APPENDIX B

NWS DISCUSSIONS AND FORECASTS

EXCEPTIONAL EVENTS DEMONSTRATION FOR 2024 $\rm PM_{2.5}$ 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 gustin	g 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

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

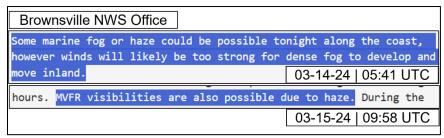


Figure B-3: NWS Area Forecast Discussions on March 14 and March 15, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

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

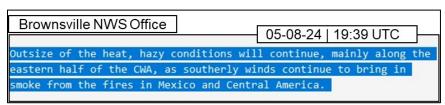


Figure B-4: NWS Area Forecast Discussions on May 8, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

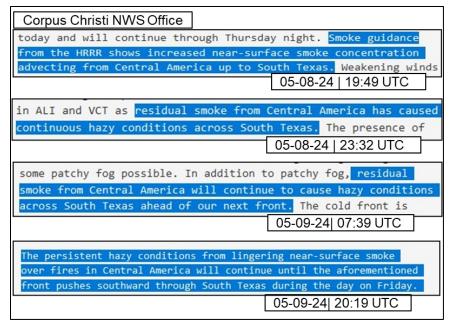


Figure B-5: NWS Area Forecast Discussions on May 8 and May 9, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Corpus Christi Huisache, Dona Park, and World Trade Bridge Monitoring Areas

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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
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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

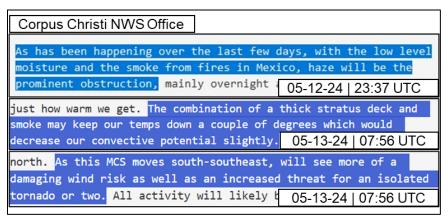


Figure B-7: NWS Area Forecast Discussions on May 12 and May 13, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park Monitoring Area

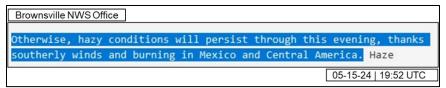


Figure B-8: NWS Area Forecast Discussions on May 15, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

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

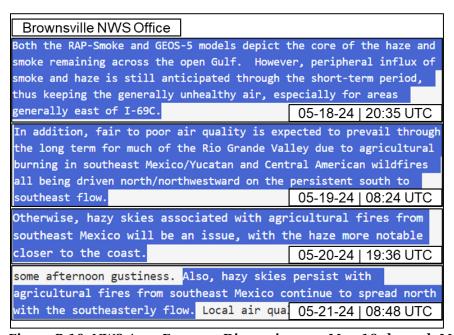


Figure B-10: NWS Area Forecast Discussions on May 18 through May 21, 2024, from the Brownsville NWS Weather Forecast Office, Covering the Edinburg East Freddy Gonzalez Drive Monitoring Area

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-re	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

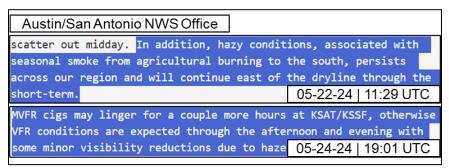


Figure B-13: NWS Area Forecast Discussions on May 22 and May 24, 2024, from the Austin/San Antonio NWS Weather Forecast Office, Covering the Von Ormy Highway 16 Monitoring Area

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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
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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

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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
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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 decr 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

Au	stin/San Antonio NWS Office	05-26-24 23:49 UTC
make	it past a Fredericksburg to Eag	gle Pass line <mark>so most of the</mark>
area	will remain in the hazy, hot, s	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

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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
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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

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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 pd 06-06-24 | 17:53 UTC
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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

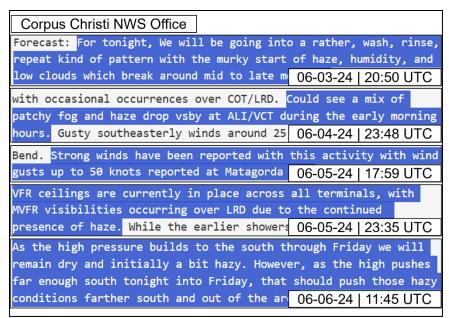


Figure B-21: NWS Area Forecast Discussions on June 3 through June 6, 2024, from the Corpus Christi NWS Weather Forecast Office, Covering the Dona Park and World Trade Bridge Monitoring Areas

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