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Weather & Climate

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April 2021

Summary

- Dry conditions expected to continue on St. Maarten through June 2021.
- Rainfall for the next 3-months expected to be below average.
- Temperatures during the month of March were above average.

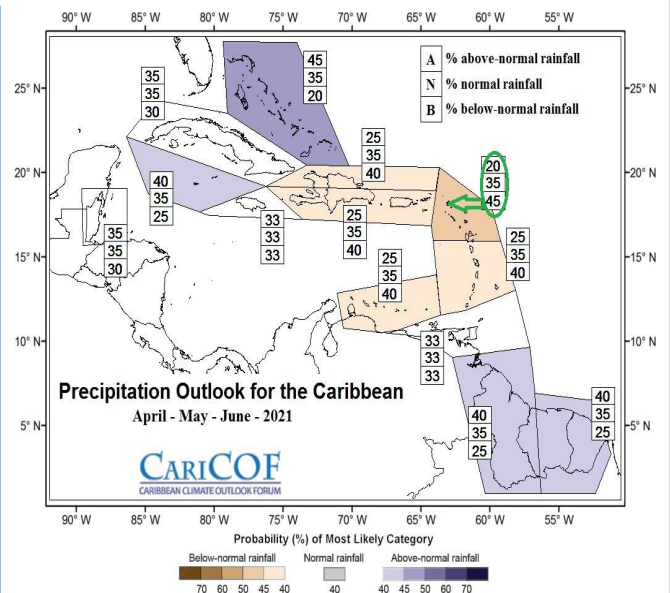
Seasonal Outlook for April to June (AMJ) 2021

Rainfall Forecast

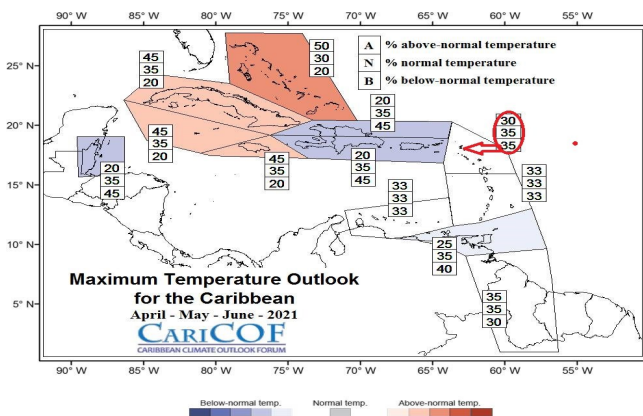
Rainfall totals for the season Apr-May-Jun 2021 are likely to be the usual or drier in St. Maarten and the rest of the Leeward Islands.

Within the 91 days of Apr-May-Jun, the normal rainfall total for St. Maarten ranges from 148mm–253mm/6-10in. with 22 to 30 wet days. There are usually some sunny days in April with limited showers while May and June usually has more frequent showers as we transition into the wet season.

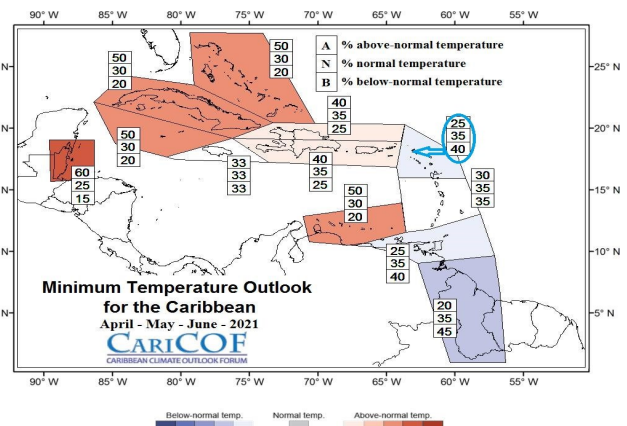
The forecast is for the usual number of wet days and for about 7 (7-day) dry spells in St. Maarten this season.



Temperature Forecast



Day-time Temperatures



Night-time Temperatures

Day-time temperature are likely to be as warm as usual while night-time temperatures will remain comfortably cool through the month of April and then progressively warm into May across most of the Eastern Caribbean.

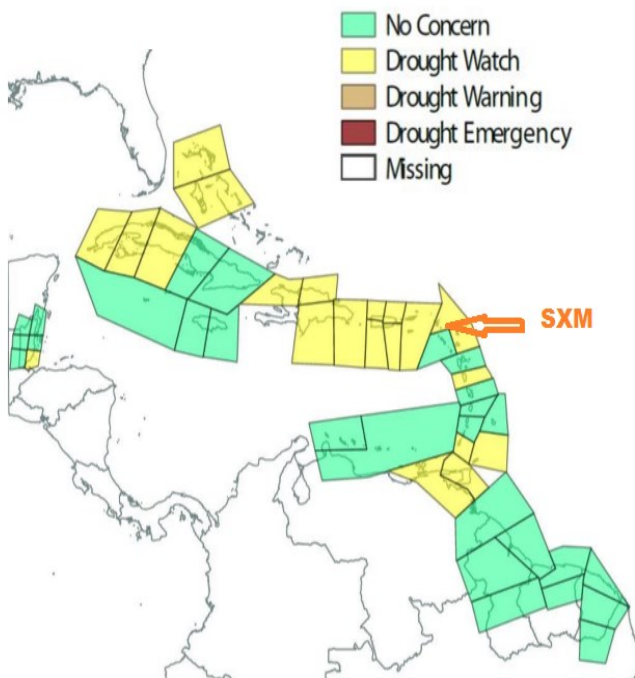
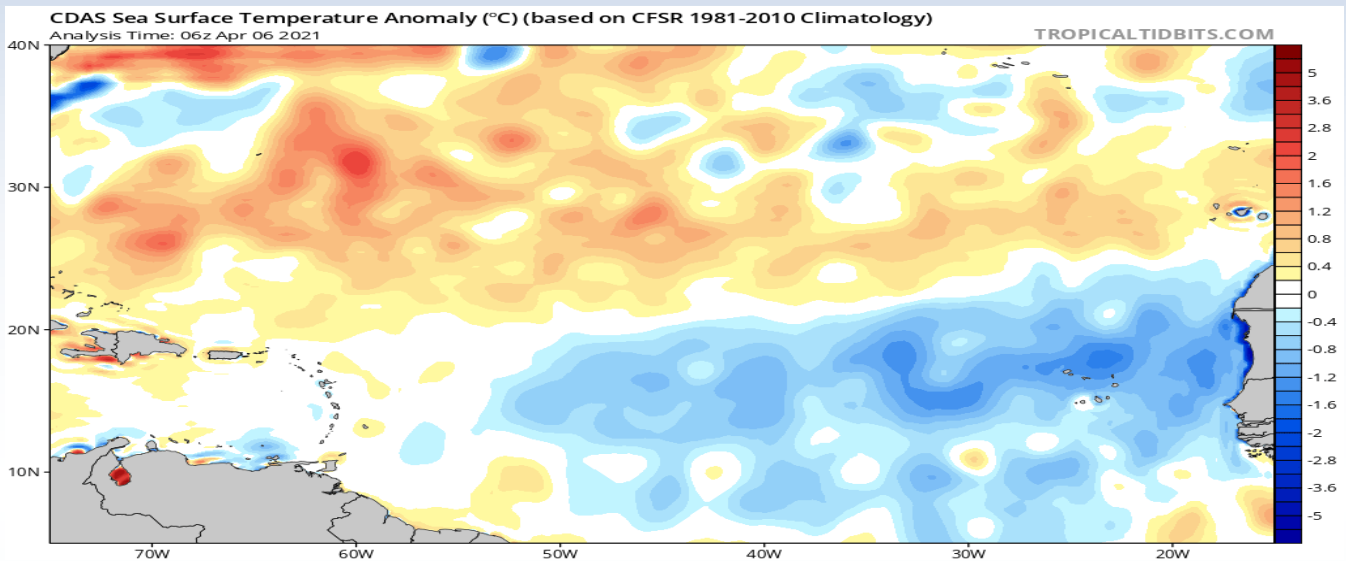
For more information on other Caribbean Outlooks go to <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid March, Sea surface temperatures (SST) in the east-central Pacific were roughly 0.3 degree Celsius below average, and most key atmospheric variables are consistent with weakening La Nina conditions.

Majority of the forecast models predict SSTs to return to normal during the Apr-May-Jun and throughout the rest of 2021 with an increased probability of the re-emergence of La Nina towards the end of 2021. However the La Nina advisory remains in effect for now.

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



**Short term drought alert levels
by the end of June 2021**

Drought Watch

Drought conditions are possible across much of the Greater Antilles and in isolated pockets of the Lesser Antilles by the end of June 2021 with the exception of St. Kitts, Barbados, the ABC Islands and the Guianas.

Due to limited amount of rainfall experienced over the past 3 months and below average rainfall forecasted for the next 3 months, dry conditions are expected to continue through June in St. Maarten.

Some of the things that can be done:

- * Keep updated on the situation;
- * Monitor and repair infrastructure; fire hydrants/ trucks, plan response strategies.
- * Implement our management plans in specific fields (water resource);
- * Put measures in place to monitor pond levels to avoid major fish kill;
- * Put irrigation plans in place and prepare shelter for animals.

MARCH 2021 IN REVIEW

Total Rainfall	27.7 mm	1.1 in.
2021 Cumulative Rainfall	108.0 mm	4.3 in.
Max. 24-Hr. Rainfall	25 th Mar.	4.9 mm/ 0.2in.
No. Rain Days (≥1.0 mm)	10 days	
No. Heavy Rain Days (≥10.0 mm)	0 days	
No. Thunderstorm Days	0 days	
Avg. Wind Speed	10 kts.	12 mph
Max. Wind Gust	34 kts.	39 mph
Avg. Temperature	26.1°C	79°F
Max. Temperature	21 st & 23 rd	30.7°C / 87°F
Min. Temperature	14 th Mar.	22.1°C / 72°F

Long /Short Term Seasonal Review**Year in Review
(Apr. 2020— Mar. 2021)**

Total rainfall over the past twelve (12) months was below the normal range (959-1195mm). A total of 947.6 mm/37in. of rainfall was recorded at the Princess Juliana International Airport.

**Seasonal Review
(Jan-Feb-Mar. 2021)**

Total rainfall for the last three (3) months was 108.0mm/4.3inches, this amount was below the normal range (136-180mm). There was only 1 day with heavy rainfall (>10mm) during that period.

Overall temperatures were above the normal range for the month of March and rainfall was below the average.

The average daily temperature for March was 26.1°C /79°F.

The warmest days were the 7th & 23rd with an average temperature of 26.8°C/80°F.

The coolest day was the 1st with an average temperature of 25.1°C/77°F.

The day with the most sunshine hours was the 21st (11hrs:24min).

The day with the least sunshine hours was the 20th (4hrs:30min).

The windiest day was the 30th, with a daily average wind speed of 14 kt./ 16 mph.

The day with the highest wind gust was the 31st with a gust of 34kt/39 mph.

Skies were mostly fair during the month of March.

There were ten (10) days with rainfall in March. None were heavy rainfall days.

The longest dry spell was 6 days from the 1st to 6th March.

**NORMAL
APRIL CONDITIONS**

Rainfall Total	41 mm – 58 mm	1– 2 in.
Avg. No. of Rain days	8 days	
Daily Average Temperature	26.6°C	79°F
Avg. Max. Temperature	29.7°C	86°F
Avg. Min. Temperature	24.3°C	76°F
Avg. Daily Hours of Sunshine	9 hrs	

Implication of Forecast for Sectors

Energy/Water Sector

Energy demand for cooling purposes may 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.
- Monitor daily forecasts for marine conditions as northerly swells and strong winds are more frequent this time of year and can create hazardous sea conditions.

Health

- During this period, excessive exposure due to dangerous UV radiation can cause skin damage across the population, especially on sunny days.
- The short term drought and associated increase in dust, as well as, potential soot and smoke from bushfires may contribute to higher concentrations of airborne particulate matter. Persons with respiratory illnesses should remain alert.

Agriculture

- Select drought tolerant crops and varieties.
- Identifying alternate water sources for on-farm activities, employing water management techniques such as irrigation scheduling and mulching; installing water-saving devices.
- Prepare proper shelter for livestock.

WEATHER

Word Search Puzzle



BLIZZARD	HEATWAVE	SLEET
CLOUDS	HUMID	SNOW
DRIZZLE	HURRICANE	SQUALL
DROUGHT	LIGHTNING	STORM
FLOOD	MIST	SUNSHINE
FORECAST	OVERCAST	THUNDER
FROST	RAIN	TORNADO
HAIL	SHOWER	WIND

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