SEVERE WEATHER

2025 WET SEASON SUMMARY

The wet season spans from May to November.

The season is bimodal, climatologically with the first peak in June and the second in October in Grand Cayman.

GRAND CAYMAN RAINFALL STATISTICS

STATISTICS **SEASONAL**

TOTAL RAINFALL 28.6 in

CLIMATOLOGICAL AVERAGE RAINFALL 47.6 in

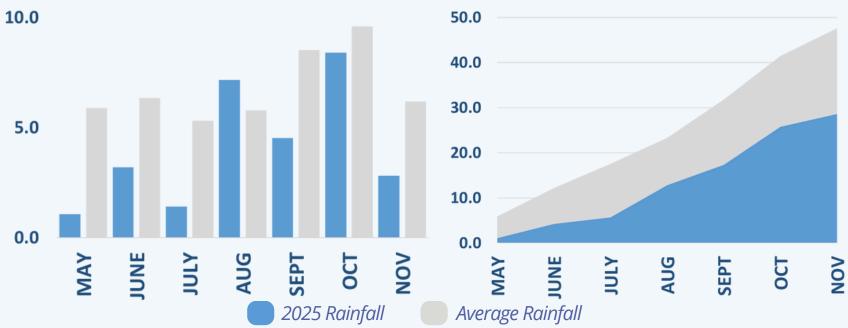
RAINFALL DEFICIT -19 in

3RD DRIEST WET SEASON **ON RECORD**



MONTHLY STATISTICS





Averages: based on the current 30-year averages for the climatological period of 1991-2020.

This 2025 Wet Season, rainfall over the Cayman Islands was driven mainly by tropical waves and local weather features rather than passing tropical systems.

RAINIEST DAY 2.9 in **AUG 7TH**

DAYS OF **RAIN 76**

DAYS OF RAIN > 2 INCHES 1

While several named tropical systems developed within the Atlantic basin and Caribbean region this season, the Cayman Islands experienced **no direct hits**.



- This season in Grand Cayman was **drier** than average compared to the climatological average for the season. The total rainfall also lagged well behind last year's total of 67.7 in.
- This season ranks as the **3rd driest wet season** since 1957.
- October is climatologically the wettest month of the wet season and was also the wettest this season.
- The wet season rainfall pattern was dominated by early deficits, with only limited recovery later in the season.
- Rainfall deficits can reduce soil moisture and groundwater recharge, affecting agriculture, vegetation and water availability.

30.0

20.0

10.0

0.0

The wet season spans from May to November.

The season is bimodal, climatologically with the first peak in May and the second in October in Cayman Brac.

CAYMAN BRAC RAINFALL STATISTICS

STATISTICS SEASONAL

10.0

5.0

0.0

MAY

TOTAL RAINFALL 16.6 in

CLIMATOLOGICAL **AVERAGE RAINFALL** 33.5 in

RAINFALL TOTALS VS AVERAGE

RAINFALL DEFICIT -16.9 in

2ND DRIEST WET SEASON ON RECORD

RAINFALL ACCUMULATION VS AVERAGE



MONTHLY STATISTICS

SEVERE WEATHER

2025 Rainfall Average Rainfall Averages: based on the current 10-year averages for the climatological period of 2011-2020. This 2025 Wet Season, rainfall over the Cayman Islands was driven mainly by tropical waves and local weather features rather than

passing tropical systems.

AUG

RAINIEST DAY 2.4 in OCT 13TH

DAYS OF **RAIN 57**

DAYS OF RAIN > 2 INCHES 1

While several named tropical systems developed within the Atlantic basin and Caribbean region this season, the Cayman Islands experienced **no direct hits**.

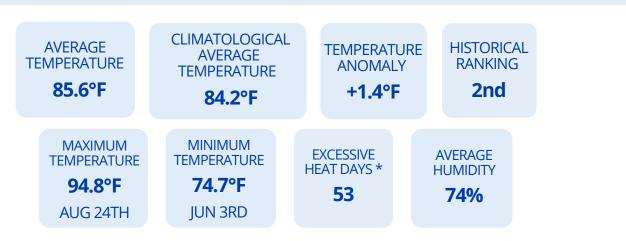
NOV



- This season in Cayman Brac was drier than average compared to the climatological average for the season. The total rainfall also lagged well behind last year's total of 43.1 in.
- This season ranks as the **2nd driest wet season** since 2006.
- July recorded the lowest monthly rainfall of the season across both islands at just 0.4 in.
- October is climatologically the wettest month of the wet season and was also the wettest this season. It was the main contributor to the seasonal rainfall totals.
- The wet season rainfall pattern was driven by early deficits, with only modest recovery later in the season.
- As with Grand Cayman, rainfall deficits have similar impacts on agriculture, vegetation and water availability.

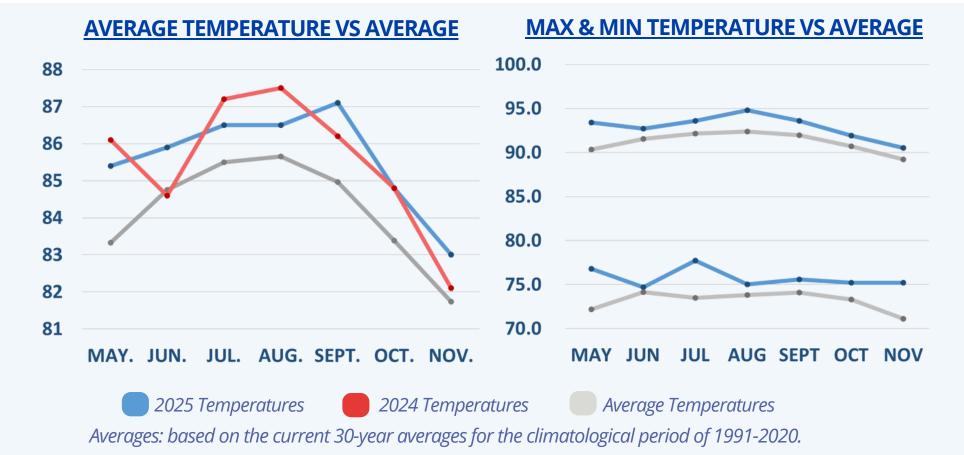
Seasonal temperatures have a steady warming from May into mid-summer, with peak average temperatures in July and August, followed by a gradual cooling toward November.

GRAND CAYMAN TEMPERATURE STATISTICS



Anomalies: monthly values compared to their 30-year averages (1991-2020).

*Excessive heat days: days within a month where the maximum temperature exceeds the 30-year climatological average temperature for its respective month.



- This season in Grand Cayman was **warmer** than average compared to the climatological average for the season. This season became the **2nd warmest wet season** since 1957, edging slightly above last year by 0.1°F.
- September's temperature peak coincided with the climatological peak of sea surface temperatures, below average rainfall and fewer prolonged cloudy periods, all of which allowed for stronger daytime heating.
- Wet season temperatures over the past decade have been consistently warm, with recent years frequently ranking among the warmest on record.
- This season was marked by persistently elevated temperatures, which increased the frequency of excessive heat days, reduced comfort and raised the risk of heat-related health impacts, particularly for vulnerable groups.

Seasonal temperatures have a steady warming from May into mid-summer, with peak average temperatures in July and August, followed by a gradual cooling toward November.

CAYMAN BRAC TEMPERATURE STATISTICS

AVERAGE TEMPERATURE 86.6°F

CLIMATOLOGICAL **AVERAGE** TEMPERATURE 85.4°F

TEMPERATURE ANOMALY +1.2°F

EXCESSIVE

HISTORICAL RANKING

3rd

MAXIMUM **TEMPERATURE**

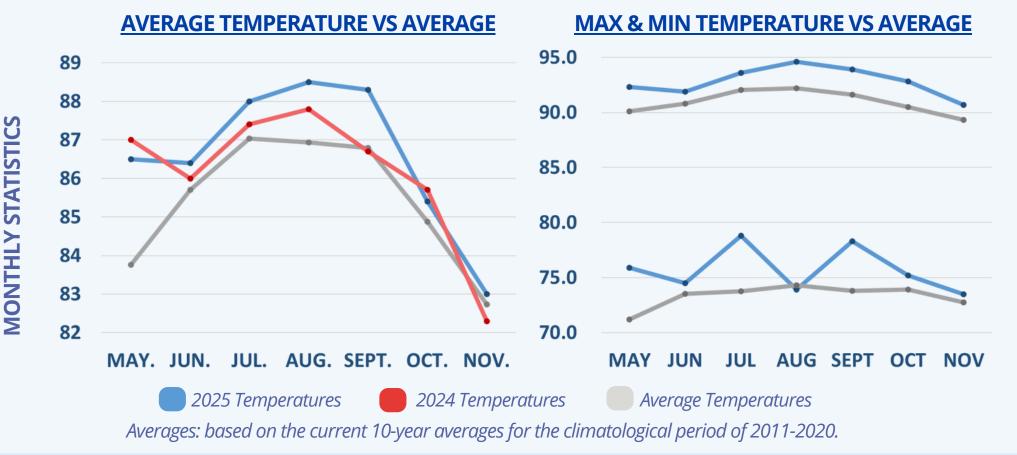
94.6°F **AUG 22ND**

MINIMUM TEMPERATURE 73.9°F

HEAT DAYS * 95 NOV 14TH

AVERAGE **HUMIDITY 75%**

Anomalies: monthly values compared to their 10-year averages (2011-2020). *Excessive heat days: days within a month where the maximum temperature exceeds the 10-year climatological average temperature for its respective month.



- This season in Cayman Brac was warmer than average compared to the climatological average for the season. This season became the **3rd warmest wet season** since 2006, finishing 0.5°F warmer than last year.
- With fewer rain days than Grand Cayman, Cayman Brac experienced less cooling from rainfall and cloud cover, which likely contributed to a higher number of excessive heat days.
- Wet season temperatures over the past decade have been consistently warm, with recent years frequently ranking among the warmest on record.
- As with Grand Cayman, elevated temperatures have similar heat-related health impacts, particularly for vulnerable groups.



The wet season spans from May to November.

SUMMARY

Currently, in the Cayman Islands, weather observations are being recorded from the Owen Roberts International Airport, Grand Cayman and the Charles Kirkconnell International Airport, Cayman Brac.

FORECAST RESULTS

The Wet Season was forecast to be influenced by neutral ENSO conditions with the potential for a weak La Niña phase later in the season, alongside above-average sea surface temperatures and an active 2025 Atlantic Hurricane Season with slightly fewer tropical cyclones than in 2024. Neutral ENSO conditions tend to produce near to below average rainfall outcomes in the western Caribbean, while above-average sea surface temperatures can enhance seasonal heat, and an active hurricane season can increase rainfall if tropical systems pass nearby.

In line with these predictions, both Grand Cayman and Cayman Brac recorded below-average rainfall totals, with each island accumulating just over half of its typical wet season rainfall.

Similarly, average temperatures on both islands were above-average for the season. With above-average sea surface temperatures, below-average rainfall and fewer cloudy periods this season, there was little relief from the heat, keeping both daytime and nighttime temperatures elevated.

Overall, the forecast accurately captured the pattern of a drier and warmer than average wet season for the Cayman Islands.

ATLANTIC HURRICANE SEASON IMPACTS ON THE CAYMAN ISLANDS

2025 Atlantic Hurricane Season Average Prediction (NOAA) vs. Outcome

Named Storms: 13-19 Named Storms: 13
Hurricanes: 6-10 Hurricanes: 5
Major Hurricanes: 4

While sea surface temperatures across the Atlantic and Caribbean were well above-average, most 2025 named storm tracks stayed over the Atlantic Ocean. Large-scale upper-level steering winds tended to turn systems northward over the Atlantic, keeping most storms away from the Caribbean Sea. Major Hurricane Melissa was the only system to track through the Caribbean Sea basin. Its slow movement allowed it to take advantage of very warm waters and favourable upper-level conditions to undergo strong intensification to a Category 5 Hurricane over the central Caribbean. Melissa went on to directly impact Jamaica, eastern Cuba and the southern Bahamas. It passed no closer than about 161 miles southeast of Cayman Brac and 247 miles east-southeast of Grand Cayman, bringing mostly increased cloudiness and rough seas to the Cayman area, with no direct tropical storm or hurricane conditions.

RECORDS

The season broke several temperature records:

GRAND CAYMAN

- 2nd warmest May on record (previously held in 2020)
- 2nd highest maximum temperature for May (previously held in 2005)
- 2nd highest maximum temperature for August (previously held in 2024)

CAYMAN BRAC

- 2nd highest maximum temperature for May (previously held in 2016)
- Highest maximum temperature for August (previously held in 2024)
- 2nd highest maximum temperature for September (previously held in 2023)