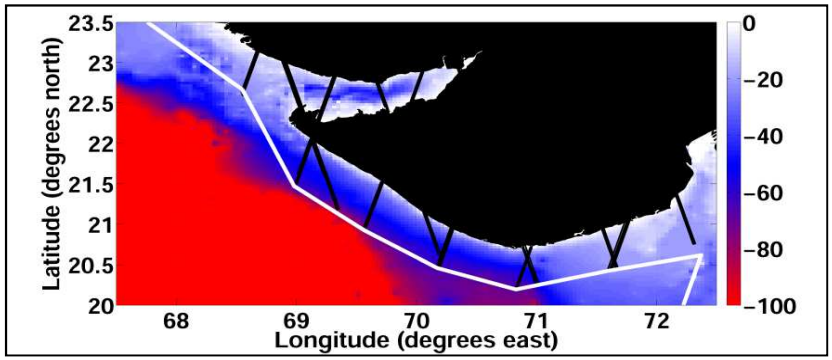
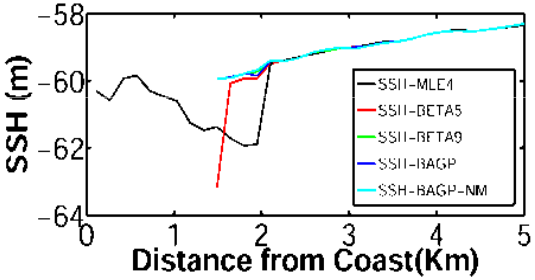
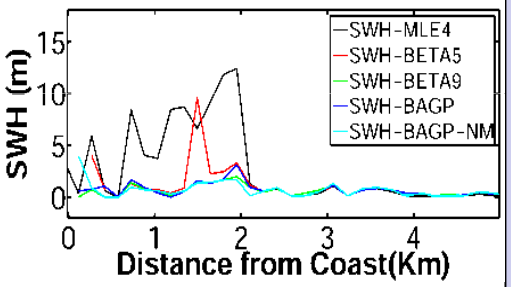
Coastal Product from SARAL/AltiKa for the Gujarat (India) coast







• **Author name: Aditya Chaudhary, Neeraj Agarwal and Rashmi Sharma**

(Space applications Centre(ISRO), Ahmedabad, India)

• Year: 2015

• Public aimed: University students, new altimetry users, general public, decision-makers, scientists, end-users

• Medium: Web site (MOSDAC, ISRO)

*ftp://1*4.139.110.237.

Username: saral_coastal

Password : saral_coastal@2015

• Size / Format: less than 1 MB per file, netcdf

• Language(s): English

Description of the Outreach Product:

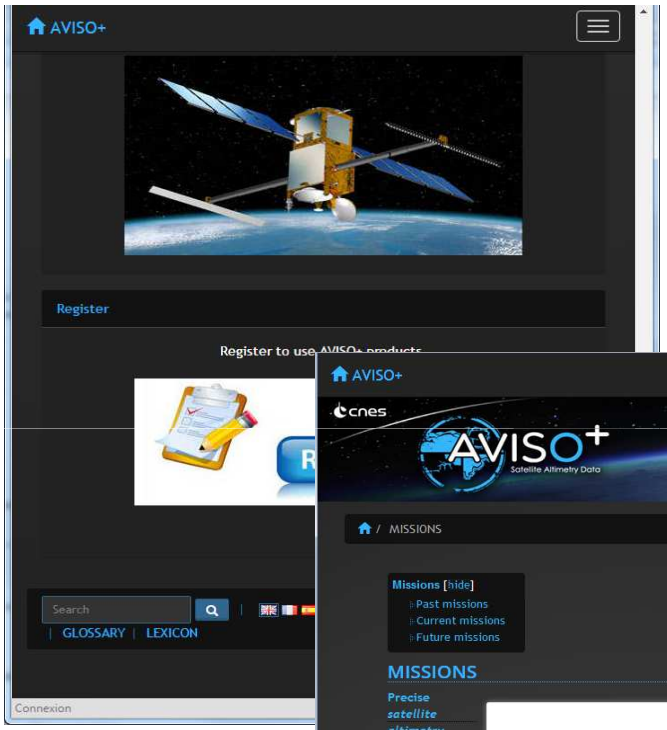
- SARAL/AltiKa, a joint Indo-French Mission of Altimeter was launched on 25th Feb., 2013 from ISRO's Shriharikota launch site.
- AltiKa operates at Ka-band (35.75 GHz) and is in a sun-synchronous orbit having 35-day repeativity. Provides data at 1-Hz and 40-Hz.
- SARAL/AltiKa 40-Hz product (SSH, SWH and Sigma-0) for the Gujarat coast (India) generated for cycles 1-24 using different retracking algorithm.
- Data has been provided up to 50 km distance from the coastline.
- SSHA, SSH, SWH and Sigma(0) at 40 Hz for all three retrackers are available. The geophysical corrections available for 1-Hz with the standard product have been used for 40 Hz by using the cubic spline interpolation.
- Shape based classification of altimetric waveforms using Linear Discriminant analysis (Chaudhary et al, 2015).
- Distance from the coast and land flag at 40 Hz are also provided.
- Regional bathymetry Sindhu et al (2007) has been used in the product.

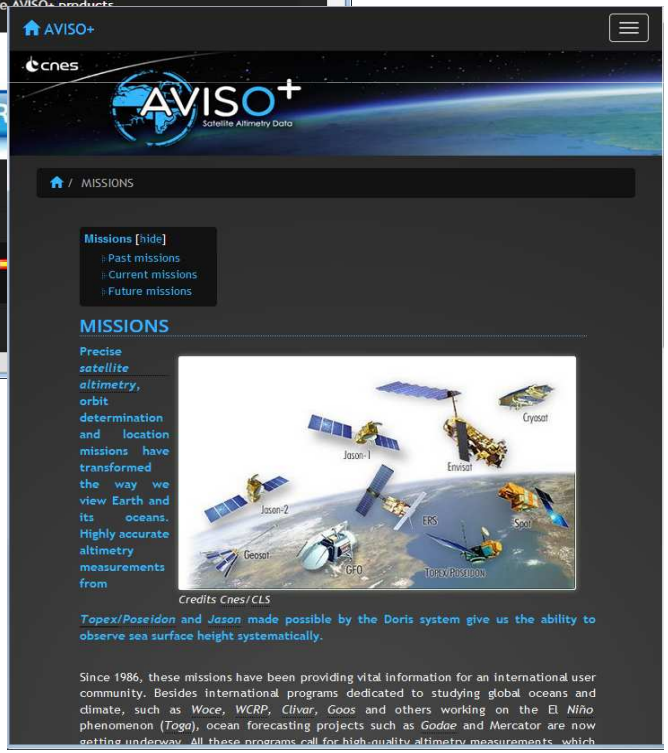
References:

[1] Chaudhary A., Basu S., Kumar R, Mahesh, C. and Sharma R. 2015. " Shape classification of AltiKa 40-Hz waveforms using Linear Discriminant Analysis and Bayes Decision Rule in the Gujarat Coastal region " Marine Geodesy doi:10.1080/01490419.2014.1001504

[2] Sindhu, B., I. Suresh, A. S. Unnikrishnan, N. V. Bhatkar, S.Neetu and G. S. Michael (2007): Improved bathymetric data sets for the shallow water regions in the Indian Ocean. *J. Earth Syst. Sci.,**116,61–274.***

Aviso+ mobile/light version



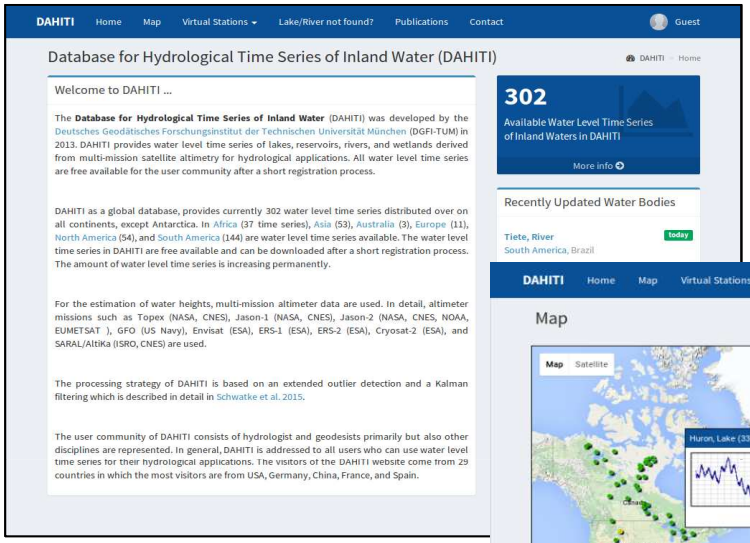


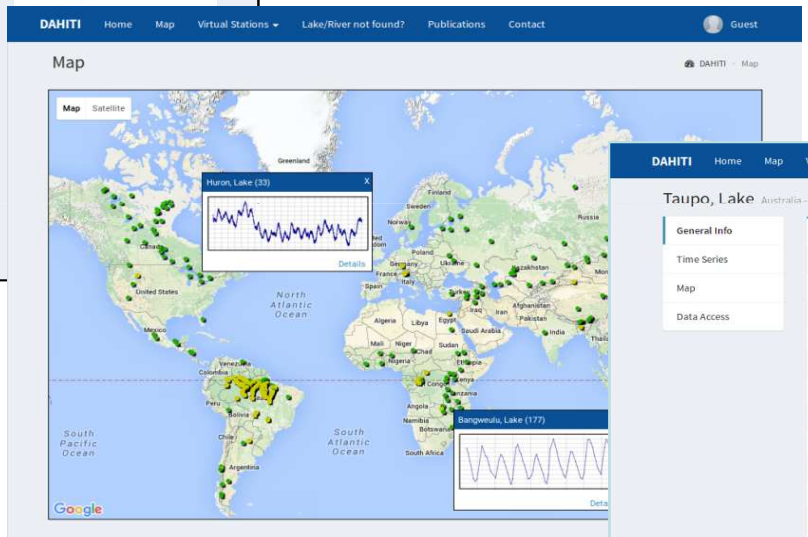
A mobile-compatible version of Aviso+ web site is under development (available soon)

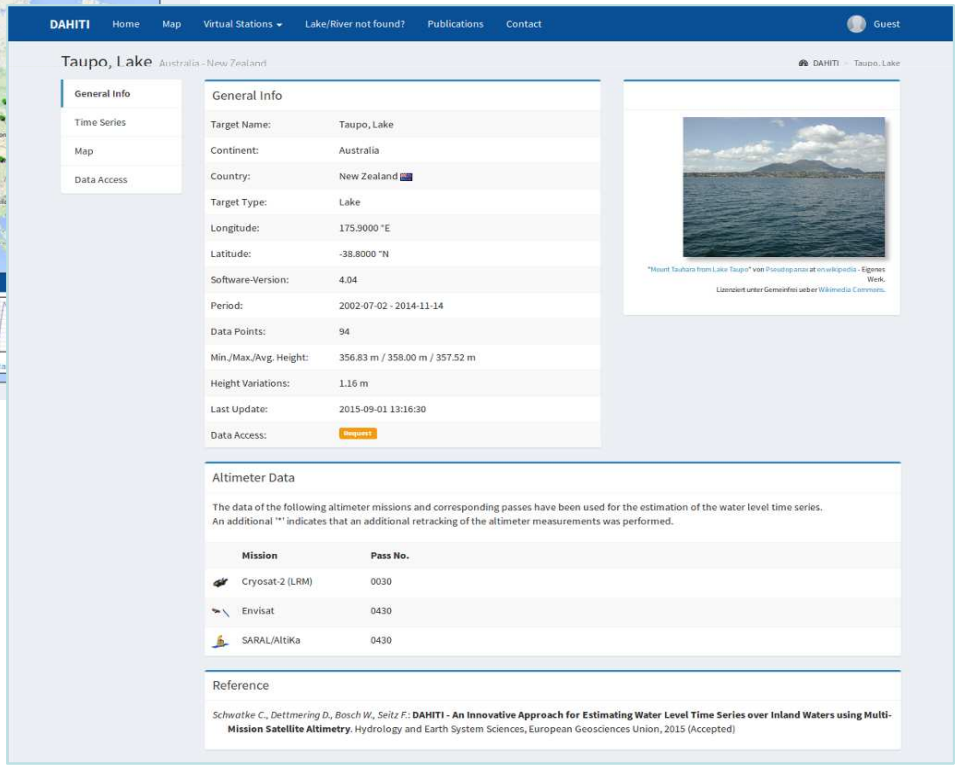
Automatic switch, but also manual one, to accommodate people with low bandwidth

Same content than the "classic" site

“Database for Hydrological Time Series of Inland Waters” (*DAHITI*)



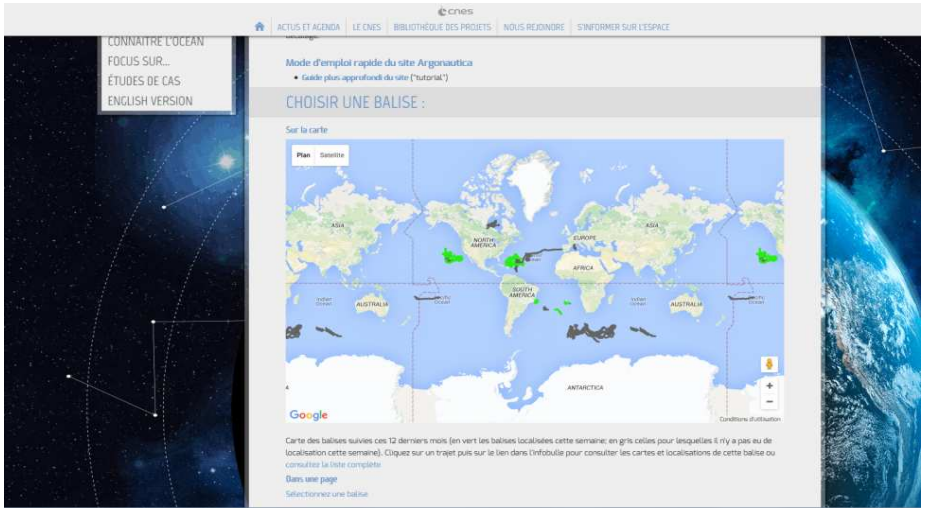




- DAHITI provides water level time series of lakes, rivers, reservoirs, and wetland based on multi-mission satellite altimetry
- More than 300 water level are online available (**http://dahiti.dgfi.tum.de**)

- Author name: C. Schwatke (DGFI-TUM)
- Year: 2013 - active
- Public aimed: Scientists, End-Users
- Medium: Website
- Language(s): english

Argonautica new data access



Argonautica data access interface dated back from 2004 (more or less).

-Techniques had evolved

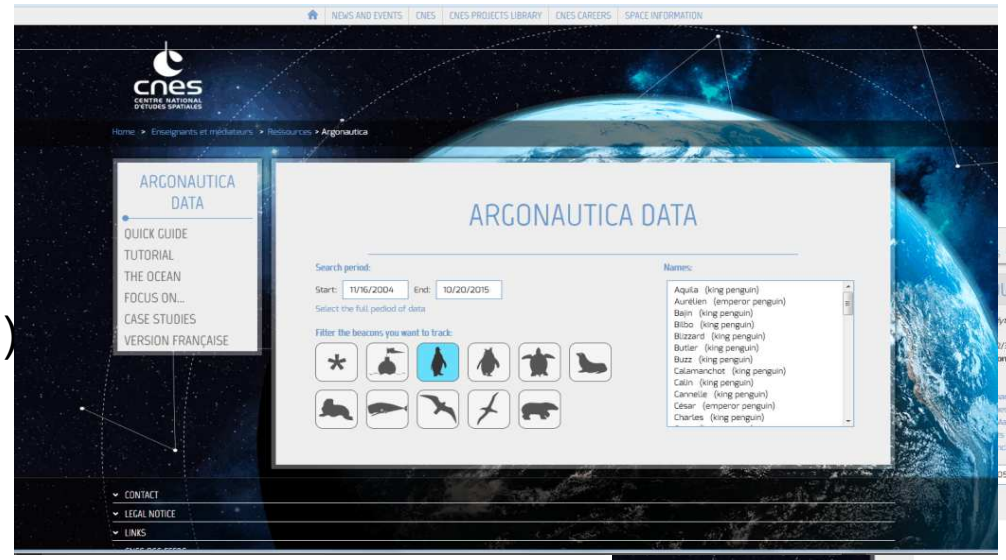
- Poor visibility of "archives" (about 300 beacons)

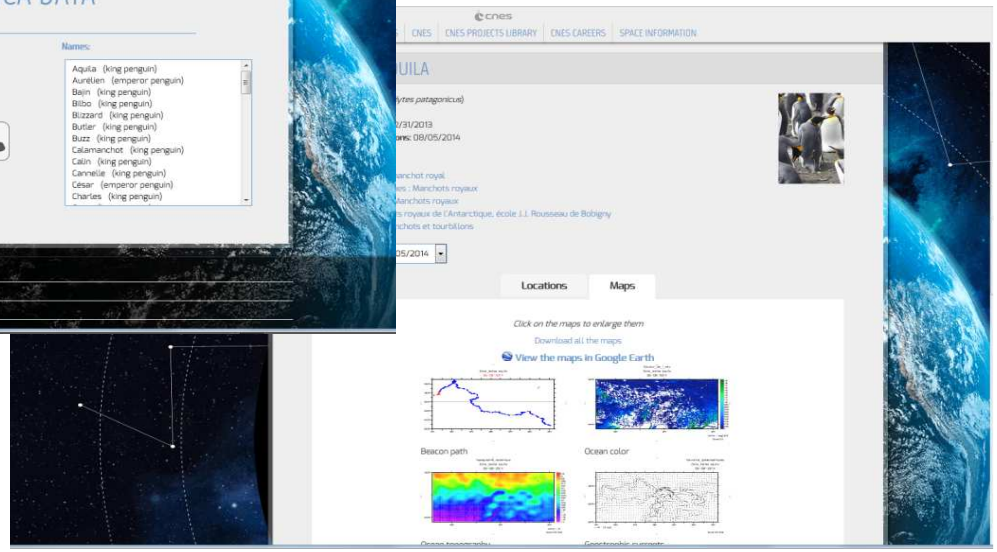
- Revamped CNES web site

➔Need of a serious upgrade

http://argonautica.jason.oceanobs.com

- V. Rosmorduc, CLS for CNES
- Year: 2015
- Public aimed: teachers (students)
- web interface
- Language(s): French, English





OSTST/SATELLITE ALTIMETRY OUTREACH ACTIVITIES

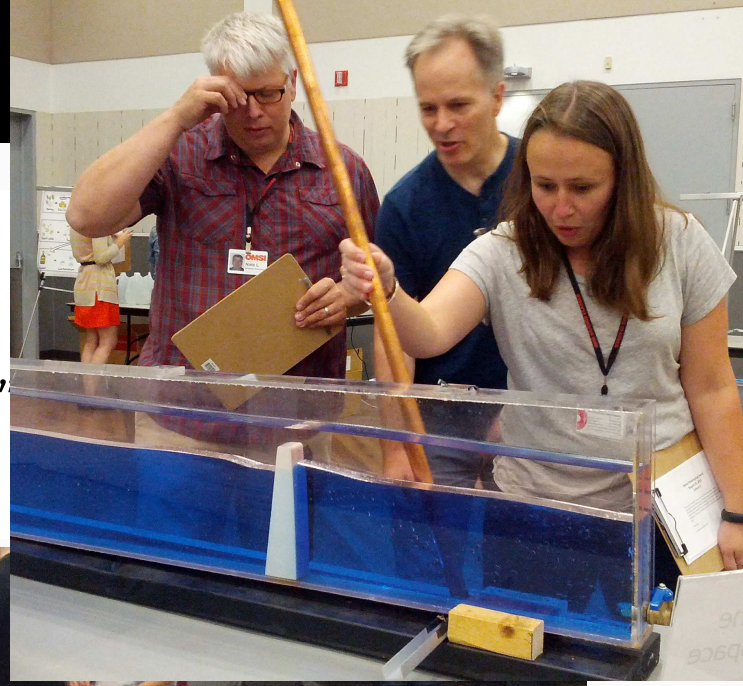
Edward D. Zaron

Department of Civil and Environmental Engineering
Portland State University

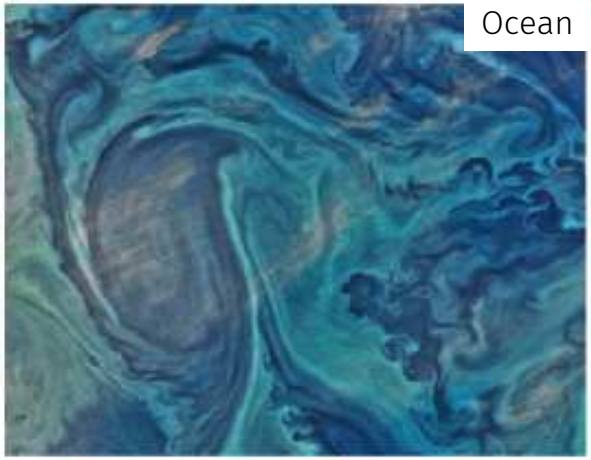
Ocean Surface Topography Science Team Meeting
Reston, VA October 20–23, 2015

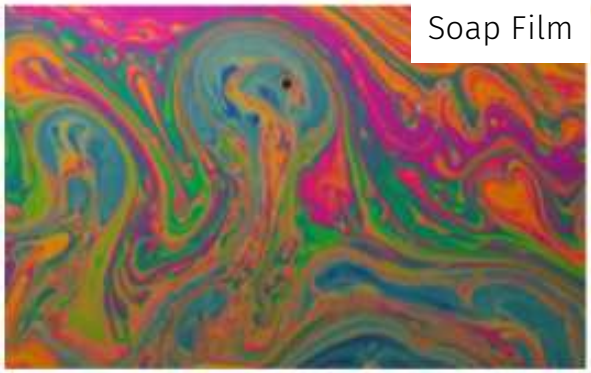
WAVE TANK DEMO AT OMSI

Oregon Museum of Science and Industry
Science Communication Fellow
“Meet a Scientist” & “Museum Open House”
Internal waves, tides, satellite altimetry



UNDERGRADUATE RESEARCH: FLOW IN SOAP-WATER FILM



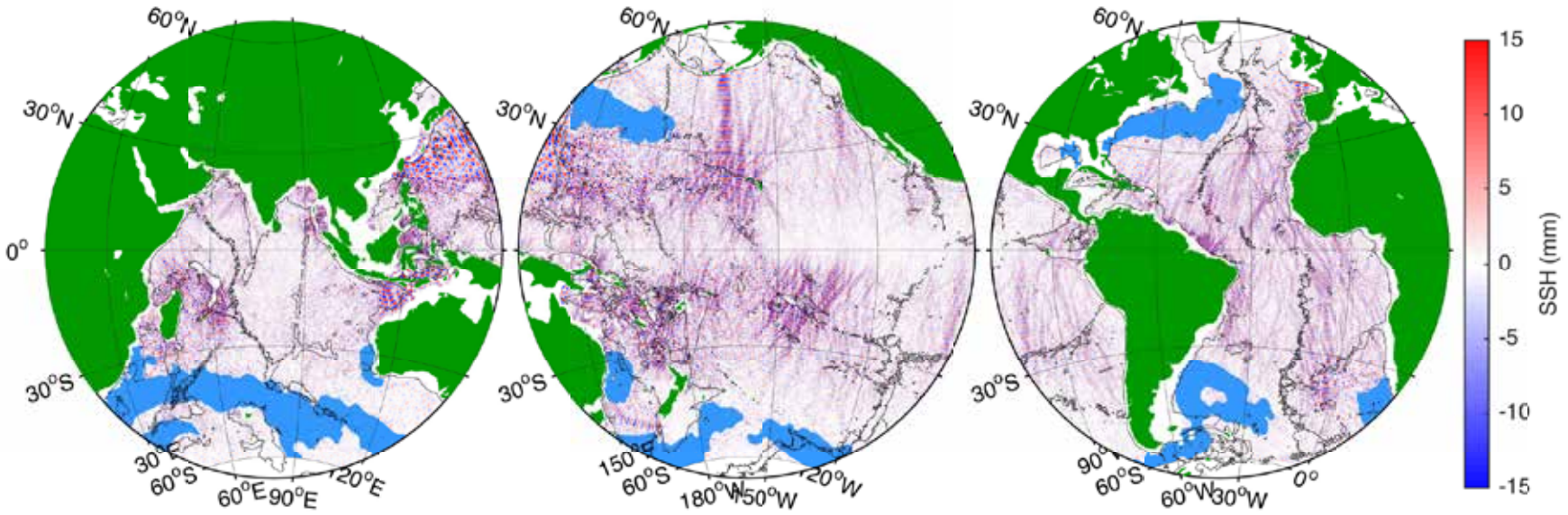


Middle school:

Undergraduate:

Submitted: “Low-Cost Laser Doppler Velocimetry with a Modified Computer Mouse.” *Am. J. Phys.*

A global map of the M_2 internal tide



- Author name: Zhongxiang Zhao et al.
- Affiliation: University of Washington
- Year: 2015
- Public aimed: Scientists, general public
- Medium: posters, pictures, and website
- Size / Format: PDF (2 MB), mov (10 MB)
- Language(s): English

A global map of the M_2 internal tide is constructed using data from previous multiple altimeter missions (ERS-1/2, Envisat, T/P, Jason-1/2, GFO).

Both surface tide models and internal tide models are required in ocean sciences.