S49 T51 Rev107 Titan Bistatic Experiment
2009/086, March 27, 2009

Stations
Goldstone   DSS-14, DSS-25
Originally also had DSS-26, but had to release to Kepler
DSS-14 pre-cal was shortened to accommodate Spitzer. 2-hours instead of 3-hours.

RS Ops Room
Danny (VOCA), Don (DSS-14 X-band), John (DSS-14 S-band), Elias (DSS-25)
Essam, Dick French
David Rochblatt showed up for a bit (there was no need for him to be there since there were no
          monopulse decisions that required his presence)
Aseel monitoring remotely from Jordan

Fgains for open-loop receivers
14	XR 59
	XL 35
	SR 49
	SL 31
25	XR 54
	XL 30
	KR 54

First time to include DSS-25 XL. Not enough open-loop receivers in the past. The bistatic procedure was updated to include steps for XLCP calibrations.

RSR1B at Goldstone is down

DSS-25 pointing model: Got bad pointing data during two ORTs (DOY 078 and DOY 079), so model was updated using data from DOY 070 only. Plan was to test the new model during GSE the day before T51, but there were problem loading the new model (problems with APC floppy drive). During ORTs, power jumps of about 5 dB were observed when monopulse was enabled, so there was definitely a need for the model to be updated.

Note: The Bistatic Egress Predicts were used from the beginning until 07:07 when the Free-Space Predicts were loaded. There was no need to use the Free-Space Predicts at the beginning as the timeline shows.

0230   ACE Briefing to 25
         Pass# 4192
         25 pointing model cas25
         Weather and equipment status?
         → Weather windy. 20 mph wind from NE. All equipment green

043241   25 on-point

0508   Asked 14 to reconfigure receivers for XRCP and SRCP
         → 14 done reconfiguring

051412 14 going to point

0522   14 X SNT looks enabled, but NOPE asked station to set default to 26.6. Now ok

0527   14 on-point

        14 SRCP fluctuating

053110 SNT measurement

0540   Minical

0546   25 completed minical

054640 14 completed minical

071432 **25 monopulse enabled. 1.5 dB increase in power**

Notes from Danny:
- The black phone was malfunctioning (3-0666). We wanted to get a DR but decided against it.
- A little tricky getting XR diode at 14 to show 26.6 for OFF, but Lu figured it out.
- SRCP ADC values fluctuated, especially while on point. Pretty good during pre-cal, not quite as good during post-cal.

END OF NOTES

DRs
None

Pc/No Measurements

	0712 (exit baseline)
14XR	56.39
14XL	29.09
14SR	43.31
14SL	~1-17
25XR	47.28
25XL	24.42
25KR	48.02