Covered Area Rainfall Event (18 October 2015)

Excess Rainfall

Event Briefing

13 November 2015

1   INTRODUCTION

The Caribbean Rainfall Model (operated by Kinetic Analysis Corporation (KAC)) indicated that a Covered Area Rainfall Event (CARE) was generated in Haiti starting and ending on 18 October 2015.

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 from the usual CCRIF associates, Caribbean Institute of Meteorology and Hydrology (CIMH), United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), Caribbean Disaster Emergency Management Agency (CDEMA) and Haiti Department of Civil Protection have been difficult to access.

2   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 18 October CARE, the Caribbean Rainfall Model reported a Maximum Aggregate Rainfall of 504 mm in the South East of Haiti, near Fond-Verrettes (Figure 1) and the maximum number of ongoing WRFXSR Grid Cells Events was 5,576.

3   TRIGGER POTENTIAL

The number of ongoing Grid Cells Events exceeded the required threshold (4,964) to trigger the CARE on 18 October and fell below the threshold the next day.

It must be noted that while the CARE technically lasted only one day, 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 3 November 2015.

The Rainfall Index Loss calculated for this CARE was below the attachment point of Haiti Excess Rainfall policy and therefore no payout is due.
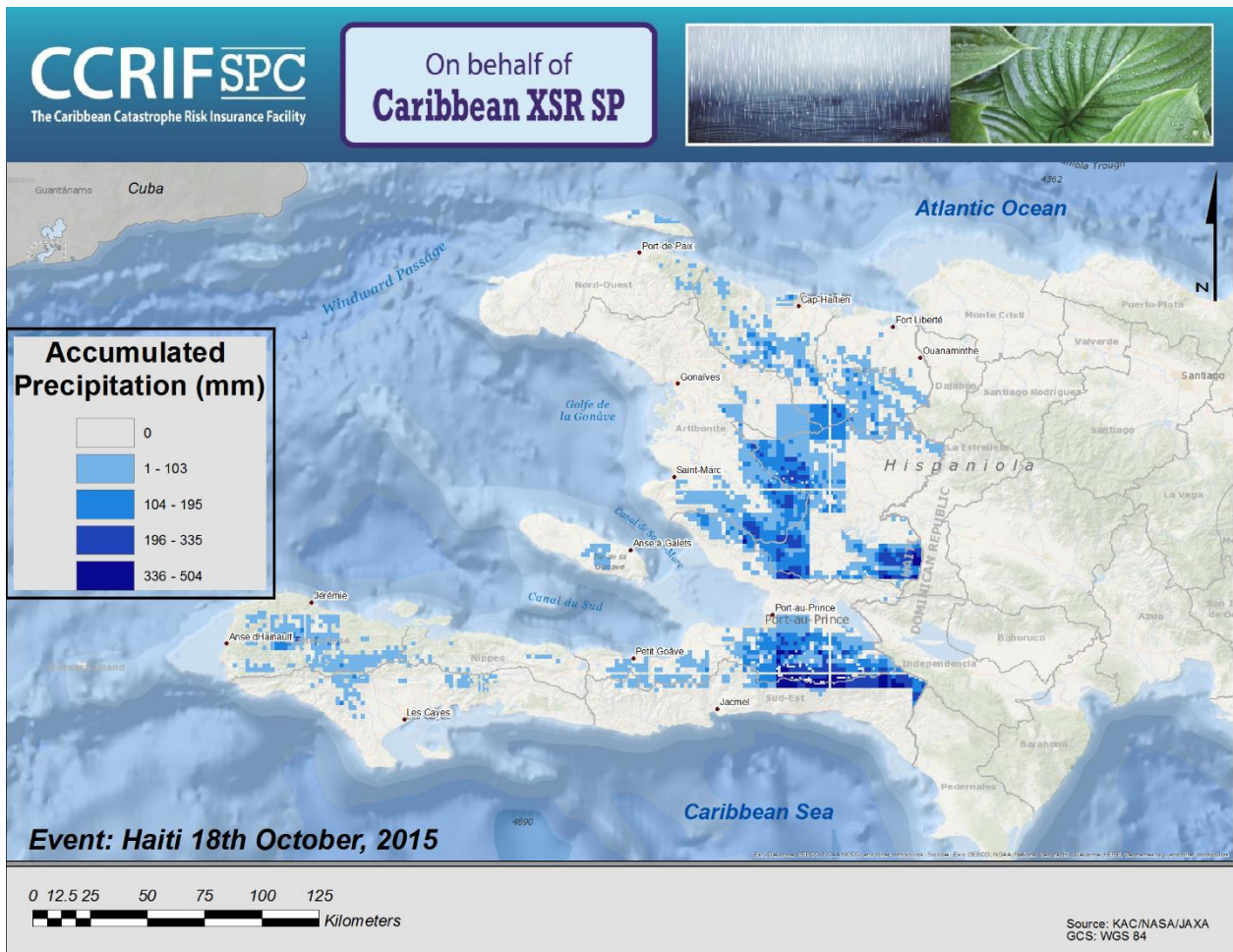
Figure 1. Map showing accumulated rainfall Haiti, 18 October 2015.

4   IMPACTS

At the time of this writing there are no reports of damage for this CARE in Haiti.

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

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DEFINITIONS

Active Percentage

The percentage of the total number of WRFXSR[1] 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 over once there have been

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[1] 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.