

# Rev 28 Cassini Radio Science Occultations: Event Times on DOY 258-260, 2006

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DRAFT

	ERT UTC OWLT = 1:23:06	SCET UTC ERT-OWLT	Pacific Time ERT-8hrs 8:00:00	Comments
<b>DOY 258; Sept 15, 2006</b>				
DSS-55 & 65: Begin-of-Track	7:45:00	6:21:54	23:45:00	
DSS-55: Enable Monopulse				
Start Enceladus Baseline	7:53:06	6:30:00	23:53:06	
At 1000 km EN OCC radius	8:42:16	7:19:10	0:42:16	
At 500 km radius	8:43:05	7:19:59	0:43:05	
At 300 km radius	8:43:26	7:20:20	0:43:26	
At minimum altitude (16 km)	8:43:56	7:20:50	0:43:56	
At 300 km radius	8:44:25	7:21:19	0:44:25	
At 500 km radius	8:44:45	7:21:39	0:44:45	
At 1000 km radius	8:45:35	7:22:29	0:45:35	
End Enceladus Baseline	10:23:06	9:00:00	2:23:06	
DSS-55: Disable Monopulse				
DSS-55 & 65: End-of-Track	10:30:00	9:06:54	2:30:00	
<b>5.5 Hours Break Till Ring Occultation Activities Start</b>				
<b>DOY 258; Sept 15, 2006</b>				
DSS-25 & 14: Begin-of-Track	16:00:00	14:36:54	8:00:00	
Start Ring Occ Baseline	19:03:06	17:40:00	11:03:06	
DSS 43 Begin-Of-Track	19:25:00	18:01:54	11:25:00	
DSS 34 Begin-Of-Track	19:30:00	18:06:54	11:30:00	
Ring F	19:47:32	18:24:26	11:47:32	
Ring A in	20:14:27	18:51:21	12:14:27	
Enke Gap	20:37:29	19:14:23	12:37:29	
Ring A out	22:01:52	20:38:46	14:01:52	
Ring B in	22:35:39	21:12:33	14:35:39	
End Part 1 of Ring Occ	22:53:06	21:30:00	14:53:06	
Cassini HGA OFF Earth-Line	22:53:06	21:30:00	14:53:06	
<b>ORS Observation of Ring G</b>				
DSS-25 & 14: End-of-Track	23:50:00	22:26:54	15:50:00	
<b>DOY 259; Sept 16, 2006</b>				
Cassini HGA back ON Earth-Line	0:23:06	23:00:00	16:23:06	
Start Part 2 of Ring Occ	0:23:06	23:00:00	16:23:06	
Ring B out	1:58:08	0:35:02	17:58:08	
DSS 55 & 65: Begin-Of-Track	3:45:00	2:21:54	19:45:00	
DSS 34 & 43 End-Of-Track	4:35:00	3:11:54	20:35:00	
Ring C out	4:46:49	3:23:43	20:46:49	
Ionosphere in (68,000 km)	6:03:00	4:39:54	22:03:00	
Atmosphere in	7:28:56	6:05:50	23:28:56	
<b>~6 Hrs Long Limb-Track Period</b>				
DSS-25 & 14: Begin-of-Track	11:25:00	10:01:54	3:25:00	
Ring C in (mixed w/atm)	13:46:54	12:23:48	5:46:54	
DSS 55 & 65: End-Of-Track	16:10:00	14:46:54	8:10:00	

Ring B in (mixed w/atm)	16:35:14	15:12:08	8:35:14	
DSS 34 & 43 Begin-Of-Track	19:20:00	17:56:54	11:20:00	
Ring B out (mixed w/atm)	19:57:02	18:33:56	11:57:02	
Ring A in (mixed w/atm)	20:30:40	19:07:34	12:30:40	
Enke Gap (mixed w/atm)	21:54:41	20:31:35	13:54:41	
Ring A out (mixed w/atm)	22:17:36	20:54:30	14:17:36	
Ring F (mixed w/atm)	22:44:24	21:21:18	14:44:24	
DSS-25 &14: End-of-Track	23:50:00	22:26:54	15:50:00	
~3 Hrs Limb-Track Period				
DOY 260; Sept 17, 2006				
Atmosphere out	2:55:27	1:32:21	18:55:27	
DSS 55 & 65: Begin-Of-Track	3:45:00	2:21:54	19:45:00	
DSS 34 & 43 End-Of-Track	4:30:00	3:06:54	20:30:00	
Ionosphere out (~68,000 km)	4:53:06	3:30:00	20:53:06	
End LMB !	4:53:06	3:30:00	20:53:06	
Start Downlink (HGA Rolling)	4:53:06	3:30:00	20:53:06	Start Gravity Science Enhancement (GSE) Pass
DSS 65: End-Of-Track	6:00:00			
DSS 55: End-Of-Track	15:30:00			

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

DSN 25 & 14 Goldstone Activities

DSN 34 & 43 Canberra Activities

DSN 55 & 65 Madrid Activities