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# Meteorological Department St. Maarten

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## Weather & Climate

Volume 7, Issue 10

November 2022

### **Summary**

- Rainfall for October was below normal; driest October since 2016.
- Heat is no longer a concern as we transition to the cool season.
- Remain alert and prepared! We are still in the Hurricane Season!

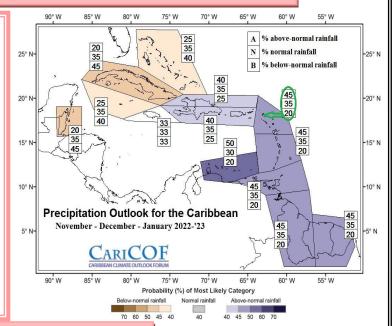
### Seasonal Outlook for November to January (NDJ) 2022/23

### **Rainfall Forecast**

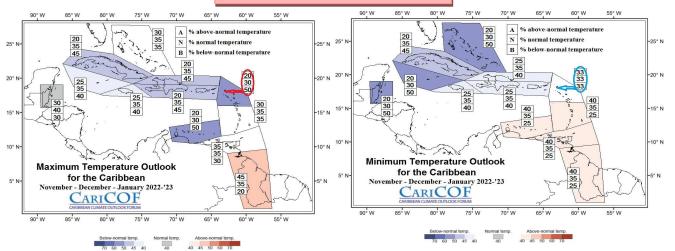
Models are indicating that rainfall totals for the season Nov-Dec-Jan 2022/23 are likely to be near to or above the normal range in St. Maarten and most of the eastern Caribbean.

Normal rainfall on St. Maarten during the Nov-Dec-Jan season ranges 272mm–321mm/11-13 inches, with 37 to 45 wet days. Nov. is normally the wettest month on St. Maarten therefore, there is usually frequent heavy showers while in Dec and Jan. as we transition to the dry season frequency decreases.

The forecast is for up to 7 (7-day) wet spells, up to 3 very wet spells and about 4 (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 be the usual or lower this season. Heat stress continues to decrease this season as we transition into the cool season.

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

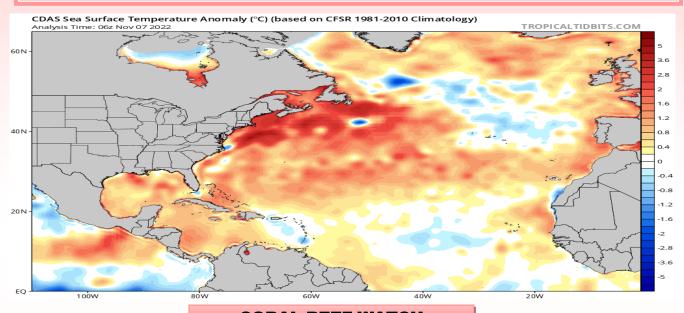
### WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid October, sea surface temperature (SST) remained below-average in the east-central Pacific (-1.0°C). The key atmospheric variables also remained consistent with continued La Nina conditions. 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 the Jan-Feb-Mar 2023 season.

SSTs have risen to 0.5-1°C above average in much of the Caribbean Sea and the Tropical north Atlantic and remain at that level in the sub-tropical North Atlantic. Models are suggesting that SST will return to between 0°C to 0.5°C above average around the Caribbean and in the 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

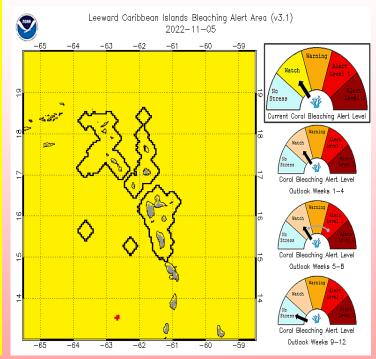
Warming continues in the Gulf of Mexico, the Caribbean basin, and the Western Atlantic.

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

Thermal stress is accumulating. Sea Surface Temperatures are currently near the bleaching threshold.

Bleaching watch alerts will remain until the end of November across the Leeward Islands. In December, bleaching is possible mainly in the southern Caribbean. Bleaching is not expected

Caribbean. Bleaching is not expected around the Leeward Islands.



This newsletter is produced by the Meteorological Department of St. Maarten. We would appreciate your comments and feedback. Kindly drop us a line at meteo@sintmaartengov.org or call us at (1 721) 520 3312/545 4226.

### **OCTOBER 2022 IN REVIEW**

Total Rainfall	67.5 mm	2.7 in
2022 Cumulative Rainfall	628.2 mm	24.7 in.
Max. 24-Hr. Rainfall	13.8 mm	0.5in.
No. Rain Days (>=1.0 mm)	12 days	
No. Heavy Rain Days (>=10.0 mm)	2 days	
No. Thunderstorm Days	5 days	
Avg. Wind Speed	8 kt.	9 mph
Max. Wind Gust	25 kt.	29 mph
Avg. Temperature	28.5°C	83°F
Max. Temperature	32.4°C	90°F
Min. Temperature	24.4°C	76°F

### Long /Short Term Seasonal Review

## Year in Review (November 2021— October 2022)

Total rainfall over the past twelve (12) months was below the normal range (986-1231mm). A total of 810mm/32in. of rainfall was recorded at the Princess Juliana International Airport.

## Seasonal Review (Aug-Sept.-Oct 2022)

Total rainfall for the last three (3) months was 351mm/14in, this amount was within the normal range (290-408mm). There were ten (10) days with heavy rainfall (>10mm) during that period.

Rainfall for the month of October was below the normal range. This was the driest October since 2016. Temperatures for the month of October were within the normal range.

The warmest days in October were the 1<sup>st</sup>, 5<sup>th</sup> & 10<sup>th</sup> with an average temperature of 29.0°C/84°F. The coolest day was the 27<sup>th</sup> with an average temperature of 27.2°C/81°F.

The day with the most sunshine hours in October was the 23<sup>rd</sup> (11hrs:12min).

The day with the least sunshine hours in October was the 26<sup>th</sup>, (0hrs:24min)

The windiest day in October was the 5<sup>th</sup> with a daily average wind speed of 11kt./13mph.

The day with the highest wind gust was the 11<sup>th</sup> (25kt./29mph).

Skies were partly cloudy to cloudy for most of the month.

There were twelve (12) days with rainfall in October, two (2) of which were heavy rainfall days (>10mm).

The longest dry spell was seven (7) days long;  $17^{th}$  -  $23^{rd}$  October.

There were three (3) hot days in October, (>32.2°C/91°F)

There were four (4) warm nights in October, (>27.2°C /81°F)

There were no heat wave periods recorded in the month of October.

# NORMAL NOVEMBER CONDITIONS

Rainfall Total	89 — 156 mm	4-7 in.
Avg. No. of Rain days	14 days	
Daily Average Temperature	27.4∘C	81ºF
Avg. Max. Temperature	30.0∘C	86°F
Avg. Min. Temperature	25.0∘C	77ºF
Avg. Daily Hours of Sunshine	8 hrs	

Please note that all data was recorded at the Princess Juliana International Airport and may not necessarily reflect conditions at other points on country St Maarten.

### **Implication of Forecast for Sectors**

### **Energy/Water Sector**

Energy demand for cooling purposes may decrease as we transition to the cool season.

#### Tourism Sector

 Keep updated on weather information as we are still in the hurricane season.

### **Agriculture**

- The potential for flooding and flash flooding remains high.
- Pest and disease may become more prevalent.

#### **Health**

- Heat stress is rapidly decreasing and is no longer a concern.
- Persons with respiratory illnesses should continue to 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.
- Avoid floodwaters as there is an increased risk of Leptospirosis due to contamination by rodents.

### 2022 Atlantic Hurricane Season

The 2022 Atlantic Hurricane Season has produced fourteen (14) named storms as of the November 7<sup>th</sup>. Seven (7) of those have become hurricanes and two were major hurricanes (Fiona & Ian). For the month of October, there were three (3) named storms two (2) of which became hurricanes. (Julia & Lisa).

Tropical storm Julia, the 10<sup>th</sup> named storm of the 2022 Atlantic Hurricane season formed over the southern Caribbean Sea on October 7<sup>th</sup> and became a hurricane just before making landfall in Nicaragua on October 9<sup>th</sup>. Tropical storm Karl formed in the Gulf of Mexico on October 11<sup>th</sup> and was short lived.

Tropical storm Lisa formed in the central Caribbean Sea on the last day of October and made landfall in Belize on November 2<sup>nd</sup> as a hurricane.

The public is hereby urged to keep updated and continue to monitor weather reports as the hurricane season officially comes to an end on November 30<sup>th</sup>.

Keep updated and be prepared.

For up to date information on the weather visit our website: www.meteosxm.com

Or

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## 2022 TROPICAL CYCLONE NAMES

ALEX	KARL
BONNIE	LISA
COLIN	MARTIN
DANIELLE	NICOLE
EARL	OWEN
FIONA	PAULA
GASTON	RICHARD
HERMINE	SHARY
IAN	TOBLAS
JULIA	VIRGINIE
	WALTER

### BE PREPARED!!!!!!

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

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