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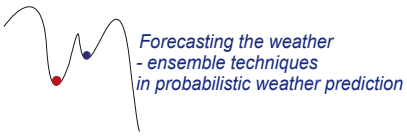

Drought forecasting in Croatia using Standardized Precipitation Index

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Drought is a complex process and various factors determine the drought risk and vulnerability. Comparing to other hydrometeorological disasters, it develops very slowly and it is difficult to determine when it starts and ends. Short-term precipitation deficit in vegetation period can cause the agricultural drought that can affect the crops, while the long-term deficit can cause the hydrological drought. For the purpose of drought monitoring and in-time warning various indices are used, which help to quantify drought information and to compare the precipitation conditions on large regions. In this study the possibility of drought forecast in Croatia is tested employing the Standardized Precipitation Index (SPI) and the medium and long-range weather forecast from the European Center for Medium-Range Weather Forecasts (ECMWF). SPI forecast is calculated at time scale from 1 day to 6 months, for several stations in Croatia, representing different climate regions. Preliminary results exhibit good correlation between forecasted and real SPI indices.