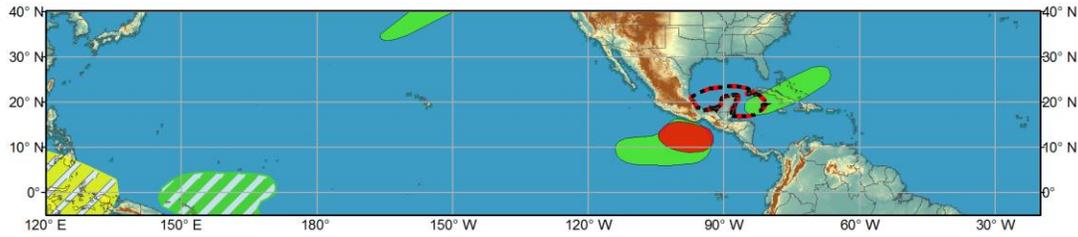




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Oct 25 2014 - Oct 28 2014



Week 2 - Valid: Oct 29 2014 - Nov 04 2014



Confidence
High Moderate

Produced: 10/24/2014
Forecaster: Pugh

- Tropical Cyclone Formation**  Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Prior TC Formation Outlook**  Tropical cyclone outlook from previous release.
- 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.

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.



The amplitude of the MJO signal decreased this week according to the RMM index, while the CPC index based on the Velocity Potential field also indicated a weakening trend. Therefore, the MJO is not expected to significantly influence anomalous convection across the global tropics during the outlook period. The evolving base state and warmer-than-normal SSTs are likely to be the primary contributors.

Since a stationary front is expected to shift southeast during the next 24 hours, much drier weather is expected for the Florida Keys and south Florida. Therefore, the coverage of above-average rainfall is reduced to include only the southern Bahamas, Cuba, and the Cayman Islands from October 25-28. Redevelopment of Tropical Depression Nine in the Caribbean Sea is unlikely due to rising surface pressures in this region. Meanwhile, as of October 24, a trough of low pressure to the south of the Gulf of Tehuantepec is producing a disorganized area of convection. Conditions are forecast to become more conducive for tropical cyclone (TC) development. The latest model guidance closes off a surface low across the East Pacific during the next few days. Therefore, confidence is high that a TC develops in this region from Oct 25-28 which is consistent with the NHC update at 2pm EDT on Friday, Oct 24. Model guidance remains consistent that above-average rainfall persists across the East Pacific into the beginning of November.

As of October 24 at 11pm HST, Tropical Storm Ana, near 28N-170W, is forecast to become extratropical by Monday as it accelerates northeastward. Above-average rainfall is depicted on the map along its track. Extratropical Ana is anticipated to be absorbed by a strong extratropical low approaching British Columbia on October 27. Moisture associated with the remnants of Ana has the potential to briefly enhance precipitation amounts across British Columbia and the Pacific Northwest.

Elsewhere, no major changes were made to the previous outlook issued on October 21.

----- Previous Discussion Follows -----

Some observations indicate a more coherent MJO signal during the past week. The CPC Velocity Potential based index indicates a Wave-1 structure but the fast propagation resembles a more transient atmospheric Kelvin Wave. The RMM index had an increase in amplitude with eastward propagation from the Americas to Africa. Dynamical and statistical models generally agree that a long-lived MJO signal is not likely with Kelvin Wave activity influencing anomalous convection across the global tropics during Week-1.

Gonzalo peaked as a Category-4 Hurricane with maximum sustained winds of 145 mph on October 16 before making landfall over Bermuda on October 17 as a Category-2 Hurricane with maximum sustained winds of 110 mph. Gonzalo was the second tropical cyclone to strike Bermuda in less than one week. Although Hurricane Ana tracked south of Hawaii, it resulted in heavy rainfall amounts including locally more than 11 inches across the Big Island and Oahu. Following a very active period of tropical cyclones including a pair Super Typhoons, no tropical cyclones formed during the past week over the West Pacific.

A stationary front is likely to remain the focus for heavy rainfall from the Bay of Campeche and Yucatan Peninsula east to the Bahamas and western Cuba. An area of low pressure currently in the southern Bay of Campeche could become a tropical cyclone before interacting with the stationary front later this week. Suppressed convection is expected to persist for coastal southern Brazil. A Kelvin wave and warm SSTs favor enhanced rainfall along and to the south of the equatorial Pacific east of New Guinea. The suppressed phase of the Kelvin Wave is anticipated to result in below-average rainfall for parts of the Maritime Continent. The enhanced rainfall areas depicted across the Arabian Sea and southern Indian

Ocean are based on model guidance and warm SSTs. A moderate confidence for tropical cyclone development is posted for the southern Indian Ocean due to the likelihood of enhanced convection in this region and climatology. Anomalous low-level convergence is expected to enhance rainfall across parts of equatorial Africa.

During Week-2, confidence is relatively low due to an anticipated weak MJO and conflicting signals between the CFS and ECMWF models. Above-average rainfall is favored to continue east of New Guinea due to the base state with warm SSTs. Today's model solutions remain consistent with above-average rainfall for parts of the Indian Ocean and East Pacific. The GFS model indicates the potential for a late season tropical cyclone in the East Pacific, but chances are too low at this time to warrant a depiction on the map.