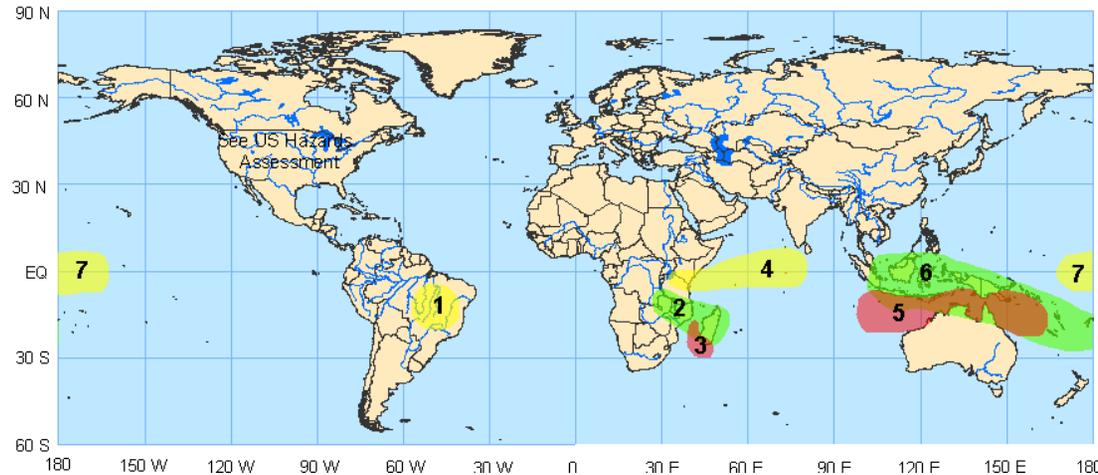


Experimental Global Tropics  
Hazards/Benefits Assessment

Update prepared by:  
Climate Prediction Center / NCEP  
December 31, 2007

Issued: 12/31

## Week 1 Outlook – Valid: January 1 – 7, 2007



**1. An increased chance for below-average rainfall for east-central Brazil.** Rainfall has been substantially below average in this area as the rainy season was slow to start and has continued to be less active than normal. Numerical weather forecast guidance indicates that this will continue during the period and the expected phase of the MJO typically results in dry conditions in this region. **Confidence: High**

**2. An increased chance for above-average rainfall for sections of southeast Africa and Madagascar.** Active frontal activity and conditions consistent with La Nina are expected to produce enhanced rainfall during the period. Rainfall across Madagascar will be beneficial as the region has suffered prolonged dry conditions. **Confidence: High**

**3. Tropical Cyclone 9S** will impact the Mozambique Channel and western Madagascar with areas of heavy rainfall, gusty winds, and high seas.

**4. An increased chance for below-average rainfall for portions of east Africa and the equatorial Indian Ocean.** The suppressed phase of the MJO is expected to result in dry conditions across these areas. Numerical weather forecast guidance supports suppressed convection in this area. **Confidence: Moderate**

**5. Favorable conditions exist for tropical cyclogenesis for the waters north of Australia.** The enhanced phase of the MJO and onset of the Australian monsoon will continue active convection across sections of the Maritime continent and northern Australia and most likely result in a greater chance for low-level westerly flow, upper-level divergence, and other factors favorable for tropical development. Sea surface temperatures are above average and statistical tropical cyclone development tools favor genesis in this region. **Confidence: High**

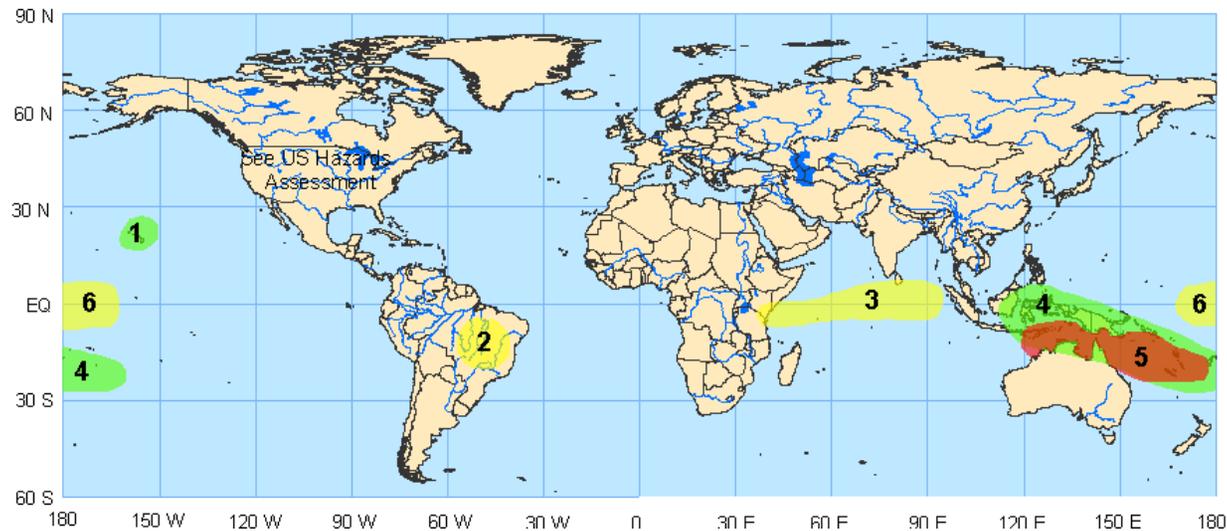
**6. An increased chance for above-average rainfall for the Maritime continent, northern Australia, and the western Pacific Islands.** The enhanced phase of the MJO and onset of the Australian monsoon are expected to continue to support a favorable large-scale environment for convection and rainfall. Above average sea surface temperatures in some areas will also contribute to enhanced rainfall. **Confidence: High**

**7. An increased chance for below-average rainfall for the equatorial Pacific Ocean near the Date Line.** Conditions consistent with La Nina (suppressed convection) are expected to continue dry conditions across sections of the western Pacific Ocean. **Confidence: High**

**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.

Issued: 12/31

## Week 2 Outlook – Valid: January 8 – 14, 2007



**1. An increased chance for above-average rainfall for Hawaii and nearby waters.** Persistent low pressure in proximity to Hawaii is a common La Nina signal and with numerical weather forecast models beginning to indicate this pattern there is a heightened chance for increased rainfall in this region. **Confidence: Moderate**

**2. An increased chance for below-average rainfall for east-central Brazil.** Rainfall has been substantially below average in this area as the rainy season was slow to start and has continued to be less active than normal. Numerical weather forecast guidance indicates that this will continue during the period and the expected phase of the MJO typically results in dry conditions in this region. **Confidence: Moderate**

**3. An increased chance for below-average rainfall for portions of east Africa and the equatorial Indian Ocean.** The suppressed phase of the MJO is expected to result in dry conditions across these areas. Numerical weather forecast guidance supports suppressed convection in this area. **Confidence: Moderate**

**4. An increased chance for above-average rainfall for the eastern Maritime continent, northern Australia, and the western Pacific Islands.** The enhanced phase of the MJO and the onset of the Australian monsoon are expected to continue to support a favorable large-scale environment for convection and rainfall. Above average sea surface temperatures in some areas will also contribute to enhanced rainfall. **Confidence: High**

**5. Favorable conditions exist for tropical cyclogenesis for the waters north and northeast of Australia.** The enhanced phase of the MJO and onset of the Australian monsoon will continue active convection across sections of the Maritime continent, northern Australia, and the western Pacific Ocean and most likely result in a greater chance for low-level westerly flow, upper-level divergence, and other factors favorable for tropical development. Sea surface temperatures are above average and statistical tropical cyclone development tools favor genesis in this region. **Confidence: High**

**6. An increased chance for below-average rainfall for the equatorial Pacific Ocean near the Date Line.** Conditions consistent with La Nina (suppressed convection) are expected to continue dry conditions across sections of the western Pacific Ocean. **Confidence: High**

**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.