

view_hdf

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Introduction

- NASA Langley Research Center has developed the Clouds and the Earth's Radiant Energy System (CERES) instrument to study the Earth's climate and environment
- The CERES Data Management System has been developed by the Atmospheric Science Division to generate science data products from the instrument measurements
- This system is now operational at the Langley Atmospheric Sciences Data Center (ASDC) producing archival data sets written in Hierarchical Data Format (HDF)

Introduction

- A visualization and analysis tool (`view_hdf`) has been written in Interactive Data Language (IDL) to access data from HDF products
- This tool is developed with graphical user interface (GUI) to manipulate the data
- Although this tool is developed for CERES project, it is of general use with other data sets written in HDF

Capabilities of view_hdf

- Select and subset variables from either Science Data Sets (SDS) or Vdata structures
- Display vgroups
- Render both two and three dimensional graphics
- Plot geolocated data onto various world map projections
- Plot multiple variables

Capabilities of view_hdf

- Do simple arithmetic operation of two variables
- Compute statistics
- Create subset of data based on the range of another criterion variable
- Do curve fit and regression
- Do Histogram

Capabilities of view_hdf

- Extract bits from data
- Display data from the screen
- Save plot in Postscript or GIF format
- Send plot directly to a printer
- Export data to an ASCII format or HDF file
- Execute user defined IDL procedure

User's Guide

- The URL for the user's guide of view_hdf is:

http://asd-www.larc.nasa.gov/ceres/collected_guide/list.html

- The URL for download view_hdf is:

http://eosweb.larc.nasa.gov/HPDOCS/view_hdf.html

Contacts for Data Center/Data Access Information

Science, User and Data Services Office

Atmospheric Sciences Data Center

NASA Langley Research Center

Mail Stop 157D

2 South Wright Street

Hampton, VA 23681-2199

USA

Telephone: (757) 864-8656

FAX: (757) 864-8807

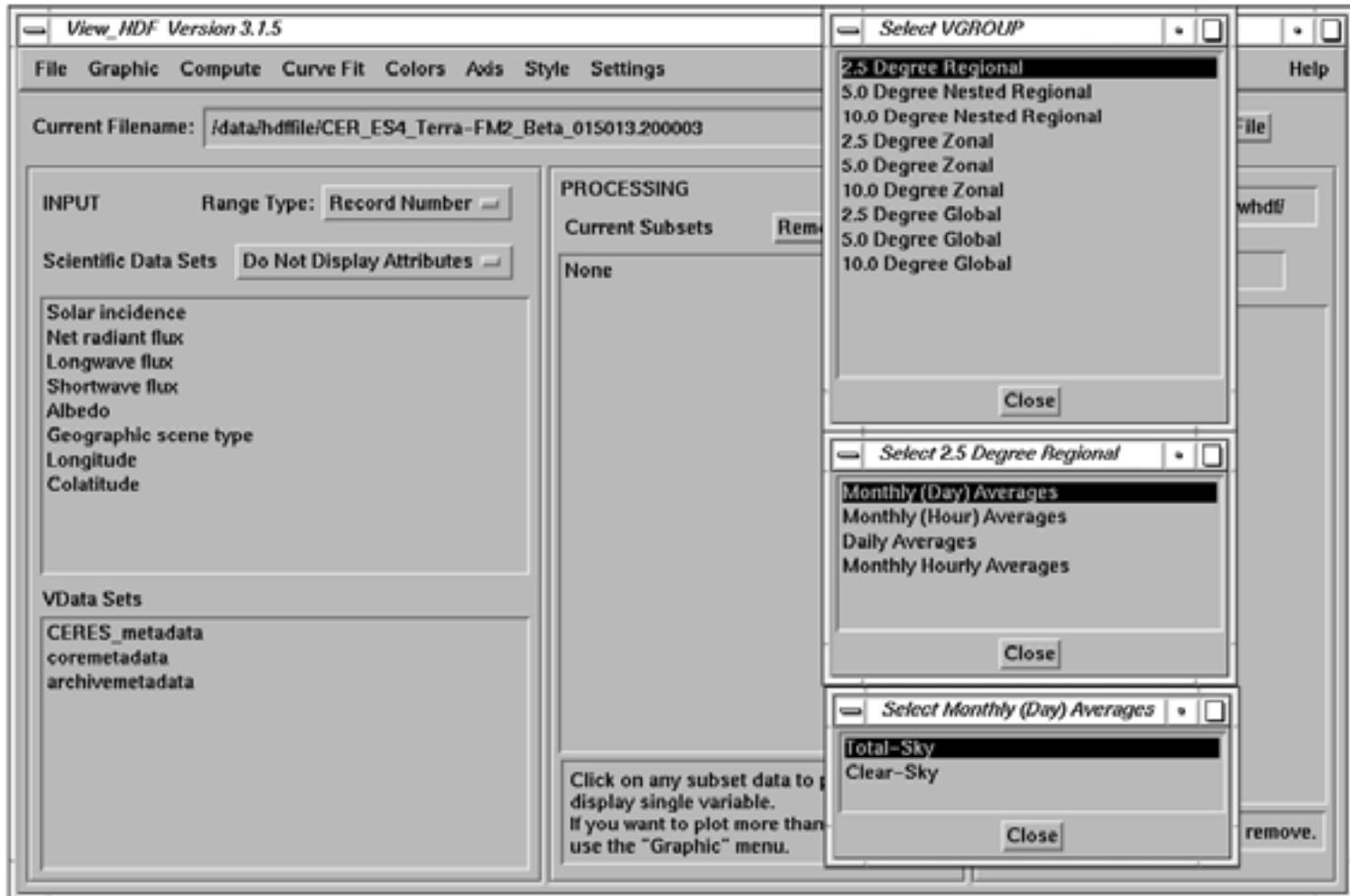
E-mail: larc@eos.nasa.gov

URL: <http://eosweb.larc.nasa.gov>

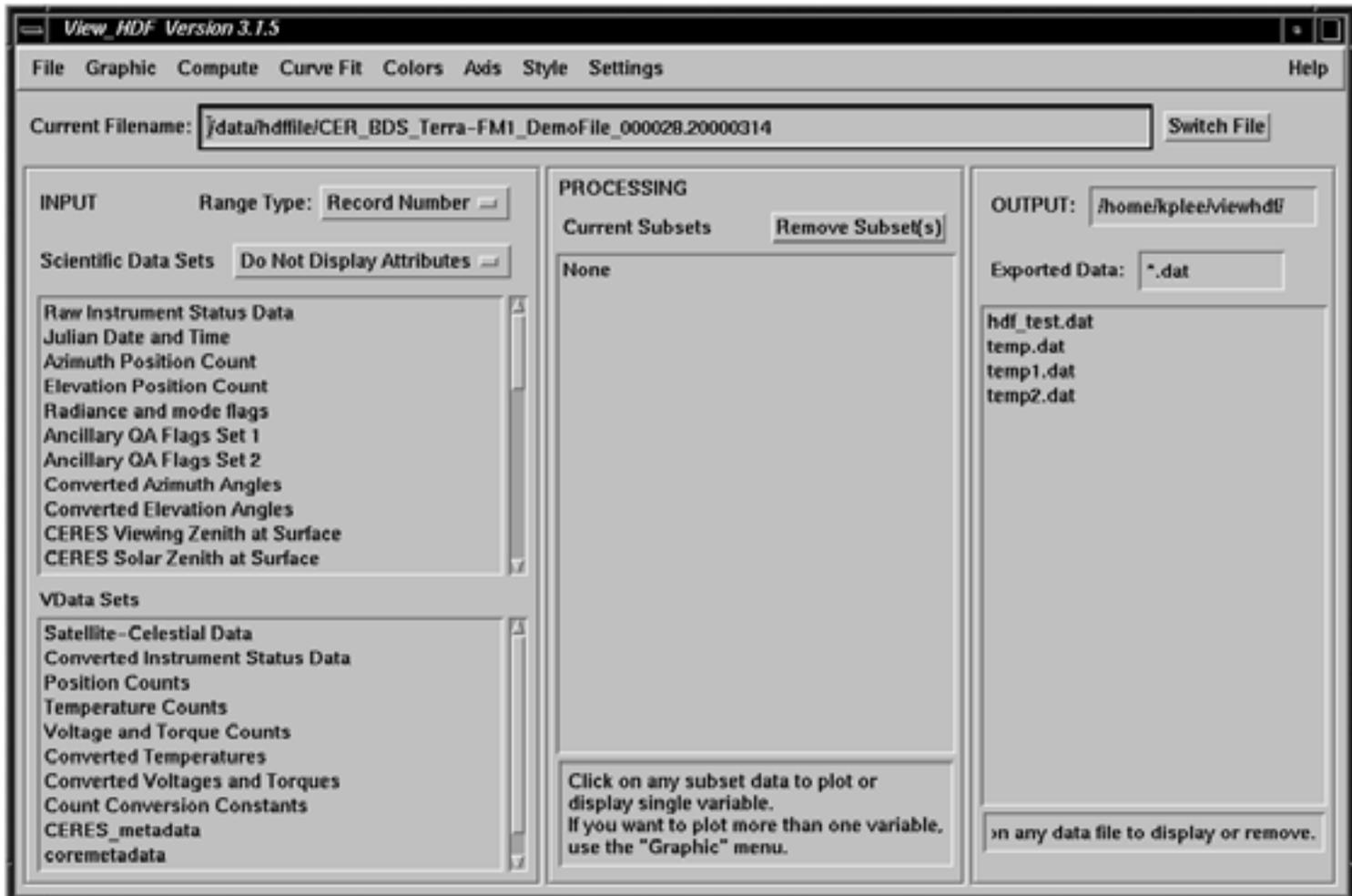
Main Menu



Open with Vgroup



List SDS and Vdata Names



Range Input Window

Subset Data

Subset Name: CERES TOT Filtered Radiances Upwards[0]

	Starting	Ending	Increment
Records:	1	12068	1
Samples:	1	660	1

Done Reset Cancel

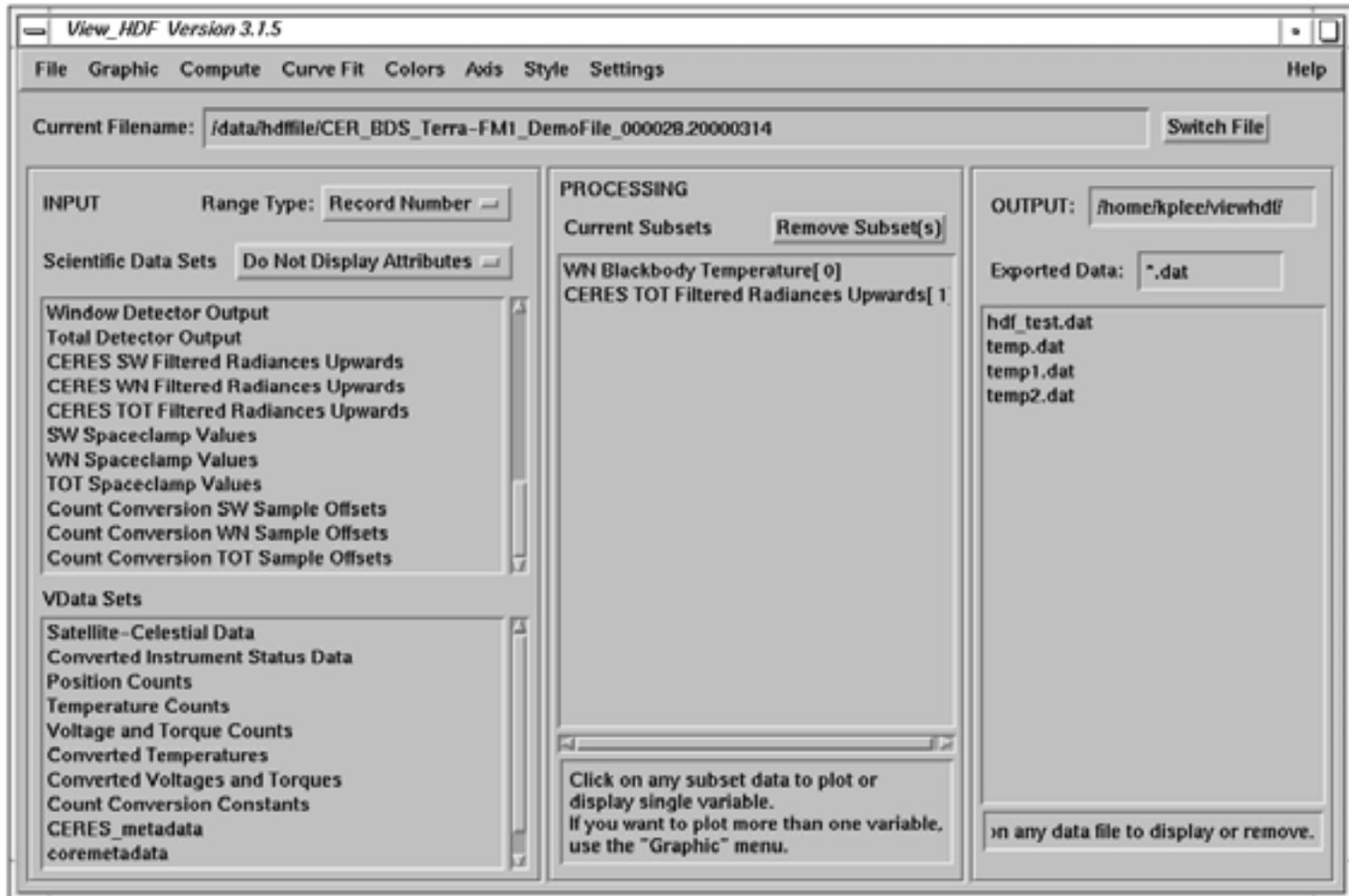
Subset Data

Subset Name: WN Blackbody Temperature[0]

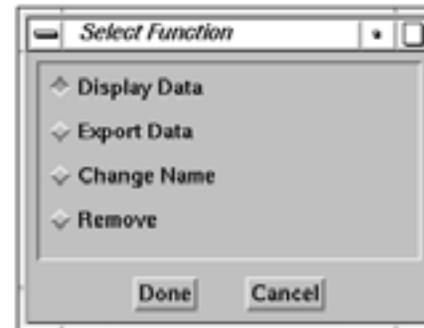
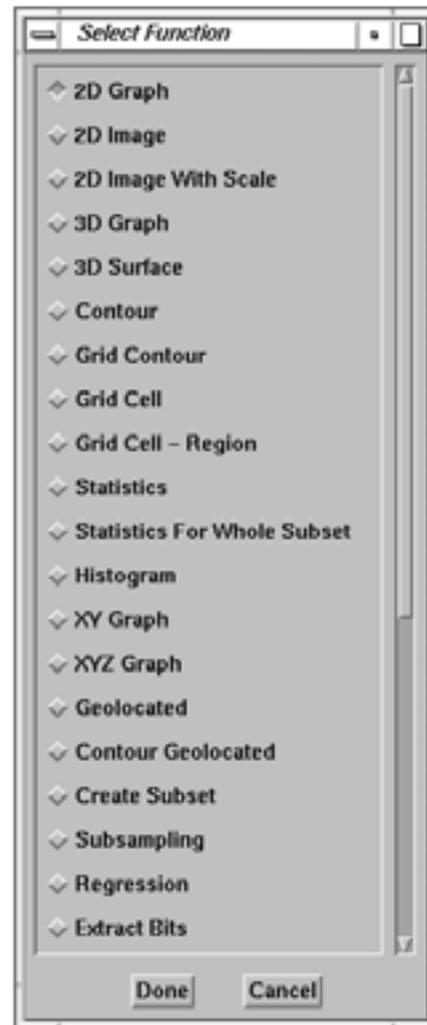
	Starting	Ending	Increment
Record Number:	1	12068	1
Order Number:	1	12	1

Done Reset Cancel

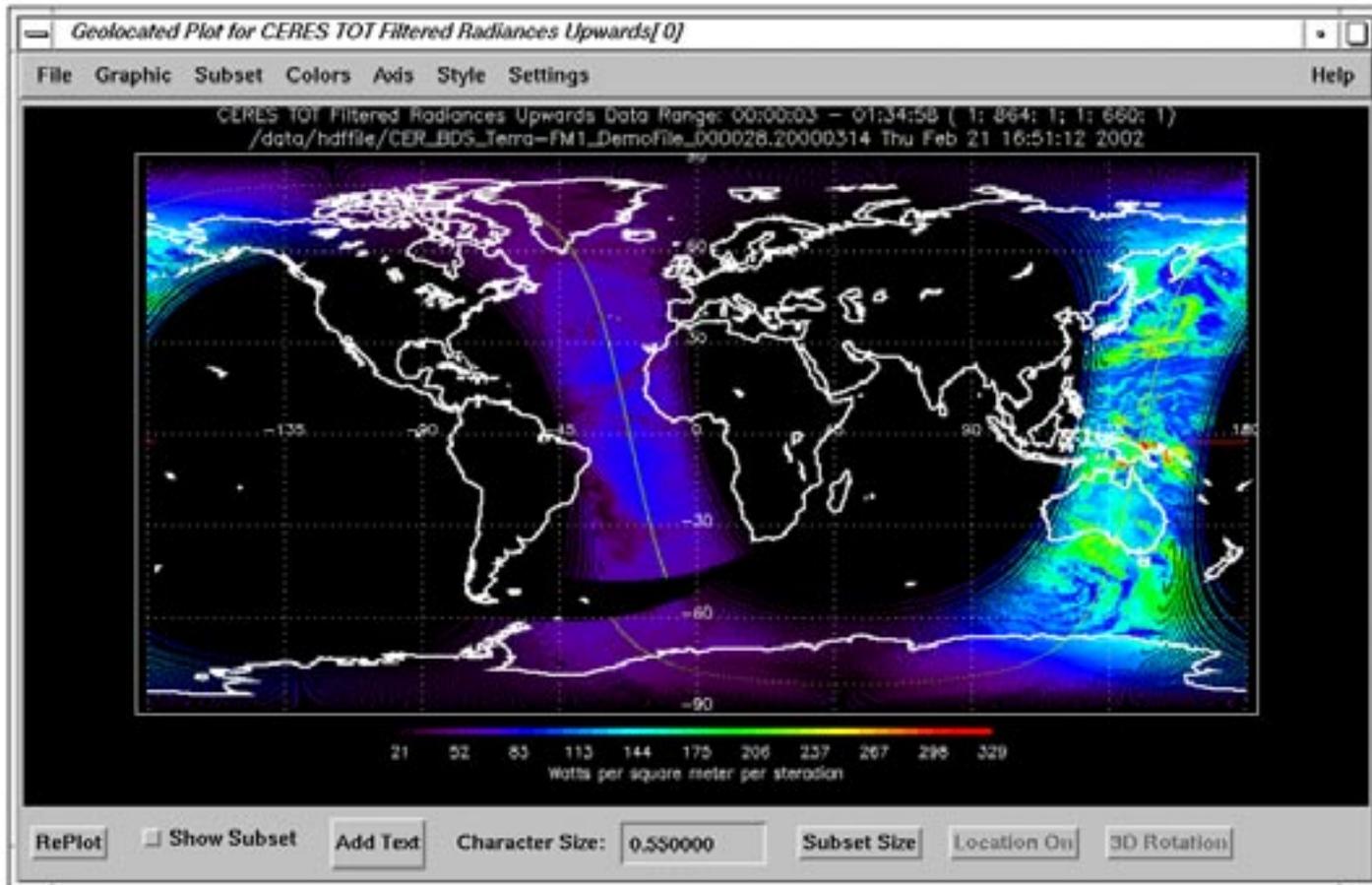
Import Data



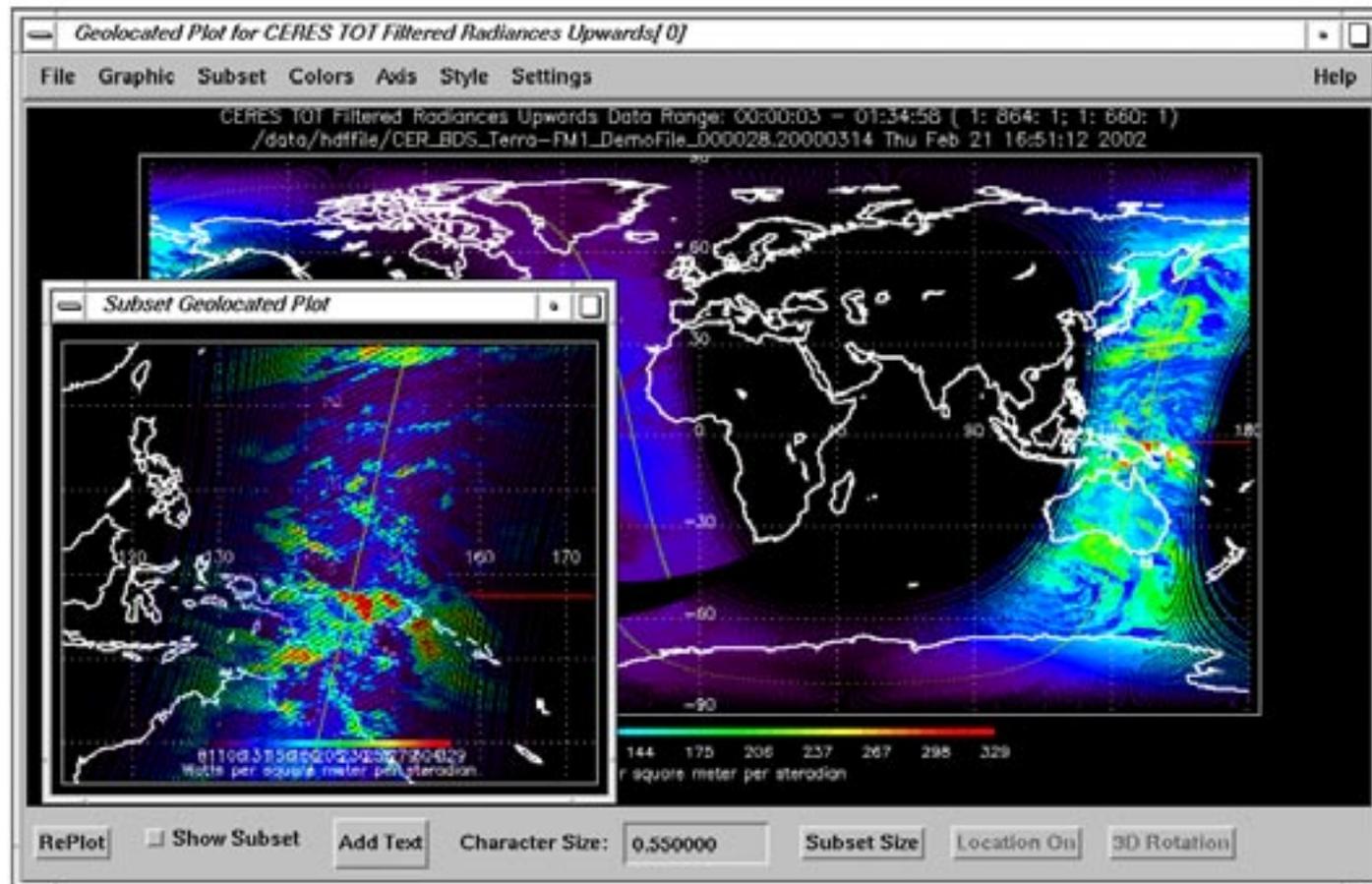
Select Graphic Menu



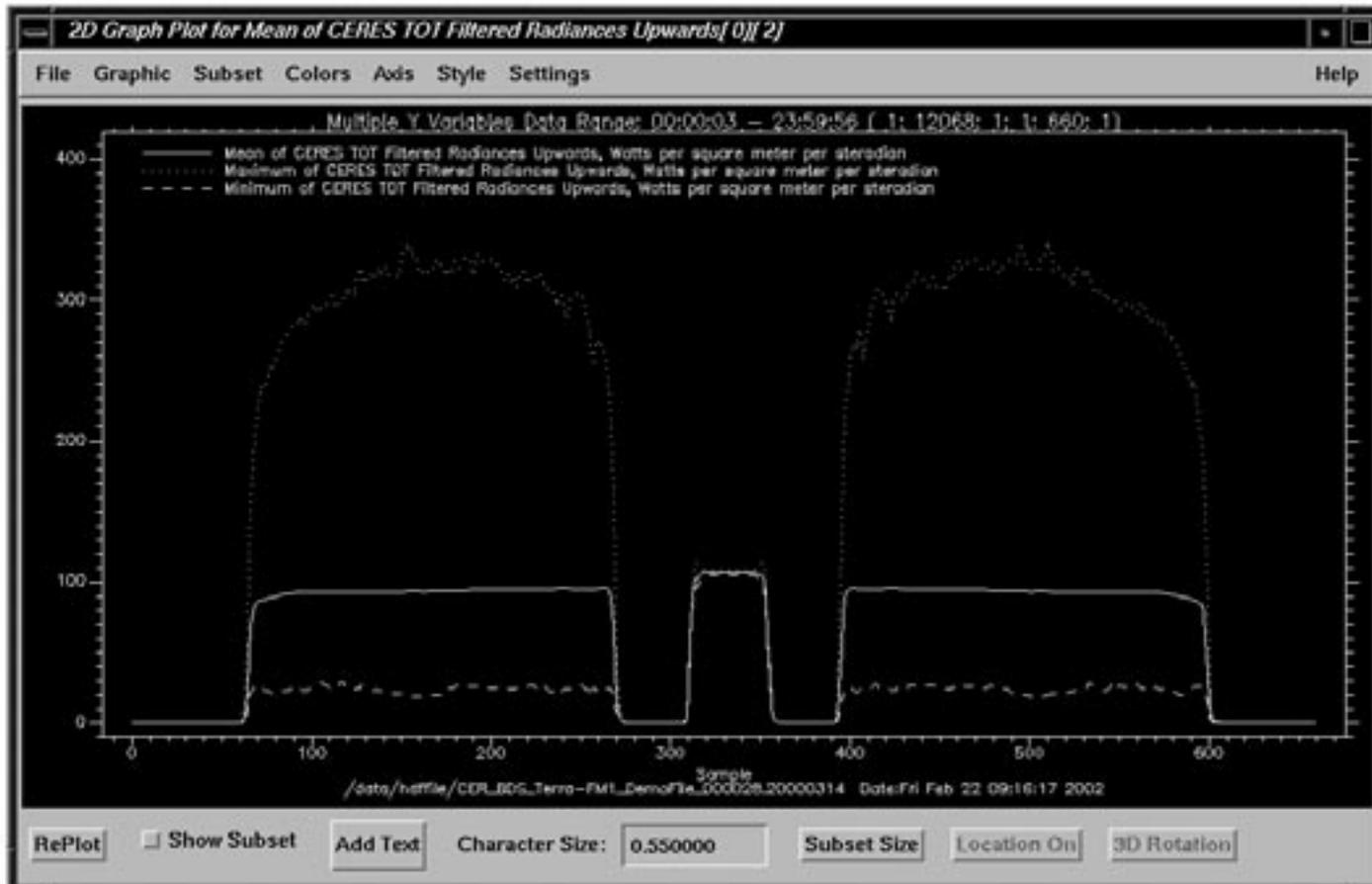
Geolocated Plot



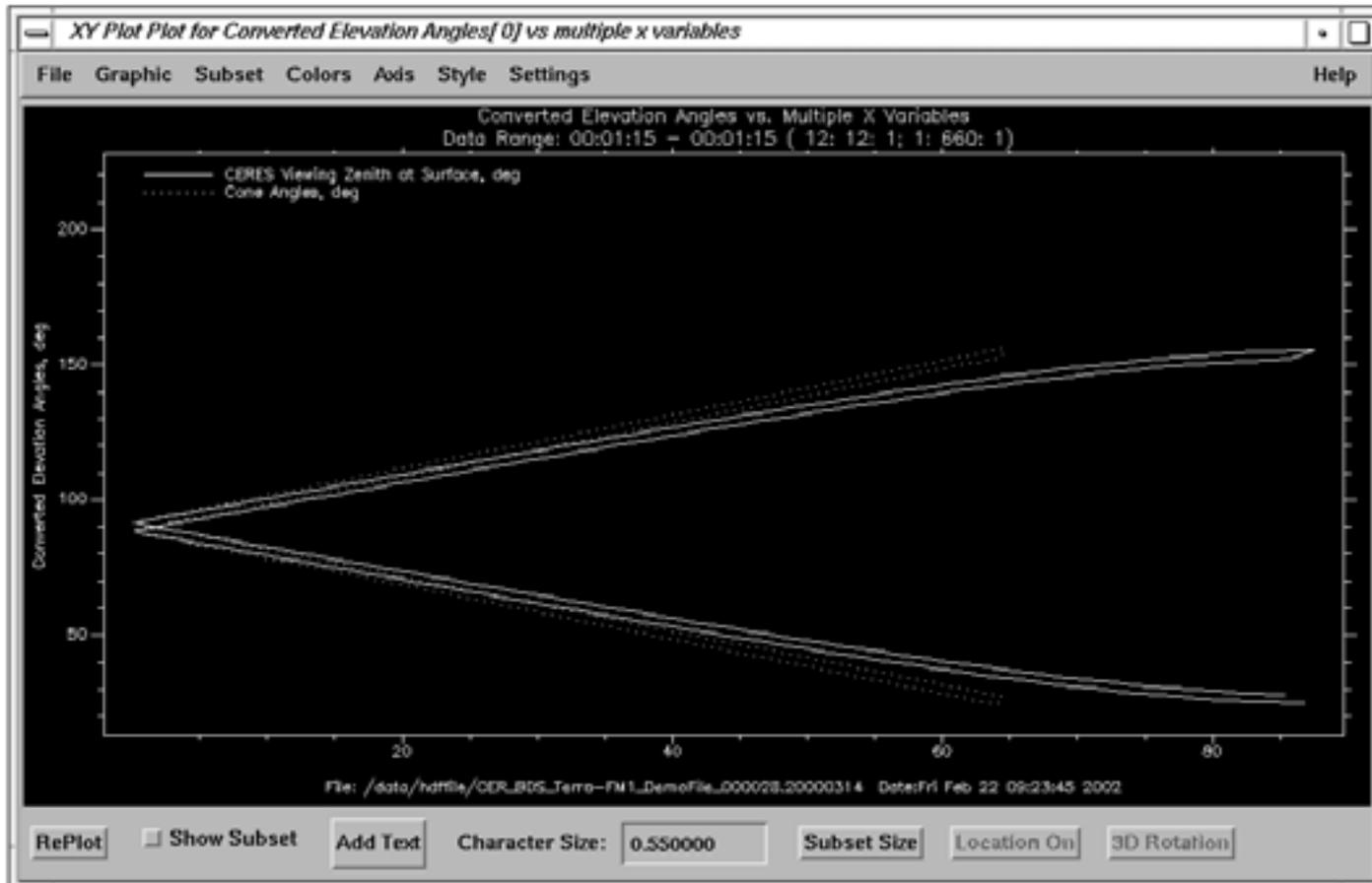
Show Subset Region



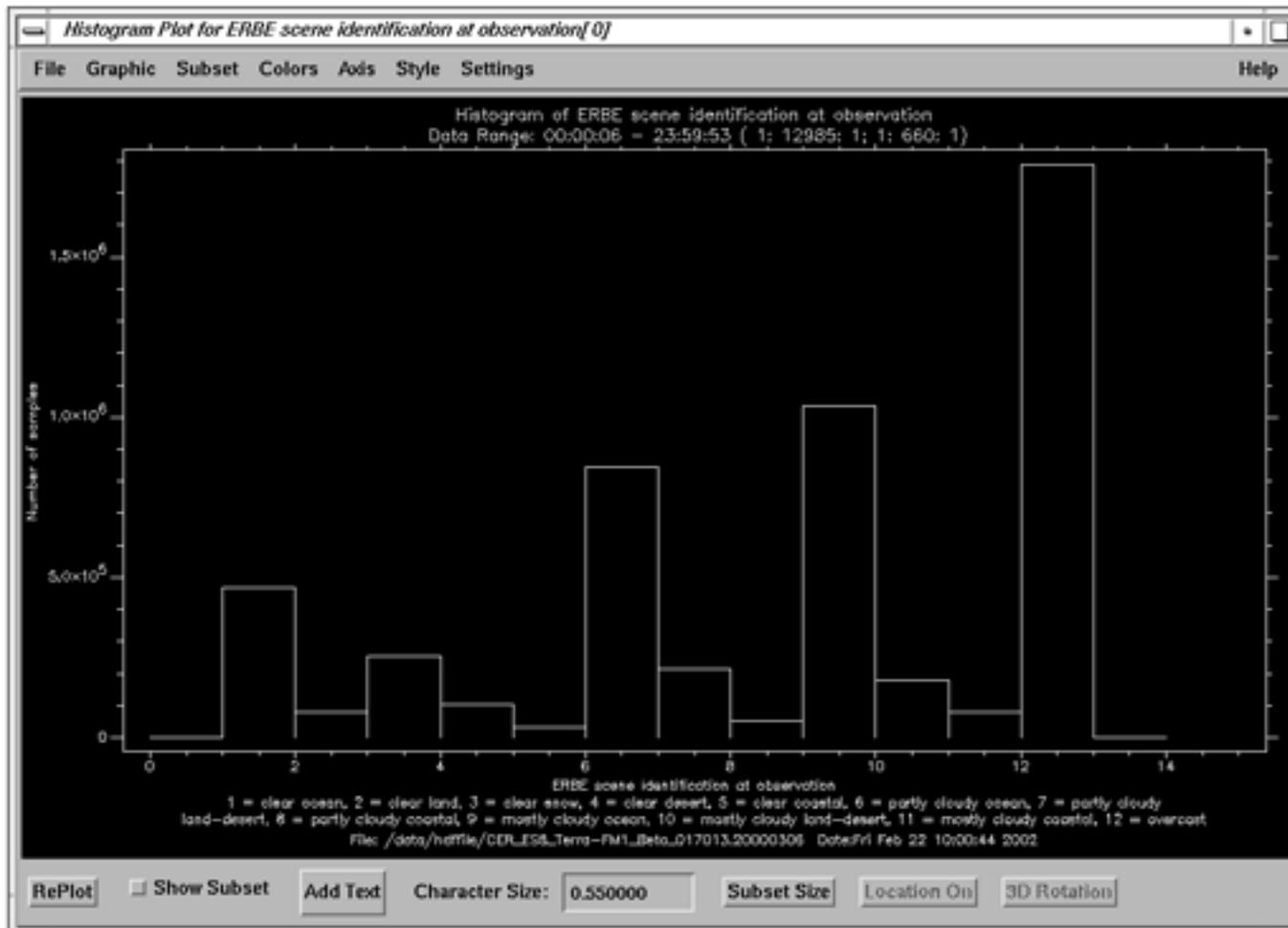
Multi Y Variables Plot



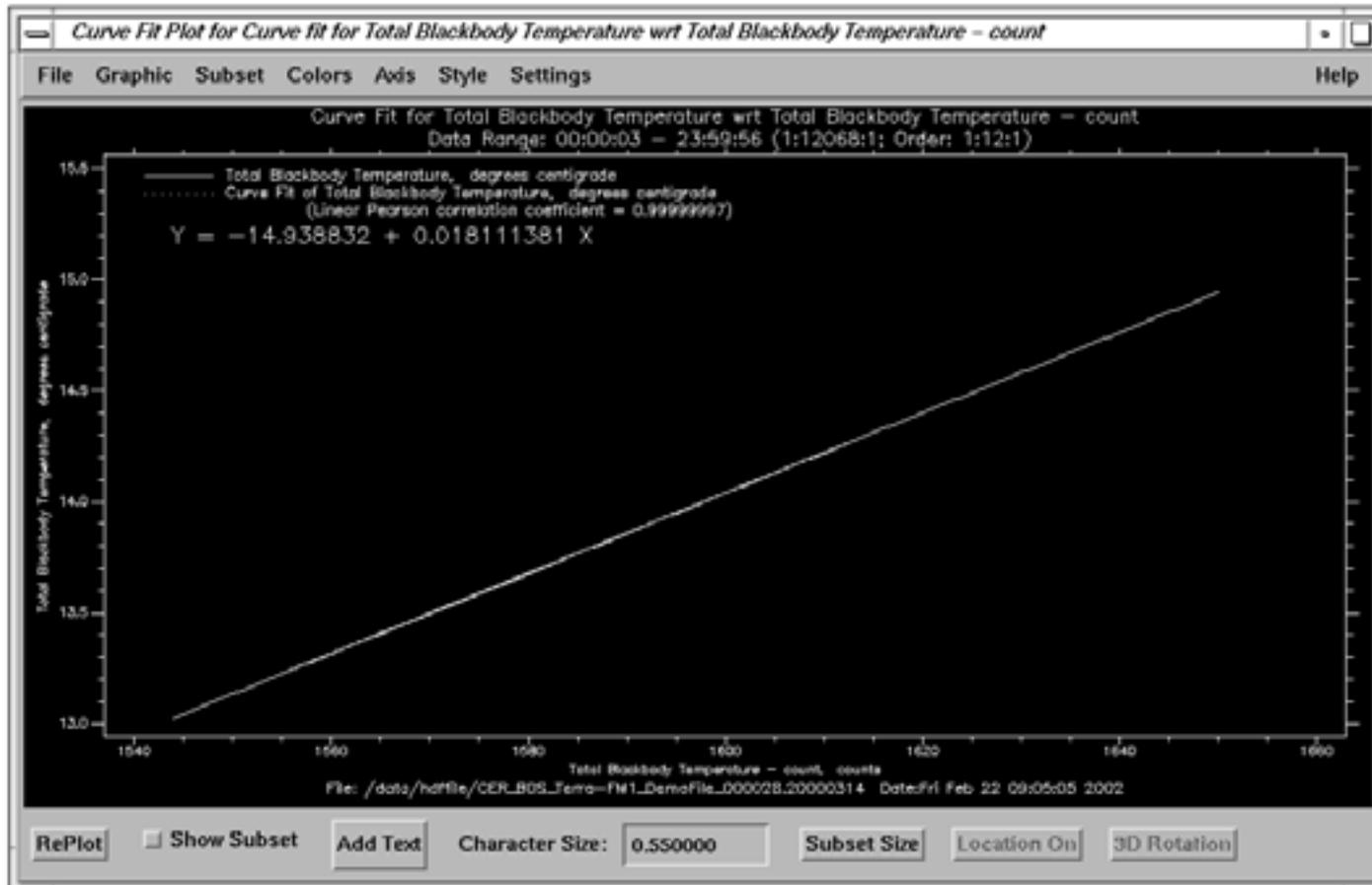
Multi X Variables Plot



Histogram of Scene ID



Curve Fit



Grid Contour Plot

