



Global: Monthly Climate Outlook May to February

Issued: August 2024

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Overview

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

<u>Global Seasonal Outlook – Temperature</u>

<u>Global Seasonal Outlook – Rainfall</u>

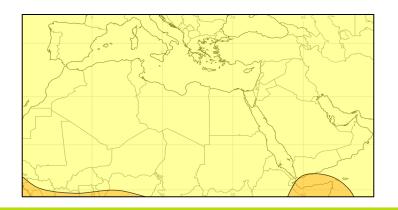


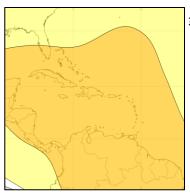


MENA, Caribbean and British Overseas Territories Current Status and Outlook - Temperature

Current Status: The Caribbean has been hot over the past three months. Conditions more variable across the MENA. Hot conditions were observed across much of North Africa (away from the northwest) and in the Levant in June. Otherwise, temperatures were normal.

Outlook: Warmer than normal conditions are very likely, increasing the likelihood of heat related impacts.





3-Month Outlook September to November - Temperature

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

Left: Middle East and North Africa

Right: Caribbean region



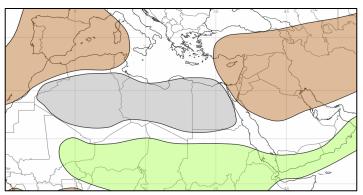


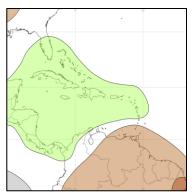
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Rainfall

Current Status: Many areas were normal or dry over the past three months. However, Haiti and northern parts of the Caribbean region were very wet in June and July. Turkey, Syria and Iraq were wet in May.

Outlook: The northern hemisphere autumn is a transitional period. At the start, conditions are typically dry across the bulk of the MENA, but as the season progresses rainfall increases, especially in the north. Overall, drier than normal conditions are most probable across much of the MENA. The main exception is across southern parts of the Arabian Peninsula with above average rainfall likely for Yemen. Across the Caribbean, wetter than normal conditions are most likely, although the southern Windward Islands are more likely to be drier than normal.

<u>Tropical Cyclone outlook</u>: Information can be found here. There is a strong signal that the remainder tropical cyclone season over the North Atlantic will be more active than normal. This signal is influenced by widely above average sea surface temperatures over the tropical Atlantic and an ENSO trend towards La Niña. This increases the risk of impactful landfalls across many areas including the Caribbean.





3-Month Outlook September to November - Rainfall

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

Left: Middle East and North Africa

Right: Caribbean region

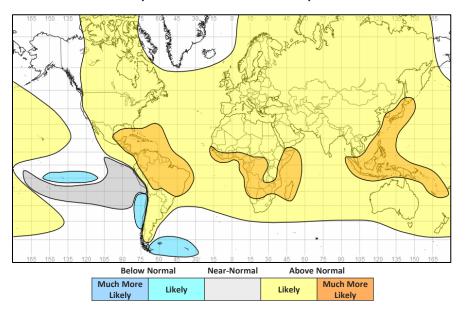




Global Outlook - Temperature

Outlook: Consistent with a warming climate, warmer than normal conditions are very likely across large parts of the globe. There are limited exceptions, most notably western parts of South America and the Central Pacific where near normal or colder than normal conditions are more likely – this linked to cooler sea surface temperatures in the Pacific.

3-Month Outlook September to November - Temperature



Met Office



Global Outlook - Rainfall

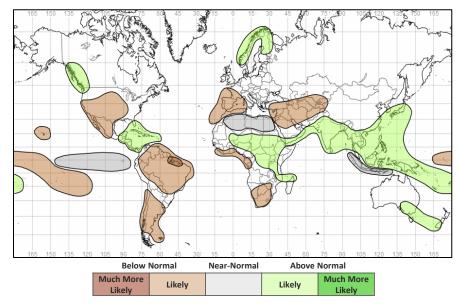
Outlook:

El Niño-Southern Oscillation (ENSO) — Both oceanic and atmospheric indicators are consistent with ENSO-neutral conditions. ENSO-neutral is expected to prevail over the next couple of months. There is a chance of La Niña developing at longer forecast lead times (October onwards), though still with some uncertainty. Latest model predictions continue to either delay and/or reduce the likelihood of a La Niña event developing.

According to CPC, the chance of La Niña developing in the period September-November is around 66%, rising to 74% in the early winter (November-January). However, other centres (such as BoM) have predictions which are much more finely balanced between ENSO-neutral and La Niña. Clearly, there is some uncertainty with predictions. Most likely is that ENSO-neutral conditions will persist for the next couple of months, with any transition to La Niña taking place from October onwards (45-65% likelihood). As such, predictability of weather patterns across many parts of the globe, is likely to be lower than this time last year, when an El Niño event was underway.

Indian Ocean Diploe (IOD) — The Indian Ocean Dipole (IOD) is currently neutral. Predictability of the IOD remains low with a wide range of outcomes in the coming months. In the short term, the IOD is most likely to remain neutral over the next month. However, later in the period, the chance of a negative IOD developing is slightly higher than either neutral or positive IOD development.

3-Month Outlook September to November - Rainfall







Current Status

Current Status maps

MENA – Middle East

MENA – North Africa

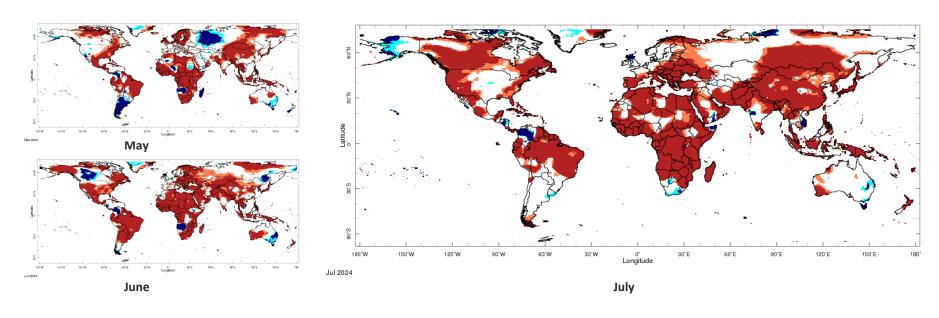
Caribbean

British Overseas Territories





Current Status – Temperature percentiles



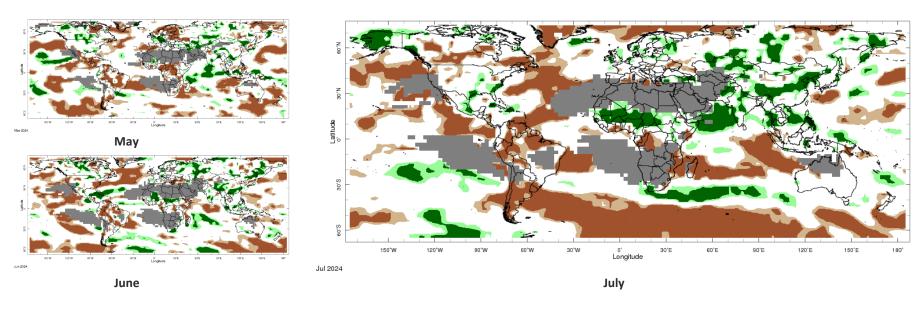


Notes: The percentiles shown in the map indicate a ranking of temperature, with the 0th percentile being the coolest and the 100th percentile being the warmest in the 1981-2010 climatology. Orange and red shading represent values above the 80th (Warm) and 90th (Hot) percentile, respectively; regions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





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		
	May	June	July
Turkey	Normal	Hot	Hot (2)
Palestine	Normal	Hot	Hot
Lebanon	Normal	Hot	Hot
Jordan	Normal	Hot	Hot
Syria	Normal	Hot	Hot
Iraq	Normal	Hot	Warm
Yemen	Mixed	Mixed (1)	Mixed

Current Status: Rainfall			
May	June	July	
Wet	Dry	Wet	
Normal*	Normal*	Normal*	
Normal*	Normal*	Normal*	
Normal*	Normal*	Normal*	
Wet	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 central parts, Hot in the west and the east.

(2) Note: Normal in the east





Current Status – MENA – North Africa

	Currei	Current Status: Temperature		
	May	June	July	
Mauritania	Mixed (1)	Mixed (1)	Mixed (1)	
Morocco	Mixed (2)	Normal	Hot	
Algeria	Mixed (3)	Hot	Hot	
Tunisia	Hot	Hot	Hot	
Libya	Hot	Hot	Hot	
Egypt	Warm	Hot	Hot	
Eritrea	Hot	Hot	Hot	

Current Status: Rainfall			
May	June	July	
Normal*	Normal*	Very Wet	
Very Dry	Normal*	Normal*	
Dry	Mixed (4)	Mixed (4)	
Normal	Normal*	Normal*	
Normal*	Normal*	Normal*	
Normal*	Normal*	Normal*	
Normal	Mixed (5)	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.ideo.columbia.edu/maproom/.

Additional Information:

Note: Normal or Cold in the north, hot in the south
Note: Hot in the north, normal or cold in the south
Note: Hot or warm in the north, cold in the south
Note: Wet in the far south, otherwise normal.
Note: Normal in the north, very dry in the south

Climate Outlook

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





Current Status – Caribbean

	Current Status: Temperature				
	May June July				
Caribbean Region	Hot	Hot	Hot		
Haiti	Hot	Hot	Hot		
Guyana	Normal	Hot	Hot		

Current Status: Rainfall				
May June July				
Normal	Mixed (1)	Mixed (2)		
Normal	Very Wet	Very Wet		
Normal	Normal	Very 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:

 Note: Very Wet in the north, dry across the Lesser Antilles and normal elsewhere
Note: Very Wet across Hispaniola, western Cuba and Jamacia. Very Dry across the Windward Islands, Normal elsewhere





Current Status – British Overseas Territories

	Current Status: Temperature			
	May June July			
Southern Europe	Normal	Warm	Hot	
Central Indian Ocean	Mixed (2)	Mixed (2)	Mixed (2)	
Central Pacific	Cold	Cold	Cold	

Cur	Current Status: Rainfall				
May	May June July				
Mixed (1)	Normal*	Normal*			
Wet	Normal	Wet			
Very Dry	Dry	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:

Note: Dry in Gibraltar, Normal in Cyprus
Note: Maldives hot, Seychelles cold.





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		
		September	September to November	December to February
Turkey	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
Palestine	Temperature	Much more 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
Lebanon	Temperature	Much more 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
Jordan	Temperature	Much more 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





Outlook: March to August – MENA – Middle East (2)

		Forecast summary		
		September	September to November	December to February
Syria	Temperature	Much more 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
Iraq	Temperature	Much more 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	Likely to be drier than normal
Yemen	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 wetter than normal	Likely to be wetter than normal	Climatological odds





Outlook: March to August – MENA – North Africa(1)

			Forecast summary	
		September	September to November	December to February
Mauritania	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
Morocco	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 near-normal	Likely to be drier than normal	Climatological odds
Algeria	Temperature	Much more 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 in the north, Likely to be near-normal in the south	Climatological odds
Tunisia	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 near-normal	Likely to be drier than normal in the north, Likely to be near-normal in the south	Climatological odds





Outlook: March to August – MENA – North Africa(2)

		Forecast summary		
		September	September to November	December to February
Libya	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
Egypt	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 near-normal	Likely to be near-normal	Climatological odds
Eritrea	Temperature	Climatological odds	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	Climatological odds





Outlook: March to August – Caribbean

		Forecast summary		
		September	September to November	December to February
Caribbean	Temperature	Much more likely to be warmer than normal	Much more likely to be warmer than normal	Likely to be warmer than normal
Region	Rainfall	*	Likely to be drier than normal in the southern Windward Islands, otherwise Likely to be wetter than normal	Climatological odds
Haiti	Temperature	Much more likely to be warmer than normal	Much more 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	Climatological odds
Guyana	Temperature	Much more 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 wetter than normal





Outlook: March to August – British Overseas Territories

		Forecast summary		
		September	September to November	December to February
Southern	Temperature	Much more likely to be warmer than normal	Likely to be warmer than normal	Likely to be warmer than normal
Europe	Rainfall	Likely to be drier than normal	Likely to be drier than normal	Climatological odds
Central Indian Ocean	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 wetter than normal	Likely to be wetter than normal	Climatological odds
Central Pacific	Temperature	Likely to be near-normal	Likely to be near-normal	Likely to be near-normal
	Rainfall	Likely to be drier than normal	Likely to be drier than normal	Likely to be drier than normal





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 (WMO Factsheet)





Technical notes

Supplemental Information

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 probabilistic 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)





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