

ANNUAL SUMMARY OF WEATHER SYSTEMS AFFECTING THE CAYMAN ISLANDS 2017

January

Weather charts indicate that a cold front moved across the Cayman area on January 8th 2017. The system produced only minimal amounts of rainfall accumulation but did support Fresh north to northeast winds and rough seas, especially along the north and west coasts on January 8th and 9th 2017. The port was closed on January 8th and 9th 2017 due to rough seas. Rough seas lasted from January 9-15 2017 for which the National Weather Service issued a marine warning.

Weather charts indicate that a cold front moved across the Cayman area on January 23rd 2017. The system produced only minimal amounts of rainfall accumulation but did support Fresh north to northeast winds and rough seas, especially along the north and west coasts on January 23rd 2017. The port was closed on January 23rd 2017 due to rough seas. Rough seas lasted from January 22nd until 24th 2017 for which the National Weather Service issued a marine warning.

The total measured accumulation of 0.9 of an inch or 1.14 inches below the normal 2.04 inches of the 30 year average for January.

February

Weather charts indicate that a high pressure system built over Florida and produced moderate to fresh northeast winds and rough seas across the Cayman area from February 10-12 2017. The National Weather Service issued Marine warnings for this event.

The total measured accumulation of 1.03 of an inch or 0.47 of an inch below the normal 1.50 inches of the 30 year average for February.

March

Weather charts indicate that a high pressure system built over the Atlantic Ocean and produced moderate to fresh northeast winds and rough seas across the Cayman area from March 9-14 2017. The National Weather Service issued Marine warnings for this event.

Weather charts indicate that a high pressure system built over the Southeast USA and produced moderate to fresh northeast winds and rough seas across the Cayman area from March 16-19 2017. The National Weather Service issued Marine warnings for this event.

The total measured accumulation of 1.00 inch or 0.32 of an inch below the normal 1.32 inches of the 30 year average for March.

April

Weather charts indicate that a cold front moved across the Cayman area on April 8th 2017. The system produced cloudiness and showers with an accumulation of 0.84 of an inch of rainfall measured at Owen Roberts International Airport. The associated high pressure system produced moderate to fresh northeast winds and rough seas across the Cayman area from April 10-15 2017. The National Weather Service issued Marine warnings for this event.

Weather charts indicate that a surface trough supported by an upper level trough produced an extensive area of cloudiness and showers across the Cayman area from April 19-21st 2017. An accumulation of 4.83 inches measured at the Owen Roberts International Airport. Rainfall totals from other locations provided by the Water Authority include 1.85 inches West Bay, 2.5 inches in East End and 3.22 inches in Savannah for that time period.

The total measured accumulation of 5.72 inches or 4.45 inches above the normal 1.27 inches of the 30 year average for April. The rainfall total was the first time monthly rainfall total was above the long term mean since January 2016. During the long dry period the rainfall deficit was 30.39 inches. During the period CIMH had issued drought warnings for the Cayman Islands.

May

There were no significant weather systems impacting the Cayman Islands during the month.

The National Weather Service recorded 1.37 inches for the month or 4.59 inches below the long term average of 5.96 inches.

June

Weather charts indicate that a high pressure system over Florida produced moderate to fresh northeast winds and rough seas across the Cayman Islands. The Cayman Islands National Weather Service issued marine warnings for the system from June 5-7 2017.

Weather charts indicate that a broad area of low pressure interacted with an upper level trough to produce an area of cloudiness and showers as well as moderate to fresh winds and rough seas over the northwest Caribbean. The Cayman Islands National Weather Service recorded an accumulation of 4.03 inches measured at the Owen Roberts International Airport from June 15-17 2017. Marine warnings were also issued for the period.

Weather charts indicate that a tropical wave moved across the Cayman area on July 23rd 2017. The system produced cloudiness and showers with an accumulation of 0.79 of an inch on July 23rd 2017.

The total measured accumulation of 6.28 inches for the month was 0.08 of an inch above the 30 year average for June of 6.20 inches.

July

Weather charts indicate that an upper level trough produced cloudiness and showers across the Cayman area on July 8th 2017. The Cayman Islands National Weather Service recorded an accumulation of 0.68 of an inch measured at the Owen Roberts International Airport on July 8 2017.

Weather charts indicate that a tropical wave moved across the Cayman area on July 14th 2017. The system produced cloudiness and showers with an accumulation of 1.19 inches on July 14th 2017.

The measured accumulation of 3.45 inches for the month was 2.33 inches below the 30 year average for July of 5.78 inches.

August

19-21 warning

Weather charts indicate that a tropical wave moved across the Cayman area on August 6th 2017. The system supported cloudiness and showers with an accumulation measured by the Cayman Islands National Weather Service at the Owen Roberts International Airport of 1.62 inches on August 6th 2017. The system developed into Tropical Storm Franklin on August 7th 2017 and supported fresh winds and rough seas from August 5-7 2017 over the Cayman area for which the Cayman Islands National Weather Service issued a marine warning for the period.

Weather charts indicate that a tropical Wave moved across the Cayman area on August 18th 2017. The system supported cloudiness and showers with an accumulation measured by the Cayman Islands National Weather Service at the Owen Roberts International Airport of 0.95 of an inch of rainfall on August 19th 2017.

Weather charts indicate that remnant low pressure system that was formerly Tropical Storm Harvey passed south of the Cayman area on August 20th 2017. The system redeveloped into Tropical Storm Harvey in the Gulf of Mexico on August 23rd 2017. The system supported fresh winds and rough seas from August 20-21 2017 over the Cayman area for which the Cayman Islands National Weather Service issued a marine warning for the period.

The total measured accumulation of 4.46 inches for the month was 1.44 inches below the 30 year average for August of 5.90 inches.

September

Weather charts indicate that a tropical Wave moved across the Cayman area on September 2nd 2017. The system supported cloudiness and showers with an accumulation measured by the Cayman Islands National Weather Service at the Owen Roberts International Airport of 1.30 inches of rainfall on September 3rd 2017.

Weather charts indicate that a tropical Wave moved across the Cayman area on September 5th 2017. The system supported cloudiness and showers with an accumulation measured by the Cayman Islands National Weather Service at the Owen Roberts International Airport of 0.68 of an inch of rainfall on September 5th 2017.

Weather charts indicate that Hurricane Irma moved west across northern Cuba and north of the Cayman Islands on September 9th through 11th 2017. The system supported strong southwest winds and rough seas across the Cayman area resulting in the National Weather Service issuing marine warnings for the period. Rainfall associated with the system was minimal in Grand Cayman but 1.96 inches of rainfall was recorded in Cayman Brac on September 8th 2017 and 0.91 of an inch on September 9th 2017. The National Weather Service issued flood warnings for Cayman Brac for the period.

Weather charts indicate that an upper level trough supported cloudiness and showers with an accumulation measured by the Cayman Islands National Weather Service at the Owen Roberts International Airport of 4.67 inches of rainfall on September 25-28 2017 and 0.52 of an inch measured on September 30th 2017.

The total measured accumulation of 8.9 inches for the month was 0.16 of an inch higher than the 30 year average for September of 8.74 inches.

October

Weather charts indicate that a strong tropical wave approached the Cayman area on October 3rd 2017. The system strengthened to tropical depression #16, 490 miles south of Grand Cayman on October 4th 2017 and to Tropical Storm Nate 377 miles southwest of Grand Cayman on October 5th 2017. There were no Tropical Storm Watches or Warnings issued for the system. The Cayman Islands National Weather Service issued severe weather statements and warnings for October 4/5th 2017. The Cayman Islands National Weather Service measured 4.76 inches from October 3-5th 2017 at the Owen Roberts International Airport.

Weather charts indicate that a cold front and associated pre-frontal trough moved across the Cayman area on October 25th 2017. Grand Cayman experienced moderate to fresh northeast winds and rough seas along with cloudy rainy weather and an accumulation of 2.92 inches measured at the Owen Roberts International Airport on October 25th 2017.

Cloudiness and showers from the front listed above lingered over the Cayman area for the next 3-4 days and Potential Tropical Cyclone formed 238 miles southwest of Grand Cayman on October 27th 2017. The system moved north and was upgraded to Tropical Depression #18 when it passed 186 miles northwest of Grand Cayman 1 p.m. October 28th 2017. No Tropical Storm Watches or Warnings were issued for the system. The Cayman Islands National Weather Service issued severe weather statements and warnings for October 27/28th 2017. The Cayman Islands National Weather Service measured 5.33 inches from October 27-28th 2017 at the Owen Roberts International Airport.

The total measured accumulation of 15.4 inches is 6.75 inches above the 30 year average for November of 8.65 inches. This was the wettest October in the past 8 years.

The total rainfall amount for 2017 through the end of October is 49.54 inches or 2.18 inches above the 30 year average of 56.2 inches.

November

Weather charts indicate that a high pressure system over the Gulf of Mexico supported fresh northeast winds and rough seas across the Cayman Islands from November 16th to 26th 2016. The Cayman Islands National Weather Service issued Marine Warnings for the period.

The total measured accumulation of 0.16 of an inch is 5.89 inches below the 30 year average for November of 6.05 inches.

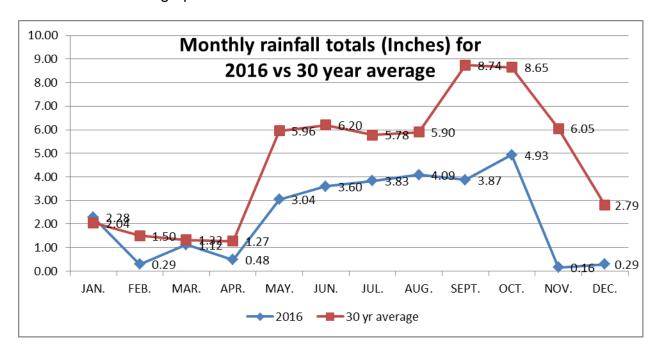
December

Weather charts indicate that a high pressure system over the Gulf of Mexico supported fresh northeast winds and rough seas across the Cayman Islands from December 15th to 31st 2016. The Cayman Islands National Weather Service issued Marine Warnings for the period.

The total measured accumulation of 0.29 of an inch is 2.5 inches below the 30 year average for December of 2.79 inches.

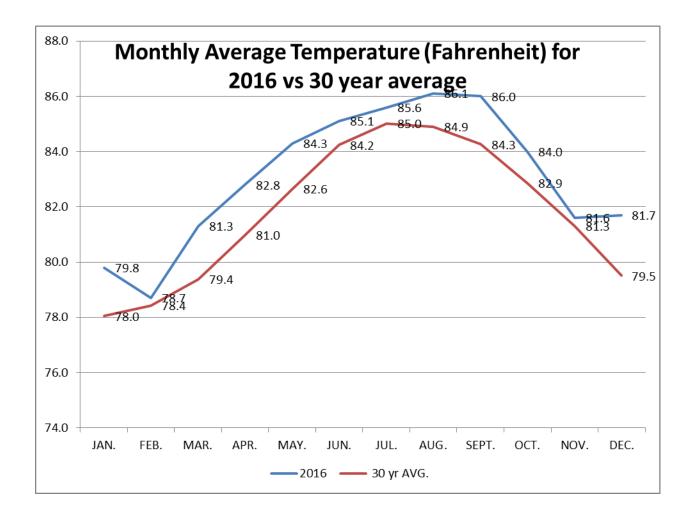
For 2016 the total rainfall was 27.98 inches or 28.22 inches below the 30 year average rainfall of 56.20 inches. The total is the lowest since 1957 when records started.

Below is the rainfall graph for 2016.

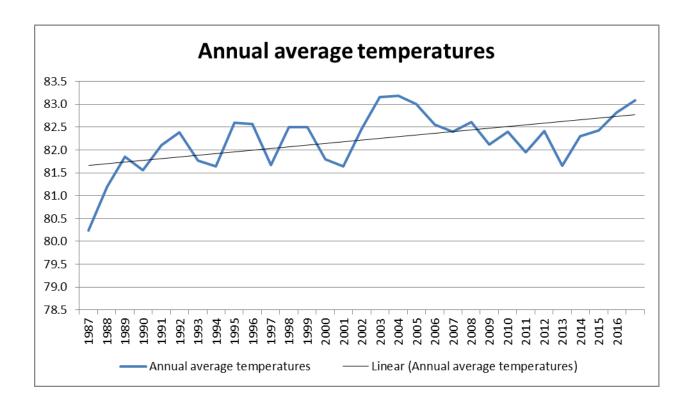


The average temperature for 2016 was 28.4 C 83.1 F or 1.3 F above the 30 year average of 81.8 F. The all time record is 83.2 F in 2002/2003.

Below is the temperature graph for 2016.



Annual temperatures continue to rise. The annual temperature pattern over the past 30 years is shown below.



Evaluation of rainfall data for Cayman Brac indicates that the drought like conditions in Grand Cayman did not extend to Cayman Brac as rainfall totals were fairly high by their standards.