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Weather & Climate

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Summary of Forecast for January to March 2019

- Jan-Feb-Mar, rainfall totals are expected to be lower than usual.
- Daytime temperatures are expected to be warmer than usual while night-time temperatures are expected to be as usual and become warmer by March.
- Drought is not expected to become a major concern until the end of May 2019.

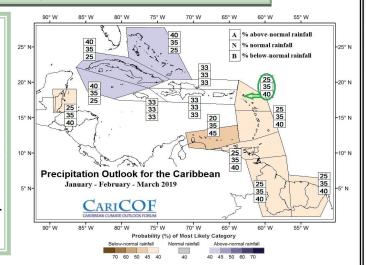
Seasonal Outlook for January to March (JFM) 2019

Rainfall Forecast

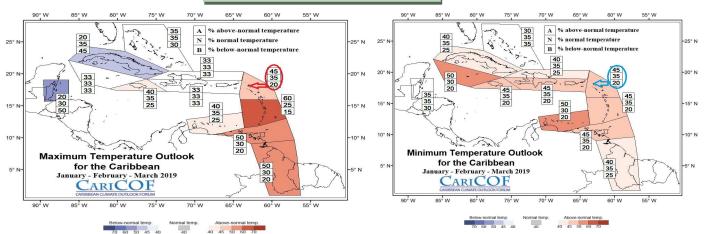
Rainfall totals for the season Jan-Feb-Mar 2019, are likely to be the usual or drier across the Lesser Antilles, the ABC Islands, the Guianas and Belize.

Within the 90 days of Jan-Feb-Mar, the normal rainfall total for St. Maarten ranges from 145 mm – 200mm/ 6-8 in. with about 27-38 wet days and up to 4 dry spells (7-day).

During Jan. to Mar., most days are usually sunny with a few showers. March is often the driest of the three months.



Temperature Forecast



Day-time Temperatures

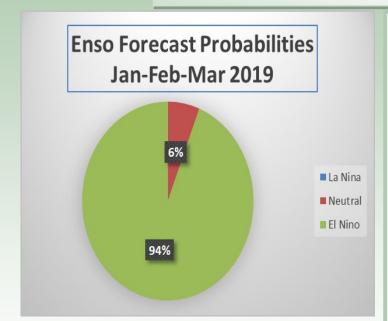
Night-time Temperatures

Day-time temperatures in the Eastern Caribbean are likely to be the usual or warmer during Jan-Feb-Mar. Nights are forecast to be as warm as usual and become warmer by March.

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)



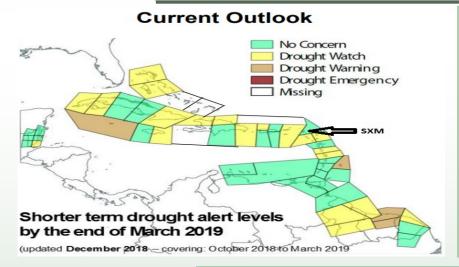
Warmer than average sea surface temperatures continue to be observed across the east-central tropical Pacific .

The latest forecast models collectively indicate a 96% chance of El Nino prevailing during Jan-Feb-Mar. 2019. The forecast also indicate that a weak to moderate strength El Nino will continue through May and even into summer. An El Nino Watch remains in effect.

An El Nino phase will tend to produce drier conditions across the eastern Caribbean and slightly wetter conditions over the portions of the Greater Antilles and the Bahamas.

No Thermal Stress on Corals is expected this season..

Drought Forecast



As we enter the dry season drought is becoming a concern for much of the Caribbean. However, drought will become more of a concern in St. Maarten by the end of the dry season.

Drought warnings have been issued for Barbados, Cayman Islands and Suriname. While drought watches have been issued for Antigua, Martinique, Dominica, portions of the Greater Antilles and Guyana.

Wendy

The 2019 Atlantic Hurricane Season

The 2019 Atlantic Hurricane season begins in less than six (6) months time.

2019 Storm Names

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

Be Prepared !!!!! Be Prepared !!!!!

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.

DECEMBER 2018 IN REVIEW

Total Rainfall	63.7 mm	2.5 in.
2018 Cumulative Rainfall	905.5 mm	35.6 in.
Max. 24-Hr. Rainfall	Dec. 27 th	10.0mm/ 0.4 in.
No. Rain Days (>=1.0 mm)	15 days	
No. Heavy Rain Days (>=10.0 mm)	1 day	
No. Thunderstorm Days	None	
Avg. Wind Speed	11 kts.	12 mph
Avg. Temperature	26.5 °C	80 °F
Max. Temperature	Dec. 6 th	30.4 °C / 87°F
Min. Temperature	Dec. 29 th	22.2°C / 72°F

Rainfall for the month of December was slightly below the normal range (75-110mm). A total of 63.7 mm/ 2.5 inches was recorded in fifteen (15) rain days. There was only one (1) heavy rainfall day.

Daytime temperatures were within the normal range however, night-time temperatures were warmer than usual for the month of December.

The warmest day was the 4^{th} with an average temperature of $27.6^{\circ}\text{C}/82^{\circ}\text{F}$.

The day with the most sunshine hours was the 9th (10hrs :30min).

The day with the least sunshine hours was the 29th (5hrs:00min).

The windiest day was the 28th, with a daily average wind speed of 19 kts. / 22 mph.

Heavy rainfall occurred on the 27th due to pockets of low-level moisture drifting with the trade winds.

Skies were mostly fair during the month.

Long /Short Term Seasonal Review

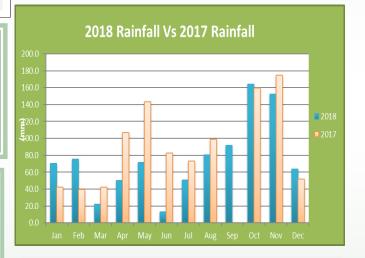
Year in Review (Jan .— Dec. 2018)

For the year 2018, there was a 23% rainfall deficit. Only February of 2018 produced above normal rainfall while five (5) months produced below normal rainfall. 2018 produced 19% less rainfall than 2017.

Seasonal Review (Oct.-Nov-Dec. 2018)

Total rainfall for the last 3 months was 380 mm, this amount was within the normal range (307-499 mm). There were ten (10) days with heavy rainfall. (>10mm)

Oct-Nov-Dec. 2018 was drier than the same period in 2017.



NORMAL JANUARY CONDITIONS

Rainfall Total	60.3 mm - 85.0 mm	2–3 in.
Avg. No. of Rain days	13 days	
Daily Average Temperature	25.5∘C	78∘F
Avg. Max. Temperature	28.8°C	84ºF
Avg. Min. Temperature	23.2°C	74ºF
Avg. Daily Hours of Sunshine	8 hrs	

Implication of Forecast for Sectors

Health

- There may be an increase in allergens in the atmosphere from plant material (pollen) driven by increased wind speeds.
- There may be accelerated mosquito proliferation in areas where water is stored in containers without protective mesh or settles after shower activity.
- Although temperatures are expected to be comfortable, the risk of dehydration and other associated symptoms are possible during the day time and dry spells.

Agriculture

- Some irrigation may become necessary as rainfall totals are expected to be below the usual for this time of year.
- Wind speed will be on the rise this season (Jan-Feb-Mar) as high pressure increases over the area.

Tourism Sector

- Less disruptions to outdoor activities this season. March is the driest of the next three (3) months.
- The UV index tends to increase by February therefore, sunscreen application is encouraged.
- On hot days, there will be an increase demand for cooling & hydration.

Energy Sector

Energy demand for cooling purposes is expected to increase as night-time temperatures expected to increase by March.

Things you should know.....

WEATHER VS CLIMATE

What is weather?

Weather describes the condition of the atmosphere over a short period of time e.g. from day to day or week to week, while climate describes average conditions over a longer period of time.

When you step outside, you experience many aspects of weather. Humidity, air temperature and pressure, wind speed and direction, cloud cover and type, and the amount and rainfall are all atmospheric characteristics of weather.

What is climate?

It has been said that "climate is what you expect; weather is what you get". In other words, you can expect snow in parts of the United States in January, but you may or may not get it on a particular day.

The climate of an area or country is known through the average weather over a long period of time. If an area has more dry days throughout the year than wet days, it would be described as a dry climate; a place which has more cold days than hot days would make it known to have a cold climate. If an area or country experiences both wet and dry conditions it is said to have a tropical climate.

Weather and Climate affects every facet of our lives; what we wear, what kinds of foods we eat, the types of sports we play, the types of houses we build and even our health.

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