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## Meteorological Department St. Maarten

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# Weather & Climate

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June 2021

# **Summary**

- Rainfall for the last 3-months was below the normal range.
- Rainfall amounts expected to increase during the next 3-months however, heat waves are possible.
- Drought is not expected by the end of August 2021.

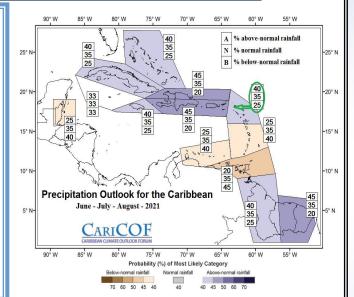
## Seasonal Outlook for June to August (JJA) 2021

### **Rainfall Forecast**

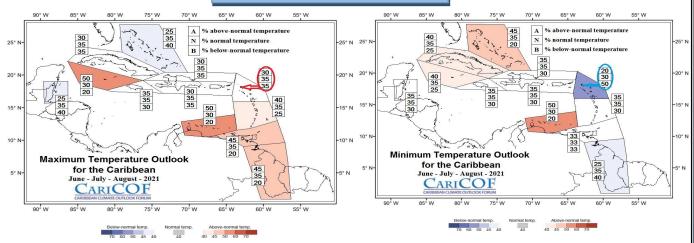
Models are indicating that rainfall totals for the season Jun-Jul-Aug 2021 are likely to be the usual or wetter in St. Maarten and the rest of the northeast Caribbean, Greater Antilles, the Bahamas and the Guianas.

Within the 92 days of Jun-Jul-Aug, the normal rainfall total for St. Maarten ranges from 201mm—267mm/8-11in. with 30 to 40 wet days. There are usually frequent showers in June, in July there is often a mid-summer dry spell while in August more frequent and heavy showers occur.

The forecast is for wetter than normal conditions with the possibility of 2-5 (7-day) wet spells and 1-5 (7-day) dry spells in Maarten this season.



## **Temperature Forecast**



**Day-time Temperatures** 

**Night-time Temperatures** 

Day-time temperatures are expected to be near normal across the Leeward Islands while night-time temperatures are likely to be cooler than usual.

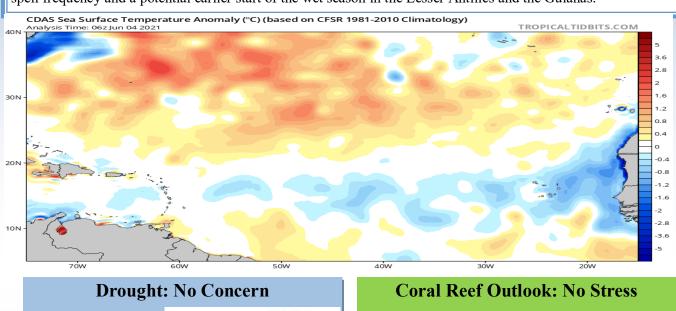
For more information on other Caribbean Outlooks go to http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/

### WHAT INFLUENCES THIS SEASON'S CLIMATE?

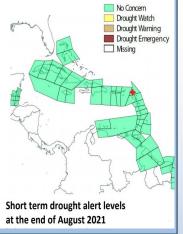
In mid May, sea surface temperatures (SST) in the east-central Pacific were roughly 0.3 degree Celsius below average, which indicated the end of La Nina conditions.

Majority of the forecast models predict SSTs to remain near normal through summer. The latest ENSO models are indicating a neutral phase to persist through Jul-Aug-Sept with great uncertainty towards the last quarter of 2021. A La Nina advisory is no longer in effect.

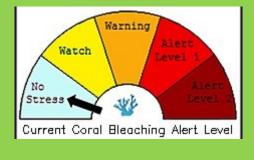
SSTs have cooled just below average in much of the Caribbean Sea and the Tropical North Atlantic and around 0.5°C above average in the sub-tropical North Atlantic. Models vary in forecasting whether SST anomalies decrease or increase across the Caribbean Sea through Sept-Oct-Nov. Continued warm SSTs throughout the Caribbean tend to contribute to above-average humidity, seasonal rainfall totals, reduced dry spell frequency and a potential earlier start of the wet season in the Lesser Antilles and the Guianas.



# Short term drought is not expected to be a major concern by the end of August across the Caribbean.

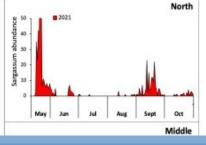


No thermal stress is expected on corals through July, Some low level thermal stress will begin by August.



# Sargassum Outlook





 Northern islands are set to receive severe influxes in mid May dropping off by early June to little or nothing over the summer. Then in early September moderate influxes return for the month, before more-or-less disappearing in October.

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.

### MAY 2021 IN REVIEW

Total Rainfall	47.4 mm	1.9 in.
2021 Cumulative Rainfall	180.8 mm	7.1 in.
Max. 24-Hr. Rainfall	14 <sup>th</sup> May	13.0mm/ 0.5in.
No. Rain Days (>=1.0 mm)	11 days	
No. Heavy Rain Days (>=10.0 mm)	1 day	
No. Thunderstorm Days	0 days	
Avg. Wind Speed	9 kts.	10 mph
Max. Wind Gust	24 kts.	28 mph
Avg. Temperature	27.8°C	82°F
Max. Temperature	30 <sup>th</sup> May	32.1°C / 90°F
Min. Temperature	31st May	23.7°C / 75°F

### Long /Short Term Seasonal Review

### Year in Review (June 2020— May 2021)

Total rainfall over the past twelve (12) months was within the normal range (958-1180mm). A total of 964mm/38in. of rainfall was recorded at the Princess Juliana International Airport.

# Seasonal Review (Mar-Apr-May 2021)

Total rainfall for the last three (3) months was 100.5mm/4inches, this amount was below the normal range (148-250mm). There was only one (1) day with heavy rainfall (>10mm) during that period.

Generally, temperatures were slightly above the normal range except for the minimum temperature which was near normal for the month of May 2021.

The average daily temperature for May was 27.8°C /82°F.

The warmest days were the 21<sup>st</sup> & 24<sup>th</sup> with an average temperature of 28.5°C/83°F.

The coolest day was the 3<sup>rd</sup> with an average temperature of 27.0°C/81°F.

The day with the most sunshine hours was the 2<sup>nd</sup> (11hrs:42min).

The day with the least sunshine hours was the 23<sup>rd</sup> (4hrs:36min).

The windiest day was the 5<sup>th</sup>, with a daily average wind speed of 12 kt./ 14 mph.

The day with the highest wind gust was the 4<sup>th</sup> with a gust of 24kt/28 mph.

Skies were fair for most of the time during the month of May.

There were eleven (11) days with rainfall in May. Heavy rainfall was only recorded on one (1) day.

The longest dry spell was six (6) days from the 3<sup>rd</sup> to 8<sup>th</sup> May.

# NORMAL JUNE CONDITIONS

Rainfall Total	35 mm — 59 mm	1— 2 in.
Avg. No. of Rain days	9 days	
Daily Average Temperature	28.4℃	83°F
Avg. Max. Temperature	31.3℃	88°F
Avg. Min. Temperature	26.2℃	79F
Avg. Daily Hours of Sunshine	8 hrs	

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

### **Energy/Water Sector**

Energy demand for cooling purposes will gradually increase through this season as temperatures warm.

#### **Tourism Sector**

- Continue to observe all health protocols.
- UV index will be very high to extremely high on sunny days. Visitors should be encouraged to apply sunscreen lotion regularly, and seek shaded areas between the hours of 10 AM and 3 PM.
- Increased possibility of interruptions of outdoor activities.

#### **Health**

- Wear protective clothing, especially on sunny days as exposure to dangerous UV radiation can cause skin damage.
- Keep hydrated.
- As shower activity become more frequent there is the likelihood of an increase in vector borne diseases.
- Proper management of water storage containers e.g., covering with protective mesh helps to reduce this risk.
- High humidity may cause discomfort when wearing masks.

### **Agriculture**

- Increased potential for flooding and waterlogged soils.
- Shelter livestock from excessive heat.
- Pests and diseases may increase in extreme dry and wet conditions.

### The 2021 Atlantic Hurricane Season

June 1st marked the official start of the 2021 Atlantic Hurricane Season. This year is the seventh consecutive year that tropical storms development has started prior to June 1st. Tropical storm Ana, the first storm of the 2021 season formed on May  $22^{nd}$  northeast of Bermuda.

This year forecasters are predicting an above normal season with 13 to 20 named storms, 6 to 10 hurricanes of which 3 to 5 may become major hurricanes.

With continued focus on protecting families and ourselves during this present global health crisis, it is very important to remember to make the necessary preparations ahead of time. Be reminded that it only takes one hurricane or storm to make landfall in our area to make it an active season for us. Therefore, preparation should be the same for every season, regardless of the level of activity predicted.

The Meteorological Department St. Maarten (MDS) will continue to monitor the development of all tropical systems closely, issue watches or warnings when it becomes necessary and inform the public using various communication mediums such as radio, newspaper, website (www.meteosxm.com,) and via social media (facebook.com/sxmweather/). It is also critical that the public seek credible information from official sources in order to make timely decisions that will help protect life and property.

The MDS will continue its awareness programs in the coming weeks with staff being interviewed by various media houses to inform and explain matter pertaining to weather and the 2021 Hurricane season.

# BE PREPARED!!! DON'T WAIT!!!!

# 2021 ATLANTIC HURRICANE SEASON STORM NAMES

 Henri Odette Bill • Ida Peter Claudette Julian Rose Kate Danny . Sam Elsa Larry Teresa Victor Fred Mindy Grace Nicholas Wanda

# 2021 ATLANTIC HURRICANE SEASON SUPLIMENTARY LIST STORM NAMES

 Adria . Heath . Orlanda Braylen Isla . Pax Caridad Jacobus Ronin Deshawn Kenzie Sophie Emery Lucio Tayshaun Foster Makayla Viviana . Will . Gemma Nolan

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