

Predictability of atmospheric teleconnections in initialized decadal forecasts

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The skill of atmospheric teleconnections forced by sea surface temperature anomalies in the Indian and Pacific Oceans that are predictable on decadal time scales is assessed in the PCMDI CMIP5 initialized decadal hindcasts of the 20th-21st centuries. This skill is assessed across the different CMIP5 ensembles and compared with observational estimates of atmospheric teleconnections forced by Indo-Pacific SSTs. This research provides an analysis of predictable patterns of rainfall, air temperature, and circulation anomalies in initialized decadal hindcasts, and by comparison with uninitialized hindcasts, an assessment of the impact of initialization.