



2024 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.

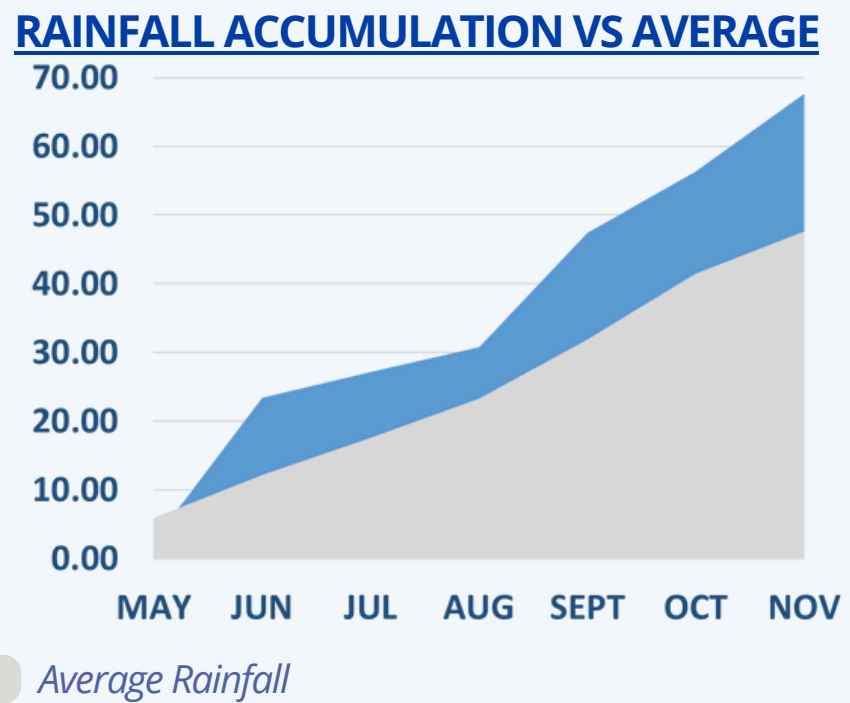
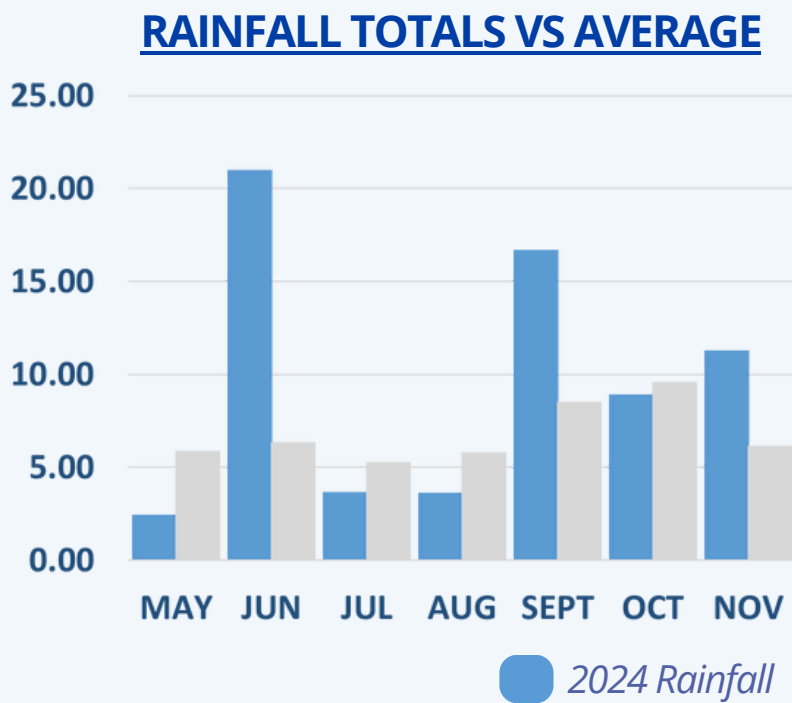
RAINFALL STATISTICS

SEASONAL STATISTICS

TOTAL RAINFALL 67.7 in	CLIMATOLOGICAL AVERAGE RAINFALL 47.6 in	RAINFALL SURPLUS +20.1 in	HISTORICAL RANKING 5th	WETTEST SEASON IN 19 YEARS SINCE 2005
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MONTHLY STATISTICS



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

SEVERE WEATHER

Tropical waves, along with the impacts of Hurricane Beryl, Hurricane Helene and Hurricane Rafael, contributed to the above average rainfall and flooding for the season.

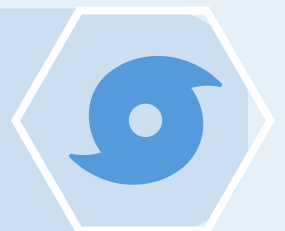
RAINIEST DAY
5.74 in
JUNE 10TH

DAYS OF RAIN
> 2 INCH
9

HURRICANE BERYL
(July 4th 2024)
Rain: 3.1 in
Max Winds: 64mph

HURRICANE HELENE
(Sept. 22nd - 26th 2024)
Rain: 12.5 in
Max Winds: 69mph

HURRICANE RAFAEL
(Nov. 5th - 6th 2024)
Rain: 1.1 in
Max Winds: 29mph



HIGHLIGHTS

- This season in Grand Cayman was **wetter** than average compared to the climatological average for the season. The total rainfall surpassed last year's total (38.5 in).
- This season now ranks as the **5th wettest Wet Season** on record, previously held in 1979.
- This season marks the **2nd wettest June** and the **3rd wettest September** on record.
- This wet season occurred under neutral-ENSO conditions, typically associated with the potential for above-average hurricane season activity and near-average rainfall totals with variability influenced by interactions with tropical systems. As shown in the *RAINFALL TOTALS VS AVERAGE* graph, rainfall totals were overall above-average, with significant outliers due to these systems during the hurricane season.



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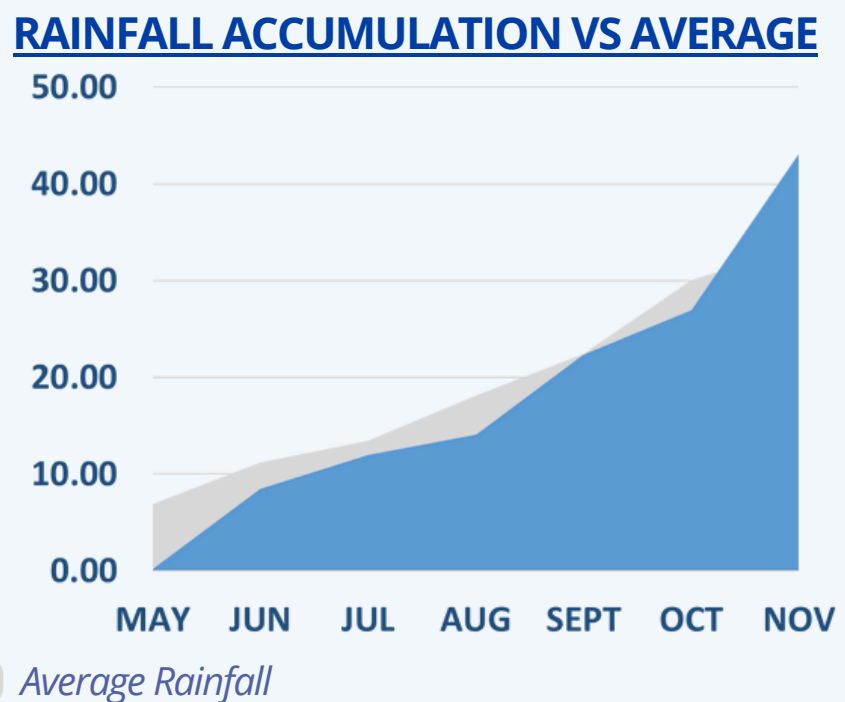
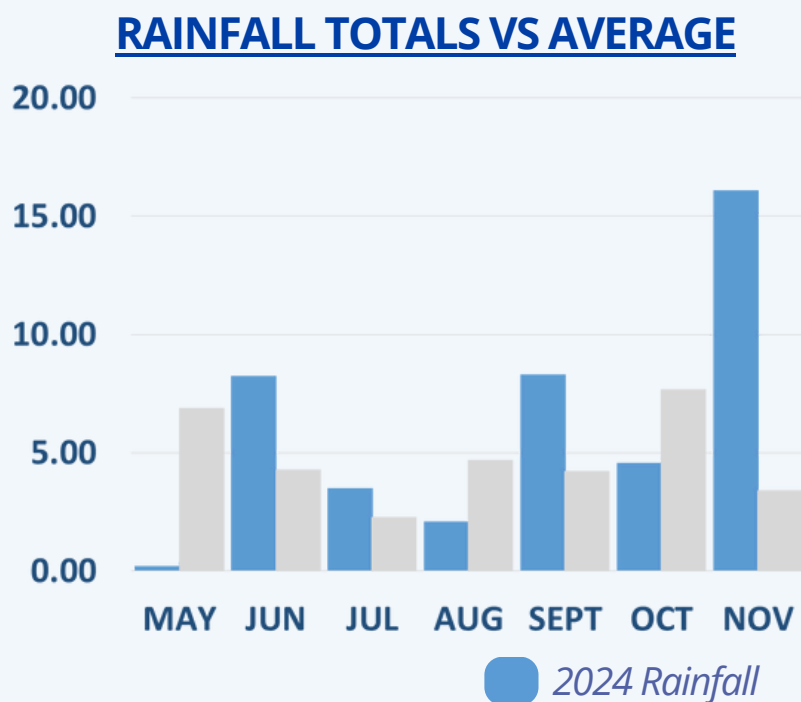
RAINFALL STATISTICS

SEASONAL STATISTICS

TOTAL RAINFALL 43.1 in	CLIMATOLOGICAL AVERAGE RAINFALL 33.5 in	RAINFALL SURPLUS +9.6 in	HISTORICAL RANKING 4th	WETTEST SEASON IN 4 YEARS SINCE 2020
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MONTHLY STATISTICS



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

SEVERE WEATHER

Tropical waves, along with the impacts of Hurricane Beryl, Hurricane Helene and Hurricane Rafael, contributed to the above average rainfall and flooding for the season.

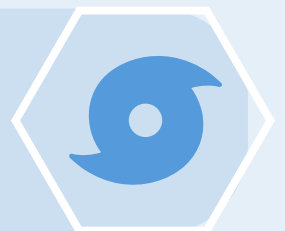
RAINIEST DAY
6.4 in
NOV 5TH

DAYS OF RAIN
> 2 INCH
3

HURRICANE BERYL
(July 4th 2024)
Rain: N/A
Max Winds: N/A

HURRICANE HELENE
(Sept. 22nd - 26th 2024)
Rain: Est. 2.9 in
Max Winds: Est. 69mph

HURRICANE RAFAEL
(Nov. 5th - 6th 2024)
Rain: 11.6 in
Max Winds: Est. 76mph



HIGHLIGHTS

- This season in Cayman Brac was **wetter** than average compared to the climatological average for the season. The total rainfall surpassed last year's total (28.4 in).
- This season now ranks as the **4th wettest Wet Season** on record, previously held in 2007.
- This season marks the **wettest November** and the **4th wettest September** on record.
- This wet season occurred under neutral-ENSO conditions, typically associated with the potential for above-average hurricane season activity and near-average rainfall totals with variability influenced by interactions with tropical systems. As shown in the *RAINFALL TOTALS VS AVERAGE* graph, rainfall totals were overall above-average, with significant outliers due to these systems during the hurricane season.

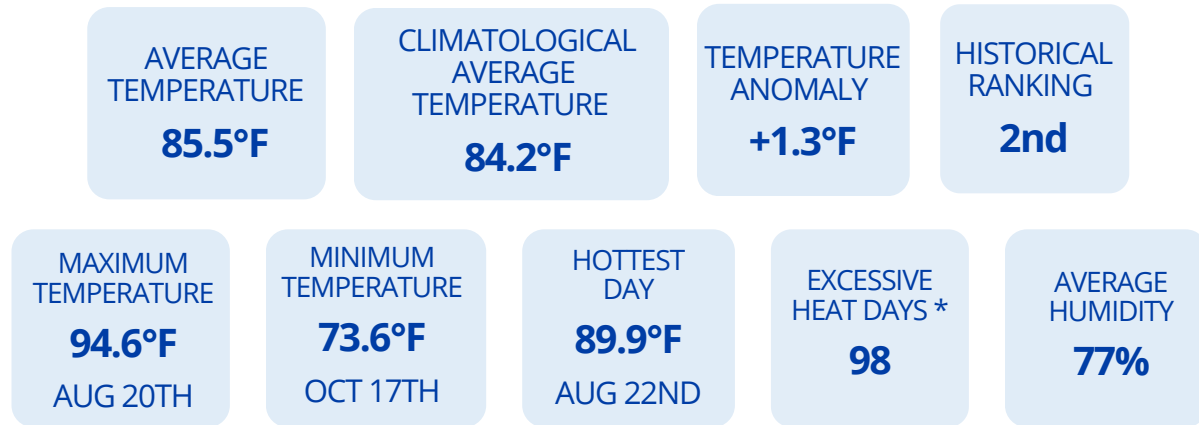


2024 WET SEASON SUMMARY

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TEMPERATURE STATISTICS

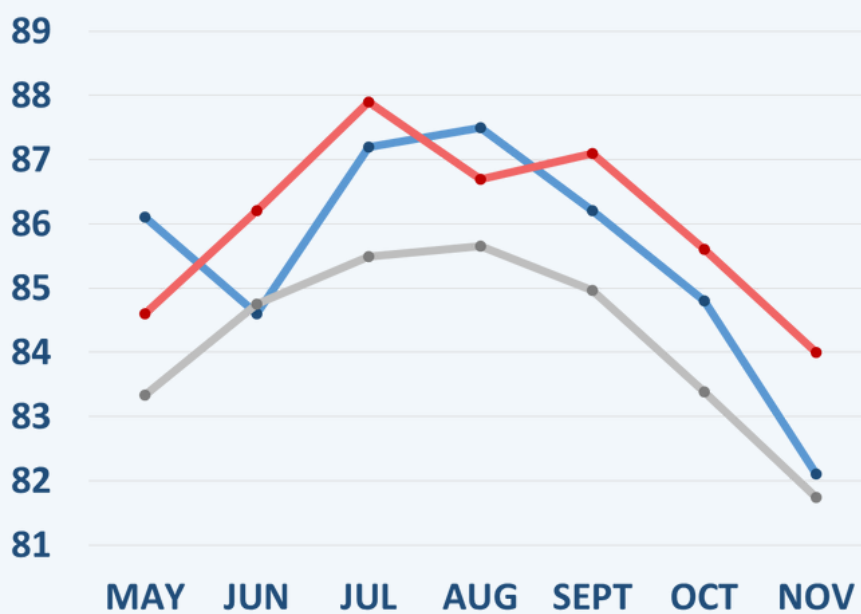
SEASONAL STATISTICS



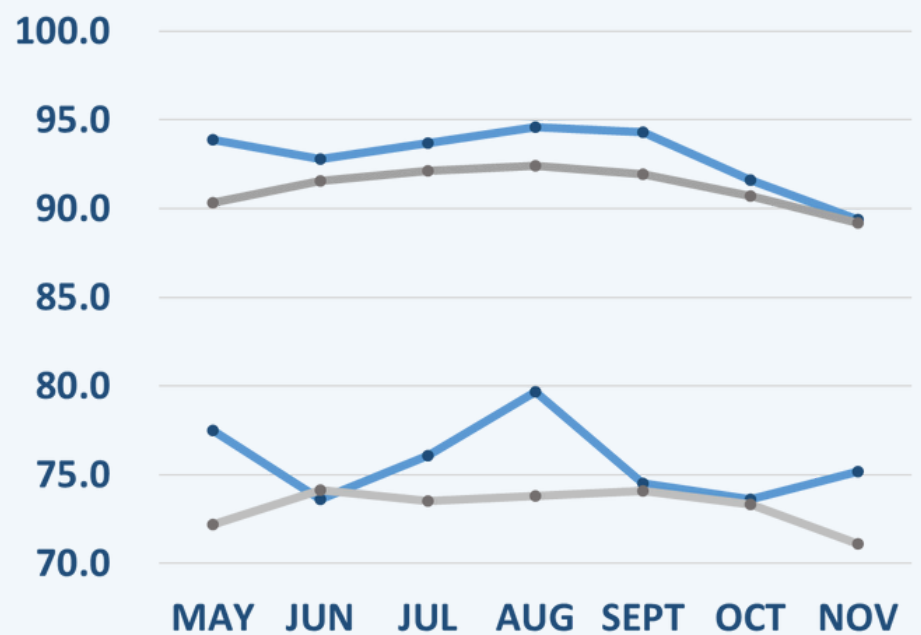
Anomalies: monthly values compared to their 30-year averages.

Excessive heat days: days within a month where the maximum temperature exceeds the average temperature for its respective month.

AVERAGE TEMPERATURE VS AVERAGE



MAX & MIN TEMPERATURE VS AVERAGE



● 2024 Temperatures ● 2023 Temperatures ● Average Temperatures

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

HIGHLIGHTS

- This season in Grand Cayman was **warmer** than average compared to the climatological average for the season. Last year's season (**warmest on record**) remains warmer than this year's by 1.5°F.
- This season now ranks as the **2nd warmest Wet Season** on record, previously held in 2019.
- Monthly maximum temperatures exceeded their averages for the whole season.
- Overall, the seasonal average temperature has increased by about 1.1°F over the last 10 years.
- This wet season occurred under neutral-ENSO conditions, typically associated with near to slightly warmer-than-average temperatures. It ranks as the second warmest season in average temperature, following 2023 (the warmest on record) when El Niño conditions, associated with below-average rainfall, led to higher temperatures. In contrast, increased rainfall this year provided some cooling effects.



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TEMPERATURE STATISTICS

SEASONAL STATISTICS

AVERAGE TEMPERATURE 86.1°F	CLIMATOLOGICAL AVERAGE TEMPERATURE 85.4°F	TEMPERATURE ANOMALY +0.7°F	HISTORICAL RANKING 3rd
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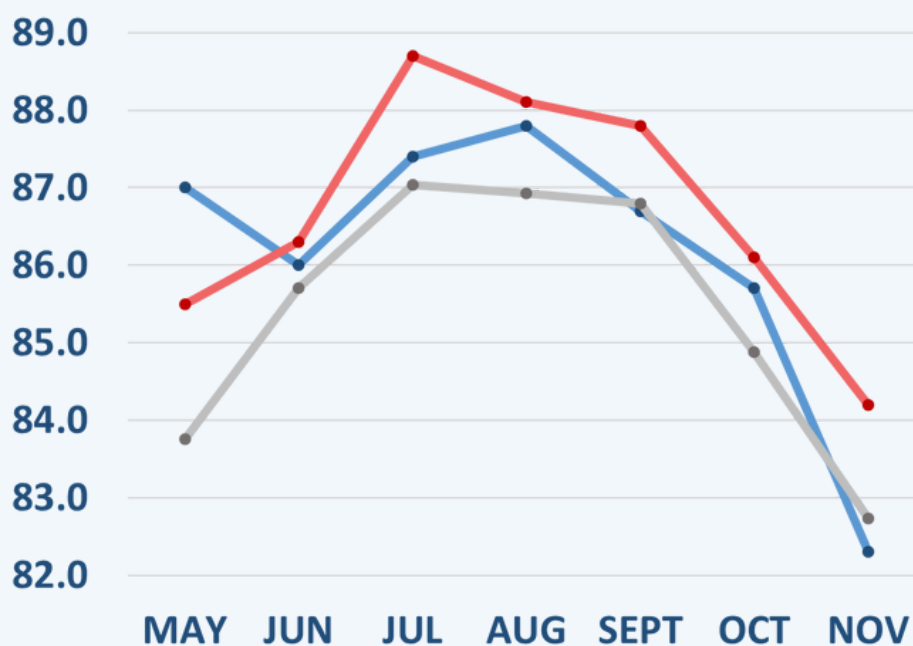
MAXIMUM TEMPERATURE 94.1°F SEPT 9TH	MINIMUM TEMPERATURE 71.4°F NOV 21ST	HOTTEST DAY 89.8°F AUG 20TH	EXCESSIVE HEAT DAYS * 97	AVERAGE HUMIDITY 77%
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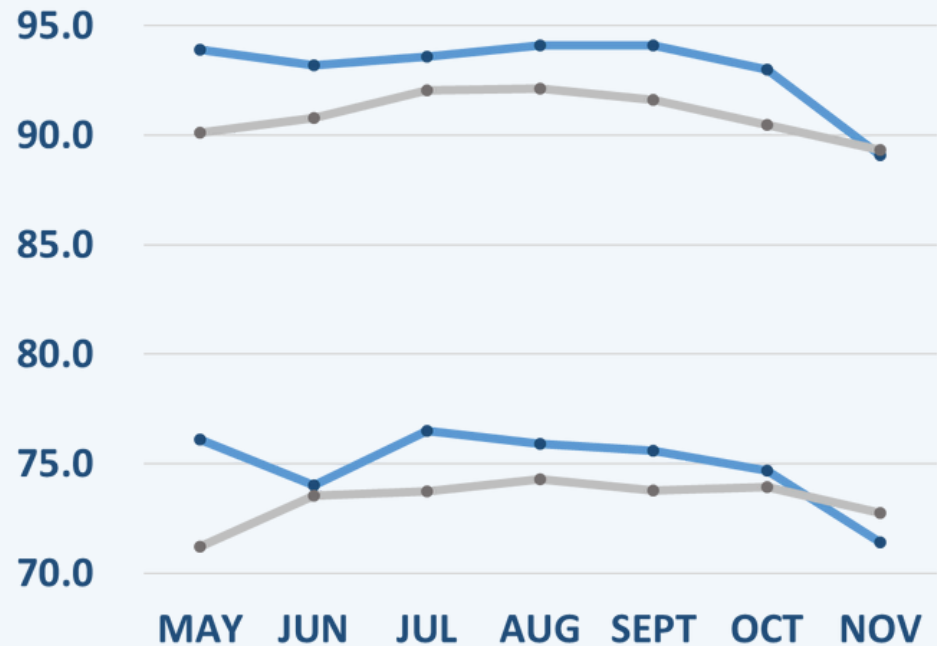
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AVERAGE TEMPERATURE VS AVERAGE



MAX & MIN TEMPERATURE VS AVERAGE



● 2024 Temperatures ● 2023 Temperatures ● Average Temperatures

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

HIGHLIGHTS

- This season in Grand Cayman was **warmer** than average compared to the climatological average for the season. Last year's season (**2nd warmest on record**) remains warmer than this year's by 0.6°F.
- This season now ranks as the **3rd warmest Wet Season** on record, previously held in 2006.
- Overall, the seasonal average temperature has increased by about 0.8°F over the last 10 years.
- This wet season occurred under neutral-ENSO conditions, typically associated with near to slightly warmer-than-average temperatures. It ranks as the third warmest season in average temperature, following 2023 when El Niño conditions, associated with below-average rainfall, led to higher temperatures. In contrast, increased rainfall this year provided some cooling effects.



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CONCLUSIONS

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

Rainfall totals and average temperatures were forecasted to be above average for this wet season.

In line with these predictions, Grand Cayman and Cayman Brac experienced above-average rainfall totals, with both islands accumulating more rainfall than the previous year.

Similarly, average temperatures in both islands were above average for the season, although not as warm as the previous year.

INFLUENCES

The Wet Season was forecasted to be influenced by neutral ENSO and La Niña phase conditions, alongside an extremely active 2024 Atlantic Hurricane Season (driven by near-record-high sea surface temperatures and the expected La Niña phase conditions).

However, neutral ENSO conditions persisted throughout the season, with La Niña now forecasted to emerge by early 2025. The 2024 Atlantic Hurricane Season was highly active, closely aligning with the predicted hurricane activity.

2024 Atlantic Hurricane Season Average Prediction vs. Outcome

Named Storms:	23	Named Storms:	18
Hurricanes:	11	Hurricanes:	11
Major Hurricanes:	5	Major Hurricanes:	5

A total of 3 tropical systems impacted the Cayman Islands, these being Hurricane Beryl, Hurricane Helene and Hurricane Rafael. The last time the islands were impacted by three tropical systems in a single year was in 2008 (Tropical Storm Fay, Hurricane Gustav & Hurricane Paloma).

Hurricane Rafael, was the most impactful bringing higher wind speeds and higher rainfall totals over a shorter period of time occurring over the Sister Islands.

IMPACTS

The season broke several records:

GRAND CAYMAN

- **5th wettest Wet Season** on record (previously held in 1979)
- **2nd wettest June** on record (previously held in 1995)
- **3rd wettest September** on record (previously held in 1979)
- **2nd warmest Wet Season** on record (previously held in 2019)
- **Warmest May** on record (previously held in 2020)
- **Warmest August** on record (previously held in 2023)

CAYMAN BRAC

- **4th wettest Wet Season** on record (previously held in 2007)
- **Wettest November** on record (previously held in 2020)
- **3rd warmest Wet Season** on record (previously held in 2006)
- **Warmest May** on record (previously held in 2023)