26 | 312.023 | +56.673 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0302582201 | 2006-01-17 | 312.072 | +56.658 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0148960901 | 2003-06-04 | 312.698 | -73.182 | 20.0               | 574                    | 20.3               | 580                    | $8.08^{+0.80}_{-0.72} \pm 0.83$  | 0.5675             | $2.00^{+0.41}_{-0.40} \pm 1.09$ | 1.44                                                | 1.60                                              | N           |
| 0148960801 | 2003-06-03 | 312.698 | -73.182 | 12.6               | 574                    | 12.5               | 581                    | $6.72^{+1.02}_{-1.14} \pm 0.54$  | 0.5625             | $2.45^{+0.56}_{-0.58} \pm 0.72$ | 1.71                                                | 1.68                                              | Y           |
| 0307000901 | 2006-01-10 | 312.808 | +28.052 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0110980601 | 2002-07-05 | 312.912 | +47.486 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0148960101 | 2003-05-12 | 312.972 | -73.525 | 32.8               | 591                    | 33.2               | 590                    | $7.82^{+1.12}_{-0.92} \pm 0.64$  | 0.5675             | $1.83^{+0.45}_{-0.39} \pm 0.86$ | 1.89                                                | 1.87                                              | Y           |
| 0506340101 | 2008-01-24 | 313.537 | +45.521 | 26.8               | 374                    | 26.8               | 463                    | $7.38^{+0.82}_{-0.79} \pm 0.43$  | 0.5725             | $3.22^{+0.52}_{-0.50} \pm 0.73$ | 1.59                                                | 1.91                                              | Y           |
| 0206580101 | 2005-01-24 | 313.567 | +45.502 | 32.6               | 525                    | 34.2               | 451                    | $8.62^{+0.85}_{-0.72} \pm 0.35$  | 0.5675             | $3.15^{+0.51}_{-0.43} \pm 0.72$ | 1.50                                                | 2.45                                              | N           |
| 0402121801 | 2007-01-25 | 313.859 | +14.412 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0551120201 | 2009-03-12 | 313.947 | -1.932  | 17.1               | 310                    | 16.8               | 399                    | $0.00^{+0.67}_{-0.00} \pm 0.00$  | 0.5425             | $2.01^{+0.70}_{-0.57} \pm 0.24$ | 1.60                                                | 2.47                                              | Y           |
| 0148961201 | 2003-06-05 | 314.201 | -73.442 | 10.0               | 541                    | 10.5               | 546                    | $5.76^{+0.93}_{-0.95} \pm 0.27$  | 0.5725             | $1.59^{+0.58}_{-0.59} \pm 0.87$ | 1.73                                                | 1.84                                              | Y           |
| 0148961301 | 2003-06-06 | 314.201 | -73.442 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{total}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------|-------------|
|            | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) |                                                   | filtering?  |
| (1)        | (2)        | (3)     | (4)     | (5)                | (6)                    | (7)                | (8)                    | (9)                              | (10)               | (11)                            | (12)                                                | (13)                                              | (14)        |
| 0402070301 | 2006-12-28 | 314.457 | +50.547 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0552080101 | 2008-08-16 | 314.493 | +31.785 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0503230101 | 2008-01-16 | 314.536 | +31.779 | 15.9               | 484                    | 16.5               | 509                    | $12.92^{+1.39}_{-0.99} \pm 0.65$ | 0.5675             | $3.25^{+0.73}_{-0.56} \pm 1.59$ | 1.49                                                | 1.82                                              | N           |
| 0035940301 | 2001-08-08 | 314.841 | +30.109 | 23.8               | 579                    | 23.7               | 503                    | $19.00^{+0.57}_{-0.91} \pm 0.33$ | 0.5675             | $4.60 \pm 0.49 \pm 2.48$        | 1.65                                                | 1.69                                              | Y           |
| 0206300101 | 2004-01-27 | 315.680 | +43.953 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0103261001 | 2001-02-28 | 315.749 | -4.436  | 5.5                | 520                    | 5.4                | 517                    | $8.05^{+1.80}_{-1.67} \pm 2.07$  | 0.5625             | $4.77^{+0.96}_{-0.89} \pm 1.17$ | 1.91                                                | 2.02                                              | N           |
| 0152330101 | 2002-12-24 | 316.121 | -67.696 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0110950401 | 2002-06-13 | 316.729 | +70.712 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0165570101 | 2004-07-10 | 317.052 | +84.749 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0092970801 | 2003-01-04 | 317.115 | +34.188 | 5.2                | 501                    | 5.1                | 571                    | $11.26^{+1.75}_{-0.95} \pm 0.37$ | 0.5725             | $5.12^{+1.16}_{-1.10} \pm 3.14$ | 1.86                                                | 1.37                                              | N           |
| 0125910501 | 2002-07-08 | 317.252 | +84.747 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0125911101 | 2003-01-01 | 317.260 | +84.749 | 6.7                | 403                    | 7.0                | 403                    | $8.91^{+1.80}_{-1.81} \pm 0.13$  | 0.5575             | $2.65 \pm 0.95 \pm 1.24$        | 1.81                                                | 1.30                                              | Y           |
| 0201751301 | 2004-12-31 | 317.513 | +61.161 | 6.8                | 436                    | 7.1                | 376                    | $10.43^{+3.30}_{-1.73} \pm 0.69$ | 0.5725             | $3.36^{+1.18}_{-1.09} \pm 2.42$ | 1.95                                                | 1.80                                              | Y           |
| 0312192101 | 2006-06-27 | 318.696 | +73.965 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0604010201 | 2009-05-22 | 319.163 | -55.047 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0147670201 | 2003-01-31 | 320.052 | +48.371 | 13.2               | 434                    | 12.9               | 502                    | $8.91^{+1.89}_{-1.11} \pm 0.54$  | 0.5675             | $2.93^{+0.91}_{-0.65} \pm 1.19$ | 1.03                                                | 1.91                                              | N           |
| 0109462901 | 2002-03-16 | 320.390 | -25.607 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0300960201 | 2005-07-03 | 321.338 | +51.891 | 5.3                | 495                    | 5.3                | 517                    | $7.64^{+1.99}_{-1.69} \pm 0.25$  | 0.5675             | $1.98^{+0.92}_{-0.85} \pm 1.57$ | 1.29                                                | 1.63                                              | N           |
| 0140950101 | 2003-02-08 | 321.461 | +15.023 | 8.2                | 389                    | 8.2                | 414                    | $22.17^{+2.18}_{-2.15} \pm 0.36$ | 0.5675             | $5.48^{+1.21}_{-1.20} \pm 3.54$ | 1.68                                                | 2.22                                              | N           |
| 0021750701 | 2001-03-04 | 321.536 | -15.258 | 19.6               | 544                    | 19.5               | 552                    | $12.65^{+1.15}_{-1.09} \pm 1.17$ | 0.5675             | $5.32^{+0.66}_{-0.63} \pm 1.10$ | 1.11                                                | 1.98                                              | Y           |
| 0021750601 | 2001-03-04 | 321.536 | -15.258 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0021750501 | 2001-03-03 | 321.536 | -15.258 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0021750101 | 2001-03-03 | 321.537 | -15.258 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0021750401 | 2001-03-03 | 321.537 | -15.258 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0083210201 | 2001-11-28 | 322.122 | -57.873 | 9.2                | 513                    | 9.0                | 590                    | $10.24^{+1.10}_{-1.09} \pm 0.55$ | 0.5675             | $2.44^{+0.61}_{-0.62} \pm 1.30$ | 1.68                                                | 1.50                                              | N           |
| 0201751201 | 2004-12-31 | 322.786 | +62.824 | 7.2                | 341                    | 7.3                | 340                    | $8.90^{+2.37}_{-2.05} \pm 0.30$  | 0.5625             | $2.26^{+1.18}_{-1.06} \pm 1.24$ | 1.92                                                | 1.73                                              | Y           |
| 0505382101 | 2007-12-05 | 323.123 | -58.759 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0017940101 | 2001-01-03 | 323.558 | +80.313 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505381201 | 2007-10-23 | 323.586 | -58.139 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0081340301 | 2002-11-19 | 323.721 | -54.023 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505382001 | 2007-12-04 | 323.734 | -58.550 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505382901 | 2007-12-05 | 323.834 | -58.973 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505381101 | 2007-10-22 | 324.176 | -57.925 | 9.4                | 494                    | 9.6                | 584                    | $5.65^{+1.01}_{-0.97} \pm 0.27$  | 0.5775             | $1.56^{+0.69}_{-0.65} \pm 1.06$ | 1.49                                                | 1.35                                              | N           |
| 0505381901 | 2007-11-29 | 324.332 | -58.336 | 9.7                | 355                    | 9.4                | 592                    | $5.19^{+1.18}_{-1.09} \pm 0.22$  | 0.5775             | $1.03^{+0.73}_{-0.71} \pm 1.07$ | 1.40                                                | 1.39                                              | N           |
| 0505382801 | 2007-12-05 | 324.441 | -58.760 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505383601 | 2007-11-27 | 324.580 | -59.171 | 8.2                | 427                    | 8.0                | 592                    | $6.16^{+1.34}_{-1.12} \pm 0.41$  | 0.5775             | $0.90^{+0.89}_{-0.72} \pm 1.32$ | 1.81                                                | 1.48                                              | Y           |
| 0505381001 | 2007-10-21 | 324.759 | -57.704 | 12.5               | 491                    | 12.2               | 583                    | $7.01^{+1.17}_{-1.02} \pm 0.32$  | 0.5675             | $2.51^{+0.57}_{-0.61} \pm 1.00$ | 1.28                                                | 1.42                                              | N           |
| 0505381801 | 2007-11-30 | 324.919 | -58.115 | 10.6               | 427                    | 10.6               | 592                    | $5.08^{+1.44}_{-1.05} \pm 0.51$  | 0.5725             | $1.88^{+0.88}_{-0.62} \pm 0.61$ | 1.78                                                | 1.56                                              | Y           |
| 0505382701 | 2007-11-28 | 325.034 | -58.540 | 10.1               | 355                    | 11.1               | 583                    | $6.03^{+1.32}_{-1.27} \pm 0.51$  | 0.5625             | $1.48^{+0.74}_{-0.70} \pm 0.33$ | 1.50                                                | 2.16                                              | N           |
| 0554560601 | 2008-12-04 | 325.188 | -58.954 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0554560201 | 2008-11-18 | 325.220 | -57.049 | 12.7               | 502                    | 13.1               | 517                    | $4.60^{+1.14}_{-0.84} \pm 0.38$  | 0.5775             | $1.17^{+0.66}_{-0.57} \pm 1.24$ | 1.54                                                | 1.18                                              | N           |
| 0505380901 | 2007-11-15 | 325.338 | -57.477 | 5.8                | 356                    | 5.7                | 518                    | $6.92^{+1.77}_{-1.82} \pm 0.16$  | 0.5625             | $2.19^{+0.97}_{-0.95} \pm 0.69$ | 1.64                                                | 1.42                                              | N           |
| 0505384801 | 2007-11-29 | 325.344 | -57.475 | 9.6                | 354                    | 9.3                | 592                    | $5.94^{+1.11}_{-1.40} \pm 0.42$  | 0.5725             | $0.97^{+0.64}_{-0.83} \pm 0.96$ | 1.64                                                | 1.17                                              | N           |
| 0505381701 | 2007-12-03 | 325.498 | -57.890 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505382601 | 2007-11-27 | 325.620 | -58.316 | 12.0               | 421                    | 12.0               | 579                    | $5.43^{+0.93}_{-0.92} \pm 0.35$  | 0.5725             | $1.51^{+0.57}_{-0.61} \pm 0.70$ | 1.79                                                | 1.38                                              | N           |
| 0554561001 | 2008-11-16 | 325.770 | -56.815 | 10.1               | 502                    | 10.1               | 518                    | $4.55^{+1.09}_{-0.94} \pm 0.15$  | 0.5775             | $1.25^{+0.64}_{-0.67} \pm 0.35$ | 1.33                                                | 1.54                                              | N           |
| 0505383401 | 2007-11-27 | 325.777 | -58.729 | 11.4               | 400                    | 11.8               | 565                    | $5.23^{+0.90}_{-1.00} \pm 0.44$  | 0.5725             | $2.23^{+0.59}_{-0.64} \pm 1.12$ | 1.70                                                | 1.26                                              | N           |
| 0505380801 | 2007-10-20 | 325.885 | -57.246 | 8.8                | 351                    | 8.8                | 589                    | $5.06 \pm 1.03 \pm 0.16$         | 0.5725             | $1.48 \pm 0.66 \pm 1.24$        | 1.57                                                | 1.05                                              | N           |
| 0505384101 | 2007-11-27 | 325.906 | -59.152 | 12.6               | 354                    | 12.0               | 591                    | $6.60^{+1.08}_{-1.13} \pm 0.17$  | 0.5675             | $2.45^{+0.62}_{-0.61} \pm 0.88$ | 1.63                                                | 1.04                                              | N           |
| 0300780301 | 2006-02-09 | 325.964 | +47.529 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0505381601 | 2007-11-16 | 326.056 | -57.659 | 7.0                | 356                    | 9.0                | 518                    | $4.73^{+1.83}_{-1.46} \pm 0.35$  | 0.5675             | $4.08^{+0.95}_{-0.87} \pm 0.14$ | 1.40                                                | 2.44                                              | N           |
| 0401790901 | 2006-08-07 | 326.095 | +13.990 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |
| 0406410101 | 2006-08-15 | 326.102 | +13.990 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                               | ...         |

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$             | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{2-5}^{\text{XMM}}}{F_{\text{exgal}}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|---------------------------------|-----------------------------------------------------|-------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                          | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                            | filtering?  |
| 0505382501 | 2007-11-20 | 326.192 | -58.086 | 15.1               | 353                    | 15.7               | 515                    | $6.00^{+1.22}_{-1.15} \pm 0.39$  | 0.5625             | $1.85^{+0.64}_{-0.65} \pm 0.45$ | 1.31                                                | 2.67                                            | Y           |
| 0200800201 | 2005-05-21 | 326.316 | -82.796 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0200800101 | 2004-12-14 | 326.337 | -82.760 | 19.5               | 445                    | 19.6               | 375                    | $4.74^{+0.89}_{-0.75} \pm 0.23$  | 0.5825             | $0.48^{+0.62}_{-0.48} \pm 0.97$ | 1.73                                                | 1.71                                            | Y           |
| 0505383301 | 2007-11-28 | 326.360 | -58.499 | 15.0               | 428                    | 15.3               | 592                    | $5.56^{+0.90}_{-1.04} \pm 0.73$  | 0.5725             | $1.38^{+0.53}_{-0.59} \pm 0.60$ | 1.37                                                | 1.63                                            | N           |
| 0505384001 | 2007-11-27 | 326.495 | -58.924 | 10.7               | 353                    | 10.4               | 590                    | $5.78^{+1.21}_{-1.04} \pm 1.46$  | 0.5725             | $2.10 \pm 0.65 \pm 0.83$        | 1.82                                                | 1.47                                            | Y           |
| 0505381501 | 2007-11-15 | 326.611 | -57.423 | 9.8                | 427                    | 10.0               | 592                    | $7.21^{+1.04}_{-1.16} \pm 0.26$  | 0.5675             | $1.52^{+0.57}_{-0.62} \pm 0.86$ | 1.46                                                | 1.46                                            | N           |
| 0505382401 | 2007-11-15 | 326.752 | -57.851 | 9.8                | 356                    | 9.5                | 514                    | $7.10^{+1.84}_{-1.43} \pm 0.76$  | 0.5675             | $1.65^{+0.87}_{-0.66} \pm 0.73$ | 1.53                                                | 1.72                                            | N           |
| 0505384901 | 2008-04-17 | 327.095 | -58.724 | 6.5                | 414                    | 6.7                | 581                    | $5.57^{+1.39}_{-1.33} \pm 0.26$  | 0.5775             | $1.58^{+0.94}_{-0.89} \pm 0.97$ | 1.06                                                | 1.67                                            | N           |
| 0505381401 | 2007-10-26 | 327.145 | -57.183 | 10.9               | 352                    | 11.0               | 589                    | $5.53^{+1.15}_{-1.07} \pm 0.30$  | 0.5725             | $1.46^{+0.79}_{-0.67} \pm 1.11$ | 1.73                                                | 1.49                                            | Y           |
| 0505382301 | 2007-11-14 | 327.302 | -57.610 | 8.6                | 424                    | 8.9                | 591                    | $5.50^{+1.73}_{-0.64} \pm 0.33$  | 0.5625             | $2.02^{+0.84}_{-0.77} \pm 0.34$ | 1.62                                                | 2.39                                            | N           |
| 0300930301 | 2005-09-24 | 327.341 | -35.685 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0505383101 | 2007-11-15 | 327.480 | -58.024 | 9.7                | 425                    | 9.8                | 590                    | $5.03^{+1.40}_{-1.16} \pm 0.77$  | 0.5725             | $1.54^{+0.79}_{-0.67} \pm 1.00$ | 1.42                                                | 1.23                                            | N           |
| 0200730201 | 2003-12-28 | 327.588 | +68.922 | 30.6               | 512                    | 30.7               | 586                    | $10.95^{+1.04}_{-0.80} \pm 1.53$ | 0.5675             | $8.69^{+0.70}_{-0.53} \pm 0.39$ | 1.37                                                | 1.85                                            | N           |
| 0505383801 | 2007-11-15 | 327.636 | -58.450 | 11.2               | 355                    | 11.1               | 501                    | $6.11^{+1.16}_{-1.44} \pm 0.47$  | 0.5675             | $2.03^{+0.59}_{-0.80} \pm 1.16$ | 1.46                                                | 1.21                                            | N           |
| 0505382201 | 2007-10-25 | 327.832 | -57.366 | 13.1               | 335                    | 13.1               | 570                    | $6.53^{+1.19}_{-1.14} \pm 0.28$  | 0.5675             | $1.88^{+0.67}_{-0.61} \pm 0.28$ | 1.75                                                | 2.49                                            | N           |
| 0505383001 | 2007-10-27 | 328.020 | -57.780 | 15.7               | 427                    | 15.1               | 516                    | $5.05^{+1.29}_{-0.98} \pm 0.33$  | 0.5625             | $1.98^{+0.60}_{-0.53} \pm 0.83$ | 1.34                                                | 1.60                                            | N           |
| 0305750901 | 2005-06-28 | 328.042 | +59.613 | 12.7               | 465                    | 12.6               | 485                    | $9.24^{+1.37}_{-1.10} \pm 0.37$  | 0.5725             | $2.51^{+0.77}_{-0.66} \pm 1.36$ | 1.84                                                | 1.68                                            | N           |
| 0505383701 | 2007-11-15 | 328.189 | -58.206 | 9.5                | 345                    | 9.8                | 582                    | $7.27^{+2.01}_{-1.83} \pm 1.36$  | 0.5725             | $1.46^{+0.96}_{-0.53} \pm 1.10$ | 1.27                                                | 1.42                                            | N           |
| 0094383201 | 2002-12-12 | 328.753 | +86.767 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0302380201 | 2005-07-05 | 329.122 | +56.042 | 16.0               | 495                    | 17.1               | 517                    | $11.23^{+1.65}_{-0.97} \pm 0.28$ | 0.5675             | $2.75^{+0.54}_{-0.53} \pm 0.98$ | 1.44                                                | 1.99                                            | N           |
| 0111281001 | 2002-07-12 | 329.126 | +60.707 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                             | ...                                                 | ...                                             | ...         |
| 0307001901 | 2006-02-13 | 329.147 | -7.103  | 20.4               | 401                    | 20.3               | 499                    | $9.00^{+$                        |                    |                                 |                                                     |                                                 |             |

Table 2—Continued

| Obs. ID    | Start      | $l$     | $b$     | $t_1^{\text{exp}}$ | $\Omega_1$             | $t_2^{\text{exp}}$ | $\Omega_2$             | $I_{\text{O VII}}$               | $E_{\text{O VII}}$ | $I_{\text{O VIII}}$              | $\langle f_{\text{sw}} \rangle$                     | $\frac{F_{\text{total}}^{2-5}}{F_{\text{exgal}}^{2-5}}$ | Affected by |
|------------|------------|---------|---------|--------------------|------------------------|--------------------|------------------------|----------------------------------|--------------------|----------------------------------|-----------------------------------------------------|---------------------------------------------------------|-------------|
| (1)        | Date       | (deg)   | (deg)   | (ks)               | (arcmin <sup>2</sup> ) | (ks)               | (arcmin <sup>2</sup> ) | (L.U.)                           | (keV)              | (L.U.)                           | (10 <sup>8</sup> cm <sup>-2</sup> s <sup>-1</sup> ) | (13)                                                    | filtering?  |
| 0157360101 | 2003-01-01 | 338.755 | +83.083 | 10.9               | 474                    | 10.8               | 472                    | $10.19^{+1.17}_{-1.19} \pm 0.39$ | 0.5675             | $1.77 \pm 0.63 \pm 1.60$         | 1.77                                                | 1.17                                                    | Y           |
| 0402850701 | 2006-12-27 | 338.859 | +83.072 | 9.5                | 242                    | 9.7                | 473                    | $4.90^{+1.76}_{-1.43} \pm 0.43$  | 0.5725             | $0.92^{+0.86}_{-0.85} \pm 1.11$  | 1.08                                                | 1.25                                                    | N           |
| 0305900601 | 2006-01-10 | 338.871 | +83.074 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0163560101 | 2003-12-30 | 338.872 | +83.072 | 24.5               | 400                    | 24.5               | 398                    | $6.48^{+0.88}_{-0.82} \pm 0.44$  | 0.5725             | $1.26^{+0.53}_{-0.52} \pm 1.11$  | 1.12                                                | 1.94                                                    | N           |
| 0550120301 | 2008-08-16 | 338.908 | +14.518 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0146310201 | 2003-09-06 | 339.518 | +9.394  | 13.8               | 467                    | 13.7               | 469                    | $2.70^{+1.03}_{-1.04} \pm 0.23$  | 0.5675             | $2.46^{+0.63}_{-0.64} \pm 0.15$  | 1.23                                                | 1.94                                                    | N           |
| 0405950501 | 2006-12-23 | 339.692 | +66.614 | 40.1               | 498                    | 40.4               | 514                    | $10.07 \pm 0.70 \pm 0.29$        | 0.5625             | $4.00^{+0.42}_{-0.41} \pm 1.22$  | 1.32                                                | 1.55                                                    | N           |
| 0404240101 | 2007-01-16 | 340.563 | +63.459 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0510990101 | 2008-03-22 | 340.828 | -2.498  | 18.1               | 414                    | 19.4               | 505                    | $1.72^{+0.92}_{-0.93} \pm 0.60$  | 0.5575             | $0.00^{+0.40}_{-0.00} \pm 0.00$  | 1.75                                                | 2.68                                                    | Y           |
| 0202890201 | 2003-12-28 | 341.008 | +66.478 | 15.8               | 540                    | 16.3               | 466                    | $10.11^{+1.10}_{-1.50} \pm 0.42$ | 0.5675             | $5.96^{+0.67}_{-0.85} \pm 2.08$  | 1.61                                                | 1.39                                                    | N           |
| 0200230201 | 2004-05-13 | 341.307 | -45.402 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0406610301 | 2006-06-01 | 341.992 | +88.984 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0551150101 | 2009-04-14 | 342.164 | -32.242 | 28.2               | 394                    | 32.2               | 563                    | $8.87^{+1.43}_{-1.73} \pm 2.09$  | 0.5675             | $3.34^{+0.53}_{-0.66} \pm 0.48$  | 1.74                                                | 2.40                                                    | Y           |
| 0145480101 | 2003-02-08 | 342.412 | +55.943 | 10.8               | 433                    | 11.7               | 415                    | $9.14^{+1.55}_{-1.42} \pm 1.74$  | 0.5575             | $3.88^{+0.80}_{-0.77} \pm 0.95$  | 1.46                                                | 2.31                                                    | N           |
| 0302020201 | 2005-10-12 | 343.317 | -13.805 | 66.4               | 396                    | 67.4               | 484                    | $22.85^{+0.91}_{-0.99} \pm 1.94$ | 0.5675             | $13.75^{+0.57}_{-0.58} \pm 2.16$ | 1.17                                                | 2.55                                                    | N           |
| 0012850201 | 2002-06-06 | 343.811 | +88.446 | 22.6               | 454                    | 22.8               | 534                    | $13.15^{+0.93}_{-0.86} \pm 0.23$ | 0.5675             | $3.50^{+0.51}_{-0.48} \pm 1.63$  | 1.29                                                | 1.67                                                    | N           |
| 0152630101 | 2003-08-13 | 344.982 | +12.007 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0152630301 | 2003-08-11 | 344.982 | +24.008 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0152630201 | 2003-08-10 | 344.983 | +18.008 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0555970301 | 2008-08-12 | 345.371 | +40.503 | 12.9               | 351                    | 12.6               | 587                    | $8.17^{+1.30}_{-1.17} \pm 0.55$  | 0.5675             | $4.00^{+0.79}_{-0.69} \pm 0.68$  | 1.27                                                | 1.65                                                    | N           |
| 0555970401 | 2008-08-26 | 345.372 | +40.503 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0302540201 | 2005-05-02 | 345.386 | -51.102 | 11.7               | 375                    | 12.8               | 469                    | $8.74^{+1.45}_{-1.89} \pm 0.89$  | 0.5625             | $4.36^{+0.79}_{-0.87} \pm 0.21$  | 1.22                                                | 2.67                                                    | N           |
| 0402250301 | 2006-12-21 | 345.816 | +83.123 | 15.2               | 410                    | 15.1               | 423                    | $8.18^{+1.26}_{-1.32} \pm 0.79$  | 0.5675             | $1.35^{+0.62}_{-0.55} \pm 0.92$  | 1.38                                                | 1.70                                                    | N           |
| 0203060201 | 2004-04-07 | 346.152 | -20.754 | 38.4               | 463                    | 38.9               | 471                    | $21.65^{+1.04}_{-1.16} \pm 1.17$ | 0.5675             | $9.62^{+0.60}_{-0.67} \pm 1.46$  | 1.71                                                | 2.11                                                    | Y           |
| 0164570401 | 2004-08-27 | 346.461 | +34.153 | 31.4               | 582                    | 30.4               | 509                    | $17.65^{+0.82}_{-0.81} \pm 0.72$ | 0.5675             | $7.81 \pm 0.49 \pm 1.87$         | 1.39                                                | 1.76                                                    | Y           |
| 0511581401 | 2008-01-23 | 346.899 | +40.675 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0511581601 | 2008-01-26 | 346.899 | +40.675 | 26.1               | 379                    | 26.3               | 542                    | $7.78^{+0.84}_{-0.86} \pm 0.98$  | 0.5675             | $4.50^{+0.59}_{-0.51} \pm 0.52$  | 1.51                                                | 1.93                                                    | N           |
| 0142630301 | 2003-09-05 | 347.106 | +21.521 | 15.2               | 505                    | 16.0               | 586                    | $15.70^{+1.40}_{-1.27} \pm 1.00$ | 0.5675             | $11.24 \pm 0.85 \pm 0.90$        | 1.27                                                | 2.04                                                    | N           |
| 0502060301 | 2007-08-03 | 347.235 | +53.199 | 8.2                | 379                    | 8.6                | 474                    | $7.81^{+1.78}_{-1.94} \pm 0.46$  | 0.5675             | $0.99^{+1.01}_{-0.99} \pm 1.15$  | 1.05                                                | 2.22                                                    | N           |
| 0501540201 | 2008-01-06 | 348.092 | +53.757 | 14.3               | 418                    | 14.6               | 582                    | $6.87^{+1.39}_{-0.94} \pm 1.36$  | 0.5675             | $2.33^{+0.68}_{-0.56} \pm 0.93$  | 1.32                                                | 1.94                                                    | N           |
| 0112310201 | 2001-05-25 | 348.097 | -65.712 | 20.3               | 483                    | 21.0               | 470                    | $6.33^{+0.84}_{-0.97} \pm 0.50$  | 0.5575             | $2.35^{+0.56}_{-0.40} \pm 0.45$  | 0.64                                                | 2.60                                                    | N           |
| 0204610101 | 2005-04-29 | 348.106 | -65.712 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0501650201 | 2008-05-01 | 348.170 | -65.252 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0405380701 | 2007-04-30 | 348.256 | -65.861 | 5.8                | 375                    | 6.0                | 540                    | $8.74^{+1.83}_{-1.91} \pm 3.68$  | 0.5575             | $4.76^{+1.31}_{-0.80} \pm 1.23$  | 1.63                                                | 2.60                                                    | N           |
| 0112380101 | 2000-08-26 | 348.620 | +22.412 | 33.1               | 528                    | 32.8               | 523                    | $14.98^{+0.67}_{-0.88} \pm 2.04$ | 0.5675             | $10.75^{+0.55}_{-0.47} \pm 1.27$ | 1.39                                                | 2.22                                                    | N           |
| 0504630101 | 2008-04-30 | 349.503 | -59.948 | 12.0               | 286                    | 13.1               | 374                    | $6.50^{+1.59}_{-1.82} \pm 2.71$  | 0.5675             | $1.62^{+0.86}_{-0.98} \pm 0.53$  | 1.71                                                | 2.38                                                    | Y           |
| 0111810101 | 2001-05-28 | 349.589 | -52.579 | 45.3               | 260                    | 46.1               | 221                    | $12.41^{+1.02}_{-1.01} \pm 0.37$ | 0.5675             | $5.30 \pm 0.60 \pm 1.21$         | 1.31                                                | 2.35                                                    | N           |
| 0306080101 | 2005-11-05 | 350.213 | -61.785 | 36.9               | 398                    | 37.8               | 499                    | $6.04^{+0.70}_{-0.74} \pm 0.53$  | 0.5675             | $1.90^{+0.40}_{-0.41} \pm 0.37$  | 1.63                                                | 2.28                                                    | Y           |
| 0304080401 | 2005-09-28 | 350.355 | -32.590 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0304080301 | 2005-09-26 | 350.355 | -32.590 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0205920401 | 2004-10-04 | 350.356 | -32.589 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0303561501 | 2006-01-08 | 350.742 | +65.040 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0551200101 | 2008-07-22 | 351.377 | +52.666 | 6.1                | 311                    | 6.0                | 474                    | $7.02^{+2.02}_{-2.33} \pm 0.93$  | 0.5625             | $3.27 \pm 1.17 \pm 0.41$         | 1.89                                                | 1.84                                                    | Y           |
| 0504480301 | 2008-02-08 | 351.416 | +51.410 | 23.3               | 475                    | 24.6               | 562                    | $8.26^{+1.70}_{-0.83} \pm 1.06$  | 0.5725             | $1.83^{+0.77}_{-0.48} \pm 0.82$  | 1.68                                                | 2.37                                                    | N           |
| 0553790301 | 2008-07-20 | 351.859 | +54.922 | 18.1               | 500                    | 19.4               | 589                    | $7.35^{+1.00}_{-1.18} \pm 0.74$  | 0.5675             | $0.94^{+0.49}_{-0.50} \pm 0.86$  | 1.80                                                | 1.77                                                    | N           |
| 0109060201 | 2000-08-24 | 352.134 | +19.971 | 45.9               | 371                    | 44.8               | 367                    | $20.52^{+0.85}_{-1.60} \pm 2.67$ | 0.5675             | $13.35^{+0.54}_{-0.68} \pm 0.88$ | 1.11                                                | 2.10                                                    | N           |
| 0404710401 | 2006-09-30 | 352.437 | -27.054 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0303670101 | 2005-07-07 | 352.626 | +60.628 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0555650301 | 2008-09-01 | 352.636 | +19.889 | 17.7               | 365                    | 18.5               | 443                    | $14.18^{+0.72}_{-2.46} \pm 5.13$ | 0.5675             | $10.70^{+0.93}_{-0.79} \pm 1.71$ | 1.85                                                | 2.69                                                    | Y           |
| 0555650201 | 2008-08-30 | 352.637 | +19.889 | 59.2               | 440                    | 59.5               | 442                    | $11.12^{+0.70}_{-0.83} \pm 2.32$ | 0.5675             | $9.40^{+0.45}_{-0.48} \pm 2.40$  | 1.70                                                | 2.29                                                    | Y           |
| 0109060101 | 2000-09-11 | 352.967 | +17.198 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0304200901 | 2005-07-21 | 353.190 | +50.902 | ...                | ...                    | ...                | ...                    | ...                              | ...                | ...                              | ...                                                 | ...                                                     | ...         |
| 0305920401 | 2005-08-18 | 353.859 | +55.933 | 16.5               | 393                    | 17.0               | 488                    | $8.69 \pm 1.25 \pm 2.31$         | 0.5675             | $2.13^{+0.63}_{-0.64} \pm 2.16$  | 1.66                                                | 2.41                                                    | N           |

Table 2—Continued

[illegible]

Table 4. Oxygen Line Intensities from Directions with Multiple Observations

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                  | With proton flux filtering       |                                  |
|---------|------------------|------------|---------|---------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                           | (L.U.)                           | (L.U.)                           |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                              | (9)                              | (10)                             |
| 1       | 2                | 0050940401 | ...     | 0.015   | -12.011 | $35.17^{+1.55}_{-2.29} \pm 2.52$ | $15.68^{+1.16}_{-1.35} \pm 6.78$ | $35.17^{+1.55}_{-2.29} \pm 2.52$ | $15.68^{+1.16}_{-1.35} \pm 6.78$ |
|         |                  | 0203040401 | ...     | 359.985 | -11.990 | $33.54 \pm 1.79 \pm 0.53$        | $13.35 \pm 1.08 \pm 5.71$        | ...                              | ...                              |
| 2       | 2                | 0018741701 | ...     | 3.967   | -59.448 | $11.29 \pm 2.03 \pm 1.31$        | $5.49 \pm 1.23 \pm 0.55$         | ...                              | ...                              |
|         |                  | 0404910801 | ...     | 3.966   | -59.441 | $6.27^{+1.87}_{-0.91} \pm 1.22$  | $0.70^{+0.88}_{-0.57} \pm 1.09$  | ...                              | ...                              |
| 3       | 2                | 0057560301 | ...     | 5.457   | +56.766 | $13.99 \pm 0.63 \pm 1.11$        | $4.71 \pm 0.39 \pm 2.67$         | $13.69^{+0.72}_{-0.76} \pm 0.28$ | $5.07 \pm 0.46 \pm 2.36$         |
|         |                  | 0148520101 | ...     | 5.456   | +56.770 | $12.42^{+0.78}_{-0.82} \pm 1.51$ | $4.47^{+0.47}_{-0.55} \pm 2.52$  | $12.42^{+0.78}_{-0.82} \pm 1.51$ | $4.47^{+0.47}_{-0.55} \pm 2.52$  |
| 4       | 2                | 0400460301 | ...     | 6.230   | -38.240 | $6.14^{+1.08}_{-0.92} \pm 0.72$  | $2.76^{+0.72}_{-0.57} \pm 0.34$  | $7.39^{+1.39}_{-1.36} \pm 0.82$  | $2.14^{+0.83}_{-0.82} \pm 0.66$  |
|         |                  | 0400460401 | ...     | 6.229   | -38.240 | $6.29^{+1.48}_{-1.53} \pm 0.50$  | $1.70^{+0.74}_{-0.73} \pm 0.38$  | $6.29^{+1.48}_{-1.53} \pm 0.50$  | $1.70^{+0.74}_{-0.73} \pm 0.38$  |
| 5       | 3                | 0401660101 | ...     | 6.604   | +7.775  | $7.03^{+1.16}_{-0.78} \pm 0.80$  | $4.21^{+0.61}_{-0.44} \pm 0.72$  | ...                              | ...                              |
|         |                  | 0085582001 | ...     | 6.588   | +7.785  | $3.84^{+1.64}_{-1.28} \pm 1.78$  | $6.01^{+1.28}_{-1.18} \pm 1.17$  | $3.84^{+1.64}_{-1.28} \pm 1.78$  | $6.01^{+1.28}_{-1.18} \pm 1.17$  |
|         |                  | 0085581401 | ...     | 6.588   | +7.786  | $5.15^{+0.82}_{-1.55} \pm 0.99$  | $3.97^{+0.99}_{-0.95} \pm 0.97$  | $5.15^{+0.82}_{-1.55} \pm 0.99$  | $3.97^{+0.99}_{-0.95} \pm 0.97$  |
| 6       | 3                | 0041160101 | ...     | 10.406  | +11.152 | $10.51 \pm 0.77 \pm 1.79$        | $7.48 \pm 0.48 \pm 0.99$         | ...                              | ...                              |
|         |                  | 0501580201 | ...     | 10.391  | +11.163 | $3.24^{+0.56}_{-0.58} \pm 0.78$  | $4.43^{+0.37}_{-0.39} \pm 1.08$  | ...                              | ...                              |
|         |                  | 0501580101 | ...     | 10.391  | +11.164 | $3.17^{+0.71}_{-0.56} \pm 1.35$  | $4.40^{+0.40}_{-0.37} \pm 0.72$  | $5.03^{+0.69}_{-1.06} \pm 0.98$  | $4.33^{+0.49}_{-0.60} \pm 0.68$  |
| 7       | 2                | 0304080501 | ...     | 12.896  | -78.051 | $8.78^{+1.23}_{-1.37} \pm 0.56$  | $2.26^{+0.63}_{-0.68} \pm 0.57$  | $8.78^{+1.23}_{-1.37} \pm 0.56$  | $2.26^{+0.63}_{-0.68} \pm 0.57$  |
|         |                  | 0504370701 | ...     | 12.842  | -78.035 | $6.10^{+0.43}_{-0.75} \pm 0.44$  | $0.63^{+0.28}_{-0.35} \pm 0.30$  | ...                              | ...                              |
| 8       | 2                | 0304720101 | ...     | 14.140  | -11.887 | $17.42^{+2.03}_{-1.61} \pm 1.90$ | $9.32^{+1.00}_{-0.99} \pm 1.54$  | $17.42^{+2.03}_{-1.61} \pm 1.90$ | $9.32^{+1.00}_{-0.99} \pm 1.54$  |
|         |                  | 0204690101 | ...     | 14.108  | -11.866 | $17.06^{+1.46}_{-1.10} \pm 1.50$ | $9.35^{+0.87}_{-0.67} \pm 1.40$  | ...                              | ...                              |
| 9       | 2                | 0414580101 | ...     | 15.157  | -53.076 | $6.42^{+1.17}_{-0.90} \pm 0.25$  | $1.30^{+0.57}_{-0.56} \pm 0.33$  | ...                              | ...                              |
|         |                  | 0147920601 | ...     | 15.128  | -53.066 | $10.40^{+2.22}_{-1.23} \pm 0.52$ | $5.14^{+1.11}_{-0.74} \pm 0.56$  | $9.67^{+2.21}_{-1.53} \pm 1.44$  | $5.22^{+1.26}_{-0.91} \pm 0.46$  |
| 10      | 3                | 0500910901 | ...     | 18.070  | +67.695 | $10.20^{+1.38}_{-1.60} \pm 0.40$ | $4.04^{+0.72}_{-0.78} \pm 2.10$  | ...                              | ...                              |
|         |                  | 0500911001 | ...     | 18.071  | +67.695 | $11.30^{+1.13}_{-1.16} \pm 0.39$ | $3.54^{+0.66}_{-0.68} \pm 2.18$  | $11.81^{+1.79}_{-1.96} \pm 0.90$ | $4.19^{+0.96}_{-0.87} \pm 2.42$  |
|         |                  | 0500910601 | ...     | 18.069  | +67.696 | $11.40^{+1.64}_{-1.56} \pm 0.35$ | $3.44^{+0.84}_{-0.89} \pm 2.26$  | ...                              | ...                              |
| 11      | 3                | 0085280201 | ...     | 18.426  | +16.024 | $5.05^{+1.54}_{-0.70} \pm 0.85$  | $3.00^{+0.92}_{-0.85} \pm 1.16$  | ...                              | ...                              |
|         |                  | 0085281001 | ...     | 18.426  | +16.025 | $7.85^{+1.50}_{-1.52} \pm 1.15$  | $4.47^{+0.76}_{-0.77} \pm 0.69$  | $6.79^{+1.35}_{-1.51} \pm 1.01$  | $3.57^{+0.72}_{-0.70} \pm 1.14$  |
|         |                  | 0085280501 | ...     | 18.396  | +16.048 | $8.74^{+1.14}_{-0.60} \pm 1.21$  | $3.14^{+0.50}_{-0.38} \pm 0.44$  | ...                              | ...                              |
| 12      | 4                | 0402080801 | ...     | 20.625  | +79.299 | $5.25^{+1.84}_{-1.43} \pm 0.40$  | $0.00^{+0.52}_{-0.00} \pm 0.78$  | ...                              | ...                              |
|         |                  | 0096010101 | ...     | 20.591  | +79.318 | $15.28 \pm 0.87 \pm 0.42$        | $3.88 \pm 0.47 \pm 1.76$         | ...                              | ...                              |
|         |                  | 0402080301 | ...     | 20.559  | +79.334 | $8.44 \pm 0.66 \pm 0.41$         | $0.85^{+0.35}_{-0.36} \pm 0.94$  | $8.29^{+1.26}_{-0.85} \pm 0.51$  | $0.45^{+0.68}_{-0.45} \pm 1.32$  |
|         |                  | 0402080201 | ...     | 20.563  | +79.334 | $7.87^{+0.97}_{-1.41} \pm 0.25$  | $0.98^{+0.59}_{-0.46} \pm 1.11$  | $7.87^{+0.97}_{-1.41} \pm 0.25$  | $0.98^{+0.59}_{-0.46} \pm 1.11$  |
| 13      | 2                | 0147420401 | ...     | 20.728  | +27.290 | $29.08^{+2.19}_{-4.00} \pm 2.28$ | $14.63^{+1.45}_{-1.65} \pm 5.20$ | $28.52^{+2.54}_{-3.66} \pm 1.82$ | $12.86^{+1.34}_{-2.59} \pm 6.14$ |
|         |                  | 0101640101 | ...     | 20.712  | +27.303 | $35.09 \pm 2.28 \pm 0.39$        | $15.86^{+1.40}_{-1.41} \pm 6.31$ | ...                              | ...                              |
| 14      | 2                | 0400200101 | ...     | 32.954  | +73.438 | $4.80^{+1.15}_{-0.81} \pm 0.38$  | $0.60^{+0.54}_{-0.48} \pm 0.80$  | $4.80^{+1.15}_{-0.81} \pm 0.38$  | $0.60^{+0.54}_{-0.48} \pm 0.80$  |
|         |                  | 0109081001 | ...     | 32.983  | +73.440 | $11.27^{+0.65}_{-1.88} \pm 2.15$ | $2.13^{+0.77}_{-0.45} \pm 1.10$  | $11.27^{+0.65}_{-1.88} \pm 2.15$ | $2.13^{+0.77}_{-0.45} \pm 1.10$  |
| 15      | 2                | 0403570201 | ...     | 33.994  | +20.278 | $22.12^{+1.14}_{-1.13} \pm 2.86$ | $11.32^{+0.75}_{-0.74} \pm 5.10$ | ...                              | ...                              |
|         |                  | 0403570101 | ...     | 33.994  | +20.279 | $22.26^{+0.88}_{-0.89} \pm 1.44$ | $10.62 \pm 0.58 \pm 4.54$        | $22.26^{+0.88}_{-0.89} \pm 1.44$ | $10.62 \pm 0.58 \pm 4.54$        |
| 16      | 2                | 0112440301 | ...     | 35.701  | -4.135  | $16.81^{+1.53}_{-2.58} \pm 2.26$ | $6.84^{+0.89}_{-1.38} \pm 0.26$  | ...                              | ...                              |
|         |                  | 0112440401 | ...     | 35.702  | -4.135  | $12.48^{+1.23}_{-1.07} \pm 0.38$ | $5.46^{+0.71}_{-0.70} \pm 0.49$  | $12.48^{+1.23}_{-1.07} \pm 0.38$ | $5.46^{+0.71}_{-0.70} \pm 0.49$  |
| 17      | 3                | 0201730101 | ...     | 36.078  | +8.299  | $14.65^{+1.26}_{-1.33} \pm 0.57$ | $5.11 \pm 0.75 \pm 2.83$         | $14.65^{+1.31}_{-1.34} \pm 0.57$ | $5.24^{+0.79}_{-0.77} \pm 2.70$  |
|         |                  | 0201730301 | ...     | 36.078  | +8.299  | $10.85^{+2.08}_{-0.97} \pm 2.16$ | $4.72^{+0.67}_{-0.58} \pm 1.48$  | ...                              | ...                              |
|         |                  | 0201730201 | ...     | 36.077  | +8.299  | $13.20 \pm 0.90 \pm 0.80$        | $4.30 \pm 0.53 \pm 2.00$         | ...                              | ...                              |
| 18      | 2                | 0205510201 | ...     | 36.633  | +53.011 | $15.44^{+1.73}_{-2.46} \pm 0.59$ | $5.94^{+1.12}_{-1.31} \pm 2.96$  | ...                              | ...                              |
|         |                  | 0101640801 | ...     | 36.616  | +53.048 | $19.41^{+1.69}_{-1.48} \pm 0.54$ | $6.03^{+0.94}_{-0.88} \pm 3.10$  | ...                              | ...                              |
| 19      | 5                | 0106660101 | ...     | 39.269  | -52.930 | $11.84^{+0.47}_{-0.53} \pm 0.34$ | $2.82^{+0.27}_{-0.28} \pm 1.64$  | $12.46^{+0.71}_{-0.62} \pm 0.16$ | $3.02^{+0.37}_{-0.35} \pm 1.54$  |
|         |                  | 0106660201 | ...     | 39.268  | -52.930 | $13.63^{+0.66}_{-0.60} \pm 0.28$ | $3.27^{+0.35}_{-0.33} \pm 1.20$  | $12.31^{+1.56}_{-1.39} \pm 0.38$ | $3.12^{+0.83}_{-0.77} \pm 0.90$  |
|         |                  | 0106660401 | ...     | 39.268  | -52.930 | $9.61^{+0.95}_{-0.71} \pm 0.51$  | $2.29^{+0.50}_{-0.43} \pm 1.51$  | $9.37^{+0.92}_{-0.84} \pm 0.30$  | $2.26^{+0.52}_{-0.48} \pm 1.33$  |
|         |                  | 0106660501 | ...     | 39.268  | -52.930 | $10.72^{+1.30}_{-1.75} \pm 1.01$ | $2.37^{+0.71}_{-0.78} \pm 1.31$  | $10.72^{+1.30}_{-1.75} \pm 1.01$ | $2.37^{+0.71}_{-0.78} \pm 1.31$  |
|         |                  | 0106660601 | ...     | 39.266  | -52.928 | $10.18^{+0.39}_{-0.46} \pm 0.47$ | $2.80^{+0.21}_{-0.27} \pm 1.05$  | $10.74^{+0.68}_{-0.65} \pm 0.62$ | $2.71^{+0.39}_{-0.36} \pm 1.76$  |
| 20      | 2                | 0302261001 | ...     | 42.695  | +41.157 | $7.76^{+1.72}_{-1.75} \pm 0.64$  | $3.17^{+0.53}_{-1.10} \pm 0.37$  | $7.76^{+1.72}_{-1.75} \pm 0.64$  | $3.17^{+0.53}_{-1.10} \pm 0.37$  |
|         |                  | 0302260701 | ...     | 42.698  | +41.157 | $8.13^{+1.21}_{-1.89} \pm 0.96$  | $1.97^{+0.69}_{-0.92} \pm 0.67$  | ...                              | ...                              |
| 21      | 2                | 0146500101 | ...     | 42.757  | +46.759 | $9.05^{+1.76}_{-1.77} \pm 0.19$  | $2.28^{+0.97}_{-1.09} \pm 1.86$  | ...                              | ...                              |
|         |                  | 0146500201 | ...     | 42.757  | +46.760 | $12.02^{+1.76}_{-1.60} \pm 0.39$ | $3.37^{+1.04}_{-0.93} \pm 1.95$  | ...                              | ...                              |



Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |        |         | Without proton flux filtering    |                                 | With proton flux filtering       |                                 |
|---------|------------------|------------|---------|--------|---------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$    | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)  | (deg)   | (L.U.)                           | (L.U.)                          | (L.U.)                           | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)    | (6)     | (7)                              | (8)                             | (9)                              | (10)                            |
| 22      | 2                | 0089940101 | ...     | 44.914 | -6.552  | $7.91^{+1.60}_{-1.06} \pm 0.54$  | $2.55^{+0.66}_{-0.60} \pm 1.17$ | ...                              | ...                             |
|         |                  | 0089940801 | ...     | 44.915 | -6.552  | $5.87^{+1.59}_{-1.25} \pm 0.74$  | $3.35^{+0.92}_{-0.73} \pm 1.12$ | ...                              | ...                             |
| 23      | 2                | 0113051401 | ...     | 47.397 | -3.887  | $7.72^{+1.13}_{-1.38} \pm 0.58$  | $3.77^{+0.56}_{-0.57} \pm 0.48$ | $5.18^{+1.21}_{-1.17} \pm 1.00$  | $2.61^{+0.68}_{-0.72} \pm 0.82$ |
|         |                  | 0113051301 | ...     | 47.361 | -3.877  | $9.04^{+1.03}_{-1.16} \pm 1.54$  | $3.14^{+0.54}_{-0.60} \pm 0.59$ | ...                              | ...                             |
| 24      | 2                | 0502360101 | ...     | 47.745 | -8.911  | $9.03^{+1.21}_{-0.45} \pm 1.73$  | $3.71^{+0.49}_{-0.32} \pm 1.48$ | ...                              | ...                             |
|         |                  | 0502360201 | ...     | 47.744 | -8.911  | $11.13^{+1.05}_{-1.01} \pm 0.69$ | $3.93^{+0.37}_{-0.46} \pm 0.97$ | $10.87^{+0.91}_{-0.83} \pm 0.91$ | $3.75^{+0.49}_{-0.36} \pm 0.92$ |
| 25      | 2                | 0603590201 | ...     | 51.403 | -42.038 | $6.22^{+0.61}_{-0.63} \pm 0.46$  | $1.05^{+0.35}_{-0.36} \pm 0.60$ | $6.22^{+0.61}_{-0.63} \pm 0.46$  | $1.05^{+0.35}_{-0.36} \pm 0.60$ |
|         |                  | 0404190201 | ...     | 51.352 | -42.033 | $8.85^{+0.63}_{-0.67} \pm 0.23$  | $1.50^{+0.35}_{-0.36} \pm 1.19$ | $8.85^{+0.63}_{-0.67} \pm 0.23$  | $1.50^{+0.35}_{-0.36} \pm 1.19$ |
| 26      | 5                | 0073140201 | ...     | 52.878 | +47.989 | $12.93 \pm 0.80 \pm 0.23$        | $1.63^{+0.40}_{-0.41} \pm 1.59$ | $12.89^{+0.93}_{-0.85} \pm 0.18$ | $1.65^{+0.47}_{-0.43} \pm 1.52$ |
|         |                  | 0073140301 | ...     | 52.878 | +47.989 | $12.77^{+0.83}_{-1.09} \pm 0.70$ | $1.97^{+0.46}_{-0.52} \pm 1.60$ | ...                              | ...                             |
|         |                  | 0073140501 | ...     | 52.877 | +47.990 | $16.43^{+1.01}_{-0.96} \pm 0.25$ | $2.19^{+0.50}_{-0.49} \pm 1.89$ | ...                              | ...                             |
|         |                  | 0157360401 | ...     | 52.877 | +47.990 | $10.72^{+0.77}_{-1.10} \pm 0.27$ | $2.46^{+0.42}_{-0.40} \pm 1.33$ | ...                              | ...                             |
|         |                  | 0157360601 | ...     | 52.877 | +47.991 | $13.00^{+2.10}_{-2.04} \pm 0.49$ | $2.01^{+1.00}_{-0.93} \pm 1.16$ | ...                              | ...                             |
| 27      | 3                | 0112960601 | ...     | 53.638 | -13.628 | $11.21^{+1.59}_{-1.26} \pm 1.46$ | $2.32^{+0.97}_{-0.73} \pm 1.65$ | $11.21^{+1.59}_{-1.26} \pm 1.46$ | $2.32^{+0.97}_{-0.73} \pm 1.65$ |
|         |                  | 0112960301 | ...     | 53.638 | -13.627 | $9.90^{+1.03}_{-1.10} \pm 1.26$  | $3.18 \pm 0.61 \pm 0.80$        | $9.90^{+1.03}_{-1.10} \pm 1.26$  | $3.18 \pm 0.61 \pm 0.80$        |
|         |                  | 0112960501 | ...     | 53.638 | -13.627 | $12.65^{+1.28}_{-1.20} \pm 0.75$ | $3.57^{+0.65}_{-0.62} \pm 0.57$ | ...                              | ...                             |
| 28      | 2                | 0505010501 | ...     | 56.664 | +43.826 | $5.11^{+1.41}_{-1.24} \pm 0.43$  | $0.52^{+0.34}_{-0.52} \pm 0.15$ | $5.11^{+1.41}_{-1.24} \pm 0.43$  | $0.52^{+0.34}_{-0.52} \pm 0.15$ |
|         |                  | 0505011201 | ...     | 56.663 | +43.826 | $4.67^{+1.18}_{-1.06} \pm 0.24$  | $0.65^{+0.55}_{-0.51} \pm 0.29$ | ...                              | ...                             |
| 29      | 6                | 0500500601 | ...     | 57.061 | -28.019 | $6.20^{+1.16}_{-1.14} \pm 0.48$  | $0.89^{+0.53}_{-0.66} \pm 0.24$ | $6.25 \pm 1.24 \pm 1.01$         | $0.78^{+0.57}_{-0.63} \pm 0.54$ |
|         |                  | 0150610201 | ...     | 57.061 | -28.017 | $8.85^{+1.34}_{-1.22} \pm 1.75$  | $1.34 \pm 0.74 \pm 0.53$        | $8.85^{+1.34}_{-1.22} \pm 1.75$  | $1.34 \pm 0.74 \pm 0.53$        |
|         |                  | 0500500701 | ...     | 57.060 | -28.017 | $5.36^{+0.75}_{-0.69} \pm 0.41$  | $0.91^{+0.40}_{-0.36} \pm 0.07$ | $5.36^{+0.75}_{-0.69} \pm 0.41$  | $0.91^{+0.40}_{-0.36} \pm 0.07$ |
|         |                  | 0500500801 | ...     | 57.060 | -28.017 | $9.67^{+0.69}_{-0.66} \pm 0.58$  | $0.71^{+0.36}_{-0.34} \pm 0.66$ | $8.18^{+0.99}_{-0.93} \pm 0.52$  | $0.38^{+0.49}_{-0.38} \pm 0.85$ |
|         |                  | 0300310201 | ...     | 57.019 | -28.013 | $7.97^{+0.57}_{-0.61} \pm 0.71$  | $1.53^{+0.32}_{-0.33} \pm 0.65$ | $8.63^{+0.44}_{-1.00} \pm 0.69$  | $1.75^{+0.28}_{-0.37} \pm 0.61$ |
| 30      | 4                | 0500500901 | ...     | 57.019 | -28.010 | $5.36^{+0.75}_{-0.69} \pm 1.35$  | $1.39 \pm 0.40 \pm 0.33$        | ...                              | ...                             |
|         |                  | 0551860501 | ...     | 57.709 | +6.402  | $1.07^{+1.12}_{-0.65} \pm 0.55$  | $1.62^{+0.82}_{-0.59} \pm 0.68$ | $0.87^{+0.84}_{-0.87} \pm 0.28$  | $1.76^{+0.67}_{-0.64} \pm 0.55$ |
|         |                  | 0109500101 | ...     | 57.709 | +6.403  | $3.61^{+1.58}_{-1.31} \pm 0.90$  | $1.08 \pm 0.70 \pm 0.85$        | ...                              | ...                             |
|         |                  | 0105460801 | ...     | 57.713 | +6.412  | $2.72^{+0.88}_{-0.74} \pm 0.70$  | $0.99^{+0.40}_{-0.41} \pm 0.22$ | ...                              | ...                             |
|         |                  | 0105460201 | ...     | 57.714 | +6.413  | $2.40^{+0.94}_{-0.86} \pm 0.19$  | $1.45^{+0.50}_{-0.46} \pm 0.19$ | ...                              | ...                             |
| 31      | 4                | 0005010201 | ...     | 59.233 | +65.016 | $8.67^{+1.59}_{-2.19} \pm 0.58$  | $2.41^{+0.86}_{-0.99} \pm 1.09$ | ...                              | ...                             |
|         |                  | 0005010301 | ...     | 59.227 | +65.017 | $12.08^{+0.84}_{-0.85} \pm 0.46$ | $2.27^{+0.43}_{-0.44} \pm 1.09$ | ...                              | ...                             |
|         |                  | 0005010101 | ...     | 59.232 | +65.017 | $10.89^{+1.52}_{-0.90} \pm 0.74$ | $1.39^{+0.49}_{-0.46} \pm 1.26$ | $11.35^{+1.09}_{-1.13} \pm 0.33$ | $1.25^{+0.55}_{-0.56} \pm 1.09$ |
|         |                  | 0107660201 | ...     | 59.214 | +65.019 | $13.91^{+1.13}_{-1.21} \pm 0.23$ | $1.52 \pm 0.56 \pm 1.13$        | $13.91^{+1.13}_{-1.21} \pm 0.23$ | $1.52 \pm 0.56 \pm 1.13$        |
| 32      | 8                | 0502041401 | ...     | 62.633 | -33.140 | $8.38^{+1.77}_{-1.90} \pm 0.39$  | $1.72^{+0.92}_{-1.10} \pm 0.90$ | ...                              | ...                             |
|         |                  | 0502040701 | ...     | 62.677 | -33.140 | $11.46^{+2.02}_{-1.50} \pm 1.00$ | $2.66^{+0.45}_{-0.79} \pm 2.01$ | ...                              | ...                             |
|         |                  | 0502041801 | ...     | 62.677 | -33.140 | $5.93^{+1.60}_{-1.42} \pm 0.22$  | $0.77^{+1.04}_{-0.77} \pm 1.59$ | ...                              | ...                             |
|         |                  | 0502040901 | ...     | 62.677 | -33.137 | $11.98^{+2.23}_{-2.10} \pm 0.79$ | $1.83^{+1.14}_{-0.85} \pm 1.66$ | ...                              | ...                             |
|         |                  | 0502041201 | ...     | 62.633 | -33.137 | $8.22^{+2.31}_{-1.50} \pm 1.95$  | $1.16^{+1.04}_{-0.81} \pm 1.80$ | ...                              | ...                             |
|         |                  | 0502041101 | ...     | 62.633 | -33.136 | $9.12^{+1.40}_{-1.78} \pm 0.14$  | $1.04^{+0.74}_{-0.86} \pm 1.77$ | ...                              | ...                             |
|         |                  | 0502041001 | ...     | 62.633 | -33.135 | $8.19^{+1.75}_{-1.74} \pm 0.30$  | $2.14^{+0.54}_{-1.40} \pm 1.10$ | $8.19^{+1.75}_{-1.74} \pm 0.30$  | $2.14^{+0.54}_{-1.40} \pm 1.10$ |
|         |                  | 0201150101 | ...     | 62.675 | -33.133 | $11.94^{+0.98}_{-1.25} \pm 0.22$ | $1.93^{+0.52}_{-0.51} \pm 1.80$ | ...                              | ...                             |
| 33      | 2                | 0094310201 | ...     | 63.028 | -44.013 | $10.53^{+0.47}_{-0.41} \pm 0.34$ | $2.32^{+0.26}_{-0.23} \pm 1.40$ | $10.53^{+0.47}_{-0.41} \pm 0.34$ | $2.32^{+0.26}_{-0.23} \pm 1.40$ |
|         |                  | 0094310101 | ...     | 63.029 | -44.012 | $10.59^{+0.52}_{-0.49} \pm 0.33$ | $2.76^{+0.29}_{-0.28} \pm 1.68$ | $11.29^{+0.89}_{-0.88} \pm 0.24$ | $2.82 \pm 0.47 \pm 1.58$        |
| 34      | 2                | 0206860201 | ...     | 71.257 | +37.471 | $19.55^{+2.07}_{-1.24} \pm 0.92$ | $1.81^{+1.01}_{-0.70} \pm 1.67$ | ...                              | ...                             |
|         |                  | 0206860101 | ...     | 71.257 | +37.471 | $6.76^{+0.90}_{-0.92} \pm 0.41$  | $1.00^{+0.51}_{-0.52} \pm 0.32$ | ...                              | ...                             |
| 35      | 2                | 0501621601 | ...     | 72.954 | +38.208 | $4.51^{+1.71}_{-1.17} \pm 0.33$  | $0.84^{+0.67}_{-0.66} \pm 0.92$ | $4.51^{+1.71}_{-1.17} \pm 0.33$  | $0.84^{+0.67}_{-0.66} \pm 0.92$ |
|         |                  | 0501620301 | ...     | 72.974 | +38.214 | $4.21^{+1.62}_{-1.76} \pm 0.60$  | $1.20^{+0.88}_{-0.84} \pm 0.21$ | ...                              | ...                             |
| 36      | 2                | 0111260701 | ...     | 75.851 | +64.877 | $7.74^{+0.83}_{-0.95} \pm 1.08$  | $1.07^{+0.72}_{-0.54} \pm 1.45$ | ...                              | ...                             |
|         |                  | 0212480701 | ...     | 75.906 | +64.905 | $5.95 \pm 0.99 \pm 1.33$         | $0.52^{+0.54}_{-0.52} \pm 0.72$ | $5.95 \pm 0.99 \pm 1.33$         | $0.52^{+0.54}_{-0.52} \pm 0.72$ |
| 37      | 2                | 0130920101 | ...     | 76.753 | -28.526 | $14.22^{+0.98}_{-1.13} \pm 0.54$ | $5.36^{+0.58}_{-0.61} \pm 1.50$ | ...                              | ...                             |
|         |                  | 0404450101 | ...     | 76.732 | -28.526 | $7.87^{+0.99}_{-0.84} \pm 0.29$  | $2.72^{+0.53}_{-0.48} \pm 0.91$ | $10.23^{+2.73}_{-2.23} \pm 0.28$ | $3.34^{+1.36}_{-1.20} \pm 1.20$ |
| 38      | 8                | 0401880901 | ...     | 82.346 | -5.828  | $9.19^{+1.77}_{-2.20} \pm 0.68$  | $6.40^{+1.07}_{-1.17} \pm 0.93$ | ...                              | ...                             |
|         |                  | 0550060801 | ...     | 82.347 | -5.828  | $9.12^{+1.70}_{-1.85} \pm 0.90$  | $6.51^{+0.82}_{-0.97} \pm 0.63$ | $9.12^{+1.70}_{-1.85} \pm 0.90$  | $6.51^{+0.82}_{-0.97} \pm 0.63$ |

Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |              | Without proton flux filtering |                                  | With proton flux filtering       |                                  |                                 |
|---------|------------------|------------|---------|--------------|-------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$<br>(deg) | $b$<br>(deg)                  | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)    | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)   |
| (1)     | (2)              | (3)        | (4)     | (5)          | (6)                           | (7)                              | (8)                              | (9)                              | (10)                            |
| 39      | 3                | 0041741101 | ...     | 82.336       | −5.825                        | $23.07^{+2.09}_{-2.06} \pm 4.32$ | $15.28^{+1.18}_{-1.16} \pm 1.37$ | ...                              | ...                             |
|         |                  | 0041740301 | ...     | 82.300       | −5.822                        | $11.63^{+2.14}_{-1.63} \pm 0.43$ | $3.62^{+1.12}_{-1.02} \pm 1.50$  | ...                              | ...                             |
|         |                  | 0501930601 | ...     | 82.312       | −5.820                        | $9.96^{+1.65}_{-1.37} \pm 2.19$  | $6.42^{+0.96}_{-0.77} \pm 0.72$  | $9.96^{+1.65}_{-1.37} \pm 2.19$  | $6.42^{+0.96}_{-0.77} \pm 0.72$ |
|         |                  | 0550061301 | ...     | 82.310       | −5.819                        | $6.45^{+1.64}_{-1.02} \pm 0.94$  | $5.74^{+0.87}_{-0.89} \pm 0.16$  | ...                              | ...                             |
|         |                  | 0401880801 | ...     | 82.309       | −5.818                        | $8.23^{+2.33}_{-1.07} \pm 1.70$  | $5.30^{+1.29}_{-0.67} \pm 0.74$  | ...                              | ...                             |
|         |                  | 0143630101 | ...     | 82.301       | −5.814                        | $8.72^{+1.69}_{-1.54} \pm 1.47$  | $5.54^{+0.97}_{-0.85} \pm 1.46$  | $8.72^{+1.69}_{-1.54} \pm 1.47$  | $5.54^{+0.97}_{-0.85} \pm 1.46$ |
|         |                  | 0109660801 | ...     | 85.622       | +75.921                       | $6.92^{+0.52}_{-0.49} \pm 0.57$  | $0.81^{+0.29}_{-0.26} \pm 0.99$  | $6.99^{+0.57}_{-0.55} \pm 0.21$  | $0.78^{+0.29}_{-0.30} \pm 0.98$ |
|         |                  | 0109660901 | ...     | 85.622       | +75.921                       | $6.48^{+0.80}_{-0.78} \pm 0.32$  | $0.84 \pm 0.46 \pm 0.88$         | $6.48^{+0.80}_{-0.78} \pm 0.32$  | $0.84 \pm 0.46 \pm 0.88$        |
|         |                  | 0109661001 | ...     | 85.623       | +75.921                       | $6.22 \pm 0.40 \pm 0.44$         | $0.89 \pm 0.22 \pm 0.75$         | $6.22 \pm 0.40 \pm 0.44$         | $0.89 \pm 0.22 \pm 0.75$        |
|         |                  | 0109661101 | ...     | 85.623       | +75.921                       | $6.22 \pm 0.40 \pm 0.44$         | $0.89 \pm 0.22 \pm 0.75$         | $6.22 \pm 0.40 \pm 0.44$         | $0.89 \pm 0.22 \pm 0.75$        |
| 40      | 2                | 0406421401 | ...     | 87.472       | +34.704                       | $5.54^{+1.41}_{-0.72} \pm 0.45$  | $1.00^{+0.85}_{-0.88} \pm 0.67$  | ...                              | ...                             |
|         |                  | 0406420401 | ...     | 87.477       | +34.706                       | $17.14^{+1.69}_{-1.60} \pm 0.26$ | $0.55^{+0.84}_{-0.55} \pm 1.60$  | ...                              | ...                             |
| 41      | 2                | 0112522601 | ...     | 88.190       | −55.573                       | $5.55^{+1.00}_{-0.90} \pm 0.44$  | $1.42^{+0.47}_{-0.51} \pm 0.70$  | $5.55^{+1.00}_{-0.90} \pm 0.44$  | $1.42^{+0.47}_{-0.51} \pm 0.70$ |
|         |                  | 0112521301 | ...     | 88.253       | −55.561                       | $7.60^{+1.30}_{-1.03} \pm 0.44$  | $2.19^{+0.53}_{-0.56} \pm 0.55$  | ...                              | ...                             |
| 42      | 3                | 0400360301 | ...     | 91.516       | +47.948                       | $4.85^{+1.72}_{-1.60} \pm 0.59$  | $0.69^{+0.96}_{-0.69} \pm 0.13$  | ...                              | ...                             |
|         |                  | 0400360601 | ...     | 91.517       | +47.949                       | $8.20^{+1.35}_{-1.19} \pm 0.21$  | $0.79^{+0.65}_{-0.64} \pm 0.95$  | ...                              | ...                             |
|         |                  | 0400360801 | ...     | 91.518       | +47.950                       | $17.08^{+1.44}_{-1.36} \pm 0.49$ | $0.86^{+0.69}_{-0.62} \pm 0.95$  | ...                              | ...                             |
| 43      | 5                | 0502460401 | ...     | 91.566       | −3.051                        | $5.50^{+1.68}_{-1.18} \pm 0.63$  | $5.93^{+0.85}_{-0.73} \pm 0.93$  | $5.87^{+1.38}_{-1.46} \pm 0.69$  | $6.00^{+0.78}_{-0.83} \pm 0.94$ |
|         |                  | 0502460301 | ...     | 91.563       | −3.048                        | $8.42^{+0.74}_{-0.71} \pm 0.88$  | $6.05^{+0.44}_{-0.42} \pm 0.30$  | ...                              | ...                             |
|         |                  | 0502460201 | ...     | 91.561       | −3.045                        | $6.49^{+1.24}_{-0.77} \pm 0.61$  | $5.95^{+0.78}_{-0.49} \pm 0.85$  | $6.42^{+1.03}_{-0.75} \pm 0.60$  | $5.84 \pm 0.45 \pm 0.96$        |
|         |                  | 0502460101 | ...     | 91.560       | −3.038                        | $6.94^{+0.70}_{-0.72} \pm 0.98$  | $6.76^{+0.43}_{-0.44} \pm 0.35$  | $6.94^{+0.70}_{-0.72} \pm 0.98$  | $6.76^{+0.43}_{-0.44} \pm 0.35$ |
|         |                  | 0307120201 | ...     | 91.595       | −3.031                        | $9.21^{+1.01}_{-1.16} \pm 0.97$  | $7.29^{+0.67}_{-0.74} \pm 0.40$  | $8.59^{+1.40}_{-1.36} \pm 0.89$  | $7.03^{+0.99}_{-0.97} \pm 0.73$ |
| 44      | 2                | 0501660401 | ...     | 92.575       | −10.453                       | $1.26^{+0.83}_{-0.81} \pm 0.11$  | $0.95^{+0.65}_{-0.64} \pm 0.23$  | $1.26^{+0.83}_{-0.81} \pm 0.11$  | $0.95^{+0.65}_{-0.64} \pm 0.23$ |
|         |                  | 0501660301 | ...     | 92.571       | −10.445                       | $2.88^{+1.09}_{-0.90} \pm 0.21$  | $2.79^{+0.65}_{-0.59} \pm 0.15$  | $4.40^{+1.73}_{-1.54} \pm 0.51$  | $3.10^{+0.86}_{-0.88} \pm 0.14$ |
| 45      | 2                | 0302582301 | ...     | 94.955       | −43.442                       | $3.58^{+0.82}_{-0.75} \pm 1.28$  | $0.80^{+0.42}_{-0.41} \pm 0.40$  | $3.58^{+0.82}_{-0.75} \pm 1.28$  | $0.80^{+0.42}_{-0.41} \pm 0.40$ |
|         |                  | 0502430301 | ...     | 94.916       | −43.439                       | $2.88^{+0.56}_{-0.50} \pm 0.81$  | $0.38^{+0.26}_{-0.25} \pm 0.19$  | $2.91^{+0.99}_{-1.00} \pm 0.44$  | $0.08^{+0.54}_{-0.08} \pm 0.34$ |
| 46      | 2                | 0500730101 | ...     | 95.700       | +11.676                       | $3.11^{+1.00}_{-0.99} \pm 0.64$  | $1.88^{+0.53}_{-0.56} \pm 0.45$  | ...                              | ...                             |
|         |                  | 0500730201 | ...     | 95.700       | +11.676                       | $3.19^{+0.75}_{-0.74} \pm 0.34$  | $1.79^{+0.40}_{-0.41} \pm 0.27$  | $3.41^{+0.87}_{-1.05} \pm 0.40$  | $1.85^{+0.50}_{-0.51} \pm 0.20$ |
| 47      | 2                | 0127921101 | ...     | 96.402       | +60.095                       | $12.54^{+1.42}_{-1.43} \pm 0.39$ | $3.82^{+0.80}_{-0.82} \pm 1.88$  | ...                              | ...                             |
|         |                  | 0127921201 | ...     | 96.402       | +60.095                       | $10.14^{+0.91}_{-0.83} \pm 0.33$ | $1.32^{+0.43}_{-0.42} \pm 1.14$  | $10.14^{+0.91}_{-0.83} \pm 0.33$ | $1.32^{+0.43}_{-0.42} \pm 1.14$ |
| 48      | 2                | 0304850901 | ...     | 96.866       | −87.971                       | $6.18^{+1.72}_{-0.70} \pm 0.57$  | $2.30^{+1.03}_{-0.95} \pm 1.37$  | $6.34^{+1.45}_{-1.44} \pm 0.21$  | $2.37^{+1.01}_{-0.96} \pm 1.29$ |
|         |                  | 0304851001 | ...     | 96.873       | −87.971                       | $10.00^{+1.61}_{-1.89} \pm 0.21$ | $1.03^{+0.92}_{-0.90} \pm 1.56$  | ...                              | ...                             |
| 49      | 2                | 0032140701 | ...     | 98.449       | −39.414                       | $6.99^{+1.22}_{-1.23} \pm 1.30$  | $1.75 \pm 0.64 \pm 0.36$         | ...                              | ...                             |
|         |                  | 0147580301 | ...     | 98.502       | −39.334                       | $4.89^{+1.10}_{-1.15} \pm 1.26$  | $1.30^{+0.57}_{-0.56} \pm 0.49$  | $4.89^{+1.10}_{-1.15} \pm 1.26$  | $1.30^{+0.57}_{-0.56} \pm 0.49$ |
| 50      | 4                | 0147130901 | ...     | 100.313      | +40.970                       | $13.14^{+1.01}_{-1.13} \pm 0.35$ | $1.86^{+0.51}_{-0.56} \pm 0.97$  | ...                              | ...                             |
|         |                  | 0147130101 | ...     | 100.311      | +40.978                       | $4.22^{+0.88}_{-1.02} \pm 0.40$  | $0.57^{+0.55}_{-0.57} \pm 0.32$  | ...                              | ...                             |
|         |                  | 0147131001 | ...     | 100.301      | +40.987                       | $13.56^{+1.34}_{-1.36} \pm 1.08$ | $2.40 \pm 0.69 \pm 1.43$         | ...                              | ...                             |
|         |                  | 0151530501 | ...     | 100.301      | +40.987                       | $11.71^{+1.14}_{-1.66} \pm 0.26$ | $0.78^{+0.47}_{-0.53} \pm 0.72$  | ...                              | ...                             |
| 51      | 2                | 0205320101 | ...     | 100.900      | +29.190                       | $3.57^{+0.74}_{-0.73} \pm 0.22$  | $0.67^{+0.49}_{-0.50} \pm 0.91$  | ...                              | ...                             |
|         |                  | 0205320201 | ...     | 100.901      | +29.200                       | $7.66^{+1.17}_{-1.06} \pm 0.37$  | $0.26^{+0.60}_{-0.26} \pm 0.54$  | ...                              | ...                             |
| 52      | 3                | 0112840201 | ...     | 104.820      | +68.546                       | $10.13^{+1.26}_{-1.34} \pm 0.57$ | $1.70 \pm 0.61 \pm 0.25$         | ...                              | ...                             |
|         |                  | 0303420101 | ...     | 104.889      | +68.578                       | $6.70^{+1.44}_{-1.53} \pm 2.76$  | $1.21^{+0.30}_{-0.72} \pm 1.15$  | $6.70^{+1.44}_{-1.53} \pm 2.76$  | $1.21^{+0.30}_{-0.72} \pm 1.15$ |
|         |                  | 0303420201 | ...     | 104.889      | +68.579                       | $6.52^{+1.50}_{-1.46} \pm 0.28$  | $0.10^{+0.70}_{-0.10} \pm 0.10$  | ...                              | ...                             |
| 53      | 3                | 0300490301 | ...     | 107.538      | +14.027                       | $3.64^{+0.84}_{-1.06} \pm 0.54$  | $0.81^{+0.56}_{-0.61} \pm 0.16$  | ...                              | ...                             |
|         |                  | 0300490501 | ...     | 107.538      | +14.028                       | $4.92^{+0.99}_{-0.89} \pm 0.57$  | $1.04^{+0.46}_{-0.42} \pm 0.21$  | ...                              | ...                             |
|         |                  | 0300490201 | ...     | 107.539      | +14.028                       | $8.46 \pm 0.91 \pm 0.32$         | $0.66^{+0.54}_{-0.46} \pm 1.09$  | ...                              | ...                             |
| 54      | 3                | 0600540501 | ...     | 108.762      | −41.423                       | $2.03^{+0.60}_{-0.50} \pm 0.42$  | $1.00^{+0.33}_{-0.30} \pm 0.07$  | $1.96^{+1.02}_{-1.00} \pm 0.63$  | $1.08^{+0.55}_{-0.53} \pm 0.15$ |
|         |                  | 0600540601 | ...     | 108.761      | −41.422                       | $2.76^{+0.53}_{-0.65} \pm 1.14$  | $0.97^{+0.37}_{-0.24} \pm 0.31$  | $1.18^{+0.53}_{-0.52} \pm 1.13$  | $0.41^{+0.39}_{-0.38} \pm 0.41$ |
|         |                  | 0510010701 | ...     | 108.782      | −41.412                       | $5.65^{+0.81}_{-0.91} \pm 0.47$  | $0.88^{+0.50}_{-0.59} \pm 0.85$  | ...                              | ...                             |
| 55      | 2                | 0400920201 | ...     | 111.311      | +33.345                       | $2.52^{+0.98}_{-0.96} \pm 0.36$  | $0.97^{+0.65}_{-0.64} \pm 0.25$  | $2.52^{+0.98}_{-0.96} \pm 0.36$  | $0.97^{+0.65}_{-0.64} \pm 0.25$ |
|         |                  | 0400920101 | ...     | 111.311      | +33.346                       | $2.51^{+1.09}_{-1.10} \pm 0.29$  | $1.05^{+0.71}_{-0.79} \pm 0.23$  | $2.51^{+1.09}_{-1.10} \pm 0.29$  | $1.05^{+0.71}_{-0.79} \pm 0.23$ |
| 56      | 2                | 0111000201 | ...     | 111.583      | −45.721                       | $5.99^{+1.97}_{-0.80} \pm 0.40$  | $2.38^{+1.04}_{-1.01} \pm 1.02$  | $5.99^{+1.97}_{-0.80} \pm 0.40$  | $2.38^{+1.04}_{-1.01} \pm 1.02$ |
|         |                  | 0111000101 | ...     | 111.583      | −45.721                       | $5.57^{+0.44}_{-0.66} \pm 1.45$  | $1.68^{+0.41}_{-0.38} \pm 0.75$  | $6.12^{+0.93}_{-1.14} \pm 0.62$  | $1.51^{+0.46}_{-0.54} \pm 0.53$ |

Table 4—Continued

| Dataset | $N_{\text{obs}}$ | Obs. ID    | Paper I |              |              |  | Without proton flux filtering    |                                 | With proton flux filtering      |                                 |
|---------|------------------|------------|---------|--------------|--------------|--|----------------------------------|---------------------------------|---------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$<br>(deg) | $b$<br>(deg) |  | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)   | $I_{\text{O VII}}$<br>(L.U.)    | $I_{\text{O VIII}}$<br>(L.U.)   |
| (1)     | (2)              | (3)        | (4)     | (5)          | (6)          |  | (7)                              | (8)                             | (9)                             | (10)                            |
| 57      | 3                | 0556230101 | ...     | 111.925      | +52.021      |  | $1.97^{+1.19}_{-1.20} \pm 0.22$  | $0.39^{+0.61}_{-0.39} \pm 0.09$ | $1.97^{+1.19}_{-1.20} \pm 0.22$ | $0.39^{+0.61}_{-0.39} \pm 0.09$ |
|         |                  | 0556230201 | ...     | 111.924      | +52.023      |  | $2.01^{+0.77}_{-0.67} \pm 0.21$  | $0.21^{+0.58}_{-0.21} \pm 0.04$ | $2.45^{+1.10}_{-0.93} \pm 0.51$ | $0.49^{+0.78}_{-0.49} \pm 0.13$ |
|         |                  | 0205390301 | ...     | 111.923      | +52.027      |  | $4.09^{+0.50}_{-0.48} \pm 0.45$  | $0.44^{+0.28}_{-0.27} \pm 0.18$ | ...                             | ...                             |
| 58      | 2                | 0305920301 | ...     | 112.288      | +50.307      |  | $5.80^{+1.00}_{-0.99} \pm 1.01$  | $0.40^{+0.48}_{-0.40} \pm 0.60$ | ...                             | ...                             |
|         |                  | 0305920601 | ...     | 112.300      | +50.328      |  | $16.83^{+1.17}_{-1.21} \pm 1.23$ | $2.17 \pm 0.59 \pm 1.81$        | ...                             | ...                             |
| 59      | 2                | 0502290101 | ...     | 113.116      | -57.622      |  | $3.87^{+0.55}_{-0.47} \pm 0.36$  | $0.42^{+0.16}_{-0.27} \pm 0.51$ | $3.87^{+0.55}_{-0.47} \pm 0.36$ | $0.42^{+0.16}_{-0.27} \pm 0.51$ |
|         |                  | 0112320101 | ...     | 113.167      | -57.599      |  | $7.40^{+0.76}_{-0.81} \pm 1.28$  | $2.36^{+0.47}_{-0.48} \pm 0.64$ | $7.40^{+0.76}_{-0.81} \pm 1.28$ | $2.36^{+0.47}_{-0.48} \pm 0.64$ |
| 60      | 4                | 0142770101 | ...     | 113.461      | +57.995      |  | $7.60^{+1.16}_{-1.29} \pm 0.35$  | $1.08^{+0.54}_{-0.59} \pm 0.30$ | $8.05^{+1.22}_{-1.02} \pm 0.77$ | $1.31^{+0.58}_{-0.54} \pm 0.34$ |
|         |                  | 0405690501 | ...     | 113.457      | +58.007      |  | $3.35^{+0.91}_{-0.85} \pm 0.18$  | $0.20^{+0.45}_{-0.20} \pm 0.12$ | $3.52^{+1.07}_{-1.15} \pm 0.77$ | $0.13^{+0.51}_{-0.13} \pm 0.13$ |
|         |                  | 0405690101 | ...     | 113.459      | +58.010      |  | $6.29 \pm 1.65 \pm 0.69$         | $0.00^{+0.81}_{-0.00} \pm 0.37$ | ...                             | ...                             |
|         |                  | 0405690201 | ...     | 113.460      | +58.010      |  | $4.33^{+1.02}_{-0.82} \pm 1.04$  | $0.26^{+0.44}_{-0.26} \pm 0.32$ | $4.33^{+1.02}_{-0.82} \pm 1.04$ | $0.26^{+0.44}_{-0.26} \pm 0.32$ |
| 61      | 2                | 0305361501 | ...     | 116.966      | +86.004      |  | $5.23^{+0.84}_{-0.87} \pm 0.36$  | $0.28^{+0.44}_{-0.28} \pm 0.82$ | ...                             | ...                             |
|         |                  | 0305360501 | ...     | 116.949      | +86.010      |  | $5.35^{+1.07}_{-0.88} \pm 0.40$  | $0.71^{+0.50}_{-0.48} \pm 0.82$ | $5.35^{+1.07}_{-0.88} \pm 0.40$ | $0.71^{+0.50}_{-0.48} \pm 0.82$ |
| 62      | 2                | 0402750601 | ...     | 117.095      | -36.327      |  | $2.94^{+0.83}_{-0.36} \pm 0.31$  | $0.63^{+0.50}_{-0.48} \pm 0.26$ | ...                             | ...                             |
|         |                  | 0402750201 | ...     | 117.135      | -36.316      |  | $5.28^{+1.05}_{-0.93} \pm 0.68$  | $0.67^{+0.47}_{-0.37} \pm 0.76$ | ...                             | ...                             |
| 63      | 2                | 0413380601 | ...     | 120.207      | +69.447      |  | $4.81 \pm 1.28 \pm 0.18$         | $0.83^{+0.69}_{-0.70} \pm 0.05$ | $5.93^{+1.69}_{-1.81} \pm 0.37$ | $1.95 \pm 0.87 \pm 0.18$        |
|         |                  | 0551090101 | ...     | 120.126      | +69.460      |  | $3.08^{+0.88}_{-1.03} \pm 0.09$  | $0.00^{+0.32}_{-0.00} \pm 0.09$ | $2.93^{+1.04}_{-1.03} \pm 0.28$ | $0.10^{+0.56}_{-0.10} \pm 0.38$ |
| 64      | 2                | 0511380101 | ...     | 120.324      | -22.572      |  | $4.46^{+0.73}_{-0.77} \pm 0.49$  | $1.38 \pm 0.39 \pm 0.49$        | ...                             | ...                             |
|         |                  | 0505760101 | ...     | 120.349      | -22.543      |  | $6.13^{+0.79}_{-0.96} \pm 0.88$  | $1.92^{+0.46}_{-0.43} \pm 0.20$ | ...                             | ...                             |
| 65      | 2                | 0505760501 | ...     | 120.377      | -22.193      |  | $3.77^{+1.03}_{-0.54} \pm 0.56$  | $0.93^{+0.51}_{-0.37} \pm 0.38$ | ...                             | ...                             |
|         |                  | 0402560701 | ...     | 120.404      | -22.166      |  | $5.12^{+1.18}_{-0.59} \pm 0.56$  | $1.58^{+0.52}_{-0.33} \pm 0.21$ | ...                             | ...                             |
| 66      | 2                | 0511380301 | ...     | 120.528      | -21.851      |  | $4.63^{+0.74}_{-0.84} \pm 0.22$  | $1.44^{+0.42}_{-0.41} \pm 0.26$ | $4.63^{+0.74}_{-0.84} \pm 0.22$ | $1.44^{+0.42}_{-0.41} \pm 0.26$ |
|         |                  | 0402560501 | ...     | 120.554      | -21.822      |  | $5.32^{+0.66}_{-0.73} \pm 0.26$  | $1.47 \pm 0.36 \pm 0.19$        | ...                             | ...                             |
| 67      | 2                | 0112570301 | 1       | 120.595      | -22.245      |  | $7.45^{+0.71}_{-0.56} \pm 1.16$  | $2.15^{+0.37}_{-0.39} \pm 0.60$ | ...                             | ...                             |
|         |                  | 0402560801 | 1       | 120.591      | -22.242      |  | $5.89^{+0.73}_{-0.80} \pm 1.24$  | $1.75^{+0.36}_{-0.40} \pm 0.41$ | $5.89^{+0.73}_{-0.80} \pm 1.24$ | $1.75^{+0.36}_{-0.40} \pm 0.41$ |
| 68      | 2                | 0505760401 | ...     | 120.715      | -22.488      |  | $5.75^{+0.75}_{-0.87} \pm 1.13$  | $1.40^{+0.47}_{-0.53} \pm 0.98$ | $5.56^{+1.09}_{-0.80} \pm 1.20$ | $1.37^{+0.45}_{-0.46} \pm 0.97$ |
|         |                  | 0402560601 | ...     | 120.742      | -22.461      |  | $4.99^{+1.10}_{-0.86} \pm 2.02$  | $1.22^{+0.42}_{-0.45} \pm 1.27$ | $4.99^{+1.10}_{-0.86} \pm 2.02$ | $1.22^{+0.42}_{-0.45} \pm 1.27$ |
| 69      | 2                | 0410582001 | 2       | 120.820      | -21.564      |  | $4.31^{+1.19}_{-1.18} \pm 1.61$  | $1.40^{+0.62}_{-0.32} \pm 0.83$ | ...                             | ...                             |
|         |                  | 0402560301 | 2       | 120.784      | -21.514      |  | $4.99^{+0.90}_{-0.73} \pm 0.25$  | $1.91^{+0.41}_{-0.37} \pm 0.10$ | $4.99^{+0.90}_{-0.73} \pm 0.25$ | $1.91^{+0.41}_{-0.37} \pm 0.10$ |
| 70      | 2                | 0109270301 | 3       | 121.707      | -20.938      |  | $8.29^{+0.63}_{-0.77} \pm 1.35$  | $2.67^{+0.36}_{-0.39} \pm 0.41$ | $8.29^{+0.63}_{-0.77} \pm 1.35$ | $2.67^{+0.36}_{-0.39} \pm 0.41$ |
|         |                  | 0402561501 | 3       | 121.703      | -20.934      |  | $4.45^{+0.67}_{-0.66} \pm 0.34$  | $2.07^{+0.38}_{-0.36} \pm 0.34$ | $4.45^{+0.67}_{-0.66} \pm 0.34$ | $2.07^{+0.38}_{-0.36} \pm 0.34$ |
| 71      | 2                | 0403530501 | 4       | 121.807      | -21.183      |  | $6.47^{+2.15}_{-1.78} \pm 1.07$  | $0.33^{+0.85}_{-0.33} \pm 1.08$ | $6.47^{+2.15}_{-1.78} \pm 1.07$ | $0.33^{+0.85}_{-0.33} \pm 1.08$ |
|         |                  | 0403530401 | 4       | 121.808      | -21.183      |  | $7.54^{+2.48}_{-1.68} \pm 1.80$  | $3.80^{+1.30}_{-1.00} \pm 0.69$ | $7.54^{+2.48}_{-1.68} \pm 1.80$ | $3.80^{+1.30}_{-1.00} \pm 0.69$ |
| 72      | 2                | 0100640101 | 5       | 122.774      | +22.470      |  | $8.15^{+0.62}_{-0.64} \pm 0.60$  | $2.12^{+0.34}_{-0.35} \pm 0.42$ | $8.05^{+0.69}_{-0.65} \pm 0.65$ | $2.12^{+0.37}_{-0.36} \pm 0.46$ |
|         |                  | 0100640201 | 5       | 122.774      | +22.471      |  | $9.66^{+0.52}_{-0.49} \pm 1.12$  | $3.31^{+0.29}_{-0.28} \pm 0.86$ | $9.37^{+0.66}_{-0.90} \pm 1.11$ | $3.11^{+0.34}_{-0.35} \pm 1.19$ |
| 73      | 2                | 0094360601 | ...     | 123.442      | +76.002      |  | $11.06^{+1.38}_{-1.53} \pm 0.21$ | $1.66^{+0.72}_{-0.77} \pm 1.12$ | ...                             | ...                             |
|         |                  | 0404980101 | ...     | 123.290      | +76.012      |  | $4.62^{+0.79}_{-0.80} \pm 1.54$  | $1.24^{+0.38}_{-0.32} \pm 0.47$ | $4.62^{+0.79}_{-0.80} \pm 1.54$ | $1.24^{+0.38}_{-0.32} \pm 0.47$ |
| 74      | 2                | 0110890301 | 6       | 123.770      | -50.163      |  | $6.61^{+1.26}_{-0.91} \pm 0.54$  | $1.50^{+0.30}_{-0.50} \pm 0.53$ | $7.45^{+2.12}_{-1.12} \pm 0.59$ | $1.87^{+0.61}_{-0.60} \pm 0.75$ |
|         |                  | 0300470101 | 6       | 123.767      | -50.161      |  | $6.22^{+0.66}_{-0.73} \pm 0.38$  | $3.76^{+0.40}_{-0.38} \pm 0.56$ | ...                             | ...                             |
| 75      | 7                | 0111550401 | 7       | 125.892      | +54.815      |  | $9.93^{+0.46}_{-0.42} \pm 0.47$  | $3.29^{+0.25}_{-0.24} \pm 1.15$ | ...                             | ...                             |
|         |                  | 0111550201 | 7       | 125.917      | +54.818      |  | $6.37^{+0.50}_{-0.56} \pm 0.40$  | $0.72^{+0.27}_{-0.25} \pm 0.63$ | $6.37^{+0.50}_{-0.56} \pm 0.40$ | $0.72^{+0.27}_{-0.25} \pm 0.63$ |
|         |                  | 0111550301 | 7       | 125.907      | +54.819      |  | $3.78^{+0.92}_{-0.87} \pm 0.57$  | $0.37^{+0.45}_{-0.37} \pm 0.21$ | $3.78^{+0.92}_{-0.87} \pm 0.57$ | $0.37^{+0.45}_{-0.37} \pm 0.21$ |
|         |                  | 0111550101 | 7       | 125.917      | +54.822      |  | $6.16^{+0.91}_{-0.35} \pm 0.67$  | $0.43^{+0.15}_{-0.43} \pm 0.79$ | $5.59^{+0.60}_{-0.54} \pm 0.59$ | $0.20^{+0.30}_{-0.20} \pm 0.64$ |
|         |                  | 0162160601 | 7       | 125.846      | +54.826      |  | $4.58^{+0.81}_{-0.78} \pm 0.56$  | $0.00^{+0.39}_{-0.00} \pm 0.69$ | $4.58^{+0.81}_{-0.78} \pm 0.56$ | $0.00^{+0.39}_{-0.00} \pm 0.69$ |
|         |                  | 0162160401 | 7       | 125.848      | +54.828      |  | $7.08^{+1.06}_{-0.92} \pm 0.42$  | $0.65^{+0.47}_{-0.51} \pm 1.05$ | ...                             | ...                             |
|         |                  | 0162160201 | 7       | 125.849      | +54.831      |  | $8.67^{+1.18}_{-1.27} \pm 0.80$  | $2.41^{+0.59}_{-0.89} \pm 0.62$ | $9.17^{+1.45}_{-1.16} \pm 1.22$ | $2.54^{+0.77}_{-0.67} \pm 0.51$ |
|         |                  | 0124900101 | 8       | 126.526      | +52.738      |  | $4.75^{+1.13}_{-1.24} \pm 0.46$  | $0.31^{+0.58}_{-0.31} \pm 0.19$ | ...                             | ...                             |
| 76      | 2                | 0158560301 | 8       | 126.530      | +52.742      |  | $8.77^{+0.84}_{-0.80} \pm 0.39$  | $0.76^{+0.39}_{-0.38} \pm 0.78$ | $8.77^{+0.84}_{-0.80} \pm 0.39$ | $0.76^{+0.39}_{-0.38} \pm 0.78$ |
|         |                  | 0153752501 | 9       | 130.728      | +3.002       |  | $3.79^{+0.64}_{-0.95} \pm 0.87$  | $1.02^{+0.43}_{-0.52} \pm 0.26$ | $3.04^{+0.61}_{-0.87} \pm 0.27$ | $0.79^{+0.46}_{-0.52} \pm 0.30$ |
| 77      | 3                | 0153751801 | 9       | 130.675      | +3.052       |  | $3.47^{+1.12}_{-0.81} \pm 0.48$  | $1.23^{+0.51}_{-0.44} \pm 0.34$ | ...                             | ...                             |
|         |                  | 0004010201 | 9       | 130.715      | +3.066       |  | $3.60^{+0.61}_{-0.86} \pm 0.08$  | $1.36^{+0.43}_{-0.42} \pm 0.20$ | $3.60^{+0.61}_{-0.86} \pm 0.08$ | $1.36^{+0.43}_{-0.42} \pm 0.20$ |
| 78      | 3                | 0153752401 | ...     | 130.825      | +3.104       |  | $3.15^{+1.27}_{-0.90} \pm 0.45$  | $0.58^{+0.60}_{-0.52} \pm 0.50$ | $3.15^{+1.27}_{-0.90} \pm 0.45$ | $0.58^{+0.60}_{-0.52} \pm 0.50$ |

Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                 | With proton flux filtering      |                                 |
|---------|------------------|------------|---------|---------|---------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$              | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                          | (L.U.)                          | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                             | (9)                             | (10)                            |
| 79      | 2                | 0153751901 | 10      | 130.769 | +3.152  | $3.02^{+0.76}_{-0.66} \pm 0.26$  | $0.56^{+0.45}_{-0.41} \pm 0.19$ | $3.02^{+0.76}_{-0.66} \pm 0.26$ | $0.56^{+0.45}_{-0.41} \pm 0.19$ |
|         |                  | 0153752001 | 10      | 130.716 | +3.202  | $2.95^{+0.79}_{-0.65} \pm 1.04$  | $0.00^{+0.31}_{-0.00} \pm 0.00$ | $2.95^{+0.79}_{-0.65} \pm 1.04$ | $0.00^{+0.31}_{-0.00} \pm 0.00$ |
|         |                  | 0102641001 | ...     | 133.424 | -31.258 | $11.20^{+2.76}_{-1.97} \pm 0.60$ | $3.76^{+0.86}_{-0.88} \pm 1.03$ | ...                             | ...                             |
| 80      | 4                | 0141980101 | ...     | 133.422 | -31.256 | $9.07^{+1.67}_{-1.98} \pm 0.80$  | $3.10^{+0.88}_{-0.91} \pm 0.52$ | ...                             | ...                             |
|         |                  | 0505980901 | ...     | 135.676 | +1.105  | $0.70^{+1.30}_{-0.70} \pm 0.23$  | $2.27^{+1.03}_{-1.02} \pm 0.32$ | $0.70^{+1.30}_{-0.70} \pm 0.23$ | $2.27^{+1.03}_{-1.02} \pm 0.32$ |
|         |                  | 0505980801 | ...     | 135.677 | +1.105  | $0.43^{+1.00}_{-0.43} \pm 0.09$  | $0.98^{+0.72}_{-0.75} \pm 0.22$ | $0.43^{+1.00}_{-0.43} \pm 0.09$ | $0.98^{+0.72}_{-0.75} \pm 0.22$ |
| 81      | 2                | 0505981301 | ...     | 135.677 | +1.105  | $0.00^{+1.20}_{-0.00} \pm 0.74$  | $0.00^{+0.52}_{-0.00} \pm 0.03$ | $0.00^{+1.20}_{-0.00} \pm 0.74$ | $0.00^{+0.52}_{-0.00} \pm 0.03$ |
|         |                  | 0505981101 | ...     | 135.677 | +1.105  | $3.06^{+1.67}_{-1.49} \pm 0.29$  | $0.39^{+0.80}_{-0.39} \pm 0.33$ | $3.06^{+1.67}_{-1.49} \pm 0.29$ | $0.39^{+0.80}_{-0.39} \pm 0.33$ |
|         |                  | 0556300101 | ...     | 138.057 | +74.858 | $5.45^{+0.83}_{-1.47} \pm 2.71$  | $0.65^{+0.72}_{-0.37} \pm 0.64$ | ...                             | ...                             |
| 82      | 2                | 0112280201 | ...     | 138.058 | +74.859 | $7.14^{+0.99}_{-1.27} \pm 0.38$  | $0.72 \pm 0.46 \pm 1.10$        | $6.57^{+1.02}_{-1.54} \pm 0.40$ | $0.46^{+0.60}_{-0.46} \pm 1.33$ |
|         |                  | 0093640901 | 11      | 138.175 | +10.579 | $1.25^{+1.18}_{-0.88} \pm 0.24$  | $0.35^{+0.60}_{-0.35} \pm 0.07$ | $1.25^{+1.18}_{-0.88} \pm 0.24$ | $0.35^{+0.60}_{-0.35} \pm 0.07$ |
|         |                  | 0206890201 | 11      | 138.101 | +10.587 | $2.63^{+0.78}_{-0.90} \pm 0.38$  | $0.77^{+0.37}_{-0.43} \pm 0.13$ | ...                             | ...                             |
| 83      | 4                | 0059140101 | 12      | 138.358 | +68.829 | $12.93^{+1.38}_{-1.45} \pm 0.26$ | $2.22^{+0.70}_{-0.72} \pm 1.17$ | ...                             | ...                             |
|         |                  | 0059140901 | 12      | 138.365 | +68.832 | $15.45^{+1.38}_{-1.44} \pm 0.34$ | $2.21 \pm 0.68 \pm 1.50$        | ...                             | ...                             |
|         |                  | 0110920101 | 12      | 138.271 | +68.851 | $8.07^{+0.86}_{-1.00} \pm 0.33$  | $1.46^{+0.50}_{-0.55} \pm 1.01$ | ...                             | ...                             |
| 84      | 2                | 0400560301 | 12      | 138.279 | +68.853 | $3.83^{+0.80}_{-0.58} \pm 0.25$  | $0.92^{+0.36}_{-0.32} \pm 0.57$ | $3.83^{+0.80}_{-0.58} \pm 0.25$ | $0.92^{+0.36}_{-0.32} \pm 0.57$ |
|         |                  | 0154350101 | ...     | 138.516 | -45.770 | $10.13^{+0.51}_{-0.92} \pm 0.50$ | $4.14^{+0.33}_{-0.52} \pm 1.15$ | ...                             | ...                             |
|         |                  | 0154350201 | ...     | 138.516 | -45.768 | $6.59^{+0.65}_{-0.90} \pm 0.29$  | $1.68 \pm 0.34 \pm 0.35$        | ...                             | ...                             |
| 85      | 2                | 0110890401 | 13      | 138.930 | -85.088 | $6.93^{+0.78}_{-1.26} \pm 1.76$  | $1.31^{+0.23}_{-0.65} \pm 0.40$ | $6.32^{+0.97}_{-1.09} \pm 0.25$ | $0.97^{+0.54}_{-0.53} \pm 0.48$ |
|         |                  | 0110890701 | 13      | 139.077 | -85.054 | $5.85^{+1.47}_{-0.98} \pm 0.38$  | $0.18^{+0.78}_{-0.18} \pm 0.93$ | ...                             | ...                             |
|         |                  | 0084140101 | 14      | 140.204 | -24.899 | $6.30^{+0.45}_{-0.57} \pm 1.47$  | $1.89^{+0.39}_{-0.21} \pm 0.21$ | $6.30^{+0.45}_{-0.57} \pm 1.47$ | $1.89^{+0.39}_{-0.21} \pm 0.21$ |
| 86      | 2                | 0084140501 | 14      | 140.203 | -24.899 | $8.99^{+1.21}_{-1.29} \pm 0.36$  | $2.75^{+0.57}_{-0.55} \pm 0.69$ | ...                             | ...                             |
|         |                  | 0560590201 | ...     | 141.420 | +40.547 | $3.41^{+1.52}_{-1.45} \pm 0.28$  | $1.70^{+0.91}_{-0.89} \pm 0.07$ | $2.98^{+1.33}_{-1.44} \pm 0.90$ | $2.28^{+1.06}_{-0.95} \pm 0.20$ |
|         |                  | 0560590301 | ...     | 141.428 | +40.549 | $2.74^{+1.65}_{-1.28} \pm 1.20$  | $1.62^{+0.90}_{-0.75} \pm 0.70$ | $1.80^{+1.61}_{-1.28} \pm 0.42$ | $0.97^{+1.01}_{-0.97} \pm 0.29$ |
| 87      | 2                | 0112521001 | 15      | 141.946 | +41.055 | $21.08^{+1.47}_{-1.62} \pm 0.24$ | $2.81^{+0.75}_{-0.76} \pm 0.73$ | ...                             | ...                             |
|         |                  | 0112521101 | 15      | 141.948 | +41.056 | $11.57^{+1.47}_{-1.45} \pm 0.23$ | $3.36^{+0.80}_{-0.76} \pm 0.79$ | ...                             | ...                             |
|         |                  | 0505400101 | ...     | 144.013 | -54.568 | $1.77^{+0.69}_{-0.74} \pm 0.37$  | $0.60^{+0.37}_{-0.39} \pm 0.13$ | $1.77^{+0.69}_{-0.74} \pm 0.37$ | $0.60^{+0.37}_{-0.39} \pm 0.13$ |
| 88      | 2                | 0610000201 | ...     | 144.038 | -54.534 | $2.83^{+0.90}_{-0.70} \pm 0.69$  | $1.33^{+0.47}_{-0.44} \pm 0.54$ | $3.49^{+0.81}_{-0.79} \pm 0.25$ | $1.30^{+0.52}_{-0.51} \pm 0.35$ |
|         |                  | 0112520601 | 16      | 144.294 | +32.706 | $29.28^{+1.78}_{-1.98} \pm 0.44$ | $4.48^{+0.84}_{-0.85} \pm 2.78$ | ...                             | ...                             |
|         |                  | 0200470101 | 16      | 144.296 | +32.707 | $6.89^{+0.67}_{-0.91} \pm 0.56$  | $0.95^{+0.32}_{-0.19} \pm 0.07$ | ...                             | ...                             |
| 89      | 2                | 0112520901 | 16      | 144.286 | +32.742 | $4.95^{+1.20}_{-1.36} \pm 1.03$  | $0.33^{+0.91}_{-0.33} \pm 0.51$ | ...                             | ...                             |
|         |                  | 0551851301 | ...     | 144.821 | +25.102 | $4.00^{+0.63}_{-0.69} \pm 2.18$  | $1.12^{+0.45}_{-0.31} \pm 0.81$ | ...                             | ...                             |
|         |                  | 0551850401 | ...     | 144.864 | +25.128 | $2.46^{+0.74}_{-0.70} \pm 0.33$  | $0.00^{+0.38}_{-0.00} \pm 0.38$ | $1.25^{+0.57}_{-0.29} \pm 0.22$ | $0.16^{+0.41}_{-0.16} \pm 0.19$ |
| 90      | 2                | 0028540601 | 17      | 145.083 | +29.427 | $7.10^{+0.54}_{-0.53} \pm 0.38$  | $1.24^{+0.30}_{-0.29} \pm 0.52$ | ...                             | ...                             |
|         |                  | 0028540201 | 17      | 145.084 | +29.465 | $8.15 \pm 0.59 \pm 0.21$         | $1.04 \pm 0.31 \pm 0.63$        | ...                             | ...                             |
|         |                  | 0502430701 | ...     | 145.828 | +43.062 | $2.44^{+1.52}_{-0.95} \pm 0.23$  | $0.62^{+1.01}_{-0.55} \pm 0.10$ | $2.44^{+1.52}_{-0.95} \pm 0.23$ | $0.62^{+1.01}_{-0.55} \pm 0.10$ |
| 91      | 2                | 0502430201 | ...     | 145.830 | +43.062 | $1.18^{+0.85}_{-0.58} \pm 0.17$  | $0.14^{+0.42}_{-0.14} \pm 0.06$ | $1.18^{+0.85}_{-0.58} \pm 0.17$ | $0.14^{+0.42}_{-0.14} \pm 0.06$ |
|         |                  | 0112550201 | 18      | 146.396 | -20.388 | $6.63^{+1.21}_{-0.95} \pm 1.44$  | $1.31^{+0.58}_{-0.54} \pm 0.47$ | ...                             | ...                             |
|         |                  | 0510010801 | 18      | 146.403 | -20.350 | $4.18^{+1.58}_{-1.45} \pm 0.87$  | $1.46^{+0.81}_{-0.88} \pm 0.66$ | ...                             | ...                             |
| 92      | 2                | 0200430501 | 19      | 147.160 | +60.303 | $6.17^{+1.43}_{-0.98} \pm 0.46$  | $2.83^{+0.69}_{-0.54} \pm 0.97$ | ...                             | ...                             |
|         |                  | 0200431301 | 19      | 147.117 | +60.334 | $5.62^{+1.54}_{-1.20} \pm 0.44$  | $1.09^{+0.69}_{-0.67} \pm 0.17$ | ...                             | ...                             |
|         |                  | 0554120701 | ...     | 148.499 | +51.426 | $1.90^{+0.97}_{-0.96} \pm 0.36$  | $0.36^{+0.60}_{-0.36} \pm 0.17$ | $1.90^{+0.97}_{-0.96} \pm 0.36$ | $0.36^{+0.60}_{-0.36} \pm 0.17$ |
| 93      | 4                | 0554121301 | ...     | 148.476 | +51.459 | $3.34^{+0.80}_{-0.81} \pm 0.51$  | $0.64^{+0.41}_{-0.35} \pm 0.11$ | $3.34^{+0.80}_{-0.81} \pm 0.51$ | $0.64^{+0.41}_{-0.35} \pm 0.11$ |
|         |                  | 0554120101 | ...     | 148.487 | +51.462 | $3.24^{+0.87}_{-1.07} \pm 0.20$  | $0.00^{+0.42}_{-0.00} \pm 0.00$ | $3.24^{+0.87}_{-1.07} \pm 0.20$ | $0.00^{+0.42}_{-0.00} \pm 0.00$ |
|         |                  | 0554121001 | ...     | 148.484 | +51.462 | $2.72^{+1.26}_{-0.86} \pm 0.63$  | $0.69^{+0.65}_{-0.86} \pm 0.52$ | $2.72^{+1.26}_{-0.86} \pm 0.63$ | $0.69^{+0.65}_{-0.54} \pm 0.52$ |
| 94      | 4                | 0606320401 | ...     | 148.917 | +70.070 | $3.65^{+1.83}_{-0.86} \pm 2.67$  | $0.02^{+0.86}_{-0.02} \pm 1.20$ | $3.65^{+1.83}_{-0.86} \pm 2.67$ | $0.02^{+0.86}_{-0.02} \pm 1.20$ |
|         |                  | 0606321401 | ...     | 148.921 | +70.071 | $2.95^{+1.36}_{-1.10} \pm 0.98$  | $0.24^{+0.74}_{-0.24} \pm 0.77$ | $2.95^{+1.36}_{-1.10} \pm 0.98$ | $0.24^{+0.74}_{-0.24} \pm 0.77$ |
|         |                  | 0606321901 | ...     | 148.926 | +70.074 | $1.88 \pm 0.92 \pm 0.24$         | $0.87^{+0.58}_{-0.71} \pm 0.25$ | $1.88 \pm 0.92 \pm 0.24$        | $0.87^{+0.58}_{-0.71} \pm 0.25$ |
| 95      | 5                | 0606322201 | ...     | 148.932 | +70.076 | $4.91^{+1.17}_{-1.36} \pm 2.36$  | $0.62^{+0.78}_{-0.51} \pm 0.67$ | $4.71^{+2.08}_{-1.86} \pm 0.63$ | $0.26^{+1.00}_{-0.26} \pm 0.26$ |
|         |                  | 0147511001 | 20      | 149.358 | +53.109 | $5.97^{+0.48}_{-0.65} \pm 0.56$  | $0.87 \pm 0.25 \pm 0.17$        | $5.97^{+0.48}_{-0.65} \pm 0.56$ | $0.87 \pm 0.25 \pm 0.17$        |
|         |                  | 0123700101 | 20      | 149.294 | +53.130 | $8.47^{+0.64}_{-0.70} \pm 0.29$  | $1.41^{+0.33}_{-0.37} \pm 0.61$ | ...                             | ...                             |
| 96      | 5                | 0123700401 | ...     | 149.296 | +53.130 | $5.22^{+1.09}_{-0.87} \pm 0.32$  | $0.98^{+0.56}_{-0.55} \pm 0.62$ | $5.22^{+1.09}_{-0.87} \pm 0.32$ | $0.98^{+0.56}_{-0.55} \pm 0.62$ |

Table 4—Continued

| Dataset | $N_{\text{obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                 | With proton flux filtering      |                                 |
|---------|------------------|------------|---------|---------|---------|----------------------------------|---------------------------------|---------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$              | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                          | (L.U.)                          | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                             | (9)                             | (10)                            |
| 99      | 2                | 0147511801 | 20      | 149.242 | +53.157 | $6.58 \pm 0.47 \pm 0.37$         | $0.82 \pm 0.25 \pm 0.45$        | ...                             | ...                             |
|         |                  | 0147511701 | 20      | 149.267 | +53.157 | $5.26^{+0.72}_{-0.42} \pm 0.78$  | $0.91^{+0.30}_{-0.23} \pm 0.38$ | $5.94^{+0.93}_{-0.77} \pm 1.11$ | $0.86^{+0.40}_{-0.46} \pm 0.17$ |
|         |                  | 0303260201 | 21      | 151.607 | +51.006 | $5.15^{+0.65}_{-0.51} \pm 0.51$  | $0.72^{+0.32}_{-0.29} \pm 0.49$ | $5.15^{+0.65}_{-0.51} \pm 0.51$ | $0.72^{+0.32}_{-0.29} \pm 0.49$ |
| 100     | 2                | 0303260501 | 21      | 151.620 | +51.011 | $7.98^{+0.77}_{-1.38} \pm 1.09$  | $4.08^{+0.42}_{-0.71} \pm 0.85$ | ...                             | ...                             |
|         |                  | 0306060301 | 22      | 151.831 | +70.103 | $3.47^{+1.41}_{-0.70} \pm 0.57$  | $0.15^{+0.62}_{-0.15} \pm 0.15$ | $3.47^{+1.41}_{-0.70} \pm 0.57$ | $0.15^{+0.62}_{-0.15} \pm 0.15$ |
|         |                  | 0306060201 | 22      | 151.829 | +70.103 | $4.90^{+0.64}_{-0.57} \pm 0.52$  | $0.00^{+0.26}_{-0.00} \pm 0.34$ | $4.90^{+0.64}_{-0.57} \pm 0.52$ | $0.00^{+0.26}_{-0.00} \pm 0.34$ |
| 101     | 2                | 0553880201 | ...     | 154.517 | +77.171 | $2.84^{+0.87}_{-0.68} \pm 0.28$  | $0.13^{+0.44}_{-0.13} \pm 0.13$ | $2.84^{+0.87}_{-0.68} \pm 0.28$ | $0.13^{+0.44}_{-0.13} \pm 0.13$ |
|         |                  | 0553880301 | ...     | 154.514 | +77.171 | $3.66^{+0.63}_{-0.69} \pm 0.23$  | $0.00^{+0.39}_{-0.00} \pm 0.27$ | $3.60^{+1.01}_{-0.98} \pm 0.22$ | $0.00^{+0.55}_{-0.00} \pm 0.78$ |
| 102     | 2                | 0109661101 | 23      | 155.030 | -64.048 | $3.87^{+0.40}_{-0.47} \pm 0.28$  | $1.10^{+0.25}_{-0.28} \pm 0.70$ | ...                             | ...                             |
|         |                  | 0109661201 | 23      | 155.049 | -64.011 | $6.56^{+0.44}_{-0.48} \pm 0.29$  | $1.13 \pm 0.27 \pm 0.70$        | ...                             | ...                             |
| 103     | 2                | 0112520101 | ...     | 160.534 | +44.824 | $14.46^{+0.94}_{-1.45} \pm 0.64$ | $1.97^{+0.42}_{-0.17} \pm 1.26$ | ...                             | ...                             |
|         |                  | 0112520201 | ...     | 160.536 | +44.825 | $12.17 \pm 1.08 \pm 0.30$        | $3.23 \pm 0.56 \pm 1.26$        | ...                             | ...                             |
| 104     | 3                | 0303720301 | 24      | 161.441 | +54.439 | $10.12^{+0.71}_{-0.56} \pm 1.16$ | $0.95^{+0.40}_{-0.23} \pm 1.29$ | ...                             | ...                             |
|         |                  | 0303720201 | 24      | 161.441 | +54.439 | $5.14^{+1.03}_{-0.70} \pm 1.48$  | $0.50^{+0.42}_{-0.33} \pm 0.55$ | $5.65^{+1.31}_{-0.83} \pm 2.39$ | $0.56^{+0.65}_{-0.41} \pm 0.72$ |
|         |                  | 0303720601 | 24      | 161.440 | +54.439 | $4.15^{+1.39}_{-0.81} \pm 0.41$  | $0.16^{+0.49}_{-0.16} \pm 0.31$ | $4.15^{+1.39}_{-0.81} \pm 0.41$ | $0.16^{+0.49}_{-0.16} \pm 0.31$ |
| 105     | 2                | 0112522701 | 25      | 162.003 | +81.540 | $8.45^{+1.63}_{-1.14} \pm 0.73$  | $1.46^{+0.61}_{-0.68} \pm 0.72$ | ...                             | ...                             |
|         |                  | 0142830101 | 25      | 162.015 | +81.547 | $7.51^{+0.49}_{-0.71} \pm 0.26$  | $0.81^{+0.22}_{-0.17} \pm 0.72$ | $6.54^{+0.56}_{-0.86} \pm 0.31$ | $0.66^{+0.27}_{-0.35} \pm 0.55$ |
| 106     | 2                | 0502020101 | ...     | 162.597 | -72.142 | $2.85^{+1.34}_{-1.20} \pm 0.60$  | $0.43^{+0.71}_{-0.43} \pm 0.19$ | $2.85^{+1.34}_{-1.20} \pm 0.60$ | $0.43^{+0.71}_{-0.43} \pm 0.19$ |
|         |                  | 0502020201 | ...     | 162.512 | -72.072 | $1.88^{+0.90}_{-0.98} \pm 0.26$  | $0.56 \pm 0.50 \pm 0.07$        | $3.73^{+2.75}_{-2.44} \pm 1.43$ | $0.11^{+1.40}_{-0.11} \pm 0.97$ |
| 107     | 2                | 0143150301 | 26      | 164.587 | +42.392 | $3.89^{+1.18}_{-1.56} \pm 0.40$  | $0.42^{+0.71}_{-0.42} \pm 0.48$ | $3.89^{+1.18}_{-1.56} \pm 0.40$ | $0.42^{+0.71}_{-0.42} \pm 0.48$ |
|         |                  | 0143150601 | 26      | 164.594 | +42.394 | $23.26^{+1.09}_{-1.23} \pm 0.62$ | $3.05^{+0.52}_{-0.57} \pm 2.05$ | ...                             | ...                             |
| 108     | 4                | 0092800201 | 27      | 165.763 | +36.223 | $4.23^{+0.33}_{-0.60} \pm 0.59$  | $0.95^{+0.25}_{-0.20} \pm 0.35$ | $4.52^{+0.45}_{-0.49} \pm 0.48$ | $1.00^{+0.23}_{-0.27} \pm 0.54$ |
|         |                  | 0502220301 | ...     | 165.745 | +36.257 | $2.61^{+0.55}_{-0.61} \pm 0.27$  | $0.27^{+0.28}_{-0.27} \pm 0.07$ | $3.20^{+1.50}_{-1.44} \pm 0.40$ | $0.92^{+0.75}_{-0.71} \pm 0.41$ |
|         |                  | 0092800101 | 27      | 165.749 | +36.259 | $4.63^{+0.73}_{-0.78} \pm 0.42$  | $1.22^{+0.45}_{-0.43} \pm 0.79$ | $4.63^{+0.73}_{-0.78} \pm 0.42$ | $1.22^{+0.45}_{-0.43} \pm 0.79$ |
| 109     | 4                | 0502220201 | ...     | 165.759 | +36.259 | $1.48^{+0.80}_{-0.47} \pm 0.45$  | $0.00^{+0.17}_{-0.00} \pm 0.00$ | $1.48^{+0.80}_{-0.47} \pm 0.45$ | $0.00^{+0.17}_{-0.00} \pm 0.00$ |
|         |                  | 0502091001 | ...     | 168.609 | +28.364 | $2.26^{+0.61}_{-0.55} \pm 1.05$  | $0.00^{+0.14}_{-0.00} \pm 0.00$ | $2.26^{+0.61}_{-0.55} \pm 1.05$ | $0.00^{+0.14}_{-0.00} \pm 0.00$ |
|         |                  | 0103862101 | 28      | 168.608 | +28.364 | $5.13^{+1.76}_{-1.55} \pm 1.25$  | $1.61^{+0.87}_{-0.80} \pm 0.52$ | $5.13^{+1.76}_{-1.55} \pm 1.25$ | $1.61^{+0.87}_{-0.80} \pm 0.52$ |
| 110     | 2                | 0400070301 | 28      | 168.597 | +28.401 | $0.93^{+0.98}_{-0.93} \pm 0.20$  | $0.58 \pm 0.58 \pm 0.09$        | ...                             | ...                             |
|         |                  | 0400070201 | 28      | 168.602 | +28.401 | $5.02^{+1.87}_{-1.19} \pm 0.65$  | $0.00^{+0.66}_{-0.00} \pm 0.04$ | ...                             | ...                             |
|         |                  | 0112372001 | 29      | 169.015 | -59.636 | $3.54^{+0.59}_{-0.55} \pm 0.65$  | $0.49^{+0.31}_{-0.29} \pm 0.45$ | ...                             | ...                             |
| 111     | 2                | 0112371701 | 29      | 169.020 | -59.598 | $3.72^{+0.82}_{-0.83} \pm 0.32$  | $0.42^{+0.41}_{-0.39} \pm 0.25$ | $3.72^{+0.82}_{-0.83} \pm 0.32$ | $0.42^{+0.41}_{-0.39} \pm 0.25$ |
|         |                  | 0553911501 | ...     | 169.265 | -59.220 | $3.11^{+1.07}_{-0.93} \pm 0.23$  | $0.27^{+0.60}_{-0.27} \pm 0.38$ | $3.11^{+1.07}_{-0.93} \pm 0.23$ | $0.27^{+0.60}_{-0.27} \pm 0.38$ |
|         |                  | 0404966901 | ...     | 169.263 | -59.219 | $2.15^{+1.52}_{-1.35} \pm 0.31$  | $0.00^{+0.47}_{-0.00} \pm 0.00$ | $2.15^{+1.52}_{-1.35} \pm 0.31$ | $0.00^{+0.47}_{-0.00} \pm 0.00$ |
| 112     | 2                | 0112370101 | 30      | 169.763 | -59.733 | $3.77^{+0.50}_{-0.48} \pm 0.27$  | $1.53 \pm 0.27 \pm 0.13$        | $4.30^{+0.49}_{-0.75} \pm 1.29$ | $1.62^{+0.30}_{-0.28} \pm 0.16$ |
|         |                  | 0112371001 | 30      | 169.763 | -59.732 | $3.69^{+0.43}_{-0.48} \pm 0.98$  | $0.58^{+0.30}_{-0.36} \pm 0.16$ | ...                             | ...                             |
| 113     | 2                | 0111200101 | 31      | 172.105 | -51.933 | $4.77^{+0.67}_{-0.73} \pm 0.23$  | $2.40^{+0.47}_{-0.44} \pm 0.60$ | ...                             | ...                             |
|         |                  | 0111200201 | 31      | 172.105 | -51.933 | $7.88^{+0.94}_{-0.88} \pm 0.69$  | $3.52^{+0.53}_{-0.49} \pm 0.60$ | $7.88^{+0.94}_{-0.88} \pm 0.69$ | $3.52^{+0.53}_{-0.49} \pm 0.60$ |
| 114     | 2                | 0553910401 | ...     | 173.311 | -58.770 | $2.61^{+1.29}_{-1.19} \pm 1.04$  | $0.01^{+0.61}_{-0.01} \pm 0.44$ | $2.61^{+1.29}_{-1.19} \pm 1.04$ | $0.01^{+0.61}_{-0.01} \pm 0.44$ |
|         |                  | 0404969201 | ...     | 173.307 | -58.769 | $5.19^{+1.54}_{-1.48} \pm 0.11$  | $0.22^{+0.81}_{-0.22} \pm 0.04$ | ...                             | ...                             |
| 115     | 5                | 0152680301 | 32      | 174.325 | -15.413 | $3.43^{+0.80}_{-0.82} \pm 0.22$  | $0.53 \pm 0.39 \pm 0.09$        | ...                             | ...                             |
|         |                  | 0152680401 | 32      | 174.326 | -15.413 | $2.81^{+0.73}_{-0.75} \pm 0.29$  | $0.30^{+0.35}_{-0.30} \pm 0.14$ | ...                             | ...                             |
|         |                  | 0152680201 | 32      | 174.325 | -15.413 | $4.90^{+0.88}_{-1.13} \pm 0.45$  | $1.04^{+0.39}_{-0.57} \pm 0.09$ | ...                             | ...                             |
|         |                  | 0152680901 | 32      | 174.325 | -15.413 | $3.39^{+0.75}_{-0.76} \pm 0.30$  | $0.21^{+0.42}_{-0.21} \pm 0.19$ | ...                             | ...                             |
|         |                  | 0152680501 | 32      | 174.325 | -15.413 | $2.65^{+0.83}_{-0.96} \pm 0.28$  | $0.68^{+0.43}_{-0.48} \pm 0.15$ | ...                             | ...                             |
| 116     | 4                | 0200810301 | 33      | 178.909 | -20.031 | $2.74^{+1.53}_{-1.33} \pm 0.43$  | $0.00^{+0.78}_{-0.00} \pm 0.08$ | ...                             | ...                             |
|         |                  | 0200811101 | 33      | 178.909 | -20.031 | $2.03^{+0.99}_{-0.98} \pm 0.34$  | $0.09^{+0.50}_{-0.09} \pm 0.24$ | $2.03^{+0.99}_{-0.98} \pm 0.34$ | $0.09^{+0.50}_{-0.09} \pm 0.24$ |
|         |                  | 0200810701 | 33      | 178.909 | -20.030 | $2.31^{+1.03}_{-0.96} \pm 0.72$  | $0.17^{+0.50}_{-0.17} \pm 0.24$ | $2.31^{+1.03}_{-0.96} \pm 0.72$ | $0.17^{+0.50}_{-0.17} \pm 0.24$ |
|         |                  | 0109060301 | 33      | 178.916 | -19.992 | $3.89^{+0.39}_{-0.67} \pm 0.40$  | $0.84^{+0.20}_{-0.30} \pm 0.09$ | $3.63^{+0.40}_{-0.41} \pm 0.30$ | $0.95 \pm 0.22 \pm 0.07$        |
| 117     | 2                | 0551851201 | ...     | 180.103 | +26.641 | $0.79^{+0.45}_{-0.40} \pm 0.26$  | $0.00^{+0.24}_{-0.00} \pm 0.03$ | $0.79^{+0.45}_{-0.40} \pm 0.26$ | $0.00^{+0.24}_{-0.00} \pm 0.03$ |
|         |                  | 0551850101 | ...     | 180.147 | +26.661 | $1.06^{+0.75}_{-0.70} \pm 0.96$  | $0.00^{+0.36}_{-0.00} \pm 0.00$ | ...                             | ...                             |
| 118     | 2                | 0506440101 | ...     | 180.288 | +59.048 | $8.50^{+0.43}_{-1.62} \pm 1.40$  | $0.28^{+0.37}_{-0.28} \pm 0.87$ | ...                             | ...                             |
|         |                  | 0561580201 | ...     | 180.293 | +59.048 | $4.21^{+1.25}_{-0.52} \pm 0.43$  | $0.04^{+0.50}_{-0.04} \pm 0.74$ | $3.63^{+0.72}_{-0.68} \pm 0.20$ | $0.14^{+0.49}_{-0.14} \pm 0.44$ |

Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         | Without proton flux filtering |                                  |                                 | With proton flux filtering       |                                 |
|---------|------------------|------------|---------|---------|-------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$     | $b$                           | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)   | (deg)                         | (L.U.)                           | (L.U.)                          | (L.U.)                           | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)                           | (7)                              | (8)                             | (9)                              | (10)                            |
| 119     | 2                | 0101441501 | 34      | 180.557 | −23.544                       | $2.11^{+0.67}_{-0.60} \pm 0.43$  | $0.15^{+0.32}_{-0.15} \pm 0.16$ | $2.07 \pm 0.49 \pm 0.35$         | $0.15^{+0.28}_{-0.15} \pm 0.12$ |
|         |                  | 0101440601 | 34      | 180.555 | −23.543                       | $2.78^{+0.46}_{-0.56} \pm 0.28$  | $1.21 \pm 0.26 \pm 0.13$        | ...                              | ...                             |
| 120     | 2                | 0306230101 | 35      | 182.026 | −57.944                       | $4.12^{+0.58}_{-0.57} \pm 0.40$  | $1.07^{+0.32}_{-0.31} \pm 0.36$ | ...                              | ...                             |
|         |                  | 0093630101 | 35      | 182.022 | −57.907                       | $4.05^{+0.97}_{-1.03} \pm 0.46$  | $1.37^{+0.51}_{-0.52} \pm 0.67$ | $4.05^{+0.97}_{-1.03} \pm 0.46$  | $1.37^{+0.51}_{-0.52} \pm 0.67$ |
| 121     | 2                | 0070340301 | 36      | 185.207 | +65.480                       | $4.53^{+1.34}_{-1.15} \pm 1.23$  | $0.98^{+0.72}_{-0.67} \pm 0.42$ | $4.53^{+1.34}_{-1.15} \pm 1.23$  | $0.98^{+0.72}_{-0.67} \pm 0.42$ |
|         |                  | 0205370101 | 36      | 185.152 | +65.494                       | $5.69^{+0.62}_{-0.51} \pm 0.19$  | $0.57^{+0.33}_{-0.28} \pm 0.68$ | ...                              | ...                             |
| 122     | 3                | 0089370501 | 37      | 186.989 | −1.553                        | $9.83 \pm 0.75 \pm 1.11$         | $2.24^{+0.41}_{-0.38} \pm 1.04$ | ...                              | ...                             |
|         |                  | 0089370601 | 37      | 186.991 | −1.550                        | $11.52^{+0.86}_{-0.87} \pm 2.51$ | $1.88 \pm 0.45 \pm 1.66$        | ...                              | ...                             |
|         |                  | 0089370701 | 37      | 186.994 | −1.547                        | $5.56^{+0.80}_{-0.88} \pm 0.68$  | $1.38^{+0.46}_{-0.55} \pm 0.36$ | ...                              | ...                             |
| 123     | 3                | 0123710101 | ...     | 187.465 | +22.477                       | $2.66^{+0.89}_{-0.91} \pm 0.34$  | $1.17 \pm 0.41 \pm 0.17$        | $2.66^{+0.89}_{-0.91} \pm 0.34$  | $1.17 \pm 0.41 \pm 0.17$        |
|         |                  | 0123710201 | 38      | 187.465 | +22.477                       | $5.04^{+1.11}_{-1.23} \pm 0.83$  | $1.03^{+0.57}_{-0.61} \pm 0.37$ | $5.04^{+1.11}_{-1.23} \pm 0.83$  | $1.03^{+0.57}_{-0.61} \pm 0.37$ |
|         |                  | 0112880801 | 38      | 187.464 | +22.499                       | $4.50^{+0.99}_{-0.65} \pm 0.65$  | $2.04^{+0.45}_{-0.36} \pm 0.38$ | $4.63^{+0.82}_{-0.85} \pm 0.35$  | $2.47^{+0.41}_{-0.39} \pm 0.17$ |
| 124     | 3                | 0400850101 | ...     | 190.071 | +41.482                       | $4.36^{+1.03}_{-0.81} \pm 0.13$  | $0.49^{+0.47}_{-0.40} \pm 0.20$ | ...                              | ...                             |
|         |                  | 0554180101 | ...     | 190.063 | +41.482                       | $3.76^{+0.72}_{-0.57} \pm 0.86$  | $0.97^{+0.38}_{-0.31} \pm 0.37$ | $3.76^{+0.72}_{-0.57} \pm 0.86$  | $0.97^{+0.38}_{-0.31} \pm 0.37$ |
|         |                  | 0502760101 | ...     | 190.070 | +41.483                       | $2.89^{+0.85}_{-0.84} \pm 0.29$  | $0.70^{+0.46}_{-0.48} \pm 0.28$ | $2.89^{+0.85}_{-0.84} \pm 0.29$  | $0.70^{+0.46}_{-0.48} \pm 0.28$ |
| 125     | 2                | 0402110201 | 39      | 190.184 | −47.865                       | $14.99^{+1.10}_{-1.51} \pm 1.34$ | $2.33^{+0.65}_{-0.57} \pm 2.91$ | ...                              | ...                             |
|         |                  | 0103861001 | 39      | 190.169 | −47.827                       | $19.92^{+1.51}_{-2.13} \pm 2.43$ | $4.83^{+0.91}_{-1.02} \pm 2.67$ | $19.92^{+1.51}_{-2.13} \pm 2.43$ | $4.83^{+0.91}_{-1.02} \pm 2.67$ |
| 126     | 8                | 0201350101 | 40      | 195.133 | +4.248                        | $3.42^{+1.04}_{-0.78} \pm 0.12$  | $1.39^{+0.51}_{-0.47} \pm 0.17$ | $3.42^{+1.04}_{-0.78} \pm 0.12$  | $1.39^{+0.51}_{-0.47} \pm 0.17$ |
|         |                  | 0550410301 | ...     | 195.134 | +4.248                        | $4.54^{+1.46}_{-1.51} \pm 0.50$  | $1.16^{+0.83}_{-0.76} \pm 1.03$ | $5.62^{+1.82}_{-1.64} \pm 0.91$  | $2.07^{+1.19}_{-1.26} \pm 0.94$ |
|         |                  | 0501270301 | ...     | 195.134 | +4.248                        | $8.15^{+1.49}_{-1.66} \pm 0.49$  | $1.97^{+0.68}_{-0.72} \pm 0.13$ | ...                              | ...                             |
|         |                  | 0400260301 | 40      | 195.133 | +4.248                        | $5.08^{+0.89}_{-0.87} \pm 0.27$  | $1.47^{+0.46}_{-0.44} \pm 0.09$ | ...                              | ...                             |
|         |                  | 0111170101 | 40      | 195.127 | +4.249                        | $5.02^{+0.37}_{-0.36} \pm 0.40$  | $1.83 \pm 0.21 \pm 0.30$        | $5.02^{+0.37}_{-0.36} \pm 0.40$  | $1.83 \pm 0.21 \pm 0.30$        |
|         |                  | 0400260201 | 40      | 195.135 | +4.285                        | $4.95^{+1.15}_{-1.06} \pm 0.48$  | $1.95^{+0.27}_{-0.50} \pm 0.31$ | $4.95^{+1.15}_{-1.06} \pm 0.48$  | $1.95^{+0.27}_{-0.50} \pm 0.31$ |
|         |                  | 0550410201 | ...     | 195.134 | +4.286                        | $3.01^{+0.99}_{-1.08} \pm 0.33$  | $0.92^{+0.53}_{-0.57} \pm 0.19$ | $3.01^{+0.99}_{-1.08} \pm 0.33$  | $0.92^{+0.53}_{-0.57} \pm 0.19$ |
|         |                  | 0501270201 | ...     | 195.135 | +4.286                        | $2.57^{+1.06}_{-0.97} \pm 1.70$  | $1.47^{+0.54}_{-0.52} \pm 0.54$ | $2.57^{+1.06}_{-0.97} \pm 1.70$  | $1.47^{+0.54}_{-0.52} \pm 0.54$ |
| 127     | 3                | 0502211201 | ...     | 201.765 | +83.269                       | $3.60^{+2.08}_{-1.71} \pm 0.76$  | $0.00^{+0.72}_{-0.00} \pm 0.00$ | $3.60^{+2.08}_{-1.71} \pm 0.76$  | $0.00^{+0.72}_{-0.00} \pm 0.00$ |
|         |                  | 0502211401 | ...     | 201.757 | +83.270                       | $6.28^{+1.81}_{-1.73} \pm 1.43$  | $0.02^{+0.89}_{-0.02} \pm 0.39$ | $6.28^{+1.81}_{-1.73} \pm 1.43$  | $0.02^{+0.89}_{-0.02} \pm 0.39$ |
|         |                  | 0502211301 | ...     | 201.757 | +83.270                       | $2.66^{+1.09}_{-0.88} \pm 0.20$  | $0.31^{+0.55}_{-0.31} \pm 0.07$ | ...                              | ...                             |
| 128     | 2                | 0153150101 | 41      | 205.475 | −14.547                       | $3.66^{+0.82}_{-0.67} \pm 0.47$  | $0.70^{+0.37}_{-0.35} \pm 0.15$ | ...                              | ...                             |
|         |                  | 0301600101 | 41      | 205.426 | −14.535                       | $2.39^{+0.48}_{-0.47} \pm 0.21$  | $0.18^{+0.25}_{-0.18} \pm 0.18$ | ...                              | ...                             |
| 129     | 2                | 0146870101 | ...     | 206.150 | −1.024                        | $7.79^{+1.25}_{-1.26} \pm 1.55$  | $5.20 \pm 0.75 \pm 1.05$        | $7.79^{+1.19}_{-1.41} \pm 0.62$  | $5.20^{+0.74}_{-0.81} \pm 0.52$ |
|         |                  | 0146870201 | ...     | 206.151 | −1.024                        | $7.99^{+1.85}_{-1.56} \pm 3.22$  | $3.29^{+1.05}_{-0.91} \pm 1.15$ | ...                              | ...                             |
| 130     | 3                | 0300480201 | 42      | 206.809 | +35.803                       | $3.90^{+1.72}_{-1.39} \pm 0.74$  | $0.09^{+0.90}_{-0.09} \pm 0.97$ | ...                              | ...                             |
|         |                  | 0502630201 | ...     | 206.808 | +35.803                       | $3.82^{+0.65}_{-0.69} \pm 0.17$  | $1.02^{+0.38}_{-0.44} \pm 0.09$ | ...                              | ...                             |
| 131     | 3                | 0401060201 | 42      | 206.815 | +35.839                       | $3.58 \pm 0.70 \pm 0.32$         | $0.75^{+0.36}_{-0.37} \pm 0.59$ | $3.58 \pm 0.70 \pm 0.32$         | $0.75^{+0.36}_{-0.37} \pm 0.59$ |
|         |                  | 0206100101 | 43      | 206.923 | +23.396                       | $6.29^{+0.81}_{-0.73} \pm 1.22$  | $3.59^{+0.37}_{-0.54} \pm 0.65$ | $6.29^{+0.81}_{-0.73} \pm 1.22$  | $3.59^{+0.37}_{-0.54} \pm 0.65$ |
|         |                  | 0551860101 | ...     | 206.926 | +23.413                       | $2.20^{+1.41}_{-1.34} \pm 0.51$  | $0.39^{+0.37}_{-0.39} \pm 0.27$ | $2.20^{+1.41}_{-1.34} \pm 0.51$  | $0.39^{+0.37}_{-0.39} \pm 0.27$ |
| 132     | 2                | 0109461801 | 44      | 211.792 | +66.197                       | $2.81^{+1.17}_{-0.44} \pm 0.28$  | $0.00^{+0.56}_{-0.00} \pm 0.29$ | ...                              | ...                             |
|         |                  | 0109462801 | 44      | 211.793 | +66.197                       | $10.19^{+1.59}_{-1.34} \pm 0.69$ | $2.14^{+0.69}_{-0.70} \pm 1.63$ | ...                              | ...                             |
| 133     | 2                | 0406541101 | ...     | 213.199 | +55.721                       | $4.43^{+1.20}_{-0.98} \pm 0.23$  | $0.49^{+0.67}_{-0.49} \pm 0.98$ | $4.43^{+1.20}_{-0.98} \pm 0.23$  | $0.49^{+0.67}_{-0.49} \pm 0.98$ |
|         |                  | 0406540401 | ...     | 213.211 | +55.757                       | $5.78^{+1.15}_{-1.16} \pm 0.35$  | $0.20^{+0.62}_{-0.20} \pm 0.25$ | ...                              | ...                             |
| 134     | 3                | 0415580201 | 45      | 213.703 | +13.019                       | $3.24^{+1.43}_{-1.03} \pm 1.06$  | $0.00^{+0.15}_{-0.00} \pm 0.00$ | ...                              | ...                             |
|         |                  | 0123940201 | 45      | 213.703 | +13.019                       | $6.10^{+1.11}_{-0.65} \pm 0.46$  | $1.48^{+0.60}_{-0.62} \pm 0.13$ | $4.71^{+1.78}_{-1.59} \pm 0.36$  | $0.00^{+0.84}_{-0.00} \pm 0.59$ |
|         |                  | 0123940101 | 45      | 213.700 | +13.020                       | $7.37^{+1.72}_{-0.63} \pm 0.43$  | $2.23^{+0.44}_{-0.31} \pm 0.37$ | $7.37^{+1.72}_{-0.63} \pm 0.43$  | $2.23^{+0.44}_{-0.31} \pm 0.37$ |
| 135     | 2                | 0128531401 | 46      | 213.700 | +13.021                       | $8.50^{+0.87}_{-1.18} \pm 0.43$  | $1.94^{+0.41}_{-0.53} \pm 0.25$ | $8.89^{+0.98}_{-0.99} \pm 0.59$  | $1.50 \pm 0.50 \pm 0.26$        |
|         |                  | 0128531601 | 46      | 216.975 | +60.681                       | $7.69^{+0.79}_{-0.62} \pm 0.83$  | $0.41^{+0.32}_{-0.31} \pm 0.98$ | ...                              | ...                             |
| 136     | 6                | 0554380101 | ...     | 216.992 | +60.718                       | $4.89^{+0.31}_{-0.68} \pm 0.67$  | $0.64^{+0.40}_{-0.18} \pm 0.25$ | $4.66^{+0.40}_{-0.41} \pm 0.21$  | $0.47 \pm 0.22 \pm 0.31$        |
|         |                  | 0554380301 | ...     | 223.362 | +68.208                       | $6.13^{+0.57}_{-0.60} \pm 0.31$  | $0.69^{+0.28}_{-0.29} \pm 0.11$ | $6.17^{+0.65}_{-0.64} \pm 0.38$  | $0.59^{+0.35}_{-0.30} \pm 0.09$ |
|         |                  | 0201940201 | 47      | 223.357 | +68.210                       | $2.06^{+0.66}_{-0.51} \pm 0.78$  | $0.25^{+0.41}_{-0.25} \pm 0.46$ | $2.18^{+0.86}_{-0.92} \pm 0.47$  | $0.55^{+0.46}_{-0.52} \pm 0.11$ |
|         |                  | 0201940201 | ...     | 223.358 | +68.210                       | $6.42^{+1.86}_{-1.45} \pm 0.54$  | $0.32^{+0.93}_{-0.32} \pm 1.02$ | ...                              | ...                             |
|         |                  | 0201940201 | ...     | 223.356 | +68.210                       | $1.93^{+0.61}_{-0.47} \pm 0.83$  | $0.00^{+0.23}_{-0.00} \pm 0.07$ | $1.28^{+0.50}_{-0.45} \pm 2.97$  | $0.00^{+0.19}_{-0.00} \pm 0.62$ |
|         |                  | 0201940101 | ...     | 223.358 | +68.210                       | $3.53^{+0.49}_{-0.54} \pm 0.32$  | $0.11^{+0.26}_{-0.11} \pm 0.22$ | ...                              | ...                             |

Table 4—Continued

| Dataset    | $N_{\text{obs}}$ | Obs. ID    | Paper I |                                 | Without proton flux filtering   |                                  | With proton flux filtering       |                                 |                                 |
|------------|------------------|------------|---------|---------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------------------|---------------------------------|
|            |                  |            | Dataset | $l$<br>(deg)                    | $b$<br>(deg)                    | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              | $I_{\text{O VII}}$              | $I_{\text{O VIII}}$             |
|            |                  |            |         |                                 |                                 | (L.U.)                           | (L.U.)                           | (L.U.)                          | (L.U.)                          |
| (1)        | (2)              | (3)        | (4)     | (5)                             | (6)                             | (7)                              | (8)                              | (9)                             | (10)                            |
| 137        | 20               | 0111290401 | 47      | 223.378                         | +68.227                         | $7.27^{+1.88}_{-1.39} \pm 0.69$  | $1.99^{+1.29}_{-0.85} \pm 1.18$  | ...                             | ...                             |
|            |                  | 0555781001 | ...     | 223.645                         | −54.475                         | $2.53^{+0.83}_{-0.46} \pm 0.53$  | $0.30^{+0.48}_{-0.24} \pm 0.22$  | $2.46^{+0.79}_{-0.61} \pm 0.28$ | $0.00^{+0.37}_{-0.00} \pm 0.00$ |
|            |                  | 0555782301 | ...     | 223.645                         | −54.474                         | $2.49^{+0.59}_{-0.27} \pm 0.27$  | $0.26^{+0.31}_{-0.24} \pm 0.09$  | $2.68^{+0.66}_{-0.87} \pm 0.04$ | $0.00^{+0.50}_{-0.00} \pm 0.56$ |
|            |                  | 0555780901 | ...     | 223.631                         | −54.473                         | $2.42^{+0.69}_{-0.54} \pm 0.27$  | $0.00^{+0.27}_{-0.00} \pm 0.24$  | $2.53^{+0.76}_{-0.59} \pm 0.31$ | $0.18^{+0.43}_{-0.18} \pm 0.53$ |
|            |                  | 0555780801 | ...     | 223.616                         | −54.472                         | $2.58^{+0.54}_{-0.60} \pm 0.29$  | $0.55^{+0.30}_{-0.14} \pm 0.28$  | $3.17^{+0.68}_{-0.43} \pm 1.09$ | $0.96^{+0.29}_{-0.26} \pm 0.50$ |
|            |                  | 0555780701 | ...     | 223.650                         | −54.467                         | $2.96^{+0.78}_{-0.57} \pm 0.73$  | $0.29^{+0.42}_{-0.18} \pm 0.30$  | ...                             | ...                             |
|            |                  | 0555780501 | ...     | 223.620                         | −54.464                         | $2.24^{+0.46}_{-0.48} \pm 0.60$  | $0.31 \pm 0.28 \pm 0.33$         | $2.46^{+0.83}_{-0.56} \pm 0.27$ | $0.44^{+0.39}_{-0.35} \pm 0.26$ |
|            |                  | 0555780601 | ...     | 223.632                         | −54.463                         | $1.95^{+0.60}_{-0.47} \pm 0.33$  | $0.24^{+0.35}_{-0.24} \pm 0.31$  | $2.20^{+0.72}_{-0.48} \pm 0.35$ | $0.32^{+0.39}_{-0.32} \pm 0.35$ |
|            |                  | 0108060701 | 48      | 223.599                         | −54.455                         | $4.81^{+0.36}_{-0.35} \pm 0.41$  | $0.48 \pm 0.22 \pm 0.89$         | $4.76^{+0.58}_{-0.35} \pm 0.45$ | $0.52 \pm 0.21 \pm 0.89$        |
|            |                  | 0108060601 | 48      | 223.606                         | −54.451                         | $5.29^{+0.32}_{-0.58} \pm 0.32$  | $0.36^{+0.22}_{-0.26} \pm 0.87$  | $6.38^{+1.24}_{-1.21} \pm 0.05$ | $0.00^{+0.25}_{-0.00} \pm 0.78$ |
|            |                  | 0108061801 | 48      | 223.596                         | −54.451                         | $5.85^{+0.82}_{-0.80} \pm 0.39$  | $0.82^{+0.35}_{-0.28} \pm 0.49$  | ...                             | ...                             |
|            |                  | 0108061901 | 48      | 223.586                         | −54.449                         | $6.17^{+0.46}_{-0.47} \pm 0.35$  | $1.02 \pm 0.26 \pm 0.76$         | ...                             | ...                             |
|            |                  | 0108062301 | 48      | 223.589                         | −54.449                         | $4.62^{+0.36}_{-0.35} \pm 0.38$  | $0.82 \pm 0.21 \pm 0.71$         | $4.63^{+0.38}_{-0.42} \pm 0.31$ | $0.93^{+0.22}_{-0.23} \pm 0.72$ |
|            |                  | 0108062101 | 48      | 223.593                         | −54.445                         | $4.61^{+0.42}_{-0.40} \pm 0.26$  | $0.83^{+0.26}_{-0.24} \pm 0.75$  | ...                             | ...                             |
|            |                  | 0108060401 | ...     | 223.542                         | −54.431                         | $4.65^{+0.66}_{-0.70} \pm 0.37$  | $0.68^{+0.32}_{-0.38} \pm 0.39$  | $4.65^{+0.66}_{-0.70} \pm 0.37$ | $0.68^{+0.32}_{-0.38} \pm 0.39$ |
|            |                  | 0108060501 | 48      | 223.553                         | −54.422                         | $4.48^{+0.60}_{-0.35} \pm 0.67$  | $0.49^{+0.27}_{-0.23} \pm 0.65$  | $4.48^{+0.60}_{-0.35} \pm 0.67$ | $0.49^{+0.27}_{-0.23} \pm 0.65$ |
| 0555780301 | ...              | 223.477    | −54.374 | $2.23 \pm 0.52 \pm 0.42$        | $0.23^{+0.32}_{-0.23} \pm 0.13$ | ...                              | ...                              |                                 |                                 |
| 0604960201 | ...              | 223.478    | −54.372 | $1.59^{+0.66}_{-0.56} \pm 0.11$ | $0.09^{+0.34}_{-0.09} \pm 0.08$ | $2.14^{+0.70}_{-0.81} \pm 0.36$  | $0.17^{+0.50}_{-0.17} \pm 0.06$  |                                 |                                 |
| 0555780401 | ...              | 223.464    | −54.373 | $2.10^{+0.97}_{-0.50} \pm 0.87$ | $0.00^{+0.63}_{-0.00} \pm 0.00$ | $1.74^{+1.21}_{-1.19} \pm 0.64$  | $0.00^{+0.33}_{-0.00} \pm 0.00$  |                                 |                                 |
| 0555780201 | ...              | 223.481    | −54.365 | $2.40^{+0.46}_{-0.86} \pm 0.87$ | $0.33^{+0.40}_{-0.27} \pm 0.22$ | $1.61^{+0.63}_{-0.59} \pm 0.54$  | $0.35^{+0.33}_{-0.32} \pm 0.20$  |                                 |                                 |
| 0555780101 | ...              | 223.465    | −54.365 | $1.54^{+0.43}_{-0.67} \pm 0.64$ | $0.11^{+0.29}_{-0.11} \pm 0.14$ | $3.05^{+0.53}_{-0.96} \pm 0.99$  | $0.44^{+0.38}_{-0.36} \pm 0.20$  |                                 |                                 |
| 138        | 2                | 0206090201 | ...     | 225.966                         | +72.498                         | $10.00^{+1.93}_{-1.70} \pm 2.18$ | $11.48^{+1.18}_{-1.16} \pm 1.24$ | ...                             | ...                             |
|            |                  | 0206090101 | ...     | 226.007                         | +72.533                         | $6.41^{+0.69}_{-0.74} \pm 0.27$  | $0.02^{+0.38}_{-0.02} \pm 0.79$  | ...                             | ...                             |
| 139        | 2                | 0411980101 | ...     | 230.067                         | +66.120                         | $7.36^{+1.56}_{-1.42} \pm 0.90$  | $0.00^{+0.64}_{-0.00} \pm 0.58$  | ...                             | ...                             |
|            |                  | 0556090101 | ...     | 230.102                         | +66.156                         | $3.32^{+0.54}_{-0.51} \pm 0.29$  | $0.62^{+0.35}_{-0.34} \pm 0.42$  | $3.54^{+0.80}_{-0.69} \pm 0.36$ | $0.27^{+0.55}_{-0.27} \pm 0.64$ |
| 140        | 2                | 0302351101 | 50      | 236.229                         | +42.398                         | $2.64^{+0.85}_{-0.69} \pm 0.37$  | $0.00^{+0.45}_{-0.00} \pm 0.31$  | $2.87^{+0.88}_{-0.79} \pm 0.24$ | $0.08^{+0.51}_{-0.08} \pm 0.54$ |
|            |                  | 0203361101 | 50      | 236.272                         | +42.422                         | $3.65^{+0.84}_{-0.69} \pm 0.56$  | $0.51^{+0.44}_{-0.47} \pm 0.55$  | $3.65^{+0.84}_{-0.69} \pm 0.56$ | $0.51^{+0.44}_{-0.47} \pm 0.55$ |
| 141        | 2                | 0302351701 | 51      | 236.311                         | +42.050                         | $7.37^{+1.07}_{-0.84} \pm 0.69$  | $0.14^{+0.47}_{-0.14} \pm 0.83$  | ...                             | ...                             |
|            |                  | 0203361701 | 51      | 236.354                         | +42.072                         | $6.13^{+0.71}_{-0.80} \pm 1.00$  | $0.10^{+0.35}_{-0.10} \pm 1.01$  | ...                             | ...                             |
| 142        | 2                | 0302352301 | ...     | 236.392                         | +41.702                         | $4.65^{+1.48}_{-1.62} \pm 0.44$  | $0.24^{+0.90}_{-0.24} \pm 0.25$  | $4.65^{+1.48}_{-1.62} \pm 0.44$ | $0.24^{+0.90}_{-0.24} \pm 0.25$ |
|            |                  | 0501170201 | ...     | 236.393                         | +41.702                         | $4.90^{+0.95}_{-0.84} \pm 1.07$  | $0.05^{+0.47}_{-0.05} \pm 0.57$  | ...                             | ...                             |
| 143        | 2                | 0302350601 | 52      | 236.428                         | +42.580                         | $4.62^{+1.10}_{-0.94} \pm 0.84$  | $0.32^{+0.55}_{-0.32} \pm 0.80$  | ...                             | ...                             |
|            |                  | 0203360601 | 52      | 236.441                         | +42.593                         | $6.06^{+0.77}_{-0.91} \pm 0.26$  | $0.12^{+0.41}_{-0.12} \pm 0.61$  | ...                             | ...                             |
| 144        | 2                | 0203361201 | 53      | 236.549                         | +42.277                         | $6.63^{+1.20}_{-1.31} \pm 0.83$  | $1.27^{+0.46}_{-0.41} \pm 0.81$  | $6.64^{+0.82}_{-0.81} \pm 0.42$ | $1.13^{+0.43}_{-0.41} \pm 0.81$ |
|            |                  | 0302351201 | 53      | 236.560                         | +42.291                         | $7.23^{+0.90}_{-0.91} \pm 0.30$  | $1.02^{+0.52}_{-0.47} \pm 1.15$  | $7.23^{+0.90}_{-0.91} \pm 0.30$ | $1.02^{+0.52}_{-0.47} \pm 1.15$ |
| 145        | 2                | 0302351801 | 54      | 236.590                         | +41.883                         | $8.21^{+0.51}_{-0.93} \pm 0.24$  | $0.77 \pm 0.49 \pm 0.74$         | ...                             | ...                             |
|            |                  | 0203361801 | 54      | 236.630                         | +41.929                         | $5.53^{+0.66}_{-1.00} \pm 0.78$  | $1.03^{+0.36}_{-0.35} \pm 0.72$  | $5.53^{+0.66}_{-1.00} \pm 0.78$ | $1.03^{+0.36}_{-0.35} \pm 0.72$ |
| 146        | 2                | 0302352401 | 55      | 236.697                         | +41.561                         | $5.41 \pm 0.78 \pm 0.32$         | $0.71 \pm 0.47 \pm 0.75$         | ...                             | ...                             |
|            |                  | 0302353201 | 55      | 236.695                         | +41.562                         | $4.34^{+1.07}_{-1.15} \pm 0.24$  | $0.71^{+0.65}_{-0.67} \pm 0.36$  | $4.34^{+1.07}_{-1.15} \pm 0.24$ | $0.71^{+0.65}_{-0.67} \pm 0.36$ |
| 147        | 2                | 0203360701 | 56      | 236.743                         | +42.482                         | $6.20^{+0.63}_{-0.59} \pm 0.80$  | $1.67^{+0.38}_{-0.32} \pm 1.07$  | ...                             | ...                             |
|            |                  | 0302350701 | 56      | 236.724                         | +42.492                         | $7.84^{+0.84}_{-0.78} \pm 0.70$  | $0.56^{+0.46}_{-0.44} \pm 1.08$  | $7.45^{+1.22}_{-1.45} \pm 0.69$ | $0.14^{+0.69}_{-0.14} \pm 1.33$ |
| 148        | 2                | 0203361301 | 57      | 236.824                         | +42.133                         | $5.58^{+0.61}_{-0.62} \pm 0.50$  | $1.92 \pm 0.35 \pm 0.61$         | $5.85^{+0.66}_{-0.64} \pm 0.49$ | $2.04^{+0.41}_{-0.37} \pm 0.34$ |
|            |                  | 0302351301 | 57      | 236.804                         | +42.142                         | $5.80^{+0.82}_{-0.80} \pm 0.24$  | $0.68^{+0.46}_{-0.44} \pm 0.80$  | $5.80^{+0.82}_{-0.80} \pm 0.24$ | $0.68^{+0.46}_{-0.44} \pm 0.80$ |
| 149        | 2                | 0302351901 | 58      | 236.859                         | +41.761                         | $5.81^{+1.11}_{-1.13} \pm 0.24$  | $1.08^{+0.62}_{-0.61} \pm 0.35$  | $5.81^{+1.11}_{-1.13} \pm 0.24$ | $1.08^{+0.62}_{-0.61} \pm 0.35$ |
|            |                  | 0203361901 | 58      | 236.902                         | +41.783                         | $5.97^{+0.66}_{-0.76} \pm 0.43$  | $0.79^{+0.34}_{-0.33} \pm 0.71$  | $5.80^{+0.66}_{-1.02} \pm 0.43$ | $0.52^{+0.35}_{-0.40} \pm 0.86$ |
| 150        | 2                | 0302350201 | 59      | 236.928                         | +42.666                         | $5.10^{+1.14}_{-1.05} \pm 0.27$  | $0.44^{+0.56}_{-0.44} \pm 0.49$  | $4.75^{+1.14}_{-1.36} \pm 0.54$ | $0.73^{+0.71}_{-0.35} \pm 0.56$ |
|            |                  | 0203360201 | 59      | 236.941                         | +42.684                         | $9.25^{+0.58}_{-1.05} \pm 0.40$  | $0.73^{+0.45}_{-0.48} \pm 0.79$  | ...                             | ...                             |
| 151        | 3                | 0302351401 | 60      | 237.085                         | +41.968                         | $6.73^{+0.83}_{-1.36} \pm 0.46$  | $0.76^{+0.55}_{-0.28} \pm 0.90$  | ...                             | ...                             |
|            |                  | 0203361401 | 60      | 237.099                         | +41.987                         | $4.46^{+0.46}_{-0.52} \pm 0.41$  | $1.13^{+0.31}_{-0.33} \pm 1.10$  | $5.82 \pm 0.87 \pm 0.29$        | $0.95^{+0.52}_{-0.51} \pm 1.17$ |
| 152        | 3                | 0302353401 | 60      | 237.110                         | +42.001                         | $3.58^{+1.22}_{-1.13} \pm 0.30$  | $0.19^{+0.31}_{-0.19} \pm 0.39$  | $3.58^{+1.22}_{-1.13} \pm 0.30$ | $0.19^{+0.31}_{-0.19} \pm 0.39$ |
|            |                  | 0501170101 | ...     | 237.136                         | +41.592                         | $5.53^{+0.83}_{-0.70} \pm 0.22$  | $0.19^{+0.38}_{-0.19} \pm 1.09$  | ...                             | ...                             |
|            |                  | 0302352001 | 61      | 237.135                         | +41.592                         | $7.70^{+1.94}_{-1.56} \pm 0.29$  | $0.37^{+0.86}_{-0.37} \pm 0.75$  | $7.70^{+1.94}_{-1.56} \pm 0.29$ | $0.37^{+0.86}_{-0.37} \pm 0.75$ |

Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                 | With proton flux filtering       |                                 |
|---------|------------------|------------|---------|---------|---------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                          | (L.U.)                           | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                             | (9)                              | (10)                            |
| 153     | 2                | 0203362001 | 61      | 237.149 | +41.606 | $6.18^{+1.15}_{-1.29} \pm 0.42$  | $1.47^{+0.74}_{-0.84} \pm 0.97$ | $6.18^{+1.15}_{-1.29} \pm 0.42$  | $1.47^{+0.74}_{-0.84} \pm 0.97$ |
|         |                  | 0203360301 | 62      | 237.192 | +42.506 | $5.18^{+0.86}_{-0.69} \pm 0.09$  | $1.01^{+0.36}_{-0.35} \pm 0.30$ | $5.18^{+0.86}_{-0.69} \pm 0.09$  | $1.01^{+0.36}_{-0.35} \pm 0.30$ |
|         |                  | 0302353101 | 62      | 237.172 | +42.516 | $5.36^{+0.98}_{-0.84} \pm 0.47$  | $0.82^{+0.51}_{-0.50} \pm 1.18$ | ...                              | ...                             |
| 154     | 2                | 0302351501 | 63      | 237.328 | +41.818 | $6.06^{+0.94}_{-0.47} \pm 0.40$  | $0.45^{+0.53}_{-0.45} \pm 1.08$ | ...                              | ...                             |
|         |                  | 0203361501 | 63      | 237.369 | +41.841 | $9.00^{+0.89}_{-0.74} \pm 0.25$  | $0.32^{+0.38}_{-0.32} \pm 0.87$ | ...                              | ...                             |
| 155     | 2                | 0302351001 | 64      | 237.554 | +42.030 | $5.43^{+0.77}_{-0.93} \pm 0.38$  | $0.19^{+0.36}_{-0.19} \pm 0.45$ | $5.93^{+1.01}_{-1.25} \pm 0.24$  | $0.33^{+0.52}_{-0.33} \pm 0.58$ |
|         |                  | 0203361001 | 64      | 237.566 | +42.043 | $6.51^{+0.97}_{-0.86} \pm 0.24$  | $0.29^{+0.50}_{-0.29} \pm 0.51$ | ...                              | ...                             |
| 156     | 4                | 0149500601 | 65      | 237.565 | −31.716 | $6.27^{+0.97}_{-0.92} \pm 0.73$  | $0.00^{+0.24}_{-0.00} \pm 0.39$ | ...                              | ...                             |
|         |                  | 0149500701 | 65      | 237.565 | −31.715 | $4.53^{+1.14}_{-1.07} \pm 1.12$  | $0.49^{+0.58}_{-0.49} \pm 0.52$ | $4.53^{+1.14}_{-1.07} \pm 1.12$  | $0.49^{+0.58}_{-0.49} \pm 0.52$ |
|         |                  | 0149500801 | 65      | 237.566 | −31.715 | $7.45^{+1.54}_{-1.32} \pm 0.23$  | $1.16^{+0.75}_{-0.66} \pm 0.30$ | ...                              | ...                             |
|         |                  | 0149501201 | 65      | 237.542 | −31.685 | $5.01^{+1.16}_{-1.32} \pm 0.25$  | $0.82^{+0.68}_{-0.72} \pm 0.47$ | $5.01^{+1.16}_{-1.32} \pm 0.25$  | $0.82^{+0.68}_{-0.72} \pm 0.47$ |
| 157     | 2                | 0203360501 | 66      | 237.765 | +42.245 | $6.72^{+0.67}_{-0.84} \pm 0.25$  | $0.70 \pm 0.33 \pm 0.50$        | ...                              | ...                             |
|         |                  | 0302350501 | 66      | 237.745 | +42.256 | $8.71^{+0.81}_{-0.88} \pm 0.22$  | $0.70^{+0.41}_{-0.43} \pm 0.43$ | ...                              | ...                             |
| 158     | 3                | 0205650401 | ...     | 237.818 | −5.386  | $3.65^{+0.83}_{-0.85} \pm 0.57$  | $1.82^{+0.47}_{-0.39} \pm 0.50$ | $3.65^{+0.83}_{-0.85} \pm 0.57$  | $1.82^{+0.47}_{-0.39} \pm 0.50$ |
|         |                  | 0205650701 | 67      | 237.829 | −5.350  | $2.57^{+1.11}_{-1.13} \pm 1.11$  | $1.84^{+0.63}_{-0.62} \pm 0.50$ | ...                              | ...                             |
|         |                  | 0205650601 | 67      | 237.829 | −5.350  | $4.73^{+0.90}_{-1.03} \pm 0.51$  | $1.22^{+0.45}_{-0.48} \pm 0.64$ | $4.73^{+0.90}_{-1.03} \pm 0.51$  | $1.22^{+0.45}_{-0.48} \pm 0.64$ |
| 159     | 5                | 0151370101 | 68      | 238.014 | −54.617 | $6.37^{+0.92}_{-0.98} \pm 2.13$  | $0.63^{+0.53}_{-0.56} \pm 1.42$ | ...                              | ...                             |
|         |                  | 0205590301 | 68      | 237.985 | −54.608 | $5.41^{+0.54}_{-0.89} \pm 1.76$  | $1.14^{+0.39}_{-0.28} \pm 1.03$ | $6.10^{+1.68}_{-1.74} \pm 1.97$  | $0.79^{+0.97}_{-0.79} \pm 1.27$ |
|         |                  | 0505140201 | ...     | 237.924 | −54.594 | $3.92^{+0.68}_{-0.71} \pm 0.39$  | $1.31^{+0.34}_{-0.36} \pm 0.13$ | $3.70^{+0.84}_{-0.88} \pm 0.40$  | $1.34^{+0.45}_{-0.42} \pm 0.10$ |
|         |                  | 0505140501 | ...     | 237.924 | −54.593 | $2.98^{+0.65}_{-0.92} \pm 0.28$  | $0.88^{+0.49}_{-0.29} \pm 0.39$ | $3.61^{+0.99}_{-0.69} \pm 0.48$  | $1.34^{+0.47}_{-0.36} \pm 0.33$ |
|         |                  | 0151370701 | 68      | 237.970 | −54.589 | $6.94^{+2.16}_{-2.00} \pm 2.50$  | $1.31^{+1.09}_{-0.87} \pm 0.12$ | ...                              | ...                             |
|         |                  | 0032342301 | 69      | 239.136 | +30.629 | $6.07^{+1.62}_{-1.85} \pm 0.71$  | $0.80^{+0.82}_{-0.80} \pm 1.12$ | ...                              | ...                             |
| 160     | 11               | 0202611001 | 69      | 239.135 | +30.629 | $4.88^{+1.33}_{-1.18} \pm 0.16$  | $0.00^{+0.70}_{-0.70} \pm 0.53$ | $4.88^{+1.33}_{-1.18} \pm 0.16$  | $0.00^{+0.70}_{-0.70} \pm 0.53$ |
|         |                  | 0143630801 | 69      | 239.136 | +30.630 | $3.29^{+1.13}_{-1.17} \pm 0.35$  | $0.65^{+0.61}_{-0.60} \pm 0.44$ | $3.29^{+1.13}_{-1.17} \pm 0.35$  | $0.65^{+0.61}_{-0.60} \pm 0.44$ |
|         |                  | 0550061201 | ...     | 239.136 | +30.630 | $2.56^{+1.38}_{-1.32} \pm 0.22$  | $0.95^{+0.64}_{-0.62} \pm 0.07$ | $2.56^{+1.38}_{-1.32} \pm 0.22$  | $0.95^{+0.64}_{-0.62} \pm 0.07$ |
|         |                  | 0401880701 | ...     | 239.136 | +30.630 | $5.01^{+1.46}_{-1.42} \pm 0.35$  | $0.65^{+0.74}_{-0.65} \pm 0.16$ | $5.44^{+1.85}_{-1.81} \pm 0.47$  | $0.61^{+0.93}_{-0.61} \pm 0.67$ |
|         |                  | 0501930501 | ...     | 239.135 | +30.631 | $4.33^{+2.67}_{-1.06} \pm 0.98$  | $0.26^{+1.06}_{-0.26} \pm 0.35$ | ...                              | ...                             |
|         |                  | 0032342201 | ...     | 239.132 | +30.631 | $7.79^{+1.93}_{-1.85} \pm 1.45$  | $0.00^{+0.57}_{-0.00} \pm 0.57$ | $7.79^{+1.93}_{-1.85} \pm 1.45$  | $0.00^{+0.57}_{-0.00} \pm 0.57$ |
|         |                  | 0202611601 | 69      | 239.153 | +30.664 | $7.97^{+1.11}_{-0.99} \pm 0.95$  | $0.00^{+0.50}_{-0.00} \pm 0.43$ | ...                              | ...                             |
|         |                  | 0401880601 | ...     | 239.154 | +30.664 | $4.18^{+1.74}_{-1.28} \pm 0.21$  | $0.03^{+0.66}_{-0.03} \pm 0.50$ | $3.96^{+1.39}_{-1.21} \pm 0.34$  | $0.27^{+0.68}_{-0.27} \pm 0.64$ |
|         |                  | 0501930401 | ...     | 239.154 | +30.664 | $1.25^{+1.17}_{-0.82} \pm 1.05$  | $0.00^{+0.64}_{-0.00} \pm 0.22$ | ...                              | ...                             |
|         |                  | 0550061101 | ...     | 239.154 | +30.665 | $7.07^{+1.22}_{-1.25} \pm 0.80$  | $0.70^{+0.58}_{-0.59} \pm 0.31$ | ...                              | ...                             |
| 161     | 2                | 0203050201 | ...     | 243.475 | +45.767 | $5.59^{+0.73}_{-0.94} \pm 0.24$  | $1.00^{+0.42}_{-0.49} \pm 0.71$ | $5.68^{+0.88}_{-0.89} \pm 0.20$  | $0.76 \pm 0.51 \pm 0.78$        |
|         |                  | 0560180801 | ...     | 243.505 | +45.798 | $4.22^{+1.08}_{-0.72} \pm 0.34$  | $0.94^{+0.55}_{-0.38} \pm 0.36$ | $4.22^{+1.08}_{-0.72} \pm 0.34$  | $0.94^{+0.55}_{-0.38} \pm 0.36$ |
| 162     | 4                | 0200530801 | ...     | 244.033 | +56.096 | $5.55^{+2.07}_{-0.93} \pm 1.33$  | $1.04^{+0.50}_{-0.66} \pm 0.77$ | $5.55^{+2.07}_{-0.93} \pm 1.33$  | $1.04^{+0.50}_{-0.66} \pm 0.77$ |
|         |                  | 0200530501 | ...     | 244.034 | +56.097 | $3.99^{+0.86}_{-0.69} \pm 0.31$  | $0.43^{+0.47}_{-0.40} \pm 0.61$ | $3.99^{+0.86}_{-0.69} \pm 0.31$  | $0.43^{+0.47}_{-0.40} \pm 0.61$ |
|         |                  | 0200530301 | ...     | 244.075 | +56.135 | $5.92^{+1.27}_{-0.93} \pm 1.15$  | $1.46^{+0.67}_{-0.46} \pm 0.64$ | ...                              | ...                             |
|         |                  | 0200530401 | ...     | 244.075 | +56.135 | $4.39 \pm 0.81 \pm 0.76$         | $0.59 \pm 0.48 \pm 0.66$        | $4.39 \pm 0.81 \pm 0.76$         | $0.59 \pm 0.48 \pm 0.66$        |
| 163     | 9                | 0554510101 | ...     | 244.161 | −8.183  | $3.55^{+1.14}_{-1.09} \pm 0.65$  | $0.00^{+0.56}_{-0.00} \pm 0.36$ | $3.55^{+1.14}_{-1.09} \pm 0.65$  | $0.00^{+0.56}_{-0.00} \pm 0.36$ |
|         |                  | 0400140301 | ...     | 244.146 | −8.178  | $6.12^{+1.46}_{-0.95} \pm 2.18$  | $2.41^{+0.71}_{-0.54} \pm 1.01$ | $6.12^{+1.46}_{-0.95} \pm 2.18$  | $2.41^{+0.71}_{-0.54} \pm 1.01$ |
|         |                  | 0300520201 | ...     | 244.159 | −8.165  | $4.30^{+1.53}_{-0.81} \pm 0.66$  | $0.54^{+0.51}_{-0.46} \pm 0.59$ | ...                              | ...                             |
|         |                  | 0164560501 | ...     | 244.158 | −8.165  | $5.47^{+0.79}_{-0.81} \pm 0.97$  | $0.76 \pm 0.45 \pm 0.55$        | $5.47^{+0.79}_{-0.81} \pm 0.97$  | $0.76 \pm 0.45 \pm 0.55$        |
|         |                  | 0300520301 | ...     | 244.157 | −8.164  | $5.47^{+1.98}_{-0.91} \pm 0.42$  | $0.84^{+0.68}_{-0.43} \pm 0.20$ | ...                              | ...                             |
|         |                  | 0132520301 | ...     | 244.157 | −8.163  | $6.87^{+0.91}_{-1.05} \pm 0.78$  | $1.18^{+0.51}_{-0.54} \pm 0.39$ | $6.87^{+0.91}_{-1.05} \pm 0.78$  | $1.18^{+0.51}_{-0.54} \pm 0.39$ |
|         |                  | 0311590101 | ...     | 244.158 | −8.163  | $5.14^{+0.87}_{-0.72} \pm 0.59$  | $0.75^{+0.46}_{-0.40} \pm 0.72$ | $5.72^{+0.95}_{-0.97} \pm 1.35$  | $0.90^{+0.51}_{-0.50} \pm 0.62$ |
|         |                  | 0502710301 | ...     | 244.168 | −8.149  | $5.85^{+1.43}_{-1.04} \pm 0.37$  | $2.00^{+0.62}_{-0.54} \pm 0.12$ | $5.85^{+1.43}_{-1.04} \pm 0.37$  | $2.00^{+0.62}_{-0.54} \pm 0.12$ |
|         |                  | 0400140401 | ...     | 244.166 | −8.147  | $3.46^{+1.12}_{-0.99} \pm 0.75$  | $0.90^{+0.57}_{-0.59} \pm 0.73$ | $2.14^{+1.03}_{-1.08} \pm 1.38$  | $0.43^{+0.75}_{-0.43} \pm 0.42$ |
|         |                  | 0405100101 | ...     | 245.241 | −4.487  | $4.01^{+0.65}_{-0.52} \pm 0.31$  | $1.06^{+0.27}_{-0.26} \pm 0.28$ | ...                              | ...                             |
| 164     | 2                | 0405100201 | ...     | 245.241 | −4.487  | $5.02^{+0.63}_{-0.39} \pm 0.40$  | $1.37^{+0.24}_{-0.29} \pm 0.48$ | $5.07^{+0.75}_{-0.64} \pm 0.32$  | $1.24 \pm 0.32 \pm 0.26$        |
|         |                  | 0203560401 | ...     | 249.864 | +60.631 | $4.70^{+0.50}_{-0.49} \pm 0.33$  | $1.16^{+0.28}_{-0.26} \pm 0.10$ | ...                              | ...                             |
| 165     | 2                | 0203560201 | ...     | 249.862 | +60.631 | $5.38^{+0.49}_{-0.50} \pm 0.81$  | $0.46^{+0.25}_{-0.24} \pm 0.46$ | $4.98^{+0.63}_{-0.58} \pm 0.57$  | $0.45^{+0.34}_{-0.16} \pm 0.61$ |
|         |                  | 0112450301 | ...     | 253.698 | −19.158 | $10.54^{+1.89}_{-1.58} \pm 0.62$ | $1.08^{+0.77}_{-0.73} \pm 1.53$ | $10.54^{+1.89}_{-1.58} \pm 0.62$ | $1.08^{+0.77}_{-0.73} \pm 1.53$ |



Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                  | With proton flux filtering       |                                  |
|---------|------------------|------------|---------|---------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                           | (L.U.)                           | (L.U.)                           |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                              | (9)                              | (10)                             |
| 167     | 2                | 0555460201 | ...     | 253.696 | −19.157 | $5.37^{+0.70}_{-1.13} \pm 0.23$  | $0.51 \pm 0.40 \pm 0.65$         | ...                              | ...                              |
|         |                  | 0201901101 | ...     | 255.654 | −25.331 | $5.23^{+2.67}_{-2.23} \pm 0.34$  | $1.40^{+1.16}_{-1.14} \pm 0.11$  | $5.23^{+2.67}_{-2.23} \pm 0.34$  | $1.40^{+1.16}_{-1.14} \pm 0.11$  |
|         |                  | 0302610401 | ...     | 255.681 | −25.314 | $7.33^{+1.50}_{-1.36} \pm 0.55$  | $0.42^{+0.64}_{-0.42} \pm 0.51$  | ...                              | ...                              |
| 168     | 10               | 0163360201 | ...     | 255.886 | −4.727  | $9.46^{+0.77}_{-1.09} \pm 3.41$  | $2.75^{+0.39}_{-0.52} \pm 1.39$  | $10.18^{+0.87}_{-1.23} \pm 1.32$ | $2.89^{+0.46}_{-0.57} \pm 0.54$  |
|         |                  | 0159361101 | ...     | 255.977 | −4.707  | $4.30^{+1.45}_{-0.71} \pm 0.75$  | $1.96^{+0.70}_{-0.39} \pm 0.30$  | $3.96^{+0.72}_{-0.96} \pm 0.24$  | $1.76^{+0.59}_{-0.55} \pm 0.29$  |
|         |                  | 0159360501 | ...     | 255.977 | −4.707  | $4.44^{+1.15}_{-1.07} \pm 1.26$  | $1.67 \pm 0.55 \pm 0.44$         | $4.44^{+1.15}_{-1.07} \pm 1.26$  | $1.67 \pm 0.55 \pm 0.44$         |
|         |                  | 0159361301 | ...     | 255.975 | −4.705  | $6.47^{+0.83}_{-0.87} \pm 0.62$  | $1.85 \pm 0.41 \pm 0.24$         | $6.47^{+0.83}_{-0.87} \pm 0.62$  | $1.85 \pm 0.41 \pm 0.24$         |
|         |                  | 0095810401 | ...     | 255.975 | −4.705  | $9.56^{+0.82}_{-0.81} \pm 1.02$  | $2.82 \pm 0.41 \pm 0.40$         | $8.49^{+2.12}_{-2.18} \pm 1.37$  | $1.73^{+1.08}_{-1.11} \pm 0.96$  |
|         |                  | 0157160501 | ...     | 255.975 | −4.705  | $8.91^{+0.69}_{-1.19} \pm 0.33$  | $2.96^{+0.45}_{-0.55} \pm 0.16$  | ...                              | ...                              |
|         |                  | 0561380101 | ...     | 255.974 | −4.705  | $5.98^{+0.83}_{-0.76} \pm 1.77$  | $1.33^{+0.42}_{-0.37} \pm 0.75$  | $6.28^{+0.84}_{-0.79} \pm 2.05$  | $1.62^{+0.41}_{-0.39} \pm 0.55$  |
|         |                  | 0159360901 | ...     | 255.976 | −4.704  | $7.05^{+0.73}_{-1.05} \pm 1.22$  | $1.94^{+0.44}_{-0.51} \pm 0.69$  | $7.05^{+0.73}_{-1.05} \pm 1.22$  | $1.94^{+0.44}_{-0.51} \pm 0.69$  |
|         |                  | 0157160901 | ...     | 255.976 | −4.704  | $10.22^{+0.99}_{-0.67} \pm 0.59$ | $3.70^{+0.49}_{-0.37} \pm 0.21$  | $12.88^{+0.85}_{-1.30} \pm 3.66$ | $4.33^{+0.73}_{-0.39} \pm 1.04$  |
|         |                  | 0159360401 | ...     | 255.990 | −4.694  | $8.06^{+0.70}_{-0.69} \pm 0.71$  | $2.74^{+0.42}_{-0.30} \pm 0.23$  | ...                              | ...                              |
| 169     | 9                | 0141750501 | ...     | 257.421 | −5.003  | $9.84^{+0.94}_{-0.97} \pm 1.58$  | $1.76^{+0.53}_{-0.52} \pm 1.65$  | ...                              | ...                              |
|         |                  | 0552210301 | ...     | 257.416 | −4.999  | $8.84^{+1.49}_{-1.66} \pm 1.00$  | $3.05^{+0.88}_{-0.81} \pm 1.69$  | ...                              | ...                              |
|         |                  | 0552210201 | ...     | 257.426 | −4.983  | $8.53^{+1.51}_{-2.11} \pm 0.93$  | $3.41^{+0.82}_{-1.03} \pm 0.32$  | $7.46^{+1.64}_{-2.01} \pm 0.64$  | $3.41^{+0.89}_{-1.02} \pm 0.32$  |
|         |                  | 0552210401 | ...     | 257.426 | −4.983  | $9.02^{+1.81}_{-2.20} \pm 0.79$  | $2.91^{+0.98}_{-1.11} \pm 0.26$  | ...                              | ...                              |
|         |                  | 0552210901 | ...     | 257.426 | −4.983  | $11.00^{+2.28}_{-2.51} \pm 0.41$ | $5.10^{+1.24}_{-1.30} \pm 0.22$  | $11.00^{+2.28}_{-2.51} \pm 0.41$ | $5.10^{+1.24}_{-1.30} \pm 0.22$  |
|         |                  | 0552211101 | ...     | 257.426 | −4.983  | $9.84^{+1.95}_{-1.64} \pm 0.42$  | $0.61^{+0.90}_{-0.61} \pm 0.52$  | $9.84^{+1.95}_{-1.64} \pm 0.42$  | $0.61^{+0.90}_{-0.61} \pm 0.52$  |
|         |                  | 0552211001 | ...     | 257.441 | −4.971  | $8.42^{+2.07}_{-0.82} \pm 0.53$  | $3.69^{+0.95}_{-0.92} \pm 0.87$  | ...                              | ...                              |
|         |                  | 0106260201 | ...     | 257.435 | −4.968  | $14.53^{+1.36}_{-1.34} \pm 2.52$ | $5.18^{+0.81}_{-0.82} \pm 3.24$  | ...                              | ...                              |
|         |                  | 0552210601 | ...     | 257.428 | −4.964  | $11.30^{+1.65}_{-2.22} \pm 4.01$ | $5.13^{+0.69}_{-1.19} \pm 1.98$  | $11.30^{+1.65}_{-2.22} \pm 4.01$ | $5.13^{+0.69}_{-1.19} \pm 1.98$  |
|         |                  | 0141751101 | ...     | 258.163 | −44.386 | $4.56^{+0.94}_{-0.58} \pm 0.48$  | $0.78 \pm 0.36 \pm 0.70$         | ...                              | ...                              |
| 170     | 4                | 0141751001 | ...     | 258.162 | −44.385 | $6.02^{+0.85}_{-0.73} \pm 0.29$  | $0.00^{+0.28}_{-0.00} \pm 0.20$  | ...                              | ...                              |
|         |                  | 0141750101 | ...     | 258.162 | −44.385 | $5.65^{+0.53}_{-0.70} \pm 0.63$  | $0.34^{+0.30}_{-0.34} \pm 0.49$  | $5.51^{+0.80}_{-0.67} \pm 0.42$  | $0.43^{+0.41}_{-0.32} \pm 0.61$  |
|         |                  | 0141751201 | ...     | 258.110 | −44.380 | $5.90^{+0.64}_{-0.60} \pm 0.27$  | $1.10^{+0.36}_{-0.35} \pm 1.09$  | ...                              | ...                              |
|         |                  | 0506200301 | ...     | 260.159 | −17.689 | $4.15^{+1.02}_{-0.79} \pm 0.43$  | $1.02^{+0.51}_{-0.34} \pm 0.20$  | ...                              | ...                              |
| 171     | 3                | 0110890201 | ...     | 260.170 | −17.655 | $7.43^{+0.67}_{-0.68} \pm 0.49$  | $1.50 \pm 0.34 \pm 0.21$         | $7.43^{+0.67}_{-0.68} \pm 0.49$  | $1.50 \pm 0.34 \pm 0.21$         |
|         |                  | 0148010301 | ...     | 260.169 | −17.655 | $7.09^{+0.59}_{-0.62} \pm 0.26$  | $2.02^{+0.17}_{-0.41} \pm 0.22$  | ...                              | ...                              |
|         |                  | 0148000401 | ...     | 266.993 | −42.014 | $5.89^{+1.35}_{-1.52} \pm 0.28$  | $0.94^{+0.71}_{-0.37} \pm 1.04$  | ...                              | ...                              |
| 172     | 3                | 0148000601 | ...     | 266.973 | −41.980 | $8.81^{+1.89}_{-1.30} \pm 0.62$  | $4.47^{+1.02}_{-0.92} \pm 0.76$  | ...                              | ...                              |
|         |                  | 0148000201 | ...     | 266.977 | −41.977 | $9.06^{+1.31}_{-1.28} \pm 0.30$  | $1.43^{+0.65}_{-0.68} \pm 0.99$  | $10.92^{+2.71}_{-2.10} \pm 1.26$ | $0.91^{+1.26}_{-0.91} \pm 1.50$  |
|         |                  | 0208020101 | ...     | 267.497 | +74.304 | $5.25^{+0.63}_{-0.60} \pm 0.25$  | $0.38^{+0.38}_{-0.36} \pm 0.68$  | $5.25^{+0.63}_{-0.60} \pm 0.25$  | $0.38^{+0.38}_{-0.36} \pm 0.68$  |
| 173     | 3                | 0502050101 | ...     | 267.601 | +74.324 | $6.18^{+0.80}_{-0.71} \pm 0.51$  | $0.77^{+0.40}_{-0.35} \pm 0.34$  | $6.18^{+0.80}_{-0.71} \pm 0.51$  | $0.77^{+0.40}_{-0.35} \pm 0.34$  |
|         |                  | 0502050201 | ...     | 267.600 | +74.324 | $4.53^{+1.14}_{-0.88} \pm 0.22$  | $0.75^{+0.55}_{-0.48} \pm 0.13$  | $4.53^{+1.14}_{-0.88} \pm 0.22$  | $0.75^{+0.55}_{-0.48} \pm 0.13$  |
|         |                  | 0606150101 | ...     | 267.605 | +52.735 | $2.67^{+0.56}_{-0.63} \pm 0.77$  | $0.31^{+0.35}_{-0.31} \pm 0.26$  | $2.13^{+0.93}_{-0.75} \pm 0.94$  | $0.23^{+0.51}_{-0.23} \pm 0.45$  |
| 174     | 2                | 0202060201 | ...     | 267.656 | +52.756 | $6.07^{+0.69}_{-1.00} \pm 0.49$  | $0.80^{+0.38}_{-0.41} \pm 0.72$  | $6.07^{+0.69}_{-1.00} \pm 0.49$  | $0.80^{+0.38}_{-0.41} \pm 0.72$  |
|         |                  | 0110970201 | ...     | 270.228 | −51.890 | $5.82^{+1.70}_{-0.97} \pm 0.67$  | $1.82^{+0.81}_{-0.64} \pm 1.04$  | ...                              | ...                              |
|         |                  | 0110970301 | ...     | 270.345 | −51.844 | $6.85^{+0.87}_{-1.64} \pm 0.50$  | $2.19^{+0.56}_{-0.66} \pm 0.81$  | $6.85^{+0.87}_{-1.64} \pm 0.50$  | $2.19^{+0.56}_{-0.66} \pm 0.81$  |
| 175     | 4                | 0110970601 | ...     | 270.153 | −51.818 | $6.48^{+1.67}_{-1.08} \pm 1.20$  | $1.26^{+0.70}_{-0.57} \pm 0.86$  | $6.48^{+1.67}_{-1.08} \pm 1.20$  | $1.26^{+0.70}_{-0.57} \pm 0.86$  |
|         |                  | 0110970401 | ...     | 270.462 | −51.798 | $7.35^{+1.53}_{-1.01} \pm 0.24$  | $1.48^{+0.62}_{-0.54} \pm 0.81$  | $7.35^{+1.53}_{-1.01} \pm 0.24$  | $1.48^{+0.62}_{-0.54} \pm 0.81$  |
|         |                  | 0126511201 | ...     | 273.824 | −15.836 | $9.07^{+0.98}_{-1.04} \pm 2.31$  | $5.13^{+0.71}_{-0.45} \pm 0.59$  | $9.07^{+0.98}_{-1.04} \pm 2.31$  | $5.13^{+0.71}_{-0.45} \pm 0.59$  |
|         |                  | 0134531201 | ...     | 273.860 | −15.827 | $9.74^{+1.00}_{-1.11} \pm 0.40$  | $4.62 \pm 0.58 \pm 0.53$         | ...                              | ...                              |
|         |                  | 0134531301 | ...     | 273.860 | −15.827 | $7.86^{+1.83}_{-1.26} \pm 2.85$  | $4.49^{+0.90}_{-0.81} \pm 1.40$  | ...                              | ...                              |
| 176     | 4                | 0134531501 | ...     | 273.844 | −15.808 | $8.52^{+1.05}_{-0.68} \pm 2.38$  | $6.15 \pm 0.62 \pm 1.00$         | ...                              | ...                              |
|         |                  | 0162160501 | ...     | 276.402 | −29.801 | $7.71^{+0.99}_{-1.58} \pm 0.93$  | $1.30^{+0.58}_{-0.60} \pm 0.91$  | $7.71^{+0.99}_{-1.58} \pm 0.93$  | $1.30^{+0.58}_{-0.60} \pm 0.91$  |
|         |                  | 0162160301 | ...     | 276.399 | −29.799 | $7.18^{+1.61}_{-1.09} \pm 0.80$  | $1.39^{+0.86}_{-0.65} \pm 1.20$  | ...                              | ...                              |
|         |                  | 0162160101 | ...     | 276.396 | −29.796 | $6.14^{+0.85}_{-0.97} \pm 0.37$  | $1.33^{+0.52}_{-0.49} \pm 0.90$  | ...                              | ...                              |
| 177     | 3                | 0506530601 | ...     | 278.565 | −31.326 | $15.70^{+1.66}_{-2.46} \pm 1.59$ | $10.91^{+1.15}_{-1.56} \pm 0.93$ | $15.70^{+1.66}_{-2.46} \pm 1.59$ | $10.91^{+1.15}_{-1.56} \pm 0.93$ |
|         |                  | 0506531401 | ...     | 278.560 | −31.325 | $15.30^{+1.73}_{-1.76} \pm 0.19$ | $11.21^{+1.14}_{-1.16} \pm 0.98$ | $15.30^{+1.73}_{-1.76} \pm 0.19$ | $11.21^{+1.14}_{-1.16} \pm 0.98$ |
|         |                  | 0500860901 | ...     | 278.562 | −31.325 | $17.04^{+3.10}_{-1.94} \pm 3.17$ | $13.17^{+1.43}_{-1.29} \pm 2.16$ | $17.04^{+3.10}_{-1.94} \pm 3.17$ | $13.17^{+1.43}_{-1.29} \pm 2.16$ |
|         |                  | 0506530901 | ...     | 278.562 | −31.325 | $15.83^{+2.07}_{-1.16} \pm 0.99$ | $11.43^{+1.17}_{-1.30} \pm 1.31$ | $15.83^{+2.07}_{-1.16} \pm 0.99$ | $11.43^{+1.17}_{-1.30} \pm 1.31$ |

Table 4—Continued

| Dataset | $N_{\text{obs}}$ | Paper I    |         | Without proton flux filtering |         |                                  |                                  | With proton flux filtering       |                                  |
|---------|------------------|------------|---------|-------------------------------|---------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|         |                  | Obs. ID    | Dataset | $l$                           | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$              |
|         |                  |            |         | (deg)                         | (deg)   | (L.U.)                           | (L.U.)                           | (L.U.)                           | (L.U.)                           |
| (1)     | (2)              | (3)        | (4)     | (5)                           | (6)     | (7)                              | (8)                              | (9)                              | (10)                             |
| 179     | 2                | 0500860201 | ...     | 278.555                       | −31.323 | $12.66^{+2.26}_{-2.74} \pm 0.99$ | $14.40^{+1.62}_{-1.22} \pm 0.94$ | ...                              | ...                              |
|         |                  | 0500860701 | ...     | 278.585                       | −31.306 | $17.93^{+1.99}_{-2.11} \pm 1.28$ | $12.15^{+1.27}_{-1.30} \pm 1.07$ | $17.93^{+1.99}_{-2.11} \pm 1.28$ | $12.15^{+1.27}_{-1.30} \pm 1.07$ |
|         |                  | 0500860601 | ...     | 278.576                       | −31.291 | $16.01^{+1.54}_{-2.00} \pm 1.39$ | $11.62^{+1.01}_{-1.23} \pm 2.92$ | $16.01^{+1.54}_{-2.00} \pm 1.39$ | $11.62^{+1.01}_{-1.23} \pm 2.92$ |
|         |                  | 0111130101 | ...     | 278.843                       | −34.808 | $22.13^{+1.63}_{-1.45} \pm 1.03$ | $6.79^{+0.87}_{-0.92} \pm 3.55$  | ...                              | ...                              |
| 180     | 8                | 0111130701 | ...     | 278.841                       | −34.806 | $20.54^{+3.15}_{-0.96} \pm 1.37$ | $7.00 \pm 0.90 \pm 3.50$         | ...                              | ...                              |
|         |                  | 0151412101 | ...     | 280.792                       | −33.706 | $28.46 \pm 1.79 \pm 0.57$        | $13.15 \pm 1.20 \pm 5.99$        | ...                              | ...                              |
|         |                  | 0151412201 | ...     | 280.790                       | −33.706 | $30.11^{+1.68}_{-1.72} \pm 0.91$ | $12.54^{+1.09}_{-1.12} \pm 5.26$ | ...                              | ...                              |
|         |                  | 0151412301 | ...     | 280.788                       | −33.706 | $29.47^{+1.48}_{-1.62} \pm 2.31$ | $13.41^{+1.01}_{-1.09} \pm 6.01$ | $29.47^{+1.48}_{-1.62} \pm 2.31$ | $13.41^{+1.01}_{-1.09} \pm 6.01$ |
|         |                  | 0151412401 | ...     | 280.787                       | −33.705 | $32.54^{+2.91}_{-2.75} \pm 2.85$ | $15.42^{+1.82}_{-1.74} \pm 6.09$ | ...                              | ...                              |
|         |                  | 0151412501 | ...     | 280.786                       | −33.705 | $29.21^{+1.68}_{-1.67} \pm 0.74$ | $13.33^{+1.14}_{-1.13} \pm 6.62$ | ...                              | ...                              |
|         |                  | 0151412601 | ...     | 280.786                       | −33.704 | $28.42^{+1.78}_{-1.80} \pm 1.50$ | $12.51 \pm 1.18 \pm 6.51$        | ...                              | ...                              |
|         |                  | 0151412701 | ...     | 280.779                       | −33.699 | $29.11^{+1.58}_{-1.62} \pm 0.82$ | $14.79^{+1.07}_{-1.08} \pm 4.80$ | $29.11^{+1.58}_{-1.62} \pm 0.82$ | $14.79^{+1.07}_{-1.08} \pm 4.80$ |
| 181     | 2                | 0151412801 | ...     | 280.779                       | −33.699 | $31.32^{+1.68}_{-1.82} \pm 1.86$ | $14.16^{+1.07}_{-1.11} \pm 4.55$ | $30.99^{+2.34}_{-2.40} \pm 0.47$ | $14.35 \pm 1.46 \pm 4.40$        |
|         |                  | 0002942301 | ...     | 283.264                       | −78.255 | $5.28^{+1.61}_{-0.99} \pm 0.26$  | $2.47^{+0.71}_{-0.72} \pm 1.21$  | ...                              | ...                              |
|         |                  | 0550950101 | ...     | 283.259                       | −78.254 | $2.67^{+0.61}_{-0.57} \pm 0.31$  | $1.19^{+0.33}_{-0.29} \pm 0.28$  | $2.67^{+0.61}_{-0.57} \pm 0.31$  | $1.19^{+0.33}_{-0.29} \pm 0.28$  |
|         |                  | 0106860101 | ...     | 283.361                       | −44.627 | $9.11^{+0.90}_{-0.95} \pm 0.38$  | $3.84^{+0.53}_{-0.55} \pm 0.43$  | $9.08^{+1.25}_{-0.83} \pm 0.39$  | $4.01^{+0.67}_{-0.52} \pm 0.34$  |
| 182     | 2                | 0405090101 | ...     | 283.360                       | −44.625 | $6.03^{+0.51}_{-0.69} \pm 0.82$  | $2.25^{+0.36}_{-0.23} \pm 0.21$  | $4.32^{+0.59}_{-0.82} \pm 2.18$  | $1.92^{+0.31}_{-0.36} \pm 0.73$  |
|         |                  | 0301860101 | ...     | 283.491                       | −44.667 | $8.48^{+1.52}_{-1.02} \pm 0.71$  | $2.51^{+0.58}_{-0.50} \pm 0.29$  | ...                              | ...                              |
|         |                  | 0205230201 | ...     | 283.445                       | −44.586 | $7.47^{+1.84}_{-1.89} \pm 0.53$  | $3.54^{+1.01}_{-0.81} \pm 0.59$  | ...                              | ...                              |
|         |                  | 0205230301 | ...     | 283.439                       | −44.584 | $8.15^{+1.29}_{-1.14} \pm 0.41$  | $2.71^{+0.59}_{-0.60} \pm 1.00$  | ...                              | ...                              |
| 183     | 6                | 0150280601 | ...     | 283.481                       | −44.564 | $6.41^{+1.12}_{-1.08} \pm 1.00$  | $2.74^{+0.75}_{-0.73} \pm 0.88$  | $6.41^{+1.12}_{-1.08} \pm 1.00$  | $2.74^{+0.75}_{-0.73} \pm 0.88$  |
|         |                  | 0150280301 | ...     | 283.477                       | −44.558 | $8.66^{+1.55}_{-1.23} \pm 0.47$  | $1.84^{+0.85}_{-0.63} \pm 0.64$  | ...                              | ...                              |
|         |                  | 0205230501 | ...     | 283.469                       | −44.553 | $8.13^{+0.93}_{-0.88} \pm 0.40$  | $2.45^{+0.52}_{-0.51} \pm 0.52$  | ...                              | ...                              |
|         |                  | 0113050101 | ...     | 285.999                       | +6.658  | $13.82^{+0.94}_{-1.04} \pm 0.69$ | $3.97 \pm 0.52 \pm 1.69$         | $13.82^{+0.94}_{-1.04} \pm 0.69$ | $3.97 \pm 0.52 \pm 1.69$         |
| 184     | 2                | 0113050201 | ...     | 285.999                       | +6.658  | $13.28^{+0.61}_{-0.58} \pm 0.89$ | $4.42 \pm 0.33 \pm 1.46$         | $13.90^{+0.91}_{-0.69} \pm 1.96$ | $4.13^{+0.49}_{-0.42} \pm 2.22$  |
|         |                  | 0500070201 | ...     | 286.928                       | +42.462 | $9.47^{+2.27}_{-1.72} \pm 0.74$  | $0.65^{+0.91}_{-0.65} \pm 1.87$  | ...                              | ...                              |
|         |                  | 0500070301 | ...     | 286.928                       | +42.463 | $8.30 \pm 1.01 \pm 0.45$         | $1.09^{+0.53}_{-0.51} \pm 1.09$  | $8.30 \pm 1.01 \pm 0.45$         | $1.09^{+0.53}_{-0.51} \pm 1.09$  |
|         |                  | 0085220201 | ...     | 286.980                       | +42.468 | $11.02^{+0.54}_{-0.85} \pm 1.15$ | $2.46^{+0.62}_{-0.36} \pm 1.07$  | $11.02^{+0.54}_{-0.85} \pm 1.15$ | $2.46^{+0.62}_{-0.36} \pm 1.07$  |
| 185     | 5                | 0500070701 | ...     | 286.975                       | +42.474 | $9.75^{+1.21}_{-1.64} \pm 0.90$  | $0.73^{+0.57}_{-0.59} \pm 0.92$  | ...                              | ...                              |
|         |                  | 0500070601 | ...     | 286.974                       | +42.475 | $7.43^{+1.57}_{-0.95} \pm 0.54$  | $1.07^{+0.76}_{-0.51} \pm 0.52$  | $7.43^{+1.57}_{-0.95} \pm 0.54$  | $1.07^{+0.76}_{-0.51} \pm 0.52$  |
|         |                  | 0205770101 | ...     | 289.203                       | −22.072 | $9.19^{+0.47}_{-0.45} \pm 0.61$  | $2.59^{+0.24}_{-0.25} \pm 0.57$  | ...                              | ...                              |
|         |                  | 0306560301 | ...     | 289.178                       | −22.066 | $6.00^{+0.92}_{-0.70} \pm 0.94$  | $1.31^{+0.43}_{-0.33} \pm 0.57$  | ...                              | ...                              |
| 186     | 2                | 0504240101 | ...     | 293.356                       | +77.007 | $8.63^{+0.71}_{-1.16} \pm 1.02$  | $0.74^{+0.53}_{-0.27} \pm 0.61$  | $8.21^{+0.72}_{-0.78} \pm 0.25$  | $0.71 \pm 0.38 \pm 0.55$         |
|         |                  | 0202730301 | ...     | 293.361                       | +77.007 | $11.21^{+1.05}_{-0.99} \pm 0.32$ | $1.21^{+0.50}_{-0.41} \pm 1.42$  | ...                              | ...                              |
|         |                  | 0102040701 | ...     | 293.725                       | −80.899 | $8.97^{+2.01}_{-2.38} \pm 0.35$  | $0.57^{+1.07}_{-0.57} \pm 1.37$  | ...                              | ...                              |
|         |                  | 0205680101 | ...     | 293.723                       | −80.896 | $5.70^{+0.31}_{-0.46} \pm 0.66$  | $1.32^{+0.21}_{-0.23} \pm 0.69$  | $5.20^{+1.25}_{-1.24} \pm 0.59$  | $0.97 \pm 0.75 \pm 1.15$         |
| 187     | 2                | 0401930101 | ...     | 293.787                       | −80.881 | $3.07^{+0.82}_{-0.58} \pm 1.15$  | $0.75^{+0.43}_{-0.38} \pm 0.33$  | $3.07^{+0.82}_{-0.58} \pm 1.15$  | $0.75^{+0.43}_{-0.38} \pm 0.33$  |
|         |                  | 0202130201 | ...     | 295.260                       | −41.879 | $6.32^{+0.76}_{-0.86} \pm 0.37$  | $1.73^{+0.42}_{-0.53} \pm 0.15$  | ...                              | ...                              |
|         |                  | 0099840101 | ...     | 295.294                       | −41.873 | $10.39^{+0.97}_{-0.96} \pm 0.99$ | $3.03 \pm 0.50 \pm 0.55$         | ...                              | ...                              |
|         |                  | 0049150301 | ...     | 295.297                       | −41.858 | $14.67^{+2.11}_{-0.58} \pm 0.33$ | $3.12^{+0.51}_{-0.41} \pm 1.44$  | ...                              | ...                              |
| 188     | 3                | 0067140101 | ...     | 296.639                       | −15.552 | $5.98^{+1.34}_{-1.20} \pm 0.35$  | $1.55^{+0.53}_{-0.56} \pm 0.11$  | ...                              | ...                              |
|         |                  | 0067140201 | ...     | 296.639                       | −15.551 | $4.68^{+0.62}_{-0.70} \pm 0.20$  | $0.85 \pm 0.33 \pm 0.06$         | $4.68^{+0.62}_{-0.70} \pm 0.20$  | $0.85 \pm 0.33 \pm 0.06$         |
|         |                  | 0305860401 | ...     | 298.845                       | −79.468 | $5.98^{+1.15}_{-0.69} \pm 1.45$  | $1.27^{+0.42}_{-0.37} \pm 0.77$  | $6.66^{+1.04}_{-1.11} \pm 2.00$  | $1.45^{+0.54}_{-0.49} \pm 1.17$  |
|         |                  | 0305860301 | ...     | 298.924                       | −79.434 | $5.10^{+0.70}_{-0.68} \pm 0.95$  | $1.08 \pm 0.40 \pm 0.94$         | $5.10^{+0.70}_{-0.68} \pm 0.95$  | $1.08 \pm 0.40 \pm 0.94$         |
| 189     | 3                | 0112800101 | ...     | 299.261                       | −79.408 | $8.35 \pm 0.53 \pm 0.31$         | $2.54 \pm 0.30 \pm 0.68$         | ...                              | ...                              |
|         |                  | 0112800201 | ...     | 299.255                       | −79.406 | $7.61^{+0.63}_{-0.58} \pm 0.39$  | $2.34^{+0.35}_{-0.34} \pm 0.75$  | $7.71^{+1.17}_{-1.04} \pm 0.58$  | $2.13^{+0.64}_{-0.63} \pm 1.00$  |
|         |                  | 0103861601 | ...     | 299.454                       | −58.616 | $10.86^{+2.33}_{-1.86} \pm 0.36$ | $1.05^{+0.90}_{-0.94} \pm 1.51$  | ...                              | ...                              |
|         |                  | 0301890101 | ...     | 299.461                       | −58.578 | $5.96^{+0.72}_{-0.63} \pm 0.71$  | $0.96^{+0.35}_{-0.15} \pm 0.34$  | $6.24^{+0.61}_{-0.67} \pm 0.21$  | $0.73^{+0.34}_{-0.35} \pm 0.39$  |
| 190     | 2                | 0110000201 | ...     | 302.064                       | −44.945 | $16.47^{+1.36}_{-1.39} \pm 2.70$ | $6.44^{+0.81}_{-0.82} \pm 3.10$  | $16.47^{+1.36}_{-1.39} \pm 2.70$ | $6.44^{+0.81}_{-0.82} \pm 3.10$  |
|         |                  | 0304250501 | ...     | 302.076                       | −44.933 | $14.45^{+1.24}_{-1.27} \pm 0.84$ | $6.84^{+0.73}_{-0.74} \pm 0.96$  | ...                              | ...                              |
|         |                  | 0304250401 | ...     | 302.075                       | −44.932 | $13.18^{+1.17}_{-1.18} \pm 0.50$ | $5.92^{+0.74}_{-0.72} \pm 1.63$  | $13.43^{+1.31}_{-1.39} \pm 0.38$ | $5.16 \pm 0.84 \pm 1.48$         |
|         |                  | 0301151601 | ...     | 302.637                       | −46.511 | $7.62^{+1.16}_{-1.25} \pm 0.39$  | $2.22^{+0.66}_{-0.61} \pm 0.76$  | ...                              | ...                              |

Table 4—Continued

| Dataset | $N_{\text{Obs}}$ | Obs. ID    | Paper I |         |         | Without proton flux filtering    |                                 | With proton flux filtering       |                                 |
|---------|------------------|------------|---------|---------|---------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
|         |                  |            | Dataset | $l$     | $b$     | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             | $I_{\text{O VII}}$               | $I_{\text{O VIII}}$             |
|         |                  |            |         | (deg)   | (deg)   | (L.U.)                           | (L.U.)                          | (L.U.)                           | (L.U.)                          |
| (1)     | (2)              | (3)        | (4)     | (5)     | (6)     | (7)                              | (8)                             | (9)                              | (10)                            |
| 195     | 5                | 0301150101 | ...     | 302.649 | −46.507 | $5.19^{+1.52}_{-1.20} \pm 0.37$  | $1.15^{+0.68}_{-0.73} \pm 1.31$ | $5.19^{+1.52}_{-1.20} \pm 0.37$  | $1.15^{+0.68}_{-0.73} \pm 1.31$ |
|         |                  | 0125320701 | ...     | 303.434 | −64.989 | $8.29^{+0.98}_{-1.24} \pm 0.30$  | $1.12^{+0.51}_{-0.50} \pm 1.13$ | ...                              | ...                             |
|         |                  | 0125320401 | ...     | 303.435 | −64.988 | $9.08^{+1.30}_{-0.71} \pm 0.45$  | $2.47^{+0.42}_{-0.40} \pm 1.03$ | ...                              | ...                             |
|         |                  | 0125320501 | ...     | 303.435 | −64.988 | $6.15^{+1.62}_{-1.40} \pm 0.70$  | $2.63^{+0.83}_{-0.81} \pm 0.43$ | ...                              | ...                             |
|         |                  | 0133120301 | ...     | 303.458 | −64.977 | $8.45^{+1.01}_{-1.15} \pm 0.41$  | $2.00^{+0.57}_{-0.61} \pm 1.11$ | $8.45^{+1.01}_{-1.15} \pm 0.41$  | $2.00^{+0.57}_{-0.61} \pm 1.11$ |
| 196     | 2                | 0133120401 | ...     | 303.439 | −64.952 | $9.20^{+1.19}_{-1.02} \pm 0.58$  | $1.58 \pm 0.51 \pm 1.39$        | $9.20^{+1.19}_{-1.02} \pm 0.58$  | $1.58 \pm 0.51 \pm 1.39$        |
|         |                  | 0112310301 | ...     | 305.287 | +13.337 | $11.28^{+0.87}_{-1.60} \pm 1.45$ | $3.47^{+0.49}_{-0.61} \pm 0.79$ | ...                              | ...                             |
|         |                  | 0204870101 | ...     | 305.287 | +13.339 | $11.86^{+1.77}_{-1.21} \pm 0.74$ | $4.13^{+0.77}_{-0.65} \pm 0.86$ | $13.11^{+1.90}_{-1.23} \pm 1.37$ | $4.54^{+0.57}_{-1.22} \pm 0.73$ |
| 197     | 2                | 0302582201 | ...     | 312.072 | +56.658 | $8.97^{+1.01}_{-1.12} \pm 0.65$  | $1.94^{+0.51}_{-0.50} \pm 1.13$ | ...                              | ...                             |
|         |                  | 0502430101 | ...     | 312.023 | +56.673 | $9.09^{+1.08}_{-0.76} \pm 1.32$  | $1.32 \pm 0.43 \pm 1.56$        | ...                              | ...                             |
| 198     | 2                | 0148960801 | ...     | 312.698 | −73.182 | $6.94^{+0.97}_{-1.23} \pm 0.85$  | $2.51^{+0.49}_{-0.67} \pm 0.70$ | $6.72^{+1.02}_{-1.14} \pm 0.54$  | $2.45^{+0.56}_{-0.58} \pm 0.72$ |
|         |                  | 0148960901 | ...     | 312.698 | −73.182 | $8.08^{+0.80}_{-0.72} \pm 0.83$  | $2.00^{+0.41}_{-0.40} \pm 1.09$ | $8.08^{+0.80}_{-0.72} \pm 0.83$  | $2.00^{+0.41}_{-0.40} \pm 1.09$ |
| 199     | 2                | 0206580101 | ...     | 313.567 | +45.502 | $8.62^{+0.85}_{-0.72} \pm 0.35$  | $3.15^{+0.51}_{-0.43} \pm 0.72$ | $8.62^{+0.85}_{-0.72} \pm 0.35$  | $3.15^{+0.51}_{-0.43} \pm 0.72$ |
|         |                  | 0506340101 | ...     | 313.537 | +45.521 | $6.15^{+1.04}_{-0.29} \pm 0.42$  | $2.67^{+0.41}_{-0.33} \pm 0.40$ | $7.38^{+0.82}_{-0.79} \pm 0.43$  | $3.22^{+0.52}_{-0.50} \pm 0.73$ |
| 200     | 2                | 0148961201 | ...     | 314.201 | −73.442 | $6.43^{+0.79}_{-0.74} \pm 0.34$  | $1.85^{+0.48}_{-0.47} \pm 1.02$ | $5.76^{+0.93}_{-0.95} \pm 0.27$  | $1.59^{+0.58}_{-0.59} \pm 0.87$ |
|         |                  | 0148961301 | ...     | 314.201 | −73.442 | $6.42^{+0.61}_{-0.57} \pm 0.65$  | $1.88^{+0.35}_{-0.33} \pm 0.79$ | ...                              | ...                             |
| 201     | 2                | 0503230101 | ...     | 314.536 | +31.779 | $12.92^{+1.39}_{-0.99} \pm 0.65$ | $3.25^{+0.73}_{-0.56} \pm 1.59$ | $12.92^{+1.39}_{-0.99} \pm 0.65$ | $3.25^{+0.73}_{-0.56} \pm 1.59$ |
|         |                  | 0552080101 | ...     | 314.493 | +31.785 | $14.76^{+0.75}_{-1.24} \pm 2.80$ | $3.35^{+0.69}_{-0.41} \pm 0.61$ | ...                              | ...                             |
| 202     | 3                | 0125910501 | ...     | 317.252 | +84.747 | $8.50^{+1.73}_{-1.50} \pm 0.50$  | $1.97^{+0.90}_{-0.93} \pm 1.36$ | ...                              | ...                             |
|         |                  | 0125911101 | ...     | 317.260 | +84.749 | $6.76^{+1.08}_{-1.14} \pm 0.69$  | $1.60^{+0.64}_{-0.73} \pm 1.60$ | $8.91^{+1.80}_{-1.81} \pm 0.13$  | $2.65 \pm 0.95 \pm 1.24$        |
|         |                  | 0165570101 | ...     | 317.052 | +84.749 | $7.59^{+0.77}_{-0.54} \pm 0.46$  | $0.96^{+0.37}_{-0.32} \pm 1.33$ | ...                              | ...                             |
| 203     | 5                | 0021750101 | ...     | 321.537 | −15.258 | $14.44^{+2.20}_{-1.77} \pm 0.75$ | $4.82^{+0.97}_{-0.92} \pm 1.23$ | ...                              | ...                             |
|         |                  | 0021750401 | ...     | 321.537 | −15.258 | $16.67^{+1.69}_{-1.64} \pm 0.59$ | $5.43^{+1.00}_{-0.90} \pm 1.42$ | ...                              | ...                             |
|         |                  | 0021750501 | ...     | 321.536 | −15.258 | $14.57^{+1.33}_{-1.03} \pm 0.72$ | $5.28 \pm 0.57 \pm 0.62$        | ...                              | ...                             |
|         |                  | 0021750601 | ...     | 321.536 | −15.258 | $10.88^{+2.68}_{-2.08} \pm 0.59$ | $5.47^{+1.24}_{-1.16} \pm 0.28$ | ...                              | ...                             |
|         |                  | 0021750701 | ...     | 321.536 | −15.258 | $13.05^{+1.01}_{-0.95} \pm 0.60$ | $5.63^{+0.56}_{-0.55} \pm 1.21$ | $12.65^{+1.15}_{-1.09} \pm 1.17$ | $5.32^{+0.66}_{-0.63} \pm 1.10$ |
| 204     | 2                | 0505380901 | ...     | 325.338 | −57.477 | $6.92^{+1.77}_{-1.82} \pm 0.16$  | $2.19^{+0.97}_{-0.95} \pm 0.69$ | $6.92^{+1.77}_{-1.82} \pm 0.16$  | $2.19^{+0.97}_{-0.95} \pm 0.69$ |
|         |                  | 0505384801 | ...     | 325.344 | −57.475 | $5.94^{+1.11}_{-1.40} \pm 0.42$  | $0.97^{+0.64}_{-0.83} \pm 0.96$ | $5.94^{+1.11}_{-1.40} \pm 0.42$  | $0.97^{+0.64}_{-0.83} \pm 0.96$ |
| 205     | 2                | 0401790901 | ...     | 326.095 | +13.990 | $18.19^{+1.71}_{-1.66} \pm 0.73$ | $6.07^{+1.05}_{-1.04} \pm 3.22$ | ...                              | ...                             |
|         |                  | 0406410101 | ...     | 326.102 | +13.990 | $18.29^{+1.60}_{-1.46} \pm 1.32$ | $6.56^{+0.91}_{-0.87} \pm 3.84$ | ...                              | ...                             |
| 206     | 2                | 0200800201 | ...     | 326.316 | −82.796 | $6.86^{+0.58}_{-0.96} \pm 0.79$  | $2.65^{+0.33}_{-0.40} \pm 0.99$ | ...                              | ...                             |
|         |                  | 0200800101 | ...     | 326.337 | −82.760 | $4.69^{+0.77}_{-0.68} \pm 0.62$  | $0.61^{+0.50}_{-0.48} \pm 0.83$ | $4.74^{+0.89}_{-0.75} \pm 0.23$  | $0.48^{+0.62}_{-0.48} \pm 0.97$ |
| 207     | 2                | 0111251701 | ...     | 337.043 | −41.456 | $10.86^{+2.53}_{-1.83} \pm 0.84$ | $3.17^{+1.23}_{-1.11} \pm 2.03$ | $10.86^{+2.53}_{-1.83} \pm 0.84$ | $3.17^{+1.23}_{-1.11} \pm 2.03$ |
|         |                  | 0111251501 | ...     | 337.045 | −41.455 | $16.95^{+0.81}_{-1.25} \pm 0.27$ | $4.92^{+0.69}_{-0.71} \pm 2.08$ | ...                              | ...                             |
| 208     | 2                | 0510380101 | ...     | 338.529 | −56.621 | $4.90^{+1.28}_{-0.83} \pm 2.98$  | $1.73^{+0.65}_{-0.44} \pm 0.97$ | ...                              | ...                             |
|         |                  | 0109070401 | ...     | 338.493 | −56.614 | $10.38^{+2.14}_{-1.35} \pm 0.24$ | $2.74^{+0.41}_{-0.69} \pm 0.35$ | $10.38^{+2.14}_{-1.35} \pm 0.24$ | $2.74^{+0.41}_{-0.69} \pm 0.35$ |
| 209     | 2                | 0303900301 | ...     | 338.630 | +11.892 | $9.55^{+1.07}_{-0.67} \pm 1.96$  | $8.64^{+0.61}_{-0.48} \pm 1.38$ | $9.55^{+1.07}_{-0.67} \pm 1.96$  | $8.64^{+0.61}_{-0.48} \pm 1.38$ |
|         |                  | 0303900401 | ...     | 338.631 | +11.893 | $7.54^{+1.36}_{-0.72} \pm 0.43$  | $6.55^{+0.82}_{-0.83} \pm 0.28$ | ...                              | ...                             |
|         |                  | 0163560101 | ...     | 338.872 | +83.072 | $6.48^{+0.88}_{-0.82} \pm 0.44$  | $1.26^{+0.53}_{-0.52} \pm 1.11$ | $6.48^{+0.88}_{-0.82} \pm 0.44$  | $1.26^{+0.53}_{-0.52} \pm 1.11$ |
| 210     | 6                | 0402850701 | ...     | 338.859 | +83.072 | $4.90^{+1.76}_{-1.43} \pm 0.43$  | $0.92^{+0.86}_{-0.85} \pm 1.11$ | $4.90^{+1.76}_{-1.43} \pm 0.43$  | $0.92^{+0.86}_{-0.85} \pm 1.11$ |
|         |                  | 0305900601 | ...     | 338.871 | +83.074 | $6.24^{+1.28}_{-1.09} \pm 0.45$  | $0.90^{+0.71}_{-0.64} \pm 1.26$ | ...                              | ...                             |
|         |                  | 0157360101 | ...     | 338.755 | +83.083 | $9.51^{+0.75}_{-0.76} \pm 0.80$  | $1.51^{+0.40}_{-0.39} \pm 1.56$ | $10.19^{+1.17}_{-1.19} \pm 0.39$ | $1.77 \pm 0.63 \pm 1.60$        |
|         |                  | 0305900301 | ...     | 338.602 | +83.092 | $9.20^{+1.36}_{-1.28} \pm 0.31$  | $1.92^{+0.76}_{-0.70} \pm 1.29$ | $9.20^{+1.36}_{-1.28} \pm 0.31$  | $1.92^{+0.76}_{-0.70} \pm 1.29$ |
| 211     | 2                | 0402850401 | ...     | 338.604 | +83.093 | $7.36^{+1.80}_{-1.93} \pm 0.30$  | $0.02^{+1.02}_{-0.02} \pm 1.45$ | $7.36^{+1.80}_{-1.93} \pm 0.30$  | $0.02^{+1.02}_{-0.02} \pm 1.45$ |
|         |                  | 0555970301 | ...     | 345.371 | +40.503 | $8.17^{+1.36}_{-1.17} \pm 0.55$  | $4.00^{+0.79}_{-0.69} \pm 0.68$ | $8.17^{+1.36}_{-1.17} \pm 0.55$  | $4.00^{+0.79}_{-0.69} \pm 0.68$ |
|         |                  | 0555970401 | ...     | 345.372 | +40.503 | $7.34^{+0.81}_{-0.39} \pm 0.56$  | $4.80 \pm 0.46 \pm 0.23$        | ...                              | ...                             |
|         |                  | 0511581601 | ...     | 346.899 | +40.675 | $7.78^{+0.84}_{-0.86} \pm 0.98$  | $4.50^{+0.59}_{-0.51} \pm 0.52$ | $7.78^{+0.84}_{-0.86} \pm 0.98$  | $4.50^{+0.59}_{-0.51} \pm 0.52$ |
| 212     | 2                | 0511581401 | ...     | 346.899 | +40.675 | $7.72^{+1.64}_{-1.25} \pm 0.40$  | $3.60^{+0.94}_{-0.85} \pm 1.41$ | ...                              | ...                             |
|         |                  | 0112310201 | ...     | 348.097 | −65.712 | $6.33^{+0.84}_{-0.97} \pm 0.50$  | $2.35^{+0.56}_{-0.40} \pm 0.45$ | $6.33^{+0.84}_{-0.97} \pm 0.50$  | $2.35^{+0.56}_{-0.40} \pm 0.45$ |
| 213     | 2                | 0204610101 | ...     | 348.106 | −65.712 | $8.11^{+0.59}_{-0.57} \pm 1.86$  | $1.19^{+0.33}_{-0.30} \pm 1.10$ | ...                              | ...                             |
|         |                  | 0304080301 | ...     | 350.355 | −32.590 | $13.69^{+1.43}_{-2.31} \pm 0.60$ | $5.93^{+0.86}_{-1.14} \pm 0.99$ | ...                              | ...                             |
| 214     | 3                | 0304080401 | ...     | 350.355 | −32.590 | $13.34^{+1.99}_{-1.27} \pm 2.94$ | $4.80^{+0.82}_{-0.74} \pm 1.61$ | ...                              | ...                             |

Table 4—Continued

| Dataset | $N_{\text{obs}}$ | Obs. ID    | Paper I |              |              | Without proton flux filtering    |                                  | With proton flux filtering       |                                  |
|---------|------------------|------------|---------|--------------|--------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|         |                  |            | Dataset | $l$<br>(deg) | $b$<br>(deg) | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)    | $I_{\text{O VII}}$<br>(L.U.)     | $I_{\text{O VIII}}$<br>(L.U.)    |
| (1)     | (2)              | (3)        | (4)     | (5)          | (6)          | (7)                              | (8)                              | (9)                              | (10)                             |
| 215     | 2                | 0205920401 | ...     | 350.356      | −32.589      | $13.83^{+2.07}_{-1.22} \pm 1.71$ | $4.59^{+0.82}_{-0.88} \pm 1.02$  | ...                              | ...                              |
|         |                  | 0555650201 | ...     | 352.637      | +19.889      | $11.04^{+0.62}_{-0.54} \pm 2.57$ | $9.45^{+0.42}_{-0.33} \pm 1.33$  | $11.12^{+0.70}_{-0.83} \pm 2.32$ | $9.40^{+0.45}_{-0.48} \pm 2.40$  |
|         |                  | 0555650301 | ...     | 352.636      | +19.889      | $11.65^{+0.78}_{-0.57} \pm 1.89$ | $9.96^{+0.44}_{-0.42} \pm 1.75$  | $14.18^{+0.72}_{-2.46} \pm 5.13$ | $10.70^{+0.93}_{-0.79} \pm 1.71$ |
| 216     | 2                | 0415180101 | ...     | 358.590      | −17.237      | $18.30 \pm 1.23 \pm 1.80$        | $8.21 \pm 0.79 \pm 2.30$         | ...                              | ...                              |
|         |                  | 0201590101 | ...     | 358.614      | −17.226      | $21.14^{+1.32}_{-1.05} \pm 1.51$ | $8.32 \pm 0.64 \pm 3.22$         | ...                              | ...                              |
| 217     | 2                | 0112251301 | ...     | 358.694      | +64.785      | $17.61^{+0.48}_{-1.47} \pm 1.56$ | $10.12^{+0.74}_{-0.41} \pm 1.25$ | ...                              | ...                              |
|         |                  | 0112250301 | ...     | 358.696      | +64.786      | $13.04^{+0.56}_{-1.21} \pm 0.68$ | $7.04^{+0.36}_{-0.76} \pm 1.02$  | ...                              | ...                              |