



ARUBA

CLIMATOLOGICAL SUMMARY 2014

PRECIPITATION

The total amount of rainfall recorded at Reina Beatrix International Airport for the year 2014 was 309.2 mm. This is **34.4 %** below normal (Figure 1).

During the first quarter of the year 2014 (January, February, March) a total of **39.2** mm of rainfall was recorded. This is **12.7%** of the total amount for 2014.

During the second quarter of the year 2014 (April, May, June) a total of **8.5** mm of rainfall was recorded. This is **2.7%** of the total amount for 2014.

During the third quarter of the year 2014 (July, August, September) a total of **59.5** mm of rainfall was recorded. This is **19.2%** of the total amount for 2014.

During the fourth quarter of the year 2014 (October, November, December) a total of **202.0** mm of rainfall was recorded. This is **65.3%** of the total amount for 2014.

The last quarter of the year 2014 which is part of the rainy season was the *wettest* quarter. But the total amount of rain for that quarter was still below normal values.

The *wettest* month for 2014 was October with a total of **84.6** mm which was just above normal values for that month. The *driest* month for 2014 was March with a total of **0.0** mm which is below normal for that month.

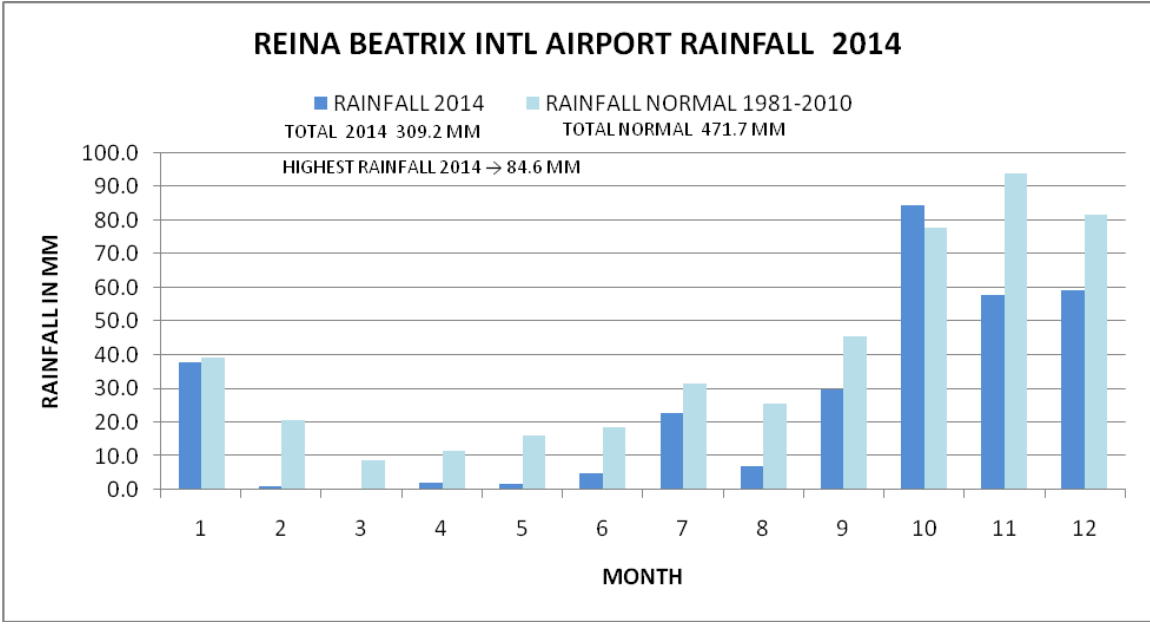


Figure 1. Rainfall 2014 versus 30 year normal (1981-2010) in mm.

TEMPERATURE

The year average air temperature recorded at the Reina Beatrix International Airport Aruba for 2014 was 28.4 °C (normal value 28.1 °C), which is a tad above normal. (Figure 2a).

June 2014 with an average of 29.0 °C, August 2014 with an average of 29.5 °C, September 2014 with an average of 29.6 °C and October 2014 with an average of 29.0 °C, appear to be the warmest months of the year 2014.

The *warmest* month of 2014 was September with an average of **29.6 °C** and the *coldest* month of 2014 was January with an average of **26.8 °C**.

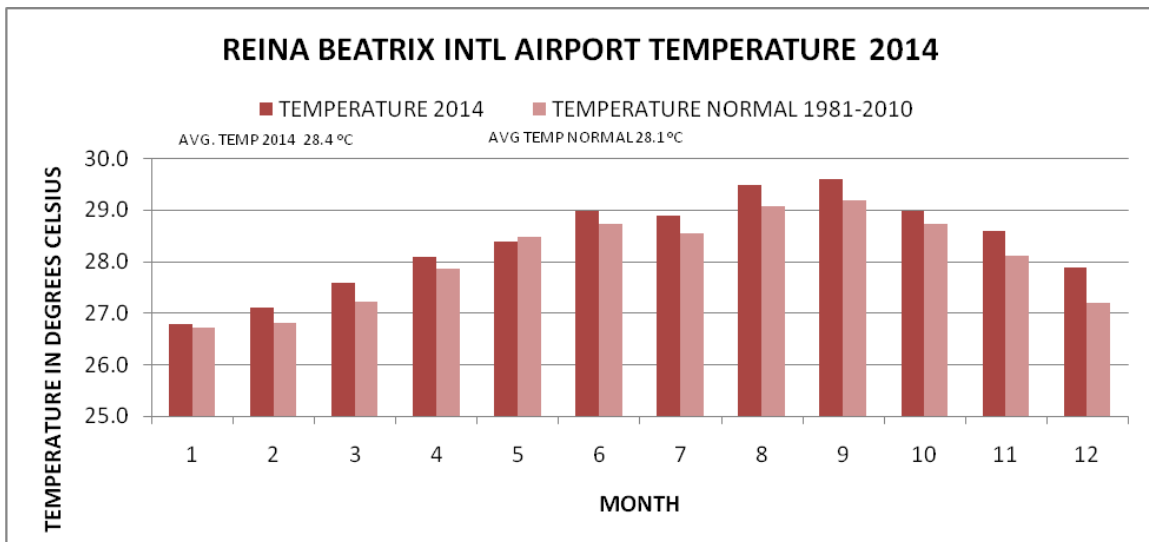


Figure 2a. Temperatures in degrees Celsius 2014

The average maximum temperature for the year 2014 was 32.0 °C compared with the normal average maximum temperature 31.5 °C which is just a tab above normal. (Figure 2b).

The *highest* maximum temperature was in August 2014 with **33.3 °C** and the *lowest* maximum temperature recorded was **30.4 °C** in January 2014.

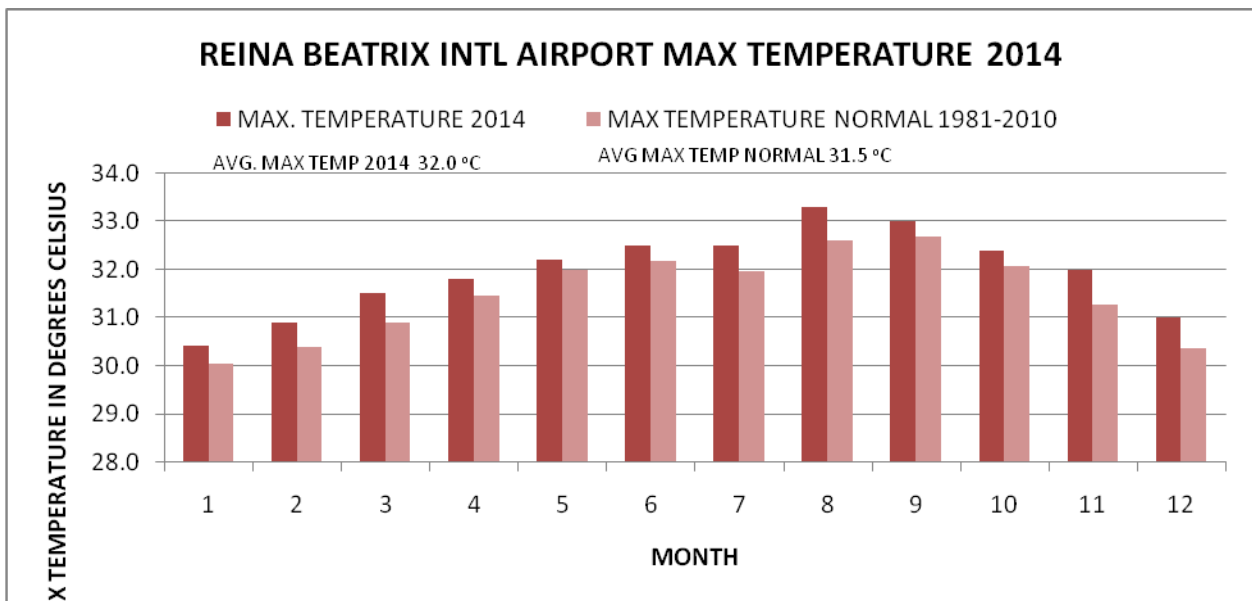


Figure 2b. Maximum temperatures in degrees Celsius 2014

WINDSPEED

The year average wind-speed at 10 meters height for the year 2014 at the Reina Beatrix International Airport was 8.0 m/sec (28.8 km/h) compared with the normal value of 7.3 m/sec (26.3 km/h) is a tab above normal. (Figure 3a).

The *highest* average wind-speed of **9.5** m/sec (34.2 km/h) was recorded during the month of April and June 2014. The *lowest* average wind-speed during the month of November 2014 with a **5.9** m/sec (21.2 km/h).

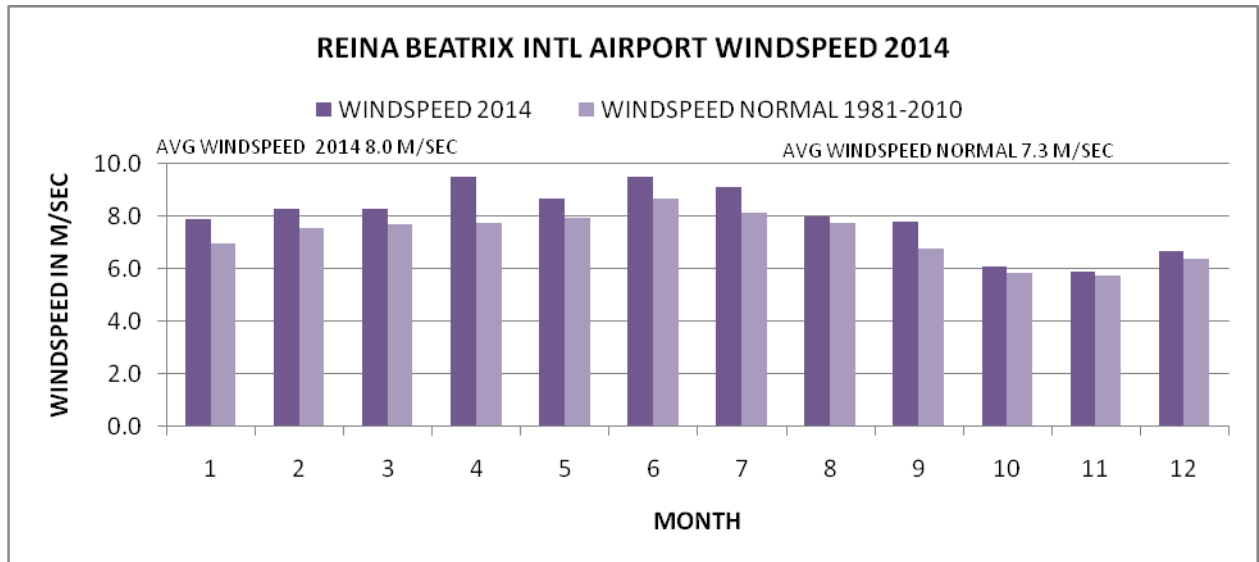


Figure 3a. Wind-speed 2014 in m/sec.

The average maximum wind-speed for the year 2014 was 15.9 m/sec (57.2 km/h) compared to the normal value of 14.5 m/sec (52.2 km/h) is a tab above normal. (Figure 3b).

The *absolute* maximum wind-speed of 28.8 m/sec (103.7 km/h) was recorded during the month of July 2014 .

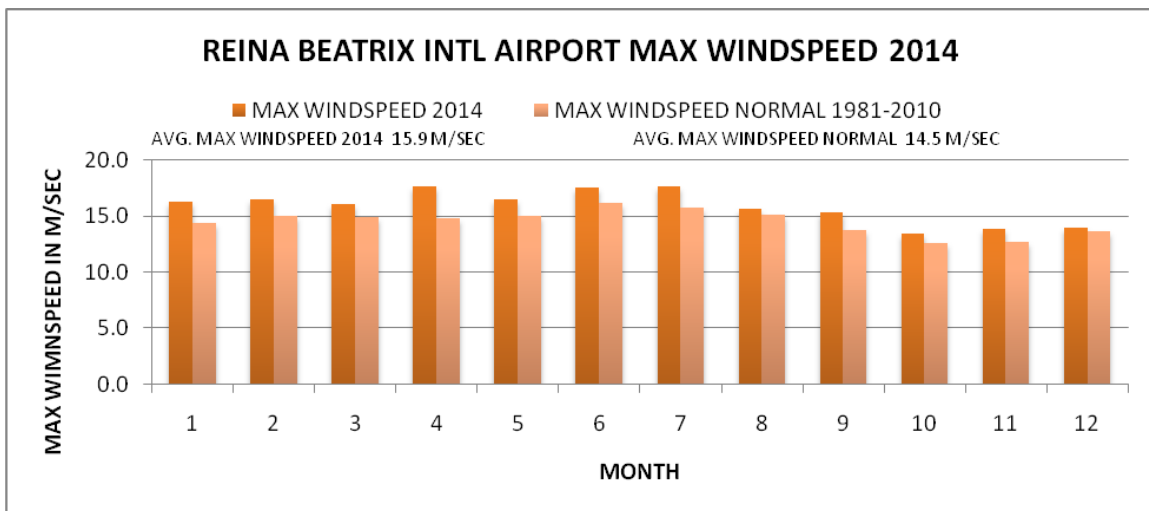


Figure 3b. Maximum wind-speed 2014 in m/sec.

The wind-rose figure indicates that for 75.1% of the time the wind was between 11-17 knots. The wind was for roughly 24.9 % of the time between 17-21 knots (Figure 3c).

The wind was 59% of the time from the East and 41% of the time from the East-Northeast.

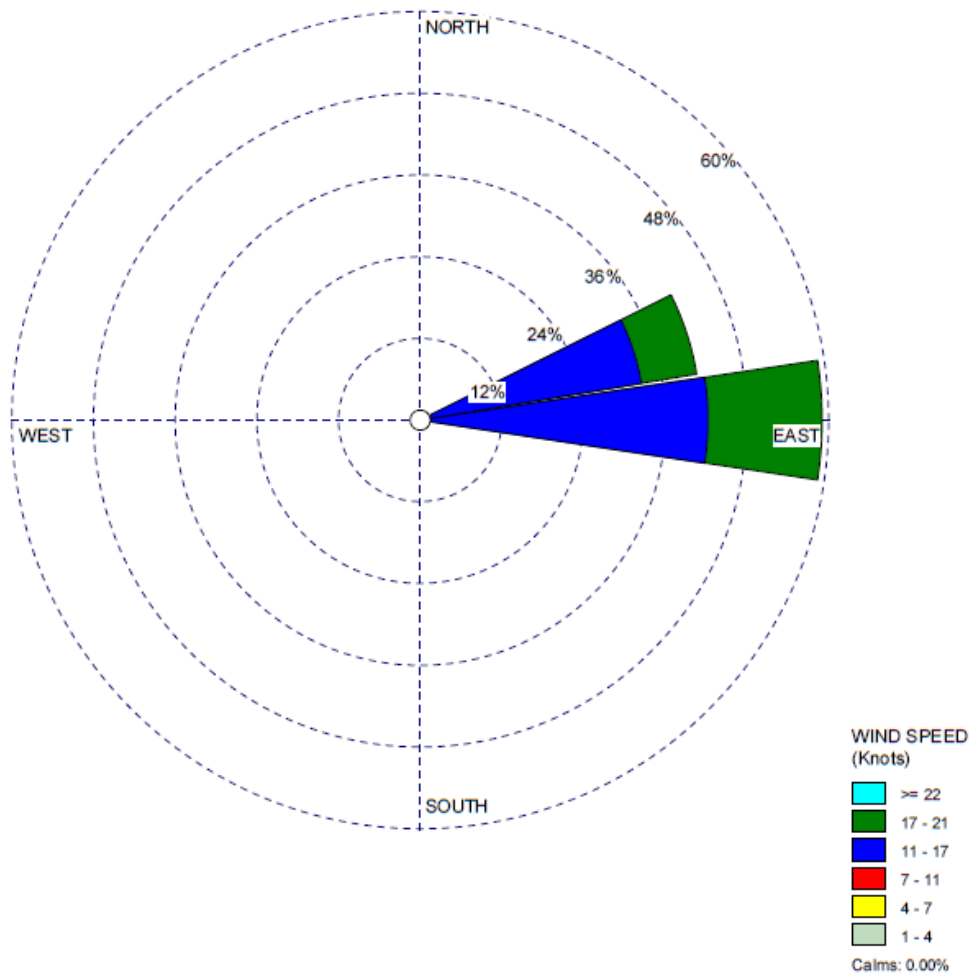


Figure 3c. Wind-rose data 2014 in knots.

ATMOSPHERIC PRESSURE

The average atmospheric pressure for 2014 recorded at the Reina Beatrix International Airport was 1012.0 hPa compared with normal value of 1011.8 hPa which is around normal (Figure 4).

The *highest* monthly average atmospheric Pressure of **1013.7** hPa was recorded during July 2014 with the *lowest* during October 2014 of **1010.6** hPa.

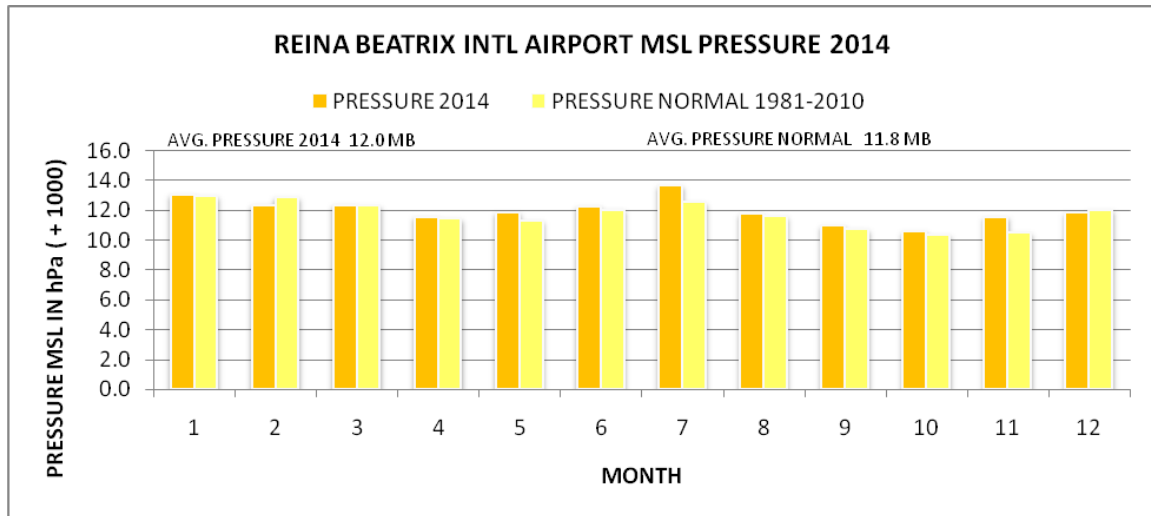


Figure 4. Atmospheric Pressure at MSL, (Mean Sea Level) in hPa (+1000).

CLOUD COVERAGE DURING 2014

The average cloud coverage in 2014 was 51.3 % compared with normal value of 47.3% which is a tab above normal. (Figure 5).

Highest average cloud coverage in 2014 was observed during June (**68.8 %**) with the *lowest* during the month of February (**29.7%**)

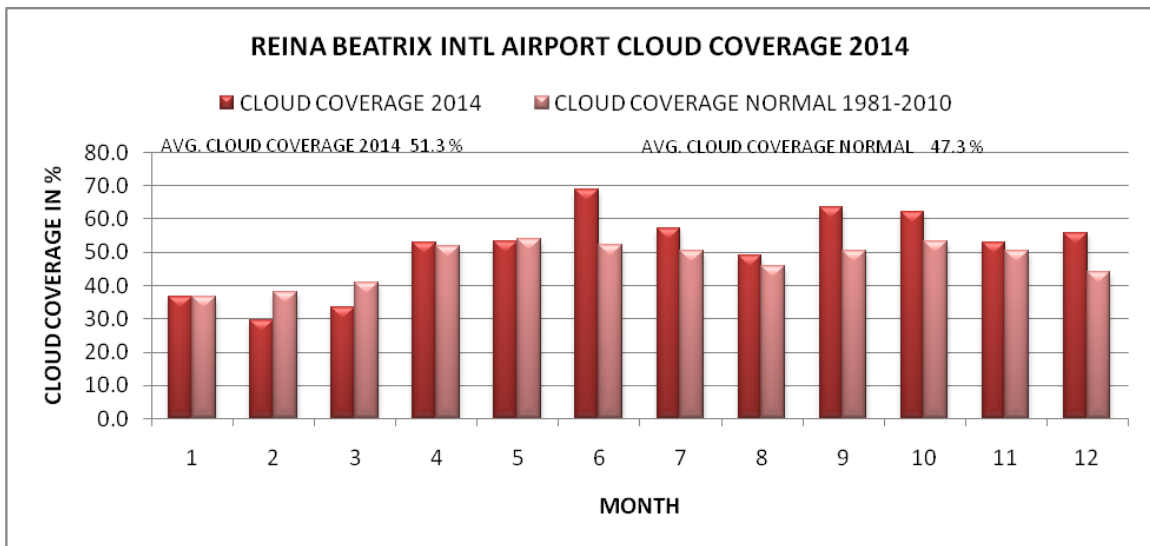


Figure 5. Total cloud cover in percentage.

RELATIVE HUMIDITY 2014

The average relative humidity of 2014 was 75.7% compared to the normal value of 77.4%, which is a tad below normal. (Figure 6).

Highest monthly average relative humidity of **77.1%** was recorded during the November 2014 with a *lowest* monthly average of **73.3** during the month of September 2014.

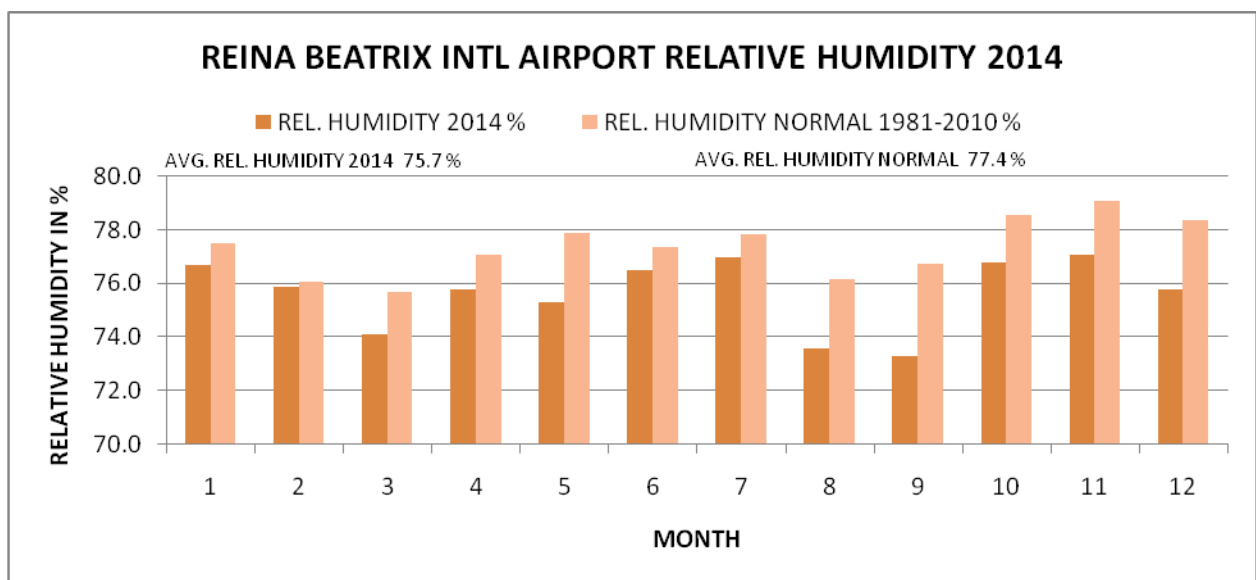


Figure 6. Relative humidity in percentage.

SPECIAL OCCURRENCE (EVENTS) DURING THE YEAR 2014

SEISMIC ACTIVITIES:

There were about 22 earthquake events near Aruba recorded and felt by humans in the year 2014 of which the strongest earthquake was on February 21 2014 at 7:43 AM local time and had a magnitude of 4.6 with epicenter at latitude 12.6 degrees north and longitude 70.7 degrees west, which is about 78 kilometers west of Aruba and a depth of 22.7 kilometer.

EARTHQUAKES NEAR ARUBA YEAR 2014

Date	Local Time (AM/PM)	Latitude North (degrees)	Longitude West (degrees)	Magnitude	Depth (km)
November 11, 2014	3:06 AM	12.02	69.89	2.5	26.8
November 9, 2014	11:48 AM	12.08	69.77	2.7	17.7
November 6, 2014	11:14 PM	11.94	70.47	2.6	5.7
October 14, 2014	2:58 PM	12.89	70.35	3.7	7.2
October 3, 2014	2:48 AM	12.93	70.41	4.4	3.2
September 30, 2014	1:18 AM	12.26	70.13	2.9	17.5
September 26, 2014	9:37 AM	11.82	70.43	2.5	23.2
September 22, 2014	3:49 AM	12.87	70.27	4.0	5.0
July 28, 2014	6:55 AM	12.83	70.29	3.6	11.7
July 27, 2014	6:41 PM	12.78	70.22	3.6	10.0
July 27, 2014	4:34 PM	12.76	70.30	4.1	16.1
July 15, 2014	2:37 AM	11.99	70.64	3.1	81.5
June 10, 2014	12:52 PM	12.45	70.40	2.7	7.0
May 16, 2014	4:53 PM	12.23	70.05	3.3	16.2
May 5, 2014	1:05 AM	11.52	70.28	2.6	22.9
April 14, 2014	10:01 AM	11.52	70.53	2.5	13.4
April 10, 2014	8:23 AM	11.73	70.53	3.3	9.1
March 7, 2014	1:31 PM	12.27	70.00	3.0	23.6
March 2, 2014	9:16 PM	12.65	70.79	3.3	16.6
March 1, 2014	5:24 PM	11.70	70.23	2.9	12.8
February 22, 2014	1:27 PM	12.67	70.64	3.2	23.5
February 21, 2014	7:43 AM	12.60	70.70	4.6	22.7

Table 1. Earthquakes near Aruba year 2014.

SEVERE BAD WEATHER:

There were no severe bad weather events recorded during the year 2014.

TROPICAL CYCLONE ACTIVITIES:

For the 2014 season overall eight named storms formed in the basin. Six of those became hurricanes and two of those reached major hurricane status. In addition one unnamed depression formed. Based on a 1981-2010 climatology the average level of activity in the basin is 12 named storms, 6 hurricanes, and 3 major hurricanes. For 2014 the number of named storms was below average, but the number of hurricanes and major hurricanes was near average. In terms of accumulated cyclone energy, which measures the combined strength and duration of tropical storms and hurricanes activity in the basin in 2014 was only about 63 percent of the 1981-2010 average.

SUMMARY TABLE

NAME	DATES	MAX WIND (KTS)
H ARTHUR	1-5 JUL	87
TD TWO*	21-23 JUL	30
H BERTHA	1-6 AUG	70
H CRISTOBAL	23-29 AUG	74
TS DOLLY	1-3 SEP	44
MH EDOUARD	11-19 SEP	100
H FAY	10-13 OCT	65
MH GONZALO	12-19 OCT	126
TS HANNA	22-28 OCT	35

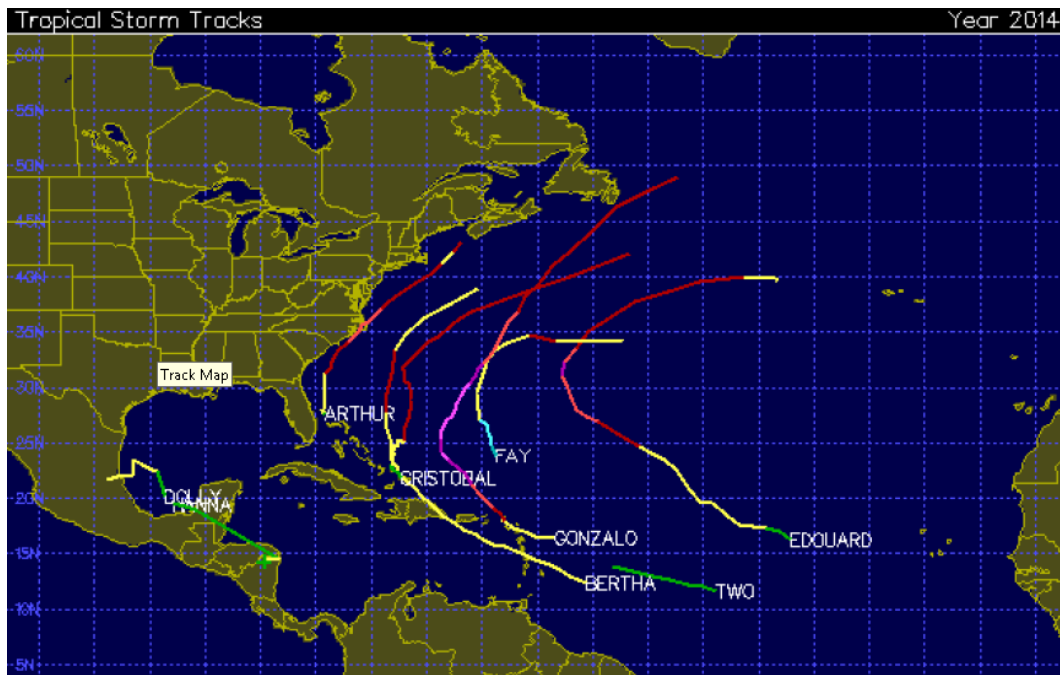


Figure 7. Storm tracks Atlantic Basin 2014.

In figure 7 we can see the storm tracks. Hurricane Bertha and hurricane Gonzalo were the closest to Aruba but were no major threat.

For the year 2015 again a below-average hurricane is forecasted. This according to experts mainly due to unfavorable trade winds in the Atlantic and weak positive ENSO conditions. Keep in mind that these are extreme long-term forecasts therefore changes can occur.

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