

CERES Requirements Log - TISA Gridding

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
6-1	NON-SCIENCE: Prepare delta delivery of scripts to ensure that all required SFC input files are available before processing	594	Raja Raju	TISA Gridding	Raja Raju	Phone calls and emails in response to problem occurring during operational processing.	07/01/05	07/01/05	11/03/05	Delivered to CM
9-1	NON-SCIENCE: Prepare delta delivery of scripts to ensure that all required SFC input files are available before processing	594	Raja Raju	TISA Gridding	Raja Raju	Phone calls and emails in response to problem occurring during operational processing.	07/01/05	07/01/05	11/03/05	Delivered to CM
9-2	NON-SCIENCE: Prepare Subsystem delivery to support Terra/Aqua Beta Edition3 SFC processing.		Raja Raju	TISA Gridding	Raja Raju	Emails and meeting	02/01/06	02/01/06		
6.2	NON-SCIENCE: Prepare delta delivery of updated PGE CER6.1P1 PCF input generator script to check and ensure that all required input files are available before processing.		Raja Raju	TISA Gridding	Raja Raju	Emails and meeting	04/12/06	04/12/06		
9-0.0	SCIENCE: Prepare initial delivery of new PGE CER9.0P1 to process and generate ISCCP-D2like, crosstrack-only data product based on SSF.	672	Raja Raju	TISA Gridding	Raja Raju	Meetings, Emails and phone calls	11/28/07	11/28/07		Delivered to CM on March 28, 2008
9-0.1	NON-SCIENCE: The delivery of the new PGE CER9.0P1 is the first delivery of Release 5 TISA Gridding subsystem.	672	Raja Raju	TISA Gridding	Raja Raju	N/A				N/A
9-0.2	Sample Read Package delivery for Terra and Aqua Beta1 ISCCP-D2like-Day/Nit products.	682	Raja Raju	TISA Gridding	Raja Raju	N/A	09/15/08	09/15/08	10/09/08	
9-1.1	PGE CER9.1P1 delivery dealing with overlap file checking and reading G5-based MOA input.	684	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-2.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-3.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-4.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
6-1.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
6-2.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
6-3.1	Support Edition2 processing on magneto.	685	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-2.2	SCIENCE: To use updated ephemeris data from solar_declination routine.	685	Dave Doelling	TISA Gridding	Raja Raju	Email	02/06/09	02/06/09	02/23/09	
6-1.2	SCIENCE: To use updated ephemeris data from solar_declination routine.	685	Dave Doelling	TISA Gridding	Raja Raju	Email	02/06/09	02/06/09	02/23/09	

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6-2.2	SCIENCE: Not to include overlap data records on FSW product.	685	Dave Doelling	TISA Gridding	Raja Raju	Email	02/06/09	02/06/09	02/23/09	
9-2.3	Gridding I/O modules in CERESLIB are modified to support both Edition2 and Edition3 process.	739	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	
9-2.4	New PGE to support Edition3 processing on magneto.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	05/05/09	05/05/09	Completed	
9-2.5	Add new types in the record to write TOA flux and Angular model scene data calculated in GMT time for TSI (7.1.1) process.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	05/05/09	05/05/09	Completed	
9-2.6	Update PCF scripts to reflect the changes to the output product name.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	10/09/09	10/09/09	Completed	
9-3.2	New PGE to support Edition3 processing on magneto.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	05/05/09	05/05/09	Completed	
9-3.3	Update PCF scripts to reflect the changes to the output product name.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	10/09/09	10/09/09	Completed	
9-4.2	New PGE to support Edition2 processing on Magneto.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	05/05/09	05/05/09	Completed	
9-4.3	Update PCF scripts to reflect the changes to the output product name.	739	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	10/09/09	10/09/09	Completed	
9-0.3	Calculate total cloud for all cloud types to include in the HDF product. Change 3hourly bin from the center hours of 2,5,6,11,14,17,20,23 to 0,3,6,9,12,15,18,21 to be consistent with the other ISCCP products.	746	Moguo Sun	TISA Gridding	Raja Raju	Emails and meeting	11/19/09	11/19/09	Completed	
9-0.4	Two new categories were added on the ISCCP-D2likeDay/Nit products	746	Moguo Sun	TISA Gridding	Raja Raju	Emails and meeting	11/19/09	11/19/09	Completed	Delivered to CM
9-2.7	New parameters were added to SSF1deg-Hour record structure.	739 cancelled	Dave Doelling	TISA Gridding	Raja Raju	Email	12/08/09	12/08/09	Completed	Delivered to CM
9-2.8	Subsystem 9 Edition3 PGEs are required to process only crosstrack data. For this purpose, text files for each year, for each satellite (Terra/Aqua) are created by Brian Magill for years 2000 - 2009. Each file contains the hourly records indicating which instrument (1 or 2 for Terra; 3 or 4 for Aqua) is predominantly in crosstrack or 0 if it is undetermined. These files will be used in CER9.2P2 PCF scripts to determine the inputs for the processing hour.	739 cancelled	SEC	TISA Gridding	Raja Raju	meeting	03/16/10	03/16/10	Completed	Delivered to CM
9-3.4	Define new types in the binary output record to write computed TOA fluxes and Angular Model scenes based on GMT hour for TSI process.	739 cancelled	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	05/05/09	05/05/09	Completed	Delivered to CM

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9-4.4	Sample read Package to support Terra Edition2G and Aqua Edition2D SFC product.	772	Raja Raju	TISA Gridding	Raja Raju	N/A	03/29/10	03/29/10	Completed	Delivered to CM
6-3.2	Sample read Package to support Terra Edition2G and Aqua Edition2D FSW product.	773	Raja Raju	TISA Gridding	Raja Raju	N/A	03/29/10	03/29/10	Completed	Delivered to CM
9-2.9	Gridding I/O modules in CERESLIB are modified to support Edition3 process on P4.	788	Raja Raju	TISA Gridding	Raja Raju	N/A	05/25/10	05/25/10	Completed	Promoted
9-2.10	New PGE CER9.2P2 to support Edition3 processing on magneto. Code is updated to process parameters that are needed for SS7.1.1P1 process.	789	Dave Doelling	TISA Gridding	Raja Raju	Phone calls and emails	05/25/10	05/25/10	Completed	
9-3.5	New PGE CER9.3P2 to support Edition3 post processing on magneto. Code is updated to process parameters that are needed for SS7.1.1P1 process.	789	Dave Doelling	TISA Gridding	Raja Raju	Phone calls and emails	05/25/10	05/25/10	Completed	
9-4.5	New PGE 9.4P2 to support Edition3 SFC HDF processing on magneto.	789	Raja Raju	TISA Gridding	Raja Raju	Phone calls and emails	05/25/10	05/25/10	Completed	Delivered to CM
9-2.11	PGE CER9.2P2 PCF script is updated to include X-track files in the PCF for processing.	789	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	
9-4.6	Edition3 SFC HDF product format is same as Edition2 product format.	789	Dave Doelling	TISA Gridding	Raja Raju	Phone calls	06/02/10	06/02/10	Completed	
9-2.12	Updated Aqua_xtrkHourly_2002 and Aqua_XtrkHourly_2003 ancillary files to prefer FM3 data for the processing hour when both instruments are in 100% cross-track mode.	816	Dave Doelling	TISA Gridding	Raja Raju	email	11/18/10	11/18/10	Completed	
9-2.13	Terra-xtrkHourly and Aqua_xtrkHourly ancillary text files for year 2010.	813	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	
9-4.7	Sample read Package to support Terra and Aqua Edition3A SFC product.	817	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM
9-5.2-1	Initial delivery of new PGE CER9.5P1 to process and create ISCCP-D2like-FixDay/Nit, crosstrack only data product based on SSF inputs.	765	Dave Doelling	TISA Gridding	Hazari Syed	Emails and meeting	12/01/10	12/01/10		
9-0.5	Code was modified to write liquid and ice cloud fractions on the HDF products correctly. Previously total cloud fraction was written to Liquid, Ice SDSs.	837	Moguo Sun	TISA Gridding	Raja Raju	Phone calls	03/01/11	03/01/11	Completed	
9-2.14	Updated Terra-xtrkHourly and Aqua_xtrkHourly ancillary text files for year 2010 to include September to December x-track instrument information.	847	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	05/17/11	Completed	Delivered to CM on May 17, 2011

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9-0.6	Initial delivery of new PGEs CER9.0P2 and CER9.0P3 to process and create ISCCP-D2like-Mrg, crosstrack only data product based on SSF and GGEO inputs.	763	Moguo Sun	TISA Gridding	Raja Raju	Emails and meeting	03/16/10	03/16/10	Completed	Delivered to CM
9-0.7	Made corrections to cloud optical depth calculations in CER9.0P2 software.	763	Moguo Sun	TISA Gridding	Raja Raju	Phone calls and meetings	09/01/11	09/01/11	Completed	
9-0.8	New module was included to perform data range checks.	763	Moguo Sun	TISA Gridding	Raja Raju	Phone calls and meetings				
9-0.9	Updates to the scripts to make it consistent with the latest CERES requirements.	763	Thomas Grepiotis	TISA Gridding	Raja Raju	N/A			Completed	
9-0.10	Modified PGE CER9.0P2 code to include overlap footprints in the current hour process to eliminate half hour issue found when scan end, start time footprints fall within the same region.	763	Dave Doelling/Raja Raju	TISA Gridding	Raja Raju	Phone calls and meeting	09/14/11	09/17/11	Completed	
9-0.11	Modified PGE CER9.0P3 code to limit merged value to be 10% of GGEO value when there is no CERES data available for the hour of the region. This modification is to avoid high cloud temperature values found in some regions.	763	Moguo Sun	TISA Gridding	Raja Raju	Emails and meeting	10/20/11	10/20/11	Completed	
9-4.8	Product name is changed from SFC to SSF1deg-Hour.	888	Dave Doelling/Jonathan Gleason	TISA Gridding	Raja Raju	Emails and phone calls	03/05/12	03/05/2012		
9-4.9	Data is processed and written in GMT.	888	Dave Doelling	TISA Gridding	Raja Raju	Emails and meetings	03/22/12	03/22/12		
9-4.10	HDF product is generated as daily files instead of 5 zonal data /HDF file. Three new vdata groups are added to the product.	888	Dave Doelling	TISA Gridding	Raja Raju	Emails and phone calls	03/22/12	03/22/12		
9-3.6	Overlap hours from the last day of the previous month and the first day of the following month are added to zonal binary files.	888	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	03/22/12	03/22/12		
9-2.15	Code is modified to compute cloud IWP/LWP and particle sizes weighted by liquid and ice amounts,	888	Dave Doelling	TISA Gridding	Raja Raju	Email	08/16/11	08/16/11		
9-2.16	Code is modified to set Angular model scene type area coverage to default if albedo is set to default.	888	Dave Doelling	TISA Gridding	Raja Raju	Email	09/20/11	09/20/11		
9-4.11	PCF and run script changes to meet CERES requirements for software delivery on to AMI.	888	Thomas Grepiotis	TISA Gridding	Raja Raju	N/A				
9-3.7	PCF and run script changes to meet CERES requirements for software delivery on to AMI.	888	Thomas Grepiotis	TISA Gridding	Raja Raju	N/A				

CERES Requirements Log - TISA Gridding

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9-2.17	PCF and run script changes to meet CERES requirements for software delivery on to AML.	888	Thomas Grepiotis	TISA Gridding	Raja Raju	N/A				
9-3.8	New input_gen_9.3P2_exception.pl and TISAgrid9.3-env-exception.pl scripts to handle special case like Edition3 June 2001 Terra process on Magneto (p4)	896	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM on April 25,2012
9-2.18	Gridding I/O modules tisa_grid_type_def_Ed4.f90, sfc_Ed4.f90,sfc_type_def_Ed4.f90, and sfc_file_Ed4_mult.f90 are modified to support Edition4 process on ami p6.	897	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-0.12	Sample read Package to support Terra and Aqua Edition2A ISCCP-D2like-Day/Nit product.	907	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM
9-0.13	Sample read Package to support Terra and Aqua Edition2A ISCCP-D2like-Mrg product.	908	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM
9-1.2	Port PGE CER9.1P1 from magneto (p4) to AML(p6) to continue production process. Magneto being decommissioned.	914	Jonathan Gleason	TISA Gridding	Raja Raju	meeting	07/12/12	07/12/12		
9-2.19	Port PGE CER9.2P2 from magneto (p4) to AML(p6) to continue Edition3 production process. Magneto being decommissioned.	914	Jonathan Gleason	TISA Gridding	Raja Raju	meeting	07/12/12	07/12/12		
9-3.9	Port PGE CER9.3P2 from magneto (p4) to AML(p6) to continue Edition3 production process. Magneto being decommissioned.	914	Jonathan Gleason	TISA Gridding	Raja Raju	meeting	07/12/12	07/12/12		
9-4.12	Port PGE CER9.4P2 from magneto (p4) to AML(p6) to continue Edition3 production process. Magneto being decommissioned.	914	Jonathan Gleason	TISA Gridding	Raja Raju	meeting	07/12/12	07/12/12		
9-0.14	Port PGE CER9.0P1 from magneto (p4) to AML(p6) to continue Edition2 production process. Magneto being decommissioned.	915	Jonathan Gleason	TISA Gridding	Raja Raju	meeting	07/12/12	07/12/12		
9-3.10	Delta delivery: The string in Cer9_3P2_FileUtils.pm script at line 263 was changed from 'input_SFC-HR\$iday' to "input_SFC-HR\$iday" to correct Perl syntax error found during SCCR 914 test runs.	944	N/A	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM.
9-2.20	Delta delivery: Updated Cer9_2P2_FileUtils.pm to run Dec 31, 2011 hour 23 through PGE CER9.2P2.The update is to correct the year boundary issue where two x-track ancillary files need to be opened to check x-track mode for processing and the following hours.	952	N/A	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM

CERES Requirements Log - TISA Gridding

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9-0.15	Modification to PGE 9.0P3 code to correct optical depth minimum value. Code is setting less than 0.0 log optical depth values to defaults that caused optical depth minimum set to 1.0 instead of 0.02. PGEs 9.0P2 & 9.0P3 software delivery to continue Edition3 production process on x86.	961	Dave Doelling/Moguo sun	TISA Gridding	Raja Raju	Emails and meeting	03/18/13	03/18/13		
9-0.16	Sample read Package to support Terra and Aqua Edition3A ISCCP-D2like-Day/Nit product.	986	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-0.17	Sample read Package to support Edition3A ISCCP-D2like-GEO product.	987	Raja Raju	GGEO	Raja Raju	N/A	N/A	N/A		
9-0.18	Sample read Package to support Terra and Aqua Edition3A ISCCP-D2like-Mrg product.	988	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A		
9-2.21	Delta delivery. Terra-xtrkHourly and Aqua-xtrkHourly ancillary text files for year 2013	969	Raja Raju	TISA Gridding	Raja Raju	Phone call , email	May 8,2013		Completed	Delivered to CM
9-04.1	Initial delivery of new PGE CER9.0P4 to create subset SSF.	940	Dave Doelling/Moguo Sun	TISA Gridding	Dennis Keyes	Emails and meeting	11/30/12	11/30/12		Delivered to CM on 11/19/13
9-05.1	Initial delivery of new PGE CER9.0P5 to create the FluxByCloudTyp data.	940	Dave Doelling/Moguo Sun	TISA Gridding	Dennis Keyes	Emails and meeting	11/30/12	11/30/12		Delivered to CM on 11/19/13
9-2.21	Updated Terra_xtrkHourly_2013 ancillary text file for PGEs CER9.0P2, CER9.2P2. Hour 2013101722 job was failed due to wrong date string in the ancillary file.	1007	Raja Raju	TISA Gridding	Raja Raju	email	4/9/2014	4/9/2014	Completed	Delivered to CM on 04/09/2014
9-2.22	Terra_xtrkHourly_2014 and Aqua_xtrkHourly_2014 ancillary text files for PGEs 9.0P2, 9.2P2. These files are required to process year 2014 data through PGEs.	1007	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM on 04/09/2014
Edition4										
9-2.23, 9-3.11, 9-4.12	New PGEs CER9.2P3, 9.3P3, 9.4P3 to support Edition4 process. Software is set to process and generate outputs in GMT time. SSF1deg-hour HDF product is written as daily files. New algorithms are included in CER9.2P3 software.	1010	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting	21-Mar-14	21-Mar-14	on going	Delivery to CM on May 16, 2014
9-2.24, 9-3.12, 9-4.13	updates to PCF generator scripts.	1010	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	on going	Delivery to CM on May 16, 2014
9-2.25, 9-3.13	Modifications to data access routines to read SSF1degB binary files.	1011	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	on going	Delivery to CERESLIB on May 2, 2014
9-2.25	New algorithm for snow/ice calculation	1010	Dave Doelling	TISA Gridding	Raja Raju	Emails and meeting				On going
9-1.3	Initial PGE9.1P1 software delivery for Edition4 pmoa product.	1018	Dave Doelling	TISA Gridding	Raja Raju	Emails and phone calls	30-May-14	30-May-14		On going

CERES Requirements Log - TISA Gridding

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9-2.26	Delta delivery:Modified Terra_xtrkHourly_2014 and Aqua_xtrkHourly_2014 ancillary text files for PGEs CER9.0P2 & CER9.2P2	1026	Jonathan Gleason	TISA Gridding	Raja Raju	Email	17-Jun-14	17-Jun-14	Completed	Completed
9-1.4	No overlap MOA hours except first hour of following month.	1018	Dave Doelling	TISA Gridding	Raja Raju	Email	3-Jun-14	3-Jun_14	Completed	Completed
9-1.5	Initial delivery of new PGE 9.1P2 for Edition4 process on x86. It was decided to have new PGE for Edition4 PMAO process.	1018	Raja Raju	TISA Gridding	Raja Raju	N/A	9-Jun-14	9-Jun-14	Completed	Completed
9-2.26	Removed Aqua 2002 and 2003 X-track duplicate files in Ancillary directory.	1010	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	Completed	Delivered to CM on August 29, 2014
9-4.14	Updated PGE CER9.4P3 code to prefer CWG Skin temperature over MOA Skin temperature when writing on to SSF1deg-Hour HDF product.	1010	Dave Doelling	TISA Gridding	Raja Raju	4-Sep-14	4-Sep-14	4-Sep-14	Completed	Delivered to CM on August 29, 2014
9-3.13, 9-4.15	Updates to PCF generator scripts and the code to accommodate missing whole day of SSF inputs that impacts SSF1deg-Hour Daily HDF product. Scripts were updated to include SSF1deg-Hour file names in the PCF only if there is corresponding binary input file exist. Code was modified to accommodate PCF script changes.	1010	Raja Raju	TISA Gridding	Raja Raju	N/A	N/A	N/A	completed	Delivery to CM on August 29, 2014