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This request revision is contained in a delivery and is frozen. Changes must be saved as a new revision.

Request Header   Description Observations Files Steps

ID:	RSS_016DI_MASS002_PRIME		
Title:	RSS Dione Mass Determination	Revision:	6
Rev Created:	06 Jun 2005, 13:06, by Rappaport, Nicole	Priority:	1
Updated:	06 Jun 2005, 13:09, by Rappaport, Nicole	Comments:	0
Start Time:	2005-285T00:00:56 GMT		
Pre Start Tolerance:	000T00:00:00		
Post Start Tolerance:	000T00:00:00		
Duration:	000T04:27:00		
End Time:	2005-285T04:27:56 GMT		
Change:	Revision 5		
Change Justification:	Revision 1: Made consistent with SOST on 3/7/02/ Revision 2: Per Amanda Hendrix request, on March 21, 2002. Revision 3: Per SCR of May 17, 2005 Revision 4: Per CCR of May 27, 2005 (changed duration to 04:27:00) Revision 5: No change made.		
Visibility:	Public		
SPASS Type:	SPASS Rider (Collaborative: No)		
Group Filter:			
Contact Info:			
Description:	This observation will be accomplished with continuous tracking for 4 hours on both wings of the targeted flyby. Note that the outer wing has an Enceladus untargeted flyby, which will complicate the data analysis. We will track the spacecraft, so the HGA must be pointed toward Earth. We expect to have Ka-band downlink capabilities at all the complexes, so we will use at least X-X and X-Ka, and Ka-Ka if possible. We will get Doppler and ranging data. The use of Ka-band requires two hours of thermal stabilization, during which other instruments can control the pointing. The attitude of the spacecraft must be controlled by the reaction wheels from the beginning of the tracking to the end of tracking (from -10 to +10 hours), even though the radio science experiment will be interrupted to let other investigations make observations. The requirement for a quiet spacecraft is to be determined after analysis of the Quiet Test in late 2001.		

Request Description   Header Observations Files Steps

Pointing Information	
Pointing:	Primary axis = KABAND to Earth. Secondary axis is free.
Agreement:	
Primary Pointing:	XBAND to Earth (0.0,0.0,20.0 deg. offset)
Secondary Pointing:	POS_X to NSP

Resources			
Sequence Type:	Background	SSR Data Class:	Normal
Op Mode:	RSS3/RWA	Telem Mode:	-
Power (watts):	81.1	Est CDS Words:	200
Rate Multiplier:	0	APGEN Rate:	0
Effective Rate:	0 bps	Data Volume:	0×10^6 bits
Frames:	0	Bits Per Frame:	0
Team	Thermal cycling of the Ka-band Translator		

| Consumables: | |
| IEB Text: | |

Apgen Fields			
Activity Type:	RSS_Activity		
Attributes		Parameters	
Legend:	RSS	CDSWords:	200
Duration:	000T04:27:00	Power:	81.1
Color:	Khaki	SSRDataClass:	Normal
Pattern:	0 - Solid Color		
Description:	see above		

Green items are request fields shown here for clarity

Support and Other Descriptive Information	
Liens:	Enceladus on the outer wing.
Waivers:	None
RTC:	None
FSW Loads:	No flight software.
ITL Request:	None
Special DSN Requirements:	DSN stations with Ka-band downlink and, if possible, uplink capabilities - DSS-25 if possible.
Special Requirements:	1) Thermal stabilization of the RFIS bay. 2) Attitude control on reaction wheels. 3) DSN station with Ka-band downlink and, if possible, uplink capabilities, with priority to Goldstone because of the tropospheric calibration capability. 4) Quiet spacecraft - TBD
Support Imaging Required:	Images of Dione taken by ISS will help decorrelate the mass from the distance at closest approach.
Document References:	CCSSWG Report, PSG # 25
As Flown:	

SASF Fields	
Processor:	SEQ
Key:	RSS
Workgroup:	MSS_SEQGEN
Status:	
Upper Label:	
Lower Label:	
Edit Group:	
Request State:	

Associated Observations

Header Description Files Steps

Last Updated	Observation	Rev	Cmts
07 Mar 2002, 13:32	▢ RSS Dione Mass Determination	2	0

Associated External Files

Header Description Observations Steps

File Name	Relative Path	Last Modified	File Size
RSS_016DI_MASS002_PRIME.xfr	SOP_Implementation/s15_s16/port3/official/ck/	05 Mar 2003, 17:53	1436kb
RSS_016DI_MASS002_PRIME.sfof	SOP_Implementation/s15_s16/port3/official/sfof/	05 Mar 2003, 17:52	23kb
RSS_016DI_MASS002_PRIME.xfr	SOP_Implementation/s15_s16/port3/prelim/ck/	03 Mar 2003, 17:58	1436kb
RSS_016DI_MASS002_PRIME.sfof	SOP_Implementation/s15_s16/port3/prelim/sfof/	03 Mar 2003, 17:57	23kb

Steps

Header Description Observations Files

Type	Label	Name	Offset	Off-Type