



## **Spatial ensemble post-processing with standardized anomalies**

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To post-process ensemble predictions to a particular location, often statistical methods are used, especially in complex terrain like the Alps. When expanded to several stations, the post-processing has to be repeated at every station individually thus losing information about spatial coherence and increasing computation cost. To maintain spatial coherence and save computational costs we propose to transform observations and predictions to standardized anomalies. Site-specific characteristics are eliminated by subtracting a spatial climatology and dividing by the standard deviation of this climatology from observations and numerical forecasts. Therefore, ensemble post-processing can be applied for multiple locations simultaneously. Furthermore, this method allows to forecast even at locations where no observations are available. The results show that these forecasts are comparable to statistical forecasts at every station individually and on average even better.