



Contribution ID: 15

Type: **not specified**

European Weather Cloud: A community cloud service tailored for Meteorology

Thursday, 23 September 2021 14:50 (20 minutes)

ECMWF (European Centre for Medium-Range Weather Forecasts) jointly with EUMETSAT (European Organisation for the Exploitation of Meteorological Satellites) work together in a project named “**European Weather Cloud**” (<https://www.europeanweather.cloud/>). The strategic goal of this initiative is to build and offer a community cloud infrastructure on which Member and Co-operating States of both organizations can create and manage on-demand virtual resources enabling access to the ECMWF’s Numerical Weather Prediction (NWP) products and EUMETSAT’s satellite data in a timely, efficient, and configurable fashion. Moreover, one of the main goals is to involve more entities in this initiative in a joint effort to form a federation of clouds/data offered from our Member States, for the maximum benefit of the European Meteorological Infrastructure as well as to support WMO NMHSs.

During the current pilot phase of the project several use cases have been defined and f both organizations have organised user and technical workshops to actively engage with the meteorological community to align the evolution of the European Weather Cloud to reflect and satisfy their goals and needs.

In this presentation, the status of the project will be analysed describing the existing infrastructure, the offered services and how these are accessed by the end-users along with examples of the existing use cases. Moreover, we will present the approach we followed to deploy the pilot infrastructure at ECMWF, the decisions made, the challenges and opportunities and lessons learned from this exercise. The initial thoughts and approaches currently considered for the Cloud -HPC convergence will be discussed, together with a review of similar activities.

Finally, the plans, next steps for the evolution and the transition to operations of the European Weather Cloud and its relationship with other projects and initiatives such as DestinE will conclude the presentation.

Primary authors: Dr BAOUSIS, Vasileios (ECMWF); Mr PAPPENBERGER, Florian (Director of Forecasts); PALKOVIC, Martin; MODIGLIANI, Umberto (ECMWF); ABELLAN, Xavier; KOMINOS, Charalampos (ECMWF)

Presenter: Dr BAOUSIS, Vasileios (ECMWF)

Session Classification: Session 8

Track Classification: 19th Workshop on high performance computing in meteorology