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AFRICA: Monthly Climate Outlook August to May

Issued: November 2024

Overview

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Overview

Africa Current Status and Outlook – Temperature

Africa Current Status and Outlook – Rainfall

Global Outlook – Temperature

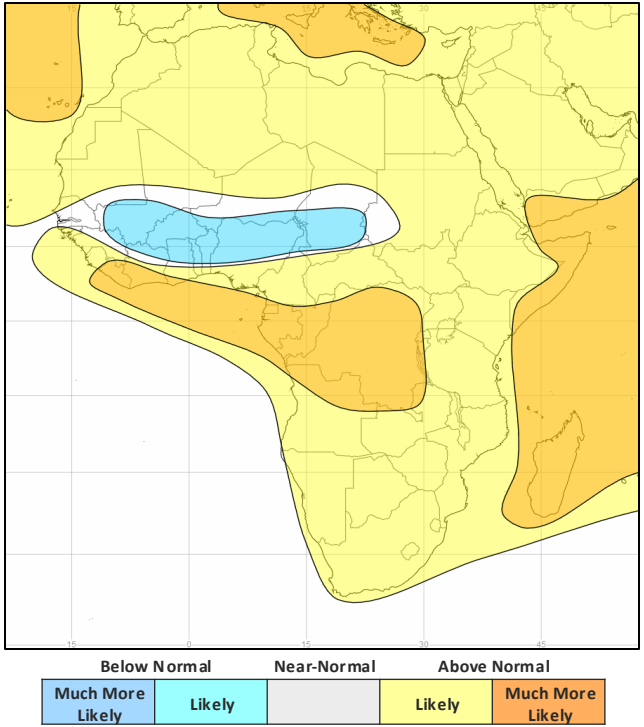
Global Outlook – Rainfall

Africa Current Status and Outlook - Temperature

Current Status: Many areas across Africa were warm or hot over the last three months. There have been some exceptions with parts of Ethiopia experiencing below normal temperatures over the last three months. Temperatures have also been more mixed across the Sahel with some areas here experiencing near or below normal temperatures. Parts of Southern Africa also had near or below normal temperatures at times between July and September, including Madagascar which was cool or cold in August and September.

Outlook: Consistent with a warming climate, warmer than normal conditions are likely across the whole continent. The exception being parts of the Sahel region where cooler than normal conditions are likely. However, this anomaly is against the context of a small normal temperature range and impacts are expected to be very limited.

3-Month Outlook December to February - Temperature



Africa Current Status and Outlook - Rainfall

Current Status: The West Africa Monsoon has now ended although its effects can be seen from August to October, with wet to very wet conditions experienced across the region. Parts of central Africa have been dry during the last three months, including DRC and Cameroon.

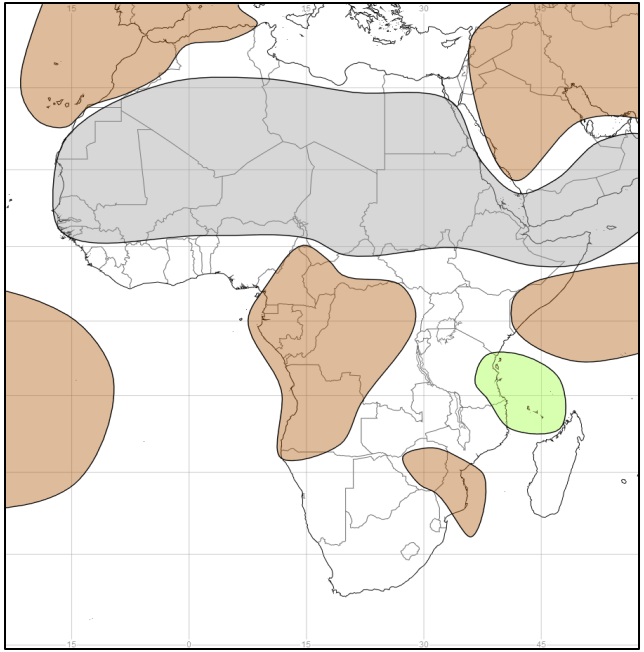
Outlook: Rainfall in West Africa is likely to be normal following the retreat of the monsoon, although Cameroon is likely to be drier than average.

December is typically the end of the East Africa 'Short Rains'. Parts of Somalia are likely to be drier than normal whilst parts of Tanzania and Mozambique are likely to be wetter than normal.

Rains across Southern Africa increase during this period. Forecasts are currently uncertain, although Zimbabwe and parts of southern Mozambique are likely to be drier than normal.

Tropical cyclones – The Southwest Indian Ocean tropical cyclone season typically begins during December before peaking between January and March. Early indications suggest a slightly above normal season is likely with a greater risk than normal of landfalls over Madagascar and Mozambique.

3-Month Outlook December to February - Rainfall

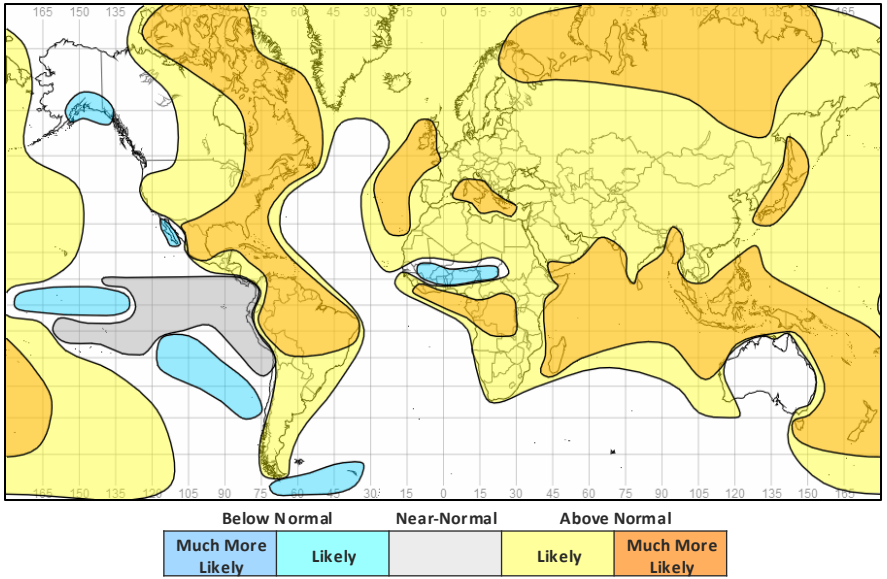


Below Normal		Near-Normal	Above Normal	
Much More Likely	Likely		Likely	Much More Likely

Global Outlook - Temperature

Outlook: Consistent with a warming climate, warmer than normal conditions are likely across most land areas. There are only very limited exceptions, most notably some Pacific coastal districts in the Americas where near normal or colder than normal conditions are likely – this is linked to cooler sea surface temperatures associated with a developing La Niña.

3-Month Outlook December to February - Temperature



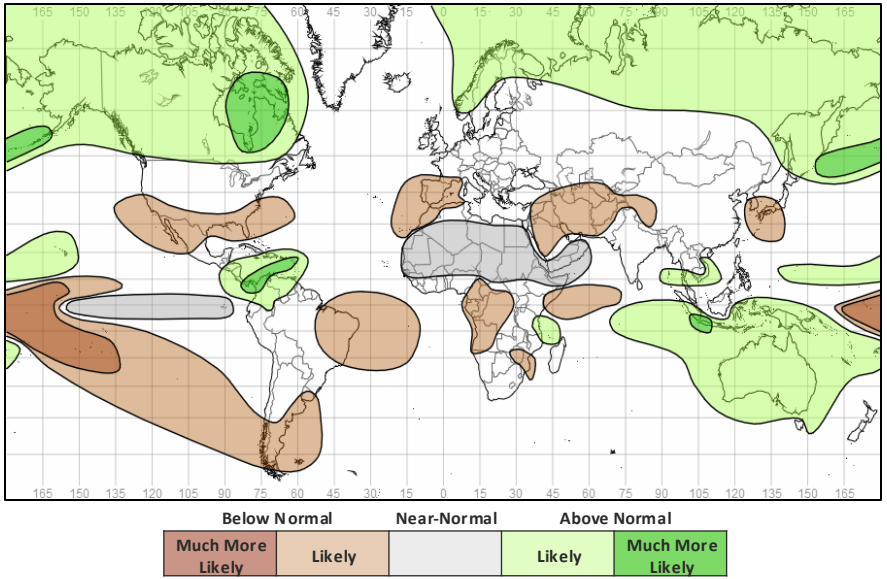
Global Outlook - Rainfall

Outlook:

El Niño-Southern Oscillation (ENSO) – ENSO is currently neutral. Equatorial sea surface temperatures across the central and eastern Pacific are below average. Over the last month, the likelihood of La Niña emerging has declined; however, there are still indications of a La Niña developing in the next couple of months. Despite this, atmospheric indicators have started to reflect those expected with La Niña. Should a La Niña emerge, it would most likely be a weak event. A transition to La Niña would improve the predictability of global weather patterns on seasonal timescales, particularly in the tropics, though its influence may not be as strong as some La Niña events over recent years.

Indian Ocean Diploe (IOD) – The IOD is currently neutral. However, recent sea surface temperature patterns across the Indian Ocean are suggestive of a negative IOD but haven't been prolonged enough to meet the threshold for an event to be declared (~6 of 8 weeks required). The IOD will likely remain neutral or weakly negative over the next couple of months and therefore provide only limited signals for seasonal predictions. Skilful prediction of the IOD at this time of year tends to be limited beyond a couple of months ahead.

3-Month Outlook December to February - Rainfall



Current Status

Current Status maps

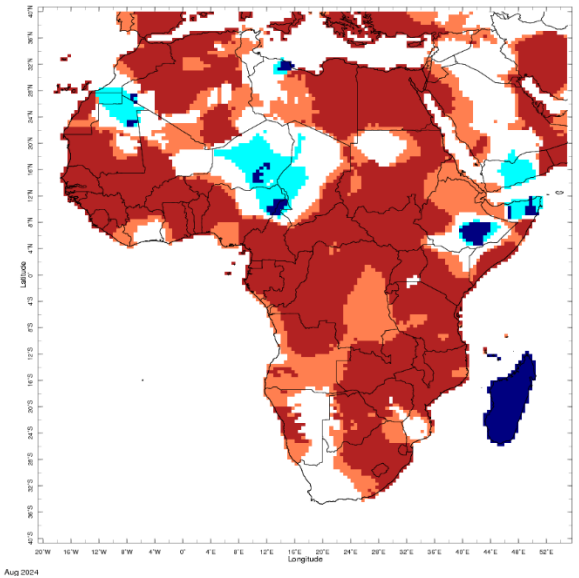
Western Africa

Central Africa

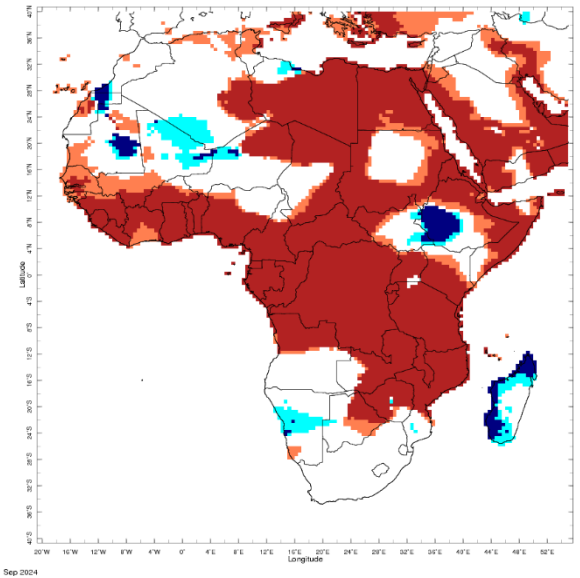
Eastern Africa

Southern Africa

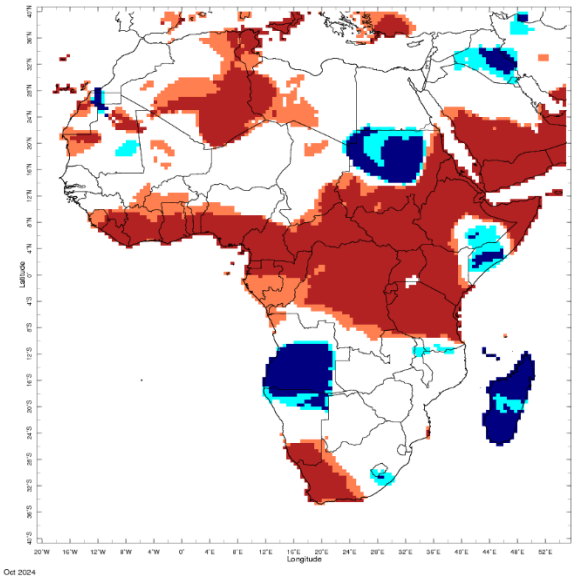
Current Status – Temperature percentiles



August



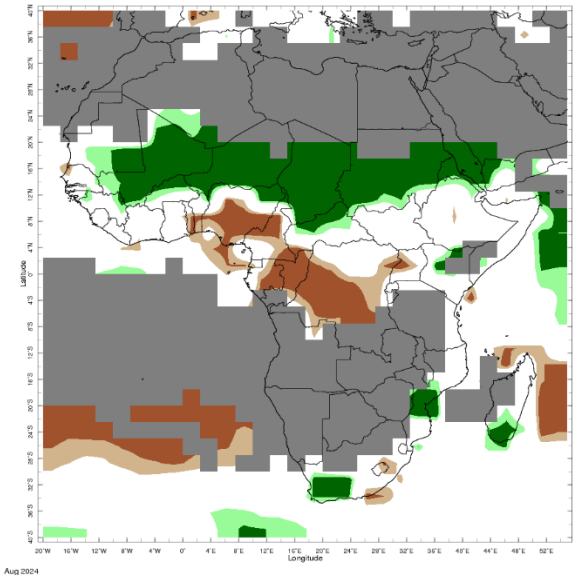
September



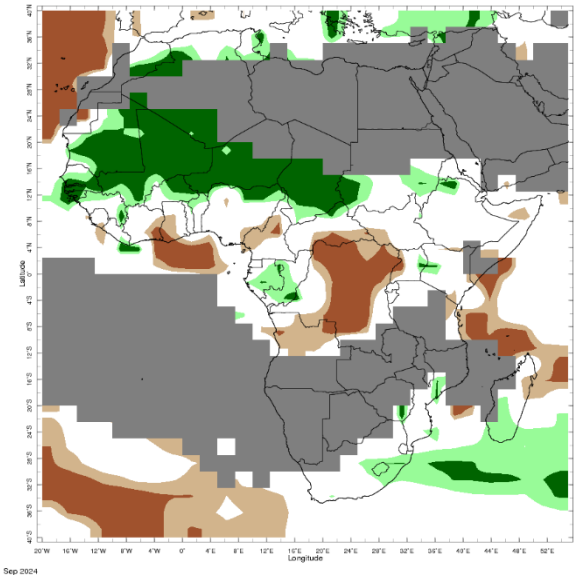
October

Notes: The percentiles shown in the map indicate a ranking of temperature, with the 0th percentile being the coolest and the 100th percentile being the warmest in the 1981-2010 climatology. Orange and red shading represent values above the 80th (Warm) and 90th (Hot) percentile, respectively; regions shaded in light and dark blue indicate values below the 20th (Cool) and 10th (Cold) percentile, with respect to the 1981-2010 climatology. The data used in this map are from the NOAA Climate Prediction Center.

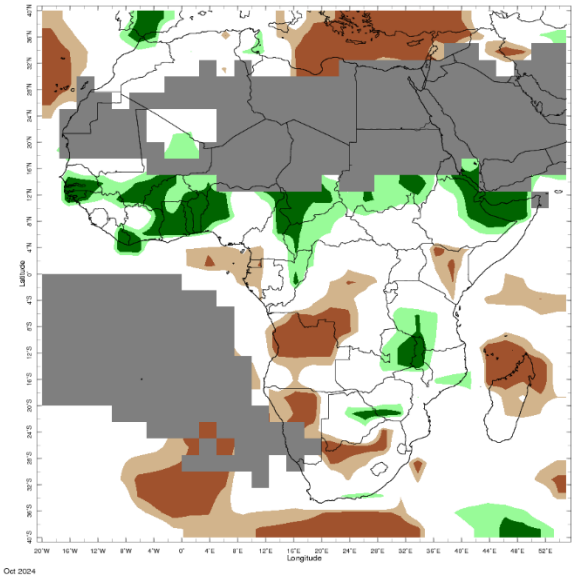
Current Status – Precipitation percentiles



August



September



October

Notes: The percentiles shown in the map indicate a ranking of rainfall, with the 0th percentile being the driest and the 100th percentile being the wettest in the 1981-2010 climatology. Green and dark green shading represent values above the 80th (Wet) and 90th (Very Wet) percentile, respectively; regions shaded in light and dark brown indicate rainfall below the 20th (Dry) and 10th (Very Dry) percentile, with respect to the 1981-2010 climatology. Grey areas on the map mask out regions that receive less than 10mm/month of rainfall on normal in the 1981-2010 climatology for the month. The data used in this map are from the NOAA Climate Prediction Center.

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Current Status – Western Africa (1)

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
Mauritania	Mixed (1)	Mixed (3)	Normal	Very Wet	Very Wet	Normal*
Sierra Leone	Hot	Hot	Warm	Normal	Normal	Normal
Liberia	Hot	Hot	Hot	Normal	Normal	Mixed (5)
Mali	Hot (2)	Mixed (4)	Normal	Very Wet	Very Wet	Mixed (6)

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) Note: Normal or cold in the north, hot in the south
(2) Note: Normal in the northeast
(3) Note: Large variations across the country
(4) Note: Warm or hot in the southwest, cool to normal in the northeast
(5) Note: Normal in the west, very wet in the east
(6) Note: Normal* in the north, very wet in the south

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Current Status – Western Africa (2)

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
Ghana	Mixed (3)	Hot	Hot	Normal	Normal (7)	Very Wet
Nigeria	Hot (1)	Hot (1)	Mixed (2)	Dry (4)	Normal (4)	Mixed (5)
Cameroon	Hot	Hot	Hot	Dry	Normal	Mixed (6)
Burkina Faso	Hot	Hot	Warm	Wet	Wet	Very wet

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) **Note:** Normal or cool in the northeast
(2) **Note:** Hot in the south, normal in the north
(3) **Note:** Hot in the north, normal in the south
(4) **Note:** Very wet in the far north
(5) **Note:** Very wet in the west and northeast, otherwise normal
(6) **Note:** Very wet in the northeast, dry in the far west, otherwise normal
(7) **Note:** Dry in the southwest

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Current Status – Central Africa

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
Niger	Normal (2)	Normal (4)	Normal	Very Wet	Very Wet	Normal*
Chad	Normal (3)	Hot	Normal (1)	Very Wet	Very Wet	Mixed (5)
DRC	Hot	Hot	Hot	Very Dry (7)	Very Dry	Mixed (6)

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) Note: Hot in the southeast
(2) Note: Cool in the northeast, hot in the far southwest
(3) Note: Warm or hot in the far east and southeast, cool in the far west, else normal
(4) Note: Hot in the northeast, cold in the northwest, else normal
(5) Note: Very wet in the south, otherwise normal*
(6) Note: Dry or very dry in the southwest, otherwise normal
(7) Note: Normal in far north and far east, otherwise normal*

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Current Status – Eastern Africa (1)

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
Sudan	Hot	Hot	Mixed (3)	Very Wet	Mixed (1)	Mixed (1)
South Sudan	Hot	Mixed (2)	Hot	Normal	Normal	Normal
Uganda	Hot	Hot	Hot	Dry	Normal	Normal
Rwanda	Hot	Hot	Hot	Normal	Normal	Normal

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) Note: Wet in parts of the south
(2) Note: Hot in the west, cool in the far east, else normal
(3) Note: Cold in the north, hot in the south

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Current Status – Eastern Africa (2)

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
Tanzania	Hot	Hot	Hot	Normal*	Normal*	Normal (5)
Eritrea	Warm	Hot	Hot	Very Wet	Normal	Mixed (6)
Ethiopia	Mixed (4)	Mixed (1)	Mixed (4)	Normal	Normal	Mixed (7)
Kenya	Hot	Hot	Hot	Normal	Normal	Dry
Somalia	Mixed (2)	Hot	Mixed (1)	Normal	Mixed (3)	Mixed (8)

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) **Note:** Warm or hot in the north and east, cool or cold in the southwest
(2) **Note:** Normal or cool in the north, otherwise hot
(3) **Note:** Very dry in the south, very wet in the north
(4) **Note**: Warm or hot in the northwest, cool or cold in the southeast
(5) **Note**: Wet in parts of the south
(6) **Note**: Normal* in the north, very wet in the south
(7) **Note:** Very wet in the northeast, otherwise normal
(8) **Note**: Very wet in the north, otherwise normal

Current Status – Southern Africa

	Current Status: Temperature			Current Status: Rainfall		
	August	September	October	August	September	October
South Africa	Mixed (1)	Normal	Mixed (2)	Normal (3)	Normal (6)	Mixed (8)
Zambia	Hot	Hot	Normal	Normal*	Normal*	Normal (6)
Zimbabwe	Hot	Hot	Normal	Normal*	Normal*	Normal (5)
Mozambique	Hot	Hot	Normal	Normal (4)	Normal	Normal
Malawi	Hot	Hot	Normal	Normal*	Normal*	Very Wet
Madagascar	Cold	Cool	Cold	Normal (5)	Mixed (7)	Mixed (9)

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

* Region usually experiences less than 10mm/month rainfall during the month (dry season).

Additional Information:

(1) **Note:** Normal in west, hot in east
(2) **Note:** Hot in west, normal in east
(3) **Note:** Very wet in parts of the southwest and normal* in far north
(4) **Note:** Very wet in central areas
(5) **Note:** Very wet in the far south
(6) **Note:** Wet in parts of the east
(7) **Note:** Wet in parts of the south, dry in the northeast, otherwise normal
(8) **Note**: Very dry in parts of the north, otherwise normal
(9) **Note**: Very dry in the north, normal in the south.

Outlooks

Notes for use

Western Africa

Central Africa

Eastern Africa

Southern Africa

Outlooks: Notes for use

Outlooks for months 4 to 6:

As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range.

Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

Climatological odds:

A forecast is only provided in the outlooks where there is information in the model data about likely outcomes. Therefore, where the likelihoods for above, near and below normal conditions are evenly balanced the phrase 'climatological odds' will be used. This means the outcome could fall anywhere within the possible climatological range. Near-normal conditions should not necessarily be assumed, and users should update with shorter-term forecasts when available.

Outlook: December to May – Western Africa (1)

		Forecast summary		
		December	December to February	March to May
Mauritania	*Temperature*	Likely to be warmer than normal, but **Much more likely to be warmer than normal** in the far west	Generally Likely to be warmer than normal, but Likely to be colder than normal in the far south.	Much more likely to be warmer than normal
	Rainfall	Likely to be near-normal	Likely to be near-normal	Likely to be near-normal
Sierra Leone	*Temperature*	**Much more likely to be warmer than normal**	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be drier than normal	Likely to be near-normal	Likely to be wetter than normal
Liberia	*Temperature*	**Much more likely to be warmer than normal**	**Much more likely to be warmer than normal**	Much more likely to be warmer than normal
	Rainfall	Likely to be drier than normal	Climatological odds	Likely to be wetter than normal
Mali	*Temperature*	Generally Likely to be warmer than normal, but Likely to be colder than normal in parts of the south	Likely to be warmer than normal in the north, Likely to be colder than normal in the south	Likely to be warmer than normal
	Rainfall	Climatological odds	Likely to be near-normal	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

Outlook: December to May – Western Africa (2)

		Forecast summary		
		December	December to February	March to May
Ghana	*Temperature*	Likely to be warmer than normal, but **Much more likely to be warmer than normal** in the south	Likely to be colder than normal in the north, Likely to be warmer than normal in the south	Likely to be warmer than normal
	Rainfall	Likely to be drier than normal	Climatological odds	Climatological odds
Nigeria	*Temperature*	Likely to be colder than normal in the north, but **Much more likely to be warmer than normal** in the south	Likely to be colder than normal in the north, Likely to be warmer than normal in the south	Likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds, but Likely to be wetter than normal in the south
Cameroon	*Temperature*	Generally **Much more likely to be warmer than normal**, but Likely to be colder than normal in the far north	Likely to be warmer than normal	Much more likely to be warmer than normal
	Rainfall	Likely to be drier than normal	Likely to be drier than normal	Climatological odds
Burkina Faso	*Temperature*	Likely to be colder than normal	Likely to be colder than normal	Likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

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Outlook: December to May – Central Africa

		Forecast summary		
		December	December to February	March to May
Niger	*Temperature*	Likely to be colder than normal in the south, but Likely to be warmer than normal in the north	Likely to be colder than normal in the north, Likely to be warmer than normal in the south	Likely to be warmer than normal, and Much more likely to be warmer than normal in the north
	Rainfall	Climatological odds	Likely to be near-normal	Climatological odds
Chad	*Temperature*	Likely to be colder than normal in the south, but Likely to be warmer than normal in the north	Likely to be colder than normal in the north, Likely to be warmer than normal in the south	Likely to be warmer than normal, and Much more likely to be warmer than normal in the north
	Rainfall	Climatological odds	Likely to be near-normal	Climatological odds
Democratic Republic of Congo	*Temperature*	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the west	**Much more likely to be warmer than normal**	Much more likely to be warmer than normal
	Rainfall	Climatological odds in the east, Likely to be drier than normal in the west	Generally Likely to be drier than normal, but Climatological odds in the far east	Climatological odds, but Likely to be drier than normal in the far west

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

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Outlook: December to May – Eastern Africa (1)

		Forecast summary		
		December	December to February	March to May
Sudan	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal, and Much more likely to be warmer than normal in the north
	Rainfall	Climatological odds	Likely to be near-normal	Climatological odds
South Sudan	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be near-normal	Climatological odds	Climatological odds, but Likely to be wetter than normal in the east
Uganda	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

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Outlook: December to May – Eastern Africa (2)

		Forecast summary		
		December	December to February	March to May
Tanzania	*Temperature*	Generally **Much more likely to be warmer than normal**, but **Likely to be near-normal** in some central parts	**Likely to be warmer than normal**	Likely to be warmer than normal
	Rainfall	**Likely to be wetter than normal**	Climatological odds, but **Likely to be wetter than normal** in the east	Climatological odds
Rwanda	*Temperature*	**Likely to be warmer than normal**	**Likely to be warmer than normal**	Likely to be warmer than normal
	Rainfall	**Likely to be near-normal**	Climatological odds	Climatological odds
Eritrea	*Temperature*	**Likely to be warmer than normal**	**Likely to be warmer than normal**	Likely to be warmer than normal
	Rainfall	**Likely to be near-normal**	**Likely to be near-normal**	Climatological odds in the north, but **Likely to be drier than normal in the south**

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

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Outlook: December to May – Eastern Africa (3)

		Forecast summary		
		December	December to February	March to May
Ethiopia	*Temperature*	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the south	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be near-normal	Likely to be near-normal	Climatological odds
Kenya	*Temperature*	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the east	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be wetter than normal in the east, but Likely to be drier than normal in the west	Climatological odds	Likely to be wetter than normal
Somalia	*Temperature*	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the south	**Much more likely to be warmer than normal**	Likely to be warmer than normal
	Rainfall	Likely to be near-normal in the north, but Likely to be drier than normal in the south.	Likely to be near-normal in the north, but Likely to be drier than normal in the south.	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

Outlook: December to May – Southern Africa (1)

		Forecast summary		
		December	December to February	March to May
South Africa	*Temperature*	Likely to be warmer than normal, but Likely to be near-normal in central parts	Likely to be warmer than normal	Generally Likely to be warmer than normal, but Likely to be near-normal in some central parts
	Rainfall	Climatological odds	Climatological odds	Climatological odds
Zambia	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Generally Climatological odds, but Likely to be wetter than normal in the northeast	Climatological odds	Climatological odds
Zimbabwe	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Climatological odds	Likely to be drier than normal	Climatological odds
Mozambique	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Climatological odds, but Likely to be wetter than normal in the far north	Generally Climatological odds, but Likely to be drier than normal in the far south and Likely to be near-normal in the far northeast	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

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Outlook: December to May – Southern Africa (1)

		Forecast summary		
		December	December to February	March to May
Malawi	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds
Madagascar	*Temperature*	Much more likely to be warmer than normal	Much more likely to be warmer than normal	Much more likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds

Outlooks for months 4 to 6: As forecast uncertainty generally increases with longer range **the 4-6-month outlook is less reliable than the 1-3 month outlook**. Outlook information will only be provided when the model data signals likely outcomes. Additionally, the longer range outlook utilises fewer models because not all seasonal models are available for the extended range. Information provided in this presentation should be used to raise early awareness of potential hazards only and should be updated with the 3-month outlook when available.

Annex 1 – Supplemental Information

For further information

WMO Lead Centre for Long-Range Forecast Multi-Model Ensemble (LC-LRFMME)
https://www.wmolc.org/seasonPmmeUI/plot_PMME

International Research Institute for Climate and Society (IRI)
http://iridl.ldeo.columbia.edu/maproom/

NOAA El Niño technical info
https://www.ncei.noaa.gov/access/monitoring/enso/

Met Office
https://www.metoffice.gov.uk/services/government/international-development

Climate Outlook Fora (WMO Factsheet), including:

Greater Horn of Africa Climate Outlook Forum (GHACOF): GHACOF 68 Statement (Aug 2024)
PRÉvisions climatiques Saisonnières en Afrique Soudano-Sahélienne (PRESASS): PRESASS April 2024 Final Communique

Technical notes

The WMO lead centre for long-range forecast multi-model ensemble (LC-LRFMME) produce a probabilistic multi-model mean forecast product in which the multi-model mean is based on uncalibrated model output with a model weighting system that accounts for errors in both the forecast probability and ensemble mean. The method used by LC-LRFMME separately computes a probabilistic forecast and calculates tercile probabilities with respect to climatology for each individual model, before creating the weighted multi-model mean. In seasonal prediction, shifts in the tercile probabilities are always closely associated with the shifts in the probability of extremes, and we can use the probability of terciles to provide information on the likelihood of above- or below- normal conditions. The thresholds used in the forecast summaries are defined below.

Seasonal forecasts rely on the aspects of the global weather and climate system that are more predictable, such as tropical sea-surface temperatures or the El Niño–Southern Oscillation (ENSO). However, whilst such forecasts may be able to show what is more or less likely to occur, they acknowledge that other outcomes are possible.

In addition, forecast uncertainty generally increases with longer range so the 6-month outlook is less reliable. It is also based on less information, because not all models are available to this range. Therefore the information presented here should be used to raise early awareness of potential hazards, and should be updated with the 3-month outlook when available.

In the report and tables precipitation is referred to as rainfall but in fact encompasses any form of water, liquid or solid, falling from the sky. Temperatures are the (2 metre) near-surface temperature.

Description	Definition
Much more likely to be below normal	When probability of lower tercile > 70%
More likely to be below normal	When probability of lower tercile is 40-70%
Likely to be near-normal	When probability of middle tercile is 40-70%
Much more likely to be near-normal	When probability of middle tercile > 70%
Likely to be above normal	When probability of upper tercile is 40-70%
Much more likely to be above normal	When probability of upper tercile > 70%
Climatological odds	When probabilities for all categories are roughly 33%

Global Producing Centres (GPC) forecasts used by WMO LC-LRFMME:

- GPC CPTEC (INPE),
- GPC ECMWF,
- GPC Exeter (Met Office),
- GPC Melbourne (BOM),
- GPC Montreal (CMC),
- GPC Moscow (Hydromet Centre of Russia),
- GPC Offenbach (DWD),
- GPC Pretoria (SAWS),
- GPC Seoul (KMA),
- GPC Tokyo (JMA),
- GPC Toulouse (Meteo France),
- GPC Washington (NCEP)

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