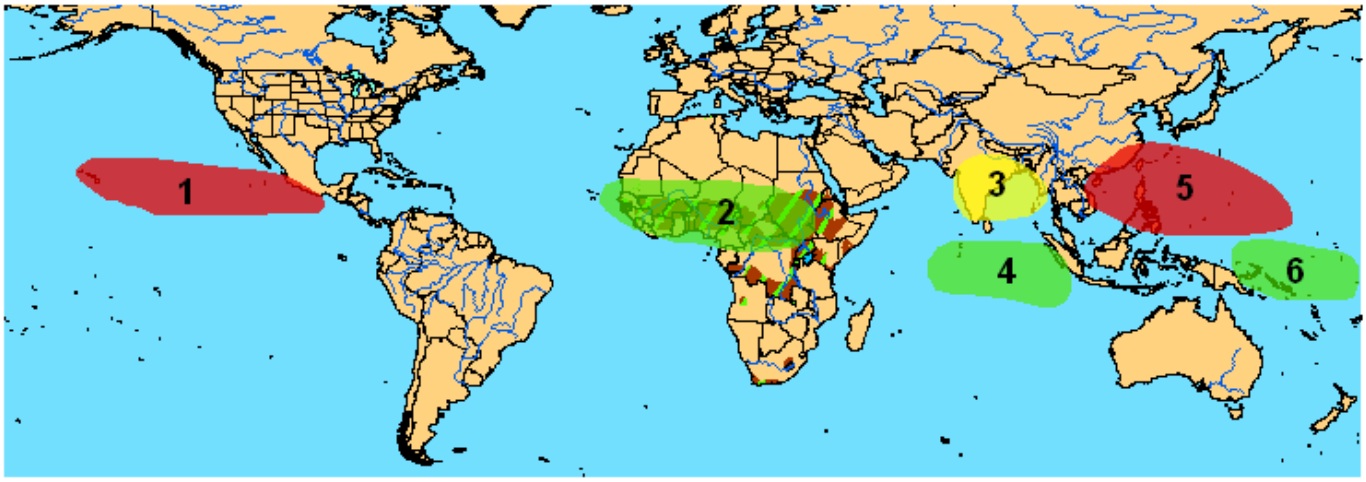
Experimental Global Tropics Hazard Assessment

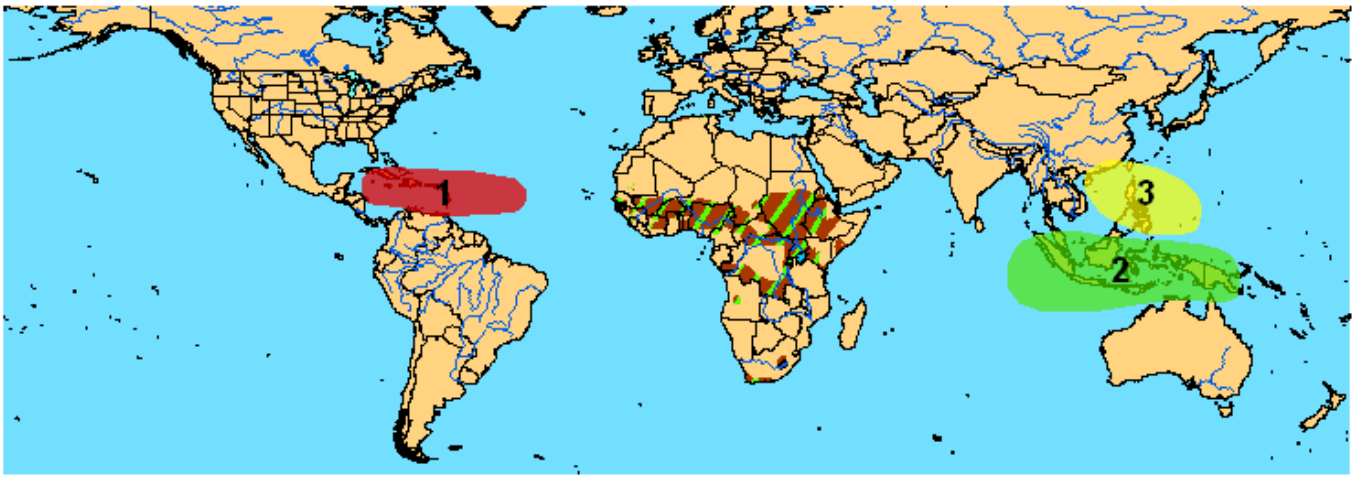
Outlook: September 26, 2005

Week 1



1. Hurricane Kenneth and Tropical Storm Norma will impact the east Pacific Ocean
2. Increased chance of above average rainfall across west central Africa
3. Increased chance of below average rainfall across India and the Bay of Bengal
4. Increased chance of above average rainfall in the equatorial Indian Ocean
5. Increased chance of tropical cyclone development, Typhoon Longwang will impact the western Pacific
6. Increased chance of above average rainfall in the equatorial western Pacific

Week 2



1. Increased chance of above average tropical cyclone activity in the western Atlantic and Caribbean Sea region
2. Increased chance of above average rainfall in the equatorial Indian Ocean
3. Increased chance of below average rainfall in the vicinity of the Philippines

Discussion: September 26, 2005

With ENSO[#] neutral conditions continuing, the amplitude/phase of the MJO[*] remains the dominant forcing across the global tropics. During the last week, the MJO remained weak but there are signs that the MJO may strengthen during the next few weeks.

Currently, the enhanced phase of the MJO is located in the western hemisphere with weak upper-level divergence mainly situated across the Atlantic and Africa regions. The suppressed phase stretches from the Indian Ocean to the eastern Pacific Ocean. Above average SSTs, however, have aided the redevelopment of convection in the eastern Indian Ocean and the far western Pacific despite the large scale upper-level convergence in these areas. Hurricane Kenneth and tropical storm Norma continue to impact the eastern Pacific Ocean while Typhoon Longwang is slowly moving to the west towards Asia.

During the next 1-2 weeks we expect an increase and expansion of convection from the eastern Indian Ocean into the far western Pacific as a result of a few factors. Above average SSTs will continue to support enhanced convection in these areas while the residual enhanced phase of the MJO propagating eastward from the western Hemisphere will interact with other modes of intraseasonal variability and result in a consolidation of convection in the region. There is a high level of uncertainty, however, of how quickly this area of enhanced convection will propagate eastward. Statistical model forecasts are mixed in how quickly this area propagates east while the GFS dynamical model depicts are more rapid shift.

Based on the scenario described above we expect above average rainfall during week 1 across western Africa as a result of the remaining enhanced phase of the MJO and in smaller areas in the eastern Indian Ocean and far western Pacific primarily due by local SSTs. We anticipate a larger region of above average rainfall by week 2 in the eastern Hemisphere.

Drier than average areas are expected across India and the Bay of Bengal during week 1and later in week 2 in the vicinity of the Philippines as the weakening suppressed phase of the previous MJO event continues to evolve.

In the near term (week 1), areas in the eastern Pacific will continue to be impacted by tropical cyclones. Hurricane Kenneth will move east of Hawaii and tropical storm Norma off the west coast of Mexico. Also, Typhoon Longwang will move east towards China and Taiwan and is expected to produce substantial rainfall, wind, and wave action concerns in these areas late during week 1. Due to continued positive SST anomalies and low vertical wind shear we expect the threat of tropical cyclone activity to remain higher than average across the western Pacific throughout the period.

Related Resources:

ENSO: http:www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.pdf

* MJO:http://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/mjo_evolution-status-fcsts.pdf