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Objective Mixed and Manually Controlled Data Base OMG

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Many customers of Deutscher Wetterdienst get forecast products (different deterministic meteorological parameters) as so-called Point-Time-Prognoses (PTPs). There's the need for data of high resolution in space (several kilometers, cities) and time (hourly up to forecast-day 7, updated each hour). Those interpretations of the numerical models have been designed by different methods, called DMO, Model Output Statistics (MOS), Kalman filtering. Because of different model results and different methods there are between five and ten different PTPs for the same location. While a forecaster, based on his experience, can choose between that different interpretations, an automatic customers supply can't do so. Because updates of those interpretations are only available for each new model run, there's also the need for more actual forecast data, using nowcasting methods as well as controlling and modifying mechanisms for the forecasters.
A process "Objective Optimization" has been implemented which automatically combines the available PTP data, nowcasting products and observations at all required locations. A frequent update of this optimization process every 30 minutes ensures that the OOG is based on the latest available model, nowcasting, and observational information.
The resulting so-called "Objectively Optimized Guidance" (OOG) passes an interactive quality control step to produce a "Man Modified output" (MMO). The corresponding tool "MMO-Editor" provides point editing functions together with automatic quality checks and corrections. The combination of automatic data merging (OOG) and quality check with optional manual corrections (MMO) aims at providing a single quality ensured data base for subsequent automatic customer supply.
The presentation describes the methods, the "status quo" and the plans of implementation a data base called OMG.