

ISDC for the INTEGRAL USER GROUP

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ESA, 18-19 January 2012

ISDC Status

- Swiss funding for 2012 approved. Operations guaranteed.
- Funding for 2013-2016 will be requested in due time later this year.
- Some changes in manpower allocation has been done at ISDC (new hire soon).
- The level of support for INTEGRAL is good.
- Re-organization of the Operation hardware and software to ease maintenance and increase performance is almost completed.

Quick look analysis of INTEGRAL data

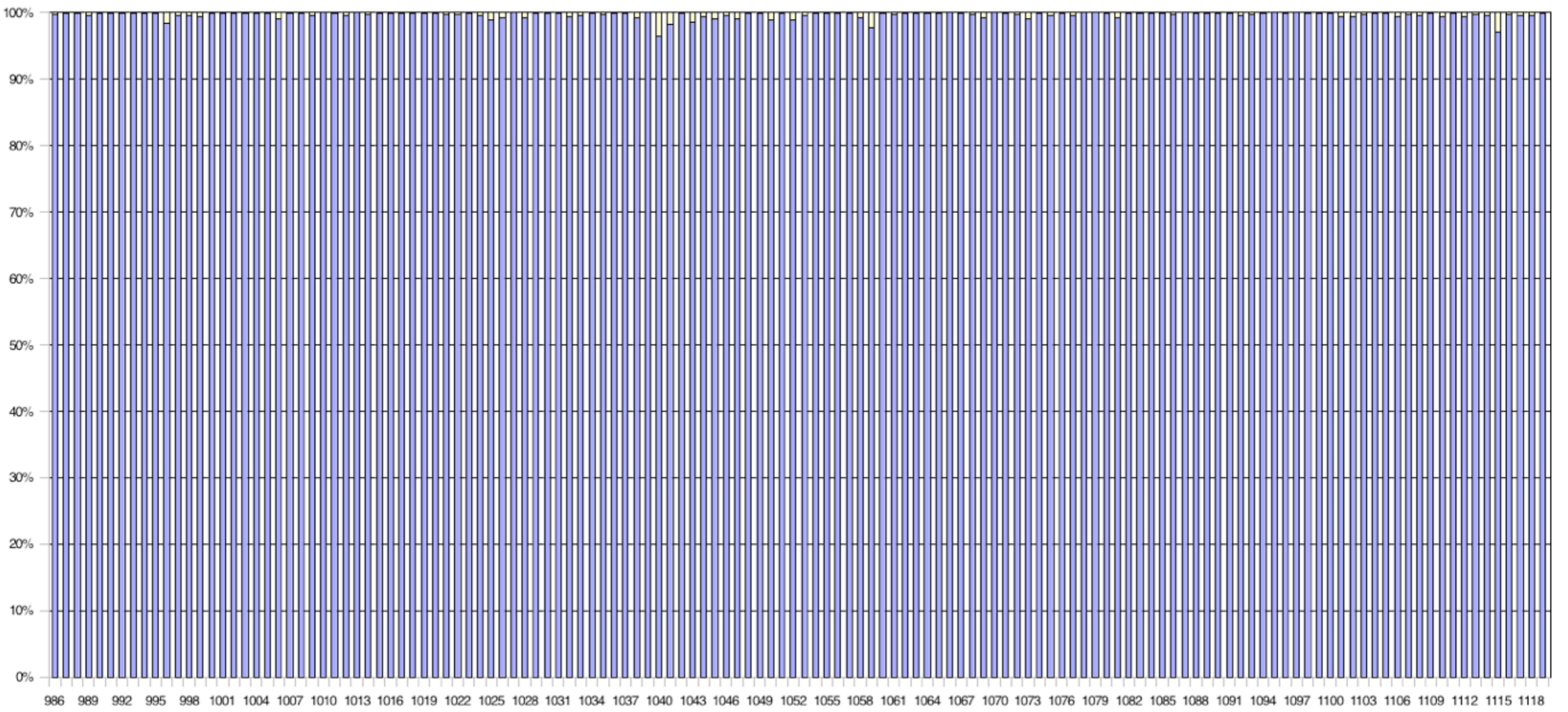
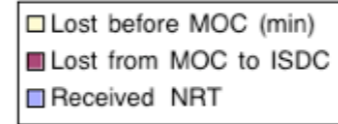
- 2 long GRB June 2011 - Jan 2012 in the IBIS Fov (2 followed up weak alerts, $6.5 < S/N < 8$ with no detection), 18.01.2012 Fake trigger from GX 304-I with OMC re-commanding.
- ~200 GRB/year in SPI ACS. Paper in preparation. Update of detection S/W foreseen. Used for IPN triangulation.
- Inform PI of Open programs of the observation status (not for public data).
- Inform all PIs of data rights in case of problems or relevant serendipitous sources (no data rights).
- 10 ATeLs after June 2011 related to INTEGRAL discoveries about half triggered and/or supported from ISDC staff: one accreting ms pulsar and one transient in globular cluster NGC 6388. Galactic center observations not performed due to observation of SN 2011fe.
- We inform the PI of public programs before using the observations.

ISDC Operations/data distribution

- NRT data are available **within 3 hours. Smooth processing.**
- The operational archive is now revision 3, including the new time correlation (NRT & CONS from rev. 1010).
- Planned a check on Crab absolute timing during the next observations.
- **Rev_3** reprocessing: completed and available. Not always used the JEM-X off-line energy calibration due to variable delivery time.

NRT telemetry

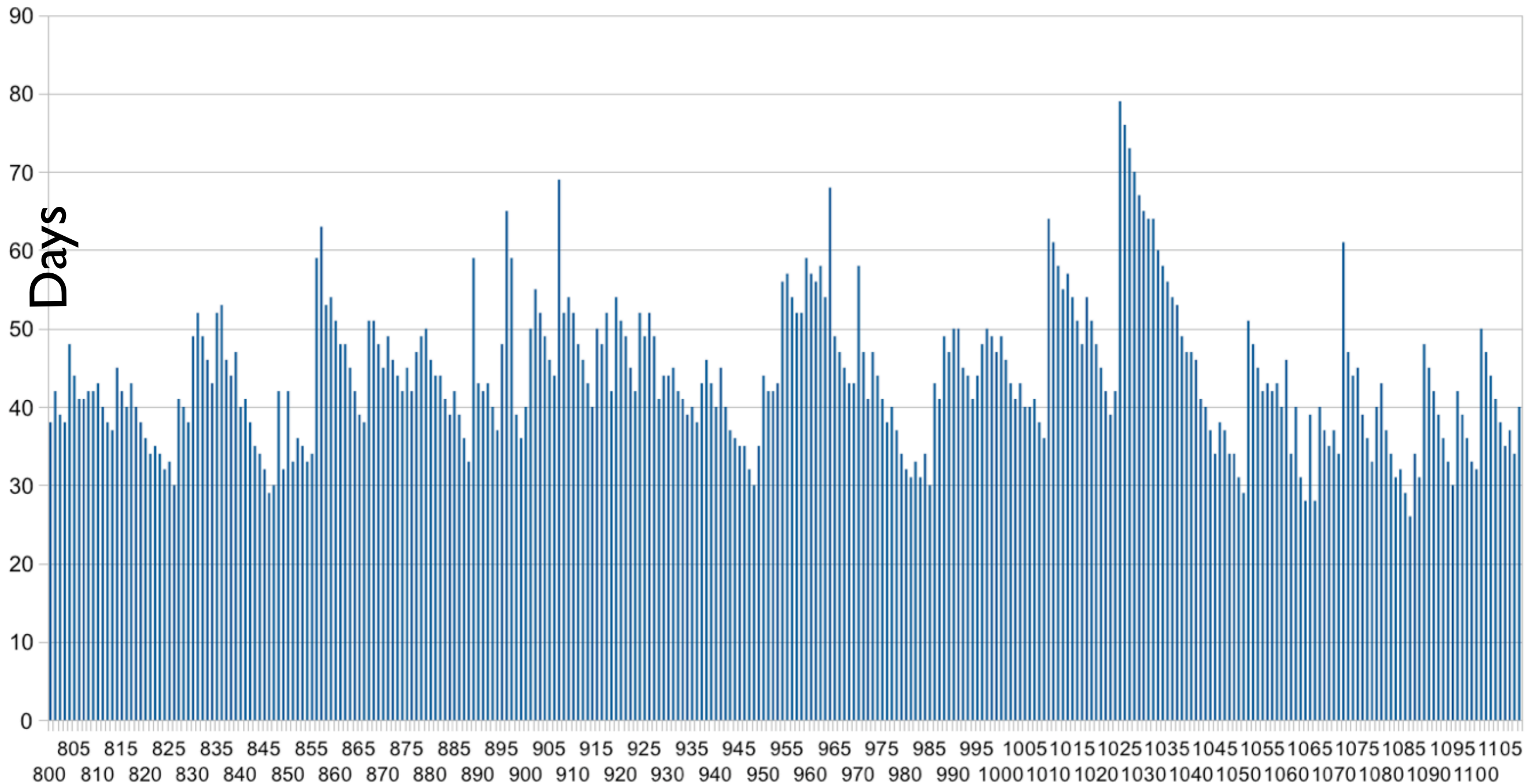
Real-time packets



Revolution

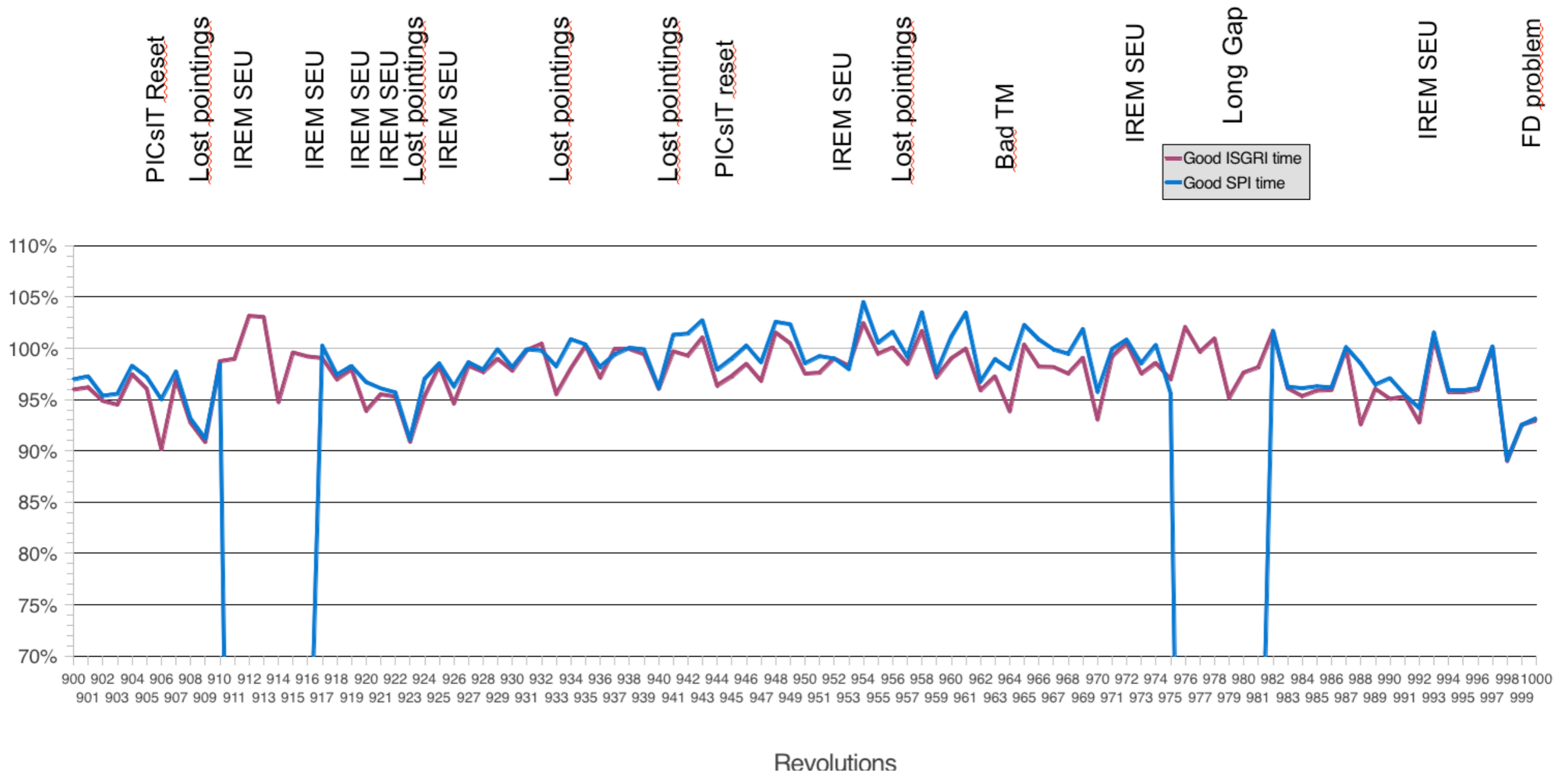
Cons distribution delay

Last processed revolution is 1109 (12-15 Nov 2011)



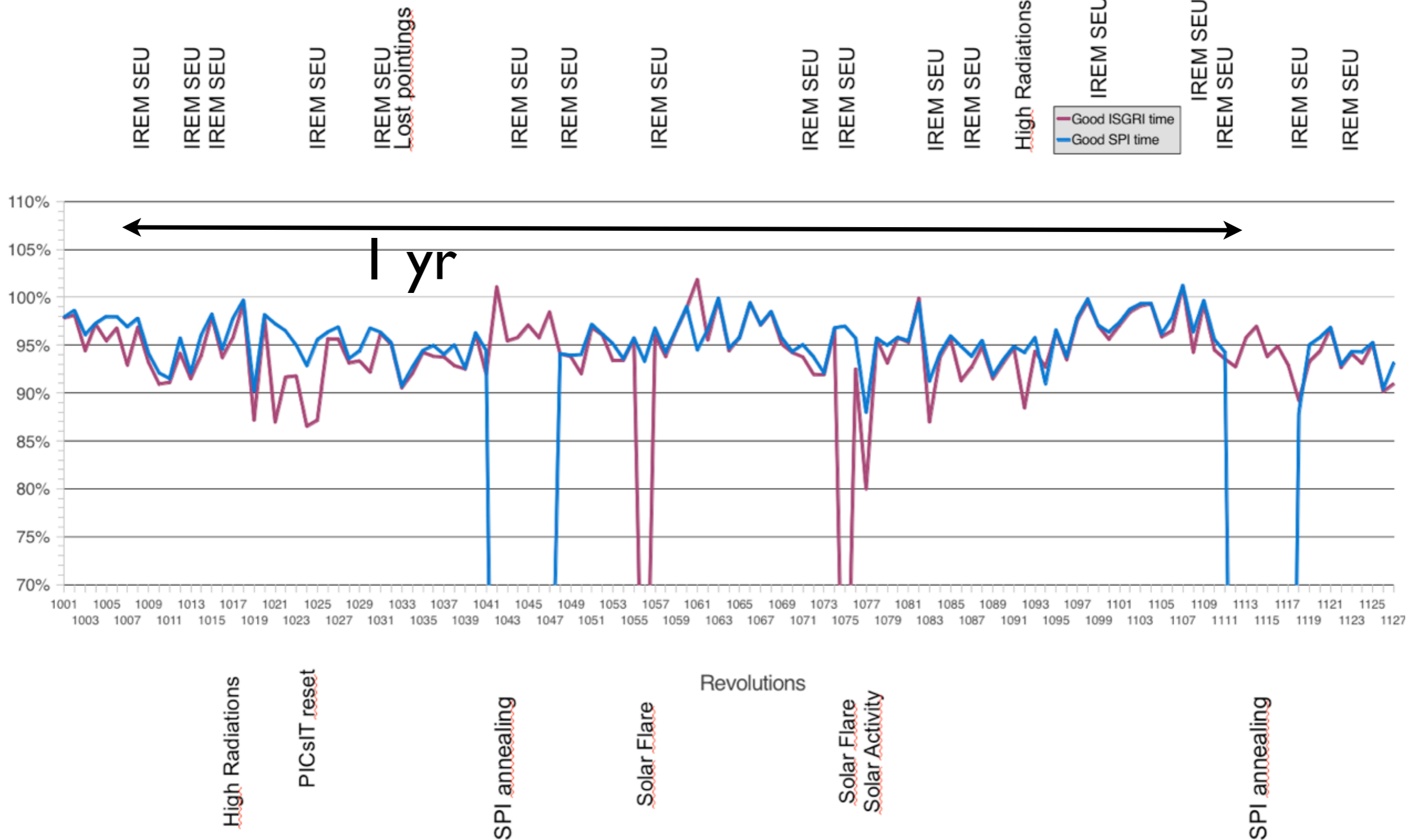
Action with MOC to switch to DVDs and speed up

Sum of Good time intervals wrt to planned time



← 1 year →

Sum of Good time intervals wrt to planned time



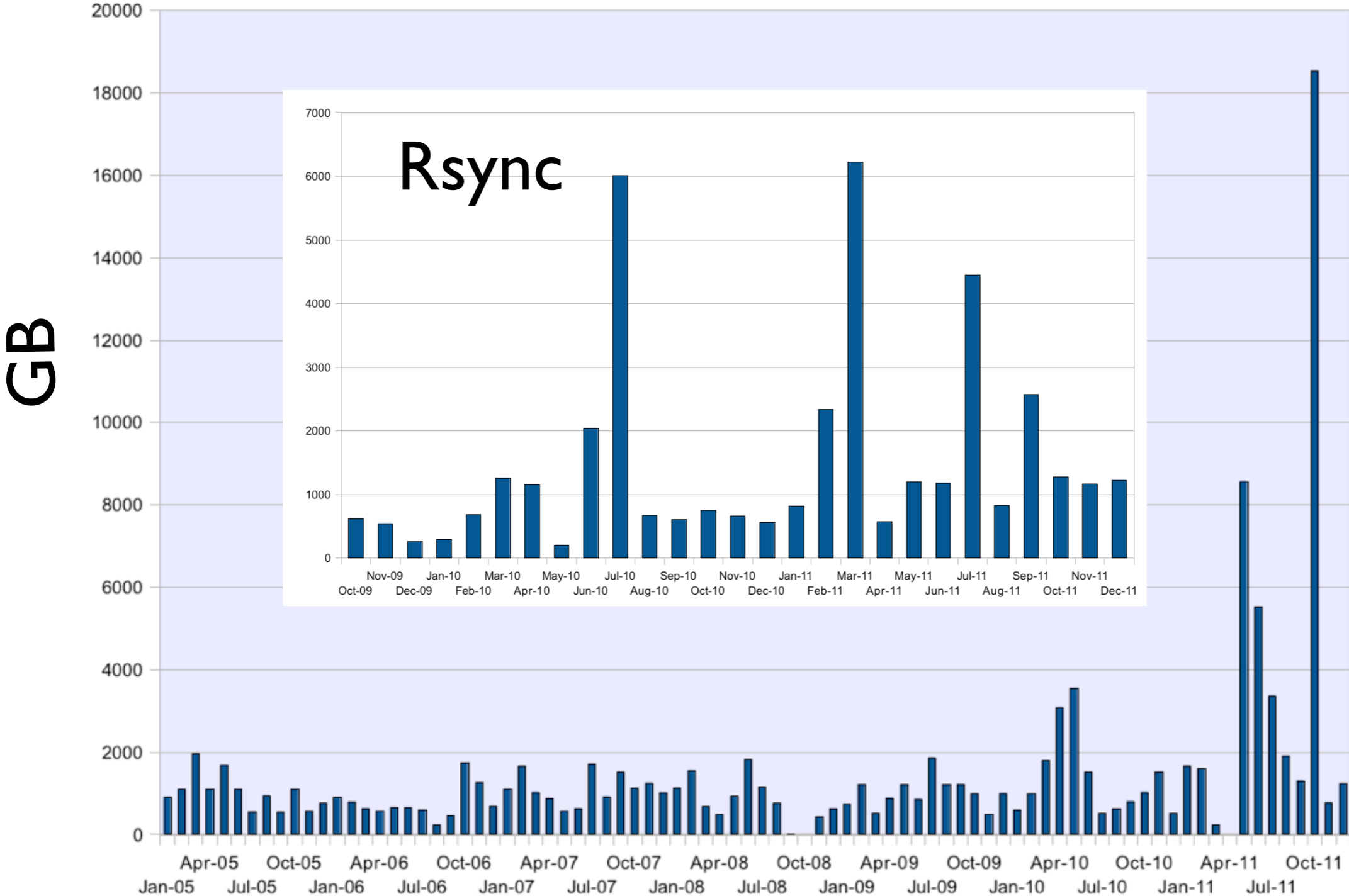
Solar activity reduces GTI

Data downloads

Month 2011	FTP		Browse		Rync		ESAC/ rsync (GB)	Total (GBytes)
	GBytes	accesses	MBytes	accesses	GBytes	accesses		
January	1661	62	327	104	814	28	437	2038
February	1600	76	504	114	2334	30	994	2940
March	228	29	707	121	6223	102	2797	3655
May	8570	52	243	84	1195	81	1	9764
June	5514	67	114	52	1178	38	225	6467
July	3367	43	388	78	4445	23	65	7747
August	1893	39	318	82	826	25	7	2712
September	1304	61	440	96	2568	29	550	3322
October	18541	432	350	112	1275	29	380	19436
November	728	174	182	116	1167	29	235	1660
December	1235	61	15	28	1224	27	180	2279

Transfer from France, UK, and Poland

FTP access statistics

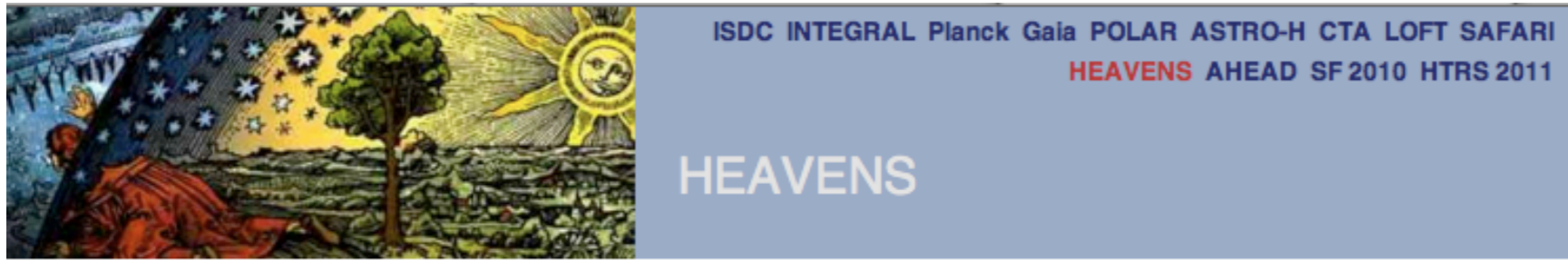


Increased in 2011
(Added Rsync since 2009)

OSA downloads

- OSA 9 software was downloaded 59 times in second half of 2011 (included internal downloads).
- Constant interest.

High level archive, HEAVENS



ISDC INTEGRAL Planck Gaia POLAR ASTRO-H CTA LOFT SAFARI
HEAVENS AHEAD SF 2010 HTRS 2011

HEAVENS

Query parameters About Help

News

- Fermi-LAT images and lightcurves are available, spectra and flexible parametrisation will soon follow.
- Average Planck spectra for point sources are now available.

Source name:

or RA DEC: Equatorial FK5

Time interval : MJD (TT)

Planck INTEGRAL OMC INTEGRAL JEM-X **INTEGRAL ISGRI** INTEGRAL PICsIT

INTEGRAL SPI INTEGRAL SPI ACS FERMILAT HEGRA INTEGRAL IREM

Sky image Energy band [keV]:

Lightcurve Min - Max:

with a bin size of hours

Spectrum

- Included **FERMI/LAT** and **Planck**.
- Extension of SPI spectra (P. Bordas, ISDC/IAAT).
- Inclusion of other instruments is in progress.

100-150 single accesses per month

Future activity

- Routine update of IC files.
- Next OSA release will be triggered by an ameliorated ISGRI energy calibration.
- Testing of NOMEX and ARFs before release.
- Minor bug fixes in rest of SW (e.g., JEM-X mosaics, DAL libraries). If JEM-X team is ready, we can include their updates.
- Extend HEAVENS to other missions (RXTE, XMM).

IBIS calibration

- As soon as IBIS team will provide the calibration, tests will start
- Assess energy calibration with cross checking of team tests
- Check if NOMEX correction is affected by the new energy scale (some support from P. Lubinski will be possible)
- Structure of tests should be defined. ISDC coordination?