Vol 5 | Issue 6

June 2023

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

May to Nov: Wet Season

Jul to Aug: includes a mid-summer dry spell

A possible transition into El Niño is often marked by a warmer heat season, a drier summer season, and reduced tropical cyclone activity.

What Happened (Mar 2023 – May 2023)

Rainfall Review

The Mar-Apr-May climatological rainfall range at Owen Roberts Airport is 167.9 to 264.4 mm. The Mar-Apr-May total rainfall recorded was 317.5 mm.
May's rainfall total of 163.1 mm, was above its climatological value of 149.6mm.

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

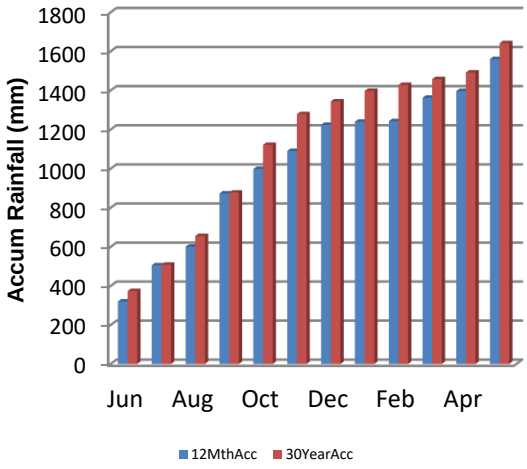
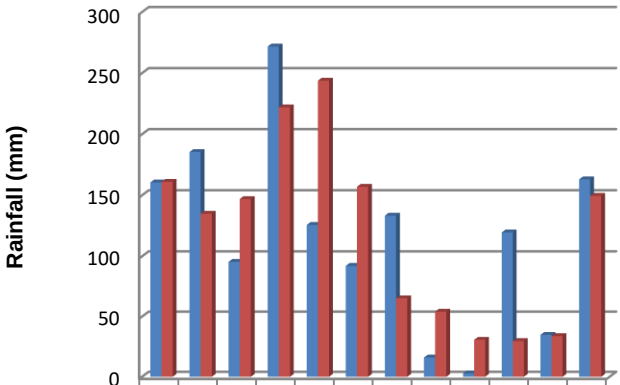


Figure 1. The graph displays the monthly accumulative rainfall over the past 12 months compared to the 30-year average. The rainfall totals for the past 12 months were **5.2% below** the 30-year average.

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



	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Current Year	160.	185.	95.5	271.	125.	92.2	133.	16.0	2.79	119.	34.8	163.
30Year	161.	134.	146.	221.	243.	156.	65.1	54.1	30.7	29.7	33.7	149.

Figure 2. The graph displays the monthly rainfall totals over the past 12 months compared to the 30-year average. September 2022's rainfall total of 271.8mm is currently the highest for the period with 115.3mm of the total associated with the passage of Hurricane Ian (September 25th-26th). Currently, the lowest for 2023 is February with 2.79mm.

Temperature Review

The Mar-Apr-May average temperature recorded at Owen Roberts Airport was 28.2°C, which was 1°C below the climatological average.

Temperature (°C)	Climatological Average (1991-2020)	May 2023		
		Highest	Avg	Lowest
Monthly Max	31.0	33.1	31.8	29.2
Monthly Min	25.1	27.4	25.7	21.8
Monthly Avg	28.5	30.0	29.2	25.7

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Outlook or What Should We Expect? (Jun 2023 – Aug 2023)

HOW WET?

Climatological Rainfall Range	Forecast
376.2-508.5 mm	Within Climatological Range

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*
28-40	29–46	3-5.8	2.8-6.6	0–1	0–1.1

HOW HOT?

Climatological Minimum Temperature Range	Forecast	Climatological Average Temperature Range	Forecast	Climatological Maximum Temperature Range	Forecast
25.8ºC – 26.1ºC	70% Probability **above** average	29.5ºC – 29.7ºC	60% Probability **above** average	31.9ºC – 32.2ºC	60% Probability **above** average

Heat Outlook: Moderate heat impact potential

HOW DRY?

Drought: No concern for short or long term drought.

No of 7–Day Dry Spells(Three 7 DDS)		No of 10–Day Dry Spells	
Climatological	*Forecast*	*Climatological*	*Forecast*
2-4	1-4	0-2	0-2

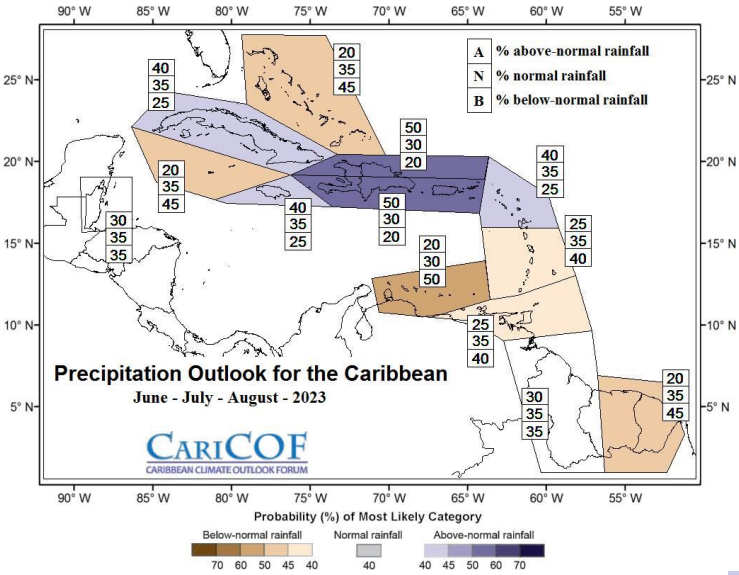

Figure 3: CariCOF Precipitation Outlook

El Niño Southern Oscillation (ENSO)

Recent observations: Sea Surface Temperatures (SSTs) in the eastern Pacific have risen from La Niña to slightly above average (ENSO neutral conditions) by mid-May.

Model forecast and guidance: The forecast models indicate a likely transition to El Niño conditions in JJA and SON (85-90% confidence).

Expected impacts on rainfall and temperatures: ENSO neutral offers little contribution to seasonal rainfall or temperature prediction in the Caribbean, but a transition into El Niño more often than not is marked by a warmer heat season, a drier summer season, and reduced tropical cyclone activity, especially from September to November.

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

Bulletin content, structure and design conceptualised by the Caribbean Institute for Meteorology and Hydrology with further design support from the Investment Plan for the Caribbean Regional Track of the Pilot Programme for Climate Resilience