

# GEMINI SCIENCE ARCHIVE

GSA Science Data Query - Mozilla Firefox  
http://www1.cadc-ccda.hia-ihia.nrc-cnrc.gc.ca/cadcbin/gsa/wslbi.cgi/g

The Canadian Astronomy Data Centre  
Herzberg Institute of Astrophysics  
CADC Homepage  
CADC en Français  
Register

## Gemini Science Archive

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### GSA Science Data Query

Enter your desired qualifiers in the fields below and click the Search button.

Search Display All Reset

Use data superset IDs from file: Browse...

Retrieval Options:  
Order by: Date Return: 50 rows

Target Information:  
 Target Name resolver: SIMBAD/NED Search Box 0010 00  
 RA (J2000)  
 DEC (J2000)  
 Galactic Latitude  
 Galactic Longitude  
 Science Category: Any (Eron Phase I proposal)  
 Target Category (from Phase I proposal)

Search Display All Reset

Observation Constraints:  
 Data Superset Name: Contains (case insensitive) (e.g. GN-2003A-C-1-52-003)  
 Science Program: Contains (case insensitive) (e.g. GN-2003A-C-2)  
 RA(2000) Max: (degrees)  
 RA(2000) Min: (degrees)  
 DEC(2000) Max: (degrees)  
 DEC(2000) Min: (degrees)  
 Exposure Time: (seconds; e.g. <600; 800..1200)  
 UT Date: (e.g. 12 June 2002..16 June 2002; > 1 Jan 2003)  
 Release Date: (e.g. 12 June 2002..16 June 2002; > 1 Jan 2003)

Search Display All Reset



NOAO Staff Contact for the Gemini Science Archive:  
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Queries for Gemini-specific issues should be directed to the  
Gemini HelpDesk at:  
<http://www.gemini.edu/sciops/helpdesk/helpdeskIndex.html>

<http://cadwww.hia.nrc.ca/gemini/>



**NRC-CNRC**



December 2007



The Gemini Science Archive (GSA) Version 1.6 was released on May 31, 2007. The GSA provides searchable access to every bit of science and calibration data taken with any of the instruments on either of the two 8-m Gemini telescopes. Raw data that have reached the end of their proprietary periods may be downloaded directly from the archive, along with all the relevant calibration exposures and associated information. Data still under the proprietary period may be fetched from the GSA by the project PI or anyone else authorized by the PI.

Enhanced capabilities are frequently added. These advances include access to meta-data such as OT Phase-II observation definition files, GMOS mask definition files, and cross-referencing of data with other datasets and archives.

Note that users of the archive must first create an account by registering with the GSA. The archive uses this account information to contact users via e-mail when the data they have requested are ready for download.

## Proprietary Periods

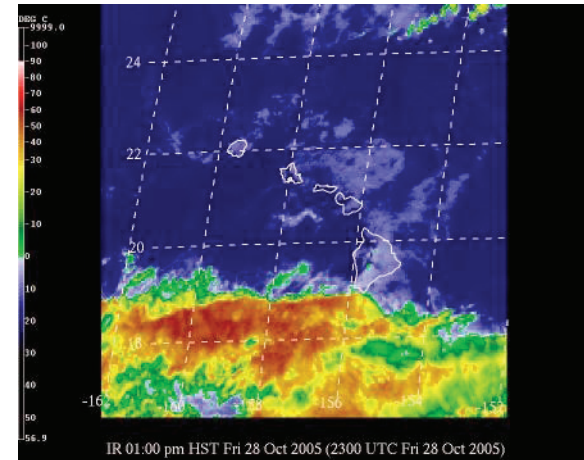
The standard proprietary period for all Gemini data is 18 months. Dataset headers are available for searches prior to the end of the proprietary period, but the data are not available for download until the period has ended. Some programs have shortened proprietary periods and are available more rapidly. All calibration data (flatfields, arcs, etc.) are available for download immediately upon arrival in the archive.

## Search Queries

From the front page of the GSA web site ([cadc.hia.nrc.ca/gemini/](http://cadc.hia.nrc.ca/gemini/)), there are two general query options: *Search for Science Data* and *Search Complete Catalogue*. A search for science data will return any observations of science targets that match the query parameters. Associated calibration data will not be listed in the returned output table, but this table will include links to the proper calibration files.

The complete catalogue search allows more flexibility in the configuration of search parameters. The user can define such parameters as binning of the detector, readout mode, instrument filter, grating, mask, etc. In fact, a user-defined query can use almost any of the standard Gemini header keywords on an instrument-by-instrument basis. For example, the user can find calibration files such as biases or twilight-sky flats that are exact matches to the science data.

The GSA search tools allow the user to save and reload search results. This enables local storage of output tables for ease of access and reference for later searches.



Sample weather satellite image included as meta-data in the GSA

## Meta-data in the GSA

The GSA supplements science observations with many types of meta-data. This includes nightly satellite weather images, observer logs of environmental conditions, information on the instrumental setup, and the xml files used to define and execute the observing sequences. These meta-data enhance the understanding and usability of the science data in the archive for the general user.

## Electronic Data Distribution

Starting with the 2005B observing semester, the GSA has become the primary distribution mechanism for all Gemini data. After a data quality review, a weekly process will generate packages of data for PIs, including all relevant meta-data. An e-mail will notify the PI that the data is available in the archive. Once the data is in the archive, the PI may retrieve it at any time. Access to proprietary science data requires the Gemini program ID as well as the Phase-II program key.

Information herein adapted from Gemini and CADC Web pages.

For more complete information, please see:

<http://www.gemini.edu/sciops/data/dataSciArchIndex.html> or  
<http://www1.cadc-ccda.hia-ihp.nrc-cnrc.gc.ca/gsa/overview.html>