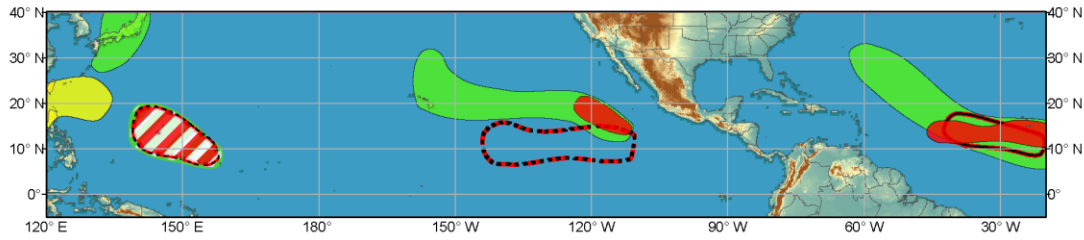




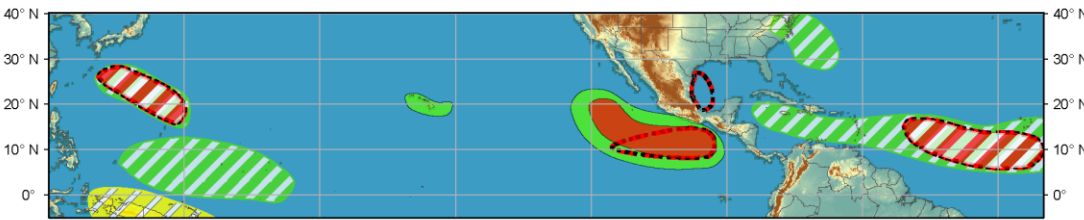
# Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



## Week 1 - Valid: Sep 08 2018 - Sep 11 2018



## Week 2 - Valid: Sep 12 2018 - Sep 18 2018



Confidence  
High Moderate

Produced: 09/07/2018  
Forecaster: MacRitchie

- 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.



There is considerable tropical cyclone (TC) activity in the North Atlantic, Eastern Pacific, and Central Pacific basins. Today's update is focused on modifying the forecasts for TC formation and above-average rainfall based on the latest model and official track guidance from NHC and CPHC.

During Week-1, we have updated the forecast region of tropical cyclone formation in the eastern North Atlantic to match NHC's latest forecasts. Satellite imagery and model solutions support the development of two tropical cyclones in that region during the next five days. The ECMWF ensemble suggests that one of those storms is likely to track almost due west towards the Lesser Antilles and into the Caribbean Sea during Week-2. Therefore, a moderate risk of above-average rainfall has been posted for this region, but this is subject to change as dynamical guidance hones in on a more accurate solution.

The National Hurricane Center forecasts Hurricane Florence to be around 30N/72W at the beginning of the Week-2 forecast period, Wednesday morning. U.S. impacts from there on out are still uncertain. The GEFS has produced smaller track errors than the ECMWF has for Florence thus far and has been reasonably consistent in its forecast of Florence recurving before reaching the East Coast. That said,

both the deterministic GFS and ECMWF runs suggest that Florence will have tangible effects along the East Coast, although the ECMWF tracks further south than the GFS. Today's forecast is for a broad region of above-average rainfall over the area encompassed by the aforementioned model forecasts. Since this is a very dynamic situation, users are encouraged to follow the National Hurricane Center and the Weather Prediction Center for the latest updates as the storm's track becomes clearer over the weekend.

Hurricane Norman is Northeast of Hawaii and any associated rainfall is expected to stay away from the islands as Norman continues to track north. However, the latest National Hurricane Center forecast for Hurricane Olivia suggests that it could affect the islands by next Wednesday. The forecast region of above-average rainfall in Week-1 has been expanded westward to account for this possibility and a new area has been added during Week-2. Users are encouraged to monitor the National Hurricane Center and Central Pacific Hurricane Center forecasts over the next few days for the latest updates regarding Olivia.

----- Original Discussion Follows: -----

The state of the MJO isn't much different than last week. The MJO still projects weakly onto the RMM and CPC velocity potential indices and model forecasts continue to predict very little MJO propagation during the next two weeks. Other modes of intraseasonal variability remain weak as well. Aside from a couple of weak Equatorial Rossby waves over the Dateline, there isn't much intraseasonal activity expected within the forecast period. The transition towards El Nino continues, though, and the interannual signal in the low-level zonal wind field is expected to continue its transition towards El Nino conditions, as the CFS forecasts the trade winds to continue breaking down over the next few weeks.

The Atlantic has become active over the past week. Hurricane Florence developed on Sep. 1 from a wave off the coast of Africa and the National Hurricane Center predicts that it will continue to track through the North Atlantic over the next five days. Tropical Storm Gordon, currently over the Gulf of Mexico, formed on Sep. 3 and is forecast to move northwestward towards the northern Gulf Coast. The National Hurricane Center provides the official source of information regarding Gordon's track. Hurricane Olivia also formed in the East Pacific during the past week, on Sep. 2, and is forecast to track westward over the next five days.

Today's forecast over the Atlantic includes high confidence for tropical cyclone formation during Week-1 over an area just west of the coast of Africa as dynamical models continue to spin up Easterly Waves. Both current environmental conditions and climatology suggest that these waves are likely to achieve tropical cyclone status. The area of risk for formation is slightly broader during Week-2, but encompasses the same general area as Week-1. The GFS and some ensemble members from the European model suggest that tropical cyclone development is possible over the western Gulf of Mexico during Week-2, which has been indicated in our forecast. In the East Pacific, there is a moderate chance of tropical cyclone formation right along 10 deg. N during Week-1, which shifts slightly east during Week-2.

Further west, there are indications from the GFS and ECMWF ensembles of a moderate chance of tropical cyclone formation in the West Pacific. During Week-1, this risk is found just east of the Philippines and shifts slightly north during Week-2.

Precipitation forecasts reflect a consensus of dynamical model forecasts and tropical cyclone track forecasts. During Week-1, reduced monsoonal precipitation is favored to continue across parts of South Asia, while convection, possibly associated with a weak intraseasonal signal, returns to the Indian Ocean just south of the Equator. An area of enhanced convection is also favored over Japan as the remnants of TC Jebi move over the area.

During Week-2, weak intraseasonal variability is likely to lead to enhanced precipitation east of the Philippines and below-average precipitation over New Guinea. Forecasts over Africa are made in consultation with the CPC international desk, and can represent local-scale conditions in addition to global-scale variability.