National Mapping Program

# Global Land Information System

## What is GLIS?

The Global Land Information System (GLIS) is an interactive computer system developed by the U.S. Geological Survey (USGS) for scientists seeking sources of information about the Earth's land surfaces. GLIS contains "metadata," that is, descriptive information about data sets. Through GLIS, scientists can evaluate data sets, determine their availability, and place online requests for products. GLIS is more, however, than a mere list of products. It offers online samples of earth science data that may be ordered through the system.

Scientists can use GLIS to bring up outlines of the geographic areas covered by the data sets. Using digital browse functions to manipulate the data, they can determine such information as the amount of cloud coverage or the quality of individual scenes.
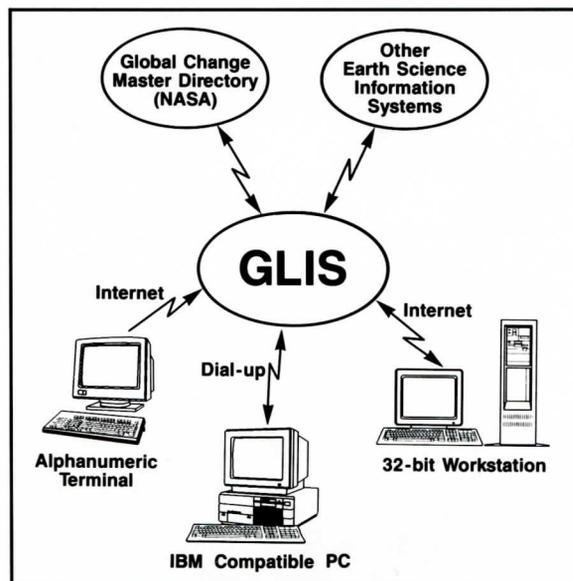
Online requests can be placed via GLIS for earth science data. The producing organization will receive the request and provide the researcher with price and ordering information.

## What Kinds of Data are Available Through GLIS?

GLIS contains references to regional, continental, and global land information including land use, land cover, and soils data; cultural and topographic data; and remotely sensed satellite and aircraft data. Continual updates of information and the addition of new data set descriptions, as they are contributed by the global change scientific community, will allow GLIS to remain current.

## GLIS System Access

Direct access to GLIS is through wide-area networks and through dial-up telecommunications interfaces. GLIS is one of the principal disciplinary nodes of the national Global Change Data and Information System (GCDIS). Access to GLIS is available through the Global Change Master Directory, an element of the GCDIS. GLIS also provides network linkages to and from other earth science information systems. For further system access information, please contact GLIS User Assistance.



**Global Land Information System access**
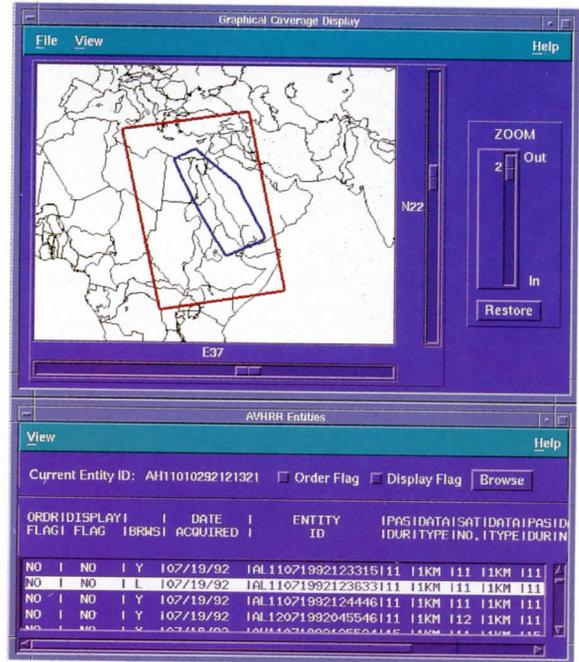
# Functional Overview of GLIS

GLIS data set descriptions are arranged in three levels of detail — directories, user guides, and inventories.

**Directories** contain summary information about each data set. Searches of a data set's directory may be based on any combination of keywords (discipline, location, geophysical parameter), acquisition date, data source (spacecraft, sensor), geographic coverage, project, and investigator.
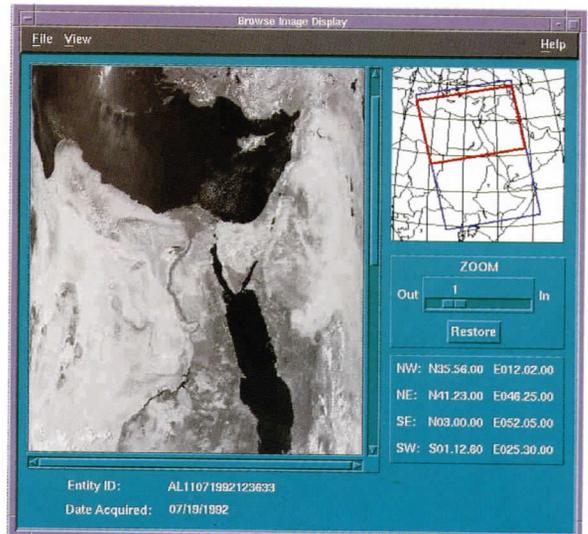
**User Guides** contain detailed information about the data set such as sensor specifications, extent of coverage, processing history, data quality, and product availability. User guide queries are by hypertext graphics and text retrieval.

**Inventories** contain detailed information about individual data set entities such as a Landsat scene or an Advanced Very High Resolution Radiometer (AVHRR) pass. Temporal, spatial, and parameter-oriented queries of inventories are possible.

In addition to the directories, user guides, and inventories, GLIS graphic services are available using the X-GLIS graphical user interface which supports the X Window System environment on 32-bit UNIX workstations. The services include user specification of geographic search parameters, geographic coverage outline, and digital image browse capabilities. Similar graphic extensions are available for IBM-compatible personal computers.



**X-GLIS screen showing geographic coverage of an AVHRR image.**



**Interactive browse screen including an AVHRR image.**

# GLIS Access Procedures

Users wishing to perform graphic-based query functions can use an X terminal or X terminal emulator package on a PC.

**From**
**INTERNET:**        $TELNET xglis.cr.usgs.gov

Users wishing to perform text-based query functions can use an alphanumeric terminal or a terminal emulator package on a PC.

**From**
**NSI/DECNET:**   $SET HOST GLIS
                  USERNAME: GLIS

**From**
**INTERNET:**        $TELNET glis.cr.usgs.gov
                  or $TELNET 152.61.192.54

**Direct Dial:**     Set modem to 8 bits, no parity, 1
                  stop bit **Dial:** (605) 594-6888

# GLIS User Assistance and Information on Obtaining Graphical Interface Software

**Telephone: 1-800-252-GLIS** (1-800-252-4547)
            or commercial: (605) 594-6099

**E-mail:**      NSI/DECNET GLIS::GLIS
             GSFCMAIL    EROS.DATA.CENTER
             OMNET       EROS.DATA.CENTER
             INTERNET    GLIS@GLIS.CR.USGS.GOV

**Mail:**        U.S. Geological Survey
             EROS Data Center
             GLIS User Assistance
             Sioux Falls, SD 57198 USA

The use of trade names does not imply an endorsement by the U.S. Government.