

Terra Engineering Report

DOY 018

018 HIGHLIGHTS

- Nominal Ops
- ASTER Retry Incremented to 200 – CDH Engineer Notified

CDH Overall Status DOY 016 – 018 2000:

- TERRA CDH continues to operate nominally overall, but did have one new problem (see CDH related DRs below).
- An SSR1 Trash Playback was performed at 016/15:52z.
- The first weekly MO Frequency Adjust was performed at 018/19:02z.

Three CDH related DRs were submitted on 1/18/01:

1. EMOS_T1505 Command Timing Problem Caused Relay Command Loss on S/C
2. ERPS0163 ERPS/USCCS Clock Correlation was wrong by -0.085089 sec (-1 PN Epoch)
3. Spcrft_T0135 SSR1 Trash Buffer Recorded Non-CADU Data (PB had Uncorrectable CADUs)

Science Data Losses:

None

Plans:

- Next MO Freq. Adjust is planned 1/25 (DOY 025)

Communications (COMMS)

- The communication subsystem performed nominally

Plans

- DataLynx/SKS testing
- Modify HGA neg. acq. Procedure.
- Test redundant side procedures.
- Integrate DSN interference tool delivery
- Support ERPS Parallel Ops.
- DDL test over SGS and GSFC

TCS Performance is Nominal for DOY 015-018

No Spacecraft Activities Planned

EPS Performance is Nominal for DOY 015-018

Minimum Battery State Of Charge was 71.1% for Delta-V

No Spacecraft Activities Planned

FSW Daily Status 1/16-1/18 2001 (DOY016-018)

- The Flight software performed as expected throughout the day.
- The ATC executed as expected.
- There were 13 TMON trips.
 - 3 MDA BITE trips at 018:02:46:25, 018:13:15:01, 018:15:17:38
 - 1 TMON 2 trip @ 017:19:15:32
- There were two critical activity log messages @ 017:19:47:16 related to charge rate calculation errors. These were due to the drag makeup burn.

PLANS

GNC Daily Status 1/16/01 – 1/18/01 (DOY 016 - 018)

- PMS performance was nominal.
- GNC was nominal in Hifi Normal Mode.
- Successfully Performed Drag Make Up Maneuver at 017/19:38:00

Plans

- Continue Developing Standard Operating Procedures for Maneuvers.
- Test Redundant Side GNC Procedures.

Navigation (NAV) DOY016-018

- TONS Filter performance was nominal.
 - Daily table loads were completed successfully. A total of 11 tables were loaded.
 - DOY017 Drag Make-up Maneuver, NAV remained in science mode.
 - DOY018 First Weekly MO Adjust, Adjust was nominal
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- Daily table loads
 - DOY031 TDRS2 Station Keeping Maneuver
 - DOY031 TDRS4 Station Keeping Maneuver