

13th SAS Workshop

10 – 14 June 2013

XMM-Newton Science Operations Centre

European Space Astronomy Centre, Madrid, Spain

XMM-NEWTON



SAS

The XMM-Newton Science Archive (XSA)

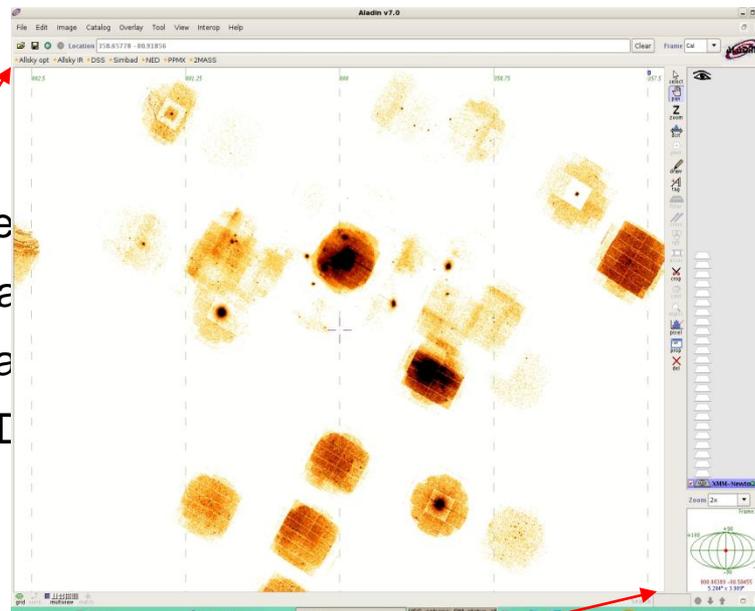


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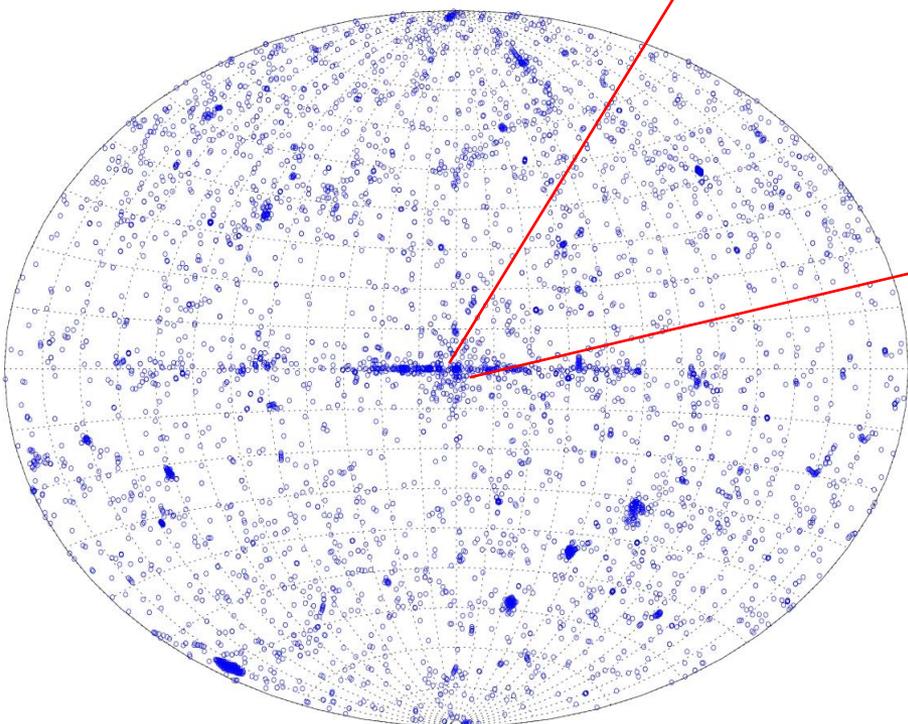
Nora Loiseau

Content of the XSA:

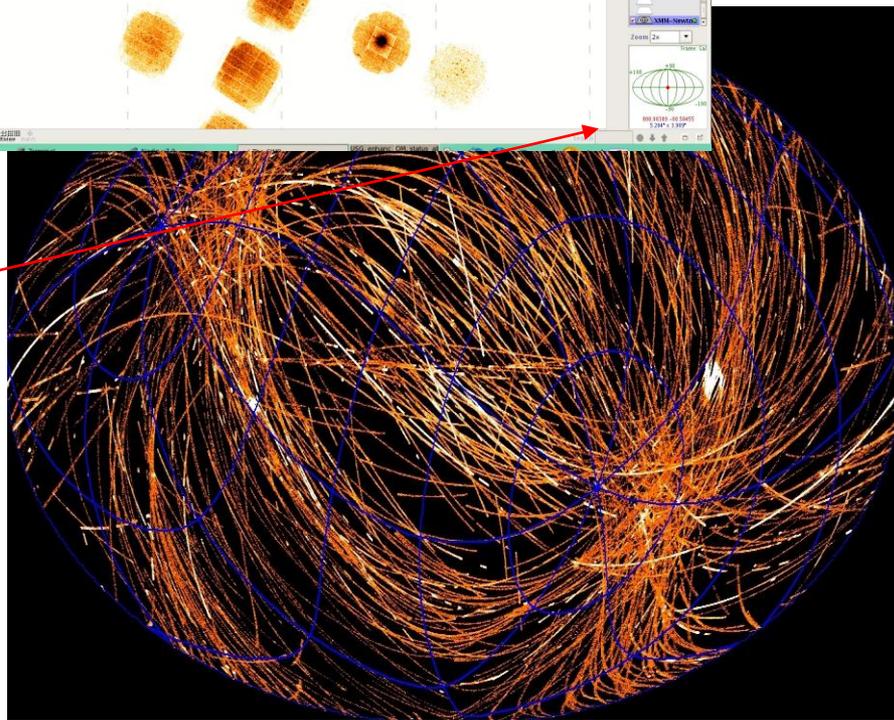
- > 9800 pointed observations
- > 2800 slew observations (> 133800 Slew Observations)
- 353191 EPIC sources (2XMMi-DR3 catalog)
- 753578 OM sources (XMMOM, SUSS catalog)
- 13617 Slew Survey sources (XMMSL1 Database)



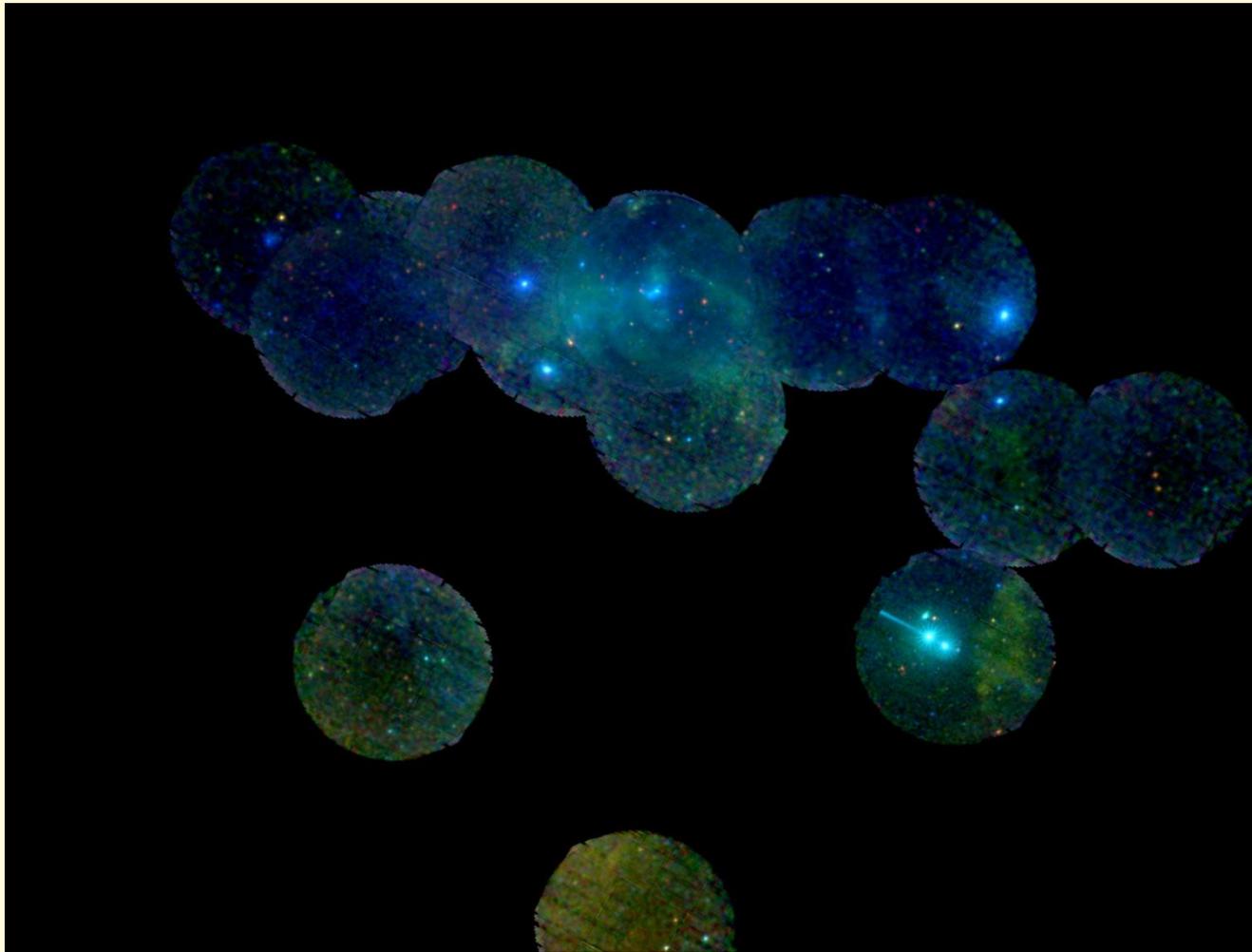
es)



Pointed Observations – P. Rodriguez



Slew observations – A. Read



Galactic Centre region – Pedro Rodriguez



<http://xmm.esac.esa.int/xsa>

XMM-Newton Science Archive (XSA)

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Access to XMM-Newton Data and Source Catalogs

To access the XSA via a Java Desktop application please use the following link:

[Start the XMM-Newton Science Archive \(XSA\) Web Start](#)

To run the XSA as a Desktop Application you must have Java Web Start installed on your computer. The Java Web Start software is a component of the Java Runtime Environment (JRE), which may be downloaded [here](#). For more details see [XSA FAQ](#).

Alternatively, you can access the XSA through the **user interface**:

[Start the XMM-Newton Science Archive \(XSA\) Applet](#)

To use the XSA Archive through a web browser it must be Java compliant, if not please install the latest Java2 following the instructions provided [here](#). If you still have problems, go to the [XSA FAQ](#). Please check the [FULL LIST](#) of options for accessing the XSA interface.

To access the XSA data **directly** through the Archive InterOperability System (AIO) please use:

[AIO tool for direct access to the XSA database](#)

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Tools

FLIX Upper limit and image cut-out from XMM-Newton 2XMMi catalogue images	Tool provided by the XMM-Newton Survey Science Centre (SSC), available via LEDAS.
"Upper Limit Server" for XMM-Newton pointed and slew observations	Tool to calculate the maximum count rate and flux which could be produced by a source at the input position in a given image. See the User Guide .
AIO: Postcard Tool, SIAP Tool, Product tool	AIO is a system to access the content of the XSA database without invoking the user interface applet. It can be used via a SOCKET or through different tools. See the Manual .

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Download Full XMM-Newton Catalogues

Alongside all XMM-Newton scientific data products and observation-related information, three high-level catalogues or multiwavelength datasets can be accessed through the XSA user interface or downloaded from the links below: the 2XMMi-DR3 **Serendipitous EPIC Source Catalogue**, the XMM-OM **Serendipitous Ultra-violet Source Survey Catalogue**, the **Slew Survey EPIC Source Catalogue** and the **XID program WFC/INT images**.

2XMMi-DR3 Serendipitous EPIC Source Catalogue	Download the FITS table Download the CSV table	Documentation (Maintained by the SSC consortium)
Slim version of the 2XMMi-DR3 catalogue	Download the FITS table Download the CSV table	Documentation (Maintained by the SSC consortium)
The Slew Survey EPIC Source Catalogue	Download the FITS table (FULL) Download the FITS table (CLEAN)	Documentation
XMM-OM Serendipitous Ultra-violet Source Survey (SUSS) Catalogue	Download the FITS table	Documentation (Maintained by MSSL)
XID program WFC/INT images	Browse them through XSA user interface	Documentation (Maintained by the SSC consortium)

Alongside the XSA user interface, 2XMMi-DR3 is also available at:

- LEDAS ([LEicester Database and Archive Service](#))
- XCAT-DB at the Observatoire Astronomique de Strasbourg
 - HEASARC

Previous versions of the XMM Serendipitous EPIC Source Catalogue can be found [here](#).

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Documentation

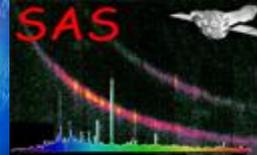
XSA Interface FAQ	Frequently Asked Questions for the XSA browser interface.
XSA Usage FAQ	How to accomplish specific search or retrieval tasks.
XSA Demos and Guided Tour	A walkthrough of the XSA to guide new users.
XMM-Newton Science Data Products Guide	A short guide to XMM-Newton science data products.
Caveats for XSA	Known issues with the current version of the XMM-Newton Science Archive.
Data Quality Process for XMM-Newton Data	A description of the "Data Quality Process" applied to XMM-Newton Data and the "Data Quality Report" available for each observation.
Article: "The XMM-Newton Science Archive"	Paper presented at the conference "New Visions of the X-ray Universe", ESTEC, Noordwijk, in November 2001

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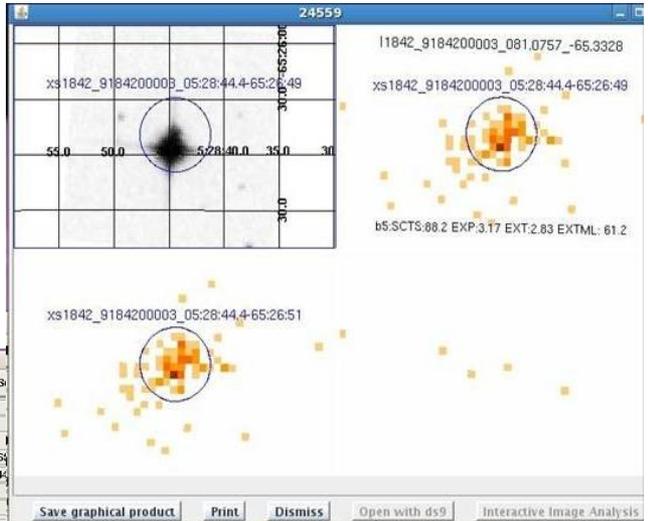
Questions, Comments

If you have questions about the XMM-Newton Science Archive please contact us via the [XMM-Newton Helpdesk](#)

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The screenshot shows the XMM-Newton Science Archive 7.0.2 web interface. The main search area includes a 'Principal Search Criteria' section with fields for 'Observation ID', 'File with Observation ID List', and 'Locate File'. Search options include 'Search Target By' (Name, Equatorial, Galactic, Ecliptic), 'Radius' (5 arcmin), and 'Target In FOV' (checked). A sidebar on the right lists observation frames with 'Image' buttons. The top navigation bar includes 'Query Specification', 'Latest Results', 'Shopping Basket', 'Login/Register', 'Logout', and 'Request Monitor'.



The screenshot shows the graphical product viewer interface. It features a 'File' menu, a 'Frame' list, and a 'Zoom' menu. The main display area shows a dark image with a bright source circled in orange. The 'Zoom' menu is open, showing options: 'to fit', 'zoom 1/8', 'zoom 1/4', 'zoom 1/2', 'zoom 1', 'zoom 2', 'zoom 4', and 'zoom 8'. The 'Frame' list shows 'Frame 1' with a zoom of 0.671 and an angle.

A new web based XSA will be release in a few weeks

XSA **test** version with data up to April 2013:

<http://nxsa.esac.esa.int>

You can try it !!



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Data for hands-on sessions

Three Options:

1. Use your own data
2. Download your favorite data from the XSA Archive

<http://xmm.esac.esa.int/xsa/>

2.1 Using XSA interface:

2.2 Direct download:

via URL:

<http://xsa.esac.esa.int:8080/aio/jsp/product.jsp?obsno=0112570401&level=ODF>

via aioclient commands:

download aioclient files from: <http://xsa.esac.esa.int:8080/aio/bin/aioclient.tar>

```
>setenv JDK_HOME /usr/local/jdk1.6.0_10
```

```
>./aioclient -S xsa.esac.esa.int -P 2002 -L "GET obsno=0112570401 level=ODF"
```

3. Use provided ODFs (by E. Ojero)



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