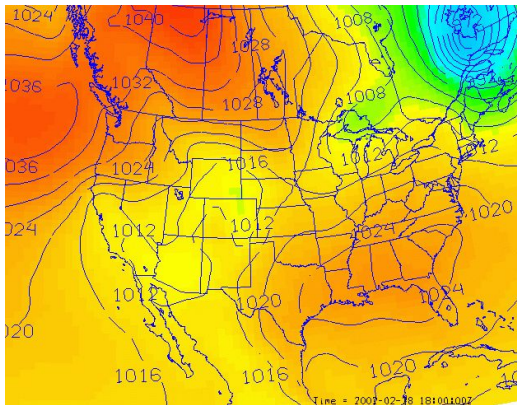
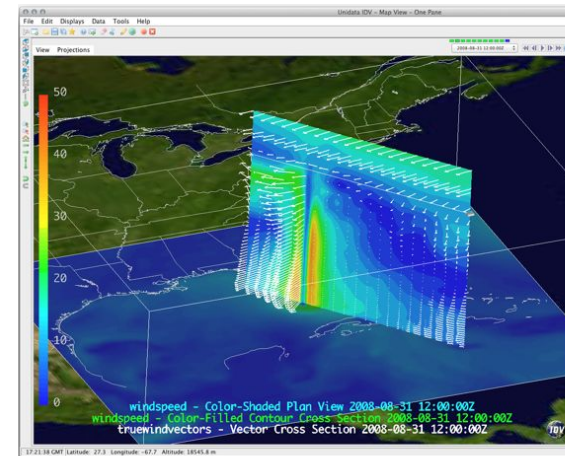


Advancing netCDF-CF for the Geoscience Community



Ethan Davis
UCAR Unidata



ESIP Winter Mtg 2017
12 January 2017
Advancing netCDF-CF Session

EarthCube netCDF-CF Project

Goals

- Explore use of new netCDF features
- Enhance CF for use across earth system science
- Coordinate with community groups and standards bodies

Partners and Collaborators

- UC Irvine, U of TX Austin, Univ of Washington/JISAO and NOAA/PMEL, Univ of Wisconsin/SSEC, The HDF Group, NCAR/EOL
- NOAA, NASA, USGS, UK NCAS, NCI, CSIRO, ...

Extending CF

- Swath data (satellite and lidar)
- CF-Radial for radar data
- CF DSG for station, profile, and track data
- Simple Geometries in CF (river segments, drainage basins, etc)
- Unstructured Grids
- Linked Data and netCDF-CF
- Hierarchical structures
- ISO Metadata

CF Standard Names

- Precisely describe the physical quantity represented by a data variable
- New standard names
 - Name, canonical units, and definition
 - Follow guidelines for constructing
 - Propose to CF mailing list for discussion
- Working with other controlled vocabularies
 - GCMD Science Keywords
 - SWEET Ontologies
 - GRIB
 - CSDMS

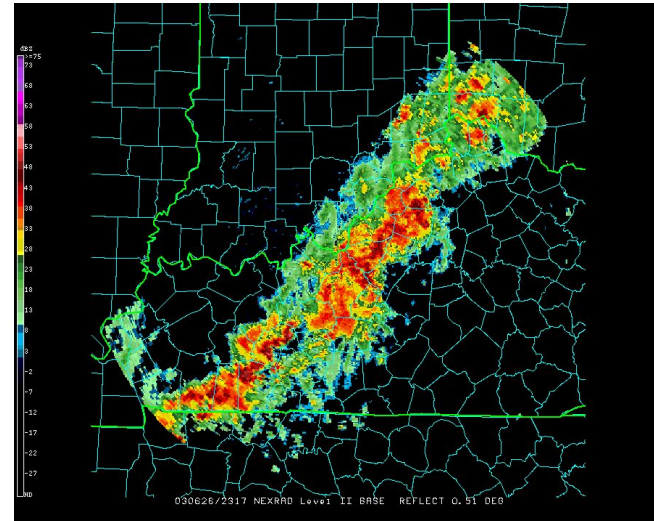
User Tools for netCDF-CF

- For Data Users

- Ferret
- IDV and McIDAS-V
- ArcGIS
- Panoply

- Data Providers

- netCDF-C and -Java libraries, python, R, C++, etc.
- NCO
- Compliance checkers



CF Governance and Process

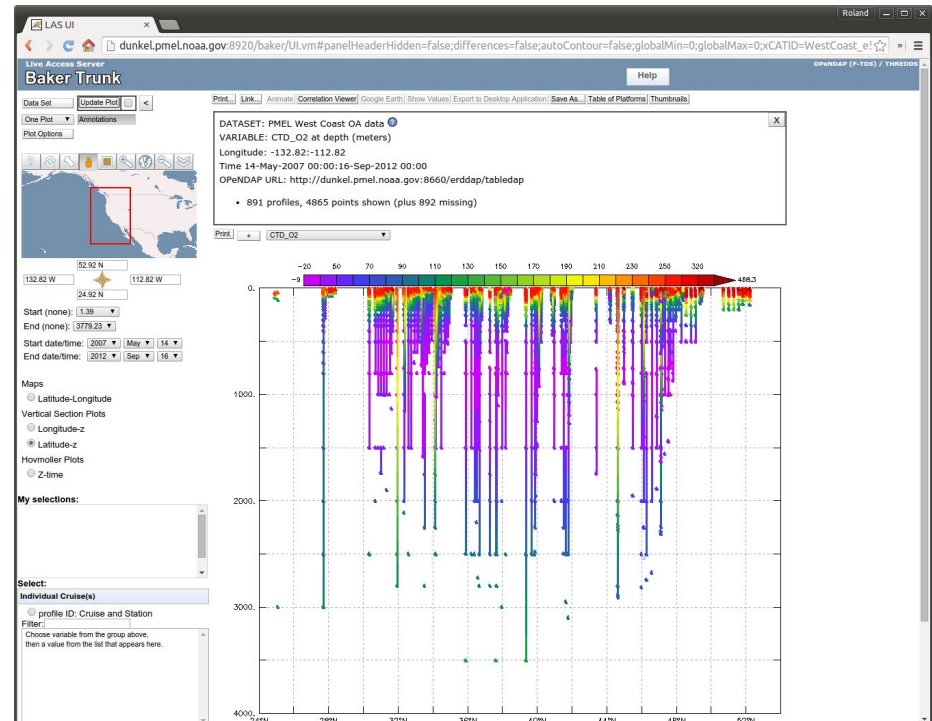
- A largely volunteer driven community effort
- Coordinate with (and within)
 - OGC, RDA and other standards bodies
 - ESIP, EarthCube, and other earth system science community groups
- Sustaining a community standards group (convention)

Advancing netCDF-CF

Thank You!

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