

CCR #96-1344A

Table 1 -REVIEW TABLE (Note: Some changes are so minor that they are difficult to read. Therefore, these changes are highlighted for readability)

req_source_id	req_title	requirement_key	ccr	text	paragraph_id	requirement_key	segment_allocation	req_type	s_ver_method	s_ver_status	a_ver_method	a_ver_status	req_category	ccr	text
DADS 2270		1386		Each DADS shall provide, on a scheduled basis, an off-site backup copy of all EOS data which would be impossible or difficult to recover in case of loss (e.g., ancillary data, metadata, command history, algorithms, engineering data, calibration data, systems and applications software, selected data products, depending on need).	DADS 2270# B		SDPS	functional	demo	un-verified	demo	un-verified	mission critical		Each DADS shall provide, on a scheduled basis, an off-site backup copy of all EOS data which would be impossible or difficult to recover in case of loss (e.g., ancillary data, metadata, command history, algorithms, engineering data, calibration data, systems and applications software, selected data products, depending on need).
DADS		1502		Each DADS shall	DADS	6411	SDPS	functional	demo	un-	demo	un-	mission		

2330				send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 c. (DELETED) d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs	2330# B			nal		verifi ed	mo	verifi ed	on essent ial		Each DADS shall send to the PGS, at a minimum, the following: a. Production data (L0) received from EDOS b. L0-L4 c. (DELETED) d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs
EOC-2510	Generate detailed activity schedule	170		The EOC shall generate a detailed activity schedule for the spacecraft and its instruments by: a. Integrating the spacecraft subsystem activity list and individual instrument activity lists	EOC-2510# B	7915	FOS	functio nal	test	un- verifi ed	test	un- verifi ed	missi on critica l	96 - 09 80 B	The EOC shall generate a detailed activity schedule for the spacecraft and its instruments

				<p>b. Determining if the aggregate resource requirements are within limits</p> <p>c. Identifying and resolving conflicts among the proposed activities</p> <p>d. Ensuring that all the sequencing constraints among the proposed activities are respected</p> <p>e. Scheduling the spacecraft recorder, direct downlink, and communication subsystem operations</p>											<p>by:</p> <p>a. Integrating the spacecraft subsystem activity list and individual instrument activity lists</p> <p>b. Determining if the aggregate resource requirements are within limits</p> <p><u>c. Identifying and resolving conflicts among the proposed activities</u></p> <p>d. Ensuring that all the sequencing constraints among the proposed activities are respected</p> <p>e. Scheduling the spacecraft recorder, direct downlink, and communication subsystem operations</p>
EOC-	Generate	1611	96-	The EOC shall	EOC-	7070	FOS	functio	demo	un-	de	un-	missi	96	

3160	operation al reports		1232	generate operational reports including, at a minimum, the following: a. SCC-stored command load report b. Integrated report having orbital events, command execution times, and TDRS contacts with candidate loads.	3160# B			nal		verifi ed	mo	verifi ed	on critica l	- 09 56 A	The EOC shall generate operational reports including, at a minimum, the following: a. SCC-stored command load report b. Integrated report having orbital events, command execution times, and TDRS contacts with candidate loads. 1431-0
EOC-4168	Provide ICC inst cmd notification	214		The EOC shall provide the ICCs with instrument command notification messages, when emergency/contingency instrument commands are issued.	EOC-4168# B	3734	FOS	functio nal	demo	un- verifi ed	de mo	un- verifi ed	missi on critica l		The EOC shall provide the ICCs with instrument command notification messages, when emergency/contingency instrument commands are issued. 1333, 946
EOC-	Accept	230		The EOC shall	EOC-	3750	FOS	functio	test	un-	test	un-	missi		

5120	temp/permanent changes			provide the capability to accept temporary or permanent changes to limit definitions.	5120# B			nal		verifi ed		<u>verifi ed</u>	on critical		The EOC shall provide the capability to accept temporary or permanent changes to limit definitions. 1418, 1428
EOC-7010	Spacecraft & instrument database	1626	96-1183 B	The EOS spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints h. Analysis algorithms i. Report formats j. NCC configuration codes k. Derived telemetry parameter equations l. Telemetry parameter limits	EOC-7010# B	8010	FOS	functional	demo	un-verified	demo	un-verified	mission critical	96-1183 B	The EOS spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator

				<p>m. Characteristics of spacecraft and its instruments</p> <p>n. Command validation parameters</p> <p>o. Operations procedures</p>											<p>directives</p> <p>f. Display formats</p> <p>g. Planning and scheduling definitions and constraints</p> <p><u>h. Analysis algorithms</u></p> <p>i. Report formats</p> <p>j. NCC configuration codes</p> <p><u>k. Derived telemetry parameter equations</u></p> <p>l. Telemetry parameter limits</p> <p>m. Characteristics of spacecraft and its instruments</p> <p>n. Command validation parameters</p> <p>o. Operations procedures</p>
EOC-8010	Schedule systems/communications I/F	273		The EOC shall have the capability to schedule its systems and communications interfaces that are used for multiple spacecraft and instrument operations and for	EOC-8010#B	7083	FOS	functional	demon	un-verified	demo	un-verified	mission critical	96-0956A	The EOC shall have the capability to schedule its systems and

				other activities, including maintenance, upgrade, sustaining engineering, testing, and training.											communications interfaces that are used for <u>multiple spacecraft and</u> instrument operations and for other activities, including maintenance, upgrade, sustaining engineering, testing, and training.
EOC-9580	Architecture to grow for more perf	307		The EOC architecture shall be capable of growing to support additional spacecraft without major redesign.	EOC-9580# B	3824	FOS	functional	analysis	un-verified	analysis	<u>un-verified</u>	mission essential		The EOC architecture shall be capable of growing to support additional spacecraft without major redesign. # 1324#
EOSD 0500	ECS perform major functions	7		ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking	EOSD 0500# B	7096	FOS SDPS CSM S	functional	test	un-verified	test	un-verified	mission critical	96 - 09 56 A	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS

				<ul style="list-style-type: none"> e. Data Input f. Data Processing g. Data Storage h. Data Distribution i. Information Management j. End-to-End Fault Management k. System Management 											<ul style="list-style-type: none"> Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution <u>i.</u> Information Management <u>j.</u> End-to-End Fault Management <u>k.</u> System Management
EOSD 1030	Accept Quick-look	1505		ECS shall have the capacity to accept a daily average of two (2) percent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.	EOSD 1030# B	6149	SDPS	performance functional	test	<u>un-verified</u>	test	<u>un-verified</u>	<u>mission critical</u>		ECS shall have the capacity to accept a daily average of <u>two</u> (2) per cent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.

EOSD 1770	Exchange Data	55		ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders f. Status data	EOSD 1770# B	7948	FOS SDPS CSM S	interfac e	test	un- verifi ed	test	un- verifi ed	missi on essent ial	96 - 09 80 B	ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders <u>f. Status data</u>
ICC- 4100	Perform instr hskping/ engnrng DP	406		The ICC shall have the capability to perform instrument housekeeping and engineering data processing, which includes at a minimum the following: a. Decommutation b. Engineering unit conversion c. Limit checking, flagging out-of-limit parameters d. Derived parameter generation e. Digital and discrete state determination	ICC- 4100# B	4561	FOS	functio nal	test	un- verifi ed	test	<u>un- verifi ed</u>	missi on critica l		The ICC shall have the capability to perform instrument housekeeping and engineering data processing, which include: a. Decommutatio n b. Engineering unit conversion c. Limit

															checking, flagging out-of-limit parameters <u>d. Derived parameter generation</u> <u>e. Digital and discrete state determination</u>
ICC-4110	Define mult. sets of bndary limits	407		The ICC shall support the definition of multiple sets of boundary limits for each non-discrete parameter, with each set including definitions for one or more upper and lower boundaries.	ICC-4110# B	4573	FOS	functional	test	un-verified	test	<u>un-verified</u>	mission critical		The ICC shall support the definition of sets of multiple sets of boundary limits for each non-discrete parameter, with each set including definitions for one or more upper and lower boundaries.
ICC-4600	Accept data & info fr IST	440		The ICC shall accept from the IST at a minimum the following: a. Instrument anomaly notifications and instructions b. PI/TL analysis results c. Calibration information d. Performance data	ICC-4600# B	6113	FOS	functional	<u>demo</u>	<u>un-verified</u>	<u>demo</u>	<u>un-verified</u>	mission critical		The ICC shall accept from the IST at a minimum the following: a. Instrument anomaly notifications and instructions

															Products d. Climatology information <u>e. Phenomenology information</u> f. Geographic reference aids g. Spacecraft location projections.
IMS-0545	Processing history	901		The IMS shall provide the capability to search a product's processing history.	IMS-0545# B	5139	SDPS	functional	demo	un-verified	demo	<u>un-verified</u>	mission fulfillment		The IMS shall provide the capability to search a product's processing history.
IMS-1650	Operations monitoring data	1024		IMS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests	IMS-1650# B	5380	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission critical		IMS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data

															acquisition requests
IMS-1765	API capabilities	1637	96-1226	<p>The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users:</p> <ul style="list-style-type: none"> a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data products c. Development of DAAC-specific data acquisition request utilities d. Support of data visualization utilities for DAAC-specific products e. Support of DAAC-specific data analysis utilities f. Development of DAAC-unique metadata search and access services that will operate independent of the delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for 	IMS-1765#B	8182	SDPS	functional	test	un-verified	test	un-verified	mission essential	96-1226	<p>The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users:</p> <ul style="list-style-type: none"> a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data

																	delivered ECS user interface for accessing DAAC-unique metadata search and access services
PGS-0950		1294		The PGS shall interface to the SMC to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data, and results c. Date and time of operational installation d. Compiler identification and version e. Final algorithm documentation	PGS-0950# B	4907	SDPS	functional	test	un-verified	test	un-verified	mission essential				The PGS shall interface to the SMC to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data, and results c. Date and

																	time of operational installation d. Compiler identification and version e. Final algorithm documentation
PGS-0970	Provide file access subroutines	612		The PGS shall provide file access subroutines that enforce compliance with the adopted standard ECS formats.	PGS-0970# B	4915	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential				The PGS shall provide the file access subroutines that enforce compliance with the adopted standard ECS formats.
PGS-1130	<u>Receive product QA</u>	1300		The PGS shall receive product QA from the SCF which shall describe the results of the scientist's product quality review at an SCF. Product QA shall contain the following information at a minimum: a. Identification of product b. QA results c. Product storage and processing instructions	PGS-1130# B	4982	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential				The PGS shall receive product QA from the SCF which shall describe the results of the scientist's product quality review at an SCF. Product QA shall contain the following information at a minimum: a.

															Identification of product b. QA results c. Product storage and processing instructions
PGS-1200		636		The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the product's input data sets.	PGS-1200# B	5018	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the product's input data sets.
SDPS 0100	Ensure delivery of EOS data	539		The SDPS shall be responsible for delivery of EOS data and data products to the IPs, the ADCs, the ODCs, and the other science users via EOSDIS networks and on a variety of physical media.	SDPS 0100# B	5109	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The SDPS shall be responsible for delivery of EOS data and data products to the <u>IPs</u> , the <u>ADCs</u> , the <u>ODCs</u> , and the

															other science users via EOSDIS networks and on a variety of physical media.
SDPS 0150	Generate expedited data.	1607	96-0914 A	The SDPS shall assign priority and distribute expedited data and expedited data availability notices.	SDPS 0150# B	6150	SDPS	functional	test	un-verified	test	un-verified	mission essential		The SDPS shall assign priority and distribute expedited data and expedited data availability notices.
SDPS 0230	Spectral band selection subsetting	1549		In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting by spectral band(s) selection, for standard production as well as reprocessing.	SDPS 0230# B	6201	SDPS	functional	demo	un-verified	demo	un-verified	mission fulfillment		In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting by spectral band(s) selection, for standard production as well as reprocessing.

SMC-1315	LSM's provision of system-wide sched.	1131		The LSM shall provide each element's scheduling function with access to the system-wide scheduling information, including, at a minimum: a. ECS policies and procedures regarding instrument and ground event scheduling b. Other element's plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations	SMC-1315# B	6281	CSM S	functional	test	un-verified	test	un-verified	mission critical		The LSM shall provide each element's scheduling function with access to the system-wide scheduling information, including, at a minimum: a. ECS policies and procedures regarding instrument and ground event scheduling b. Other elements plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations
SMC-2110	Managerial &	1053		The SMC shall have the capability to generate	SMC-2110#	4667	CSM S	functional	demo	un-verified	demo	un-verified	mission		The SMC

	operational directives			managerial and operational directives affecting, at a minimum, an element's: a. Operational status b. Resource allocation c. Upgrade	B					ed		ed	essential	shall have the capability to generate managerial and operational directives affecting, at a minimum, an element's: a. Operational status b. Resource allocation c. Upgrade
SMC-3305	Elem system SW status monitoring	1450		The LSM shall monitor its element's hardware, and scientific and system software status to determine their operational states including, at a minimum : a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode	SMC-3305# B	4790	CSM S	functional	test	un-verified	test	un-verified	mission critical	The LSM shall monitor its element's hardware, and scientific and system software status to determine their operational states including, at a minimum : a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode
SMC-3315	Sched & executio	1150		The LSM shall	SMC-3315#	6297	SDPS	functional	demo	un-verified	de mo	un-verified	mission	The LSM

	n of events monitor			monitor its element's schedule and execution of events.	B					ed		ed	essential		shall monitor its element's schedule and execution of events.
SMC-3335	Sched perf comparison & evaluation	1152		The LSM shall compare and evaluate its element's actual schedule performance against planned schedule performance.	SMC-3335# B	4921	CSM S	functional	test	un-verified	test	<u>un-verified</u>	mission critical		The LSM shall compare and evaluate its element's actual schedule performance against planned schedule performance.
SMC-3345	QA for perf & programmatic areas	1153		The LSM shall perform quality assurance for its site/element's performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,	SMC-3345# B	4925	CSM S	functional	analysis	un-verified	analysis	<u>un-verified</u>	mission critical		The LSM shall perform quality assurance for its site/element's performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality

				<ul style="list-style-type: none"> b. QA results c. Product storage and processing instructions
PGS-1200	Generate QA report	636		The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the product's input data sets.
SDPS 0230	Spectral band selection subsetting	1549		In support of reducing production data dependency flow bandwidth consumption during inter-DAAC network transmission, the ECS shall support subsetting by spectral band(s) selection, for standard production as well as reprocessing.
SMC-1315	LSM's provision of system-wide sched.	1131		<p>The LSM shall provide each element's scheduling function with access to the system-wide scheduling information, including, at a minimum:</p> <ul style="list-style-type: none"> a. ECS policies and procedures regarding instrument and ground event scheduling b. Other element's plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations
SMC-2110	Managerial & operational directives	1053		<p>The SMC shall have the capability to generate managerial and operational directives affecting, at a minimum, an element's:</p> <ul style="list-style-type: none"> a. Operational status b. Resource allocation c. Upgrade
SMC-3305	Element system SW status monitoring	1450		<p>The LSM shall monitor its element's hardware, and scientific and system software status to determine their operational states including, at a minimum :</p> <ul style="list-style-type: none"> a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode
SMC-3315	Sched & execution	1150		The LSM shall monitor its element's schedule and execution of events.

	n of events monitor			
SMC-3335	Sched perf comparison & evaluation	1152		The LSM shall compare and evaluate its element's actual schedule performance against planned schedule performance.
SMC-3345	QA for perf & programmatic areas	1153		The LSM shall perform quality assurance for its site/element's performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance;

Table 3 -RBR change table

paragra ph_id	require ment_k ey	segment _allocat ion	req_type	s_ver_ metho d	s_ver_ status	a_ve r_me thod	a_ver_s tatus	req_c ategor y	ccr	text
DADS 2270# B <i>NOT E for imple ment or: input a space , betwe</i>	3605	SDPS	functio nal	demo	un- verifi ed	de mo	<u>un- verified</u>	missi on critic al		Each DADS shall provide, on a scheduled basis, an off-site backup copy of all EOS data which would be impossible or difficult to recover in case of loss (e.g., ancillary data, metadata, command history, algorithms, engineering data, calibration data, systems and applications software, selected data products, depending on need).

<i>en the words 'which' and 'would'</i>										
DADS 2330# B	6411	SDPS	functional	demo	un-verified	demo	un-verified	mission essential		<p>Each DADS shall send to the PGS, at a minimum, the following:</p> <ul style="list-style-type: none"> a. Production data (L0) received from EDOS b. L0-L4 c. <u>(DELETED)</u> d. Metadata e. Ancillary data f. Calibration data g. Algorithms h. Schedules i. Status j. Spacecraft and instrument logs k. Special data sets l. Non-EOS science data from ADCs/ODCs
EOC-2510# B	7915	FOS	functional	test	un-verified	test	un-verified	mission critical	96-098 0B	<p>The EOC shall generate a detailed activity schedule for the spacecraft and its instruments by:</p> <ul style="list-style-type: none"> a. Integrating the spacecraft subsystem activity list and individual instrument activity lists b. Determining if the aggregate resource requirements are within limits c. <u>Identifying and resolving conflicts among the proposed activities</u> d. Ensuring that all the sequencing constraints among the proposed activities are respected e. Scheduling the spacecraft recorder, direct downlink, and communication subsystem operations
EOC-3160# B	7070	FOS	functional	demo	un-verified	demo	un-verified	mission critical	96-095 6A	<p>The EOC shall generate operational reports including, at a minimum, the following:</p> <ul style="list-style-type: none"> a. SCC-stored command load report

										b. Integrated report having orbital events, command execution times, and TDRS contacts with candidate loads. 1431-0
EOC-4168# B	3734	FOS	functional	demo	un-verified	demo	<u>un-verified</u>	mission critical		The EOC shall provide the ICCs with instrument command notification messages, when emergency/contingency instrument commands are issued. 1333, 946
EOC-5120# B	3750	FOS	functional	test	un-verified	test	<u>un-verified</u>	mission critical		The EOC shall provide the capability to accept temporary or permanent changes to limit definitions. 1418, 1428
EOC-7010# B	8010	FOS	functional	demo	un-verified	demo	<u>un-verified</u>	mission critical	96-1183B	The EOS spacecraft and instrument database, referred to as the Project Data Base (PDB) shall include at a minimum the following: a. Housekeeping data formats b. Housekeeping data parameter descriptions c. Command descriptions d. Syntactical rules for commands and operator directives e. Operator directives f. Display formats g. Planning and scheduling definitions and constraints <u>h. Analysis algorithms</u> i. Report formats j. NCC configuration codes <u>k. Derived telemetry parameter equations</u> l. Telemetry parameter limits m. Characteristics of spacecraft and its instruments n. Command validation parameters o. Operations procedures
EOC-8010# B	7083	FOS	functional	demo	un-verified	demo	<u>un-verified</u>	mission critical	96-0956A	The EOC shall have the capability to schedule its systems and communications interfaces that are used for <u>multiple spacecraft and</u> instrument operations and for other activities, including maintenance, upgrade, sustaining engineering, testing, and training.
EOC-9580# B	3824	FOS	functional	analysis	un-verified	analysis	<u>un-verified</u>	mission essential		The EOC architecture shall be capable of growing to support additional spacecraft without major redesign. 1324

EOSD 0500# B	7096	FOS SDPS CSM S	function al	test	un- verifi ed	test	un- verified	missi on critic al	96- 095 6A	ECS shall perform the following major functions: a. EOS Mission Planning and Scheduling b. EOS Mission Operations c. Command and Control d. Communications and Networking e. Data Input f. Data Processing g. Data Storage h. Data Distribution i. <u>Information Management</u> j. <u>End-to-End Fault Management</u> k. <u>System Management</u>
EOSD 1030# B	6149	SDPS	perform ance function al	test	<u>un- verifi ed</u>	test	<u>un- verified</u>	<u>missi on critic al</u>		ECS shall have the capacity to accept a daily average of <u>two (2)</u> per cent of the daily data throughput as expedited data for use in mission functions of calibration and anomalies.
EOSD 1770# B	7948	FOS SDPS CSM S	interfac e	test	un- verifi ed	test	un- verified	missi on essen tial	96- 098 0B	ECS elements shall exchange the following types of data at a minimum with the IPs: a. Instrument command loads b. Science data c. Planning and scheduling data d. Directories e. Product Orders f. <u>Status data</u>
ICC- 4100# B	4561	FOS	function al	test	un- verifi ed	test	<u>un- verified</u>	missi on critic al		The ICC shall have the capability to perform instrument housekeeping and engineering data processing, which include: a. Decommutation b. Engineering unit conversion c. Limit checking, flagging out-of-limit parameters d. <u>Derived parameter generation</u> e. <u>Digital and discrete state determination</u>
ICC-	4573	FOS	function al	test	un-	test	<u>un-</u>	missi		

4110# B			nal		verifi ed		<u>verified</u>	on critic al		The ICC shall support the definition of sets of multiple sets of boundary limits for each non-discrete parameter, with each set including definitions for one or more upper and lower boundaries.
ICC-4600# B	6113	FOS	functio nal	demo	<u>un- verifi ed</u>	de mo	<u>un- verified</u>	missi on critic al		The ICC shall accept from the IST at a minimum the following: a. Instrument anomaly notifications and instructions b. PI/TL analysis results c. Calibration information d. <u>Performance data</u>
IMS-0510# B	5130	SDPS	interfac e	demo	<u>TBD un- verifi ed</u>	de mo	<u>un- verified</u>	missi on critic al		The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information e. <u>Phenomenology information</u> f. Geographic reference aids g. Spacecraft location projections.
IMS-0545# B	5139	SDPS	functio nal	demo	un- verifi ed	de mo	<u>un- verified</u>	missi on fulfill ment		The IMS shall provide the capability to search a product's processing history.
IMS-1650# B	5380	SDPS	functio nal	test	un- verifi ed	test	<u>un- verified</u>	missi on critic al		<u>IMS</u> operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding processing requests d. Outstanding data acquisition requests
PGS-0950# B	4907	SDPS	functio nal	test	un- verifi ed	test	<u>un- verified</u>	missi on essen tial		The PGS shall interface to <u>the SMC</u> to maintain configuration control of all algorithms and calibration coefficients used in operational Standard Product production. Controlled information shall contain at a minimum: a. Source code including version number and author b. Benchmark test procedures, test data, and results

										c. Date and time of operational installation d. Compiler identification and version e. Final algorithm documentation
PGS-0970# B	4915	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The PGS shall provide the file access subroutines that enforce compliance with the adopted standard ECS formats.
PGS-1130# B	4982	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The PGS shall receive product QA from the SCF which shall describe the results of the scientist's product quality review at an SCF. Product QA shall contain the following information at a minimum: a. Identification of product b. QA results c. Product storage and processing instructions
PGS-1200# B	5018	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The PGS shall have the capability to generate a data quality assessment report including a description of the quality of each processed product as well as the quality of each of the product's input data sets.
SDPS 0100# B	5109	SDPS	functional	test	un-verified	test	<u>un-verified</u>	mission essential		The SDPS shall be responsible for delivery of EOS data and data products to the IPs, the ADCs, the ODCs, and the other science users via EOSDIS networks and on a variety of physical media.
SDPS 0150# B	6150	SDPS	functional	test	<u>un-verified</u>	test	<u>un-verified</u>	<u>mission essential</u>		The SDPS shall assign priority and distribute expedited data and expedited data availability notices.
SMC-1315# B	6281	CSMS	functional	test	un-verified	test	un-verified	mission critical		The LSM shall provide each element's scheduling function with access to the system-wide scheduling information, including, at a minimum: a. ECS policies and procedures regarding instrument and ground event scheduling b. Other element's plans and schedules c. Element allocations of ground event functions and capabilities d. Product generation information e. Scheduling directives for testing, maintenance, and emergency situations
SMC-2110# B	4667	CSMS	functional	demo	un-verified	demo	<u>un-verified</u>	mission essential		The SMC shall have the capability to generate managerial and operational directives

								missi	affecting, at a minimum, an element's: a. Operational status b. Resource allocation c. Upgrade
SMC-3305# B	4790	CSM S	functional	test	un-verified	test	<u>un-verified</u>	on critical	The LSM shall monitor its element's hardware, and scientific and system software status to determine their operational states including, at a minimum : a. On-line b. Failed c. In maintenance d. In test mode e. In simulation mode
SMC-3315# B	6297	SDPS	functional	demo	un-verified	demo	un-verified	on essential	The LSM shall monitor its element's schedule and execution of events.
SMC-3335# B	4921	CSM S	functional	test	un-verified	test	<u>un-verified</u>	on critical	The LSM shall compare and evaluate its element's actual schedule performance against planned schedule performance.
SMC-3345# B	4925	CSM S	functional	analysis	un-verified	analysis	<u>un-verified</u>	on critical	The LSM shall perform quality assurance for its site/element's performance as well as programmatic areas that includes, at a minimum: a. Quality testing, benchmarks and audits for element enhancement implementations b. Quality checking and audits of products processed and delivered c. Quality testing and audits of element resource performance,