Dynamo Intraseasonal State Summary
See commentary on pages 2 and 4.

November 24, 2011
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Active MJO convection is growing over the western and central Indian basin. A convectively coupled Kelvin wave is enhancing convection over the eastern Indian basin, but more especially over the Maritime Continent, relative to the convectively suppressed MJO base state in the same region. 2-10 day westward-moving waves, with some structural similarity to the MRG wave are also strongly influencing the organization of convection over the Indian basin. Although still substantial over the Pacific basin, equatorial Rossby wave signals are now less of a factor than they have been over recent weeks. Direct filtering in the wave number frequency domain suggests another Kelvin wave over the western Indian basin. However, these time extended EOF projections suggest that the spatial structures associated with those signals are more consistent with the developing MJO. If that inference is correct, filtered products following the Wheeler and Weickmann algorithm are likely to show increasing MJO amplitude in real time over the next few days.

These OLR projections suggest that maximum MJO band convection is likely over the Dynamo array December 2. However, the projections also suggest that a strong suppressed phase of a Kelvin wave is likely to cross the central Indian basin November 28 through December 3, with an active phase more likely over the array beginning around December 6. High frequency components of the Kelvin band are not likely well predicted at that lead time, but the large scale low frequency portion might be, which would enhance the forecast residence time. Taking into account both the MJO and Kelvin contributions, maximum rainfall over the array is likely around December 7, well offset from the center of activity in the MJO band.
Indian Ocean Dipole

OLR anomalies associated with the IOD are of moderate intensity. Active convection in the MJO band is now centered west of the longitudes of the dynamo array.

Active convection in the MJO band is now growing over the western Indian basin.

Suppressed convection in the MJO band is located over the Maritime Continent. These OLR projections suggest that the active convective phase of a Kelvin wave is presently over the eastern Indian basin and the Maritime Continent, where it offsets the suppressed signal of the MJO at the same locations. A weak active phase is also suggested over east Africa, but these OLR projections suggest that the western Indian basin activity is dominated by the MJO, not a Kelvin wave. Active convection associated with a mixed Rossby gravity wave, in combination with the Kelvin wave and other circulation features over the northern Indian basin and southeast Asia are enhancing potential for TC formation over the northern Indian basin over the next few days.