Opening the Landsat Archive

The USGS Landsat archive holds an unequaled 36-year record of the Earth's surface that is invaluable to climate change studies, forest and resource management activities, and emergency response operations.

An aggressive effort is taking place to provide all Landsat imagery [scenes currently held in the USGS Earth Resources Observation and Science (EROS) Center archive, as well as newly acquired scenes daily] free of charge to users with electronic access via the Web by the end of December 2008. The entire Landsat 7 Enhanced Thematic Mapper Plus (ETM+) archive acquired since 1999 and any newly acquired Landsat 7 ETM+ images that have less than 40 percent cloud cover are currently available for download.

When this endeavor is complete all Landsat 1–5 data will also be available for download. This includes Landsat 1–5 Multispectral Scanner (MSS) scenes, as well as Landsat 4 and 5 Thematic Mapper (TM) scenes.

All **Landsat 7 (1999–present)** and **Landsat 5 (1984–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

Landsat 4 (1982–86) standard L1T products will also be processed with these parameters, but will be produced by using the NLAPS* processing system.

All **Landsats 1–3 (1972–83)** 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

*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).

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.

U.S. Department of the Interior
U.S. Geological Survey

Fact Sheet 2008–3091
October 2008