

Importance of Ocean-Atmosphere Coupling in Modulating the Seasonal Cycle of Indian Monsoon Rainfall

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Role of coupling ocean and atmosphere on the seasonal cycle of rainfallover the Indian region is presented. It is seen that the seasonal cycle of rainfall is more realistic in the coupled model (CCSM2, Community Climate SystemModel Version 2) than when its atmospheric component (CAM2, CommunityAtmospheric Model Version 2) is integrated with specified SST. The cause of these differences is investigated and is seen to be related to the relationship between SST and precipitable water and the relationship between precipitablewater and rainfall in these models.