



EPS based probabilistic forecasts and verification at Finnish Meteorological Institute (FMI)

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ECMWF EPS forecasts been used widely at FMI since mid 1990'ies. However, the data has been mostly used as guidance information. Now FMI is moving towards more direct and operational use of probabilistic information also for customer products and warnings. Calculations of the probabilities of accumulated precipitation forecasts (and also many other parameters) of ECMWF EPS system are performed at FMI to allow the determination of user specific thresholds. It also provides fast response time if some additional changes like local calibration is needed. Another important aspect is that the end products are in our own production system allowing easy access to the data. Within the production system the duty forecasters are even able modify the probabilistic data if needed. Verification of this data has also started.

Many users need also probabilistic information in shorter forecast lead times and even in nowcasting range. A project is going on at FMI to face this challenging problem to calibrate and merge all different data input sources into a solid and optimized probabilistic customer product. To achieve that one has to combine and merge probabilistic nowcasting information from radars, output from LAM-EPS systems (like the GLAMEPS initiative), output from local PEPS (Poor Man's EPS) and finally the ECMWF EPS data into a well behaving single product.

The work in the project has started and some preliminary verification results are presented.