Antigua and Barbuda Meteorological Service

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Monthly Climate Summary

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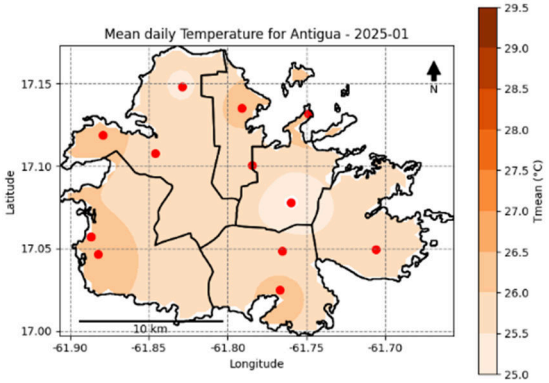
SUMMARY

This month's climate bulletin highlights January's climate patterns and extreme values. Drought conditions are also analyzed.

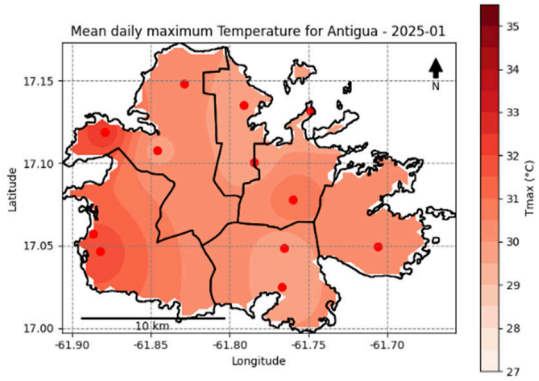
TEMPERATURE

The mean daily temperature for January was well above normal, with 25.8°C (78.4°F) recorded at V.C. Bird International Airport (VCBIA), making it the 5th highest January recorded since 1991. The mean daily maximum temperature was above normal at 28.7°C (83.7°F), with the highest value of 30.5°C (86.9°F) recorded on the 9th day. The mean daily minimum temperature was above normal at 23.2°C (73.8°F), with the lowest value of 19.8°C (67.6°F) on the 10th.

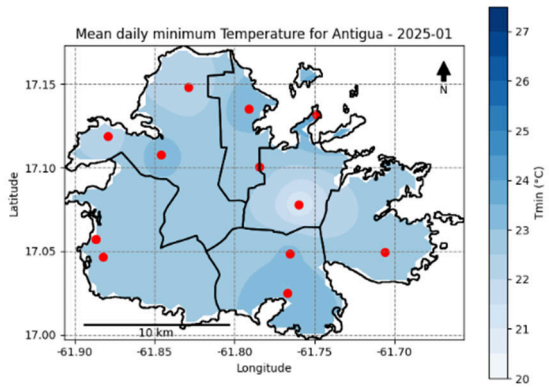
Map 1 illustrates the mean daily temperatures across Antigua for February 2025, with the average of 25.8°C (78.4°F). The lowest mean temperature was observed at Diamonds Station with 24.9°C (76.8°F), located in St. Peter parish and the highest mean temperature at Crabbs, in St. Peter parish, with 26.5°C (79.7°F).



Map 1: Mean Temperature



Map 2: Mean Minimum Temperature



Map 3: Mean Minimum Temperature

***Note**: All averages are taken from the Automatic Weather Stations*

Map 2 shows the mean daily maximum temperatures across Antigua for the month of January 2025. January's average maximum

Map 3 illustrates the mean daily minimum temperatures across Antigua for January 2025, with the average at 22.6°C (72.7°F). The lowest

temperature was 30.2°C (86.4°F). The highest temperature recorded was 35.1°C (95.2°F) on the 29th at Five Islands station in St. John's parish temperature in January was recorded on the 9th, with 16.8°C (62.2°F) at Dunbars station, located in the north of St. John's parish.

In Barbuda (Hannah Thomas Hospital), the mean daily temperature was 25.5°C (77.9°F). The mean daily maximum temperature was 30.1°C (86.2°F), and the mean daily minimum temperature was 22.1°C (71.9°F). The highest value was 31.5°C (88.7°F) on the 29th and the lowest value was 16.3°C (61.3°F) on the 11th, both recorded at Sir McChesney George Secondary.

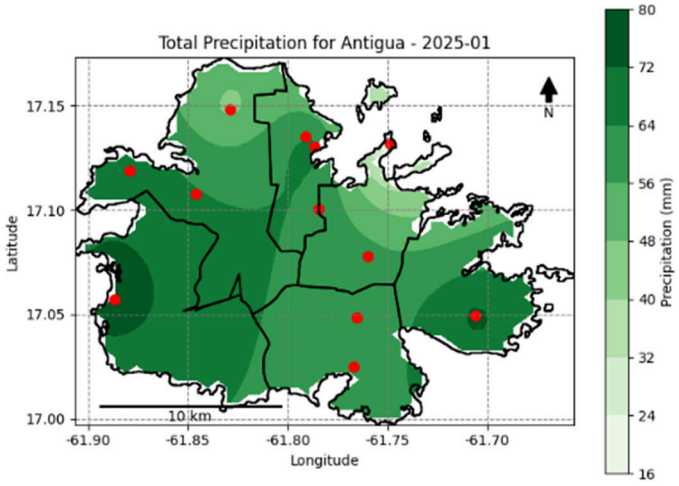
RAINFALL

The island average rainfall for Antigua in January was above normal at 80.5 mm (3.17 in).

January's total rainfall was normal, with 64.1 mm (2.52 in) recorded at VCBIA. The rainiest day was the 15th with 31.9 mm (1.26 in) nearly 50% of the total rainfall for the month. There were eleven wet days and two heavy rainfall days.

Rainfall distribution across the island of Antigua shows the wettest part is located in the Southwest, while the driest areas are in the North and Northeast. The highest rainfall value was recorded at Valley Church (St. Mary parish) with 76.4 mm (3.01 in), and the lowest at Crabbs (St. Peter) with just 16 mm (0.63 in) (Map 4). The highest 24-hour value was on the 15th with 37.6 mm (1.48 in) recorded at Free Town Station in St Philip parish.

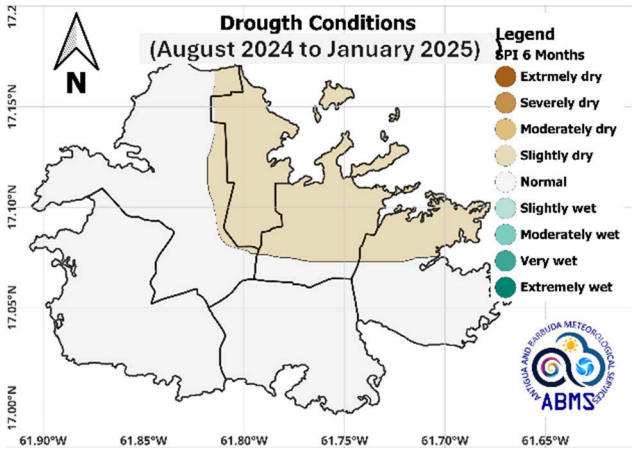
The rainfall estimated by satellite for Barbuda is 51mm (2.01in).



Map 4: Total Rainfall

DROUGHT

The Standardized Precipitation Index (SPI) for January indicates that the past 30-day period was slightly wet. However, for the 90-day period (from November 2024, to January 2025), conditions where normal in the south portion of the island and slightly dry for the rest of the island. For the six month period (from August 2024, to January 2025), the conditions were slightly dry in the north and normal for the rest of the island. Map 4 shows the drought conditions across Antigua for the past six-month period, with the northeastern portion being the most affected by short-term drought.



Note: *All rainfall totals were taken from the Automatic Weather Stations and some rain gauges.*

Key Terms:

Well above normal: Top 10% (90 percentile or higher) of the WMO standard climate period of 1991–2020
Above normal: Top third (upper tercile) of the WMO standard climate period of 1991–2020
Near normal: Middle third (middle tercile) of the WMO standard climate period of 1991–2020
Below normal: Bottom third (lower tercile) of the WMO standard climate period of 1991–2020
Well below normal: Bottom 10% (10 percentile or lower) of the WMO standard climate period of 1991–2020
Wet day: a day with 1 mm or more of rainfall
Heavy rainfall day: a day with 10 mm or more of rainfall
Dry day: a day with less than 1 mm of rainfall
Dry spell: a period of consecutive dry days
Short Term Drought: Dry conditions lasting 1 to 6 consecutive months.
Long-Term Drought: Dry conditions persisting for more than 6 consecutive months.
SPI: **https://rcc.cimh.edu.bb/spi-monitor/**
Moderate Drought: Dry conditions for at least three consecutive months with SPI values of less than or equal to -0.8.

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