

# **ANNUAL SUMMARY OF WEATHER SYSTEMS** **AFFECTING THE CAYMAN ISLANDS 2007**

## **January**

A strong cold front moved across the Cayman area January 10<sup>th</sup> and though it produced only minimal rainfall accumulation, the associated high pressure system produce strong northeast winds of 15 to 20 knots and very rough seas from January 10<sup>th</sup> to 15<sup>th</sup>.

Second driest January in last 10 years with only 0.43 of an inch of rainfall recorded as compared to 1.96 inches for the 30 year average.

## **February**

There was no significant weather system recorded during the month of February.

February continues to be a very dry month with 3 out of the past 4 years recording less than 0.26 of an inch. The last time this occurred was in 1962.

## **March**

A strong cold front moved across the Cayman area March 17<sup>th</sup> producing only minimal rainfall accumulation, but the associated high pressure system produced strong northeast winds and very rough seas from March 18<sup>th</sup> to 21<sup>st</sup>.

Monthly accumulation of 0.71 of an inch means three straight years below the 30 year average of 1.41 inches.

## **April**

A stationary inverted surface trough produced cloudiness and showers over the northwest Caribbean with an accumulation of 0.54 of an inch on April 4<sup>th</sup>.

Although the monthly total of 1.61 inches of rainfall compares favorably with the 30 year average the drying trend continued for March with only one March out of the past 10 years above the 30 year average of 1.68 inches.

## **May**

A surface trough produced cloudiness and showers over the northwest Caribbean with accumulations of 1.22 and 1.93 inches on May 14<sup>th</sup> and 16<sup>th</sup> respectively.

A surface trough moved across the Cayman and produced cloudiness and showers with an accumulation of 1.61 inches on May 21<sup>st</sup>.

A surface trough moved across the Cayman and produced cloudiness and showers with an accumulation of 1.35 inches on May 24<sup>th</sup>.

A surface trough moved across the Cayman May 30<sup>th</sup> and produced cloudiness and showers with accumulations of 0.67 and 1.78 inches on May 30<sup>th</sup> and 31<sup>st</sup> respectively.

May's accumulation of 10.86 inches represents nearly twice the 30 year average of 5.53 inches and the second wettest May in the past 10 years.

## **June**

An upper level trough produced an extensive area of cloudiness and showers over the northwest Caribbean with an accumulation of 5.11 inches measured from June 11 through 15.

A tropical wave moved across the Cayman June 26<sup>th</sup> and produced cloudiness and showers with an accumulation of 1.98 inches.

Rainfall accumulation for the month was 8.04 inches as compared to 5.72 inches for the 30 year average. The total represents the 4<sup>th</sup> time out of the past 5 years when June's rainfall total exceeded the 30 year average.

## **July**

A tropical wave moved across the Cayman Area July 7<sup>th</sup> and produced cloudiness and showers with an accumulation of 1.07 inches.

A tropical wave moved across the Cayman July 24<sup>th</sup> and produced cloudiness and showers with an accumulation of 2.11 inches.

Rainfall accumulation for the month was 3.63 inches as compared to 5.81 inches for the 30 year average. The total represents the lowest in the past 5 years.

## **August**

A tropical wave moved across the Cayman Area, on August 4<sup>th</sup> producing cloudiness and showers with an accumulation of 0.66 of an inch.

A tropical wave moved across the Cayman Area, on August 11<sup>th</sup> producing cloudiness and showers with an accumulation of 1.34 inches.

A tropical wave moved across the Cayman Area on August 23<sup>rd</sup>, producing cloudiness and showers with accumulations of 0.52 of an inch.

On August 13<sup>th</sup> the fourth tropical depression of the 2007 hurricane season formed in the far eastern Atlantic Ocean. Tropical Depression #4 would become Tropical Storm Dean 10 a.m. August 14<sup>th</sup> as it moved to 1490 miles east of the Lesser Antilles. The storm would continue to strengthen and reach hurricane strength 4 a.m., August 16<sup>th</sup> when it was 485 miles east of Barbados. The Cayman Islands issued a Hurricane Watch for Hurricane Dean 10 a.m., August 18<sup>th</sup> when Dean moved to 15.7 N latitude 68.6 W longitude or 565 miles east-southeast of Jamaica. The Hurricane Watch was upgraded to a Hurricane Warning 10 p.m. August 18<sup>th</sup>.

Tropical Storm force winds began to affect the Sister Islands 10 p.m. August 19<sup>th</sup> and Grand Cayman 1 a.m. the following morning. The hurricane passed within 107 miles south of Grand Cayman 7 a.m. August 20<sup>th</sup>. The storm became the first category 5 system of the year. Tropical Storm force winds ceased in the Sister Islands 10 a.m. August 20<sup>th</sup> and in Grand Cayman 4 p.m. August 20<sup>th</sup>. The Hurricane produced a 1 to 3 foot storm surge and 7 to 9 feet of waves in the Sister Islands and 4 to 6 feet storm surge and 10 to 12 feet waves in Grand Cayman. Minimal damage was reported with Grand Cayman receiving damage from wave action along the south coast.

Rainfall accumulation for the month was 4.54 inches as compared to 6.35 inches for the 30 year average.

## **September**

On August 31<sup>st</sup> the sixth tropical depression of the 2007 hurricane season formed near 11.8 N 58.6 W or 180 miles east-southeast of the Windward Islands. The depression strengthened to Tropical Storm Felix 4 a.m., September 1<sup>st</sup> when the system was near 12.4 N 62.0 W, or 30 miles northwest of Grenada, and reached hurricane strength 7 p.m. September 1<sup>st</sup> when it was near 12.6 N 66.0 W, or 270 miles east of Aruba. The Cayman Islands issued a Tropical Storm Watch for Grand Cayman only; from 10 a.m. September 2<sup>nd</sup>. The Tropical Storm Watch was discontinued 7 p.m. September 3<sup>rd</sup>. The storm passed 338 miles south of Grand Cayman as a category IV hurricane.

The Cayman Islands received no damage from Hurricane Felix but cloudiness and showers spread across Grand Cayman with an accumulation of 1.08 inches recorded on September 4<sup>th</sup>.

A tropical wave interacted with an upper level low pressure system to produce cloudiness and showers as the wave moved across the Cayman area. This produced rainfall accumulation of 0.9 of an inch on September 13<sup>th</sup>.

An upper level trough over the Yucatan Peninsula supported an extensive area of cloudiness that moved across Grand Cayman with an accumulation of 0.95 of an inch on September 20<sup>th</sup>.

Rainfall accumulation for the month was 5.56 inches as compared to 8.04 inches for the 30 year average. The total represents the lowest since 1998.

## **October**

An extensive area of cloudiness, scattered showers and thundershowers, developed east of the Cayman area in associated with a broad area of low pressure. Cloudiness and showers from this system moved over the Cayman area from time to time and produced a rainfall accumulation of 7.35 inches from October 9<sup>th</sup> through October 12<sup>th</sup>.

A broad area of low pressure produced an area of cloudiness and showers over the Cayman area with a rainfall accumulation of 1.16 inches on October 26<sup>th</sup>.

Rainfall accumulation for the month was 12.45 inches as compared to 8.45 inches for the 30 year average. October's total is the highest for the year and this is in keeping with the dependability of high rainfall totals during October with 6 out of the past 10 years of October rainfall having exceeded 10 inches.

## **November**

Weather charts indicate that a cold front moved across the Cayman area November 1<sup>st</sup> - 3<sup>rd</sup>, and became stationary east of Cayman. There was no significant rainfall measured with the passage of this front. The associated high pressure system produced fresh to strong northeast winds (15 – 20kts), and rough seas November 3<sup>rd</sup> through 5<sup>th</sup>.