WEEKLY WEATHER OUTLOOK BELIZE, CENTRAL AMERICA

PERIOD: Sunday-Monday, Aug. 5-13, 2012

DATE ISSUED: Sunday, Aug. 5, 2012 – 12:00 pm

RFrutos

EcoSolutions & Services

SYNOPSIS: The feature of interest this week will be the approach and landfall of tropical cyclone Ernesto along the northern coast of Belize on Tuesday night or early Wednesday morning as a minimal hurricane. The GFS model cyclonic vorticity projection has the center of Ernesto moving across the central coast of Belize early on Wednesday. Although Ernesto is entraining dry air as it moves into the western Caribbean this evening, environmental conditions will still be favorable for the system to strengthen to hurricane intensity before making landfall over the northern or central coast of Belize. A strong windshear zone is evident in the extreme NW Caribbean and SE Gulf of Mexico, while a persistent high pressure ridge to the north of the western Caribbean will keep Ernesto on a westerly to westnorthwesterly track, propelling the system towards the southern Yucatan-Belize coast. Regardless of where, along the coast of Belize, Ernesto makes landfall, tropical storm force winds will affect most areas of Belize, with hurricane force winds in a narrow zone near the center. Torrential rainfall will spread across the country by Tuesday afternoon through Wednesday, with highest concentration projected over the north and central areas of the country. The instability will persist through Thursday until Saturday. So expect much rainfall this week, with a high potential of strong winds near where Ernesto makes landfall, and flooding in flood prone areas, including the Belize city area and surroundings!

Daily rainfall accumulations will range from 0.10-0.25 of-an-inch on Sunday and Monday. Rainfall rates will increase on Tuesday and Wednesday continuing through Thursday. Expect the highest rainfall amounts on Tuesday night through Thursday morning, with rates of 2-3 inches per day. Locally higher daily rates of 4-5 inches are expected in the elevated areas of the Cayo, Stann Creek and Toledo Districts. The

northern sector of the mainland including the Belize District will also see high rainfall accumulations on Tuesday through Thursday, with totals of 2-3 inches per day. The rapid runoff will provoke localized flash floods in valley and hilly areas.

Residence in flood prone zones should be prepared to move to safer areas!

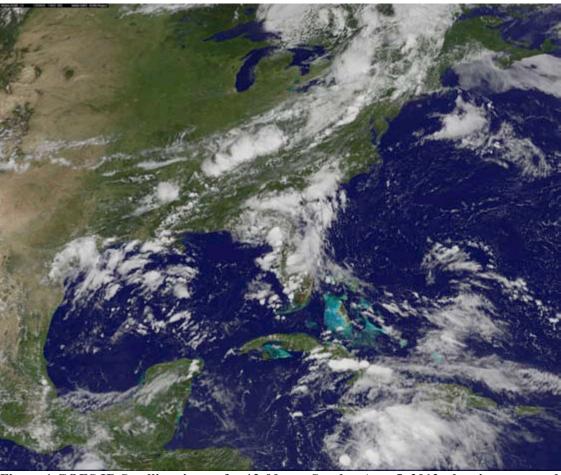


Figure 1 GOES IR Satellite picture for 12:00 pm, Sunday Aug. 5, 2012, showing scattered, disorganized thunderstorms associated with tropical storm Ernesto centred about 200 miles SSE of Jamaica this afternoon.

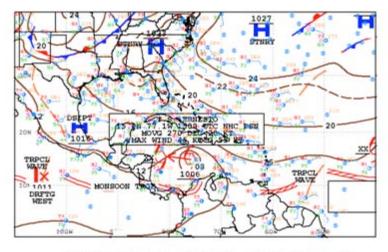


Figure 2 Surface map valid for 12:00 pm Sunday, Aug. 5, 2012, showing TS Ernesto near 15.2N 77.9 W or about 200 SSE of Jamaica, heading west at 23 mph.

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

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Aug. 5, 2012	Aug. 6, 2012	Aug. 7, 2012	Aug. 8, 2012	Aug. 9, 2012	Aug. 10, 2012	Aug. 11, 2012
Sunny with cloudy spells. Few showers or thunderstorms	Becoming cloudy with increasing showers and thunderstorms especially along coast & hills	Overcast at times with outbreaks of showers and thunderstorms , some heavy at times	Overcast with torrential showers & intense thunderstorms , especially over central and northern areas.	Cloudy to overcast with outbreaks of showers and thunderstorms over north and western areas especially.	Mostly cloudy with few showers and thunderstorms over most districts	Cloudy with outbreaks of showers & thunderstorms along coast and the hills
Rainfall: 0.25-0.50 inch	Rainfall: 0.50-1.00 inch	Rainfall: 1.50- 2.00 inches	Rainfall: 3 – 5 inches	Rainfall: 2- 3 inches	Rainfall: 0.50-1.00 inch	Rainfall: 0.75-1.75 inches

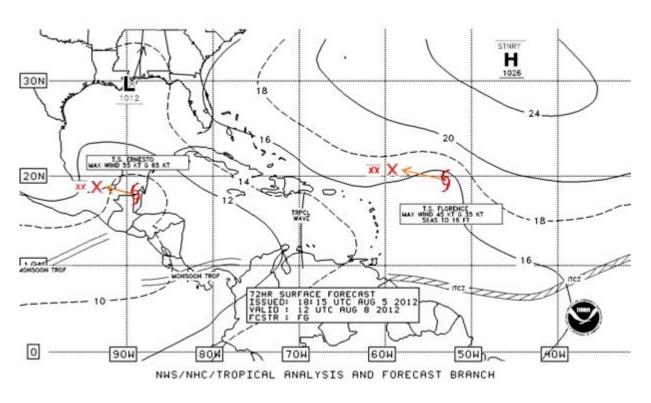


Figure 3 NHC 72-hr forecast surface map, valid for 6:00 am Wednesday, August 8, 2012, showing TS Ernesto over NW Belize, weakening and moving WNW towards the Bay of Campeche.

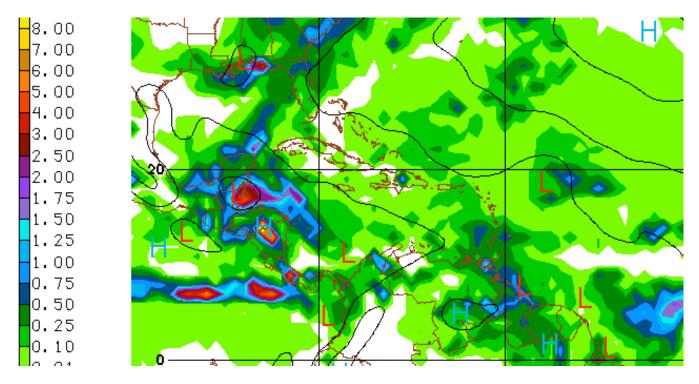


Figure 4 GFS model daily rainfall projection at 72 hours ending 6:00 am, Wednesday August 8, 2012, showing concentrated rainfall, associated with TS Ernesto, over Central and Northern Belize, with 24-hr accumulations of 3-4 inches. Higher rates of around 5 inches are expected in the hilly terrain of the Maya Mountain Massive, resulting in dangerous flash floods.

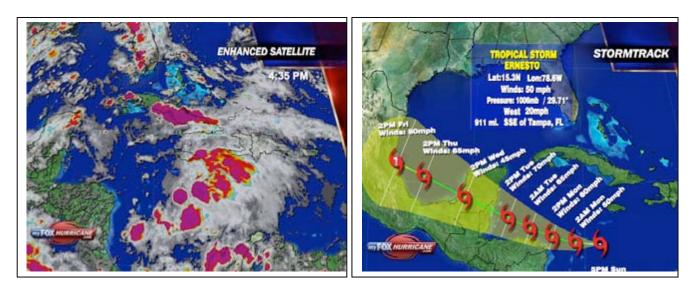


Figure 5 a) IR Satellite image of TS Ernesto in the central Caribbean SSE of Jamaica. b) NHC projected track of Ernesto. Ernesto reaches minimal hurricane strength at landfall over northern Belize on Tuesday night or early Wednesday.

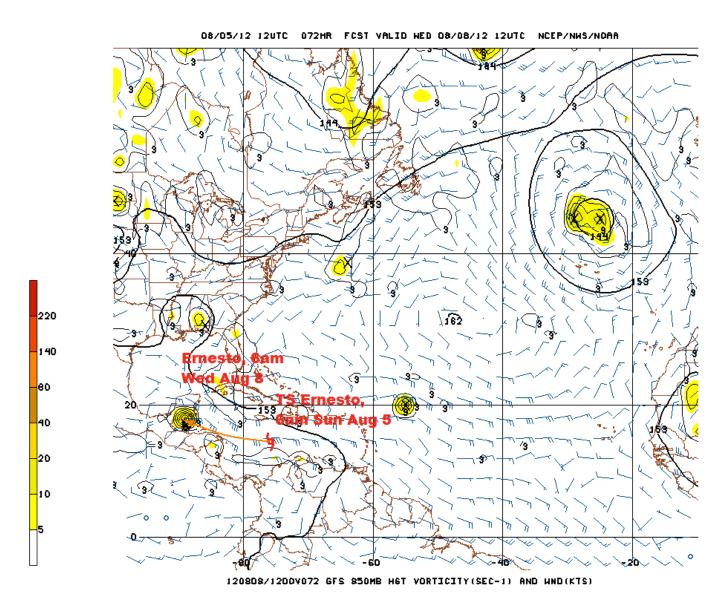


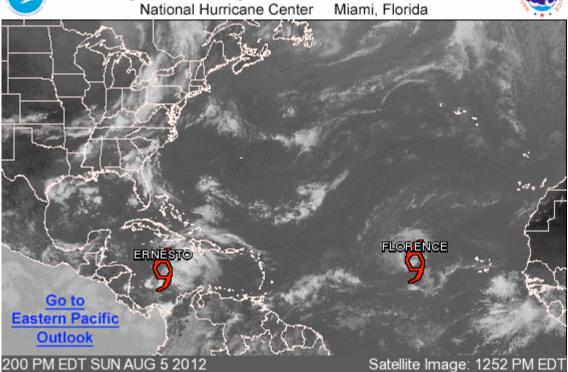
Fig. 6 GFS Model 72-hr vorticity projection at 5,000 ft level or 850 mb, valid for 6:00 am Wednesday, August 8, 2012, showing projected track of the cyclonic vorticity that is Ernesto, aiming directly into central Belize. The system is moving a fast clip of 23 mph, but will likely slow down as it near the NE coast of Honduras on Monday. Landfall will be around dawn on Wednesday over the central or northern coast of Belize.

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



Graphical Tropical Weather Outlook





Outlined areas denote current position of systems discussed in the Tropical Weather Outlook. Color indicates probability of tropical cyclone formation within 48 hours.

Low <30% Medium 30-50% High >50%

WTNT35 KNHC 051739 TCPAT5

BULLETIN

TROPICAL STORM ERNESTO INTERMEDIATE ADVISORY NUMBER 16A NWS NATIONAL HURRICANE CENTER MIAMI FL AL052012 200 PM EDT SUN AUG 05 2012

...ERNESTO REMAINS POORLY ORGANIZED...

SUMMARY OF 200 PM EDT...1800 UTC...INFORMATION

LOCATION...15.2N 77.9W

ABOUT 205 MI...335 KM SSW OF KINGSTON JAMAICA
ABOUT 355 MI...570 KM E OF CABO GRACIAS A DIOS ON NIC/HON BORDER
MAXIMUM SUSTAINED WINDS...50 MPH...85 KM/H
PRESENT MOVEMENT...W OR 270 DEGREES AT 23 MPH...37 KM/H
MINIMUM CENTRAL PRESSURE...1006 MB...29.71 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY...

NONE.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT...

- A TROPICAL STORM WARNING IS IN EFFECT FOR...
- * JAMAICA
- A TROPICAL STORM WATCH IS IN EFFECT FOR...
- * GRAND CAYMAN
- * THE COAST OF HONDURAS FROM THE HONDURAS/NICARAGUA BORDER WESTWARD TO PUNTA CASTILLA

A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED SOMEWHERE WITHIN THE WARNING AREA...IN THIS CASE WITHIN 12 HOURS.

A TROPICAL STORM WATCH MEANS THAT TROPICAL STORM CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...IN THIS CASE WITHIN 24 TO 48 HOURS.

INTERESTS IN BELIZE AND THE YUCATAN PENINSULA OF MEXICO SHOULD MONITOR THE PROGRESS OF ERNESTO.

FOR STORM INFORMATION SPECIFIC TO YOUR AREA...PLEASE MONITOR PRODUCTS ISSUED BY YOUR NATIONAL METEOROLOGICAL SERVICE.

DISCUSSION AND 48-HOUR OUTLOOK

AT 200 PM EDT...1800 UTC... 12:00 PM LOCAL TIME BELIZE

THE CENTER OF TROPICAL STORM ERNESTO WAS LOCATED NEAR LATITUDE 15.2 NORTH...LONGITUDE 77.9 WEST. ERNESTO ISMOVING TOWARD THE WEST NEAR 23 MPH...37 KM/H...AND THIS MOTION ISEXPECTED TO CONTINUE TODAY AND TONIGHT WITH A DECREASE IN FORWARDSPEED. A TURN TOWARD THE WEST-NORTHWEST IS EXPECTED BY LATE MONDAYOR MONDAY NIGHT. ON THE FORECAST TRACK...THE CENTER OF ERNESTO ISEXPECTED TO CONTINUE TO PASS SOUTH OF JAMAICA THIS AFTERNOON ANDMOVE NORTH OF THE NORTHEASTERN COAST OF HONDURAS LATE MONDAY AND MONDAY NIGHT.

MAXIMUM SUSTAINED WINDS ARE NEAR 50 MPH...85 KM/H...WITH HIGHER GUSTS. SOME STRENGTHENING IS POSSIBLE AS ERNESTO MOVES OVER THE WESTERN CARIBBEAN SEA.

TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 125 MILES...205 KM FROM THE CENTER.

ESTIMATED MINIMUM CENTRAL PRESSURE IS 1006 MB...29.71 INCHES.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE EXPECTED IN JAMAICA LATER THIS AFTERNOON AND THIS EVENING. TROPICAL STORM CONDITIONS ARE POSSIBLE IN GRAND CAYMAN TONIGHT AND EARLY MONDAY...AND IN THE WATCH AREA ALONG THE COAST OF HONDURAS BY LATE MONDAY. SOME SQUALLS WILL CONTINUE TO AFFECT THE SOUTH COAST OF HAITI TODAY.

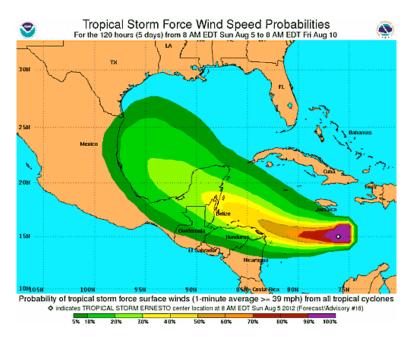
RAINFALL...RAINFALL ACCUMULATIONS OF 3 TO 6 INCHES...WITH ISOLATED HIGHER AMOUNTS...CAN BE EXPECTED IN JAMAICA AS ERNESTO MOVES BY THE ISLAND. SHOWERS AND THUNDERSTORMS...OCCASIONALLY HEAVY...ARE

POSSIBLE OVER HAITI TODAY.

NEXT ADVISORY

NEXT COMPLETE ADVISORY...500 PM EDT.

FORECASTER PASCH/ROBERTS





HURREVAC LATEST STORM TRACK PROJECTION, 3:00 pm SUNDAY, AUGUST 5, 2012

