

CERES Processing Status



Presented to
CERES Science Team

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November 14, 2007

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Edition3



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- Edition3 BDS and ERBElike data sets are delayed until 2008
 - All other Edition3 data sets still on schedule for 2009 or 2010
 - Reprocess and forward process all Terra and Aqua data
 - Terra and Aqua data sets will be of very similar quality
 - Product parameters may be added or changed
 - No changes expected in BDS or ERBElike
 - SSF size to increase over 25%!

Edition2



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- Edition2 currently expected to extend through December 2007
 - Aqua SSF and all data products which follow change from Edition2B to Edition2C to indicate MODIS collection change
 - Terra SSF and all data products which follow change to Edition2F to indicate MODIS collection change
 - If Edition2 were to extend beyond 2007, expect another change in data set name
 - GEOS-4 based inputs end Dec'07
 - Extension would have to use GEOS-5 based inputs

CERES Science Data Sets

New Since April 2007



Data Set	Comments
CER_SSF_Aqua-FM3-MODIS_Edition2C CER_SSF_Aqua-FM4-MODIS_Ed2C-NoSW CER_SFC_Aqua-FM3-MODIS_Edition2C CER_SSF_Terra-FMx-MODIS_Edition2F CER_SFC_Terra-FMx-MODIS_Edition2F	<ul style="list-style-type: none">• Switch from MODIS collection 004 to 005 as input, algorithms and warts otherwise remain same• Processing 1/06, 5/06 - 12/06; expected to extend through 12/07 in Spr'08• Public release expected
CER_CRS_Aqua-FMx-MODIS_Edition2B CER_FSW_Aqua-FMx-MODIS_Edition2B	<ul style="list-style-type: none">• Corrects Model B SW Surface fluxes, modifies aerosol hierarchy• Processing 7/02 - 4/06 as resources available• Public release expected

CERES Science Data Sets

Expected Before June 2008



Data Set	Comments	When?
CER_SRBAVG_Terra-FMx-MODIS_Edition2E	<ul style="list-style-type: none"> • Daily files added, Flux improvements, improved RAP data handling • Process 3/00 – 12/05; expected to eventually extend through 12/06 • Public release expected 	Spring 2008
CER_SRBAVG_Aqua-FMx-MODIS_Edition2A	<ul style="list-style-type: none"> • Same code as Terra Edition2D • First Edition data set for Aqua • Process 7/02 – 10/05 • Public release expected 	Early 2008
CER_SRBAVG_Aqua-FMx-MODIS_Edition2B	<ul style="list-style-type: none"> • Same code as Terra Edition2E • Process 7/02 – 12/05; expected to eventually extend through 12/06 • Public release expected 	Summer 2008
CER_CRS_Terra-FMx-MODIS_Edition2F CER_FSW_Terra-FMx-MODIS_Edition2F	<ul style="list-style-type: none"> • Terra Edition2F SSF is input • Process 5/06 - 12/06; expected to extend through 12/07 • Waiting on MATCH data to become available • Public release expected 	??
CER_CRS_Aqua-FM3-MODIS_Edition2C CER_FSW_Aqua-FM3-MODIS_Edition2C	<ul style="list-style-type: none"> • Aqua Edition2C SSF is input • Process 5/06 - 12/06; expected to extend through 12/07 • Waiting on MATCH data to become available • Public release expected 	??

CERES Science Data Sets

Expected Before June 2008



Data Set	Comments	When?
CER_SYN_Terra-FMx-MODIS_Beta4 CER_AVG_Terra-FMx-MODIS_Beta4 CER_ZAVG_Terra-FMx-MODIS_Beta4 CER_SYN_Aqua-FMx-MODIS_Beta1 CER_AVG_Aqua-FMx-MODIS_Beta1 CER_ZAVG_Aqua-FMx-MODIS_Beta1	<ul style="list-style-type: none"> • Last expected round of Beta processing • Process seasonal months for 4/00 – 10/05 • Available to Science Team only (no public release expected) 	Spring 2008
CER_BDS_Aqua-FMx-MODIS_Edition3 CER_BDS_Terra-FMx-MODIS_Edition3 CER_ES8_Aqua-FMx_Edition3 CER_ES8_Terra-FMx_Edition3 CER_ES4_Aqua-FMx_Edition3 CER_ES4_Terra-FMx_Edition3 CER_ES9_Aqua-FMx_Edition3 CER_ES9_Terra-FMx_Edition3	<ul style="list-style-type: none"> • The first Edition3 data sets! • Terra to process 2/25/00 forward • Aqua to process 6/18/02 forward 	Spring 2008
CER_SSF_Terra-FMx-MODIS_Beta1-Ed3 CER_SSF_Aqua-FMx-MODIS_Beta1-Ed3	<ul style="list-style-type: none"> • First Beta run of proposed Edition3 data sets (There will be a second Beta run later in 2008.) • Plan to process 8 months of data per instrument • Many new parameters (see SSF - Edition3 in CERES Data Products Catalog) • Some parameters changed or deleted • Collection 005 MODIS data are input 	Early 2008

Older CERES Science Data Sets

Still of Interest (Calibration/Validation)



Data Set	Comments
CER_BDS_TRMM-PFM_Edition1-CV CER_ES8_TRMM-PFM_Edition1-CV CER_ES4_TRMM-PFM_Edition1-CV CER_ES9_TRMM-PFM_Edition1-CV CER_BDS_TRMM-PFM_Ed1-CV-TransOps CER_ES8_TRMM-PFM_Ed1-CV-TransOps CER_ES4_TRMM-PFM_Ed1-CV-TransOps CER_ES9_TRMM-PFM_Ed1-CV-TransOps	<ul style="list-style-type: none"> • 12/27/1997 through 8/31/1998; March 2000 (Edition1-CV) • Select transient operation periods during 1999 (Ed1-CV-TransOps) • Algorithms held constant across entire data set
CER_BDS_Terra-FMx_Edition1-CV CER_ES8_Terra-FMx_Edition1-CV CER_ES4_Terra-FMx_Edition1-CV CER_ES9_Terra-FMx_Edition1-CV	<ul style="list-style-type: none"> • All Terra data from time the covers opened through present • Replaces Edition1 • Algorithms to be held constant across entire data set • Algorithms consistent between Terra and Aqua • Publicly available

Older CERES Science Data Sets

Still of Interest (Calibration/Validation)



Data Set	Comments
CER_BDS_Aqua-FMx_Edition1-CV CER_ES8_Aqua-FMx_Edition1-CV CER_ES4_Aqua-FMx_Edition1-CV CER_ES9_Aqua-FMx_Edition1-CV	<ul style="list-style-type: none"> • All Aqua-FM3 data from time the covers opened through present • Aqua FM4 data from 6/19/02 - 3/29/05 • Replaces Edition1 • Algorithms to be held constant across entire data set • Publicly available
CER_BDS_Aqua-FM4_Ed1-CV-NoSW CER_ES8_Aqua-FM4_Ed1-CV-NoSW CER_ES4_Aqua-FM4_Ed1-CV-NoSW CER_ES9_Aqua-FM4_Ed1-CV-NoSW	<ul style="list-style-type: none"> • 3/30/05 through present • Same algorithms and processing as Edition1-CV • Due to SW channel failure, no daytime SW or LW radiances and fluxes • Available to Science Team
CER_BDS_Aqua-FM4_AnomOps-Ed1-CV CER_ES8_Aqua-FM4_AnomOps-Ed1-CV CER_ES4_Aqua-FM4_AnomOps-Ed1-CV CER_ES9_Aqua-FM4_AnomOpsEd1-CV	<ul style="list-style-type: none"> • 7/19/05 through 8/30/05 • Same algorithms and processing as Edition2 • Due to instrument temperature changes made in hopes of reversing SW channel problem, data quality varies from Ed1-CV-NoSW • Available to Science Team (no public release)

Older CERES Science Data Sets

Still of Interest (TRMM)



Data Set	Comments
CER_BDS_TRMM-PFM_Edition1 CER_ES8_TRMM-PFM_Edition2 CER_ES4_TRMM-PFM_Edition2 CER_ES9_TRMM-PFM_Edition2 CER_SSF_TRMM-PFM-VIRS_Edition2B CER_SFC_TRMM-PFM-VIRS_Edition2B CER_SRBAVG_TRMM-PFM-VIRS_Edition2B CER_CRS_TRMM-PFM-VIRS_Edition2C CER_FSW_TRMM-PFM-VIRS_Edition2C	<ul style="list-style-type: none"> • TRMM period Jan'98 – Aug'98; Mar'00 • Publicly available
CER_BDS_TRMM-PFM_Transient-Ops2 CER_ES8_TRMM-PFM_Transient-Ops2 CER_SSF_TRMM-PFM-VIRS_Edition2B-TransOps	<ul style="list-style-type: none"> • Transient Operations period Jan'99 – Jul'99 • BDS not publicly released; others publicly available
CER_ES4_PFM+FM1+FM2_Edition2 CER_ES9_PFM+FM1+FM2_Edition2 CER_ES4_PFM+FM1_Edition2 CER_ES9_PFM+FM1_Edition2 CER_ES4_PFM+FM2_Edition2 CER_ES9_PFM+FM2_Edition2	<ul style="list-style-type: none"> • Mar'00 only month of TRMM, Terra overlap • Publicly available
CER_SSF_TRMM-SIM-VIRS_Edition2-VIROnly	<ul style="list-style-type: none"> • Processed only for months when CERES was off • Processed through Jul'01; no additional months expected • Publicly available

Older CERES Science Data Sets

Still of Interest (Terra)



Data Set	Comments
CER_BDS_Terra-FMx_Edition2 CER_ES8_Terra-FMx_Edition2 CER_ES4_Terra-FMx_Edition2 CER_ES9_Terra-FMx_Edition2	<ul style="list-style-type: none"> • Rev1 SW corrections available • 2/25/00 – 12/31/06 processed, 1/1/07 - 12/31/07 coming in Spr'08 • Publicly available
CER_ES4_FM1+FM2_Edition2 CER_ES9_FM1+FM2_Edition2	<ul style="list-style-type: none"> • Processed Mar'00 through Dec'02, production then halted • Replaced by Terra/Aqua combined Crosstrack data sets (FM1+FM3, FM1+FM4, FM2+FM3 Edition2) • Publicly available
CER_SSF_Terra-FMx_Edition2B CER_SFC_Terra-FMx-MODIS_Edition2C	<ul style="list-style-type: none"> • 2/25/00 – 7/31/06 • Uses Edition2 instrument data as input • Edition2 Clouds, Final Terra ADMs, Rev1 SW corrections available • Publicly available
CER_SRBAVG_Terra-FMx-MODIS_Edition2D	<ul style="list-style-type: none"> • Edition2C SFC are input • 3/00 - 10/05 processed, no additional processing expected • Publicly available
CER_CRS_Terra-FMx_Edition2B CER_FSW_Terra-FMx-MODIS_Edition2C	<ul style="list-style-type: none"> • 3/1/00 – 12/31/05 processed • 1/1/06 - 6/30/06 to process as resources become available • Edition2B SSF input; latest version of SARB algorithms • Publicly available
CER_SYN_Terra-FMx-MODIS_Beta3 CER_AVG_Terra-FMx-MODIS_Beta3 CER_ZAVG_Terra-FMx-MODIS_Beta3	<ul style="list-style-type: none"> • Processed 3/00 - 10/05, but 10/04 - 10/05 had problems and were pulled from view • Publicly available

Older CERES Science Data Sets

Still of Interest (Aqua)



Data Set	Comments
CER_BDS_Aqua-FMx_Edition2 CER_ES8_Aqua-FMx_Edition2 CER_ES4_Aqua-FMx_Edition2 CER_ES9_Aqua-FMx_Edition2 CER_BDS_Aqua-FM4_Ed2-NoSW CER_ES8_Aqua-FM4_Ed2-NoSW CER_ES4_Aqua-FM4_Ed2-NoSW CER_ES9_Aqua-FM4_Ed2-NoSW	<ul style="list-style-type: none"> • Rev1 SW corrections available • Aqua-FM4 Edition2 processed 6/18/02 – 3/29/05 • Aqua-FM4 Ed2-NoSW processed 3/30/05 - 12/31/06, expect 1/1/07 - 12/31/07 in Spr'08 • Aqua-FM3 Edition2 processed 6/18/02 – 12/31/06, expect 1/1/07 - 12/31/07 in Spr'08 • Edition2 publicly available • Ed2-NoSW available to Science Team
CER_ES4_FM1+FM3_Edition2 CER_ES4_FM2+FM3_Edition2 CER_ES4_FM1+FM4_Edition2 CER_ES9_FM1+FM3_Edition2 CER_ES9_FM2+FM3_Edition2 CER_ES9_FM1+FM4_Edition2	<ul style="list-style-type: none"> • Combine only Crosstrack instruments • 7/02 – 12/06 available, 1/07 - 12/07 expected in Spr'08 • Uses Terra Edition2 and Aqua Edition2 inputs • Publicly available

Older CERES Science Data Sets

Still of Interest (Aqua)



Data Set	Comments
CER_SSF_Aqua-FMx-MODIS_Edition2A CER_SFC_Aqua-FMx-MODIS_Edition2A CER_SSF_Aqua-FM4-MODIS_Ed2A-NoSW CER_SFC_Aqua-FM4-MODIS_Ed2A-NoSW	<ul style="list-style-type: none"> • Aqua ADMs, Rev1 SW corrections available • 7/02 - 12/31/05 • FM4 SW channel failed 3/30/05 hour 18, no daytime SW or LW • All SSF and Edition2A SFC publicly available • Ed2A-NoSW SFC available to Science Team only
CER_CRS_Aqua-FMx-MODIS_Edition2A CER_FSW_Aqua-FMx-MODIS_Edition2A	<ul style="list-style-type: none"> • Edition2A SSF, Rev1 SW corrections available • Available only for main crosstrack instrument • 7/02 - 12/05 • Publicly available
CER_SRBAVG_Aqua-FMx-MODIS_Beta6 CER_SRBAVG_Aqua-FM4-MODIS_Beta6-NoSW	<ul style="list-style-type: none"> • Edition2A SFC are input • 7/02 – 10/05, FM4 SW channel failed 3/30/05 hour 18 • Available to Science Team only (no public release)
CER_SSF_Aqua-FMx-MODIS_Edition2B CER_SSF_Aqua-FM4-MODIS_Ed2B-NoSW CER_SFC_Aqua-FMx-MODIS_Edition2B CER_SFC_Aqua-FM4-MODIS_Ed2B-NoSW	<ul style="list-style-type: none"> • Corrects Model B SW surface fluxes, all other parameters remain the same as Edition2A • 7/02 -4/06, FM4 SW channel failed 3/30/05 hour 18 • Gap from 11/04 - 11/05 will be filled as resources become available • All SSF and Edition2B SFC publicly available • Ed2B-NoSW SFC available to Science Team only

Documentation Overview



- Data Quality Summaries
 - Detailed information about a particular data set
 - Always consult Quality Summary prior to using data or publishing research
- Data Products Catalog
 - Parameter lists for each data product
 - Version of pages that apply to data set included with order
- Collection Guides
 - User Guide for data product
- Description/Abstract
 - Record of differences between data sets and configuration codes

Questions about Data Sets??



- Look over Data Products Catalog pages
- Reread Data Quality Summary
- Consult Collection Guide, if available
- Specific science questions may be sent to Contact Scientist listed in Section 2.2 of Collection Guide or in Description/Abstract
- All other questions should be sent to User Services

larc@eos.nasa.gov

- For data products for which no Collection Guide or Description/Abstract is available, send all questions to User Services

Science Data Product URLs and Contacts



- Ordering Data
 - http://eosweb.larc.nasa.gov/HBDOCS/langley_web_tool.html
 - Can also order data from EOS Data Gateway
- Subsets of SSF, CRS, and ES8 are available
 - Order data using Java version of Langley Ordering Tool
 - Can subset by parameters or latitude/longitude box
- Contact Points
 - All questions regarding production data products and their use
 - E-mail: larc@eos.nasa.gov
 - Langley ASDC Customer Service
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