

CERES Science Team Meeting - Fall 2000

Items for Discussion

CERES Data Product Status

Major SSF changes since Spring

Subsetting CERES Data Products

CERES Data Distributed from LaRC DAAC

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

CERES Data Product Status

What's new since last meeting?

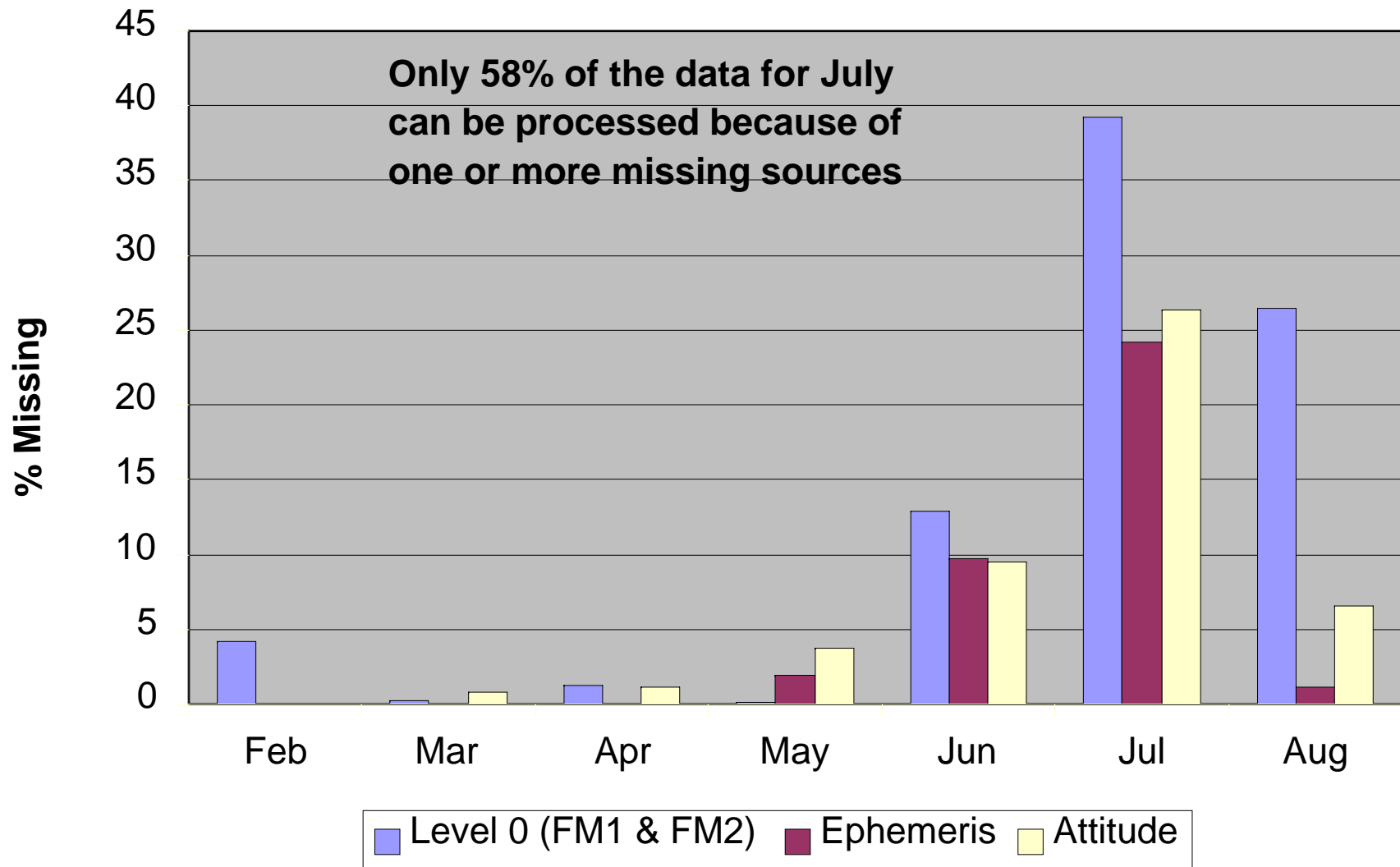
Data Set	Comments	When?
CER_BDS_Terra-FM1_Edition1 CER_BDS_Terra-FM2_Edition1	<ul style="list-style-type: none">• Problems receiving Terra data• March - May 2000 most data sources available• June - August 2000 sporadically available• Terra count conversion offsets updated to ground determined values (previously zero)• Second time constant coefficients and algorithm updated• To be reprocessed October 2000	8/00

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.

Missing CERES Data Sources for Terra As of 8/23/00



CERES Data Product Status (cont.)

What's planned for near-term?

Data Set	Comments	When?
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 	10/00
CER_ES4_Terra-FM1_Edition1 CER_ES4_Terra-FM2_Edition1		
CER_ES9_Terra-FM1_Edition1 CER_ES9_Terra-FM2_Edition1		
CER_SSF_TRMM-PFM-VIRS_ValidationR5	<ul style="list-style-type: none"> • Clouds, Inversion, Surface data set for TRMM • First reprocessing since ValidationR4 over a year ago • Changes too numerous to itemize; major changes to be discussed on later slide • 9 February days for aerosol validation • January '98 Validation Regions only for SSF checkout 	Fall 2000
CER_SSF_TRMM-PFM-VIRS_Edition1	<ul style="list-style-type: none"> • Archival data set for TRMM • Reprocess full 8 months (Jan - Aug '98) • Software identical or very similar to ValidationR5 	Fall/ Winter 2000

CERES Data Product Status (cont.)

What's older but possibly still of interest?

Data Set	Comments	When?
CER_BDS_TRMM-PFM_Edition1	<ul style="list-style-type: none"> • Archival BDS for TRMM • January - August '98 processed (8 months) 	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 ERBElke 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_ValidationR4	<ul style="list-style-type: none"> • Until ValidationR5 and Edition1 produced, remains most current SSF data set available for TRMM • VIRS Release 4 data • VIRS12A ADM's • January - August '98 processed (8 months) 	7/99
CER_CRS_TRMM-PFM-VIRS_ValidationR3	<ul style="list-style-type: none"> • Only CRS data set available for TRMM • Processed January '98 only 	3/99
CER_FSW_TRMM-PFM-VIRS_ValidationR4	<ul style="list-style-type: none"> • Only FSW data set available for TRMM • Processed January '98 only 	11/99
CER_SFC_TRMM-PFM-VIRS_ValidationR4	<ul style="list-style-type: none"> • Only SFC and SRBAVG data sets available for TRMM • Processed January '98 only 	10/99
CER_SRBAVG_TRMM-PFM-VIRS_ValidationR4		

Major SSF changes since Spring

Parameter changes

- All clear, layer, overlap, and overcast percent coverages now 32-bit real numbers
- Only if clear coverage > 99.9% are fluxes archived on SSFs (otherwise default)
- Cloud-mask aerosol called “aerosol B”, Larry Stowe aerosol called “aerosol A”
- Clear cloud-mask coverages reorganized

Parameters: Clear-strong, Clear-weak, Snow/ice, Aerosol B

Digits within supplement: Shadow, Clear-glint, Fire

Parameter additions

- Aerosol A supplements 1 - 4 (percent coverages and radiances)
- Cloud property extrapolation over cloudy region (Norman’s discussion)
- Potential overlap and saturated 3.7 μm digits added to “Notes on Cloud algorithms”

Parameter deletions

- Array of 6 spectral albedos (moved to CRS product)
- Area percent coverage for cloud layer (can be derived from layer and overlap coverage)

Consult SSF Guide for details

- Still in draft form
- Until Edition1 available at DAAC, Edition1 Guide available only from SSF webpage
http://earth-www.larc.nasa.gov/ssf/pub_ssf/
click on “SSF Definitions” and select “Edition1 and beyond”
- When data available from DAAC, Guide also available from Collection Guide webpage
- Send SSF Guide questions and comments to e.b.geier@larc.nasa.gov

Subsetting CERES data products

Langley DAAC can subset SSF, CRS, and ES8 products

User may specify individual hdf parameters to be included

- **Each file contains all the selected parameters**
- **Specify parameter names using full names listed in Data Products Catalog**

User may specify latitude-longitude boxes

- **Latitude ranges from -90 to 90**
- **Longitude ranges from -180 to 180**
- **A separate file is generated for each specified box**

Drastically reduces data volume

- **Larry Stowe reduced SSF data volume by over 75%**
- **Not fully automated - it must be set up manually**
- **Know your product before requesting subsets of large data volumes**

Suggested scenario

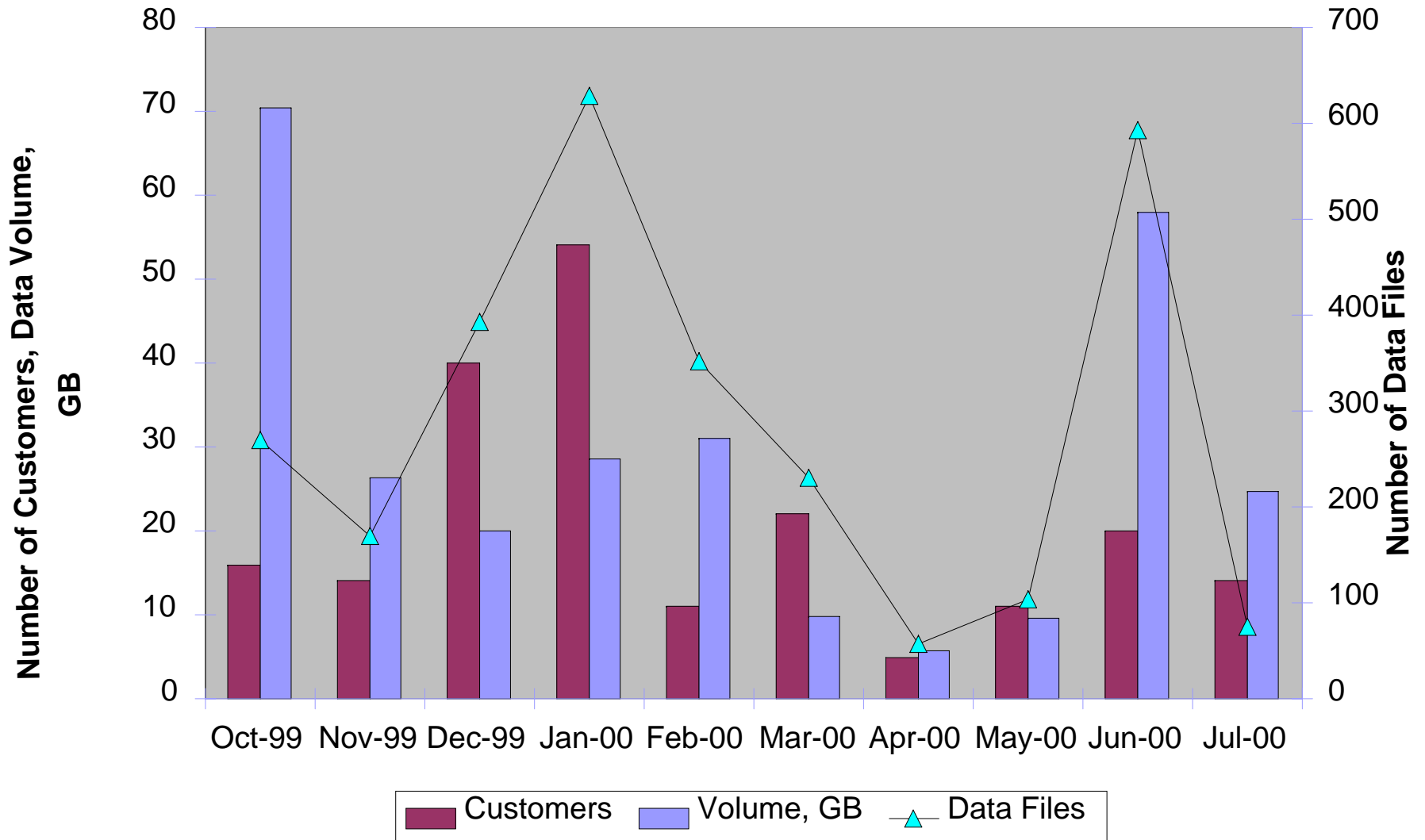
- **Obtain one or more complete files of product of interest**
- **Use files and corresponding Guide to determine parameters of interest**
- **Request subset of parameters of interest for several files**
- **Verify subsetting data before requesting subsets for full period of interest**

To request subsetting data

- **User must provide subsetting requirements and select desired medium for file transfer**
- **Send requests to: LaRC DAAC User Services at larc@eos.nasa.gov**

CERES Data Distributed from LaRC DAAC

1.4 GB/customer, 14 files/customer, 100 MB/file



URL's of Interest

- CERES home page with links to DAAC, documentation, quicklook results
<http://asd-www.larc.nasa.gov/ceres/ASDceres.html>
- Full list of CERES data sets and associated links
http://eosweb.larc.nasa.gov/PRODOCS/ceres/table_ceres.html
- Langley DAAC with links to data order tool and download view_hdf
<http://eosweb.larc.nasa.gov/>
- Instrument Operations and Housekeeping Data Statistics, link to Terra input availability
http://earth-www.larc.nasa.gov/ceresweb/instr_pub.html
- ERBE-like Public Web Page
http://earth-www.larc.nasa.gov/erbelike/pub_cdval
- SSF Public Web Page
http://earth-www.larc.nasa.gov/ssf/pub_ssf/
- SARB Working Group
<http://srbsun.larc.nasa.gov/sarb/>
- Surface Properties
http://tanalo.larc.nasa.gov:8080/surf_htmls/SARB_surf.html/