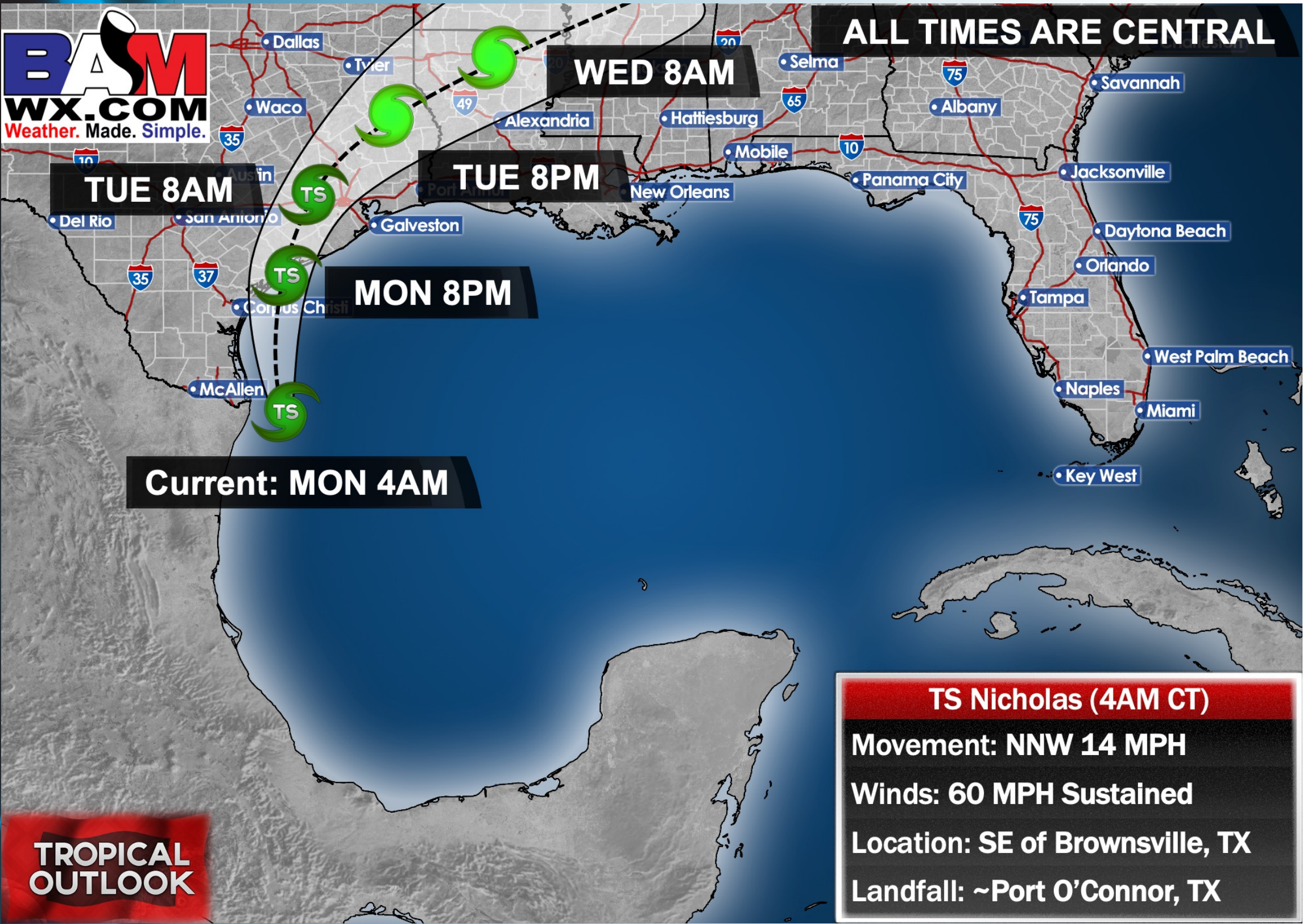


**Updated: 5:00 AM CT, Monday, September 13, 2021**

- **As always, please do not hesitate to reach out to us with any forecast questions via the chat option on the Weather Porthole or our on-call number, (317)-560-8122 press 1 for forecast questions.**
  
- **TROPICAL STORM NICHOLAS PM VIDEO:**
  - <http://youtu.be/zAfl0fZd7xU?hd=1>

# Tropical Update:

## BAMWX TS Nicholas Track



# TROPICAL DETAILS

Monday, September 13, 2021

## WINDS FOR THE BOARDING STATION

**Monday (5AM to ~5 PM) – 15 to 25 MPH with gusts 25 to 30 MPH possible**

**Monday (~5 PM to ~10 PM) – 25 to 35 MPH with gusts 30 – 40 MPH possible**

**Mon - Tue (~10 PM to ~5AM) – 35 to 50 MPH with gusts 45 to 60 MPH possible**

**Tue - Wed (~5AM to ~7 AM) – 20 to 30 MPH with gusts 25 – 40 MPH possible [decreasing towards lower-end Tue. Night]**

## WAVES AT THE BOARDING STATION

- 6+ foot waves favored to start ~10 AM Monday**
- MAX Wave Height: ~12 feet, ~10AM Tuesday**
- 6+ foot waves favored to end ~9 PM Tuesday**

## Trigger Thresholds for Houston Pilots Boarding Station:

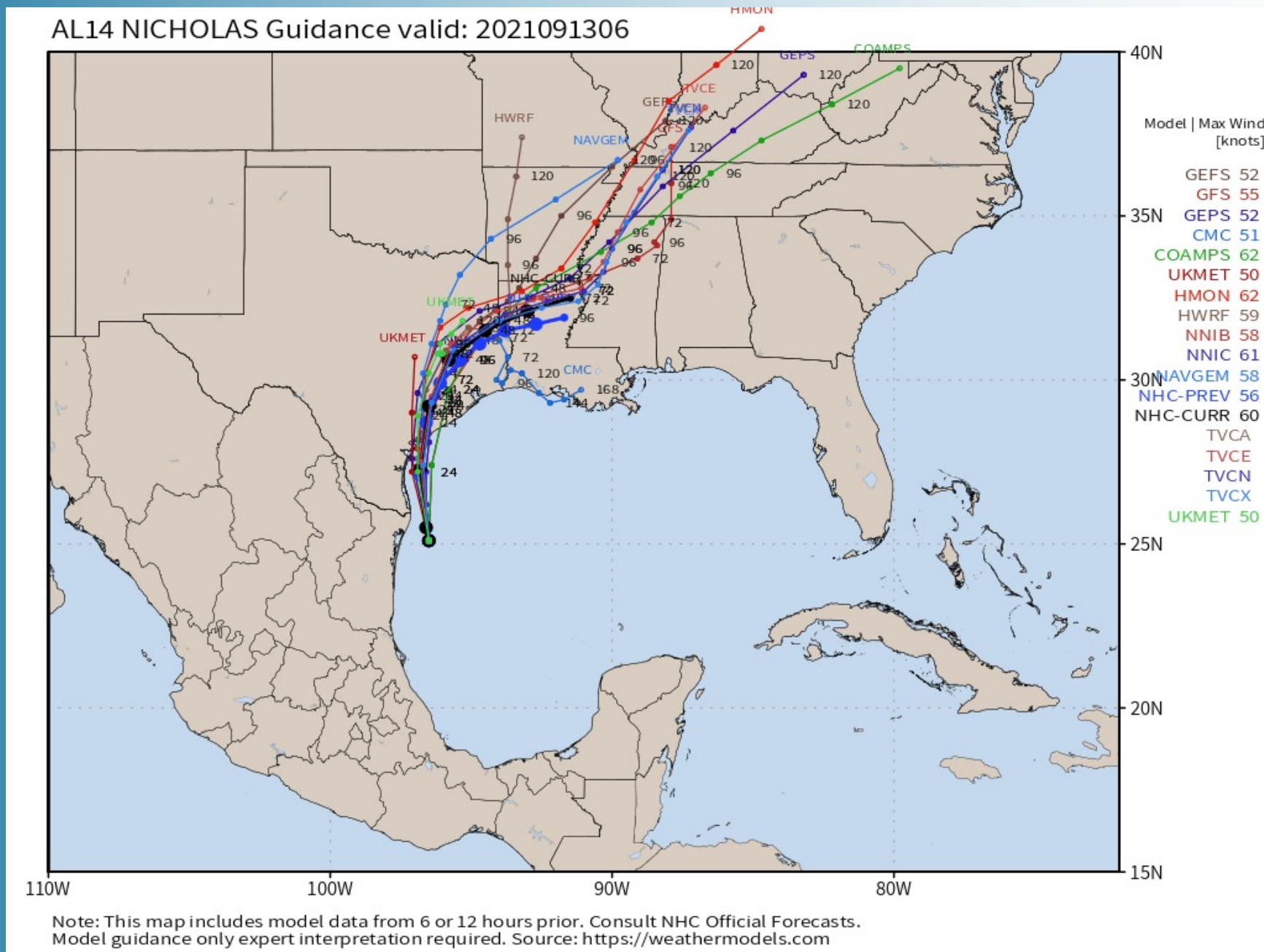
Trigger met at:	Sustained winds 39+ MPH	Consistent Waves of 6 Feet+	Expected time when trigger will end + hours remaining
Victor	N/A	N/A	N/A
Whiskey	N/A	N/A	N/A
X-Ray	N/A	N/A	N/A
Yankee	N/A	N/A	N/A
Zulu	N/A	IN EFFECT	TUE 9/14/21 @ 9 PM CT

Port Condition	Definition Of Triggers	Trigger Reached
Victor	Hurricane entering or developing in the Gulf of Mexico	NO
Whiskey	72 hrs. prior to predicted sustained winds 39+ MPH	NO
X-Ray	48 hrs. prior to predicted sustained winds of 39+ MPH OR 6' wave height	YES
Yankee	24 hrs. prior to predicted sustained winds of 39+ MPH OR 6' wave height	YES
Zulu	12 hrs. prior to predicted sustained winds of 39+ MPH OR 6' wave height	YES

- Data is converging on a landfall near Port O'Conner, TX – about 115 miles southwest of Galveston, TX with a track inland north of Houston early this week.
- The track of Nicholas has sped up a bit as it is already just southeast of the southern tip of Texas.
- Given this tick northward a little bit fast, we believe that it is necessary to go ahead and trigger Zulu. We are speeding up the onset of 6 ft waves for the boarding station by 10AM CT this morning. We continue to favor winds to reach Tropical Storm threshold after 6 foot waves arrive.
- As our stations will likely be on the E side of Nicholas, storm surge is certainly something that needs to be monitored. Latest indications would suggest that a storm surge of 2-4 feet is likely for all stations, though there are some hints that up to a 5 - 6 foot storm surge cannot be ruled out especially for our northern stations (76/76, Morgan's Point, etc.).

# Tropical Update:

## TS Nicholas Tracks



- Still high confidence the HOU / Galveston area sees impacts from TS Nicholas out through Tuesday evening.
- Peak conditions in both wave heights and winds are likely found starting later today to the pre-dawn hours Tuesday, extending out through mid afternoon.
- Winds will continue to remain at near tropical storm force upon arrival to the Bay locations to HOU metro.



# Visibility Report

## Monday, September 13, 2021

# HOURLY VISIBILITY BREAKDOWN (in miles)

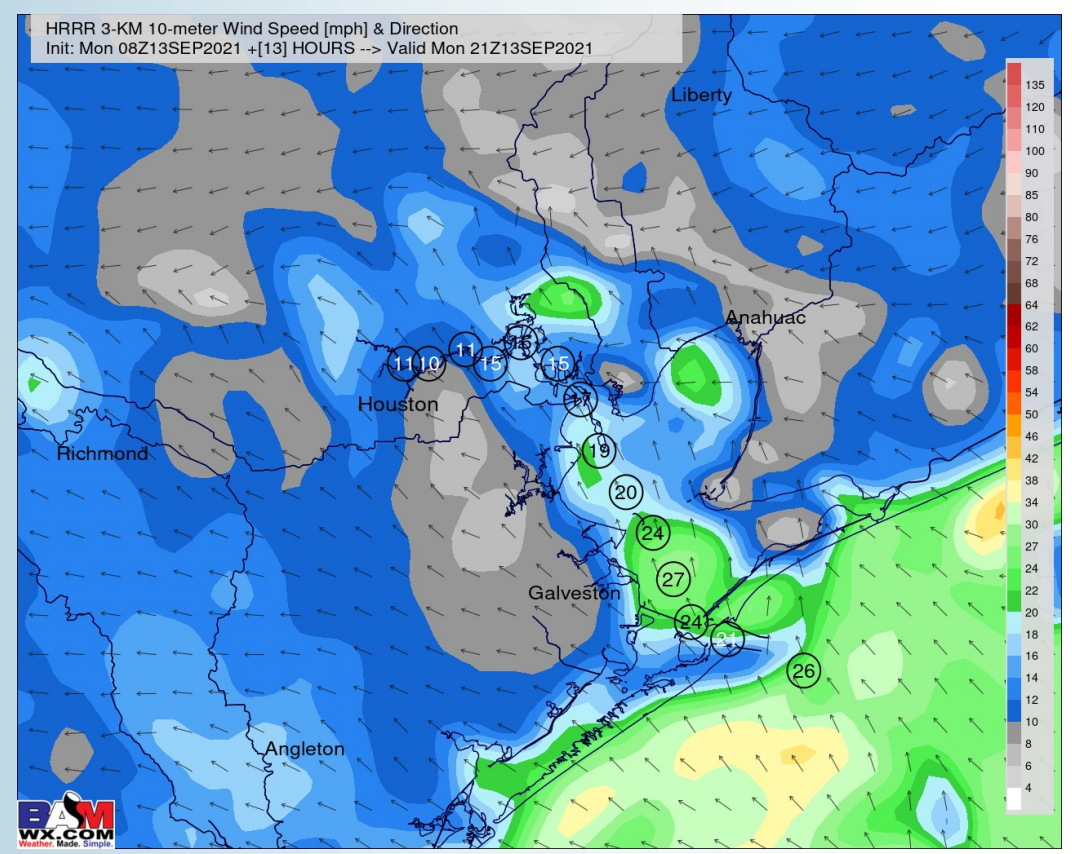
09-13-2021 Mon 3am	09-13-2021 Mon 4am	09-13-2021 Mon 5am	09-13-2021 Mon 6am	09-13-2021 Mon 7am	09-13-2021 Mon 8am	09-13-2021 Mon 9am	09-13-2021 Mon 10am	09-13-2021 Mon 11am	09-13-2021 Mon 12pm	09-13-2021 Mon 1pm	09-13-2021 Mon 2pm	09-13-2021 Mon 3pm	09-13-2021 Mon 4pm	09-13-2021 Mon 5pm	09-13-2021 Mon 6pm	09-13-2021 Mon 7pm	09-13-2021 Mon 8pm	09-13-2021 Mon 9pm	09-13-2021 Mon 10pm	09-13-2021 Mon 11pm	09-14-2021 Tue 12am	09-14-2021 Tue 1am	09-14-2021 Tue 2am	09-14-2021 Tue 3am	09-14-2021 Tue 4am	09-14-2021 Tue 5am	09-14-2021 Tue 6am	09-14-2021 Tue 7am	09-14-2021 Tue 8am	09-14-2021 Tue 9am	09-14-2021 Tue 10am	09-14-2021 Tue 11am	09-14-2021 Tue 12pm			
10.000	10.000	10.000	10.000	8.988	6.096	5.886	6.964	6.935	4.902	3.948	4.902	6.890	4.902	3.948	3.948	4.931	5.921	6.955	6.955	6.955	6.955	7.954	8.988	10.000	10.000	10.000	10.000	10.000	3.897	2.988	3.897	4.897	4.897			
10.000	10.000	10.000	10.000	8.695	6.096	5.886	6.964	6.935	4.902	3.948	4.902	6.890	4.902	3.948	3.948	4.931	6.422	8.256	7.493	6.955	7.212	7.954	8.988	10.000	10.000	10.000	10.000	10.000	3.897	2.988	3.897	4.897	4.897			
10.000	10.000	10.000	10.000	7.940	5.779	5.886	6.952	6.893	4.823	3.948	4.902	6.890	5.936	3.948	3.948	4.931	7.146	9.907	9.137	8.205	7.744	8.133	8.900	10.000	10.000	10.000	10.000	10.000	3.897	2.975	3.897	4.897	4.897			
10.000	10.000	10.000	10.000	7.328	4.996	5.895	6.922	6.893	4.289	4.038	4.902	6.890	5.936	3.948	3.948	4.931	9.274	10.000	10.000	10.000	8.988	9.274	7.954	10.000	10.000	10.000	10.000	10.000	3.897	2.972	3.897	4.897	4.897			
7.101	9.182	10.000	10.000	6.920	5.319	5.924	6.920	6.026	5.365	4.038	4.902	6.890	5.936	3.948	3.948	4.931	9.274	10.000	10.000	10.000	8.988	9.274	7.954	10.000	10.000	10.000	10.000	10.000	3.897	2.943	3.897	4.897	4.897			
6.920	7.231	9.350	9.038	6.920	5.886	6.920	6.920	6.890	5.365	4.902	4.902	6.890	5.936	3.948	3.948	4.931	10.000	10.000	10.000	10.000	8.988	10.000	7.954	10.000	10.000	10.000	10.000	8.988	4.318	2.943	3.897	4.897	4.897			
5.924	6.920	8.402	8.479	6.929	5.886	6.920	6.920	7.389	5.365	4.902	4.902	6.890	5.936	3.948	4.902	4.931	10.000	10.000	10.000	10.000	8.988	10.000	8.464	10.000	9.722	10.000	10.000	8.988	6.737	3.977	3.897	4.897	4.897			
5.924	6.920	10.000	10.000	10.000	6.920	6.920	6.427	8.840	5.936	4.902	4.902	6.890	5.936	3.948	4.902	5.668	10.000	10.000	10.000	10.000	8.988	10.000	8.685	10.000	8.988	10.000	10.000	7.954	6.737	3.977	4.456	4.897	4.897			
6.488	7.522	10.000	10.000	10.000	6.920	6.920	5.924	9.038	5.936	4.902	4.902	6.890	4.902	3.948	4.902	7.580	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	9.636	6.999	3.977	4.931	5.500	5.931		
6.920	8.674	10.000	10.000	10.000	8.182	6.920	6.920	9.038	6.890	5.448	5.936	6.890	5.547	4.902	4.902	9.810	10.000	10.000	10.000	10.000	10.000	10.000	10.000	9.667	10.000	10.000	10.000	10.000	10.000	6.817	3.977	4.931	5.931	5.931		
8.415	10.000	10.000	10.000	10.000	8.988	9.292	9.292	9.038	7.702	5.936	5.936	6.890	5.747	4.902	4.902	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	5.965	3.977	5.498	6.388	5.931		
10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	8.146	5.936	5.936	6.890	5.747	4.902	4.902	10.000	10.000	10.000	10.000	9.695	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	5.135	4.435	5.739	6.642	6.749		
10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	9.038	6.890	5.936	6.890	6.377	4.902	4.902	10.000	10.000	10.000	10.000	9.695	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	5.135	4.435	5.739	6.642	6.749		
10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	9.038	6.890	5.936	6.890	5.936	4.902	4.902	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	10.000	9.064	8.557	4.692	4.448	5.965	4.854	4.734

***The reduced visibility being shown above will be from Tropical Storm Nicholas heavy precipitation, not fog.***

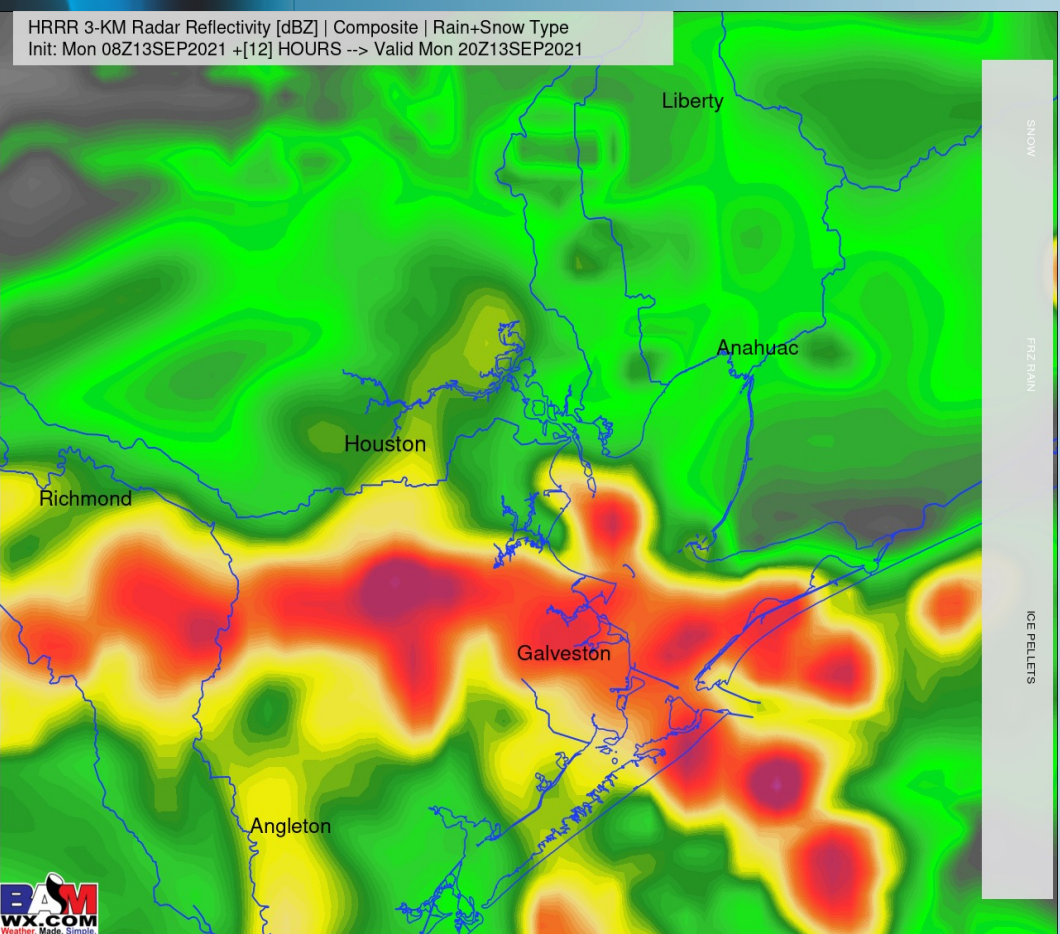
## Short-Term Forecast Discussion

- Showers and thunderstorms look to continue for most of today with best chances of seeing breaks later this morning to early afternoon. Rainfall rates of 1-2"/hour will be possible at times. Severe threat still looks rather low. Little dry time is favored for today, overall.
- Winds generally look to be coming from the SE today, 15-25 MPH sustained. Gusts 25-35 MPH. After ~sundown, currently favoring sustained 20-30 MPH, gusts 30-40+ MPH the deeper into the evening to overnight we go. After 10PM, sustained winds of 35 – 50 MPH possible with gusts of 45 – 60 MPH.
- Highs today look to be in the low to mid 80s.
- *No fog anticipated for today, but reduced visibility will be possible in heavier showers.*

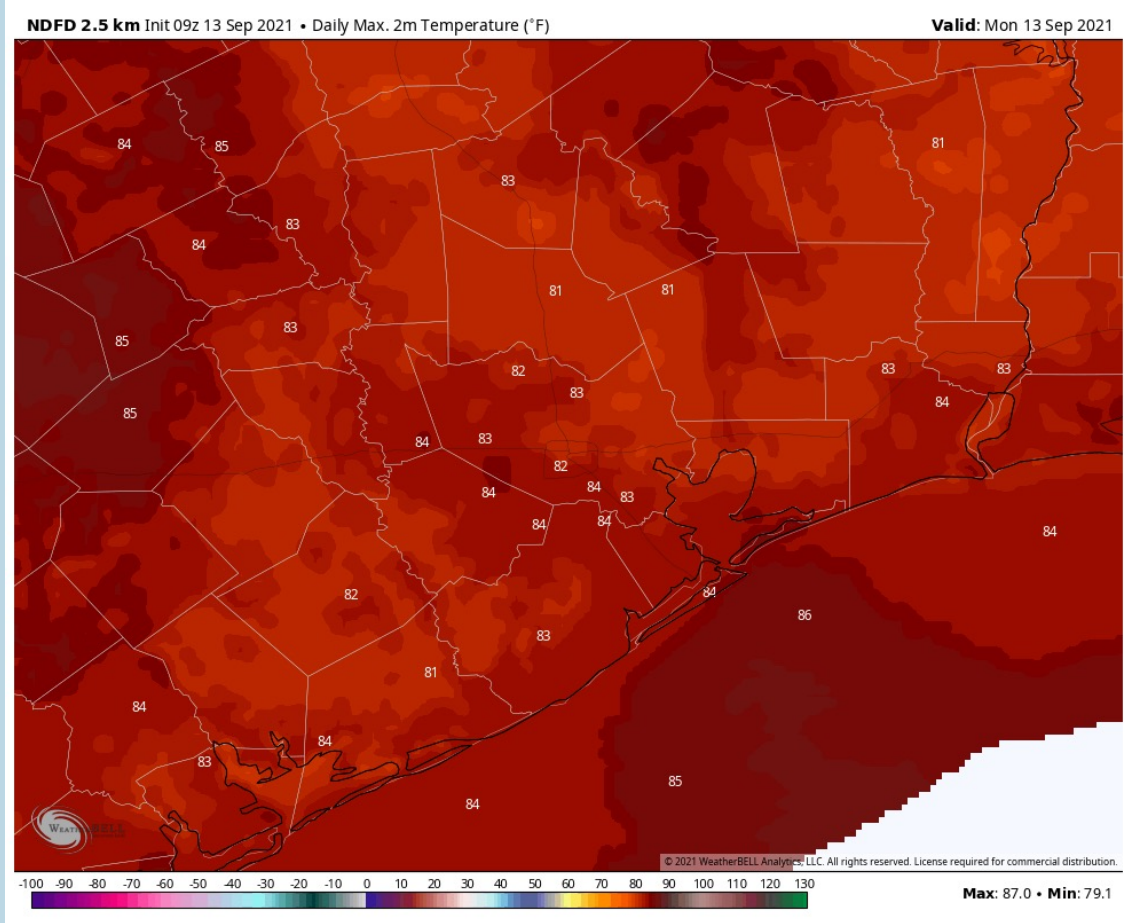
## Sustained Winds (4 PM CT)



## Simulated Radar Snapshot (3 PM CT)



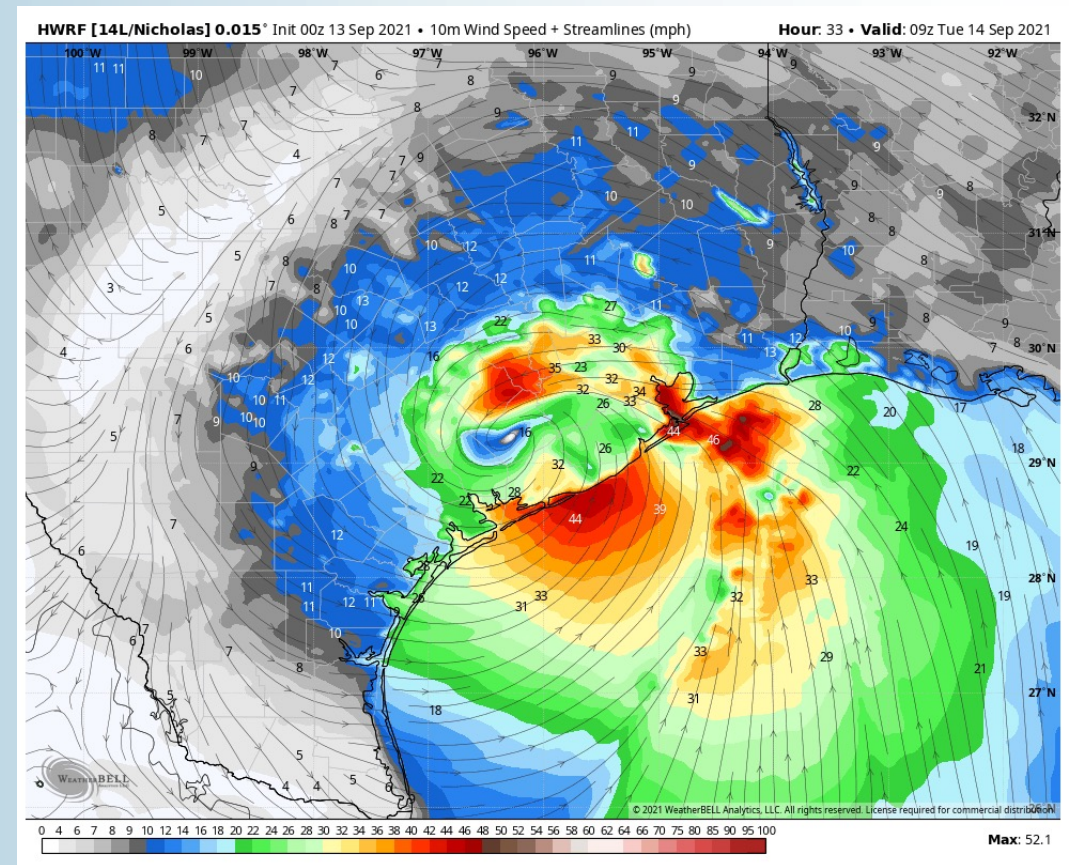
## High Temperatures Monday



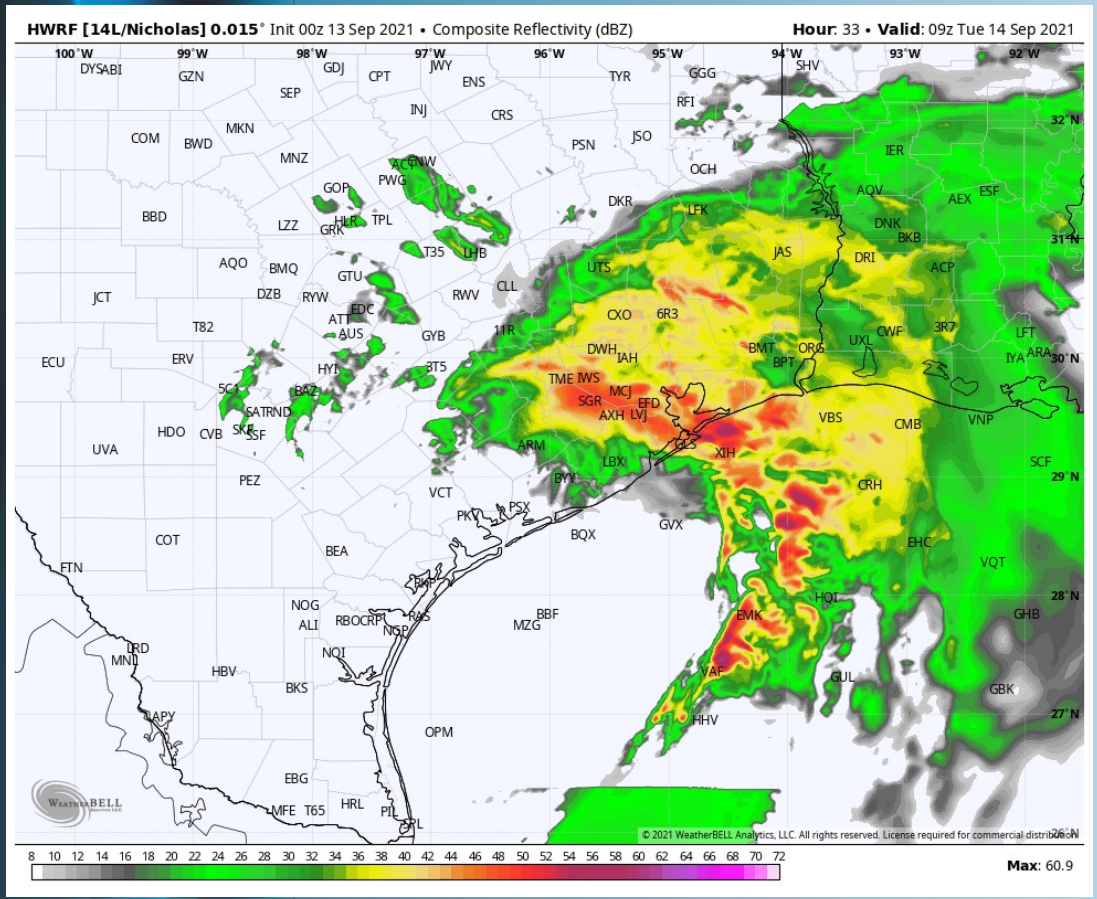
## Short-Term Forecast Discussion

- Like Monday, heavy / gusty showers and thunderstorms look to continue for most of Tuesday morning. Since things have sped up in the short-term, Tuesday afternoon looks to see lessening chances of precipitation.
- Pending exact timing and location of landfall, sustained winds 35-45 MPH Tuesday morning (~4AM-12PM), gusts 45-55 MPH are possible. Getting into afternoon to evening 20 – 30 MPH sustained with gusts 25-40 MPH possible.
- At this moment, 6'+ is favored for the boarding station (like shown in bottom right) to continue through ~9PM.
- *No fog anticipated for Tuesday, but reduced visibility will be possible in heavier showers.*

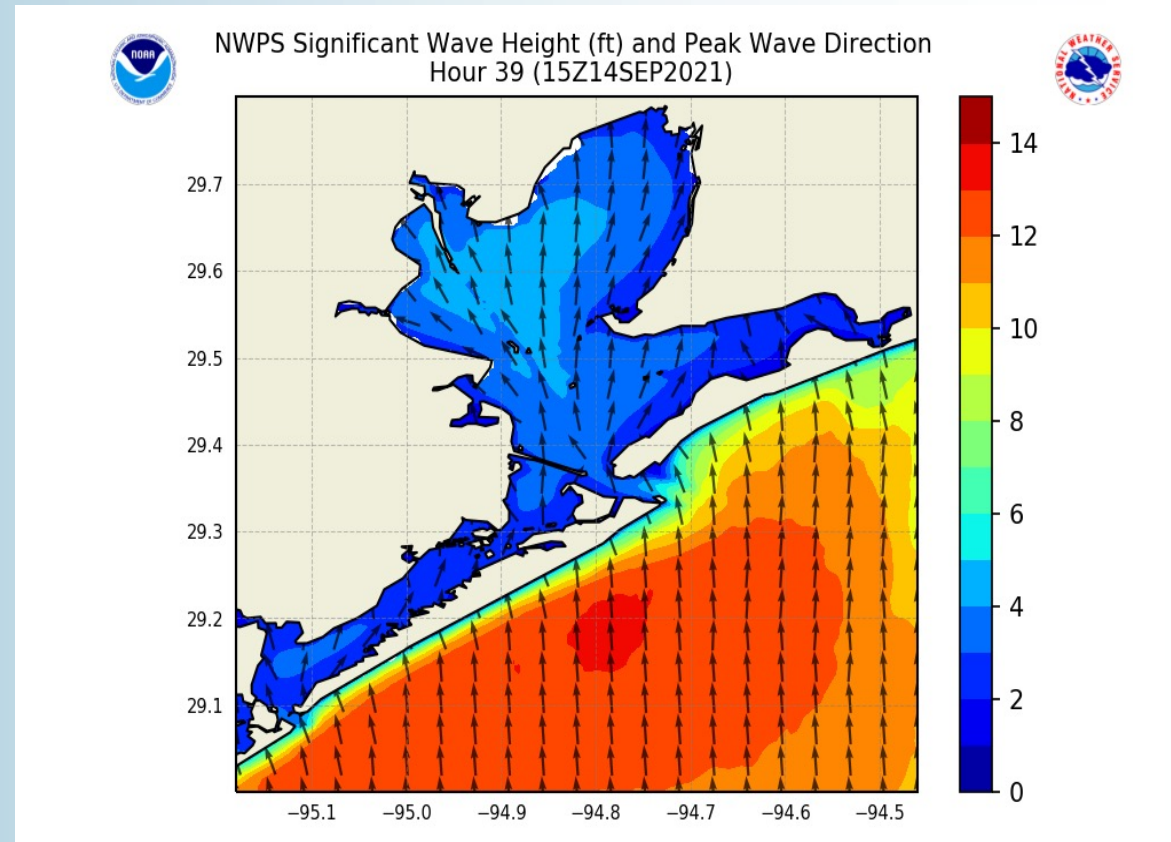
## Sustained Winds (4 AM CT)



## Simulated Radar Snapshot (4 AM CT)



## Wave Heights: 10 AM CT

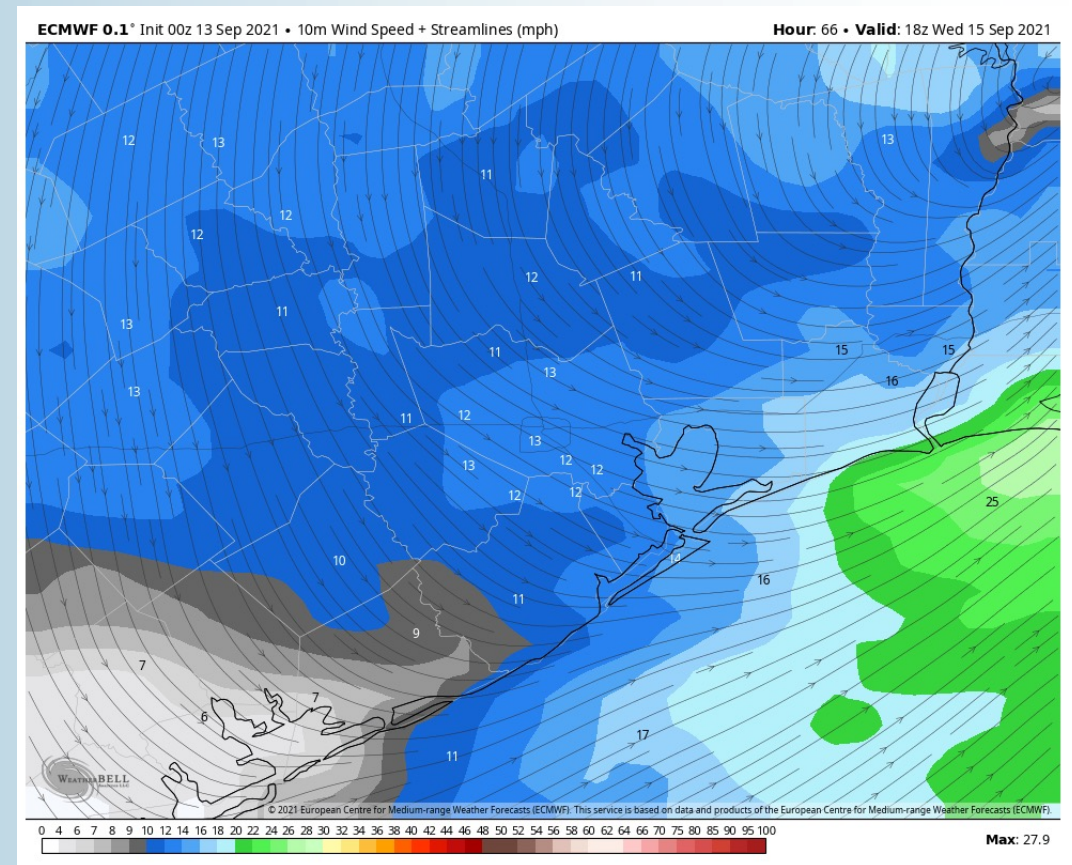




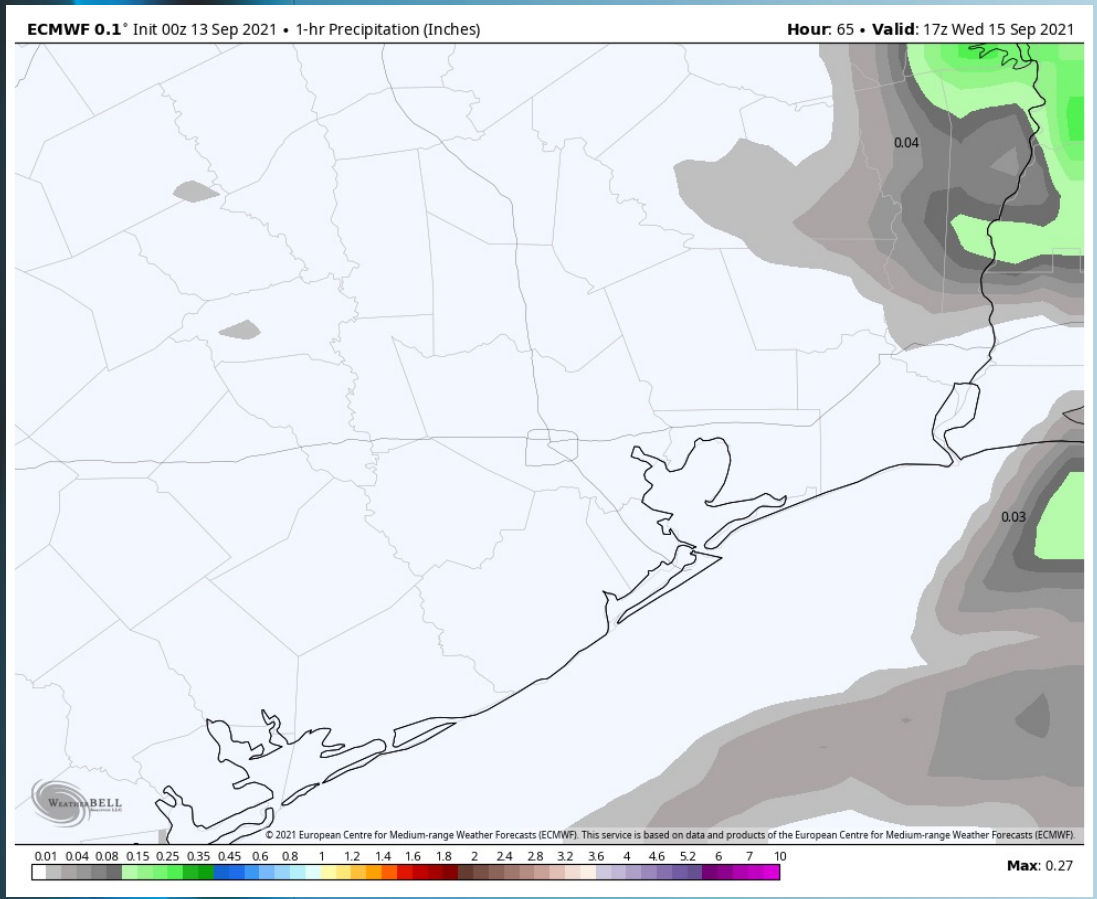
## Short-Term Forecast Discussion

- Overall, Wednesday is expected to trend towards a drier day across the HOU metro area towards the Boarding Station.
- Winds will remain elevated at this time, expecting to be sustained at West to Northwest at 10-15 MPH, gusting at times up to 20-25 MPH (especially through early afternoon - tapering off deeper into the PM hours we go).
- High temperatures look to return back into the mid-to-upper 80s on Wednesday, especially further in-land towards HOU.
- ***No fog is anticipated for WED.***

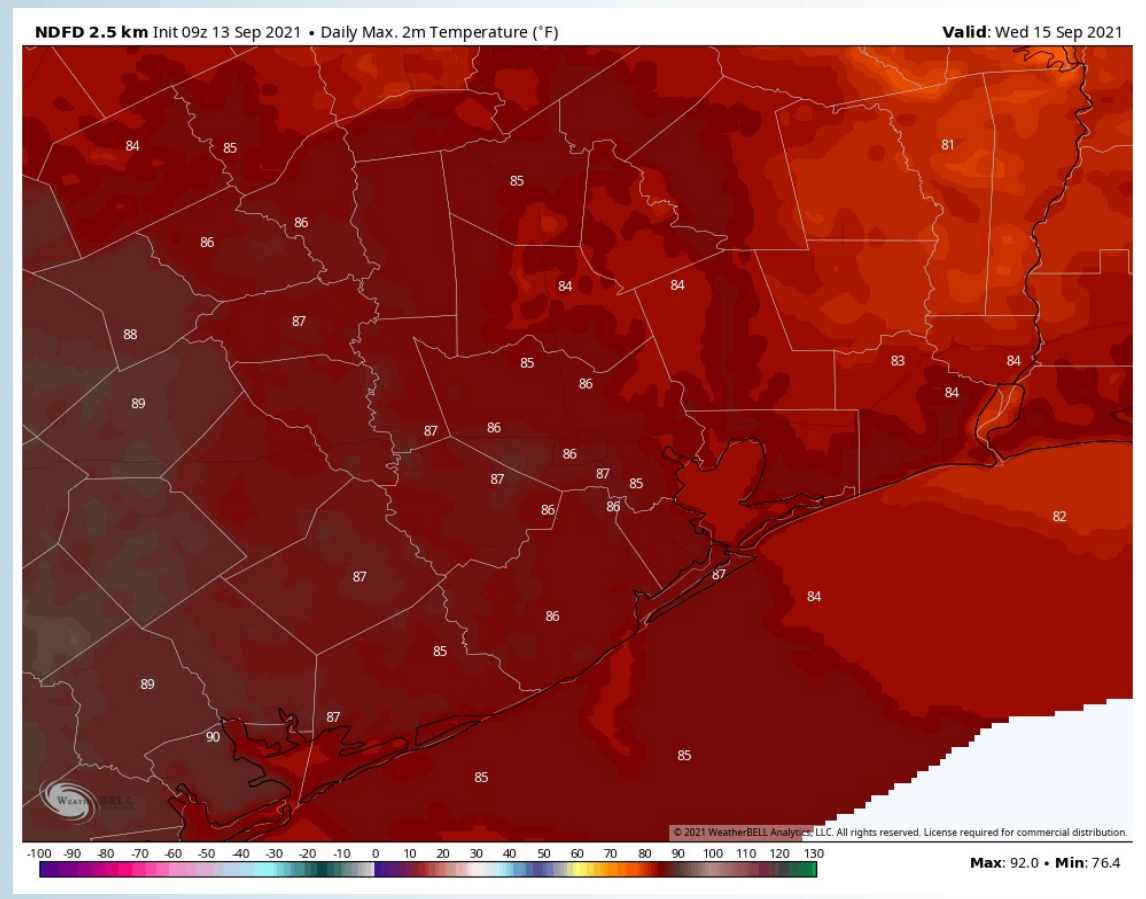
## Sustained Winds (2 PM CT)



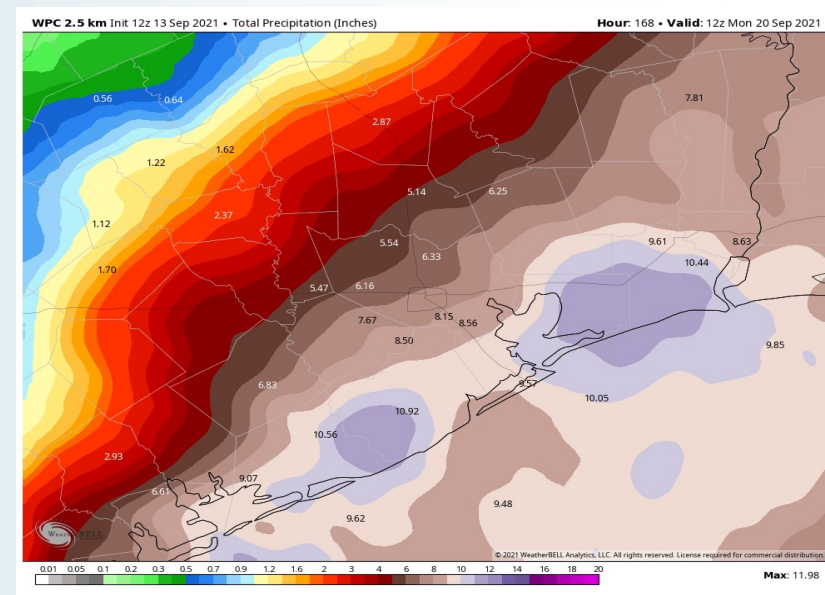
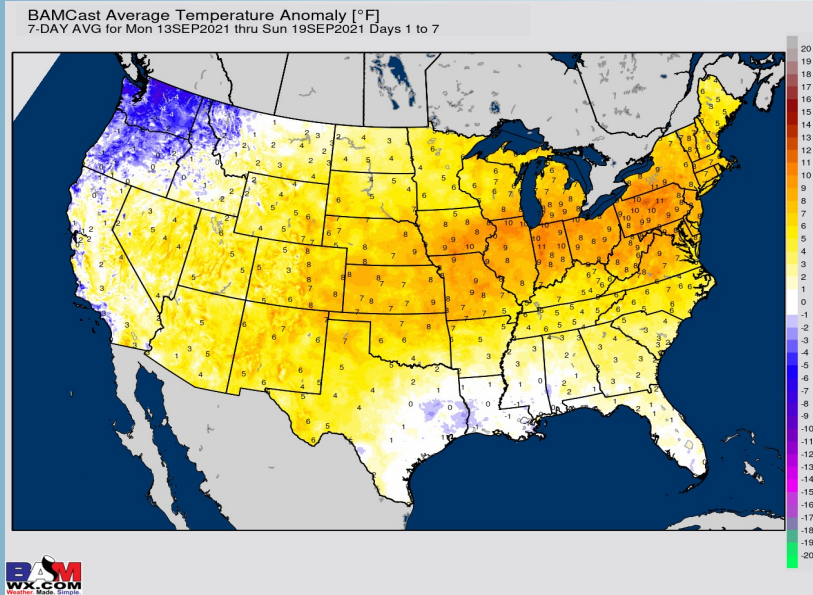
## Simulated Radar Snapshot (12 PM CT)



## High Temperatures Wednesday



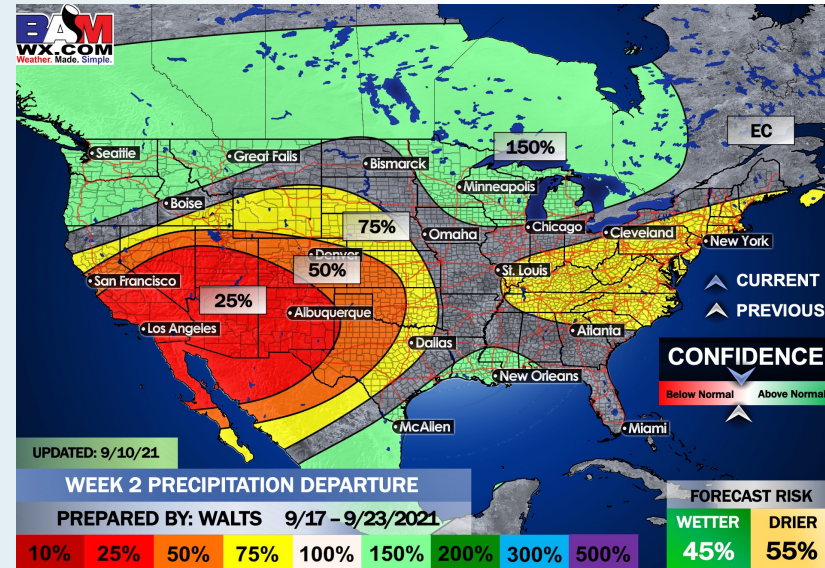
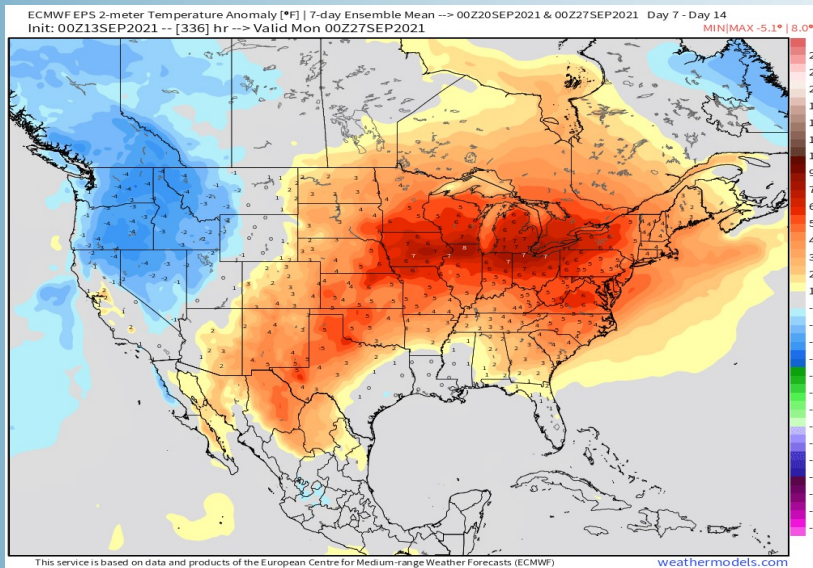
## Week 1 Forecast



## Long-Range Forecast Discussion

- The focus in the week 1 period is going to be the heavy rainfall potentially, especially today through Wednesday. This is associated with the upcoming tropical disturbance. Model data continues to be very aggressive with rainfall amounts of 5"+ possible (around 10" will be possible pending the exact evolution of the system as it moves in-land. Multiple bouts of heavy rain will be possible, especially in the afternoon / evening hours. The added clouds/precipitation will lead to normal to slightly below normal temps. Please refer to the slides above for more specifics.
- The week 2 timeframe is expected to have above average precipitation with near-normal temps. The pattern continues to favor tropical moisture into the area, especially early in the period as the aforementioned system exits. Not eyeing a specific threat for a tropical storm or hurricane at this distance, but will need to continue to monitor.
- Right now, we have the risk of above normal temps and normal precipitation for the weeks 3/4 period. We will continue to monitor for tropical disturbances during this time. All it takes is for one system for above normal rainfall. However, avoiding tropical systems may introduce drier risks. The forecast may ultimately be "boom or bust" in regards to precipitation potential.

## Week 2 Forecast



## Weeks 3/4 Forecast

