

MODIS IOT Weekly Report

Mission Operations Days: 2000/253 to 2000/259

September 8, 2000 20:00:00 GMT to September 15, 2000 20:00:00 GMT

* NOTE: Band 14H (detectors 1-10) and Band 25 (detector 1) gain changes were made
* on day 256 (Sept. 12th) at approx. 18:17:46 GMT.

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

Blackbody	A On; B Off	Nominal
Calibration Electronics	A On; B Off	Nominal
Control Processor	A On; B Off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	A On; B off	Nominal
FIFO Memory	1 & 2 On; 3 & 4 Off	Nominal
Format Processor	A On; B off	Nominal
PC FPA	A On	Nominal
Power Supply:1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	A On; B off	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On; B Off	Nominal
Flight Software	Rev BD + 2 patches	Nominal
Inhibit Ids Set	None	Nominal
TMONs enabled	66,67, 68	Nominal

This Week's Completed MODIS Activities:

Saturday, September 9, 2000

None

Sunday, September 10, 2000

None

Monday, September 11, 2000

None

Tuesday, September 12, 2000

256/14:12:44	Real-Time	SMIR VDET/ITWK to 79/110
256/14:38:44	ATC Load	OA16 - SDSM Double Screened
256/16:17:38	ATC Load	OA15 - SDSM Double Open
256/16:39:03	Real-Time	SMIR VDET/ITWK to 110/226 (Nominal Operations)
256/16:45:28	Real-Time	Memory Dump of Table 4 (PV gains)
256/18:17:46	Real-Time	Set new Gain Values for Band 14H (detectors 1-10)
256/18:19:49	Real-Time	Set new Gain Value for Band 25 (detector 1)
256/18:40:37	Real-Time	Memory Dump of Table 4 (PV gains)

Wednesday, September 13, 2000

None

Thursday, September 14, 2000

None

Friday, September 15, 2000

259/19:42:22	Real-Time	Memory Dump, XIO Read Memory Fault Status
259/19:43:30	Real-Time	Memory Dump, XIO Read Memory Fault Address
259/19:44:41	Real-Time	Memory Dump, XIO Read OAS Register

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Saturday, September 16, 2000

None

Sunday, September 17, 2000
None

Monday, September 18, 2000

262/05:05:12 ATC Load - Set Formatter to Night Rate 00:03:15 early (for 50/50 SSR buffer)
262/05:35:22 ATC Load - Set Formatter to Day Rate (for Lunar Roll)
262/05:35:24 ATC Load - Set SCIABNORM Flag to ABNORM
262/05:35:26 ATC Load - PC DC Restore OFF
262/05:35:28 ATC Load - PV DC Restore OFF
262/05:35:30 ATC Load - Sector Rotation to -3072 (EA to SV and OBCs)
262/05:41:44 ATC Load - Sector Rotation to 0 (Normal)
262/05:41:46 ATC Load - PC DC Restore ON
262/05:41:48 ATC Load - PV DC Restore ON
262/05:41:50 ATC Load - Set SCIABNORM Flag to NORM
262/05:41:52 ATC Load - Set Formatter to Night Rate (for Lunar Roll)
262/06:01:09 ATC Load - Set Formatter to Day Rate 00:03:15 late (for 50/50 SSR buffer)

Maneuvers:

The next roll maneuver to view the moon through the space view port is scheduled for September 18th (2000-262, 05:29:56 - 05:16:44 GMT).

MODIS Anomalies:

The first formatter error in 3-1/2 weeks was detected at 256-14:12:42. The software patch that is in place prevented a watchdog reset so operations continued nominally. The formatter temperature does not appear to have been abnormal at the time of the error.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches.

MODIS Telemetry Trends:

The Radiative Cooler intermediate stage temperature has slowly been increasing since approximately day 240. During this time the LWIR focal plane heater margin has been decreasing. The IOT is continuing to trend these telemetry mnemonics.

Non-MODIS Significant Events:

None

Limited Life Item Status:

SRCA 10W Lamp #1: 173.5 of 500 hours

SRCA 10W Lamp #2: 135.9 of 500 hours

SRCA 10W Lamp #3: 145.1 of 500 hours

SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 556.1 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1411 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements