

ICTP/PROMISE conference on:

**Monsoon Environments: Agricultural and Hydrological Impacts of Seasonal Variability and Climate Change**

**Role of Indian Ocean SST forcing on the interannual variability of the South Asian Monsoon**

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One of the important problems relevant to monsoon research pertains to the role of the Indian Ocean SST forcing in affecting the variability of the South Asian monsoon rainfall and circulation. In this study, we shall present results from a series of ensemble GCM experiments that were carried out in order to assess the sensitivity of the monsoon response to SST forcing in the Indian Ocean. The model simulations have been validated with observed datasets. The results of our study suggest that the Indian Ocean SST forcing can be a potential contributor to the interannual variability of the monsoon. It is seen that the SST anomalies in the tropical Indian Ocean tends to significantly alter the intraseasonal variability of convection over the equatorial Indian Ocean and the subcontinent. These regional scale impacts in turn lead to persistent anomalies of the seasonal mean monsoon rainfall and circulation fields.

**Monday III (Talk)**

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