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Evaluating high resolution regional reanalysis with satellite derived data

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Within the Seventh Framework Program the EURO4M project (European Reanalysis and Observations for Monitoring) is a European capacity for monitoring climate change and extremes. The collaborative project aims at developing the best possible and most complete (gridded) data sets and monitoring services covering Europe by combining regional observational datasets and model based reanalysis.

Here we present results from the verification of EURO4M's high-resolution regional reanalysis data sets that are generated by the Swedish Meteorological and Hydrological Institute (SMHI). The focus will be on cloud parameters, surface solar radiation, surface albedo, water vapour and precipitation. As reference different gridded data sets, mainly derived from the SAF on Climate Monitoring (CM SAF), are used. First results indicate a slight overestimation of the surface solar radiation and the precipitation of the reanalysis data set. Evaluation results are frequently shared and discussed with users in order to optimize the products. Both validation methods and the latest results will be presented at this meeting.