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Weather & Climate

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August 2022

Summary

- Rainfall for the past 3 months was below the normal range.
- The Caribbean 'Heat Season' continues through October. Stay Hydrated!
- The 2022 Atlantic Hurricane Season is predicted to be an above average season, Be Prepared!!

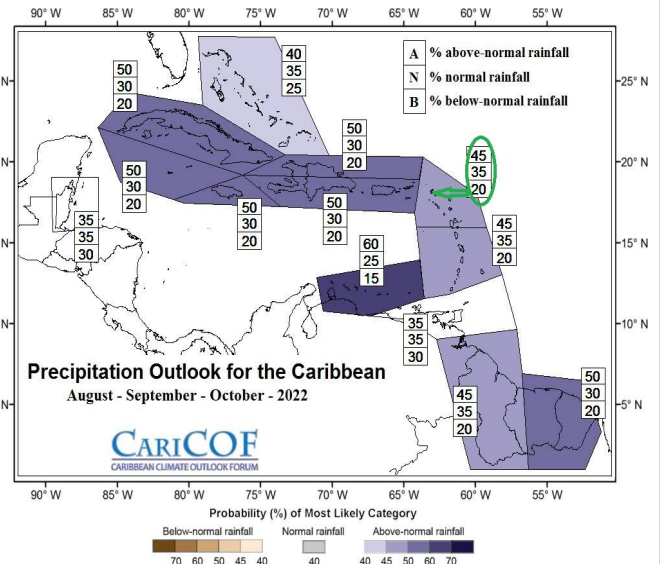
Seasonal Outlook for August to October (ASO) 2022

Rainfall Forecast

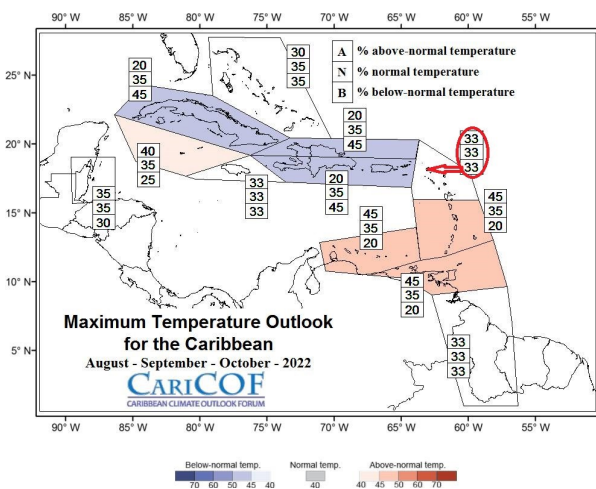
Models are indicating that rainfall totals for the season Aug-Sept-Oct 2022 are likely to be near to or above the normal range in St. Maarten and most of the eastern Caribbean.

Normal rainfall on St. Maarten during the Aug-Sept-Oct season ranges 290mm-408mm/11-16 inches, with 37 to 45 wet days. August often includes a mid-summer dry spell while in Sept. & Oct., there are usually frequent heavy showers.

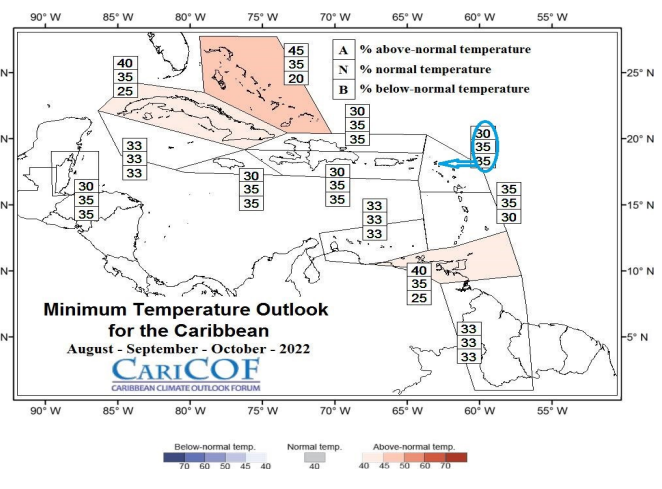
The forecast is for up to 7 (7-day) wet spells, up to 4 very wet spells and about 3 (7-day) dry spells on St. Maarten during this season.



Temperature Forecast



Day-time Temperatures



Night-time Temperatures

Day-time and night-time temperatures are expected to warm throughout the season but likely less than in recent hot years.

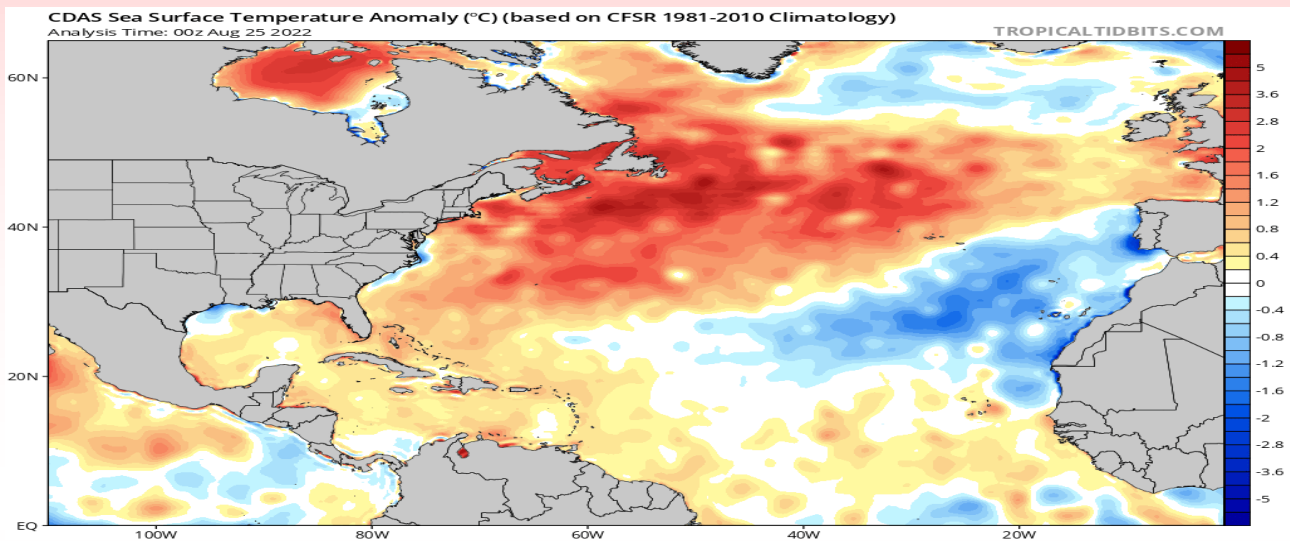
For more information on other Caribbean Outlooks go to <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid August, sea surface temperature (SST) remained below-average in the east-central Pacific (-0.6°C). The key atmospheric variables also remained consistent with continued La Nina conditions, strengthening slightly. The La Nina Advisory remained in place.

Majority of the forecast models predict that SSTs will remain below normal at the level of a La Nina until at least February 2023.

Warm SSTs have persisted to 1°C above average around the western subtropical North Atlantic and the Gulf of Mexico. Models are forecasting SST to be slightly warmer than usual (up to 0.5°C above average) around the Caribbean and in the sub-tropical North Atlantic. Warm SSTs in and around the Caribbean tend to contribute to higher air temperature, above-average humidity, seasonal rainfall totals and an increase in the frequency of extreme rainfall.



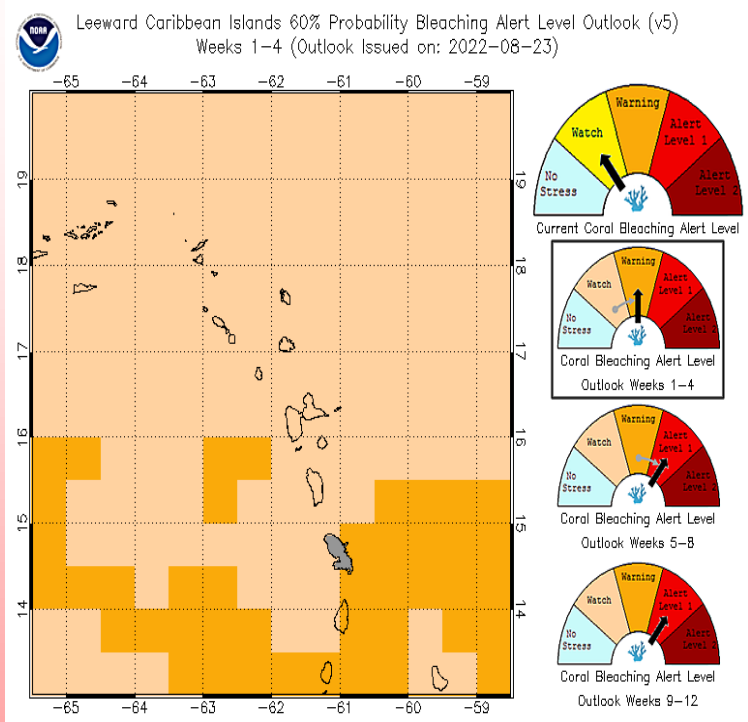
CORAL REEF WATCH

Warming continues in the Gulf of Mexico, the Caribbean basin, and the Western Atlantic.

Bleaching watch alerts issued throughout the region. Every regional virtual station is currently registering a watch alert.

The bleaching alert and outlook for the Caribbean indicates that extensive watch and warning alert level conditions could be expected throughout the region in October and November.

Significant heat stress is not predicted for most of the region.



JUNE/JULY 2022 IN REVIEW

	June		July	
Total Rainfall	13.1mm	0.5in	64.3mm	2.5in
2022 Cumulative Rainfall	213.1mm	8.4in.	277.4mm	10.9in.
Max. 24-Hr. Rainfall	3.4mm	0.1in.	13.3mm	0.5in.
No. Rain Days (≥1.0 mm)	6 days		17 days	
No. Heavy Rain Days (≥10.0 mm)	None		1 day	
No. Thunderstorm Days	None		2 days	
Avg. Wind Speed	9 kt.	10 mph	11 kt.	13 mph
Max. Wind Gust	31 kt.	36 mph	33 kt.	38 mph
Avg. Temperature	28.5°C	83°F	28.6°C	84°F
Max. Temperature	32.5°C	91°F	32.5°C	91°F
Min. Temperature	25.1°C	77°F	24.0°C	75°F

Long /Short Term Seasonal Review**Year in Review
(August 2021– July 2022)**

Total rainfall over the past twelve (12) months was below the normal range (929-1198mm). A total of 720mm/28in. of rainfall was recorded at the Princess Juliana International Airport.

**Seasonal Review
(May-Jun-Jul 2022)**

Total rainfall for the last three (3) months was 107mm/4in, this amount was below the normal range (167-295mm). There was only one (1) day with heavy rainfall (>10mm) during that period.

Rainfall for the month of June was below normal while for July rainfall was within the normal range. June 2022 was the driest June since 2018. Temperatures for both months were generally near the normal range or slightly above normal.

The warmest days in June were the 11th, 26th, 29th & 30th with an average temperature of 28.8°C/84°F. The coolest day was the 4th with an average temperature of 27.4°C/81°F.

The warmest day in July was the 31st with an average temperature of 29.9°C/86°F. The coolest day was the 23rd with an average temperature of 27.7°C/82°F.

The days with the most sunshine hours in June and July were the 1st & 28th respectively. (12hrs:00min).

The day with the least sunshine hours in June was the 17th (2hrs:24min) and in July was the 2nd (2hrs:00min).

The windiest day in June was the 14th and in July were the 1st & 2nd with a daily average wind speed of 14kt./ 16mph.

The day with the highest wind gust in June was the 29th (31kt./36mph) while in July was the 1st with a gust of 33kt/38mph.

Skies were mostly cloudy for both months.

There were six (6) days with rainfall in June while in July there were seventeen (17) days.

The longest dry spell was twelve (12) days; 1st - 12th June.

There were three (3) hot days and nine (9) warm nights in June while in July there were five (5) hot days and two (2) warm nights.

There was also one (1) heat wave period from July 29th to 31st.

**NORMAL
AUGUST CONDITIONS**

Rainfall Total	75 – 122 mm	3-5 in.
Avg. No. of Rain days	14 days	
Daily Average Temperature	28.8°C	84°F
Avg. Max. Temperature	31.8°C	89°F
Avg. Min. Temperature	26.5°C	80°F
Avg. Daily Hours of Sunshine	9 hrs	

Implication of Forecast for Sectors

Energy/Water Sector

Energy demand for cooling purposes will continue to increase through October.

Tourism Sector

- Continue to observe all health protocols.
- Keep updated on weather information as we are in the hurricane season.

Agriculture

- Drought conditions are not expected throughout this season.
- The potential for flooding and flash flooding remains high.

Health

- On hot days, excessive UV exposure can cause skin damage across the population on sunny days. Keep Hydrated!
- Persons with respiratory illnesses should take the necessary precautions during Saharan dust episodes and monitor daily forecasts for more information.
- Proper management of water storage containers e.g. covering with protective mesh helps to reduce the risk of potential breeding sites for mosquitoes.

2022 Atlantic Hurricane Season

So far three (3) named storms have formed for the 2022 season. Forecasters continue to predict above normal activity this season.

Sea surface temperatures continue to warm, the presence of La Nina conditions in the Pacific Ocean, weaker easterly trade winds and weaker than average vertical wind shear are some of the reasons for the above average activity forecasted.

Based on long-term averages, in an average season there are about fourteen (14) named storms out of which seven (7) become hurricanes and three (3) of them are usually major hurricanes (with wind 111mph or higher).

The National Oceanic & Atmospheric Administration (NOAA) released their latest predictions for the season which suggests above normal activity.

Named Storms: 14–20

Hurricanes: 6–10

Major Hurricanes: 3–5

Presently there are two areas of interest being monitored. Keep updated and be prepared.

2022 TROPICAL CYCLONE NAMES

ALEX	KARL
BONNIE	LISA
COLIN	MARTIN
DAN-	NICOLE
IELLE	OWEN
EARL	PAULA
FIONA	RICHARD
GASTON	SHARY
HERMINE	TOBIAS
IAN	VIRGINIE
JULIA	WALTER

BE PREPARED!!!!!!

1. Tropical Depression	<38mph
2. Tropical Storm	39-73mph
3. Hurricane	74+mph

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