

**270TI T126**

C/A Altitude = 979 km

Delivered: October 26, 2016

Start Time	End Time	Prime Activity	Observation Detail	Operational Mode	Telemetry Mode	Comments
2017-111T12:30:00	2017-111T13:10:00	SP Turn to Waypoint	NEG_Y to Titan, NEG_X to NTP	DFPW Normal	S_N_ER_3	(from Rings_270 final attitude of XBAND to Earth, NEG_X to NSP/Rolling)
2017-111T13:10:00	C/A - 16:43:09	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3	
C/A - 16:43:09	-14:00	CIRS	Template A (TC1b)	DFPW Normal	S_N_ER_3	ISS Collaborative Rider
-14:00	-12:00	ISS	Template D2 (TC1a, TC1b, TN1a, TN2c - could also use TN1c for limb haze layer, depending on geometry if along limb, or TN2d, depending on timing.)	DFPW Normal	S_N_ER_3	
-12:00	-09:00	CIRS	Template D2 (TN1c)	DFPW Normal, then RADWU at -09:15	S_N_ER_3, then S_N_ER_5A at -09:15	
-09:00	-06:00	ISS	Template H1 (TC1a, TN1a, TN2c - could also be TC1b and/or TN1c, depending on geometry, or TN2d, depending on timing.)	RADWU	S_N_ER_3	
-06:00	-02:15	RADAR	Templates H1 + L (TN2c, TN2c)	RADRWA	S_N_ER_8	For RADRWA: ISS & VIMS sleep, UVIS "no HDAC", and RWAs in full power (not slow).
-02:15	-01:12	RADAR Scatterometry/Radiometry	(TN1a, TN2c)	RADRWA	S_N_ER_8	
-01:12	-00:31	RADAR High-Altitude SAR	(TN1a)	RADRWA	S_N_ER_8	
-00:31	-00:30	RWA to RCS Transition		RADRCs	S_N_ER_8	Set deadband to (0.5, 0.5, 2.0 mrad) for RADAR
-00:30	-00:15	RADAR Altimetry	(TN2b)	RADRCs	S_N_ER_8	
-00:15	0	RADAR design for INMS	(TC1a, TN1a, TN1b, TN2b, TN2c)	RADRCs	S_N_ER_8	RADAR to image entire northern lake region.
2017-112T06:08:07		<b>CLOSEST APPROACH</b>	<b>NEG_X to RAM, NEG_Z to Titan (TC2a)</b>			
0	+00:18	RADAR SAR	RADAR SAR+Close Altimetry (TC1a, TN1a, TN1b, TN2b, TN2c)	RADRCs	S_N_ER_8	INMS Collaborative Rider
+00:18	+00:30	RADAR Altimetry	(TN2b)	RADRCs	S_N_ER_8	
+00:30	+00:52	RCS to RWA Transition		RADRWA	S_N_ER_8	
+00:52	+01:30	RADAR High-Altitude SAR	(TN1a)	RADRWA	S_N_ER_8	
+01:30	+02:35	RADAR Scatterometry/Radiometry	(TN1a, TN2c)	RADRWA	S_N_ER_8	
+02:35	+06:00	RADAR	Templates L + Q1 (TN2c, TN2c)	RADRWA	S_N_ER_8	
+06:00	+09:00	VIMS	Template Q1 (TN1a, specular reflection of lakes-depending on geometry)	DFPW Normal	S_N_ER_3	Instruments wake following transition from RADRWA.
+09:00	+13:00	VIMS	Template O (TN1a, specular reflection of lakes-depending on geometry)	DFPW Normal	S_N_ER_3	
+13:00	C/A + 22:52:51	CIRS	Template M2 (TC1b, TN1c on outbound)	DFPW Normal	S_N_ER_3	ISS Collaborative Rider
C/A + 22:52:51	2017-113T05:16:00	OD Uncertainty Dead Time		DFPW Normal	S_N_ER_3	
2017-113T05:16:00	2017-113T05:56:00	SP Turn to Earth for Downlink	XBAND to Earth, POS_X to NEP	DFPW Normal	S_N_ER_3	
2017-113T05:56:00	2017-113T14:26:00	Goldstone 70M	XBAND to Earth, Rolling for MAG	RSS_K_RWAF	RTE_N_SPB	with shadow DSS-25 pass for RSS ORT (Operational Readiness Test)
2017-113T14:26:00	2017-113T22:56:00	Canberra 70M	XBAND to Earth, Rolling for MAG	DFPW Normal	RTE_N_SPB	Dual playback for RADAR/INMS, -00:15 to +00:18. Pass requested by NAV (tracking for backup OTM)
2017-113T22:56:00	2017-113T23:36:00	SP Turn to Waypoint	NEG_Y to Titan, NEG_Z to NTP	DFPW Normal	S_N_ER_3	
2017-113T23:36:00	2017-114T11:12:00	CIRS	Compositional mapping (TC1b)	DFPW Normal	S_N_ER_3	
2017-114T11:12:00	2017-114T11:52:00	SP Turn to Earth for Downlink	XBAND to Earth, NEG_Y to 153.1/-45.1	DFPW Normal	S_N_ER_3	Secondary pointing is RA/DEC-equivalent of MIMI-preferred NEG_Y to Saturn with (0.0, 0.0, -9.5 deg) offset
2017-114T11:52:00	2017-114T20:52:00	Canberra 34M	XBAND to Earth, NEG_Y to 153.1/-45.1	DFPW Normal	RTE_N_SPB	OTM (Orbital Trim Maneuver) Prime pass
2017-114T20:52:00	2017-114T21:32:00	SP Turn to Waypoint	NEG_Y to Titan, NEG_X to NTP	DFPW Normal	S_N_ER_3	

2017-114T21:32:00	2017-114T22:22:00	ISS	Cloud monitoring (TC1a, TC1b, TN1a, TN2c, TN2d)	DFPW Normal	S_N_ER_3	
2017-114T22:22:00	2017-114T23:02:00	SP Turn to Earth for Downlink	XBAND to Earth, NEG_Y to 153.1/-45.1	DFPW Normal	S_N_ER_3	Secondary pointing is RA/DEC-equivalent of MIMI-preferred NEG_Y to Saturn with (0.0, 0.0, -9.5 deg) offset
2017-114T23:02:00	2017-115T06:12:00	Madrid 34M	XBAND to Earth, NEG_Y to 153.1/-45.1	DFPW Normal	RTE_N_SPB	OTM Backup pass
2017-115T06:12:00	2017-115T13:12:00	Goldstone 70M	XBAND to Earth, NEG_Y to 153.1/-45.1	DFPW Normal	RTE_N_SPB	OTM Backup pass