

Field Data Merging for CONTRAST



Shawn Honomichl



22 October 2013



Purpose: Provide a quick, no-hassle means of viewing all available instrument/aircraft data in the field.

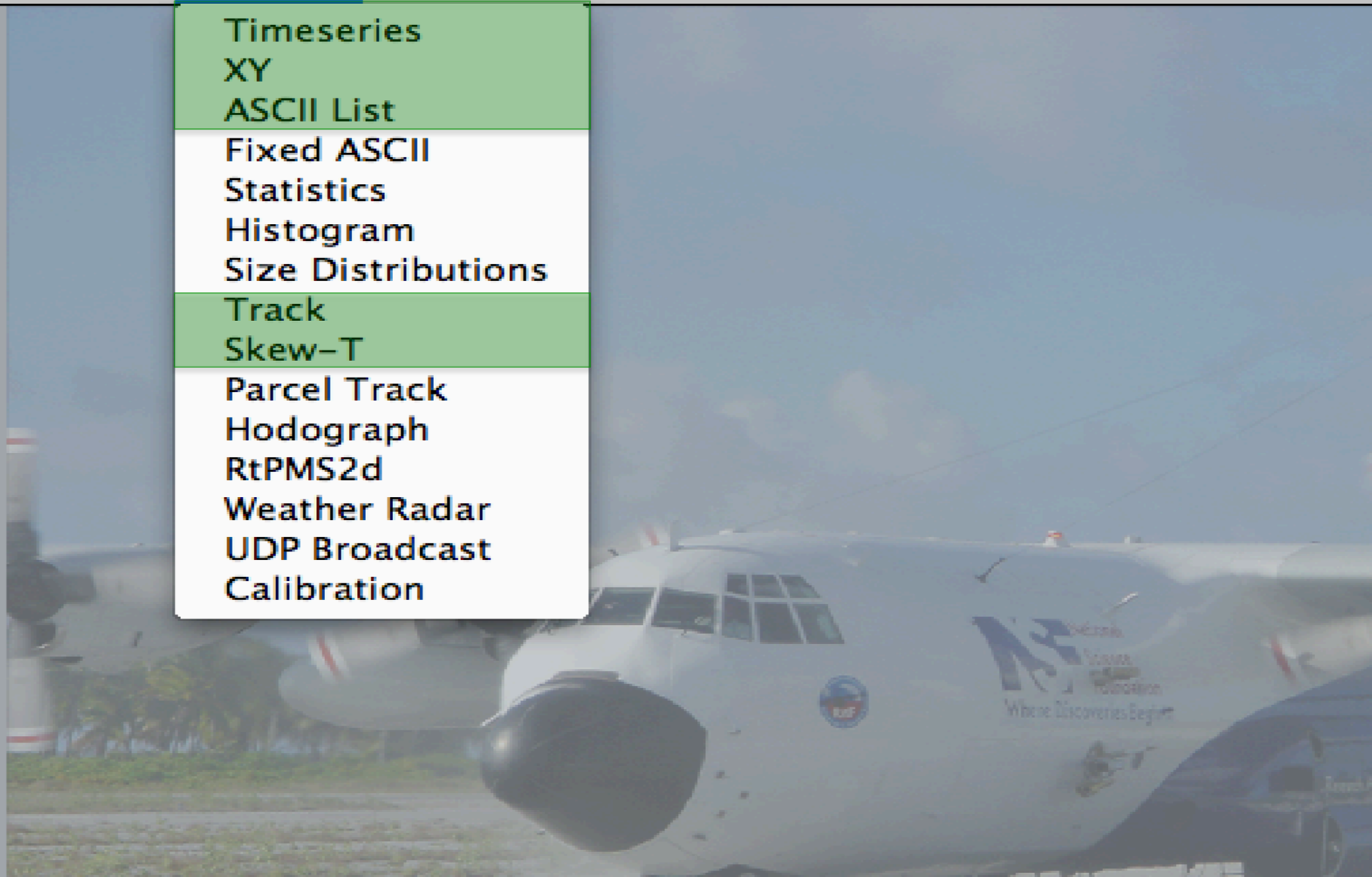
- **Merge files designed to work with NCAR EOL AEROS Software.**
 - **Freely available at http://www.eol.ucar.edu/raf/Software/aeros_dnld.html**
 - **Or just Google search “NCAR AEROS”.**
 - **Available on all major operating systems.**
 - **Mac**
 - **Windows**
 - **Linux**
 - **Easy-to-use graphical user interface.**
- **Merges generated from submitted instrument files.**
 - **Ideal if field data submitted within 24-48 hours.**
- **Option to include interpolated model variables.**
 - **GFS.**
- **Open to ideas about other things to include in merges.**



AEROS Displays

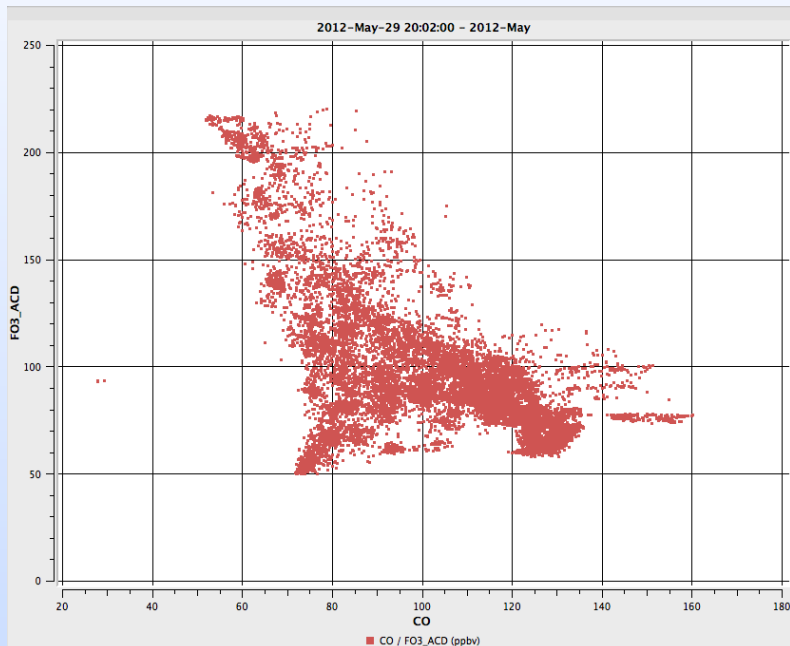
File Edit View **Displays** Windows Help

- Timeseries
- XY
- ASCII List
- Fixed ASCII
- Statistics
- Histogram
- Size Distributions
- Track
- Skew-T
- Parcel Track
- Hodograph
- RtPMS2d
- Weather Radar
- UDP Broadcast
- Calibration



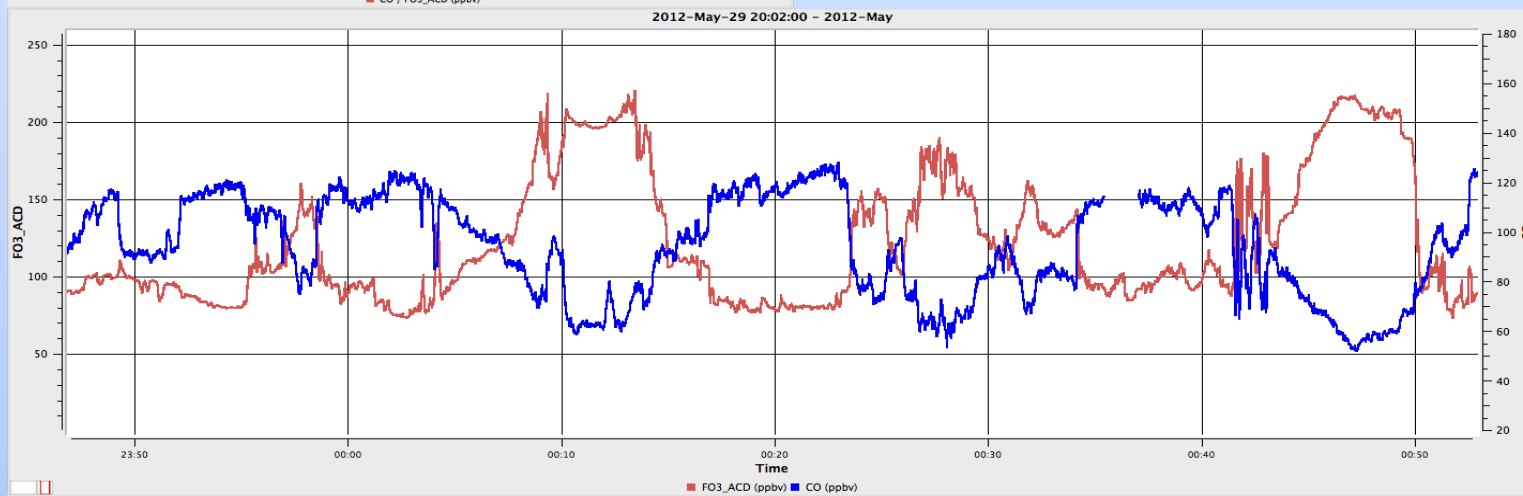


AEROS Displays



X-Y

Time Series





AEROS Displays

ASCII List – Customizable and exportable

ASCIList

File Edit View

2012-May-29 20:02:00 - 2012-May

	CO (ppbv)	FO3_ACD (ppbv)	TROP_PRESS (P)	NO (pptv)
22:13:22	82.7	96.532	9843.53	25.627
22:13:23	80.5	96.993	9842.48	13.404
22:13:24	80.4	99.425	9841.4	12.556
22:13:25	80.3	105.75	9840.3	12.088
22:13:26	79.6	112.62	9839.2	13.891
22:13:27	81.6	116.69	9838.08	23.132
22:13:28	80.4	119.73	9836.94	25.405
22:13:29	82.3	120.55	9835.78	47.877
22:13:30	84.8	119.58	9834.61	31.907
22:13:31	86.9	119.03	9833.42	52.187
22:13:32	88.2	117.29	9832.22	45.287

Save ASCII Configuration

Delimiter: Comma Space

Date/Time Format:

Mixed-rate fill value: Replicate prev Leave blank

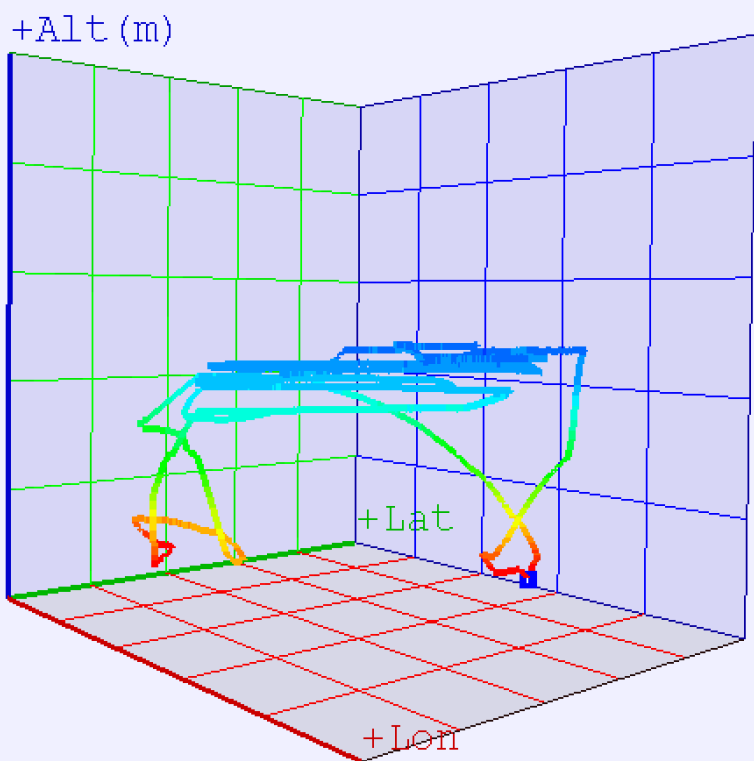
```
DATE,UTC,CO,FO3_ACD,GFS_TROP_PRESS,NO
2012-05-29,20:02:00,-99999,-999999.9,23287.27,-999999.9
2012-05-29,20:02:01,-99999,-999999.9,23286.82,-999999.9
2012-05-29,20:02:02,-99999,-999999.9,23286.38,-999999.9
2012-05-29,20:02:03,-99999,-999999.9,23285.95,-999999.9
2012-05-29,20:02:04,-99999,-999999.9,23285.47,-999999.9
2012-05-29,20:02:05,-99999,-999999.9,23285.04,-999999.9
2012-05-29,20:02:06,-99999,-999999.9,23284.56,-999999.9
2012-05-29,20:02:07,-99999,-999999.9,23284.08,-999999.9
2012-05-29,20:02:08,-99999,-999999.9,23283.61,-999999.9
2012-05-29,20:02:09,-99999,-999999.9,23283.13,-999999.9
```

OK Cancel

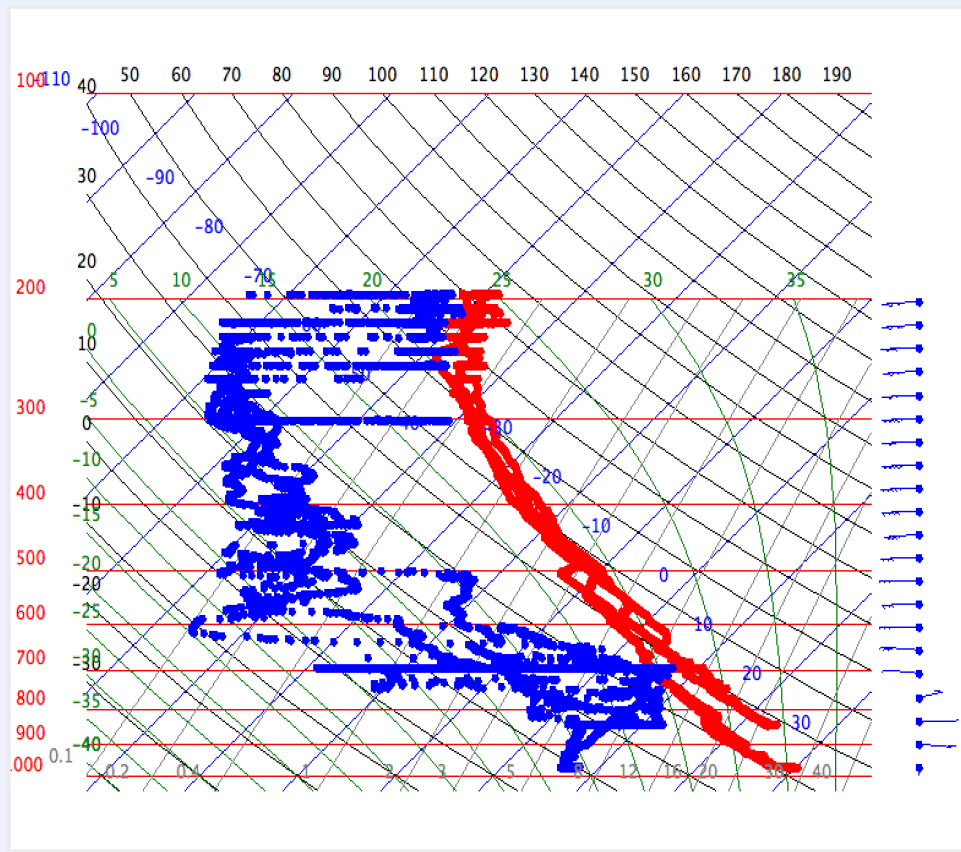


AEROS Displays

Aircraft Track



Skew-T



Navigating Files in AEROS

The screenshot shows the 'DataSet Selection' window with the following structure:

- Buttons: Expand All, Collapse All, Filter text: []
- Navigation: File, File then Category, Category
- Table Headers: Data Sets, Units, Type/Title
- Tree View:
 - netcdf (post-proce... /Users/shawnh/Desktop/DC3_Data/GV/V02/DC3-MERGE_NCAR_A...)
 - AEROSOL
 - CAMS_CH2O[MISSING]
 - CLOUDS
 - CO
 - GFS-FNL
 - GFS_2PVU_HGT (gpm): GFS-FNL Interpolated 2 PVU Geopotential Height
 - GFS_2PVU_PRESS (Pa): GFS-FNL Interpolated 2 PVU Pressure
 - GFS_2PVU_TEMP (K): GFS-FNL Interpolated 2 PVU Temperature
 - GFS_PV (PVU): GFS-FNL Interpolated Potential Vorticity
 - GFS_TEMP (K): GFS-FNL Interpolated Air Temperature
 - GFS_TROP_HGT (gpm): GFS-FNL Interpolated Troposphere Geopotential Height
 - GFS_TROP_PRESS (Pa): GFS-FNL Interpolated Troposphere Pressure
 - GFS_TROP_TEMP (K): GFS-FNL Interpolated Troposphere Temperature
 - GFS_U_WIND (m/s): GFS-FNL Interpolated U-Component Wind Velocity
 - GFS_V_WIND (m/s): GFS-FNL Interpolated V-Component Wind Velocity
 - GTCIMS
 - HARP
 - Housekeeping
 - NOx
 - O3
 - PCIMS
 - PICARRO
 - Position
 - SMPS
 - TOGA
 - Thermodynamic
 - Time
 - VCSEL
 - Wind

Y axis = None selected

Buttons: Help, Close

Questions?