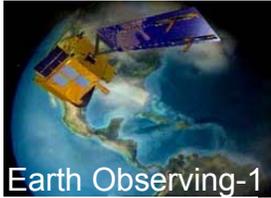


June 4, 2002

# Section 7

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Current Status

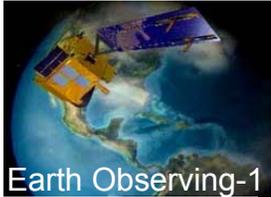


# Current Status



June 4, 2002

- ◆ ***All NMP mission objectives were accomplished within 13 months of launch as planned***
- ◆ ***EO-1 now beginning 19th month of operation and is now in an Extended Mission based on a partnership with the U.S. Geological Survey (USGS)***
- ◆ ***EO-1 is fully functional and has spacecraft consumables to last at least another two years***
- ◆ ***EO-1 Science Validation has revealed numerous scientific applications for the Advanced Land Imager and the Hyperion***
- ◆ ***Continuous Improvements to Operations have steadily reduced the cost of imagery to facilitate widespread availability of EO-1 imagery***

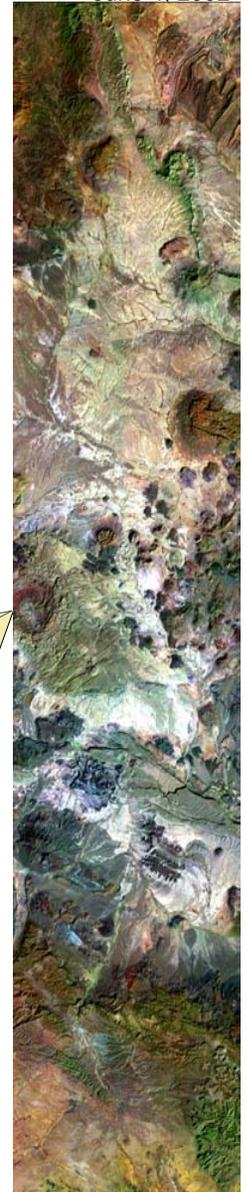
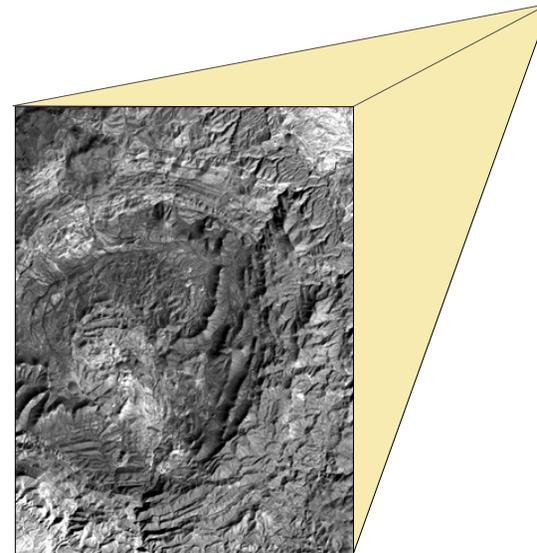


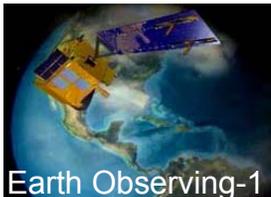
# USGS/NASA EO-1 Extended Mission



June 4, 2002

- ◆ *This satellite image, centered on the Big Bend National Park in southwestern Texas, was acquired on January 25, 2002 by the Advanced Land Imager (ALI) instrument onboard NASA's Earth Observing-1 (EO-1).*
- ◆ *This scene is the first EO-1 satellite image directly downlinked to the USGS EROS Data Center and successfully processed through the newly installed Data Processing System and ALI Level 1 system.*
- ◆ *The NASA New Millennium Program's EO-1, launched on November 21, 2000, was designed as a one-year mission to flight-validate a variety of new technologies aimed at lowering the cost and increasing the performance of future Earth science missions. Part of the EO-1 technology validation effort is applicable to the future Landsat Data Continuity Mission (LDCM).*
- ◆ *The superior performance of the satellite and instruments, and exceptional interest and value in the unique satellite imagery has led NASA and the USGS to enter a joint partnership for an extended operational mission.*
- ◆ *EO-1's imaging technologies include Hyperion, the world's only hyperspectral satellite sensor with 220-bands at 30-meter spatial resolution; and the ALI, a lightweight, high performance, multi-spectral sensor (LDCM prototype) at 30-meter (multi-spectral bands) spatial resolution and a 10-meter panchromatic band. NASA and USGS scientists believe that the datasets will prove valuable to global land cover studies, ecosystem monitoring, mineral and petroleum prospecting, and agricultural crop assessment, among other potential applications.*
- ◆ *Image data products are now distributed by USGS EROS Data Center in Sioux Falls, South Dakota to a broad customer constituency including scientific and academic users, U.S. Government agencies, and the commercial remote sensing / GIS industry. Additional information can be found at: <http://eo1.usgs.gov/>*



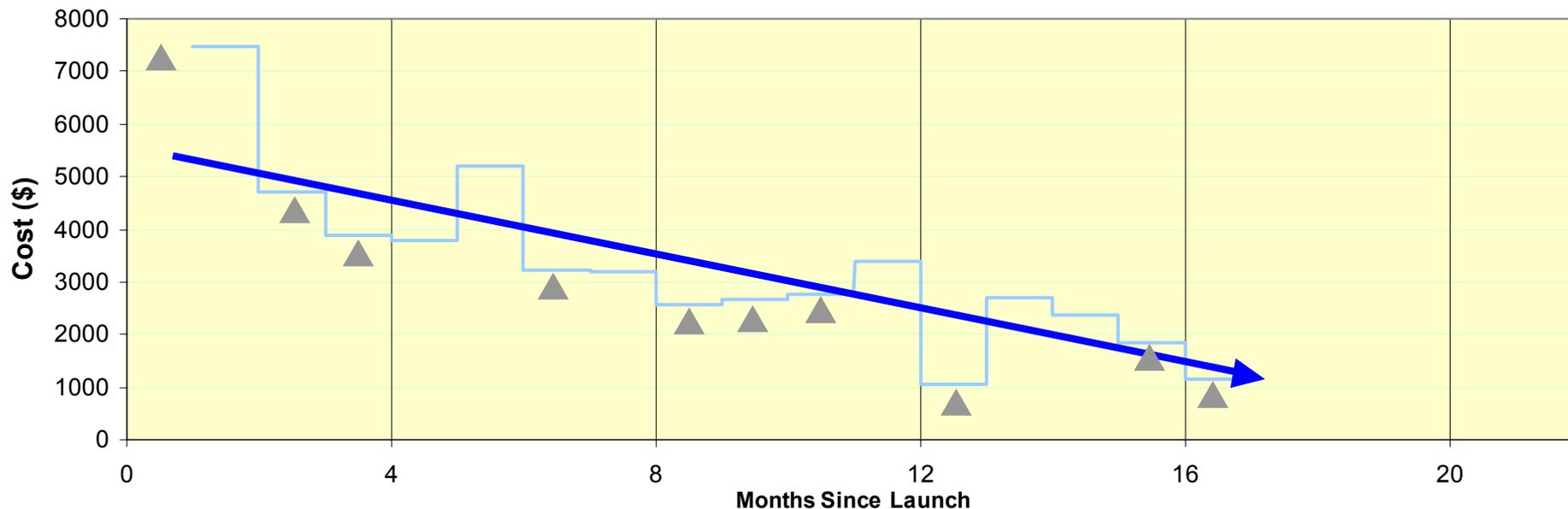


Earth Observing-1

# Monthly Cost of a DCE



June 4, 2002



N D J F M A M J J A S O N D J F M A M J J A

▲ Launch

▲ Added Hobart and Goddard Ground Stations

▲ Automated Planning, Scheduling, and Scene Tracking

▲ Developed Capability for Two DCEs / Orbit

▲ Added Ground-Based Cloud Cover Predictions

▲ Quick Turnaround Scene Request & Expedited Data Delivery

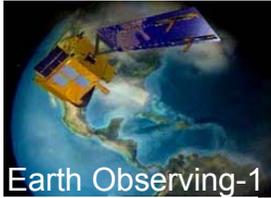
▲ Automated Control Center Ops

Scheduling & Data Processing Moved to EROS Data Center

Streamlined Image Sequencing

EDC X-Band Ground Station Operational

Added "Two Path Away" Pointing Capability

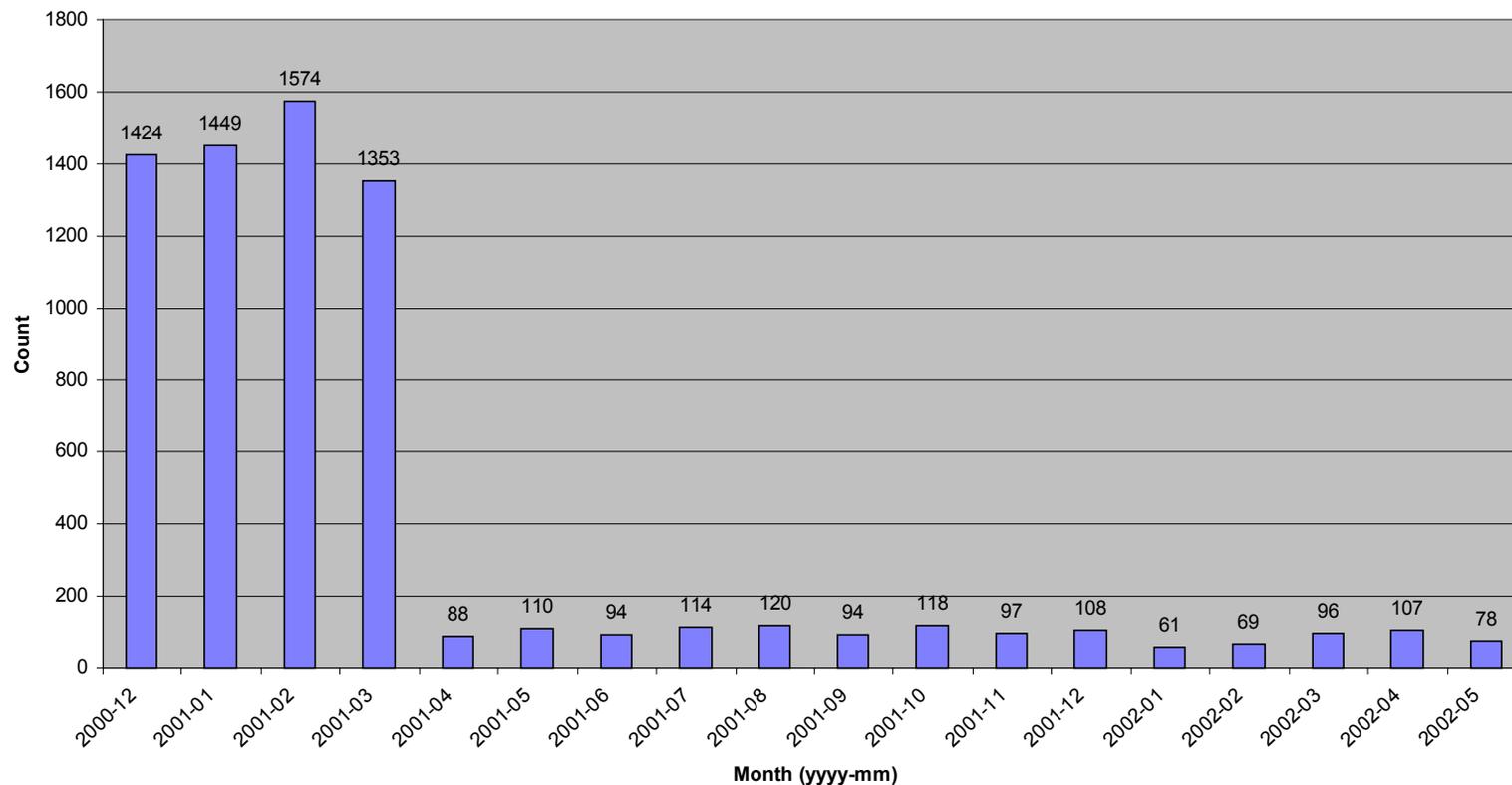


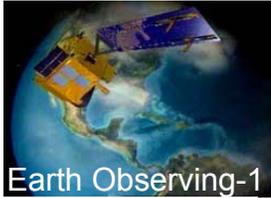
# Workload After Launch



June 4, 2002

- ◆ **Chart shows procedures run by FOT console folks in blue**
- ◆ **Significant reduction resulted from automation**





# Science Data Collects



June 4, 2002

- ◆ **Chart shows, per day, number of science data collects in blue.**
- ◆ **Trendline shows increase in science data collects.**

