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ANNOUNCEMENTS

The Antigua and Barbuda Meteorological Service (ABMS) Climate Section (CliSec) has launched an experimental youtube channel (<u>www.youtube.com/anumetservice</u>) to further the availability and access to weather and climate information. Last month, the ABMS CliSec launched its facebook page (<u>www.facebook.com/anumetservice</u>) as apart of its communication strategy. Persons are encouraged to subscribe and like our youtube and facebook accounts respectively. Also, feel free to follow us on twitter (<u>www.twitter.com/anumetservice</u>). 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 - JANUARY 2012

Antigua experienced above normal rainfall during January with 3.00 inches or 76.2 mm; this was 111% of the normal total (1981 -2010). This is the highest total for the month since 2008. Moisture advection in association with fresh to strong low level winds was responsible for about 75% of the rainfall. For the past three months the rainfall has also been above normal with 14.37 inches. At Coolidge, the 11 rainfall days (>= 1 mm) were near normal; meanwhile, there were two heavy rainfall days (>= 10 mm), which were above normal. The mean temperature of 25.1°C was below normal and the lowest since 2008. The mean daily maximum and minimum temperatures of 27.9°C and 22.4°C were below and near normal respectively. Further, the absolute maximum temperature was 28.7°C and the absolute minimum temperature was 20.6°C.

For the past three months – November to January - the rainfall was also above normal, 14.37 inches, and the mean temperature was below normal, 25.6°C.

WEATHER AND CLIMATE SUMMARY IN BRIEF FOR CAMI ISLANDS - JANUARY 2012

The majority of the Eastern Caribbean and Guyana had normal to above normal rainfall, except for St. Vincent and Dominica, which had below normal rainfall. In the Western Caribbean, Jamaica had below normal rainfall, while Belize ranged from normal to above normal.

For the past three months, rainfall in the Eastern Caribbean and Guyana were normal to above normal, apart from Trinidad, which was below to near normal. Meanwhile, Jamaica had below normal rainfall and Belize ranged from below to near normal. Temperatures across the region were mostly near normal.

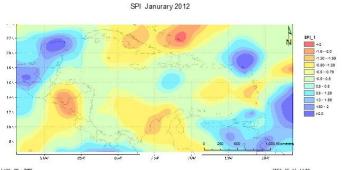
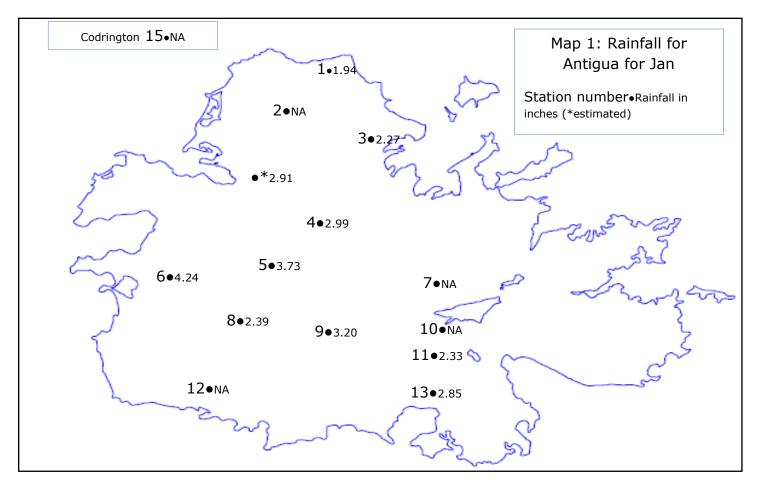


Figure 1. Standardised Precipitation Index (SPI) for the Caribbean for November. Information on the SPI can be viewed at <u>http://63.175.159.26/~cdpmn/spimonitor.html</u>.



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(Jan)	3.00	2.70	+ 0.30	Above normal	8.57	2006	0.64	1931		
3(Nov – Jan)	14.37	12.55	+ 1.82	Near normal	26.06	1999	4.95	1947		
6(Aug – Jan)	36.55	28.63	+ 7.92	Above normal	44.96	1937	16.19	1984		
9(May – Jan)	56.90	39.15	+ 17.75	Well above normal	64.40	1971	21.65	1931		
12(Feb – Jan)	64.98	46.49	+ 18.49	Well above normal	69.81	1952	24.80	1931		
24(Feb – Jan)	129.31	93.94	+ 35.37	Well above normal	131.40	1953	65.82	1931		
Table 1: Rainfall (inches) over the past 24 months Antigua.										

TEMPERATURE SUMMARY FOR ANTIGUA AND BARBUDA – JAN 2012											
	Mean			Maximum			Minimum				
Station	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)	Temp(°C)	Rank (Total)	Anomaly (°C)		
Coolidge	25.1	26(42)	- 0.3	28.7	35(42)	- 0.8	20.6	7(42)	+ 1.1		
Jolly Hill	24.8	-	-	29.4	-	-	17.2	-	-		
Table 1: Temperature Summary for Antigua – January 2012. Temperatures are ranked from the highest to the lowest.											

WEATHER AND CLIMATE OUTLOOKS FOR ANTIGUA

MONTLY WEATHER OUTLOOK - FEBRUARY

Rainfall

Near normal rainfall is most likely with than **1.67** to **2.31 inches**. Probabilistically, there is a

- **30%** chance of above normal rainfall;
- **45%** chance of near normal rainfall and
- **25%** chance of below normal rainfall.

Temperature

Near normal temperature is most likely with **25.0** to **25.4°C**. Probabilistically, there is a

- **30%** chance of above normal temperature;
- **45%** chance of near normal temperature and
- **25%** chance of below normal temperature.

SEASONAL OUTLOOKS – FEBRUARY TO APRIL

Rainfall

Near normal rainfall is most likely with **5.82 to 7.94 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

Below normal temperature is most likely with less than **25.6°C**. Probabilistically, there is a

- **15%** chance of above normal temperature;
- 35% chance of near normal temperature and
- **50%** chance of below normal temperature.

NATIONAL AGRICULTURAL SUMMARY

For much of the month, weather conditions were quite conducive for land preparation, planting and harvesting for most of Antigua and Barbuda. However, some farmers are still feeling the impacts of the excess rainfall of last year.

Notwithstanding the above normal rainfall for the month of January, about half of the days of the month were dry days, which allowed for a significant amount of land preparation and general farming activities. The weather also allowed for the harvesting of such crops as sweet potatoes, tomatoes, yams, sweet peppers and egg plants. Meanwhile, planted crops included cucumbers, butternut squashes, tomatoes, carrots and onions.

Of the crops on the market, there is a glut of yams, sweet potatoes and tomatoes. The glut of yams is particularly significant. According to news reports, the great abundance of yams on the market has led to the Ministry of Agriculture exploring a programme to educate the public on different ways to utilise the vegetable in food preparation.

In spite of the gluts of a few crops, a number of items remain scarce; crop production is still down on account of the abundant rainfall of last year. Further, a number of farmers are still feeling the effects of the above normal rainfall of last year. Some of the more clayey soil in some central areas of Antigua remains high in moisture content and continues to be a challenge for farming activities. There have also been crop losses reported for the month on account of the excess soil moisture and gluts. Losses were reported regarding tomatoes, sweep potatoes and yams.

Based on the outlook through April, near normal weather conditions are likely to prevail, which should lead to relatively good farming conditions. However, it must be noted that there's a moderate (35%) <u>chance</u> <u>of a drought</u>. For farming purposes among other things, the <u>7-Day Forecast</u> is strongly encouraged as a very useful planning tool. See also <u>www.antiguamet.com/Climate</u>

International Weather and Crop Summary

EUROPE: Rain and snow favoured dormant winter crops in central and Eastern Europe, while showers improved prospects for wheat and barley in Spain.

WESTERN FSU: The season's first snow arrived in Ukraine, insulating winter crops against potential incursions of bitter cold.

MIDDLE EAST: Additional rain and high-elevation snow maintained excellent prospects for winter grains.

NORTHWESTERN AFRICA: Rain returned to Morocco, improving soil moisture for vegetative winter wheat and barley.

SOUTH ASIA: Dry weather aided cotton harvesting in southern India as winter wheat and rapeseed in northern India benefited from cool weather.

EAST ASIA: Light snow boosted moisture reserves for dormant winter wheat on the North China Plain.

SOUTHEAST ASIA: Lighter rainfall eased excessive wetness for corn in the Philippines and allowed oil palm harvesting to resume in Malaysia.

AUSTRALIA: Periods of rain and sun continued to favour summer crop development in eastern Australia.

SOUTH AFRICA: Drier weather spurred growth of summer crops throughout the Corn Belt after last week's beneficial rain.

ARGENTINA: Unseasonable warmth and dryness returned, renewing stress on corn, soybeans, and cotton.

BRAZIL: Drier conditions returned to southern farming areas but overall favourable conditions continued for crops elsewhere.

U.S. Crop Production Highlights for 2011

Corn: Corn for grain production is estimated at 12.4 billion bushels, 1% below 2010. Dry soil conditions and above-normal temperatures during the critical development phase limited yield potential in many locations.

Oats: The 2011 production is estimated at a record- low 53.6 million bushels, down 34% from 2010. Extreme drought conditions in Texas led to a large decline in yield from last year.

Barley: Production is estimated at 156 million bushels, 14% below 2010, the lowest since 1936.

All wheat: Production totalled 2.00 billion bushels in 2011, down 9 percent from 2010.

Rice: Production in 2011 is estimated 185 million cwt, 24% below 2010. In all states except California, severe drought conditions, excessive flooding, and higher prices for competing commodities contributed to the decline in rice.

Peanuts: Production is estimated at 3.64 billion pounds, down 13% from 2010. Yields were down significantly from last year due to a severe drought during the growing season in some places.

Soybeans: Production in 2011 totalled 3.06 billion bushels, down 8% from 2010. Drought conditions across much of South hampered soybean development this year.

Cotton: Upland cotton production is estimated at 14.8 million 480-pound bales, down 16% from last year. Drought throughout much of the Cotton Belt was the main factor contributing to decreased Upland cotton production compared with last year.

References

Caribbean Institute for Meteorology and Hydrology CAMI Monthly Bulletin, [online]. Available from: <<u>http://63.175.159.26/~cimh/cami/regional_bulletin.html</u>> [Accessed 15 January, 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-01-25-2012.pdf> [Accessed 10 January, 2012]

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Internet URL: http://www.antiguamet.com/climate E-mail address: <u>metoffice@antigua.gov.ag</u> or <u>dale_destin@yahoo.com</u> Twitter: <u>www.twitter.com/anumetservice</u> Facebook: <u>www.facebook.com/anumetservice</u> Youtube: <u>www.youtube.com/anumetservice</u>

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