



## **EUMETGRID - towards a common European data infrastructure for gridded climate data**

O.E. Tveito

Norwegian Meteorological Institute, Oslo, Norway (ole.einar.tveito@met.no)

EUMETGRID aims to provide high resolution gridded climate data for Europe meeting the increasing demand for access to such data at pan-European scale. Gridded climate and weather data are considered as important in order to improve monitoring European weather and climate and to understand and predict climate variability, extremes and weather related hazards. The information is urgent for the society to be able to adapt to and cope with the challenges associated with a changing climate.

The EUMETGRID programme will meet this demand by establishing high quality gridded data sets and related products and services covering all of Europe. The programme will concentrate on developing and evaluating of methodologies to establish high resolution grids based on observations from synoptic and climatological stations, building a common European data infrastructure to distribute and exchange gridded data and to develop products and services associated with these data.

EUMETGRID aims to establish access to very high spatial (preferably 1x1km<sup>2</sup>) and temporal (at least daily) resolution gridded datasets using in-situ observations as input. The dataset should take advantage of all information available at national scales. In order to achieve this EUMETGRID will take a distributed data base approach, building a system based on nationally tiled datasets provided and hosted by the individual NMSs. This decentralized approach will ensure access to the at any time best available datasets, based on full coverage of observations, best knowledge about local and regional climate conditions, and national ownerships that are crucial for the national commitments to the programme.

In addition to nationally contributed datasets, EUMETGRID will establish a data infrastructure that will offer a platform for dissemination of other gridded climate datasets such as E-OBS and be used to access and distribute data from regional re-analyses such as EURO4M.

The EUMETGRID concept can develop to a central access point to both observation-based gridded climate data and data from weather prediction and climate models and thereby evolve into a future GMES service for weather and climate.