

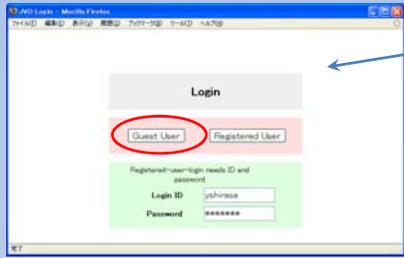
# The Japanese Virtual Observatory in action



**Yuji Shirasaki (NAOJ)**, M. Tanaka (NAOJ), M. Ohishi (NAOJ), Y. Mizumoto (NAOJ), S. Kawanomoto (NAOJ), S. Honda (Gunma Astronomical Observatory), N. Yasuda (U. Tokyo), Y. Masunaga (Aoyama Gakuin U.), Y. Ishihara (Fujitsu), Y. Machida (Fujitsu), H. Nakamoto (SEC), M. Sakamoto (SEC)



**Abstract:** The Japanese Virtual Observatory (JVO) is a web portal for astronomical data and analysis system. We have started official operation of the JVO since March 2008 at <http://jvo.nao.ac.jp/portal/>. We also operate several VO data services (SkyNode, SIA, SSA), and publishing and searchable registry. As of October 20 of 2008, over 2,000 resources in the world are registered to the JVO. More than 40 thousands pages are requested to the JVO system every month. 1.4 TB of data have been downloaded since the start of the official operation. GRID computing system is introduced to provide massive computing resource for reducing the data obtained by the Subaru telescope. In the initial operation, we offer 48 CPU cores, 4~GB memory per core. 1TB (Max) of locally attached hard disk is available as a working area. 8~TB of storage area is also available for registered users.



## Login Page

Anyone can login to the JVO system as a guest user without having a proper account.

## Registered User vs Guest User

A registered user can use the user storage area of the JVO, and can use the data reduction service for Subaru Suprime-Cam. Most of the other functionalities are open to any user.

## JVO Portal Top Page

Links to the user interface for accessing the various functionality of JVO are categorized. If you wish to get a user account, please click the "Registration" link.



## Links to VO Service Search Pages

Three kinds of query interfaces are provided. You can find VO data services around the world from here.

Service Type	Waveband	Facility	Subject1	Subject2
			AGN(59)	
			Associations(32)	
			Asteroids(36)	
			BL Lac(1)	Abundance(303)
			Eberles(86)	Age(3)
			Cosmology(15)	Astrometry(5)
			Extinction(8)	Catalog(2)
			Galaxies(427)	Clusters(10)
			Globular Clusters(10)	Ephemerides(2)
			Gravitational lensing(2)	Flares(1)
			Hipparcos(5)	Images(45)
			Interstellar Medium(2)	Masses(15)
			Magneto Scales(6)	Models(23)
			Planets(11)	Photometry(546)
			Multiple Stars(32)	Polarization(29)
			Nebulas(95)	Positions(3)
			Norstar(5)	Proper Motions(2)
			Redshift(113)	Spectra(4)
			Open Clusters(106)	Spectroastrometry(1)
			Orbits(4)	Spectroscopy(38)
			Planets(46)	Surveys(29)
			Planets(11)	Variables(78)
			Spectroscopy(38)	
			Star(2)	
			Star(2)	
			Star Formation(3)	
			Superflood(26)	
			YSOs(8)	

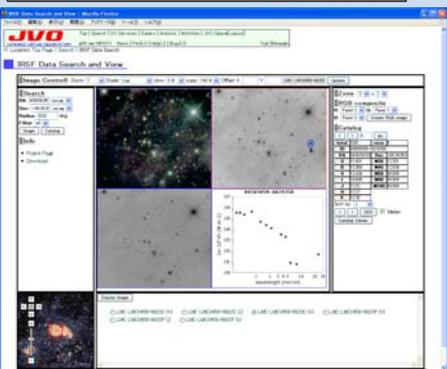
## Links to Data Search Pages

Five kinds of query interfaces are provided. The interfaces recommended for a beginner are marked by . At the "Quick Search" page, you can search on the Digital Universe, which is a database containing coordinates and brightness of the objects from various published catalogs such as Subaru Deep Survey, TWOMASS, SDSS, UKIDSS, Rosat, AGN, GRB and so on. At the other pages, you can also search on the VO services of the world.

## Questions & Requests

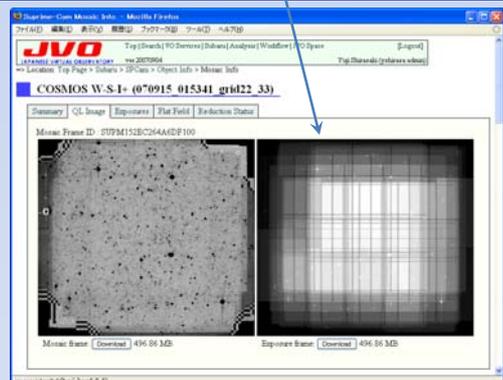
Send your feedback to this e-mail address.

If you have any questions or requests on JVO, please contact us at: [help\\_desk@jvo.nao.ac.jp](mailto:help_desk@jvo.nao.ac.jp)



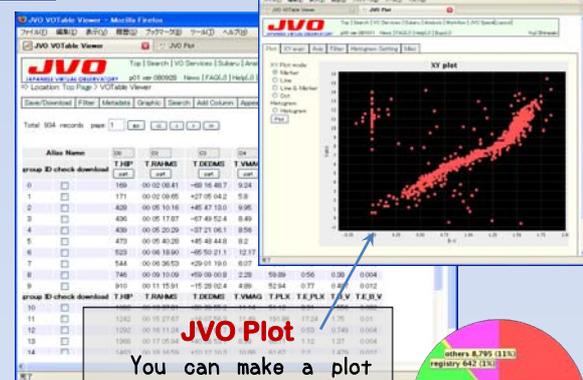
## Image Data Viewer

A server side image data viewer is being developed to help the user to browse the large amount of data without downloading a lot of FITS data to the local machine. A tricolor composite image and SED of each object can be created.



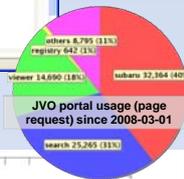
## Subaru Data

Reduced Subaru images (Suprime-Cam) and spectrum (HDS) are available at the Subaru archive page. These data are also provided through the SkyNode and SIA interfaces.



## JVO Plot

You can make a plot from the search result.



## Usage Statistics

Since the start of the official operation, we have got ~80,000 pages requests to the portal. Half of them are queries to the VOs and use of viewers to look at the results. 30% are accesses to the Subaru data.

