

CERES Requirements Log - Instantaneous SARB and Synoptic SARB

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
Prepare Instantaneous SARB for Aqua Edition2A processing	597	Tom Charlock	Instantaneous SARB	Lisa Coleman	Email	07/28/05	07/28/05	01/19/06	Delivery released to ASDC
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	Implementation verified by ST
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	Implementation verified by ST
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	Implementation verified by ST
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	Implementation verified by ST
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	Implementation verified by ST
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	Requirement removed after implementation - deemed unnecessary by ST
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	Suggestion sent to ASDC
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	Implementation verified by ST
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	06/30/95	01/19/06	Delivery released to ASDC
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	Implementation verified by ST
Add Fred's ASSALUT software	597	Fred Rose	SARBlib	Scott Zentz	Email	07/14/05	07/14/05	09/08/05	Implementation verified by ST
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	Implementation verified by ST

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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	Implementation verified by ST
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	Initial tests indicate success
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	Initial tests indicate success
Prepare for Edition3 delivery	622	Bruce W.	SARBlib and Instantaneous SARB	Tom Caldwell, Scott Zentz	CERES Team mtg	09/25/05	09/25/05		No delivery date set. Many requirements still to be defined.
Incorporate new FuLiou model supplied by Science Team	622	Fred Rose	SARBlib	Scott Zentz	Email	01/10/06	01/10/06		Implementation in progress
Incorporate new, contributed software for the surface spectral optical properties	622	Fred Rose	SARBlib	Scott Zentz	Email	01/26/06	01/26/06	01/26/06	
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		
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	Delivered
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	In progress
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
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

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Modify aerosol heirarchy 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	Tested at SCF, ready for delivery
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	Jan - Jun 2006 delivered 03/14/07 under SCCR 647
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	Duplicate step as in Aqua version of script for PGE CER5.4P2
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
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		In progress
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		In progress
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		In progress
Enable Terra PGEs 5.1P1 and 5.4P1 to run in Linux environment	692	ASDC	Instantaneous SARB	Tom Caldwell					In progress
Convert Terra PGEs to new directory structure	692	SEC	Instantaneous SARB	Tom Caldwell	Email	10/30/07	10/30/07		In progress
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	Delivered
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
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
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	Delivered

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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
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
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
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
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	Delivered
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
Modify PCF generator to account for variation in NOAA SnowIce file naming convention.	643	ASDC	Synoptic SARB	Tom Caldwell	Email	01/05/07	01/05/07	01/05/07	Delivered
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	Delivered
Deliver monthly SeaWiifs 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	New set delivered on or about 04/06/07 for March 2004 through December 2006
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.									
Prepare Synoptic SARB for Terra Beta4 delivery	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	07/16/07	07/16/07		In progress
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		In progress

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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		In progress
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		In progress
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		In progress
Implement snow grain retrieval changes.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	08/08/07	08/08/07		In progress
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		In progress
Removed use of STOWE aerosols from Synoptic Control file.	663	Fred Rose	CER7.2.1P1	Tom Caldwell	Email	09/19/07	09/19/07		In progress
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		In progress
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		In progress
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					In progress
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		In progress