Status Update on PO.DAAC's OVW Products and Services

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The Physical Oceanography Distributed Active Archive Center (PO.DAAC)

- We provide data, tools, and user services for physical ocean parameters including: Circulation/Currents, Gravity, ***OVW***, Salinity, and Sea Surface Temperature.
- One of 12 NASA-sponsored DAACs
- Designated archive for many NASA EOS missions: Aquarius (June 2011), GRACE, Jason-1, NSCAT, SEASAT, SeaWinds on QuikSCAT/ADEOS-II.
- Additional archive for partner missions and value-added products: AVHRR, GHRSST, MODIS, OSCAT, SSM/I Pathfinder, TOPEX/Poseidon, and WindSat.

New Tools, Services, and Features

- New Web Portal: http://podaac.jpl.nasa.gov
  - Fully operational since April 2011
  - Most "Old" web pages are no longer available.
  - QuikSCAT Known Problems and Data Gap Page still available:
    - http://podaac.jpl.nasa.gov/OceanWind/QuikSCAT/
- New FTP Layout: Note: Old FTP site no longer available
- THREDDS Data Server
- Live Access Server (LAS)
- Beta Level 2 Subsetter: QuikSCAT and ASCAT
- POET 2.0

Web Portal Features:

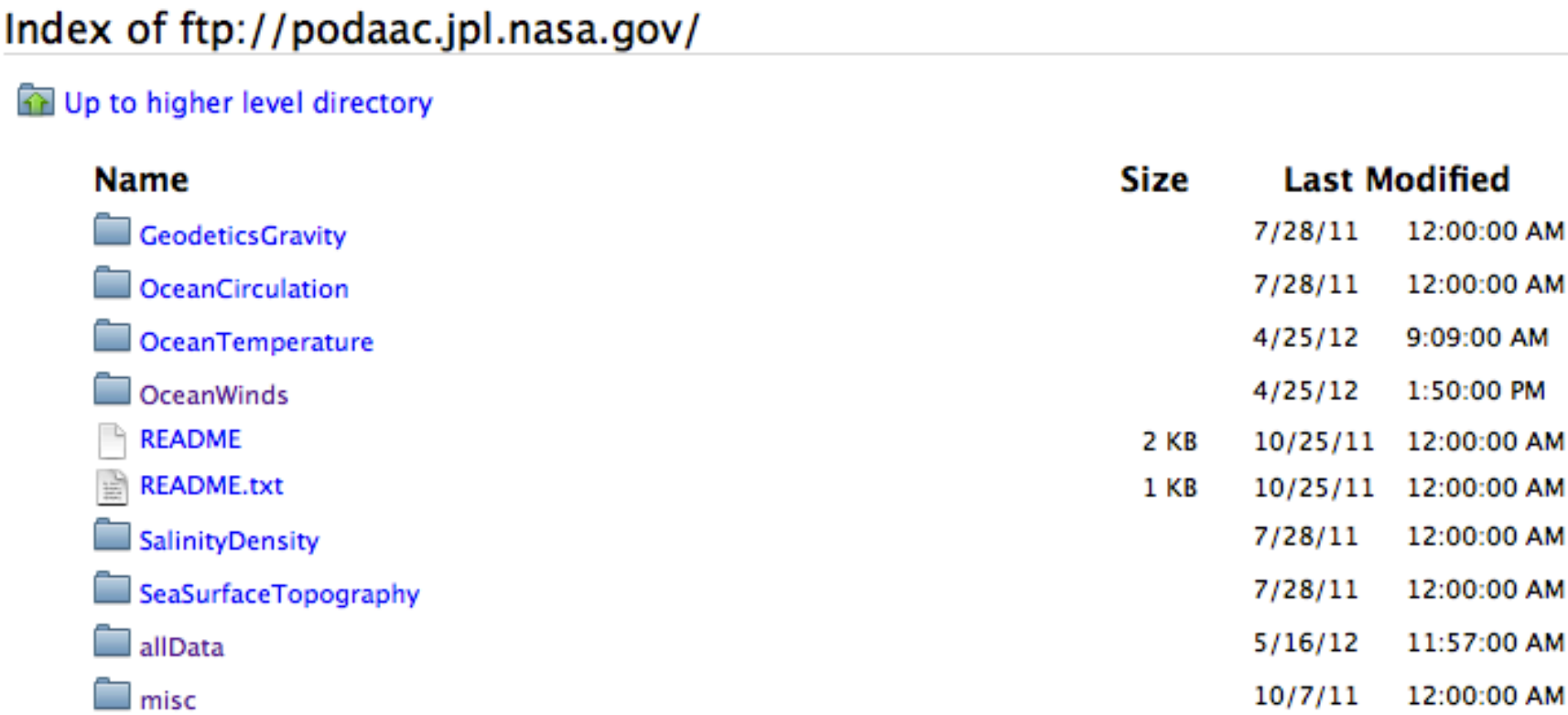
- Monthly Updated Ocean Stories
- Tools and Services
- State of the Ocean
- Dataset Keyword Search
- Dataset Faceted Search
- Events
- Announcements
- Dataset Highlights

http://podaac.jpl.nasa.gov/OceanWind/QuikSCAT/

SEAWINDS ON QUIKSCAT KNOWN PROBLEMS

Mission Status and QA Reports	Mission Status and QA Reports are available via FTP at ftp://podaac-old.jpl.nasa.gov/pub/ocean_wind/quikscat/mission_status_rep.... All files are in tar format.
Data Gaps	Click here to view the table listing all L2B data gaps longer than 4 seconds.
Level 2A Issues	***12 June 2000:*** Near 66.6° South Latitude and 359.0° East Longitude approximately 12-15 pixels are being reported as land instead of ice. The ice mask will be fixed in upcoming data.
Level 2B Issues	***Level 2B Usage Notes: 23 July 1999 - present; revs 430-present*** The Level 2B wind vectors have been processed with the new QSCAT-1 model function, developed by M. Freilich and B. VanHoff. The mean model coefficients [A(0)] have been tuned specifically to induce a mean speed bias relative to numerical weather prediction winds of about +0.3 m/s, addressing the observed wind speed under-prediction problem inherent in the NWP products. The reference height for the QuikSCAT wind vectors remains at 10 meters. Furthermore, the azimuthal modulation of the QSCAT-1 model has been tuned to remove, as far as possible, systematic instrument-induced direction errors ("beam spikes" and "square circulations"). The Level 2B product includes two additional scientific data set (SDS) elements, the "mp_rain_probability" and the "nof_rain_index", to indicate the detection of rain contamination in the QuikSCAT data. For all wind vector cells, the mp_rain_probability element contains a value between 0 and 1 based on an extended version of the Multi-Parameter rain algorithm developed by J. Huddleston and B. Stiles at JPL. Cells for which the algorithm could not compute a valid value contain the value -3. Additionally, bit 12 of the "wvc_quality_flag" indicates whether the MP algorithm computation was valid (0) or invalid (1), and bit 13 indicates whether rain was detected (1) or not detected (0) by the algorithm. Bit 14 of the wvc_quality_flag indicates whether the rain detection is based on data from both beams (0) or from outer-beam measurements only (1). The nof_rain_index is a value ranging from 0-249, with 250 as the "invalid" value, based on the Expected Normalized Objective Function (NOF) algorithm developed by C. Mears, D. Smith, and F. Wentz at Remote Sensing Systems. The Level 2B product includes two additional scientific data set (SDS) elements, the "wind_speed_selection" and the "wind_dir_selection". These elements contain the final output of the wind retrieval/ambiguity removal processing using the Direction Interval Retrieval with Threshold Nudging (DIRTH) algorithm.
L3 issue	***25 July 2002:*** The Level 3 data files on the CD are compressed using HDF's internal gzip compression. Characteristics: • The reduced file size (~80%) allow 3 months to fit on a CD. • Programs that read L3 data may run slower but need no changes. • Programs built using HDF version 4.1r2 may crash when reading these data. Versions 4.1r3 and above fixed this bug.
Spacecraft and Instrument	Click here to view the table listing

ftp://podaac.jpl.nasa.gov/allData/



Index of ftp://podaac.jpl.nasa.gov/

Up to higher level directory

Name	Size	Last Modified
GeodeticsGravity		7/28/11 12:00:00 AM
OceanCirculation		7/28/11 12:00:00 AM
OceanTemperature		4/25/12 9:09:00 AM
OceanWinds		4/25/12 1:50:00 PM
README	2 KB	10/25/11 12:00:00 AM
README.txt	1 KB	10/25/11 12:00:00 AM
SalinityDensity		7/28/11 12:00:00 AM
SeaSurfaceTopography		7/28/11 12:00:00 AM
allData		5/16/12 11:57:00 AM
misc		10/7/11 12:00:00 AM

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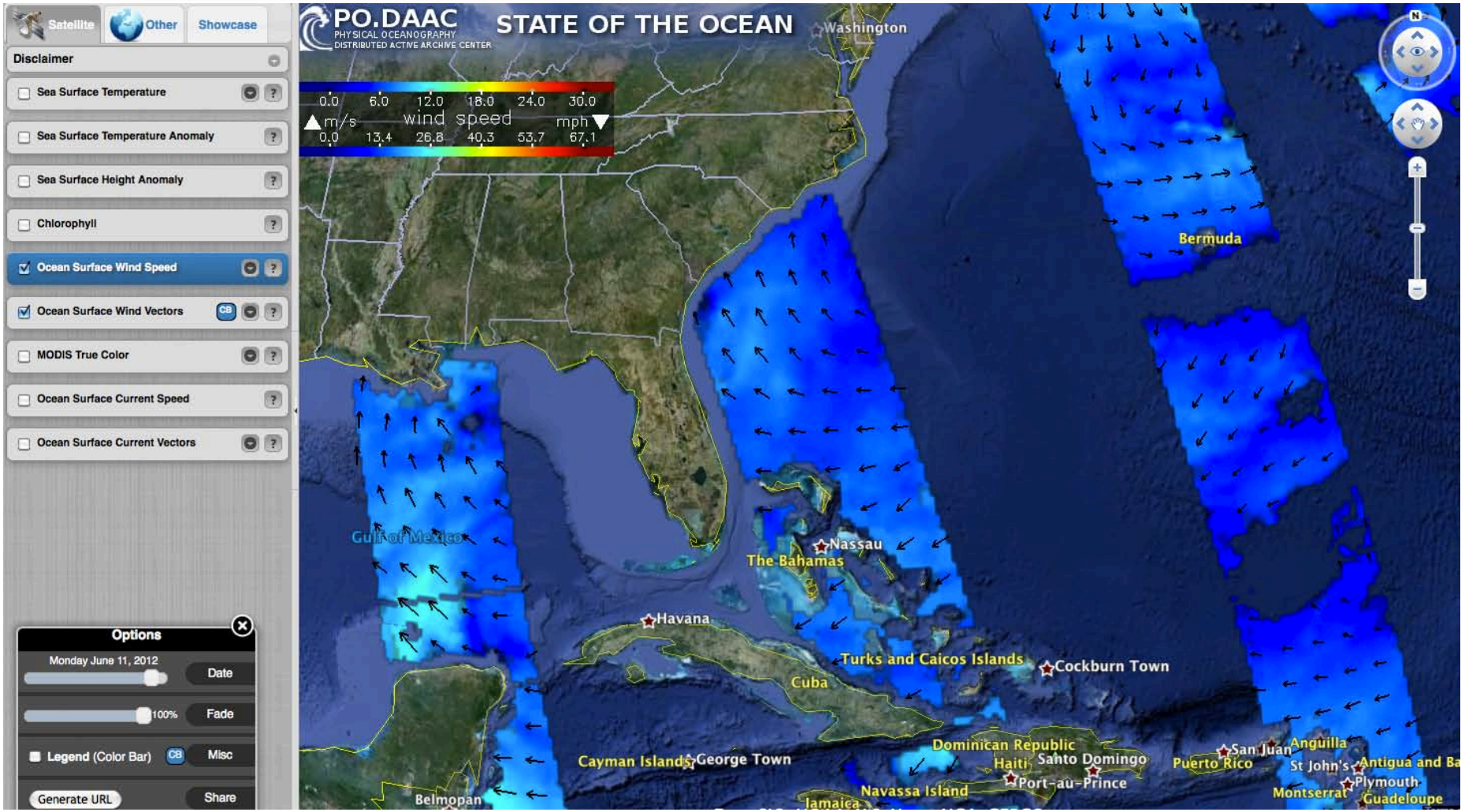
http://podaac-tools.jpl.nasa.gov/soto/



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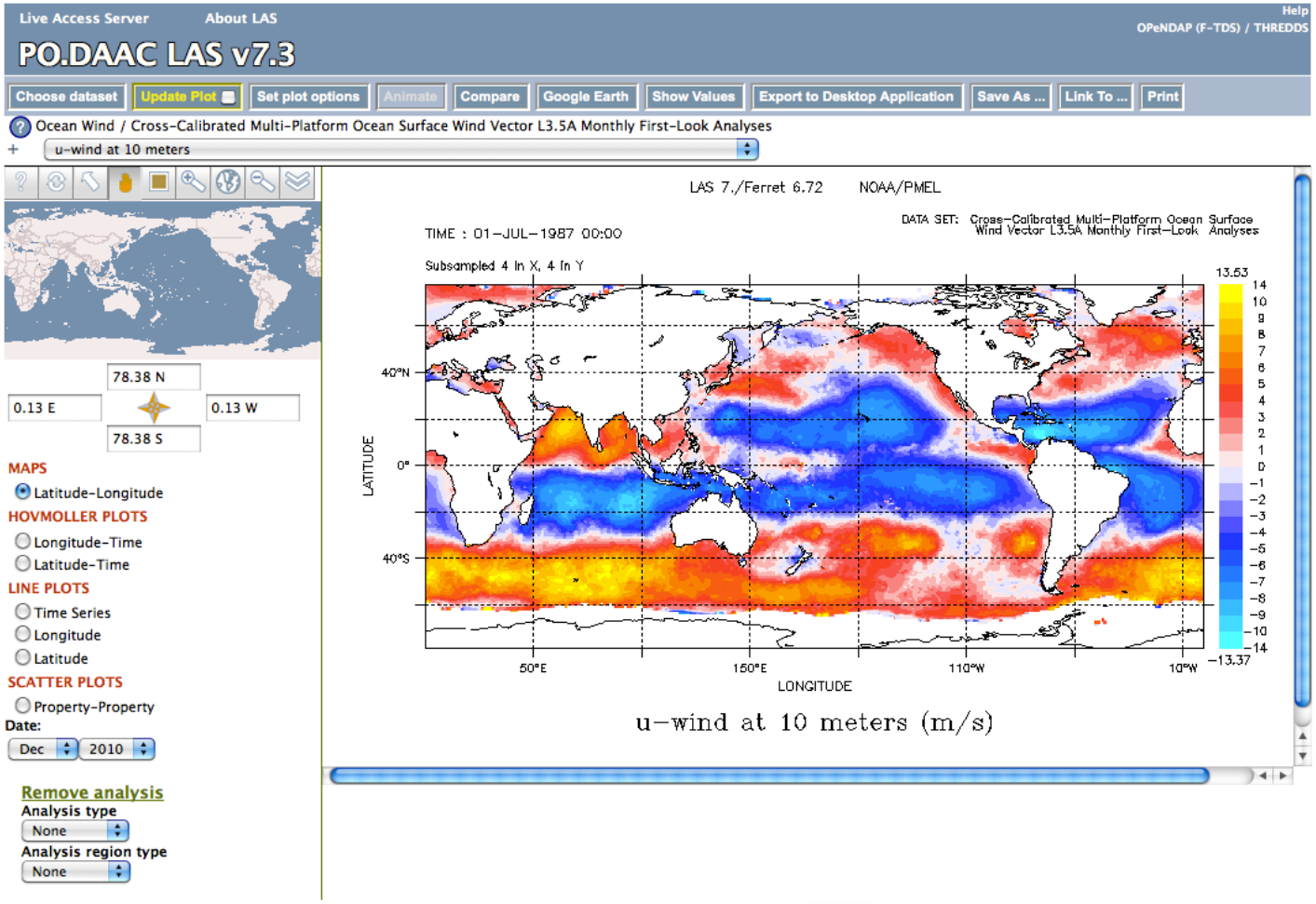
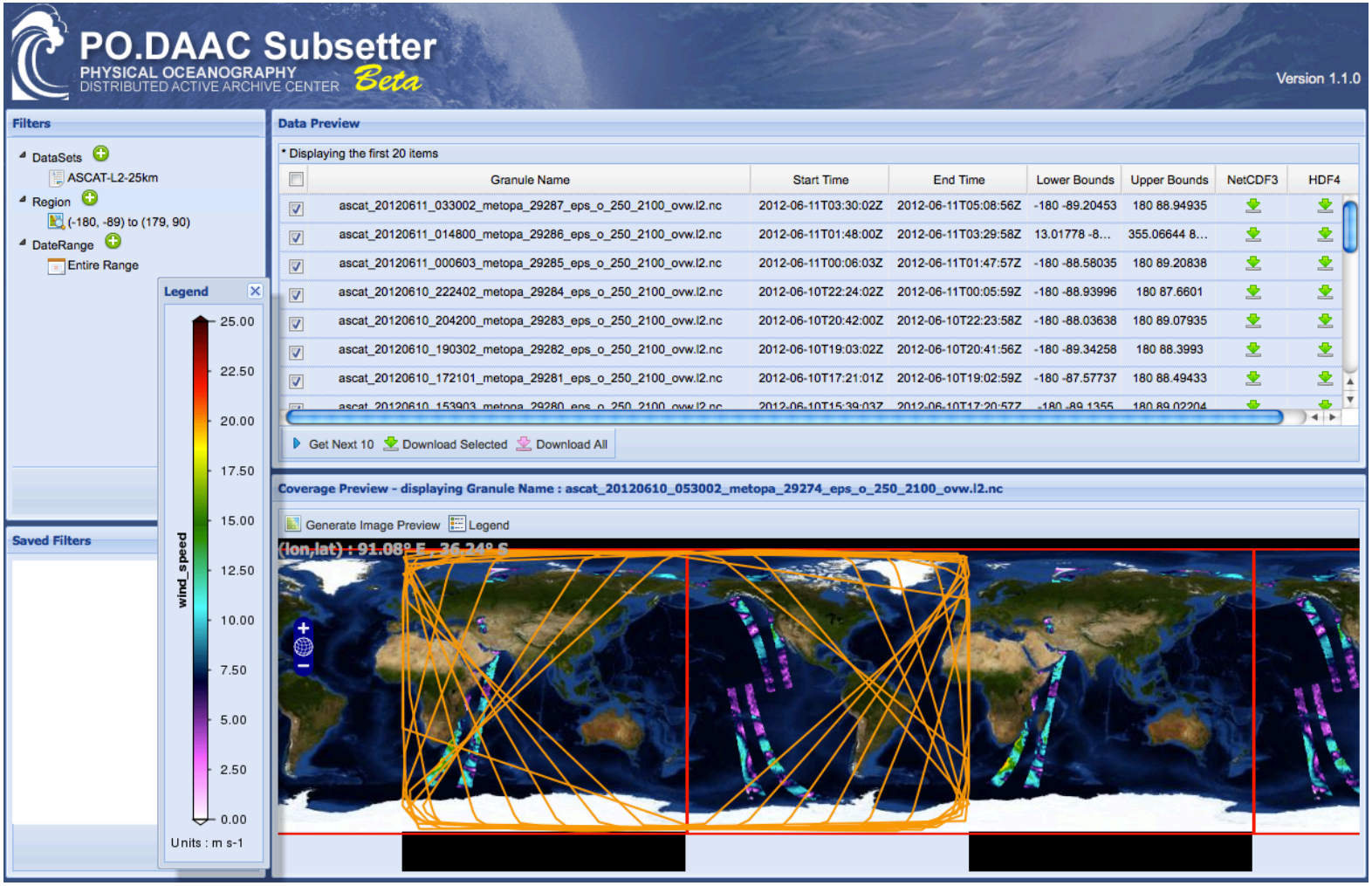


http://podaac-tools.jpl.nasa.gov/hitide



New Datasets and Extensions

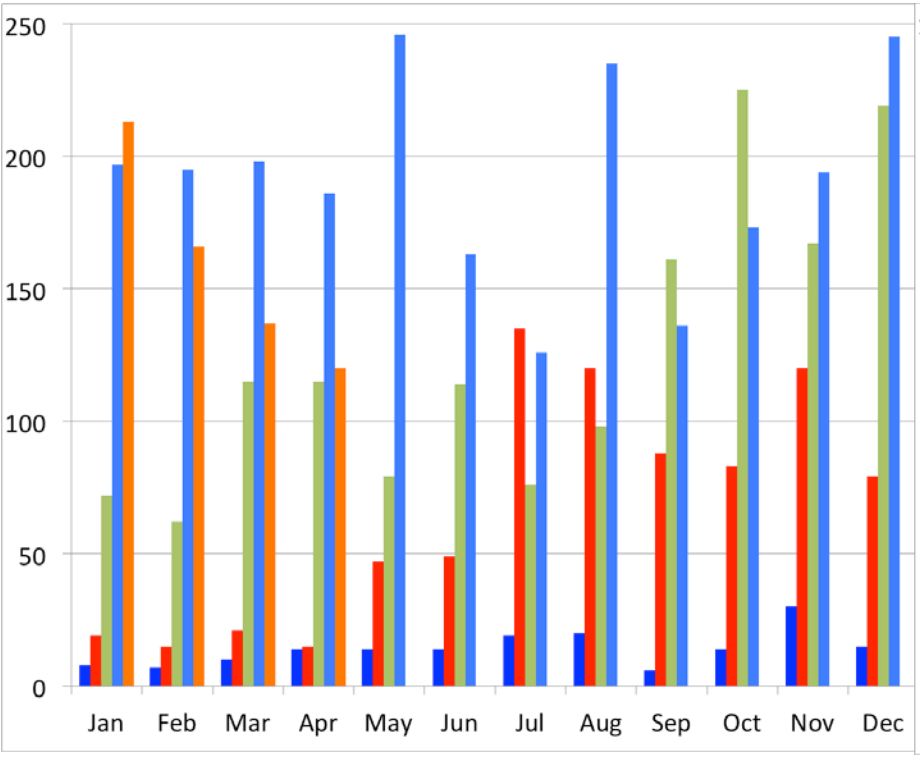
- ASCAT Level 2 12.5 Coastal-Optimized Dataset
  - near-real-time distribution
  - historical data since August 2010
- CCMP Extension to 30 June 2011, released in May 2012
- QuikSCAT L2B Reprocessed 12.5 km Dataset
  - made publicly available since April 2012
  - remains in evaluation mode
- QuikSCAT L3 Monthly Averaged 1 Degree Global Wind Vector Dataset
- JPL-reprocessed Oceansat-II OSCAT L2B Data
  - available for shared cal/val only
- WindSat
  - GHRSST Level 3 SST and Wind Vector Product
- David Long:
  - Enhanced Resolution Sigma-0 Datasets completely migrated: SEASAT, NSCAT, QuikSCAT, SeaWinds on ADEOS-II, ERS-1, and ERS-2
  - Local-Time-of-Day Sigma-0 Browse Datasets completely migrated for QuikSCAT and SeaWinds on ADEOS-II

Datasets in the works

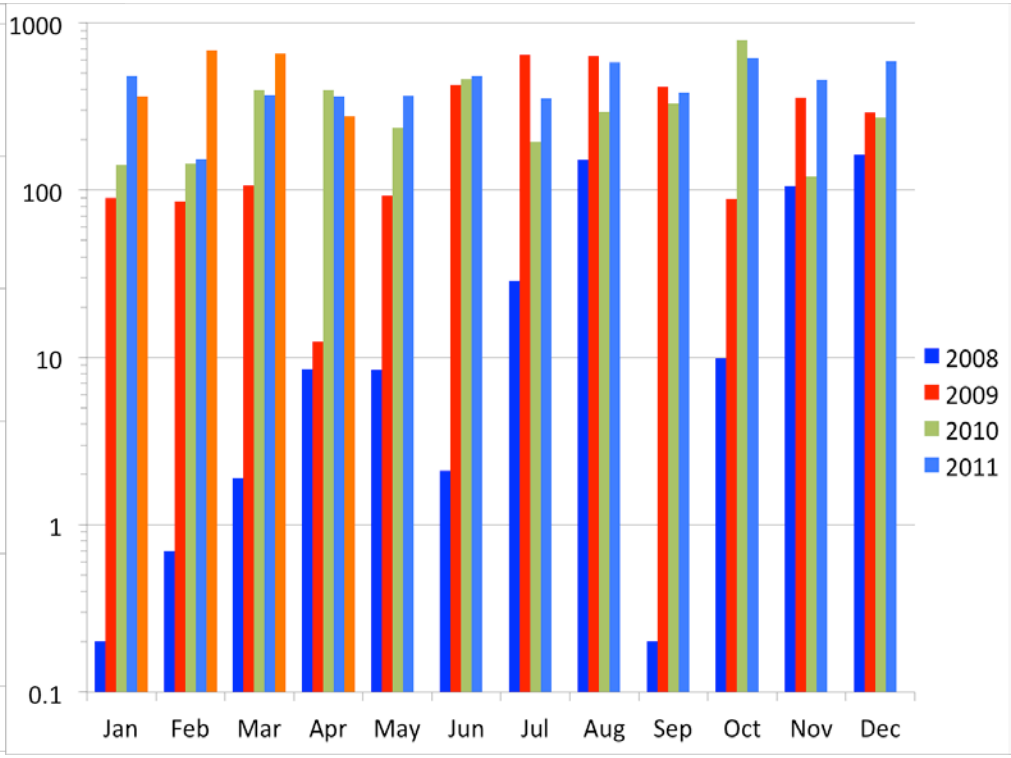
- QuikSCAT:
  - L2C: JPL wind vectors with derivative fields at 12.5 km sampling using spatial filtering and latest L2B GMF and rain flagging (Fall 2012)
  - L3: Daily Gridded Pseudo-stress (Bourassa) on 1.0° global grid (awaiting finalization of L2B cal/val)
- ASCAT:
  - L3: OSI-SAF (KNMI) daily wind vectors on 0.25° global grid (under development)
  - MetOp-B wind vector datasets (as soon as available)
- WindSat:
  - L3: REMSS non-GHRSST daily wind vectors on 0.25° global grid (Fall 2012)
- OSCAT:
  - We hope to be able to distribute ISRO's latest reprocessed L2B datasets
  - Currently we are relying on IOVWST and the JPL QuikSCAT Science team to make this work
  - If there's anything else we can do, we are willing and able

CCMP Usage Metrics

Unique Users

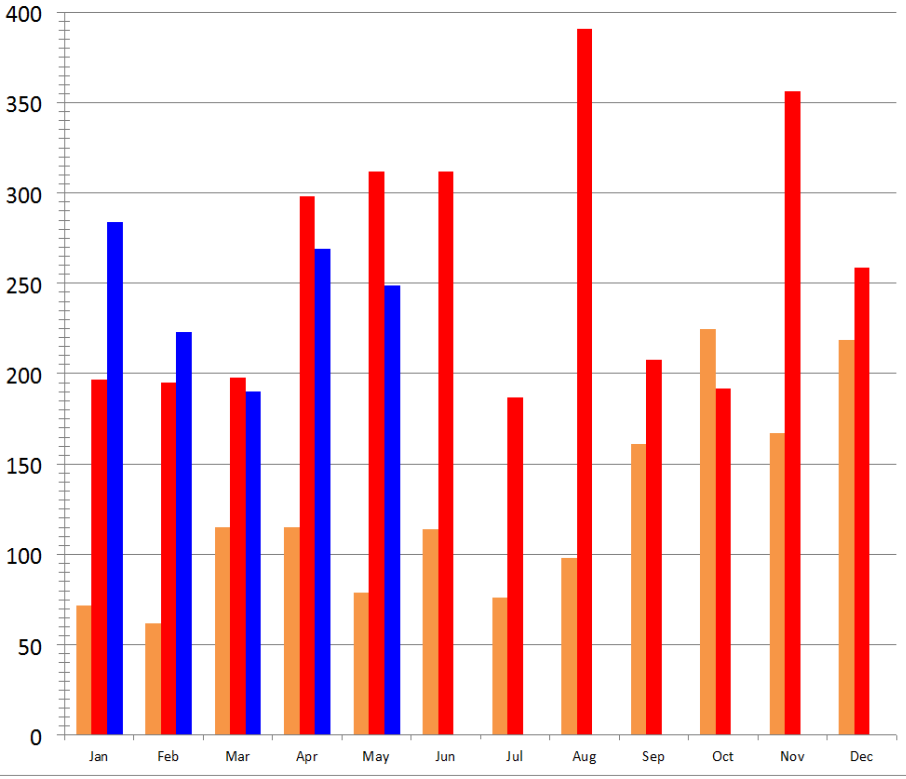


Volume (GB)

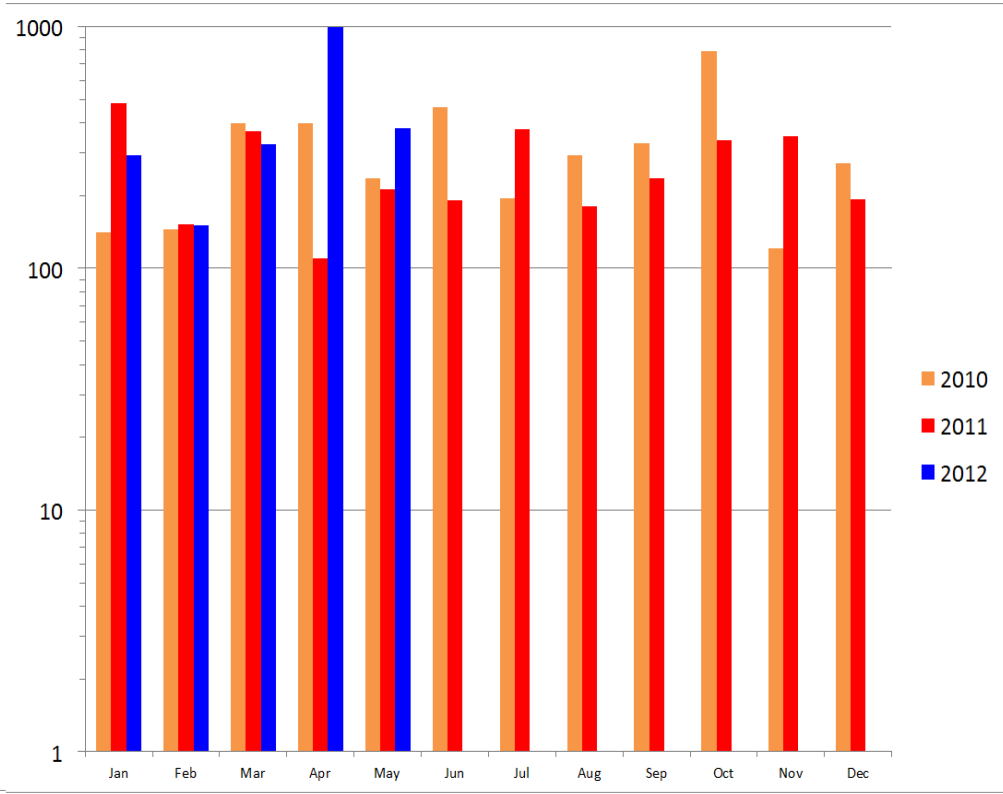


ASCAT Usage Metrics

Unique Users



Volume (GB)



Measuring Our Success

- Metrics collection:
  - Data ingest and access
  - Data and services usage
  - User satisfaction rates
  - Portal access
  - Search engine ranking

- Reminder: please register your name and email at podaac@podaac.jpl.nasa.gov in order to receive the annual EOSDIS user satisfaction survey.

Science and Technical Support at PO.DAAC

- Dr. Michelle Gierach (Michelle.Gierach@jpl.nasa.gov)
  - Lead Project Scientist
  - Primary point-of-contact between all science teams and PO.DAAC (for all parameters).
- Dr. Tong Lee (Tong.Lee@jpl.nasa.gov)
  - Scientist responsible for wind-related topics.
- Mr. David Moroni (David.F.Moroni@jpl.nasa.gov)
  - Data Engineer and co-investigator for wind and scatterometry datasets and primary point-of-contact between users and data providers.
- Scientists and Data Engineers meet regularly with the aim of collecting and sharing feedback from IOVWST and user communities.

Questions?

All scientific/technical inquiries and requests for user registration may be sent to:

PODAAC@PODAAC.JPL.NASA.GOV