



05/05/2026 to 05/05/2026

**Excess Rainfall
Wind and Storm Surge**

Final Event Briefing

**The Bahamas Water and Sewerage
Corporation (WSC)
The Bahamas North**

13 May 2026

1 SUMMARY

This event briefing is designed to review the modelled losses due to wind, storm surge and excess rainfall calculated by CCRIF’s CWUIC model for a rainfall event that occurred during 5 May 2026 for affected CCRIF member water utilities. The Bahamas Water and Sewerage Corporation was the only CCRIF water utility member for which the CCRIF CWUIC loss model for wind, storm surge and excess rainfall produced losses due to this rainfall event.

Between 3 and 5 May, a stationary front that extended between the northern Bahamas and the Florida Straits triggered showers and thunderstorms across the northern Bahamas. The convective activity peaked on 5 May, when a strong thunderstorm produced heavy rainfall mainly over New Providence and Eleuthera.

The runs of the CCRIF CWUIC model produced losses greater than zero for The Bahamas Water and Sewerage Corporation (WSC) for one of the WSC’s CWUIC policies due to this rainfall event, specifically its policy for The Bahamas – North¹. The losses for WSC Bahamas - North are below the Attachment Point of its CWUIC policy for this region and therefore this occurrence is designated as a Loss Event² for WSC’s Bahamas - North policy. Therefore, no payout is due under the utility’s policy.

2 INTRODUCTION

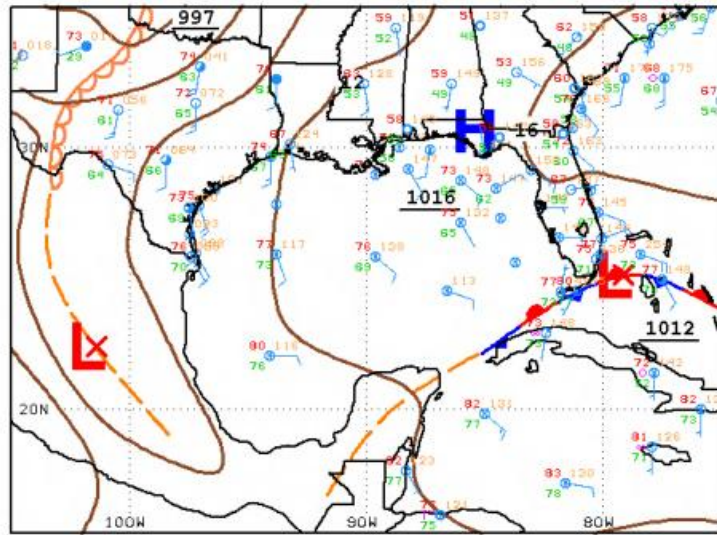
On 3 and 4 May, a cold front, which later evolved into a stationary front, extended over the Atlantic Ocean from latitude 31°N longitude 64°W to the Florida Straits (Figure 1). A broad band of showers and thunderstorms developed along the front and up to 220 km ahead of it, producing scattered rainfall of moderate intensity across the northern islands of The Bahamas.

On 5 May, the development of a low-pressure system just north-west of Andros and embedded within the stationary front (Figure 1) enhanced convective activity over the northern Bahamas. In particular, at 0600 UTC, a strong and long-lasting thunderstorm developed north of Andros and subsequently moved south-eastward, affecting northern Andros, New Providence, Eleuthera, and Cat Island with moderate to locally heavy rainfall, as reported by the satellite maps in Figure 2. Convective activity peaked between 0900 UTC and 1100 UTC, when the most intense convection affected New Providence and Eleuthera (Figure 2b and 2c). By 1500 UTC, the thunderstorm began to dissipate, marking the end of the convective episode over The Bahamas.

On 6 May, the stationary front weakened into a surface trough and drifted eastward, moving away from the area and allowing more stable conditions to establish over The Bahamas.

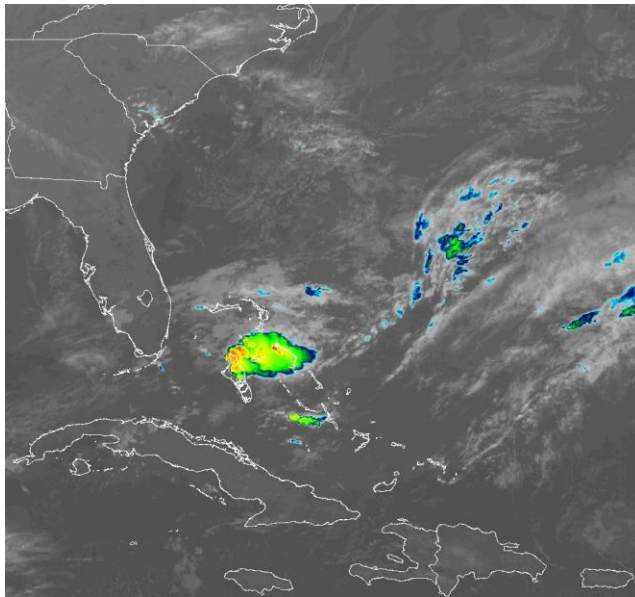
¹ The Bahamas has 2 Excess Rainfall policies for CWUIC: The Bahamas North and The Bahamas - Extreme North; there were no losses produced for The Bahamas - Extreme North

² Any CWUIC event which produces a modelled loss greater than zero but lower than the policy Attachment Point (AP) in one or more policyholder utility

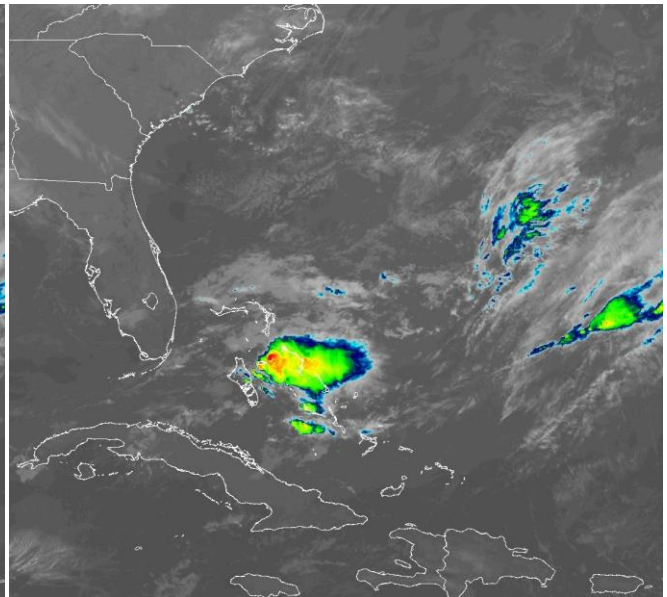


OSZ GULF SURFACE ANALYSIS NATIONAL HURRICANE CENTER
ISSUED: MIAMI, FLORIDA
Tue May 5 08:19:00 UTC 2026 BY TAFB ANALYST: KRV
COLLABORATING CENTERS: NHC OPC WPC

Figure 1 Surface analysis over the Gulf of Mexico and the northwestern Caribbean area on 5 May at 0600UTC.
Source: US National Hurricane centre³

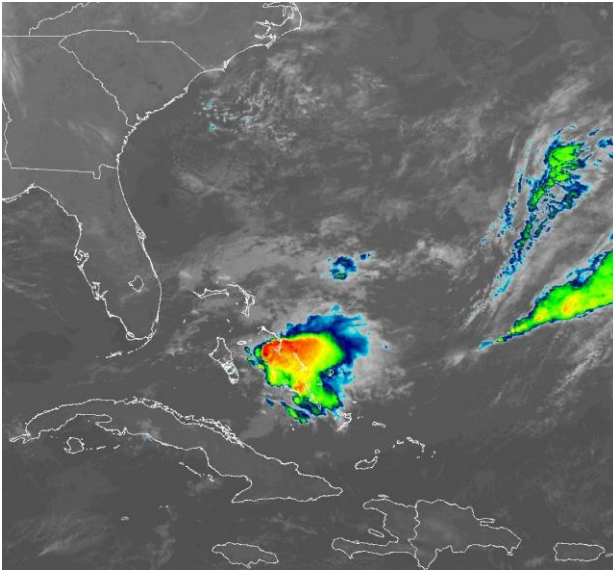


a) 5 May at 0650UTC

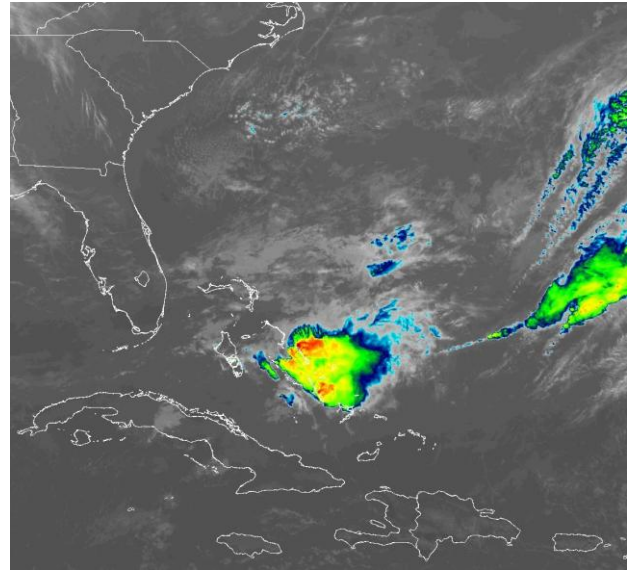


b) 5 May at 0850UTC

³ National Oceanic and Atmospheric Administration - FTP, National Hurricane centre, review date: 5 May 2026, available at: <https://www.nhc.noaa.gov/tafb/GULF06Z.gif>



c) 5 May at 1050UTC



d) 5 May at 1250UTC

Figure 2 Satellite imagery on 5 May, 2026 at different times as indicated in the labels 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. Source: NOAA, National Environmental Satellite, Data and Information Service⁴.

3 CCRIF SPC MODEL OUTPUTS

The CWUIC model is made up of two components: the tropical cyclone (TC) component, accounting for the losses produced by wind and storm surge, and the excess rainfall (XSR) component, accounting for the losses associated with excess rainfall. Each of the two model components estimates a loss value specifically related to the hazard for which it is designed. When both a tropical cyclone and a Covered Area Rainfall Event (CARE) happen at the same time, the outputs of the two model components are added together. When only one model component, TC or XSR, reports losses associated with a specific event, only the losses produced for that component are used. In the following description, the model output for each component is described separately.

TC Component

This CARE does not involve any tropical cyclone activity. No modelled wind or storm surge losses for WSC Bahamas - North are attributed to a tropical cyclone, and therefore the tropical cyclone component was not activated.

⁴ RAMSDIS Online Archive, NOAA Satellite and Information Service, available [here](#)

XSR Component

All data sources used by the XSR 3.0 model, CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15⁵, detected the occurrence of precipitation over The Bahamas - North and the surrounding waters during the period 3 to 5 May 2026. Each data source reported a specific distribution and accumulation of rainfall, as discussed below in Table 1 and shown in Figure 3. A CARE for The Bahamas - North was activated on 5 May and lasted for one day. The CARE was activated due to the use of the 12-hour and the 48-hour aggregation intervals for precipitation⁶ and thus the period considered by the XSR 3.1 model for the loss estimate based on the accumulated precipitation in The Bahamas - North was 3 to 5 May 2026.

Table 1: Report from XSR 3.1 Data Sources on the Precipitation over The Bahamas - North, 3 to 5 May 2026

CMORPH	CMORPH reported total accumulated precipitation values exceeding 60 mm over New Providence and most of Eleuthera. Maximum values, ranging between 120 mm and 150 mm, were observed over the central part of Eleuthera. Lower values were reported across the rest of The Bahamas - North.
IMERG	IMERG showed total accumulated precipitation values higher than 60 mm over the eastern portion of New Providence and the central part of Eleuthera. The highest values, between 120 mm and 150 mm, were reported in localized areas of central Eleuthera.
WRF5	WRF5 reported total accumulated precipitation values exceeding 60 mm, locally reaching maximum between 90 mm and 120 mm, over portions of Andros. Lower values were reported across the remainder of The Bahamas - North.
WRF7	WRF7 showed total accumulated precipitation values exceeding 60 mm over the eastern portion of Andros and most of New Providence. The highest values, between 120 mm and 150 mm, were reported along the north-eastern coast of

⁵ CMORPH Model: the satellite-based rainfall precipitation estimates provided by the NOAA Climate Prediction Center (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, 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.

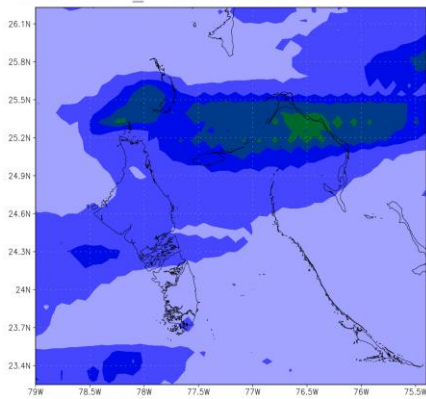
⁶ The two aggregation periods correspond to the Rainfall Aggregation Period #1 and Rainfall Aggregation Period #2, as indicated in the Schedule. Further details in the Definitions section of this report.

Andros. Lower values were reported across the remainder of The Bahamas - North.

WRF11 WRF11 showed total accumulated precipitation values ranging between 120 mm and 180 mm over New Providence and between 90 mm and 120mm over a localized region in northern Andros, while values lower than 60 mm were reported over the rest of the territory

WRF15 WRF15 reported accumulated precipitation values exceeding 60 mm over the eastern side of New Providence and localized areas of Andros. The maximum values, between 120 mm and 150mm, were reported over small localized regions there. Lower values were reported across the rest of the territory.

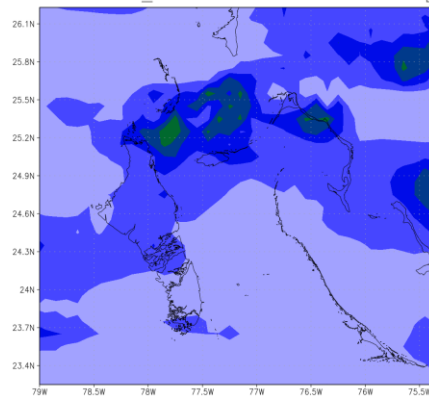
CARE Event BHS_N: 03-05MAY2026 - CMORPH [mm]



GHADS: IGES/COLA

a) CMORPH

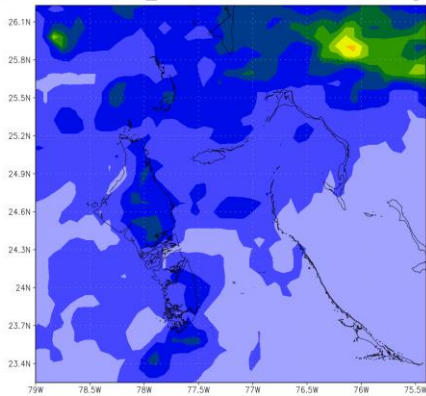
CARE Event BHS_N: 03-05MAY2026 - IMERG7 [mm]



GHADS: IGES/COLA

b) IMERG

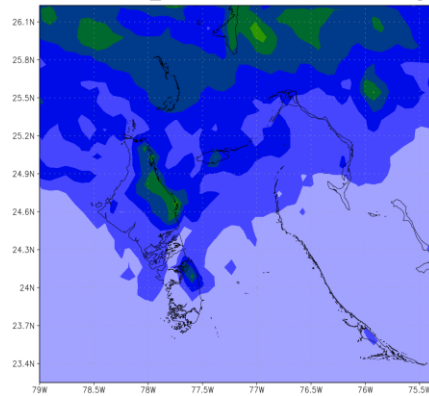
CARE Event BHS_N: 03-05MAY2026 - WRF5 [mm]



GHADS: IGES/COLA

c) WRF5

CARE Event BHS_N: 03-05MAY2026 - WRF7 [mm]



GHADS: IGES/COLA

d) WRF7

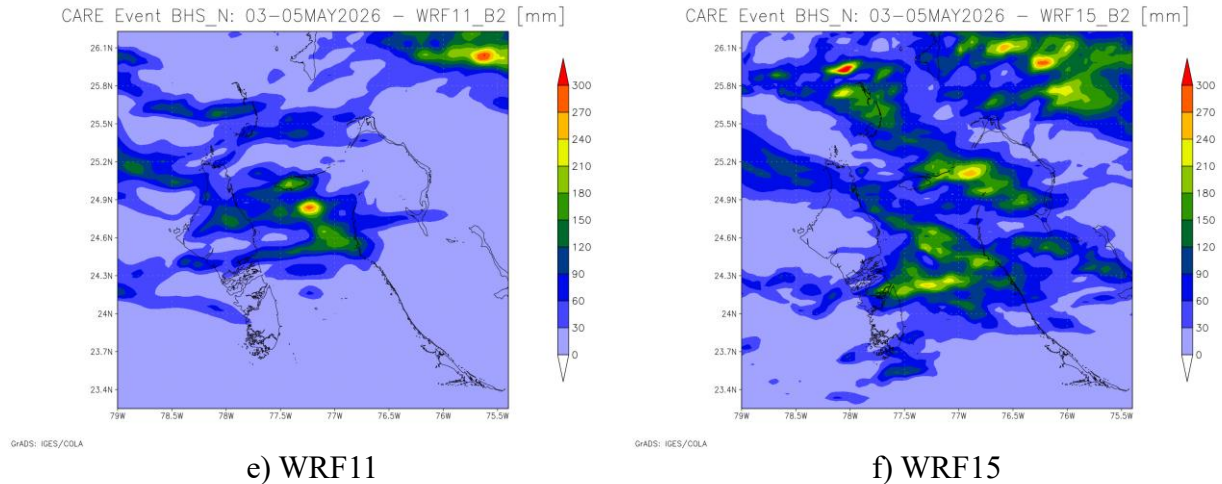


Figure 3 Total accumulated precipitation during the period 3 to 5 May 2026 estimated by CMORPH (a), IMERG (b), WRF5 (c), WRF7 (d), WRF11 (e), WRF15 (f). Source: CCRIF SPC

Daily rainfall maps by CMORPH, IMERG, WRF5, WRF7, WRF11 and WRF15 over the exposure map of CWUIC 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/CWUICXSR/Events/BHS/BHS_N/CARE_3_2025/daily_prec_short.mp4

https://wemap.ccrif.org/OUTPUT/CCRIF/CWUICXSR/Events/BHS/BHS_N/CARE_3_2025/daily_prec_long.mp4

The Rainfall Index Loss (RIL) was above the loss threshold for The Bahamas - North for three of the data sources used by XSR3.1: CMORPH, WRF11, and WRF15. The RIL was the highest for WRF11.

The final RIL (RIL_{FINAL}) was calculated as the average of the three RILs from CMORPH, WRF11 and WRF15. The RIL_{FINAL} was below the attachment point of the Excess Rainfall component of WSC’s CWUIC policy for The Bahamas - North and therefore the policy was not triggered; thus no payout is due to the Water and Sewerage Corporation under its CWUIC policy for The Bahamas - North.

4 REPORTED IMPACTS

While The Bahamas experienced rainfall during the indicated period, at the time of producing this report, there were no reports of specific impacts to the Bahamas Water and Sewerage Corporation.

5 CCRIF LOSS MODEL

The final run of the CCRIF’s CWUIC tropical cyclone and excess rainfall loss model for the Bahamas Water and Sewerage Corporation (WSC), produced losses below the Attachment Point

of its CWUIC policy for The Bahamas - North and therefore no payout under this policy is due.

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.

***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 Relief Web (<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 Relief Web 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.

<i>Maximum Aggregate Rainfall #2</i>	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.
<i>Rainfall Event Threshold #1</i>	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.

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.