Global Tropics Hazards And Benefits Outlook
May 24, 2016

Dan Harnos

Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts
Outlook Review

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
Synopsis of Climate Modes

**ENSO:**
• La Nina Watch in effect as of 14 April 2016

ENSO Neutral likely during late spring/early summer 2016; possible La Nina conditions to develop by late summer/early fall. El Nino is weakening, though large area of +30 C SSTs still exists over central South Pacific (0-15S, DL-150W). More than sufficient to sustain convection.

**MJO and other subseasonal tropical variability:**
• MJO in phase 4 over the Maritime Continent last week. Noisy pattern elsewhere.

• Most dynamical model MJO index forecasts depict the MJO signal to become incoherent over the coming week. Select models and some ensemble members continue the MJO signal through to the Pacific or depict a new signal emerging again over the Indian Ocean. **High uncertainty.**

**Extratropics:**
• The extended range temperature and precipitation forecasts for the U.S. are not likely to be impacted by the MJO or the decaying El Niño, but more likely impacted by mid-latitude frontal/cyclonic activity.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: May 25, 2016 - May 31, 2016

Week 2 - Valid: Jun 01, 2016 - Jun 07, 2016

Confidence
High Moderate

Tropical Cyclone Formation
Development of a tropical cyclone (tropical depression - TD, or greater 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: 05/24/2016
Forecaster: D.Harnos

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.
Wave-2 pattern with 200-hPa divergence over Americas, Africa, and Indian Ocean.

Eastward propagation of pattern from prior week.

Upper-level divergence over Maritime Continent, E. Pacific, and W. Africa.
Wheeler-Hendon based analyses of model forecasts indicate a weakening signal during week-1, with on average an incoherent pattern present by week-2 in the GEFS and ECMWF.
Tropical cyclone activity is not expected during the next 48 hours.
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 26Jan2016 - 24May2016) AD index
mean=0.0233

1000mb Z (7day Forecast) AD index
mean=-0.2371 cor(w/obs)=0.8596

1000mb Z (10day Forecast) AD index
mean=-0.3990 cor(w/obs)=0.5587

1000mb Z (14day Forecast) AD index
mean=-0.6312 cor(w/obs)=0.2080
Week 2 – Temperature and Precipitation

8-14 DAY OUTLOOK TEMPERATURE PROBABILITY MADE 24 MAY 2016
VALID JUN 01 - 07, 2016

DASHED BLACK LINES ARE CLIMATOLOGY VALUES ABOVE TYPICAL OR BELOW TYPICAL;
NORMAL VALUES ARE NEAR-NORMAL

8-14 DAY OUTLOOK PRECIPITATION PROBABILITY MADE 24 MAY 2016
VALID JUN 01 - 07, 2016

DASHED BLACK LINES ARE CLIMATOLOGY VALUES ABOVE TYPICAL OR BELOW TYPICAL;
NORMAL VALUES ARE NEAR-NORMAL
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: May 25, 2016 - May 31, 2016

Week 2 - Valid: Jun 01, 2016 - Jun 07, 2016

Confidence
High Moderate

Tropical Cyclone Formation
Development of a tropical cyclone (tropical depression - TD, or greater 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: 05/24/2016
Forecaster: D.Harnos

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.