





# Covered Area Rainfall Event (23 January 2016)

# **Excess Rainfall**

**Event Briefing** 

3 February 2016

#### 1 INTRODUCTION

The Caribbean Rainfall Model (operated by Kinetic Analysis Corporation (KAC)) indicated that a Covered Area Rainfall Event (CARE) was generated in Haiti on 23 January 2016.

Efforts have been made to acquire information regarding possible damages and actual rainfall measurements on the ground in Haiti, but due to the fact that this event was not associated with a significant weather system, data were not available from the usual CCRIF associates: Caribbean Institute of Meteorology and Hydrology (CIMH), Caribbean Disaster Emergency Management Agency (CDEMA) and Haiti's Meteorology Center (Centre National de Météorologie, CNM).

# 2 IMPACTS

According to CNM, there were no reports of damage in Haiti for this CARE.

## 3 RAINFALL MODEL OUTPUTS

The Caribbean Rainfall Model uses a 3-day running aggregate of rainfall measurements for Haiti, meaning that the rainfall attributed to a particular day is the total sum of the rainfall on that day itself and the two following days.

For the 23 January CARE, the Caribbean Rainfall Model reported a Maximum Aggregate Rainfall of 341 mm in Pic Macaya National Park, located in southwest Haiti (Figure 1). The maximum number of ongoing WRFXSR Grid Cell Events for this event was 5,272.

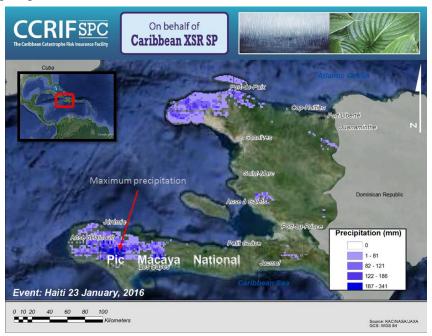


Figure 1. Map showing accumulated rainfall in Haiti, 23 January 2016

### 4 TRIGGER POTENTIAL

The number of ongoing Grid Cell Events in Haiti exceeded the required threshold (4,964) to trigger the CARE on 23 January, and fell below the threshold on 24 January.

A CARE is not considered complete until the Aggregate Rainfall in each WRFXSR Grid Cell (that had an ongoing WRFXSR Grid Cell Event that contributed to the CARE) has fallen below 50 mm for at least 2 days. The CARE was considered complete on 27 January 2016.

The Rainfall Index Loss calculated for this CARE was below the attachment point of Haiti's Excess Rainfall policy and therefore no payout is due.

For further information, please contact ERN-RED, the CCRIF SPC Risk Management Specialist.

Evaluación de Riesgos Naturales Vito Alessio Robles No.179 Col. Hda Gpe Chimalistac. Del. Álvaro Obregón. Cp 01050, México D.F. +52 (55) 5616-8161, 62, 64 cavelar@ccrif.org

#### **DEFINITIONS**

Active Percentage The percentage of the total number of WRFXSR<sup>1</sup> Grid Cells,

within the Covered Area of the Insured, in which a WRFXSR Grid Cell Event must be occurring to trigger a Covered Area Rainfall Event. The Active Percentage is

defined in the Schedule.

Aggregate Rainfall The value of Aggregate Rainfall, as measured in millimeters

(mm), using the WRFXSR Precipitation Data over the Covered Area and evaluated by the Calculation Agent as part of the Rainfall Index Loss Calculation Methodology. For a

given day:

(a) 2-day aggregate - the total sum of rainfall on the day

itself, and the day after; or

(b) 3-day aggregate - the total sum of rainfall on the day

itself, and the two following days.

Caribbean Rainfall Model The computer model used to calculate the WRFXSR Grid

Cell Event Loss and the Rainfall Index Loss.

Covered Area Rainfall Event Any continuous period of days during which the number of

WRFXSR Grid Cell Events is greater than or equal to the product of (a) Active Percentage multiplied by (b) the total

number of WRFXSR Grid Cells within the Covered Area.

Covered Area The territory of the Insured as represented in the Caribbean

Rainfall Model.

WRFXSR Grid Cell (grid cell) The 30 arc-second by 30 arc-second grid of cells each of

which is attributed with an exposure value and, for those with exposure value greater than zero, to which an

Aggregate Rainfall Amount is attributed each day.

WRFXSR Grid Cell Event (cell event) Any continuous period of days during which the

Aggregate Rainfall value equals or exceeds the Rainfall Event Threshold in a WRFXSR Grid Cell. For Covered Areas that have 3-day aggregation periods, a WRFXSR Grid Cell Event is only considered to be ever once there have been

Cell Event is only considered to be over once there have been

<sup>1</sup> Weather Research and Forecasting (WRF) Excess Rainfall (XSR)

two or more consecutive days where the Aggregate Rainfall does not exceed the Rainfall Event Threshold.

Maximum Aggregate Rainfall The highest Aggregate Rainfall amount during a WRFXSR

Grid Cell Event for each WRFXSR Grid Cell in which there

is a WRFXSR Grid Cell Event.

Rainfall Event Threshold Aggregate Rainfall level which, when exceeded, starts a

WRFXSR Grid Cell Event.

Rainfall Index Loss For any Covered Area Rainfall Event affecting the Insured,

the US Dollar loss calculated by the Calculation Agent using

the Caribbean Rainfall Model.