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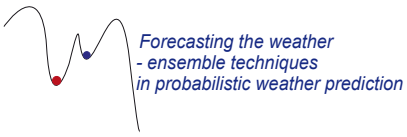

AMV and IPO Decadal Prediction Skill

J. García-Serrano (1) and F.J. Doblas-Reyes (2)

(1) Institut Català de Ciències del Clima (IC3), (2) ICREA & Institut Català de Ciències del Clima (IC3), Barcelona, Spain (f.doblas-reyes@ic3.cat)

Positive temperature skill has been found in decadal predictions over the North Atlantic and the subtropical Pacific. This skill can be linked to skilful predictions of the Atlantic multi-decadal variability (AMV) and the Interdecadal Pacific Oscillation (IPO). The ENSEMBLES multi-model and DePreSys perturbed parameter decadal ensemble re-forecasts are used to illustrate the skill of indices that characterize these phenomena. Both the multi-model and DePreSys re-forecasts yield skilful predictions in the first few years, which is generally higher than the single-model predictions. A comparison of the ensemble-mean correlation for DePreSys using one- and five-year interval between start dates shows that, although a five-year interval sampling allows to estimate the level of skill, local maxima along the forecast time might well be due to poor sampling of the start dates. The beneficial impact of the initialization is discussed using the uninitialized set of DePreSys_PP re-forecasts. These are useful results because of the climate impacts of both the AMV and IPO, which will be illustrated using teleconnections estimated using both observations and the model output.