Experimental Global Tropics Hazards/Benefits Assessment

Update prepared by:
Climate Prediction Center / NCEP
December 24, 2007
1. An increased chance for above-average rainfall for areas in northern South America. Interaction with the subtropics and conditions consistent with La Nina are expected to produce enhanced rainfall. Numerical weather forecast guidance also supports the continuation of wet conditions. **Confidence: High**

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: High**

3. 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**

4. Favorable conditions exist for tropical cyclogenesis for the waters northwest of Australia. The enhanced phase of the MJO 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**

5. An increased chance for above-average rainfall for the Maritime continent, parts of northern Australia. The enhanced phase of the MJO is 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**

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.
1. An increased chance for above-average rainfall for Hawaii and nearby waters. Interaction with the subtropics and conditions consistent with La Nina are expected to produce enhanced rainfall. Numerical weather forecast guidance also supports wet conditions. **Confidence: Moderate**

2. An increased chance for above-average rainfall for areas in northern South America. Interaction with the extratropics and conditions consistent with La Nina are expected to produce enhanced rainfall. Numerical weather forecast guidance also supports the continuation of wet conditions. **Confidence: Moderate**

3. 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**

4. Favorable conditions exist for tropical cyclogenesis for the waters northwest of Australia. The enhanced phase of the MJO 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**

5. An increased chance for above-average rainfall for the Maritime continent, parts of northern Australia, and the far western Pacific Islands. The enhanced phase of the MJO and conditions consistent with La Nina 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**

**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.