

Timeline for Cassini Rev 79 RSS Occultation of Saturn's Rings on August 4, 2008 (DOY 217)

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	ERT UTC OWLT = 1:25:05	SCET	PST ERT-8hrs 7:00:00	Comments
DSS-55: Start Precal	9:40:00	8:14:55	2:40:00	
DSS-63: Start Precal	10:10:00	8:44:55	3:10:00	
DSS-55 & 63 Begin of Track	11:10:00	9:44:55	4:10:00	
SNT Measurements (all bands)	TBD			Time close to start GMB time is preferred
Start SP Wypoint Turn to Earth Pointing	11:25:05	10:00:00	4:25:05	
TWNC ON	11:49:57	10:24:52	4:49:57	
TLM OFF	11:50:02	10:24:57	4:50:02	
Spacecraft HGA is Earth Pointed	11:50:05	10:25:00	4:50:05	S/X/Ka signals likely detectable shortly before this time
Start GMB Deadtime	11:50:05	10:25:00	4:50:05	
DSS-55: Enable Monopulse	11:50:35	10:25:30	4:50:35	Enable monopulse once receiver is locked
DSS-55: Disable Monopulse	TBD			Real-Time decision; stay on monopulse, if needed
Start Free-Space Baseline	12:14:45	10:49:40	5:14:45	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F in	12:34:02	11:08:57	5:34:02	Rings F is only detectable in postprocessing
Ring A in	12:34:36	11:09:31	5:34:36	Detectable signals over most of Ring A
Enke Gap	12:35:06	11:10:01	5:35:06	Signals are back very briefly to full strength
Ring A out	12:36:55	11:11:51	5:36:55	Relatively strong signals in the Cassini Division
Ring B in	12:37:40	11:12:35	5:37:40	Signals may be detectable over inner region of Ring B
Ring C in	12:42:30	11:17:25	5:42:30	Signals detectable but briefly blocked by dense ringlets
Ring B in	12:55:32	11:30:27	5:55:32	Signals likely absent over most of Ring B
Ring B out	13:00:21	11:35:16	6:00:21	Relatively strong signals in the Cassini Division
Ring A in	13:01:06	11:36:01	6:01:06	Detectable signals over most of Ring A

Encke gap	13:02:56	11:37:51	6:02:56	Signals are back very briefly to full strength
Ring A out	13:03:25	11:38:20	6:03:25	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F	13:04:00	11:38:55	6:04:00	Rings F is only detectable in postprocessing
End of Free-Space Baseline	13:19:45	11:54:40	6:19:45	
End of GMB Deadtime	13:30:05	12:05:00	6:30:05	"Official" end of the Rev 79 RSS ring occultation
End of RSS3a Op-Mode	13:30:06	12:05:01	6:30:06	Loss of S-band & Ka-band Downlink
TLM ON	13:30:07	12:05:02	6:30:07	
TWNC OFF	13:30:11	12:05:06	6:30:11	
SNT measurement (all bands)	TBD			
DSS-55 & 63: End of Track	14:30:00	13:04:55	7:30:00	
DSS-55 & 63 Postcal	14:45:00	13:19:55	7:45:00	

Indicates DSS-55 & 63 Related Activities

All times are based on 080520 reference trajectory

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

Monopulse strategy is to be decided in real-time