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Weather & Climate

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Summary of Forecast for April to June 2019

- Weak El Nino-conditions are expected to persist.
- Rainfall totals are forecasted to be the usual or drier in Apr-May-Jun.
- Both Day-time and night-time temperatures are expected to increase this season.
- A Drought Watch has been issued for in St. Maarten and most of the Leeward Islands. Keep Updated!

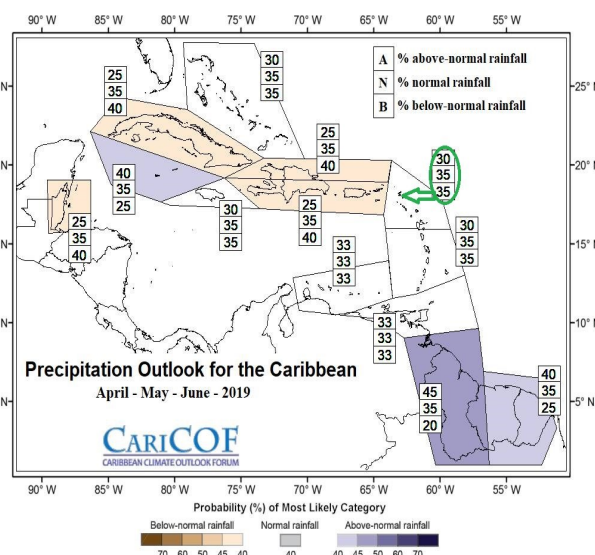
Seasonal Outlook for April to June (AMJ) 2019

Rainfall Forecast

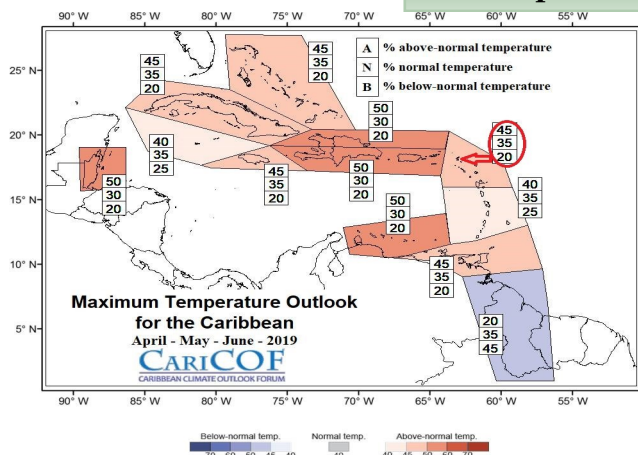
Rainfall totals for the season Apr-May-Jun 2019, are likely to be the usual or drier across most of the Caribbean except for the Cayman Islands and Belize where it is expected to be wetter than usual.

Within the 91 days of Apr-May-Jun, the normal rainfall total for St. Maarten ranges from 156 mm – 253mm/ 6-10 in. with about 22-34 wet days and up to 6 dry spells (7-day).

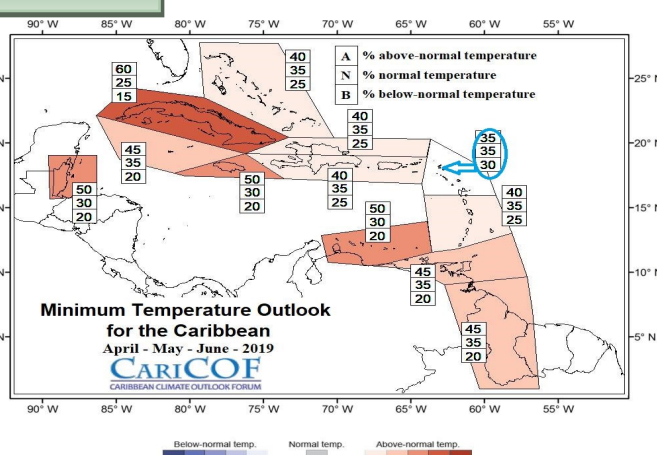
April usually marks the end of the dry season while May can either be wet or dry as transition into the wet season begins. According to the predictions these months are expected to be the usual or drier on St. Maarten.



Temperature Forecast



Day-time Temperatures



Night-time Temperatures

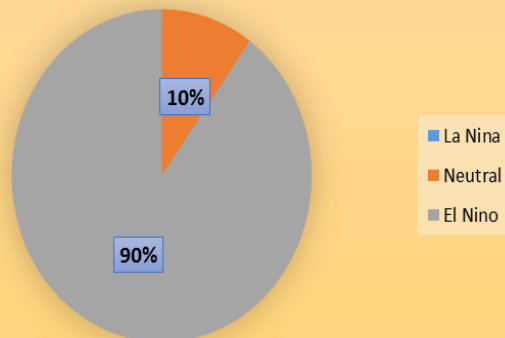
Both day-time and night-time temperatures in the Eastern Caribbean are likely to be usual or warmer during Apr-May-Jun 2019

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

ENSO FORECAST

(El Niño Southern Oscillation)

Enso Forecast Probabilities Apr-May-Jun 2019



Sea surface temperatures in the Pacific have increased during February and early March while subsurface waters have become warmer than average. Patterns in the atmosphere now clearly suggest El Niño conditions.

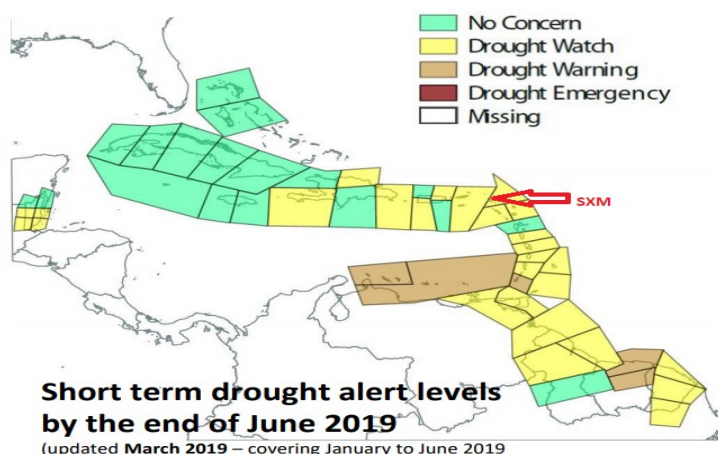
The latest forecast models collectively indicates a 90% chance of El Niño prevailing during Apr-May-Jun 2019. The forecast also indicate that, a weak El Niño will continue through summer and perhaps lasting through 2019.

An El Niño phase usually produces warmer and drier conditions with less rainfall activity in most parts of the Caribbean.

No Thermal Stress on Corals is expected this season..

Drought Forecast

Current Outlook



Most of the islands in the Caribbean have experienced low rainfall activity over the past six months or more.

Severe drought has developed in Antigua, Aruba, Curacao, Barbados, Northern Guyana and some of the Windward Islands.

A drought watch has been issued for St. Maarten and the most of the Leeward Islands.

A watch means drought is possible therefore management plans should be implemented, protect resources, conserve water, monitor and look out for monthly updates.

The 2019 Atlantic Hurricane Season

The 2019 Atlantic Hurricane season begins in less than two (2) months time.

2019 Storm Names

Andrea	Fernand	Karen	Pablo	Wendy
Barry	Gabrielle	Lorenzo	Rebekah	
Chantal	Humberto	Melissa	Sebastien	
Dorian	Imelda	Nestor	Tanya	
Erin	Jerry	Olga	Van	
Be Prepared !!!!!		Be Prepared !!!!!		Be Prepared !!!!!

MARCH 2019 IN REVIEW

Total Rainfall	13.4 mm	0.5 in.
2019 Cumulative Rainfall	100.3 mm	3.9 in.
Max. 24-Hr. Rainfall	Mar. 4 th	4.2 mm/ 0.2 in.
No. Rain Days (≥1.0 mm)	5 days	
No. Heavy Rain Days (≥10.0 mm)	0 days	
No. Thunderstorm Days	None	
Avg. Wind Speed	10 kts.	12 mph
Avg. Temperature	26.4°C	80°F
Max. Temperature	Mar. 15 th	30.0°C / 86°F
Min. Temperature	Mar. 30 th	23.0°C / 73°F

Rainfall for the month of March was below the normal range (32-58 mm).

Average daily temperatures for the month of March were above normal. This was the warmest March since 2010.

Daytime temperatures were within the normal range while night time temperatures were above the usual range for the month of March.

The warmest days were the 28th & 31st with an average temperature of 26.6°C/80°F.

The day with the most sunshine hours was the 14th (11hrs :18min).

The day with the least sunshine hours was the 4th (2hrs:54min).

The windiest day was the 25th, with a daily average wind speed of 13 kts. / 15 mph.

Mostly fair skies prevailed throughout the month of March as the Atlantic High Pressure System influenced stable conditions across the region.

The longest dry spell was 14 days from March 18th to 31st.

Long /Short Term Seasonal Review

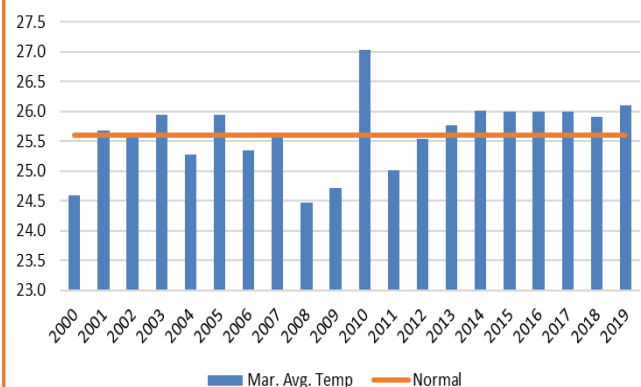
Year in Review (Apr 2018— Mar. 2019)

Rainfall over the past year continues to remain below normal. There is a 27% rainfall deficit. There were six (6) months within the past year with below normal rainfall.

Seasonal Review (Jan-Feb-Mar)

Total rainfall for the last 3 months was 100.3 mm, this amount was below the normal range (145-201 mm). There were only two (2) days with heavy rainfall (>10mm) within that period.

Average March Temperatures at PJIA



NORMAL APRIL CONDITIONS

Rainfall Total	41.3 mm – 74.9 mm	2– 3in.
Avg. No. of Rain days	8 days	
Daily Average Temperature	26.6°C	80°F
Avg. Max. Temperature	29.9°C	86°F
Avg. Min. Temperature	24.2°C	76°F
Avg. Daily Hours of Sunshine	9 hrs	

Implication of Forecast for Sectors

Health

- More frequent episodes of Saharan dust into the Caribbean region as well as dust due to drought conditions may increase the risk of respiratory illnesses. Persons suffering with Asthma and other such illness should take the necessary precaution.
- Heat waves may become an issue from May onwards therefore the need for hydration and protection from repeated exposure to dangerous UV radiation is advised.

Tourism Sector

- Less disruptions to outdoor activities expected in April however from May the risk of disruptions increases.
- The UV index continues to increase this season therefore, sunscreen application is encouraged.
- On hot days, there will be an increase demand for cooling & hydration.

Agriculture

- Irrigation will become necessary as rainfall totals continue to be below the usual for this time of year.
- Provide adequate water and shade for Livestock.
- The risk of bush fires continues to increase this season.

Energy/Water Sector

Energy demand for cooling purposes is expected to increase as both day-time and night-time temperatures are expected to increase this season.

Demand for water for irrigation and other purposes will increase.

Things you should know.....

2018 STORM NAMES RETIRED

Storm names are retired if they are deadly or destructive - otherwise, names are reused on a six-year cycle.

The names of two storms (Florence & Michael), which caused extensive fatalities and damage from Florida north to Virginia last year, have been retired by the World Meteorological Organization's Region IV Hurricane Committee Meeting which was held in Curacao last month.

The committee also selected the replacement names for Florence and Michael as Francine and Milton, respectively. These names will first appear in the 2024 list of storm names.

Including these two, 89 names have been retired from the Atlantic basin list since 1953, when storms began to be named. The 2005 hurricane season had the most retired names – five.

Hurricane Florence, one of the deadliest and costliest hurricanes to ever hit the Carolinas, on September 14, 2018 and moved slowly inland with heavy rain, storm surge, and record flooding. It caused at least 51 deaths and produced extensive flooding.

The following month, Hurricane Michael made landfall near Mexico Beach, Florida, on October 10, with sustained winds of 155 mph. It made landfall along the Florida Panhandle, where it caused widespread devastation and farther inland across Georgia, the Carolinas, and Virginia. There were at least 45 fatalities blamed on the storm in the United States.