EMS Annual Meeting Abstracts
Vol. 16, EMS2019-133, 2019

Copernicus regional reanalysis for Europe

Semjon Schimanke and Per Undén
SMHI, Norrköping, Sweden (semjon.schimanke@smhi.se)

The Copernicus regional reanalysis for Europe (https://climate.copernicus.eu/regional-reanalysis-europe) is produced as part of the Copernicus Climate Change Service (C3S) and the presentation will introduce the service and its main objectives. In September 2019, the service will reach its midterm. So, we will look both back in time – to see what we have achieved so far – and forward, to see what is ahead of us.
The service started to produce a regional reanalysis (RRA) for Europe more or less from the onset of the service. This was possible based on a reanalysis system inherited from the preoperational FP7 project UERRA (Uncertainties in Ensembles of Regional ReAnalyses, http://www.uerra.eu/). In contrast to the UERRA project, we started to produce the RRA in operational mode with monthly updates. Today, the service offers a RRA for Europe, which provides meteorological data from 1961 to near real-time at a higher resolution than the global analyses. And, since the beginning of 2019 the data is available through Copernicus Climate Data Store, which was also a big step forward for the service and the users. Moreover, as any Copernicus service, this service is supposed to be user driven. Therefore, we will show what kind of support is offered and how users can interact with the service provider. For instance, there will be a User Workshop in late spring 2020 and training material and software is available through the Copernicus User Learning Service (ULS).
In parallel with the production of the RRA with the UERRA system, we develop a system, which should start its production in autumn 2019. It will generate a RRA at higher resolution (5.5 km) and assimilate more observations than the UERRA system, in particular remote sensing data. There is also an Ensemble Data Assimilation component in order to gauge the uncertainties of the products. In the presentation, we will have a glance on what the users can expect from the new system.