Demos of OIIP Visualization Tool, CSV to netCDF-CF Using Rosetta, and THREDDS 5.0

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Connection Information

https://global.gotomeeting.com/join/157892821
You can also dial in using your phone.
United States: +1 (312) 757-3121
Access Code: 157-892-821

Presentation

Recording

Attendees

Jocelyn Elya, Carolina Berys-Gonzalez, Alex Kozyr, Vardis Tsontos, Sean Arms, Stace Beaulieu, Karen Stocks, Steve Diggs, Kevin O'Brien, Megan Carter, Jorge Vazquez, Eugene Burger, Cynthia Hall

Minutes

1. Rosetta
    a. https://rosetta.unidata.ucar.edu/cfType

b. Tool to convert ASCII data into a machine readable data format with metadata without needing to learn to program or know the ins and outs of netCDF
    i. Important for people closest to the data to do this conversion
    ii. Development started in late 2011. Written into Unidata's latest 5 year grant.
c. Abstract away many of the CF-netCDF details
d. First, select from examples in populatr communities
e. CTD example
    i. Upload CSV file. Select which fields are your header.
    ii. Based on variable names you put in, Rosetta narrows down the CF standard name list to possible matches.
    iii. Controlled drop-down list of standard_name options
    iv. Unit builder interface
    v. Prompt the user for required and recommended metadata
f. Template
    i. JSON with all metadata and parsing info from Rosetta session
    ii. Can upload into GUI with data file
    iii. Can also upload supplemental metadata file to modify some pieces of template
g. Can zip data files, metadta files, and template. Zip and upload to batch processing web interface (just a webservice)
    i. https://rosetta.unidata.ucar.edu/batch/batchProcess.html
h. Questions
    i. Eugene - Units builder. +/- for saving. Want to add valid unit checks.
    ii. Carolina - are some steps required before the next ones? Yes. Will check for coordinate variables before final file is created. Want to move this check into the GUI. Must fill out required metadata.

2. THREDDS 5.0
    a. In Beta testing right now
    b. Built around web services, so the UI is lacking
    c. Now there's a template to customize the look
    d. Producing JSON-LD based on metadata in catalog and granules. Google Dataset search can parse these.
    e. Aggregation services
    f. New services - CdmRemote. Better than OPeNDAP for large downloads.
    g. Uses Godiva3 for web-based visualization

    h. Jupyter Notebook viewer
    i. All services can be turned off and on individually
        i. Used to be turned off by default, but with 5.0, THREDDS will guess which services should be enabled by default based on data types
    j. Hopefully releasing 5.0 this summer.
3. OIIP Data Visualization Tool
    a. https://oiip.jpl.nasa.gov/
    b. To explore satellite data with in situ data, in horizontal and vertical directions
    c. Can use with any data hosted in NASA GIBS
    d. Chart creation and maps
    e. Built off of Common Mapping Client at JPL. Open Source.