

## Cassini Rev 46: Radio Occultation of Saturn's Ring and Atmosphere

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	ERT UTC OWLT = 1:20:32	SCET UTC	PDT GMT - 7hrs 7:00:00	Comments
Cassinin HGA Earth Pointed				
Start Warmup (if OTM-115 BU is unused)	17:30:32	16:10:00	10:30:32	
DSS-25 & 26: Pre-cals	17:35:00	16:14:28	10:35:00	
DSS-14: Pre-cals	18:05:00	16:44:28	11:05:00	
Start Warmup (if OTM-115 BU is used)	18:10:32	16:50:00	11:10:32	
DSS-14: Begin-of-Track	19:05:00	17:44:28	12:05:00	Likely strong S/X Signals (~41 & 44 dB-Hz)
DSS-25 & 26: Begin-of-Track	19:20:00	17:59:28	12:20:00	Likely Ka-band signal (~48 db-Hz)
DSS-25 & 26: Enable Monopulse	TBD			Enable monopulse once receivers are in lock
DSS-25 & 26: Disable Monopulse	TBD			Keep/Remove offsets decision
Start LMB	19:30:32	18:10:00	12:30:32	PC/N0~54, 48, 48, 41 dB-Hz (X70 X34, K34, S70)
TELEM OFF/ TWNC OFF	19:30:38	18:10:06	12:30:38	
Start Baseline	20:14:14	18:53:42	13:14:14	Start of the RSS occultation experiment
Ring F	20:43:47	19:23:15	13:43:47	Rings F is only detectable in postprocessing
Ring A in	20:47:11	19:26:39	13:47:11	Sudden drop in signal level
Enke Gap	20:50:05	19:29:33	13:50:05	Brief recovery of strong signal level
Ring A out	21:00:40	19:40:08	14:00:40	Strong signal expected in the Cassini Div
Ring B in	21:04:52	19:44:20	14:04:52	Signal level drops substantially
Ring B out	21:29:39	20:09:07	14:29:39	Signal level throughout Ring B is small
Ring C out	21:49:14	20:28:42	14:49:14	High signal level but with fast fluctuations
DSS-25 & 26: Enable Monopulse	21:53:00	20:32:28	14:53:00	Monopulse offset used to reintialize blind pntng
DSS-22 & 26: Disable Monopulse	21:55:00	20:34:28	14:55:00	Keep/Remove offsets decision
Ionosphere in (~68,000 km radius)	21:56:25	20:35:53	14:56:25	PC/N0~54, 48, 48, 41 dB-Hz (X70 X34, K34, S70)
Troposphere in	22:05:19	20:44:47	15:05:19	Signals level start dropping & scintillating
Ka-Band signal loss (approximate)	22:18:40	20:58:08	15:18:40	Likely disappearance of the Ka-band signal
X-band signal loss (approximate)	22:21:30	21:00:58	15:21:30	Likely disappearance of the X-band signal
S-band signal loss (approximate)	22:24:00	21:03:28	15:24:00	Likely disappearance of the S-band signal
End Ingress Limb-Track	22:25:27	21:04:55	15:25:27	
End of RSS Observations	22:29:48	21:09:16	15:29:48	End of Saturn ingress occultation
End LMB	22:55:32	21:35:00	15:55:32	Behind Saturn; no signals expected
DSS-25 & 26: End-of-Track	23:50:00	22:29:28	16:50:00	
DSS-14: End-of-Track	23:50:00	22:29:28	16:50:00	
DSS-14, 25, & 26: Post-cals	0:05:00	22:44:28	17:05:00	

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

Ring and atmosphere event times are based on rev 46 LUD OD

Monopulse strategy above is preliminary at this time