

WebODV: Providing Ocean Data View Services over the Internet: <http://webodv.awi.de>

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Abstract

In the context of the ongoing and recently approved EMODNET and SeaDataCloud projects we are planning the development of an on-line version of the ODV software. In a first step we are implementing a data extraction service for the GEOTRACES IDP2014 v3 dataset, shown on this poster. Aims and long-term visions:

- Provide typical ODV functionality
- Centrally maintained datasets
- Data up- and download
- Collaborative data manipulation
- Provide data extraction services
- Visualization services
- User accounts / history
- Intuitive web interface
- Responsiveness
- Minimization of network traffic

Techniques

WebSocket:

- WebSocket is a protocol for communication over a TCP connection
- WebODV is an ODV version, running on a web server, which can be queried / triggered by the client via the WebSocket protocol

User interface:

- jQuery, (AJAX)
- Bootstrap-select (<https://silviomoreto.github.io/>)
- Cropper (<https://fengyuanchen.github.io/cropper/>)
- Treeview (<https://jonmiles.github.io/bootstrap-treeview/>)

Security & User Management

WebODV employs a sophisticated open source User Management Framework, UserSpice (<http://www.userspice.com/>), which is based on PHP. It handles:

- Login / Logout / User Creation
- Account Creation / Deletion
- User Groups
- Tokens, Sessions, Cookies
- Password Management
- Page Permissions
- Database Connections and Sanitization
- Page, Site and Database Security

Responsive web design

WebODV is developed with Responsive web design. It can be used, and looks good, on all devices (desktops, tablets, and phones), and hence supports touchscreens. We use:

- Bootstrap (<http://getbootstrap.com/>)
- Font Awesome (<http://fontawesome.io/>)
- CSS3 background (<http://lea.verou.me/css3patterns/>)
- Bootstrap buttons (<http://bootsnipp.com/faizshaikh>)

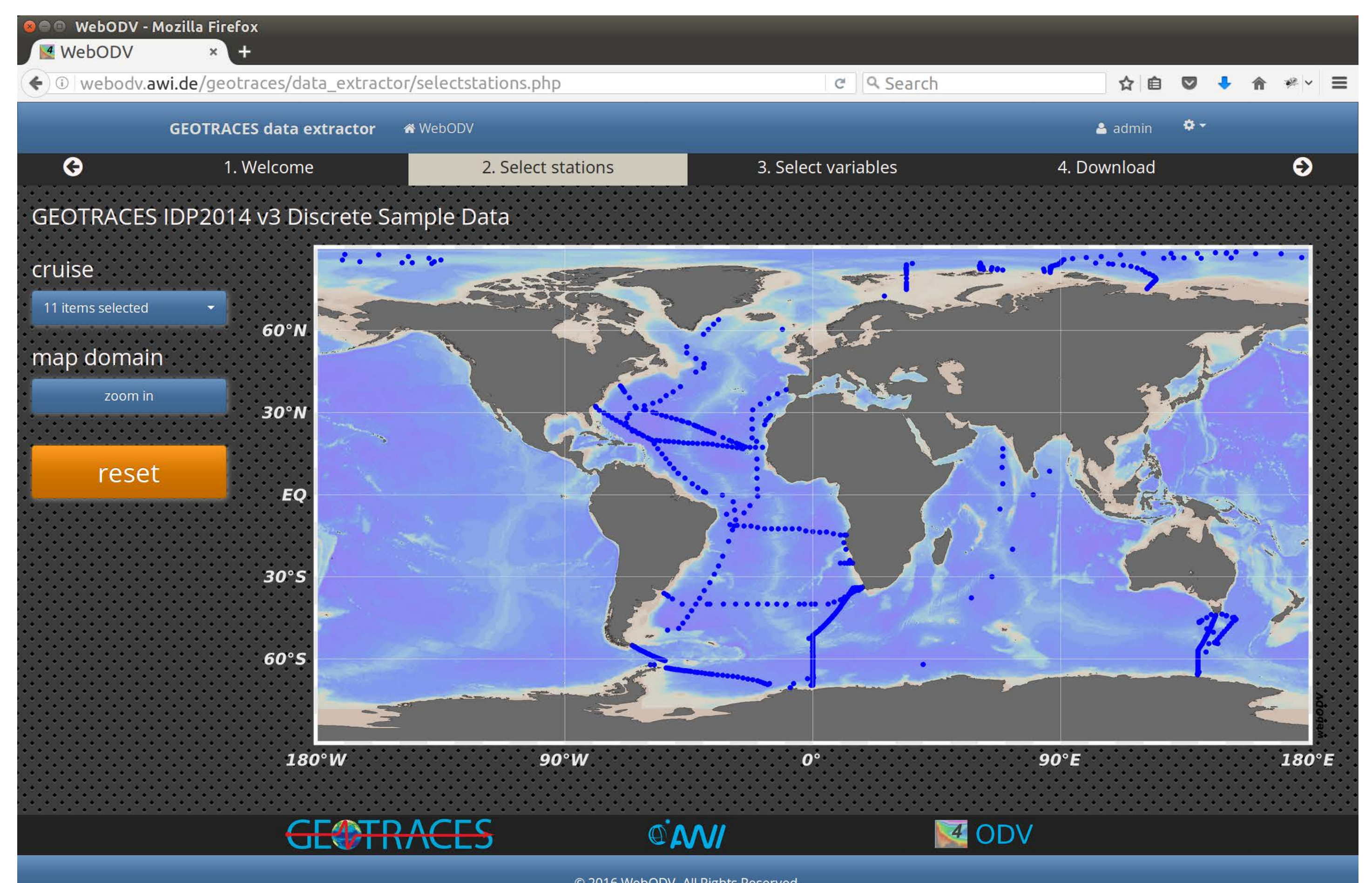
Current state

A first prototype of the WebODV GEOTRACES (IDP2014 v3) data extraction service is online at <http://webodv.awi.de>. It provides:

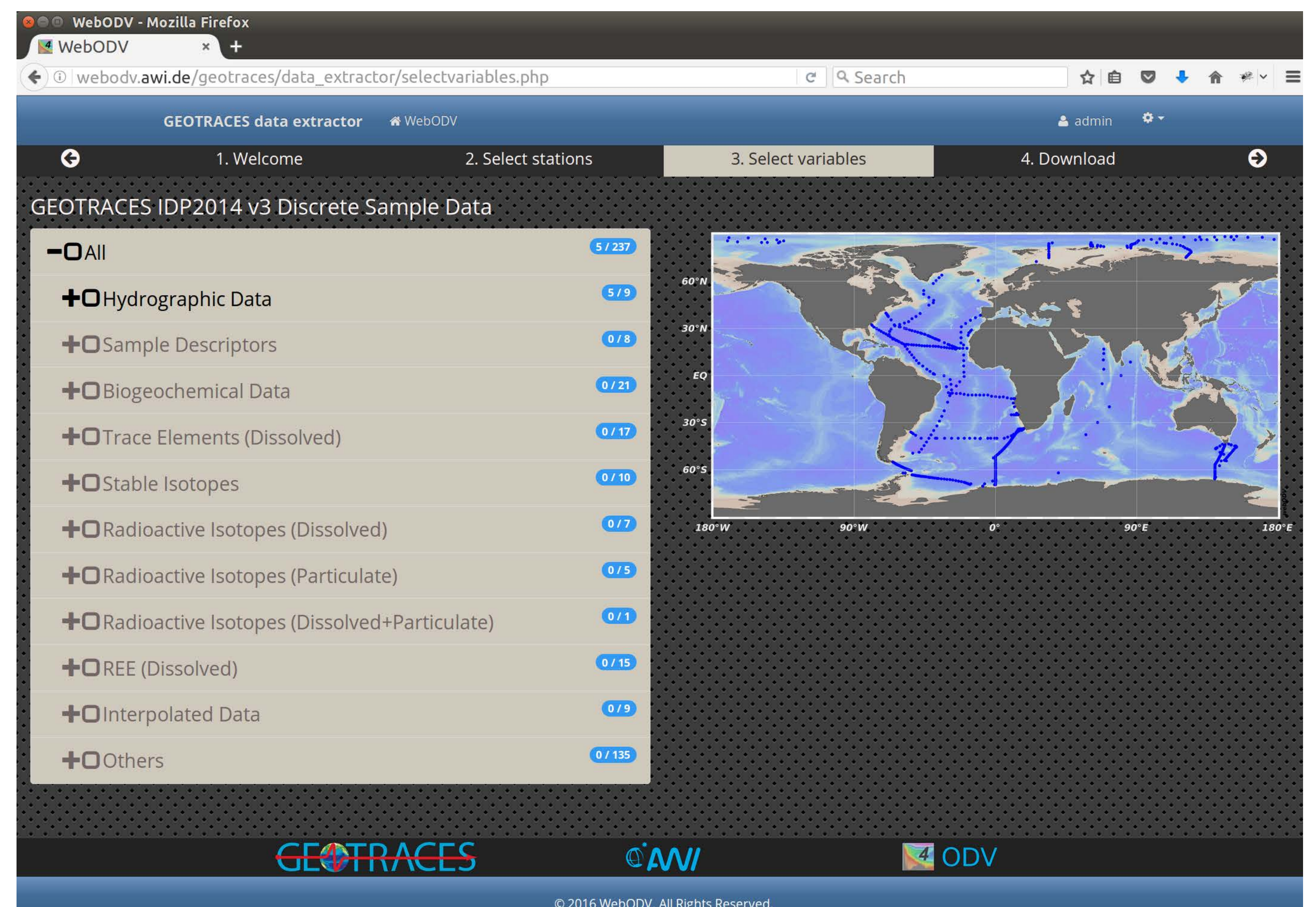
- User management
- Cruise selection
- Map domain (zoom)
- Reset settings
- Variable selection
- Download data (.txt, .odv, .nc, .csv)
- Remember state

Interested? → Become a beta tester and register at <http://webodv.awi.de>

Select stations



Select variables



Download

