

Latest Datasets and Services at the:

po daaac

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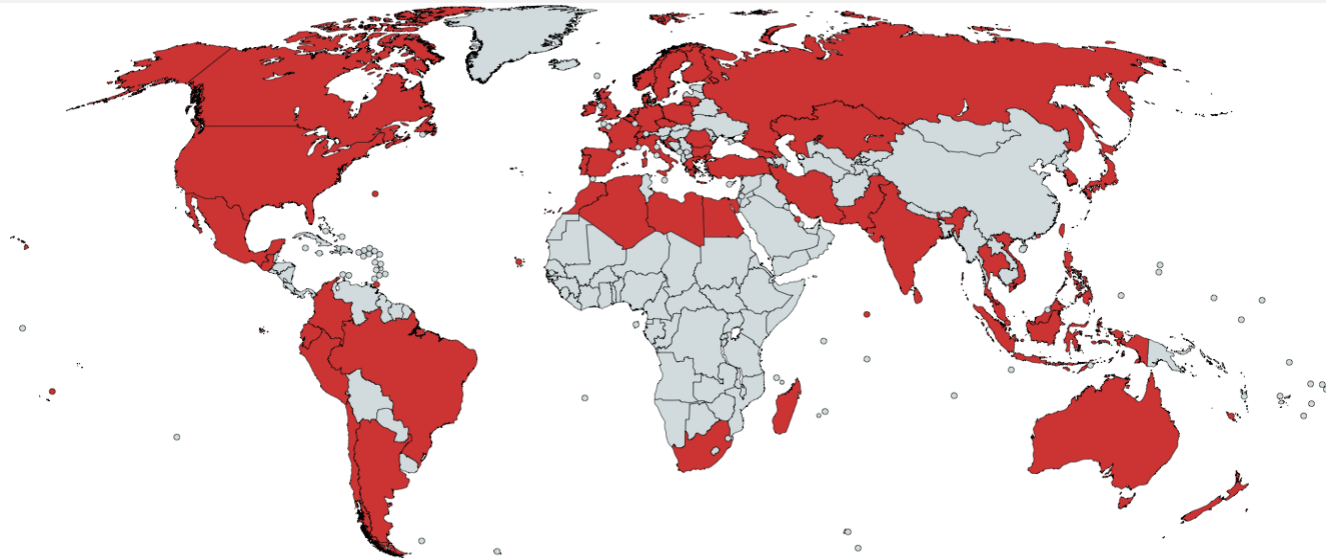
PO.DAAC Data Stewardship and User Services Team Manager

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

The Role of PO.DAAC

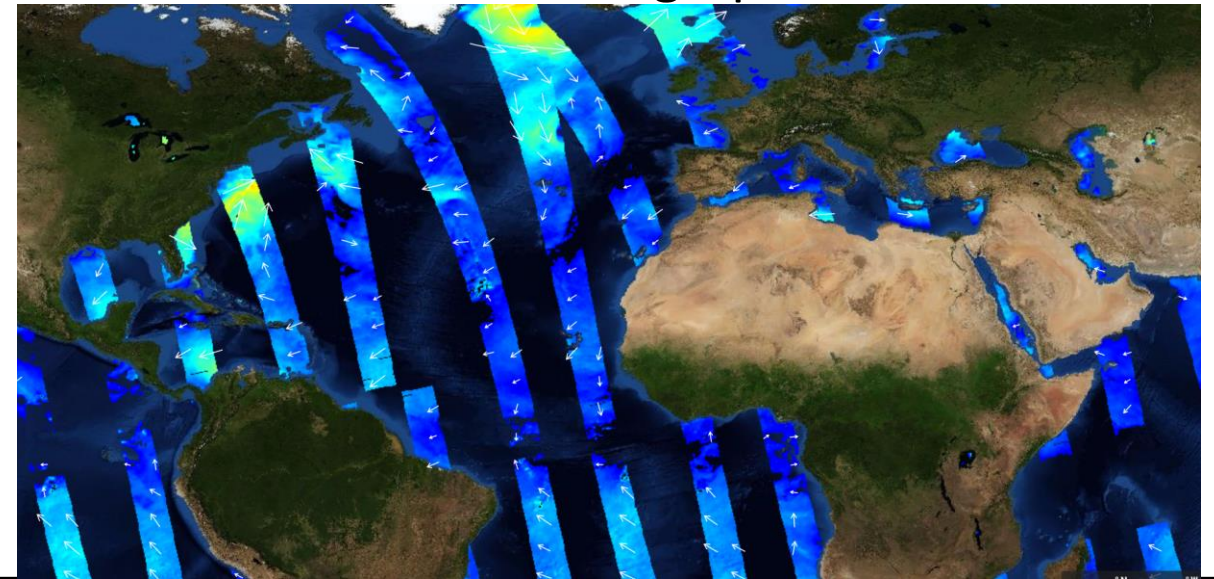
Data Management & Stewardship

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



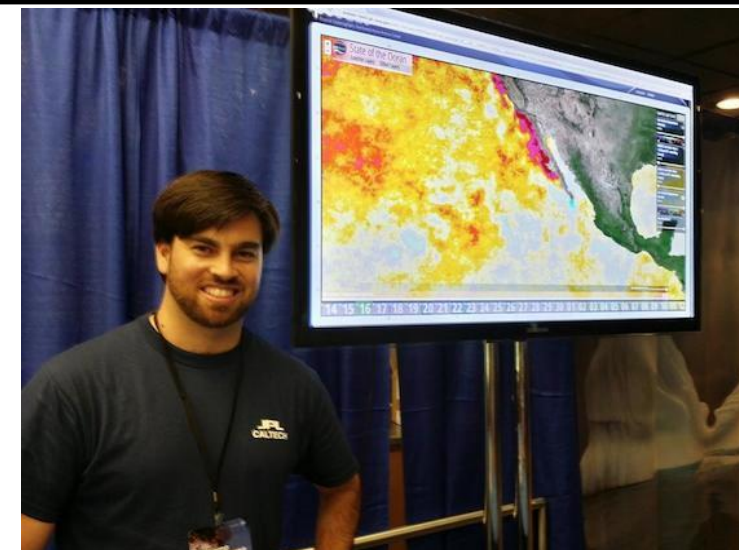
Data Access

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



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, ***CYGNSS***,
QuikSCAT, ***ISS-RapidScat***, Terra, Aqua,
 GRACE, GHRSSST, MeASURES, Aquarius, SPURS

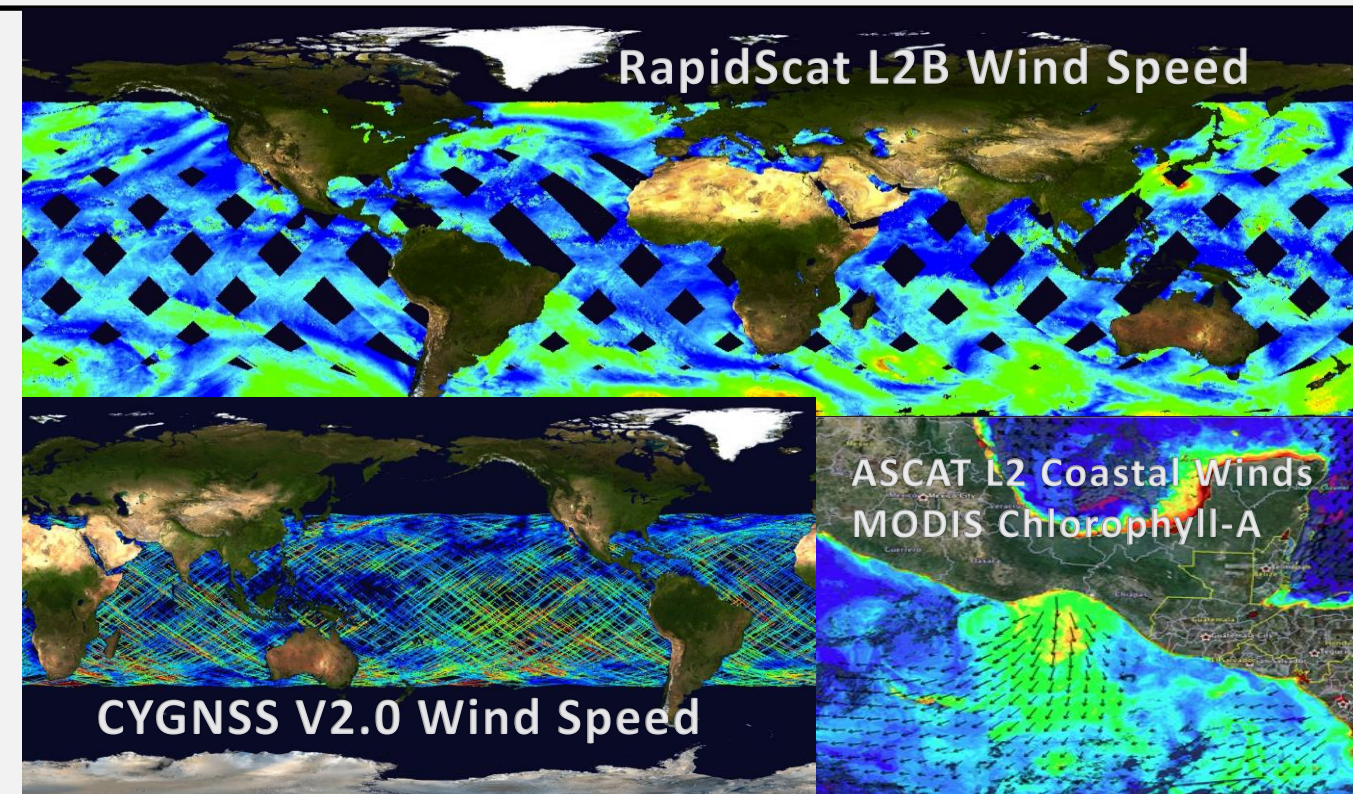
Other Missions & Projects

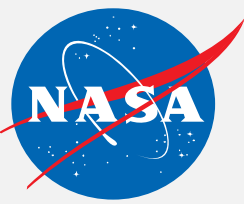
AVHRR-Pathfinder, DMSP (SSMI, SSMIS),
 GEOS-3, GOES, ***MetOp-A/B***,
Oceansat-II, ***WindSat***.

Physical Oceanographic Data

- *600 Publicly Distributed Datasets*
 - *72 Near-Real-Time (NRT)*

- | | |
|--------------------------------|------------------------------------|
| ➤ Gravity | ➤ <u>Ocean Vector Winds</u> |
| ➤ Ocean Circulation & Currents | ➤ Sea Surface Temperature |
| ➤ Ocean Surface Salinity | ➤ Sea Ice |
| ➤ Ocean Surface Topography | |





15 New Wind Datasets

Version 5.0 Aquarius/SAC-D Wind Speed

- Released 7 Dec. 2017.
- Daily, 7 day, monthly, seasonal, annual

SMAP L2/L3 CAP Version 4.0 (JPL) Wind Speed

Released 22 Feb 2018.

- Daily, 8-Day, Monthly; 60 km L2; 0.25x0.25 degree L3.

RapidScat L2B Climate Version 2.0, 12.5-km netCDF-4

- Released 11 April 2018
- SST-dependent GMF with cross-swath bias corrections.
- Simplified flagging schema with new flags.

QuikSCAT L2B Version 4.0 @ 12.5 km, netCDF-4

- Released 5 April 2018.
- Complete historical reprocessing, provides closer land retrieval using Land Contamination Ratio (LCR) algorithm.

MetOp-A ASCAT L2 Wind Vector CDR

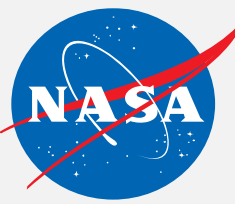
- 12.5-km (Coastal) and 25-km
- Consistently reprocessed, CMOD7, 1Jan2007 to 31Mar2014

CYGNSS Version 2.0 L1, L2, and L3 netCDF

- Released 19 Dec. 2017.
- First science quality, full public release.
- 18 March 2017 to present day.
- 6-day latency.

Note: DOIs are now available for all “Open” Datasets! Please cite accordingly when publishing.

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



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

Open-source Project for a Network Data Access Protocol (OPeNDAP):
<http://opendap.jpl.nasa.gov>

FTP Replacement: PO.DAAC Drive interface with WebDAV client:
<https://podaac-uat.jpl.nasa.gov/drive/>

**Thematic Real-time Environmental
Distributed Data Service (THREDDS):**
<https://thredds.jpl.nasa.gov>

Web Services (search/subset/extract):
<https://podaac.jpl.nasa.gov/ws>

PO.DAAC-PY (Python Library Toolkit):
<https://github.com/nasa/podaacpy>

Data Recipes: <http://bit.ly/datarecipes>

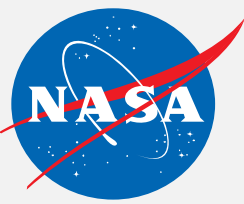
State of the Oceans (SOTO) upgraded to Version 4.2.1.

- Enhanced Map functionality and Full Time Series Backfill!
- Added layers: Sea-Ice Concentration, Soil Moisture, Surface Precip.
- Extended browser compatibility: Chrome, Firefox, Safari.
- <https://podaac-tools.jpl.nasa.gov/soto/>

HiTIDE L2 Subsetter Updated: Version 4.2.0

- Granule Merge Feature
- ASCAT, QuikSCAT, and RapidScat Available!
- CYGNSS coming soon!

Upcoming Datasets and Services



Datasets:

Cyclone Global Navigation Satellite System
(**CYGNSS**):

- **Version 2.1**: Science Team evaluation is nearly complete.

ASCAT: MetOp-B and MetOp-A CDR (TBD in 2019, KNMI).

Salinity Continuity Project (SCP): Periodically re-processed salinity and wind speed datasets from SMAP.

- Includes datasets coming from both RSS and JPL.

Services:

SOTO Next Generation:

- On-demand Analytics + More Data Layers
- More wind layers: RapidScat, QuikSCAT, and CYGNSS.

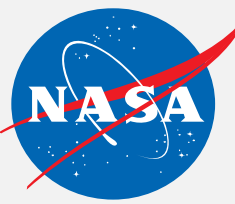
HiTIDE Data Infusion:

- CYGNSS, QuikSCAT v4, RapidScat v2.

Drive Version 1.4.2:

- More consistent browser UX vs. FTP.
- WebDav directory structure more consistent with FTP.

Comments/Questions Always Welcome!



- **FTP-Retirement coming very soon, likely by end of 2018.**
- **Tutorials:** <http://bit.ly/podaactutorials>
- **User Forum:** <https://podaac.jpl.nasa.gov/forum/>
 - *Data Recipes (server-side subsetting, numerical analysis, machine learning, etc...)*
 - *Tutorials (search, extract, subset, tools, 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