Global Tropics Hazards And Benefits Outlook

May 7, 2013

Brad Pugh

Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
Outlook Review

Week 1 - Valid: May 01, 2013 - May 07, 2013

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Week 2 - Valid: May 01, 2013 - May 07, 2013

7-Day Average OLR Anomaly 2013/04/29 - 2013/05/05
Synopsis of Climate Modes

**ENSO:**
- ENSO-neutral conditions are favored to continue through boreal summer 2013.

**MJO and other subseasonal tropical variability:**
- The MJO strengthened since the beginning of May as many observational indicators are more coherent than late April.
- Model MJO index forecasts continue an organized MJO during the next 2 weeks with enhanced convection shifting east from the Indian Ocean to the Maritime Continent.

**Extratropics:**
- Due to the transition time of year (too early to influence monsoon flow & TC development), the MJO is expected to have only minor effects on the mid-latitudes of North America.
- The expected evolution of the MJO tends to favor above normal temperatures for the eastern half of the nation late week-2 and week-3.
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence  Brown: Enhanced Convergence
OLR Anomalies

Cool shading
More clouds/rain

Warm shading
Less clouds/rain

Ovals represent the targeting of organized tropical variability that can be used to aid predictions
MJO Observation/Forecast

MJO Index Forecast for 06May2013-20May2013

GFS

ECMWF
Average Conditions when the MJO is present (May-Sep)
Table 2. Progress of the average eastern Pacific season (1971-2009). Date upon which the following number of events would normally have occurred.

<table>
<thead>
<tr>
<th>Number</th>
<th>Named systems</th>
<th>Hurricanes</th>
<th>Category 3 or greater</th>
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<tr>
<td>1</td>
<td>June 10</td>
<td>June 26</td>
<td>July 19</td>
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<td>2</td>
<td>June 25</td>
<td>July 14</td>
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<td>3</td>
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<td>Sep 20</td>
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<td>July 14</td>
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<td>14</td>
<td>Oct 11</td>
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<td>15</td>
<td>Nov 5</td>
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</table>
Mean mid-level forecast circulation for Days 8-14

Total

Individual Ensemble Members
(Mean: Black & Climo: Red)
T composites (AMJ)

Significance (%) (AMJ)
Week 1 - Valid: May 08, 2013 - May 14, 2013

Preliminary

Week 2 - Valid: May 15, 2013 - May 21, 2013

Preliminary

Confidence
High Moderate

Tropical Cyclone Formation
Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.

Above-average rainfall
Weekly total rainfall in the upper third of the historical range.

Below-average rainfall
Weekly total rainfall in the lower third of the historical range.

Above-normal temperatures
7-day mean temperatures in the upper third of the historical range.

Below-normal temperatures
7-day mean temperatures in the lower third of the historical range.

Produced: 05/06/2013
Forecaster: Pugh

Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.