



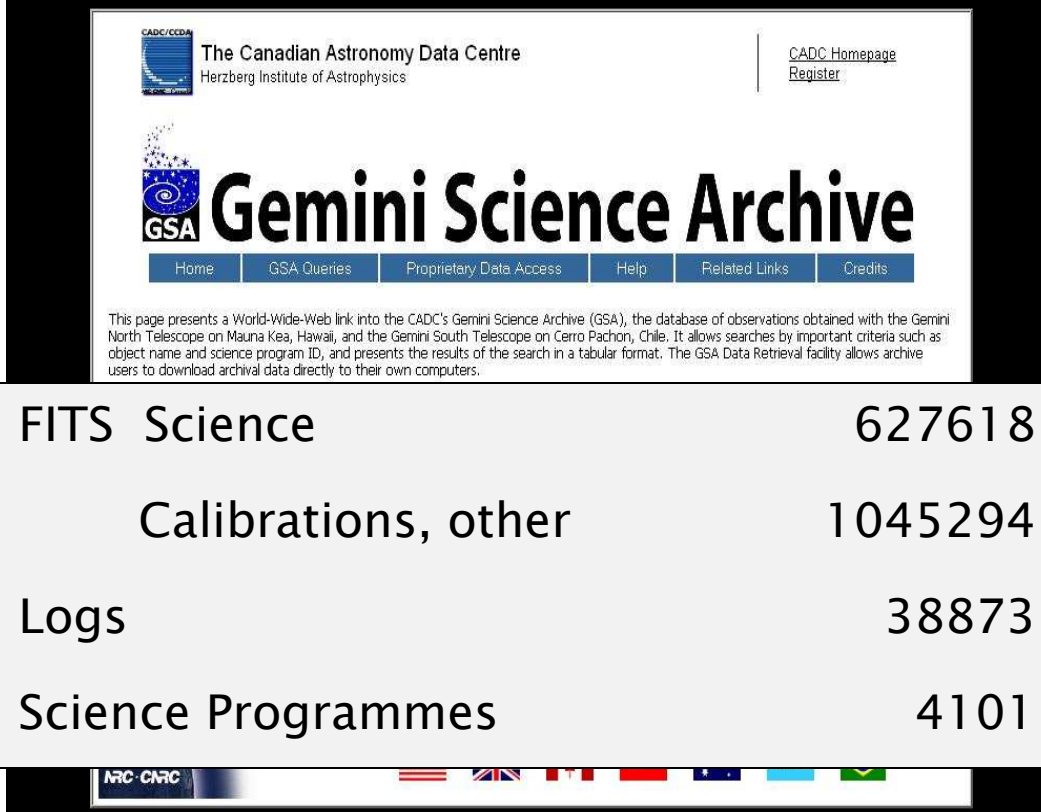
**GEMINI**  
**OBSERVATORY**



# The Gemini Science Archive

SAGDSW – Brazil, October 27–30,  
2011

- Hosted by CADC in Victoria, Canada.
- Released September 2004
- Gemini North data from May 2000
- Gemini South data from October 2001
- E-transfer started October 2005 – automatic transfer from sites to CADC.
- Active transfer from sites to archive as observation progresses.

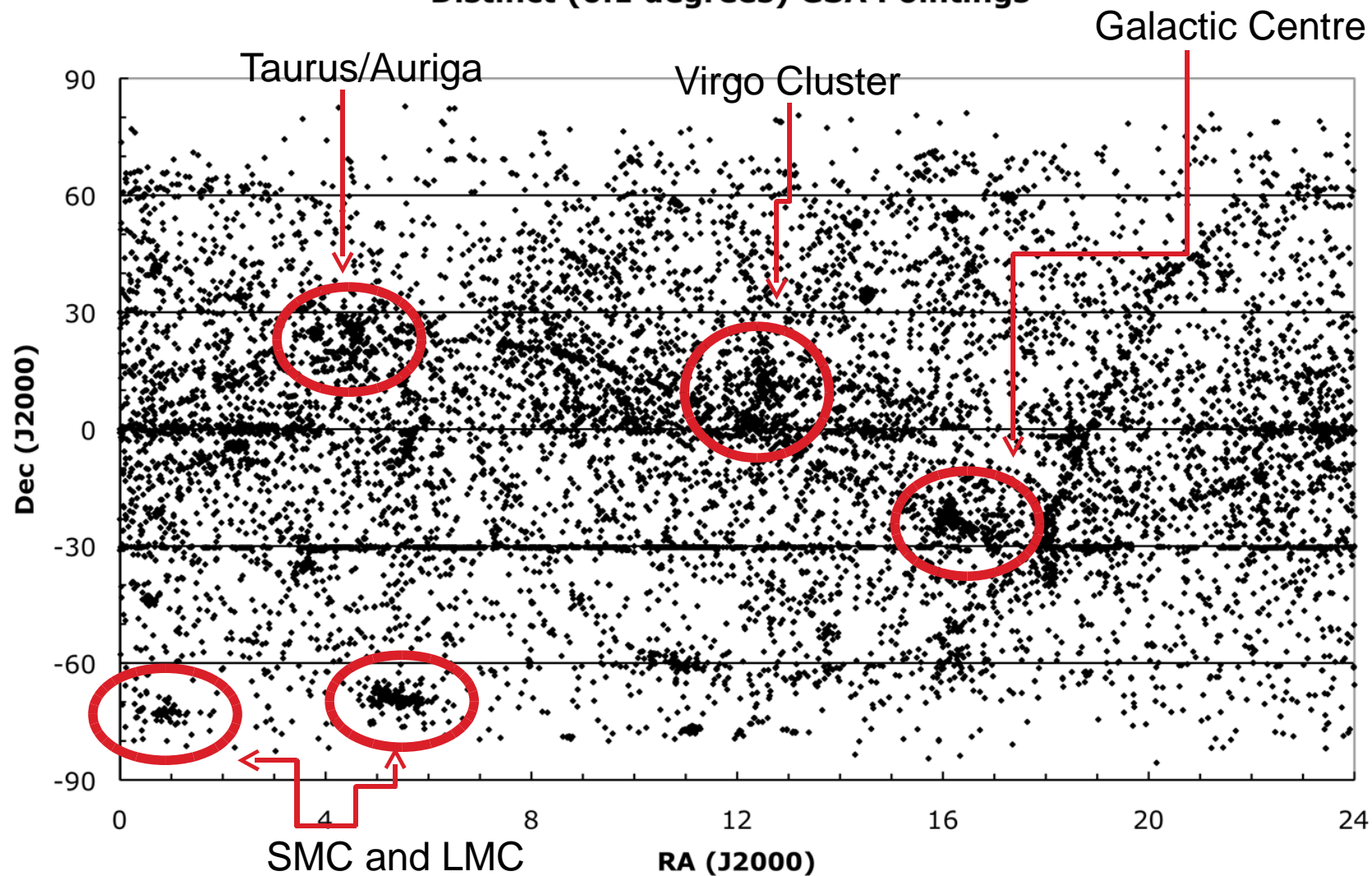


The screenshot shows the Gemini Science Archive (GSA) website. At the top, it says 'The Canadian Astronomy Data Centre' and 'Herzberg Institute of Astrophysics'. There are links for 'CADC Homepage' and 'Register'. The main heading is 'Gemini Science Archive' with a 'GSA' logo. Below this is a navigation bar with links: 'Home', 'GSA Queries', 'Proprietary Data Access', 'Help', 'Related Links', and 'Credits'. A paragraph of text describes the archive as a World-Wide-Web link into the CADC's Gemini Science Archive (GSA), the database of observations obtained with the Gemini North Telescope on Mauna Kea, Hawaii, and the Gemini South Telescope on Cerro Pachon, Chile. It allows searches by important criteria such as object name and science program ID, and presents the results of the search in a tabular format. The GSA Data Retrieval facility allows archive users to download archival data directly to their own computers.

FITS Science	627618
Calibrations, other	1045294
Logs	38873
Science Programmes	4101

At the bottom of the screenshot, there is a row of flags representing various countries: Canada, USA, UK, France, Germany, Italy, Spain, and others.

Distinct (0.1 degrees) GSA Pointings



- Database is populated with content of header keywords
- Header content is enforced from the time of ingestion – if a mandatory keyword is absent, the dataset is rejected until fixed
- Metadata related to individual observations is obtained from the Observing Tool – very little information is required to be added by the observer (environmental information in terms of realized percentiles, name of observer/operator).
- Instrument/telescope related information is passed directly from subsystems to the Data Handling System
- Result in complete, stable header content.
- Filename format is fixed and unique (S20111019S0412.fits)
- Each dataset is uniquely identified by a datalabel, containing the name of the programme (GS-2011B-Q-13-24-350)
- Observing logs are generated as observation progresses, and the observer can add comments, but not change content.

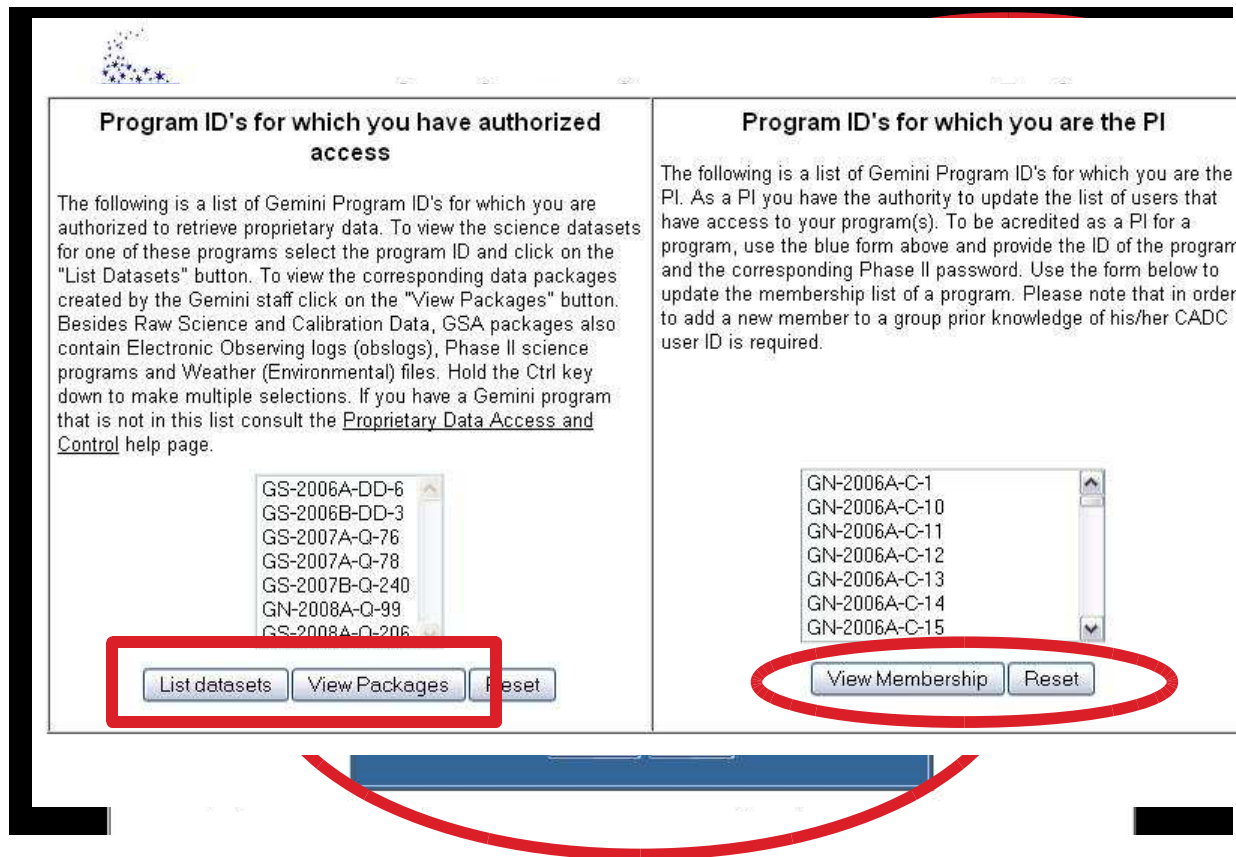


# Data Ingestion and Distribution



OPD, SOAR, Gemini – Brazil  
2010-03-09

- Proprietary period 18 months from date of observation
- CADC registration required
- Access through Phase II passkey
- Authorize other users without releasing Phase II key
- Download datasets any time or “packages” when available



**Program ID's for which you have authorized access**

The following is a list of Gemini Program ID's for which you are authorized to retrieve proprietary data. To view the science datasets for one of these programs select the program ID and click on the "List Datasets" button. To view the corresponding data packages created by the Gemini staff click on the "View Packages" button. Besides Raw Science and Calibration Data, GSA packages also contain Electronic Observing logs (obslogs), Phase II science programs and Weather (Environmental) files. Hold the Ctrl key down to make multiple selections. If you have a Gemini program that is not in this list consult the [Proprietary Data Access and Control](#) help page.

GS-2006A-DD-6  
GS-2006B-DD-3  
GS-2007A-Q-76  
GS-2007A-Q-78  
GS-2007B-Q-240  
GN-2008A-Q-99  
GS-2008A-Q-206

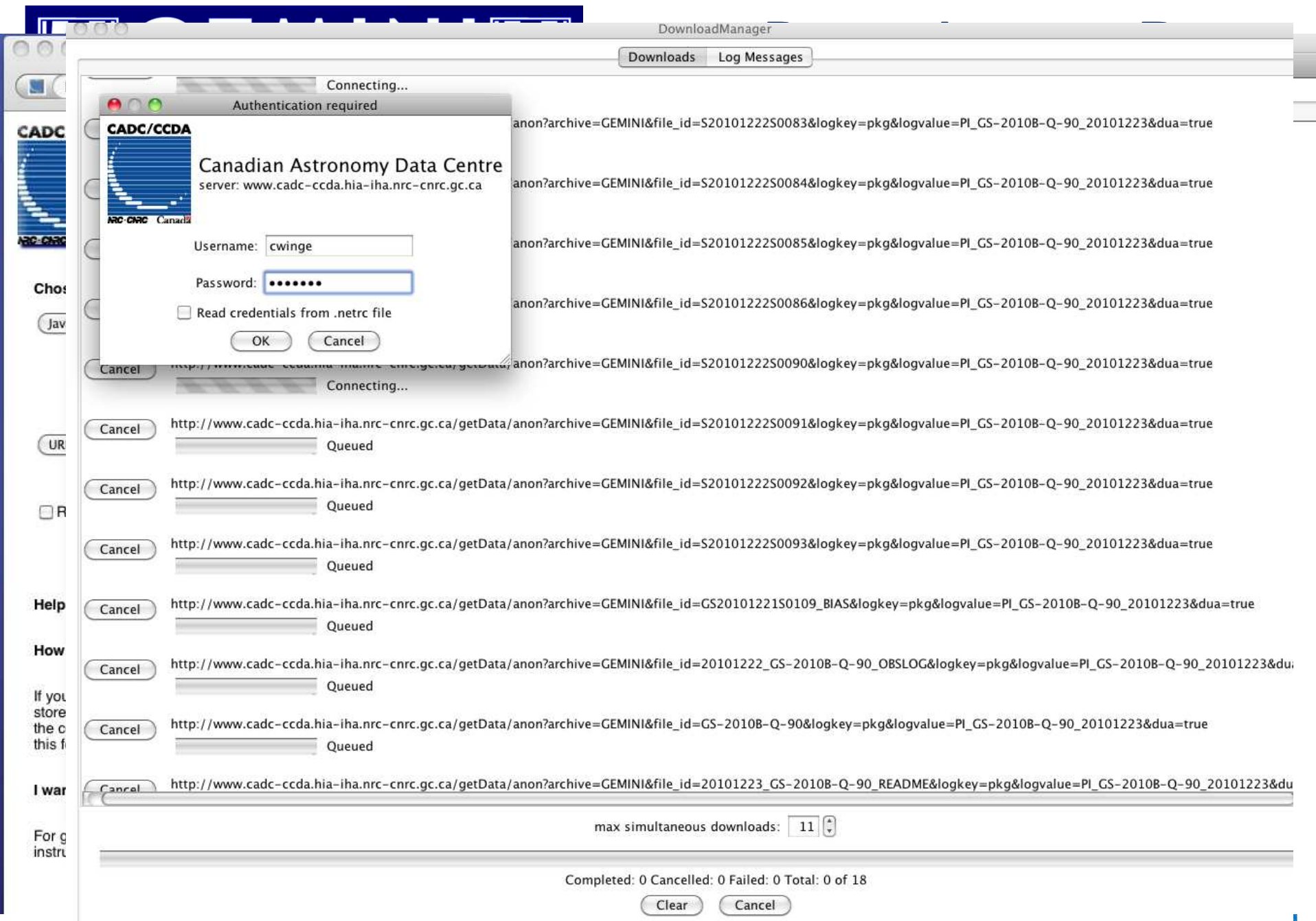
List datasets View Packages Reset

**Program ID's for which you are the PI**

The following is a list of Gemini Program ID's for which you are the PI. As a PI you have the authority to update the list of users that have access to your program(s). To be accredited as a PI for a program, use the blue form above and provide the ID of the program and the corresponding Phase II password. Use the form below to update the membership list of a program. Please note that in order to add a new member to a group prior knowledge of his/her CADC user ID is required.

GN-2006A-C-1  
GN-2006A-C-10  
GN-2006A-C-11  
GN-2006A-C-12  
GN-2006A-C-13  
GN-2006A-C-14  
GN-2006A-C-15

View Membership Reset



27-30, 2011



Proceed with downloading the selected items ...

Download 26 files = 100727 KB

... or doublecheck the list of files.

### Science Datasets

All None	Dataset Name	File ID	Type	Size (KB)
<input checked="" type="checkbox"/>	GS-2010B-Q-90-53-008	S20111018S0064	science	6016

Name	Filters	Instrument
	no filter	GMOS-S

Download Datasets with Ca Download Datasets Save Datasets MarkAll UnMarkAll

Mark	Dataset Name	Program ID	UT Date	Release Date	Telescope
<input checked="" type="checkbox"/>	20111018_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Oct 18 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20111010_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Oct 10 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110910_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Sep 10 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110720_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Jul 20 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110702_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Jul 2 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110614_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Jun 14 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110321_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Mar 21 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110318_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Mar 18 2011 12:00AM	Jun 22 2012 12:00AM	GS
<input type="checkbox"/>	20110317_GS-2010B-Q-90_OBSLOG	GS-2010B-Q-90	Mar 17 2011 12:00AM	Jun 22 2012 12:00AM	GS

<input checked="" type="checkbox"/>	GS-2010B-Q-90-52-002	S20111018S
<input checked="" type="checkbox"/>	GS-2010B-Q-90-52-001	S20111018S
<input type="checkbox"/>	GS-2010B-Q-90-45-010	S20111010S
<input type="checkbox"/>	GS-2010B-Q-90-45-009	S20111010S
<input type="checkbox"/>	GS-2010B-Q-90-45-008	S20111010S

<input checked="" type="checkbox"/>	GS-2010B-Q-90-52-003	S20111018S0055	calibration	5255
<input checked="" type="checkbox"/>	GS-2010B-Q-90-52-002	S20111018S0054	calibration	61
<input checked="" type="checkbox"/>	GS-2010B-Q-90-52-001	S20111018S0053	calibration	3024
<input checked="" type="checkbox"/>	GS-CAL2011017-1-016-g-bias	GS20111017S0374_BIAS	calibration	6292

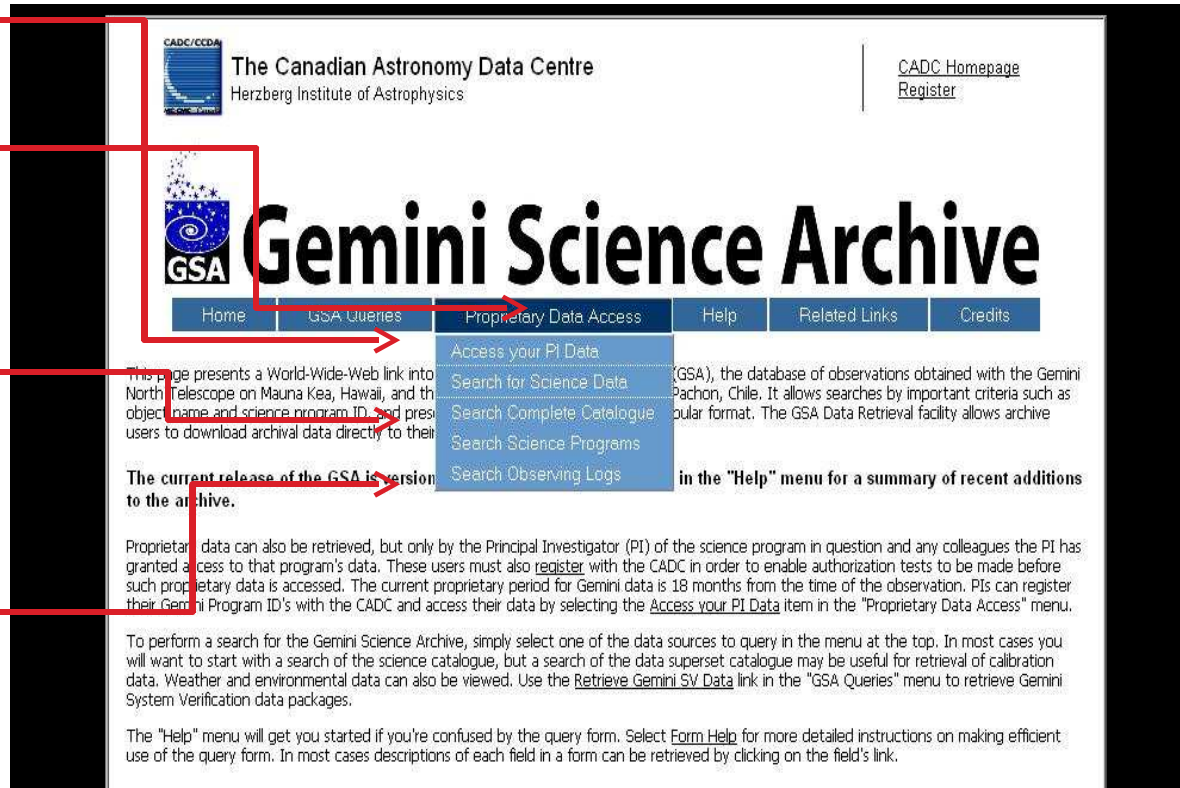
Download 26 files = 100727 KB

Offcentre	r_G0326	GMOS-S
Offcentre	r_G0326	GMOS-S
Offcentre	GG455_G0329	GMOS-S
Offcentre	GG455_G0329	GMOS-S
Offcentre	GG455_G0329	GMOS-S

SAGDSW – Brazil, October  
27–30, 2011



- Authorize user first
- Use proprietary data searches to enable access
- Science Catalog contains only science datasets – no calibrations
- Use Complete Catalog to search for calibrations
- Obslogs are proprietary until first dataset goes public – then ALL obslogs become public.
- Science Programs NOT available from outside packages – FETCH from ODB instead



The screenshot shows the Gemini Science Archive (GSA) website. Red arrows point from the list on the left to specific elements on the website:

- An arrow points from "Authorize user first" to the "Register" link in the top right corner.
- An arrow points from "Use proprietary data searches to enable access" to the "Proprietary Data Access" menu item.
- An arrow points from "Science Catalog contains only science datasets – no calibrations" to the "Search for Science Data" menu item.
- An arrow points from "Use Complete Catalog to search for calibrations" to the "Search Complete Catalogue" menu item.
- An arrow points from "Obslogs are proprietary until first dataset goes public – then ALL obslogs become public." to the "The current release of the GSA is version 1.0.0" text.
- An arrow points from "Science Programs NOT available from outside packages – FETCH from ODB instead" to the "Search Science Programs" menu item.

The website content includes:

**The Canadian Astronomy Data Centre**  
Herzberg Institute of Astrophysics

[CADC Homepage](#)  
[Register](#)

## Gemini Science Archive

Home | [GSA Queries](#) | [Proprietary Data Access](#) | [Help](#) | [Related Links](#) | [Credits](#)

[Access your PI Data](#)  
[Search for Science Data](#)  
[Search Complete Catalogue](#)  
[Search Science Programs](#)  
[Search Observing Logs](#)

This page presents a World-Wide-Web link into the Gemini Science Archive (GSA), the database of observations obtained with the Gemini North Telescope on Mauna Kea, Hawaii, and the Gemini South Telescope on Cerro Pachón, Chile. It allows searches by important criteria such as object name and science program ID, and provides users to download archival data directly to their local system.

The current release of the GSA is version 1.0.0 in the "Help" menu for a summary of recent additions to the archive.

Proprietary data can also be retrieved, but only by the Principal Investigator (PI) of the science program in question and any colleagues the PI has granted access to that program's data. These users must also register with the CADC in order to enable authorization tests to be made before such proprietary data is accessed. The current proprietary period for Gemini data is 18 months from the time of the observation. PIs can register their Gemini Program ID's with the CADC and access their data by selecting the [Access your PI Data](#) item in the "Proprietary Data Access" menu.

To perform a search for the Gemini Science Archive, simply select one of the data sources to query in the menu at the top. In most cases you will want to start with a search of the science catalogue, but a search of the data superset catalogue may be useful for retrieval of calibration data. Weather and environmental data can also be viewed. Use the [Retrieve Gemini SV Data](#) link in the "GSA Queries" menu to retrieve Gemini System Verification data packages.

The "Help" menu will get you started if you're confused by the query form. Select [Form Help](#) for more detailed instructions on making efficient use of the query form. In most cases descriptions of each field in a form can be retrieved by clicking on the field's link.

### GSA Science Data Query

Enter your desired qualifiers in the fields below and click the Search button.  
(You can also retrieve Gemini files with your own scripts.)

Search Display All Reset

Use data superset IDs from file: Browse...

arches



The Canadian Astronomy Data Centre  
Herzberg Institute of Astrophysics

[CADCC Homepage](#)  
[Register](#)



# Gemini Science Archive

New Resolver Object Right Ascension Declination

V=VizieR (local)(vizie.hia.nrc.ca) NGC1068 02 42 40.8 -00 01 48.0

Download Datasets with Cal. Download Datasets Save Datasets MarkAll

Mark	Target Name	RA (J2000)	DEC (J2000)	Original File Name	Science Program	Observing Logs	Integration Time	UT Date	Release Date	All Program Obs.	Processed Calibration Files	Nightly Raw Calibration Files	Instrument	Filter(s)	Central Wavelength
<input type="checkbox"/>	NGC1068	02 42 40.83	-00 00 48.3	N20091109S0012	GN-2009B-Q-114	Obs. Logs	84.00	Nov 9 2009 6:20AM	May 9 2011 12:00AM	List	Proc. Cal.	Cal. Files	GMOS-N	no filter	0.4900
<input type="checkbox"/>	NGC1068	02 42 40.83	-00 00 48.3	N20091109S0015	GN-2009B-Q-114	Obs. Logs	84.00	Nov 9 2009 6:37AM	May 9 2011 12:00AM	List	Proc. Cal.	Cal. Files	GMOS-N	no filter	0.5000
<input type="checkbox"/>	NGC1068	02 42 40.83	-00 00 48.3	N20091109S0016	GN-2009B-Q-114	Obs. Logs	84.00	Nov 9 2009 6:53AM	May 9 2011 12:00AM	List	Proc. Cal.	Cal. Files	GMOS-N	no filter	0.5100

Download Datasets with Cal. Download Datasets Save Datasets MarkAll UnMarkAll

A total of 3 records were retrieved



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☐ Maximum Wavelength... (microns; e.g. >0.5; 0.6..1.2) (For NICI, RED channel only)

☒ Central Wavelength... (microns; e.g. >0.5; 0.6..1.2) (For NICI, RED channel only)

☐ Spectral Resolution... (dimensionless R; e.g. >10000; 100..500)

☐ AO System..... Any or None

CFD, SOAR, Gemini - Brazil  
2010-03-09



## NIFS Observing Log

Observation ID	Dataset	UT	Data Labels	File Numbers	Target Name	Filter	Disperser	Mask	Read Mode
GN-2006B-C-9-6	03:44:48	1	65	-	-	HK Filter	K_short Grating/2.1	Blocked	
GN-2006B-C-9-6	03:45:14	2-3	66-67	-	-	HK Filter	K_short Grating/2.1	Blocked	
GN-2006B-C-9-6	03:47:49	4-8	68-72	GCALflat	GCALflat	HK Filter	K_short Grating/2.1	Clear	
GN-2006B-C-9-6	03:50:05	9-13	73-77	GCALflat	GCALflat	HK Filter	K_short Grating/2.1	Clear	
GN-2006B-C-9-6	03:52:21	14-15	78-79	Ar,Xe	Ar,Xe	HK Filter	K_short Grating/2.1	Clear	
GN-2006B-C-9-6	03:54:41	16-17	80-81	GCALflat	GCALflat	HK Filter	K_short Grating/2.1	Ronche Cal Mask	
GN-2006B-C-9-6	03:55:40	18	82	GCALflat	GCALflat	HK Filter	K_short Grating/2.1	Ronche Cal Mask	
GN-2006B-C-9-6	03:56:49	19	83	GCALflat	GCALflat	HK Filter	K Grating/2.2	Blocked	
GN-2006B-C-9-6	03:57:15	20-21	84-85	GCALflat	GCALflat	HK Filter	K Grating/2.2	Blocked	
GN-2006B-C-9-6	03:58:17	22-23	86-87	GCALflat	GCALflat	HK Filter	K Grating/2.2	Clear	
GN-2006B-C-9-420								Clear	
GN-2006B-C-9-420								Clear	
GN-2006B-C-9-420								Clear	
GN-2006B-C-9-496								Clear	
GN-2006B-C-9-421								Clear	
GN-2006B-C-9-421								Clear	
GN-2006B-C-9-421								Clear	
GN-2006B-C-9-421								Clear	
GN-2006B-C-9-422								Clear	
GN-2006B-C-9-422	08:38:39	2-3	190-191	HIP 18863	HIP 18863	Same as Disperser	K Grating/2.2	Clear	
GN-2006B-C-9-422	08:41:33	4-7	192-195	HIP 18863	HIP 18863	Same as Disperser	K_short Grating/2.1	Clear	
GN-2006B-C-9-92	08:52:26	1-3	196-198	HIP 14719	HIP 14719	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-92	08:56:38	4-7	199-202	HIP 14719	HIP 14719	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-93	09:09:55	1	203	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	Clear	
GN-2006B-C-9-93	09:11:16	2	204	GCALflat	GCALflat	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-93	09:15:30	3-13	205-215	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-710	10:30:56	3-4	220-221	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-94	09:53:18	1-3	216-218	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-94	10:36:47	4-6	222-224	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	
GN-2006B-C-9-94	11:12:13	7-8	225-226	CW Tau	CW Tau	Same as Disperser	H Grating/1.65	0.2 arcsec Occulting Disk	

- ☐
- ☐
- ☐
- ☐



☒ Grating: Any

☒ Central Wavelength: (microns)

2010-03-09





Save Marked Rows MarkAll UnMarkAll

es

Mark	Bibcode	Authors	Title	Citations	Program ID	Telescope	Instruments	Affiliate
			NGC 7097: The					

s.

Program ID	GS-2008B-Q-21
Partner Country	Brazil
Science Datasets	All data public
Science Category	Extra Galactic
Keywords	Active galaxies Elliptical galaxies Galaxy centers LINERS Seyfert galaxies
PI Name	Joao Steiner
Co-I Names	Roberto Menezes, Tiago Ricci, Alexandre Oliveira
Title	Search for very weak LINER 1 galactic nuclei
Abstract	We will search for the very low end of the luminosity function of LINERs type 1, proceeding with the study launched in semester 2008A. We expect to detect broad line emission in a good fraction of them (>50%), even if the main LINER emitting source is non-nuclear. The knowledge of the super-massive black hole demography is relevant for establishing their mass function in the local universe. As a by-product, we expect to identify and quantify the diverse mechanisms that are contributing to the overall LINER emission - as well as locate them in space.
Instruments	GMOS-S
SRB	1
Hours Allocated	6

Hours Charged... :

Save Marked Rows MarkAll UnMarkAll

OPD, SOAR, Gemini - Brazil  
2010-03-09

# Future plans?

- PI packaging replacement:
  - Association of raw calibration with science files outside packages (and in the public archive!)
  - User configurable notification, via RSS feeds
  - Download via VOSpace (tree) or GSA pages
- Common Archive Operations Model (single search to all CADC archives), data products (visualization) and VO publication:
  - Raw Phoenix and GMOS imaging raw/processed.
- Long range plan: input/demand is needed from the user community – take your requests to the Gemini Sci&Tech Advisory Committee!



**GEMINI**  
**OBSERVATORY**



# Questions?

OPD, SOAR, Gemini – Brazil  
2010-03-09