

Latest Datasets and Services at the:

David Moroni

David.F.Moroni@jpl.nasa.gov

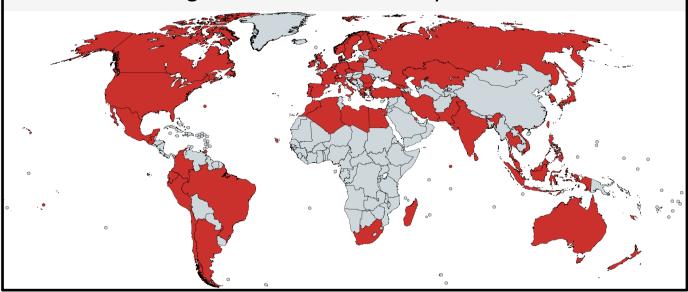
Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA

The Role of PO.DAAC



Data Management & Stewardship

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



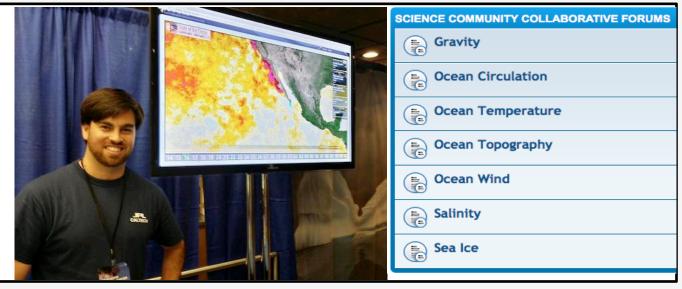
Data Access

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



Information Services and Forum

- Science data specialists
- Human-to-human interaction
- Knowledgebase and FAQs
- Guidance and resource materials



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

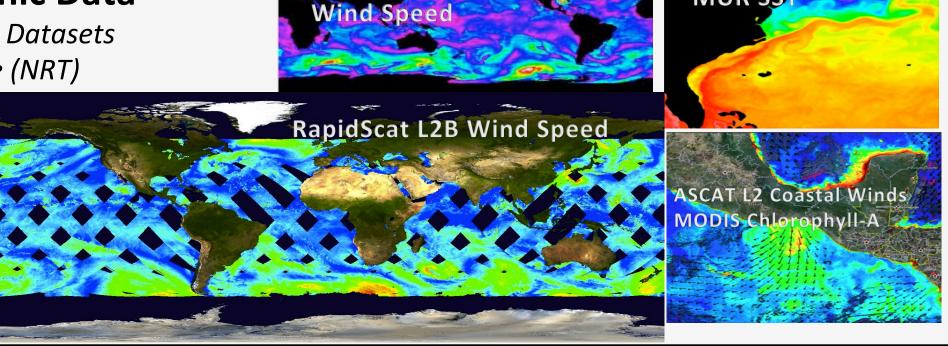
Other Missions & Projects

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

MUR SST

Physical Oceanographic Data

- 540 Publicly Distributed Datasets
 - 97 in Near-Real-Time (NRT)
- Gravity
- Ocean Circulation & Currents
- Ocean Surface Salinity
- Ocean Surface Topography
- Ocean Vector Winds
- Sea Surface Temperature
- Sea Ice



CCMP V1.1

14 New Datasets



1. <u>SMAP L2/L3 CAP Version 3.0 (JPL) Wind Speed and Salinity</u>

- Released on 10 March 2017.
- Daily, 8-Day, Monthly; 60 km L2; 0.25x0.25 degree L3.

2. SMAP L2/L3 RSS Version 2.0 Wind Speed and Salinity

- Released on 18 November 2016
- Note: Wind speed/direction comes from WindSat, not SMAP.
- Daily, 8-Day, Monthly. 39x47 km L2; 0.25x0.25 degree L3.

3. RapidScat Rain Colocations with Winds by RSS

- Level 2B 12.5 km, released on 9 December 2016.
- Wind speed, rain rate, cloud liquid water content.
- Co-locations with: 1) DMSP SSM/I (F15) and SSMIS (F16/F17), 2)
 WindSat, 3) GCOM-W1 AMSR2 and 4) GPM Core GMI.
- 4. RapidScat Version 1.3: Released 3 November 2016
 - L1B, L2A 12.5-km, L2A 25-km, and L2B 12.5-km.
 - Time series: 2016-Feb-11 to 2016-Aug-19.
 - Corrects calibration for lowSNR.

- 5. RapidScat L2B Climate Version 1.0, 12.5-km netCDF: Released 10 May 2016
 - Time series: 2014-Oct-3 to 2016-Aug-19.
 - 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.
- **6. QuikSCAT** L2B Version 3.1 @ 12.5 km
 - Fully released on 14 November 2016.
 - Complete historical reprocessing, provides closer land retrieval using Land Contamination Ratio (LCR) algorithm.
- 7. <u>QuikSCAT</u> L1C Averaged Sigma-0 and Wind Vector (Post 2009, non-spinning only):
 - Fully released on 29 June 2016.

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

https://podaac.jpl.nasa.gov/CitingPODAAC

Upcoming Datasets



- <u>Cyclone</u> <u>Global</u> <u>Navigation</u> <u>Satellite</u> <u>System</u> (<u>CYGNSS</u>):
 - Raw telemetry fully ingested.
 - -Level 1, 2, and 3 Data expected by 22 May 2017!
 - More info: https://podaac.jpl.nasa.gov/CYGNSS
- RapidScat:
 - Final Re-Processing for L2B Climate Quality Wind Vectors (Version 2.0).
- QuikSCAT:
 - -Level 2 Hurricane Subsets (Expected by August 2017, Bryan Stiles et al.)
- ASCAT: Level 2 Reprocessed (in development, KNMI)

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



Open-source Project for a **N**etwork **D**ata **A**ccess **P**rotocol (**OPeNDAP**):

http://opendap.jpl.nasa.gov

NEW in 2016!: PO.DAAC Drive interface with WebDAV client: https://podaac-uat.jpl.nasa.gov/drive/

<u>Thematic Real-time Environmental</u> <u>Distributed Data Service (THREDDS):</u>

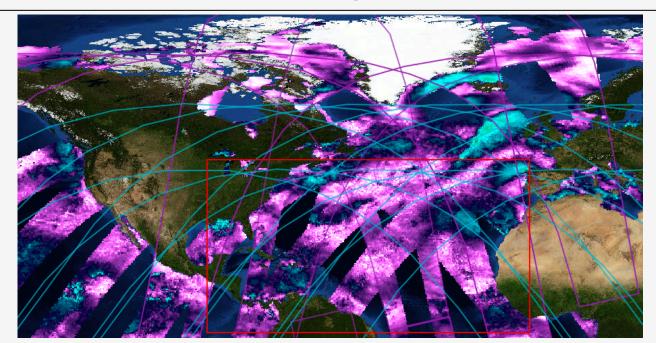
http://thredds.jpl.nasa.gov

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

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

HiTIDE L2 Subsetter Updated: Version 4.1.0

- Granule Merge Feature
- ASCAT, QuikSCAT, and RapidScat Available!
- Release Notes, and Bug Fixes!



Comments/Questions Always Welcome!



- State of the Oceans (SOTO) upgraded to Version 4.0.
 - Enhanced Map functionality and Full Time Series Backfill!
 - <u>https://podaac-tools.jpl.nasa.gov/soto/</u>
- 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 get URS Account: https://urs.earthdata.nasa.gov/users/new
- Join our Mailing list: podaac@podaac.jpl.nasa.gov