Cassini Radio Science Activities/Requests - Prime Mission Thru End of 2013

V140218

Light Orange	AUX-PIM (USO-PIM prior to Dec, 2011)
Gold	Boresight Calibration
Gray	Stand-alone PIM (Periodic Instrument Maintenance)
Light Yellow	Operational Readiness Test (ORT)
Pink	DSN Tests/Engineering Pass
Light Turquoise	Special Activity
Lavender	Gravity Science Enhancement (GSE)
Rose	Solar Conjunction
Sky Blue	Saturn Atmosphere and/or Rings Occultation
Pale Blue	Titan Atmosphere Occultation and/or Bistatic
Turquoise	Satellite Earth Occultation
Lime Green	Prime Gravity Science Experiments

Opmode: rss3a = S-, X- and Ka-band downlink, s/c on RWA rss3 = S-, X- and Ka-band downlink, s/c on RCS rss3s = S-, X- and Ka-band downlink, s/c on RWA SLOW
rssk = X- and Ka-band downlink rss2 = S- and X-band downlink
* = Unique Opmode s = RWA SLOW Opmode, but FULL mode may be used if power is available

For GSE and engineering activities (ORT, USOPIM, BORESIGHT, SCE, DSNMONCAL):
If Ka-TWTA Maint in Black: CIMS start time is "Times in SCET" minus "Ka-TWTA Maint" minus "Thrm Stab"
If Ka-TWTA Maint in Orange: CIMS start time is time shown in SCET. Ka-TWTA Maint occurs during downlink

Activities in BLUE (Sky blue, Pale Blue, Turquoise) and GREEN require DSN Level3 supports. Some special activities (light turquoise) may require Level3 as well.

TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_000EA_USO001_RSS	01	2004	136	17:08	21:08	1:20	136	18:28	22:28	4:00	2:00	2:00	rss3a	G	14	136	18:25	22:50	05/15/04	
															G	25	136	18:25	03:30		Also tracking pass
	Rev 0 Engineering pass	01	2004	136	16:50	22:25	1:20	136	18:10	23:45	5:35				G	26	136	18:10	23:45		
	Rev 0 Engineering pass	01	2004		17:05	20:40		136	18:25	22:00	3:35				M	55	136	18:25	22:15		
	RSS_000EA_PIM001_RSS	01	2004	158	13:50	19:50	1:20	158	15:10	21:10	6:00	2:00					No Tracking			06/06/04	Stand-alone PIM
	SOI	02	2004	183																	
	RSS_00AEA_USOPIM001_RSS	04	2004	262	02:21	06:21	1:19	262	03:40	07:40	4:00	2:00	2:00	rss3a	M	63	262	03:40	12:40	09/18/04	Also tracking pass
															M	55	262	03:40	12:40		KaT Testing
	Rev 00A Engineering pass	04	2004		08:06	11:21	1:19	262	09:25	12:40	3:15				G	25	262	09:25	12:40		
															G	26	262	09:25	12:40		
	Thermal Stabilization Test	04	2004	268	07:47	10:52	1:18	268	09:05	12:10	3:05	0:05	0:00	rss3a	M	63	268	03:10	12:10	09/24/04	Also tracking pass
															M	55	268	09:05	12:10		
															G	25	268	09:05	12:10		
	Ka-band Downlink for Grav - Iapetus	04	2004	291	09:10	11:30	1:15	291	10:25	12:45	2:20	0:05	2:00	rssk	G	26	291	07:45	12:45	10/17/04	2-way & 3-way data
	Ka-band Downlink for Grav - Iapetus	04	2004	291	01:25	03:25	1:15	292	02:40	04:40	2:00	N/A		rssk	M	55	292	00:00	04:40	10/18/04	2-way & 3-way data
	Proble S-band Characterization	06	2004	322	06:04	15:04	1:11	322	07:15	16:15	9:00	2:00		rss2	G	15	322	07:15	16:15	11/17/04	
	DSS-55 Monopulse Test	06	2004	322	22:44	02:54	1:11	322	23:55	04:05	4:10	0:05	2:00	rssk	M	55	322	23:55	04:05	11/17/04	Monopulse testing
	DSS-55 Monopulse Test/PIM	06	2004	342	20:06	02:46	1:09	342	21:15	03:55	6:40	2:00	2:00	rssk	M	55	342	21:15	03:55	12/07/04	Monopulse testing
	Ka-band for DSN Testing at Goldstone	07	2005	022	01:38	10:38	1:07	022	02:45	11:45		2:00		rssk						01/22/05	via IDAP
	RSS_00CEA_PATTERN002_PRIME	08	2005	025	02:00	12:00	1:07	025	03:07	13:07	10:00	2:00	2:00	rss3a	G	14	025	03:05	11:35	01/25/05	End-to-end test. Include Boresight
															G	25	025	03:05	13:10		DSS-25 Antenna Calib last hour
	Rev C Engineering pass	08	2005		01:58	04:53		025	03:05	06:00	2:55				M	55	025	03:05	06:00		
	RSS_003TI_OCCORT001_a_RSS	08	2005	039	00:28	09:22	1:08	039	01:36	10:30	8:54	0:05	2:00	rss3a	G	14	039	01:30	10:30	02/08/05	DSS-14 TP. S-band support
															G	25	039	01:30	05:55		Shadow DSS-14 039/01:30-10:30
															G	26	039	01:45	04:45		
	RSS_003EA_USOPIM001_RSS	08	2005	039	16:52	20:52	1:08	039	18:00	22:00	4:00	0:05	2:00	rss3a	M	63	039	18:00	21:50		Ka-band off at end of USO
															M	55	039	18:00	04:30		
	Ka-band for DSN Testing at Goldstone	08	2005	041	00:22	09:22	1:08	041	01:30	10:30		2:00								02/10/05	via IDAP
	RSS_003EN_GRAVORT001_RSS	08	2005	041	16:43	01:37	1:08	041	17:51	02:45	8:54	0:05	2:00	rssk	M	63	041	17:45	02:45	02/10/05	Tkg pass. S-band support
															M	55	041	17:50	02:45		KaT Testing

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	RSS_003TI_OCCORT002_RSS	08	2005	045	00:13	09:07	1:08	045	01:21	10:15	8:54	0:05	2:00	rss3a	G	14	045	01:15	10:15	02/14/05	Tkg pass. S-band support
															G	25	045	01:15	10:15		Shadow DSS-14 045/01:15-10:15
															G	26	045	01:30	05:40		
	RSS_003EN_GRAVITY001_PRIME	08	2005	047	17:43	21:51	1:09	047	18:52	23:00	4:08	0:05	2:00	rssk	M	55	047	16:15	23:05	02/16/05	E3. Altitude 1511 km, SEP ~143 deg
	RSS_003EN_GRAVITY002_PRIME			048	05:25	08:16	1:09	048	06:34	09:25	2:51				G	25	048	03:55	09:30	02/17/05	DSS-25 BOT Changed to 0420!
																14	048	06:25	09:30		No S-band. NAV pass?
	RSS_005TI_KADOWN001_RSS	09	2005	089	21:08	05:50	1:13	089	22:21	07:03	8:42	2:00	2:00	rssk	G	26	089	22:35	07:05	03/30/05	Shadow DSS-14 089/22:20-07:05
	Ka-band downlink for DSN Testing	10	2005	101	19:44	06:29	1:16	101	21:00	07:45		0:05	2:00	rssk			101	21:00	07:45	04/11/05	Shadow DSS-15 101/21:00-07:45
	Ka-band downlink for DSN Testing	10	2005	102	18:14	01:59	1:16	102	19:30	03:15		0:05	2:00	rssk			102	19:30	03:15	04/12/05	Shadow DSS-14 102/19:30-03:15
	Ka-band downlink for DSN Testing	10	2005	105	21:24	06:29	1:16	105	22:40	07:45		0:05	2:00	rssk			105	22:40	07:45	04/15/05	Shadow DSS-14 105/22:40-07:45
	Ka-band downlink for DSN Testing	10	2005	107	12:29	21:29	1:16	107	13:45	22:45		0:05	2:00	rssk			107	13:45	22:45	04/17/05	Shadow DSS-63 107/13:45-22:45
	RSS_006EA_BORESIGHT002_PRIME	10	2005	108	23:00	01:16	1:16	108	23:16	00:16	1:00	2:00	2:00	rssk	G	25	108	20:15	06:35	04/18/05	Also Tracking Pass
	Ka-band downlink for DSN Testing	10	2005	108	18:59	05:19	1:16	108	20:15	06:35		Incl above		rssk			108	20:15	06:35	04/18/05	Shadow DSS-25 108/20:15-06:35
	RSS_006EA_KA34ORT001_RSS	10	2005	112	02:24	04:24	1:16	112	03:40	05:40	2:00	0:05	2:00	rssk	C	34	112	03:35	05:30	04/22/05	Shadow DSS-25 111/20:15-05:30
	RSS_006EA_KA34ORT002_RSS	10	2005	113	02:19	04:19	1:17	113	03:36	05:36	2:00	0:05	2:00	rssk	C	34	113	03:30	05:35	04/23/05	Shadow DSS-14 112/20:15-05:35
	Ka-band downlink for DSN Testing	10	2005	113	17:28	01:18	1:17	113	18:45	02:35		0:05	2:00	rssk			113	18:45	02:35	04/23/05	Shadow DSS-14 113/18:45-02:35
	Ka-band downlink for DSN Testing	10	2005	114	18:43	04:03	1:17	114	20:00	05:20		0:05	2:00	rssk			114	20:00	05:20	04/24/05	Shadow DSS-25 114/20:00-05:20
	RSS_007EA_KA34ORT003_RSS	10	2005	115	02:14	04:14	1:17	115	03:31	05:31	2:00	0:05	2:00	rssk	C	34	115	03:25	05:20	04/25/05	Shadow DSS-25 114/20:00-05:20
	RSS_007EA_KA34ORT004_RSS	10	2005	116	02:06	04:06	1:17	116	03:23	05:23	2:00	0:05	2:00	rssk	C	34	116	03:15	05:20	04/26/05	Shadow DSS-25 115/20:30-05:20
	Ka-band downlink for DSN Testing	10	2005	116	17:28	01:58	1:17	116	18:45	03:15		0:05	2:00	rssk			116	18:45	03:15	04/26/05	Shadow DSS-25 116/18:45-03:15
	RSS_007SA_OCCORT001_RSS	10	2005	117	18:58	03:58	1:17	117	20:15	05:15	9:00	0:05	2:00	rss3a	G	26	117	20:15	05:15	04/27/05	Shadow DSS-25 117/20:15-05:15
															C	34	118	03:15	05:15	04/28/05	
	RSS_007SA_OCCORT002_RSS	10	2005	121	18:22	03:22	1:18	121	19:40	04:40	9:00	0:05	2:00	rss3a	G	14	121	19:40	04:30	05/01/05	Tkg pass. S-band support
															G	25	121	19:40	04:30		Shadow DSS-14
															G	26	121	19:55	04:30		
															C	34	122	02:55	04:30	05/02/05	
	RSS_007TE_KADOWN001_RSS	10	2005	122	19:00	01:10	1:18	122	20:18	02:28	6:10	0:05	2:00	rss3a	G	25	122	21:50	06:50	05/02/05	Pass continues for Occ
	Begin LMB and deadtime (X to Earth)	10	2005	123	01:10	02:19	1:18	123	02:28	03:37	1:09			rss3a	G	14	122	18:15	07:00	05/02/05	Saturn & Rings Ingress & Egress
	RSS_007RI_OCC003_PRIME			123	02:32	04:39	1:18	123	03:50	05:57	2:07				G	25	122	21:50	06:50	05/03/05	DSS-25 pass starts early for gravity
	RSS_007SA_OCC003_PRIME			123	04:39	05:20	1:18	123	05:57	06:38	0:41	Included in			G	26	123	02:00	06:50		
	RSS_007SA_OCC004_PRIME			123	06:39	07:12	1:18	123	07:57	08:30	0:33	above grav			C	43	123	02:45	11:10		
	RSS_007RI_OCC004_PRIME			123	07:12	09:16	1:18	123	08:30	10:34	2:04	observ			C	34	123	03:00	11:10		
	End deadtime and LMB (X to Earth)			123	09:20	10:29	1:18	123	10:38	11:47	1:09				M	63	123	10:25	12:00		
	End deadtime and LMB (X to Earth)														M	55	123	10:25	12:00		
	RSS_007SA_KADOWN001_RSS	10	2005	124	11:30	20:30	1:18	123	12:48	21:48	9:00	0:05	2:00	rssk	Italy	Noto	124	15:20	21:50	05/04/05	Shadow DSS-63 124/12:45-21:50
	Ka-band for DSN Testing at Madrid	10	2005	130	10:36	11:41	1:19	130	11:55	13:00		0:05	2:00	rssk	M	55	130	11:55	13:00	05/10/05	E. Shadow DSS-63 130/11:15-22:05
	RSS_008SA_OCCORT001_RSS	11	2005	134	17:11	04:11	1:19	134	18:30	05:30	11:00	0:05	2:00	rssk	M	55	134	18:30	22:55	05/14/05	Shadow DSS-15 134/18:30-05:30
															C	34	135	02:00	05:30	05/15/05	
	RSS_008SA_OCCORT002_RSS	11	2005	135	12:41	18:26	1:19	135	14:00	19:45	5:45	0:05	2:00	rss3a	M	63	135	14:00	19:45	05/15/05	Shadow DSS-63 135/14:00-19:45
															M	55	135	14:00	19:45		
	RSS_008EA_BORESIGHT002_PRIME	11	2005	137	21:00	22:00	1:20	137	22:20	23:20	1:00	2:00	2:00	rssk	G	26	137	18:20	04:20	05/17/05	Ka-band on until 03:00 SCET
	Rev 8 Engineering Passes	11	2005	138	00:30	03:00	1:20	138	01:50	04:20	1:00				C	34	138	01:50	04:05	05/18/05	Non-rol. Antenna Calibration.
	RSS_008SA_OCCORT003_RSS	11	2005	138	18:35	03:35	1:20	138	19:55	04:55	9:00	0:05	2:00	rss3a	C	43	139	01:50	04:55	05/19/05	Shadow DSS-14 138/19:55-04:55
															C	34	139	01:55	04:55		
	Begin deadtime (off Earth point)	11	2005	141	5:58	06:59	1:20	141	7:18	08:19	1:01	0:05	2:00	rss3a	C	43	141	06:50	10:10	05/21/05	Saturn & Rings Ingress & Egress
	RSS_008RI_OCC003_PRIME			141	06:59	09:07	1:20	141	08:19	10:27	2:08				C	34	141	06:55	10:10		
	RSS_008SA_OCC003_PRIME			141	09:07	09:41	1:20	141	10:27	11:01	0:34				M	63	141	09:20	16:15		
	RSS_008SA_OCC004_PRIME			141	11:09	11:44	1:20	141	12:29	13:04	0:45				M	55	141	09:20	16:15		
	RSS_008RI_OCC004_PRIME			141	11:44	13:47	1:20	141	13:04	15:07	2:03										
	End deadtime and LMB (X to Earth)			141	13:47	14:48	1:20	141	15:07	16:08	1:01										
	Ka-band for DSN Testing at Madrid	11	2005	148	10:39	20:34	1:21	148	12:00	21:55	9:55	0:05	2:00		M	55				05/28/05	via IDAP. DSS-55 sched by David
	Ka-band for DSN Testing at Goldstone	11	2005	153	16:59	02:04	1:21	153	18:20	03:25	9:05	0:05	2:00		G	25	153	18:20	03:25	06/02/05	via IDAP. Also tracking pass
	RSS_009SA_OCCORT001_RSS	11	2005	154	15:59	01:04	1:21	154	17:20	02:25	9:05	0:05	2:00	rssk	G	25	154	17:05	20:40	06/03/05	
															G	26	154	17:20	02:25		Shadow DSS-14 154/17:20-02:25
															M	55	154	17:20	21:35		

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	RSS_009SA_KADOWN001_RSS	11	2005	157	16:28	01:33	1:22	157	17:50	02:55	9:05	0:05	2:00	rss3a	G	26	157	17:50	20:15	06/06/05	Shadow DSS-14157/17:50-02:55
	RSS_009SA_OCCORT002_RSS	11	2005	157	16:28	01:33	1:22	157	17:50	02:55	9:05	0:05	2:00	rss3a	G	14	157	17:50	02:55	06/06/05	
															G	26	157	17:50	20:15		26 also gravity pass, see above
															M	63	157	17:50	21:35		Shadow DSS-14 157/17:50-02:55
															M	55	157	17:50	21:30		
	Add DSS-25 ORT Pass														G	25	157	16:30	22:45		25 Released from maint. to RS
	Begin deadtime (off Earth point)	11	2005	159	15:10	15:54	1:22	159	16:32	17:16	0:44	0:05	2:00	rss3a	G	14	159	16:20	20:45	06/08/05	Saturn & Rings Egress Only
	RSS_009SA_OCC004_PRIME			159	15:54	16:30	1:22	159	17:16	17:52	0:36				G	26	159	16:20	20:45		
	RSS_009RI_OCC004_PRIME			159	16:30	18:33	1:22	159	17:52	19:55	2:03				G	25	159	16:05	20:45		
	End deadtime and LMB (X to Earth)			159	18:33	19:17	1:22	159	19:55	20:39	0:44				M	63	159	16:20	20:45		Live Update shift -6 mins
															M	55	159	16:20	20:45		
	RSS_009SA_KADOWN002_RSS	11	2005	160	08:18	17:23	1:22	160	09:40	18:45	9:05	0:05	2:00	rssk	M	55	160	09:40	18:45	06/09/05	Shadow DSS-63 160/09:40-18:45
	RSS_010SA_OCCORT001_RSS	12	2005	170	14:10	22:50	1:23	170	15:33	00:13	8:45	0:05	2:00	rssk	G	26	170	15:30	00:15	06/19/05	Shadow DSS-25 170/15:30-00:15
	RSS_010EA_USOPIM001_RSS	12	2005	172	22:00	02:00	1:23	172	23:23	03:23	4:00	2:00	2:00	rss3a	G	25	172	19:20	03:25	06/21/05	Also tracking pass
	plus Boresight Calibration during last														G	26	172	23:20	03:25		
	hour														G	14	172	23:20	03:25		S-band support
	Rev 10 Engineering Pass	12	2005		22:22	02:02		172	23:45	03:25	3:40				C	43	172	23:55	03:25		DSS-43 S-band support
					22:22	02:02		172	23:45	03:25					C	34	172	23:55	03:25		non-rolling
	RSS_010SA_OCCORT002_RSS	12	2005	173	16:30	01:30	1:23	173	17:53	02:53	9:00	0:00	0:00	rss3a	G	26	173	17:45	02:55	06/22/05	Shadow DSS-14 173/17:45-22:45
	RSS_010SA_OCCORT003_RSS	12	2005	175	14:30	22:30	1:23	175	15:53	23:53	8:00	0:05	2:00	rssk	G	25	175	15:15	23:55	06/24/05	Shadow DSS-14 175/15:15-23:55
	RSS_010SA_KADOWN001_RSS	12	2005	177	09:00	16:28	1:23	177	10:23	17:51	7:28	0:05	2:00	rssk	M	55	177	07:30	17:55	06/26/05	Shadow DSS-63 177/07:30-17:55
	Begin LMB and deadtime (X to Earth)	12	2005	177	16:29	16:52	1:23	177	17:52	18:15	0:23	0:05	2:00	Uniq	G	26	177	17:20	02:10	06/26/05	Saturn & Rings Ingress & Egress
	RSS_010RI_OCC003_PRIME			177	16:52	19:02		177	18:15	20:25	2:05			trans	G	25	177	17:35	01:55		
	RSS_010SA_OCC003_PRIME			177	19:02	19:38		177	20:25	21:01	0:36			to rss3a	G	14	177	17:50	02:10		
	RSS_010SA_OCC004_PRIME			177	21:09	21:48		177	22:32	23:11	0:39										
	RSS_010RI_OCC004_PRIME			177	21:48	23:52		177	23:11	01:15	2:04										
	End deadtime and LMB (X to Earth)			177	23:52	00:21		178	01:15	01:44	0:29										
	RSS_010SA_KADOWN002_RSS	12	2005	178	14:30	00:30	1:23	178	15:53	01:53	10:00	0:05	2:00	rssk	G	25	178	15:50	01:55	06/27/05	Shadow DSS-15 178/15:50-01:55
	RSS_011SA_OCCORT001_RSS	12	2005	187	21:31	01:30	1:24	187	22:55	02:54	3:59	0:05	2:00	rssk	C	34	187	23:00	03:00	07/06/05	Shadow DSS-14 187/18:00-03:00
	RSS_011SA_OCCORT002_RSS	12	2005	193	14:40	18:01	1:24	193	16:04	19:25	2:21	0:00	0:00	rss3a	M	55	193	16:00	19:25	07/12/05	Shadow DSS-14 193/16:00-00:55
															M	63	193	16:00	19:25		
	RSS_011SA_KADOWN001_RSS	12	2005	194	19:54	00:44	1:24	194	21:18	02:08	4:50	0:05	2:00	rss3a	G	26	194	21:15	02:15	07/13/05	Shadow DSS-14 194/18:25-02:15
	RSS_011SA_OCCORT003_RSS	12	2005	194	21:06	00:51	1:24	194	22:30	02:15	3:45	Included above			C	34	194	22:35	02:15		
															C	43	194	22:35	02:15		
	Begin Deadtime	12	2005	196	03:40	03:46	1:24	196	05:04	05:10	0:06	5 min	2:00	rss3a	C	34	196	04:55	07:00	07/15/05	Saturn & Rings Egress Only
	RSS_011SA_OCC004_PRIME			196	03:46	04:31		196	05:14	05:58	0:44				C	43	196	04:55	07:00		
	RSS_011RI_OCC004_PRIME			196	04:31	06:37		196	05:58	08:04	2:06				M	55	196	06:15	11:05		55 also gravity pass (see below)
	End deadtime and GMB (X to Earth)			196	06:37	06:50		196	08:01	08:14	0:13				M	63	196	06:15	11:05		X to Earth until 11:04 ERT rolling
	RSS_011SA_KADOWN002_RSS	12	2005	196	06:50	09:40	1:24	196	08:14	11:04	2:50	Included above			M	55	196	06:15	11:05	07/15/05	Shadow DSS-63 196/06:15-11:05
	RSS_011EA_SCECORONA001_RSS	12	2005	196	14:30	23:30	1:24	196	15:54	00:54	9:00	0:00	0:00	rss2 u	G	14	196	15:50	00:55	07/15/05	Unique Opmode
	RSS_011EA_SCECORONA002_RSS	12	2005	198	14:20	23:20	1:24	198	15:44	00:44	9:00	0:00	0:00	rss2 u	G	14	198	15:40	00:45	07/17/05	Unique Opmode
		12	2005	202			1:24								G	25	202	15:15	00:20	07/21/05	via IDAP. All are also tracking
		12	2005	203			1:24								G	26	203	14:45	23:45	07/22/05	passes. Ka-TWTA Standby at
	Ka-band for Sol Corona Charact Demo	12	2005	204			1:24								G	25	204	14:45	23:45	07/23/05	202/11:46 SCET, KEX & KA-TWTA
		12	2005	205			1:24								G	25	205	14:45	23:45	07/24/05	ON (Ka-band downlink) at
		12	2005	206			1:24								G	25	206	15:15	00:15	07/25/05	202/11:51, OFF at 206/22:51 SCET
	RSS_012SA_OCCORT001_RSS	12	2005	207	07:52	16:52	1:24	207	09:16	18:16	9:00	0:05	2:00	rssk	M	55	207	09:15	18:20	07/26/05	Shadow DSS-54 207/09:15-18:20
	RSS_012EA_SCECORONA003_RSS	12	2005	208	13:37	22:49	1:24	208	15:01	00:13	9:12	0:00	0:00	rss2 u	G	14	208	15:00	00:15	07/28/05	Unique Opmode
	RSS_012SA_OCCORT002_RSS	12	2005	210	12:30	16:56	1:24	210	13:54	18:20	4:26	0:00	0:00	rss3a	M	55	210	14:50	18:20	07/29/05	Shadow DSS-14 210/13:50-22:55
															M	63	210	14:50	18:20		
	RSS_012SA_KADOWN001_RSS	13	2005	213	06:46	12:06	1:24	213	08:10	13:30	5:20	0:05	2:00	rssk	M	55	213	05:30	13:30	08/01/05	Also tracking pass
	Begin LMB and deadtime (X to Earth)	13	2005	214	06:57	07:33	1:24	214	08:21	08:57	0:36	0:05	2:00	rss3a	M	63	214	08:00	16:50	08/02/05	Saturn & Rings Ingress & Egress
	RSS_012RI_OCC003_PRIME			214	07:33	09:34		214	08:57	10:58	2:01				M	55	214	08:00	16:50		
	RSS_012SA_OCC003_PRIME			214	09:34	10:11		214	10:58	11:35	0:37										
	RSS_012SA_OCC004_PRIME			214	11:40	12:24		214	13:04	13:48	0:44										
	RSS_012RI_OCC004_PRIME			214	12:24	14:32		214	13:48	15:56	2:08										X-band to Earth con't until 2200
	End LMB and deadtime (X to Earth)			214	14:32	15:06		214	15:56	16:30	0:34										GSE follows
	RSS_012SA_KADOWN002_RSS	13	2005	214	14:26	20:36	1:24	214	15:50	22:00	7:10	Include above		rssk*	G	25	214	15:50	22:00	08/02/05	Shadow DSS-14 214/13:05-22:00

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_013RI_OCCORT001_RSS	13	2005	227	12:22	21:37	1:23	227	13:45	23:00	9:15	0:00	0:00	rss3a	G	25	227	13:45	23:00	08/15/05	Shadow DSS-14 227/13:45-23:00
															G	26	227	14:00	23:00		
	RSS_013EA_BORESIGHT001_PRIME	13	2005	227	13:55	14:55	1:23	227	15:18	16:18	1:00	Included above			G	25	Above DSS-25 pass				
	RSS_013RI_OCCORT002_RSS	13	2005	229	10:45	18:00	1:23	229	12:08	19:23	7:50	0:00	0:00	rss3a	G	25	229	14:25	19:25	08/17/05	Shadow DSS-14 229/12:05-19:25
															G	26	229	14:25	19:25		
	RSS_013SA_KADOWN001_RSS	13	2005	232	04:57	08:57	1:23	232	06:20	10:20	4:00	0:05	2:00	rssk	M	55	232	06:20	11:25	08/20/05	Shadow DSS-63 232/04:25-11:25
	Start GMB and deadtime (X to Earth)	13	2005	232	17:22	17:51	1:23	232	18:45	19:14	0:29	0:05	2:00	rss3a	G	14	232	18:15	22:35	08/20/05	Rings Egress only
	RSS_013RI_OCC004_PRIME			232	17:51	20:21		232	19:14	21:44	2:29				G	25	232	18:15	22:35		RSS only GMB
	End deadtime and GMB			232	20:21	20:42		232	21:44	22:05	0:21				G	26	232	18:00	22:35		Shift +00:15:16
	RSS_013_KADOWN002_RSS	13	2005	233	15:02	21:22	1:23	233	16:25	22:45	6:20	0:05	2:00	rssk	G	25	233	16:25	22:45	08/21/05	Shadow DSS-14 233/13:40-22:45
	RSS_013_KADOWN003_RSS	13	2005	235	07:27	13:42	1:23	235	08:50	15:05	7:15	0:05	2:00	rssk	M	55	235	06:05	15:05	08/23/05	Array. Shadow 63 235/06:05-15:05
	RSS_014SA_OCCORT001_RSS	13	2005	240	11:52	21:12	1:23	240	13:15	22:35	9:20	0:05	2:00	rssk	G	25	240	13:15	22:35	08/28/05	Shadow DSS-14 240/13:15-22:35
															G	26	240	13:30	22:35		
															M	55	240	13:15	16:35		
	RSS_014SA_OCCORT002_RSS	14	2005	245	11:00	20:00	1:22	245	12:22	21:22	9:05	0:00	0:00	rss3a	G	14	245	12:20	13:45	09/02/05	
															G	25	245	12:20	21:25		DSS-25 also Tracking Pass
															G	26	245	12:35	16:10		
	RSS_014SA_KADOWN001_RSS	14	2005	248	05:53	10:58	1:22	248	07:15	12:20	5:05	0:05	2:00	rssk	M	55	248	07:15	12:20	09/05/05	Shadow DSS-63 248/04:30-12:20
	Start LMB (deadtime 20 mins)	14	2005	248	12:04	12:24	1:22	248	13:26	13:46	0:20	0:05	2:00	rss3a	G	14	248	12:30	17:50	09/05/05	Saturn & Rings Ingress only
	RSS_014RI_OCC002_PRIME			248	12:24	14:49		248	13:46	15:11	2:25				G	25	248	12:30	17:50		Ka-band on at 0515 for GSE above
	RSS_014SA_OCC002_PRIME			248	14:49	15:34		248	15:11	16:56	0:45				G	26	248	12:45	17:50		S-band on at 1102 ERT
	End LMB (deadtime 20 min)			248	15:34	15:54		248	16:56	17:20	0:24										RSS only LMB
	RSS_014SA_KADOWN002_RSS	14	2005	249	13:58	20:33	1:22	249	15:20	21:55	6:35	0:05	2:00	rssk	G	25	249	15:20	21:55	09/06/05	Shadow DSS-14 249/12:35-21:55
	RSS_014HY_MASORT001_RSS	14	2005	251	02:48	12:48	1:22	251	04:10	14:10	10:00	0:05	2:00	rssk	M	55	251	04:10	14:10	09/08/05	Shadow DSS-65 251/04:10-14:10
	RSS_015HY_MASORT001_RSS	14	2005	260	09:09	17:24	1:21	260	10:30	18:45	8:15	0:05	2:00	rssk	G	25	260	10:30	18:45	09/17/05	Shadow DSS-14 260/10:30-18:45
															G	26	260	10:45	18:45		KaT Testing
	RSS_015HY_MASORT002_RSS	14	2005	265	12:35	18:44	1:21	265	13:56	20:05	8:55	0:05	2:00	rssk	G	25	265	11:10	20:05	09/22/05	DSS-25 also Tracking Pass
															G	26	265	11:10	20:05		Early Uplink over DSS-25
															M	55	265	11:10	15:00		Downlink begins ~1356 ERT
	RSS_015HY_KADOWN001_RSS	14	2005	268	07:30	13:40	1:20	268	08:50	15:00	6:10	0:05	2:00	rssk	M	55	268	08:50	15:00	09/25/05	Shadow 54 268/03:00-15:00. Also 63
	Start deadtime (15 mins. Within GMB)	14	2005	268	17:44	17:59	1:20	268	19:04	19:19	0:15	0:05	2:00	rssk	G	25	268	15:30	22:00	09/25/05	1st segment in non-custom period
	RSS_015HY_MASS001_PRIME			268	17:59	20:20		268	19:19	21:40	2:21				G	26	268	18:20	22:00		Turn to/from EA 11.3min (included in RSS time)
	End 1st segmenet w/ deadtime			268	20:20	20:35		268	21:40	21:55	0:15				M	55	269	02:10	07:35		HY C/A 269/03:44 ERT (02:25 SCET)
	Start 2nd segement w/ deadtime			269	03:36	04:10		269	04:56	05:30	0:34										Altitude 488 km, SEP ~55 deg
	RSS_015HY_MASS002_PRIME			269	04:10	05:56		269	05:30	07:16	1:46										2nd segment in custom priod
	End deadtime (15 mins)			269	05:56	06:11		269	07:16	07:31	0:15										Turn to Earth 25.8 min. Only turn to EA included
	RSS_015HY_KADOWN002_RSS	14	2005	269	10:40	19:20	1:20	269	12:00	20:40	8:40	0:05	2:00	rssk	G	25	269	12:00	20:40	09/26/05	Also Tracking Pass
	RSS_016DI_MASORT001_RSS	14	2005	276	11:31	20:36	1:19	276	12:50	21:55	9:05	0:05	2:00	rssk	G	26	276	12:50	21:55	10/03/05	Shadow DSS-25 276/12:50-21:55
															M	55	276	12:50	14:20		
															C	34	276	17:50	21:55		
	RSS_016DI_MASORT002_RSS	14	2005	277	09:56	19:11	1:19	277	11:15	20:30	9:15	0:05	2:00	rssk	G	25	277	11:15	20:30	10/04/05	Shadow DSS-14 277/11:15-20:30
															M	55	277	11:15	14:20		
	RSS_016DI_MASORT003_RSS	14	2005	280	09:26	18:46	1:19	280	10:45	20:05	9:20	0:05	2:00	rssk	G	25	280	10:45	16:05	10/07/05	Shadow DSS-24 280/10:45-20:05
															G	26	280	11:00	20:05		
															C	34	280	17:35	20:05		
	RSS_016DIA_KADOWN001_RSS	15	2005	283	07:42	18:27	1:18	283	09:00	19:45	4:31	0:05	2:00	rssk	G	26	283	09:00	19:45	10/10/05	Array w/ DSS-14
	Deadtime (15 minutes)	15	2005	284	10:47	13:04	1:18	284	12:05	14:22	2:17	0:05	2:00	rssk	G	25	284	09:30	14:25	10/11/05	DI C/A 284/19:10 ERT (17:52 SCET)
	RSS_016DI_MASS001_PRIME			284	11:02	13:04		284	12:20	14:22	2:03				C	34	284	22:25	02:00		Altitude 500 km, SEP ~69 deg
	RSS_016DI_MASS002_PRIME			285	00:00	04:28		285	01:18	05:46	4:28				M	55	285	01:15	09:45		Also DSS-63 285/01:15-05:15
	RSS_017TI_KADOWN001_RSS	15	2005	300	08:59	18:29	1:16	300	10:15	19:45	5:11	0:05	2:00	rssk	G	25	300	10:15	19:45	10/27/05	Also Tracking Pass
	RSS_017TI_KADOWN002_RSS	15	2005	302	00:49	09:49	1:16	302	02:05	11:05	9:00	0:05	2:00	rssk	M	55	302	02:05	11:05	10/29/05	Shadow DSS-63 302/02:05-11:05
	RSS_018RH_GRAVORT002_RSS	16	2005	323	23:57	08:47	1:13	324	01:10	10:00	8:50	0:05	2:00	rssk	M	55	324	04:45	10:00	11/20/05	Shadow DSS-65 324/01:10-10:00
	RSS_018RH_GRAVORT001_RSS	16	2005	326	07:12	15:47	1:13	326	08:25	17:00	8:35	0:05	2:00	rssk	G	25	326	08:25	17:00	11/22/05	Shadow DSS-14 326/08:25-17:00
															C	34	326	14:40	17:20		
	RSS_018RH_GRAVORT003_RSS	16	2005	329	07:03	15:48	1:12	329	08:15	17:00	8:45	0:05	2:00	rssk	G	25	329	08:15	17:00	11/25/05	DSS-25 also gravity pass (below)
															G	26	329	08:30	14:15		
															M	55	329	08:15	11:00		Shadow DSS-14 329/08:15-17:00
															C	34	329	14:30	17:00		
	RSS_018RH_KADOWN001_RSS	16	2005	329	07:03	15:48	1:12	329	08:15	17:00	8:45	Included above			G	25	Above DSS-25 pass				

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	Deadtime (15 minutes)	16	2005	330			1:12					0:05	2:00	rssk	G	25	330	06:00	18:40	11/26/05	RH C/A 330/23:50 ERT (22:38 SCET)
	RSS_018RH_GRAVITY004_PRIME			330	08:32	11:51		330	09:44	13:03	3:19				G	26	330	09:00	17:40		Altitude 1262 km, SEP ~113 deg
	RSS_018RH_GRAVITY001_PRIME			330	12:54	15:43		330	14:06	16:55	2:49				C	34	330	14:15	23:10		DSS-34Start/End at 6 deg elev
	RSS_018RH_GRAVITY002_PRIME			330	20:58	00:32		330	22:10	01:44	3:34				M	55	330	22:20	09:35		DSS-55 start at 6 deg elevation
	RSS_018RH_GRAVITY003_PRIME			331	05:41	07:39		331	06:53	08:51	1:58										Also DSS-63 330/06:50-08:55
	Deadtime (15 minutes)																				
	Ka-band downlinkg for DSN Testing	16	2005	344	03:44	14:49	1:11	344	04:55	16:00		0:05	2:00	IDAP	G	25				12/10/05	Shadow DSS-15 344/06:55-16:00
	RSS_019TI_KADOWN001_RSS	17	2005	359	20:58	06:59	1:09	359	22:07	08:08	9:00	0:05	2:00	rssk	M	55	359	22:05	08:10	12/25/05	Shadow DSS-63 359/22:05-08:10
	RSS_019TI_KADOWN002_RSS	17	2005	361	04:34	13:34	1:09	361	05:43	14:43	9:00	0:05	2:00	rssk	G	25	361	05:40	14:45	12/27/05	Shadow DSS-14 361/05:20-14:45
	RSS_019TI_KADOWN003_RSS	17	2005	362	04:17	13:22	1:09	362	05:26	14:31	9:05	0:05	2:00	rssk	G	26	362	05:25	14:35	12/28/05	Also prime Tracking Pass
	RSS_020EA_BORESIGHT002_PRIME	18	2006	028	07:30	08:30	1:08	028	08:38	09:38	1:00	2:00	2:00	rssk	G	25	028	03:25	12:35	01/28/06	Also prime Tracking Pass
	RSS_021EA_USOPIM001_RSS	18	2006	051	00:47	04:47	1:08	051	01:55	05:55	4:00	2:00	2:00	rss3a	G	25	051	01:50	11:00	02/20/06	DSS-25 also prime TP & grav ORT
																14	051	01:50	06:00		KaT Testing
	RSS_021TI_GRAVORT001_RSS	18	2006	051	07:22	09:52	1:08	051	08:30	11:00	2:30	0:05	2:00	rssk	C	34	051	08:50	11:00		
		18	2006									no spacecraft signal			G	26	053	16:00	19:25	02/22/06	NOPE to develop procedure
	RSS_021TI_GRAVORT002_RSS	18	2006	054	00:31	09:27	1:08	054	01:39	10:35	8:56	0:05	2:00	rssk	G	25	054	08:05	10:40	02/23/06	Shadow DSS-15 054/01:40-10:40
															C	34	054	08:15	10:40		
		18	2006	056			1:09					no spacecraft signal			G	25	056	13:45	17:50	02/25/06	NOPE, multiple stations, and RSS
																14	056	16:00	19:30		
	Deadtime (15 minutes)	18	2005	058			1:09	058				0:05	2:00	rssk	G	25	058	00:05	12:15	02/27/06	T11
	RSS_021TI_GRAVITY001_PRIME			058	01:25	04:26		058	02:34	05:35	3:01				C	34	058	07:50	14:30		TI C/A 058/09:44 ERT (08:35 SCET)
	RSS_021TI_GRAVITY002_PRIME			058	06:55	13:26		058	08:04	14:35	6:31										SEP ~147 deg
	Deadtime (15 minutes)																				Unramped Uplinke Predicts
																					Earth-point 058/03:04-05:04 ERT
																					Earth-point 058/08:34-14:04 ERT
	RSS_021TI_KADOWN001_RSS	18	2006	058	22:21	08:51	1:09	058	23:30	10:00	10:30	0:05	2:00	rssk	G	25	058	23:30	10:00	02/27/06	Shadow DSS-14 058/23:30-10:00
	RSS_021TI_KADOWN002_RSS	18	2006	059	23:51	08:51	1:09	060	01:00	10:00	9:00	0:00	0:00	rssk	G	25	060	01:00	10:00	03/01/06	Also prime Tracking Pass
		18	2006				1:09					no spacecraft signal			M	55	060	10:15	13:30	03/01/06	NOPE, multiple complexes, and
															G	25	060	10:15	13:30		RSS
	Ka-band Downlink for DSN & RS	18	2006	062	22:51		1:09	063	00:00		129:30	0:05	2:00	IDAP	M	55	063	00:00	06:30	03/04/06	Shadow DSS-25 063/00:45-09:45
	Testing			067		08:20	1:10	067		09:30					M	55	065	21:30	02:15	03/06/06	Shadow DSS-65 065/17:00-02:00
															M	55	067	00:26	04:20	03/08/06	KLCP Test
															G	26	067	05:45	09:10	03/08/06	Shadow DSS-15 067/00:30-09:30
	RSS_022TI_BISTATORT002_RSS	18	2006	069	15:35	00:35	1:10	069	16:45	01:45	9:00	0:05	2:00	rssk	M	55	069	16:30	01:45	03/10/06	Also prime Tracking Pass
	RSS_022TI_BISTATORT003_RSS	19	2006	070	23:05	08:05	1:10	071	00:15	09:15	9:15	0:00	0:00	rss3a	G	26	071	00:15	09:15	03/12/06	DSS-26 also prime Tracking Pass
															G	25	071	00:30	02:00		
															G	14	071	00:15	02:00		3 hr pre-cal, 1 hr post-cal for all
															M	55	071	00:20	02:00		Madrid not in view, but does not
															M	63	071	00:15	02:00		need to be for this ORT
	RSS_022TI_BISTATORT004_RSS	19	2006	071	23:05	08:05	1:10	072	00:15	09:15	8:45	0:00	0:00	rss3a	M	55	072	00:20	03:35	03/13/06	
															M	63	072	00:15	03:35		
															G	14	072	00:15	03:35		3 hr pre-cal, 1 hr post-cal for all
															G	26	072	00:15	03:35		
															G	25	072	00:30	09:15		DSS-25 also prime Tracking Pass
	RSS_022TI_BISTATORT005_RSS	19	2006	073	15:20	00:10	1:10	073	16:30	01:20	8:50	0:05	1:45	rssk	M	55	073	16:30	01:30	03/14/06	Also prime Tracking Pass
	RSS_022TI_KADOWN001_RSS	19	2006	076	22:50	07:49	1:10	077	00:00	08:59	9:00	0:05	2:00	rssk	G	25	077	00:00	09:00	03/18/06	Shadow DSS-14 077/00:00-09:00
	Start deadtime	19	2006	077	22:35	22:40	1:11	077	23:46	23:51	0:05	0:05	2:00	rss3/rcs	M	55	077	23:00	03:00	03/18/06	Bistatic Ingress only
	RSS_022TI_BISTATIN001_PRIME			077	22:40	00:00		078	23:51	01:11	1:20				M	63	077	23:00	03:00	03/19/06	Titan Occ Ingress and Egress
	RSS_022TI_OCC001_PRIME			078	00:00	01:03		078	01:11	02:14	1:03				G	25	077	22:45	03:00		T12
	End deadtime			078	01:03	01:18		078	02:14	02:29	0:15				G	26	077	23:00	03:00		
															G	14	077	23:15	03:00		3 hr pre-cal, 1 hr post-cal for all
	RSS_022TI_KADOWN002_RSS	19	2006	078	14:44	00:04	1:11	078	15:55	01:15	9:20	0:05	2:00	rssk	M	55	078	15:55	01:15	03/19/06	Shadow DSS-63 078/15:35-01:15

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_023EA_USOPIM001_RSS	19	2006	110	20:30	12:30	1:15	110	21:45	01:45	4:00	2:00	2:00	rss3a	G	25	110	21:45	06:45	04/20/06	DSS-25 also prime tracking pass
															G	14	110	22:15	02:15		RSS3A until 21:45 ERT
	RSS_023TI_KADOWN001_RSS	20	2006	119	19:44	04:44	1:16	119	21:00	06:00	9:00	0:05	0:25	rssk	G	25	119	21:00	06:00	04/29/06	Array w/ DSS-14
	RSS_023TI_KADOWN002_RSS	20	2006	121	12:14	21:14	1:16	121	13:30	22:30	9:00	0:05	2:00	rssk	M	55	121	13:30	22:30	05/01/06	Array w/ DSS-63 121/113:30-22:30
	RSS_023TI_BISTATORT001_RSS	20	2006	126	11:43	20:43	1:17	126	13:00	22:00	9:00	0:05	2:00	rssk	M	55	126	13:00	22:00	05/06/06	Also prime Tracking Pass
	RSS_024TI_BISTATORT002_RSS	20	2006	134	11:27	20:27	1:18	134	12:45	21:45	9:00	0:00	0:00	rss3a	M	63	134	12:45	21:45	05/14/06	DSS-63 also prime pass
															M	55	134	12:45	21:45		3 hour pre-cal, 1 hour post-cal
	RSS_024TI_KADOWN001_RSS	20	2006	139	10:56	19:56	1:19	139	12:15	21:15	9:00	0:05	2:00	rssk	M	55	139	12:15	21:15	05/19/06	Also prime tracking pass
	Start deadtime	20	2006	140	10:58	11:13	1:19	140	12:17	12:32	0:15	0:05	2:00	rss3/rcs	M	55	140	11:50	15:25	05/20/06	Bistatic Ingress and Egress
	RSS_024TI_BISTATIN001_PRIME			140	11:13	12:04		140	12:32	13:23	0:51				M	63	140	11:50	15:25		Titan Occ Ingress and Egress
	RSS_024TI_OCC001_PRIME			140	12:04	12:34		140	13:23	13:53	0:30										T14
	RSS_024TI_BISTATOUT001_PRIME			140	12:34	13:24		140	13:53	14:43	0:50										
	End deadtime			140	13:24	13:37		140	14:43	14:56	0:13										3 hr pre-cal, 1 hr post-cal for all
	RSS_024TI_KADOWN002_RSS	20	2006	141	09:56	19:56	1:19	141	11:15	21:15	10:00	0:05	2:00	rssk	M	55	141	11:15	21:15	05/21/06	Array w/ DSS-63 141/11:15-21:15
	RSS_025TI_KADOWN001_RSS	21	2006	182	08:22	17:22	1:23	182	09:45	18:45	9:00	2:00	2:00	rssk	M	55	182	09:15	18:45	07/01/06	Shadow DSS-65 182/09:25-18:45
	RSS_025TI_KADOWN022_RSS	21	2006	184	08:22	17:22	1:23	184	09:45	18:45	9:00	0:05	2:00	rssk	M	55	184	09:45	18:45	07/03/06	Array w/ DSS-65 184/09:45-18:45
	RSS_026EA_SCE3001_RSS	22	2006	203	13:56	23:36	1:24	203	15:20	01:00	9:40	0:05	2:00	rss3a	G	25	203	15:20	01:00	07/22/06	Array
															G	14	203	15:20	01:00		
	RSS_026EA_SCE3002_RSS	22	2006	204	06:11	15:01	1:24	204	07:35	16:25	8:50	0:05	2:00	rssk	M	55	204	07:50	16:25	07/23/06	Array w/ DSS-65 204/15:10-16:25
	RSS_026EA_SCE3003_RSS	22	2006	207	14:26	23:21	1:24	207	15:50	00:45	8:55	0:05	2:00	rss3a	G	14	207	15:30	00:45	07/26/06	DSS-14 prime Tracking Pass
															G	26	207	15:50	00:45		
	RSS_026EA_SCE3004_RSS	22	2006	208	14:21	23:21	1:24	208	15:45	00:45	9:00	0:05	2:00	rssk	G	25	208	15:45	00:45	07/27/06	Also prime Tracking Pass
	RSS_026EA_SCE3005_RSS	22	2006	209	14:21	23:21	1:24	209	15:45	00:45	9:00	0:05	2:00	rssk	G	26	209	15:45	00:45	07/28/06	Also prime Tracking Pass
	RSS_026EA_SCE3006_RSS	22	2006	210	06:50	15:50	1:25	210	08:15	17:15	9:00	0:05	2:00	rssk	M	55	210	08:15	17:15	07/29/06	Also prime Tracking Pass
	RSS_026EA_SCE3007_RSS	22	2006	211	14:20	23:20	1:25	211	15:45	00:45	9:00	0:05	2:00	rssk	G	26	211	15:45	00:45	07/30/06	Also prime Tracking Pass
	RSS_026EA_SCE3008_RSS	22	2006	212	14:05	23:05	1:25	212	15:30	00:30	9:00	0:05	2:00	rssk	G	26	212	15:30	00:30	07/31/06	Also prime Tracking Pass
	RSS_026EA_SCE3009_RSS	22	2006	215	14:05	23:05	1:25	215	15:30	00:30	9:00	0:05	2:00	rssk	G	25	215	15:30	00:30	08/03/06	Also prime Tracking Pass
	RSS_026EA_SCE3010_RSS	22	2006	216	13:50	22:50	1:25	216	15:15	00:15	9:00	0:05	2:00	rssk	G	25	216	15:15	00:15	08/04/06	Also prime Tracking Pass
	RSS_027EA_SCE3011_RSS	22	2006	217	13:50	22:50	1:25	217	15:15	00:15	9:00	0:05	2:00	rssk	G	25	217	15:15	00:15	08/05/06	Also prime Tracking Pass
	RSS_027EA_SCE3012_RSS	22	2006	218	13:50	22:50	1:25	218	15:15	00:15	9:00	0:05	2:00	rssk	G	26	218	15:15	00:15	08/06/06	Also prime Tracking Pass
	RSS_027EA_SCE3013_RSS	22	2006	219	13:50	22:50	1:25	219	15:15	00:15	9:00	0:05	2:00	rssk	G	25	219	15:15	00:15	08/07/06	Also prime Tracking Pass
	RSS_027EA_SCE3014_RSS	22	2006	220	13:50	22:50	1:25	220	15:15	00:15	9:00	0:05	2:00	rssk	G	25	220	15:15	00:15	08/08/06	Also prime Tracking Pass
	RSS_027EA_SCE3015_RSS	22	2006	221	13:35	22:35	1:25	221	15:00	00:00	9:00	0:05	2:00	rssk	G	26	221	15:00	00:00	08/09/06	Also prime Tracking Pass
	RSS_027EA_SCE3016_RSS	22	2006	222	13:35	22:35	1:25	222	15:00	00:00	9:00	0:05	2:00	rssk	G	25	222	15:00	00:00	08/10/06	Also prime Tracking Pass
	RSS_027EA_SCE3017_RSS	22	2006	223	06:05	12:05	1:25	223	07:30	13:30	6:00	0:05	2:00	rssk	M	55	223	07:30	16:30	08/11/06	Also prime Tracking Pass
	RSS_027EA_SCE3018_RSS	22	2006	223	11:55	15:05	1:25	223	13:20	16:30	3:10	0:05	2:00	rss3a	G	14	223	13:30	16:30	08/11/06	TP. Overlap w/ above DSS-55
															G	25	223	13:25	16:30		RS SPS PIT
	RSS_027EA_SCE3019_RSS	22	2006	224	10:00	14:00	1:25	224	11:25	15:25	4:00	0:05	2:00	rssk	M	55	224	14:05	15:25	08/12/06	Also prime Tracking Pass
	RSS_027EA_SCE3020_RSS	22	2006	224	13:45	00:00	1:25	224	15:10	01:25	10:15	0:05	2:00	rssk	G	26	224	13:30	01:25	08/12/06	TP. Also DSS-14 224/13:30-17:30
	RSS_027EA_SCE3021_RSS	22	2006	225	13:20	22:15	1:25	225	14:45	23:40	8:55	0:05	2:00	rss3a	G	14	225	14:25	23:40	08/13/06	DSS-14 prime Tracking Pass
															G	25	225	14:45	23:40		
	RSS_027EA_SCE3022_RSS	22	2006	226	13:20	22:20	1:25	226	14:45	23:45	9:00	0:05	2:00	rssk	G	26	226	14:45	23:45	08/14/06	Also prime Tracking Pass
	RSS_027EA_SCE3024_RSS	22	2006	229	13:21	22:21	1:24	229	14:45	23:45	9:00	0:05	2:00	rssk	G	25	229	14:45	23:45	08/17/06	Also prime Tracking Pass
	RSS_027EA_SCE3025_RSS	22	2006	230	13:06	22:06	1:24	230	14:30	23:30	9:00	0:05	2:00	rss3a	G	14	230	14:10	23:30	08/18/06	DSS-14 also prime Tracking Pass
															G	25	230	14:30	23:30		
															C	34	230	21:30	23:30		
	RSS_027EA_SCE3026_RSS	22	2006	231	13:06	22:06	1:24	231	14:30	23:30	9:00	0:05	2:00	rss3a	G	14	231	14:10	23:30	08/19/06	DSS-14 also prime Tracking Pass
															G	25	231	14:30	23:30		
															C	43	231	21:05	23:30		
	RSS_027EA_SCE3027_RSS	23	2006	232	13:06	22:06	1:24	232	14:30	23:30	9:00	0:05	2:00	rss3a	G	14	232	14:30	23:30	08/20/06	DSS-14 also prime Tracking Pass
															G	25	232	14:30	23:30		
	RSS_027EA_SCE3028_RSS	23	2006	233	13:06	22:06	1:24	233	14:30	23:30	9:00	0:05	2:00	rssk	G	26	233	14:30	23:30	08/21/06	Also prime Tracking Pass
	RSS_028EA_USOPIM001_RSS	23	2006	242	12:36	16:36	1:24	242	14:00	18:00	4:00	0:05	2:00	rss3a	G	14	242	13:40	23:00	08/30/06	
															G	26	242	14:00	19:15		
	RSS_028EA_BORESIGHT002_PRIME	23	2006	242	16:36	17:36	1:24	242	18:00	19:00	1:00	Included above			G	26	Above DSS-26 pass				
	RSS_028SA_GRAVORT001_RSS	23	2006	243	12:36	21:36	1:24	243	14:00	23:00	9:00	0:05	2:00	rssk	G	25	243	14:00	23:00	08/31/06	KaT Testing
	RSS_028SA_GRAVORT002_RSS	23	2006	245	04:51	13:51	1:24	245	06:15	15:15	9:00	0:05	2:00	rssk	M	55	245	06:15	15:15	09/02/06	Also prime Tracking Pass
	RSS_028SA_GRAVORT003_RSS	23	2006	246	04:51	13:51	1:24	246	06:15	15:15	9:00	0:05	2:00	rssk	M	55	246	06:15	15:15	09/03/06	Also prime Tracking Pass

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_028SA_KADOWN001_RSS	23	2006	251	10:36	21:06	1:24	251	12:00	22:30	10:30	0:05	2:00	rssk	G	25	251	12:00	22:30	09/08/06	Shadow DSS-14 251/12:00-22:30
	RSS_028SA_GRAVORT004_RSS	23	2006	251	10:36	21:06	1:24	251	12:00	22:30	10:30	0:05	2:00	sk S-ba	G	25	251	12:00	22:30		DSS-25 also GSE Pass above
															G	14	251	12:00	22:30		DSS-14 prime TP
															M	65	251	12:00	16:40		S-band ON via IDAP at 1228 ERT
															C	43	251	19:55	22:30		
	RSS_028SA_GRAVITY001_PRIME	23	2006	252	14:44	21:00	1:23	252	16:07	22:23	6:16	0:05	1:55	rssk	G	25	252	12:40	22:30	09/09/06	Also DSS-14 252/15:45-22:25
	RSS_028SA_OCCORT001_RSS	23	2006	252	18:32	21:00	1:23	252	19:55	22:23	3:00	0:05	2:00	rssk	C	34	252	19:55	22:30	09/09/06	Shadow DSS-25 252/12:40-22:30
	RSS_028SA_OCCORT002_RSS	23	2006	255	11:57	21:02	1:23	255	13:20	22:25	9:05	0:05	0:22	rss2 Ka	G	14	255	13:20	22:25	09/12/06	DSS-14 also prime Tracking Pass
															C	34	255	19:50	22:25		Ka-band ON via IDAP at 1253 ERT
	RSS_028EN_OCC001_PRIME	23	2006	258	06:30	09:00	1:23	258	07:53	10:23	2:30	0:05	2:00	rss3a	M	55	258	07:45	10:30	09/15/06	
															M	65	258	07:45	10:30		
	Begin deadtime	23	2006	258	15:10		1:23	258	16:33		2:30	0:05	1:55	rss3a	G	25	258	18:15	23:50	09/15/06	
	RSS_028RI_OCC001_PRIME			258	17:40	21:30		258	19:03	22:53	3:50				G	14	258	18:15	23:50		
	RSS_028RI_OCC002_PRIME			258	23:00	05:00		259	00:23	06:23	6:00				C	34	258	19:30	04:35		
	RSS_028SA_OCC001_PRIME			259	05:00	12:00		259	06:23	13:23	7:00				C	43	258	19:25	04:35		
	RSS_028SA_OCC002_PRIME			259	12:00	20:00		259	13:23	21:23	8:00				M	55	259	03:45	16:10		
	RSS_028SA_OCC003_PRIME			259	20:00	02:30		259	21:23	03:53	6:30				M	65	259	03:45	16:10		
	End deadtime					03:30				04:53	1:00				G	25	259	11:25	23:50		
															G	14	259	11:25	23:50		
															C	34	259	19:30	04:30		
															C	43	259	19:20	04:30		
															M	55	260	03:45	15:30		DSS-55 also GSE pass below
															M	65	260	03:45	06:00		S-band ON until 05:53 ERT
	RSS_028SA_KADOWN002_RSS	23	2006	260	04:04	14:07	1:23	260	05:27	15:30	10:03	0:05	2:00	rssk	M	55	260	03:45	15:30	09/17/06	Also DSS-14 260/11:30-15:30
	Ka-band for MRO/DSN Testing	25	2006	299	01:02		1:19	299	04:21			2:00	0:05		G						via IDAP
	s4429a			306		17:42	1:18	306		19:00											
	RSS_033EA_BORESIGHT002_PRIME	25	2006	320	12:00	13:00	1:16	320	13:16	14:16	1:00	2:00	2:00	rssk	G	25	320	09:15	18:15	11/16/06	
	RSS_035TI_GRAVORT001_RSS	26	2006	353	05:48	14:48	1:12	353	07:00	16:00	9:00	2:00	2:00	rssk	G	25	353	07:00	16:00	12/19/06	DSS-25 also tracking pass
															M	55	353	07:00	10:10		
															C	34	353	13:45	16:00		
	RSS_035EA_USOPIM001_RSS	26	2006	356	05:34	08:34	1:11	356	06:45	09:45	4:00	2:00	2:00	rss3a	G	25	356	06:45	15:45	12/22/06	DSS-25 also tracking pass
															G	14	356	06:45	10:45		3-hr USO
	RSS_035TI_GRAVORT002_RSS	26	2006	356	05:34	14:34	1:11	356	06:45	15:45	9:00	0:05	2:00	rssk	M	55	356	06:45	08:20	12/22/06	Shadow DSS-25 356/06:45-15:45
															C	34	356	13:30	15:45		
	RSS_036TI_KADOWN001_RSS	26	2006	361	05:19	14:19	1:11	361	06:30	15:30	9:00	0:05	2:00	rssk	G	25	361	05:15	15:30	12/27/06	Shadow DSS-15 361/06:30-15:30
	Deadtime	26	2006				1:11				0:15	0:05	2:00	rssk							
	RSS_036TI_GRAVITY001_PRIME			362	01:32	04:32		362	02:43	05:43	3:00				M	55	362	00:15	05:35	12/28/06	T22
	RSS_036TI_GRAVITY002_PRIME			362	07:32	11:32		362	08:43	12:43	4:00				G	25	362	05:15	12:35		Closest Approach ~362/11:16 ERT
	Titan CLOSEST APPROACH			362	10:05			362	11:16												Altitude 1300 km, SEP ~132 deg
	RSS_036TI_GRAVITY003_PRIME			362	15:32	18:32		362	16:43	19:43	3:00				C	34	362	14:20	19:35		
	Deadtime										0:13										
	RSS_036TI_KADOWN002_RSS	26	2006	362	21:49	06:49	1:11	362	23:00	08:00	9:00	0:05	2:00	rssk	M	55	362	21:40	08:00	12/28/06	Shadow DSS-63 362/23:00-08:00
	RSS_038TI_KADOWN001_RSS	27	2007	028	03:06	12:12	1:09	028	04:15	13:21	9:06	0:05	0:30	rssk	G	25	028	04:15	13:25	01/28/07	Shadow DSS-14 028/04:15-13:25
	RSS_038TI_KADOWN002_RSS	27	2007	030	03:12	12:12	1:08	030	04:20	13:20	9:00	0:05	2:00	rssk	G	25	030	02:50	13:20	01/30/07	Shadow DSS-14 030/04:20-13:20
																					RWA Bias 2.5 hrs before EOT
	RSS_038EA_BORESIGHT002_PRIME	27	2007	041	04:22	05:22	1:08	041	05:30	06:30	1:00	0:05	2:00	rssk	G	25	041	03:30	12:30	02/10/07	Also prime Tracking Pass
	RSS_040EA_USOPIM001_RSS	28	2007	070	23:06	03:06	1:09	071	00:15	04:15	4:00	2:00	2:00	rss3a*	G	25	071	01:00	10:15	03/12/07	DSS-25 also prime TP. 3-hr USO
															G	14	071	01:00	04:35		Earth pt 0115 ERT. S-band off 0415
																					DSS-14 AMN pre-test at 0420
	RSS_040TI_BISTATORT001_RSS	28	2007	073	23:50	08:50	1:10	074	01:00	10:00	9:00	0:00	0:00	rss2	G	14	074	01:00	10:00	03/15/07	DSS-14 also prime tracking pass
															M	63	074	01:00	04:35		DSS-14 and DSS-63 3-hr pre-cal
	RSS Antenna Mechanical Noise Test														G	25	074	04:15	10:00		AMN Test at 04:30
	RSS_041TI_BISTATORT002_RSS	28	2007	074	23:50	08:50	1:10	075	01:00	10:00	9:00	0:05	2:00	rssk	G	26	075	01:00	10:00	03/16/07	Also prime tracking pass
	RSS_041TI_BISTATORT003_RSS	28	2007	075	16:20	01:20	1:10	075	17:30	02:30	9:00	0:05	2:00	rssk	M	55	075	17:30	02:30	03/16/07	Also prime TP. 1 Hr post-cal
	RSS_041TI_BISTATORT004_RSS	28	2007	078	23:50	08:20	1:10	079	01:00	09:30	8:30	0:05	2:00	rssk	G	25	079	01:00	09:30	03/20/07	Shadow DSS-15 079/01:00-09:30
																					DSS-25 3-hr pre-cal

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_041TI_BISTATORT005_RSS	28	2007	079	22:05	06:35	1:10	079	23:15	07:45	8:30	0:05	2:00	rssk	M	55	079	23:15	03:50	03/20/07	Shadow DSS-15 079/23:15-07:45
															G	26	080	01:45	07:45		DSS-55 3-hr pre-cal, 1-hr post-cal
																					DSS-26 2-hr post-cal
	RSS_041TI_KADOWN001_RSS	28	2007	083	23:20	08:20	1:10	084	01:30	09:30	8:00	0:05	2:00	rssk	G	25	084	00:30	09:30	03/25/07	Shadow DSS-14 084/00:30-09:30
	GMB Deadtime (not Earth pointed)	28	2007				1:10				0:17	0:05	1:55	rss3	M	55	084	23:50	03:10	03/25/07	3 hr pre-cal, 1 hr post-cal for all
	RSS_041TI_BISTATIN001_PRIME			084	23:25	00:00		085	00:35	01:10	0:35				M	63	084	23:50	03:10		RSS Epoch is LMB
	RSS_041TI_OCC001_PRIME			084	00:00	00:35		085	01:10	01:45	0:35				G	25	084	23:50	03:10		
	RSS_041TI_BISTATOUT001_PRIME			085	00:35	01:24		085	01:45	02:34	0:49				G	26	084	23:50	03:10		T27
	GMB Deadtime (not Earth pointed)										0:14				G	14	084	23:35	03:10		
	RSS_041TI_KADOWN002_RSS	28	2007	085	22:22	07:22	1:10	085	23:32	08:32	9:00	0:05	2:00	rssk	G	25	085	23:30	08:35	03/26/07	Shadow DSS-14 085/23:30-08:35
	RSS Antenna Mechanical Noise Test	29	2007	094	22:48	07:33	1:12	095	00:00	08:45	8:45			X only	G	14	095	00:00	08:45	04/05/07	DSS-14 also prime tracking pass
																25	095	00:00	08:45		AMN Test at 03:00
	RSS_042EA_PIM001_RSS	29	2007	102	17:00	01:00	1:12	102	18:12	02:12	8:00	2:00	0:00				No Tracking			04/12/07	
	RSS_042EA_BORESIGHT002_PRIME	29	2007	103	00:00	01:00	1:13	103	01:13	02:13	1:00	2:00	2:00	rssk	G	25	102	23:15	08:15	04/12/07	DSS-25 also prime Tracking Pass
	RSS_043SA_OCCORT001_RSS	29	2007	117	12:56	22:36	1:14	117	14:10	23:50	9:30	0:05	2:00	rssk	M	55	117	14:10	23:50	04/27/07	Shadow DSS-63 117/14:10-23:50
	RSS_043SA_OCCORT002_RSS	29	2007	121	13:00	22:00	1:15	121	14:15	23:15	9:00	0:05	2:00	rssk	M	55	121	14:15	23:15	05/01/07	Shadow DSS-63 121/14:15-23:15
	RSS_044SA_OCCORT003_RSS	30	2007	126	20:14	23:44	1:16	126	21:30	01:00	3:30	0:00	0:00	rss2	M	63	126	21:30	01:00	05/06/07	Shadow DSS-15 126/21:30-06:30
	Begin LMB and deadtime (X to Earth)	30	2007	130	13:30		1:16	130	14:46		0:15	0:05	2:14	rss3a	M	55	130	14:30	20:00	05/10/07	
	RSS_044SA_OCC002_PRIME			130	13:45	14:40		130	15:01	15:56	0:55				M	63	130	14:30	20:00		
	RSS_044SA_OCC003_PRIME			130	16:09	17:00		130	17:25	18:16	0:51										
	RSS_044RI_OCC002_PRIME			130	17:00	18:23		130	18:16	19:39	1:23										
	End LMB and deadtime (X to Earth)			130		18:38				19:54	0:15										
	RSS_044SA_KADOWN001_RSS	30	2007	131	00:44	06:56	1:16	131	02:00	08:10		0:05	2:00	rssk	G	25	130	23:30	08:10	05/11/07	Shadow DSS-14 131/00:00-08:10
	RSS_044TI_BISTATORT001_RSS	30	2007	133	12:13	21:13	1:17	133	13:30	22:30	9:00	0:05	0:24	rssk	M	55	133	13:30	22:30	05/13/07	Array w/ DSS-63 133/13:30-22:30
	RSS_044TI_BISTATORT002_RSS	30	2007	138	19:28	04:28	1:17	138	20:45	05:45	9:00	0:05	2:00	rssk	G	25	138	20:45	05:45	05/18/07	DSS-25 also prime Tracking Pass
															G	26	138	20:45	05:45		
															M	55	138	20:45	00:00		
	RSS_045EA_PIM001_RSS	30	2007	142	03:42	12:42	1:18	142	05:00	14:00	9:00	2:00	0:00				No Tracking			05/22/07	
	RSS_045TI_BISTATORT003_RSS	30	2007	143	19:12	04:12	1:18	143	20:30	05:30	9:00	0:00	0:00	rss2	G	14	143	20:30	05:30	05/23/07	DSS-14 also prime Tracking Pass
															M	63	143	20:30	23:55		
	RSS_045TI_KADOWN001_RSS	30	2007	147	18:56	03:56	1:19	147	20:15	05:15	9:00	0:05	2:00	rssk	G	25	147	20:15	05:15	05/27/07	Shadow DSS-14 147/20:15-05:15
	GMB Deadtime - (not Earth pointed)	30	2007	148	17:19		1:19	148	18:38		0:17	0:05	1:55	rss3a	M	55	148	18:00	21:35	05/28/07	T31
	RSS_045TI_OCC001_PRIME			148	17:36	18:15		148	18:55	19:34	0:39				M	63	148	18:00	21:35		Occultation only (no bistatic)
	RSS_045TI_OCC001_PRIME			148	18:15	19:32		148	19:34	20:51	0:17				G	25	148	18:36	21:35		
	GMB Deadtime - (not Earth pointed)			148		19:47		148		21:06	0:15				G	26	148	18:51	21:35		Goldstone BOT at low EL
															G	14	148	18:36	21:35		
	RSS_045TI_KADOWN002_RSS	30	2007	149	10:51	21:21	1:19	149	12:10	22:40	10:30	0:05	2:00	rssk	M	55	149	12:10	22:40	05/29/07	Shadow DSS-63 149/12:10-22:40
	RSS_046SA_OCCORT001_RSS	30	2007	158	18:25	03:25	1:20	158	19:45	04:45	9:00	0:05	2:00	rssk	G	25	158	19:45	04:45	06/07/07	DSS-25 also prime Tracking Pass
															G	26	158	19:45	04:45		
	Begin LMB and Deadtime (X to Earth)	31	2007	162	18:10		1:20	162	19:30		0:44	0:05	1:55	rss3a	G	14	162	19:05	23:50	06/11/07	
	RSS_046RI_OCC002_PRIME			162	18:54	20:39		162	20:14	21:59	1:45	RTC			G	25	162	19:20	23:50		Warmup via RTC during OTM-BU
	RSS_046SA_OCC002_PRIME			162	20:39	21:10		162	21:59	22:30	0:31				G	26	162	19:20	23:50		pass at 162/1610 SCET
	End LMB and deadtime (X to Earth)			162		21:35				22:55	0:25										or 162/1650 if OTM-BU is needed
	RSS_046SA_KADOWN001_RSS	31	2007	163	17:54	02:54	1:21	163	19:15	04:15	9:00	0:05	2:00	rssk	G	25	163	19:15	04:15	06/12/07	Shadow DSS-14 163/19:15-04:15
	RSS_046SA_OCCORT002_RSS	31	2007	170	17:39	02:39	1:21	170	19:00	04:00	9:00	0:00	0:00	rss3a	G	25	170	19:15	04:00	06/19/07	DSS-14 also prime Tracking Pass
															G	14	170	19:00	04:00		Warm-up Data
															C	34	171	01:30	04:00		
	RSS_047SA_OCCORT003_RSS	31	2007	171	17:24	02:24	1:21	171	18:45	03:45	9:00	0:05	2:00	rssk	G	26	171	18:45	03:45	06/20/07	Shadow DSS-14 171/18:25-03:45
	RSS_047EA_USOPIM001_RSS	31	2007	174	16:23	20:23	1:22	174	17:45	21:45	4:00	0:05	2:00	rss3a	G	25	174	18:45	03:45	06/23/07	DSS-25 also prime TP. 3-hr USO
															G	14	174	18:45	03:45		Earth point 1845 ERT
	RSS_047SA_GRAVORT002_RSS	31	2007	174	22:28	02:23	1:22	174	23:40	03:45		Included above			C	34	175	01:10	03:45		RSS3A throughout
	RSS_047SA_OCCORT001_RSS	31	2007	175	09:38	18:38	1:22	175	11:00	20:00	9:00	2:00	2:00	rssk	M	55	175	11:00	20:00	06/24/07	Shadow DSS-65 175/11:00-20:00
															G	25	175	17:10	20:00		KaT Testing
	GMB Deadtime (not Earth pointed)	31	2007	178	22:56		1:22	179	00:18		0:12	0:05	1:55	rss3a	G	14	178	23:45	01:15	06/27/07	
	RSS_047SA_OCCOUT001_PRIME			178	23:08	23:44		179	00:30	01:06	0:36				G	25	179	00:00	01:15		RSS observation in LUB
	GMB Deadtime (not Earth pointed)					00:26		179		01:48	0:42				G	26	179	00:00	01:15		
	RSS_047TI_KADOWN001_RSS	31	2007	179	16:05	02:05	1:22	179	17:27	03:27	10:00	0:05	0:25	rssk	G	25	179	16:55	03:30	06/28/07	TP. RSSK at 15:35:02 SCET

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	Deadtime - 30 mins?		2007	180	07:29		1:22	180	08:51		0:30	0:05	1:55	rssk	C	34	180	06:00	09:55	06/29/07	T33
	RSS_047TI_GRAVITY001_PRIME			180	07:59	12:00		180	09:21	13:22	4:01				M	55	180	09:10	19:40		Altitude 1944 km
	RSS_047TI_GRAVITY002_PRIME	31		180	14:59	17:45		180	16:21	19:07	2:46				G	25	180	16:45	04:00		Unramped Uplink Predicts
	RSS_047TI_GRAVITY003_PRIME			180	22:14	01:45		180	23:36	03:07	3:31				G	26	180	23:00	04:00		Playback during 1st segment
	Deadtime - 30 mins?					02:15		181		03:40	0:30				C	34	181	00:50	04:00		
	RSS_047TI_KADOWN002_RSS	31	2007	181	13:51	16:35	1:22	181	15:13	17:57	2:44	0:05	2:00	rssk	M	55	181	12:15	18:10	06/30/07	Shadow DSS-65 181/15:10-18:10
	RSS_047TI_KADOWN003_RSS	31	2007	181	16:13	02:38	1:22	181	17:35	04:00	10:25	0:05	2:00	rssk	G	25	181	17:35	04:00	06/30/07	Shadow DSS-14 181/17:40-04:00
	RSS_047TI_KAORT001_RSS Narrabi Ka-band	31	2007	183	23:07	08:07	1:23	184	00:30	09:30	9:00	0:05	2:00	rssk	C	34	183				Shadow DSS-43 184/00:30-09:30
	RSS_047TI_BISTATORT001_RSS	31	2007	186	16:37	01:37	1:23	186	18:00	03:00	9:00	0:05	2:00	rssk	G	25	186	18:00	03:00	07/05/07	DSS-25 also prime tracking pass
															C	34	187	01:00	03:00		2-hr post-cal both. 34 2.5-hr pre-cal
	RSS_048TI_BISTATORT002_RSS	31	2007	191	16:22	01:22	1:23	191	17:45	02:45	9:00	0:00	0:00	rss2	G	14	191	17:45	02:45	07/10/07	DSS-14 also prime tracking pass
															C	43	192	00:00	02:45		2-hr post-cal both. 43 3-hr pre-cal
	RSS_048TI_BISTATORT003_RSS	31	2007	192	16:07	01:07	1:23	192	17:30	02:30	9:00	0:05	2:00	rssk	G	26	192	16:30	02:30	07/11/07	Shadow DSS-14 192/17:30-02:30
																					DSS-26 2-hr post-cal
	RSS_048TI_BISTATORT004_RSS	31	2007	194	16:06	01:05	1:24	194	16:06	01:05	9:00	0:05	2:00	rssk	G	26	194	23:10	02:30	07/13/07	Shadow DSS-14 194/17:30-02:30
															C	34	195	00:05	02:30		34 3-hr pre-cal. 2-hr post-cal both
	RSS_048TI_KADOWN001_RSS	32	2007	198	15:51	00:51	1:24	198	17:15	02:15	9:00	0:05	2:00	rssk	G	25	198	17:15	02:15	07/17/07	Shadow DSS-14 198/17:15-02:15
	Deadtime - 30 mins?	32	2007	199	23:03		1:24	199	00:27		0:30	0:05	1:47	rss3/rcs	G	14	199	23:45	03:30	07/18/07	T34
	RSS_048TI_BISTATIN001_PRIME			199	23:33	01:07		200	00:57	02:31	1:30				G	25	200	00:00	03:30		RSS observation is in LUB
	Deadtime - 30 mins?			199		01:37		200		03:01	0:30				G	26	200	00:00	03:30		3 hr pre-cal, 1 hr post-cal for all
															C	43	200	00:00	03:30		
															C	34	200	00:10	03:30		
	RSS_048TI_KADOWN002_RSS	32	2007	200	15:36	00:34	1:24	200	17:00	02:00	9:00	0:05	2:00	rssk	G	25	200	16:55	02:00	07/19/07	Also prime TP. Array w/ DSS-14
	RSS_048EA_BORESIGHT002_PRIME	32	2007	207	17:21	18:21	1:24	207	18:45	19:45	1:00	0:05	2:00	rssk	G	25	207	16:45	01:45	07/26/07	Also prime Tracking Pass
	RSS_048EA_SCE4001_RSS	32	2007	219	07:05	16:05	1:25	219	08:30	17:30	9:00	0:05	2:00	rssk	M	55	219	08:45	17:30	08/07/07	TP. 1hr pre-cal. No monopulse.
	RSS_048EA_SCE4002_RSS	32	2007	220	14:35	23:35	1:25	220	16:00	01:00	9:00	0:05	2:00	rssk	G	26	220	15:40	01:00	08/08/07	Shadow DSS-14 220/15:40-01:00
	RSS_048EA_SCE4003_RSS	32	2007	221	14:20	23:20	1:25	221	15:45	00:45	9:00	0:05	2:00	rssk	G	25	221	15:45	00:45	08/09/07	Also prime Tracking Pass
	X-band Only	32	2007	222	14:00	23:20	1:25	222	15:25	00:45	9:20	0:00	0:00	X only	G	14	222	15:25	00:45	08/10/07	
	RSS_049EA_SCE4005_RSS	32	2007	223	14:20	23:20	1:25	223	15:45	00:45	9:00	0:05	2:00	rssk	G	25	223	15:25	00:45	08/11/07	Shadow DSS-14 223/15:25-00:45
	RSS_049EA_SCE4006_RSS	33	2007	224	06:50	15:50	1:25	224	08:15	17:15	9:00	0:05	2:00	rssk	M	55	224	08:15	17:15	08/12/07	Also prime Tracking Pass
	RSS_049EA_SCE4007_RSS	33	2007	225	14:05	23:05	1:25	225	15:30	00:30	9:00	0:05	2:00	rssk	G	25	225	15:30	00:30	08/13/07	Also prime Tracking Pass
	RSS_049EA_SCE4008_RSS	33	2007	226	14:05	23:05	1:25	226	15:30	00:30	9:00	0:05	2:00	rssk	M	55	226	15:30	18:40	08/14/07	Shadow DSS-14 226/15:10-00:30
															G	25	226	20:10	00:30		
	RSS_049EA_SCE4009_RSS	33	2007	227	14:05	23:05	1:25	227	15:30	00:30	9:00	0:05	2:00	rssk	G	25	227	15:30	00:30	08/15/07	Also prime Tracking Pass
	RSS_049EA_SCE4010_RSS	33	2007	228	14:05	23:05	1:25	228	15:30	00:30	9:00	0:05	2:00	rssk	G	25	228	15:30	00:30	08/16/07	Also prime Tracking Pass
	RSS_049EA_SCE4011_RSS	33	2007	229	06:35	15:35	1:25	229	08:00	17:00	9:00	0:05	2:00	rssk	M	55	229	08:00	17:00	08/17/07	Also prime Tracking Pass
	RSS_049EA_SCE4012_RSS	33	2007	230	14:05	23:05	1:25	230	15:30	00:30	9:00	0:05	2:00	rssk	G	25	230	15:30	00:30	08/18/07	Shadow DSS-14 230/14:20-00:30
	RSS_049EA_SCE4013_RSS	33	2007	231	13:50	22:50	1:25	231	15:15	00:15	9:00	0:05	2:00	rssk	G	25	231	15:15	00:15	08/19/07	Also prime Tracking Pass
	RSS_049EA_SCE4014_RSS	33	2007	232	14:00	23:00	1:25	232	15:25	00:25	9:00	0:05	2:00	rssk	G	25	232	15:25	00:25	08/20/07	Also prime Tracking Pass
	RSS_049EA_SCE4015_RSS	33	2007	233	14:00	23:00	1:25	233	15:25	00:25	9:00	0:05	2:00	rssk	G	25	233	15:25	00:25	08/21/07	Also prime Tracking Pass
	RSS_049EA_SCE4016_RSS	33	2007	234	14:00	23:00	1:25	234	15:25	00:25	9:00	0:05	2:00	rssk	G	26	234	15:25	00:25	08/22/07	Also prime Tracking Pass
	RSS_049EA_SCE4017_RSS	33	2007	235	14:00	23:00	1:25	235	15:25	00:25	9:00	0:05	2:00	rssk	G	25	235	15:25	00:25	08/23/07	Also prime Tracking Pass
	RSS_049EA_SCE4018_RSS	33	2007	236	13:35	22:35	1:25	236	15:00	00:00	9:00	0:05	2:00	rssk	G	25	236	15:00	00:00	08/24/07	Also prime Tracking Pass
															C	34	236	23:55	06:45		
	RSS_049EA_SCE4019_RSS	33	2007	237	06:05	15:05	1:25	237	07:30	16:30	9:00	0:05	2:00	rssk	M	55	237	07:30	16:30	08/25/07	Also prime Tracking Pass
	RSS_049EA_SCE4020_RSS	33	2007	238	13:20	22:20	1:25	238	14:45	23:45	9:00	0:05	2:00	rssk	G	25	238	14:45	23:45	08/26/07	Shadow DSS-14 238/14:25-23:45
	X-band Only	33	2007	239	13:20	22:20	1:25	239	14:45	23:45	9:00	0:00	0:00	X only	G	15	239	14:45	23:45	08/27/07	Also prime Tracking Pass
	X-band Only	33	2007	240	13:20	22:20	1:25	240	14:45	23:45	9:00	0:00	0:00	X only	G	14	240	14:45	23:45	08/28/07	Also prime Tracking Pass
	RSS_049EA_SCE4021_RSS	33	2007	241	17:25	19:11	1:25	241	18:50	20:36	1:46	0:05	2:00	rssk	G	26	241	18:50	20:40	08/29/07	Shadow DSS-14 241/18:50-21:00
	RSS_049EA_SCE4022_RSS	33	2007	242	07:34	14:05	1:25	242	08:59	15:30	6:31	0:05	2:00	rssk	M	55	242	08:55	15:30	08/30/07	Also prime Tracking Pass
	RSS_049EA_SCE4023_RSS	33	2007	242	14:05	17:34	1:25	242	15:30	18:59	2:29	0:05	2:00	rssk	G	25	242	14:30	22:15	08/30/07	Shadow DSS-14 242/13:35-22:15
	RSS_049EA_SCE4024_RSS	33	2007	244	04:20	16:20	1:25	244	05:45	17:45	12:00	0:05	2:00	rssk	M	55	244	05:45	17:45	09/01/07	Also TP. DSS-14 244/13:10-17:45
	X-band Only	33	2007	244	12:20	16:20	1:25	244	13:45	17:45	4:00	0:00	0:00	X only	M	63	244	13:45	17:45	09/01/07	Also prime Tracking Pass
	X-band Only	33	2007	245	05:35	14:35	1:25	245	07:00	16:00	9:00	0:00	0:00	X only	M	65	245	07:00	16:00	09/02/07	Also prime Tracking Pass
	X-band Only	33	2007	246	13:05	22:05	1:25	246	14:30	23:30	9:00	0:00	0:00	X only	G	25	246	14:30	23:30	09/03/07	Shadow DSS-26 246/14:30-23:30
	RSS_049EA_SCE4025_RSS	33	2007	247	12:50	21:50	1:25	247	14:15	23:15	9:00	0:05	2:00	rssk	G	25	247	14:15	23:15	09/04/07	Also prime Tracking Pass
	RSS_049IA_KADOWN001_RSS	33	2007	253	06:00	08:45	1:25	253	07:25	10:05	2:40	0:05	2:00	rssk	M	55	253	05:05	10:10	09/10/07	Shadow DSS-63 253/07:25-10:10
	RSS_049IA_KADOWN002_RSS	33	2007	253	20:05	22:20	1:25	253	21:30	23:45	2:15	0:05	2:00	rssk	G	25	253	18:30	23:45	09/10/07	Shadow DSS-14 253/21:30-23:45

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_050EA_USOBSC001_RSS	34	2007	267	11:51	14:51	1:24	267	13:15	16:15	3:00	0:05	1:55	rss3a*	G	25	267	13:15	22:15	09/24/07	DSS-25 also prime tracking pass
																14	267	13:15	16:15		3-hr USO
	RSS_050EA_BORESIGHT002_PRIME	34	2007	267	14:51	15:51		267	16:15	17:15	1:00				G	25	Above DSS-25 pass				
	RSS_050SA_OCCORT001_RSS	34	2007	274	03:51	12:51	1:24	274	05:15	14:15	9:00	0:05	2:00	rssk	M	55	274	05:15	14:15	10/01/07	Shadow DSS-63 274/05:15-14:15
	RSS_050SA_OCCORT002_RSS	34	2007	276	04:17	14:19	1:23	276	05:40	15:42	10:02	0:05	2:00	rssk	M	55	276	05:40	15:45	10/03/07	Array w/ DSS-63 until 0800
	RSS_051SA_OCCORT003_RSS	34	2007	292	10:23	13:28	1:22	292	11:45	14:50	3:05	0:00	0:00	rss2	M	63	292	11:45	14:50	10/19/07	Shadow DSS-26 292/11:45-20:45
	RSS_051SA_OCCORT004_RSS	34	2007	294	10:23	13:18	1:22	294	11:45	14:40	2:55	0:05	2:00	rssk	M	55	294	11:45	14:40	10/21/07	Shadow DSS-14 294/11:45-20:45
	RSS_051SA_KADOWN001_RSS	34	2007	296	03:00	08:00	1:22	296	04:22	09:22	5:00	0:05	2:00	rssk	M	55	296	02:40	09:25	10/23/07	Shadow DSS-63 296/02:40-09:25
	Deadtime - 30 min?	34	2007	297	04:14		1:21	297	05:35		0:35	0:05	1:55	rss3a*	M	55	297	05:15	10:15	10/24/07	
	RSS_051SA_OCCIN001_PRIME			297	04:49	06:25		297	06:10	07:46	1:36				M	63	297	05:15	10:15		Warm-up in Radar warm Opmode?
	RSS_051SA_OCCOUT001_PRIME			297	06:25	07:14		297	07:46	08:35	0:49										
	Deadtime - 30 min?			297		08:34		297		09:55	1:20										
	RSS_051SA_KADOWN002_RSS	34	2007	297	10:52	16:37	1:21	297	12:13	17:58	5:45	0:05	2:00	rssk	G	26	297	10:10	18:00	10/24/07	Shadow DSS-14 297/12:10-18:00
	RSS_051EA_UPLINKTST001_PRIME	35	2007	308	11:25	12:25	1:20	308	12:45	13:45	1:00	2:00	2:00	SPA	G	24	308	09:55	14:00	11/04/07	Shadow DSS-25 308/10:45-19:45
	RSS_052EA_PIM001_RSS	35	2007	317	09:00	17:00	1:19	317	10:19	18:19	8:00	2:00	0:00				No Tracking			11/13/07	
	RSS_052SA_OCCORT001_RSS	35	2007	325	00:57	09:57	1:18	325	02:15	11:15	9:00	0:05	2:00	rssk	M	55	325	02:15	11:15	11/21/07	Array w/ DSS-63 325/02:15-07:15
	RSS_052SA_GRAVORT001_RSS	35	2007	328	08:13	17:13	1:17	328	09:30	18:30	9:00	0:05	2:00	rssk	G	25	328	09:30	18:30	11/24/07	DSS-25 also prime tracking pass
															M	55	328	09:30	12:30		
															C	34	328	16:00	18:30		
	RSS_053SA_GRAVORT002_RSS	35	2007	333	07:58	16:58	1:17	333	09:15	18:15	9:00	0:05	2:00	rssk	G	25	333	09:15	18:15	11/29/07	DSS-25 also prime tracking pass
															C	34	333	15:45	18:15		
	RSS_053SA_OCCORT002_RSS	35	2007	334	07:58	10:58	1:17	334	09:15	12:15	3:00	0:00	0:00	rss2	M	63	334	09:15	10:45	11/30/07	Shadow DSS-15 334/09:15-18:15
	Deadtime - 30 min?	35	2007	337	04:08		1:16	337	05:24		0:30	0:05	1:28	rss3a*	M	55	337	05:15	08:15	12/03/07	
	RSS_053RI_OCC002_PRIME			337	04:38	06:20		337	05:54	07:36	1:42				M	63	337	05:15	08:15		
	Deadtime - 30 min?			337		06:50		337		08:06	0:30										
	RSS_053TI_KADOWN001_RSS	35	2007	338	02:29	09:14	1:16	338	03:43	10:30	6:47	0:05	2:00	rssk	M	55	338	01:00	10:30	12/04/07	Shadow DSS-63 338/03:45-10:30
	RSS_053TI_KADOWN002_RSS	35	2007	340	00:29	09:29	1:16	340	01:45	10:45	9:00	0:05	2:00	rssk	M	55	340	00:00	10:45	12/06/07	Shadow DSS-63 340/01:25-10:45
	RSS_053SA_OCCORT001_RSS	35	2007	344	23:45	08:45	1:15	345	01:00	10:00	9:00	0:05	2:00	rssk	M	55	345	01:00	10:00	12/11/07	Shadow DSS-63 345/01:00-10:00
	RSS_054EA_USOPIM001_RSS	35	2007	347	12:25	16:25	1:15	347	13:40	17:40	4:00	0:05	2:10	rss3a*	G	25	347	11:10	18:40	12/13/07	DSS-25 also prime tracking pass
															G	14	347	13:40	17:40		
	RSS_054EA_BORESIGHT002_PRIME	35	2007	347	16:25	17:25		347	17:40	18:40	1:00				G	25	Above DSS-25 pass				
	RSS_054SA_OCCORT002_RSS	36	2007	350	07:01	10:01	1:14	350	08:15	11:15	3:00	0:00	0:00	rss2	M	63	350	08:15	11:15	12/16/07	Shadow DSS-15 350/08:15-17:15
	Begin LMB and Deadtime (X to Earth)	36	2007	353	02:01		1:14	353	03:15		0:13	0:05	2:05	rss3a*						12/19/07	
	RSS_054RI_OCC002_PRIME			353	02:14	03:18		353	03:28	04:32	1:10				M	63	353	02:30	07:10		
	RSS_054SA_OCC002_PRIME			353	03:18	04:10		353	04:32	05:24	0:46				M	55	353	02:30	07:10		
	RSS_054SA_OCC003_PRIME			353	04:10	05:09		353	05:24	06:23	0:59										
	End LMB and deadtime (X to Earth)					05:25				06:39	0:16										
	RSS_055SA_OCCORT001_RSS	36	2008	004	21:18	05:48	1:12	004	22:30	07:00	8:30	0:05	2:00	rssk	M	55	004	22:30	07:00	01/04/08	Shadow DSS-63 004/22:30-07:00
	RSS_055SA_OCCORT005_RSS	36	2008	006	22:23	07:28	1:12	006	23:35	08:40	9:05	0:00	0:00	rss2	M	63	006	23:35	08:40	01/06/08	Also prime Tracking Pass
	RSS_055SA_OCCORT002_RSS	36	2008	008	05:33	14:33	1:12	008	06:45	15:45	9:00	0:05	2:00	rssk	M	55	008	06:45	09:35	01/08/08	Shadow DSS-15 008/06:45-15:45
															C	34	008	13:05	15:45		
	RSS_055SA_OCCORT003_RSS	36	2008	009	11:54	14:19	1:11	009	13:05	15:30	2:25	0:05	2:00	rss3a*	C	34	009	13:05	15:30	01/09/08	Shadow DSS-14 009/06:30-15:30
															C	43	009	12:45	15:30		S-band from 1134-1419 SCET
	RSS_056SA_OCCORT004_RSS	36	2008	010	11:49	14:19	1:11	010	13:00	15:30	2:30	0:05	2:00	rssk	C	34	010	13:00	15:30	01/10/08	Shadow DSS-15 010/06:30-15:30
	RSS_056EA_PIM001_RIDER	36	2008	012	14:49	22:49	1:11	012	16:00	00:00	8:00	2:00	0:00				No Tracking			01/12/08	
	RSS_056SA_KADOWN001_RSS	36	2008	014	21:34	06:34	1:11	014	22:45	07:45	9:00	0:05	2:00	rssk	M	55	014	22:45	07:45	01/14/08	Also prime Tracking Pass
	Begin LMB and Deadtime (X to Earth)	36	2008	015	18:32		1:11	015	19:43		0:30	0:05	2:23	rss3a*	C	34	015	20:00	22:05	01/15/08	Observation over low elev angles
	RSS_056RI_OCC002_PRIME			015	19:43	20:55		015	20:54	22:06	1:12				C	43	015	20:00	22:05		Canberra EOT and Madrid BOT
	RSS_056SA_OCC002_PRIME			015	20:55	22:17		015	22:06	23:28	1:22				M	55	015	21:20	08:30		~ 6 degrees elev
	End LMB and deadtime (X to Earth)			015		22:31		015		23:42	0:30				M	63	015	21:20	00:00		
	RSS_056RI_OCCORT001_RSS	36	2008	019	11:14	13:49	1:11	019	12:25	15:00	2:35	0:05	2:00	rssk	C	34	019	12:25	15:00	01/19/08	Shadow DSS-14 019/06:00-15:00
	RSS_057RI_OCCORT002_RSS	37	2008	023	11:00	13:35	1:10	023	12:10	14:45	2:40	0:05	2:00	rssk	C	34	023	12:10	14:45	01/23/08	Shadow DSS-15 023/05:45-14:45
	Deadtime - 30 min?	37	2008	027	16:50		1:10	027	18:00		0:30	0:05	2:05	rss3a*	C	34	027	17:30	21:15	01/27/08	LMB
	RSS_057RI_OCC002_PRIME				17:20	19:03			18:30	20:13	1:43				C	43	027	17:30	21:15		
	Deadtime - 30 min?					19:33				20:43	0:30										
	RSS_057SA_OCCORT001_RSS	37	2008	030	10:30	13:05	1:10	030	11:40	14:15	2:35	0:05	2:00	rssk	C	34	030	11:40	14:15	01/30/08	Shadow DSS-24 030/05:15-14:15
	RSS_057EA_BORESIGHT002_PRIME	37	2008	033	05:50	06:50	1:10	033	07:00	08:00	1:00	0:05	2:00	rssk	G	25	033	05:00	14:05	02/02/08	DSS-25 also prime TP
	RSS_057SA_OCCORT002_RSS	37	2008	033	10:15	12:55	1:10	033	11:25	14:05	2:40				C	34	033	11:25	14:05		
	RSS_058SA_OCCORT003_RSS	37	2008	036	09:51	12:36	1:09	036	11:00	13:45	2:45	0:05	2:00	rss2	C	43	036	11:00	13:45	02/05/08	Shadow DSS-15 036/04:45-13:45

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_058SA_KADOWN001_RSS	37	2008	038	19:51	04:51	1:09	039	21:00	06:00	9:00	0:05	2:00	rssk	M	55	038	21:30	06:00	02/07/08	Also prime Tracking Pass
	Deadtime - 30 min?	37	2008	039	15:55		1:09	039	17:04		0:30	0:05	2:30	rss3a*	C	34	039	16:30	20:20	02/08/08	
	RSS_058RI_OCC002_PRIME				16:25	17:30			17:34	18:39	1:05				C	43	039	16:30	20:20		
	RSS_058SA_OCC002_PRIME				17:30	18:59			18:39	20:08	1:29				M	55	039	19:35	20:40		
	Deadtime - 30 min?					19:29				20:38	0:30				M	63	039	19:35	20:40		
	RSS_058SA_KADOWN002_RSS	37	2008	040	19:36	04:36	1:09	040	20:45	05:45	9:00	0:05	2:00	rssk	M	55	040	20:45	05:45	02/09/08	Shadow DSS-63 040/20:45-05:45
	RSS_059SA_OCCORT001_RSS	38	2008	050	18:06	01:06	1:09	050	19:15	02:15	7:00	0:05	2:00	rssk	M	55	050	21:40	02:15	02/19/08	Shadow DSS-63 050/19:15-02:15
	RSS_059SA_OCCORT002_RSS	38	2008	056	02:36	11:06	1:09	056	03:45	12:15	8:30	0:05	2:00	rssk	G	25	056	03:45	12:15	02/25/08	DSS-25 also prime Tracking Pass
	RSS_060SA_OCCORT003_RSS	38	2008	057	02:06	11:06	1:09	057	03:15	12:15	9:00	0:05	2:00	rssk	G	25	057	03:15	12:15	02/26/08	DSS-25 also prime Tracking Pass
															G	26	057	03:15	12:15		
															M	55	057	03:15	06:20		
	RSS_060SA_OCCORT005_RSS	38	2008	058	02:06	11:06	1:09	058	03:15	12:15	9:00	0:05	2:00	rssk	G	26	058	03:15	12:15	02/27/08	Also prime Tracking Pass
	RSS_060SA_OCCORT004_RSS	38	2008	059	01:51	10:51	1:09	059	03:00	12:00	9:00	0:00	0:00	rss2	G	14	059	03:00	12:00	02/28/08	DSS-14 also prime Tracking Pass
															M	63	059	03:00	05:45		
	Ka-band for DSN Software Testing	38	2008	060	02:31	10:51	1:09	060	03:40	12:00					G	26	060	07:55	11:55		Shadow Cas D-25, but no Ka at 25
	Deadtime - 30 min?	38	2008	062	01:37		1:09	062	02:46		0:30	0:05	1:37	rss3a*	M	63	061	18:05	05:15	03/02/08	
	RSS_060RI_OCC002_PRIME				02:07	03:03			03:16	04:12	0:56				M	55	062	02:15	05:15		OTM immediately preceding Occ.
	Deadtime - 30 min?					03:33				04:42	0:30				G	14	062	02:00	05:15		Get shorter warm-up.
															G	25	062	02:15	05:15		OTM will not be canceled, so
															G	26	062	02:15	05:15		no need for RTC.
	RSS_061EA_PIM001_RSS	38	2008	068	10:21	18:21	1:09	068	11:30	19:30		2:00					No Tracking			03/08/08	
	RSS_061EN_KADOWN001_RSS	38	2008	071	18:06	02:36	1:09	071	19:15	03:45	8:30	0:05	2:00	rssk	M	55	071	19:15	03:45	03/11/08	Shadow DSS-65 071/19:15-03:45
	RSS_061EN_KADOWN002_RSS	38	2008	073	00:51	09:51	1:09	073	02:00	11:00	9:00	0:05	2:14	rssk	G	25	073	02:00	11:00	03/13/08	Shadow DSS-14 073/02:00-11:00
	RSS_061EA_BORESIGHT002_PRIME	38	2008	076	03:01	04:01	1:09	076	04:10	05:10	1:00	0:05	1:55	rssk	G	25	076	02:00	11:00	03/16/08	Also prime Tracking Pass
	RSS_062SA_OCCORT001_RSS	39	2008	084	17:05	01:35	1:10	084	18:15	02:45	8:30	0:05	2:00	rssk	M	55	084	18:15	02:45	03/24/08	Also prime Tracking Pass
	RSS_062SA_OCCORT002_RSS	39	2008	086	16:20	01:20	1:10	086	17:30	02:30	9:00	0:05	2:00	rssk	M	55	086	21:35	02:30	03/26/08	Shadow DSS-63 086/17:30-02:30
	RSS_063SA_OCCORT003_RSS	39	2008	088	03:20	08:50	1:10	088	04:30	10:00	5:30	0:00	0:00	rss2	M	63	088	01:10	03:45	03/28/08	Shadow DSS-25 088/01:00-10:00
	RSS_063SA_KADOWN001_RSS	39	2008	091	16:34	01:04	1:11	091	17:45	02:15	6:30	0:05	2:00	rssk	M	55	091	17:45	02:15	03/31/08	Also prime Tracking Pass
	Deadtime - Not Earth pointed	39	2008	092	15:51		1:11	092	17:02			0:05	2:00	rss3a*	M	55	092	16:45	21:20	04/01/08	
	RSS_063RI_OCC002_PRIME			092	16:21	19:23		092	17:32	20:34	3:02				M	63	092	16:45	21:20		RWA Bias starting at 1858 SCET
	Deadtime - Not Earth pointed					19:53				21:04											
	RSS_063SA_KADOWN002_RSS	39	2008	093	16:04	01:04	1:11	093	17:15	02:15	9:00	0:05	2:00	rssk	M	55	093	17:15	02:15	04/02/08	Shadow DSS-63 093/17:15-02:15
	RSS_063SA_OCCORT001_RSS	39	2008	094	23:19	08:19	1:11	095	00:30	09:30	9:00	0:05	2:00	rssk	G	25	095	05:55	09:30	04/04/08	Shadow DSS-14 095/00:30-09:30
	RSS_063SA_OCCORT002_RSS	39	2008	095	23:19	08:19	1:11	096	00:30	09:30	9:00	0:05	2:00	rssk	G	25	096	00:30	09:30	04/05/08	Also prime Tracking Pass
															C	34	096	07:00	09:30		
	RSS_064SA_OCCORT001_RSS	39	2008	097	23:04	08:04	1:11	098	00:15	09:15	9:00	0:00	0:00	rss2	G	14	098	00:15	09:15	04/07/08	DSS-14 Also prime tracking pass
															C	43	098	06:45	09:15		
	RSS_064EA_USOPIM001_RSS	39	2008	098	23:04	02:04	1:11	099	00:15	03:15	4:00	2:00	2:00	rssk	G	25	099	00:15	09:15	04/08/08	Also prime Tracking Pass. 3-hr
		39	2008	102	05:49		1:12	102	07:01			0:05	2:00	rss3a*	G	25	102	06:45	10:45	04/11/08	
	RSS_064RI_OCC002_PRIME			102	06:19	09:20		102	07:31	10:32	3:01				G	14	102	06:45	10:45		Warmup in RTC?
						09:50				11:02					C	34	102	06:45	11:20		
															C	43	102	06:45	11:20		
															Narrab	47	102	05:30	10:30		
	RSS_066RI_OCCORT001_RSS	40	2008	118	21:47	06:52	1:13	118	23:00	08:05	9:05	0:05	2:00	rssk	G	26	118	23:00	08:05	04/27/08	DSS-26 also prime Tracking Pass
															M	54	118	23:00	02:05		DSS-54 New Ka. DEMO. 1hr pre-cal
	RSS_066RI_OCCORT002_RSS	40	2008	119	21:31	06:31	1:14	119	22:45	07:45	9:00	0:05	2:00	rssk	G	25	119	22:45	07:45	04/28/08	DSS-25 also prime Tracking Pass
															M	54	119	22:45	02:00		DSS-54 DEMO Pass. 1-hr pre-cal
	RSS_066SA_GRAVORT001_RSS	40	2008	120	14:01	23:01	1:14	120	15:15	00:15	9:00	0:05	2:00	rssk	M	54	120	15:20	00:15	04/29/08	Shadow DSS-55 120/15:15-00:15
	RSS_066RI_OCCORT003_RSS	40	2008	124	21:43	06:13	1:14	124	22:50	07:30	8:40	0:05	2:00	rssk	G	25	124	22:50	07:30	05/03/08	Also prime Tracking Pass
	RSS_066RI_OCCORT004_RSS	40	2008	125	21:16	06:16	1:14	125	22:30	07:30	9:00	0:05	0:25	rssk	G	26	125	22:30	07:30	05/04/08	Shadow DSS-14 125/22:30-07:30
															Narrab	47	126	04:30	07:30	05/05/08	DSS-47 in view at 0457
	RSS_067EA_PIM001_RSS	40	2008	126	16:15	00:15		126	17:30	01:30		2:00					No Tracking			05/05/08	
	RSS_067EA_BORESIGHT002_PRIME	40	2008	127	00:15	01:15	1:15	127	01:30	02:30	1:00	0:05	2:00	rssk	G	25	126	21:30	07:30	05/05/08	Also prime TP. Ka off at 0230 ERT
	RSS_067RI_OCCORT005_RSS	40	2008	127	19:55	22:30	1:15	127	21:10	23:45	2:35	0:00	0:00	rss2	G	14	127	22:35	23:45	05/06/08	DSS-63 also prime Tracking Pass
															M	63	127	15:05	23:45		DSS-14 30-min pre-cal
															G	15	127	21:10	23:45		DSS-15 d/l demo. 30 min pre-cal
	Deadtime	40	2008	130	22:02		1:15	130	23:17			0:05	2:03	rss3a*	G	25	130	22:25	01:45	05/09/08	DSS-25 & 26 1-hr pre-cal D/L only
	RSS_067RI_OCC002_PRIME e			130	22:10	23:45		130	23:25	01:00	1:35				G	26	130	22:40	01:45		INMS observation after occ
	Deadtime			131	01:14	01:36		131	02:29	02:51					G	14	130	22:40	01:45		No DSN coverage during deadtime

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	RSS_067SA_GRAVORT002_RSS	40	2008	134	13:14	22:14	1:16	134	14:30	23:30	9:00	0:05	2:00	rssk	M	54	134	14:30	23:30	05/13/08	Array. Shadow DSS-63
	RSS_068SA_GRAVORT003_RSS	40	2008	136	16:59	22:59	1:16	136	18:15	00:15	6:00	0:05	2:27	rssk	M	55	136	15:40	00:15	05/15/08	Also prime Tracking Pass
	SP Turn to Earth-point	40	2008	138	19:05		1:16	138	20:21			0:05	2:00	rss3a*						05/17/08	
	RSS_068SA_GRAVITYN001_PRIME		2008	138	19:35	21:20		138	20:51	22:36	1:45				M	55	138	17:20	00:50		DSS-55 U/L for 1st segment
	Deadtime		2008	138	21:20			138	22:36						G	25	138	20:20	06:00		DSS-25 U/L for 2nd segment
	RSS_068SA_OCCIN001_PRIME e		2008	138	21:41	22:33		138	22:57	23:49	0:52				G	26	138	20:20	06:00		DSS-26 1-hr pre-cal. D/L only
	RSS_068SA_OCCOUT001_PRIME e		2008	138	22:52	23:48		139	00:08	01:04	0:56				G	15	138	22:00	01:45		Periapse 139/01:11 ERT
	Deadtime			138		23:56		139		01:12					M	63	138	22:00	01:00		OFFSET 2356 SCET. SCR 107718
	RSS_068SA_GRAVITYN002_PRIME		2008	138	23:56	04:05		139	01:12	05:21	4:09										N in gravity CIMS name indicates
	SP Turn from Earth-point		2008	138		04:35		139		05:51					Check open-loop equipment						that SP will do turns
	RSS_070SA_OCCORT004_RSS	40	2008	151	19:27	04:27	1:18	151	20:45	05:45	9:00	0:05	2:00	rssk	G	25	151	20:45	05:45	05/30/08	Also prime Tracking Pass
	Deadtime	41	2008	153	20:59		1:18	153	22:17			0:05	2:00	rss3a*	G	25	153	21:30	01:30	06/01/08	
	RSS_070SA_OCCIN001_PRIME			153	21:09	23:14		153	22:27	00:32	2:05				G	26	153	21:30	01:30		DSS-26 1-hr pre-cal. D/L only
	Deadtime			153		23:23		154		00:41					G	14	153	21:45	01:30		Bias 153/202320-303926 SCET
	RSS_071SA_OCCORT001_RSS	41	2008	157	19:11	04:11	1:19	157	20:30	05:30	9:00	0:05	2:00	rssk	G	25	157	20:30	05:30	06/05/08	DSS-25 also prime Tracking Pass
															C	34	158	03:00	05:30		DSS-34 1-hr prel-cal. D/L only
															Narrab	47	158	02:30	05:30		
	RSS_071SA_OCCORT002_RSS	41	2008	158	19:11	04:11	1:19	158	20:30	05:30	9:00	0:05	2:00	rssk	G	26	158	20:30	05:30	06/06/08	DSS-25 also prime TP
															C	34	159	03:00	05:30		DSS-34 1-hr prel-cal. D/L only
	RSS_071SA_KADOWN001_RSS	41	2008	160	14:40	18:40	1:19	160	15:59	19:59	4:00	0:05	2:00	rssk	M	55	160	13:20	20:00	06/08/08	Shadow DSS-63 160/15:55-20:00
	RSS_071SA_KADOWN002_RSS	41	2008	161	12:00	17:50	1:19	161	13:19	19:09	5:50	0:05	2:00	rssk	M	54	161	11:25	19:10	06/09/08	Also prime Tracking Pass
	RSS_071SA_OCCORT003_RSS	41	2008	163	18:40	03:40	1:20	163	20:00	05:00	9:00	0:00	0:00	rss2	G	14	163	20:00	05:00	06/11/08	DSS-14 also prime Tracking Pass
															C	43	164	02:30	05:00		
	RSS_072SA_KADOWN001_RSS	41	2008	166	18:40	03:40	1:20	166	20:00	05:00	9:00	0:05	2:00	rssk	G	25	166	20:15	05:00	06/14/08	Also prime Tracking Pass
	Deadtime	41	2008	168	03:19		1:20	168	04:39			0:05	2:00	rss3a*	C	25	168	04:00	06:35	06/16/08	DSS-25 1-hr pre-cal. D/L only
	RSS_072SA_OCCIN001_PRIME			168	03:35	05:37		168	04:55	06:57	2:02				C	26	168	04:00	06:35		DSS-26 1-hr pre-cal. D/L only
	Deadtime			168		05:51		168		07:11					G	14	168	03:45	06:35		
															G	34	168	04:00	08:00		DSS-34 1-hr pre-cal. D/L only
															G	43	168	04:00	08:00		Bias 168/023610-025152 SCET
															Narrab	47	168	04:30	05:30		
	RSS_072SA_KADOWN002_RSS	41	2008	168	23:00	05:00	1:20	169	00:20	06:20	6:00	0:05	2:00	rssk	G	25	168	21:20	06:20	06/16/08	TP. Also DSS-14 169/00:00-06:20
	RSS_072SA_OCCORT001_RSS	41	2008	169	01:05	05:00	1:20	169	02:25	06:20	3:55	0:05	2:00	rssk	C		No Canberra Station				DSS-34 down. DSS-45 conflct
	RSS_073SA_KADOWN001_RSS	41	2008	173	18:09	03:09	1:21	173	19:30	04:30	9:00	0:05	2:00	rssk	G	25	173	19:45	04:30	06/21/08	Shadow DSS-14 173/19:30-04:30
	RSS_073SA_OCCIN001_PRIME	41	2008	175	06:37	07:21	1:21	175	07:58	08:42	0:44	0:05	0:28	only rss3a*						06/23/08	Ingress X-band only no IVD
	Deadtime			175	07:21			175	08:42						C	43	175	01:45	10:45		
	RSS_073SA_OCCOUT001_PRIME			175	07:37	08:45		175	08:58	10:06	1:08				Narrab	47	175	08:30	10:30		Egress rss3a w/ IVD
	Deadtime					08:57		175		10:18	0:05										Bias 175/092310-094257 SCET
	RSS_073EA_USOPIM001_PRIME	41	2008	178	17:54	20:54	1:21	178	19:15	22:15	3:00	0:05	2:00	rss3a*	G	25	178	19:15	04:15	06/26/08	DSS-25 also prime Tracking Pass
															G	63	178	19:15	22:15		
	RSS_074EA_BORESIGHT002_PRIME	41	2008	178	20:54	21:54		178	22:15	23:15	1:00				G		Above DSS-25 pass				
	RSS_074SA_KADOWN001_RSS	41	2008	181	10:08	19:08	1:22	181	11:30	20:30	9:00	0:05	2:00	rssk	M	55	181	11:30	20:30	06/29/08	Shadow DSS-63 181/11:30-20:30
	RSS_074SA_KADOWN002_RSS	41	2008	183	09:38	19:08	1:22	183	11:00	20:30	9:30	0:05	2:00	rssk	M	55	183	11:00	20:30	07/01/08	Array w/ DSS-63. Switch to 55
BEGIN EQUINOX MISSION (XM) 2008-183T19:08:00																					
Rings	RSS_074SA_OCCORT001_RSS	42	2008	185	17:23	02:23	1:22	185	18:45	03:45	9:00	0:05	2:00	rssk	C	45	186	01:15	03:20	07/03/08	Shadow DSS-25 185/18:45-03:45
Rings	RSS_075SA_OCCORT001_RSS	42	2008	187	17:23	02:23	1:22	187	18:45	03:45	9:00	0:00	0:00	rss2	M	63	187	18:45	19:45	07/05/08	Shadow DSS-14 187/18:45-03:45
															C	43	188	01:00	03:50		
Rings	*Deadtime*	42	2008	189	07:58		1:23	189	09:21			0:05	2:00	rss3a*	C	45	189	09:00	10:25	07/07/08	Canbrerra low EL angles < 30
	RSS_075SA_OCCIN001_PRIME			189	08:17	10:29		189	09:40	11:52	2:12				C	43	189	08:40	10:25		
	Deadtime					10:49		189		12:12					Narrab	47	189	09:00	10:00		ATCA sets at 1002
															M	55	189	09:45	12:55		
															M	63	189	09:45	21:15		
Rings	RSS_077SA_OCCORT001_RSS	42	2008	202	09:06	17:21	1:24	202	10:30	18:45	8:15	0:05	2:00	rssk	M	55	202	10:10	18:45	07/20/08	Also prime Tracking Pass
Saturn	RSS_078EA_USOPIM001_RSS	42	2008	207	16:06	19:06	1:24	207	17:30	20:30	3:00	0:05	1:25	rss3a*	G	25	207	17:30	03:30	07/25/08	DSS-25 also prime Tracking Pass
															G	14	207	17:30	20:30		3-hr USO
	RSS_078EA_BORESIGHT002_PRIME		2008	207	19:06	20:06	1:24	207	20:30	21:30	1:00	Incl. above		rssk	G		Above DSS-25 pass				
	RSS_078SA_OCCORT002_RSS		2008	207	16:06	19:06	1:24	207	17:30	20:30	3:00	0:05	2:00	rssk	M	55	207	17:30	20:30		Shadow DSS-25
Saturn	RSS_078SA_OCCORT001_RSS	42	2008	208	16:06	01:06	1:24	208	17:30	02:30	9:00	0:05	2:00	rssk	G	26	208	17:30	00:40	07/26/08	Shadow DSS-14 208/17:30-02:30

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
Rings	RSS_078TI_KADOWN001_RSS	42	2008	211	22:20	07:20	1:25	211	23:45	08:45	9:00	0:05	2:00	rssk		No Ka-band Station				07/29/08	Shadow DSS-43 211/23:45-08:45
TOST		42	2008				1:25					0:05	2:00	rssk	M	55	212	12:50	20:10	07/30/08	T45
	RSS_078TI_GRAVITY001_PRIME			212	14:43	06:59		212	16:08	08:24	16:16				M	54	212	15:30	20:10		Playback during both segments
	RSS_078TI_GRAVITY002_PRIME			213	10:29	15:06		213	11:54	16:31	4:37				G	25	212	16:00	03:45		25/26 Array. 26 2-hr pre-cal
	Deadtime			213		15:20		213		16:45					G	26	212	16:00	03:45		C/A 213/0338 ERT. 1613 km
															C	45	212	23:40	09:05		34 down. Get 45 for u/l and x-band
															Narrab	47	212	23:30	08:30		47 rise 2329, set 0840
															M	55	213	08:20	17:30		55/54 Array
															M	54	213	11:00	17:30		Earth-pt con't for following GSE
TOST	RSS_078TI_KADOWN002_RSS	42	2008	213	15:50	00:50	1:25	213	17:15	02:15	9:00	0:05	2:00	rssk	G	25	213	17:15	02:15	07/31/08	Array w/ DSS-24 213/17:15-02:15
Rings	*Deadtime*	42	2008	217	10:25		1:25	217	11:50			0:05	2:00	rss3a*	M	55	217	11:10	14:30	08/04/08	
	RSS_079RI_OCC002_PRIME			217	10:48	11:54		217	12:13	13:19	1:06				M	63	217	11:10	14:30		
	Deadtime			217		12:05		217		13:30											
Rings	RSS_079SA_OCCORT004_RSS	42	2008	220	15:20	00:20	1:25	220	16:45	01:45	9:00	0:05	2:00	rssk	G	25	220	16:45	01:45	08/07/08	Shadow DSS-14 220/16:45-01:45
															M	55	220	16:45	19:40		Occ and Grav ORT
Rings	RSS_080EN_KADOWN001_RSS	42	2008	223	15:20	00:20	1:25	223	16:45	01:45	9:00	0:05	2:00	rssk	G	25	223	16:45	01:45	08/10/08	Shadow DSS-14 223/16:45-01:45
SOST		43	2008				1:25					0:05	2:00	rssk	M	55	224	10:30	17:40	08/11/08	Earth-pt 123323-160623 scet
	RSS_080EN_GRAVITY001_PRIME			224	12:06	16:07		224	13:31	17:32	4:01				M	63	224	13:15	17:40		15deg Offset in Z-axis during d/l
																					Closest Approach 224/2231 ERT
SOST		43	2008				1:26					0:05	2:00	rssk	C	45	225	00:40	08:25	08/12/08	Closest Approach 224/2231 ERT
	RSS_080EN_GRAVITY002_PRIME			225	04:06	08:07		225	05:32	09:33	4:01				Narrab	47	225	04:00	07:30		Bias at 06:05 scet
															M	55	225	07:40	09:40		SP downlink starts 225/0236 scet
SOST	RSS_080EN_KADOWN002_RSS	43	2008	225	15:04	00:04	1:26	225	16:30	01:30	9:00	0:05	2:00	rssk	G	25	225	16:25	01:30	08/12/08	Shadow DSS-14 225/16:25-01:30
Rings	RSS_081RI_KADOWN001_RSS	43	2008	230	14:49	23:49	1:26	230	16:15	01:15	9:00	0:05	2:00	rssk	G	25	230	16:15	01:15	08/17/08	Shadow DSS-14 230/16:15-01:15
Rings	*Deadtime*	43	2008	232	04:29		1:26	232	05:55			0:05	2:00	rss3a*	C	43	232	05:20	08:00	08/19/08	DSS-43 30 min pre-cal. D/L only
	RSS_081RI_OCC002_PRIME			232	04:49	05:50		232	06:15	07:16	1:01										Low elevation angles < 25 degrees
	Deadtime					06:09				07:35					Narrab	47	232	06:00	07:30		Narrabri set 0736
Rings	RSS_081RI_KADOWN002_RSS	43	2008	232	14:49	23:49	1:26	232	16:15	01:15	9:00	0:05	2:00	rssk	G	25	232	16:15	01:15	08/19/08	Shadow DSS-14 232/16:15-01:15
Rings	RSS_081EA_SCE5001_RSS	43	2008	233	14:34	23:34	1:26	233	16:00	01:00	9:00	0:05	2:00	rssk	G	26	233	16:00	01:00	08/20/08	Also prime Tracking Pass
Rings	RSS_081EA_SCE5002_RSS	43	2008	234	14:34	23:34	1:26	234	16:00	01:00	9:00	0:05	2:00	rssk	G	25	234	16:00	01:00	08/21/08	Shadow DSS-14 234/16:00-01:00
MAG	RSS_082RI_KADOWN001_RSS	43	2008	237	20:49	05:49	1:26	237	22:15	07:15	9:00	0:05	2:00	rssk	C	No Ka-band station				08/24/08	Prime DSS-45 237/22:15-07:15
MAG	*Deadtime*	43	2008	239	13:16		1:26	239	14:42		0:20	0:05	2:00	rss3a*	M	55	239	14:00	17:15	08/26/08	Madrid good elev angles
	RSS_082RI_OCC002_PRIME			239	13:36	14:35		239	15:02	16:01	0:59				M	63	239	14:00	17:15		Goldstone in view but < 30
	Deadtime			239		14:55		239		16:21	0:20										
MAG	RSS_082EA_SCE5003_RSS	43	2008	239	15:34	00:34	1:26	239	17:00	02:00	9:00	0:05	2:00	rssk	G	25	239	17:00	02:00	08/26/08	Shadow DSS-14 239/17:00-02:00
MAG	RSS_082RI_KADOWN002_RSS	43	2008	240	14:19	23:19	1:26	240	15:45	00:45	9:00	0:05	2:00	rssk	G	26	240	15:45	00:45	08/27/08	Shadow DSS-14 240/15:45-00:45
MAG	RSS_082EA_SCE5004_RSS	43	2008	241	14:19	23:19	1:26	241	15:45	00:45	9:00	0:05	2:00	rssk	G	25	241	15:45	20:45	08/28/08	Also prime Tracking Pass
MAG	RSS_082EA_SCE5005_RSS	43	2008	242	06:34	15:34	1:26	242	08:00	17:00	9:00	0:05	2:00	rssk	M	55	242	08:00	14:45	08/29/08	Shadow DSS-63 242/08:00-17:00
MAG	RSS_082EA_SCE5006_RSS	43	2008	243	06:34	15:34	1:26	243	08:00	17:00	9:00	0:05	2:00	rssk	M	55	243	08:00	17:00	08/30/08	Also prime Tracking Pass
MAG	RSS_083EA_SCE5007_RSS	43	2008	244	06:34	15:34	1:26	244	08:00	17:00	9:00	0:05	2:00	rssk	M	55	244	08:00	17:00	08/31/08	Shadow DSS-63 244/08:00-17:00
MAG	RSS_083EA_SCE5008_RSS	43	2008	245	06:19	15:19	1:26	245	07:45	16:45	9:00	0:05	2:00	rssk	M	54	245	07:45	16:45	09/01/08	Also prime TP. DSN PIT over 25
MAG	RSS_083EA_SCE5009_RSS	43	2008	246	06:19	15:19	1:26	246	07:45	16:45	9:00	0:05	2:00	rssk	M	54	246	07:45	16:45	09/02/08	Also prime Tracking Pasas
MAG	RSS_083EA_SCE5010_RSS	43	2008	247	06:19	15:19	1:26	247	07:45	16:45	9:00	0:05	2:00	rssk	M	54	247	07:45	16:45	09/03/08	Also prime TP. Minimum SEP?
MAG	RSS_083EA_SCE5011_RSS	43	2008	248	06:19	15:19	1:26	248	07:45	16:45	9:00	0:05	2:00	rssk	M	54	248	07:45	16:45	09/04/08	Also prime Tracking Pass
MAG	RSS_083EA_SCE5012_RSS	43	2008	249	06:19	15:19	1:26	249	07:45	16:45	9:00	0:05	2:00	rssk	M	54	249	13:30	16:45	09/05/08	Also prime TP. DSN PIT over 25
MAG	RSS_083EA_SCE5013_RSS	43	2008	250	06:04	15:04	1:26	250	07:30	16:30	9:00	0:05	2:00	rssk	M	54	250	07:30	16:30	09/06/08	Also prime Tracking Pass
MAG	RSS_084EA_SCE5014_RSS	43	2008	251	06:04	15:04	1:26	251	07:30	16:30	9:00	0:05	2:00	rssk	M	54	251	07:30	14:35	09/07/08	Shadow DSS-63 251/07:30-16:30
MAG	RSS_084EA_SCE5015_RSS	43	2008	252	06:04	15:04	1:26	252	07:30	16:30	9:00	0:05	2:00	rssk	M	54	252	07:30	16:30	09/08/08	Also prime Tracking Pass
MAG	RSS_084RI_KADOWN001_RSS	43	2008	253	06:04	15:04	1:26	253	07:30	16:30	9:00	0:05	2:00	rssk	M	54	253	07:30	16:30	09/09/08	Shadow DSS-63 253/07:30-14:30
MAG		43	2008	254	07:12		1:26	254	08:38		0:20	0:05	2:00	rss3a*	M	54	254	08:00	10:55	09/10/08	
	RSS_084RI_OCC002_PRIME			254	07:32	08:27		254	08:58	09:53	0:55				M	63	254	08:00	10:55		
				254		08:47		254		10:13	0:20										
MAG	RSS_084RI_KADOWN002_RSS	43	2008	255	05:49	14:49	1:26	255	07:15	16:15	9:00	0:05	2:00	rssk	M	54	255	07:15	16:15	09/11/08	Also prime Tracking Pass
MAG	RSS_084EA_SCE5016_RSS	43	2008	256	05:49	14:49	1:26	256	07:15	16:15	9:00	0:05	2:00	rssk	M	54	256	15:30	16:15	09/12/08	Shadow DSS-63 256/07:15-15:05
MAG	RSS_084EA_SCE5017_RSS	43	2008	257	13:19	22:19	1:26	257	14:45	23:45	9:00	0:05	2:00	rssk	G	26	257	14:45	22:55	09/13/08	Shadow DSS-14 257/14:45-23:45
Rings	RSS_085EA_SCE5018_RSS	44	2008	258	13:19	22:19	1:26	258	14:45	23:45	9:00	0:05	2:00	rssk	G	25	258	14:45	23:45	09/14/08	Also prime Tracking Pass
Rings	RSS_085EA_SCE5019_RSS	44	2008	259	13:19	22:19	1:26	259	14:45	23:45	9:00	0:05	2:00	rssk	G	25	259	14:45	23:45	09/15/08	Also prime Tracking Pass
	RSS_085EA_USOPIM001_RSS	44		259	13:19	17:19	1:26	259	14:45	18:45	4:00	0:05	2:00				Above DSS-25 pass				X&Ka USO. No S-band
	RSS_085EA_BORESIGHT002_PRIME	44		259	17:19	18:19	1:26	259	18:45	19:45	1:00						Above DSS-25 pass				
Rings	RSS_085RI_KADOWN001_RSS	44	2008	260	13:04	22:04	1:26	260	14:30	23:30	9:00	0:05	2:00	rssk	G	25	260	14:30	23:00	09/16/08	Shadow DSS-14 260/14:30-23:00

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
Rings	RSS_085RI_KADOWN002_RSS	44	2008	262	05:34	14:34	1:26	262	07:00	16:00	9:00	0:05	2:00	rssk	M	54	262	07:00	16:00	09/18/08	Also prime TP. Short 14 pass too
Rings	RSS_086RI_KADOWN001_RSS	44	2008	268	05:04	14:04	1:26	268	06:30	15:30	9:00	0:05	2:00	rssk	M	54	268	08:00	15:30	09/24/08	Also prime Tracking Pass
Rings	RSS_086RI_KADOWN002_RSS	44	2008	269	12:34	21:34	1:26	269	14:00	23:00	9:00	0:05	2:00	rssk	G	25	269	14:00	23:00	09/25/08	Shadow DSS-14 269/14:00-23:00
MAG	RSS_087SA_OCCORT001_RSS	44	2008	278	04:35	13:35	1:25	278	06:00	15:00	9:00	0:05	0:00	rssk-s	M	54	278	06:00	15:00	10/04/08	Also prime Tracking Pass
Rings	RSS_088RI_KADOWN001_RSS	44	2008	282	11:50	20:50	1:25	282	13:15	22:15	9:00	0:05	0:00	rssk-s	G	26	282	13:15	22:15	10/08/08	Shadow DSS-14 282/13:15-22:15
	RSS_088SA_OCCORT001_RSS		2008	282	17:35	20:50	1:25	282	19:00	22:15	3:15	0:05	0:00	rssk-s	C	34	282	19:20	22:15		
SOST	RSS_088RI_KADOWN002_RSS	44	2008	284	11:50	20:50	1:25	284	13:15	22:15	9:00	0:05	0:00	rssk-s	G	25	284	13:15	22:05	10/10/08	Shadow DSS-14 284/12:55-22:15
	RSS_088SA_OCCORT002_RSS		2008	284	17:05	20:50	1:25	284	18:30	22:15	3:45	0:05	0:00	rssk-s	C	34	284	19:15	22:15		
Rings	RSS_088SA_OCCORT003_RSS	44	2008	285	11:35	20:35	1:25	285	13:00	22:00	9:00	0:00	0:00	rss2-s	M	63	285	13:00	15:45	10/11/08	Shadow DSS-15 285/13:00-22:00
															C	43	285	19:00	22:00		
Rings		44	2008				1:24					0:05	2:00	rss3a*	C	34	291	02:45	04:45	10/17/08	Low elevation angles < 15 degrees
	RSS_089RI_OCC001_PRIME			291	02:25	03:10		291	03:49	04:34	0:45				C	43	291	02:45	04:45		Canberra & Madrid
															M	54	291	04:00	07:15		RSS3A ends at 030934 SCET
															M	63	291	04:00	13:35		OTM-168 immed follows occ
															Narrab	47	291	03:30	04:45		
	Ka-band for DSN software testing	45	2008	293	11:06	20:06	1:24	293	12:30	21:30	9:00	0:05	0:00	Ka-ba	G	26	293	11:30	15:25	10/19/08	Shadow Cas D-25, but no Ka at 25
Rings	RSS_090SA_OCCORT001_RSS	45	2008	296	03:36	12:36	1:24	296	05:00	14:00	9:00	0:05	0:00	rssk-s	M	55	296	05:00	14:00	10/22/08	Also prime Tracking pass
Rings	RSS_090RI_KADOWN001_RSS	45	2008	297	10:51	19:51	1:24	297	12:15	21:15	9:00	0:05	0:00	rssk-s	G	26	297	12:15	21:15	10/23/08	DSS-26 also prime Tracking pass
	RSS_090SA_OCCORT004_RSS		2008	297	10:51	19:51	1:24	297	12:15	21:15	9:00	0:05	0:00	rssk-s	G	25	297	12:15	21:15		
Rings	RSS_090RI_KADOWN002_RSS	45	2008	299	10:52	19:52	1:24	299	12:16	21:16	9:00	0:05	0:00	rssk-s	G	26	299	12:15	21:15	10/25/08	Shadow DSS-14 299/12:15-21:20
	RSS_090SA_OCCORT002_RSS		2008	299	16:06	19:52	1:24	299	17:30	21:16	3:46	0:05	0:00	rssk-s	C	34	299	18:15	21:15		All 2-hr post-cal
	RSS_090SA_OCCORT003_RSS		2008	299	10:52	19:52	1:24	299	12:16	21:16	9:00	0:00	0:00	and *uni	G	14	299	12:15	21:15		
															C	43	299	18:05	21:15		
Rings	RSS_090SA_OCCORT005_RSS	45	2008	301	03:22	12:22	1:23	301	04:45	13:45	9:00	0:05	0:00	rssk-s	M	54	301	04:45	08:45	10/27/08	Shadow DSS-63 301/04:45-13:45
Rings	RSS_091EA_USOPIM001_RSS	45	2008	302	10:37	14:37	1:23	302	12:00	16:00	4:00	2:00	2:00	rss2*	G	25	302	12:00	21:00	10/28/08	DSS-25 also prime Tracking Pass
															G	14	302	12:00	15:00		S-band USO. Rolling first 8 mins
	RSS_091SA_OCCORT001_RSS		2008	302	10:37	19:37	1:23	302	12:00	21:00	9:00	0:05	0:00	at 14:0	G	25	Above DSS-25 pass				DSS-25 and 34 2-hr post-cal
															C	34	302	18:05	21:00		S OFF 1530. Ka ON 15:35 ERT
SOST		45	2008				1:23					0:05	2:00	rssk*	M	55	305	03:10	09:30	10/31/08	SP doing turns. Playback
	RSS_091EN_GRAVITY001_PRIME			305	05:05	07:35		305	06:28	08:58	2:30				M	54	305	06:00	09:30		Also DSS-63 305/06:25-09:00
	Enceladus E5 CLOSEST APPROACH			305	17:15			305	17:38						C	34	306	00:20	03:55		34 TRX OFF Lim 033215
	RSS_091EN_GRAVITY002_PRIME			306	02:00	05:30		306	03:23	06:53	3:30				M	55	306	03:10	07:30		U/L transfer from 34 to 55
															M	54	306	03:10	07:30		Also DSS-63 306/03:20-06:55
SOST	RSS_091EN_KADOWN001_RSS	45	2008	306	10:22	19:22	1:23	306	11:45	20:45	9:00	0:05	0:00	rssk-s	G	25	306	11:45	20:45	11/01/08	Shadow DSS-14 306/11:45-20:45
															C	34	306	17:50	20:45		D/L only pass. 1-hr pre-cal.
SOST	RSS_091TI_KADOWN001_RSS	45	2008	307	10:22	19:22	1:23	307	11:45	20:45	9:00	0:05	0:00	rssk-s	G	26	307	11:45	20:45	11/02/08	Shadow DSS-14 307/11:45-20:45
TOST		45	2008				1:23					0:05	2:00	rss3/rcs	G	14	308	16:15	21:15	11/03/08	T46
	RSS_091TI_BISTATIN001_PRIME e			308	16:09	17:21		308	17:32	18:44	1:12				G	25	308	16:00	21:15		All 3-hr pre-cal, 1-hr post-cal
	RSS_091TI_OCC001_PRIME e			308	17:21	17:54		308	18:44	19:17	0:33				G	26	308	16:00	21:15		S ON first then Ka after RCS trans
	RSS_091TI_BISTATOUT001_PRIME e			308	17:54	18:52		308	19:17	20:15	0:58				C	34	308	17:40	21:15		S warm-up 02:10. Ka 01:50
															C	43	308	17:30	21:15		
															Narrab	47	308	17:30	20:30		
TOST	RSS_091TI_KADOWN002_RSS	45	2008	309	10:08	19:08	1:22	309	11:30	20:30	9:00	0:05	0:00	rssk-s	G	25	309	11:30	20:30	11/04/08	Shadow DSS-14 309/11:30-20:30
Rings	RSS_092SA_GRAVORT001_RSS	45	2008	311	02:38	11:38	1:22	311	04:00	13:00	9:00	0:05	0:00	rssk-s	M	55	311	04:00	13:00	11/06/08	Also prime Tracking Pass
Rings	RSS_092SA_GRAVORT002_RSS	45	2008	312	10:08	17:50	1:22	312	11:30	19:12	7:42	0:05	0:00	rssk-s	M	55	312	10:05	14:05	11/07/08	Shadow DSS-14 312/11:30-19:15
															C	34	312	17:25	19:15		DSS-55 Early Uplink
MAG		45	2008				1:21					0:05	2:00	rssk*						11/16/08	Check turns
	RSS_093SA_GRAVITY001_PRIME			321	18:53	02:23		321	20:14	03:44	7:30				C	34	321	16:55	02:55		DSS-34 provide U/L throughout?
															M	55	322	02:10	04:15		34 TRX ON Lim 321/165618
	Ka-band for Narrabri Pc/No Measure.	46	2008	341	17:07	21:27	1:18	341	18:25	22:45	4:20	0:05	0:00	IDAP	Narrab	47	341	17:30	19:45	12/06/08	Shadow Cas DSS-43 pass
	Ka-band for Narrabri Pc/No Measure.	46	2008	357	14:09	19:29	1:16	357	15:25	20:45	5:20	0:05	0:00	IDAP	Narrab	47	357	14:00	21:00	12/22/08	Shadow Cas DSS-43 pass
Saturn	RSS_099EA_PIM001_RSS	46	2008	366	06:45	14:45	1:15	366	08:00	16:00	8:00	2:00	0:00	rssk-s	G	26	366	08:00	17:00	12/31/08	Entire PIM over DSS-26 downlink
Saturn	RSS_102EA_USOPIM001_RSS	47	2009	029	04:48	07:48	1:12	029	06:00	09:00	3:00	2:00	2:00	rss3a*	G	25	029	06:00	15:00	01/29/09	DSS-25 also prime Tracking Pass
															G	14	029	06:00	09:00		
	RSS_102EA_BORESIGHT002_PRIME	47	2009	029	07:48	08:48	1:12	029	09:00	10:00	1:00	2:00	2:00	rssk*			Above DSS-25 pass				Ka-band OFF at end of Boresight
Rings	RSS_104EA_USOPIM001_RSS	48	2009	060	19:20	23:20	1:10	060	20:30	00:30	4:00	2:00	2:00	rssk*	M	55	060	20:30	05:30	03/01/09	Also prime Tracking Pass
Rings	RSS_105TI_BISTATORT002_RSS	48	2009	070	02:05	11:05	1:10	070	03:15	12:15	9:00	0:05	0:00	rssk-s	G	25	070	03:15	12:15	03/11/09	Also prime Tracking Pass
Rings	RSS_105TI_BISTATORT001_RSS	48	2009	072	02:05	11:05	1:10	072	03:15	12:15	9:00	0:05	0:00	rssk-s	G	25	072	03:15	12:15	03/13/09	TP. No KA/ORT. Background seq de-activated due to thruster swap

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
Rings	RSS_106TI_BISTATORT001_RSS	48	2009	075	18:20	03:20	1:10	075	19:30	04:30	9:00	0:05	0:00	rssk-s	M	55	075	19:30	04:30	03/16/09	TP. Background seq de-activated. Real-time Ka commands?
Rings	RSS_106TI_BISTATORT002_RSS	48	2009	076	18:05	03:05	1:10	076	19:15	04:15	9:00	0:00	0:00	rss2-s	M G	63 14	076 077	19:15 01:35	04:15 02:55	03/17/09	63 TP. Real-time S-band ON? 14 2-hr pre-cal. 63 2-hr post-cal
MAG	RSS_106TI_BISTATORT003_RSS	48	2009	078	01:35	10:35	1:10	078	02:45	11:45	9:00	0:05	0:00	rssk-s	G	25	078	02:45	11:45	03/19/09	DSS-25 prime TP. 3-hr pre-cal
MAG	RSS_106TI_BISTATORT004_RSS	48	2009	079	01:35	10:35	1:10	079	02:45	11:45	9:00	0:05	0:00	rssk-s	G	25	079	02:45	11:45	03/20/09	Array w/ DSS-14 079/05:45-11:45
MAG	RSS_106TI_KADOWN001_RSS	48	2009	085	01:05	10:05	1:10	085	02:15	11:15	9:00	0:05	0:00	rssk-s	G M	25 55	085 085	02:15 02:15	11:15 05:00	03/26/09	Shadow DSS-14 085/0215-1115
TOST	RSS_107TI_BISTATOUT001_PRIME	49	2009	086	04:58	06:12	1:10	086	06:08	07:22	1:14	0:05	2:00	rss2/3	G G 26 pass released to Kepler	14 25	086 086	05:15 05:30	08:00 08:00	03/27/09	T51 3-hr pre-cal, 1-hr post-cal for all RSS2 to RSS3/RCS at -30
TOST	RSS_107TI_KADOWN001_RSS	49	2009	087	09:30	16:50	1:10	087	10:40	18:00	7:20	0:05	0:00	rssk-s	C Original 34 pass released to Kepler. Cassini switch to 45. No Ka support	45	087	10:40	18:00	03/28/09	Also prime Tracking Pass
MAG	RSS_107TI_BISTATORT001_RSS	49	2009	089	17:20	02:20	1:10	089	18:30	03:30	9:00	0:05	0:00	rssk-s	M	55	089	18:30	03:30	03/30/09	Also prime TP. 3-hr pre-cal
MAG	RSS_107TI_KADOWN002_RSS	49	2009	093	00:34	09:34	1:11	093	01:45	10:45	9:00	0:05	0:00	rssk-s	G M	25 55	093 093	01:45 01:45	10:45 04:25	04/03/09	Shadow DSS-14 093/01:45-10:45
TOST	RSS_107TI_BISTATIN001_PRIME e RSS_107TI_OCC001_PRIME e RSS_108TI_BISTATOUT001_PRIME e	49	2009	094 094 094	00:27 01:26 02:00	01:26 02:00 03:16	1:11 1:11 1:11	094 094 094	01:38 02:37 03:11	02:37 03:11 04:27	0:59 0:34 1:16	0:05	1:55	rss3	M M G G 26 pass released to Kepler	55 63 14 25	094 094 094 094	01:00 01:00 00:45 01:00	04:20 04:30 05:00 05:00	04/04/09	Over Madrid/Goldstone overlap T52 3-hr pre-cal, 1-hr post-cal for all
TOST	RSS_108TI_KADOWN001_RSS	49	2009	095	00:19	09:19	1:11	095	01:30	10:30	9:00	0:05	0:00	rssk-s	G	25	095	01:30	10:30	04/05/09	Shadow DSS-14 095/01:30-10:30
	Ka-band for DSN Monopulse Testing	49	2009	111	23:18	08:18	1:12	112	00:30	09:30	9:00	0:05	0:00	IDAP	G	26	112			04/22/09	Shadow Cas DSS-15 pass
	Ka-band for DSN Monopulse Testing	49	2009	116	22:47	07:47	1:13	117	00:00	09:00	9:00	0:05	0:00	IDAP	G	26	117			04/27/09	Shadow Cas DSS-15 pass
MAG	RSS_109EA_PIM001_RSS	49	2009	121	15:32	23:32	1:13	121	16:45	00:45	8:00	2:00	0:00	rssk-s	M	55	121	16:15	01:15	05/01/09	Occurs over DSS-55
	Ka-band for DSN Monopulse Testing	50	2009	126	22:16	07:16	1:14	126	23:30	08:30	9:00	0:05	0:00	rssk-s	G	26	Released to CAS			05/06/09	Shadow Cas DSS-14 pass
MAG	RSS_112EA_USOPIM001_RSS	50	2009	153	12:58	15:58	1:17	153	14:15	17:15	3:00	2:00	4:55	rssk*	M	55	153	14:15	23:15	06/02/09	DSS-55 also prime TP. 3-hr USO
	RSS_112TI_OCCORT001_RSS		2009	153	12:58	21:58	1:17	153	14:15	23:15	9:00	0:05	0:00	rssk-s			Above DSS-55 pass			06/02/09	Leave Ka-band ON after USO
Rings	RSS_112TI_OCCORT003_RSS	50	2009	159	19:57	04:57	1:18	159	21:15	06:15	9:00	0:05	0:00	rssk-s	M	55	159	21:15	00:00	06/08/09	Shadow DSS-25 159/21:15-06:15
Rings	RSS_112TI_OCCORT004_RSS	50	2009	163	19:41	04:41	1:19	163	21:00	06:00	9:00	0:05	0:00	rss2-s	G M	14 65	163 163	23:05 21:00	06:00 23:45	06/12/09	DSS-14 also prime Tracking Pass 63 downtime
MAG	RSS_112TI_OCCORT002_RSS	51	2009	164	19:41	04:41	1:19	164	21:00	06:00	9:00	0:05	0:00	rssk-s	M	55	164	21:00	23:40	06/13/09	Shadow DSS-25 164/21:00-06:00
MAG	RSS_113TI_KADOWN001_RSS	51	2009	172	19:10	04:10	1:20	172	20:30	05:30	9:00	0:05	0:00	rssk-s	G	25	172	20:30	05:30	06/21/09	Shadow DSS-14 172/21:00-05:30
TOST	RSS_113TI_OCC001_PRIME e	51	2009	173	17:22	18:12	1:20	173	18:42	19:32	0:50	0:05	2:00	rss3/rcs	M M G	55 65 14	173 173 173	18:00 18:30 19:05	20:15 20:15 20:15	06/22/09	T57 63 donwtime. 65 D/L only Also get 14 since 63 may be down
TOST	RSS_113TI_KADOWN002_RSS	51	2009	174	17:40	03:40	1:20	174	19:00	05:00	10:00	0:05	0:00	rssk-s	G	25	174	23:15	05:05	06/23/09	Shadow DSS-14 174/19:00-05:05
	Ka-band for Narrabri Prep for Kepler Ka	51	2009	179	00:54	09:54	1:21	179	02:15	11:15	9:00	0:05	0:00	IDAP	Narrab	47				06/28/09	Shadow Cas DSS-34 pass
Rings	RSS_114EA_PIM001_RSS	51	2009	197	17:22	02:22	1:23	197	18:45	03:45	9:00	2:00	0:00	rssk-s	G	25	197	18:45	03:45	07/16/09	Entire PIM over DSS-25 downlink
	Ka-band for Narrabri Prep for Kepler Ka	52	2009	224	15:49	00:49	1:26	224	17:15	02:15	9:00	0:05	0:00	IDAP	Narrab	47	Rise 224/23:16			08/12/09	Shadow Cas DSS-14 pass
Rings	RSS_117EA_USOPIM001_RSS	52	2009	232	15:19	18:19	1:26	232	16:45	19:45	3:00	2:00	2:00	rssk*	G	26	232	16:45	01:45	08/20/09	Also prime Tracking Pass
Rings	RSS_117EA_SCE6001_RSS	53	2009	245	14:33	23:33	1:27	245	16:00	01:00	9:00	0:05	0:00	rssk-s	G	26	245	16:00	01:00	09/02/09	Also prime Tracking Pass
Rings	RSS_117EA_SCE6002_RSS	53	2009	246	14:33	23:33	1:27	246	16:00	01:00	9:00	0:05	0:00	rssk-s	G	26	246	16:00	01:00	09/03/09	Also prime Tracking Pass
Rings	RSS_117EA_SCE6003_RSS	53	2009	249	20:33	05:33	1:27	249	22:00	07:00	9:00	0:05	0:00	rssk-s	C	34	250	04:00	07:00	09/07/09	Shadow DSS-43 249/22:00-07:00
Rings	RSS_117EA_SCE6004_RSS	53	2009	250	20:33	05:33	1:27	250	22:00	07:00	9:00	0:05	0:00	rssk-s	C	34	250	22:00	06:40	09/07/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6005_RSS	53	2009	251	20:33	05:33	1:27	251	22:00	07:00	9:00	0:05	0:00	rssk-s	C	34	251	22:00	07:00	09/08/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6006_RSS	53	2009	252	20:33	05:33	1:27	252	22:00	07:00	9:00	0:05	0:00	rssk-s	C	34	252	No Ka Station		09/09/09	Shadow DSS-43 252/22:00-07:00
Rings	RSS_118EA_SCE6007_RSS	53	2009	253	20:18	05:18	1:27	253	21:45	06:45	9:00	0:05	0:00	rssk-s	C	34	253	21:45	06:45	09/10/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6008_RSS	53	2009	254	14:03	23:03	1:27	254	15:30	00:30	9:00	0:05	0:00	rssk-s	G	25	254	No Ka Station		09/11/09	Prime DSS-14 254/15:30-00:30
Rings	RSS_118EA_SCE6009_RSS	53	2009	255	14:03	23:03	1:27	255	15:30	00:30	9:00	0:05	0:00	rssk-s	G	26	255	15:30	00:30	09/12/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6010_RSS	53	2009	256	14:03	23:03	1:27	256	15:30	00:30	9:00	0:05	0:00	rssk-s	G	25	256	15:30	00:30	09/13/09	Shadow DSS-14 256/15:30-00:30
MAG	RSS_118EA_SCE6011_RSS	53	2009	257	13:48	22:48	1:27	257	15:15	00:15	9:00	0:05	0:00	rssk-s	G	25	257	16:50	00:15	09/14/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6012_RSS	53	2009	258	13:48	22:48	1:27	258	15:15	00:15	9:00	0:05	0:00	rssk-s	G	25	258	15:15	00:15	09/15/09	Also prime TP. DSS-54 Ka demo
MAG	RSS_118EA_SCE6013_RSS	53	2009	259	13:48	22:48	1:27	259	15:15	00:15	9:00	0:05	0:00	rssk-s	G	26	259	No Ka Station		09/16/09	Shadow DSS-14 259/15:15-00:15
MAG	RSS_118EA_SCE6014_RSS	53	2009	260	13:48	22:48	1:27	260	15:15	00:15	9:00	0:05	0:00	rssk-s	G	25	260	15:15	23:45	09/17/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6015_RSS	53	2009	261	13:48	22:48	1:27	261	15:15	00:15	9:00	0:05	0:00	rssk-s	G	25	261	15:15	22:15	09/18/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6016_RSS	53	2009	262	13:33	22:33	1:27	262	15:00	00:00	9:00	0:05	0:00	rssk-s	G	25	262	15:00	00:00	09/19/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6017_RSS	53	2009	264	13:33	22:33	1:27	264	15:00	00:00	9:00	0:05	0:00	rssk-s	G	26	264	15:00	00:00	09/21/09	Also prime Tracking Pass
Rings	RSS_118EA_SCE6018_RSS	53	2009	265	13:33	22:33	1:27	265	15:00	00:00	9:00	0:05	0:00	rssk-s	G	25	265	15:00	00:00	09/22/09	Shadow DSS-14 265/15:00-00:00
Rings	RSS_118EA_SCE6019_RSS	53	2009	266	13:18	22:18	1:27	266	14:45	23:45	9:00	0:05	0:00	rssk-s	G	26	266	14:45	23:45	09/23/09	Shadow DSS-14 266/14:45-23:45

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
Rings	RSS_118EA_SCE6020_RSS	53	2009	267	13:18	22:18	1:27	267	14:45	23:45	9:00	0:05	0:00	rssk-s	G	26	267	14:45	20:45	09/24/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6021_RSS	53	2009	268	13:18	22:18	1:27	268	14:45	23:45	9:00	0:05	0:00	rssk-s	G	25	268	14:45	23:45	09/25/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6022_RSS	53	2009	269	19:33	04:33	1:27	269	21:00	06:00	9:00	0:05	0:00	rssk-s	C	34	269	No Ka Station		09/26/09	Shadow DSS-43 269/21:00-06:00
MAG	RSS_118EA_SCE6023_RSS	53	2009	271	05:33	14:33	1:27	271	07:00	16:00	9:00	0:05	0:00	rssk-s	M	55	271	07:00	16:00	09/28/09	25 prime TP. Also 14 1345-1600
MAG	RSS_118EA_SCE6024_RSS	53	2009	272	13:03	22:03	1:27	272	14:30	23:30	9:00	0:05	0:00	rssk-s	G	25	272	14:30	23:30	09/29/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6025_RSS	53	2009	273	19:18	04:18	1:27	273	20:45	05:45	9:00	0:05	0:00	rssk-s	C	34	273	20:45	05:45	09/30/09	Also prime Tracking Pass
MAG	RSS_118EA_SCE6026_RSS	53	2009	275	05:18	14:18	1:27	275	06:45	15:45	9:00	0:05	0:00	rssk-s	M	~~55~~	275	No Ka Station		10/02/09	Shadow DSS-63 275/06:45-15:45
MAG	RSS_119EA_USOPIM001_RSS	53	2009	276	12:48	16:48	1:27	276	14:15	18:15	4:00	2:00	2:00	rssk*	G	25	276	14:15	23:15	10/03/09	Also prime Tracking Pass
	RSS_119EA_BORESIGHT002_PRIME			276	16:48	17:48		276	18:15	19:15	1:00						Above DSS-25 pass				Also DSS-14 276/19:15-23:15
Saturn	RSS_119SA_OCCORT001_RSS	54	2009	287	18:34	03:34	1:26	287	20:00	05:00	9:00	0:00	0:00	rss2-s	C	45	287	20:00	20:45	10/14/09	Shadow DSS-43 287/20:00-05:00
															G	14	287	20:00	23:45		
	Ka-band ON for Monopulse Cal	54	2009	290	18:19	03:19	1:26	290	19:45	04:45	9:00			IDAP	C	34	290	19:55	04:45	10/17/09	Also prime TP. Monopulse Cal
Saturn	RSS_119SA_OCCORT002_RSS	54	2009	292	18:19	03:19	1:26	292	19:45	04:45	9:00	0:05	0:25	rssk-s	C	34	292	19:10	03:45	10/19/09	DSS-34 also prime Tracking Pass
															G	25	292	19:45	23:25		s/c Earth pointed ~19:25
Saturn	RSS_119SA_OCCORT003_RSS	54	2009	295	18:04	03:04	1:26	295	19:30	04:30	9:00	0:05	0:00	rssk-s	C	34	295	19:30	04:30	10/22/09	DSS-34 also prime Tracking Pass
Saturn	RSS_120EN_KADOWN001_RSS	54	2009	305	03:35	12:35	1:25	305	05:00	14:00	9:00	0:05	0:00	rssk-s	M	55	305	05:00	14:00	11/01/09	Shadow DSS-63 305/05:00-14:00
SOST	*Begin LUB*	54	2009									0:05	2:00	rss3a*	G	14	305	16:15	22:40	11/01/09	Goldstone till set
	RSS_120SA_OCCIN001_PRIME e			305	15:37	17:16	1:25	305	17:02	18:41	1:39				G	25	305	16:15	22:40		Start and end turns by SP
	RSS_120SA_OCCOUT001_PRIME e			305	18:44	20:46	1:25	305	20:09	22:11	1:02				C	45	305	19:35	22:50		DSS-43 downtime
	End LUB														C	34	305	19:35	22:50		
SOST	RSS_120EN_KADOWN002_RSS	54	2009	306	17:00	02:00	1:25	306	18:25	03:25	9:00	0:05	0:00	rssk-s	C	34	306	18:25	03:25	11/02/09	Shadow DSS-43 306/18:25-03:25
SOST	RSS_120SA_OCCORT002_RSS	54	2009	314	17:06	02:06	1:24	314	18:30	03:30	9:00	0:05	0:00	rssk-s	C	34	314	18:30	20:45	11/10/09	Shadow DSS-43 314/18:30-03:30
Saturn	RSS_121SA_OCCORT001_RSS	55	2009	320	16:36	01:36	1:24	320	18:00	03:00	9:00	0:05	0:00	rssk-s	C	34	320	17:55	03:00	11/16/09	Also prime Tracking Pass
Saturn	RSS_121EN_KADOWN001_RSS	55	2009	324	02:37	11:37	1:23	324	04:00	13:00	9:00	0:05	0:00	rssk-s	M	55	324	04:00	12:10	11/20/09	Shadow DSS-63 324/04:00-13:00
SOST	*Begin LUB*	55	2009									0:05	2:00	rss3a*	C	34	324	20:10	23:50	11/20/09	
	RSS_121SA_OCCOUT001_PRIME e			324	19:24	22:00	1:23	324	20:47	23:23	2:36				C	43	324	20:10	23:50		
	End LUB																				
SOST	RSS_121EN_KADOWN002_RSS	55	2009	325	08:25	15:45	1:23	325	09:48	17:08	8:00	0:05	2:00	rssk-s	M	55	325	09:45	12:00	11/21/09	Shadow DSS-63 325/09:45-12:00
															G	25	325	11:35	17:10		Shadow DSS-14 325/11:35-17:10
Saturn	RSS_121SA_OCCORT002_RSS	55	2009	332	15:52	00:52	1:23	332	17:15	02:15	9:00	0:05	0:00	rssk-s	C	34	332	17:15	02:15	11/28/09	Shadow DSS-43 332/17:15-02:15
Saturn	RSS_122SA_OCCORT001_RSS	55	2009	336	15:38	00:38	1:22	336	17:00	02:00	9:00	0:05	0:00	rssk-s	C	34	336	21:30	02:00	12/02/09	Shadow DSS-43 336/17:00-02:00
Saturn	*Begin LMB and Deadtime (X to Earth)*	55	2009	343	17:24			343	18:45		0:20	0:05	2:00	rss3a*	C	34	343	18:05	00:30	12/09/09	
	RSS_122SA_OCC001_PRIME e			343	17:44	22:21	1:21	343	19:05	23:42	4:37				C	43	343	18:05	00:30		Ingress and Egress
	End LMB and Deadtime (X to Earth)			343		22:41		344		00:02	0:20										
TOST	RSS_122SA_OCCORT002_RSS	55	2009	348	01:10	10:10	1:20	348	02:30	11:30	9:00	0:00	0:00	rss2-s	M	63	348	02:30	11:30	12/14/09	Also prime Tracking Pass
MAG	RSS_122SA_OCCORT003_RSS	55	2009	351	00:55	09:55	1:20	351	02:15	11:15	9:00	0:05	0:00	rssk-s	M	55	351	02:15	11:15	hh	Also prime Tracking Pass
MAG	RSS_123SA_OCCORT004_RSS	55	2009	353	00:41	09:41	1:19	353	02:00	11:00	9:00	0:05	0:00	rssk-s	M	55	353	02:00	11:00	12/19/09	Also prime Tracking Pass
MAG	RSS_123SA_OCCORT001_RSS	55	2009	356	14:26	23:26	1:19	356	15:45	00:45	9:00	0:05	0:00	rssk-s	C	34	356	15:45	00:45	12/22/09	Shadow DSS-43 356/15:45-00:45
Rings	*Begin LMB and Deadtime (X to Earth)*	56	2009	359	18:37		1:19	359	19:56		0:20	0:05	2:00	rss3a*	C	34	359	19:20	23:15	12/25/09	
	RSS_123RI_OCC002_PRIME			359	18:57	21:23		359	20:16	22:42	2:26				C	43	359	19:20	23:15		RSS3A at 16:55:49 SCET and not
	RSS_123SA_OCCOUT001_PRIME			360	00:37	01:16		360	01:56	02:35	0:39				M	55	360	01:20	06:10		2 hrs before deadtime due to OTM
	RSS_123RI_OCC003_PRIME			360	01:16	03:58		360	02:35	05:17	2:42				M	63	360	01:20	06:10		
	End LMB and Deadtime (X to Earth)			360		04:13		360		05:32	0:15										
MAG	RSS_124EA_USOPIM001_RSS	56	2010	003	23:43	02:43	1:17	004	01:00	04:00	3:00	0:05	2:00	rssk*	M	55	004	01:00	06:45	01/04/10	Shadow DSS-54 004/01:00-10:00
	RSS_124SA_GRAVORT001_RSS	56	2010	003	23:43	08:43	1:17	004	01:00	10:00	9:00	0:05	0:00	rssk-s	M	55	Above DSS-55 pass				
Rings	RSS_124SA_GRAVORT002_RSS	56	2010	008	13:28	22:28	1:17	008	14:45	23:45	9:00	0:05	0:00	rssk-s	C	34	008	14:45	23:45	01/08/10	Also prime Tracking Pass
Rings		56	2010									0:05	2:00	rssk*	C	34	010	22:20	00:20		Playback
	RSS_124SA_GRAVITY001_PRIME			011	00:10	06:50	1:16	011	01:26	08:06	6:40				M	55	010	23:50	08:30	01/11/10	Canberra mainly for uplink
																					then transfer to Madrid
Rings	RSS_124SA_KADOWN001_RSS	56	2010	011	23:14	08:14	1:16	012	00:30	09:30	9:00	0:05	0:00	rssk-s	M	54	012	00:30	09:30	01/12/10	Shadow DSS-63 012/00:30-09:30
MAG	RSS_124SA_OCCORT001_RSS	56	2010	018	22:45	07:45	1:15	019	00:00	09:00	9:00	0:05	0:00	rssk-s	M	55	019	00:00	09:00	01/19/10	Also prime Tracking Pass
MAG	RSS_125SA_OCCORT001_RSS	56	2010	019	22:45	07:45	1:15	020	00:00	09:00	9:00	0:05	0:00	rssk-s	M	55	020	00:00	09:00	01/20/10	Shadow DSS-63 020/00:00-09:00
MAG	RSS_125SA_OCCORT002_RSS	56	2010	023	06:00	15:00	1:15	023	07:15	16:15	9:00	0:00	0:00	rss2-s	M	63	023	07:15	09:45	01/23/10	Shadow DSS-15 023/07:15-16:15
															C	43	023	12:55	16:15		
Rings	RSS_125SA_OCCORT003_RSS	57	2010	024	12:31	21:31	1:15	024	13:46	22:46	9:00	0:05	0:00	rssk-s	C	34	024	13:45	22:50	01/24/10	Also prime Tracking Pass
Rings	*Being LMB and Deadtime (X to Earth)*	57	2010	026	14:23			026	15:37		0:20	0:05	2:00	rss3a*	C	34	026	15:00	23:30	01/26/10	Canberra passes continue to
	RSS_125EN_OCC001_PRIME			026	14:43	15:44	1:14	026	15:57	16:58	1:01				C	43	026	15:00	23:30		support part of following RI/SA occ
	Earth point																				Plume Occ

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
Rings	*Earth point*	57	2010									0:05	2:00	rss3a*							
	RSS_125RI_OCC002_PRIME			026	17:30	19:52	1:14	026	18:44	21:06	2:23				C	34	026	15:00	23:30	01/26/10	One LMB for EN and RI/SA Occs
	RSS_125SA_OCCIN001_PRIME			026	19:52	20:39		026	21:06	21:53	0:47				C	43	026	15:00	23:30		Earth pointed entire time except
	RSS_125SA_OCCOUT001_PRIME			026	23:03	23:42		027	00:17	00:56	0:39				M	55	026	22:45	04:35		for when s/c is behind Satrun
	RSS_125RI_OCC003_PRIME			026	23:42	02:13		027	00:56	03:27	2:32				M	63	026	22:45	04:35		
				027		02:33		027		03:47	0:20										
	Ka-band ON for Narrabri Testing	57	2010	050	10:48	19:48	1:12	050	12:00	21:00				IDAP	Narrab	47	050			02/19/10	Shadow Cas DSS-43 pass
Saturn	RSS_126EA_BORESIGHT002_PRIME	57	2010	053	06:03	07:03	1:12	053	07:15	08:15	1:00	2:00	2:00	rssk*	G	25	053	05:15	14:15	02/22/10	Also prime Tracking Pass
	Ka-band ON for Narrabri Testing	57	2010	056	10:18	19:18	1:12	056	11:30	20:30				IDAP	Narrab	47	056			02/25/10	Shadow Cas DSS-45 pass
Saturn	RSS_129EA_PIM001_RSS	58	2010	089	18:04	03:04	1:11	089	19:15	04:15	9:00	2:00	0:00	rssk-s	M	55	089	19:30	04:15	03/30/10	Shadow DSS-63 089/19:15-04:15
TOST	RSS_129DI_KADOWN001_RSS	59	2010	096	07:34	16:34	1:11	096	08:45	17:45	9:00	0:05	0:00	rssk-s	C		096	No Ka Station		04/06/10	Shadow DSS-43 096/08:45-17:45
SOST	RSS_129DI_KADOWN002_RSS	59	2010	097	18:00	10:04	1:11	097	19:11	11:15	16:04	0:05	0:00	rssk-s	M	55	097	19:10	04:20	04/07/10	Shadow DSS-63 097/19:10-04:20
															G	25	098	03:55	11:15		
MAG	RSS_129SA_OCCORT001_RSS	59	2010	103	07:04	16:04	1:11	103	08:15	17:15	9:00	0:05	0:00	rssk-s	C		103	No Ka Station		04/13/10	Shadow DSS-45 103/08:15-17:15
	DSS-34 Return To Service														C	34	103	08:15	17:15		DSS-34 Return to Service
MAG	RSS_129EA_USOPIM001_RSS	59	2010	107	00:18	03:18	1:12	107	01:30	04:30	3:00	0:05	3:55	rssk*	G	25	107	01:30	10:30	04/17/10	Also prime Tracking Pass
MAG	RSS_130SA_OCCORT001_RSS	59	2010	111	00:03	09:03	1:12	111	01:15	10:15	9:00	0:05	0:00	rssk-s	G	25	111	01:15	10:15	04/21/10	DSS-25 also prime TP
															M	55	111	01:15	03:40		
MAG	RSS_130SA_OCCORT002_RSS	59	2010	112	00:03	09:03	1:12	112	01:15	10:15	9:00	0:00	0:00	rss2	G	15	112	01:15	10:15	04/22/10	DSS-15 also prime TP
															C	43	112	07:00	10:15		DSS-14 downtime
MAG	RSS_130SA_OCCORT003_RSS	59	2010	113	00:03	09:03	1:12	113	01:15	10:15	9:00	0:05	0:00	rssk-s	G	25	113	01:15	10:15	04/23/10	DSS-25 also prime TP
															C	34	113	06:55	07:45		Extended in real-time till 0900
MAG	RSS_130EN_KADOWN001_RSS	59	2010	116	23:45	07:47	1:12	117	00:57	08:59	8:02	0:05	0:00	rssk-s	G	25	117	00:00	11:00	04/27/10	Also prime TP. Continue for OCC
SOST	Earth point from previous GSE	59	2010									0:05	2:00	rss3a*	G	25	117	00:00	11:00	04/27/10	Earth pointed from previous GSE
	RSS_130SA_OCCIN001_PRIME e			117	07:47	09:22	1:12	117	08:59	10:34	1:35				G	15	117	08:00	11:00		No limb-track maneuver
	RSS_130SA_OCCOUT001_PRIME e			117	11:46	14:00		117	12:58	15:12	2:14				C	34	117	08:00	17:00		DSS-34 covers GRAV too
															C	43	117	08:00	16:00		DSS-14 downtime
SOST	RSS_130EN_GRAVITY001_PRIME	59	2010	117	14:00	00:00	1:12	117	15:12	00:00	26:04	0:05	2:00	rssk*	C	34	117	08:00	17:00	04/27/10	DSS-34 covers OCC too
				118	00:00	16:03	1:13	118	00:00	17:16					M	55	117	16:20	03:10		E9
	Enceladus E9 CLOSEST APPROACH			118	00:10		1:13	118	01:23						G	25	117	23:45	11:00		EN C/A 118/0123 ERT. 100 km
															C	34	118	06:35	16:55		No playback (during GSEs only)
															M	55	118	16:15	02:15		DSS-55 continues for GSE
SOST	RSS_130EN_KADOWN002_RSS	59	2010	118	16:03	01:03	1:13	118	17:16	02:16	9:00	0:05	0:00	rssk-s	M	55	118	16:15	02:15	04/28/10	Shadow DSS-63 118/17:15-02:15
Saturn	RSS_130EN_GRAVORT001_RSS	59	2010	125	23:02	08:02	1:13	126	00:15	09:15	9:00	0:05	0:00	rssk-s	G	25	126	00:15	09:15	05/06/10	DSS-25 also prime TP
															C	34	126	06:05	09:15		
Saturn	RSS_130EN_GRAVORT002_RSS	59	2010	127	05:17	14:17	1:13	127	06:30	15:30	9:00	0:05	0:00	rssk-s	C	34	127	06:30	15:30	05/07/10	Shadow DSS-43 127/06:30-15:30
Saturn	RSS_131EN_GRAVORT001_RSS	59	2010	128	15:16	00:16	1:14	128	16:30	01:30	9:00	0:05	0:00	rssk-s	M	55	128	16:25	01:30	05/08/10	Shadow DSS-63 128/16:25-01:30
Saturn	RSS_131EN_GRAVORT002_RSS	59	2010	129	22:46	07:46	1:14	130	00:00	09:00	9:00	0:05	0:00	rssk-s	G	25	130	00:00	09:00	05/10/10	Also prime Tracking Pass
SOST	RSS_131EN_KADOWN001_RSS	60	2010	138	22:15	07:15	1:15	138	23:30	08:30	9:00	0:05	0:15	rssk-s	G	25	139	00:55	08:30	05/18/10	& Ti GSE. Also prime TP
TOST	RSS_131TI_GRAVITY001_PRIME	60	2010	139	18:24	12:24	1:15	139	19:39	13:39	18:00	0:05	2:00	rssk*	M	55	139	16:30	01:45	05/19/10	T68
															G	25	139	22:15	09:30		Titan C/A 140/0439 ERT. 1400 km
															C	34	140	05:05	14:10		Plybck. 40/25 min turns @ strt/end
TOST	RSS_131TI_KADOWN002_RSS	60	2010	140	22:00	07:00	1:15	140	23:15	08:15	9:00	0:05	0:00	rssk-s	G	25	140	23:15	08:15	05/20/10	Shadow DSS-14 140/23:15-08:15
MAG	RSS_131EA_USOPIM001_RSS	60	2010	146	06:14	09:14	1:16	146	07:30	10:30	3:00	0:05	2:00	rssk*	C	34	146	07:30	14:15	05/26/10	Also prime Tracking Pass
Rings	RSS_132SA_OCCORT001_RSS	60	2010	155	03:13	12:13	1:17	155	04:30	13:30	9:00	0:05	0:00	rssk-s	C	34	155	10:45	13:30	06/04/10	Shadow DSS-43 155/04:30-13:30
TOST	RSS_132SA_OCCORT002_RSS	60	2010	156	20:58	05:58	1:17	156	22:15	07:15	9:00	0:05	0:00	rssk-s	G	25	156	22:15	08:05	06/05/10	
															C	34	157	04:00	06:40		Shadow DSS-43 157/04:00-08:05
TOST	RSS_132SA_OCCORT003_RSS	60	2010	157	20:58	05:58	1:17	157	22:15	07:15	9:00	0:00	0:00	rss2-s	G	15	157	22:15	04:05	06/06/10	DSS-15 and DSS-43 also prime TP
															C	43	158	03:45	08:00		DSS-14 down, so ORT over 15
MAG	RSS_132SA_OCCORT004_RSS	60	2010	160	20:42	05:42	1:17	160	21:59	06:59	9:00	0:05	0:00	rssk-s	G	25	160	21:55	07:00	06/09/10	DSS-25 also prime TP
															C	34	161	03:41	05:10		
MAG	*Begin LMB and Deadtime (X to Earth)*	60	2010	169	20:46			169	22:05		0:10	0:05	2:00	rss3a*	G	25	169	21:30	07:30	06/18/10	s/c Earth pointed prior to occ for
	RSS_133RI_OCC002_PRIME			169	20:56	23:04	1:19	169	22:15	00:23	2:08				G	15	169	21:15	07:30		OTMBU
	RSS_133SA_OCCIN001_PRIME			169	23:04	23:49		170	00:23	01:08	0:45				M	63	169	13:05	00:00		DSS-14 down. Get 63 for some
	RSS_133SA_OCCOUT001_PRIME			170	02:09	02:47		170	03:28	04:06	0:38				C	43	170	03:00	08:00		70-m coverage
	RSS_133RI_OCC003_PRIME			170	02:47	05:32		170	04:06	06:51	2:45				C	34	170	03:10	08:00		DSS-25 D/L only
	End LMB and Deadtime (X to Earth)			170		06:02		170		07:21	0:30										
	Ka-band ON for DSN software testing	60	2010	171	02:11	11:11	1:19	171	03:30	12:30				IDAP	C	45	171	03:30	12:30	06/20/10	DSN DSS-25 pass
	Ka-band ON for DSN software testing	60	2010	173	19:56	04:56	1:19	171	21:15	06:15				IDAP	G	25	173	21:15	06:15	06/22/10	Over Cassini DSS-25 Prime TP

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
BEGIN BRIDGE SEQUENCES 2012-176T21:10:00																					
MAG	RSS_134EA_USOPIM001_RSS	61	2010	178	19:25	04:25	1:20	178	20:45	05:45	9:00	2:00	0:00	rssk-s	G	25	178	20:45	05:45	06/27/10	Also prime TP. 3-hr USO
MAG	RSS_134SA_OCCORT001_RSS	61	2010	179	11:55	20:55	1:20	179	13:15	22:15	9:00	0:00	0:00	rss2-s	M	63	179	13:15	22:15	06/28/10	Also prime TP
MAG	RSS_134SA_OCCORT002_RSS	61	2010	183	11:39	20:39	1:21	183	13:00	22:00	9:00	0:05	0:00	rssk-s	M	55	183	13:00	22:00	07/02/10	Shadow DSS-63
TOST	RSS_134SA_OCCORT003_RSS	61	2010	188	18:54	01:09	1:21	188	20:15	02:30	6:15	0:05	0:00	rssk-s	M	55	188	20:15	22:30	07/07/10	Shadow DSS-26. Add Ka to 26
Saturn	RSS_135SA_KADOWN001_RSS	61	2010	204	17:52	02:52	1:23	204	19:15	04:15	9:00	0:05	0:00	rssk-s	G	25	204	19:15	04:15	07/23/10	Also prime TP
Saturn	*Begin LMB and Deadtime*	61	2010	205	13:33		1:23	205	14:56		0:10	0:05	2:00	rss3a*	M	55	205	14:40	17:40	07/24/10	
	RSS_135SA_OCCIN001_PRIME			205	13:43	15:52		205	15:06	17:15	2:09				M	63	205	14:40	17:40		
	End LMB and Deadtime					16:02				17:25	0:10										
MAG	RSS_136EA_BORESIGHT002_PRIME	62	2010	220	11:20	12:20	1:25	220	12:45	13:45	1:00	0:05	2:00	rssk	M	55	220	10:45	19:45	08/08/10	Also prime TP. Ka on entire pass
XD	RSS_136EA_LGATEST001_PRIME	62	2010	227	08:15	18:45	1:26	227	09:41	20:11	10:30	0:00	0:00	dfpw	M	63	227	09:40	20:15	08/15/10	X-band only
XD	RSS_136SA_OCCORT001_RSS	62	2010	231	16:04	01:04	1:26	231	17:30	02:30	9:00	0:05	0:00	rssk-s	G	25	231	17:30	02:30	08/19/10	DSS-25 also prime TP
															M	55	231	17:30	19:50		RCS for CDS FSW update
XD	RSS_136SA_OCCORT002_RSS	62	2010	232	16:04	01:04	1:26	232	17:30	02:30	9:00	0:05	0:00	rssk-s	G	25	232	17:30	02:30	08/20/10	DSS-25 also prime TP
															M	55	232	17:30	19:45		Partly RCS
XD	~~RSS_137SA_OCCORT003_RSS~~	~~62~~	~~2010~~	~~243~~	~~07:48~~	~~16:48~~	~~1:27~~	~~243~~	~~09:15~~	~~18:15~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~M~~	~~55~~	~~243~~	~~09:15~~	~~18:15~~	~~08/31/10~~	Shadow DSS-63 243/09:15-18:15
																					Usage conflicts. 55 deleted
XD	RSS_137RI_KADOWN001_RSS	62	2010	244	15:18	00:18	1:27	244	16:45	01:45	9:00	0:05	0:00	rssk-s	G	26	244	16:45	01:45	09/01/10	Also prime TP
Rings	*Deadtime*	62	2010	245	10:32		1:27	245	11:59		0:20	0:05	2:00	rss3a*	M	55	245	11:30	16:30	09/02/10	
	RSS_137RI_OCC001_PRIME			245	10:52	14:36		245	12:19	16:03	3:44				M	63	245	11:30	16:30		Rings occ ingess & egress
	RSS_137RI_OCC002_PRIME			245	17:33	19:50		245	19:00	21:17	2:17				G	25	245	18:10	22:10		
	Deadtime					20:04				21:31	0:14				G	24	245	18:10	22:10		DSS-14 down. Had 15 then 24
	SCE7	63	2010	261	06:47	15:47	1:28	261	08:15	17:15	9:00	0:05	0:00	rssk-s	M	55	261	08:15	17:15	09/18/10	Also prime TP
	SCE7	63	2010	262	06:47	15:47	1:28	262	08:15	17:15	9:00	0:05	0:00	rssk-s	M	55	262	08:15	17:15	09/19/10	Also prime TP
	SCE7	63	2010	263	06:47	15:47	1:28	263	08:15	17:15	9:00	0:05	0:00	rssk-s	M	54	263	08:15	17:15	09/20/10	Also prime TP
	SCE7	63	2010	266	20:17	05:17	1:28	266	21:45	06:45	9:00	0:00	0:00	rss2-s	C	43	266	21:45	06:45	09/23/10	Also prime TP
	SCE7	63	2010	268	19:32	06:17	1:28	268	21:00	07:45	9:45	0:05	0:00	rssk-s	C	34	268	21:00	07:45	09/25/10	Shadow DSS-43 268/21:00-07:45
	SCE7	63	2010	269	20:17	05:17	1:28	269	21:45	06:45	9:00	0:00	0:00	rss2-s	C	45	269	21:45	06:45	09/26/10	Also prime TP
	SCE7	63	2010	272	20:02	05:02	1:28	272	21:30	06:30	9:00	0:05	0:00	rssk-s	C	34	272	21:30	06:30	09/29/10	Also prime TP
	SCE7	63	2010	274	19:47	04:47	1:28	274	21:15	06:15	9:00	0:00	0:00	rss2-s	C	43	274	21:15	06:15	10/01/10	Also prime TP
	SCE7	63	2010	276	13:32	22:32	1:28	276	15:00	00:00	9:00	0:00	0:00	rss2-s	G	15	276	15:00	00:00	10/03/10	Also prime TP
	SCE7	63	2010	278	05:47	14:47	1:28	278	07:15	16:15	9:00	0:05	0:00	rssk-s	M	55	278	07:15	16:15	10/05/10	Also prime TP
	SCE7	63	2010	279	19:32	04:32	1:28	279	21:00	06:00	9:00	0:00	0:00	rss2-s	C	43	279	21:00	06:00	10/06/10	Also prime TP
	SCE7	63	2010	281	19:32	04:32	1:28	281	21:00	06:00	9:00	0:00	0:00	rss2-s	C	45	281	21:00	06:00	10/08/10	Also prime TP
	SCE7	63	2010	283	19:17	04:17	1:28	283	20:45	05:45	9:00	0:00	0:00	rss2-s	C	43	283	20:45	05:45	10/10/10	Also prime TP
BEGIN SOLSTICE MISSION (XXM) 2010-284-04:17:00																					
XD	RSS_139EA_SCE7014_RSS	64	2010	284	19:17	04:17	1:28	284	20:45	05:45	9:00	0:00	0:00	rss2	C	45	284	20:45	05:45	10/11/10	Also prime TP
XD	RSS_139EA_SCE7015_RSS	64	2010	285	19:17	04:17	1:28	285	20:45	05:45	9:00	0:00	0:00	rss2	C	45	285	20:45	05:45	10/12/10	Also prime TP
XD	RSS_139EA_USOPIM001_RSS	64	2010	286	19:17	04:17	1:28	286	20:45	05:45	9:00	0:05	2:00	rssk-s	C	34	286	20:45	05:45	10/13/10	Also prime TP. 3-hr USO
XD	RSS_140EA_PIM001_RSS	64	2010	304	04:18	13:18	1:27	304	05:45	14:45	9:00	2:00	0:00	rssk-s	M	55	304	05:45	14:45	10/31/10	Also prime TP
XD	RSS_141EN_GRAVORT001_RSS	64	2010	324	10:50	19:50	1:25	324	12:15	21:15	9:00	0:05	0:00	rssk-s	G	26	324	12:15	21:15	11/20/10	DSS-26 also prime TP
																55	324	12:15	13:15		DSS-25 down from 311-346
																34	324	17:35	21:15		
XD	RSS_141EN_GRAVORT002_RSS	65	2010	329	10:20	19:20	1:25	329	11:45	20:45	9:00	0:05	0:00	rssk-s	G	26	329	11:45	20:45	11/25/10	DSS-26 also prime TP
																~~55~~	~~329~~	~~11:45~~	~~13:55~~		
																34	329	17:15	20:45		
SOST	RSS_141EN_KADOWN001_RSS	65	2010	333	02:36	11:36	1:24	333	04:00	13:00	9:00	0:05	0:00	rssk-s	M	55	333	04:00	11:00	11/29/10	Shadow DSS-63 333/04:00-13:00
SOST	RSS_141EN_GRAVITY001_PIE	65	2010	334	03:54	06:54	1:24	334	05:18	08:18	3:00	0:05	2:00	rssk	C	34	334	01:40	04:05	11/30/10	E12
	RSS_141EN_GRAVITY002_PIE			334	10:24	13:24		334	11:48	14:48	3:00				M	55	334	03:25	13:05		C/A 334/13:18 ERT, 47.9 km
	RSS_141EN_GRAVITY003_PIE			334	16:54	19:54		334	18:18	21:18	3:00				G	26	334	11:15	21:25		DSS-25 down from 311-346
															C	34	334	17:30	21:45		
	Ka-band ON for DSN testing	65	2010	345	15:52	00:52	1:23	345	17:15	02:15				IDAP	G	25	345	17:45	20:45	12/11/10	Shadow DSS-43 345/17:15-02:15
XD	RSS_143EA_USOPIM001_RSS	66	2011	019	07:12	16:12	1:18	019	08:30	17:30	9:00	2:00	2:00	rssk-s	G	26	019	08:30	17:30	01/19/11	Also prime TP. 3-hr USO
	Ka-band ON to Calibrate Monopulse	66	2011	027	12:58	21:58	1:15	027	14:13	23:13	9:00	0:05	0:00	IDAP	C	34	027	14:15	23:15	01/27/11	Also prime TP
SOST	RSS_144TI_GRAVORT003_RSS	66	2011	030	06:29	15:29	1:16	030	07:45	16:45	9:00	0:05	0:00	rssk-s	G	25	030	07:45	13:10	01/30/11	Shadow DSS-24 030/07:45-16:45
MAPS	RSS_145TI_GRAVORT001_RSS	66	2011	041	22:00	07:00	1:15	041	23:15	08:15	9:00	0:05	0:00	rssk-s	M	55	041	23:15	06:45	02/10/11	Shadow DSS-65 041/23:15-08:15
MAPS	RSS_145TI_GRAVORT002_RSS	66	2011	045	11:46	20:46	1:15	045	13:01	22:01	9:00	0:05	0:00	rssk-s	C	34	045	13:00	16:25	02/14/11	Shadow DSS-45 045/13:00-22:00
															G	~~25~~	~~045~~	~~13:00~~	~~16:30~~		

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
MAPS	RSS_145TI_KADOWN001_RSS	66	2011	048	11:31	20:31	1:14	048	12:45	21:45	9:00	0:05	0:00	rssk-s	C	34	048	13:05	21:45	02/17/11	Also prime TP. Bias ~17:46 ERT
															G	25	048	12:45	14:10		Added instead of DOY 045 ORT
TOST	RSS_145TI_GRAVITY001_RSS	66	2011	049	04:04	04:04	1:14	049	05:18	05:18	24:00	0:05	2:00	rssk	M	55	049	02:45	08:30	02/18/11	T74
															G	25	049	05:50	16:15		C/A 049/17:18 ERT, 3650 km
															C	34	049	11:50	22:55		C/A over Canberra
															M	55	049	22:15	05:30		
TOST	RSS_145TI_KADOWN002_RSS	66	2011	050	11:31	20:31	1:14	050	12:45	21:45	9:00	0:05	0:00	rssk-s	C	34	050	12:45	21:45	02/19/11	Shadow DSS-43. Bias ~21:15 ERT
Saturn	RSS_145EA_BORESIGHT002_PRIME	66	2011	059	22:17	23:17	1:13	059	23:30	00:30	1:00	0:05	2:00	rssk	M	55	059	22:00	07:00	02/28/11	Also TP. Keep Ka ON till EOT
MAPS	RSS_146EA_DSNMONCAL001_RSS	67	2011	090	08:48	17:48	1:12	090	10:00	19:00	9:00	2:00	0:00	rssk	C	34	090	10:00	19:00	03/31/11	Also prime TP
MAPS	RSS_147EA_DSNMONCAL002_RSS	67	2011	098	01:48	10:48	1:12	098	03:00	12:00	9:00	0:05	0:00	rssk	G	25	098	03:00	12:00	04/08/11	Also prime TP
MAPS	RSS_147EA_DSNMONCAL003_RSS	67	2011	103	01:33	10:33	1:12	103	02:45	11:45	9:00	0:05	0:00	rssk	G	26	103	02:45	11:45	04/13/11	Also prime TP
XD	RSS_147EA_USOPIM001_RSS	68	2011	117	00:33	09:33	1:12	117	01:45	10:45	9:00	2:00	2:00	rssk-s	G	26	117	01:45	10:45	04/27/11	Also prime TP. 3-hr USO
	DSS-34 Return To Service	68	2011	160	03:44	12:44	1:16	160	05:00	14:00		2:00								06/09/11	Shadow DSS-43
	DSS-34 Return To Service	68	2011	162	03:43	12:43	1:17	162	05:00	14:00		0:05								06/11/11	Shadow DSS-45
	DSS-34 Return To Service	68	2011	164	03:28	12:28	1:17	164	04:45	13:45		0:05								06/13/11	Shadow DSS-43
	DSS-34 Return To Service	68	2011	165	21:13	06:13	1:17	165	22:30	07:30		0:05								06/14/11	Shadow DSS-25
Saturn	RSS_150SA_OCCORT002_RSS	69	2011	191	01:39	10:39	1:21	191	03:00	12:00	9:00	2:00	0:00	rssk-s	C	34	191	03:00	12:00	07/10/11	Also prime TP
Saturn	RSS_150SA_OCCORT001_RSS	69	2011	192	01:39	10:39	1:21	192	03:00	12:00	9:00	0:00	0:00	rss2-s	C	43	192	03:00	12:00	07/11/11	Also prime TP
XD	RSS_150SA_OCCORT003_RSS	69	2011	196	01:24	10:24	1:21	196	02:45	11:45	9:00	0:05	0:00	rssk-s	C	34	196	02:45	11:45	07/15/11	Also prime TP
XD	RSS_151EA_USOPIM001_RSS	69	2011	202	18:38	03:38	1:22	202	20:00	05:00	9:00	2:00	2:00	rssk-s	G	25	202	20:00	05:00	07/21/11	Also prime TP
Saturn	RSS_151SA_KADOWN001_RSS	69	2011	212	18:06	03:06	1:24	212	19:30	04:30	9:00	0:05	0:00	rssk-s	G	25	212	19:30	04:30	07/31/11	Shadow DSS-14
Saturn	*Deadtime*	69	2011	213	03:06		1:24	213	04:30		0:20	0:05	2:00	rss3a*	C	34	213	02:00	08:15	08/01/11	Goldstone downlink before occ
	RSS_151SA_OCCIANDE001_PIE				03:26	05:51			04:50	07:15	2:25				C	43	213	02:00	08:15		
	Deadtime					06:11				07:35	0:20										
Saturn	RSS_151SA_KADOWN001_RSS	69	2011	214	17:51	02:51	1:24	214	19:15	04:15	9:00	0:05	0:00	rssk-s	G	25	214	19:15	04:15	08/02/11	Shadow DSS-14
XD	RSS_153EA_BORESIGHT002_PRIME	70	2011	250	17:48	18:48	1:27	250	19:15	20:15	1:00	2:00	2:00	rssk	G	25	250	17:15	02:15	09/07/11	Also prime TP
XD	RSS_154EA_SCE8001_RSS	70	2011	270	07:02	16:02	1:28	270	08:30	17:30	9:00	0:00	0:00	rss2-s	M	63	270	08:30	17:30	09/27/11	Also prime TP
XD	RSS_154EA_SCE8002_RSS	70	2011	273	14:17	23:17	1:29	273	15:46	00:46	9:00	0:00	0:00	rss2-s	G	14	273	15:45	00:50	09/30/11	Also prime TP
SOST	RSS_154EA_SCE8003_RSS	70	2011	275	14:17	00:17	1:29	275	15:46	01:46	10:00	0:00	0:00	rss2-s	G	14	275	15:45	00:50	10/02/11	Also prime TP
															C	43	275	00:25	01:50		Also prime TP
	X-band track	70	2011	276	14:01	23:06	1:29	276	15:30	00:35	9:05	0:00	0:00	dfpw	G	15	276	15:30	00:35	10/03/11	Also prime TP
XD	RSS_154EA_SCE8005_RSS	70	2011	279	20:16	05:16	1:29	279	21:45	06:45	9:00	0:05	0:00	rssk-s	C	45	279	21:45	03:45	10/06/11	Also prime TP
XD	RSS_154EA_SCE8006_RSS	70	2011	280	20:16	05:16	1:29	280	21:45	06:45	9:00	0:05	0:00	rssk-s	C	34	280	21:45	06:45	10/07/11	Also prime TP
XD	RSS_154EA_SCE8007_RSS	70	2011	281	20:16	05:16	1:29	281	21:45	06:45	9:00	0:00	0:00	rss2-s	C	43	281	21:45	06:45	10/08/11	Also prime TP
XD	RSS_155EA_SCE8008_RSS	70	2011	284	20:01	05:01	1:29	284	21:30	06:30	9:00	0:00	0:00	rss2-s	C	43	284	21:30	06:30	10/11/11	Also prime TP. On thrusters
XD	RSS_155EA_SCE8009_RSS	70	2011	285	20:01	05:01	1:29	285	21:30	06:30	9:00	0:05	0:00	rssk-s	C	34	286	00:30	06:20	10/13/11	Conjunction day. RCS within 3 deg
XD	RSS_155EA_SCE8010_RSS	70	2011	287	06:31	14:46	1:29	287	08:00	16:15	8:15	0:05	0:00	rssk-s	M	55	287	08:00	16:15	10/14/11	Also prime TP
XD	RSS_155EA_SCE8011_RSS	70	2011	288	06:01	15:01	1:29	288	07:30	16:30	9:00	0:05	0:00	rssk-s	M	55	288	07:30	16:30	10/15/11	Also prime TP. On thrusters
XD	RSS_155EA_SCE8012_RSS	70	2011	289	06:01	15:01	1:29	289	07:30	16:30	9:00	0:05	0:00	rssk-s	M	55	289	07:30	16:30	10/16/11	Also prime TP
XD	RSS_155EA_SCE8013_RSS	70	2011	290	05:46	14:46	1:29	290	07:15	16:15	9:00	0:05	0:00	rssk-s	M	54	290	07:15	16:15	10/17/11	Also prime TP
XD	RSS_155EA_SCE8014_RSS	70	2011	291	05:46	14:46	1:29	291	07:15	16:15	9:00	0:00	0:00	rss2-s	M	63	291	07:15	16:15	10/18/11	Also prime TP
SOST	RSS_155EA_SCE8015_RSS	70	2011	292	14:06	04:31	1:29	292	15:35	06:00	14:25	0:00	0:00	rss2-s	G	14	292	15:35	21:00	10/19/11	Also prime TP
															C	43	292	20:40	03:00		Also prime TP
XD	RSS_155EA_SCE8016_RSS	70	2011	296	19:17	04:17	1:29	296	20:46	05:46	9:00	0:05	0:00	rssk-s	C	34	296	20:45	05:50	10/23/11	Also prime TP
XD	RSS_155EA_SCE8017_RSS	70	2011	298	05:32	14:32	1:29	298	07:01	16:01	9:00	0:00	0:00	rss2-s	M	63	298	07:00	16:00	10/25/11	Also prime TP
XD	RSS_155EA_SCE8018_RSS	70	2011	299	05:17	14:17	1:29	299	06:46	15:46	9:00	0:05	0:00	rssk-s	M	55	299	06:45	15:45	10/26/11	Also prime TP
XD	RSS_155EA_SCE8019_RSS	70	2011	300	05:17	14:17	1:28	300	06:45	15:45	9:00	0:05	0:00	rssk-s	M	55	300	06:45	15:45	10/27/11	Also prime TP
MAPS	RSS_157EA_USOPIM001_RSS	71	2011	325	17:33	02:33	1:27	325	19:00	04:00	9:00	2:00	2:00	rssk-s	C	25	325	19:00	22:25	11/21/11	TP. USO no rolling 1st 3-hrs
	RSS_157DI_GRAVORT001_RSS	71	2011	325	17:33	20:58	1:27	325	19:00	22:25	3:25				G	25	Above DSS-25 pass				Tracking continues over DSS-43
XD	RSS_157DI_GRAVORT002_RSS	71	2011	333	10:49	19:49	1:26	333	12:15	21:15	9:00	0:05	0:00	rssk-s	G	25	333	12:15	21:00	11/29/11	Also prime TP
																55	333	12:15	14:00		
XD	RSS_158DI_GRAVORT003_RSS	71	2011	339	16:49	01:49	1:26	339	18:15	03:15	9:00	0:05	0:00	rssk-s	C	34	339	18:15	03:15	12/05/11	Also prime TP
XD	RSS_158DI_GRAVORT004_RSS	71	2011	342	02:49	11:49	1:26	342	04:15	13:15	9:00	0:05	0:00	rssk-s	M	55	342	04:15	10:15	12/08/11	Also prime TP
SOST	RSS_158DI_KADOWN001_RSS	71	2011	345	02:35	11:35	1:25	345	04:00	13:00	9:00	0:05	0:00	rssk-s	M	55	345	04:00	13:00	12/11/11	Also prime TP. No Bias
SOST	*Deadtime (X-band to Earth)*	71	2011	346	01:00	01:09	1:25	346	02:25	02:34	0:09	0:05	2:00	rssk	C	34	345	23:00	04:15	12/11/11	First segment at low EL angles
	RSS_158DI_GRAVITY001_PIE			346	01:09	04:09		346	02:34	05:34	3:00				M	55	346	03:40	13:00		D3 C/A 346/11:04 ERT, 100 km
	RSS_158DI_GRAVITY002_PIE			346	08:09	11:09		346	09:34	12:34	3:00				G	25	346	11:05	21:10		DSS-25 till set. Covers part of GSE
	RSS_158DI_GRAVITY003_PIE			346	14:39	17:39		346	16:04	19:04	3:00										No Bias
SOST	RSS_158DI_KADOWN002_RSS	71	2011	346	17:40	02:35	1:25	346	19:05	04:00	8:55	0:05	0:00	rssk-s	C	34	346	19:05	04:00	12/12/11	Shadow DSS-43. No Bias

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
	USO Anomaly	71	2011											dfpw	C	43	357	17:15	02:15	12/23/11	No USO signal. 2-way signal OK
	USO Anomaly	71	2011											dfpw	C	43	359	16:00	02:00	12/25/11	USO Inhibit. 1-way AUX OSC ~2248
	USO Anomaly	71	2011											dfpw	C	43	361	17:00	01:20	12/27/11	Recorded data
SATURN_159_160	RSS_159EA_DSNMONCAL001_RSS	71	2012	009	08:23	17:23	1:22	009	09:45	18:45	9:00	2:00	0:00	rssk-s	G	25	009	09:45	18:45	01/09/12	Also prime TP. Power Cycle USO
SATURN_159_160	RSS_159EA_DSNMONCAL002_RSS	71	2012	012	00:39	09:39	1:21	012	02:00	11:00	9:00	0:05	0:00	rssk-s	M	55	012	05:15	10:15	01/12/12	Also prime TP
~~SATURN_159_160~~	~~RSS_160EA_DSNMONCAL001_RSS~~	~~71~~	~~2012~~	~~018~~	~~14:10~~	~~23:10~~	~~1:20~~	~~018~~	~~15:30~~	~~00:30~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~018~~	~~15:30~~	~~00:30~~	~~01/18/12~~	DSS-43 track only. Ka band ON
	USO Troubleshooting	71	2012	020	14:10	23:10	1:20	020	15:30	00:30	9:00	0:00	0:00	rss2/IDAF	C	43	020	15:30	00:30	01/20/12	USO Enable for 1hr5min. 55min with TLM off
XD_160_161	RSS_160EA_DSNMONCAL002_RSS	72	2012	032	06:57	15:57	1:18	032	08:15	17:15	9:00	0:05	0:00	rssk-s	G	26	032	08:15	17:15	02/01/12	Also prime TP
XD_160_161	RSS_160EA_USOPIM001_RSS	72	2012	038	06:32	15:32	1:18	038	07:50	16:50	9:00	2:00	2:00	rssk-s	G	25	038	08:00	17:00	02/07/12	Also prime TP. No rolling 1st 3 hrs
~~TOST_T82~~	~~TI LGA Gravity Opportuninty - T82, Rev 161~~ ~~RSS_161EA_LGAGRAV001_RSS~~	~~72~~	~~2012~~	~~050~~	~~04:43~~	~~12:43~~	~~1:16~~	~~050~~	~~05:59~~	~~13:59~~	~~8:00~~	~~0:00~~	~~0:00~~	~~dfpw~~	~~M~~ ~~G~~	~~63~~ ~~14~~	~~050~~ ~~050~~	~~03:00~~ ~~06:45~~	~~09:10~~ ~~14:20~~	~~02/19/12~~	~~BOE > 55 degrees~~
	AUX OSC Frequency Drift Characterization	72	2012	067	04:46	13:46	1:14	067	04:46	13:46	9:00	0:05	0:00	rssk/IDAF	G	25	067	06:00	15:00	03/07/12	Also prime TP
	AUX OSC Frequency Drift Characterization	72	2012	068	11:01	20:01	1:14	068	11:01	20:01	9:00	0:00	0:00	rss2/IDAF	C	43	068	12:15	21:15	03/08/12	Also prime TP
	AUX OSC Frequency Drift Characterization	72	2012	073	04:31	13:41	1:14	073	04:31	13:41	9:00	0:05	2:00	rssk/IDAF	G	25	073	05:45	14:45	03/13/12	Also prime TP. 1-hr Precal
	AUX OSC Frequency Drift Characterization	72	2012	074	10:46	19:46	1:14	074	10:46	19:46	9:00	0:00	2:00	rss2/IDAF	C	43	074	12:00	21:00	03/14/12	Also prime TP
XD_162_163	RSS_163EA_BORESIGHT002_PRIME	72	2012	081	05:47	06:47	1:13	081	07:00	08:00	1:00	2:00	2:00	rssk-s	G	25	081	05:00	13:45	03/21/12	Prime TP. TLM OFF 1hr Boresight
~~XD_163_164~~	~~RSS_163EA_DSNMONCAL001_RSS~~	~~72~~	~~2012~~	~~094~~	~~03:02~~	~~12:02~~	~~1:13~~	~~094~~	~~04:15~~	~~13:15~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~G~~	~~26~~	~~094~~	~~04:15~~	~~13:15~~	~~04/03/12~~	~~DSS-25 prime. DSS-26 downtime~~
XD_164	RSS_164EA_DSNMONCAL001_RSS	73	2012	100	02:33	11:33	1:13	100	03:46	12:46	9:00	0:05	0:00	rssk-s	G	25	100	03:45	12:45	04/09/12	Also prime TP
	RSS_164EN_GRAVORT001_RSS	73	2012	100	02:33	04:27	1:13	100	03:46	05:40	1:54	0:05	0:00	rssk-s	M	55	100	03:45	05:40		
~~SOST_164 E18~~	~~EN LGA Gravity Opportunity - E18, Rev 164~~	~~73~~	~~2012~~	~~105~~	~~13:02~~	~~15:02~~	~~1:13~~	~~105~~	~~14:15~~	~~16:15~~	~~2:00~~	~~0:00~~	~~0:00~~	~~dfpw~~	~~C~~	~~43~~				~~04/14/12~~	~~BOE > 55 degrees~~
SOST_164 E18	RSS_164EA_DSNMONCAL003_RSS	73	2012	107	08:18	17:18	1:12	107	09:30	18:30	9:00	0:05	0:00	rssk-s	C	34	107	09:30	16:05	04/16/12	Also prime TP
XD_164_165	RSS_164EN_GRAVORT002_RSS	73	2012	114	01:33	10:33	1:13	114	02:46	11:46	9:00	0:05	0:00	rssk-s	G M	25 55	114 114	02:45 02:45	11:50 04:40	04/23/12	DSS-25 also prime TP
	DSS-26 RTS Engineering Demo														G	26	114	03:00	07:00		
XD_164_165	RSS_165EN_GRAVORT001_RSS	73	2012	117	07:32	16:32	1:13	117	08:45	17:45	9:00	0:05	0:00	rssk-s	C	34	117	08:45	17:30	04/26/12	Also prime TP
XD_164_165	RSS_165EN_GSE001_RSS	73	2012	122	01:02	10:02	1:13	122	02:15	11:15	9:00	0:05	0:00	rssk-s	G	25	122	02:15	11:15	05/01/12	Shadow DSS-14 122/02:15-11:15
	RSS_165EN_GRAVORT002_RSS	73	2012	122	06:07	10:02	1:13	122	07:20	11:15	3:55	0:05	0:00	rssk-s	~~G~~	~~34~~	~~122~~	~~07:20~~	~~11:15~~		No Bias
SOST_165 E19	RSS_165EN_GRAVITY001_PIE RSS_165EN_GRAVITY002_PIE RSS_165EN_GRAVITY003_PIE	73	2012	123	01:32 08:02 14:02	04:32 11:02 17:02	1:13	123	02:45 09:15 15:15	05:45 12:15 18:15	3:00 3:00 3:00	0:05	2:00	rssk-s	M G C	55 25 34	122 123 123	23:30 02:00 07:20	04:05 11:50 18:45	05/01/12	E19 C/A 123/10:45 ERT, 77 km No Bias C/A over Canberra. Start 34 later?
SOST_165 E19	RSS_165EN_KADOWN002_RSS	73	2012	124	00:47	09:47	1:13	124	02:00	11:00	9:00	0:05	0:00	rssk-s	G	25	124	04:30	11:00	05/03/12	Shadow DSS-14 0215-1100. No Bias
MAPS_165_166	RSS_166EA_USOPIM001_RSS	73	2012	137	23:46	08:46	1:14	138	01:00	10:00	9:00	2:00	2:00	rssk-s	G	26	138	01:00	10:00	05/17/12	Also prime TP. No rolling 1st 3 hrs
TOST_T83	RSS_166SA_OCCORT001_RSS	73	2012	143	16:01	02:01	1:14	143	17:15	03:15	10:00	0:00	0:00	rss2-s	M G	63 14	143 144	17:15 01:30	02:15 03:15	05/23/12	Also prime TP
XD_166_167	RSS_166SA_OCCORT002_RSS	73	2012	147	23:16	08:16	1:14	148	00:30	09:30	9:00	0:05	0:00	rssk-s	G	25	148	00:30	09:30	05/27/12	Also prime TP
XD_166_167	RSS_167SA_OCCORT001_RSS	73	2012	149	23:00	08:00	1:15	150	00:15	09:15	9:00	0:05	0:00	rssk-s	G	25	150	00:15	09:15	05/29/12	Also prime TP
XD_166_167	RSS_167SA_OCCORT002_RSS	73	2012	152	15:15	00:15	1:15	152	16:30	01:30	9:00	0:05	0:00	rssk-s	M	~~55~~	~~152~~	~~16:30~~	~~01:30~~	05/31/12	Coverage at DSS-63 152/17:10-23:50
XD_166_167	RSS_167SA_OCCORT003_RSS	73	2012	153	15:00	00:00	1:15	153	16:15	01:15	9:00	0:05	0:00	rssk-s	M	55	153	19:15	01:15	06/01/12	Also prime TP
RINGS_167	*Deadtime* RSS_167RI_OCC001_PIE *Deadtime*	73	2012	Included below 156 Included above	21:02	01:17	1:15	Included below 156 Included above	22:17	02:32	4:15	0:05	2:00	rssk+S	M M G G	63 55 25 14	156 156 156 156	19:30 21:45 23:10 23:10	01:45 01:45 03:00 03:00	06/04/12	Ingress RSSK then S-band at start of obs Slow rates for turns to/from Earth ~25 min trun at start to Earth point. No turn at end
RINGS_167	RSS_167RI_KADOWN001_RSS	73	2012	157	22:29	07:29	1:15	157	23:44	08:44	9:00	0:05	0:00	rssk-s	G	25	158	03:20	08:45	06/06/12	Shadow DSS-14 158/00:00-08:45
XD_167_168	RSS_167SA_OCCORT004_RSS	73	2012	165	04:14	13:14	1:16	165	05:30	14:30	9:00	0:05	0:00	rssk-s	C	34	165	07:30	14:30	06/13/12	Shadow DSS-43 165/05:30-14:30
XD_167_168	RSS_167SA_OCCORT005_RSS	73	2012	167	03:58	12:58	1:17	167	05:15	14:15	9:00	0:00	0:00	rss2-s	C	43	167	05:15	12:15	06/15/12	Also prime TP
XD_167_168	RSS_168SA_OCCORT001_RSS	73	2012	169	03:58	12:58	1:17	169	05:15	14:15	9:00	0:05	0:00	rssk-s	C	34	169	05:15	14:15	06/17/12	Also prime TP
XD_168	RSS_168RI_KADOWN001_RSS	74	2012	179	14:15	22:55	1:18	179	15:33	00:13	8:40	0:05	0:00	rssk-s	M	~~55~~	~~179~~	~~15:30~~	~~00:15~~	06/27/12	Shadow DSS-63 179/17:10-00:15
RINGS_168	*Deadtime* RSS_168RI_OCC001_PRIME *Deadtime*	74	2012	Included below 180 Included above	08:51	12:46	1:18	Included below 180 Included above	10:09	14:04	3:55	0:05	01:19	rssk+S	C C	43 34	180 180	07:10 09:55	14:35 14:15	06/28/12	Ingress. Ends at low elevations Ends at 1240, not 1246 SCET for bias Ka warmup 01:19. S-band 0. No turns
RINGS_168	RSS_168RI_KADOWN002_RSS	74	2012	181	13:27	22:27	1:18	181	14:45	23:45	9:00	0:05	0:00	rssk-s	M	55	181	17:45	23:45	06/29/12	Also prime TP
MAPS_168_169	RSS_168SA_OCCORT002_RSS	74	2012	184	12:56	21:56	1:19	184	14:15	23:15	9:00	0:05	0:00	rssk-s	M	55	184	14:15	23:15	07/02/12	DSS-55 also prime TP
	Ka-band Check														M	~~54~~	~~184~~	~~14:15~~	~~23:15~~		
	USO Test Using DST-B	74	2012	186										S-band	C	43	186	04:00	13:00	07/04/12	USO enabled 08:25-09:25
MAPS_168_169	RSS_169SA_OCCORT001_RSS	74	2012	194	02:10	11:10	1:20	194	03:30	12:30	9:00	0:00	0:00	rss2-s	C	43	194	03:55	12:30	07/12/12	Also prime TP
MAPS_168_169	RSS_169SA_OCCORT002_RSS	74	2012	196	02:10	11:10	1:20	196	03:30	12:30	9:00	0:05	0:00	rssk-s	C	34	196	03:30	12:30	07/14/12	Also prime TP
MAPS_168_169	RSS_169SA_OCCORT003_RSS	74	2012	198	12:09	21:09	1:21	198	13:30	22:30	9:00	0:00	0:00	rss2-s	M	~~63~~	~~198~~	~~13:30~~	~~22:30~~	07/16/12	Coverage at DSS-14 198/20:35-22:20
MAPS_168_169	RSS_169SA_OCCORT004_RSS	74	2012	201	01:54	10:54	1:21	201	03:15	12:15	9:00	0:05	0:00	rssk-s	C	34	201	03:30	12:15	07/19/12	Also prime TP

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
RINGS_169	*Deadtime*	74	2012	204	06:55		1:22	204	08:17		0:20	0:05	01:20	rssk+S	C	43	204	05:10	13:20	07/22/12	Ingress
	RSS_169RI_OCC001_PIE			204	07:15	10:11			08:37	11:33	2:56				C	34	204	07:40	13:20		Ends at low elevations
Saturn	RSS_169SA_OCCIN001_PIE			204	10:11	11:43			11:33	13:05	1:32										DSS-43 overlaps preceding DSS-14 w/ EOT 1545
	Deadtime					12:03				13:25	0:20										Ka warmup 01:20. S 00:21
RINGS_169	RSS_169RI_KADOWN001_RSS	74	2012	205	11:38	20:38	1:22	205	13:00	22:00	9:00	0:05	0:00	rssk-s	M	~~55~~	~~205~~	~~16:30~~	~~22:00~~	07/23/12	Shadow DSS-63 205/13:00-22:00
	RSS_169SA_OCCORT005_RSS	74	2012	205	11:38	20:38	1:22	205	13:00	22:00	9:00	0:05	0:00	rssk-s	M	~~55~~	~~Above DSS-55 pass~~				55 weekly maint till 1530. D/L only
XD_169_170	RSS_169SA_OCCORT006_RSS	74	2012	213	11:07	20:07	1:23	213	12:30	21:30	9:00	0:05	0:00	rssk-s	M	~~55~~	~~213~~	~~12:30~~	~~21:30~~	07/31/12	DSS-63 213/12:30-21:30
	OCCORT Late Addition	74	2012	215	00:52	09:52	1:23	215	02:15	11:15	9:00	0:05	0:00	rssk	C	34	215	02:15	11:15	08/02/12	Also prime TP
XD_169_170	RSS_170EA_USOPIM001_RSS	74	2012	219	00:36	09:36	1:24	219	02:00	11:00	9:00	2:00	2:00	rssk-s	C	~~34~~	~~219~~	~~02:00~~	~~11:00~~	08/06/12	Also prime TP. No rolling 1st 3 hrs
															G	26	219	02:15	05:15		Coverage switched to Goldstone
XD_169_170	RSS_170RI_KADOWN001_RSS	74	2012	225	00:21	09:21	1:24	225	01:45	10:45	9:00	0:05	2:00	rssk-s	C	34	225	05:55	12:05	08/12/12	DSS-43 BOT 0745. Also cover occ
RINGS_170	*Deadtime*	74	2012	225	09:21		1:24	225	10:45		0:20	0:05	2:00	rssk+S	C	34	225	05:55	12:05	08/12/12	Canberra coverage continues from GSE
	RSS_170SA_OCCOUT001_PRIME			225	09:41	12:16		225	11:05	13:40	2:35				C	43	225	07:45	12:05		Atmospheric Ingress & Egress
	RSS_170RI_OCC001_PIE			225	12:16	16:13		225	13:40	17:37	3:57				M	55	225	11:25	18:30		Rings Egress
	Deadtime			225		16:33		225		17:57	0:20				M	63	225	11:25	18:30		S-band warmup 01:45
SATURN_170_171	RSS_170SA_OCCORT001_RSS	74	2012	229	17:35	02:35	1:25	229	19:00	04:00	9:00	0:05	0:00	rssk-s	G	26	229	19:00	04:00	08/16/12	Also prime TP
SATURN_170_171	RSS_170SA_OCCORT002_RSS	74	2012	233	17:35	02:35	1:25	233	19:00	04:00	9:00	0:05	0:00	rssk-s	G	26	233	19:00	04:00	08/20/12	Shadow DSS-14 233/19:00-23:00
SATURN_170_171	RSS_171SA_OCCORT001_RSS	74	2012	237	17:19	02:19	1:26	237	18:45	03:45	9:00	0:00	0:00	rss2-s	G	14	237	18:45	03:45	08/24/12	DSS-63 also prime TP
															M	63	237	18:45	20:30		
SATURN_171	RSS_171SA_OCCORT002_RSS	75	2012	239	09:34	18:34	1:26	239	11:00	20:00	9:00	0:05	0:00	rssk-s	M	55	239	11:00	20:00	08/26/12	Also prime TP
SATURN_171	RSS_171SA_OCCORT003_RSS	75	2012	241	09:19	18:19	1:26	241	10:45	19:45	9:00	0:05	0:00	rssk-s	M	55	241	14:45	19:45	08/28/12	Also prime TP
SATURN_171	RSS_171RI_KADOWN001_RSS	75	2012	245	22:48	07:48	1:27	246	00:15	09:15	9:00	0:05	0:00	rssk-s	C	34	246	03:55	09:15	09/02/12	Shadow DSS-43
SATURN_171	Earth point	75	2012	246	08:28	14:16	1:27	246	09:55	15:43	5:48	0:05	2:00	rss3s*	M	55	246	10:15	20:00	09/02/12	
	Deadtime			246	14:16		1:27	246	15:43		0:20				M	63	246	12:10	20:00		Ingress
	RSS_171SA_OCCIN_PIE			246	14:36	18:39		246	16:03	20:06	4:03				G	26	246	17:35	20:40		No turns at end
	Deadtime			246		18:59		246		20:26	0:20				G	14	246	17:35	20:40		
XD_171_172	RSS_171EA_BORESIGHT002_PRIME	75	2012	250	00:48	01:48	1:27	250	02:15	03:15	1:00	2:00	2:00	rssk	C	34	250	00:15	09:15	09/06/12	Prime TP. TLM OFF 1hr Boresight
XD_172_173	RSS_172EA_SCE9001_RSS	75	2012	279	07:16	16:16	1:29	279	08:45	17:45	9:00	0:05	0:00	rssk-s	M	55	279	08:45	12:45	10/05/12	Also prime TP
XD_172_173	RSS_172EA_SCE9002_RSS	75	2012	280	07:01	16:01	1:29	280	08:30	17:30	9:00	0:05	0:00	rssk-s	M	55	280	08:30	17:30	10/06/12	Also prime TP
XD_172_173	RSS_173EA_SCE9003_RSS	75	2012	281	07:01	16:01	1:29	281	08:30	17:30	9:00	0:05	0:00	rssk-s	M	55	281	08:30	17:30	10/07/12	Also prime TP
XD_172_173	RSS_173EA_SCE9004_RSS	75	2012	282	07:01	16:01	1:29	282	08:30	17:30	9:00	0:00	0:00	rss2-s	M	65	282	09:45	17:30	10/08/12	TP (no switch: 55 WM, 54 down)
~~XD_172_173~~	~~RSS_173EA_SCE9005_RSS~~	~~75~~	~~2012~~	~~286~~	~~06:46~~	~~15:46~~	~~1:29~~	~~286~~	~~08:15~~	~~17:15~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~M~~	~~55~~	~~286~~	~~08:15~~	~~17:15~~	~~10/12/12~~	~~DSS-55 TP~~ **SCO Propellant Gauging start**
~~XD_172_173~~	~~RSS_173EA_SCE9006_RSS~~	~~75~~	~~2012~~	~~288~~	~~14:00~~	~~23:00~~	~~1:29~~	~~288~~	~~15:29~~	~~00:29~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~G~~	~~14~~	~~288~~	~~15:30~~	~~00:30~~	~~10/14/12~~	Also prime TP
~~XD_172_173~~	~~RSS_173EA_SCE9007_RSS~~	~~75~~	~~2012~~	~~290~~	~~14:00~~	~~23:00~~	~~1:30~~	~~290~~	~~15:30~~	~~00:30~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~G~~	~~14~~	~~290~~	~~15:30~~	~~00:30~~	~~10/16/12~~	Also prime TP
~~RINGS_173~~	~~RSS_173EA_SCE9008_RSS~~	~~75~~	~~2012~~	~~291~~	~~14:00~~	~~23:00~~	~~1:30~~	~~291~~	~~15:30~~	~~00:30~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~G~~	~~26~~	~~291~~	~~15:30~~	~~00:30~~	~~10/17/12~~	DSS-15 prime
~~RINGS_173~~	~~RSS_173EA_SCE9009_RSS~~	~~75~~	~~2012~~	~~292~~	~~20:15~~	~~05:15~~	~~1:30~~	~~292~~	~~21:45~~	~~06:45~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~C~~	~~43~~	~~292~~	~~21:45~~	~~06:45~~	~~10/18/12~~	Also prime TP
	~~RSS_173SA_OCCORT001_RSS~~	~~75~~	~~2012~~	~~292~~	~~20:15~~	~~05:15~~	~~1:30~~	~~292~~	~~21:45~~	~~06:45~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~C~~	~~43~~	~~Above DSS-43 pass~~				DSS-43 downtime 252-300
~~RINGS_173~~	~~RSS_173EA_SCE9010_RSS~~	~~75~~	~~2012~~	~~293~~	~~20:00~~	~~05:00~~	~~1:29~~	~~293~~	~~21:29~~	~~06:29~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~293~~	~~21:30~~	~~06:30~~	~~10/19/12~~	DSS-45 prime
	~~RSS_173SA_OCCORT002_RSS~~	~~75~~	~~2012~~	~~293~~	~~20:00~~	~~05:00~~	~~1:29~~	~~293~~	~~21:29~~	~~06:29~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~Above DSS-34 pass~~				
~~XD_173_174~~	~~RSS_173EA_SCE9011_RSS~~	~~75~~	~~2012~~	~~295~~	~~20:00~~	~~05:00~~	~~1:29~~	~~295~~	~~21:29~~	~~06:29~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~C~~	~~43~~	~~295~~	~~21:30~~	~~06:30~~	~~10/21/12~~	Also prime TP
~~XD_173_174~~	~~RSS_173EA_SCE9012_RSS~~	~~75~~	~~2012~~	~~297~~	~~19:45~~	~~04:45~~	~~1:29~~	~~297~~	~~21:14~~	~~06:14~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~C~~	~~45~~	~~297~~	~~21:15~~	~~06:15~~	~~10/23/12~~	Also prime TP
~~XD_173_174~~	~~RSS_173EA_SCE9013_RSS~~	~~75~~	~~2012~~	~~299~~	~~19:45~~	~~04:45~~	~~1:30~~	~~299~~	~~21:15~~	~~06:15~~	~~9:00~~	~~0:00~~	~~0:00~~	~~rss2-s~~	~~C~~	~~43~~	~~299~~	~~21:15~~	~~06:15~~	~~10/25/12~~	Also prime TP. Conjunction Day
~~XD_173_174~~	~~RSS_173EA_SCE9014_RSS~~	~~75~~	~~2012~~	~~301~~	~~19:30~~	~~02:30~~	~~1:30~~	~~301~~	~~21:00~~	~~04:00~~	~~7:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~301~~	~~21:00~~	~~04:00~~	~~10/27/12~~	DSS-45 prime
	~~RSS_173SA_OCCORT003_RSS~~	~~75~~	~~2012~~	~~301~~	~~19:30~~	~~02:30~~	~~1:30~~	~~301~~	~~21:00~~	~~04:00~~	~~7:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~Above DSS-34 pass~~				
~~XD_173_174~~	~~RSS_173EA_SCE9015_RSS~~	~~75~~	~~2012~~	~~303~~	~~05:45~~	~~14:45~~	~~1:30~~	~~303~~	~~07:15~~	~~16:15~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rss2-s~~	~~M~~	~~65~~	~~303~~	~~07:15~~	~~16:15~~	~~10/29/12~~	Conjuction Day. SCO Propellant Gauging end
XD_173_174	RSS_174EA_SCE9016_RSS	75	2012	305	05:45	14:45	1:30	305	07:15	16:15	9:00	0:05	0:00	rssk-s	M	55	305	07:15	16:15	10/31/12	Also prime TP
XD_173_174	RSS_174EA_SCE9017_RSS	75	2012	307	05:30	14:30	1:30	307	07:00	16:00	9:00	0:00	0:00	rss2-s	M	63	307	07:00	16:00	11/02/12	Also prime TP
XD_174	RSS_174EA_SCE9018_RSS	76	2012	309	05:31	14:31	1:29	309	07:00	16:00	9:00	0:05	0:00	rssk-s	M	55	309	07:00	16:00	11/04/12	Also prime TP
XD_174	RSS_174EA_SCE9019_RSS	76	2012	311	05:16	14:16	1:29	311	06:45	15:45	9:00	0:00	0:00	rss2-s	M	63	311	06:45	15:20	11/06/12	Also prime TP
XD_174	RSS_174EA_SCE9020_RSS	76	2012	312	05:16	14:16	1:29	312	06:45	15:45	9:00	0:05	0:00	rssk-s	M	55	312	06:45	12:45	11/07/12	Also prime TP
XD_174	RSS_174EA_SCE9021_RSS	76	2012	313	12:46	21:46	1:29	313	14:15	23:15	9:00	2:00	2:00	rssk-s	G	25	313	14:15	22:50	11/08/12	Also prime TP
	RSS_174EA_USOPIM001_RSS	76	2012	313	12:46	21:46	1:29	313	14:15	23:15	3:00	2:00	2:00	rssk-s	G	25	Above DSS-25 pass				No rolling 1st 3-hrs
								313	19:10	23:15	4:05			rssk-s	C	34	313	19:10	22:55		
RINGS_174	*Deadtime*	76	2012	Included below			1:29	Included below				0:05	1:20	rss3s*	C	43	314	23:50	06:35	11/09/12	Ingress
	RSS_174RI_OCC001_PIE			315	01:34	04:55		315	03:03	06:24	3:21				C	34	315	02:30	06:35		43 downtime moved for occ
	Deadtime			Included above				Included above													No RSS turns
RINGS_174	RSS_174EA_SCE9022_RSS	76	2012	317	05:01	14:01	1:29	317	06:30	15:30	9:00	0:00	0:00	rss2-s	M	63	317	06:30	12:30	11/12/12	Also prime TP
TOST_174_T87	NAV Atmospheric Density	76	2012	318	05:22	15:22	1:29	318	06:51	16:51	10:00	0:05	2:00	rssk	C	34	318	03:30	06:45	11/13/12	T87 C/A 318/11:51 ERT
															M	55	318	06:10	14:35		Altitude 973 km. Thrusters C/A +/- 1hr
															G	25	318	13:30	17:20		40min turn at start. 30min turn at end

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
TOST_174_T87	RSS_174EA_SCE9023_RSS	76	2012	319	12:01	21:46	1:29	319	13:30	23:15	9:45	0:00	0:00	rss2-s	M	63	319	08:00	13:45	11/14/12	Also prime TP
															G	14	319	13:30	19:00		
SATURN_176	RSS_176EA_USOPIM001_RSS	76	2012	343	17:17	02:17	1:28	343	18:45	03:45	9:00	2:00	2:00	rssk-s	C	34	343	18:45	03:45	12/08/12	Also prime TP
SOST_177	RSS_177SA_OCCORT001_RSS	76	2012	358	17:19	02:34	1:26	358	18:45	04:00	9:15	0:00	0:00	rss2-s	C	45	358	18:45	04:00	12/23/12	Also prime TP
XD_177_178	RSS_177SA_OCCORT003_RSS	76	2012	362	16:04	01:04	1:26	362	17:30	02:30	9:00	0:05	0:00	rssk-s	C	34	362	17:30	22:30	12/27/12	Also prime TP
XD_177_178	RSS_177SA_OCCORT002_RSS	76	2012	364	16:05	01:05	1:25	364	17:30	02:30	9:00	0:05	0:00	rssk-s	C	34	364	17:30	02:30	12/29/12	Also prime TP
XD_177_178	RSS_178SA_OCCORT001_RSS	76	2012	366	02:05	11:05	1:25	366	03:30	12:30	9:00	0:00	0:00	rss2-s	M	63	366	03:30	12:30	12/31/12	Also prime TP
XD_177_178	RSS_178SA_OCCORT002_RSS	76	2013	002	02:05	11:05	1:25	002	03:30	12:30	9:00	0:05	0:00	rssk-s	M	55	002	03:30	06:45	01/02/13	Array. Shadow DSS-65 002/03:30-11:35
XD_177_178	RSS_178SA_OCCORT003_RSS	76	2013	003	02:05	11:05	1:25	003	03:30	12:30	9:00	0:05	0:00	rssk-s	M	55	003	03:30	10:10	01/03/13	Paritally Shadow DSS-26 003/10:40-12:30
SATURN_178	*Deadtime*	76	2013				1:25					0:05	2:00	rss2+Ka	C	45	004	23:15	03:40	01/04/13	DSS-43 downtime 2012/317 - 2013/161
	RSS_178SA_OCCOUT001_PIE			004	23:36	03:14		005	01:01	04:39	3:38				C	34	005	01:40	03:40		DSS-45 xmtr off limit ~0321 In custom period
	Deadtime			005		03:34		005		04:59	0:20				M	55	005	03:10	05:30		25m36s turn to EA. No RSS turn at end
															M	63	005	03:10	05:30		RSS2 004/213106 scet. RSS3RWAS 234147
	USO Power OFF	76	2013	009	20:00		1:24	009	21:24					real-time			009				
XD_179	RSS_179RI_KADOWN001_RSS	77	2013	017	08:37	17:37	1:23	017	10:00	19:00	9:00	0:05	0:00	rssk-s	G	25	017	10:00	19:00	01/17/13	Also prime TP
RINGS_179	*Deadtime*	77	2013	Included below			1:23	Included below				0:05	2:00	rss3s*	M	63	018	02:20	07:40	01/18/13	Ingress 63 xmtr on limit 018/02:44:02
	RSS_179RI_OCC001_PRIME			018	03:23	06:30		018	04:46	07:53	3:07				M	55	018	04:50	07:40		Turn to Earth ends at 035351 scet (30m51s)
	Deadtime			Included above				Included above													Turn from EA starts at 055708 scet (32m52s)
RINGS_179	RSS_179RI_KADOWN002_RSS	77	2013	019	08:37	17:37	1:23	019	10:00	19:00	9:00	0:05	0:00	rssk-s	G	25	019	10:00	16:45	01/19/13	Shadow DSS-14 019/10:00-19:00
XD_179_180	RSS_179SA_OCCORT001_RSS	77	2013	022	08:23	17:23	1:22	022	09:45	18:45	9:00	0:00	0:00	rss2-s	G	14	022	09:45	18:45	01/22/13	Shadow DSS-15 022/09:45-14:05
															C	45	022	14:30	18:45		
XD_179_180	RSS_180SA_OCCORT002_RSS	77	2013	027	08:08	17:08	1:22	027	09:30	18:30	9:00	0:05	0:00	rssk-s	G	25	027	09:30	18:30	01/27/13	DSS-25 also prime TP
															C	34	027	14:30	18:30		
XD_179_180	RSS_180SA_OCCORT001_RSS	77	2013	028	07:54	16:54	1:21	028	09:15	18:15	9:00	0:05	0:00	rssk-s	G	25	028	09:15	18:15	01/28/13	DSS-25 also prime TP
															C	34	028	14:15	17:40		
RINGS_180	RSS_180RI_OCC001_PRIME	77	2013	031	10:39	14:00	1:21	031	12:00	15:21	3:21	0:05	2:00	rss3s*	G	14	031	09:00	18:30	01/31/13	Real-time RSSK command at end of previous
	Deadtime			031	14:00	14:20		031	15:21	15:41	0:20				G	25	031	11:20	18:30		65 OTB pass (in XD segment) No RSS turns
	RSS_180SA_OCCOUT001_PIE			031	14:20	17:00		031	15:41	18:21	2:40				C	34	031	14:00	19:10		Ingress rings occ. Egress atmospheric
	Deadtime			031	17:00	17:20		031	18:21	18:41	0:20				C	45	031	14:05	18:15		DSS-43 downtime 2012/317 - 2013/161
RINGS_180	RSS_180TI_GRVORT001_RSS	77	2013	034	13:55	22:55	1:21	034	15:16	00:16	9:00	0:05	0:00	rssk-s	C	34	034	15:15	00:20	02/03/13	Also prime TP
XD_180_181	RSS_181TI_GRVORT001_RSS	77	2013	040	07:10	16:10	1:20	040	08:30	17:30	9:00	0:05	0:00	rssk-s	G	25	040	08:30	17:30	02/09/13	Also prime TP
XD_180_181	RSS_181TI_GRVORT002_RSS	77	2013	041	23:40	08:40	1:20	042	01:00	10:00	9:00	0:05	0:00	rssk-s	M	55	042	01:00	06:45	02/11/13	Shadow DSS-63 042/0100-1000
XD_180_181	RSS_181TI_GRVORT002_RSS	77	2013	042	23:41	08:26	1:19	043	01:00	09:45	8:45	0:05	0:00	rssk-s	M	55	043	01:00	07:30	02/12/13	Shadow DSS-63 043/0100-0945
RINGS_181	RSS_181TI_KADOWN001_RSS	77	2013	046	23:26	08:26	1:19	047	00:45	09:45	9:00	0:05	0:00	rssk-s	M	55	047	00:45	09:40	02/16/13	Shadow DSS-63 0045-0945. No Bias
TOST_181_T89	RSS_181TI_GRAVITY001_RSS e	77	2013	047	13:57	13:57	1:19	047	15:16	15:16	24:00	0:05	2:00	rssk-s	G	25	047	12:00	17:30	02/16/13	T89 1978 km
															C	34	047	13:00	01:00		C/A 048/03:16 ERT over Madrid
															M	55	048	00:30	09:35		No Bias Earth-point at 047/1310 ERT
															G	25	048	07:50	15:45		~15min uplink gap at C/M overlap
TOST_181_T89	RSS_181TI_KADOWN002_RSS	77	2013	048	23:11	08:11	1:19	049	00:30	09:30	9:00	0:05	0:00	rssk-s	M	55	049	00:30	09:30	02/18/13	Shadow DSS-63 w/ EOT 0815. No Bias
XD_181_182	RSS_182SA_GRVORT001_RSS	77	2013	051	22:57	07:57	1:18	052	00:15	09:15	9:00	0:05	0:00	rssk-s	M	55	052	00:15	06:50	02/21/13	Also prime TP
XD_181_182	RSS_182SA_OCCORT001_RSS	77	2013	053	06:27	15:27	1:18	053	07:45	16:45	9:00	0:05	0:00	rssk-s	G	25	053	07:45	16:45	02/22/13	DSS-25 also prime TP
															C	34	053	12:35	16:45		
XD_181_182	RSS_182SA_OCCORT002_RSS	77	2013	054	06:27	15:27	1:18	054	07:45	16:45	9:00	0:05	0:00	rssk-s	G	25	054	07:45	16:45	02/23/13	Shadow DSS-14 054/07:45-16:30
															C	34	054	12:30	16:45		
SATURN_182	*Deadtime (20 mins)*	77	2013	056	12:30	12:50	1:18	056	13:48	14:08	0:20	0:05	2:00	rss2+Ka	G	14	056	12:10	16:55	02/25/13	Ka-band ~1hr24min warm-up
	RSS_182SA_OCCOUT001_PIE			056	12:50	16:14		056	14:08	17:32	3:24				G	25	056	14:30	16:55		Goldstone for partial 70-m support & U/L
	Deadtime (20 mins)			056	16:14	16:34		056	17:32	17:52	0:20				C	34	056	14:30	18:25		Egress atmospheric occ No RSS turns
															C	45	056	14:30	18:25		DSS-43 downtime 2012/317 - 2013/161
XD_182_183	RSS_183RH_GRVORT001_RSS	77	2013	063	11:58	20:58	1:17	063	13:15	22:15	9:00	0:05	0:00	rssk-s	C	34	063	13:15	22:15	03/04/13	DSS-34 also prime TP
															G	25	063	13:15	16:25		
XD_182_183	RSS_183RH_KADOWN001_RSS	77	2013	067	05:29	14:29	1:16	067	06:45	15:45	9:00	0:05	0:00	rssk-s	G	25	067	06:45	15:45	03/08/13	Shadow DSS-14. No Bias
	RSS_183RH_GRVORT002_RSS	77	2013	067	05:29	07:04	1:16	067	06:45	08:20	1:35				M	55	067	06:45	08:20		
	DSS-54 Checkout	77													M	54	067	06:45	08:20		
SOST_183_R4	*Deadtime (X-band to Earth)*	77	2013	068			1:16	068				0:05	2:00	rssk-s	M	55	068	05:15	08:20	03/09/13	R4 997 km. No Bias
	RSS_183RH_GRAVITY001_PIE			068	07:10	10:10		068	08:26	11:26	3:00				G	25	068	06:30	12:00		C/A 068/19:34 ERT over Canberra
	RSS_183RH_GRAVITY002_PIE			068	16:47	19:47		068	18:03	21:03	3:00				C	34	068	14:50	23:35		No C->M u/l transfer. Gap in 3rd
	RSS_183RH_GRAVITY003_PIE			068	23:17	02:17		069	00:33	03:33	3:00				M	55	068	23:05	04:00		34 TRX OFF Lim 231555. 55 TRX ON Lim 232732
SOST_183_R4	RSS_183RH_KADOWN002_RSS	77	2013	069	05:29	14:29	1:16	069	06:45	15:45	9:00	0:05	0:00	rssk-s	G	25	069	06:45	15:45	03/10/13	Shadow DSS-14. No Bias
XD_184_185	RSS_185EA_AUXPIM001_RSS	78	2013	088	04:16	13:16	1:14	088	05:30	14:30	9:00	2:00	2:00	rssk-s	G	25	088	05:35	14:30	03/29/13	Also prime TP. No rolling 1st 3 hrs
XD_184_185	RSS_185SA_OCCORT001_RSS	78	2013	089	04:01	13:01	1:14	089	05:15	14:15	9:00	0:05	0:00	rssk-s	G	25	089	05:15	14:15	03/30/13	Also prime TP

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
XD_185_186	RSS_186SA_OCCORT001_RSS	78	2013	097	20:01	05:01	1:14	097	21:15	06:15	9:00	0:05	0:00	rssk-s	M	55	097	21:15	05:45	04/07/13	Also prime TP
	DSS-54 RTS Engineering Demo														M	54	097	21:15	05:45		DSS-54 1hr pre-cal
RINGS_186	*Deadtime*	78	2013	102	02:20		1:14	102	03:34		0:20	0:05	2:00	rss3s*	M	63	102	00:50	06:10	04/12/13	Preceded by SP 22.8m turn. No turns by RSS
	RSS_186SA_OCCIN001_PIE			102	02:40	04:47		102	03:54	06:01	2:07				M	55	102	03:00	06:00		Ingress atmospheric occ
	Deadtime			102		05:07		102		06:21	0:20				G	25	102	04:05	06:45		
															G	14	102	04:05	06:45		
															M	54	102	03:00	06:00		DSS-54 late addition
MAPS_187	RSS_187SA_OCCORT001_RSS	78	2013	110	19:02	04:02	1:13	110	20:15	05:15	9:00	0:05	0:00	rssk-s	M	55	110	20:15	05:15	04/20/13	Also prime TP
XD_187_188	~~RSS_187EA_BORESIGHT002_PRIME~~	~~78~~	~~2013~~	~~115~~	~~03:17~~	~~04:17~~	~~1:13~~	~~115~~	~~04:30~~	~~05:30~~	~~1:00~~	0:05	2:00	rssk	G	25	115	05:55	12:30	04/25/13	Prime TP. Boresight moved to S79 DOY171
SATURN_188	RSS_188SA_OCCORT001_RSS	78	2013	124	18:02	01:32	1:13	124	19:15	02:45	7:30	0:05	0:00	rssk-s	M	55	124	19:15	02:45	05/04/13	Also prime TP
XD_188_189	RSS_189SA_OCCORT001_RSS	78	2013	127	07:47	16:47	1:13	127	09:00	18:00	9:00	0:05	0:00	rssk-s	C	34	127	09:00	18:00	05/07/13	Also prime TP
RINGS_189	*Deadtime (X-band to Earth)*	78	2013	130	19:07	19:27	1:14	130	20:21	20:41	0:20	0:05	2:00	rss3s*	C	45	130	17:40	19:10	05/10/13	Ingress atmospheric occ
	RSS_189SA_OCCIN001_PIE			130	19:27	22:00		130	20:41	23:14	2:33				M	63	130	18:40	02:10		Egress rings occ. No turns by RSS
	Deadtime			130	22:00	22:20		130	23:14	23:34	0:20				M	55	130	19:50	02:10		45 xmtr off limit ~1853. 63 xmtr on limit ~1901
	RSS_189RI_OCC001_PRIME			130	22:20	00:25		130	23:34	01:39	2:05										SA Occ in LMB. RI Occ not in LMB
XD_189_190	RSS_190SA_OCCORT001_RSS	78	2013	137	00:46	09:46	1:14	137	02:00	11:00	9:00	0:05	0:00	rssk-s	C	34	137	06:50	11:00	05/17/13	Shadow DSS-25 137/02:00-11:00
MAPS_190	*Deadtime*	78	2013	140	08:05		1:14	140	09:19		0:20	0:05	2:00	rss3s*	G	14	140	06:30	11:10	05/20/13	DSS-43 downtime 2012/317 - 2013/161
	RSS_190SA_OCC001_PIE			140	08:25	11:45		140	09:39	12:59	3:20				C	45	140	08:50	16:45		Ingress atmospheric occ
	RSS_190RI_OCC001_PIE			140	11:45	14:56		140	12:59	16:10	3:11				C	34	140	08:50	16:45		Egress rings occ. Turn at beg & end
	Deadtime			140		15:16				16:30	0:20										14 xmtr off lim 105035
XD_191	RSS_191SA_OCCORT001_RSS	78	2013	149	06:01	15:01	1:14	149	07:15	16:15	9:00	0:05	0:00	rssk-s	C	34	149	08:25	16:20	05/29/13	Also prime TP
RINGS_191	RSS_191RI_KADOWN001_RSS	78	2013	150	06:00	15:00	1:15	150	07:15	16:15	9:00	0:05	0:00	rssk-s	C	34	150	07:15	16:15	05/30/13	Also prime TP
RINGS_191	*Deadtime*	78	2013	Included below			1:15	Included below				0:05	2:00	rss3s*	G	14	151	04:10	10:25	05/31/13	14 XMTR off limit ~1005. Transfer U/L to 45
	RSS_191SA_OCCIN001_PRIME			151	05:41	07:06		151	06:56	08:21	1:25				C	45	151	06:30	12:30		Grazing ingress atm occ
	RSS_191RI_OCC001_PIE			151	07:06	11:52		151	08:21	13:07	4:46				C	34	151	06:30	13:40		No LMB (don't lose signal). No turns by RSS
	Deadtime			Included above				Included above													Egress rings occ. 14 xmtr off lim 100522
	DSS-43 RTS Engineering Demo														C	43	151	08:05	12:05		DSS-43 downtime 2012/317 - 2013/161
RINGS_191	RSS_191RI_KADOWN002_RSS	78	2013	151	16:00	01:00	1:15	151	17:15	02:15	9:00	0:05	0:00	rssk-s	M	55	151	17:15	02:15	05/31/13	Shadow DSS-63
SATURN_191_192	RSS_192SA_OCCORT001_RSS	79	2013	160	05:15	14:15	1:15	160	06:30	15:30	9:00	0:05	0:00	rssk-s	C	34	160	06:30	15:30	06/09/13	Also prime TP
XD_192_193	RSS_192SA_OCCORT002_RSS	79	2013	169	22:14	07:14	1:16	169	23:30	08:30	9:00	0:00	0:00	rss2-s	C	43	170	04:40	08:30	06/19/13	Shadow DSS-14 169/23:30-08:30
XD_192_193	RSS_193EA_AUXPIM001_RSS	79	2013	171	22:13	07:13	1:17	171	23:30	08:30	9:00	2:00	2:00	rssk-s	G	25	171	23:30	08:30	06/20/13	Also prime TP. No rolling
	RSS_193EA_BORESIGHT002_PRIME	79	2013	172	01:13	02:13	1:17	172	02:30	03:30	1:00	Included above									TLM OFF 1hr Boresight
SATURN_193	RSS_193RI_KADOWN001_RSS	79	2013	174	04:28	13:28	1:17	174	05:45	14:45	9:00	0:05	0:00	rssk-s	C	34	174	05:45	14:45	06/23/13	Also prime TP
SATURN_193	*Deadtime*	79	2013	Included below			1:17	Included below				0:05	2:00	rss3s*	G	14	175	02:30	08:50	06/24/13	DSS-14 for uplink. xmtr off limit 082800
	RSS_193RI_OCC001_PIE			175	04:07	09:18		175	05:24	10:35	5:11				C	43	175	04:50	12:30		Chord occ. No RSS turns
	Deadtime			Included above				Included above							C	34	175	04:50	13:30		Downlink period 1035-1327 ERT
SATURN_193	RSS_193RI_KADOWN002_RSS	79	2013	175	14:28	23:28	1:17	175	15:45	00:45	9:00	0:05	0:00	rssk-s	M	54	175	15:45	00:45	06/24/13	Also prime TP
XD_193_194	RSS_193SA_OCCORT001_RSS	79	2013	182	03:57	12:57	1:18	182	05:15	14:15	9:00	0:05	0:00	rssk-s	C	34	182	05:15	14:15	07/01/13	Also prime TP. Bias
RINGS_194	RSS_194RI_KADOWN001_RSS	79	2013	186	13:42	22:42	1:18	186	15:00	00:00	9:00	0:05	0:00	rssk-s	M	54	186	15:35	00:00	07/05/13	TP. DSS-55 downtime 161/0500-200/1700
RINGS_194	*Deadtime*	79	2013	Included below			1:18	Included below				0:05	2:00	rss3s*	G	14	187	01:25	07:00	07/06/13	DSS-14 for uplink. xmtr off limit ~074010
	RSS_194RI_OCC001_PRIME			187	03:09	08:59		187	04:27	10:17	5:50				C	43	187	03:30	10:45		43 xmtr on lim 033945. s/c Earth point 030231
	Deadtime			Included above				Included above							C	34	187	03:50	10:45		Chord occ. No RSS turns
	DSS-55 RTS Engineering Demo													rssk/IDAF	M	55	190	17:30	21:25	07/09/13	Shadow DSS-63 190/14:45-21:25
SATURN_194_195	RSS_195EA_DSNMONCAL001_RSS	79	2013	198	20:25	05:25	1:20	198	21:45	06:45	9:00	0:05	0:00	rssk-s	G	26	198	21:45	06:45	07/17/13	Also prime TP
RINGS_195	RSS_195SA_OCCORT001_RSS	79	2013	201	12:40	21:40	1:20	201	14:00	23:00	9:00	0:05	0:00	rssk-s	M	55	201	13:45	23:00	07/20/13	Also prime TP
TOST_195_T93	RSS_195SA_OCCORT003_RSS	79	2013	208	12:00	14:39	1:21	208	13:21	16:00	2:39	0:05	0:00	rssk-s	M	55	208	13:20	16:00	07/27/13	Also prime TP
SATURN_195_196	RSS_195SA_OCCORT002_RSS	79	2013	215	19:23	04:23	1:22	215	20:45	05:45	9:00	0:05	0:00	rssk-s	G	25	215	20:45	05:45	08/03/13	Also prime TP
SATURN_195_196	*Deadtime*	79	2013	Included below			1:23	Included below				0:05	2:00	rss3s*	~~M~~	~~63~~	~~220~~	~~13:00~~	~~21:25~~	08/08/13	Earth-point from 220/0122 scet
	RSS_196RI_OCC001_PIE			220	14:36	23:49		220	15:59	01:12	9:13				M	65	220	13:00	22:05		Apoapse occ. No RSS turns
	Deadtime			Included above				Included above							M	55	220	15:00	22:00		65 xmtr off lim 220/21:47:25
															G	25	220	20:00	01:40		DSS-63 RTS Track Deleted
															G	14	220	20:00	01:40		14 xmtr on lim 220/20:18:33
XD_196_197	RSS_196SA_OCCORT001_RSS	80	2013	232	10:50	19:35	1:24	232	12:14	20:59	8:45	0:05	0:00	rssk-s	M	55	232	12:15	21:00	08/20/13	Also prime TP
XD_196_197	RSS_196SA_OCCORT002_RSS	80	2013	236	00:20	09:20	1:25	236	01:45	10:45	9:00	0:05	0:00	rssk-s	C	34	236	01:45	10:45	08/24/13	Shadow DSS-43 236/01:45-10:45
XD_196_197	RSS_196SA_OCCORT003_RSS	80	2013	238	00:05	09:05	1:25	238	01:30	10:30	9:00	0:05	0:00	rssk-s	C	34	238	01:30	10:30	08/26/13	Shadow DSS-43 238/01:30-10:30
XD_196_197	RSS_197SA_OCCORT003_RSS	80	2013	243	17:34	02:34	1:26	243	19:00	04:00	9:00	0:05	0:00	rssk-s	G	25	243	19:00	04:00	08/31/13	DSS-15 prime. Switch to DSS-25?

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TWT/ OST Segment	REQUEST/CIMS_Request	Cas SEQ #	Year	Times in SCET DOY	Start hh:mm	End hh:mm	OWLT h:mm	Times in ERT DOY	Start hh:mm	End hh:mm	Dur h:mm	Ka-TWTA Maint	Thrm Stab h:mm	Op-mode	Required DSN Coverage in ERT Cmplx	DSS	DOY	Start hh:mm	End hh:mm	Date ERT	Notes
XD_196_197	RSS_197RI_OCC001_RSS	80	2013	244	08:15	21:10	1:26	244	09:41	22:36	12:55	0:05	2:00	rss3s*	C	43	244	05:30	11:45	09/01/13	Ingress atmospheric occ. Egress rings
															C	34	244	09:00	11:45		43 xmtr off lim 244/11:26:48
															M	55	244	11:15	20:30		
															M	63	244	11:10	20:40		Uplink gap from C to M
															G	25	244	18:30	23:00		63 xmtr on lim 244/11:33:52
															G	14	244	18:30	23:00		
XD_196_197	~~RSS_197EA_DSNMONCAL001_RSS~~	~~80~~	~~2013~~	~~249~~	~~23:18~~	~~08:18~~	~~1:27~~	~~250~~	~~00:45~~	~~09:45~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~250~~	~~00:45~~	~~09:45~~	~~09/07/13~~	DSS-43 250/00:45-07:45
~~TOST_197_T94~~	~~TI LGA Gravity Opportuninty - T94, Rev 197~~	~~80~~	~~2013~~	~~255~~	~~03:44~~	~~11:44~~	~~1:27~~	~~255~~	~~05:11~~	~~13:11~~	~~8:00~~	~~0:00~~	~~0:00~~	~~dfpw~~	~~C~~	~~43~~	~~255~~	~~01:55~~	~~11:00~~	~~09/12/13~~	T94
	~~RSS_197EA_LGAGRAV001_RSS~~														~~M~~	~~63~~	~~255~~	~~10:40~~	~~13:15~~		
XD_197_198	RSS_197EA_DSNMONCAL001_RSS	80	2013	267	16:01	01:01	1:29	267	17:30	02:30	9:00	0:05	2:00	rssk-s	G	25	267	18:30	02:30	09/24/13	Also prime TP
XD_197_198	RSS_198EA_AUXPIM001_RSS	80	2013	280	15:16	00:16	1:29	280	16:45	01:45	9:00	2:00	2:00	rssk-s	G	25	280	16:45	01:45	10/07/13	Also prime TP. No rolling 1st 3 hrs
XD_197_198	~~RSS_198EA_DSNMONCAL001_RSS~~	~~80~~	~~2013~~	~~282~~	~~21:30~~	~~06:30~~	~~1:29~~	~~282~~	~~22:59~~	~~07:59~~	~~9:00~~	~~0:05~~	~~0:00~~	~~rssk-s~~	~~C~~	~~34~~	~~282~~	~~22:55~~	~~08:00~~	~~10/09/13~~	Coverage switch to DSS-43
XD_198_199	RSS_198EA_SCE10001_RSS	81	2013	297	20:30	05:30	1:30	297	22:00	07:00	9:00	0:05	0:00	rss2-s	C	43	297	22:00	05:00	10/24/13	Also prime TP
XD_198_199	RSS_198EA_SCE10002_RSS	81	2013	299	20:30	05:30	1:30	299	22:00	07:00	9:00	0:00	0:00	rss2-s	C	43	299	22:00	06:00	10/26/13	Also prime TP
XD_198_199	RSS_198EA_SCE10003_RSS	81	2013	301	20:15	05:15	1:30	301	21:45	06:45	9:00	0:05	0:00	rssk-s	C	34	301	21:45	06:15	10/28/13	Also prime TP
XD_198_199	RSS_198EA_SCE10004_RSS	81	2013	303	06:45	15:00	1:30	303	08:15	16:30	8:15	0:05	0:00	rssk-s	M	55	303	08:15	16:30	10/30/13	Also prime TP. SLOW Opmode
XD_198_199	RSS_198EA_SCE10005_RSS	81	2013	304	14:00	22:45	1:30	304	15:30	00:15	8:45	0:05	0:00	rssk-s	G	25	304	15:30	23:15	10/31/13	Also prime TP
XD_198_199	RSS_198EA_SCE10006_RSS	81	2013	305	06:45	15:00	1:30	305	08:15	16:30	8:15	0:00	0:00	rss2-s	M	63	305	08:15	16:30	11/01/13	Also prime TP
														X-band		63	306				OTM Pass
														X-band		63	307				OTM Pass
XD_198_199	RSS_198EA_SCE10007_RSS	81	2013	309	06:59	14:14	1:31	309	08:30	15:45	7:15	0:05	0:00	rssk-s	M	55	309	08:30	15:45	11/05/13	TP. Transition to RCS at 1330 ERT
XD_198_199	RSS_198EA_SCE10008_RSS	81	2013	310	13:44	22:29	1:31	310	15:15	00:00	8:45	0:00	0:00	rss2-s	G	14	310	15:15	00:00	11/06/13	Prime TP. Conjunction day. RCS
XD_198_199	RSS_199EA_SCE10009_RSS	81	2013	312	19:45	04:45	1:30	312	21:15	06:15	9:00	0:05	0:00	rssk-s	C	34	312	21:15	06:15	11/08/13	RCS. RWA transition starts 313/0315
XD_198_199	RSS_199EA_SCE10010_RSS	81	2013	314	19:30	04:30	1:30	314	21:00	06:00	9:00	0:00	0:00	rss2-s	C	43	314	21:00	06:00	11/10/13	Also prime TP
XD_198_199	RSS_199EA_SCE10011_RSS	81	2013	316	19:30	04:30	1:30	316	21:00	06:00	9:00	0:00	0:00	rss2-s	C	43	316	22:55	02:00	11/12/13	Also prime TP
XD_198_199	RSS_199EA_SCE10012_RSS	81	2013	318	19:30	04:30	1:30	318	21:00	06:00	9:00	0:00	0:00	rss2-s	C	43	318	21:00	06:00	11/14/13	Also prime TP
XD_198_199	RSS_199EA_SCE10013_RSS	81	2013	320	19:15	04:15	1:30	320	20:45	05:45	9:00	0:05	0:00	rssk-s	C	34	320	20:45	05:45	11/16/13	Also prime TP
XD_198_199	RSS_199EA_SCE10014_RSS	81	2013	322	05:30	14:15	1:30	322	07:00	15:45	8:45	0:00	0:00	rss2-s	M	63	322	07:00	14:15	11/18/13	Also prime TP
XD_198_199	RSS_199EA_SCE10015_RSS	81	2013	324	12:45	21:45	1:30	324	14:15	23:15	9:00	0:05	0:00	rssk-s	G	26	324	14:15	23:15	11/20/13	Also prime TP
XD_199_200	RSS_199EA_BORESIGHT002_PRIME	81	2013	348	13:16	14:16	1:29	348	14:45	15:45	1:00	2:00	2:00	rssk-s	G	25	348	12:45	21:45	12/14/13	Prime TP. TLM OFF 1hr Boresight

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