

Chowdary, J. S., R. Attada, J.-Y. Lee, Y. Kosaka, K.-J. Ha, J.-J. Luo, C. Gnanaseelan, A. Parekh, and D.-Y. Lee, 2014: Seasonal prediction of distinct climate anomalies in the summer 2010 over the tropical Indian Ocean and South Asia. *J. Meteor. Soc. Japan*, 92, 1-16.

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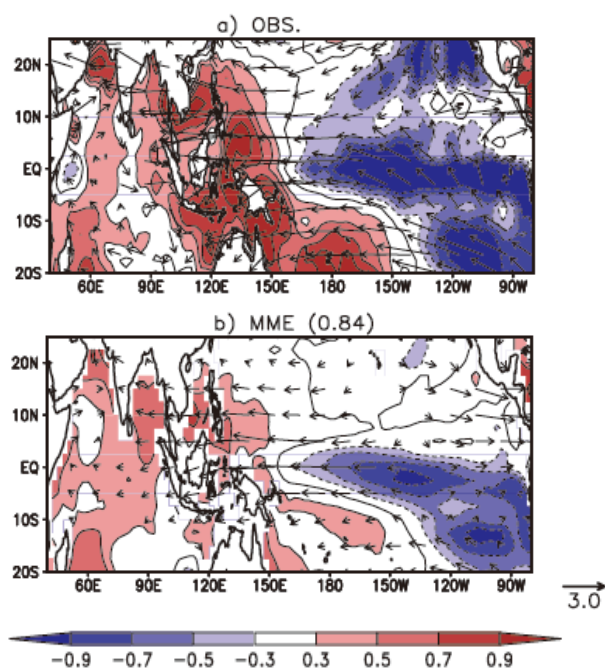


Figure 1. JJA 2010 SST (contours and shaded; °C) and 850 hPa wind anomalies (vectors; above 0.3 ms<sup>-1</sup> are displayed) for (a) observation and (b) multi-model ensemble (MME) prediction initialized on 01May 2010. The pattern correlation between the observation and MME prediction is shown at the top of (b).

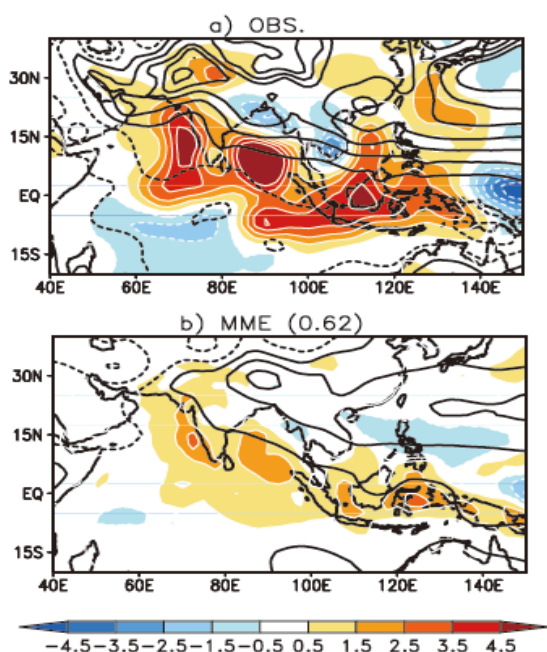


Figure 2. JJA 2010 precipitation (white contours and shaded; above 0.5 mm/day and below -0.5 mm/day are displayed) and SLP (black contours; CI 0.5 hPa) for (a) observation and (b) MME prediction. The pattern correlation between the observation and MME prediction is shown at the top of (b)

- This study reveals that the predictive skill of rainfall and circulation anomalies during summer 2010 over the TIO and South Asia is largely attributable to the Indian Ocean basin-wide warming during the decay phase of El Niño (Fig. 1).
- Coupled models well predicted the positive rainfall anomalies over the west coast of India, southern Peninsular India and central Bay of Bengal and the suppressed rainfall over northeast Bay of Bengal associated with northwestward extension of northwest Pacific ridge one month ahead (Fig. 2).
- Coupled models failed to predict the anomalous positive rainfall in the northern Pakistan due to their inability in predicting the mid-latitude circulation anomalies (Fig. 2).