# An Introduction to OIIP and THREDDS

Vardis Tsontos and Sean Arms

Thursday, April 11, 10:30 PST (17:30 UTC)

## **Connection Information**

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### Presentation

<u>Slides</u> <u>Recording</u>

### Attendees

Jocelyn Elya, Vardis Tsontos, Shawn Arms, Alex, Carolina Berys-Gonzalez, Heather Holbach, Mathew Biddle, Megan Carter, Micah Wengren, Sara Haines, Steve Diggs

#### Minutes

- 1. OIIP
  - OIIP funded under NASA ACCESS. ACCESS focuses on high technology readiness level technologies. Goal to support NASA field campaign data and marine animal electronic tagging
  - b. In situ data is inherently diverse, complex, and heterogeneous.
  - c. Enhancement and integration of NCEI .nc templates, CMC, ROSETTA, THREDDS, Tagbase
  - Released all source code on Github. Linked here with documentation and demo videos: <u>https://oiip.jpl.nasa.gov/</u>

- e. 3 key pieces for interoperability: file standards, standard lexicon, metadata standards
- f. Reviewed standards and recommended extensions to NCEI nc template
- g. Web-based visualization tool Common Mapping Client. Synchronized horizontal and vertical views.
- 2. THREDDS
  - a. Thematic Real-time Environmental Data Distributed Services
  - b. 3 initial components: THREDDS catalogs, netCDF-Java, and THREDDS Data Server
  - c. Rosetta (data format translation service) and Siphon new components
- 3. THREDDS Data Server
  - a. Next release will have improvements from OIIP
- 4. Rosetta convert ascii data to standards-compliant netCDF files
  - a. REST web service api. rosetta template json file that stores info on translation process.

#### Questions

- 1. Steve Any attempt to align with the FAIR guidelines?
  - a. Guidelines are very high level, they focused on technical aspects of "I" component. Interoperability.
  - b. Working on white paper for OceanObs, road map for FAIR data
  - c. There's a lot that can be done with existing standards and tools. Do that and also focus on gaps for certain communities that aren't covered by CF.
- 2. Jocelyn Did all components of OIIP start out open source?
  - a. Rosetta and THREDDS started out open source. VSD3 license. Aims for wide use.
  - b. Visualization components had to go through formal process of open sourcing at JPL. Now it's relatively simple to make software open source. Reviewed for copyrights by CalTech.
  - c. NASA-funded tech projects mandate that tech needs to be open source in many cases.
- Micah IOOS annual data management meeting at end of April. April 30 May 2. Forwarded to cluster.
  - a. OIIP Involved with animal telemetry network in IOOS
- 4. Requests for demos
  - a. Rosetta CSV to netCDF

- b. THREDDS spatial subsetting
- c. Data visualization tool