



# Latest Datasets and Services at the PO.DAAC

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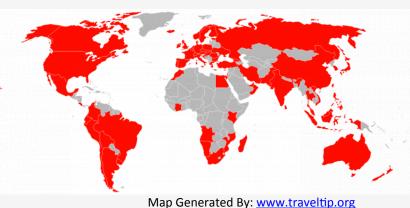
Jet Propulsion Laboratory, Pasadena, CA

## The Role of PO.DAAC



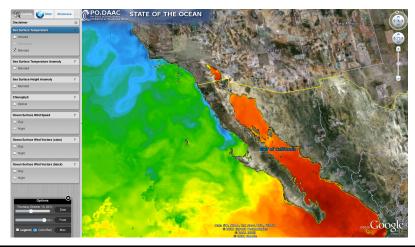
# Data Management & Stewardship

Preserve and distribute oceanographic data for the benefit of future generations domestically and abroad.



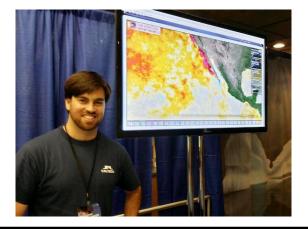
#### **Data Access**

Provide intuitive services to discover, select, extract and utilize oceanographic data.



# Science Information Services and User Forum

Team of science data specialists, multiple user interaction interfaces, and knowledgebase to help data users understand and better utilize datasets and corresponding resource materials.



SCIENCE COMMUNITY COLLABORATIVE FORUMS
Gravity
Ocean Circulation
Ocean Temperature
Ocean Topography
Ocean Wind
Salinity
Sea Ice

## Overview of Data Sources

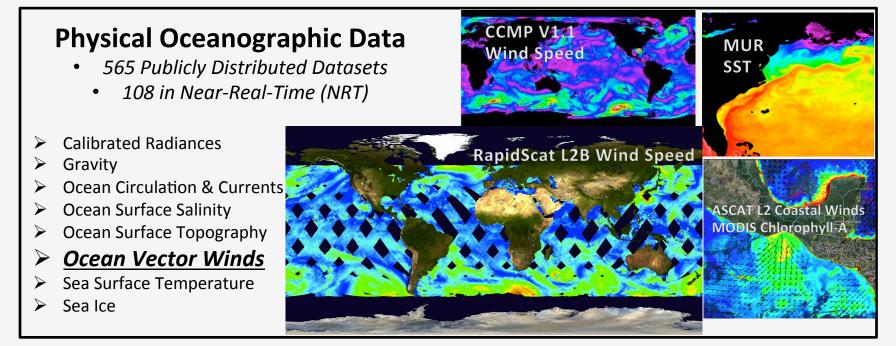


#### **Supported NASA Missions & Projects**

Seasat, TOPEX/Poseidon, Jason-1, NSCAT, SeaWinds on ADEOS-II, QuikSCAT, *ISS-RapidScat*, Terra, Aqua, GRACE, GHRSST, MeASUREs, Aquarius, SPURS

#### **Other Missions & Projects**

AVHRR-Pathfinder, DMSP (SSMI, SSMIS), ERS-1/2, GEOS-3, GOES, **MetOp-A/B**, Oceansat-II, WindSat.



### 14 New OVW Datasets



- 1. <u>RapidScat</u> Version 1.1: Released 1 December 2015 (http://bit.ly/rscatsigma0v1-1)
  - L1B, L2A 12.5-km, and L2A 25-km
  - First time RapidScat Sigma-0 data has been publicly released.
- 2. RapidScat Version 1.2 (same as above, plus L2B 12.5-km): Released 4 May 2016
  - Time series: 2015-Aug-19 to present (7-day latency)
  - Continues from Version 1.1.
  - Corrects calibration for lowSNR.
  - http://bit.ly/rscatv1-2
- 3. RapidScat L2B Climate Version 1.0, 12.5-km netCDF: Released 10 May 2016
  - Time series: 2014-Oct-3 to 2016-Feb-11.
  - Complete historical reprocessing and corrects calibration for LowSNR.
  - Leverages "full aperture" L1B Sigma-0 data.
  - Only becomes updated when a new LowSNR state is completed.
  - http://bit.ly/rscatl2bclim
- 4. QuikSCAT L1B and L2A (12.5-km and 25-km): Released on 19 November 2015.
  - Also includes post-2009 non-spinning data (L1B) and brief periods of spinning data (2013,2015).
  - http://bit.ly/qscatsigma0
- **5. QuikSCAT** L2B Version 2.0 (12.5-km and 25-km) 2013 and 2015 data:
  - Brief periods of "spinning" data corresponding to L2A release.
  - Version 3.0 netCDF product was not included.
  - http://bit.ly/qscatl2bv2
- 6. QuikSCAT L1C Averaged Sigma-0 and Wind Vector (Post 2009, non-spinning only):
  - Provisionally released on 3 February 2016.
  - ftp://podaac.jpl.nasa.gov/allData/quikscat/L1C/
  - Expect full release (i.e., Portal, tools, services, etc...) by June 2016.

Note: <u>DOIs</u> are now available for all "Open" Datasets! Please cite accordingly when publishing.

# 2016 Upcoming OVW Datasets



#### QuikSCAT:

- Level 2 Hurricane Subsets (Expected by August 2016, Bryan Stiles et al.)
- **CCMP Version 2.0:** Just released by RSS (Frank Wentz et al.)
  - Discussions are underway to formulate a data distribution agreement.
  - RSS link is here: http://www.remss.com/measurements/ccmp
- <u>SMAP</u>: Level 2 and Level 3 CAP Wind Speed (Yueh and Fore)
  - Evaluation products available at: http://ourocean.jpl.nasa.gov
  - PO.DAAC release is TBD, depending on progress of evaluation.
- <u>ASCAT:</u> Level 2 Reprocessed (in development, KNMI)
- <u>ASCAT</u>: Level 3 from MyOcean
  - Distribution agreement delayed due to competing interests and priorities.
  - Planning to revisit this in Summer 2016.
- <u>Cyclone</u> <u>Global</u> <u>Navigation</u> <u>Satellite</u> <u>System</u> (<u>CYGNSS</u>):
  - Launching in late October (possibly early November) 2016.
  - Will provide near-global wind speeds through constellation of 8 "Small Sats".
  - Designed to provide higher sampling rate of winds speeds of TC "inner core".
  - GPS provides bistatic forward scattering, which responds to surface roughness.
  - Data may be distributed as early as January 2017 (stay tuned!).
  - More info: http://science.nasa.gov/missions/cygnss/

#### **Data Access**



<u>File Transfer Protocol (FTP): ftp://podaac.jpl.nasa.gov</u>

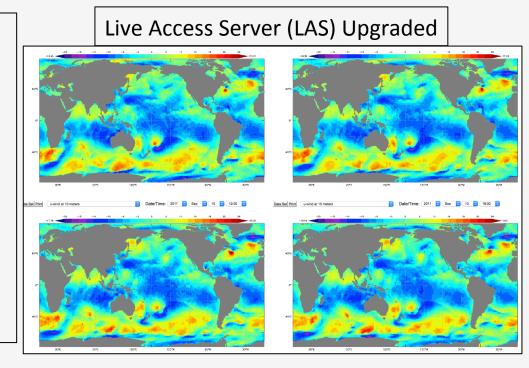
<u>Ope</u>n-source Project for a <u>Network <u>D</u>ata <u>A</u>ccess <u>P</u>rotocol (<u>OPeNDAP</u>): <u>http://opendap.jpl.nasa.gov</u></u>

#### **NEW in 2016!: PO.DAAC Drive HTTPS and WebDAV Interface**

<u>Th</u>ematic <u>R</u>eal-time <u>E</u>nvironmental <u>D</u>istributed <u>D</u>ata <u>S</u>ervice (THREDDS): <a href="http://thredds.jpl.nasa.gov">http://thredds.jpl.nasa.gov</a>

Access plug-ins: OPeNDAP, WCS, WMS, NetcdfSubset, NCML, UDDC, ISO

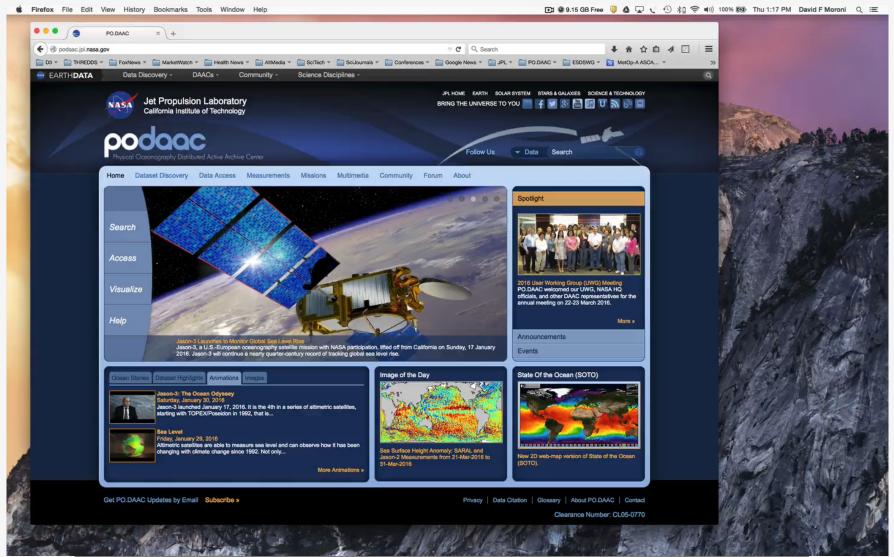
Web-based Data Viewers: IDV, NetCDF-Java ToolsUI, Godiva2



#### PO.DAAC Drive Demo



#### https://podaac-uat.jpl.nasa.gov/drive



## Questions?



- User Forum: https://podaac.jpl.nasa.gov/forum/
  - Data Recipes (how to use OPeNDAP, THREDDS, Web Services, etc...)
  - Frequently Asked Questions (FAQs)
  - User Questions
  - Ocean Stories
- How to Cite PO.DAAC Data:
  - http://podaac.jpl.nasa.gov/CitingPODAAC
- Join our Mailing list: podaac@podaac.jpl.nasa.gov