

**210TI T107**

C/A Altitude = 980 km

Delivered: April 17, 2014

Start Time	End Time	Prime Activity	Observation Detail	Operational Mode	Telemetry Mode	Comments
2014-344T03:30:00	2014-344T04:10:00	SP Turn to Waypoint	NEG_Y to Titan, NEG_X to NTP	DFPW Normal	S_N_ER_3	NEG_X to NEP would also work
2014-344T04:10:00	C/A-18:01:35	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3	
C/A-18:01:35	-14:00	CIRS	Template A3 (TC1b)	DFPW Normal	S_N_ER_3	ISS rider
-14:00	-09:00	CIRS	Template C (TN1c)	DFPW Normal	S_N_ER_3	VIMS rider
-09:00	-07:05	ISS	(TN1a)	DFPW Normal	S_N_ER_3	
-07:05	-05:00	ISS	(TN1a)	RSS_K_RWAF	S_N_ER_3	Includes KA-band warm up for RSS. Warm-up mode can accommodate ORS instruments.
-05:00	-04:20	SP Turn to Earth for Downlink	XBAND to Earth, NEG_X to Titan SC_RAM	RSS_K_RWAF	S_N_ER_3	
-04:20	-01:00	Canberra 34M, NAV/INMS	XBAND to Earth, NEG_X to Titan SC_RAM (TC2a)	RSS_K_RWAF	S_N_ER_3	NOTE: NAV/INMS requires early uplink;
-01:00	-00:39	RWA to RCS Transition (Rider)	XBAND to Earth, NEG_X to Titan SC_RAM (TC2a)	RSS3RCS, then RSS2RWAP_Full at -00:39:12 to turn off S-band (Unique: "RSS_K_RCS")	S_N_ER_3	Set deadband to (0.5, 0.5, 2.0 mrad) to save hydrazine. Two-part opmode transition, going from RSSKRWAP-FULL to RSS3RCS in two steps: ORSRWA to ORSRCS, then DFPW_normal to RSS2RWAP-FULL.
-00:39	+00:38	Canberra 34M, NAV/INMS	XBAND to Earth, NEG_X to Titan SC_RAM (TC2a)	Unique: "RSS_K_RCS"	S_N_ER_3	
2014-344T22:26:35		<b>CLOSEST APPROACH</b>	<b>XBAND to EARTH, NEG_X to Titan SC_RAM (TC2a)</b>			<b>Work the transitions with NAV. If the transition is out at -5 hr then ok. If closer in, work MAPS issue.</b>
+00:38	+00:59	RCS to RWA Transition (Rider)	XBAND to Earth, NEG_X to Titan SC_RAM (TC2a)	RSS_K_RWAF	S_N_ER_3	Set deadband to (0.5, 0.5, 2.0 mrad) during transition. Transition back to RSSKRWAP-FULL in two steps: RSS2RWAP-FULL to RSSKRWAP-FULL, then ORSRCS to ORSRWA.
+00:59	+04:30	Canberra 34M, NAV/INMS	XBAND to Earth, NEG_X to Titan SC_RAM (TC2a)	RSS_K_RWAF	S_N_ER_3	
+04:30	+05:00	SP Turn to Waypoint	NEG_Y to Titan, NEG_X to NTP	DFPW Normal	S_N_ER_3	
+05:00	+09:00	VIMS	Template Q (TN1a, specular reflection of lakes-depending on geometry)	DFPW Normal	S_N_ER_3	
+09:00	+13:00	CIRS	Template N1 (TC1b, TN1c aerosol)	DFPW Normal	S_N_ER_3	
+13:00	C/A+17:38:25	CIRS	Template M4 (TC1b, TN1c on outbound)	DFPW Normal	S_N_ER_3	
C/A+17:38:25	2014-345T16:20:00	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3	
2014-345T16:20:00	2014-345T17:00:00	SP Turn to Earth for Downlink	XBAND to Earth, NEG_Y to Saturn (0.0, 0.0, -9.5 deg offset)	DFPW Normal	S_N_ER_3	Secondary pointing is MIMI preference
2014-345T17:00:00	2014-346T05:00:00	Canberra 70M		DFPW Normal	RTE_N_SPB	Rolling
2014-346T05:00:00	2014-346T07:00:00	Madrid 70M		DFPW Normal	RTE_N_SPB	Rolling. Dual playback for INMS, -00:30 to +00:30