

2017



# Annual Severe Weather Summary

A summary of weather events across Jamaica that produced prolonged periods of heavy or very little rainfall and strong winds leading to hazards, destruction of property and infrastructure and fatalities.



## **OVERVIEW**

### *Climatology*

Jamaica's bimodal rainfall pattern consists of two peak periods with higher values of rainfall and corresponding periods of lower rainfall amounts. The primary peak occurs in October and the secondary in May. The lowest amounts are at a minimum during the period February to March and the month of July.

### General

Notwithstanding the fact that six months of the year 2017 brought in below normal rainfall, the year can be described as an active year as it relates to weather systems which caused damages, destruction and displacement. For eleven (11) months of the year, weather systems resulted in either isolated damages (freak storms or lightning strikes) or more substantial damages (such as flooding, landslides and damages to property and infrastructure), impacting several parishes during any one event. Portland was affected on most occasions, with many cases of landslides in sections of the parish and especially in the Rio Grande Valley.

### Drought Analysis

The December to March months represent the traditional dry period for Jamaica and with less than expected rains during the primary wet season in 2016, meteorological drought conditions affected sections of Westmoreland, St. Elizabeth, Manchester, Clarendon, Trelawny and St. James at the end/start of 2016/2017. Drought conditions continued in January/February for four parishes, however, these conditions were broken when unusual rains in March brought an end to this dry spell.

The rainfall in March was to mark the start of a 4-month period (March to June), where several weather features impacted the island during that time and which produced rainfall that resulted in flooding and earth movement (landslides and rockslides) among other destruction across several parishes. Over these four (4) months, the island was to

experience consecutive months of above-normal rainfall. The rains received, resulted in severe flooding especially in sections of Clarendon and St. Catherine mainly in April, May and June. In some areas and communities of these parishes, there were cases of repeated flooding events and in other areas and communities, residents experienced flooding for the first time. Drought conditions were to return in the June/July and July/August periods, where St. Mary, St. Thomas and Manchester were affected.

## Severe Weather Events and Major Impacts in 2017

Date	Weather Feature	Damage/ Impact	Affected parishes/areas
January 8-10	High Pressure Ridge / Cold Front	Electrical outages from near gale force winds	Portland, St. Mary, St. Andrew and St. Catherine
March 6-7	High Pressure Ridge / Cold Front	Collapsed road section at the shore line.	Buff Bay, Portland
March 16-19	Stationary Front	Landslides and blocked roads	Sections of Portland
March 24-25	Surface Trough	Overnight landslides and blocked roads.	Sections of Portland.
		Thundershowers with soft hail on 25 <sup>th</sup> .	Old Harbour main road in St. Catherine.
April 9	Pre-Frontal Trough	Violent winds (freak storm)	Comfort in Manchester.
April 16	Surface Trough	Landslides, rockslides	Hope Bay, Buff Bay and Rio Grande Valley in Portland.
		Flooding	Commercial properties in Balaclava, St. Elizabeth
April 17	Mid to Upper Level Trough	Landslide and rockslides	Claverty Cottage and Windsor in Portland
April 20	Surface to Upper Level Trough	Flooding	Residential properties in Newton in St. Elizabeth.
April 21-22		Flooding	Sections of St. Elizabeth, Clarendon, St. Catherine and St. Thomas.
		Landslides and rockslides	Sections of Clarendon, St. Thomas and Portland
May 13-17	Surface to Upper Level Trough	Flooding, landslides and rockslides	St. Elizabeth, Manchester, Clarendon, St. Catherine, KSA, St. Thomas, Portland, St. Ann, Trelawny.
June 16-17	Area of disturbed weather/Tropical Wave	Flooding	St. Elizabeth, Manchester, Clarendon and St. Catherine.
		Landslide	Northern Clarendon, St. Andrew, St. Thomas and Portland.
July 16	Tropical Wave	Violent winds results in crop damage and a	Lacovia in St. Elizabeth

		blown off roof	
August 4-5	Tropical Wave	Landslides	Sections of Portland.
September 8-10	Induced Trough from Hurricane Irma	12-y.o. boy washed away and rescued in the Shoemaker Gully on the 8 <sup>th</sup> .	Trench Town in St. Andrew.
		Lightning strike on the 8 <sup>th</sup> . FIR closed.	JCAA facility on Winchester Road in St. Andrew
		Lightning strike on the 9 <sup>th</sup> .	Kills a woman in St. Thomas.
September 25-28	Trough across the western Caribbean. Tropical Wave across Jamaica on the 27 <sup>th</sup> .	Flooding.	Yallahs in St. Thomas. Sections of Montego Bay. Southern Clarendon.
Sept. 30 to Oct. 5	Area of disturbed weather associated with a Trough	Landslides	Sections of St. Thomas on Sept 30 and Oct 4.
Nov 19-24	A Trough that moved westward across the island on the 20 <sup>th</sup> , then the western Caribbean.	Landslides and rockslides.	Sections of Portland, St. Mary and St. Andrew.
		Flooding.	Communities in Portmore and Montego Bay.
Dec 9-14	Stationary Front	Landslides.	Sections of Portland.
		Flooding.	Sections of Trelawny
		A collapse road section.	Hague in St. Ann.
January-September	El Nino	Meteorological Drought	Westmoreland, St. Elizabeth, Manchester, Clarendon, St. Thomas, Portland, St. Mary, Trelawny and St. James

Table 1 shows the severe weather events and major impacts that occurred in 2017<sup>1</sup>

<sup>1</sup> Disclaimer: The information about damages/impacts and parishes/areas affected were those reported in the local electronic and/or print media and therefore, the Meteorological Service, Jamaica takes no responsibility for the accuracy of the information.

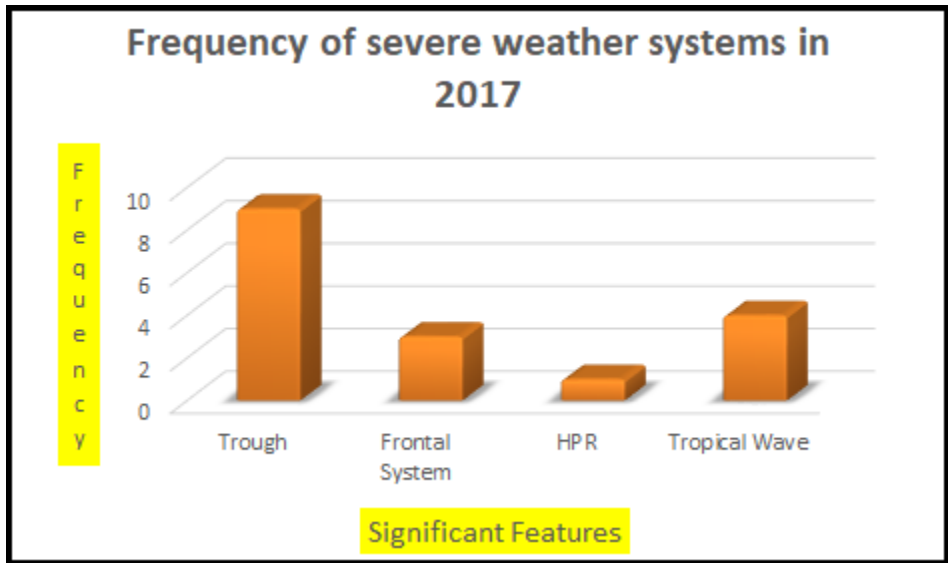


Figure 1: Depicts the severe weather features that impacted the island during 2017

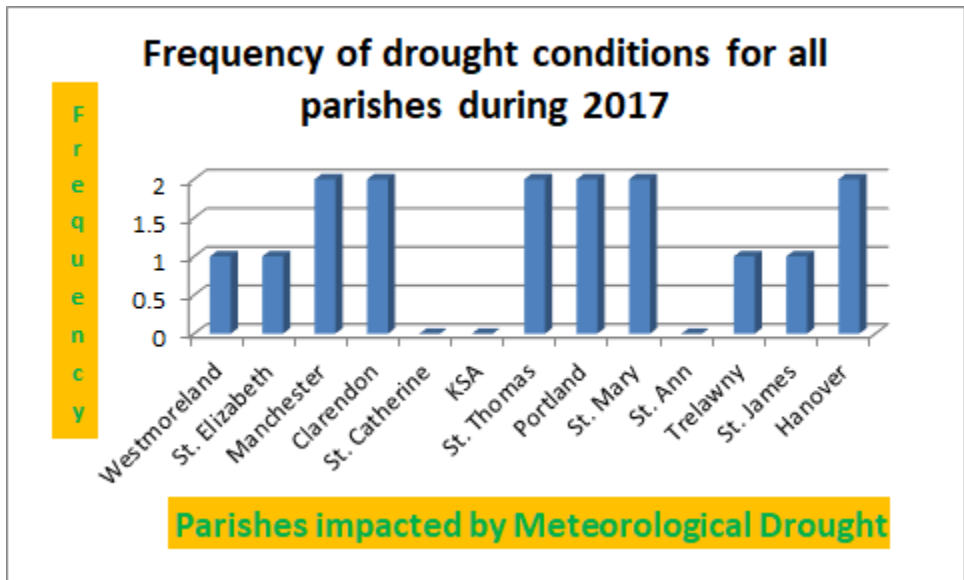


Figure 2: Parishes impacted by Meteorological Drought conditions during 2017