Experimental Global Tropics Hazards/Benefits Assessment

Update prepared by: Climate Prediction Center / NCEP September 17, 2007

Week 1 Outlook – Valid: September 18-September 24, 2007



<u>1. The potential for tropical cyclone development in the east-central Pacific Ocean.</u> A few disturbances are expected to continue their westward movement through the basin into the western sections where conditions are favorable for development (areas of weak shear and above average SSTs). Numerical forecast guidance also suggests the potential for development in this region. Confidence: Moderate

2. The potential for tropical cyclone development in the Gulf Of Mexico. Several disturbances (leftover frontal boundary and easterly waves) are expected to persist or enter the Gulf of Mexico and with areas of weak vertical wind shear and above average SSTs, the likelihood of tropical cyclogenesis are increased in this region during the period. Numerical forecast guidance also suggests the potential for development in this region. Confidence: High

3. An increased chance for above average rainfall across the eastern Indian Ocean, sections of the Maritime continent, 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 enhance rainfall in this region. **Confidence: High**

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

Ocean. Active convection, areas of weak vertical wind shear, above average SSTs, and areas of low-level cyclonic vorticity are expected to continue the threat for tropical cyclogenesis during the period. The greatest threat is across the western sections of the basin, typical during La Nina conditions. Numerical forecast guidance also suggests the potential for tropical cyclone development. **Confidence: High**

<u>5. Typhoon Wipha</u> is a dangerous category 4 storm and may further strengthen. Wipha will impact Taiwan, sections of eastern China, Korea, and the Sea of Japan during the period with torrential rain, dangerous winds, and extremely high seas. **Confidence: High**

6. An increased chance for below-average rainfall for the west-central Pacific Ocean including eastern

sections of Micronesia and the Marshall Islands. Large-scale subsidence consistent with developing La Nina conditions are expected to produce dry conditions across these areas during the period. Confidence: Moderate

ADDITIONAL ITEMS:

→ A couple of tropical easterly waves will continue to transverse further into the Atlantic Ocean during the period. The environment across much of the deep tropical Atlantic Ocean remains generally hostile for cyclogenesis (drier than average conditions just west of Africa and a high shear environment closer to the West Indies). A small window, however, exists in the Atlantic where a relatively low but distinct probability exists for tropical development.

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: September 25 - October 1, 2007



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 enhance rainfall in this region. **Confidence: High**

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

Ocean. Active convection, areas of weak vertical wind shear, above average SSTs, and areas of low-level cyclonic vorticity are expected to continue the threat for tropical cyclogenesis during the period. The greatest threat is across the western sections of the basin, typical during La Nina conditions. Numerical forecast guidance also suggests the potential for tropical cyclone development. **Confidence: High**

3. An increased chance for below-average rainfall for the west-central Pacific Ocean including eastern sections of Micronesia, the Marshall Islands, and Kiribati. Large-scale subsidence consistent with developing La Nina conditions are expected to produce dry conditions across these areas during the period. Confidence: Moderate

ADDITIONAL ITEMS:

→ The possibility exists for the redevelopment of enhanced convection separate from region (1) further southwest across the west-central equatorial Indian Ocean and southern India as we progress later into weeks 2-3. Linked with this possibility, is the potential for tropical cyclogenesis across the Bay of Bengal as the vertical wind shear associated with the Southeast Asian monsoon wanes. The probability of these events, however, are considered low at this time.