Vol 6 | Issue 4 **April 2024**



Highlights

A transition from El Niño to Neutral conditions is expected for Apr-May-Jun and into La Niña conditions for Jul-Aug-Sept.

A transition to La Niña conditions is usually marked by an increased chance of heavy showers and higher rainfalls totals for the mentioned period above, which additionally should be noted as the Wet Season.

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.

What Happened (Jan 2024 -Mar 2024)

Rainfall Review

The Jan-Feb-Mar climatological rainfall range at the Owen Roberts International Airport is 84.1 to 133.6 mm. The Jan-Feb-Mar total rainfall recorded was 53.6 mm. March's rainfall total of 15.5 mm, was **below** its climatological value of 29.7 mm.

12 Month Accumulative Rainfall at Owen Roberts Intl Airport, Grand Cayman

Monthly Rainfall Total vs 30 Year Average at Owen Roberts Intl Airport, Grand Cayman

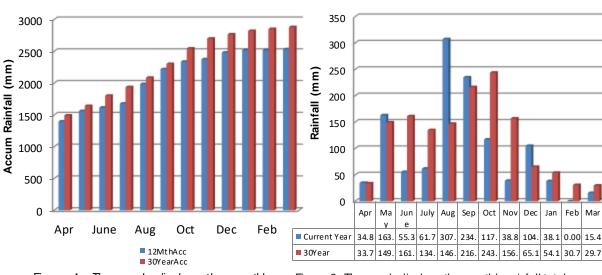


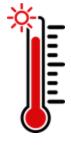
Figure 1. The graph displays the monthly accumulative rainfall over the past 12 months compared to the 30-year average. The rainfall totals for the past 12 months were 13.7% below the 30-year average.

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 Jan-Feb-Mar average temperature recorded at Owen Roberts International Airport was 29.8°C, which was 1.0°C above the climatological average. March's average temperature was 28.2°C.

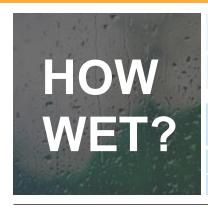
	Climatological	Mar 2024			
Temperature (°C)	A	Highest	Avg	Lowest	
Monthly Max	29.2	32.1	30.9	28.8	
Monthly Min	23.1	27.5	25.0	22.0	
Monthly Avg	26.7	29.0	28.2	27.1	



Jan

Feb Mar

Outlook or What Should We Expect? (Apr 2024 - June 2024)



Climatological Rainfall Range	Forecast
293.9 – 379.2 mm	40% below average

Frequency	of Wet Days	Frequency of 7-Day Wet Spells		Frequency of Extreme (top 1%) 3-Day Wet Spells	
Climatological	Forecast	Climatological	Forecast	Climatological	Forecast
18-29	15-29	2.1-3.9	1.3-4.5	0–1	0–1.2



Climatological <u>Minimum</u> Temperature Range	Forecast	Climatological <u>Average</u> Temperature Range	Forecast	Climatological <u>Maximum</u> Temperature Range	Forecast
24.9°C – 25.3°C	70% Probability above average	28.4°C – 28.7°C	80% Probability above average	30.6°C – 31.1°C	80% Probability above average



No of 7-Day Dry Spells(Three 7 DDS)		No of 10-Day Dry Spells		
Climatological	Forecast	Climatological	Forecast	
6-10	6-11	3-5	3-5	

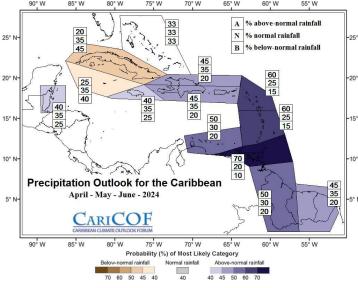


Figure: CariCOF Precipitation Outlook

El Niño Southern Oscillation (ENSO)

Recent observations: A strong El Niño event peaked in December and anomalous cooling of the eastern equatorial Pacific is ongoing, with Sea Surface Temperatures (SSTs) around 1.0°C above average.

Model forecast and guidance: The forecast models indicate further cooling to ENSO neutral conditions in AMJ (~70-80% confidence) and La Niña conditions by JAS (~60-75% confidence).

Expected impacts on rainfall and temperatures: A transition out of El Niño is often associated with increased chances of heavy showers and higher rainfall totals in April, as well as higher air temperatures. The appearance of La Niña conditions in summer tends to increase tropical cyclone activity in the peak and second half of the Atlantic Hurricane Season.

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.