

Like us on Facebook:

www.facebook.com/sxmweather

Meteorological Department St. Maarten

Follow us on twitter:

@sxmweather



Weather & Climate

Volume 5, Issue 11

November 2020

Summary

- October 2020 was the wettest month for 2020 so far and wettest October since 2010.
- October 2020 produced 5 named storms 4 of which were hurricanes.
- Temperatures for the next 3 months expected to be more comfortable; no heatwaves expected.
- La Nina conditions are forecast to remain in place until the first quarter of 2021.

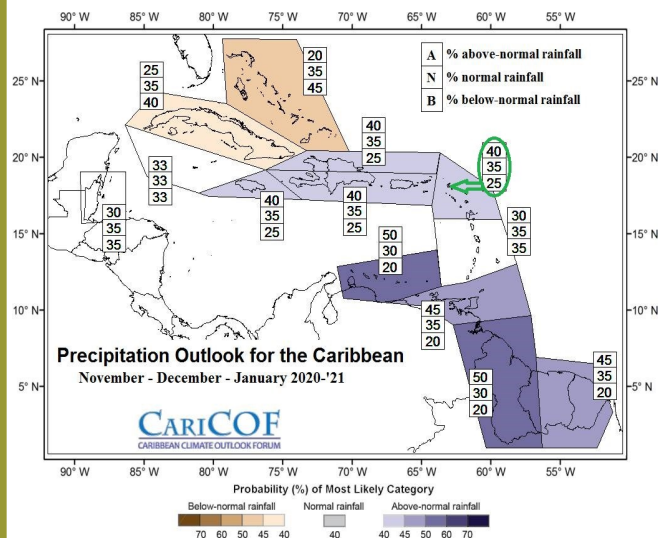
Seasonal Outlook for November to January (NDJ) 20/21

Rainfall Forecast

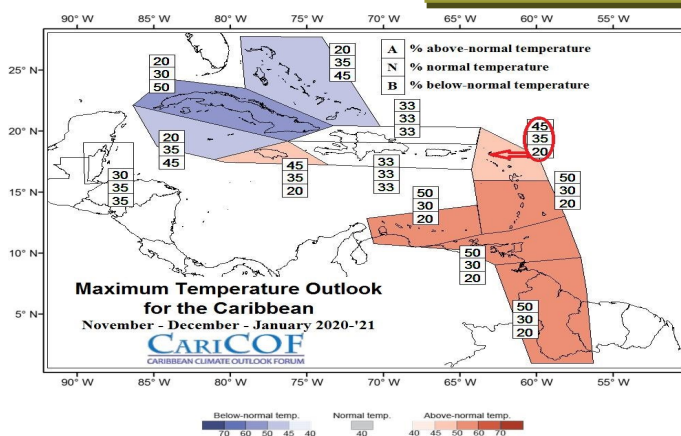
Rainfall totals for the season Nov-Dec-Jan 20/21 are likely to be higher than usual in St. Maarten and most of the Antilles but likely to be drier than usual in the Bahamas and Cuba.

Within the 92 days of Nov-Dec-Jan., the normal rainfall total for St. Maarten ranges from 269mm–325mm/ 11-13in. with 38 to 48 wet days. There is usually frequent showers in November since it is the wettest month of the year and December through January there is a decrease in frequency and intensity of showers as we transition into the dry season.

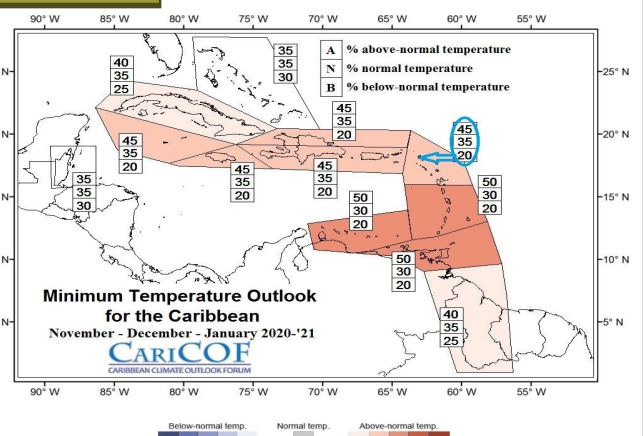
The forecast is for 2-6 (7-day) wet spells and up to 3 very wet spells in St. Maarten this season.



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 day time temperatures in Cuba, Cayman Islands and the Bahamas. Any heat discomfort should subside quickly.

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

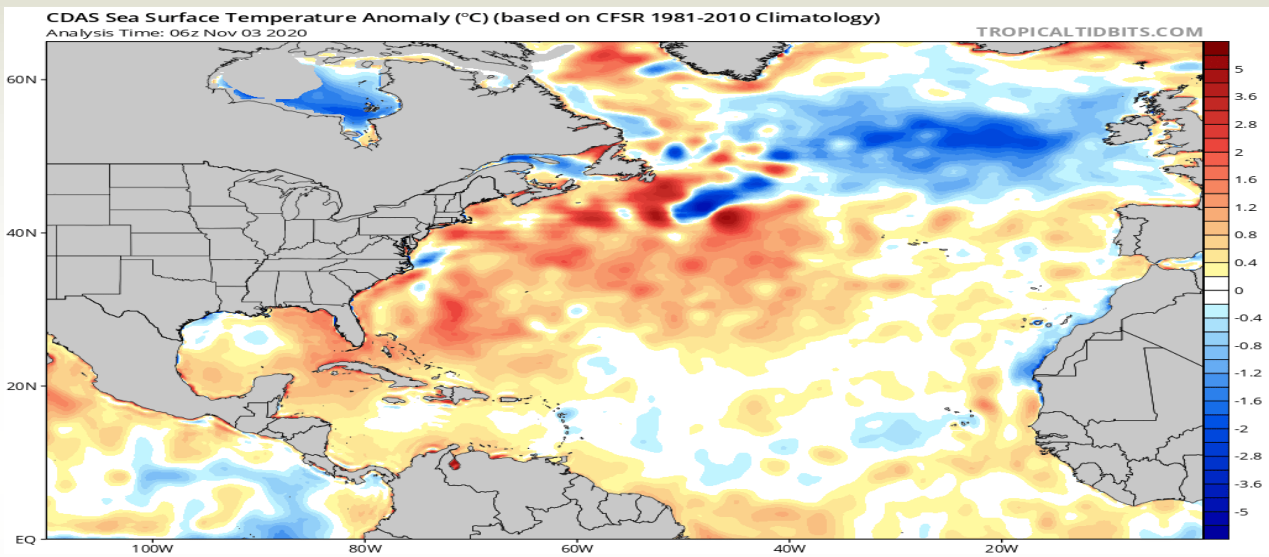
WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid October, Sea surface temperatures (SST) in the east-central Pacific were roughly 1 degree Celsius below average, and all key atmospheric variables were consistent with La Nina conditions.

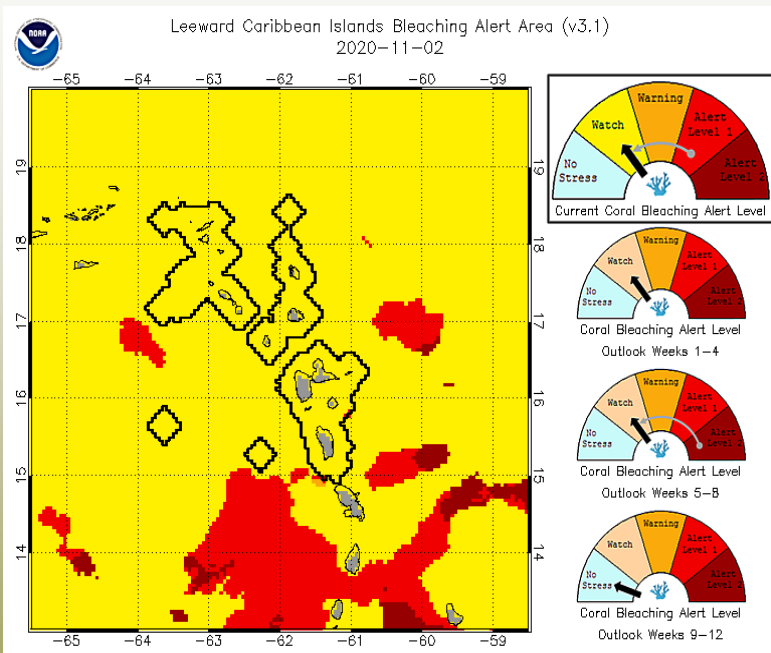
Majority of the forecast models exceed the threshold for La Nina conditions throughout 2020 and dissipating around Feb-Mar-Apr. season 2021. A La Nina Advisory is in effect.

La Nina conditions favor more rainfall and tropical cyclone activity in the Caribbean till December. However La Nina conditions tilts the odd for less rainfall in the northwestern Caribbean in the Jan-Feb-Mar Season. In addition, temperatures may be tempered by 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°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



Coral Bleaching was forecast to take in some isolated areas across the Caribbean during the month of October and is expected to continue during the next few weeks in the southern Caribbean.

Presently the SSTs around the Leeward Islands are slightly above average but slightly below the bleaching threshold.

Bleaching is no longer expected around the Leeward Island and alert levels should return to No Stress by the end of November.

Coral Bleach Alert:

WATCH → **NO STRESS**

OCTOBER 2020 IN REVIEW

Total Rainfall	271.1 mm	10.7 in.
2020 Cumulative Rainfall	952.1 mm	37.5 in.
Max. 24-Hr. Rainfall	Oct. 16 th	71.7 mm/ 2.8in.
No. Rain Days (≥1.0 mm)	21 days	
No. Heavy Rain Days (≥10.0 mm)	9 days	
No. Thunderstorm Days	8 days	
Avg. Wind Speed	8 kts.	9 mph
Max. Wind Gust	39 kts.	45 mph
Avg. Temperature	28.4°C	83°F
Max. Temperature	Oct. 8 th &	32.9°C / 91°F
Min. Temperature	Oct. 1 st	22.7°C / 73°F

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

Total rainfall over the past twelve (12) months was within the normal range. A total of 1120.9 mm/44in. of rainfall was recorded at the Princess Juliana International Airport.

**Seasonal Review
(Aug-Sept-Oct. 2020)**

Total rainfall for the last three (3) months was 463.6mm/18 inches, this amount was above the normal range (332-422mm). There were 15 days with heavy rainfall (>10mm). August and September were extremely hot while in October the heat was tempered a bit; there were 54 hot days with 10 heat wave periods during the last 3 months.

Overall temperatures were within the normal range for the month of October. There were 9 hot days (>32.3°C/90°F) and 2 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 October was 28.4°C /83°F.

The warmest day was the 22nd with an average temperature of 29.5°C/85°F.

The coolest day was the 17th with an average temperature of 27.1°C/81°F.

The day with the most sunshine hours was the 21st (10hrs :48min).

The day with the least sunshine hours was the 3rd (1hrs:30min).

The windiest day was the 30th, with a daily average wind speed of 12 kt./ 14 mph.

The day with the highest wind gust was the 1st with a gust of 39kt/45mph.

Skies were cloudy most days in October.

There were twenty-one (21) days with rainfall in October with 9 days of heavy rainfall.

There were 9 hot days with 5 of them being very hot days.

There were 2 heat wave periods; the longest heat wave was from October 6th to 12th.

**NORMAL
NOVEMBER CONDITIONS**

Rainfall Total	85 mm – 170 mm	3– 7 in.
Avg. No. of Rain days	15 days	
Daily Average Temperature	27.3°C	81°F
Avg. Max. Temperature	30.0°C	86°F
Avg. Min. Temperature	24.7°C	77°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 this season as temperatures are expected to become more comfortable.

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

- 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.
- Proper management of water storage containers e.g., covering with protective mesh helps to reduce this risk.

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

OCTOBER PRODUCED 5 NAMED STORMS 4 OF WHICH WERE HURRICANES, 3 MAJOR (EPSILON, DELTA, ETA)

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

2020 Atlantic Hurricane Season thus Far By Sheryl Etienne-Leblanc

The 2020 Atlantic hurricane season continues to be very active and continues setting records. This is the first time that we have gone past the 6th Greek Alphabet. In 2005 the final named storm used was Zeta which formed in Late December of that year. This year on the last day of October we are using the 7th Greek Alphabet (Eta).

So far this season we have had 28 named storms, twelve (12) of which have become hurricanes including five (5) major hurricane (Laura, Teddy, Delta, Epsilon & Eta).

The record 2005 hurricane season generated four named storms, which included one hurricane, after November 1. One of which formed after Christmas 2005 and dissipated in January 2006.

Presently, there is only one system in the western Caribbean; Hurricane Eta which made landfall in Nicaragua as a category 4 hurricane on November 3rd 2020. Eta is expected to bring life threatening storm surge, catastrophic winds and flash flooding over portions of Central America this week.

As we move into the final month of the 2020 Atlantic Hurricane season let us be reminded that it is not all over. In November 1984 Tropical Storm Klaus brought storm conditions to St. Maarten and in 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.