

### CERES Requirements Log - Inversion

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
4.5-1	Prepare Subsystem for Aqua Edition2 processing	596	Bruce Wielicki	Inversion	Victor Sothcott, Sandy Nolan	Telephone call from Erika Geier	07/19/05	07/19/05	11/07/05	
4.5-1.1	Modify SW Model B surface flux module to switch source of aerosol optical depth from GFDL to MATCH	596	Shashi Gupta	Inversion	Sandy Nolan, Victor Sothcott	email, Team meeting	07/25/05	07/25/05	11/07/05	Code delivered to CM with Aqua Edition2 Inversion software
4.5-1.2	Modify SW Model A surface flux module to use aerosol optical depth at 550 nm	596	Anne Wilber	Inversion	Sandy Nolan, Victor Sothcott	email, Team meeting	07/25/05	07/25/05	11/07/05	Code delivered to CM with Aqua Edition2 Inversion software
4.5-1.3	Update Aqua PGEs CER4.5-6.3P3 and CER4.5-6.6P3 to incorporate the Edition2 Aqua ADMS	596	Norman Loeb	Inversion	Victor Sothcott, Sandy Nolan	email	8/22/2005, 08/26/05	08/26/05	11/07/05	PGEs delivered to CERES CM on 11-07-05
4.5-1.4	Update Aqua PGE CER4.5-6.1P3 to incorporate the Edition2 Aqua ADMS	596	Norman Loeb	Inversion	Victor Sothcott, Sandy Nolan	email	8/22/2005, 08/26/05	08/26/05	11/07/05	PGE delivered to CERES CM on 11-07-05
4.5-1.5	Update LW Model B surface flux module to correct cloud based pressure	596	Shashi Gupta	Inversion	Victor Sothcott	email	09/29/05	09/29/05	11/07/05	Code delivered to CM with Aqua Edition2 Inversion software
4.5-2	Convert subsystem production software to execute in Open Source environment		Mike Little	Inversion	Sandy Nolan	DMTM			01/22/09	
4.5-1.2	Review code for conformance to ANSI standards			Inversion	Sandy Nolan		04/20/05		01/22/09	
4.5-2.2	Prepare subsystem conversion plan			Inversion	Sandy Nolan		04/20/05		01/22/09	
4.5-2.3	Port and test code on cluster when it becomes available			Inversion	Sandy Nolan		04/20/05		01/22/09	
4.5-3	Deliver updated SW and LW Surface flux modules to CERESlib after Aqua Edition2 software has been promoted at the ASDC		Erika Geier	Inversion	Victor Sothcott, Sandy Nolan	Telephone call from Erika Geier		10/05/05		
4.5-4	Correct typographical error causing archiving of support files to fail.	614		Inversion	Victor Sothcott	email	01/26/06	01/26/06	01/30/06	
4.5-5	Update CER4.5-6.2P2 PCF generator and Run script to support the -NoSW Production Strategy.	625		Inversion	Victor Sothcott	email	04/27/06	05/01/06	05/02/06	
4.5-6	Modify SW Model B surface flux module to switch source of aerosol optical depth from MATCH back to GFDL.	638	Dave Kratz	Inversion	Victor Sothcott	email	09/08/06	09/13/06	11/22/06	
4.5-7	Updated all PGEs to use Toolkit Version 5.2.12.	638	Erika Geier	Inversion	Victor Sothcott	email	09/20/06	09/20/06	11/22/06	
4.5-8	Recompile of PGE's to support MOA MERRA	659	Erika Geier	Inversion	Victor Sothcott	email	06/06/07	06/15/07	07/03/07	
4.5-9	Change subsetter so that the SCOOOL subsets use unnested grids.	659	Lin Chambers	Inversion	Victor Sothcott	Meeting	06/12/07	06/15/07	07/04/07	
4.5-10	Add 'Exit Code:' to scripts to indicate the exit code for processing.	659	Lisa Link	Inversion	Victor Sothcott	Meeting	06/28/07	07/03/07	07/05/07	

### CERES Requirements Log - Inversion

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
4.5-11	Change the name and location of the SCOOOLRegions input file.	659	Lin Chambers	Inversion	Victor Sothcott	Meeting	06/29/07	07/03/07	07/06/07	
4.5-12	Implement new algorithm Estimated Inversion Strength.	666, 704	Norman Loeb	Inversion	Victor Sothcott	email	10/30/07	10/30/07	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-13	Implement the Constrained Surface Temperature algorithm.	666, 704	Shashi Gupta	SOFA	Victor Sothcott	meeting	08/13/07	08/13/07	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-14	Implement the new LW Model C algorithm.	666, 704	Anne Wilber	SOFA	Victor Sothcott	meeting	09/12/06	09/12/06	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-15	Update the LW Model A and LW Model B algorithms using the Constrained Surface Temperature.	666, 704	Shashi Gupta	SOFA	Victor Sothcott	meeting	08/13/07	08/13/07	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-16	Update SW Model B algorithm to use monthly averaged cosine solar zenith angle and the new clear sky surface albedo.	666, 704	Shashi Gupta	SOFA	Victor Sothcott	meeting	08/13/07	08/13/07	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-17	Update ADM's for Terra ANN SW ADM's, Fresh snow, Permanent snow and Sea Ice.	666, 704	Costy Loukachine	Inversion	Victor Sothcott	email	01/10/07	01/10/07	10/30/09	Delivered under SCCR 666 but retracted due to testing issues. To be redelivered under SCCR 704.
4.5-18	Implement the new Delivery Directory Structure	666, 690	Jeff Walters	Inversion	Victor Sothcott	meeting	01/23/08	01/23/08	01/22/09	
4.5-19	Deliver all Inversion Edition2 PGE's to run the on the Linux cluster at ASDC.	690, 782	Erika Geier	Inversion	Victor Sothcott	meeting			1/22/2009, 5/13/2010	Aqua delivered under 690 and Terra delivered under 782
4.5-20	Output to the SSF the following parameters: SW TOA flux - downwards, SW Model B downward surface flux - clearsky and LW Model B downward surface flux - clearsky	704	Dave Kratz	Inversion	Victor Sothcott	Meeting	02/18/09	02/18/09	10/30/09	
4.5-21	Implement the new format for the SSF for Edition3.	704	Erika Geier	Inversion	Victor Sothcott	DMTM	02/18/09	02/18/09	10/30/09	
4.5-22	Implement two new PGE's to create an Edition3 SSF product by combining an existing SSF product with an Edition3 IES.	722	Erika Geier	Inversion	Victor Sothcott	email	05/06/09	05/06/09	05/12/10	
4.5-23	Implement Radiance Scaling factor ancillary file and code changes.	704	Norman Loeb	Inversion	Victor Sothcott	email	10/22/09	10/22/09	10/30/09	
4.5-24	Update Sample Read Package to support Terra Edition2G and Aqua Edition2D/Ed2D-NoSW	769	Lindsay Parker	Inversion	Victor Sothcott	meeting	03/03/10	03/03/10	03/25/10	
4.5-25	Implement two new PGE's to create and Edition2 SSF product by combining an existing Edition2 SSF product with an Edition3 IES.	786	Jonathan Gleeson	Inversion	Victor Sothcott	email	05/19/10	05/19/10	06/04/10	
4.5-26	Update CER4.5-6.2P2 subsetter to fix MODIS land and ocean aerosol parameters.	791	Norman Loeb	Inversion	Victor Sothcott	email	06/07/10	06/08/10	09/27/10	
4.5-27	Update CER4.5-6.2P2 to add additional parameters to the subset.	791	Norman Loeb	Inversion	Victor Sothcott	email	06/07/10	06/08/10	09/27/10	

**CERES Requirements Log - Inversion**

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
4.5-28	Update CER4.5-6.5P4 to allow for mismatched numbers of IES FOVs between Edition2 and Edition3 for Terra.	811	Norman Loeb	Inversion	Victor Sothcott	email	10/11/10	10/12/10	10/13/10	
4.5-29	Update CER4.5-6.5P4 to allow for mismatched numbers of IES FOVs between Edition2 and Edition3 for Aqua.	812	Norman Loeb	Inversion	Victor Sothcott	email	10/11/10	10/12/10	10/14/10	
4.5-30	Port Edition3-Beta2 software from magneto system to AMI system as Edition4-Beta1	814	Norman Loeb	Inversion	Victor Sothcott		11/01/10	11/01/10	05/24/12	
4.5-31	Convert the input and output data structure to match the DPO data structure. Install production environment variables.	814	Victor Sothcott	Inversion	Victor Sothcott		11/01/10	11/01/10	05/24/12	
4.5-32	Combine the Main and Alternate Processors into one PGE each for Terra and Aqua.	814	Victor Sothcott	Inversion	Victor Sothcott		11/01/10	11/01/10	05/24/12	
4.5-33	Delete use of the CERESlib Radiometric Scale Factors file.	814	Dale Walikainen	Inversion	Victor Sothcott		11/01/10	11/01/10	05/24/12	
4.5-34	Deliver surface algorithms to CERESlib	823	Victor Sothcott	SOFA	Victor Sothcott		01/18/11	01/18/11	01/28/11	
4.5-35	Update Sample Read Package to support Terra and Aqua Edition3A.	824	Lindsay Parker	Inversion	Victor Sothcott	meeting	01/18/11	01/18/11	01/21/11	
4.5-36	Add 'DefaultSCC' to pcfgenerator for Terra	828	Jonathan Gleeson	Inversion	Victor Sothcott	meeting	01/25/11	01/25/11	01/26/11	
4.5-37	Add 'DefaultSCC' to pcfgenerator for Aqua	829	Jonathan Gleeson	Inversion	Victor Sothcott	meeting	01/25/11	01/25/11	01/26/11	
4.5-38	Install LASP SORCE TSI data for Solar Constant into code through ancillary file	814	Dave Kratz	Inversion	Victor Sothcott	meeting	03/03/11	03/03/11	05/24/12	
4.5-39	Implement updated SWB model with ancillary files	814	Shashi Gupta	SOFA	Victor Sothcott	meeting	07/06/11	07/06/11	05/24/12	
4.5-40	Update CER4.5-6.5P4 to fix the 645 imager channel bug.	870	Jonathan Gleeson	Inversion	Victor Sothcott	email	10/01/11	10/01/11	10/06/11	
4.5-41	Update CER4.5-6.5P5 to fix the 645 imager channel bug.	871	Jonathan Gleeson	Inversion	Victor Sothcott	email	10/01/11	10/01/11	10/06/11	
4.5-42	Install updated SW Model B algorithm that uses MODIS Aerosols where they are available.	814	Dave Kratz	SOFA	Victor Sothcott	meeting	11/23/11	11/23/11	05/24/12	
4.6-1	Update SW model B code to fix bug that allowed for negative surface albedo.	901	Shashi gupta	SOFA	Victor Sothcott	meeting	05/09/12	05/09/12	05/24/12	
4.5-43	Update ceres_valregions file	901	Anne Wilber	SOFA	Victor Sothcott	email	05/29/12	05/29/12	05/29/12	