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ENSO hindcast skill in the DWD - MPI-M - UHH seasonal prediction system

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We present an assessment of the El Niño Southern Oscillation (ENSO) hindcast skill in the DWD - MPI-M - UHH seasonal prediction system based on the earth system model MPI-ESM. The system is initialised from re-analysis in the atmospheric, oceanic and sea-ice component of the model. We use a hindcast ensemble with semi-annual start dates between 1981 and 2014 (10 member ensembles started every May and November for 6 months each). We find hindcast skill for Niño 3.4 sea surface temperatures up to 6 months ahead. Hindcast skill is higher for November start dates than for May start dates. In addition to the Niño 3.4 Index, we also assess hindcast skill for Niño3, the West Pacific Warm Water Volume and the zonal wind variability. In particular we focus on the difference in the hindcast skill in the May start dates for the 1997/98 and the 2014 November conditions - though for these two periods overall similar conditions were observed, the subsequent development with a strong El Niño in 1997/98 and a very weak El Niño in 2014 differed considerably.