Experimental Global Tropics Hazards/Benefits Assessment

Update prepared by: Climate Prediction Center / NCEP December 10, 2007

## <u>Week 1 Outlook – Valid: December 11 – 17, 2007</u> Issued: 12/10 90 N 1 03 30 N **Fext** EQ 2 30 S 60 S 180 120 W 90 W 150 W 60 W 30 W 30 E 60 E 90 E 120 E 150 E 180

**1.** An increased chance for above-average rainfall for Hispaniola, Puerto Rico, eastern Cuba and nearby waters. A tropical disturbance will move through this region early during the period and most likely will result in heavy rainfall. The potential for flooding and mudslides exists as this tropical moisture interacts with the island topography. Confidence: High

**2. Favorable conditions exist for tropical cyclogenesis across the central southern Indian Ocean.** The enhanced phase of the MJO will result in active convection and result in a greater likelihood for low-level westerly flow, upper-level divergence, and other factors favorable for tropical development. Sea surface temperatures are also warmer than average in this region. Also, statistical tropical development tools favor genesis in this region. **Confidence: High** 

<u>3. An increased chance for above-average rainfall for the Indian Ocean and western Indonesia.</u> The enhanced phase of the MJO is expected to continue supporting a favorable large-scale environment for convection and rainfall. Above average SSTs will also contribute to enhanced rainfall. Confidence: High

**4.** Unfavorable conditions exist for tropical cyclogenesis for waters northeast of Australia. The anticipated phase of the MJO is expected to result in strengthening easterlies along the equator in the western Pacific Ocean and most likely result in conditions unfavorable for tropical development Also, statistical tropical development tools favor low probabilities for genesis in this region. Confidence: High

5. An increased chance for below-average rainfall for the Pacific Ocean near the Date Line in the western Pacific Ocean. The combination of La Nina and the exiting suppressed phase of the MJO is expected to result in dry conditions across these island areas during the period. Confidence: High

## SEE TEXT ITEMS:

→ Tropical disturbances in the western Atlantic Ocean and Bay of Bengal show some potential to develop into tropical cyclones early in the period but the probabilities are considered low.

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.



**1.** An increased chance for above-average precipitation for the region in close proximity to the Hawaiian Islands. During La Nina events, the atmospheric circulation often favors low-pressure areas near the Hawaiian Islands and results periods of heavy precipitation. The potential for these conditions is expected to increase during week 2. Confidence: Moderate

**2. Favorable conditions exist for tropical cyclogenesis across the western Indian Ocean.** The enhanced phase of the MJO and La Nina is expected to result in active convection across the Maritime continent and result in a greater likelihood for low-level westerly flow, upper-level divergence, and other factors favorable for tropical development. Sea surface temperatures are also warmer than average in this region. Confidence: High

**3.** An increased chance for above-average rainfall for the Maritime continent. The potential for the continued evolution of the enhanced phase of the MJO shifting into this region and the reorganization of La Nina associated rainfall is expected to result in wet conditions during the period. Confidence: High

## **SEE TEXT ITEMS:**

The timing and phase of the MJO, if it remains coherent into this period, may aid the onset of the Northwest Australia monsoon.

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