

Mechanics of the hurricane

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I'll get ultimate revenge on everyone who did not answer my questions. Nothing aggravates a list full of people who don't answer questions more than answering the question. I expect you'll all get angry, and start telling me I'm wrong – and accidentally spill information I didn't know in the process. Then again – on this list, we have people who spend their energy making up nonsensical hurricanes!

The high pressure system that has been over the southeastern United States is a subtropical ridge, like the Bermuda high, and almost as permanent. It was caused by abnormalities in Pacific weather systems, and by the warm waters in the southern Atlantic. I was not supposed to go away until mid October. These strong high pressure systems move in for long periods of time and are hard to budge. The Bermuda high is actually a permanent meteorological feature that moves back and forth across the Atlantic over the course of the year.

The subtropical ridge that caused the heat wave has at times merged with the Bermuda high, which spread into the Gulf in a way that is unusual.

The low pressure system that was supposed to budge the subtropical ridge today or Friday is a high level low pressure trough. A high level low pressure trough is the low pressure equivalent of a ridge. On radar that shows cloud cover it clearly shows as a long broad band of clouds that has slowly spread eastward across southern California, Nevada, northwestern Texas, and Colorado. On surface analysis maps, it shows as a bunch of letter L's that bounce around in a way that makes no apparent sense.

WEather maps at weather.unisys.com and intellicast.com show the high pressure ridge weakening over Texas as the highest pressure part of it moved eastward, over the course of the past week.

This must have weakened the back end of the high pressure ridge even more than they expected. Instead of waiting for the trough to move and circling around back of it, the hurricane was sucked into it and began to follow its track; but it split the high pressure ridge. The future models show the eastern portion of this high pressure ridge moving off the Atlantic coast. One model shows it heading for New Foundland closely followed by the hurricane. At the moment the western edge of this ridge is still fluctuating between Austin and the Louisiana border. This is why the hurricane keeps changing direction.

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Meanwhile, now that the subtropical ridge is no longer in the way, a cold front is moving southward across the middle of the country toward Louisiana. Some other low pressure system is moving eastward toward Texas. The cold front (I believe, and not the high pressure ridge) is expected by most TV weathercasters today, to cause the hurricane to stall over Louisiana, and gradually spread across eastern and central Texas, causing pouring rain from Sunday through Wednesday in areas the hurricane originally missed. A different version of that model has the hurricane reach northern Louisiana, turn around, and come southward through central Texas.

As for the low pressure system moving eastward, I think they are hoping it will push the hurricane back to the north. I think they are not talking about the high level trough, but I'm not certain. I think they are talking about something new.

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Yours,
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