Met Office

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Global: Monthly Climate Outlook
May to February

Issued: August 2020

Overview

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

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

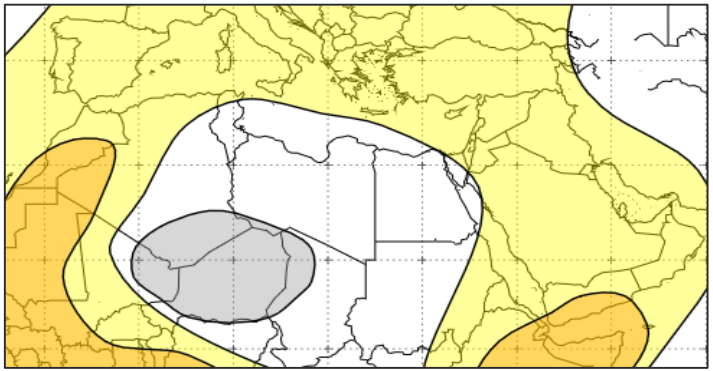
Global Seasonal Outlook – Temperature

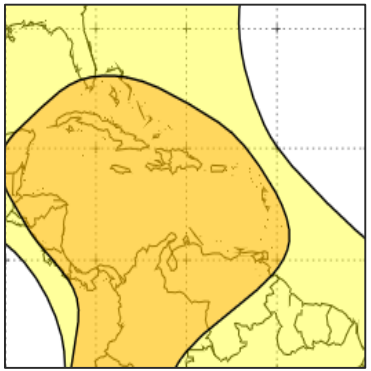
Global Seasonal Outlook – Rainfall

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

Current Status: For May to July, temperatures have been near normal across the MENA region, the exception being Yemen which continued to be cooler than normal. Southern Europe, Central Indian and Pacific Oceans, along with the Caribbean were also warmer than normal.

Outlook: For the next three months, warmer than normal conditions are likely, with confidence highest across the Caribbean region and Central Indian Ocean.





3-Month Outlook September to November 2020 - Temperature

Below Normal		Near-Normal	Above Normal	
Very Likely	Likely		Likely	Very Likely

Left: Middle East and North Africa
Right: Caribbean region

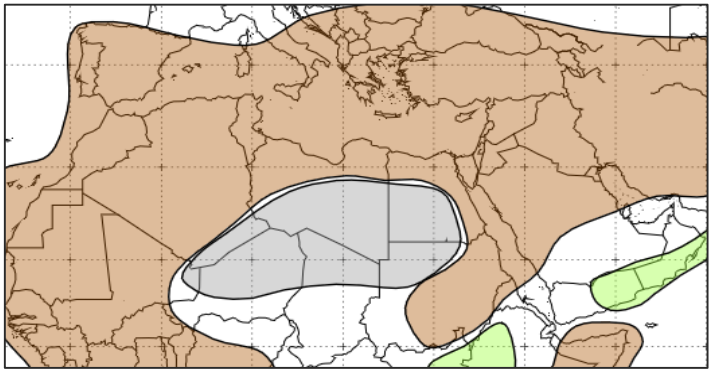
MENA, Caribbean and British Overseas Territories Current Status and Outlook - Rainfall

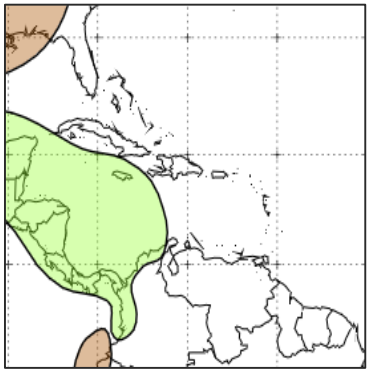
Current Status: Many areas have seen normal or slightly drier than normal conditions over the past couple of months. The exceptions are the Indian Ocean and parts of Yemen where conditions have been wetter than normal.

Outlook: In the Caribbean region, for the next three months, the outlook for rainfall suggests wetter than normal conditions for much of the Gulf of Mexico, and climatological odds for Cuba and much of the east of the Caribbean.

Climatologically, as we move into autumn (Sept – Nov) rainfall begins to increase across the Mediterranean coastal regions, Middle East and North Africa; the Gulf region remains largely dry and Yemen and Oman are drier than in the summer. For the next three months, the outlook is for drier than normal conditions across the bulk of the region and in Yemen, wetter than normal conditions are likely.

Tropical Cyclone outlook: Information can be found here.





3-Month Outlook September to November 2020 - Rainfall

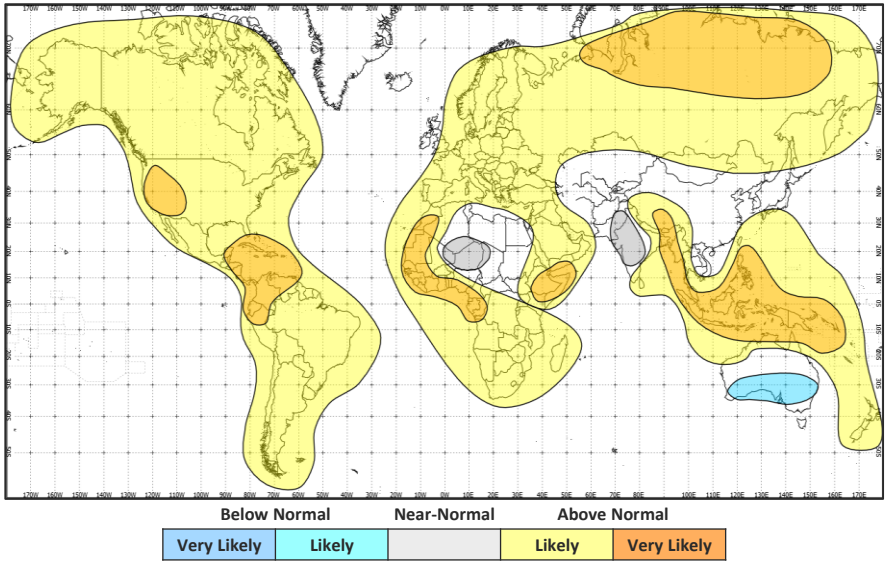
Below Normal		Near-Normal	Above Normal	
Very Likely	Likely		Likely	Very Likely

Left: Middle East and North Africa
Right: Caribbean region

Global Outlook - Temperature

Outlook: There is an increase in the likelihood of warmer than normal conditions across large parts of the world, with the highest confidence in tropical regions. This is consistent with the warming observed in the past decade.

3-Month Outlook September to November 2020 - Temperature



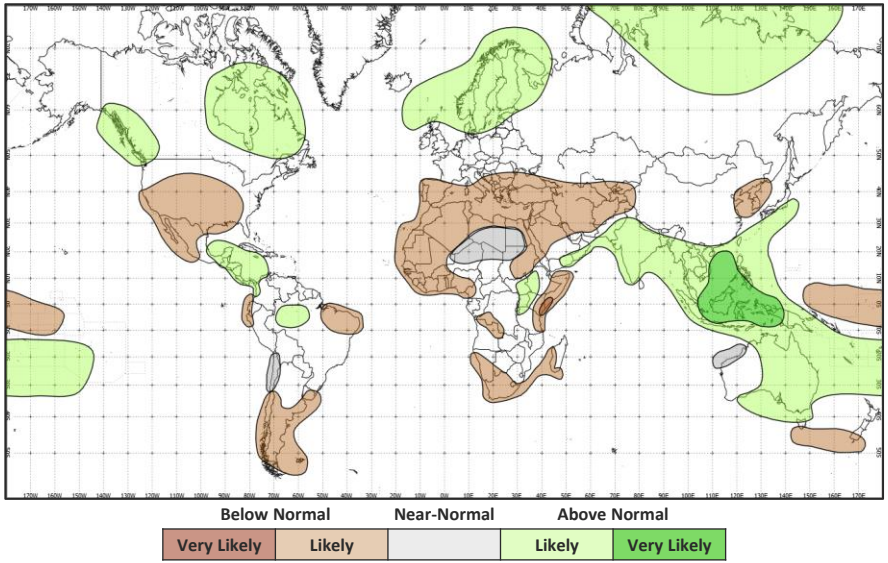
Global Outlook - Rainfall

Outlook:

El Niño-Southern Oscillation (ENSO) – There is a 60% to 70% likelihood of La Niña developing over the next three months. ENSO indicators, such as sea-surface temperatures (SSTs) in the tropical Pacific Ocean, trade wind strength and cloudiness near the Date Line are consistent with the early stages of La Niña development. Long-range forecast models are in good agreement in predicting further cooling of the tropical Pacific Ocean to take place in the coming weeks and months. Should La Niña develop then impacts would be far reaching. With a couple of notable exceptions (e.g. East Arica) 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 Dipole (IOD) – In the western Indian Ocean, particularly off the Horn of Africa, sea-surface temperatures (SSTs) are beginning to reduce more than normal. Further cooling of this part of the Indian Ocean is possible in the coming weeks and months, such that a negative Indian Ocean Dipole (IOD) develops; however, confidence of this pattern developing is lower than predictions for ENSO. Should a negative IOD establish then wetter than normal conditions become more likely across Australia and Southern Asia; drier than normal conditions in East Africa for the Short Rains season (October-November-December).

3-Month Outlook September to November 2020 - Rainfall



Current Status

Current Status maps

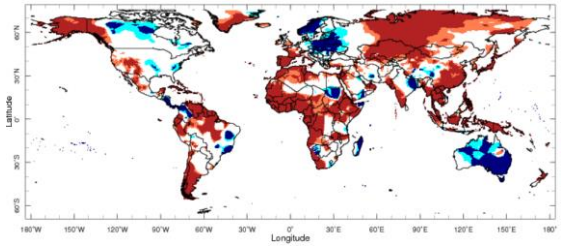
MENA – Middle East

MENA – North Africa

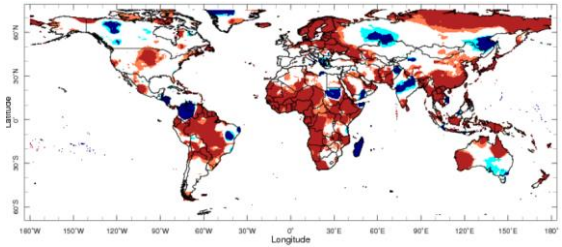
Caribbean

British Overseas Territories

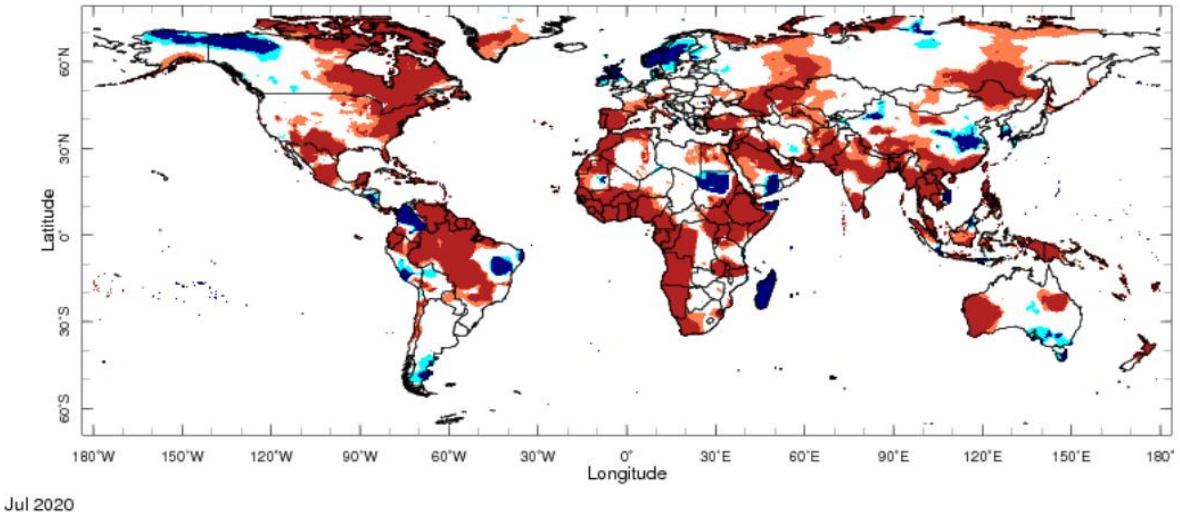
Current Status – Temperature percentiles



May 2020



June 2020

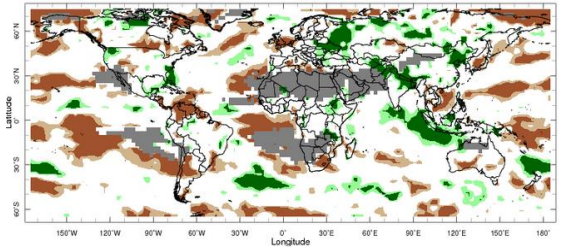


Jul 2020

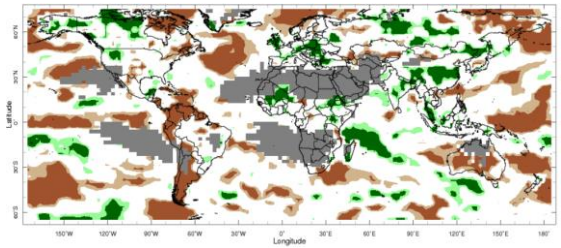
July 2020

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.

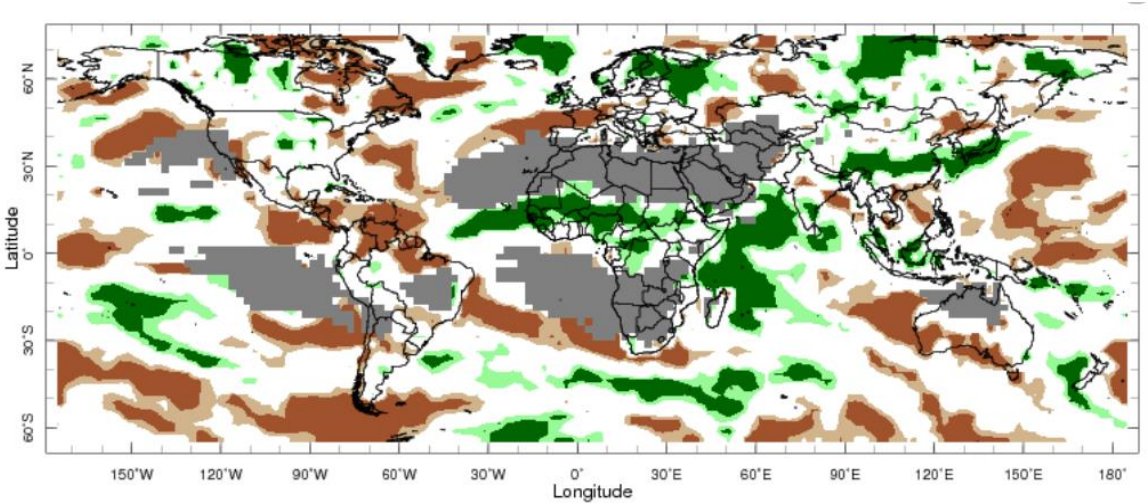
Current Status – Precipitation percentiles



May 2020



June 2020



Jul 2020

July 2020

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		
	May	June	July	May	June	July
Turkey	Normal	Normal	Hot	Normal	Normal	Normal
Palestine	Hot	Normal	Hot	Normal	Normal	Normal*
Lebanon	Hot	Normal	Hot	Normal	Normal	Normal*
Jordan	Hot	Normal	Hot	Normal	Normal	Normal*
Syria	Warm	Normal	Hot	Normal	Normal	Normal*
Iraq	Normal	Normal	Normal	Normal	Normal	Normal*
Yemen	Cool	Cool	Cold	Wet	Wet	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:

Current Status – MENA – North Africa

	Current Status: Temperature			Current Status: Rainfall		
	May	June	July	May	June	July
Mauritania	Hot	Hot	Hot	Normal*	Normal*	Normal*
Morocco	Hot	Normal	Hot	Normal	Normal	Normal*
Algeria	Hot	Normal	Normal	Normal	Normal^	Normal*
Tunisia	Hot	Warm	Normal	Dry	Dry	Normal*
Libya	Warm	Warm	Normal	Normal*	Normal*	Normal*
Egypt	Normal	Normal	Warm	Normal*	Normal*	Normal*
Eritrea	Hot	Hot	Hot	Normal	Very Wet	Normal

Notes:

The table gives an assessment of whether temperature and rainfall across each country have been above normal, normal or below normal over the past three months, using data from the NOAA Climate Prediction Center and the IRI Map Room: http://iridl.ldeo.columbia.edu/maproom/.

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

Additional Information:

^Note: the far south of Algeria was hot in June

Current Status – Caribbean

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

Current Status: Rainfall		
May	June	July
Dry	Dry	Dry^
Normal	Very Dry	Normal
Very Dry	Very Dry	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: The Windward Islands were very dry during July.

Current Status – British Overseas Territories

	Current Status: Temperature			Current Status: Rainfall		
	May	June	July	May	June	July
Southern Europe	Hot	Hot	Hot	Normal	Normal	Normal
Central Indian Ocean	Normal	Normal	Cold	Normal	Normal	Very Wet
Central Pacific	Normal	Normal	Hot	Dry	Normal	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:

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: September to November – 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	Climatological odds - see note
	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	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be drier than normal	Climatological odds - see note
Lebanon	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be drier than normal	Climatological odds - see note
Jordan	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be drier than normal	Climatological odds - see note

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: September to November – MENA – Middle East (2)

		Forecast summary		
		September	September to November	December to February
Syria	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be drier than normal	Likely to be drier than normal
Iraq	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be drier than normal	Likely to be drier than normal
Yemen	*Temperature*	Likely to be warmer than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Likely to be wetter than normal	Likely to be wetter than normal	Climatological odds - see note

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: September to November – MENA – North Africa(1)

		Forecast summary		
		September	September to November	December to February
Mauritania	*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 near-normal	Likely to be drier than normal	Climatological odds - see note
Morocco	*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 near-normal	Likely to be drier than normal	Climatological odds - see note
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	Likely to be drier than normal	Climatological odds - see note
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	Likely to be drier than normal	Climatological odds - see note

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: September to November – MENA – North Africa(2)

		Forecast summary		
		September	September to November	December to February
Libya	*Temperature*	Climatological odds - see note	Climatological odds - see note	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be near-normal	Climatological odds - see note
Egypt	*Temperature*	Climatological odds - see note	Climatological odds - see note	Climatological odds - see note
	Rainfall	Likely to be near-normal	Likely to be near-normal	Climatological odds - see note
Eritrea	*Temperature*	Likely to be colder than normal	Likely to be warmer than normal	Climatological odds - see note
	Rainfall	Climatological odds - see note	Likely to be drier than normal	Climatological odds - see note

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: September to November – Caribbean

		Forecast summary		
		September	September to November	December to February
Caribbean Region	*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 - see note	**Likely to be wetter than normal** south and west of Hispaniola. Climatological odds elsewhere - see note	Climatological odds - see note
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	Climatological odds - see note	Climatological odds - see note	Climatological odds - see note
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	Climatological odds - see note	Climatological odds - see note	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: September to November – British Overseas Territories

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

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

Tropical Storm Outlook for the North Atlantic Ocean basin

Tropical storm seasonal forecast for the September to November period:

Near to slightly above average activity is the most probable outcome, with storms perhaps preferentially affecting the Gulf of Mexico where there are currently above-average SSTs.

More information, and the full forecast can be found at https://www.metoffice.gov.uk/research/weather/tropical-cyclones/seasonal/northatlantic2020

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.ncdc.noaa.gov/teleconnections/enso/indicators/sst.php

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

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

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