IN-SITU DELAYED MODE AT CORIOLIS DATA CENTER

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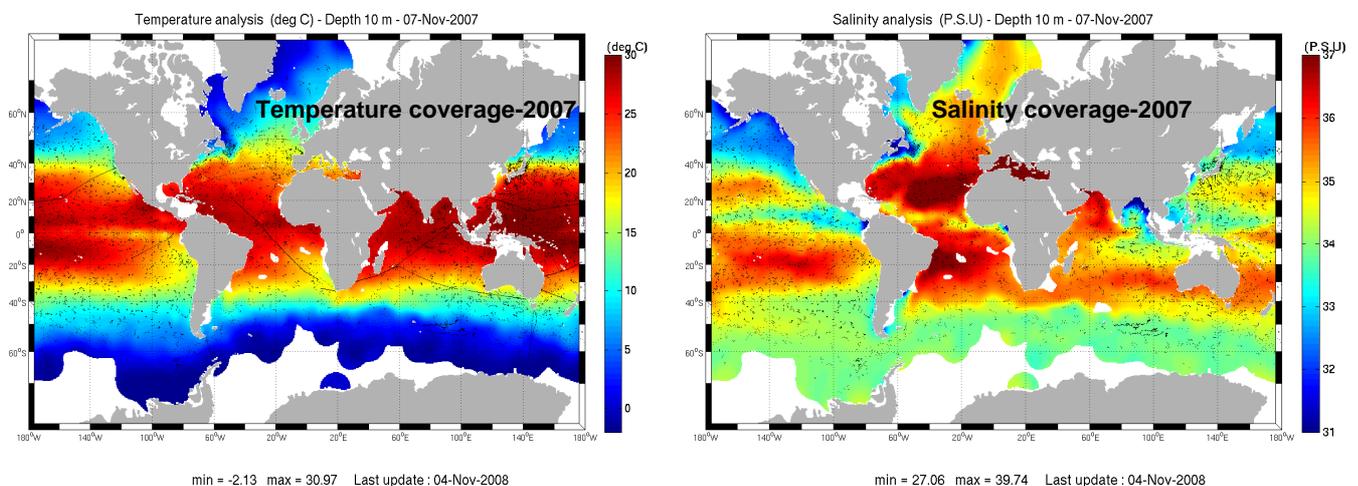
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Abstract

End of 2007, the Coriolis Data Center has set up a new product dedicated to operational oceanographic centers that want to perform re-analysis on a delayed mode basis. Its main goal is to improve the database content and strengthen the quality control to fit modelers' needs.
The release 2007 covers the period 2002-2006, and the release 2008 is extended to 1990-2007.

In addition to the near real time validation done on a daily and weekly basis for the forecasting needs, it has been decided to create a reference dataset updated on a yearly basis. The new procedure has involved an objective analysis method (statistical tests) with a visual quality control (QC) on the suspicious profiles, and has been developed to improve the database content and to fit the level required by the physical ocean re-analysis activities.

The quality control process uses two runs of objective analysis, corresponding to two different time windows, with an additional visual control in between. The first run is done on a three weeks window to capture the most doubtful profiles which are visually checked by an operator to decide whether or not they are bad data or real oceanic phenomena. Whereas the second run is operated on a weekly basis for the modeling needs.

The reprocessing of both releases is global and annual delayed analysis of the content of the database and an additional validation of the dataset collected in real time and delayed mode during this 17 years period. The dataset includes all types of In-Situ data, and also the updated CTD Levitus Reference Dataset WOD05. Each release provides T and S weekly gridded fields and individual profiles both on their original levels and interpolated levels.

Temperature and Salinity coverage in 2007 at 10m depth

These Coriolis products are available on different servers using different technologies (ftp, OPeNDAP and web).
http://www.coriolis.eu.org/cdc/global_dataset_release_2007.htm
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