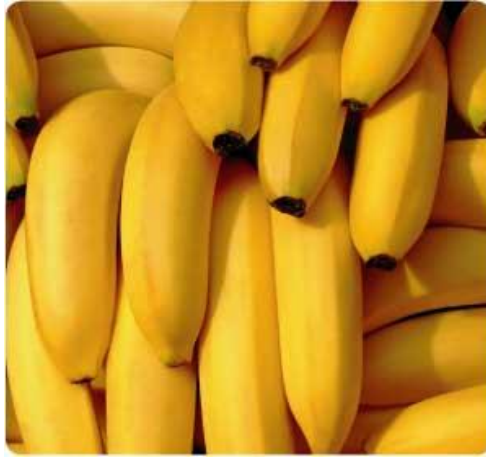


NATIONAL AGROMET BULLETIN



Issued by

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March 2015

- + Moderate drought conditions being reported for Tulloch.**
- + Above normal rainfall forecast for most stations.**
- + Above normal Temperature forecast to continue through June 2015.**

Weather Summary for month of March 2015

Throughout the month of March, surface troughs coupled with a few frontal systems were the dominant weather features affecting the island. Towards the end of the month the country was affected by a series of surface troughs and cold fronts which resulted in an increase in shower activities across most parishes. Manley in the southeast and Sangster in the northwest both exceeded their 30 year rainfall means.

During the month, Sangster in the northwest recorded 93.2 mm of rainfall, while Norman Manley in the southeast received 63.1 mm of rainfall. There were seven (7) rainfall days reported for Sangster while Norman Manley International airports had three (3) rain days. Both Manley and Sangster received well above the average rainfall for the month of March (1971-2000 mean).

The highest maximum temperature recorded for Sangster Airport was 33.1°C (11th March) meanwhile 33.8°C (12th March) was reported for Norman Manley Airport and it was noted that the 20yr mean extreme maximum temperature value was exceeded at both airports.

Standardized Precipitation Index (SPI)

The Standardized Precipitation Index (SPI), developed by T.B. McKee, N.J. Doesken, and J. Kleist in 1993, is based only on precipitation. One unique feature is that the SPI can be used to monitor conditions on a variety of time scales namely 1- month, 3-month, 6-month, 9-month and 12-month periods. This temporal flexibility allows the SPI to be useful in both short-term agricultural and long-term hydrological applications.

KEY

SPI Value	Category	SPI Value	Category
0 to -0.4	Normal drought	0 to 0.4	Normal Wetness
-0.5 to -0.7	Abnormally Dry (30%tile)	0.5 to 0.7	Abnormal Wetness (70%tile)
-0.8 to -1.2	Moderate Drought (20%tile)	0.8 to 1.2	Moderate Wetness (80%tile)
-1.3 to -1.5	Severe Drought (10%tile)	1.3 to 1.5	Severe Wetness (90%tile)
-1.6 to -1.9	Extreme Drought (5%tile)	1.6 to 1.9	Extreme Wetness (95%tile)
-2.0 or less	Exceptional Drought (2%tile)	2.0 or more	Exceptional Wetness (98%tile)

Table 1. Rainfall and Drought Analysis for Selected Stations

Parish	Station	March Monthly Total (mm)	Percent of 30 year Mean (%)	SPI for March
Hanover	Mount Peto	94	81	0.21
Westmoreland	Sav-la-mar	52	62	-0.64
Manchester	Sutton	350	338	2.24
St. Elizabeth	Y.S Estates	127	102	0.45
St. Elizabeth	Potsdam	42	49	-0.
Clarendon	Beckford Kraal	53	62	-0.45
St. Catherine	Tulloch	22	32	-1.03
Trelawny	Orange Valley	70	156	0.46
St. James	Sangster	93	175	0.16
St. Ann	Cave Valley	62	91	-0.12
St. Mary	Hampstead	284	318	1.28
Portland	Shirley Castle	301	101	-0.74
St. Thomas	Serge Island	56	76	-0.52
KSA	Langley	134	109	-0.29
KSA	Manley Airport	63	262	0.45



Standardized Precipitation Index Discussion

Seven stations are showing abnormally dry conditions however Tulloch is now reporting moderate drought conditions. Potsdam has improved since last month and is now showing abnormally dry conditions.

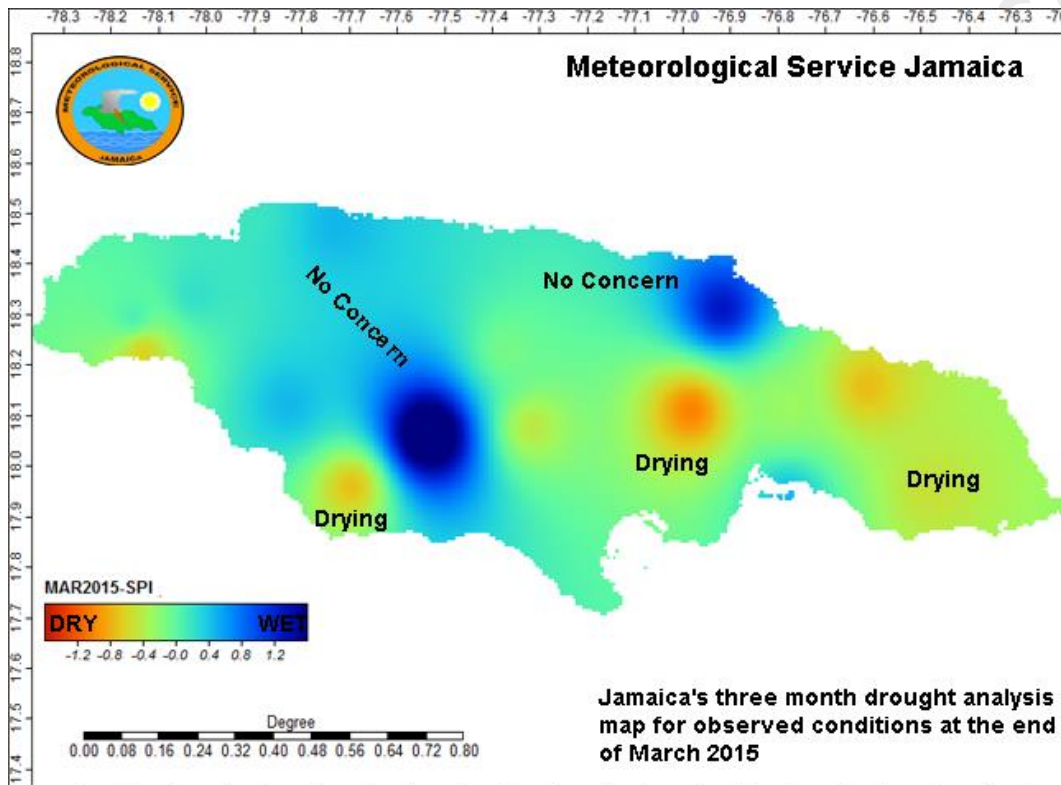


Fig.1 Station observed drought conditions for March 2015



Precipitation Forecast – April to June 2015

The rainfall outlooks for the period April to June, from the Global Dynamic Models as well as Climate Predictability Tool (CPT) are indicating mixed results. The dynamic models are indicating that the Caribbean will experience near normal to below normal rainfall with warmer than normal temperatures. However, our local CPT model is predicting that most areas across Jamaica will get near normal to above normal rainfall for the period April to June.

Of the fifteen rainfall stations that were examined across the island, ten are likely to receive above normal rainfall, while five stations mainly in the east and west of the island are likely to get near normal rainfall during the period. The parish of St Thomas are likely to experience the greatest deficit in rainfall during the period.

Table 2. Climate Predictability Tool (CPT) Outlook AMJ 2015.

Stations	Below (B) %	Normal (N) %	Above (A) %
Manley (Kingston)	19	32	49
Sangster (St. James)	20	32	48
Sav. (Westmoreland)	26	38	36
Beckford (Clarendon)	20	31	49
Serge Island (St. Thomas)	32	37	31
Cave Valley (St. Ann)	28	11	61
Tulloch Estate (St. Cath.)	21	33	46
Y.S. Estate (St. Elizabeth)	24	36	40
Hampstead (St. Mary)	26	30	44
Orange Valley (Trelawny)	28	37	35
Langley (Kingston)	25	38	37
Mount Peto (Hanover)	30	37	33
Shirley Castle (Portland)	23	34	43
Suttons (Manchester)	26	13	61



Potsdam (St. Elizabeth)	28	19	53
Jamaica	25	30	40

Key

- A: Above normal rainfall means greater than 66 percentile of the rank data
- N: Near normal rainfall means between 33 and 66 percentile of the rank data
- B: Below normal rainfall means below 33 percentile of the rank data

Drought Forecast – June 2015

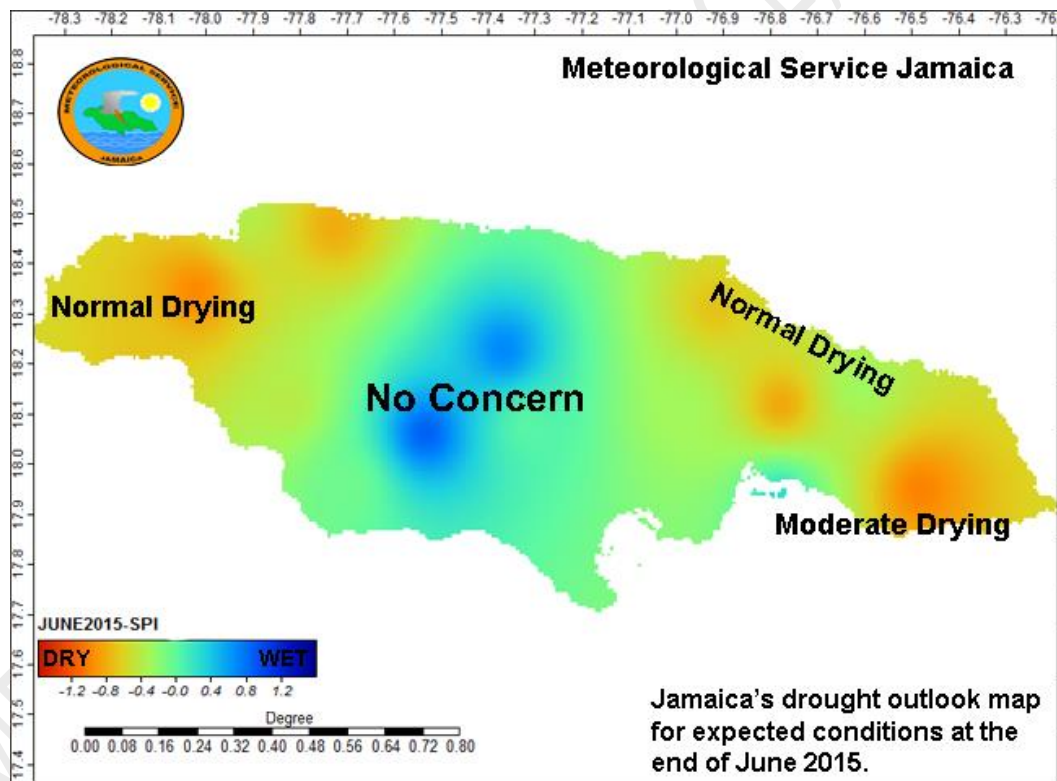


Fig.2 Expected drought conditions by end of June 2015



Temperature Forecast – April to June 2015

Location	Below (B) %	Normal (N) %	Above (A) %
Jamaica Temperature Outlook	15	30	55

Summary and Expected Agricultural Impacts

Most sections of the island are currently above drought conditions or showing abnormally dry conditions which is normal for this time of year. Tulloch in St. Catherine however is showing moderate drought and this will be closely monitored. The forecast for most stations including Tulloch is for above normal rainfall for April through June and realization of this would result in recovery over most of the areas showing drought or drying.

There is some concern for the possible impacts of the forecast for above normal temperatures. Heat stress for plants and animals could be an issue for farmers. Procedures such as shading and irrigation might be necessary to prevent significant impacts on plants and livestock.