# 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 is pleased to announce that it now has a presence on the World AgroMeteorological Information Service (WAMIS) site funded by the World Meteorological Organization (WMO) for the dissemination of agrometeorological products. 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 - OCTOBER 2012

October produced near record high rainfall for Antigua. The rainfall total of 321.8 mm was the second highest on record for the month (1928 – 2012); this was 200% of the normal total (1981 – 2010). Only October 2008 had a higher total – 384.3 mm. At the airport, the 18 rainy days (>= 1 mm) were also well above normal and tied for the third highest on record (1971 – 2012); further, there were five heavy rainfall days (>= 10 mm), which accounted for 72% of the total rainfall. Tropical Cyclone Rafael caused more than half of the rainfall. The mean temperature of 27.1°C was below normal. Further, the mean daily maximum (30.1°C) and minimum (24.2°C) temperatures were below normal and near normal respectively; the absolute maximum temperature was 32.5°C and the absolute minimum temperature was 22.5°C. See tables and maps below.

For the period August to October (ASO) - the rainfall, 431.5 mm or 16.99 inches, was near normal but the lowest since 2009 and the second lowest since 2005. The mean temperature of 27.1°C was below normal.

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

Conditions were very diverse across the Eastern Caribbean. Trinidad and Barbados were moderately dry; Grenada extremely dry; Tobago, St. Vincent, St. Lucia and Dominica normal and Antigua very wet. Conditions in Guyana ranged from exceptionally wet to moderately dry. Jamaica was abnormally wet in the west and moderately wet in the east and Belize normal. Click on figure 1 for larger view. (rainfall descriptions).

For ASO, Trinidad and Dominica were moderately dry; Tobago, Barbados, St. Lucia and Antigua normal; and St. Vincent abnormally wet. Conditions in Guyana ranged from moderately wet in the north to moderately dry in the east. Conditions in Jamaica were normal to moderately wet. Belize was moderately dry in the south and abnormally dry in the north. Regional Bulletin

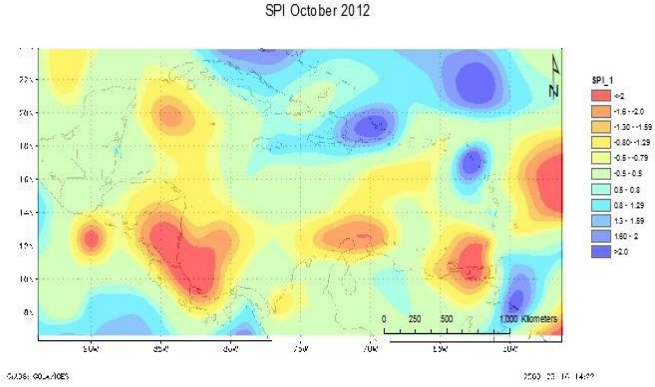
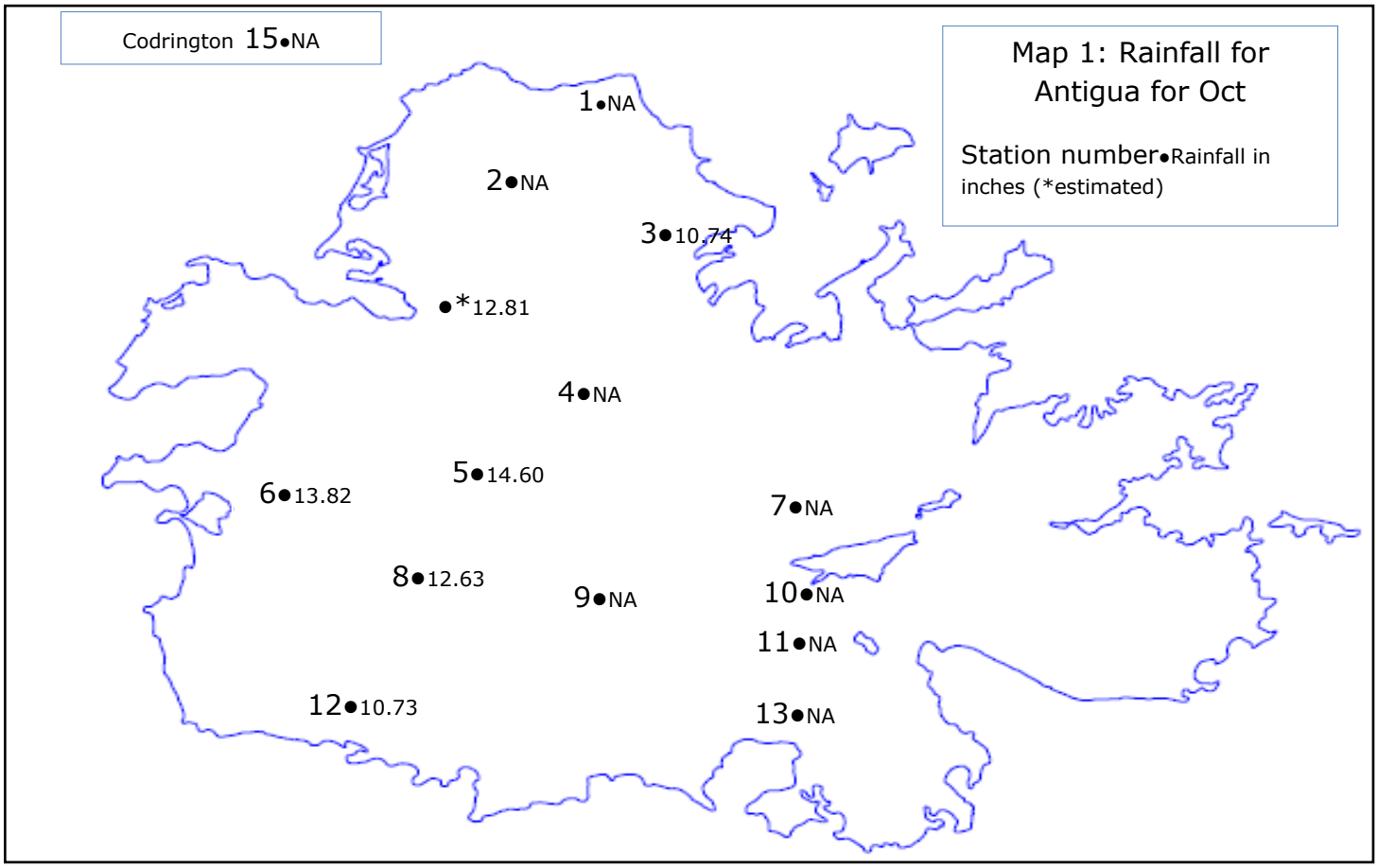



Figure 1. Standardised Precipitation Index for Oct.




| Period | Rainfall (inches) | | | | Rainfall Record – 1928 to 2012 | | | |
|---|---|---|---|---|---|---|---|---|
| Previous Month(s) | Actual | Normal (1981 – 2010) | Anomaly (1981 – 2010) | Description (1981 – 2010) | Max | Year | Min | Year |
| 1(Oct) | 12.67 | 6.34 | + 6.33 | Near normal | 15.13 | 2008 | 1.13 | 1953 |
| 3(Aug – Oct) | 16.99 | 16.45 | + 0.54 | Near normal | 32.63 | 1995 | 6.43 | '68& '94 |
| 6(May – Oct) | 26.35 | 27.21 | - 0.86 | Near normal | 45.01 | 1951 | 13.10 | '30&'53 |
| 9(Feb – Oct) | 31.75 | 34.81 | - 3.06 | Near normal | 55.88 | 2010 | 16.25 | 1930 |
| 12(Nov – Oct) | 49.12 | 47.37 | + 1.75 | Near normal | 67.70 | 1987 | 24.88 | 1968 |
| 24(Nov – Oct) | 105.18 | 94.23 | + 10.95 | Above normal | 132.45 | 1952 | 65.06 | 1968 |

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

| TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – OCTOBER 2012 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Mean | | | Mean Maximum | | | Mean Minimum | | |
| Station | Temp(°C) | Rank (Total) | Anomaly (°C) | Temp(°C) | Rank (Total) | Anomaly (°C) | Temp(°C) | Rank (Total) | Anomaly (°C) |
| Coolidge | 28.1 | 32(42) | -0.4 | 30.1 | 31(44) | -0.5 | 24.2 | 28(44) | -0.2 |
| Jolly Hill | 27.6 | - | - | 31.6 | - | - | 23.6 | - | - |

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

## WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

### MONTLY WEATHER OUTLOOK – NOVEMBER

**Rainfall**

Near normal rainfall is most likely with **greater than 6.68 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 **26.6 to 27.1°C**. Probabilistically, there is a

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

### SEASONAL OUTLOOKS – NOVEMBER TO JANUARY

**Rainfall**

Near normal rainfall is most likely with **8.89 to 14.94 inches**. Probabilistically, there is a

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

**Temperature**

Near normal temperature is most likely with **25.8 to 26.2°C**. Probabilistically, there is a

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

## NATIONAL AGRICULTURAL SUMMARY

The drought, which started in February this year and reach serious levels in September, came to an abrupt end in October. Tropical Cyclone Rafael was responsible in a large way for the ending of the significant rainfall deficits which built up for most of the year. The system produced over half on the month's rainfall and brought us back from the brink of island-wide water rationing by the water authority, which potentially would have been devastating to farmers and the wide community. The wet weather for the month was not necessarily conducive for agricultural activities as too much water could be just as harmful as too little; however, very conducive conditions were left in the aftermath.

Many farmers were on hold from planting for many weeks. They had in place all preparations and were just waiting for the rains to start. Thus, after the showers of October, most of which occurred in the first half of the month, many farmers went out and did just that. However, they were those who suffered setbacks. Because of the heavy nature of some of the rainfall, some fields had to be prepared again for planting. Additionally, some of those who had things planted, suffered losses as a result of soil erosion and water-logged soil. Losses of crops such as cabbages and butternuts were reported. Losses were mainly among young crops.

Based on the outlooks – above normal rainfall and near normal temperature are most likely for November. Meanwhile, near normal rainfall and temperature are most likely for the period November to January (See inserts to the left). The outlooks are generally projecting reasonably conducive agricultural weather conditions for the next three months with only a slight chance of drought. For agricultural 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 planning agricultural activities.

During the month, the crops planted were cucumbers, sweet pepper, egg plants sweet corn, tomatoes, onions, carrots and okras. Crops harvested were much of what were mentioned above plus pumpkins. Actually, pumpkins were glutting the market while tomatoes were going scarce. Please see our page for more products: www.antiguamet.com/Climate

# International Weather and Crop Summary (Highlights) – October 21 - 27

**EUROPE:** Rain boosted soil moisture for wheat and barley from Spain into Italy and the northern Balkans, while the lower Danube River Valley remained unfavourably dry.

**WESTERN FSU:** Unfavourable warmth and dryness further reduced soil moisture for winter wheat in southern Russia and portions of southern Ukraine.

**MIDDLE EAST:** Increasing rainfall across much of the region improved prospects for winter grain establishment.

**SOUTH ASIA:** Heavy rainfall slowed fieldwork in southern India.

**EAST ASIA:** Showers favored germination and establishment of winter crops.

**SOUTHEAST ASIA:** Dry weather aided rice maturation and harvesting in Indochina, while Typhoon Son-Tinh brought high winds and heavy rains to the Philippines and northern Vietnam.

**AUSTRALIA:** Showers returned to Western Australia, but the rain came too late to significantly benefit immature winter crops.

**SOUTH AFRICA:** Showers continued throughout the eastern corn belt and in most major sugarcane areas.

**ARGENTINA:** Persistent wetness maintained concern for winter grains, although moisture was abundant for germination of summer grains and oilseeds.

**BRAZIL:** Locally heavy rain benefited corn and soybeans but was untimely for unharvested winter wheat.

**MEXICO:** Warm, seasonably drier weather hastened maturation of corn and other rain-fed summer crops.

# U.S. Agricultural Summary (Highlights) – Oct 22 to 28

**Corn:** As harvest neared completion in most of the major corn-producing regions, nationwide progress advanced to 91 percent complete by week's end. This was 17 percentage points ahead of last year and 31 percentage points ahead of the 5-year average. In portions of the Corn Belt, early-week rainfall limited or halted fieldwork, as some producers waited for soils to dry out.

**Soybeans:** By October 28, producers had harvested 87 percent of this year's soybean crop. This was 2 percentage points ahead of last year and 9 points ahead of the 5-year average. In Nebraska, lodging resulting from high winds at mid-month and left some producers struggling to harvest their remaining crop.

**Winter Wheat:** By week's end, 88 percent of the 2013 winter wheat crop was sown. This was 2 percentage points ahead of last year and 3 points ahead of the 5-year average. In Texas, winter wheat seeding was ongoing in many regions, despite the need for additional moisture to promote germination in some locations. Nationally, 63 percent of the winter wheat crop had emerged by October 28, slightly behind last year and 4 percentage points behind the 5-year average. The most significant delay in emergence was evident in South Dakota, where topsoil and subsoil moisture levels were rated 84 and 92 percent short to very short, respectively. Overall, 40 percent of the winter wheat crop was reported in good to excellent condition, compared with 46 percent at the same time last year.

**Cotton:** Ninety-six percent of the nation's cotton crop was at or beyond the boll opening stage by October 28, slightly behind last year but slightly ahead of the 5-year average. Producers had harvested half of this year's crop by week's end, 6 percentage points behind last year but 3 points ahead of the 5-year average. Double-digit picking was evident in 11 of the 15 major cotton-producing states, as mostly favorable weather conditions aided fieldwork. Overall, 43 percent of the cotton crop was reported in good to excellent condition, up slightly from last week and 14 percentage points better than the same time last year.

**Sorghum:** By week's end, 94 percent of the sorghum crop was at or beyond the mature stage. This was 3 percentage points ahead of both last year and the 5-year average. Producers harvested 12 percent of the nation's crop during the week, leaving progress—at 64 percent complete—slightly ahead of last year and 4 percentage points ahead of the 5-year average. Mild, mostly dry conditions in the central Great Plains allowed for double digit harvesting during the week.

**Rice:** Producers had harvested 94 percent of this year's rice crop by October 28, three percentage points ahead of last year and 2 points ahead of the 5-year average. In California, harvest was in full swing, but remained behind normal.

**Other Crops:** By October 28, peanut producers had harvested 79 percent of this year's crop. This was 9 percentage points ahead of last year and 12 points ahead of the 5-year average.

By week's end, 80 percent of the sugarbeet crop was harvested, 4 percentage points behind last year and 2 points behind the 5-year average. Warm weather halted harvest in Michigan during much of the week. Meanwhile, a mixture of rain and snow limited fieldwork in Minnesota, where harvest fell behind normal by week's end.

Sunflower producers had harvested 82 percent of the nation's crop by October 28, twenty percentage points ahead of last year and 40 points ahead of the 5-year average. Despite persistently wet conditions in portions of North Dakota, harvest continued to advance well ahead of the normal pace.

### References

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