



**Network  
Control  
Center**

**STDN DAILY REPORT  
FOR GMT DAYS  
21, 22 AND 23 MAY , 2001**

**Part I. Operations**

**21 MAY**

**A. SN Anomalies:**

**1. STGT/TERRA Support**

**21/0034-0034Z**

The POCC reported uncorrectable errors for the science dump on TDS. This is a continuation of TTR 23887 problem. TTR # 23888

TDS KSAR-2 0033-0053Z 2 Seconds Data Loss Non-Recoverable

**2. MULTIPLE/BRTS Support**

**21/0515-0612Z**

Three Alice Springs (1313) events were impacted by a power outage. A power recycle was performed on the transponder and service was restored. TTR # 23889

171 SSA1-R 0518-0523Z 3 Mins 30 Seconds Service Loss

275 MAR 0601-0605Z 3 Mins 30 Seconds Service Loss

275 MAR 0608-0612Z 3 Mins 30 Seconds Service Loss

**B. ISS Anomalies - None.**

**C. GN Anomalies:**

**1. AGS/TEP Support**

**21/0920-0933Z**

The project called and stated that they did not received real time data after the PRT data was finished. TMOc contacted Com and Com stated no problems with connection or data The Project suspects a problem on their end and will wait until Monday morning when the normal crew comes in to reboot before requesting a playback. CDS # 18814

TOTS-1 13 Minutes service loss

## 2. SGS/TERRA Support

21/1735-2030Z

No science data dump was commanded on. When commands should be tested before AOS, no input clock was indicated by the green led "Clock In" for the PSK subcarrier modulator type General Data Products GDP 782 used for commanding. Troubleshooting covered check of all matrix settings and GDP 782 settings, no anomalies were noted. Further troubleshooting by manual bypass of digital matrix by patching, re-powering the GDP 782, as well as switching command input to the "782 command in" from Prime GSIP to Backup GSIP. At no point in time we got green led for "Clock In" on the GDP 782 PSK sub-carried modulator. After each change or troubleshooting action, Terra AM-1 MOC sent test commands to see if troubleshooting action had rectified problem and thereby detecting where the fault could be located. Nothing helped. CDS # 18818.

11 Meter 1737-1747Z No Data Loss Declared

## 3 SGS/QST Support

21/1735-2030Z

No commands were sent to S/C, command loads were shown on PTP desktop, but QMOC advised on black phone that no commands were getting through. Troubleshooting covered check of all matrix settings and GDP 782 settings, all LED on GDP 782 were green and normal, no anomalies were noted. Further troubleshooting; manual bypass of matrixes by patching

and re-powering of the GDP 782. CDS # 18821

11 Meter 1920-1936Z No Data Loss Declared

4. WGS/QST Support

21/2255-2359Z

Master did not transfer schedule. Had to manually schedule pass causing a late AOS. 2mb data bit sync was locked when downlink was captured. QSCAT personnel responded to home pager system and called WGS to inquire as to what caused late AOS. During discussion, QSCAT stated that it is possible that 51,748 frames of 2mb has all expected data. CDS # 18822

11 Meter 2255-2310Z Data Loss (Unknown) Recov  
(Unknown)

5. AGS/TEP Support

21/2224-2235Z

TMOC reported that only one of the spacecraft receivers were locked and the locked receiver was reporting low AGCs. The problem was isolated to the polarization switch not operating and was stuck in the LHC position. Attempts to repair the switch is ongoing. CDS # 18828

TOTS No Data Loss Declared

F. TDRS-6 (1305) station keeping maneuver was successful.

22 MAY

A. SN Anomalies

1. MULTIPLE/TERRA Support

22/0035-2359Z

The POCC is still experiencing an ongoing anomaly with uncorrectable errors during science dump. This is a continuation of TTR'S 23887 and 23888. TTR # 23890

TDW KSAR-1 0038-0100Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-1 0255-0315Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-1 0430-0450Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-1 0605-0625Z 20 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-2 0735-0755Z 4 Mins 50 Sec Svc/Data Loss  
Non-Recov  
TDS KSAR-2 0852-0912Z 20 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-2 1022-1042Z 18 Seconds Svc/Data Loss  
Non-Recov  
TDW KSAR-1 1111-1151Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDW KSAR-1 1249-1309Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDW KSAR-1 1420-1500Z 23 Seconds Svc/Data Loss  
Non-Recov  
171 KSAR-1 1654-1729Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDW KSAR-1 2007-2042Z 23 Seconds Svc-Data Loss  
Non-Recov  
TDW KSAR-1 2145-2209Z 23 Seconds Svc/Data Loss  
Non-Recov  
TDS KSAR-1 2245-2320Z 23 Seconds Svc/Data Loss  
Non-Recov

B. ISS Anomalies - None.

C. GN Anomalies:

1. SGS/Terra Support

22/1330-1336Z

After AOS we successfully received and verified test command. When Terra was about to send the command to start the 512K PB, the uplink was turned off. It turned out that the HPA had changed from operate to standby.

Attempted to switch to operate, but that failed. The HPA was brought offline, then online, and finally the HPA came on. When we were "go for command" again, we verified a test command but there was too little time left for the 512K to be dumped. Reason unknown, SCC message log file will be sent to Scott Schaire at VIASAT for analysis. CDS # 18825

11 Meter 6 Minutes Service/Data Loss Unknown If Recoverable

## 2. AGS/LANDSAT-7 Support

22/1929-1939Z

At PTP start time the operator noted that the 782 command sub carrier generator output modulation was not coherent. His investigation led him to the analog switch where he observed that the 782 ST was connected to both the PTP and GSIP. When the connection to the GSIP was broken the SC modulation became coherent the reason that there was a double connection on the 782 ST is because we had just finished a AQUA data flow test where the GSIP command verification was conducted. The double connection is a result of the switch not being cleared before being loaded for the next support. CDS # 18829

11 Meter 1929-1943Z No Data Loss Declared

23 MAY

### A. SN Anomalies

#### 1. MULTIPLE/TERRA Support

23/0329-2125Z

POCC reported continued problem with uncorrectable errors during science dump. Reference TTRs 23887,23888.

TDS KSAR-1 0329-0404Z 23 Seconds Svc/Data Loss Non-Recoverable

TDS KSAR-1 0510-0545Z 23 Seconds Svc/Data Loss Non-Recoverable  
171 KSAR-1 0700-0735Z 23 Seconds Svc/Data Loss Non-Recoverable  
TDW KSAR-1 1325-1400Z 23 Seconds Svc/Data Loss Non-Recoverable  
TDS KSAR-1 1555-1630Z 23 Seconds SVC/Data Loss Non-Recoverable  
171 KSAR-1 1745-1820Z 23 Seconds Svc/Data Loss Non-Recoverable  
TDW KSAR-1 1920-1955Z 23 Seconds Svc/Data Loss Non-Recoverable  
171 KSAR-1 2055-2125Z 23 Seconds Svc/Data Loss Non-Recoverable. TTR # 23891

## 2. IONET Anomaly

23/0747-0808Z

The following events were impacted by the IONET lines from WSC/GSFC went down. The anomaly is under investigation. TTR # 23892

TDE TOPEX 0728-0801Z 14 Mins. 48 Secs. Service/Data Recoverable  
TDE TRMM 0748-0808Z 20 Mins. Service/Data Loss Recoverable  
TDW ERBS 0741-0757Z 56 Secs. Service/Data Loss Recoverable

B. ISS Anomalies - None.

C. GN Anomalies:

### 1. WGS/SAMPEX Support

23/0042-0054Z

Prior to AOS, station took a power hit. This caused the master computer and several other pieces of equipment to halt or fail at AOS, was able to reboot master prior to AOS. All systems appeared to configure. At AOS, noticed that WFEP-1 was not showing any data blocks. Also found that the Metrum tapes had ejected following the power hit and was not noticed by the

operator, no data recorded on tape. Partial data sent to project post pass from WFEP-2. WFEP-2 also showed CRC errors. Unknown if data can be recovered from another support. With WFEP-1 not functioning, commands probably did not uplink. Following the support, all systems and sub-systems have been rebooted. CDS 18834

TOTS-1 11 Mins 53 Seconds Data Loss Recov Unknown

2. SGS/AMPEX Support 23/092440-0926Z

SIM 300 in wrong mode; should be serial instead of parallel. This was caused by a operator error. This DR is closed.  
CDS ID# 18839

11M 1 Min. 20 Secs Service/Data Loss Recoverable (Unknown)

3. SGS/QST Support 23/1837-1840Z

Lost lock on PTP desktop for RT 4k QST data. Modulation on receivers and Bit Sync lock. Applying the analog matrix on the ATS, we made the PTP lock up on 4k again. Test command went through without any problems.

11M 1830-1845Z 3 Mins. Service/Data Loss Recoverable (Unknown)

4. AGS/FAST Support 23/2055-2108Z

LEO-T antenna failed to move for this support. Just before AOS the support was moved to TOTS. Initially we established a good TLM and CMD connection with the MOC, but at 20:55Z the TLM connection dropped. I contacted the UCB MOC and at 21:08 the FOT decided to reset their system. All connections were re-established and the remainder of the support was without incident. There was no impact to the command support. All TLM data was sent during the normal post pass activity.  
CDS ID# 18851

TOTS 13 Mins. Data Loss Recoverable

## 5. AGS/SNOE Support

23/195506-195926Z

The combiner failed to configure properly for the support. Manual intervention corrected the configuration faults with the combiner demodulator. The demodulator was found in the default state of FM (mode), loop open, and sweep disabled. The tuning mode was also found in the default state of logic Out and open loop. This default setting effectively shuts the combiner output OFF. Data was recorded by TOTS-1 while shadow tracking.  
CDS ID# 18855

LEO-T 1954-2005Z 4 Mins. 20 Secs. Service/Data Loss Recoverable

## 6. AGS/FAST Support

23/2046-2116Z

The antenna failed to respond to commands. Support was switched over to TOTS-1 with no impact. CDS ID# 18856

LEO-T 30 Mins Service Loss

## Part II. Testing Anomalies

A. SN Test - None.

B. GN Test

1. THE W1576LS PEGASUS 22/1230-1930Z NCC/  
HESSI TLM/LTAS/MDDF NISN/WPS/KSC/  
DATA FLOW CD&SC/ER/H/AE/TEL-4

Objectives:

- A. To verify that WPS can strip the LTAS/MDDF data from the Pegasus telemetry stream and forward to the ER.
- B. To check the modification to the TELPRO at WFF.
- C. Perform an end-to-end Pegasus telemetry and radar

data flow with launch participants.

Results: Objective Not Met

REMARKS:

Objectives not met. H/AE was able to see the 115.942 kb telemetry from WPS, but unable to achieve lock on data; reason unknown. Post fault-isolation continuing. Lemon-1 reported unacceptable LTAS/MDDF Data. Telecom with participants and additional data flow will be performed; date TBD.

2. TDRS-8 HANDOVER TEST 21/2300-0400Z WSGT/JPL/  
FDF/NISN/DSS-46/DSS-16/MOSA

Objectives:

- A. Verify WSGT can receive error free TDRS-8 telemetry from site at 4Kb and 1Kb.
- B. Verify command capability and make delay measurements from WSGT to site.
- C. Verify ranging from site.

Results: Objective Partially Met

Remarks:

Test was scheduled to run with CAN(DSS-46 DOY 138/1300-1700Z) and re-run on 141/1450-1800Z. Test also was run with GDS(DSS-16 DOY 141/2300-142/0400Z).

CAN 138/1300-1700Z: Testing unsuccessful due to WSGT was unable to process the 4Kb telemetry from DSS-46. Trouble shooting of DSS-46 desktop configurations remainder of test. Test will be re-run.

CAN 141/1450-1800Z: Testing was successful. WSGT was able to process 4Kb and 1Kb telemetry. Command capability was also verified as well as ranging. Delay measurements were also taken.

GDS 141/2300-142/0400Z: Testing was partially successful.



be in a landing configuration and we could try to recreate the overflow anomaly at that time.

### Part III. Equipment Status Changes

\$ = Changed ETRO

\*\* = New Items

### Part IV. Scheduled Activities:

STS-105/7A.1 FD4 MPLM JMST #1 Long Simulation 24/1100-25/0030Z

NCCDS-CCS-R WSC SMTF Engineering Interface Test 24/1300-1900Z

DAT Engineering Test Backup Date 24/1500-2300Z

ATLAS CENTAUR/2MLV-10 Reradiate Test 24/1724-1844Z

Engineering Test with JASON-1 POCC, WFF and PKRR 24/1730-1830Z

### Part V. Launch Forecast Changes

\* 1.) M2104LS (STS-104/ISS-10-7A) 165 14 JUN.,2001 T-0 = 2011Z

\* 2.) H3332LS (ATLAS/ICO-A1) 170 19 JUN.,2001 T-0 = 0441Z

\* 3.) M2105LS (STS-105/ISS-10-7A1) 193 12 JUL.,2001 T-0 – 0922Z

\* 4.) Y3504LS (ATLAS/GOES-M) 196 15 JUL.,2001 T-0 = 0652Z