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In this update:

• Tropical development appears likely in the western Caribbean Sea



National Hurricane Center (NHC) forecasters are still monitoring the possible development of a tropical wave over the western Caribbean Sea.

Latest satellite imagery shows a large area of showers and thunderstorms spanning much of the western Caribbean Sea and even though it mostly still appears to be rather disorganized, of note is the increase in activity near the apparent storm center, located about 100 miles northeast of the Nicaragua/Honduras border, approximately 560 miles south of Key West, Florida and about 925 miles from the well head location of Deepwater Horizon.

Conditions ahead of the storm (light wind shear, a moist airmass and sea surface temperatures between 86 and 88 degreres) are expected to remain favorable for intensification and the National Hurricane Center has indicated an <u>80% chance of this</u> wave developing into the first tropical depression or tropical storm of the season within the next 48 hours (by Sunday morning) before moving over the Mexico's Yucatan Peninsula.

Satellite-based winds from this morning continue to show no sign of a closed circulation but a broad elongated circulation with maximum sustained winds near 30-35kts (35-40mph) on the northern side of the system. However, Air Force Reserve Hurricane Hunter aircraft is currently investigating the system for signs of a closed center. If a center of circulation is found, it will be named a tropical depression.



The storm is moving west-northwest at about 10 mph, and this motion is expected to gradually slow over the next five days to about 6 mph.



Computer models are gradually coming into better agreement as to the possible track and intensity of this system, though overall forecast confidence remains low as some models continue to performing drastic track changes from run to run. The consensus, as of this morning, is that it will likely make landfall on the Yucatan Peninsula within the next 48 hours as a tropical depression or weak tropical storm. The storm (in whatever form) will probably spend the better part of day or so (at least 12 hours) over the Yucatan, which will result in some weakening of the storm. However, once 93L emerges over the Gulf of Mexico, the storm will have the ability to recover its strength.

From there is where the models continue to diverge. A cold front and associated upper level trough of low pressure is expected to swing down over the eastern U.S. on Monday and Tuesday (at right: forecast weather map of Tuesday 6/29 from the Hydrometeorological Prediction Center). If this front is strong enough and 93L develops significantly, the storm could get pulled northwards and make landfall along the central Gulf of Mexico coast towards Louisiana. If 93L stays weak and/or the front is not so strong, the storm would get pushed more towards Mexico or Texas. It is still too soon to speculate as to if this system will have any impact on Florida or the Deepwater Horizon oil spill as the storm could hit virtually anywhere along the Gulf of Mexico coast given the current uncertainty in development and movement. However, the fact that 93L has not gained any latitude in terms of position over the past day and remains fairly weak is what is pulling the more reliable computer models (such as the European) on a more southern track. Still, if the system intensifies in the western Gulf of Mexico and moves on a track towards Texas/Louisiana, an expanding wind field



may reach at least the western fringes of Deepwater Horizon response activities.



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Elsewhere in the tropics...A tropical wave a few hundred miles northeast of the Leeward Island is producing a large but disorganized area of thunderstorm activity as it interacts with an upper level low pressure disturbance in the vicinity. The National Hurricane Center only forecasting a 20% of tropical in development within the next 2 days as there is a good amount of dry air and wind shear to the north and east of the system that would act to inhibit development. Also of good news is that the early run of computer models indicates that this sytem (whether it develops or not) will remain out at sea, initially moving northwest then north towards Bermuda early next week.



Summary:

- A tropical wave in the central Caribbean Sea is becoming better organized.
- Atmospheric and oceanic conditions remain favorable for further development.
- The system is approximately 560 miles S of Key West, FL, or about 925 miles SSE of the Deepwater Horizon well head site.
- The National Hurricane Center is indicating an 80% chance for development over the next 48 hours.
- This system could become the first tropical depression or tropical storm of the 2010 Atlantic Hurricane season.
- Maximum sustained winds are near 35mph.
- System is expected to move west-northwest across Mexico's Yucatan Peninsula this weekend and then into the southwestern Gulf of Mexico by Monday.
- Hurricane Hunter aircraft is currently investigating the system.
- Additional information can be found at www.nhc.noaa.gov

The next full update will be issued Saturday afternoon. An email with bullets and a few graphics will also be sent if advisories are started before that time.

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