

EUMETNET Project ECSN/HRT-GAR: High Resolution Temperature Climatology in Complex terrain – demonstrated in the test area Greater Alpine Region (GAR)

I. Auer, R. Böhm, W. Schöner,

Central Institute for Meteorology and Geodynamics, Vienna, Austria

After a longer preparation phase the project officially started in January 2006. The objective to be achieved first is the creation of 12 monthly temperature climatologies of the Alps and their wider surroundings (“Greater Alpine Region”) in high spatial resolution. To meet the steep topography of the region a minimum resolution of 1km is achieved with an option to provide additional information to tackle subgrid effects within the grid-boxes (e.g. the vertical t-gradients for each grid box). Data collecting from about 25 providers from 13 countries produced more than 1700 single station sets with at least 20 years of data. The data were all adjusted to the common period 1961-1990 and to a common means-calculation algorithm. Different ways of modelling the mean temperature fields were compared. The contribution will show and discuss the data elaboration and the preliminary results of the high resolution maps.