

# ANTIGUA AND BARBUDA MONTHLY AGROMETEOROLOGICAL BULLETIN

ANTIGUA AND BARBUDA METEOROLOGICAL SERVICE CLIMATE SECTION

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## ANNOUNCEMENTS

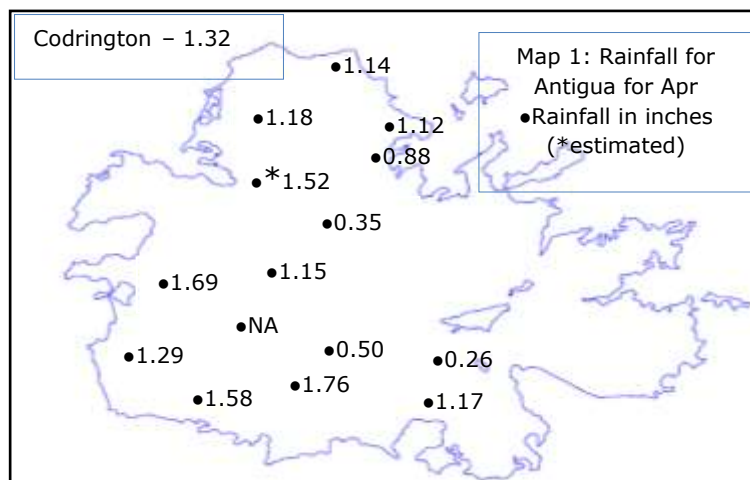
The Antigua and Barbuda Meteorological Service (ABMS) [Climate Section](#) will be taking part in an advanced workshop on Statistics in Applied Climatology to be held in Barbados during the latter half of June 2015. The workshop will provide follow-up training to build capacity in the provision of climate services. The ABMS Climate Section has started to publish a monthly [newsletter](#) to highlight recent weather and climate events, and the outlooks for the upcoming months. We continue to welcome feedback on all of our products.

## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR ANTIGUA – APRIL 2015

This month had a [heatwave](#) over the period April 24-30. It's the second heatwave on record for the month; the other one was back in 1998. On the whole, it's the first heatwave since 2010. Meanwhile, the mean daily minimum [temperature](#) for April was 23.9 °C (75 °F), tying 2002, 1980 and 1973 for the sixth warmest on record. However, the mean temperature for April was near normal – 26.2 °C (79.2 °F). Like the previous three months, this was the warmest April since 2010.

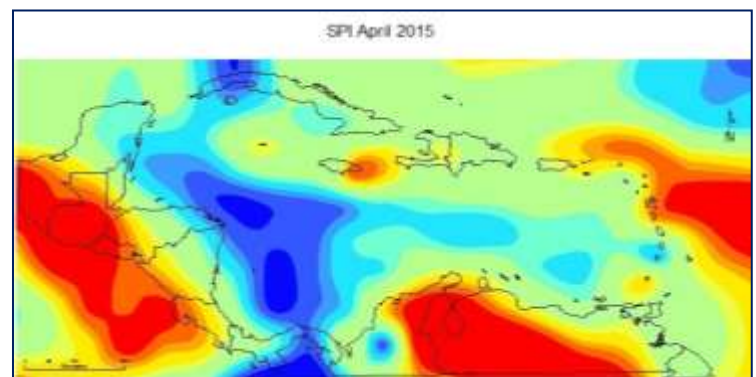
[April](#) was twice as wet as [March](#); notwithstanding, the 29.0 mm (1.14 in) for April was below normal, the lowest since 2006 and the 14<sup>th</sup> lowest. At the V. C. Bird International Airport, although the rainfall was below normal, the seven wet days (with ≥ 1 mm) and one heavy rainfall day (with ≥ 10 mm) were near normal. The maximum 24-hour total was 10.3 mm (0.41 in); this is well below normal and lowest since 2003.

Meanwhile, the “season” February to April (FMA), had well below normal rainfall – 87.1 mm (3.43 in) and the eighth driest on record. It is also drier than FMA 2014 and the driest since 2001. The mean temperature – 25.7 °C (78.3 °F), was near normal but the highest since 2010.



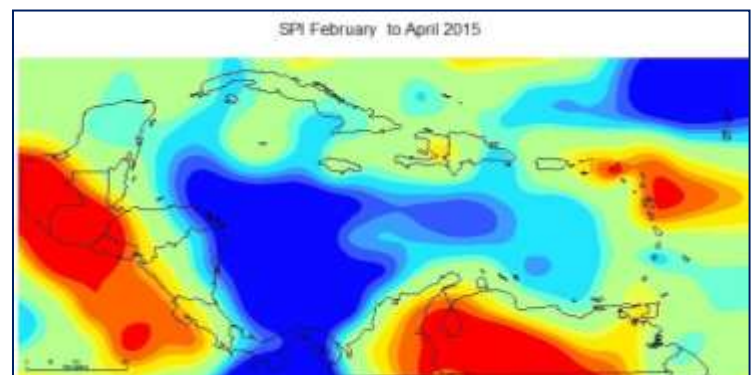
## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR THE CARIBBEAN – FEBRUARY TO APRIL 2015

The Eastern Caribbean and Guyana [[with respect to rainfall](#)] were normal to below normal apart from St. Vincent and St. Lucia that were moderately wet. Aruba was normal while Puerto Rico was normal to slightly dry. The Dominican Republic was predominantly normal, but conditions in Jamaica ranged from normal in the west to extremely dry in the east. Grand Cayman was slightly dry ([SPI explanation](#)).



Map 2: Standardised Precipitation Index (SPI) for April

For [FMA], conditions were mixed over the Eastern Caribbean. Conditions in the Dominican Republic ranged from slightly dry in the west to moderately wet in the east. Jamaica was slightly wet in the west and normal in the east. Click map for larger view, while Grand Cayman was normal. [Read more...](#)



Map 3: Standardised Precipitation Index for FMA

**WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA****EXPERIMENTAL MONTHLY OUTLOOK – MAY****Rainfall**

Below normal rainfall is most likely i.e. less than **2.2 inches**. Probabilistically, there is a

- **20%** chance of above normal rainfall;
- **30%** chance of near normal rainfall and
- **50%** chance of below normal rainfall.

**Temperature**

Near normal temperature is most likely i.e. **27.0 to 27.3 °C**. Probabilistically, there is a

- **35%** chance of above normal temperature;
- **40%** chance of near normal temperature and
- **25%** chance of below normal temperature.

**SEASONAL OUTLOOKS – MAY TO JULY****Rainfall**

Near normal rainfall is most likely i.e. **7.4 to 11.5 inches**. Probabilistically, there is a

- **35%** chance of above normal rainfall;
- **40%** chance of near normal rainfall and
- **25%** chance of below normal rainfall.

**Temperature**

Near normal temperature is most likely i.e. **27.5 to 27.9 °C**. Probabilistically, there is a

- **35%** chance of above normal temperature;
- **40%** chance of near normal temperature and
- **25%** chance of below normal temperature.

**NATIONAL AGRICULTURAL SUMMARY**

The ongoing **drought** remains at serious intensity. Surface and ground water continue to dwindle. However, the impacts of the drought continue to be masked by the country's desalinated water resources, without which we would most likely have a national crisis stemming from an economic drought – the worst of droughts.

At the moment, agriculture extension officers are indicating that about 1000 of the country's approximately 1500 farmers are out of business due to the serious rainfall deficits. This amounts to about one-third of agricultural lands being out of production. For those who are able to produce, it is mainly with the use of potable water, which has significantly increased the cost of production.

According to Antigua Public Utility Authority (APUA) – the water resource authority, half of the country's major surface

water catchment - Hamilton, Big Creek and Break Knocks are below extraction levels. Potworks Dam, the country's largest surface catchment, which has a capacity of about a billion gallons, continues to fall; it is now around 20% full (80% empty). Given the trend, the country could be out of surface water by September. Normally, surface water contributes to around 30% of the country's potable water mix.

Compared to this time last year, farming conditions appear worse. The period January-April 2015 is about 27% drier than the same period last year, and overall, it is around 54% drier than normal. Farmers are having difficulty germinating crops while some existing ones are wilting. According to extension officers, the poor rainfall has caused difficulty in germinating crops, stunted growth, delayed maturity due to heat stress and abortion of fruits and flowers. The dry conditions have also made land preparation difficult.

Farmers are encouraged to practice climate smart agriculture, which emphasizes the need for water conservation and efficiency. This is especially so in times of rainfall deficits. **Water efficiency** by farmers can be improved by making the right decisions on crop selection, irrigation scheduling and methods and source of water.

Crops harvested during April included tomatoes, sweet peppers, pumpkins cabbages and sweet potatoes. Crops planted included butternuts, cucumbers plus those mentioned above. Glutting the market are tomatoes and sweet peppers. Scarce or going scarce are yams, okras, carrots and peppers.



Cabbages being grown

Credit: Kenrick Francis

The outlooks for rainfall remain discouraging: below normal for **May, August-October** and near to above normal for **May-July**. (See inserts on the left). For agricultural and other activities the **7-Day Forecast** and the **Hazardous Weather Outlook** are recommended as useful planning tools.

**Acknowledgements**

Thanks to the **CAMI Project** and the Min. of Agriculture.

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