

APPENDIX B

NWS DISCUSSIONS AND FORECASTS

EXCEPTIONAL EVENTS DEMONSTRATION FOR 2024 PM_{2.5}
EXCEEDANCES AT ATASCOSA, HIDALGO, NUECES, TARRANT, AND
WEBB COUNTIES

AUGUST 5, 2025

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

APPENDIX B: NWS DISCUSSIONS AND FORECASTS

B.1: Group 1 – February 27, 2024

Brownsville NWS Office	
airports due to south winds gusting above 40 mph. The strong winds will continue through this afternoon. Plain	02-27-24 16:28 UTC

Figure B-1: NWS Area Forecast Discussions on February 7, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

B.2: Group 2 – March 4 through March 6, 2024

Brownsville NWS Office	
with southeasterly winds. Patchy fog and haze are possible, with dense marine fog off the lower Texas coast	03-04-25 20:34 UTC

Figure B-2: NWS Area Forecast Discussions on March 4, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

B.3: Group 3 – March 14 and March 15, 2024

Brownsville NWS Office	
Some marine fog or haze could be possible tonight along the coast, however winds will likely be too strong for dense fog to develop and move inland.	03-14-24 05:41 UTC
hours. MVFR visibilities are also possible due to haze. During the	03-15-24 09:58 UTC

Figure B-3: NWS Area Forecast Discussions on March 14 and March 15, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

B.4: Group 9 – May 7 through May 13, May 15, May 16, May 18 through May 28, May 30, and May 31, 2024

Brownsville NWS Office	05-08-24 19:39 UTC
Outside of the heat, hazy conditions will continue, mainly along the eastern half of the CWA, as southerly winds continue to bring in smoke from the fires in Mexico and Central America.	

Figure B-4: NWS Area Forecast Discussions on May 8, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

Corpus Christi NWS Office
today and will continue through Thursday night. Smoke guidance from the HRRR shows increased near-surface smoke concentration advecting from Central America up to South Texas. Weakening winds
05-08-24 19:49 UTC
in ALI and VCT as residual smoke from Central America has caused continuous hazy conditions across South Texas. The presence of
05-08-24 23:32 UTC
some patchy fog possible. In addition to patchy fog, residual smoke from Central America will continue to cause hazy conditions across South Texas ahead of our next front. The cold front is
05-09-24 07:39 UTC
The persistent hazy conditions from lingering near-surface smoke over fires in Central America will continue until the aforementioned front pushes southward through South Texas during the day on Friday.
05-09-24 20:19 UTC

Figure B-5: NWS Area Forecast Discussions on May 8 and May 9, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Corpus Christi Huisache, Dona Park, and World Trade Bridge Monitoring Areas

Austin/San Antonio NWS Office
visibilities are 1 mile or greater in mist and haze. We have also inserted haze into the forecast through the day, south of the front and east of the dryline, given the background residual smoke in the air originating from seasonal burnings in Mexico and Central America. Minor updates were made on timing
05-09-24 13:50 UTC

Figure B-6: NWS Area Forecast Discussions on May 9, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

Corpus Christi NWS Office
As has been happening over the last few days, with the low level moisture and the smoke from fires in Mexico, haze will be the prominent obstruction, mainly overnight
05-12-24 23:37 UTC
just how warm we get. The combination of a thick stratus deck and smoke may keep our temps down a couple of degrees which would decrease our convective potential slightly.
05-13-24 07:56 UTC
north. As this MCS moves south-southeast, will see more of a damaging wind risk as well as an increased threat for an isolated tornado or two. All activity will likely t
05-13-24 07:56 UTC

Figure B-7: NWS Area Forecast Discussions on May 12 and May 13, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park Monitoring Area

Brownsville NWS Office
Otherwise, hazy conditions will persist through this evening, thanks southerly winds and burning in Mexico and Central America. Haze
05-15-24 19:52 UTC

Figure B-8: NWS Area Forecast Discussions on May 15, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

Corpus Christi NWS Office
north of the region. Smoke will linger at times through the week as fires continue to burn to our south.
05-19-24 20:09 UTC
morning streamer shower or sprinkle on Monday. In addition, the haze will likely stick around through the early part of the week, and tomorrow could be combined with some fog, especially in the northern coastal bend.
05-19-24 20:09 UTC
stay to the north of the area Wednesday and Thursday. Hazy conditions will continue through the week as the fires continue to burn well to our south.
05-20-24 08:42 UTC
Hazy conditions will likely continue through the period due to fires well south of the region.
05-21-24 02:45 UTC

Figure B-9: NWS Area Forecast Discussions on May 19 through May 21, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park and World Trade Bridge Monitoring Areas

Brownsville NWS Office
Both the RAP-Smoke and GEOS-5 models depict the core of the haze and smoke remaining across the open Gulf. However, peripheral influx of smoke and haze is still anticipated through the short-term period, thus keeping the generally unhealthy air, especially for areas generally east of I-69C.
05-18-24 20:35 UTC
In addition, fair to poor air quality is expected to prevail through the long term for much of the Rio Grande Valley due to agricultural burning in southeast Mexico/Yucatan and Central American wildfires all being driven north/northwestward on the persistent south to southeast flow.
05-19-24 08:24 UTC
Otherwise, hazy skies associated with agricultural fires from southeast Mexico will be an issue, with the haze more notable closer to the coast.
05-20-24 19:36 UTC
some afternoon gustiness. Also, hazy skies persist with agricultural fires from southeast Mexico continue to spread north with the southeasterly flow. Local air qua
05-21-24 08:48 UTC

Figure B-10: NWS Area Forecast Discussions on May 18 through May 21, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

Austin/San Antonio NWS Office	
10-30% range. Otherwise, continued above normal temperatures with periods of hazy conditions.	05-19-24 07:10 UTC
Otherwise, continued well above normal temperatures with periods of hazy conditions east of the dryline. Heat-ré	05-21-24 08:26 UTC
overnight and linger through Wednesday morning. There could at times be some reduced visibility due to a mix of BR and smoke from fires in Mexico, mainly noticeable during the morning	05-21-24 17:29 UTC

Figure B-11: NWS Area Forecast Discussions on May 19 and May 21, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

Corpus Christi NWS Office	
knots through the afternoon. Mist during the early morning hours and haze from smoke over Central America will continue to result in 4-6SM visibilities throughout the TAF p	05-22-24 23:42 UTC
reach LRD, but could briefly reach COT early Friday morning. Winds will likely be too elevated to allow fog to develop, but hazy conditions are expected in the morning due to agricultural fires well south of the region. Otherwise, VFR co	05-23-24 23:48 UTC
gusty once again today, especially for the eastern sites. MVFR conditions will be possible once again tomorrow night, mainly or reduced visibilities due to haze.	05-24-24 11:02 UTC
MVFR visibilities remain in place over ALI, COT, and VCT due to the continued presence of haze. A low chan	05-25-24 17:41 UTC

Figure B-12: NWS Area Forecast Discussions on May 22 through May 25, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park and World Trade Bridge Monitoring Areas

Austin/San Antonio NWS Office	
scatter out midday. In addition, hazy conditions, associated with seasonal smoke from agricultural burning to the south, persists across our region and will continue east of the dryline through the short-term.	05-22-24 11:29 UTC
MVFR cigs may linger for a couple more hours at KSAT/KSSF, otherwise VFR conditions are expected through the afternoon and evening with some minor visibility reductions due to haze	05-24-24 19:01 UTC

Figure B-13: NWS Area Forecast Discussions on May 22 and May 24, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

Brownsville NWS Office	
The haze is expected to continue to persist with the ongoing agricultural fires in southeast Mexico and the southeasterly flow allowing to spread over the region. If you h	05-22-24 05:10 UTC
Through 18z Saturday....As of this update, VFR-MVFR conditions (mainly due to haze restricting visibilities between 3-6 miles) were taking place at the TAF sites under sunny to	05-24-24 20:15 UTC
visibilities down to 5-6 statute miles. Haze reducing vsbys down to MVFR levels is the main concern this afterno	05-25-24 17:49 UTC

Figure B-14: NWS Area Forecast Discussions on May 22, May 24 and May 25, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

Dallas/Fort Worth NWS Office	
highlighting thunderstorm development. Large hail and damaging wind gusts will the be the primary hazards with any storms south of the frontal boundary. If the front stal	05-22-24 10:58 UTC

Figure B-15: NWS Area Forecast Discussions on May 22, 2024, from the Dallas/Fort Worth NWS Weather Forecast Office, Covering the Fort Worth Northwest Monitoring Area

Corpus Christi NWS Office	
VFR through the remainder of the period. Some brief periods of IFR remains possible at site ALI tomorrow morning as fog could mix with the haze/smoke from Mexico. Winds dechr	05-26-24 08:09 UTC
Air quality will remain poor as HRRR near-surface smoke model guidance continues to illustrate smoke ushering in from Central America agricultural fires early this week	05-27-24 03:58 UTC
week. The onshore winds will also continue to draw a thick plume of smoke/haze northward into the region as fires continue to burn in Mexico. In fact according to the Nation	05-28-24 08:51 UTC

Figure B-16: NWS Area Forecast Discussions on May 26 through May 28, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Corpus Christi Huisache, Dona Park, and World Trade Bridge Monitoring Areas

Austin/San Antonio NWS Office	05-26-24 23:49 UTC
make it past a Fredericksburg to Eagle Pass line...so most of the area will remain in the hazy, hot, smokey airmass. Heat Advisories	

Figure B-17: NWS Area Forecast Discussions on May 26, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

Brownsville NWS Office	
brief exceptions. Haze will continue to cause slight visibility reductions. As has been the pattern, low c	05-26-24 19:42 UTC
MVFR conditions at the TAF sites now due to ceilings, but pesky haze is also slightly limiting visibility	05-27-24 17:45 UTC
clouds are expected to develop overnight with MVFR ceilings. Winds will continue to decrease overnight allowing for some patchy fog/haze to form. Winds will increase after	05-28-24 09:05 UTC

Figure B-18: NWS Area Forecast Discussions on May 26 through May 28, 2024. from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

B.5: Group 11 - June 2 through June 6, 2024

Brownsville NWS Office	
Persistent smoke/soot from the last of agricultural burning in southeast Mexico...as well as Central American wildfires...combined with increasing low level inversion(s) and lighter winds associated with surface high pressure ridge settling over the Valley have brought back visibility-reducing haze/smog that was fairly thick this morning as pockets of IFR visibility developed. That, along with po	06-06-24 17:53 UTC

Figure B-20: NWS Area Forecast Discussions on June 6, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

Corpus Christi NWS Office	
Forecast: For tonight, We will be going into a rather, wash, rinse, repeat kind of pattern with the murky start of haze, humidity, and low clouds which break around mid to late m	06-03-24 20:50 UTC
with occasional occurrences over COT/LRD. Could see a mix of patchy fog and haze drop vsby at ALI/VCT during the early morning hours. Gusty southeasterly winds around 25	06-04-24 23:48 UTC
Bend. Strong winds have been reported with this activity with wind gusts up to 50 knots reported at Matagorda	06-05-24 17:59 UTC
VFR ceilings are currently in place across all terminals, with MVFR visibilities occurring over LRD due to the continued presence of haze. While the earlier showers	06-05-24 23:35 UTC
As the high pressure builds to the south through Friday we will remain dry and initially a bit hazy. However, as the high pushes far enough south tonight into Friday, that should push those hazy conditions farther south and out of the ar	06-06-24 11:45 UTC

Figure B-21: NWS Area Forecast Discussions on June 3 through June 6, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park and World Trade Bridge Monitoring Areas

B.6: Group 13 – July 30 through August 1, 2024

Austin/San Antonio NWS Office	
advisory levels for some locations this afternoon and again Wednesday afternoon. Hazy skies are expected to return as another round of Saharan dust makes its way into the region on Wednesday. This shouldn't affect temperatures for the r	07-31-24 05:22 UTC

Figure B-22: NWS Area Forecast Discussions on July 31, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

Corpus Christi NWS Office	
Additionally, Saharan Dust is forecast to move into the area late Tuesday into early Wednesday morning, likely resulting in hazy skies across the region.	07-30-24 5:32 UTC
- Haze from Saharan Dust expected this afternoon through Thursday.	07-31-24 5:23 UTC

Figure B-23: NWS Area Forecast Discussions on July 30 and July 31, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park and World Trade Bridge Monitoring Areas

Dallas/Fort Worth NWS Office	
toward sunrise, but ceiling are not expected. Otherwise, expect a clear sky through Thursday evening. There could be some minor slant range visibility restrictions in the afternoon and evening due to Saharan dust.	08-01-24 5:50 UTC

Figure B-24: NWS Area Forecast Discussions on August 1, 2024, from the Dallas/Fort Worth NWS Weather Forecast Office, Covering the Fort Worth Northwest and Haws Athletic Center Monitoring Areas