

Opening the Landsat Archive

The USGS Landsat archive holds an unequalled 37-year record of the Earth's surface that is invaluable to climate change studies, forest and resource management activities, and emergency response operations.

All Landsat images within the USGS Earth Resources Observation and Science (EROS) Center archive are available free of charge to users with electronic access via the Web. Newly acquired Landsat 7 Enhanced Thematic Mapper Plus (ETM+) Scan Line Corrector off (SLC-off) and Landsat 5 Thematic Mapper (TM) images with less than 40 percent cloud cover are automatically processed and made available for immediate download, and requests can be placed for the processing of all other scenes.

All **Landsat 7 (1999–present)** and most **Landsat 4 and 5 TM (1982–present)** standard L1T products will be processed by using the LPGS* system with the following parameters applied:

Level 1T (terrain corrected) product**
30/60 meters pixel size (Landsat 7 Pan band = 15)
GeoTIFF output format
Cubic Convolution (CC) resampling method
Universal Transverse Mercator (UTM) map projection, with Polar Stereographic projection used for Antarctica scenes
MAP (north up) image orientation
File transfer protocol (FTP) download only

All **Landsat 1–5 Multispectral Scanner (MSS) (1972–83)** and some **Landsat 4–5 TM (1982–90)** standard L1T products will be processed by using the NLAPS* system with the following parameters applied:

Level 1T (terrain corrected) product**
60 meters pixel size
GeoTIFF output format
Cubic Convolution (CC) resampling method
UTM map projection, with Polar Stereographic projection used for Antarctica scenes
MAP (north up) image orientation
FTP download only

NOTE: Prior to April 15, 2009, all Landsat 4 TM scenes were processed through NLAPS

*Two processing systems will continue to generate Landsat data products: the Level 1 Product Generation System (LPGS) and the National Land Archive Production System (NLAPS). There are geometric, radiometric, and data-format differences in the systems that create final products with slight differences. Details about the LPGS and NLAPS can be found at http://landsat.usgs.gov/products_IP_LPGSvsNLAPS.php.

**While most data will be processed as Level 1T (precision and terrain corrected), certain scenes do not have ground-control or elevation data necessary for precision or terrain correction, respectively. In these cases, the best level of correction will be applied (Level 1G-systematic or Level 1Gt-systematic terrain). Specific L1T scenes are available for most of the globe under the Global Land Surveys (GLS) of 1975, 1990, 2000, and 2005.

The USGS Global Visualization Viewer (<http://glovis.usgs.gov>) and EarthExplorer (<http://earthexplorer.usgs.gov>) allow access to the Landsat satellite archive.

More details and updates on the status of Landsat missions and imagery can be found at <http://landsat.usgs.gov>.

Please contact USGS EROS Customer Services at 1–800–252–4547, or email custserv@usgs.gov for more information.