

Global: Monthly Climate Outlook November to August

Issued: February 2023

[Overview](#)

[Current Status](#)

[Outlooks](#)

[Annex 1 – Supplemental Information](#)

Overview

[MENA, Caribbean and British Overseas Territories Current Status and Outlook – Temperature](#)

[MENA, Caribbean and British Overseas Territories Current Status and Outlook – Rainfall](#)

[Global Seasonal Outlook – Temperature](#)

[Global Seasonal Outlook – Rainfall](#)

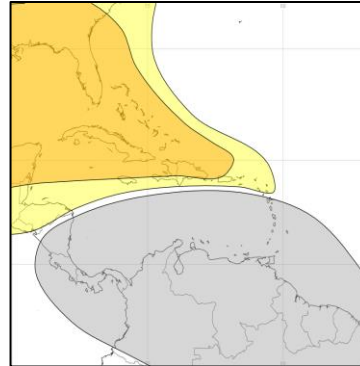
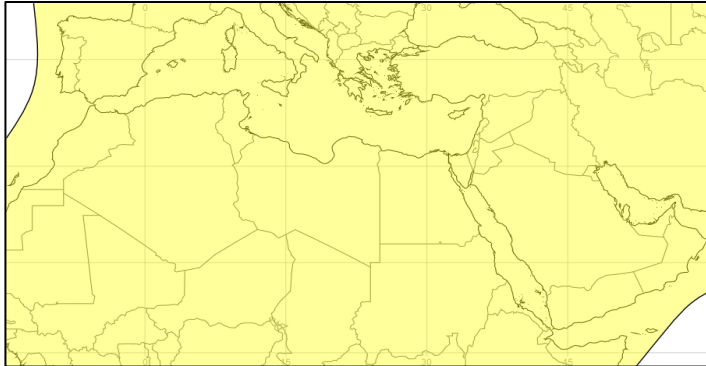
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Temperature

Current Status:

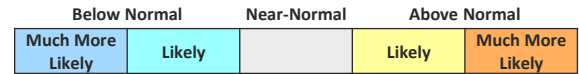
Over the last three months, it has been warm or hot across MENA and southern Europe. It has often been warm in the Caribbean region, whilst British Overseas Territories in the Pacific and Indian Ocean were cold.

Outlook:

Over the next three months, warmer than normal conditions are likely across most of the MENA and southern Europe. Across the Caribbean region the Lesser Antilles are likely to see near-normal temperatures while warmer than normal conditions are likely or much more likely for the Greater Antilles



3-Month Outlook March to May - Temperature



Left: Middle East and North Africa

Right: Caribbean region

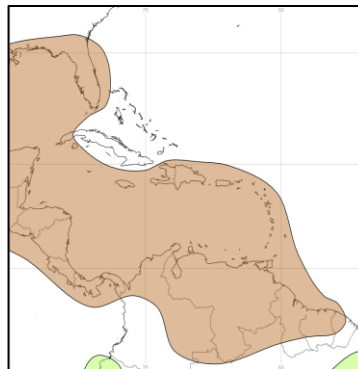
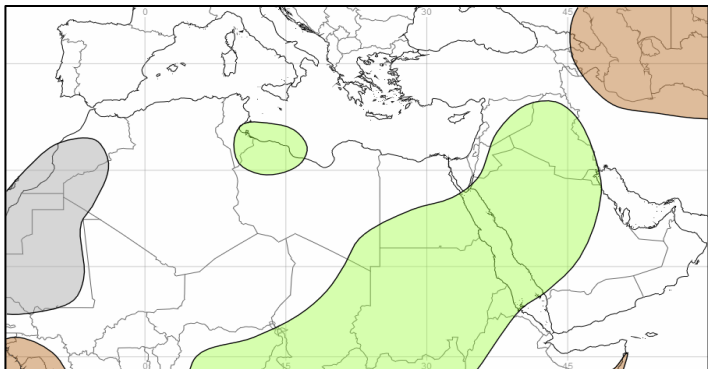
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Rainfall

Current Status:

Over the last three months, the MENA and Caribbean regions have been near-normal to dry. Some parts of the Levant were wetter than normal in November and again in January. The Lesser Antilles were also wet in January.

Outlook:

In the next three months, wetter than normal conditions are likely across inland parts of Levant, Saudi Arabia and some parts of North Africa. In the Caribbean, drier than normal conditions are likely across many parts of the region.



3-Month Outlook March to May - Rainfall

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

Left: Middle East and North Africa

Right: Caribbean region

Global Outlook - Temperature

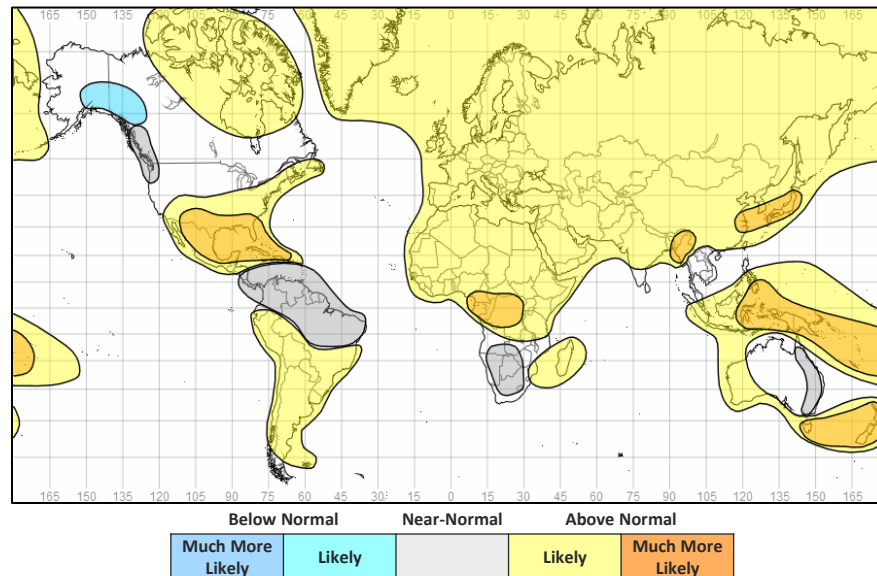
Outlook:

The influence of La Niña is likely to reduce further over the next three months, as the El Niño Southern Oscillation (ENSO) is expected to become neutral during the northern hemisphere spring.

Many regions are likely to be warmer than normal, consistent with a changing climate. However, there are exceptions, mostly as a legacy of the waning La Niña; these include northern South America, mainland Southeast Asia and parts of Canada where near normal or colder than normal conditions are likely.

Globally, La Niña acts to cool temperatures and can often suppress rising temperatures due to climate change. Looking further into 2023, early predictions highlight an increased likelihood of El Niño conditions taking hold in the August to October period (60% likelihood in NOAA forecast). While forecasts looking this far ahead are inherently uncertain, particularly when issued at this time of year, there is a consistent message emerging from many international modelling centres.

3-Month Outlook March to May - Temperature



Global Outlook - Rainfall

Outlook:

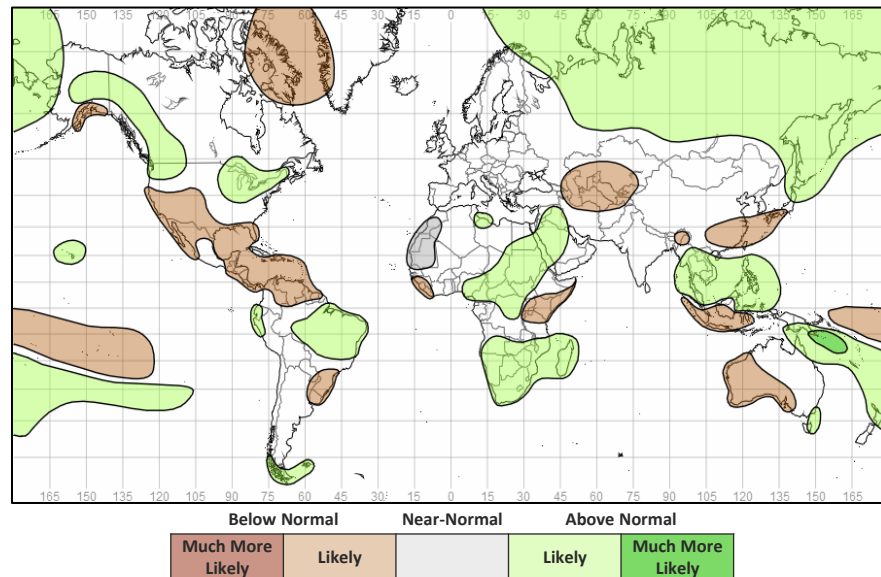
El Niño-Southern Oscillation (ENSO) – Whilst oceanic indicators, including sea surface temperatures (SSTs), are moving towards ENSO-neutral conditions, the atmosphere has been slower to respond, and the current La Niña event continues to influence global weather and climate. However, this effect is likely to be short-lived, as the current multi-year event is expected to soon end, likely within the next month.

ENSO-neutral conditions are expected to prevail during the northern-hemisphere spring and early summer (90% likelihood for March-May), with increasing chances of El Niño at longer forecast lead times (60% likelihood for August-October) However, due to the spring prediction barrier, uncertainty is higher, and this can typically be associated with lower forecast accuracy.

With ENSO-neutral conditions expected to begin within the next couple of months and persist through the Northern Hemisphere spring and early summer, forecast predictability on seasonal timescales is expected to be lower than in recent years when ENSO has been active.

Indian Ocean Dipole (IOD) – The Indian Ocean Dipole is neutral and therefore won't provide any predictive value for this period.

3-Month Outlook March to May - Rainfall



Current Status

[Current Status maps](#)

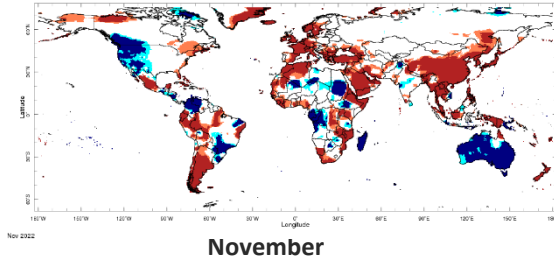
[MENA – Middle East](#)

[MENA – North Africa](#)

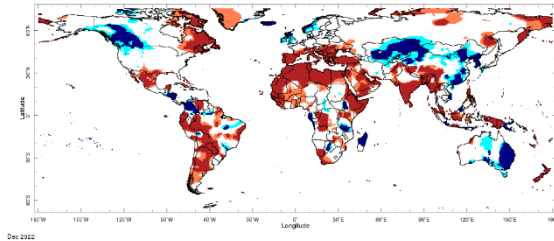
[Caribbean](#)

[British Overseas Territories](#)

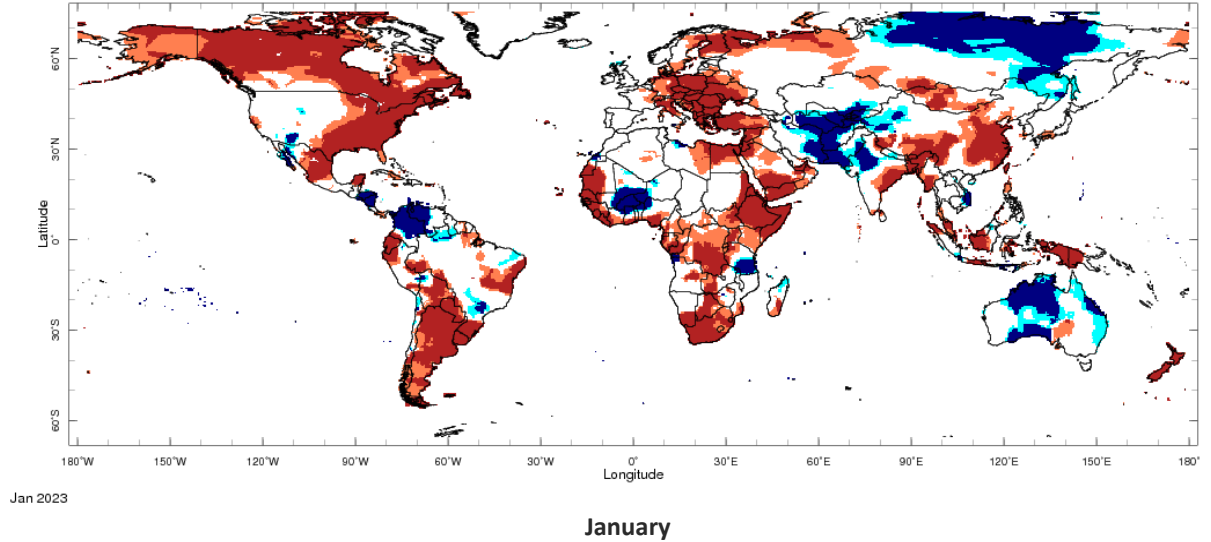
Current Status – Temperature percentiles



November



December

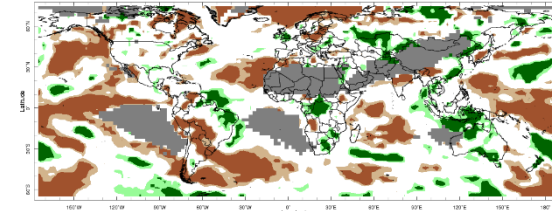


January

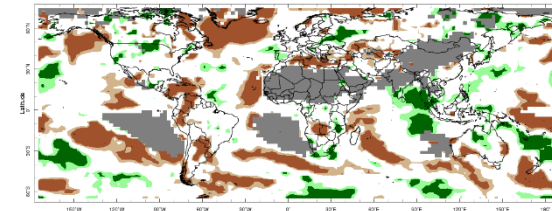


Notes: The percentiles shown in the map indicate a ranking of temperature, with the 0th percentile being the coolest and the 100th percentile being the warmest in the 1981-2010 climatology. Orange and red shading represent values above the 80th (Warm) and 90th (Hot) percentile, respectively; regions 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.

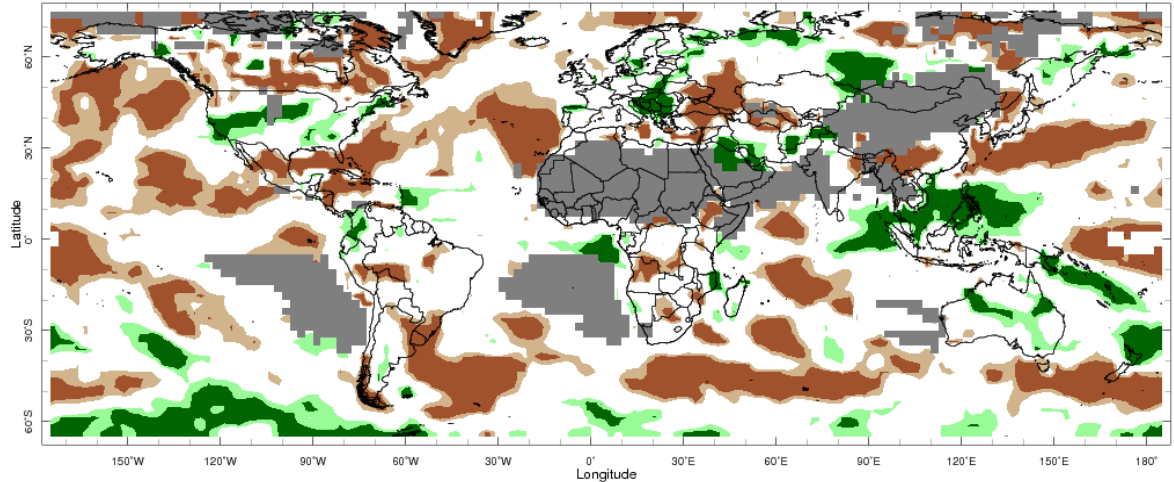
Current Status – Precipitation percentiles



Nov 2022



Dec 2022



Jan 2023

January



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 – MENA – Middle East

Current Status: Temperature

	November	December	January
Turkey	Hot	Hot	Hot
Palestine	Warm	Hot	Hot
Lebanon	Warm	Hot	Hot
Jordan	Hot	Hot	Hot
Syria	Warm	Hot	Hot
Iraq	Warm	Warm	Normal
Yemen	Hot	Hot	Hot

Current Status: Rainfall

	November	December	January
	Normal	Dry	Very Dry
	Normal	Very Dry	Very Dry
	Normal	Very Dry	Very Dry
	Wet	Very Dry	Very Dry
	Normal	Normal	Dry
	Normal	Normal	Wet
	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:

Current Status – MENA – North Africa

Current Status: Temperature

	November	December	January
Mauritania	Warm	Hot	Hot
Morocco	Hot	Hot	Normal
Algeria	Mixed (1)	Hot	Normal
Tunisia	Hot	Hot	Normal
Libya	Mixed (2)	Hot	Normal
Egypt	Mixed (2)	Hot	Hot
Eritrea	Hot	Hot	Hot

Current Status: Rainfall

	November	December	January
	Normal*	Normal*	Normal*
	Dry	Normal	Normal
	Dry	Very Dry	Normal
	Normal	Very Dry	Normal
	Mixed (3)	Very Dry	Normal
	Normal*	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: Cold in far south, hot elsewhere

(2) Note: Cold in far south, mainly normal elsewhere

(3) Note: Wet in parts of the north, normal* elsewhere

Current Status – Caribbean

Current Status: Temperature

	November	December	January
Caribbean Region	Mixed (1)	Warm	Normal
Haiti	Normal	Normal	Normal
Guyana	Normal	Normal	Normal

Current Status: Rainfall

	November	December	January
Caribbean Region	Normal	Dry	Mixed (2)
Haiti	Dry	Very Dry	Very Dry
Guyana	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: Large variations across the region

(2) Note: Most of the region Dry/Very Dry but Very Wet across Lesser Antilles

Current Status – British Overseas Territories

	Current Status: Temperature		
	November	December	January
Southern Europe	Hot	Hot	Mixed (2)
Central Indian Ocean	Normal	Cold	Warm
Central Pacific	Cold	Cold	Cold

	Current Status: Rainfall		
	November	December	January
	Normal	Mixed (1)	Normal (3)
	Normal	Dry	Normal
	Normal	Very Dry	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 Gibraltar and Very Dry in Cyprus

(2) Note: Normal in Gibraltar, Hot in Cyprus

(3) Note: Very Dry in Cyprus

Outlooks

Outlooks – Notes for use

MENA – Middle East

MENA – North Africa

Caribbean

British Overseas Territories

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: March to August – MENA – Middle East (1)

		Forecast summary		
		March	March to May	June to August
Turkey	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
Palestine	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	Climatological odds	Likely to be near-normal
Lebanon	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	Climatological odds	Likely to be near-normal
Jordan	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 wetter than normal	Likely to be near-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: March to August – MENA – Middle East (2)

		Forecast summary		
		March	March to May	June to August
Syria	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	Climatological odds, but Likely to be wetter than normal in the east	Likely to be near-normal
Iraq	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 wetter than normal	Likely to be near-normal
Yemen	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	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: March to August – MENA – North Africa(1)

		Forecast summary		
		March	March to May	June to August
Mauritania	Temperature	Likely to be near-normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal	Likely to be near-normal	Climatological odds
Morocco	Temperature	Likely to be near-normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Likely to be wetter than normal	Likely to be near-normal	Climatological odds
Algeria	Temperature	Likely to be near-normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be near-normal	Climatological odds	Climatological odds
Tunisia	Temperature	Likely to be near-normal	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 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: March to August – MENA – North Africa(2)

		Forecast summary		
		March	March to May	June to August
Libya	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	Likely to be wetter than normal in the far northwest and far southeast; Climatological odds elsewhere	Climatological odds
Egypt	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 in the north; Likely to be wetter than normal in the south	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 wetter than normal	Likely to be wetter than normal	Likely to be wetter 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: March to August – Caribbean

		Forecast summary		
		March	March to May	June to August
Caribbean Region	Temperature	Likely to be colder than normal in the south; Likely to be warmer than normal in the north	Likely to be near-normal in the south; Likely to be warmer than normal in the north	Climatological odds
	Rainfall	Likely to be drier than normal	Likely to be drier than normal but Climatological odds in Turks and Caicos	Likely to be drier than normal
Haiti	Temperature	Likely to be warmer than normal	Much more 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
Guyana	Temperature	Likely to be near-normal	Likely to be near-normal	Climatological odds
	Rainfall	Climatological odds	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: March to August – British Overseas Territories

		Forecast summary		
		March	March to May	June to August
Southern Europe	Temperature	Likely to be near-normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Likely to be wetter than normal	Climatological odds	Climatological odds
Central Indian Ocean	Temperature	Likely to be near-normal	Likely to be warmer than normal	Likely to be warmer than normal
	Rainfall	Climatological odds	Climatological odds	Climatological odds
Central Pacific	Temperature	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds
	Rainfall	Climatological odds	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/>

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 (<https://public.wmo.int/en/our-mandate/climate/regional-climate-outlook-products>)

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 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 near-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

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