CF-netCDF Standardization

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NetCDF has long been a de facto standard for data storage and access in several communities. More recently it has been recognized by the NASA Standards Process Group and the NOAA IOOS DMAC as a de jure standard. Within the Open Geospatial Consortium (OGC), CF-netCDF is being considered as an extension to the latest recognized version of the Web Coverage Service (WCS). A new initiative is underway to establish netCDF, and in perspective its CF-netCDF extension, as OGC binary encoding standards in their own right. In fact, establishing netCDF and CF-netCDF as a separate OGC encoding standards will simplify the process of using them as a payload for other standard access protocols such as the Web Feature Service (WFS) and Sensor Observation Service (SOS).

The netCDF standardization approach is modeled on that taken for establishing Google KML as an OGC standard. One difference is that netCDF will be standardized with a core and a set of extensions (i.e. CF-netCDF).

For implementing the core and extensions standardization process a CF-netCDF Standard Working Group (SWG) was formed. The existing NASA standard was considered as the basis for the OGC Core Candidate Standard for netCDF and its CF extension.

In parallel initiatives will be undertaken for extension standard for specific CF conventions (e.g., gridded data, point data collections, swath data, etc.), for netCDF APIs, and for ncML (the netCDF Markup Language)-GML.

The presentation will outline the plan and provide a report on the status of the initiative at the time of the meeting.