

**CERES Requirements Log - Instantaneous SARB and Synoptic SARB**

Reqm'ts No.	Requirement	SCCR	Provider	Responsible Subsystem	Responsible Person	How was it conveyed?	When was it received?	When was it Accepted?	When was it completed?	Current Status
5-1.0	Prepare Instantaneous SARB for Aqua Edition2A processing	597	Tom Charlock	Instantaneous SARB	Lisa Coleman	Email	07/28/05	07/28/05	01/19/06	Completed
5-1.1	Correct surface albedo retrieval for instances of MATCH values less than 0.0001	597	Fred Rose	Instantaneous SARB	Scott Zentz	Email	08/03/05	08/03/05	09/08/05	Completed
5-1.2	Modify definition of surface albedo over cloudy-sky coast to use the SAH cloudy land albedo value for ocean coverage of less than 1%	597	Fred Rose	Instantaneous SARB	Scott Zentz	Email	08/03/05	08/03/05	09/08/05	Completed
5-1.3	Modify definition of surface albedo for clear-sky coast to use Z. Jin's ocean LUT value	597	Fred Rose	Instantaneous SARB	Scott Zentz	Email	08/03/05	08/03/05	09/08/05	Completed
5-1.4	Modify cloudy sky over snow surface albedo retrieval to include a more complex LUT	597	Fred Rose	Instantaneous SARB	Scott Zentz	Email	07/14/05	07/14/05	09/08/05	Completed
5-1.5	Correct the direct/diffuse definition for ice clouds	597	Fred Rose	Instantaneous SARB	Scott Zentz	Email	07/13/05	07/13/05	09/08/05	Completed
5-1.6	Incorporate Fred's SARB cookie cutter H2O map for coast determination	597	Tom Charlock	Instantaneous SARB	Scott Zentz	Email	07/28/05	07/28/05	08/08/05	Completed
5-1.7	Correct problem encountered during manual setup of operational runs regarding the availability of necessary input files	597	ASDC	Instantaneous SARB	Tom Caldwell	Email	09/02/05	09/02/05	10/21/05	Completed
5-1.8	Modify Monthly QC Summary Pre-Processor to include new parameters added to the Main-Processor QC Report	597	Tom Charlock	Instantaneous SARB	Scott Zentz	Email	04/20/05	04/20/05	10/07/05	Completed
5-2.0	Prepare SARBlib for inclusion in Instantaneous SARB delivery for Aqua Edition2A and also used for next Synoptic SARB delivery	597	Tom Charlock	SARBlib	Scott Zentz	Email	07/14/05	06/30/05	01/19/06	Completed
5-2.1	Modify the definition of PAR to include Wenying Su's spectral weighting factors	597	Fred Rose	SARBlib	Scott Zentz	Email	07/25/05	07/25/05	09/08/05	Completed
5-2.2	Add Fred's ASSALUT software	597	Fred Rose	SARBlib	Scott Zentz	Email	07/14/05	07/14/05	09/08/05	Completed
5-2.3	Include time varying trace gas concentrations for CO2, CH4, and N2O	597	Fred Rose	SARBlib	Scott Zentz	Email	07/25/05	07/25/05	09/08/05	Completed
5-2.4	Modify QC report to include new statistics requested by SARB Working Group	597	Tom Charlock	SARBlib	Scott Zentz	Email	04/20/05	04/20/05	10/07/05	Completed

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5-3.0	Make any necessary modifications to SARBlib to enable OpenSource environment processing	597	Mike Little	SARBlib	Tom Caldwell, Scott Zentz	DMT meeting	04/20/05	04/20/05	11/30/05	Completed
5-4.0	Make any necessary modifications to Instantaneous SARB Subsystem to enable OpenSource environment processing	597	Mike Little	Instantaneous SARB	Tom Caldwell, Scott Zentz	DMT meeting	04/20/05	04/20/05	11/30/05	Completed
5-5.0	Prepare for Edition3 delivery	622	Bruce W.	SARBlib and Instantaneous SARB	Tom Caldwell, Scott Zentz	CERES Team mtg	09/25/05	09/25/05		Disapproved (CRS Edition3 cancelled)
5-5.1	Incorporate new FuLiou model supplied by Science Team	622	Fred Rose	SARBlib	Scott Zentz	Email	01/10/06	01/10/06		Disapproved (CRS Edition3 cancelled)
5-5.2	Incorporate new, contributed software for the surface spectral optical properties	622	Fred Rose	SARBlib	Scott Zentz	Email	01/26/06	01/26/06		Disapproved (CRS Edition3 cancelled)
5-5.3	Add new parameters to CRS structure: Surface UV; Broadband all-sky SW flux; Broadband all-sky radiance; SW flux - pristine - surface - COART; and SW flux - pristine -TOA- COART	622	Tom Charlock	SARBlib and Instantaneous SARB	Scott Zentz	Email	02/08/06	02/08/06		Disapproved (CRS Edition3 cancelled)
5-6.0	Modify SARB Surface Albedo Pre-Processor (5.0P1) to use older albedo retrieval code for Terra Edition2B data runs.	626	Fred Rose	SARBlib and Instantaneous SARB	Tom Caldwell	Email	04/28/06	04/28/06	06/05/06	Completed
5-7.0	Prepare Instantaneous SARB delivery to process Aqua Edition2B CRS and CRSVB datasets	651	Dave Kratz, Bruce Wielicki	PGE CER5.3P1	Tom Caldwell	Email	12/13/06	12/13/06	04/02/07	Completed
5-7.1	Modify PGE CER5.3P1 to also read in an SSF as input so that Edition2B surface flux values will be loaded	N/A	Dave Kratz, Bruce Wielicki	PGE CER5.3P1	Tom Caldwell	Email	12/13/06	12/13/06	N/A	Requirement removed once requirement 5-7.3 was made
5-7.2	Modify PGE CER5.3P1 to output the CRSVB product	N/A	Dave Rutan	PGE CER5.3P1	Tom Caldwell	Email	02/09/07	02/09/07	N/A	Requirement removed once requirement 5-7.3 was made
5-7.3	Modify aerosol hierarchy file to eliminate possibility of using monthly maps based on daily gridded MODIS aerosol data	651	Tom Charlock	PGE CER5.1P1, CER5.1P2	Tom Caldwell	Email	03/16/07	03/16/07	03/23/07	Completed
5-8.0	Deliver daily MATCH aerosol files for SARB processing as they become available	647	Tom Charlock	PGEs CER5.0P1, CER5.1P1, CER5.1P2	Tom Caldwell	Email	Standing request	03/14/07	03/20/07	Completed

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5-9.0	Modify script for PGE CER5.1P1 to change *tar.gz to *tar	648	ASDC	PGE 5.4P1	Tom Caldwell	Email	03/08/07	03/08/07	03/20/07	Completed
5-10.0	Provide unique IDL software for Terra Edition2 processing	664	ASDC	PGE 5.4P1	Tom Caldwell	Email	12/10/07	12/11/07	12/16/07	Completed
5-11.0	Modify ASCII file generators to enable use of collection 5 MATCH data	668	ASDC	PGE 5.0P1, 5.1P1 and 5.1P2	Tom Caldwell	Email	11/30/07	11/30/07	03/20/08	Completed
5-11.1	Disable use of gridded MODIS product for MATCH data for further Terra processing	668	Fred Rose	PGE 5.1P1	Tom Caldwell	Email	01/10/08	01/10/08	03/20/08	Completed
5-11.2	Deliver daily MATCH aerosol files for SARB processing as they become available	668	ASDC	PGE 5.0P1, 5.1P1 and 5.1P2	Tom Caldwell	Email	Standing request	03/14/07	03/20/08	Completed
5-12.0	Enable Terra PGEs 5.1P1 and 5.4P1 to run in Linux environment	692	ASDC	Instantaneous SARB	Tom Caldwell	Email	10/30/07	10/30/07	11/14/08	Completed
5-13.0	Convert Terra PGEs to new directory structure	692	SEC	Instantaneous SARB	Tom Caldwell	Email	10/30/07	10/30/07	11/14/08	Completed
5-14.0	Deliver PGE 5.0P1 in new directory structure	694	ASDC	PGE 5.0P1	Tom Caldwell	Email	01/08/09	01/08/09	03/04/09	Completed
5-15.0	New routine added to surfmap_io for reading high resolution 16 mesh snow/ice data from NESDIS	695	Sunny Sun-Mack	CERESlib	Tom Caldwell	Email	01/26/09	01/26/09	02/26/09	Completed
5-16.0	New routine added to surfmap_io for reading NSIDC data on Linux machines	695	Sunny Sun-Mack	CERESlib	Tom Caldwell	Email	01/26/09	01/26/09	11/13/09	Completed
5-17.0	New PGE 5.0P2 to create surface albedo history inputs for Synoptic SARB and Edition3 CRS	718	Fred Rose	Inst and SYN SARB	Tom Caldwell	Email	07/06/09	07/06/09	11/13/09	Completed

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5-17.0	Delivery of PGE 5.4P2 to new directory structure	728	SEC	Instantaneous SARB	Tom Caldwell	Email	10/06/09	10/06/09	11/25/09	Completed
5-17.1	Porting PGE 5.4P2 to the Linux cluster	728	SEC	Instantaneous SARB	Tom Caldwell	Email	10/06/09	10/06/09	11/25/09	Completed
5-18.0	Delivery of PGE 5.1P2 to new directory structure	733	SEC	Instantaneous SARB	Tom Caldwell	Email	10/22/09	10/22/09	11/25/09	Completed
5-19.0	Delivery of MATCH data files for 2008	744	Tom Charlock	Instantaneous SARB	Tom Caldwell	Standing request	11/18/09	11/18/09	12/07/09	Completed
5-20.0	Delivery of CRS Sample Read package for release of Edition2G products	764	ASDC	Instantaneous SARB	Tom Caldwell	Email	03/16/10	03/16/10	04/30/10	Completed
5-21.0	Delivery of MATCH data files for 2009	777	ASDC	Instantaneous SARB	Tom Caldwell	Standing request	04/07/10	04/07/10	04/08/10	Completed
5-22.0	Correction to ASCII file generator for PGE 5.1P1 to use correct ControlFile	781	ASDC	Instantaneous SARB	Tom Caldwell	Email	05/04/10	05/04/10	05/19/10	Completed
5-23.0	Removal of Edition2 rev1 corrections to SW TOA flux for PGE 5.0P2 for Edition3 processing	794	Fred Rose	Instantaneous SARB	Tom Caldwell	Email	07/06/10	07/06/10	09/21/10	Completed
5-24.0	Delivery of MATCH data for January through June 2010 to magneto	808	Tom Charlock	Instantaneous SARB	Tom Caldwell	Standing request	09/22/10	09/22/10	10/12/10	Completed
5-25.0	Correction to ASCII file generator for 5.0P1 on magneto to increment MOD08 file version number	841	ASDC	Instantaneous SARB	Tom Caldwell	Email	03/18/11	03/18/11	03/23/11	Completed
5-26.0	Delivery of MATCH data for July 2010 through December 2010 to magneto	850	ASDC	Instantaneous SARB	Tom Caldwell	Email	06/07/11	06/07/11	06/21/11	Completed
5-27.0	Delivery of MATCH data for Jan 2011 through December 2011 to magneto	891	ASDC	Instantaneous SARB	Tom Caldwell	Email	04/13/12	04/13/12	04/18/12	Completed
5-28.0	Delivery of PGE 5.0P2 (surface albedo history preprocessor) to AMI platform	917	ASDC	Instantaneous SARB	Tom Caldwell	DMT meeting	07/17/12	07/17/12		In Progress
7.2-1.0	Prepare Synoptic SARB for Terra Beta3/TRMM Beta4 delivery	634	Tom Charlock	Synoptic SARB	Lisa Coleman	Email	07/13/05	07/13/05	09/07/06	Completed

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7.2-1.1	Replace data statement from Syn_Spectral_Dat.f90 to include 7 updated spectral albedo curves with associated ln (nir/vis) values	634	Dave Rutan	Synoptic SARB	Scott Zentz	Email	07/13/05	07/13/05	09/05/06	Completed
7.2-1.2	Add new parameters to SYNI product	623	Tom Charlock	Synoptic SARB	Scott Zentz, Tom Caldwell	Email	07/19/05	07/19/05	08/25/06	Completed
7.2-1.3	Make any necessary modifications to Synoptic SARB Subsystem to enable OpenSource environment processing	634	Mike Little	Synoptic SARB	Scott Zentz	DMT meeting	04/20/05	04/20/05	10/07/05	Completed
7.2-1.4	Add new parameters to the SYNI for Total ozone amount and source of ozone data.	634	Tom Charlock	Synoptic SARB	Scott Zentz	Email	02/08/06	02/08/06	09/01/06	Completed
7.2-1.5	Implement use of aerosol hierarchy in similar manner as CRS. Use new aerosol parameters from TSI.	634	Fred Rose	Synoptic SARB	Tom Caldwell	Email	04/04/06	04/04/06	08/25/06	Completed
7.2-1.6	Modify code to use 3-hourly MOA skin temperature values instead of 6-hourly values.	634	Fred Rose	Synoptic SARB	Tom Caldwell	Email	04/04/06	04/04/06	08/10/06	Completed
7.2-1.7	Implement corrections and updates to code as directed by subsystem science testing.	634	Fred Rose	Synoptic SARB	Tom Caldwell	Email	06/20/06	06/20/06	08/25/06	Completed
7.2-1.8	Modify aerosol decode routine in sarb_params module to handle default input values.	623	Fred Rose	Synoptic SARB	Scott Zentz	In Person	06/30/06	06/30/06	09/06/06	Completed
7.2-1.9	Change number of SYNI vertical flux profile levels from 36 to 5.	623	Fred Rose	Synoptic SARB	Tom Caldwell	Email	03/16/06	03/16/06	08/25/06	Completed
7.2-1.10	Modify PCF generator to account for variation in NOAA Snowlce file naming convention.	643	ASDC	Synoptic SARB	Tom Caldwell	Email	01/05/07	01/05/07	01/05/07	Completed
7.2-1.11	Deliver MATCH vertical aerosol data file for December 31, 2000.	644	ASDC	Synoptic SARB	Tom Caldwell	Email	01/26/07	01/26/07	01/26/07	Completed
7.2-1.11*	Deliver monthly SeaWifs chlorophyll files for SARB processing as they become available.	652	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	Standing request	04/05/07	04/05/07	Completed
7.2-1.12	Updating PCF generator to disable interactive query concerning availability of these files during production processing.	652	Self-imposed	CER7.2.1P1	Tom Caldwell		04/05/07	04/05/07	04/05/07	Completed
	*Reuse of Req number identified after SCCR submittal. SCCR not resubmitted.									
7.2-1.13	Prepare Synoptic SARB for Terra Beta4 delivery	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	07/16/07	07/16/07	04/01/08	Completed

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7.2-1.14	Implement new surface albedo history maps to replace outputs from PGE 5.0P1	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	10/19/07	10/19/07	04/01/08	Completed
7.2-1.15	Implement Edition3 correction to daytime longwave and Revision 1 correction to shortwave. NOTE: this change is implemented in TSI (PGE 7.1.1). TSI science change affects SYNI output data.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	08/08/07	08/08/07	04/01/08	Completed
7.2-1.16	Implement cloud sky colorization look-up table for applying retrieved clear sky albedo to cloudy conditions.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	08/08/07	08/08/07	04/01/08	Completed
7.2-1.17	Implement Zhuo Wang two parameter diurnal models for surface albedo	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	08/08/07	08/08/07	04/01/08	Completed
7.2-1.18	Implement snow grain retrieval changes.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	08/08/07	08/08/07	04/01/08	Completed
7.2-1.19	Change names of four actinic flux variables to diagnostic variables requested by Science Team	662	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	09/19/07	09/19/07	03/20/08	Completed
7.2-1.20	Removed use of STOWE aerosols from Synoptic Control file.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	09/19/07	09/19/07	04/01/08	Completed
7.2-1.21	Change name of Flag_SigTabConfig to Error_Code to better represent variable contents. Added new structure to prevent change from affecting CRS.	662	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	10/05/07	10/05/07	03/20/08	Completed
7.2-1.22	Add new output diagnostic output product: SYNS. It will contain TSI and SYNI data for regions designated by Science Team.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	10/26/07	10/26/07	04/01/08	Completed
7.2-1.23	Modify ASCII file generator to use collection 5 MATCH data. Added environment variable to represent use of collection 4 or 5 MATCH.	663	Self-imposed	CER7.2.1P1	Tom Caldwell		10/26/07	10/26/07	04/01/08	Completed
7.2-1.24	Modify PCF generator search algorithm to decrease PCF run time at ASDC.	676	ASDC	CER7.2.1P1	Tom Caldwell	Email	05/29/08	05/29/08	06/06/08	Completed
7.2-1.25	Modify scripts to use new surface albedo history files produced by 5.0P2	721	ASDC	CER7.2.1P1	Tom Caldwell	Email	08/18/09	08/18/09	12/01/09	Completed
7.2-1.26	Port Synoptic SARB to new directory structure	721	SEC	CER7.2.1P1	Tom Caldwell	Email	08/18/09	08/18/09	12/01/09	Completed

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7.2-1.27	Delivery of SYN scripts to support merged Edition3 input processing on magneto	797	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	07/06/10	07/06/10	01/13/11	Completed
7.2-1.28	Added SS5 env variables to specify SAH maps used in processing	797	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	07/06/10	07/06/10	01/13/11	Completed
7.2-1.29	Updated sitelist.txt file to add more sites	797	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	07/06/10	07/06/10	01/13/11	Completed
7.2-1.29	Delivered revised Edition2 MATCH data set for Edition3 SYN processing to correct buildup of aerosols in upper profile levels	803	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	08/12/10	08/12/10	01/13/11	Completed
7.2-1.30	Delivery of Synoptic SARB 7.2.1P1 to AMI for Edition2 and Edition3 processing	804	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	08/25/10	08/25/10		Approved
7.2-1.31	Delivery of Edition2 and revised Edition2 MATCH data file sets for Synoptic processing on AMI	804	Tom Charlock	Instantaneous SARB	Tom Caldwell	Email	08/25/10	08/25/10		Approved
7.2-1.31	The ascii_gen_7.2.1P1 causes the wrong MATCH collection to be written to the PCF when running the first 4 months for data years from 2007 forward on magneto.	822	ASDC	Synoptic SARB	Tom Caldwell	Email	01/14/11	01/14/11	01/19/11	Completed