

Local validation of operational weather forecasts of IFS and COSMO-EU for the DWD observational site at Falkenberg

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Based on its long experience in the measurement of atmospheric boundary layer parameters and on its profound knowledge of the measurement and site characteristics, the Lindenberg Meteorological Observatory is well qualified to validate operational weather forecasts for this location by using all available measurements. This enables the validation studies to include much more quantities than normally used in areal verification techniques. The validation studies mainly focus on near-surface boundary layer and soil processes playing an important role in the atmospheric forcing mechanism from the surface and estimate the model behaviour for different meteorological conditions. Their aim is to reveal possible deficiencies in the boundary layer parameterizations. For the very first time local validation results of an extended intercomparison of COSMO-EU and IFS predictions are presented for the Falkenberg site. The poster comments the most striking features on a monthly basis between 2008 and 2010 and points out important differences between the IFS and COSMO-EU concerning the parameters temperature, humidity, soil moisture, wind speed and energy fluxes.