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# Towards a new high resolution gridded daily precipitation dataset over Europe

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The availability of high resolution daily gridded observational datasets is essential in many applications and to properly evaluate regional climate models. As the horizontal resolution of such models has significantly increased in recent modelling exercises (e.g., Euro-Cordex), while the one of the available observational datasets has remained constant (approx. 25km), new approaches are needed to develop gridded dataset of daily precipitation. Here, we discuss a statistical conceptual framework to combine data from neighbouring stations and model outputs. Our approach is based on recent statistical models for precipitation distributions, meshed with a data assimilation scheme. Our study focuses on the European region.