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UERRA regional reanalysis products, data services, quality and user interaction

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The FP7 C3S pre-cursor project UERRA (Uncertainties in Ensembles of Regional ReAnalyses) has now evolved into its production phase. Three upper air European area reanalyses are running and for different length of time. One (SMHI) is for the last 55 years, the Met Office 35+ years but complemented by a large 20 member ensemble system and the University of Bonn with the COSMO system for a limited period of 5 years. This will also be an ensemble, 20 members, and the three systems can be compared for the 5 years when there are actually two SMHI (HARMONIE ALADIN and ALARO) versions, Unified Model and the COSMO system available.
A common but extensive set of output reanalysis parameters are stored in a unified public MARS archive at ECMWF. Both model variables and diagnostic quantities will be available at full resolution, horizontally (11-12 km grid) and vertically with additional height level variables in the lowest 500 m above ground.
Data and visualisation services (Web API and Web Map Servers) are available both through ECMWF and through KNMI. Part of the data will be available through an ESGF node and complementary access provided through that.
URV and UEA (NMA-Romania) have provided over 8 M (300 K) of surface station rescued data with subsequent data development (quality control and correction) and homogenisation. These data are provided to international data centres for open access and to be used for reanalyses.
There is also a surface 5 km grid resolution 55 year reanalysis of precipitation and temperatures, using all available in situ data that can be accessed (public data). In addition, there is also a consistent 25 year cloud cover analysis and off-line hydrological models to evaluate the reanalyses.

Users have been involved through in a workshop and more will follow in 2017.