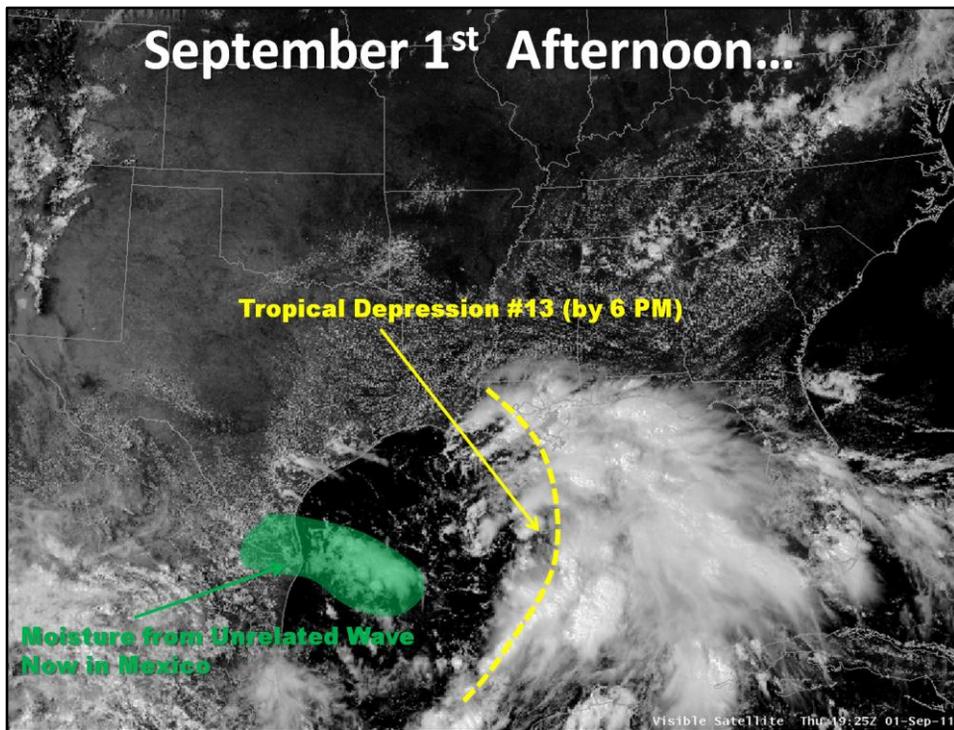


Return of the Dry?

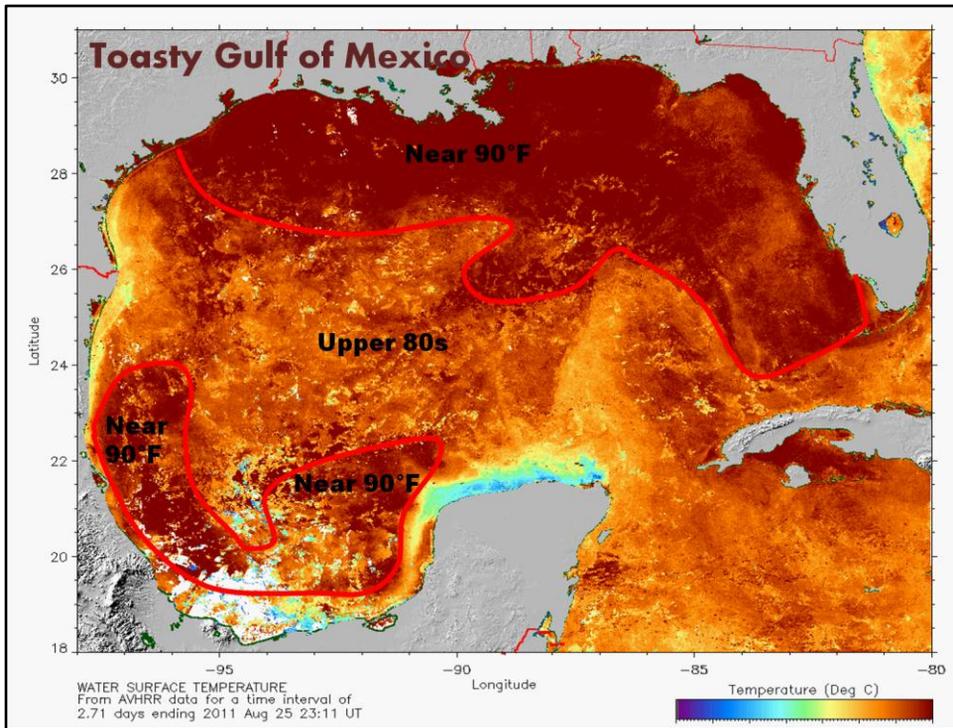
**The 2011 Labor Day Weekend
...and Beyond
for the Rio Grande Valley**

The Setup

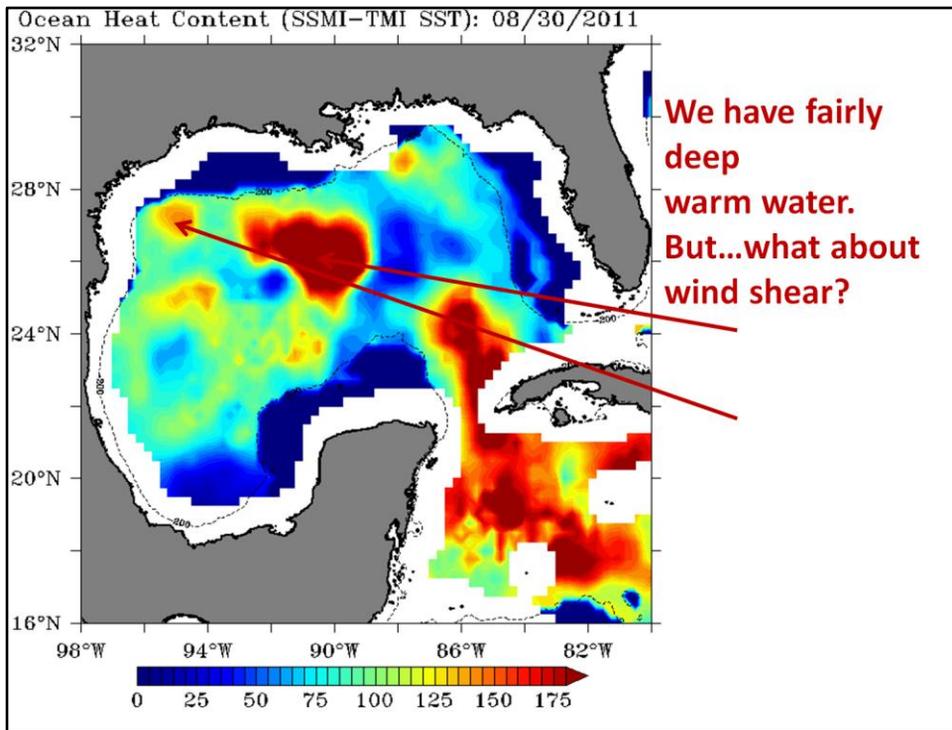
- Weather pattern changes...stopped short?
- Tropical Moisture invading the central and western Gulf
- Potential Exists for a LOT of rain...probably well north and east of the RGV
- Searing, record heat possible, followed by more dry weather
- Confidence increasing this afternoon...
- **But not a done deal yet.**



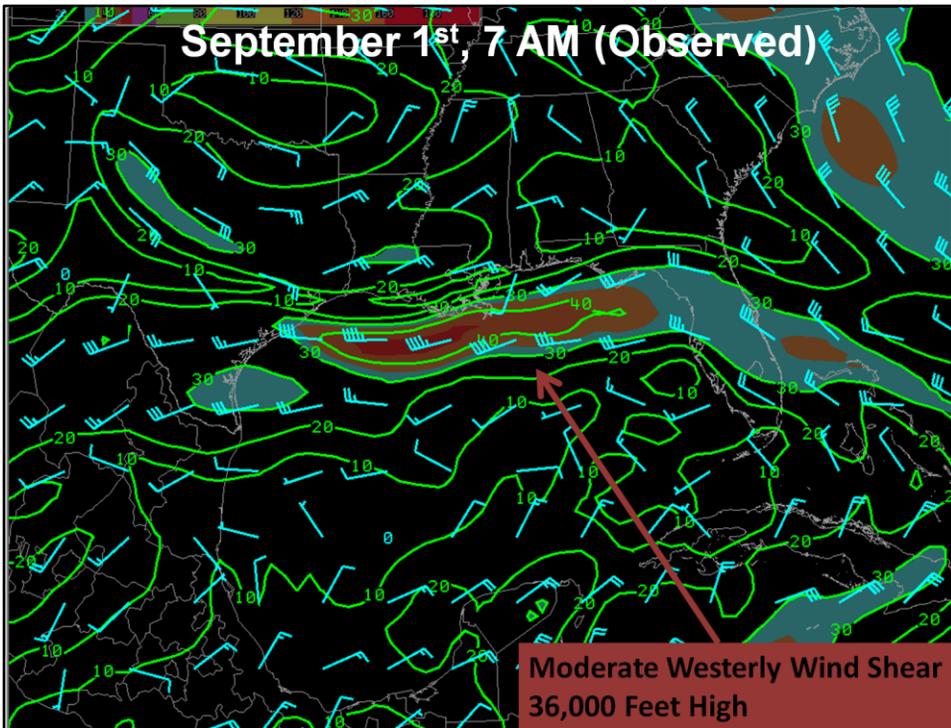
As expected, the tropical disturbance has developed over the west central Gulf and became Tropical Depression 13, and should intensify to Tropical Storm Lee as the weekend approaches. Notice the elongation (yellow dashed arc) of the disturbance, as well as the clear air across the northwest Gulf. Upper level wind shear from the northwest is effectively putting a “hold” on rapid development, or westward movement.



It's plenty warm in the Gulf! Sea Surface temperatures are at their seasonal peaks near 90°F in many locations at the end of August.



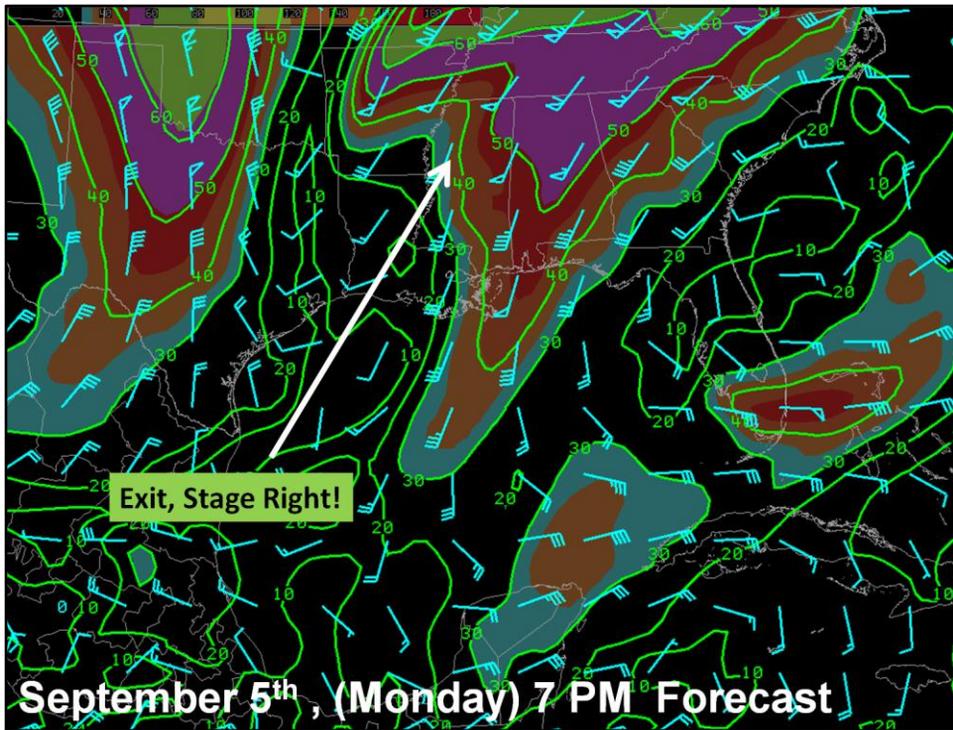
Oceanic Heat Content can be a good indicator of rapid development of hurricanes, all things being “in line”. There’s plenty in the west central Gulf (large red area) and pockets of moderate high levels just east of the Texas coast.



The moderate shear is expected to weaken in the vicinity of the developing system Thursday night and Friday, September 2nd. But...



By Saturday, wind shear has weakened in the area of the cyclone (red circle), and strengthening or maintenance of the cyclone is likely, whether just on land (Louisiana coast) or just offshore. However, additional northwest shear across south Texas should be a “stop sign” for any westward development – and possibly westward progression.

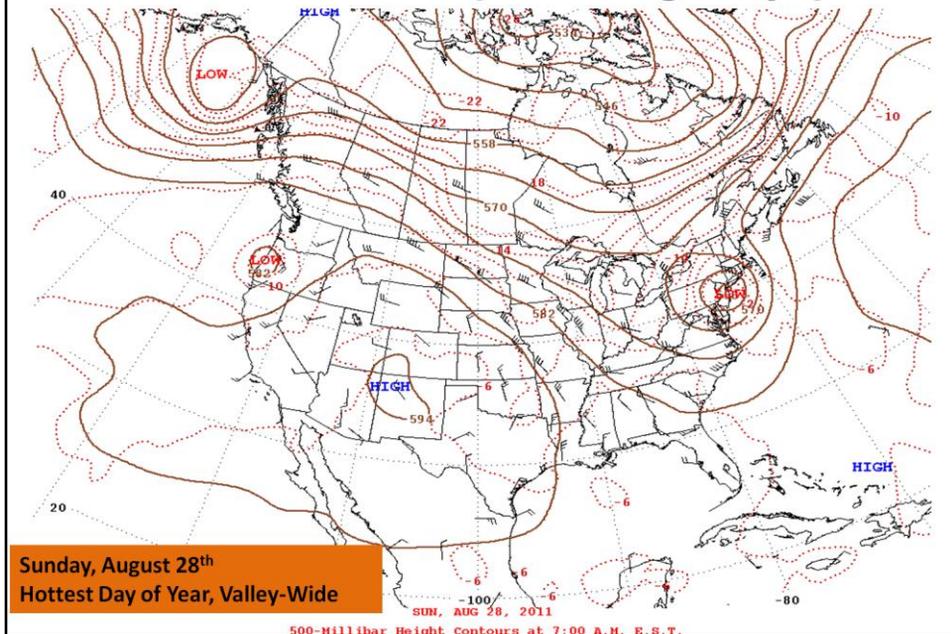


This shear “signature” looks like a mid latitude winter-type system, with the surface and upper level systems at the edge of the comma, moving into southwest Mississippi or eastern Louisiana. Note the strong northerly flow slicing through north and central Texas – bringing potentially very dry and – less hot – air to the Valley.

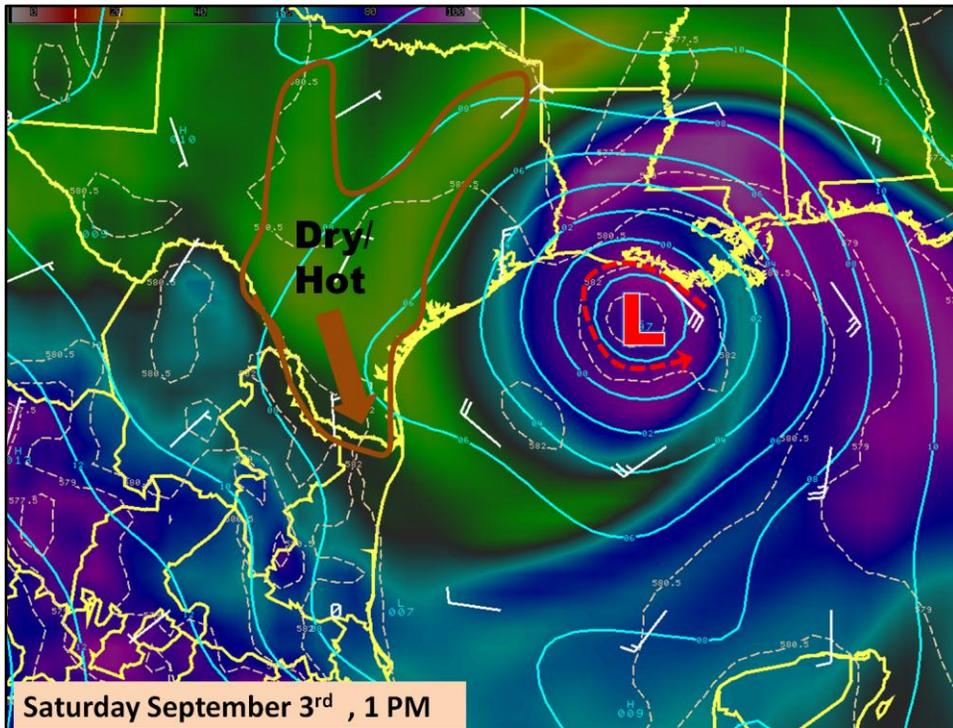
Regional and Global Model Data

- Cautious Optimism September 1st Evening
- All Global Models held system along northern Gulf coast through weekend, then move farther north or northeast through the Alabama/Mississippi/Louisiana region early next week
- Still, worth another couple of model runs and more definition of the system to “call off the dogs...”
- Speaking of Dogs: Appears that “La Canicula” (Dog Days) will “win” the battle once again
- “La Canicula” is the persistent core of high pressure which has had a vice grip on our hot and dry summer

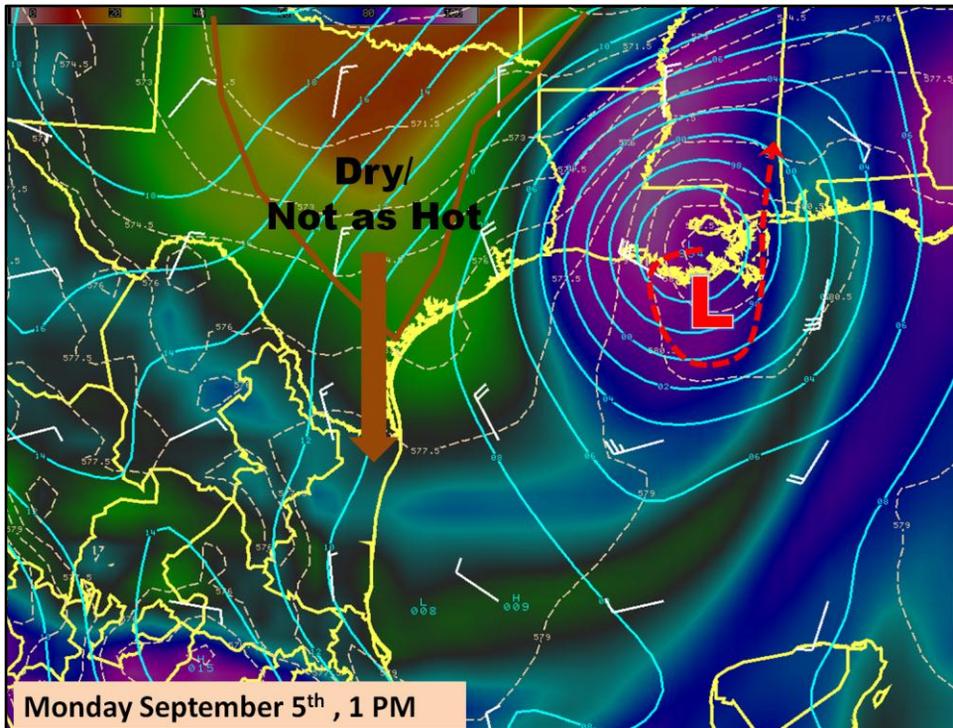
“La Canicula” (The Dog Days)



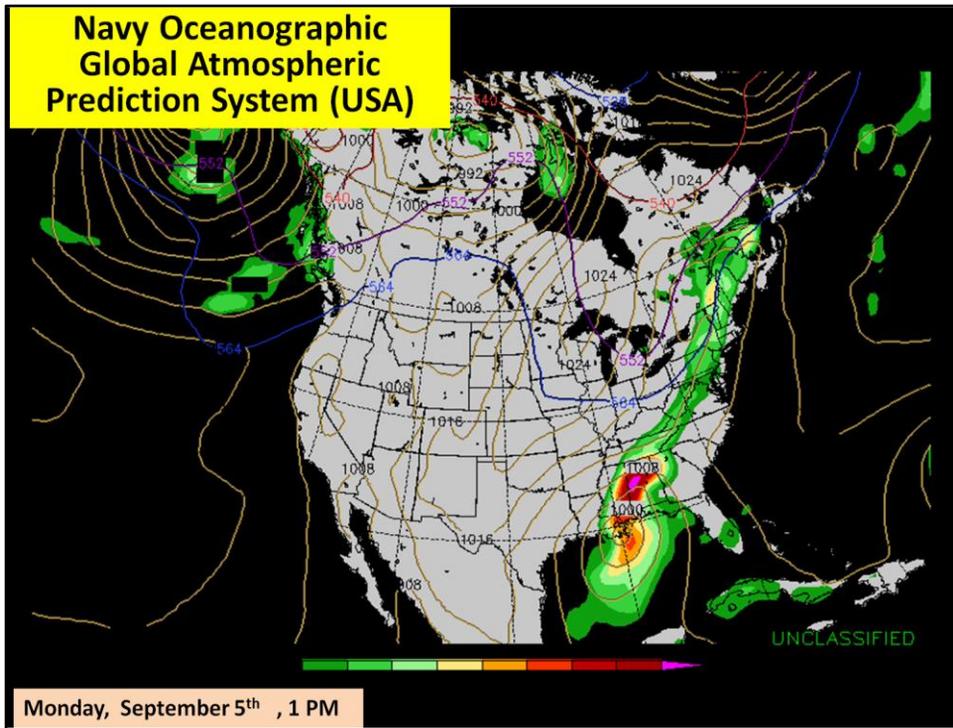
Very hot and dry air circulated around the east side of the “High”, located across the southwest U.S., on August 28th and 29th. Similar heat was felt often this summer with little rain as this ridge of high pressure remained anywhere from the Rockies to the Ozarks, always extending south into Texas.



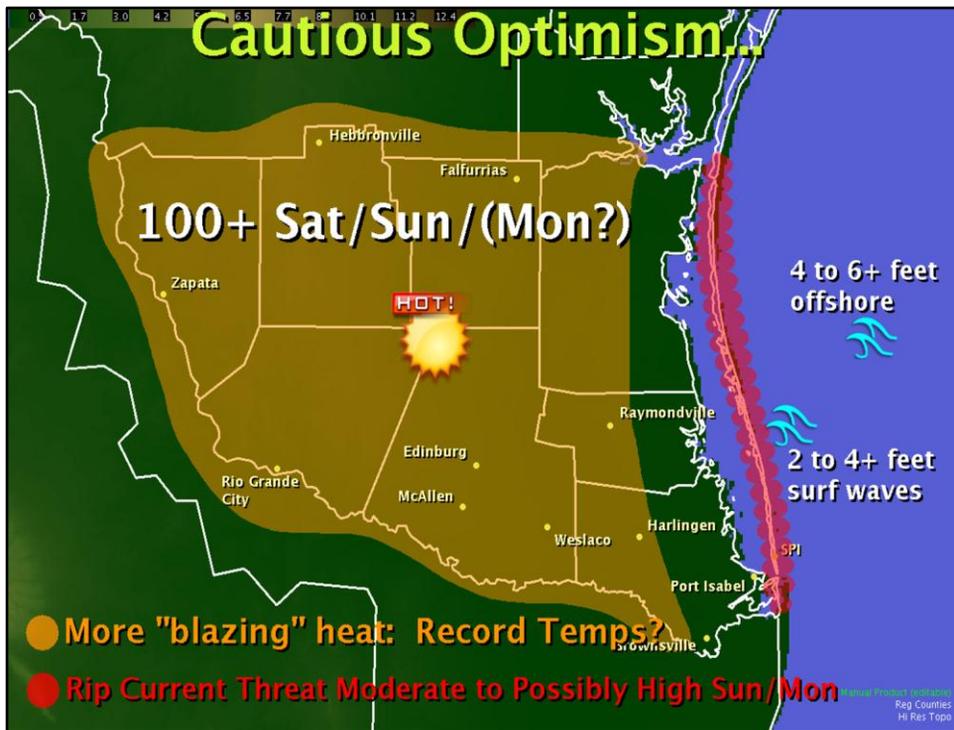
At this point, system is locked nearly in place, or in a one to three day “looping” pattern along the Louisiana coast (Saturday through early Monday), which could spell flooding disaster from rainfall in the lowlands of Louisiana and Mississippi while the Texas coast stays high and dry. Winds will be blowing offshore, guaranteeing a hot one on Saturday.



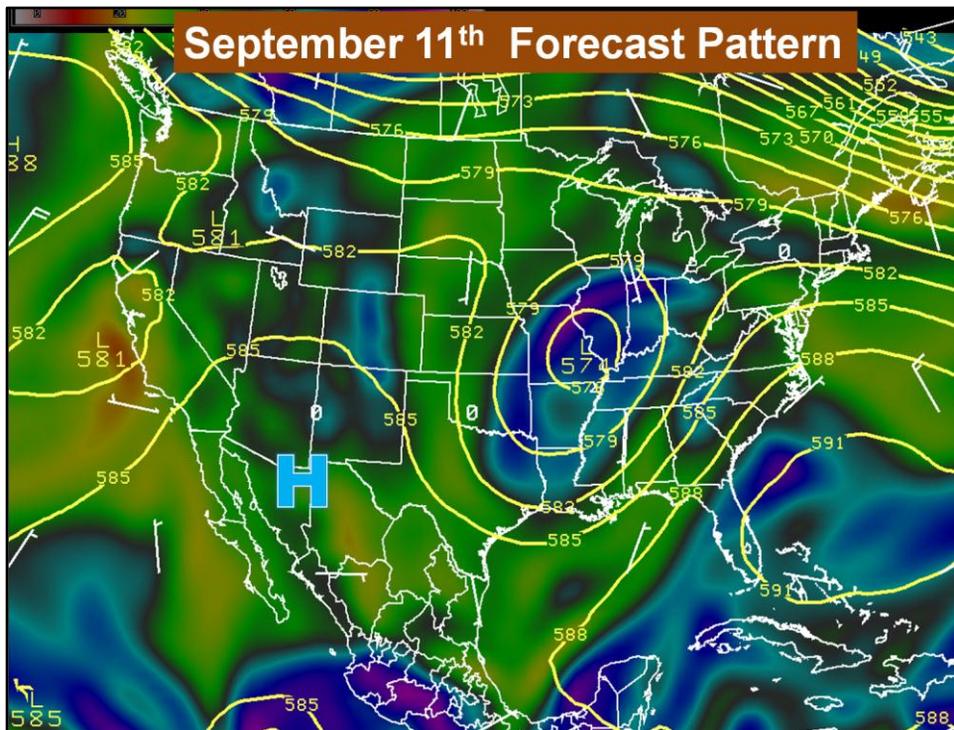
The red colored air mass diving south from north Texas is actually /cooler/ air which will bring nicer evenings and overnights, while the days still get hot, but less than 100 degrees, perhaps as early as Monday but more likely by Tuesday and beyond (September 6). After “looping” in the northern Gulf, the cyclone should begin moving inland for good by the 5th or 6th.



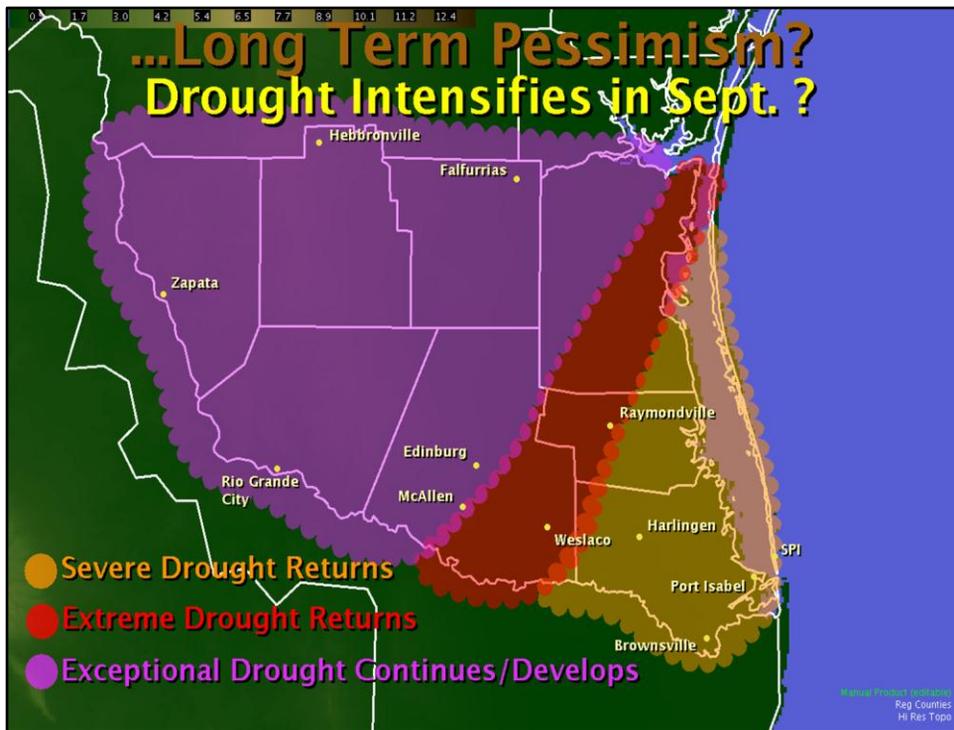
The “NOGAPS”, European Centre for Medium Range Weather Forecasting, and the Canadian Global Environmental Model all have a similar solution to the US Global Forecast System model, increasing confidence for a hot, dry weekend and early next week (September 5th and beyond)



The biggest threat will be at the beach, where swells radiating from the cyclone will reach the beach despite a light surface wind from the north or northwest. While not as wild as Hurricane Gustav in 2008, surfing waves and rip currents could be deadly if caution is not observed, particularly Sunday, September 4th and Monday, September 5th. Stay safe in the surf! <http://weather.gov/rgv/?n=ripcurrentindex> and <http://weather.gov/rgv/?n=ripcurrentindexesp> (Espanol).



Even flattened, the southwest U.S. ridge continues to flow dry air across Texas into the second full week of September. Longer range models suggest little or no rain through at least the 15th. September is normally the wettest month of the year, so little rain combined with a potential winter La Nina would most certainly intensify the drought, as shown in the next slide.



This could be the story of the month, especially if little or no rain falls during the second half of September.

**As always...Stay Tuned,
and Stay Prepared!**

