Decadal forecasts with the IPSL-CM5A-LR model

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Decadal hindcasts experiments of the last 50 years are presented using the IPSL-CM5A-LR model with an initialization based on surface nudging to observed SST anomalies. In contrast to previous attempts, a weaker and physically based nudging coefficient is used to avoid spurious drifts in the sub-surface ocean. We evaluate the influence of this simple initialization technique by comparing the nudged experiments to an original set of oceanic and atmospheric observations and reanalysis. We also present the performance of the decadal prediction system by comparing the prediction skill of the initialized versus non initialized hindcasts.