

# AFRICA: Monthly Climate Outlook December to September

**Issued: March 2022**

[Overview](#)

[Current Status](#)

[Outlooks](#)

[Annex 1 – Supplemental Information](#)

# 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

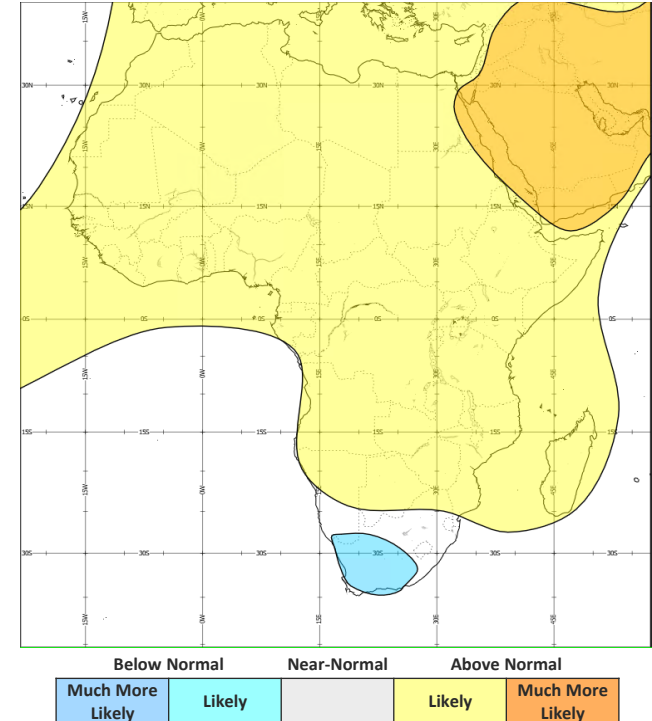
## Current Status:

Over the last three months, tropical parts of the continent have seen mostly hot conditions, whereas parts of southern Africa have experienced near- or below normal temperatures, particularly Madagascar. Across northern Africa temperatures have been near- or below normal widely during December and January. However, for February, much of northwest Africa experienced warm conditions.

## Outlook:

During next three months, most of the continent is likely to be warmer than normal. The main exception to this being for parts of southern Africa, where temperatures are likely to be below normal.

## 3-Month Outlook April to June - Temperature



# Africa Current Status and Outlook - Rainfall

## Current Status:

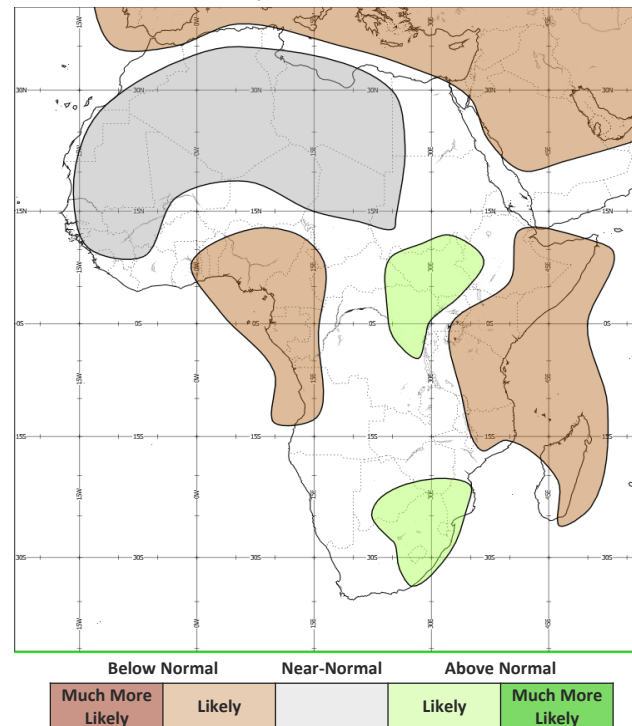
At this time of year rainfall tends to be focused on central/southern/eastern parts of the continent. After a dry December for some of these areas, particularly southeast Africa, January was wetter, whilst wet weather in February was focussed across more eastern parts of the continent, particularly Tanzania.

## Outlook:

Over the next three months, seasonal rains over East Africa will move north through this period. For some areas (including Somalia, Madagascar, northern Mozambique, eastern Ethiopia and parts of Kenya), it is likely to be drier than normal. Below normal rainfall is also likely from Angola up to the Guinea coast. Wetter than normal conditions are likely for parts of central Africa, including the northeast of the DRC as well as South Sudan. Wetter than normal conditions are also likely for eastern South Africa, eSwatini, Lesotho, and southern Mozambique.

Beyond this, during July to September, wetter than normal conditions are likely in many parts of East Africa and the Eastern Sahel, including Rwanda, Uganda, Sudan, South Sudan and parts of Ethiopia. However, it is likely to remain drier than normal in southeast Ethiopia and the coastal regions of Kenya and Tanzania. Also, it is likely to be drier than normal in much of Southern Africa.

## 3-Month Outlook April to June - Rainfall



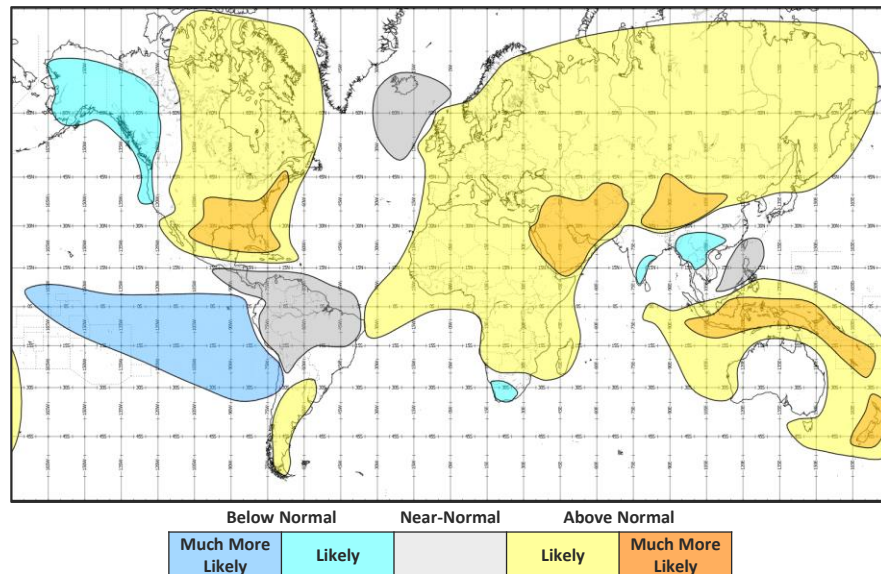
# Global Outlook - Temperature

## Outlook:

La Niña is ongoing across the tropical Pacific, persisting longer than originally anticipated. La Niña will remain the main driver of temperature anomalies across the tropics over the next three months, this despite La Niña's expected weakening through this period.

As is typical due to climate change, many parts of the globe are likely to see above normal temperatures. However, there are some notable exceptions. Consistent with La Niña, near- to below normal temperatures are most likely for some northern and western parts of South America, Australia and northwest North America. Near- to below normal temperatures are also likely for parts of southern and southeast Asia.

## 3-Month Outlook April to June - Temperature



# Global Outlook - Rainfall

## Outlook:

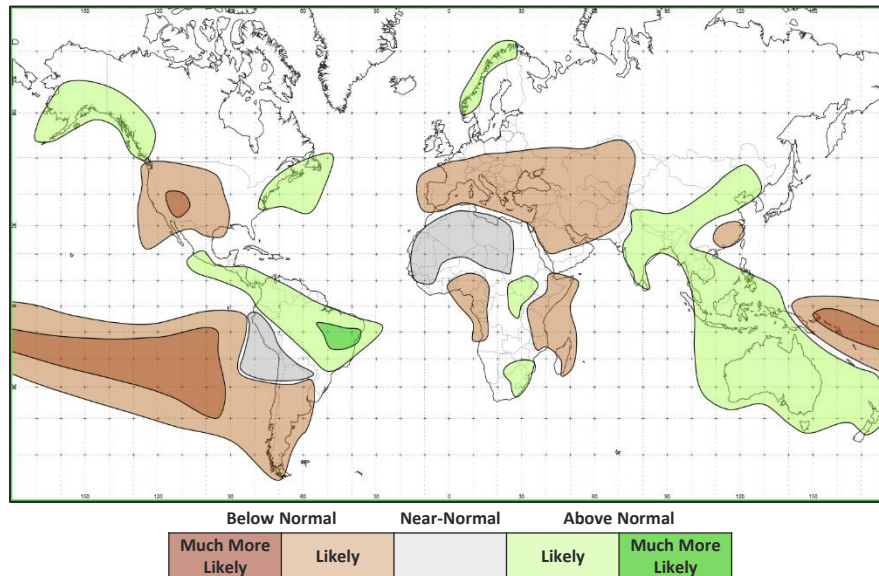
**El Niño-Southern Oscillation (ENSO)** – La Niña persists with sea surface temperatures and atmospheric conditions across the Pacific basin indicative of a weak ongoing event. The event has peaked and, according to NOAA, whilst La Niña is likely to continue into the Northern Hemisphere early summer (53% chance of lasting June-August 2022, and a 40-50% chance of La Niña or ENSO-neutral thereafter). The effects of La Niña are likely to remain wide-reaching during the rest of the Boreal spring and into the summer.

With a couple of notable exceptions (including East Africa) La Niña, very broadly speaking, tends to increase the likelihood of wetter than normal conditions across many land areas of the tropics. More information on typical impacts can be found here <https://www.metoffice.gov.uk/research/climate/seasonal-to-decadal/gpc-outlooks/el-nino-la-nina/enso-impacts>

For the next three months, wetter than normal conditions are likely across much of south and southeast Asia, as well as Australia. Wetter than normal conditions are also likely for parts of southeast Africa, as well as central Africa (northeast DRC and South Sudan in particular), as well as the western and eastern coastal areas of North America. Parts of the north of South America are also likely to be wetter than normal. Drier than normal conditions are likely in East Africa as well as large parts of Europe, the Middle East and Central Asia.

**Indian Ocean Dipole (IOD)** – The IOD returned to a neutral state during early November and is expected to remain neutral throughout April to June. It will therefore have little effect on global climate during this period.

## 3-Month Outlook April to June - Rainfall



# Current Status

[Current Status maps](#)

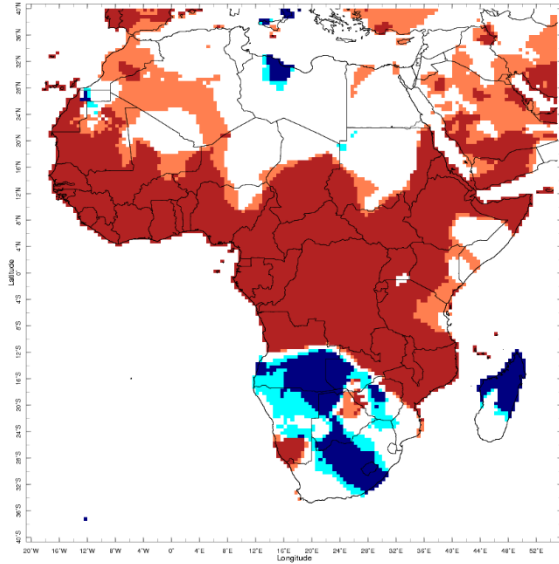
[Western Africa](#)

[Central Africa](#)

[Eastern Africa](#)

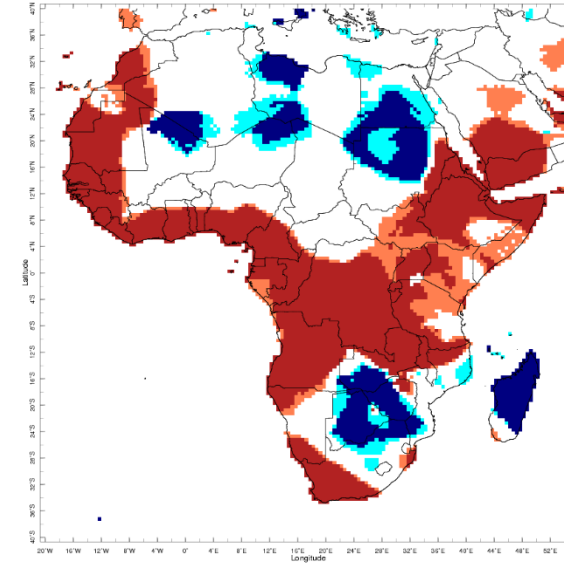
[Southern Africa](#)

# Current Status – Temperature percentiles



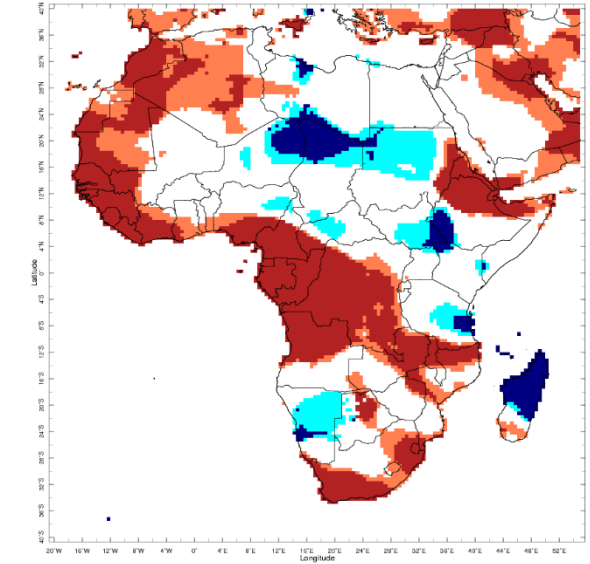
Dec 2021

December



Jan 2022

January



Feb 2022

February

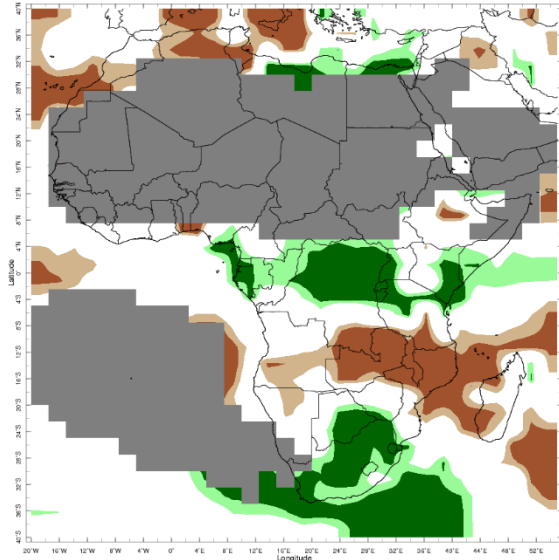
Temperature Percentiles (BLUE below 20th and RED above 80th)



**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.

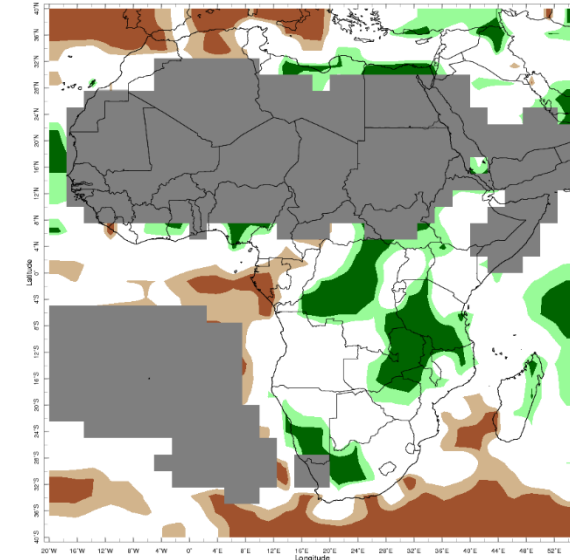


# Current Status – Precipitation percentiles



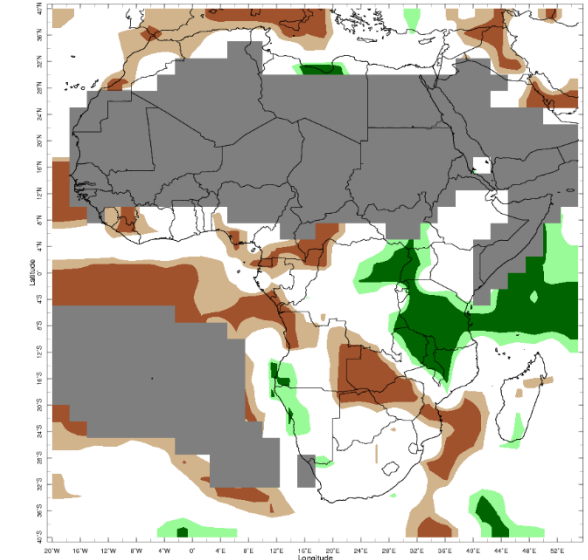
Dec 2021

December



Jan 2022

January



Feb 2022

February



**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 10 mm/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.

## Current Status – Western Africa

### Current Status: Temperature

	December	January	February
Sierra Leone	Hot	Hot	Hot
Liberia	Hot	Hot	Hot
Mali	Hot	Normal	Mixed (1)
Ghana	Hot	Hot	Mixed (2)
Nigeria	Hot	Hot	Mixed (2)
Cameroon	Hot	Hot	Hot

### Current Status: Rainfall

	December	January	February
	Normal*	Normal	Dry
	Normal	Normal	Normal
	Normal*	Normal*	Normal*
	Normal	Wet	Normal
	Normal	Wet	Normal (3)
	Normal	Normal	Dry

#### 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:** Cold in the north; normal elsewhere
- (2) **Note:** Warm in the south; normal elsewhere
- (3) **Note:** Dry in the southern coastal regions

## Current Status – Central Africa

### Current Status: Temperature

	December	January	February
Niger	Hot	Normal	Mixed (1)
Chad	Hot	Normal	Mixed (1)
DRC	Hot	Hot	Hot

### Current Status: Rainfall

	December	January	February
	Normal*	Normal*	Normal*
	Normal*	Normal*	Normal*
	Mixed (2)	Very Wet	Mixed (3)

#### 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:** Very cold in the north; normal elsewhere
- (2) **Note:** Very Wet in the north, dry in the south and normal elsewhere
- (3) **Note:** Normal for most areas, though very wet in the far east

## Current Status – Eastern Africa (1)

Current Status: Temperature

	December	January	February
Sudan	Normal	Mixed (2)	Mixed (2)
South Sudan	Hot	Warm	Cold
Uganda	Hot	Hot	Normal
Rwanda	Hot	Hot	Normal

Current Status: Rainfall

	December	January	February
	Normal*	Normal*	Normal*
	Normal*	Mixed (3)	Mixed (3)
	Mixed (1)	Normal	Wet
	Very Wet	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:** Very Wet in the west; normal elsewhere
- (2) Note:** Normal in the south, cold or very cold in the north
- (3) Note:** Wet in the south, normal\* elsewhere

## Current Status – Eastern Africa (2)

### Current Status: Temperature

	December	January	February
Tanzania	Hot	Mixed (4)	Normal (5)
Ethiopia	Mixed (2)	Mixed (2)	Mixed (6)
Kenya	Hot	Warm	Normal
Somalia	Normal	Warm	Normal (7)

### Current Status: Rainfall

	December	January	February
	Mixed (3)	Very Wet	Very Wet
	Normal	Normal	Normal
	Wet	Normal	Normal
	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:** Normal in the west, very dry in the east
- (2) **Note:** Hot in the northwest, hot in the southeast
- (3) **Note:** Wet in the north, very dry in the south.
- (4) **Note:** Normal in parts of the east, elsewhere warm or hot
- (5) **Note:** Locally very cold in the east
- (6) **Note:** Hot in the north, very cold in the far southwest, normal elsewhere
- (7) **Note:** Hot in the far north

# Current Status – Southern Africa

## Current Status: Temperature

	December	January	February
South Africa	Cold	Mixed (1)	Warm
Zambia	Mixed (2)	Mixed (2)	Hot
Zimbabwe	Cool	Cold	Mixed (3)
Mozambique	Hot	Normal	Mixed (3)
Malawi	Hot	Hot	Hot
Madagascar	Cold	Cold	Cold

## Current Status: Rainfall

	December	January	February
	Very Wet	Mixed (5)	Normal
	Very Dry	Very Wet	Mixed (6)
	Normal	Wet	Very Dry
	Very Dry	Normal	Mixed (7)
	Very Dry	Wet	Very Wet
	Mixed (4)	Wet	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:** Hot in the southwest, cold in the northeast
- (2) Note:** Hot in the east, cold in the west
- (3) Note:** Hot in the northeast, normal elsewhere
- (4) Note:** Dry in the far south and far north, normal elsewhere
- (5) Note:** Very wet in parts of the southwest, normal elsewhere
- (6) Note:** Very dry in the west, very wet in the east.
- (7) Note:** Very wet in the far north, very dry in parts of the south, normal elsewhere

# 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: April to September – Western Africa (1)

		Forecast summary		
		April	April to June	July to September
Sierra Leone	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
Liberia	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
Mali	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be near-normal
	Rainfall	Likely to be near-normal	Likely to be near-normal	Likely to be wetter than normal
Ghana	Temperature	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 in the east; Climatological odds elsewhere	Likely to be drier than normal in the east; Climatological odds elsewhere	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: April to September – Western Africa (2)

		Forecast summary		
		April	April to June	July to September
Nigeria	Temperature	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 drier than normal	Climatological odds
Cameroon	Temperature	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 drier than normal	Likely to be drier than normal

**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: April to September – Central Africa

		Forecast summary		
		April	April to June	July to September
Niger	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be near-normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds
Chad	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be near-normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds
Democratic Republic of Congo	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Much more likely to be warmer than normal
	Rainfall	Likely to be drier than normal in the west; Likely to be wetter than normal in the east; Climatological odds elsewhere	Likely to be drier than normal in the west; Likely to be wetter than normal in the east; Climatological odds elsewhere	Likely to be drier than normal in the west; Likely to be wetter than normal in the east; Climatological odds elsewhere

**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: April to September – Eastern Africa (1)

		Forecast summary		
		April	April to June	July to September
Sudan	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Climatological odds	Climatological odds	Climatological odds
South Sudan	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal	Likely to be wetter than normal	Likely to be wetter than normal
Uganda	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal in the northwest; Likely to be drier than normal in the southeast; Climatological odds elsewhere	Likely to be wetter than normal in the northwest; Likely to be drier than normal in the southeast; Climatological odds elsewhere	Likely to be wetter than normal in the northwest; Likely to be drier than normal in the southeast; Climatological odds elsewhere
Rwanda	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	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.

## Outlook: April to September – Eastern Africa (2)

		Forecast summary		
		April	April to June	July to September
Tanzania	Temperature	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 drier than normal	Likely to be drier than normal
Ethiopia	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal in the far west; Likely to be drier than normal elsewhere	Likely to be wetter than normal in the far west; Likely to be drier than normal elsewhere	Likely to be wetter than normal
Kenya	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be drier than normal	Likely to be drier than normal	Likely to be wetter than normal
Somalia	Temperature	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 drier than 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: April to September – Southern Africa (1)

		Forecast summary		
		April	April to June	July to September
South Africa	Temperature	Likely to be colder than normal for the southwest; Climatological odds elsewhere	Likely to be colder than normal for the southwest; Climatological odds elsewhere	Likely to be near-normal
	Rainfall	Likely to be wetter than normal in the east and southeast. Climatological odds elsewhere	Likely to be wetter than normal in the east and southeast. Climatological odds elsewhere	Climatological odds
Zambia	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
Zimbabwe	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be wetter than normal in the far south; Climatological odds elsewhere	Likely to be wetter than normal in the far south; Climatological odds elsewhere	Climatological odds
Mozambique	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal in the far south; Likely to be drier than normal in the far north; Climatological odds elsewhere	Likely to be wetter than normal in the far south; Likely to be drier than normal in the far north; Climatological odds elsewhere	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: April to September – Southern Africa (1)

		Forecast summary		
		April	April to June	July to September
Malawi	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be drier than normal	Climatological odds	Climatological odds
Madagascar	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be drier than normal	Likely to be drier than 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.

# 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](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.ncdc.noaa.gov/teleconnections/enso/indicators/sst.php>

Met Office

<https://www.metoffice.gov.uk/services/government/international-development>

Climate Outlook Fora (<https://public.wmo.int/en/our-mandate/climate/regional-climate-outlook-products>), including:

Greater Horn of Africa Climate Outlook Forum (GHACOF): [GHACOF 60 Statement](#) (February 2022)

PRÉvisions climatiques Saisonnières en Afrique Soudano-Sahélienne (PRESASS): <http://acmad.net/rcc/presassS.php> (April 2021)

Southern African Regional Climate Outlook Forum (SARCOF): <http://csc.sadc.int/en/news-and-events/326-climate-outlook-forum-2021-sarcof-25> (August 2021)

PRÉvisions climatiques Saisonnières en Afrique, pays du Golfe de Guinée (PRESAGG): <http://acmad.net/rcc/presagg.php> (February 2021)

South-West Indian Ocean Climate Outlook Forum (SWIOCOF) - [http://www.acmad.net/new/NEWSITEACMAD/wp-content/uploads/2021/10/SWIOCOF-10\\_Statement-EN.pdf](http://www.acmad.net/new/NEWSITEACMAD/wp-content/uploads/2021/10/SWIOCOF-10_Statement-EN.pdf) (October 2021)

# 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 CPTC (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)

# Enquiries

Email: [internationaldevelopment@metoffice.gov.uk](mailto:internationaldevelopment@metoffice.gov.uk)

Web: <https://www.metoffice.gov.uk/services/government/international-development>