Experimental Global Tropics Hazards/Benefits Assessment

Update prepared by: Climate Prediction Center / NCEP September 24, 2007

Week 1 Outlook – Valid: September 25-October 1, 2007



<u>1. The potential for tropical cyclone development in the western Gulf of Mexico.</u> A disturbance currently in the Southwest Gulf of Mexico has some potential for tropical development early in the period as current unfavorable conditions are forecast by numerical guidance to ease. **Confidence: High**

2. An increased chance for below-average rainfall across interior Brazil. Rainfall associated with the onset of the South American monsoon has been delayed. In general, tropical convection has been displaced northward of its climatological position across much of the global tropics. This pattern is expected to continue during the period. Confidence: High

<u>3. The potential for tropical cyclone development in the deep tropical Atlantic Ocean.</u> A few robust African easterly waves are currently crossing the Atlantic basin. These waves have ample moisture and are far enough south in latitude to avoid much of the high vertical wind shear at higher latitudes. Confidence: High

4. An increased chance for above-average rainfall across India, the Bay of Bengal, Southeast Asia, and the far western Pacific Ocean including the Philippines. The organization of enhanced convection across the eastern hemisphere is increasingly becoming consistent with La Nina conditions. Consequently, many areas within this region are expected to have enhanced rainfall during the period. Above average SSTs in some areas are also expected to contribute to enhanced rainfall in this region. Confidence: High

5. An increased chance for below-average rainfall across a small area in the eastern Indian Ocean and

western Maritime continent. Persistent large-scale subsidence associated with the regional scale circulation and belowaverage SSTs are expected to continue dry conditions in this region. **Confidence: Moderate**

6. The potential for tropical cyclone development across the South China Sea and western Pacific

Ocean. Active convection, areas of weak vertical wind shear, above average SSTs, and low-level westerly flow aiding the generation of low-level cyclonic circulations are expected to continue the threat for tropical cyclogenesis during the period. Numerical forecast guidance also suggests the potential for tropical cyclone development. **Confidence: High**

ADDITIONAL ITEMS:

→ There exists the potential for tropical cyclogenesis across the western sections of the east Pacific basin during late week 1 into early week 2. The probability is considered somewhat low at this time.

Please note: Confidence estimates are subjective in nature and are not based on an objective scheme. The estimates are given to provide additional information to the user.

Week 2 Outlook – Valid: October 2 - October 8, 2007



<u>1. The potential for tropical cyclone development in the deep tropical Atlantic Ocean.</u> Numerical weather forecast guidance suggests a more favorable environment for tropical cyclogenesis during the period (Area of high vertical wind shear shifted farther north). Also, SSTs will remain at or above-average across much of this region and with the continuation of easterly waves the chances for development are increased. Confidence: Moderate

2. An increased chance for below-average rainfall across interior Brazil. Rainfall associated with the onset of the South American monsoon has been delayed. In general, tropical convection has been displaced northward of its climatological position across much of the global tropics. This pattern is expected to continue during the period. Confidence: Moderate

3. An increased chance for above-average rainfall across India, the Bay of Bengal, Southeast Asia, and

the far western Pacific Ocean including the Philippines. The organization of enhanced convection across the eastern hemisphere is increasingly becoming consistent with La Nina conditions so that enhanced rainfall is expected within this region. Above average SSTs in some areas are also expected to contribute to enhanced rainfall in this region. Moreover, subseasonal variability is expected to reinitiate organized convection across the equatorial central Indian Ocean during the period. Confidence: Moderate

4. The potential for tropical cyclone development across the South China Sea and western Pacific

Ocean. Active convection, areas of weak vertical wind shear, and above average SSTs are expected to continue the threat for tropical cyclogenesis during the period. **Confidence: Moderate**