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Prediction skill of the MPI-ESM based seasonal forecast system for sea level pressure and wind speed

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A seasonal forecast system is used to study the prediction skill for sea level pressure and wind speed over the ocean. The forecast system is based on the CMIP5 version of MPI-ESM. This model system was initialised by reanalysis/observations in the atmospheric, ocean and sea ice components. Bred vectors with a vertically varying norm were implemented in the ocean component to generate initial perturbations. A set of ensemble hindcast simulations for the years 1982 until 2010 starting each May and November were conducted for model setups with different spatial resolution. Similar to the sea surface temperature, we found predictive skill for sea level pressure at lead time 2-4 months with relatively high anomaly correlation in the tropical Pacific and Atlantic. An intercomparison analysis of the prediction skill for sea level pressure and 10 m wind speed for the tropical Pacific and the North Atlantic will be presented with the focus on different model resolutions.