Aviso+ products & services: what's new?

OSTST 2019

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The products

Sea surface height and derived products

- Ssalto/Duacs Climatology Maps of Sea Level Anomalies
- Ssalto/Duacs along-track and Maps of Sea Level Anomalies heights and velocities (Mozambique)
- Ssalto/Duacs experimental along-track and gridded Sea Level Heights and velocities
- Geophysical Data Records
- Monomission Corrected Sea Level Anomalies (L2P):

New in 2019: + L2P Sentinel-3B

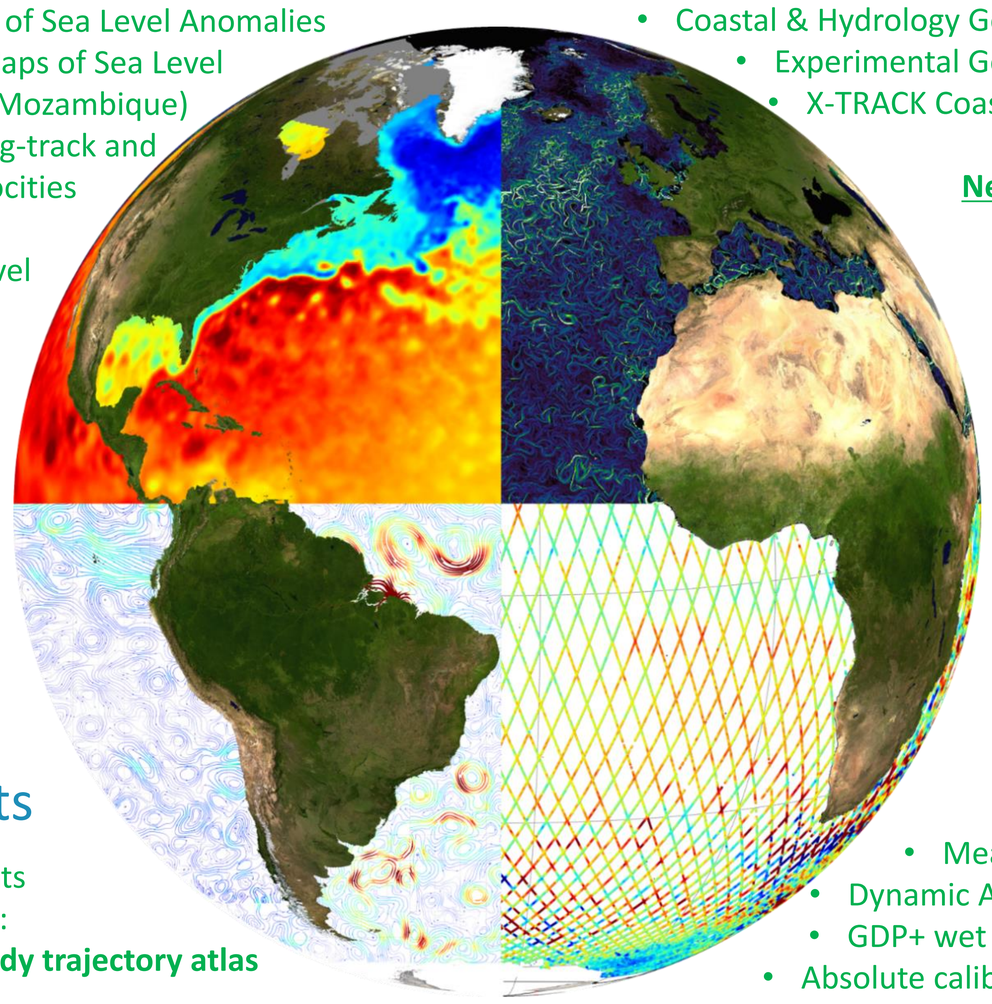
Wave heights and wind speed

- Along-track Wave NRT for Sentinel-3A and Sentinel-3B
- Maps of Wind speed
- Maps of SWH

Value-added products

- Lyapunov exponents or Filaments
- Mesoscale Eddy trajectory atlas:

New in 2019: + NRT Mesoscale Eddy trajectory atlas



Coastal – Ice – Hydrology products

- Coastal & Hydrology Geophysical Data Records
- Experimental Geophysical Data Records
- X-TRACK Coastal Sea Level Anomalies
- Sea ice product:

New in 2019: + Antarctica
+ New Alti Snow Depth

Ocean indicators

- ENSO index & maps
- Mean Sea Level
- Kuroshio index
- Ionian Sea index

Auxiliary products

- Tidal model
- Mean Sea Surface
- Mean Dynamic Topography
- Dynamic Atmospheric Corrections
- GDP+ wet tropospheric correction
- Absolute calibration tide gauge series

Upcoming products, upgrades and reprocessing

- **Tidal constants** from CTOH
- **Sea Ice**: new L3 products
- **CFOSAT:** L1 and L2 products from SWIM (WAVE) and SCAT (WIND)
- Cnes **Bathymetry** from FES14 tidal model
- New version of **Sea Ice** products
- New version of **X-TRACK** products
- New **MDT** version **CNES_CLS18** (Rio et. Al, OSTST 2018)
- New **MSS** version in preparation (Schaeffer et al., OSTST 2018) :
  - calculated with 25 years of altimeter data containing the DUACS2018 standards.
  - use of the historical missions ERS-1, TOPEX/Poseïdon, ERS-2, Geosat Follow On, Envisat, Jason-1
  - improvement of the shortest topographic structures with the missions Jason-2, SARAL/AltiKa, Sentinel-3A, Cryosat-2.

Change in the dissemination of GDR products

The ftp dissemination of the **Geophysical Data Records** (OGDRs for Saral and S/I/GDRs for Jason-1, -2, -3, Saral) products was **transfered** during the summer **to the authenticated Aviso+ ftp portal** :
ftp://ftp-access.aviso.altimetry.fr/geophysical-data-record/

The **previous anonymous access was stopped on September 12.**

REMINDER – data access
Since Aviso+ data/product distribution services are managed separately by CNES and CLS, three login/password exist:

- One for the private space « My Aviso+ », the authenticated ftp, Opendap and the Gridded Data Extraction tool,
- A second one for ODES,
- A third one for the Aviso+ CNES Data Center.

More information at
https://www.aviso.altimetry.fr/en/data/data-access.html

CFOSAT products

https://www.aviso.altimetry.fr/en/missions/current-missions/cfosat.html

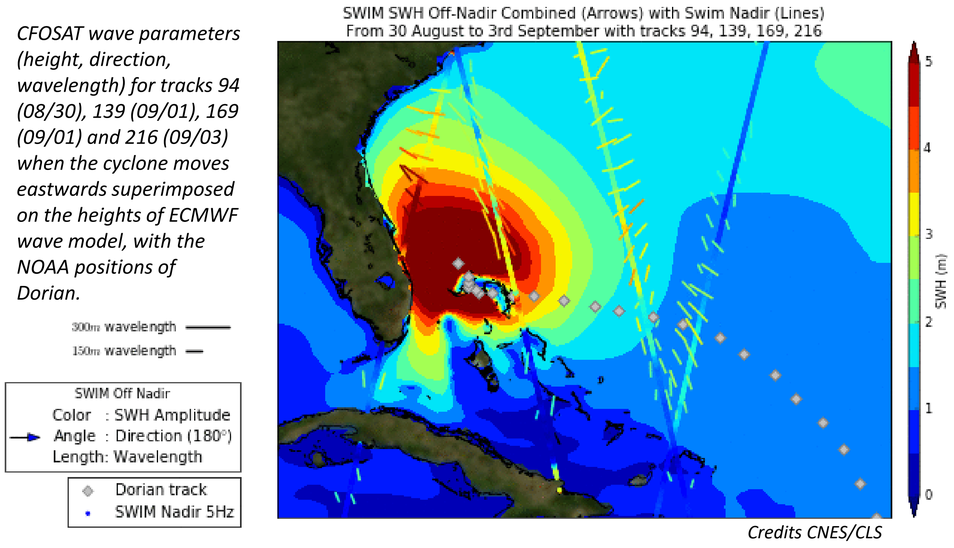
- The French-Chinese CFOSAT satellite was launched on 28 October 2018 with the French wave diffusiometer SWIM, and the Chinese wind scatterometer SCAT.
- Based on the outcomes of the first CFOSAT International Science Team meeting held in Nanjing in September 2019, the Joint Scientific Working Group issued a recommendation for the distribution of SWIM and SCAT data to all users.
- The CFOSAT data will therefore be made available to the scientific community as soon as it is validated by the CNES / CNSA Joint Steering Committee (coming weeks).
- **L1/L2 SWIM and SCAT products will be proposed through the Aviso+ services**

The CFOSAT International Science Team in Nanjing, 23-25 September 2019

Hurricane Dorian seen by satellites

https://www.aviso.altimetry.fr/en/applications/atmosphere-wind-and-waves/hurricanes/dorian-2019.html

CFOSAT wave parameters (height, direction, wavelength) for tracks 94 (08/30), 139 (09/01), 169 (09/01) and 216 (09/03) when the cyclone moves eastwards superimposed on the heights of ECMWF wave model, with the NOAA positions of Dorian.



Credits CNES/CLS

A page on Aviso+ website is dedicated to Hurricane Dorian as seen by the remote sensing satellites :

- wave parameters from Jason-3, Jason-2, Copernicus Sentinel-3A/B, CFOSAT
- wind speed from Copernicus Sentinel-1, SMOS and SMAP
- ocean ernergy content from models.

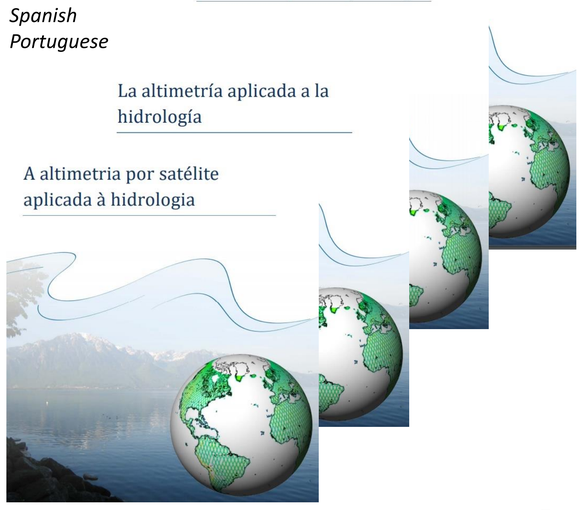
How to use altimetry for hydrology?

https://www.aviso.altimetry.fr/en/multimedia/education/altimetry-courses.html

A document to explain altimetry for hydrology. This document, in pdf, have been written thanks to the help of many people. It explains the details and technical points of altimetry for hydrology.

Available on Aviso+ in :

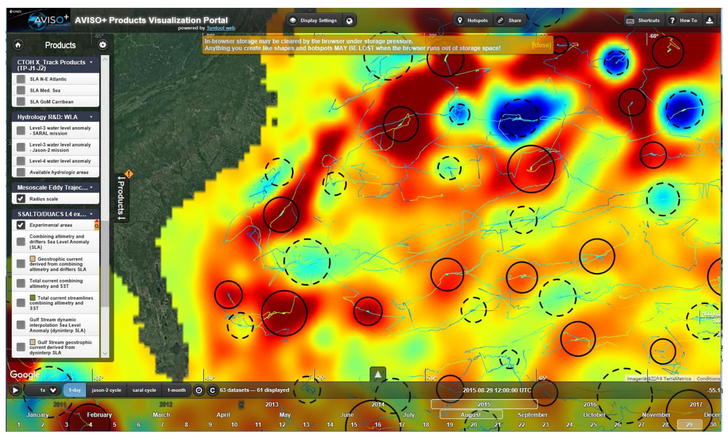
- *English*
- *French*
- *Spanish*
- *Portuguese*



Aviso'VIZ visualization portal

https://www.aviso.altimetry.fr/en/data/tools/avisoviz.html

A new release of the Aviso'VIZ portal provides new capabilities and new products, recently disseminated via AVISO+ or CMEMS.



AVISO'VIZ screen capture showing Map of Sea Level Anomalies products (background colors) and Mesoscale Eddy Trajectories (continuous black circles for anticyclonic eddies and discontinuous for cyclonic eddies; trajectory plotted with the SLA amplitude).
Credits OceanDataLab, CMEMS, CLS, LEGOS/CTOH, LOCEAN.

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SALP Service Altimetrie & Localisation Precise

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