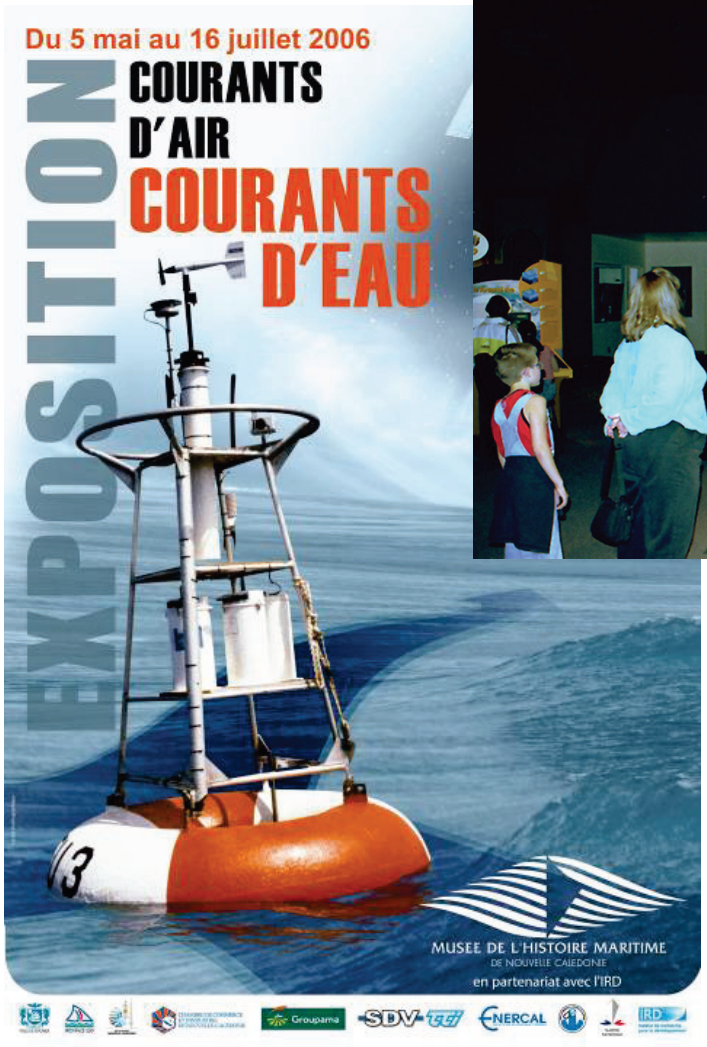
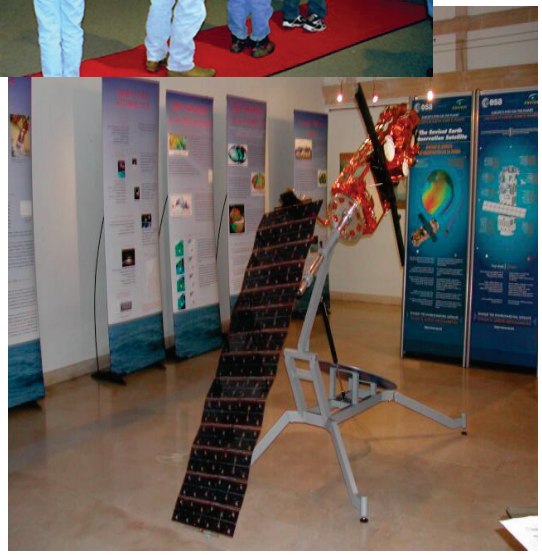
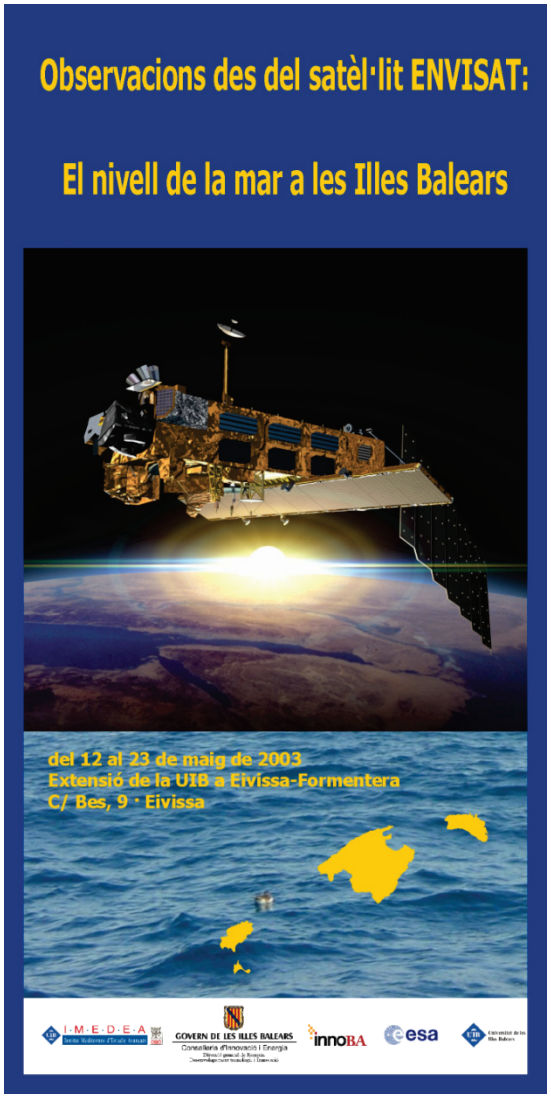
Outreach can be…

Helping in the making of exhibitions

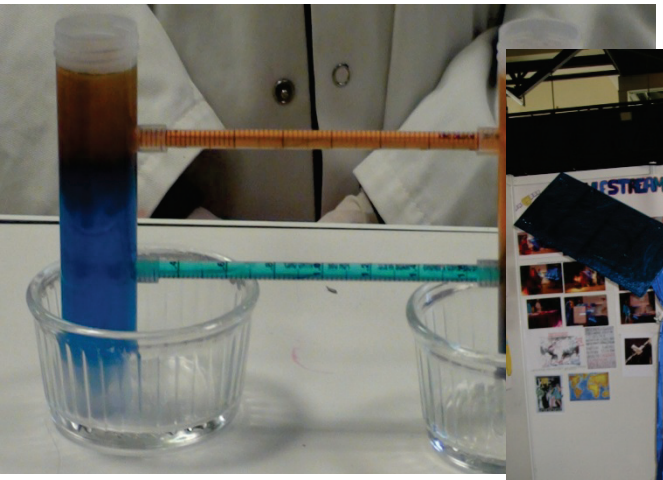




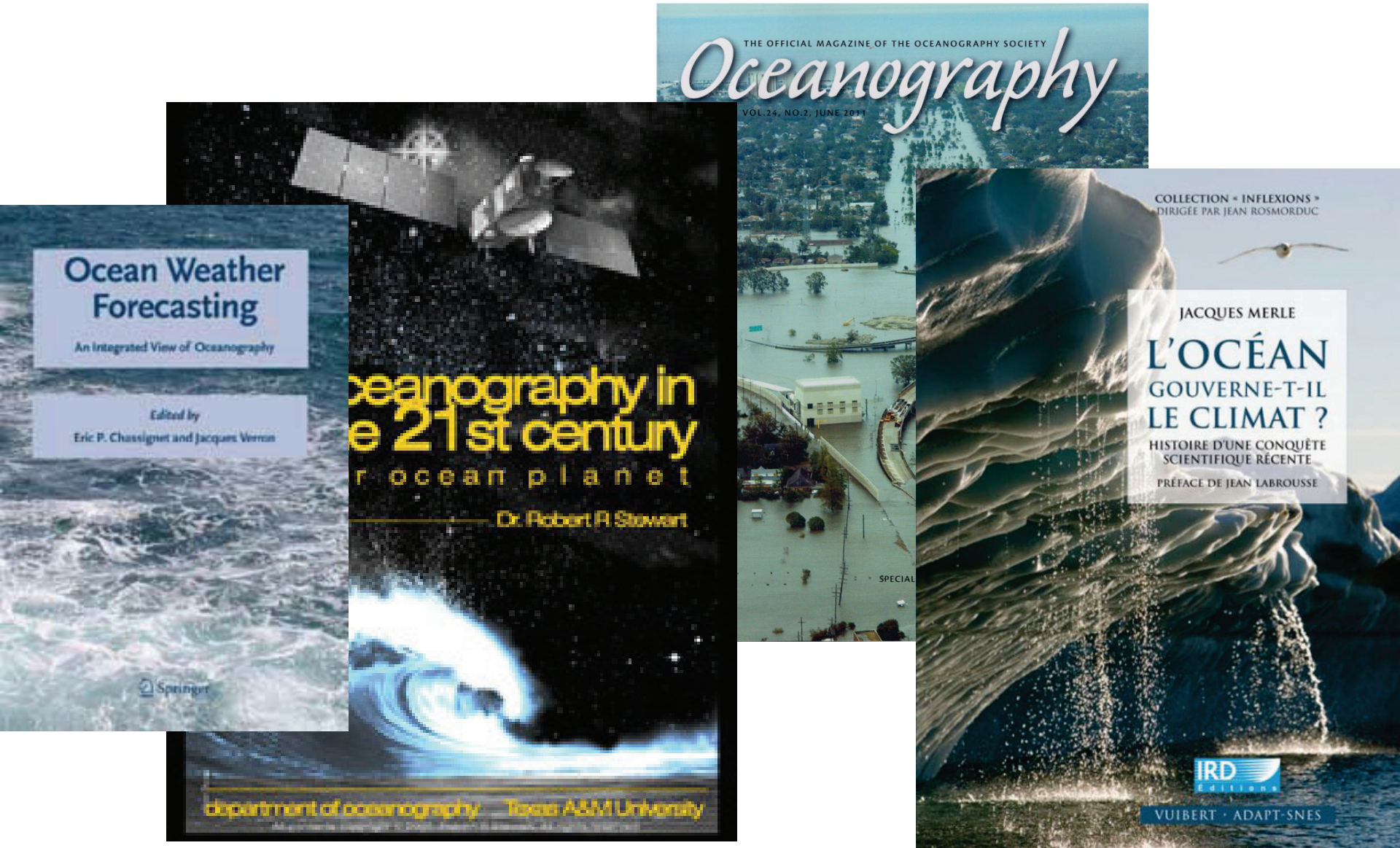


Doing public lectures / conferences

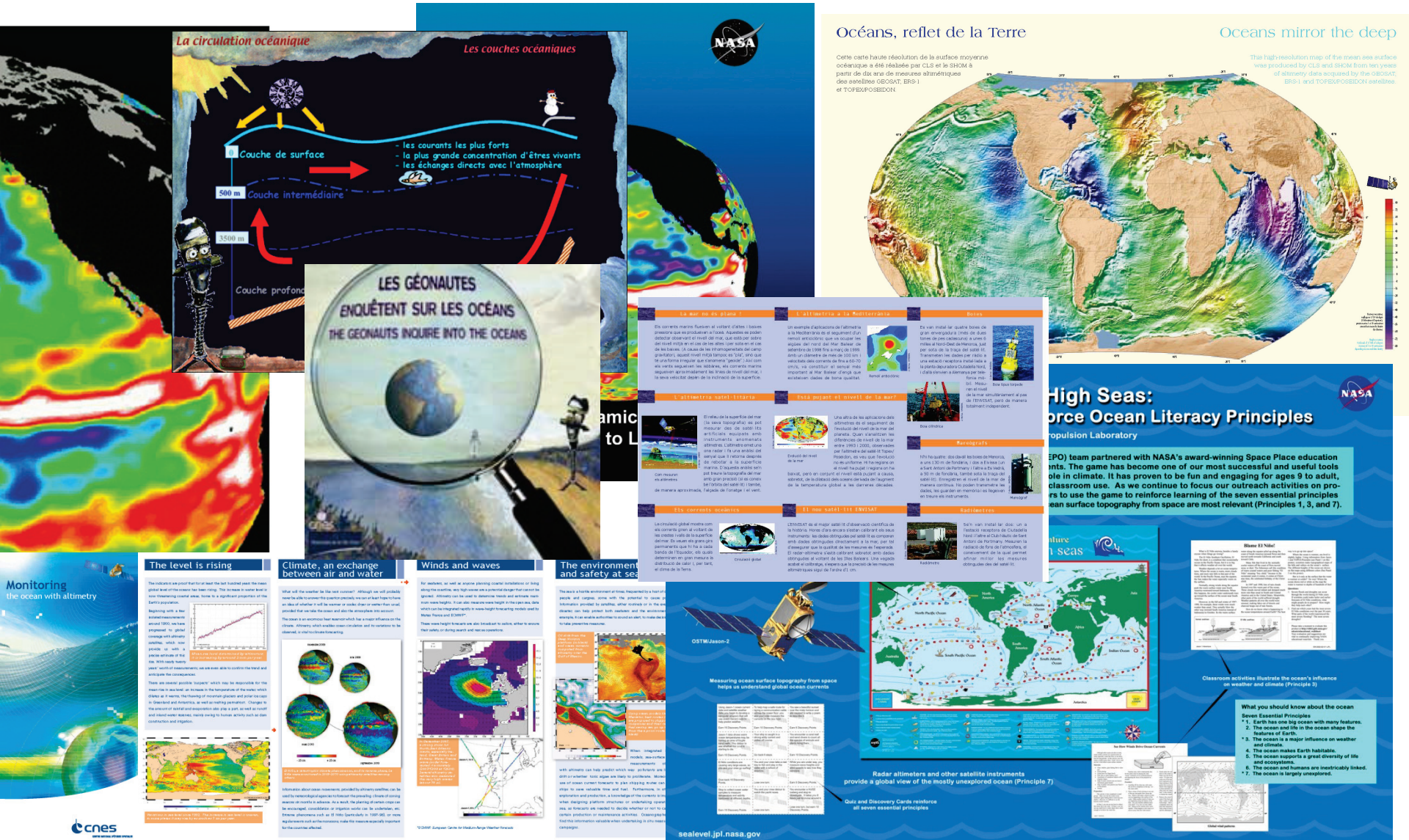
Participating in classroom activities



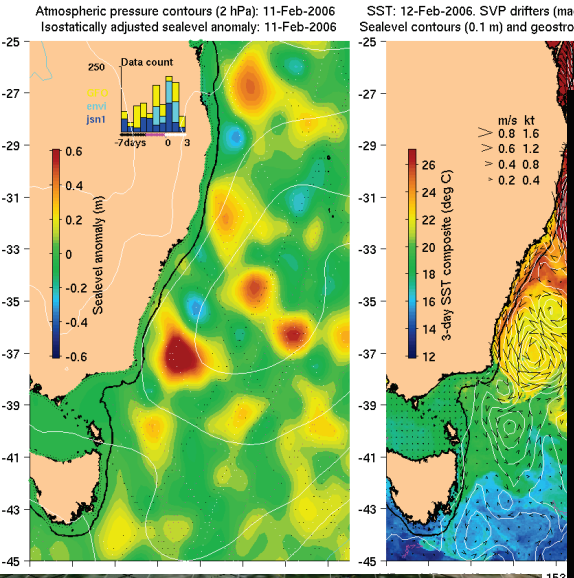
Writing & editing books

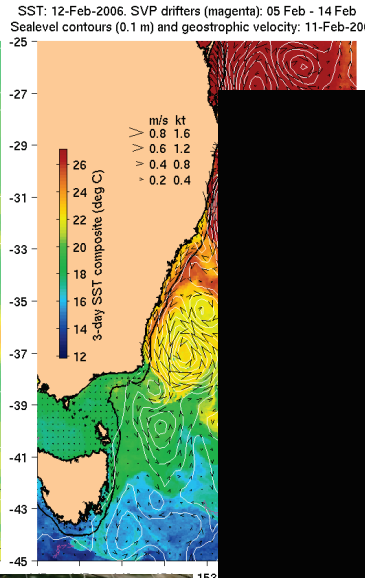


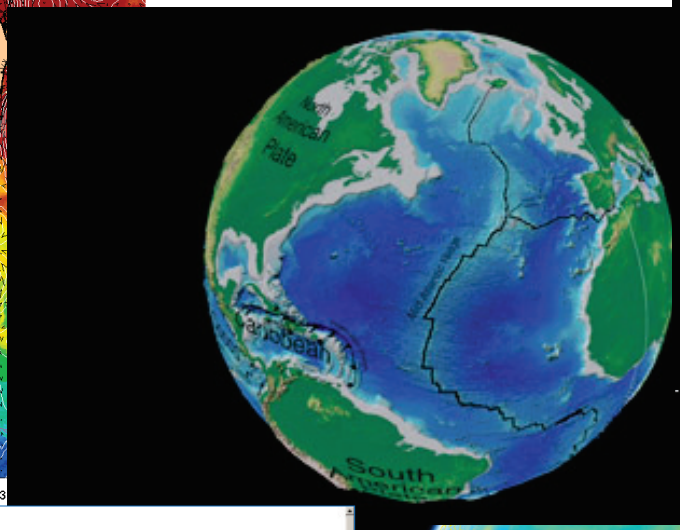
Or making other “hard copy” material

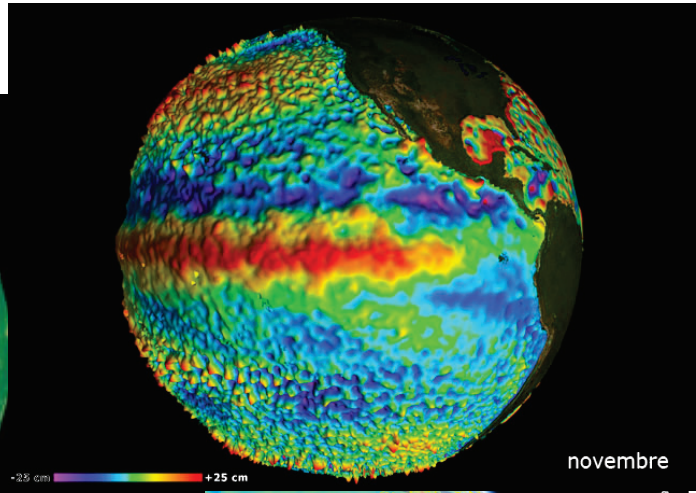


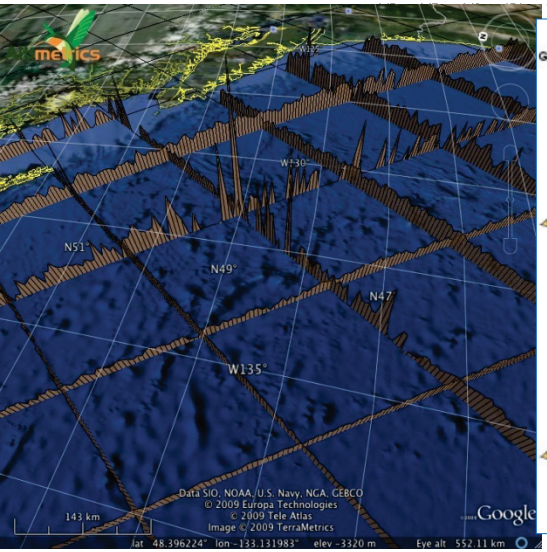
Generating animations and images

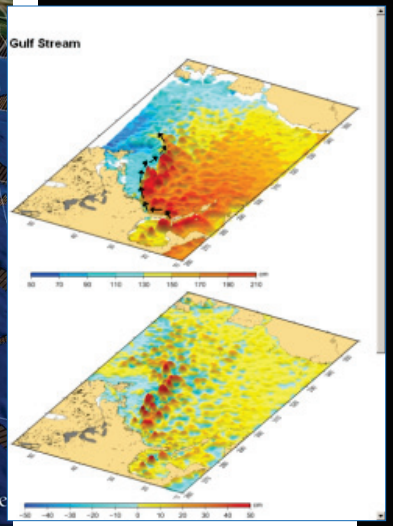


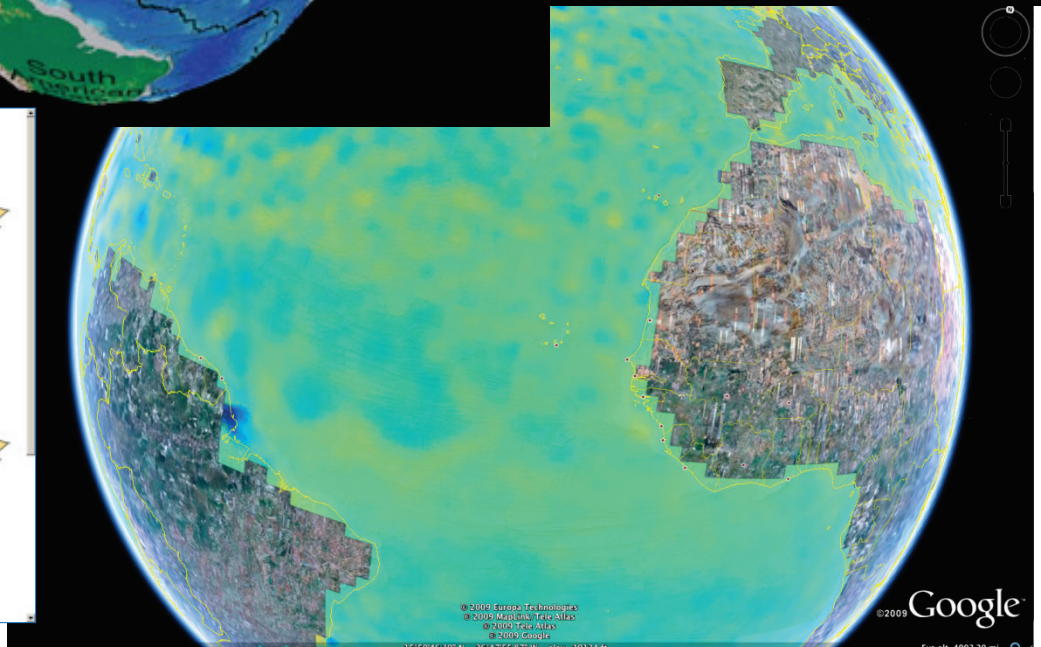




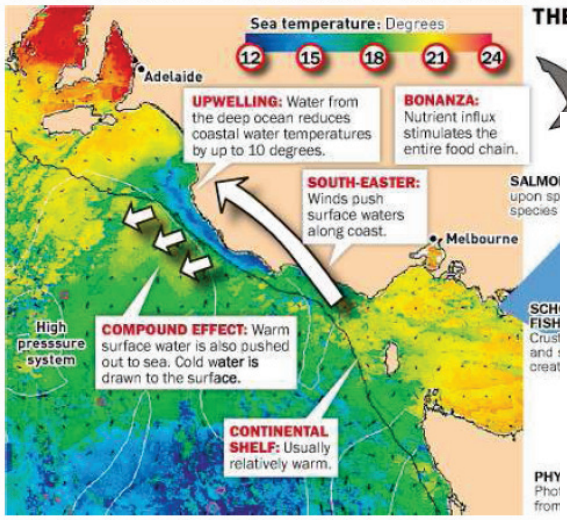


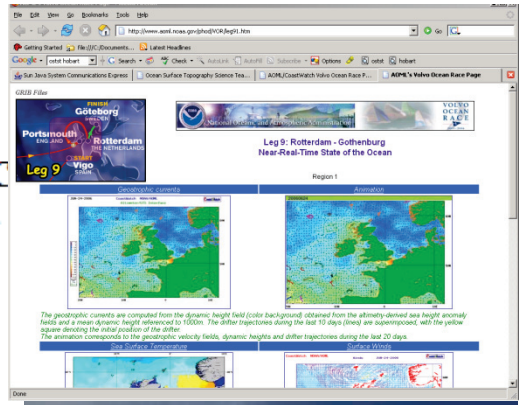


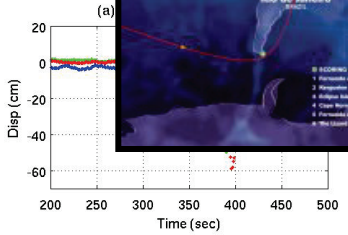


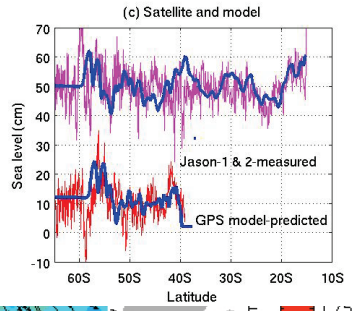


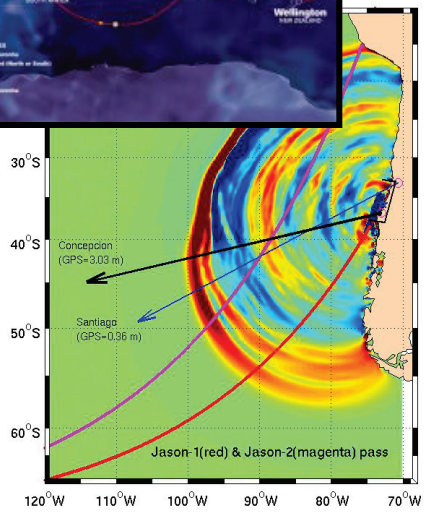
Talking with journalists/media people





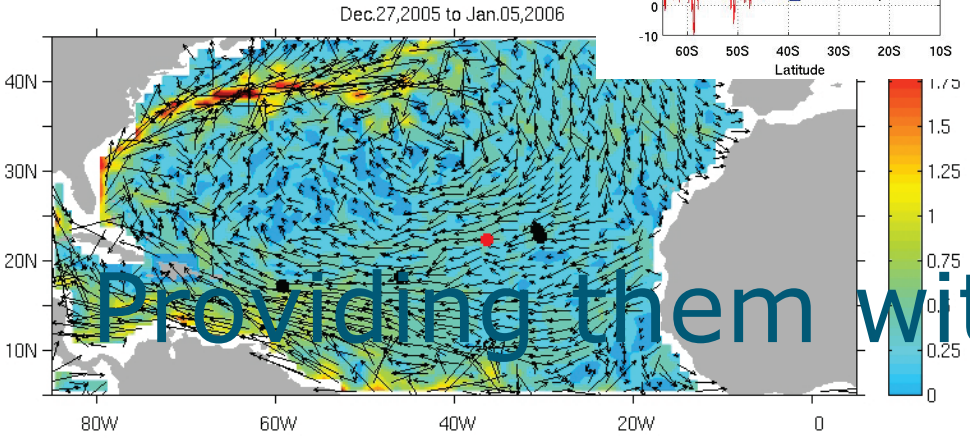






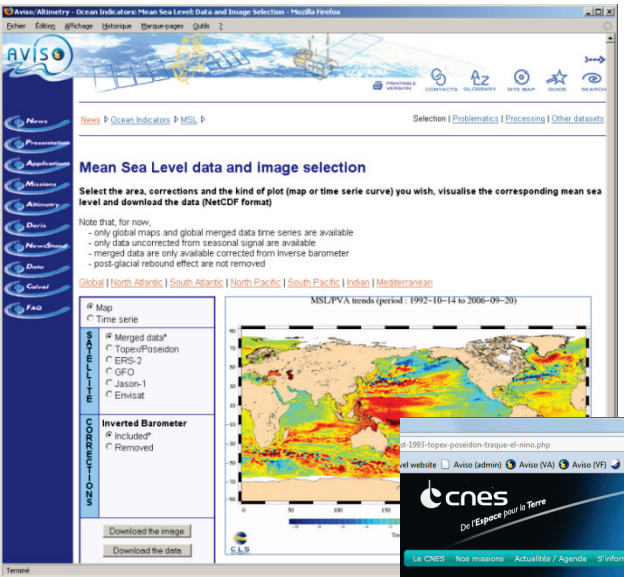
Get out the rubber booties ... a surfer enjoys the balmy warm water at Bondi Beach yesterday but swimmers will soon have to endure water temperatures of 19 degrees. *Photo: Wolter Peeters*

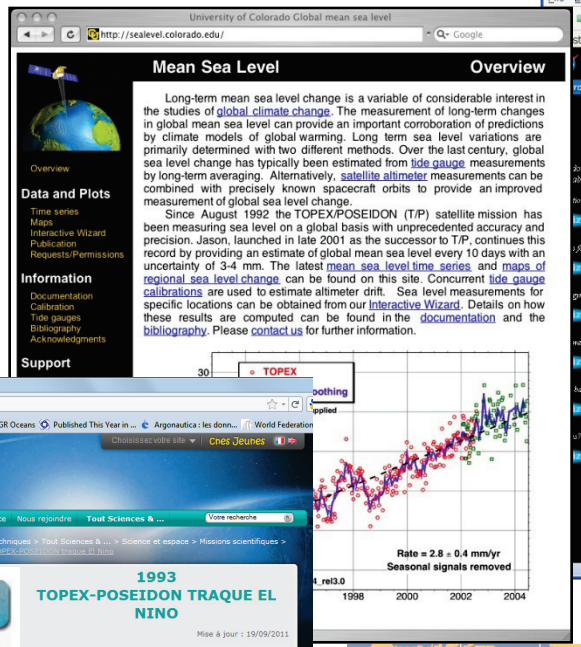
TAKE a dip in the ocean this weekend - it might be the last for a few months. After about eight weeks of unseasonably high water temperatures off Sydney, often reaching 25 degrees, the cold currents are set to finally arrive next week.

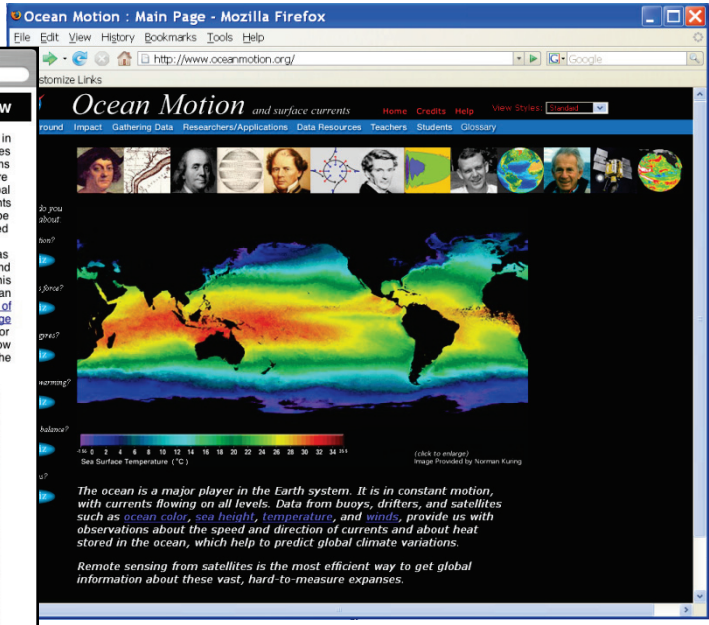


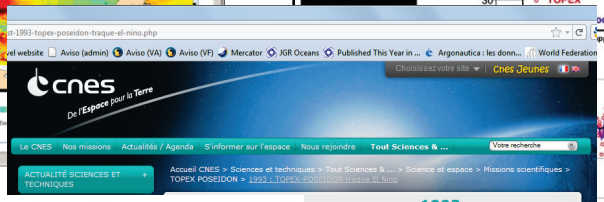
Providing them with "stories" (ours)

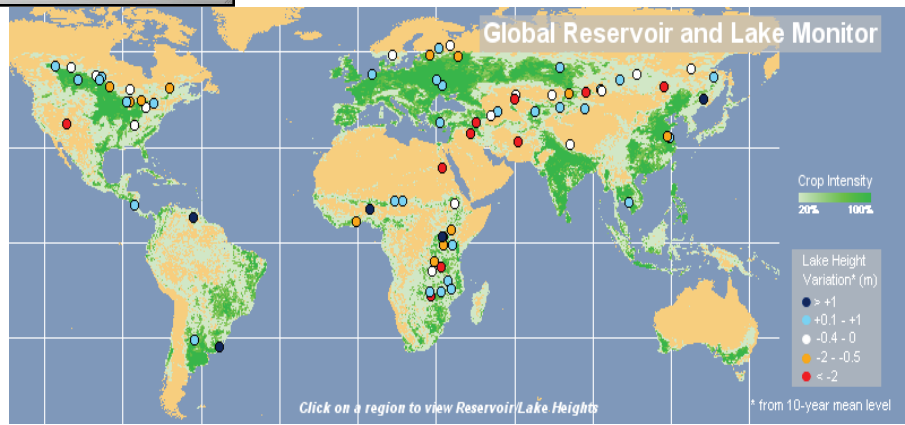
Putting up web sites / pages



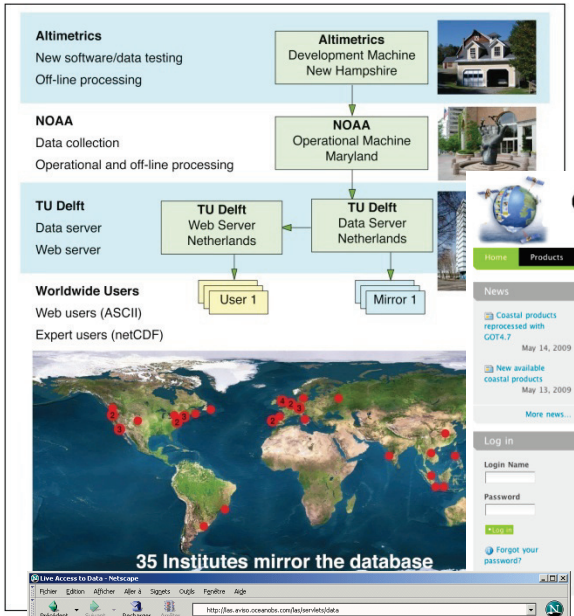


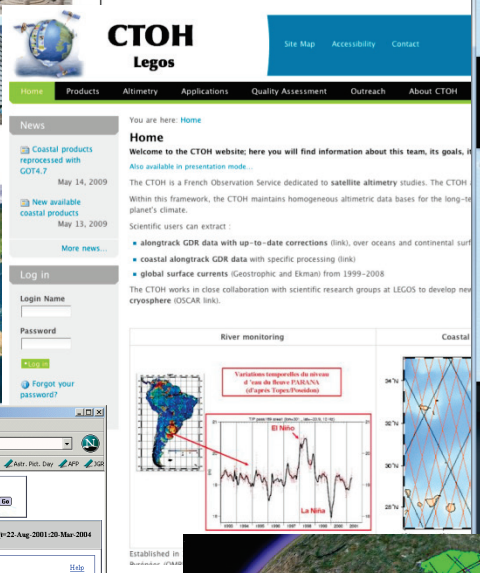


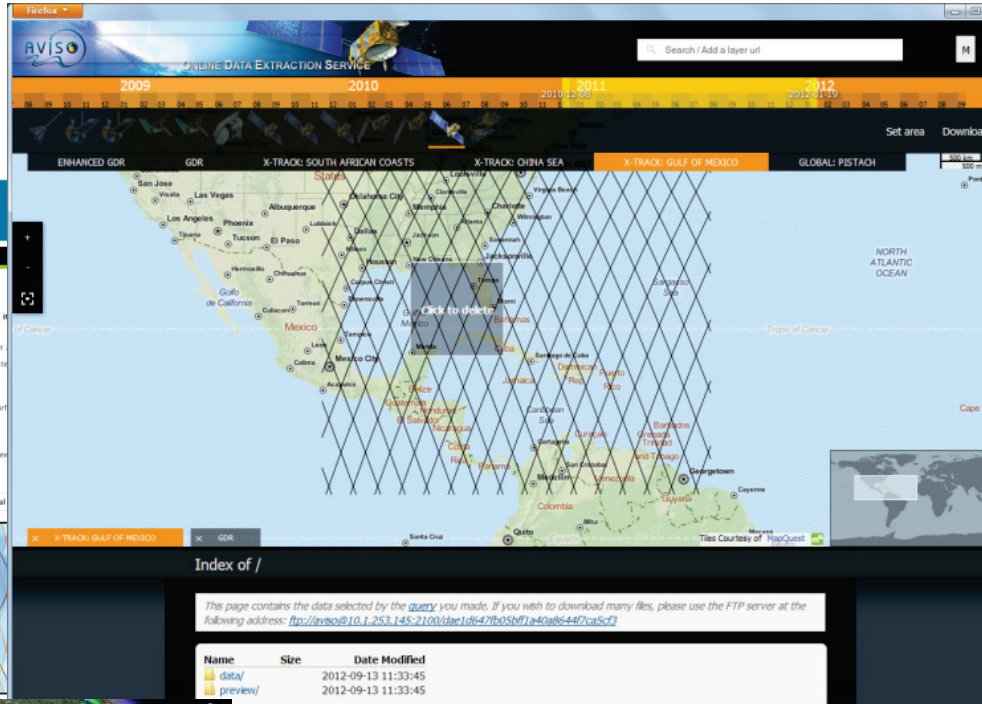


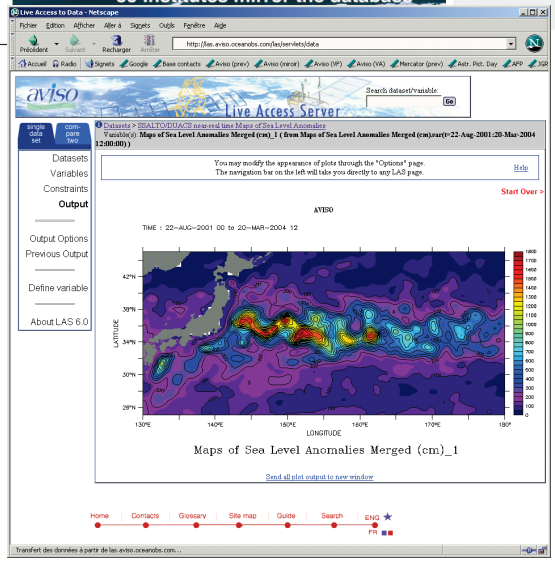


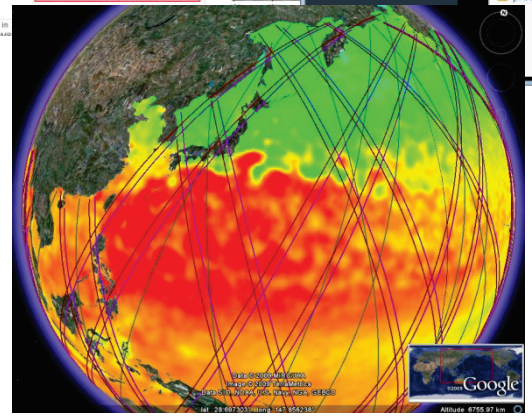
Easing data & their access

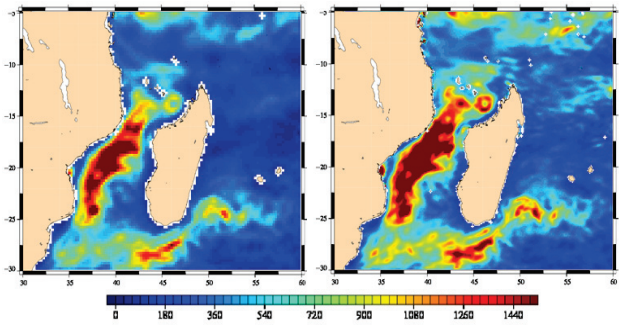








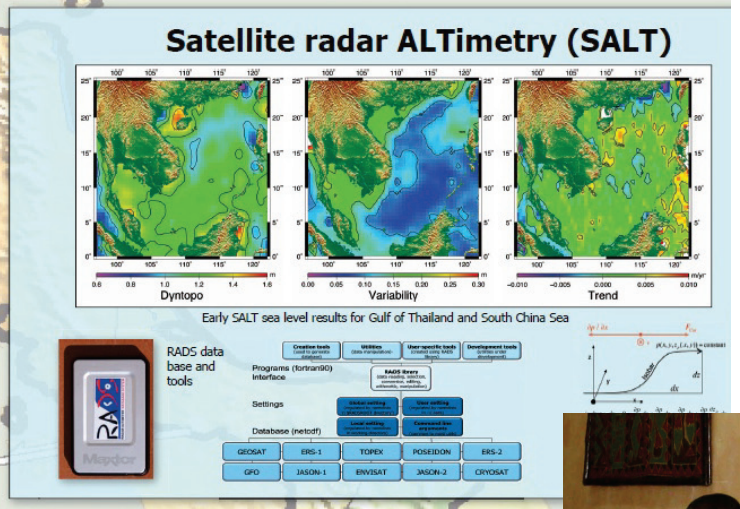




Giving courses

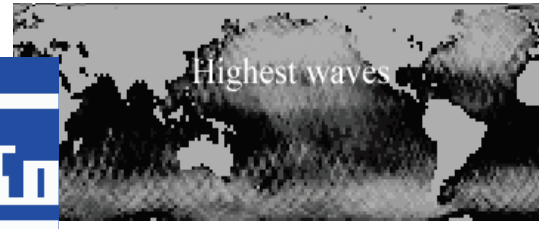
SALT course (Bangkok, May 2009)

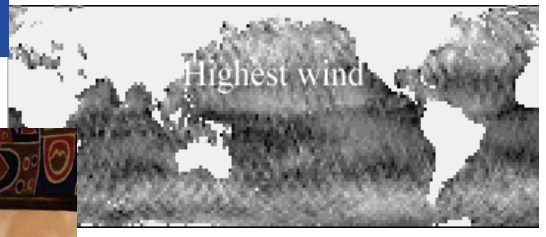
GNSS course (Bangkok, May 2009)



details can be found on the web site http://www.sv.eng.chula.ac.th/geo2tecdi

UNIVERSITY OF WASHINGTON





Providing with dedicated tools

- (along-track) altimetry data needs quite different tools than "imagery" data:
  - Use of several hundreds(thousands) files at the same time
  - Computation
  - Editing selection on criterias (on different variables)
  - A lot of different satellites/formats
- Basic Radar Altimetry Toolbox:
  - A Joint project between ESA and CNES,
  - Data reading, processing and visualisation
  - from ERS-1 (1991) up to Saral
  - http://www.altimetry.info, http://earth.esa.int/brat/ (mirror), DVD

Thanks to all who participated!

(this year and previous years)

Outreach & data services splinter

Outreach session
Thursday, 20 October 14:00-15:40

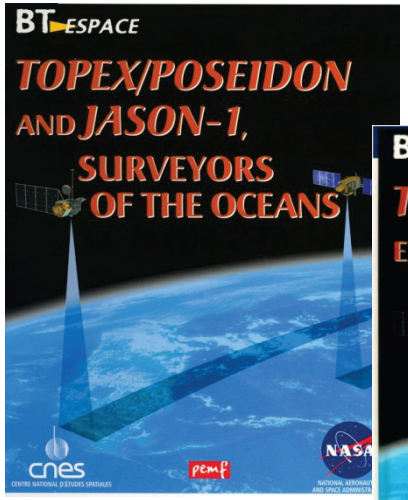
- Chairpersons: V. Rosmorduc, M. Srinivasan
- Agenda Topics:
  - ARGONAUTICA, an educational project using JASON data
  - The 7th Continent Expedition : International Student Participation in a Voyage to the “Great Pacific Garbage Patch” (Staerke et al)
  - Education, Outreach, and Societal Benefits of Ocean Altimetry Missions: 20 Years of Communication & Collaboration (Richardson et al.)
  - Climate Science Education for Underrepresented Students through Collaboration with CABPES (Hamlington et al.)
  - Indonesian Throughflow Proxy from Satellite Altimeters (Susanto et al.)
  - Jason-1 Geodetic Datasets at PO.DAAC and the Impact on its Users and Services (Hausman)
  - SHOWCASE of altimeter outreach

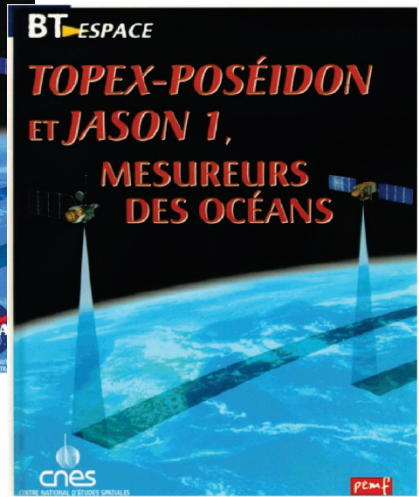
Posters

- LearnEO!: an ESA Learn Earth Observation Project Byfield et al.
- A new interface to download altimetry data in Toulouse Rosmorduc et al.
- Reaching Operational Users ? A JPL/CCAR collaboration Srinivasan et al.
- Sea Level Experiments for Climate Science Education of High School Students Fitzpatrick et al.
- CTOH: 20 years of altimeter data Fleury et al.
- Ssalto/Duacs: Preparation of the next products version Pujol et al.

20 years of NASA/JPL-CNES collaboration

- A fruitful collaboration
- Now with Eumetsat, NOAA, ESA…
- Joint products & activities including Argonautica in the US
- Translations English-French & French-English





Altimetry Data Services

- Several presentations/posters.
- Statistics/metrics about users (Jason-1 geodetic phase GDRs) were provided.
- Is there interest in compiling joint, multi-service, metrics to provide "total" number of users to the agencies? (is it feasible?)
- Aviso "Online Data Extraction Service" on demo
- JPL/CCAR collaboration for real-time users
- CTOH, SSALTO/DUACS data
- D. Griffin "IMOS ocean current" web site

Oceancurrent.imos.org.au

oceancurrent.imos.org.au

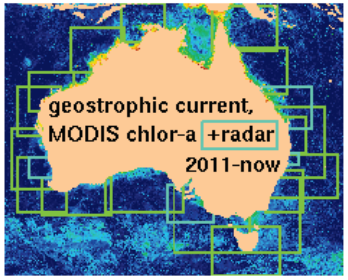
20 years altimetry

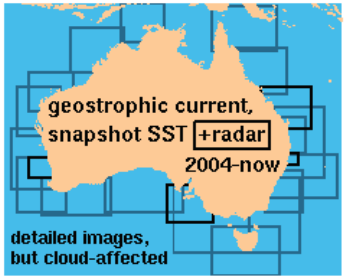
IMOS Integrated Marine Observing System

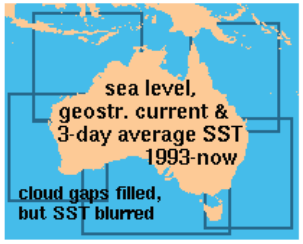
OceanCurrent - Ocean Surface Currents and Temperature

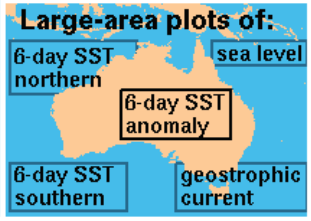
Ocean News: An even-higher sea level event in the Great Australian Bight (29 Aug 2012) [more...]
The Day the East Australian Current vanished (13 Aug 2012) [more...]
Technical News: Data system functioning again (24 Aug 2012) [more...]

Prepared maps and animations



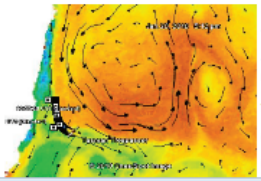






[Source Data] [what's shown] [animation won't play?]

Imagery for import into Google Earth



[West Australia, last 6 days] [2008-now]
[East Australia, last 6 days] [2008-now]
Click one of these links to make a map of the anomaly of 3-day average SST for WA or East Australia appear in Google Earth. If you select the 'last 6 days' link, drag the time slider right to see the most recent data. For either recent or old, zoom in to see 'snapshot' images of SST anomaly, overlain with altimeter-derived estimates of currents. Move the time slider slowly to load other days' data. **Warning**: You need a good internet connection for this to work well. **Tip**: Do not save this to My Places in GE. To refresh tomorrow, reload from the website.

Education

- Argonautica: students presentations in plenary (20yrs) and outreach session (OSTST)
  - **real** appreciation from the attendees for the quality of science content, procedures and presentation

  → definitely something to continue in next OSTSTs (both sides of the Atlantic?)

Education (cont'd)

- Argonautica:
  - "7th continent" operation: understand and study the Pacific plastic garbage patch through an expedition + satellite data):
    - JPL joining in
    - OSTST members are welcome to join in too!
- CAPBES Sea Level Education For Underrepresented Students: after-school sea level and climate science course with Matlab and experiments
- LearnEO (web-based lessons about use of EO data)
- OSTST members involved in a number of Training courses:
  - Advertise them more widely?
  - Share material? (including "kitchen experiment" descriptions) ➔ medium?

Recommendations

- Heightened interest of general public concerning all things concerning climate, more efforts should be made in altimetry visibility
- Organize more trainings, make more tutorials, let them be known, share material
- Link between the different data available by the different data center
- Continue funding “old” missions for regular upgrades / reprocessings
- Develop international collaboration between students ; material in several languages.

New Planned Efforts

- Jason-2/OSTM, SWOT, Saral and Jason-3 education & public outreach and applications outreach
- Altimetry and multisensor applications promotion
- Coverage of science team research and other applications on web
- Presentations about altimetry and applications made available to the community?
- Continue the “beautiful images from altimetry”?
- AvisOcean Iphone/Ipad application expanded
- Aviso Online Data Extraction Service to be open online (2013) with full database
- Climate day cont’d

OSTST posters on the web

- A complete overview of what was shown during this meeting
- An archive of past meetings (from 1998)

- Send them in pdf to aviso@oceanobs.com (tell us if > 5MB)

- Your posters available online at: http://www.aviso.oceanobs.com/ostst/