

What you want is what you get – a web interface for World Ocean Database 98

Roeland T'Jampens and Edward Vanden Berghe

Flanders Marine Data and Information Centre, Flanders Marine Institute
Vismijn, Pakhuizen 45-52, B-8400 Ostend, Belgium

E-mail: Roeland@vliz.be ; wardvdb@vliz.be

The usefulness and importance of the World Ocean Database (WOD) cannot be overstated. Within the world of oceanographic data, this is probably the most comprehensive and most consulted database on physical oceanography parameters. The data from the World Ocean Database are available online, as is a specialised viewer – Ocean Data View (ODV). Unfortunately, the data come in zipped files, which typically contain many more data than the ones needed. ODV, while very powerful, is not trivial to learn to use. The specialist user will be able to invest the time and energy to learn how to download the WOD files, and open them in ODV. The occasional user, however, might be deterred by the complexities. VLIZ decided to build a user-friendly web interface for the WOD, and make the data for the North Sea available through this interface. This activity frames in the objectives of the VLIZ, to make access to data relevant to the North Sea as easy as possible, and where possible through the institute's web site.

All data from the six WMO squares overlapping with the North Sea were extracted from the WOD, and uploaded in a MS SQL-Server database, using an application written in MS VB. The resulting database was compared with extractions from WOD done with ODV, as a quality-checking procedure. The database contains 25 tables; all features of the WOD can be imported, including quality control flags and supporting documentation. Extra fields have been added to allow merging data from other datasets, keeping track of the origin of data.

Data available through the interface came from 10749 'Cruises', 361211 'Stations', 365008 casts. The size of the database is 530 MB. Data can be selected on the basis of measurement type, parameter, time/date or geography. The geographic selection can be done through a graphical interface developed in SVG. Stations can be displayed using the same SVG approach; interaction with the SVG maps (like picking one of the selected stations to display the actual measurements) is realised through a series of JavaScript routines. These data, and also the list of stations and/or cruises resulting from the queries can be downloaded through the browser. A more sophisticated download procedure, allowing users to choose between comma-separated or XML formats, is in preparation.