



BARBODON



BMS MONTHLY CLIMATE OUTLOOK NEWSLETTER

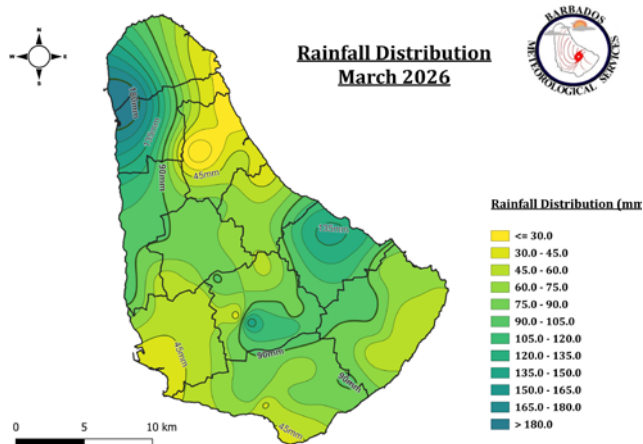
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Key Messages: Below to near-average rainfall is expected for the remainder of the dry season and near to above-average rainfall is expected thereafter. Therefore, an **Agricultural Drought Watch** is in effect; a **Hydrological Drought Watch may come into effect for May and June**. The Annual Heat season will begin within the next month, and **warmer-than-normal nighttime temperatures are likely**. A moderate to strong El Niño is expected to develop in the coming months. Persons are urged to continue monitoring the BMS daily weather forecast as well as seasonal outlooks for updates.

MARCH IN REVIEW

Precipitation

Figure 1: March Rainfall Distribution



After experiencing below-average rainfall in February, March accumulations aligned with the projection for near to above-average rainfall (88.9mm), being only 7mm below the climatological mean (81.9mm) at the BMS in Charnocks. While near to above accumulations were recorded across the island this month, Barbados was still in the middle of the dry season, and conditions were still relatively dry with much of the rainfall occurring on a few days of the month. The wettest day of the month occurred on the 22nd as low-level convergence generated between 10mm and 35mm of rainfall across the island.

Strong high-pressure cells generated brisk winds and agitated the seas throughout most of the month. Marine advisories and warnings were issued for 14 days of the month as sea swells peaked between 2.5 and 3.0m in open water.

Temperature

Figure 2: March Average Temperature Distribution

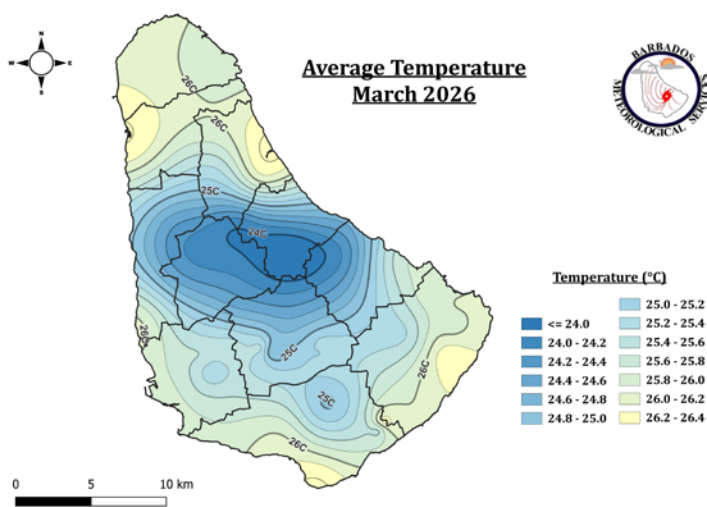
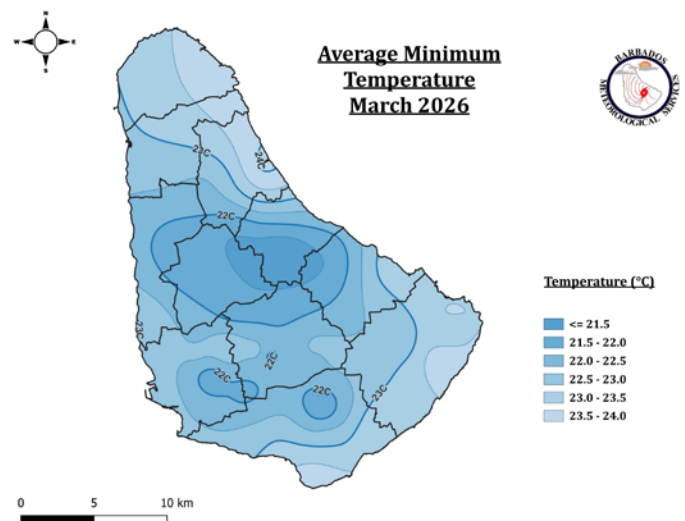


Figure 3: March Minimum Temperature Distribution



For the past two years, temperatures in Barbados were consistently above normal; however, this month, near or slightly below-normal temperatures were recorded. Here at Charnocks, the average temperature was 0.7°C below average (25.6°C); the average maximum was 0.8°C below (28.9°C) and the average minimum was equal to climatology at 23.4°C. Meanwhile, the average temperature at the 3DPaws stations across the island ranged from 23.8°C to 26.4°C, as seen in Figure 2; and minimum temperatures ranged from 21.1°C to 24.0°C, as seen in Figure 3.



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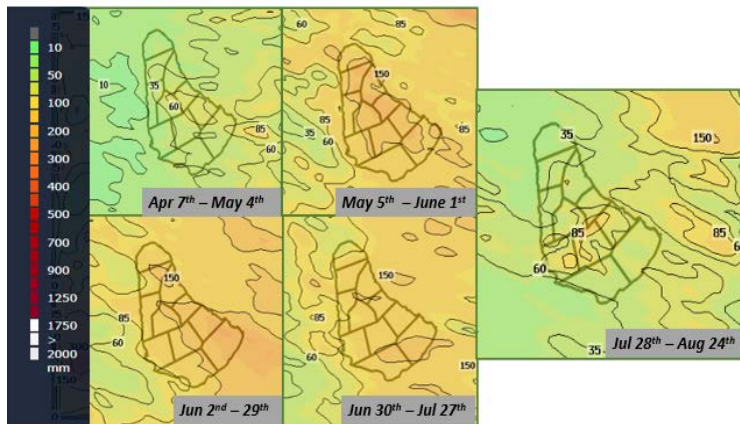


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PRECIPITATION OUTLOOK

Figure 4: BMS Experimental rainfall forecast from April to August 2026



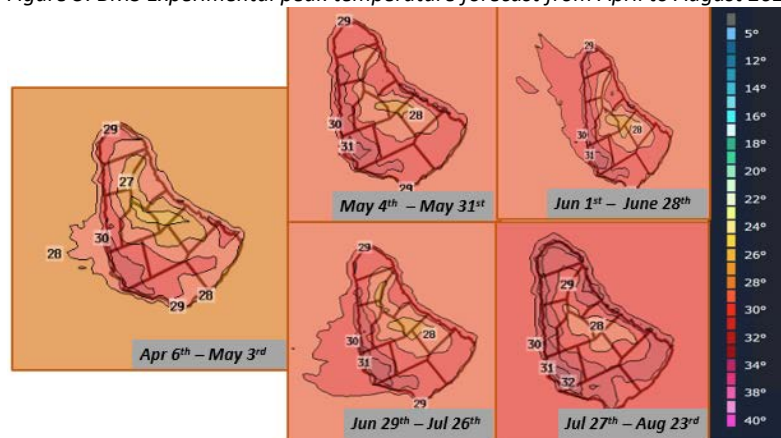
Near to above-average rainfall is forecast for the month of May as we transition into the Wet Season. Below to near-average rainfall is otherwise possible. The BMS Experimental model (figure 4) had a low bias for April and showed relatively wet conditions for the entire forecast period, with up to 200mm of rainfall in some time steps (figure 4). However, the latest probabilistic and dynamic global climate models are indicating below-average rainfall for Barbados and the Eastern Caribbean, likely due to a stronger indication of a moderate to strong El Niño developing in the coming months. Considering these two opposing factors along with the possibility of Saharan Dust intrusions, the official forecast now calls for near to above-average rainfall for the remainder of the dry season (April and May) and near-average rainfall thereafter. Further downward adjustments to the longer-term rainfall forecast are possible in subsequent issues of BCON, and the BMS should be closely monitored for updates in the coming months.

Month	Projections (mm)	Deviation from 30-yr Average at Charnocks
April	40-100	Below to Near average
May	100-150	Near to Above average
June	100-120	Near Average
July	100-140	Near Average
August	130-170	Near Average

Table 1: Rainfall Projections for April to August 2026

TEMPERATURE OUTLOOK

Figure 5: BMS Experimental peak temperature forecast from April to August 2026



The Heat season is expected to officially begin within the next month and will be characterized by above-normal temperatures, especially at night. The latest probabilistic and dynamic model forecast continues to favour above-normal minimum and mean temperatures for the entire forecast period (Table 2). As for the maximum temperature, the probabilistic forecast is leaning towards below-normal for AMJ and above-normal for JAS. Based on the BMS experimental model (Figure 5), daytime temperatures should peak between 28°C and 31°C for the remainder of April. After this, the Heat Season will begin and temperatures should peak around 29°C in the higher elevations and around 34°C in the urban and south-western districts.

Temperature	Season	Forecast Probability (%)		
		Below	Normal	Above
Minimum Temperature	AMJ	11	24	65
	JAS	6	16	78
Maximum Temperature	AMJ	40	29	31
	JAS	13	21	66
Mean Temperature	AMJ	20	22	58
	JAS	9	21	70

Table 2: Temperature Outlook for April to September 2026

DROUGHT OUTLOOK

The concerns for drought have increased for the agriculture sector, during the first half of the forecast period. Given the expectation of below to near-average rainfall until May, the alert level has been elevated to **Drought Watch** the possibility a developing **Agricultural Drought**. However, near-average rainfall is currently expected for the first half of the wet season and as a result, there is **No Concern for an Agricultural Drought for June through August**. The BWA has reported that the current state of available water resources is within the expected range for this time of year and given the rainfall outlook, the alert level has been lowered to **Be Aware** for the possibility of drought for April and remains elevated to **Hydrological Drought Watch for May and June**. Members of the public are urged to continue to conserve water, regardless of the drought alert level and to monitor the BWA and the BMS for updates. Below is a table of the forecast drought alert levels based on the forecast rainfall accumulations (Table 3).

Table 3: Drought Outlooks for April to August 2026

MONTH	AGRICULTURAL	HYDROLOGICAL
APRIL	Drought Watch	Be Aware
MAY	Drought Watch	Drought Watch
JUNE	No concern	Drought Watch
JULY	No concern	Be Aware
AUGUST	No concern	No concern



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Agricultural Drought Watch

Responses to the predicted Drought Alert Level.

Key Messages:

- Monitor resources
- Prepare the infrastructure for the possibility of drought
- Prepare for the possibility of increased irrigation during periods of extensive dryness

- ✓ Continue to monitor for updates from the Barbados Water Authority and Ministry of Agriculture, Food and Nutritional Security.
- ✓ Continue to monitor the BMS Climate Outlook for monthly updates.

Hydrological Drought Watch

Responses to the predicted Drought Alert Level.

Key Messages:

- Encourage water conservation through public awareness campaigns
- Last minute infrastructural repairs and upgrades
- Implement drought management plans

- ✓ Continue to monitor for updates from the Barbados Water Authority.
- ✓ Continue to monitor the BMS Climate Outlook for monthly updates.

Likely Impacts for the April to September 2026 Period

What do these forecasts mean for Barbados?

- Falling reservoir/aquifer levels.
- Employ rainwater harvesting techniques for rain-fed crops during dry periods.
- It is recommended to have an irrigation plan and systems to ensure the best crop yield during the dry season.
- A transition into the heat season and uncomfortable temperatures, especially at night.
- Air quality may be impacted by periodic intrusions of Saharan dust and grass fires.
- Keep updated with daily weather as well as seasonal forecasts issued by the BMS.

CLIMATE OUTLOOK

ENSO (El Niño Southern Oscillation)

ENSO is the interaction between the ocean and atmosphere in the equatorial Pacific which results in periodic departures from the expected sea surface temperatures. There are two phases of ENSO, the cold phase of sea surface temperatures, La Niña and the warm phase, El Niño. La Niña conditions usually results in higher rainfall for Barbados. El Niño conditions usually result in lower rainfall for the island. Neutral conditions which are close to average or what is normally expected. These are the general conditions associated with each phase however, there are other factors which influence the rainfall patterns across Barbados which may result in a deviation from the norm.

Current state

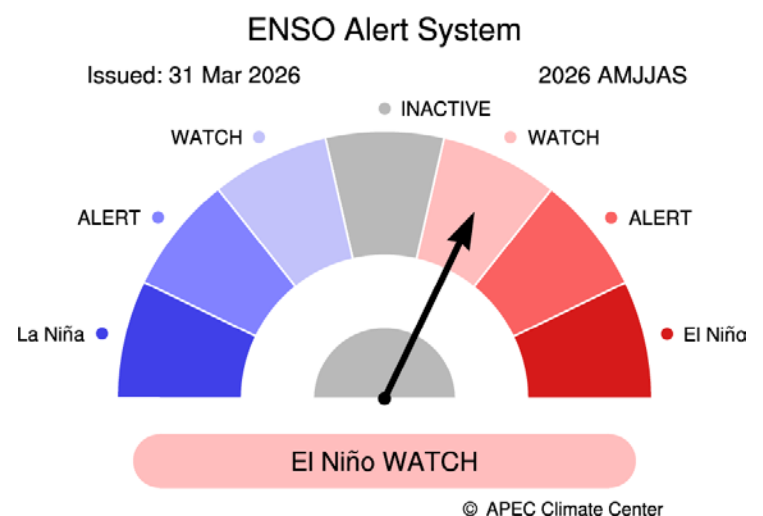
ENSO neutral conditions are present across the Pacific Ocean.

What's the Outlook?

ENSO neutral conditions are expected until April, transitioning to El Niño thereafter.

Impact to the Upcoming Seasons

There is typically no significant predictability on rainfall patterns in Barbados during ENSO-neutral events; El Niño conditions may favour a decrease in rainfall across Barbados.



(Source: APCC/ Climate Information Services)



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CLIMATE OUTLOOK

Sea Surface Temperatures (SSTs)

The Multi-Model Ensemble continues to suggest that above-normal sea surface temperatures (SSTs) are expected across the tropical Atlantic. SSTs are forecast to remain above normal by 0.2°C to 0.6°C through to September 2026. Across the eastern and central equatorial Pacific, SSTs are expected to be slightly above the climatological average, which is consistent with the trend towards El Niño conditions for AMJ and are forecast to be between 0.6°C to 1.8°C warmer than average thereafter, consistent with a moderate to strong El Niño.

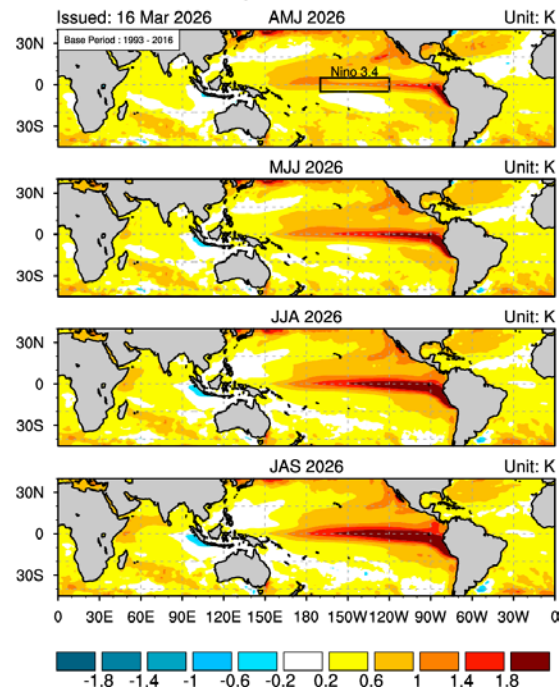
Impact on Rainfall

Warmer-than-normal SSTs in the Atlantic may continue to favour some periods of increased rainfall; however, the emergence of an El Niño event will likely cause a decrease in rainfall activity later in the forecast period.

Impact on Temperatures

Warmer-than-normal SSTs across the tropical Atlantic will result in warmer-than-normal temperatures. Comfortable temperatures are not expected during the cool season. However, as the Heat Season begins, conditions will become uncomfortable, particularly at night.

SST Anomaly for AMJ-JAS 2026



(Source: APCC/ Climate Information Services)

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Editors: Mr. Christophe Martin (Meteorologist), Mr. Don Layne (Senior Meteorological Assistant), Ms. Cherise Brathwaite (Meteorologist), Ms. Danielle Nurse (Meteorologist), Ms. Marlene Arthur (Meteorological Assistant), Mr. Keoni Williams (Meteorological Assistant Ag)

For more information, contact the Barbados Meteorological Services at
BCAA Building Charnocks Christ Church
Tel: 535-0023|Fax: 535-0029|Email: BMS.Climat@barbados.gov.bb

CONTRIBUTORS:

