Impact Weather Update for East Central Florida

The experimental Impact Weather Update (IWU) provides a chronological series of discussions to detail conditions expected over the next 8 hours. The IWU was designed to supplement existing NWS products by providing more frequent information in a less formal format. IWU entries will only be available when workload permits, most often on weekdays between late morning and early afternoon. When severe weather becomes imminent, IWU posts will often cease due to increasing workload. East Central Florida counties include: Volusia, Seminole, Lake, Orange, Brevard, Osceola, Indian River, Okeechobee, Saint Lucie and Martin. Please provide us with your comments concerning the IWU.

Thursday, September 20, 2007

Posted at 7:30 PM

Edited on: Thursday, September 20, 2007 7:31 PM

Scattered storms across western Orange and Lake county this evening

Scattered storms will continue across western Orange and Lake county this evening while moving toward the northwest at 25 to 30 mph. The storms will contain very heavy rain...cloud to ground lightning and a very low threat for rotation to develop and a funnel cloud to form with one of the stronger cells.

The surface low pressure across the eastern Gulf of Mexico has not yet become any better organized this evening. This system is forecast to move toward the Central gulf coast Friday night and Saturday.

This will be the last Impact Weather Update until Friday morning. We appreciate your feedback, send emails to:

sr-mlb.stormreport@noaa.gov

Posted by Matt Volkmer

Posted at 4:02 PM

Edited on: Thursday, September 20, 2007 4:20 PM

Low coverage of showers/storms with still a remote chance for rotating storms

While the wind shear profile remains quite favorable for rotating storms, the presence of large scale supression and dry air aloft continues to limit the overall coverage and intensity of showers storms. Additional development of scattered showers and a few storms is expected through late afternoon/early evening as the sea breeze boundary moves into the interior peninsula and interacts with pre-existing boundaries. The greatest chance for shower/storm development through early evening will be over the interior, however a few showers or storms will also occur near the coast, primarily south of Brevard county. If any storms are able to overcome the supressed/dry atmosphere and become deep and persistent, a limited prospect exists for funnel cloud development and perhaps a waterspout over an inland lake or a brief tornado.

Concerning the weak low pressure system in the Gulf of Mexico, a reconnaissance aircraft has investigated the area this afternoon and determined that the system has not yet acquired any tropical characteristics. Here is the update from the National Hurricane Center.

Please continue to monitor offical NWS Melbourne products. A final Impact Weather Update will be issued by early this evening.

Posted by Scott Spratt

Posted at 2:21 PM

Isolated showers and storms developing - limited severe weather threat continues

The east coast sea breeze has developed and is moving slowly inland over the coastal counties - with the boundary generally near Interstate 95. The wind profile in the lower atmosphere remains favorable for development of rotating storms if showers and storms grow deep enough and persist for long enough. Thus far, showers and storms which have formed over the region have not sustained themselves very long - possibly due to suppressing motion in the upper atmosphere and the presence of some dry air aloft. However, during the past 30 minutes, a few longer-lived, heavy showers have developed near the coast east of the sea breeze boundary and also inland along an outflow boundary over Lake and Osceola counties. Activity east of the sea breeze will develop in the most favorable environment for formation of funnel clouds and perhaps a brief waterspout or tornado. While the showers and storms over the interior will also have a potential to produce isolated severe weather, the threat does not appear as high here unless storms can grow high into the atmosphere and persist. Shower and storms will move north or northwest at 25 to 30 mph.

Please continue to monitor official NWS MLB products concerning the limited severe weather potential through the remainder of the afternoon. Another Impact Weather Update will be issued later this afternoon.

Posted by Scott Spratt

Posted at 10:41 AM

Surface low moving away, but scattered strong storms possible this afternoon

The series of weak and transcient surface lows that formed over the past few days over the Atlantic in association with a large disturbance in the upper atmosphere has begun to consolidate into a single, stronger low over the eastern Gulf of Mexico. This low will move slowly away from the Florida peninsula today and Friday, while possibly acquiring tropical characteristics. However, the feature will still have an impact on our local weather as it has caused wind shear to increase within the lower atmosphere. Morning weather balloon data and observations from the USAF wind profilers at Cape Canaveral indicated southerly winds of 25 to 30 mph just above the surface. Local weather models indicate these strong winds will continue today, with surface winds becoming more southeast near the coast as the sea breeze forms. The change in winds from southeast near the ground to strongly southerly just above the surface could create favorable conditions for a few storms to acquire rotation and produce funnel clouds and possibly a waterspout or brief tornado. This possibility will continue to be assessed this morning.

Scattered showers and storms are forecast to form by early afternoon, especially over the coastal counties and will move quickly north or north-northwest into the interior peninsula during the afternoon. As mentioned above, a few showers or storms may become strong and have the potential to produce high wind gusts, funnel clouds, and possibly a brief waterspout or tornado. Instability is not great however, so the overall coverage of showers and storms is not expected to be widespread, but should be more scattered.

Posted by Scott Spratt
