### WEEKEND WEATHER OUTLOOK BELIZE, CENTRAL AMERICA

PERIOD: Friday, Aug. 3 until Monday, Aug. 6, 2012

DATE ISSUED: Friday, August 3, 2012, 6:00 pm

**RFrutos** 

SYNOPSIS: An unstable easterly airflow will prevail over the NW Caribbean this weekend favoring some showers and thunderstorms over northern Central America and Belize. Tropical storm Ernesto is moving westward at 21 mph over the eastern Caribbean with maximum sustained winds of 50 mph.

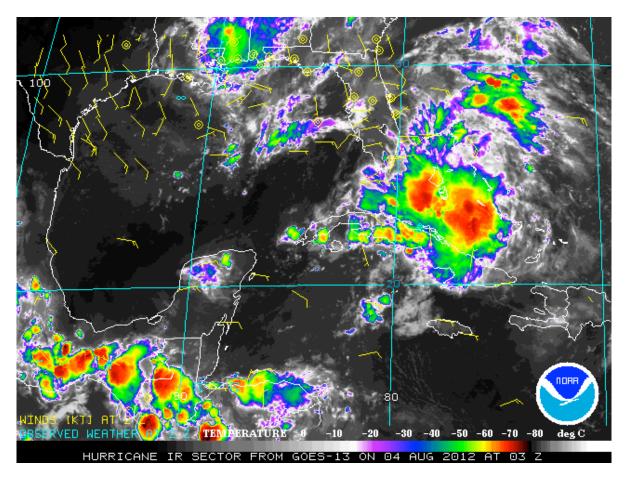


Figure 1 GOES IR Satellite image for 9:00 pm, Friday, August 3, 2012, shallow convection over extreme southern Toledo district. Heavier thunderstorm activity are evident over central Guatemala and along the Caribbean coast of Honduras.

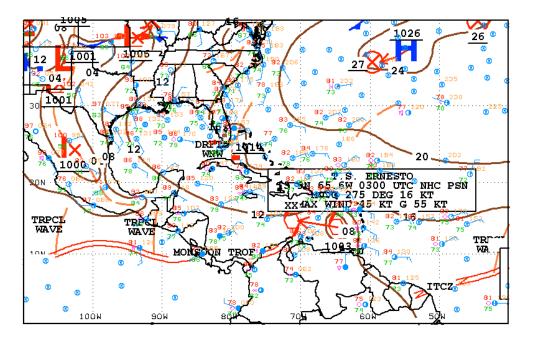


Figure 2 NHC surface map for 9:00 pm, Friday, August, 2012, showing tropical storm Ernesto in the eastern Caribbean moving westward at 21 mph. Maximum sustained winds were 50 mph.



OOZ SOUTHWEST NORTH ATLANTIC SFC ANALYSIS ISSUED: Sat Aug 4 02:45:39 UTC 2012 NATIONAL HURRICANE CENTER MIAMI, FLORIDA BY TAFB ANALYST: GARCIA COLLABORATING CENTERS: NHC OPC HPC

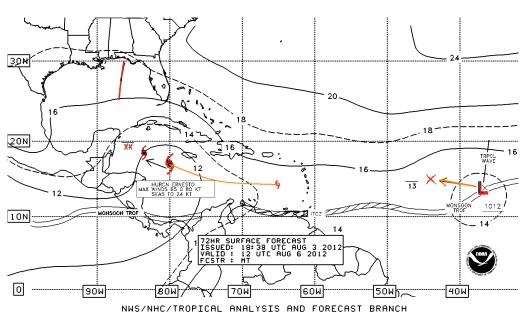


Figure 3 NHC 72-hr forecast surface map valid for 6:00 am, Monday, August 6, 2012 has hurricane Ernesto SW of Jamaica near 17N 80W heading on a WNW track towards the central coast of Yucatan.

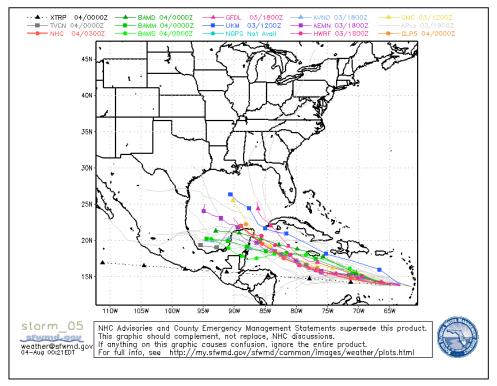


Figure 4 Hurricane Model tracks for tropical storm Ernesto initialized at 6:00 pm, Friday, August 3, 2012. Most of the model tracks have Ernesto making landfall over the coast of central or southern Yucatan peninsula, by Wednesday afternoon.

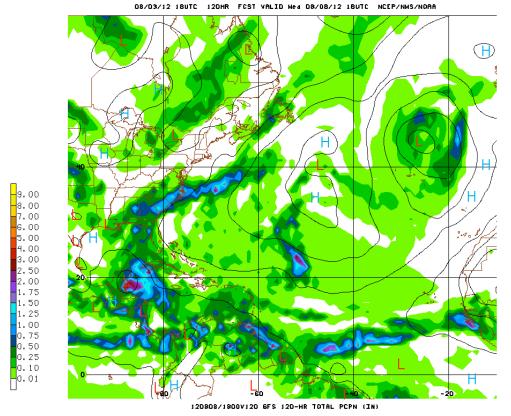


Figure 5 GFS model rainfall projection showing the 24-hour rainfall accumulation for the period ending 12:00 pm, Wednesday, August 8, 2012. Rainfall concentrated over northern and central areas of the coastal waters and the mainland of Belize, with totals ranging from 1.50-3.00 inches. Higher rainfall in the hills associated with Ernesto.

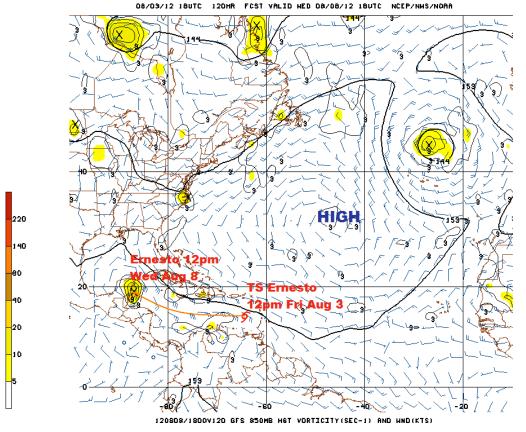


Figure 6 GFS model 120-hr vorticity projection at 850 mb (5,000ft), valid for 12:00 pm Wednesday, August8, 2012, projecting cyclonic vorticity centre (Ernesto) near the southern coast of Yucatan by mid-day, Wednesday, August 8, 2012.

Conditions will remain unstable this weekend favouring a few showers and thunderstorms. Daytime heating will also add to the instability. Expect a mix of sunshine and cloudy spells through Monday. Daily rainfall accumulations will be in the range of 0.25-0.50 of-an-inch today Friday, through the weekend and Monday especially in the elevated areas of the interior. The feature of interest next week will be the movement of tropical storm Ernesto through the NW Caribbean. Ernesto is moving at a fairly fast clip of 21 mph at present, but it is forecast to slow down and strengthen as it moves further west through the central Caribbean this weekend. Hurricane models (Figure 4) are projecting a WNW track for Ernesto as it comes farther west, with possible landfall over southern or central Yucatan by mid day on Wednesday of next week. All eyes will be on Ernesto this weekend and early next week. All interest in the central and western Caribbean should remain informed on the progress of tropical storm Ernesto.

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

Fri	Sat	Sun	Mon	Tue	Wed	Thu
Aug 3, 2012	Aug 4, 2012	Aug 5, 2012	Aug 6, 2012	Aug 7, 2012	Aug 8, 2012	Aug 9, 2012
<u></u>	15		<b>*</b>			
Sunny with isolated showers or thunderstorms	Sunny with isolated showers or thunderstorms	Sunny with isolated showers or thunderstorms	Sunny with cloudy spells. Isolated showers and thunderstorms	Cloudy with showers & thunderstorms increasing along coast / hills especially	Overcast with frequent outbreaks of showers & thunderstorms mainly central & northern areas	Overcast with frequent outbreaks of showers & thunderstorms mainly central & northern areas.
Rainfall: 0.10-0.25of-an- inch	Rainfall: 0.10-0.50of-an- inch	Rainfall: 0.1025 of-an- inch	Rainfall: 0.25-0.50 inch	Rainfall: 0.75-1.00 inch. Higher in the hills	Rainfall: 1.75-2.00 inches. Higher in the hills	Rainfall: 2.50-4.00 inches

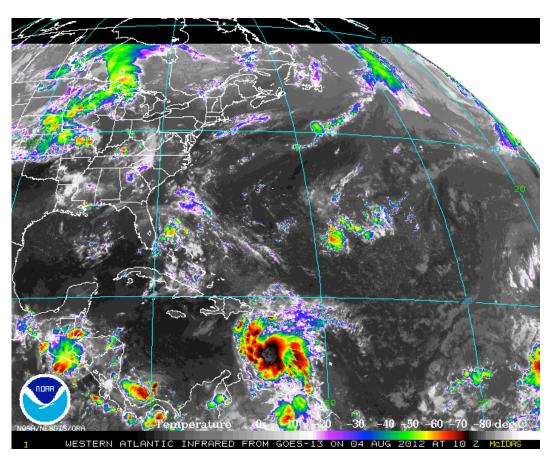


Figure 7 GOES IR
Satellite image valid for
12:00 am August 4,
2012, showing very deep
and organized
convection in the eastern
Caribbean associated
with tropical storm
Ernesto

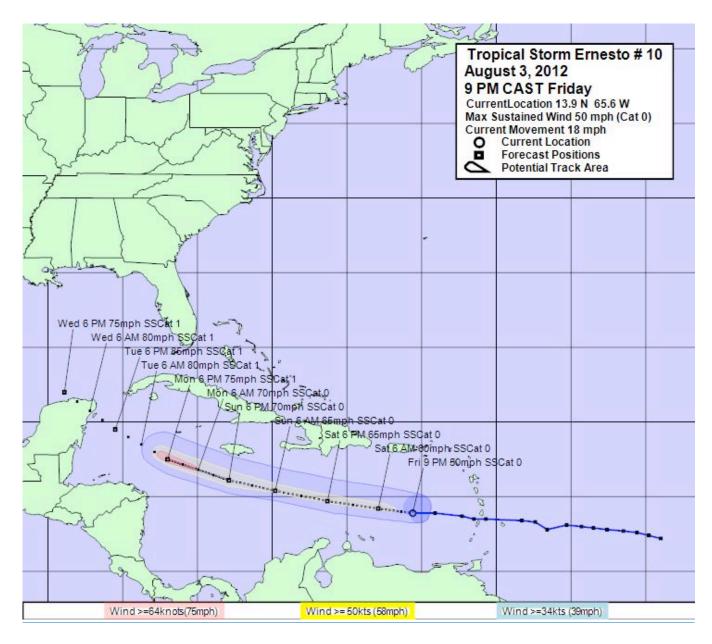
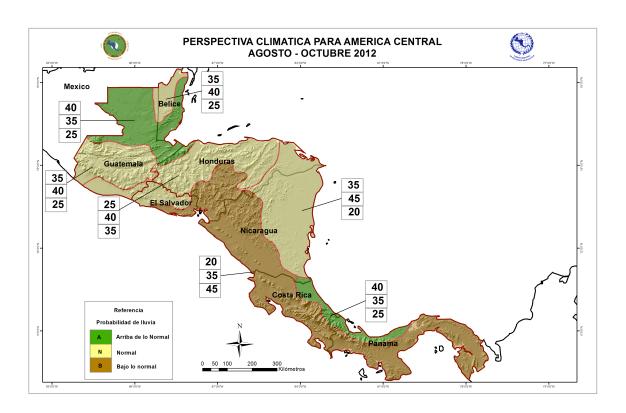


Figure 8 Hurrevac Model (FEMA) projection for tropical storm Ernesto through Wednesday of next week.

# Central America Climate Outlook for the Period ASO, 2012

#### San José, Costa Rica, July 17-18, 2012



## This regional climate outlook is based on:

- i) A projected warm phase of ENSO (El Nino) persisting over the eastern Pacific during the period August-September-October;
- ii) About normal sea surface temperature in the Main Development Region (MDR) of the tropical Atlantic Ocean;
- iii) About normal hurricane activity forecast for the tropical Atlantic Basin; and
- iv) Considering analogous years to the year 2012, namely: 2000, 2006, and 2009.

The perspective for Belize is for **above normal** rainfall accumulations along coastal areas and Southern Districts, and generally **normal** rainfall accumulations for west-central and northern Belize for the period August-September-December, 2012.

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

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

Tropical Cyclones	NHC 1981-2010 Seasonal Average	CSU (Klotzbach & Gray)	NOAA	INSMET (Cuba)
Named Storms (NS)	12	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	<b>1.5 (INSMET)</b>			1
Gulf of Mexico NS	2.0 (INSMET)			1
Probability of at least one moving through the Caribbean Sea from Atlantic	50% (INSMET)			55%

### **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 Cyclone Energy</u> (ACE) index, 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 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, the 2012 Atlantic hurricane season is predicted 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).