Request	Riders	Start (SCET)	Start (Epoch)	Duration	End	Primary	Secondary	Comments
Sequence S94, length = 69 days		2016-109T18:43:00		068T21:01:00	2016-178T15:44:00			
XD_235 Segment		2016-109T18:43:00		015T00:46:00	2016-124T19:29:00			
SP_235EA_S94IVP109_PRIME		2016-109T18:43:00		000T00:06:00	2016-109T18:49:00	XBAND to Earth	NEG_X to 270.0/68.0	S94 IVP Gap
ENGR_235SC_RWABIAS109_PRIME		2016-109T18:49:00		000T01:30:00	2016-109T20:19:00	XBAND to Earth	NEG_X to 270.0/68.0	
SP_235EA_DLTURN109_PRIME		2016-109T20:19:00		000T00:21:00	2016-109T20:40:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-109T20:40:00		000T17:48:00	2016-110T14:28:00	XBAND to Earth	NEG_X to 320.0/45.0	
CDA_235DR_EXOGEN001_PRIME		2016-109T20:40:00		000T07:18:00	2016-110T03:58:00	XBAND to Earth	Rolling	
SP_235EA_YGAP110_PRIME	M	2016-110T03:58:00		000T01:30:00	2016-110T05:28:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34BWGNON110_PRIME	C, M	2016-110T05:28:00		000T08:30:00	2016-110T13:58:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 320/45.SRU.
SP_235SA_WAYPTTURN110_PRIME	M	2016-110T13:58:00		000T00:30:00	2016-110T14:28:00	ISS_NAC to Saturn	POS_Z to 189.3/66.9	
NEW WAYPOINT		2016-110T14:28:00		000T13:15:00	2016-111T03:43:00	ISS_NAC to Saturn	POS_Z to 189.3/66.9	
ISS_235TI_M60R3CLD110_PRIME	C, I, M, V	2016-110T14:28:00	E235_M60R3CLD110+000T00:00:00	000T01:30:00	2016-110T15:58:00	ISS_NAC to Titan	POS_Z to 189.3/66.9	No Preference to secondary pointing
CIRS_235SA_COMPSIT001_PRIME	I, M, U, V	2016-110T15:58:00		000T11:10:00	2016-111T03:08:00	CIRS_FP3 to Saturn	POS_Z to 189.3/66.9	
SP_235EA_DLTURN111_PRIME		2016-111T03:08:00		000T00:35:00	2016-111T03:43:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-111T03:43:00		001T10:40:00	2016-112T14:23:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_YGAP111_PRIME		2016-111T03:43:00		000T01:30:00	2016-111T05:13:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34B26NON111_PRIME	C, R	2016-111T05:13:00		000T08:30:00	2016-111T13:43:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 320/45.SRU.
CDA_235DR_EXOGEN003_PRIME	M	2016-111T14:43:00		000T09:00:00	2016-111T23:43:00	XBAND to Earth	Rolling	
SP_235EA_YGAP112_PRIME	M	2016-112T03:43:00		000T01:30:00	2016-112T05:13:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34BWGNON112_PRIME	C, M, R	2016-112T05:13:00		000T08:30:00	2016-112T13:43:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 320/45.SRU.
SP_235SA_WAYPTTURN112_PRIME	M	2016-112T13:43:00		000T00:40:00	2016-112T14:23:00	ISS_NAC to Saturn	POS_Z to 189.3/66.9	
NEW WAYPOINT		2016-112T14:23:00		000T19:10:00	2016-113T09:33:00	ISS_NAC to Saturn	POS_Z to 189.3/66.9	
ISS_235TI_M60R3CLD112_PRIME	C, M, V	2016-112T14:23:00	E235_M60R3CLD112+000T00:00:00	000T01:30:00	2016-112T15:53:00	ISS_NAC to Titan	POS_Z to 189.3/66.9	No Preference to secondary pointing
ISS_235OT_SATELLORB004_PRIME	I, M, V	2016-112T15:53:00		000T01:00:00	2016-112T16:53:00	ISS_NAC to Satellites	POS_Z to 189.3/66.9	Must point within 15 deg of Saturn Center
CIRS_235SA_MIRTMAP001_PRIME	I, M, V	2016-112T16:53:00		000T16:00:00	2016-113T08:53:00	CIRS_FP3 to Saturn	POS_Z to 189.3/66.9	
SP_235EA_DLTURN113_PRIME		2016-113T08:53:00		000T00:40:00	2016-113T09:33:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-113T09:33:00		001T11:20:00	2016-114T20:53:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_C34BWGOTP113_PRIME	C, E, N	2016-113T11:13:00		000T09:00:00	2016-113T20:13:00	XBAND to Earth	4_Hr_Rolling	CDA.NEG_X to 320/45.OTP.SRU.
CDA_235DR_EXOGEN004_PRIME		2016-113T21:13:00		000T09:00:00	2016-114T06:13:00	XBAND to Earth	Rolling	
CDA_235DR_EXOGEN005_PRIME		2016-114T07:13:00		000T03:00:00	2016-114T10:13:00	XBAND to Earth	Rolling	
SP_235EA_C34BWGOTB114_PRIME	C, N	2016-114T11:13:00		000T09:00:00	2016-114T20:13:00	XBAND to Earth	4_Hr_Rolling	CDA.same secondary as OTP pass.OTB.SRU.
SP_235SA_WAYPTTURN114_PRIME		2016-114T20:13:00		000T00:40:00	2016-114T20:53:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
NEW WAYPOINT		2016-114T20:53:00		000T13:07:00	2016-115T10:00:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
ISS_235TI_M60R3CLD114_PRIME	C, V	2016-114T20:53:00	E235_M60R3CLD114+000T00:00:00	000T01:30:00	2016-114T22:23:00	ISS_NAC to Titan	NEG_X to 189.3/66.9	No Preference to secondary pointing
ISS_235OT_SATELLORB006_PRIME	C, I, V	2016-114T22:23:00		000T01:00:00	2016-114T23:23:00	ISS_NAC to Satellites	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
CIRS_235RA_COMPLLRES001_PRIME	C, I, U, V	2016-114T23:23:00		000T10:00:00	2016-115T09:23:00	CIRS_FP1 to Rings	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
SP_235EA_DLTURN115_PRIME		2016-115T09:23:00		000T00:37:00	2016-115T10:00:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-115T10:00:00		003T04:08:00	2016-118T14:08:00	XBAND to Earth	NEG_X to 320.0/45.0	
CIRS_235ST_ECSTARCAL012_PRIME	C	2016-115T10:00:00		000T10:13:00	2016-115T20:13:00	CIRS_FP3 to 161.265/-59.684	PIC	Jettison Activity. Will be deleted if RBOT issues occur.
SP_235EA_YGAP115_PRIME		2016-115T20:13:00		000T01:30:00	2016-115T21:43:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_M70METNON115_PRIME	C	2016-115T21:43:00		000T06:00:00	2016-116T03:43:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235EA_M70METUNQ515_PRIME	C, U	2016-116T03:43:00		000T02:00:00	2016-116T05:43:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
ISS_235SA_SATSTARE001_PRIME	C, V	2016-116T05:43:00		001T21:30:00	2016-118T03:13:00	ISS_WAC to Saturn	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
ENGR_235SC_RWABIAS118_PRIME		2016-118T03:13:00		000T01:30:00	2016-118T04:43:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34HEFNON118_PRIME	C	2016-118T04:43:00		000T08:45:00	2016-118T13:28:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235SA_WAYPTTURN118_PRIME		2016-118T13:28:00		000T00:40:00	2016-118T14:08:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
NEW WAYPOINT		2016-118T14:08:00		000T21:52:00	2016-119T12:00:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
ISS_235TI_M90R3CLD118_PRIME	C, V	2016-118T14:08:00	E235_M90R3CLD118+000T00:00:00	000T01:30:00	2016-118T15:38:00	ISS_NAC to Titan	NEG_X to 88.251/9.968	
ISS_235OT_SATELLORB008_PRIME	I, V	2016-118T15:38:00		000T01:00:00	2016-118T16:38:00	ISS_NAC to Satellites	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
ISS_235RI_ARCORBIT001_PRIME	C, I	2016-118T16:38:00		000T19:00:00	2016-119T11:38:00	ISS_NAC to Rings	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
SP_235EA_DLTURN119_PRIME		2016-119T11:38:00		000T00:22:00	2016-119T12:00:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-119T12:00:00		002T01:40:00	2016-121T13:40:00	XBAND to Earth	NEG_X to 320.0/45.0	
ISS_235OT_TARPOL109_PRIME	V	2016-119T12:00:00		000T13:14:00	2016-120T01:14:00	UVIS_FUV to Rocks	NEG_Z to Earth	Jettison Activity. Will be deleted if RBOT issues occur.
MAG_235SU_CALROLL001_PRIME	U	2016-120T01:14:00		000T08:00:00	2016-120T09:14:00	NEG_X to Earth (0.0,0.0,-30.0 deg. offset)	Rolling	
SP_235EA_YGAP120_PRIME		2016-120T09:14:00		000T01:30:00	2016-120T10:44:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_C70METNON120_PRIME	C, R	2016-120T10:44:00		000T09:00:00	2016-120T19:44:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235EA_YGAP121_PRIME		2016-121T03:14:00		000T01:30:00	2016-121T04:44:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34HEFNON121_PRIME	C	2016-121T04:44:00		000T08:30:00	2016-121T13:14:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235SA_WAYPTTURN121_PRIME		2016-121T13:14:00		000T00:26:00	2016-121T13:40:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
NEW WAYPOINT		2016-121T13:40:00		000T13:19:00	2016-122T02:59:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
ISS_235TI_M60R3CLD121_PRIME	C, I, V	2016-121T13:40:00	E235_M60R3CLD121+000T00:00:00	000T01:30:00	2016-121T15:10:00	ISS_NAC to Titan	NEG_X to 189.3/66.9	No Preference to secondary pointing
CIRS_235SA_FIRMAP001_PRIME	I, V	2016-121T15:10:00		000T11:20:00	2016-122T02:30:00	CIRS_FP1 to Saturn	NEG_X to NSP	
SP_235EA_DLTURN122_PRIME		2016-122T02:30:00		000T00:29:00	2016-122T02:59:00	XBAND to Earth	NEG_X to 320.0/45.0	
NEW WAYPOINT		2016-122T02:59:00		000T10:20:00	2016-122T13:19:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_YGAP122_PRIME		2016-122T02:59:00		000T01:30:00	2016-122T04:29:00	XBAND to Earth	NEG_X to 320.0/45.0	
SP_235EA_G34BWGNON122_PRIME	C	2016-122T04:29:00		000T08:30:00	2016-122T12:59:00	XBAND to Earth	NEG_X to 320.0/45.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235EA_DLTURN522_PRIME		2016-122T12:59:00		000T00:20:00	2016-122T13:19:00	XBAND to Earth	NEG_X to 356.0/-29.0	
NEW WAYPOINT		2016-122T13:19:00		001T00:16:00	2016-123T13:35:00	XBAND to Earth	NEG_X to 356.0/-29.0	
ISS_235RF_FMOVIE001_PRIME	C, V	2016-122T13:19:00		000T13:40:00	2016-123T02:59:00	ISS_NAC to Rings	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
ENGR_235SC_KPTYBIAS123_PRIME		2016-123T02:59:00		000T01:30:00	2016-123T04:29:00	NEG_Z to DELTA_H (0.0,0.0,-35.002 deg. offset)	NEG_X to Sun	
SP_235EA_G34BWGNON123_PRIME	C	2016-123T04:29:00		000T08:30:00	2016-123T12:59:00	XBAND to Earth	NEG_X to 356.0/-29.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_235SA_WAYPTTURN123_PRIME		2016-123T12:59:00		000T00:36:00	2016-123T13:35:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
NEW WAYPOINT		2016-123T13:35:00		000T20:54:00	2016-124T10:29:00	ISS_NAC to Saturn	NEG_X to 189.3/66.9	
ISS_235TI_M60R3CLD123_PRIME	C, V	2016-123T13:35:00	E235_M60R3CLD123+000T00:00:00	000T01:30:00	2016-123T15:05:00	ISS_NAC to Titan	NEG_X to 189.3/66.9	No Preference to secondary pointing
ISS_235OT_SATELLORB012_PRIME	C, I, V	2016-123T15:05:00		000T01:00:00	2016-123T16:05:00	ISS_NAC to Satellites	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
UVIS_235SA_AURSLEW001_PRIME	C, V	2016-123T16:05:00		000T08:55:00	2016-124T01:00:00	UVIS_FUV to Saturn	NEG_X to 189.3/66.9	Collaborative Rider(s): VIMS. must point within 15 deg. of Saturn center
CIRS_235RH_COMPGLBL001_PRIME	C, U, V	2016-124T01:00:00		000T06:00:00	2016-124T07:00:00	CIRS_FP1 to Rhea	NEG_X to 189.3/66.9	Collaborative Rider(s): UVIS. No Preference to secondary pointing
ISS_235RI_PROPRETRG001_PRIME	C	2016-124T07:00:00		000T02:54:00	2016-124T09:54:00	ISS_NAC to Rings (-0.006,13.0,0.0 deg. offset)	NEG_X to 189.3/66.9	Must point within 15 deg of Saturn Center
SP_235EA_DLTURN124_PRIME		2016-124T09:54:00		000T00:35:00	2016-124T10:29:00	XBAND to Earth	NEG_X to 356.0/-29.0	

NEW WAYPOINT		2016-124T10:29:00		000T09:40:00	2016-124T20:09:00	XBAND to Earth	NEG_X to 356.0/-29.0	
SP_235EA_C70METOTP124_PRIME	C, N	2016-124T10:29:00		000T09:00:00	2016-124T19:29:00	XBAND to Earth	NEG_X to 356.0/-29.0	No Roll per AACS 2 of 3 Rule. Secondary chosen for CDA.
SATURN_235 Segment		2016-124T19:29:00		001T23:45:00	2016-126T19:14:00			
SP_235SA_WAYPTTURN124_PRIME		2016-124T19:29:00		000T00:40:00	2016-124T20:09:00	ISS_NAC to Saturn	NEG_X to NSP	
NEW WAYPOINT		2016-124T20:09:00		000T14:20:00	2016-125T10:29:00	ISS_NAC to Saturn	NEG_X to NSP	
VIMS_235SA_NHEMMAP001_PRIME	C, I	2016-124T20:09:00		000T02:40:00	2016-124T22:49:00	ISS_NAC to Saturn	NEG_X to NSP	Collaborative Rider(s): ISS
VIMS_235SA_SHEMMAP001_PRIME	C, I, M	2016-124T22:49:00		000T11:00:00	2016-125T09:49:00	ISS_NAC to Saturn	NEG_X to NSP	Collaborative Rider(s): ISS
SP_235EA_DLTURN125_PRIME		2016-125T09:49:00		000T00:40:00	2016-125T10:29:00	XBAND to Earth	NEG_X to 356.0/-29.0	
NEW WAYPOINT		2016-125T10:29:00		000T09:40:00	2016-125T20:09:00	XBAND to Earth	NEG_X to 356.0/-29.0	
SP_235EA_C34BWGOTB125_PRIME	C, E, N	2016-125T10:29:00		000T09:00:00	2016-125T19:29:00	XBAND to Earth	4_Hr_Rolling	CAPS.same secondary as OTP pass.OTB.SRU.
Periapse R = 8.330 Rs, lat ...		2016-125T16:34:07		000T00:00:01	2016-125T16:34:08			
SP_235SA_WAYPTTURN126_PRIME		2016-125T19:29:00		000T00:40:00	2016-125T20:09:00	ISS_NAC to Saturn (0.0,0.0,5.0 deg. offset)	NEG_X to NSP	
NEW WAYPOINT		2016-125T20:09:00		000T12:35:00	2016-126T08:44:00	ISS_NAC to Saturn (0.0,0.0,5.0 deg. offset)	NEG_X to NSP	
VIMS_235SA_SPOLEMAP001_PRIME		2016-125T20:09:00		000T01:00:00	2016-125T21:09:00	ISS_NAC to Saturn	NEG_X to NSP	
UVIS_235SA_AURSTARE001_PRIME	C, I, V	2016-125T21:09:00		000T05:00:00	2016-126T02:09:00	UVIS_FUV to Saturn	NEG_X to NSP	Collaborative Rider(s): VIMS
ISS_235SA_LIMBINT001_PRIME	C, U, V	2016-126T02:09:00		000T02:00:00	2016-126T04:09:00	ISS_NAC to Saturn	NEG_X to NSP	
UVIS_235SA_AURSTARE002_PRIME	C, I, V	2016-126T04:09:00		000T03:55:00	2016-126T08:04:00	UVIS_FUV to Saturn	NEG_X to NSP	Collaborative Rider(s): VIMS
SP_235EA_DLTURN126_PRIME		2016-126T08:04:00		000T00:07:00	2016-126T08:11:00	ISS_NAC to Saturn (0.0,0.0,20.0 deg. offset)	NEG_X to NSP	
SP_235EA_DLTURN426_PRIME		2016-126T08:11:00		000T00:33:00	2016-126T08:44:00	XBAND to Earth	NEG_X to NSP	
NEW WAYPOINT		2016-126T08:44:00		000T11:10:00	2016-126T19:54:00	XBAND to Earth	NEG_X to NSP	
SP_235EA_YGAP126_PRIME		2016-126T08:44:00		000T01:30:00	2016-126T10:14:00	XBAND to Earth	NEG_X to NSP	
SP_235EA_C70METNON126_PRIME	C, R	2016-126T10:14:00		000T09:00:00	2016-126T19:14:00	XBAND to Earth	Rolling	CAPS.NEG_X to 40.6/83.5 (NSP) or NEP.
Titan Flyby T119 Segment		2016-126T19:14:00		003T00:00:00	2016-129T19:14:00			
SP_235TI_WAYPTTURN126_PRIME		2016-126T19:14:00		000T00:40:00	2016-126T19:54:00	NEG_Y to Titan	NEG_X to Sun	
NEW WAYPOINT		2016-126T19:54:00		001T14:20:00	2016-128T10:14:00	NEG_Y to Titan	NEG_X to Sun	
SP_235TI_DEADTIME126_PRIME		2016-126T19:54:00		000T00:08:51	2016-126T20:02:51	NEG_Y to Titan	NEG_X to Sun	
CIRS_235TI_MIDIRTMAP001_PRIME	I, V	2016-126T20:02:51	GMB_E235_TITAN_T119-000T20:51:46	000T06:51:46	2016-127T02:54:37	CIRS_FPB to Titan	PIC	Collaborative Rider(s): ISS
ISS_235TI_MONITORNA001_PRIME	C, U, V	2016-127T02:54:37	GMB_E235_TITAN_T119-000T14:00:00	000T02:00:00	2016-127T04:54:37	ISS_NAC to Titan	NEG_X to Sun	No Preference to secondary pointing
CIRS_235TI_FIRNADCMP001_PRIME	I, U, V	2016-127T04:54:37	GMB_E235_TITAN_T119-000T12:00:00	000T03:00:00	2016-127T07:54:37	CIRS_FP1 to Titan	PIC	
CIRS_235TI_MIRLMBMAP001_PRIME	V	2016-127T07:54:37	GMB_E235_TITAN_T119-000T09:00:00	000T04:00:00	2016-127T11:54:37	CIRS_FPB to Titan	PIC	
Begin Custom Period		2016-127T11:54:37	GMB_E235_TITAN_T119-000T05:00:00	000T00:00:01	2016-127T11:54:38			
CIRS_235TI_FIRNADMAP001_PRIME	V	2016-127T11:54:37	GMB_E235_TITAN_T119-000T05:00:00	000T02:42:00	2016-127T14:36:37	CIRS_FP1 to Titan	NEG_Z to Earth	Pick up at NEG_Y to Titan, NEG_X to Sun; Hand off at NEG_Y to Titan, NEG_Z to Earth.
ENGR_235SC_ORSRCS127_PRIME	R	2016-127T14:36:37	GMB_E235_TITAN_T119-000T02:18:00	000T00:01:00	2016-127T14:37:37	NEG_Y to Titan	NEG_Z to Earth	Pick up at NEG_Y to Titan, NEG_Z to Earth; Hand off at NEG_Y to Titan, NEG_Z to Earth. deadband = (0.5,2,0.5) for CIRS
CIRS_235TI_FIRLMBINT001_PRIME	I, M, R, V	2016-127T14:37:37	GMB_E235_TITAN_T119-000T02:17:00	000T01:02:00	2016-127T15:39:37	CIRS_FP1 to Titan	NEG_Z to Earth	Collaborative Rider(s): MIMI. Pick up at NEG_Y to Titan, NEG_Z to Earth; Hand off at CIRS_FP1 to Titan, NEG_Z to Earth. Collaborative Rider(s): MIMI
CIRS_235TI_FIRLMBAER001_PRIME	M, R, V	2016-127T15:39:37	GMB_E235_TITAN_T119-000T01:15:00	000T00:30:00	2016-127T16:09:37	CIRS_FP1 to Titan	NEG_Z to Earth	Collaborative Rider(s): MIMI. Pick up at CIRS_FP1 to Titan, NEG_Z to Earth; Hand off at CIRS_FP1 to Titan, NEG_Z to Earth. Collaborative Rider(s): MIMI
CIRS_235TI_FIRLMBT001_PRIME	M, R, V	2016-127T16:09:37	GMB_E235_TITAN_T119-000T00:45:00	000T00:30:00	2016-127T16:39:37	CIRS_FP1 to Titan	NEG_Z to Earth	Collaborative Rider(s): MIMI. Pick up at CIRS_FP1 to Titan, NEG_Z to Earth; Hand off at NEG_X to Titan_SC_RAM, NEG_Z to Earth. Collaborative Rider(s): MIMI
Set deadband to (2,2,2) to ...		2016-127T16:39:27	GMB_E235_TITAN_T119-000T00:15:10	000T00:01:00	2016-127T16:40:27			Deadband = (2.0, 2.0, 2.0)
INMS_235TI_TITAN119001_PRIME	C, M, R	2016-127T16:39:37	GMB_E235_TITAN_T119-000T00:15:00	000T00:23:39	2016-127T17:03:16	NEG_X to Titan_SC_RAM	XBAND to Earth	Collaborative Rider(s): MIMI. Pick up at NEG_X to Titan_SC_RAM, NEG_Z to Earth; Hand off at XBAND to Earth (12.0,8.5,-6.5 deg. offset), NEG_X to Titan_SC_RAM. Collaborative Rider(s): MIMI. Use MIMI-preferred secondary NEG_Z to Earth
235TI (t) T119 TITAN Outbou...		2016-127T16:54:37		000T00:00:01	2016-127T16:54:38			
Set deadband to (0.5,0.5,2)...		2016-127T17:03:06	GMB_E235_TITAN_T119+000T00:08:29	000T00:01:00	2016-127T17:04:06			Deadband = (0.5, 0.5, 2.0)
RSS_235TI_OCC001_PRIME	C, M	2016-127T17:03:16	LUB_E235_TITAN_T119+000T00:08:39	000T00:18:21	2016-127T17:21:37	XBAND to Earth	NEG_X to Titan_SC_RAM	Collaborative Rider(s): MIMI. Pick up at XBAND to Earth (12.0,8.5,-6.5 deg. offset), NEG_X to Titan_SC_RAM; Hand off at XBAND to Earth, NEG_X to Titan_SC_RAM. Collaborative Rider(s): MIMI. RSS egress occultation of Titan's atmosphere
RSS_235TI_BISTATOUT001_PRIME	C, M	2016-127T17:21:37	LUB_E235_TITAN_T119+000T00:27:00	000T01:43:00	2016-127T19:04:37	XBAND to Titan	PIC	Collaborative Rider(s): MIMI. Pick up at XBAND to Earth, NEG_X to Titan_SC_RAM; Hand off at NEG_Y to Titan, NEG_X to Sun. Collaborative Rider(s): MIMI. Egress bistatic surface scattering observation
End Custom Period		2016-127T19:04:37	GMB_E235_TITAN_T119+000T02:10:00	000T00:00:01	2016-127T19:04:38			
ENGR_235SC_DFPWBIAS127_PPS	C, V	2016-127T19:04:37	GMB_E235_TITAN_T119+000T02:10:00	000T00:21:07	2016-127T19:25:44			Deadband: (2,2,2).
VIMS_235TI_REGMAP001_PRIME	C, I	2016-127T19:26:37	GMB_E235_TITAN_T119+000T02:32:00	000T02:28:00	2016-127T21:54:37	VIMS_IR to Titan	NEG_X to Sun	No Preference to secondary pointing
VIMS_235TI_MEDRES001_PRIME	C, I	2016-127T21:54:37	GMB_E235_TITAN_T119+000T05:00:00	000T04:00:00	2016-128T01:54:37	VIMS_IR to Titan	NEG_X to Sun	Collaborative Rider(s): ISS. No Preference to secondary pointing
CIRS_235TI_FIRNADCMP002_PRIME	I, U, V	2016-128T01:54:37	GMB_E235_TITAN_T119+000T09:00:00	000T04:00:00	2016-128T05:54:37	CIRS_FP1 to Titan	PIC	
CIRS_235TI_MIDIRTMAP002_PRIME	I, V	2016-128T05:54:37	GMB_E235_TITAN_T119+000T13:00:00	000T03:24:23	2016-128T09:19:00	CIRS_FPB to Titan	PIC	
SP_235TI_DEADTIME128_PRIME		2016-128T09:19:00	GMB_E235_TITAN_T119+000T16:24:23	000T00:15:00	2016-128T09:34:00	NEG_Y to Titan	NEG_X to Sun	
SP_235EA_DLTURN128_PRIME		2016-128T09:34:00		000T00:40:00	2016-128T10:14:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
NEW WAYPOINT		2016-128T10:14:00		000T09:40:00	2016-128T19:54:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
SP_235EA_C70METNON128_PRIME	C	2016-128T10:14:00		000T09:00:00	2016-128T19:14:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	Rolling/SRU	MIMI.NEG_Y to Saturn (0,0,-9.5).SRU.
SP_235TI_WAYPTTURN128_PRIME		2016-128T19:14:00		000T00:40:00	2016-128T19:54:00	NEG_Y to Titan	NEG_X to NTP	
NEW WAYPOINT		2016-128T19:54:00		000T12:50:00	2016-129T08:44:00	NEG_Y to Titan	NEG_X to NTP	
ISS_235TI_CLOUD001_PRIME	V	2016-128T19:54:00		000T04:00:00	2016-128T23:54:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
ISS_235TI_CLOUD002_PRIME	V	2016-128T23:54:00		000T04:10:00	2016-129T04:04:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
ISS_235TI_CLOUD003_PRIME	V	2016-129T04:04:00		000T01:00:00	2016-129T05:04:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
RADAR_235TI_RADIOMCAL134_PRIME		2016-129T05:04:00		000T02:00:00	2016-129T07:04:00	NEG_Z to Titan	NEG_X to NTP	No Preference to secondary pointing
ISS_235TI_CLOUD004_PRIME	V	2016-129T07:04:00		000T01:00:00	2016-129T08:04:00	ISS_NAC to Titan	NEG_X to NTP	No Preference to secondary pointing
SP_235EA_DLTURN129_PRIME		2016-129T08:04:00		000T00:40:00	2016-129T08:44:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
NEW WAYPOINT		2016-129T08:44:00		000T10:41:00	2016-129T19:25:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
SP_235EA_YGAP129_PRIME		2016-129T08:44:00		000T01:30:00	2016-129T10:14:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
SP_235EA_C34BWGNON129_PRIME	C	2016-129T10:14:00		000T09:00:00	2016-129T19:14:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	Rolling/SRU	MIMI.NEG_Y to Saturn (0,0,-9.5).SRU.
XD_235_236 Segment		2016-129T19:14:00		025T22:01:00	2016-155T17:15:00			
SP_235EA_DLTURN529_PRIME		2016-129T19:14:00		000T00:11:00	2016-129T19:25:00	XBAND to Earth	NEG_Y to 156.0/-17.0	
NEW WAYPOINT		2016-129T19:25:00		003T12:49:00	2016-133T08:14:00	XBAND to Earth	NEG_Y to 156.0/-17.0	
ISS_235RI_PHOEBEHOL001_PRIME	C, U, V	2016-129T19:25:00		000T14:34:00	2016-130T09:59:00	ISS_NAC to 242.0/-24.5	PIC	Must point within 15 deg of NAC to 242/-24.5
SP_235EA_C34BWGOTP130_PRIME	C, E, N	2016-130T09:59:00		000T09:00:00	2016-130T18:59:00	XBAND to Earth	NEG_Y to 156.0/-17.0	MIMI.RA/DEC for NEG_Y to Saturn (0,0,-9.5).OTP.SRU.post-TOST flyby.
ISS_235RF_FMOVIE002_PRIME	C, V	2016-130T18:59:00		000T15:00:00	2016-131T09:59:00	ISS_NAC to Rings	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center

SP_235EA_C34HEFOTB131_PRIME	C, N	2016-131T09:59:00		000T09:00:00	2016-131T18:59:00	XBAND to Earth	4_Hr_Rolling	MIMI.same secondary as OTP pass.OTB.SRU.
ISS_235OT_SKAPOL015_PRIME	U, V	2016-131T18:59:00		001T13:05:00	2016-133T08:04:00	UVIS_FUV to Rocks	NEG_X to NEP	JETTISON DAY. Must point at Skathi.
SP_235EA_DLTURN133_PRIME		2016-133T08:04:00		000T00:10:00	2016-133T08:14:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
NEW WAYPOINT		2016-133T08:14:00		000T11:46:00	2016-133T20:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_YGAP133_PRIME		2016-133T08:14:00		000T01:30:00	2016-133T09:44:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_C70METNON133_PRIME	C	2016-133T09:44:00		000T09:00:00	2016-133T18:44:00	XBAND to Earth	Rolling/SRU	SRU.
SP_235SA_WAYPTTURN133_PRIME		2016-133T19:20:00		000T00:40:00	2016-133T20:00:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
NEW WAYPOINT		2016-133T20:00:00		001T10:40:00	2016-135T06:40:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
CIRS_235SA_MIRMAP003_PRIME	I, V	2016-133T20:00:00		000T23:00:00	2016-134T19:00:00	CIRS_FP3 to Saturn	POS_Z to NSP	
CIRS_235RA_COMPLLRES002_PRIME	C, U, V	2016-134T19:00:00		000T10:00:00	2016-135T05:00:00	CIRS_FP1 to Rings	POS_Z to 190.7/59.7	No Preference to secondary pointing. Must point withing 15 degrees of Saturn center
ISS_235OT_SATELLORB016_PRIME	C, I, V	2016-135T05:00:00		000T01:00:00	2016-135T06:00:00	ISS_NAC to Satellites	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
SP_235EA_DLTURN135_PRIME		2016-135T06:00:00		000T00:40:00	2016-135T06:40:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
NEW WAYPOINT		2016-135T06:40:00		005T05:45:00	2016-140T12:25:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_YGAP135_PRIME		2016-135T08:14:00		000T01:30:00	2016-135T09:44:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_C34BWGNON135_PRIME	C	2016-135T09:44:00		000T04:00:00	2016-135T13:44:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS Y BIASCAL. Secondary chosen for CDA.
ENGR_235SC_YBIASCAL001_AACS	C	2016-135T13:44:00		000T01:30:00	2016-135T15:14:00	POS_Z to DELTA_H	NEG_X to Sun	
SP_235EA_C34BWG2ND135_PRIME	C	2016-135T15:14:00		000T01:00:00	2016-135T16:14:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS Y BIASCAL. Secondary chosen for CDA.
ENGR_235SC_YBIASCAL002_AACS	C	2016-135T16:14:00		000T01:30:00	2016-135T17:44:00	POS_Z to DELTA_H	NEG_X to Sun	
SP_235EA_C34BWG3RD135_PRIME	C	2016-135T17:44:00		000T01:00:00	2016-135T18:44:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS Y BIASCAL. Secondary chosen for CDA.
SP_235EA_YGAP137_PRIME		2016-137T08:00:00		000T01:30:00	2016-137T09:30:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_C70METNON137_PRIME	C	2016-137T09:30:00		000T09:00:00	2016-137T18:30:00	XBAND to Earth	Rolling/SRU	SRU.
ISS_235TI_M90R3CLD137_PRIME	C, V	2016-137T18:30:00	E235_M90R3CLD137+000T00:00:00	000T02:00:00	2016-137T20:30:00	ISS_NAC to Titan	NEG_Z to 62.733/-29.802	No Preference to secondary pointing
CDA_235DR_EXOGEN002_PRIME		2016-137T20:30:00		000T09:00:00	2016-138T05:30:00	XBAND to Earth	Rolling	
CDA_235DR_EXOGEN006_PRIME		2016-138T06:30:00		000T09:00:00	2016-138T15:30:00	XBAND to Earth	Rolling	
CDA_235DR_EXOGEN007_PRIME		2016-138T16:30:00		000T09:00:00	2016-139T01:30:00	XBAND to Earth	Rolling	
SP_235EA_YGAP139_PRIME		2016-139T02:00:00		000T01:30:00	2016-139T03:30:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_G34BWGNON139_PRIME	C, R	2016-139T03:30:00		000T08:30:00	2016-139T12:00:00	XBAND to Earth	Rolling/SRU	SRU.
CDA_235DR_EXOGEN008_PRIME		2016-139T13:00:00		000T08:00:00	2016-139T21:00:00	XBAND to Earth	Rolling	
ENGR_235SC_KPTYBIAS140_PRIME		2016-140T01:45:00		000T01:30:00	2016-140T03:15:00	NEG_Z to DELTA_H (0.0,0.0,39.001 deg. offset)	NEG_X to Sun	
SP_235EA_G34BWGNON140_PRIME	C, R	2016-140T03:15:00		000T01:40:00	2016-140T04:55:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS 2 of 3 Rule and RSS Boresight. Secondary chosen for MIMI.
RSS_235EA_BORESIGHT002_PRIME	C, R	2016-140T04:55:00		000T01:00:00	2016-140T05:55:00	XBAND to Earth	PIC	
SP_235EA_G34BWG2ND140_PRIME	C, R	2016-140T05:55:00		000T05:50:00	2016-140T11:45:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS 2 of 3 Rule and RSS Boresight. Secondary chosen for MIMI.
SP_235SA_WAYPTTURN140_PRIME		2016-140T11:45:00		000T00:40:00	2016-140T12:25:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
NEW WAYPOINT		2016-140T12:25:00		000T03:10:00	2016-140T15:35:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
ISS_235TI_M60R3CLD140_PRIME	C, V	2016-140T12:25:00	E235_M60R3CLD140+000T00:00:00	000T01:30:00	2016-140T13:55:00	ISS_NAC to Titan	NEG_X to 190.7/59.7	No Preference to secondary pointing
ISS_235OT_SATELLORB020_PRIME	C, I, V	2016-140T13:55:00		000T01:00:00	2016-140T14:55:00	ISS_NAC to Satellites	NEG_X to 190.7/59.7	Must point within 15 deg of Saturn Center
SP_235EA_DLTURN140_PRIME		2016-140T14:55:00		000T00:40:00	2016-140T15:35:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
NEW WAYPOINT		2016-140T15:35:00		001T20:50:00	2016-142T12:25:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
MAG_235SU_CALROLL002_PRIME	U	2016-140T22:00:00		000T08:00:00	2016-141T06:00:00	NEG_X to Earth (0.0,0.0,-30.0 deg. offset)	Rolling	
SP_235EA_YGAP141_PRIME		2016-141T06:00:00		000T01:30:00	2016-141T07:30:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_235EA_C70METNON141_PRIME	C	2016-141T07:30:00		000T09:00:00	2016-141T16:30:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
Apoapse Per = 31.9 d, inc ...		2016-141T13:11:34		000T00:00:01	2016-141T13:11:35			
SP_236EA_YGAP142_PRIME		2016-142T01:45:00		000T01:30:00	2016-142T03:15:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_236EA_G34BWGNON142_PRIME	C, R	2016-142T03:15:00		000T08:30:00	2016-142T11:45:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No Roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
SP_236SA_WAYPTTURN142_PRIME		2016-142T11:45:00		000T00:40:00	2016-142T12:25:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
NEW WAYPOINT		2016-142T12:25:00		000T13:10:00	2016-143T01:35:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
ISS_236TI_M60R3CLD142_PRIME	C, V	2016-142T12:25:00	E236_M60R3CLD142+000T00:00:00	000T01:30:00	2016-142T13:55:00	ISS_NAC to Titan	NEG_X to 190.7/59.7	No Preference to secondary pointing
ISS_236OT_SATELLORB002_PRIME	C, I, V	2016-142T13:55:00		000T01:00:00	2016-142T14:55:00	ISS_NAC to Satellites	NEG_X to 190.7/59.7	Must point within 15 deg of Saturn Center
CIRS_236RB_COMPLLRES001_PRIME	C, I, U, V	2016-142T14:55:00		000T10:00:00	2016-143T00:55:00	CIRS_FP1 to Rings	NEG_X to 190.7/59.7	No Preference to secondary pointing. Must point within 15 degrees of Saturn center
SP_236EA_DLTURN143_PRIME		2016-143T00:55:00		000T00:40:00	2016-143T01:35:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
NEW WAYPOINT		2016-143T01:35:00		003T17:05:00	2016-146T18:40:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_236EA_C34HEFOTP143_PRIME	C, E, N	2016-143T09:00:00		000T09:00:00	2016-143T18:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No Roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
SP_236EA_C34BWGOTB144_PRIME	C, N	2016-144T09:00:00		000T09:00:00	2016-144T18:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No Roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
SP_236EA_YGAP146_PRIME		2016-146T07:30:00		000T01:30:00	2016-146T09:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
SP_236EA_C34BWGNON146_PRIME	C, R	2016-146T09:00:00		000T09:00:00	2016-146T18:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No Roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
SP_236SA_WAYPTTURN146_PRIME		2016-146T18:00:00		000T00:40:00	2016-146T18:40:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
NEW WAYPOINT		2016-146T18:40:00		001T23:20:00	2016-148T18:00:00	ISS_NAC to Saturn	NEG_X to 190.7/59.7	
ISS_236TI_M60R3CLD146_PRIME	C, V	2016-146T18:40:00	E236_M60R3CLD146+000T00:00:00	000T01:30:00	2016-146T20:10:00	ISS_NAC to Titan	NEG_X to Sun	
ISS_236OT_SATELLORB005_PRIME	C, I, V	2016-146T20:10:00		000T01:00:00	2016-146T21:10:00	ISS_NAC to Satellites	NEG_X to 190.7/59.7	Must point within 15 deg of Saturn Center
ISS_236OT_ALBPOL121_PRIME	I, V	2016-146T21:10:00		001T04:30:00	2016-148T01:40:00	UVIS_FUV to Rocks	NEG_Z to NSP	JETTISON observation; must point at Albiorix.
VIMS_236RI_WHYAOCC001_PRIME	C	2016-148T01:40:00		000T10:20:00	2016-148T12:00:00	VIMS_IR to 207.261/-28.368	NEG_X to 190.7/59.7	Must point within 15 degrees of Saturn center
CIRS_236RI_SATREFL001_PRIME	C, U	2016-148T12:00:00		000T05:20:00	2016-148T17:20:00	CIRS_FP1 to Rings	NEG_X to 190.7/59.7	No Preference to secondary pointing
SP_236EA_DLTURN148_PRIME		2016-148T17:20:00		000T00:40:00	2016-148T18:00:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
NEW WAYPOINT		2016-148T18:00:00		000T09:45:00	2016-149T03:45:00	XBAND to Earth	NEG_Y to 157.7/-13.5	
ENGR_236SC_KPTYBIAS148_PRIME		2016-148T18:00:00		000T01:30:00	2016-148T19:30:00	POS_Z to DELTA_H (0.0,0.0,90.006 deg. offset)	NEG_X to Sun	
SP_236EA_M70METNON148_PRIME	C	2016-148T19:30:00		000T07:45:00	2016-149T03:15:00	XBAND to Earth	NEG_Y to 157.7/-13.5	No Roll due to AACS 2 of 3 Rule. Secondary chosen for MIMI.
SP_236SA_WAYPTTURN149_PRIME		2016-149T03:15:00		000T00:30:00	2016-149T03:45:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
NEW WAYPOINT		2016-149T03:45:00		001T14:00:00	2016-150T17:45:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
ISS_236OT_SATELLORB006_PRIME	C, I, V	2016-149T03:45:00		000T00:45:00	2016-149T04:30:00	ISS_NAC to Satellites	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
CIRS_236SA_COMPSIT003_PRIME	V	2016-149T04:30:00		000T23:00:00	2016-150T03:30:00	CIRS_FP3 to Saturn	POS_Z to 190.7/59.7	
NAV_236SK_OPNAV501_PRIME		2016-150T03:30:00		000T01:30:00	2016-150T05:00:00	ISS_NAC to Satellites	POS_Z to 190.7/59.7	No Preference to secondary pointing. Starts at waypoint, ends at same waypoint
CIRS_236RA_COMPLLRES001_PRIME	C, I, U, V	2016-150T05:00:00		000T10:00:00	2016-150T15:00:00	CIRS_FP1 to Rings	POS_Z to 190.7/59.7	No Preference to secondary pointing. Must point within 15 degrees of Saturn center
UVIS_236TE_ICYLON001_PRIME	V	2016-150T15:00:00		000T02:15:00	2016-150T17:15:00	UVIS_FUV to Tethys (0.115,0.0,0.0 deg. offset)	POS_Z to 190.7/59.7	Must point within 15 deg of RA/DEC
SP_236EA_DLTURN150_PRIME		2016-150T17:15:00		000T00:30:00	2016-150T17:45:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
NEW WAYPOINT		2016-150T17:45:00		001T09:55:00	2016-152T03:40:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
SP_236EA_YGAP150_PRIME		2016-150T17:45:00		000T01:30:00	2016-150T19:15:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
SP_236EA_M34BWGNON150_PRIME	C	2016-150T19:15:00		000T08:00:00	2016-151T03:15:00	XBAND to Earth	Rolling	

ISS_236RI_ARCORBIT001_PRIME	C, U, V	2016-151T03:15:00		000T14:30:00	2016-151T17:45:00	ISS_NAC to Rings (0.038,-65.0,-0.011 deg. offset)	NEG_X to 190.7/59.7	Must point within 15 deg of Saturn Center
SP_236EA_YGAP151_PRIME		2016-151T17:45:00		000T01:30:00	2016-151T19:15:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
SP_236EA_M70METNON151_PRIME	C	2016-151T19:15:00		000T07:45:00	2016-152T03:00:00	XBAND to Earth	Rolling	
SP_236SA_WAYPTTURN152_PRIME		2016-152T03:00:00		000T00:40:00	2016-152T03:40:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
NEW WAYPOINT		2016-152T03:40:00		000T14:05:00	2016-152T17:45:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
ISS_236TI_M60R3CLD152_PRIME	C, V	2016-152T03:40:00	E236_M60R3CLD152+000T00:00:00	000T01:30:00	2016-152T05:10:00	ISS_NAC to Titan	POS_Z to 190.7/59.7	No Preference to secondary pointing
ISS_236OT_SATELLORB008_PRIME	C, I, V	2016-152T05:10:00		000T01:00:00	2016-152T06:10:00	ISS_NAC to Satellites	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
UVIS_236TE_ICYLON004_PRIME	V	2016-152T06:10:00		000T04:50:00	2016-152T11:00:00	UVIS_FUV to Tethys (0.115,0.0,0.0 deg. offset)	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
VIMS_236RI_APOMOSAIC001_PRIME	C, U	2016-152T11:00:00		000T06:00:00	2016-152T17:00:00	VIMS_IR to Rings	POS_Z to 190.7/59.7	Must point within 15 degrees of Saturn center
SP_236EA_DLTURN152_PRIME		2016-152T17:00:00		000T00:45:00	2016-152T17:45:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
NEW WAYPOINT		2016-152T17:45:00		000T09:45:00	2016-153T03:30:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
ENGR_236SC_RWABIAS152_PRIME		2016-152T17:45:00		000T01:30:00	2016-152T19:15:00	XBAND to Earth	NEG_Y to 160.0/-5.5	
SP_236EA_M34BWGNON152_PRIME	C, R	2016-152T19:15:00		000T07:45:00	2016-153T03:00:00	XBAND to Earth	Rolling	
SP_236SA_WAYPTTURN153_PRIME		2016-153T03:00:00		000T00:30:00	2016-153T03:30:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
NEW WAYPOINT		2016-153T03:30:00		001T03:15:00	2016-154T06:45:00	ISS_NAC to Saturn	POS_Z to 190.7/59.7	
ISS_236TI_M60R3CLD153_PRIME	C, V	2016-153T03:30:00	E236_M60R3CLD153+000T00:00:00	000T01:30:00	2016-153T05:00:00	ISS_NAC to Titan	POS_Z to 190.7/59.7	No Preference to secondary pointing
ISS_236OT_SATELLORB009_PRIME	C, I, V	2016-153T05:00:00		000T00:50:00	2016-153T05:50:00	ISS_NAC to Satellites	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
UVIS_236ST_URDELSCO001_PRIME	C	2016-153T05:50:00		000T09:00:00	2016-153T14:50:00	UVIS_HSP to 240.083/-22.622	POS_Z to 190.7/59.7	Must point within 15 deg of Saturn Center
UVIS_236RH_LOPHASE001_PRIME	I, V	2016-153T14:50:00		000T15:20:00	2016-154T06:10:00	UVIS_FUV to Rhea (0.115,0.0,0.0 deg. offset)	POS_X to 63.0/-70.0	Must point within 15 deg of Saturn Center
SP_236EA_DLTURN154_PRIME		2016-154T06:10:00		000T00:35:00	2016-154T06:45:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
NEW WAYPOINT		2016-154T06:45:00		000T11:15:00	2016-154T18:00:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
SP_236EA_YGAP154_PRIME		2016-154T06:45:00		000T01:30:00	2016-154T08:15:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
SP_236EA_C34BWGNON154_PRIME	C	2016-154T08:15:00		000T09:00:00	2016-154T17:15:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	Rolling	MIMI.NEG_Y to Saturn (0,0,-9.5).
SP_236SA_WAYPTTURN154_PRIME		2016-154T17:15:00		000T00:45:00	2016-154T18:00:00	ISS_NAC to Saturn	NEG_Z to 190.7/59.7	
NEW WAYPOINT		2016-154T18:00:00		000T12:45:00	2016-155T06:45:00	ISS_NAC to Saturn	NEG_Z to 190.7/59.7	
CIRS_236RB_COMPLITB1001_PRIME	C, I, U, V	2016-154T18:00:00		000T06:00:00	2016-155T00:00:00	CIRS_FP1 to Rings	NEG_Z to 190.7/59.7	No Preference to secondary pointing. Must point within 15 degrees of Saturn center
UVIS_236DI_LOPHASE001_PIE	C, I, V	2016-155T00:00:00		000T06:15:00	2016-155T06:15:00	UVIS_FUV to Dione (0.115,0.0,0.0 deg. offset)	NEG_Z to 190.7/59.7	Collaborative Rider(s): ISS. Collaborative Rider(s): ISS
SP_236EA_DLTURN155_PRIME		2016-155T06:15:00		000T00:30:00	2016-155T06:45:00	XBAND to Earth	NEG_Y to 329.2/29.8	
NEW WAYPOINT		2016-155T06:45:00		000T11:10:00	2016-155T17:55:00	XBAND to Earth	NEG_Y to 329.2/29.8	
SP_236EA_YGAP155_PRIME		2016-155T06:45:00		000T01:30:00	2016-155T08:15:00	XBAND to Earth	NEG_Y to 329.2/29.8	
SP_236EA_C70METNON155_PRIME	C, R	2016-155T08:15:00		000T09:00:00	2016-155T17:15:00	XBAND to Earth	Rolling	
MAPS_236 Segment		2016-155T17:15:00		003T09:30:00	2016-159T02:45:00			
SP_236EA_WAYPTTURN155_PRIME		2016-155T17:15:00		000T00:40:00	2016-155T17:55:00	XBAND to Earth	NEG_Y to Saturn	
NEW WAYPOINT		2016-155T17:55:00		001T00:00:00	2016-156T17:55:00	XBAND to Earth	NEG_Y to Saturn	
Begin Custom Period		2016-155T17:55:00		000T00:00:01	2016-155T17:55:01			
CIRS_236RH_COMPGLBL001_PRIME	C, I	2016-155T17:55:00		000T07:05:00	2016-156T01:00:00	CIRS_FP1 to Rhea	NEG_X to 179.7/38.0	Collaborative Rider(s): ISS. Pick up at XBAND to Earth, NEG_Y to Saturn; Hand off at ISS_NAC to Titan, NEG_X to 142.802/44.18. Collaborative Rider(s): ISS
ISS_236TI_M30R2CLD155_PRIME	C, V	2016-156T01:00:00	E236_M30R2CLD155+000T00:00:00	000T01:30:00	2016-156T02:30:00	ISS_NAC to Titan	NEG_X to 142.802/44.18	Pick up at ISS_NAC to Titan, NEG_X to 142.802/44.18; Hand off at XBAND to Earth, NEG_Y to Saturn.
End Custom Period		2016-156T02:30:00		000T00:00:01	2016-156T02:30:01			
CDA_236DR_RPX1100002_PRIME	M	2016-156T02:30:00		000T05:45:00	2016-156T08:15:00	NEG_Z to Earth	NEG_X to NSP	
SP_236EA_C34BWGOTP156_PRIME	C, E, N	2016-156T08:15:00		000T09:00:00	2016-156T17:15:00	XBAND to Earth	4_Hr_Rolling	MAPS/CAPS.update during integration.OTP.SRU.
SP_236SA_WAYPTTURN156_PRIME		2016-156T17:15:00		000T00:40:00	2016-156T17:55:00	NEG_Y to Saturn	NEG_X to NSP	
NEW WAYPOINT		2016-156T17:55:00		000T14:20:00	2016-157T08:15:00	NEG_Y to Saturn	NEG_X to NSP	
ISS_236TI_M60R2CLD156_PRIME	C, V	2016-156T17:55:00	E236_M60R2CLD156+000T00:00:00	000T01:30:00	2016-156T19:25:00	ISS_NAC to Titan	NEG_X to 353.619/50.393	
UVIS_236SA_ENAURFOOT001_PIE	C, V	2016-156T19:25:00		000T12:10:00	2016-157T07:35:00	UVIS_FUV to Saturn	NEG_X to NSP	Collaborative Rider(s): VIMS
SP_236EA_DLTURN157_PRIME		2016-157T07:35:00		000T00:40:00	2016-157T08:15:00	XBAND to Earth	NEG_Y to Saturn	
NEW WAYPOINT		2016-157T08:15:00		000T09:40:00	2016-157T17:55:00	XBAND to Earth	NEG_Y to Saturn	
SP_236EA_C70METOTB157_PRIME	C, N	2016-157T08:15:00		000T09:00:00	2016-157T17:15:00	XBAND to Earth	4_Hr_Rolling	MAPS/CAPS.same secondary as OTP pass.OTB.SRU.
Periapse R = 10.039 Rs, lat...		2016-157T11:45:42		000T00:00:01	2016-157T11:45:43			
SP_236SA_WAYPTTURN157_PRIME		2016-157T17:15:00		000T00:40:00	2016-157T17:55:00	NEG_Y to Saturn (0.0,15.0,0.0 deg. offset)	NEG_X to NSP	
NEW WAYPOINT		2016-157T17:55:00		000T09:40:00	2016-158T03:35:00	NEG_Y to Saturn (0.0,15.0,0.0 deg. offset)	NEG_X to NSP	
UVIS_236SA_AURSLEW001_PRIME	C, R, V	2016-157T17:55:00		000T09:00:00	2016-158T02:55:00	UVIS_FUV to Saturn	NEG_X to NSP	Collaborative Rider(s): VIMS
SP_236EA_WAYPTTURN158_PRIME	R	2016-158T02:55:00		000T00:30:00	2016-158T03:25:00	NEG_Z to Saturn (0.0,0.0,20.0 deg. offset)	POS_Y to NSP	
SP_236EA_WAYPTTURN458_PRIME	R	2016-158T03:25:00		000T00:10:00	2016-158T03:35:00	XBAND to Earth	POS_Y to NSP	
NEW WAYPOINT		2016-158T03:35:00		000T23:50:00	2016-159T03:25:00	XBAND to Earth	POS_Y to NSP	
RSS_236RI_OCC001_PIE		2016-158T03:35:00		000T07:26:00	2016-158T11:01:00	XBAND to Earth	PIC	
MAG_236SU_CALROLL001_PRIME	U	2016-158T11:01:00		000T06:14:00	2016-158T17:15:00	NEG_X to Earth (0.0,0.0,-30.0 deg. offset)	Rolling	
ENGR_236SC_KPTYBIAS158_PRIME		2016-158T17:15:00		000T01:30:00	2016-158T18:45:00	NEG_Z to DELTA_H (0.0,0.0,34.003 deg. offset)	NEG_X to Sun	
SP_236EA_M70METNON158_PRIME	C	2016-158T18:45:00		000T08:00:00	2016-159T02:45:00	XBAND to Earth	Rolling	MIMI. WP attitude is XBand to EA, POS_Y to NSP. Turn to T120 following segment works from this attitude.
Titan Flyby T120 Segment		2016-159T02:45:00		002T07:45:00	2016-161T10:30:00			
SP_236TI_WAYPTTURN159_PRIME		2016-159T02:45:00		000T00:40:00	2016-159T03:25:00	NEG_Y to Titan	NEG_X to NTP	
NEW WAYPOINT		2016-159T03:25:00		001T04:35:00	2016-160T08:00:00	NEG_Y to Titan	NEG_X to NTP	
SP_236TI_DEADTIME159_PRIME		2016-159T03:25:00		000T00:08:39	2016-159T03:33:39			
CIRS_236TI_FIRNADCMP001_PRIME	I, U, V	2016-159T03:33:39	GMB_E236_TITAN_T120-000T10:32:38	000T01:32:38	2016-159T05:06:17	CIRS_FP1 to Titan	PIC	
Begin custom period		2016-159T03:39:59	GMB_E236_TITAN_T120-000T10:26:18	000T00:00:01	2016-159T03:40:00			
CIRS_236TI_MIRLMBINT001_PRIME	I, V	2016-159T05:06:17	GMB_E236_TITAN_T120-000T09:00:00	000T04:00:00	2016-159T09:06:17	CIRS_FPB to Titan	PIC	Pick up at NEG_Y to Titan, NEG_X to NTP; Hand off at CIRS_FP1 to Titan, NEG_X to NTP.
CIRS_236TI_FIRNADMAP001_PRIME	V	2016-159T09:06:17	GMB_E236_TITAN_T120-000T05:00:00	000T02:30:00	2016-159T11:36:17	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, NEG_X to NTP; Hand off at CIRS_FP1 to Titan, NEG_X to NTP.
CIRS_236TI_FIRLMBINT001_PRIME	I, M, V	2016-159T11:36:17	GMB_E236_TITAN_T120-000T02:30:00	000T01:15:00	2016-159T12:51:17	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, NEG_X to NTP; Hand off at CIRS_FP1 to Titan, PIC. Handoff at CIRS_FP1 to Titan, Lat_View, 51S, 90 degrees, LHS, 225 km altitude; POS_Z to Titan FOV_Limb, 51S, LHS
ENGR_236SC_RADRCS159_PRIME	M	2016-159T12:51:17	GMB_E236_TITAN_T120-000T01:15:00	000T00:01:00	2016-159T12:52:17	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, PIC; Hand off at CIRS_FP1 to Titan, PIC. Deadband = (0.5,2.0,0.5)
CIRS_236TI_FIRLMBAER002_PRIME	M, V	2016-159T12:52:17	GMB_E236_TITAN_T120-000T01:14:00	000T00:44:00	2016-159T13:36:17	CIRS_FP1 to Titan	PIC	Pick up at CIRS_FP1 to Titan, PIC; Hand off at NEG_Z to Titan, NEG_X to NTP. Pickup at CIRS_FP1 to Titan, Lat_View, 51S, 90 degrees, LHS, 225 km altitude; POS_Z to Titan FOV_Limb, 51S, LHS. Handoff at NEG_Z to Titan, NEG_X to NTP.

Switch from (0.5,2,0.5) for...		2016-159T13:35:17	GMB_E236_TITAN_T120-000T00:31:00	000T00:01:00	2016-159T13:36:17			Deadband = (0.5, 0.5, 2.0)
RADAR_236TI_T120INALT001_PRIME	M	2016-159T13:36:17	GMB_E236_TITAN_T120-000T00:30:00	000T00:12:00	2016-159T13:48:17	NEG_Z to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_Z to Titan, NEG_X to NTP; Hand off at NEG_Z to Titan, NEG_X to Titan_SC_RAM.
Begin Dual Playback Science		2016-159T13:48:17	GMB_E236_TITAN_T120-000T00:18:00	000T00:00:01	2016-159T13:48:18			
RADAR_236TI_T120INSAR001_PRIME	M	2016-159T13:48:17	GMB_E236_TITAN_T120-000T00:18:00	000T00:18:00	2016-159T14:06:17	NEG_Z to Titan	NEG_X to Titan_SC_RAM	Pick up at NEG_Z to Titan, NEG_X to Titan_SC_RAM; Hand off at NEG_X to Titan_SC_RAM, NEG_Z to Titan. INMS ride along.
236TI (t) T120 TITAN Outbou...		2016-159T14:06:17		000T00:00:01	2016-159T14:06:18			
RADAR_236TI_T120OTRAS001_PRIME	M	2016-159T14:06:17	GMB_E236_TITAN_T120+000T00:00:00	000T00:15:00	2016-159T14:21:17	NEG_X to Titan_SC_RAM	NEG_Z to Titan	Collaborative Rider(s): INMS. Pick up at NEG_X to Titan_SC_RAM, NEG_Z to Titan; Hand off at NEG_X to Titan_SC_RAM, NEG_Z to Titan. Collaborative Rider(s): INMS. Ride-along at c/a.
End Dual Playback Science		2016-159T14:21:17	GMB_E236_TITAN_T120+000T00:15:00	000T00:00:01	2016-159T14:21:18			
RADAR_236TI_T120OTALT001_PRIME	M	2016-159T14:21:17	GMB_E236_TITAN_T120+000T00:15:00	000T00:15:00	2016-159T14:36:17	NEG_Z to Titan	NEG_Y to NTP	Pick up at NEG_X to Titan_SC_RAM, NEG_Z to Titan; Hand off at NEG_Z to Titan, NEG_Y to NTP.
ENGR_236SC_RADRWBIAS159_PPS	M	2016-159T14:36:17	GMB_E236_TITAN_T120+000T00:30:00	000T00:22:00	2016-159T14:58:17	NEG_Z to Titan	NEG_Y to NTP	Pick up at NEG_Z to Titan, NEG_Y to NTP; Hand off at NEG_Z to Titan, NEG_Y to NTP.
RADAR_236TI_T120OHSAR001_PRIME	M	2016-159T14:58:17	GMB_E236_TITAN_T120+000T00:52:00	000T00:45:00	2016-159T15:43:17	NEG_Z to Titan	NEG_Y to NTP	Pick up at NEG_Z to Titan, NEG_Y to NTP; Hand off at NEG_Z to Titan, NEG_Y to NTP.
RADAR_236TI_T120OTSCT001_PRIME	M	2016-159T15:43:17	GMB_E236_TITAN_T120+000T01:37:00	000T00:38:00	2016-159T16:21:17	NEG_Z to Titan	NEG_Y to NTP	Pick up at NEG_Z to Titan, NEG_Y to NTP; Hand off at NEG_Y to Titan, NEG_X to NTP.
End custom period		2016-159T16:21:17	GMB_E236_TITAN_T120+000T02:15:00	000T00:00:01	2016-159T16:21:18			
CIRS_236TI_FIRNADMAP002_PRIME	V	2016-159T16:21:17	GMB_E236_TITAN_T120+000T02:15:00	000T02:45:00	2016-159T19:06:17	CIRS_FP1 to Titan	PIC	
CIRS_236TI_MIRLMBMAP002_PRIME	V	2016-159T19:06:17	GMB_E236_TITAN_T120+000T05:00:00	000T04:00:00	2016-159T23:06:17	CIRS_FPB to Titan	PIC	
CIRS_236TI_FIRNADCMP002_PRIME	I, U, V	2016-159T23:06:17	GMB_E236_TITAN_T120+000T09:00:00	000T04:00:00	2016-160T03:06:17	CIRS_FP1 to Titan	PIC	
CIRS_236TI_MIDIRTMAP002_PRIME	I, V	2016-160T03:06:17	GMB_E236_TITAN_T120+000T13:00:00	000T03:52:22	2016-160T06:58:39	CIRS_FPB to Titan	PIC	Template
SP_236TI_DEADTIME160_PRIME		2016-160T06:58:39	GMB_E236_TITAN_T120+000T16:52:22	000T00:21:20	2016-160T07:19:59	NEG_Y to Titan		
SP_236EA_DLTURN160_PRIME		2016-160T07:20:00		000T00:40:00	2016-160T08:00:00	XBAND to Earth	NEG_Y to 153.0/-20.0	
NEW WAYPOINT		2016-160T08:00:00		000T09:40:00	2016-160T17:40:00	XBAND to Earth	NEG_Y to 153.0/-20.0	
SP_236EA_C70METNON160_PRIME	C	2016-160T08:00:00		000T09:00:00	2016-160T17:00:00	XBAND to Earth	NEG_Y to 153.0/-20.0	MIMI.NEG_Y to Saturn (0,0,-9.5).SRU.post-TOST flyby.
Pointer Reset in preparatio...		2016-160T17:00:00		000T01:00:00	2016-160T18:00:00			
SP_236TI_WAYPTTURN160_PRIME		2016-160T17:00:00		000T00:40:00	2016-160T17:40:00	NEG_Y to Titan	NEG_X to NSP	
NEW WAYPOINT		2016-160T17:40:00		000T06:35:00	2016-161T00:15:00	NEG_Y to Titan	NEG_X to NSP	
ISS_236TI_CLOUD001_PRIME	C, V	2016-160T17:40:00		000T02:55:00	2016-160T20:35:00	ISS_NAC to Titan	NEG_X to NSP	No Preference to secondary pointing
ISS_236TI_CLOUD002_PRIME	C, V	2016-160T20:35:00		000T02:00:00	2016-160T22:35:00	ISS_NAC to Titan	NEG_X to NSP	No Preference to secondary pointing
ISS_236TI_CLOUD003_PRIME	C, V	2016-160T22:35:00		000T01:00:00	2016-160T23:35:00	ISS_NAC to Titan	NEG_X to NSP	No Preference to secondary pointing
SP_236EA_DLTURN460_PRIME		2016-160T23:35:00		000T00:40:00	2016-161T00:15:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
NEW WAYPOINT		2016-161T00:15:00		000T10:35:00	2016-161T10:50:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	NEG_Y to Saturn	
ENGR_236SC_KPTYBIAS161_PRIME		2016-161T00:15:00		000T01:30:00	2016-161T01:45:00	NEG_Z to DELTA_H (0.0,0.0,-82.002 deg. offset)	NEG_X to Sun	
SP_236EA_G70METNON161_PRIME	C	2016-161T01:45:00		000T08:45:00	2016-161T10:30:00	XBAND to Earth (0.0,0.0,-9.5 deg. offset)	Rolling/SRU	MIMI.NEG_Y to Saturn (0,0,-9.5).SRU.
XD_236_237 Segment		2016-161T10:30:00		017T05:14:00	2016-178T15:44:00			
SP_236SA_WAYPTTURN161_PRIME		2016-161T10:30:00		000T00:20:00	2016-161T10:50:00	ISS_NAC to Saturn	NEG_X to NSP	
NEW WAYPOINT		2016-161T10:50:00		000T13:25:00	2016-162T00:15:00	ISS_NAC to Saturn	NEG_X to NSP	
ISS_236OT_SATELLORB011_PRIME	C, V	2016-161T10:50:00		000T01:00:00	2016-161T11:50:00	ISS_NAC to Satellites	NEG_X to NSP	Must point within 15 deg of Saturn Center
CIRS_236SA_FIRMAP002_PRIME	V	2016-161T11:50:00		000T12:00:00	2016-161T23:50:00	CIRS_FP1 to Saturn	NEG_X to NSP	
SP_236EA_DLTURN161_PRIME		2016-161T23:50:00		000T00:25:00	2016-162T00:15:00	XBAND to Earth	NEG_X to 141.0/-42.0	
NEW WAYPOINT		2016-162T00:15:00		000T10:20:00	2016-162T10:35:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_236EA_YGAP162_PRIME		2016-162T00:15:00		000T01:30:00	2016-162T01:45:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_236EA_G34BWGNON162_PRIME	C, R	2016-162T01:45:00		000T08:30:00	2016-162T10:15:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 141/-42.SRU.
SP_236SA_WAYPTTURN162_PRIME		2016-162T10:15:00		000T00:20:00	2016-162T10:35:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
NEW WAYPOINT		2016-162T10:35:00		000T21:10:00	2016-163T07:45:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
ISS_236TI_M120R2HZ162_PRIME	C, I, V	2016-162T10:35:00	E236_M120R2HZ162+000T00:00:00	000T01:30:00	2016-162T12:05:00	ISS_NAC to Titan	NEG_X to 191.4/52.8	No Preference to secondary pointing
ISS_236RF_FMOVIE002_PRIME	C, I, V	2016-162T12:05:00		000T15:00:00	2016-163T03:05:00	ISS_NAC to Rings	NEG_X to 191.4/52.8	Must point within 15 deg of Saturn Center
ISS_236RI_COLPHMEMP001_PRIME	C, U, V	2016-163T03:05:00		000T04:20:00	2016-163T07:25:00	ISS_NAC to Rings	NEG_X to NSP	Must point within 15 deg of Saturn Center
SP_236EA_DLTURN163_PRIME		2016-163T07:25:00		000T00:20:00	2016-163T07:45:00	XBAND to Earth	NEG_X to 141.0/-42.0	
NEW WAYPOINT		2016-163T07:45:00		007T09:00:00	2016-170T16:45:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_236EA_C34BWGOTP163_PRIME	C, E, N	2016-163T07:45:00		000T09:00:00	2016-163T16:45:00	XBAND to Earth	4_Hr_Rolling	CDA.NEG_X to 141/-42.OTP.SRU.
ISS_236OT_TAQROTA037_PRIME	M, U, V	2016-163T16:45:00		000T15:00:00	2016-164T07:45:00	UVIS_FUV to Rocks	NEG_X to 109.945/68.998	Collaborative Rider(s): CDA. Must point within 15 deg of 233/9
SP_236EA_C34BWGOTB164_PRIME	C, N	2016-164T07:45:00		000T09:00:00	2016-164T16:45:00	XBAND to Earth	4_Hr_Rolling	CDA.same secondary as OTP pass.OTB.SRU.
ISS_236OT_TAQROTB036_PRIME	M, U, V	2016-164T16:45:00		001T13:15:00	2016-166T06:00:00	UVIS_FUV to Rocks	NEG_X to 129.055/62.502	Collaborative Rider(s): CDA. Must point within 15 deg of 233/9
SP_236EA_YGAP166_PRIME		2016-166T06:00:00		000T01:30:00	2016-166T07:30:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_236EA_C70METSEQ166_PRIME	C	2016-166T07:30:00		000T09:00:00	2016-166T16:30:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 141/-42.SRU.
SP_236EA_YGAP168_PRIME		2016-168T06:00:00		000T01:30:00	2016-168T07:30:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_236EA_C34BWGSEQ168_PRIME	C, E, R	2016-168T07:30:00		000T09:00:00	2016-168T16:30:00	XBAND to Earth	Rolling/SRU	CDA.NEG_X to 141/-42.SRU.
ISS_236OT_TAQROTD033_PRIME	M, U, V	2016-168T16:30:00		001T13:15:00	2016-170T05:45:00	UVIS_FUV to Rocks	NEG_X to 129.055/62.502	Collaborative Rider(s): CDA. Must point within 15 deg of 233/9
Apoapse Per = 23.9 d, inc ...		2016-169T05:46:32		000T00:00:01	2016-169T05:46:33			
SP_237EA_YGAP170_PRIME		2016-170T05:45:00		000T01:30:00	2016-170T07:15:00	XBAND to Earth	NEG_X to 141.0/-42.0	
SP_237EA_C70METSEQ170_PRIME	C	2016-170T07:15:00		000T09:00:00	2016-170T16:15:00	XBAND to Earth	NEG_X to 141.0/-42.0	No Roll due to AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_237SA_WAYPTTURN170_PRIME		2016-170T16:15:00		000T00:30:00	2016-170T16:45:00	ISS_NAC to Saturn	POS_Z to 191.4/52.8	
NEW WAYPOINT		2016-170T16:45:00		001T12:10:00	2016-172T04:55:00	ISS_NAC to Saturn	POS_Z to 191.4/52.8	
ISS_237TI_M90R3CLD170_PRIME	C, V	2016-170T16:45:00	E237_M90R3CLD170+000T00:00:00	000T01:30:00	2016-170T18:15:00	ISS_NAC to Titan	POS_Z to 191.4/52.8	No Preference to secondary pointing
ISS_237OT_SATELLORB001_PRIME	C, I, V	2016-170T18:15:00		000T01:00:00	2016-170T19:15:00	ISS_NAC to Satellites	POS_Z to 191.4/52.8	Must point within 15 deg of Saturn Center
CIRS_237SA_COMPSIT001_PRIME	I, V	2016-170T19:15:00		000T23:00:00	2016-171T18:15:00	CIRS_FP1 to Saturn	POS_Z to 191.4/52.8	
CIRS_237RA_COMPLLRES001_PRIME	C, U, V	2016-171T18:15:00		000T10:00:00	2016-172T04:15:00	CIRS_FP1 to Rings	POS_Z to 191.4/52.8	No Preference to secondary pointing. Must point within 15 degrees of Saturn center
SP_237EA_DLTURN172_PRIME		2016-172T04:15:00		000T00:40:00	2016-172T04:55:00	XBAND to Earth	NEG_X to 322.0/40.0	
NEW WAYPOINT		2016-172T04:55:00		000T11:40:00	2016-172T16:35:00	XBAND to Earth	NEG_X to 322.0/40.0	
SP_237EA_YGAP172_PRIME		2016-172T05:45:00		000T01:30:00	2016-172T07:15:00	XBAND to Earth	NEG_X to 322.0/40.0	
SP_237EA_C34BWGSEQ172_PRIME	C, E	2016-172T07:15:00		000T09:00:00	2016-172T16:15:00	XBAND to Earth	NEG_X to 322.0/40.0	No Roll due to AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_237SA_WAYPTTURN172_PRIME		2016-172T16:15:00		000T00:20:00	2016-172T16:35:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
NEW WAYPOINT		2016-172T16:35:00		001T13:20:00	2016-174T05:55:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
ISS_237TI_M60R3CLD172_PRIME	C, V	2016-172T16:35:00	E237_M60R3CLD172+000T00:00:00	000T01:30:00	2016-172T18:05:00	ISS_NAC to Titan	NEG_X to 191.4/52.8	No Preference to secondary pointing

ISS_237OT_SATELLORB002_PRIME	I, V	2016-172T18:05:00		000T01:00:00	2016-172T19:05:00	ISS_NAC to Satellites	NEG_X to 191.4/52.8	Must point within 15 deg of Saturn Center
CIRS_237RC_COMPLLRES001_PRIME	C, U, V	2016-172T21:25:00		000T10:00:00	2016-173T07:25:00	CIRS_FP1 to Rings	NEG_X to 191.4/52.8	No Preference to secondary pointing. Must point within 15 degrees of Saturn center
VIMS_237RI_2CENCAL001_PRIME	C	2016-173T07:25:00		000T02:00:00	2016-173T09:25:00	VIMS_IR to 207.361/-34.451	NEG_X to 191.4/52.8	Must point within 15 degrees of Saturn center
VIMS_237RI_2CENOCC001_PRIME	C, I	2016-173T09:25:00		000T20:05:00	2016-174T05:30:00	VIMS_IR to 207.361/-34.451	NEG_X to 191.4/52.8	Must point within 15 degrees of Saturn center
SP_237EA_DLTURN174_PRIME		2016-174T05:30:00		000T00:25:00	2016-174T05:55:00	XBAND to Earth	NEG_X to 322.0/40.0	
NEW WAYPOINT		2016-174T05:55:00		000T10:35:00	2016-174T16:30:00	XBAND to Earth	NEG_X to 322.0/40.0	
SP_237EA_YGAP174_PRIME		2016-174T05:55:00		000T01:30:00	2016-174T07:25:00	XBAND to Earth	NEG_X to 322.0/40.0	
SP_237EA_C70METSEQ174_PRIME	C, R	2016-174T07:25:00		000T08:35:00	2016-174T16:00:00	XBAND to Earth	NEG_X to 322.0/40.0	No Roll due to AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_237SA_WAYPTTURN174_PRIME		2016-174T16:00:00		000T00:30:00	2016-174T16:30:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
NEW WAYPOINT		2016-174T16:30:00		001T13:00:00	2016-176T05:30:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
ISS_237TI_M30R3CLD174_PRIME	C, V	2016-174T16:30:00	E237_M30R3CLD174+000T00:00:00	000T01:30:00	2016-174T18:00:00	ISS_NAC to Titan	NEG_X to 191.4/52.8	No Preference to secondary pointing
VIMS_237ST_ALPSCOCAL001_PRIME		2016-174T18:00:00		000T04:00:00	2016-174T22:00:00	VIMS_IR to 247.352/-26.432	POS_X to 359.0/-40.0	Must point within 15 degrees of Saturn center
ISS_237OT_SATELLORB003_PRIME	C, I, V	2016-174T22:00:00		000T01:00:00	2016-174T23:00:00	ISS_NAC to Satellites	NEG_X to 191.4/52.8	Must point within 15 deg of Saturn Center
ISS_237RI_ARCORBIT001_PRIME	C, I, V	2016-174T23:00:00		000T22:55:00	2016-175T21:55:00	ISS_NAC to Rings	NEG_X to 181.4/42.8	Must point within 15 deg of Saturn Center
VIMS_237RI_APOMOSAIC001_PRIME	C, I, U	2016-175T21:55:00		000T07:00:00	2016-176T04:55:00	VIMS_IR to Rings	NEG_X to 191.4/52.8	Must point within 15 degrees of Saturn center
SP_237EA_DLTURN175_PRIME		2016-176T04:55:00		000T00:35:00	2016-176T05:30:00	XBAND to Earth	NEG_X to 322.0/40.0	
NEW WAYPOINT		2016-176T05:30:00		000T11:00:00	2016-176T16:30:00	XBAND to Earth	NEG_X to 322.0/40.0	
ENGR_237SC_RWABIAS176_PRIME		2016-176T05:30:00		000T01:30:00	2016-176T07:00:00	XBAND to Earth	NEG_X to 322.0/40.0	
SP_237EA_C34BWGSEQ176_PRIME	C, R	2016-176T07:00:00		000T09:00:00	2016-176T16:00:00	XBAND to Earth	NEG_X to 322.0/40.0	No Roll due to AACS 2 of 3 Rule. Secondary chosen for CDA.
SP_237SA_WAYPTTURN176_PRIME		2016-176T16:00:00		000T00:30:00	2016-176T16:30:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
NEW WAYPOINT		2016-176T16:30:00		001T14:14:00	2016-178T06:44:00	ISS_NAC to Saturn	NEG_X to 191.4/52.8	
ISS_237TI_M30R3CLD176_PRIME	C, V	2016-176T16:30:00	E237_M30R3CLD176+000T00:00:00	000T01:30:00	2016-176T18:00:00	ISS_NAC to Titan	NEG_X to Sun	
MAG_237SU_CALROLL001_PRIME	U	2016-176T18:00:00		000T08:00:00	2016-177T02:00:00	NEG_X to Earth (0.0,0.0,-30.0 deg. offset)	Rolling	
UVIS_237SA_AURSLEW002_PRIME	C, V	2016-177T02:00:00		000T09:49:00	2016-177T11:49:00	UVIS_FUV to Saturn	NEG_X to 191.4/52.8	Must point within 15 deg of Saturn Center
VIMS_237RI_ALPSCOOCC001_PIE	C, I, U	2016-177T11:49:00		000T10:16:00	2016-177T22:05:00	VIMS_IR to 247.352/-26.432	NEG_X to 177.625/35.058	Must point within 15 degrees of Saturn center
NAV_237SK_OPNAV771_PRIME		2016-177T22:05:00		000T01:30:00	2016-177T23:35:00	ISS_NAC to Satellites	NEG_Z to 263.337/32.066	Starts at waypoint, ends at same waypoint
VIMS_237RI_0PHASEC001_PRIME	C, I, U	2016-177T23:35:00		000T05:25:00	2016-178T05:00:00	POS_Y to Sun	NEG_X to 191.4/52.8	Must point within 15 degrees of Saturn center
SP_237EA_DLTURN178_PRIME		2016-178T06:10:00		000T00:34:00	2016-178T06:44:00	XBAND to Earth	NEG_X to 352.0/-30.0	
NEW WAYPOINT		2016-178T06:44:00		000T09:00:00	2016-178T15:44:00	XBAND to Earth	NEG_X to 352.0/-30.0	
SP_237EA_C70METSEQ178_PRIME	C, E	2016-178T06:44:00		000T09:00:00	2016-178T15:44:00	XBAND to Earth	NEG_X to 352.0/-30.0	CDA.NEG_X to 352/-30.EOS.