

Intraseasonal Variability in the Tropical Indian Ocean

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Intraseasonal variability in the tropical Indian Ocean, with typical time-scale of 10 to 60 days, is believed to be an important process in the atmosphere-ocean coupled system around the Indian Ocean in various ways. However, our understanding of detailed characteristics of the variability is rather limited due mainly to lack of the in situ observed data, which has enough temporal resolution to detect the intraseasonal variability. Recent observational activities in the tropical Indian Ocean and simulations using high-resolution ocean general circulation models provide us nice opportunities to proceed towards the deep understanding of the intraseasonal variability and its role in the climate system over the Indian Ocean. In this talk, at first, a brief review of the studies on the intraseasonal variability in the tropical Indian Ocean is given. This is followed by an overview of recent works, including upper-layer velocity variability in the equatorial region, deeper-layer current variability, and sea surface temperature variability in the thermocline dome region around 5S. Some observation projects that is now underway and planning in the near future is also introduced.