

# **The US INTEGRAL Public Data Archive**

INTEGRAL Data Analysis Workshop: November 14-15, 2005 at NASA/GSFC

# Public Data Archive Status

- The ISDC INTEGRAL Public Data Archive opened in July 2004.
- The US INTEGRAL Public Data Archive at the HEASARC opened September 2004.
- New public data is available to the community within a few days of its release from the ISDC.
- All public data through the latest release (10-17-05) is currently available from the HEASARC archive.
- Public data releases occur ~monthly with the next release scheduled for 11-17-05.
- The public data release schedule is available on the ISDC website.

ISDC Website:

<http://isdc.unige.ch/>

The screenshot shows a Netscape browser window displaying the ISDC Public Data Release website. The browser's address bar shows the URL <http://isdc.unige.ch/index.cgi?Data+release>. The website header includes the INTEGRAL Science Data Centre logo and a navigation menu with links for Home, Outreach, Newsletter, Data, Software, Science, and Support. Below the navigation menu, there is a section titled "Schedule of Public Data Releases:" followed by a table. The table has two columns: "Date" and "Revolutions getting public". The table lists data release dates from 2004 to 2006, along with the corresponding revolution numbers. A sidebar on the left contains links for "Data Archive", "INTEGRAL Source Results", "Archive Browse", "Archive ftp", "Data Known Issues", "Public Data Releases", "Reference Catalog", and "Data Structures". There is also a "SITE SEARCH" box and a Sun Microsystems logo.

Date	Revolutions getting public
2006 Jul 31	274-276, 291, 310-321
2006 Jun 23	270-273, 279-282, 287-290, 292-299, 301, 302, 304-309
2006 May 08	300
2006 Apr 20	277, 284-286
2006 Mar 31	261-266, 268, 269, 278, 283
2006 Feb 23	251-260, 267
2006 Jan 30	210-214, 221, 222, 236, 237, 244-250
2005 Dec 9	215, 216, 218, 220, 226, 227, 229-231, 238
2005 Nov 17	207, 209, 217, 219, 223-225, 239-243
2005 Oct 17	232-235
2005 Sep 30	201-206, 208, 228
2005 Aug 8	168, 188, 189, 192, 194-200
2005 Jul 22	176, 177, 186, 187, 193
2005 Jun 17	184, 190, 191
2005 Jun 3	161-162, 164, 166, 172, 173, 175, 178-182, 185
2005 May 19	137-141, 150-160, 163, 183
2005 May 2	171, 174
2005 Apr 5	165, 167, 169, 170
2005 Mar 21	126-129, 131-136, 142-149
2005 Jan 3	081-088, 123-125
2004 Dec 10	107, 108, 110-115, 130
2004 Nov 19	098, 099, 104, 105, 106, 109, 119-122
2004 Nov 1	097, 101, 116, 117, 118
2004 Oct 18	079, 080
2004 Oct 04	100, 102, 103
2004 Sep 24	74-76, 89-96
2004 Aug 16	77, 78

INTEGRAL Data Analysis Workshop: November 14-15, 2005 at NASA/GSFC

- The ISOC website contains detailed information on past and future observations.
- This is useful in planning future proposals as well as utilizing the public data archive
- [integral.esac.esa.int/isoc/](http://integral.esac.esa.int/isoc/)

Integral Target and Scheduling Information - Netscape

http://integral.esac.esa.int/isocweb/schedule.html?action=schedule&startRevno=370&endRevno=373

Integral Target and Scheduling Information

Approved Targets: A01 A02 A03 Schedule: All executed Current revolution (373) Future schedule Revolution 370 to 373 Show...

### Schedule for revolutions 370 to 373

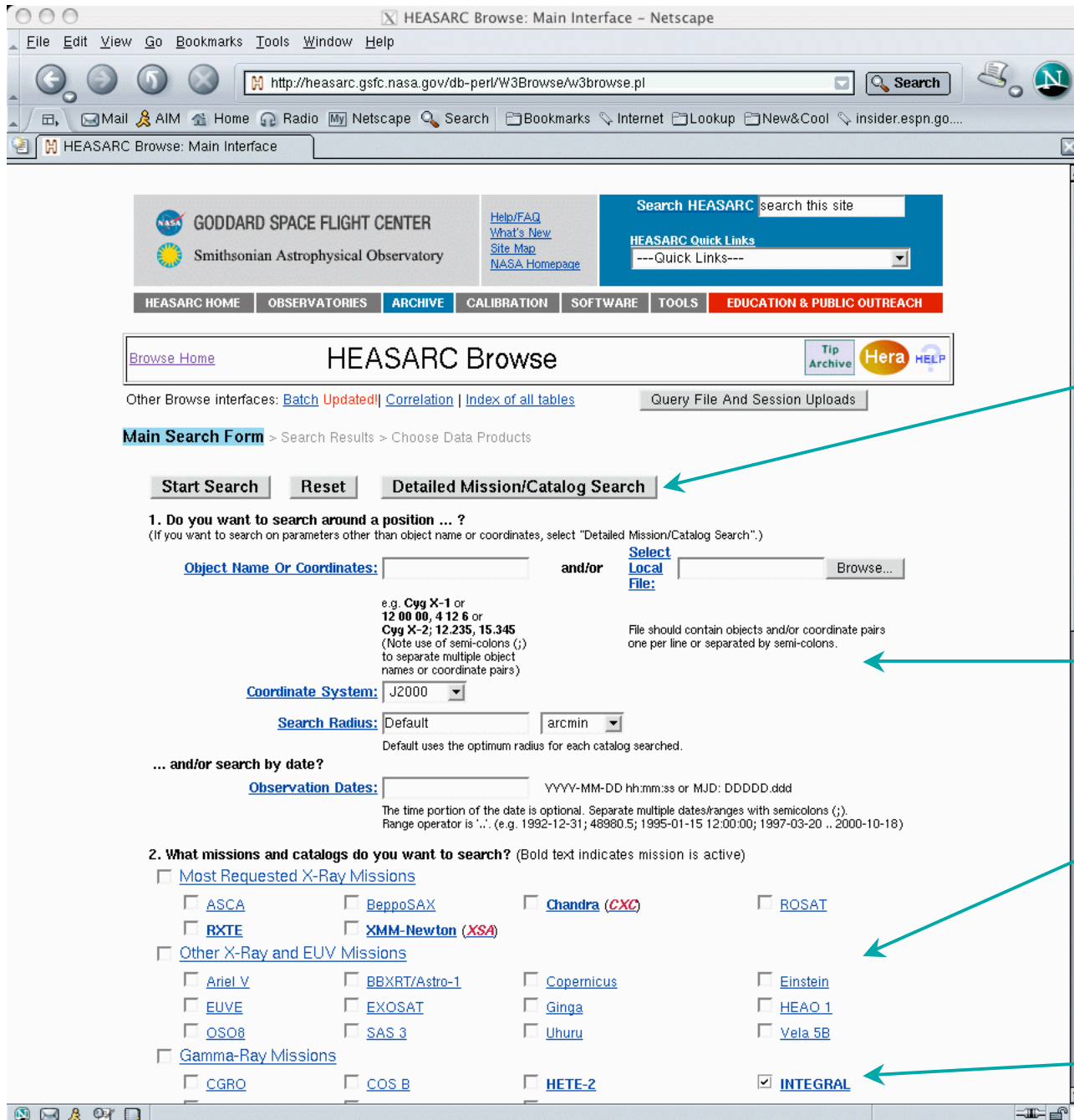
Rev	Start time (UTC)	End time (UTC)	Exp. time (s)	Source	Ra (J2000)	Dec (J2000)	Pattern	PI	Proposal
370	2005-10-24 07:12:22	2005-10-24 10:38:28	12000	GX 17+2	18:16:01.40	-14:02:11.0	5x5	Tiziana Di Salvo	<a href="#">0320093</a>
370	2005-10-24 10:53:46	2005-10-24 16:03:16	18000	GX 17+2	18:16:01.40	-14:02:11.0	5x5	Tiziana Di Salvo	<a href="#">0320093</a>
370	2005-10-24 16:18:34	2005-10-25 15:40:05	81000	GX 17+2	18:16:01.40	-14:02:11.0	5x5	Tiziana Di Salvo	<a href="#">0320093</a>
370	2005-10-25 16:08:29	2005-10-26 08:34:46	57000	GX 17+2	18:16:01.40	-14:02:11.0	5x5	Tiziana Di Salvo	<a href="#">0320093</a>
370	2005-10-26 10:19:10	2005-10-26 13:09:10	10200	OMC FF #30	19:19:12.00	+61:54:00.0	Staring	Public	<a href="#">8660084</a>
370	2005-10-26 13:10:40	2005-10-26 13:44:00	2000	OMC FF #30	19:19:12.00	+61:54:00.0	Staring	Public	<a href="#">8660084</a>
370	2005-10-26 15:33:17	2005-10-26 18:42:57	10800	Gal. Bulge region	17:45:36.00	-28:56:00.0	HEX	Erik Kuulkers	<a href="#">0320109</a>
370	2005-10-26 19:04:03	2005-10-26 19:34:03	1800	Gal. Bulge region	17:45:36.00	-28:56:00.0	HEX	Erik Kuulkers	<a href="#">0320109</a>
370	2005-10-26 19:55:00	2005-10-26 21:12:34	4400	GPS			GPS	ISWT	<a href="#">0399816</a>
371	2005-10-27 06:58:02	2005-10-28 15:57:18	114818	HETE J1900.1-2455 (TOO)	19:00:13.00	-24:54:44.0	HEX	Maurizio Falanga	<a href="#">0320032</a>
371	2005-10-28 16:24:36	2005-10-29 18:35:48	91179	HETE J1900.1-2455 (TOO)	19:00:13.00	-24:54:44.0	HEX	Maurizio Falanga	<a href="#">0320032</a>
371	2005-10-29 19:03:05	2005-10-29 20:57:35	6754	HETE J1900.1-2455 (TOO)	19:00:13.00	-24:54:44.0	HEX	Maurizio Falanga	<a href="#">0320032</a>
372	2005-10-30 06:43:24	2005-10-30 13:25:30	22000	GPS			GPS	ISWT	<a href="#">0399809</a>
372	2005-10-30 13:54:40	2005-10-30 19:15:47	17600	GPS			GPS	ISWT	<a href="#">0399809</a>
372	2005-10-30 21:19:17	2005-10-31 15:06:19	61341	Field_6	21:46:58.00	+17:49:40.0	5x5	Eugene Churazov	<a href="#">0320108</a>

# Accessing the US INTEGRAL Public Data Archive

- The US INTEGRAL Public Data Archive is accessible from the HEASARC via Browse or FTP.
- Retrieving the data directly via Browse is complicated by the large size of the typical observation, 3 days of data = 7-8 GB.
- The HEASARC limit for a tar file is ~3.5 GB ==> the preferred download method is via a wget script created by Browse.
- A detailed description of all the INTEGRAL catalogs available through Browse as well as a detailed cookbook describing the downloading of data and the setting up of a local data repository are available on the GOF website:  
[http://heasarc.gsfc.nasa.gov/docs/integral/inthp\\_archive.html](http://heasarc.gsfc.nasa.gov/docs/integral/inthp_archive.html)

Click Here





Click here

Source Search Parameters

List of Missions

Check this



List of all searchable catalogs  
for INTEGRAL

HEASARC Browse: Search of INTEGRAL and object Catalog(s) - Netscape

http://heasarc.gsfc.nasa.gov/db-perl/W3Browse/w3table.pl

Search of **INTEGRAL** and object Catalog(s)

Main Search Form > **Search Form** > Search Results > Choose Data Products

1. Please select one or more of the tables below.

Sort by a column in order: 1,2,3 ↑ Sort by column in reverse order: 3,2,1

Select:	Description	Catalog	Data	Default Radius (arcmin)	Mission	Table Type
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Public Pointed Science Window Data</a>	intscwpub	Y	600	INTEGRAL	Observation
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Science Window Data</a>	intscw	Y	600	INTEGRAL	Observation
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Bright Source Catalog</a>	intbsc	Y	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Public Data Results Catalog</a>	intpublic	Y	600	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">First IBIS/SGRI Soft Gamma-Ray Galactic Plane Survey Catalog</a>	ibisgpocat	N	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL IBIS Hard X-Ray Survey of Galactic Center</a>	intgccat	N	5	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Observing Program</a>	integralao	N	60	INTEGRAL	Proposal
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Reference Catalog</a>	intrefcat	N	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL First SPI-ACS Gamma-Ray Burst Catalog</a>	intspiagrb	N	***	INTEGRAL	Object

2. Do you want to change any of your current query selections?

**Object Name Or Coordinates:** \_\_\_\_\_ (e.g. Cyg X-1 or '12 00 00, 4 12 6') Use semi-colons (;) to separate multiple object names or coordinate pairs (e.g. Cyg x-2; 12.235, 15.345)

**Coordinate System:** J2000

**Search Radius:** Default arcmin Default uses the optimum radius for each catalog searched.

**Name Resolver:** SIMBAD, else NED

**Observation Dates:** \_\_\_\_\_ (g). The time portion of the date is optional. Separate multiple dates/ranges with semicolons. Range operator is '..'. (e.g. 1992-12-31; 48980.5; 1995-01-15 12:00:00; 1997-03-20 .. 2000-10-18)

**Limit Results To:** 1000 rows

**Output Format:** HTML Table

**Show All Parameters:**  Select to display all catalog parameters instead of only defaults

3.

[Send email to the Browse Software Development Team](#)



# INTEGRAL Science Window Data

## **INTEGRAL Science Window Data Catalog:**

A catalog containing a list of all INTEGRAL science windows (SCWs). This table can be searched using many observation parameters including source name, source position, good time, and observation date.

## **INTEGRAL Public Pointed Science Window Data Catalog:**

A catalog containing a list of all public INTEGRAL science windows (SCWs) of type "pointing" in which the good time of at least one of the instruments is greater than 0. Thus this table does not contain slew or engineering SCWs or SCWs where no good data were acquired. Like the INTEGRAL Science Window Data Catalog, this table can also be searched using many observation parameters including source name, source position, good time, and observation date.

**These catalogs are useful for retrieving low-level SCW data products.**

# INTEGRAL Bright Source Catalog

- A source catalog of bright sources based on the all public data.
- The catalog can be searched by source name, source position, source type, or observed SPI flux.
- ISGRI and SPI lightcurves can be retrieved for the selected sources.
- The measurements included in the catalog are intended to serve as a guideline to users of the INTEGRAL database, and should generally not be used directly in published materials.

INTEGRAL Bright Source Catalog

Here we present the (apparently) brightest sources seen by INTEGRAL in the 20-40 keV energy band in public data. This is **not a flux limited sample**. All results are from consolidated data in the 20 - 40 keV energy band. ISGRI analysis has been performed by Paizis & Chernyakova at the [INTEGRAL Science Data Centre](#), SPI analysis was done at [INTEGRAL Guest Observer Facility](#). Apparent flux variations of non-variable sources are based on short exposure times and/or far off-axis position. INTEGRAL/SPI fluxes are based on the assumption that  $[20-40\text{keV}] = 0.1783 \text{ ph/cm}^2/\text{sec}$  corresponds to 1 Crab. *Highest flux* measurements require at least a 3 sigma significance. *Lowest flux* represents the lowest measured flux with at least 1 sigma significance. The average fluxes is are weighted means of all measurements with at least 1 sigma significance (if not mentioned different).

In ISGRI the Crab has a count rate of 99 counts/sec (20 - 40 keV) and 40 counts/sec (40 - 60 keV), respectively (determined for revolution 102 on-axis staring observation). For more information on sources seen by ISGRI, see also [Bird et al. 2004, ApJ, 607, L33](#)

You can [download the catalog in fits format here](#) and use it as an input catalog (GNRL-REFR-CAT) in your analysis (note that the flux values in this catalog are the same as in the original ISDC reference catalog).

[Download the Bright Source Catalog on your PalmOS® or Pocket PC® PDA](#)

**Note! These are preliminary results, and should only give a rough guide of what INTEGRAL can do with respect to point sources**

**INTEGRAL Bright Source Catalog**

Source	Type	RA (J2000.0)	DEC (J2000.0)	ISGRI detections	ISGRI results	SPI average flux [mCrab]	SPI highest flux [mCrab]	SPI lowest flux [mCrab]	SPI lightcurve	Remarks on SPI analysis
<a href="#">V709_Cas</a>	CV	00 28 49	+59 17 22			4 ± 2		4 ± 2	<input checked="" type="checkbox"/>	
<a href="#">IGR J00370+6122</a>	HMXB	00 37 06	+61 22 00			8 ± 2	8 ± 2	8 ± 2	<input checked="" type="checkbox"/>	
<a href="#">Gam_Cas</a>	Be Star	00 56 43	+60 43 00			8 ± 1	11 ± 3	5 ± 2	<input checked="" type="checkbox"/>	
<a href="#">SMC X-1</a>	HMXB	01 17 05	-73 26 36	35	<input checked="" type="checkbox"/>	23 ± 3	23 ± 3	22 ± 5	<input checked="" type="checkbox"/>	
<a href="#">3A 0114+650</a>	HMXB	01 18 03	+65 17 30			13 ± 1	23 ± 3	6 ± 3	<input checked="" type="checkbox"/>	
<a href="#">4U 0115+634</a>	HMXB	01 18 32	+63 44 24	6	<input checked="" type="checkbox"/>	11 ± 3	53 ± 13	4 ± 3	<input checked="" type="checkbox"/>	
<a href="#">RX J0146.9+6121</a>	XRb	01 47 00	+61 21 24			13 ± 2	18 ± 4	9 ± 4	<input checked="" type="checkbox"/>	
<a href="#">NGC 1275</a>	Sy2	03 19 48	+41 30 42			16 ± 3	15 ± 3	10 ± 10	<input checked="" type="checkbox"/>	
<a href="#">EXO 0331+530</a>	HMXB	03 35 00	+53 10 24			290 ± 2	707 ± 6	29 ± 26	<input checked="" type="checkbox"/>	V0332+53
<a href="#">X Per</a>	HMXB	03 55 23	+31 02 45	91	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	
<a href="#">LMC X-4</a>	HMXB	05 32 50	-66 22 14	117	<input checked="" type="checkbox"/>	32 ± 1	79 ± 9	3 ± 2	<input checked="" type="checkbox"/>	
<a href="#">Crab</a>	SNR	05 34 32	+22 00 52	591	<input checked="" type="checkbox"/>	1000 ± 1	1059 ± 16	916 ± 24	<input checked="" type="checkbox"/>	
<a href="#">IGR J06074+2205</a>	?	06 07 18	+22 04 52	7	<input checked="" type="checkbox"/>	9 ± 1	33 ± 10	5 ± 2	<input checked="" type="checkbox"/>	
<a href="#">MRK 3</a>	Sy2	06 15 36	+74 02 15			6 ± 2	8 ± 3	5 ± 2	<input checked="" type="checkbox"/>	
<a href="#">H 0614+091</a>	LMXB	06 17 07	09 08 13	47	<input checked="" type="checkbox"/>	21 ± 2	67 ± 4	8 ± 3	<input checked="" type="checkbox"/>	
<a href="#">EXO 0748-676</a>	LMXB	07 48 33	-67 45 00	47	<input checked="" type="checkbox"/>	19 ± 1	38 ± 13	6 ± 4	<input checked="" type="checkbox"/>	
<a href="#">Vela Pulsar</a>	Pulsar	08 35 21	-45 10 35			12 ± 1	59 ± 15	7 ± 3	<input checked="" type="checkbox"/>	
<a href="#">Ginga 0836-429</a>	LMXB	08 37 25	-42 53 18	501	<input checked="" type="checkbox"/>	58 ± 1	81 ± 2	4 ± 2	<input checked="" type="checkbox"/>	
<a href="#">Vela X-1</a>	HMXB	09 02 07	-40 33 17	572	<input checked="" type="checkbox"/>	199 ± 1	671 ± 17	17 ± 2	<input checked="" type="checkbox"/>	
<a href="#">MCG -05-23-16</a>	Sy 1.9	09 47 40	-30 56 56	3					<input checked="" type="checkbox"/>	

# INTEGRAL Public Data Results Catalog

- A catalog containing SPI and IBIS imaging analysis results which are given per observation or revolution.
- The catalog can be searched by revolution number, source name, source position, observation date, exposure time, and PI name. SPI and ISGRI imaging results can be retrieved.
- It is useful to specify a large search radius when searching this catalog due to the inclusion of Galactic Plane Scan (GPS) and Galactic Center Deep Exposure (GCDE) data.
- This catalog can also be used to retrieve low-level SCW data products.

INTEGRAL Public Data Results

Scientific analysis for SPI and IBIS/ISGRI has been performed at NASA's [INTEGRAL Guest Observer Facility](#) and for some ISGRI data by Paizis, Rodriguez, Chernyakova et al. at the [INTEGRAL Science Data Centre](#). For ISGRI check the header of the FITS files to see which software version was used. For SPI look into the analysis results ASCII file.

Scientific results:  
 I = ISGRI significance JPEG image 20 - 40 keV (if not mentioned different on the map)  
 F = ISGRI results maps (intensity, error, significance, and exposure map) as a gzipped fits file (20,40,60,80,100,150,200,400 keV bands for most of the fits files)  
 S = SPI significance image 20 - 40 keV (JPEG)  
 F2 = SPI significance map 20 - 40 keV (gzipped fits file)  
 L = SPI analysis results (ASCII file)  
 W = list of science windows (Note! if the entries end on "swg\_prp.fits[1]", the list is for revision 1 data. When it ends on "swg.fits[1]", it was created for revision 2)

Rev#	Start Time (UTC)	End Time (UTC)	Exposure Time (s)	Source	RA (J2000) [hr:min:sec]	DEC (J2000) [deg:arcmin:arcsec]	Dither Pattern	PI	Proposal	Scientific Results
370	2005-10-26 15:33:17	2005-10-26 19:34:03	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
369	2005-10-23 17:30:00	2005-10-23 21:24:58	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
368	2005-10-19 03:39:12	2005-10-19 07:41:06	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
367	2005-10-15 08:13:38	2005-10-15 11:55:14	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
366	2005-10-12 08:20:17	2005-10-12 12:01:53	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
365	2005-10-10 20:30:00	2005-10-11 00:11:36	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
364	2005-10-06 08:44:28	2005-10-06 09:14:28	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
363	2005-10-03 08:58:55	2005-10-03 12:40:31	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
362	2005-09-30 09:14:24	2005-09-30 12:56:00	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
361	2005-09-28 22:42:06	2005-09-29 02:23:42	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
360	2005-09-26 19:32:00	2005-09-26 23:31:23	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
359	2005-09-23 00:41:00	2005-09-23 04:22:36	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
358	2005-09-20 01:00:00	2005-09-20 04:41:36	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
357	2005-09-17 20:06:00	2005-09-18 00:07:48	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
354	2005-09-07 03:04:52	2005-09-07 06:46:28	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
353	2005-09-03 11:48:56	2005-09-03 15:30:32	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>
352	2005-08-28 00:00:00	2005-08-28 00:00:00	12600	Gal. Bulge region	17:45:36.0	-28:56:00.0	HEX	Kuulkers	0320109	<a href="#">I</a> <a href="#">W</a>

Used to select object and search radius. Be sure to set the search radius to a size that is instrument

appropriate:

SPI: 12 degrees

ISGRI: 10 degrees

JEM-X: 2.5 degrees

Click here

HEASARC Browse: Search of INTEGRAL and object Catalog(s) - Netscape

http://heasarc.gsfc.nasa.gov/db-perl/W3Browse/w3table.pl

Browse Home Search of **INTEGRAL** and object Catalog(s) Tip Archive Hera HELP

Main Search Form > **Search Form** > Search Results > Choose Data Products

1. Please select one or more of the tables below.  
Sort by a column in order: 1,2,3 Sort by column in reverse order: 3,2,1

Select:	Description	Catalog	Data	Default Radius (arcmin)	Mission	Table Type
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Public Pointed Science Window Data</a>	intscwpub	Y	600	INTEGRAL	Observation
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Science Window Data</a>	intscw	Y	600	INTEGRAL	Observation
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Bright Source Catalog</a>	intbsc	Y	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Public Data Results Catalog</a>	intpublic	Y	600	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">First IBIS/ISGRI Soft Gamma-Ray Galactic Plane Survey Catalog</a>	ibisgpocat	N	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL IBIS Hard X-Ray Survey of Galactic Center</a>	intgccat	N	5	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Observing Program</a>	integralao	N	60	INTEGRAL	Proposal
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL Reference Catalog</a>	intrefcat	N	15	INTEGRAL	Object
<input checked="" type="checkbox"/>	<a href="#">INTEGRAL First SPI-ACS Gamma-Ray Burst Catalog</a>	intspiagrb	N	***	INTEGRAL	Object

2. Do you want to change any of your current query selections?

**Object Name Or Coordinates:** (e.g. Cyg X-1 or '12 00 00, 4 12 6') Use semi-colons (;) to separate multiple object names or coordinate pairs (e.g. Cyg x-2; 12.235, 15.345)

**Coordinate System:** J2000

**Search Radius:** Default arcmin Default uses the optimum radius for each catalog searched.

**Name Resolver:** SIMBAD, else NED

**Observation Dates:** (g). The time portion of the date is optional. Separate multiple dates/ranges with semicolons. Range operator is '..'. (e.g. 1992-12-31; 48980.5; 1995-01-15 12:00:00; 1997-03-20 .. 2000-10-18)

**Limit Results To:** 1000 rows

**Output Format:** HTML Table

**Show All Parameters:**  Select to display all catalog parameters instead of only defaults

3.

[Send email to the Browse Software Development Team](#)

Select "sort" to order list by SCW = time

Set to "pointing" to eliminate slew and engineering data

Set to "public" for only public data in list

Set to ">200" for instrument of interest to eliminate short/unstable pointings

View	Sort Parameter (Unit)	Query Terms	Min Value	Max Value	Value Type
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> scw_id		000100000012	036000790010	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> scw_ver		001	003	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> scw_type		other	slew	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> status		private	public	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> data in heasarc		N	Y	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> ra		00 00 00.63	23 59 59.81	position
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> dec		-89 20 33.6	+85 27 29.1	position
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_spi (s)		0	12464	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_isgri (s)		0	15220	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_picsit (s)		0	18990	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_jemx1 (s)		0	15372	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_jemx2 (s)		0	15372	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> good_omc (s)		0	22241	integer
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> start_date		2002-10-17 06:00:36.8	2005-09-26 09:17:22.9	date
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> end_date		2002-10-17 06:00:44.8	2005-09-26 09:52:23	date
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> obs_id		00600040001	88998010301	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> obs_type		Calibration	TOO	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> pi_name		Acad. Rashid Sunyaev	Thierry Courvoisier, Dr. C. C. Dudley, Prof. Jonathan Grindlay	string
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> data_size (bytes)		492544	468219904	float
<input type="checkbox"/>	<input type="checkbox"/> omc_mode		11	99	integer
<input type="checkbox"/>	<input type="checkbox"/> spi_mode		11	99	integer
<input type="checkbox"/>	<input type="checkbox"/> ibis_mode		11	99	integer
<input type="checkbox"/>	<input type="checkbox"/> jemx1_mode		11	99	integer
<input type="checkbox"/>	<input type="checkbox"/> jemx2_mode		11	99	integer
<input type="checkbox"/>	<input type="checkbox"/> exp_id		00120001	03600002	string
<input type="checkbox"/>	<input type="checkbox"/> posangle (degree)		-179.994145971320	179.993833371100	float
<input type="checkbox"/>	<input type="checkbox"/> obt_end		16417554432	97422675017728	float
<input type="checkbox"/>	<input type="checkbox"/> ingest_date		2003-05-21 01:11:00	2005-10-27 11:15:55	date
<input type="checkbox"/>	<input type="checkbox"/> bii (degree)		-86.18688	89.86079	float
<input type="checkbox"/>	<input type="checkbox"/> lii (degree)		0.00014	359.99998	float
<input type="checkbox"/>	<input type="checkbox"/> creation_date		2004-08-10 15:34:44	2005-10-20 19:24:52	date
<input type="checkbox"/>	<input type="checkbox"/> obt_start		16409165824	97420473008128	float
<input type="checkbox"/>	<input type="checkbox"/> dec_z (degree)		-59.72319	60.33339	float

List of SCWs meeting selection criteria. Select SCWs to retrieve.

Data products to download. Choose "All."

Click on "Create Download Script."

HEASARC Browse: Query Results - Netscape

http://heasarcdev.gsfc.nasa.gov/db-perl/W3Browse/w3query.pl

HEASARC Browse: Query Results

RASS X-ray image, 75.0"

Images centered on requested position

**Browse Tip:** Do you know how to plot Browse results? [Learn more on this topic](#) or [See all tips](#)

Table Name and Row Count

[INTEGRAL Science Window Data \(intscw\)](#) 163

**Table Legend:**

- Display all parameters for a row
- Sort by a column in order: 1,2,3
- Sort by column in reverse order: 3,2,1

Services links: O: Digitized Sky Survey image, R: ROSAT All-Sky Survey image, N: NED objects near coordinates, S: SIMBAD objects near coordinates, D: get list of data products, X: analyze data products using [Hera](#), B: ADS bibliography holdings, Scroll down below tables to select Data Products and Further Actions.

**INTEGRAL Science Window Data (intscw)**

Search radius used: 600.00"

<input type="checkbox"/>	<a href="#">O</a>	<a href="#">R</a>	<a href="#">N</a>	<a href="#">S</a>	<a href="#">D</a>	<a href="#">X</a>	009000110010001	pointing	public	Y	12	34	54.99	+01	07	00.1	3417	3408	3389	0	3417	3395	2003-07-10	04:24:40.1	2003-07-10
<input type="checkbox"/>	<a href="#">O</a>	<a href="#">R</a>	<a href="#">N</a>	<a href="#">S</a>	<a href="#">D</a>	<a href="#">X</a>	009000120010001	pointing	public	Y	12	42	54.63	+01	07	11.2	3406	3396	3382	0	3406	3392	2003-07-10	05:23:41.1	2003-07-10
<input type="checkbox"/>	<a href="#">O</a>	<a href="#">R</a>	<a href="#">N</a>	<a href="#">S</a>	<a href="#">D</a>	<a href="#">X</a>	009000130010001	pointing	public	Y	12	42	55.99	+03	07	16.3	3380	3372	3358	0	3380	3380	2003-07-10	06:22:42.1	2003-07-10

163 rows retrieved from intscw

**Are you interested in data products?**

- Select the checkboxes for the rows of interest above,
- un-check any data products you are not interested in:

**Data Products available for intscw**

- All
- Auxiliary Reference Data (aux ref)
- Auxiliary Revolution Data (aux rev)
- Science Window and Revolution Data (data)

3. optionally, add a file name constraint to specify product types, e.g., "Ari/\*.gif"  
Use a semicolon (;) for multiple constraints, e.g., "fits;.gif"

File name filter:

4. then click a button below.

for data products for selected rows

data products for selected rows

data products for selected rows

data products for selected rows

[What is Hera?](#)

**Further Actions:**

Do you want to  your intscw results? ([help](#))

Do you want to  your intscw results with another catalog or table?

Do you want to  all the columns for the rows selected above?

Do you want to query other services for the rows selected? ([help](#))

Services:

- NED
- SIMBAD
- SkyView:ROSAT All-Sky
- SkyView:DSS
- CoCo



- List of wget's
- Not in SCW order
- Cut and paste into a local shell script
- Creates aux and scw directories of data repository
- The ic, idx, and cat data can be downloaded using a shell script on the INTEGRAL GOF website.

The screenshot shows a Netscape browser window with the address bar containing `http://heasarcdev.gsfc.nasa.gov/db-perl/W3Browse/w3hdprods.pl`. The page title is "Data Products Download Commands". Below the title, there is a section titled "Data Products Download Commands" with a sub-header "The following commands can be used to download selected data products:". A note states: "Copy and paste lines to a local shell script or command line or download commands to a file". Below this note is a button labeled "Download Commands To File". A second note says: "Note: The network utility *wget* is included with most systems. To download *wget* or get more information visit the [GNU website](#)". The main content of the page is a list of 30 `wget` commands, each followed by a file URL. The commands are:
 

```
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//aux/adp//0089.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700670010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700250010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700220010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0090/009000010020.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0090/009000050010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800080010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0090/009000020010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800050010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800020010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800440010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800410010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0028/002800340010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0032/003200400010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0028/002800340010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700180010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0028/002800310010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700570010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700150010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700540010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700510010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0089/008900240010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800370010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0032/003200390010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800340010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0078/007800310010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0028/002800270010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0032/003200330010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700460020.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0028/002800240010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0032/003200300010.001/
wget --passive-ftp -q -nH --cut-dirs=3 -r -lO -c -N -np --retr-symlinks ftp://legacy.gsfc.nasa.gov/FTP/integral/data//scw/0077/007700470010.001/
```



# Finishing Up

- The 2 shell scripts will create the scw, aux, ic, cat, and idx data directories.
- Detailed instructions for downloading data and setting up your data repository are included in a data download cookbook on our website:

[http://heasarc.gsfc.nasa.gov/docs/integral/inthp\\_archive\\_cookbook.html](http://heasarc.gsfc.nasa.gov/docs/integral/inthp_archive_cookbook.html)

- Included in this cookbook is a script for converting the scw download script into an ASCII list suitable for use with og\_create.