

Rev 7 Cassini Radio Science Occultation: Event Times on DOY 122/123

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	SCET UTC	ERT UTC OWLT = 1:18:03	Pacific Time GMT-7hrs 7:00:00	Comments
Start LMB; Enable Monopulse	1:15:00	2:33:03	19:33:03	TWNC OFF (1-Way) Throughout
Disable Monopulse	2:24:57	3:43:00	20:43:00	Blind pointing is initialized by Monopulse
Start Baseline	2:26:34	3:44:37	20:44:37	Free-space: ~51, 39, 41 dB-Hz @ X, S, and Ka
Ring F	2:55:25	4:13:28	21:13:28	Narrow isolated ring; not much effect expected
Ring A in	3:00:43	4:18:46	21:18:46	Sudden drop in signal level
Enke Gap	3:05:12	4:23:15	21:23:15	Brief recovery of strong signal level
Ring A out	3:21:03	4:39:06	21:39:06	Strong signal expected in the Cassini Div
Ring B in	3:27:09	4:45:12	21:45:12	Signal level drops substantially
Ring B out	4:00:38	5:18:41	22:18:41	Signal level throughout Ring B is unknown!
Ring C out	4:23:13	5:41:16	22:41:16	High signal level but with fast fluctuations
Enable Monopulse	4:25:27	5:43:30	22:43:30	Monopulse offset used to reintialize blind
Disable Monopulse	4:26:17	5:44:20	22:44:20	blind pointing
Ionoshere in	4:28:40	5:46:43	22:46:43	Multipath? (more than one spectral line?)
Troposphere in	4:38:59	5:57:02	22:57:02	Signal level drops systematically and fast
End of Ingress	5:14:34	6:32:37	23:32:37	Signal absorbed in Saturn's atmosphere
Behind Saturn				
Start of Egress	6:33:34	7:51:37	0:51:37	Signal level builds up systematically
Troposphere out	7:03:50	8:21:53	1:21:53	Pointing error may affect free-space signal level
Ring C in	7:15:23	8:33:26	1:33:26	Strong, dynamically changing signal level
Ionosphere out	7:16:18	8:34:21	1:34:21	Multipath? (more than one spectral line?)
Enable Monopulse	7:16:27	8:34:30	1:34:30	Monopulse offset used to reintialize blind
Disable Monopulse	7:17:07	8:35:10	1:35:10	blind pointing
Ring B in	7:37:32	8:55:35	1:55:35	Signal level drops substantially
Ring B out	8:09:38	9:27:41	2:27:41	Signal level unknown (small) throughout Ring B
Ring A in	8:15:22	9:33:26	2:33:26	Signal level comes back up in the Cassini Division
Enke Gap	8:30:00	9:48:03	2:48:03	Clear dynamic signal throughout most of Ring A
Ring A out	8:34:04	9:52:09	2:52:09	Sudden transition to free-space signal level
Ring F	8:38:52	9:56:55	2:56:55	Rings F is only detectable in postprocessing
End of Baseline	9:09:34	10:27:37	3:27:37	Pointing error may affect free-space signal level
Enable Monopulse	9:11:00	10:29:03	3:29:03	To assess blind pointing error during rings egress
End LMB	10:39:00	11:57:03	4:57:03	End of the radio occultation experiment

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