

# CERES Data Management Status

---

Presented to  
CERES Science Team

**Erika Geier**

**Mike Little**

**NASA Langley Research Center**

**November 1, 2005**

[erika.b.geier@nasa.gov](mailto:erika.b.geier@nasa.gov)

[michael.m.little@nasa.gov](mailto:michael.m.little@nasa.gov)

# Agenda

---

- Rev1
- Edition3
- CERES Data Product Summary Tables
  - New Data Sets since May 2005
  - Data Sets expected before next Science Team Meeting
  - Older CERES Data Sets of interest
- Questions about Data Set
- URLs and Contacts

# Rev1 corrections to previous Editions

---

- This revision is necessary to account for spectral darkening of the transmissive optics on the CERES SW channels.
- Rev1 corrections apply to most SW parameters including SW radiance, SW flux, albedo, net radiant flux
  - After applying correction, append “-Rev1” to name of data set
  - Example: Terra Edition2 ES8 becomes Terra Edition2-Rev1 ES8
- Rev1 correction will be included in Edition3; no need to apply it separately
- Quality Summary states how to apply Rev1 and links to appropriate scaling factor table
  - BDS/ERBELike Quality Summaries include Rev1 discussion
    - Applies only to Edition2 families of data sets
    - Notice sent to all who have ordered these data sets
  - SSF/SFC Quality Summaries containing Rev1 discussion in review, public shortly
    - Rev1 corrections apply to Edition1 and Edition2 data set families
    - Expect Summaries to be made public before Thanksgiving
  - SRBAVG Quality Summary to be updated next
  - Science evaluating how to apply Rev1 to CRS and FSW

# Edition3 is coming!!

---

- Edition2 expected to end with December 2005 data
- Edition3 to start in 2006
  - Phase-in slowly, starting with BDS and ERBElike data products
  - Parameters on product may be added or changed
  - Terra and Aqua data sets will be of very similar quality
  - MODIS collection 5 input to cloud processing
  - Reprocess all data and do forward processing
  - Beta data set to run first for most products
- Edition1 BDS and ES8 will switch to Edition1-CV starting this month

# CERES Science Data Sets

New Since May 2005

---

- No new data sets have been added since the last CERES Science Team Meeting.
- Many Terra and Aqua data sets have been extended.

# CERES Science Data Sets

## Expected Before Next Science Team Meeting

Data Set	Comments	When?
CER_SRBAVG_Terra-FMx-MODIS_Edition2D	<ul style="list-style-type: none"> <li>• Edition2C SFC are input</li> <li>• Initially 3 years to be processed (3/00 – 2/03)</li> <li>• Eventually extended through 12/05</li> </ul>	To start December 2005 or early 2006
CER_SRBAVG_Terra-FMx-MODIS_Beta4	<ul style="list-style-type: none"> <li>• Edition2C SFC are input</li> <li>• Process 3/03 – 12/04</li> </ul>	To start January 2006
CER_SSF_Aqua-FMx-MODIS_Edition2A CER_SFC_Aqua-FMx-MODIS_Edition2A	<ul style="list-style-type: none"> <li>• Aqua ADMs, updated Surface LW Model B Flux</li> <li>• Process all month for which inputs available (initially 7/02 - 3/05)</li> </ul>	To start December 2005
CER_SRBAVG_Aqua-FMx-MODIS_Beta1	<ul style="list-style-type: none"> <li>• Edition2A SSF are input</li> <li>• Initially process 7/02 – 2/03</li> </ul>	To start after Terra Beta4 SRBAVG completes and once Aqua Edition2A SFC available
CER_CRS_Aqua-FMx-MODIS_Edition2A CER_FSW_Aqua-FMx-MODIS_Edition2A	<ul style="list-style-type: none"> <li>• Aqua Edition2A SSF are input</li> <li>• Process all month for which inputs available (initially 7/02 - 3/05)</li> </ul>	To start Spring 2006
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"> <li>• The first Edition3 data sets!</li> <li>• Terra to process 2/25/00 forward</li> <li>• Aqua to process 6/18/02 forward</li> </ul>	To start April/May 2006

# 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"> <li>• TRMM period Jan'98 – Aug'98; Mar'00</li> <li>• Publicly available</li> </ul>
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"> <li>• Transient Operations period Jan'99 – Jul'99</li> <li>• BDS not publicly released; others publicly available</li> </ul>
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"> <li>• Mar'00 only month of TRMM, Terra overlap</li> <li>• Publicly available</li> </ul>
CER_SSF_TRMM-SIM-VIRS_Edition2-VIROnly	<ul style="list-style-type: none"> <li>• Processed only for months when CERES was off</li> <li>• Currently processed through Jul'01</li> <li>• Publicly available</li> </ul>

# 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"> <li>• Instrument drifts removed</li> <li>• Terra Edition2 BDS and ES8 processed 2/25/00 – 6/30/05</li> <li>• Terra Edition2 ES4 and ES9 processed 3/00 – 5/05</li> <li>• Publicly available</li> <li>• Edition1 through 3/31/05 also publicly available</li> </ul>
CER_ES4_FM1+FM2_Edition2 CER_ES9_FM1+FM2_Edition2	<ul style="list-style-type: none"> <li>• Processed Mar'00 through Dec'02</li> <li>• Production of these data sets halted</li> <li>• Replaced by Terra/Aqua combined Crosstrack data sets (FM1+FM3, FM1+FM4 Edition2)</li> <li>• Publicly available</li> </ul>
CER_SSF_Terra-FMx_Edition2B CER_SFC_Terra-FMx-MODIS_Edition2C	<ul style="list-style-type: none"> <li>• SSF: 2/25/00 – 6/30/05 processed; 7/1/04 - 12/31/05 still expected</li> <li>• SFC: 3/00 - 5/05 processed; 6/05 - 12/05 still expected</li> <li>• Uses Edition2 instrument data as input</li> <li>• Edition2 Clouds; Final Terra ADMs</li> <li>• Publicly available</li> </ul>
CER_CRS_Terra-FMx_Edition2B CER_FSW_Terra-FMx-MODIS_Edition2C	<ul style="list-style-type: none"> <li>• CRS: 3/1/00 – 6/30/05 Crosstrack processed; 7/05 - 12/05 expected</li> <li>• FSW: 3/00 - 5/05 crosstrack processed; 6/05 - 12/05 expected</li> <li>• Edition2B SSF input; latest version of SARB algorithms</li> <li>• Publicly available</li> </ul>



# 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	<ul style="list-style-type: none"> <li>• Aqua Edition2 BDS and ES8 processed 6/18/02 – 3/31/05</li> <li>• Aqua Edition2 ES4 and ES9 processed 7/02 – 2/05</li> <li>• Publicly available</li> <li>• FM3 Edition1 through 9/30/05 also publicly available</li> <li>• FM4 Edition1 through 3/29/05 also publicly available</li> <li>• FM4 Ed1-NoSW 4/1/05 - 7/18/05 and 8/31/05 - 9/30/05 available to Science Team</li> </ul>
CER_ES4_FM1+FM3_Edition2 CER_ES4_FM1+FM4_Edition2 CER_ES9_FM1+FM3_Edition2 CER_ES9_FM1+FM4_Edition2	<ul style="list-style-type: none"> <li>• Combine only Crosstrack instruments</li> <li>• Jul'02 – Feb'05 currently available</li> <li>• Uses Terra Edition2 and Aqua Edition2 inputs</li> <li>• Publicly available</li> </ul>
CER_SSF_Aqua-FMx-MODIS_Edition1B CER_SFC_Aqua-FMx-MODIS_Edition1B	<ul style="list-style-type: none"> <li>• 6/18/02 – 3/31/05 processed; no more expected</li> <li>• Uses Edition2 instrument data as input</li> <li>• Publicly available</li> </ul>
CER_CRS_Aqua-FMx-MODIS_Beta1 CER_FSW_Aqua-FMx-MODIS_Beta1	<ul style="list-style-type: none"> <li>• First SARB data sets for Aqua</li> <li>• Edition1B SSF (Crosstrack instrument) is input</li> <li>• 7/02 – 12/04 processed; no additional months will be processed</li> <li>• CRS publicly available; FSW available to Science Team</li> </ul>

# 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 Set

---

- 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](mailto: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](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](mailto:larc@eos.nasa.gov)
    - Langley ASDC Customer Service
  - Contents of this presentation: [erika.b.geier@nasa.gov](mailto:erika.b.geier@nasa.gov)
- CERES News (e-mail)
  - Subscribe from CERES datasets webpage
  - All new public datasets are announced as soon as available
  - Mechanism for distributing CERES information