

Global: Monthly Climate Outlook

August to May

Issued: November 2024

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Overview

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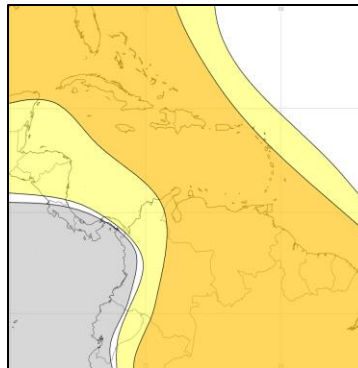
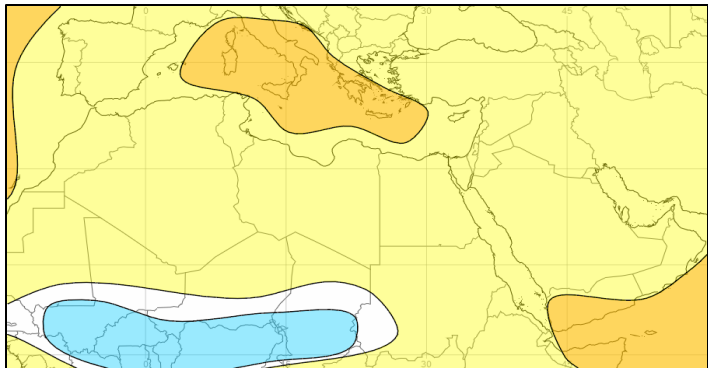
[Global Seasonal Outlook – Temperature](#)

[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. Warm or hot conditions have prevailed over MENA for much of the past three months although temperatures in Syria and Iraq were normal. Temperatures returned back to normal across many regions during October.

Outlook: Warmer than normal conditions are likely or much more likely across all areas apart from the Sahel where some areas may see cooler than normal conditions.



3-Month Outlook December to February - Temperature

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

Left: Middle East and North Africa

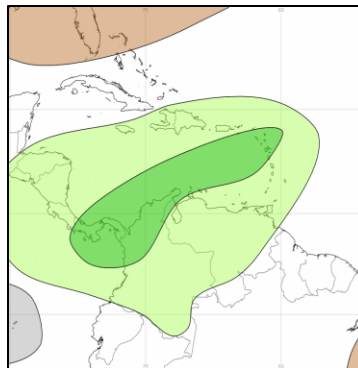
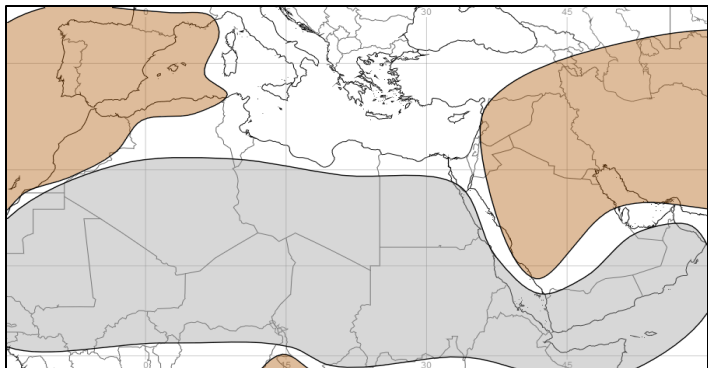
Right: Caribbean region

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

Current Status: Normal conditions were mostly observed across much of MENA between July and September. The main exceptions were for Eritrea and some western parts of Yemen which were very wet during August. Parts of the Caribbean Region were wet during August before widely dry conditions were observed in September, with October being more mixed. Very dry conditions have prevailed across Venezuela, Guyana and much of Colombia.

Outlook: During late autumn and into winter, rainfall amounts tend to increase across northern parts of MENA. For the December to February period, most areas are likely to experience drier than normal conditions. Normal conditions are likely across southern portions of MENA which are typically dry during this period. Across the Caribbean Region and into South America including Colombia and Venezuela, wetter than normal conditions are likely.

Tropical Cyclones: The North Atlantic season officially finishes at the end of November though on rare occasions systems can form beyond this. However, there are no signals currently of storms forming during this period.



3-Month Outlook December to February - Rainfall

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

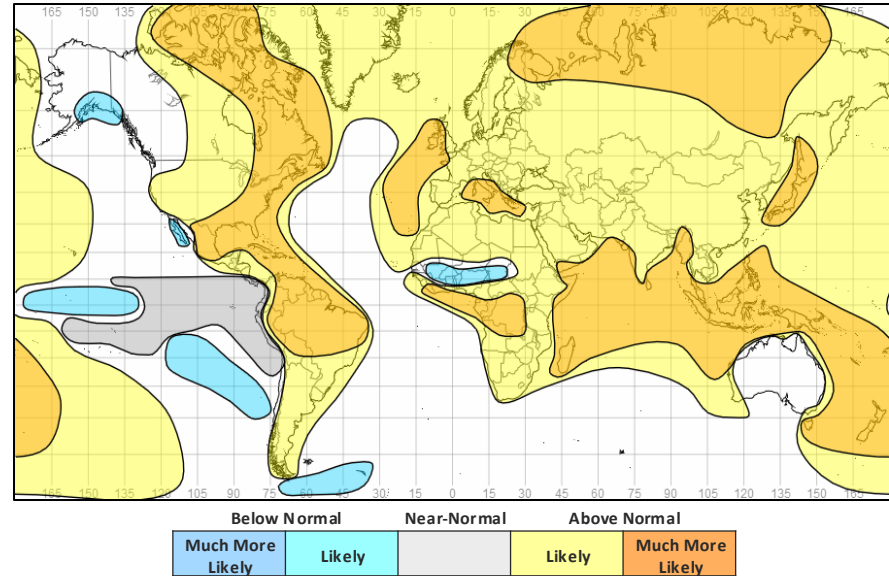
Left: Middle East and North Africa

Right: Caribbean region

Global Outlook - Temperature

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

3-Month Outlook December to February - Temperature



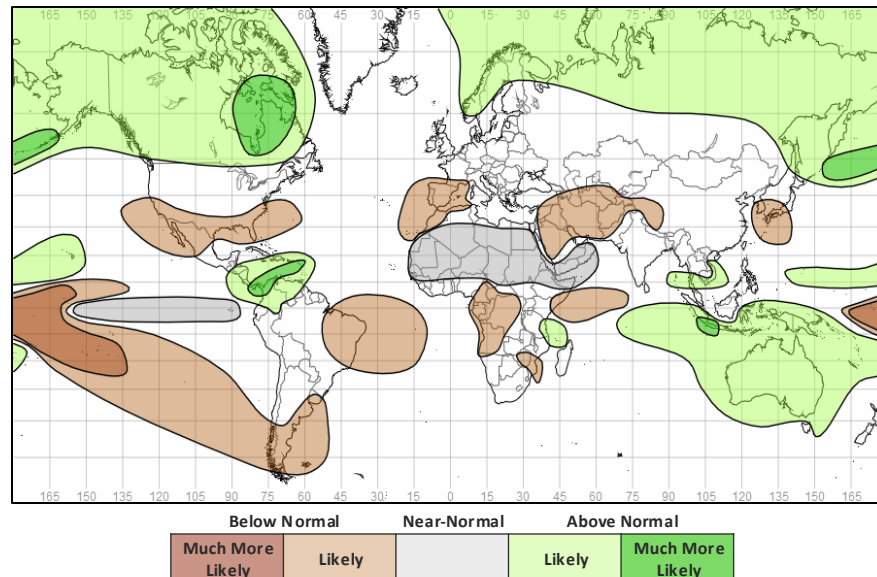
Global Outlook - Rainfall

Outlook:

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

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

3-Month Outlook December to February - Rainfall



Current Status

[Current Status maps](#)

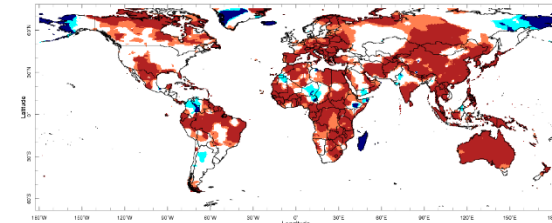
[MENA – Middle East](#)

[MENA – North Africa](#)

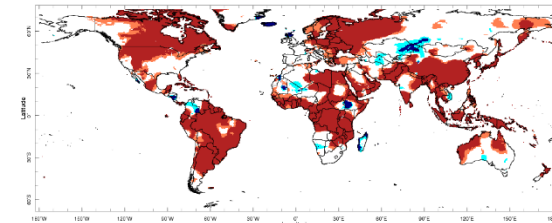
[Caribbean](#)

[British Overseas Territories](#)

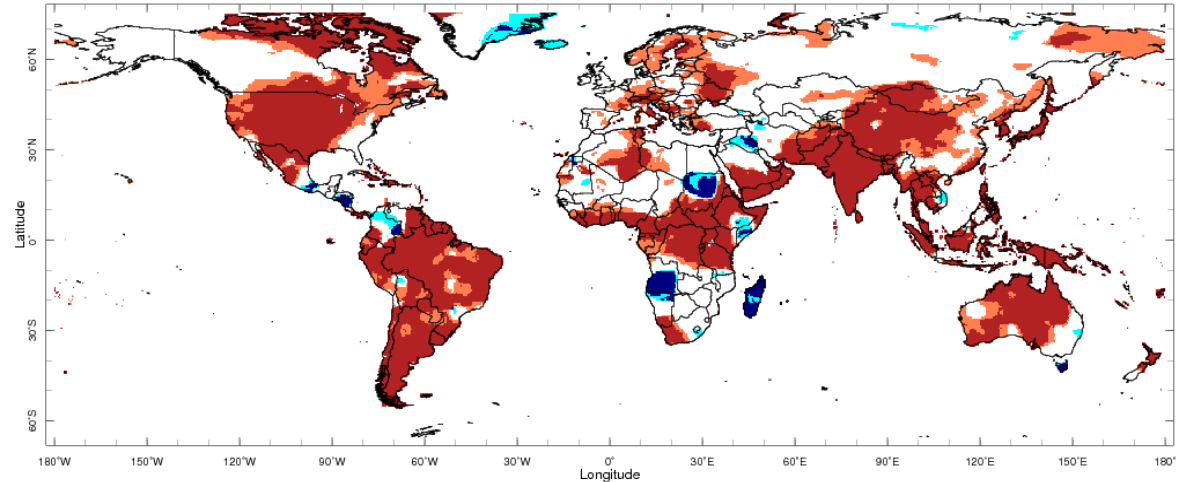
Current Status – Temperature percentiles



August



September



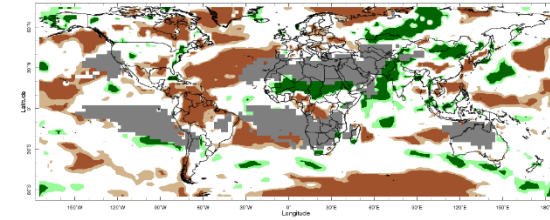
Oct 2024

October

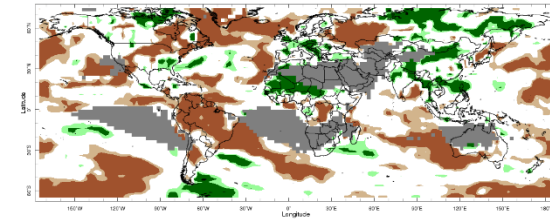
Temperature Percentiles (BLUE below 20th and RED above 80th)


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.

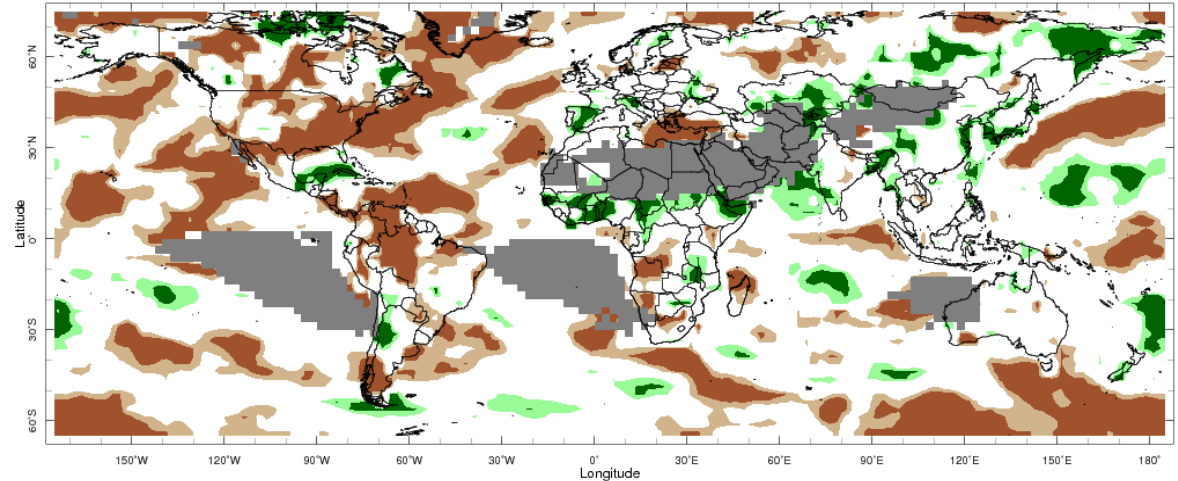
Current Status – Precipitation percentiles



Aug 2024

August


Sep 2024

September


Oct 2024

October


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

Current Status – MENA – Middle East

| | Current Status: Temperature | | | Current Status: Rainfall | | |
|-----------|-----------------------------|------------|------------|--------------------------|-----------|-----------|
| | August | September | October | August | September | October |
| Turkey | Hot (1) | Hot (1) | Normal (4) | Normal | Wet | Mixed (5) |
| Palestine | Warm | Warm | Normal | Normal* | Normal* | Normal* |
| Lebanon | Warm | Warm | Normal | Normal* | Normal* | Dry |
| Jordan | Warm | Warm | Normal | Normal* | Normal* | Normal* |
| Syria | Normal | Normal | Normal | Normal* | Normal* | Dry |
| Iraq | Normal | Normal (6) | Cool | Normal* | Normal* | Normal* |
| Yemen | Mixed (2) | 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 the east
- (2) Note:** Cool in central areas, warm in the southwest else normal
- (3) Note:** Very wet in the far west, else normal
- (4) Note:** Hot in the west
- (5) Note:** Normal in the north and west, very dry in the south and west
- (6) Note:** Hot in the northeast

Current Status – MENA – North Africa

Current Status: Temperature

| | August | September | October |
|---------|-----------|-----------|-----------|
| Morocco | Hot (1) | Normal | Normal |
| Algeria | Hot | Normal | Mixed (2) |
| Tunisia | Warm | Warm | Hot |
| Libya | Mixed (2) | Hot (3) | Mixed (4) |
| Egypt | Hot | Hot | Normal |
| Eritrea | Warm | Warm | Hot |

Current Status: Rainfall

| | August | September | October |
|--|----------|------------|-----------|
| | Normal* | Normal (5) | Normal |
| | Normal* | Normal (6) | Normal |
| | Normal* | Normal | Normal |
| | Normal* | Normal* | Normal* |
| | Normal* | Normal* | Normal* |
| | Very Wet | Normal | Mixed (7) |

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:** Cool in the far south
- (2) **Note:** Normal in west, hot in east
- (3) **Note:** Cool in northwest
- (4) **Note:** Normal in east, Hot in west
- (5) **Note:** Normal* in south, very wet in east and normal elsewhere.
- (6) **Note:** Very wet in west
- (7) **Note:** Normal* in north, very wet in south

Current Status – Caribbean and Central America

| | Current Status: Temperature | | |
|------------------|-----------------------------|-----------|-----------|
| | August | September | October |
| Caribbean Region | Hot | Hot | Hot |
| Haiti | Hot | Hot | Hot |
| Guyana | Hot | Hot | Hot |
| Venezuela | Mixed (1) | Mixed (1) | Mixed (1) |
| Columbia | Cool | Cool | Mixed (5) |

| | Current Status: Rainfall | | |
|------------------|--------------------------|-----------|------------|
| | August | September | October |
| Caribbean Region | Mixed (2) | Dry | Mixed (2) |
| Haiti | Normal | Dry | Normal |
| Guyana | Very Dry | Very Dry | Normal (4) |
| Venezuela | Very Dry | Very Dry | Very Dry |
| Columbia | Mixed (3) | Very Dry | 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 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:** Hot in the west and cool in the east

Current Status – British Overseas Territories

| | Current Status: Temperature | | | Current Status: Rainfall | | |
|----------------------|-----------------------------|-----------|---------|--------------------------|-----------|-----------|
| | August | September | October | August | September | October |
| Southern Europe | Hot | Mixed (1) | Normal | Normal* | Normal | Mixed (2) |
| Central Indian Ocean | Normal | Normal | Normal | Very Wet | Normal | Normal |
| Central Pacific | 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:** Cyprus hot, Gibraltar normal
- (2) **Note:** Very wet in Gibraltar, 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 | | |
|-----------|-------------|---|---|---------------------------------|
| | | December | December to February | March to May |
| Turkey | 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 south, Climatological odds in the north | Climatological odds, but Likely to be drier than normal in the east | 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 | Likely to be drier than normal | Climatological odds |
| 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 | Likely to be drier than normal | Climatological odds |
| 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 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 – MENA – Middle East (2)

| | | Forecast summary | | |
|-------|-------------|---|---------------------------------|---|
| | | December | December to February | March to May |
| 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 | Likely to be drier than normal | Climatological odds |
| Iraq | 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 |
| Yemen | Temperature | Climatological odds, but Much more likely to be warmer than normal in the west | Likely to be warmer than normal | Much more likely to be warmer than normal |
| | Rainfall | Likely to be near-normal | Likely to be near-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: March to August – MENA – North Africa

Forecast summary

| | | December | December to February | March to May |
|---------|-------------|---|---|---------------------------------|
| Morocco | 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 north, but Climatological odds in the south | Likely to be drier than normal | Climatological odds |
| Algeria | 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, but Likely to be drier than normal in the far north | Climatological odds in the south, but Likely to be drier than normal in the north | Climatological odds |
| Tunisia | 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, but Likely to be drier than normal in the far north | Climatological odds | Climatological odds |
| 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 | Likely to be warmer than normal | Likely to be warmer than normal | Likely to be warmer than normal |
| | Rainfall | Climatological odds | Likely to be near-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 – Caribbean and Central America (1)

| | | Forecast summary | | |
|------------------|-------------|---|--|--|
| | | December | December to February | March to May |
| 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 | Generally Likely to be wetter than normal, but Climatological odds in the far north and Much more likely to be wetter than normal across the Lesser Antilles and in the south | Generally Likely to be wetter than normal, but Likely to be drier than normal in the north and Much more likely to be wetter than normal across the Lesser Antilles and in the south | Climatological odds in the north, but Likely to be near-normal in the south and east |
| 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 | 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 near-normal |
| | Rainfall | Climatological odds | 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 and Central America (2)

| | | Forecast summary | | |
|-----------|-------------|--|--|---------------------------------|
| | | December | December to February | March to May |
| Venezuela | Temperature | Much more likely to be warmer than normal | Much more likely to be warmer than normal | Likely to be warmer than normal |
| | Rainfall | Climatological odds in the east, Likely to be wetter than normal in the west | Likely to be wetter than normal | Likely to be wetter than normal |
| Columbia | Temperature | Much more likely to be warmer than normal in the west, but Climatological odds in the west. | Much more likely to be warmer than normal in the west, but Climatological odds in the west. | Likely to be warmer than normal |
| | Rainfall | Likely to be wetter than normal | Likely to be wetter than normal, but Much more likely to be wetter than normal in the north | 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 – British Overseas Territories

| | | Forecast summary | | |
|----------------------|-------------|---|---|---------------------------------|
| | | December | December to February | March to May |
| Southern Europe | 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 near-normal in Gibraltar and Climatological odds in Cyprus | Climatological odds |
| Central Indian Ocean | 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 |
| Central Pacific | Temperature | Climatological odds | Likely to be colder than normal | Likely to be warmer than normal |
| | Rainfall | Much more 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://iriidldeo.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

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 a 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>