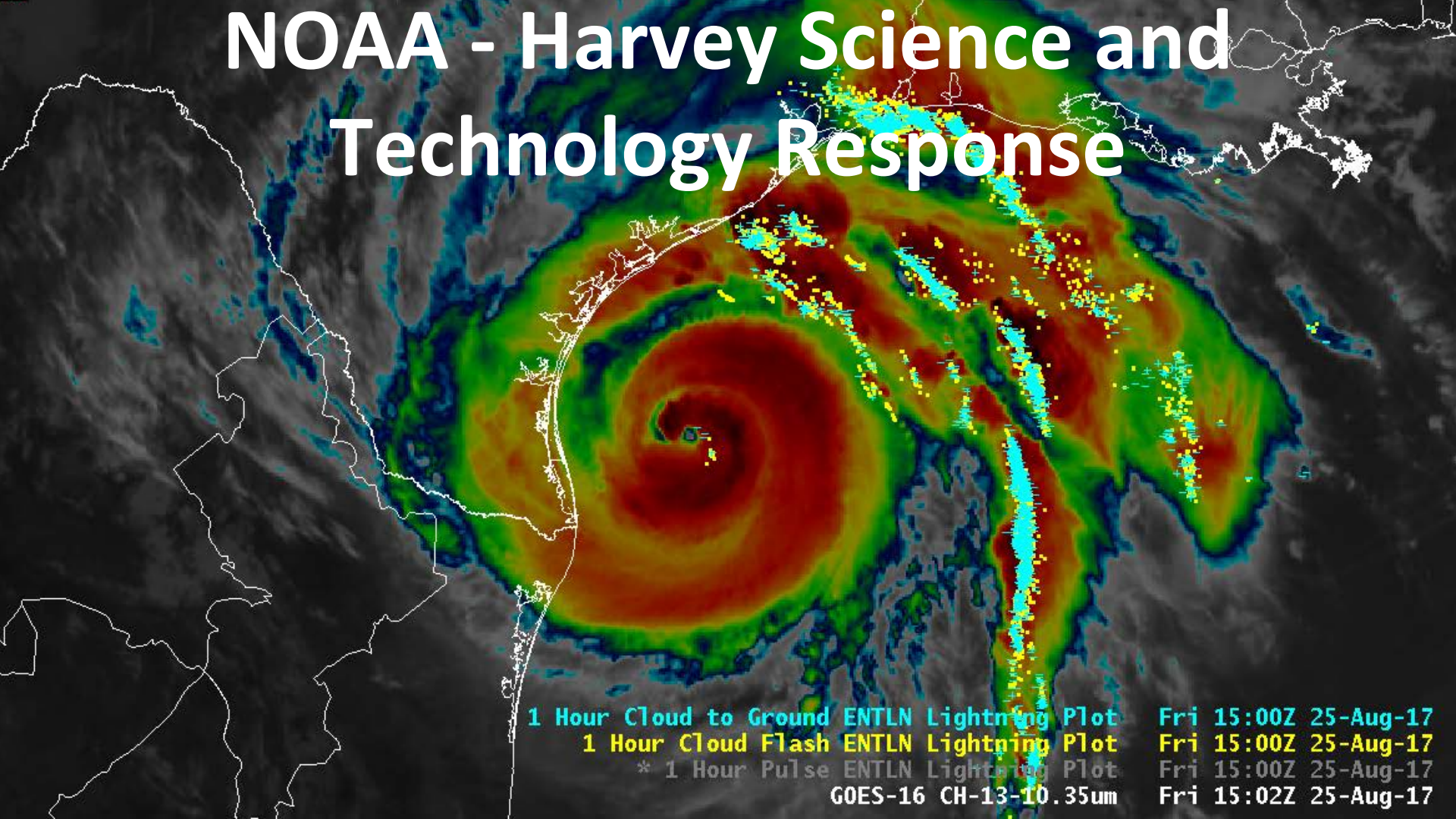


# NOAA - Harvey Science and Technology Response



1 Hour Cloud to Ground ENTNLN Lightning Plot Fri 15:00Z 25-Aug-17  
1 Hour Cloud Flash ENTNLN Lightning Plot Fri 15:00Z 25-Aug-17  
\* 1 Hour Pulse ENTNLN Lightning Plot Fri 15:00Z 25-Aug-17  
GOES-16 CH-13-10.35um Fri 15:02Z 25-Aug-17

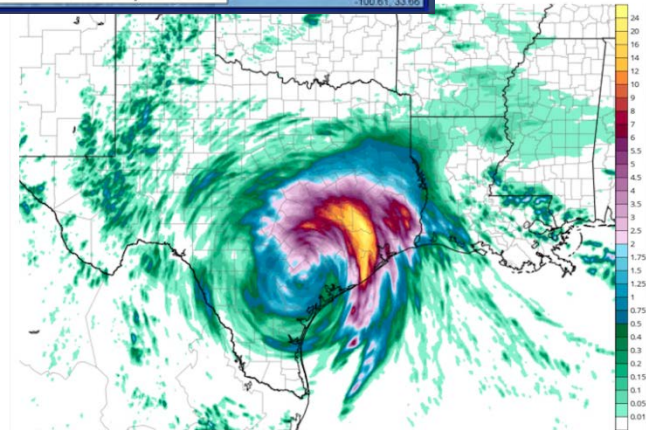
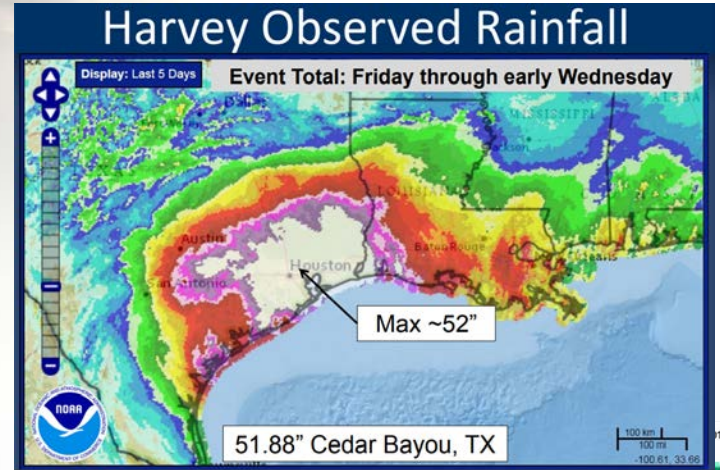
# Quantitative Precipitation Forecasts

Based on 7-day rainfall ending at 5 pm on 8/31:

- 6.9 million people had 30+
- 1.25 million had 45+
- 11 thousand had 50+

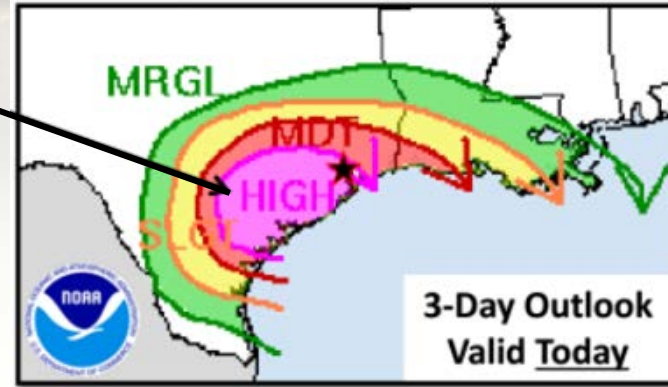
Initiated detailed QPF graphics and multi-day rainfall outlooks early

The hourly output from the HRRR depicted detailed areas of heaviest precipitation

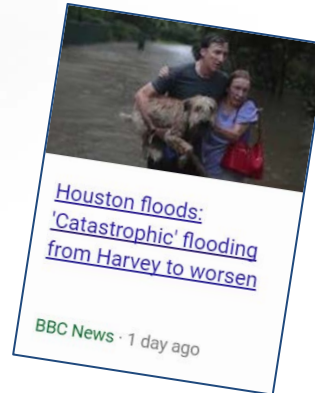


# Tropical “firsts” for Harvey

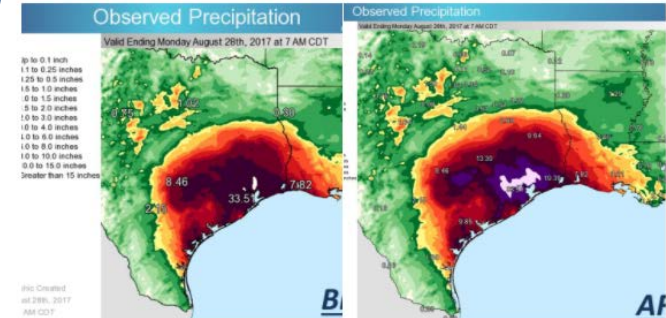
- First-ever HIGH RISK in the Day 3 Rainfall Outlook
- Rainfall was so excessive, the scales had to be increased
- Coordinated statements: "Rainfall of this magnitude is causing catastrophic and life-threatening flooding."
- Only the second time an Extreme Wind Warning has been issued



Follow



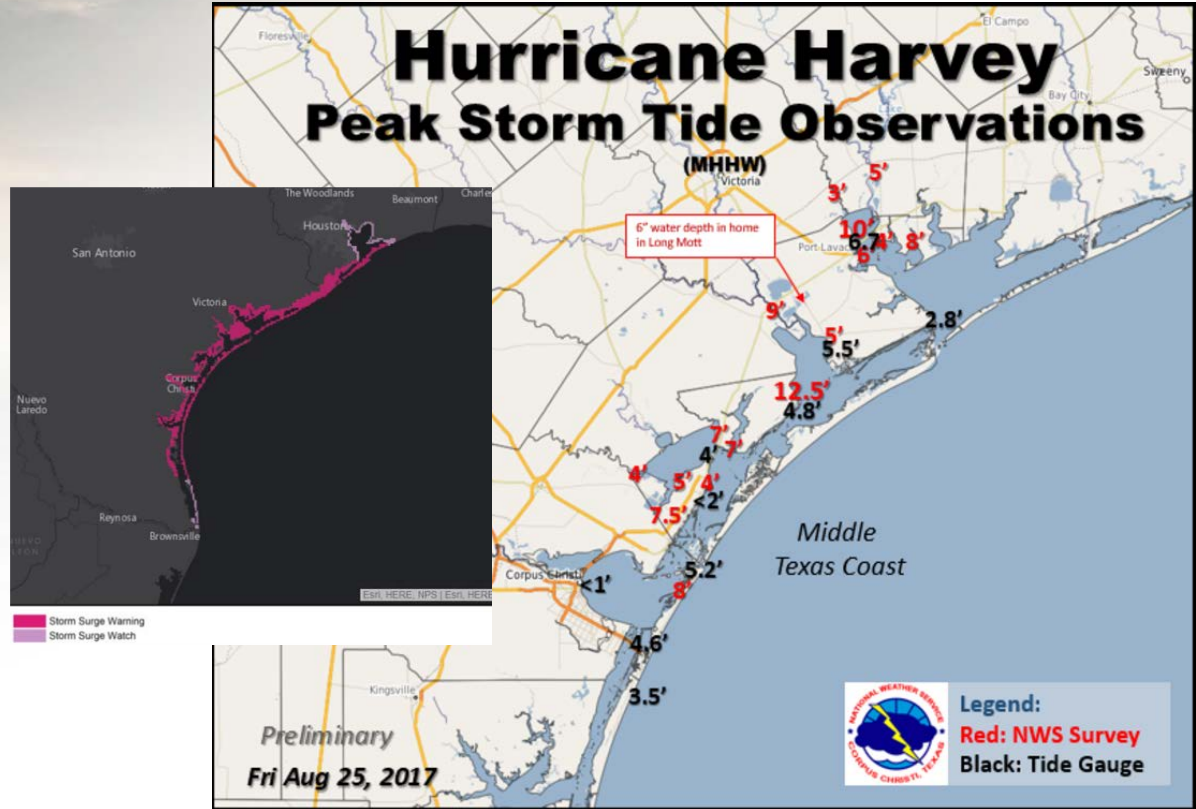
[#Harvey](#) in perspective. So much rain has fallen, we've had to update the color charts on our graphics in order to effectively map it.



# Tropical “firsts” for Harvey

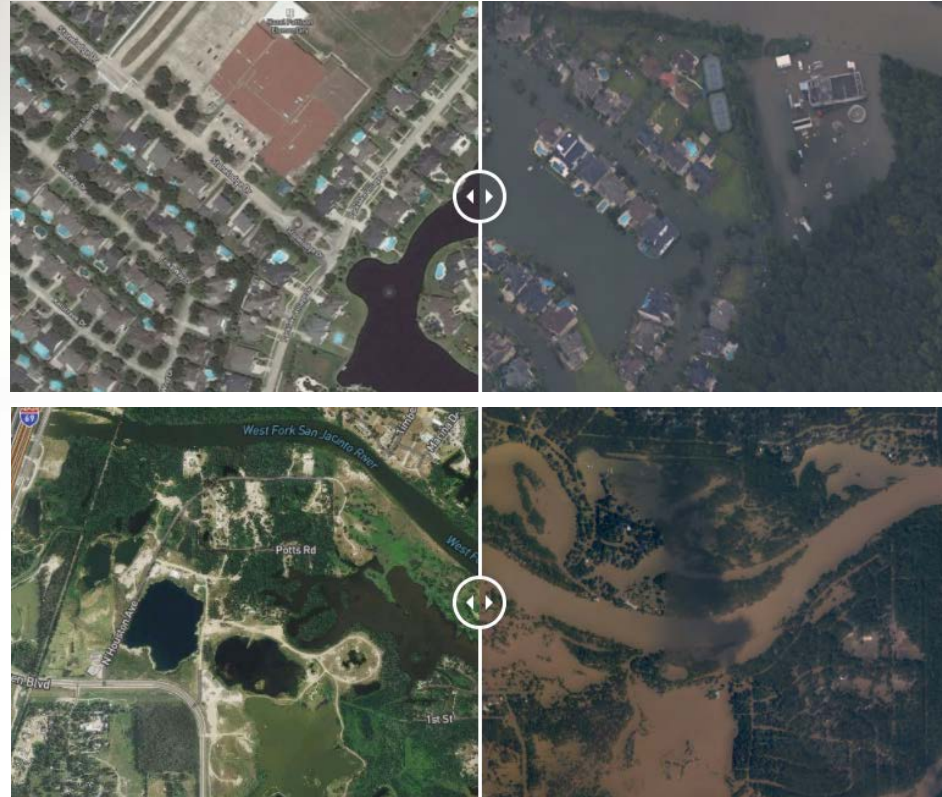
NHC used a Storm Surge Graphic along the coast.

Harvey marks the first time the new storm surge watch and warning was officially issued by the NWS.



# Aviation Support

- Supported operations with P3 and G-IV flights.
  - P3 had a total of 12 penetrations over 3 hurricane flights.
- Twin Otter (N48) outfitted with camera equipment and continuing damage assessment for Texas.
- King Air (N68) repositioned on 8/27 to support damage assessment flights.



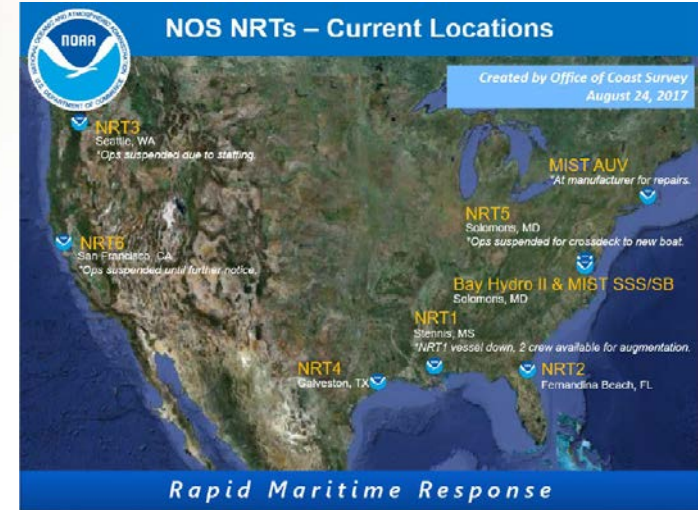
# Response Teams

## Navigation -

- NRT2 (FL) - Mobilized to Corpus Christi Ship Channel for surveys with side-scan sonar
- NRT4 (TX) - Integrated pole mounted sidescan sonar and is surveying the Houston Ship Channel
- Mobile Integrated Survey Team (MIST) was integrated on the R/V MANTA and is using single beam and sidescan in Houston
- David Evans and Associates - R/V Blake is supporting surveys at the Houston-Galveston ship channel outer bar

## Pollution -

- SSTs are supporting 4 incident command posts: Corpus Christi, Houston, and Port Arthur and New Orleans
- Coordinating with the Texas Workgroup which focuses on ESF-10 hazmat and coastal debris threats
- Response Examples: natural gas leak, gasoline spills, marine debris, and wildlife rescues and strandings



# Using Social Media

## NWS Comms Office Reach

### • Twitter @NWS

- Last 5 days: 7M
- Friday: 2M
- Saturday: 3.1 M

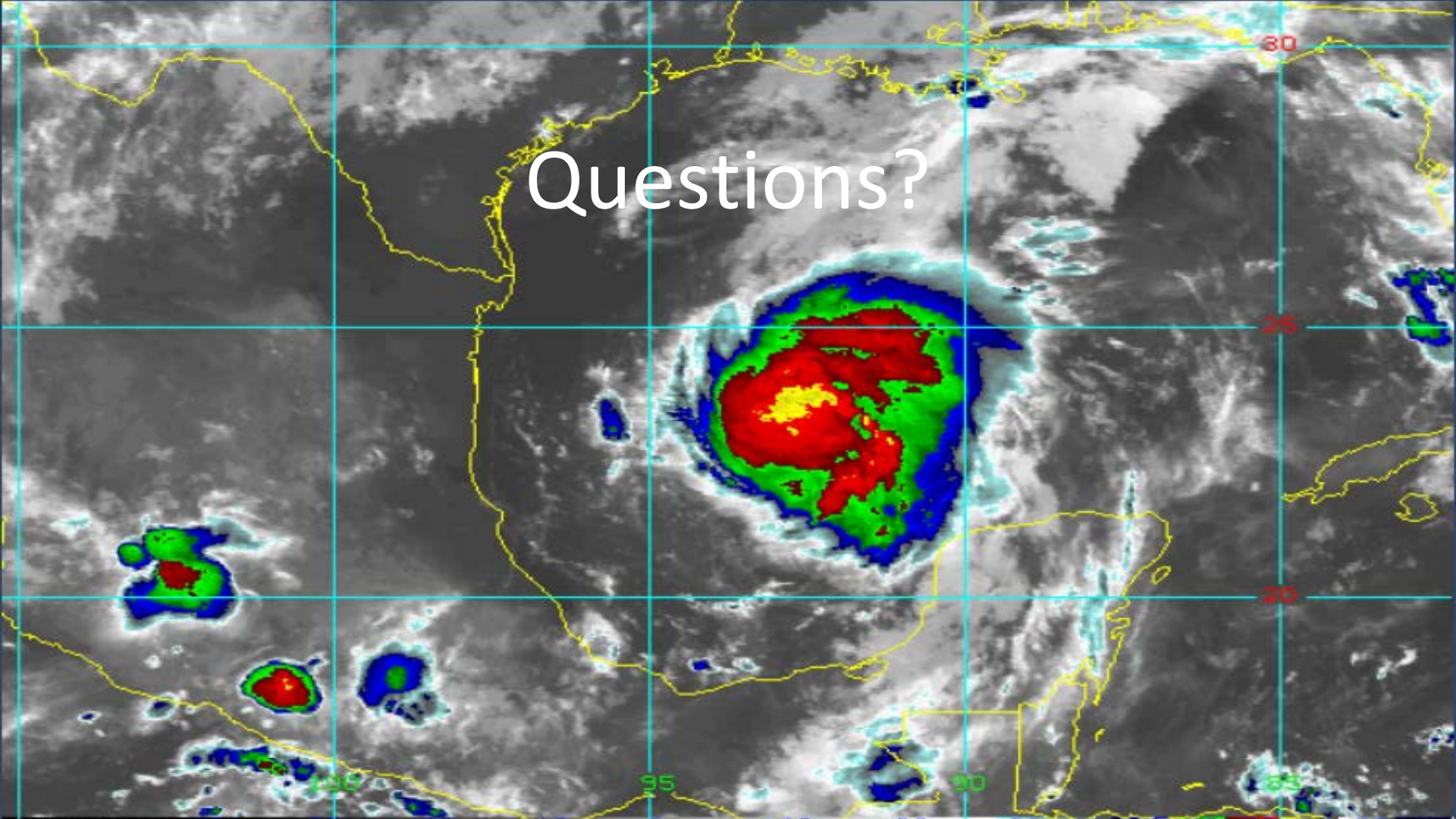
### • Facebook

- Last 5 days: 2.4M
- Friday: 815K
- Saturday: 127k (FB outage)

## Top Posts/Tweets Thursday, Friday & Saturday



Questions?





# Our Partners are Force Multipliers

- Partners and Ambassadors posted NWS material directly to their accounts.
- [Nextdoor's CEO](#) speaks about resilient communities and working with "public agencies" during a media interview.

