



# Reformatted Seasat Data and Improved Tools at PO.DAAC

(What's new and shiny)

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# Overview

User metrics

Seasat reformatted datasets

Other new datasets

AltiKa near real time and Jason-1 GPS RINEX

Tools and services

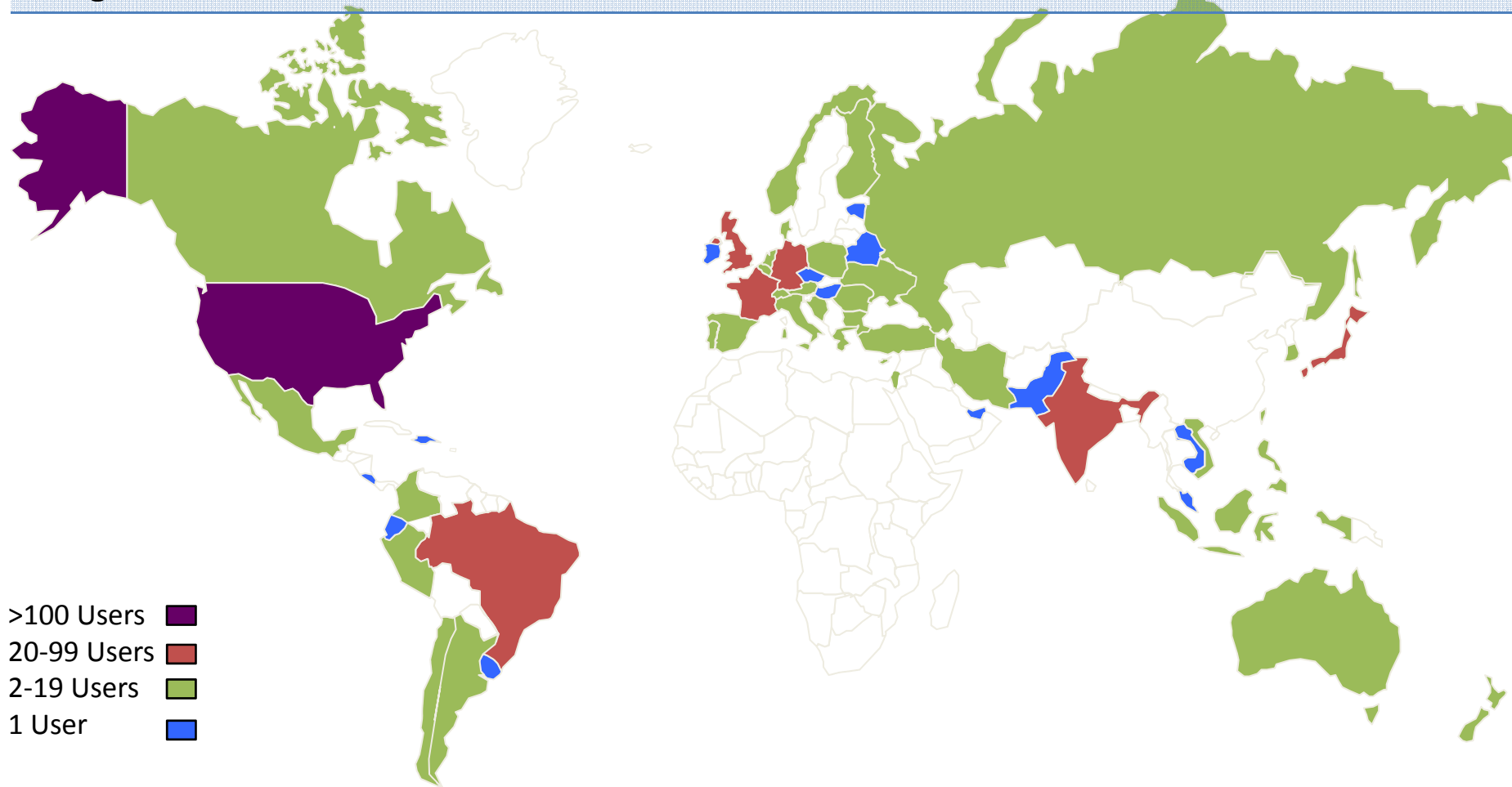
New web portal layout

SOTO 2-D

HiTide

LAS

Mission	Unique Users	# of Files Downloaded
TOPEX/Poseidon	1084	3,522,234
Jason-1	1461	6,288,188
OSTM/Jason-2	715	660,167
<b>Total</b>	<b>2157</b>	<b>10,470,589</b>
Integrated Multi-Mission	574	18,262



# Seasat-A



NASA's first oceanographic satellite mission

June 28, 1978 – October 10, 1978

Measured sea surface height, winds, brightness temperature, and sea surface temperature

# Reformatted Seasat

Took the original flat binary Seasat data from the mission, last produced in 1980, and reformatted them into NetCDF with CF and ACDD metadata formats.

This updates the data format and makes it available to more users.



# Instrument Data Reformatted

## Altimeter

Basic Geophysical Data Record (GDR), Level 2

Basic Sensor Data Record (SDR), Level 1

## Seasat-A Satellite Scatterometer (SASS)

Basic and Supplemental (Level 2) GDR

Basic and Supplemental (Level 1) SDR

## Scanning Multi-channel Microwave Radiometer (SMMR)

Basic GDR

Basic and Supplemental SDR

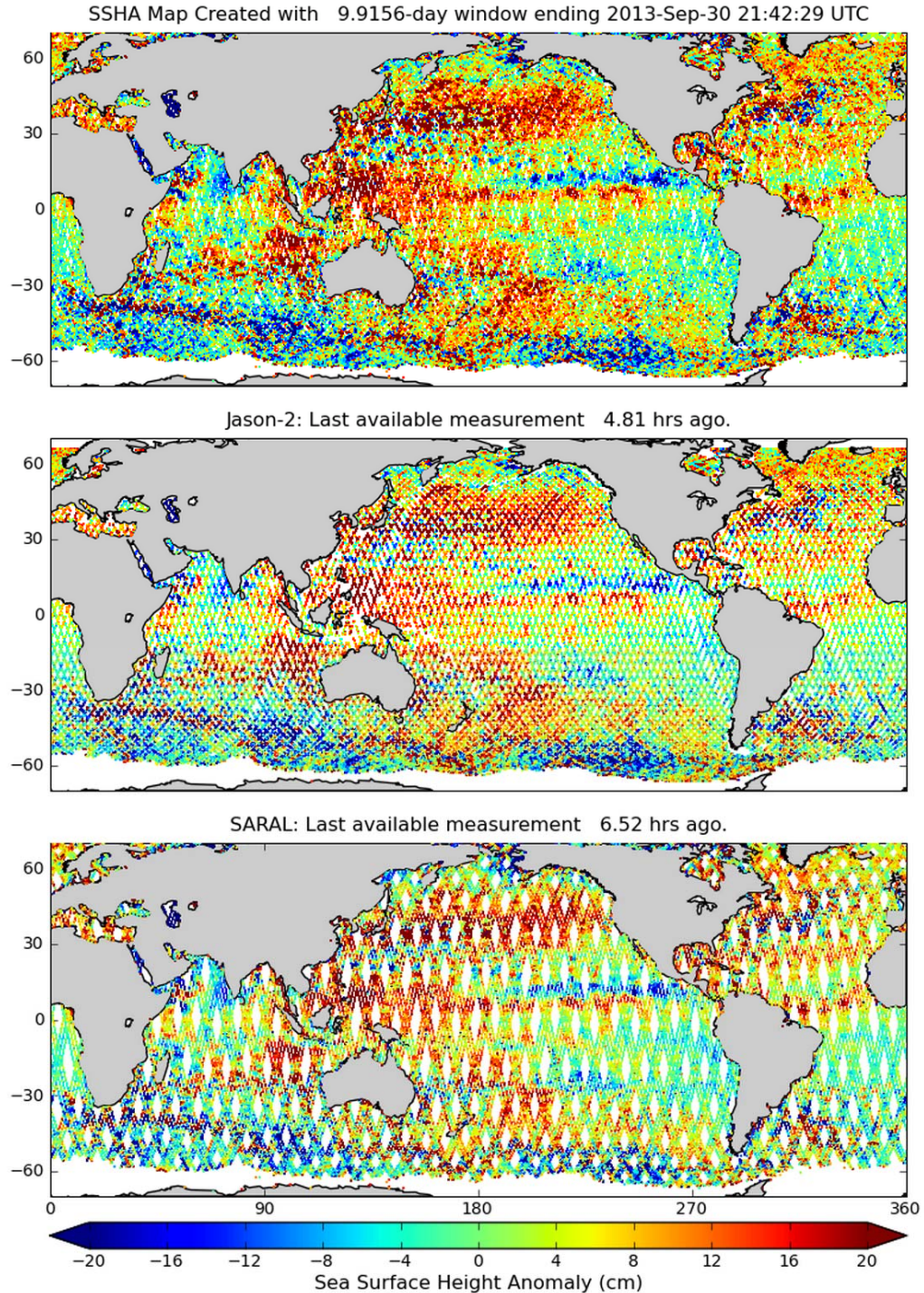
# Other Datasets

AltiKa Near Real Time  
GPS based orbit SSHA

Similar to the  
OSTM/Jason-2 by  
Desai et al.

Jason-1 GPS RINEX

Brought over from  
Desai et al. as part of  
Jason-1 closeout





# New Web Portal

More intuitive and streamlined layout

Tabs to reduce clutter

Announcements more pronounce

The new PO.DAAC web portal features a clean, intuitive design. At the top, it includes the NASA logo and Jet Propulsion Laboratory branding. A navigation bar contains tabs for Home, Dataset Discovery, Data Access, Measurements, Missions, Multimedia, User Community, Help, and Forum. A left sidebar offers filters for Parameter, Collections, Platform, Sensor, Spatial Coverage, and Latency. The main content area is divided into several sections: 'NEW OCEAN STORY' (August 2013), 'DATA ACCESS TOOLS & SERVICES' (including protocols and tools), 'VISUALIZATION' (State of the Ocean), 'ANIMATION & IMAGES', 'OCEAN STORIES', 'PO.DAAC SERVICES & TEAM', and 'EOSDIS'. A search bar is prominently displayed at the top right of the main content area. The footer includes the USA.gov logo and privacy/feedback links.

The current PO.DAAC web portal has a more cluttered layout. It features a top navigation bar with tabs for Home, Data Search, Data Access, Measurements, Missions, Multimedia, Community, and Help. A large map of the Santa Barbara coast is the central focus, with a 'NASA MODIS Sea Surface Temperature' announcement overlaid. To the right, there are several vertical panels: 'Announcements' (upcoming webinars and software updates), 'System Alerts', 'Image of the Day' (along-track sea surface height anomaly data), and 'Our People' (featuring Michelle Gierach). The bottom of the page includes a 'Subscribe' button for email updates and a footer with site map, privacy, and contact information.

# Current Web Portal

# SOTO 2D

Will be available end of this year. Google Earth based SOTO still available.

Image capture

Arrange layers

Layer Sorter

Sea Surface Height Anomaly

Opacity:

-18.0 -12.0 -6.0 0.0 6.0 12.0 18.0

▲ cm SSHA ▼ in

Blue Marble 4.0

Opacity:

Satellite Layers

- Sea Surface Temperature [More](#) [Info](#)
- Sea Surface Temperature Anomaly [Info](#)
- Sea Surface Height Anomaly** [Info](#)
- Chlorophyll [Info](#)
- Ocean Surface Wind Speed [More](#) [Info](#)
- Ocean Surface Wind Vectors [More](#) [Info](#)
- Salinity [Info](#)
- MODIS True Color [More](#) [Info](#)
- Ocean Surface Current Speed [Info](#)
- Ocean Surface Current Vectors [More](#) [Info](#)

State of the Ocean

Satellite Layers

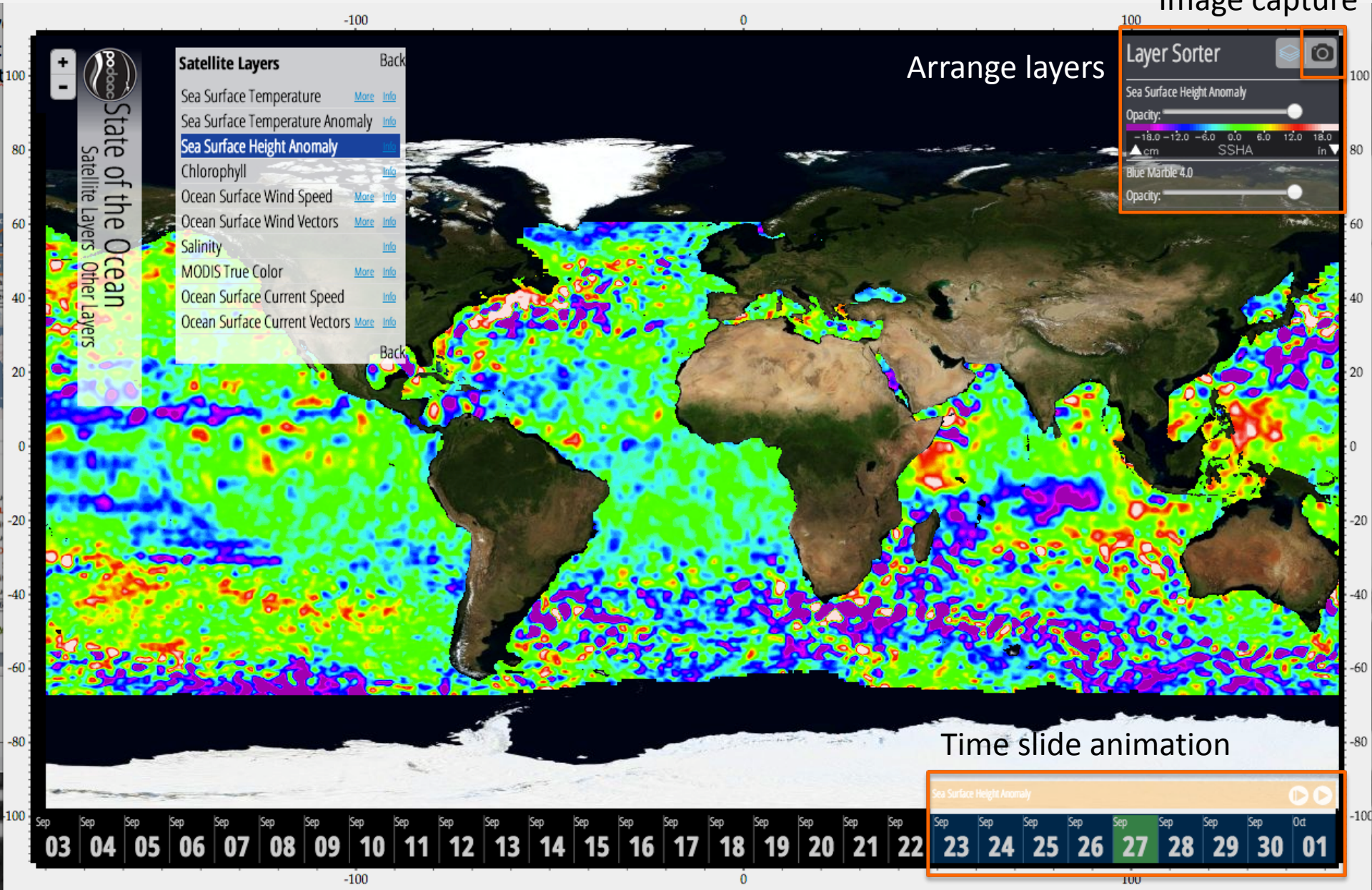
Other Layers

Time slide animation

Sea Surface Height Anomaly

▶ ◀

Sep 03 Sep 04 Sep 05 Sep 06 Sep 07 Sep 08 Sep 09 Sep 10 Sep 11 Sep 12 Sep 13 Sep 14 Sep 15 Sep 16 Sep 17 Sep 18 Sep 19 Sep 20 Sep 21 Sep 22 Sep 23 Sep 24 Sep 25 Sep 26 Sep 27 Sep 28 Sep 29 Sep 30 Oct 01



# HiTide

Swath/Level 2 data visualizer and subsetter

The screenshot displays the HiTide web interface, which is a tool for visualizing and subsetting Swath/Level 2 data. The interface is divided into several sections:

- Header:** Features the Podaac logo and the text "HiTIDE PHYSICAL OCEANOGRAPHY DISTRIBUTED ACTIVE ARCHIVE CENTER". The version number "Version 3.1.0" is located in the top right corner.
- Filters:** A sidebar on the left contains filter options: "DataSets" (with a plus icon), "Region" (with a plus icon), and "DateRange" (with a plus icon). Under "Region", "Global" is selected. Under "DateRange", "Entire Range" is selected.
- Data Preview:** A table in the center-right shows a list of data granules. The table has columns for "Granule Name", "Start Time", "End Time", "Lower Bo...", "Upper Bo...", "NetCDF3", and "HDF4". Several granules are checked, and their corresponding NetCDF3 and HDF4 download icons are visible.
- Select a Start Date and/or End Date:** A modal dialog box is open in the foreground. It contains the following information:
  - Dataset: OSTM\_L2\_GDR\_D
  - Start Date: 2008-06-22
  - End Date: 2012-06-18
  - From: A text input field with the placeholder "YYYY-mm-dd".
  - To: A text input field.
  - Buttons: "Select" and "Cancel".
- Map:** A satellite-style map of the world is shown at the bottom. It features a grid of latitude and longitude lines. A red box highlights a region in the Indian Ocean. A legend in the bottom right corner lists "Global Ocean", "Greenland", and "Indian Ocean".

# Live Access Server (LAS)

http://thredds.jpl.nasa.gov/las/getUI.do

Live Access Server

About LAS

OPeNDAP (F-TDS)

## PO.DAAC LAS v7.3

Choose dataset

Update Plot

Set plot options

Animate

Compare

Google Earth

Show Values

Export to Desktop Application

Save As ...

Link To ...

Print

Ocean Surface Topography / CSEOF Reconstructed Sea Level (loading of Date selection may cause a few seconds delay)

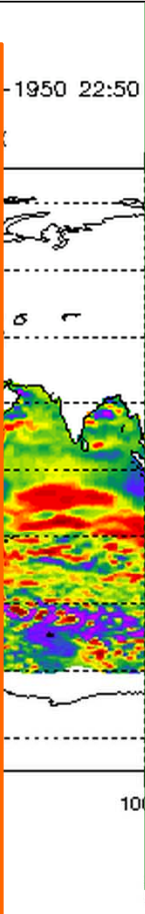
reconstructed SSHA



**Close**

Select a dataset category.

- Chlorophyll
- Climate Intercomparison
- Gravity
- Ocean Surface Currents
- Ocean Surface Topography
  - CSEOF Reconstructed Sea Level
    - reconstructed SSHA
- Ocean Temperature
- Ocean Winds
- Sea Surface Salinity



### Download Data

**Selected Region** Longitude range: [37.96875, 397.96875]  
Latitude range: [-130.78125, 49.21875]

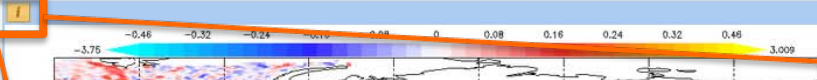
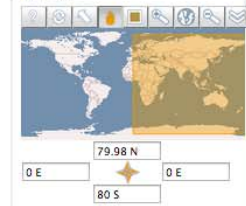
**Select Format**  NetCDF  
ASCII  
CSV  
arcGrid

**Select Time** 0  
16-Jun-1950

**OK**

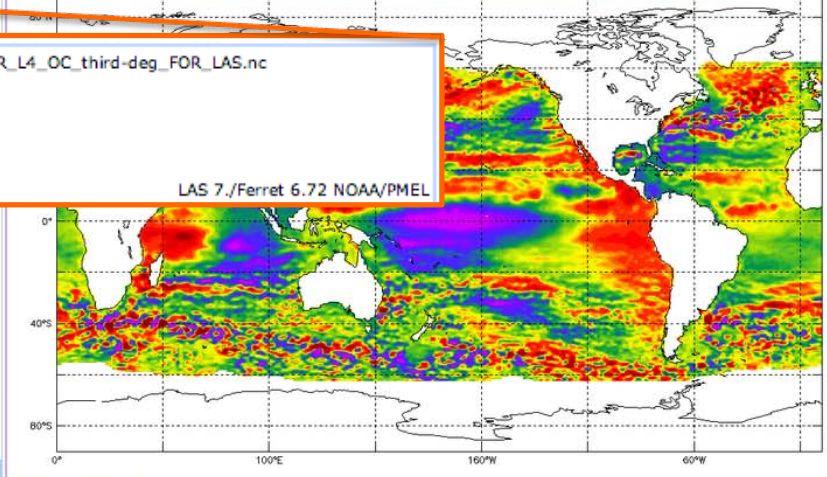
▼ Data Set Plot Options Print... Difference Mode Auto Colors

▼ Settings  
▼ Plot Axes



OPeNDAP URL: [http://thredds.jpl.nasa.gov/thredds/dodsC/ocean\\_circulation/FOR\\_LAS\\_ALL\\_OSCAR\\_L4\\_OC\\_third-deg\\_FOR\\_LAS.nc](http://thredds.jpl.nasa.gov/thredds/dodsC/ocean_circulation/FOR_LAS_ALL_OSCAR_L4_OC_third-deg_FOR_LAS.nc)  
DATASET: OSCAR Third Degree Resolution Ocean Surface Currents  
VARIABLE: Ocean Surface Meridional Currents (meter/sec)  
DEPTH (m) : 15  
TIME : 01-JAN-2008 00:00

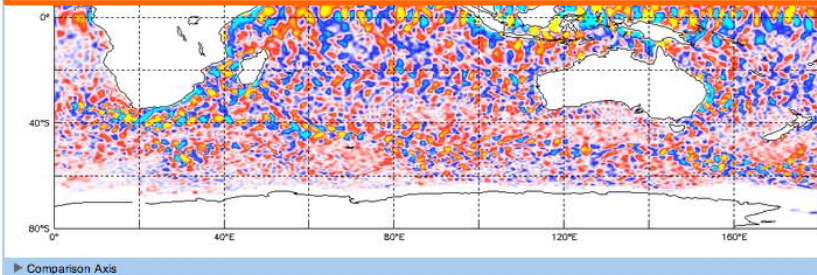
Settings Revert



▼ Maps  
● Latitude-Longitude

▼ Line Plots  
● Time  
● Longitude  
● Latitude

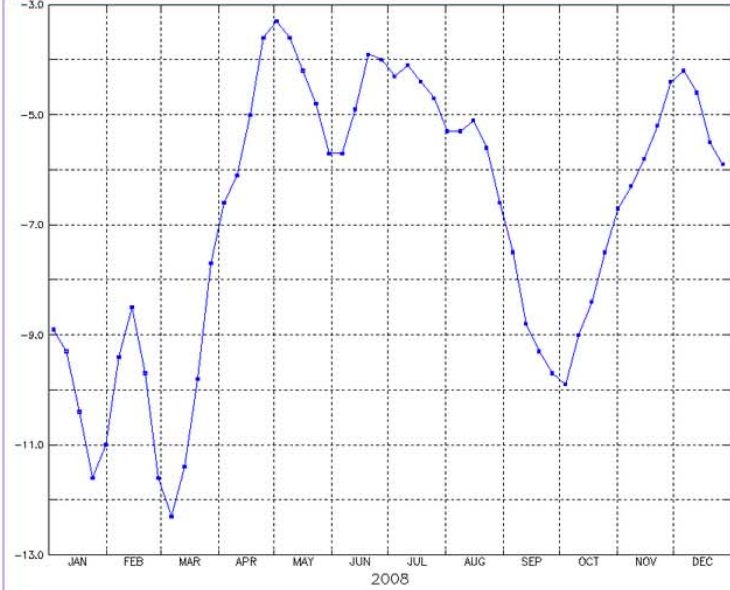
▼ Hofmuller Plots  
● Longitude-time  
● Latitude-time



► Comparison Axis

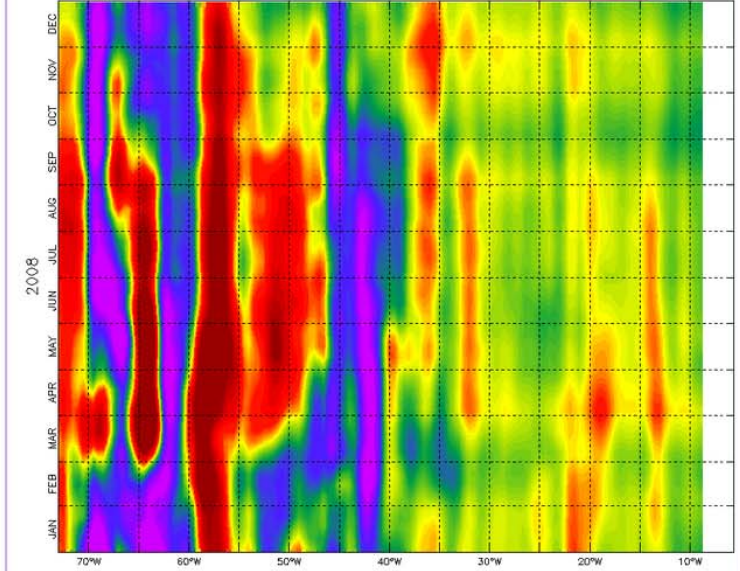
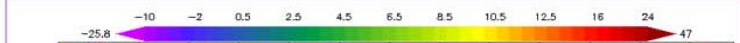
► Plot Axis ► Other Axes

Settings Revert



► Plot Axis ► Other Axes

Settings Revert



► Plot Axis ► Other Axes

# Questions

<http://podaac.jpl.nasa.gov/>  
[podaac@podaac.jpl.nasa.gov](mailto:podaac@podaac.jpl.nasa.gov)

<http://www.youtube.com/user/NASAJPLPODAAC>

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