

# 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 - APRIL 2012

Antigua experienced above normal [rainfall](#) during April with 3.18 inches or 80.8 mm; this was 94% of the normal total (1981 – 2010). This is the third highest total for the month since 2002. About half of the rainfall occurred in two days (April 19 and 20) due to a deep-layered trough; most of the rest of the rainfall were caused by three separate frontal troughs. At the airport, the 13 rainy days ( $\geq 1$  mm) and the three heavy rainfall days ( $\geq 10$  mm) were above normal. The mean [temperature](#) of 25.9°C was below normal. The mean daily maximum and minimum temperatures of 28.9°C and 23.2°C were below and near normal respectively. Further, the absolute maximum temperature was 30.1°C and the absolute minimum temperature was 22.0°C.

For the past three months – February to April (FMA) - the rainfall was near normal, 167.4 mm/6.59 inches, and the mean temperature was below normal, 25.5°C.

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

The Eastern Caribbean had normal to above normal rainfall during April. Trinidad was moderately wet; Tobago exceptionally wet; Grenada extremely wet; St Vincent, St. Lucia and Antigua abnormally wet; Dominica normal; and Barbados abnormally dry. Meanwhile, Guyana had normal rainfall; Jamaica was extremely wet, and Belize ranged from normal in the south to moderately wet in the north. See figure 1.

For the past three months (FMA) the southern islands had mainly above normal rainfall and the Northern Eastern Caribbean had mainly near normal rainfall. [Click for more](#)

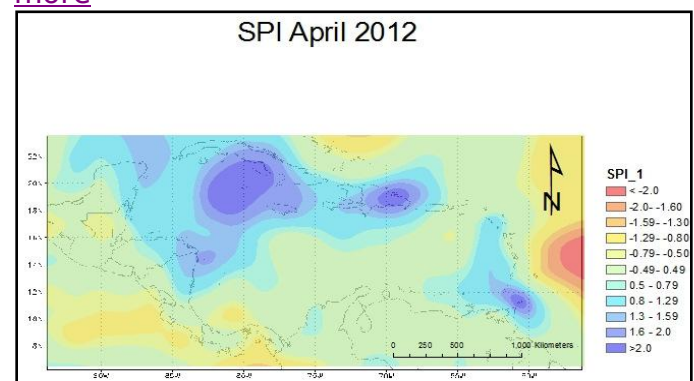
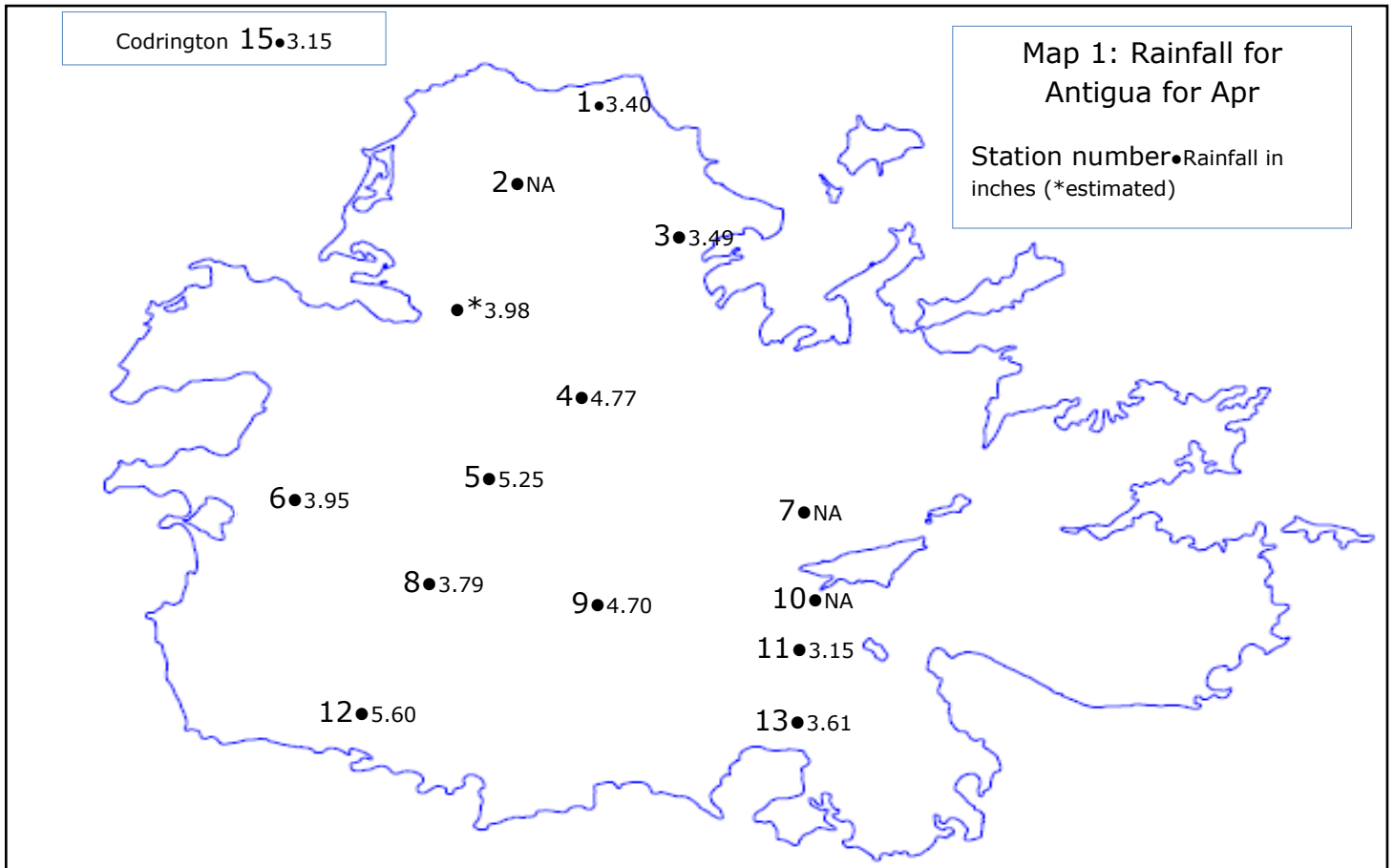


Figure 1. Standardised Precipitation Index for March.  
For info: <http://63.175.159.26/~cdpmn/spimonitor.html>



Period	Rainfall (inches)			Description (1981 – 2010)	Rainfall Record – 1928 to 2012			
	Actual	Normal (1981 – 2010)	Anomaly (1981 – 2010)		Max	Year	Min	Year
1(Apr)	3.18	3.37	- 0.19	Above normal	9.66	1981	0.23	1944
3(Feb – Apr)	5.40	7.60	- 2.2	Below normal	16.19	1992	2.44	1947
6(Nov – Apr)	22.77	20.16	+ 2.61	Above normal	34.31	2000	8.83	1948
9(Aug – Apr)	41.95	36.23	+ 5.72	Above normal	53.44	1952	20.05	1931
12(May – Apr)	62.30	46.76	+ 15.54	Well above normal	72.04	1952	25.11	1931
24(May – Apr)	123.07	94.18	+ 28.89	Well above normal	130.93	1953	63.07	1931

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

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – APR 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	25.9	28(42)	- 0.4	28.9	30(44)	- 0.5	23.2	25(44)	- 0.2
Jolly Hill	26.2	-	-	29.9	-	-	22.6	-	-

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

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

Above normal rainfall is most likely with greater than **3.34 inches**. Probabilistically, there is a

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

**Temperature**

Near normal temperature is most likely with **27.0 to 27.3°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 – MAY TO JULY****Rainfall**

Above normal rainfall is most likely with greater than **11.40 inches**. Probabilistically, there is a

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

**Temperature**

Near normal temperature is most likely with **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**

After two months of below normal rainfall, the showers returned in April. Thus, weather conditions and adequate soil moisture levels were favourable for agricultural activities, especially planting.

The rainfall of April, which was above normal, has reversed the dry trend that was setting in to the extent that a slight meteorological drought was detected by the end of March. This drought has eased significantly and will likely come to an end by the end of May. The rainfall deficit for the period January to April was 2.20 below the climatological normal (1981 – 2010).

Notwithstanding the above normal rainfall, the weather allowed for a wide range of agriculture activities outside of planting. A number of crops were harvested such as cucumbers (other cucurbits), carrots, sweet peppers, zucchinis, onions, egg plants, lettuces and cabbages. Meanwhile, planted crops included most of those mentioned above along with yam, cassavas, sweet potatoes, tomatoes, butternut squash and okras.

Of the crops on the market, there is a bit of a glut of cucumbers and sweet peppers. Scarcities include yams, eddoes, okras tomatoes and season peppers.

Based on the outlook through July, above normal rainfall and near normal temperature are most likely for May. Meanwhile, for the period May to July, above normal rainfall and near normal temperature are most likely. Thus, the outlooks are projecting favourable weather conditions for agriculture. There is only a slight chance of a meteorological drought over the outlook period. 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 question directly from the farming community. Please see our home page for related products: [www.antiguamet.com/Climate](http://www.antiguamet.com/Climate)

**International Weather and Crop Summary – Apr 15 to 21**

**EUROPE:** Widespread rain persisted, improving winter crop prospects across much of the continent and easing drought impacts on the Iberian Peninsula.

**WESTERN FSU:** Periods of rain maintained favourable soil moisture for winter grains and oilseeds across western portions of the region.

**EASTERN FSU:** Sunny, unseasonably warm weather accelerated fieldwork and early spring wheat emergence but rapidly reduced soil moisture for crop establishment.

**MIDDLE EAST:** Showers and thunderstorms persisted, slowing fieldwork but maintaining favourable soil moisture for vegetative to reproductive winter crops.

**NORTHWESTERN AFRICA:** Widespread showers further improved winter grain prospects in northern Morocco while benefiting reproductive winter crops elsewhere.

**SOUTH ASIA:** Seasonably dry weather returned to much of India as cotton planting proceeded in the north.

**SOUTHEAST ASIA:** Showers slowed harvesting from southern parts of Vietnam and the Philippines into Malaysia and Indonesia.

**EAST ASIA:** Rainfall across most key growing areas of China maintained favourable soil moisture for winter and spring crops.

**AUSTRALIA:** In eastern Australia, relatively cool, showery weather was replaced by warmer, drier weather, allowing summer crop harvesting to regain momentum.

**SOUTH AFRICA:** Dry, seasonably mild weather dominated much of the region, aiding summer crop drydown and seasonal fieldwork.

**ARGENTINA:** Showers continued throughout the region, causing local disruptions in summer crop harvesting but increasing topsoil moisture for the upcoming winter growing season.

**BRAZIL:** Rain benefited secondary (safrinha) corn in key central and southern production areas.

**MEXICO:** Rain increased moisture for corn and sugarcane in farming areas along the Gulf Coast.

## U.S. Crop Production Highlights

**Corn:** By April 22, producers had planted 28 percent of the nation's corn crop, 20 percentage points ahead of last year and 13 points ahead of the 5-year average. Planting was ahead of normal in all estimating states except Iowa and Minnesota. Aided by favourable weather conditions, double-digit progress was evident in 10 of the 18 estimating states. By week's end, 9 percent of the corn crop was emerged, 7 percentage points ahead of both last year and the 5-year average.

**Soybeans:** Nationally, 6 percent of the soybean crop was planted by week's end, 4 percentage points ahead of both last year and the 5-year average. Planting was most advanced in the Delta, where producers had at least 28 percent of their seed in the ground.

**Winter Wheat:** Heading advanced 13 percentage points during the week, as favourable weather promoted a rapid crop development pace in many of the major producing regions. By April 22, forty-two percent of the winter wheat was at or beyond the heading stage, 22 percentage points ahead of last year and 27 points ahead of the 5-year average. Overall, 63 percent of the winter wheat crop was reported in good to excellent condition, down slightly from last week but 28 percentage points better than the same time last year.

**Cotton:** Producers had planted 17 percent of this year's cotton crop by April 22, five percentage points ahead of last year and 4 points ahead of the 5-year average. Planting was most active in California, where mostly sunny weather provided producers ample time for fieldwork during the week; however, overall progress in the State was well behind both last year and the average. In Texas, producers on the Plains regions were listing fields, prewatering, and readying equipment, while planting was nearly complete in other locations. Irrigation was active in cotton fields in South Texas and the Lower Valley.

**Rice:** By April 22, producers had seeded 65 percent of this year's rice crop, 23 percentage points ahead of last year and 22 points ahead of the 5-year average. Progress remained well ahead of normal in much of the Delta, while seeding was behind normal in California and Texas. In Louisiana, seeding advanced 13 percentage points during the week, but overall progress remained just ahead of normal, as producers applied fertilizers and herbicides to their fields. Favourable growing conditions promoted a rapid emergence pace throughout the Delta and in Texas, with nationwide progress advancing 22 percentage points during the week. By week's end, 49 percent of the rice crop was emerged, 24 percentage points ahead of last year and 27 points ahead of the 5-year average.

**Small Grains:** Nationally, 82 percent of the oat crop was seeded by April 22, thirty-five percentage points ahead of last year and 25 points ahead of the 5-year average. Emergence advanced to 58 percent complete by week's end, 20 percentage points ahead of last year and 17 points ahead of the five-year average. Adequate soil moisture supplies, along with mostly warmer-than-normal weather, boosted crop conditions in many of the growing regions. Overall, two-thirds of this year's oat crop was reported in good to excellent condition. Comparable data from last year is not available, as this is the quickest year on record that emergence has surpassed the halfway mark, and the earliest crop conditions have ever been estimated.

Fieldwork across most of the major barley-producing region continued at a rapid pace, as temperatures and moisture levels provided nearly ideal seeding conditions. By week's end, barley producers had seeded 50 percent of the nation's crop, 33 percentage points ahead of last year and 23 points ahead of the 5-year average—and the quickest pace on record. Eleven percent of the barley crop was emerged by April 22, six percentage points ahead of last year and 4 points ahead of the 5-year average.

By week's end, 57 percent of the spring wheat crop was seeded, 51 percentage points ahead of last year and 38 points ahead of the 5-year average—and the quickest pace on record. In Minnesota and the Dakotas, seeding was at least 45 percentage points ahead of last year and at least 37 points ahead of normal. Emergence advanced to 18 percent complete by April 22, sixteen percentage points ahead of last year and 14 points ahead of the 5-year average.

**Other Crops:** Peanut producers had planted 5 percent of this year's crop by week's end, 4 percentage points ahead of both last year and the 5-year average. Planting was most advanced in Florida, where warmer-than-normal spring weather allowed producers to prepare fields earlier this year. Although some producers in Georgia were waiting until after a forecasted cold front passed to start planting their fields, overall progress was ahead of normal. 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.

## 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 15 May, 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-04-25-2012.pdf](http://usda01.library.cornell.edu/usda/waob/weather_weekly/2010s/2012/weather_weekly-04-25-2012.pdf)> [Accessed 14 May, 2012]

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**V. C. Bird International Airport, St. George, P. O. Box 1051, St. John's, Antigua**

Internet URL: <http://www.antiguamet.com/climate>

E-mail address: [metoffice@antigua.gov.ag](mailto:metoffice@antigua.gov.ag) or [dale\\_destin@yahoo.com](mailto:dale_destin@yahoo.com)

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### ABMS CliSec

Editor/Meteorologist/Climatologist.....Dale C. S. Destin (268) 764-5030