

NETCDF-CF_PROFILE_MATROOS Export

Overview



This export is available in DELFT-FEWS versions after 28-10-2009 (FEWS version 2009.02)

Exports data to NetCDF files which comply to the CF 1.4 standard.

To indicate that data values are missing, NetCDF-CF exports use float value 9.96921e+036 by default. It is possible to change it by entering a different missing value (NaN or other) in the configuration files. Use option <exportMissingValue> in TimeSeriesExport module, and <missVal> in GeneralAdapter. More information about the cf standards can be found at: <http://cfconventions.org/>

There are six types of NetCDF-CF exports which can be defined:

- Time series ([NETCDF-CF_TIMESERIES](#))
- Profiles ([NETCDF-CF_PROFILE](#))
- Grids ([NETCDF-CF_GRID](#))
- Time series ([NETCDF-CF_TIMESERIES_MATROOS](#))
- Profiles ([NETCDF-CF_PROFILE_MATROOS](#))
- Grids ([NETCDF-CF_GRID_MATROOS](#))

Configuring the export

An example of the NETCDF-CF_PROFILE_MATROOS export can be found at [NETCDF-CF_PROFILE](#). The only difference is that the exportType must be changed to NETCDF-CF_PROFILE_MATROOS.

The structure of the netCDF file which is created is shown below.

200101010000_example.nc

```
netcdf 200101010000_example {
dimensions:
    time = UNLIMITED ; // (4021 currently)
    nonodes = 1113 ;
    nchar = 40 ;
    noelements = 1110 ;
    nodesperelement = 2 ;
variables:
    float time(time) ;
        time:standard_name = "time" ;
        time:long_name = "time" ;
        time:units = "minutes since 1970-01-01 00:00:00.0 +0000" ;
        time:axis = "T" ;
    float y(nonodes) ;
        y:standard_name = "projection_y_coordinate" ;
        y:long_name = "y coordinate in local grid" ;
        y:units = "m" ;
        y:axis = "Y" ;
        y:_FillValue = 9.96921e+036f ;
    float x(nonodes) ;
        x:standard_name = "projection_x_coordinate" ;
        x:long_name = "x coordinate in local grid" ;
        x:units = "m" ;
        x:axis = "X" ;
        x:_FillValue = 9.96921e+036f ;
    char nodenames(nonodes, nchar) ;
        nodenames:long_name = "name of the node <branch>_<offset>" ;
    int connections(noelements, nodesperelement) ;
        connections:long_name = "Left and right node for each element" ;
        connections:_FillValue = -999 ;
    float waterlevel(time, nonodes) ;
        waterlevel:long_name = "Waterlevel" ;
        waterlevel:units = "m" ;
        waterlevel:_FillValue = -9999.f ;

// global attributes:
    :title = "Netcdf data" ;
    :institution = "Deltares" ;
    :source = "export NETCDF-CF_PROFILE_MATROOS from FEWS" ;
    :history = "Created at Thu Oct 15 08:32:40 GMT 2009" ;
    :references = "http://www.deltares.nl" ;
    :Conventions = "CF-1.4" ;
    :coordinate_system = "RD" ;
```