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Global: Monthly Climate Outlook October to July

Issued: January 2025

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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

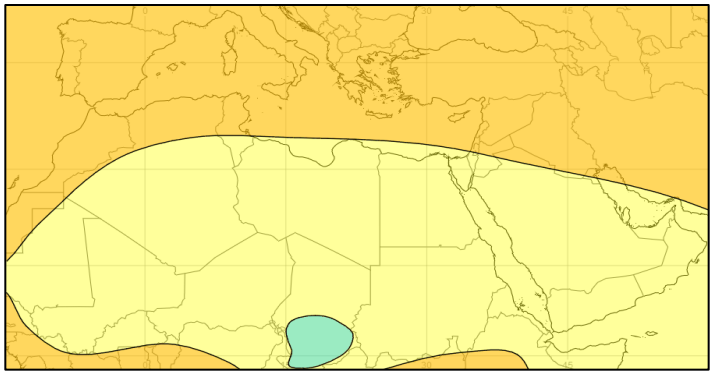
Global Seasonal Outlook – Rainfall

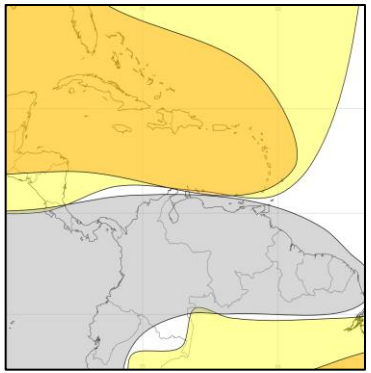
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Temperature

Current Status: The Caribbean Region has been hot over the past three months while more mixed conditions were observed over Colombia and Venezuela. Much of the MENA experienced normal temperatures, although parts of north Africa were warm or hot.

Outlook: Warmer than normal conditions are likely across the MENA, and much more likely for many places although occasional cold snaps are possible during February and March. Across the Caribbean, temperatures are very likely to be above normal. Meanwhile, near normal temperature are expected across northern parts of South America.

3-Month Outlook February to April - Temperature





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

Left: Middle East and North Africa
Right: Caribbean region

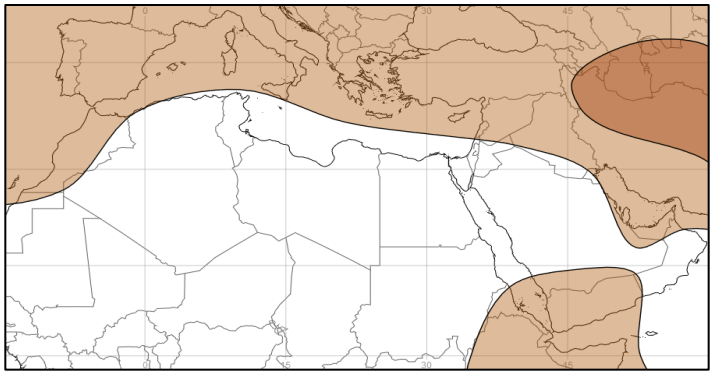
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Rainfall

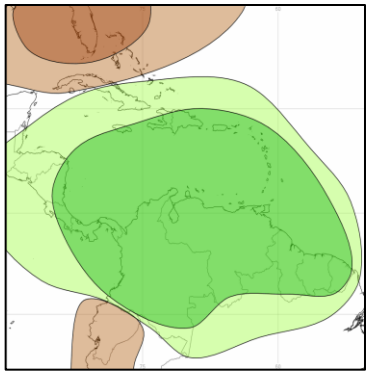
Current Status: Normal conditions were mostly observed across much of MENA between September and November, although parts of Syria and Iraq were wet in November. Across the Caribbean, conditions were more mixed with November and December being very wet across Haiti, Turks and Caicos and BVI. Very dry conditions have prevailed across Venezuela with Colombia being more mixed.

Outlook: For many parts of the MENA, the climatological chance of rainfall tends to increase into winter, although for countries such as Yemen the converse is true. Across northern parts of the region, seasonal systems favour drier than normal conditions through the coming three months, this is also true for Yemen. The Caribbean is likely to be wetter than normal. Across South America, wetter than normal conditions are very likely across Columbia, Guyana and Venezuela

Tropical Cyclones: The North Atlantic season is now over.

3-Month Outlook February to April - Rainfall





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

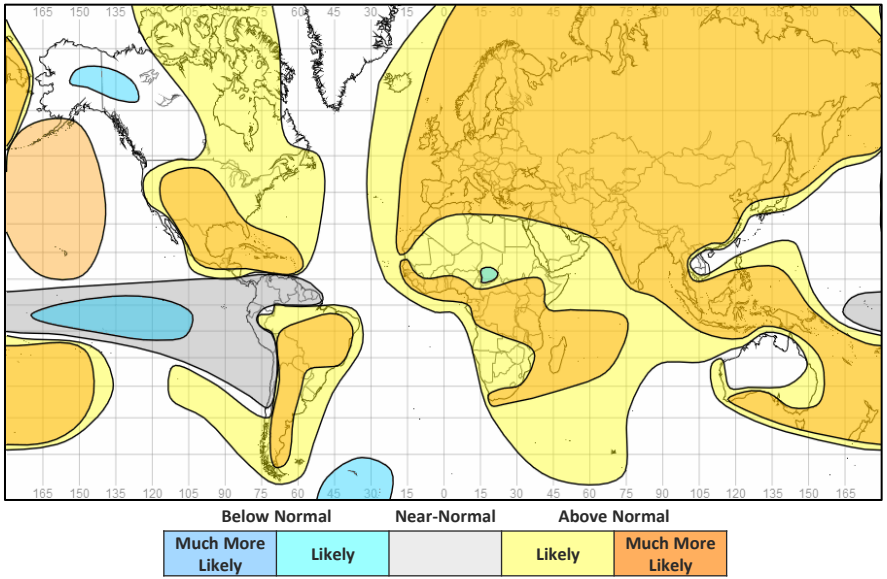
Left: Middle East and North Africa
Right: Caribbean region

Global Outlook - Temperature

Outlook: La Niña-like conditions have now developed and are likely to persist over the next two or three months, transitioning back to ENSO-Neutral in the northern hemisphere spring. More details in the precipitation section.

Many parts of the globe are likely to see warmer than normal conditions through the next three months. However, consistent with known La Niña connections, parts of Alaska, western Canada, and the south Pacific are more likely to be colder than normal.

3-Month Outlook February to April - Temperature



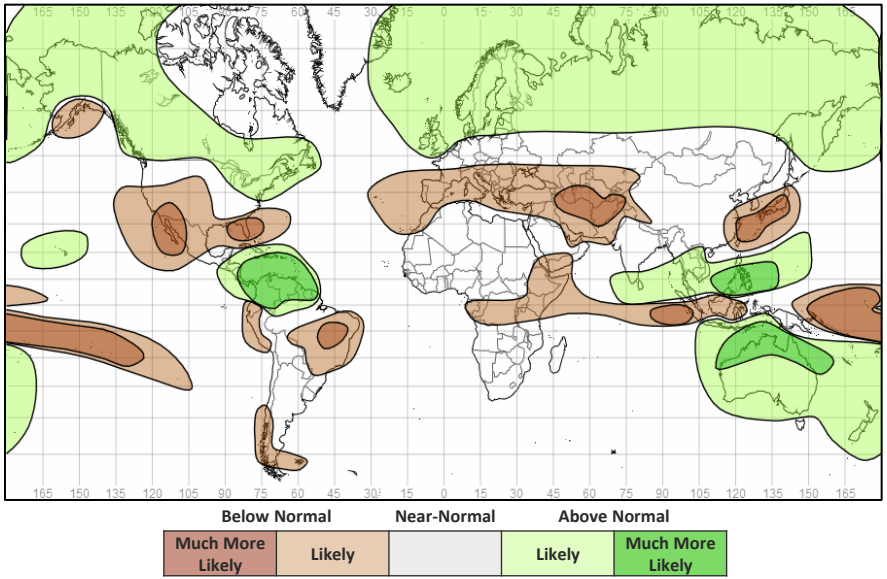
Global Outlook - Rainfall

Outlook:

El Niño-Southern Oscillation (ENSO) – La Niña has been declared by some climate monitoring services whilst conditions do not quite meet the criteria for others. Nevertheless, La Niña-like conditions now exist and will affect the global climate over the next three months, with then a return to ENSO-neutral in the northern hemisphere spring. Equatorial sea surface temperatures across the central and eastern Pacific are slightly below average. Atmospheric indicators, such as the Southern Oscillation Index (SOI), trade wind strength and dateline cloudiness, are now indicating that some ocean-atmosphere coupling may now be underway. La Niña typically improves 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.
With a couple of notable exceptions (e.g., 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

Indian Ocean Diploe (IOD) – Negative-like IOD conditions were observed through much of October and November. However, this event was never officially declared by the Bureau of Meteorology (BoM), falling short by just one week of the necessary 7 consecutive weeks of an IOD index below -0.4°C. The IOD is now at neutral levels and is expected to remain so throughout this period, offering little predictive value.

3-Month Outlook February to April - Rainfall



Current Status

Current Status maps

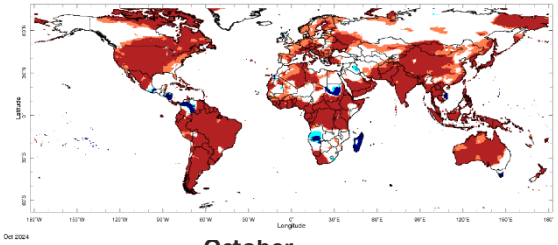
MENA – Middle East

MENA – North Africa

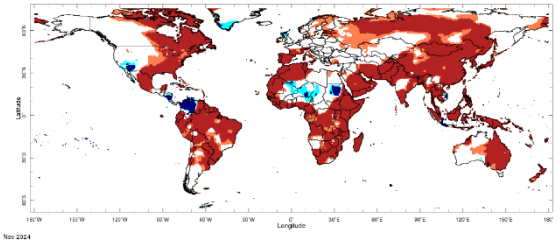
Caribbean

British Overseas Territories

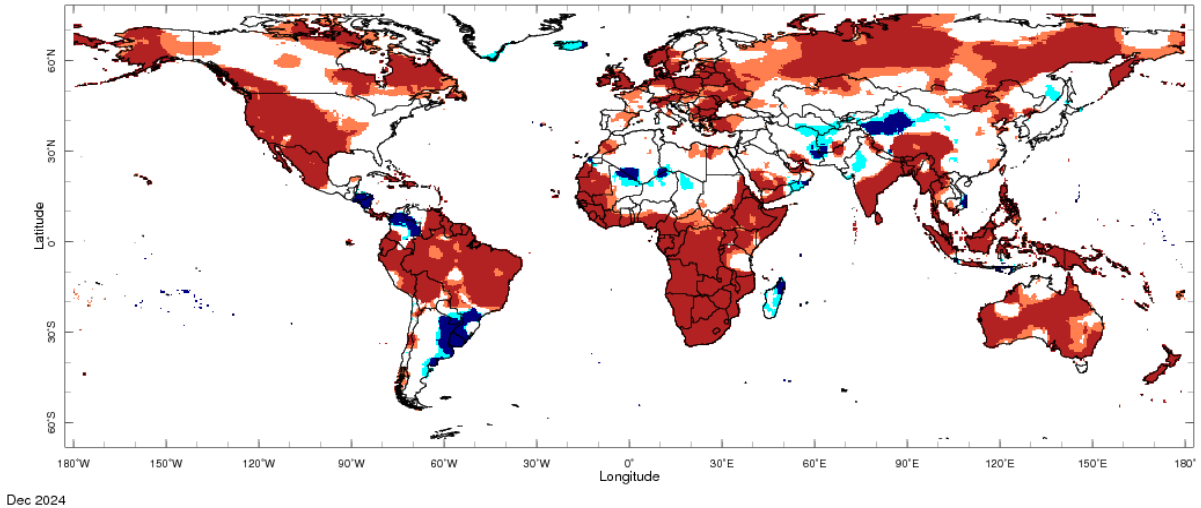
Current Status – Temperature percentiles



October



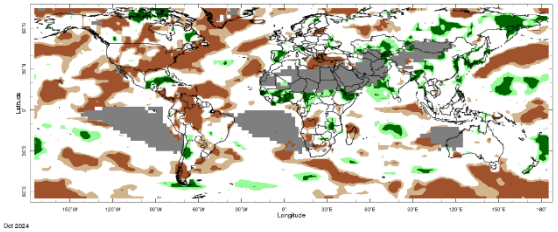
November



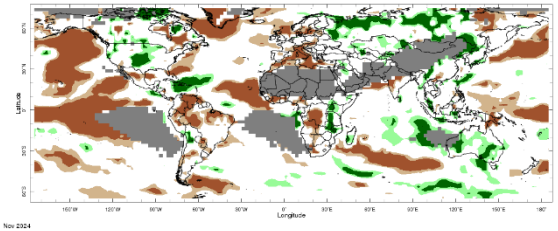
December

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.

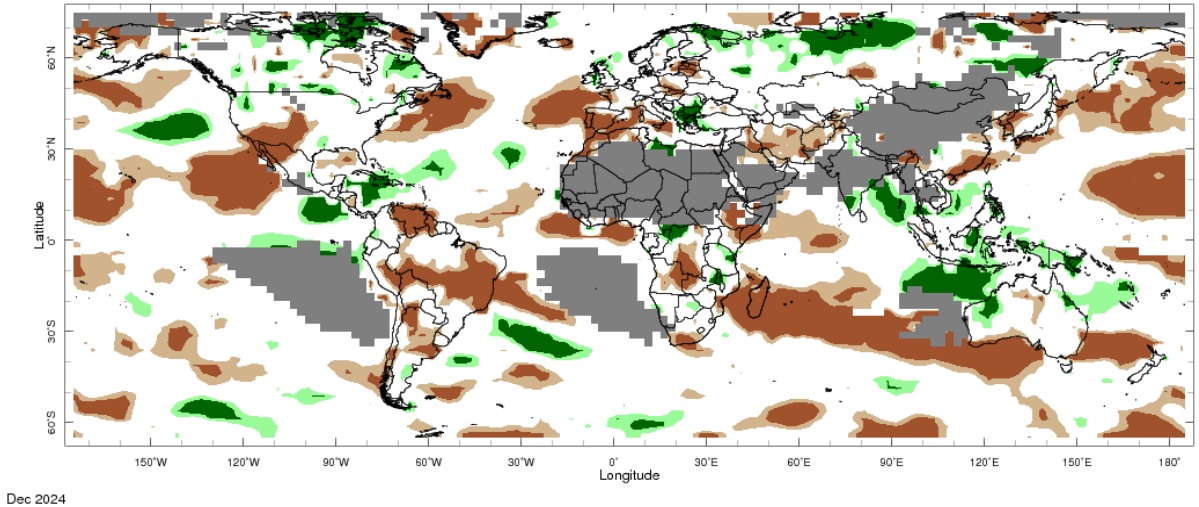
Current Status – Precipitation percentiles



October



November



December

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			Current Status: Rainfall		
	October	November	December	October	November	December
Turkey	Normal (1)	Normal (1)	Normal (1)	Mixed (2)	Normal	Normal
Palestine	Normal	Normal	Normal	Normal*	Normal	Normal
Lebanon	Normal	Normal	Normal	Dry	Normal	Normal
Jordan	Normal	Normal	Normal	Normal*	Normal	Normal
Syria	Normal	Normal	Normal	Dry	Wet	Mixed (5)
Iraq	Cool	Normal	Normal	Normal*	Wet	Dry (4)
Yemen	Hot	Hot	Hot (3)	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: Hot in the west
(2) Note: Normal in the north and east, very dry in the south and west
(3) Note: Normal in the east
(4) Note: Normal in far west.
(5) Note: Mostly normal, but wet in parts of the east

Current Status – MENA – North Africa

	Current Status: Temperature			Current Status: Rainfall		
	October	November	December	October	November	December
Morocco	Normal	Hot	Hot	Normal	Dry	Very Dry
Algeria	Mixed (1)	Mixed (4)	Normal (5)	Normal	Dry	Normal* (7)
Tunisia	Hot	Hot	Normal	Normal	Dry	Normal
Libya	Mixed (2)	Mixed (2)	Normal	Normal*	Dry	Normal* (7)
Egypt	Normal	Normal	Normal (6)	Normal*	Normal*	Normal*
Eritrea	Hot	Hot	Hot	Mixed (3)	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 west, hot in east
(2) Note: Normal, but Hot in the west
(3) Note: Normal* in the north, very wet in the south
(4) Note: Hot in the north, cool in the south
(5) Note: Cold in the far south
(6) Note: Hot in the northwest
(7) Note: Dry or very dry in the north

Current Status – Caribbean and Central America

	Current Status: Temperature			Current Status: Rainfall		
	October	November	December	October	November	December
Caribbean Region	Hot	Warm	Hot	Mixed (2)	Very Wet (7)	Very Wet (7)
Haiti	Hot	Normal	Hot	Normal	Very Wet	Very Wet
Guyana	Hot	Hot	Hot	Normal (4)	Dry	Normal
Venezuela	Mixed (1)	Mixed (1)	Mixed (1)	Very Dry	Very Dry	Very Dry
Columbia	Mixed (5)	Mixed (6)	Mixed (8)	Mixed (3)	Mixed (3)	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: Hot in the east and cool or cold in the west
(2) Note: Very wet in Cuba, dry for much of the Lesser Antilles, else normal.
(3) Note: Normal in the west, dry or very dry in the east
(4) Note: Dry in the south
(5) Note: Normal, but hot in the west and cool in the east
(6) Note: Cold in the north, hot in the south
(7) Note: Normal Windward Islands
(8) Note: Hot in the southwest, cold in the north and northeast

Current Status – British Overseas Territories

	Current Status: Temperature			Current Status: Rainfall		
	October	November	December	October	November	December
Southern Europe	Normal	Mixed (2)	Mixed (3)	Mixed (1)	Normal	Normal
Central Indian Ocean	Normal	Normal	Normal	Normal	Wet	Wet
Central Pacific	Normal	Cold	Cold	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:** Very wet in Gibraltar, very dry in Cyprus
(2) **Note:** Hot in Gibraltar, normal in Cyprus
(3) **Note:** Hot in Cyprus, normal in Gibraltar

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: February to July – MENA – Middle East (1)

		Forecast summary		
		February	February to April	May to July
Turkey	*Temperature*	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	Likely to be drier than normal	Likely to be drier than normal
Palestine	*Temperature*	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	Likely to be drier than normal	Likely to be drier than normal
Lebanon	*Temperature*	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	Likely to be drier than normal	Likely to be near-normal
Jordan	*Temperature*	Likely to be near-normal	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the north	Much more likely to be warmer than normal
	Rainfall	Likely to be drier than normal	Climatological odds	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: February to July – MENA – Middle East (2)

		Forecast summary		
		February	February to April	May to July
Syria	*Temperature*	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	Likely to be drier than normal	Climatological odds
Iraq	*Temperature*	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	Likely to be drier than normal	Climatological odds
Yemen	*Temperature*	Likely to be near-normal	Likely to be warmer than normal	Much more likely to be warmer than normal
	Rainfall	Likely to be near-normal	Likely to be drier 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: February to July – MENA – North Africa(1)

		Forecast summary		
		February	February to April	May to July
Mauritania	*Temperature*	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the far west	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	Likely to be near-normal	Climatological odds	Climatological odds
Morocco	*Temperature*	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 near-normal, but Likely to be drier than normal in the north	Likely to be drier than normal	Likely to be near-normal
Algeria	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal, and **Much more likely to be warmer than normal** in the north	Much more likely to be warmer than normal
	Rainfall	Likely to be near-normal, but Likely to be drier than normal in the far north	Climatological odds	Climatological odds
Tunisia	*Temperature*	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 near-normal, but Likely to be drier than normal in the north	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(2)

		Forecast summary		
		February	February to April	May to July
Libya	*Temperature*	Climatological odds	Likely to be warmer than normal	Much more likely to be warmer than normal
	Rainfall	Likely to be near-normal	Climatological odds	Likely to be near-normal
Egypt	*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 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 drier 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: February to July – Caribbean and Central America (1)

		Forecast summary		
		February	February to April	May to July
Caribbean Region	*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 wetter than normal**	**Much more likely to be wetter than normal**	Climatological odds, but Likely to be wetter than normal in the southeast
Haiti	*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 wetter than normal**	**Much more likely to be wetter than normal**	Climatological odds
Guyana	*Temperature*	Likely to be near-normal	Likely to be near-normal	Much more likely to be warmer than normal
	Rainfall	**Likely to be wetter than normal**	**Much more likely to be wetter 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: February to July – Caribbean and Central America (2)

		Forecast summary		
		February	February to April	May to July
Venezuela	*Temperature*	Likely to be warmer than normal	Likely to be near-normal	Much more likely to be warmer than normal
	Rainfall	Likely to be wetter than normal	**Much more likely to be wetter than normal**	Likely to be wetter than normal
Columbia	*Temperature*	Likely to be near-normal	Likely to be near-normal	Much more likely to be warmer than normal
	Rainfall	**Much more likely to be wetter than normal**	**Much more 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: February to July – British Overseas Territories

		Forecast summary		
		February	February to April	May to July
Southern Europe	*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	Likely to be drier than normal	Likely to be drier than normal
Central Indian Ocean	*Temperature*	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	Likely to be drier than normal
Central Pacific	*Temperature*	Climatological odds	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.

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 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)

Enquiries

Email: internationaldevelopment@metoffice.gov.uk

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