

	ERT UTC OWLT = 01:15:46	SCET	PDT ERT-7hrs 07:00:00	Comments
<b>DOY 2017-187</b>				
DSS-43: Pre-Cal	10:45:00	09:29:14	03:45:00	
DSS-43: BOT	11:45:00	10:29:14	04:45:00	
DSS-43: Transmitter ON, 18 kW, LCP, RAMP, SWEEP	11:46:00	10:30:14	04:46:00	Earth point - RTLT
DSS-35: Pre-Cal	12:40:00	11:24:14	05:40:00	
S-Band ON	12:56:54	11:41:08	05:56:54	Per PEF
Ka-Band ON	13:01:50	11:46:04	06:01:50	Per PEF
RSSG: Begin DSS-43 & DSS-35 Open-Loop Recordings	13:10:00	11:54:14	06:10:00	
S/C at Waypoint: XBAND to Earth, NEG_X to NEP	13:36:46	12:21:00	06:36:46	Signals may be detected earlier
DSS-43: Start X- & S-Band 1-Way Acquisition	13:36:46	12:21:00	06:36:46	Pc/N0 TLM ON (X-70, S-70) = 40, 42 dB-Hz
RSSG: Enter 1-Way Open-Loop Frequency Offsets as Needed	13:36:46	12:21:00	06:36:46	
DSS-35: BOT	14:10:00	12:54:14	07:10:00	
DSS-35: Start X- & Ka-Band 1-Way Acquisition	14:10:00	12:54:14	07:10:00	Pc/N0 TLM ON (X-34, Ka-34) = 35, 48 dB-Hz
RSSG: Enter 1-Way Open-Loop Frequency Offsets as Needed	14:10:00	12:54:14	07:10:00	
DSS-35: Enable Monopulse	14:12:00	12:56:14	07:12:00	Enable/Disable Monopulse only when requested by RSSG
DSS-35:Disable Monopulse Without Clearing The Offsets	14:17:00	13:01:14	07:17:00	Prior to mode switch to 3-way, when requested by RSSG
DSS-43 Transmitter ON Observed	14:17:32	13:01:46	07:17:32	
DSS-43: Start X- & S-Band 2-Way Acquisition	14:17:32	13:01:46	07:17:32	Pc/N0 TLM ON (X-70, S-70) = 40, 42 dB-Hz
DSS-35: Start X- & Ka-Band 3-Way Acquisition w/DSS-43	14:17:32	13:01:46	07:17:32	Pc/N0 TLM ON (X-34, Ka-34) = 34, 48 dB-Hz
RSSG: Clear 1-Way Open-Loop Frequency Offsets	14:17:32	13:01:46	07:17:32	
DSS-35: Enable Monopulse	14:24:00	13:08:14	07:24:00	Enable/Disable Monopulse only when requested by RSSG
DSS-74: Pre-Cal	14:50:00	13:34:14	07:50:00	
<b>Start of Rev 282 Chord Ring Occultation</b>	15:17:46	14:02:00	08:17:46	
RNG OFF	15:17:46	14:02:00	08:17:46	
TLM OFF	15:17:47	14:02:01	08:17:47	Pc/N0 TLM OFF (X-70, X-34) = 54, 48 dB-Hz
RSSG: Begin DSS-74 Open-Loop Recordings	15:30:00	14:14:14	08:30:00	
DSS-74: BOT	15:35:00	14:19:14	08:35:00	
DSS-74: Start X-Band 3-Way Acquisition w/DSS-43	15:35:00	14:19:14	08:35:00	
Ring F	16:06:50	14:51:04	09:06:50	Approximate time
Ring A-in	16:15:00	14:59:14	09:15:00	Approximate time

DSS-35: Disable Monopulse Without Clearing the Offsets	16:40:30	15:24:44	09:40:30	Enable/Disable Monopulse only when requested by RSSG
Ring A-out	16:51:11	15:35:25	09:51:11	Approximate time
DSS-74: Transmitter ON, 18 kW, LCP, RAMP	16:52:28	15:36:42	09:52:28	NO SWEEP; uplink transfer from DSS-43 to DSS-74
DSS-43: Transmitter OFF	16:52:33	15:36:47	09:52:33	Transfer occurs at Ring C Turnaround - RTL
Ring B-in	17:02:54	15:47:08	10:02:54	Approximate time
DSS-55: Pre-Cal	17:15:00	15:59:14	10:15:00	
DSS-63: Pre-Cal	17:45:00	16:29:14	10:45:00	
RSSG: Begin DSS-63 & DSS-55 Open-Loop Recordings	18:15:00	16:59:14	11:15:00	
Ring B-out/Ring C-in	18:26:37	17:10:51	11:26:37	Approximate time
DSS-35: Enable Monopulse	18:32:24	17:16:38	11:32:24	~6.6 deg EL. Enable/Disable Monopulse only when requested by RSSG
DSS-63 & DSS-55: BOT	18:45:00	17:29:14	11:45:00	
DSS-63: Start X- & S-Band 3-Way Acquisition w/DSS-43	18:45:00	17:29:14	11:45:00	In Outer Ring C
DSS-55: Start X- & Ka-Band 3-Way Acquisition w/DSS-43	18:45:00	17:29:14	11:45:00	In Outer Ring C
DSS-35: Disable Monopulse	19:05:00	17:49:14	12:05:00	Enable/Disable Monopulse only when requested by RSSG
DSS-43 & DSS-35: EOT	19:05:00	17:49:14	12:05:00	
DSS-55: Enable Monopulse	19:12:00	17:56:14	12:12:00	~10 deg EL. Enable/Disable Monopulse only when requested by RSSG
DSS-43 & DSS-35: Post-Cal	19:20:00	18:04:14	12:20:00	
DSS-43 to DSS-74 Uplink Transfer Observed	19:24:00	18:08:14	12:24:00	
Ring C Turn-Around	19:24:00	18:08:14	12:24:00	
DSS-74: Start X-Band 2-Way Acquisition	19:24:00	18:08:14	12:24:00	In Outer Ring C
RSSG: Use 3-Way/DSS-43 Predicts at DSS-74	19:24:00	18:08:14	12:24:00	Since 2-way predicts are not available
DSS-63: Begin X- & S-Band 3-Way Acquisition/DSS-74	19:24:00	18:08:14	12:24:00	In Outer Ring C. Pc/N0 TLM OFF (X-70, S-70) = 54, 42 dB-Hz
RSSG: Continue Using 3-Way/DSS-43 Predicts at DSS-63	19:24:00	18:08:14	12:24:00	Since 3-way/74 predicts are not available
DSS-55: Begin X- & Ka-Band 3-Way Acquisition/DSS-74	19:24:00	18:08:14	12:24:00	In Outer Ring C. Pc/N0 TLM OFF (X-34, Ka-34) = 48, 48 dB-Hz
RSSG: Continue Using 3-Way/DSS-43 Predicts at DSS-55	19:24:00	18:08:14	12:24:00	Since 3-way/74 predicts are not available
RSSG: End DSS-43 & DSS-35 Open-Loop Recordings	19:25:00	18:09:14	12:25:00	
DSS-55: Disable Monopulse Without Clearing Offsets	20:15:36	18:59:50	13:15:36	Enable/Disable Monopulse only when requested by RSSG
Ring C-out/Ring B-in	20:19:14	19:03:28	13:19:14	Approximate time
DSS-63: Transmitter ON, 18 kW, LCP, RAMP	20:29:55	19:14:09	13:29:55	NO SWEEP; uplink transfer from DSS-74 to DSS-63
DSS-74: Transmitter OFF	20:30:00	19:14:14	13:30:00	
DSS-74: EOT	20:30:00	19:14:14	13:30:00	
DSS-74: Post-Cal	20:45:00	19:29:14	13:45:00	
RSSG: End DSS-74 Open-Loop Recordings	20:50:00	19:34:14	13:50:00	
DSS-63: Transmitter OFF	20:56:14	19:40:28	13:56:14	End of Rev 282 - RTL
RSSG: Switch DSS-63 Predicts to 2-Way	21:39:34	20:23:48	14:39:34	
RSSG: Switch DSS-55 Predicts to 3-Way w/DSS-63	21:39:34	20:23:48	14:39:34	
Ring B-out	21:41:42	20:25:56	14:41:42	Approximate time
Ring A-in	21:53:04	20:37:18	14:53:04	Approximate time

DSS-55: Enable Monopulse	22:04:48	20:49:02	15:04:48	Enable/Disable Monopulse only when requested by RSSG
Ring A-out	22:27:40	21:11:54	15:27:40	Approximate time
Ring F	22:35:21	21:19:35	15:35:21	Approximate time
DSS-74 to DSS-63 Uplink Transfer Observed	23:01:27	21:45:41	16:01:27	
DSS-63: Begin X- & S-Band 2-Way Acquisition	23:01:27	21:45:41	16:01:27	Pc/N0 TLM OFF (X-70, S-70) = 54, 42 dB-Hz
DSS-55: Begin X- & Ka-Band 3-Way Acquisition/DSS-63	23:01:27	21:45:41	16:01:27	Pc/N0 TLM OFF (X-34, Ka-34) = 48, 48 dB-Hz
RSSG: Predicts Have Already Been Switched	23:01:27	21:45:41	16:01:27	
S-Band OFF	23:27:07	22:11:21	16:27:07	Per PEF
Ka-Band OFF	23:27:09	22:11:23	16:27:09	Per PEF
DSS-55: Disable Monopulse	23:27:09	22:11:23	16:27:09	At loss of Ka-band signal
TLM ON	23:27:40	22:11:54	16:27:40	
RNG ON	23:27:44	22:11:58	16:27:44	
<b>End of Rev 282 Chord Ring Occultation</b>	23:27:46	22:12:00	16:27:46	
Loss of X-band Signal	23:27:48	22:12:02	16:27:48	Begin spacecraft turn away from Earth point
<b>DOY 2017-188</b>				
RSSG: End DSS-63 & DSS-55 Open-Loop Recordings	00:00:00	22:44:14	17:00:00	
DSS-63 & DSS-55: EOT	00:30:00	23:14:14	17:30:00	
DSS-63 & DSS-55: Post-Cal	00:45:00	23:29:14	17:45:00	

Canberra DSS-43 & DSS-35 related activities
Madrid DSS-63 & DSS-55 related activities
New Norcia DSS-74 related activities

Predicted ring event times are approximate and are based on reference trajectory 150901