

**238TI\_T121**

C/A Altitude = 976 km

Start Time	End Time	Prime Activity
2016-206T23:27:00	2016-207T00:07:00	SP Turn to Waypoint
2016-207T00:07:00	C/A-09:42:40	OD Uncertainty Dead Time
C/A-09:42:40	-05:00	CIRS
-05:00	-02:15	CIRS
		Begin Custom Period
-02:15	-01:06	VIMS Stellar Occultation
-01:06	-01:05	ENGR: RADWU to RADRWA
-01:05	-01:04	RWA to RCS Transition
-01:04	-00:30	RADAR High-Altitude SAR
-00:30	-00:18	RADAR Altimetry
-00:18	0	RADAR SAR
2016-207T09:58:23		<b>CLOSEST APPROACH</b>
0	+00:18	RADAR SAR
+00:18	+00:30	RADAR Altimetry
+00:30	+00:52	RCS to RWA Transition
+00:52	+01:37	RADAR High-Altitude SAR
+01:37	+02:15	RADAR Scatterometry
		End Custom Period
+02:15	+05:00	VIMS
+05:00	+09:00	VIMS
+09:00	+12:30	CIRS
+12:30	C/A+17:33:37	CIRS
C/A+17:33:37	2016-208T03:47:00	OD Uncertainty Dead Time
2016-208T03:47:00	2016-208T04:27:00	SP Turn to Earth for Downlink
2016-208T04:27:00	2016-208T13:27:00	Canberra 70M
2016-208T13:27:00	2016-208T14:07:00	SP Turn to Waypoint
2016-208T14:07:00	2016-208T18:47:00	ISS
2016-208T18:47:00	2016-208T23:17:00	ISS
2016-208T23:17:00	2016-209T00:17:00	ISS
2016-209T00:17:00	2016-209T00:57:00	SP Turn to Earth for Downlink
2016-209T00:57:00	2016-209T02:27:00	Y-Bias Window
2016-209T02:27:00	2016-209T04:27:00	Goldstone 70M
2016-209T04:27:00	2016-209T13:27:00	Canberra 34M

Observation Detail	Operational Mode	Telemetry Mode
NEG_Y to Titan, NEG_X to NTP	DFPW Normal	S_N_ER_3
	DFPW Normal	S_N_ER_3
Template F extended (TC1b or TN1c)	DFPW Normal	S_N_ER_3
Template E (TN2c)	RADWU	S_N_ER_5A for 1st 15 minutes, then S_N_ER_3
Stellar Occultation: 30 Hercules (TN1c)	RADWU	S_N_ER_3
	RADRWA	S_N_ER_8
	RADRCS	S_N_ER_8
RADAR turning from VIMS attitude (TN2b)	RADRCS	S_N_ER_8
(TC1a, TN1a, TN1b, TN2b)	RADRCS	S_N_ER_8
<b>NEG_Z to Titan, NEG_X to RAM (TC2a)</b>		
(TC1a, TN1a, TN1b, TN2b)	RADRCS	S_N_ER_8
(TN2b)	RADRCS	S_N_ER_8
	RADRWA	S_N_ER_8
(TC1a, TN1a, TN1b, TN2b)	RADRWA	S_N_ER_8
(TN2c, TN1a)	RADRWA	S_N_ER_8
Template Y (TN1c)	DFPW Normal	S_N_ER_3
Template Q (TN1a)	DFPW Normal	S_N_ER_3
Template N1 (TN1b, TN1c aerosol)	DFPW Normal	S_N_ER_3
Template M4 (TC1b, TN1c on outbound)	DFPW Normal	S_N_ER_3
	DFPW Normal	S_N_ER_3
<b>XBAND to Earth, NEG_Y to Saturn (0.0, 0.0, -9.5 deg offset)</b>	DFPW Normal	S_N_ER_3
	DFPW Normal	RTE_N_SPB
<b>NEG_Y to Titan, NEG_X to NTP</b>	DFPW Normal	S_N_ER_3
Cloud Monitoring Campaign (TC1a, TC1b, TN1a, TN2c, TN2d)	DFPW Normal	S_N_ER_3
Cloud Monitoring Campaign (TC1a, TC1b, TN1a, TN2c, TN2d)	DFPW Normal	S_N_ER_3
Cloud Monitoring Campaign (TC1a, TC1b, TN1a, TN2c, TN2d)	DFPW Normal	S_N_ER_3
<b>XBAND to Earth, NEG_Y to Saturn (0.0, 0.0, -9.5 deg offset)</b>	DFPW Normal	S_N_ER_3
	DFPW Normal	S_N_ER_3
	DFPW Normal	RTE_N_SPB
	DFPW Normal	RTE_N_SPB

Delivered: December 30, 2015

Comments
Ingress-only Occultation, from -01:20 to -00:20
For RADAR ESS power on RADRWA: ISS/VIMS in sleep, UVIS no HDAC, CDA no articulation
Set deadband to (0.5, 0.5, 2.0 mrad)
INMS Rider
INMS Rider
<b>Tui and Hotei - Switch-hitter (Right-look/Left-look) SAR</b>
INMS Rider
INMS Rider
Set deadband to (2.0, 2.0, 2.0 mrad) through transition RADRWA: ISS/VIMS in sleep, UVIS no HDAC, CDA no articulation
ISS Collaborative Rider
Secondary pointing is MIMI preference
Rolling/SRU
Secondary pointing is MIMI preference
Dual playback for RADAR, -00:18 to +00:18
Rolling/SRU