Timeline for Cassini Rev 67 RSS Occultation of Saturn's Rings
on May 09-10, 2008 (DOY 130-131): Last Ring Occultation in the Prime Mission

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	ERT UTC OWLT = 1:15:11	SCET	PST ERT-7hrs 7:00:00	Comments
Start RSS Warmup	21:17:41	20:02:30	14:17:41	HGA is Earth Pointed
DSS-25 Start Precal	21:25:00	20:09:49	14:25:00	
DSS-26 & DSS-14: Start Precal	21:40:00	14:40:00	14:40:00	
DSS-25 Begin of Track	22:25:00	21:09:49	15:25:00	X/S/Ka downlink signals should be detectable
DSS-25 Enable Monopulse	TBD			Enable monopulse once receiver is locked
DSS-26 & DSS-14 Begin of Track	22:40:00	21:24:49	15:40:00	X/S/Ka downlink signals should be detectable
DSS-26: Enable Monopulse	TBD			Enable monopulse once receiver is locked
SNT Masurements (all bands)	TBD			Diodes need to be OFF before 17:00:00
DSS-25 & DSS-26: Disable Monopulse	TBD			Real-Time decisions
TWNC ON/ RNG OFF/ TLM OFF	23:17:11	22:02:00	16:17:11	X-band at full strength
Start Live Movable Block	23:17:11	22:02:00	16:17:11	Pc/N0 (X70, X&Ka34, S70) = ~53, 47, 47, and 41 dB
Start Free-Space Baseline	23:26:03	22:10:52	16:26:03	
Ring F	23:56:24	22:41:13	16:56:24	Rings F is only detectable in postprocessing
Ring A in	23:57:20	22:42:09	16:57:20	Detectable signals over most of Ring A
Enke Gap	23:58:09	22:42:58	16:58:09	Signals are back very briefly to full strength
Ring A out	0:01:08	22:45:57	17:01:08	Relatively strong signals in the Cassini Division
Ring B in	0:02:20	22:47:09	17:02:20	Signals may be detectrable over inner region of Ring B
Ring C in	0:09:45	22:54:34	17:09:45	Signals detectable but briefly blocked by dense ringlets
Ring C out	0:16:49	23:01:38	17:16:49	Pc/N0 (X70, X&Ka34, S70) = ~53, 47, 47, and 41 dB
At top of ionosphere (~68,000 km)	0:24:12	23:09:01	17:24:12	During ingress, the ionosphere is mixed with the rings
Ring C in	0:29:19	23:14:08	17:29:19	All ring features occulted again in reverse order

Ring B in	0:36:23	23:21:12	17:36:23	Signals likely absent over most of Ring B
Ring B out	0:43:49	23:28:38	17:43:49	Relatively strong signals in the Cassini Division
Ring A in	0:45:01	23:29:50	17:45:01	Detectable signals over most of Ring A
Encke gap	0:48:00	23:32:49	17:48:00	Signals are back very briefly to full strength
Ring A out	0:48:48	23:33:37	17:48:48	Pc/N0 (X70, X&Ka34, S70) = ~53, 47, 47, and 41 dB
Ring F	0:49:45	23:34:34	17:49:45	Rings F is only detectable in postprocessing
Smallest ionosph. radius probed (60,895 km)	0:58:38	23:43:27	17:58:38	Possible scintillations of S/X signal power
End of the Rev 67 occultation	1:00:03	23:44:52	18:00:03	
Start turn for INMS observation	1:00:03	23:44:52	18:00:03	All three radio signals are lost shorttly after this time
Loss of Ka-Band Signal	1:00:35	23:45:24	18:00:35	
Loss of X-Band Signal	1:00:47	23:45:36	18:00:47	
Loss of S-Band Signal	1:01:29	23:46:18	18:01:29	
SNT measurement (all bands)	TBD			
DSS-25, DSS-26, & DSS-14: End of Track	1:45:00	0:29:49	18:45:00	End of Rev67 Observations
DSS-25, DSS-26, & DSS-14: End of Postcal	2:00:00	0:44:49	19:00:00	
TLM ON/ TWNC OFF/ RNG LOW	2:51:12	1:36:01	19:51:12	

Indicates DSS-25, 26, & 14 Related Activities

All times are based on OTM-153 OD on 4/24/2008 with assumed NO GO for LMB (times to be updated when OTM-154 OD is published)

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

Monopulse strategy is to be decided in real-time