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St. Maarten

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Weather & Climate

Volume 3, Issue 5

March 2018

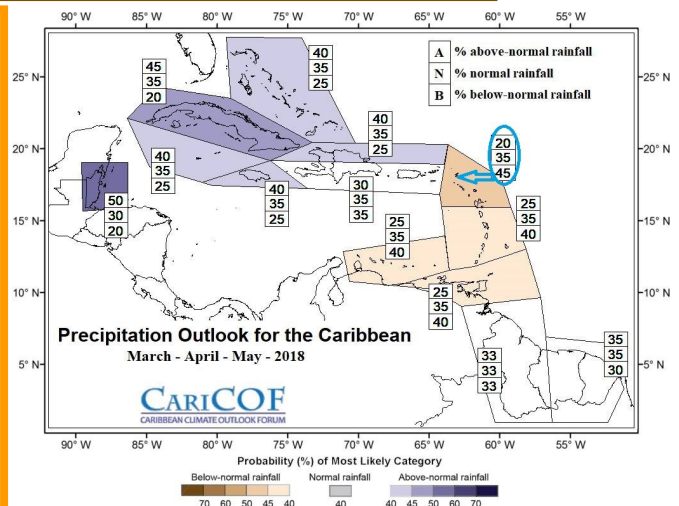
Seasonal Outlook for March to May (MAM) 2018

Rainfall Forecast

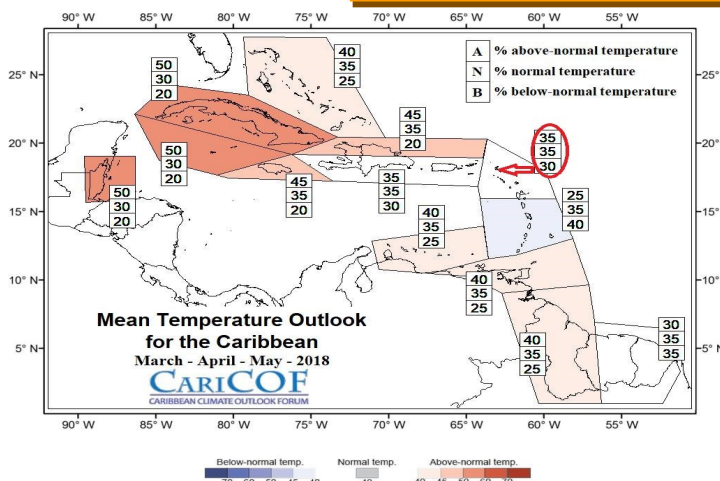
Rainfall is forecast to be below normal for St. Maarten, the ABC Islands and the rest of the eastern Caribbean while above normal rainfall is forecast for the Greater Antilles and western Caribbean for the season March-April-May.

Within the 92 days of Mar-Apr-May, the normal rainfall total for St. Maarten ranges from 163 mm – 262 mm/ 6-10 in. with about 25-29 wet days.

The forecast is for the possibility of up to 4 wet spells and about 2 very wet spells within that period. These spells often occur in April or May. March is the driest month of the year.



Temperature Forecast



Temperatures for both day and night across the Caribbean are likely to be near normal to above normal for this season. Except for Guyana and Trinidad and Tobago.

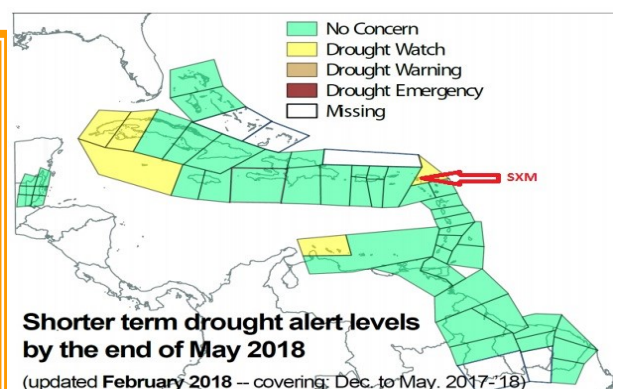
Day-time temperatures across St. Maarten and the Leeward Islands are expected to be above normal while night-time temperatures are expected to be near normal to above normal for this time of year.

Drought Forecast

Short term drought conditions might possibly develop in some areas across the Caribbean by the end of May 2018. Namely; St. Maarten, ABC islands, Cayman Islands and western Cuba.

The Drought Forecast suggests that drought conditions may develop on St. Maarten by the end of May 2018. In the upcoming months we should continue to monitor and keep updated while we implement our management plans.

Current Outlook



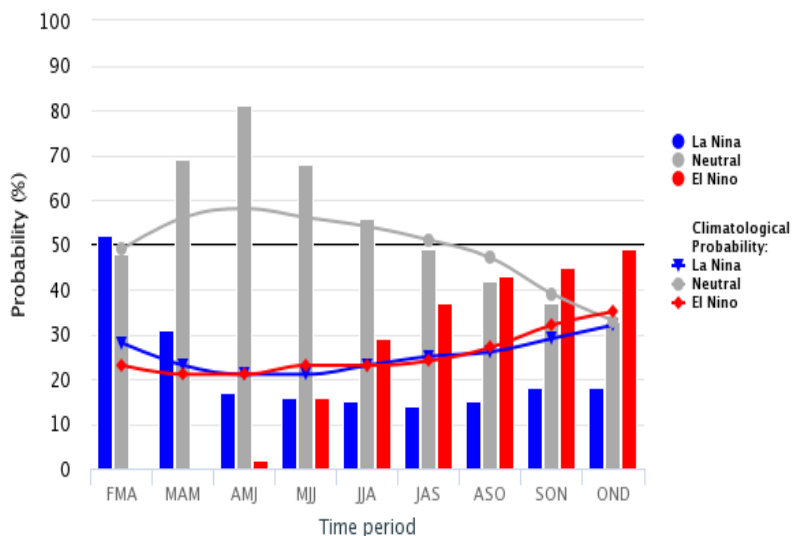
For more information on other Caribbean Outlooks go to <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

ENSO FORECAST

(El Niño Southern Oscillation)

Mid-Feb IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C



In mid February 2018, the tropical Pacific reflected La Nina conditions, with sea surface temperatures of around 0.8°C below average in the east-central Pacific. This is a range of a weak to moderate La Nina and most key atmospheric variables were also suggesting La Nina patterns.

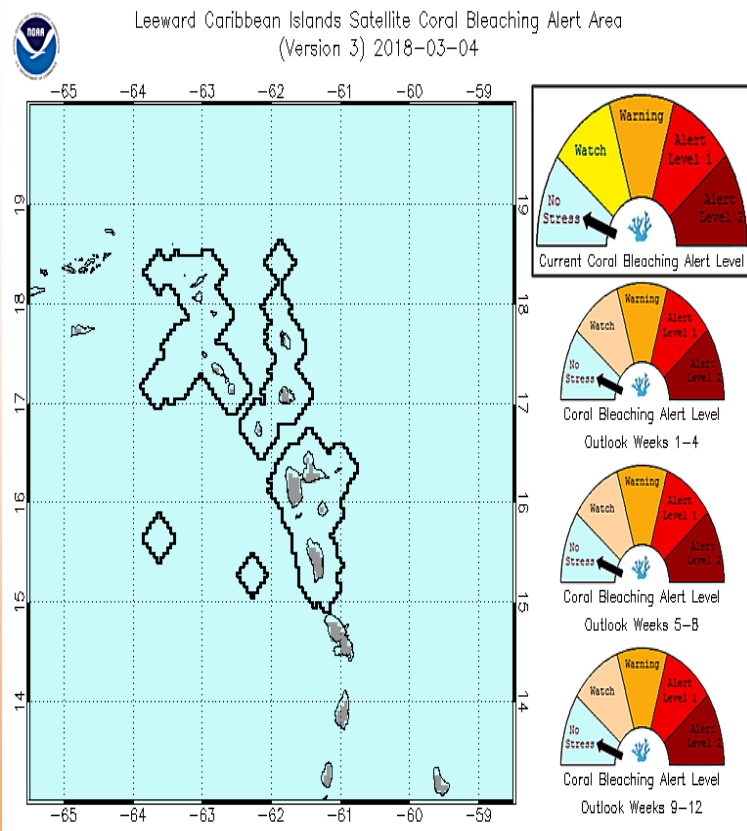
The collection of all ENSO Predicting Models are indicating that neutral conditions will return this season (Mar-Apr-May) and continue until the Jul-Aug-Sept season.

Based on historical data, in some cases, following a La Nina phase, the wet season in the eastern Caribbean usually starts late. This often increases the chances of a drier than usual Mar-Apr-May.

No Thermal Stress Concern for Corals.

Presently sea surface temperatures (SST) around the Leeward Islands and St. Maarten are about 26.1°C (79°F). This is above average for this time of year however, this temperature is way below the bleaching threshold (29.3°C/85°F).

As a result no thermal stress on corals is expected at this time and through the end of May.



Legend

- "Man of War Shoal" Marine Park
- Marine Park traffic zone
- Marine Park conservation zone
- Proposed conservation zone extension
- Dive sites



Total Rainfall	75.5 mm	3.0 in.
2018 Cumulative Rainfall	145.7 mm	5.7 in.
Max. 24-Hr. Rainfall	Feb. 16th	9.8mm/ 0.4 in.
No. Rain Days (≥1.0 mm)	18 days	
No. Heavy Rain Days (≥10.0 mm)	None	
No. Thunderstorm Days	None	
Avg. Wind Speed	12 kts.	14 mph
Max. Wind Gust	NA	
Avg. Temperature	25.2 °C	77 °F
Max. Temperature	Feb. 7th	29.1 °C / 84 °F
Min. Temperature	Feb. 8th & 27th	21.7°C / 71 °F

Rainfall for the month of February was above the normal range (31-57mm). A total of 75.5 mm/ 3.0 inches were recorded in eighteen (18) rain days. There were no heavy rainfall days in February.

A few records were broken in the month of February based on records at PJIA: This was the wettest and coolest February since 2011, it was also the windiest since 1997 and had the highest wet days since 1982.

The strong Atlantic High Pressure System generated brisk winds during the month of February. Consequently, small craft warnings were issued due to rough seas and high surf warnings were also issued as a result of long period swells in excess of 14 seconds generated by a deep low pressure system north of the region.

The average and maximum temperature for February were within the normal range while the minimum temperature was below-normal.

The warmest days were the 6th with an average temperature of 25.9°C/79°F.

The day with the most sunshine hours was the 28th (11hrs :06min).

The day with the least sunshine hours was the 1st (4hrs:54 min).

The windiest days were the 11th & 12th, with a daily average wind speed of 18 kts. / 21 mph.

Skies were fair to partly cloudy.

Year in Review (Mar. 2017-Feb. 2018)

For the last 12 months rainfall has been within the normal range. December was below normal while April, May, June, November and February were above the normal range.

Seasonal Review (Dec 2017–Feb 2018)

Total rainfall for the last 3 months was 197.5 mm this amount was within the normal range (173-258mm). There were no heavy rainfall events during the last three (3) months. Occasional showers produced by shallow clouds drifting with the brisk trade winds or lingering frontal boundaries.

Small craft /high surf warnings were issued due to northerly swells and strong winds in both January and February.

The 2018 Atlantic Hurricane Season

2018 Atlantic Storms

Alberto	Helene	Oscar
Beryl	Isaac	Patty
Chris	Joyce	Rafael
Debby	Kirk	Sara
Ernesto	Leslie	Tony
Florence	Michael	Valerie
Gordon	Nadine	William

Summary of Forecast for March to May 2018

- Rainfall totals are expected to be lower than normal.
- Daytime and night-time temperatures are forecast to be normal to above normal.
- Drought conditions expected to develop by the end of May.
- No thermal stress on coral expected this season.

Implication of Forecast for Sectors

Health

- Possible cases of vector borne diseases such as Dengue, Zika or chikungunya as breeding grounds for mosquitoes may still be present.
- There will be an increase in the risk of dehydration during the next 3 months which may present other symptoms.
- As temperatures increase vulnerable persons are to be monitored as the risk of morbidity from heat stress increases.

Energy Sector

- Need for power for cooling will begin to increase this season as temperatures for both nights and days are expected to be on the rise.

Tourism Sector

- Fewer disruptions to outdoor activities in March, risk of disruptions increases by May.
- Temperatures are forecast to remain comfortable in March and increase to uncomfortably hot by May.
- Tourists are encouraged to use sunscreen and seek shaded areas between the hours of 10am to 3pm to avoid risk of skin damage on sunny days.

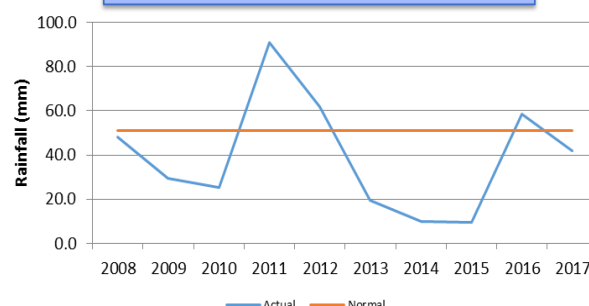
Agriculture

- Surface dryness will increase this season as rainfall is expected to be lower than usual.
- It is possible that drought condition will develop by the end of May. Put irrigation plans in place and monitor for brush fires.

NORMAL MARCH CONDITIONS

Rainfall Total	32.4 mm – 58.3 mm	1– 2 in.
Avg. No. of Rain days	9 days	
Daily Average Temperature	25.7°C	78°F
Avg. Max. Temperature	29.2°C	85°F
Avg. Min. Temperature	23.4°C	74°F
Avg. Daily Hours of Sunshine	9 hrs	

Actual Vs Normal March Rainfall



Rainfall for the month of March was below-normal for 7 out of the last 10 years.

Important Tips

Windy conditions during the last months and weeks across the region was as a result of the Bermuda High/ Azores high. The Bermuda/Azores high is part of the North Atlantic Oscillation (NAO) .

There are positive and negative phases of the NAO. When it is in a positive phase like it has been since early December; The Bermuda Azores High becomes higher than normal.

Resulting in strong winds which leads to rough seas in the Caribbean region. The NAO is forecast to begin a negative phase towards the end of February thus weaker winds in your forecast across the local area. Listen to daily forecast for more information.