Global Tropics Hazards And Benefits Outlook

November 26, 2013

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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

Cyclone Lehar (23 November)

Tropical Storm Alessia (22 November)

Cool shading
More clouds/rain

Warm shading
Less clouds/rain
TROPICAL CYCLONE 05B (LEMAR) WARNING #14
WTO031 PGTW 261500

261200Z POSIT: NEAR 12.9N 88.6E
MOVING 285 DEGREES TRUE AT 09 KNOTS

MAXIMUM SIGNIFICANT WAVE HEIGHT: 27 FEET
26/12Z, WINDS 075 KTS, GUSTS TO 090 KTS
27/00Z, WINDS 080 KTS, GUSTS TO 100 KTS
27/12Z, WINDS 085 KTS, GUSTS TO 105 KTS
28/00Z, WINDS 090 KTS, GUSTS TO 110 KTS
28/12Z, WINDS 060 KTS, GUSTS TO 075 KTS
29/12Z, WINDS 025 KTS, GUSTS TO 035 KTS

CPA TO:
CHENNAI 166 26/05Z

BEARING AND DISTANCE
DIR DIST TAU
CHENNAI 072 262 24

○ LESS THAN 34 KNOTS
£ 34-63 KNOTS
§ MORE THAN 63 KNOTS
PAST 6 HOURLY CYCLONE POSITS IN BLACK
FORECAST CYCLONE POSITS IN COLOR
Synopsis of Climate Modes

**ENSO:**

- ENSO-neutral conditions are favored to continue through Northern Hemisphere spring 2013

**MJO and other subseasonal tropical variability:**

- The MJO remained incoherent during the previous week, with influence from other types of coherent tropical subseasonal variability dominating the anomalous convection and circulation pattern.

- Dynamical model MJO index forecasts indicate little signal over the next several days. The majority of dynamical forecasts indicate increasing agreement for the potential for an eastward propagating signal emerging over the Indian Ocean during Week-2.

- It is too early to conclude that this potential signal will emerge as a longer lived, more robust MJO.

**Extratropics:**

- Little tropical to extratropical impacts can be discerned from the current pattern. A significant outbreak of arctic air is anticipated over the north central U.S. during early December.
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Nov 27, 2013 - Dec 03, 2013

Week 2 - Valid: Dec 04, 2013 - Dec 10, 2013

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: 11/26/2013
Forecaster: Allgood

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.
IR Satellite & 200-hpa Velocity Potential Anomalies

Green: Enhanced Divergence  Brown: Enhanced Convergence

No MJO coherence (e.g., a Wave-1 pattern) evident
Average Conditions when the MJO is present (Nov - Mar)
Rossby Wave influence is evident over the western Pacific and Maritime Continent.

Atmospheric Kelvin Waves are evident over the Western Hemisphere and Pacific Ocean.
Influence of westward moving features evident in the evolution of equatorial low level zonal wind anomalies.
November Tropical Storm Formation by MJO phase
Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

- **Yellow** (Low <30%)
- **Orange** (Medium 30-50%)
- **Red** (High >50%)

Tropical Cyclone Activity is Not Expected During the Next 48 Hours.
NORTH INDIAN 1891 - 1969
AVERAGE NUMBER OF DAYS PER SEASON WITH TROPICAL CYCLONE WINDS
\geq 34 KNOTS: 16
\geq 64 KNOTS: 3

SOUTHWEST INDIAN 1947 - 1968
AVERAGE NUMBER OF DAYS PER SEASON WITH TROPICAL CYCLONE WINDS
\geq 34 KNOTS: 66
\geq 64 KNOTS: 21

AUSTRALIA/SE INDIAN 1958 - 1968
AVERAGE NUMBER OF DAYS PER SEASON WITH TROPICAL CYCLONE WINDS
\geq 34 KNOTS: 36
\geq 64 KNOTS: 11
Connections to U.S. Impacts
AO: Observed & ENSM forecasts

1000mb Z (Obs: 30Jul2013 - 26Nov2013)  AO index
mean=0.4220

1000mb Z (7day Forecast)  AO index
mean=0.4580  cor(w/obs)=0.9773

1000mb Z (10day Forecast)  AO index
mean=0.3017  cor(w/obs)=0.9069

1000mb Z (14day Forecast)  AO index
mean=0.1018  cor(w/obs)=0.8158
Week 2 – Temperature and Precipitation
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

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Confidence:
- **High**
- **Moderate**

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