



Seamless probabilistic analysis and forecasting: from minutes to days ahead

Alexander Kann, Yong Wang, Aitor Atencia, Nauman Awan, Markus Dabernig, Josef Kemetmüller, Florian Meier, Irene Schicker, Lukas Tüchler, Clemens Wastl, and Christoph Wittmann

Central Institute for Meteorology and Geodynamics, Numerical Weather Prediction, Vienna, Austria
(alexander.kann@zamg.ac.at)

During the last years, a seamless probabilistic forecasting system (SAPHIR) has been continuously developed at ZAMG. The system is designed to provide the best possible deterministic weather information as well as probabilistic forecasts on very high resolution (1km). The system is updated up to every 10 minutes and spans the forecast horizons from the current state of the atmosphere, minutes to hours ahead, up to the short range of +72 hours. The system integrates various kinds of observation data (i.e. station data, radar and satellite data) and smartly combines observation-based analysis and nowcasting methods, ensemble nowcasting, a convection-permitting RUC model, a convection-permitting EPS, ensemble calibration, and regional and global deterministic and probabilistic NWP models.

The concept of the system and first results will be presented and discussed.