



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

Mar to Apr - latter part of dry season; limited duration and area of heavy showers. May - transition to wet season.

MAM night-time (min.) and daytime (max.) temperatures are forecast to be close to the usual or slightly higher during the day.

What Happened (Dec 2022 – Feb 2023)

Rainfall Review

The Dec-Jan-Feb climatological rainfall range at Owen Roberts Airport is 130.0 to 159.5 mm. The Dec-Jan-Feb total rainfall recorded was 152.1 mm. December to February's rainfall totals were within the climatological range.

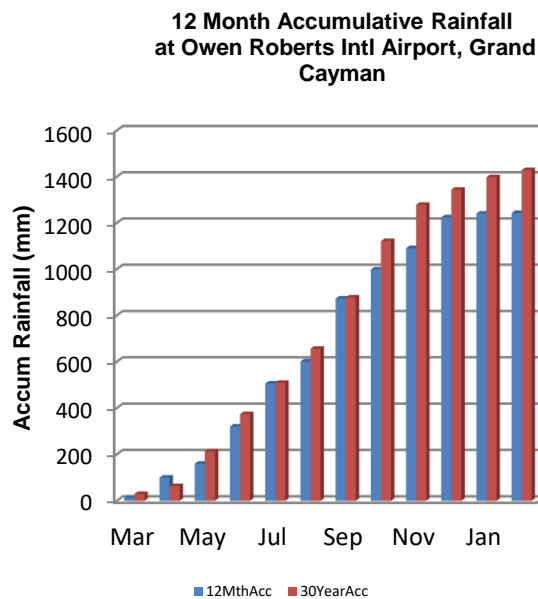


Figure 1. The graph displays the monthly accumulative rainfall over the past 12 months compared to the 30-year average. The rainfall totals for the past 12 months were **14.9% below** the 30-year average.

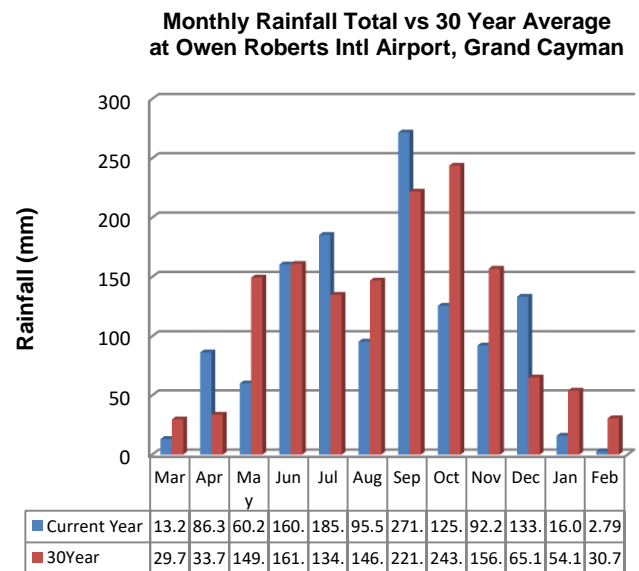
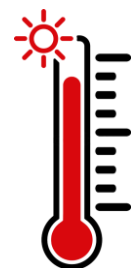


Figure 2. The graph displays the monthly rainfall totals over the past 12 months compared to the 30-year average. September's rainfall total of 271.8mm is currently the highest for 2022 with 115.3mm of the total associated with the passage of Hurricane Ian (September 25th-26th).

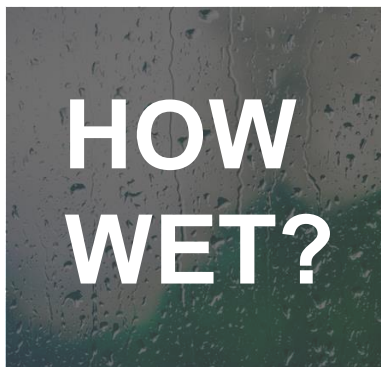
Temperature Review

The Dec-Jan-Feb average temperature recorded at Owen Roberts Airport was 27.0°C, which was 0.7 above the climatological average.

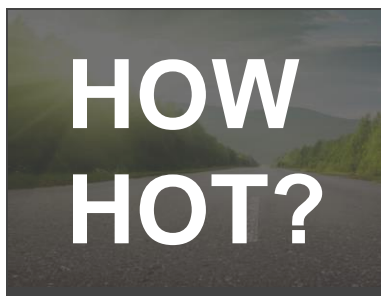
Temperature (°C)	Climatological Average (1991-2020)	Feb 2023		
		Highest	Avg	Lowest
Monthly Max	28.7	30.8	30.0	27.7
Monthly Min	22.9	25.5	23.3	19.9
Monthly Avg	26.3	27.8	27.1	26.0



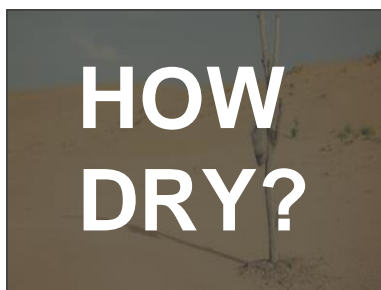
Outlook or What Should We Expect? (Mar 2023 – May 2023)



Climatological Rainfall Range				Forecast	
167.9-264.4 mm				Climatological	
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>
9-22	8-24	0.9-2.6	0.9-3	0-1	0-1.2



Climatological Minimum Temperature Range	Forecast	Climatological Average Temperature Range	Forecast	Climatological Maximum Temperature Range	Forecast
24.0°C – 24.3°C	40% Probability below average	27.5°C – 27.7°C	45% Probability above average	29.9°C – 30.2°C	45% probability above average
Heat Outlook N/A					



Drought: Short term and long term show no Concern.

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>
6-10	6-10	3-6	4-7

El Niño Southern Oscillation (ENSO)

Recent observations: Sea Surface Temperatures (SSTs) in the eastern Pacific have risen from La Niña to ENSO neutral conditions by mid-February (i.e. less than 0.5°C below average).

Model forecast and guidance: The forecast models indicate a return to ENSO neutral conditions is likely in MAM (90% confidence) and either remaining so in JJA (35-45% confidence), or possibly transitioning to El Niño conditions from then onwards (50-60% 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 delayed onset of the wet season and a drier summer season, resp.

- 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

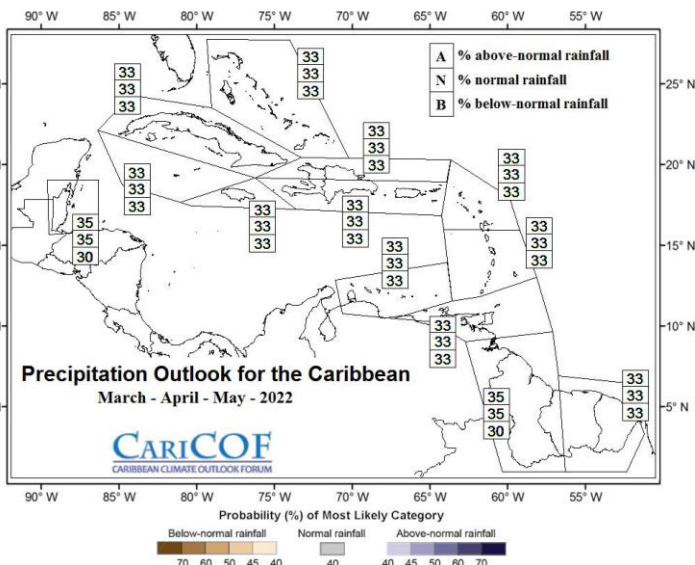


Figure 3: CariCOF Precipitation Outlook

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.