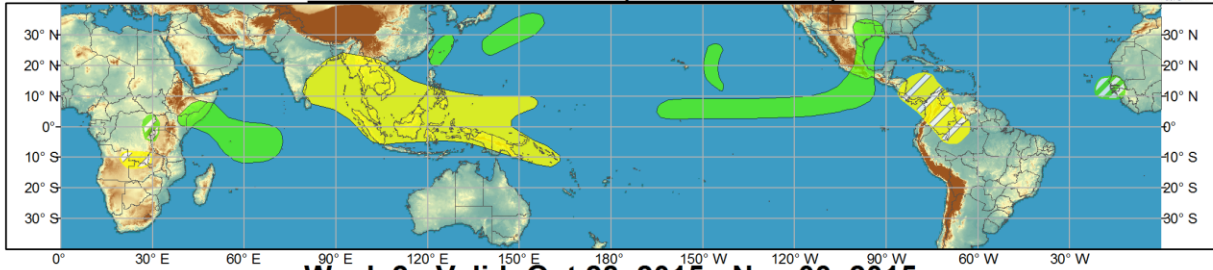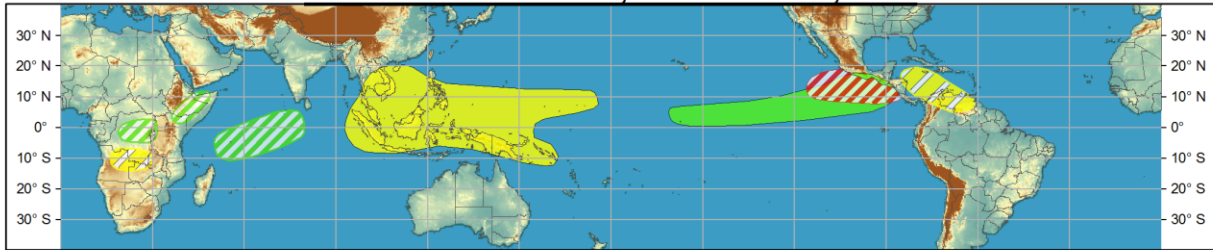## Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Oct 21, 2015 - Oct 27, 2015

Week 2 - Valid: Oct 28, 2015 - Nov 03, 2015

Produced: 10/20/2015
Forecaster: Pugh

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.

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.

The ongoing, strong El Nino continues to remain the major contributor to large scale tropical convective anomalies. The Wheeler-Hendon RMM index indicates a weak MJO signal, while the CPC MJO index based on 200-hpa velocity potential features a stationary pattern of upper-level divergence/convergence consistent with El Nino. Upper-level divergence recently developed across Africa and the western Indian Ocean where convection is becoming more enhanced. Dynamical models depict an increase in the amplitude of the MJO signal with its enhanced phase over Africa during Week-1. However, it is uncertain if a long-lived coherent MJO develops during the next few weeks due to the strong background state.

Major Hurricane Olaf developed at 10N-117W on October 15 and intensified to a Category-4 hurricane, more than 1,000 miles southeast of Hawaii. Olaf is forecast to turn north and remain east of Hawaii. Please see the latest forecasts from the Central Pacific Hurricane Center at: http://www.prh.noaa.gov/hnl/cphc/. Meanwhile, a pair of tropical cyclones in the West Pacific became super typhoons during the past week, both peaking with maximum sustained winds of 130 knots (Category-4). Super Typhoon Koppu made landfall in Luzon of the northern Philippines on October 18 and it weakened to Tropical Storm strength. Super Typhoon Champi began to weaken across the West

Pacific and it is forecast to recurve northeast as it interacts with the mid-latitude westerlies. Model guidance at this time indicates that the powerful remnant low of Champi tracks north towards the Kamchatka Peninsula, posing a risk of high winds and waves to the western Aleutians later in Week-1.

Tropical Depression 20-E developed in the East Pacific, a few hundred miles southeast of Puerto Escondido, Mexico. Environmental conditions are very favorable for intensification and it is forecast to become a hurricane within 48 hours. After predicted landfall along the southwest coast of Mexico, it is expected to dissipate over the high terrain of the Sierra Madre. Heavy rainfall and flooding is anticipated along its track. A mid-latitude low pressure system along with abundant Gulf moisture is forecast to bring widespread, heavy rainfall to the southern Great Plains and western Gulf Coast during Week-1. This heavy rain is expected to alleviate intensifying short-term drought across these areas.

Anomalous rainfall during the next two weeks is based on El Nino and model guidance. Above (below)-average rainfall is likely to persist across parts of the Central and East Pacific (Maritime Continent). Below-average rainfall is also favored across the southwest Caribbean and parts of northern South America during the next two weeks. Upper-level divergence supports a continuation of enhanced convection across the Horn of Africa and the western Indian Ocean during Week-1 with a slight expansion east across the Indian Ocean during Week-2. This is consistent with the CFS model but forecast confidence by Week-2 is reduced due to the ongoing El Nino.

Forecasts for Africa are done in collaboration with CPC's Africa Desk and based on model forecast guidance and regional scale anomaly features.