

Timeline for Cassini Rev 82 RSS Occultation of Saturn's Rings on August 26, 2008 (DOY 239)

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	ERT UTC OWLT = 1:25:57	SCET	PST ERT-7hrs 7:00:00	Comments
DSS-55: Start Precal	12:30:00	11:04:03	5:30:00	
Start of RSS3a Op-Mode	12:36:57	11:11:00	5:36:57	
DSS-63: Start Precal	13:00:00	11:34:03	6:00:00	
DSS-55 & 63 Begin of Track	14:00:00	12:34:03	7:00:00	
SNT Measurements (all bands)	TBD			Time close to start of the GMB time is preferred
Start SP Wypoint Turn to Earth Point	14:01:57	12:36:00	7:01:57	40 m S/C turn to Earth point
TWNC ON	14:41:49	13:15:52	7:41:49	
TLM OFF	14:41:54	13:15:57	7:41:54	
Spacecraft HGA is Earth Pointed	14:41:57	13:16:00	7:41:57	S/X downlink likely detectable shortly before this time
Start Ground Moveable Block Deadtime	14:41:57	13:16:00	7:41:57	
DSS-55: Enable Monopulse	TBD			Enable Monopulse soon after receiver is locked
DSS-55: Disable Monopulse	TBD			Keep monopulse enabled if ground pointing is problematic
Start Free-Space Baseline	15:02:30	13:36:33	8:02:30	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F in	15:24:48	13:58:52	8:24:48	Rings F is only detectable in postprocessing
Ring A in	15:25:18	13:59:21	8:25:18	Detectable signals over most of Ring A
Enke Gap	15:25:44	13:59:47	8:25:44	Signals are back very briefly to full strength
Ring A out	15:27:20	14:01:24	8:27:20	Relatively strong signals in the Cassini Division
Ring B in	15:28:01	14:02:04	8:28:01	Signals may be detectable over inner region of Ring B
Ring C in	15:32:50	14:06:53	8:32:50	Signals detectable but briefly blocked by dense ringlets
Ring B in	15:39:56	14:13:59	8:39:56	Signals likely absent over most of Ring B
Ring B out	15:44:45	14:18:49	8:44:45	Relatively strong signals in the Cassini Division

Ring A in	15:45:25	14:19:29	8:45:25	Detectable signals over most of Ring A
Encke gap	15:47:02	14:21:06	8:47:02	Signals are back very briefly to full strength
Ring A out	15:47:28	14:21:31	8:47:28	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F	15:47:58	14:22:01	8:47:58	Rings F is only detectable in postprocessing
End of Free-Space Baseline	16:01:30	14:35:33	9:01:30	
End of Ground Moveable Block Deadtime	16:20:57	14:55:00	9:20:57	Formal end of the Rev 82 RSS ring occultation
CDA observation; HGA is Earth Pointed	16:20:57	14:55:00	9:20:57	
TLM ON	16:20:59	14:55:02	9:20:59	
TWNC OFF	16:21:03	14:55:06	9:21:03	
End of RSS3a Op-Mode	16:39:57	15:14:00	9:39:57	Loss of S-band downlink
Downlink turn; HGA is earth pointed	16:39:57	15:14:00	9:39:57	X-and Ka-band downlink detectable
SNT measurement	TBD			
Start Downlink; HGA is earth pointed	16:59:57	15:34:00	9:59:57	X- & Ka-band downlink; Modulation ON
DSS-55 & 63: End of Track	17:15:00	15:49:03	10:15:00	
DSS-55 & 63 Postcal	17:30:00	16:04:03	10:30:00	

Indicates DSS-55 & DSS-63 Realted Activities

DSS-55 Monopulse enable/disable times are decided in realtime

Ring event times are based on the NAV OTM-164 OD on 20 August 2008

Some Ring Edges are known to be noncircular, which will affect ring event times above