

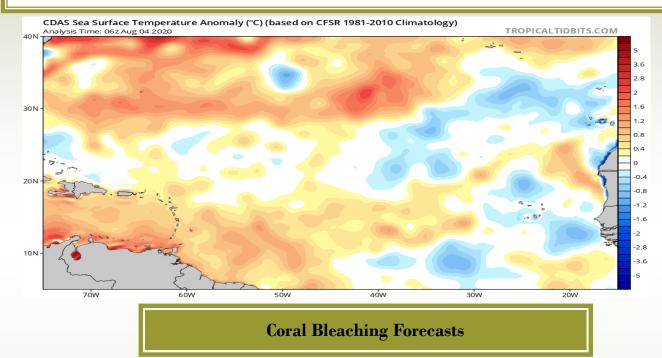
Sea surface temperatures (SST) in the east-central Pacific were in the cool-neutral range in mid July.

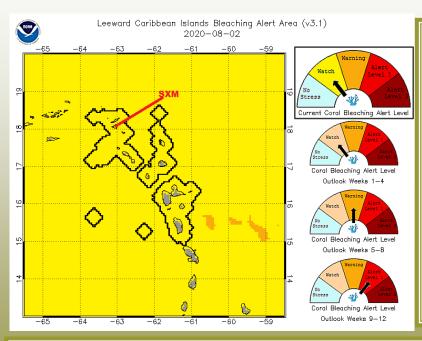
Atmospheric variables were either ENSO-neutral or slightly leaning toward La Nina conditions.

Most of the latest forecast models are tending towards a weak La Nina through early 2021. A La Nina watch is now posted.

La Nina tilts to more rainfall and tropical cyclone activity in the Caribbean. However La Nina conditions are very weak at this time and offers little contribution to the seasonal rainfall and temperature predictions.

Recent observations show that SSTs along the Caribbean coasts and in parts of the Tropical North Atlantic are up to 1°C with sub-tropical North Atlantic SSTs up to 2°C above average. Continued warm SSTs throughout the Caribbean may contribute to above-average humidity, increased seasonal rainfall totals and increase tropical cyclone activity.





The Coral Bleaching Alert and Outlook for St. Maarten and the Leeward Islands remain at watch level until the end of August, then evolve to a warning in September followed by bleaching Alert Level 1 by October.

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

Low thermal stress is expected for the next few weeks across the Leeward Islands, thermal stress will begin to accumulate in September followed by bleaching.

Coral Bleach Alert: WATCH

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.

JULY 2020 IN REVIEW

Total Rainfall	129.0 mm	5.1 in.
2020 Cumulative Rainfall	488.5mm	19.2 in.
Max. 24-Hr. Rainfall	Jul. 29 th	46.2mm/ 1.8in.
No. Rain Days (>=1.0 mm)	14 days	
No. Heavy Rain Days (>=10.0 mm)	3 days	
No. Thunderstorm Days	4 days	
Avg. Wind Speed	10 kts.	12 mph
Max. Wind Gust	44 kts.	51 mph
Avg. Temperature	29.0°C	84°F
Max. Temperature	Jul. 28 th	32.8°C / 91°F
Min. Temperature	Jul. 7 th	24.2°C / 76°F

Long /Short Term Seasonal Review

Year in Review (Aug. 2019– Jul 2020)

Total rainfall over the past twelve (12) months slightly below the normal range. A total of 1035 mm/41 inches of rainfall was recorded at the Princess Juliana International Airport.

Seasonal Review (May-Jun –Jul. 2020)

Total rainfall for the last three (3) months was 166.8mm/7 inches, this amount was below the normal range (194-281 mm). There were three (3) days with heavy rainfall (>10mm) within that period all occurring in the month of July.

Rainfall for the month of July was above the normal range (63-106mm). This was the first month with above normal rainfall since March. Temperatures were near to above normal for this the month of July.

The average daily temperature for July was 29.0°C /84°F.

The warmest day was the 28^{th} with an average temperature of $29.9^{\circ}\text{C}/86^{\circ}\text{F}$.

The coolest day was the 19^{th} with an average temperature of $27.3^{\circ}\text{C/81}^{\circ}\text{F}$.

The day with the most sunshine hours was the 18^{th} (11hrs :54min).

The day with the least sunshine hours was the 29th (0hrs:24min).

The windiest day was the 29^{th} , with a daily average wind speed of 19 kt./ 22 mph.

The day with the highest wind gust was the 29^{th} with a gust of 44kt/51 mph. This was as a result of Potential Tropical Cyclone #9 which passed about 160 miles southwest of St. Maarten on the 29^{th} .

Skies were fair to partly cloudy most days in July.

There were fourteen (14) days with rainfall in July.

There were 3 heat wave periods in July with 12 hot days and 1 very hot day (28^{th}) .

The longest heat wave was 4 days from July 1^{st} to 4^{th} . (Heat wave: 2 or more consecutive days with max. temperature 32.3° C or above).

NORMAL JULY CONDITIONS

Rainfall Total	63.4 mm — 106.4 mm	3— 4 in.
Avg. No. of Rain days	13 days	
Daily Average Temperature	28.6ºC	84∘F
Avg. Max. Temperature	31.7ºC	89∘F
Avg. Min. Temperature	26.2ºC	79∘F
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 is expected to increase until October as this heat season is expected to be most intense in recent years.

Agriculture

Warmer than usual conditions expected this season therefore proper shelter for livestock should be put in place.

<u>Tourism Sector</u>

- Observe all health protocols.
- Put all hurricane/disaster plans in place and monitor weather advisories issued by the Meteorological Department.



BE PREPARED!!!!! BE PREPARED!!!!!!!!

<u>Health</u>

- UV radiation will continue to increase this season. Excessive exposure can cause skin damage on sunny days. The use of sunscreen and other protective gears are advised.
- Day-time temperatures are expected to be warmer than usual this season and become uncomfortably hot at times. 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 may promote the breeding of mosquitoes and increase the risk of vector-borne illnesses.

2020 Atlantic Hurricane Season thus Far By Sheryl Etienne-Leblanc

The 2020 Atlantic hurricane season has already broken the records for having nine (9) named storms so early in the season. This season is also tied with the 2005 season for having five (5) named storms in the month of July.

With just two months into the season and most predictions going for more than eighteen (18) named storms, there is the possibility of running out of storm names.

The list in any given year has 21 names, if a storm is formed after the 21st named storm (Wilfred) this season, the next name (s) would come from the Greek alphabet, starting with Alpha.

This has only occurred once before; 2005. After devastating Hurricane Wilma in 2005, activity didn't stop. There were six (6) named storms after Wilma, two (2) of which became hurricanes.

They were Alpha, Beta, Gamma, Delta, Epsilon and Zeta. Zeta formed on December 30th 2005 and ended on January 7th 2006. (Hurricanes: Beta and Epsilon)

We have seen one of the worst Saharan dust event in over 20 years as recorded by many of the measuring stations across the Caribbean; records of warmest temperatures in 60 years (April); records of driest month in 25 years (May). What more can 2020 bring weather-wise?

Preparing for the safety of self and property is key and with Covid-19, it is all so complicated.

Anticipating what's breaking next in 2020. Be Safe!!!!!

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