

Application and Verification of ECMWF Products 2019

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1. Summary of major highlights

Our national service use ECMWF forecast products in operational work more than 10 years.

In this moment our numerical weather prediction model use ECMWF boundary condition for work on 1 km. resolution.

We also use material from ECMWF for monthly forecast for our country and people from our Hydrology department also need information from ECMWF for their water level forecast in particular river catchments.

Our service will continue to use ECMWF's extended range forecasts and seasonal forecasts.

2. Use and application of products

We use:

- ensemble (ENS) forecasts
- medium-range high-resolution (HRES),
- monthly forecasts and seasonal forecasts.

Products are used with

- Chart dashboard
- EcCharts

Our forecasters use continuously :

- ENS meteograms by locations;
- Vertical profile emagram for 3 locations;
- Extreme Forecast Index - EFI;

Example:

- Large number of meteorological field e.g. SLP, 850 hPa t, 500 hPa g, total precipitation, cloud cover, wind speed and direction and other.

2.1 Direct Use of ECMWF Products

For severe weather conditions we try to use:

- field of PV anomalie generated on chart dashboard

Our intention is to see early sign of intensive severe weather.

2.2 Other uses of ECMWF output

2.1.1 Statistical adaptation

At this moment we not have other uses of ECMWF outputs

2.1.2 Physical adaptation

At this moment we not have other uses of ECMWF outputs

2.2.3 Modelling

In our HMS we are running twice a day WRF-NMM v.3.9.1, non-hydrostatic limited-area model, with boundary conditions from ECMWF.

3. Verification of ECMWF products

3.1 Objective verification

3.1.1 Direct ECMWF model output (both HRES and ENS), and other NWP models

3.1.2 Post-processed products and end products delivered to users

3.1.3 Monthly and Seasonal forecasts

3.2 Subjective verification

3.2.1 Subjective scores (including evaluation of confidence indices when available)

3.2.2 *Case studies*

4. Requests for additional output

- No requests at this moment.

5. Feedback on ECMWF “forecast user” initiatives

- We estimate all aspects of collaboration through web portal including all additional information as help are very good.

- ECMWF Support for representatives and users is also very good.

6. References to relevant publications

(7. Structure of these Reports)

ECMWF is reviewing the way in which contributions such as these are gathered and collated. We have made some simple changes to the structure this year, as can be seen above. Please provide any comments you have on the whole process (e.g. schedule for collecting input, report content, report layout, TAC summary). Comments entered in this section will be examined and used by ECMWF, but will be removed prior to publishing your reports on the ECMWF website.