



## **Verification of long range weather forecasts in Croatia**

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The paper presents the long range (monthly and seasonal) forecasts, provided regularly by the Meteorological and Hydrological Service of Croatia. These forecasts, issued once or twice a month for several Croatian regions, are dominantly based on the ECMWF forecasting systems. The demand and importance of such forecast is constantly increasing, so regular verification is also provided. The analysis points to several deficiencies: for the temperature, variance of the forecast anomalies is significantly smaller compared to the observed ones („low signal“), particularly in extreme seasons; furthermore, a consistent underestimation of the temperature („too cold“) is also noticed. However, another verification approach reveals a certain ability of the forecasting system to resolve relatively cold or warm seasons. Similar results are obtained for the precipitation, when employing the forecasts for drought prediction (Standardized Precipitation Index). Some of the weaknesses of the product are influenced by the use of ensemble mean/median, so in the future a more probabilistic approach should be considered. Improvement of these forecasts would clearly enable the development of various Service's specific products, such as drought prediction and warning system, forecasts for the fire-fighting season etc.