

## Buccino, Dustin R (332K)

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**From:** Kahan, Daniel S (332K) <daniel.s.kahan@jpl.nasa.gov>  
**Sent:** Saturday, August 03, 2013 8:30 PM  
**To:** rs@list.jpl.nasa.gov  
**Subject:** CAS OCC ORT Report: S79, 2013/215 DSS-25 (& DSS-26 Ka-Band Array Test)

S79 OCC ORT, August 3 PDT, 2013/215  
& Ka-Band Array Test August 4 PDT, 2013/216

215 1915 2045 0545 0600 DSS-25 CAS RS195-OCCORT MC 0216 N748 1A1 A  
216 0120 0220 0320 0335 DSS-26 CAS KA ARRAY TEST R 0216 3659 7 2C3 A

### DSS-25

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X- and Ka-band

- Weather: Clear & Calm
- Equipment: Green
- fgain X 38 K 55
- X-Band on DC6. Ka-band on DC7
  
- 20:24:30 X-Band AOS
- 20:36 SNT X 34.6, Ka 71.9, elevation 9.9
- 20:45:27 (BOT) Ka-Band AOS, X in lock, Ka in lock
- 20:46:53 Monopulse enabled. No change in SNR.
- 20:55:00 Az Corr 1.56, El Corr 0.90, Elevation 13.65
- S/C NOT rolling
- eDMD shows Conscan type = NONE but corrections are updating
- while 1-way referenced to OSC AUX: no SFRO applied; Ka-band drifted from +340 to +68 Hz before going 2-way
- 23:35 Az Corr 6.28 El Corr 3.11 Elevation 38.2
- 23:35 Disabled Monopulse (without clearing offsets) before switching to 2-way and reenabled at 23:42:55.
- 23:35 Ka-Band Pc/No ~48.7 dB-Hz; X-Band Pc/No ~32.3 dB-Hz; Elevation 38.2
- 01:39 Ka-Band Pc/No ~48.5 dB-Hz; X-Band Pc/No ~32.7 dB-Hz; Elevation 42
- 02:16 SNT K=55.2; X=24.6; Elevation = 41
- 02:30 RWA bias occurred as scheduled, causing 8 dB-Hz drop
- nominal tracking as of 03:30

### DSS-26

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X-Band, Ka-Band, and pts8 (Ka-Band array)

- pts8 on DC8. Ka-band on DC9; no X-Band DC
- fgain X 38 Ka 55 pts8 60
- station was not configured to support recording the arrayed input on the RSR/WVSR
- used DSS-25 predicts for X-Band

- 01:39 X- & Ka-Band AOS
- 01:39 SNT Ka 33, elevation 42
- 01:39 Ka-Band Pc/No 49.1 dB-Hz; X-Band Pc/No 32.6 dB-Hz; Elevation 42
- eDMD shows Conscan type = NONE but corrections are updating
- 02:04:14 Monopulse enabled. 1.2 dB increase. Az corr = 7.8. El corr = 1.0 Elevation 41.9
- 02:30 RWA bias occurred as scheduled causing 8 dB drop
- Nominal tracking

Data to be played back to /rssg/data/CAS/2013\_215/ORT/RSR on Bespin:

#### DSS-25

X-band, RCP, 1-way & 2-way

RSR2A1

1 kHz, 16 bits

start = 20:30:00

stop = 05:50:00

Ka-band, RCP, 1-way & 2-way

RSR2B1

1 kHz, 16 bits

start = 20:30:00

stop = 05:50:00

not playing back 4-KHz Ka-Band since signal stayed within 1 KHz

#### DSS-26

X-band, RCP, 3-way/25

RSR3A1

1 kHz, 16 bits

start = 01:20:00

stop = 03:25:00

Ka-band, RCP, 3-way/25

RSR3B1

1 kHz, 16 bits

start = 01:20:00

stop = 03:25:00