

# 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 (CliSec) will be taking part in the Crop Simulating Training Workshop at the Caribbean Institute for Meteorology and Hydrology early next month. This workshop will take place as a part of the CAMI Project, whose overarching goal is to increase and sustain agricultural productivity at the farm level in Antigua and Barbuda and the rest of the Caribbean. We continue to welcome feedback and questions from all, especially from farmers and the wider agricultural community indicating usefulness, relevance, appropriateness of language and possible changes to be made to this bulletin.

## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR ANTIGUA AND BARBUDA - NOVEMBER 2011

The respite from excess rainfall, which started in April, only last for one month – October. The rain returned with a vengeance during November with well above normal totals experienced, as if to makeup for the break in October. The total for the month was 10.11 inches; this was 172% of the normal total (1981 – 2010). This is the highest total since 1999 and the 8<sup>th</sup> highest on record for the month. The main rain-producers were three trough systems, which were responsible for over 85% of the total. At Coolidge, the number of rainy days ( $\geq 1$  mm) of 13 was near normal; however, the six heavy rainfall days ( $\geq 10$  mm) were above normal. The mean temperature (temp) of 26.4°C was below normal, and the mean daily maximum and minimum temp were below and near normal respectively.

The mean temperature at Coolidge for November of 26.4°C was near normal; the mean daily maximum and minimum temperatures of 29.5°C and 23.8°C were below and near normal respectively.

## WEATHER AND CLIMATE SUMMARY IN BRIEF FOR CAMI ISLANDS - NOVEMBER 2011

Based on Standardised Precipitation Index (SPI) analysis, apart from Trinidad that was moderate to severely dry, rainfall in the Eastern Caribbean and Guyana ranged from normal to above normal in November. Rainfall conditions in Tobago and Grenada were normal; Barbados, St. Vincent and Antigua moderately wet; St. Lucia and Dominica very wet; and Guyana ranged from normal to moderately wet. Rainfall in Jamaica was from normal in the west to moderately dry in the east; Belize ranged from abnormally dry in the south to extremely dry in the north.

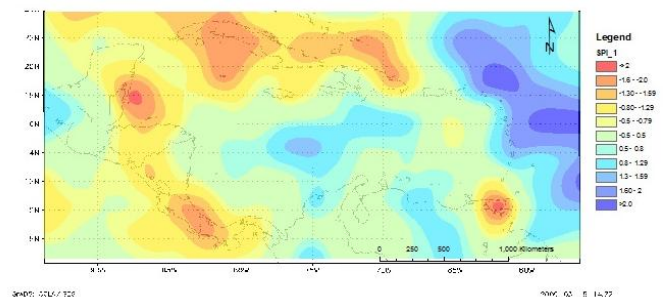
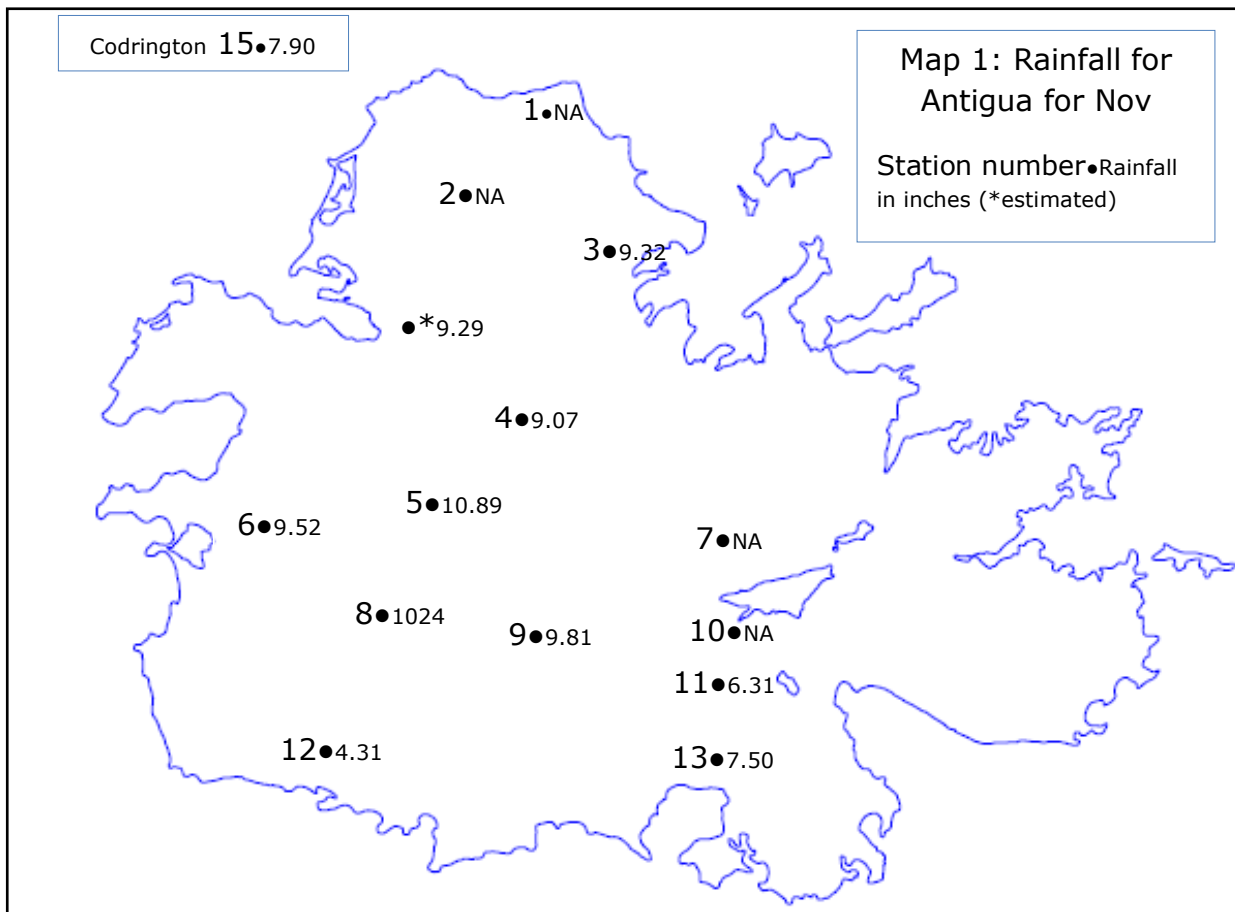


Figure 1. Standardised Precipitation Index (SPI) for the Caribbean for November. Information on the SPI can be viewed at <http://63.175.159.26/~cdpmn/spimonitor.html>.



Period	Rainfall (inches)			Description (1981 – 2010)	Rainfall Record – 1928 to 2011			
	Actual	Normal (1981 – 2010)	Anomaly (1981 – 2010)		Max	Year	Min	Year
1(Nov)	10.11	5.88	+ 4.23	Well above normal	20.91	1999	0.99	1947
3(Sep – Nov)	19.79	17.88	+ 1.91	Near normal	33.57	1974	6.45	1983
6(Jun – Nov)	40.69	29.01	+ 11.68	Well above normal	43.87	1999	15.46	1983
9(Mar – Nov)	55.83	38.49	+ 17.34	Well above normal	59.33	1987	20.68	1930
12(Dec – Nov)	63.35	47.38	+ 15.97	Well above normal	69.01	1952	27.11	2001
24(Dec – Nov)	127.34	94.02	+ 33.32	Well above normal	134.39	1952	62.88	2001

Table 1: Rainfall (inches) over the past 24 months. The rainfall for November was the highest since 1999 and the 8<sup>th</sup> highest on record.

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – NOV 2011									
Station	Mean			Maximum			Minimum		
	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)
Coolidge	26.4	27(41)	- 0.4	31.9	4(41)	+ 0.8	21.4	16(41)	+ 0.4
Jolly Hill	26.8	-	-	32.8	-	-	21.1	-	-

Table 1: Temperature Summary for Antigua and Barbuda – November 2011. Temperatures are ranked from the highest to the lowest.

## WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA AND BARBUDA

### MONTHLY WEATHER OUTLOOK - DECEMBER

#### Rainfall

Above normal rainfall is most likely with greater than **4.04 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 **25.7 to 26.1°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 – DECEMBER TO FEBRUARY

#### Rainfall

Above normal rainfall is most likely with greater than **10.06 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 **25.3 to 25.7°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 rainy weather has become quite frustrating for farmers. The break in the rain in October allowed for a lot of field preparation and planting. However, a lot of that work may have gone to naught as the

ground is waterlogged in many areas. With the above normal rainfall of previous months still being a significant negative farming factor, the rainfall of November has majorly exacerbated the situation. Most of the problems with waterlogged grounds took place mainly in low lying and flood prone areas. In some areas, flood waters caused notable erosion of soil and crops.

Of course, with the very wet conditions for most of the month, there was very little field work during November. Notwithstanding, the excess rainfall challenges, there were crops harvested and there was an abundance of spinach, bananas, lettuce and pumpkins. However, on a very broad scale, local agricultural products continued to be at very low levels. The low or non-productions on farms continued to cause significant shortages and scarcities of a number of local produce such as tomatoes, sweet peppers and carrots. Naturally, the products that were on the market were fairly expensive as demands far exceeded supplies. As can be expected, lots of produce were imported in an effort to makeup for the local shortfalls.

Crop losses were reported and further losses are anticipated, as the forecast does not look good. Crops at all stages were lost due to such things as root rot, fungi and bacteria. Even crops that were ready for harvesting were lost since they could not be reached because farmers just could not enter their waterlogged fields.

Based on the outlook through February, challenging weather conditions are likely to prevail for farming in Antigua and Barbuda with above normal rainfall most likely; the temperature will most likely be near normal. A very useful tool to deal with this challenge is the 7-Day Forecast, which was designed to assist farmers with short-term planning.

## International Weather and Crop Summary

**EUROPE:** Dry weather over much of Europe promoted late summer crop harvesting, although showers favoured winter wheat and barley in Spain.

**WESTERN FSU:** Generally dry, cold weather prevailed, with winter grains and oilseeds now dormant.

**MIDDLE EAST:** Rain benefited winter grains in Iran, while dry weather and sunny skies promoted winter crop development elsewhere.

**NORTHWESTERN AFRICA:** Locally heavy rain favoured winter grain establishment but hampered fieldwork.

**SOUTH ASIA:** A tropical system brought increased late season moisture to cotton and groundnuts in southern India.

**EAST ASIA:** Mostly dry, cool weather prevailed for winter crops in China.

**SOUTHEAST ASIA:** Flooding rainfall continued to hamper fieldwork and necessitate replanting in the eastern Philippines.

**AUSTRALIA:** Heavy rains in eastern Australia delayed winter grain harvesting and increased concerns about crop quality, while mostly dry weather in the west aided harvesting.

**SOUTH AFRICA:** Rain brought much-needed relief from heat and dryness to the corn belt.

**ARGENTINA:** Early week rain soaked major production areas of central and Northeastern Argentina.

**BRAZIL:** Scattered, locally heavy showers maintained overall favourable conditions for soybeans and other crops in south-central Brazil.

## U.S. Crop Production Highlights

**Winter Wheat** Nationally, 92 percent of the winter wheat crop was emerged by November 27, slightly behind last year but on par with the 5-year average. In Texas, recent cold fronts delivered much-needed moisture to vegetative winter wheat stands in many areas. Overall, 52 percent of the nation's winter wheat crop was reported in good to excellent condition, up 2 percentage points from last week and 5 percentage points above the same time last year.

**Cotton** By week's end, 92 percent of the cotton crop was harvested. This was 2 percentage points ahead of last year and 10 points ahead of the 5-year average. Windy conditions limited harvest in the Northern Plains of Texas, while drought conditions shortened the season in the Edwards Plateau. Elsewhere, favourable weather in the Southwest allowed ample time for producers in Arizona and California to continue harvesting cotton.

**Sorghum:** Producers had harvested 94 percent of this year's sorghum crop by week's end, 4 percentage points behind last year but slightly ahead of the 5-year average. Harvest was complete or nearly complete in all estimating states except New Mexico and Oklahoma.

**Other Crops:** Peanut producers had harvested 97 percent of the nation's crop by November 27, two percentage points behind last year but slightly ahead of the 5-year average.

### References

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### Acknowledgements

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