Covered Area Rainfall Events (14/04/2026 to 14/04/2026)

Excess Rainfall

Event Briefing

Sint Maarten

23 April 2026

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1 INTRODUCTION

This event briefing describes the impact of rainfall on Sint Maarten which was associated with a Covered Area Rainfall Event (CARE) starting on 14 April and ending on 14 April 2026. The Rainfall Index Loss (RIL) for the Covered Area Rainfall Event was below the attachment point of Sint Maarten's Excess Rainfall policy, and therefore no payout is due to the Government of Sint Maarten.

2 EVENT DESCRIPTION

On 14 April, a stationary front was positioned over the northwestern Atlantic Ocean, extending from latitude 28°N, longitude 55°W southeastward to a low-pressure system located just north of Puerto Rico, at latitude 20°N, longitude 64°W (Figure 1). From this point, the stationary front weakened into a surface trough that stretched eastward to Hispaniola (Figure 1). This structure, together with a pre-frontal trough located east of the main front (Figure 1), generated scattered showers with embedded thunderstorms between latitudes 18°N and 22°N, and between longitudes 58°W and 68°W, throughout most of the day. In particular, between 0600 UTC and 1200 UTC, convective activity affected the northern Leeward Islands, including Sint Maarten, producing moderate to locally intense showers.

On the following day, the stationary front further weakened into a surface trough, which drifted westward, moving away from the northern Leeward Islands.

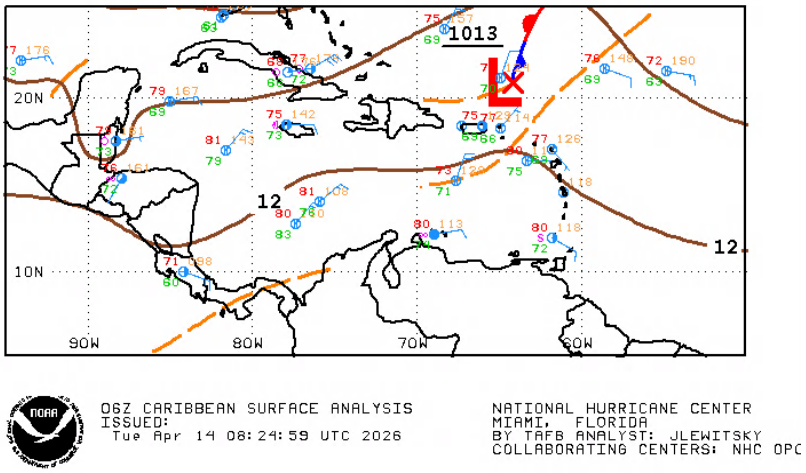
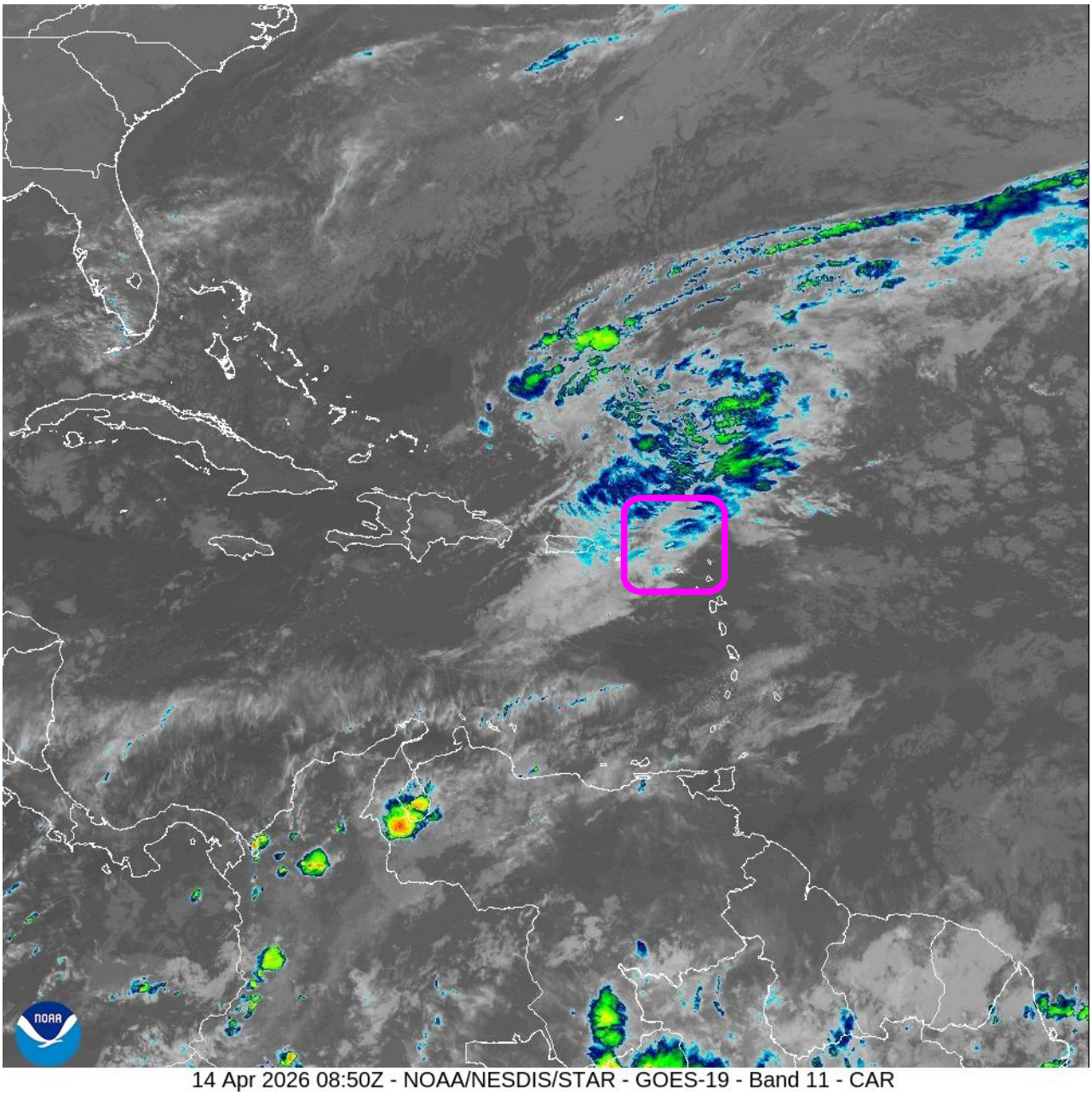


Figure 1 Surface analysis over the Caribbean area on 14 April at 0600UTC. Source: US National Hurricane centre[1]

[1] National Oceanic and Atmospheric Administration - FTP, National Hurricane centre, review date: 14 April 2026, available at: https://www.nhc.noaa.gov/tafb /CAR06Z.gif



14 April at 0850UTC

Figure 2 Satellite imagery on 14 April, 2026 at 0850UTC as indicated in the label from the thermal infrared channel enhanced with colour. Blue/green colours represent high altitude clouds (top cloud temperature between -50°C and -70°C), while the red/yellow colours represent very high altitude clouds (top cloud lower than -70°C). High altitude clouds indicate strong convection associated with intense precipitation. Sint Maarten's position is highlighted by a violet square. Source: NOAA, National Environmental Satellite, Data and Information Service[2].

[2] RAMSDIS Online Archive, NOAA Satellite and Information Service, available at: https://www.star.nesdis.noaa.gov/GOES/sector.php?sat=G19&sector=car

3 REPORTED IMPACTS

At the time of writing this report, there was no information about damage in Sint Maarten due to this Covered Area Rainfall Event during the indicated period.

4 RAINFALL MODEL OUTPUTS

All data sources used by the XSR 3.1 model, CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15[3], detected the occurrence of precipitation over Sint Maarten and the surrounding waters during the period 12 to 14 April 2026. Each data source reported a specific distribution and accumulation of rainfall, as discussed below and shown in Figure 3. A CARE for Sint Maarten was activated on 14 April and lasted one day. The CARE was activated due to the use of the 12-hour and the 48-hour aggregation intervals for precipitation[4] and thus the period considered by the XSR 3.1 model for the loss estimate based on the accumulated precipitation in Sint Maarten was 12 to 14 April 2026.

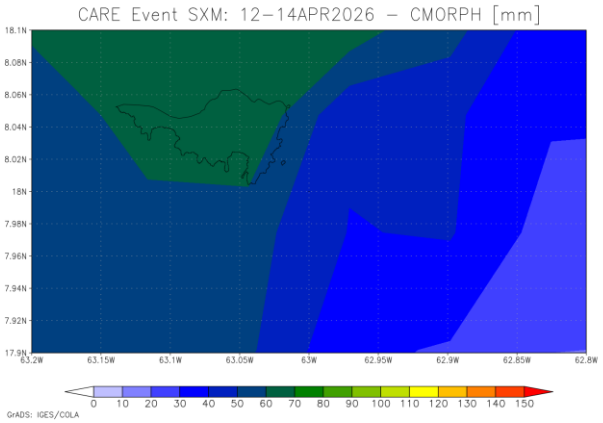
Table 1: Report from XSR 3.1 Data Sources on the Precipitation over Sint Maarten, 12 to 14 April 2026

CMORPH	CMORPH reported total accumulated precipitation values between 60 mm and 70 mm over most of the country. Lower values, between 50 mm and 60 mm, were shown along the eastern coast.
IMERG	IMERG showed total accumulated precipitation values between 60 mm and 80 mm over Sint Maarten, with the highest amounts (70–80 mm) over the northwestern part of the country.
WRF5	WRF5 reported total accumulated precipitation values ranging between 30 mm and 40 mm across the entire territory of Sint Maarten.
WRF7	WRF7 showed total accumulated precipitation values between 20 mm and 50 mm over the country, with maximum amounts (40–50 mm) over the western portion of the territory.

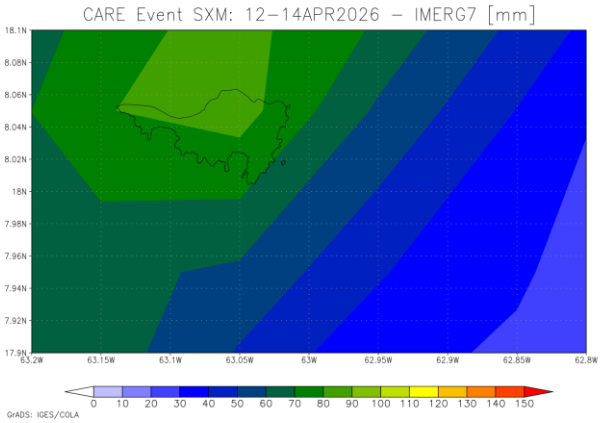
[3] CMORPH Model: the satellite-based rainfall precipitation estimates provided by the NOAA Climate Prediction centre (CPC) using the so-called Morphing Technique *http://www.cpc.ncep.noaa.gov/products/janowiak/cmorph_description.html*. Further details are provided in the Definitions section of this reportIMERG Model: The satellite-based rainfall estimation model developed by NASA, expressed in mm, derived by aggregating the IMERG 30-minute Rainfall Data at 10km spatial resolution and available at *https://jsimpsonhttps.pps.eosdis.nasa.gov/imerg/late*. Further details in the Definitions section of this reportWRF5, WRF7, WRF11 and WRF15 Models: the Weather Research and Forecasting Model weather model-based Configuration #1 and #2 data *https://www.mmm.ucar.edu/weather-research-and-forecasting-model*. These data are initialised by the NCEP FNL dataset. (NCEP FNL Operational Model Global Tropospheric Analyses [*http://rda.ucar.edu/datasets/ds083.2/*]). Further details are provided in the Definitions section of this report.

[4] The two aggregation periods correspond to the Rainfall Aggregation Period #1 and Rainfall Aggregation Period #2, as indicated in the Schedule. Further details in the Definitions section of this report.

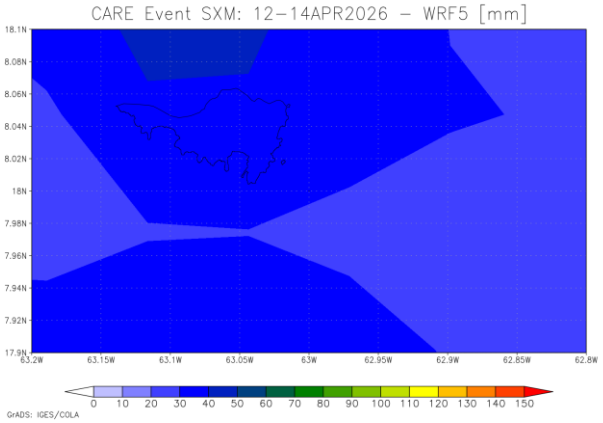
WRF11	WRF11 showed total accumulated precipitation values ranging between 10 mm and 50 mm over Sint Maarten, with values gradually increasing from southwest to northeast.
WRF15	WRF15 reported total accumulated precipitation values between 50 mm and 70 mm over most of the country, with the highest values along the southern coast.



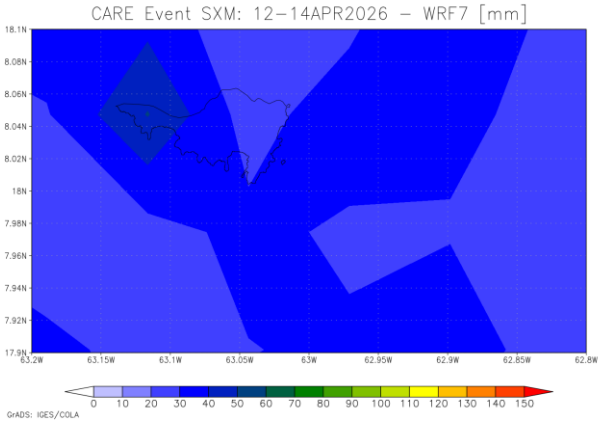
a) CMORPH



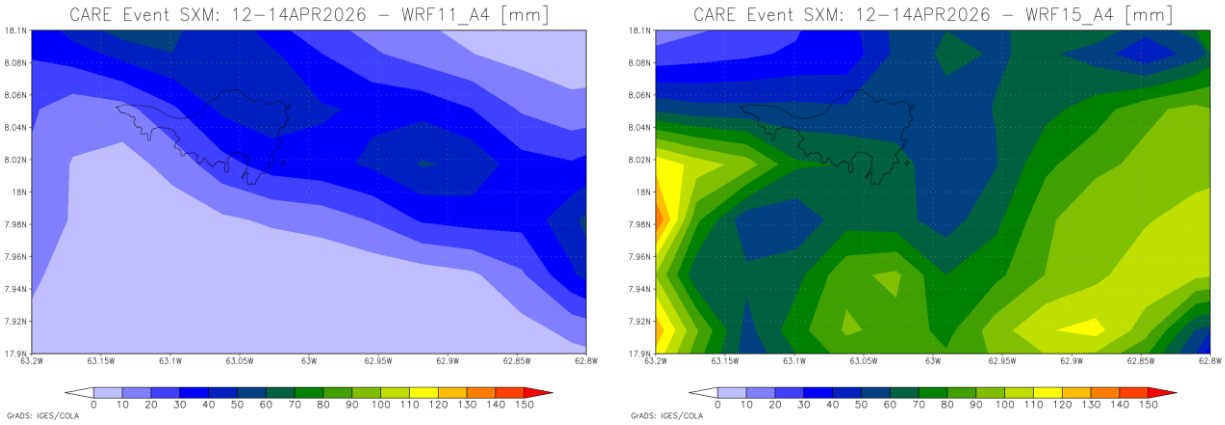
b) IMERG



c) WRF5



d) WRF7



e) WRF11 f) WRF15

Figure 3 Total accumulated precipitation during the period 12 to 14 April, 2026 estimated by CMORPH (a), IMERG7 (b), WRF5 (c), WRF7 (d), WRF11 (e), WRF15 (f). Source: CCRIF SPC

Daily rainfall maps by CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15 over the exposure map of XSR 3.1 are not included here and they can be downloaded at the following links for 12-hour aggregation and 48-hour aggregation respectively:

https://wemap.ccrif.org/OUTPUT/CCRIF/XSR/Events/SXM/CARE_3_2025/daily_prec_short.mp4

https://wemap.ccrif.org/OUTPUT/CCRIF/XSR/Events/SXM/CARE_3_2025/daily_prec_long.mp4

The Rainfall Index Loss (RIL) was above the loss threshold for Sint Maarten for three among the six data sources used by XSR3.1: CMORPH, IMERG and WRF15. The RIL was the highest for IMERG.

The final RIL (RIL_{FINAL}) was calculated as the average of the three RILs from CMORPH, IMERG and WRF15. The RIL_{FINAL} was below the attachment point of the country's Excess Rainfall policy, and thus the policy was not triggered. Therefore, no payout is due to the Government of Sint Maarten under its Excess Rainfall policy.

5 TRIGGER POTENTIAL

The Rainfall Index Loss calculated for the Covered Area Rainfall Event (CARE) for Sint Maarten was below the attachment point of Sint Maarten's Excess Rainfall policy, and therefore no payout is due.

For additional information, please contact CCRIF SPC at: pr@ccrif.org

DEFINITIONS

Active Exposure Cell Percentage Threshold	The percentage of the total number of XSR Exposure Grid Cells within the Covered Area of the Insured, that must be exceeded to trigger a Covered Area Rainfall Event.
Active Exposure Grid Cells	The XSR Exposure Grid Cells for which in the same single day the Aggregate Rainfall #1 value computed using the CMORPH-based Rainfall Estimate equals or exceeds the Rainfall Event Threshold #1 or the Aggregate Rainfall #2 value computed using the CMORPH-based Rainfall Estimate equals or exceeds the Rainfall Event Threshold #2.
Aggregate Rainfall #1	The rainfall amount accumulated over the Rainfall Aggregation Period #1 (as defined in the Schedule) measured in millimeters (mm) in any of the XSR Exposure Grid Cells in the Covered Area of the Insured. For a given day and a Rainfall Aggregation Period #1 of n hours, the Aggregate Rainfall #1 is the maximum amount of rainfall accumulated over any of the n-hour windows that intersect the day itself considering a time interval of 3 hours.
Aggregate Rainfall #2	The rainfall amount accumulated over the Rainfall Aggregation Period #2 (as defined in the Schedule) measured in millimeters (mm) in any of the XSR Exposure Grid Cells in the Covered Area of the Insured. For a given day and a Rainfall Aggregation Period #2 of n hours, the Aggregate Rainfall #2 is the maximum amount of rainfall accumulated over any of the n-hour windows that intersect the day itself considering a time interval of 3 hours.
Calculation Agent	Entity charged with undertaking the primary calculation of the Rainfall Index Loss.
CMORPH-based Maximum Aggregate Rainfall #1	The maximum value during the Covered Area Rainfall Event of the Aggregate Rainfall #1 computed using the CMORPH-based Rainfall Estimates in any given XSR Exposure Grid Cell over the Covered Area of the Insured.
CMORPH-based Maximum Aggregate Rainfall #2	The maximum value during the Covered Area Rainfall Event of the Aggregate Rainfall #2 computed using the CMORPH-based Rainfall Estimates in any given XSR Exposure Grid Cell over the Covered Area of the Insured.
CMORPH-based Covered Area Rainfall Parameters	The CMORPH Model information provided on a continuous basis by the XSR Model Data Reporting Agency used by the

	Calculation Agent to obtain the CMORPH-based Rainfall Estimates using the XSR Rainfall Model. Parameters are drawn from XSR Exposure Grid Cells within the Covered Area of the Insured, by their respective latitude and longitude. Measurement units and precision of data ingested by the XSR Rainfall Model are identical to those provided by the XSR Model Data Reporting Agency and are further elaborated in the Attachment entitled 'Calculation of Rainfall Index Loss and Policy Payment'.
CMORPH Model	The satellite-based rainfall estimation model provided by NOAA CPC as described in the Rainfall Estimation Models section of the Policy.
Covered Area	The territory of the Insured as represented in the XSR Rainfall Model.
Covered Area Rainfall Event	Any period of days, with an interruption less than or equals to the Event Tolerance Period, during which the number of Active Exposure Grid Cells is greater than or equal to the product of (a) Active Exposure Cell Percentage Threshold multiplied by (b) the total number of XSR Exposure Grid Cells within the Covered Area.
Country Disaster Alert	An official disaster alert issued by ReliefWeb (*http://reliefweb.int/*) for the country in question for one of the following types of events: tropical cyclone, flood, flash flood and severe local storm. Any disaster alert issued later than seven (7) days after the completion of the Covered Area Rainfall Event (CARE) event will not be considered. The Disaster Alert description issued by ReliefWeb and/or its attached documentation must include specific reference to the CARE dates with a tolerance period of 2 calendar days.
Maximum Aggregate Rainfall #1	The highest value during a Covered Area Rainfall Event of the Aggregate Rainfall #1 amount in any of the XSR Exposure Grid Cells in the Covered Area of the Insured computed.
Maximum Aggregate Rainfall #2	The highest value during a Covered Area Rainfall Event of the Aggregate Rainfall #2 amount in any of the XSR Exposure Grid Cells in the Covered Area of the Insured computed.
Rainfall Event Threshold #1	Aggregate Rainfall #1 level as defined in the Schedule which should be exceeded to trigger an Active Exposure Cell.

Rainfall Event Threshold #2	Aggregate Rainfall #2 level as defined in the Schedule which should be exceeded to trigger an Active Exposure Cell.
Rainfall Aggregation Period #1	The number of hours over which the Aggregate Rainfall #1 is computed for all XSR Exposure Grid Cells during a Covered Area Rainfall Event.
Rainfall Aggregation Period #2	The number of hours over which the Aggregate Rainfall #2 is computed for all XSR Exposure Grid Cells during a Covered Area Rainfall Event.
Rainfall Index Loss	For any Covered Area Rainfall Event affecting the Insured, the US Dollar loss calculated by the Calculation Agent using the XSR Rainfall Model, as described in the Attachment entitled 'Calculation of Rainfall Index Loss and Policy Payment'. The Rainfall Index Loss can only be calculated once the Covered Area Rainfall Event is completed.
WRF5 Model	The weather research and forecasting rainfall model by NOAA with Configuration #5 data initialized with and assimilating the data provided by the National Center for Environmental Prediction as described in the Rainfall Estimation Models and in the Input Data to the Rainfall Estimation Models sections of this Attachment.
WRF7 Model	The weather research and forecasting rainfall model by NOAA with Configuration #7 data initialized with and assimilating the data provided by the National Center for Environmental Prediction as described in the Rainfall Estimation Models and in the Input Data to the Rainfall Estimation Models sections of this Attachment.
XSR Rainfall Model	The computer model used to calculate the Rainfall Index Loss, as described in the Attachment entitled 'Calculation of Rainfall Index Loss and Policy Payment'.
XSR Exposure Grid Cells	The 30 arc-second by 30 arc-second grid of cells each of which is attributed with an XSR Grid Cell Exposure Value greater than zero.
XSR Grid Cell Exposure Value	The value, used to calculate the CMORPH-based Exposure Grid Cell Loss, the WRF5-based Exposure Grid Cell Loss, and the WRF7-based Exposure Grid Cell Loss.