

CERES Science Team Meeting

Items for Discussion - May 2001

EDOS data delivery improves

Code deliveries to Atmospheric Sciences Data Center

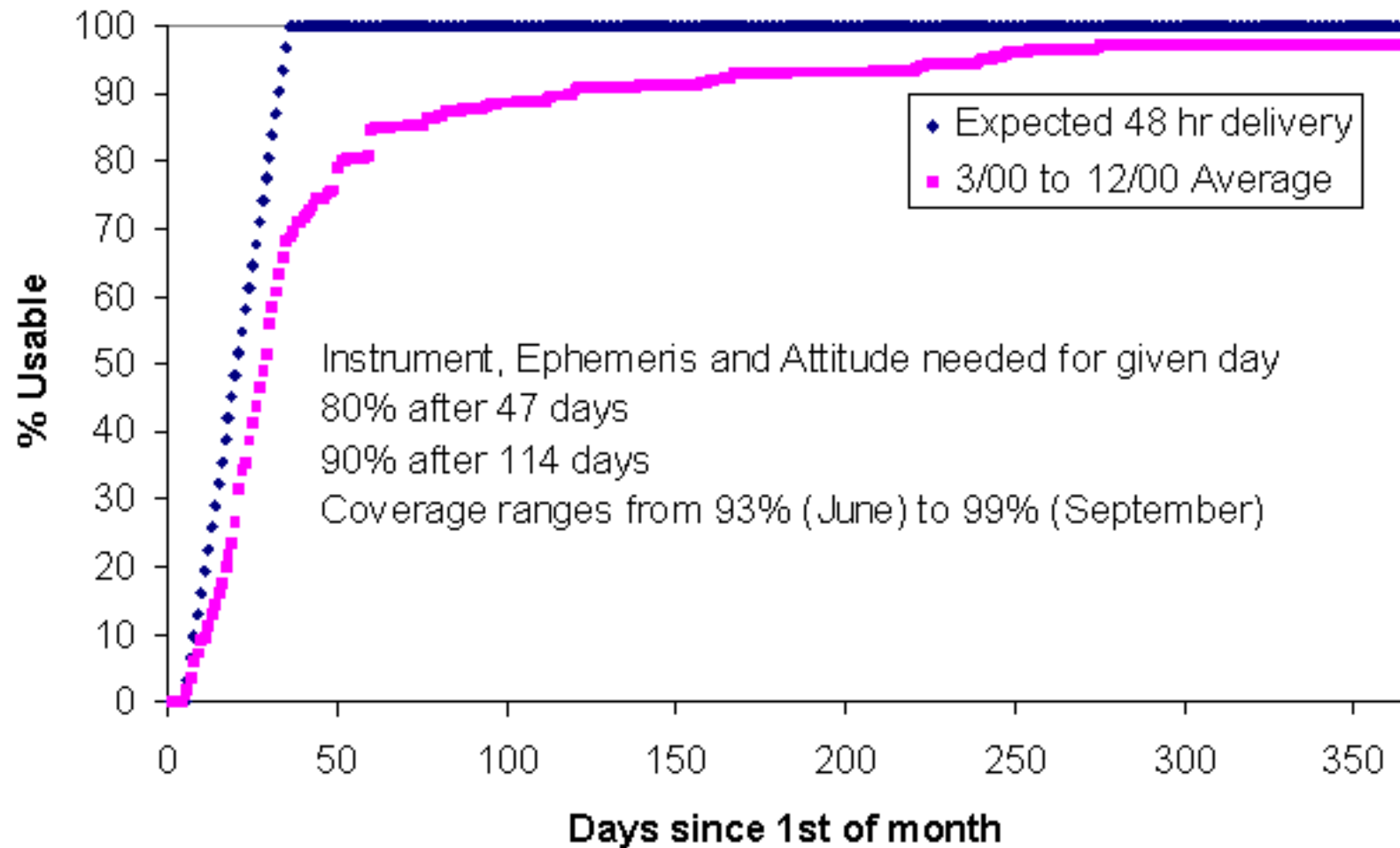
Data products available at ASDC

Product ordering statistics

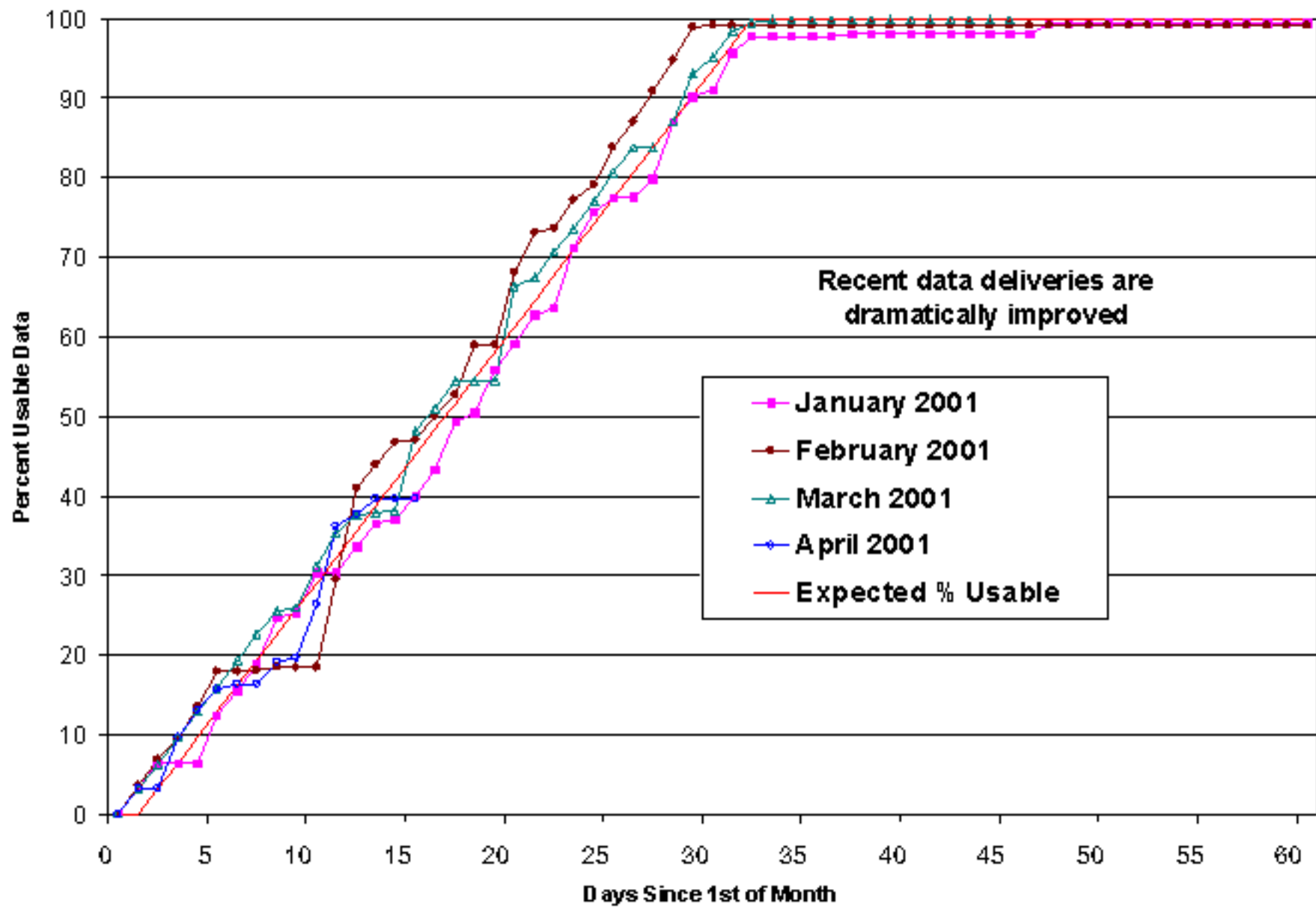
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Atmospheric Sciences Research
NASA Langley Research Center

These charts: http://asd-www.larc.nasa.gov/ceres/science_team/quart_rept.html

% Usable Level 0 CERES Data After Terra Launch



Percent Usable FM2 Data (FM1 is similar)



CERES PGE Sizes as Delivered to LaRC ASDC - April 2001

| Working Group (Subsystem) | Delivery Date | Number of Lines | | | | |
|---|----------------------------------|-------------------------|-------------------------|-----------------------|---------------------|----------------------|
| | | Source (w/ comments) | Source (executable) | Scripts | SMF/ PCF | MCF |
| Instrument (1.0) | 10/24/00 | 139268 | 103052 | 15072 | 4062 | 4901 |
| ERBE-like (2.0 & 3.0) | 03/16/01 | 105549 | 47271 | 12169 | 381 | 10500 |
| Clouds (4.1-4.4) | 04/18/01 | 174911 | 138175 | 9789 | 8115 | 6236 |
| Inversion (4.5-4.6) | 03/02/01 | 23409 | 13521 | 2733 | 530 | 2168 |
| SARB (5.0) (12.0) | 03/19/01 04/16/01 | 45928 20280 | 27376 9629 | 3122 1828 | 1201 297 | 2501 700 |
| TISA (6.0 & 9.0) (7.1, 8.0, & 10.0) (11.0) | 04/18/01 03/09/01 02/26/01 | 58634 63783 38158 | 39422 41446 27606 | 11340 2762 7268 | 12787 61 4084 | 4200 5950 1400 |
| System (CERESlib) | 04/16/01 | 80353 | 46107 | 8626 | 308 | 1374 |
| System Total | | 750273 | 493605 | 74709 | 31826 | 39930 |

An additional 569,990 lines of code in use at the SCF for validation and analysis.

CERES Data Products at ASDC

What's new since last meeting?

| Data Set | Comments | When? |
|------------------------------------|--|-------|
| CER_SFC_TRMM-PFM-VIRS_ValidationR5 | <ul style="list-style-type: none">• Edition1 SSFs used as input• January - August 1998 available• March 2000 available shortly | 4/01 |

**Reminder: Full list of products and associated links available on
http://eosweb.larc.nasa.gov/PRODOCS/ceres/table_ceres.html**

You must login to the Web Ordering Tool with your CERES Science Team name and password.

CERES Data Products at ASDC

What TRMM products are planned for near-term?

| Data Set | Comments | When? |
|---|--|-------|
| CER_SRBAVG_TRMM-PFM-VIRS_ValidationR5 | <ul style="list-style-type: none"> • First SRBAVG to include GGEO clouds • ValidationR5 SFC to be used as input (Edition1 SSF) • Process all 9 months | 5/01 |
| CER_CRS_TRMM-PFM-VIRS_ValidationR4 | <ul style="list-style-type: none"> • Edition1 SSFs to be used as input • Process Jan - Aug 1998 subset over validation regions | 5/01 |
| CER_SSF_TRMM-PFM-VIRS_Beta2 | <ul style="list-style-type: none"> • January - August 1998 and March 2000 • Edition1 Cloud algorithms; no IR emissivity at night • Draft TRMM ADMs | 6/01 |
| CER_CRS_TRMM-PFM-VIRS_Beta1 | <ul style="list-style-type: none"> • Process Jan - Aug 1998 subset over validation regions | 7/01 |
| CER_SFC_TRMM-PFM-VIRS_Beta1 CER_SRBAVG_TRMM-PFM-VIRS_Beta1 | <ul style="list-style-type: none"> • Process all 9 months | 7/01 |
| CER_SSF_TRMM-PFM-VIRS_Edition2 | <ul style="list-style-type: none"> • January - August 1998 and March 2000 • Latest Cloud algorithms; IR emissivity at night • Final TRMM ADMs | 9/01 |
| CER_CRS_TRMM-PFM-VIRS_Beta2 | | 10/01 |
| CER_SFC_TRMM-PFM-VIRS_Beta2 CER_SRBAVG_TRMM-PFM-VIRS_Beta2 | | 11/01 |
| CER_SSF_TRMM-SIM-VIRS_Edition2-VIRSONly | <ul style="list-style-type: none"> • Simulated crosstrack CERES footprints containing imager derived parameters • September 1998 - present (except March 2000) | 8/01 |

CERES Data Products at ASDC

What Terra products are planned for near-term?

| Data Set | Comments | When? |
|--|---|-------|
| CER_SSF_Terra-FM1-MODIS_Alpha CER_SSF_Terra-FM2-MODIS_Alpha | <ul style="list-style-type: none"> • Three days of November 2000 • MODIS inputs 2x2 subset • Latest Cloud algorithms; IR emissivity at night • VIRS12B ADMs | 5/01 |
| CER_SSF_Terra-FM1-MODIS_Beta1 CER_SSF_Terra-FM2-MODIS_Beta1 | <ul style="list-style-type: none"> • One year of Terra data • Reprocessed, 2x2 subsetted MODIS data from GSFC • Latest Cloud algorithms • Draft TRMM ADMs | 7/01 |
| CER_CRS_Terra-FM1-MODIS_Beta1 CER_CRS_Terra-FM2-MODIS_Beta1 | | 8/01 |
| CER_SFC_Terra-FM1-MODIS_Beta1 CER_SFC_Terra-FM2-MODIS_Beta1 CER_SRBAVG_Terra-FM1-MODIS_Beta1 CER_SRBAVG_Terra-FM2-MODIS_Beta1 | | 7/01 |
| CER_SSF_Terra-FM1-MODIS_Beta1-overARM CER_SSF_Terra-FM2-MODIS_Beta1-overARM | <ul style="list-style-type: none"> • Same as Beta1, but restricted to ARM sites | 7/01 |
| CER_CRS_Terra-FM1-MODIS_Beta1-overARM CER_CRS_Terra-FM2-MODIS_Beta1-overARM | | 8/01 |

CERES Data Products at ASDC

Older TRMM products still of interest

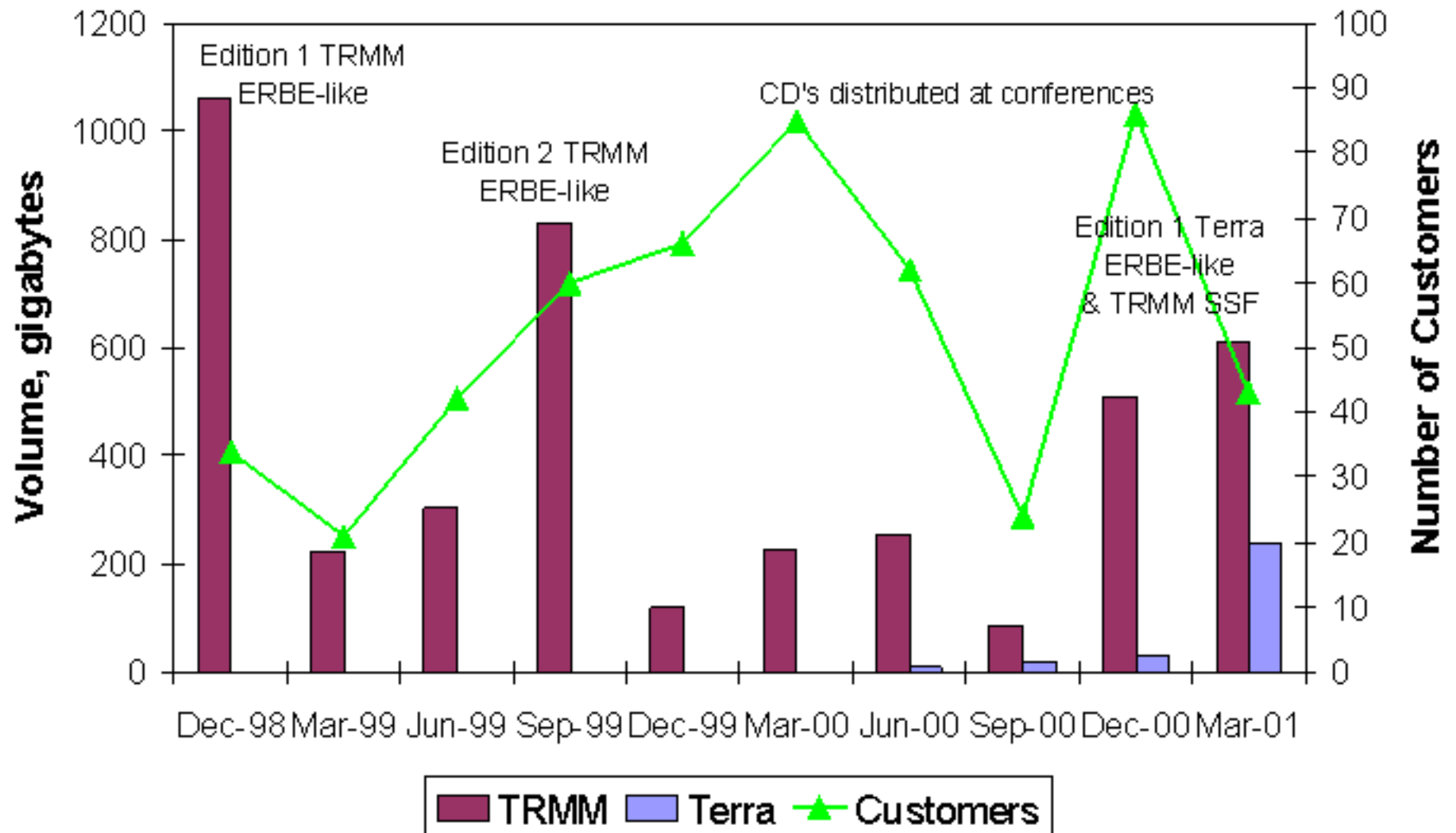
| Data Set | Comments | When? |
|---|---|-------|
| CER_BDS_TRMM-PFM_Edition1 | <ul style="list-style-type: none">• Archival BDS for TRMM | 4/99 |
| CER_ES8_TRMM-PFM_Edition2 CER_ES4_TRMM-PFM_Edition2 CER_ES9_TRMM-PFM_Edition2 | <ul style="list-style-type: none">• Most current archival ERBElike data set for TRMM• Slope-intercept, day/night spectral correction• January - August '98 processed (8 months) | 4/00 |
| CER_ES8_TRMM-PFM_TransientOps2 | <ul style="list-style-type: none">• Limited TRMM turn-on periods from 9/98 - 2/00• Mainly for ScaRaB and INDOEX comparisons | 12/99 |
| CER_SSF_TRMM-PFM-VIRS_Edition1 | <ul style="list-style-type: none">• Clouds, Inversion, Surface archival data set for TRMM• Jan - Aug 1998 and March 2000 | 12/00 |

CERES Data Products at ASDC

Older Terra products still of interest

| Data Set | Comments | When? |
|--|---|-------|
| CER_BDS_Terra-FM1_Edition1 CER_BDS_Terra-FM2_Edition1 | <ul style="list-style-type: none">• Terra count conversion offsets updated to ground determined values (previously zero)• Second time constant coefficients and algorithm updated• March 2000 - present | 11/00 |
| CER_ES8_Terra-FM1_Edition1 CER_ES8_Terra-FM2_Edition1 | <ul style="list-style-type: none">• ERBElike data sets for Terra• Updated spectral correction coefficients for snow• March 2000 - present | 11/00 |
| CER_ES4_Terra-FM1_Edition1 CER_ES4_Terra-FM2_Edition1 | | |
| CER_ES9_Terra-FM1_Edition1 CER_ES9_Terra-FM2_Edition1 | | |

CERES Product Distribution from ASDC



CERES Volume/Customer Distribution by Mission and Product

| Data Product | Volume in megabytes (Number of Customers) | | | | | |
|---------------|---|--------------------|---------------------|---------------------|---------------------|---------------------|
| | Oct-Dec 2000 | | | Jan-Mar 2001 | | |
| | TRMM | Terra | Total | TRMM | Terra | Total |
| CD | 31,322 (69) | 0 | 31,322 (69) | 9,987 (22) | 0 | 9,987 (22) |
| BDS | 0 | 876 (2) | 876 (2) | 0 | 2,720 (2) | 2,720 (2) |
| ES4 | 413 (4) | 235 (6) | 648 (4) | 257 (4) | 1,751 (5) | 2,008 (6) |
| ES8 | 353,482 (8) | 27,377 (3) | 380,859 (8) | 245,605 (6) | 231,284 (6) | 476,888 (10) |
| ES9 | 345 (4) | 1,842 (3) | 2187 (4) | 628 (1) | 3795 (2) | 4,422 (3) |
| SSF | 121,959 (1) | 0 | 121,959 (1) | 352,965 (4) | 0 | 352,965 (4) |
| Test | 11 (6) | 0 | 11 (6) | 0 | 0 | 0 |
| Totals | 507,532 (80) | 30,330 (10) | 537,862 (86) | 609,441 (34) | 239,549 (14) | 848,990 (43) |

Note: Products from combined instruments (ES4, ES9) assigned to Terra

- **About 30% of CERES customers are from outside the US - at least 18 different countries**
- **85 distinct ftp sites have downloaded the view_hdf validation tool this year, presumably to help interpret CERES data products!**

Are these documents of any use to you?

- http://eosweb.larc.nasa.gov/PRODOCS/ceres/table_ceres.html
 - **Quality Summaries** - required reading before ordering each product
 - **Description/Abstract** - includes versions of products and sample plots
- http://asd-www.larc.nasa.gov/ceres/collect_guide/
 - **Collection Guides** - parameter descriptions and usage details
 - **Currently available for BDS, ES8, ES9, ES4, SSF**

The CERES and ASDC teams spend considerable efforts on these documents.

If you do not find them useful, they are unlikely to be useful to other users of the data products.

Describe your experience with ASDC CERES data orders

- **Ordering tool, data delivery, overall service?**
- **Data products, read software, documentation usable?**

**Comments, pro and con, to J.F.Kibler@larc.nasa.gov or
E.B.Geier@larc.nasa.gov**

CERES Processor Usage (summary of BAW's 35 job streams)

