







# 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**
- 🌐 **Preview: <http://podaac-www.jpl.nasa.gov>**

# PO.DAAC Ocean Parameters

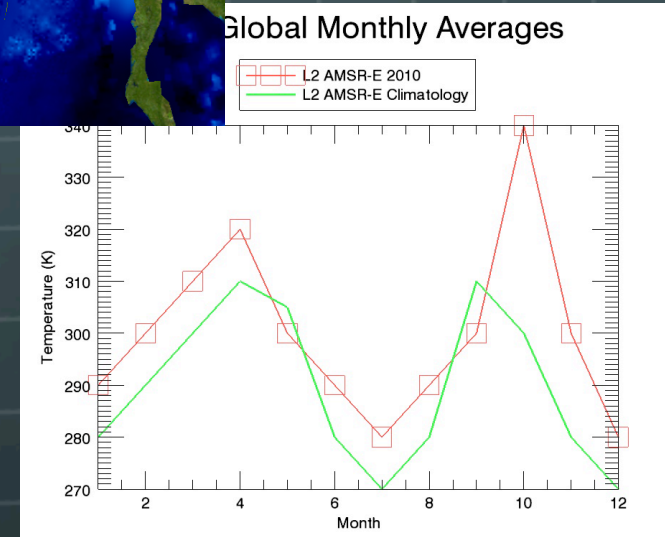
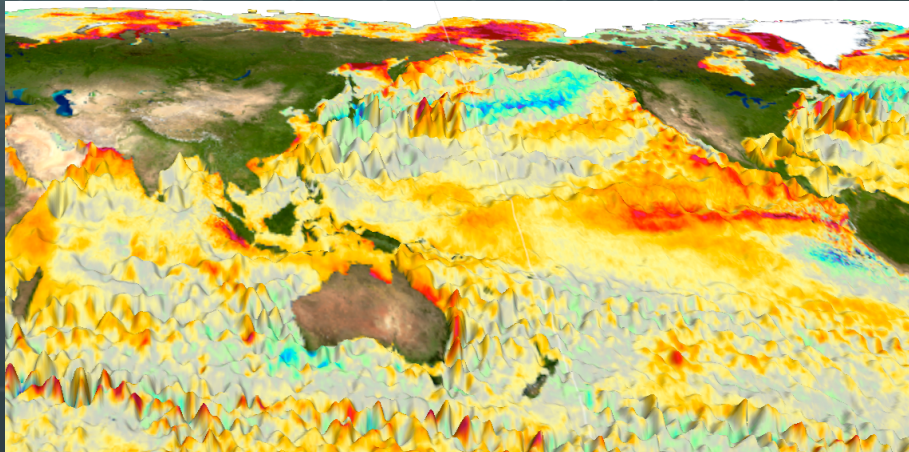
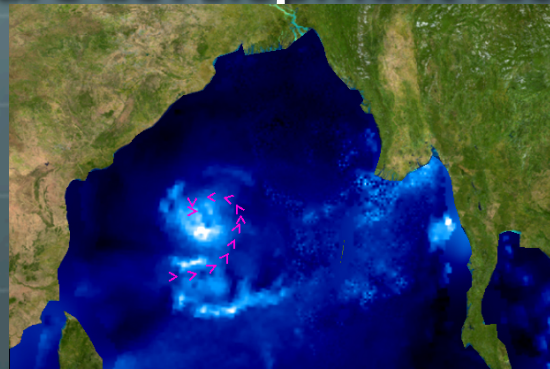
-  Sea surface temperature
-  Sea surface height
-  Ocean winds
-  Currents and ocean circulation
-  Gravity
-  Salinity (coming soon)



# PO.DAAC Tools & Services

Visualization software development facilitating data:

- Assessability
- Evaluation
- Interpretation
- Obtainability
- Understanding





# L3/L4 Data Access: POET

- Provides spatiotemporal search, subset, and visualization capabilities for gridded datasets

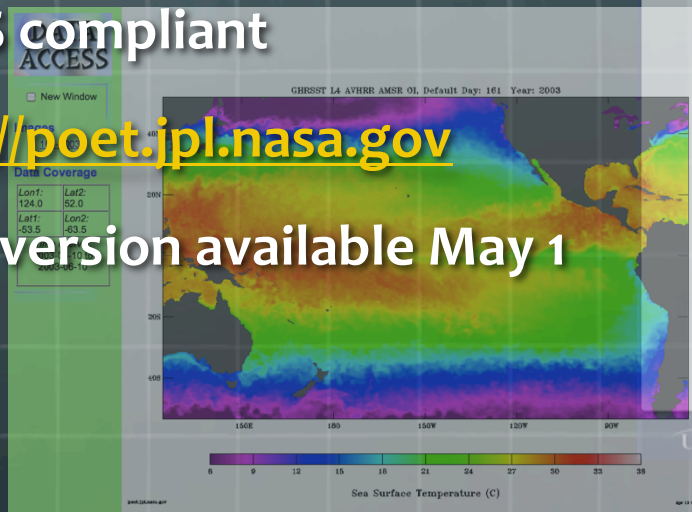
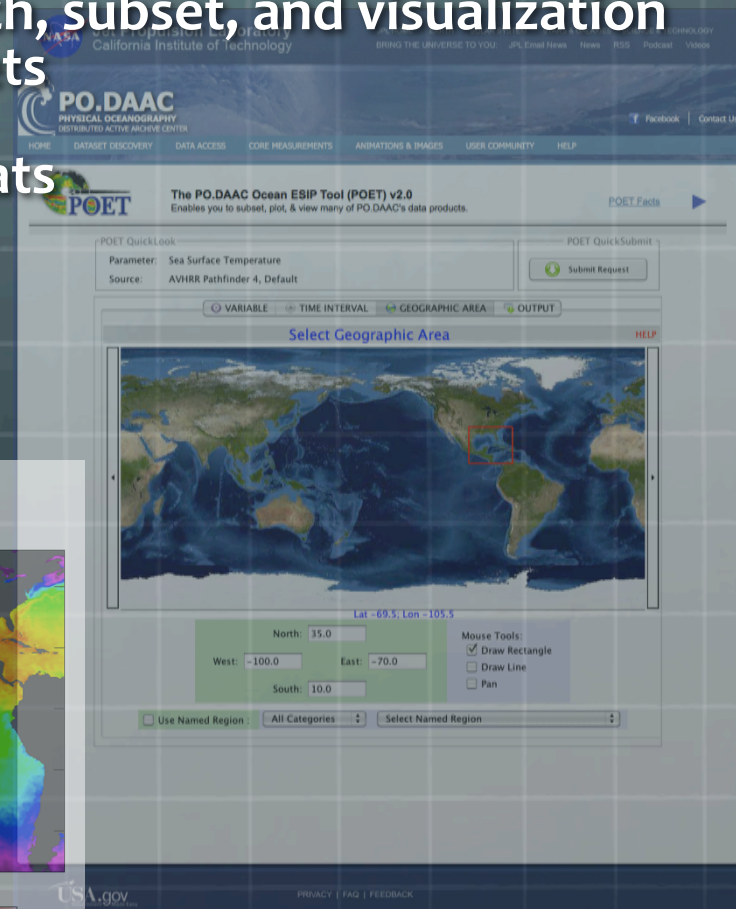
- Large number of output formats

- Image: JPG, PNG, GIF
- Scientific: HDF, NetCDF
- GIS: GeoTIFF, ArcGrid

- WMS compliant

- <http://poet.jpl.nasa.gov>

- New version available May 1



# L2 Data Access: Dataminer

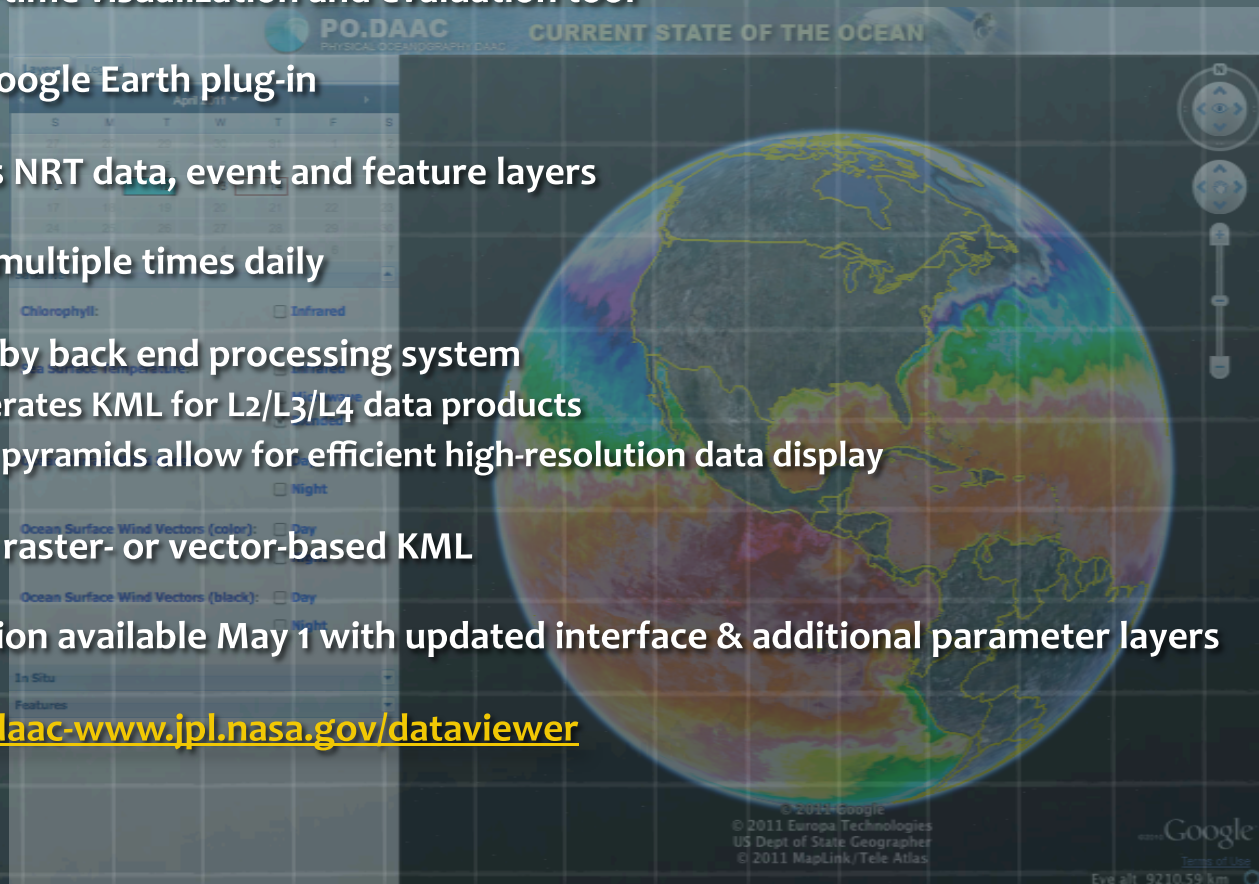
- Provides fine-grained (sub-granular) search, imaging and extraction capabilities for swath datasets
- Spatiotemporal search can include unique statistical constraints specific to each dataset
- Access local and remote datasets
- Originally developed at Ifremer
- <http://podaac-tools.jpl.nasa.gov/dataminer>
- Coming soon: Dataminer functionality via web services

Mouse (lon,lat) : 19.34° E , 25.93° S



# State of the Oceans

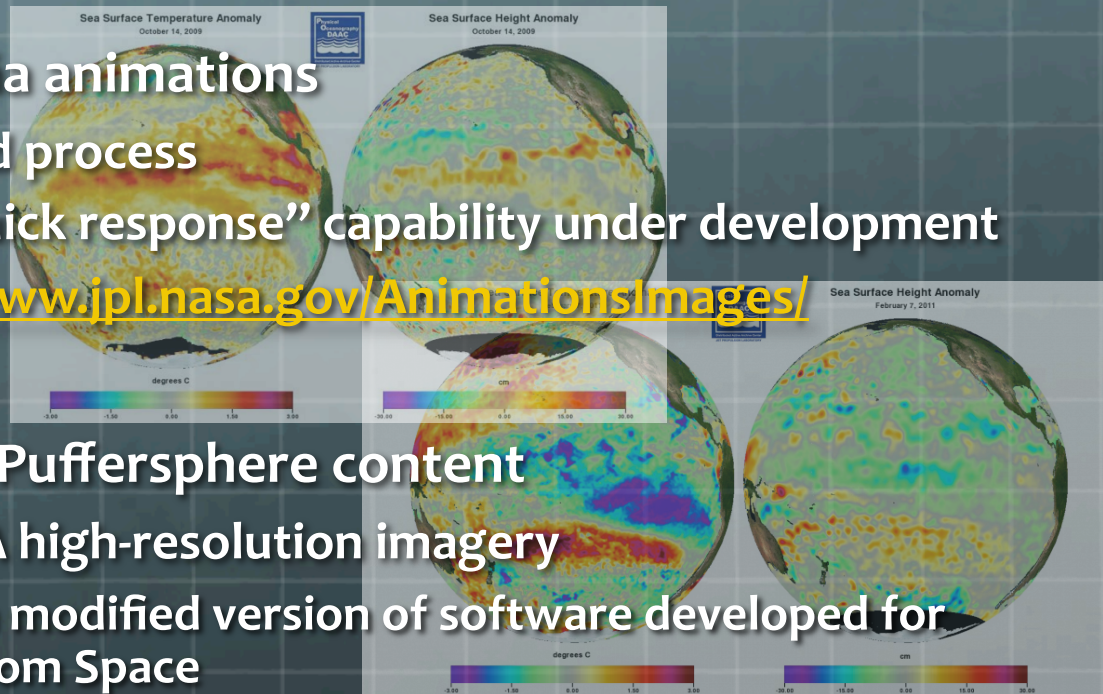
- Near real-time visualization and evaluation tool
- Utilizes Google Earth plug-in
- Combines NRT data, event and feature layers
- Updated multiple times daily
- Powered by back end processing system
  - Generates KML for L2/L3/L4 data products
  - KML pyramids allow for efficient high-resolution data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





# Other Work

- El Niño and La Niña animations
  - Semi-automated process
  - Generalized “quick response” capability under development
  - <http://podaac-www.jpl.nasa.gov/Animations/Images/Animations>
- Magic Planet and Puffersphere content
  - SST, SSTA, SSHA high-resolution imagery
    - Created with modified version of software developed for AIRS Maps From Space
- [http://www-airs.jpl.nasa.gov/maps/satellite\\_feed](http://www-airs.jpl.nasa.gov/maps/satellite_feed)



# Demos

# Questions/Comments?