Online data extraction service for research and operational users

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ODES
Online Data Extraction Service
Interactive web portal to distribute Level-2 / Level-2P altimetry products from CNES (GDR, PISTACH, DUACS) and LEGOS (XTRACK)

Handle 60+ years of cumulated data (data volume, heterogeneity)

Custom extractions (web portal must get into the product and process it)

Client / Server technology (MMI allows to build the query and the server disseminate the data)

Fast and interactive data exploration / extraction
Interface and basic features

User friendly map interface:
- zoom,
- scroll,
- view
(flexible background: vectors or images, ...)

Timeline (temporal selection)

Product family (global & regional, L2 and L2P)
Altimetry mission and product type is now selected (here Jason-2)

Geographical selection made easier with rapid satellite track preview
Here is your custom directory for small areas
HTTP or FTP internet features
(rapid setup, no waiting required).

Your custom directory also features
preview pictures for your favorite areas.

Check your selection, select the parameters of
interest and hit the OK button.
Case study

You want

• To study significant wave heights over the last twenty years over the North-East Atlantic.

Previously

• You downloaded all the GDRs (each having its different format), extracted the region and parameters of interest by yourself

With ODES

• You chose the product (GDRs), time span, satellite(s)
• You select the area
• You select the parameters of interest (swh_ku, swh_c...)
• And download: you begin immediately to have files on your computer (standardized NetCDF4 files).
Case study

You want

• To compute Sea Level Anomalies from GDRs using the new FES2012 tide model

Previously

• You waited for a GDR re-processing.

With ODES

• You chose the “enhanced GDRs” product
• You select the satellite, the period
• You select the tide correction from FES, as well as the other corrections you want
• You download.
ODES can distribute operational and research-grade products

- from reference products (CNES missions)
- from CNES CALVAL activities (L2P on all altimetry missions)
- from LEGOS (L2P and L3)
- experimental algorithms and data from the OSTST community
- from non-CNES missions (after agreement of partner agency)

Fall 2013 (ramp-up phase)

- GDR-class (level 2)
- PISTACH coastal and hydrology demonstrators (level-2P)
- XTRACK coastal (level 3)
- Additional research-grade parameters (e.g. alternative orbit solutions, alternative geophysical corrections...) from the OSTST PI community

2014 and beyond: CNES willing to improve the MMI, integrate more products from various contributors
Notable user-oriented features

**Not just a file/dataset selector**
- ODES actually extracts and sends only the measurements and parameters selected with the interface (e.g. 3 parameters in a GDR, subset of 1D track)

**Rapid interface and extraction (a.k.a: we don’t keep you waiting)**
- File-by-file processing and only when the user is ready to download them
- Your Internet bandwidth is the limit (that... and our watchdog)

**Graphical preview**
- You can verify the availability of EACH file disseminated from EACH cycle
- No more time waiting with empty/useless files

**Automated usage is possible for operational users**
- HTTPS, FTP and FTPES interfaces
- Set up your parameters with the web portal and your FTP account mirrors your data of interest
- You can receive automatically new cycles after subscription
Available this Fall on
http://odes.altimetry.cnes.fr/
with your AVISO account

Give us your feedback at
aviso@oceanobs.com