INTEGRAL Product Visualisation

Pieter-Jan Baeck, YGT
Tutor: Dr. O. R. Williams
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Outline

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- Project Aims
- INtegral VIssualisation Tool & Explorer: INVITE
- Conclusions
- Future possibilities
Introduction

- **INTEGRAL**
  - International Gamma-Ray Astrophysics Laboratory
    - Launched in October 2002
  - Science Operations Centre (ISOC) at ESAC
    - Operations allowed until mid 2013
Introduction

- ISOC Science Data Archive (ISDA)
  - INTEGRAL data open to the astronomical community
  - Encourage the widest possible community access to this data
Project Aims

- Visualisation tool
  - Manipulate light-curves from INTEGRAL
    - Simultaneously display
    - Combine light-curves from different energy bands
    - Re-bin in time
  - Generate hardness ratios
  - Generate broad-band spectra
  - Generate images
INVITE

- **INVITE = Integral Visualisation Tool and Explorer**
  - Compact Java GUI (1.5 Mbyte)
    - Maven, Eclipse and CVS
    - nom.tam.fits and JFreeChart
  - Launchable from the ISDA with any source or as stand-alone application with any OGIP FITS file
  - VO services for reading
    - OMC light-curves using LAEFF's OMC archive
    - Image data using the GAIO
Conclusions

- Making INTEGRAL data more accessible to the community
  - Quick look at INTEGRAL data
  - Easy display, manipulation and generation

- Guide subsequent detailed studies
  - INVITE invokes other software for further analysis
    - XSPEC – spectral analysis
    - DS 9 – imaging and data visualisation
Future possibilities

- Data input
  - Reading in all data using the VO
- Image handling
  - Online mosaicing of Science Window images
- Publicising INVITE
  - Make it available on the INTEGRAL home page
I INVITE YOU TO USE INVITE!