

## Timeline for Cassini Rev 81 RSS Occultation of Saturn's Rings on August 19, 2008 (DOY 232)

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	ERT UTC OWLT = 1:25:46	SCET	PST ERT-8hrs 7:00:00	Comments
Start of RSS3a Op-Mode	3:56:28	2:30:42	20:56:28	
Start SP Wypoint Turn to Earth Point	4:42:46	3:17:00	21:42:46	Long 1 hr 12 m S/C turn to Earth point
DSS-43: Start Precal	4:50:00	3:24:14	21:50:00	
DSS-43 Begin of Track	5:20:00	3:54:14	22:20:00	
SNT Masurements (X/S bands)	TBD			Time close to start GMB time is preferred
DSS-47 Start Precal	5:30:00	4:04:14	22:30:00	
TWNC ON	5:54:38	4:28:52	22:54:38	
TLM OFF	5:54:43	4:28:57	22:54:43	
Spacecraft HGA is Earth Pointed	5:54:46	4:29:00	22:54:46	S/X downlink likely detectable shortly before this time
Start GMB Deadtime	5:54:46	4:29:00	22:54:46	
DSS-47 Start of Track	6:00:00	4:34:14	23:00:00	Ka-downlink detectable
Start Free-Space Baseline	6:13:59	4:48:13	23:13:59	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F in	6:33:58	5:08:12	23:33:58	Rings F is only detectable in postprocessing
Ring A in	6:34:29	5:08:43	23:34:29	Detectable signals over most of Ring A
Enke Gap	6:34:55	5:09:10	23:34:55	Signals are back very briefly to full strength
Ring A out	6:36:36	5:10:50	23:36:36	Relatively strong signals in the Cassini Division
Ring B in	6:37:17	5:11:31	23:37:17	Signals may be detectable over inner region of Ring B
Ring C in	6:41:58	5:16:12	23:41:58	Signals detectable but briefly blocked by dense ringlets
Ring B in	6:51:22	5:25:37	23:51:22	Signals likely absent over most of Ring B
Ring B out	6:56:03	5:30:17	23:56:03	Relatively strong signals in the Cassini Division
Ring A in	6:56:44	5:30:58	23:56:44	Detectable signals over most of Ring A

Encke gap	6:58:24	5:32:39	23:58:24	Signals are back very briefly to full strength
Ring A out	6:58:51	5:33:05	23:58:51	Pc/N0 (X70, X&Ka34, S70) = ~54, 48, 48, and 42 dB
Ring F	6:59:22	5:33:36	23:59:22	Rings F is only detectable in postprocessing
End of Free-Space Baseline	7:14:59	5:49:13	0:14:59	
DSS-47 End of Track	7:30:00	6:04:14	0:30:00	
End of GMB Deadtme	7:33:59	6:08:13	0:33:59	"Official" end of the Rev 81 RSS ring occultation
End of RSS3a Op-Mode	7:34:46	6:09:00	0:34:46	Loss of S-band & then Ka-band Downlink
TLM ON	7:34:48	6:09:02	0:34:48	
TWNC OFF	7:34:52	6:09:06	0:34:52	
SNT measurement (X/S bands)	TBD			
DSS-47 Postcal	8:00:00	6:34:14	1:00:00	
DSS-43: End of Track	8:00:00	6:34:14	1:00:00	
DSS-43 Postcal	8:15:00	6:49:14	1:15:00	

#### Indicates DSS-43 & 47 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