

EO-1 Weekly

Week of May 04 thru May 10, 2001

Significant Events

Performed second Orbit burn planned by Enhanced Formation Flying software in Semiautonomous mode.

X-band test with Goddard X-band downlink. ER- 54 on day 129

Two long duration images with Yaw Steering enabled (ALI only)

The Venus image for Hyperion (day 107) was incorrectly performed with cryocooler off. It will be performed again.

Instrument Activities

Hyperion Cryocooler on/off times:	On	125/0850
	Off	128/1800
	On	129/1040

ALI heated out-gassing operation:	126/1000 – 127/0330
Done on ten day period.	

Operations

Aiming for 6 scenes per day.

Ops Instructions performed

- 569 Return EFF to idle mode
- 570 Reset TSM 53 after burn
- 571 dump table 33
- 572 Start Cryocooler
- 573 Disable power TSMs 50,53 and 60 for lunar cal
- 574 Enable power TSMs
- 575 Load EFF tables
- 576 Retrieve EFF burn plan
- 577 Run proc to get GPS special request data
- 578 Commit EFF burn
- 579 Disable power TSMs for burn
- 580 LFSA data collect
- 581 Solar Array Characterization test via RTS 30
- 582 EFF to idle mode
- 583 Enable power TSMs
- 584 Power on and off PPT for aliveness check

Discrepancy Reports opened this week

- 442 TSM 50 and 60 tripped post burn
- 443 GPS packet request RTSs did not work properly
- 444 ACE RSN software warning
- 445 Primary workstation slowed down
- 446 Repeat of 445

Upcoming Events

ER 59 Polar motion correction for GPS

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Image Venus and Vega

Number of Real-Time Supports (from daily reports)

47 2Meg coherent S and X band
25 2Meg coherent S band only
7 Hobart X Band only passes
1 Goddard X Band only
4 TDRSS supports

Problem supports:

Hobart antenna not dependable from day to day.

No other ground system problems reported other than the occasional sequence breaks in the X-band data. The following is a recent ground system DR:

CDSID# : 00018754
Element : PF1
System ID : PF1
Requirement# : EO-1, 2419

Description of discrepancy : EO-1, orbit 2419, drop in X-band signal strength.
AOS 2001 126-21:09:44 LOS 2001 126-21:22:37

At 65 degrees elevation, the operator noticed a degradation of the X-band signal by ~20dB that resulted in a high number of drops and sequence errors on the X-band data. The signal degradation lasted about 20 seconds and the cause is unknown at this time.

20 sec data loss.

Number of Scenes

34 science collections scheduled.
0 of these were not taken or recovered completely.
1 of these were ALI, Hyperion or AC solar calibrations or Lunar Cals or ALI internal Cal.

Number of Scenes Processed

Tape 54, 55 and 56 were created and sent this week containing 53 DCE's.

Operational Changes

Looking at possibility of doing two images on an orbit over conus.
Also looking at how to use cloud cover predicts
Next burn will be fully autonomously planned by EFF

Staffing

We will revisit staffing levels in June. Continuing 24x7 console operations. 16x7 Data Processing.