

Creating a new ODV Collection with ICESCAPE Data

Kate Lowry and Gert van Dijken

The ICESCAPE Bottle Files were created in the WOCE WHP Exchange format, which means that the variables and quality flags will be imported automatically into ODV if the collection is set up correctly. The CTD files were also created in WHP format, but in order for ODV to recognize extra data beyond conductivity, temperature, and depth (such as transmission, fluorescence, etc), it was necessary to convert the files into ODV format and import them in a different way. We have created a custom ODV template that is ready for use with the ICESCAPE data following these instructions. All files can be found at <http://ocean.stanford.edu/icescape/odv/>.

Download the collection template and ODV version of files

- 1) Create a subfolder in your ODV folder (should be in the Documents folder): templates/collections
- 2) Save ODV Collection file (Icescape_Collection.odv) to this subfolder.

Hint: Do not add the .txt extension if prompted.

- 3) Download and save 2010 & 2011 ODV bottle files (ending in .hly.csv) & CTD files (.txt).

Create a new ODV collection from template

- 1) Open ODV: File > New (Save as your name of choice)

Hint: Start a new collection rather than replacing or adding to an old one.

- 2) Definition of collection variables: Scroll down to bottom and select 'Icescape_Collection'. If you don't see the collection then the Icescape_Collection file was not saved in the right location.

Import CTD File

- 3) Import > ODV Spreadsheet > Navigate to 'HLY1001.txt'
- 4) Select 'CTDPRS [DBARS]' in Source file variables and 'DEPTH [M]' in Target collection
- 5) Press **Convert** and select 'Pressure [dB] >> Depth [m] to convert from pressure to depth
- 6) Ensure that Import Mode is 'Add/Replace Station Data,' then press OK twice to import

Import Bottle File

- 7) Import > WOCE Formats > WHP Bottle (exchange format) > Select 2010 bottle file
- 8) Follow prompts to select Depth in Water Column (DEPTH), Temperature (CTDTMP), and Practical Salinity (CTDSAL)
- 9) Change 'Add/Replace Station Data' to 'Merge Data (selected variables)'
- 10) In 'Edit Matching Criteria', **uncheck** Longitude, Latitude, Time, and Station type. Only 'Station Label' and 'Cruise Label' should be selected.
- 11) Press okay to import and again to approve the import

Repeat both import steps for the 2011 CTD & Bottle Files

Note: If done correctly, there will be 155 stations for the 2010 CTD File, 154 stations for the 2010 Bottle File, and 189 stations each for the 2011 CTD & Bottle Files.

Specify acceptable Quality Flag values

This customized ODV collection recognizes the meaning of each of the quality flags, but the user **must** manually specify which values are acceptable for each of the different quality flag schema:

ODV: View > Sample Selection Criteria > Quality > Select the flag values that are acceptable for your work > Click 'Apply to all variables' to make this flag selection standard.

This process must be repeated for each of the three quality flag schema. The three schema used in this collection are:

- 1) WOCECTD (i.e. CTDTEMP, FLUOR, CTDOXY)
- 2) WOCEBOTTLE (i.e. CHLORA, POC, OXYGEN)
- 3) WOCE SAMPLE (only BTLNBR)

Selecting Station Criteria

The station number now includes the cast number (e.g. Station 46 Cast 2 is now 04602). There is a new metavariable called SHORT_STATION that has the original station number (e.g. Station 46). To select data based on station number:

ODV: View > Station Selection Criteria > Meta Data (tab) > Scroll down to STATION_SHORT > Enter the Station range that you want to work with in your current view

Update collection with a new version of the bottle files

When you need to update your collection with a newer version of the bottle file, use the import directions as above, but choose 'Update Data (Selected Variables)' as the import mode.