METEOROLOGICAL DEPARTMENT ST.MAARTEN

Volume 10, Issue 03 | March 2025

Weather & Climate

Key Points

- Temperatures remain **above normal** since April 2023.
- February 2025 was the **warmest February** in 27 years.
- We are in the dry season however, there is a **moderate chance for flooding** to occur.

SEASONAL OUTLOOK FOR MARCH TO MAY (MAM) 2025

Rainfall Forecast

Normal Rainfall *Mar-Apr-May Season*	148 mm - 250 mm | 6 -10 inches 22 - 30 wet days
Mar-Apr-May 2025	• Likely to be usual or above • 1 to 4 (7-day) wet spells • up to 7 (7-day) dry spells

The north and western Caribbean is expected to be drier than usual.

There is moderate chance of flooding and flash flooding through May.

Temperature Forecast

Day-time Temp. **Night-time Temp.**	Near or *below* normal Near or above normal

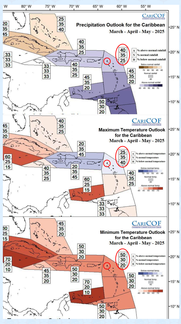
Few episodes of hazardous heat may appear in April or May in some areas.

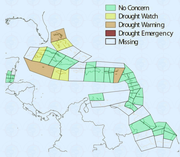
Drought Alert

There is no drought concern for St.Maarten and the eastern Caribbean by the end of May 2025. However, it is advised to monitor resources and monthly updates, and upgrade infrastructure and management plans.

Flash Flood Potential

Moderate Chance 20% - 50%	Atleast **1** event could cause flash flooding/ flooding





Short term drought alert levels at the end of May 2025

IMPLICATION OF FORECAST FOR SECTORS

Health

- UV radiation will gradually increase this season.
- An increase in Saharan Dust incursion is likely; persons with respiratory illnesses should be vigilant.

Tourism

- As heat gradually increases ensure adequate hydration.
- Some interruptions for outdoor activities.

Energy/ Water

- Energy demand for cooling purposes will gradually increase this season.

Agriculture

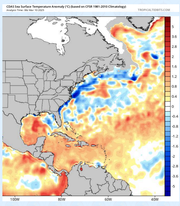
- Use mulch and drip irrigation to conserve water, retain soil moisture, and regulate soil temperature.
- Schedule irrigation during dry spells.

What Influences This Season's Climate ?

As of mid-February weak La Niña conditions persist across the equatorial Pacific. The IRI ENSO Plume forecasts equal chances (50%) for La Niña and ENSO-neutral conditions for Feb-Apr, 2025. For Mar-May, 2025, onwards to the Jul-Sep, ENSO-neutral conditions are favored. Thereafter, La Niña conditions are slightly favored. The probability of El Niño remains very low throughout the forecast period.

Sea Surface Temperatures (SSTs) in the Caribbean Sea and the tropical Atlantic remain warm through January around 0.5 to 1.5°C above normal. Models are confidently forecasting above average SSTs across the Caribbean Sea and the Tropical North Atlantic through the Jun-Jul-Aug 2025 season.

Warm SSTs in and around the Caribbean contribute to higher air temperatures with above-average humidity seasonal rainfall totals, increased frequency of extreme rainfall and tropical cyclone activity. The likelihood of extreme rainfall and related impacts is higher than usual even in the dry season.



February In Review

Average Temperature	**26.5°C | 80°F**
Maximum Temperature	**February 18th** *30.2°C | 86°F*
Minimum Temperature	**February 12th** *22.0°C | 72°F*

Most Sunshine Hours	**February 18th** *11hrs:00mins*
Least Sunshine Hours	**February 28th** *06hrs:30mins*

Warmest Day *Average Temperature*	**February 25th** *27.1°C | 81°F*
Coolest Day *Average Temperature*	**February 13th** *25.4°C | 78°F*
Cool Nights (≥ 22.7° | 73°F)	**2 nights** *February 12th & 13th*

Average Wind Speed	**11 kt | 13 mph**
Windiest Day *Daily Average Wind Speed*	**February 13th** *15 kt | 17 mph*
Highest Wind Gust	**February 13th** *34 kt | 39 mph*

For the month of February, rainfall was above the normal range, but was drier than February 2024. Generally, temperatures have been above the normal range since April 2023. February 2025 was the warmest February since 1998 on St. Maarten. February is the coolest month of the year.

Total Rainfall	**48.2 mm | 1.9 in**
2025 Cumulative Rainfall	**84.3 mm | 3.3 in**
Maximum 24-hr. Rainfall	**9.7 mm | 0.4 in**
No. of Rain Days	**13 days**
No. of Heavy Rain Days	-
No. of Thunderstorm Days	-

LONG / SHORT TERM SEASONAL REVIEW

Year In Review
Mar 2024 - Feb 2025

Normal Rainfall Recorded Rainfall	**1007 mm - 1222 mm** ↑ 1187 mm | 47 inches

Seasonal Review
Dec-Jan-Feb 2024/25

Normal Rainfall Recorded Rainfall *Heavy Rain Days (>10 mm)*	**160 mm - 249 mm** ↓ 122 mm | 5 inches

Normal March Conditions

Total Rainfall	24 - 58 mm | 1 - 2 in
Average 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 Hrs. of Sunshine	9 hrs

World Meteorological Day
March 23rd, 2025

Closing the Early Warnings Gap Together

This newsletter is produced by

the Meteorological Department of St. Maarten.

We would appreciate your comments and feedback.

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

Please note that all data was recorded at the *Princess Juliana International Airport* and may not necessarily reflect conditions at other points on country St Maarten.

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