NetCDF

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NetCDF is a machine-independent data format offered by numerous institutions, particularly within the Earth and Ocean Science communities. It is important for the metadata in these files to follow a particular standard to properly generate a readable product.

Ocean Networks Canada has primarily adopted the CF (Climate Forecast), ACDD (Attribute Conventions Dataset Discovery), and OceanSites standards for describing metadata in NetCDF files, following the hierarchy CF > ACDD > OceanSites.

All NetCDF formats need to pass a CF compliance checker for the version stated.

NetCDF Common Global Attributes

An effort is underway to standardize ONC netCDF files with a set of consistent and compliant attributes. As this is built-out, the details of the common global attributes will be documented here. Currently, only one attribute is common to all netCDF files.

Global Attribute Name	Description	Standard
id	Contains DOI URLs for each applicable deployment as per our Data Citations page.	ACDD 1.3

External Resources

- BODC provides details about how NetCDF files can be used by MATLAB, IDL, Fortran, and C.