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Weather & Climate

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October 2020

Summary

- September 2020 was the warmest September since 1987 with 22 hot days and 4 heatwave periods.
- September 2020 was the most active month on record having produced 10 named storms, 4 of which became hurricanes one major hurricane (Teddy).
- Warmer than usual temperatures are likely for the next 3 months; heatwaves are still possible during the month of October.

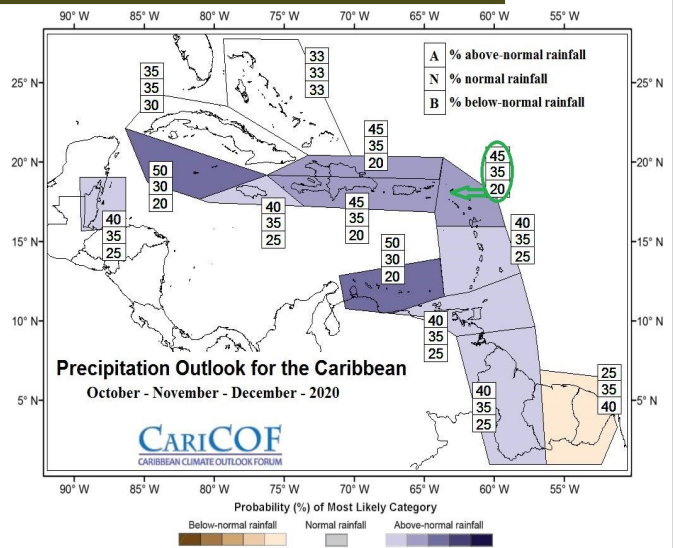
Seasonal Outlook for October to December (OND) 2020

Rainfall Forecast

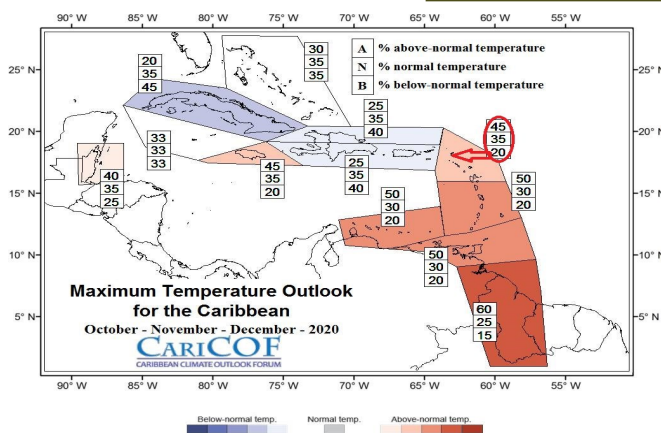
Rainfall totals for the season Oct-Nov-Dec 2020 are likely to be higher than usual in St. Maarten and much of the Antilles but drier than usual in the eastern parts of the Guianas.

Within the 92 days of Oct-Nov-Dec., the normal rainfall total for St. Maarten ranges from 307mm–499mm/ 12-20in. with 38 to 49 wet days. There is usually frequent showers in October and November with a decrease in frequency and intensity in December.

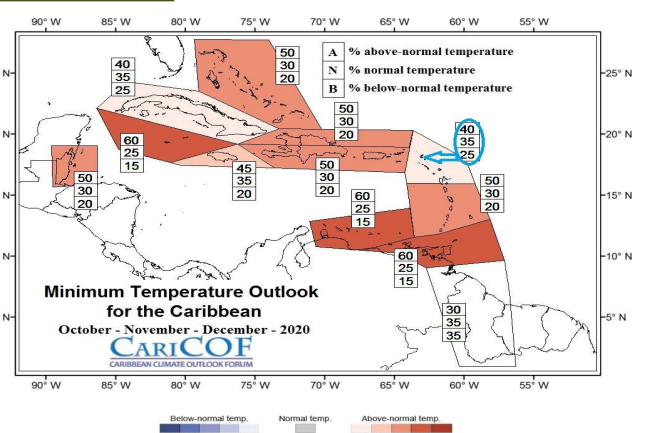
The forecast is for 3-7 (7-day) wet spells and up to 4 very wet spells in St. Maarten this season.



Temperature Forecast



Day-time Temperatures



Night-time Temperatures

Day-time and night-time temperatures are likely to be the usual or warmer across most of the Caribbean with the exception of Cuba, Hispaniola and US territories. Heat discomfort is still expected in October mainly in the Southern Caribbean.

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

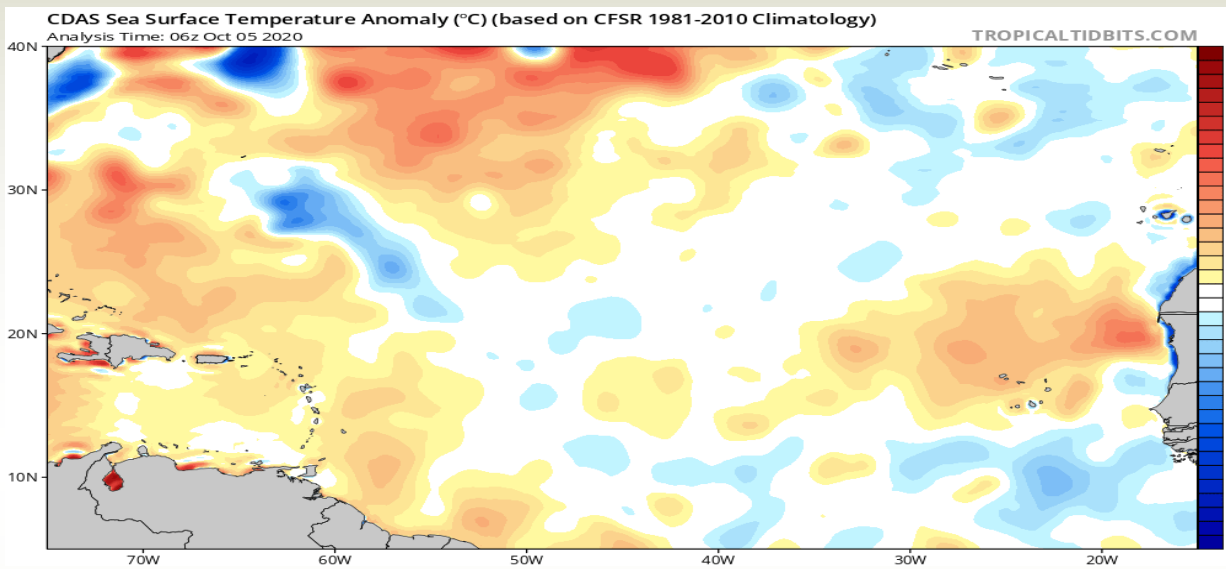
WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid September, Sea surface temperatures (SST) in the east-central Pacific were below average and Atmospheric variables were consistent with La Nina conditions.

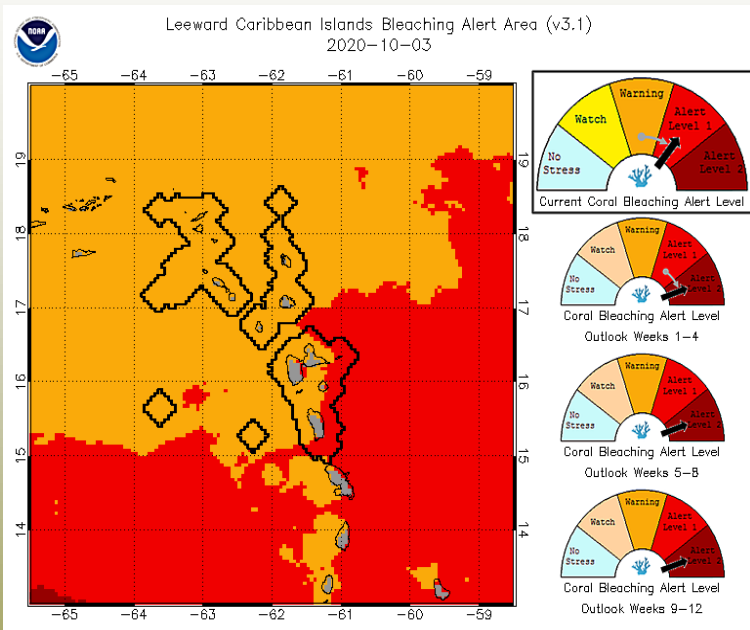
Majority of the forecast models exceed the threshold for La Nina conditions throughout 2020 into early 2021. A La Nina Advisory is posted.

La Nina conditions favor more rainfall and tropical cyclone activity in the Caribbean. However La Nina conditions tilts the odd for less rainfall in the northern Caribbean in the Jan-Feb-Mar Season. In addition, temperatures may be tempered a bit due to added moisture and more frequent showers in areas that are wetter.

Recent observations show that SSTs along the Caribbean coasts and in parts of the Tropical North Atlantic are up to 1-1.5°C above average. Continued warm SSTs throughout the Caribbean may contribute to above-average humidity, increased seasonal rainfall totals, wet spell frequency and increase tropical cyclone activity.



Coral Bleaching Forecasts



The Coral Bleaching Alert and Outlook for St. Maarten and the Leeward Islands is currently at a warning and is expected to be upgraded to Alert Level 1 by the end of this week and to Level 2 by the end of October .

Presently the SSTs around the Leeward Islands are above average and above the bleaching threshold.

Widespread bleaching and some mortality is expected by the end of October.

Coral Bleach Alert:
WARNING ➔ **ALERT LEVEL 1**

SEPTEMBER 2020 IN REVIEW

Total Rainfall	95.3 mm	3.8 in.
2020 Cumulative Rainfall	681.0 mm	26.8 in.
Max. 24-Hr. Rainfall	Sept. 30 th	14.2 mm/ 0.6in.
No. Rain Days (≥1.0 mm)	13 days	
No. Heavy Rain Days (≥10.0 mm)	3 days	
No. Thunderstorm Days	10 days	
Avg. Wind Speed	7 kts.	8 mph
Max. Wind Gust	26 kts.	30 mph
Avg. Temperature	29.5°C	85°F
Max. Temperature	Sept. 24 th	34.2°C / 94°F
Min. Temperature	Sept. 6, 28	26.0°C / 79°F

Long /Short Term Seasonal Review**Year in Review
(Oct. 2019— Sept 2020)**

Total rainfall over the past twelve (12) months was within the normal range. A total of 1004.1 mm/40in. of rainfall was recorded at the Princess Juliana International Airport.

**Seasonal Review
(Jul –Aug-Sept. 2020)**

Total rainfall for the last three (3) months was 321.5mm/13 inches, this amount was within the normal range (264-349mm). There were nine (9) days with heavy rainfall (>10mm). The last 3 months were extremely hot; there were fifty-seven (57) hot days with (eleven) 11 heat wave periods.

Overall temperatures were above normal for the month of September. This was the warmest September in 33 years, there were 22 hot days (>32.3°C/90°F) and 4 heatwave periods; the longest was 7 days. i.e. 7 consecutive days when maximum temperature was 32.3°C/90°F or above.

The average daily temperature for September was 29.5°C /85°F.

The warmest days were the 21st & 22nd with an average temperature of 30.3°C/87°F.

The coolest days were the 12th & 27th with an average temperature of 28.3°C/83°F.

The days with the most sunshine hours were the 5th & 6th (11 hrs :00min).

The day with the least sunshine hours was the 27th (2hrs:30min).

The windiest day was the 30th, with a daily average wind speed of 11 kt./ 13 mph.

The day with the highest wind gust was the 1st with a gust of 26kt/30mph.

Skies were fair to partly cloudy most days in September.

There were thirteen (13) days with rainfall in September with 3 days of heavy rainfall.

There were 22 hot days with 9 of them being very hot days and six (6) of them extremely hot.

There were 4 heat wave periods; the longest heat wave was from September 20th to 26th.

NORMAL OCTOBER CONDITIONS

Rainfall Total	100 mm – 181 mm	4– 7 in.
Avg. No. of Rain days	14 days	
Daily Average Temperature	28.2°C	83°F
Avg. Max. Temperature	31.4°C	89°F
Avg. Min. Temperature	25.8°C	78°F
Avg. Daily Hours of Sunshine	8 hrs	

Implication of Forecast for Sectors

Energy/Water Sector

Energy demand for cooling purposes is not expected to increase after October as temperatures are expected to be more comfortable from November.

Tourism Sector

- Continue to observe all health protocols.
- Monitor weather advisories issued by the Meteorological Department.

Agriculture

An Increase in rainfall activity may increase the risk of moisture related pests and disease as well as increase erosion.

Health

- Heat waves and high humidity are still possible in October. This may cause significant heat discomfort therefore, adequate cooling and hydration are required.
- During episodes of Saharan dust persons with respiratory illnesses/allergies should stay indoors or take the necessary precautions when venturing outdoors.
- As shower activity increases this season, the presence of stagnant water after heavy rainfall events may promote the breeding of mosquitoes and increase the risk of vector-borne illnesses.

2020 TROPICAL CYCLONE NAMES



Arthur	Omar	Zeta
Bertha	Paulette	Eta
Cristobal	Rene	Theta
Dolly	Sally	Iota
Edouard	Teddy	Kappa
Fay	Vicky	Lambda
Gonzalo	Wilfred	Mu
Hanna		Nu
Isaias	Greek Alphabet	Xi
Josephine	Alpha	Omicron
Kyle	Beta	Pi
Laura	Gamma	Rho
Marco	Delta	Sigma
Nana	Epsilon	Tau

SEPTEMBER PRODUCED 10 NAMED STORMS 4 OF WHICH WERE HURRICANES, 1 MAJOR (TEDDY)

REMAIN VIGILANT!!!!
MONITOR WEATHER INFORMATION DAILY !!!!

2020 Atlantic Hurricane Season thus Far

By Sheryl Etienne-Leblanc

This Atlantic hurricane season continues on its busy path. By September 18th the final name on the regular storm list for 2020 was exhausted thus turning to the Greek Alphabet for additional storm names. This is the second time this has ever happened, the first time was in 2005.

So far this season we have had 25 named storms, nine (9) of which have become hurricanes including three (3) major hurricane (Laura, Teddy & Delta).

September 2020 became the most active month on record having produced ten (10) named storms.

There is only one system in the Gulf of Mexico presently; Hurricane Delta which made landfall in Mexico as a category 2 hurricane on October 7th 2020. On its projected path is expected to make a second landfall in Louisiana by the weekend.

As we wind down the last two months of the season, we must be reminded that it is not yet over. On October 15th 2008, Hurricane Omar dumped over **5** inches of rainfall on St. Maarten and on October 13th 2014 Hurricane Gonzalo affected St. Maarten dumping nearly **6** inches of rainfall in 24 hours accompanied by hurricane force winds. In November 1999 Hurricane Lenny dumped **18** inches of rainfall on St. Maarten within 2 days.

Lets not put our guards down, remain vigilant and prepared to take the necessary action when called upon. Monitor weather information from credible sources and remember it does not have to be a storm or hurricane, heavy rainfall events can have significant impacts as well.

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