

S13 Rev 165 E19 Gravity

E19 ①

Day 122 - 123

DSS 55, 25, 34

RSS support: Aseel → Dan → Elias → Danny

NOPEs : Jack → Sandy → Lu

ACE : Bill → Grant → Dave Doady (w/1150)

RSRS : 2 A&B @ 55 & 25, 1 A&B @ 34 (Per Mitch's recommendation)
fgain: X: 38, Ka: 53

DSS-55 support nominal. See notes attached to Log.
Monopulse nominal (was problematic during ORT).
Playback short haul segment 122/2345 - 123/0030
RSRZA SCI only

2-way 123/0225 - 123/0415
1 & 8 kHz BW

Weather Partly cloudy

0255 weather update: Overcast & no wind
024513 mono enabled during 1st segment → 0.5 dB improvement

DSS-25 support nominal. See notes attached to Log
Monopulse nominal

024130 mono enabled during 1st segment
→ no change in power

002050 mono enabled during 2nd segment
→ +1 dB increase in power

Weather slightly overcast, light winds @ Pre-Cal
0242 wind 20 mph, gusts to 30 mph!

1103 weather update:
58°. Cloudy. 10 mph winds

Playback : 1st segment
123/0225 - 123/0600
123/0905 - 123/1200

DSS-34 Where do I begin?!!

~ 0200 NOPE said over the net that DSS-34 is ~~down~~ & won't be able to support. No other antenna available
PSS-45 is down. DSS-43 scheduled
Talked to ACE, who is using DSS-43 & is it as high priority as Cassini flyby
→ looking into it
Sent txt msg to Shahram (SIP lead)
Many calls.
E19 Playback not as impacted. They have dual playback scheduled

DSS-43 scheduled by:

OUY: 0625 - 1150	⇒ said No.
Vgr2: 1150 - 1440	⇒ said No. Had issues w/ LNA for days now. This a special test
NH: 1440 - 1835	⇒ can give up last hour

Eventually had telecon w/ SIP leads (Shahram, Shawn, Nimisha, Bill, Kari). Significant impact is to PSS.
Bill asked if we need LNA. Got confused by his Q. What he was asking was that if we don't need LNA, 34 can still support

Went to other phone to talk to NOPE (Jack)
Don't do w/o LNA. Signal before LNA still @ RF level. Nothing would get to rvr w/o LNA.
No way around it. And no backup LNA.
New LNAs are dual package: X & Ka, so if get X, will get Ka (in response to me asking if they can support X only).

Bob got called into meeting.
He will call other project management & will call me back
Concentrate on getting time from Vgr2 & NH for 2nd segment.

~~GOV & Vgr2~~

Doesn't have details about problem but LNA & circuit breaker that keeps tripping. All in one package in new LNAs. Circuit breaker provides power to the whole assembly. In past used to be separate ones

0405 Bob called me back
We are out of luck!

Talked to Voyager (didn't catch name. VCCA was
word). They need to uplink commands to
determine BLF in order to ^{get science} ~~push back~~ data
during a later track. They already lost data.
Doesn't want to get into who's data are
more important

NH hard negotiation. Project management prob.
on east coast & hard to get a hold of
in time

No Bargain

Since no threat to Cassini slc, difficult to
push harder for this.

Sent email to team to tell them no 3rd segment
support & CIA segment 25 mins shorter, unless some
miracle

0650 ACE told Don that expert is @ station working on
antenna. May have it available for support !!!
(Don called me)

Shortly before pre-cool, ACE said that station will
support but antenna will probably trip (circuit
breakers) at time, but they will be able to turn it
back on. Interruptions.

0710 DSS-34 Pre-cool !!

Weather Overcast w/ light rain

got update @ 1105 → Heavy fog
Ka-band is impacted & ~~1.6~~ dB
degradation) but mostly no. 6 dB)

Im back on shift @ 0900

Talked w/ ACE & NOPE (Sandy) to understand
things better

Circuit breakers CP-1 & CB27 may trip. If switch off may
have to cool down, so couple of steps. Expert is
standing by.

Sandy sent me report

0919 DSS-34 1/L X & Ka !!!

n 2 minutes after DSS-25. AZ brakes were set to on. Will open DR.

DR # C108649

092210 Mono enabled → 2dB improvement
told ACE if this complicates ops, then no

- Small spurs (≈ 10 dB-Hz) @ ± 180 Hz around Ka-band carrier
Delayed telling station about it cause happy that they
are even tracking!

1018 Told station about spurs, but no need to work on
it now. They are far enough not to impact data.
Just to be informed

⇒ see it in X

⇒ no

DR C108651 for RCP uplink