Ocean Data View - Online Services

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ODV – As Standalone Tool

- Interactive analysis and visualization software for Windows, Linux and MacOS
- Very large user community (>66,000 registered users; ca. 20 new users per day; ca. 200 website visitors per day; >8000 ODV5 installations since Mar/15/2018)
- ODV graphics published in high-level scientific journals (e.g., Nature, Science, PNAS and PlosOne) as well as textbooks
- ODV formats adopted by international projects and data systems (e.g., EU SeaDataCloud, US SeaCube, ERDDAP)
- Widely used importers for SeaDataNet, World Ocean Database, Argo, GTSSPP, WOCE, SeaBird, etc.
ODV – Usage in SeaDataCloud

- Aggregation of data files
- Aggregation and unit harmonization of parameters
- Data quality control

Resulting in large, quality controlled data collections.
Future

• Continue ODV standalone development

• In addition create wsODV (ODV + Websocket Server) for Webservice applications and integration in the SeaDataCloud VRE.

• Service types: (a) interactive via webbrowser, and (b) automatic machine-to-machine interaction
ODV – As Online Tool

Client

User working in web-browser

Server / VRE

- User authentication system
- ODV server software (wsODV)
- Data collections to be served
Data Extraction Service (operational)
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Quality Control Service (beta)

- All modifications are logged
- Log records are send to parent data center
- Automatic outlier detection algorithms under development
Visualization Service (beta)

- Provide ODV look-and-feel in the browser window
- Fully interactive (mouse or touch; context menus, ...)
- Fast response, low latency
- Easy to learn and operate
- Creates all ODV graphics types
- Works on desktop/laptop computers, tablets, smartphones
Summary

- Development driven by users / SDC partners
- Websocket technology allows truly interactive user experience
- Integration into SDC VRE underway