











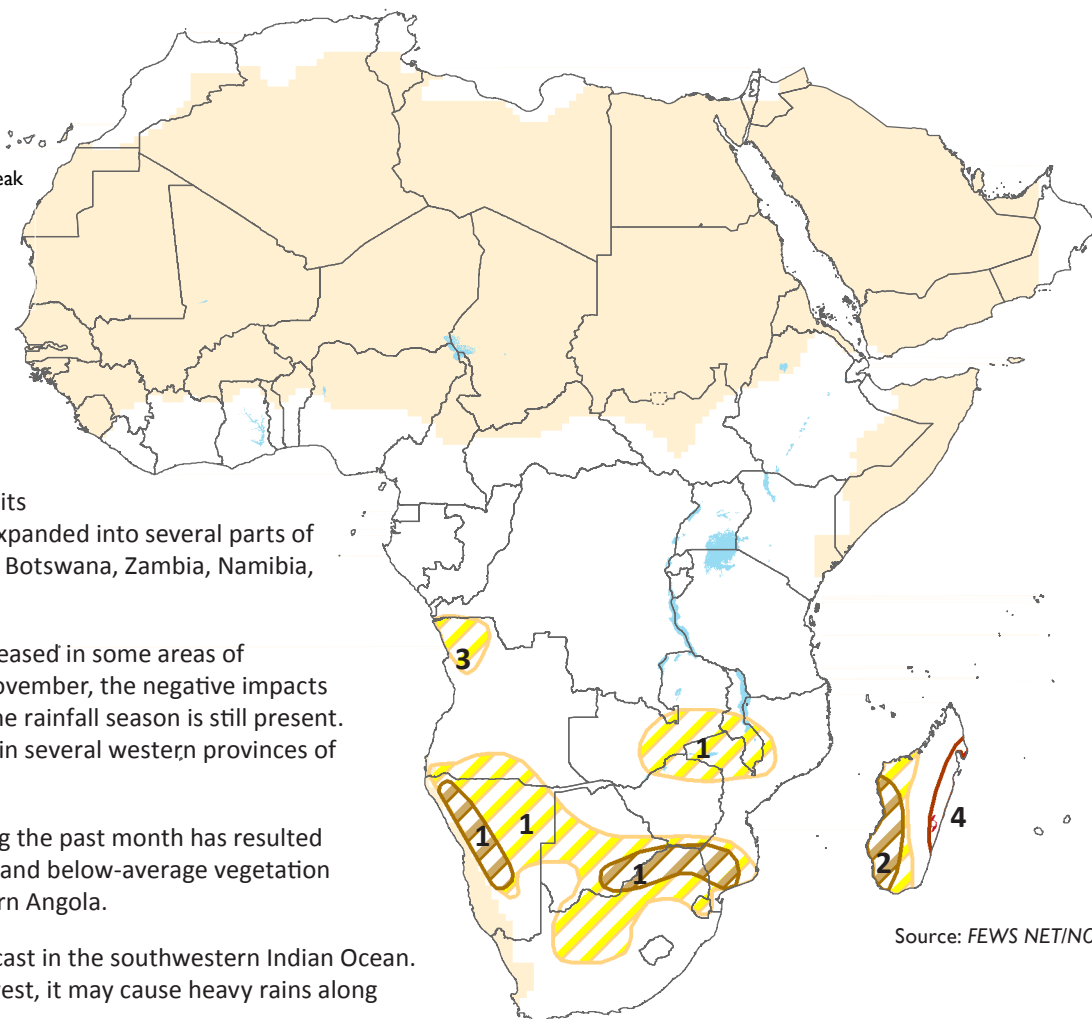
## Global Weather Hazards Summary

March 2 - 8, 2018

*Ground conditions improve in southern Africa, while Namibia and Angola remain dry*

### Africa Weather Hazards

-  Flooding
-  Abnormal Dryness
-  Drought
-  Severe Drought
-  Tropical Cyclone
-  Potential Locust Outbreak
-  Heavy Snow
-  Abnormal Cold
-  Abnormal Heat
-  Seasonally Dry



1. Since November, rainfall has been below-average in South Africa. Significant moisture deficits have strengthened and expanded into several parts of Mozambique, Zimbabwe, Botswana, Zambia, Namibia, and southern Angola.
2. Although rainfall has increased in some areas of Madagascar since mid-November, the negative impacts of the delayed onset of the rainfall season is still present. Rainfall is below average in several western provinces of the island.
3. Below-average rain during the past month has resulted in large moisture deficits and below-average vegetation conditions in northwestern Angola.
4. A tropical cyclone is forecast in the southwestern Indian Ocean. As it tracks south-southwest, it may cause heavy rains along Madagascar's east coast.

Source: FEWS NET/NOAA

## Africa Overview

### Rainfall forecast through much of southern Africa

Rainfall was recorded in southern Africa during the last week. Above-average rains were recorded in southern Mozambique, Zimbabwe, South Africa's Limpopo province, and eastern Botswana with 7-day totals exceeding 100mm (**Figure 1**). Similarly heavy rainfall fell in western Tanzania. Lighter rainfall was observed through many areas of Zambia and Angola. Southwestern Angola, Namibia, and drought-affected areas of Madagascar remained dry.

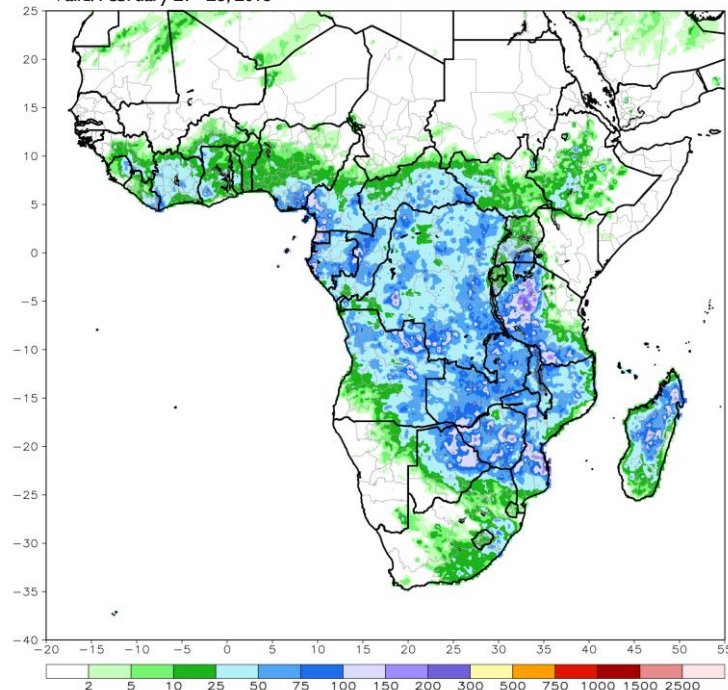
During January, much of southern Africa recorded significantly low rainfalls totals. However, during February, widespread soaking rains have been present in many of these same areas and significant changes are observed in short-term anomalies. While large 30-day deficits had been widespread 3 weeks ago, surpluses are now more prevalent than deficits. In contrast, the largest 30-day deficits are now present in eastern Tanzania, and northern Mozambique (**Figure 2**). To the west, rains are still erratic in Namibia, approaching 5 weeks without significant rainfall. Impacts from this past January are still evident in some areas. Regions in Zambia, Malawi, Mozambique, Namibia, Botswana, northern South Africa, and northwestern Angola are still experiencing less than 80% of their normal rainfall accumulation since late November. Southwestern Madagascar has been extremely dry since the monsoon season began, receiving very infrequent rainfall.

February's shift in monsoon pattern and associated heavy rains has led to rapid improvement of moisture conditions for large swaths of southern Africa. Analysis of vegetation health indices reflects this improvement, as do other indicators of soil moisture. Reports indicate that improved rains positively impacted crops in central South Africa and northern Zimbabwe, but may have come too late in areas of southern Zimbabwe and southern Mozambique. Degraded ground conditions are evident in Namibia, and parts of Madagascar where rains remained erratic during February.

Next week, weather models suggest that above-average rainfall will likely be widespread throughout southern Africa. Very heavy rainfall, widely exceeding 100mm, is likely in Zambia, Malawi, northern Mozambique and Zimbabwe. Above-average rainfall is also expected in eastern Angola, southeastern DRC, and Tanzania. A developing tropical cyclone passing offshore may impact Madagascar's east coast. More rain is forecast in Ethiopia through the next week.

**Figure 1: RFE2 Satellite-Estimated Rainfall (mm)**

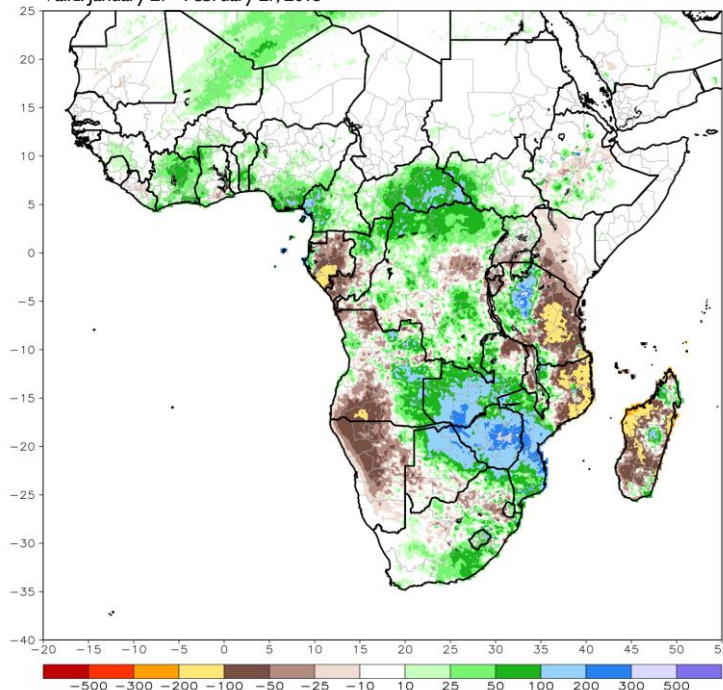
Valid: February 21 - 28, 2018



Source: NOAA/CPC

**Figure 2: ARC 30-Day Total Rainfall Anomaly (mm)**

Valid: January 29 - February 27, 2018

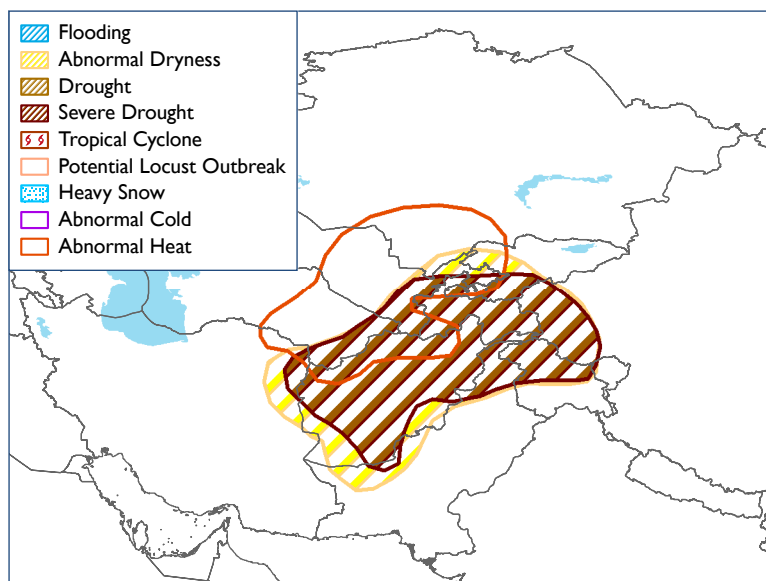


Source: NOAA/CPC

## Central Asia Weather Hazards

### Temperatures

Last week, temperatures were warmer than average for late-February. High temperatures were as much as 8°C above normal over southern Afghanistan, and minimum temperatures were even more anomalously warm in the center of the country. A maximum temperature of 27°C was recorded in Helmand province. During the first week of March, the GFS model indicates that well-above normal temperatures will continue through next week. An abnormal heat polygon is posted in southern Kazakhstan, southern Uzbekistan, southern Turkmenistan, and northern Afghanistan, where maximum temperature is forecast to exceed 25°C and average 8°C or more above normal.



Source: FEWS NET/NOAA

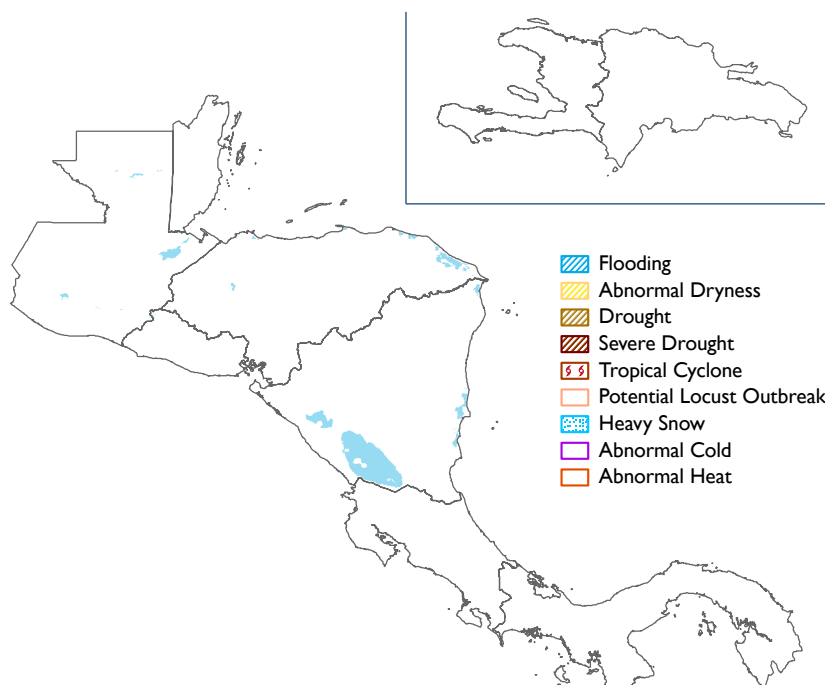
### Precipitation

Last week, precipitation was recorded over most of Afghanistan. Eastern provinces received the most precipitation (25-50mm of liquid equivalent). With abnormally warm temperatures, precipitation fell as rain in many lower elevations. Although this past week's precipitation helped to raise snow water volumes, very low snow water equivalent and large 90-day precipitation deficits persisted over Central Asia. A severe drought polygon is now posted over much of Afghanistan as the ongoing, large moisture deficits are likely to negatively impact crops over the coming months.

Based upon model guidance, widespread moderate rain and high-elevation snow is forecast to benefit the majority of the country next week. The highest precipitation totals could locally reach 50mm liquid equivalent in the northwest.

## Central America and the Caribbean Weather Hazards

No hazards reported



Source: FEWS NET/NOAA

## Central America and the Caribbean Overview

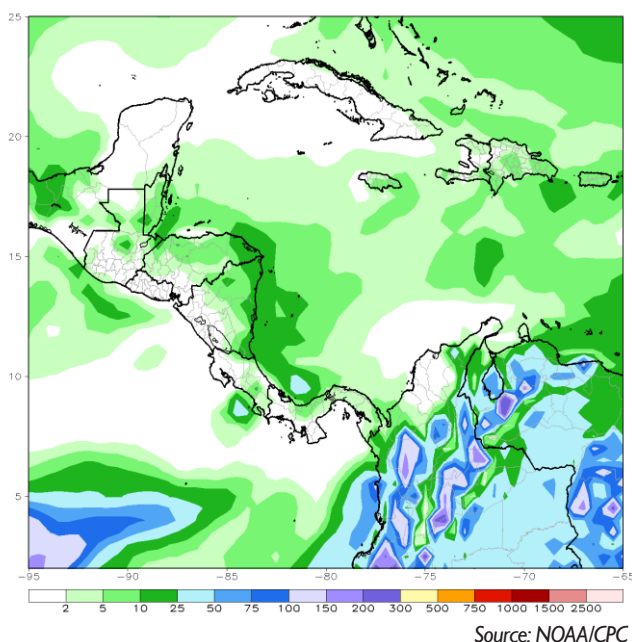
### Dry weather may elevate the risks for forest fires in Central America

Last week, drier weather was recorded over Central America again. During the past 30 days, near-average rainfall was registered throughout much of the inland of the region, while positive rainfall anomalies were recorded over northern Guatemala, Belize, and northern Honduras. Since December 2017 to present, positive rainfall anomalies were registered over northern Guatemala, Belize, and the eastern portions of Honduras, Nicaragua, Costa Rica, and Panama. Meanwhile, marginal seasonal rainfall anomalies were observed throughout the remainders of the region.

Next week, little rain is forecast along the Atlantic coastlines of Central America. Although the lack of rainfall is typical of the region during this time of the year, the continuation of drier weather patterns and resulting dry soil increases risks for forest fires over many local areas. Minimum temperature is forecast to average slightly below-average and range between 0-5°C over elevated terrains of Guatemala.

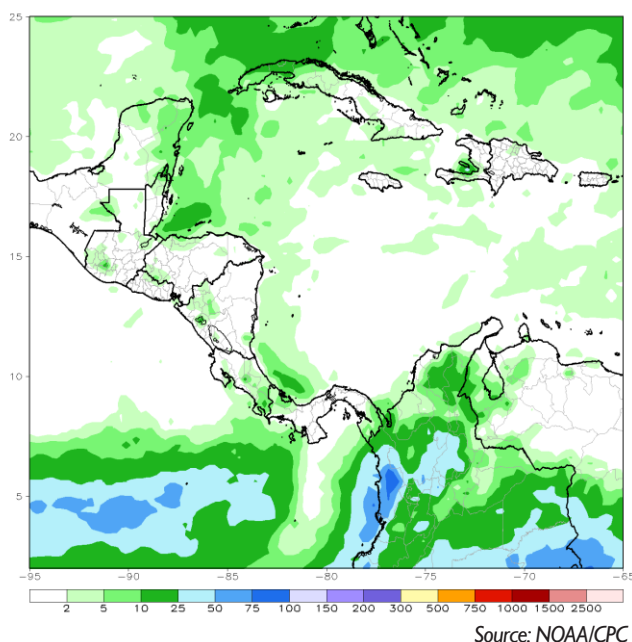
**Figure 4:** GEFS mean total rainfall forecast (mm)

Valid: February 28 - March 7, 2018



**Figure 5:** CMORPH rainfall climatology (mm)

Valid: February 28 - March 7, 2018



### Average rainfall over the recent weeks has benefited ground conditions in Hispaniola

During late February, light to locally moderate rains fell over central Haiti and the central portions of the Dominican Republic. Drier weather with below-average rains were recorded elsewhere. Over the past 30 days, marginal anomalies prevailed over the Island, though some areas such as central Haiti and the central and northern parts of the Dominican Republic might have accumulated some surpluses. As a result, vegetation conditions were favorable. Also, since December 2017 to date, cumulative rainfall totals were near-average to above-average over much of the Island. Next week, drier weather is again expected across Hispaniola. However, light rain is possible along the southern and northeastern coastlines of Haiti and the Dominican Republic.

### ABOUT WEATHER HAZARDS

Hazard maps are based on current weather/climate information, short and medium range weather forecasts (up to 1 week) and their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.