



Influence of Perturbation Type on Results of EPS Forecasts of Surface Elements

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The results from research on COSMO-EPS (Ensemble Prediction System of Consortium for Small-scale Modeling Model), carried out at IMWM (Institute of Meteorology and Water Management), are presented. The operational EPS set-up is based on perturbations of soil surface-area index of the evaporating fraction of grid points over land. Other types of perturbations (perturbations of analysis fields of soil temperature and/or precipitation-related parameters, eg. the collection efficiency coefficient) have also been applied to assess which would generate the best forecasts of surface meteorological fields like precipitation, air temperature/dew point temperature at 2m agl. or wind speed at 10m agl. Results of EPS-system (using the archive data) have been verified against measurements at Polish SYNOP stations for the entire year.