## CERES External Ancillary Data Set Requirements for TRMM and Terra Product Generation

IRD Ref	SS	CERES Field ID	AHWGP Field ID	Data Set Name	Source (Reference)	Science Team	ICD Reference
2	5	APD-Column	CERX10	Aerosol global analyzed field (optical depth units) 100km Analyzed Field File - global 1 deg map of total aerosol optical thickness	NOAA/NESDIS	Charlock Validation Product	ICD 1 (2.2)
3	5	APD-Strat	CERX10	SAGE thin stratospheric aerosol optical depth SAGE2_AERO_PRF product	LARC DAAC	Charlock	Not needed- See Guide
4, 5	12	OPD	CERX11	NCEP SMOBA (Strat. Monitoring Group Ozone Blended Analysis) 24 levels O3 and total ozone	GSFC DAAC primary	Charlock	ICD 2 Section 4.5
				TOMS level 3 data from EP 1 by 1.25 deg grid daily averages.	GSFC DAAC Secondary		ICD 2 Section 4.4
6	12	MWH	CERX13	SSM/I Integrated Water Vapor (IWV) Daily .5 by .5 degree lat/lon grid	Global Hydrology Resource Center (GHRC)	Kratz	ICD 8
7, 8, 9	12	GAP(3-D) GAP(Sfc)	CERX12	ECMWF; 4/day at 31 sigma levels on .56 by .56 deg grid. Skin temperature 8/day	Primary meteorological data beginning 2/99	Charlock	ICD 3
				TRMM: DAS GEOS-2 data; Parameters at surface & at 10 meters; Gridded product at 3 or 6 hourly snapshots on 2-deg lat by 2.5-deg longrid; 36 pressure levels available	Data Assimilation System (DAS) GSFC secondary		ICD 3
				Terra: DAS GEOS-3 data; Parameters at surface & at 10 meters; Gridded product at 3 or 6 hourly snapshots on 1-deg lat by 1-deg lon grid; 36 pressure levels available.	DAS GSFC Primary for upper level temperature and humidity; secondary to ECMWF		ICD 3, ICD 9
				NCEP Ocean Wave Model of large scale sea state, 2.5 by 2.5-deg grid	Hsuan Chen hschen@ncep.noaa.gov		Need new ICD
10, 11	4	CID_MODIS	CERX04	Terra MODIS Cloud Imager Data	GSFC DAAC	Minnis	ICD 9
		CID_VIRS	CERX05	TRMM VIRS Cloud Imager Data - Every 2 hours	GSFC DAAC		ICD 2 Section 4.1
14, 15	2,4	SURFMAP snow/ice	CERX07	Snow/Ice Cover from DMSP SSM/I. Equal area SSM/I Earth Grid	NSIDC	Minnis	ICD 4

## CERES External Ancillary Data Set Requirements for TRMM and Terra Product Generation

IRD Ref	SS	CERES Field ID	AHWGP Field ID	Data Set Name	Source (Reference)	Science Team	ICD Reference
14, 15	5	SURFMAP snow/ice	CERX07	DMSP SSM/I Snow/Ice Cover; requesting 1 / day 6-hourly global data set; 48 km at 60 deg lat. 1 file / hemisphere for 2 (10,11) DMSP sat	NOAA/NESDIS	Charlock Validation Product	ICD 1 (2.3)
16	5	SURFMAP- veg	CERX07	Vegetation index from NOAA AVHRR. Plate Carree projection-16km res. 75 deg N - 55 deg S	NOAA/NESDIS	Charlock Validation	ICD 1 (2.1)
17	11	GEO	CERX09	Meteosat and GMS ISCCP B1 data	NOAA NCDC	Wong	ICD 5
				GOES-East ISCCP B1 data	AES		ICD 6
				GOES-West ISCCP B1 data	CIRA at CSU		ICD 7
1	4	MWP	CERX13	Microwave Liquid Water Path (TMI Lev 1-b day)	DELETE	Minnis	DELETE
4	5	OPD-Strat	CERX11	SAGE stratospheric ozone*	REPLACE with SMOBA	Charlock	DELETE
5	5	OPD-Column	CERX11	NESDIS Layer/Level Ozone - NOAA 14 POES SBUV/2 total ozone levels at 30, 10, 5, 2, 1, 0.4 hPa in mixing ratio (10*-3g/g) on NMC 65 by 65 polar stereographic grid for both hemispheres;	REPLACE with SMOBA	Charlock	DELETE
7, 8, 9	12	GAP(3-D) GAP(Sfc)	CERX12	NCEP T62 Spectral Coefficients (28-level Sigma Product)	DISCONTINUE	Charlock	DELETE
				NCEP Surface Flux File H2D	DISCONTINUE		DELETE
12	4	SURFMAP- DEM	CERX07	Digital Elevation Map	Not Used	Minnis	DELETE
13	4	SURFMAP- H2O	CERX07	Water Conditions	DELETE	Minnis	DELETE
17	11	GEO	CERX09	GOES - Chinese McIDAS format; GHCC working format issues; need calibration info.	DELETE	Wong	DELETE

Note: The yellow shaded areas are data sets CERES already has or CERES has dropped the requirement.

For copies of CERES interface agreements, see the Langley TRMM & Terra Information System (LaTIS) Home Page under Data Products and then under External Data Providers at URL: <a href="http://latis/44712/latis/">http://latis/44712/latis/</a>

## **CERES Interface Control Document (ICD) Reference Number and Name:**

- 1. Data Interface Agreement for National Oceanic and Atmospheric Administration (NOAA) National Environmental Satellite, Data, and Information Service (NESDIS) and Langley Distributed Active Archive Center (DAAC), July 1997. Data covered under umbrella agreement with NASA.
- 2. Interface Control Document between GSFC DAAC TRMM Support System (TSS) and LaRC DAAC TRMM Information System (LaTIS), September 1997
- 3. Data Interface Agreement for the Data Assimilation System (DAS) and Langley Distributed Active Archive Center (DAAC), June 1997
- 4. Data Inteface Agreement for National Snow and Ice Data Center (NSIDC) Distributed Active Archive Center (DAAC) and Langley Distributed Active Archive Center (DAAC), April 1999
- 5. Data Interface Agreement between National Oceanic and Atmospheric Administration (NOAA) National Climate Data Center (NCDC) and Langley Distributed Active Archive Center (DAAC), October 1997
- 6. Data Interface Agreement for Atmospheric Environment Service (AES) and Langley Distributed Active Archive Center (DAAC), April 1999
- 7. Technical Policy and Procedures Agreed to between the Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University (CSU) and the Langley Distributed Active Archive Center (DAAC) for Collection and Delivery of ISCCP B1 Satellite Data for CERES, May 1999
- 8. Memorandum of Agreement between the Global Hydrology Resource Center and the Langley Distributed Active Archive Center for SSM/I-Derived Water Vapor Data Sets, April 1999
- 9. Interface Control Document between the LaRC and GSFC DAACs, August 1999.

Guide Book: http://charm.larc.nasa.gov/GUIDE/dataset\_documents/sage2\_aer\_dataset.html

## **Revision number and description:**

Revision 15, 4/05/00: Updated ICD dates. Added ICD 9.

Revision 14, 8/10/99: Added GEOS-3 meteorological data for Terra processing. Available from DAS GSFC.

Revision 13, 3/31/99: Re-activated APD(Strat) SAGE thin stratospheric aerosol optical depth. Available from LaRC DAAC.

Revision 12, 3/22/99: Deleted GOES - Chinese McIDAS format as input to SS11.0; may add when data set contains full coverage (now 3-hours).

Revision 11, 3/19/99: Added NCEP Ocean Wave Model sea state product as input to SS12.0.

Revision 10, 2/18/99:Added ECMWF as primary input to SS12.0 and changed DAO data to secondary.

- Deleted NCEP T62 Spectral Coefficients; deleted NCEP Surface Flux File H2D.
- Revision 9, 05/13/98: Re-activated Aerosol Global analyzed field (IRD Ref 2), DMSP Snow/Ice Cover (IRD Ref 14, 15), and NOAA vegetation index (IRD Ref 16) as SARB validation products.
- Revision 8, 04/24/98: Added Chinese GOES product that is currently being worked by GHCC Added MODIS for EOS-AM1 processing
- Revision 7, 01/20/98: Added ICD References 4-8, LaTIS URL for the electronic documentation, and SS Num column (Subsystem using product)
  Deleted 3 Columns: Size/Frequency, Point of contact, and Expected availability columns; Information is in the ICDs;
  Deleted Snow/Ice Cover from NOAA/NESDIS, APD(Column), APD(Strat), SURFMAP(vege)
  Updated Science Team Column
- Revision 6, 05/15/97: Replaced SAGE stratospheric ozone with NCEP SMOBA; added ICD references; corrected columns to match ICD.

  Deleted NESDIS Layer/Level Ozone CERX11. Reassigned CERX11 to NCEP SMOBA and TOMS secondary.

  DAO products combined into custom product for CERES. GAP(3-D) and GAP(Sfc) combined. IRD 7, 8, & 9 CERX12.
- Revision 5, 10/10/96: Added TOMS data as secondary source for IRD 5, CERX11.