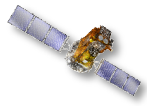
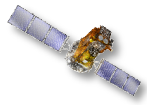


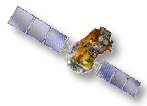
Project Scientist Status Report



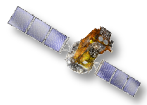
Observatory status



Community interfaces

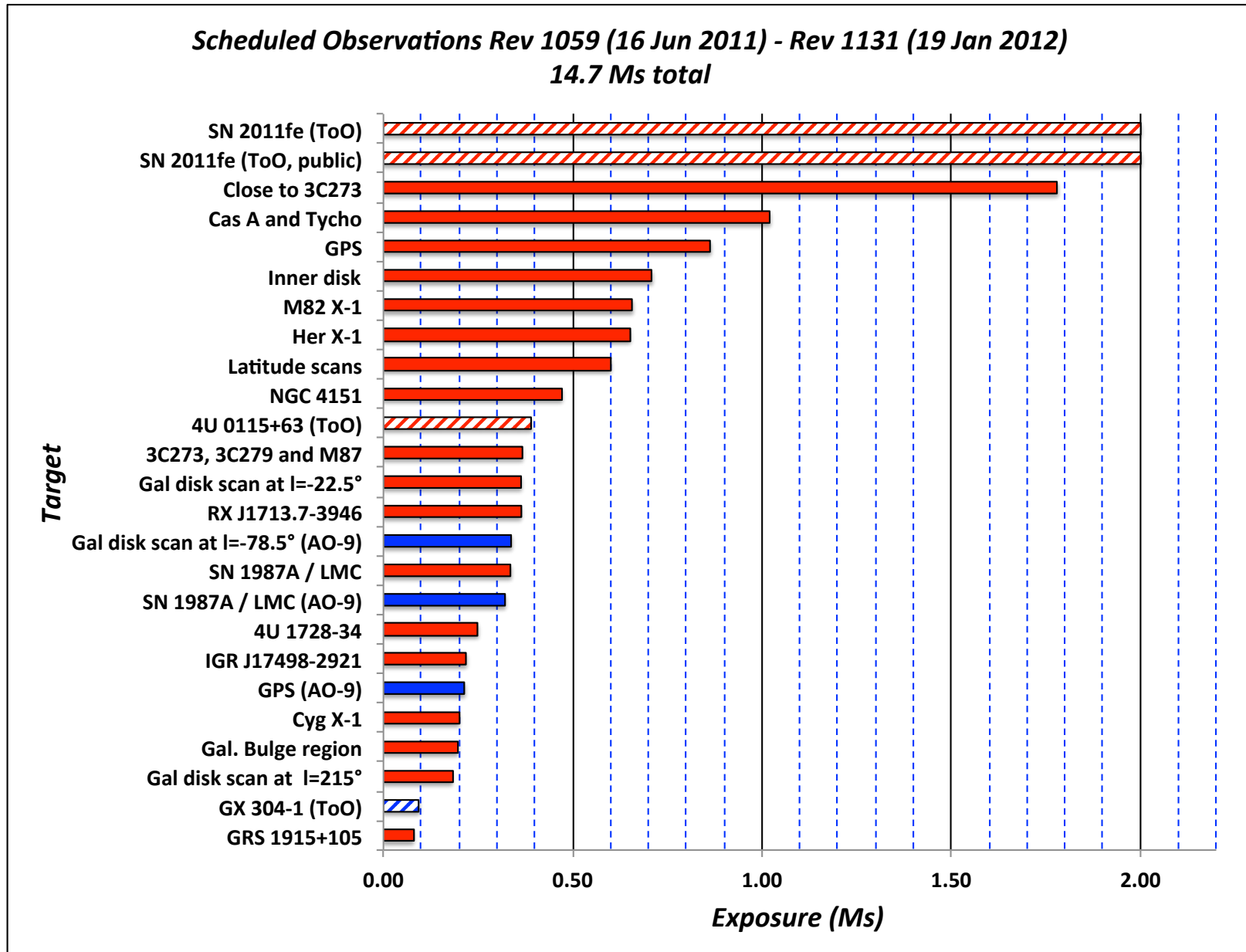


Science highlights



Outreach

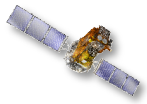
Observatory status: scheduled observations



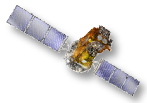
TOO follow-up observations + GRB (June 2011 – Jan 2012)

Trigger Date	Source	PI	Comments
21 June 2011	4U 0115+63	S. Tsygankov	#840021, scheduled
26 August 2011	SN 2011fe	J. Isern	#840007, scheduled
27 September 2011	SN 2011fe	R. Diehl/IUG/ public	Unsolicited, scheduled
14 January 2011	GX 304-1	D. Klochkov	#940023, scheduled
5 July 2011	PKS 1510-089	A. Tramacere	Unsolicited, overlap with existing proposal
25 Aug 2011	SN 2011fe	N.Barriere	Unsolicited, overlap with existing proposal
16 October 2011	Aql X-1	S. Campana	#840015, lower priority than on-going ToO (SN 2011fe)
21 October 2011	PKS 1510-089	E. Pian	#840008, source visible only after 27 Dec
GRB 110708A	GRB inside FOV	L. Hanlon	#840025
GRB 110903A	GRB inside FOV	S. Sazonov	#840026

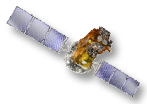
PS Status Report



Observatory status



Community interfaces



Science highlights

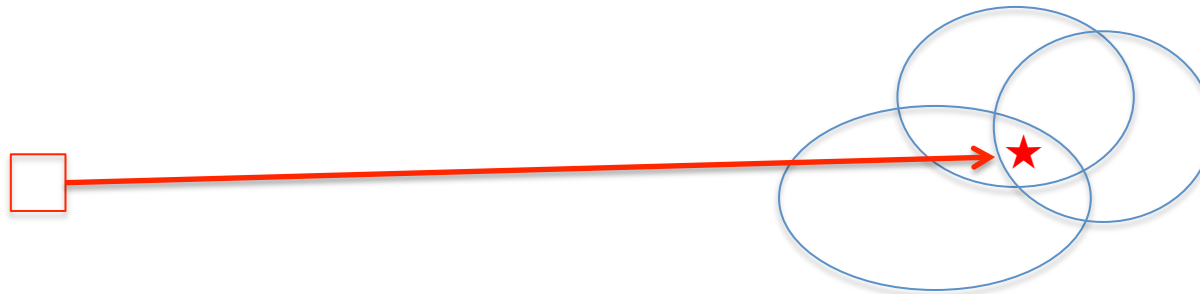


Outreach

Community Response to AO-9

- AO-9 second call [data rights proposals], 5 Sep – 14 (17) Oct 2011
- 52 proposals
- 155 subscribed fields
- 477 sources

- TAC recommended 47 proposals: 16 November 2011



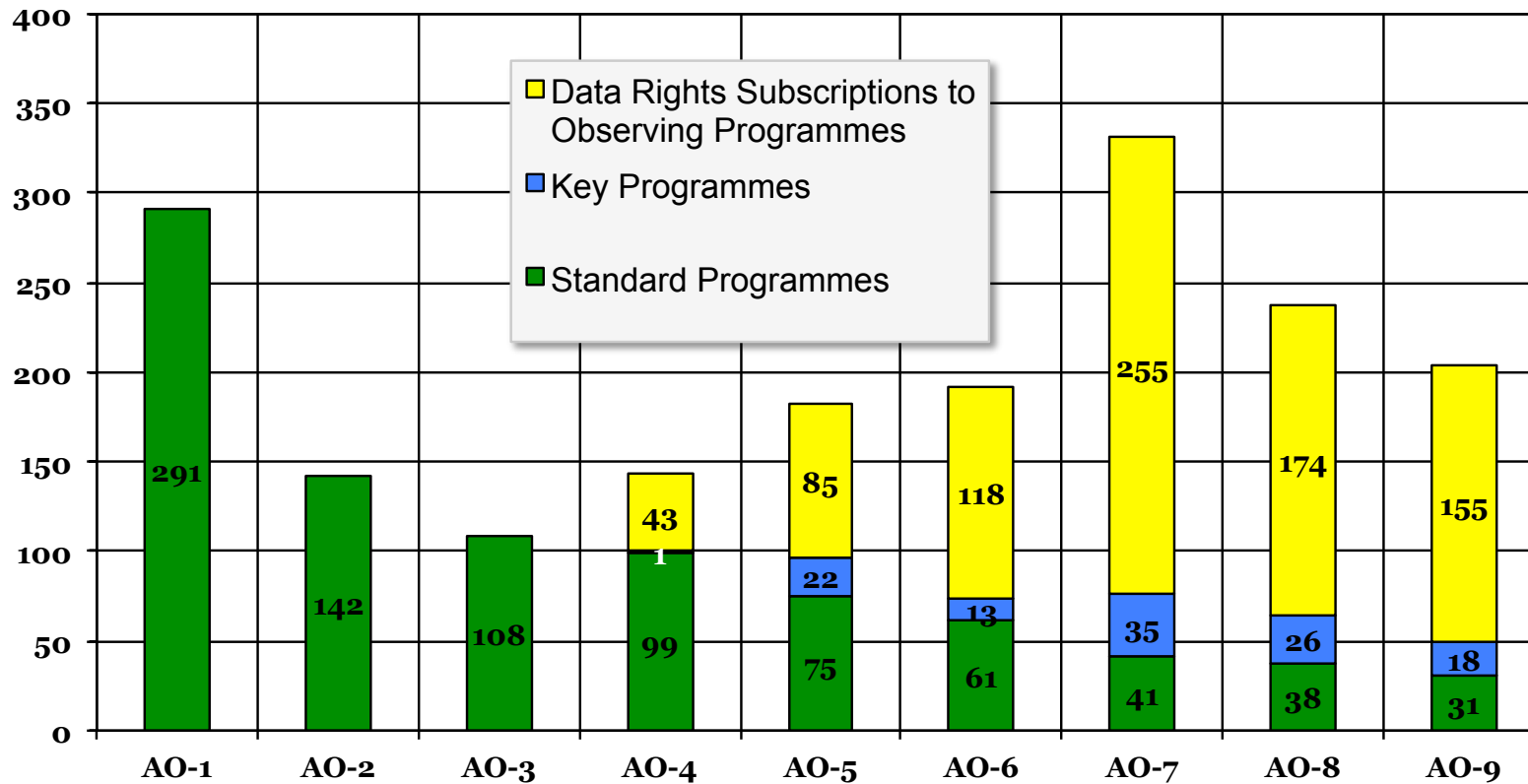
Example (see Dec 2010 IUG mtg):

1 data right proposal applies for data rights on 1 source which is covered by 3 observations.

Therefore: # proposals = 1, # sources = 1, # subscribed fields = 3

Response to AO-9

Number of observing proposals and data-rights subscriptions received in response to INTEGRAL AO



Carry-over AO-8 → AO-9 → AO-10

- SN 2011fe (1x2 Ms + 2x1 Ms = 4 Ms = 2 months elapsed time)
 - significant impact on the observing programmes included in the AO-8 LTP.
 - Nature decided to place it near/close the anti-centre/GC visibility window
 - total annual visibility for anti-centre/GC is ~ 8 Ms/year, spring and fall windows
 - Carry-over (scheduled time $> 25\%$ approved): schedule /w priority next AO
 - “Standard” LTP planning for AO-9: some long programmes located in the GC/anti-centre window would **not** continue/carry-over in AO-10 ($< 25\%$), or would **not** be started at all (0%).
 - LTP planning strategy for AO-9 **modified** for the GC/anticentre window:
 - have as many different GC/anti-GC observations as possible
 - reduce frequency of monitoring programmes (Bulge, GRS 1915, GPS, spiral arms) where possible
 - reduce ToO “earmark” (was 2.2 Ms)
- ⌘ Same numerical carry-over from AO-9 into AO-10, but “load” is shared

Planning for AO-10

- AO-9 programmes in GC/anti-centre visibility window – can't finish them

Proposal ID	Title	PI	Approved Target	Approved Time [ksec]	To be carried over to AO-10 [ksec]
0920005	Keeping watch over our Galaxy - the return of the GPS	Bazzano	Gal. plane scans	2000	1200
0920008	Broad Band Variability of Microquasars: Integral observations of Cygnus X-1 and GRS 1915+105	Wilms	GRS 1915+105	1200	170
0920013	Determining the longitude distribution of the asymmetric e+/e- radiation from the inner galaxy.	Weidenspointner	Inner Galactic disk (l=+-15)	2500	700
0920015	INTEGRAL Monitoring of the Inner Spiral Arms	Bodaghee	Perseus/Norma Scutum/Sagittarius	1200	800
0920025	Observing the Galactic Center Region with INTEGRAL	Wilms	GC: Sgr A*, Sgr B2	2000	1100
0920002	Probing relativistic electrons in the Galaxy and its halo (@ l = 0)	Strong	Galactic halo scans	1600	220
0920021	Deep Galactic Anticentre Survey: an INTEGRAL must	Ubertini	Region at l=150	2000	720

- As of mid Dec 2011, the total carry-over from AO-9 into AO-10 will be 4.9 Ms (100% completion), or 3.5 Ms (85% completion)
- Note that proposals #920002 ("B", galactic halo scans at l = 10°/20°), #920017 ("C", SS 433), #920024 ("C", 4U 0614+91) can not be done at all in A-10.
- What are the options for AO-10, i.e. how to treat the "carry-over" further on ?

Options for observing time in AO-10

- A. Do nothing special, this is "bad luck".
- + Within general boundary conditions of an AO; nature "decided"
 - Possibly many grumpy users: attractive GC/anti-centre affected.
 - Carry-over will continue affecting AO's beyond AO-10
- B. In AO-10, first, complete the uncompleted observations (GC/anti-centre window) from AO-9, and, reduce the new open time in AO-10 from 24 Ms accordingly to, say, 20 Ms
- + Solves the carry-over "long-term" problem: global "reset" for AO-11
 - ± Note that 18 Ms open time were offered during early years (CP !)
 - Grumpy users (less time), less proposals, less "new ideas" ?
 - The 8 Ms GC/anti-centre window will already partially used by those carried over from AO-9 ! Inform community in AO-10 docs !
- C. Other options, not considered any further....
- Combine AO-10 and AO-11 in one AO, lasting two years
 - Modify the duration of AO: no synch with end of calendar year
 - Choose AO-9 observations above a certain TAC rank, all grades

AO-10 Schedule

- Preliminary schedule (V 0.1)
 - 12 March 2012: Release AO-10 (1st call, observing proposals)
 - 20 April 2012: Submission deadline
 - June 2012: TAC meeting

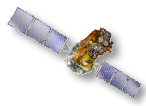
 - 3 September 2012: Release AO-10 (2nd call, data rights proposals)
 - 29 September 2012: Submission deadline
 - November 2012: TAC chair meeting (TBC)

 - 01 Jan 2013: Start AO-10 cycle of observations (until 31 Dec 2013)

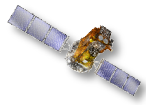
IUG: rotation of membership

- The two-year term will end in July 2012 for external members
 - Margarida Hernanz
 - Maurizio Falanga
 - Marc McConnell
- Please e-mail proposals for candidates to CW.
- External IUG members should be active researchers in the field of high-energy astrophysics and be regularly using INTEGRAL scientific data. They should not formally be affiliated with INTEGRAL PI teams (neither instruments nor ISDC).
- The term will be four years.

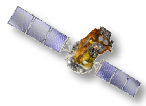
PS Status Report



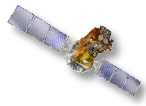
Observatory status



Community interfaces



Science highlights



Outreach

Science highlights

Discovery of ^{44}Ti line emission from SN 1987A

S. Grebenev et al., Nature, submitted, Nov 2011

IGR J17354-3255 as a candidate intermediate SFXT possibly associated with the transient MeV AGL J1734-3310

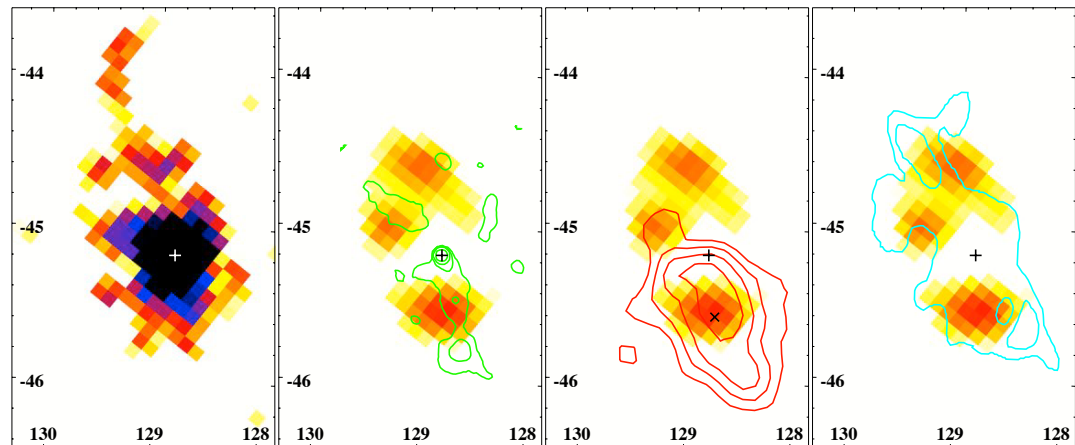
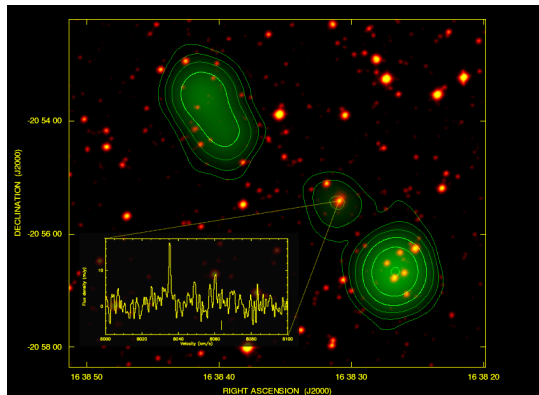
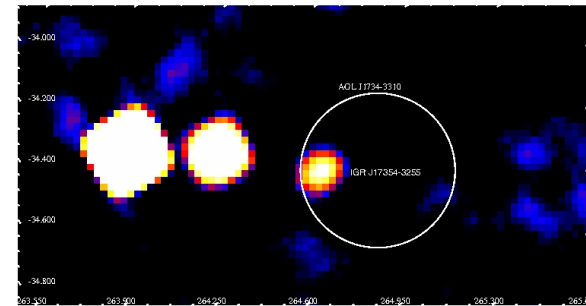
V. Sguera et al., MNRAS 417, 573, 2011

Extended hard X-ray emission from the Vela pulsar wind nebula

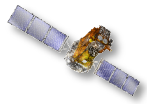
F. Mattana et al., ApJ 743, L18, 2011

The water maser in the INTEGRAL source IGR J16385-2057

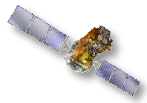
A. Tarchi et al., A&A, 532, 125, 2011



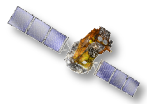
PS Status Report



Observatory status



Community interfaces



Science highlights



Outreach

Outreach: status since last meeting (June 2011)

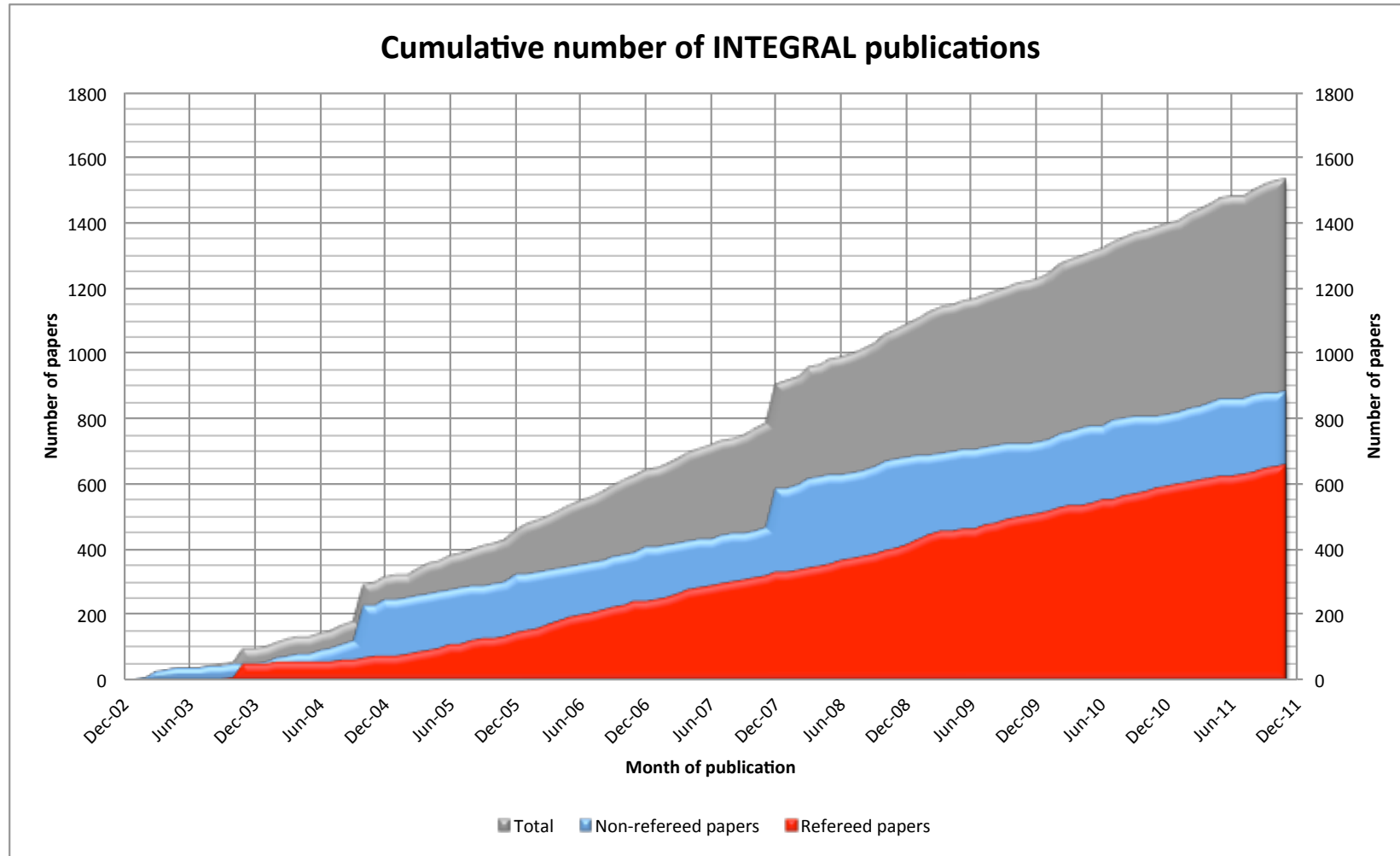
Outreach Activity	Status
9th INTEGRAL Workshop (15 - 19 October 2012) and 10th INTEGRAL launch anniversary (17 October 2012). CW requested various items, see next slide....	Most of the requested items were approved
Web-stories	
Constraints on Lorentz Invariance Violation (Laurent et al.)	Published 30 Jun 2011
Reflection in Seyfert galaxies (Ricci/Walter)	Published 2 Aug 2011
Variability of outflow in Mkr 509 (Kaastra et al., XMM-led story)	Published 29 Sep 2011
INTEGRAL discovery of extended hard X-ray emission above 18 keV from the Vela nebula (Mattana et al.)	Approved 18 Dec 2011
Diffuse emission measurement with SPI as an indirect probe of cosmic-ray electrons and positrons (Bouchet et al.)	Published 21 Dec 2011

Suggestions and proposals for new outreach products to Chris, please

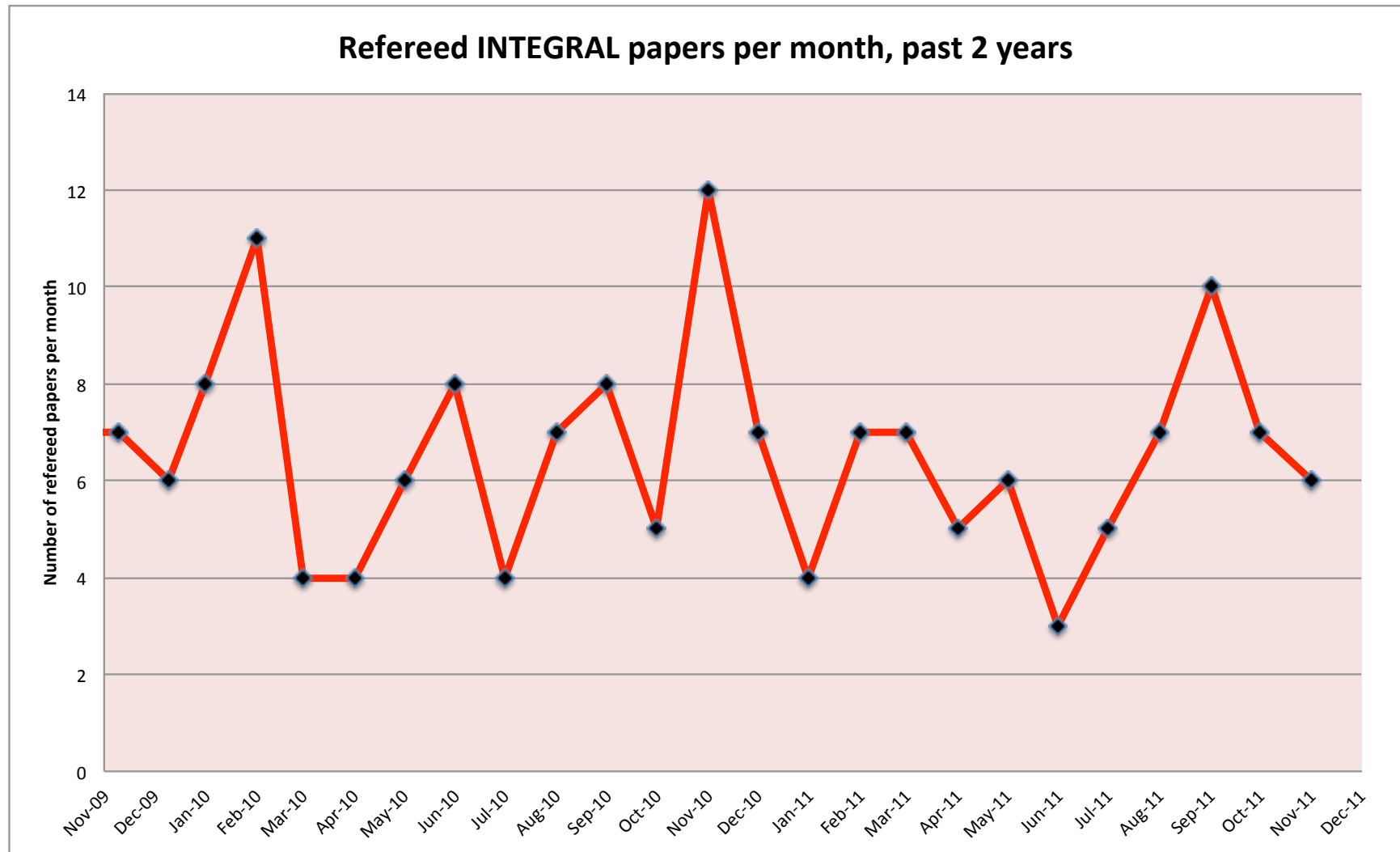
10th launch anniversary/INTEGRAL #9 (2012)

- CW requested in Feb 2011 several outreach products from the “SRE Communication Committee”.
- Approved on 6 October :
 - workshop reception & travel support (as for all previous workshops, not new)
 - workshop poster
 - ~~polo-shirts~~
 - multi media show to display INTEGRAL pictures and movies
 - ~~Conference dinner in Paris for about 300 people, including (retired) ex-Integral colleagues as guests~~
 - ESA brochure (e.g. INTEGRAL after 1, 5 years, see Pietro’s annual brochures)
 - web story about workshop/launch anniversary
 - production of a news feature for Euronews (TV)
 - shipment of models scale 1:4 and 1:10 and various display/exhibit walls
 - stickers ~~and mouse pads~~
 - conduct a student competition (for school students 11-19 years)
 - special gifts for INTEGRAL PIs and selected key people
 - ESA bulletin article about 10 years with INTEGRAL

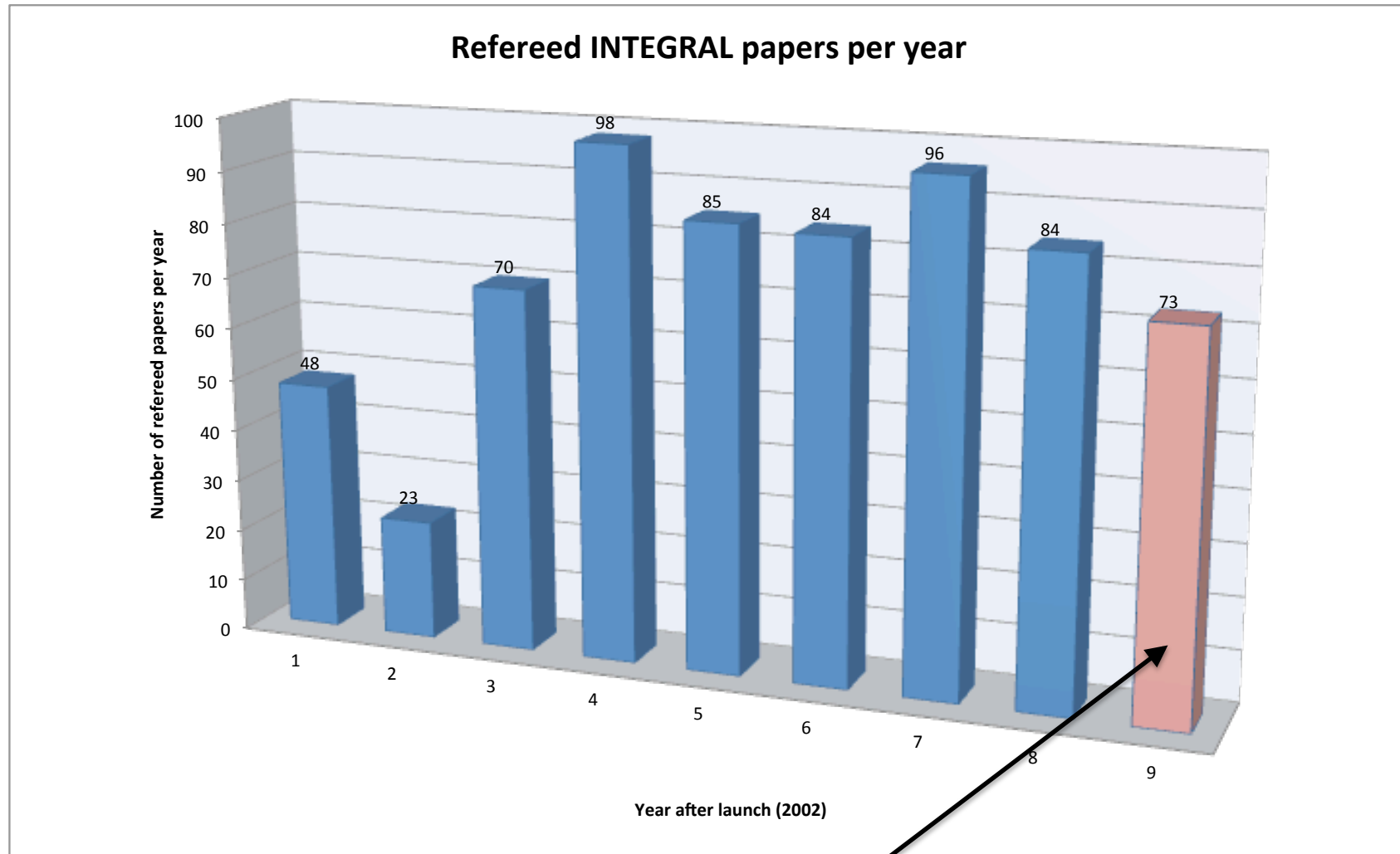
Publications (Oct 2002 – Nov 2011)



Monthly publication rate, past 2 years



Yearly publication rate



Projected for 2011: 67 (Jan-Nov) + 6 (monthly average, Dec) = 73

IUG Dinner

18 January 2012, 19:30

IUG Dinner @ “**Trattoria Mimmo**”,

Noordwijk aan Zee, Koningin Wilhelmina Boulevard 16, 071 – 362 44 77



Adres **Koningin Wilhelmina
Boulevard 16
2202 Noordwijk**

