EMS Annual Meeting Abstracts Vol. 11, EMS2014-535, 2014 14th EMS / 10th ECAC © Author(s) 2014



## Developing climate indicators from gridded data.

## Ole Einar Tveito and Hans Olav Hygen

Norwegian Meteorological Institute, Climatology Division, Oslo, Norway (ole.einar.tveito@met.no, +47 22963050)

Maps can be a powerful tool to communicate climate information. Since climate data are complex and detailed there is a challenge to develop useful climate indicators in order to target the essential information different groups of users requires. The intention of these indicators is to simplify the complex structure of weather and climate into simple, easily understandable indices. A close collaboration with the user communities is needed to ensure the usefulness of the indicators.

Gridded climate data forms an excellent basis for deriving climate indicator maps at different levels. MET Norway is currently developing several such indicator datasets, both as gridded data with 1 x 1 km resolution and for different administrative and natural regions. The basis for these maps are 1x1 km data sets for temperature and precipitation covering the period 1957 until today with a daily resolution and back to 1901 with monthly resolution. Target user groups are local and regional administrations, the forestry and agricultural sector, natural resources management. The indicators range from degree days over different thresholds, water balance indices describing droughts and forest fire conditions, snow conditions etc. The indicators can be distributed either as map themes, or as time series representing points or defined areas.

We will present different sets of indicators developed in close contact with different user communities.