



New self-descriptive naming convention for climate data

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The presentation will be about a new naming convention for observations and statistical data from the Norwegian Meteorological institute. This naming convention describes self-explanatory metadata to bridge between sciences, applications, stakeholders, and end users.

All institutes seem to have their own naming convention for observed atmospheric and oceanographic elements. This means that data are not so easy to combine because of the different names, and possibly gives a different understanding of what the elements represent. It is a very large variety of instruments and how the measurements are treated. For climate data elements it is even more complex because of the different statistical functions that are used to produce the data. Earlier MET Norway used the letter “X” meaning the max function, but with limited access to information about “max over what”.

To solve these problems we wanted to use names that are self-descriptive and easily understood. Therefore we decided to use the CF convention if possible, and suggest new CF standard names when the convention does not cover the observed parameters. The CF standard names do not cover our need of defining the time aspect of a phenomenon or how the statistical weather elements were generated, but the cell-method and time aspect in the standard for NetCDF can be used. This caused us to expand the naming convention with function based names. The derived elements are therefore described with names as functions of standard names with respect to periods. The periods are named as an ISO-term. All in all the naming convention has a structure that makes us independent of observation station-specific installations as sensor number, sensor height- or depth and how the data are stored. The timeseries described by the metadata in the new convention can easily be stored as NetCDF files or distributed in other formats and can be used for interoperable solutions using international standards.