



Grenada

Excess Rainfall

Covered Area Rainfall Event (22-23 October 2014)

Event Briefing

14 November 2014

1 INTRODUCTION

On 23 October 2014, Grenada experienced heavy rainfall as a result of a very strong easterly tropical wave that affected the southeastern Windward Islands of the Lesser Antilles. This triggered a Covered Area Rainfall Event (CARE) according to CCRIF's Caribbean Rainfall Model. This event concluded on 23 October 2014 and CCRIF is still awaiting official reports regarding any damage on the ground and actual rainfall measurements.

Grenada was the only CCRIF member country with an Excess Rainfall policy that was affected by this rainfall event.

2 DAILY MODEL RAINFALL DATA

The rainfall produced by the Caribbean Rainfall Model (operated by Kinetic Analysis Corporation (KAC)) on 23 October 2014, was concentrated in the mountainous interior of the island. The model produced maximum rainfall of 319.46 mm in the mountainous region west of Victoria at an elevation of ~400 m. The area is densely forested and drains north and northeast into the Sauteurs and Victoria districts respectively.

Figure 1 shows the accumulated rainfall over Grenada on 23 October. The image shows the interpolated *iTRMM* satellite values with the higher values being recorded in the mountainous interior of Grenada.

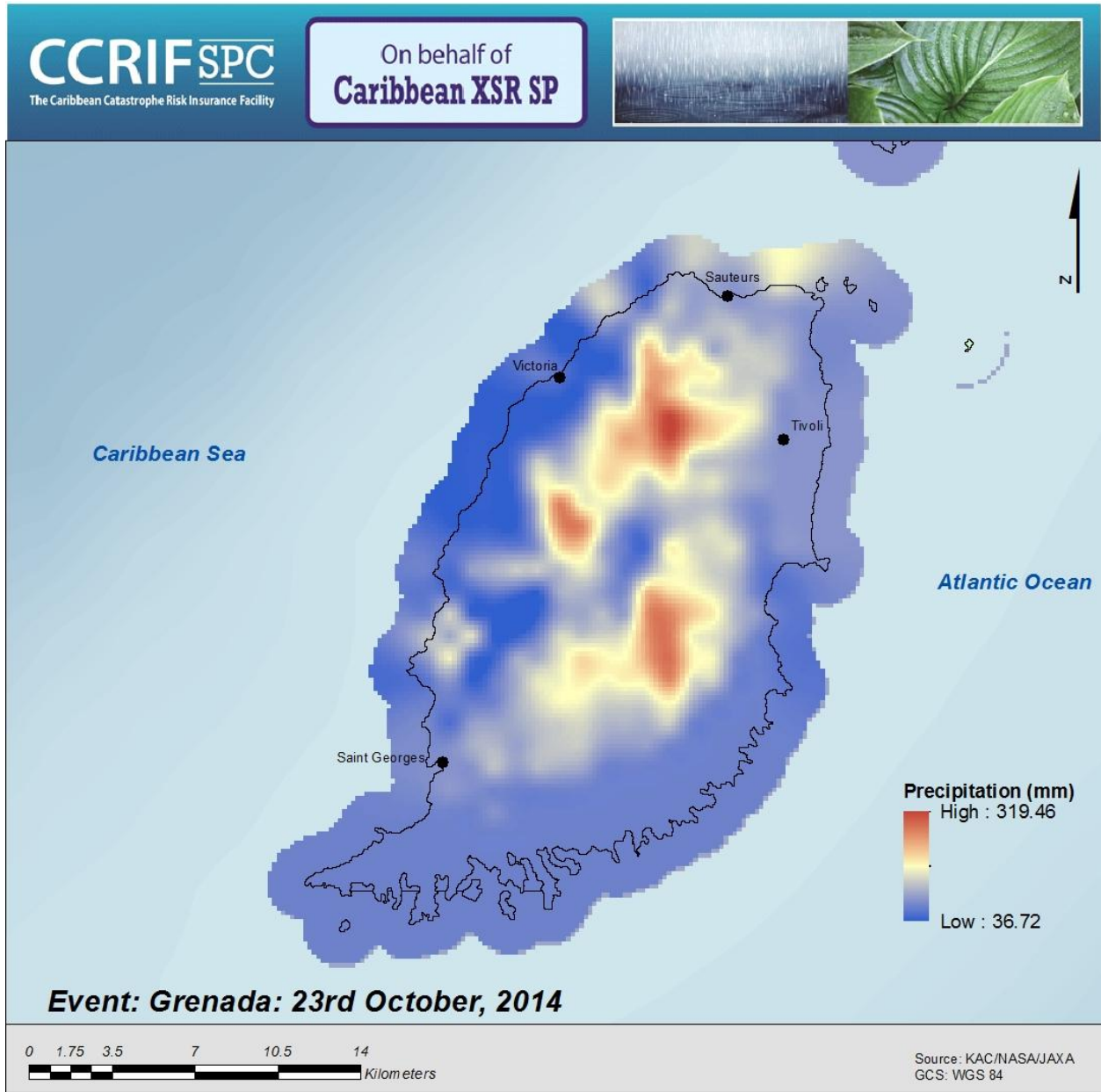


Figure 1 Map showing accumulated rainfall in Grenada, 22-23 October 2014.

3 RAINFALL MODEL OUTPUTS

The Caribbean Rainfall Model uses a 2-day running aggregate of rainfall measurements for Grenada as a basis for determining Rainfall Index Losses, meaning that the rainfall attributed to a particular day is the total sum of the rainfall on that day itself and the following day.

The Caribbean Rainfall Model produced Maximum Aggregate Rainfall of 333.57 mm on 23 October 2014 (this includes daily rainfall measurements from 23 and 24 October). The maximum number of ongoing iTRMM Grid Cell Events (iGCEs) was 275.

4 TRIGGER POTENTIAL

The number of ongoing iGCEs exceeded the required threshold (228) to trigger the CARE on 22 October and fell below the threshold on 24 October.

It must be noted that a CARE is not considered complete until the Aggregate Rainfall in each iTRMM Grid Cell, that had an ongoing iGCE that contributed to the CARE, has fallen below 75 mm for at least 1 day (2 days in the case of those countries for which the model uses 3-day Aggregate Rainfall). In this instance, the CARE and its contributing iGCEs ended on 23 October.

The Rainfall Index Loss calculated for Grenada's CARE was below the country's Excess Rainfall policy attachment point, and therefore no payout is due.

For further information, please contact Caribbean Risk Managers Ltd., the CCRIF SPC Facility Supervisor.

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DEFINITIONS

- Active Percentage*** The percentage of the total number of iTRMM Grid Cells, within the Covered Area of the Insured, in which an iTRMM 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 millimetres (mm), using the iTRMM 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 iTRMM Grid Cell Event Loss and the Rainfall Index Loss.
- Covered Area Rainfall Event*** Any continuous period of days during which the number of iTRMM Grid Cell Events is greater than or equal to the product of (a) Active Percentage multiplied by (b) the total number of iTRMM Grid Cells within the Covered Area.
- Covered Area*** The territory of the Insured as represented in the Caribbean Rainfall Model.
- iTRMM 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.
- iTRMM Grid Cell Event (cell event)*** Any continuous period of days during which the Aggregate Rainfall value equals or exceeds the Rainfall Event Threshold in an iTRMM Grid Cell. For Covered Areas that have 3-day aggregation periods, an iTRMM Grid Cell Event is only considered to be over once there have been two or more consecutive days where the Aggregate Rainfall does not exceed the Rainfall Event Threshold.

<i>Maximum Aggregate Rainfall</i>	The highest Aggregate Rainfall amount during an iTRMM Grid Cell Event for each iTRMM Grid Cell in which there is an iTRMM Grid Cell Event.
<i>Rainfall Event Threshold</i>	Aggregate Rainfall level which, when exceeded, starts an iTRMM Grid Cell 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 Caribbean Rainfall Model.