paragraph_id	release	segment	req_title	req_type	req_cat	funct_status	text	interpretation
TRMM1010#A	A	SDPS	LaRC ingests CERES data from SDPF	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall ingest CERES Level 0 and quick-look data sets from SDPF.	
TRMM1010#B	B	SDPS	LaRC ingests CERES data from SDPF	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall ingest CERES Level 0 and quick-look data sets from SDPF.	
TRMM1010#Ir1	Ir1	SDPS	LaRC ingests CERES data from SDPF	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall ingest CERES Level 0 and quick-look data sets from SDPF.	
~~TRMM1020#A~~	~~A~~	~~SDPS~~	~~CERES L0 & Q/L to ECS LaRC DAAC~~	~~procedural~~	~~TBD~~	~~no new functionality~~	~~The SDPF to the ECS LaRC DAAC data stream shall include Level 0 and quick-look data sets.~~	
~~TRMM1020#B~~	~~B~~	~~SDPS~~	~~CERES L0 & Q/L to ECS LaRC DAAC~~	~~procedural~~	~~TBD~~	~~no new functionality~~	~~The SDPF to the ECS LaRC DAAC data stream shall include Level 0 and quick-look data sets.~~	
~~TRMM1020#Ir1~~	~~Ir1~~	~~SDPS~~	~~CERES L0 & Q/L to ECS LaRC DAAC~~	~~procedural~~	~~TBD~~	~~fully met~~	~~The SDPF to the ECS LaRC DAAC data stream shall include Level 0 and quick-look data sets.~~	
TRMM1030#A	A	SDPS	CERES quality and accounting	procedural	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for CERES shall contain quality and accounting information.	External only requirement: Information only. No action is required by ECS.
TRMM1030#B	B	SDPS	CERES quality and accounting	procedural	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for CERES shall contain quality and accounting information.	External only requirement: Information only. No action is required by ECS.
TRMM1030#Ir1	Ir1	SDPS	CERES quality and accounting	procedural	TBD	~~TBD~~ fully met	The SDPF Level 0 and quick-look data sets for CERES shall contain quality and accounting information.	External only requirement: Information only. No action is required by ECS.
TRMM1040# Ir1	Ir1	SDPS	CERES L0 & Q/L SFDU header	interface	TBD	~~fully met~~	The SDPF Level 0 and quick-look data sets for CERES shall contain a detached SFDU header.	
TRMM1040#A	A	SDPS	CERES L0 & Q/L SFDU header	interface	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for CERES shall contain a detached SFDU header.	

TRMM1 040#B	B	SDPS	CERES L0 & Q/L SFDU header	interface	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for CERES shall contain a detached SFDU header.	
TRMM1 050#Ir1	A	SDPS	SDPF notifies CERES availability	interface	TBD	fully met	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of CERES Level 0 production or quick-look data.	
TRMM1 050#A	A	SDPS	SDPF notifies CERES availability	interface	TBD	~~TBD~~ no new functionality	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of CERES Level 0 production or quick-look data.	
TRMM1 050#B	B	SDPS	SDPF notifies CERES availability	interface	TBD	~~TBD~~ no new functionality	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of CERES Level 0 production or quick-look data.	
TRMM1 060#A	A	SDPS | CSMS	LaRC receives CERES L0 & Q/L	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall, after notification by SDPF, retrieve CERES Level 0 production by an agreed-upon file transfer protocol.	
TRMM1 060#B	B	SDPS | CSMS	LaRC receives CERES L0 & Q/L	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall, after notification by SDPF, retrieve CERES Level 0 production by an agreed-upon file transfer protocol.	
TRMM1 060#Ir1	Ir1	SDPS | CSMS	LaRC receives CERES L0 & Q/L	interface	TBD	~~no new functionality~~ fully met	The ECS systems at the LaRC DAAC shall, after notification by SDPF, retrieve CERES Level 0 production by an agreed-upon file transfer protocol.	IR1: For IR-1, this applies to ingest and temporary storage of data from the SDPF for testing purposes only.
TRMM1 070#A	A	SDPS	LaRC ensures receipt and validation	interface	TBD	fully met	The ECS systems at the LaRC DAAC shall ensure that CERES data has been received and validated.	
TRMM1 070#B	B	SDPS	LaRC ensures receipt and validation	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall ensure that CERES data has been received and validated.	

TRMM1080#A	A	SDPS	LaRC acknowledges data receipt	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall acknowledge successful receipt of a CERES data set from the SDPF.	
TRMM1080#B	B	SDPS	LaRC acknowledges data receipt	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall acknowledge successful receipt of a CERES data set from the SDPF.	
TRMM1080#Ir1	Ir1	SDPS	LaRC acknowledges data receipt	interface	TBD	fully met	The ECS systems at the LaRC DAAC shall acknowledge successful receipt of a CERES data set from the SDPF.	
TRMM1090#A	A	SDPS	LaRC assesses need for regeneration	interface	TBD	fully met	Upon the ECS systems at the LaRC DAAC, ~~upon~~ discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need ~~with the SPDF~~ for regeneration.	
TRMM1090#B	B	SDPS	LaRC assesses need for regeneration	interface	TBD	no new functionality	Upon the ECS systems at the LaRC DAAC, ~~upon~~ discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need ~~with the SPDF~~ for regeneration.	
TRMM1100#A	A	N/A	Regenerate/reprocess CERES L0 data	procedural	TBD	TBD	SDPF shall regenerate/reprocess CERES Level 0 data for the ECS systems at the LaRC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	External only requirement: Information only. No action is required by ECS.
TRMM1100#B	B	N/A	Regenerate/reprocess CERES L0 data	procedural	TBD	TBD	SDPF shall regenerate/reprocess CERES Level 0 data for the ECS systems at the LaRC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	External only requirement: Information only. No action is required by ECS.
TRMM1110#A	A	SDPS	SDPF provides CERES L0 daily	interface	TBD	fully met	SDPF shall provide a CERES Level 0 data set to the ECS systems at the LaRC DAAC once per day within 24 hours of the last acquisition session.	

TRMM1 110#B	B	SDPS	SDPF provides CERES L0 daily	interface	TBD	no new functionality	SDPF shall provide a CERES Level 0 data set to the ECS systems at the LaRC DAAC once per day within 24 hours of the last acquisition session.	
TRMM1 120#A	A	~~SDPS~~ N/A	SDPF retains CERES L0 5 days	~~interface~~ procedural	TBD	TBD	The SDPF shall retain CERES Level 0 data sets for five (5) days.	External only requirement: Information only. No action is required by ECS.
TRMM1 120#B	B	~~SDPS~~ N/A	SDPF retains CERES L0 5 days	~~interface~~ procedural	TBD	TBD	The SDPF shall retain CERES Level 0 data sets for five (5) days.	External only requirement: Information only. No action is required by ECS.
TRMM1 130#A	A	SDPS	CERES scheduled & occasional Q/L	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall receive CERES scheduled quick-look from SDPF 3 times per day plus occasional special quick-look data sets.	
TRMM1 130#B	B	SDPS	CERES scheduled & occasional Q/L	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall receive CERES scheduled quick-look from SDPF 3 times per day plus occasional special quick-look data sets.	
TRMM1 140#A	A	~~SDPS~~ N/A	CERES Q/L data set = 1 contact	~~interface~~ procedural	TBD	TBD	A CERES quick-look data set shall contain data received during a single spacecraft contact.	External only requirement: Information only. No action is required by ECS.
TRMM1 140#B	B	~~SDPS~~ N/A	CERES Q/L data set = 1 contact	~~interface~~ procedural	TBD	TBD	A CERES quick-look data set shall contain data received during a single spacecraft contact.	External only requirement: Information only. No action is required by ECS.
TRMM1 150#A	A	SDPS	CERES Q/L availability notification	interface	TBD	TBD	SDPF shall notify the ECS systems at the LaRC DAAC of availability of a CERES quick-look data set within 2 hours of the end of the acquisition session.	
TRMM1 150#B	B	SDPS	CERES Q/L availability notification	interface	TBD	TBD	SDPF shall notify the ECS systems at the LaRC DAAC of availability of a CERES quick-look data set within 2 hours of the end of the acquisition session.	

TRMM1 160#A	A	SDPS	CERES schedules special Q/L	interface	TBD	TBD	CERES special quick-look data collection and processing shall be scheduled with SDPF by human interaction.	
TRMM1 160#B	B	SDPS	CERES schedules special Q/L	interface	TBD	TBD	CERES special quick-look data collection and processing shall be scheduled with SDPF by human interaction.	
TRMM1 170#A	A	SDPS	Scheduled data for calibration	interface	TBD	TBD	Data collected and processed for CERES solar calibration shall be scheduled by human interaction.	
TRMM1 170#B	B	SDPS	Scheduled data for calibration	interface	TBD	TBD	Data collected and processed for CERES solar calibration shall be scheduled by human interaction.	
TRMM1 180#A	A	SDPS	CERES L0 & Q/L formats	interface	TBD	TBD	ECS shall be able to process SDPF Level 0 and quick-look data sets in SPDF-defined format.	
TRMM1 180#B	B	SDPS	CERES L0 & Q/L formats	interface	TBD	TBD	ECS shall be able to process SDPF Level 0 and quick-look data sets in SPDF-defined format.	
TRMM1 190#A	A	~~SDPS~~ N/A	Retain CERES raw data for 2 years	~~interface~~ procedural	TBD	TBD	SDPF shall retain CERES raw data for 2 years.	External only requirement: Information only. No action is required by ECS.
TRMM1 190#B	B	~~SDPS~~ N/A	Retain CERES raw data for 2 years	~~interface~~ procedural	TBD	TBD	SDPF shall retain CERES raw data for 2 years.	External only requirement: Information only. No action is required by ECS.
TRMM1 195#Ir1	Ir1	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of predictive or definitive orbit data.	
TRMM1 195#A	A	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of predictive or definitive orbit data.	
TRMM1 195#B	B	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the LaRC DAAC upon availability of predictive or definitive orbit data.	

TRMM1200#A	A	SDPS	LaRC ingests predicted orbit data	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall ingest predicted orbit data from the SDPF.	
TRMM1200#B	B	SDPS	LaRC ingests predicted orbit data	interface	TBD	no new functionality	The ECS systems at the LaRC DAAC shall ingest predicted orbit data from the SDPF.	
TRMM1200#Ir1	Ir1	SDPS	LaRC ingests predicted orbit data	interface	TBD	TBD	The ECS systems at the LaRC DAAC shall ingest predicted orbit data from the SDPF.	IR1: This requirement is supported as follows: IR1 shall have the capability at the LaRC DAAC, to receive data from the SDPF for the purpose of testing the ingest interface between IR1 and the SDPF.
~~TRMM1210#A~~	~~A~~	~~SDPS~~	~~LaRC ingests definitive orbit data~~	~~interface~~	~~TBD~~	~~all functionality complete~~	~~The ECS systems at the LaRC DAAC shall ingest definitive orbit data from the SDPF.~~	
~~TRMM1210#B~~	~~B~~	~~SDPS~~	~~LaRC ingests definitive orbit data~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The ECS systems at the LaRC DAAC shall ingest definitive orbit data from the SDPF.~~	
~~TRMM1210#Ir1~~	~~Ir1~~	~~SDPS~~	~~LaRC ingests definitive orbit data~~	~~interface~~	~~TBD~~	~~partially met~~	~~The ECS systems at the LaRC DAAC shall ingest definitive orbit data from the SDPF.~~	~~IR1: This requirement is supported as follows: IR1 shall have the capability at the LaRC DAAC, to receive data from the SDPF for the purpose of testing the ingest interface between IR1 and the SDPF.~~
~~TRMM1220#A~~	~~A~~	~~SDPS~~	~~LARC ingests definitive orbit data~~	~~interface~~	~~TBD~~	~~TBD~~	~~ECS shall archive definitive orbit for CERES reprocessing of level 1A data in case of data loss.~~	
~~TRMM1220#B~~	~~B~~	~~SDPS~~	~~LARC ingests definitive orbit data~~	~~interface~~	~~TBD~~	~~TBD~~	~~ECS shall archive definitive orbit for CERES reprocessing of level 1A data in case of data loss.~~	
~~TRMM1230#A~~	~~A~~	~~SDPS~~	~~CERES defines ancillary, etc.~~	~~procedural~~	~~TBD~~	~~TBD~~	~~The CERES instrument team and science team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.~~	

TRMM1230#B	B	SDPS	CERES defines ancillary, etc.	procedural	TBD	TBD	The CERES instrument team and science team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.	
TRMM1230#Ir1	Ir1	SDPS	CERES defines ancillary, etc.	procedural	TBD	TBD	The CERES instrument team and science team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.	IR1: External requirement: Information only. No action is required by ECS.
TRMM1240#A	A	SDPS	CERES provides Q/L algorithms	procedural	TBD	TBD	The CERES instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for CERES.	
TRMM1240#B	B	SDPS	CERES provides Q/L algorithms	procedural	TBD	TBD	The CERES instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for CERES.	
TRMM1240#Ir1	Ir1	SDPS	CERES provides Q/L algorithms	procedural	TBD	TBD	The CERES instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for CERES.	IR1: External requirement: Information only. No action is required by ECS.
TRMM1250#A	A	SDPS	CERES products & Q/A from LaRC	interface	TBD	TBD	The ECS LaRC DAAC shall produce standard products for the CERES instrument and perform quality control for ECS-developed products.	
TRMM1250#B	B	SDPS	CERES products & Q/A from LaRC	interface	TBD	TBD	The ECS LaRC DAAC shall produce standard products for the CERES instrument and perform quality control for ECS-developed products.	
TRMM1260#A	A	SDPS	LaRC archives CERES products	interface	TBD	TBD	*The CERES standard products developed at the ECS LaRC DAAC shall be archived at the ECS LaRC DAAC.	

TRMM1260#B	B	SDPS	LaRC archives CERES products	interface	TBD	TBD	*The CERES standard products developed at the ECS LaRC DAAC shall be archived at the ECS LaRC DAAC.	
TRMM1270#A	A	SDPS	LaRC testing 9 months before	procedural	TBD	fully met	The ECS LaRC DAAC and SPDF shall support TRMM end-to-end testing 9 months before TRMM launch.	Compliance will be demonstrated by inclusion in the ECS Project Master Schedule.
TRMM1270#B	B	SDPS	LaRC testing 9 months before	procedural	TBD	no new functionality	The ECS LaRC DAAC and SPDF shall support TRMM end-to-end testing 9 months before TRMM launch.	Compliance will be demonstrated by inclusion in the ECS Project Master Schedule.
TRMM1280#A	A	SDPS	ECS accepts CERES simulated data	interface	TBD	all functionality complete	ECS shall be able to accept CERES simulated data from SDPF.	
TRMM1280#B	B	SDPS	ECS accepts CERES simulated data	interface	TBD	no new functionality	ECS shall be able to accept CERES simulated data from SDPF.	
TRMM1280#Ir1	Ir1	SDPS	ECS accepts CERES simulated data	interface	TBD	partially met	ECS shall be able to accept CERES simulated data from SDPF.	IR1: This requirement is supported as follows: IR1 shall have the capability to receive CERES simulated data from the SDPF for the purpose of testing the ingest interface between IR1 and the SDPF.
TRMM1290#A	A	SDPS | CSMS	Use standards and COTS products	interface	TBD	no new functionality	The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use commercial off-the-shelf (COTS) hardware and software products as appropriate.	

~~TRMM1290#B~~	~~B~~	~~SDPS┤CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use commercial off-the-shelf (COTS) hardware and software products as appropriate.~~	
~~TRMM1290#Ir1~~	~~Ir1~~	~~SDPS┤CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~fully met~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use commercial off-the-shelf (COTS) hardware and software products as appropriate.~~	
TRMM2010#A	A	SDPS	MSFC ingests LIS data from SDPF	interface	TBD	all functionality complete	The ECS systems at the MSFC DAAC shall ingest LIS data from SDPF.	
TRMM2010#B	B	SDPS	MSFC ingests LIS data from SDPF	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ingest LIS data from SDPF.	
TRMM2010#Ir1	Ir1	SDPS	MSFC ingests LIS data from SDPF	interface	TBD	partially met	The ECS systems at the MSFC DAAC shall ingest LIS data from SDPF.	IR1: IR1 shall have the capability at the MSFC DAAC to receive LIS data from the SDPF for the purpose of testing the ingest interface between IR1 and the SDPF.
~~TRMM2020#A~~	~~A~~	~~SDPS~~	~~LIS L0 & Q/L to ECS MSFC DAAC~~	~~procedural~~	~~TBD~~	~~no new functionality~~	~~The SDPF to the ECS MSFC DAAC data stream shall include Level 0 and quick-look data setssets.~~	
~~TRMM2020#B~~	~~B~~	~~SDPS~~	~~LIS L0 & Q/L to ECS MSFC DAAC~~	~~procedural~~	~~TBD~~	~~no new functionality~~	~~The SDPF to the ECS MSFC DAAC data stream shall include Level 0 and quick-look data setssets.~~	

~~TRMM2 020#Ir1~~	~~Ir1~~	~~SDPS~~	~~LIS L0 & Q/L to ECS MSFC DAAC~~	~~procedural~~	~~TBD~~	~~fully met~~	~~The SDPF to the ECS MSFC DAAC data stream shall include Level 0 and quick-look data setssets.~~	~~IR1: External requirement: Information only. No action is required by ECS.~~
TRMM2 030#A	A	SDPS	LIS quality and accounting	~~interface~~ procedural	TBD	no new functionality	The SDPF Level 0 and quick-look data sets for LIS shall contain quality and accounting information.	External requirement: Information only. No action is required by ECS.
TRMM2 030#B	B	SDPS	LIS quality and accounting	~~interface~~ procedural	TBD	no new functionality	The SDPF Level 0 and quick-look data sets for LIS shall contain quality and accounting information.	External requirement: Information only. No action is required by ECS.
TRMM2 030#Ir1	Ir1	SDPS	LIS quality and accounting	~~interface~~ procedural	TBD	fully met	The SDPF Level 0 and quick-look data sets for LIS shall contain quality and accounting information.	External requirement: Information only. No action is required by ECS.
TRMM2 040#Ir1	Ir1	SDPS	LIS L0 and Q/L SFDU header	interface	TBD	fully met	The SDPF Level 0 and quick-look data sets for LIS shall contain a detached SFDU header.	
TRMM2 040#A	A	SDPS	LIS L0 and Q/L SFDU header	interface	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for LIS shall contain a detached SFDU header.	
TRMM2 040#B	B	SDPS	LIS L0 and Q/L SFDU header	interface	TBD	~~TBD~~ no new functionality	The SDPF Level 0 and quick-look data sets for LIS shall contain a detached SFDU header.	
TRMM2 050#Ir1	Ir1	SDPS	SDPF notifies LIS availability	interface	TBD	fully met	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of LIS Level 0 production or quick-look data.	
TRMM2 050#A	A	SDPS	SDPF notifies LIS availability	interface	TBD	~~TBD~~ no new functionality	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of LIS Level 0 production or quick-look data.	
TRMM2 050#B	B	SDPS	SDPF notifies LIS availability	interface	TBD	~~TBD~~ no new functionality	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of LIS Level 0 production or quick-look data.	

TRMM2 060#Ir1	Ir1	SDPS | CSMS	MSFC retrieves LIS L0 & Q/L	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall, after notification by SPDF, retrieve LIS Level 0 production and quick-look data by an agreed upon file transfer protocol.	
TRMM2 060#A	A	SDPS | CSMS	MSFC retrieves LIS L0 & Q/L	interface	TBD	all functionality complete	The ECS systems at the MSFC DAAC shall, after notification by SPDF, retrieve LIS Level 0 production and quick-look data by an agreed upon file transfer protocol.	
TRMM2 060#B	B	SDPS | CSMS	MSFC retrieves LIS L0 & Q/L	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall, after notification by SPDF, retrieve LIS Level 0 production and quick-look data by an agreed upon file transfer protocol.	
TRMM2 070#A	A	SDPS	MSFC ensures receipt and validation	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall ensure that LIS data has been received and validated.	
TRMM2 070#B	B	SDPS	MSFC ensures receipt and validation	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ensure that LIS data has been received and validated.	
TRMM2 080#Ir1	Ir1	SDPS	MSFC acknowledges data receipt	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall acknowledge successful receipt of a LIS data set to the SDPF.	
TRMM2 080#A	A	SDPS	MSFC acknowledges data receipt	interface	TBD	~~TBD~~ no new functionality	The ECS systems at the MSFC DAAC shall acknowledge successful receipt of a LIS data set to the SDPF.	
TRMM2 080#B	B	SDPS	MSFC acknowledges data receipt	interface	TBD	~~TBD~~ no new functionality	The ECS systems at the MSFC DAAC shall acknowledge successful receipt of a LIS data set to the SDPF.	
TRMM2 090#A	A	SDPS	MSFC assesses need for regeneration	interface	TBD	fully met	Upon the ECS operations at the ~~ECS~~ MSFC DAAC, ~~upon~~ discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need ~~with the SPDF~~ for regeneration.	

TRMM2090#B	B	SDPS	MSFC assesses need for regeneration	interface	TBD	no new functionality	Upon the ECS operations at the ~~ECS~~ MSFC DAAC, ~~upon~~ discovering an unprocessable data set during validation, the ECS and SDPF personnel shall assess the need ~~with the SPDF~~ for regeneration.	
TRMM2100#A	A	SDPS	Regenerate/reprocess LIS L0 data	interface	TBD	TBD	SDPF shall regenerate/reprocess LIS Level 0 data for the ECS systems at the MSFC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	
TRMM2100#B	B	SDPS	Regenerate/reprocess LIS L0 data	interface	TBD	TBD	SDPF shall regenerate/reprocess LIS Level 0 data for the ECS systems at the MSFC DAAC, for recovery purposes, as negotiated in order to avoid impacting SDPF support for on-orbit spacecraft.	
TRMM2110#A	A	SDPS	SDPF provides LIS L0 daily	interface	TBD	fully met	SDPF shall provide a LIS Level 0 data set to the ECS systems at the MSFC DAAC once per day within 24 hours of the last acquisition.	
TRMM2110#B	B	SDPS	SDPF provides LIS L0 daily	interface	TBD	no new functionality	SDPF shall provide a LIS Level 0 data set to the ECS systems at the MSFC DAAC once per day within 24 hours of the last acquisition.	
TRMM2120#A	A	~~SDPS~~ N/A	SDPF retains LIS L0 5 days	~~interface~~ procedural	TBD	TBD	SDPF shall retain retrieved LIS Level 0 data sets for five (5) days.	External only requirement: Information only. No action is required by ECS.
TRMM2120#B	B	~~SDPS~~ N/A	SDPF retains LIS L0 5 days	~~interface~~ procedural	TBD	TBD	SDPF shall retain retrieved LIS Level 0 data sets for five (5) days.	External only requirement: Information only. No action is required by ECS.
TRMM2130#A	A	SDPS	Scheduled & occasional Q/L	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall receive LIS scheduled quick-look from SDPF 3 times per day plus occasional special quick-look.	

TRMM2 130#B	B	SDPS	Scheduled & occasional Q/L	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall receive LIS scheduled quick-look from SDPF 3 times per day plus occasional special quick-look.	
TRMM2 140#A	A	~~SDPS~~ N/A	Q/L data set = 1 contact	~~interface~~ procedural	TBD	TBD	A LIS quick-look data set shall contain data received during a single spacecraft contact.	External only requirement: Information only. No action is required by ECS.
TRMM2 140#B	B	~~SDPS~~ N/A	Q/L data set = 1 contact	~~interface~~ procedural	TBD	TBD	A LIS quick-look data set shall contain data received during a single spacecraft contact.	External only requirement: Information only. No action is required by ECS.
TRMM2 150#A	A	SDPS	Q/L availability notification	interface	TBD	TBD	SDPF shall notify the ECS systems at the MSFC DAAC of availability of a LIS quick-look data set within 2 hours of the end of the acquisition session.	
TRMM2 150#B	B	SDPS	Q/L availability notification	interface	TBD	TBD	SDPF shall notify the ECS systems at the MSFC DAAC of availability of a LIS quick-look data set within 2 hours of the end of the acquisition session.	
TRMM2 160#A	A	SDPS	LIS schedules special Q/L	interface	TBD	TBD	LIS special quick-look data collection and processing shall be scheduled with SDPF by human interaction.	
TRMM2 160#B	B	SDPS	LIS schedules special Q/L	interface	TBD	TBD	LIS special quick-look data collection and processing shall be scheduledwith SDPF by human interaction..	
TRMM2 170#A	A	SDPS	LIS L0 and Q/L formats	interface	TBD	TBD	ECS shall be able to process LIS Level 0 and quick-look data sets in SDPF-defined formats.	
TRMM2 170#B	B	SDPS	LIS L0 and Q/L formats	interface	TBD	TBD	ECS shall be able to process LIS Level 0 and quick-look data sets in SDPF-defined formats.	
TRMM2 180#A	A	~~SDPS~~ N/A	Retain LIS raw data for 2 years	~~interface~~ procedural	TBD	TBD	SDPF shall retain LIS data for 2 years.	External only requirement: Information only. No action is required by ECS.

TRMM2 180#B	B	~~SDPS~~ N/A	Retain LIS raw data for 2 years	~~interface~~ procedural	TBD	TBD	SDPF shall retain LIS data for 2 years.	External only requirement: Information only. No action is required by ECS.
TRMM2 185#Ir1	Ir1	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of predictive or definitive orbit data.	
TRMM2 185#A	A	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of predictive or definitive orbit data.	
TRMM2 185#B	B	SDPS	orbit data availability notification	interface	TBD	TBD	SDPF shall send a notification to the ECS systems at the MSFC DAAC upon availability of predictive or definitive orbit data.	
TRMM2 190#A	A	SDPS	MSFC ingests predicted orbit data	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall ingest predicted orbit data from the SDPF.	
TRMM2 190#B	B	SDPS	MSFC ingests predicted orbit data	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ingest predicted orbit data from the SDPF.	
TRMM2 190#Ir1	Ir1	SDPS	MSFC ingests predicted orbit data	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall ingest predicted orbit data from the SDPF.	IR1: IR-1 shall have the capability at the MSFC DAAC, to recieve data from the SDPF for the purpose of testing the ingest interface between IR-1 and the SDPF.
TRMM2 200#A	A	SDPS	MSFC ingests definitive orbit data	interface	TBD	all functionality complete	ECS systems at the MSFC DAAC shall ingest definitive orbit data from the SDPF.	
TRMM2 200#B	B	SDPS	MSFC ingests definitive orbit data	interface	TBD	no new functionality	ECS systems at the MSFC DAAC shall ingest definitive orbit data from the SDPF.	
TRMM2 200#Ir1	Ir1	SDPS	MSFC ingests definitive orbit data	interface	TBD	partially met	ECS systems at the MSFC DAAC shall ingest definitive orbit data from the SDPF.	IR1: IR-1 shall have the capability at the MSFC DAAC, to receive data from the SDPF for the purpose of testing the ingest interface between IR-1 and the SDPF.

TRMM2210#A	A	SDPS	ECS archives definitive orbit data	interface	TBD	TBD	ECS shall archive definitive orbit for LIS reprocessing of Level 1A data in case of data loss.	
TRMM2210#B	B	SDPS	ECS archives definitive orbit data	interface	TBD	TBD	ECS shall archive definitive orbit for LIS reprocessing of Level 1A data in case of data loss.	
TRMM2220#A	A	SDPS	LIS defines ancillary, etc.	procedural	TBD	TBD	The LIS science team and instrument team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.	
TRMM2220#B	B	SDPS	LIS defines ancillary, etc.	procedural	TBD	TBD	The LIS science team and instrument team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.	
TRMM2220#Ir1	Ir1	SDPS	LIS defines ancillary, etc.	procedural	TBD	TBD	The LIS science team and instrument team shall define the ancillary, correlative, and flight dynamics data and algorithms needed for their processing.	IR1: External requirement: Information only. No action is required by ECS.
TRMM2230#A	A	SDPS	LIS provides Q/L algorithms	procedural	TBD	TBD	The LIS instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for LIS.	
TRMM2230#B	B	SDPS	LIS provides Q/L algorithms	procedural	TBD	TBD	The LIS instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for LIS.	
TRMM2230#Ir1	Ir1	SDPS	LIS provides Q/L algorithms	procedural	TBD	TBD	The LIS instrument team and science team shall provide the quick-look data processing algorithms and quick-look operations concept needed for LIS.	IR1: External requirement: Information only. No action is required by ECS.

TRMM2 240#A	A	SDPS	LIS products and Q/A from MSFC	interface	TBD	TBD	The ECS MSFC DAAC shall produce standard products for the LIS instrument and perform quality control for ECS-developed products.	
TRMM2 240#B	B	SDPS	LIS products and Q/A from MSFC	interface	TBD	TBD	The ECS MSFC DAAC shall produce standard products for the LIS instrument and perform quality control for ECS-developed products.	
TRMM2 250#A	A	SDPS	MSFC archives LIS products	interface	TBD	TBD	LIS standard products developed at the ECS MSFC DAAC shall be archived at the ECS MSFC DAAC.	
TRMM2 250#B	B	SDPS	MSFC archives LIS products	interface	TBD	TBD	LIS standard products developed at the ECS MSFC DAAC shall be archived at the ECS MSFC DAAC.	
TRMM2 260#A	A	SDPS	MSFC testing 9 months before	interface	TBD	fully met	The ECS MSFC DAAC and SPDF shall support TRMM end-to-end testing 9 months before TRMM launch.	
TRMM2 260#B	B	SDPS	MSFC testing 9 months before	interface	TBD	no new functionality	The ECS MSFC DAAC and SPDF shall support TRMM end-to-end testing 9 months before TRMM launch.	
TRMM2 270#A	A	SDPS	ECS accepts LIS simulated data	interface	TBD	all functionality complete	ECS shall be able to accept LIS simulated data from SDPF.	
TRMM2 270#B	B	SDPS	ECS accepts LIS simulated data	interface	TBD	no new functionality	ECS shall be able to accept LIS simulated data from SDPF.	
TRMM2 270#Ir1	Ir1	SDPS	ECS accepts LIS simulated data	interface	TBD	partially met	ECS shall be able to accept LIS simulated data from SDPF.	IR1: This requirement is supported as follows: IR-1 shall have the capability to receive LIS simulated data from the SDPF for the purpose of testing the ingest interface between IR-1 and the SDPF.

TRMM2280#A	A	SDPS/CSMS	Use standards and COTS products	interface	TBD	all functionality complete	The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.	
TRMM2280#B	B	SDPS/CSMS	Use standards and COTS products	interface	TBD	no new functionality	The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.	
TRMM2280#Ir1	Ir1	SDPS/CSMS	Use standards and COTS products	interface	TBD	partially met	The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.	
TRMM3010#A	A	SDPS	MSFC ingests PR & TMI L1A - 3B) data	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for PR and TMI from TSDIS.	
TRMM3010#B	B	SDPS	MSFC ingests PR & TMI L1A - 3B) data	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for PR and TMI from TSDIS.	
TRMM3010#Ir1	Ir1	SDPS	MSFC ingests PR & TMI L1A - 3B) data	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for PR and TMI from TSDIS.	IR1: This requirement is supported as follows: IR-1 shall have the capability at the MSFC DAAC, to receive Level 1A data for PR and TMI from TSDIS, for the purpose of testing the ingest interface between IR-1 and TSDIS.

~~TRMM3020#A~~	~~A~~	~~SDPS~~	~~MSFC ingests PR & TMI L1B-3B~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The ECS MSFC DAAC shall ingest TRMM standard products (Level 1B-3B) for PR, and TMI from TSDIS.~~	
~~TRMM3020#B~~	~~B~~	~~SDPS~~	~~MSFC ingests PR & TMI L1B-3B~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The ECS MSFC DAAC shall ingest TRMM standard products (Level 1B-3B) for PR, and TMI from TSDIS.~~	
~~TRMM3020#Ir1~~	~~Ir1~~	~~SDPS~~	~~MSFC ingests PR & TMI L1B-3B~~	~~interface~~	~~TBD~~	~~fully met~~	~~The ECS MSFC DAAC shall ingest TRMM standard products (Level 1B-3B) for PR, and TMI from TSDIS.~~	~~IR1: This requirement is supported as follows: IR-1 shall have the capability at the MSFC DAAC, to receive standard products for PR and TMI from TSDIS, for the purpose of testing the ingest interface between IR-1 and TSDIS.~~
TRMM3030#A	A	SDPS	MSFC ingests TRMM PR & TMI & GV browse	interface	TBD	no new functionality	The ECS MSFC DAAC shall ingest TRMM browse products for PR and TMI from TSDIS.	
TRMM3030#B	B	SDPS	MSFC ingests TRMM PR & TMI & GVbrowse	interface	TBD	no new functionality	The ECS MSFC DAAC shall ingest TRMM browse products for PR and TMI from TSDIS.	
TRMM3030#Ir1	Ir1	SDPS	MSFC ingests TRMM PR & TMI & GV browse	interface	TBD	fully met	The ECS MSFC DAAC shall ingest TRMM browse products for PR and TMI from TSDIS.	IR1: This requirement is supported as follows: IR-1 shall have the capability at the MSFC DAAC, to receive browse products for PR and TMI from TSDIS, for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM3040#A	A	SDPS	MSFC ingests algorithms & doc	interface	TBD	no new functionality	The ECS systems at the MSFC DAAC shall ingest algorithms and documentation for PR and TMI from TSDIS.	

TRMM3 040#B	B	SDPS	MSFC ingests algorithm s & doc	interface	TBD	no new functiona lity	The ECS systems at the MSFC DAAC shall ingest algorithms and documentation for PR and TMI from TSDIS.	
TRMM3 040#Ir1	Ir1	SDPS	MSFC ingests algorithm s & doc	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall ingest algorithms and documentation for PR and TMI from TSDIS.	IR1: This requirement is supported as follows: IR-1 shall have the capability at the M SFC DAAC, to receive algorithms and documentation for PR and TMI from TSDIS, for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM3 050#A	A	SDPS	MSFC ingests TRMM GV & Metadata	interface	TBD	no new functiona lity	The ECS systems at the MSFC DAAC shall ingest TRMM Ground Validation (GV) data products and associated metadata from TSDIS.	
TRMM3 050#B	B	SDPS	MSFC ingests TRMM GV & Metadata	interface	TBD	no new functiona lity	The ECS systems at the MSFC DAAC shall ingest TRMM Ground Validation (GV) data products and associated metadata from TSDIS.	
TRMM3 050#Ir1	Ir1	SDPS	MSFC ingests TRMM GV & Metadata	interface	TBD	fully met	The ECS systems at the MSFC DAAC shall ingest TRMM Ground Validation (GV) data products and associated metadata from TSDIS.	IR1: This requirement is supported as follows: IR1 shall have the capability at the M SFC DAAC, to receive Ground Validation Data from TSDIS, for the purpose of testing the ingest interface between Ir1 and TSDIS.
TRMM3 060#A	A	SDPS	MSFC archives PR, TMI, &GV data	interface	TBD	TBD	The PR, TMI, and GV data ingested from TSDIS by ECS shall be archived in the ECS systems at the ECS MSFC DAAC.	
TRMM3 060#B	B	SDPS	MSFC archives PR, TMI, &GV data	interface	TBD	TBD	The PR, TMI, and GV data ingested from TSDIS by ECS shall be archived in the ECS systems at the ECS MSFC DAAC.	

TRMM3 070#A	A	SDPS	MSFC ingests TRMM data daily	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	
TRMM3 070#B	B	SDPS	MSFC ingests TRMM data daily	interface	TBD	TBD	The ECS systems at the MSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	
TRMM3 080#A	A	SDPS	TSDIS provides product schedule	interface	TBD	TBD	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the MSFC DAAC.	
TRMM3 080#B	B	SDPS	TSDIS provides product schedule	interface	TBD	TBD	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the MSFC DAAC.	
TRMM3 090#A	A	SDPS	TSDIS statuses delayed products	interface	TBD	TBD	TSDIS shall electronically provide status information to the ECS systems at the MSFC DAAC about delayed products.	
TRMM3 090#B	B	SDPS	TSDIS statuses delayed products	interface	TBD	TBD	TSDIS shall electronically provide status information to the ECS systems at the MSFC DAAC about delayed products.	
TRMM3 100#A	A	SDPS	ECS delivers 2-days data	interface	TBD	fully met	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM PR, TMI, GV, and SSM/I ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS also shall daily ingest an average of 2-days worth of reprocessed data from TSDIS.	

TRMM3 100#B	B	SDPS	ECS delivers 2-days data	interface	TBD	no new functionality	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM PR, TMI, GV, and SSM/I ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS also shall daily ingest an average of 2-days worth of reprocessed data from TSDIS.	
TRMM3 110#A	A	SDPS	TRMM order for SSM/I data	interface	TBD	TBD	TRMM shall make a standing order to ECS for SSM/I data to be delivered from the ECS systems at the MSFC DAAC to TSDIS.	
TRMM3 110#B	B	SDPS	TRMM order for SSM/I data	interface	TBD	TBD	TRMM shall make a standing order to ECS for SSM/I data to be delivered from the ECS systems at the MSFC DAAC to TSDIS.	
TRMM3 120#A	A	CSMS	ESDIS communications for TSDIS/ MSFC	interface	TBD	TBD	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV ~~Level 1A data, Level 1B-3B~~ standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.	
TRMM3 120#B	B	CSMS	ESDIS communications for TSDIS/ MSFC	interface	TBD	no new functionality	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV ~~Level 1A data, Level 1B-3B~~ standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.	

TRMM3 120#Ir1	Ir1	CSMS	ESDIS communications for TSDIS/ MSFC	interface	TBD	TBD	Communications between TSDIS and the ECS systems at the MSFC DAAC to transport the PR, TMI, and GV ~~Level 1A data, Level 1B-3B~~ standard products, metadata, SSM/I ancillary data, algorithms, and documentation shall be provided by ESDIS.	
TRMM3 130#A	A	SDPS	ESDIS data standards and formats	interface	TBD	TBD	All data transferred between TSDIS and the ECS systems at the MSFC DAAC, including GV, shall follow ESDIS-defined standards with specific product formats to be jointly agreed to and documented in ICDs.	
TRMM3 130#B	B	SDPS	ESDIS data standards and formats	interface	TBD	TBD	All data transferred between TSDIS and the ECS systems at the MSFC DAAC, including GV, shall follow ESDIS-defined standards with specific product formats to be jointly agreed to and documented in ICDs.	
~~TRMM3 140#A~~	~~A~~	~~SDPS / CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.~~	
~~TRMM3 140#B~~	~~B~~	~~SDPS / CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.~~	

TRMM3140#Ir1	Ir1	SDPS|CSMS	Use standards and COTS products	interface	TBD	no new functionality	The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.	
TRMM4010#A	A	SDPS	GSFC ingests VIRS L1A - 3B data	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for VIRS from TSDIS.	
TRMM4010#B	B	SDPS	GSFC ingests VIRS L1A - 3B data	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for VIRS from TSDIS.	
TRMM4010#Ir1	Ir1	SDPS	GSFC ingests VIRS L1A - 3B data	interface	TBD	fully met	The ECS systems at the GSFC DAAC shall ingest TRMM standard products (Level 1A - 3B) data for VIRS from TSDIS.	IR1: This requirement is supported as follows: IR1 shall have the capability at the GSFC DAAC, to receive Level 1A data from VIRS from TSDIS for the purpose of testing the ingest interface between IR1 and TSDIS.
TRMM4020#A	A	SDPS	GSFC ingests VIRS L1B-3B products	interface	TBD	no new functionality	The ECS GSFC DAAC shall ingest TRMM standard products Level 1B-3B for VIRS from TSDIS.	
TRMM4020#B	B	SDPS	GSFC ingests VIRS L1B-3B products	interface	TBD	no new functionality	The ECS GSFC DAAC shall ingest TRMM standard products Level 1B-3B for VIRS from TSDIS.	

~~TRMM4020#Ir1~~	~~Ir1~~	~~SDPS~~	~~GSFC ingests VIRS L1B-3B products~~	~~interface~~	~~TBD~~	~~fully met~~	~~The ECS GSFC DAAC shall ingest TRMM standard products Level 1B-3B for VIRS from TSDIS.~~	~~IR1: This requirement is supported as follows: IR-1 shall have the capability at the GSFC DAAC, to receive Level 1B-3B data from VIRS from TSDIS for the purpose of testing the ingest interface between IR-1 and TSDIS.~~
TRMM4030#A	A	SDPS	GSFC ingests VIRS browse products	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest TRMM browse products for VIRS from TSDIS.	
TRMM4030#B	B	SDPS	GSFC ingests VIRS browse products	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest TRMM browse products for VIRS from TSDIS.	
TRMM4030#Ir1	Ir1	SDPS	GSFC ingests VIRS browse products	interface	TBD	fully met	The ECS systems at the GSFC DAAC shall ingest TRMM browse products for VIRS from TSDIS.	IR1: This requirement is supported as follows: IR1 shall have the capability at the GSFC DAAC, to receive TRMM browse products for VIRS from TSDIS for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM4040#A	A	SDPS	GSFC ingests algorithms and doc	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest from TSDIS algorithms and documentation for VIRS.	
TRMM4040#B	B	SDPS	GSFC ingests algorithms and doc	interface	TBD	no new functionality	The ECS systems at the GSFC DAAC shall ingest from TSDIS algorithms and documentation for VIRS.	

TRMM4040#Ir1	Ir1	SDPS	GSFC ingests algorithms and doc	interface	TBD	fully met	The ECS systems at the GSFC DAAC shall ingest from TSDIS algorithms and documentation for VIRS.	IR1: This requirement is supported as follows; IR-1 shall have the capability at the G SFC DAAC, to receive algorithms and documentation for VIRS from TSIDS for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM4050#A	A	SDPS	GSFC archives VIRS	interface	TBD	TBD	The VIRS data ingested from TSDIS by ECS shall be archived at the ECS systems at the GSFC DAAC.	
TRMM4050#B	B	SDPS	GSFC archives VIRS	interface	TBD	TBD	The VIRS data ingested from TSDIS by ECS shall be archived at the ECS systems at the GSFC DAAC.	
TRMM4060#A	A	SDPS	GSFC ingests TRMM data daily	interface	TBD	TBD	The ECS systems at the GSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	
TRMM4060#B	B	SDPS	GSFC ingests TRMM data daily	interface	TBD	TBD	The ECS systems at the GSFC DAAC shall ingest TRMM data files and data products, including metadata, daily.	
TRMM4070#A	A	SDPS	TSDIS provides product schedule	interface	TBD	TBD	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the GSFC DAAC.	
TRMM4070#B	B	SDPS	TSDIS provides product schedule	interface	TBD	TBD	TSDIS shall electronically provide a schedule of TRMM product delivery to the ECS systems at the GSFC DAAC.	
TRMM4080#A	A	SDPS	TSDIS statuses delayed products	interface	TBD	TBD	TSDIS shall electronically provide status information to the ECS systems at the GSFC DAAC about delayed products.	

TRMM4080#B	B	SDPS	TSDIS statuses delayed products	interface	TBD	TBD	TSDIS shall electronically provide status information to the ECS systems at the GSFC DAAC about delayed products.	
TRMM4090#A	A	SDPS	ECS delivers 2-days TRMM data	interface	TBD	TBD	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and AVHRR, GOES Precipitation Index (GPI), Global Precipitation Climatology Project (GPCP), and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS shall also daily ingest an average of 2-days worth of reprocessed data from TSDIS.	
TRMM4090#B	B	SDPS	ECS delivers 2-days TRMM data	interface	TBD	TBD	ECS shall make daily deliveries of an average of 2-days worth of archived TRMM VIRS and AVHRR, GOES Precipitation Index (GPI), Global Precipitation Climatology Project (GPCP), and National Meteorological Center (NMC) ancillary data to TSDIS for the purpose of reprocessing by TSDIS. ECS shall also daily ingest an average of 2-days worth of reprocessed data from TSDIS.	
TRMM4100#A	A	SDPS	TSDIS standing orders ancillary	interface	TBD	TBD	TSDIS shall make a standing order to ECS for AVHRR, GPI, GPCP, and NMC ancillary data to be delivered from the ECS systems at the GSFC DAAC to TSDIS.	

TRMM4 100#B	B	SDPS	TSDIS standing orders ancillary	interface	TBD	TBD	TSDIS shall make a standing order to ECS for AVHRR, GPI, GPCP, and NMC ancillary data to be delivered from the ECS systems at the GSFC DAAC to TSDIS.	
TRMM4 110#A	A	CSMS	ESDIS communications for TSDIS/GSFC	interface	TBD	TBD	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS ~~Level 1A data, Level 1B-3B~~ standard products, metadata, ~~AVHRR~~, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.	
TRMM4 110#B	B	CSMS	ESDIS communications for TSDIS/GSFC	interface	TBD	no new functionality	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS ~~Level 1A data, Level 1B-3B~~ standard products, metadata, ~~AVHRR~~, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.	
TRMM4 110#Ir1	Ir1	CSMS	ESDIS communications for TSDIS/GSFC	interface	TBD	TBD	Communications between TSDIS and the ECS systems at the GSFC DAAC to transport the VIRS ~~Level 1A data, Level 1B-3B~~ standard products, metadata, ~~AVHRR~~, GPI, GPCP, and NMC ancillary data, and algorithms and documentation shall be provided by ESDIS.	
~~TRMM4 120#A~~	~~A~~	~~CSMS~~	~~TSDIS and ECS I/Fs to GSFC LAN~~	~~interface~~	~~TBD~~	~~fully met~~	~~TSDIS and ECS shall each provide an interface to the GSFC local area network.~~	
~~TRMM4 120#B~~	~~B~~	~~CSMS~~	~~TSDIS and ECS I/Fs to GSFC LAN~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~TSDIS and ECS shall each provide an interface to the GSFC local area network.~~	
~~TRMM4 120#Ir1~~	~~Ir1~~	~~CSMS~~	~~TSDIS and ECS I/Fs to GSFC LAN~~	~~interface~~	~~TBD~~	~~TBD~~	~~TSDIS and ECS shall each provide an interface to the GSFC local area network.~~	

TRMM4 130#Ir1	Ir1	SDPS	ESDIS data standards and formats	interface	TBD	TBD	All data transferred between TSDIS and the ECS GSFC DAAC shall follow ESDIS-defined standards, with specific product formats to be jointly agreed to and documented in ICDs.	
TRMM4 130#A	A	SDPS	ESDIS data standards and formats	interface	TBD	TBD	All data transferred between TSDIS and the ECS systems at the GSFC DAAC shall follow ESDIS-defined standards, with specific product formats to be jointly agreed to and documented in ICDs.	
TRMM4 130#B	B	SDPS	ESDIS data standards and formats	interface	TBD	TBD	All data transferred between TSDIS and the ECS systems at the GSFC DAAC shall follow ESDIS-defined standards, with specific product formats to be jointly agreed to and documented in ICDs.	
~~TRMM4 140#A~~	~~A~~	~~SDPS/ CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.~~	
~~TRMM4 140#B~~	~~B~~	~~SDPS/ CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.~~	

~~TRMM4140#Ir1~~	~~Ir1~~	~~SDPS/CSMS~~	~~Use standards and COTS products~~	~~interface~~	~~TBD~~	~~no new functionality~~	~~The interfaces between TRMM and ECS shall make appropriate use of standards for data structures and data transport as defined for use within the publications of CCSDS and ISO/OSI, and shall use COTS hardware and software products as appropriate.~~	
TRMM5010#A	A	SDPS	ECS ingests products in ECS format	interface	TBD	all functionality complete	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.	
TRMM5010#B	B	SDPS	ECS ingests products in ECS format	interface	TBD	no new functionality	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.	
TRMM5010#Ir1	Ir1	SDPS	ECS ingests products in ECS format	interface	TBD	partially met	ECS shall ingest TRMM metadata, and browse from TSDIS along with the TRMM standard products in the ECS format.	IR1: This requirement is supported as follows: IR-1 shall have the capability to receive TRMM metadata and browse data from TSDIS, in ECS format, along with the TRMM standard products for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM5020#A	A	SDPS	TRMM product schedule & status	interface	TBD	TBD	Availability of TRMM data products (PR, VIRS, TMI, and GV) shall be based on the TSDIS product schedule, and an electronic status mechanism shall be available for late products.	
TRMM5020#B	B	SDPS	TRMM product schedule & status	interface	TBD	TBD	Availability of TRMM data products (PR, VIRS, TMI, and GV) shall be based on the TSDIS product schedule, and an electronic status mechanism shall be available for late products.	

TRMM5030#A	A	SDPS	ECS ingests directory & guide	interface	TBD	TBD	ECS shall have the capability to ingest directory and guide information from TSDIS.	
TRMM5030#B	B	SDPS	ECS ingests directory & guide	interface	TBD	no new functionality	ECS shall have the capability to ingest directory and guide information from TSDIS.	
TRMM5030#Ir1	Ir1	SDPS	ECS ingests directory & guide	interface	TBD	TBD	ECS shall have the capability to ingest directory and guide information from TSDIS.	IR1: This requirement is supported as follows: IR-1 shall have the capability to receive directory and guide information from TSDIS for the purpose of testing the ingest interface between IR-1 and TSDIS.
TRMM5040#A	A	SDPS	ECS archives & distributes TRMM	interface	TBD	TBD	ECS shall have the capability to archive and distribute standard TRMM data files and products (including VIRS, PR and TMI data, metadata, GV data, algorithms and documentation) as provided and produced by TSDIS and the TRMM Science Team.	
TRMM5040#B	B	SDPS	ECS archives & distributes TRMM	interface	TBD	TBD	ECS shall have the capability to archive and distribute standard TRMM data files and products (including VIRS, PR and TMI data, metadata, GV data, algorithms and documentation) as provided and produced by TSDIS and the TRMM Science Team.	
TRMM5050#A	A	N/A	TRMM supports ECS user model	procedural	TBD	TBD	TRMM shall support maintenance of a TRMM user model for use in the overall ECS user model.	External only requirement: Information only. No action is required by ECS.
TRMM5050#B	B	N/A	TRMM supports ECS user model	procedural	TBD	TBD	TRMM shall support maintenance of a TRMM user model for use in the overall ECS user model.	External only requirement: Information only. No action is required by ECS.

TRMM5060#A	A	SDPS	ECS supports browse, order of data	interface	TBD	fully met	ECS shall provide standard information management functions for browse, and order of data and products provided by TSDIS and delivered to the MSFC and GSFC DAACs (including VIRS, PR and TMI data, metadata, GV data, TRMM Science Team algorithms and documentation).	
TRMM5060#B	B	SDPS	ECS supports browse, order of data	interface	TBD	no new functionality	ECS shall provide standard information management functions for browse, and order of data and products provided by TSDIS and delivered to the MSFC and GSFC DAACs (including VIRS, PR and TMI data, metadata, GV data, TRMM Science Team algorithms and documentation).	
TRMM5070#A	A	SDPS	ECS archives TRMM L1B-3 6 months	interface	TBD	partially met	ECS will continue to archive original TRMM standard products (Level 1B-3) after reprocessing for 6 months, after which the products will become eligible for deletion.	
TRMM5070#B	B	SDPS	ECS archives TRMM L1B-3 6 months	interface	TBD	all functionality complete	ECS will continue to archive original TRMM standard products (Level 1B-3) after reprocessing for 6 months, after which the products will become eligible for deletion.	
~~TRMM5080#A~~	A	~~SDPS~~	~~ECS notifies Team after reprocessng~~	~~interface~~	~~TBD~~	~~TBD~~	~~The ECS shall notify TRMM Science Team (TST) members when a TRMM product has been reprocessed and therefore will become eligible for deletion. The product eligible for deletion shall be deleted after 6 months unless the ECS is directed otherwise by appropriate authority.~~	

TRMM5080#B	B	SDPS	ECS notifies Team after reprocessng	interface	TBD	TBD	The ECS shall notify TRMM Science Team (TST) members when a TRMM product has been reprocessed and therefore will become eligible for deletion. The product eligible for deletion shall be deleted after 6 months unless the ECS is directed otherwise by appropriate authority.	
TRMM5090#A	A	SDPS	ECS supports product browse & order	interface	TBD	TBD	ECS shall provide standard information management services for browse and order of CERES and LIS standard products, flight dynamics information, algorithms, and documentation developed from the CERES and LIS data.	
TRMM5090#B	B	SDPS	ECS supports product browse & order	interface	TBD	TBD	ECS shall provide standard information management services for browse and order of CERES and LIS standard products, flight dynamics information, algorithms, and documentation developed from the CERES and LIS data.	
TRMM5100#A	A	SDPS	ECS provides TRMM product status	interface	TBD	TBD	ECS shall provide products status for TRMM products to users based upon ECS holdings. Status also shall be based on the TRMM schedule provided electronically by TSDIS and an interactive status mechanism for late products.	
TRMM5100#B	B	SDPS	ECS provides TRMM product status	interface	TBD	TBD	ECS shall provide products status for TRMM products to users based upon ECS holdings. Status also shall be based on the TRMM schedule provided electronically by TSDIS and an interactive status mechanism for late products.	

~~TRMM5110#A~~	~~A~~		~~MSFC & LaRC science expertise~~	~~procedural~~	~~TBD~~	~~fully met~~	~~The ECS MSFC and LaRC DAACS shall be responsible for providing science expertise to advise researchers on the use of CERES and LIS data.~~	~~External only requirement. Information only. No action is required by ECS.~~
~~TRMM5110#B~~	~~B~~	~~TBD~~	~~MSFC & LaRC science expertise~~	~~procedural~~	~~TBD~~	~~fully met~~	~~The ECS MSFC and LaRC DAACS shall be responsible for providing science expertise to advise researchers on the use of CERES and LIS data.~~	~~External only requirement. Information only. No action is required by ECS.~~
~~TRMM5120#A~~	~~A~~	~~N/A~~	~~TRMM science expertise~~	~~procedural~~	~~TBD~~	~~TBD~~	~~The TRMM Science Team shall be responsible for providing science expertise to advise researchers on the use of TRMM (PR, TMI, VIRS, and GV) data.~~	~~External only requirement: Information only. No action is required by ECS.~~
~~TRMM5120#B~~	~~B~~	~~N/A~~	~~TRMM science expertise~~	~~procedural~~	~~TBD~~	~~TBD~~	~~The TRMM Science Team shall be responsible for providing science expertise to advise researchers on the use of TRMM (PR, TMI, VIRS, and GV) data.~~	~~External only requirement: Information only. No action is required by ECS.~~
TRMM8010#A	A	SDPS	End-to-end testing of interfaces	interface	TBD	fully met	TRMM shall manage, and ESDIS shall support, the TRMM end-to-end system testing of the interfaces between ECS and TRMM.	
TRMM8010#B	B	SDPS	End-to-end testing of interfaces	interface	TBD	no new functionality	TRMM shall manage, and ESDIS shall support, the TRMM end-to-end system testing of the interfaces between ECS and TRMM.	
TRMM8020#A	A	SDPS	ESDIS support testing		TBD	TBD	ESDIS shall support testing, fault isolation, verification, and validation of the interfaces with the TRMM end-to-end ground system.	
TRMM8020#B	B	SDPS	ESDIS support testing		TBD	TBD	ESDIS shall support testing, fault isolation, verification, and validation of the interfaces with the TRMM end-to-end ground system.	

TRMM8030#A	A	N/A	TRMM test plans and procedures		TBD	TBD	The TRMM I&T Program shall develop an overall ground segment integration and test plans and procedures.	
TRMM8030#B	B	N/A	TRMM test plans and procedures		TBD	TBD	The TRMM I&T Program shall develop an overall ground segment integration and test plans and procedures.	
TRMM8031#A	A	N/A	ESDIS test plans and procedures		TBD	TBD	ESDIS shall develop test plans and procedures in support of the development, verification and testing of the interfaces with the TRMM ground system.	
TRMM8031#B	B	N/A	ESDIS test plans and procedures		TBD	TBD	ESDIS shall develop test plans and procedures in support of the development, verification and testing of the interfaces with the TRMM ground system.	
TRMM8040#A	A	N/A	ESDIS test plans and procedures		TBD	TBD	ESDIS shall support TRMM development of test plans and procedures in support of the development, verification and testing of the interfaces between with the TRMM ground system and ECS.	
TRMM8040#B	B	N/A	ESDIS test plans and procedures		TBD	TBD	ESDIS shall support TRMM development of test plans and procedures in support of the development, verification and testing of the interfaces between with the TRMM ground system and ECS.	
TRMM8050#A	A	N/A	TSDIS supports integration and test		TBD	TBD	The TSDIS elements shall support integration and test activities defined in the TRMM overall ground segment integration and test plans and procedures.	
TRMM8050#B	B	N/A	TSDIS supports integration and test		TBD	TBD	The TSDIS elements shall support integration and test activities defined in the TRMM overall ground segment integration and test plans and procedures.	
TRMM8060#A	A	SDPS	ECS archives and distributes TRMM test plans and procedures		TBD	TBD	ECS shall archive and distribute TRMM test plans and procedures for the interface between ECS and the TRMM ground system including TSDIS.	

TRMM8060#B	B	SDPS	TSDIS supports integration and test		TBD	TBD	ECS shall archive and distribute TRMM test plans and procedures for the interface between ECS and the TRMM ground system including TSDIS.	
TRMM8071#A	A	SDPS	ECS supports dataflows, archive, and distribution tests with TRMM ground system		TBD	TBD	ECS shall support all dataflows and archival and distribution functionality for integration and test with the TRMM ground system.	
TRMM8071#B	B	SDPS	ECS supports dataflows, archive, and distribution tests with TRMM ground system		TBD	TBD	ECS shall support all dataflows and archival and distribution functionality for integration and test with the TRMM ground system.	
TRMM8080#Ir1	Ir1	SDPS	ECS supports TRMM Mission Simulation #1		TBD	TBD	ECS shall support TRMM Mission Simulation #1.	
TRMM8080#A	A	SDPS	ECS supports TRMM Mission Simulation #1		TBD	TBD	ECS shall support TRMM Mission Simulation #1.	
TRMM8081#A	A	SDPS	ECS supports TRMM Mission Simulation #2		TBD	TBD	ECS shall support TRMM Mission Simulation #2.	
TRMM8090#A	A	SDPS	ECS archives distributes TRMM algorithms and documentation in tests with TSDIS		TBD	TBD	ECS shall archive and distribute TRMM algorithms and documentation in support of test and integration of interfaces with TSDIS.	
TRMM8100#A	A	SDPS	ECS processes CERES/LIS Level 0 and Q/L during testing	interface	TBD	TBD	ECS shall process CERES and LIS Level 0 and quick-look data sets received from SDPF for early interface testing.	

TRMM8110# Ir1	Ir1	N/A	TSDIS elements process simulated instrument data	interface	TBD	TBD	The TSDIS elements shall be capable of processing simulated TRMM instrument data in support of pre launch checkout of the interfaces with ECS.	
TRMM8110# A	A	N/A	TSDIS elements process simulated instrument data	procedural	TBD	TBD	The TSDIS elements shall be capable of processing simulated TRMM instrument data in support of pre launch checkout of the interfaces with ECS.	
TRMM8120# Ir1	Ir1	N/A	ESDIS coordinates provision of simulated instrument data	procedural	TBD	TBD	ESDIS shall coordinate provision of LIS and CERES simulated instrument data and instrument data parameters to SDPF in support of integration and test.	
TRMM8120# A	A	N/A	ESDIS coordinates provision of simulated instrument data	procedural	TBD	TBD	ESDIS shall coordinate provision of LIS and CERES simulated instrument data and instrument data parameters to SDPF in support of integration and test.	