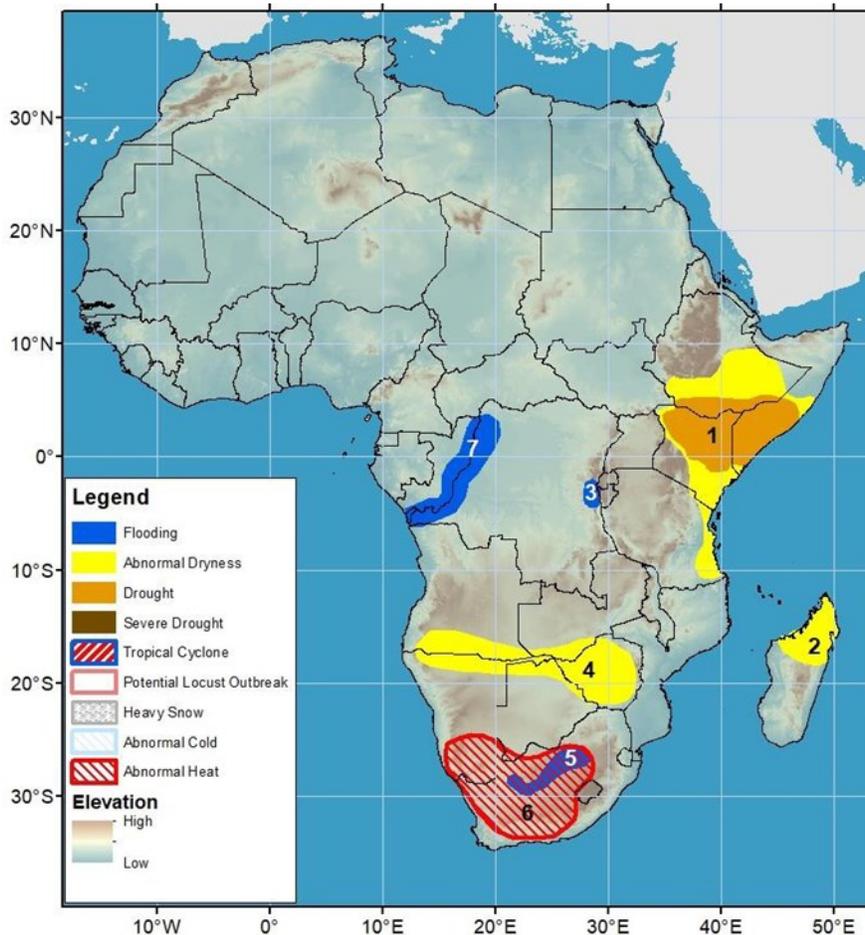


Abnormal heat in southern Africa as dryness and drought persist in Eastern Africa

AFRICA WEATHER HAZARDS



1. Dry, erratic conditions since the onset of the October to December season have resulted in abnormal dryness across central and eastern Kenya, southern Ethiopia, and eastern Tanzania. Drought has developed in southern Ethiopia, southern Somalia, and northern Kenya.
2. Below-average rainfall over the past eight weeks has resulted in moderate to large 30-day moisture deficits, which have led to abnormal dryness in northern Madagascar. Below-average rainfall is expected in the region next week.
3. Heavier-than-usual rainfall in the past few weeks has caused flooding in South Kivu Provinces in DRC. Additional rainfall next week may exacerbate conditions.
4. An erratic rainfall distribution since November has resulted in abnormal dryness in southern parts of Angola and Zambia, northern portions of Namibia and Botswana, and much of Zimbabwe.
5. Recent heavy rainfall has caused elevated flows in the Orange and Vaal rivers in central South Africa.
6. An abnormal heat hazard is posted in South Africa and southern Namibia, where maximum temperature could exceed 35°C next week.
7. Heavy rainfall in recent weeks has led to flooding along the Congo River and its tributaries.

AFRICA OVERVIEW

Scattered moderate rainfall in Eastern Africa

During the past week, showers were widely scattered over parts of western Ethiopia and Kenya, with some areas receiving moderate totals (**Figure 1**). Tanzania received more widespread rainfall that nonetheless still lagged below normal. During the past month, below-average rainfall persisted across southern Ethiopia, many areas in Kenya, as well as northern and southeastern Tanzania, maintaining abnormal dryness over the dry portions of the subregion. Parts of Kenya, western Ethiopia, and Uganda received above-average rainfall due to wet episodes through mid-December. Since October, southern Ethiopia, Kenya, and southern Somalia have experienced large seasonal rainfall deficits, which have resulted in drought across the dry portions of Eastern Africa.

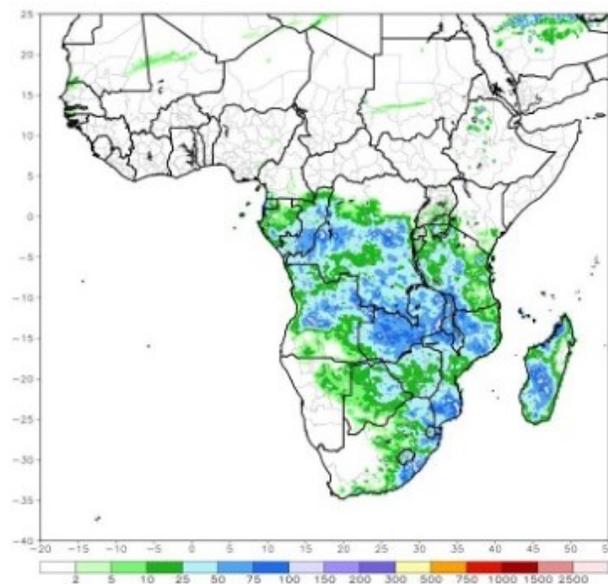
Next week, light rainfall is expected over western Ethiopia and southern Kenya. Much of Somalia, Ethiopia, and Kenya are expected to have no rainfall. Heavier rainfall will likely move into northern Tanzania.

Drier conditions in the northern sectors of southern Africa since the season’s onset

During the past week, heavy rainfall occurred in central Angola, Zambia, eastern South Africa, northern and southern Mozambique, and central Madagascar. However, accumulated rainfall in the northern sectors of southern Africa has been below average since October. Angola, northern Namibia, southern Zambia, Zimbabwe, and northern Mozambique have experienced moderate seasonal rainfall deficits, while Northern Madagascar experienced larger deficits (**Figure 2**). Due to the ongoing *La Niña* event, which tends to bring above-average rainfall to the southeastern portions of the subregion, well above-average seasonal rainfall was recorded across South Africa, Lesotho, Eswatini, parts of Namibia, Botswana, Mozambique, and southern Madagascar, triggering flooding in many areas, including the Huíla Province in Angola. Flows along the Orange and Vaal rivers in central South Africa appear to be elevated after recent rainfall.

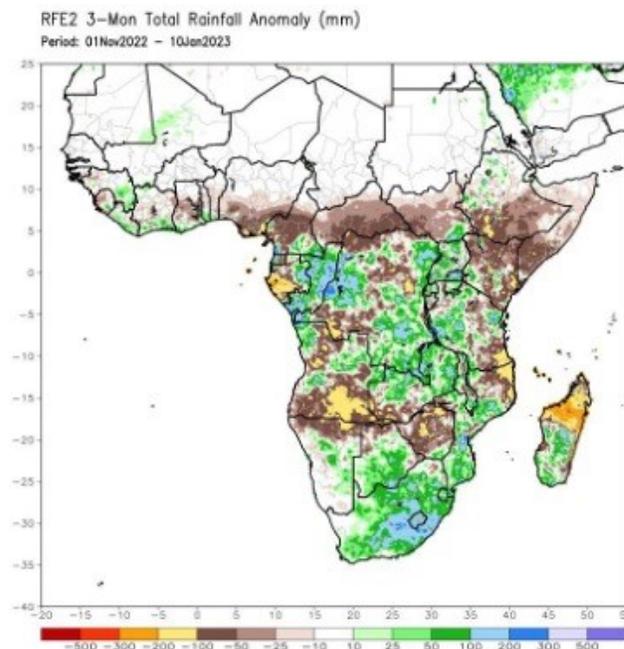
Next week, heavy and above-average rainfall is expected to continue over northern portions of the region, including Angola, Zambia, Malawi, and northern Mozambique. Madagascar is also expected to receive heavy rainfall. Conversely, only light rainfall is expected to the south.

Figure 1. 7-Day Satellite Estimated Total Rainfall (mm)
Period: January 4 – 10, 2023



Source: NOAA/CPC

Figure 2. 3-Month Satellite Estimated Rainfall Anomaly (mm)
Period: November 1, 2022 – January 10, 2023



Source: NOAA/CPC

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.

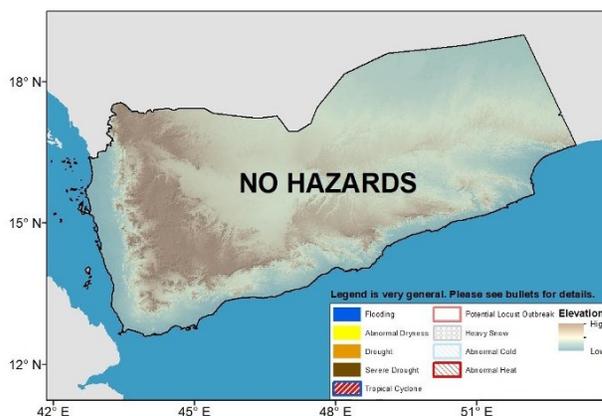
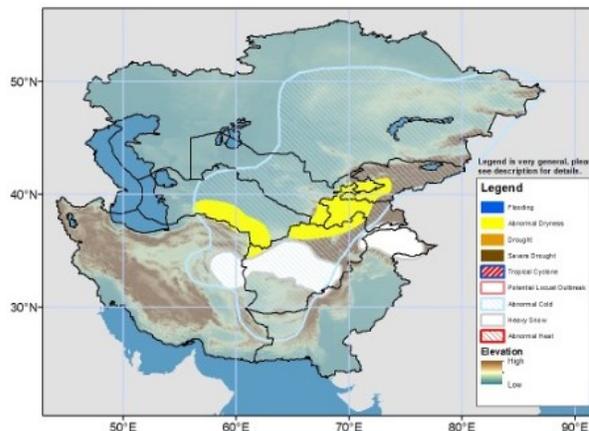
CENTRAL ASIA OVERVIEW

Temperatures

During the past week, mean maximum temperatures started well above average across most of the region before crashing well below average by the end of the period. Maximum temperatures were highest in portions of Kazakhstan, northern Uzbekistan, and Kyrgyzstan. Parts of southern Kazakhstan even remained completely above freezing for the first half of the period. The southern half of the region experienced more seasonable temperatures but still some above-normal maximums. Next week, arctic air will continue spilling through Central Asia. Below-average mean temperatures are forecast for the entire region, with the greatest deviations from the average expected in southeast Kazakhstan, eastern Uzbekistan, Turkmenistan, and Afghanistan. Temperatures will drop below -20°C in parts of northern Kazakhstan, Kyrgyzstan, Tajikistan, and Afghanistan’s higher elevations, while widespread freezing temperatures are expected in the region’s south. Next week, an axis of rain and mostly snow from Iran, stretching northeastward through eastern Kazakhstan, will exit the region, while still bringing significant snowfall to northern Pakistan. Heavy snow is expected in many parts of Afghanistan and northern Pakistan.

Precipitation

During the past week, moderate to heavy precipitation was observed across Kazakhstan. The highest liquid equivalent totals and largest snow accumulations occurred in Aqtobe, Qaraghandy, South Kaz, and East Kaz regions, and Afghanistan and Tajikistan also received significant snow. Central portions of Central Asia have been drier than normal during December and early January, with below-normal snow depth and snow water equivalent (SWE) values across much of Kyrgyzstan, Tajikistan, and Afghanistan. Conversely, Kazakhstan and central Tajikistan have been snowier than average. Abnormally dry conditions have prevailed from northern Afghanistan to western Kyrgyzstan and from Afghanistan’s Herat province to southern Turkmenistan due to low two-month precipitation accumulation and SWE values.



YEMEN OVERVIEW

Temperatures

During the past month, both maximum and minimum mean temperatures were above normal, with minimum temperatures showing the largest departures from the normal, especially across inland portions of the country. Minimum temperatures ranged between 10 and 20°C across the country. Next week, warmer than normal weather is forecast to continue in Yemen, with mean temperatures expected to range between 10 and 25°C.

Precipitation

During the past week, dry but seasonable conditions for the time of the year were observed in Yemen. Next week, light rainfall is expected over a few areas in the western sector of Yemen, with close-to-average precipitation forecasted for the entire country.

CENTRAL AMERICA AND THE CARIBBEAN OVERVIEW

Above-average rainfall forecast for Panama next week

During the past week, normal conditions dominated in Central America, with little to light rainfall in Belize, southeastern Honduras, along the Caribbean coasts of Nicaragua, and parts of Costa Rica and Panama. During the past month, below-average rainfall was observed along the eastern littorals in Nicaragua, Costa Rica, and Panama, whereas near-average conditions were recorded elsewhere. Next week, rainfall is expected along the coastal areas of Costa Rica and Panama, with heavy downpours likely across central and southern Panama. Weekly rainfall accumulation could fall near to above average across Costa Rica and Panama, helping to alleviate the dry conditions in the region. Near-average to below-average mean temperatures are forecasted across Guatemala, while the expected passage of cold fronts across northern Central America might push minimum temperatures to below freezing across higher terrains in the Huehuetenango, Totonicapán, Quiché, Chimaltenango, Sacatepéquez, and Guatemala departments in Guatemala.

Hispaniola receives seasonal rainfall

During the past week, Hispaniola received little to no rainfall, following typical conditions for the time of the year. Drier-than-average conditions were observed in southern Haiti, while slightly wetter-than-average conditions were observed in some areas in the eastern Dominican Republic. Next week, little to moderate rainfall is expected across Haiti and the western Dominican Republic, indicating likely above-average rainfall conditions, which could help to reduce moisture deficits in some areas in the region.

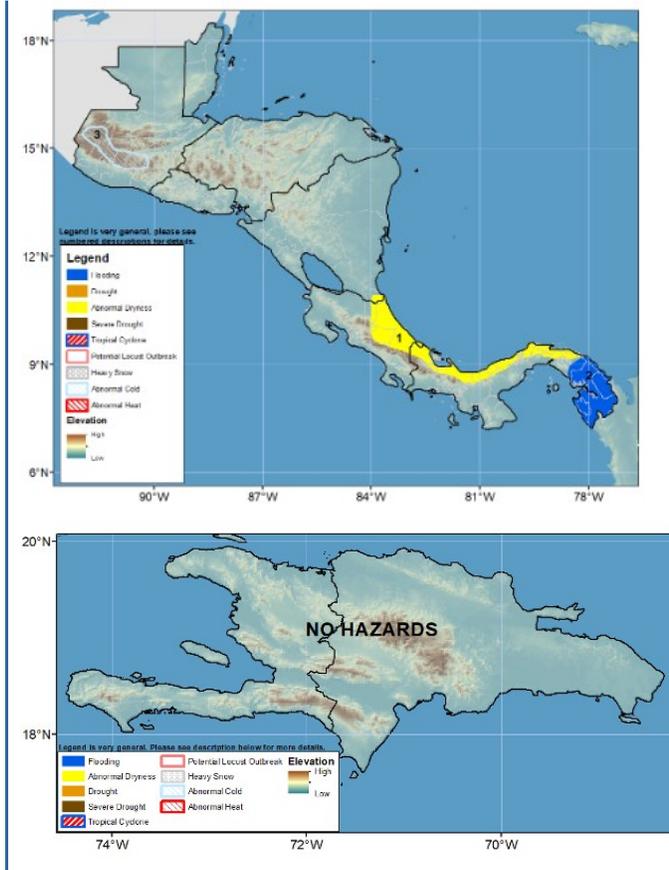
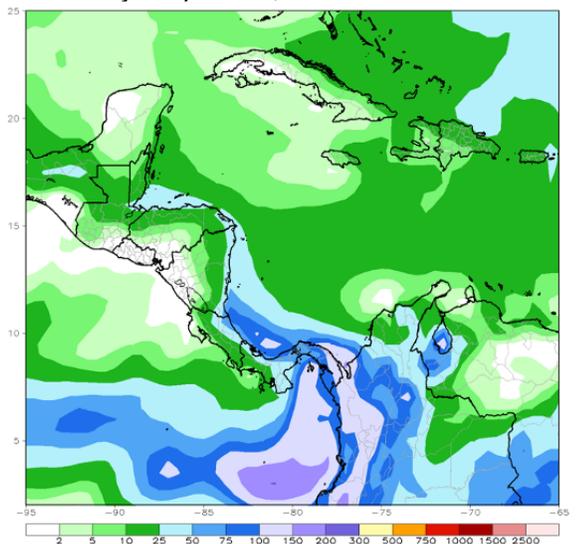
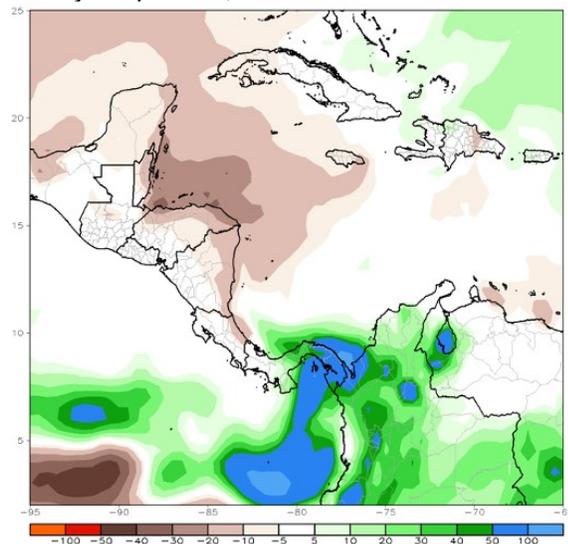


Figure 3. Ensemble Mean Total Rainfall (mm)
Period: January 12 – 18, 2023



Source: NOAA/CPC

Figure 4. CMORPH Climatological Rainfall Anomaly (mm)
Period: January 12 – 18, 2023



Source: NOAA/CPC