

Cassini Rev 53: Radio Occultation of Saturn's Ring
 December 3, 2007 (DOY 337)
 Essam Marouf; 11/27/07 (v1)

	ERT UTC OWLT = 1:16:14	SCET UTC ERT - OWLT	PST GMT - 8hrs 8:00:00	Comments
DSS-55 Pre-cals DSS-63 Pre-cals	3:30:00 4:15:00	2:13:46 2:58:46	19:30:00 20:15:00	
DSS-55 Begin-of-Track DSS-63 Begin-of-Track	5:15:00 5:15:00	3:58:46 3:58:46	21:15:00 21:15:00	
S/C at Waypoint (HGA off Earth point)	5:46:14	4:30:00	21:46:14	No downlink signals detectable
Start S/C turn to Earth point	5:55:05	4:38:51	21:55:05	Signals will be detectable before the turn is completed (before xx:xx:xx ERT)
TWNC ON/ RNG OFF/ TLM OFF	5:55:09	4:38:55	21:55:09	
Start the Free-Space Baseline	6:01:18	4:45:04	22:01:18	PC/N0~54, 48, 48, 41 dB-Hz (X70 X34, K34, S70)
DSS-55: Enable Monopulse	6:01:30	4:45:16	22:01:30	Enable monopulse once receiver is in lock
DSS-55: Disable Monopulse	6:07:00	4:50:46	22:07:00	Keep/Remove offsets decision
Ring F	6:31:53	5:15:39	22:31:53	Ring F is usually not detectable in real-time
Ring A in	6:34:02	5:17:48	22:34:02	Sudden drop in signal level
Enke Gap	6:35:55	5:19:41	22:35:55	Brief recovery of strong signal level
Ring A out	6:43:17	5:27:03	22:43:17	Detectable signal expected in the Cassini Division
Ring B in	6:46:33	5:30:19	22:46:33	Signal level drops substantially
End of Ring Occultation (in Ring B)	7:28:55	6:12:41	23:28:55	Signal may not be detectable over most of Ring B
End of the turn back to the Waypoint	7:35:07	6:18:53	23:35:07	End of RSS observation period
TLM ON/TWNC OFF/RNG ON	7:36:02	6:19:48	23:36:02	
DSS-55: End-of-Track	8:15:00	6:58:46	0:15:00	
DSS-63: End-of-Track	8:15:00	6:58:46	0:15:00	
DSS-55 and DSS-63: End Post-cals	8:30:00	7:13:46	0:30:00	

Note: Ring Edges are known to be noncircular which may affect event times above
 Ring times are based on trajectory 071125AP_SCPSE_07329_07344.bsp

Indicates DSN activity