APPENDIX C

MEDIA REPORTS AND TCEQ FORECAST DISCUSSIONS

EXCEPTIONAL EVENTS DEMONSTRATION FOR 2023 $PM_{2.5}$ EXCEEDANCES AT ATASCOSA, HIDALGO, TARRANT, AND WEBB COUNTIES

AUGUST 5, 2025

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. BOX 13087
AUSTIN, TEXAS 78711-3087

APPENDIX C: TCEQ FORECAST DISCUSSIONS AND MEDIA REPORTS

C.1: GROUP 1 – JANUARY 2 AND JANUARY 3, 2023

Table C-1: TCEQ Forecast Discussions for January 2 and January 3, 2023

EE Date	Site Name	Summary of Applicable Information
1/2/2023	Edinburg East Freddy Gonzalez Drive	Slightly increased fine particulate levels associated with elevated relative humidity including patchy fog this morning across the eastern two-thirds of the state as well as parts of the Texas Panhandle are raising $PM_{2.5}$ levels into the "Moderate" range. Additionally, light amounts of smoke from rigs in the Bay of Campeche and seasonal fire activity in eastern Mexico is filtering along the coastal bend of Texas and into parts of Deep South and Southeast Texas. Overall, the daily $PM_{2.5}$ AQI is forecast to stay in the lower end of the "Moderate" range in parts of the Austin, Brownsville-McAllen, Corpus Christi, Houston, Laredo, San Antonio, Victoria.
1/3/2023	Edinburg East Freddy Gonzalez Drive	As the aforementioned cold front continues to push through the state, slightly increased fine particulate levels associated with elevated relative humidity including patchy morning fog, primarily along the coastal areas out ahead of the front will raise $PM_{2.5}$ levels into the "Moderate" range. Behind the frontal boundary lower relative humidity and drier air will help tamper down fine particulate levels and bring $PM_{2.5}$ levels back to the "Good" range. Meanwhile, light amounts of smoke from the rigs in the Bay of Campeche and seasonal fire activity in eastern Mexico may continue to contribute fine particulate background levels across parts of Deep South Texas, the coastal bend of Texas, and Southeast Texas. Overall, the daily $PM_{2.5}$ AQI is forecast to reach the lower end of the "Moderate" range in parts of the Brownsville-McAllen, Corpus Christi, and Houston areas.

C.2: GROUP 2 – FEBRUARY 26 AND FEBRUARY 27, 2023

Table C-2: TCEQ Forecast Discussions for February 27, 2023

EE Date	Site Name	Summary of Applicable Information
2/26/2023	Haws Athletic Center	A fast-moving cold front associated with a potent upper/mid-level storm system will push through the Texas Panhandle, Permian Basin, and far West region starting in the afternoon hours. Patchy blowing dust is expected at times as gusty winds accompany the surface boundary. Spikes of the $PM_{2.5}$ AQI into the upper end of the "Moderate" to lower end of the "Unhealthy for Sensitive Groups" range will be possible for parts of the El Paso, Lubbock, and Midland-Odessa areas and to the middle to upper end of the "Moderate" range in parts of the Amarillo and Big Bend areas. Southerly winds in the eastern two thirds of the state ahead of the approaching cold front are forecast to continue filtering residual smoke northward from seasonal and industrial burnings in southern Mexico and the Bay of Campeche. Patchy fog will be possible in South Central and Deep South Texas as well as along the coastal bend due to an influx of ample moisture from the gulf. The resultant elevated fine particulate levels are expected to push the overall daily $PM_{2.5}$ AQI into the lower end of the "Moderate" range for parts of the Austin, Beaumont-Port Arthur, Brownsville-McAllen, Bryan-College Station, Corpus Christi, Dallas-Fort Worth, Houston, Laredo, San Antonio, and Victoria areas and the upper end of the "Good" range (perhaps with an isolated low "Moderate" or two) for parts of the Tyler-Longview and Waco-Killeen areas.
2/27/2023	Haws Athletic Center, Fort Worth Northwest	Heavy amounts of suspended fine particulate matter kicked up from an intense dust storm as a cold front moved through on Sunday over New Mexico, Northern Mexico, and Texas are still lingering over the southern Texas Panhandle as well as far West, North Central, South Central, and East Texas this morning. Meanwhile, a sprawling area of thin density smoke/aerosols from seasonal fires and industrial activity in southern Mexico, Central America, and Cuba are filtering over the coastal bend of Texas and expanding over Southeast Texas, South Texas, as well as along the Rio Grande Valley and possibly mixing with some of the dust aerosols over South Central and East Texas, contributing towards elevated fine particulate levels.

The Dallas Morning News

NEWS > WEATHER

Dust from West Texas is giving Dallas poor air quality. Is it unhealthy?

People with breathing conditions like asthma might find it harder to take a breath outside Monday morning. But air quality should improve as the day continues.

By Michael Williams
Breaking News reporter

Feb. 27, 2023 | Updated 8:58 a.m. CST | 2 min. read

Dust from strong southerly winds partially obscured wind turbines spinning on the plains near Southland on Jan. 18, 2022. (Tom Fox)

LISTEN

Strong wings carried dust and dirt from the exposed grazing land of West Texas to the Dallas-Fort Worth area on Monday, dirtying cars and causing some residents to get an alert about poor air quality.

The cause is the same storm system that brought strong wind gusts to the area Sunday evening.

MOST

1

2

3

Figure C-1: The Dallas Morning News Article of Dust from West Texas Affecting Dallas Air Quality, Reported on February 27, 2023[1]

[1] https://www.dallasnews.com/news/weather/2023/02/27/dust-from-west-texas-is-giving-dallas-poor-air-quality-is-it-unhealthy/

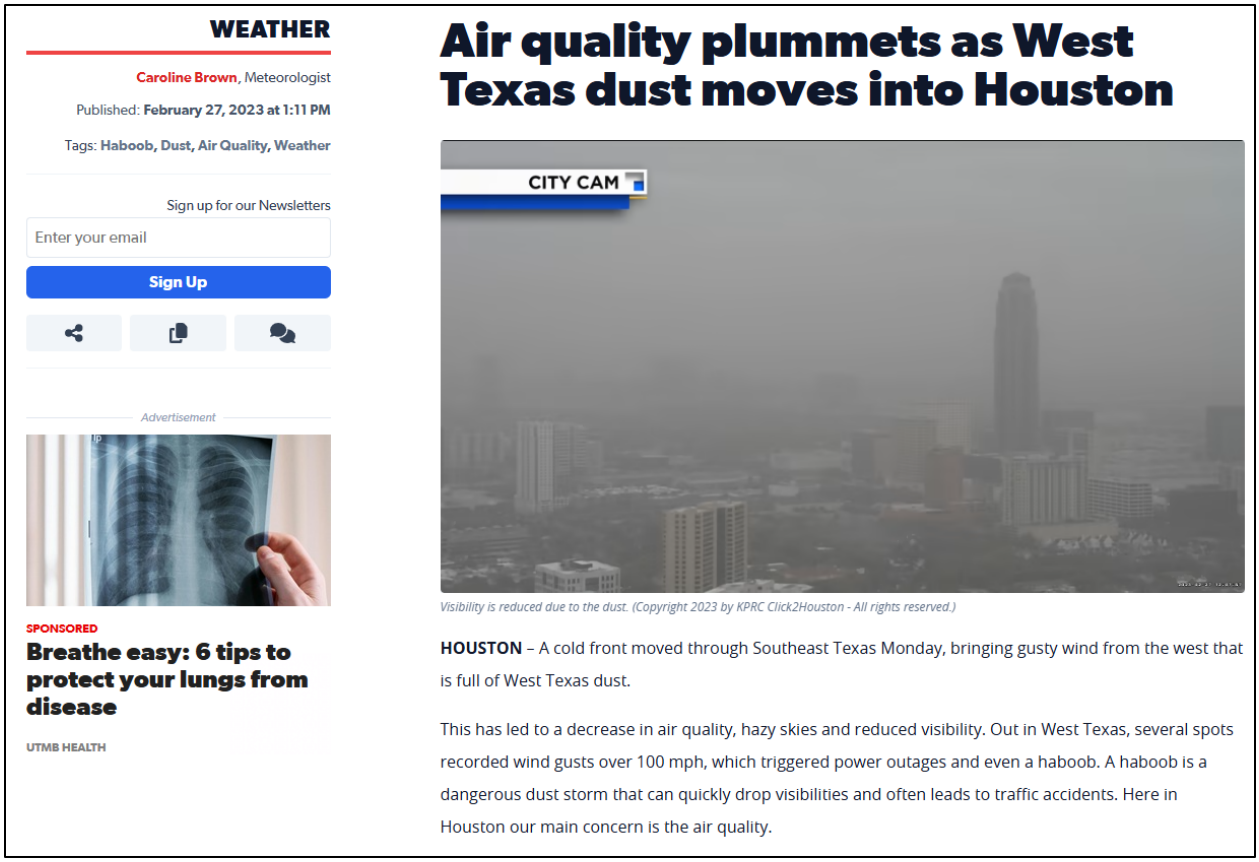


Figure C-2: KPRC News Article of Dust from West Texas Affecting Houston Air Quality, Reported on February 27, 2023[2]

[2] https://www.click2houston.com/weather/2023/02/27/air-quality-plummets-as-west-texas-dust-moves-into-houston/#:~:text=(Copyright%202023%20by%20KPRC%20Click2Houston,hazy%20skies%20and%20reduced%20visibility.

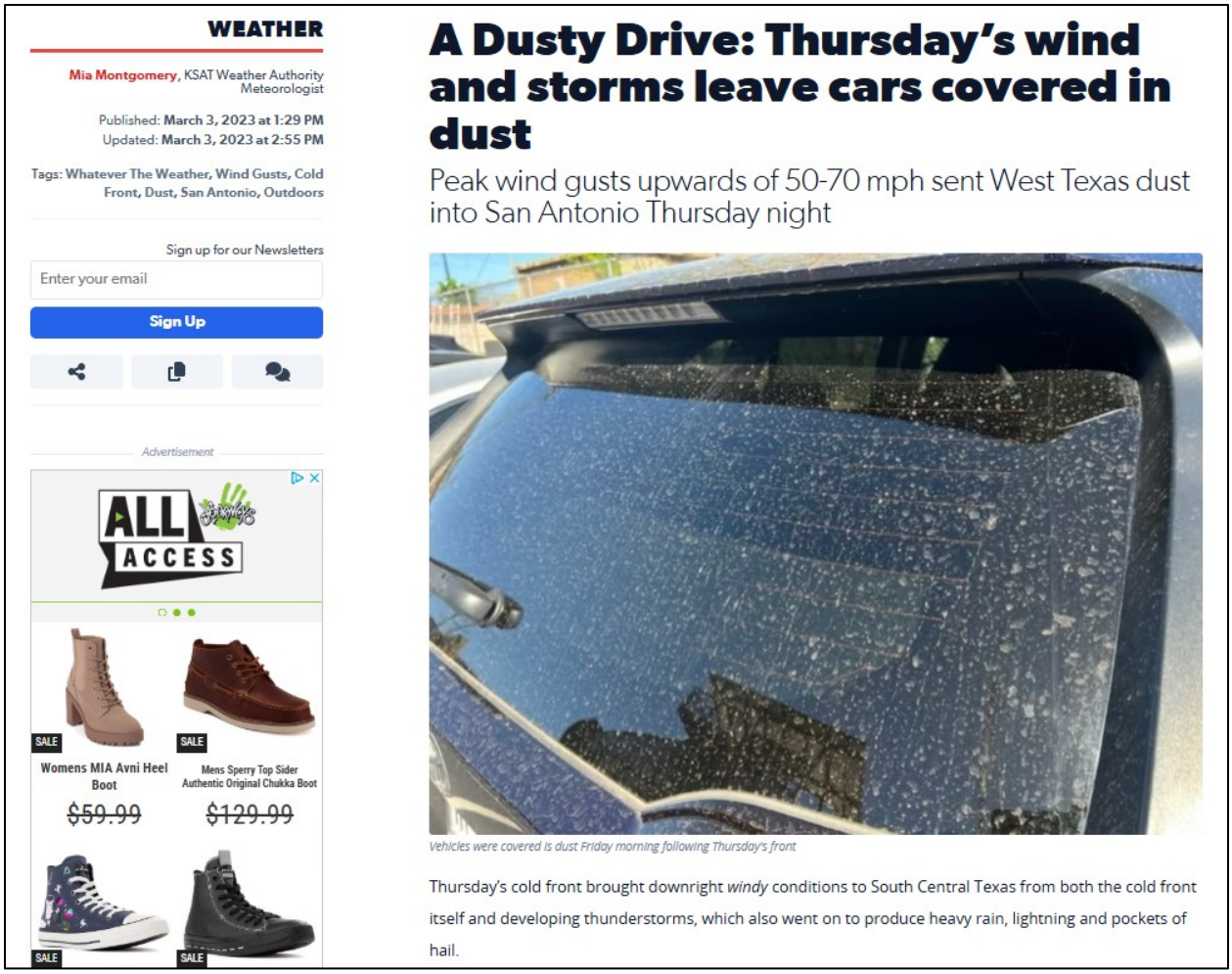


Figure C-3: KSAT News Article Describing High Winds and Dust Associated With a Cold Front, Reported on March 3, 2023[3]

[3] https://www.ksat.com/weather/2023/03/03/a-dusty-drive-thursdays-wind-and-storms-leave-cars-covered-in-dust/

C.3: GROUP 3 – MARCH 1 AND MARCH 2, 2023

Table C-3: TCEQ Forecast Discussions on March 1 and March 2, 2023

EE Date	Site Name	Summary of Applicable Information
3/1/2023	Edinburg East Freddy Gonzalez Drive	Southerly winds will continue to filter and steer moderate amounts of smoke from seasonal fires and industrial activity in southern Mexico, Central America, and Cuba combined with residual smoke from numerous seasonal fires across portions of South and Southeast Texas as well as along the coastal bend over the eastern two-thirds of the state. Additionally, urban fine particulate matter along with light winds, limited vertical mixing, and elevated relative humidity will trap pollutants near the surface and promote particle elevation with the formation of morning fog, increasing fine particulate $PM_{2.5}$ levels in spots across the eastern two-thirds of the state as well. Even with precipitation over North Central and East Texas associated with a stalled frontal boundary along the Texas/Oklahoma border, the coverage and density of the fine particulates are forecast to raise the overall daily $PM_{2.5}$ AQI to the lower to middle end of the "Moderate" range in parts of the Austin, Beaumont-Port Arthur, Brownsville-McAllen, Bryan-College Station, Corpus Christi, Houston, Laredo, San Antonio, and Victoria areas and to the lower end of the "Moderate" range in parts of the Dallas-Fort Worth, Tyler-Longview, and Waco-Killeen areas.
3/2/2023	Edinburg East Freddy Gonzalez Drive	Elevated/gusty winds associated with the next upper-level system and cold front are expected this afternoon for the Texas Panhandle, far West Texas, and Permian Basin. Blowing dust associated with these strong winds will originate over portions of northern Mexico, southeast New Mexico, as well as the aforementioned regions of Texas and be transported eastward. The moderate amounts of smoke from seasonal fires and industrial activity in southern Mexico, Central America, and Cuba as well as scattered seasonal fires across portions of South Texas, Southeast Texas, and the coastal bend combined with urban fine particulate levels in addition to limited vertical mixing and elevated relative humidity producing patchy morning fog are forecast to persist across the eastern two-thirds of the state, out ahead of the aforementioned cold front. Depending on the coverage and density of the fine particulates as well as precipitation expected over the South Central, North Central, and Eastern portions of the state, the fine particulates may be enough to raise the overall daily $PM_{2.5}$ AQI to the middle of the "Moderate" range in parts of the Brownsville-McAllen and Corpus Christi areas.

C.4: GROUP 4 – MARCH 27, 2023

Table C-4: TCEQ Forecast Discussion on March 27, 2023

EE Date	Site Name	Summary of Applicable Information
3/27/2023	Edinburg East Freddy Gonzalez Drive	Patchy residual smoke from agricultural burning in Mexico and Central America is expected to continue expanding northward over Deep South Texas as well as along the Rio Grande Valley and coastal bend of Texas. Meanwhile, residual smoke associated with seasonal fire activity across East and Southeast Texas is forecast to elevate fine particulate levels over these portions of the state in addition to seasonal burning activity across the Central U.S. filtering over North Central and Northeast Texas. Combined with elevated relative humidity levels over South Texas, Southeast Texas, and coastal regions of the state, the coverage and intensity of the smoke is forecast to raise the daily $PM_{2.5}$ AQI to the lower to middle end of the "Moderate" range in parts of the Brownsville-McAllen and Laredo areas.

C.5: GROUP 5 – APRIL 4, 2023

Table C-5: TCEQ Forecast Discussion on April 4, 2023

EE Date	Site Name	Summary of Applicable Information
4/4/2023	Edinburg East Freddy Gonzalez Drive	Light to moderate amounts of residual smoke from agricultural and industrial burning activity in Mexico and Central America was again observed across the eastern two-thirds of the state, as southerly winds continue filtering it northward out ahead of the approaching cold front. Combined with persistent high relative humidity levels, $PM_{2.5}$ levels could rise, at times, into the upper end of the "Moderate" range with the overall daily $PM_{2.5}$ AQI forecast to reach the lower to middle end of the "Moderate" range in parts of the Brownsville-McAllen, Corpus Christi, Laredo, and Victoria areas.

C.6: GROUP 6 – APRIL 15, 2023

Table C-6: TCEQ Forecast Discussion on April 15, 2023

EE Date	Site Name	Summary of Applicable Information
4/15/2023	Edinburg East Freddy Gonzalez Drive	Light amounts of patchy smoke from agricultural burning in Mexico, Central America, and the Bay of Campeche is forecast to begin expanding northward over portions of Deep South Texas, ahead of the approaching cold front, however model guidance indicates that the higher concentrations of fine particulates will arrive later this afternoon to overnight.

C.7: GROUP 7 - MAY 5 AND MAY 6, 2023

Table C-7: TCEQ Forecast Discussions for May 5 and May 6, 2023

EE Date	Site Name	Summary of Applicable Information
5/5/2023	World Trade Bridge, Edinburg East Freddy Gonzalez Drive	Influence from an upper-level ridge will persist today as it stubbornly sits over the central CONUS, with model guidance showing a low-pressure center wobbling back and forth in the Central Plains. A very large area of thin to moderate density smoke from ongoing fire activity in Mexico and Central America was detected over portions of the Atlantic Ocean off the Southeast U.S. coast and then extending west and southwest through the Gulf Coastal States of the U.S. and into Texas. With southerly surface winds persisting over the eastern two thirds of Texas, copious amounts of moisture will continue to be transported northward as a dryline extending from the panhandle down through the Permian Basin inches farther eastward. The daily $PM_{2.5}$ AQI could reach the to middle to upper end of the "Moderate" range for parts of the Brownsville-McAllen, Corpus Christi, Houston, Laredo, San Antonio, and Victoria areas and the lower to middle end of the "Moderate" range for parts of the Austin, Beaumont-Port Arthur, Bryan-College Station, Dallas-Fort Worth, Tyler-Longview, and Waco-Killeen areas.

EE Date	Site Name	Summary of Applicable Information
5/6/2023	Von Ormy Highway 16, Edinburg East Freddy Gonzalez Drive, World Trade Bridge	The upper ridging is forecast to continue creeping eastward as it pushes toward the eastern third of the country, but a similar pattern at the surface from the previous day is likely to result in high to very high dew points remaining in place for the eastern two thirds of Texas ahead of a dryline extending from Southwest Texas, north into the region between Abilene and Dallas-Fort Worth. Residual smoke from seasonal burnings in Mexico/Central America, in addition to any activity in East/Southeast Texas, should keep fine particulate levels elevated for most of the affected regions due to the amount of surface moisture expected. The daily $PM_{2.5}$ AQI could reach the middle to upper end of the "Moderate" range for parts of the Brownsville-McAllen, Corpus Christi, Houston, Laredo, and Victoria areas and the lower to middle end of the "Moderate" range for parts of the Austin, Beaumont-Port Arthur, Bryan-College Station, Dallas-Fort Worth, San Antonio, Tyler-Longview, and Waco-Killeen areas.

Figure C-4: City of Corpus Christi News Report on Fire Activities in Mexico and Central America, Reported on May 5, 2023[4]

[4] https://news.cctexas.com/news/releases-20230505-6892025

WEATHER

Justin Horne, KSAT Weather Authority Meteorologist

Sarah Spivey, KSAT Weather Authority Meteorologist

Mia Montgomery, KSAT Weather Authority Meteorologist

Published: May 8, 2024 at 12:20 PM
Updated: May 8, 2024 at 1:16 PM

Tags: Whatever The Weather, San Antonio, Weather

Sign up for our Newsletters

Enter your email

Sign Up

Parts of South Texas experiencing a dip in air quality from agricultural smoke in Mexico

Places like Brownsville and Corpus Christi will see the worst of the air quality Wednesday and Thursday

Smoke from agricultural fires in Mexico will be around San Antonio for most of this week (Copyright 2024 by KSAT - All rights reserved.)

SAN ANTONIO – Surface smoke is funneling up through Texas courtesy of agricultural burning in Mexico. This will likely lead to a decrease in air quality across parts of South Texas, especially south of San Antonio this week.

KEY POINTS:

- Small dip in air quality expected in San Antonio
- The worst air quality will be found in Deep South Texas, near Brownsville, Corpus Christi and Laredo
- Nothing unusual -- this happens every year
- Agricultural burning in Mexico should end around June

Figure C-5: KSAT News Article on Poor Air Quality in South Texas Due to Agricultural Burning from Mexico, Reported on May 8, 2023[5]

[5] https://www.ksat.com/weather/2024/05/08/parts-of-south-texas-experiencing-a-dip-in-air-quality-from-agricultural-smoke-in-mexico/

C.8: GROUP 8 – MAY 11 AND MAY 12, 2023

Table C-8: TCEQ Forecast Discussions on May 11 and May 12, 2023

EE Date	Site Name	Summary of Applicable Information
5/11/2023	Edinburg East Freddy Gonzalez Drive	The huge mass of mainly thin to moderate density smoke from the ongoing significant seasonal fire activity along with a few wildfires occurring in Mexico and Central America continued to be seen this morning over a good part of Mexico, northwestern Central America, the Pacific Ocean, the gulf, the southeastern U.S., and all of the central/south central U.S. Isolated pockets of precipitation will be possible for eastern two thirds Texas but the coverage and intensity are not anticipated to have a significant effect on $PM_{2.5}$ levels. Large amounts of moisture will remain in place with the combination of smoke and high to very high relative humidity likely to keep elevated fine particulate matter widespread as the daily $PM_{2.5}$ AQI could net out in the lower end of the "Unhealthy for Sensitive Groups" range for parts of the Brownsville-McAllen area.
5/12/2023	Edinburg East Freddy Gonzalez Drive, World Trade Bridge, Haws Athletic Center	A huge plume of moderate to heavy density smoke from the significant ongoing seasonal and industrial burnings in Mexico and Central America is expected to extend with at least light amounts over the majority of the state with the exception of the Texas Panhandle and South Plains. The heaviest concentrations are forecast to be over Deep South Texas, the lower Rio Grande Valley and coastal bend of Texas regions, and portions of South-Central Texas. Overall, the daily $PM_{2.5}$ AQI is forecast to net out at the lower end of the "Unhealthy for Sensitive Groups" range in parts of the Brownsville-McAllen area, the upper end of the "Moderate" range in parts of the Corpus Christi and Laredo areas.

C.9: GROUP 9 – JUNE 14, JUNE 15, AND JUNE 16, 2023

Table C-9: TCEQ Forecast Discussions on June 14, June 15, and June 16, 2023

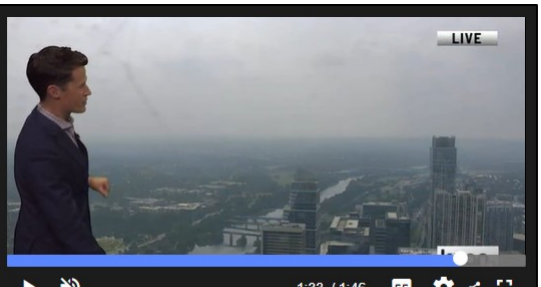
EE Date	Site Name(s)	Summary of Applicable Information
6/14/2023	Haws Athletic Center	Light to moderate residual smoke is expected to continue being transported northward from the seasonal burnings in southern Mexico into South, Central, and North Central Texas with the highest density smoke spreading eastward into the coastal and Southeast regions as a stalling surface front pushes into Central Texas. Smoke density is not expected to be overly thick however the copious amounts of moisture will aid in maximizing the formation of fine particulate matter. Additionally, urban fine particulate matter will contribute to PM levels as light winds remain in the Central, North Centrals and Northeast regions. An exiting upper/mid-level disturbance will take the chance for precipitation mostly out of the state, but a lingering chance will remain in Northeast Texas; possibly counteracting elevated PM levels with any convection that manages to develop. The daily $PM_{2.5}$ AQI is forecast to reach the middle of the "Moderate" range in parts of the Brownsville-McAllen, Corpus Christi, and Laredo areas and the lower end of the "Moderate" range for parts of the Austin, Beaumont-Port Arthur, Bryan-College Station, Dallas-Fort Worth, Houston-Galveston, San Antonio, Tyler-Longview, Victoria, and Waco-Killeen areas.

EE Date	Site Name(s)	Summary of Applicable Information
6/15/2023	Haws Athletic Center, World Trade Bridge	The smoke from the fires in Mexico and Central America is merging with smoke from the Canadian wildfires somewhere over the south central U.S., in addition to some aerosols from industrial activities also in Mexico and Central America. Smoke transport could persist into the eastern two thirds of Texas as the burning activity remains in the aforementioned regions. Higher density smoke is forecast to be in the South, South Central, and Southeast regions with effects still being felt in North Central and Northeast Texas. Dew points in the low to mid 70's will keep relative humidity quite high, and combined with residual smoke and urban haze, will create prime conditions for elevated fine particulate matter. PM levels were spiking into the "Unhealthy for Sensitive Groups" this morning in South and South Central Texas with concentrations expected to stay elevated most of the day. The daily $PM_{2.5}$ AQI is forecast to reach the lower end of the "Unhealthy for Sensitive Groups" range for parts of the Brownsville-McAllen area, the middle to upper end of the of the "Moderate" range for parts of the Austin, Corpus Christi, Laredo, and San Antonio areas, the middle of the "Moderate" range in parts of the Beaumont-Port Arthur, Bryan-College Station, Dallas-Fort Worth, Houston-Galveston, Victoria, and Waco-Killeen areas, and the lower to middle end of the "Moderate" range for parts of the Tyler-Longview area.
6/16/2023	World Trade Bridge	Southerly surface winds are anticipated to remain ahead of a slow-moving surface boundary expected to stall over northern Texas before slowly retreating toward the Central and Southern High Plains. Light residual smoke could continue being transported into the eastern half of Texas from southern Mexico as light smoke spreads into far West Texas and the Permian Basin from seasonal burnings in northwest Mexico near the Sea of Cortez. Dew points are likely to remain in the upper 60's to mid-70's for most areas east of the panhandle as light winds contribute toward the urban haze that has occupied the eastern half of Texas most of the week. The combination of these factors could keep the daily $PM_{2.5}$ AQI in the lower end of the "Unhealthy for Sensitive Groups" range for parts of the Brownsville-McAllen and Corpus Christi areas, the middle to upper end of the "Moderate" range for parts of the Austin, Bryan-College Station, Houston-Galveston, Laredo, San Antonio, and Victoria areas, and the lower to middle end of the "Moderate" range in parts of the Beaumont-Port Arthur, Dallas-Fort Worth, Tyler-Longview, and Waco-Killeen areas.

WEATHER

How Mexico's agriculture burn affects Austin local weather

by: Rich Segal
Posted: Jun 14, 2023 / 04:50 PM CDT
Updated: Jun 14, 2023 / 05:20 PM CDT



SHARE

AUSTIN (KXAN) — The haze happens every spring and it can make you feel bad.

The sky loses that beautiful azure, blue hue. Though its occurrence doesn't originate in the Austin area, if the wind is blowing just right, Central Texas and a good deal of the state will still see the haze's effects.

Why is the sky so hazy in Austin? ›

The Texas Commission On Environmental Quality attributes this recent haze to "a good amount of atmospheric moisture" helping to partially contribute to the hazy sky.
The other factor that led to the haze partnering with the clouds is smoke that wafted into our sky from the agriculture burning ongoing in northern Mexico. These fires occur in the northern part of the country as well as the Yucatan. A south-to-southeast wind flow will cause the smoke from the Yucatan to travel across the western Gulf to our coastline and further into the coastal plain on the Interstate 35 corridor.

South and southeast winds bring in agriculture burning smoke from Mexico

The southern part of the state, as well as coastal Texas, will experience poorer visibility than Central Texas.

MOST READ: 12,000+ Texas kids sent to court for truancy, no one tracks what happens next ›

The fires are deliberately set to manage the farmland. Farmers use these fires to add nutrients back to the soil as well as clear the grounds of unwanted plants.

Figure C-6: KXAN News Article on the Effects of Mexico's Agricultural Burns on Austin Weather, Reported on June 14, 2023[6]

[6] https://www.kxan.com/weather/how-mexicos-agriculture-burn-affects-austin-local-weather/

WEATHER

Significant haze blankets Austin Tuesday, Wednesday

A mix of humid and smoky conditions caused air quality issues across Central Texas.

Credit: John Gusky

View toward Downtown Austin from Mount Bonnell on June 14. Photo by KVUE's John Gusky.

Author: **Grace Thornton**
Published: **4:58 PM CDT June 13, 2023**
Updated: **12:03 PM CDT June 14, 2023**

AUSTIN, Texas — If you were outside in Central Texas on Tuesday, you may have noticed a smog of haze on the horizon.

Figure C-7: KVUE News Article on Hazy Conditions in Austin, Texas, Reported on June 13, 2023[7]

[7] https://www.kvue.com/article/weather/ausitn-haze-tuesday/269-4d418e8a-f05d-49d8-97a2-b6728825a163

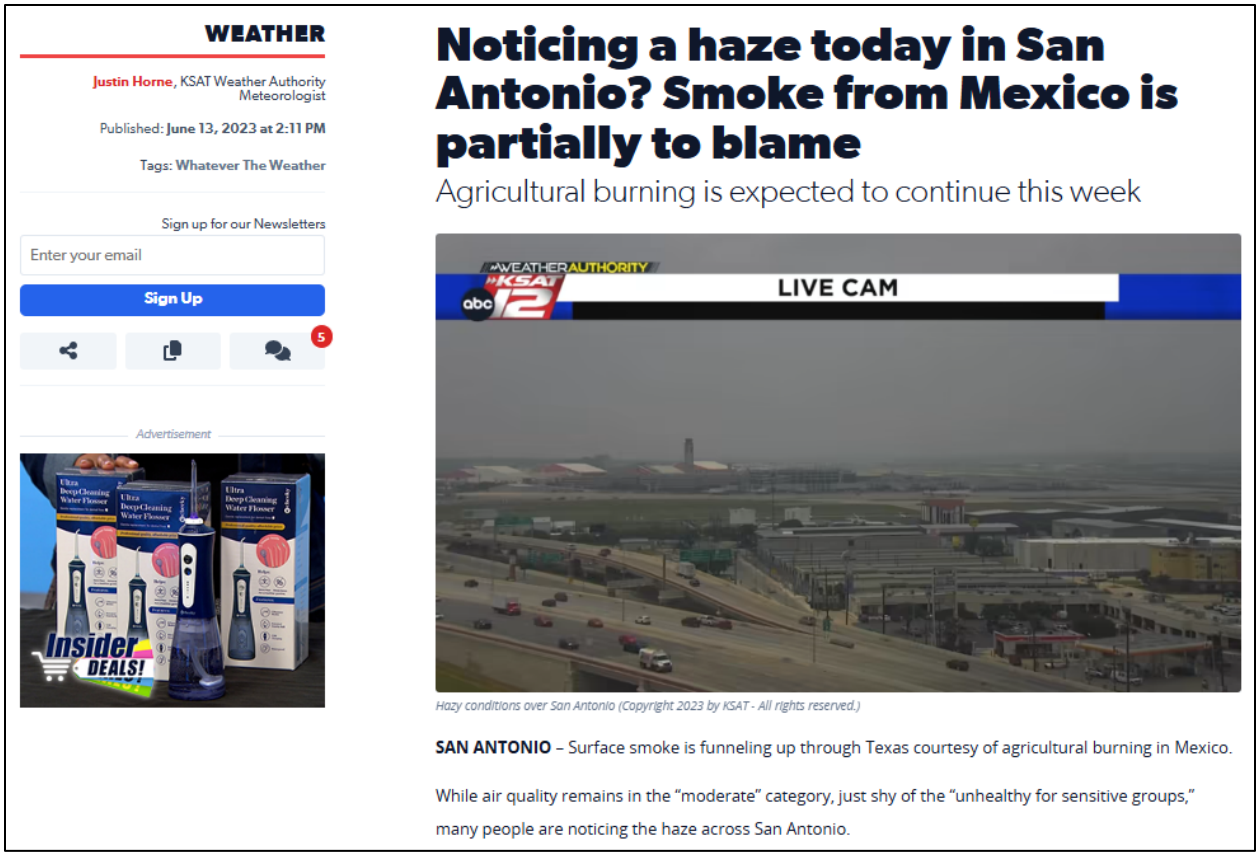


Figure C-8: KSAT News Article on Hazy Conditions in San Antonio Due to Agricultural Burning in Mexico, Reported on June 13, 2023[8]

C.10: GROUP 10 – JULY 15 AND JULY 16, 2023

Table C-10: TCEQ Forecast Discussions for July 15 and July 16, 2023

EE Date	Site Name	Summary of Applicable Information
7/15/2023	Edinburg East Freddy Gonzalez Drive	Fine particulate matter associated with already present lingering residual smoke from the Canadian wildfires are still expected over most of the state with minimal impacts. Additionally, the light to moderate density plume of Saharan dust is expected to continue to build as it spreads northward and westward, with at least light patches extending to cover most of the state with the exception of the far northern Texas Panhandle and far West Texas. The heaviest concentrations are expected to be over Southwest Texas, South Central Texas, and North Central Texas.

[8] https://www.ksat.com/weather/2023/06/13/noticing-a-haze-today-in-san-antonio-smoke-from-mexico-is-partially-to-blame/

EE Date	Site Name	Summary of Applicable Information
7/16/2023	Edinburg East Freddy Gonzalez Drive	The aforementioned weak cold front is forecast to slow and possibly stall over North Central Texas before transitioning into a warm front and lifting northward towards the Central Plains region of the U.S. This should help quell the spread and intrusion of the pulse of residual smoke associated with the Canadian wildfires towards Texas. Model guidance suggests the already present fine particulate matter associated with residual smoke should linger in light amounts over the majority of the state. Meanwhile, Saharan dust will continue spreading through Texas reaching most spots and impacting areas at varying intensities. Building urban fine particulate levels associated with light winds combined with incoming continental haze could elevate fine particulate background levels over North Central and Northeast Texas as well.

FORECAST

Saharan dust making its way to Houston

Low concentrations of dust currently over Houston; impacting air quality.

Author: **Chita Craft, Jaime E. Galvan, Pat Cavlin, Tim Pandajis**
Published: **11:23 AM CDT July 12, 2023**
Updated: **8:25 AM CDT July 15, 2023**

HOUSTON — Low concentrations of Saharan dust have already made the long journey across the Atlantic and have arrived in the skies over southeast Texas.

You may notice the sky looks a little extra hazy this morning thanks to the dust. Some of it is mixing down to the surface and will impact the air quality today.

Figure C-9: KHOU News Article on Saharan Dust Impacts in Houston, Texas, Reported on July 15, 2023[9]

[9] https://www.khou.com/article/weather/forecast/saharan-dust-houston-texas-2023/285-39fd5aac-9141-4194-b9f8-29df13e76130

WEATHER > TODAY'S FORECAST

More wicked heat for the weekend

Dale Nelson 5 pm weather 0714


By: Dale Nelson

Posted 8:21 PM, Jul 14, 2023 and last updated 8:30 PM, Jul 14, 2023

There is little change expected to our extraordinary weather well into the end of July. Upper-level high pressure is anchored over the area resulting in dangerous heat. Do expect a small decrease in our winds.

Tonight, will be breezy warm and stuffy again with fair skies and a low of 81. The heat index stays in the 90's.
Saturday and Sunday expect a little less wind but still breezy and scorching hot and under hazy sunshine we will have a high of 99 Saturday and 98 on Sunday with a heat index on both days between 115 and 120.
Saturday night will be mainly clear and calmer, and not quite as warm with a low of 79.

Figure C-10: KRIS News Article on Hazy Skies Due to Saharan Dust in South Texas, Reported on July 14, 2023[10]

[10] https://www.kristv.com/weather/todays-forecast/more-wicked-heat-for-the-weekend

C.11: GROUP 11 – JULY 26 AND JULY 27, 2023

Table C-11: TCEQ Forecast Discussions for July 26 and July 27, 2023

EE Date	Site Name	Summary of Applicable Information
7/26/2023	Edinburg East Freddy Gonzalez Drive	The residual smoke from the Canadian wildfires is forecast to continue persisting over Texas with the majority of the smoke expected to remain aloft with only very light amounts reaching the surface. Meanwhile, the plume of Saharan dust is expected to continue to build as it spreads northward and westward, with light patches possibly extending to cover most of the state with the exception of far West Texas and the upper Texas Panhandle, with the highest concentrations over South, Central, Southeast Texas as well as along the coastal bend of Texas and the Rio Grande Valley.
7/27/2023	Edinburg East Freddy Gonzalez Drive	The fine particulates associated with the residual smoke from the Canadian wildfires are expected to persist over the state though much of the smoke should remain aloft. Additionally, light amounts of residual smoke associated with small, scattered, local burning activities across East and Central Texas may enhance fine particulate background levels in these portions of the state. Meanwhile, Saharan dust is forecast to continue moving over the entire state of Texas and impact areas at varying intensities with the heaviest amounts over Central Texas, North Central Texas, Southeast Texas, and along the coastal bend of Texas.

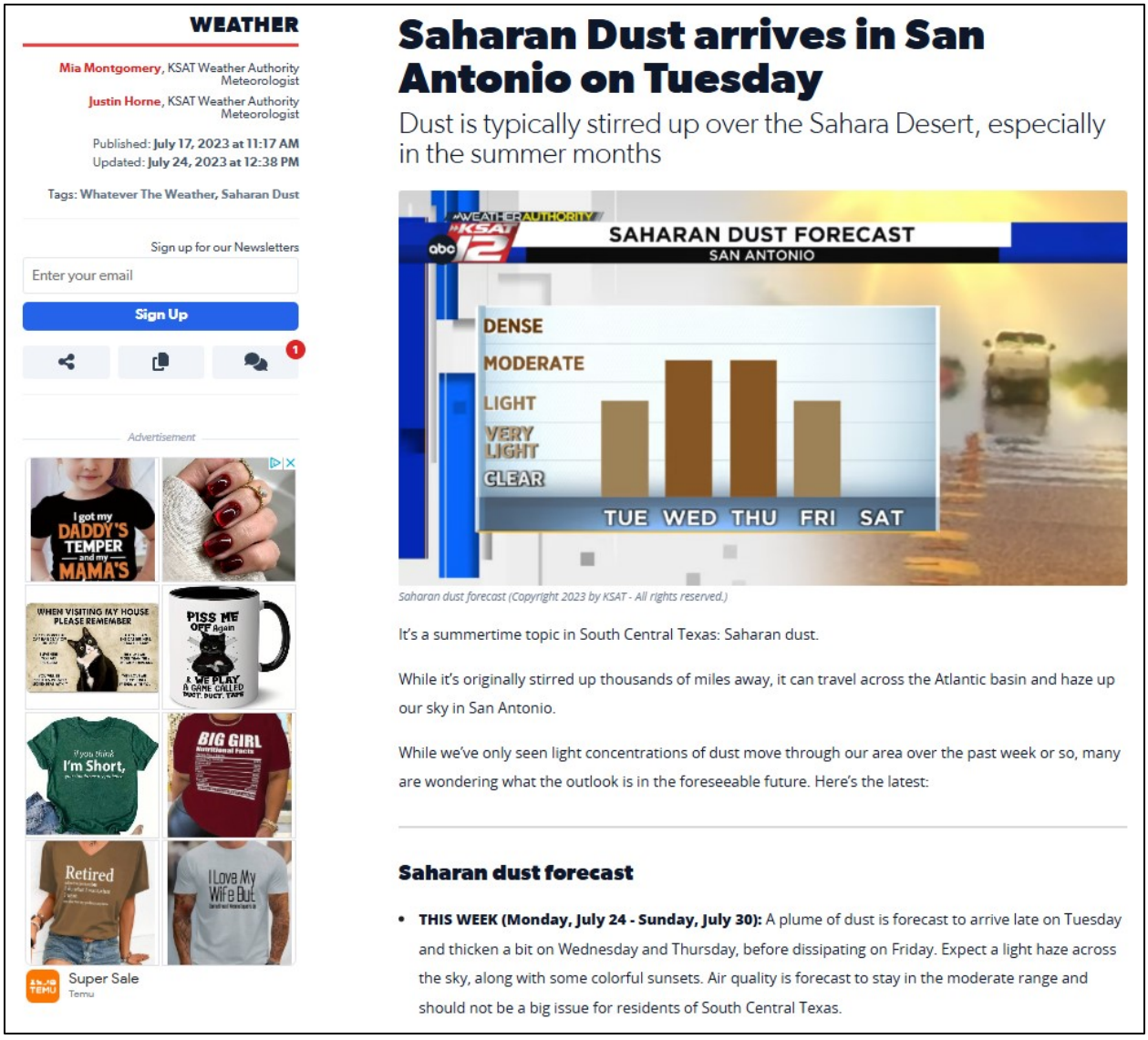


Figure C-11: KSAT News Article on Saharan Dust Affecting South Central Texas, Reported on July 24, 2023[11]

[11] https://www.ksat.com/weather/2023/07/17/saharan-dust-what-is-the-latest-outlook-and-how-does-it-get-to-san-antonio/

SAN ANTONIO NEWS | WEATHER

Saharan dust is returning to San Antonio again. Here's what to know.

Texans can expect to see hazy skies beginning Thursday evening

By **Jennifer Flores**, *Digital Content Producer*
Updated July 26, 2023 10:07 a.m.

Saharan Dust arrived in South-Central Texas on Wednesday afternoon in New Braunfels.
US National Weather Service Austin-San Antonio Texas

The Saharan dust is returning again to Texas, and San Antonians can expect to see hazy skies this week. If you are wondering what this means for you and your family, here is what to expect and how you can prepare.

CPS Energy Chief Meteorologist Brian Alonzo announced on Twitter, Tuesday morning, July 11, that the Saharan dust will be moving into Texas Thursday evening, July 13. According to Alonzo's tweet, the dust is expected to linger through next week. The dust is expected to return again July 25 to 27.

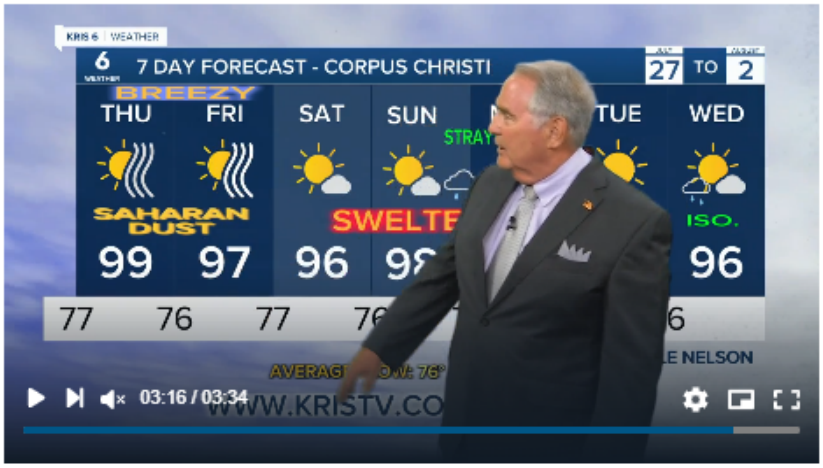
SAHARAN DUST: It's coming back folks. It moves into Texas Thursday evening. Looks to linger through next week. So there will be a bit more hazy skies later this week. Also, if you have allergies or respiratory issues, you'll definitely want to limit your time outdoors. pic.twitter.com/HeNIQ2P2uS
— Brian Alonzo (@wxprobrian) July 11, 2023

Figure C-12: MySanAntonio.com News Article on Saharan Dust Returning to Texas, Reported on July 26, 2023[12]

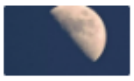
[12] https://www.mysanantonio.com/news/weather/article/saharan-dust-cloud-texas-18194585.php

WEATHER > TODAY'S FORECAST

Hazy and very hot



Dale Nelson 5 pm weather 0726

By: Dale Nelson

Posted 8:30 PM, Jul 26, 2023 and last updated 8:37 PM, Jul 26, 2023

Our extraordinary heat and dry conditions continue with little hope of much change in this weather pattern through the end of next week, and well into August.

Tonight will be hazy and tranquil and also warm and stuffy with fair skies and a low of 77.
Thursday expect hazy sunshine breezy and baking hot again with a high of 99 and a heat index between 110 and 115.
Thursday night will be tranquil with clear skies, and seasonal with a low of 76.
Friday expect a few more clouds, hazy sunshine, breezy and not quite as hot with a high of 96.
The Saharan dust goes away over the weekend and temperatures stay hot with only a stray shower.

Figure C-13: KRIS News Article on Hazy Conditions Due to Saharan Dust, Reported on July 26, 2023[13]

[13] https://www.kristv.com/weather/todays-forecast/hazy-and-very-hot

WEATHER

Frank Billingsley, Chief Meteorologist
Amanda Cochran, Digital Special Projects Manager

Published: July 28, 2023 at 8:59 AM
Updated: July 28, 2023 at 10:17 AM

Tags: Weather Blog, Saharan Dust, Sahara, Frank Billingsley

Sign up for our Newsletters

Enter your email

Sign Up

3

Advertisement

Ads by Google

Send feedback

Why this ad?

The dust is back...all the way from the Sahara!

Credit: Suzanne on Click2pins at Point West

HOUSTON – Today's I'm 'dusting' off a blog I wrote last year regarding the origins of our Saharan dust which I find fascinating. Here are some of the salient points:

Most of the dust comes from ONE spot in Africa. We've known about the dust since the 1960s. The dust is iron and phosphorous rich which greatly helps marine and plant life, especially the Amazon Forest in South America. Here's more:

Believe it or not, half of Saharan dust that comes our way begins in one place: the Bodélé Depression (pronounced Bah-del). Just *what and where* is this dust source in the Sahara?

First the what. Over thousands of years, the once huge Lake Chad (about the size of Lake Erie and now only 5% of that) dried up leaving silt and sediment in the hot desert sun which baked into a fine dust. This bowl, or depression, of dust is northeast of the current Lake Chad and is 310 miles long, 93 miles wide and about 500 feet deep. In fact, it only takes up .2% of the whole Sahara Desert and yet is THE primary source of all this dust--hundreds of thousands of tons of it every year! You can see on the map below the exact location of the Bodélé Depression. Other countries to the west--Algeria, Mali, Mauritania and Algiers supply airborne dust due to the very hot 100+ temperatures causing rising air which takes the dust upward where winds transport it westward.

Figure C-14: KHOU News Article on the Origins of Saharan Dust, Reported on July 28, 2023[14]

[14] https://www.click2houston.com/weather/2023/07/28/the-dust-is-backall-the-way-from-the-sahara/