

INTEGRAL Product Visualisation



Pieter-Jan Baeck, YGT

Tutor: Dr. O. R. Williams

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Outline

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Project Aims

Software tool: INVITE

Strengths and Advantages

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Introduction

INTEGRAL

International Gamma-Ray Astrophysics Laboratory

Launched in October 2002

Science Operations Centre (ISOC) at ESA

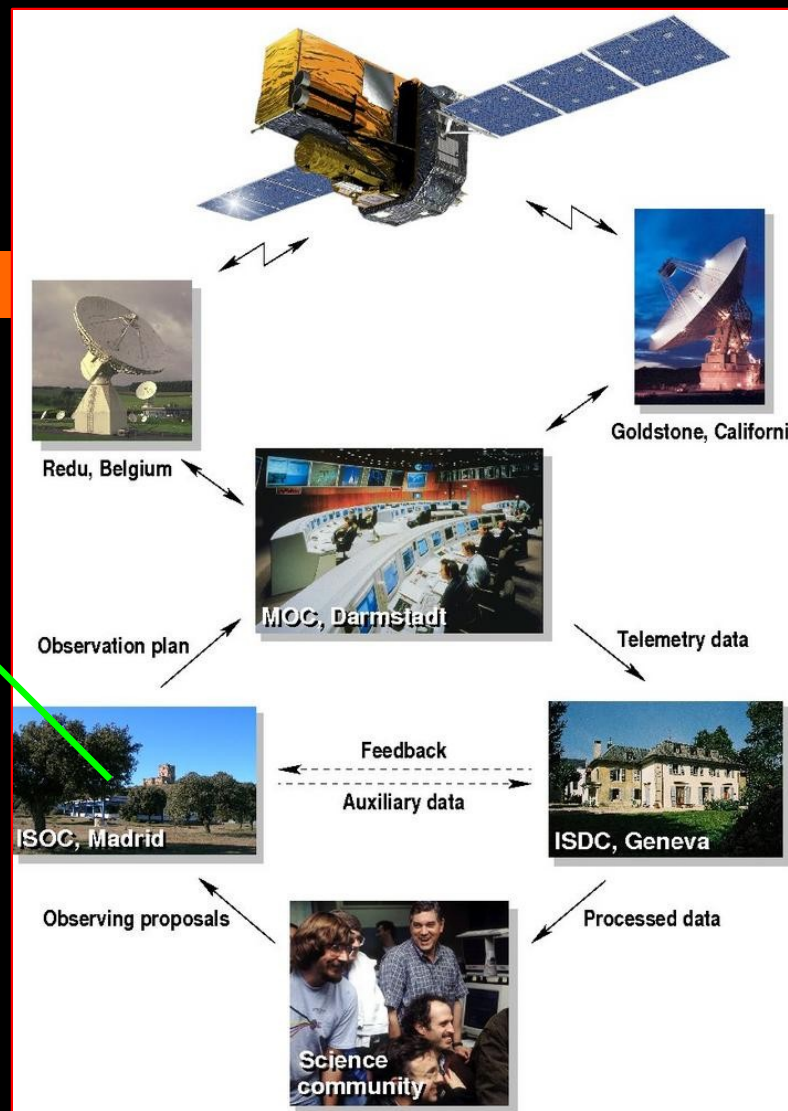
Operations approved until December 2010



Introduction

ISOC Science Data Archive (ISDA)

INTEGRAL data open to the astronomical community
 Encourage the widest possible community access to this data



Project Aims

Quick look facility

Launchable from the ISDA interface

Data input

Light curve data of the source of interest

Instruments: ISGRI, JEM-X, SPI, OMC

Passed by the ISDA

Image data

Accessed via GAIO (INTEGRAL “Virtual Observatory” compliant interface)

Project Aims

Data display, manipulation and generation

Easy manipulation of **light curve data**

- Select time binning

- Select and combine energy ranges

Generation of **hardness ratio's**

- Allow any combination of energy bands

- Simultaneously display parent light curves

Generation of **broad band spectra**

- For the period of interest

- Launch **Xspec** to perform a detailed spectral analysis

Project Aims

Data display, manipulation and generation

Generation of Images

Create a mosaic of science window images for the period of interest (if feasible)

Invoke DS9 or the SPDT to display and manipulate

Common options:

Scaling, color codes

Printing, viewing values

Saving as FITS or ASCII file

Software tool: INVITE

INVITE = Integral Visualisation Tool and Explorer

Java based Graphical User Interface

Example session

<http://integral.esac.esa.int/isda>

Strengths and Advantages

Making INTEGRAL data more accessible to the community:

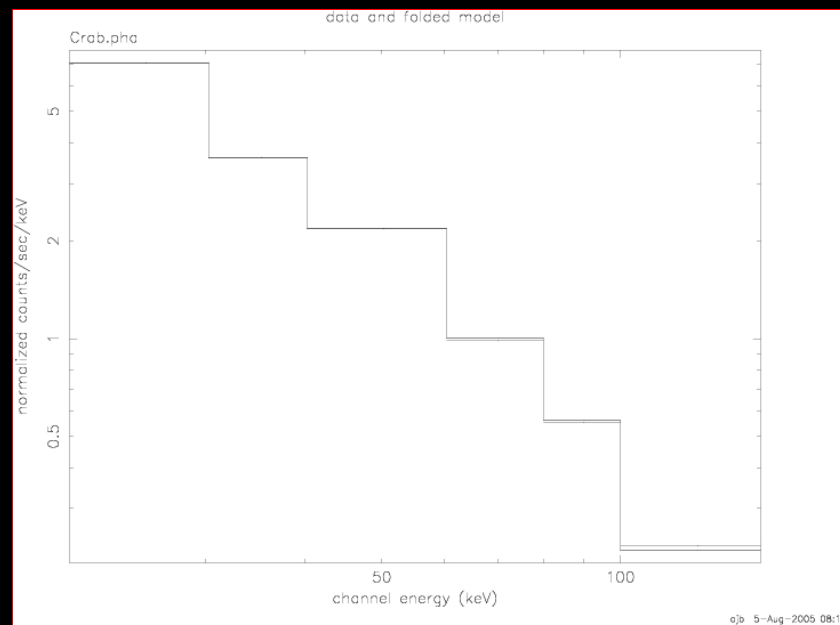
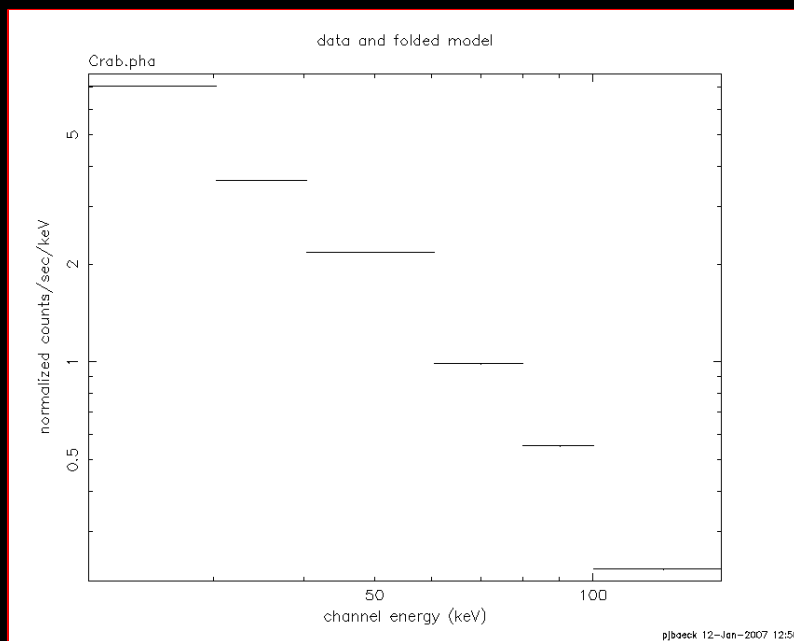
- Quick look at INTEGRAL data

- Easy display, manipulation and generation

- Guide subsequent detailed studies

Strengths and Advantages

Invoking other software for further analysis
Xspec for spectral analysis



Future possibilities

Image handling

Use of **GAIO** to directly access the database

Creation a mosaic of Science Window images

Invoking **DS9** or **SPDT** to display and manipulate

Publicising INVITE