

Select weather products retrieved on 09Mar2022

from [Iowa Environmental Mesonet, Iowa State University](#),

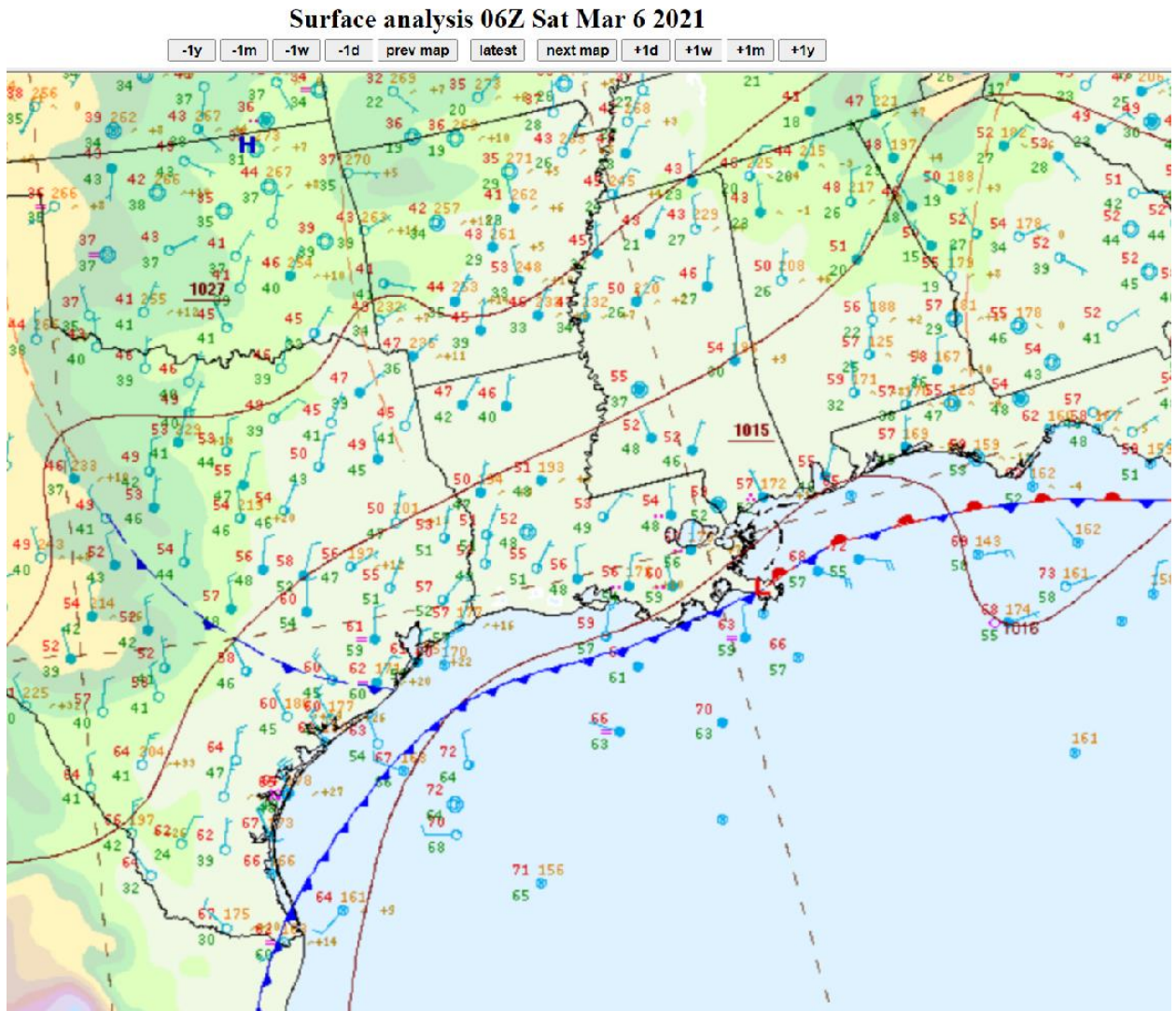
[NWS Enhanced Data Display](#), and from [NOAA Weather Prediction Center](#)

by Marcel L. Muise, NTSB

## Contents

Surface Analysis .....	2
Observations from Houma Airport (KHUM) .....	3
Area Forecast Discussion .....	3
Coastal Weather Forecast.....	9
Zone Forecast Product .....	11

# Surface Analysis



## Observations from Houma Airport (KHUM)

Observation Graph for: KHUM

Graphs Tabular More Options...

Field: T > 0 Apply  Combine Clear Filters

Time	T	DP	RH	WDir	WSpd	WGst	SLP	Vis	Cig	Wx	P1	Clouds
3/6 3:15 AM	69	68	97	120	7		0	5	1,000	BR		SCT007 BKN010 BKN021
3/6 2:55 AM	69	68	97	120	8		0	5	0	BR		SCT007 SCT019
3/6 2:35 AM	69	68	97	120	8		0	7	0			SCT007 SCT019
3/6 2:15 AM	69	68	97	120	7		0	7	0			SCT007
3/6 1:55 AM	69	67	96	110	6		0	7	0			CLR
3/6 1:35 AM	68	67	97	110	7		0	7	0			SCT008
3/5 7:47 PM	72	66	83	150	10		0	7	0			CLR
3/5 6:47 PM	73	66	78	160	14	23	0	7	0			CLR

8 rows

Start Time: Mar 5, 2022 06 30 PM Apply  Realtime Update?

End Time: Mar 6, 2022 03 30 AM

## Area Forecast Discussion

618

FXUS64 KLIX 060538

AFDLIX

Area Forecast Discussion

National Weather Service New Orleans LA

1138 PM CST Sat Mar 5 2022

.AVIATION (06Z TAFs)...

Varying conditions at all terminals tonight with mostly VFR, but a couple in MVFR and IFR due to low cigs. Lower cigs will continue overnight keeping these conditions along with some very patchy areas of fog that may slightly reduce visibility. Conditions will begin to improve after 15z tomorrow, back to VFR for all. HL

&&

.PREV DISCUSSION... /issued 336 PM CST Sat Mar 5 2022/

SHORT TERM (TONIGHT THROUGH TUESDAY)...The pattern will be little changed through the short term as a mid to upper level southwest flow regime dominates the Gulf South through Tuesday night. Embedded within this flow regime, a series of shortwave troughs will slide from the Southern Plains into the Midwest. The trailing end of these troughs will slide through the forecast area, and will bring an increased risk of convective activity to the area.

For tonight into tomorrow, the pattern will be little changed from what was seen today. A persistent onshore flow regime in the low levels will keep marine layer influences in play. This will result in continued stratus development and overcast skies for tonight into tomorrow morning. Some patchy fog may also develop largely in response to stratus build down conditions. By tomorrow afternoon, the marine layer should begin to mix out a bit as an elevated inversion weakens over the region. However, mid-level lapse rates will still remain marginal at around 5.5C/km. These weaker lapse rates will limit the ability for updrafts to both deepen and

maintain themselves. As a result, most of the convection should remain fairly shallow and only a slight chance of thunderstorms is in the forecast. Widely scattered shower activity is more likely to occur tomorrow afternoon as temperatures warm into the lower to middle 80s. The thunderstorm risk should wane quickly tomorrow evening as temperatures cool off, and marine layer influences should build back in. Skies should turn overcast and some light marine layer showers will be possible. Another round of stratus build down fog cannot be ruled out either.

The first shortwave feature should move north of the forecast area on Monday, and a trailing cold front is expected to push into the region during the day. This front should then stall just offshore over the coastal waters Monday night and remain in place through Tuesday night. The reason for the front stalling is that the parent shortwave feature driving the front southward will quickly depart the region, and the flow pattern in the mid and upper levels will be nearly parallel to the front by Monday afternoon. Thus, there will be no significant synoptic scale mechanism driving the front south with the only movement being generated by air mass density differentials. In advance of the front, a moderate degree of instability should be in place as reflected by MLCAPE of around 500 J/KG and mid-level lapse rates of around 6.0C/km, and these values should be supportive of some weaker thunderstorm activity during the afternoon hours on Monday. Another interesting thing to keep an eye out for is the prospect of some compressional heating in advance of the front Monday afternoon. Temperatures may climb into the middle to possibly upper 80s in a few locations.

Some weak cold air advection will take place behind the stalled front Monday night into Tuesday, and a fairly decent temperature gradient is expected across the area. Lows should range from the upper 40s in the northwest corner of the CWA to the mid 60s along the Louisiana coast both Monday and Tuesday nights, and highs should range from the upper 50s in the far northwest to the lower 70s along the coast on Tuesday. This temperature gradient is indicative of a high degree of baroclinicity in the region, and these zones are typically favored for cyclogenesis. This low level cyclogenesis should initiate Tuesday morning over the northwest Gulf and a deepening low should then pass through the forecast area Tuesday night. Additionally, very favorable upper level dynamics in the form of strong positive vorticity advection and a passing jet streak in advance of another approaching shortwave trough will combine with strong isentropic forcing over the cooler airmass near the surface to produce ample deep layer forcing across the region. The combination of strong low level convergence and lift in relation to the surface low, mid-level isentropic lift, and upper level lift from the passing jet streak and approaching shortwave feature will produce fairly widespread rain and even some embedded thunderstorm activity from Monday night through Tuesday night. PoP values will be in the likely to categorical range through this period, and the prospect of a soaking rain of 2 to 3 inches will be possible by late Tuesday night.

LONG TERM (WEDNESDAY THROUGH SATURDAY)...The surface low and shortwave feature affecting the area on Tuesday will quickly pull

to the east on Wednesday. A secondary shortwave feature should slide through Wednesday night into Thursday morning, but the overall trend will be for lower PoP values from Wednesday into Thursday as increasing negative vorticity advection and subsidence take hold in the mid to upper levels. The stalled front should also push further offshore as the surface low impacting the area on Tuesday pulls into the Southeastern states. Precipitable water values are expected to fall from around 1.5 inches on Wednesday to less than 0.75 inches by Thursday as upper level subsidence strengthens. Wednesday morning will be the wettest period as the low and trough axis is still in the vicinity and ample forcing should allow for continued shower and thunderstorm activity. The secondary trough axis will keep low end chance PoP in place over coastal portions of the CWA and the offshore waters Wednesday night into Thursday, but dry conditions are forecast across the northwest half of the forecast area on Thursday. Skies should also turn partly cloudy and increasing solar insolation should allow temperatures to warm back into the lower 70s by Thursday afternoon.

Model spread begins to increase for Friday and Saturday as the timing of a longwave trough axis varies between the different solutions. This longwave feature is expected to swing through the area and a much colder airmass is expected to move into the area over the weekend. At this time, have stuck with the NBM solution for this time frame given the timing differences between the ECMWF and GFS members. This results in a period of low end chance PoP in advance of an approaching cold front on Friday. The NBM hints at a limited degree of instability that could be supportive of a few

thunderstorms, but the severe potential looks to be extremely limited as this front moves through Friday night. By Saturday, the NBM solution has a much drier and colder airmass advecting into the area as the parent upper level trough slides through the Gulf South. Temperatures are forecast to be near average on Friday, but a good 20 degrees below normal on Saturday.

AVIATION...VFR conditions will be found at all of the terminals this evening. After 06z, stratus build down will lead to some IFR and MVFR conditions at the terminals. IFR conditions will be most likely at KMCB, KBTR, and KHDC. Conditions should begin to mix out into MVFR and VFR range after 16z tomorrow.

MARINE...A persistent onshore flow of 15 to 20 knots is expected through tomorrow night over the Gulf waters, and seas of 4 to 6 feet are expected as these winds continue. A slight relaxation in the pressure gradient is expected Monday into Monday night as a front stalls over the waters and winds should turn more variable at around 10 knots. However, a low pressure system is expected to affect the waters Tuesday into Wednesday and winds should increase back above 15 knots as this system moves through. In the wake of the low Wednesday night into Thursday, offshore flow will develop at around 10 to 15 knots and seas of 3 to 5 feet can be expected.

&&

.PRELIMINARY POINT TEMPS/POPS...

MCB 63 83 66 84 / 10 40 20 80

BTR 64 84 68 85 / 0 40 20 80



ASD 63 81 65 83 / 0 40 20 80  
MSY 65 81 68 81 / 10 40 20 70  
GPT 63 75 65 76 / 0 30 20 70  
PQL 62 78 64 79 / 0 30 10 70

&&

.LIX WATCHES/WARNINGS/ADVISORIES...

LA...None.

GM...None.

MS...None.

GM...None.

&&

\$\$

## Coastal Weather Forecast

(NTSB Edit: Weather forecast zones outside of Houma deleted for brevity)

806

FZUS54 KLIX 052131

CWFLIX

Coastal Waters Forecast

National Weather Service New Orleans LA

331 PM CST Sat Mar 5 2022

Pascagoula to Atchafalaya River Out to 60 mile

Seas are provided as a range of the average height of the highest 1/3

of the waves...along with the occasional height of the average highest ten percent of the waves.

GMZ570-572-061030-

Coastal waters from Port Fourchon Louisiana to Lower Atchafalaya River LA from 20 to 60 mile-

Coastal waters from Southwest Pass of the Mississippi River to Port Fourchon Louisiana from 20 to 60 mile-

331 PM CST Sat Mar 5 2022

...SMALL CRAFT EXERCISE CAUTION IN EFFECT THROUGH LATE TONIGHT...

.TONIGHT...Southeast winds 15 to 20 knots. Seas 3 to 6 feet.

Dominant period 6 seconds.

.SUNDAY...Southeast winds 15 to 20 knots. Seas 3 to 6 feet with occasional seas to 8 feet. Dominant period 7 seconds.

.SUNDAY NIGHT...Southeast winds 15 to 20 knots. Seas 3 to 6 feet with occasional seas to 8 feet. Dominant period 8 seconds.

.MONDAY...South winds 15 to 20 knots. Seas 3 to 6 feet with occasional seas to 8 feet. Dominant period 8 seconds. Chance of showers in the late morning and afternoon. Chance of thunderstorms in the afternoon.

.MONDAY NIGHT...South winds 10 to 15 knots. Seas 3 to 6 feet. Dominant period 8 seconds. Chance of showers and thunderstorms.

.TUESDAY...Southeast winds 10 to 15 knots. Seas 3 to 6 feet. Dominant period 8 seconds. Chance of showers and slight chance of thunderstorms.

.TUESDAY NIGHT...South winds 15 to 20 knots becoming west after

midnight. Seas 3 to 5 feet with occasional seas to 6 feet.

Dominant period 5 seconds. Showers likely and chance of thunderstorms.

.WEDNESDAY...Northwest winds 15 to 20 knots becoming north in the afternoon. Seas 3 to 5 feet with occasional seas to 6 feet.

Dominant period 5 seconds. Showers in the morning. Chance of thunderstorms through the day. Showers likely in the afternoon.

.WEDNESDAY NIGHT...Northeast winds 15 to 20 knots. Seas 3 to 5 feet. Dominant period 5 seconds. Chance of showers and slight chance of thunderstorms.

.THURSDAY...Northeast winds 10 to 15 knots becoming east late in the afternoon. Seas 2 to 4 feet. Dominant period 4 seconds.

Chance of showers and slight chance of thunderstorms.

.THURSDAY NIGHT...Southeast winds 15 to 20 knots becoming northwest after midnight. Seas 3 to 5 feet. Dominant period 5 seconds. Chance of showers and thunderstorms.

\$\$

## Zone Forecast Product

(NTSB Edit: Weather forecast zones outside of Houma deleted for brevity)

FPUS54 KLIX 052144

ZFPLIX

Zone Forecast Product

National Weather Service New Orleans LA

344 PM CST Sat Mar 5 2022

LAZ065-061215-

Upper Terrebonne-

Including the cities of Houma and Bayou Cane

344 PM CST Sat Mar 5 2022

.TONIGHT...Partly cloudy. Lows in the mid 60s. Southeast winds 10 to 15 mph.

.SUNDAY...Mostly cloudy. Patchy fog in the morning. Slight chance of showers in the morning, then slight chance of showers and thunderstorms in the afternoon. Highs in the lower 80s. Southeast winds 10 to 20 mph. Chance of precipitation 20 percent.

.SUNDAY NIGHT...Mostly cloudy. Lows in the upper 60s. South winds 10 to 15 mph.

.MONDAY...Partly cloudy. Chance of showers and slight chance of thunderstorms in the morning, then showers likely and chance of thunderstorms in the afternoon. Highs in the lower 80s. South winds 10 to 15 mph. Chance of precipitation 70 percent.

.MONDAY NIGHT...Partly cloudy with chance of rain showers and thunderstorms in the evening, then mostly cloudy with rain showers likely and chance of thunderstorms after midnight. Lows in the upper 50s. Southwest winds 5 to 10 mph shifting to the north 10 to 15 mph after midnight. Chance of precipitation 70 percent.

.TUESDAY...Cooler. Rain showers likely and chance of thunderstorms in the morning, then rain showers and slight chance of thunderstorms in the afternoon. Highs in the lower 70s. Chance of precipitation 80 percent.

.TUESDAY NIGHT...Rain showers and chance of thunderstorms in the evening, then rain showers likely and slight chance of

thunderstorms after midnight. Lows in the mid 50s. Chance of precipitation 80 percent.

.WEDNESDAY...Mostly cloudy. Rain showers likely in the morning, then chance of rain showers in the afternoon. Highs in the mid 60s. Chance of showers 70 percent.

.WEDNESDAY NIGHT...Mostly cloudy. Chance of rain showers in the evening, then slight chance of rain showers after midnight. Lows in the lower 50s. Chance of showers 30 percent.

.THURSDAY...Partly cloudy with a 20 percent chance of rain showers. Highs in the mid 70s.

.THURSDAY NIGHT...Partly cloudy with a 20 percent chance of rain showers. Lows in the upper 50s.

.FRIDAY...Partly cloudy. Chance of rain showers in the morning, then chance of rain showers and slight chance of thunderstorms in the afternoon. Highs in the mid 70s. Chance of precipitation 30 percent.

.FRIDAY NIGHT...Colder. Partly cloudy. A 20 percent chance of rain showers and thunderstorms in the evening. Lows in the lower 40s.

.SATURDAY...Cooler. Partly cloudy in the morning then becoming sunny. Highs in the lower 60s.

\$\$

LAZ066-061215-

Lower Terrebonne-

Including the cities of Chauvin, Cocodrie, Dulac, and Montegut

344 PM CST Sat Mar 5 2022

.TONIGHT...Partly cloudy. Lows in the mid 60s. Southeast winds 10 to 15 mph.

.SUNDAY...Partly cloudy. Patchy fog in the morning. A 20 percent chance of showers and thunderstorms in the afternoon. Highs 76 to 82. Southeast winds 10 to 20 mph.

.SUNDAY NIGHT...Partly cloudy. Lows in the upper 60s. Southeast winds 10 to 15 mph.

.MONDAY...Partly cloudy. Chance of showers and slight chance of thunderstorms in the morning, then showers likely and chance of thunderstorms in the afternoon. Highs 76 to 82. South winds 10 to 15 mph. Chance of precipitation 70 percent.

.MONDAY NIGHT...Partly cloudy in the evening then becoming mostly cloudy. Rain showers likely and chance of thunderstorms. Lows in the upper 50s. Southwest winds 5 to 10 mph shifting to the north 10 to 15 mph after midnight. Chance of precipitation 70 percent.

.TUESDAY...Rain showers likely and chance of thunderstorms in the morning, then rain showers and slight chance of thunderstorms in the afternoon. Highs in the lower 70s. Chance of precipitation 80 percent.

.TUESDAY NIGHT...Rain showers and chance of thunderstorms in the evening, then rain showers and slight chance of thunderstorms after midnight. Lows in the mid 50s. Chance of precipitation 80 percent.

.WEDNESDAY...Mostly cloudy. Rain showers likely and slight chance of thunderstorms in the morning, then chance of rain showers in the afternoon. Highs in the mid 60s. Chance of precipitation 70 percent.

.WEDNESDAY NIGHT...Mostly cloudy with a 40 percent chance of rain showers. Lows in the mid 50s.

.THURSDAY...Partly cloudy with a 20 percent chance of rain showers. Highs in the lower 70s.

.THURSDAY NIGHT...Partly cloudy with a 20 percent chance of rain showers. Lows in the upper 50s.

.FRIDAY...Partly cloudy with chance of rain showers and slight chance of thunderstorms. Highs in the mid 70s. Chance of precipitation 30 percent.

.FRIDAY NIGHT...Colder. Partly cloudy. Slight chance of rain showers and thunderstorms in the evening, then slight chance of rain showers after midnight. Lows in the mid 40s. Chance of precipitation 20 percent.

.SATURDAY...Cooler. Partly cloudy in the morning then becoming sunny. Highs in the lower 60s.

\$\$