

Covered Area Rainfall Event (13/04/2026 to 13/04/2026)

Excess Rainfall

Event Briefing

Haiti

22 April 2026

1 INTRODUCTION

This event briefing describes the impact of rainfall on Haiti, which was associated with a Covered Area Rainfall Event (CARE) starting on 13 April and ending on 13 April 2026. The Rainfall Index Loss (RIL) for the Covered Area Rainfall Event was below the attachment point of Haiti’s Excess Rainfall policy, and therefore no payout is due to the Government of Haiti. This CARE did not activate the Wet Season Trigger or Localized Event Trigger endorsement of the Excess Rainfall policy and therefore no payout under either endorsement is due.

2 EVENT DESCRIPTION

On 12 and 13 April, a stationary front over the Atlantic Ocean extended from east of Bermuda southwestward to the northern coast of Hispaniola (Figure 1). Associated convergent southerly winds, together with a pre-frontal trough located east of the front (Figure 1), supported scattered to numerous showers and thunderstorms across a broad area of the Atlantic, including Hispaniola, the Mona Passage, and Puerto Rico.

Over Haiti, convective activity peaked on 13 April, when localized thunderstorms of moderate intensity affected areas of the country (Figure 2).

On 14 April, the stationary front and its associated convection shifted southeastward, gradually moving away from the Hispaniola region.

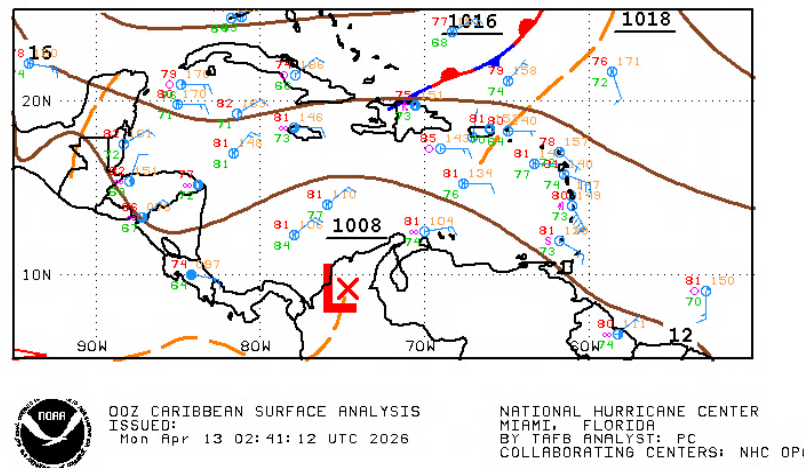
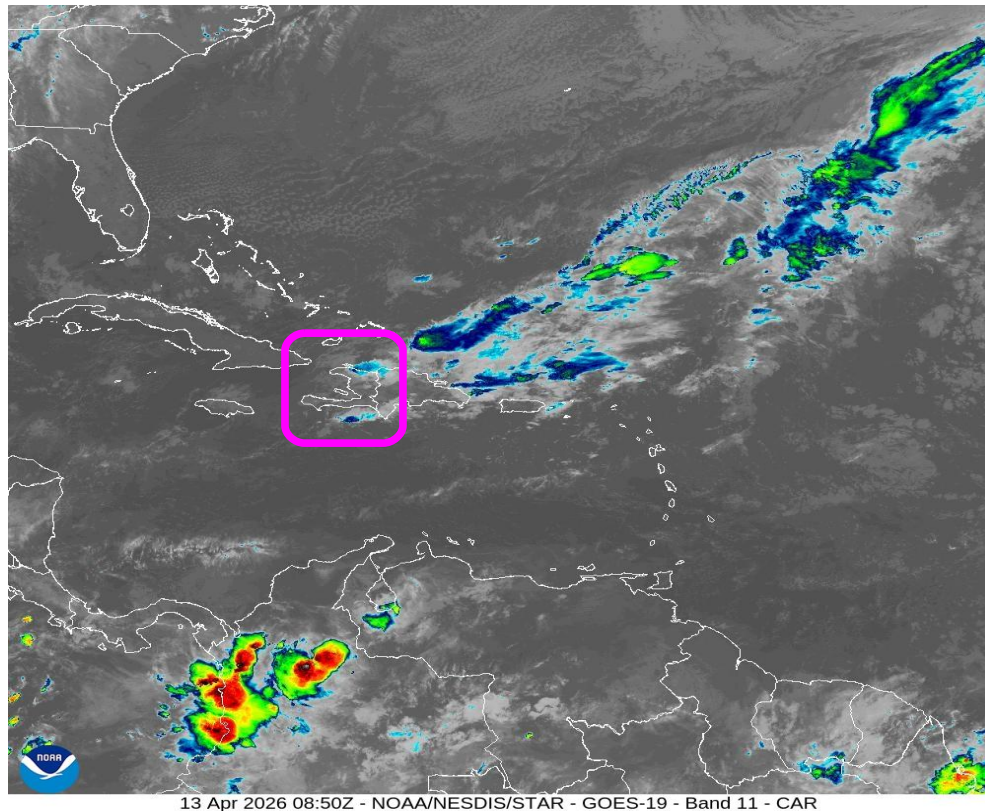


Figure 1 Surface analysis over the Caribbean area on 13 April at 00UTC. Source: US National Hurricane centre¹

¹ National Oceanic and Atmospheric Administration - FTP, National Hurricane centre, review date: 13 April 2026, available at: <https://www.nhc.noaa.gov/tafb/CAR00Z.gif>



13 April at 0850UTC

Figure 2 Satellite imagery on 13 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. Haiti's position is highlighted by a violet square. Source: NOAA, National Environmental Satellite, Data and Information Service².

3 REPORTED IMPACTS

The intense heavy rains in Haiti's Northwest Department caused severe flooding and landslides, particularly affecting the municipalities of Port-de-Paix, Saint-Louis du Nord, and Anse-à-Foleur³.

² RAMSDIS Online Archive, NOAA Satellite and Information Service, available at:

<https://www.star.nesdis.noaa.gov/GOES/sector.php?sat=G19§or=car>

³ FLASH - Devastating floods leave at least 12 dead in Northwest Haiti - HaitiLibre.com : Haiti news 7/7



Figure 3 Flooding in the Northwest caused by torrential rains

At least 12 people have died, with more than 2,500 families directly affected and many forced to leave their homes for relatives' houses or temporary shelters⁴. The floods inundated 900 to 1,200 homes, flooded the local hospital (Hôpital Communautaire Autrichien-Haïtien), destroyed the Ti-Rivière bridge, further deteriorated the Bas Voeux-Jour bridge and damaged dozens of roads, isolating several communities and constraining access for food and essential supplies⁵.



Figure 4 Before and after the destruction of Ti-Rivière bridge⁶

Farmland and crops have been flooded or destroyed, exacerbating high pre-existing levels of acute food insecurity in Haiti. Local authorities report that flooded roads and damaged infrastructure have forced the temporary closure of some schools and businesses and continue to hinder response operations.

4 RAINFALL MODEL OUTPUTS

All data sources used by the XSR 3.1 model, CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15⁷, detected the occurrence of precipitation over Haiti and the surrounding waters during

⁴ ReliefWeb report. Haiti: Flooding in the North-West Department - Flash Update (as of 17 April 2026)

⁵ [12 killed in Haiti as heavy rains damage hundreds of homes | AP News](#)

⁶ Before, Google Maps. After, Youtube video: [NONDATATION NAN VILLE SAINT LOUIS DU NORD PONT](#)

⁷ 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 report. IMERG Model: The satellite-based rainfall estimation model developed by NASA,

the period 11 to 13 April 2026. Each data source reported a specific distribution and accumulation of rainfall, as discussed below and shown in Figure 3. A CARE for Haiti was activated on 13 April and lasted one day. The CARE was activated due to the use of the 12-hour and the 48-hour aggregation intervals for precipitation⁸ and thus the period considered by the XSR 3.1 model for the loss estimate based on the accumulated precipitation in Haiti was 11 to 13 April 2026.

Table 1: Report from XSR 3.1 Data Sources on the Precipitation over Haiti, 11 to 13 April 2026

CMORPH	CMORPH reported total accumulated precipitation values higher than 100 mm over the Nord and Nord-Est departments, as well as a small portion of the Grand’Anse department in southwestern Haiti. Lower values were reported over the rest of the territory. Maximum values between 200 mm and 250 mm were observed over limited areas in the Nord and Nord-Est departments.
IMERG	IMERG showed total accumulated precipitation values with a geographical distribution and intensity similar to those reported by CMORPH.
WRF5	WRF5 reported total accumulated precipitation values with a geographical distribution and intensity similar to CMORPH, but with higher maximum values than CMORPH, ranging between 300 mm and 350 mm, over small areas in the Nord and Grand’Anse departments.
WRF7	WRF7 showed total accumulated precipitation values similar to WRF5, apart from small areas in the Centre department, where values ranged between 100 mm and 250 mm.
WRF11	WRF11 showed total accumulated precipitation values higher than 100 mm over several areas spread across most of Haiti. The highest values, between 350 mm and 500 mm, were reported over a small region along the border between the Grand’Anse and Sud departments.
WRF15	Similarly to WRF11, WRF15 also reported a patchy spatial pattern of accumulated precipitation values exceeding 100 mm. Likewise, the highest values, between 350 mm and 500 mm, were showed over a small region along the border between the Grand’Anse and Sud departments.

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 report WRF5, 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.

⁸ 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.

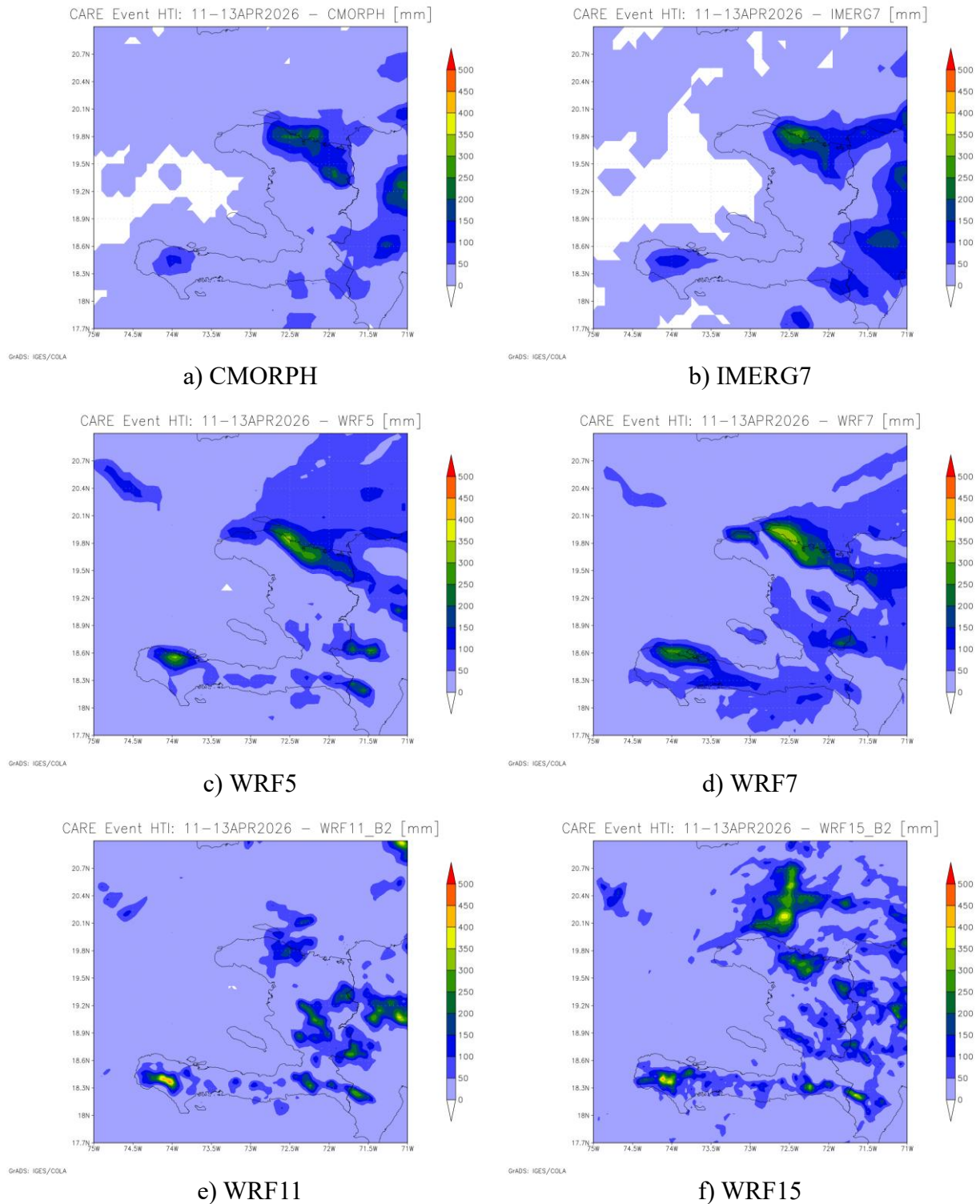


Figure 5 Total accumulated precipitation during the period 11 to 13 April 2026 estimated by CMORPH (a), IMERG7 (b), WRF5 (c), WRF7 (d), WRF11 (e), WRF15 (f). Source: CCRIF SPC

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/HTI/CARE_3_2025/daily_prec_short.mp4

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

The Rainfall Index Loss (RIL) was above the loss threshold for Haiti for all the six data sources used by XSR3.1: CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15. The RIL was the highest for WRF7.

The final RIL (RIL_{FINAL}) was calculated as the average of the six RILs from CMORPH, IMERG, WRF5, WRF7, WRF11 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 Haiti under its Excess Rainfall policy.

The Wet Season Trigger (WST) endorsement of the XSR3.1 model identified this CARE as a “Wet Season” event⁹. However, the corresponding Wet Index during the Wet Season event did not exceed the Wet Season Payment threshold. Therefore, no payout is due under the Wet Season Trigger endorsement of Haiti's Excess Rainfall policy.

5 TRIGGER POTENTIAL

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

Although the component of the XSR3.1 model identified this CARE as a Wet Season event, it was below the Wet Season Payment threshold, therefore, no payout is due under the Wet Season Trigger endorsement of Haiti's Excess Rainfall policy.

The Localized Event Trigger (LET) component of the XSR3.1 model did not identify this CARE as a localized event¹⁰. Therefore, no payout is due under the Local Event Trigger endorsement of Haiti's Excess Rainfall policy.

⁹ The WST endorsement is designed to provide a predetermined payout for rainfall events occurring amidst already saturated soil conditions, effectively capturing the heightened risk of flooding and landslides. It is activated based on two factors: the Wet Index (the average 1-month Standardized Precipitation Index for all grid cells in the country) and Wet Periods (the period of time where the Wet Index exceeds 1, which indicates that the soil is wetter than its long-term average and serves as an indicator of soil saturation). The WST policy endorsement provides a payment when one or more CAREs with a modelled loss greater than zero and lower than the policy Attachment Point occur within a Wet Period and the corresponding value of the Wet Index during the Wet Period exceeds a predetermined threshold. Wet season event (WE). Any period of consecutive days, during which the Wet Index (WI) is equal or greater than 1.

¹⁰ The LET is designed to cover rainfall events that affect only a small portion of the country. To determine a qualifying localized event, two conditions must be met: the average precipitation in the 10% of the area with highest precipitation, known as the “Local Exposure”, must be greater than the local precipitation threshold (LPT) for (i) at least one of the satellite datasets (CMORPH or IMERG) and (ii) at least three of the six models (CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15).

CCRIF expresses condolences to the Government and people of Haiti for the lives lost and damage to crops, infrastructure and communities.

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

DEFINITIONS

<i>Active Exposure Cell Percentage Threshold</i>	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.
<i>Active Exposure Grid Cells</i>	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.
<i>Aggregate Rainfall #1</i>	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.
<i>Aggregate Rainfall #2</i>	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.
<i>Calculation Agent</i>	Entity charged with undertaking the primary calculation of the Rainfall Index Loss.
<i>CMORPH-based Maximum Aggregate Rainfall #1</i>	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.
<i>CMORPH-based Maximum Aggregate Rainfall #2</i>	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.
<i>CMORPH-based Covered Area Rainfall Parameters</i>	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.

<i>Rainfall Event Threshold #2</i>	Aggregate Rainfall #2 level as defined in the Schedule which should be exceeded to trigger an Active Exposure Cell.
<i>Rainfall Aggregation Period #1</i>	The number of hours over which the Aggregate Rainfall #1 is computed for all XSR Exposure Grid Cells during a Covered Area Rainfall Event.
<i>Rainfall Aggregation Period #2</i>	The number of hours over which the Aggregate Rainfall #2 is computed for all XSR Exposure Grid Cells during a Covered Area Rainfall Event.
<i>Rainfall Index Loss</i>	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.
<i>WRF5 Model</i>	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.
<i>WRF7 Model</i>	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.
<i>XSR Rainfall Model</i>	The computer model used to calculate the Rainfall Index Loss, as described in the Attachment entitled ‘Calculation of Rainfall Index Loss and Policy Payment’.
<i>XSR Exposure Grid Cells</i>	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.
<i>XSR Grid Cell Exposure Value</i>	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.