

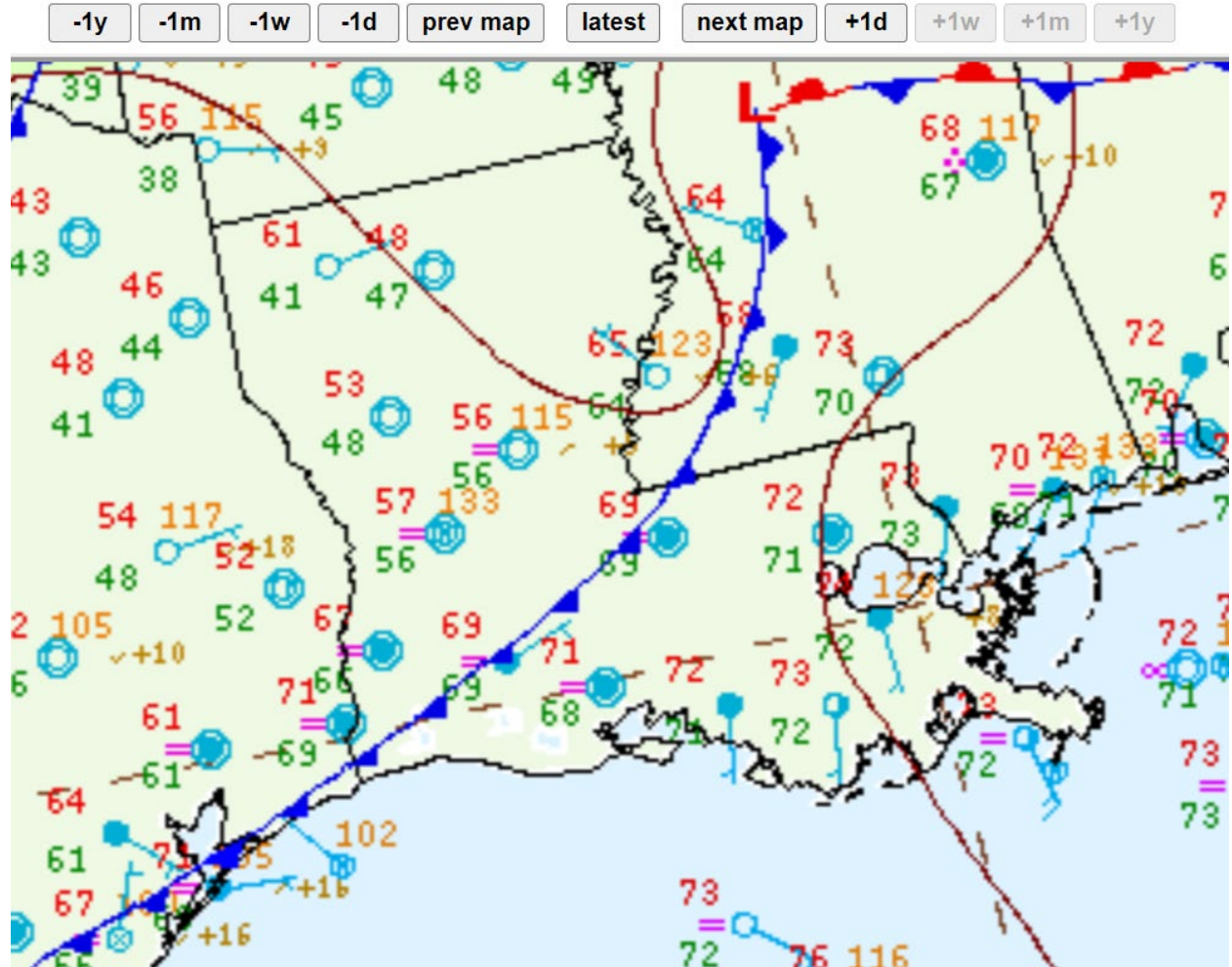
Select metocean products retrieved 27 Mar 2023

By Marcel Muise, NTSB

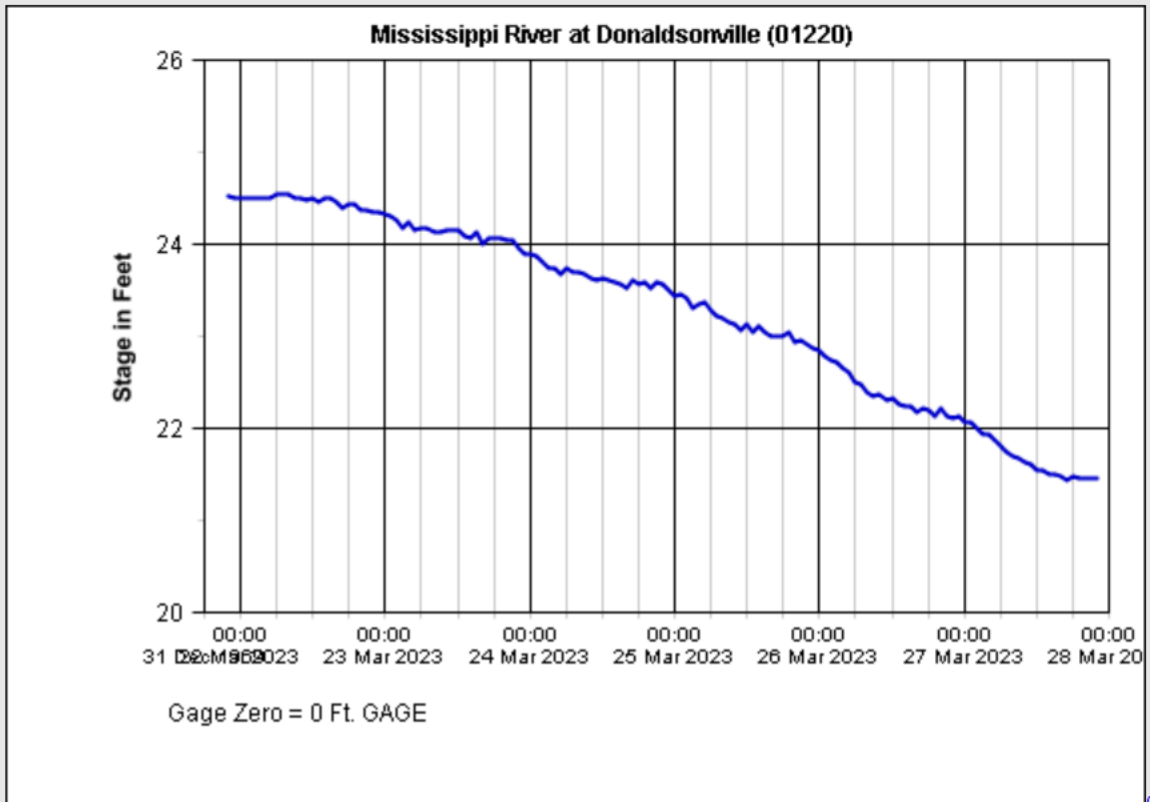
## Surface Analysis

Retrieved from [WPC surface analysis zoom, pan, animation and archives \(noaa.gov\)](#)

### Surface analysis 12Z Sun Mar 26 2023



Mississippi River at Donaldsonville (01220)  
(Central Time Zone)



US Army Corps of Engineers - [New Orleans District](#) - [Water Control Center](#) - [Contact Us](#)



Zone Forecast Product

(NTSB Edits: Zones outside Ascension Parish deleted for brevity)

National Weather Service New Orleans LA

413 AM CDT Sun Mar 26 2023

LAZ085-086-261700-

Western Ascension-Eastern Ascension-

Including the cities of Sorrento, Acy, Gonzales, Prairieville,

Geismar, and Donaldsonville

413 AM CDT Sun Mar 26 2023

.TODAY...Patchy fog this morning. Mostly cloudy with a chance of showers and thunderstorms this morning, then partly sunny with a slight chance of showers and thunderstorms this afternoon. Highs in the mid 80s. Southwest winds 10 to 15 mph. Chance of rain 50 percent.

.TONIGHT...Mostly cloudy. A chance of showers and thunderstorms after midnight. Patchy fog after midnight. Lows in the lower 70s. Southwest winds 10 to 15 mph. Chance of rain 30 percent.

.MONDAY...Patchy fog in the morning. Partly sunny with a chance of showers and thunderstorms. Highs in the lower 80s. Northwest winds around 5 mph, becoming northeast in the afternoon. Chance of rain 50 percent.

.MONDAY NIGHT...Mostly cloudy with a chance of showers and thunderstorms. Lows in the mid 60s. Southeast winds around 5 mph. Chance of rain 50 percent.

.TUESDAY...Showers likely with a chance of thunderstorms in the morning, then a chance of showers with a slight chance of thunderstorms in the afternoon. Highs in the lower 70s. North winds 5 to 10 mph. Chance of rain 70 percent.

.TUESDAY NIGHT...Mostly cloudy. Cooler with lows in the mid 50s.

.WEDNESDAY AND WEDNESDAY NIGHT...Partly cloudy. Highs in the lower 70s. Lows in the mid 50s.

.THURSDAY...Mostly sunny. Highs in the upper 70s.

.THURSDAY NIGHT THROUGH FRIDAY NIGHT...Mostly cloudy. Lows in the upper 60s. Highs in the mid 80s.

.SATURDAY...Mostly cloudy in the morning, then partly sunny with a slight chance of showers in the afternoon. Highs in the mid 80s. Chance of rain 20 percent.



## Area Forecast Discussion

National Weather Service New Orleans LA

1044 PM CDT Sat Mar 25 2023

...New UPDATE...

.UPDATE...

Issued at 942 PM CDT Sat Mar 25 2023

Overall no major changes made to the forecast outside of updating some hourly PoPs and weather. Main concern is the subtle disturbance coming across the TX Big Bend region. The first subtle piece of this is already running over Austin, TX and could begin to approach western portions of the CWA before 7z while the bulk of the energy may be closer to 8z. This may be what the HRRR is picking up on as it tries to fire off convection overnight and this could develop just west of the area and move into locations near and northwest of BTR. This may be a little bullish but given the rather amped up airmass in place this could be more than sufficient to get storm to break through that warm nose around h78-h8 and then just rapidly develop. These would likely not be sfc based so not as concerned with damaging winds or tornadoes, but large hail could be an absolute concern. There will be a lot of CAPE in the hail growth region to work with and maybe a little upper lvl diffluence in place as well. Mid lvl lapse rates are just as impressive around 7-7.5 c/km while 0-6km bulk shear of around 55-60kt will be quite capable of leading to organized

convection. So the big take is if we can actually get convection to develop and break through h8 there is a good chance we could be dealing with a few severe storms during the early through late morning hours along the LA/MS border. /CAB/

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.SHORT TERM...

(This evening through Monday)

Issued at 232 PM CDT Sat Mar 25 2023

A somewhat diffuse cold frontal boundary resides across the northern half of the forecast area. Much of the thermal/moist gradient resides to our north, however, eyes will focus on one particular detail, which could have some implications on the forecast this evening and overnight. This would be backing and increasing surface flow leading to the cold front sharpening. This is important as the environment is conducive for convection. MLCAPE of 1500-2000 j/kg with H5 temps around -14C...steep lapse rates, especially in the hail growth region is enough to catch some attention. The EML is still present, which will limit coverage. The thought is with the sharpening frontal boundary the low level ascent may be just enough to overcome the inhibition allowing for convective initiation to take place later this evening. Low level hodographs signal the potential for splitting supercells with large hail and wind being possible. That said, a right mover especially in closer proximity to the surface boundary may have a tornadic potential. Again, coverage this evening will be limited mainly to SW MS.

Starting early Sunday both CAMs and Globals show clusters of storms developing along the front, which by that time should still reside along our northern forecast zones. As the front lifts northward as a warm front, isentropic upglide will take place, with much of the elevated convection/shower activity on the opposite side of the front further north into MS. However, there will be a severe weather potential right along the front. Severe hail and damaging winds are the primary concerns, however, any storms that root into the boundary layer and interact with the front or perhaps developing LLJ later in the day may contain a tornadic potential as well.

Going into Sunday night and into Monday a weak upper level impulse may drive the front southward again meandering over the area. If multiple rounds of convection develop we may start to see a localized hydro risk, especially where the heaviest rainfall is anticipated over the Florida Parishes and SW MS. With instability still lingering along and head of the front, we'll also need to watch for an isolated strong to perhaps severe storm through the end of the period. Although with the shelf waters a bit on the cooler side, instability may be more limited closer to the tidal lakes and coast.

Finally, fog potential will be there overnight tonight and into Sunday. Both stat and ensemble guidance are signaling this potential. Moisture pooling ahead of the front along with southerly return flow over the aforementioned cooler SSTs will help with advecting marine fog inland especially over the MS Gulf Coast.

(Frye)



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.PRELIMINARY POINT TEMPS/POPS...

MCB 60 78 64 79 / 20 80 60 40

BTR 66 83 70 84 / 30 70 40 40

ASD 66 84 67 81 / 30 60 40 50

MSY 68 83 69 79 / 30 50 30 50

GPT 66 78 67 76 / 30 70 40 50

PQL 65 81 67 80 / 30 60 40 40

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.LIX WATCHES/WARNINGS/ADVISORIES...

LA...None.

GM...Dense Fog Advisory from 1 AM to 9 AM CDT Sunday for GMZ530-532-534-536-538-550-552-555-557.

MS...None.

GM...Dense Fog Advisory from 1 AM to 9 AM CDT Sunday for GMZ532-534-536-538-550-552-555-557.