INTEGRAL Product Visualisation

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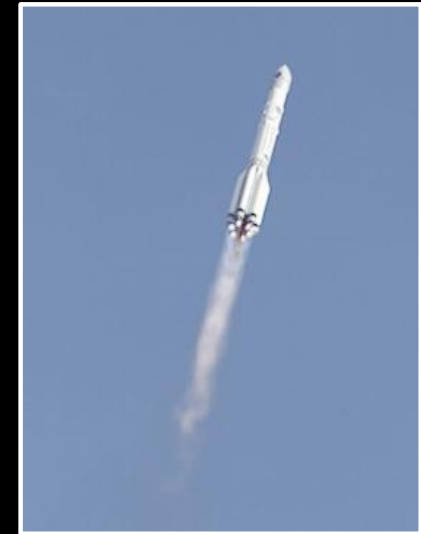
July 2006 – June 2007

Outline

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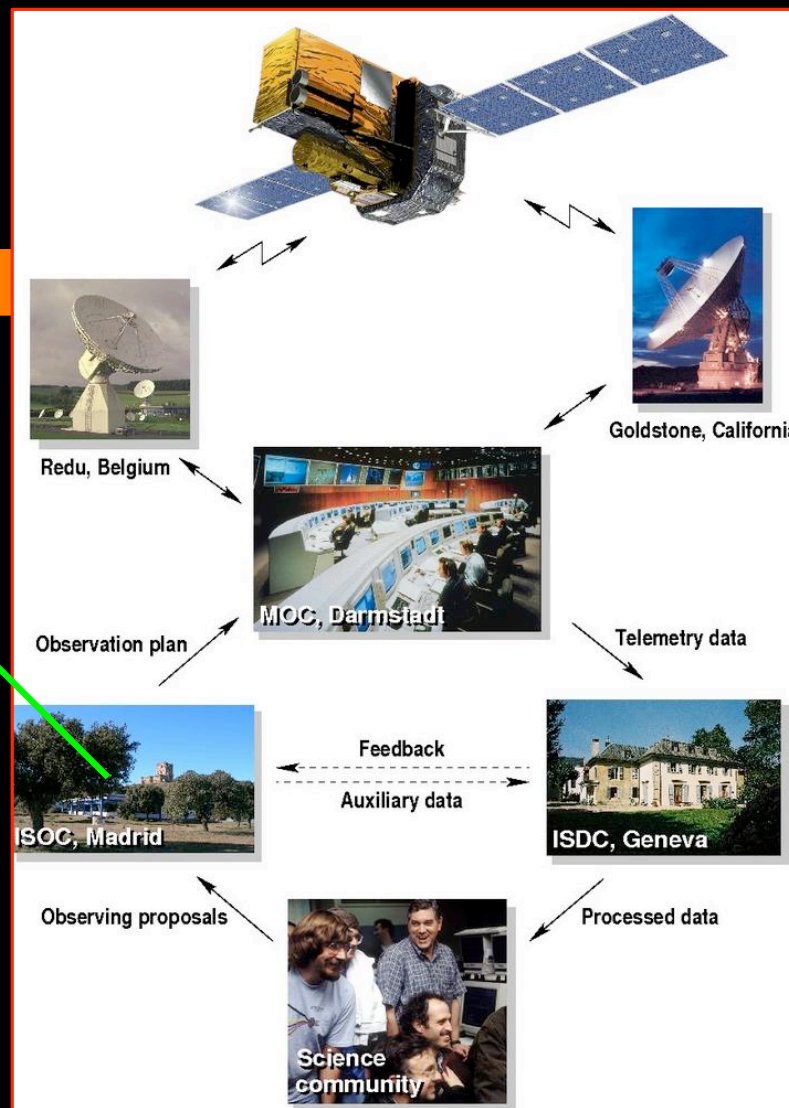- Conclusions
- Future possibilities

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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 !

9 July 2007, ESAC Alumni Meeting   Pieter-Jan Baeck, YGT