



Statistically related coupled modes of South Asian summer monsoon interannual variability in the tropics

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Statistically coupled patterns of South Asian Summer Monsoon (SASM) interannual variability in the tropical oceans have been explored. Maximum covariance analysis (MCA) performed between global tropical sea surface temperature (SST) and SASM precipitation shows that El-Nino southern oscillation (ENSO) is the leading mode in the tropics, whereas the eastern pole of the Indian Ocean Dipole contributes to the second global mode and is the leading mode in the Indian Ocean. South tropical Atlantic SST variability is contributing to the second and third mode in the tropics and is the leading mode in the tropical Atlantic MCA coupled with SASM. The physical mechanism of the south tropical Atlantic-SASM teleconnection is analysed in more details.