

# 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) will benefit from a new automatic weather station, within the next year or so, to be established in Bethesda. The station will be one of the 50 stations being funded by the US National Science Foundation under the Continuously Operational Caribbean Observational Network (COCONet) Initiative. This station will provide us with very important data for an area of Antigua, which many consider to be the island's "bread basket". We continue to welcome feedback and questions from all, especially from farmers and the wider agricultural community on this and other products.

## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR ANTIGUA - MARCH 2012

Antigua experienced below normal [rainfall](#) during March with 1.01 inches or 25.7 mm; this was only 50% of the normal total (1981 – 2010). This is the second lowest total for the month since 2005. Frontal troughs were responsible for most of the rainfall. Notwithstanding the below normal rainfall, at the airport, the 7 rainy days ( $\geq 1$  mm) were near normal; however, there were no heavy rainfall days ( $\geq 10$  mm). The mean [temperature](#) of 25.3°C was near normal. The mean daily maximum and minimum temperatures of 28.4°C and 22.8°C were both near normal. Further, the absolute maximum temperature was 29.7°C and the absolute minimum temperature was 21.1°C.

For the past three months – January to March - the rainfall was below normal, 94.5 mm/3.72 inches, and the mean temperature was near normal, 25.2°C.

## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR THE CARIBBEAN - MARCH 2012

In March 2012, except for Antigua, the Eastern Caribbean Islands were predominantly normal to above normal. Tobago and Grenada were exceptionally wet; St. Vincent moderately wet; Barbados, St. Lucia and Dominica normal; and Trinidad extremely to exceptionally wet. Conditions in Guyana ranged from moderately wet in the northwest to moderately dry in the east, while in Jamaica they ranged from normal in the west to extremely wet in the east. Belize was abnormally to moderately wet. These can be seen in the Standardised Precipitation Index below. For the past three months, January to March, most of the Eastern Caribbean and Guyana were normal to above normal. [Click for more](#)

SPI March 2012

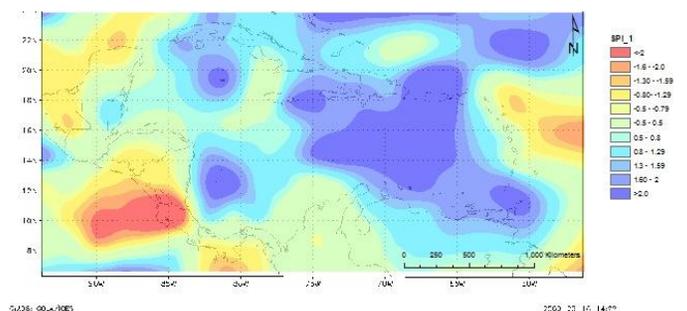
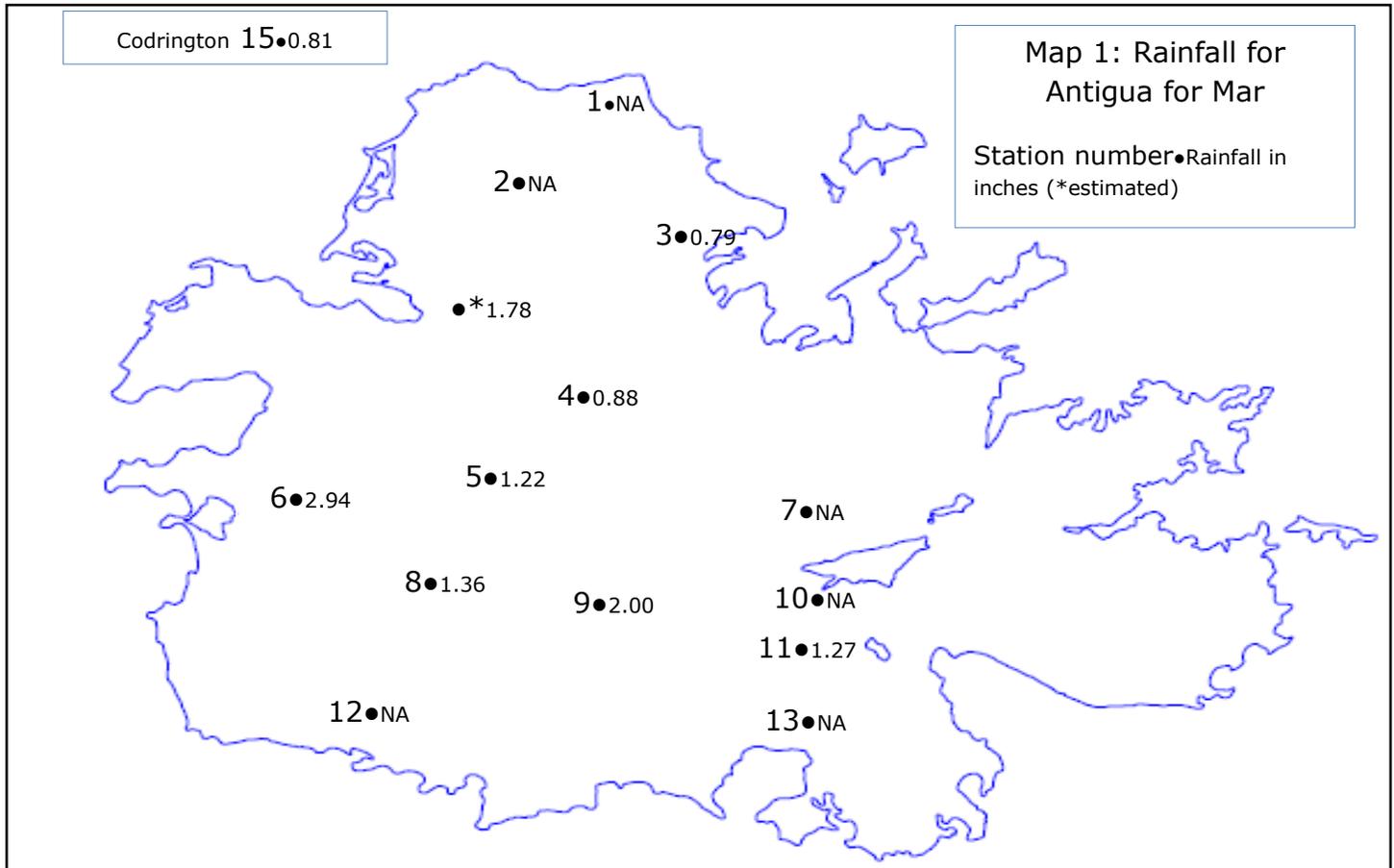


Figure 1. Standardised Precipitation Index for March.  
For info: <http://63.175.159.26/~cdpmm/spimonitor.html>



Period	Rainfall (inches)			Description (1981 – 2010)	Rainfall Record – 1928 to 2012			
	Actual	Normal (1981 – 2010)	Anomaly (1981 – 2010)		Max	Year	Min	Year
1(Mar)	1.01	2.04	- 1.03	Well below normal	8.90	1967	0.36	1930
3(Jan – Mar)	5.22	6.93	- 1.71	Below normal	12.95	1937	1.87	1931
6(Oct – Mar)	22.41	23.00	- 0.39	Near normal	38.52	2000	10.47	2001
9(Jul – Mar)	47.29	36.80	+ 10.49	Well above normal	55.26	1937	19.95	1931
12(Apr – Mar)	62.35	46.47	+ 15.88	Well above normal	71.72	1952	24.34	1931
24(Apr – Mar)	129.29	93.91	+ 35.38	Well above normal	131.61	1953	60.91	1969

Table 1: Rainfall (inches) over the past 24 months Antigua.

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – MAR 2012									
Station	Mean			Mean Maximum			Mean Minimum		
	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)
Coolidge	25.3	29(42)	- 0.3	28.4	28(44)	- 0.4	22.8	16(44)	+ 0.1
Jolly Hill	NA	-	-	NA	-	-	NA	-	-

Table 2: Temperature Summary for Antigua – March 2012. Temperatures are ranked from the highest to the lowest.

## WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

### MONTHLY WEATHER OUTLOOK - APRIL

#### **Rainfall**

Below normal rainfall is most likely with less than **1.99 inches**. Probabilistically, there is a

- **20%** chance of above normal rainfall;
- **35%** chance of near normal rainfall and
- **45%** chance of below normal rainfall.

#### **Temperature**

Near normal temperature is most likely with **26.2 to 26.5°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 – APRIL TO JUNE

#### **Rainfall**

Near normal rainfall is most likely with **7.08 to 10.32 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 with **27.0 to 27.4°C**. Probabilistically, there is a

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

Below normal rainfall for the second month running allowed for a significant amount of land preparation and general farming activities. However, the below normal rainfall has led to a slight meteorological drought, which took effect in February and is continuing. The rainfall deficit for the period January to March was 1.71 below the climatological normal (1981 – 2010). So soils have gone from being soggy last year to dry this year, in the space of less than 6 months. Notwithstanding, the weather allowed for the harvesting of crops such as tomatoes, sweet peppers, cucumbers (other cucurbits), onions, egg plants, lettuces and cabbages. Meanwhile, planted crops included most of those mentioned above along with watermelons, cantaloupes and zucchinis.

Of the crops on the market, there is a bit of a glut of cabbage. No scarcities were reported. However, the rainfall deficit has started to take a toll on farmers, especially those crop farmers without irrigation systems.

Based on the outlook through June, below normal rainfall and near normal temperature are most likely for April. Meanwhile, for the period April to June, near normal rainfall and temperature are most likely. There is a moderate chance that the slight meteorological drought will come to an end over this period. For farming purposes and other activities, especially those sensitive to the weather, the [7-Day Forecast](#) and the [Hazardous Weather Outlook](#) are strongly encouraged as very useful inputs for planning. [www.antiguamet.com/Climate](http://www.antiguamet.com/Climate)

## NATIONAL AGRICULTURAL SUMMARY

Excellent weather prevailed for the month; conditions were once again, for the second month running, quite conducive for land preparation, planting and harvesting for most of Antigua and Barbuda.

**International Weather and Crop Summary – Mar 4 to 10**

**EUROPE:** Intensifying drought on the Iberian Peninsula contrasted with beneficial showers in northern Europe.

**WESTERN FSU:** Cold weather kept much of the region encased in a moderate to deep snowpack.

**MIDDLE EAST:** Unsettled weather continued, although precipitation was mostly lighter than previous weeks.

**NORTHWESTERN AFRICA:** Increasingly dry conditions in Morocco contrasted with heavy rain in eastern growing districts.

**SOUTH ASIA:** Warm, dry weather continued to aid harvesting of rabi crops across India.

**EAST ASIA:** Showers and warmer weather benefited greening winter rapeseed in the Yangtze Valley.

**SOUTHEAST ASIA:** Excessive wetness in western Java, Indonesia, slowed rice harvesting and raised concerns over quality.

**AUSTRALIA:** Following early week showers, relatively warm, sunny weather overspread major summer crop areas, favoring cotton and sorghum development.

**SOUTH AFRICA:** Untimely warmth and dryness maintained stress on corn and other summer crops in many key production areas.

**ARGENTINA:** Warm, showery weather continued, sustaining abundant levels of moisture for late-planted corn and soybeans.

**BRAZIL:** Unseasonably warm, dry weather returned to the south, hastening maturation and harvesting of soybeans while reducing moisture for secondary (safrinha) corn.

## U.S. Crop Production Highlights

The U.S. **all orange** forecast for the 2011-2012 season is 9.00 million tons, up 1 percent from the previous forecast and up 2 percent from the 2010-2011 final utilization. The Florida all orange forecast, at 147 million boxes (6.62 million tons), is up 1 percent from the February forecast and up 5 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 74.0 million boxes (3.33 million tons), up 1 percent from the February forecast and up 5 percent from last season. The Florida Valencia orange forecast, at 73.0 million boxes (3.29 million tons), is unchanged from the February forecast but up 4 percent from the 2010-2011 crop. Sizes for Valencia oranges in Florida are expected to be about average. The California Valencia orange forecast is 14.0 million boxes (560,000 tons), up 4 percent from the previous forecast. This brings California's all orange forecast to 58.0 million boxes (2.32 million tons), up 1 percent from the January 1 forecast.

Objective survey measurements taken during January and February indicated that fruit set per tree was slightly lower than the previous year, while measured average fruit size was slightly larger than the previous year. The forecast for Texas is carried forward from January.

### References

Caribbean Institute for Meteorology and Hydrology *CAMI Monthly Bulletin*, [online]. Available from: <[http://63.175.159.26/~cimh/cami/regional\\_bulletin.html](http://63.175.159.26/~cimh/cami/regional_bulletin.html)> [Accessed 18 April, 2012]

United States Department of Agriculture, *Weekly Weather and Crop Bulletin*, [online] <[http://usda01.library.cornell.edu/usda/waob/weather\\_weekly/2010s/2012/weather\\_weekly-03-13-2012.pdf](http://usda01.library.cornell.edu/usda/waob/weather_weekly/2010s/2012/weather_weekly-03-13-2012.pdf)> [Accessed 18 April, 2012]

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