## WEEKLY WEATHER OUTLOOK BELIZE, CENTRAL AMERICA

PERIOD: Sunday, June 24 until Monday, July 2, 2012 DATE ISSUED: Sunday, June 24, 2012 - 3:00 pm

RFrutos EcoSolutions & Services

**SYNOPSIS**: Tropical storm Debby in the NE Gulf of Mexico will remain nearly stationary during the next 72 hour. It will then begin a slow NE'ly motion later on Wednesday and Thursday morning, moving across northern Florida and into the SW Atlantic by late Thursday through Friday. A trough of low pressure near the surface will extend from the center of Debby to the Yucatan peninsula and Belize through Wednesday. Meanwhile, an upper level low will drift westwards to the NW Caribbean and Belize by next Monday morning. No tropical cyclone is expected to develop or move through the Caribbean over the next seven days.



Figure 1 GOES IR Satellite picture for 6:00 am, Monday June 25, 2012, with super-imposed surface map valid for 3:00 am. TS Debby remains stationary in the NE Gulf of Mexico near lat. 28.6N, Lon. 85.8W. Moderate convective clusters can be seen from eastern Cuba to the Gulf of Honduras and northern Belize.

Weak pressure gradient will persist over the southern Gulf of Mexico and the NW Caribbean during most of this week, with a low pressure system remaining in the vicinity of Belize and Yucatan through Friday. Some residual moisture will continue to stream into the NW Caribbean from the Pacific this week, while an upper low vortex forms over the SW Caribbean and makes it way towards the NW Caribbean over the weekend and on Monday.

Daytime heating and instability will induce more outbreaks of showers and thunderstorms over Belize and coastal waters during most of this working week and the coming weekend. However, the rainfall is not expected to be as intense and persistent as was experience last week. We will see more hours of sunshine over most districts this week.

Daily rainfall accumulations will range from 0.50-1.00 inch on Sunday through Friday over most districts, but especially in the interior. Rainfall amounts will be higher in the hilly terrain of the Cayo, Stann Creek and Toledo Districts. Daily rainfall totals on Saturday through Monday will be ranging from 0.25-0.50 of-an-inch, especially in the South and along the coast. Folks in low lying areas should remain vigilant!

Sun	Mon	Tue	Wed	Thu	Fri	Sat
June 24, 2012	June 25, 2012	June 26, 2012	June 27, 2012	June 28, 2012	June 29, 2012	June 30, 2012
Sunny with cloudy periods; few showers & thunderstorms mostly inland	Sunny with cloudy periods; few showers & thunderstorms mostly inland	Cloudy with scattered showers & thunderstorms mostly over west-central interior	Cloudy with scattered showers & thunderstorms mostly over west-central interior	Cloudy with more out- breaks of showers & thunderstorms mostly west- central areas	Cloudy with a few showers & thunderstorms mostly in the South and along the coast	Cloudy with a few showers & thunderstorms mostly over NW and west- central sector of the mainland.
Rainfall: 0.25-0.50 of-an inches	Rainfall: 0.50-1.50 inches	Rainfall: 0.50 – 1.50 inches	Rainfall: 1.00 – 2.00 inches	Rainfall: 1.25 – 2.00 inches	Rainfall: 0.75-1.50 inches	Rainfall: 0.50-1.50 inches

### **Belize Seven-day Outlook for Agriculture and Industry...**



Figure 2 Surface map valid for 3:00 am Monday, June 25, 2012, showing TS Debby in the NE Gulf of Mexico almost stationary, with 50 mph maximum sustained one-minute winds. Weak pressure gradient over the NW Caribbean and Belize.



OGZ SOUTHWEST NORTH ATLANTIC SFC ANALYSIS ISSUED: Mon Jun 25 08:40:07 UTC 2012

NATIONAL HURRICANE CENTER MIAMI, FLORIDA BY TAFB ANALYST: MKH COLLABORATING CENTERS: NHC OPC HPC



Figure 3 NHC 72hr forecast surface map valid for 6:00 pm Wednesday, June 27, 2012, showing TS Debby still lingering off the Louisiana coast with a surface trough extending southwards over eastern Yucatan and NW Belize.





Figure 4 GFS model for daily rainfall totals of 0.25-0.50 of-an-inch in the NW interior of Belize for Wednesday afternoon – Thursday morning, June 27-28, 2012. The end date of this GFS rainfall projection is 12:00 pm, Thursday, June 28, 2012.

120628/1800V084 6FS 084-HR TOTAL PCPN (IN)

# OUTLOOK FOR THE MAIN DEVELOPMENT REGION (MDR) OF THE TROPICAL ATLANTIC BASIN

ABNT20 KNHC 251117 TWOAT

TROPICAL WEATHER OUTLOOK NWS NATIONAL HURRICANE CENTER MIAMI FL 800 AM EDT MON JUN 25 2012

FOR THE NORTH ATLANTIC...CARIBBEAN SEA AND THE GULF OF MEXICO...

THE NATIONAL HURRICANE CENTER IS ISSUING ADVISORIES ON TROPICAL STORM DEBBY...LOCATED OVER THE NORTHEASTERN GULF OF MEXICO.

ELSEWHERE...TROPICAL CYCLONE FORMATION IS NOT EXPECTED DURING THE NEXT 48 HOURS.

FORECASTER FRANKLIN

## DISCUSSION AND 48-HOUR OUTLOOK

AT 700 AM CDT...1200 UTC...6:00 AM BELIZE... THE CENTER OF TROPICAL STORM DEBBY WAS LOCATED NEAR LATITUDE 28.6 NORTH...LONGITUDE 85.8 WEST. DEBBY HAS REMAINED NEARLY STATIONARY OVER THE PAST SEVERAL HOURS. LITTLE MOVEMENT IS EXPECTED DURING THE NEXT COUPLE OF DAYS...BUT THIS FORECAST REMAINS UNCERTAIN DUE TO WEAK STEERING CURRENTS.

MAXIMUM SUSTAINED WINDS REMAIN NEAR 50 MPH...85 KM/H...WITH HIGHER GUSTS. LITTLE CHANGE IN STRENGTH IS EXPECTED OVER THE NEXT DAY OR SO.

TROPICAL-STORM-FORCE WINDS EXTEND OUTWARD UP TO 200 MILES...325 KM FROM THE CENTER.

THE ESTIMATED MINIMUM CENTRAL PRESSURE IS 993 MB...29.32 INCHES.

## HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS WILL CONTINUE OVER PORTIONS OF THE FLORIDA GULF COAST TODAY.

STORM SURGE...THE COMBINATION OF A STORM SURGE AND THE TIDE WILL CAUSE NORMALLY DRY AREAS NEAR THE COAST TO BE FLOODED BY RISING WATERS. THE WATER COULD REACH THE FOLLOWING DEPTHS ABOVE GROUND AT THE TIMES OF HIGH TIDE OVER THE NEXT FEW DAYS...

APALACHEE BAY TO WACCASASSA BAY...4 TO 6 FT FLORIDA WEST COAST SOUTH OF WACCASASSA BAY...2 TO 4 FT ALABAMA-FLORDA BORDER EASTWARD TO APALACHEE BAY...2 TO 4 FT SOUTHEASTERN LOUISIANA TO ALABAMA-FLORIDA BORDER...1 TO 3 FT

THE DEEPEST WATER WILL OCCUR ALONG THE IMMEDIATE COAST IN AREAS OF ONSHORE FLOW. SURGE-RELATED FLOODING DEPENDS ON THE RELATIVE TIMING OF THE SURGE AND THE TIDAL CYCLE...AND CAN VARY GREATLY OVER SHORT DISTANCES. FOR INFORMATION SPECIFIC TO YOUR AREA...PLEASE SEE PRODUCTS ISSUED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE.

RAINFALL...DEBBY IS EXPECTED TO PRODUCE TOTAL RAIN ACCUMULATIONS OF 10 TO 15 INCHES OVER EASTERN PORTIONS OF THE FLORIDA PANHANDLE AND NORTHERN FLORIDA...WITH ISOLATED MAXIMUM AMOUNTS OF 25 INCHES POSSIBLE. SURROUNDING THIS AREA...TOTAL RAIN ACCUMULATIONS OF 5 TO 10 INCHES ARE EXPECTED OVER CENTRAL FLORIDA AND SOUTHEAST GEORGIA INTO COASTAL SOUTH CAROLINA...WITH ISOLATED MAXIMUM AMOUNTS OF 15 INCHES POSSIBLE. GIVEN THE RECENT HEAVY RAINFALL AND WET SOIL CONDITIONS...THESE ADDITIONAL AMOUNTS WILL EXACERBATE THE FLASH FLOOD THREAT ACROSS PORTIONS OF NORTHERN FLORIDA AND SOUTHERN ALABAMA.

TORNADOES...A FEW TORNADOES ARE POSSIBLE TODAY ACROSS THE EASTERN FLORIDA PANHANDLE...AS WELL AS WESTERN AND CENTRAL PORTIONS OF THE FLORIDA PENINSULA.

## **Summary of Atlantic Basin 2012 Hurricane Season Forecast:**

<b>Tropical Cyclones</b>	NHC 1981-2010 Seasonal Average	CSU (Klotzbach	NOAA	INSMET (Cuba)
Named Storms (NS)	12	<u>a Gray)</u> 10	9_15	10
Hurricanes (H)	6	4	4-8	5
Major Hurricanes	3	2	1-3	
Atlantic NS	7.1 (INSMET)			8
Caribbean NS	1.5 (INSMET)			1
Gulf of Mexico NS	2.0 (INSMET)			1
Probability of at least one moving through the Caribbean Sea from Atlantic	50% (INSMET)			55%
Probability of at least one forming and reaching hurricane intensity within the Caribbean Sea	43% (INSMET)			15%

### Expected 2012 activity in the Atlantic Basin

Climate signals and evolving oceanic and atmospheric conditions, combined with dynamical model forecasts, indicate that a near-normal 2012 Atlantic hurricane season is most likely. This outlook calls for a 50% chance of a near-normal season, a 25% chance of an above-normal season, and a 25% chance of a below normal season.

An important measure of the total overall seasonal activity is NOAA's <u>Accumulated</u> <u>Cyclone Energy (ACE) index</u>, which accounts for the intensity and duration of named storms and hurricanes during the season. This outlook indicates a 70% chance that the 2012 seasonal ACE range will be 65%-140% of the median. According to <u>NOAA's</u> <u>hurricane season classifications</u>, an ACE value above 111% of the 1981-2010 median reflects an above-normal season. An ACE value below 71.4% of the median reflects a below-normal season.

Consistent with the expected ACE range, <u>the 2012 Atlantic hurricane season is predicted</u> to produce (with 70% probability for each range) 9-15 named storms, of which 4-8 are expected to become hurricanes, and 1-3 are expected to become major hurricanes. These ranges are centered near the 1981-2010 period averages of 12 named storms, 6 hurricanes and 3 major hurricanes. (Source: NOAA, June 2012)