



LANDSAT 7 MONTHLY UPDATE

The Landsat 7 Mission, developed by the National Aeronautics and Space Administration, is managed by the U.S. Geological Survey under authority established by Presidential Decision Directive NSTC-3.

Program News

Out With the Old, In With the New

Thank you to our many friends and cooperators throughout the world for your contributions, advice, business, and support during this past year of tremendous success and progress of the Landsat 7 Mission and Program. Landsat personnel from NASA's Landsat Project Science Office and Earth Science Mission Operations Office, the U.S. Geological Survey (USGS) Program and Mission Management staff, and our team of operations and engineering staff from Honeywell Technology Solutions, Inc. and Raytheon are looking forward to new challenges and accomplishments during 2001. We wish you all a HAPPY NEW YEAR!

USGS Funding Support for Landsat 7 Mission Operations

The USGS has completed the first cycle of budgetary planning for FY 2001 and was successful in securing additional appropriated funds for majority funding for Landsat 7 Mission Operations, adding approximately \$5 million to the funding base for the Landsat 7 Program. While this funding does not completely solve our FY 2001 budgetary problems, it is a major contribution to stabilizing the financial foundation for the Program, both for this year and for the anticipated life of the mission.

New Landsat 7 Agreements

The MOU between the USGS and the National Institute for Space Research (INPE) in Brazil was signed December 26, 2000. The Landsat 7 Program welcomes INPE to the Landsat 7 International Ground Station community. In addition, the USGS and CSIR in South Africa have reached agreement to authorize Landsat data reception at the CSIR Space Applications Center in Pretoria. South Africa intends to begin downlink testing in late January. We welcome the SAC team to the network of operational Landsat 7 International Cooperators.

Antarctica Campaign

The Landsat 7 Program began a campaign on November 20, 2000, to collect data over Antarctica. This is the second year that we have taken advantage of the relatively low demand for ETM+ duty cycle from December to March to collect Landsat 7 data over Antarctica. This year we will concentrate on collecting scenes in ascending-mode, to allow scientists to see subtle features by contrasting the different lighting conditions between this year and the descending-mode scenes acquired last year. Dr. Robert Bindschadler, a Landsat 7 Science Team member, will lead an effort to improve the Automatic Cloud Cover Assessment (ACCA) algorithm. His results will also be shared with the Landsat Project Science Office to facilitate improvements to the ACCA software and with the International Ground Station community when they are available.

Landsat 4/5 Archives

The USGS met with Space Imaging (SI) representatives on December 18 to discuss the transfer of SI's archives of Landsat 4/5 data. SI also asked the USGS to advise International Cooperators, who are no longer receiving Landsat 5 data directly, to contact SI with regard to residual data rights on existing ground station archives. International Cooperators are asked to copy the Landsat 7 Program Manager, R. J. Thompson, on any correspondence with SI regarding archive data rights.

Technical News

IGS Data Validation/Exchange Status

Cooperation in implementation of the Landsat 7 Data Validation Plan and Data Exchange Plan has been tremendous. The Cordoba, Argentina Ground Station is the first station to provide to the USGS raw computer-compatible data that have been successfully processed and validated as equivalent in quality to the USGS EROS Data Center's (EDC) raw computer-compatible data. The Alice Springs, Australia Ground Station is the first station to provide the USGS with L-ORp data that have been successfully processed and validated as equivalent in quality to the EDC L-ORp data product.

Raw Computer-Compatible Data Format Control Book Release

The official [Landsat 7 Raw Computer-Compatible Data Format Control Book \(DFCB\)](#) was released January 1, 2001. This release documents the existing Landsat 7 raw computer-compatible data format and replaces all previous versions of the [Landsat 7 Computer-Compatible Raw Wideband Exchange DFCB](#). As part of IGS data validation and exchange, the Landsat 7 Program asks all ground stations to use this updated DFCB when providing the USGS raw computer-compatible data.

The Landsat 7 Program is also planning to release a Raw Computer-Compatible DFCB update in mid-2001 to document forthcoming changes associated with the raw computer-compatible data accounting file. Although these changes are expected to be minor, we will provide IGS's adequate time to accommodate them in their capture systems.

Landsat 7 Band 6 Calibration Updates

The calibration efforts of the Landsat 7 Science Team revealed an offset error in the calibration coefficients of Band 6. These offsets have been corrected through a reformulation of the calibration equation in the Image Assessment System (IAS) and the Landsat Product Generation System (LPGS). These updates directly impact users of the Landsat 7 Calibration Parameter Files (CPFs) and/or Level-1 software based on the IAS or LPGS software.

Read more about the changes at:

http://edcwww.cr.usgs.gov/l7dhf/ias_folder/cal_notice_jan2001.htm. Please contact Julia Barsi at the Landsat Project Science Office (julia@ltpmail.gsfc.nasa.gov) with questions.

Meetings

Landsat Data Continuity Mission (LDCM) Workshop

International Cooperators should be aware of an upcoming LDCM workshop on January 9-10, 2001, at the USGS National Center in Reston, Virginia. The workshop will be an open forum to discuss the draft LDCM Data Specifications and potential commercial opportunities. Registration information is available on the LDCM website at <http://ldcm.usgs.gov>, and International Cooperators are encouraged to attend if possible. The LDCM Data Specification is also online at this website and comments on the Specification can be made on-line.

EO-1 Workshop

The first of several EO-1 Technology Workshops will be held on January 11, 2001, beginning at 8:30 a.m. in the USGS Auditorium in Reston, Virginia. This one-day workshop is organized to provide background on the new technologies to be flight-validated by the EO-1 mission and to discuss the various ways that these new technologies might be infused into future science missions such as the LDCM. For more information on attending the EO-1 Workshop see the website (<http://ldcm.usgs.gov>; click on workshops.)

Landsat 7 Technical Working Group Meeting #9

The Station Report format for the upcoming LTWG-9 meeting in Maspalomas, Spain on February 19-22, 2001, has been sent to each ground station. The deadline for reservations is approaching in January. It looks as though most of the Ground Stations will be represented.

Related News

EROS 1A Satellite Launch

On December 5, 2000, a Russian Start-1 rocket successfully launched an Israeli satellite into orbit from Russia's Far East launch facility. For more information see their website at <http://www.imagesatintl.com>.

EO-1 Status

On November 22, 2000, the Earth Observing 1 satellite was successfully launched on a Delta 2 launch vehicle from the Vandenberg Air Force Base in California. Because EO-1 is a technology demonstration mission, only about 4000 images will be acquired globally. These data will be distributed from the USGS EROS Data Center starting about January 2002. For more information see the EO-1 website at <http://eo1.gsfc.nasa.gov>.

The Landsat 7 Monthly Update is an informal communication tool, prepared monthly and distributed electronically to USGS Landsat 7 partners, to provide information about Landsat 7 activities and related topics of interest. Comments, corrections, and queries may be directed to David Carnegie at the following email address: carnegie@usgs.gov.