

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

## **January**

Quiet with no significant weather systems affecting the Cayman area.

## **February**

February 5 Cold front with minimal rainfall.

February 12 Strong cold front with minimal rainfall and rough seas along the west coast

## **March**

March 8 Cold front with minimal rainfall but with hail reported and rough seas along west coast

March 25 Cold front with minimal rainfall but rough seas along west coast

## **April**

April 10 Cold front with minimal rainfall

April 10 Cold front with 0.5 of an inch measured

April 22 Cold front with minimal rainfall

Climatologically the dry season ends mid May. Dry season rainfall usually determined by the passage of frontal systems. This dry season produced 7 cold fronts with an accumulation of 3.55 inches (January-April). This marks a 3.34 inches deficit or 48% of the expected rainfall total for this time (6.89 inches).

## **May**

Month that usually marks the beginning of the rainy season was instead extremely quiet with minimal rainfall and no significant systems. The total rainfall for the month was 2.60 inches as compared to 5.53 inches normally received. This marked a 2.93 inches deficit or 53% of the expected rainfall total. This marks the second straight year where each of the first 5 months has been below average rainfall totals.

## **June**

- June 3 Weak low pressure system over the southwest Caribbean and supported a rainfall accumulation of 2.79 inches
- June 7-9 Surface trough moved across the Cayman area and supported a rainfall accumulation of 7.99 inches over the three days. This led to localized flooding. This system also affected the Sister Islands with periods of very heavy showers and a measured 5.53 inches on July 7. This excessive rainfall total resulted in localized flooding and the closure of the runway on July 10 and disruptions to the West End school, Cayman Brac.
- June 15 Tropical wave moved across the Cayman area and supported cloudiness and showers with an accumulation of 0.65 of an inch.
- June 30 Tropical wave moved across the Cayman area and supported cloudiness and showers with an accumulation of 1.60 inches.

This was the fourth wettest June on record.

## **July**

- July 3-5 Upper trough supported cloudiness and thundershowers with an accumulation of 3.58 inches
- July 26 Tropical wave moved across the Cayman area and supported cloudiness and showers with an accumulation of 1.35 inches.
- July 30-31 Upper low pressure system supported cloudiness and thundershowers with an accumulation of 3.93 inches

## **August**

- August 2 Upper level trough produced cloudiness and showers across the region with an accumulation of 0.99 of an inch
- August 10 Upper level trough produced cloudiness and showers across the region with an accumulation of 0.61 of an inch
- August 18 Upper level trough produced cloudiness and showers across the region with an accumulation of 0.70 of an inch
- August 21 Upper level trough produced cloudiness and showers across the region with an accumulation of 1.25 inches

The biggest synoptic level system to affect the area was Ernesto. The details are listed below.

### **Tropical Storm Ernesto**

#### **Hurricane Watch issued - Saturday 10 a.m. Aug 26th, 2006**

TROPICAL STORM ERNESTO WAS  
LOCATED NEAR LATITUDE 15.1 NORTH...LONGITUDE 71.2 West

#### **Ernesto upgraded to a hurricane – Sunday 7 a.m. Aug 27th, 2006**

5:04 AM EDT SUN AUG 27 2006  
...AIR FORCE RECONNAISSANCE AIRCRAFT INDICATES THAT TROPICAL STORM  
ERNESTO HAS NOW REACHED HURRICANE STRENGTH... 800 AM EDT...1200Z...THE  
CENTER OF HURRICANE ERNESTO WAS  
LOCATED NEAR LATITUDE 17.3 NORTH...LONGITUDE 73.4 WEST

Hurricane Watch discontinued for all islands. Tropical Storm Watch in effect for the Sister Islands - Sunday 8 p.m. Aug 27

All watches and warnings lifted - Monday 7 a.m. Aug 28

CPA-189 miles northeast CYB – Monday 10 p.m. Aug 28th, 2006

This storm produced little in terms of weather for the Cayman Islands.

## **September**

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|--------------|--|
| September 2  | Upper level trough supported an area of unsettled weather and an accumulation of 1.40 inches. A very strong waterspout came ashore and produced damage to roofs, plants and yards in Prospect, Grand Cayman. |
| September 12 | Daytime heating supported an already unstable atmosphere to produce cloudiness and thundershowers across the Cayman area resulting in an accumulation of 3.78 inches.  |
| September 28 | Upper level trough supported an area of cloudiness and thundershowers with an accumulation of 2.10 inches.   |
| September 30 | Inverted trough moved across the Cayman area resulting in an area of cloudiness and thundershowers with an accumulation of 1.10 inches   |

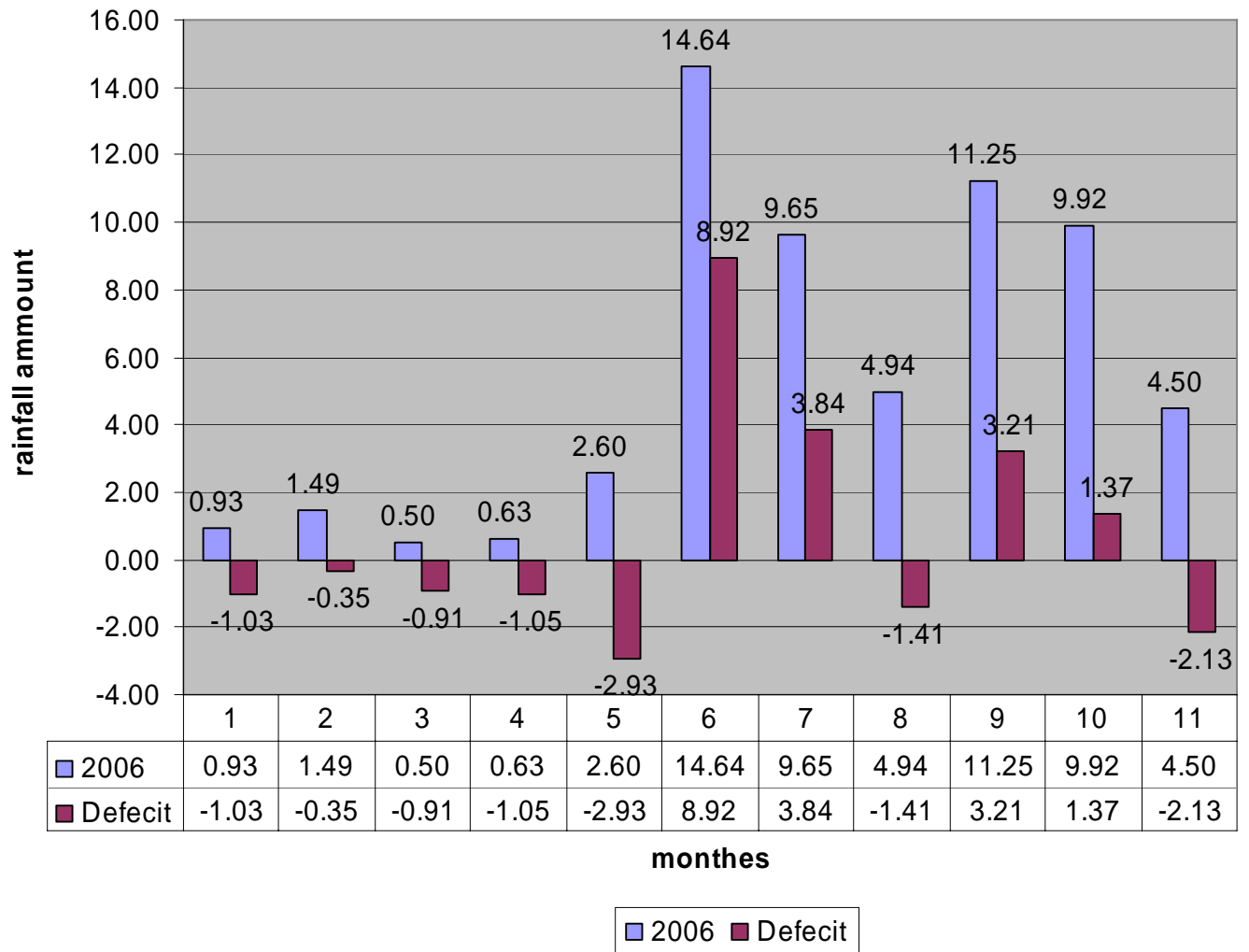
## **October**

- October 8<sup>th</sup> Surface trough produced cloudiness and an accumulation of 1.33 inches.
- October 20<sup>th</sup> Surface trough produced cloudiness and an accumulation of 1.36 inches.
- October 28<sup>th</sup> A cold front produced cloudiness and an accumulation of 2.83 inches
- October 31<sup>st</sup> A tropical wave produced cloudiness and an accumulation of 1.02 inches.

## **November**

- November 6 A dissipating stationary front produced cloudiness and an accumulation of 1.12 inches.
- November 19 A cold front moved across the Cayman area to produced cloudiness, showers, fresh northerly winds and rough seas on November 19. This front produced rough seas along the west and southwest coasts resulting in the closing of the George Town Harbour and portions of the main road for a few days. An accumulation of 0.56 of an inch was recorded on November 19<sup>th</sup>.

## 2006 rainfall and deficit over 30 yr average



TTAA00 KNHC DDHMM  
BULLETIN  
TROPICAL STORM ERNESTO ADVISORY NUMBER 8  
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL AL052006  
1100 AM AST SAT AUG 26 2006

...ERNESTO CONTINUES WEST-NORTHWESTWARD OVER THE CARIBBEAN...NEW WARNINGS AND WATCHES ISSUED...

AT 11 AM AST...1500Z...THE GOVERNMENT OF JAMAICA HAS ISSUED A TROPICAL STORM WARNING AND A HURRICANE WATCH FOR JAMAICA.

AT 11 AM AST...1500Z...THE GOVERNMENT OF THE CAYMAN ISLANDS HAS ISSUED A HURRICANE WATCH FOR THE CAYMAN ISLANDS.

A TROPICAL STORM WARNING REMAINS IN EFFECT FOR THE SOUTH COAST OF HISPANIOLA FROM THE HAITI-DOMINICAN REPUBLIC BORDER WESTWARD TO THE SOUTHWESTERN TIP OF HAITI.

INTERESTS IN ELSEWHERE IN THE NORTHWESTERN CARIBBEAN SEA...CUBA...THE NORTHEASTERN YUCATAN PENINSULA OF MEXICO...AND THE SOUTHEASTERN GULF OF MEXICO...SHOULD MONITOR THE PROGRESS OF ERNESTO.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...INCLUDING POSSIBLE INLAND WATCHES AND WARNINGS...PLEASE MONITOR PRODUCTS ISSUED BY YOUR LOCAL WEATHER OFFICE.

AT 1100 AM AST...1500Z...THE CENTER OF TROPICAL STORM ERNESTO WAS LOCATED NEAR LATITUDE 15.1 NORTH...LONGITUDE 71.2 WEST OR ABOUT 250 MILES...405 KM...SOUTH-SOUTHWEST OF SANTO DOMINGO IN THE DOMINICAN REPUBLIC AND ABOUT 420 MILES...680 KM...EAST-SOUTHEAST OF KINGSTON JAMAICA.

ERNESTO IS MOVING TOWARD THE WEST-NORTHWEST NEAR 14 MPH...22 KM/HR ...AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE FOR THE NEXT 24 HOURS. THIS MOTION SHOULD BRING THE CORE OF ERNESTO SOUTH OF THE SOUTHERN COAST OF HISPANIOLA TODAY...AND NEAR JAMAICA ON SUNDAY.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH...85 KM/HR...WITH HIGHER GUSTS. SOME STRENGTHENING IS FORECAST DURING THE NEXT 24 HOURS... AND ERNESTO COULD BE NEAR HURRICANE STRENGTH AS IT PASSES NEAR JAMAICA.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 115 MILES...185 KM FROM THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 997 MB...29.44 INCHES. TIDES OF UP TO 3 FT ABOVE NORMAL TIDE LEVELS ARE EXPECTED ON JAMAICA AS THE CENTER OF ERNESTO APPROACHES.

RAINFALL AMOUNTS OF 4 TO 8 INCHES...WITH POSSIBLE ISOLATED MAXIMUM AMOUNTS OF 12 INCHES...ARE EXPECTED IN ASSOCIATION WITH ERNESTO ACROSS JAMAICA. ACROSS PORTIONS OF HAITI AND THE DOMINICAN REPUBLIC...RAINFALL AMOUNTS OF 3 TO 6 INCHES ARE EXPECTED...WITH ISOLATED AMOUNTS OF 8 INCHES POSSIBLE. THE OUTER BANDS OF ERNESTO MAY PRODUCE 1 TO 3 INCH RAINFALL AMOUNTS ACROSS PUERTO RICO AND THE VIRGIN ISLANDS.

REPEATING THE 1100 AM AST POSITION...15.1 N...71.2 W. MOVEMENT  
TOWARD...WEST-NORTHWEST NEAR 14 MPH. MAXIMUM SUSTAINED WINDS...50 MPH.  
MINIMUM CENTRAL PRESSURE...997 MB.

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