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AVISO: online data extraction service for all altimetry users

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Altimetry users have a wide variety of needs ranging from research to operational applications. Standards datasets provide a robust base to meet most of them but research-grade algorithms and corrections are not easily accessible to the general audience. Similarly, classical distribution channels make it difficult to provide ad-hoc datasets in a convenient way especially when product size and bandwidth are a concern.

To address such evolving user needs, AVISO developed a new distribution channel, the Online Data Extraction Service (ODES), in order to provide users and applications with a wider range of altimetry-derived data (including high-resolution and coastal data).

The platform is designed to distribute both operational products from CNES and partner Agencies (Eumetsat, ESA, NOAA, NASA) but also research-grade data from LEGOS/CTOH and CLS and other contributions from the OSTST research community. Accessible products include GDR-class level 2 data, PISTACH coastal and hydrology demonstrators and XTRACK level 3 data. Various research-grade parameters (e.g. alternative geophysical corrections...) from the OSTST PI community are also available.

Most importantly, the ODES system provides flexible interfaces and an ad-hoc response. To illustrate, ODES users can use a user-friendly web interface to download along-track altimetry data only over their area of interest, choose their period of interest in a multi-mission context, limit the parameters and variables they wish to download (e.g. select only significant wave height-related variables) and apply more complex selection criteria. Most features aim at streamlining the data acquisition in an intuitive way.

The extraction service is also "on-the-fly", with no delay nor cache necessary, so that users can immediately begins their download. Lastly the ordering and downloading process can be automated and scripted for operational users with a custom and ad-hoc environment containing only the products they want.

Thanks to this framework, AVISO will now be able to include up-to-date corrections and information (e.g. updated tide model, results from a new or alternative algorithm to compute significant wave height, etc. ) to streamline the reprocessing strategy and provide intermediate releases phased with the research advancement of OSTST research and other users.

ODES is available for OSTST testing first.

Its public opening is planned to be phased with the opening of the new altimetry portal, Aviso+.

OSTS session
Outreach, Education and Altimetric Data Services
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