

TROPICAL UPDATE 5 PM EDT Monday, August 29, 2016 T.D. #9, T.D. #8, & Hurricane Gaston

This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office or visit the National Hurricane Center website at www.nhc.noaa.gov.

Atlantic Basin Satellite Image

18:00 29-AUG-2016 GMT @Copyright WSI Corporation http://www.wsi.com





Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Current Disturbances and Two-Day Cyclone Formation Chance: 🗱 < 40% 🗱 40-60% 🗰 > 60% Tropical or Sub-Tropical Cyclone: O Depression 🥑 Storm 🍠 Hurricane & Post-Tropical Cyclone × Remnants



Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida





Tropical Cyclone Formation Potential for the Five-Day Period Ending at 2:00 pm EDT Sat Sep 3 2016 Chance of Cyclone Formation in Five Days: Low < 40% Medium 40-60% High > 60% X indicates current disturbance location; shading indicates potential formation area. Tropical Depression Nine 11/AM EDT Mon Aug 29.2016. Position 23.6 N 84:3 W Maximum Winds, 35 mph Gusts (45/mph Movement Wat 6 mph Minimum Pressure 1007/mb (29.73 in ches) A

Blue Marble basemap imagery courtesy NASA

Satellite 8:10 PM UTC 4:10 PM EDT

wunderground.com



Tropical Depression 09L Model Track Guidance

Initialized at 18z Aug 29 2016

Levi Cowan - tropicaltidbits.com



20°N Forecast tracks for the 18Z model runs have a good consensus on the possible track of T.D. 9. Models are in agreement that the system will continue moving west northwest into the southeastern Gulf of Mexico for the next 24-36 hours. Then, the high pressure over the Mid-Atlantic states is expected to rapidly move offshore and dissipate causing the steering currents in the Gulf of Mexico to quickly shift to a northeast direction. T.D. 9 will take a quick sharp turn to the north and then the northeast on Wednesday. As of now, models are predicting a landfall in the eastern Big Bend area. Please be aware that impacts will definitely be felt in areas east and west of where this system comes ashore.



Most models are now in agreement that T.D. 9 will become a tropical storm. Today we have seen the models trending towards a stronger tropical storm at landfall than yesterday. This does not mean that we will absolutely experience a stronger system, and additional monitoring is necessary. <u>Note:</u> Statistical models (SHF5, SHIP, DSHP, LGEM) are based on historical relationships between hurricane-specific information, such as the location and time of year, and the behavior of historical hurricanes. Due to their simplicity, statistical models are generally less skillful than dynamical models.

Tropical Storm Wind Probabilities (34Kt):		
Pensacola	12%	
Panama City	28%	
Apalachicola	36%	
Cedar Key	43%	
Gainesville	37%	
Татра	36%	
Ft. Myers	19%	
Jacksonville	31%	

Tropical Storm Wind Probabilities (50Kt):	
Pensacola	0%
Panama City	7%
Apalachicola	9%
Cedar Key	12%
Gainesville	9%
Tampa	8%
Ft. Myers	3%
Jacksonville	8%



T.D. 9 Water Vapor Image

eak

The strongest wind shear is now off to the east of T.D. 9. The environment in southeastern Gulf is much more favorable for development and the system will remain in this area for 24-48 hours.

GOES-FLOATER WATER VAPOR - AUG 29 16 20:15 UTC

Looking Ahead: Water Vapor Satellite Image

As T.D. 9 continues its path into the southeastern Gulf of Mexico, environmental conditions will become more favorable for development. A moist atmosphere and lower wind shear will likely allow the system to become organized and strengthen. However, it is still interacting with Cuba, which will hinder development at least for the next 6-12 hours.

Dry Air

Steering Currents



Weak tropical systems are influenced by steering currents in the lower parts of the atmosphere. At this time T.D. 9 is located in an area with very little steering winds in the southern Gulf of Mexico, which is why the storm has been moving so slowly today. We expect this weak steering flow to continue through tomorrow. Afterwards a strong high pressure is expected to build over the eastern part of the country, and T.D. 9 will be picked up along the eastern part of the new high pressure field, which is what will accelerate T.D. 9 to the northeast on Wednesday.

CIMSS ENV STEERING PRODUCT: 700-850 HPA LAYER (FOR TO MSLP RANGE: 1000-1010 HPA) 1800 UTC 29AUG/F

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Sea Surface Temperatures near T.D. 9



Current Wind Shear (shaded) and Shear Tendency (contours)



GOES-EAST 24 HOUR WIND SHEAR TENDENCY PRODUCT 1800 UTC

29AUG16

UW-CIMSS

An The States Inches 15 10 6 25 Tropical Depression 9 72-hour Day 1-3 Rainfall Forecast (inches) Created 5:02 PM EDT Mon Aug 29 2016 Valid 8:00 PM EDT Mon Aug 29 2016 through 8:00 PM EDT Thu Sep 1 2016 NOAA/NWS/NCEP/WPC Local point maximum rainfall may be higher than shown. See the NHC public advisories for the latest tropical cyclone information.

Current Rainfall Forecast



0.01

7-Day Forecast Rainfall Total (Tue-Mon)



Hurricane/Gaston 5 PM/EDT/Mon/Aug/29/2016 Position 31.2 N 55.2 W Maximum Winds 105 mph Gusts 125 mph Movement NNE at 3 mph Minimum/Pressure 968 mb (28.57 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 9:07 PM UTC 5:07 PM EDT

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Tropical Depression Eight 2 PM EDT Mon Aug 29 2016 Position 33.4 N 73.8 W Maximum Winds 35 mph Gusts 45 mph Movement NW at 6 mph Minimum Pressure 1 011 mb (29.84 inches)

Blue Marble basemap imagery courtesy NASA

Satellite 8:08 PM UTC 4:08 PM EDT

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Tropical Depression 9:

- The center of Tropical Depression 9 is located 195 miles west southwest of Key West. The Depression is moving west northwest near 5 mph.
- A turn towards the north-northwest is expected on Tuesday night, followed by a turn toward the northnortheast on Wednesday.
- Some strengthening is forecast during the next 48 hours, and the depression is expected to become a tropical storm by Tuesday.
- Computer models are in agreement that T.D. 9 will sharply curve towards Florida on Wednesday, and likely make landfall along the Big Bend region sometime on Thursday.
- Still, possible impacts may be felt from Tampa to Panama City. The main impacts would be flash flooding from heavy rain, coastal flooding from minor storm surge, isolated tornadoes, and damaging sustained tropical storm force winds.
- The heaviest precipitation will be on Wednesday and Thursday along the Gulf Coast from Naples north through Tampa and the Nature Coast.
- The next two names on the Atlantic storm list are Hermine and Ian.

Hurricane Gaston:

- Hurricane Gaston has maximum sustained winds of 105 mph and is located 570 miles east of Bermuda.
- The hurricane is expected to move generally to the northeast or east-northeast at an increasing forward speed for the next couple of days.

Tropical Depression 8:

- Tropical Depression 8 is located 140 miles southeast of Cape Hatteras, NC with maximum sustained winds at 35 mph.
- The depression is moving northwest near 6 mph, this general motion with a slower forward speed is expected later this evening, with a gradual turn toward the north forecast on Tuesday. On the forecast track, the center of the depression will be near the Outer Banks of North Carolina late Tuesday.

Florida Outlook:

- Total rain accumulations of 3 to 7 inches are possible over much of the Florida peninsula through Thursday. Isolated maximum amounts of 10 inches are possible along the west coast of Florida from Naples to Steinhatchee. This rainfall may cause flooding and flash flooding.
- Gusts to tropical storm force are possible in a few squalls as the storm approaches the state on Tuesday and Wednesday.
- Strong life threatening rip currents are likely along all east coast beaches for the next few days. Rip currents will likely spread to the Gulf Coast as the storm approaches and ocean swells increase.
- It is likely that some areas of the Gulf Coast will experience 2-4 feet of storm surge, and we expect the storm to come ashore during high tide, which will increase the amount of water that comes ashore in some areas.
- Impacts will likely begin affecting Florida Wednesday night and last through Friday.
- Tropical storm watches and warnings (and possibly a hurricane watch) are likely to be issued Tuesday morning as the storm will be 48 hours from landfall.
- Hurricane Gaston and Tropical Depression 8 do not pose a threat to Florida.

Another briefing packet will be issued on Tuesday morning. For more information on this system, please visit the NHC website at <u>www.nhc.noaa.gov</u>



TROPICAL UPDATE

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