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The EUPPBench postprocessing benchmark

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Statistical postprocessing of forecasts from numerical weather prediction systems is an important component of modern weather forecasting systems. A growing variety of postprocessing methods has been proposed, but a comprehensive, community-driven comparison of their relative performance is yet to be established. Important reasons for this lack include the absence of a fair intercomparison protocol, and, the difficulty of constructing a common comprehensive dataset that can be used to perform such intercomparison. Here we introduce the first version of the EUPPBench, a dataset of time-aligned medium-range forecasts and observations over Central Europe, with the aim to facilitate and standardize the intercomparison of postprocessing methods. This dataset is publicly available [1], includes station and gridded data, ensemble forecasts for training (20 years) and validation (2 years) based on the ECMWF system. The initial dataset is the basis of an ongoing activity to establish a benchmarking platform for postprocessing of medium-range weather forecasts. We showcase a first benchmark of several methods for the adjustment of near-surface temperature forecasts and outline the future plans for the benchmark activity.

[1] https://github.com/EUPP-benchmark/climetlab-eumetnet-postprocessing-benchmark