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Weather & Climate

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June 2020

Summary

- May 2020 was the driest May in 46 years and the warmest May in 21 years.
- Temperatures are forecast to be warmer than usual for the next 3 months with the likelihood of heatwaves occurring during this period.
- The 2020 Atlantic Hurricane Season is forecast to be an active one, 2 storms formed before June 1st 2020.

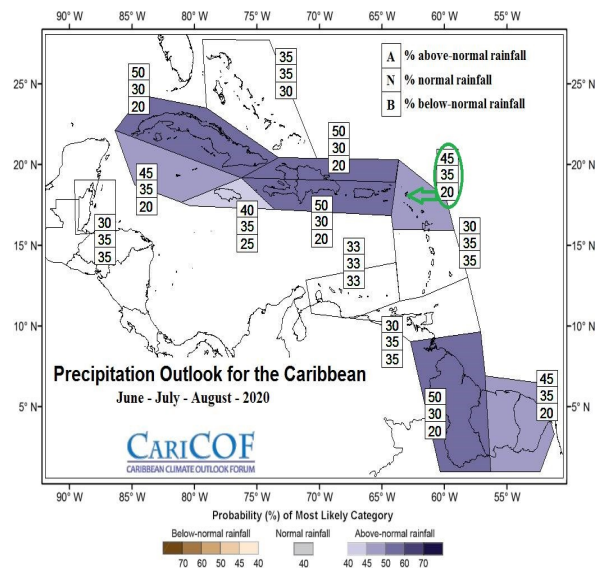
Seasonal Outlook for June to August (JJA) 2020

Rainfall Forecast

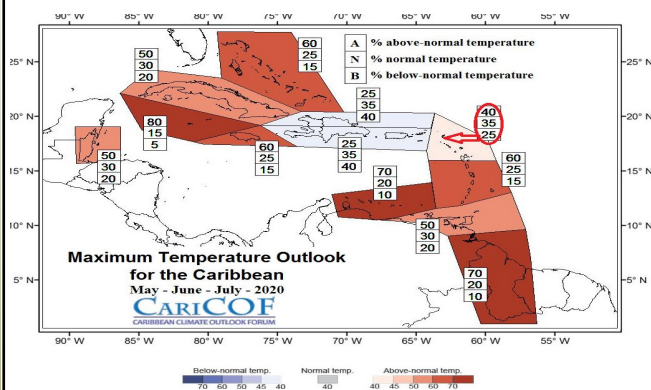
Rainfall totals for the season Jun-Jul-Aug. 2020 are likely to be above the usual in St. Maarten, the Leeward Islands, Greater Antilles and the Guianas.

Within the 92 days of Jun-Jul-Aug., the normal rainfall total for St. Maarten ranges from 210mm–288mm/ 8-11in with 32-42 wet days. The forecast goes for 2 to 5 (7-day) wet spells and 2 to 6 (7-day) dry spells this season.

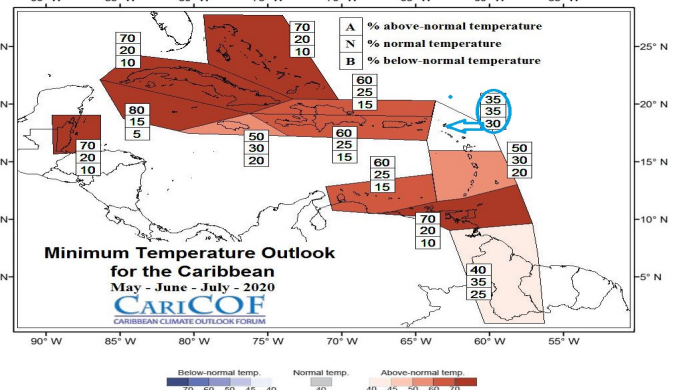
June is normally the beginning of the wet season, therefore expect more frequent showers however, dry spells are expected through July with the heavier shower activity expected to occur in August.



Temperature Forecast



Day-time Temperatures

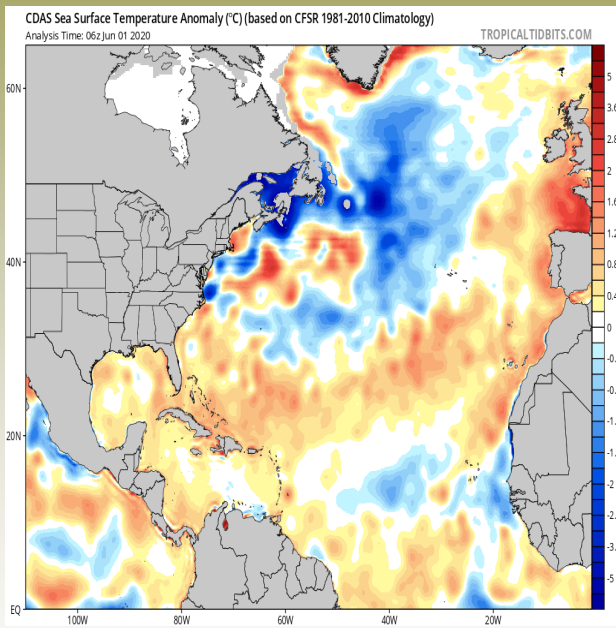


Night-time Temperatures

Both day-time and night-time temperatures are expected to be warmer than usual across most of the Caribbean. There are times when it may become uncomfortably hot especially during heat waves.

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?



Sea surface temperatures (SST) in the east-central Pacific were near average in mid-May.

Patterns in the atmosphere were either neutral or slightly cooler. The latest models forecast neutral SST conditions to continue throughout the summer, becoming below-average but not necessarily into La Nina phase for the rest of 2020.

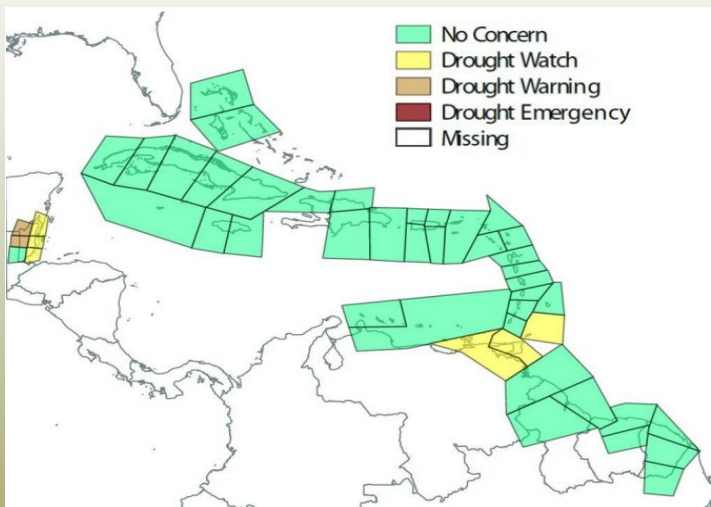
The ENSO neutral conditions have little contribution to the seasonal rainfall or temperature in the Caribbean.

Recent observations show that SSTs across much of the Caribbean and western Tropical North Atlantic are up to 1°C with sub-tropical North Atlantic SSTs up to 2°C above average.

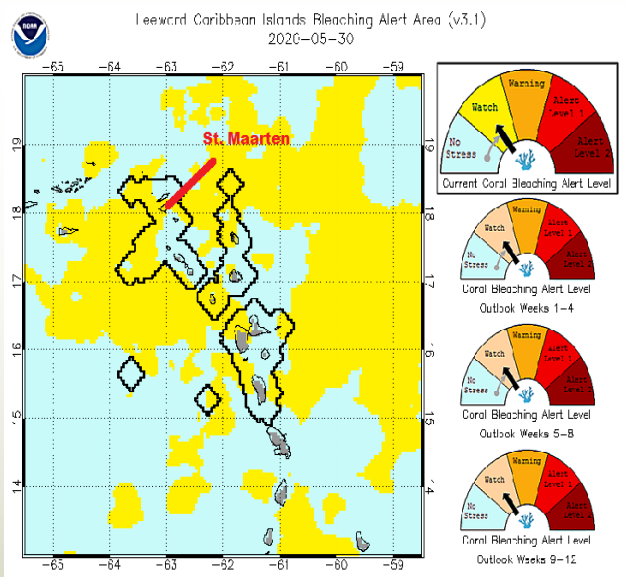
Continued warm SSTs throughout the Caribbean may contribute to above-average humidity, seasonal rainfall totals, and wet spell frequency across the region. In addition, warm SSTs favour warmer night-time temperatures and, where rainfall does not increase, warmer day-time temperatures.

Coral Bleaching & Drought Forecasts

January to April 2020 was exceptionally to moderately wet while May was exceptionally dry. Many Caribbean Islands are experiencing dry conditions since the beginning of May. As the wet season begins it is expected that rainfall activity will increase however there is the possibility for dry spells to continue through July with most of the rainfall activity occurring in August. As a result it is likely that by the end of August drought conditions will be alleviated in most islands including St. Maarten.



Suggested alert levels for short term drought at the end of August 2020



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

Low thermal stress is expected for the next three (3) months across the Leeward Islands.

Coral Bleach Alert: WATCH

MAY 2020 IN REVIEW

Total Rainfall	11.5 mm	0.5 in.
2020 Cumulative Rainfall	333.2mm	13.1 in.
Max. 24-Hr. Rainfall	May 4 th	4.6mm/ 0.2in.
No. Rain Days (≥1.0 mm)	4 days	
No. Heavy Rain Days (≥10.0 mm)	0 day	
No. Thunderstorm Days	2 days	
Avg. Wind Speed	9 kts.	10 mph
Max. Wind Gust	29 kts.	33 mph
Avg. Temperature	28.5°C	83°F
Max. Temperature	May 27 th	32.4°C / 90°F
Min. Temperature	May 5 th	23.7°C / 75°F

Long /Short Term Seasonal Review**Year in Review****(Jun. 2019— May 2020)**

Total rainfall over the past twelve (12) months was within the normal range. A total of 1089 mm/43 inches of rainfall was recorded at the Princess Juliana International Airport.

Seasonal Review (Mar-Apr-May 2020)

Total rainfall for the last three (3) months was 133.5mm/5 inches, this amount was below the normal range (163-262 mm). There were five (5) days with heavy rainfall (>10mm) within that period.

Rainfall for the month of May was below the normal range (56-115mm). This was the driest May since 1974. Temperatures were above normal for this time of year. May 2020 was the warmest May since 1999.

The average daily temperature for May was 28.5°C /83°F.

The warmest day was the 29th with an average temperature of 29.2°C/85°F.

The coolest day was the 18th with an average temperature of 27.7°C/82°F.

The day with the most sunshine hours was the 14th (11 hrs :54min).

The day with the least sunshine hours was the 28th (7hrs:36min).

The windiest day was the 10th, with a daily average wind speed of 12 kt./ 14 mph.

The day with the highest wind gust was the 10th with a gust of 29kt/33 mph.

Skies were mostly fair throughout the month of May.

There were only four (4) days with rainfall in May this is the lowest number of rainy days in the month of May since 1999.

There was a 17-day dry spell in May from the 14th-30th

NORMAL JUNE CONDITIONS

Rainfall Total	39.7 mm – 65.9 mm	2– 3 in.
Avg. No. of Rain days	10 days	
Daily Average Temperature	28.4°C	83°F
Avg. Max. Temperature	31.5°C	89°F
Avg. Min. Tem- perature	26.1°C	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

Tourism Sector

- Use this quiet time to put your hurricane/disaster plans in place.

Agriculture

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

Some form of irrigation and alert for bush fires will continue during dry spells.

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.

Health

- UV radiation will be on the increase this season. Excessive exposure can cause skin damage on sunny days. The use of sunscreen and other protective gears are advised.
- During lockdown stay hydrated, open windows for air circulation. Avoid heat stress as we move into the Caribbean heat season.
- Day-time and night time temperatures are expected to be warmer than usual this season and become uncomfortably hot at times. Adequate cooling and hydration required.
- During episodes of Saharan dust persons with respiratory illnesses/allergies should stay indoors or take the necessary precautions when venturing outdoors.

2020 ATLANTIC HURRICANE SEASON

2020 TROPICAL CYCLONE NAMES



Arthur	Laura
Bertha	Marco
Cristobal	Nana
Dolly	Omar
Edouard	Paulette
Fay	Rene
Gonzalo	Sally
Hanna	Teddy
Isaias	Vicky
Josephine	Wilfred
Kyle	

JUNE 1ST MARKED THE OFFICIAL START OF THE
2020 ATLANTIC HURRICANE SEASON. 2 STORMS
HAVE FORMED BEFORE JUNE 1ST THIS YEAR.

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

This is the 6th consecutive year that storms have formed before the official start of the Atlantic Hurricane Season.

2015: Ana formed May 7th

**2016: Alex formed January 13th
Bonnie formed May 27th**

2017: Arlene formed April 20th

2018: Alberto formed May 25th

2019: Andrea formed May 20th

**2020: Arthur formed May 16th
Bertha formed May 27th**

Storms and hurricanes could form at any time of year but conditions are more conducive for development from June 1st to November 30th.

Storms or hurricanes have formed in every month of the year. May is the month outside the hurricane season in which the most storms have formed in the past 120 years. February and March are the least active months with only one storm or hurricane developing in the past.

On March 6th 1908 a tropical storm formed east of the Lesser Antilles and developed into a category 2 hurricane near Puerto Rico.

On February 3rd 1952 a tropical storm developed near Florida.

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