Visualization tools and services PO.DAAC

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About PO.DAAC

Physical Oceanography Distributed Active Archive Center

Official NASA repository for satellite ocean data

Part of a national network of Earth Science Data and Information System (ESDIS) data centers

Completely revamped portal to go public May 1

PO.DAAC Ocean Parameters

- Sea surface temperature
- Sea surface height
- Ocean winds
- Currents and ocean circulation
- Gravity
- Salinity (coming soon)
PO.DAAC Tools & Services

Visualization software development facilitating data:
- Assessibility
- Evaluation
- Interpretation
- Obtainibility
- Understanding
L3/L4 Data Access: POET

- Provides spatiotemporal search, subset, and visualization capabilities for gridded datasets
- Large number of output formats
  - Image: JPG, PNG, GIF
  - Scientific: HDF, NetCDF
  - GIS: GeoTIFF, ArcGrid
- WMS compliant
- New version available May 1
L2 Data Access: Dataminer

- Provides fine-grained (sub-granular) search, imaging and extraction capabilities for swath datasets
- Spatiotemporal search can include unique statistical constraints specific to each dataset
- Access local and remote datasets
- Originally developed at Ifremer
- Coming soon: Dataminer functionality via web services
State of the Oceans

- Near real-time visualization and evaluation tool
- Utilizes Google Earth plug-in
- Combines NRT data, event and feature layers
- Updated multiple times daily
- Powered by back end processing system
  - Generates KML for L2/L3/L4 data products
  - KML pyramids allow for efficient high-resolution data display
- Produces raster- or vector-based KML
- New version available May 1 with updated interface & additional parameter layers

Other Work

- **El Niño and La Niña animations**
  - Semi-automated process
  - Generalized “quick response” capability under development

- **Magic Planet and Puffersphere content**
  - SST, SSTA, SSHA high-resolution imagery
  - Created with modified version of software developed for AIRS Maps From Space
Demos
Questions/Comments?