



Cayman Islands Monthly Climate Bulletin

The Cayman Islands Monthly Climate Bulletin provides a broad overview of current climate conditions, as well as, an outlook of climate conditions up to 3 months in advance. The information is developed and disseminated by the Cayman Islands National Met Service and is intended to help Public manage climate risk and help build resilience to climate related hazards in Cayman Islands. Weather observations are taken at the Owen Roberts International Airport.

Highlights

Oct: wet season
Nov-Dec: transition to dry season, decreasing shower frequency and intensity

Sea surface temperatures should remain well above average, continuing to amplify heat stress in the Caribbean through October by increasing temperatures and humidity.

Current El Niño phase more often than not is marked by a warmer end to the heat season and reduced activity toward the end of the hurricane season.

What Happened (Jul 2023 – Sept 2023)

Rainfall Review

The Jul-Aug-Sept climatological rainfall range at the Owen Roberts Airport is 408.9 to 585.2 mm. The Jul-Aug-Sept total rainfall recorded was 604.0 mm. September's rainfall total of 235.0 mm, was **above** its climatological value of 216.4 mm.

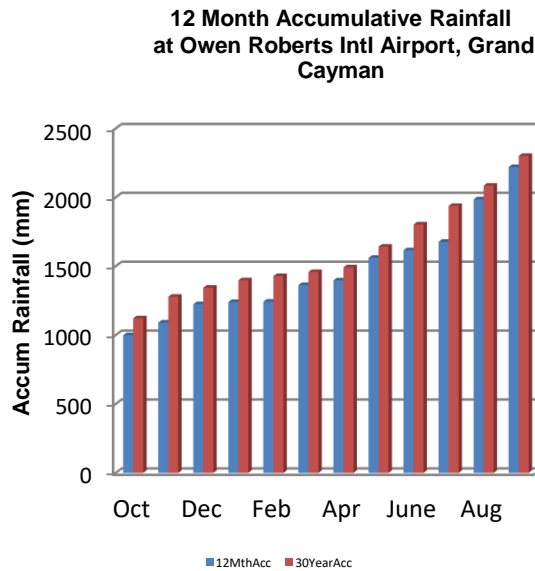


Figure 1. The graph displays the monthly accumulative rainfall over the past 12 months compared to the 30-year average. The rainfall totals for the past 12 months were **3.6% below** the 30-year average.

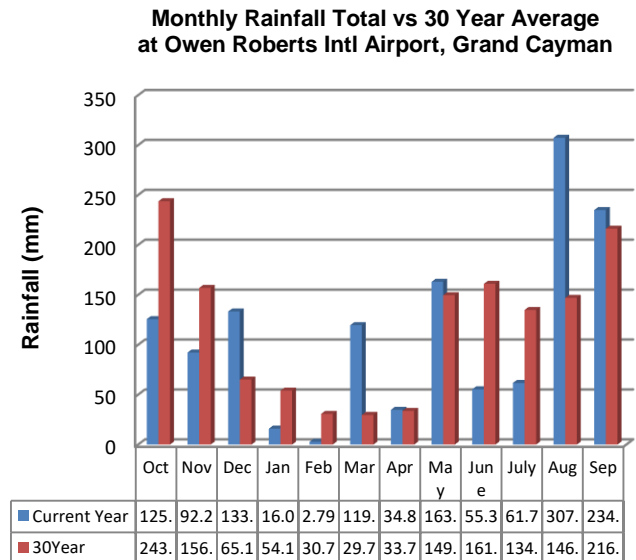
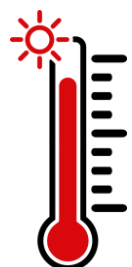


Figure 2. The graph displays the monthly rainfall totals over the past 12 months compared to the 30-year average. August 2023's rainfall total of 307.3mm is currently the highest for the period. Currently, the lowest for 2023 is February with 2.79mm.

Temperature Review

The Jul-Aug-Sept average temperature recorded at Owen Roberts Airport was 30.7°C, which was 1°C **above** the climatological average. September's average temperature was 30.6°C.

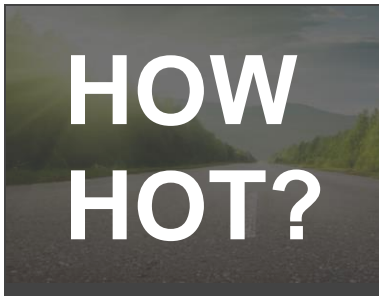
Temperature (°C)	Climatological Average (1991-2020)	Sept 2023		
		Highest	Avg	Lowest
Monthly Max	31.9	34.7	33.2	31.3
Monthly Min	25.7	27.1	26.7	23.1
Monthly Avg	29.4	31.8	30.6	28.7



Outlook or What Should We Expect? (Oct 2023 – Dec 2023)



Climatological Rainfall Range				Forecast	
323.9 - 488.2 mm				40% Probability below average	
Frequency of Wet Days		Frequency of 7-Day Wet Spells		Frequency of Extreme (top 1%) 3-Day Wet Spells	
<i>Climatological</i>	<i>Forecast</i>	<i>Climatological</i>	<i>Forecast</i>	<i>Climatological</i>	<i>Forecast</i>
22-39	21-40	2-5	2-5	0-2.6	0-2.9



Climatological <u>Minimum</u> Temperature Range	Forecast	Climatological <u>Average</u> Temperature Range	Forecast	Climatological <u>Maximum</u> Temperature Range	Forecast
24.4°C – 24.7°C	50-60% Probability above average	27.5°C – 27.9°C	50-60% Probability above average	29.6°C – 30.3°C	60% Probability above average
Heat Outlook: Low heat impact potential					



Drought: No concern for short term drought, however there is a long term drought watch.

No of 7-Day Dry Spells(Three 7 DDS)		No of 10-Day Dry Spells	
<i>Climatological</i>	<i>Forecast</i>	<i>Climatological</i>	<i>Forecast</i>
3-5	2-5	0-2	0-2

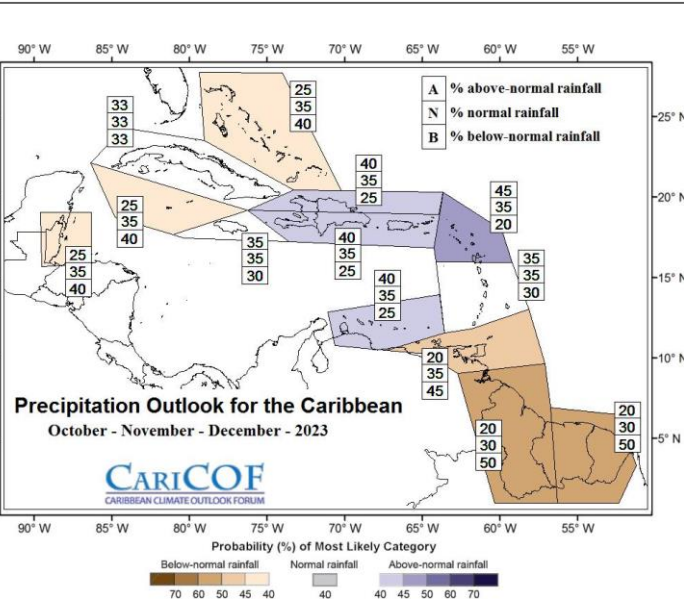


Figure 3: CariCOF Precipitation Outlook

El Niño Southern Oscillation (ENSO)

Recent observations: An El Niño event has been declared, with Sea Surface Temperatures (SSTs) in the eastern equatorial Pacific exceeding 1°C by the end of August, indicative of moderate El Niño conditions.

Model forecast and guidance: The forecast models indicate a likely further anomalous warming of the eastern Pacific to exceed 1.5°C, with virtually certainly El Niño conditions in OND and JFM (>95% confidence).

Expected impacts on rainfall and temperatures: El Niño more often than not is marked by a warmer end to the heat season and reduced activity toward the end of the hurricane season. Rainfall tends to be lower than usual in the southeastern half of the region, but higher than usual in the far north.

- Above-normal (A)** - within the wettest/hottest third of the historical record
- Near-normal (N)** - within the middle third of the historical record
- Below-normal (B)** - within the driest/coldest third of the historical record

Find out more about climate conditions in the Caribbean region by reading the CariCOF Outlook Newsletter:

<http://www.weather.gov.ky/portal/page/portal/nwshome/climate/Climate%20Outlook%20Newsletter>

Disclaimer: The Cayman Islands National Climate Bulletin is meant to provide a general summary of current climate conditions and an outlook of future seasonal climate conditions for Cayman as well as some implications for the agriculture, health and tourism sectors. The information contained herein is provided with the understanding that the Cayman Islands National Weather Service makes no warranties, either expressed or implied, concerning the accuracy, completeness, reliability or suitability of said information and takes no responsibility for improper use or interpretation of the Bulletin.