

## MODIS IOT Weekly Report

Mission Operations Days: 2000/365 to 2001/005

December 29, 2000 20:00:00 GMT to January 5, 2001 20:00:00 GMT

### Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in B-side Science Mode

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

### This Week's Completed MODIS Activities:

Friday, December 29, 2000

None

Saturday, December 30, 2000

None

Sunday, December 31, 2000

None

Monday, January 1, 2001

None

Tuesday, January 2, 2001

002/20:00:20 ATC Set Blackbody to 270K

Wednesday, January 3, 2001

003/14:00:00 ATC Set Blackbody to 280K

003/18:00:00 ATC Set Blackbody to 285K

003/21:00:00 ATC Set Blackbody to 290K

Thursday, January 4, 2001

004/01:00:00 ATC Set Blackbody to 295K

004/01:00:30 ATC Set Blackbody duty cycle to FULL

004/03:00:00 ATC Set Blackbody to 300K

004/05:00:00 ATC Set Blackbody to 315K

004/08:00:00 ATC Set Blackbody to 270K

004/08:00:30 ATC Set Blackbody duty cycle to THIRD

004/21:06:33-21:18:01 ATC OA-15: SD/SDSM Open

004/22:45:26-22:56:54 ATC OA-16: SD/SDSM Screened

Friday, January 5, 2001

005/04:00:00 ATC Set Blackbody to 290K

This Week's Scheduled MODIS Activities Not Completed:

None

Upcoming MODIS Events:

Friday, January 5, 2001

005/21:53:22-21:55:53 ATC OA27: PV ECAL  
(Centered around orbit 5600 Maximum Latitude)

005/23:31:15-23:35:45 ATC OA28: PC ECAL  
(Centered around orbit 5601 Maximum Latitude)

Saturday, January 6, 2001

None

Sunday, January 7, 2001

None

Monday, January 8, 2001

008/12:27:08-12:38:36 ATC OA15: SD/SDSM Open  
008/13:27:01-14:00:34 ATC OA19: SRCA Full Radiometric  
(Data collect centered in S/C Night)  
008/14:06:01-14:17:29 ATC OA16: SD/SDSM Screened  
008/21:28:48-22:26:19 ATC OA23: SRCA Full Spatial  
(Data collect centered in S/C Night)

Tuesday, January 9, 2001

009/13:59:43-14:51:22 ATC OA22: SRCA Full Spectral (Part 1)  
(Data collect centered in S/C Night)  
009/15:55:10-16:29:55 ATC OA22: SRCA Full Spectral (Part 2)  
(Data collect centered in S/C Night)  
009/17:17:25-18:08:41 ATC OA22: SRCA Full Spectral (Part 3)  
(Data collect centered in S/C Night)  
009/19:12:37-19:50:35 ATC OA22: SRCA Full Spectral (Part 4)  
(Data collect centered in S/C Night)

Wednesday, January 10, 2001

None

Thursday, January 11, 2001

None

Friday, January 12, 2001

None

#### Maneuvers:

MODIS Lunar Calibration Roll Maneuver: 013/17:17:41  
Drag Makeup Maneuver 017/19:38:00 to 017/21:08:00.

#### MODIS Anomalies:

No formatter anomalies have been detected since switching to B-side science operations. The MODIS IOT is continuing to monitor changes with the radiative cooler temperatures and focal plane power.

General Instrument Comments:

MODIS is in Science Mode on the B-side with the SVD and NAD open, operating with the Formatter Resolution Flight Software Patches (FRFSP). No new events have been witnessed by the FRFSP since the B-Side Transition on DOY 304.

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: 176.3 of 500 hours  
SRCA 10W Lamp #2: 137.6 of 500 hours  
SRCA 10W Lamp #3: 146.8 of 500 hours  
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 556.3 of 4000 hours  
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1495 of 3022 Movements  
Nadir Aperture Door: 532 of 1316 Movements  
Space View Door: 437 of 1316 Movements