

CAMS 50: Regional production

Description

The present tender concerns the continuation of the CAMS Regional production service (CAMS_50) for the period 2018-2021. The purpose of the service will remain to produce numerical data and mapping products providing information on air quality and atmospheric composition on the European scale, with the aim of making it freely and easily accessible to the various user communities.

As with the current CAMS_50 that is nearing completion (September 2018):

- The CAMS_50 outputs will consist in the following streams: daily near-real time (NRT) forecasts, daily NRT analyses, annual re-analyses based on in-situ observations in an interim stage of validation and annual re-analyses based on fully validated in-situ observations.
- Acquisition of data, production of analyses, re-analyses and forecasts, verification of the outputs, data dissemination services and support to the users will form the bulk of the activities.
- A multi-model ensemble approach will be implemented.
- User satisfaction will be a central focus, which will be reflected through a strong emphasis on production quality and through user support activities.
- Important development efforts will underpin the Service, not only to allow for regular individual and Ensemble upgrades meant to improve the Service, but also to allow for a potential small-scale extension of the pool of Regional systems taking part in the operational production.

For the 2018-2021 period, new challenges for CAMS_50 will arise, among others:

- The delivery of the Regional products to the ECMWF Copernicus Data Store, with a transition period expected to start in 2018.
- The addition of two Regional systems bringing the pool of models contributing to the operational Ensemble.
- The extension of the geographical domain.
- The addition of aerosol parameters proposed as outputs to present impact of residential burning emissions and secondary organic production on air quality.
- The acquisition of new types of air quality observations through ECMWF.

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