13th ESAC SAS Workshop
10th - 14th June 2013

Step-by-step guide to the RGS data analysis threads

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Two Threads:

- How to reduce RGS data and extract spectra of point-like sources

http://xmm.esac.esa.int/sas/current/documentation/threads/rgs_thread.shtml

- rgsproc, coordinates and masks

http://xmm.esac.esa.int/sas/current/documentation/threads/rgs_thread_2.shtml

How to reduce RGS data and extract spectra of point-like sources

- running rgsproc
- the output filenames
- useful checks:
  - ✓ coordinates
  - ✓ extraction regions position
  - ✓ high background periods

…and answers to some frequent questions

rgsproc, coordinates and masks

- How to deal with some common problems:

a) wrong source coordinates:
how to change the coordinates of the prime source

b) moderately extended sources:
how to change the size of the extraction region

c) several sources in the Field of View:
how to change the background region

RGS data for the hands-on session

AB Dor :
Active star, emission line object

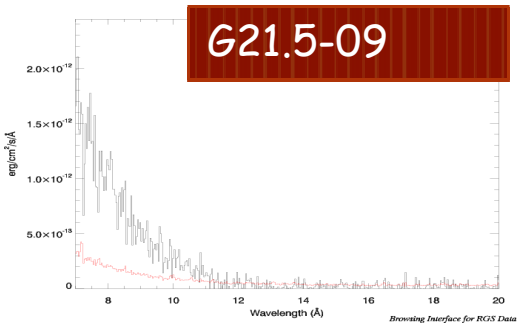
PKS 0558-504:
Quasar, continuum spectrum

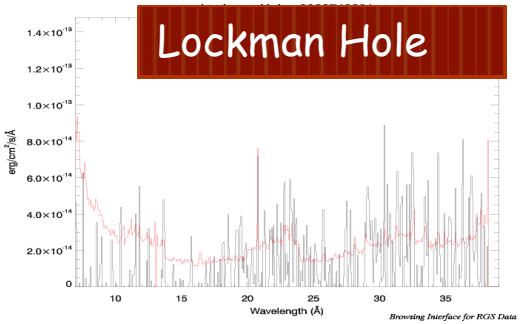
Mkn 421:
BL Lac, continuum spectrum

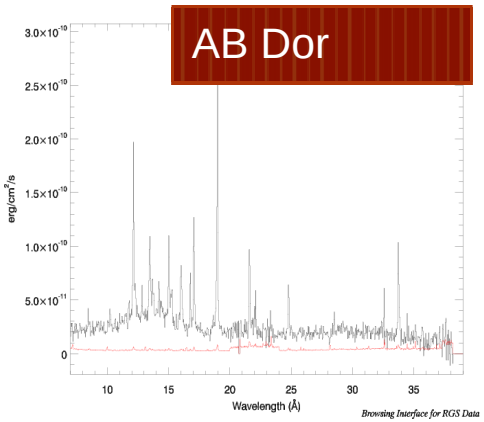
G21.5-09:
SNR, extended source

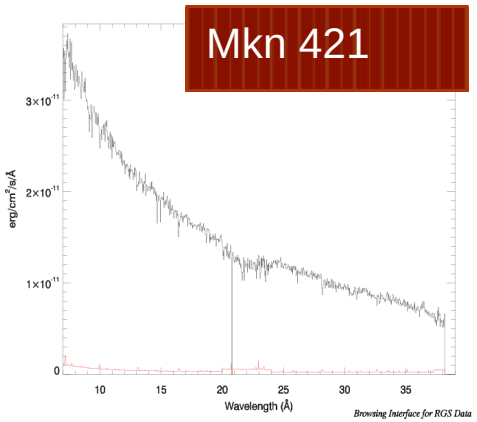
HD 13499:
F star, empty field

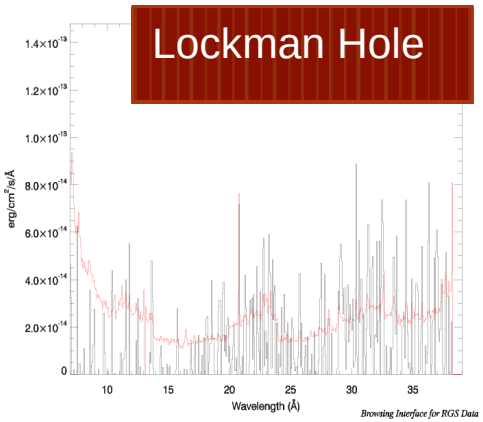
Lockman Hole:
Empty field

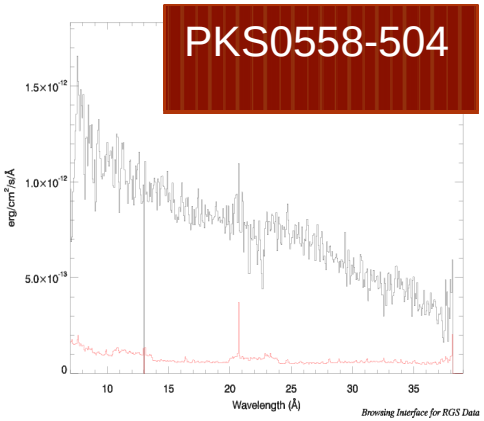


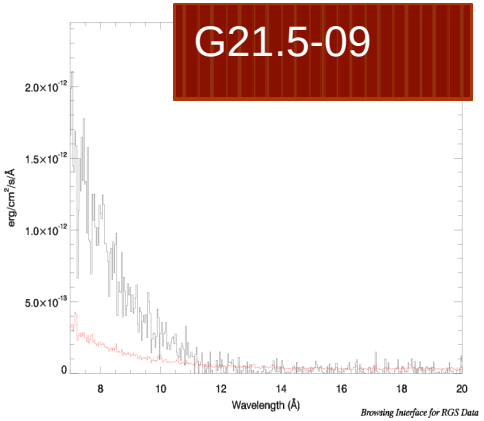


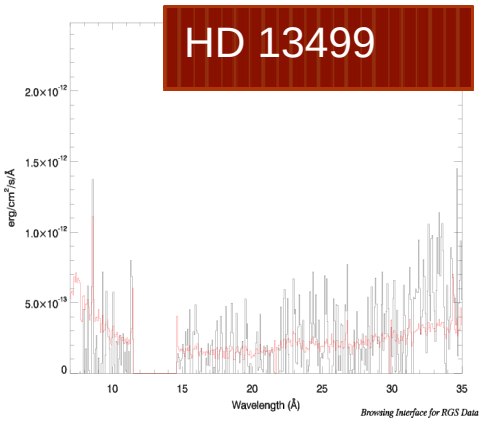

AB Dor
erg/cm²/s
Wavelength (Å)
Browsing Interface for RGS Data


Mkn 421
erg/cm²/s/Å
Wavelength (Å)
Browsing Interface for RGS Data


Lockman Hole
erg/cm²/s/Å
Wavelength (Å)
Browsing Interface for RGS Data


PKS0558-504
erg/cm²/s/Å
Wavelength (Å)
Browsing Interface for RGS Data


G21.5-09
erg/cm²/s/Å
Wavelength (Å)
Browsing Interface for RGS Data


HD 13499
erg/cm²/s/Å
Wavelength (Å)
Browsing Interface for RGS Data