

# 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 two new automatic weather stations, which will be established in a few months, one in the vicinity of the airport and another in Bendals. These stations are being provided through the Enhanced Resilience to Reduce Vulnerability in the Caribbean Initiative. These stations will provide very important data, especially the one in Bendals, which will be located at the Green Castle Agricultural Station. 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 - MAY 2012

Antigua had above normal [rainfall](#) during May with 126.5 mm; this was 122% of the normal total (1981–2010). Notwithstanding, the last three Mays were wetter. Rainfall for the month was highly variable spatially with totals ranging from 64.3 to 222.8 mm. Record one-day rainfall totals occurred on May 5 in some places including the airport which had 77.9 mm, 99% fell in three hours. At the airport, the 14 rainfall days ( $\geq 1$  mm) and the five heavy rainfall days ( $\geq 10$  mm) were also above normal. The mean [temperature](#) of 26.3°C tied with three other years for the lowest on record. Further, the mean daily maximum temperature (28.7) tied with 1971 for the lowest on record while the minimum temperature was near normal; 30.0°C and 21.3°C were the absolute maximum and minimum temperatures respectively. See table and map below.

For the past three months – March to May (MAM) - the rainfall was near normal, 240.8 mm/9.40 inches, and the mean temperature was below normal, 25.8°C.

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

The Eastern Caribbean and Guyana experienced normal to above normal rainfall for May. Trinidad and St. Vincent were very wet; Tobago and Antigua moderately wet; Grenada and Barbados exceptionally wet; St. Lucia extremely wet; Dominica normal; and Guyana ranged from very wet in the northwest to normal in the east. Jamaica was abnormally dry, but conditions in Belize ranged from moderately wet in the south to exceptionally wet in the north. See figure 1.

For the past three months (MAM) the Caribbean had near to above normal rainfall with a few places experiencing exceptionally wet conditions including Trinidad, Tobago Grenada and portions of Belize. [Click for more](#)

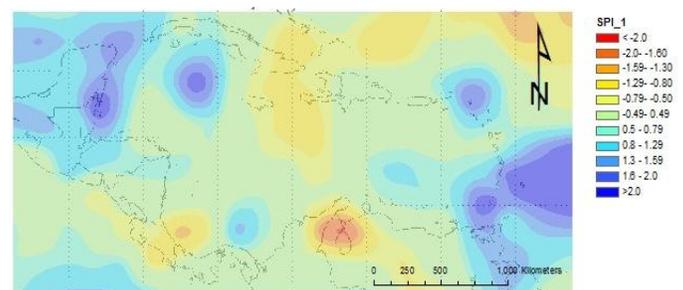
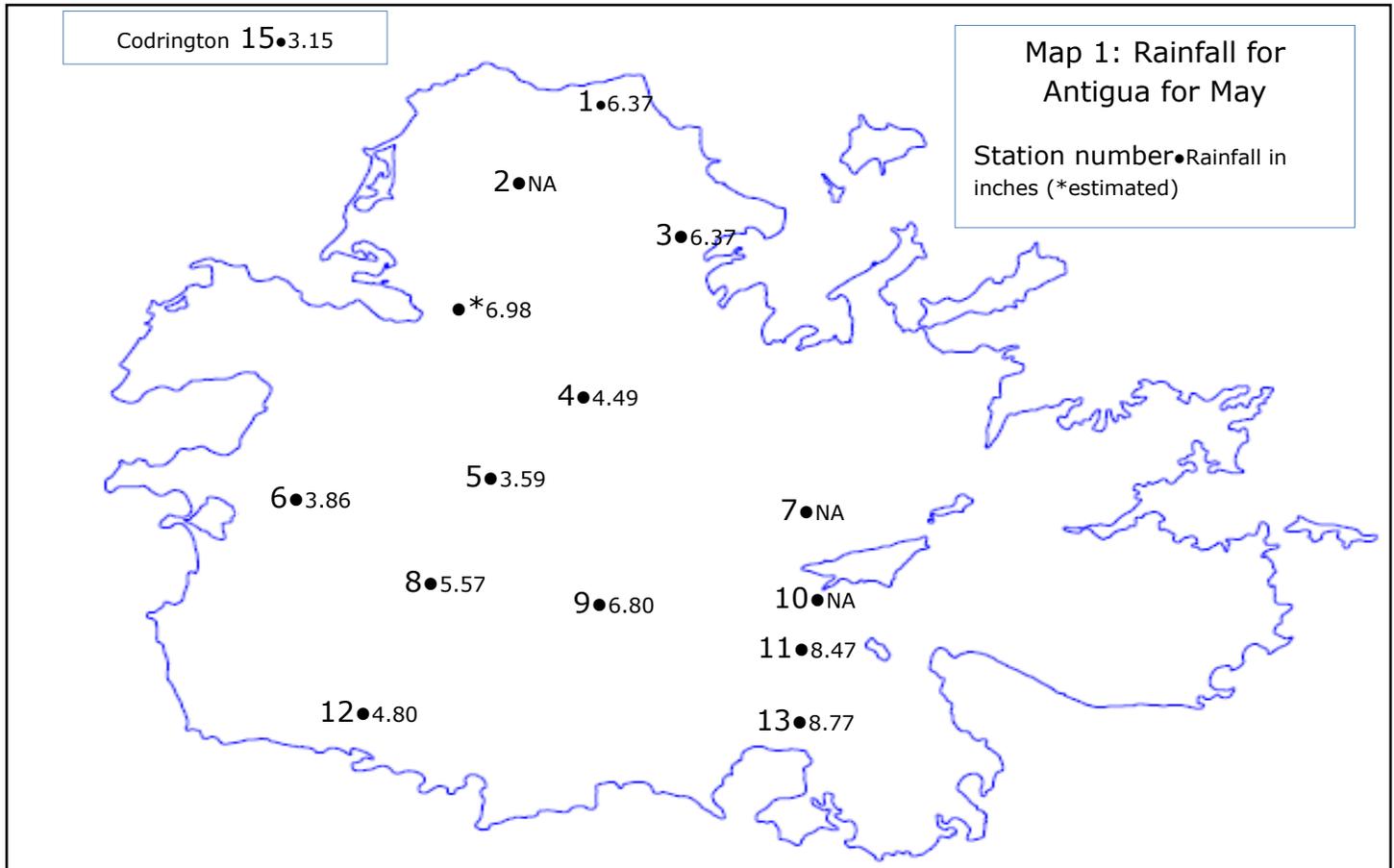


Figure 1. Standardised Precipitation Index for May.  
For info: <http://63.175.159.26/~cdpmn/spimonitor.html>



Period	Rainfall (inches)			Description (1981 – 2010)	Rainfall Record – 1928 to 2012			
	Actual	Normal (1981 – 2010)	Anomaly (1981 – 2010)		Max	Year	Min	Year
1(May)	4.98	4.08	+ 0.90	Above normal	20.02	1987	0.25	2001
3(Feb – Apr)	9.17	9.48	- 0.31	Near normal	23.79	1987	2.50	2001
6(Dec – May)	17.64	18.37	- 0.73	Near normal	29.53	1969	6.83	2001
9(Sep – May)	37.43	36.17	+ 1.26	Near normal	50.40	1993	19.51	2001
12(Jun – May)	58.33	46.87	+ 11.46	Well above normal	65.64	1952	27.17	2001
24(Jun – May)	122.92	94.07	+ 28.85	Well above normal	123.55	1952	62.74	1931

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

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – MAY 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	26.3	3(42)	- 0.9	28.7	1(44)	- 1.5	24.4	19(44)	- 0.1
Jolly Hill	27.0	-	-	30.1	-	-	23.9	-	-

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

**WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA****MONTHLY WEATHER OUTLOOK - JUNE****Rainfall**

Near normal rainfall is most likely with **2.08 to 3.20 inches**. Probabilistically, there is a

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

**Temperature**

Near normal temperature is most likely with **27.8 to 28.0°C**. Probabilistically, there is a

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

**SEASONAL OUTLOOKS – JUNE TO AUGUST****Rainfall**

Below normal rainfall is most likely with less than **8.92 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 **28.0 to 28.1°C**. Probabilistically, there is a

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

**NATIONAL AGRICULTURAL SUMMARY**

The return of showers in April continued for the first two thirds of May. Notwithstanding the copious showers of this period, by the time the month (May) ended soil moisture levels had dropped notably. Perhaps we may

have also slipped into an agricultural drought brought on by a nine-day dry spell at the end of the month.

Notwithstanding the nine-day dry spells at the end of the month, the rainfall of the earlier parts of the month prompted farmers to take advantage of the near field capacity soil by planting a number of crops.

The rainfall for May, which was above normal, had further reduced the slight meteorological drought, which started in February. This drought was initially projected to end in May; however, sufficient rain did not fall; thus, the drought continues. The rainfall deficit for the period January to May was 1.00 inch below the climatological normal (1981 – 2010).

Crops planted in May included tomatoes, cabbages, sweet potatoes, cucumbers, string beans, zucchinis, sweet peppers and pumpkins. Meanwhile, crops harvested included butternuts and cucumbers. Scarcities have been observed in onions, sweet potatoes and melons. Further, there has been a significant drop in mangoes, which may be due to the below normal rainfall of February and March when the meteorological drought was moderate.

Based on the outlook through August, near normal rainfall and temperature are most likely for June. Meanwhile, for the period June to August, below normal rainfall and near normal temperature are most likely. Thus, the outlooks are generally projecting unfavourable rainfall conditions for agriculture. The existing meteorological drought will likely continue or get worse. For farming purposes and other activities, especially those sensitive to the weather, the 7-Day Forecast and the Hazardous Weather Outlook are strongly recommended as very useful inputs for agricultural activities and planning. We are also available to answer questions directly from the farming community. Please see our page for more products: [www.antiguamet.com/Climate](http://www.antiguamet.com/Climate)

**International Weather and Crop Summary – May 20 to 26**

**EUROPE:** Stormy weather across southern and western Europe contrasted with increasingly dry conditions in the north and east.

**WESTERN FSU:** Much-needed rain boosted soil moisture for winter grains and oilseeds in southern portions of Russia and Ukraine.

**EASTERN FSU:** Light showers maintained favourable soil moisture for spring wheat, although heat developed in western growing areas.

**MIDDLE EAST:** Periods of locally heavy rain persisted in Turkey, favouring reproductive winter crops but hampering cotton planting.

**NORTHWESTERN AFRICA:** Despite a few light showers, winter crop maturation and harvesting proceeded with only minimal delay.

**SOUTH ASIA:** Hot, dry weather continued in the region as growers await the onset of the monsoon (typically in early June).

**EAST ASIA:** Showers maintained favourable moisture supplies for rice in Southeastern China, while more rain was needed for corn and soybeans in the northeast.

**SOUTHEAST ASIA:** Monsoon rains continued to aid summer grain establishment in Indochina and the Philippines.

**AUSTRALIA:** Needed rain overspread most of southern and eastern Australia, while dry weather reduced topsoil moisture for winter crops in Western Australia.

**ARGENTINA:** Drier conditions favoured corn and soybean harvesting in portions of central Argentina.

**BRAZIL:** Unseasonably heavy rain increased moisture for secondary (safrinha) corn.

**MEXICO:** More rain was needed throughout the southern plateau corn belt.

**CANADIAN PRAIRIES:** Cool, showery weather slowed planting and emergence of spring grains and oilseeds.

**SOUTHEASTERN CANADA:** Unseasonable warmth and dryness reduced moisture for winter grains, pastures, and emerging summer crops.

## U.S. Crop Production Highlights

**Corn:** Nationally, 92 percent of this year's corn crop was emerged by week's end, 33 percentage points ahead of last year and 23 points ahead of the 5-year average. Above-average temperatures dominated the major producing regions, promoting a rapid crop development pace but negatively impacting crop conditions.

**Soybeans:** Sunny skies across the major soybean-producing regions of the U.S. provided ample time for fieldwork during the week. By May 27, producers had planted 89 percent of this year's crop, 41 percentage points ahead of last year and 28 points ahead of the 5-year average. Warm weather promoted double-digit emergence during the week, and had the crop developing at the quickest pace on record. By week's end, 61 percent of the soybean crop was emerged, 39 percentage points ahead of last year and 31 points ahead of the 5-year average.

**Winter Wheat:** Heading was complete or nearly complete in most southern locations, while rapid crop development was evident across much of the nation's northern tier and the Great Lakes region. By May 27, 85% percent of this year's winter wheat crop was at or beyond the heading stage, 16 percentage points ahead of last year and 14 points ahead of the 5-year average. Hot, dry weather in many southern locations led to an early start of this year's winter wheat harvest. Nationwide, producers had harvested 9 percent of this year's crop by week's end, 7 percentage points ahead of last year and 8 points ahead of the 5-year average.

**Cotton:** Warm, mostly sunny weather in much of the Cotton Belt promoted a brisk planting pace during the week. By May 27, producers had planted 76 percent of the nation's crop, 8 percentage points ahead of last year and 6 points ahead of the 5-year average. Progress was ahead of normal in all estimating states except California and North Carolina. The planting pace gained speed in Texas, as producers switched their focus from corn to cotton. Nationwide, 7 percent of the cotton crop was

squaring, slightly ahead of both last year and the 5-year average. Despite unseasonably cool weather, crop development in California was advancing ahead of normal. Overall, 57 percent of the cotton crop was reported in good to excellent condition. With the accelerated crop development pace this year, comparable data from last year is not available leaving producers concerned about crop development.

**Rice:** Ninety-nine percent of the rice crop was seeded by May 27, eight percentage points ahead of last year and 5 points ahead of the 5-year average. Emergence advanced to 92 percent complete by week's end, 22 percentage points ahead of last year and 12 points ahead of the 5-year average. Despite cool weather, 45 percent of California's rice crop emerged during the week, pushing progress ahead of normal for the first time this season. Overall, 69 percent of the rice crop was reported in good to excellent condition, up 3 percentage points from last week and 16 points better than the same time last year.

**Small Grains:** Forty-three percent of this year's oat crop was at or beyond the heading stage by May 27, seven percentage points ahead of both last year and the 5-year average. Warm weather promoted a rapid development pace during the week, with heading advancing 33 percentage points or more in Nebraska and Ohio. Overall, 72 percent of the oat crop was reported in good to excellent condition, down 2 percentage points from last week but 16 points better than the same time last year. As emergence of the barley crop neared completion across much of the nation's northern tier, cooler-than-normal weather limited seed germination in Washington during the week; however, nationwide progress remained well ahead of normal. By week's end, 91 percent of the crop was emerged, 50 percentage points ahead of last year and 25 points ahead of the 5-year average. Overall, 69 percent of the barley crop was reported in good to excellent condition, up slightly from last week. By May 27, ninety-six percent of the spring wheat had emerged.

This was 60 percentage points, or 40 days, ahead of last year and 28 points ahead of the 5-year average. In North Dakota, favorable growing conditions promoted a rapid crop development pace. By week's end, 19 percent of North Dakota's spring wheat crop was reported as jointed with 1 percent in the boot stage. Overall, 79 percent of the spring wheat crop was reported in good to excellent condition, up 5 percentage points from last week.

**Other Crops:** By week's end, 87 percent of this year's peanut crop was planted, 15 percentage points ahead of last year and 18 points ahead of the 5-year average. In parts of the Southeast, soil moisture levels remained low and hot, dry weather continued to negatively impact crop conditions.

Sunny skies and mostly dry conditions provided at least 4 days suitable for fieldwork in the four largest sunflower-producing states, allowing producers to plant 24 percent of the nation's crop during the week. By May 27, 45% of this year's crop was in the ground, 35 percentage points ahead of last year and 18 points ahead of the 5-year average.

With planting complete in Michigan and nearing completion in Idaho, sugarbeet producers had 60 percent of the nation's crop in the ground by April 22. This was 51 percentage points ahead of last year and 31 points ahead of the 5-year average.

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