



Monthly forecast products based on daily data

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MeteoSwiss provides monthly predictions for Switzerland based on ECMWF extended range forecasts both to the public and commercial customers. So far, these forecasts have been provided in the format of weekly tercile probabilities for mean temperature and precipitation sums, either as maps with contours indicating the probabilities of upper and lower terciles or as data files of tercile probabilities. Feedback from the public suggests that these formats are difficult to interpret and commercial customers are increasingly interested in receiving more specific forecast formats, such as predictions of certain indices that are directly relevant to their business. Examples are heating degree days for the energy sector or drought indices for agriculture. For improving the presentation of monthly forecasts and as a first step towards forecasts of indices, we currently experiment with products based on ECMWF model output at daily time resolution and using additional parameters besides mean temperatures and precipitation sums.

First results from this ongoing effort will be presented. For selected sites in the Alpine area, we produced climagram-like plots showing weekly distributions of daily minimum maximum and mean temperatures. Simple downscaling approaches were used to produce site-specific ensemble forecasts of absolute temperatures. First verification analyses indicate that skilful forecasts in the extended range are possible but skill varied quite significantly between the different test sites.