Ten day Outlook for Belize

Date: May 25, 2015

Onset of the Rainy Season, 2015

Rainfall accumulation of half inch to one inch was recorded over southern and coastal Belize, and about half an inch in central and western regions on Saturday last (May 23, 2015). In northern districts, some areas also received about half inch. The instability generating the showers and thunderstorms was short-lived and died away by early Sunday. The models were expecting this rainfall event to be brief. So, we can conclude that this was not the *onset* of the rainy season 2015 as it did not meet the criteria.

The brief review, discussed in an earlier report, with regards the *onset* of the rainy season at Spanish Lookout and Belmopan during El Nino years, shows that rainfall behavior is variable, with a high tendency for *false starts*. There is a higher probability for the *start* of the rains to occur during the last *dekad* in May and the first *dekad* in June in the Spanish Lookout area, while around Belmopan, the *onset* of the rains is more probable during the second *dekad* in June in El Niño years.

Outlook

An analysis of the 10-day GFS and GFS-MNSPRD models prediction indicate that a fairly strong subsidence inversion in the East – Northeast trade wind flow will support only isolated shallow convection across Belize during the rest of May and through most of the first week of June. Therefore, expect little in the form of significant rainfall over the next 8 to 9 days which could increase the moisture content of the soil.

The models are resolving an energetic, eastward-moving upper level shortwave trough over the central Gulf of Mexico and southern Mexico on June 4-5. This feature, along with low pressures over northern Central America will induce a marked increase in convection over Yucatan, Guatemala, Belize and western Honduras. Vigorous outbreaks of showers and thunderstorms will begin to move across SW Belize on Friday, June 5, then spreading across the rest of Belize through Saturday and Sunday June 6-7, 2015. This activity is expected to persist through most of the second week of June. The GFS 288-hr. precipitation forecast map (Figure 1 below), shows rainfall rate of 0.10-0.25 of-an-inch/24hr in SW Belize for the morning of Saturday, June 6, 2015. The daily rainfall rates will increase over the rest of the weekend through most of the following working week.

This event will *very likely* mark the *onset* of the 2015 rainy season in Belize.

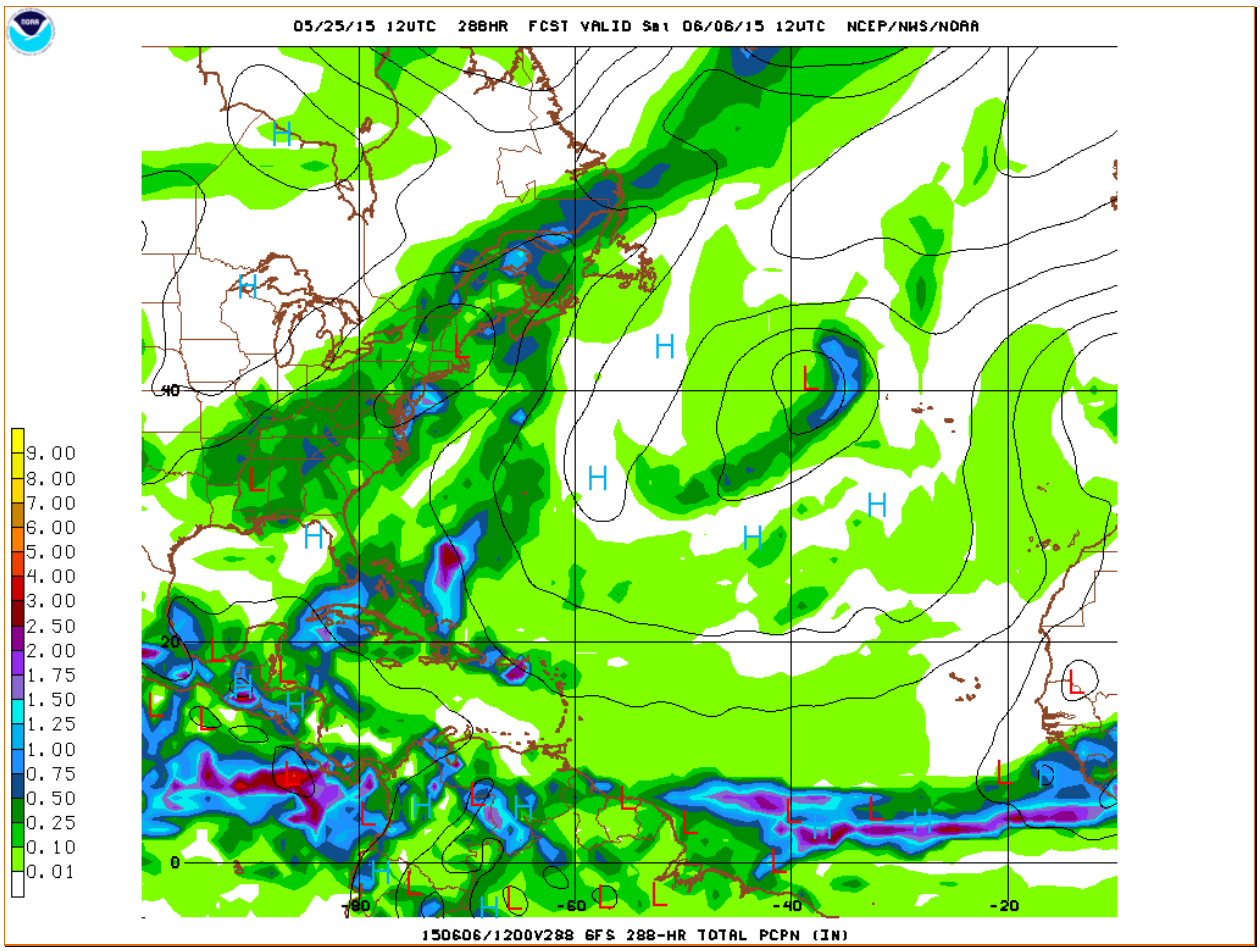

Figure 1: GFS 288 hr Model projections valid for 6:00 am, Saturday, June 6, 2015, showing low pressure over Belize, and cumulative rainfall in the range of 0.10–0.25 inch/24 hrs) spreading from the SW over Belize.

North Atlantic Basin 2015 Hurricane Season Prediction

Forecasts	*Named Storms*	*Hurricanes*	*Major Hurricane*	*Caribbean*	*ACE**
CSU (Klotzbach & Gray)	7	3	1	22% probability that one major hurricane will move through the Caribbean.	40
TRS	11	5	2	--	56
INSMET (Cuba)	8	3	--	50 %	--
Median	**12**	**6.5**	**2.0**	**42%**	

*ACE …accumulated cyclone energy

Below is Philip Klotzbach's and Dr. William Gray's (Colorado State University) *Abstract* for their 2015 Atlantic Basin Hurricane Season Forecast issued on 9 April, 2015.

ABSTRACT

Information obtained through March 2015 indicates that the 2015 Atlantic hurricane season will likely have much less activity than the median 1981-2010 season. We estimate that 2015 will have only 3 hurricanes (median is 6.5), 7 named storms (median is 12.0), 30 named storm days (median is 60.1), 10 hurricane days (median is 21.3), 1 major (Category 3-4-5) hurricane (median is 2.0) and 0.5 major hurricane days (median is 3.9). The probability of U.S. major hurricane landfall is estimated to be about 55 percent of the long-period average. We expect Atlantic basin Accumulated Cyclone Energy (ACE) and Net Tropical Cyclone (NTC) activity in 2015 to be approximately 45 percent of their long-term averages.

This forecast is based on an extended-range early April statistical prediction scheme that was developed utilizing 29 years of past data. Analog predictors are also utilized. We anticipate a below-average Atlantic basin hurricane season due to the combination of a high likelihood of at least a moderate El Niño event and a relatively cool tropical Atlantic. Coastal residents are reminded that it only takes one hurricane making landfall to make it an active season for them, and they need to prepare the same for every season, regardless of how much activity is predicted.

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May 25, 2015