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ANTIGUA AND BARBUDA METEOROLOGICAL SERVICE CLIMATE SECTION

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ANNOUNCEMENTS

The Antigua and Barbuda Meteorological Service (ABMS) will be sending off someone to pursue an MSc in Applied Meteorology at the University of Reading. The knowledge and experienced gain by this person will be invaluable to the service and will further our vision of becoming a "reliable and trusted source of climate service". The person is due back January 2014. 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 - JUNE 2012

Antigua had well below normal rainfall during June, the third lowest on record for the month; the average total for the month was 13.5 mm. This was just 19% of the normal total for the period 1981–2010. Tropical waves were responsible for over 75% of the rainfall. At the airport, the 5 rainfall days (>= 1 mm) were below normal and the lowest for June since 2000; further, there was no heavy rainfall days (>= 10 mm), the first time since 1995, for the month. The mean temperature of 27.8°C was near normal but the lowest since 1995. Further, the mean daily maximum (30.3°C) and minimum (25.5°C) temperatures were below and near normal respectively. Additionally, 30.9°C and 22.9°C were the absolute maximum and minimum temperatures respectively. See table and map below.

For the past three months – April to June (AMJ) - the rainfall was near normal, 220.7 mm or 8.69 inches, and the mean temperature of 26.7°C was below normal.

WEATHER AND CLIMATE SUMMARY IN BRIEF FOR THE CARIBBEAN - JUNE 2012

Apart from Trinidad, which was moderate to very wet and Tobago, which was normal, the Eastern Caribbean experienced below normal rainfall for June. Grenada was exceptionally dry; Dominica was extremely dry; Barbados, St. Vincent, St. Lucia and Antigua were moderately dry. Conditions in Guyana ranged from moderately wet in the west to normal in the east. Jamaica was abnormally wet in the west and normal in the east. Rainfall in Belize ranged from normal in the west to extremely wet in the north and south (rainfall descriptions). See figure 1.

For AMJ, the Caribbean had near to above normal rainfall with a few places experiencing exceptionally wet conditions including parts of Belize. Regional Bulletin

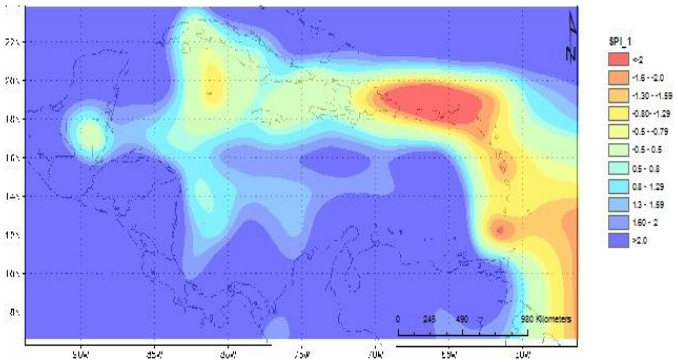
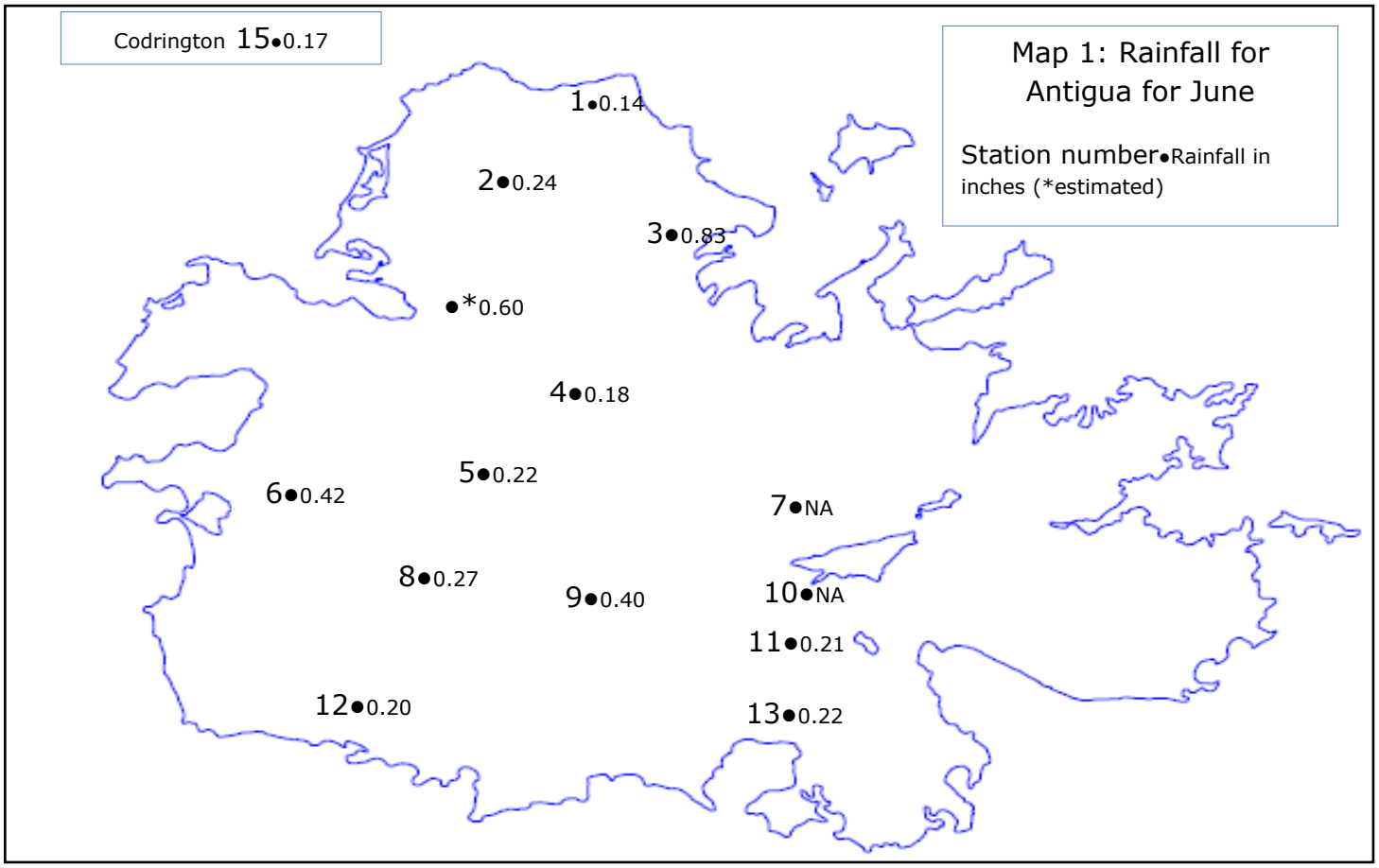


Figure 1. Standardised Precipitation Index for June.



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(Jun)	0.53	2.73	- 2.20	Well below normal	12.22	1938	0.32	1974
3(Apr – Jun)	8.69	10.18	- 1.49	Near normal	26.61	1987	2.26	1940
6(Jan – Jun)	13.91	17.11	- 3.20	Below normal	31.75	1987	5.12	1929
9(Oct – Jun)	31.10	33.18	- 2.08	Near normal	49.53	1987	13.09	2001
12(Jul – Jun)	55.98	46.98	+ 9.00	Above normal	68.92	1952	26.34	2001
24(Jul – Jun)	117.12	94.15	+ 22.97	Well above normal	127.51	1952	66.99	1966

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

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – MAY 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	27.8	23(42)	- 0.1	30.3	31(44)	- 0.3	25.5	17(44)	- 0.2
Jolly Hill	28.4	-	-	32.2	-	-	24.6	-	-

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

WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

MONTLY WEATHER OUTLOOK - JULY

Rainfall
Near normal rainfall is most likely with **2.86 to 4.48 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 **28.0 to 28.2°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 – JULY TO SEPTEMBER

Rainfall
Below normal rainfall is most likely with less than **11.08 inches**. Probabilistically, there is a

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

Temperature
Near normal temperature is most likely with **28.0 to 28.2°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 showers of May became a distant memory with the very low rainfall of June. The dry conditions were conducive for land preparation. However, at this time of the year, farmers are looking forward for the start of the rainy season in earnest. However, we continue to be in a slight meteorological drought which is likely to remain or get worse. A meteorological drought implies that there is also an agricultural drought in effect. Crops having solely rain-fed irrigation, would have struggled severely if not die during June. At the airport, the reference evapotranspiration for June was about 152.3 mm or 6 inches, seven times more than the rainfall; hence, a lot of artificial irrigation would have been required to keep crops from being stressed.

Naturally, there have been lots of complaints bout the below normal rainfall; conditions in some places are being described as very dry by some of the extension officers. Cracks are also evident in a number of fields due to low soil moisture content. Further, even grasses are having a difficult time growing owing to the dry conditions. However, the droughts are likely to continue slight or get worse. The rainfall deficit for the period January to June was 3.20 inch below the climatological normal (1981 – 2010).

Crops planted in June included carrots, tomatoes, sweet potatoes, cucumbers, sweet peppers and cantaloupes. Meanwhile, crops harvested included butternuts, melons pumpkins, okras, sorrel and also those listed under crops planted. Butternuts and cantaloupes are in abundance while onions are scarce.

Based on the outlook through August, near normal rainfall and temperature are most likely for July. Meanwhile, for the period July to September, 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

International Weather and Crop Summary – June

EUROPE: Widespread rainfall maintained abundant soil moisture for winter and summer crops across much of the continent, although heat and dryness stressed crops in the Balkans.

WESTERN FSU: Favourably wet weather in western and northern areas contrasted with periods of stressful heat for filling wheat in the south.

EASTERN FSU: Showers boosted soil moisture for jointing spring wheat in Russia, but the rain bypassed parts of northern Kazakhstan.

MIDDLE EAST: Scattered showers in Turkey provided supplemental moisture for irrigated summer crops but did not cause significant winter grain harvesting delays.

SOUTH ASIA: Monsoon rains continued to promote rice, groundnut, and cotton planting in central and eastern India.

EAST ASIA: A pair of tropical cyclones dominated the weather pattern for the region, bringing heavy rainfall to southern China and Japan.

SOUTHEAST ASIA: Rainfall continued to be light across much of Thailand, while Tropical Cyclone Talim brought more flooding to the northwestern Philippines.

AUSTRALIA: Rain continued to benefit wheat, barley, and canola in western and southeastern Australia.

ARGENTINA: Dry weather further improved conditions for autumn fieldwork.

BRAZIL: Locally heavy showers persisted throughout the south, maintaining locally excessive moisture for crops and causing some flooding.

MEXICO: Beneficial rain overspread the southern plateau corn belt.

CANADIAN PRAIRIES: Warmer weather was needed for emerging spring grains and oilseeds.

SOUTHEASTERN CANADA: Warm, mostly dry weather sped development of winter grains and summer crops.

U.S. Crop Production Highlights

Corn: By week's end, 10 percent of this year's corn crop was at or beyond the silking stage, 8 percentage points ahead of last year and 7 percentage points ahead of the 5-year average. Silking was most advanced in Tennessee, where despite declining soil moisture levels, above average temperatures pushed overall progress to 41 percentage points ahead of normal. Overall, 56 percent of the corn crop was reported in good to excellent condition, down 7 percentage points from ratings last week and 12 percentage points below the same time last year. Unfavourably hot, dry weather during the week increased drought stress throughout most of the major corn-producing regions of the country.

Soybeans: Twelve percent of the Nation's soybean crop was blooming by June 24, ten percentage points ahead of last year and 8 percentage points ahead of the 5-year average. Overall, 53 percent of the soybean crop was reported in good to excellent condition, down 3 percentage points from ratings last week and 12 percentage points below the same time last year. The most significant decline was evident in Illinois, where topsoil moisture levels were rated 84 percent short to very short.

Winter Wheat: Heading of this year's winter wheat crop was 98 percent complete by week's end, 6 percentage points ahead of last year and 3 percentage points ahead of the 5-year average. Under mostly sunny skies, harvest surpassed the halfway mark during the week, with double-digit progress evident in half of the 18 estimating States. By June 24, producers had harvested 59 percent of the Nation's winter wheat crop, 23 percentage points ahead of last year and 32 percentage points ahead of the 5-year average, for the quickest pace on record. Overall, 54 percent of the winter wheat crop was reported in good to excellent condition, unchanged from last week but 19 percentage points better than the same time last year.

Rice: Sixteen percent of the rice crop was at or beyond the heading stage by June 24, nine percentage points ahead of last year and 11 percentage points ahead of the 5-year average. With over half of the rice fields in Louisiana headed, overall progress was 29 percentage points ahead of normal as above average temperatures promoted rapid crop development. Overall, 71 percent of the rice crop was reported in good to excellent condition, up 3 percentage points from ratings last week and 10 percentage points better than the same time last year.

Small Grains: Warm weather helped to maintain an accelerated crop development pace of this year's oat crop. By June 24, heads were evident in 91 percent of oat fields across the Nation, 36 percentage points ahead of last year and 24 percentage points ahead of the 5-year. With activity limited to Iowa, Nebraska, Ohio, and Texas, producers had harvested 10 percent of this year's oat crop by week's end, slightly ahead of both last year and the 5-year average. Overall, 69 percent of the oat crop was reported in good to excellent condition, up 2 percentage points from ratings last week and 12 percentage points better than the same time last year.

Nationally, 40 percent of this year's barley crop was headed by week's end, 36 percentage points ahead of last year and 24 percentage points ahead of the 5-year average. Heading advanced 15 percentage points or more in all estimating States during the week as near to above average temperatures provided favorable growing conditions. Overall, 66 percent of the barley crop was reported in good to excellent condition, down slightly from ratings last week and 9 percentage points below the same time last year. By week's end, 57 percent of the spring wheat crop was at or beyond the heading stage, 52 percentage points, or over 3 weeks, ahead of last year and 39 percentage points ahead of the 5-year average. In Minnesota and the Dakotas, head development was 49 percentage points or more ahead of normal. Overall, 77 percent of the spring wheat crop was reported in good to excellent condition, up slightly from ratings last week and 8

percentage points better than the same time last year.

Other Crops: Twenty-six percent of this year's peanut crop was pegging by June 24, 13 percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Despite peg development of 16 percent during the week, peanuts in portions of Georgia were reported as growing slower than normal. Overall, 69 percent of the peanut crop was reported in good to excellent condition, down 6 percentage points from ratings last week but 40 percentage points better than the same time last year.

Sunflower producers had planted 95 percent of this year's crop by week's end, 12 percentage points ahead of last year and 7 percentage points ahead of the 5-year average.

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