



New strategies for surface initialisation of decadal and seasonal hindcasts

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The first results of the CMIP5 "Near term" IPSL-CM5 (NEMO ocean / LMDz atmosphere) decadal previsibility experiments are presented. The strategy chosen at IPSL is to initialize the climate model only at the ocean-atmosphere interface, following the guidance and expertise gained from ocean-only NEMO experiments. Two novel approaches are presented for initialising the coupled system. First, a nudging of sea surface temperature and wind stress towards available reanalysis is made with the surface salinity climatologically restored. Second, the heat, salt and momentum fluxes received by the ocean model are computed as a linear combination of the fluxes computed by the atmospheric model and by a CORE-style bulk formulation using up-to-date reanalysis. Results from the two approaches are compared. It is shown how the second approach, using bulk formulae, is more physical than the first one. First hindcasts results are evaluated in this perspective.