

The ILRS Website's Site Log Viewer Application



Carey Noll/NASA GSFC, Nathan Pollack/SSAI, NASA GSFC
NASA Goddard Space Flight Center, Code 690, Greenbelt, MD 20771, USA

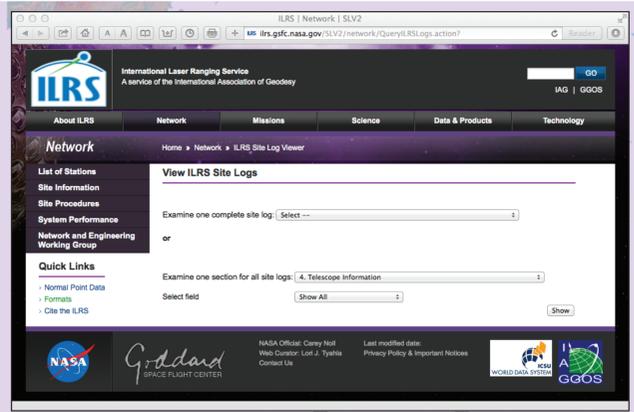
Abstract: The CDDIS has developed the Site Log Viewer application to allow users to query the site description/configuration logs for services within the International Association of Geodesy (IAG). As part of their ILRS operational compliance, stations in the ILRS network complete and update official site logs that describe the system's configuration, environment, and contact information. These logs are also accessible on the individual station pages and now through the new web application, the Site Log Viewer (SLV). The SLV provides for an enhanced display and comparison of the contents of the ILRS site logs. Through the SLV application, users can display and browse through a complete site log section by section, display contents of one section for all site logs, or search the contents of one section of a site log for a specified parameter value. An ILRS version of the SLV is available through the ILRS website, providing access to ILRS logs only. Through an expanded version of the application on the CDDIS website, users can browse logs from stations in the networks of the ILRS, the International DORIS Service (IDS) and the International GNSS Service (IGS); logs from sites in the International VLBI Service for Geodesy and Astrometry (IVS) will be accessible through the application in the future. This poster will describe the application and provide examples of its use.

Background -- Station Site Logs:

- Accurate, consistent information about the stations in the ILRS network is vital for data analysis
- Each station's ILRS Site Log is a formatted ASCII text description of the laser station's location, environment, equipment, co-located instrumentation, and organization/contact information
- Station personnel report changes in the system's configuration, etc. by adding information to the log
- Thus the form serves as a historical collection of major changes during the lifetime of a system's installation
- Each station's site log form is a key source for understanding how the station's configuration has changed over time
- The CDDIS has developed an application for the enhanced display and comparison of the contents of the ILRS site logs
- The ILRS version of the Site Log Viewer application is accessible at: <http://ilrs.gsfc.nasa.gov/SiteLogViewer/>

Use Cases:

- Users need to query the logs for a particular system to understand station configuration
- Users need to determine which sites have equipment with a particular configuration
- The CDDIS has developed an application, the Site Log Viewer, for the enhanced display and comparison of the contents of these site logs
- An ILRS only version is available through the ILRS website
- An enhanced version that displays site log contents for IGS, IDS, and IVS logs, in addition to the ILRS logs, is available through the CDDIS website.
- Through the Site Log Viewer application, users can:
 - Display a complete site log, section by section
 - Display contents of all site logs for a specified topic (site log section)
 - Search the contents of all site logs for a specified parameter value

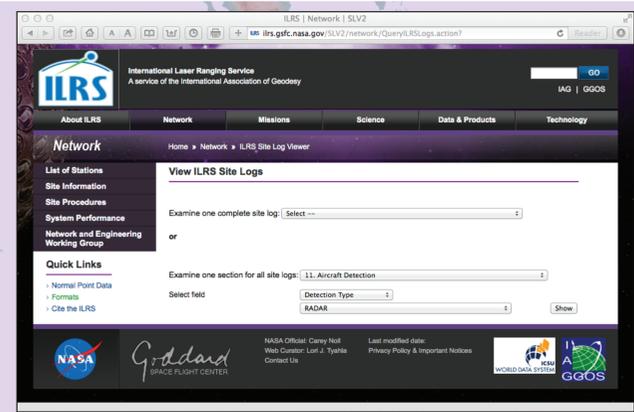


The initial page of the Site Log Viewer application displays the two selection options. Here the user next selects to view a particular section ("Time and Frequency Standard") from all site logs.

Query Results For: 4. Telescope Information - Show All

Site Name	SiteLogFileName	SubsectionNumber	Receiving Telescope Type	Aperture	Mount
Ajaccio, France (mobile sir) (ajaf)	ajaf_20080929.log	4.01	CASSEGRAIN	13 [m]	AZ-EL
ALTAJ (alt)	altl_20090325.log	4.01	CASSEGRAIN	0.6 [m]	AZ-EL
APOLLO (apol)	apol_20090629.log	4.01	FOLDED RITCHE-CHRETIEN	3.5 [m]	AZ-EL
Arequipa (are)	arel_20140121.log	4.01	SCHMIDT-CASSEGRAIN CATADIOPTRIC	0.28 [m]	AZ-EL
Arkhyz (ark)	arki_20120215.log	4.01	GREGORY	0.25 [m]	AZ-EL
Badary (bad)	badl_20120131.log	4.01	GREGORY	0.25 [m]	AZ-EL
Baikour (bai)	baill_20120213.log	4.01	MUKSUTOV	0.6 [m]	AZ-EL
Beijing SLR Station (br)	beia_20030821.log	4.01	CASSEGRAIN	0.60 [m]	AZ-EL

The resulting page lists the "Time and Frequency Standards" section from all site logs in a scrollable display. The display scrolls vertically for all sites and horizontally for fields within the "Time and Frequency Standards" section of the site log.

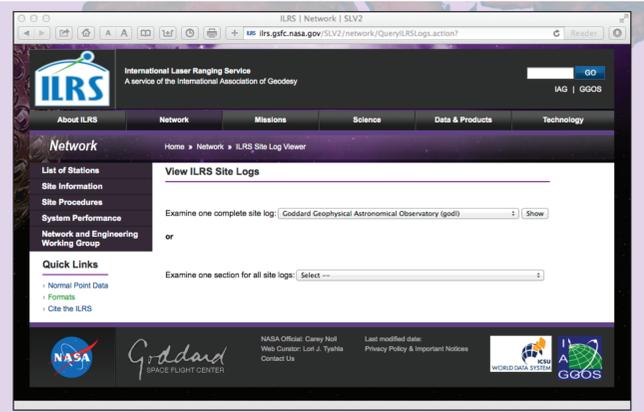


The user returns to the main page of the Site Log Viewer application to view a particular entry for one section of the site logs. Here the user selects the "Aircraft Detection" section and lists the possible entries for the "Detection Type" field in that section. The user then picks "RADAR" to determine what sites in the network use radars for aircraft detection.

Query Results For: 11. Aircraft Detection - Detection Type - RADAR

Site Name	SiteLogFileName	SubsectionNumber	Detection Type	Date Installed	Date Removed	Additional Information
TIGO-SLR, Conception (con)	conl_20100929.log	11.01	RADAR	1997-01-01		
Daejeon (daek)	daek_20121022.log	11.01	RADAR	2012-09-28	(yyyy-mm-dd)	(multiple lines)
Tanegashima (guts)	gmsl_20140424.log	11.01	RADAR	yyyy-mm-dd	(yyyy-mm-dd)	(multiple lines)
NGSLR (go1)	go1l_20130603.log	11.01	RADAR	2007-05-31	(yyyy-mm-dd)	(multiple lines)
Goddard Geophysical Astronomical Observatory (godl)	godl_20140116.log	11.01	RADAR	1994-08-31	(yyyy-mm-dd)	(multiple lines)
Hartebeeshoek Radio Astronomy Observatory (hart)	hart_20121011.log	11.01	RADAR	2000-06-09	(yyyy-mm-dd)	(multiple lines)
Herstmonceux (herl)	herl_20140109.log	11.01	RADAR	1994-01-01	Upgraded 2003	RADAR interfaced to LR control sw and automatically interrupts laser on detection of aircraft

The query then results in a page that lists the fields within the "Aircraft Detection" section of the site log for only those sites specifying a radar as the method for aircraft detection. Pressing the "Get CSV" button will create a file of these results in comma-separated values format for use in other applications (e.g., Excel, etc.).



After returning to the Site Log Viewer application's main page, the user opts to view the full site log for GODL (MOBLAS-7 at Greenbelt, MD).

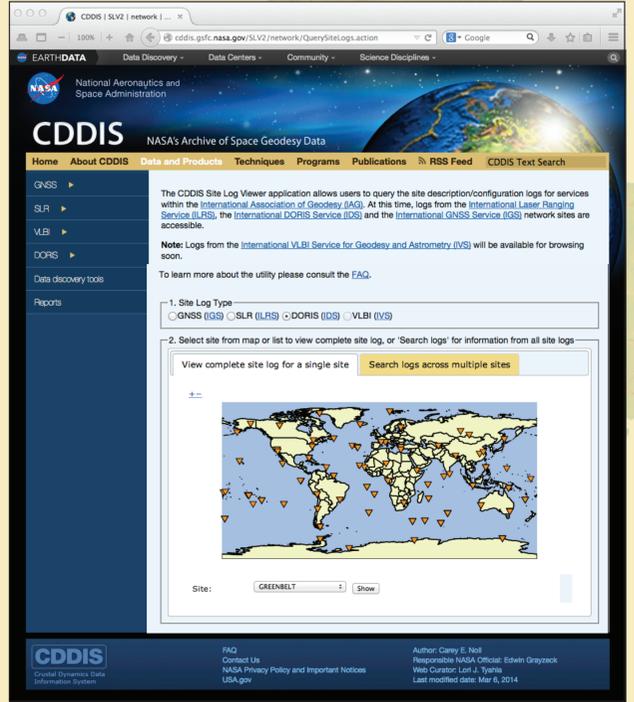
Goddard Geophysical Astronomical Observatory (godl)

Original Text File: View

0. Form	SiteLogFileName	godl_20140116.log
1. Identification of the Ranging System Reference Point (SRP)	SubsectionNumber	4.01
2. Site Location Information	Receiving Telescope Type	CASSEGRAIN
3. General System Information	Aperture	0.762 [m]
4. Telescope Information	Mount	AZ-EL
5. Laser System Information	Xmitting Telescope Type	REFRACTOR
6. Receiver System	Xmitting Aperture	0.163 [m]
7. Tracking Capabilities	Tracking Camera Type	EMCCD
8. Calibration	Model	SI-VGA60-EM
9. Time and Frequency Standards	Manufacturer	SALVADOR IMAGING (FLIR)
10. Preprocessing Information	Field of View	+/-0.100 [deg]
11. Aircraft Detection	Minimum Magnitude	12 [mag]
12. Meteorological Instrumentation	Transmit Receive Path	SEPARATE
13.01 Collocated Permanent Geodetic System	Transmit Receive Switch	NONE
13.02 Local Ties from the SRP to Other Monuments or Systems on Site	Max Slew Rate Az	20 [deg/s]
13.03 Eccentricities Between Other Monuments on Site	Max Slew Rate El	5 [deg/s]
14. Local Events Possibly Affecting Computed Position	Max Used Tracking Rate	5
15. On Site Point of Contact Agency Information	Az	
16. Responsible Agency if different from 15		
17. More Information		

The resulting page shows the location of the selected site on a zoom-able map and a picture of the station. The bottom half of the page lists the sections of the site log on the left and the contents of that section on the right. The user can then select one of the sections to view the contents in a scrollable window. To view another site log or view a section of all logs, the user then presses the "New Query" button.

A general version of the Site Log Viewer available on the CDDIS website, allows users to browse IGS, ILRS, and IDS site logs; IVS logs will be added in a future version.



Once the user selects the type of site log, in this case IDS/DORIS site logs, a map of all sites is shown. The user selects a particular site (Greenbelt). The user can display the contents of the IDS site log by section.

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Site Log Map Images

Original Text File: View

0. Form	SiteLogFileName	GRFB20131003.LOG
1. Site location information	SubsectionNumber	3.4
2. DORIS antenna and reference point information	Beacon serial number	3690082
3. DORIS beacons information	Beacon model	3.0
4. ITRF coordinates and velocities of the current DORIS ref point	Four Char ID of the REF point	GRFB
5. IERS collocation information	Date installed	17/05/2012
6. Tide Gauge collocation information		
7. Local site ties		
8. Meteorological Instrumentation		
9. DORIS network contacts		

After displaying the log for a site, a series of tabs allows the user to view an enlarged map showing the site location or any available photos.

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Site Log Map Images