



SeaDataCloud

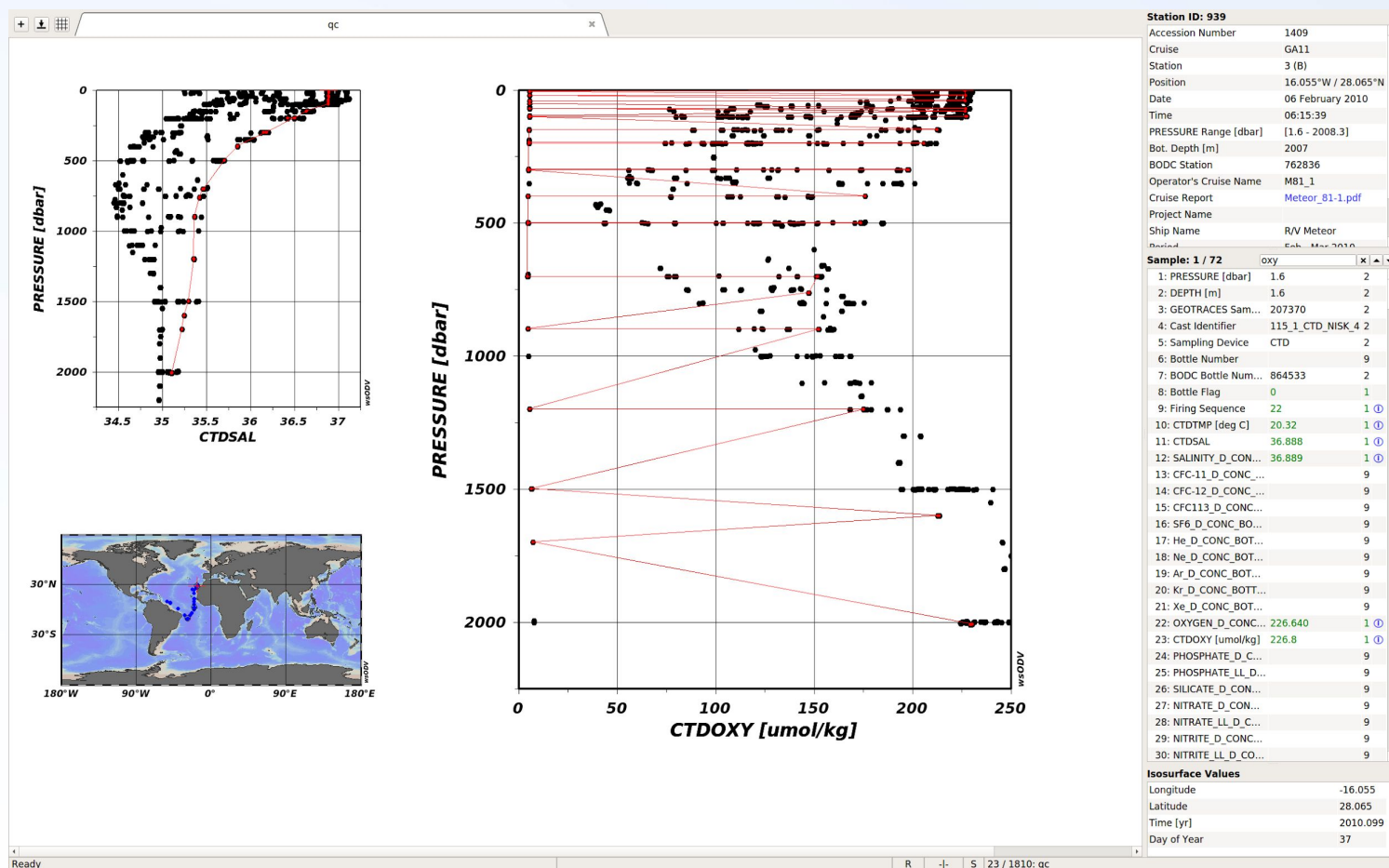
Ocean Data View (ODV) software and the cloud

Sebastian Mieruch and Reiner Schlitzer

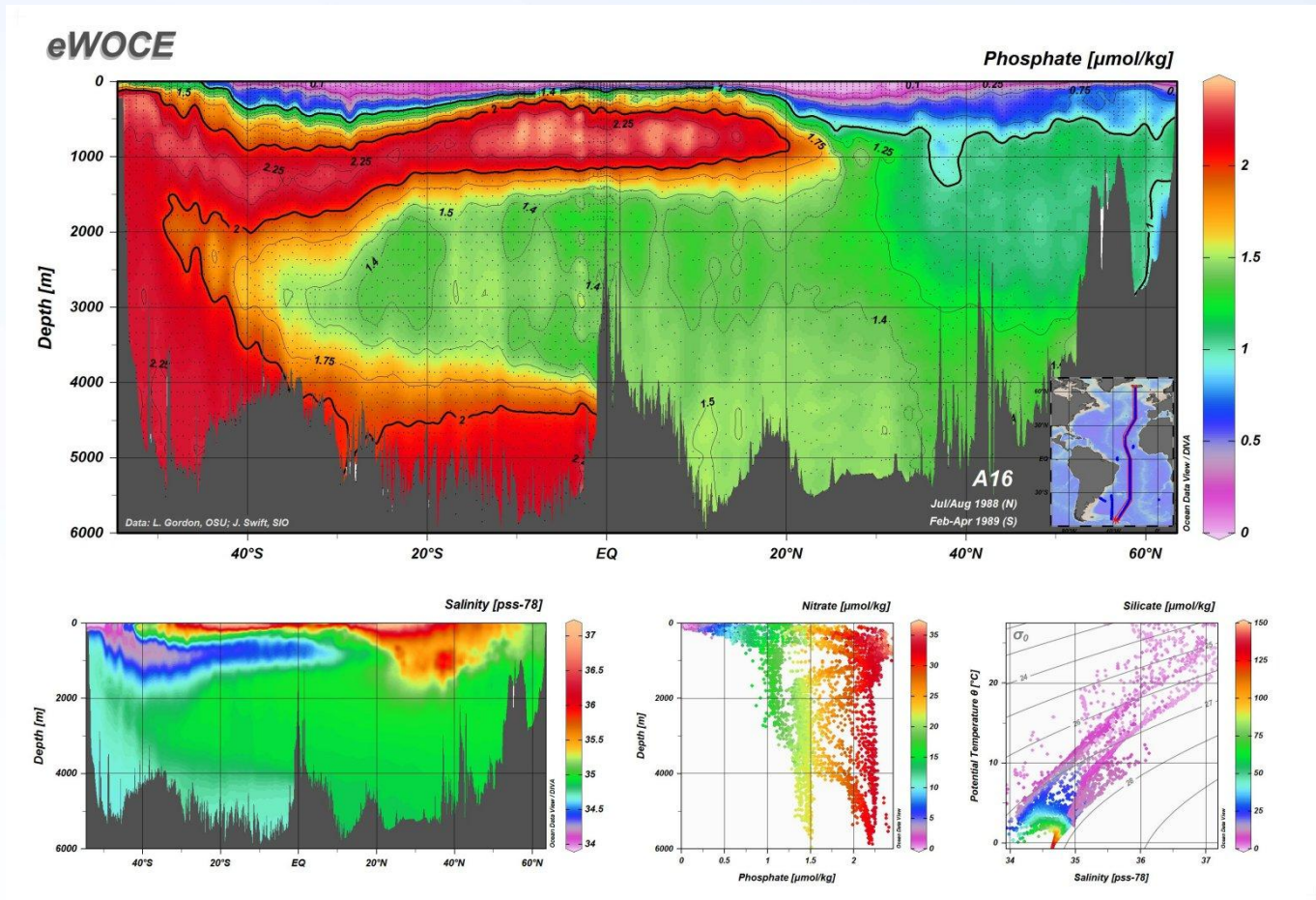
Ocean Data View (ODV)

- Developed by Reiner Schlitzer (AWI)
- Approx. 3,000 active users (>60,000 registrations)
- Oceanographic and other geo-referenced data
- Interactive exploration, analysis and visualisation
- Profiles, time series, trajectories, other sequence data
- Windows, Mac, Linux, Unix
- <https://odv.awi.de>

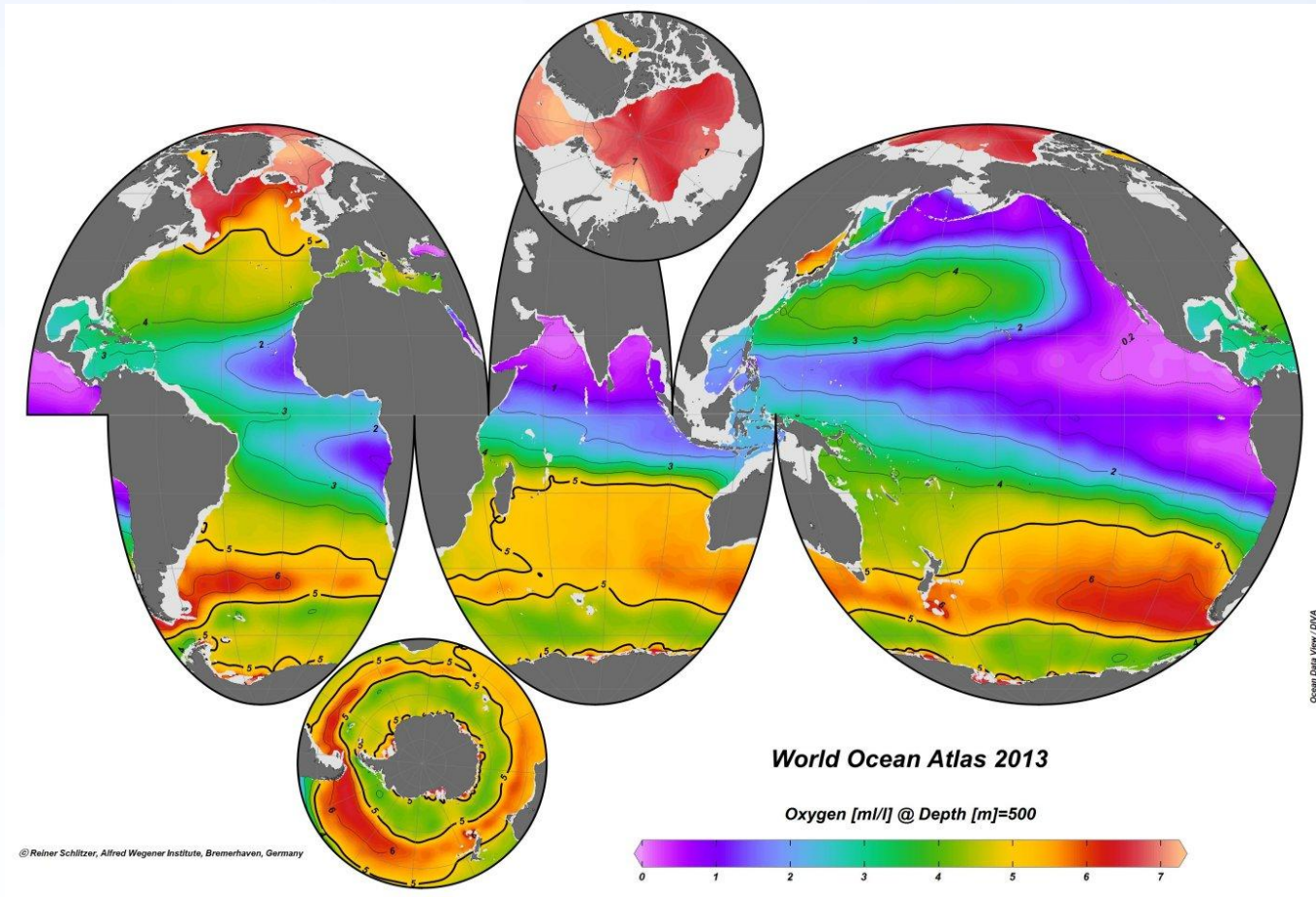
Quality Control



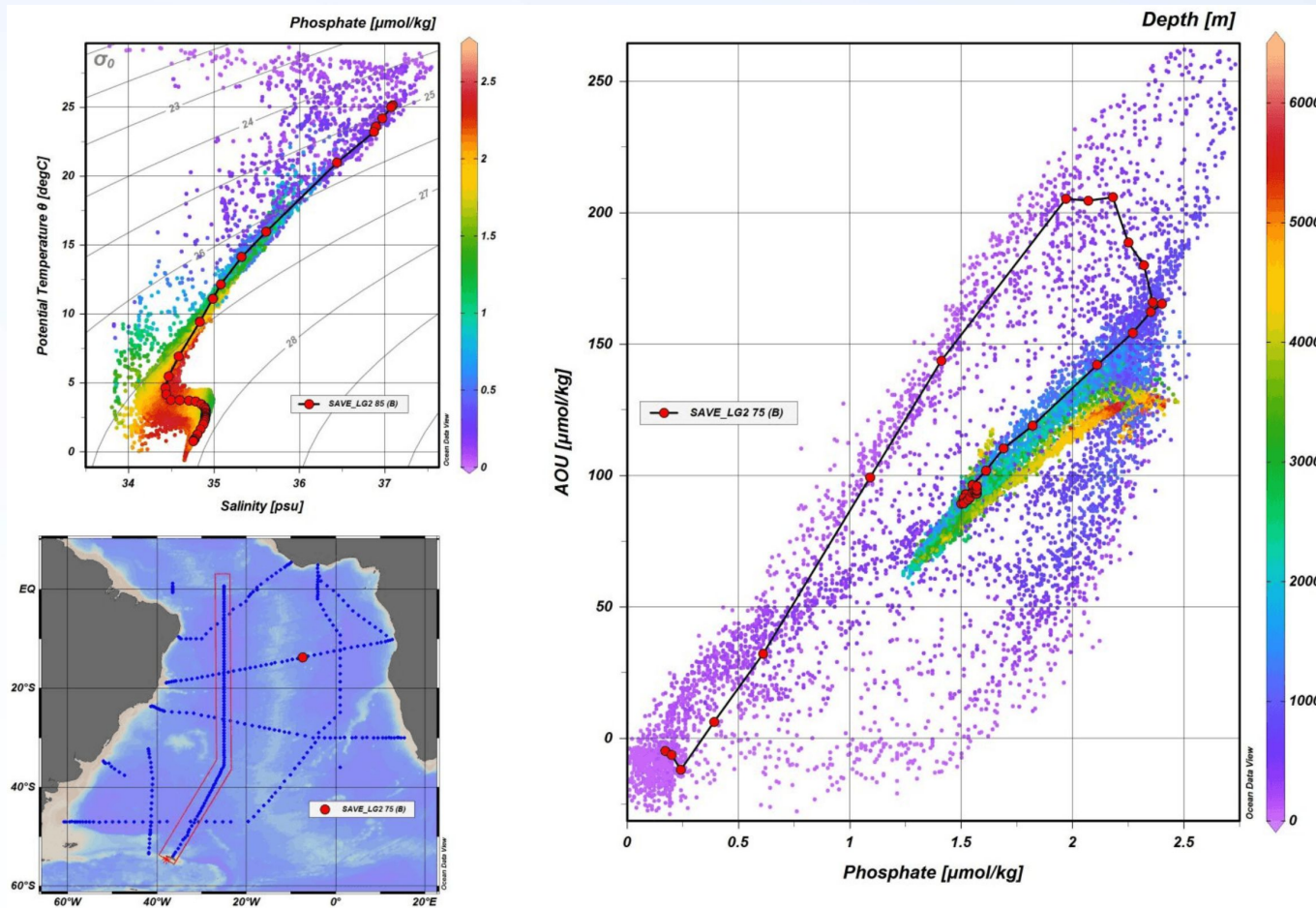
Sections



Maps



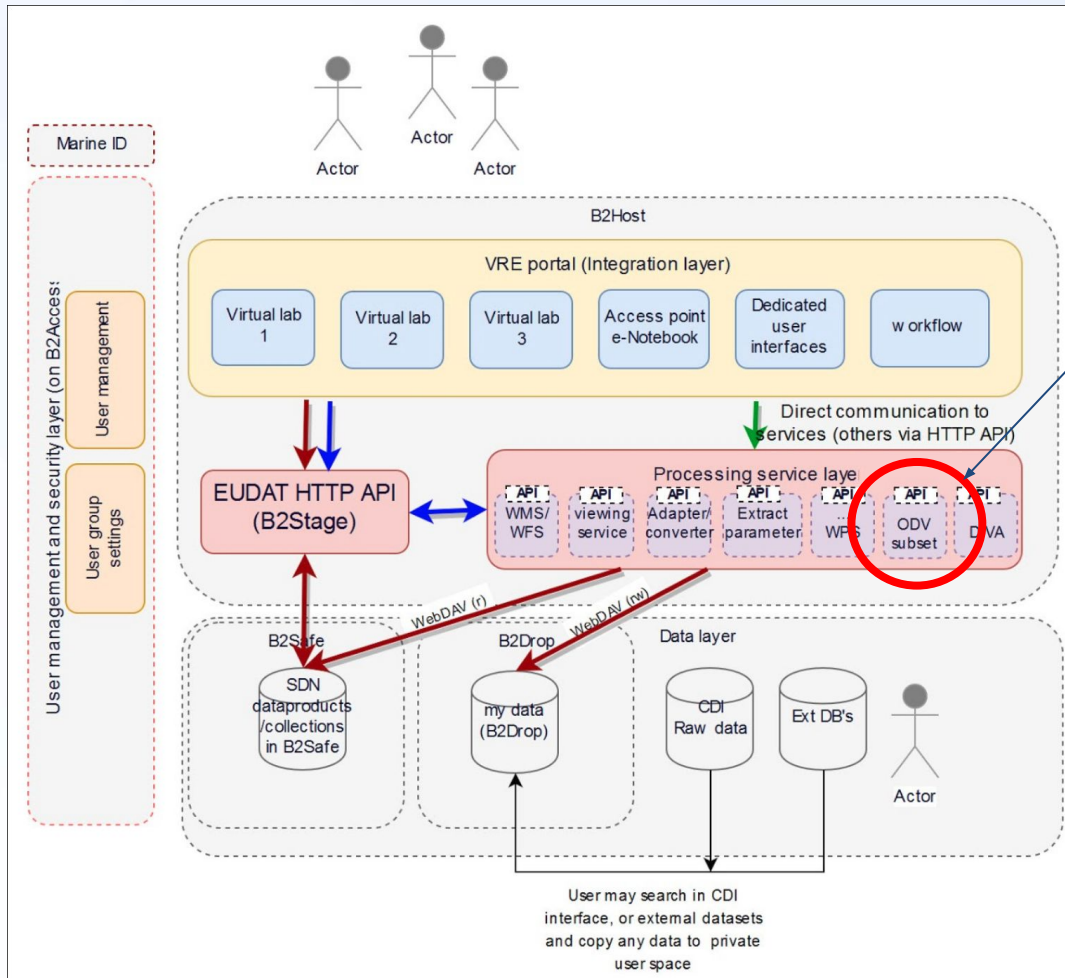
Scatter plots



webODV (Ocean Data View -- online)

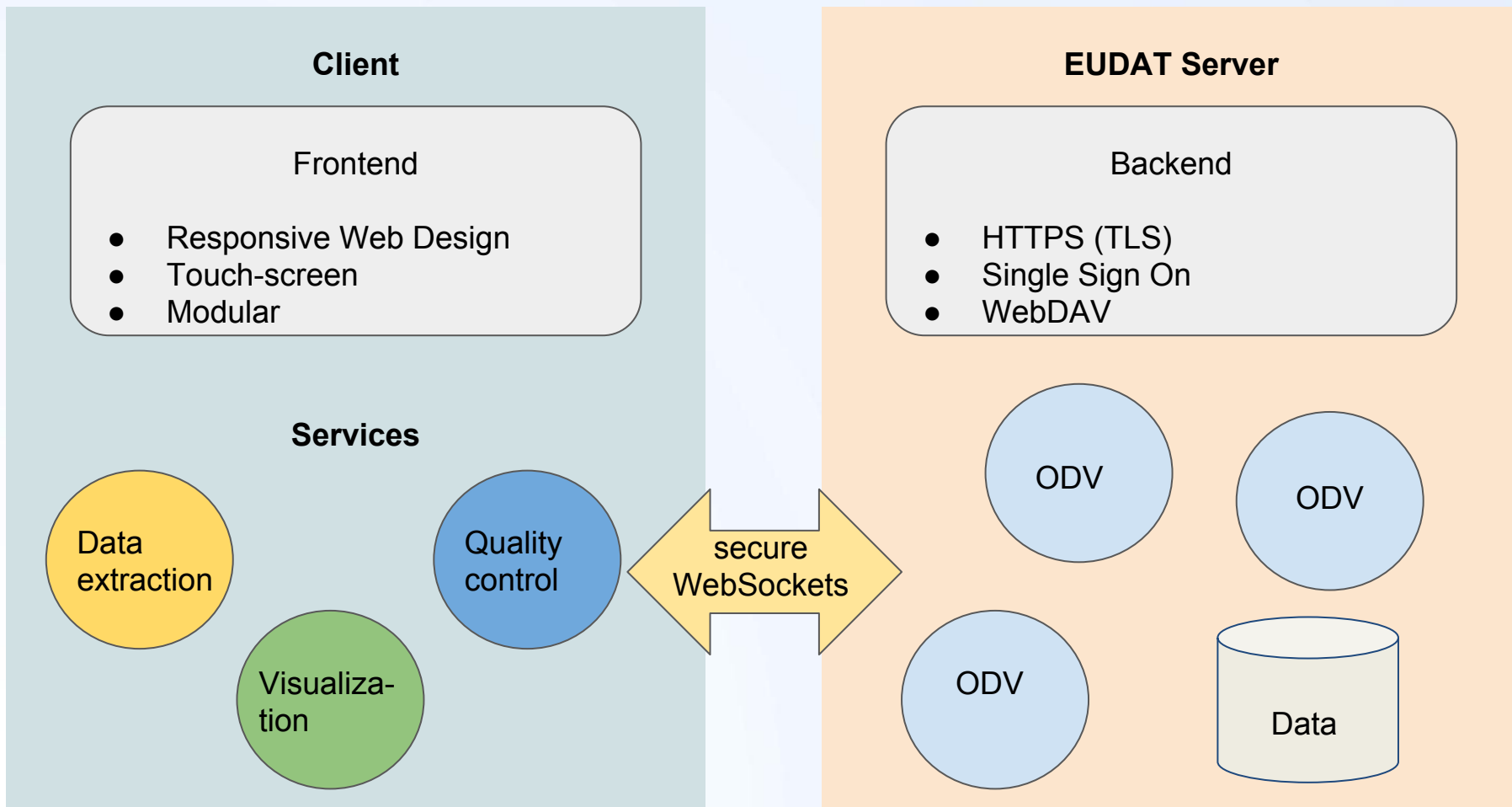
- Provide typical ODV functionality over the Internet
- Desktop like user experience
- Centrally maintained datasets
- Services
 - Data extraction
 - Quality control
 - Visualization

webODV -> VRE -> EUDAT infrastructure

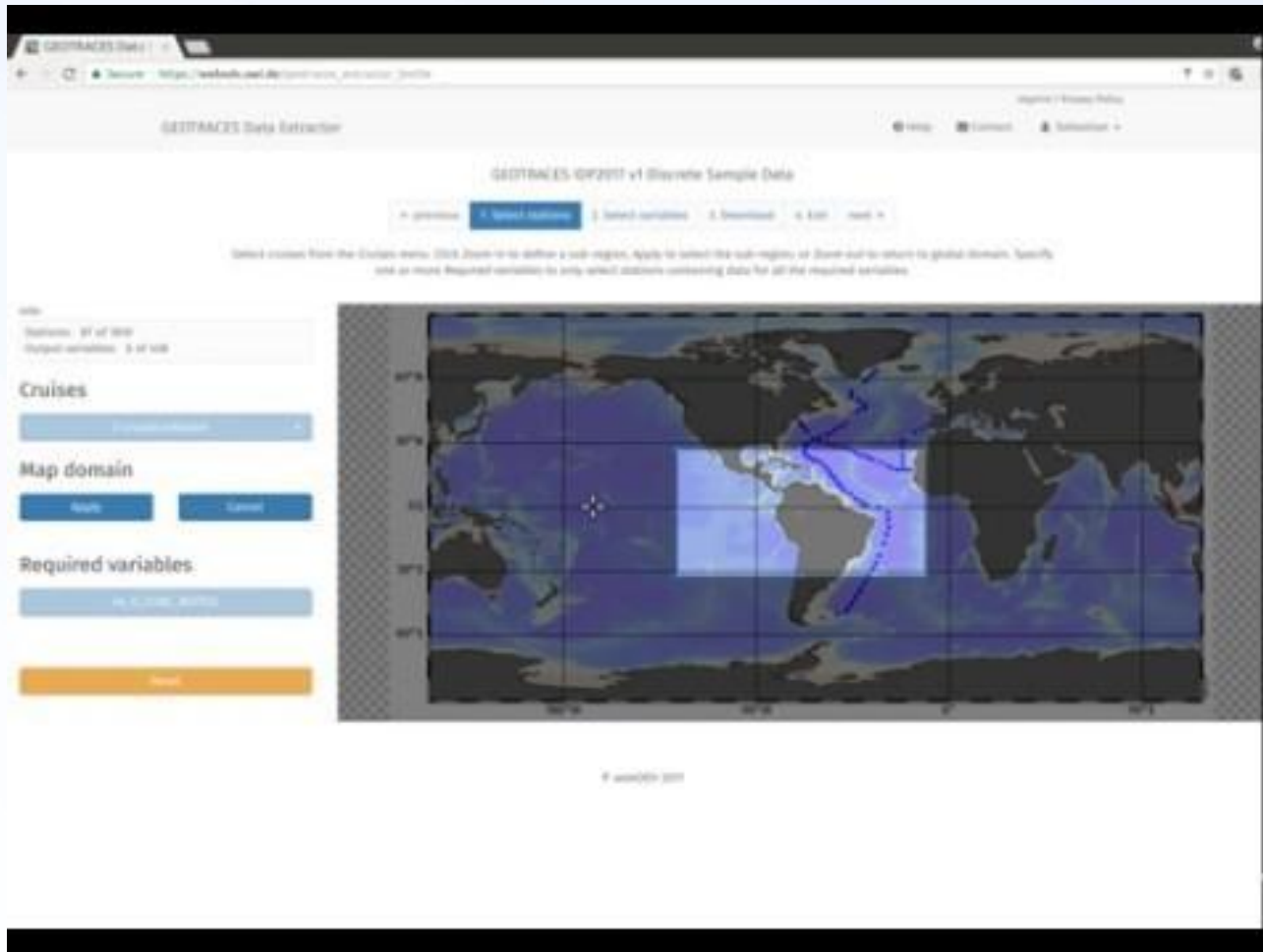


webODV

webODV - Concept



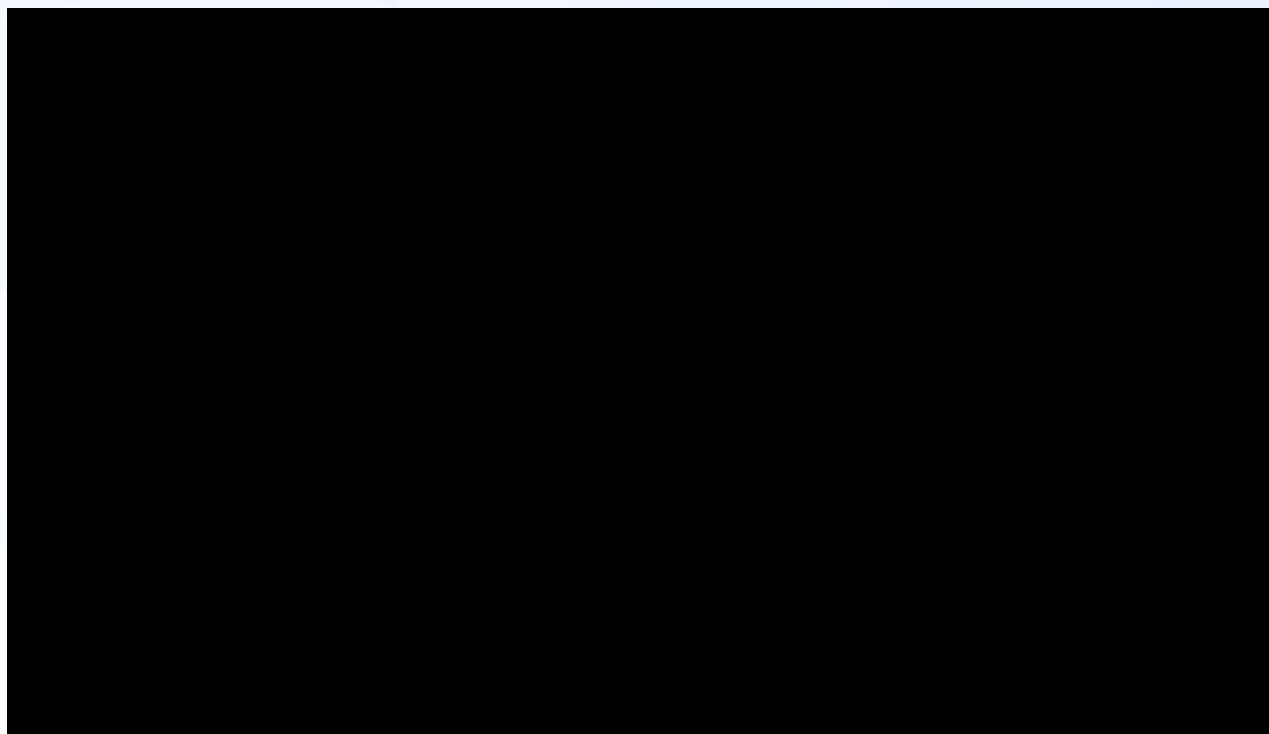
Data extraction at <https://webodv.awi.de> (in production)



Quality control (prototype)

Browser

Server



Conclusions

- Concept works
- Desktop like user experience
- Fast, powerful, stable and efficient
- Scalable and modular

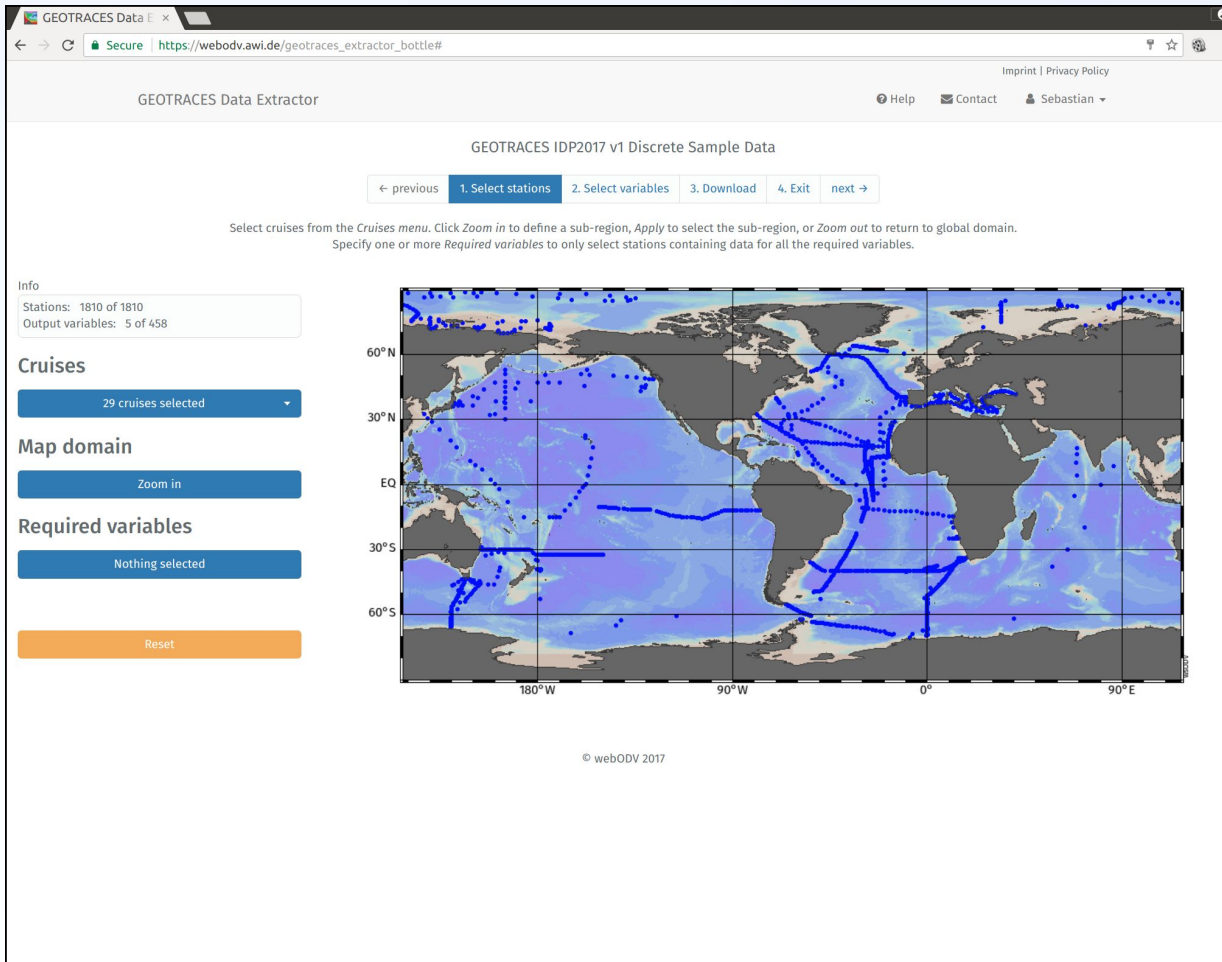
Next steps

- Implementation into the VRE in close collaboration with users and EUDAT partners
- Development of visualization services



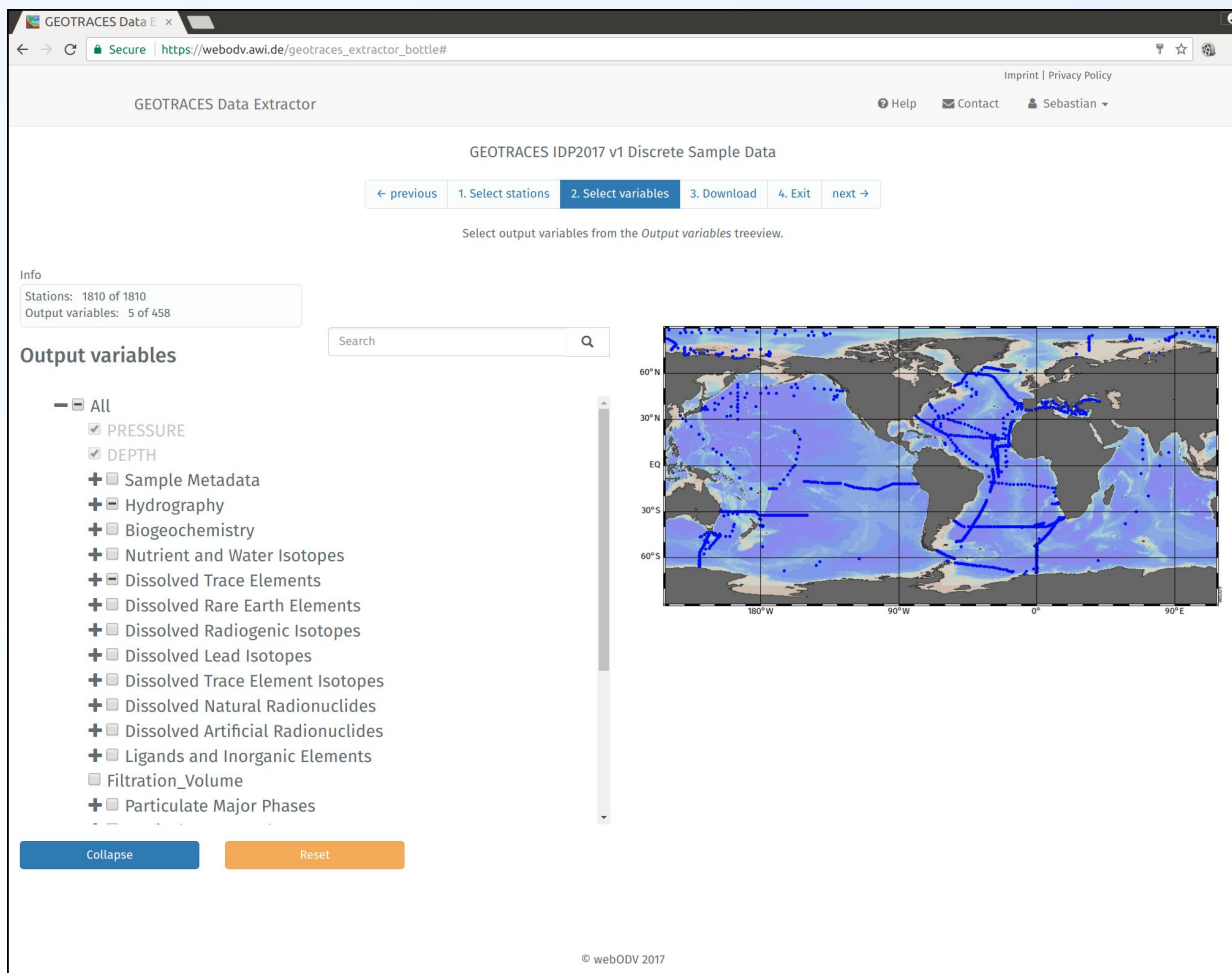
Back Up Slides

Data extraction at <https://webodv.awi.de>



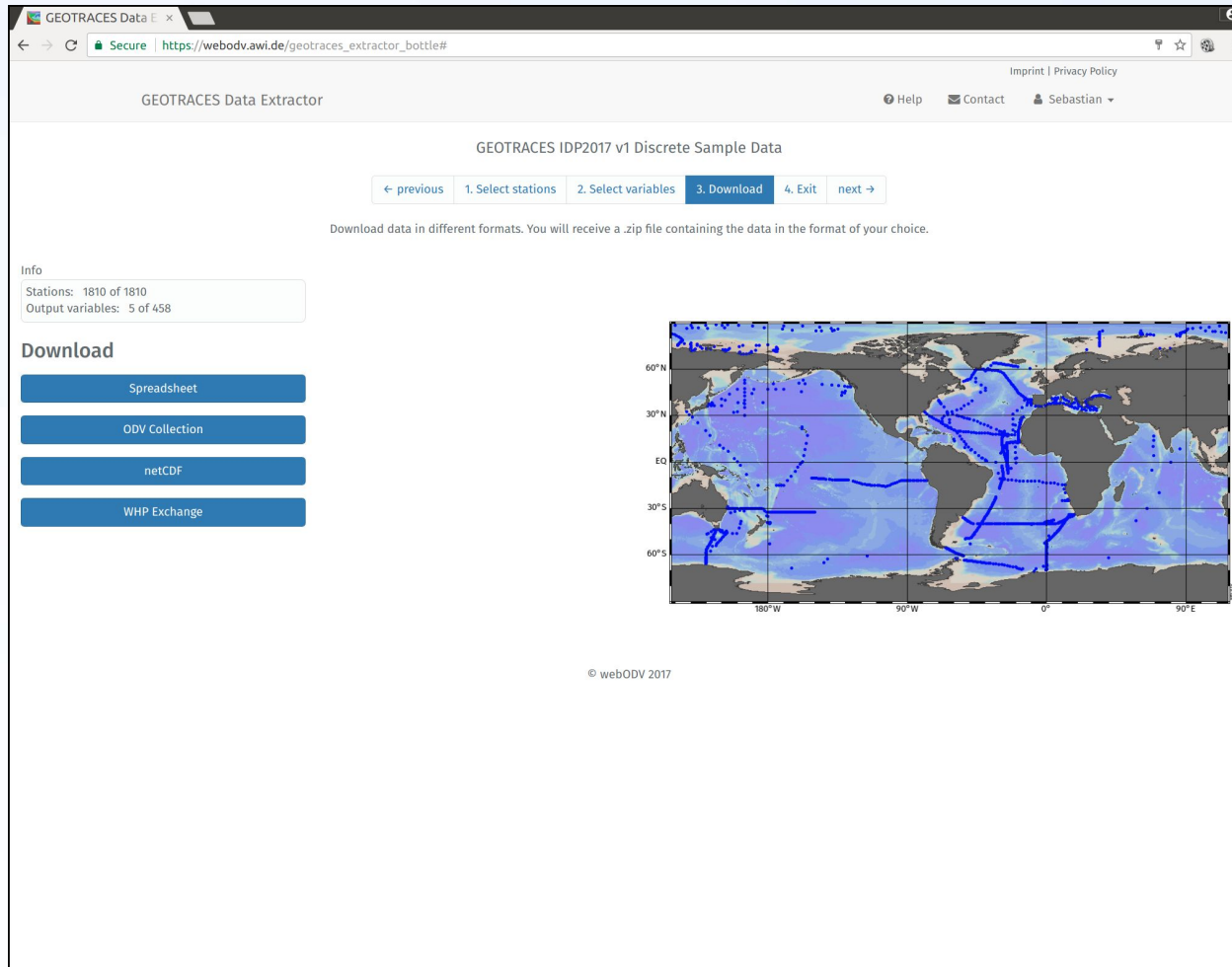
The screenshot shows the GEOTRACES Data Extractor web interface. The browser address bar displays https://webodv.awi.de/geotracex_extractor_bottle#. The page title is "GEOTRACES Data Extractor". The main heading is "GEOTRACES IDP2017 v1 Discrete Sample Data". A navigation bar includes buttons for "previous", "1. Select stations", "2. Select variables", "3. Download", "4. Exit", and "next". Below the navigation bar, instructions state: "Select cruises from the Cruises menu. Click Zoom in to define a sub-region, Apply to select the sub-region, or Zoom out to return to global domain. Specify one or more Required variables to only select stations containing data for all the required variables." The interface features a sidebar on the left with sections: "Info" (Stations: 1810 of 1810, Output variables: 5 of 458), "Cruises" (29 cruises selected), "Map domain" (Zoom in), "Required variables" (Nothing selected), and a "Reset" button. The main area contains a world map with a grid from 60°N to 60°S and 180°W to 90°E, showing blue lines representing cruise tracks and blue dots representing sample stations. The copyright notice "© webODV 2017" is visible at the bottom of the map area.

Data extraction at <https://webodv.awi.de>



The screenshot shows the 'GEOTRACES Data Extractor' web application. The browser address bar displays 'https://webodv.awi.de/geotracex_extractor_bottle#'. The page title is 'GEOTRACES Data Extractor'. The main content area is titled 'GEOTRACES IDP2017 v1 Discrete Sample Data' and features a progress bar with steps: '1. Select stations', '2. Select variables' (current step), '3. Download', and '4. Exit'. Below the progress bar, it says 'Select output variables from the Output variables treeview.' On the left, an 'Info' box shows 'Stations: 1810 of 1810' and 'Output variables: 5 of 458'. The 'Output variables' section is expanded to show a list of variables with checkboxes: 'All', 'PRESSURE', 'DEPTH', 'Sample Metadata', 'Hydrography', 'Biogeochemistry', 'Nutrient and Water Isotopes', 'Dissolved Trace Elements', 'Dissolved Rare Earth Elements', 'Dissolved Radiogenic Isotopes', 'Dissolved Lead Isotopes', 'Dissolved Trace Element Isotopes', 'Dissolved Natural Radionuclides', 'Dissolved Artificial Radionuclides', 'Ligands and Inorganic Elements', 'Filtration_Volume', and 'Particulate Major Phases'. A search bar is located above the list. To the right, a world map shows the GEOTRACES sampling tracks in blue. At the bottom, there are 'Collapse' and 'Reset' buttons, and a copyright notice '© webODV 2017'.

Data extraction at <https://webodv.awi.de>



The screenshot shows the GEOTRACES Data Extractor web interface. The browser address bar displays https://webodv.awi.de/geotraces_extractor_bottle#. The page title is "GEOTRACES Data Extractor". The main heading is "GEOTRACES IDP2017 v1 Discrete Sample Data". A navigation bar includes buttons for "previous", "1. Select stations", "2. Select variables", "3. Download" (highlighted), "4. Exit", and "next". Below the navigation bar, a message states: "Download data in different formats. You will receive a .zip file containing the data in the format of your choice." On the left, an "Info" box shows "Stations: 1810 of 1810" and "Output variables: 5 of 458". Under the "Download" section, there are four buttons: "Spreadsheet", "ODV Collection", "netCDF", and "WHP Exchange". On the right, a world map displays blue lines representing sampling tracks and blue dots representing sampling stations. The map covers latitudes from 60°N to 60°S and longitudes from 180°W to 90°E. At the bottom center, the copyright notice "© webODV 2017" is visible.

Quality control (prototype)

Browser

Server

