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## **Sub-seasonal-to-Seasonal (S2S) Prediction at ECMWF**

ECMWF produces operational S2S forecasts since 2004, which are now included in the WWRP/WCRP S2S database. In the current configuration, the ECMWF S2S forecasts are run daily with 100 ensemble members, at 36km resolution. The performance of the ECMWF extended-range forecasting system to predict precipitation and temperature, as well as some high-impact weather events will be discussed, with a particular focus on the representation and prediction of the main sources of S2S predictability (e.g. the MJO) and their impacts. The ECMWF S2S forecast skill has significantly increased over the past 20 years, particularly in the tropical regions, making these forecasts potentially more useful for applications. Multi-model ensemble prediction and the use of AI/ML methods for improved calibration represent important opportunities to increase the value of the S2S forecasts.