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Weather & Climate

Volume 7, Issue 3

March 2022

Summary

- Rainfall for February 2022 was above the normal range.
- Temperatures were near normal in February, expected to remain comfortable through April.
- Drought is evolving and may become a concern in St. Maarten by the end of May 2022.
- March 23rd 2022 is World Meteorological Day.

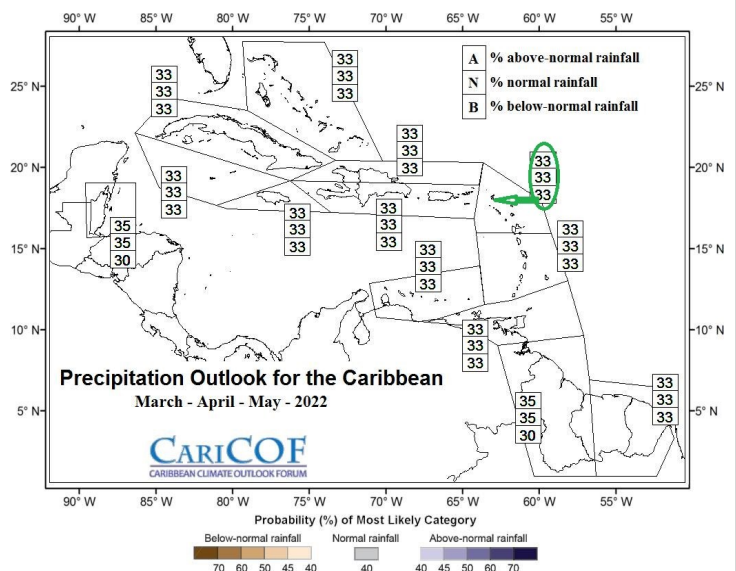
Seasonal Outlook for March to May (MAM) 2022

Rainfall Forecast

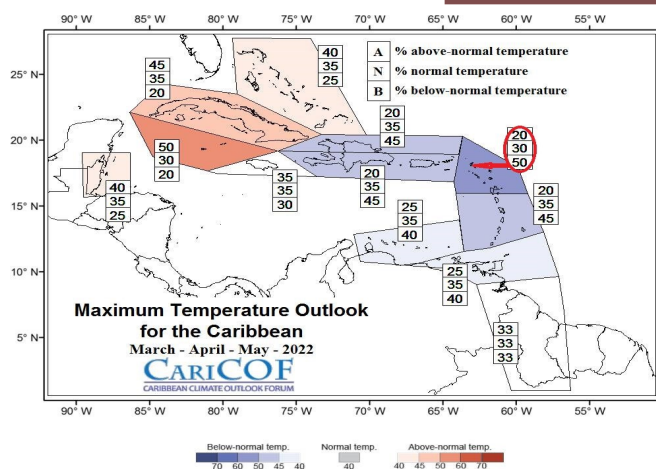
Models are indicating that rainfall totals for the season Mar-Apr-May 2022 are likely to be near normal in St. Maarten and across the entire Caribbean.

Normal rainfall on St. Maarten during the Mar-Apr-May season ranges 148mm–250mm/ 6-10 inches, with 22 to 30 wet days. There are usually sunny days March through April, while in May there are some days with showers.

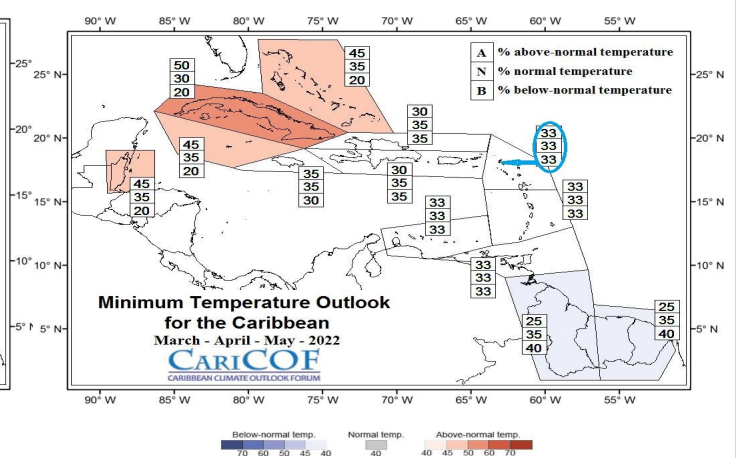
The forecast is for up to 6 (7-day) wet spells and up to 7 (7-day) dry spells on St. Maarten during this season.



Temperature Forecast



Day-time Temperatures



Night-time Temperatures

Day-time and night-time temperatures will progressively warm into April but will remain comfortably cooler than usual throughout much of the Lesser Antilles.

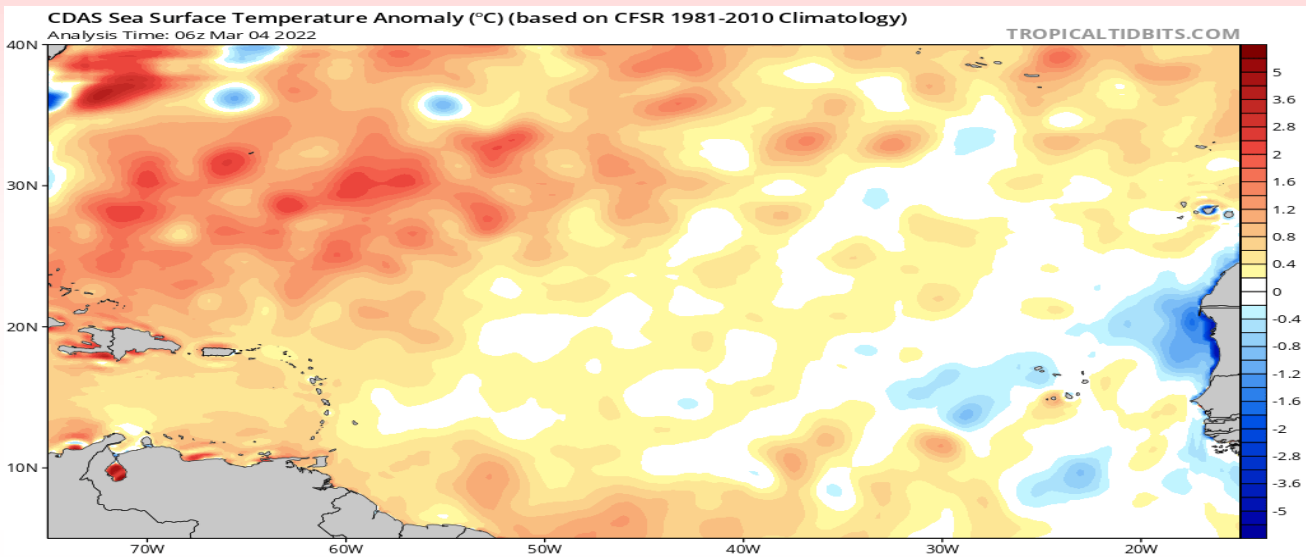
For more information on other Caribbean Outlooks go to <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

WHAT INFLUENCES THIS SEASON'S CLIMATE?

In mid February, sea surface temperature (SST) in the east-central Pacific remained below normal (-0.6°C). The key atmospheric variables were consistent with weak La Nina conditions and therefore a La Nina Advisory remained in place.

Majority of the forecast models predict SSTs will remain below normal and near La Nina levels through the Mar-Apr-May season and return to ENSO-neutral levels thereafter.

Warm SSTs have persisted to 1°C above average around most of the Caribbean Sea and up to 2°C in portions of the Tropical North Atlantic. Models are forecasting observed SST to remain around average to above average across the Caribbean Sea and in the sub-tropical North Atlantic. Warm SSTs in and around the Caribbean tend to contribute to higher air temperature, above-average humidity, seasonal rainfall totals and an increase in the frequency of extreme rainfall.



Drought Outlook

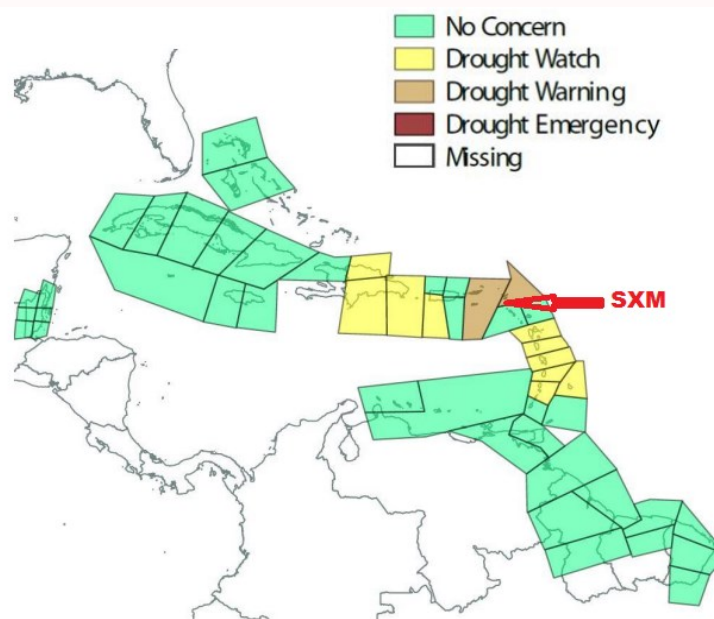
Alert Level: No Concern

Short term drought may evolve in St. Maarten and the Virgin Islands by the end of May 2022, while drought conditions may also be possible in the Windward Islands, Dominican Republic and sections of Puerto Rico.

Long term drought may become a concern for most of the eastern Caribbean and the ABC Islands by the end of May 2022.

Long term drought impacts large surface water reservoirs while short term drought impacts agriculture.

Keep monitoring monthly updates.



Short term drought alert levels by the end of May 2022

FEBRUARY 2022 IN REVIEW

Total Rainfall	71.2mm	2.8in.
2022 Cumulative Rainfall	101.5mm	4.0in.
Max. 24-Hr. Rainfall	4 th Feb.	16.7mm/ 0.7in.
No. Rain Days (≥1.0 mm)	12 days	
No. Heavy Rain Days (≥10.0 mm)	3 day	
No. Thunderstorm Days	NONE	
Avg. Wind Speed	10kts.	12mph
Max. Wind Gust	26kts.	30mph
Avg. Temperature	25.7°C	78°F
Max. Temperature	2 nd Feb.	30.7°C / 87°F
Min. Temperature	24 th Feb.	21.5°C / 71°F

Long /Short Term Seasonal Review

Year in Review (March 2021— February 2022)

Total rainfall over the past twelve (12) months was below the normal range (987-1222mm). A total of 791.2mm/31in. of rainfall was recorded at the Princess Juliana International Airport.

Seasonal Review (Dec-Jan-Feb. 2021/22)

Total rainfall for the last three (3) months was 145mm/6in, this amount was below the normal range (160-249mm). There were four (4) days with heavy rainfall (>10mm) during that period.

Rainfall for February 2022 was above the normal range and was the wettest February since 2018. Temperature was generally near normal.

The average daily temperature for February was 25.7°C/78°F.

The warmest days were the 2nd & 16th with an average temperature of 26.5°C/80°F. The coolest day was the 5th with an average temperature of 24.2°C/76°F.

The day with the most sunshine hours was the 24th. (11hrs:12min).

The day with the least sunshine hours was the 3rd (3hrs:36min).

The windiest day was the 11th, with a daily average wind speed of 14kt./ 16mph.

The days with the highest wind gust were the 9th & 11th with a gust of 26kt/30mph.

Skies were mostly fair during the month of February.

There were twelve (12) days with rainfall in February, three (3) days recorded more than 10mm of rainfall.

NORMAL MARCH CONDITIONS

Rainfall Total	24 – 58mm	1– 2in.
Avg. No. of Rain days	8 days	
Daily Average Temperature	25.8°C	78°F
Avg. Max. Temperature	29.0°C	84°F
Avg. Min. Temperature	23.5°C	74°F
Avg. Daily Hours of Sunshine	9 hrs	

Implication of Forecast for Sectors

Energy/Water Sector

Energy demand for cooling purposes will continue to increase through May.

Tourism Sector

- Continue to observe all health protocols.
- Fewer interruptions to outdoor activities are possible.

Agriculture

- Frequent dry spells are expected through this season.
- Drought conditions are evolving, implement management plans, carry out last minute infrastructural repairs and upgrades.

Health

- UV radiation will increase this season. Excessive UV exposure can cause skin damage across the population on sunny days.
- Persons with respiratory illnesses should take the necessary precautions during Saharan dust episodes and monitor daily forecasts for more information.
- Proper management of water storage containers e.g. covering with protective mesh helps to reduce the risk of potential breeding sites for mosquitoes.

WORLD METEOROLOGICAL DAY 2022.



World Meteorological Day 23 March 2022 has the theme ‘Early Warning and Early Action,’ and spotlights the vital importance of Hydro-meteorological and Climate Information for Disaster Risk Reduction.

Weather, climate and water extremes are becoming more frequent and intense in many parts of the world as a result of climate change. More of us are exposed than ever before to multiple related hazards, which are themselves evolving as a result of population growth, urbanization and environmental degradation.

Greater coordination between national meteorological and hydrological services, disaster management authorities and development agencies is fundamental to better prevention, preparedness and response.

COVID-19 has complicated the challenges facing society and weakened coping mechanisms. The pandemic has also highlighted that, in our inter-connected world, we need to embrace a truly multi-hazard, cross-border approach to make progress towards global goals on climate action, disaster risk reduction and sustainable development.

Being prepared and able to act at the right time, in the right place, can save many lives and protect the livelihoods of communities everywhere, both now and in the future.

From: WMO Hydrometeorological and Climate Information for Disaster Risk Reduction

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