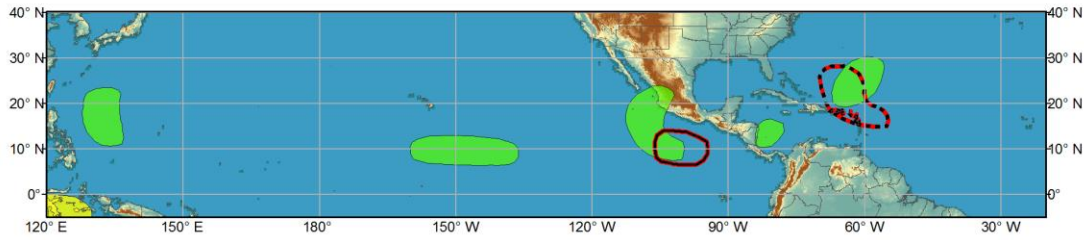




Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Nov 01 2014 - Nov 04 2014



Week 2 - Valid: Nov 05 2014 - Nov 11 2014



Confidence
High Moderate

Produced: 10/31/2014
Forecaster: Allgood

- 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 MJO remains incoherent as depicted the RMM and CPC velocity potential based indices. Considerable spread remains among the dynamical model forecasts of the evolution of the global tropical convective patterns. The GFS and CFS both indicate the development of an enhanced convective envelope over the Indian Ocean, while the ECMWF favors a return to the low-frequency base state favoring enhanced convection between New Guinea and the Date Line. As with the initial release, the Week-2 outlook leans toward the European solution, with enhanced convection depicted east of New Guinea.

Tropical Storm Vance developed south of Mexico early in the period, and is currently moving slowly and erratically. Dynamical models favor a track towards the southern coast of Mexico, well south of the Baja by the end of the Week-1 period. Tropical Storm Nuri developed over the northwestern Pacific, and is forecast to attain typhoon intensity as it turns northward or north-northeastward well east of the Philippines over the next several days. The updated Week-1 outlook depicts areas of enhanced rainfall in association with these tropical cyclones. During Week-2, several GFS ensemble members indicate a potential for additional tropical cyclogenesis east of the Philippines. There is also a low chance for additional tropical cyclone formation over the eastern Pacific during Week-2.

Over the Atlantic, tropical cyclogenesis is no longer anticipated north of the Lesser Antilles, but interactions between a plume of tropical moisture and a broad trough is forecast to generate enhanced convection north of Puerto Rico during the remainder of Week-1 and part of Week-2.

The previous forecast discussion released on 28 October 2014 follows.

The MJO became increasingly incoherent during the past week, based on recent observations and both the RMM and CPC velocity potential MJO indices. OLR time-longitude analyses indicate the presence of an eastward moving envelope currently propagating over the Indian Ocean. This signal, however, is experiencing destructive influence from the suppressed phase of an equatorial Rossby Wave currently propagating over the Maritime Continent. The enhanced phase of the Rossby Wave over the western Pacific is also out of phase with any MJO-like activity over the Indian Ocean.

There is considerable spread among the dynamical model MJO index forecasts. The GFS has consistently indicated increasing amplitude over the Western Hemisphere and Africa during the next two weeks, while the ECMWF forecast depicts a weak signal that favors convection over the western and central Pacific. The UKMET likewise maintains a weak signal, but favors enhanced convection over the Indian Ocean. The divergent model solutions indicate the difficulty resolving the future evolution of the weak signal currently over the Indian Ocean and the competing influence of a SST-based low frequency state favoring suppressed convection over the Maritime Continent and enhanced convection across the western Pacific. This outlook, therefore, is not based on the anticipation of an emerging subseasonal signal, favoring instead any large-scale regions where the divergent CFS and ECMWF models are consistent with each other.

Cyclone Nilofar developed over the Arabian Sea on 25 October, attaining Category-4 intensity on the Saffir-Simpson Scale. Nilofar is currently moving northward and is anticipated to turn northeastward and weaken before making landfall near the border between India and Pakistan. Tropical depression (TD-9) developed over the southern Bay of Campeche briefly on 22 October. The remnants of TD-9 intensified and became Tropical Storm Hanna on 28 October before making landfall over eastern Nicaragua. During the upcoming week, a robust late season disturbance over the eastern Pacific has a high probability of development early in the period. A second disturbance east of the Lesser Antilles has

a low to moderate potential for brief development before interacting with a mid-latitude trough over the central Atlantic. Elsewhere, a disturbance well east of the Philippines has a low potential for development, and a low potential for tropical cyclogenesis also exists for a broad area of low pressure north of Madagascar.

During Week-1, enhanced convection is favored over eastern Tanzania the southwestern Indian Ocean north of Madagascar, as well as across the Arabian Sea in association with Cyclone Nilofar. Enhanced convection is also favored over the equatorial central Indian Ocean due to influence from the weak eastward moving signal. Suppressed (enhanced) convection is favored over parts of the Maritime Continent (north of New Guinea) due to Rossby Wave influence and the low frequency state. An active ITCZ favors enhanced convection south and southeast of Hawaii, while a potential tropical cyclone may bring heavy rainfall to western Mexico. The remnants of Hanna may bring localized heavy rainfall to parts of Central America.

Enhanced (suppressed) convection over the north-central Indian ocean and western Pacific (southern Maritime Continent) is anticipated to continue during Week-2, with a low potential for tropical cyclone development over the northern Indian Ocean. The CFS favors enhanced precipitation over the central Pacific to lift northward, possibly bringing above-average rainfall to Hawaii, while the ECMWF forecasts a return to suppressed rainfall across northern and eastern Brazil. A mid-latitude trough over the central Atlantic, possibly in association with the remnants of a weak tropical cyclone, is anticipated to bring enhanced convection to a broad region north of Hispaniola and south of Bermuda.

Forecasts for enhanced or suppressed convection over Africa are based on regional scale features and provided through coordination with CPC's Africa Desk.