UVIG Forecasting Workshop 2015
(18.-19. Feb. 2015, Denver Lakewood, CO,USA)

Tutorial on Stochastic Forecasting Methods and Applications

Applicability of Ensembles in different time horizons
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Corinna provided some insight into the fundamental differences between various ensemble methodologies and thereby bridged the theoretical explanations of previous speakers on how ensemble systems and post-processing algorithms are built with their applicability in the power industry.
The differences to be most aware of when using ensemble forecasts in the power industry are the two "philosophies" of ensemble systems and their applicable time horizons. One type of ensemble system is built by perturbation of 1 NWP model and the second type of ensemble systems are built by using multiple NWP models or multiple parameterisation schemes inside a NWP model, forming multiple model configurations. The first types are natively only applicable for trading of futures in the power markets, while the latter type is natively applicable at all time horizons. Ensemble Histograms are a useful way to identify whether post-processing methodologies such as analogue ensembles, EMOS, logistic regression are necessary workarounds, especially when making use of the 1-model-ensembles in power industry applications.
Additionally, a number of different visualisation methods for ensemble data was demonstrated. Some practical applications such as "finding outliers", "objectively finding the best deterministic forecast", "reserve predictions", "data quality control procedures in the context of forecast information and measurements" were shown. It was also addressed how ensemble data can create additional situational awareness and value in decision making.
Corinna concluded that the power engineers and economist can learn a lot from how meteorologists use the additional information from ensemble data for automatic processes of decision making.