

# LANDSAT MONTHLY UPDATE

December 2002

The Landsat Program is managed by the U.S. Geological Survey under authority established by Presidential Decision Directive NSTC-3.

## Program News

### Ken Dolan Retires

Ken Dolan, Senior Scientist at the NASA/Goddard Space Flight Center and a long time advocate of the Landsat Program, has announced his retirement. Ken was a key leader in the Landsat Program and has been a major factor in the program's success. All of us in the Landsat Program are grateful for his thoughtful support and advice, and wish Ken well as he takes a well-deserved rest from government service.

### IGS Metadata

IGS Metadata from Canada, Australia, South Africa, China, Argentina, Thailand, and Europe continue to be archived successfully. As of December 27, 2002 there were 13,986 L7 IGS subintervals archived for 230,661 Landsat 7 Worldwide Reference System (WRS) scenes. Metadata and browse files have been received from Brazil (CUB) on 8 mm tape. These data and the 8 mm tape interface are being tested. Any IGS interested in submitting browse images electronically (using FTP) is asked to contact the USGS EDC.

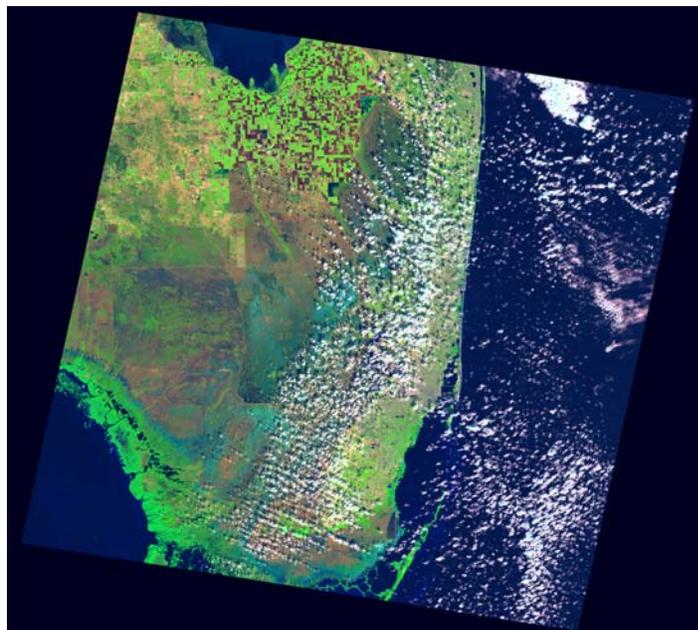
### 100,000 orbits for Landsat 5

Last month, the Landsat Monthly Update reported the 100,000th orbit of Landsat 5. Some of the detailed calculations in that report were incorrect. Here is the correct statement.

Landsat 5 was launched on March 1, 1984; therefore, as of January 3, 2003, it has been in service for 18 years and 307 days or nearly 19 years.

Landsat 5 achieved 100,000 orbits on the morning of Dec 19, 2002.

Additionally, a scene from the 100,000th orbit has been processed and is included to mark the historic success of Landsat 5. This scene covers the southeastern portion of Florida.



## Technical News

### Data Validation

Germany and Sweden provided the USGS with RCC data for their scheduled biannual revalidations and were successfully revalidated. LORp data from the Mongolian mobile station was also received and successfully revalidated by the USGS. The Bangkok, Thailand station supplied the USGS with RCC and LORp data. Both the RCC and LORp data from the Thailand station were successfully validated and found to be of equivalent quality to the corresponding USGS data.

### Landsat 5 Year-End Transition

Landsat 5 Year-End Transition (YET) was scheduled for an image down period of 365:23:45:00 Z - 001:03:00:00 Z. The event was nominal. A patch that was developed to perform the YET update performed flawlessly; however, some peculiar behavior occurred within the Attitude Update Filter during the clock correction. This is a procedural problem that will be fixed by next year's YET. Once the procedure is corrected, the next YET on Landsat 5 may reduce the image down period to better than half.

### Landsat 7 Year-End Transition

Landsat 7 Flight Operations successfully conducted year-end operations activities to accommodate the calendar year rollover and spacecraft onboard timing issues. Imaging was suspended 24 minutes during rollover and a subsequent earth shadow. Operations and image taking resumed with no problems encountered.

### Landsat 7 Backup MOC

The Landsat 7 backup Mission Operations Center (bMOC) Operations Readiness Review was held on Dec 11, 2002 at the Datalynx facility in Columbia, Maryland. The Landsat Program deemed the bMOC is ready to fully assume operations for a minimum of 30 days should circumstances shut down the primary MOC, and directed Flight Operations to proceed with the final configuration changes to the ground network. BMOc implementation required extensive changes to nearly all of Landsat 7 flight operations interfaces including the MOC. The Landsat Ground Network sites will be phased in by mid-January, marking the final implementation steps for the MOC/bMOC.

The bMOC will be exercised on a monthly basis for planning and realtime operations. In an actual event, where USGS directs transfer of operations to the bMOC, an email notification will alert the extended Landsat 7 community, instructing them to use alternate IP addresses and points of contact information.

### Call for Passwords

Landsat 7 Flight Operations is in the process of updating the IGS server passwords for all the International Cooperator users. This must be done on a regular basis to meet electronic security requirements. Their goal is to have all passwords updated by the end of January 2003. ICs should contact Landsat 7 Mission Planning as soon as possible to arrange for an update.

**The Landsat monthly update is an informal communication tool, prepared monthly and distributed electronically to USGS Landsat partners, to provide information about Landsat activities and related topics of interest. Comments, corrections, and queries may be directed to Ronald Beck, USGS Landsat team, at the following e-mail address: [beck@usgs.gov](mailto:beck@usgs.gov).**

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