INTEGRAL ATELs 2010

- 3065 RFO:Swift/XRT follow-up observations of two unidentified INTEGRAL sources R. Landi, N. Masetti (INAF/IASF Bologna), A. Bazzano, F. Capitanio (INAF/IASF Rome), A. J. Bird (Univ..... -- 3 Dec
- 3055 INTEGRAL observations of 3C 454.3 following the gamma-ray outburst E. Pian (INAF-OA Trieste & SNS Pisa), A. Bazzano (INAF/IASF-Rm), M. Tuerler, C. Ferrigno, A. Frankowski,.... -- 25 Nov 2010;
- 3052 INTEGRAL detects pre-outburst flares in EXO 2030+375 D. Klochkov, A. Santangelo (IAAT), M. Turler, C. Ferrigno, E. Bozzo, (ISDC - University of Geneva), K..... -- 23 Nov 2010; 13:17 UT
- 2983 INTEGRAL detects renewed activity from IGR J19294+1816 E. Bozzo (ISDC, University of Geneva), J. Rodriguez (CEA, Saclay), J. Wilms (Dr. Karl Remeis-Observatory),.... -- 29 Oct 2010; 17:08 U
- 2975 Swift/XRT follow-up observations of unidentified INTEGRAL sources E. Maiorano, R. Landi, P. Parisi, N. Masetti, L. Bassani, A. Malizia (INAF/IASF Bologna), A. Bazzano,.... -- 27 Oct 2010; 13:10 U
- 2965 Archival BeppoSAX/MECS observation of MAXI J1409-619 and INTEGRAL upper limit V. Sguera, M. Orlandini, F. Frontera, (INAF/IASF Bologna), A. Bazzano (INAF/IASF Roma), A.J. Bird (Univ..... -- 2
- 2940 INTEGRAL and RXTE spectral analysis of IGR J17480-2446, the new transient in Terzan 5. C. Ferrigno (ISDC/University of Geneva), S. Brandt (DTU Space, Denmark), E. Kuulkers (ESA/ESAC), P.
- 2924 Further INTEGRAL observations of the transient X-ray burster EXO 1745-248 J. Chenevez (DTU Space, Denmark), E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzón (LAEX-CAB/INTA-CSIC,.... --
- 2919 A hard X-ray transient in the direction of Terzan 5 detected by INTEGRAL P. Bordas (ISDC/IAAT), E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzón (LAEX-CAB/INTA-CSIC, Spain),.... -- 10 Oct 2010; 2
- 2890 INTEGRAL shows MAXI J1659-152 further declines in hard X-raysE. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzon (LAEX-CAB/INTA-CSIC, Spain), V. Beckmann (APC, France),.... -- 30 Sep 2010; 16
- 2888 INTEGRAL TOO observations of MAXI J1659-152 E. Kuulkers (ESA/ESAC), C. Kouveliotou (NASA/MSFC), J. Chenevez (DTU Space), A.J. van der Horst (NASA/MSFC/ORAU),.... -- 30 Sep 2010; 12:0
- 2875 INTEGRAL detection of the new MAXI transient MAXI J1659-152 I. Vovk (ISDC-University of Geneva), E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzón (LAEX-CAB/INTA-CSIC,.... -- 27 Sep 2010; 10
- 2856 INTEGRAL non-detection of enhanced Crab flux C. Ferrigno, R. Walter, E. Bozzo (ISDC/University of Geneva), P. Bordas (ISDC/IAAT) -- 22 Sep 2010; 17:32 UT
- 2853 RFO:Swift/XRT follow-up of three unidentified INTEGRAL sources R. Landi, L. Bassani, P. Parisi, N. Masetti (INAF/IASF Bologna), A. Bazzano, M. Fiocchi (INAF/IASF Rome),.... -- 22 Sep 2010; 12:07 U
- 2828 The continued flaring activity of LS V +44 17/RX J0440.9+4431 R. Krivonos, S. Tsygankov (IKI,MPA) A. Lutovinov (IKI), M. Turler, E. Bozzo (ISDC - University of.... -- 3 Sep 2010; 17:59 UT
- 2825 INTEGRAL confirms that XTE J1728-295 = IGR J17285-2922 M. Turler, C. Ferrigno (ISDC - University of Geneva, Switzerland) E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzon.... -- 1 Sep 2010;
- 2820 RFO:INTEGRAL sees IGR J17544-2619 active again E. Kuulkers (ESA/ESAC, Spain), J. Chenevez (DNSC, Denmark), J. Alfonso-Garzon (LAEX-CAB/INTA-CSIC, Spain),.... -- 30 Aug 2010; 13:25
- 2814 A photospheric radius-expansion burst observed from XTE J1701-407 by INTEGRAL: an update on distance J. Chenevez (DTU Space, Denmark), M. Falanga (ISSI, Switzerland), S. Brandt (DTU Spac
- 2811 Erratum to ATel #2809: INTEGRAL discovery of a new transient source: IGR J16374-5043 L. Pavan, C. Ferrigno, E. Bozzo (ISDC-University of Geneva) -- 24 Aug 2010; 12:16 UT
- 2810 Swift follow-up observations of IGR J16374-5043 E. Bozzo, C. Ferrigno, L. Pavan (ISDC, University of Geneva) -- 24 Aug 2010; 11:05 UT
- 2809 INTEGRAL discovery of a new transient source: IGR J16374-5043 L. Pavan (ISDC-University of Geneva), R. Terrier (CNRS/APC France), C. Ferrigno, E. Bozzo (ISDC-University.... -- 24 Aug 2010; 10:5
- 2807 INTEGRAL and Swift follow-up observations of XMMSL1 J171900.4-353217 L. Pavan (ISDC-University of Geneva), R. Terrier (CNRS/APC France), E. Bozzo, C. Ferrigno (ISDC-University.... -- 23 Aug 2
- 2803 INTEGRAL detection of high energy emission from XMMSL1 J171900.4-353217 W. Ishibashi, E. Bozzo (ISDC), R. Terrier (CNRS/APC France), S. Mereghetti, A. Paizis, L. Ducci (INAF-IASF.... -- 18 Aug
- 2692 RFO:INTEGRAL and RXTE observations of XTE J1946+274 in outburst I. Caballero (CEA-AIM Saclay), K. Pottschmidt (CRESST/GSFC/UMBC), E. Bozzo, C. Ferrigno, A. Neronov.... -- 23 Jun 2010; 7
- 2695 RFO:New X-ray source IGR J05414-6858 discovered with INTEGRAL S.A. Grebenev, A.A. Lutovinov (IKI, Moscow) -- 24 Jun 2010; 16:27 UT
- 2644 INTEGRAL observations of Cygnus X-3 J.A. Tomsick (SSL/UC Berkeley), A. Tramacere (ISDC), C. Ferrigno (ISDC), S. Corbel (Univ. Paris Diderot.... -- 27 May 2010; 17:13 UT
- 2616 INTEGRAL upper limits on XMMSL1 J171900.4-353217 E. Bozzo (ISDC-University of Geneva, Switzerland), G. Weidenspointner (MPE, Germany and MPI-HLL, Germany),.... -- 12 May 2010; 22:21 U
- 2573 RFO:Simultaneous INTEGRAL, RXTE, Swift and FT South observations of the transition of GX 339-4 M. Cadolle Bel, E. Kuulkers, A. Ibarra, M. Diaz Trigo (ESAC Madrid, Spain), J. Tomsick (SSL/UC B
- 2561 INTEGRAL/JEM-X detection of an X-ray burst from Swift J1749.4-2807 J. Chenevez, S. Brandt (DTU Space, Denmark), C. Sanchez-Fernandez, E. Kuulkers (ESA/ESAC, Spain),J. Alfonso-Garzón....
- 2548 RFO:INTEGRAL and Swift detection of high energy emission from Swift J1749.4-2807 L. Pavan (ISDC, Switzerland), J. Chenevez (DTU space, Denmark), E. Bozzo (ISDC, Switzerland), E. Kuulkers...
- 2541 New outburst of A0535+26 observed with INTEGRAL, RXTE, Suzaku, and Swift I. Caballero (CEA-AIM Saclay), A. Santangelo (IAAT), K. Pottschmidt (CRESST/GSFC/UMBC), D. Klochkov (IAAT),.... --
- 2530 INTEGRAL observations of XTEJ1752-223 Manousakis A., Ferrigno C. (ISDC-University of Geneva), Weidenspointner G. (MPE), Kuulkers E. (ESA/ESAC).... -- 1 Apr 2010; 11:34 UT
- 2509 INTEGRAL observations of SGR 1833-0832: The detection of the prompt emission and the non-detection of soft gamma-rays in the post-burst era L. Kuiper (SRON), W. Hermsen (SRON,UvA) -- 25 Ma
- 2505 RFO:INTEGRAL/JEM-X detects an X-ray burst from SAX J1753.5-2349 J. Chenevez, S. Brandt (DTU Space, Denmark), E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzón (LAEX-CAB/INTA-CSIC,....
- 2498 INTEGRAL view of the sky field containing Fermi J2102+4542 L. Bassani, A. Malizia (IASF/INAF Bologna), A. Bazzano, P. Ubertini (IASF/INAF Roma), A.J. Bird (Southampton.... -- 22 Mar 2010; 11:2
- 2496 INTEGRAL observes enhanced activity of A0535+26 outside of outbursts I. Caballero (CEA Saclay), F.Lebrun (APC (CEA/IRFU)), J.Rodriguez, S.Soldi (CEA Saclay), F. Mattana (APC),.... -- 20 Mar 201
- 2482 INTEGRAL catches an exceptional bright outburst from the HMXB XTE J1855-026 K. Watanabe (FGCU), E. Bozzo (ISDC/University of Geneva), S. Mereghetti (IASF-Mi/INAF), C. Baldovin (ISDC/U
- 2465 RFO:INTEGRAL reports renewed activity from KS 1741-293 J. Chenevez (DTU Space, Denmark), E. Kuulkers (ESA/ESAC, Spain), J. Alfonso-Garzón (LAEX-CAB/INTA-CSIC,.... -- 8 Mar 2010; 17
- 2464 INTEGRAL observation of renewed activity from 4U 1608-522 W. Ishibashi and C. Ferrigno (ISDC/University of Geneva), C. Sánchez-Fernández and E. Kuulkers (ESAC-ESA,.... -- 5 Mar 2010; 17:40 U
- 2455 INTEGRAL observes an increasing Hard X-ray flux of GX 339-4 L. Prat (CEA Saclay, France), M. Cadolle Bel (ESA/ESAC, Spain), R. Terrier (CNRS/APC, France), L. Pavan,.... -- 24 Feb 2010; 15:52 UT
- 2344 INTEGRAL/IBIS observation of the blazar 3C 454.3 during the decaying phase of the gamma-ray super-flare Vercellone et al. 8 Jan 2010; 15:15 UT
- 2412 INTEGRAL observations of U Sco A. Manousakis (ISDC/Unige), M. Revnivtsev (IKI, Excellence Cluster Universe), R. Krivonos (MPA, IKI),.... -- 2 Feb 2010; 13:20 UT
- 2405 INTEGRAL upper limit on AGL J2206+6203 C. Ferrigno, E. Bozzo (ISDC/Unige) P. Martin (Mpe-Garching) V. Beckmann (APC/University Paris 7) V. Bianchin.... -- 26 Jan 2010; 15:08

43 in 11months (+ 8 FOV GRB in 11months)

INTEGRAL Operations at ISDC

- Telemetry is automatically processed to produce data that can be analyzed using OSA within a couple of hours from the end of each science window (scw).

- Basic sanity checks are performed automatically and alerts are issued to the shift team in case of problems.

- NRT data are copied automatically on a private ftp area for the PIs as soon as they are ready.

- NRT data are inspected off-line by a scientist on duty under the supervision of an operation coordinator with particular attention to:

  - problems in the data, e.g., gain correction of JEM-X.
  - new transient sources
  - unusual behavior of known sources.

Communications from the shift team

- An e-mail is automatically sent at the beginning of each observation to the PIs of open time and data right proposal with the ftp/rsync commands to download NRT data.

- At the end of each observation and after the data manual inspections, an e-mail is sent to the PI of the open time proposal with basic informations on the observation: fluxes of target the source or a general statement on the quality of data for SPI proposals.

- TOO proposals are followed with more urgency and updates are sent to th PI on daily basis.

- In case the scientist on duty notices some phenomena from a source (known or new) which may deserve an ATel, there are several cases:
  1. the source is covered by a data right proposal;
  2. the source is part of a private observation with data rights assigned to several scientists;
  3. the source is part of public observation.

Case 1

- If the source is assigned to a PI or it is part of a proposal from a PI from the Russian federation, an e-mail is sent to the colleagues reporting the phenomenon and suggesting that it might deserve to be reported in a ATEL.
- The PI might accept or decline the suggestion. In the positive case, the PI normally acknowledges the ISDC effort by including the scientist on duty and the operator in the list of authors.

- Case 1, negative answer: low state of Cyg X-1, PI J.Wilms.

Hi Carlo,
thanks for the information. There have been several ATELs already on this newest soft state (as well as lots of email communications between people interested in this source) and I think everybody interested already knows about this, so this low flux doesn't really justify an ATEL (it just means that Cyg X-1 is a little bit further into the soft since the INTEGRAL band is very sensitive to this).
I think the interesting next thing is to look at when the source goes back to the normal hard state.
cheers,
Joern

On 11/28/10 18:55, Carlo Ferrigno wrote:
Dear Joern,

INTEGRAL is currently observing the Cygnus X region (proposal 0720026 <http://integral.esac.esa.int/isocweb/schedule.html?action=intro> PI P. Martin). For this observation, you have data rights on Cyg X-1.
I write to you, since our scientist on duty, Adam Frankowski, noticedthat the ISGRI light curve of Cyg X-1 is going to its lowest level sinceINTEGRAL started to observe it. The BAT light curve from the transient
monitor shows a similar trend. To illustrate what I write, I attach ascreenshot of the historic light curve from ISGRI, and a zoom for thelatest observations.
For the figure, note that in the 20-40 keV energy band thecount-rates of the Crab are 144 cts/s. In the 40-80 keV energy band the Crab is characterized by a count-rate of 71 cts/s. Points in the lightcurves with no errors on the estimated count-rates correspond to low significant detections in a single SCW. The third and fourth
panels in the figure correspond to the detection significance in the 20-40 keV energy band and off-set with respect to the center of the FOV in degrees, respectively.
The average flux up to scw 36 in rev 992 is 106+/-1 mCrab in the -40 keV range and 70 +/- 2 mCrab in the 40-80 keV band.
Please let us know if you think this is relevant and if you would like to have more observational details and/or updates for the next observations in order to write a communication on this phenomenon
In case you would like to perform your own analysis, you should havereceived an automatically generated e-mail with the directions to download the NRT raw data on which to run OSA, please let us know if you haven't received it.
Best wishes,
Carlo

- Case 1, positive answer: ATel #2828 The continued flaring activity of LS V +44 17/RX J0440.9+4431 PI R. Krivonos.

Dear Dr. Krivonos,
following your quick and interested answer, we made some further checks and spotted previous Swift, RXTE and ASCA observations of the Be binary RX J0440.9+4431/LS V +44 17. The coordinates of this source are positionally coincident with the source that we observe in INTEGRAL.
In April 2010 a GCN was published following a BAT trigger on this source:
http://gcn.gsfc.nasa.gov/gcn3/10561.gcn3
The source also appears in the Palermo Swif/BAT catalogue.
http://cds.aanda.org/index.php?Itemid=129&option=com_article&access=bibcode&bibcode=2010A%25252526A...510A..48C
Even though this does not seem the discovery of a new source, such short flares are quite unusual for a Be binary and are possibly a new phenomenology that could be potentially interesting. We are looking forward to hearing the outcome of your checks and thank you for your interest.
Regards,
Carlo

On 1 Sep 2010, at 3:07 PM, Roman Krivonos wrote:

Dear Marc,
thank you for the information and detailed research for this source.
I've just downloaded last data and trying to see mosaics.
Let me check results, and I'll write you as soon as it will be possible.
Best wishes,
Roman

Marc Türler wrote:

Dear Roman,
I am scientist on duty this week and looking at the ScW images of today, I spotted a new source with a 7.4 sigma detection in ScW 0962 0096 0010 as part of your INTEGRAL Galactic plane l=155° observation. The INTEGRAL ISGRI source position is at: RA=70.195 DEC=44.513. The source is outside the JEM-X field of view (at that time). It is the first time I get so a high significance for a new source in a given ScW so it was quite exciting.
Together with Carlo Ferrigno (ISDC operations coordinator together with Enrico also in CC) we checked the literature and performed light-curve and preliminary spectral analysis with OSA 9.
A Simbad query finds a possible association with an Einstein slew survey source: 1ES 0437+444 located at RA(B1950)=04 37 21 DEC(B1950)= +44 25 55 (Elvis, M. et al. 1992, ApJS 80, 257) with an uncertainty (90% c.l.) of 1.2 arcmin. The source is at 1.9 arcmin (marginally compatible) with a variable star of unknown type called "V* OU Per" (V band magnitude=10.78 by Schachter J.F. et al. (1996, ApJ 463, 747)). In one slew (3.9 sec of exposure!) Einstein got a flux of 8.3x10^{-11} erg/s/cm^2. The best position of the star OU Per is given by Kato (1999, IBVS 4762, 1) and is RA=04 40 55.89 DEC=+44 30 06.5.
OSA 9 lightcurve extraction for the time range from 1 ScW before and 2 ScWs after (i.e. ScWs 95 to 98) in bins of 1000 sec gives the attached plot. There seems to be a rather broad outburst of typically an hour or so (see attached plot).
Very preliminary spectral extraction for the same time range gives the following spectral fit (see attached plot):

Model powerlaw<1> Source No.: 1 Active/On
Model Model Component Parameter Unit Value
par comp
1 1 powerlaw PhoIndex 3.57116 +/- 0.431757 2 1
powerlaw norm 44.6065 +/- 54.3610

Chi-Squared = 6.85 using 8 PHA bins.
Reduced chi-squared = 1.14 for 6 degrees of freedom Null hypothesis probability = 3.351744e-01

XSPEC12>flux 20 80
Model Flux 0.0076194 photons (3.6458e-10 ergs/cm^2/s) range (20.000 - 80.000 keV)

Checking just for the ScW 96 seems to give a harder slope of Gamma=2.5 or so.
This needs to be investigated in more detail.

Based on these interesting results we think it could be worth an ATel and let you, as the PI, decide how you would like to proceed.
We are ready to contribute with additional information if you wish so. Please let us know.

With our best regards,
Marc and Carlo

Case 2

- The source is not covered by any data right proposal and is in the field of an open time proposal: it belongs to all PIs of the observation who can publish the data also individually.

- The ISDC policy is to include all the PIs of the observation by proposing a draft of an ATel. This also applies when a scientist at ISDC could publish the results on his/her own.

- E.g., ATEL #2803 17-18 Aug 2010.

Dear colleagues,
you are receiving this email because you got data right on the INTEGRAL observation
program 0720047.From the quick look analysis that we are carrying out as part of the standard operations
at the ISDC, we found that IBIS/ISGRI detected hard X-ray emission from the recently discovered
XMM-Newton transient XMMSL1 J171900.4-353217 (please see Atels #2607, #2615, #2616, #2627, #2656,
#2722, #2738).
We thought it could be interesting for the high energy community to send an Astronomer telegram
on the event, and prepared a draft of the Atel (you can find the draft below).
According to the usual policy, we included in the Atel all the collaborators to the observational program
0720047. In case we will not receive an answer, we will anyway include your name in the author list of the telegram.
We would like to send the communication within 1 day, and we will be glad to include any comments you might have.
Thank you very much for your help, interest and collaboration.

Best regards,
Enrico Bozzo.

INTEGRAL detection of high energy emission from XMMSL1 J171900.4-353217
W. Ishibashi, E. Bozzo (ISDC), R. Terrier (CNRS/APC France), S. Mereghetti,
A. Paizis, L. Ducci (INAF-IASF Milano), D. Gotz (CEA Saclay),
A. Bazzano, M. Fiocchi, A. De Rosa, A. Tarana, M. Del Santo,
L. Natalucci, F. Panessa, F. Capitanio (INAF-IASF, Rome),
V. Sguera, V. Bianchin (INAF-IASF, Bologna), K. Watanabe (FGCU), L. Kuiper (SRON),
L. Barragan (FAU), J. Chenevez (DTU), I. Caballero (CEA Saclay),
C. Shrader (GSFC/USRA), A. Bird (Southampton), G. Puehlhofer (IAA Tuebingen),
C. Sanchez (ESAC), G. Skinner (CRESST/GSFC/UMCP), P.R. den Hartog (SRON)
K. Pottschmidt (UMBC/NASA GSFC), I. Negueruela (Alicante)
L. Prat (CEA Saclay)

During the observations of the region around the SNR RXJ1713.7-3946 performed
from 2010 August 12 at 00:14 to 2010 August 14 at 16:02 (PI R. Terrier),
INTEGRAL detected hard X-ray emission from a position consistent with
that of the recently reported transient XMMSL1 J171900.4-353217.

The source was within the IBIS/ISGRI FOV for a total exposure time
of 88 ks and was detected at a significance level of 6.5 sigma
(20-40 keV energy band). The best fit position of the IBIS/ISGRI source is
at RA: 259.738 DEC: -35.508 (J2000), with an associated error
of 3.9 arcmin. The ISGRI spectrum is best fit with a power-law model
of photon index Gamma=2.7-0.9+1.3 and the estimated flux is
3.0e-11 ergs/cm^2/s (20-40 keV energy band). The count-rate of the
source slightly increased in the latest part of the observation.

The source was also in the Jem-X FOV, but not detected.
We estimated a 3 sigma upper limit on its flux of 6 mCrab.

Further INTEGRAL observation of the region comprising XMMSL1 J171900.4-353217
are planned for 2008 August 17. A Swift follow-up observation has been
requested.

Case 3

- The source is part of a public observation: for now only the Galactic Bulge monitoring.

- We contact the PI of the observation reporting the phenomenon with some details and a draft of the ATel, normally we lead the effort but include also the members of the collaboration.

- ATel #2825 INTEGRAL confirms that XTE J1728-295 = IGR J17285-2922

Dear Erik,
we saw the ATEL #2823 by Markwardt on the renewed activity of XTE J1728-295 and noticed that it is in the FOV of the INTEGRAL monitoring of the Galactic Bulge. We believed that it would be interesting to further strengthen the identification of this source with IGR J17285-2922 using the INTEGRAL observations and prepared a draft for an ATel. We would like to send it tomorrow morning after receiving your comments and suggestions. Please let us know if you agree on sending the ATel and if you want that your collaborators appear in the author list.
Regards,
Marc and Carlo

M. Turler, C. Ferrigno (ISDC - University of Geneva), E. Kuulkers (ESOC)
INTEGRAL confirmation that XTE J1728-295 is IGR J17285-2922

Following the renewed activity of XTE J1728-295 and its probable association with IGR J17285-2922 (ATel #2823), we searched for a coincident outburst of the hard X-ray source in the data from the on-going INTEGRAL Galactic Bulge monitoring program (ATel #438).

We find that IGR J17285-2922 was indeed detected by INTEGRAL during the last three monitoring observations of the Galactic Bulge in spacecraft revolutions 960, 961 and 962, whereas it was undetected in revolution 959 (2010-08-20T23:37 2010-08-21T03:19) with a 3-sigma upper limit of 7
mCrab in the 20-40 keV energy band.

In the table below, we summarize the IBIS/ISGRI results in the 20-40 keV [...]