Table 1: RBR modification table **CCR# 97-1587A**

Req_by_rel	RBR_id	object_id	release	seg_allocation	req_type	s_verification_status	s_verification_method	a_verification_status	a_verification_method	req_category	ccr	text	req_interpretation	clarification
CC	DADS1235#B	9080	B0	SDPS	performance | functional	un-verified	test	un-verified	test	mission essential	97-0942A	Each DADS shall temporarily store expedited data received for 48 hours or until production data are available (whichever comes first).		
CT	DADS1235#B												Expedited data is staged for pickup and marked eligible for deletion after 48 hours, and is then deleted when the space is needed. Expedited data storage capacity is estimated as 0.02 of the daily Level 0 ingest multiplied by two for two days of storage: GSFC 6.4 GB (ASTER and MODIS);LaRC 1.9 GB (MISR, CERES, and MOPPIT). (ref: ECS F&PRS Appendix C, Table C-1 and EOSD1030 for 2%)	
CC	DADS3100#B	3642	B0B1	SDPS	performance	un-verified	test	un-verified	test	mission essential	97-0714A	Each DADS shall be capable of transmitting data over communications network in support of data production requests at the data rate specified in Appendix C and in support of data distribution requests at a rate equivalent to daily product volume (L1-L4).	The Release B0 Data Server supports the data ~~production the following network distribution flows~~, as derived from the L1-L4 volume in the Feb., 1996 Technical Baseline (Release B0 procurement baseline): @GSFC 368 GB/day ~~to users~~, @ LaRC 146 GB/day ~~to users~~, @ EDC 88 GB/day ~~to users~~ and @ NSIDC 11 GB/day ~~to users~~. This includes the distribution of data for instrument calibration and data QA.	
CT	DADS3100#B												The Release B0 Data Server supports the electronic data distribution to users equivalent to 1X the daily archive input, as derived from the L1-L4 volume in	

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													the Feb., 1996, Technical Baseline (Release B0 procurement baseline not adjusted for ECS production capacity phasing ramp-up): @GSFC 368 GB/day, @ LaRC 146 GB/day, @ EDC 88 GB/day, and @ NSIDC 11 GB/day. This includes the distribution of data for instrument calibration and data QA. The values differ from the total archives throughput (see DADS 2778) due to anticipated data access frequencies and expected preparation (e.g., subsetting) of the data into a form desired by the users. The staging area capacity for daily data distribution is assumed to be the equivalent of one day's (24 hours) worth of distribution data as defined above; therefore, the staging area capacity for distribution is: 368 GB for GSFC, 146 GB for LaRC, 88 GB for EDC, and 11 GB for NSIDC. Throughput rate for Archive to Production is derived from dynamic modeling (not adjusted for ECS production capacity phasing ramp-up) and is: EDC 7.1 MB/s; GSFC 6.4 MB/s; LaRC 2.7 MB/s; NSIDC 0.4 MB/s.	
CC	DADS3110#B	3643	B1	SDPS	performance	un-verified	demo	un-verified	demo	mission essential	97-0919A	Each DADS shall be capable of distributing data via physical media at a rate equivalent to the rate data are ingested at that DADS.		
CT	DADS3110#B												The Release B0 Data	

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													Server supports data distribution to users via media equivalent to 1X the daily archive input, as derived from the L1-L4 volume in the Feb., 1996, Technical Baseline (Release B0 procurement baseline not adjusted for ECS production capacity phasing ramp-up): @GSFC 368 GB/day, @ LaRC 146 GB/day, @ EDC 88 GB/day, and @ NSIDC 11 GB/day. This includes the distribution of data for instrument calibration and data QA. The values differ from the total archives throughput (see DADS 2778) due to anticipated data access frequencies and expected preparation (e.g., subsetting) of the data into a form desired by the users. Physical limitations imposed by purchase strategies limit the at-launch capacity to 107 GB/day (four each of 4 mm and 8mm tape drives at 1 GB per 1.8 hours per drive) at each DAAC.	
CC	EOSD1010#B	9502	B0B	FOS | SDPS | CSMS	performance	un-verified	test	un-verified	test	mission critical	97-1328	ECS shall support daily data volume, processing load, storage volume, instrument support, and data traffic as derivable from and specified in Appendix C and D.	FOS applicability: instrument support only. ~~B: AM1 only.~~	~~Refer to the Clarification text of the following requirements for Release B capacity requirements: Processing PGS 1300#B; Archiving Capacity DADS1640#B, DADS1805#B, DADS2778#B, and DADS2900#B; and Archive~~

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														~~Throughput - DADS2778#B and DADS3100#B.~~
CT	EOSD1010#B												FOS applicability: instrument support only. Refer to the Interpretation text of the following requirements for Release B capacity requirements: Processing -PGS 1300#B; Archiving Capacity - DADS1640#B, DADS1805#B, DADS2778#B, and DADS2900#B; and Archive Throughput - DADS2778#B and DADS3100#B.	<remove>
CC	EOSD1040#B	9147	~~B0~~	SDPS | CSMS	performance	un-verified	analysis	un-verified	analysis	mission fulfillment	97-0742A	ECS shall provide sufficient capacity to permit the reprocessing of all EOS science data at twice the incoming data rate at a minimum, concurrently with processing of new data.	~~AM 1~~	
CT	EOSD1040#B		B1										For the at-launch reprocessing capacity, see requirement PGS-1300. Full capacity for reprocessing will not be available until 3 years after launch (not adjusted for ECS production capacity phasing).	
CC	NOAA0510#B	9382	B0	SDPS	interface	un-verified	test	un-verified	test	mission essential	97-1130A	The CEMSCS shall have the capability to send and the ECS shall have the capability to receive data sets to be used as ancillary data for ECS standard product generation.		
CT	NOAA0510#B												Maximum ingest capability at launch for	

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													NOAA ancillary data (consistent with the ECS/NOAA ADC IRD): LaRC 110 MB/day. Values were estimated by summing all data types as though each entire set of files all arrived on the same day (worst case).	
CC	NOAA0710#B	9361	B0	SDPS	interface	un-verified	test	un-verified	test	mission essential	97-0729A	The NCEP shall have the capability to send via the GSFC DAAC and the ECS shall have the capability to receive via the GSFC DAAC data sets to be used as ancillary data for ECS standard product generation.		ECS will not have a direct interface with NCEP. ECS will receive NCEP data from DAS Data Link Server at GSFC.
CT	NOAA0710#B												Maximum ingest capability at launch for NOAA ancillary data (consistent with the ECS/NOAA ADC IRD): GSFC 78.3 MB/day. Values were estimated by summing all data types as though each entire set of files all arrived on the same day (worst case).	
CC	NOAA0820#B	9355	B0	SDPS	interface	un-verified	test	un-verified	test	mission essential	97-0729A	The NOAA Data Centers shall have the capability to send and the ECS shall have the capability to receive data sets requested by ECS as ancillary data for ECS standard product generation.		
CT	NOAA0820#B												Maximum ingest capability at launch for NOAA ancillary data from NCDC (consistent with the ECS/NOAA ADC IRD): LaRC 7.3 GB/month.	

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CC	PGS-1300#B	8238	B0	SDPS	performance	un-verified	analysis	un-verified	analysis	mission critical	97-0695A	Each PGS shall provide a processing capacity as shown in Table C-5 of Appendix C. It shall be possible to effectively utilize the entire reprocessing capacity at each site on computers with similar architectural design (e.g., parallel processors), for a single algorithm or any mix of algorithms normally run at that site. The four times processing capacity accounts for: a. normal processing demands b. reprocessing demands c. algorithm integration and test demands, production of prototype products, and ad hoc processing for "dynamic browse" or new search and access techniques developed by science users.	Release ~~A~~ Processing capacity provided is equal to 1.2X normal processing AM-1 instruments ~~and SAGE III~~. This will be provided only at the GSFC, LaRC, EDC and NS~~DI~~C DAACs. Totals provided as derived from the Feb., 1996 Technical Baseline (Release B0 procurement baseline) in MFLOPS is @ GSFC: 22899, @ LaRC: 24966, @ EDC: 7581 and @ NS~~DI~~C: 71.These capacities include the 25% efficiency required by PGS-1301#A.	
CT	PGS-1300#B												Release B0 Processing capacity provided is equal to 1.2X the normal processing for AM-1 instruments. This will be provided only at the GSFC, LaRC, EDC, and NSIDC DAACs. Totals provided as derived from the Feb., 1996, Technical Baseline (Release B0 procurement baseline as a daily average) in MFLOPS is @ GSFC:	

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													22899, @ LaRC: 24966 (does not include TRMM), @ EDC: 7581 and @ NSIDC: 71. Actual expected processing capacity at EDC is 10,924 MFLOPS (rather than an average day) to account for higher processing loads to efficiently process 16- and 30-day products. Actual expected processing capacity at NSIDC will be at 212 MFLOPS (3 times daily average) due to the 8 hour shift. These capacities include the 25% efficiency required by PGS-1301#B and are not adjusted for ECS production capacity phasing ramp-up.	