



Low-frequency variability of Sahel rainfall driven by sea surface temperature patterns in CMIP5 models

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Throughout the 20th century it has been observed a decadal variability of the Sahelian rainfall, with a rainy period during the 1950s and 1960s followed by a period of severe drought during the 1970s and 1980s. Sea surface temperature (SST) patterns mainly drove this low-frequency variability. In this work we study the low-frequency variability of SST in historical and preindustrial control simulations of CMIP5 models. We describe the leading large-scale patterns of SST related to external forcing and to internal variability in the Atlantic and Pacific oceans and we analyze their relation with Sahel rainfall.