

MODIS IOT Weekly Report

Mission Operations Days: 2000/239 to 2000/245

August 25, 2000 20:00:00 GMT to September 1, 2000 20:00:00 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, August 26, 2000

239/04:00:00 ATC

Set BB Temp to 315

239/04:00:22 ATC

Set BB Duty Cycle to FULL

239/05:52:33 Real-Time

Set Inhibit ID 31 to prevent CE-B from turning on

239/05:53:14 Real-Time Set Inhibit ID 32 to prevent BB-B from turning on  
239/11:00:00 Real-Time Set BB Temp to 270  
239/10:59:11 Real-Time Set BB Duty Cycle to THIRD  
239/22:33 Real-Time Cleared Inhibit ID 31 to allow future CE ATC events  
239/22:34 Real-Time Cleared Inhibit ID 32 to allow future BB ATC events

Sunday, August 27, 2000

240/06:00:00 ATC Turn On CE-A  
240/06:00:20 ATC Turn On BB-A  
240/06:00:22 ATC Set BB Temp to 290

Monday, August 28, 2000

None

Tuesday, August 29, 2000

None

Wednesday, August 30, 2000

None

Thursday, August 31, 2000

244/20:47:54 ATC OA15 - SDSM Open  
244/22:26:47 ATC OA16 - SDSM Screened

Friday, September 1, 2000

None

This Week's Scheduled MODIS Activities Not Completed:

239/11:00:00 ATC Set BB Duty Cycle to THIRD  
(Inhibit ID 32 was set to prevent the next ATC event)  
239/11:01:00 ATC Set BB-Temp to 270  
(activity scheduled using B-Side CE and BB)

Upcoming MODIS Events:

Saturday, September 2, 2000

None

Sunday, September 3, 2000

None

Monday, September 4, 2000

None

Tuesday, September 5, 2000  
None

Wednesday, September 6, 2000  
None

Thursday, September 7, 2000  
None

Friday, September 8, 2000  
None

#### Maneuvers:

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

#### MODIS Anomalies:

The formatter anomaly investigation has continued. At approximately 8:00pm EDT August 19<sup>th</sup>, the formatter errors ceased occurring. There are currently 9 unique error addresses recorded by the Formatter, and a total error count of 2183. The A-Side Formatter is operating at approx. - 0.3C.

The LWIR CFPA temperature control has been restored. The temperature is holding within +/- 0.02K of the set-point of 83K. The LWIR CFPA heater voltage is cycling with orbital variations of +/- 0.5V around 6.0V.

MCST is establishing automatic long term trending and critical telemetry point monitoring to track the lasting results of the two recent anomaly resolutions.

#### 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:

See MODIS Anomalies above.

#### Non-MODIS Significant Events:

None

Limited Life Item Status:

SRCA 10W Lamp #1: 173.3 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: 555.8 of 4000 hours

SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1399 of 3022 Movements

Nadir Aperture Door: 532 of 1316 Movements

Space View Door: 437 of 1316 Movements