DIRECT DATA ACCESS
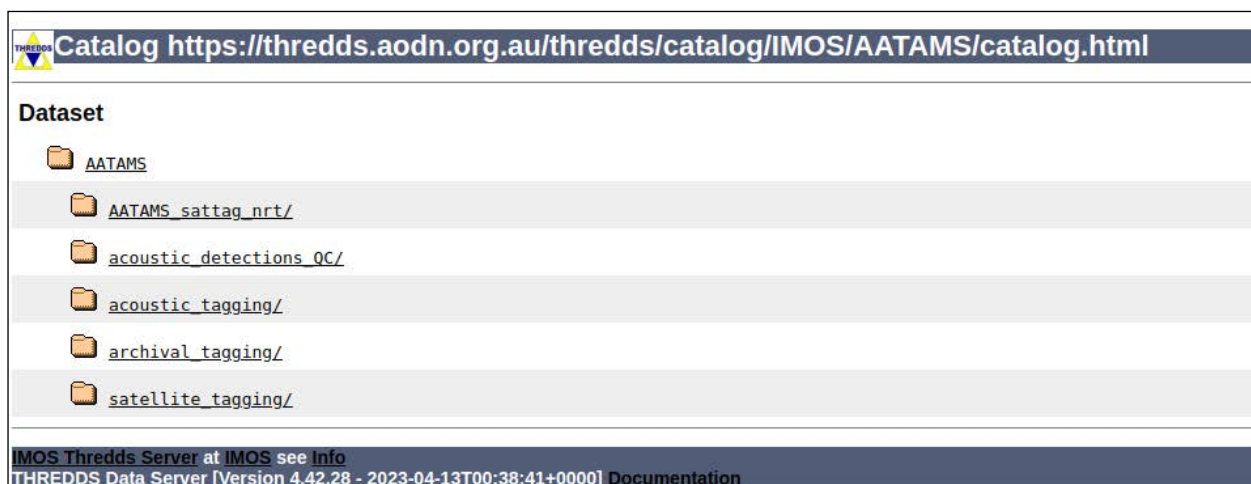# DIRECT DOWNLOAD

IMOS
Integrated **Marine**
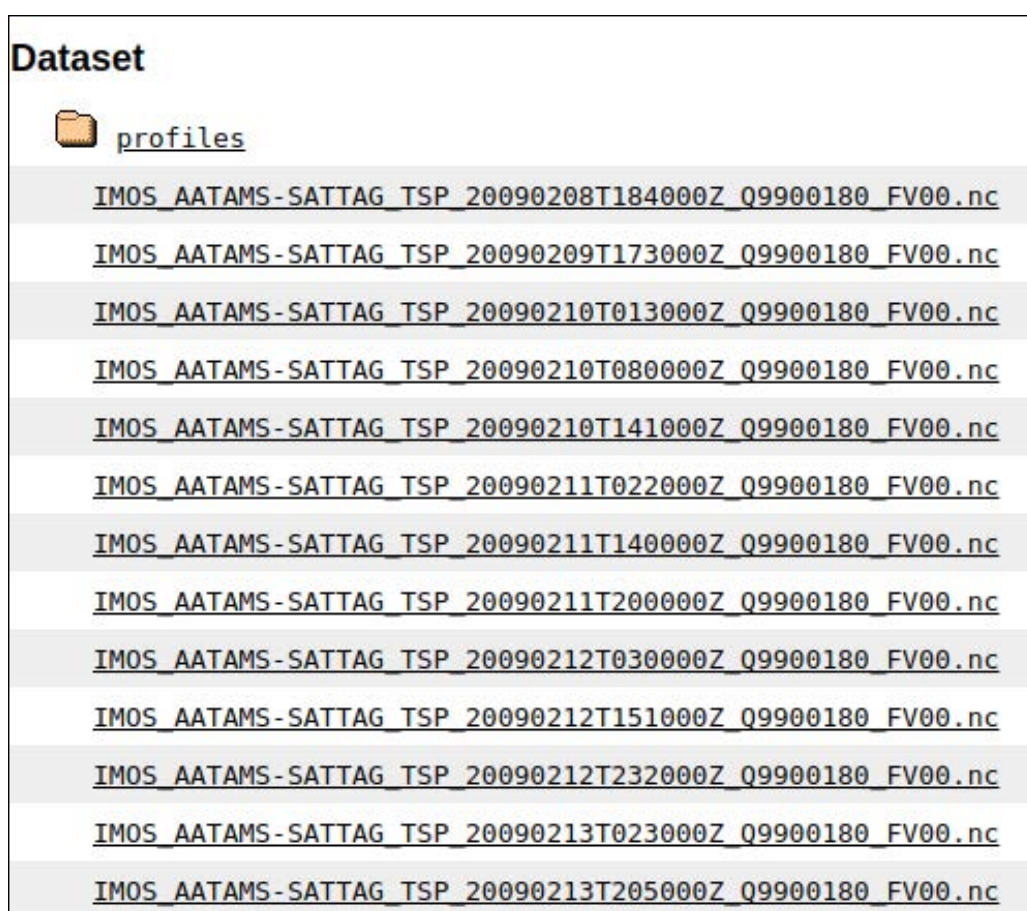**Observing** System

Downloading data via the THREDDS Server

Most IMOS datasets are available from the IMOS THREDDS Data Server. THREDDS provides a web catalog service, with hierarchical directory structure from which users can select files. An example of a page containing a Thredds Catalog is shown below:

From this page, click through the directory structure until you see names ending in .nc. These are the names of netCDF files available for download, with their file size shown. The filenames give information including the facility collecting the data, the start date of the measurement, the platform (or instrument) of collection, the end date of the measurement and the creation date of the file.

Clicking on a file name takes you to a Thredds server page:

Several data access methods are available, depending on the type of the dataset (e.g. time series or gridded data).

Accessing data via OPeNDAP

OPeNDAP is the name of the protocol used to download or transfer the files. As well as being the protocol for data transfer, it offers an interface (data access form) with the ability to view information about the data before downloading and to specify subsets of the data for download.

The OPeNDAP access option is a link to an online OPeNDAP Dataset Access Form:

This page lists the netCDF global attributes and the variables included in the netCDF file. Note that the boxes containing the global and variable attributes can be expanded by dragging the corner, and useful information about the dataset is listed in these attributes. Alternatively, you can view the full dataset description using the .info OPeNDAP feature. To access it, simply replace .html in the URL with .info

It is possible to view the entire file in the browser by clicking on the '**get ASCII**' button, however accessing the entire file in your browser is not recommended for very large data files. Sub-sets of netCDF files can be extracted using the form.

Accessing data via HTTP

The HTTP Server access option is a link that enables the user to download the entire file in one step and save it locally. This is the preferred method of accessing large netCDF files in their entirety.

Accessing data via WMS

The WMS link will use the ncWMS application which is a Web Map Service for geospatial netCDF data. The netCDF file must follow the Climate and Forecast Convention (CF), which all IMOS netCDF files do.

THREDDS   **IMOS Thredds Server**

THREDDS Data Server

Catalog https://thredds.aodn.org.au/thredds/catalog/IMOS/AATAMS/AATAMS_sattag_nrt/Q9900180/profiles/catalog.html

Dataset: profiles/IMOS_AATAMS-SATTAG_TSP_20090208T184000Z_Q9900180_FV00.nc

- *Data size:* 35.01 Kbytes
- *Data type:* GRID
- *ID:* IMOS/AATAMS/AATAMS_sattag_nrt/Q9900180/profiles/IMOS_AATAMS-SATTAG_TSP_20090208T184000Z_Q9900180_FV00.nc

Access:

1. **OPENDAP:** /thredds/dodsC/IMOS/AATAMS/AATAMS_sattag_nrt/Q9900180/profiles/IMOS_AATAMS-SATTAG_TSP_20090208T184000Z_Q9900180_FV00.nc
2. **HTTPServer:** /thredds/fileServer/IMOS/AATAMS/AATAMS_sattag_nrt/Q9900180/profiles/IMOS_AATAMS-SATTAG_TSP_20090208T184000Z_Q9900180_FV00.nc
3. **WMS:** /thredds/wms/IMOS/AATAMS/AATAMS_sattag_nrt/Q9900180/profiles/IMOS_AATAMS-SATTAG_TSP_20090208T184000Z_Q9900180_FV00.nc

Dates:

- 2016-03-03T15:36:14Z **(modified)**

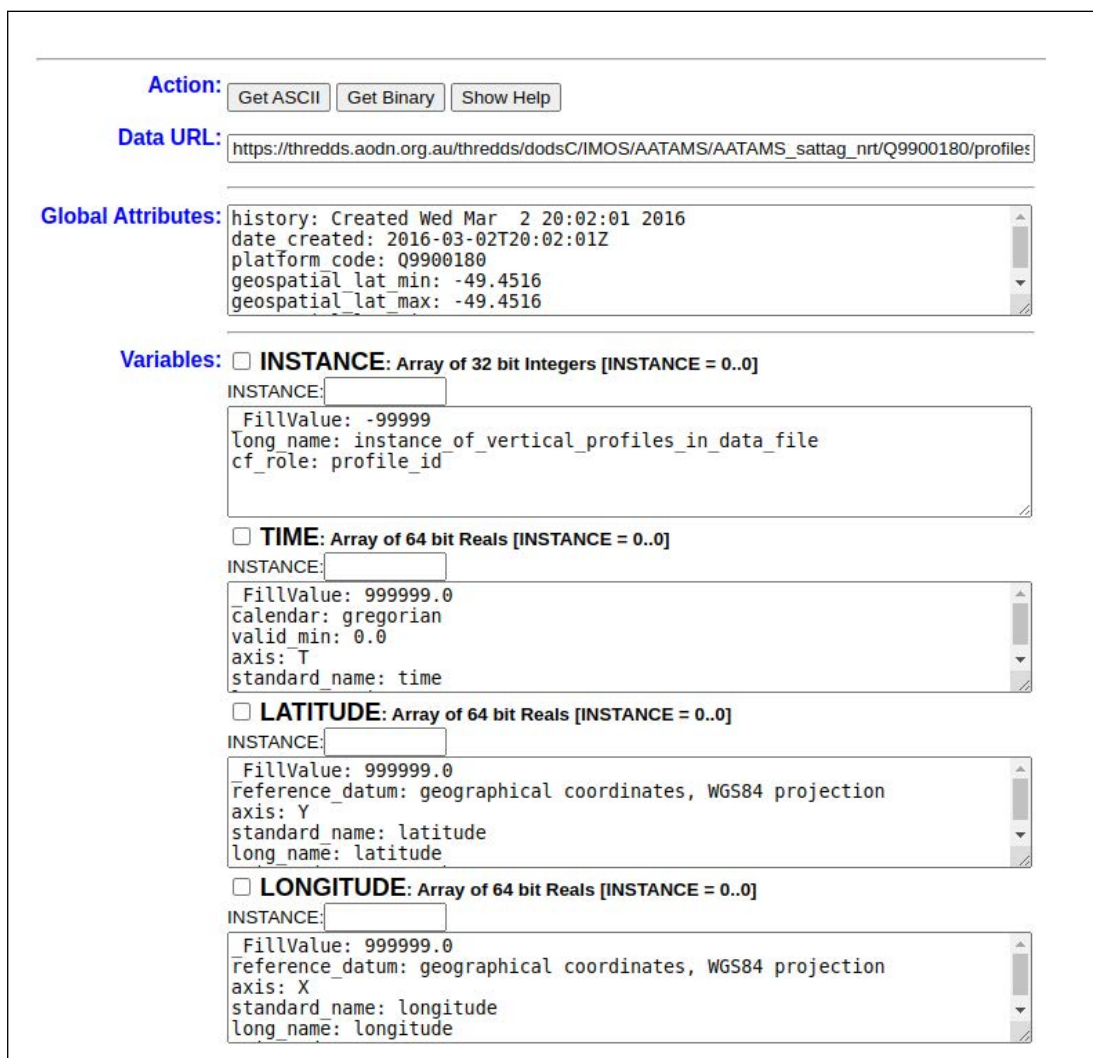**Viewers:**

- Godiva2 (browser-based)
- NetCDF-Java ToolsUI (webstart)
- Integrated Data Viewer (IDV) (webstart)

If you don't have a netCDF viewer installed on your computer you can download one from:

https://www.opendap.org/software/interoperability/

https://www.unidata.ucar.edu/software/netcdf/software.html

For help in using netCDF files within MATLAB, R and Python, goto ->

https://imos.org.au/data/ocean-information-resources/data-usage-tutorials-and-libraries