



Arizona Department of Transportation

Environmental Planning

Draft Atypical Events Report

SR 24, SR 202L (Santan) – Ironwood Drive

**Federal Project No. 024-A(201)T
ADOT Tracs No. 024 MA 000 F0719 01D/02D**

May 16, 2025

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by ADOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated June 25, 2024, and executed by FHWA and ADOT.

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Introduction

This report aims to provide the United States Environmental Protection Agency (U.S. EPA) with a robust rationale for the exclusion of seven specific dates from the background particulate matter (PM) concentration data for a project to construct improvements to State Route (SR) 24 between SR Loop 202 (SR 202L) and Ironwood Drive. These dates stand out as atypical when compared to the air quality levels and meteorological conditions of the project site. Consequently, the U.S. EPA seeks justification for categorizing these dates as atypical events that warrant their removal from the background concentration analysis.

This report demonstrates that these dates and their instances of exceeding the National Ambient Air Quality Standards (NAAQS) for 24-hour particulates measuring 10 microns or less (PM₁₀) should be disregarded in the projects' PM₁₀ background concentration calculations and the projects assessments of NAAQS exceedance or violations. This recommendation is made due to the dates' air quality characteristics being unique and uncontrollable due to meteorological conditions, which distinguishes them from typical conditions at the project site. This report provides an introductory summary of the project and the regulatory purpose of the report, the projects calculated PM₁₀ background concentrations before and after removing the dates considered atypical to that of standard air quality conditions, and a description of the dates meteorological and air quality conditions that occurred and resulted in 24-hour PM₁₀ NAAQS exceedance.

1.0 Project Description

The Arizona Department of Transportation (ADOT) has initiated a project to construct improvements to State Route (SR) 24 between SR Loop 202 (SR 202L) and Ironwood Drive. The project is located on SR 24 between milepost (MP) 0.00 and MP 5.64 and SR 202L between MP 31.57 to MP 37.70 within the City of Mesa, Town of Queen Creek, Town of Gilbert, and unincorporated areas in Maricopa County and Pinal County, Arizona (see enclosed Figures 1 and 2).

In 2014 the initial segment of SR 24 between SR 202L and Ellsworth Road was opened to traffic. In 2023 the second segment of SR 24 between Ellsworth Road and Ironwood Drive was completed in an interim condition. The purpose of the project is to widen SR 24 to accommodate two additional general-purpose lanes between Ellsworth Road and Ironwood Drive, resulting in three new bridges over existing crossroads at Williams Field, Signal Butte, and Meridian Road and widening the existing SR 24 bridge over Mountain Road. Roadway and bridge widening over Power Road and the East Maricopa Floodway is proposed along SR 202L to provide lane continuity and additional traffic capacity to and from the SR 24/SR 202L system traffic interchange (TI). The need for the project is to construct improvements to accommodate increased traffic demand.

The scope of work for the project consists of:

- Adding two additional travel lanes on SR 24 in each direction between Ellsworth Road and Ironwood Drive (3+ auxiliary)
- Adding new three-lane approaches and traffic interchange overpass structures (TIOP) at Williams Field Road, Signal Butte Road, and Meridian Road
- Widening the existing grade separated structures at Mountain Road
- Adding ramp connector roads between SR 202L and the Ellsworth Road intersection including structures over Ray and Hawes Road, a service ramp, and the Powerline Floodway
- Restriping portions of the directional system TI ramps from one lane to two lanes
- Adding an outside general purpose travel lane on the northbound SR 202L between SR 24 and Guadalupe Road
- Reconstructing NB SR 202L exit and entrance ramps at the Elliott Road TI and the exit ramp at Guadalupe Road TI
- Modifying existing on-site roadway drainage system to accommodate additional lanes
- Installing and upgrading signing and pavement markings
- Installing ITS/FMS, traffic signals, and lighting
- Placing seeding on SR 24
- Restoring landscaping and irrigation on SR 202L
- Upgrading sidewalks and ramps to be ADA compliant on Ellsworth Road
- Removing existing SR 202L AR-ACFC and resurfacing by diamond grinding the roadway surface on both directions between Recker Road to Guadalupe Road
- Widening WB SR 202L from the Power Road WB exit ramp to Recker Road including both Power Road ramps
- Widening EB SR 202L between the Power Road entrance and exit ramps including both Power Road ramps
- Widening the existing SR 202L structures over Power Road and the Eastern Maricopa Floodway
- Replacing deck joints on existing SR 202L structures within the project limits
- Constructing new retaining and sound walls and screen walls if needed
- Conducting geotechnical investigations consisting of structure and roadway borings

- Replacing sign panels and removing sign lighting at three SB SR 202L locations north of Guadalupe Rd
- Reconstructing the existing half-diamond intersection of SR 24 at Ironwood Drive to a half diverging diamond intersection (DDI)
- Repairing a pavement crack on the system TI NW Ramp

This project is within the Phoenix CO maintenance area and a nonattainment area for PM₁₀. The proposed project is included in the Maricopa Association of Governments (MAG) Regional Transportation Plan (RTP) MOMENTUM 2050. In addition, the project is included in the FY 2022-2025 MAG Transportation Improvement Program.

2.0 Regulatory Standards

Per U.S. EPA guidelines, specific transportation projects now necessitate a quantitative assessment of PM₁₀ impacts in proximity to roadways. This PM hotspot evaluation entails includes estimating the background PM₁₀ concentration levels associated with all sources not explicitly included in the modeling for the project. In part, this estimation involves using a 3-year dataset of historical air quality information to establish the PM₁₀ background value. This calculated background value is then added to the project's modeled PM₁₀ values to determine if the project's emissions might result in exceeding the National Ambient Air Quality Standards (NAAQS). Should the background concentration surpass the NAAQS, a build versus no-build project analysis becomes necessary.

40 CFR Part 51, Appendix W, section 8.3 and Hot Spot Guidance Section 8 provide recommendations for determining an appropriate background concentration. 40 CFR Part. 51 (A 2019 clarification memo, "Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events" (available at <https://www.epa.gov/air-quality-analysis/clarification-memo-additional-methods-determinations-and-analyses-modify-air>) confirms the applicability of that CFR section to transportation conformity hot spot analyses.) Appendix W, Section 8.3.2 recommends that for many cases, the current design value at a nearby, representative monitoring station is the best starting point for a background concentration. However, there may be cases where the current design value is not appropriate. Section 8.3.2.c.ii specifies there may be circumstances which would necessitate modifications to the background concentrations, stating that "[s]uch cases could include removal of data from specific days or hours when a monitor is being affected by activities that are not typical or not expected to occur again in the future (e.g., construction, roadway repairs, forest fires, or unusual agricultural activities). Such adjustments would make the monitored background concentrations more temporally and/or spatially representative of the area around the new or modifying source for the purposes of the regulatory assessment." The data used to determine the background concentration includes 24-hour average pollutant levels and annual means, excluding atypical air quality events. If the chosen 3-year period for determining the project's background concentration encompasses atypical air quality such events, data affected by those events can be excluded from the analysis. This is done to mitigate the influence of outliers unrepresentative in air quality events on the determination of the background concentration of an area data stemming from uncontrollable air quality events, which could lead to NAAQS exceedances¹.

EPA Region 9 recommends examining several criteria for determining whether a high-wind dust event is appropriate to exclude from a project's background concentrations:

1. Hourly and 24-hour average PM₁₀ exceedances at multiple air monitors in the specified areas indicating it's a regional air quality event.
2. Windspeed conditions greater than 25 mph consistent with an increase in hourly PM₁₀
3. Reduced visibility to less than 10 miles consistent with increases in hourly PM₁₀ concentrations.
4. National Weather Service (NWS) wind/dust advisories consistent with an increase in hourly PM₁₀ concentrations.
5. Summaries of dust complaints and/or notices of PM₁₀ violations; if dust complaints are received, or dust complaints do not involve anthropogenic source(s) located upwind of an exceeding monitor.

¹ U.S. EPA, Guidelines on Air Quality Models, 40 CFR Appendix-W-to-Part-51 8.08.3.2.

This document regards the seven requested days as atypical in their meteorological and PM₁₀ characteristics and proposes their removal from the PM "hot spot" background concentration for the project.

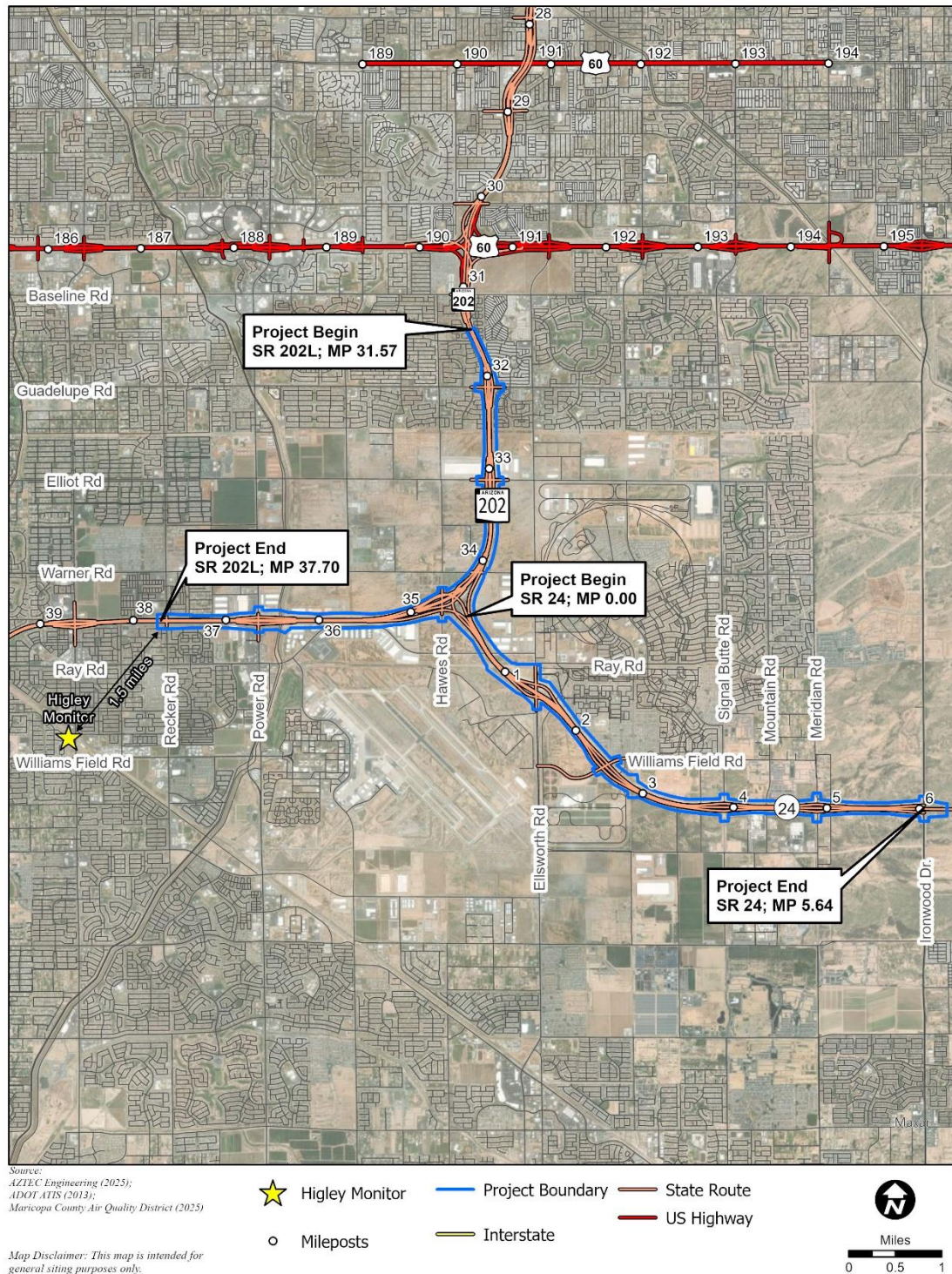
The days identified are proposed to be considered atypical events, due to the occurrence of high wind conditions and dust storms. ADOT justifies that it is inappropriate to consider these days when calculating the project's hot spot analysis background PM₁₀ concentrations. To provide justification for exclusion of these dates, the report discusses air pollution forecasts issued by Arizona Department of Environmental Quality (ADEQ), National Weather Service (NWS) historical weather forecasts, National Oceanic and Atmospheric Association (NOAA) weather station data, and 24-hour average PM₁₀ concentrations for air quality monitoring stations in the general Phoenix metropolitan area (Phoenix Area).

Maricopa County Air Quality Department (MCAQD), as the designated air quality reporting agency for the project, has provided air quality monitoring data for the dates discussed in this report, accessible in **Appendix A**. MCAQD's data has been utilized as a point of reference for the dates under consideration as atypical in this summary report. Details on these dates are provided in **Section 4.0**.

3.0 Project PM₁₀ Background Concentrations, Without Removing Atypical Events

There is one monitor in the vicinity of the project site. The Higley PM monitor (Higley) is approximately 1.5 miles south of the project. **Figure 1** identifies the project location below.

Figure 1. Project location map and proximity to Higley monitor.



Using the U.S. EPA's Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas, the project's background PM₁₀ levels were calculated for 2021 through 2023 at Zuni Hills Monitoring Station. **Table 1** shows the number of completed monitoring days and highest 24-hour typical readings for 2021 through 2023 for Higley monitor.

Using the U.S. EPA's Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM_{2.5} and PM₁₀ Nonattainment and Maintenance Areas, the 4th highest PM₁₀ reading each year between 2021 and 2023 were selected for this project.

Table 1: Project Monitoring station Highest 24-hour PM₁₀ Readings, Without Removing Atypical Events			
Higley Monitor			
Data Year	2021	2022	2023
Number of Readings	357	362	333
1st	219	160*	164
2nd	207	99	143
3rd	134	88	122
4th	130	86	114
Source: https://www.epa.gov/outdoor-air-quality-data/download-daily-data			
Note: *4 th highest 24-hour readings are highlighted in red, without removing atypical events.			

Table 1 shows that without considering atypical events, Higley monitor's 4th highest value over three years (2021-2023) is 160 µg/m³. This comes from a total of 1052 days of sampling.

The predicted background concentration, without removing atypical events, of the project is 160 µg/m³.

Per 40 CFR 50, Appendix K, the Maricopa County NAAQS threshold for PM₁₀ 24-hour average concentration threshold is 150 µg/m³. As such, the predicted PM₁₀ background concentration does exceed the PM₁₀ NAAQS threshold. **Table 2** compares the background concentration to the PM₁₀ NAAQS threshold.

Table 2: PM₁₀ NAAQS Threshold & Projects Calculated Background PM₁₀ Concentrations			
Higley Monitor			
4 th Highest 24-hour Average PM ₁₀ Concentration without Atypical Event Data Exclusion (µg/m ³)	PM ₁₀ National Ambient Air Quality Standards (NAAQS)	Difference (µg/m ³)	Exceeds Threshold?
160	150	10	Yes

As shown in **Table 2**, the project PM₁₀ background concentrations exceed the PM₁₀ NAAQS threshold, without removing atypical event day data from the analysis. This can be attributed to dates within the three-year evaluation period (2021 – 2023) being classified as atypical events (weather conditions attributing to high PM₁₀ concentrations). As such, the background concentration levels that include atypical event data during this three-year period are unrepresentative of the project's average PM₁₀ background concentration and should not be included in the projects PM₁₀ background concentration calculations.

4.0 Atypical Event Days

Hourly and daily PM₁₀ data for the years 2021 through 2023 was obtained from air quality monitors in the general Phoenix Area from the EPA AirData website to be evaluated for the projects PM₁₀ background concentration calculations. Within these three years of data, the following dates are being proposed to be considered as atypical events:

- March 3rd, 2021
- October 11th, 2021
- October 12th, 2021
- September 2nd, 2022
- July 21st, 2023
- July 26th, 2023
- October 1st, 2023

The dates above are being proposed to be excluded from the projects PM₁₀ background concentration calculations per guidelines listed in 40 CFR Part 51, Appendix W, Section 8.3.2.c.ii for the 40 CFR Part 53 transportation conformity portion of the project. Monitoring data for these seven days proposed to be removed was obtained from MCAQD's monitoring records and EPA and was reviewed to ensure that it meets the U.S. EPA's 75% data completeness criteria². **Table 3** summarizes the days recommended for exclusion due to atypical-type events.

The seven days proposed for removal from the background concentration analysis are considered atypical in nature because they fit the EPA Region 9's 5-criteria for the data background modification of atypical events (Section 2.0). For the days proposed, Higley and other surrounding monitoring sites showed hourly and 24-hour average PM₁₀ NAAQS exceedances, and the Phoenix Area's windspeed conditions were recorded to be greater than 25 mph. The high wind conditions time series data recorded on these dates coincides with an increase in hourly PM₁₀ concentrations throughout the Arizona region. These increases in PM₁₀ concentrations are consistent with reduced visibility to less than 10 miles as identified in NWS, NOAA Storm Event Reports, ADEQ pollution reports, wind dust advisories, dust complaints received, and notices of PM₁₀ violations.

The Higley monitor, chosen as the project's background monitor, did not record PM₁₀ NAAQS exceedances on every exceedance day listed for Maricopa County between 2021 and 2023. However, given the regional nature of these atypical events, even on region wide exceedance days in which Higley did not exceed NAAQS, the PM₁₀ concentrations at this site may not reflect its typical background concentrations. This is because elevated PM₁₀ concentrations were recorded across the Phoenix Area during these atypical events, as documented by other monitors that did record exceedances on those dates. As such, to accurately demonstrate the regional nature and widespread impact of these atypical events, data from other regional monitors will be reviewed on days that Higley monitor did not exceed, to properly distinguish typical background levels from the atypical event-driven exceedance anomalies noted for these dates throughout Maricopa County. Wind and PM₁₀ concentration data at Higley monitor and additional monitors is provided and discussed, to demonstrate the impact of the atypical weather conditions not only on the Phoenix Area, but on the background concentration at Higley monitor for each date being proposed as atypical. **Table 3** lists Higley monitor's PM₁₀ concentrations for each of the days

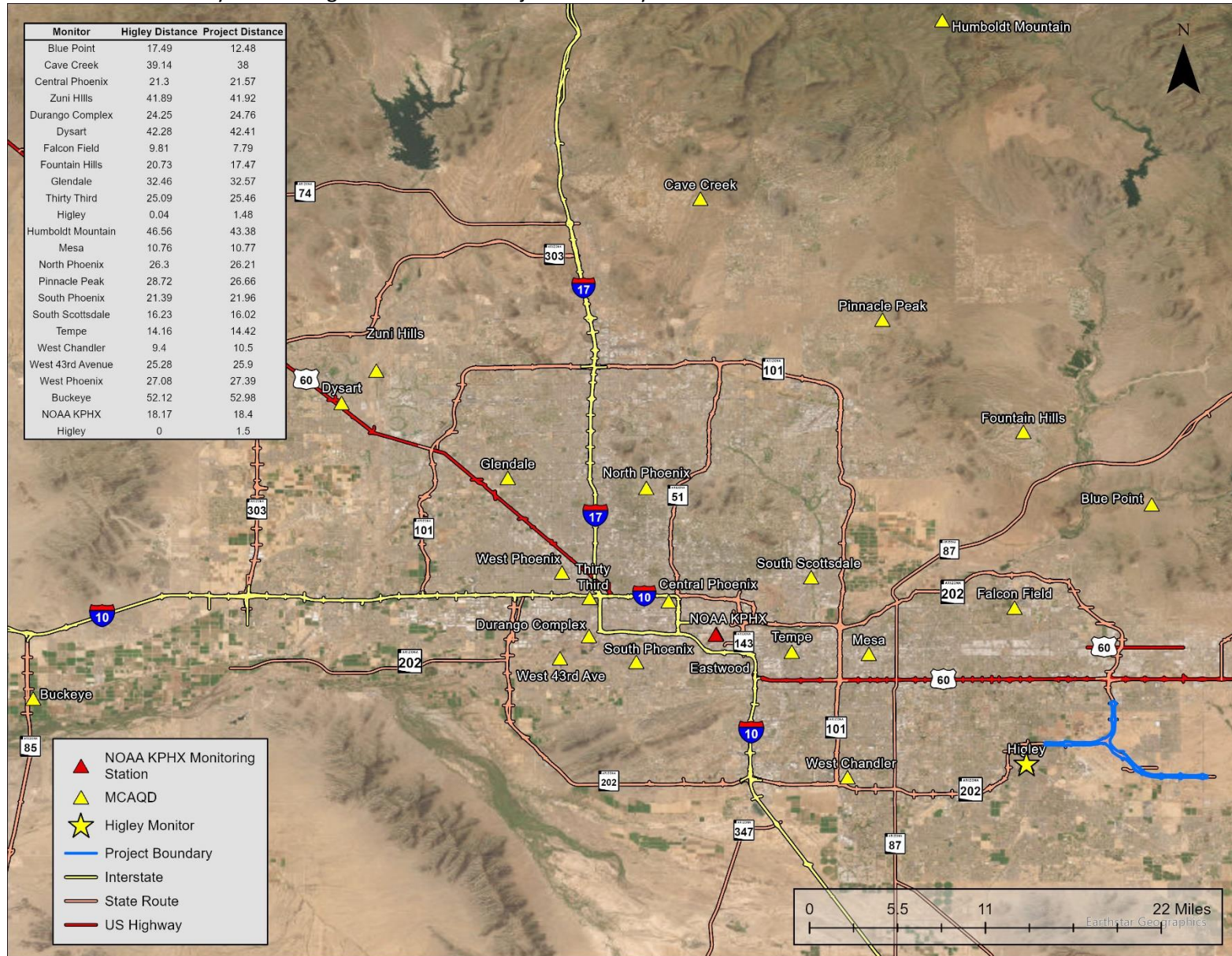
² U.S. EPA, Office of Air Quality Planning and Standards, Guideline on Data Handling Conventions for the PM NAAQS, April 1999, Table 8-1. Accessed September 17th, 2023. https://www3.epa.gov/ttn/naaqs/aqmguides/collection/cp2/19990401_oaqps_epa-454_r-99-009_guideline_data_handling_pm_naaqs.pdf

discussed in this report, and additional monitors that exceeded 24-hour average PM₁₀ NAAQS on these dates in Maricopa County.

Table 3: Higley and Other Monitor Stations PM ₁₀ NAAQS Atypical Event Days Data					
Monitor	Date	24-hour Average PM ₁₀ Concentration (µg/m ³)*	PM ₁₀ NAAQS Exceedance	Identified as a potential Atypical Event	Other Monitors that Exceeded NAAQS on this date (PM ₁₀ values)
Higley	3/3/2021	208	Yes	Yes**	West 43 rd Avenue (177.9)
	10/11/2021	134.7	No	Yes**	West Chandler (160.9)
					Buckeye (259.0)
					Dysart (155.9)
	10/12/2021	219.8	Yes	Yes**	Zuni Hills (142)
					West Chandler (181.5)
					South Scottsdale (180.7)
					Durango Complex (163.3)
					Mesa (170.4)
					Central Phoenix (170.9)
					Tempe (158.9)
					West 43 rd Avenue (166.6)
	9/2/2022	160.7	Yes	Yes**	Dysart (206.7)
					Zuni Hills (167)
	7/21/2023	125	No	Yes**	West 43 rd Avenue (216.9)
	7/26/2023	165.3	Yes	Yes**	-
	10/1/2023	129	No	Yes	West 43 rd Avenue (160.8)
Source: U.S. EPA Outdoor Air Quality Data, Download Daily Air Quality Data, https://www.epa.gov/outdoor-air-quality-data/download-daily-data					
Notes:					
*Highest 24-Hr average PM ₁₀ concentration reading identified during the 3-year period's potential atypical events days.					
** Previously approved atypical event report dates for the SR 202 Loop - Val Vista Drive to SR 101L and SR 303Loop – Lake Pleasant Drive to I-17 project					

The data from nearby monitors, with 1-hour and 5-minute PM₁₀ concentrations provided in **Appendix A**, was flagged for high PM₁₀ concentrations on the atypical events days, indicating that the atypical air quality events were widespread and regional in nature. **Figure 2** shows the MCAQD monitors proximity to the project site, and NOAA Phoenix Sky Harbor International Airport Weather Station (NOAA KPHX).

Figure 2. MCAQD's Air Quality Monitoring Stations within Project Proximity



Windspeed data from NOAA KPHX was used to show that atypical events occurred over the entire Phoenix Area, including the Higley Monitor, the project site, and other MCAQD monitors with recorded NAAQS exceedances. While some dates did not show PM₁₀ levels or wind speeds over 25 mph at Higley monitor, data from NOAA KPHX confirmed sustained wind speeds and wind gusts over 25 mph, along with reduced visibility due to blowing dust and haze. This NOAA KPHX data and MCAQD monitoring site data supports the conclusion that atypical events influenced air quality across the Phoenix Area on these dates.

Appendix A includes maximum hourly sustained wind speed and wind gust data for the dates being proposed as atypical at each of MCAQD's monitors discussed in this report. To demonstrate which of the seven dates meet the atypical event criteria of windspeeds exceeding 25 mph, **Table 4** presents the selected days maximum sustained windspeeds and gust speeds from the NOAA KPHX monitoring data. For more detailed NOAA KPHX data referenced in **Table 4**, please refer to **Appendix B**.

Table 4: NOAA Phoenix Sky Harbor Station (WBAN:23183) Windspeed for Atypical Events Days					
Date	Max Wind Gust Speed (mph)	Time Recorded	Max Sustained Windspeed (mph)	Time Recorded	Maximum sustained wind or windspeed > 25 mph?
3/3/2021	30	3:51 P.M.	47	4:51 P.M.	Yes
10/11/2021	46	10:44 P.M.	28	10:44 P.M.	Yes
10/12/2021	37	12:51 A.M.	28	12:25 A.M.	Yes
9/2/2022	30	6:51 P.M.	20	6:50 P.M.	No
7/21/2023	46	11:05 P.M.	35	10:55 P.M.	Yes
7/26/2023	43	9:51 P.M., 9:57 P.M., 10:20 P.M., 10:25 P.M.	29	10:19 P.M.	Yes
10/1/2023	26	12:40 P.M.	18	11:25 A.M.	No
Source: U.S. Department of Commerce National Centers for Environmental Information National Oceanic & Atmospheric Administration, <i>National Environmental Satellite, Data, and Information Service for Phoenix Airport Station, AZ US WBAN:23183 (ICAO:KPHX), Local Climatological Data - Hourly Observations for 3/3/21, 10/12/21, 9/2/22, 7/26/23, & 10/1/23.</i> https://www.ncdc.noaa.gov/cdo-web/datasets/LCD/stations/WBAN:23183/detail					

Meteorological conditions, beyond human control (nonanthropogenic sources) – such as high temperatures, low precipitation, atmospheric pressure changes, wildfires, and strong winds – can lead to PM₁₀ emissions spikes. Consequently, the dates discussed in this summary report are characterized by a combination stormy weather, strong winds, dust storms, thunderstorms, drought, or heat wave conditions which led to naturally occurring, uncontrollably elevated regional and project PM₁₀ background concentrations. As such, these dates are subject to atypical event review per 40 CFR Part 51, Appendix W, Section 8.3.2.c.ii..

March 3rd, 2021, Atypical Event

A high-wind event due to a low-pressure system moving through the state occurred on this date, with wind gusts reaching up to 45 mph at the NOAA Phoenix Sky Harbor Airport Weather Station (**Table 5**). This caused widespread blowing dust throughout the region. Nine monitoring sites, in both Maricopa and Pinal counties, exceeded the 24-hour PM₁₀ NAAQS due to this storm. For more details on all monitoring sites that exceeded the 24-hour PM₁₀ NAAQS during this atypical event besides and Higley, please refer to **Appendix D**.

According to ADEQ's pollution forecast for March 3rd, 2021, winds between 20 and 30 mph were forecasted with possible chances for precipitation and the NWS issued a Red Flag Warning in effect from 11:00 A.M. to 6:00 P.M.³. Red Flag Warning weather conditions consist of warm temperatures, low humidity, and strong winds which can increase the risk of fire danger.⁴ On March 3rd, 2021, these conditions resulted in a high wind event and elevated PM₁₀ concentrations. **Table 5** shows the windspeed levels and the highest PM₁₀ concentration recorded for March 3rd, 2021, at the West Chandler and Higley Stations.

Table 5: Windspeed and PM₁₀ Data for March 3rd, 2021					
Site	24-hour average PM₁₀ (µg/m³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
West Chandler	154*	20.8	4:00 P.M.	42.9	4:00 P.M.
Higley	208*	22.3	4:00 P.M.	45.3	5:00 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, <i>Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021</i> , March 3 rd , 2021, Atypical Event, Table 6, Page 20 .					
Notes: *Measurement exceeds PM ₁₀ NAAQS.					

Gusty winds, with maximum hourly average windspeeds slightly lower than 25 mph, were recorded at the West Chandler and Higley monitors on March 3rd, 2021. Both the West Chandler and Higley stations experienced wind gusts of over 25 mph on March 3rd, 2021, with West Chandler's maximum wind gust speed being 42.9 mph and Higley's being 45.3 mph⁵. Per NOAA KPHX data, the highest windspeed for March 3rd, 2021, recorded was 30 mph at 3:51 P.M. High PM₁₀ concentrations observed on March 3rd, 2021, coincided with windy conditions in the project area (maximum wind gust speeds of 42.9 mph at the West Chandler and 45.3 mph at Higley Stations) as shown in **Figures 3** and **4** below. 5-minute windspeed and PM₁₀ concentration data from the MCAQD Atypical Events Report for the West Chandler and Higley stations is plotted in **Figures 3** and **4**.

³ Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, *Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021*, March 3rd, 2021, Atypical Event, **Pages 19-27**. Accessed September 18th, 2023.

⁴ National Weather Service, *Red Flag Warning*. Accessed August 17th, 2023. <https://www.weather.gov/mqt/redflagtips>

⁵ Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, *Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021*, March 3rd, 2021, Atypical Event, **Table 6, Page 20**. Accessed September 18th, 2023.

Figure 3: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at West Chandler monitoring station on March 3rd, 2021.

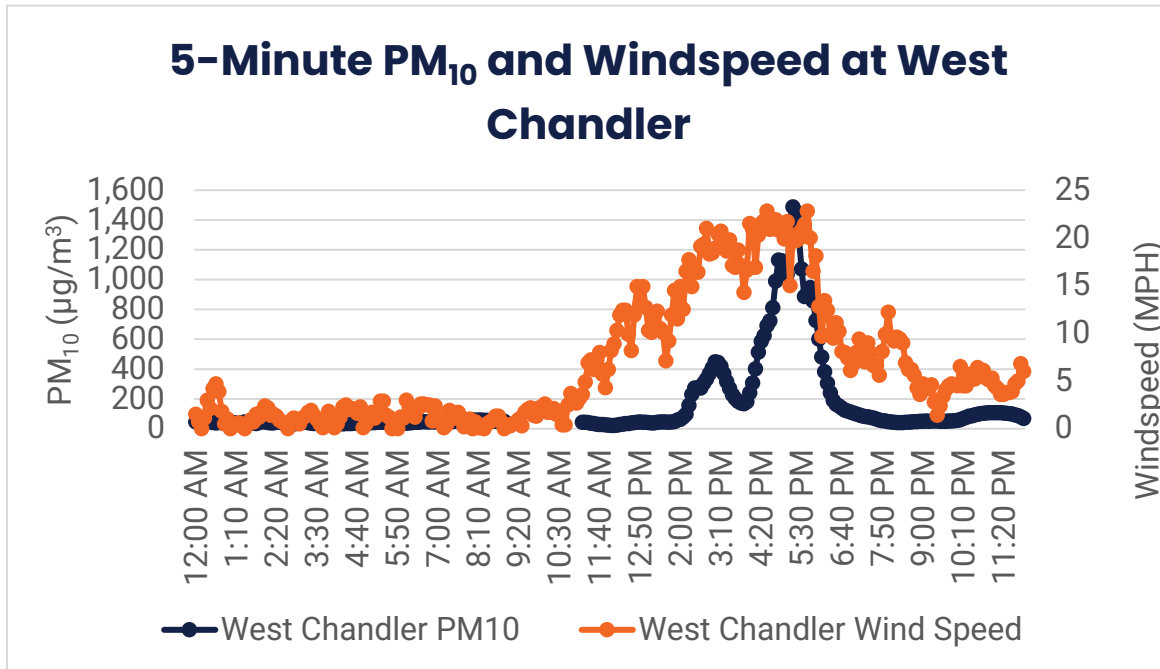
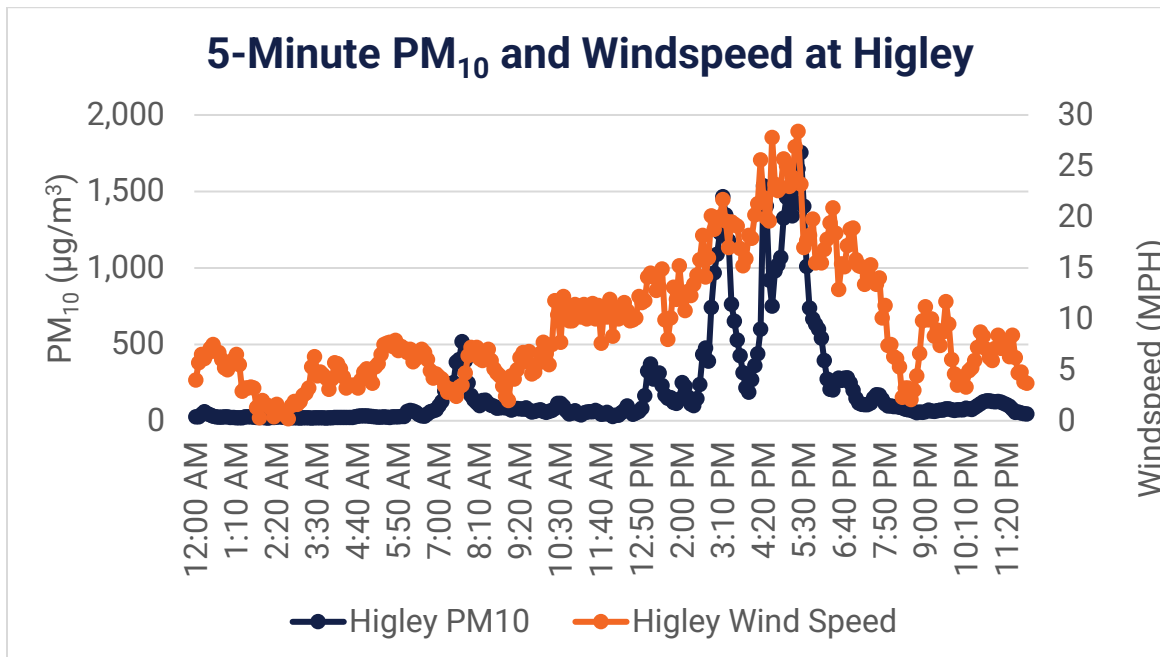


Figure 4: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Higley monitoring station on March 3rd, 2021.



Figures 3 and 4 show that as windspeeds increased on March 3rd, 2021, at the Higley and West Chandler stations, 5-Minute PM₁₀ concentrations rose relatively as well to over 1,000 µg/m³, indicating dust storm activity⁶. 5-Minute windspeeds at West Chandler and Higley are greater than 25 mph, peaking around 27 mph between 4:20 P.M. and 5:30 P.M. At the peak of these high winds PM₁₀ concentrations were the highest, with 24-hour average concentrations being recorded as 154 µg/m³ at West Chandler and 208 µg/m³ at Higley, and at 4:00 P.M. both stations' PM₁₀ concentrations exceeded NAAQS.

An evaluation of all air quality inspections and complaints between February 28th, 2021, and March 6th, 2021, indicates no evidence of unusual anthropogenic PM₁₀ emissions. During the 7-day period, 58 air quality related events were received, with 50 of them related to windblow dust or PM₁₀. For more details on these complaints, please refer to **Appendix A**.

Blowing dust, haze, and dust storms were reported on March 3rd, 2021, along with reduced visibilities throughout the Phoenix area. The pictures below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix area at the time prior to and during the dust storm on March 3rd, 2021. The pictures on the left show the area prior to the storm and the pictures on the right show the area with reduced visibility during the storm. Note the storm hit the Phoenix area around 12:00 P.M and was at its peak at 4:00 P.M.

South Mountain Camera, 12:00 P.M.



South Mountain Camera, 4:45 P.M.



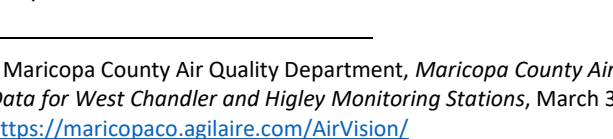
Camelback Mountain Camera, 1:00 P.M.



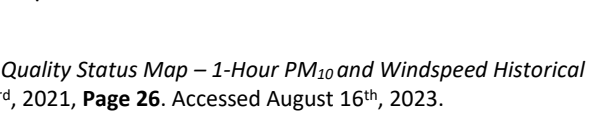
Camelback Mountain Camera, 3:45 P.M.



Superstition Mountains Camera, 12:00 P.M.



Superstition Mountains Camera, 5:00 P.M.



⁶ Maricopa County Air Quality Department, *Maricopa County Air Quality Status Map – 1-Hour PM₁₀ and Windspeed Historical Data for West Chandler and Higley Monitoring Stations*, March 3rd, 2021, **Page 26**. Accessed August 16th, 2023.
<https://maricopaco.agilaire.com/AirVision/>



October 11th, 2021, Atypical Event

A high-wind event from monsoon storm activity occurred on October 11th, 2021, causing widespread blowing dust throughout Arizona. Wind gusts were recorded to reach up to 46 mph at the NOAA Phoenix Airport Weather Station (**Table 7**) Five monitoring sites in both Maricopa and Pinal counties, including West Chandler, exceeded the 24-hour PM₁₀ NAAQS. For more details on all monitoring sites besides West Chandler that exceeded the 24-hour PM₁₀ NAAQS during this atypical event date, please refer to **Appendix D**.

According to the ADEQ pollution forecast for October 11th and 12th, two strong low-pressure fronts hit the Southwest United States region. The first low pressure front resulted in breezy westerly winds and potential pockets of dust on October 9th and 10th, and the second low pressure front on October 11th brought stronger southwestern winds with elevated PM₁₀ levels due to a combination of fall seasonally dependent high winds and PM₁₀ concentration volatility. On October 11th, 2021, the NWS Phoenix Area Forecast Discussion reported that a low-pressure front had advanced southward through the Sierra Nevada mountain range and Central California. In response to this tightening low-pressure gradient, winds intensified. Satellite imagery confirmed the presence of blowing dust near the Salton Sea. This blowing dust propagated eastward into the Phoenix area during the evening of October 11th, 2021. Consequently, a Blowing Dust Advisory was issued for the lower desert areas of Arizona⁷. On October 12th around 12:00 A.M., due to strong winds and cooler temperatures because of October 11th's low-pressure front and westerly winds, PM₁₀ levels rose again significantly. On October 11th and 12th, 2021, PM₁₀ levels exceeded health standards and resulted in a High Pollution Advisory for PM₁₀ in the Phoenix area being placed on October 12th, 2021⁸.

With winds over 25 mph throughout the Phoenix area and due to meteorological conditions and a high wind event, high PM₁₀ concentrations occurred on October 11th and 12th, 2021. The majority of the elevated PM₁₀ concentrations occurred between October 11th, 2021, and 9:00 P.M. and October 12th, 2021, at 3:00 A.M. However, October 11th is the day being analyzed for atypical event consideration, as the initial low-pressure front causing high winds, blowing dust, and PM₁₀ exceedances initiated on October 11th, 2021.

Table 6 shows the windspeed levels and highest PM₁₀ concentrations recorded for October 11th, 2021, at the West Chandler and Higley Stations.

Table 6: Windspeed and PM ₁₀ Data for October 11 th , 2021						
Site	Date	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
West Chandler	10/11/2021	160*	19.9	9:00 P.M.	45.6	10:00 P.M.
Higley	10/11/2021	134	18.4	7:00 P.M.	36.2	7:00 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, <i>Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021</i> , July 9 th , 2021, Atypical Event, Table 12, Page 45 . Notes: *Measurement exceeds PM ₁₀ NAAQS.						

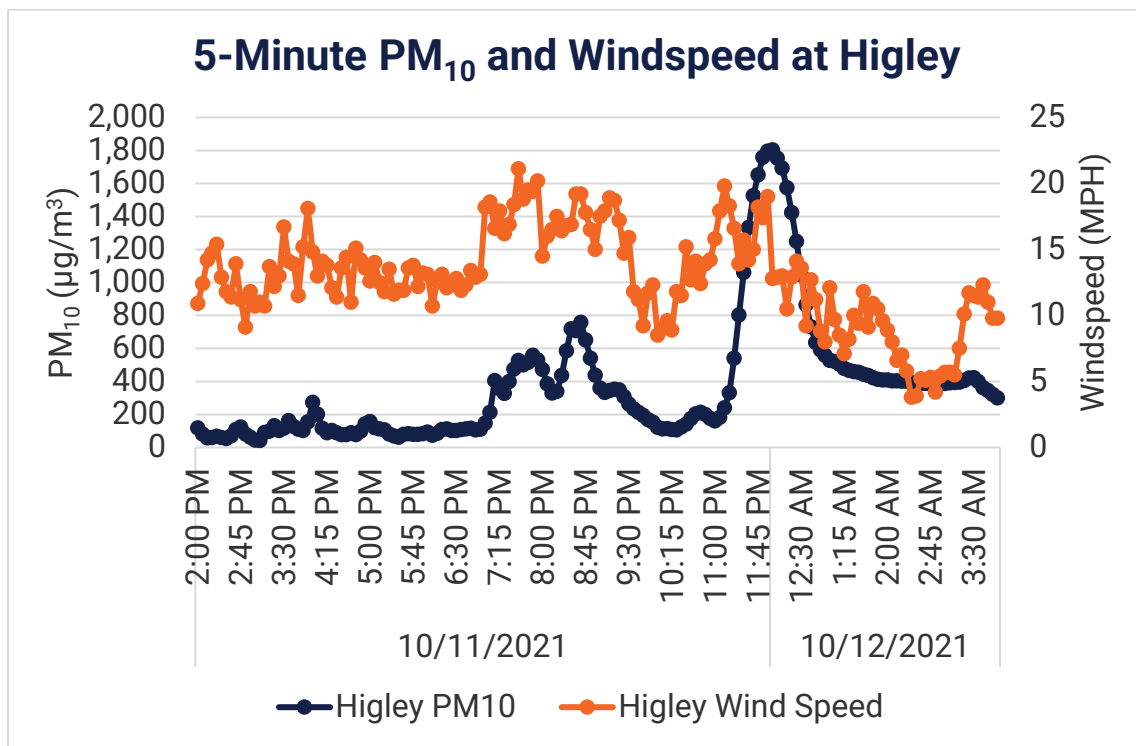
High winds, with max hourly windspeeds reaching up to 19.9 mph, were recorded at West Chandler and 18.4 mph at Higley on October 11th, 2021. Throughout the Phoenix Area, wind gusts over 25 mph were

⁸ Valley Metro, *High Pollution Advisory Dates*, 2021. Accessed August 17th, 2023. <https://www.valleymetro.org/commute-solutions/high-pollution-advisory>

recorded and five PM monitors including West Chandler recorded PM₁₀ concentrations over NAAQS thresholds. For more details on these five monitors besides West Chandler that exceeded please refer to **Appendix A**.

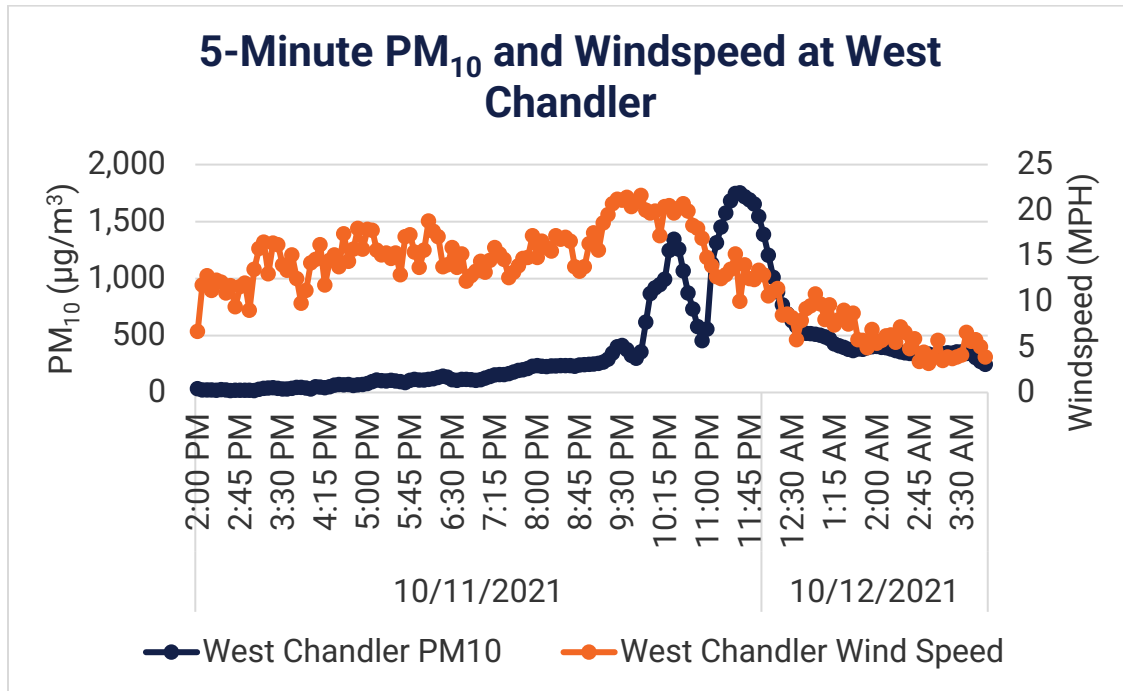
The West Chandler and Higley stations both recorded wind gust speeds surpassing 25 mph at a maximum of 45.6 mph at West Chandler and 36.2 mph at Higley⁹. Per NOAA Phoenix Sky Harbor Airport Weather Station data, the highest windspeed recorded for October 11th, 2021, was 28 mph at 10:44 P.M. Increased PM₁₀ concentrations observed on October 11th, 2021, coincided with these high wind conditions (maximum wind gust speeds over 45 mph at West Chandler Station) in the project area as shown in **Figures 5 and 6** below (referenced from MCAQD's Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021, **Appendix D**).

Figure 5: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Higley monitoring station on October 11th and 12th, 2021.



⁹ Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, *Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021*, July 9th, 2021, Atypical Event, **Table 12, Page 45**. Accessed September 18th, 2023.

Figure 6: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at West Chandler monitoring station on October 11th and 12th, 2021.



Figures 5 and 6 illustrate high windspeeds at the Higley and West Chandler monitoring stations on October 11th, 2021, with sustained high windspeeds increasing as the storm progressed. Coinciding with the peak windspeeds, beginning around 7:00 P.M. on October 11th and extending to 12:00 A.M. on October 12th, 2021, 5-minute PM₁₀ concentrations notably rose to greater than 1,000 µg/m³ at both the Higley and West Chandler monitoring stations indicating dust storm activity. As a result, the West Chandler monitoring station exceeded PM₁₀ NAAQS on both October 11th and 12th. The Higley monitoring station did not go over PM₁₀ NAAQS thresholds on October 11th, 2021, but did exceed 3 hours later (24-hour average of 219 µg/m³) at 12:00 A.M. on October 12th, 2021¹⁰.

An evaluation of all air quality inspections and complaints between October 8th, 2021, and October 12th, 2021, indicates no evidence of unusual anthropogenic PM₁₀ emissions. During the 4-day period, 25 air quality related events were received, with 17 related to windblow dust or PM₁₀. For more details on these complaints, please refer to **Appendix D**.

Blowing dust, haze, and dust storms along with reduced visibilities were reported on October 11th, 2021, in the Phoenix area. The pictures below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix area at the time prior to and during the dust storm with reduced visibility on October 11th, 2021. Note the first low pressure wave of the storm hit the Phoenix area around 9:00 P.M.

¹⁰ Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, *Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021*, July 9th, 2021, Atypical Event, **Table 12, Page 45**. Accessed September 18th, 2023.

South Mountain Camera, 4:30 P.M.



Note: There are no images available in the archive for South Mountain camera after 4:30 P.M. on October 11, 2021

Camelback Mountain Camera, 9:15 P.M.



Camelback Mountain Camera, 11:00 P.M.



Superstition Mountains Camera, 3:00 P.M.



Superstition Mountains Camera, 6:30 P.M.



Note: There are no images available in the archive for Superstition Mountains Camera after 6:30 P.M. on October 11, 2021

October 12th, 2021, Atypical Event

Dust storm conditions continued through October 12th, 2021, from the dust storm which occurred on October 11th, 2021. On October 12th around 12:00 A.M., due to strong winds and cooler temperatures because of October 11th's low-pressure front and westerly winds, PM₁₀ levels rose significantly. On October 11th and 12th, 2021, PM₁₀ levels exceeded health standards and resulted in a High Pollution Advisory for PM₁₀ in the Phoenix Area being placed on October 12th, 2021¹¹.

With winds over 25 mph throughout the Phoenix Area and due to meteorological conditions and a high wind event, high PM₁₀ concentrations occurred on October 11th and 12th, 2021. The majority of the elevated PM₁₀ concentrations occurred between October 11th, 2021, and 9:00 P.M. and October 12th, 2021, at 3:00 A.M.

MCAQD monitoring data from October 12th, 2021, captures the high PM₁₀ levels and exceedances which were a result from the dust storm and high winds which occurred on October 11th, 2021. A total of eight monitoring locations recorded NAAQS exceedances on October 12th, 2021. Of these eight, three monitoring stations were evaluated for NAAQS exceedances in relation to the project: Higley, West Chandler, and South Scottsdale. Monitors closer to the project site and Higley monitor also exceeded NAAQS this day, including Central Phoenix (21.5 miles from project site), Durango Complex (24.7 miles northwest from the project site), and West 43rd Avenue (27.7 miles from project site). The closest monitor to Higley that exceeded NAAQS was West Chandler, approximately 9.5 miles west of Higley.

Hourly windspeed and max wind gust speeds were recorded and compared to PM₁₀ levels at these stations, in correlation with October 11th, 2021, dust storm dates, and NOAA KPHX weather data. **Table 7** captures windspeed and PM₁₀ data at Higley, West Chandler, South Scottsdale, and Zuni Hills monitors.

Table 7: Windspeed and PM₁₀ Data for October 12th, 2021						
Site	Date	24-hour average PM₁₀ (µg/m³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	10/12/2021	219.8*	14.1	12:25 A.M.	14.4	12:25 A.M.
South Scottsdale	10/12/2021	180.7*	18.1	12:55 A.M.	18.4	12:55 A.M.
West Chandler	10/12/2021	181.5*	12.9	12:00 A.M.	13.5	12:00 A.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Higley, South Scottsdale, and West Chandler Quality Monitoring Station Data for October 12 th , 2021.						
Notes: *Measurement exceeds PM ₁₀ NAAQS.						

As shown in **Table 7**, Higley, South Scottsdale, and West Chandler monitors exceeded 24-hour average PM₁₀ NAAQS in the early morning of October 12th, 2021, following the storm conditions from the previous night. Although the windspeeds at these selected monitors did not increase to greater than 25 mph, throughout the Phoenix Area, wind gusts over 25 mph were recorded at NOAA KPHX and five PM monitors recorded PM₁₀ concentrations over NAAQS thresholds.

As windspeeds increased on October 11th, 2021, PM₁₀ levels continued to rise at the Higley, South Scottsdale, and West Chandler monitors, resulting in PM₁₀ exceedances recorded in the early morning of

¹¹ Valley Metro, *High Pollution Advisory Dates*, 2021. Accessed August 17th, 2023. <https://www.valleymetro.org/commute-solutions/high-pollution-advisory>

October 12th, 2021. **Figures 7 – 9** show 5-minute windspeed and PM₁₀ for the Higley, South Scottsdale, and West Chandler monitors on October 12th, 2021.

Figure 7: 5-Minute PM₁₀ concentrations ($\mu\text{g}/\text{m}^3$) and windspeed (mph) at Higley monitor on October 12th, 2021.

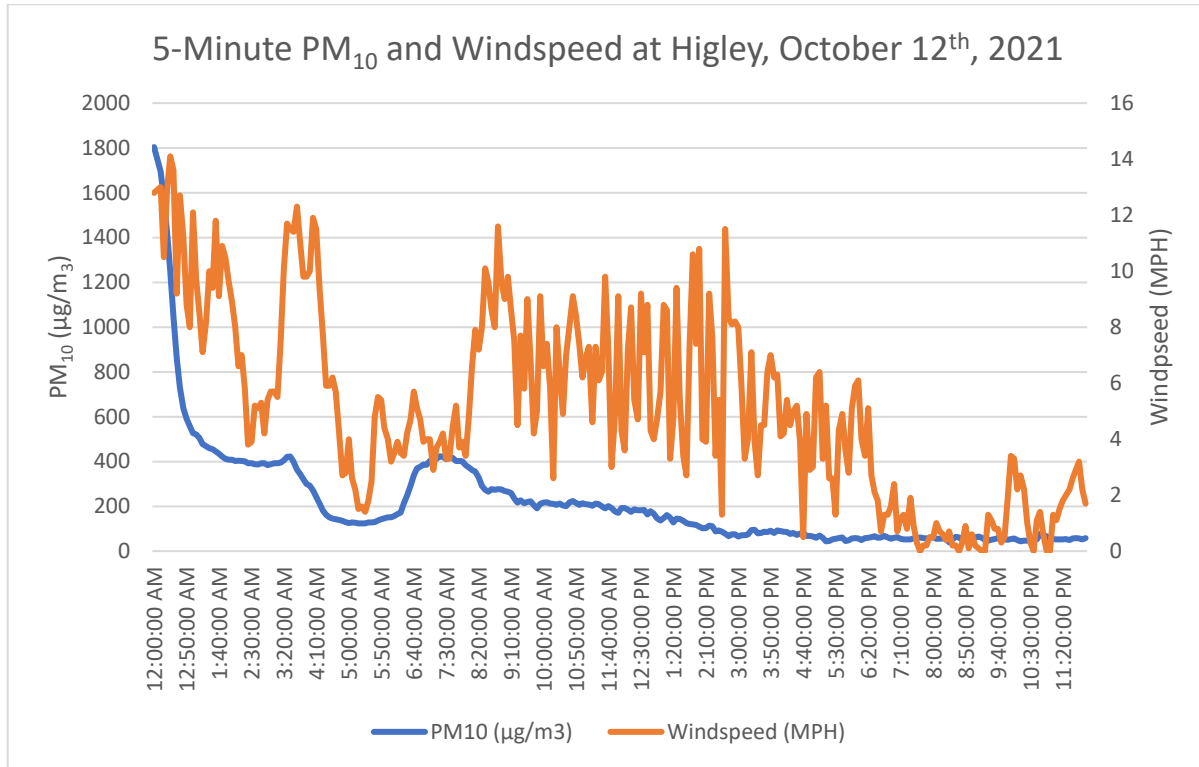


Figure 8: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at South Scottsdale monitor station October 12th, 2021.

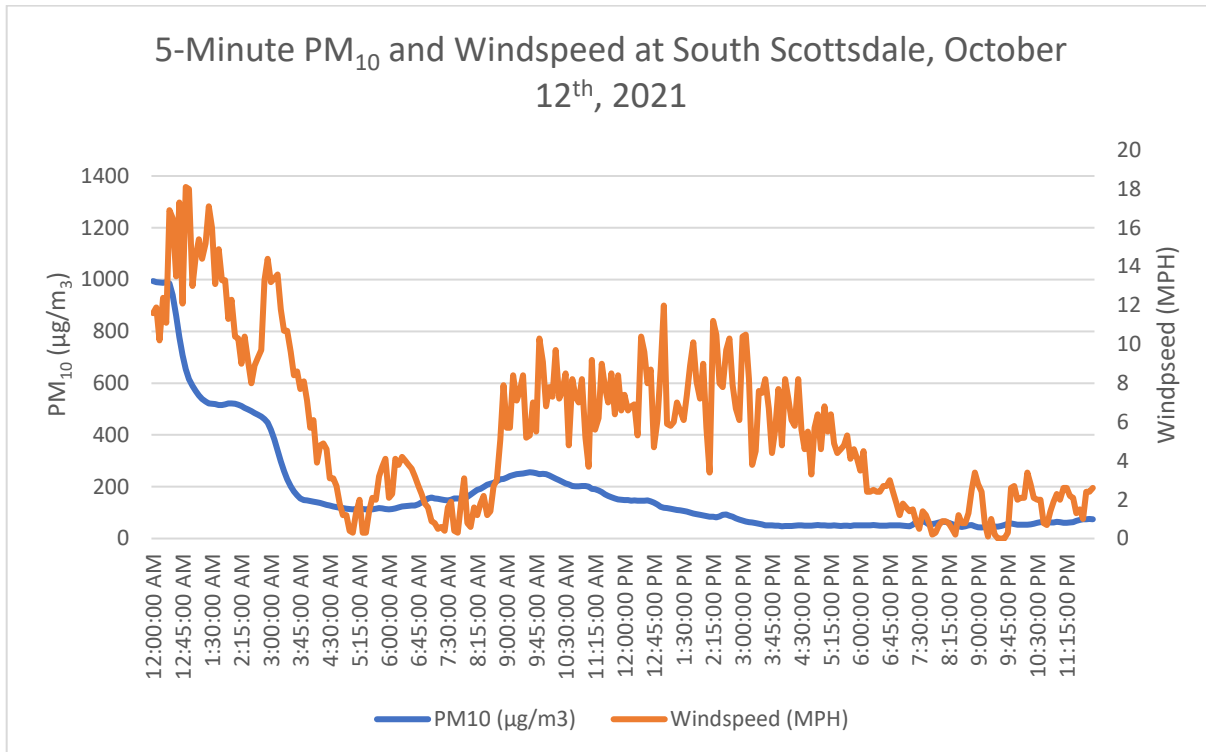
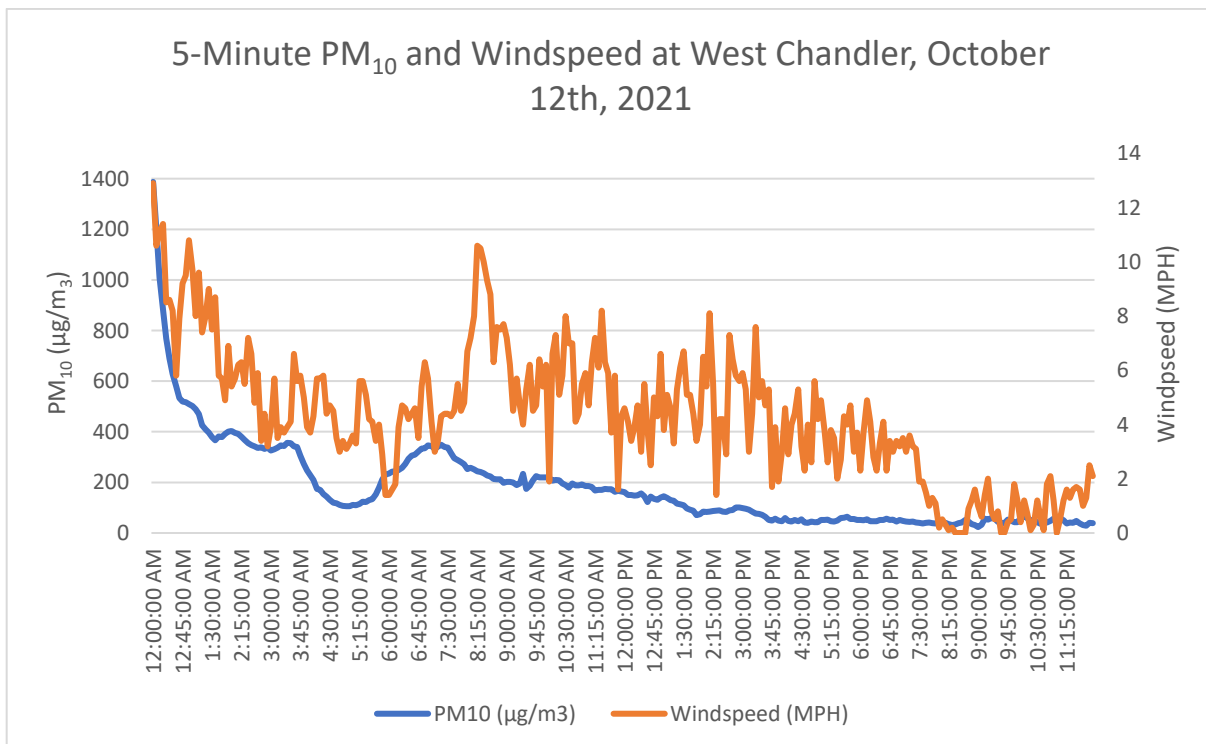


Figure 9: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at West Chandler monitor on October 12th, 2021.



It is important to recognize that these high PM₁₀ exceedances were initiated from weather conditions which began the night of October 11th, 2021, and extended into the early morning of October 12th, 2021. This can be seen in **Figures 7-9**, as PM₁₀ and windspeed concentrations are highest at the start of October 11th, 2021, but slowly decrease over time. The slow decrease in intensity of storm conditions overnight from the night of October 11th, 2021, meant that an immense concentration of dust was lofted in the air for a significant period of time. As such the 24-hour average NAAQS remained higher than NAAQS until around 7:00 A.M. the morning of the 12th.

Data from NOAA KPHX follows suit with the storm conditions observed the evening of October 11th, 2021, and following into the early morning of October 12th, 2021. Windspeeds greater than 25 mph were recorded at 12:00 A.M. and continued to about 2:00 A.M. on October 12th, 2021. The highest wind speed recorded on October 12th, 2021, was 28 mph at 12:25 A.M. and the highest wind gust speed recorded was 37 mph around 12:51 A.M. Dust and decreased visibility were also noted in the NOAA KPHX data, supporting the increased PM₁₀ concentrations noted at monitors throughout the Phoenix Area on October 12th, 2021. **Table 8** shows the period where the highest wind speeds, wind gusts, and their corresponding weather conditions were recorded at NOAA KPHX on October 12th, 2021.

Table 8: NOAA KPHX Weather for October 12 th , 2021						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
10/12/2021	12:00 A.M.	20	-	-	2.5	W
10/12/2021	12:05 A.M.	22	28	-	2.5	W
10/12/2021	12:10 A.M.	24	30	-	2.5	W
10/12/2021	12:15 A.M.	25	31	-	2.5	W
10/12/2021	12:18 A.M.	22	33	Dust	4	W
10/12/2021	12:20 A.M.	23	-	-	4	W
10/12/2021	12:25 A.M.	28*	33	-	4	W
10/12/2021	12:30 A.M.	24	-	-	5	W
10/12/2021	12:32 A.M.	24	33	Dust	4	W
10/12/2021	12:35 A.M.	25	33	-	5	W
10/12/2021	12:40 A.M.	24	-	-	5	W
10/12/2021	12:45 A.M.	24	31	-	5	W
10/12/2021	12:50 A.M.	24	-	-	5	W
10/12/2021	12:51 A.M.	24	37*	Dust	5	W
10/12/2021	12:55 A.M.	25	33	-	5	W
10/12/2021	1:00 A.M.	22	30	-	5	W
10/12/2021	1:05 A.M.	21	-	-	5	W
10/12/2021	1:10 A.M.	18	25	-	5	W
10/12/2021	1:15 A.M.	21	-	-	5	W
10/12/2021	1:20 A.M.	18	-	-	5	W
10/12/2021	1:25 A.M.	20	-	-	5	W
10/12/2021	1:30 A.M.	16	-	-	5	W
Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 10/12/2021, Link: https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20211010&end=20211013						
Notes:						
* Highest windspeed or wind gust recorded for the day ,						

- no observation recorded

As shown in **Table 8**, high windspeeds recorded at NOAA KPHX coincide with the high windspeeds and peak PM₁₀ levels recorded at the MCAQD monitors in the Phoenix Area. Although the storm conditions including windspeeds greater than 25 mph began to reside around 2:00 A.M. on October 11th, windspeeds continued to remain greater than 10 mph for the next few hours, and increased again around 2:45 A.M., with wind gusts greater than 25 mph at 2:45 A.M. at NOAA KPHX. The increase in windspeeds coincides with the rise in windspeeds and PM₁₀ shown in **Figures 7 – 9** at the West Chandler, South Scottsdale, and Higley monitors, which still remained above NAAQS PM₁₀ standards until about 4:30 A.M., and then saw an increase again in the later morning around 6:45 A.M. due to an increase in windspeeds, which can also be seen in the NOAA KPHX data for October 12th, 2021.

In addition, PM₁₀ wind roses from the South Scottsdale monitor indicate the primary wind direction recorded on October 12th was southwest and west, aligning with the westerly wind direction recorded at NOAA KPHX. The high winds carried concentrations of PM₁₀ greater than 600 µg/m³ from NOAA KPHX and east to the Higley and South Scottsdale monitor. Wind roses from the Higley monitor indicate that the primary wind direction recorded on October 12th was west and northwest, carrying concentrations of PM₁₀ greater than 600 µg/m³ from NOAA KPHX east towards the Higley monitor. Higley monitor is approximately 18 miles southeast of NOAA KPHX. Wind roses from the West Chandler monitor, approximately 9.5 miles west of Higley monitor, indicates the primary wind direction recorded on October 12th was west, carrying concentrations of PM₁₀ greater than 600 µg/m³ from NOAA KPHX east to the West Chandler and Higley monitors. This can explain why the Higley monitor PM₁₀ concentrations exceeded 3 hours after the West Chandler monitor, as the wind pushed dust particles towards the Higley monitor from West Chandler and NOAA KPHX over the night of the 11th and into the early morning of the 12th.

These wind directions and high PM₁₀ concentrations recorded at the monitors on October 12th, in coordination with the NOAA KPHX weather data indicates that the monsoon conditions and high wind event was widespread in nature, impacting the whole Phoenix Area, including Higley monitor and the project site. For more details on the PM₁₀ wind roses for the Higley, West Chandler, and South Scottsdale monitors on October 12th, 2021, please refer to **Appendix C**.

Blowing dust, haze, dust storms, and reduced visibility were reported in the Phoenix Area on October 11th, 2021, leading into the early morning of October 12th, 2021. The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm with reduced visibility on October 12th, 2021. Note the first low pressure wave of the storm hit the Phoenix Area around 9:00 P.M., October 11th, 2021, following high windspeeds and monsoon conditions moving over the Phoenix Area the previous afternoon.

Camelback Mountain Camera, 12:00 A.M.



Camelback Mountain Camera, 2:45 A.M.



Estrella Mountains Camera, 12:00 A.M.



Estrella Mountains Camera, 5:45 A.M.



White Tank Mountains Camera, 12:00 A.M.



White Tank Mountains Camera, 2:00 A.M.



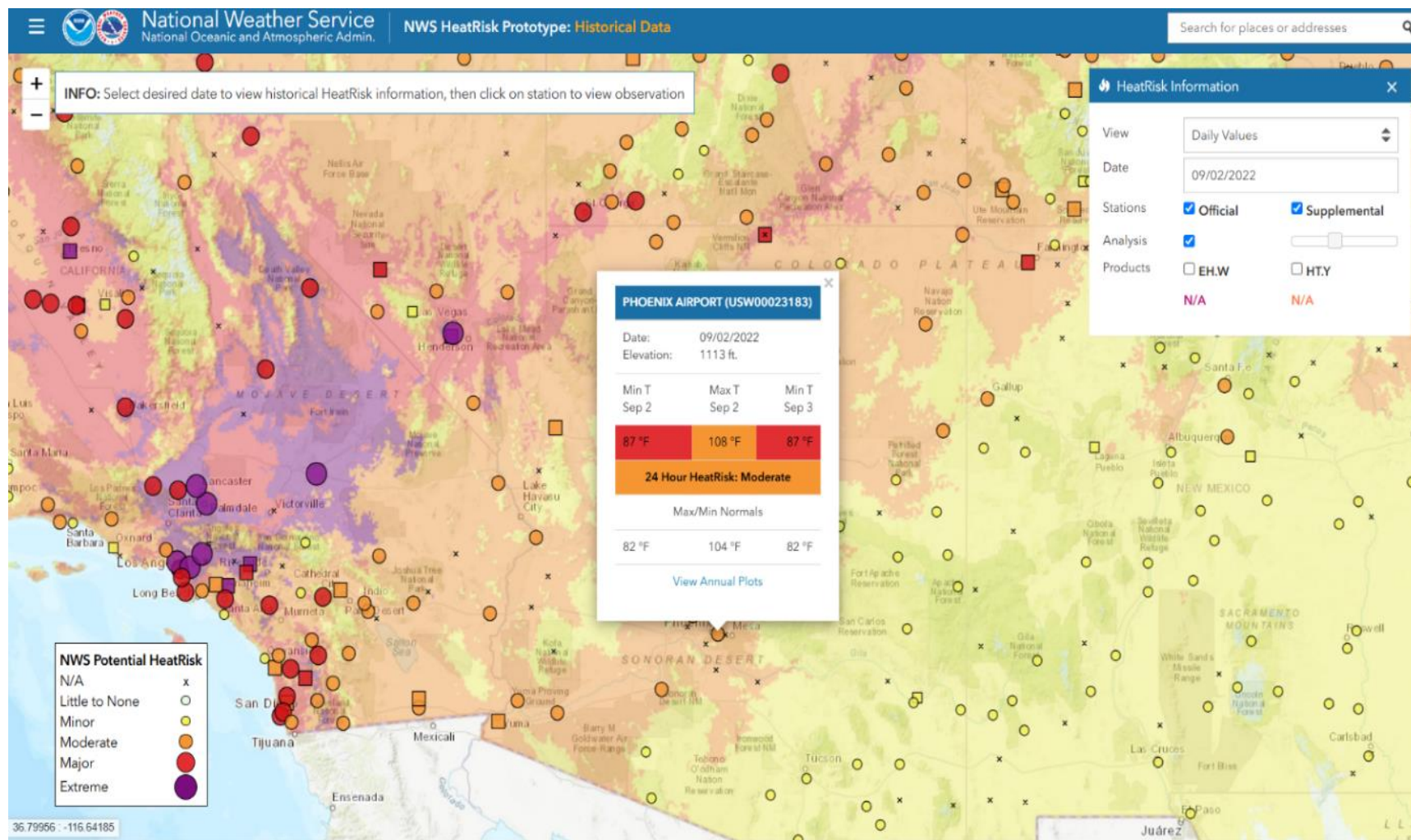
Note: There are no images available in the archive for Superstition Mountains, South Mountain camera on October 12th, 2021

September 2nd, 2022, Atypical Event

Extreme heat experienced in California, Nevada, Utah, and Arizona was caused by a long-lasting heat dome settling over the Western United States in early September 2022 and resulted in wildfires and poor air quality conditions across the Western United States¹². **Figure 10** below shows the NWS Potential Heat Risk Map for the Phoenix Area and surrounding Western United States on September 2nd, 2022.

¹² *Intense Heat Wave Fuels West Coast Wildfires & Air Quality Alerts*, IQAir, September 1, 2022, https://www.iqair.com/us/newsroom/intense-heat-wave-fuels-west-coast-wildfires-air-quality-alerts?srsId=AfmBOopf24koH2lB5I1ka62HKElBDTX0vLD0RjdeGFPG0_RWkn-ifLPS.

Figure 10. NWS HeatRisk Prototype: Historical Data for September 2nd, 2022, 24-hour heat risk recorded at NOAA KPHX¹³



¹³ NWS HeatRisk Prototype: Historical Data, NOAA, <https://www.wrh.noaa.gov/wrh/hil/historical/#>

As shown in **Figure 10**, a moderate heat risk was issued specifically for September 2nd, 2022, following the development of a strong ridge of high pressure over the Western United States. Heat advisory warnings had already been issued by the NWS for the Phoenix area starting on August 29th, 2022, due to excessive heat conditions caused by this high-pressure system¹⁴. This high-pressure system created excessive heat and monsoon-like conditions for the week of September 1st, 2022, continuing through September 5th, 2022, in the Phoenix Area. According to the NOAA Storm Events Database report for Central Phoenix on September 5th, 2022, weather conditions were due to an “anomalously strong ridge of high pressure, with 500 mb heights around 594 dm, was parked over the western CONUS for the start of September. This resulted in well above normal temperatures as well as excessive heat conditions at times.”

Given the high-pressure system, poor air quality due to wildfires, and extreme heat conditions, dust storms, poor visibility and bouts of precipitation were noted throughout the Phoenix Area between September 1st and 5th, 2022, per NOAA’s Storm Events Database webpage. Around 10:30 P.M. on September 1st, 2022, dust storms were reported in Northwest Pinal County, developing over the White Tank Mountains eventually moving north into Maricopa County, moving towards the project area and Higley Monitor. Additionally, a storm developed over Queen Creek Valley and joined this storm cluster in the Phoenix Area. The NOAA Storm Event Report for Southeast Valley and Queen Creek Areas of Southern Arizona states:

“Under a classic setup for storm motion from the Mogollon Rim to the Valley (Rim-to-Valley), with the monsoon 500mb high positioned over Nevada, a multicell storm cluster descended out of the White Mountains, through Gila County, and into the lower deserts of Maricopa and Pinal Counties in the early overnight hours of the 1st. Moisture levels were near average for the time of year, but steep mid-level lapse rates over the high terrain (7-8 C/km) and modest shear (Sfc-6km around 20-25 kts) was sufficient to support the development of an organized multicell storm cluster. The environment was also supportive of strong downbursts, with DCAPE up around 1000-1500 J/kg. A single ordinary storm also developed in the Queen Creek/San Tan Valley area a couple hours before the multicell cluster moved into the lower deserts and produced a damaging downburst. Strong winds leading to a dust storm was eventually generated by the multicell cluster once it moved into Maricopa and Pinal Counties.”¹⁵

Again, on September 2nd, 2022, dust storm conditions continued due to the high-pressure system positioned over the Western United States. On the evening of September 2nd, 2022, around 6:00 P.M. a NOAA Storm Events Report Maricopa County’s Queen Creek area was published describing the continuity of the monsoon/high pressure conditions which resulted in thunderstorms, high winds, dense blowing dust, low visibility, hail, and localized flash flooding¹⁶.

With excessive heat and monsoon conditions occurring within the Phoenix Area on September 2nd, 2022, NAAQS PM₁₀ exceedances were noted throughout the Phoenix Area at four MCAQD monitoring stations including the Higley, Zuni Hills, and Dysart monitors. The highest PM₁₀ concentrations recorded at these monitors coincides with the times of dust storms reported by NOAA Storm Event Reports for Maricopa County and the Phoenix Area, and aligns with NOAA KPHX data for both September 1st, and 2nd, 2022. **Table 9** captures windspeed and PM₁₀ data at Higley, Zuni Hills, and Dysart monitoring stations on September 2nd, 2022.

¹⁴ NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

¹⁵ NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

¹⁶ NOAA, *Storm Events Database*, Event Details "1148966," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1148966>.

Table 9: Windspeed and PM ₁₀ Data for September 2 nd , 2022						
Site	Date	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	9/2/2022	160*	5.5	6:00 P.M.	38.6	6:00 P.M.
Zuni Hills	9/2/2022	167.6*	12.2	7:35 P.M.	12.5	7:35 P.M.
Dysart	9/2/2022	206.7*	17.2	7:30 P.M.	17.5	7:30 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, Higley, Dysart and Zuni Hills Air Quality Monitoring Station Data for September 2 nd , 2022.						
Notes: *Measurement exceeds PM ₁₀ NAAQS.						

As shown in **Table 9**, the highest wind gust speed recorded at the Higley monitor is 38.6 mph, and the max hourly average windspeed is 5.5 mph, occurring within the same hour at 6:00 P.M. Zuni Hills monitor is 12.2 mph, and the max wind gust is 12.5 mph, occurring at 7:35 P.M. The highest wind speed at the Dysart Monitor is 17.2 mph and the max wind gust is 17.5 mph, occurring at 7:30 P.M. **Figures 11 – 13** show the corresponding 5-minute windspeed and PM₁₀ data recorded at Higley, Zuni Hills, and Dysart monitors on September 2nd, 2022.

PM₁₀ NAAQS exceedances for Dysart and Zuni Hills monitors were recorded in the early morning of September 2nd, 2022, in the Phoenix Area following the storm conditions that began the prior evening. As the storm moved north and northwest from Pinal County to Maricopa County between the night of the 1st and the 2nd, and storm cells from multiple storm fronts combined over the Phoenix Area, and first hitting Zuni Hills and Dysart monitors in the early morning of the 2nd, and then Higley the evening of the 2nd, which resulted in recorded exceedances in the 24-hour average PM₁₀ NAAQS.

Figure 11: 5-Minute PM₁₀ concentrations ($\mu\text{g}/\text{m}^3$) and windspeed (mph) at Higley monitor on September 2nd, 2022.

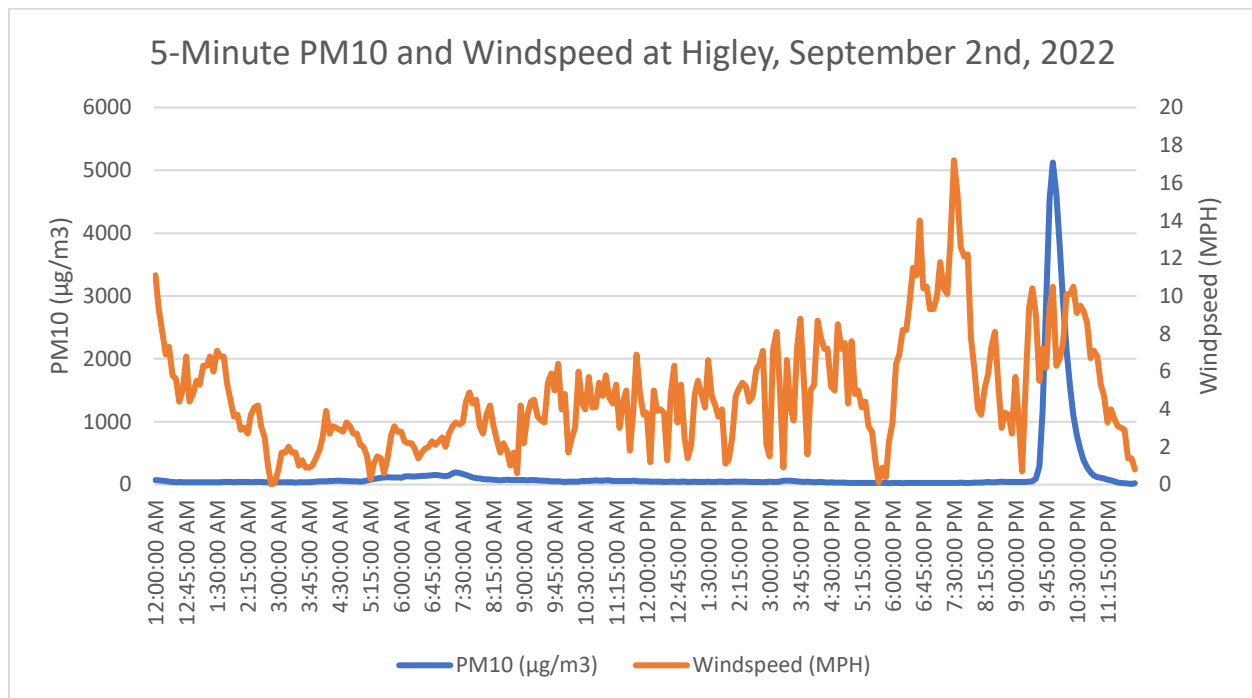


Figure 12: 5-Minute PM₁₀ concentrations ($\mu\text{g}/\text{m}^3$) and windspeed (mph) at Dysart monitor on September 2nd, 2022.

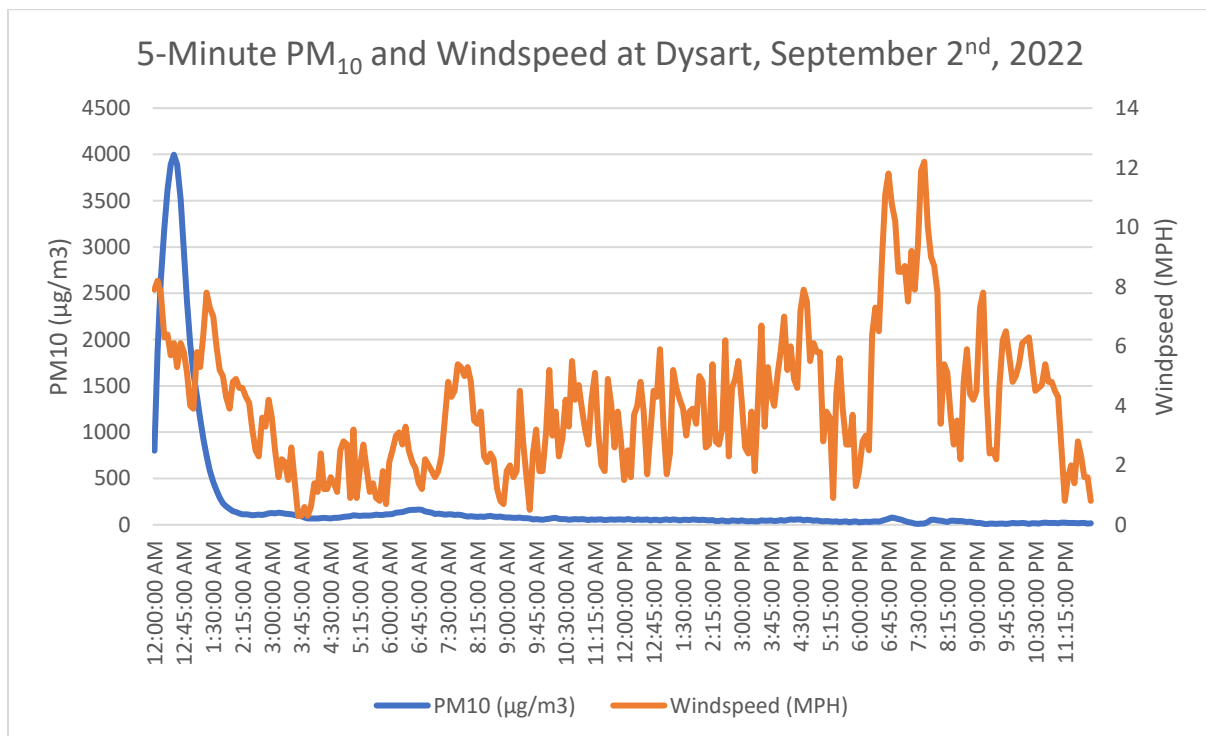
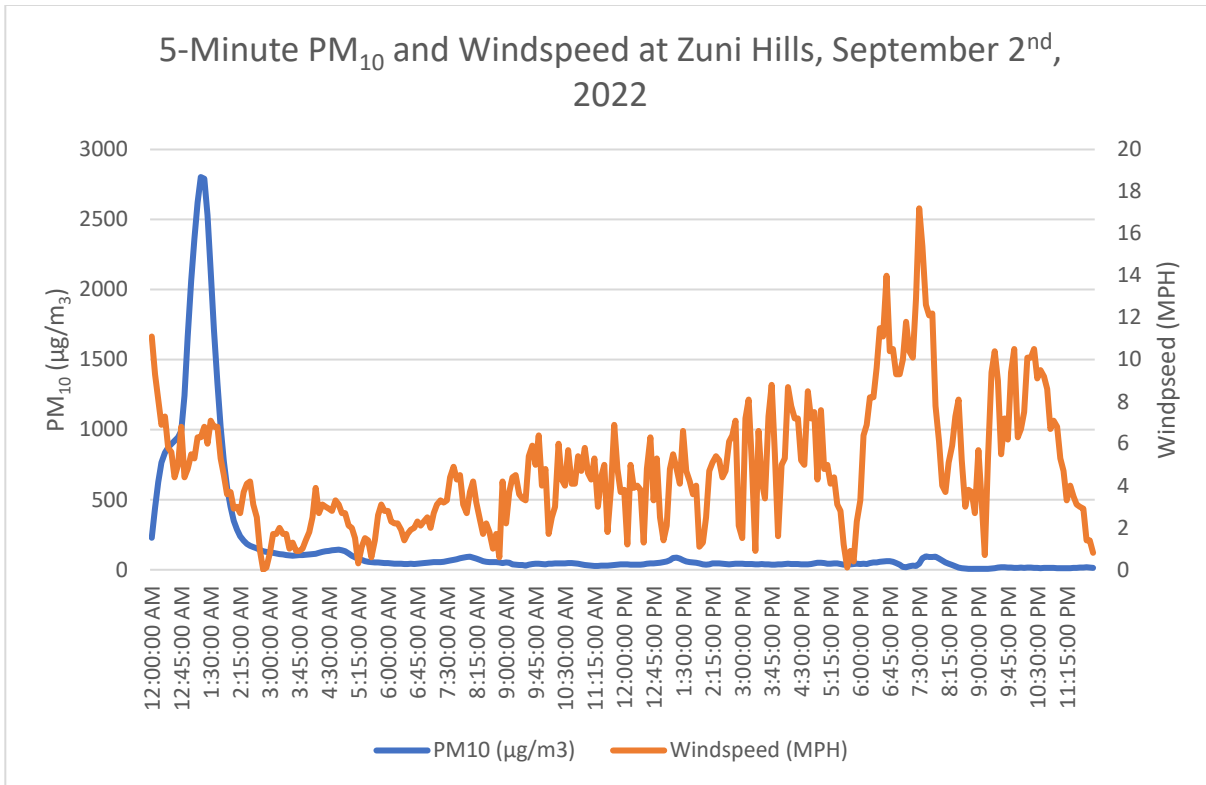


Figure 13: 5-Minute PM₁₀ concentrations ($\mu\text{g}/\text{m}^3$) and windspeed (mph) at Zuni Hills monitor on September 2nd, 2022.



Based on **Figures 11-13**, PM₁₀ concentrations peaked in the early morning of September 2nd, 2022, at Higley, Zuni Hills, Dysart monitoring stations, followed by additional peaks in PM₁₀ concentrations and maximum wind speeds recorded later that evening and an exceedance at Higley monitor. This pattern aligns with monsoon conditions affecting the area in early September, influenced by a low-pressure system over the Western United States. According to NOAA's Storm Events Report for September 1st, 2022, strong winds and dust storms developed around 10:00 P.M., extending into the early hours of September 2nd, 2022¹⁷.

Storm conditions remained within the Phoenix Area for the day of September 2nd, and winds began to increase again in the evening of September 2nd, resulting in peak windspeeds being recorded in the evening and an exceedance of PM₁₀ concentrations at Higley monitor the evening of the 2nd. The peak windspeeds recorded at all 3 monitors align with Higley's exceedance of Per monitoring data, Dysart monitor recorded a PM₁₀ peak of 3,996.9.9 µg/m³ at 1:10 A.M., Zuni Hills monitor registered 2,791.9 µg/m³ at 12:30 A.M. NOAA KPHX data confirmed haze, blowing dust, and high winds approximately 1 hour before the peak PM₁₀ levels at Zuni Hills and Dysart monitors were recorded, on the evening of September 1st, 2022.

As storm conditions continued to impact the Phoenix Area on September 2nd, pushing dust east towards Higley monitor and southeastern Phoenix near the project area, high winds continued to be recorded and picked up into the evening of the 2nd, where Higley monitor recorded its peak PM₁₀ concentrations coinciding with peak windspeeds of the day. Higley monitor recorded a PM₁₀ peak of 5,125 µg/m³ at 9:55 P.M., following peak windspeeds reaching up to 17.2 mph at 7:30 P.M. All three monitors windspeeds and PM₁₀ data follow similar trends between the early morning of the 1st and evening of the 2nd, with peaks

¹⁷ NOAA, *Storm Events Database*, Event Details "1052142," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1052142>.

noted in the early morning, and a gradual increase in speed and concentration leading up to the peak windspeeds the evening of the 2nd.

Table 10 provides windspeed and weather conditions data recorded the evening of September 1st, 2022, at NOAA KPHX, that demonstrates dust storm conditions occurring in the Phoenix Area near the monitors. These conditions continued into the early morning of the 2nd, resulting in PM₁₀ exceedances being recorded at the monitors shown between 12:00 and 1:00 A.M., as shown in **Figures 11-13**.

The highest wind gusts recorded at NOAA KPHX around 6:00 p.m. on September 2nd, coinciding with the time at which maximum wind speeds were recorded Higley, Dysart, and Zuni Hills monitors, and as the wind pushed east towards Higley monitor, Higley recorded peak PM₁₀ concentrations and windspeeds between 7:00 and 10:00 P.M. the night of the 2nd. **Table 10** provides the highest wind speeds, gusts, and weather conditions at NOAA KPHX on September 1-2, as the storm initiated the night of September 1st, contributing to PM₁₀ exceedances occurring early September 2nd, 2022, which continued into the evening of the 2nd.

Additional data from the Luke Airforce Base NOAA Station's (approximately 23 miles northwest of NOAA KPHX) is provided for the evening of September 1st, 2022, to demonstrate the regional wide impact of the multiple storm cells over the Phoenix Area, while focusing on the wind patterns and direction attributing to PM₁₀ exceedances at the Zuni hills and Dysart monitors in the early morning of September 2nd, 2022, and the Higley monitors exceedance in the evening of the 2nd. Luke Airforce Base NOAA Station is approximately 40 miles northwest of Higley monitor, 8 miles southwest of Dysart monitor, 12 miles southwest of Zuni Hills monitor.

Table 10: NOAA Weather for September 1 st and 2 nd , 2022						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
NOAA Luke Airforce Base Station Data						
9/1/2022	11:34 P.M.	28	33	-	9	SSE
9/1/2022	11:42 P.M.	24	33	Lt drizzle	3	SE
9/1/2022	11:52 P.M.	21	-	Lt drizzle	2.75	SE
9/1/2022	11:54 P.M.	17	-	Haze	3	SE
9/1/2022	11:56 P.M.	18	-	Haze	2.75	SE
9/2/2022	12:06 A.M.	16	-	Haze	3	ESE
9/2/2022	12:26 A.M.	10	-	-	7	SSE
NOAA KPHX Station Data						
9/1/2022	10:40 P.M.	23*	33*	-	10	SE
9/1/2022	10:45 P.M.	16	22	-	4	SE
9/1/2022	10:51 P.M.	13	23	Haze, Blowing dust	3	SSE
9/1/2022	11:05 P.M.	16	-	Haze, Blowing dust	2	SE
9/1/2022	11:15 P.M.	18	24	Haze, Blowing dust	4	SE
9/1/2022	11:22 P.M.	13	24	Haze, Blowing dust	5	SSE
9/1/2022	11:25 P.M.	14	20	Haze, Blowing dust	6	SSE

9/1/2022	11:51 P.M.	13	25	-	10	SE
9/2/2022	12:00 A.M.	15	-	-	10	SE
9/2/2022	12:15 A.M.	13	-	-	10	E
9/2/2022	12:25 A.M.	16	-	-	10	E
9/2/2022	12:45 A.M.	14	-	-	10	E
9/2/2022	12:55 A.M.	13	-	-	10	E
9/2/2022	1:00 A.M.	14	20	-	10	ESE
9/2/2022	1:05 A.M.	12	17	-	10	ESE
9/2/2022	1:10 A.M.	14	-	-	10	ESE
9/2/2022	1:15 A.M.	13	18	-	10	ESE
9/2/2022	6:45 P.M.	10	-	-	10	ENE
9/2/2022	6:50 P.M.	20*	-	-	10	ENE
9/2/2022	6:51 P.M.	17	30*	-	10	ENE
9/2/2022	6:55 P.M.	18	-	-	10	NE
9/2/2022	6:58 P.M.	15	-	Thunder	10	ENE
9/2/2022	7:00 P.M.	16	-	-	10	E
Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 09/01/2022 - 09/03/2022, Link: https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20220901&end=20220903 , NOAA Weather for Phoenix, Luke Airforce Base, AZ on 09/01/2022, Link: https://www.weather.gov/wrh/timeseries?site=KLUF&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20220901&end=20220903 Notes: * Highest windspeed or wind gust recorded for the day - no observation recorded						

As shown in **Table 10**, high windspeeds recorded at NOAA KPHX coincide with the high windspeeds and peak PM₁₀ levels recorded at Zuni Hills, and Dysart monitors for the early morning of September 2nd, 2022, and high windspeeds and the thunderstorm conditions resulting in exceedance at Higley on the evening of September 2nd, 2022. Haze and blowing dust were noted from 10:50 P.M. to 11:30 P.M. on September 1st, 2022, which aligns with NOAA Storm Events Report's description of dust storms occurring around this time throughout the Phoenix Area. On the evening of September 1st, 2022, haze and blowing dust was noted at NOAA KPHX with primarily southeasterly winds of speeds greater than 25 mph, from the Casa Grande Area to NOAA KPHX, the Zuni Hills, Dysart, and Higley monitors. Wind speeds greater than 25 mph were also recorded at Luke Air Force Base NOAA Station around a similar time, primarily in the southeast direction, demonstrating that areas within closer proximity to the monitors experienced a similar wind pattern to that of NOAA KPHX's wind blowing pattern at this time. An increase in windspeeds in the evening of the 2nd is also demonstrated in the NOAA KPHX data, aligning with the peak windspeeds recorded at Higley at 6:45 P.M and later peak in PM₁₀ concentrations to their maximum at Higley monitor.

ADEQ Visibility Camera Historical Archive photos at the South Mountain Camera show a decrease in visibility and dust clouds moving north and northwest towards the Central Phoenix Area around 11:00 P.M., the night of September 1st, 2022, which aligns with the NOAA KPHX and Luke Airforce Base NOAA Station weather conditions of blowing dust and haze that were recorded during this time.

From 10:45 P.M. to 11:30 P.M., visibility decreased drastically at NOAA KPHX, coinciding with haze and visible dust being noted in the forecast. Additionally, this blowing dust and peak windspeeds continued into the morning of the 2nd and could explain the highest PM₁₀ levels being recorded at the Zuni Hills and Dysart monitors just after 12:00 A.M. on September 2nd, 2022. The highest wind gust speed recorded at

NOAA KPHX for September 2nd, 2022, was 30 mph at 6:51 P.M. from the east-northeast direction, moving towards Zuni, Dysart, and Higley monitors. This was followed by reports of thunder and monsoon conditions that were noted in the NOAA Storm Events Reports throughout the Phoenix Area. This peak wind gusts on the evening of September 2nd, 2022, aligns with the highest windspeeds recorded at Higley, Zuni Hills, and Dysart monitors of 12.2 mph at 7:35 P.M., 17.2 mph at 7:30 P.M. and 17.2 mph at 7:40 P.M., respectively.

It is important to note that windspeeds did not reach levels greater than 25 mph at the Higley, Zuni Hills and Dysart monitors, but a series of high wind speed and monsoon conditions resulting in dust storm events were noted for this period during September of 2022. As such the Zuni Hills, and Dysart monitors PM₁₀ concentrations increased on the night of September 1st, 2022, and exceeded in the morning of September 2nd, 2022, and why Higley exceeded in the evening of the 2nd, as storm conditions moved throughout the Phoenix Area.

Based on NOAA Storm Event Reports for both Maricopa County and the Central Phoenix Area, it was demonstrated that the high-pressure excessive heat wave resulted in monsoon-like conditions including high wind, thunder, flashflood, hail, and dust storms. The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the thunderstorm and monsoon conditions in between the evenings of September 1st and September 2nd, 2022. Note the first wave of the storm hit the Phoenix Area around 10:00 P.M., September 1st, 2022, and moved north and northwest, followed by thunderstorms and high winds the next evening on September 2nd, 2022, moving west and southwest.

Camelback Mountain Camera, 10:30 P.M.,
09/01/2022



Camelback Mountain Camera, 11:15 P.M.,
09/01/2022



White Tank Mountains Camera, 9:00 P.M.,
09/01/2022



White Tank Mountains Camera, 11:45 P.M.,
09/01/2022



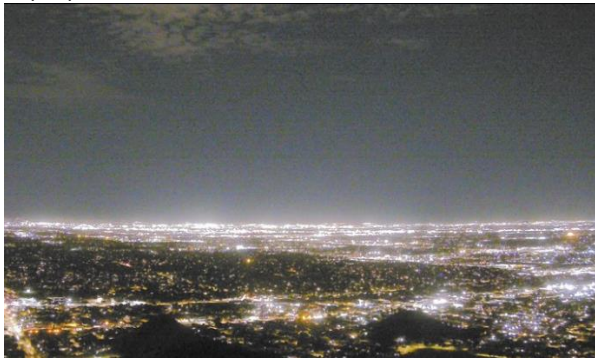
South Mountain Camera, 11:00 P.M.,
09/01/2022



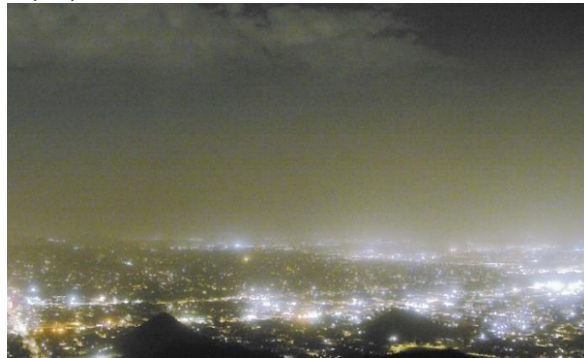
South Mountain Camera, 11:45 P.M.,
09/01/2022



Estrella Mountains Camera, 10:00 P.M.,
09/01/2022



Estrella Mountains Camera, 11:30 P.M.,
09/01/2022



White Tank Mountains Camera, 12:00 A.M.,
09/02/2022



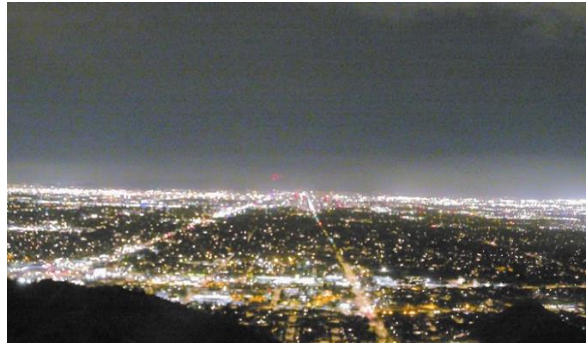
White Tank Mountains Camera, 5:30 A.M.,
09/02/2022



South Mountain Camera, 12:15 A.M.,
09/02/2022



South Mountain Camera, 12:30 A.M.,
09/02/2022



Estrella Mountains Camera, 12:15 A.M.,
09/02/2022



Estrella Mountains Camera, 5:45 A.M.,
09/02/2022



South Mountain Camera, 6:15 A.M.,
09/02/2022



South Mountain Camera, 5:15 P.M.,
09/02/2022



Superstition Mountains Camera, 10:30 A.M.,
09/02/2022



Superstition Mountains Camera, 5:45 P.M.,
09/02/2022



Camelback Mountain Camera, 12:00 A.M.,
09/02/2022



Camelback Mountain Camera, 2:00 P.M.,
09/02/2022



Estrella Mountains Camera, 1:45 P.M.,
09/02/2022



Superstition Mountains Camera, 6:30 P.M.,
09/02/2022



Camelback Mountain Camera, 6:00 P.M.,
09/02/2022



White Tank Mountains Camera, 6:00 P.M.,
09/02/2022



Estrella Mountains Camera, 5:30 P.M.,
9/02/2022



Superstition Mountains Camera, 6:45 P.M.,
09/02/2022



Camelback Mountain Camera, 6:30 P.M.,
09/02/2022



White Tank Mountains Camera, 7:15 P.M.,
09/02/2022



July 21st, 2023, Atypical Event

Per NOAA Storm Event Reports, thunderstorm activities and severe winds were noted Southeastern Arizona on this day as a result of monsoon like conditions moving west across Southern Arizona during the afternoon of July 21st, 2023¹⁸. As the monsoon conditions winds moved further west and northwest towards the Phoenix area, thunderstorms hit the Phoenix area on the evening of July 21st, 2023, resulting in high winds and blowing dust throughout the region. In addition, the Chimney Fire began on July 19th, 2023, burning over 1,600 acres on the far east side of the Santa Catalina Mountains in Northeast Pima County (approximately 110 miles southeast of Phoenix), resulting in smoke and hazy conditions in southeastern Arizona¹⁹.

Winds carried smoke and particulate matter from the Chimney Fire westward toward the Phoenix area from July 19–23, 2023, driven by the summer monsoon conditions that brought strong winds to southern Phoenix. According to discussions with Rone Pope, an Atmospheric Scientist with ADEQ's Air Quality Department on February 13th, 2025, ADEQ monitoring data from July 20th, 2023, indicates haboob conditions across Phoenix, with periodic spikes in wind gusts coinciding with increased PM₁₀ concentrations at on this date. For more details on this data, please refer to **Appendix A**.

Nearly all Maricopa County monitors recorded elevated wind gusts and speeds between 5:00 PM and 10:00 PM on July 20th. Higley experienced gusts up to 18.2 mph wind gusts, Zuni Hills experienced gusts up to 22 mph, while Central Phoenix (near NOAA KPHX) recorded gusts up to 24 mph, consistent with other countywide readings (**Appendix A**). These winds, driven by monsoon thunderstorms, lifted dust and particulate matter, dispersing them throughout the Phoenix area. Combined with smoke from the Chimney Fire, this resulted in decreased visibility and haze, which settled over the Phoenix Area by the early morning of July 21st. NOAA KPHX station data confirmed reduced visibility that morning, along with increases in PM₁₀ concentrations at Higley, Zuni Hills, and West 43rd Avenue monitors. Please refer to **Table 11** and the figures at the end of this section for more details.

Additional high winds from summer monsoon-related thunderstorms, exceeding 25 mph, moved northeast from southern Arizona on the late evening of the 20th into the early morning of the 21st. According to MesoWest Surface Weather Maps, data from OTMA3—a Remote Automatic Weather Service station operated by the National Interagency Fire Center, located about 65 miles southwest of the Zuni Hills monitor—recorded wind speeds above 25 mph between 3:00 A.M. and 4:00 A.M.²⁰, blowing northeast toward the Phoenix area. These winds align with elevated wind speeds in combination with visible haze from Chimney Fire smoke, and blowing dust from thunderstorm activity affecting the area, as observed in weather data around Phoenix between 5:00 A.M. and 6:00 A.M. on the 21st.

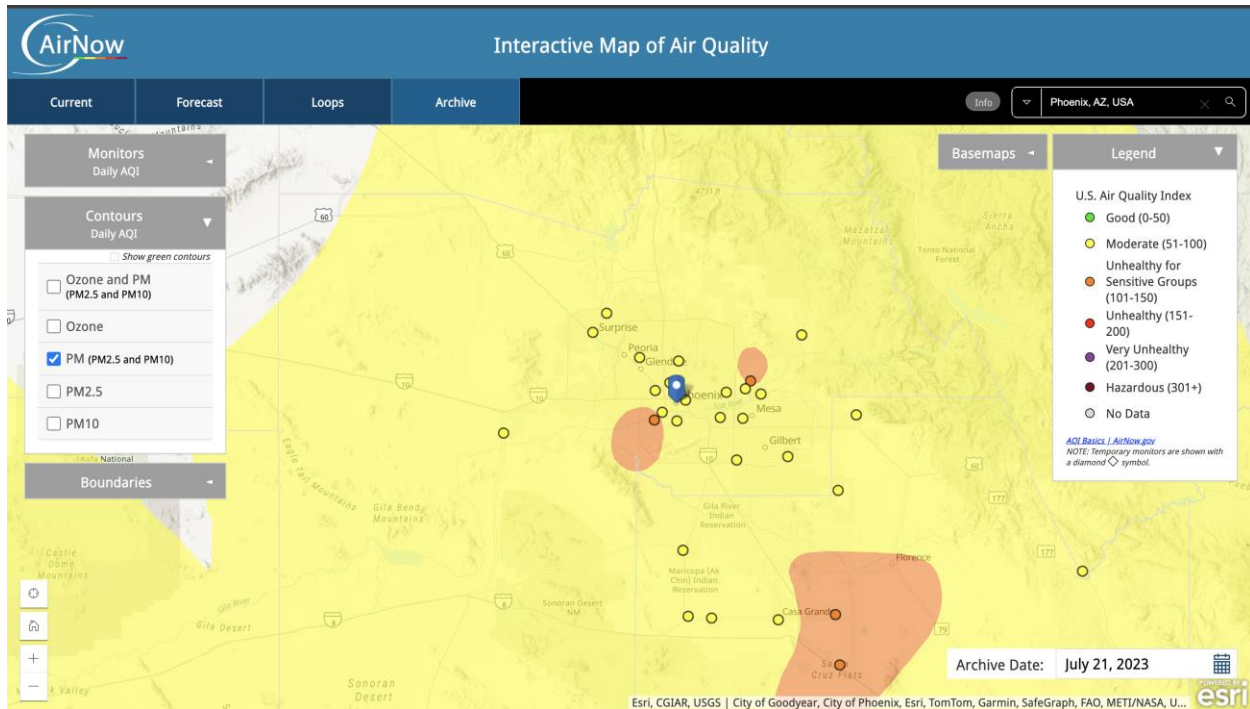
According to NOAA KPHX data and ADEQ's Visibility Camera Historical Archive photos, beginning in the early morning of July 21st, there was decreased visibility and haze observed throughout the Phoenix Area. Visible haze in the atmosphere can be seen in photos from the South Mountain and Estrella Mountains Cameras, looking southwest from North Mountain towards Central Phoenix and NOAA KPHX at 6:45 AM. As a result, the Phoenix area's Air Quality Index (AQI) values were listed as moderate to unhealthy for sensitive groups on July 21st, 2023.

¹⁸NOAA, *Storm Events Database*, Event Details "1121576," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1121576>.

¹⁹ NOAA, *Storm Events Database*, Event Details "1125390", <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1125390>

²⁰ MesoWest, *Surface Weather Maps, Arizona Region - OATMAN3 Station*, "7/21/23 Windspeed Station Observations", <https://mesowest.utah.edu/cgi-bin/droman/mesomap.cgi?state=AZ&rawsflag=3>

Per U.S. EPA's AirNow interactive Map of Air Quality dashboard²¹, the Zuni Hills AQI for ozone and particulate matter was 86, the West 43rd Avenue monitor's AQI for ozone and particulate matter was 132, and Higley monitors was ozone and particulate matter 81 on July 21st, 2023. The photo below shows the Phoenix area's particulate matter and AQI values for July 21st, 2023. Areas shown in yellow are listed with moderate AQI values, and areas shown in orange are listed with unhealthy for sensitive groups AQI values. West 43rd Avenue monitor was within a portion of the Phoenix Area that was considered unhealthy for sensitive groups for July 21st, 2023.



Windspeeds periodically increased throughout the day, as the thunderstorms moved into the Phoenix Area. Wind gusts up to 28 mph were recorded at NOAA KPHX station at 6:50 A.M., up to 24 mph at 4:00 P.M., and up to 26 mph at 7:30 P.M. resulting in decreased visibility from blowing dust in the Phoenix Area. This blowing dust may be residual from the haze that settled over the Phoenix area in the morning, which saw a spike in PM₁₀ concentrations at both Zuni Hills and West 43rd Avenue, as a result from smoke and particulate matter transported from the Chimney Fire in Northeast Pima County. Additionally, the previous day's monsoon conditions, which brought high winds and increase in blown dust, likely contributed to the dispersion of these particulates across the region on July 20th, 2023, and the early morning of July 21st, 2023. As the day progressed into the evening, these thunderstorm conditions focused on the Phoenix Area and multiple peaks in PM₁₀ concentrations were recorded at Zuni Hills, West 43rd Avenue monitors, and Higley monitor exceeded NAAQS 24-hour average PM₁₀ concentrations.

Due to the thunderstorm conditions moving north into the Phoenix Area, windspeeds over 25 mph were recorded at NOAA KPHX, 24-hour average PM₁₀ NAAQS exceedances were recorded at West 43rd Avenue monitor, and elevated concentrations of PM₁₀ were recorded at Higley and Zuni Hills monitor on the evening of the 21st. Although Zuni Hills monitors did not exceed 24-hour average PM₁₀ NAAQS on July 21st, 2023, elevated concentrations of PM₁₀ were identified at on this date, which occurred prior to the NAAQS

²¹U.S. EPA, *Air Now*, *Air Quality Archive Data*, accessed December 18, 2024, <https://gispub.epa.gov/airnow/?archivedates=07%2F21%2F2023&monitors=pm10&boundaries=county&contours=pm&showlegend=no&tab=archive&xmin=-13334403.77352085&xmax=-11573294.641830858&ymin=3530985.6275526467&ymax=4360174.510390018>.

PM₁₀ exceedances at West 43rd Avenue and align with blowing dust conditions and high windspeeds noted at NOAA KPHX and West 43rd Avenue monitor. Higley did not exceed 24-hour average PM₁₀ NAAQS, but the elevated concentration of PM₁₀ occurring later in the evening of the 21st after Higley and West 43rd Avenue's peak concentrations, aligns with the storm movement and NOAA KPHX data.

Table 11 shows the windspeed levels and highest PM₁₀ concentrations recorded for July 21st, 2023, at Higley, West 43rd Avenue, and Zuni Hills monitor.

Table 11: Windspeed and PM ₁₀ Data for July 21 st , 2023						
Site	Date	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	7/21/2023	114	10.5	11:00 P.M.	33.9	10:00 P.M.
West 43 rd Avenue	7/21/2023	216.9*	21.8	11:05 P.M.	22.3	11:05 P.M.
Zuni Hills	7/21/2023	125	19.9	6:30 P.M.	20.2	6:30 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, West 43 rd Avenue and Zuni Hills Air Quality Monitoring Station Data for July 21 st , 2023.						
Notes: *Measurement exceeds PM ₁₀ NAAQS.						

As shown in **Table 11**, on July 21st, 2023, 24-hour average PM₁₀ NAAQS were exceeded in the late evening and windspeeds were recorded of over 20 mph at West 43rd Avenue monitor. As windspeeds increased the night of the 21st, PM₁₀ concentrations rose as well, resulting in the highest level of PM₁₀ recorded at 11:20 P.M. of 2,825.8 µg/m³. Earlier in the evening, Zuni Hills monitor recorded a max windspeed of 19.9 mph and wind gust of 20.2 mph at 6:30 P.M. This max wind speed and wind gust speed coincide with the highest PM₁₀ concentration recorded of 872.8 µg/m³ **Figures 14 - 16** below shows the corresponding increase in 5-minute PM₁₀ concentrations and in windspeeds recorded on July 21st, 2023, at West 43rd Avenue and Zuni Hills monitor.

Figure 14: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Higley monitor on July 21st, 2023.

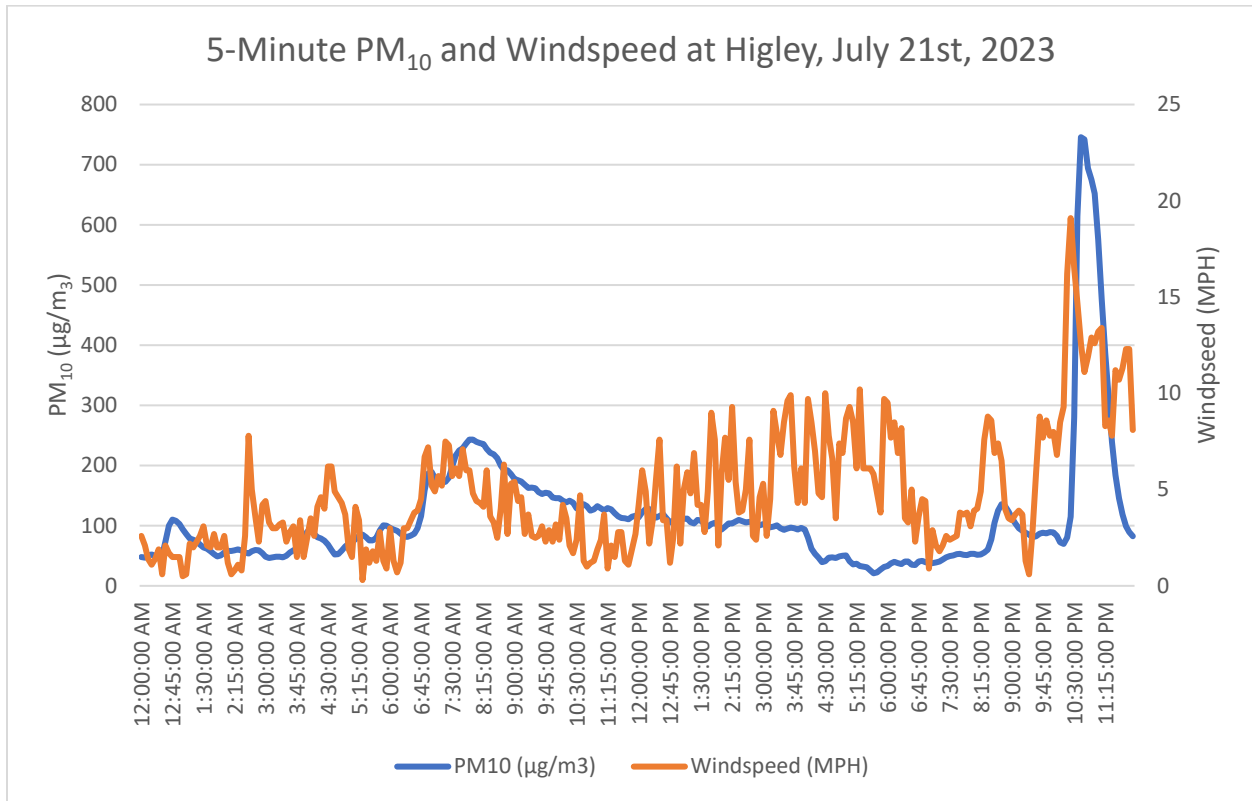


Figure 15: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at West 43rd Avenue monitor on July 21st, 2023.

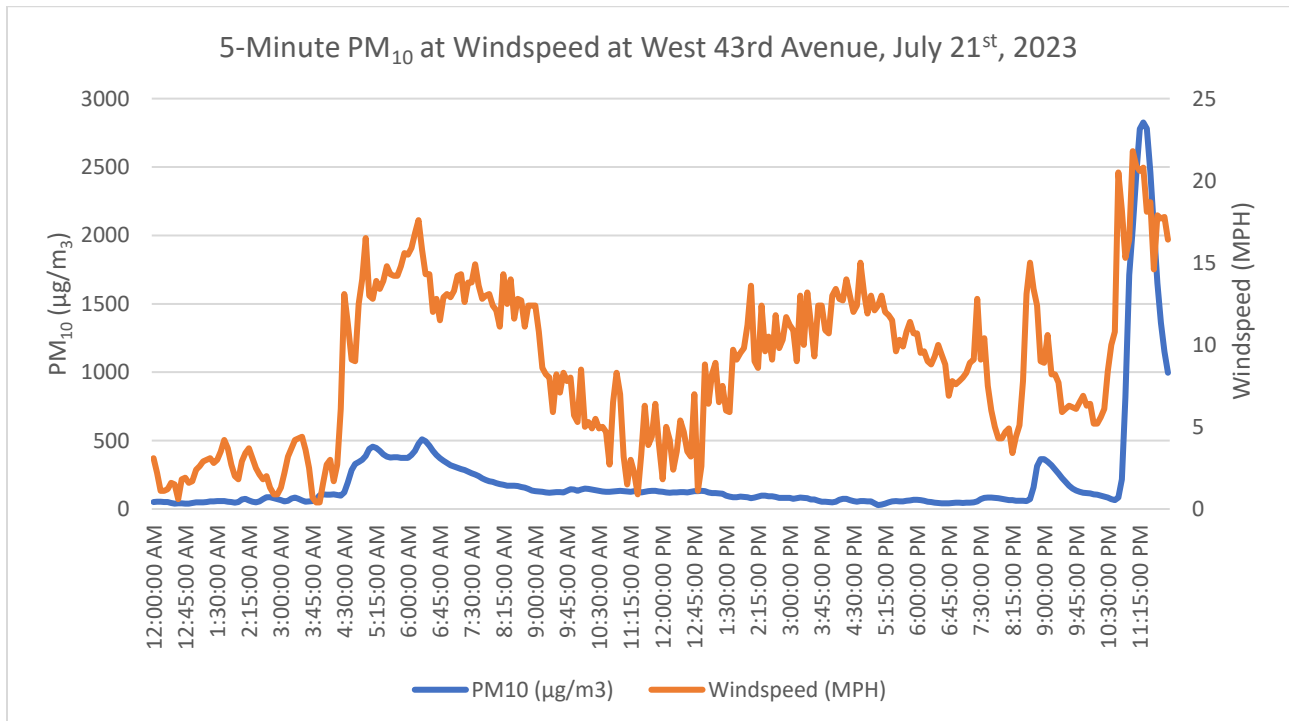
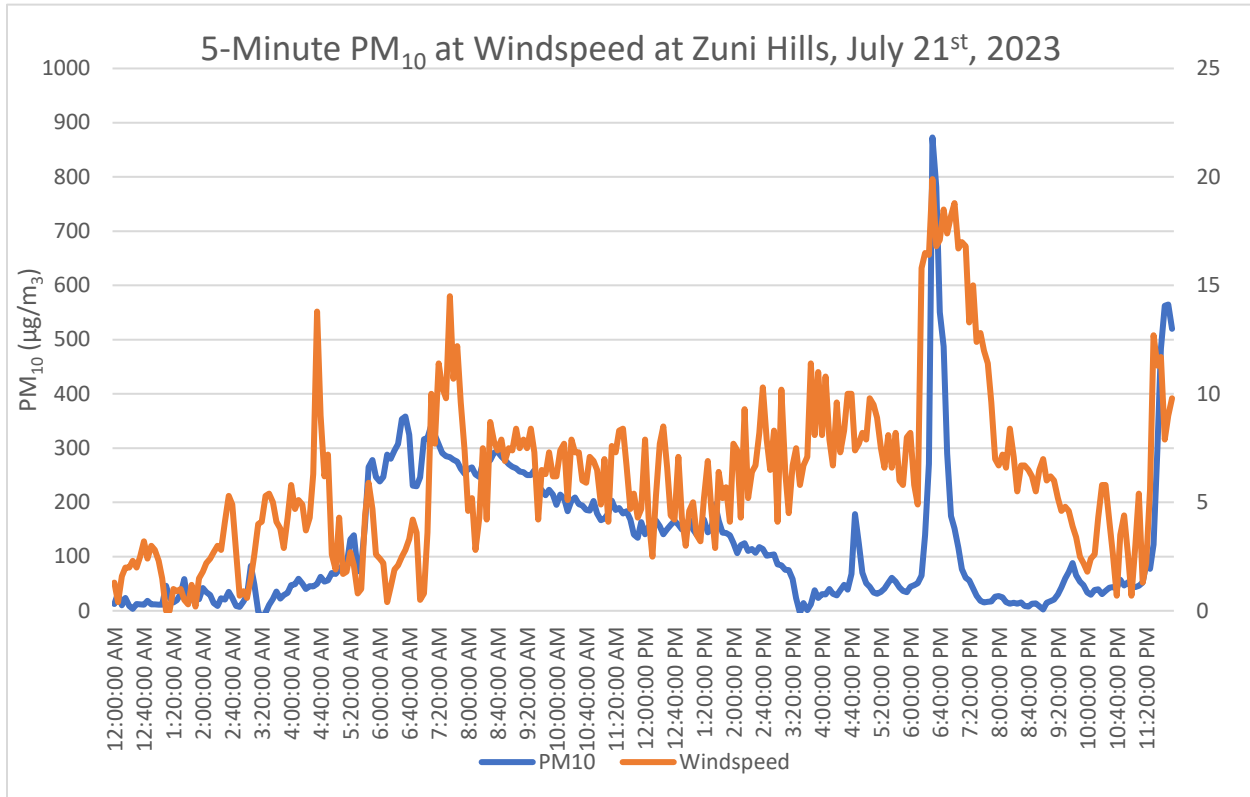


Figure 16: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Zuni Hills monitor on July 21st, 2023.

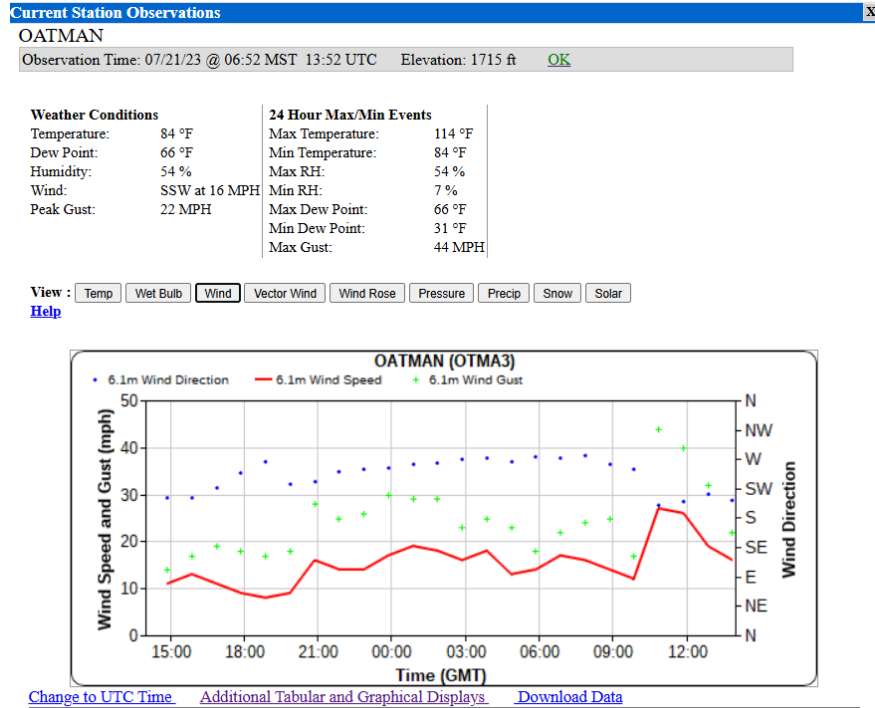


As shown in **Figure 14-16**, as windspeeds peaked at their highest level at Higley., on the night of July 21st, 2023, at the West 43rd Avenue monitor, PM₁₀ levels also increased to their maximum values, well over NAAQS thresholds. As such, the 24-hour average PM₁₀ level at the West 43rd Avenue monitor exceeded NAAQS standards on July 21st, 2023. The peaks in windspeed throughout the day noted at Zuni Hills monitor follow the increases and peaks noted in PM₁₀ concentration, as shown in **Figure 16**.

Although windspeeds did not exceed 25 mph at the monitors, windspeed levels over 25 mph were recorded at NOAA KPHX at similar times coinciding with the thunderstorm conditions noted in weather reports throughout the Phoenix Area. Additionally, the smaller peaks in windspeed and PM₁₀ concentrations recorded at the Zuni Hills, Higley, and West 43rd Avenue monitors between 6:00 and 7:30 A.M. and 3:30 and 9:00 P.M. coincide with noted increases in windspeeds at NOAA KPHX.²² as shown in **Figures 14 – 16**. The early morning spikes in PM₁₀ identified at Zuni Hills, West 43rd and Higley were attributed to these northeasterly blowing winds due to the monsoon thunderstorm conditions impacting southern Arizona on July 20th and July 21st, 2023. As noted at the OATMA3 weather station, northeasterly winds coming from the Gila Bend area, approximately 65 miles northwest of Zuni Hills monitor, tracked winds of up to 25 miles an hour around 3:00 to 4:00 A.M., the morning of the 21st, and pushed towards the Phoenix Area between 5:00 A.M. and 6:00 A.M., as noted in NOAA KPHX data and monitoring data. **Figure 17** below shows the windspeed trends and direction recorded at OATMA3 weather station between July 20th and 21st, 2023.

Figure 17: Weather Observations at OATMA3 weather station on July 20th – 21st, 2023.

²² MesoWest, *Surface Weather Maps, Arizona Region - OATMAN3 Station, "7/21/23 Windspeed Station Observations"*, <https://mesowest.utah.edu/cgi-bin/droman/mesomap.cgi?state=AZ&rawsflag=3>



These northeasterly winds in the early morning of July 21st moved dust into the Phoenix area resulting in early morning haze and decreased visibility noted in combination with the smoke from the Chimney Fire, resulting in peaks of PM₁₀ concentrations noted beginning around 4:30 A.M., and noted later around 6:00 A.M. in the NOAA KPHX data. **Table 12** shows the time where the highest wind speeds, wind gusts, and their corresponding weather conditions were recorded at NOAA KPHX on July 21st, 2023.

Table 12: NOAA KPHX Weather for July 21 st , 2023						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
7/21/2023	6:51 A.M.	17	28	-	10	NW
7/21/2023	6:55 A.M.	18	25	Haze	6	NW
7/21/2023	7:00 A.M.	20	20	Haze	6	WNW
7/21/2023	7:20 A.M.	18	28	-	10	NW
7/21/2023	3:51 P.M.	16	21	-	10	WNW
7/21/2023	4:30 P.M.	18	24	-	10	WNW
7/21/2023	5:35 P.M.	14	20	-	10	W
7/21/2023	7:25 P.M.	15	25	-	10	NNW
7/21/2023	7:25 P.M.	13	26	-	10	NNW
7/21/2023	8:25 P.M.	25	-	-	9	NNE
7/21/2023	8:35 P.M.	21	-	-	7	ENE
7/21/2023	10:45 P.M.	25	36	Haze	5	SSE
7/21/2023	10:50 P.M.	23	33	Blowing dust	3	SSE
7/21/2023	10:51 P.M.	26	45	Blowing dust	3	SSE

7/21/2023	10:55 P.M.	35*	44	Blowing dust	3	S
7/21/2023	11:00 P.M.	32	43	Blowing dust	4	S
7/21/2023	11:05 P.M.	32	46*	Haze	4	S
7/21/2023	11:10 P.M.	24	32	Haze	4	S
7/21/2023	11:15 P.M.	28	38	Haze	5	S
7/21/2023	11:20 P.M.	18	24	Haze	6	S
7/21/2023	11:25 P.M.	26	33	-	7	S
7/21/2023	11:30 P.M.	30	-	-	7	S
7/21/2023	11:35 P.M.	23	31	-	7	S
7/21/2023	11:40 P.M.	24	32	-	7	SSW
7/21/2023	11:45 P.M.	18	25	-	8	S
7/21/2023	11:50 P.M.	21	-	-	10	S
7/21/2023	11:51 P.M.	20	30		10	SSW
Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 07/21/2023 Link: https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20230720&end=20230722 Notes: * Highest windspeed or wind gust recorded for the day - no observation recorded						

As shown in **Table 12**, NOAA KPHX noted haze, blowing dust, and high windspeeds with wind gusts over 25 mph throughout the day on July 21st, 2023. The peaks in PM₁₀ concentration at 6:35 A.M. of 358.1 µg/m³ at Zuni Hills monitor, 495.2 µg/m³ at 6:25 A.M. at West 43rd Avenue monitor, and 242.9 µg/m³ at 8:00 A.M. at Higley monitor, follow recorded peaks in 5-minute windspeed at these locations and coincide with the wind gust speeds over 24 mph and lowered visibility recorded at NOAA KPHX during this time.

Based on the wind recorded during this time, winds were moving from the southeast and east to Central Phoenix and the NOAA KPHX station, towards Higley, Zuni Hills, and West 43rd Avenue. Given the storm conditions developing over southeastern Arizona and moving west and northwest towards the Phoenix area, wind gusts and elevated wind speeds could have pushed concentrations of PM₁₀ in the direction of the monitors and NOAA KPHX, creating concentrated pockets of haze and particulate matter that moved from the southeast into the Phoenix area as the storm advanced. This is evident in the slight peaks in PM₁₀ observed at monitors around 6:45 A.M., as well as in the EPA AQI air data, which shows an AQI greater than 100 southwest of the Phoenix area in Casa Grande for July 21st, 2023.

Similarly, the afternoon PM₁₀ concentration peaks of 178.1 µg/m³ at 4:45 P.M. at Zuni Hills monitor that followed a gradual increase in 5-minute windspeeds directed east towards NOAA KPHX, align with NOAA KPHX's gradual increase in windspeeds of up to 24 mph at 4:51 P.M. By midafternoon, wind continued to flow east and southeast over Zuni Hills and West 43rd Avenue monitor until approximately 7:00 P.M. towards NOAA KPHX and Central Phoenix and the Higley monitor. As the thunderstorm conditions carried blowing dust east across the Phoenix Area towards Higley monitor, PM₁₀ concentrations continued to rise, until the highest concentration of PM₁₀ recorded Higley of 745.7 µg/m³ at 10:55 P.M. This peak concentration also aligns with the highest windspeed recorded at Higley monitor for July 21st, 2023, of 21.5 mph.

The West 43rd Avenue monitor did not record any peaks in PM₁₀ concentrations again until 9:00 P.M., shortly after decreased visibility and wind speeds of up to 25 mph were recorded at NOAA KPHX. As winds moved east and northeast towards NOAA KPHX from West 43rd Avenue, beginning around 7:15 P.M., they pushed up dust and haze into the atmosphere, increasing PM₁₀ concentrations to 249 µg/m³ at 9:00 P.M. at the West 43rd Avenue monitor, which then flowed east towards NOAA KPHX and Higley.

The change in wind direction from primarily west and northwest to south and southwest later in the day (after 7:00 P.M., per NOAA KPHX), may account for the difference in times that the West 43rd and Zuni Hills monitors recorded their highest PM₁₀ concentrations on July 21st, 2023.

The highest windspeed recorded at NOAA KPHX was 35 mph at 10:55 P.M., with blowing dust and a decreased visibility of 3 miles. The highest wind gust was recorded at 11:05 P.M., of 46 mph. The high windspeeds and wind gusts decreased visibility, and noted blowing dust at NOAA KPHX corresponds to similar conditions noted at Higley and West 43rd Avenue monitor on the night of July 21st, 2023. Low visibility due to blowing dust and haze in the atmosphere from thunderstorm activity around the time of the highest PM₁₀ concentration noted at Higley and West 43rd Avenue and resulted in 24-hour average PM₁₀ concentrations to be exceeded on July 21st, 2023.

The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the evening of July 21st, 2023. Note that haze conditions were recorded around 6:00 A.M. at NOAA KPHX, resulting in reduced visibility. Haze was then followed by thunderstorm weather conditions such as high winds and associated dust accumulation in the early afternoon to early evening, and blowing dust was recorded the evening of July 21st as well, following the southwesterly high winds due to the day's thunderstorm conditions.

South Mountain Camera, 6:15 A.M.



South Mountain Camera, 6:45 A.M.



Camelback Mountain Camera, 7:00 A.M.



Camelback Mountain Camera, 11:00 P.M.



Camelback Mountain Camera, 7:00 P.M.

Camelback Mountain Camera, 8:45 P.M.



Superstition Mountains Camera, 9:00 P.M.



Superstition Mountains Camera, 11:00 P.M.



Superstition Mountains Camera, 3:00 P.M.



Superstition Mountains Camera, 7:45 P.M.



Estrella Mountains Camera, 5:45 A.M.



Estrella Mountains Camera, 10:30 P.M.



White Tank Mountains Camera, 6:45 A.M.



White Tank Mountains Camera, 6:45 P.M.



Note: There are no images available in the archive for South Mountain camera after 12:45 P.M., for Estrella Mountains camera after 10:30 P.M. on July 21, 2023

July 26th, 2023, Atypical Event

A subtropical high-pressure system situated across New Mexico created a southeasterly wind flow in Arizona resulting in thunderstorm activity developing across Southeastern Arizona on the afternoon of July 26th, 2023²³. Per a NOAA Storm Event webpage for Mesa and Maricopa County on July 26th, 2023, these thunderstorms created strong downburst of winds and were responsible for dense blowing dust conditions noted across Pinal and Maricopa Counties and affected portions of the Phoenix Area. Thunderstorms, high wind, and dust storms were noted in 36 NOAA Storm Events weather reports in southeastern Arizona counties between July 26th and July 27th, 2023²⁴. In addition to these reports noting dust storm conditions, an exceedance in the 24-hour average PM₁₀ NAAQS was recorded at the Higley monitor, and wind and wind gust speeds exceeding 25 mph.

Data from the NOAA KPHX also recorded these thunderstorms and resulting high wind speeds and blowing dust conditions. **Table 13** lists the 24-hour average PM₁₀ concentrations, and highest windspeeds and wind gust speeds recorded at the Higley monitor on July 26th, 2023.

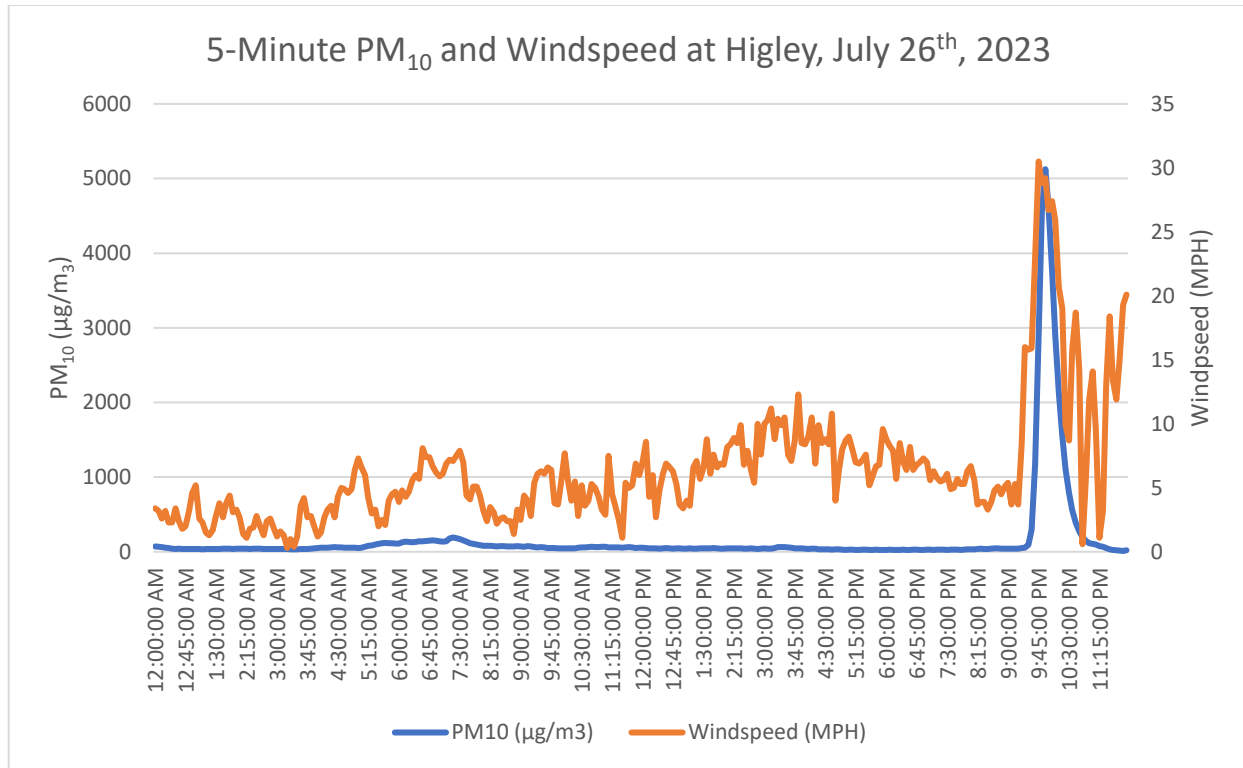
Table 13: Windspeed and PM ₁₀ Data for July 26 th , 2023						
Site	Date	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
Higley	7/26/2023	165.3*	30.5	9:45 P.M.	31.1	9:45 P.M.
Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division Higley Air Quality Monitoring Station Data for July 26 th , 2023.						
Notes: *Measurement exceeds PM ₁₀ NAAQS.						

As shown in **Table 13**, on July 26th, 2023, the highest wind speed of 30.5 mph and wind gust of 31.1 were recorded at 9:45 P.M. at Higley monitor. As windspeeds increased the night of July 26th, 2023, PM₁₀ concentrations rose as well, resulting in the highest level of PM₁₀ recorded at 9:45 P.M. of 5,125 µg/m³ at Higley monitor. **Figure 18** below shows the corresponding increase in 5-minute PM₁₀ with the increase in windspeeds to greater than 25 mph on the evening of July 26th, 2023, at Higley monitor.

Figure 2418 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Higley monitor on July 26th, 2023.

²³ NOAA, *Storm Events Database*, Event Details "1121093," <https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=1121093>.

²⁴ NOAA, *Storm Events Database*, "Events in Arizona from July 26–27, 2023," https://www.ncdc.noaa.gov/stormevents/listevents.jsp?eventType=ALL&beginDate_mm=07&beginDate_dd=26&beginDate_yy=2023&endDate_mm=07&endDate_dd=27&endDate_yyyy=2023&county=ALL&hailfilter=0.00&tornfilter=0&windfilter=000&sort=DT&submitbutton=Search&statefips=4%2CARIZONA.



As shown in **Figure 18**, the highest wind speed recorded of 30.5 mph at 9:45 P.M. coincides with the peak in PM₁₀ concentrations at the Higley monitor shortly after at 9:55 P.M. on July 26th, 2023. On July 26th, 2023, thunderstorm conditions resulting in high winds and blowing dust began in afternoon but slowly began to increase in the evening as thunderstorms drifted into the Phoenix Area. These high windspeeds and resulting blowing dust on the evening of July 26th, 2023, were also recorded at NOAA KPHX, where windspeeds reached up to 29 mph and wind gusts were recorded up to 43 mph. **Table 13** below shows the data recorded for the evening of July 26th, 2023, at NOAA KPHX during the time when max windspeeds and PM₁₀ concentrations were recorded at Higley monitor.

Table 13: NOAA KPHX Data for July 26 th , 2023						
Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
7/26/2023	9:50 P.M.	20	41	Blowing dust	6	SSE
7/26/2023	9:51 P.M.	25	43*	Blowing dust	3	SSE
7/26/2023	9:55 P.M.	18	-	Blowing dust	1.75	SSE
7/26/2023	9:57 P.M.	17	43*	-	0.5	S
7/26/2023	10:00 P.M.	17	-	-	0.5	S
7/26/2023	10:05 P.M.	25	38	-	0.5	SSE
7/26/2023	10:10 P.M.	23	29	-	0.5	SSE
7/26/2023	10:15 P.M.	23	36	-	0.5	SSE
7/26/2023	10:18 P.M.	29*	41	-	0.5	SE
7/26/2023	10:20 P.M.	25	43*	Blowing dust	2	SE
7/26/2023	10:25 P.M.	23	43*	Blowing dust	2.5	ESE

7/26/2023	10:30 P.M.	22	31	Blowing dust	3	E
7/26/2023	10:35 P.M.	22	30	Blowing dust	6	E
7/26/2023	10:40 P.M.	25	31	-	8	ENE
7/26/2023	10:43 P.M.	26	35	Thunder	8	E
7/26/2023	10:45 P.M.	23	-	-	8	E
7/26/2023	10:51 P.M.	18	30	Thunder	9	E

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 07/26/2023 Link: <https://www.weather.gov/wrh/timeseries?site=KPHX&hours=72&units=english&chart=on&headers=on&obs=tabular&hourly=false&pview=standard&font=12&history=yes&start=20230725&end=20230727>

Notes: * Highest windspeed or wind gust recorded for the day
- no observation recorded

As shown in **Table 13**, on the evening of July 26th, 2023, around 9:50 P.M. blowing dust and wind speeds and wind gusts greater than 25 mph were recorded at NOAA KPHX. The highest wind speed recorded at NOAA KPHX was 29 mph, before and after multiple recordings of wind gust speeds reaching 43 mph. The highest windspeed and wind gusts recorded shown in **Table 13** correspond with the similar time frame at which the highest windspeeds, wind gusts, and PM₁₀ concentrations were recorded at Higley monitor on July 26th, 2023, peaking at 9:55 P.M. **Table 13** shows that blowing dust and high winds were noted at 9:50 P.M., with noted decrease in visibility to ½ a mile during this time and continued until about 10:50 P.M.

In addition, thunder conditions and wind gusts greater than 25 mph are recorded again at the time of the highest windspeed noted at Higley monitor at 9:45 P.M. As such, thunderstorm activities caused high winds and blowing dust throughout the Phoenix Area and at Higley monitors, resulting in low visibility, Higley monitor 24-hour average PM₁₀ NAAQS exceedance, and increased PM₁₀ concentrations to occur on July 26th, 2023.

The photographs below show ADEQ's Visibility Camera Historical Archive photos of the Phoenix Area at the time prior to and during the dust storm and thunderstorm conditions on the evening of July 26th, 2023. Note the dust storm conditions and dense blowing winds were documented to hit the Phoenix Area around 9:30 P.M., as shown in NOAA KPHX and MCAQD monitoring data.

Camelback Mountain Camera, 9:45 P.M.



Camelback Mountain Camera, 10:00 P.M.



Superstition Mountains Camera, 9:00 P.M.



Superstition Mountains Camera, 9:45 P.M.



White Tank Mountains Camera, 10:00 P.M.



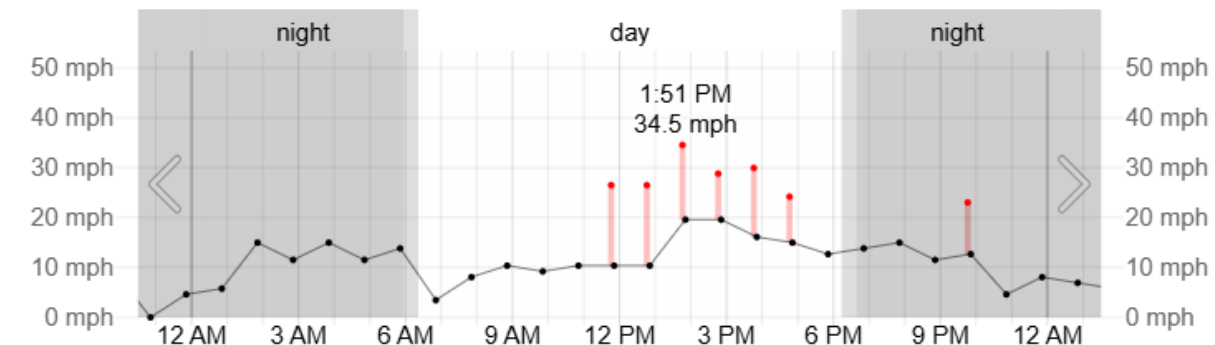
White Tank Mountains Camera, 10:45 P.M.



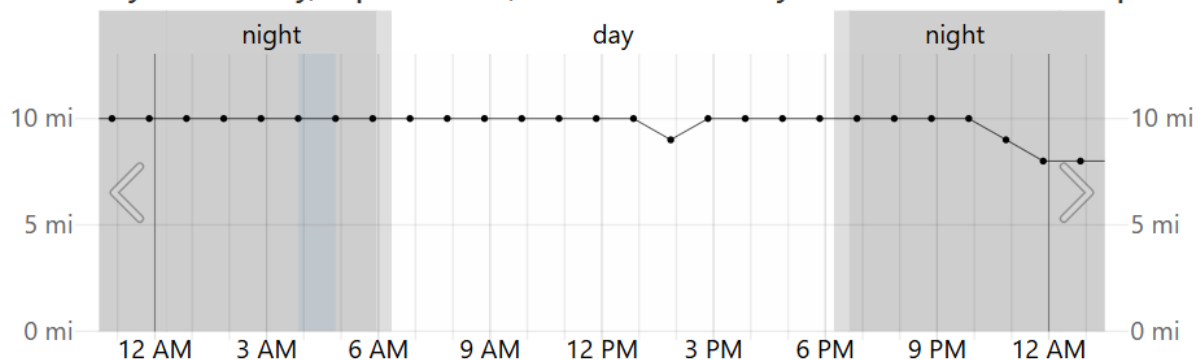
Note: There are no images available in the archive for South Mountain and Estrella Mountains camera on July 26, 2023

October 1st, 2023, Atypical Event

Between September 30th and October 1st, 2023, partially cloudy conditions with brief high wind gusts and dry conditions resulted in dust storm conditions in the Phoenix Area. Beginning on the afternoon of September 30th, windspeeds began to pick up in the Central Phoenix Area, with windspeeds being recorded up to 23 mph at NOAA KPHX. As the afternoon progressed, wind speeds increased, and visibility decreased down to 6 miles with haze being noted in the NOAA KPHX weather report. The photographs taken from Weather Spark website below show a graph of windspeeds and visibility on September 30th recorded at NOAA KPHX.



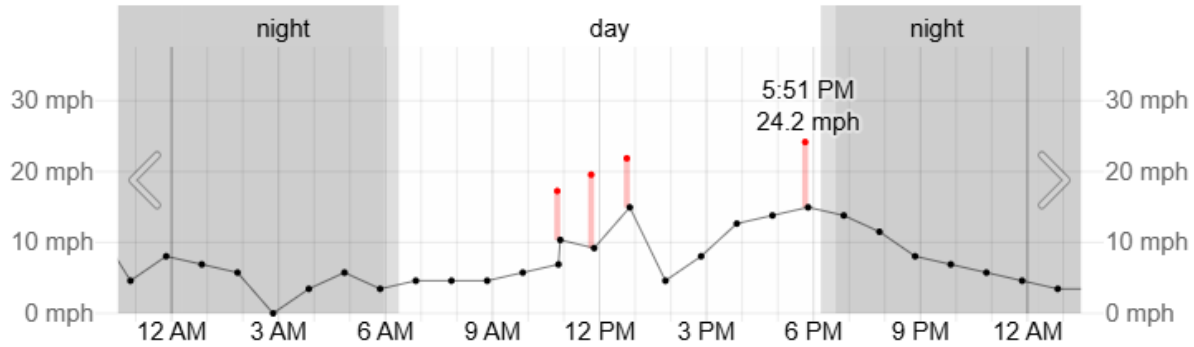
Visibility on Saturday, September 30, 2023 at Phoenix Sky Harbor International Airport



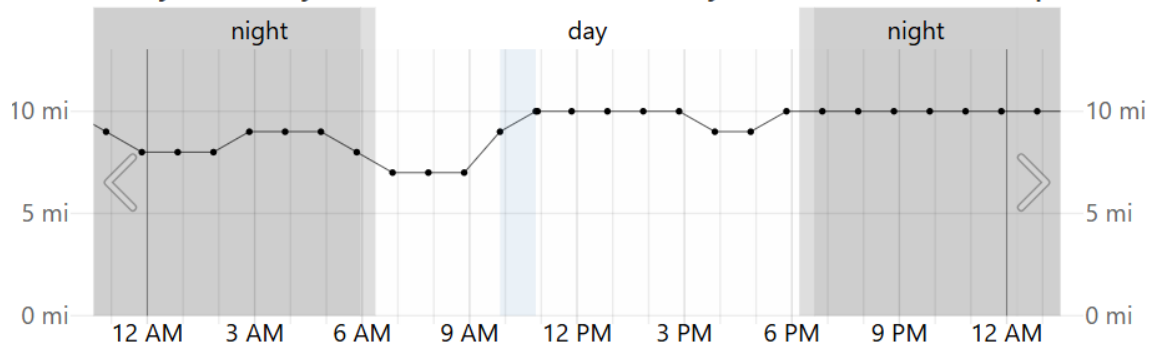
Measured visibility (black dots). Note that a maximum visibility (often but not always 10 miles) is reported if the visibility exceeds the maximum. Civil twilight and night are indicated by shaded overlays.

Source: [September 30, 2023 Historical Weather at Phoenix Sky Harbor International Airport, Arizona, United States - Weather Spark](#)

Based on the photograph above, there is a clear drop in visibility as windspeeds increased throughout the day of September 30th, 2023, and visibility again decreases after 9:00 P.M. leading into the early morning of October 1st, 2023. Windspeeds continued to remain above 10 mph until the early morning of October 1st, 2023, and dust conditions continued to impact the Phoenix Area into the morning of the 1st. Again, on the early afternoon of the 1st, windspeeds began to pick up with wind gust speeds reaching up to 26 mph recorded at NOAA KPHX, lofting the dust that had been picked up prior day. The photographs below taken from Weather Spark Website below show graphs of windspeed and visibility levels on October 1st, 2023, recorded at NOAA KPHX.



Visibility on Sunday, October 1, 2023 at Phoenix Sky Harbor International Airport



Measured visibility (black dots). Note that a maximum visibility (often but not always 10 miles) is reported if the visibility exceeds the maximum. Civil twilight and night are indicated by shaded overlays.

Source: [October 1, 2023 Historical Weather at Phoenix Sky Harbor International Airport, Arizona, United States - Weather Spark](#)

Based on the photograph above, there is a clear drop in visibility as windspeeds increased throughout the day of afternoon of October 1st, 2023, between 3:00 P.M. and 5:00 P.M. Additionally, after windspeeds increase between 10:30 A.M. and 1:00 P.M., visibility drops. These two trends may suggest dust storm activity and PM₁₀ concentrations increase within the Phoenix Area.

As a result of these high winds and widespread dust on October 1st, 2023, monitors throughout the Phoenix Area recorded 24-hour average PM₁₀ exceedances at MCAQD monitors. One monitoring station was evaluated for 24-hour average PM₁₀ NAAQS exceedances in relation to the SR 24 project: West 43rd Avenue (25.8 miles southwest from project site and 25.3 miles northwest of Higley). Although Higley monitor did not record 24-hour average PM₁₀ NAAQS exceedance on October 1st, 2023, windspeeds greater than 25 mph and significant increases in PM₁₀ concentrations were recorded at similar times to the peak windspeed, wind gust speeds, and PM₁₀ concentrations noted at West 43rd Avenue and NOAA KPHX monitors. **Table 14** lists the 24-hour average PM₁₀ concentrations, highest windspeeds, and wind gust speeds recorded at the West 43rd Avenue and Higley monitors on October 1st, 2023.

Table 14: Windspeed and PM ₁₀ Data for October 1 st , 2023						
Site	Date	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Windspeed (MPH)	Time	Max Wind Gust (MPH)	Time
West 43 rd Avenue	10/1/2023	160.8*	11.3	4:00 P.M.	28.2	2:00 P.M.
Higley	10/1/2023	143	16	4:00 P.M.	20.3	3:00 P.M.

Source: Maricopa County Air Quality Departments (MCAQD) Air Quality Planning & Analysis Division, West 43rd Avenue and Higley Air Quality Monitoring Station Data for October 1st, 2023.

Notes: *Measurement exceeds PM₁₀ NAAQS.

As shown in **Table 14**, both the Higley and West 43rd Avenue monitors recorded peak windspeeds at similar times during the afternoon of October 1st, 2023. The peak windspeeds recorded at the monitors aligns with the NOAA KPHX data provided for this date, as wind speeds reached their peak in the late afternoon on the 1st. Based on NOAA KPHX and MCAQD monitoring data, the primary wind direction for October 1st, 2023, was west following suite for the primary wind direction on September 30th, 2023, being west beginning around 3:00 P.M. September 30th. Higher concentrations of dust and PM₁₀ moved from west from West 43rd Avenue and NOAA KPHX to east towards Higley monitor. The wind direction from the west and aligns with the wind direction of the NOAA KPHX blowing dust weather conditions noted documented the afternoon of October 1st, 2023. **Figures 19** and **20** show 5-minute PM₁₀ concentrations and windspeeds at West 43rd Avenue and Higley monitor on October 1st, 2023.

Figure 19: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at Higley on October 1st, 2023.

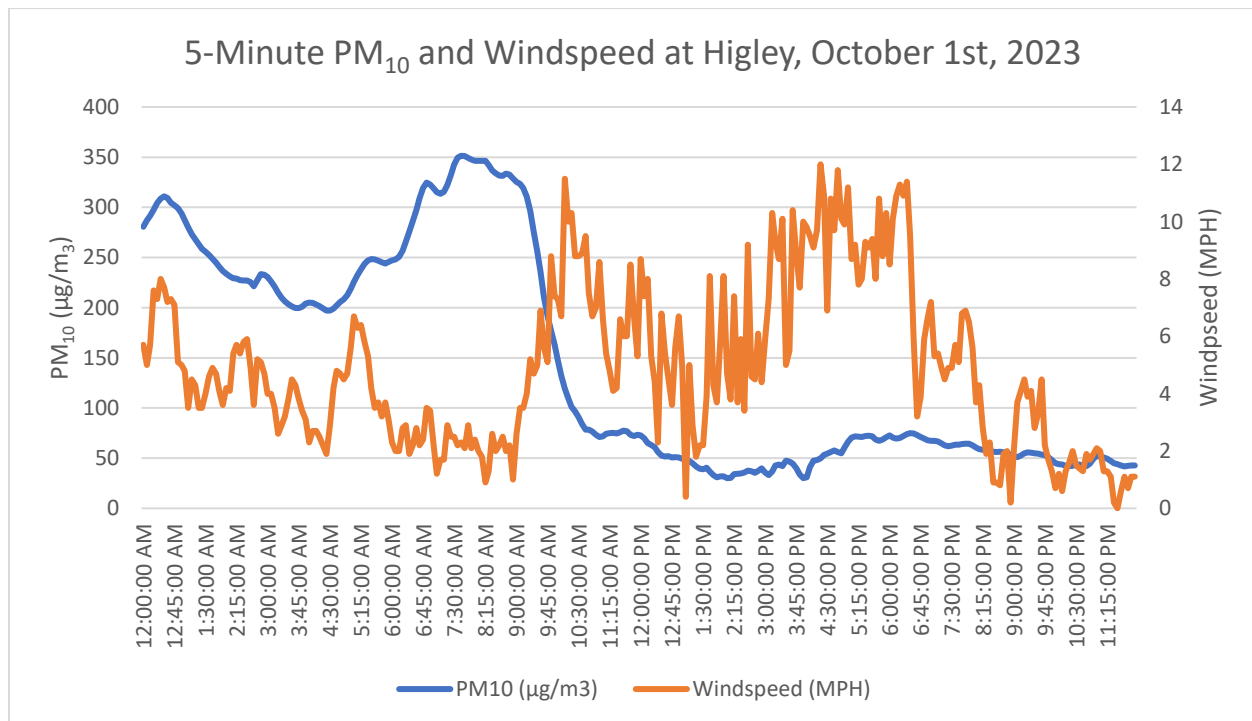
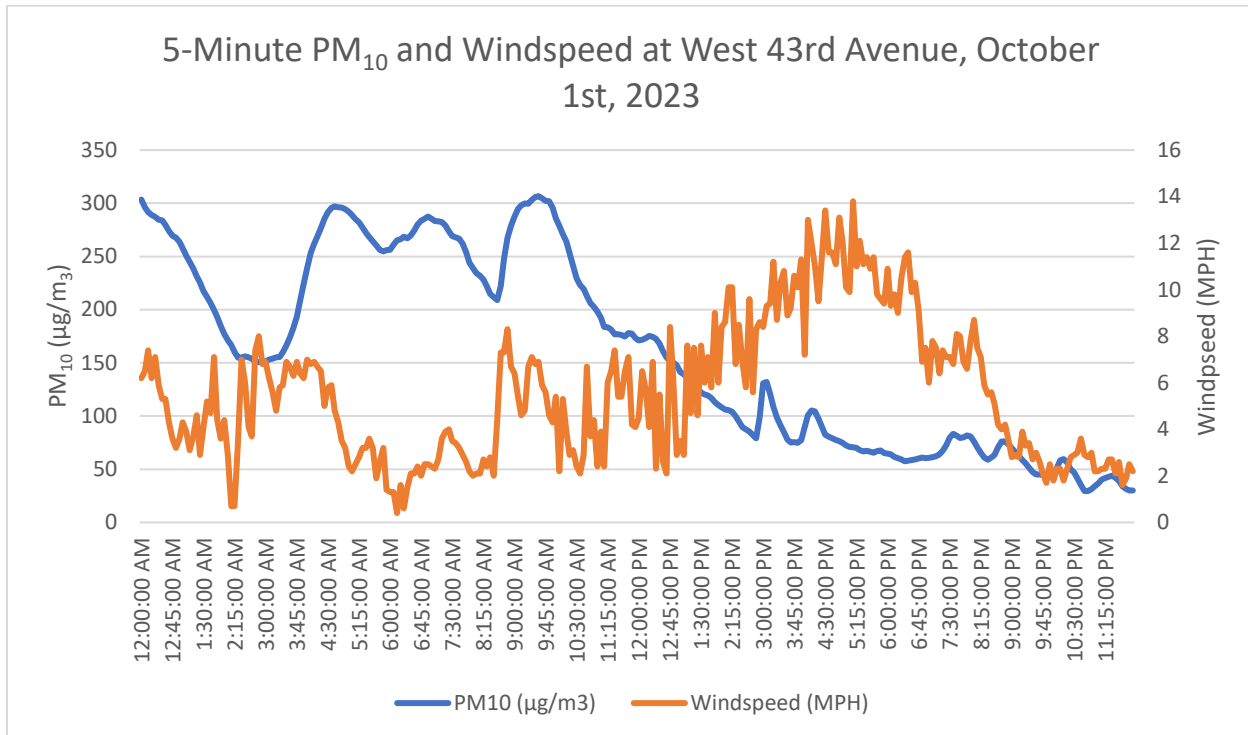


Figure 20: 5-Minute PM₁₀ concentrations (µg/m³) and windspeed (mph) at West 43rd Avenue on October 31st, 2023.



As shown in **Figures 19** and **10**, in the early morning of October 1st, 2023, PM₁₀ concentrations were already peaking, following the previous evenings and afternoons high wind and dust storm activities. As wind speeds began to pick up around 2:15 A.M., PM₁₀ concentrations began to increase and stay elevated following trend with the wind speeds, peaking at 306.7 µg/m³ at 9:35 A.M. at West 43rd Avenue and 351.4 µg/m³ at 7:40 A.M. at Higley, until they steadily decrease around 10:00 A.M. As peak windspeeds are recorded in the afternoon at the West 43rd Avenue and Higley monitors, spikes in PM₁₀ concentrations are noted as well. Although the times at which the monitors PM₁₀ concentrations peak do not align with the highest windspeeds recorded for the day, it is important to note that both monitors recorded high PM₁₀ concentrations at 12:00 A.M., following the previous day's high wind and dust storm activities. Because concentrations were already elevated overnight between September 30th and October 1st, even slight increases in windspeed during the early morning of the 1st resulted in PM₁₀ concentrations staying relatively elevated for the first 10 hours of October 1st, 2023.

Data from NOAA KPHX also displays this increase in windspeed and blowing dust conditions around the same time that West 43rd Avenue and Higley monitors indicate peaks in windspeed and PM₁₀ concentrations. **Table 15** shows the time where the highest wind speeds, wind gusts speeds, and corresponding weather conditions were recorded at the NOAA KPHX on October 1st, 2023, and the evening of September 30th, 2023.

Table 15: NOAA KPHX Weather for September 30th & October 1st, 2023

Date	Time	Hourly-Averaged Windspeed (MPH)	Wind Gust Recorded (MPH)	Weather Conditions Noted	Visibility (miles)	Wind Direction
9/30/2023	3:25 P.M.	22	32	-	-	SW
9/30/2023	3:51 P.M.	16	30	-	-	SW
9/30/2023	6:25 P.M.	13	22	-	-	WSW
9/30/2023	9:05 P.M.	17	24	-	10	WSW
9/30/2023	9:51 P.M.	13	23	-	10	WSW
9/30/2023	10:15 P.M.	13	20	-	9	WSW
10/1/2023	12:30 A.M.	10	-	-	7	WSW
10/1/2023	10:54 A.M.	10	17	-	10	SE
10/1/2023	11:25 P.M.	18*	-	-	10	S
10/1/2023	11:51 A.M.	9	20	-	10	S
10/1/2023	12:40 P.M.	16	26*	-	10	S
10/1/2023	12:50 P.M.	14	20	-	10	S
10/1/2023	12:51 P.M.	15	22	-	10	S
10/1/2023	2:45 P.M.	12	17	-	10	NW
10/1/2023	3:35 P.M.	12	20	-	10	NW
10/1/2023	3:40 P.M.	15	25	-	10	NW
10/1/2023	3:45 P.M.	14	20	-	10	NW
10/1/2023	3:50 P.M.	14	-	-	9	WNW
10/1/2023	4:05 P.M.	16	-	-	8	WNW
10/1/2023	4:10 P.M.	16	-	-	8	W
10/1/2023	5:20 P.M.	17	-	-	10	WNW
10/1/2023	5:30 P.M.	12	17	-	10	WNW
10/1/2023	5:51 P.M.	15	24	-	10	W

Source: NOAA Weather for Phoenix, Phoenix Sky Harbor International Airport, AZ on 10/1/2023 Link: [Phoenix, Phoenix Sky Harbor International Airport](#)

Notes:

* Highest windspeed or wind gust recorded for the day, - no observation recorded

As shown in **Table 15**, the highest recorded wind speed on October 1st, 2023, at the NOAA KPHX was 18 mph, with the highest wind gust speed recorded of 26 mph around 12:40 P.M., coinciding with times that the highest wind speeds were noted at the Higley and West 43rd Avenue monitors. Data from September 30th, 2023, demonstrates windy activity and decreased visibility into the evening of September 30th, 2023, and leading into the morning of October 1st, 2023. This follows the trends of peak concentration of PM₁₀ noted at both West 43rd Avenue and Higley monitor in the early morning of the 1st, as greater levels of dust particles were in the air at this time due to the windy conditions on September 30th. With these conditions, there was an increased concentration of dust and PM₁₀ in the air on October 1st, 2023, throughout the Phoenix Area near the monitors resulting in 24-hour average PM₁₀ NAAQS exceedance at West 43rd Avenue, and increased concentrations in PM₁₀ at Higley monitor above typical levels.

5.0 Project PM₁₀ Background Concentrations, Removing Atypical Events

In summary, 7 days are being proposed to be excluded from the project's background concentration analysis excluded because they have been considered as affected by an atypical air quality event, such as a high wind event, monsoon conditions, or thunderstorm activity. These days were removed from the original Higley monitor 2021 through 2023 PM₁₀ data set due to the atypical-type nature of the local conditions when the high PM₁₀ values were observed (e.g., windblown dust, high winds, haze). Once removed, the remaining data was used to calculate a PM₁₀ background concentration of 108 µg/m³.

Table 16: Project Monitoring Station Highest 24-hour PM ₁₀ Readings, Removing Atypical Events			
Higley			
Data Year	2021	2022	2023
Number of Readings	357	362	333
1 st	130	99	122
2 nd	116	88	107
3 rd	108	86	103
4 th	93	83	99
Source: U.S. EPA Outdoor Air Quality Data, Download Daily Air Quality Data, https://www.epa.gov/outdoor-air-quality-data/download-daily-data			
Note: *4 th highest 24-hour readings are highlighted in red, removing atypical events.			

Table 16 shows that with removing atypical events, Higley monitors 4th highest value over three years (2021-2023) is 108 µg/m³. This comes from the 4th highest reading out of a total of 1052 days of sampling. This background concentration is under the PM₁₀ NAAQS threshold.

The predicted background concentration, removing data for atypical events, of the project is 108 µg/m³.

Per 40 CFR 50, Appendix K, the Maricopa County NAAQS threshold for PM₁₀ 24-hour average concentration threshold is 150 µg/m³. As such, the predicted background concentration when removing atypical event data does not exceed the NAAQS threshold.

Days in which an atypical event, i.e., a dust storm or high wind event occurred in the region and impacting Higley monitor and the project site have been identified. Because regional atypical events were occurring on these days, it is inappropriate to consider these days when calculating background PM₁₀ concentrations for the projects hot spot analyses. Finally, after removing days in which an atypical event occurred, the 24-hour PM₁₀ background concentration identified for 2021 through 2023 is 108 µg/m³. This concentration is suitable for use as a reasonable background concentration for the project, as it is more representative of typical background concentrations for the project site excluding atypical events.



Appendix A: Maricopa County Air Quality Department Planning & Analysis Division – Air Quality Monitor Data

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	12:00:00 AM	1803.8	280	13	279.9	12.8
10/12/2021	12:05:00 AM	1753	283	13.2	283.2	12.9
10/12/2021	12:10:00 AM	1693.6	276.5	13.4	276.4	13
10/12/2021	12:15:00 AM	1574.3	283.6	10.9	283.8	10.5
10/12/2021	12:20:00 AM	1422.4	288.3	13.1	288.9	12.9
10/12/2021	12:25:00 AM	1247.7	279.1	14.4	279	14.1
10/12/2021	12:30:00 AM	1044.6	283	14.1	282.4	13.6
10/12/2021	12:35:00 AM	864.9	282.2	9.5	282.4	9.2
10/12/2021	12:40:00 AM	730.5	280	13	279.7	12.7
10/12/2021	12:45:00 AM	636.4	281.6	11.4	282.1	11.2
10/12/2021	12:50:00 AM	591.5	270.5	9.1	270.7	8.8
10/12/2021	12:55:00 AM	557.9	278.5	8.2	278.3	8
10/12/2021	1:00:00 AM	527.3	284.6	12.4	284.6	12.1
10/12/2021	1:05:00 AM	521.4	285.8	9.9	286.7	9.7
10/12/2021	1:10:00 AM	504.8	289.2	8.6	289.1	8.5
10/12/2021	1:15:00 AM	478	292.9	7.2	293.3	7.1
10/12/2021	1:20:00 AM	467.8	296.1	8.4	296	8.2
10/12/2021	1:25:00 AM	459.4	299	10.1	298.8	10
10/12/2021	1:30:00 AM	455.9	308.1	9.6	306.6	9.4
10/12/2021	1:35:00 AM	444.8	302.5	12	301.9	11.8
10/12/2021	1:40:00 AM	435.4	296.5	9.2	296.9	9.1
10/12/2021	1:45:00 AM	421.9	298.5	11.1	298.4	10.9
10/12/2021	1:50:00 AM	412.1	293.6	10.6	293.7	10.5
10/12/2021	1:55:00 AM	408.2	298.7	9.8	298	9.6
10/12/2021	2:00:00 AM	408.3	289	9	288.8	8.9
10/12/2021	2:05:00 AM	403.1	298	8.1	297.5	8
10/12/2021	2:10:00 AM	403.2	299.1	6.7	298.9	6.6
10/12/2021	2:15:00 AM	402.1	293.2	7.1	292.7	7
10/12/2021	2:20:00 AM	400.3	287.9	6	288.3	5.8
10/12/2021	2:25:00 AM	393	277.2	3.9	276.5	3.8
10/12/2021	2:30:00 AM	392.2	285.3	4	286.8	3.9
10/12/2021	2:35:00 AM	388.5	292.1	5.3	291.9	5.2
10/12/2021	2:40:00 AM	387.2	288	5.2	287.2	5.1
10/12/2021	2:45:00 AM	391.7	281.6	5.5	282.3	5.3
10/12/2021	2:50:00 AM	391.8	293.8	4.4	292.4	4.2
10/12/2021	2:55:00 AM	384.3	297.3	5.5	297.3	5.4
10/12/2021	3:00:00 AM	388.4	298.8	5.7	298.9	5.7
10/12/2021	3:05:00 AM	392.4	300.9	5.8	300.5	5.7
10/12/2021	3:10:00 AM	393.1	305.5	5.6	304.5	5.5
10/12/2021	3:15:00 AM	395	301.4	7.6	299.9	7.5
10/12/2021	3:20:00 AM	404.9	298.5	10.3	296.6	10.1
10/12/2021	3:25:00 AM	420.5	296.7	11.9	296.4	11.7
10/12/2021	3:30:00 AM	422.7	296.7	11.7	296.5	11.5
10/12/2021	3:35:00 AM	399.9	299.5	11.6	299.3	11.4
10/12/2021	3:40:00 AM	363.4	297.3	12.5	297.7	12.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:45:00 AM	344.4	297.4	11.1	297.4	11
10/12/2021	3:50:00 AM	321.1	289.6	9.9	289.7	9.8
10/12/2021	3:55:00 AM	299.5	288.8	10	288.9	9.8
10/12/2021	4:00:00 AM	292.5	294.7	10.2	295	10
10/12/2021	4:05:00 AM	270.9	293.8	12.1	293.4	11.9
10/12/2021	4:10:00 AM	241.7	291.8	11.7	291.7	11.5
10/12/2021	4:15:00 AM	211.2	290.6	9.5	290.8	9.3
10/12/2021	4:20:00 AM	180.4	288	7.8	287.7	7.7
10/12/2021	4:25:00 AM	161.9	286.1	6	286.4	5.9
10/12/2021	4:30:00 AM	151.5	284.7	6	284.8	5.9
10/12/2021	4:35:00 AM	145.8	286.2	6.2	286.4	6.2
10/12/2021	4:40:00 AM	142.1	290.1	5.7	289.8	5.7
10/12/2021	4:45:00 AM	138.9	285.4	4.4	285.7	4.3
10/12/2021	4:50:00 AM	135.7	269.3	2.8	271.6	2.7
10/12/2021	4:55:00 AM	129.9	245.9	2.9	249.6	2.8
10/12/2021	5:00:00 AM	124.9	254.1	4.1	253.6	4
10/12/2021	5:05:00 AM	128.7	257	2.6	259.2	2.6
10/12/2021	5:10:00 AM	127.2	255.9	2.2	255.5	2.2
10/12/2021	5:15:00 AM	123.9	251.7	1.6	251.8	1.5
10/12/2021	5:20:00 AM	123.4	236.2	1.6	236.1	1.6
10/12/2021	5:25:00 AM	123.4	253	1.5	253.7	1.4
10/12/2021	5:30:00 AM	127.5	256.1	1.8	256	1.8
10/12/2021	5:35:00 AM	128.5	265.6	2.5	264.8	2.5
10/12/2021	5:40:00 AM	129.5	244.9	4.9	243.2	4.8
10/12/2021	5:45:00 AM	136.5	237	5.5	236.7	5.5
10/12/2021	5:50:00 AM	141.9	237.9	5.4	238.1	5.4
10/12/2021	5:55:00 AM	147.1	232.3	4.4	232.8	4.4
10/12/2021	6:00:00 AM	150.9	228	4	228.3	4
10/12/2021	6:05:00 AM	151.6	229	3.2	229.1	3.2
10/12/2021	6:10:00 AM	156.7	189	3.6	189.3	3.5
10/12/2021	6:15:00 AM	165.3	174.4	4	173.6	3.9
10/12/2021	6:20:00 AM	171.9	182.9	3.6	183.4	3.5
10/12/2021	6:25:00 AM	214.2	181.9	3.4	182.1	3.4
10/12/2021	6:30:00 AM	247.8	187.9	4.3	188.7	4.2
10/12/2021	6:35:00 AM	292.8	191.6	4.7	191.9	4.7
10/12/2021	6:40:00 AM	338.6	195.5	5.8	195.9	5.7
10/12/2021	6:45:00 AM	369.4	205.9	5.2	205	5.1
10/12/2021	6:50:00 AM	377	216.4	4.8	216.1	4.7
10/12/2021	6:55:00 AM	386	208.9	3.9	209.5	3.9
10/12/2021	7:00:00 AM	385	209.6	4.1	209.9	4
10/12/2021	7:05:00 AM	402.7	218	4	217.6	4
10/12/2021	7:10:00 AM	413	221.7	3	221.5	2.9
10/12/2021	7:15:00 AM	412.7	212.2	3.8	211.7	3.7
10/12/2021	7:20:00 AM	423.5	200.4	4	200.8	3.9
10/12/2021	7:25:00 AM	421.1	197.3	4.3	196.8	4.2

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	7:30:00 AM	410.8	172.3	3.4	172.5	3.3
10/12/2021	7:35:00 AM	416.9	174.9	3.8	177.1	3.3
10/12/2021	7:40:00 AM	416.2	208.7	4.5	207.4	4.4
10/12/2021	7:45:00 AM	403.1	208.6	5.3	208.7	5.2
10/12/2021	7:50:00 AM	403	214.6	3.8	214.7	3.7
10/12/2021	7:55:00 AM	401	211	4	211.2	3.9
10/12/2021	8:00:00 AM	383.7	204.4	3.5	205.8	3.4
10/12/2021	8:05:00 AM	373.6	204.8	4.9	204.2	4.8
10/12/2021	8:10:00 AM	362.6	219	6.8	219.4	6.6
10/12/2021	8:15:00 AM	354.6	223.3	8	222.9	7.9
10/12/2021	8:20:00 AM	327.6	231.9	7.3	232.5	7.2
10/12/2021	8:25:00 AM	290.3	220.3	8.3	219.1	8
10/12/2021	8:30:00 AM	274.2	223.1	10.3	223.1	10.1
10/12/2021	8:35:00 AM	265.3	225.5	9.8	225.1	9.6
10/12/2021	8:40:00 AM	276.5	217.6	8.7	217.8	8.6
10/12/2021	8:45:00 AM	274.3	230.3	8.1	230.9	8
10/12/2021	8:50:00 AM	276.3	236.6	11.9	238.5	11.6
10/12/2021	8:55:00 AM	275.6	248.2	9.9	249.1	9.6
10/12/2021	9:00:00 AM	268.5	235.9	9.3	235.4	9
10/12/2021	9:05:00 AM	265.6	242.3	10.1	241.7	9.8
10/12/2021	9:10:00 AM	259.6	243.3	8.7	243.6	8.6
10/12/2021	9:15:00 AM	235.8	253.8	7.8	254.4	7.5
10/12/2021	9:20:00 AM	217.4	231.8	4.9	234.2	4.5
10/12/2021	9:25:00 AM	226.5	238.5	8	241.8	7.7
10/12/2021	9:30:00 AM	213.4	266	6	266.7	5.8
10/12/2021	9:35:00 AM	219.1	253.3	9.2	251.6	9
10/12/2021	9:40:00 AM	222.2	259.7	6.9	258.6	6.8
10/12/2021	9:45:00 AM	205.1	272.1	4.7	259.5	4.2
10/12/2021	9:50:00 AM	190.7	229.4	5.3	218.1	5
10/12/2021	9:55:00 AM	211.2	245.6	9.6	246.3	9.1
10/12/2021	10:00:00 AM	216.3	263	7	262.9	6.6
10/12/2021	10:05:00 AM	218.4	244.8	7.6	244.4	7.4
10/12/2021	10:10:00 AM	213.1	257.2	6.2	257	5.8
10/12/2021	10:15:00 AM	211.6	307.3	3.4	290.4	2.6
10/12/2021	10:20:00 AM	207.1	276.6	8.7	276.7	8
10/12/2021	10:25:00 AM	212.9	248.2	6.6	251.2	6.3
10/12/2021	10:30:00 AM	204	249.7	5.2	252	4.9
10/12/2021	10:35:00 AM	201.6	265.3	7.6	265.7	7
10/12/2021	10:40:00 AM	218.3	251.6	8.4	252	8.1
10/12/2021	10:45:00 AM	223.8	230.6	9.5	231	9.1
10/12/2021	10:50:00 AM	215.6	230.2	8.9	231.6	8.4
10/12/2021	10:55:00 AM	206.3	245.9	7.7	244.8	7.4
10/12/2021	11:00:00 AM	213.2	223.6	6.7	223.3	6.2
10/12/2021	11:05:00 AM	209.6	223.3	7.2	222.1	6.9
10/12/2021	11:10:00 AM	208.2	193.4	7.4	193.7	7.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	11:15:00 AM	202	206.3	6.3	200.1	4.6
10/12/2021	11:20:00 AM	212.5	224	7.8	224.5	7.3
10/12/2021	11:25:00 AM	209.5	196.7	6.4	196.8	6.1
10/12/2021	11:30:00 AM	199.4	244.9	8	244.6	6.4
10/12/2021	11:35:00 AM	190.6	271.8	10.3	272.4	9.8
10/12/2021	11:40:00 AM	201.6	271.2	7.4	270.8	7.2
10/12/2021	11:45:00 AM	192.6	258.2	3.8	270.1	3
10/12/2021	11:50:00 AM	176.7	231.7	5.5	228.8	4.9
10/12/2021	11:55:00 AM	171.4	203.8	9.3	203.4	9.1
10/12/2021	12:00:00 PM	192.9	247.3	5.6	242.8	4.3
10/12/2021	12:05:00 PM	191.9	258.4	4.2	252.1	3.6
10/12/2021	12:10:00 PM	184.8	261	8.1	262.4	7.2
10/12/2021	12:15:00 PM	175.4	265.7	9	260.9	8.7
10/12/2021	12:20:00 PM	186.2	221.8	6.2	230.2	5.4
10/12/2021	12:25:00 PM	182.5	163.9	5.1	164.3	4.7
10/12/2021	12:30:00 PM	182.8	251.5	9.9	254.1	9.2
10/12/2021	12:35:00 PM	184.3	268.1	8	267.6	7.1
10/12/2021	12:40:00 PM	164.2	226.7	9.2	229.3	8.8
10/12/2021	12:45:00 PM	177.8	242.5	4.7	238.4	4.3
10/12/2021	12:50:00 PM	166	258.2	5.7	266.7	4
10/12/2021	12:55:00 PM	146.5	295	5	296.4	4.7
10/12/2021	1:00:00 PM	137.4	274.8	6.4	273.9	5.7
10/12/2021	1:05:00 PM	148.2	215.6	9.4	218.6	8.8
10/12/2021	1:10:00 PM	160.3	260.6	9	261.9	8.6
10/12/2021	1:15:00 PM	148.9	254.7	3.5	257.2	3.3
10/12/2021	1:20:00 PM	127.9	230.2	5.2	229.8	4.7
10/12/2021	1:25:00 PM	145.1	244.2	9.8	243.8	9.4
10/12/2021	1:30:00 PM	144.5	277.4	5.9	280.1	5.5
10/12/2021	1:35:00 PM	135.5	328.7	4.1	314.1	3.4
10/12/2021	1:40:00 PM	125.7	297.3	3.3	281.8	2.7
10/12/2021	1:45:00 PM	121.6	252	8.1	259.3	7.4
10/12/2021	1:50:00 PM	120	290.8	11	291.4	10.6
10/12/2021	1:55:00 PM	116.8	291.7	7.7	288.4	7.4
10/12/2021	2:00:00 PM	109.8	260.9	11	260.7	10.8
10/12/2021	2:05:00 PM	101.8	244.1	4.5	237.4	4
10/12/2021	2:10:00 PM	102.4	239.4	4.1	240.1	3.9
10/12/2021	2:15:00 PM	113.9	244.8	9.6	244.9	9.2
10/12/2021	2:20:00 PM	110.8	255.5	7.8	253.2	7.6
10/12/2021	2:25:00 PM	87.7	261.2	3.7	265.7	3.4
10/12/2021	2:30:00 PM	92.9	278.9	5.5	277.8	5.4
10/12/2021	2:35:00 PM	87.4	292.6	2.4	262.8	1.3
10/12/2021	2:40:00 PM	78	231.4	11.7	233.5	11.5
10/12/2021	2:45:00 PM	67	255.8	8.7	255.7	8.3
10/12/2021	2:50:00 PM	75.9	260.9	8.6	261.1	8.1
10/12/2021	2:55:00 PM	75.2	265.6	8.5	269	8.2

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:00:00 PM	65.9	279.7	8.3	282.2	8
10/12/2021	3:05:00 PM	71.1	239.8	7.2	250.8	5.9
10/12/2021	3:10:00 PM	70.9	184.7	3.8	176.4	3.3
10/12/2021	3:15:00 PM	73.5	248.6	4.2	257.4	4
10/12/2021	3:20:00 PM	94	284.8	7.4	285.7	7.1
10/12/2021	3:25:00 PM	94.6	281.9	4.6	275.5	3.9
10/12/2021	3:30:00 PM	79.1	321.3	3.1	309.2	2.7
10/12/2021	3:35:00 PM	80.9	319.3	4.9	315.1	4.5
10/12/2021	3:40:00 PM	86	314.8	5	309.7	4.5
10/12/2021	3:45:00 PM	85.9	297.7	6.6	292.9	6.4
10/12/2021	3:50:00 PM	91.3	273.7	7.2	273.7	7
10/12/2021	3:55:00 PM	80.3	289.4	6.4	289.5	6.2
10/12/2021	4:00:00 PM	92.8	273.9	7	277.6	6.3
10/12/2021	4:05:00 PM	89.4	202.4	4.3	202.2	4.1
10/12/2021	4:10:00 PM	87.1	209.4	4.4	213.6	4.2
10/12/2021	4:15:00 PM	85.4	228.1	5.5	229.9	5.4
10/12/2021	4:20:00 PM	76	243.8	5.8	251.3	4.5
10/12/2021	4:25:00 PM	80.6	288.8	5.3	290.1	5
10/12/2021	4:30:00 PM	73	223.1	6	226.6	5.2
10/12/2021	4:35:00 PM	77.6	176	4.4	172.6	3.9
10/12/2021	4:40:00 PM	80.6	41.1	3	18.4	0.5
10/12/2021	4:45:00 PM	67.5	311.1	5	309.1	4.9
10/12/2021	4:50:00 PM	68	320.2	3.4	315.7	2.9
10/12/2021	4:55:00 PM	65.5	314.6	3.2	304.8	3
10/12/2021	5:00:00 PM	59	294.2	6.3	293.6	6.2
10/12/2021	5:05:00 PM	69.1	311.8	6.6	307.2	6.4
10/12/2021	5:10:00 PM	60.2	315.7	3.4	305.3	3.3
10/12/2021	5:15:00 PM	43.3	295.8	5.3	296.2	5.2
10/12/2021	5:20:00 PM	44.8	301.9	2.7	297.2	2.6
10/12/2021	5:25:00 PM	52.1	342.4	2.9	354.4	2.6
10/12/2021	5:30:00 PM	54.9	333.2	1.6	341.1	1.3
10/12/2021	5:35:00 PM	57.7	293.8	4.8	290.7	4.3
10/12/2021	5:40:00 PM	60.9	293.2	4.9	294	4.9
10/12/2021	5:45:00 PM	45.4	282.6	3.9	278.4	3.6
10/12/2021	5:50:00 PM	48.3	310	3	304.5	2.8
10/12/2021	5:55:00 PM	57.2	296.5	5.1	296.4	5.1
10/12/2021	6:00:00 PM	58.5	297.8	5.9	297.5	5.9
10/12/2021	6:05:00 PM	56.5	297.2	6.1	297.2	6.1
10/12/2021	6:10:00 PM	49.7	298.5	4	298.6	4
10/12/2021	6:15:00 PM	58.5	305.9	3.4	305	3.4
10/12/2021	6:20:00 PM	59.5	303.4	5.1	303.2	5.1
10/12/2021	6:25:00 PM	62.3	311.9	2.8	306.8	2.7
10/12/2021	6:30:00 PM	67.3	311.1	2.2	307	2.1
10/12/2021	6:35:00 PM	59.9	313.9	1.9	310.8	1.8
10/12/2021	6:40:00 PM	60.9	337.1	0	341.8	0.7

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	6:45:00 PM	67.8	340.9	1.4	344.6	1.3
10/12/2021	6:50:00 PM	60.9	344.4	1.3	345.6	1.3
10/12/2021	6:55:00 PM	55.8	356	1.7	358.1	1.6
10/12/2021	7:00:00 PM	60.1	347.5	2.5	350.8	2.4
10/12/2021	7:05:00 PM	62	308.9	0	323.3	0.7
10/12/2021	7:10:00 PM	54.7	354.3	1.3	359.9	1.2
10/12/2021	7:15:00 PM	51.9	357.1	1.4	358.1	1.3
10/12/2021	7:20:00 PM	53.1	344.2	0.9	358.8	0.8
10/12/2021	7:25:00 PM	52.5	3.8	2	2.7	1.9
10/12/2021	7:30:00 PM	56.2	325.8	1	331.7	0.9
10/12/2021	7:35:00 PM	57.8	307.9	0	303.6	0.3
10/12/2021	7:40:00 PM	60.3	296.2	0	306.7	0
10/12/2021	7:45:00 PM	58.7	326.9	0	338.7	0.2
10/12/2021	7:50:00 PM	57.3	299.4	0	309.8	0.2
10/12/2021	7:55:00 PM	59.5	242.3	0	241.5	0.5
10/12/2021	8:00:00 PM	63.1	262.4	0	271	0.5
10/12/2021	8:05:00 PM	55.6	271.5	1	272.5	1
10/12/2021	8:10:00 PM	54.9	265.8	0	263	0.7
10/12/2021	8:15:00 PM	56.1	256.1	0	259.5	0.6
10/12/2021	8:20:00 PM	53.5	322	0	308.1	0.4
10/12/2021	8:25:00 PM	39.2	327.1	0	322	0.7
10/12/2021	8:30:00 PM	53	353.5	0	3.9	0.2
10/12/2021	8:35:00 PM	63.3	31.7	0	32	0.2
10/12/2021	8:40:00 PM	61.3	10.8	0	0.9	0
10/12/2021	8:45:00 PM	48.9	333.2	0	312.6	0.3
10/12/2021	8:50:00 PM	47.6	265.5	0.9	263.2	0.9
10/12/2021	8:55:00 PM	47.9	271	0	132.7	0.1
10/12/2021	9:00:00 PM	54.3	108.9	0	112.8	0.6
10/12/2021	9:05:00 PM	60.9	131.8	0	129.7	0.2
10/12/2021	9:10:00 PM	65.8	109.4	0	110.7	0.1
10/12/2021	9:15:00 PM	59.1	104.5	0	104.5	0
10/12/2021	9:20:00 PM	48.9	104.4	0	104.4	0
10/12/2021	9:25:00 PM	46.1	140.9	1.3	142.6	1.3
10/12/2021	9:30:00 PM	51.4	130.4	1.1	132.1	1.1
10/12/2021	9:35:00 PM	53.3	104.8	0	104.7	0.8
10/12/2021	9:40:00 PM	57.6	93	0	93.1	0.8
10/12/2021	9:45:00 PM	54.1	98.5	0	98.5	0.3
10/12/2021	9:50:00 PM	52	99.8	0	100.9	0.5
10/12/2021	9:55:00 PM	50.7	120.5	1.9	123	1.9
10/12/2021	10:00:00 PM	53.8	105.4	3.4	105.9	3.4
10/12/2021	10:05:00 PM	57.1	108.4	3.3	107.9	3.3
10/12/2021	10:10:00 PM	49.3	112.4	2.2	113	2.2
10/12/2021	10:15:00 PM	43.6	108.2	2.7	108.3	2.7
10/12/2021	10:20:00 PM	46.2	106	2.2	107.8	2.2
10/12/2021	10:25:00 PM	46.4	105.4	1	105.8	1

Maricopa County Air Quality Department Monitoring Station Data (10-12-2021)

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	10:30:00 PM	50.1	128.2	0	125	0.3
10/12/2021	10:35:00 PM	50.9	134.1	0	284.6	0
10/12/2021	10:40:00 PM	53.1	313.7	1.1	313.4	1.1
10/12/2021	10:45:00 PM	76.7	317.3	1.4	316.2	1.4
10/12/2021	10:50:00 PM	73.3	349.7	0	338.8	0.6
10/12/2021	10:55:00 PM	65.6	33	0	33	0
10/12/2021	11:00:00 PM	55.7	50.5	0	132.2	0
10/12/2021	11:05:00 PM	53.4	144.5	1.3	142.5	1.3
10/12/2021	11:10:00 PM	52.2	130	1.1	129.8	1.1
10/12/2021	11:15:00 PM	51.9	99.6	1.5	100	1.5
10/12/2021	11:20:00 PM	51.8	103.3	1.8	103.7	1.8
10/12/2021	11:25:00 PM	54.3	99.8	2	99.9	2
10/12/2021	11:30:00 PM	49.9	99.3	2.2	100.7	2.2
10/12/2021	11:35:00 PM	56.1	95	2.6	95.8	2.6
10/12/2021	11:40:00 PM	58	105.8	2.9	105.3	2.9
10/12/2021	11:45:00 PM	56.6	93	3.3	93.9	3.2
10/12/2021	11:50:00 PM	52.5	102.7	2.4	100.9	2.2
10/12/2021	11:55:00 PM	58.6	95.5	1.8	99	1.7
Average		219.8	265	5.3	265	4
Max		1803.8	357.1	14.4	359.9	14.1
Max Hour		64260.54842	4841.582718	12.50086672	4934.090461	11.61828966
Min		39.2	3.8	0	0.9	0
Count		288	288	288	288	288
Total		63308.1	70569.6	1547.4	70225.5	1491.7
Date Printed:		9/30/2024 11:08				

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	12:00:00 AM	994.1	275.3	11.9	275.4	11.6
10/12/2021	12:05:00 AM	989.7	273.4	12.3	272.9	11.9
10/12/2021	12:10:00 AM	988.2	267.9	10.5	267.8	10.2
10/12/2021	12:15:00 AM	987.3	263.8	12.7	264.3	12.4
10/12/2021	12:20:00 AM	989.5	257.6	11.4	256.7	11.1
10/12/2021	12:25:00 AM	985.3	253	17.3	253.4	16.9
10/12/2021	12:30:00 AM	940.3	251.4	17	252	16.5
10/12/2021	12:35:00 AM	860	246.2	14.1	246.8	13.5
10/12/2021	12:40:00 AM	777.5	251.1	17.7	252.3	17.3
10/12/2021	12:45:00 AM	708.8	244.7	12.6	245	12.1
10/12/2021	12:50:00 AM	653.8	243.3	18.4	243.5	18.1
10/12/2021	12:55:00 AM	615.5	241.3	18.4	240.9	18
10/12/2021	1:00:00 AM	590	245.6	13.4	245.9	13
10/12/2021	1:05:00 AM	569.4	246.5	14.9	246.2	14.5
10/12/2021	1:10:00 AM	553	250	15.8	250	15.4
10/12/2021	1:15:00 AM	538.5	255.1	14.7	255.4	14.4
10/12/2021	1:20:00 AM	528.6	253.6	15.6	253.5	15.2
10/12/2021	1:25:00 AM	522	254.7	17.4	254.7	17.1
10/12/2021	1:30:00 AM	520.1	261.8	16.4	262	16
10/12/2021	1:35:00 AM	518.9	261.5	13.5	261.7	13.1
10/12/2021	1:40:00 AM	515.5	256.8	15.1	256.6	14.9
10/12/2021	1:45:00 AM	515.5	256.9	13.6	257.9	13.3
10/12/2021	1:50:00 AM	518	255.9	13.6	255.9	13.3
10/12/2021	1:55:00 AM	521.9	255.5	11.7	256.7	11.3
10/12/2021	2:00:00 AM	521.2	255.2	12.5	255.1	12.3
10/12/2021	2:05:00 AM	520.2	254.6	10.6	254.7	10.4
10/12/2021	2:10:00 AM	516.7	258.8	10.5	258.8	10.3
10/12/2021	2:15:00 AM	511.7	255.1	9.2	255.6	9
10/12/2021	2:20:00 AM	504.7	252.9	10.5	252.7	10.4
10/12/2021	2:25:00 AM	497.9	246.9	9.3	247.5	9.1
10/12/2021	2:30:00 AM	492	239.5	8.2	240	8
10/12/2021	2:35:00 AM	484.7	241.2	9.2	240.8	8.9
10/12/2021	2:40:00 AM	478.9	239.9	9.6	239.9	9.3
10/12/2021	2:45:00 AM	471.4	245.9	10.1	245.3	9.7
10/12/2021	2:50:00 AM	460.8	248.5	13.6	248.4	13.3
10/12/2021	2:55:00 AM	447.8	253.1	14.8	253.2	14.4
10/12/2021	3:00:00 AM	420.6	247.6	13.7	247.9	13.2
10/12/2021	3:05:00 AM	382.3	240.5	13.8	240.3	13.4
10/12/2021	3:10:00 AM	340.1	245.5	13.9	246.2	13.6
10/12/2021	3:15:00 AM	298	254.5	12.1	254.5	11.8
10/12/2021	3:20:00 AM	260.7	252.1	11	251.7	10.7
10/12/2021	3:25:00 AM	229	251.9	11	252.7	10.7
10/12/2021	3:30:00 AM	202.2	258.3	9.9	258.8	9.6
10/12/2021	3:35:00 AM	182.2	253.7	8.7	253.7	8.4
10/12/2021	3:40:00 AM	166.7	255.3	8.8	255.6	8.6
10/12/2021	3:45:00 AM	154.4	245.7	7.9	245.7	7.7

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:50:00 AM	148.4	239.7	8.4	239.8	8.1
10/12/2021	3:55:00 AM	146.9	247.1	7.3	246.7	7.1
10/12/2021	4:00:00 AM	144.9	250.9	5.9	250.9	5.7
10/12/2021	4:05:00 AM	142.6	243.7	6.2	244.1	6.1
10/12/2021	4:10:00 AM	140.2	236.3	4	237.3	3.9
10/12/2021	4:15:00 AM	137.3	237.5	4.9	237.6	4.8
10/12/2021	4:20:00 AM	133.7	247.3	5.1	247.7	4.9
10/12/2021	4:25:00 AM	130.3	248.1	4.8	247.6	4.6
10/12/2021	4:30:00 AM	126.9	253.6	3.1	253.4	3.1
10/12/2021	4:35:00 AM	124.2	247.8	3.2	248.3	3.1
10/12/2021	4:40:00 AM	120.8	247.2	2.7	247.3	2.7
10/12/2021	4:45:00 AM	119.4	251.1	1.8	251.3	1.8
10/12/2021	4:50:00 AM	117.4	232	1.2	231.3	1.2
10/12/2021	4:55:00 AM	115.1	251.3	1.2	250.8	1.2
10/12/2021	5:00:00 AM	113.8	304.6	0	299.3	0.4
10/12/2021	5:05:00 AM	112.7	328.5	0	312.6	0.3
10/12/2021	5:10:00 AM	113.3	333.8	1.5	339.7	1.3
10/12/2021	5:15:00 AM	113.9	318	2	317	2
10/12/2021	5:20:00 AM	113.3	347.4	0	348.3	0.3
10/12/2021	5:25:00 AM	113.2	231.5	0	189.1	0.3
10/12/2021	5:30:00 AM	113.8	160.5	1.4	160.7	1.4
10/12/2021	5:35:00 AM	112.6	170.6	2.1	171.2	2.1
10/12/2021	5:40:00 AM	115.6	197.7	2.2	196.8	2
10/12/2021	5:45:00 AM	117.3	246.4	3.2	246.8	3.2
10/12/2021	5:50:00 AM	115.9	256.5	3.7	256.4	3.7
10/12/2021	5:55:00 AM	114.3	254.6	4.1	254.7	4.1
10/12/2021	6:00:00 AM	113	259.6	2.1	257.9	2.1
10/12/2021	6:05:00 AM	113.3	246.7	2.5	240.4	2.3
10/12/2021	6:10:00 AM	115.9	219.3	4.2	217.3	4.1
10/12/2021	6:15:00 AM	120.6	242.7	3.8	242.2	3.8
10/12/2021	6:20:00 AM	124.1	237.3	4.2	237.3	4.2
10/12/2021	6:25:00 AM	125.6	237.3	4.1	236.9	4
10/12/2021	6:30:00 AM	126.6	240.6	3.8	240.7	3.8
10/12/2021	6:35:00 AM	127.1	241.6	3.6	241.4	3.6
10/12/2021	6:40:00 AM	127.9	220.8	3.3	220.9	3.2
10/12/2021	6:45:00 AM	132.5	197.6	2.7	198.5	2.7
10/12/2021	6:50:00 AM	139.3	185.8	2.3	185.7	2.3
10/12/2021	6:55:00 AM	145.5	169.8	1.9	170.2	1.8
10/12/2021	7:00:00 AM	154.7	177.1	1.6	176.3	1.6
10/12/2021	7:05:00 AM	157.8	172.4	0.9	170.9	0.9
10/12/2021	7:10:00 AM	154.5	157	0.9	159.3	0.8
10/12/2021	7:15:00 AM	153.3	155.3	0	156.6	0.5
10/12/2021	7:20:00 AM	150.5	167.3	0	162.9	0.6
10/12/2021	7:25:00 AM	148	149.7	0	154.5	0.4
10/12/2021	7:30:00 AM	147	161	1.6	161.4	1.6
10/12/2021	7:35:00 AM	150.3	138.8	1.9	138.4	1.9

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	7:40:00 AM	155	123.8	0	129.5	0.4
10/12/2021	7:45:00 AM	154.7	239.9	0	252.7	0.3
10/12/2021	7:50:00 AM	153.9	272.3	2.1	268.7	1.8
10/12/2021	7:55:00 AM	154.2	260.4	3.2	263.8	3.1
10/12/2021	8:00:00 AM	161.3	240.9	1.4	262.7	0.8
10/12/2021	8:05:00 AM	169.9	289.1	0.9	300.3	0.6
10/12/2021	8:10:00 AM	178.8	55	2.3	32.5	1.6
10/12/2021	8:15:00 AM	188.2	102.5	1.3	102.7	1.2
10/12/2021	8:20:00 AM	191.9	110.5	1.9	106.9	1.8
10/12/2021	8:25:00 AM	198.8	130	2.3	131.9	2.2
10/12/2021	8:30:00 AM	208.2	176.8	1.4	158.9	1.2
10/12/2021	8:35:00 AM	211.6	175.9	1.5	174.2	1.4
10/12/2021	8:40:00 AM	215.7	184.9	3	188.6	2.7
10/12/2021	8:45:00 AM	221.9	198	3.5	200.4	3
10/12/2021	8:50:00 AM	228.8	222.7	5.5	223.9	5.1
10/12/2021	8:55:00 AM	230.1	257.8	8.8	258.4	7.9
10/12/2021	9:00:00 AM	235.2	266.6	6	266.2	5.7
10/12/2021	9:05:00 AM	241.5	255.9	6.1	256.6	5.7
10/12/2021	9:10:00 AM	245.4	241.6	8.9	242.9	8.4
10/12/2021	9:15:00 AM	248.4	249.7	7.5	249.5	7.1
10/12/2021	9:20:00 AM	249.8	245.3	7.9	245.9	7.6
10/12/2021	9:25:00 AM	250.5	268.3	8.8	267.3	8.4
10/12/2021	9:30:00 AM	253.1	256.2	5.6	258.6	5.2
10/12/2021	9:35:00 AM	256.4	233.4	5.7	234.1	5.3
10/12/2021	9:40:00 AM	255.1	233.7	7.3	235.3	7
10/12/2021	9:45:00 AM	251.7	238.8	5.7	237.6	5.5
10/12/2021	9:50:00 AM	249.1	241.6	10.8	241.5	10.3
10/12/2021	9:55:00 AM	250.1	237.6	9.5	237.4	9.1
10/12/2021	10:00:00 AM	248.3	250.2	7.2	252.1	6.8
10/12/2021	10:05:00 AM	244.1	252.6	8.1	248.4	7.8
10/12/2021	10:10:00 AM	237.6	264.1	7.7	263.8	7.3
10/12/2021	10:15:00 AM	230.8	269.6	10	269.1	9.7
10/12/2021	10:20:00 AM	225.3	258.8	7.5	260	7.2
10/12/2021	10:25:00 AM	218.9	243.9	8.2	239.5	7.6
10/12/2021	10:30:00 AM	213.2	253.5	9.6	253.3	8.5
10/12/2021	10:35:00 AM	208.9	275.2	5.3	275.6	4.8
10/12/2021	10:40:00 AM	202.6	260.6	8.5	260.2	8.2
10/12/2021	10:45:00 AM	201.4	262.3	7.8	261.4	7.3
10/12/2021	10:50:00 AM	201.4	214.3	7.3	213.3	7
10/12/2021	10:55:00 AM	202.9	237.8	8.8	234.2	8.2
10/12/2021	11:00:00 AM	202.4	261.2	5.6	263.3	5.2
10/12/2021	11:05:00 AM	199.8	259.7	4	264.3	3.7
10/12/2021	11:10:00 AM	192.1	233.7	9.6	232.7	9.2
10/12/2021	11:15:00 AM	190.7	220	7	217	5.6
10/12/2021	11:20:00 AM	186	222.9	6.7	224.5	6.2
10/12/2021	11:25:00 AM	179.5	249.7	9.4	249.7	9

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	11:30:00 AM	171.1	258	8.3	258.7	7.8
10/12/2021	11:35:00 AM	164.8	224.9	7.5	221	7
10/12/2021	11:40:00 AM	159.3	236.4	9.4	236.1	8.5
10/12/2021	11:45:00 AM	154.2	235	6.9	238.1	6.4
10/12/2021	11:50:00 AM	151.5	202.1	9	205.6	8.4
10/12/2021	11:55:00 AM	149.9	244.8	7	248.5	6.6
10/12/2021	12:00:00 PM	147.9	247.5	7.8	249	7.4
10/12/2021	12:05:00 PM	147.9	253.8	6.9	251.4	6.6
10/12/2021	12:10:00 PM	146.2	220.7	7.2	218.3	6.8
10/12/2021	12:15:00 PM	147	249.8	7.3	254.2	6.9
10/12/2021	12:20:00 PM	145.8	291.1	5.6	295.2	5.3
10/12/2021	12:25:00 PM	145.9	259.2	10.7	257.9	10.4
10/12/2021	12:30:00 PM	146.2	236.5	9.9	236	9.6
10/12/2021	12:35:00 PM	146.9	222.9	8.4	222.8	8
10/12/2021	12:40:00 PM	143.7	251.2	9.1	253.1	8.7
10/12/2021	12:45:00 PM	138	246.9	5.2	245.5	4.7
10/12/2021	12:50:00 PM	131.3	234.5	6.4	234.6	6.1
10/12/2021	12:55:00 PM	123	240.6	8.9	240.2	8.7
10/12/2021	1:00:00 PM	119.2	258.1	12.2	258	12
10/12/2021	1:05:00 PM	117.7	245.8	6.4	243.5	5.9
10/12/2021	1:10:00 PM	114.9	244.8	6.6	247.5	5.8
10/12/2021	1:15:00 PM	112.1	243.1	6.9	247.2	6
10/12/2021	1:20:00 PM	110.6	240.6	8.1	238.6	7
10/12/2021	1:25:00 PM	108.9	208.4	7	209.3	6.6
10/12/2021	1:30:00 PM	106.4	212.6	6.5	208.4	6.1
10/12/2021	1:35:00 PM	104.2	266.2	8	266.9	7.4
10/12/2021	1:40:00 PM	100.3	251.8	9.5	251	8.9
10/12/2021	1:45:00 PM	97.1	245.6	10.4	246.5	10.1
10/12/2021	1:50:00 PM	94.4	230.1	8.6	233.3	8.1
10/12/2021	1:55:00 PM	91.6	240.4	7.5	241.1	7.2
10/12/2021	2:00:00 PM	89.4	251.6	9.3	252.7	9
10/12/2021	2:05:00 PM	86.5	253.8	5.9	254.1	5.7
10/12/2021	2:10:00 PM	84	223.9	3.7	226.5	3.4
10/12/2021	2:15:00 PM	83.7	273	11.6	273.2	11.2
10/12/2021	2:20:00 PM	82	273.7	10.8	274.1	10.5
10/12/2021	2:25:00 PM	85.8	272.4	8.4	272.9	8
10/12/2021	2:30:00 PM	91.4	245.3	8.2	249.2	7.8
10/12/2021	2:35:00 PM	92.8	261.2	9.9	261.1	9.7
10/12/2021	2:40:00 PM	88.5	255.1	10.6	255.4	10.3
10/12/2021	2:45:00 PM	83.6	254.4	8.1	254.3	7.9
10/12/2021	2:50:00 PM	77.6	262	7	260.6	6.7
10/12/2021	2:55:00 PM	72.8	273.5	7.5	265	6.1
10/12/2021	3:00:00 PM	69.1	259.2	10.9	259.7	10.4
10/12/2021	3:05:00 PM	65.6	256.1	10.8	258	10.5
10/12/2021	3:10:00 PM	62.9	241.5	8.6	241.1	8.2
10/12/2021	3:15:00 PM	61.7	245.4	4.5	247.9	3.8

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m³)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:20:00 PM	59.3	280.5	5	280.5	4.5
10/12/2021	3:25:00 PM	56.8	246.3	7.9	247.3	7.6
10/12/2021	3:30:00 PM	54.5	231	7.8	230.7	7.5
10/12/2021	3:35:00 PM	51.4	285.9	8.8	286.8	8.2
10/12/2021	3:40:00 PM	51.1	285.9	6.9	285.1	6.7
10/12/2021	3:45:00 PM	51	285.9	5.1	281.4	4.4
10/12/2021	3:50:00 PM	50.1	268.5	6	267.5	5.6
10/12/2021	3:55:00 PM	49.3	255.8	8.1	256.2	7.7
10/12/2021	4:00:00 PM	47.6	269.8	5.2	268.7	4.8
10/12/2021	4:05:00 PM	48.1	257.4	8.4	257.1	8.2
10/12/2021	4:10:00 PM	48	247.6	7.5	247.5	7.2
10/12/2021	4:15:00 PM	48.3	221.1	6.5	221.1	6.1
10/12/2021	4:20:00 PM	49.7	229.1	6	228.2	5.8
10/12/2021	4:25:00 PM	50.7	248.5	8.4	249.4	8.2
10/12/2021	4:30:00 PM	51	262.6	5.8	263.8	5.6
10/12/2021	4:35:00 PM	50.2	299	5.2	293	4.6
10/12/2021	4:40:00 PM	49.3	308.7	5.7	307.4	5.5
10/12/2021	4:45:00 PM	50.1	268.6	3.6	269.2	3.3
10/12/2021	4:50:00 PM	51	250.1	5.9	249.1	5.7
10/12/2021	4:55:00 PM	51.5	267	6.8	264.9	6.4
10/12/2021	5:00:00 PM	51.4	293.5	4.9	292	4.6
10/12/2021	5:05:00 PM	50.3	285.9	7	286.4	6.8
10/12/2021	5:10:00 PM	50	284.8	5.9	288.1	5.5
10/12/2021	5:15:00 PM	50.2	259.3	6.6	259.9	6.4
10/12/2021	5:20:00 PM	50.3	247.7	5.1	247.3	4.9
10/12/2021	5:25:00 PM	49.9	266.5	4.6	267	4.4
10/12/2021	5:30:00 PM	48.9	266.7	4.8	267.3	4.6
10/12/2021	5:35:00 PM	49.9	286.8	5	287.2	4.8
10/12/2021	5:40:00 PM	49.6	282.3	5.4	282.9	5.3
10/12/2021	5:45:00 PM	48.9	279.2	4.3	280.6	4.1
10/12/2021	5:50:00 PM	50.5	265.3	4.7	264.1	4.6
10/12/2021	5:55:00 PM	50.9	307.2	4.3	308	4.1
10/12/2021	6:00:00 PM	51.4	292.2	3.7	291.1	3.5
10/12/2021	6:05:00 PM	50.9	293.6	4.6	294.5	4.5
10/12/2021	6:10:00 PM	50.5	296.7	2.5	296.5	2.4
10/12/2021	6:15:00 PM	51.4	286.6	2.5	285.7	2.4
10/12/2021	6:20:00 PM	51.6	282.5	2.6	283.1	2.5
10/12/2021	6:25:00 PM	50.7	286.4	2.4	287.8	2.4
10/12/2021	6:30:00 PM	50.1	289	2.5	287.8	2.4
10/12/2021	6:35:00 PM	49.3	284.5	2.7	284.4	2.7
10/12/2021	6:40:00 PM	49.6	288.2	2.8	287.5	2.7
10/12/2021	6:45:00 PM	50.9	283.6	3.1	283.1	3
10/12/2021	6:50:00 PM	51.3	286	2.4	285.5	2.4
10/12/2021	6:55:00 PM	51.3	288.4	1.8	289	1.8
10/12/2021	7:00:00 PM	50.8	276.1	1.2	276.8	1.2
10/12/2021	7:05:00 PM	49.5	281.3	1.8	282.5	1.8

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	7:10:00 PM	47.8	289.8	1.6	289.6	1.6
10/12/2021	7:15:00 PM	46.9	281.5	1.4	281.1	1.4
10/12/2021	7:20:00 PM	53.5	285.8	1.5	286	1.5
10/12/2021	7:25:00 PM	62.8	260.8	1	267.4	0.9
10/12/2021	7:30:00 PM	67.3	254	0	261.5	0.5
10/12/2021	7:35:00 PM	67	262.8	1.4	264.2	1.4
10/12/2021	7:40:00 PM	61.6	282.3	1.3	280.9	1.2
10/12/2021	7:45:00 PM	53.7	274.1	0	279.6	0.8
10/12/2021	7:50:00 PM	56.2	242.6	0	237.8	0.2
10/12/2021	7:55:00 PM	57.7	171.1	0	171.3	0.3
10/12/2021	8:00:00 PM	61.7	191.8	0	191.5	0.7
10/12/2021	8:05:00 PM	64.9	188.1	0.9	188	0.9
10/12/2021	8:10:00 PM	64.1	198	0.9	198.1	0.9
10/12/2021	8:15:00 PM	61.1	217.5	0	217.7	0.8
10/12/2021	8:20:00 PM	56	217.8	0	224.3	0.5
10/12/2021	8:25:00 PM	51.3	213.8	0	228	0.2
10/12/2021	8:30:00 PM	47	230.9	1.2	230.6	1.2
10/12/2021	8:35:00 PM	44.8	221.4	0	219.9	0.8
10/12/2021	8:40:00 PM	47.4	230.9	0	237	0.8
10/12/2021	8:45:00 PM	50.5	244.8	1.3	244.7	1.3
10/12/2021	8:50:00 PM	51.5	217.1	2.5	218.7	2.5
10/12/2021	8:55:00 PM	47.5	258.8	3.4	259	3.4
10/12/2021	9:00:00 PM	43	268.4	2.8	268.2	2.8
10/12/2021	9:05:00 PM	42.6	263.9	2.4	264.1	2.4
10/12/2021	9:10:00 PM	44.6	297.2	0	284.2	0.8
10/12/2021	9:15:00 PM	48.6	277.2	0	230.1	0.1
10/12/2021	9:20:00 PM	49	227.7	1	224.4	1
10/12/2021	9:25:00 PM	46.5	253.4	0	248.7	0.2
10/12/2021	9:30:00 PM	46.4	259.8	0	257.3	0
10/12/2021	9:35:00 PM	48.9	268.3	0	268.2	0
10/12/2021	9:40:00 PM	52.2	277.3	0	255.8	0
10/12/2021	9:45:00 PM	57.2	359.5	0	19.3	0.3
10/12/2021	9:50:00 PM	58	31.1	2.6	30.9	2.6
10/12/2021	9:55:00 PM	55.5	24.4	2.7	25	2.7
10/12/2021	10:00:00 PM	53.8	9.9	2	11.2	2
10/12/2021	10:05:00 PM	53.6	26.3	2.2	26.8	2.1
10/12/2021	10:10:00 PM	53.3	27	2.2	26.7	2.1
10/12/2021	10:15:00 PM	53.7	21.3	3.4	21.3	3.4
10/12/2021	10:20:00 PM	54.7	29.2	2.8	29.1	2.8
10/12/2021	10:25:00 PM	57.3	29	2.1	30.1	2.1
10/12/2021	10:30:00 PM	61	70	2.1	69.3	2
10/12/2021	10:35:00 PM	63.4	75.6	2	75.1	2
10/12/2021	10:40:00 PM	63.5	70.8	0	69.9	0.8
10/12/2021	10:45:00 PM	61.8	21	0	14.2	0.7
10/12/2021	10:50:00 PM	61.5	34	1.5	35.6	1.4
10/12/2021	10:55:00 PM	61.9	67.3	1.9	67	1.9

Maricopa County Air Quality Department Monitoring Station Data (10-12-2021)

Site: South Scottsdale						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	11:00:00 PM	64	92.3	2.3	94.3	2.3
10/12/2021	11:05:00 PM	63.2	30.4	2.1	29.7	2
10/12/2021	11:10:00 PM	61.3	37.7	2.7	37.5	2.6
10/12/2021	11:15:00 PM	60.6	39.4	2.6	39.9	2.6
10/12/2021	11:20:00 PM	61.5	43.5	2.2	43.1	2.2
10/12/2021	11:25:00 PM	63.8	59.4	2.1	59.6	2.1
10/12/2021	11:30:00 PM	67.6	61.6	1.3	60.8	1.3
10/12/2021	11:35:00 PM	71.7	129.8	1.6	123.5	1.5
10/12/2021	11:40:00 PM	74.2	23.2	1	14	1
10/12/2021	11:45:00 PM	74.9	56.3	2.5	57.2	2.4
10/12/2021	11:50:00 PM	75.9	56.4	2.4	58.2	2.4
10/12/2021	11:55:00 PM	74.3	50.4	2.6	50.6	2.6
Average		180.7	252	5.7	252.6	4.9
Max		994.1	359.5	18.4	348.3	18.1
Max Hour		38237.01717	4654.118208	19.21598868	4786.968957	17.65621322
Min		42.6	9.9	0	11.2	0
Count		288	288	288	288	288
Total		52057.9	65841.1	1663.8	65396.5	1607.8
Date Printed:		9/30/2024 11:08				

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	12:00:00 AM	1803.8	280	13	279.9	12.8
10/12/2021	12:05:00 AM	1753	283	13.2	283.2	12.9
10/12/2021	12:10:00 AM	1693.6	276.5	13.4	276.4	13
10/12/2021	12:15:00 AM	1574.3	283.6	10.9	283.8	10.5
10/12/2021	12:20:00 AM	1422.4	288.3	13.1	288.9	12.9
10/12/2021	12:25:00 AM	1247.7	279.1	14.4	279	14.1
10/12/2021	12:30:00 AM	1044.6	283	14.1	282.4	13.6
10/12/2021	12:35:00 AM	864.9	282.2	9.5	282.4	9.2
10/12/2021	12:40:00 AM	730.5	280	13	279.7	12.7
10/12/2021	12:45:00 AM	636.4	281.6	11.4	282.1	11.2
10/12/2021	12:50:00 AM	591.5	270.5	9.1	270.7	8.8
10/12/2021	12:55:00 AM	557.9	278.5	8.2	278.3	8
10/12/2021	1:00:00 AM	527.3	284.6	12.4	284.6	12.1
10/12/2021	1:05:00 AM	521.4	285.8	9.9	286.7	9.7
10/12/2021	1:10:00 AM	504.8	289.2	8.6	289.1	8.5
10/12/2021	1:15:00 AM	478	292.9	7.2	293.3	7.1
10/12/2021	1:20:00 AM	467.8	296.1	8.4	296	8.2
10/12/2021	1:25:00 AM	459.4	299	10.1	298.8	10
10/12/2021	1:30:00 AM	455.9	308.1	9.6	306.6	9.4
10/12/2021	1:35:00 AM	444.8	302.5	12	301.9	11.8
10/12/2021	1:40:00 AM	435.4	296.5	9.2	296.9	9.1
10/12/2021	1:45:00 AM	421.9	298.5	11.1	298.4	10.9
10/12/2021	1:50:00 AM	412.1	293.6	10.6	293.7	10.5
10/12/2021	1:55:00 AM	408.2	298.7	9.8	298	9.6
10/12/2021	2:00:00 AM	408.3	289	9	288.8	8.9
10/12/2021	2:05:00 AM	403.1	298	8.1	297.5	8
10/12/2021	2:10:00 AM	403.2	299.1	6.7	298.9	6.6
10/12/2021	2:15:00 AM	402.1	293.2	7.1	292.7	7
10/12/2021	2:20:00 AM	400.3	287.9	6	288.3	5.8
10/12/2021	2:25:00 AM	393	277.2	3.9	276.5	3.8
10/12/2021	2:30:00 AM	392.2	285.3	4	286.8	3.9
10/12/2021	2:35:00 AM	388.5	292.1	5.3	291.9	5.2
10/12/2021	2:40:00 AM	387.2	288	5.2	287.2	5.1
10/12/2021	2:45:00 AM	391.7	281.6	5.5	282.3	5.3
10/12/2021	2:50:00 AM	391.8	293.8	4.4	292.4	4.2
10/12/2021	2:55:00 AM	384.3	297.3	5.5	297.3	5.4
10/12/2021	3:00:00 AM	388.4	298.8	5.7	298.9	5.7
10/12/2021	3:05:00 AM	392.4	300.9	5.8	300.5	5.7
10/12/2021	3:10:00 AM	393.1	305.5	5.6	304.5	5.5
10/12/2021	3:15:00 AM	395	301.4	7.6	299.9	7.5
10/12/2021	3:20:00 AM	404.9	298.5	10.3	296.6	10.1
10/12/2021	3:25:00 AM	420.5	296.7	11.9	296.4	11.7
10/12/2021	3:30:00 AM	422.7	296.7	11.7	296.5	11.5
10/12/2021	3:35:00 AM	399.9	299.5	11.6	299.3	11.4
10/12/2021	3:40:00 AM	363.4	297.3	12.5	297.7	12.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:45:00 AM	344.4	297.4	11.1	297.4	11
10/12/2021	3:50:00 AM	321.1	289.6	9.9	289.7	9.8
10/12/2021	3:55:00 AM	299.5	288.8	10	288.9	9.8
10/12/2021	4:00:00 AM	292.5	294.7	10.2	295	10
10/12/2021	4:05:00 AM	270.9	293.8	12.1	293.4	11.9
10/12/2021	4:10:00 AM	241.7	291.8	11.7	291.7	11.5
10/12/2021	4:15:00 AM	211.2	290.6	9.5	290.8	9.3
10/12/2021	4:20:00 AM	180.4	288	7.8	287.7	7.7
10/12/2021	4:25:00 AM	161.9	286.1	6	286.4	5.9
10/12/2021	4:30:00 AM	151.5	284.7	6	284.8	5.9
10/12/2021	4:35:00 AM	145.8	286.2	6.2	286.4	6.2
10/12/2021	4:40:00 AM	142.1	290.1	5.7	289.8	5.7
10/12/2021	4:45:00 AM	138.9	285.4	4.4	285.7	4.3
10/12/2021	4:50:00 AM	135.7	269.3	2.8	271.6	2.7
10/12/2021	4:55:00 AM	129.9	245.9	2.9	249.6	2.8
10/12/2021	5:00:00 AM	124.9	254.1	4.1	253.6	4
10/12/2021	5:05:00 AM	128.7	257	2.6	259.2	2.6
10/12/2021	5:10:00 AM	127.2	255.9	2.2	255.5	2.2
10/12/2021	5:15:00 AM	123.9	251.7	1.6	251.8	1.5
10/12/2021	5:20:00 AM	123.4	236.2	1.6	236.1	1.6
10/12/2021	5:25:00 AM	123.4	253	1.5	253.7	1.4
10/12/2021	5:30:00 AM	127.5	256.1	1.8	256	1.8
10/12/2021	5:35:00 AM	128.5	265.6	2.5	264.8	2.5
10/12/2021	5:40:00 AM	129.5	244.9	4.9	243.2	4.8
10/12/2021	5:45:00 AM	136.5	237	5.5	236.7	5.5
10/12/2021	5:50:00 AM	141.9	237.9	5.4	238.1	5.4
10/12/2021	5:55:00 AM	147.1	232.3	4.4	232.8	4.4
10/12/2021	6:00:00 AM	150.9	228	4	228.3	4
10/12/2021	6:05:00 AM	151.6	229	3.2	229.1	3.2
10/12/2021	6:10:00 AM	156.7	189	3.6	189.3	3.5
10/12/2021	6:15:00 AM	165.3	174.4	4	173.6	3.9
10/12/2021	6:20:00 AM	171.9	182.9	3.6	183.4	3.5
10/12/2021	6:25:00 AM	214.2	181.9	3.4	182.1	3.4
10/12/2021	6:30:00 AM	247.8	187.9	4.3	188.7	4.2
10/12/2021	6:35:00 AM	292.8	191.6	4.7	191.9	4.7
10/12/2021	6:40:00 AM	338.6	195.5	5.8	195.9	5.7
10/12/2021	6:45:00 AM	369.4	205.9	5.2	205	5.1
10/12/2021	6:50:00 AM	377	216.4	4.8	216.1	4.7
10/12/2021	6:55:00 AM	386	208.9	3.9	209.5	3.9
10/12/2021	7:00:00 AM	385	209.6	4.1	209.9	4
10/12/2021	7:05:00 AM	402.7	218	4	217.6	4
10/12/2021	7:10:00 AM	413	221.7	3	221.5	2.9
10/12/2021	7:15:00 AM	412.7	212.2	3.8	211.7	3.7
10/12/2021	7:20:00 AM	423.5	200.4	4	200.8	3.9
10/12/2021	7:25:00 AM	421.1	197.3	4.3	196.8	4.2

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	7:30:00 AM	410.8	172.3	3.4	172.5	3.3
10/12/2021	7:35:00 AM	416.9	174.9	3.8	177.1	3.3
10/12/2021	7:40:00 AM	416.2	208.7	4.5	207.4	4.4
10/12/2021	7:45:00 AM	403.1	208.6	5.3	208.7	5.2
10/12/2021	7:50:00 AM	403	214.6	3.8	214.7	3.7
10/12/2021	7:55:00 AM	401	211	4	211.2	3.9
10/12/2021	8:00:00 AM	383.7	204.4	3.5	205.8	3.4
10/12/2021	8:05:00 AM	373.6	204.8	4.9	204.2	4.8
10/12/2021	8:10:00 AM	362.6	219	6.8	219.4	6.6
10/12/2021	8:15:00 AM	354.6	223.3	8	222.9	7.9
10/12/2021	8:20:00 AM	327.6	231.9	7.3	232.5	7.2
10/12/2021	8:25:00 AM	290.3	220.3	8.3	219.1	8
10/12/2021	8:30:00 AM	274.2	223.1	10.3	223.1	10.1
10/12/2021	8:35:00 AM	265.3	225.5	9.8	225.1	9.6
10/12/2021	8:40:00 AM	276.5	217.6	8.7	217.8	8.6
10/12/2021	8:45:00 AM	274.3	230.3	8.1	230.9	8
10/12/2021	8:50:00 AM	276.3	236.6	11.9	238.5	11.6
10/12/2021	8:55:00 AM	275.6	248.2	9.9	249.1	9.6
10/12/2021	9:00:00 AM	268.5	235.9	9.3	235.4	9
10/12/2021	9:05:00 AM	265.6	242.3	10.1	241.7	9.8
10/12/2021	9:10:00 AM	259.6	243.3	8.7	243.6	8.6
10/12/2021	9:15:00 AM	235.8	253.8	7.8	254.4	7.5
10/12/2021	9:20:00 AM	217.4	231.8	4.9	234.2	4.5
10/12/2021	9:25:00 AM	226.5	238.5	8	241.8	7.7
10/12/2021	9:30:00 AM	213.4	266	6	266.7	5.8
10/12/2021	9:35:00 AM	219.1	253.3	9.2	251.6	9
10/12/2021	9:40:00 AM	222.2	259.7	6.9	258.6	6.8
10/12/2021	9:45:00 AM	205.1	272.1	4.7	259.5	4.2
10/12/2021	9:50:00 AM	190.7	229.4	5.3	218.1	5
10/12/2021	9:55:00 AM	211.2	245.6	9.6	246.3	9.1
10/12/2021	10:00:00 AM	216.3	263	7	262.9	6.6
10/12/2021	10:05:00 AM	218.4	244.8	7.6	244.4	7.4
10/12/2021	10:10:00 AM	213.1	257.2	6.2	257	5.8
10/12/2021	10:15:00 AM	211.6	307.3	3.4	290.4	2.6
10/12/2021	10:20:00 AM	207.1	276.6	8.7	276.7	8
10/12/2021	10:25:00 AM	212.9	248.2	6.6	251.2	6.3
10/12/2021	10:30:00 AM	204	249.7	5.2	252	4.9
10/12/2021	10:35:00 AM	201.6	265.3	7.6	265.7	7
10/12/2021	10:40:00 AM	218.3	251.6	8.4	252	8.1
10/12/2021	10:45:00 AM	223.8	230.6	9.5	231	9.1
10/12/2021	10:50:00 AM	215.6	230.2	8.9	231.6	8.4
10/12/2021	10:55:00 AM	206.3	245.9	7.7	244.8	7.4
10/12/2021	11:00:00 AM	213.2	223.6	6.7	223.3	6.2
10/12/2021	11:05:00 AM	209.6	223.3	7.2	222.1	6.9
10/12/2021	11:10:00 AM	208.2	193.4	7.4	193.7	7.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	11:15:00 AM	202	206.3	6.3	200.1	4.6
10/12/2021	11:20:00 AM	212.5	224	7.8	224.5	7.3
10/12/2021	11:25:00 AM	209.5	196.7	6.4	196.8	6.1
10/12/2021	11:30:00 AM	199.4	244.9	8	244.6	6.4
10/12/2021	11:35:00 AM	190.6	271.8	10.3	272.4	9.8
10/12/2021	11:40:00 AM	201.6	271.2	7.4	270.8	7.2
10/12/2021	11:45:00 AM	192.6	258.2	3.8	270.1	3
10/12/2021	11:50:00 AM	176.7	231.7	5.5	228.8	4.9
10/12/2021	11:55:00 AM	171.4	203.8	9.3	203.4	9.1
10/12/2021	12:00:00 PM	192.9	247.3	5.6	242.8	4.3
10/12/2021	12:05:00 PM	191.9	258.4	4.2	252.1	3.6
10/12/2021	12:10:00 PM	184.8	261	8.1	262.4	7.2
10/12/2021	12:15:00 PM	175.4	265.7	9	260.9	8.7
10/12/2021	12:20:00 PM	186.2	221.8	6.2	230.2	5.4
10/12/2021	12:25:00 PM	182.5	163.9	5.1	164.3	4.7
10/12/2021	12:30:00 PM	182.8	251.5	9.9	254.1	9.2
10/12/2021	12:35:00 PM	184.3	268.1	8	267.6	7.1
10/12/2021	12:40:00 PM	164.2	226.7	9.2	229.3	8.8
10/12/2021	12:45:00 PM	177.8	242.5	4.7	238.4	4.3
10/12/2021	12:50:00 PM	166	258.2	5.7	266.7	4
10/12/2021	12:55:00 PM	146.5	295	5	296.4	4.7
10/12/2021	1:00:00 PM	137.4	274.8	6.4	273.9	5.7
10/12/2021	1:05:00 PM	148.2	215.6	9.4	218.6	8.8
10/12/2021	1:10:00 PM	160.3	260.6	9	261.9	8.6
10/12/2021	1:15:00 PM	148.9	254.7	3.5	257.2	3.3
10/12/2021	1:20:00 PM	127.9	230.2	5.2	229.8	4.7
10/12/2021	1:25:00 PM	145.1	244.2	9.8	243.8	9.4
10/12/2021	1:30:00 PM	144.5	277.4	5.9	280.1	5.5
10/12/2021	1:35:00 PM	135.5	328.7	4.1	314.1	3.4
10/12/2021	1:40:00 PM	125.7	297.3	3.3	281.8	2.7
10/12/2021	1:45:00 PM	121.6	252	8.1	259.3	7.4
10/12/2021	1:50:00 PM	120	290.8	11	291.4	10.6
10/12/2021	1:55:00 PM	116.8	291.7	7.7	288.4	7.4
10/12/2021	2:00:00 PM	109.8	260.9	11	260.7	10.8
10/12/2021	2:05:00 PM	101.8	244.1	4.5	237.4	4
10/12/2021	2:10:00 PM	102.4	239.4	4.1	240.1	3.9
10/12/2021	2:15:00 PM	113.9	244.8	9.6	244.9	9.2
10/12/2021	2:20:00 PM	110.8	255.5	7.8	253.2	7.6
10/12/2021	2:25:00 PM	87.7	261.2	3.7	265.7	3.4
10/12/2021	2:30:00 PM	92.9	278.9	5.5	277.8	5.4
10/12/2021	2:35:00 PM	87.4	292.6	2.4	262.8	1.3
10/12/2021	2:40:00 PM	78	231.4	11.7	233.5	11.5
10/12/2021	2:45:00 PM	67	255.8	8.7	255.7	8.3
10/12/2021	2:50:00 PM	75.9	260.9	8.6	261.1	8.1
10/12/2021	2:55:00 PM	75.2	265.6	8.5	269	8.2

Maricopa County Air Quality Department Monitoring Station Data (10-12-2021)

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	3:00:00 PM	65.9	279.7	8.3	282.2	8
10/12/2021	3:05:00 PM	71.1	239.8	7.2	250.8	5.9
10/12/2021	3:10:00 PM	70.9	184.7	3.8	176.4	3.3
10/12/2021	3:15:00 PM	73.5	248.6	4.2	257.4	4
10/12/2021	3:20:00 PM	94	284.8	7.4	285.7	7.1
10/12/2021	3:25:00 PM	94.6	281.9	4.6	275.5	3.9
10/12/2021	3:30:00 PM	79.1	321.3	3.1	309.2	2.7
10/12/2021	3:35:00 PM	80.9	319.3	4.9	315.1	4.5
10/12/2021	3:40:00 PM	86	314.8	5	309.7	4.5
10/12/2021	3:45:00 PM	85.9	297.7	6.6	292.9	6.4
10/12/2021	3:50:00 PM	91.3	273.7	7.2	273.7	7
10/12/2021	3:55:00 PM	80.3	289.4	6.4	289.5	6.2
10/12/2021	4:00:00 PM	92.8	273.9	7	277.6	6.3
10/12/2021	4:05:00 PM	89.4	202.4	4.3	202.2	4.1
10/12/2021	4:10:00 PM	87.1	209.4	4.4	213.6	4.2
10/12/2021	4:15:00 PM	85.4	228.1	5.5	229.9	5.4
10/12/2021	4:20:00 PM	76	243.8	5.8	251.3	4.5
10/12/2021	4:25:00 PM	80.6	288.8	5.3	290.1	5
10/12/2021	4:30:00 PM	73	223.1	6	226.6	5.2
10/12/2021	4:35:00 PM	77.6	176	4.4	172.6	3.9
10/12/2021	4:40:00 PM	80.6	41.1	3	18.4	0.5
10/12/2021	4:45:00 PM	67.5	311.1	5	309.1	4.9
10/12/2021	4:50:00 PM	68	320.2	3.4	315.7	2.9
10/12/2021	4:55:00 PM	65.5	314.6	3.2	304.8	3
10/12/2021	5:00:00 PM	59	294.2	6.3	293.6	6.2
10/12/2021	5:05:00 PM	69.1	311.8	6.6	307.2	6.4
10/12/2021	5:10:00 PM	60.2	315.7	3.4	305.3	3.3
10/12/2021	5:15:00 PM	43.3	295.8	5.3	296.2	5.2
10/12/2021	5:20:00 PM	44.8	301.9	2.7	297.2	2.6
10/12/2021	5:25:00 PM	52.1	342.4	2.9	354.4	2.6
10/12/2021	5:30:00 PM	54.9	333.2	1.6	341.1	1.3
10/12/2021	5:35:00 PM	57.7	293.8	4.8	290.7	4.3
10/12/2021	5:40:00 PM	60.9	293.2	4.9	294	4.9
10/12/2021	5:45:00 PM	45.4	282.6	3.9	278.4	3.6
10/12/2021	5:50:00 PM	48.3	310	3	304.5	2.8
10/12/2021	5:55:00 PM	57.2	296.5	5.1	296.4	5.1
10/12/2021	6:00:00 PM	58.5	297.8	5.9	297.5	5.9
10/12/2021	6:05:00 PM	56.5	297.2	6.1	297.2	6.1
10/12/2021	6:10:00 PM	49.7	298.5	4	298.6	4
10/12/2021	6:15:00 PM	58.5	305.9	3.4	305	3.4
10/12/2021	6:20:00 PM	59.5	303.4	5.1	303.2	5.1
10/12/2021	6:25:00 PM	62.3	311.9	2.8	306.8	2.7
10/12/2021	6:30:00 PM	67.3	311.1	2.2	307	2.1
10/12/2021	6:35:00 PM	59.9	313.9	1.9	310.8	1.8
10/12/2021	6:40:00 PM	60.9	337.1	0	341.8	0.7

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	6:45:00 PM	67.8	340.9	1.4	344.6	1.3
10/12/2021	6:50:00 PM	60.9	344.4	1.3	345.6	1.3
10/12/2021	6:55:00 PM	55.8	356	1.7	358.1	1.6
10/12/2021	7:00:00 PM	60.1	347.5	2.5	350.8	2.4
10/12/2021	7:05:00 PM	62	308.9	0	323.3	0.7
10/12/2021	7:10:00 PM	54.7	354.3	1.3	359.9	1.2
10/12/2021	7:15:00 PM	51.9	357.1	1.4	358.1	1.3
10/12/2021	7:20:00 PM	53.1	344.2	0.9	358.8	0.8
10/12/2021	7:25:00 PM	52.5	3.8	2	2.7	1.9
10/12/2021	7:30:00 PM	56.2	325.8	1	331.7	0.9
10/12/2021	7:35:00 PM	57.8	307.9	0	303.6	0.3
10/12/2021	7:40:00 PM	60.3	296.2	0	306.7	0
10/12/2021	7:45:00 PM	58.7	326.9	0	338.7	0.2
10/12/2021	7:50:00 PM	57.3	299.4	0	309.8	0.2
10/12/2021	7:55:00 PM	59.5	242.3	0	241.5	0.5
10/12/2021	8:00:00 PM	63.1	262.4	0	271	0.5
10/12/2021	8:05:00 PM	55.6	271.5	1	272.5	1
10/12/2021	8:10:00 PM	54.9	265.8	0	263	0.7
10/12/2021	8:15:00 PM	56.1	256.1	0	259.5	0.6
10/12/2021	8:20:00 PM	53.5	322	0	308.1	0.4
10/12/2021	8:25:00 PM	39.2	327.1	0	322	0.7
10/12/2021	8:30:00 PM	53	353.5	0	3.9	0.2
10/12/2021	8:35:00 PM	63.3	31.7	0	32	0.2
10/12/2021	8:40:00 PM	61.3	10.8	0	0.9	0
10/12/2021	8:45:00 PM	48.9	333.2	0	312.6	0.3
10/12/2021	8:50:00 PM	47.6	265.5	0.9	263.2	0.9
10/12/2021	8:55:00 PM	47.9	271	0	132.7	0.1
10/12/2021	9:00:00 PM	54.3	108.9	0	112.8	0.6
10/12/2021	9:05:00 PM	60.9	131.8	0	129.7	0.2
10/12/2021	9:10:00 PM	65.8	109.4	0	110.7	0.1
10/12/2021	9:15:00 PM	59.1	104.5	0	104.5	0
10/12/2021	9:20:00 PM	48.9	104.4	0	104.4	0
10/12/2021	9:25:00 PM	46.1	140.9	1.3	142.6	1.3
10/12/2021	9:30:00 PM	51.4	130.4	1.1	132.1	1.1
10/12/2021	9:35:00 PM	53.3	104.8	0	104.7	0.8
10/12/2021	9:40:00 PM	57.6	93	0	93.1	0.8
10/12/2021	9:45:00 PM	54.1	98.5	0	98.5	0.3
10/12/2021	9:50:00 PM	52	99.8	0	100.9	0.5
10/12/2021	9:55:00 PM	50.7	120.5	1.9	123	1.9
10/12/2021	10:00:00 PM	53.8	105.4	3.4	105.9	3.4
10/12/2021	10:05:00 PM	57.1	108.4	3.3	107.9	3.3
10/12/2021	10:10:00 PM	49.3	112.4	2.2	113	2.2
10/12/2021	10:15:00 PM	43.6	108.2	2.7	108.3	2.7
10/12/2021	10:20:00 PM	46.2	106	2.2	107.8	2.2
10/12/2021	10:25:00 PM	46.4	105.4	1	105.8	1

Maricopa County Air Quality Department Monitoring Station Data (10-12-2021)

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
10/12/2021	10:30:00 PM	50.1	128.2	0	125	0.3
10/12/2021	10:35:00 PM	50.9	134.1	0	284.6	0
10/12/2021	10:40:00 PM	53.1	313.7	1.1	313.4	1.1
10/12/2021	10:45:00 PM	76.7	317.3	1.4	316.2	1.4
10/12/2021	10:50:00 PM	73.3	349.7	0	338.8	0.6
10/12/2021	10:55:00 PM	65.6	33	0	33	0
10/12/2021	11:00:00 PM	55.7	50.5	0	132.2	0
10/12/2021	11:05:00 PM	53.4	144.5	1.3	142.5	1.3
10/12/2021	11:10:00 PM	52.2	130	1.1	129.8	1.1
10/12/2021	11:15:00 PM	51.9	99.6	1.5	100	1.5
10/12/2021	11:20:00 PM	51.8	103.3	1.8	103.7	1.8
10/12/2021	11:25:00 PM	54.3	99.8	2	99.9	2
10/12/2021	11:30:00 PM	49.9	99.3	2.2	100.7	2.2
10/12/2021	11:35:00 PM	56.1	95	2.6	95.8	2.6
10/12/2021	11:40:00 PM	58	105.8	2.9	105.3	2.9
10/12/2021	11:45:00 PM	56.6	93	3.3	93.9	3.2
10/12/2021	11:50:00 PM	52.5	102.7	2.4	100.9	2.2
10/12/2021	11:55:00 PM	58.6	95.5	1.8	99	1.7
Average		219.8	265	5.3	265	4
Max		1803.8	357.1	14.4	359.9	14.1
Max Hour		64260.54842	4841.582718	12.50086672	4934.090461	11.61828966
Min		39.2	3.8	0	0.9	0
Count		288	288	288	288	288
Total		63308.1	70569.6	1547.4	70225.5	1491.7
Date Printed:		9/30/2024 11:08				

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	12:00:00 AM	71.7		5.5	93.1	3.9
9/2/2022	12:05:00 AM	66.2		-	105.5	5.1
9/2/2022	12:10:00 AM	61.4		-	106.8	5.1
9/2/2022	12:15:00 AM	56		-	106.3	5.9
9/2/2022	12:20:00 AM	48.8		-	113.3	7.9
9/2/2022	12:25:00 AM	42.1		-	118.2	5.9
9/2/2022	12:30:00 AM	39.2		-	116	5.4
9/2/2022	12:35:00 AM	39.5		-	118.9	6.5
9/2/2022	12:40:00 AM	38.4		-	134.7	6.1
9/2/2022	12:45:00 AM	36.5		-	137.9	5.8
9/2/2022	12:50:00 AM	36.2		-	134	5.4
9/2/2022	12:55:00 AM	38.2		-	132.9	5
9/2/2022	1:00:00 AM	39.1		4.4	132.7	4.7
9/2/2022	1:05:00 AM	37.5		-	123.3	4.6
9/2/2022	1:10:00 AM	34.9		-	116.1	5.4
9/2/2022	1:15:00 AM	35.5		-	123.8	5.3
9/2/2022	1:20:00 AM	37.9		-	116	4.8
9/2/2022	1:25:00 AM	37.4		-	120.3	5
9/2/2022	1:30:00 AM	35.7		-	124.9	4
9/2/2022	1:35:00 AM	36.2		-	130.8	4.8
9/2/2022	1:40:00 AM	39.6		-	128.1	2.7
9/2/2022	1:45:00 AM	41.5		-	121.3	3.6
9/2/2022	1:50:00 AM	40		-	121.7	4
9/2/2022	1:55:00 AM	38.5		-	117.5	3.9
9/2/2022	2:00:00 AM	39.9		3.8	111.3	4.6
9/2/2022	2:05:00 AM	42.4		-	103.3	4.5
9/2/2022	2:10:00 AM	42		-	119.7	5.4
9/2/2022	2:15:00 AM	39.5		-	113.2	5.1
9/2/2022	2:20:00 AM	38.9		-	124.8	4.1
9/2/2022	2:25:00 AM	41.1		-	119.2	3
9/2/2022	2:30:00 AM	41.9		-	131.4	4.6
9/2/2022	2:35:00 AM	40.1		-	114.8	3.9
9/2/2022	2:40:00 AM	38		-	132.7	4.4
9/2/2022	2:45:00 AM	38.3		-	122	3.6
9/2/2022	2:50:00 AM	39		-	162.2	1.8
9/2/2022	2:55:00 AM	37.7		-	150.7	2.3
9/2/2022	3:00:00 AM	35.5		1.7	146.9	2.2
9/2/2022	3:05:00 AM	35.4		-	113.7	2.3
9/2/2022	3:10:00 AM	36.9		-	119.2	2.8
9/2/2022	3:15:00 AM	36.8		-	103	1.8
9/2/2022	3:20:00 AM	34.9		-	96.6	2.9
9/2/2022	3:25:00 AM	33.1		-	63.3	3.2
9/2/2022	3:30:00 AM	34.5		-	59.1	3.3
9/2/2022	3:35:00 AM	36.6		-	46	1.1
9/2/2022	3:40:00 AM	36.7		-	42.1	1.5
9/2/2022	3:45:00 AM	37.2		-	22	0.8
9/2/2022	3:50:00 AM	41.6		-	295.8	0
9/2/2022	3:55:00 AM	47.8		-	61.7	2.4

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	4:00:00 AM	51.9		1.4	337.6	0.7
9/2/2022	4:05:00 AM	53.2		-	338.4	1.5
9/2/2022	4:10:00 AM	53.8		-	342.2	0.6
9/2/2022	4:15:00 AM	55.2		-	302.7	0.7
9/2/2022	4:20:00 AM	59.6		-	33.1	2.2
9/2/2022	4:25:00 AM	62.5		-	279.1	1.2
9/2/2022	4:30:00 AM	60.4		-	346.5	0.7
9/2/2022	4:35:00 AM	57		-	31.7	3
9/2/2022	4:40:00 AM	55.5		-	28	3.1
9/2/2022	4:45:00 AM	54.6		-	28.2	2.3
9/2/2022	4:50:00 AM	54.5		-	38.2	2.2
9/2/2022	4:55:00 AM	52.5		-	29.4	2
9/2/2022	5:00:00 AM	49.3		4	37.7	2.1
9/2/2022	5:05:00 AM	54.1		-	61.5	3.3
9/2/2022	5:10:00 AM	66.2		-	70.5	4.3
9/2/2022	5:15:00 AM	79.6		-	77.7	3.4
9/2/2022	5:20:00 AM	86.5		-	78.5	3.5
9/2/2022	5:25:00 AM	98		-	72.4	4.1
9/2/2022	5:30:00 AM	106.7		-	90	5.3
9/2/2022	5:35:00 AM	114.7		-	99.4	6.2
9/2/2022	5:40:00 AM	116.7		-	99.7	6.4
9/2/2022	5:45:00 AM	113.6		-	90.3	4.3
9/2/2022	5:50:00 AM	113.7		-	96.4	3.9
9/2/2022	5:55:00 AM	111.4		-	88.7	2.8
9/2/2022	6:00:00 AM	109.1		2.6	79.9	2.2
9/2/2022	6:05:00 AM	128.5		-	117.5	1.4
9/2/2022	6:10:00 AM	134.5		-	135.5	0.9
9/2/2022	6:15:00 AM	130.3		-	153.8	1.9
9/2/2022	6:20:00 AM	126.3		-	114	2.9
9/2/2022	6:25:00 AM	131.2		-	100.9	4.1
9/2/2022	6:30:00 AM	140.9		-	110	3.6
9/2/2022	6:35:00 AM	141.1		-	132.1	3.6
9/2/2022	6:40:00 AM	143.5		-	113.5	2.6
9/2/2022	6:45:00 AM	150.8		-	107.7	2
9/2/2022	6:50:00 AM	154.8		-	149.8	3.6
9/2/2022	6:55:00 AM	149.5		-	141.3	4.7
9/2/2022	7:00:00 AM	140.2		5.3	121.4	3.4
9/2/2022	7:05:00 AM	134.5		-	121.5	3.6
9/2/2022	7:10:00 AM	141.9		-	121.2	4.5
9/2/2022	7:15:00 AM	177		-	125.6	4.2
9/2/2022	7:20:00 AM	193		-	128.2	4.8
9/2/2022	7:25:00 AM	183.4		-	131.8	5.5
9/2/2022	7:30:00 AM	170.7		-	129.4	6.2
9/2/2022	7:35:00 AM	154.7		-	127.1	6.4
9/2/2022	7:40:00 AM	133.9		-	128.8	7.1
9/2/2022	7:45:00 AM	115.3		-	134.1	6.3
9/2/2022	7:50:00 AM	104.9		-	129.3	6.7
9/2/2022	7:55:00 AM	97.8		-	128.6	5.4

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	8:00:00 AM	88.3		3.7	111.8	4.8
9/2/2022	8:05:00 AM	80.6		-	99.1	5.6
9/2/2022	8:10:00 AM	80.1		-	100.4	4.7
9/2/2022	8:15:00 AM	79.6		-	116.1	4.4
9/2/2022	8:20:00 AM	74.4		-	116.5	4.5
9/2/2022	8:25:00 AM	69.8		-	129.5	3.5
9/2/2022	8:30:00 AM	74		-	133.3	2.3
9/2/2022	8:35:00 AM	75.4		-	106	3.6
9/2/2022	8:40:00 AM	73.4		-	114.2	2.5
9/2/2022	8:45:00 AM	70.7		-	108.7	3.5
9/2/2022	8:50:00 AM	73.4		-	101.3	3.6
9/2/2022	8:55:00 AM	74.4		-	110.9	2
9/2/2022	9:00:00 AM	70.3		2.7	151.1	3.7
9/2/2022	9:05:00 AM	68.9		-	154.9	1.5
9/2/2022	9:10:00 AM	74.3		-	214.5	2.1
9/2/2022	9:15:00 AM	73.2		-	152.9	3.5
9/2/2022	9:20:00 AM	65		-	194.2	1.6
9/2/2022	9:25:00 AM	60.7		-	145.4	2.7
9/2/2022	9:30:00 AM	61.1		-	145	3.1
9/2/2022	9:35:00 AM	57.2		-	170.9	1.7
9/2/2022	9:40:00 AM	51.1		-	149.1	3.4
9/2/2022	9:45:00 AM	50.6		-	109	3.3
9/2/2022	9:50:00 AM	51.5		-	110.6	4.6
9/2/2022	9:55:00 AM	46.5		-	124.6	5.7
9/2/2022	10:00:00 AM	44.1		5.7	107.5	5.4
9/2/2022	10:05:00 AM	47.3		-	120.7	5.9
9/2/2022	10:10:00 AM	47.9		-	136.5	7
9/2/2022	10:15:00 AM	45.5		-	116.3	5.8
9/2/2022	10:20:00 AM	47.7		-	108.4	5.8
9/2/2022	10:25:00 AM	55.6		-	108.5	6.6
9/2/2022	10:30:00 AM	57.8		-	146.3	5.7
9/2/2022	10:35:00 AM	56.7		-	141.5	6.3
9/2/2022	10:40:00 AM	61		-	125.5	5.1
9/2/2022	10:45:00 AM	65.9		-	129.8	6.3
9/2/2022	10:50:00 AM	64.3		-	117.5	3.7
9/2/2022	10:55:00 AM	62.1		-	139	6.4
9/2/2022	11:00:00 AM	65.3		3	167.1	4.1
9/2/2022	11:05:00 AM	65.4		-	183.1	3.6
9/2/2022	11:10:00 AM	59.4		-	194.6	4.4
9/2/2022	11:15:00 AM	56.8		-	163.4	6
9/2/2022	11:20:00 AM	59.7		-	152	4.5
9/2/2022	11:25:00 AM	59.5		-	155.5	0.8
9/2/2022	11:30:00 AM	56.3		-	163.6	4
9/2/2022	11:35:00 AM	56.6		-	126.5	5.5
9/2/2022	11:40:00 AM	61.6		-	97.6	2.1
9/2/2022	11:45:00 AM	56.9		-	150.3	2.1
9/2/2022	11:50:00 AM	51.1		-	99.6	4.1
9/2/2022	11:55:00 AM	54.3		-	96.6	0.9

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	12:00:00 PM	54.2		2.3	188.6	3.7
9/2/2022	12:05:00 PM	49.1		-	234.6	4.3
9/2/2022	12:10:00 PM	47		-	164.2	3.3
9/2/2022	12:15:00 PM	47.1		-	228.6	1.1
9/2/2022	12:20:00 PM	45.2		-	200.3	2.6
9/2/2022	12:25:00 PM	40.6		-	72	3.1
9/2/2022	12:30:00 PM	44		-	160.6	5.5
9/2/2022	12:35:00 PM	49.1		-	190.6	3.8
9/2/2022	12:40:00 PM	46.6		-	214.6	3.1
9/2/2022	12:45:00 PM	43.5		-	241.3	5.6
9/2/2022	12:50:00 PM	46.2		-	291.7	5.7
9/2/2022	12:55:00 PM	46.3		-	281.9	2.4
9/2/2022	1:00:00 PM	40.3		2.2	217.7	2.8
9/2/2022	1:05:00 PM	40.9		-	173	3
9/2/2022	1:10:00 PM	44.7		-	215.6	1.3
9/2/2022	1:15:00 PM	42.2		-	167.8	3.7
9/2/2022	1:20:00 PM	39.4		-	111.2	3.7
9/2/2022	1:25:00 PM	44.4		-	230.8	1.9
9/2/2022	1:30:00 PM	47.4		-	170	3.1
9/2/2022	1:35:00 PM	44.4		-	228.3	7.2
9/2/2022	1:40:00 PM	44.4		-	263.3	6.3
9/2/2022	1:45:00 PM	48.6		-	286.1	3.8
9/2/2022	1:50:00 PM	47		-	305.7	4.1
9/2/2022	1:55:00 PM	42.1		-	282.1	2.5
9/2/2022	2:00:00 PM	42.8		3.7	225.4	2.6
9/2/2022	2:05:00 PM	47.3		-	189	3.8
9/2/2022	2:10:00 PM	46.7		-	161.3	6
9/2/2022	2:15:00 PM	45.2		-	161.1	4.9
9/2/2022	2:20:00 PM	45.9		-	204.7	5.4
9/2/2022	2:25:00 PM	45.8		-	229.8	4.9
9/2/2022	2:30:00 PM	41.7		-	170.9	3
9/2/2022	2:35:00 PM	41		-	211.2	2.6
9/2/2022	2:40:00 PM	44.1		-	203.4	3.4
9/2/2022	2:45:00 PM	42.7		-	182.3	3.9
9/2/2022	2:50:00 PM	38.8		-	194.9	3.8
9/2/2022	2:55:00 PM	42.1		-	202.3	4.4
9/2/2022	3:00:00 PM	44.8		2.6	139.9	2.2
9/2/2022	3:05:00 PM	41.7		-	179.6	4.3
9/2/2022	3:10:00 PM	40.4		-	224.8	5.9
9/2/2022	3:15:00 PM	48.7		-	246.7	1.5
9/2/2022	3:20:00 PM	64.4		-	248.7	5.6
9/2/2022	3:25:00 PM	64		-	252.4	2.1
9/2/2022	3:30:00 PM	61.3		-	236.4	7.3
9/2/2022	3:35:00 PM	58.8		-	174.8	4.5
9/2/2022	3:40:00 PM	52.4		-	209.2	2.3
9/2/2022	3:45:00 PM	44.9		-	209.9	1.9
9/2/2022	3:50:00 PM	44		-	142.3	4.5
9/2/2022	3:55:00 PM	44.6		-	83.9	4.4

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	4:00:00 PM	40.6		2.9	120.2	5.4
9/2/2022	4:05:00 PM	38.8		-	88.4	6.8
9/2/2022	4:10:00 PM	39.9		-	92.5	5.5
9/2/2022	4:15:00 PM	39.8		-	54.8	4.3
9/2/2022	4:20:00 PM	34.7		-	54.7	2.8
9/2/2022	4:25:00 PM	33.6		-	90.7	2.6
9/2/2022	4:30:00 PM	34.9		-	135.1	2.7
9/2/2022	4:35:00 PM	32.6		-	149.4	5.1
9/2/2022	4:40:00 PM	29.2		-	148	4.8
9/2/2022	4:45:00 PM	31.5		-	179.4	1.8
9/2/2022	4:50:00 PM	32.1		-	267.8	0.8
9/2/2022	4:55:00 PM	27.3		-	58.3	2.5
9/2/2022	5:00:00 PM	24.6		0.9	175.6	4.4
9/2/2022	5:05:00 PM	26.7		-	211.2	3.3
9/2/2022	5:10:00 PM	27.8		-	169.3	4.2
9/2/2022	5:15:00 PM	25		-	190.2	3.6
9/2/2022	5:20:00 PM	24.9		-	238.5	3.8
9/2/2022	5:25:00 PM	28		-	232.4	1.2
9/2/2022	5:30:00 PM	27.5		-	321.7	2.1
9/2/2022	5:35:00 PM	24.7		-	351.1	4.3
9/2/2022	5:40:00 PM	26.1		-	7.7	5.1
9/2/2022	5:45:00 PM	28.6		-	349	4.7
9/2/2022	5:50:00 PM	26.2		-	359	6
9/2/2022	5:55:00 PM	24		-	23	7.2
9/2/2022	6:00:00 PM	25.8		5.5	91.3	12
9/2/2022	6:05:00 PM	26.9		-	78.3	16
9/2/2022	6:10:00 PM	24.4		-	72.9	9.5
9/2/2022	6:15:00 PM	23.9		-	98.5	21.3
9/2/2022	6:20:00 PM	26.4		-	104.4	14.6
9/2/2022	6:25:00 PM	26.6		-	110.4	8.8
9/2/2022	6:30:00 PM	24.1		-	130.5	4.5
9/2/2022	6:35:00 PM	25.1		-	233.7	0.5
9/2/2022	6:40:00 PM	28.4		-	276.5	3.7
9/2/2022	6:45:00 PM	27.8		-	257.2	3.1
9/2/2022	6:50:00 PM	25.1		-	271.7	4.1
9/2/2022	6:55:00 PM	25.5		-	285.8	5.7
9/2/2022	7:00:00 PM	28.6		4.5	291.7	7.6
9/2/2022	7:05:00 PM	27.3		-	283.2	7.2
9/2/2022	7:10:00 PM	25.2		-	284.6	10.2
9/2/2022	7:15:00 PM	26.5		-	290.8	9.8
9/2/2022	7:20:00 PM	28.5		-	289.9	11.3
9/2/2022	7:25:00 PM	27		-	286.5	10.5
9/2/2022	7:30:00 PM	24.9		-	301.3	8.3
9/2/2022	7:35:00 PM	27.4		-	350.3	2.9
9/2/2022	7:40:00 PM	29.7		-	54	10.9
9/2/2022	7:45:00 PM	28		-	59.2	9.6
9/2/2022	7:50:00 PM	25.5		-	59.7	4.7
9/2/2022	7:55:00 PM	27.2		-	58	3.6

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	8:00:00 PM	31.2		5.1	98	5.9
9/2/2022	8:05:00 PM	32.1		-	84.5	7.8
9/2/2022	8:10:00 PM	32		-	68.4	8.1
9/2/2022	8:15:00 PM	35.8		-	66.5	7
9/2/2022	8:20:00 PM	39.4		-	75.9	5.1
9/2/2022	8:25:00 PM	38.1		-	99.3	5.1
9/2/2022	8:30:00 PM	36		-	86.4	3.1
9/2/2022	8:35:00 PM	40.2		-	98	3.1
9/2/2022	8:40:00 PM	46		-	116.3	5
9/2/2022	8:45:00 PM	44.1		-	120.1	5.7
9/2/2022	8:50:00 PM	40.2		-	118	5.5
9/2/2022	8:55:00 PM	40.8		-	131.1	4.8
9/2/2022	9:00:00 PM	42.4		2.9	130	4.9
9/2/2022	9:05:00 PM	40.7		-	165.8	2.6
9/2/2022	9:10:00 PM	39.8		-	190.9	2.2
9/2/2022	9:15:00 PM	43		-	164.9	0.8
9/2/2022	9:20:00 PM	48.1		-	117.1	1.6
9/2/2022	9:25:00 PM	54.5		-	108.6	3.8
9/2/2022	9:30:00 PM	93.9		-	137.4	3.2
9/2/2022	9:35:00 PM	293.3		-	158.8	2.9
9/2/2022	9:40:00 PM	1169.5		-	161.5	2.9
9/2/2022	9:45:00 PM	2894.2		-	166.4	3.5
9/2/2022	9:50:00 PM	4555		-	166.5	4.5
9/2/2022	9:55:00 PM	5125		-	158.1	5.2
9/2/2022	10:00:00 PM	4617.3		2.5	160.4	5.8
9/2/2022	10:05:00 PM	3766.2		-	167.3	5.6
9/2/2022	10:10:00 PM	2893.5		-	176.5	3.3
9/2/2022	10:15:00 PM	2135.7		-	185	4.3
9/2/2022	10:20:00 PM	1550		-	192.2	3.2
9/2/2022	10:25:00 PM	1107.5		-	158.4	1.8
9/2/2022	10:30:00 PM	786.5		-	166.4	2.2
9/2/2022	10:35:00 PM	555.4		-	187.9	2.2
9/2/2022	10:40:00 PM	388.7		-	182.2	1.6
9/2/2022	10:45:00 PM	274		-	173.7	0.8
9/2/2022	10:50:00 PM	194.5		-	297.4	0.8
9/2/2022	10:55:00 PM	142.3		-	248.8	0
9/2/2022	11:00:00 PM	115.8		2.8	103.4	1.2
9/2/2022	11:05:00 PM	106.6		-	25.8	2
9/2/2022	11:10:00 PM	99		-	49.5	3.1
9/2/2022	11:15:00 PM	77.3		-	28.5	2.1
9/2/2022	11:20:00 PM	68.8		-	25.6	2.6
9/2/2022	11:25:00 PM	50.8		-	17	2.6
9/2/2022	11:30:00 PM	33.1		-	26.2	3.1
9/2/2022	11:35:00 PM	24.1		-	7.8	2.7
9/2/2022	11:40:00 PM	22.1		-	2.8	2.9
9/2/2022	11:45:00 PM	17.4		-	26.8	4.1
9/2/2022	11:50:00 PM	10.6		-	23.8	4.5
9/2/2022	11:55:00 PM	20.4		-	16.4	4.6

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>(µg/m₃)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(hourly, MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
	Average	165.357			146.5253472	4.178472222
	Max	5125	0	5.7	359	21.3
	Max Hour	5125	11915.14347	0	0	8.795114208
	Min	10.6	0	0	2.8	0
	Count	288	288	288	288	288
	Total	48290.9	47330.1	1434.2	48078.3	1360

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> (<u>µg/m₃</u>)	<u>Sustained Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Sustained</u> <u>Windspeed</u> (<u>MPH</u>)	<u>Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Windspeed</u> (<u>MPH</u>)
9/2/2022	12:00:00 AM	229	148	11.4	148.2	11.1
9/2/2022	12:05:00 AM	440.1	157.3	9.5	157.5	9.3
9/2/2022	12:10:00 AM	626	153.4	8.2	153	8.1
9/2/2022	12:15:00 AM	764.9	145.2	7	146.3	6.9
9/2/2022	12:20:00 AM	835.9	142.5	7.4	142.5	7.3
9/2/2022	12:25:00 AM	872.8	139.8	5.9	139.7	5.8
9/2/2022	12:30:00 AM	897.9	141.3	5.7	141	5.6
9/2/2022	12:35:00 AM	919.9	156.7	4.6	157.2	4.4
9/2/2022	12:40:00 AM	944.7	190.7	5.2	191.3	5
9/2/2022	12:45:00 AM	991.4	216	6.9	216.1	6.8
9/2/2022	12:50:00 AM	1243.1	178.5	4.6	177.9	4.4
9/2/2022	12:55:00 AM	1663	169.1	5	168.3	4.8
9/2/2022	1:00:00 AM	2065.1	194.2	5.6	194.5	5.5
9/2/2022	1:05:00 AM	2361	205.9	5.4	205.6	5.3
9/2/2022	1:10:00 AM	2623	211.9	6.4	211.7	6.3
9/2/2022	1:15:00 AM	2803.2	207.6	6.4	207.2	6.3
9/2/2022	1:20:00 AM	2791.9	217.7	6.9	217.2	6.8
9/2/2022	1:25:00 AM	2529.9	219.5	6.1	219.7	6
9/2/2022	1:30:00 AM	2128.7	230	7.2	230.1	7.1
9/2/2022	1:35:00 AM	1715.2	226.6	7	227	6.8
9/2/2022	1:40:00 AM	1331.9	218.1	6.8	218.8	6.8
9/2/2022	1:45:00 AM	1019	223.6	5.4	223.8	5.3
9/2/2022	1:50:00 AM	774.9	220.4	4.6	221.2	4.5
9/2/2022	1:55:00 AM	588.6	179.9	4	183.3	3.6
9/2/2022	2:00:00 AM	449.6	122	3.9	121.6	3.7
9/2/2022	2:05:00 AM	350.2	158	2.9	157.2	2.9
9/2/2022	2:10:00 AM	286.7	172.8	3	172.3	3
9/2/2022	2:15:00 AM	239.5	189.5	2.8	189.2	2.7
9/2/2022	2:20:00 AM	206.9	187.2	3.7	187.4	3.7
9/2/2022	2:25:00 AM	185.4	212.4	4.1	212.5	4.1
9/2/2022	2:30:00 AM	171.4	221.5	4.2	221.5	4.2
9/2/2022	2:35:00 AM	161.9	210	3.2	210.2	3.1
9/2/2022	2:40:00 AM	152.7	211.6	2.5	210.9	2.5
9/2/2022	2:45:00 AM	140.7	184.8	1	193.2	0.9
9/2/2022	2:50:00 AM	133.4	117.3	0.1	146.7	0
9/2/2022	2:55:00 AM	127.3	18.1	0.1	15.5	0.1
9/2/2022	3:00:00 AM	124	47.1	0.8	63	0.8
9/2/2022	3:05:00 AM	120.4	67.6	1.7	67.6	1.7
9/2/2022	3:10:00 AM	116.7	61.5	1.7	61.5	1.7
9/2/2022	3:15:00 AM	112	47.5	2	47.3	2
9/2/2022	3:20:00 AM	108.4	64.1	1.8	63.9	1.7
9/2/2022	3:25:00 AM	104.7	68.8	1.7	69.7	1.7
9/2/2022	3:30:00 AM	102	51.8	1.1	49.6	1
9/2/2022	3:35:00 AM	101	82.9	1.4	84	1.3
9/2/2022	3:40:00 AM	103.3	113.4	0.9	112.2	0.9
9/2/2022	3:45:00 AM	105.1	86.5	0.9	85.2	0.9
9/2/2022	3:50:00 AM	105.1	55.2	1	56.5	1
9/2/2022	3:55:00 AM	108.2	327.2	1.6	307.7	1.4

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	4:00:00 AM	110.5	302.2	1.8	301.7	1.8
9/2/2022	4:05:00 AM	112.9	323.4	2.5	323.8	2.5
9/2/2022	4:10:00 AM	115.1	327.1	3.9	326.9	3.9
9/2/2022	4:15:00 AM	121.5	338.2	2.8	337.9	2.7
9/2/2022	4:20:00 AM	128.8	345.1	3.1	345.1	3.1
9/2/2022	4:25:00 AM	133.1	348.1	3	348.1	3
9/2/2022	4:30:00 AM	134.6	324.3	3	324.8	2.9
9/2/2022	4:35:00 AM	140.3	319.1	2.9	319.3	2.8
9/2/2022	4:40:00 AM	140.7	325	3.3	324.9	3.3
9/2/2022	4:45:00 AM	142.6	340.3	3.1	339.7	3.1
9/2/2022	4:50:00 AM	139.9	5.5	2.8	5.4	2.7
9/2/2022	4:55:00 AM	131.5	37.2	2.8	33.8	2.7
9/2/2022	5:00:00 AM	116.7	52.1	2.2	51.4	2.1
9/2/2022	5:05:00 AM	101.2	56.2	2	55.9	2
9/2/2022	5:10:00 AM	88	66.2	1.5	67.2	1.5
9/2/2022	5:15:00 AM	77.7	40	0.3	48.9	0.3
9/2/2022	5:20:00 AM	69.6	338.7	1.1	341	1.1
9/2/2022	5:25:00 AM	62.5	29.1	1.5	29	1.5
9/2/2022	5:30:00 AM	56.9	15.9	1.4	17.6	1.4
9/2/2022	5:35:00 AM	54.6	292.8	0.7	262.2	0.6
9/2/2022	5:40:00 AM	52.4	259.6	1.5	258.2	1.4
9/2/2022	5:45:00 AM	51.6	295.9	2.6	296.7	2.6
9/2/2022	5:50:00 AM	51	288	3.1	288.4	3.1
9/2/2022	5:55:00 AM	48.6	288.3	2.8	288.4	2.8
9/2/2022	6:00:00 AM	47.4	303.4	2.8	302.5	2.8
9/2/2022	6:05:00 AM	45.7	312.4	2.3	312.3	2.3
9/2/2022	6:10:00 AM	44.2	303.7	2.2	303.9	2.2
9/2/2022	6:15:00 AM	42.5	321.8	2.2	322.1	2.2
9/2/2022	6:20:00 AM	42.1	335.9	1.9	335.1	1.9
9/2/2022	6:25:00 AM	41.6	336.6	1.5	337.2	1.4
9/2/2022	6:30:00 AM	41.6	294.9	1.7	294	1.7
9/2/2022	6:35:00 AM	42.4	302.3	2	302.4	1.9
9/2/2022	6:40:00 AM	41.9	336.1	2	336.3	2
9/2/2022	6:45:00 AM	42.3	329.7	2.4	329.9	2.3
9/2/2022	6:50:00 AM	45	334.6	2.1	334.4	2.1
9/2/2022	6:55:00 AM	47.9	4.7	2.3	6.2	2.3
9/2/2022	7:00:00 AM	50.2	17.9	2.5	17.5	2.5
9/2/2022	7:05:00 AM	52.4	343.4	2.1	344.1	2
9/2/2022	7:10:00 AM	54.7	314.7	2.7	314.6	2.7
9/2/2022	7:15:00 AM	55	356.2	3.1	355.9	3.1
9/2/2022	7:20:00 AM	55	356.2	3.4	355.9	3.3
9/2/2022	7:25:00 AM	57.2	346.8	3.2	346.3	3.2
9/2/2022	7:30:00 AM	62.1	341.7	3.4	342.1	3.3
9/2/2022	7:35:00 AM	65.6	349.5	4.4	349.4	4.4
9/2/2022	7:40:00 AM	71.1	344	5	344.2	4.9
9/2/2022	7:45:00 AM	75.1	335.7	4.4	335.1	4.3
9/2/2022	7:50:00 AM	81.4	349.6	4.5	349.4	4.5
9/2/2022	7:55:00 AM	86.2	333.6	3.2	332.3	3.1

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	8:00:00 AM	91.3	344.5	2.9	341.3	2.7
9/2/2022	8:05:00 AM	92.7	339.4	3.8	339.1	3.7
9/2/2022	8:10:00 AM	87.4	342.9	4.3	343.7	4.2
9/2/2022	8:15:00 AM	78.9	3.9	3.5	3.8	3.2
9/2/2022	8:20:00 AM	70.3	17.8	2.5	16.2	2.4
9/2/2022	8:25:00 AM	62.4	24.2	2.3	35	1.7
9/2/2022	8:30:00 AM	56.9	45.9	2.3	46	2.2
9/2/2022	8:35:00 AM	54.6	347.8	2	350.9	1.8
9/2/2022	8:40:00 AM	53.9	281.3	2.5	261.4	1
9/2/2022	8:45:00 AM	54.5	206.9	1.9	204.8	1.7
9/2/2022	8:50:00 AM	52.8	114.2	1.7	94.3	0.6
9/2/2022	8:55:00 AM	47	120.7	4.3	119.4	4.2
9/2/2022	9:00:00 AM	52.4	135.9	2.5	135.7	2.2
9/2/2022	9:05:00 AM	49	97.6	3.9	97.2	3.7
9/2/2022	9:10:00 AM	39.1	123.8	4.7	124.2	4.4
9/2/2022	9:15:00 AM	35.4	126.3	4.7	125.5	4.5
9/2/2022	9:20:00 AM	33.9	105.3	4.1	109.5	3.6
9/2/2022	9:25:00 AM	35.2	120.9	3.6	116.1	3.4
9/2/2022	9:30:00 AM	30.1	187.7	3.4	188	3.3
9/2/2022	9:35:00 AM	36.6	131.9	5.9	129.4	5.4
9/2/2022	9:40:00 AM	40.4	109.1	6.1	108.8	5.9
9/2/2022	9:45:00 AM	42.2	105.4	5.2	107.8	5
9/2/2022	9:50:00 AM	43.5	134.3	6.7	131.9	6.4
9/2/2022	9:55:00 AM	40.7	105.4	4.2	104.7	4
9/2/2022	10:00:00 AM	39.8	102.9	5.1	100.6	4.8
9/2/2022	10:05:00 AM	42.5	170.2	3	145.3	1.7
9/2/2022	10:10:00 AM	43.9	153.3	3.2	156.7	2.5
9/2/2022	10:15:00 AM	45	154.1	3.4	152.5	3
9/2/2022	10:20:00 AM	44.9	175	6.1	175.4	6
9/2/2022	10:25:00 AM	45.7	152.9	4.5	154.7	4.3
9/2/2022	10:30:00 AM	46.3	151.9	4.5	148.1	4
9/2/2022	10:35:00 AM	47.3	213.6	5.9	219.1	5.7
9/2/2022	10:40:00 AM	46.9	218.8	4.2	218.1	4.1
9/2/2022	10:45:00 AM	46.1	153.2	5.1	140.9	4.1
9/2/2022	10:50:00 AM	42.8	129.1	5.7	126.8	5.4
9/2/2022	10:55:00 AM	39	136.2	4.9	136.6	4.7
9/2/2022	11:00:00 AM	35.1	155.1	6.2	162.1	5.8
9/2/2022	11:05:00 AM	32.4	164.9	5.1	162.4	4.6
9/2/2022	11:10:00 AM	29.2	168.3	4.6	163.6	4.3
9/2/2022	11:15:00 AM	28.1	148.3	5.5	150.1	5.3
9/2/2022	11:20:00 AM	28.3	156.4	3.9	158.3	3
9/2/2022	11:25:00 AM	29.3	154.1	5.1	150.5	4.4
9/2/2022	11:30:00 AM	29.3	165.9	5.1	165.2	5
9/2/2022	11:35:00 AM	29.6	206.9	2.3	165.8	1.8
9/2/2022	11:40:00 AM	31	181.9	4.3	184.7	3.9
9/2/2022	11:45:00 AM	33.8	157.1	7.1	154.6	6.9
9/2/2022	11:50:00 AM	36.1	121	5.2	125.8	4.8
9/2/2022	11:55:00 AM	38.1	159.5	4.2	165.1	3.7

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed</u> (MPH)
9/2/2022	12:00:00 PM	39.3	210.4	4.1	209.8	3.8
9/2/2022	12:05:00 PM	38.9	247.5	2.4	257.9	1.2
9/2/2022	12:10:00 PM	37.4	170.8	5.2	168.3	5
9/2/2022	12:15:00 PM	35.8	169.3	4.3	170.5	3.9
9/2/2022	12:20:00 PM	35.8	176.1	5	172.4	4
9/2/2022	12:25:00 PM	35.4	116.7	4.6	119.7	3.8
9/2/2022	12:30:00 PM	39.1	161.2	2.2	181.6	1.3
9/2/2022	12:35:00 PM	43.3	220.4	6	213.5	4.8
9/2/2022	12:40:00 PM	44.9	174.1	6.5	175.1	6.3
9/2/2022	12:45:00 PM	44.8	181.4	3.4	183.3	3.3
9/2/2022	12:50:00 PM	47.1	126.9	5.5	125.7	5.3
9/2/2022	12:55:00 PM	50	139.7	3.5	146.8	2.5
9/2/2022	1:00:00 PM	55.2	344	2.1	353.1	1.4
9/2/2022	1:05:00 PM	58.9	203	2.8	212.7	2.1
9/2/2022	1:10:00 PM	68.7	204.8	5	204.7	4.8
9/2/2022	1:15:00 PM	84.7	205.8	5.7	204.4	5.5
9/2/2022	1:20:00 PM	86.8	195.1	4.9	195.9	4.8
9/2/2022	1:25:00 PM	79	153.8	4.6	152.9	4.1
9/2/2022	1:30:00 PM	68.7	136.6	6.8	134.1	6.6
9/2/2022	1:35:00 PM	59.6	105.1	5.2	110.2	4.7
9/2/2022	1:40:00 PM	54.1	107.3	4.6	112.1	4.2
9/2/2022	1:45:00 PM	51.6	197.6	5.3	205.2	3.6
9/2/2022	1:50:00 PM	49.5	171.9	5.3	160.8	4
9/2/2022	1:55:00 PM	44.4	126.7	1.8	136	1.1
9/2/2022	2:00:00 PM	38.8	130	1.6	124	1.3
9/2/2022	2:05:00 PM	36	185.3	4.4	201.3	2.5
9/2/2022	2:10:00 PM	39.5	168	5.5	171.6	4.7
9/2/2022	2:15:00 PM	45.9	167.8	5.5	170.6	5.1
9/2/2022	2:20:00 PM	45.6	133.1	5.9	134.4	5.4
9/2/2022	2:25:00 PM	45.9	112.2	5.7	115.9	5.2
9/2/2022	2:30:00 PM	42.1	87.5	4.6	87.9	4.4
9/2/2022	2:35:00 PM	40.2	133.9	5.1	134.8	4.7
9/2/2022	2:40:00 PM	38.5	178.9	6.6	183.5	6.1
9/2/2022	2:45:00 PM	41.2	179.7	6.7	185	6.4
9/2/2022	2:50:00 PM	43.2	192.6	7.2	193.3	7.1
9/2/2022	2:55:00 PM	44.2	149.6	2.4	157.5	2.1
9/2/2022	3:00:00 PM	42.9	156.6	2	180.7	1.5
9/2/2022	3:05:00 PM	41.7	198.9	7.8	200.3	7.2
9/2/2022	3:10:00 PM	41.2	223.5	8.2	223.4	8.1
9/2/2022	3:15:00 PM	40.3	206	5.2	204.3	5.1
9/2/2022	3:20:00 PM	39.1	98.3	1.2	99.7	0.9
9/2/2022	3:25:00 PM	38.3	211.6	7.1	216.7	6.6
9/2/2022	3:30:00 PM	40.1	198.4	4.5	196.9	4.2
9/2/2022	3:35:00 PM	39.2	199.1	4	214.1	3.4
9/2/2022	3:40:00 PM	38.4	195.9	7.6	196.8	7.3
9/2/2022	3:45:00 PM	37	197.8	8.9	197.9	8.8
9/2/2022	3:50:00 PM	37.5	153.2	6.2	156.5	5.5
9/2/2022	3:55:00 PM	38.2	133.5	2.8	178.1	1.6

Site: Zuni Hills						
Date	Time	PM ₁₀ ($\mu\text{g}/\text{m}^3$)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
9/2/2022	4:00:00 PM	38.2	236.2	5.3	237.4	5
9/2/2022	4:05:00 PM	41.2	162.3	5.8	161.7	5.3
9/2/2022	4:10:00 PM	42.5	173.9	8.9	173.9	8.7
9/2/2022	4:15:00 PM	41.5	158	7.9	157.5	7.8
9/2/2022	4:20:00 PM	41.1	168.1	7.7	170.3	7.2
9/2/2022	4:25:00 PM	40.2	180	7.3	180.6	7.2
9/2/2022	4:30:00 PM	39.1	162.4	5.6	160.9	5.2
9/2/2022	4:35:00 PM	39.5	144.5	5.5	147.9	5
9/2/2022	4:40:00 PM	39.1	137.9	9.1	138.1	8.5
9/2/2022	4:45:00 PM	40.9	118.7	7.5	121.3	7.2
9/2/2022	4:50:00 PM	44.7	130.6	8	132.3	7.5
9/2/2022	4:55:00 PM	50.3	161.3	4.4	166.3	4.3
9/2/2022	5:00:00 PM	50.3	134.7	7.8	135	7.6
9/2/2022	5:05:00 PM	47.4	155.4	5.3	148.7	4.8
9/2/2022	5:10:00 PM	43.6	166.6	5.6	156.9	5
9/2/2022	5:15:00 PM	42.6	157.2	4.4	156.6	4.1
9/2/2022	5:20:00 PM	45.2	217.9	4.6	213.1	4.4
9/2/2022	5:25:00 PM	46.3	166.9	3.6	164.3	3.1
9/2/2022	5:30:00 PM	41.7	177.3	2.9	176.4	2.8
9/2/2022	5:35:00 PM	35.9	328.3	1.5	333.8	1.2
9/2/2022	5:40:00 PM	37.6	295.2	0.3	299.7	0.1
9/2/2022	5:45:00 PM	38.6	192.2	1	191.5	0.9
9/2/2022	5:50:00 PM	41.2	47.3	0.5	344.1	0.4
9/2/2022	5:55:00 PM	42.1	352.1	2.4	352.6	2.3
9/2/2022	6:00:00 PM	41.5	9.3	3.7	5.9	3.3
9/2/2022	6:05:00 PM	42.9	335	6.6	336.6	6.4
9/2/2022	6:10:00 PM	41.9	340.7	7.1	340.4	6.9
9/2/2022	6:15:00 PM	47.7	351.5	8.4	350.9	8.2
9/2/2022	6:20:00 PM	52.5	4.2	8.5	5.1	8.2
9/2/2022	6:25:00 PM	52.8	2.3	10	2.5	9.6
9/2/2022	6:30:00 PM	55.9	355.8	11.8	355.1	11.5
9/2/2022	6:35:00 PM	59.4	351.2	11.4	351.1	11.1
9/2/2022	6:40:00 PM	61.5	353.5	14.4	352.9	14
9/2/2022	6:45:00 PM	61.7	355.6	10.7	355.6	10.4
9/2/2022	6:50:00 PM	56.2	356.6	10.8	356.7	10.5
9/2/2022	6:55:00 PM	47.4	356.3	9.5	356	9.3
9/2/2022	7:00:00 PM	36.5	357.4	9.7	357.6	9.3
9/2/2022	7:05:00 PM	19.8	4.9	10.4	6.1	10
9/2/2022	7:10:00 PM	17	1.3	12.2	0.3	11.8
9/2/2022	7:15:00 PM	24.8	357.8	10.6	357.6	10.4
9/2/2022	7:20:00 PM	29.1	356.2	10.4	355.8	10.1
9/2/2022	7:25:00 PM	28.3	10.4	13.3	12.2	12.9
9/2/2022	7:30:00 PM	43.8	17.7	17.5	18	17.2
9/2/2022	7:35:00 PM	81.9	12.7	15.7	13	15.4
9/2/2022	7:40:00 PM	96.9	12.3	12.9	12.5	12.6
9/2/2022	7:45:00 PM	90.8	8.5	12.3	9.1	12.1
9/2/2022	7:50:00 PM	91	334.2	12.3	334.3	12.2
9/2/2022	7:55:00 PM	92.4	2.8	8.3	2.4	7.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	8:00:00 PM	80.1	34.3	6.3	29.7	6.1
9/2/2022	8:05:00 PM	66.1	48.6	4.2	45.4	4
9/2/2022	8:10:00 PM	53.5	71.9	3.8	71.5	3.7
9/2/2022	8:15:00 PM	42.4	68.4	5.2	68.1	5.1
9/2/2022	8:20:00 PM	33.9	56.3	6.1	56	5.9
9/2/2022	8:25:00 PM	25.5	40.9	7.6	38.7	7.3
9/2/2022	8:30:00 PM	16.9	30.2	8.3	30	8.1
9/2/2022	8:35:00 PM	11.5	33.8	5.4	33.1	5.2
9/2/2022	8:40:00 PM	9.3	43.6	3.2	42.4	3
9/2/2022	8:45:00 PM	7.1	50	4	47.6	3.8
9/2/2022	8:50:00 PM	6.5	41.7	3.9	40.8	3.7
9/2/2022	8:55:00 PM	7.8	34.1	2.8	29.6	2.7
9/2/2022	9:00:00 PM	7.8	24.2	5.9	23.4	5.7
9/2/2022	9:05:00 PM	7.7	27	3.4	26.9	3.3
9/2/2022	9:10:00 PM	7.4	334.3	0.8	349.2	0.7
9/2/2022	9:15:00 PM	7.7	17.3	5.4	18.4	5.3
9/2/2022	9:20:00 PM	8.4	29.6	9.6	30	9.4
9/2/2022	9:25:00 PM	10.5	34.6	10.7	33.6	10.4
9/2/2022	9:30:00 PM	15.4	40.8	9.3	38	9
9/2/2022	9:35:00 PM	18.7	53.7	5.9	52.5	5.5
9/2/2022	9:40:00 PM	17.8	53	7.5	51.2	7.2
9/2/2022	9:45:00 PM	16.3	47.7	6.5	45.2	6.2
9/2/2022	9:50:00 PM	15.2	35	9.6	34.6	9.4
9/2/2022	9:55:00 PM	13.8	34.2	10.7	33.3	10.5
9/2/2022	10:00:00 PM	14.1	43.6	6.6	41.6	6.3
9/2/2022	10:05:00 PM	14.8	40.7	6.9	39	6.7
9/2/2022	10:10:00 PM	14.6	36.8	7.8	36.2	7.5
9/2/2022	10:15:00 PM	15.1	29.5	10.3	29	10.1
9/2/2022	10:20:00 PM	15.3	23.9	10.3	23.9	10.1
9/2/2022	10:25:00 PM	14.6	18.4	10.6	18.5	10.5
9/2/2022	10:30:00 PM	13.7	20.1	9.2	20.2	9.1
9/2/2022	10:35:00 PM	12.3	17.4	9.7	17.4	9.5
9/2/2022	10:40:00 PM	13	13.4	9.4	13.5	9.2
9/2/2022	10:45:00 PM	13.7	10.7	8.8	10.9	8.6
9/2/2022	10:50:00 PM	13.3	13.8	6.8	13.8	6.7
9/2/2022	10:55:00 PM	13.1	19.9	7.2	19.9	7.1
9/2/2022	11:00:00 PM	12.3	19.3	6.9	20	6.8
9/2/2022	11:05:00 PM	11	12.4	5.5	13	5.3
9/2/2022	11:10:00 PM	10.7	9.6	4.9	10.7	4.7
9/2/2022	11:15:00 PM	10.6	356	3.4	355.2	3.3
9/2/2022	11:20:00 PM	11.5	0.3	4.1	359.3	4
9/2/2022	11:25:00 PM	13.2	5.4	3.5	5	3.5
9/2/2022	11:30:00 PM	14.4	29.2	3.3	27.1	3.1
9/2/2022	11:35:00 PM	14.8	54.9	3.1	54.2	3
9/2/2022	11:40:00 PM	15.1	86.9	3.1	85.5	2.9
9/2/2022	11:45:00 PM	17.1	66.9	1.5	67.8	1.4
9/2/2022	11:50:00 PM	16.3	60.2	1.5	63.1	1.4
9/2/2022	11:55:00 PM	14.2	84.7	1.3	101.2	0.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
	Average	167.6	86	4.9	70.5	0.8
	Max	2803.2	357.8	17.5	359.3	17.2
	Max Hour	188001	11915.14347	8.902728901	11995.71213	8.795114208
	Min	6.5	0.3	0.1	0.3	0
	Count	288	288	288	288	288
	Total	48290.9	47330.1	1434.2	48078.3	1360

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> (<u>µg/m₃</u>)	<u>Sustained Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Sustained</u> <u>Windspeed</u> (<u>MPH</u>)	<u>Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Windspeed</u> (<u>MPH</u>)
9/2/2022	12:00:00 AM	799.8	148.7	8.1	148.4	7.9
9/2/2022	12:05:00 AM	1878.1	152.8	8.4	152.5	8.2
9/2/2022	12:10:00 AM	2642.1	150.1	8	149.7	7.8
9/2/2022	12:15:00 AM	3198.5	150.5	6.4	150.5	6.3
9/2/2022	12:20:00 AM	3617.6	140.2	6.6	140.4	6.4
9/2/2022	12:25:00 AM	3889.3	154.8	5.8	155.7	5.7
9/2/2022	12:30:00 AM	3996.9	177.2	6.4	177.2	6.1
9/2/2022	12:35:00 AM	3892	194.6	5.4	193.3	5.3
9/2/2022	12:40:00 AM	3517.9	189.3	6.3	188.9	6.1
9/2/2022	12:45:00 AM	2963	182.5	6	183.1	5.8
9/2/2022	12:50:00 AM	2405.5	178.7	5.3	182.2	5.1
9/2/2022	12:55:00 AM	1947.8	193.4	4.4	195.5	4
9/2/2022	1:00:00 AM	1635.8	200.8	4.2	202.8	3.9
9/2/2022	1:05:00 AM	1387.7	183.3	5.9	184.6	5.8
9/2/2022	1:10:00 AM	1146.3	179.9	5.5	179.7	5.3
9/2/2022	1:15:00 AM	929	171.9	6.6	172.6	6.4
9/2/2022	1:20:00 AM	744.3	180.5	8	180.6	7.8
9/2/2022	1:25:00 AM	586.5	174.8	7.5	175.3	7.3
9/2/2022	1:30:00 AM	463.3	188.8	7.1	188.8	7
9/2/2022	1:35:00 AM	372	193.5	6.1	193	6
9/2/2022	1:40:00 AM	293.4	192.7	5.3	192.8	5.2
9/2/2022	1:45:00 AM	233.6	205	5.1	205.6	5
9/2/2022	1:50:00 AM	201.1	200.3	4.4	200	4.3
9/2/2022	1:55:00 AM	171.8	186.9	4.1	188.6	3.9
9/2/2022	2:00:00 AM	146.6	192.8	4.9	193.3	4.8
9/2/2022	2:05:00 AM	136.4	188.1	5	188	4.9
9/2/2022	2:10:00 AM	124.2	144.8	4.9	142.5	4.6
9/2/2022	2:15:00 AM	111.8	130.5	4.6	130.5	4.6
9/2/2022	2:20:00 AM	112.6	114.1	4.5	114.8	4.3
9/2/2022	2:25:00 AM	111.2	113	4.2	113.3	4.1
9/2/2022	2:30:00 AM	103.8	115.4	3.2	115.6	3.2
9/2/2022	2:35:00 AM	105.5	102	2.6	103.3	2.5
9/2/2022	2:40:00 AM	108.3	80.9	2.5	80.7	2.3
9/2/2022	2:45:00 AM	105.5	60.2	3.7	60	3.6
9/2/2022	2:50:00 AM	113.4	63.8	3.4	63.3	3.3
9/2/2022	2:55:00 AM	124.6	63.8	4.3	63.8	4.2
9/2/2022	3:00:00 AM	126.3	63.1	3.6	63.2	3.6
9/2/2022	3:05:00 AM	124.6	60.4	2.6	60.5	2.5
9/2/2022	3:10:00 AM	130.6	62.8	1.7	61.5	1.6
9/2/2022	3:15:00 AM	128.2	63.1	2.3	63.9	2.2
9/2/2022	3:20:00 AM	119.3	69.5	2.1	69	2.1
9/2/2022	3:25:00 AM	116.9	121.6	1.8	126	1.5
9/2/2022	3:30:00 AM	114.4	162.7	2.7	162.6	2.6
9/2/2022	3:35:00 AM	105	135.3	1.6	140	1.5
9/2/2022	3:40:00 AM	95.6	50	0.3	63.7	0.3
9/2/2022	3:45:00 AM	91.8	21.1	0.4	11.2	0.3
9/2/2022	3:50:00 AM	79.8	40.5	0.7	33.9	0.6
9/2/2022	3:55:00 AM	67.5	30.9	0.3	29.5	0.3

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> (<u>µg/m₃</u>)	<u>Sustained Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Sustained</u> <u>Windspeed</u> (<u>MPH</u>)	<u>Wind</u> <u>Direction</u> (<u>Degree</u>)	<u>Windspeed</u> (<u>MPH</u>)
9/2/2022	4:00:00 AM	67.3	345.3	0.6	344.2	0.6
9/2/2022	4:05:00 AM	67.4	328.1	1.4	328.7	1.4
9/2/2022	4:10:00 AM	66.9	357	1.3	0.6	1.1
9/2/2022	4:15:00 AM	72.9	3.1	2.5	2.6	2.4
9/2/2022	4:20:00 AM	76.3	17.5	1.3	18.5	1.2
9/2/2022	4:25:00 AM	70.9	11.5	1.3	10	1.2
9/2/2022	4:30:00 AM	69.1	326.2	1.7	320.8	1.6
9/2/2022	4:35:00 AM	76.1	294.2	1.4	293.7	1.4
9/2/2022	4:40:00 AM	76.4	307.2	1.1	307	1.1
9/2/2022	4:45:00 AM	77.7	309.7	2.5	310	2.5
9/2/2022	4:50:00 AM	86.8	311.9	2.9	311.8	2.8
9/2/2022	4:55:00 AM	90	307.4	2.7	307.9	2.7
9/2/2022	5:00:00 AM	92.5	235	1.3	232.7	0.9
9/2/2022	5:05:00 AM	101.9	165.8	3.3	165.8	3.2
9/2/2022	5:10:00 AM	100.4	205	1	192.1	0.9
9/2/2022	5:15:00 AM	95.5	261.9	1.9	261.8	1.9
9/2/2022	5:20:00 AM	100.3	275.7	2.8	275.9	2.7
9/2/2022	5:25:00 AM	100.4	275.5	1.9	275.6	1.9
9/2/2022	5:30:00 AM	98	254.9	1.2	262.1	1.1
9/2/2022	5:35:00 AM	102.1	228	1.4	227.9	1.4
9/2/2022	5:40:00 AM	108.6	232.9	0.9	233.6	0.9
9/2/2022	5:45:00 AM	106.5	266.7	0.9	265.6	0.8
9/2/2022	5:50:00 AM	106.1	278.9	1.8	278.8	1.8
9/2/2022	5:55:00 AM	113.5	302.7	0.8	301.6	0.7
9/2/2022	6:00:00 AM	113.4	327.4	2.1	327.9	2.1
9/2/2022	6:05:00 AM	116.3	325.9	2.5	326	2.5
9/2/2022	6:10:00 AM	130.2	328.2	3	328.3	3
9/2/2022	6:15:00 AM	133.8	314.6	3.2	314.6	3.1
9/2/2022	6:20:00 AM	138.4	302.5	2.7	304	2.7
9/2/2022	6:25:00 AM	147.5	310.4	3.3	310.1	3.3
9/2/2022	6:30:00 AM	159.7	310.9	2.6	310.4	2.5
9/2/2022	6:35:00 AM	162.8	325.4	2.2	325.4	2.1
9/2/2022	6:40:00 AM	160.9	334.3	2	338.1	1.9
9/2/2022	6:45:00 AM	166.4	335.7	1.5	333.5	1.4
9/2/2022	6:50:00 AM	160.3	322	1.3	323.2	1.2
9/2/2022	6:55:00 AM	145.3	330.1	2.2	331.1	2.2
9/2/2022	7:00:00 AM	138.1	324.2	2.1	325.3	2
9/2/2022	7:05:00 AM	129	303.4	1.9	304	1.8
9/2/2022	7:10:00 AM	117.8	313.1	1.7	316.5	1.6
9/2/2022	7:15:00 AM	119.5	310.3	1.9	311.3	1.8
9/2/2022	7:20:00 AM	118	297.8	2.4	296.1	2.3
9/2/2022	7:25:00 AM	110.5	302.7	3.6	302.8	3.6
9/2/2022	7:30:00 AM	112.6	301.8	4.9	301.4	4.8
9/2/2022	7:35:00 AM	114.3	304.8	4.4	304.2	4.3
9/2/2022	7:40:00 AM	107.9	301.8	4.6	301.2	4.5
9/2/2022	7:45:00 AM	108.2	296.7	5.4	297	5.4
9/2/2022	7:50:00 AM	105.8	298.5	5.4	298.6	5.3
9/2/2022	7:55:00 AM	95.2	318	5	318.4	5

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	8:00:00 AM	88.1	321.9	5.4	321.8	5.3
9/2/2022	8:05:00 AM	92.9	309	4.9	309.1	4.8
9/2/2022	8:10:00 AM	87.7	339.5	3.7	335.5	3.5
9/2/2022	8:15:00 AM	86.3	346.1	3.7	344.3	3.4
9/2/2022	8:20:00 AM	87.7	330.4	4.1	332.9	3.8
9/2/2022	8:25:00 AM	85.7	358.2	2.5	342.1	2.3
9/2/2022	8:30:00 AM	93.2	335.1	2.4	337.4	2.1
9/2/2022	8:35:00 AM	95.9	1.8	2.8	9.5	2.4
9/2/2022	8:40:00 AM	88.2	350.1	2.3	348.6	2.2
9/2/2022	8:45:00 AM	86.7	270.1	1.4	268.5	1.2
9/2/2022	8:50:00 AM	88.8	19.2	1	27.1	0.8
9/2/2022	8:55:00 AM	80.5	91.5	1.3	37	0.7
9/2/2022	9:00:00 AM	77.4	19.4	2.1	19.3	1.8
9/2/2022	9:05:00 AM	80.2	12.9	2.2	12.5	2
9/2/2022	9:10:00 AM	73.8	355.8	1.8	4.1	1.6
9/2/2022	9:15:00 AM	74.7	132.8	2	162.5	1.8
9/2/2022	9:20:00 AM	77.5	171	4.6	173	4.5
9/2/2022	9:25:00 AM	71.9	179.5	2.9	177.6	2.8
9/2/2022	9:30:00 AM	72.4	122.6	1.9	131.4	1.7
9/2/2022	9:35:00 AM	66.9	267.4	1.5	193.1	0.5
9/2/2022	9:40:00 AM	57.6	205.8	2.7	188.7	2.4
9/2/2022	9:45:00 AM	61.4	125.7	3.4	129	3.2
9/2/2022	9:50:00 AM	59.2	195.7	2.5	174.3	1.8
9/2/2022	9:55:00 AM	53.9	185.6	2.3	171	1.8
9/2/2022	10:00:00 AM	61.6	211.1	3.6	198.7	3.1
9/2/2022	10:05:00 AM	65.7	136.1	5.3	132	5.2
9/2/2022	10:10:00 AM	72.5	115.1	3.3	110	3
9/2/2022	10:15:00 AM	74.1	93.9	4.5	88.2	3.8
9/2/2022	10:20:00 AM	64.1	98.6	2.8	86.1	2.3
9/2/2022	10:25:00 AM	62.4	131.2	3.5	122.2	2.9
9/2/2022	10:30:00 AM	61	106.6	4.5	108.6	4.2
9/2/2022	10:35:00 AM	52.9	110.2	4.2	104.5	3.3
9/2/2022	10:40:00 AM	56.8	150.7	6.3	143.6	5.5
9/2/2022	10:45:00 AM	60	157.8	4.6	159.8	4.2
9/2/2022	10:50:00 AM	57.3	126.8	5.1	132.5	4.7
9/2/2022	10:55:00 AM	62.7	116.4	4.2	118.9	3.9
9/2/2022	11:00:00 AM	56.3	98	3.7	99.2	3.2
9/2/2022	11:05:00 AM	51.5	181	3.8	183.5	2.7
9/2/2022	11:10:00 AM	57.2	171.4	4.7	174.8	4.2
9/2/2022	11:15:00 AM	54.8	171.3	5.4	172.1	5.1
9/2/2022	11:20:00 AM	57	140.1	3.6	137.5	3.1
9/2/2022	11:25:00 AM	58.1	148.7	2.3	170.6	2
9/2/2022	11:30:00 AM	51.3	214.1	2.8	190.9	1.8
9/2/2022	11:35:00 AM	53.2	172.3	5.3	166.7	4.9
9/2/2022	11:40:00 AM	57.8	217.1	4.6	208.9	4
9/2/2022	11:45:00 AM	52.9	164	3.3	152.9	2.6
9/2/2022	11:50:00 AM	57.5	210.7	4.2	206.1	3.8
9/2/2022	11:55:00 AM	58.5	201.2	3.3	224.6	2.8

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>(µg/m₃)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	12:00:00 PM	54.9	270.7	2.1	259.2	1.5
9/2/2022	12:05:00 PM	61.2	312.8	3.2	316.9	2.5
9/2/2022	12:10:00 PM	58.1	167.6	2.1	166.7	1.6
9/2/2022	12:15:00 PM	52.6	158.2	4.8	160.7	3.7
9/2/2022	12:20:00 PM	57.8	144.7	4.2	145.5	4
9/2/2022	12:25:00 PM	54.8	147.7	5.2	147.2	4.8
9/2/2022	12:30:00 PM	56.1	195.6	4.4	189.2	3.8
9/2/2022	12:35:00 PM	57.1	264.3	2.1	253.8	1.7
9/2/2022	12:40:00 PM	48.3	250.2	3.8	245.2	3.1
9/2/2022	12:45:00 PM	53.1	239.4	5.1	243.1	4.5
9/2/2022	12:50:00 PM	53.9	268.5	4.5	271.2	4.3
9/2/2022	12:55:00 PM	47.3	301.6	6.2	300.4	5.9
9/2/2022	1:00:00 PM	55.8	273.4	3.7	286.1	3.3
9/2/2022	1:05:00 PM	58.5	280.5	2.3	287.8	1.7
9/2/2022	1:10:00 PM	51.9	295.8	3.1	303.7	2.4
9/2/2022	1:15:00 PM	56.6	283.6	5.4	283.3	5.2
9/2/2022	1:20:00 PM	54.2	299	4.7	299.1	4.6
9/2/2022	1:25:00 PM	47.4	307.4	4.8	309.4	4.2
9/2/2022	1:30:00 PM	53.2	335.7	4.1	337.9	3.9
9/2/2022	1:35:00 PM	54.8	316.4	3.2	318.4	3
9/2/2022	1:40:00 PM	50.8	255.6	4.1	254.6	3.8
9/2/2022	1:45:00 PM	57.8	248	4.4	249.9	3.9
9/2/2022	1:50:00 PM	53.7	293.7	4.1	278.6	3.4
9/2/2022	1:55:00 PM	50.8	329.2	5.2	328.9	5
9/2/2022	2:00:00 PM	56.1	285.5	5.4	285.8	4.8
9/2/2022	2:05:00 PM	50.3	290.3	3	279.3	2.6
9/2/2022	2:10:00 PM	47.4	262.4	3.2	263.4	2.7
9/2/2022	2:15:00 PM	49.6	299	5.9	295.3	5.4
9/2/2022	2:20:00 PM	42.4	312.1	3.1	317.1	2.8
9/2/2022	2:25:00 PM	42.2	36.9	3	34.9	2.7
9/2/2022	2:30:00 PM	46.1	351.3	4.5	340.3	3.2
9/2/2022	2:35:00 PM	39.1	348.4	6.4	347.7	6.2
9/2/2022	2:40:00 PM	35.7	298.5	3.3	310.6	2.3
9/2/2022	2:45:00 PM	46.4	165.1	4.9	161.6	4.6
9/2/2022	2:50:00 PM	44.9	202.4	5.8	200.3	4.9
9/2/2022	2:55:00 PM	42.2	283	5.8	279.8	5.5
9/2/2022	3:00:00 PM	46.7	305.2	4.7	299.2	4.2
9/2/2022	3:05:00 PM	40	319.9	3.2	311.3	2.6
9/2/2022	3:10:00 PM	36.1	310.9	2.7	314.6	2.4
9/2/2022	3:15:00 PM	42.2	248.1	4.4	243.7	3.8
9/2/2022	3:20:00 PM	37.7	214.4	3.1	206.4	1.8
9/2/2022	3:25:00 PM	36.7	162.8	4.4	165.1	4.1
9/2/2022	3:30:00 PM	47.1	182.4	7	181.7	6.7
9/2/2022	3:35:00 PM	44.9	245.9	3.7	246.2	3.3
9/2/2022	3:40:00 PM	44.4	180	5.6	179.7	5.3
9/2/2022	3:45:00 PM	49	181.7	4.7	187.7	4.4
9/2/2022	3:50:00 PM	42.2	171.2	4.5	175.2	4
9/2/2022	3:55:00 PM	43.7	163.1	5.5	161.1	5.1

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	4:00:00 PM	51.1	157.4	6.1	156.9	5.9
9/2/2022	4:05:00 PM	45.7	174.6	7.5	176.3	7
9/2/2022	4:10:00 PM	50	152.2	5.4	150.5	5.2
9/2/2022	4:15:00 PM	58.1	149.2	6.3	148.6	6
9/2/2022	4:20:00 PM	53.9	171	5.2	171.8	4.9
9/2/2022	4:25:00 PM	57.4	207.6	5.1	208.6	4.6
9/2/2022	4:30:00 PM	56.6	183.5	7.5	183.2	7.2
9/2/2022	4:35:00 PM	48.7	168.1	8.1	170	7.9
9/2/2022	4:40:00 PM	54.2	184.5	7.7	184.9	7.5
9/2/2022	4:45:00 PM	51.3	156	5.7	152.6	5.5
9/2/2022	4:50:00 PM	44.4	146.8	6.3	143.4	6.1
9/2/2022	4:55:00 PM	47.3	154.7	6.3	150.4	5.8
9/2/2022	5:00:00 PM	40.5	149.2	6.1	149.8	5.8
9/2/2022	5:05:00 PM	37	163.5	3.2	157	2.8
9/2/2022	5:10:00 PM	42.1	115.8	4	114.1	3.8
9/2/2022	5:15:00 PM	36.4	114.7	3.8	116.8	3.6
9/2/2022	5:20:00 PM	33.5	57.8	1.3	80.9	0.9
9/2/2022	5:25:00 PM	35.5	176	4.6	176	4.4
9/2/2022	5:30:00 PM	29.5	173.3	5.7	172.5	5.6
9/2/2022	5:35:00 PM	32.2	129.4	4.3	131.5	3.9
9/2/2022	5:40:00 PM	35.6	93.9	2.8	94.4	2.7
9/2/2022	5:45:00 PM	27.9	84.3	2.8	82.7	2.7
9/2/2022	5:50:00 PM	33.2	61.1	3.9	58.5	3.7
9/2/2022	5:55:00 PM	36.2	45.3	2.2	30	1.3
9/2/2022	6:00:00 PM	27.8	289.9	2	293.7	1.8
9/2/2022	6:05:00 PM	31.6	6.7	3.1	30.5	2.8
9/2/2022	6:10:00 PM	34.7	9.1	3.1	8.2	3
9/2/2022	6:15:00 PM	28.7	312.6	2.8	307.8	2.5
9/2/2022	6:20:00 PM	34	332.2	6.5	332.9	6.4
9/2/2022	6:25:00 PM	35.8	358	7.6	357.5	7.3
9/2/2022	6:30:00 PM	33.3	2.6	6.8	3.3	6.5
9/2/2022	6:35:00 PM	44.5	354.9	9.3	354.7	9
9/2/2022	6:40:00 PM	53.8	352.3	11.4	352.3	11.1
9/2/2022	6:45:00 PM	66.5	354.1	12.1	353.5	11.8
9/2/2022	6:50:00 PM	78.8	357.6	11.2	356.5	10.8
9/2/2022	6:55:00 PM	72.1	351.2	10.4	350.7	10.2
9/2/2022	7:00:00 PM	61.5	354.1	8.7	353.9	8.5
9/2/2022	7:05:00 PM	55.3	356.9	8.8	356.9	8.5
9/2/2022	7:10:00 PM	39.5	358.8	8.9	359.2	8.7
9/2/2022	7:15:00 PM	30.4	356.3	7.8	356	7.5
9/2/2022	7:20:00 PM	24.9	5.1	9.6	4.9	9.2
9/2/2022	7:25:00 PM	11.4	348.9	8.2	348	7.9
9/2/2022	7:30:00 PM	8.3	7.3	9.7	7.3	9.4
9/2/2022	7:35:00 PM	12.2	17	12.2	17.2	11.9
9/2/2022	7:40:00 PM	14.7	29.5	12.5	30	12.2
9/2/2022	7:45:00 PM	29.1	10.8	10.5	11.9	10
9/2/2022	7:50:00 PM	54.4	353.1	9.4	353.6	9
9/2/2022	7:55:00 PM	54.2	328.5	9	328.8	8.7

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
9/2/2022	8:00:00 PM	49.1	303.4	7.9	303.8	7.8
9/2/2022	8:05:00 PM	45.6	345.1	3.9	340.2	3.4
9/2/2022	8:10:00 PM	35.8	48.7	5.6	51.9	5.4
9/2/2022	8:15:00 PM	32	68.3	5.2	65.2	5.1
9/2/2022	8:20:00 PM	44.2	80.4	3.8	76.8	3.7
9/2/2022	8:25:00 PM	43.4	84.2	2.9	81.9	2.7
9/2/2022	8:30:00 PM	39.9	77.2	3.9	73.6	3.5
9/2/2022	8:35:00 PM	41.4	32.7	2.5	39.9	2.2
9/2/2022	8:40:00 PM	36.7	47.8	4.9	47	4.8
9/2/2022	8:45:00 PM	31.7	46.5	6	45.8	5.9
9/2/2022	8:50:00 PM	32.6	19.7	4.5	21.3	4.4
9/2/2022	8:55:00 PM	25.7	347.4	4.3	347.2	4.2
9/2/2022	9:00:00 PM	19.2	9.1	4.6	10.4	4.5
9/2/2022	9:05:00 PM	20.2	16.6	7.4	16.6	7.3
9/2/2022	9:10:00 PM	13.2	13.1	7.9	13.6	7.8
9/2/2022	9:15:00 PM	5.5	0.9	4.7	2.1	4.5
9/2/2022	9:20:00 PM	11.6	36	2.7	34.4	2.4
9/2/2022	9:25:00 PM	13.4	48.8	2.7	44.5	2.5
9/2/2022	9:30:00 PM	9.4	80.6	2.3	79.6	2.2
9/2/2022	9:35:00 PM	13.8	59.2	4.9	58.9	4.7
9/2/2022	9:40:00 PM	14	31.4	6.4	32.2	6.2
9/2/2022	9:45:00 PM	9.8	32.3	6.7	34.2	6.5
9/2/2022	9:50:00 PM	13.9	48.9	5.8	48.5	5.7
9/2/2022	9:55:00 PM	20.1	60.5	4.9	58.9	4.8
9/2/2022	10:00:00 PM	16.2	53	5.2	51.2	5
9/2/2022	10:05:00 PM	15	25	5.6	26.1	5.4
9/2/2022	10:10:00 PM	19	25.4	6.4	25.9	6.1
9/2/2022	10:15:00 PM	15	29	6.4	29.6	6.2
9/2/2022	10:20:00 PM	10.2	26.1	6.5	26.5	6.3
9/2/2022	10:25:00 PM	14.9	21.5	5.5	20.9	5.4
9/2/2022	10:30:00 PM	17.9	18.4	4.6	18.5	4.5
9/2/2022	10:35:00 PM	13.9	9.4	4.8	10.8	4.6
9/2/2022	10:40:00 PM	20	352.2	4.9	351.8	4.7
9/2/2022	10:45:00 PM	22.8	4.5	5.6	3.5	5.4
9/2/2022	10:50:00 PM	18.7	10	5	11.7	4.8
9/2/2022	10:55:00 PM	19.8	2.9	4.9	2.6	4.8
9/2/2022	11:00:00 PM	21.4	1.7	4.6	1.6	4.5
9/2/2022	11:05:00 PM	17.7	356.5	4.4	356.2	4.3
9/2/2022	11:10:00 PM	22.7	12.5	2.6	13	2.5
9/2/2022	11:15:00 PM	24.6	340	0.9	326.8	0.8
9/2/2022	11:20:00 PM	19.5	305.4	1.7	305.8	1.6
9/2/2022	11:25:00 PM	19.7	293.7	2	291	2
9/2/2022	11:30:00 PM	21.4	259.2	1.4	257.8	1.4
9/2/2022	11:35:00 PM	17	237.4	2.9	236.4	2.8
9/2/2022	11:40:00 PM	18.6	263.3	2.4	263.4	2.3
9/2/2022	11:45:00 PM	18.3	242.3	1.8	247.1	1.6
9/2/2022	11:50:00 PM	12.8	212.3	1.7	202.6	1.6
9/2/2022	11:55:00 PM	16.3	235.2	0.9	236	0.8

Site: Dysart						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed</u> <u>(MPH)</u>
	Average	206.7	329	4.2	8.5	0.3
	Max	3996.9	358.8	12.5	359.2	12.2
	Max Hour	379001	12424.33415	5.303559693	12404.69484	5.237909287
	Min	5.5	0.9	0.3	0.6	0.3
	Count	288	288	288	288	288
	Total	59543.7	54968.9	1228.1	54018.6	1153.7
	Date Printed:	9/30/2024 11:13				

Site: West 43rd Avenue						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	12:00:00 AM	51.2	255.5	3.1	255.7	3.1
7/21/2023	12:05:00 AM	52.3	258.6	2.2	258.1	2.2
7/21/2023	12:10:00 AM	52.1	287	1.1	285.8	1.1
7/21/2023	12:15:00 AM	51.1	287.6	1.1	287.5	1.1
7/21/2023	12:20:00 AM	50.4	255.8	1.3	256.3	1.2
7/21/2023	12:25:00 AM	45	259.5	1.6	260	1.6
7/21/2023	12:30:00 AM	40.4	252.6	1.5	250.6	1.5
7/21/2023	12:35:00 AM	42.1	301.5	0	305.1	0.6
7/21/2023	12:40:00 AM	41.1	325.8	1.8	326.6	1.8
7/21/2023	12:45:00 AM	40	7.9	2	8.3	1.9
7/21/2023	12:50:00 AM	40.4	11.2	1.7	12.5	1.6
7/21/2023	12:55:00 AM	44.1	334	1.7	334.3	1.7
7/21/2023	1:00:00 AM	47.6	343.3	2.4	343.3	2.4
7/21/2023	1:05:00 AM	48	331.7	2.6	331.3	2.6
7/21/2023	1:10:00 AM	49.2	331	2.9	330.9	2.9
7/21/2023	1:15:00 AM	52	316.5	3	316.7	3
7/21/2023	1:20:00 AM	55	301.3	3.1	301.2	3.1
7/21/2023	1:25:00 AM	56.4	295.1	2.8	295.2	2.8
7/21/2023	1:30:00 AM	57.4	291.5	3	291.4	3
7/21/2023	1:35:00 AM	57.7	281.9	3.5	282.1	3.5
7/21/2023	1:40:00 AM	56.8	282.2	4.3	282.3	4.2
7/21/2023	1:45:00 AM	54.4	278.8	3.7	279	3.7
7/21/2023	1:50:00 AM	50.8	265.1	2.7	266.4	2.7
7/21/2023	1:55:00 AM	45.2	233.1	2.1	233.3	2
7/21/2023	2:00:00 AM	49.9	218.9	1.8	219.1	1.8
7/21/2023	2:05:00 AM	70.6	227.9	2.9	228.8	2.9
7/21/2023	2:10:00 AM	74.3	238.6	3.4	238.7	3.4
7/21/2023	2:15:00 AM	62.1	234.3	3.7	234.3	3.7
7/21/2023	2:20:00 AM	53.2	240	3.1	240.3	3.1
7/21/2023	2:25:00 AM	49.2	240	2.6	240.3	2.5
7/21/2023	2:30:00 AM	56.4	248.5	2.1	248.8	2.1
7/21/2023	2:35:00 AM	70.9	232.4	1.9	233	1.8
7/21/2023	2:40:00 AM	86.3	198	2.1	199.6	2
7/21/2023	2:45:00 AM	85.6	195.2	1.3	194.3	1.3
7/21/2023	2:50:00 AM	79.3	176.6	1	178.2	0.9
7/21/2023	2:55:00 AM	71.7	170	1	171.7	0.9
7/21/2023	3:00:00 AM	64.1	227.6	1.3	228.9	1.3
7/21/2023	3:05:00 AM	56.5	244	2.3	243.5	2.2
7/21/2023	3:10:00 AM	60	249.8	3.3	249.9	3.2
7/21/2023	3:15:00 AM	76.4	260.3	3.7	260.5	3.7
7/21/2023	3:20:00 AM	82.8	262.4	4.2	262.5	4.2
7/21/2023	3:25:00 AM	74.2	260.8	4.3	260.8	4.3
7/21/2023	3:30:00 AM	61.9	262.4	4.4	262.6	4.4
7/21/2023	3:35:00 AM	54.1	256.6	3.7	256.7	3.6
7/21/2023	3:40:00 AM	54.9	242	2.5	242.7	2.5
7/21/2023	3:45:00 AM	57.4	201.3	0	204.3	0.7
7/21/2023	3:50:00 AM	68.9	151.5	0	157.7	0.4
7/21/2023	3:55:00 AM	100.1	202.4	0	192.9	0.4
7/21/2023	4:00:00 AM	106.3	44.1	1.7	43	1.6
7/21/2023	4:05:00 AM	104.1	37.9	2.7	37.6	2.7
7/21/2023	4:10:00 AM	105	50.6	3.1	50.7	3
7/21/2023	4:15:00 AM	107.4	27.2	1.8	33.5	1.7
7/21/2023	4:20:00 AM	102.2	286	2.9	277.4	2.7

Site: West 43rd Avenue						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	4:25:00 AM	98.7	240	6.3	240.1	6.1
7/21/2023	4:30:00 AM	120.5	241.6	13.3	241.5	13.1
7/21/2023	4:35:00 AM	192.6	241.1	11.4	241.3	11.3
7/21/2023	4:40:00 AM	285.3	243.2	9.2	243	9.1
7/21/2023	4:45:00 AM	330.3	243.6	9.2	243.5	9
7/21/2023	4:50:00 AM	343.1	252.5	12.7	252.7	12.5
7/21/2023	4:55:00 AM	359	256.1	14.2	256.3	14
7/21/2023	5:00:00 AM	388	253.2	16.7	253.1	16.5
7/21/2023	5:05:00 AM	439.9	257.4	13.3	257.4	13
7/21/2023	5:10:00 AM	456.6	262.8	12.9	263.2	12.8
7/21/2023	5:15:00 AM	445.8	269.6	14.1	269.8	13.9
7/21/2023	5:20:00 AM	424.9	272.8	13.5	272.8	13.4
7/21/2023	5:25:00 AM	398.4	271.7	14.1	272	13.9
7/21/2023	5:30:00 AM	383.8	269.2	14.9	269.5	14.8
7/21/2023	5:35:00 AM	376.8	267.2	14.5	267.5	14.3
7/21/2023	5:40:00 AM	378.4	268.7	14.4	268.8	14.2
7/21/2023	5:45:00 AM	377.4	268.8	14.3	269.2	14.2
7/21/2023	5:50:00 AM	374.2	269.1	14.9	269.5	14.8
7/21/2023	5:55:00 AM	372.6	268.8	15.7	269	15.6
7/21/2023	6:00:00 AM	373	263.6	15.7	263.9	15.5
7/21/2023	6:05:00 AM	394.8	265.9	16	266.1	15.9
7/21/2023	6:10:00 AM	425.4	263.3	17	263.5	16.8
7/21/2023	6:15:00 AM	476.6	268.2	17.8	268.3	17.6
7/21/2023	6:20:00 AM	509.8	267.1	16	267.6	15.8
7/21/2023	6:25:00 AM	495.2	270.1	14.5	270.3	14.3
7/21/2023	6:30:00 AM	463	270.6	14.4	271	14.3
7/21/2023	6:35:00 AM	425.7	264.2	12.3	264.1	12
7/21/2023	6:40:00 AM	393.9	274.9	12.9	275	12.8
7/21/2023	6:45:00 AM	370.7	267	11.7	267.3	11.5
7/21/2023	6:50:00 AM	353	270.9	13	271	12.9
7/21/2023	6:55:00 AM	336.3	268.2	13.3	268.3	13.1
7/21/2023	7:00:00 AM	320.1	270.7	13	270.8	12.9
7/21/2023	7:05:00 AM	311.2	271.5	13.4	271.8	13.3
7/21/2023	7:10:00 AM	300.8	272.9	14.3	273.3	14.2
7/21/2023	7:15:00 AM	291.7	274.5	14.4	274.7	14.3
7/21/2023	7:20:00 AM	284.7	277.3	12.8	277.5	12.6
7/21/2023	7:25:00 AM	273.5	273.3	14	273.8	13.8
7/21/2023	7:30:00 AM	261.9	273.7	14	273.7	13.8
7/21/2023	7:35:00 AM	252.2	274	15.1	274.4	14.9
7/21/2023	7:40:00 AM	240.2	273.2	13.7	273.7	13.6
7/21/2023	7:45:00 AM	224.5	272.5	13	272.2	12.8
7/21/2023	7:50:00 AM	212.2	279.1	13.2	279	13
7/21/2023	7:55:00 AM	203.8	274.4	13.2	274.3	13.1
7/21/2023	8:00:00 AM	198.8	279.8	12.5	279.6	12.4
7/21/2023	8:05:00 AM	190.1	279.2	12.3	279.6	12.1
7/21/2023	8:10:00 AM	181.7	286.9	11.2	286.2	11.1
7/21/2023	8:15:00 AM	176.5	288.7	14.5	288.8	14.3
7/21/2023	8:20:00 AM	170.2	289.6	12.6	289.5	12.5
7/21/2023	8:25:00 AM	169.7	294.2	14.1	294.4	14
7/21/2023	8:30:00 AM	169.1	292	11.8	291.1	11.6
7/21/2023	8:35:00 AM	167	288.2	13	288.3	12.8
7/21/2023	8:40:00 AM	161.6	288.7	12.9	288.8	12.7
7/21/2023	8:45:00 AM	156.1	279	11.3	279.5	11.1

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:50:00 AM	146.1	276	12.5	276	12.4
7/21/2023	8:55:00 AM	135.5	277.8	12.5	277.8	12.4
7/21/2023	9:00:00 AM	130.9	272	12.5	272.5	12.4
7/21/2023	9:05:00 AM	128	273.3	10.9	273.7	10.8
7/21/2023	9:10:00 AM	125.7	265.6	8.9	266.7	8.6
7/21/2023	9:15:00 AM	120.9	258.8	8.4	258.6	8.2
7/21/2023	9:20:00 AM	118.5	257.3	8.2	257.1	8
7/21/2023	9:25:00 AM	121.6	260.1	6.2	258.9	5.9
7/21/2023	9:30:00 AM	122.4	272.8	8.4	273.6	8.2
7/21/2023	9:35:00 AM	123.9	240.2	7.2	240.4	7.1
7/21/2023	9:40:00 AM	120.1	242.8	8.6	242.9	8.3
7/21/2023	9:45:00 AM	132.3	255.1	8.4	257	7.8
7/21/2023	9:50:00 AM	144.4	270.6	8.2	271.2	8
7/21/2023	9:55:00 AM	141.7	239.4	6.1	239.8	5.7
7/21/2023	10:00:00 AM	132.7	224.2	5.7	233.4	5.3
7/21/2023	10:05:00 AM	141.1	258.4	8.7	258.4	8.5
7/21/2023	10:10:00 AM	148.2	253	5.5	250	5
7/21/2023	10:15:00 AM	146.4	264.6	5.5	264.8	5.3
7/21/2023	10:20:00 AM	142.4	266	5.2	267.5	4.9
7/21/2023	10:25:00 AM	136.5	272.2	5.8	273.3	5.5
7/21/2023	10:30:00 AM	132.4	293.6	5	292.4	4.9
7/21/2023	10:35:00 AM	128.6	274.2	5.4	274.3	5
7/21/2023	10:40:00 AM	125.9	236.4	5.1	233.1	4.7
7/21/2023	10:45:00 AM	126.2	242.3	3.5	254	2.7
7/21/2023	10:50:00 AM	128.1	275.9	6.6	276.6	6.5
7/21/2023	10:55:00 AM	131.5	279	8.6	278.8	8.3
7/21/2023	11:00:00 AM	132.5	263.2	7.2	263.6	7
7/21/2023	11:05:00 AM	130.3	233.7	3.7	243.2	3.2
7/21/2023	11:10:00 AM	127.2	207	2.1	214.6	1.5
7/21/2023	11:15:00 AM	125.4	244.7	3.4	249.2	3
7/21/2023	11:20:00 AM	129.8	213.5	3.9	225.1	2.2
7/21/2023	11:25:00 AM	129.2	273.4	3.3	275.1	0.9
7/21/2023	11:30:00 AM	121.8	203.5	4.2	191	3.3
7/21/2023	11:35:00 AM	126.4	257.4	6.9	254.3	6.3
7/21/2023	11:40:00 AM	131.4	224.7	4.9	220.4	3.9
7/21/2023	11:45:00 AM	133.5	208.1	5.3	203.9	4.4
7/21/2023	11:50:00 AM	133.7	283.7	6.6	283.9	6.4
7/21/2023	11:55:00 AM	129	309.1	4.1	309.2	4
7/21/2023	12:00:00 PM	125.3	339.4	2.4	321	1.8
7/21/2023	12:05:00 PM	120.4	175.5	5.3	175.5	5
7/21/2023	12:10:00 PM	118.5	166.5	4.7	170.7	4.2
7/21/2023	12:15:00 PM	120.8	241.9	2.8	239.2	2.4
7/21/2023	12:20:00 PM	121.2	254.4	5.2	252.6	3.5
7/21/2023	12:25:00 PM	122.6	191.7	5.7	190.9	5.4
7/21/2023	12:30:00 PM	123.4	169.6	4.9	171.6	4.7
7/21/2023	12:35:00 PM	122.1	92	3.7	91.8	3.5
7/21/2023	12:40:00 PM	124.9	176.9	3.7	188.7	3.2
7/21/2023	12:45:00 PM	130.8	241.6	7.3	239.2	7
7/21/2023	12:50:00 PM	131	200.9	2.7	223.5	1.1
7/21/2023	12:55:00 PM	133	264.6	3.5	256.2	2.6
7/21/2023	1:00:00 PM	130.2	257.9	9	258.6	8.8
7/21/2023	1:05:00 PM	121	252.7	6.8	252	6.4
7/21/2023	1:10:00 PM	115.9	268	8.6	268	8.2

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	116.6	287.2	9.5	286.3	8.9
7/21/2023	1:20:00 PM	115.2	251.1	7	258.1	6.5
7/21/2023	1:25:00 PM	112.5	261.9	7.8	265	7.5
7/21/2023	1:30:00 PM	98.5	258.5	6.2	257.4	6
7/21/2023	1:35:00 PM	90.7	281.2	6.3	281.9	5.9
7/21/2023	1:40:00 PM	85.8	238.6	10	238.7	9.7
7/21/2023	1:45:00 PM	85.7	273	9.5	271.9	9.1
7/21/2023	1:50:00 PM	90.3	261.8	9.8	263	9.5
7/21/2023	1:55:00 PM	88	264.4	10.1	265.6	9.8
7/21/2023	2:00:00 PM	85	271.5	11.8	272.6	11.2
7/21/2023	2:05:00 PM	78.5	265.3	13.8	265.2	13.6
7/21/2023	2:10:00 PM	83.4	261	9.4	263.1	9
7/21/2023	2:15:00 PM	91.6	262.2	9.3	262.5	8.6
7/21/2023	2:20:00 PM	96.9	276	12.6	276.8	12.4
7/21/2023	2:25:00 PM	97.7	255.4	10.6	252.2	9.6
7/21/2023	2:30:00 PM	92.7	263.6	10.8	263.9	10.5
7/21/2023	2:35:00 PM	91.9	263.7	9.3	264.3	9.1
7/21/2023	2:40:00 PM	88	270.7	12	271.5	11.8
7/21/2023	2:45:00 PM	81.5	262.1	10.1	262.5	9.8
7/21/2023	2:50:00 PM	81.4	261.9	10.7	260.8	10.3
7/21/2023	2:55:00 PM	80.8	260.3	11.9	260.3	11.7
7/21/2023	3:00:00 PM	80.5	267	11.5	267.4	11.2
7/21/2023	3:05:00 PM	75.4	268.2	11.2	268	10.9
7/21/2023	3:10:00 PM	78.1	254.6	9.4	254.1	9
7/21/2023	3:15:00 PM	84.1	267.2	13.4	268.3	13
7/21/2023	3:20:00 PM	81.7	259.1	10.4	260.5	10
7/21/2023	3:25:00 PM	78.7	274.9	13.5	274.3	13.2
7/21/2023	3:30:00 PM	70.1	259.1	11.7	259.6	11.3
7/21/2023	3:35:00 PM	68.5	258.3	9.8	257.3	9.3
7/21/2023	3:40:00 PM	60.4	270.9	12.9	270.8	12.4
7/21/2023	3:45:00 PM	52.1	256.4	12.6	256.2	12.4
7/21/2023	3:50:00 PM	53.1	263.8	11.3	265.7	10.9
7/21/2023	3:55:00 PM	51.2	257.2	11.2	257.3	10.7
7/21/2023	4:00:00 PM	49	256.7	13.4	256.8	13
7/21/2023	4:05:00 PM	53.6	243.5	13.6	243.5	13.4
7/21/2023	4:10:00 PM	66.4	254.5	13.3	255.8	12.8
7/21/2023	4:15:00 PM	73.6	261.8	13	262.2	12.7
7/21/2023	4:20:00 PM	74.3	259.8	14.2	260.5	14
7/21/2023	4:25:00 PM	65.7	247.1	13.2	247.5	13
7/21/2023	4:30:00 PM	59	261.2	12.3	261.3	12
7/21/2023	4:35:00 PM	53.8	265.4	12.6	265.6	12.4
7/21/2023	4:40:00 PM	59.1	275.8	15.1	276.3	15
7/21/2023	4:45:00 PM	57.1	262.9	13.4	262.5	13.2
7/21/2023	4:50:00 PM	56.3	266	12.2	265.9	11.9
7/21/2023	4:55:00 PM	55.3	276.2	13.2	276.1	13
7/21/2023	5:00:00 PM	42.5	268.5	12.3	268.5	12.1
7/21/2023	5:05:00 PM	28.6	266.4	12.6	267.4	12.4
7/21/2023	5:10:00 PM	31.9	265.5	13.2	265.6	13
7/21/2023	5:15:00 PM	39.7	255.2	12.3	254.8	12
7/21/2023	5:20:00 PM	47.5	254.3	11.9	254.1	11.8
7/21/2023	5:25:00 PM	55.4	257.4	11.7	257.4	11.5
7/21/2023	5:30:00 PM	58.4	255.8	9.8	256.5	9.6
7/21/2023	5:35:00 PM	56.3	249	10.5	248.7	10.3

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	5:40:00 PM	55.5	253.2	10	252.4	9.9
7/21/2023	5:45:00 PM	59.8	253	10.9	252.8	10.8
7/21/2023	5:50:00 PM	63.2	258.4	11.5	258.7	11.4
7/21/2023	5:55:00 PM	67.8	251.1	10.9	251.4	10.7
7/21/2023	6:00:00 PM	67.8	250.1	10.9	249.8	10.7
7/21/2023	6:05:00 PM	64.7	258.3	9.7	258.7	9.5
7/21/2023	6:10:00 PM	59.2	254.6	9.7	254.7	9.6
7/21/2023	6:15:00 PM	54.2	254.5	9.1	254.3	9
7/21/2023	6:20:00 PM	49.9	255.1	8.9	254.9	8.8
7/21/2023	6:25:00 PM	46.5	257.3	9.5	257.6	9.3
7/21/2023	6:30:00 PM	44.9	252.6	10.1	251.9	10
7/21/2023	6:35:00 PM	42	254.7	9.6	254.8	9.4
7/21/2023	6:40:00 PM	41.5	253.7	9	253.3	8.8
7/21/2023	6:45:00 PM	41.8	252.2	7.1	252.5	6.9
7/21/2023	6:50:00 PM	43.9	262.5	8	262.6	7.8
7/21/2023	6:55:00 PM	46.6	270.3	7.7	270.7	7.6
7/21/2023	7:00:00 PM	46.5	272.1	7.8	272.3	7.8
7/21/2023	7:05:00 PM	44.5	284.9	8.2	285.4	8
7/21/2023	7:10:00 PM	45.1	308.8	8.4	307.7	8.3
7/21/2023	7:15:00 PM	46.3	332.9	9	333.2	8.9
7/21/2023	7:20:00 PM	48.3	346.2	9.4	346.1	9.1
7/21/2023	7:25:00 PM	56.3	346.5	13	346.9	12.8
7/21/2023	7:30:00 PM	70.9	353.9	9.4	354.8	9.1
7/21/2023	7:35:00 PM	81.8	349.4	10.6	349.3	10.4
7/21/2023	7:40:00 PM	84.4	358.1	7.8	357.8	7.5
7/21/2023	7:45:00 PM	83.4	349.9	6.1	350.6	6
7/21/2023	7:50:00 PM	81.7	350	5.2	350.2	5
7/21/2023	7:55:00 PM	77.9	351.4	4.4	352.4	4.3
7/21/2023	8:00:00 PM	74.5	335.4	4.4	337.2	4.3
7/21/2023	8:05:00 PM	70.4	9	5.2	6.6	4.7
7/21/2023	8:10:00 PM	65.4	358.6	5.1	358.7	4.9
7/21/2023	8:15:00 PM	64.2	0.3	3.5	359.5	3.4
7/21/2023	8:20:00 PM	61.1	4.3	4.5	4.3	4.4
7/21/2023	8:25:00 PM	60.1	5	5.2	4.6	5.1
7/21/2023	8:30:00 PM	60	21.1	7.9	21.3	7.8
7/21/2023	8:35:00 PM	58.7	46.3	13.4	47.1	13.1
7/21/2023	8:40:00 PM	71.4	45.5	15.1	45.2	15
7/21/2023	8:45:00 PM	159.7	44.7	13.6	44.6	13.4
7/21/2023	8:50:00 PM	313.6	53.3	12.6	52.9	12.4
7/21/2023	8:55:00 PM	364.6	73.1	9.1	72.3	9
7/21/2023	9:00:00 PM	364.6	70.3	9.1	70	8.9
7/21/2023	9:05:00 PM	345.4	69.2	10.7	69.5	10.6
7/21/2023	9:10:00 PM	319	61.8	8.3	62.3	8.2
7/21/2023	9:15:00 PM	290.2	65.6	8.3	65.7	8.2
7/21/2023	9:20:00 PM	258.9	70.6	7.8	70.6	7.7
7/21/2023	9:25:00 PM	226.8	72.3	6.1	72.5	5.9
7/21/2023	9:30:00 PM	197.5	86.4	6.3	85.7	6.1
7/21/2023	9:35:00 PM	170.2	86.6	6.5	86.9	6.3
7/21/2023	9:40:00 PM	149.4	81.3	6.3	81.7	6.2
7/21/2023	9:45:00 PM	135.1	83.4	6.2	83.8	6.1
7/21/2023	9:50:00 PM	125.3	69.4	6.6	69.7	6.5
7/21/2023	9:55:00 PM	119.1	62.6	7	62.8	6.9
7/21/2023	10:00:00 PM	116.3	72.3	6.3	72	6.3

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	113.4	82	6.5	82	6.4
7/21/2023	10:10:00 PM	107.9	106.2	5.4	105.1	5.2
7/21/2023	10:15:00 PM	103.8	123.4	5.3	123.2	5.2
7/21/2023	10:20:00 PM	98.2	116.2	5.8	116.3	5.6
7/21/2023	10:25:00 PM	91.7	134.3	6.4	134.2	6.1
7/21/2023	10:30:00 PM	83.3	148.1	8.6	147.8	8.4
7/21/2023	10:35:00 PM	72.6	145.8	10.1	145.6	10
7/21/2023	10:40:00 PM	64.9	145.1	10.9	144	10.8
7/21/2023	10:45:00 PM	83.2	156.7	21.1	156.2	20.5
7/21/2023	10:50:00 PM	217.6	159.5	18.6	159.6	18.2
7/21/2023	10:55:00 PM	815.1	150.9	15.6	151	15.3
7/21/2023	11:00:00 PM	1711.9	155.6	16.8	155.9	16.4
7/21/2023	11:05:00 PM	2056.4	154	22.3	154	21.8
7/21/2023	11:10:00 PM	2443.5	156.1	21.3	155.5	20.9
7/21/2023	11:15:00 PM	2777.9	158	21.1	158.2	20.6
7/21/2023	11:20:00 PM	2825.8	162.3	21.2	162.3	20.8
7/21/2023	11:25:00 PM	2780.4	162.6	18.5	162.7	18.1
7/21/2023	11:30:00 PM	2463.4	176.9	19.2	176.5	18.7
7/21/2023	11:35:00 PM	2053.4	181.2	15.2	180.3	14.6
7/21/2023	11:40:00 PM	1650.7	180.9	18.4	179.9	17.9
7/21/2023	11:45:00 PM	1360.7	180.7	18.2	180.1	17.7
7/21/2023	11:50:00 PM	1151.2	179.1	18.2	178	17.8
7/21/2023	11:55:00 PM	995.8	182.8	16.9	181.9	16.4
Average		216.9	261	8.8	259.3	5.4
Max		2825.8	358.6	22.3	359.5	21.8
Max Hour		171535.1092	5820.927452	23.87581446	5669.745795	23.59950784
Min		28.6	0.3	0	4.3	0.4
Count		288	288	288	288	288
Total		62481.9	67031.4	2557.8	67459.3	2490.6

Site: Zuni Hills						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	12:00:00 AM	12.8	<	1.4	<	1.3
7/21/2023	12:05:00 AM	32.4	<	0.4	<	0.4
7/21/2023	12:10:00 AM	10.2	<	1.7	<	1.6
7/21/2023	12:15:00 AM	23.7	<	2.1	<	2
7/21/2023	12:20:00 AM	8.9	<	2.1	<	2
7/21/2023	12:25:00 AM	3.4	<	2.4	<	2.3
7/21/2023	12:30:00 AM	12.4	<	2.2	<	2
7/21/2023	12:35:00 AM	11.7	<	2.6	<	2.5
7/21/2023	12:40:00 AM	11.1	<	3.3	<	3.2
7/21/2023	12:45:00 AM	18.5	<	2.4	<	2.4
7/21/2023	12:50:00 AM	12.2	<	3	<	3
7/21/2023	12:55:00 AM	12	<	2.8	<	2.8
7/21/2023	1:00:00 AM	11.4	<	2.4	<	2.3
7/21/2023	1:05:00 AM	11.4	<	1.6	<	1.5
7/21/2023	1:10:00 AM	45.9	<	0	<	0
7/21/2023	1:15:00 AM	24.2	<	0.1	<	0
7/21/2023	1:20:00 AM	15.5	<	1.1	<	1
7/21/2023	1:25:00 AM	19.3	<	0.9	<	0.9
7/21/2023	1:30:00 AM	31.7	<	1	<	1
7/21/2023	1:35:00 AM	58.4	<	0.9	<	0.5
7/21/2023	1:40:00 AM	13.6	<	0.3	<	0.3
7/21/2023	1:45:00 AM	31.4	<	1.2	<	1.2
7/21/2023	1:50:00 AM	25.8	<	0.2	<	0.2
7/21/2023	1:55:00 AM	21.3	<	1.5	<	1.5
7/21/2023	2:00:00 AM	42.1	<	2.1	<	1.8
7/21/2023	2:05:00 AM	34.4	<	2.3	<	2.2
7/21/2023	2:10:00 AM	29.2	<	2.5	<	2.4
7/21/2023	2:15:00 AM	14.1	<	2.7	<	2.7
7/21/2023	2:20:00 AM	9.2	<	3	<	3
7/21/2023	2:25:00 AM	23.3	<	2.8	<	2.8
7/21/2023	2:30:00 AM	20.7	<	4.1	<	4.1
7/21/2023	2:35:00 AM	35.1	<	5.4	<	5.3
7/21/2023	2:40:00 AM	23.5	<	5	<	4.9
7/21/2023	2:45:00 AM	9	<	2.7	<	2.7
7/21/2023	2:50:00 AM	7.4	<	0.7	<	0.7
7/21/2023	2:55:00 AM	17.4	<	0.9	<	0.9
7/21/2023	3:00:00 AM	29.1	<	0.6	<	0.6
7/21/2023	3:05:00 AM	83	<	1.6	<	1.5
7/21/2023	3:10:00 AM	48.4	<	2.7	<	2.6
7/21/2023	3:15:00 AM	-1.2	<	4.2	<	4
7/21/2023	3:20:00 AM	-15.2	<	4.2	<	4.1
7/21/2023	3:25:00 AM	-3.5	<	5.3	<	5.3
7/21/2023	3:30:00 AM	11	<	5.4	<	5.4
7/21/2023	3:35:00 AM	21.7	<	5	<	5
7/21/2023	3:40:00 AM	35.7	<	4.1	<	4.1
7/21/2023	3:45:00 AM	22.6	<	3.8	<	3.8
7/21/2023	3:50:00 AM	28.9	<	2.9	<	2.9
7/21/2023	3:55:00 AM	32.9	<	4.3	<	4.3
7/21/2023	4:00:00 AM	47.1	<	5.9	<	5.8
7/21/2023	4:05:00 AM	48.8	<	4.8	<	4.7
7/21/2023	4:10:00 AM	59.4	<	5.2	<	5.1
7/21/2023	4:15:00 AM	50	<	5	<	4.9
7/21/2023	4:20:00 AM	40.2	<	3.8	<	3.7

Site: Zuni Hills						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	4:25:00 AM	45.8	<	4.5	<	4.3
7/21/2023	4:30:00 AM	45.1	<	6.4	<	6.3
7/21/2023	4:35:00 AM	49.9	<	14	<	13.8
7/21/2023	4:40:00 AM	62.7	<	9.1	<	9
7/21/2023	4:45:00 AM	54	<	6.3	<	6.2
7/21/2023	4:50:00 AM	55.9	<	7.4	<	7.2
7/21/2023	4:55:00 AM	70	<	2.8	<	2.6
7/21/2023	5:00:00 AM	67.7	<	2	<	1.9
7/21/2023	5:05:00 AM	75.8	<	4.4	<	4.3
7/21/2023	5:10:00 AM	84.2	<	1.7	<	1.7
7/21/2023	5:15:00 AM	82.8	<	2	<	1.8
7/21/2023	5:20:00 AM	131.6	<	2.8	<	2.7
7/21/2023	5:25:00 AM	139.5	<	4	<	2.1
7/21/2023	5:30:00 AM	72.5	<	1	<	0.8
7/21/2023	5:35:00 AM	82.7	<	1.3	<	1
7/21/2023	5:40:00 AM	160.6	<	4.6	<	4.4
7/21/2023	5:45:00 AM	265.2	<	6.1	<	5.9
7/21/2023	5:50:00 AM	277.8	<	4.9	<	4.7
7/21/2023	5:55:00 AM	246.6	<	2.8	<	2.6
7/21/2023	6:00:00 AM	238.6	<	2.9	<	2.4
7/21/2023	6:05:00 AM	246.9	<	2.7	<	2.2
7/21/2023	6:10:00 AM	288.3	<	0.5	<	0.4
7/21/2023	6:15:00 AM	280.5	<	1.1	<	1.1
7/21/2023	6:20:00 AM	296	<	2	<	1.9
7/21/2023	6:25:00 AM	307.3	<	2.1	<	2.1
7/21/2023	6:30:00 AM	353.6	<	2.5	<	2.5
7/21/2023	6:35:00 AM	358.1	<	2.9	<	2.8
7/21/2023	6:40:00 AM	324.7	<	3.4	<	3.3
7/21/2023	6:45:00 AM	230.7	<	4.2	<	4.2
7/21/2023	6:50:00 AM	229.8	<	3.8	<	3.6
7/21/2023	6:55:00 AM	246	<	1.2	<	0.5
7/21/2023	7:00:00 AM	316.6	<	1.9	<	0.8
7/21/2023	7:05:00 AM	318.5	<	4.2	<	3.6
7/21/2023	7:10:00 AM	342.4	<	10.3	<	10
7/21/2023	7:15:00 AM	323.8	<	7.9	<	7.7
7/21/2023	7:20:00 AM	306.8	<	11.7	<	11.4
7/21/2023	7:25:00 AM	291.2	<	10.5	<	10.3
7/21/2023	7:30:00 AM	285	<	10	<	9.8
7/21/2023	7:35:00 AM	283.2	<	14.6	<	14.5
7/21/2023	7:40:00 AM	278.4	<	10.8	<	10.7
7/21/2023	7:45:00 AM	274.9	<	12.4	<	12.2
7/21/2023	7:50:00 AM	261.9	<	9.8	<	9.6
7/21/2023	7:55:00 AM	252.5	<	7.9	<	7.4
7/21/2023	8:00:00 AM	261.7	<	4.7	<	4.6
7/21/2023	8:05:00 AM	264.2	<	5.8	<	5.2
7/21/2023	8:10:00 AM	251.2	<	3	<	2.8
7/21/2023	8:15:00 AM	246.8	<	4.6	<	4.3
7/21/2023	8:20:00 AM	272.8	<	7.9	<	7.5
7/21/2023	8:25:00 AM	274.3	<	4.5	<	4.2
7/21/2023	8:30:00 AM	277.4	<	9	<	8.7
7/21/2023	8:35:00 AM	291.7	<	8.1	<	7.8
7/21/2023	8:40:00 AM	293.6	<	7.6	<	7.4
7/21/2023	8:45:00 AM	284.3	<	8.2	<	7.9

Site: Zuni Hills						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	8:50:00 AM	277.9	<	7.1	<	6.9
7/21/2023	8:55:00 AM	270.2	<	7.7	<	7.5
7/21/2023	9:00:00 AM	265.7	<	7.6	<	7.4
7/21/2023	9:05:00 AM	262.6	<	8.5	<	8.4
7/21/2023	9:10:00 AM	256.6	<	7.7	<	7.5
7/21/2023	9:15:00 AM	255.7	<	8.1	<	7.9
7/21/2023	9:20:00 AM	250.3	<	7.8	<	7.5
7/21/2023	9:25:00 AM	250	<	8.6	<	8.4
7/21/2023	9:30:00 AM	259.2	<	7.5	<	7.3
7/21/2023	9:35:00 AM	230.9	<	4.8	<	4.2
7/21/2023	9:40:00 AM	222.7	<	6.8	<	6.5
7/21/2023	9:45:00 AM	213.4	<	6.7	<	6.3
7/21/2023	9:50:00 AM	222.9	<	7.6	<	7.3
7/21/2023	9:55:00 AM	214.3	<	6.4	<	6.2
7/21/2023	10:00:00 AM	195.4	<	7	<	6.2
7/21/2023	10:05:00 AM	214.5	<	7.5	<	7.4
7/21/2023	10:10:00 AM	207	<	8	<	7.7
7/21/2023	10:15:00 AM	183.8	<	5.6	<	5.1
7/21/2023	10:20:00 AM	203.1	<	8.2	<	7.9
7/21/2023	10:25:00 AM	208.8	<	7.5	<	7.3
7/21/2023	10:30:00 AM	196.4	<	8	<	7.3
7/21/2023	10:35:00 AM	194.5	<	6.6	<	6
7/21/2023	10:40:00 AM	186	<	6	<	5.9
7/21/2023	10:45:00 AM	184.7	<	7.4	<	7.1
7/21/2023	10:50:00 AM	202.2	<	7	<	6.9
7/21/2023	10:55:00 AM	179.3	<	6.8	<	6.5
7/21/2023	11:00:00 AM	167.2	<	5.1	<	4.9
7/21/2023	11:05:00 AM	170	<	7.3	<	7
7/21/2023	11:10:00 AM	179.4	<	4.5	<	4.1
7/21/2023	11:15:00 AM	202.9	<	7.9	<	7.6
7/21/2023	11:20:00 AM	186.1	<	7.5	<	7.3
7/21/2023	11:25:00 AM	189.5	<	8.6	<	8.3
7/21/2023	11:30:00 AM	179.2	<	8.6	<	8.4
7/21/2023	11:35:00 AM	183.7	<	7.1	<	6.7
7/21/2023	11:40:00 AM	168.4	<	5.9	<	4.7
7/21/2023	11:45:00 AM	140.8	<	5.6	<	5.4
7/21/2023	11:50:00 AM	134.5	<	5	<	4.3
7/21/2023	11:55:00 AM	163.7	<	5.4	<	4.7
7/21/2023	12:00:00 PM	140.9	<	8.3	<	7.9
7/21/2023	12:05:00 PM	155.2	<	6	<	4.3
7/21/2023	12:10:00 PM	145.3	<	3	<	2.5
7/21/2023	12:15:00 PM	166.5	<	6.1	<	5.3
7/21/2023	12:20:00 PM	155.9	<	8	<	7.7
7/21/2023	12:25:00 PM	141.3	<	8.6	<	8.5
7/21/2023	12:30:00 PM	150.4	<	6.8	<	6.6
7/21/2023	12:35:00 PM	158.3	<	5.3	<	4.4
7/21/2023	12:40:00 PM	166.2	<	4.5	<	4.2
7/21/2023	12:45:00 PM	158.7	<	7.4	<	7.1
7/21/2023	12:50:00 PM	149.7	<	5	<	4.3
7/21/2023	12:55:00 PM	155.6	<	4.2	<	3
7/21/2023	1:00:00 PM	168.5	<	4.8	<	4.6
7/21/2023	1:05:00 PM	149.9	<	5.4	<	5
7/21/2023	1:10:00 PM	140.6	<	3.8	<	3.5

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	1:15:00 PM	147.7	<	3.5	<	3.2
7/21/2023	1:20:00 PM	168.1	<	5.3	<	5.2
7/21/2023	1:25:00 PM	144.5	<	7.8	<	6.9
7/21/2023	1:30:00 PM	150.8	<	5	<	4.7
7/21/2023	1:35:00 PM	196.7	<	3.9	<	2.9
7/21/2023	1:40:00 PM	166.5	<	6.8	<	6.4
7/21/2023	1:45:00 PM	144.1	<	6.1	<	5.2
7/21/2023	1:50:00 PM	143.4	<	5.9	<	5.7
7/21/2023	1:55:00 PM	139.6	<	4.9	<	4.1
7/21/2023	2:00:00 PM	125.4	<	8.3	<	7.7
7/21/2023	2:05:00 PM	106.5	<	7.7	<	7.4
7/21/2023	2:10:00 PM	120.9	<	4.5	<	4.3
7/21/2023	2:15:00 PM	124.8	<	9.7	<	9.3
7/21/2023	2:20:00 PM	110.7	<	5.6	<	5.2
7/21/2023	2:25:00 PM	113.7	<	6.6	<	6.4
7/21/2023	2:30:00 PM	107	<	6.9	<	6.7
7/21/2023	2:35:00 PM	117.7	<	9	<	8.2
7/21/2023	2:40:00 PM	113.7	<	10.8	<	10.3
7/21/2023	2:45:00 PM	101.4	<	9	<	7.9
7/21/2023	2:50:00 PM	102.7	<	7	<	6.5
7/21/2023	2:55:00 PM	104	<	8.8	<	8.3
7/21/2023	3:00:00 PM	85.9	<	4.3	<	4.1
7/21/2023	3:05:00 PM	83.8	<	10.6	<	10.2
7/21/2023	3:10:00 PM	75.4	<	6.8	<	6.4
7/21/2023	3:15:00 PM	75	<	4.7	<	4.5
7/21/2023	3:20:00 PM	58.3	<	6.9	<	6.7
7/21/2023	3:25:00 PM	23.3	<	7.8	<	7.5
7/21/2023	3:30:00 PM	-3.8	<	6.4	<	5.8
7/21/2023	3:35:00 PM	14.3	<	7.5	<	6.7
7/21/2023	3:40:00 PM	1.3	<	7.6	<	7.1
7/21/2023	3:45:00 PM	12	<	11.9	<	11.4
7/21/2023	3:50:00 PM	37.6	<	8.3	<	8.1
7/21/2023	3:55:00 PM	23.7	<	11.4	<	11
7/21/2023	4:00:00 PM	30.9	<	8.3	<	8.1
7/21/2023	4:05:00 PM	30.5	<	11.2	<	10.8
7/21/2023	4:10:00 PM	40.3	<	8	<	7.9
7/21/2023	4:15:00 PM	31.1	<	7	<	6.7
7/21/2023	4:20:00 PM	28.7	<	10.1	<	9.6
7/21/2023	4:25:00 PM	37.7	<	7.6	<	7.3
7/21/2023	4:30:00 PM	47.8	<	8.8	<	8.3
7/21/2023	4:35:00 PM	39.1	<	10.8	<	10
7/21/2023	4:40:00 PM	67.9	<	10.2	<	10
7/21/2023	4:45:00 PM	178.1	<	8	<	7.4
7/21/2023	4:50:00 PM	123.8	<	8	<	7.7
7/21/2023	4:55:00 PM	70.4	<	8.5	<	8.2
7/21/2023	5:00:00 PM	50.6	<	8.2	<	7.9
7/21/2023	5:05:00 PM	44.2	<	10.1	<	9.8
7/21/2023	5:10:00 PM	34	<	10	<	9.5
7/21/2023	5:15:00 PM	31.6	<	9	<	8.9
7/21/2023	5:20:00 PM	34.7	<	7.6	<	7.5
7/21/2023	5:25:00 PM	40.6	<	6.8	<	6.6
7/21/2023	5:30:00 PM	51.2	<	8.3	<	8.1
7/21/2023	5:35:00 PM	60.8	<	6.7	<	6.6

Site: Zuni Hills						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/21/2023	5:40:00 PM	53.6	<	8.3	<	8.2
7/21/2023	5:45:00 PM	43.4	<	6.1	<	6
7/21/2023	5:50:00 PM	36.9	<	6.1	<	5.8
7/21/2023	5:55:00 PM	34.6	<	8.3	<	8
7/21/2023	6:00:00 PM	44.4	<	8.2	<	8.2
7/21/2023	6:05:00 PM	47.1	<	6	<	5.8
7/21/2023	6:10:00 PM	51.1	<	5.8	<	4.9
7/21/2023	6:15:00 PM	65.2	<	16	<	15.8
7/21/2023	6:20:00 PM	139.4	<	17.4	<	16.5
7/21/2023	6:25:00 PM	271	<	16.8	<	16.4
7/21/2023	6:30:00 PM	872.8	<	20.2	<	19.9
7/21/2023	6:35:00 PM	781.3	<	17.1	<	16.8
7/21/2023	6:40:00 PM	550.8	<	18	<	17.1
7/21/2023	6:45:00 PM	487.2	<	18.9	<	18.5
7/21/2023	6:50:00 PM	290	<	18.2	<	17.4
7/21/2023	6:55:00 PM	174.6	<	18.8	<	18.2
7/21/2023	7:00:00 PM	151.6	<	19.1	<	18.8
7/21/2023	7:05:00 PM	116.1	<	16.9	<	16.7
7/21/2023	7:10:00 PM	76.7	<	17.3	<	17
7/21/2023	7:15:00 PM	60.6	<	17	<	16.8
7/21/2023	7:20:00 PM	56.1	<	13.6	<	13.3
7/21/2023	7:25:00 PM	41.4	<	15.3	<	15
7/21/2023	7:30:00 PM	27.6	<	12.6	<	12.4
7/21/2023	7:35:00 PM	18.7	<	13	<	12.8
7/21/2023	7:40:00 PM	15.5	<	12.3	<	12
7/21/2023	7:45:00 PM	16.5	<	11.6	<	11.4
7/21/2023	7:50:00 PM	17.5	<	9.9	<	9.6
7/21/2023	7:55:00 PM	25.8	<	7.2	<	7
7/21/2023	8:00:00 PM	27.5	<	7	<	6.7
7/21/2023	8:05:00 PM	24.7	<	7.4	<	7.2
7/21/2023	8:10:00 PM	15.9	<	6.9	<	6.6
7/21/2023	8:15:00 PM	13.2	<	8.7	<	8.4
7/21/2023	8:20:00 PM	14.8	<	7.5	<	7.1
7/21/2023	8:25:00 PM	13	<	5.6	<	5.5
7/21/2023	8:30:00 PM	15.3	<	7	<	6.7
7/21/2023	8:35:00 PM	9	<	7	<	6.7
7/21/2023	8:40:00 PM	7.7	<	6.6	<	6.5
7/21/2023	8:45:00 PM	13	<	6.3	<	6.2
7/21/2023	8:50:00 PM	13.8	<	5.7	<	5.5
7/21/2023	8:55:00 PM	8.6	<	6.7	<	6.5
7/21/2023	9:00:00 PM	2.5	<	7.1	<	7
7/21/2023	9:05:00 PM	15.1	<	6.1	<	6
7/21/2023	9:10:00 PM	17.9	<	6.3	<	6.2
7/21/2023	9:15:00 PM	20.8	<	6.1	<	6
7/21/2023	9:20:00 PM	30.3	<	5.3	<	5.2
7/21/2023	9:25:00 PM	43	<	4.7	<	4.6
7/21/2023	9:30:00 PM	59.9	<	4.8	<	4.8
7/21/2023	9:35:00 PM	71.7	<	4.6	<	4.6
7/21/2023	9:40:00 PM	87.9	<	4	<	3.9
7/21/2023	9:45:00 PM	65.9	<	3.4	<	3.4
7/21/2023	9:50:00 PM	54	<	2.6	<	2.5
7/21/2023	9:55:00 PM	47.1	<	2.2	<	2.2
7/21/2023	10:00:00 PM	33.7	<	1.9	<	1.8

Site: Zuni Hills						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	10:05:00 PM	29.8	<	2.4	<	2.4
7/21/2023	10:10:00 PM	38.6	<	2.7	<	2.6
7/21/2023	10:15:00 PM	39.6	<	4.3	<	4.3
7/21/2023	10:20:00 PM	30.6	<	5.9	<	5.8
7/21/2023	10:25:00 PM	36.7	<	5.8	<	5.8
7/21/2023	10:30:00 PM	42.6	<	4.2	<	4.1
7/21/2023	10:35:00 PM	43.5	<	2.6	<	2.6
7/21/2023	10:40:00 PM	41.2	<	1.5	<	0.7
7/21/2023	10:45:00 PM	57.3	<	3.5	<	3.5
7/21/2023	10:50:00 PM	46.9	<	4.4	<	4.4
7/21/2023	10:55:00 PM	52.6	<	2.8	<	2.6
7/21/2023	11:00:00 PM	44.1	<	0.8	<	0.7
7/21/2023	11:05:00 PM	43.5	<	3	<	3
7/21/2023	11:10:00 PM	46.4	<	5.4	<	5.4
7/21/2023	11:15:00 PM	51.8	<	3.4	<	1.3
7/21/2023	11:20:00 PM	87.1	<	3.4	<	2.2
7/21/2023	11:25:00 PM	77.5	<	6	<	5.6
7/21/2023	11:30:00 PM	122.5	<	13	<	12.7
7/21/2023	11:35:00 PM	297.2	<	11.7	<	11.3
7/21/2023	11:40:00 PM	483.5	<	11.9	<	11.7
7/21/2023	11:45:00 PM	562.2	<	8	<	7.9
7/21/2023	11:50:00 PM	564.6	<	9.2	<	9
7/21/2023	11:55:00 PM	520.2	<	10.1	<	9.8
Average		125.5		6.4		6.1
Max		872.8	0	20.2	0	19.9
Max Hour						
Min		-15.2	0	0	0	0
Count		288	0	288	0	288
Total						

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 AM	47.8	-	3.9	176.1	2.6
7/21/2023	12:05:00 AM	47.1	-	-	145.7	2.1
7/21/2023	12:10:00 AM	50.6	-	-	133.5	1.4
7/21/2023	12:15:00 AM	51.9	-	-	136.1	1.1
7/21/2023	12:20:00 AM	50	-	-	162.7	1.4
7/21/2023	12:25:00 AM	47.8	-	-	158.1	1.9
7/21/2023	12:30:00 AM	50.7	-	-	161.1	0.6
7/21/2023	12:35:00 AM	73.2	-	-	122.7	2.1
7/21/2023	12:40:00 AM	100.1	-	-	108.4	1.7
7/21/2023	12:45:00 AM	110.1	-	-	120.4	1.5
7/21/2023	12:50:00 AM	108	-	-	148.6	1.5
7/21/2023	12:55:00 AM	102.5	-	-	183.2	1.5
7/21/2023	1:00:00 AM	94.3	-	4.5	192.6	0.5
7/21/2023	1:05:00 AM	86.4	-	-	95.2	0.6
7/21/2023	1:10:00 AM	79	-	-	85.3	2.2
7/21/2023	1:15:00 AM	76.5	-	-	90.9	2
7/21/2023	1:20:00 AM	73.8	-	-	113.4	2.3
7/21/2023	1:25:00 AM	68.6	-	-	117.2	2.6
7/21/2023	1:30:00 AM	64.1	-	-	112.7	3.1
7/21/2023	1:35:00 AM	61.8	-	-	99.9	2.1
7/21/2023	1:40:00 AM	57.5	-	-	113.9	2
7/21/2023	1:45:00 AM	52.7	-	-	141.3	2.7
7/21/2023	1:50:00 AM	49.2	-	-	137	2
7/21/2023	1:55:00 AM	50.4	-	-	137.7	2
7/21/2023	2:00:00 AM	55.1	-	11.3	141.7	2.6
7/21/2023	2:05:00 AM	57.8	-	-	170.4	1.2
7/21/2023	2:10:00 AM	58.2	-	-	208.4	0.6
7/21/2023	2:15:00 AM	59.1	-	-	226.5	0.8
7/21/2023	2:20:00 AM	60.9	-	-	205.5	1.1
7/21/2023	2:25:00 AM	58.4	-	-	169.6	0.8
7/21/2023	2:30:00 AM	55.6	-	-	80.5	2.6
7/21/2023	2:35:00 AM	53.8	-	-	64	7.8
7/21/2023	2:40:00 AM	57.4	-	-	70.5	5
7/21/2023	2:45:00 AM	59.8	-	-	75.6	3.6
7/21/2023	2:50:00 AM	58.9	-	-	72	2.3
7/21/2023	2:55:00 AM	54.5	-	-	69.5	4.2
7/21/2023	3:00:00 AM	48.2	-	6.6	81.7	4.4
7/21/2023	3:05:00 AM	46.3	-	-	92.3	3.3
7/21/2023	3:10:00 AM	47.5	-	-	99.8	3
7/21/2023	3:15:00 AM	48.4	-	-	110.6	3
7/21/2023	3:20:00 AM	48.6	-	-	108.7	3.2
7/21/2023	3:25:00 AM	47.3	-	-	100.7	3.3
7/21/2023	3:30:00 AM	50.2	-	-	112	2.3
7/21/2023	3:35:00 AM	55.6	-	-	120.5	2.8
7/21/2023	3:40:00 AM	59.1	-	-	115.9	3.1
7/21/2023	3:45:00 AM	61.7	-	-	103.4	1.5
7/21/2023	3:50:00 AM	63.7	-	-	129.9	3.4
7/21/2023	3:55:00 AM	77.8	-	-	141.6	1.5

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:00:00 AM	89.9	-	9	139	2.5
7/21/2023	4:05:00 AM	90.5	-	-	133.4	3.5
7/21/2023	4:10:00 AM	86.2	-	-	154.3	2.6
7/21/2023	4:15:00 AM	80.7	-	-	155.7	4.1
7/21/2023	4:20:00 AM	78.6	-	-	166.7	4.6
7/21/2023	4:25:00 AM	74.8	-	-	197.5	4
7/21/2023	4:30:00 AM	68.6	-	-	225.7	6.2
7/21/2023	4:35:00 AM	59.5	-	-	217.5	6.2
7/21/2023	4:40:00 AM	52	-	-	223.7	4.9
7/21/2023	4:45:00 AM	52.8	-	-	226.5	4.6
7/21/2023	4:50:00 AM	58.5	-	-	240.6	4.3
7/21/2023	4:55:00 AM	65.5	-	-	251.2	3.7
7/21/2023	5:00:00 AM	70.1	-	6.3	268.4	1.9
7/21/2023	5:05:00 AM	72.6	-	-	10.5	1.5
7/21/2023	5:10:00 AM	77.5	-	-	51.2	4.1
7/21/2023	5:15:00 AM	83	-	-	53.8	3.4
7/21/2023	5:20:00 AM	85.1	-	-	39.8	0.3
7/21/2023	5:25:00 AM	81	-	-	290.4	1.9
7/21/2023	5:30:00 AM	75.6	-	-	289.2	1.2
7/21/2023	5:35:00 AM	75.4	-	-	194.9	1.8
7/21/2023	5:40:00 AM	79.8	-	-	186.3	1.3
7/21/2023	5:45:00 AM	92.1	-	-	24.4	2.8
7/21/2023	5:50:00 AM	100.6	-	-	325.5	1.3
7/21/2023	5:55:00 AM	99.8	-	-	240.2	0.9
7/21/2023	6:00:00 AM	96.3	-	13	243.3	3
7/21/2023	6:05:00 AM	93.9	-	-	271.5	1.3
7/21/2023	6:10:00 AM	91.7	-	-	352.9	0.7
7/21/2023	6:15:00 AM	86.9	-	-	54.7	1.2
7/21/2023	6:20:00 AM	81.7	-	-	57.7	3
7/21/2023	6:25:00 AM	81.4	-	-	50.4	3
7/21/2023	6:30:00 AM	83.7	-	-	52.8	3.4
7/21/2023	6:35:00 AM	86.7	-	-	42.2	3.8
7/21/2023	6:40:00 AM	95.6	-	-	32.7	3.9
7/21/2023	6:45:00 AM	116.2	-	-	14.7	4.5
7/21/2023	6:50:00 AM	158.3	-	-	16.8	6.7
7/21/2023	6:55:00 AM	186.5	-	-	35.9	7.2
7/21/2023	7:00:00 AM	189.3	-	13.1	35.9	5.2
7/21/2023	7:05:00 AM	179.4	-	-	32.8	4.9
7/21/2023	7:10:00 AM	172.5	-	-	28.2	5.7
7/21/2023	7:15:00 AM	172.1	-	-	21	5.2
7/21/2023	7:20:00 AM	172.9	-	-	28.7	7.5
7/21/2023	7:25:00 AM	179.8	-	-	18.6	7.3
7/21/2023	7:30:00 AM	197.7	-	-	10.5	5.7
7/21/2023	7:35:00 AM	216.5	-	-	358.6	6.1
7/21/2023	7:40:00 AM	225.1	-	-	0.4	5.7
7/21/2023	7:45:00 AM	228.7	-	-	11	7.1
7/21/2023	7:50:00 AM	236.6	-	-	357.7	6
7/21/2023	7:55:00 AM	242.9	-	-	0	6

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:00:00 AM	243	-	11.4	351.4	4.8
7/21/2023	8:05:00 AM	239.1	-	-	354.4	4.4
7/21/2023	8:10:00 AM	237.5	-	-	347.9	4.3
7/21/2023	8:15:00 AM	235.4	-	-	1.6	4.1
7/21/2023	8:20:00 AM	227.8	-	-	1.1	6
7/21/2023	8:25:00 AM	221.2	-	-	352.2	3.6
7/21/2023	8:30:00 AM	218.5	-	-	2.9	3.3
7/21/2023	8:35:00 AM	212.5	-	-	345.3	2.5
7/21/2023	8:40:00 AM	200.1	-	-	291.4	4
7/21/2023	8:45:00 AM	192.6	-	-	288.7	6.3
7/21/2023	8:50:00 AM	192.1	-	-	305.1	2.7
7/21/2023	8:55:00 AM	185.7	-	-	280.6	5.3
7/21/2023	9:00:00 AM	177.7	-	9.2	280.8	5.4
7/21/2023	9:05:00 AM	175.7	-	-	301.8	4.4
7/21/2023	9:10:00 AM	173.6	-	-	278.8	4.6
7/21/2023	9:15:00 AM	168.1	-	-	346.3	2.7
7/21/2023	9:20:00 AM	163	-	-	318.6	3.7
7/21/2023	9:25:00 AM	163.2	-	-	306.8	2.6
7/21/2023	9:30:00 AM	162.1	-	-	314.6	2.5
7/21/2023	9:35:00 AM	156.1	-	-	320.2	2.6
7/21/2023	9:40:00 AM	152.7	-	-	276.5	3.1
7/21/2023	9:45:00 AM	154.9	-	-	267.6	2.3
7/21/2023	9:50:00 AM	153.5	-	-	348.6	2.9
7/21/2023	9:55:00 AM	147	-	-	351.8	2.3
7/21/2023	10:00:00 AM	146	-	9.4	287.6	3.2
7/21/2023	10:05:00 AM	145.6	-	-	294.8	2.4
7/21/2023	10:10:00 AM	141.5	-	-	231.2	4.2
7/21/2023	10:15:00 AM	138.9	-	-	208.2	3.5
7/21/2023	10:20:00 AM	141.5	-	-	291	2.1
7/21/2023	10:25:00 AM	138.4	-	-	287.4	1.7
7/21/2023	10:30:00 AM	129	-	-	269.6	2.4
7/21/2023	10:35:00 AM	129.7	-	-	281.1	4.7
7/21/2023	10:40:00 AM	135.4	-	-	334.5	1.3
7/21/2023	10:45:00 AM	132.4	-	-	313	1
7/21/2023	10:50:00 AM	124.8	-	-	330.5	1.2
7/21/2023	10:55:00 AM	127.4	-	-	287.5	1.3
7/21/2023	11:00:00 AM	132.7	-	7.4	356	1.9
7/21/2023	11:05:00 AM	128.8	-	-	276.3	2.4
7/21/2023	11:10:00 AM	125.4	-	-	271.8	3.7
7/21/2023	11:15:00 AM	129.2	-	-	237.2	0.9
7/21/2023	11:20:00 AM	127.4	-	-	322.3	2.1
7/21/2023	11:25:00 AM	120.7	-	-	311.8	1.5
7/21/2023	11:30:00 AM	115.5	-	-	347.7	2.8
7/21/2023	11:35:00 AM	113	-	-	339.7	2.8
7/21/2023	11:40:00 AM	112.5	-	-	295.8	1.3
7/21/2023	11:45:00 AM	110.9	-	-	330.5	1.1
7/21/2023	11:50:00 AM	114.8	-	-	234.2	1.9
7/21/2023	11:55:00 AM	116.4	-	-	170.2	2.7

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	12:00:00 PM	114	-	16.4	254.8	4.2
7/21/2023	12:05:00 PM	122.1	-	-	253.7	6
7/21/2023	12:10:00 PM	127.9	-	-	246.1	4.9
7/21/2023	12:15:00 PM	127.6	-	-	35.3	2.2
7/21/2023	12:20:00 PM	119.4	-	-	234.2	3.4
7/21/2023	12:25:00 PM	113.3	-	-	250.9	5.5
7/21/2023	12:30:00 PM	116.1	-	-	283.6	7.6
7/21/2023	12:35:00 PM	119.4	-	-	300.8	3.4
7/21/2023	12:40:00 PM	112	-	-	286.8	3.4
7/21/2023	12:45:00 PM	105.6	-	-	305.3	1.2
7/21/2023	12:50:00 PM	107.9	-	-	209.8	2.5
7/21/2023	12:55:00 PM	114	-	-	255.1	6.2
7/21/2023	1:00:00 PM	110.4	-	15	268.9	2.2
7/21/2023	1:05:00 PM	111.5	-	-	247.9	5
7/21/2023	1:10:00 PM	111.7	-	-	216.2	5.9
7/21/2023	1:15:00 PM	106.1	-	-	271.3	4.8
7/21/2023	1:20:00 PM	104	-	-	294.4	6.9
7/21/2023	1:25:00 PM	109.7	-	-	287.1	4.2
7/21/2023	1:30:00 PM	108.3	-	-	224.4	4.2
7/21/2023	1:35:00 PM	102.1	-	-	243.8	2.8
7/21/2023	1:40:00 PM	98.2	-	-	266	4.9
7/21/2023	1:45:00 PM	102.8	-	-	267.5	9
7/21/2023	1:50:00 PM	104.7	-	-	278.7	7.6
7/21/2023	1:55:00 PM	99.8	-	-	283	2.1
7/21/2023	2:00:00 PM	93.9	-	16	257.9	5.8
7/21/2023	2:05:00 PM	98.6	-	-	275	7.7
7/21/2023	2:10:00 PM	103.5	-	-	270.7	5.5
7/21/2023	2:15:00 PM	103.8	-	-	250.1	9.3
7/21/2023	2:20:00 PM	106.8	-	-	251.4	5.4
7/21/2023	2:25:00 PM	109.4	-	-	210.9	3.8
7/21/2023	2:30:00 PM	107.6	-	-	289.4	3.9
7/21/2023	2:35:00 PM	105.5	-	-	288.6	5
7/21/2023	2:40:00 PM	106.5	-	-	262.5	7.6
7/21/2023	2:45:00 PM	106.1	-	-	281.3	2.6
7/21/2023	2:50:00 PM	102.2	-	-	333	2.4
7/21/2023	2:55:00 PM	100.4	-	-	273.7	4.6
7/21/2023	3:00:00 PM	102.6	-	18.2	298.6	5.3
7/21/2023	3:05:00 PM	100.9	-	-	295.9	2.6
7/21/2023	3:10:00 PM	97.5	-	-	255.7	4.5
7/21/2023	3:15:00 PM	98.3	-	-	237.6	9.1
7/21/2023	3:20:00 PM	100.5	-	-	267.9	7.9
7/21/2023	3:25:00 PM	95.8	-	-	286	6.8
7/21/2023	3:30:00 PM	93.1	-	-	290.3	8.5
7/21/2023	3:35:00 PM	95.2	-	-	270	9.6
7/21/2023	3:40:00 PM	97	-	-	251.4	9.9
7/21/2023	3:45:00 PM	95.6	-	-	259.5	6.2
7/21/2023	3:50:00 PM	93.6	-	-	285	4.3
7/21/2023	3:55:00 PM	96.4	-	-	254.3	6.1

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	4:00:00 PM	93.4	-	17.5	299.8	4.3
7/21/2023	4:05:00 PM	80.5	-	-	290	9.7
7/21/2023	4:10:00 PM	61.8	-	-	282.4	8.5
7/21/2023	4:15:00 PM	53.2	-	-	275.2	7
7/21/2023	4:20:00 PM	47.1	-	-	308.4	4.8
7/21/2023	4:25:00 PM	39.4	-	-	296.7	4.6
7/21/2023	4:30:00 PM	40.8	-	-	287.2	10
7/21/2023	4:35:00 PM	46.8	-	-	292.2	7.8
7/21/2023	4:40:00 PM	47.5	-	-	291.1	6.6
7/21/2023	4:45:00 PM	46.5	-	-	304.9	3.5
7/21/2023	4:50:00 PM	49.2	-	-	302.2	7.4
7/21/2023	4:55:00 PM	50.2	-	-	307.5	6.9
7/21/2023	5:00:00 PM	50.4	-	17.7	288.2	8.7
7/21/2023	5:05:00 PM	40.8	-	-	277.6	9.3
7/21/2023	5:10:00 PM	35.5	-	-	293.8	8.5
7/21/2023	5:15:00 PM	36.5	-	-	304.2	6.1
7/21/2023	5:20:00 PM	33	-	-	301.7	10.2
7/21/2023	5:25:00 PM	31.7	-	-	305.4	6.1
7/21/2023	5:30:00 PM	30.8	-	-	322.5	6.1
7/21/2023	5:35:00 PM	25.7	-	-	306.1	6.1
7/21/2023	5:40:00 PM	20.9	-	-	304.3	5.8
7/21/2023	5:45:00 PM	22.5	-	-	305.3	4.8
7/21/2023	5:50:00 PM	27.4	-	-	303.7	3.8
7/21/2023	5:55:00 PM	31.3	-	-	295	9.7
7/21/2023	6:00:00 PM	32.9	-	13.8	290.8	9.5
7/21/2023	6:05:00 PM	37.1	-	-	290	7.7
7/21/2023	6:10:00 PM	40	-	-	284.7	8.5
7/21/2023	6:15:00 PM	37.7	-	-	297.2	6.9
7/21/2023	6:20:00 PM	36.4	-	-	290.4	8.2
7/21/2023	6:25:00 PM	40.3	-	-	303.2	3.5
7/21/2023	6:30:00 PM	40.6	-	-	305.6	3.3
7/21/2023	6:35:00 PM	35.1	-	-	298.4	5
7/21/2023	6:40:00 PM	34.7	-	-	336	2.3
7/21/2023	6:45:00 PM	40.4	-	-	352.5	3.6
7/21/2023	6:50:00 PM	41.5	-	-	352.2	4.5
7/21/2023	6:55:00 PM	39.3	-	-	350.7	4.4
7/21/2023	7:00:00 PM	37.8	-	6.4	346.5	0.9
7/21/2023	7:05:00 PM	37.7	-	-	12.3	2.9
7/21/2023	7:10:00 PM	39.1	-	-	27.8	2.1
7/21/2023	7:15:00 PM	40.7	-	-	32.3	1.8
7/21/2023	7:20:00 PM	43.6	-	-	37.5	2.1
7/21/2023	7:25:00 PM	47.4	-	-	31.4	2.6
7/21/2023	7:30:00 PM	49.7	-	-	34.7	2.4
7/21/2023	7:35:00 PM	50.4	-	-	53.8	2.5
7/21/2023	7:40:00 PM	52.9	-	-	69.9	2.6
7/21/2023	7:45:00 PM	53.3	-	-	63.4	3.8
7/21/2023	7:50:00 PM	51.5	-	-	65.7	3.7
7/21/2023	7:55:00 PM	51.2	-	-	65.9	3.8

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/21/2023	8:00:00 PM	53	-	14.3	70.3	3.1
7/21/2023	8:05:00 PM	53.1	-	-	77.8	3.9
7/21/2023	8:10:00 PM	51.6	-	-	74.9	4
7/21/2023	8:15:00 PM	52.4	-	-	71.9	4.9
7/21/2023	8:20:00 PM	55.4	-	-	70.8	7.6
7/21/2023	8:25:00 PM	60	-	-	36.2	8.8
7/21/2023	8:30:00 PM	77.4	-	-	53.3	8.6
7/21/2023	8:35:00 PM	104.6	-	-	63.5	6.9
7/21/2023	8:40:00 PM	124.8	-	-	52.6	7.4
7/21/2023	8:45:00 PM	135.9	-	-	67.9	6.5
7/21/2023	8:50:00 PM	132.3	-	-	86.2	4
7/21/2023	8:55:00 PM	123.3	-	-	107	3.5
7/21/2023	9:00:00 PM	113.3	-	14.4	126.8	3.4
7/21/2023	9:05:00 PM	103.9	-	-	113.9	3.7
7/21/2023	9:10:00 PM	96	-	-	97.3	3.9
7/21/2023	9:15:00 PM	91.5	-	-	88.6	3.7
7/21/2023	9:20:00 PM	88.1	-	-	81.7	1.3
7/21/2023	9:25:00 PM	85.1	-	-	185.3	0.6
7/21/2023	9:30:00 PM	81	-	-	72.2	2.9
7/21/2023	9:35:00 PM	82.7	-	-	85.1	5.9
7/21/2023	9:40:00 PM	86.7	-	-	96.1	8.8
7/21/2023	9:45:00 PM	88.2	-	-	105.8	7.7
7/21/2023	9:50:00 PM	87.1	-	-	106.9	8.6
7/21/2023	9:55:00 PM	89.2	-	-	89.1	7.8
7/21/2023	10:00:00 PM	89	-	33.9	73.7	8
7/21/2023	10:05:00 PM	83.2	-	-	89.5	6.8
7/21/2023	10:10:00 PM	72.4	-	-	106.8	8.5
7/21/2023	10:15:00 PM	69.6	-	-	123.7	9.3
7/21/2023	10:20:00 PM	80.3	-	-	146	16.2
7/21/2023	10:25:00 PM	114.8	-	-	157.1	19.1
7/21/2023	10:30:00 PM	279.9	-	-	168.8	16.5
7/21/2023	10:35:00 PM	614.5	-	-	183	14.7
7/21/2023	10:40:00 PM	745.7	-	-	196.9	12.6
7/21/2023	10:45:00 PM	742.2	-	-	188.5	11.1
7/21/2023	10:50:00 PM	693.9	-	-	181.3	11.9
7/21/2023	10:55:00 PM	675.2	-	-	206.1	12.9
7/21/2023	11:00:00 PM	651.9	-	24.1	203	12.6
7/21/2023	11:05:00 PM	575.5	-	-	204.9	13.2
7/21/2023	11:10:00 PM	476	-	-	202.3	13.4
7/21/2023	11:15:00 PM	386.9	-	-	191	8.3
7/21/2023	11:20:00 PM	310.6	-	-	175.8	8.6
7/21/2023	11:25:00 PM	239.5	-	-	174.5	7.8
7/21/2023	11:30:00 PM	183.8	-	-	171.2	11.2
7/21/2023	11:35:00 PM	145.7	-	-	165.4	10.7
7/21/2023	11:40:00 PM	118.7	-	-	170.9	11.3
7/21/2023	11:45:00 PM	99	-	-	182.3	12.3
7/21/2023	11:50:00 PM	89.2	-	-	176.1	12.3
7/21/2023	11:55:00 PM	82.4	-	-	164.4	8.1

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (hourly, MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
	Average	114.6586806	#DIV/0!	13.03333333	195.9385417	4.747916667
	Max	745.7	#DIV/0!	33.9	358.6	19.1
	Max Hour	360257.3448	6592.675765	24.36151846	6493.778775	23.67709337
	Min	20.9	0	3.9	0	0.3
	Count	288	288	288	288	288
	Total					

Site: Higley						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	12:00:00 AM	71.7	142.6	3.4	142.7	3.4
7/26/2023	12:05:00 AM	66.2	145.2	3.2	145.8	3.2
7/26/2023	12:10:00 AM	61.4	161	2.6	160.7	2.6
7/26/2023	12:15:00 AM	56	169.6	3.2	169.8	3.2
7/26/2023	12:20:00 AM	48.8	180.7	2.4	180.6	2.3
7/26/2023	12:25:00 AM	42.1	186.8	2.3	186.5	2.3
7/26/2023	12:30:00 AM	39.2	194.7	3.5	194.8	3.4
7/26/2023	12:35:00 AM	39.5	197.4	2.5	197.2	2.4
7/26/2023	12:40:00 AM	38.4	169.9	1.8	171	1.8
7/26/2023	12:45:00 AM	36.5	129.6	2.1	129.3	2
7/26/2023	12:50:00 AM	36.2	90.5	3.2	89.7	3.2
7/26/2023	12:55:00 AM	38.2	84.8	4.7	84.4	4.6
7/26/2023	1:00:00 AM	39.1	82.5	5.3	82.4	5.2
7/26/2023	1:05:00 AM	37.5	116.8	2.7	118	2.6
7/26/2023	1:10:00 AM	34.9	141.8	2.3	142.6	2.3
7/26/2023	1:15:00 AM	35.5	110.6	1.6	109.1	1.5
7/26/2023	1:20:00 AM	37.9	149.1	1.4	148.7	1.3
7/26/2023	1:25:00 AM	37.4	139.5	1.7	138.8	1.7
7/26/2023	1:30:00 AM	35.7	120.1	2.8	120.1	2.8
7/26/2023	1:35:00 AM	36.2	138.4	3.8	138.6	3.8
7/26/2023	1:40:00 AM	39.6	91.3	2.8	89.3	2.7
7/26/2023	1:45:00 AM	41.5	128.3	3.9	130.3	3.8
7/26/2023	1:50:00 AM	40	133.6	4.4	133.5	4.4
7/26/2023	1:55:00 AM	38.5	158.7	3.1	158	3.1
7/26/2023	2:00:00 AM	39.9	176.1	3.3	175.4	3.3
7/26/2023	2:05:00 AM	42.4	171.9	2.7	172.2	2.7
7/26/2023	2:10:00 AM	42	156.9	1.4	158.6	1.4
7/26/2023	2:15:00 AM	39.5	139	1.1	139.2	1.1
7/26/2023	2:20:00 AM	38.9	138.7	1.8	138.4	1.8
7/26/2023	2:25:00 AM	41.1	152.7	2	153.6	1.9
7/26/2023	2:30:00 AM	41.9	163.6	2.8	163.9	2.8
7/26/2023	2:35:00 AM	40.1	156.5	2	157.5	2
7/26/2023	2:40:00 AM	38	168.9	1.5	172.7	1.3
7/26/2023	2:45:00 AM	38.3	216.1	2.4	216.5	2.4
7/26/2023	2:50:00 AM	39	215.2	2.6	215.3	2.6
7/26/2023	2:55:00 AM	37.7	200.8	1.9	209.4	1.9
7/26/2023	3:00:00 AM	35.5	138.7	1.3	138.4	1.2
7/26/2023	3:05:00 AM	35.4	154.2	1.7	154.3	1.6
7/26/2023	3:10:00 AM	36.9	180.6	1.3	177.8	1.3
7/26/2023	3:15:00 AM	36.8	203.4	0	198.2	0.3
7/26/2023	3:20:00 AM	34.9	185.5	1	191.2	1
7/26/2023	3:25:00 AM	33.1	185.1	0	214.1	0.4
7/26/2023	3:30:00 AM	34.5	47.3	1.3	38.5	1.2
7/26/2023	3:35:00 AM	36.6	32	3.6	32.6	3.6
7/26/2023	3:40:00 AM	36.7	38.7	4.2	38.5	4.2
7/26/2023	3:45:00 AM	37.2	47.4	2.8	47.4	2.7
7/26/2023	3:50:00 AM	41.6	63.3	2.8	64	2.8
7/26/2023	3:55:00 AM	47.8	80.5	2.1	79.8	2
7/26/2023	4:00:00 AM	51.9	87.6	1.3	87.7	1.2
7/26/2023	4:05:00 AM	53.2	34.3	1.6	31.4	1.5
7/26/2023	4:10:00 AM	53.8	35.9	2.7	36.1	2.7
7/26/2023	4:15:00 AM	55.2	55.4	3.3	55.8	3.3
7/26/2023	4:20:00 AM	59.6	65.9	3.6	64.6	3.6

Site: Higley						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	4:25:00 AM	62.5	80.1	2.8	81.4	2.7
7/26/2023	4:30:00 AM	60.4	82.8	4.3	83.9	4.3
7/26/2023	4:35:00 AM	57	91.6	5.1	91.3	5
7/26/2023	4:40:00 AM	55.5	84.3	5	83.8	4.9
7/26/2023	4:45:00 AM	54.6	86.9	4.7	86.4	4.6
7/26/2023	4:50:00 AM	54.5	107.1	5	107.8	4.9
7/26/2023	4:55:00 AM	52.5	113.9	6.5	113.3	6.4
7/26/2023	5:00:00 AM	49.3	111	7.5	111	7.3
7/26/2023	5:05:00 AM	54.1	107.7	6.6	107.6	6.6
7/26/2023	5:10:00 AM	66.2	108.4	6.1	108.5	6
7/26/2023	5:15:00 AM	79.6	106.2	4.2	107.1	4.2
7/26/2023	5:20:00 AM	86.5	124.1	3.1	123.8	3
7/26/2023	5:25:00 AM	98	119	3.4	118.9	3.3
7/26/2023	5:30:00 AM	106.7	96.5	2.1	97.7	2
7/26/2023	5:35:00 AM	114.7	75.6	2.6	75.8	2.5
7/26/2023	5:40:00 AM	116.7	66.6	2.1	66.4	2.1
7/26/2023	5:45:00 AM	113.6	60.9	4	60.9	4
7/26/2023	5:50:00 AM	113.7	63.7	4.5	63.6	4.5
7/26/2023	5:55:00 AM	111.4	68	4.8	68.8	4.7
7/26/2023	6:00:00 AM	109.1	71.6	4	71.4	3.9
7/26/2023	6:05:00 AM	128.5	82.1	4.9	82.4	4.8
7/26/2023	6:10:00 AM	134.5	84.6	4.4	84.5	4.3
7/26/2023	6:15:00 AM	130.3	92.5	4.8	93	4.7
7/26/2023	6:20:00 AM	126.3	94.5	5.7	95	5.6
7/26/2023	6:25:00 AM	131.2	93.7	6.1	94	6
7/26/2023	6:30:00 AM	140.9	97.3	5.8	97.8	5.7
7/26/2023	6:35:00 AM	141.1	96.3	8.2	96.5	8.1
7/26/2023	6:40:00 AM	143.5	104	7.5	104.2	7.4
7/26/2023	6:45:00 AM	150.8	105.3	7.5	105.4	7.4
7/26/2023	6:50:00 AM	154.8	113.3	6.8	113.3	6.7
7/26/2023	6:55:00 AM	149.5	112.8	6.3	112.5	6.2
7/26/2023	7:00:00 AM	140.2	109.6	6	109.8	5.9
7/26/2023	7:05:00 AM	134.5	113.7	6.2	113.5	6.1
7/26/2023	7:10:00 AM	141.9	109.9	7	109.7	6.9
7/26/2023	7:15:00 AM	177	109.4	7.3	109.4	7.2
7/26/2023	7:20:00 AM	193	115.3	7.2	115.4	7.1
7/26/2023	7:25:00 AM	183.4	120.4	7.6	120.5	7.5
7/26/2023	7:30:00 AM	170.7	120.5	7.9	120.7	7.9
7/26/2023	7:35:00 AM	154.7	117.7	7.1	118.9	7
7/26/2023	7:40:00 AM	133.9	122.7	4.5	122.8	4.4
7/26/2023	7:45:00 AM	115.3	125	4.3	126.1	4.1
7/26/2023	7:50:00 AM	104.9	116.7	5.4	116.9	5.1
7/26/2023	7:55:00 AM	97.8	139.5	5.2	138.9	5.1
7/26/2023	8:00:00 AM	88.3	128.7	4.5	128.4	4.4
7/26/2023	8:05:00 AM	80.6	118.7	3.4	118	3.2
7/26/2023	8:10:00 AM	80.1	140.7	2.6	140.8	2.4
7/26/2023	8:15:00 AM	79.6	151.4	3.6	151.2	3.5
7/26/2023	8:20:00 AM	74.4	185.9	3.2	184.9	3.1
7/26/2023	8:25:00 AM	69.8	163.3	2.3	161	2.2
7/26/2023	8:30:00 AM	74	146.7	2.8	147.3	2.6
7/26/2023	8:35:00 AM	75.4	139	2.7	139.3	2.7
7/26/2023	8:40:00 AM	73.4	177.7	2.7	182.5	2.4
7/26/2023	8:45:00 AM	70.7	199.6	2.6	202.4	2.4

Site: Higley						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	8:50:00 AM	73.4	220.8	1.6	216.1	1.4
7/26/2023	8:55:00 AM	74.4	210.2	3.6	210.1	3.3
7/26/2023	9:00:00 AM	70.3	191.9	2.6	190.8	2.5
7/26/2023	9:05:00 AM	68.9	228.3	4.6	227.7	4.4
7/26/2023	9:10:00 AM	74.3	232.9	4.1	234.7	4
7/26/2023	9:15:00 AM	73.2	217.4	3.2	221.6	2.8
7/26/2023	9:20:00 AM	65	231.4	5.6	230.8	5.4
7/26/2023	9:25:00 AM	60.7	231.6	6.2	231.1	6.1
7/26/2023	9:30:00 AM	61.1	233.8	6.5	233.7	6.3
7/26/2023	9:35:00 AM	57.2	224.1	6.4	225.9	6.1
7/26/2023	9:40:00 AM	51.1	228	6.7	228.8	6.6
7/26/2023	9:45:00 AM	50.6	228.7	6.6	229.9	6.4
7/26/2023	9:50:00 AM	51.5	186.2	4.1	189.4	3.8
7/26/2023	9:55:00 AM	46.5	181.7	4.1	174.2	3.7
7/26/2023	10:00:00 AM	44.1	212.4	6	214	5.5
7/26/2023	10:05:00 AM	47.3	231.1	7.9	230.3	7.7
7/26/2023	10:10:00 AM	47.9	235.5	5.7	234.5	5.6
7/26/2023	10:15:00 AM	45.5	225	4.2	224.4	4
7/26/2023	10:20:00 AM	47.7	200.5	5.7	203.3	5.5
7/26/2023	10:25:00 AM	55.6	157.2	3.2	162.8	2.8
7/26/2023	10:30:00 AM	57.8	202.7	5.5	205.2	5.2
7/26/2023	10:35:00 AM	56.7	213.3	4.1	215.7	3.6
7/26/2023	10:40:00 AM	61	216.4	4.6	216.3	4
7/26/2023	10:45:00 AM	65.9	210.1	5.5	209.8	5.3
7/26/2023	10:50:00 AM	64.3	180.1	5.7	182.9	5
7/26/2023	10:55:00 AM	62.1	200.1	4.8	196	4.3
7/26/2023	11:00:00 AM	65.3	181.3	4.2	176	3.3
7/26/2023	11:05:00 AM	65.4	132.7	3.2	131.7	2.9
7/26/2023	11:10:00 AM	59.4	231.9	7.7	234.6	7.5
7/26/2023	11:15:00 AM	56.8	242.8	4.8	242.9	4.5
7/26/2023	11:20:00 AM	59.7	192.3	4.1	225.3	3.5
7/26/2023	11:25:00 AM	59.5	200.7	2.8	228.8	2.5
7/26/2023	11:30:00 AM	56.3	233.7	1.6	242.1	1.1
7/26/2023	11:35:00 AM	56.6	252.9	5.7	250.6	5.4
7/26/2023	11:40:00 AM	61.6	229	5.2	229	5
7/26/2023	11:45:00 AM	56.9	240.2	5.4	238.1	5.2
7/26/2023	11:50:00 AM	51.1	239.8	7.6	237.6	6.9
7/26/2023	11:55:00 AM	54.3	216.3	6.1	216.8	6
7/26/2023	12:00:00 PM	54.2	250.4	7.5	249.8	7
7/26/2023	12:05:00 PM	49.1	290	8.7	290.3	8.6
7/26/2023	12:10:00 PM	47	308.5	4.5	306.4	4.3
7/26/2023	12:15:00 PM	47.1	241.5	7.3	236.5	6
7/26/2023	12:20:00 PM	45.2	256.6	4.8	249.6	2.7
7/26/2023	12:25:00 PM	40.6	277.3	5.2	277	4.8
7/26/2023	12:30:00 PM	44	250.2	6.7	252.4	6.1
7/26/2023	12:35:00 PM	49.1	270.6	7.2	274.7	6.9
7/26/2023	12:40:00 PM	46.6	233.5	6.8	234.1	6.6
7/26/2023	12:45:00 PM	43.5	244.1	6.8	241.2	6.3
7/26/2023	12:50:00 PM	46.2	287.9	5.6	287.9	5.3
7/26/2023	12:55:00 PM	46.3	297.8	4.1	296.8	3.7
7/26/2023	1:00:00 PM	40.3	301.3	4.5	297.7	3.4
7/26/2023	1:05:00 PM	40.9	287.7	4.5	281.4	4
7/26/2023	1:10:00 PM	44.7	302.2	4.2	300.9	3.6

Site: Higley						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	1:15:00 PM	42.2	294.3	7	283.4	6.6
7/26/2023	1:20:00 PM	39.4	282.8	7.6	277.3	7.1
7/26/2023	1:25:00 PM	44.4	252.5	6.4	257.7	5.7
7/26/2023	1:30:00 PM	47.4	286.1	6.8	283.6	6.6
7/26/2023	1:35:00 PM	44.4	285.2	9.2	286.6	8.8
7/26/2023	1:40:00 PM	44.4	300.6	6.3	299.1	6.1
7/26/2023	1:45:00 PM	48.6	256.6	7.9	255.2	7.6
7/26/2023	1:50:00 PM	47	258.5	6.9	258.2	6.6
7/26/2023	1:55:00 PM	42.1	300.2	7.3	291.5	6.9
7/26/2023	2:00:00 PM	42.8	315.8	7.7	304.2	6.8
7/26/2023	2:05:00 PM	47.3	286.3	8.8	285	8.2
7/26/2023	2:10:00 PM	46.7	308.7	8.7	304.1	8.4
7/26/2023	2:15:00 PM	45.2	294.3	9.1	293.8	8.9
7/26/2023	2:20:00 PM	45.9	286.5	8.9	285	8.5
7/26/2023	2:25:00 PM	45.8	283	10.1	284.1	9.9
7/26/2023	2:30:00 PM	41.7	283.9	7	283.6	6.8
7/26/2023	2:35:00 PM	41	279.9	8.3	282.8	7.9
7/26/2023	2:40:00 PM	44.1	304.7	6.6	300	6.4
7/26/2023	2:45:00 PM	42.7	291.7	5.8	288.4	5.4
7/26/2023	2:50:00 PM	38.8	289.4	10.2	290.8	10
7/26/2023	2:55:00 PM	42.1	282.2	7.8	278.6	7.6
7/26/2023	3:00:00 PM	44.8	275.2	10.6	276.5	10
7/26/2023	3:05:00 PM	41.7	280.6	10.8	281.2	10.3
7/26/2023	3:10:00 PM	40.4	287.5	11.4	287.8	11.2
7/26/2023	3:15:00 PM	48.7	257.9	9.2	262.4	8.8
7/26/2023	3:20:00 PM	64.4	265.6	11.1	266	10.4
7/26/2023	3:25:00 PM	64	269.5	10.2	269.2	9.9
7/26/2023	3:30:00 PM	61.3	276.2	10.7	275.4	10.5
7/26/2023	3:35:00 PM	58.8	278.2	7.8	278	7.6
7/26/2023	3:40:00 PM	52.4	259.5	7.4	257.4	7.1
7/26/2023	3:45:00 PM	44.9	279.4	9.2	282.2	8.7
7/26/2023	3:50:00 PM	44	285.1	12.5	283.3	12.3
7/26/2023	3:55:00 PM	44.6	289.3	8.8	287.1	8.5
7/26/2023	4:00:00 PM	40.6	305.2	8.8	300.2	8.4
7/26/2023	4:05:00 PM	38.8	281.4	9.3	283.4	9
7/26/2023	4:10:00 PM	39.9	283.6	11	283.2	10.5
7/26/2023	4:15:00 PM	39.8	304	7.3	296.3	6.9
7/26/2023	4:20:00 PM	34.7	281.1	10.2	280.6	9.9
7/26/2023	4:25:00 PM	33.6	274.3	9	275.4	8.5
7/26/2023	4:30:00 PM	34.9	273.8	9.3	274.5	8.8
7/26/2023	4:35:00 PM	32.6	273.1	8.9	274.7	8.4
7/26/2023	4:40:00 PM	29.2	292.7	11.1	291.5	10.8
7/26/2023	4:45:00 PM	31.5	317.8	4.6	304.7	4
7/26/2023	4:50:00 PM	32.1	315.1	6.9	301.3	6.4
7/26/2023	4:55:00 PM	27.3	289.4	8.3	288.6	8
7/26/2023	5:00:00 PM	24.6	300.8	8.9	299.3	8.7
7/26/2023	5:05:00 PM	26.7	273.3	9.3	274.5	9
7/26/2023	5:10:00 PM	27.8	290.4	8.1	290.7	8
7/26/2023	5:15:00 PM	25	276	7.5	278.9	7
7/26/2023	5:20:00 PM	24.9	265.2	7.2	265.4	6.9
7/26/2023	5:25:00 PM	28	293.8	7.4	292.3	7.2
7/26/2023	5:30:00 PM	27.5	308.3	7.9	302.6	7.6
7/26/2023	5:35:00 PM	24.7	305.5	5.4	302.8	5.2

Site: Higley						
Date	Time	PM ₁₀ (µg/m ₃)	Sustained Wind Direction (Degree)	Sustained Windspeed (MPH)	Wind Direction (Degree)	Windspeed (MPH)
7/26/2023	5:40:00 PM	26.1	293.2	6.1	289.5	5.9
7/26/2023	5:45:00 PM	28.6	293.5	6.9	290.9	6.7
7/26/2023	5:50:00 PM	26.2	287.4	7	285.6	6.8
7/26/2023	5:55:00 PM	24	282.9	9.8	282.8	9.6
7/26/2023	6:00:00 PM	25.8	294	8.9	294.1	8.8
7/26/2023	6:05:00 PM	26.9	292.3	8.4	292.5	8.3
7/26/2023	6:10:00 PM	24.4	288.1	8	288.4	7.9
7/26/2023	6:15:00 PM	23.9	302.6	6	301.7	5.7
7/26/2023	6:20:00 PM	26.4	295.6	8.6	295.7	8.5
7/26/2023	6:25:00 PM	26.6	290.6	7.1	290.8	7
7/26/2023	6:30:00 PM	24.1	285	6.5	285.6	6.4
7/26/2023	6:35:00 PM	25.1	289.2	8.3	288.2	8.2
7/26/2023	6:40:00 PM	28.4	281.1	6.6	281.3	6.4
7/26/2023	6:45:00 PM	27.8	284.3	6.9	284.8	6.8
7/26/2023	6:50:00 PM	25.1	280	7.1	279.6	7
7/26/2023	6:55:00 PM	25.5	277.6	7.3	277.4	7.3
7/26/2023	7:00:00 PM	28.6	282.9	7.2	283.1	7
7/26/2023	7:05:00 PM	27.3	276	5.7	275.9	5.6
7/26/2023	7:10:00 PM	25.2	271.8	6.3	271.5	6.3
7/26/2023	7:15:00 PM	26.5	274.1	5.9	274	5.8
7/26/2023	7:20:00 PM	28.5	277.7	5.6	278.3	5.5
7/26/2023	7:25:00 PM	27	279.6	5.7	279.3	5.6
7/26/2023	7:30:00 PM	24.9	280.6	6.2	280.3	6.1
7/26/2023	7:35:00 PM	27.4	277.6	5	277.6	4.9
7/26/2023	7:40:00 PM	29.7	275	5.1	274.8	5
7/26/2023	7:45:00 PM	28	273.5	5.8	273.6	5.7
7/26/2023	7:50:00 PM	25.5	272.5	5.3	272.3	5.3
7/26/2023	7:55:00 PM	27.2	265.2	5.4	266.1	5.3
7/26/2023	8:00:00 PM	31.2	255.2	6.3	255.3	6.3
7/26/2023	8:05:00 PM	32.1	260.3	6.9	260.4	6.7
7/26/2023	8:10:00 PM	32	261.4	5.7	261	5.6
7/26/2023	8:15:00 PM	35.8	265.6	3.8	265.9	3.7
7/26/2023	8:20:00 PM	39.4	262.7	3.9	262.6	3.9
7/26/2023	8:25:00 PM	38.1	257	4	258.1	3.9
7/26/2023	8:30:00 PM	36	228.6	3.7	230.6	3.3
7/26/2023	8:35:00 PM	40.2	240.1	4	240.1	3.9
7/26/2023	8:40:00 PM	46	242.6	4.9	242	4.8
7/26/2023	8:45:00 PM	44.1	245.2	5.2	245.9	5.1
7/26/2023	8:50:00 PM	40.2	247.5	4.6	248	4.5
7/26/2023	8:55:00 PM	40.8	238.9	5.2	238.9	5.1
7/26/2023	9:00:00 PM	42.4	230.9	5.5	231	5.4
7/26/2023	9:05:00 PM	40.7	205.1	3.7	205.2	3.7
7/26/2023	9:10:00 PM	39.8	198.4	5.4	198.6	5.3
7/26/2023	9:15:00 PM	43	182.2	3.9	183.4	3.7
7/26/2023	9:20:00 PM	48.1	163.3	8.7	164.4	8.4
7/26/2023	9:25:00 PM	54.5	172.2	16.8	171	16
7/26/2023	9:30:00 PM	93.9	175.3	16.4	176.1	15.8
7/26/2023	9:35:00 PM	293.3	141	16.3	140.5	15.9
7/26/2023	9:40:00 PM	1169.5	141.8	23.8	141.5	23
7/26/2023	9:45:00 PM	2894.2	127.6	31.1	128.1	30.5
7/26/2023	9:50:00 PM	4555	130	29.1	130	28.8
7/26/2023	9:55:00 PM	5125	130.4	29.5	129.9	29.2
7/26/2023	10:00:00 PM	4617.3	126.8	27.1	126.7	26.7

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀ (µg/m₃)</u>	<u>Sustained Wind Direction (Degree)</u>	<u>Sustained Windspeed (MPH)</u>	<u>Wind Direction (Degree)</u>	<u>Windspeed (MPH)</u>
7/26/2023	10:05:00 PM	3766.2	118.3	27.8	118.4	27.4
7/26/2023	10:10:00 PM	2893.5	118.5	26.4	118.4	25.9
7/26/2023	10:15:00 PM	2135.7	129.7	21.2	130.2	20.7
7/26/2023	10:20:00 PM	1550	139.1	19.3	139.2	19
7/26/2023	10:25:00 PM	1107.5	150.5	10.5	147.4	9.9
7/26/2023	10:30:00 PM	786.5	154.6	9.3	156	8.7
7/26/2023	10:35:00 PM	555.4	124.6	16.2	124.3	15.8
7/26/2023	10:40:00 PM	388.7	119.7	19.1	119.6	18.7
7/26/2023	10:45:00 PM	274	123.8	14.6	122.9	14.2
7/26/2023	10:50:00 PM	194.5	119	5.5	122.7	0.6
7/26/2023	10:55:00 PM	142.3	4.2	6.4	1.9	5.9
7/26/2023	11:00:00 PM	115.8	12.6	13.1	12.2	11.9
7/26/2023	11:05:00 PM	106.6	24.1	14.5	24.5	14.1
7/26/2023	11:10:00 PM	99	44.6	9.9	41.4	9.4
7/26/2023	11:15:00 PM	77.3	334.1	3.2	324.4	1.1
7/26/2023	11:20:00 PM	68.8	63.6	5.3	95	3.2
7/26/2023	11:25:00 PM	50.8	135.8	13.5	136.7	13
7/26/2023	11:30:00 PM	33.1	121.6	18.6	122.2	18.4
7/26/2023	11:35:00 PM	24.1	108.5	13.6	109	13.4
7/26/2023	11:40:00 PM	22.1	116.5	12.1	116.5	11.9
7/26/2023	11:45:00 PM	17.4	100.3	15.3	100.6	15
7/26/2023	11:50:00 PM	10.6	87.7	20.1	87.5	19.3
7/26/2023	11:55:00 PM	20.4	68.6	20.4	68.8	20.1
Average		165.3	207	6.6	205.2	1.4
Max		5125	334.1	31.1	324.4	30.5
Max Hour		360257.3448	6592.675765	24.36151846	6493.778775	23.67709337
Min		10.6	4.2	0	1.9	0.3
Count		288	288	288	288	288
Total		47622.7	55860.8	1919.5	55872.7	1844.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	12:00:00 AM	280.5	187.9	3.5	187.9	5.7
10/1/2023	12:05:00 AM	287.1	178.4	-	177.2	5
10/1/2023	12:10:00 AM	291.4	184.5	-	181.9	5.7
10/1/2023	12:15:00 AM	297.4	180	-	180.1	7.6
10/1/2023	12:20:00 AM	304.1	186.9	-	186.5	7.3
10/1/2023	12:25:00 AM	308.7	175.8	-	175.7	8
10/1/2023	12:30:00 AM	311.00	178.6	-	178.2	7.7
10/1/2023	12:35:00 AM	309.4	184.3	-	182.7	7.2
10/1/2023	12:40:00 AM	304.5	209.2	-	209.5	7.3
10/1/2023	12:45:00 AM	302.00	173.5	-	172.3	7.1
10/1/2023	12:50:00 AM	299.00	198.2	-	195.9	5.1
10/1/2023	12:55:00 AM	293.9	183.8	-	183.7	5
10/1/2023	1:00:00 AM	287.5	158.6	4.3	156.3	4.8
10/1/2023	1:05:00 AM	280.1	178.2	-	173.6	3.5
10/1/2023	1:10:00 AM	273.3	221	-	221.5	4.5
10/1/2023	1:15:00 AM	268.1	192.8	-	192.5	4.3
10/1/2023	1:20:00 AM	263.00	185.3	-	185.4	3.5
10/1/2023	1:25:00 AM	258.7	192.1	-	193	3.5
10/1/2023	1:30:00 AM	255.9	211.7	-	211.8	4
10/1/2023	1:35:00 AM	252.5	225	-	214	4.6
10/1/2023	1:40:00 AM	248.7	222.1	-	221	4.9
10/1/2023	1:45:00 AM	244.9	209.2	-	210.9	4.7
10/1/2023	1:50:00 AM	240.7	202.7	-	201.5	4.1
10/1/2023	1:55:00 AM	236.5	282.4	-	290.3	3.6
10/1/2023	2:00:00 AM	233.8	316.7	2.7	317.2	4.2
10/1/2023	2:05:00 AM	231.1	261.3	-	262.5	4.1
10/1/2023	2:10:00 AM	229.3	257.3	-	244.9	5.4
10/1/2023	2:15:00 AM	229.00	304.5	-	300.3	5.7
10/1/2023	2:20:00 AM	227.3	284.2	-	280.5	5.4
10/1/2023	2:25:00 AM	227.00	279.6	-	279.6	5.8
10/1/2023	2:30:00 AM	227.00	286.4	-	286.2	5.9
10/1/2023	2:35:00 AM	225.4	294.6	-	294.4	4.9
10/1/2023	2:40:00 AM	221.4	270.8	-	271.1	3.6
10/1/2023	2:45:00 AM	227.5	277.1	-	278.1	5.2
10/1/2023	2:50:00 AM	233.4	282.9	-	282.9	5.1
10/1/2023	2:55:00 AM	232.9	268.7	-	268.6	4.7
10/1/2023	3:00:00 AM	230.7	265.5	2.6	265.8	4
10/1/2023	3:05:00 AM	226.2	261	-	261.3	4
10/1/2023	3:10:00 AM	220.9	258	-	258.2	3.5
10/1/2023	3:15:00 AM	214.9	269.9	-	271.1	2.6
10/1/2023	3:20:00 AM	209.7	225.7	-	228	2.9
10/1/2023	3:25:00 AM	206.4	225.8	-	226.5	3.2
10/1/2023	3:30:00 AM	203.5	237.8	-	236.7	3.8
10/1/2023	3:35:00 AM	201.2	262	-	262.3	4.5
10/1/2023	3:40:00 AM	199.6	254.4	-	254.5	4.3
10/1/2023	3:45:00 AM	199.7	248.7	-	248.4	3.8

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	3:50:00 AM	200.9	257.9	-	258.2	3.4
10/1/2023	3:55:00 AM	204.1	249	-	248.5	3.1
10/1/2023	4:00:00 AM	205.00	252.5	2.8	253.1	2.3
10/1/2023	4:05:00 AM	204.6	248.6	-	248.2	2.7
10/1/2023	4:10:00 AM	203.20	255.9	-	255.6	2.7
10/1/2023	4:15:00 AM	201.4	254.9	-	254.7	2.5
10/1/2023	4:20:00 AM	199.4	265.8	-	265.9	2.2
10/1/2023	4:25:00 AM	197.2	268.2	-	268.2	1.9
10/1/2023	4:30:00 AM	197.2	266.3	-	266.8	2.9
10/1/2023	4:35:00 AM	199.1	262.6	-	263.1	4.2
10/1/2023	4:40:00 AM	202.1	259.1	-	259.6	4.8
10/1/2023	4:45:00 AM	205.7	250.7	-	250.6	4.7
10/1/2023	4:50:00 AM	208.3	252.8	-	252.5	4.5
10/1/2023	4:55:00 AM	212.4	256.2	-	255.7	4.7
10/1/2023	5:00:00 AM	218.7	258.3	2.8	258.4	5.6
10/1/2023	5:05:00 AM	225.7	258.1	-	258.1	6.7
10/1/2023	5:10:00 AM	232.6	267.3	-	267.5	6.3
10/1/2023	5:15:00 AM	238.2	253.5	-	253.3	6.4
10/1/2023	5:20:00 AM	243.7	247.8	-	247.8	5.8
10/1/2023	5:25:00 AM	247.2	237	-	237.3	5.3
10/1/2023	5:30:00 AM	248.3	238	-	237.6	4.2
10/1/2023	5:35:00 AM	248.00	244.6	-	244.2	3.5
10/1/2023	5:40:00 AM	246.8	260.1	-	259.7	3.7
10/1/2023	5:45:00 AM	245.1	243.4	-	244.7	3.2
10/1/2023	5:50:00 AM	244.1	241.6	-	241.8	3.7
10/1/2023	5:55:00 AM	245.6	226.3	-	228	3.1
10/1/2023	6:00:00 AM	247.1	156.8	4.8	155.7	2.3
10/1/2023	6:05:00 AM	248.2	139.4	-	140.8	2
10/1/2023	6:10:00 AM	250.7	161.2	-	147.9	2
10/1/2023	6:15:00 AM	256.6	152.5	-	154.5	2.8
10/1/2023	6:20:00 AM	265.6	151.9	-	150.1	2.9
10/1/2023	6:25:00 AM	276.00	110.9	-	107.6	1.9
10/1/2023	6:30:00 AM	286.3	101.5	-	100.9	2.2
10/1/2023	6:35:00 AM	297.1	107.3	-	107	2.8
10/1/2023	6:40:00 AM	308.9	101.2	-	99.9	2.2
10/1/2023	6:45:00 AM	319.1	110.2	-	110.2	2.4
10/1/2023	6:50:00 AM	324.8	113.8	-	113.6	3.5
10/1/2023	6:55:00 AM	322.9	110.7	-	111	3.4
10/1/2023	7:00:00 AM	318.8	107.5	4.9	107.6	2.2
10/1/2023	7:05:00 AM	315.1	105.2	-	105.2	1.2
10/1/2023	7:10:00 AM	313.5	106.8	-	106.5	1.7
10/1/2023	7:15:00 AM	315.4	90	-	89.6	1.7
10/1/2023	7:20:00 AM	322.3	90.9	-	90.9	2.9
10/1/2023	7:25:00 AM	332.2	88.8	-	88.3	2.5
10/1/2023	7:30:00 AM	342.5	88.2	-	88.8	2.5
10/1/2023	7:35:00 AM	349.6	56.2	-	54.5	2.2

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	7:40:00 AM	351.4	51	-	51.2	2.3
10/1/2023	7:45:00 AM	351.00	75.7	-	76.6	2.1
10/1/2023	7:50:00 AM	349.1	54.5	-	52	2.9
10/1/2023	7:55:00 AM	347.6	82.9	-	82.6	2.1
10/1/2023	8:00:00 AM	346.3	61.1	5.5	57.7	2.4
10/1/2023	8:05:00 AM	346.4	47.9	-	49.1	2
10/1/2023	8:10:00 AM	346.3	61.1	-	62.4	1.8
10/1/2023	8:15:00 AM	346.5	37.5	-	35	0.9
10/1/2023	8:20:00 AM	342.3	19.5	-	18.2	1.3
10/1/2023	8:25:00 AM	336.7	355.6	-	358.6	2.6
10/1/2023	8:30:00 AM	333.8	332.7	-	343.2	2
10/1/2023	8:35:00 AM	331.8	284.4	-	285.6	2.2
10/1/2023	8:40:00 AM	331.5	287.3	-	287.1	2.5
10/1/2023	8:45:00 AM	333.5	279.6	-	279.2	2
10/1/2023	8:50:00 AM	332.5	272.8	-	272.7	2.2
10/1/2023	8:55:00 AM	328.8	287.2	-	286.9	1
10/1/2023	9:00:00 AM	325.2	300.2	7.5	299.5	2.6
10/1/2023	9:05:00 AM	323.4	305.8	-	305.9	3.5
10/1/2023	9:10:00 AM	319.2	309.2	-	309	3.5
10/1/2023	9:15:00 AM	310.6	303.6	-	303.8	4
10/1/2023	9:20:00 AM	296.3	313	-	313.5	5.2
10/1/2023	9:25:00 AM	275.3	305.8	-	305.5	4.7
10/1/2023	9:30:00 AM	255.8	304.3	-	304	5
10/1/2023	9:35:00 AM	235.7	312.1	-	310.6	6.9
10/1/2023	9:40:00 AM	209.7	289.3	-	287	5.6
10/1/2023	9:45:00 AM	191.7	270.8	-	270	5.1
10/1/2023	9:50:00 AM	177.00	272.1	-	276	8.8
10/1/2023	9:55:00 AM	163.3	267.3	-	268.3	7.4
10/1/2023	10:00:00 AM	147.7	297	8.9	296.6	7.3
10/1/2023	10:05:00 AM	132.00	230.4	-	230.8	6.7
10/1/2023	10:10:00 AM	119.2	300.1	-	298.7	11.5
10/1/2023	10:15:00 AM	109.3	288.1	-	281.8	10
10/1/2023	10:20:00 AM	101.00	314.5	-	308	10.3
10/1/2023	10:25:00 AM	96.7	297	-	300.7	8.8
10/1/2023	10:30:00 AM	90.9	263.1	-	260.6	8.8
10/1/2023	10:35:00 AM	83.9	274.8	-	265.9	8.9
10/1/2023	10:40:00 AM	78.5	234.6	-	238	9.5
10/1/2023	10:45:00 AM	78.5	229.9	-	232.2	7.5
10/1/2023	10:50:00 AM	76.6	211	-	215.4	6.7
10/1/2023	10:55:00 AM	73.2	285.2	-	282.8	7
10/1/2023	11:00:00 AM	71.00	324.6	8	317.8	8.6
10/1/2023	11:05:00 AM	71.9	311.5	-	300.8	6.6
10/1/2023	11:10:00 AM	74.2	234.2	-	252.3	5.4
10/1/2023	11:15:00 AM	75.00	250.6	-	256	4.8
10/1/2023	11:20:00 AM	75.1	268.1	-	268.6	4.1
10/1/2023	11:25:00 AM	74.7	318.8	-	317.4	4.2

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	11:30:00 AM	76.00	313.6	-	314.9	6.6
10/1/2023	11:35:00 AM	77.4	295.6	-	288.1	6
10/1/2023	11:40:00 AM	76.8	287.4	-	287.8	6
10/1/2023	11:45:00 AM	73.3	304.4	-	303.8	8.5
10/1/2023	11:50:00 AM	72.1	323.9	-	322.1	6.7
10/1/2023	11:55:00 AM	73.4	331	-	333	5.3
10/1/2023	12:00:00 PM	72.7	306.4	13.2	305.6	8.7
10/1/2023	12:05:00 PM	69.9	302.9	-	297.2	7.4
10/1/2023	12:10:00 PM	64.9	315.7	-	316.4	8
10/1/2023	12:15:00 PM	63.00	310.3	-	311.6	5.3
10/1/2023	12:20:00 PM	60.8	338.5	-	328.9	4.4
10/1/2023	12:25:00 PM	56.00	265.9	-	286.2	2.3
10/1/2023	12:30:00 PM	52.6	245.6	-	245.7	6.8
10/1/2023	12:35:00 PM	51.8	252.3	-	259.8	5.4
10/1/2023	12:40:00 PM	52.1	309.6	-	298.9	4.5
10/1/2023	12:45:00 PM	50.7	279.2	-	281.5	3.6
10/1/2023	12:50:00 PM	51.00	300.6	-	301.8	5.6
10/1/2023	12:55:00 PM	50.8	22	-	3.6	6.7
10/1/2023	1:00:00 PM	49.4	18.3	14.6	17.7	4.9
10/1/2023	1:05:00 PM	48.2	330.5	-	306.9	0.4
10/1/2023	1:10:00 PM	47.1	258	-	256.9	5
10/1/2023	1:15:00 PM	44.8	289.3	-	288.8	2.9
10/1/2023	1:20:00 PM	41.9	288.5	-	291	1.8
10/1/2023	1:25:00 PM	39.5	303.1	-	300.8	2.2
10/1/2023	1:30:00 PM	39.00	300	-	300.1	2.2
10/1/2023	1:35:00 PM	40.4	315.3	-	311.4	3.9
10/1/2023	1:40:00 PM	36.8	273.2	-	274.2	8.1
10/1/2023	1:45:00 PM	33.1	299.6	-	305.7	4.3
10/1/2023	1:50:00 PM	30.8	275.2	-	274.9	3.7
10/1/2023	1:55:00 PM	31.8	267.3	-	269.6	5.9
10/1/2023	2:00:00 PM	31.8	278.4	15.8	279.1	8.1
10/1/2023	2:05:00 PM	30.1	296.6	-	295.2	4.7
10/1/2023	2:10:00 PM	30.3	292.2	-	290.6	3.8
10/1/2023	2:15:00 PM	34.1	286	-	286.4	7.4
10/1/2023	2:20:00 PM	34.3	296.3	-	292.5	3.7
10/1/2023	2:25:00 PM	34.9	320.9	-	319.5	5.9
10/1/2023	2:30:00 PM	35.6	344.1	-	338.2	3.4
10/1/2023	2:35:00 PM	37.7	346.9	-	346.5	9.2
10/1/2023	2:40:00 PM	37.1	316.6	-	314.8	4.6
10/1/2023	2:45:00 PM	35.5	296.3	-	298.2	4.5
10/1/2023	2:50:00 PM	37.4	273.6	-	275.8	6.1
10/1/2023	2:55:00 PM	39.8	270.4	-	270.6	4.4
10/1/2023	3:00:00 PM	35.8	276.9	13.5	278.9	5.9
10/1/2023	3:05:00 PM	33.1	313.2	-	312.9	7.3
10/1/2023	3:10:00 PM	36.7	310.3	-	307.7	10.3
10/1/2023	3:15:00 PM	42.8	313.7	-	313.5	9.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (hourly, MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	3:20:00 PM	43.8	312	-	311.1	8.7
10/1/2023	3:25:00 PM	42.00	315.5	-	315.7	10.1
10/1/2023	3:30:00 PM	47.4	274.5	-	274.7	5
10/1/2023	3:35:00 PM	46.5	270.5	-	271.1	5.5
10/1/2023	3:40:00 PM	44.7	293.8	-	293.6	10.4
10/1/2023	3:45:00 PM	40.3	287.4	-	287.8	8.9
10/1/2023	3:50:00 PM	33.8	269	-	269.5	7.7
10/1/2023	3:55:00 PM	30.1	264.1	-	265.7	10
10/1/2023	4:00:00 PM	31.00	290.9	16	290.8	9.8
10/1/2023	4:05:00 PM	41.1	275.4	-	275.3	9.5
10/1/2023	4:10:00 PM	47.4	284.6	-	284.7	9.1
10/1/2023	4:15:00 PM	48.3	276.8	-	276.9	9.7
10/1/2023	4:20:00 PM	49.6	278.4	-	277.6	12
10/1/2023	4:25:00 PM	53.3	283.1	-	282.9	10.9
10/1/2023	4:30:00 PM	54.6	285.4	-	285.8	6.9
10/1/2023	4:35:00 PM	56.1	292.6	-	294	10.8
10/1/2023	4:40:00 PM	57.6	293.2	-	292.9	9.7
10/1/2023	4:45:00 PM	56.00	287.8	-	286.8	11.8
10/1/2023	4:50:00 PM	54.8	291.3	-	292	10.1
10/1/2023	4:55:00 PM	60.5	292.5	-	293.3	9.9
10/1/2023	5:00:00 PM	66.3	277.8	14.8	277.5	11.2
10/1/2023	5:05:00 PM	70.4	290.2	-	290.2	8.7
10/1/2023	5:10:00 PM	71.6	283.2	-	283.1	9.2
10/1/2023	5:15:00 PM	71.4	281.7	-	281.7	7.8
10/1/2023	5:20:00 PM	71.2	290.2	-	289.9	8
10/1/2023	5:25:00 PM	72.00	284.5	-	284.1	9.3
10/1/2023	5:30:00 PM	72.5	285.3	-	285.3	9.1
10/1/2023	5:35:00 PM	71.6	296.9	-	297.5	9.4
10/1/2023	5:40:00 PM	68.7	300.5	-	300.9	8
10/1/2023	5:45:00 PM	67.4	287.1	-	287.2	10.8
10/1/2023	5:50:00 PM	68.7	285.5	-	286	8.8
10/1/2023	5:55:00 PM	70.9	285.3	-	285.3	10.3
10/1/2023	6:00:00 PM	72.6	288.9	8	289.1	8.5
10/1/2023	6:05:00 PM	70.5	279.6	-	279.3	10.1
10/1/2023	6:10:00 PM	69.4	277.7	-	277.4	10.9
10/1/2023	6:15:00 PM	70.2	272.1	-	272.7	11.3
10/1/2023	6:20:00 PM	72.1	267.1	-	267.5	10.9
10/1/2023	6:25:00 PM	73.9	268.2	-	268.3	11.4
10/1/2023	6:30:00 PM	74.9	270.5	-	270.8	9.5
10/1/2023	6:35:00 PM	74.7	266.5	-	267	5.9
10/1/2023	6:40:00 PM	73.1	268	-	268.4	3.2
10/1/2023	6:45:00 PM	71.2	271.5	-	272.1	3.9
10/1/2023	6:50:00 PM	69.4	268.3	-	268.6	5.9
10/1/2023	6:55:00 PM	68.00	271.5	-	271.7	6.6
10/1/2023	7:00:00 PM	67.4	264.9	6.9	265	7.2
10/1/2023	7:05:00 PM	67.2	260.7	-	260.8	5.3

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>($\mu\text{g}/\text{m}^3$)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(hourly, MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed (MPH)</u>
10/1/2023	7:10:00 PM	66.5	259.4	-	259.6	5.4
10/1/2023	7:15:00 PM	64.7	259.1	-	259.2	4.9
10/1/2023	7:20:00 PM	62.8	258.7	-	258.7	4.5
10/1/2023	7:25:00 PM	61.9	256.7	-	256.6	4.9
10/1/2023	7:30:00 PM	62.4	256.6	-	256.8	4.9
10/1/2023	7:35:00 PM	63.3	257.8	-	257.9	5.7
10/1/2023	7:40:00 PM	63.5	257.9	-	258	5.1
10/1/2023	7:45:00 PM	64.1	258.7	-	259	6.8
10/1/2023	7:50:00 PM	64.3	255.9	-	256	6.9
10/1/2023	7:55:00 PM	64.3	255.5	-	255.6	6.5
10/1/2023	8:00:00 PM	62.7	257.8	5.1	257.9	5.6
10/1/2023	8:05:00 PM	60.6	257.8	-	257.9	3.7
10/1/2023	8:10:00 PM	59.1	256.3	-	256.4	4.3
10/1/2023	8:15:00 PM	58.3	259.4	-	259.7	2.8
10/1/2023	8:20:00 PM	57.9	266.1	-	266.4	1.9
10/1/2023	8:25:00 PM	57.2	265.2	-	265.3	2.3
10/1/2023	8:30:00 PM	56.4	261.8	-	262.1	0.9
10/1/2023	8:35:00 PM	56.2	244.9	-	244.8	0.9
10/1/2023	8:40:00 PM	56.4	244.2	-	244.3	0.8
10/1/2023	8:45:00 PM	55.7	246.2	-	245.9	1.9
10/1/2023	8:50:00 PM	55.4	248.2	-	248.2	2
10/1/2023	8:55:00 PM	53.4	253.3	-	253.1	0.2
10/1/2023	9:00:00 PM	52.1	257.9	7	256	2
10/1/2023	9:05:00 PM	50.9	247.9	-	247.7	3.7
10/1/2023	9:10:00 PM	52.6	245.2	-	245.3	4.1
10/1/2023	9:15:00 PM	54.7	253.9	-	254.2	4.5
10/1/2023	9:20:00 PM	55.8	259.3	-	260.4	3.9
10/1/2023	9:25:00 PM	55.4	257	-	257.2	4.1
10/1/2023	9:30:00 PM	55.00	260.4	-	261.3	2.8
10/1/2023	9:35:00 PM	54.5	255.2	-	256.4	3.3
10/1/2023	9:40:00 PM	53.6	257.4	-	257.8	4.5
10/1/2023	9:45:00 PM	52.8	254.4	-	252.4	2.2
10/1/2023	9:50:00 PM	50.9	251.1	-	251.5	1.7
10/1/2023	9:55:00 PM	48.1	232.4	-	231.4	1.3
10/1/2023	10:00:00 PM	45.1	201.7	10	203	0.7
10/1/2023	10:05:00 PM	44.00	177.4	-	176.7	1.2
10/1/2023	10:10:00 PM	43.7	176.3	-	176.3	0.6
10/1/2023	10:15:00 PM	42.5	185.7	-	185.2	1.3
10/1/2023	10:20:00 PM	42.1	197.1	-	196.3	1.6
10/1/2023	10:25:00 PM	42.4	207	-	207	2
10/1/2023	10:30:00 PM	43.4	214	-	213.9	1.5
10/1/2023	10:35:00 PM	43.6	214.9	-	215	1.4
10/1/2023	10:40:00 PM	42.5	214	-	214	1.3
10/1/2023	10:45:00 PM	42.00	215	-	214.8	1.9
10/1/2023	10:50:00 PM	44.7	216.5	-	216.7	1.7
10/1/2023	10:55:00 PM	49.3	211.8	-	212.1	1.9

Site: Higley						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>(µg/m₃)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(hourly, MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed (MPH)</u>
10/1/2023	11:00:00 PM	52.2	206.6	7.4	206.4	2.1
10/1/2023	11:05:00 PM	51.7	202.9	-	202.4	2
10/1/2023	11:10:00 PM	50.7	203.1	-	203	1.3
10/1/2023	11:15:00 PM	49.4	202.2	-	202.9	1.3
10/1/2023	11:20:00 PM	47.2	205.2	-	205.3	1.1
10/1/2023	11:25:00 PM	44.9	209.4	-	209.6	0.2
10/1/2023	11:30:00 PM	43.9	203.7	-	204.3	0
10/1/2023	11:35:00 PM	42.7	190.5	-	190.7	0.6
10/1/2023	11:40:00 PM	41.9	184.8	-	185.1	1.1
10/1/2023	11:45:00 PM	42.3	182.3	-	181.8	0.7
10/1/2023	11:50:00 PM	42.7	174.5	-	174.1	1.1
10/1/2023	11:55:00 PM	42.6	169.1	-	169.1	1.1
	Average	144.0087	262	5.7	272.1	4.2
	Max	351.4	355.6	13.9	358.6	12
	Max Hour	8190.552	4424.864889	9.359254743	4455.557487	9.007116604
	Min	29.5	18.3	0	3.6	0.4
	Count	288	288	288	288	288
	Total	46320.3	70053.8	1661.2	69959.4	1603.7

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	12:00:00 AM	303.4	187.9	6.6	187.9	6.2
10/1/2023	12:05:00 AM	296.2	178.4	6.7	177.2	6.5
10/1/2023	12:10:00 AM	291.8	184.5	7.7	181.9	7.4
10/1/2023	12:15:00 AM	289	180	6.6	180.1	6.2
10/1/2023	12:20:00 AM	287.2	186.9	7.2	186.5	7.1
10/1/2023	12:25:00 AM	284.4	175.8	6.1	175.7	5.9
10/1/2023	12:30:00 AM	283.8	178.6	5.5	178.2	5.3
10/1/2023	12:35:00 AM	279.7	184.3	5.5	182.7	5.3
10/1/2023	12:40:00 AM	274	209.2	4.5	209.5	4.3
10/1/2023	12:45:00 AM	269.6	173.5	3.7	172.3	3.6
10/1/2023	12:50:00 AM	267.7	198.2	3.4	195.9	3.2
10/1/2023	12:55:00 AM	263.6	183.8	3.8	183.7	3.6
10/1/2023	1:00:00 AM	257.6	158.6	4.4	156.3	4.3
10/1/2023	1:05:00 AM	250.7	178.2	4.1	173.6	3.9
10/1/2023	1:10:00 AM	244.9	221	3.2	221.5	3.1
10/1/2023	1:15:00 AM	238.9	192.8	3.8	192.5	3.7
10/1/2023	1:20:00 AM	231.3	185.3	4.9	185.4	4.6
10/1/2023	1:25:00 AM	225.4	192.1	3.1	193	2.9
10/1/2023	1:30:00 AM	217.3	211.7	4.3	211.8	4.1
10/1/2023	1:35:00 AM	211.9	225	5.7	214	5.2
10/1/2023	1:40:00 AM	206.2	222.1	5.1	221	4.7
10/1/2023	1:45:00 AM	199.6	209.2	7.3	210.9	7.1
10/1/2023	1:50:00 AM	193	202.7	4.7	201.5	4.4
10/1/2023	1:55:00 AM	184.5	282.4	4	290.3	3.6
10/1/2023	2:00:00 AM	177	316.7	4.5	317.2	4.4
10/1/2023	2:05:00 AM	171.5	261.3	3	262.5	2.9
10/1/2023	2:10:00 AM	166.6	257.3	0	244.9	0.7
10/1/2023	2:15:00 AM	160.4	304.5	0	300.3	0.7
10/1/2023	2:20:00 AM	154.8	284.2	3.6	280.5	3.5
10/1/2023	2:25:00 AM	155	279.6	7	279.6	7
10/1/2023	2:30:00 AM	156.2	286.4	6	286.2	6
10/1/2023	2:35:00 AM	155.1	294.6	4.1	294.4	4.1
10/1/2023	2:40:00 AM	153.9	270.8	3.8	271.1	3.7
10/1/2023	2:45:00 AM	150.8	277.1	7.5	278.1	7.4
10/1/2023	2:50:00 AM	150.6	282.9	8.1	282.9	8
10/1/2023	2:55:00 AM	151.1	268.7	6.9	268.6	6.8
10/1/2023	3:00:00 AM	151.1	265.5	7	265.8	6.9
10/1/2023	3:05:00 AM	153	261	6.3	261.3	6.2
10/1/2023	3:10:00 AM	154	258	5.7	258.2	5.6
10/1/2023	3:15:00 AM	155.2	269.9	5	271.1	4.8
10/1/2023	3:20:00 AM	155.4	225.7	6.1	228	5.8
10/1/2023	3:25:00 AM	160.1	225.8	6	226.5	5.9
10/1/2023	3:30:00 AM	166.3	237.8	7	236.7	6.9
10/1/2023	3:35:00 AM	173.9	262	6.8	262.3	6.7
10/1/2023	3:40:00 AM	182.7	254.4	6.3	254.5	6.3
10/1/2023	3:45:00 AM	193.8	248.7	6.9	248.4	6.9

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	3:50:00 AM	208.4	257.9	6.5	258.2	6.4
10/1/2023	3:55:00 AM	223.9	249	6.3	248.5	6.2
10/1/2023	4:00:00 AM	239.1	252.5	7.1	253.1	7
10/1/2023	4:05:00 AM	253.2	248.6	6.9	248.2	6.8
10/1/2023	4:10:00 AM	261.8	255.9	7	255.6	6.9
10/1/2023	4:15:00 AM	269	254.9	6.8	254.7	6.7
10/1/2023	4:20:00 AM	276.7	265.8	6.5	265.9	6.5
10/1/2023	4:25:00 AM	285.4	268.2	5	268.2	5
10/1/2023	4:30:00 AM	291.7	266.3	5.9	266.8	5.8
10/1/2023	4:35:00 AM	295.7	262.6	5.9	263.1	5.9
10/1/2023	4:40:00 AM	297.1	259.1	4.8	259.6	4.8
10/1/2023	4:45:00 AM	296.2	250.7	4.3	250.6	4.3
10/1/2023	4:50:00 AM	295.9	252.8	3.5	252.5	3.5
10/1/2023	4:55:00 AM	294.3	256.2	3.2	255.7	3.2
10/1/2023	5:00:00 AM	292.1	258.3	2.4	258.4	2.4
10/1/2023	5:05:00 AM	289	258.1	2.2	258.1	2.2
10/1/2023	5:10:00 AM	285	267.3	2.5	267.5	2.5
10/1/2023	5:15:00 AM	282	253.5	2.9	253.3	2.8
10/1/2023	5:20:00 AM	277.2	247.8	3.2	247.8	3.2
10/1/2023	5:25:00 AM	272.1	237	3.2	237.3	3.2
10/1/2023	5:30:00 AM	268.3	238	3.6	237.6	3.6
10/1/2023	5:35:00 AM	264.5	244.6	3.2	244.2	3.2
10/1/2023	5:40:00 AM	260.5	260.1	1.9	259.7	1.9
10/1/2023	5:45:00 AM	256.3	243.4	2.7	244.7	2.6
10/1/2023	5:50:00 AM	254.7	241.6	3.2	241.8	3.2
10/1/2023	5:55:00 AM	256	226.3	1.5	228	1.4
10/1/2023	6:00:00 AM	256.2	156.8	1.5	155.7	1.3
10/1/2023	6:05:00 AM	261	139.4	1.3	140.8	1.3
10/1/2023	6:10:00 AM	265.4	161.2	0	147.9	0.4
10/1/2023	6:15:00 AM	266.3	152.5	1.6	154.5	1.6
10/1/2023	6:20:00 AM	268.5	151.9	0	150.1	0.6
10/1/2023	6:25:00 AM	267.1	110.9	1.5	107.6	1.5
10/1/2023	6:30:00 AM	269.8	101.5	2.1	100.9	2.1
10/1/2023	6:35:00 AM	274.7	107.3	2.1	107	2.1
10/1/2023	6:40:00 AM	280	101.2	2.4	99.9	2.4
10/1/2023	6:45:00 AM	283.7	110.2	2	110.2	2
10/1/2023	6:50:00 AM	285.3	113.8	2.5	113.6	2.5
10/1/2023	6:55:00 AM	287.6	110.7	2.6	111	2.5
10/1/2023	7:00:00 AM	285.5	107.5	2.4	107.6	2.4
10/1/2023	7:05:00 AM	283.3	105.2	2.4	105.2	2.3
10/1/2023	7:10:00 AM	283.1	106.8	2.8	106.5	2.7
10/1/2023	7:15:00 AM	282.5	90	3.7	89.6	3.6
10/1/2023	7:20:00 AM	279	90.9	3.9	90.9	3.9
10/1/2023	7:25:00 AM	273.7	88.8	4.1	88.3	4
10/1/2023	7:30:00 AM	269.3	88.2	3.6	88.8	3.5
10/1/2023	7:35:00 AM	267.9	56.2	3.5	54.5	3.4

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	7:40:00 AM	266.7	51	3.3	51.2	3.2
10/1/2023	7:45:00 AM	261.9	75.7	3	76.6	2.9
10/1/2023	7:50:00 AM	253.8	54.5	2.8	52	2.6
10/1/2023	7:55:00 AM	244.3	82.9	2.3	82.6	2.2
10/1/2023	8:00:00 AM	239	61.1	2.3	57.7	2
10/1/2023	8:05:00 AM	234.4	47.9	2.4	49.1	2.1
10/1/2023	8:10:00 AM	231.9	61.1	2.1	62.4	2.1
10/1/2023	8:15:00 AM	228.3	37.5	2.9	35	2.7
10/1/2023	8:20:00 AM	222.2	19.5	2.6	18.2	2.4
10/1/2023	8:25:00 AM	214.8	355.6	2.9	358.6	2.8
10/1/2023	8:30:00 AM	211.8	332.7	2.3	343.2	2
10/1/2023	8:35:00 AM	209	284.4	4.5	285.6	4.4
10/1/2023	8:40:00 AM	222.1	287.3	7.4	287.1	7.3
10/1/2023	8:45:00 AM	247.5	279.6	7.3	279.2	7.3
10/1/2023	8:50:00 AM	267.4	272.8	8.3	272.7	8.3
10/1/2023	8:55:00 AM	278.8	287.2	6.9	286.9	6.7
10/1/2023	9:00:00 AM	287.4	300.2	6.5	299.5	6.4
10/1/2023	9:05:00 AM	294.6	305.8	5.4	305.9	5.4
10/1/2023	9:10:00 AM	297.9	309.2	4.8	309	4.6
10/1/2023	9:15:00 AM	299.9	303.6	5	303.8	4.8
10/1/2023	9:20:00 AM	299.6	313	6.8	313.5	6.7
10/1/2023	9:25:00 AM	303.2	305.8	7.3	305.5	7.1
10/1/2023	9:30:00 AM	305.8	304.3	6.9	304	6.8
10/1/2023	9:35:00 AM	306.7	312.1	7.2	310.6	6.9
10/1/2023	9:40:00 AM	304.7	289.3	6.3	287	5.9
10/1/2023	9:45:00 AM	302.2	270.8	5.8	270	5.6
10/1/2023	9:50:00 AM	301.9	272.1	4.7	276	4.6
10/1/2023	9:55:00 AM	295.9	267.3	4.7	268.3	4.3
10/1/2023	10:00:00 AM	285.9	297	5.5	296.6	5.4
10/1/2023	10:05:00 AM	278.9	230.4	2.9	230.8	2.2
10/1/2023	10:10:00 AM	271	300.1	5.5	298.7	5.3
10/1/2023	10:15:00 AM	263.9	288.1	4.1	281.8	3.9
10/1/2023	10:20:00 AM	253.2	314.5	3.2	308	2.9
10/1/2023	10:25:00 AM	241.1	297	3.5	300.7	3.1
10/1/2023	10:30:00 AM	229.4	263.1	2.8	260.6	2.4
10/1/2023	10:35:00 AM	223	274.8	3.7	265.9	2.1
10/1/2023	10:40:00 AM	219.6	234.6	3	238	2.9
10/1/2023	10:45:00 AM	212.8	229.9	6.9	232.2	6.7
10/1/2023	10:50:00 AM	206.2	211	4.1	215.4	3.7
10/1/2023	10:55:00 AM	202.8	285.2	4.7	282.8	4.4
10/1/2023	11:00:00 AM	198.3	324.6	2.6	317.8	2.4
10/1/2023	11:05:00 AM	192.6	311.5	4.3	300.8	3.9
10/1/2023	11:10:00 AM	183.7	234.2	2.8	252.3	2.4
10/1/2023	11:15:00 AM	183.4	250.6	6.6	256	6
10/1/2023	11:20:00 AM	181.3	268.1	6.7	268.6	6.5
10/1/2023	11:25:00 AM	176.9	318.8	7.6	317.4	7.4

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	11:30:00 AM	176.9	313.6	5.7	314.9	5.4
10/1/2023	11:35:00 AM	176.2	295.6	6.2	288.1	5.4
10/1/2023	11:40:00 AM	174.6	287.4	6.8	287.8	6.5
10/1/2023	11:45:00 AM	178	304.4	7.3	303.8	7.1
10/1/2023	11:50:00 AM	177.3	323.9	4.4	322.1	4.2
10/1/2023	11:55:00 AM	173.2	331	4.9	333	4.1
10/1/2023	12:00:00 PM	171	306.4	5.8	305.6	4.5
10/1/2023	12:05:00 PM	171.7	302.9	7	297.2	6.5
10/1/2023	12:10:00 PM	173.3	315.7	6.3	316.4	5.7
10/1/2023	12:15:00 PM	175.4	310.3	4.9	311.6	4.1
10/1/2023	12:20:00 PM	174.4	338.5	7.3	328.9	6.9
10/1/2023	12:25:00 PM	172.5	265.9	3.4	286.2	2.3
10/1/2023	12:30:00 PM	168.2	245.6	5.7	245.7	5.5
10/1/2023	12:35:00 PM	161	252.3	3.1	259.8	2.6
10/1/2023	12:40:00 PM	155.2	309.6	3.1	298.9	2.1
10/1/2023	12:45:00 PM	151.5	279.2	9.2	281.5	8.4
10/1/2023	12:50:00 PM	150.2	300.6	6.4	301.8	6.2
10/1/2023	12:55:00 PM	147.5	22	4	3.6	2.9
10/1/2023	1:00:00 PM	141.2	18.3	4.2	17.7	3.5
10/1/2023	1:05:00 PM	139.1	330.5	5.2	306.9	2.9
10/1/2023	1:10:00 PM	135.6	258	8.3	256.9	7.6
10/1/2023	1:15:00 PM	132.5	289.3	5	288.8	4.7
10/1/2023	1:20:00 PM	129.8	288.5	7.8	291	7.5
10/1/2023	1:25:00 PM	126.2	303.1	5.3	300.8	4.6
10/1/2023	1:30:00 PM	122.2	300	7.8	300.1	7.6
10/1/2023	1:35:00 PM	120.3	315.3	6.7	311.4	6
10/1/2023	1:40:00 PM	119.3	273.2	7.6	274.2	7.1
10/1/2023	1:45:00 PM	116.8	299.6	7	305.7	5.8
10/1/2023	1:50:00 PM	112.9	275.2	9.7	274.9	9
10/1/2023	1:55:00 PM	110.4	267.3	6.6	269.6	6
10/1/2023	2:00:00 PM	108.3	278.4	8.7	279.1	8.4
10/1/2023	2:05:00 PM	106.2	296.6	9.1	295.2	8.6
10/1/2023	2:10:00 PM	105.4	292.2	10.4	290.6	10.1
10/1/2023	2:15:00 PM	104	286	10.5	286.4	10.1
10/1/2023	2:20:00 PM	99.9	296.3	7.2	292.5	6.8
10/1/2023	2:25:00 PM	95	320.9	8.8	319.5	8.5
10/1/2023	2:30:00 PM	89.7	344.1	7.2	338.2	6.9
10/1/2023	2:35:00 PM	87.6	346.9	6.1	346.5	5.8
10/1/2023	2:40:00 PM	85.3	316.6	9.8	314.8	9.6
10/1/2023	2:45:00 PM	82.1	296.3	6.5	298.2	5.6
10/1/2023	2:50:00 PM	78.9	273.6	9.8	275.8	8.3
10/1/2023	2:55:00 PM	98.7	270.4	8.9	270.6	8.6
10/1/2023	3:00:00 PM	130.8	276.9	8.8	278.9	8.4
10/1/2023	3:05:00 PM	131.9	313.2	9.7	312.9	9.3
10/1/2023	3:10:00 PM	120.6	310.3	9.7	307.7	9.4
10/1/2023	3:15:00 PM	108.5	313.7	11.4	313.5	11.2

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	3:20:00 PM	98.6	312	8.8	311.1	8.7
10/1/2023	3:25:00 PM	91.4	315.5	10.4	315.7	10.3
10/1/2023	3:30:00 PM	84.8	274.5	12	274.7	10.8
10/1/2023	3:35:00 PM	77.9	270.5	9.4	271.1	8.9
10/1/2023	3:40:00 PM	75.2	293.8	9.4	293.6	9.2
10/1/2023	3:45:00 PM	75.3	287.4	11.2	287.8	10.6
10/1/2023	3:50:00 PM	74.7	269	10.8	269.5	10.1
10/1/2023	3:55:00 PM	77.3	264.1	11.7	265.7	11.3
10/1/2023	4:00:00 PM	90	290.9	7.6	290.8	7.2
10/1/2023	4:05:00 PM	100.6	275.4	13.1	275.3	13
10/1/2023	4:10:00 PM	105.1	284.6	12.1	284.7	12
10/1/2023	4:15:00 PM	104.4	276.8	11.1	276.9	11
10/1/2023	4:20:00 PM	97.3	278.4	9.6	277.6	9.5
10/1/2023	4:25:00 PM	89.5	283.1	11.8	282.9	11.5
10/1/2023	4:30:00 PM	82.3	285.4	13.7	285.8	13.4
10/1/2023	4:35:00 PM	80.4	292.6	12	294	11.6
10/1/2023	4:40:00 PM	79.1	293.2	11.8	292.9	11.6
10/1/2023	4:45:00 PM	77.6	287.8	11.2	286.8	11.1
10/1/2023	4:50:00 PM	76.4	291.3	13.2	292	13.1
10/1/2023	4:55:00 PM	74.8	292.5	12.5	293.3	12.1
10/1/2023	5:00:00 PM	72.3	277.8	10.4	277.5	10.1
10/1/2023	5:05:00 PM	70.9	290.2	10.1	290.2	9.9
10/1/2023	5:10:00 PM	70.7	283.2	13.9	283.1	13.8
10/1/2023	5:15:00 PM	70	281.7	11.1	281.7	11
10/1/2023	5:20:00 PM	68	290.2	12.2	289.9	12.1
10/1/2023	5:25:00 PM	66.8	284.5	11.2	284.1	11.1
10/1/2023	5:30:00 PM	67.4	285.3	11.6	285.3	11.4
10/1/2023	5:35:00 PM	66.4	296.9	11	297.5	10.9
10/1/2023	5:40:00 PM	65.5	300.5	11.5	300.9	11.4
10/1/2023	5:45:00 PM	67.1	287.1	9.9	287.2	9.8
10/1/2023	5:50:00 PM	67.6	285.5	9.8	286	9.6
10/1/2023	5:55:00 PM	65.2	285.3	9.8	285.3	9.4
10/1/2023	6:00:00 PM	64.6	288.9	11	289.1	10.9
10/1/2023	6:05:00 PM	64	279.6	9.6	279.3	9.3
10/1/2023	6:10:00 PM	61.5	277.7	10	277.4	9.8
10/1/2023	6:15:00 PM	60.4	272.1	9.1	272.7	9
10/1/2023	6:20:00 PM	59.1	267.1	10.6	267.5	10.5
10/1/2023	6:25:00 PM	57.5	268.2	11.5	268.3	11.4
10/1/2023	6:30:00 PM	57.9	270.5	11.7	270.8	11.6
10/1/2023	6:35:00 PM	58.5	266.5	9.9	267	9.9
10/1/2023	6:40:00 PM	59.1	268	10.4	268.4	10.3
10/1/2023	6:45:00 PM	60.1	271.5	9.2	272.1	9.1
10/1/2023	6:50:00 PM	61	268.3	7	268.6	6.9
10/1/2023	6:55:00 PM	60.4	271.5	7.6	271.7	7.5
10/1/2023	7:00:00 PM	60.8	264.9	6.1	265	6
10/1/2023	7:05:00 PM	61.4	260.7	7.9	260.8	7.8

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> ($\mu\text{g}/\text{m}^3$)	<u>Sustained Wind</u> <u>Direction</u> (Degree)	<u>Sustained</u> <u>Windspeed</u> (MPH)	<u>Wind</u> <u>Direction</u> (Degree)	<u>Windspeed (MPH)</u>
10/1/2023	7:10:00 PM	62.3	259.4	7.5	259.6	7.5
10/1/2023	7:15:00 PM	64.1	259.1	6.4	259.2	6.4
10/1/2023	7:20:00 PM	67.2	258.7	7.4	258.7	7.4
10/1/2023	7:25:00 PM	72.5	256.7	7.2	256.6	7.1
10/1/2023	7:30:00 PM	79.5	256.6	7.2	256.8	7.1
10/1/2023	7:35:00 PM	83.1	257.8	6.8	257.9	6.8
10/1/2023	7:40:00 PM	81.4	257.9	8.1	258	8.1
10/1/2023	7:45:00 PM	79.3	258.7	8	259	8
10/1/2023	7:50:00 PM	80	255.9	7	256	6.9
10/1/2023	7:55:00 PM	81.6	255.5	6.7	255.6	6.6
10/1/2023	8:00:00 PM	80.8	257.8	7.9	257.9	7.8
10/1/2023	8:05:00 PM	76.1	257.8	8.8	257.9	8.7
10/1/2023	8:10:00 PM	70.7	256.3	7.6	256.4	7.5
10/1/2023	8:15:00 PM	65.6	259.4	7.2	259.7	7.1
10/1/2023	8:20:00 PM	61.1	266.1	6	266.4	5.9
10/1/2023	8:25:00 PM	58.8	265.2	5.5	265.3	5.5
10/1/2023	8:30:00 PM	61	261.8	5.6	262.1	5.6
10/1/2023	8:35:00 PM	63.3	244.9	5.2	244.8	5.1
10/1/2023	8:40:00 PM	70.6	244.2	4.2	244.3	4.2
10/1/2023	8:45:00 PM	76	246.2	4	245.9	4
10/1/2023	8:50:00 PM	75.9	248.2	4.3	248.2	4.2
10/1/2023	8:55:00 PM	73.2	253.3	3.6	253.1	3.5
10/1/2023	9:00:00 PM	69.7	257.9	3	256	2.8
10/1/2023	9:05:00 PM	66	247.9	2.9	247.7	2.9
10/1/2023	9:10:00 PM	62.5	245.2	2.8	245.3	2.8
10/1/2023	9:15:00 PM	58.5	253.9	4	254.2	3.9
10/1/2023	9:20:00 PM	55.6	259.3	3.3	260.4	3.3
10/1/2023	9:25:00 PM	51.5	257	3.4	257.2	3.4
10/1/2023	9:30:00 PM	47.4	260.4	2.8	261.3	2.7
10/1/2023	9:35:00 PM	45.1	255.2	3.1	256.4	3
10/1/2023	9:40:00 PM	44.9	257.4	2.6	257.8	2.6
10/1/2023	9:45:00 PM	44.5	254.4	2.1	252.4	2.1
10/1/2023	9:50:00 PM	45.9	251.1	1.7	251.5	1.7
10/1/2023	9:55:00 PM	46.4	232.4	2.5	231.4	2.5
10/1/2023	10:00:00 PM	46.2	201.7	1.9	203	1.8
10/1/2023	10:05:00 PM	51.1	177.4	2.3	176.7	2.3
10/1/2023	10:10:00 PM	58.3	176.3	2.3	176.3	2.3
10/1/2023	10:15:00 PM	59.5	185.7	1.8	185.2	1.8
10/1/2023	10:20:00 PM	56.2	197.1	2.3	196.3	2.3
10/1/2023	10:25:00 PM	49.9	207	2.9	207	2.8
10/1/2023	10:30:00 PM	46.8	214	2.9	213.9	2.9
10/1/2023	10:35:00 PM	41.5	214.9	3	215	3
10/1/2023	10:40:00 PM	35.1	214	3.6	214	3.6
10/1/2023	10:45:00 PM	29.5	215	2.9	214.8	2.9
10/1/2023	10:50:00 PM	29.5	216.5	2.8	216.7	2.8
10/1/2023	10:55:00 PM	31.2	211.8	3	212.1	3

Site: West 43rd Avenue						
<u>Date</u>	<u>Time</u>	<u>PM₁₀</u> <u>(µg/m₃)</u>	<u>Sustained Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Sustained</u> <u>Windspeed</u> <u>(MPH)</u>	<u>Wind</u> <u>Direction</u> <u>(Degree)</u>	<u>Windspeed (MPH)</u>
10/1/2023	11:00:00 PM	33.8	206.6	2.2	206.4	2.2
10/1/2023	11:05:00 PM	36.6	202.9	2.2	202.4	2.2
10/1/2023	11:10:00 PM	40.2	203.1	2.3	203	2.3
10/1/2023	11:15:00 PM	41.7	202.2	2.4	202.9	2.3
10/1/2023	11:20:00 PM	42.8	205.2	2.7	205.3	2.7
10/1/2023	11:25:00 PM	43.8	209.4	2.7	209.6	2.7
10/1/2023	11:30:00 PM	41.9	203.7	2.1	204.3	2.1
10/1/2023	11:35:00 PM	39.1	190.5	2.6	190.7	2.6
10/1/2023	11:40:00 PM	34	184.8	1.6	185.1	1.6
10/1/2023	11:45:00 PM	31.4	182.3	1.9	181.8	1.9
10/1/2023	11:50:00 PM	30.1	174.5	2.5	174.1	2.5
10/1/2023	11:55:00 PM	29.9	169.1	2.2	169.1	2.2
Average		160.8	262	5.7	272.1	4.2
Max		306.7	355.6	13.9	358.6	13.8
Max Hour		8190.552	4424.864889	9.359254743	4455.557487	9.007116604
Min		29.5	18.3	0	3.6	0.4
Count		288	288	288	288	288
Total		46320.3	70053.8	1661.2	69959.4	1603.7

Appendix B: NOAA Phoenix Sky Harbor Airport Station Data

Generated on 09/15/2023

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Observations
March 2021

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Generated on 09/15/2023

Date	Time (LST)	Station Type	Sky Conditions	Visi- bility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press Tend	Net 3-Hr Change (inHg)	Sea Level Press (inHg)	Report Type	Precip Total (in)	Alti-meter Setting (inHg)
					AU AW MW	(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
03	0051	7	CLR:00	10.00		57	13.9	42	5.6	19	-7.2	23	6	140		28.68			29.82	FM-15	0.00	29.85
03	0151	7	CLR:00	10.00		59	15.0	42	5.6	18	-7.8	20	7	100		28.69	5	0.00	29.83	FM-15	0.00	29.86
03	0251	7	CLR:00	10.00		56	13.3	41	5.0	18	-7.8	22	9	100		28.69			29.83	FM-15	0.00	29.86
03	0351	7	CLR:00	10.00		54	12.2	40	4.4	19	-7.2	25	7	100		28.69			29.83	FM-15	0.00	29.86
03	0451	7	CLR:00	10.00		53	11.7	40	4.4	20	-6.7	27	7	110		28.69	3	-0.01	29.84	FM-15	0.00	29.87
03	0500	4		9.94		53	11.7	40	4.4	20	-6.7	27	7	110		28.70	3	-0.01	29.84	FM-12		
03	0551	7	CLR:00	10.00		50	10.0	38	3.3	20	-6.7	30	6	100		28.69			29.84	FM-15	0.00	29.87
03	0651	7	FEW:02 150 FEW:02 250	10.00		53	11.7	39	3.9	18	-7.8	25	9	120		28.69			29.84	FM-15	0.00	29.87
03	0751	7	FEW:02 150	10.00		55	12.8	41	5.0	19	-7.2	24	6	100		28.70	3	-0.01	29.85	FM-15	0.00	29.88
03	0851	7	FEW:02 150	10.00		60	15.6	43	6.1	19	-7.2	20	8	120		28.71			29.87	FM-15	0.00	29.89
03	0951	7	FEW:02 150	10.00		66	18.9	46	7.8	17	-8.3	15	8	100		28.71			29.86	FM-15	0.00	29.89
03	1051	7	FEW:02 150	10.00		72	22.2	49	9.4	18	-7.8	13	11	110		28.69	8	+0.02	29.83	FM-15	0.00	29.87
03	1100	4		9.94		72	22.2	49	9.4	18	-7.8	13	11	110		28.70	8	+0.02	29.83	FM-12		
03	1151	7	FEW:02 150	10.00		77	25.0	51	10.6	17	-8.3	10	10	160		28.66			29.80	FM-15	0.00	29.84
03	1251	7	FEW:02 120	10.00		81	27.2	51	10.6	9	-12.8	6	14	170	21	28.62			29.76	FM-15	0.00	29.79
03	1351	7	FEW:02 120	10.00		84	28.9	53	11.7	11	-11.7	6	14	180	23	28.58	8	+0.12	29.70	FM-15	0.00	29.75
03	1451	7	FEW:02 120	10.00		85	29.4	54	12.2	18	-7.8	8	17	200	28	28.54			29.67	FM-15	0.00	29.71
03	1551	7	FEW:02 120	10.00		83	28.3	55	12.8	24	-4.4	11	30	190	43	28.56			29.69	FM-15	0.00	29.73
03	1651	7	FEW:02 120	10.00		79	26.1	53	11.7	23	-5.0	12	23	210	47	28.58	3	-0.01	29.72	FM-15	0.00	29.75
03	1700	4		9.94		79	26.1	53	11.7	23	-5.0	12	23	210		28.58	3	-0.01	29.72	FM-12		
03	1751	7	FEW:02 120	10.00		72	22.2	51	10.6	26	-3.3	18	26	240	38	28.63			29.77	FM-15	0.00	29.80
03	1851	7	FEW:02 120	10.00		67	19.4	52	11.1	36	2.2	32	21	240	29	28.69			29.83	FM-15	0.00	29.86
03	1951	7	FEW:02 120 FEW:02 230	10.00		65	18.3	52	11.1	39	3.9	39	11	250		28.73	3	-0.15	29.88	FM-15	0.00	29.91
03	2051	7	FEW:02 120 FEW:02 230	10.00		64	17.8	51	10.6	38	3.3	38	9	250		28.75			29.90	FM-15	0.00	29.93
03	2151	7	BKN:07 80	10.00		64	17.8	51	10.6	37	2.8	37	5	120		28.78			29.93	FM-15	0.00	29.96
03	2251	7	BKN:07 85	10.00		62	16.7	51	10.6	40	4.4	44	5	250		28.80	3	-0.07	29.95	FM-15	0.00	29.98
03	2300	4		9.94		62	16.7	51	10.6	40	4.4	44	5	250		28.80	3	-0.07	29.95	FM-12		
03	2351	7	BKN:07 80	10.00		61	16.1	51	10.6	41	5.0	48	10	240		28.83			29.97	FM-15	0.00	30.01

Max Hourly &
24-Hour Wind Speed

Max Hourly &
24-Hour Wind Gust
Speed

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Remarks
March 2021
Generated on 09/15/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Date	Time (LST)	Remarks
03	0051	MET09903/03/21 00:51:02 METAR KPHX 030751Z 14005KT 10SM CLR 14/M07 A2985 RMK AO2 SLP097 T01391072 \$ (GEH)
03	0151	MET10503/03/21 01:51:02 METAR KPHX 030851Z 10006KT 10SM CLR 15/M08 A2986 RMK AO2 SLP101 T01501078 55000 \$ (GEH)
03	0251	MET09903/03/21 02:51:02 METAR KPHX 030951Z 10008KT 10SM CLR 13/M08 A2986 RMK AO2 SLP101 T01331078 \$ (GEH)
03	0351	MET09903/03/21 03:51:02 METAR KPHX 031051Z 10006KT 10SM CLR 12/M07 A2986 RMK AO2 SLP102 T01221072 \$ (GEH)
03	0451	MET11703/03/21 04:51:02 METAR KPHX 031151Z 11006KT 10SM CLR 12/M07 A2987 RMK AO2 SLP104 T01171067 10161 20111 53002 \$ (GEH)
03	0500	SYN08072278 32966 01106 10117 21067 39718 40104 53002 91151 333 10261 20111 555 90312=
03	0551	MET09903/03/21 05:51:02 METAR KPHX 031251Z 10005KT 10SM CLR 10/M07 A2987 RMK AO2 SLP104 T01001067 \$ (GEH)
03	0651	MET10803/03/21 06:51:02 METAR KPHX 031351Z 12008KT 10SM FEW150 FEW250 12/M08 A2987 RMK AO2 SLP106 T01171078 \$ (DZ)
03	0751	MET10703/03/21 07:51:02 METAR KPHX 031451Z 10005KT 10SM FEW150 13/M07 A2988 RMK AO2 SLP109 T01281072 53005 \$ (DZ)
03	0851	MET10103/03/21 08:51:02 METAR KPHX 031551Z 12007KT 10SM FEW150 16/M07 A2989 RMK AO2 SLP114 T01561072 \$ (DZ)
03	0951	MET10103/03/21 09:51:02 METAR KPHX 031651Z 10007KT 10SM FEW150 19/M08 A2989 RMK AO2 SLP112 T01891083 \$ (DZ)
03	1051	MET11903/03/21 10:51:02 METAR KPHX 031751Z 11010KT 10SM FEW150 22/M08 A2987 RMK AO2 SLP102 T02221078 10222 20094 58006 \$ (DZ)
03	1100	SYN08072278 32966 21110 10222 21078 39718 40102 58006 91751 333 10222 20094 555 90318=
03	1151	MET10103/03/21 11:51:02 METAR KPHX 031851Z 16009KT 10SM FEW150 25/M08 A2984 RMK AO2 SLP092 T02501083 \$ (DZ)
03	1251	MET10403/03/21 12:51:02 METAR KPHX 031951Z 17012G18KT 10SM FEW120 27/M13 A2979 RMK AO2 SLP077 T02721128 \$ (DZ)
03	1351	MET11003/03/21 13:51:02 METAR KPHX 032051Z 18012G20KT 10SM FEW120 29/M12 A2975 RMK AO2 SLP059 T02891117 58040 \$ (DZ)
03	1451	MET12203/03/21 14:51:02 METAR KPHX 032151Z 20015G24KT 10SM FEW120 29/M08 A2971 RMK AO2 PK WND 16033/2124 SLP047 T02941078 \$ (SH)
03	1551	MET13303/03/21 15:51:02 METAR KPHX 032251Z 19026G37KT 10SM FEW120 28/M04 A2973 RMK AO2 PK WND 21038/2229 SLP054 BLDU ALQDS T02831044 \$ (SH)
03	1651	MET15103/03/21 16:51:02 METAR KPHX 032351Z 21020G41KT 10SM FEW120 26/M05 A2975 RMK AO2 PK WND 20041/2333 SLP064 BLDU ALQDS T02611050 10300 20222 53003 \$ (SH)
03	1700	SYN08672278 32966 22120 10261 21050 39679 40064 53003 92351 333 10300 20111 91041 555 90400=
03	1751	MET12803/03/21 17:51:01 METAR KPHX 040051Z 24023G33KT 10SM FEW120 22/M03 A2980 RMK AO2 PK WND 21034/0001 SLP081 BLDU ALQDS T02221033 \$
03	1851	MET12703/03/21 18:51:01 METAR KPHX 040151Z 24018G25KT 10SM FEW120 19/02 A2986 RMK AO2 PK WND 24036/0108 SLP102 BLDU ALQDS T01940022 \$
03	1951	MET12603/03/21 19:51:01 METAR KPHX 040251Z 25010KT 10SM FEW120 FEW230 18/04 A2991 RMK AO2 PK WND 24027/0154 SLP120 T01830039 53051 \$
03	2051	MET10203/03/21 20:51:01 METAR KPHX 040351Z 25008KT 10SM FEW120 FEW230 18/03 A2993 RMK AO2 SLP125 T01780033 \$
03	2151	MET09503/03/21 21:51:02 METAR KPHX 040451Z 12004KT 10SM BKN080 18/03 A2996 RMK AO2 SLP137 T01780028 \$
03	2251	MET11303/03/21 22:51:02 METAR KPHX 040551Z 25004KT 10SM BKN085 17/04 A2998 RMK AO2 SLP143 T01670044 10261 20167 53025 \$
03	2300	SYN08072278 32966 62504 10167 20044 39754 40143 53025 90551 333 10261 20111 555 90406=
03	2351	MET10503/03/21 23:51:02 METAR KPHX 040651Z 24009KT 10SM BKN080 16/05 A3001 RMK AO2 SLP149 T01610050 403000094 \$

Local Climatological Data
Hourly Precipitation
March 2021

Generated on 09/15/2023

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Date	For Hour (LST) Ending at																								Date		
	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	MID			
01																									01		
02																									02		
03																									03		
04																									04		
05																									05		
06																									06		
07																									07		
08																									08		
09																									09		
10																									10		
11																					0.01	T			11		
12	T		T	0.04	0.06	0.01								T	T	T						T	0.01	0.05	12		
13	0.02	0.12	0.04	0.01																	T				13		
14																									14		
15																									15		
16				T	T																				16		
17																									17		
18																									18		
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24																									24		
25																									25		
26														T	T										26		
27																									27		
28																									28		
29																									29		
30																									30		
31																									31		
Maximum Short Duration Precipitation																											
Time Period (Minutes)				5		10		15		20		30		45		60		80		100		120		150		180	
Precipitation (inches)				0.02		0.03		0.05		0.06		0.08		0.11		0.13		0.14		0.15		0.17		0.18		0.19	
Ending Date Time (yyyy-mm-dd hh:mi)				2021-03-13 01:39		2021-03-13 01:39		2021-03-13 01:18		2021-03-13 01:27		2021-03-13 01:39		2021-03-13 01:47		2021-03-13 01:53		2021-03-13 01:53		2021-03-13 02:39		2021-03-13 02:52		2021-03-13 02:52		2021-03-13 03:36	

Hourly, daily, and monthly totals on the Daily Summary page and the Hourly Precipitation Table are shown as reported by the instrumentation at the site. However, NWS does not edit hourly values for its ASOS sites, but may edit the daily and monthly totals for selected sites which will be reflected on the Daily Summary page.

T = Trace
s = Suspect
* = Erroneous
blank = No precipitation observed
M = Missing

Generated on 09/15/2023

Generated on 09/15/2023

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Observations
July 2021

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)
Generated on 09/15/2023

Date	Time (LST)	Station Type	Sky Conditions	Visi- bility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press Tend	Net 3-Hr Change (inHg)	Sea Level Press (inHg)	Report Type	Precip Total (in)	Alti- meter Setting (inHg)
					AU AW MW	(F)	(C)	(F)	(C)	(F)	(C)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
09	0051	7	FEW:02 160	10.00		98	36.7	74	23.3	63	17.2	32	13	260		28.58			29.68	FM-15	0.00	29.75
09	0151	7	FEW:02 250	10.00		98	36.7	74	23.3	63	17.2	32	13	270		28.59	1	-0.03	29.69	FM-15	0.00	29.76
09	0251	7	FEW:02 250	10.00		97	36.1	74	23.3	63	17.2	33	6	290		28.61			29.71	FM-15	0.00	29.78
09	0351	7	FEW:02 250	10.00		96	35.6	74	23.3	63	17.2	34	7	320		28.62			29.71	FM-15	0.00	29.79
09	0451	7	FEW:02 250	10.00		95	35.0	73	22.8	63	17.2	35	7	300		28.63	1	-0.03	29.72	FM-15	0.00	29.80
09	0500	4		9.94		95	35.0	73	22.8	63	17.2	35	7	300		28.63	1	-0.03	29.72	FM-12		
09	0551	7	FEW:02 160 FEW:02 250	10.00		94	34.4	73	22.8	63	17.2	36	0	000		28.66			29.76	FM-15	0.00	29.83
09	0651	7	FEW:02 160	10.00		95	35.0	74	23.3	64	17.8	36	7	330		28.66			29.77	FM-15	0.00	29.84
09	0751	7	FEW:02 160	10.00		96	35.6	74	23.3	64	17.8	35	0	000		28.69	1	-0.06	29.79	FM-15	0.00	29.86
09	0851	7	FEW:02 160	10.00		98	36.7	75	23.9	64	17.8	33	0	000		28.69			29.79	FM-15	0.00	29.86
09	0951	7	FEW:02 160	10.00		100	37.8	75	23.9	63	17.2	30	6	VRB		28.69			29.78	FM-15	0.00	29.86
09	1051	7	FEW:02 85 FEW:02 160	10.00		103	39.4	76	24.4	64	17.8	28	7	190		28.68	8	+0.01	29.78	FM-15	0.00	29.85
09	1100	4		9.94		103	39.4	76	24.4	64	17.8	28	7	190		28.68	8	+0.01	29.78	FM-12		
09	1151	7	FEW:02 95 FEW:02 160	10.00		105	40.6	76	24.4	63	17.2	25	9	300		28.66			29.76	FM-15	0.00	29.83
09	1251	7	FEW:02 95 FEW:02 250	10.00		106	41.1	76	24.4	63	17.2	25	8	260		28.64			29.74	FM-15	0.00	29.81
09	1351	7	FEW:02 95 FEW:02 250	10.00		108	42.2	76	24.4	61	16.1	22	8	VRB	20	28.62	8	+0.06	29.71	FM-15	0.00	29.79
09	1451	7	FEW:02 95 FEW:02 250	10.00		109	42.8	75	23.9	60	15.6	20	14	280		28.60			29.70	FM-15	0.00	29.77
09	1551	7	FEW:02 95 FEW:02 250	10.00		111	43.9	76	24.4	61	16.1	20	13	VRB	17	28.56			29.66	FM-15	0.00	29.73
09	1651	7	FEW:02 95 FEW:02 170 FEW:02 250	10.00		111	43.9	75	23.9	59	15.0	18	6	230		28.55	6	+0.07	29.65	FM-15	0.00	29.72
09	1700	4		9.94		111	43.9	75	23.9	59	15.0	18	6	230		28.55	6	+0.07	29.65	FM-12		
09	1751	7	FEW:02 95 SCT:04 170 SCT:04 250	10.00		111	43.9	75	23.9	59	15.0	18	7	250	20	28.55			29.64	FM-15	0.00	29.72
09	1851	7	SCT:04 95 SCT:04 180 BKN:07 210	10.00		110	43.3	75	23.9	58	14.4	18	13	240		28.54			29.63	FM-15	0.00	29.71
09	1951	7	SCT:04 95 BKN:07 180 BKN:07 200	10.00		109	42.8	74	23.3	58	14.4	19	10	240		28.55	3	0.00	29.65	FM-15	0.00	29.72
09	2051	7	SCT:04 95 BKN:07 180 BKN:07 210	10.00		107	41.7	74	23.3	59	15.0	21	11	240		28.56			29.65	FM-15	0.00	29.73
09	2151	7	SCT:04 80 BKN:07 180 BKN:07 210	10.00		105	40.6	74	23.3	59	15.0	22	9	240		28.59			29.68	FM-15	0.00	29.76
09	2245	7	BKN:07 8	1.00	BL:5 DU:5	100	37.8	74	23.3	61	16.1	27	30	120	46	28.69				FM-16		29.87
09	2249	6	VV:09 5	0.50	DS:5 DU s	97	36.1	73	22.8	61	16.1	30	29	140	46	28.69				FM-16		29.87

Max 24-Hour Wind Speed

Max 24-Hour Wind Gust Speed

09	2251	7	VV:09 5	0.25	DS:5 DU s	95	35.0	72	22.2	61	16.1	32	21	140	46	28.69	3	-0.14	29.80	FM-15	0.00	29.87
09	2258	7	VV:09 5	0.50	DS:5 DU s	94	34.4	71	21.7	59	15.0	31	20	130	36	28.69				FM-16		29.87
09	2300	4		0.25	DU	95	35.0	72	22.2	61	16.1	32	21	140		28.70	3	-0.14	29.80	FM-12		
09	2308	7	OVC:08 8	1.00	BL:5 DU:5	93	33.9	71	21.7	59	15.0	32	17	150	26	28.68				FM-16		29.85
09	2314	7	SCT:04 8 BKN:07 50	5.00	BL:5 DU:5	93	33.9	72	22.2	61	16.1	34	22	150	31	28.66				FM-16		29.84
09	2351	7	SCT:04 60 BKN:07 120 OVC:08 180	10.00		96	35.6	73	22.8	61	16.1	31	17	190		28.66			29.75	FM-15	0.00	29.83

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Remarks
July 2021
Generated on 09/15/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Date	Time (LST)	Remarks
09	0051	MET09907/09/21 00:51:02 METAR KPHX 090751Z 26011KT 10SM FEW160 37/17 A2975 RMK AO2 SLP052 T03670172 (ANH)
09	0151	MET10507/09/21 01:51:02 METAR KPHX 090851Z 27011KT 10SM FEW250 37/17 A2976 RMK AO2 SLP054 T03670172 51009 (ANH)
09	0251	MET09907/09/21 02:51:02 METAR KPHX 090951Z 29005KT 10SM FEW250 36/17 A2978 RMK AO2 SLP060 T03610172 (ANH)
09	0351	MET09907/09/21 03:51:02 METAR KPHX 091051Z 32006KT 10SM FEW250 36/17 A2979 RMK AO2 SLP062 T03560172 (ANH)
09	0451	MET11707/09/21 04:51:02 METAR KPHX 091151Z 30006KT 10SM FEW250 35/17 A2980 RMK AO2 SLP066 T03500172 10394 20350 51011 (ANH)
09	0500	SYN08072278 32966 23006 10350 20172 39695 40066 51011 91151 333 10444 20350 555 90912=
09	0551	MET10607/09/21 05:51:02 METAR KPHX 091251Z 00000KT 10SM FEW160 FEW250 34/17 A2983 RMK AO2 SLP077 T03440172 (ANH)
09	0651	MET09807/09/21 06:51:02 METAR KPHX 091351Z 33006KT 10SM FEW160 35/18 A2984 RMK AO2 SLP082 T03500178 (DZ)
09	0751	MET10407/09/21 07:51:02 METAR KPHX 091451Z 00000KT 10SM FEW160 36/18 A2986 RMK AO2 SLP089 T03560178 51021 (DZ)
09	0851	MET09807/09/21 08:51:02 METAR KPHX 091551Z 00000KT 10SM FEW160 37/18 A2986 RMK AO2 SLP088 T03670178 (DZ)
09	0951	MET09807/09/21 09:51:02 METAR KPHX 091651Z VRB05KT 10SM FEW160 38/17 A2986 RMK AO2 SLP086 T03780172 (DZ)
09	1051	MET12307/09/21 10:51:02 METAR KPHX 091751Z 19006KT 10SM FEW085 FEW160 39/18 A2985 RMK AO2 SLP084 T03940178 10400 20344 58004 (DZ)
09	1100	SYN08072278 32966 21906 10394 20178 39712 40084 58004 91751 333 10400 20344 555 90918=
09	1151	MET10507/09/21 11:51:02 METAR KPHX 091851Z 30008KT 10SM FEW095 FEW160 41/17 A2983 RMK AO2 SLP078 T04060172 (DZ)
09	1251	MET12207/09/21 12:51:02 METAR KPHX 091951Z 26007KT 10SM FEW095 FEW250 41/17 A2981 RMK AO2 SLP072 CB DSNT N AND NE T04110172 (DZ)
09	1351	MET13107/09/21 13:51:02 METAR KPHX 092051Z 29007G17KT 10SM FEW095 FEW250 42/16 A2979 RMK AO2 SLP062 CB DSNT N AND NE T04220161 58021 (DZ)
09	1451	MET11707/09/21 14:51:02 METAR KPHX 092151Z 28012KT 10SM FEW095 FEW250 43/16 A2977 RMK AO2 SLP056 CB DSNT N AND NE T04280156
09	1551	MET13507/09/21 15:51:02 METAR KPHX 092251Z 27011G15KT 10SM FEW095 FEW250 44/16 A2973 RMK AO2 SLP043 CB DSNT NE AND SE AND NW-N T04390161 (SH)
09	1651	MET16707/09/21 16:51:02 METAR KPHX 092351Z 23005KT 10SM FEW095 FEW170 FEW250 44/15 A2972 RMK AO2 SLP039 CB DSNT NE AND S AND NW-N TCU DSNT E T04390150 10444 20383 56023 (SH)
09	1700	SYN08072278 32966 22305 10439 20150 39669 40039 56023 92351 333 10444 20350 555 91000=
09	1751	MET14207/09/21 17:51:01 METAR KPHX 100051Z 25006G17KT 10SM FEW095 SCT170 SCT250 44/15 A2972 RMK AO2 SLP038 CB DSNT NE AND E AND S AND NW-N T04390150
09	1851	MET13407/09/21 18:51:01 METAR KPHX 100151Z 24011KT 10SM SCT095 SCT180 BKN210 43/14 A2971 RMK AO2 SLP035 CB DSNT NE-SE AND S AND NW T04330144
09	1951	MET12507/09/21 19:51:01 METAR KPHX 100251Z 24009KT 10SM SCT095 BKN180 BKN200 43/14 A2972 RMK AO2 SLP039 SHRA DSNT E T04280144 53000
09	2051	MET14307/09/21 20:51:02 METAR KPHX 100351Z 24010KT 10SM SCT095 BKN180 BKN210 42/15 A2973 RMK AO2 SLP041 CONS LTGCGIC DSNT NE-E CB DSNT NE-E T04170150
09	2151	MET15707/09/21 21:51:02 METAR KPHX 100451Z 24008KT 10SM SCT080 BKN180 BKN210 41/15 A2976 RMK AO2 LTG DSNT SE SLP052 CONS LTGCGIC DSNT NE-SE CB DSNT NE-SE T04060150
09	2245	MET15107/09/21 22:45:02 SPECI KPHX 100545Z 12026G40KT 1SM R07L/6000VP6000FT BLDU BKN008 38/16 A2987 RMK AO2 PK WND 15040/0545 LTG DSNT E-S PRESRR BLDU BKN008
09	2249	MET14107/09/21 22:49:03 SPECI KPHX 100549Z 14025G40KT 1/2SM R07L/2600VP6000FT DS VV005 36/16 A2987 RMK AO2 PK WND 15040/0545 LTG DSNT E-S FIBI (JH)
09	2251	MET16707/09/21 22:51:02 METAR KPHX 100551Z 14018G40KT 1/4SM R07L/2600VP6000FT DS VV005 35/16 A2987 RMK AO2 PK WND 15040/0545 LTG DSNT E-SW SLP090 T03500161 10444 20350 53049
09	2258	MET15207/09/21 22:58:02 SPECI KPHX 100558Z 13017G31KT 1/2SM R07L/2600V4500FT DS VV005 34/15 A2987 RMK AO2 PK WND 12031/0553 WSHFT 0539 LTG DSNT E-SW T03440150
09	2300	SYN09272278 31204 /1418 10350 20161 39718 40090 53049 734// 90551 333 10444 20350 91040 555 91006=
09	2308	MET20507/09/21 23:08:02 SPECI KPHX 100608Z 15015G23KT 1SM R07L/6000VP6000FT BLDU OVC008 34/15 A2985 RMK AO2 PK WND 12031/0553 WSHFT 0539 LTG DSNT SE-SW CONS LTGICCG DSNT SE-SW BLDU OVC008 CB DSNT SE-SW T03390150
09	2314	MET19407/09/21 23:14:02 SPECI KPHX 100614Z 15019G27KT 5SM BLDU SCT008 BKN050 34/16 A2984 RMK AO2 PK WND 12031/0553 WSHFT 0539 LTG DSNT SE-SW CONS LTGICCG DSNT SE-SW BLDU SCT008 CB DSNT SE-SW T03390161
09	2351	MET19307/09/21 23:51:02 METAR KPHX 100651Z 19015KT 10SM SCT060 BKN120 OVC180 36/16 A2983 RMK AO2 PK WND 12031/0553 WSHFT 0539 LTG DSNT S SLP076 CONS LTGICCG DSNT S-SW CB DSNT S-SW T03560161 404440339

Local Climatological Data
Hourly Precipitation
July 2021

Generated on 09/15/2023

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Date	For Hour (LST) Ending at																								Date		
	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	MID			
01																								T	01		
02	T																								02		
03																				0.19	0.02	0.04	0.01	T	03		
04																									04		
05																									05		
06																									06		
07																									07		
08																									08		
09																									09		
10																					T				10		
11																									11		
12																									12		
13																									13		
14					T	0.01	T	0.08	0.01																14		
15																									15		
16									0.01		T	T													16		
17																									17		
18																									18		
19																									19		
20																									20		
21																									21		
22																					0.13	0.07	0.01	T	22		
23			T	T	0.02	0.14	T	0.02	0.02	0.07	0.06	0.10	0.15	0.15	0.04	0.01	0.02	T							23		
24					0.09	0.06		0.01	0.01		T													0.01	24		
25	0.06	0.01			T	0.03							T	0.01											25		
26																									26		
27																									27		
28																									28		
29																									29		
30		T	T																					0.01	30		
31	0.01	0.04	T																						31		
Maximum Short Duration Precipitation																											
Time Period (Minutes)				5		10		15		20		30		45		60		80		100		120		150		180	
Precipitation (inches)				0.08		0.14		0.17		0.18		0.19		0.20		0.21		0.23		0.29		0.33		0.37		0.41	
Ending Date Time (yyyy-mm-dd hh:mi)				2021-07-03 19:35		2021-07-03 19:38		2021-07-03 19:41		2021-07-03 19:45		2021-07-03 19:54		2021-07-03 20:10		2021-07-03 20:14		2021-07-23 13:32		2021-07-23 13:32		2021-07-23 13:46		2021-07-23 13:58		2021-07-23 14:19	

Hourly, daily, and monthly totals on the Daily Summary page and the Hourly Precipitation Table are shown as reported by the instrumentation at the site. However, NWS does not edit hourly values for its ASOS sites, but may edit the daily and monthly totals for selected sites which will be reflected on the Daily Summary page.

T = Trace
s = Suspect
* = Erroneous
blank = No precipitation observed
M = Missing

Local Climatological Data Daily Summary October 2021

Generated on 09/15/2023

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W

Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather			Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH						
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set	Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn	Avg SL	Avg Speed	Direction = Degrees								
																			Peak Speed	Peak Dir	Sust. Speed	Sust. Dir					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23					
01	91	69	80	-3.2	28	42	59	0	15	0622	1813		0.00			28.78	29.91	5.5	20	080	15	090					
02	94	67	81	-1.7	28	43	60	0	16	0623	1811		0.00			28.77	29.91	4.2	20	060	16	060					
03	96	69	83	0.7	28	46	62	0	18	0624	1810		0.00			28.74	29.86	3.5	17	010	14	110					
04	98*	74	86	4.1	30	49	64	0	21	0624	1809	RA	T			28.72	29.85	7.7	29	270	23	270					
05	85	68	77	-4.5	52	59	66	0	12	0625	1807	TS RA	0.28			28.72	29.85	7.6	26	020	20	270					
06	90	68	79	-2.1	45	54	64	0	14	0626	1806		0.00			28.72	29.86	4.5	18	130	13	130					
07	91	71	81	0.3	37	51	63	0	16	0626	1805		0.00			28.74	29.87	5.7	27	350	14	170					
08	92	72	82	1.7	36	52	64	0	17	0627	1803		0.00			28.72	29.86	8.1	27	310	21	280					
09	85	69	77	-2.8	29	41	58	0	12	0628	1802		0.00			28.69	29.83	8.0	21	280	15	270					
10	85	62	74	-5.4	24	33	53	0	9	0629	1801		0.00			28.70	29.84	4.2	16	340	10	290					
11	88	61	75	-4.0	28	36	54	0	10	0629	1800	RA DU HZ	0.04			28.46	29.60	12.5	46	270	35	270					
12	71	57	64	-14.6	25	26	46	1	0	0630	1758	DU HZ	0.00			28.61	29.77	9.0	37	260	28	270					
13	75	52*	64	-14.2	30	31	49	1	0	0631	1757		0.00			28.69	29.85	4.2	22	350	10	260					
14	79	55	67	-10.8	29	32	50	0	2	0632	1756		0.00			28.79	29.93	5.8	15	240	12	230					
15	84	56	70	-7.4	21	26	51	0	5	0633	1755		0.00			28.87	30.02	7.0	25	050	18	050					
16	92	58	75	-2.0	17	27	53	0	10	0633	1753		0.00			28.79	29.94	7.2	25	080	18	070					
17	90	67	79	2.4	22	35	56	0	14	0634	1752		0.00			28.74	29.87	6.3	23	300	16	270					
18	86	63	75	-1.2	33	42	57	0	10	0635	1751		0.00			28.66	29.79	9.4	28	270	23	270					
19	80	61	71	-4.8	37	42	55	0	6	0636	1750		0.00			28.76	29.90	4.1	25	320	12	280					
20	85	59	72	-3.4	34	42	56	0	7	0636	1749		0.00			28.84	29.99	3.5	19	340	12	080					
21	89	60	75	0.0	31	41	56	0	10	0637	1748		0.00			28.84	29.99	4.4	22	340	10	300					
22	89	63	76	1.4	29	39	56	0	11	0638	1746		0.00			28.71	29.85	4.4	18	310	10	290					
23	85	60	73	-1.2	31	39	55	0	8	0639	1745		0.00			28.61	29.75	6.0	17	080	12	070					
24	87	63	75	1.2	32	41	56	0	10	0640	1744		0.00			28.67	29.80	5.6	20	010	12	130					
25	90	63	77	3.5	36	47	60	0	12	0641	1743		0.00			28.63	29.77	8.1	26	260	21	260					
26	77	60	69	-4.1	32	36	53	0	4	0641	1742		0.00			28.76	29.88	12.1	29	270	22	280					
27	79	56	68	-4.7	25	29	49	0	3	0642	1741		0.00			28.90	30.05	3.1	15	300	12	300					
28	88	55	72	-0.3	26	34	53	0	7	0643	1740		0.00			28.82	29.97	3.8	15	080	12	080					
29	93	64	79	7.1	23	34	55	0	14	0644	1739		0.00			28.71	29.85	3.6	20	070	14	080					
30	89	61	75	3.5	23	33	54	0	10	0645	1738		0.00			28.71	29.84	4.2	12	100	9	120					
31	88	62	75	3.9	26	38	55	0	10	0646	1737		0.00			28.73	29.87	6.0	22	330	12	200					
	86.8	62.7	74.8							Monthly Averages Totals			0.32			28.73	29.87	6.0									
	-1.7	-2.1	-1.9	Departure from Normal (1981-2010)									-0.26														
Degree Days											Number of days with...																
	Monthly				Season-to-date			Temperature					Precipitation			Snow		Weather									
	Total		Departure		Total		Departure		Max			Min															
Heating	2		-4		2				>=90°			<=32°		<=32°		<=0°		>=0.01"		>=0.1"		>=1"		T-Storms		Heavy Fog	
Cooling	305		-62		4693				11			0		0		0		2		1				1			
Date of 5-sec to 3-sec wind equipment change								Sea Level Pressure						Greatest...													
2007-04-03												Date		Time		24-Hr...				Snow Depth							
								Maximum		30.15		27		0936		Precip		Snowfall									
								Minimum		29.40		11		2151		0.28											
														Date													
														05-05													
Station Augmentation																											
Name:CONTRACTOR Lat: 33.4442 Lon: -112.0247 Elevation: N/A Distance: 0.5mi N Elements: TEMP, PRECIP Equipment: MXMN, SRG																											

Local Climatological Data
Hourly Observations
October 2021

← Max Hourly Wind
Speed

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)

Generated on 09/15/2023

Date	Time (LST)	Station Type	Sky Conditions	Visi- bility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press Tend	Net 3-Hr Change (inHg)	Sea Level Press (inHg)	Report Type	Precip Total (in)	Alti- meter Setting (inHg)
						AU AW MW	(F)	(C)	(F)	(C)	(F)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
11	0051	7	CLR:00	10.00		68	20.0	53	11.7	38	3.3	33	7	100		28.64			29.76	FM-15	0.00	29.81
11	0151	7	CLR:00	10.00		65	18.3	52	11.1	40	4.4	40	3	160		28.63	8	+0.02	29.76	FM-15	0.00	29.80
11	0251	7	FEW:02 30	10.00		65	18.3	53	11.7	41	5.0	42	5	100		28.61			29.74	FM-15	0.00	29.78
11	0351	7	CLR:00	10.00		64	17.8	51	10.6	39	3.9	40	8	120		28.61			29.74	FM-15	0.00	29.78
11	0451	7	CLR:00	10.00		63	17.2	51	10.6	40	4.4	43	8	110		28.60	6	+0.02	29.73	FM-15	0.00	29.77
11	0500	4		9.94		63	17.2	51	10.6	40	4.4	43	8	110		28.60	6	+0.02	29.73	FM-12		
11	0551	7	CLR:00	10.00		62	16.7	50	10.0	39	3.9	43	8	110		28.60			29.73	FM-15	0.00	29.77
11	0651	7	CLR:00	10.00		61	16.1	50	10.0	38	3.3	43	9	090		28.60			29.73	FM-15	0.00	29.77
11	0751	7	CLR:00	10.00		64	17.8	51	10.6	38	3.3	38	10	110		28.59	8	+0.01	29.72	FM-15	0.00	29.76
11	0851	7	FEW:02 250	10.00		69	20.6	53	11.7	37	2.8	31	8	110		28.59			29.72	FM-15	0.00	29.76
11	0951	7	FEW:02 250	10.00		74	23.3	54	12.2	34	1.1	23	11	160		28.58			29.70	FM-15	0.00	29.75
11	1051	7	FEW:02 250	10.00		77	25.0	55	12.8	34	1.1	21	10	150	20	28.57	8	+0.03	29.69	FM-15	0.00	29.74
11	1100	4		9.94		77	25.0	55	12.8	34	1.1	21	10	150		28.57	8	+0.03	29.69	FM-12		
11	1151	7	FEW:02 250	10.00		82	27.8	57	13.9	33	0.6	17	8	VRB		28.52			29.65	FM-15	0.00	29.69
11	1251	7	FEW:02 250	10.00		83	28.3	56	13.3	30	-1.1	15	10	VRB	18	28.48			29.60	FM-15	0.00	29.65
11	1351	7	FEW:02 250	10.00		87	30.6	58	14.4	30	-1.1	13	11	180	25	28.43	8	+0.13	29.55	FM-15	0.00	29.60
11	1451	7	FEW:02 250	10.00	Max Hourly Wind Gust Speed	87	30.6	57	13.9	28	-2.2	12	11	240	22	28.39			29.51	FM-15	0.00	29.56
11	1551	7	FEW:02 100 FEW:02 250	10.00		87	30.6	57	13.9	26	-3.3	11	15	220	25	28.37			29.48	FM-15	0.00	29.53
11	1651	7	FEW:02 100	10.00		85	29.4	56	13.3	27	-2.8	12	21	210	29	28.33	8	+0.11	29.44	FM-15	0.00	29.49
11	1700	4		9.94		85	29.4	56	13.3	27	-2.8	12	21	210		28.33	8	+0.11	29.44	FM-12		
11	1751	7	SCT:04 80	10.00	Max Hourly Wind Speed	83	28.3	58	14.4	35	1.7	18	14	210		28.31			29.43	FM-15	0.00	29.47
11	1851	7	FEW:02 80	10.00		81	27.2	57	13.9	37	2.8	21	18	200	28	28.30			29.42	FM-15	0.00	29.46
11	1951	7	FEW:02 80	10.00		79	26.1	57	13.9	37	2.8	22	18	210	22	28.31	5	+0.01	29.43	FM-15	0.00	29.47
11	2051	7	CLR:00	10.00		77	25.0	56	13.3	38	3.3	24	22	200	39	28.29			29.41	FM-15	0.00	29.45
11	2151	7	SCT:04 80 SCT:04 200	10.00		75	23.9	57	13.9	43	6.1	32	20	180	33	28.28			29.40	FM-15	0.00	29.44
11	2244	7	SCT:04 30 OVC:08 75	3.00	-RA:02 BL:5 DU:5 RA RA	67	19.4	55	12.8	45	7.2	45	28	280	46	28.35			FM-16	T	29.51	
11	2251	7	SCT:04 27 OVC:08 75	2.50	+RA:02 BL:5 DU:5 RA RA	62	16.7	56	13.3	51	10.6	67	21	270	38	28.37	3	-0.06	29.49	FM-15	T	29.53
11	2256	7	BKN:07 41 OVC:08 75	3.00	-RA:02 BL:5 DU:5 RA RA	63	17.2	55	12.8	49	9.4	60	13	260		28.37			FM-16		29.53	
11	2300	4	26	2.49	RA	62	16.7	56	13.3	51	10.6	67	21	270		28.37	3	-0.06	29.49	FM-12		
11	2320	7	BKN:07 30 OVC:08 70	2.50	BL:5 DU:5	65	18.3	53	11.7	43	6.1	45	20	280	29	28.39			FM-16	0.04	29.56	
11	2328	7	BKN:07 28 OVC:08 70	2.50	BL:5 DU:5	65	18.3	51	10.6	36	2.2	34	21	290		28.39			FM-16	0.04	29.56	
11	2351	7	BKN:07 28 OVC:08 70	2.50	DU:5 HZ FU	64	17.8	48	8.9	29	-1.7	27	21	260	28	28.40			29.53	FM-15	0.04	29.57

Max 24-Hour
Wind Speed

Max 24-Hour Wind
Gust Speed

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: **PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)**

Local Climatological Data
Hourly Remarks
October 2021
Generated on 09/15/2023

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Date	Time (LST)	Remarks
11	0051	MET09610/11/21 00:51:02 METAR KPHX 110751Z 10006KT 10SM CLR 20/03 A2981 RMK AO2 SLP079 T02000033 (ADH)
11	0151	MET10210/11/21 01:51:02 METAR KPHX 110851Z 16003KT 10SM CLR 18/04 A2980 RMK AO2 SLP077 T01830044 58008 (ADH)
11	0251	MET10910/11/21 02:51:02 METAR KPHX 110951Z 10004KT 10SM FEW030 18/05 A2978 RMK AO2 SLP071 FU FEW030 T01830050 (ADH)
11	0351	MET09610/11/21 03:51:02 METAR KPHX 111051Z 12007KT 10SM CLR 18/04 A2978 RMK AO2 SLP070 T01780039 (ADH)
11	0451	MET11410/11/21 04:51:02 METAR KPHX 111151Z 11007KT 10SM CLR 17/04 A2977 RMK AO2 SLP068 T01720044 10211 20172 56008 (ADH)
11	0500	SYN08072278 32966 01107 10172 20044 39685 40068 56008 91151 333 10294 20172 555 91112=
11	0551	MET09610/11/21 05:51:02 METAR KPHX 111251Z 11007KT 10SM CLR 17/04 A2977 RMK AO2 SLP069 T01670039 (ADH)
11	0651	MET09510/11/21 06:51:02 METAR KPHX 111351Z 09008KT 10SM CLR 16/03 A2977 RMK AO2 SLP067 T01610033 (DZ)
11	0751	MET10110/11/21 07:51:02 METAR KPHX 111451Z 11009KT 10SM CLR 18/03 A2976 RMK AO2 SLP065 T01780033 58003 (DZ)
11	0851	MET09810/11/21 08:51:02 METAR KPHX 111551Z 11007KT 10SM FEW250 21/03 A2976 RMK AO2 SLP064 T02060028 (DZ)
11	0951	MET09810/11/21 09:51:02 METAR KPHX 111651Z 16010KT 10SM FEW250 23/01 A2975 RMK AO2 SLP059 T02330011 (DZ)
11	1051	MET11910/11/21 10:51:02 METAR KPHX 111751Z 15009G17KT 10SM FEW250 25/01 A2974 RMK AO2 SLP055 T02500011 10250 20161 58009 (DZ)
11	1100	SYN08672278 32966 21509 10250 20011 39675 40055 58009 91751 333 10250 20161 91017 555 91118=
11	1151	MET09810/11/21 11:51:02 METAR KPHX 111851Z 17007KT 10SM FEW250 28/01 A2969 RMK AO2 SLP039 T02780006 (DZ)
11	1251	MET10210/11/21 12:51:02 METAR KPHX 111951Z 19009G16KT 10SM FEW250 28/M01 A2965 RMK AO2 SLP024 T02831011 (DZ)
11	1351	MET10810/11/21 13:51:02 METAR KPHX 112051Z 18010G22KT 10SM FEW250 31/M01 A2960 RMK AO2 SLP006 T03061011 58045 (DZ)
11	1451	MET10210/11/21 14:51:02 METAR KPHX 112151Z 24010G19KT 10SM FEW250 31/M02 A2956 RMK AO2 SLP994 T03061022 (JH)
11	1551	MET12710/11/21 15:51:02 METAR KPHX 112251Z 22013G22KT 10SM FEW100 FEW250 31/M03 A2953 RMK AO2 PK WND 19030/2230 SLP983 T03061033 (JH)
11	1651	MET13810/11/21 16:51:02 METAR KPHX 112351Z 21018G25KT 10SM FEW100 29/M03 A2949 RMK AO2 PK WND 22027/2331 SLP970 T02941028 10311 20250 58036 (JH)
11	1700	SYN08672278 32966 22118 10294 21028 39594 49970 58036 92351 333 10311 20172 91025 555 91200=
11	1751	MET10410/11/21 17:51:01 METAR KPHX 120051Z 21012KT 10SM SCT080 28/02 A2947 RMK AO2 SLP966 BLDU ALQDS T02830017
11	1851	MET09610/11/21 18:51:01 METAR KPHX 120151Z 20016G24KT 10SM FEW080 27/03 A2946 RMK AO2 SLP963 T02720028
11	1951	MET12010/11/21 19:51:02 METAR KPHX 120251Z 21016G28KT 10SM FEW080 26/03 A2947 RMK AO2 PK WND 21030/0239 SLP965 T02610028 55005
11	2051	MET11110/11/21 20:51:02 METAR KPHX 120351Z 20019G34KT 10SM CLR 25/03 A2945 RMK AO2 PK WND 21034/0350 SLP959 T02500033
11	2151	MET12110/11/21 21:51:02 METAR KPHX 120451Z 18017G29KT 10SM SCT080 SCT200 24/06 A2944 RMK AO2 PK WND 17030/0432 SLP955 T02390061
11	2244	MET17010/11/21 22:44:02 SPECI KPHX 120544Z 28024G40KT 3SM -RA BLDU SCT030 OVC075CB 19/07 A2951 RMK AO2 PK WND 27040/0541 WSHFT 0527 RAB43 BLDU SCT030 CB W MOV E P0000 T01940072
11	2251	MET21210/11/21 22:51:02 METAR KPHX 120551Z 27018G33KT 2 1/2SM +RA BLDU SCT027 OVC075CB 17/11 A2953 RMK AO2 PK WND 27040/0541 WSHFT 0527 RAB43 PRESRR SLP986 BLDU SCT027 CB W MOV E 60000 T01670106 10294 20167 53019 PNO \$
11	2256	MET14310/11/21 22:56:02 SPECI KPHX 120556Z 26011KT 3SM -RA BLDU BKN041 OVC075CB 17/09 A2953 RMK AO2 WSHFT 0538 BLDU BKN041 CB W MOV E T01720094 PNO \$
11	2300	SYN09872278 11540 82718 10167 20106 39607 49986 53019 69901 765// 90551 333 10294 20167 91033 555 91206=
11	2320	MET14110/11/21 23:20:02 SPECI KPHX 120620Z 28017G25KT 2 1/2SM BLDU BKN030 OVC070 18/06 A2956 RMK AO2 WSHFT 0538 RAE05 BLDU BKN030 P0004 T01830061 \$
11	2328	MET13810/11/21 23:28:02 SPECI KPHX 120628Z 29018KT 2 1/2SM BLDU BKN028 OVC070 18/02 A2956 RMK AO2 WSHFT 0538 RAE05 BLDU BKN028 P0004 T01830022 \$
11	2351	MET15510/11/21 23:51:02 METAR KPHX 120651Z 26018G24KT 2 1/2SM DU BKN028 OVC070 18/M02 A2957 RMK AO2 WSHFT 0538 RAE05 SLP000 DU BKN028 P0004 T01781017 403110161 \$

Current Location: Elev: 1113 ft. Lat: 33.4278° N Lon: 112.0037° W
Station: **PHOENIX AIRPORT, AZ US WBAN:23183 (ICAO:KPHX)**

Local Climatological Data
Hourly Precipitation
October 2021
Generated on 09/15/2023

Date	For Hour (LST) Ending at																								Date		
	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM	MID			
01																									01		
02																									02		
03																									03		
04																								T	04		
05	T					T						T	T	T					0.28						05		
06																									06		
07																									07		
08																									08		
09																									09		
10																									10		
11																							T	0.04	11		
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28																									28		
29																									29		
30																									30		
31																									31		
Maximum Short Duration Precipitation																											
Time Period (Minutes)				5		10		15		20		30		45		60		80		100		120		150		180	
Precipitation (inches)				0.27		0.28		0.28		0.28		0.28		0.28		0.28		0.28		0.28		0.28		0.28		0.28	
Ending Date Time (yyyy-mm-dd hh:mi)				2021-10-05 18:17		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18		2021-10-05 18:18	

Hourly, daily, and monthly totals on the Daily Summary page and the Hourly Precipitation Table are shown as reported by the instrumentation at the site. However, NWS does not edit hourly values for its ASOS sites, but may edit the daily and monthly totals for selected sites which will be reflected on the Daily Summary page.

T = Trace
s = Suspect
* = Erroneous
blank = No precipitation observed
M = Missing

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	11:51 pm	64	29	27		W	21	G	28	2.5	Dust	IKN028 OVC07	1000	28.4	29.57	0.04
10/11/2021	11:50 pm	64	30	28		W	20	G	28	2.5		BKN028 OVC070		28.4	29.57	0.04
10/11/2021	11:45 pm	64	34	32		W	18	G	24	2.5		BKN028 OVC070		28.4	29.57	0.04
10/11/2021	11:40 pm	64	35	34		W	16			2.5	Blowing dust	IKN028 OVC070		28.39	29.56	0.04
10/11/2021	11:35 pm	64	35	34		W	17			2.5	Blowing dust	IKN028 OVC070		28.39	29.56	0.04
10/11/2021	11:30 pm	64	35	34		WNW	20			2.5	Blowing dust	IKN028 OVC070		28.39	29.56	0.04
10/11/2021	11:28 pm	65	36	34		WNW	21			2.5	Blowing dust	IKN028 OVC070		28.39	29.56	0.04
10/11/2021	11:25 pm	64	37	37		WNW	21			2.5	Blowing dust	IKN030 OVC070		28.39	29.56	0.04
10/11/2021	11:20 pm	64	43	45		W	20	G	26	2.5	Blowing dust	IKN030 OVC070		28.39	29.56	0.04
10/11/2021	11:15 pm	66	45	46		W	22	G	28	3	Blowing dust	IKN030 OVC070		28.37	29.54	0.04
10/11/2021	11:10 pm	64	44	49		W	16	G	25	3.5	Blowing dust	IKN030 OVC070		28.37	29.54	0.04
10/11/2021	11:05 pm	64	48	56		WSW	14	G	20	4	Haze, Blowing dust	IKN033 OVC075		28.37	29.54	0.04
10/11/2021	11:00 pm	63	48	59		WSW	12	G	20	5	Lt rain, Blowing dust	IKN041 OVC075		28.36	29.53	
10/11/2021	10:56 pm	63	49	60		W	13			3	Lt rain, Blowing dust	IKN041 OVC075		28.36	29.53	
10/11/2021	10:55 pm	63	48	59		WSW	14			2.5	Rain, Blowing dust	ICT027 OVC075		28.36	29.53	
10/11/2021	10:51 pm	62	51	67		W	21	G	38	2.5	Hvy rain, Blowing dust	ICT027 OVC07	998.6	28.36	29.53	
10/11/2021	10:50 pm	63	50	63		W	22			2.5	Hvy rain, Blowing dust	ICT027 OVC075		28.36	29.53	
10/11/2021	10:45 pm	66	46	49		W	29	G	37	3	Lt rain, Blowing dust	ICT030 OVC075		28.34	29.51	
10/11/2021	10:44 pm	67	45	45		W	28	G	46	3	Lt rain, Blowing dust	ICT030 OVC075		28.34	29.51	T
10/11/2021	10:40 pm	72	43	35		W	26	G	35	7		SCT080		28.34	29.51	
10/11/2021	10:35 pm	73	45	36		SSW	20	G	25	10		SCT080		28.3	29.47	
10/11/2021	10:30 pm	73	45	36		SSW	22	G	30	9		SCT080		28.29	29.46	
10/11/2021	10:25 pm	73	45	36		S	22	G	35	9		SCT080		28.29	29.46	
10/11/2021	10:20 pm	73	45	36		S	17			9		SCT080		28.29	29.46	
10/11/2021	10:15 pm	73	45	36		S	24	G	32	9		SCT080		28.28	29.45	
10/11/2021	10:10 pm	73	45	36		S	23	G	30	10		SCT080		28.28	29.45	
10/11/2021	10:05 pm	73	45	36		S	25	G	32	10		SCT080		28.27	29.44	
10/11/2021	10:00 pm	73	45	36		S	23	G	32	10		SCT080		28.27	29.44	
10/11/2021	9:55 pm	73	43	33		S	17	G	26	10		SCT080		28.27	29.44	
10/11/2021	9:51 pm	75	43	32		S	20	G	33	10		SCT080 SCT200	995.5	28.27	29.44	
10/11/2021	9:50 pm	75	43	31		S	21	G	26	10		SCT080		28.27	29.44	
10/11/2021	9:45 pm	75	43	31		S	20	G	32	10		CLR		28.28	29.45	
10/11/2021	9:40 pm	75	43	31		S	23			10		CLR		28.28	29.45	
10/11/2021	9:35 pm	75	43	31		S	20			10		CLR		28.29	29.46	
10/11/2021	9:30 pm	75	43	31		S	23			10		CLR		28.29	29.46	
10/11/2021	9:25 pm	75	43	31		S	16			10		CLR		28.29	29.46	
10/11/2021	9:20 pm	75	43	31		S	18			10		CLR		28.29	29.46	
10/11/2021	9:15 pm	75	41	29		S	16			10		CLR		28.29	29.46	
10/11/2021	9:10 pm	75	41	29		S	16			10		CLR		28.29	29.46	
10/11/2021	9:05 pm	75	39	27		S	18			10		CLR		28.29	29.46	
10/11/2021	9:00 pm	75	39	27		S	14			10		CLR		28.28	29.45	
10/11/2021	8:55 pm	77	37	24		S	17			10		CLR		28.28	29.45	
10/11/2021	8:51 pm	77	38	24		SSW	22	G	39	10		CLR	995.9	28.28	29.45	
10/11/2021	8:50 pm	77	37	24		S	25	G	38	10		CLR		28.28	29.45	
10/11/2021	8:45 pm	77	39	26		S	21	G	32	10		CLR		28.28	29.45	
10/11/2021	8:40 pm	77	39	26		SSW	20			10		CLR		28.28	29.45	

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	8:35 pm	77	39	26		SSW	16	G	22	10		FEW080		28.29	29.46	
10/11/2021	8:30 pm	77	39	26		SSW	20	G	25	10		FEW080		28.29	29.46	
10/11/2021	8:25 pm	77	39	26		SSW	22	G	29	10		FEW080		28.29	29.46	
10/11/2021	8:20 pm	79	37	23		SSW	25	G	36	10		FEW080		28.29	29.46	
10/11/2021	8:15 pm	79	37	23		SSW	26	G	33	10		FEW080		28.29	29.46	
10/11/2021	8:10 pm	79	36	21		SSW	28	G	36	10		FEW080		28.3	29.47	
10/11/2021	8:05 pm	79	36	21		SSW	21	G	36	10		FEW080		28.3	29.47	
10/11/2021	8:00 pm	79	36	21		SSW	17	G	24	10		FEW080		28.3	29.47	
10/11/2021	7:55 pm	79	36	21		SSW	20	G	26	10		FEW080		28.3	29.47	
10/11/2021	7:51 pm	79	37	22		SSW	18	G	32	10		FEW080	996.5	28.3	29.47	
10/11/2021	7:50 pm	79	37	23		SSW	20			10		FEW080		28.3	29.47	
10/11/2021	7:45 pm	79	37	23		SSW	23	G	30	10		FEW080		28.3	29.47	
10/11/2021	7:40 pm	79	39	24		SSW	24	G	31	10		FEW080		28.3	29.47	
10/11/2021	7:35 pm	79	39	24		SSW	22	G	29	10		FEW080		28.29	29.46	
10/11/2021	7:30 pm	79	39	24		SSW	23	G	29	10		FEW080		28.29	29.46	
10/11/2021	7:25 pm	81	39	23	79	SW	18	G	31	10		FEW080		28.3	29.47	
10/11/2021	7:20 pm	81	39	23	79	SSW	18	G	31	10		FEW080		28.3	29.47	
10/11/2021	7:15 pm	81	39	23	79	SSW	17			10		FEW080		28.3	29.47	
10/11/2021	7:10 pm	81	39	23	79	SSW	15			10		FEW080		28.29	29.46	
10/11/2021	7:05 pm	81	39	23	79	SSW	15			10		FEW080		28.29	29.46	
10/11/2021	7:00 pm	81	37	21	79	SSW	18			10		FEW080		28.29	29.46	
10/11/2021	6:55 pm	81	37	21	79	SSW	16			10		CLR		28.3	29.47	
10/11/2021	6:51 pm	81	37	21	80	SSW	18	G	28	10		FEW080	996.3	28.29	29.46	
10/11/2021	6:50 pm	81	37	21	79	SSW	20			10		FEW080		28.29	29.46	
10/11/2021	6:45 pm	81	37	21	79	SW	17			10		SCT080		28.29	29.46	
10/11/2021	6:40 pm	81	36	20	79	SSW	14			10		SCT080		28.3	29.47	
10/11/2021	6:35 pm	81	36	20	79	SW	18			10		SCT080		28.3	29.47	
10/11/2021	6:30 pm	82	36	19	80	SSW	16			10		SCT080		28.3	29.47	
10/11/2021	6:25 pm	82	36	19	80	SSW	15	G	22	10		SCT080		28.3	29.47	
10/11/2021	6:20 pm	82	36	19	80	SSW	14			10		SCT080		28.3	29.47	
10/11/2021	6:15 pm	82	36	19	80	SSW	14			10		SCT080		28.3	29.47	
10/11/2021	6:10 pm	82	36	19	80	SSW	15	G	21	10		SCT080		28.3	29.47	
10/11/2021	6:05 pm	82	34	17	80	SSW	16	G	22	10		SCT080		28.3	29.47	
10/11/2021	6:00 pm	82	34	17	80	SSW	14			10		SCT080		28.3	29.47	
10/11/2021	5:55 pm	82	34	17	80	SSW	13			10		SCT080		28.3	29.47	
10/11/2021	5:51 pm	83	35	18	80	SSW	14			10		SCT080	996.6	28.3	29.47	
10/11/2021	5:50 pm	82	36	19	80	SSW	12	G	18	10		SCT080		28.31	29.48	
10/11/2021	5:45 pm	82	36	19	80	SSW	14	G	20	10		SCT080		28.31	29.48	
10/11/2021	5:40 pm	84	36	18	81	SSW	16	G	22	10		FEW100		28.31	29.48	
10/11/2021	5:35 pm	84	36	18	81	SSW	16			10		FEW100		28.31	29.48	
10/11/2021	5:30 pm	84	36	18	81	SSW	14			10		FEW100		28.31	29.48	
10/11/2021	5:25 pm	84	34	16	81	SSW	14	G	20	10		FEW100		28.31	29.48	
10/11/2021	5:20 pm	84	34	16	81	SSW	15			10		FEW100		28.31	29.48	
10/11/2021	5:15 pm	84	34	16	81	S	13			10		FEW100		28.32	29.49	
10/11/2021	5:10 pm	84	32	15	81	SSW	16	G	22	10		FEW100		28.32	29.49	
10/11/2021	5:05 pm	84	30	14	81	SSW	15	G	22	10		FEW100		28.32	29.49	

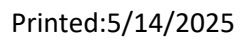
Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	5:00 pm	84	29	13	81	SSW	16			10		FEW100		28.32	29.49	
10/11/2021	4:55 pm	84	29	13	81	SSW	16	G	22	10		FEW100		28.32	29.49	
10/11/2021	4:51 pm	85	27	12	82	SSW	21	G	29	10		FEW100	997	28.32	29.49	
10/11/2021	4:50 pm	84	27	12	81	SSW	20	G	26	10		FEW100		28.31	29.48	
10/11/2021	4:45 pm	84	27	12	81	SSW	18			10		FEW100		28.32	29.49	
10/11/2021	4:40 pm	84	27	12	81	SSW	16	G	22	10		FEW100		28.32	29.49	
10/11/2021	4:35 pm	86	27	12	82	S	20			10		FEW100		28.33	29.5	
10/11/2021	4:30 pm	86	27	12	82	SSW	18	G	31	10		FEW100		28.33	29.5	
10/11/2021	4:25 pm	86	27	12	82	SW	13			10		FEW100		28.34	29.51	
10/11/2021	4:20 pm	86	27	12	82	SSW	12			10		FEW100		28.34	29.51	
10/11/2021	4:15 pm	88	27	11	84	SW	17			10		FEW100		28.35	29.52	
10/11/2021	4:10 pm	86	27	12	82	SW	17			10		FEW100		28.35	29.52	
10/11/2021	4:05 pm	88	27	11	84	SW	18	G	29	10		FEW100		28.35	29.52	
10/11/2021	4:00 pm	88	27	11	84	SW	15	G	21	10		FEW100		28.36	29.53	
10/11/2021	3:55 pm	88	27	11	84	SSW	18			10		FEW100		28.35	29.52	
10/11/2021	3:51 pm	87	26	11	83	SW	15	G	25	10		FEW100 FEW25	998.3	28.36	29.53	
10/11/2021	3:50 pm	88	27	11	84	SSW	14			10		FEW100		28.36	29.53	
10/11/2021	3:45 pm	88	27	11	84	SSW	14	G	20	10		CLR		28.36	29.53	
10/11/2021	3:40 pm	88	27	11	84	SSW	17			10		CLR		28.36	29.53	
10/11/2021	3:35 pm	88	27	11	84	SSW	14			10		CLR		28.36	29.53	
10/11/2021	3:30 pm	88	27	11	84	SSW	24	G	35	10		CLR		28.36	29.53	
10/11/2021	3:25 pm	88	27	11	84	SW	14			10		CLR		28.37	29.54	
10/11/2021	3:20 pm	88	27	11	84	SW	15			10		CLR		28.37	29.54	
10/11/2021	3:15 pm	88	27	11	84	SSW	9			10		CLR		28.38	29.55	
10/11/2021	3:10 pm	88	27	11	84	SW	18	G	25	10		CLR		28.38	29.55	
10/11/2021	3:05 pm	88	27	11	84	SW	12	G	18	10		CLR		28.38	29.55	
10/11/2021	3:00 pm	88	27	11	84	S	12			10		CLR		28.39	29.56	
10/11/2021	2:55 pm	88	29	12	84	SSW	16			10		CLR		28.39	29.56	
10/11/2021	2:51 pm	87	28	12	83	WSW	12	G	22	10		FEW250	999.4	28.39	29.56	
10/11/2021	2:50 pm	88	29	12	84	WSW	13			10				28.39	29.56	
10/11/2021	2:45 pm	88	29	12	84	SW	15			10				28.39	29.56	
10/11/2021	2:40 pm	88	29	12	84	SW	14	G	20	10				28.4	29.57	
10/11/2021	2:35 pm	86	29	12	83	SW	10			10				28.4	29.57	
10/11/2021	2:30 pm	88	29	12	84	SSW	8			10				28.4	29.57	
10/11/2021	2:25 pm	86	29	12	83	SSW	10			10				28.4	29.57	
10/11/2021	2:20 pm	88	29	12	84	SSW	14			10				28.41	29.58	
10/11/2021	2:15 pm	86	29	12	83	SW	14			10				28.41	29.58	
10/11/2021	2:10 pm	88	29	12	84	SSW	10	G	16	10				28.42	29.59	
10/11/2021	2:05 pm	86	29	12	83	SSW	16			10				28.42	29.59	
10/11/2021	2:00 pm	88	29	12	84	S	9			10				28.42	29.59	
10/11/2021	1:55 pm	86	29	12	83	S	17			10				28.43	29.6	
10/11/2021	1:51 pm	87	30	13	83	S	12	G	25	10		FEW250	1000.6	28.43	29.6	
10/11/2021	1:50 pm	88	31	13	84	S	15			10				28.43	29.6	
10/11/2021	1:45 pm	84	29	13	81	WSW	6			10				28.43	29.6	
10/11/2021	1:40 pm	86	30	13	83	SW	12			10				28.44	29.61	
10/11/2021	1:35 pm	86	30	13	83	SSW	15			10				28.44	29.61	

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	1:30 pm	86	30	13	83	S	13			10				28.45	29.62	
10/11/2021	1:25 pm	84	30	14	81	SSW	10			10				28.45	29.62	
10/11/2021	1:20 pm	84	30	14	81	WSW	7			10				28.45	29.62	
10/11/2021	1:15 pm	84	30	14	81	SSW	12			10				28.45	29.63	
10/11/2021	1:10 pm	84	30	14	81	SW	13			10				28.46	29.64	
10/11/2021	1:05 pm	84	30	14	81	SW	9			10				28.46	29.64	
10/11/2021	1:00 pm	84	30	14	81	S	8			10				28.46	29.64	
10/11/2021	12:55 pm	84	30	14	81	SSW	13			10				28.47	29.65	
10/11/2021	12:51 pm	83	30	15	80	S	10	G	18	10		FEW250	1002.4	28.47	29.65	
10/11/2021	12:50 pm	84	30	14	81	SSE	9			10				28.47	29.65	
10/11/2021	12:45 pm	84	30	14	81	SSW	9			10				28.47	29.65	
10/11/2021	12:40 pm	82	30	15	80	SSE	10			10				28.48	29.66	
10/11/2021	12:35 pm	84	29	13	81	S	12			10				28.48	29.66	
10/11/2021	12:30 pm	84	30	14	81	SSW	12			10				28.48	29.66	
10/11/2021	12:25 pm	82	30	15	80	S	8			10				28.48	29.66	
10/11/2021	12:20 pm	82	32	16	80	SE	8			10				28.49	29.67	
10/11/2021	12:15 pm	82	32	16	80	SSE	9			10				28.5	29.68	
10/11/2021	12:10 pm	82	30	15	80	S	9			10				28.5	29.68	
10/11/2021	12:05 pm	82	32	16	80	S	13			10				28.5	29.68	
10/11/2021	12:00 pm	81	32	17	79	SE	9			10				28.51	29.69	
10/11/2021	11:55 am	81	32	17	79	SSE	8			10				28.51	29.69	
10/11/2021	11:51 am	82	33	17	80	S	8			10		FEW250	1003.9	28.51	29.69	
10/11/2021	11:50 am	82	34	17	80	S	6			10				28.51	29.69	
10/11/2021	11:45 am	82	34	17	80	SSE	5			10				28.52	29.7	
10/11/2021	11:40 am	81	34	18	79	SE	5			10				28.52	29.7	
10/11/2021	11:35 am	79	34	20		SSE	8			10				28.52	29.7	
10/11/2021	11:30 am	81	34	18	79	SSE	10			10				28.52	29.7	
10/11/2021	11:25 am	81	34	18	79	S	14			10				28.53	29.71	
10/11/2021	11:20 am	81	34	18	79	SSE	10			10				28.53	29.71	
10/11/2021	11:15 am	79	34	20		SE	10			10				28.54	29.72	
10/11/2021	11:10 am	79	34	20		SSE	12			10				28.54	29.72	
10/11/2021	11:05 am	79	34	20		SSE	10			10				28.55	29.73	
10/11/2021	11:00 am	79	34	20		SE	10			10				28.55	29.73	
10/11/2021	10:55 am	79	34	20		SSE	13			10		CLR		28.55	29.73	
10/11/2021	10:51 am	77	34	21		SSE	10	G	20	10		FEW250	1005.5	28.56	29.74	
10/11/2021	10:50 am	77	34	21		SSE	10			10				28.56	29.74	
10/11/2021	10:45 am	75	34	22		SSE	12			10				28.55	29.73	
10/11/2021	10:40 am	75	36	24		SE	10	G	16	10				28.55	29.73	
10/11/2021	10:35 am	75	36	24		SSE	10			10				28.56	29.74	
10/11/2021	10:30 am	75	36	24		ESE	7			10				28.56	29.74	
10/11/2021	10:25 am	75	36	24		SE	7			10				28.56	29.74	
10/11/2021	10:20 am	75	36	24		SE	7			10				28.56	29.74	
10/11/2021	10:15 am	75	36	24		ESE	9			10				28.56	29.74	
10/11/2021	10:10 am	73	34	23		SSE	10			10				28.56	29.74	
10/11/2021	10:05 am	73	34	23		SE	8			10				28.56	29.74	
10/11/2021	10:00 am	73	34	23		SE	12			10				28.57	29.75	

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	9:55 am	73	34	23		SSE	9			10				28.57	29.75	
10/11/2021	9:51 am	74	34	23		SSE	12			10		FEW250	1005.9	28.57	29.75	
10/11/2021	9:50 am	73	34	23		SSE	10			10				28.57	29.75	
10/11/2021	9:45 am	73	34	23		SE	10			10				28.57	29.75	
10/11/2021	9:40 am	73	36	25		SE	9			10				28.57	29.75	
10/11/2021	9:35 am	73	34	23		SE	8			10				28.57	29.75	
10/11/2021	9:30 am	72	36	27		SSE	7			10				28.57	29.75	
10/11/2021	9:25 am	72	36	27		SE	7			10				28.58	29.76	
10/11/2021	9:20 am	72	37	29		ESE	7			10				28.58	29.76	
10/11/2021	9:15 am	72	37	29		E	7			10				28.58	29.76	
10/11/2021	9:10 am	70	37	31		E	7			10				28.58	29.76	
10/11/2021	9:05 am	70	37	31		ESE	7			10				28.58	29.76	
10/11/2021	9:00 am	70	37	31		ESE	8			10				28.58	29.76	
10/11/2021	8:55 am	70	37	31		ESE	8			10				28.58	29.76	
10/11/2021	8:51 am	69	37	31		ESE	8			10		FEW250	1006.4	28.58	29.76	
10/11/2021	8:50 am	70	37	31		ESE	7			10				28.58	29.76	
10/11/2021	8:45 am	68	37	32		ESE	8			10		CLR		28.58	29.76	
10/11/2021	8:40 am	66	37	35		ESE	8			10		CLR		28.58	29.76	
10/11/2021	8:35 am	66	37	35		ESE	9			10		CLR		28.58	29.76	
10/11/2021	8:30 am	66	37	35		ESE	9			10		CLR		28.58	29.76	
10/11/2021	8:25 am	66	37	35		ESE	9			10		CLR		28.58	29.76	
10/11/2021	8:20 am	66	37	35		ESE	9			10		CLR		28.58	29.76	
10/11/2021	8:15 am	64	37	37		ESE	10			10		CLR		28.58	29.76	
10/11/2021	8:10 am	64	37	37		ESE	9			10		CLR		28.58	29.76	
10/11/2021	8:05 am	64	37	37		E	9			10		CLR		28.58	29.76	
10/11/2021	8:00 am	64	37	37		ESE	10			10		CLR		28.58	29.76	
10/11/2021	7:55 am	64	37	37		E	12			10		CLR		28.58	29.76	
10/11/2021	7:51 am	64	38	38		ESE	10			10		CLR	1006.5	28.58	29.76	
10/11/2021	7:50 am	63	37	39		ESE	10			10		CLR		28.58	29.76	
10/11/2021	7:45 am	63	37	39		ESE	13			10		CLR		28.58	29.76	
10/11/2021	7:40 am	63	37	39		ESE	12			10		CLR		28.58	29.76	
10/11/2021	7:35 am	63	37	39		E	10			10		CLR		28.58	29.76	
10/11/2021	7:30 am	63	37	39		E	10			10		CLR		28.58	29.76	
10/11/2021	7:25 am	63	37	39		E	10			10		CLR		28.58	29.76	
10/11/2021	7:20 am	63	37	39		E	9			10		CLR		28.58	29.76	
10/11/2021	7:15 am	63	37	39		ESE	12			10		CLR		28.58	29.76	
10/11/2021	7:10 am	61	37	42		ESE	12			10		CLR		28.58	29.76	
10/11/2021	7:05 am	61	37	42		ESE	10			10		CLR		28.58	29.76	
10/11/2021	7:00 am	61	37	42		E	10			10		CLR		28.58	29.76	
10/11/2021	6:55 am	61	37	42		E	9			10		CLR		28.59	29.77	
10/11/2021	6:51 am	61	38	42		E	9			10		CLR	1006.7	28.59	29.77	
10/11/2021	6:50 am	61	37	42		E	8			10		CLR		28.59	29.77	
10/11/2021	6:45 am	61	37	42		E	8			10		CLR		28.59	29.77	
10/11/2021	6:40 am	61	37	42		E	9			10		CLR		28.59	29.77	
10/11/2021	6:35 am	61	37	42		E	8			9		CLR		28.59	29.77	
10/11/2021	6:30 am	63	37	39		E	8			10		CLR		28.59	29.77	

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	6:25 am	63	37	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	6:20 am	63	39	42		ESE	9			10		CLR		28.59	29.77	
10/11/2021	6:15 am	63	39	42		E	9			10		CLR		28.59	29.77	
10/11/2021	6:10 am	63	39	42		E	10			10		CLR		28.59	29.77	
10/11/2021	6:05 am	63	39	42		E	10			10		CLR		28.59	29.77	
10/11/2021	6:00 am	63	39	42		E	10			10		CLR		28.59	29.77	
10/11/2021	5:55 am	63	39	42		ESE	9			10		CLR		28.6	29.78	
10/11/2021	5:51 am	62	39	43		ESE	8			10		CLR	1006.9	28.59	29.77	
10/11/2021	5:50 am	63	39	42		ESE	8			10		CLR		28.59	29.77	
10/11/2021	5:45 am	61	39	45		ESE	7			10		CLR		28.6	29.78	
10/11/2021	5:40 am	63	39	42		ESE	7			10		CLR		28.59	29.77	
10/11/2021	5:35 am	63	39	42		E	7			10		CLR		28.59	29.77	
10/11/2021	5:30 am	63	39	42		E	6			10		CLR		28.59	29.77	
10/11/2021	5:25 am	63	39	42		ESE	7			10		CLR		28.59	29.77	
10/11/2021	5:20 am	63	39	42		E	7			10		CLR		28.59	29.77	
10/11/2021	5:15 am	63	39	42		E	8			10		CLR		28.59	29.77	
10/11/2021	5:10 am	63	39	42		E	8			10		CLR		28.59	29.77	
10/11/2021	5:05 am	63	39	42		E	7			10		CLR		28.59	29.77	
10/11/2021	5:00 am	63	39	42		E	7			10		CLR		28.59	29.77	
10/11/2021	4:55 am	63	39	42		ESE	7			10		CLR		28.59	29.77	
10/11/2021	4:51 am	63	40	43		ESE	8			10		CLR	1006.8	28.59	29.77	
10/11/2021	4:50 am	63	39	42		ESE	8			10		CLR		28.59	29.77	
10/11/2021	4:45 am	63	39	42		E	8			10		CLR		28.59	29.77	
10/11/2021	4:40 am	63	39	42		E	8			10		CLR		28.59	29.77	
10/11/2021	4:35 am	63	39	42		E	8			10		CLR		28.59	29.77	
10/11/2021	4:30 am	64	39	39		E	9			10		CLR		28.59	29.77	
10/11/2021	4:25 am	64	39	39		E	8			10		CLR		28.59	29.77	
10/11/2021	4:20 am	64	39	39		ESE	9			10		CLR		28.59	29.77	
10/11/2021	4:15 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	4:10 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	4:05 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	4:00 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	3:55 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	3:51 am	64	39	40		ESE	8			10		CLR	1007	28.6	29.78	
10/11/2021	3:50 am	64	39	39		ESE	8			10		CLR		28.6	29.78	
10/11/2021	3:45 am	64	39	39		ESE	6			10		CLR		28.6	29.78	
10/11/2021	3:40 am	64	39	39		ESE	6			10		CLR		28.6	29.78	
10/11/2021	3:35 am	64	39	39		ESE	5			10		CLR		28.6	29.78	
10/11/2021	3:30 am	64	39	39		ESE	5			10		CLR		28.6	29.78	
10/11/2021	3:25 am	64	39	39		E	5			10		CLR		28.6	29.78	
10/11/2021	3:20 am	64	39	39		E	5			10		CLR		28.6	29.78	
10/11/2021	3:15 am	64	39	39		ESE	5			10		CLR		28.6	29.78	
10/11/2021	3:10 am	64	39	39		ESE	6			10		CLR		28.6	29.78	
10/11/2021	3:05 am	64	39	39		E	7			10		CLR		28.6	29.78	
10/11/2021	3:00 am	64	39	39		E	3			10		CLR		28.6	29.78	
10/11/2021	2:55 am	64	39	39		E	6			10		CLR		28.6	29.78	

Date/Time	Column1	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter	6 Hr
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)	(°F)
10/11/2021	2:51 am	65	41	42		E	5			10		FEW030	1007.1	28.6	29.78	
10/11/2021	2:50 am	64	41	42		ESE	3			10		FEW030		28.6	29.78	
10/11/2021	2:45 am	64	39	39		ESE	5			6	Haze	FEW030		28.61	29.79	
10/11/2021	2:40 am	64	39	39		SE	5			5	Haze	CLR		28.61	29.79	
10/11/2021	2:35 am	64	39	39		SE	5			6	Haze	CLR		28.61	29.79	
10/11/2021	2:30 am	66	39	37		ESE	5			8		CLR		28.61	29.79	
10/11/2021	2:25 am	66	39	37		ESE	6			10		CLR		28.61	29.79	
10/11/2021	2:20 am	66	39	37		ESE	5			10		CLR		28.61	29.79	
10/11/2021	2:15 am	66	37	35		ESE	3			10		CLR		28.61	29.79	
10/11/2021	2:10 am	66	37	35		SE	5			10		CLR		28.62	29.8	
10/11/2021	2:05 am	66	37	35		ESE	3			10		CLR		28.62	29.8	
10/11/2021	2:00 am	66	37	35		SSE	3			10		CLR		28.62	29.8	
10/11/2021	1:55 am	64	39	39		N	0			10		CLR		28.62	29.8	
10/11/2021	1:51 am	65	40	40		SSE	3			10		CLR	1007.7	28.62	29.8	
10/11/2021	1:50 am	66	39	37		SSE	3			10		CLR		28.62	29.8	
10/11/2021	1:45 am	66	39	37		ESE	3			10		CLR		28.62	29.8	
10/11/2021	1:40 am	66	39	37		E	5			10		CLR		28.62	29.8	
10/11/2021	1:35 am	66	37	35		E	8			10		CLR		28.62	29.8	
10/11/2021	1:30 am	68	37	32		E	8			10		CLR		28.62	29.8	
10/11/2021	1:25 am	68	37	32		E	8			10		CLR		28.62	29.8	
10/11/2021	1:20 am	68	37	32		E	7			10		CLR		28.62	29.8	
10/11/2021	1:15 am	68	37	32		E	7			10		CLR		28.62	29.8	
10/11/2021	1:10 am	70	37	31		E	7			10		CLR		28.62	29.8	
10/11/2021	1:05 am	70	36	28		E	7			10		CLR		28.62	29.8	
10/11/2021	1:00 am	70	37	31		E	8			10		CLR		28.62	29.8	
10/11/2021	12:55 am	68	37	32		E	7			10		CLR		28.63	29.81	
10/11/2021	12:51 am	68	38	33		E	7			10		CLR	1007.9	28.63	29.81	
10/11/2021	12:50 am	68	37	32		E	7			10		CLR		28.63	29.81	
10/11/2021	12:45 am	68	37	32		E	6			10		CLR		28.63	29.81	
10/11/2021	12:40 am	68	37	32		E	6			10		CLR		28.63	29.81	
10/11/2021	12:35 am	68	37	32		E	6			10		CLR		28.63	29.81	
10/11/2021	12:30 am	70	37	31		E	5			10		CLR		28.63	29.81	
10/11/2021	12:25 am	70	37	31		E	5			10		CLR		28.63	29.81	
10/11/2021	12:20 am	70	37	31		E	5			10		CLR		28.63	29.81	
10/11/2021	12:15 am	70	37	31		E	5			10		CLR		28.63	29.81	
10/11/2021	12:10 am	70	37	31		E	3			10		CLR		28.64	29.82	
10/11/2021	12:05 am	70	37	31		E	3			10		CLR		28.64	29.82	



Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	11:55 pm	59	28	31		E	8			10		CLR		28.7	29.89
10/12/2021	11:51 pm	59	29	32		E	7			10		CLR	1011.4	28.7	29.89
10/12/2021	11:50 pm	59	28	31		E	7			10		CLR		28.7	29.89
10/12/2021	11:45 pm	61	28	29		E	8			10		CLR		28.7	29.89
10/12/2021	11:40 pm	61	30	31		E	6			10		CLR		28.7	29.89
10/12/2021	11:35 pm	61	26	27		E	3			10		CLR		28.71	29.9
10/12/2021	11:30 pm	61	26	27		N	0			10		CLR		28.71	29.9
10/12/2021	11:25 pm	61	30	31		N	0			10		CLR		28.71	29.9
10/12/2021	11:20 pm	59	32	36		N	0			10		CLR		28.71	29.9
10/12/2021	11:15 pm	59	30	33		SSW	3			10		CLR		28.71	29.9
10/12/2021	11:10 pm	59	32	36		SW	5			10		CLR		28.71	29.9
10/12/2021	11:05 pm	61	30	31		SW	5			10		CLR		28.71	29.9
10/12/2021	11:00 pm	61	32	34		SW	3			10		CLR		28.71	29.9
10/12/2021	10:55 pm	61	30	31		N	0			10		CLR		28.71	29.9
10/12/2021	10:51 pm	60	31	33		N	0			10		CLR	1011.5	28.71	29.9
10/12/2021	10:50 pm	61	30	31		N	0			10		CLR		28.71	29.9
10/12/2021	10:45 pm	61	26	27		N	0			10		CLR		28.71	29.9
10/12/2021	10:40 pm	61	26	27		W	3			10		CLR		28.71	29.9
10/12/2021	10:35 pm	61	28	29		N	0			10		CLR		28.71	29.9
10/12/2021	10:30 pm	61	28	29		N	0			10		CLR		28.71	29.9
10/12/2021	10:25 pm	63	25	24		N	0			10		CLR		28.71	29.9
10/12/2021	10:20 pm	63	25	24		N	0			10		CLR		28.71	29.9
10/12/2021	10:15 pm	63	25	24		N	0			10		CLR		28.71	29.9
10/12/2021	10:10 pm	63	25	24		N	0			10		CLR		28.71	29.9
10/12/2021	10:05 pm	61	26	27		N	0			10		CLR		28.71	29.9
10/12/2021	10:00 pm	61	28	29		SSW	3			10		CLR		28.71	29.9
10/12/2021	9:55 pm	61	30	31		N	0			10		CLR		28.71	29.9
10/12/2021	9:51 pm	61	29	30		N	0			10		CLR	1011.6	28.71	29.9
10/12/2021	9:50 pm	61	28	29		N	0			10		CLR		28.71	29.9
10/12/2021	9:45 pm	61	28	29		N	0			10		CLR		28.71	29.9
10/12/2021	9:40 pm	61	28	29		SW	3			10		CLR		28.71	29.9
10/12/2021	9:35 pm	61	28	29		SW	3			10		CLR		28.71	29.9
10/12/2021	9:30 pm	61	28	29		SW	3			10		CLR		28.71	29.9
10/12/2021	9:25 pm	61	28	29		SW	5			10		CLR		28.7	29.89
10/12/2021	9:20 pm	61	28	29		SW	5			10		CLR		28.7	29.89
10/12/2021	9:15 pm	61	28	29		SW	3			10		CLR		28.71	29.9
10/12/2021	9:10 pm	61	28	29		SW	3			10		CLR		28.7	29.89
10/12/2021	9:05 pm	63	28	27		SW	3			10		CLR		28.7	29.89
10/12/2021	9:00 pm	63	26	25		SW	5			10		CLR		28.7	29.89
10/12/2021	8:55 pm	63	26	25		WSW	5			10		CLR		28.7	29.89
10/12/2021	8:51 pm	62	26	25		SW	5			10		CLR	1011.3	28.7	29.89

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	8:50 pm	63	26	25		SW	5			10		CLR		28.7	29.89
10/12/2021	8:45 pm	63	26	25		SW	5			10		CLR		28.7	29.89
10/12/2021	8:40 pm	63	26	25		SW	3			10		CLR		28.7	29.89
10/12/2021	8:35 pm	63	25	24		SSW	3			10		CLR		28.7	29.89
10/12/2021	8:30 pm	63	25	24		SW	5			10		CLR		28.69	29.88
10/12/2021	8:25 pm	63	26	25		SW	3			10		CLR		28.69	29.88
10/12/2021	8:20 pm	63	26	25		SW	3			10		CLR		28.69	29.88
10/12/2021	8:15 pm	63	26	25		SSW	5			10		CLR		28.69	29.88
10/12/2021	8:10 pm	63	26	25		SSW	6			10		CLR		28.69	29.88
10/12/2021	8:05 pm	63	26	25		SSW	5			10		CLR		28.69	29.88
10/12/2021	8:00 pm	63	26	25		SSW	5			10		CLR		28.69	29.88
10/12/2021	7:55 pm	63	26	25		SSW	5			10		CLR		28.69	29.88
10/12/2021	7:51 pm	63	27	25		SW	6			10		CLR	1010.7	28.69	29.87
10/12/2021	7:50 pm	63	26	25		SSW	6			10		CLR		28.69	29.87
10/12/2021	7:45 pm	63	26	25		SSW	6			10		CLR		28.69	29.87
10/12/2021	7:40 pm	64	25	22		SSW	6			10		CLR		28.69	29.87
10/12/2021	7:35 pm	64	25	22		SW	5			10		CLR		28.69	29.87
10/12/2021	7:30 pm	64	23	20		N	0			10		CLR		28.69	29.87
10/12/2021	7:25 pm	64	23	20		WSW	3			10		CLR		28.69	29.87
10/12/2021	7:20 pm	66	19	16		W	5			10		CLR		28.69	29.87
10/12/2021	7:15 pm	66	19	16		W	6			10		CLR		28.69	29.87
10/12/2021	7:10 pm	66	19	16		W	6			10		CLR		28.69	29.87
10/12/2021	7:05 pm	66	19	16		WNW	6			10		CLR		28.69	29.87
10/12/2021	7:00 pm	66	19	16		W	6			10		CLR		28.69	29.87
10/12/2021	6:55 pm	66	19	16		WNW	7			10		CLR		28.68	29.86
10/12/2021	6:51 pm	66	20	17		W	6			10		CLR	1010.2	28.68	29.86
10/12/2021	6:50 pm	66	19	16		W	7			10		CLR		28.68	29.86
10/12/2021	6:45 pm	66	19	16		W	8			10		CLR		28.68	29.86
10/12/2021	6:40 pm	66	19	16		W	7			10		CLR		28.68	29.86
10/12/2021	6:35 pm	66	19	16		WNW	8			10		CLR		28.68	29.86
10/12/2021	6:30 pm	66	19	16		W	8			10		CLR		28.68	29.86
10/12/2021	6:25 pm	66	19	16		W	8			10		CLR		28.68	29.86
10/12/2021	6:20 pm	66	19	16		WNW	10			10		CLR		28.67	29.85
10/12/2021	6:15 pm	66	19	16		NW	10	G	16	10		CLR		28.67	29.85
10/12/2021	6:10 pm	66	19	16		NW	9			10		CLR		28.67	29.85
10/12/2021	6:05 pm	66	19	16		WNW	12			10		CLR		28.67	29.85
10/12/2021	6:00 pm	66	19	16		WNW	12			10		CLR		28.67	29.85
10/12/2021	5:55 pm	66	19	16		WNW	10			10		CLR		28.67	29.85
10/12/2021	5:51 pm	67	20	16		WNW	10			10		CLR	1009.7	28.67	29.85
10/12/2021	5:50 pm	66	19	16		WNW	10			10		CLR		28.67	29.85
10/12/2021	5:45 pm	68	19	16		WNW	14			10		CLR		28.67	29.85

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	5:40 pm	68	19	16		W	12			10		CLR		28.66	29.84
10/12/2021	5:35 pm	66	19	16		WNW	7			10		CLR		28.67	29.85
10/12/2021	5:30 pm	68	19	16		W	9			10		CLR		28.67	29.85
10/12/2021	5:25 pm	68	19	16		W	13			10		CLR		28.66	29.84
10/12/2021	5:20 pm	66	19	16		WNW	8			10		CLR		28.66	29.84
10/12/2021	5:15 pm	68	19	16		W	13			10		CLR		28.66	29.84
10/12/2021	5:10 pm	70	19	15		WNW	13			10		CLR		28.66	29.84
10/12/2021	5:05 pm	68	19	16		WNW	14			10		CLR		28.66	29.84
10/12/2021	5:00 pm	70	19	15		WNW	13			10		CLR		28.66	29.84
10/12/2021	4:55 pm	68	19	16						10		CLR		28.66	29.84
10/12/2021	4:51 pm	68	20	16			3			10		CLR	1009.4	28.66	29.84
10/12/2021	4:50 pm	70	19	15		SW	6			10		CLR		28.66	29.84
10/12/2021	4:45 pm	70	19	15		WNW	9			10		CLR		28.66	29.84
10/12/2021	4:40 pm	68	19	16		W	7			10		CLR		28.66	29.84
10/12/2021	4:35 pm	70	19	15		WNW	10			10		CLR		28.66	29.84
10/12/2021	4:30 pm	68	19	16		W	3			10		CLR		28.66	29.84
10/12/2021	4:25 pm	68	19	16		W	8			10		CLR		28.65	29.83
10/12/2021	4:20 pm	68	19	16		WSW	6			10		CLR		28.65	29.83
10/12/2021	4:15 pm	68	19	16		WNW	8			10		CLR		28.65	29.83
10/12/2021	4:10 pm	70	19	15		WNW	13			10		CLR		28.65	29.83
10/12/2021	4:05 pm	70	19	15		WNW	10			10		CLR		28.65	29.83
10/12/2021	4:00 pm	70	19	15		WNW	13			10		CLR		28.65	29.83
10/12/2021	3:55 pm	70	19	15						10		CLR		28.65	29.83
10/12/2021	3:51 pm	68	19	15		WNW	15	G	18	10		CLR	1009.2	28.65	29.83
10/12/2021	3:50 pm	68	19	16		NW	6			10		CLR		28.65	29.83
10/12/2021	3:45 pm	70	19	15		WNW	15			10		CLR		28.65	29.83
10/12/2021	3:40 pm	70	19	15		WNW	15	G	22	10		CLR		28.65	29.83
10/12/2021	3:35 pm	68	19	16		WNW	13			10		CLR		28.65	29.83
10/12/2021	3:30 pm	70	19	15		WNW	15			10		CLR		28.65	29.83
10/12/2021	3:25 pm	70	19	15		W	10	G	18	10		CLR		28.65	29.83
10/12/2021	3:20 pm	70	19	15		WNW	5			10		CLR		28.65	29.83
10/12/2021	3:15 pm	70	19	15						10		CLR		28.65	29.83
10/12/2021	3:10 pm	70	19	15		WSW	7			10		CLR		28.65	29.83
10/12/2021	3:05 pm	68	19	16		W	15			10		CLR		28.65	29.83
10/12/2021	3:00 pm	68	19	16		NW	10	G	17	10		CLR		28.65	29.83
10/12/2021	2:55 pm	70	19	15		W	10			10		CLR		28.65	29.83
10/12/2021	2:51 pm	70	20	15		W	15	G	20	10		CLR	1008.9	28.65	29.83
10/12/2021	2:50 pm	70	19	15		WSW	15			10		CLR		28.65	29.83
10/12/2021	2:45 pm	68	19	16		NW	8			10		CLR		28.65	29.83
10/12/2021	2:40 pm	70	19	15		W	10	G	18	10		CLR		28.65	29.83
10/12/2021	2:35 pm	70	19	15		W	13			10		CLR		28.64	29.82

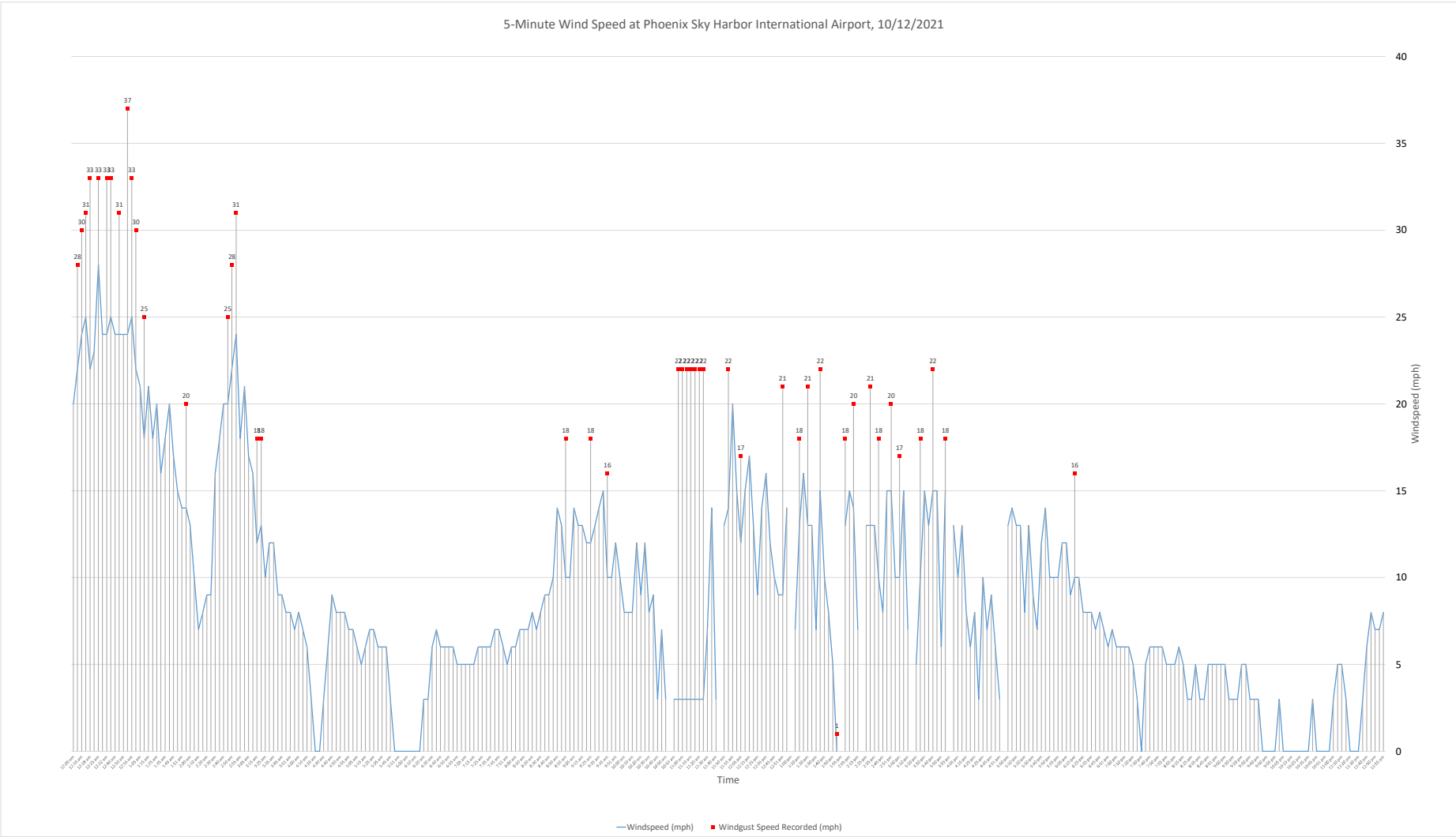
Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	2:30 pm	70	19	15		WNW	13	G	21	10		CLR		28.65	29.83
10/12/2021	2:25 pm	70	21	16		WNW	13			10		CLR		28.65	29.83
10/12/2021	2:20 pm	70	21	16						10		CLR		28.64	29.82
10/12/2021	2:15 pm	70	21	16		WSW	7			10		CLR		28.64	29.82
10/12/2021	2:10 pm	70	19	15		W	14	G	20	10		CLR		28.64	29.82
10/12/2021	2:05 pm	70	19	15		W	15			10		CLR		28.64	29.82
10/12/2021	2:00 pm	70	19	15		W	13	G	18	10		CLR		28.64	29.82
10/12/2021	1:55 pm	70	21	16						10		CLR		28.64	29.82
10/12/2021	1:51 pm	67	20	16		W	9G	2	1	10		CLR	1008.7	28.64	29.82
10/12/2021	1:50 pm	66	19	16		WSW	5			10		CLR		28.64	29.82
10/12/2021	1:45 pm	70	19	15		W	8			10		FEW100		28.64	29.82
10/12/2021	1:40 pm	70	21	16		W	10			10		FEW100		28.64	29.82
10/12/2021	1:35 pm	70	21	16		W	15	G	22	10		FEW100		28.64	29.82
10/12/2021	1:30 pm	70	21	16		WSW	7			10		FEW100		28.64	29.82
10/12/2021	1:25 pm	70	21	16		WNW	13			10		FEW100		28.64	29.82
10/12/2021	1:20 pm	68	21	17		W	13	G	21	10		FEW100		28.64	29.82
10/12/2021	1:15 pm	68	21	17		W	16			10		FEW100		28.65	29.83
10/12/2021	1:10 pm	66	21	18		W	13	G	18	10		FEW100		28.64	29.82
10/12/2021	1:05 pm	66	21	18		WNW	7			10		FEW100		28.64	29.82
10/12/2021	1:00 pm	68	21	17						10		FEW100		28.64	29.82
10/12/2021	12:55 pm	70	21	16		SW	14			10		FEW100		28.64	29.82
10/12/2021	12:51 pm	70	22	16		WSW	9	G	21	10		FEW100	1008.8	28.64	29.82
10/12/2021	12:50 pm	70	21	16		SW	9			10		FEW100		28.65	29.83
10/12/2021	12:45 pm	68	21	17		SW	10			10		FEW100		28.65	29.83
10/12/2021	12:40 pm	66	21	18		W	12			10		FEW100		28.65	29.83
10/12/2021	12:35 pm	70	21	16		WSW	16			10		FEW100		28.65	29.83
10/12/2021	12:30 pm	68	21	17		SSW	14			10		FEW100		28.65	29.83
10/12/2021	12:25 pm	68	21	17		SW	9			10		FEW100		28.65	29.83
10/12/2021	12:20 pm	68	19	16		SW	13			10		FEW100		28.65	29.83
10/12/2021	12:15 pm	66	21	18		W	17			10		FEW100		28.65	29.83
10/12/2021	12:10 pm	68	21	17		W	15			9		FEW100		28.66	29.84
10/12/2021	12:05 pm	66	21	18		W	12	G	17	9		FEW100		28.65	29.83
10/12/2021	12:00 pm	66	21	18		W	15			9		FEW100		28.65	29.83
10/12/2021	11:55 am	68	23	18		W	20			9		FEW100		28.65	29.83
10/12/2021	11:51 am	67	23	19		SW	14	G	22	10		FEW100	1009	28.65	29.83
10/12/2021	11:50 am	68	23	18		WSW	13			9		FEW085		28.65	29.83
10/12/2021	11:45 am	66	25	21						9		FEW085		28.65	29.83
10/12/2021	11:40 am	66	23	19		WSW	3			9		FEW085		28.66	29.84
10/12/2021	11:35 am	66	23	19		WSW	14			9		FEW085		28.66	29.84
10/12/2021	11:30 am	64	23	20		W	7			9		FEW085		28.66	29.84
10/12/2021	11:25 am	64	23	20		NNE	3	G	22	9		FEW085		28.65	29.83

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
	10/12/2021	11:20 am	64	23	20	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	11:15 am	66	23	19	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	11:10 am	66	23	19	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	11:05 am	66	23	19	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	11:00 am	66	26	22	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	10:55 am	64	26	24	NNE	3	G	22	9		FEW085		28.66	29.84
	10/12/2021	10:53 am	65	27	24	NNE	3			9		FEW085		28.66	29.84
	10/12/2021	10:51 am	65	27	24					9		FEW085	1009.4	28.66	29.84
	10/12/2021	10:50 am	64	26	24	W	3			9		FEW085		28.66	29.84
	10/12/2021	10:45 am	64	26	24	W	7			8		FEW085		28.66	29.84
	10/12/2021	10:40 am	64	26	24	S	3			8		FEW085		28.66	29.84
	10/12/2021	10:35 am	64	26	24	SSW	9			8		FEW085		28.66	29.84
	10/12/2021	10:30 am	64	26	24	SW	8			8		FEW085		28.65	29.83
	10/12/2021	10:25 am	64	25	22	W	12			8		FEW085		28.65	29.83
	10/12/2021	10:20 am	64	25	22	WSW	9			8		FEW085		28.65	29.83
	10/12/2021	10:15 am	64	25	22	W	12			8		FEW085		28.65	29.83
	10/12/2021	10:10 am	64	25	22	WSW	8			7		FEW085		28.65	29.83
	10/12/2021	10:05 am	66	26	22	WSW	8			7		FEW085		28.65	29.83
	10/12/2021	10:00 am	64	26	24	WSW	8			7		FEW085		28.65	29.83
	10/12/2021	9:55 am	64	26	24	SW	10			7		FEW085		28.65	29.83
	10/12/2021	9:51 am	65	26	23	WSW	12			7		FEW085	1008.8	28.65	29.83
	10/12/2021	9:50 am	64	26	24	WSW	10			7		FEW085		28.65	29.83
	10/12/2021	9:45 am	64	25	22	WSW	10	G	16	7		CLR		28.64	29.82
	10/12/2021	9:40 am	64	25	22	W	15			7		CLR		28.64	29.82
	10/12/2021	9:35 am	63	25	24	WSW	14			7		CLR		28.64	29.82
	10/12/2021	9:30 am	63	25	24	W	13			7		CLR		28.64	29.82
	10/12/2021	9:25 am	63	25	24	WSW	12	G	18	7		CLR		28.64	29.82
	10/12/2021	9:20 am	63	26	25	WSW	12			7		CLR		28.64	29.82
	10/12/2021	9:15 am	63	25	24	W	13			7		CLR		28.64	29.82
	10/12/2021	9:10 am	63	25	24	WSW	13			7		CLR		28.64	29.82
	10/12/2021	9:05 am	63	26	25	W	14			7		CLR		28.64	29.82
	10/12/2021	9:00 am	63	25	24	W	10			7		CLR		28.64	29.82
	10/12/2021	8:55 am	63	25	24	W	10	G	18	7		CLR		28.64	29.82
	10/12/2021	8:51 am	62	26	25	W	13			7		CLR	1008.5	28.64	29.82
	10/12/2021	8:50 am	63	26	25	W	14			7		CLR		28.64	29.82
	10/12/2021	8:45 am	63	26	25	SW	10			7		CLR		28.64	29.82
	10/12/2021	8:40 am	63	26	25	W	9			7		CLR		28.64	29.82
	10/12/2021	8:35 am	63	28	27	SW	9			7		CLR		28.63	29.81
	10/12/2021	8:30 am	63	26	25	WSW	8			7		CLR		28.63	29.81
	10/12/2021	8:25 am	61	28	29	WSW	7			7		CLR		28.63	29.81
	10/12/2021	8:20 am	61	28	29	WSW	8			7		CLR		28.62	29.8

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	8:15 am	61	30	31		SSW	7			7		CLR		28.62	29.8
10/12/2021	8:10 am	61	28	29		WSW	7			7		CLR		28.62	29.8
10/12/2021	8:05 am	61	30	31		SW	7			7		CLR		28.62	29.8
10/12/2021	8:00 am	61	28	29		SW	6			7		CLR		28.62	29.8
10/12/2021	7:55 am	61	28	29		WSW	6			7		CLR		28.62	29.8
10/12/2021	7:51 am	60	28	29		SW	5			7		CLR	1007.6	28.61	29.79
10/12/2021	7:50 am	59	28	31		SW	6			7		CLR		28.61	29.79
10/12/2021	7:45 am	61	28	29		SW	7			7		FEW080		28.61	29.79
10/12/2021	7:40 am	59	28	31		SW	7			7		FEW080		28.6	29.78
10/12/2021	7:35 am	59	28	31		WSW	6			7		FEW080		28.6	29.78
10/12/2021	7:30 am	59	28	31		W	6			7		FEW080		28.6	29.78
10/12/2021	7:25 am	57	30	36		WSW	6			7		FEW080		28.6	29.78
10/12/2021	7:20 am	57	30	36		SSW	6			7		FEW080		28.6	29.78
10/12/2021	7:15 am	57	30	36		SW	5			7		FEW080		28.59	29.77
10/12/2021	7:10 am	57	30	36		SW	5			7		FEW080		28.59	29.77
10/12/2021	7:05 am	57	32	38		SW	5			7		FEW080		28.59	29.77
10/12/2021	7:00 am	57	34	41		SW	5			7		FEW080		28.59	29.77
10/12/2021	6:55 am	57	30	36		SW	5			7		FEW080		28.58	29.76
10/12/2021	6:51 am	57	31	37		WSW	6			8		FEW080	1006.5	28.58	29.76
10/12/2021	6:50 am	57	30	36		WSW	6			7		FEW080		28.58	29.76
10/12/2021	6:45 am	57	32	38		WSW	6			8		CLR		28.58	29.76
10/12/2021	6:40 am	57	30	36		SW	6			8		CLR		28.58	29.76
10/12/2021	6:35 am	57	28	33		SSW	7			8		CLR		28.57	29.75
10/12/2021	6:30 am	57	28	33		W	6			9		CLR		28.57	29.75
10/12/2021	6:25 am	57	28	33		WSW	3			9		CLR		28.57	29.75
10/12/2021	6:20 am	57	28	33		W	3			9		CLR		28.57	29.75
10/12/2021	6:15 am	57	28	33		N	0			9		CLR		28.57	29.75
10/12/2021	6:10 am	57	28	33		N	0			10		CLR		28.56	29.74
10/12/2021	6:05 am	57	30	36		N	0			10		CLR		28.56	29.74
10/12/2021	6:00 am	57	30	36		N	0			10		CLR		28.56	29.74
10/12/2021	5:55 am	57	30	36		N	0			10		CLR		28.56	29.74
10/12/2021	5:51 am	57	30	36		N	0			10		CLR	1005.7	28.56	29.74
10/12/2021	5:50 am	57	30	36		N	0			10		CLR		28.56	29.74
10/12/2021	5:45 am	57	30	36		SE	3			10		CLR		28.56	29.74
10/12/2021	5:40 am	57	30	36		SSE	6			10		CLR		28.55	29.73
10/12/2021	5:35 am	57	32	38		S	6			10		CLR		28.55	29.73
10/12/2021	5:30 am	57	30	36		SSW	6			10		CLR		28.55	29.73
10/12/2021	5:25 am	57	28	33		WSW	7			10		CLR		28.55	29.73
10/12/2021	5:20 am	57	30	36		W	7			10		CLR		28.54	29.72
10/12/2021	5:15 am	57	30	36		WSW	6			10		CLR		28.54	29.72
10/12/2021	5:10 am	57	28	33		WSW	5			10		CLR		28.54	29.72

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	5:05 am	57	30	36		WSW	6			10		CLR		28.54	29.72
10/12/2021	5:00 am	59	28	31		W	7			10		CLR		28.54	29.72
10/12/2021	4:55 am	59	28	31		W	7			10		CLR		28.54	29.72
10/12/2021	4:51 am	59	29	32		W	8			10		CLR	1004.9	28.53	29.71
10/12/2021	4:50 am	59	28	31		W	8			10		CLR		28.54	29.72
10/12/2021	4:45 am	59	28	31		W	8			10		CLR		28.54	29.72
10/12/2021	4:40 am	57	30	36		W	9			10		CLR		28.54	29.72
10/12/2021	4:35 am	57	30	36		WSW	6			10		CLR		28.53	29.71
10/12/2021	4:30 am	57	30	36		SW	3			9		CLR		28.53	29.71
10/12/2021	4:25 am	57	32	38		N	0			9		CLR		28.53	29.71
10/12/2021	4:20 am	57	32	38		N	0			9		CLR		28.53	29.71
10/12/2021	4:15 am	57	30	36		SW	3			9		CLR		28.53	29.71
10/12/2021	4:10 am	57	30	36		WSW	6			9		CLR		28.53	29.71
10/12/2021	4:05 am	57	30	36		WSW	7			9		CLR		28.53	29.71
10/12/2021	4:00 am	57	30	36		WSW	8			9		CLR		28.53	29.71
10/12/2021	3:55 am	57	30	36		WSW	7			9		CLR		28.52	29.7
10/12/2021	3:51 am	59	30	33		WSW	8			9		FEW013	1004.5	28.52	29.7
10/12/2021	3:50 am	59	30	33		WSW	8			9		FEW013		28.52	29.7
10/12/2021	3:45 am	59	30	33		WSW	9			9		CLR		28.52	29.7
10/12/2021	3:40 am	59	30	33		WSW	9			9		CLR		28.52	29.7
10/12/2021	3:35 am	59	30	33		SW	12			9		CLR		28.52	29.7
10/12/2021	3:30 am	59	30	33		WSW	12			9		CLR		28.52	29.7
10/12/2021	3:25 am	59	30	33		WSW	10			9		CLR		28.52	29.7
10/12/2021	3:20 am	59	28	31		WSW	13	G	18	9		BKN034 BKN070		28.51	29.69
10/12/2021	3:15 am	61	28	29		WSW	12	G	18	9		BKN034 BKN070		28.51	29.69
10/12/2021	3:10 am	61	28	29		W	16			8		BKN034 BKN070		28.51	29.69
10/12/2021	3:05 am	61	28	29		W	17			8		BKN034 BKN070		28.5	29.68
10/12/2021	3:00 am	61	26	27		W	21			7		BKN034 BKN070		28.5	29.68
10/12/2021	2:55 am	61	26	27		W	18			6		BKN034 BKN070		28.5	29.68
10/12/2021	2:51 am	61	27	27		W	24	G	31	6	Dust	3KN034 BKN071	1003.7	28.5	29.68
10/12/2021	2:50 am	61	26	27		W	22	G	28	6		BKN034 BKN070		28.5	29.68
10/12/2021	2:45 am	61	26	27		W	20	G	25	6		BKN034 BKN070		28.5	29.68
10/12/2021	2:40 am	61	26	27		W	20			6		BKN034 BKN090		28.5	29.68
10/12/2021	2:35 am	61	26	27		W	18			6		BKN034 BKN090		28.5	29.68
10/12/2021	2:30 am	61	26	27		W	16			6		BKN034 BKN090		28.49	29.67
10/12/2021	2:25 am	61	26	27		W	9			5		BKN030 BKN090		28.49	29.67
10/12/2021	2:20 am	61	26	27		W	9			5		BKN030 BKN090		28.49	29.67
10/12/2021	2:15 am	61	26	27		W	8			5		BKN030 BKN090		28.49	29.67
10/12/2021	2:10 am	61	26	27		WSW	7			5		BKN030 BKN090		28.49	29.67
10/12/2021	2:05 am	61	26	27		W	10			5		BKN030 BKN090		28.48	29.66
10/12/2021	2:00 am	61	26	27		W	13			5		BKN030 BKN090		28.48	29.66

Date/Time	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/12/2021	1:55 am	61	26	27		W	14	G	20	5		BKN030 BKN090		28.48	29.66
10/12/2021	1:51 am	61	26	26		W	14			5	Dust	3KN030 BKN090	1002.7	28.47	29.65
10/12/2021	1:50 am	61	26	27		W	15			5		BKN030 BKN090		28.47	29.65
10/12/2021	1:45 am	63	26	25		W	17			5		BKN030 BKN090		28.47	29.65
10/12/2021	1:40 am	63	26	25		W	20			5		FEW024 OVC100		28.47	29.65
10/12/2021	1:35 am	63	26	25		W	18			5		FEW024 OVC100		28.46	29.64
10/12/2021	1:30 am	63	26	25		W	16			5		FEW024 OVC100		28.46	29.64
10/12/2021	1:25 am	63	26	25		W	20			5		FEW024 OVC100		28.46	29.64
10/12/2021	1:20 am	63	26	25		W	18			5		FEW024 OVC100		28.46	29.64
10/12/2021	1:15 am	63	26	25		W	21			5		FEW024 OVC100		28.45	29.63
10/12/2021	1:10 am	63	26	25		W	18	G	25	5		FEW024 OVC100		28.45	29.63
10/12/2021	1:05 am	63	26	25		W	21			5		FEW024 OVC100		28.45	29.63
10/12/2021	1:00 am	63	26	25		W	22	G	30	5		FEW024 OVC100		28.45	29.62
10/12/2021	12:55 am	63	26	25		W	25	G	33	5		FEW024 OVC100		28.44	29.61
10/12/2021	12:51 am	62	26	25		W	24	G	37	5	Dust	FEW024 OVC100	1001.3	28.44	29.61
10/12/2021	12:50 am	63	26	25		W	24			5		FEW024 OVC100		28.44	29.61
10/12/2021	12:45 am	63	26	25		W	24	G	31	5		SCT024 OVC100		28.44	29.61
10/12/2021	12:40 am	63	28	27		W	24			5		SCT024 OVC100		28.43	29.6
10/12/2021	12:35 am	63	28	27		W	25	G	33	5		SCT024 OVC100		28.42	29.59
10/12/2021	12:32 am	63	29	28		W	24	G	33	4	Dust	SCT024 OVC100		28.42	29.59
10/12/2021	12:30 am	63	28	27		W	24			5		BKN024 OVC090		28.42	29.59
10/12/2021	12:25 am	64	28	26		W	28	G	33	4		BKN024 OVC090		28.41	29.58
10/12/2021	12:20 am	64	28	26		W	23			4		BKN024 OVC090		28.41	29.58
10/12/2021	12:18 am	64	30	28		W	22	G	33	4	Dust	3KN024 OVC090		28.41	29.58
10/12/2021	12:15 am	64	30	28		W	25	G	31	2.5		BKN028 OVC070		28.42	29.59
10/12/2021	12:10 am	64	28	26		W	24	G	30	2.5		BKN028 OVC070		28.41	29.58
10/12/2021	12:05 am	63	28	27		W	22	G	28	2.5		BKN028 OVC070		28.41	29.58
10/12/2021	12:00 am	64	28	26		W	20			2.5		BKN028 OVC070		28.41	29.58



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	11:55 pm	WNW	9			10	
9/2/2022	11:51 pm	WNW	10			10	
9/2/2022	11:50 pm	W	10			10	
9/2/2022	11:45 pm	W	10			10	
9/2/2022	11:40 pm	WNW	5			10	
9/2/2022	11:35 pm	N	0			10	
9/2/2022	11:30 pm	N	0			10	
9/2/2022	11:25 pm	N	0			10	
9/2/2022	11:20 pm	N	0			10	
9/2/2022	11:15 pm	N	0			10	
9/2/2022	11:10 pm	SE	5			10	
9/2/2022	11:05 pm	SE	6			10	
9/2/2022	11:00 pm	SE	8			10	
9/2/2022	10:55 pm	SE	8			10	
9/2/2022	10:51 pm	ESE	7			10	
9/2/2022	10:50 pm	ESE	7			10	
9/2/2022	10:45 pm	SE	7			10	
9/2/2022	10:40 pm	SE	6			10	
9/2/2022	10:35 pm	ESE	7			10	
9/2/2022	10:30 pm	SSE	8			10	
9/2/2022	10:25 pm	SE	8			10	
9/2/2022	10:20 pm	ESE	8			10	
9/2/2022	10:15 pm	E	9			10	
9/2/2022	10:10 pm	E	7			10	
9/2/2022	10:05 pm	E	7			10	
9/2/2022	10:00 pm	E	8			10	
9/2/2022	9:55 pm	E	8			10	
9/2/2022	9:51 pm	E	8			10	
9/2/2022	9:50 pm	E	8			10	
9/2/2022	9:45 pm	ESE	7			10	
9/2/2022	9:40 pm	E	7			10	
9/2/2022	9:35 pm	E	8			10	
9/2/2022	9:30 pm	E	10			10	
9/2/2022	9:25 pm	E	7			10	
9/2/2022	9:20 pm	E	6			10	
9/2/2022	9:15 pm	ESE	7			10	
9/2/2022	9:10 pm	ENE	5			10	
9/2/2022	9:05 pm	NNE	8			10	
9/2/2022	9:00 pm	NE	6			10	
9/2/2022	8:55 pm	E	5			10	
9/2/2022	8:51 pm	E	7			10	
9/2/2022	8:50 pm	E	7			10	
9/2/2022	8:45 pm	E	9			10	
9/2/2022	8:40 pm	NE	7			10	
9/2/2022	8:35 pm	N	7			10	
9/2/2022	8:30 pm	NW	12			10	
9/2/2022	8:25 pm	NNW	13			10	
9/2/2022	8:20 pm	NW	10			10	
9/2/2022	8:15 pm	NW	8			10	
9/2/2022	8:10 pm	NW	9			10	
9/2/2022	8:05 pm	NNW	9			10	
9/2/2022	8:00 pm	NNW	7			10	
9/2/2022	7:55 pm	N	0			10	
9/2/2022	7:51 pm	N	0			10	
9/2/2022	7:50 pm	N	0			10	
9/2/2022	7:45 pm	N	0			10	
9/2/2022	7:40 pm	NNE	3			10	
9/2/2022	7:35 pm	ENE	3			10	
9/2/2022	7:30 pm	ESE	6			10	
9/2/2022	7:29 pm	SE	6			10	
9/2/2022	7:25 pm	ESE	9			10	
9/2/2022	7:20 pm	E	9			10	
9/2/2022	7:15 pm	NE	10			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	7:10 pm	ENE	14			10	
9/2/2022	7:05 pm	ENE	14			10	
9/2/2022	7:00 pm	E	16			10	
9/2/2022	6:58 pm	ENE	15			10	Thunder
9/2/2022	6:55 pm	NE	18			10	
9/2/2022	6:51 pm	ENE	17	G	30	10	
9/2/2022	6:50 pm	ENE	20			10	
9/2/2022	6:45 pm	ENE	10			10	
9/2/2022	6:40 pm	ESE	7			10	
9/2/2022	6:35 pm	E	8			10	
9/2/2022	6:30 pm	E	6			10	
9/2/2022	6:25 pm	ENE	7			10	
9/2/2022	6:20 pm	E	7			10	
9/2/2022	6:15 pm	ENE	8			10	
9/2/2022	6:10 pm	ENE	8			10	
9/2/2022	6:05 pm	N	0			10	
9/2/2022	6:00 pm	SW	3			10	
9/2/2022	5:55 pm	S	5			10	
9/2/2022	5:51 pm	SSW	5			10	
9/2/2022	5:50 pm	S	5			10	
9/2/2022	5:45 pm	SSE	5			10	
9/2/2022	5:40 pm	E	3			10	
9/2/2022	5:35 pm	E	5			10	
9/2/2022	5:30 pm	E	7			10	
9/2/2022	5:25 pm	ENE	5			10	
9/2/2022	5:20 pm	S	5			10	
9/2/2022	5:15 pm	SSE	7			10	
9/2/2022	5:10 pm	S	3			10	
9/2/2022	5:05 pm	SSE	9			10	
9/2/2022	5:00 pm	S	6			10	
9/2/2022	4:55 pm	SSE	6			10	
9/2/2022	4:51 pm	ENE	7	G	17	10	
9/2/2022	4:50 pm	ESE	7			10	
9/2/2022	4:45 pm	SSE	13			10	
9/2/2022	4:40 pm	SSE	10			10	
9/2/2022	4:35 pm	SE	9			10	
9/2/2022	4:30 pm	SSE	9			10	
9/2/2022	4:25 pm	S	7			10	
9/2/2022	4:20 pm	SE	6			10	
9/2/2022	4:15 pm	SE	7			10	
9/2/2022	4:10 pm	E	5			10	
9/2/2022	4:05 pm	NNW	5			10	
9/2/2022	4:00 pm	WSW	6			10	
9/2/2022	3:55 pm	W	5			10	
9/2/2022	3:51 pm	WSW	6			10	
9/2/2022	3:50 pm	SW	6			10	
9/2/2022	3:45 pm	SSW	6			10	
9/2/2022	3:40 pm					10	
9/2/2022	3:35 pm	N	0			10	
9/2/2022	3:30 pm	N	0			10	
9/2/2022	3:25 pm	N	0			10	
9/2/2022	3:20 pm	N	0			10	
9/2/2022	3:15 pm					10	
9/2/2022	3:10 pm					10	
9/2/2022	3:05 pm	SW	9			10	
9/2/2022	3:00 pm	SSW	8			10	
9/2/2022	2:55 pm	N	0			10	
9/2/2022	2:51 pm	SE	3			10	
9/2/2022	2:50 pm	SE	3			10	
9/2/2022	2:45 pm	SE	6			10	
9/2/2022	2:40 pm	S	5			10	
9/2/2022	2:35 pm	SW	6			10	
9/2/2022	2:30 pm	S	9			10	

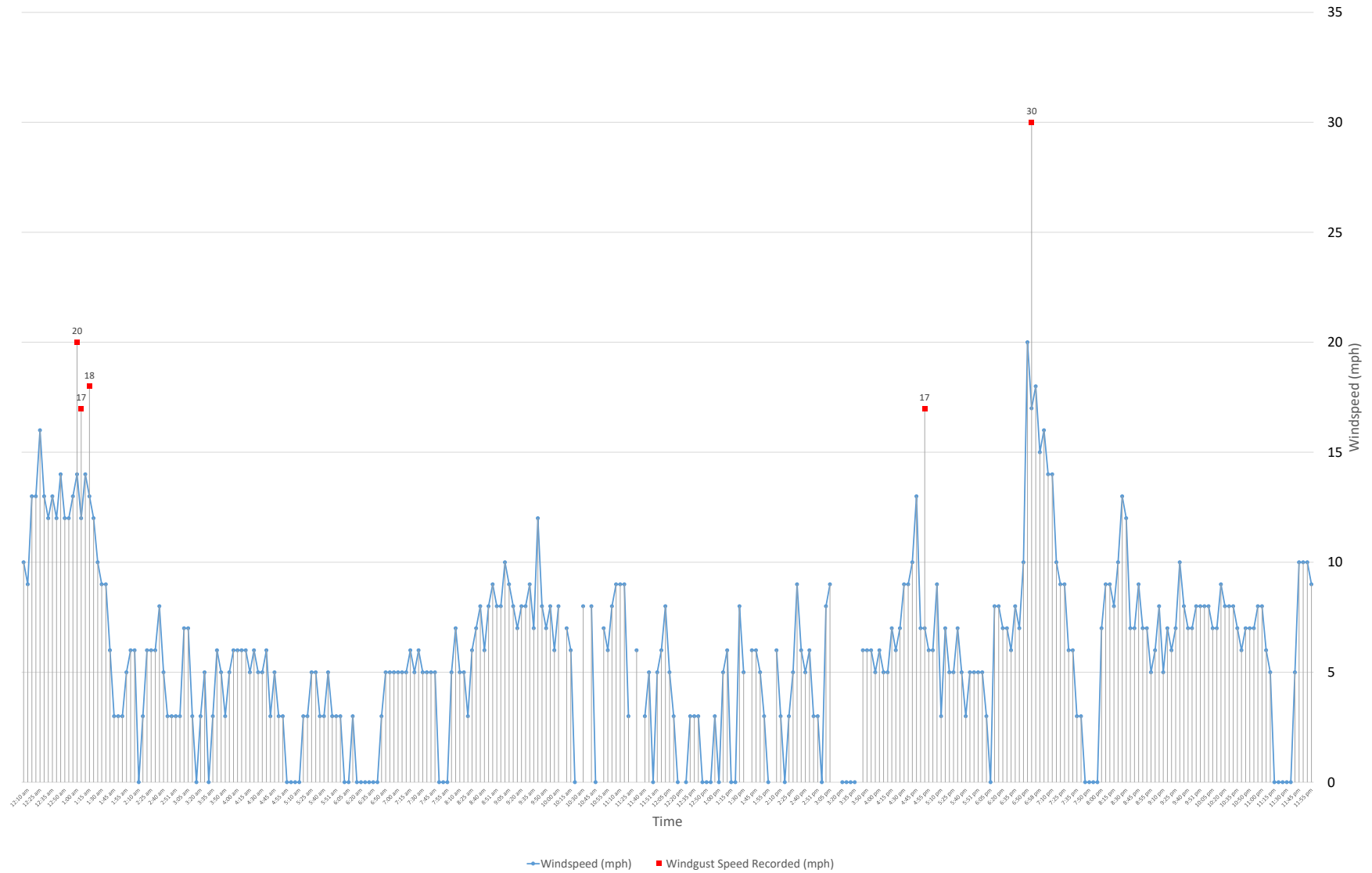
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	2:25 pm	S	5			10	
9/2/2022	2:20 pm	SE	3			10	
9/2/2022	2:15 pm	N	0			10	
9/2/2022	2:10 pm	SW	3			10	
9/2/2022	2:05 pm	S	6			10	
9/2/2022	2:00 pm					10	
9/2/2022	1:55 pm	N	0			10	
9/2/2022	1:51 pm		3			10	
9/2/2022	1:50 pm	SW	5			10	
9/2/2022	1:45 pm	SW	6			10	
9/2/2022	1:40 pm	SW	6			10	
9/2/2022	1:35 pm					10	
9/2/2022	1:30 pm	SW	5			10	
9/2/2022	1:25 pm	SSW	8			10	
9/2/2022	1:20 pm	N	0			10	
9/2/2022	1:15 pm	N	0			10	
9/2/2022	1:10 pm	NNW	6			10	
9/2/2022	1:05 pm	WNW	5			10	
9/2/2022	1:00 pm	N	0			10	
9/2/2022	12:55 pm	S	3			10	
9/2/2022	12:51 pm	N	0			10	
9/2/2022	12:50 pm	N	0			10	
9/2/2022	12:45 pm	N	0			10	
9/2/2022	12:40 pm	SSW	3			10	
9/2/2022	12:35 pm	SSW	3			10	
9/2/2022	12:30 pm	SW	3			10	
9/2/2022	12:25 pm	N	0			10	
9/2/2022	12:20 pm					10	
9/2/2022	12:15 pm	N	0			10	
9/2/2022	12:10 pm	SE	3			10	
9/2/2022	12:05 pm	ESE	5			10	
9/2/2022	12:00 pm	SE	8			10	
9/2/2022	11:55 am	SSE	6			10	
9/2/2022	11:51 am		5			10	
9/2/2022	11:50 am	N	0			10	
9/2/2022	11:45 am	W	5			10	
9/2/2022	11:40 am	ESE	3			10	
9/2/2022	11:35 am					10	
9/2/2022	11:30 am	ESE	6			10	
9/2/2022	11:25 am					10	
9/2/2022	11:20 am	SSE	3			10	
9/2/2022	11:15 am	S	9			10	
9/2/2022	11:10 am	SSE	9			10	
9/2/2022	11:05 am	SE	9			10	
9/2/2022	11:00 am	ESE	8			10	
9/2/2022	10:55 am	S	6			10	
9/2/2022	10:51 am		7			10	
9/2/2022	10:50 am					10	
9/2/2022	10:45 am	N	0			10	
9/2/2022	10:40 am	E	8			10	
9/2/2022	10:35 am					10	
9/2/2022	10:30 am	SE	8			10	
9/2/2022	10:25 am					10	
9/2/2022	10:20 am	N	0			10	
9/2/2022	10:15 am	SE	6			10	
9/2/2022	10:10 am	SE	7			10	
9/2/2022	10:05 am					10	
9/2/2022	10:00 am	SSE	8			10	
9/2/2022	9:55 am	SE	6			10	
9/2/2022	9:51 am	SSE	8			10	
9/2/2022	9:50 am	SSE	7			10	
9/2/2022	9:45 am	SSE	8			10	
9/2/2022	9:40 am	ESE	12			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	9:35 am	ESE	7			10	
9/2/2022	9:30 am	ESE	9			10	
9/2/2022	9:25 am	SE	8			10	
9/2/2022	9:20 am	SE	8			10	
9/2/2022	9:15 am	E	7			10	
9/2/2022	9:10 am	SSE	8			10	
9/2/2022	9:05 am	SE	9			10	
9/2/2022	9:00 am	SE	10			10	
9/2/2022	8:55 am	ESE	8			10	
9/2/2022	8:51 am	E	8			10	
9/2/2022	8:50 am	ESE	9			10	
9/2/2022	8:45 am	SSE	8			10	
9/2/2022	8:40 am	SE	6			10	
9/2/2022	8:35 am	SSE	8			10	
9/2/2022	8:30 am	SE	7			10	
9/2/2022	8:25 am	SSE	6			10	
9/2/2022	8:20 am	ESE	3			10	
9/2/2022	8:15 am	ESE	5			10	
9/2/2022	8:10 am	S	5			10	
9/2/2022	8:05 am	ESE	7			10	
9/2/2022	8:00 am	ESE	5			10	
9/2/2022	7:55 am	N	0			10	
9/2/2022	7:51 am	N	0			10	
9/2/2022	7:50 am	N	0			10	
9/2/2022	7:45 am	ESE	5			10	
9/2/2022	7:40 am	E	5			10	
9/2/2022	7:35 am	E	5			10	
9/2/2022	7:30 am	E	5			10	
9/2/2022	7:25 am	ESE	6			10	
9/2/2022	7:20 am	E	5			10	
9/2/2022	7:15 am	ENE	6			10	
9/2/2022	7:10 am	ENE	5			10	
9/2/2022	7:05 am	NE	5			10	
9/2/2022	7:00 am	E	5			10	
9/2/2022	6:55 am	ENE	5			10	
9/2/2022	6:51 am	ENE	5			10	
9/2/2022	6:50 am	NE	5			10	
9/2/2022	6:45 am	ENE	3			10	
9/2/2022	6:40 am	N	0			10	
9/2/2022	6:35 am	N	0			10	
9/2/2022	6:30 am	N	0			10	
9/2/2022	6:25 am	N	0			10	
9/2/2022	6:20 am	N	0			10	
9/2/2022	6:15 am	N	0			10	
9/2/2022	6:10 am	E	3			10	
9/2/2022	6:05 am	N	0			10	
9/2/2022	6:00 am	N	0			10	
9/2/2022	5:55 am	ESE	3			10	
9/2/2022	5:51 am	ESE	3			10	
9/2/2022	5:50 am	ESE	3			10	
9/2/2022	5:45 am	ESE	5			10	
9/2/2022	5:40 am	E	3			10	
9/2/2022	5:35 am	E	3			10	
9/2/2022	5:30 am	E	5			10	
9/2/2022	5:25 am	E	5			10	
9/2/2022	5:20 am	E	3			10	
9/2/2022	5:15 am	E	3			10	
9/2/2022	5:10 am	N	0			10	
9/2/2022	5:05 am	N	0			10	
9/2/2022	5:00 am	N	0			10	
9/2/2022	4:55 am	N	0			10	
9/2/2022	4:51 am	ESE	3			10	
9/2/2022	4:50 am	ESE	3			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	4:45 am	ESE	5			10	
9/2/2022	4:40 am	SE	3			10	
9/2/2022	4:35 am	ESE	6			10	
9/2/2022	4:30 am	SSE	5			10	
9/2/2022	4:25 am	SSE	5			10	
9/2/2022	4:20 am	SE	6			10	
9/2/2022	4:15 am	SE	5			10	
9/2/2022	4:10 am	ESE	6			10	
9/2/2022	4:05 am	ESE	6			10	
9/2/2022	4:00 am	E	6			10	
9/2/2022	3:55 am	ESE	6			10	
9/2/2022	3:51 am	E	5			10	
9/2/2022	3:50 am	E	3			10	
9/2/2022	3:45 am	ESE	5			10	
9/2/2022	3:40 am	E	6			10	
9/2/2022	3:35 am	E	3			10	
9/2/2022	3:30 am	N	0			10	
9/2/2022	3:25 am	E	5			10	
9/2/2022	3:20 am	E	3			10	
9/2/2022	3:15 am	N	0			10	
9/2/2022	3:10 am	E	3			10	
9/2/2022	3:05 am	E	7			10	
9/2/2022	3:00 am	E	7			10	
9/2/2022	2:55 am	E	3			10	
9/2/2022	2:51 am	E	3			10	
9/2/2022	2:50 am	E	3			10	
9/2/2022	2:45 am	E	3			10	
9/2/2022	2:40 am	E	5			10	
9/2/2022	2:35 am	E	8			10	
9/2/2022	2:30 am	E	6			10	
9/2/2022	2:25 am	E	6			10	
9/2/2022	2:20 am	E	6			10	
9/2/2022	2:15 am	ENE	3			10	
9/2/2022	2:10 am	N	0			10	
9/2/2022	2:05 am	E	6			10	
9/2/2022	2:00 am	ENE	6			10	
9/2/2022	1:55 am	NE	5			10	
9/2/2022	1:51 am		3			10	
9/2/2022	1:50 am	ENE	3			10	
9/2/2022	1:45 am	E	3			10	
9/2/2022	1:40 am	ESE	6			10	
9/2/2022	1:35 am	ESE	9			10	
9/2/2022	1:30 am	SE	9			10	
9/2/2022	1:25 am	ESE	10			10	
9/2/2022	1:20 am	ESE	12			10	
9/2/2022	1:15 am	ESE	13	G	18	10	
9/2/2022	1:10 am	ESE	14			10	
9/2/2022	1:05 am	ESE	12	G	17	10	
9/2/2022	1:00 am	ESE	14	G	20	10	
9/2/2022	12:55 am	E	13			10	
9/2/2022	12:51 am	E	12			10	
9/2/2022	12:50 am	E	12			10	
9/2/2022	12:45 am	E	14			10	
9/2/2022	12:40 am	E	12			10	
9/2/2022	12:35 am	E	13			10	
9/2/2022	12:33 am	E	12			10	
9/2/2022	12:30 am	E	13			10	
9/2/2022	12:25 am	E	16			10	
9/2/2022	12:20 am	E	13			10	
9/2/2022	12:15 am	E	13			10	
9/2/2022	12:10 am	SE	9			10	
9/2/2022	12:05 am	SSE	10			10	
9/2/2022	12:00 am	SE	15			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
9/2/2022	11:55 pm	SE	15			10	
9/1/2024	11:51 pm	SE	13	G	25	10	
9/1/2024	11:50 pm	SE	15			10	
9/1/2024	11:45 pm	SSE	9			10	
9/1/2024	11:40 pm	SE	10			10	
9/1/2024	11:35 pm	SSE	7			9	
9/1/2024	11:30 pm	SSE	12			6	Haze, Blowing dust
9/1/2024	11:25 pm	SSE	14	G	20	5	Haze, Blowing dust
9/1/2024	11:22 pm	SSE	13	G	24	5	Haze, Blowing dust
9/1/2024	11:20 pm	SE	13			4	Haze, Blowing dust
9/1/2024	11:15 pm	SE	18	G	24	2.5	Haze, Blowing dust
9/1/2024	11:10 pm	SE	14			2	Haze, Blowing dust
9/1/2024	11:05 pm	SE	16			2	Haze, Blowing dust
9/1/2024	11:02 pm	SSE	13			2	Haze, Blowing dust
9/1/2024	11:00 pm	SSE	14			2.5	Haze, Blowing dust
9/1/2024	10:55 pm	SSE	10			3	Haze, Blowing dust
9/1/2024	10:51 pm	SE	13	G	23	3	Haze, Blowing dust
9/1/2024	10:50 pm	SE	15			4	Haze, Blowing dust
9/1/2024	10:45 pm	SE	16	G	22	7	
9/1/2024	10:40 pm	SE	23	G	33	10	
9/1/2024	10:35 pm	SSE	10			10	
9/1/2024	10:30 pm	SSE	9			10	
9/1/2024	10:25 pm	SSE	7			10	
9/1/2024	10:20 pm	SSE	5			10	
9/1/2024	10:15 pm	N	0			10	
9/1/2024	10:10 pm	S	3			10	
9/1/2024	10:05 pm	S	3			10	
9/1/2024	10:00 pm	S	5			10	
9/1/2024	9:55 pm	SSW	6			10	
9/1/2024	9:51 pm	S	5			10	
9/1/2024	9:50 pm	S	6			10	
9/1/2024	9:45 pm	SSW	7			10	
9/1/2024	9:40 pm	SSW	6			10	
9/1/2024	9:35 pm	S	5			10	
9/1/2024	9:30 pm	S	6			10	
9/1/2024	9:25 pm	S	7			10	
9/1/2024	9:20 pm	S	7			10	
9/1/2024	9:15 pm	S	7			10	
9/1/2024	9:10 pm	S	6			10	
9/1/2024	9:05 pm	S	5			10	
9/1/2024	9:00 pm	S	5			10	
9/1/2024	8:55 pm	S	6			10	
9/1/2024	8:51 pm	SSW	5			10	
9/1/2024	8:50 pm	SSW	5			10	

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 09/02/2022



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather conditions
7/21/2023	11:55 pm	SSW	15			10	
7/21/2023	11:51 pm	SSW	20	G	30	10	
7/21/2023	11:50 pm	S	21			10	
7/21/2023	11:45 pm	S	18	G	25	8	
7/21/2023	11:40 pm	SSW	24	G	32	7	
7/21/2023	11:35 pm	S	23	G	31	7	
7/21/2023	11:30 pm	S	30			7	
7/21/2023	11:25 pm	S	26	G	33	7	
7/21/2023	11:20 pm	S	18	G	24	6	Haze
7/21/2023	11:15 pm	S	28	G	38	5	Haze
7/21/2023	11:10 pm	S	24	G	32	4	Haze
7/21/2023	11:05 pm	S	32	G	46	4	Haze
7/21/2023	11:00 pm	S	32	G	43	4	Blowing dust
7/21/2023	10:55 pm	S	35	G	44	3	Blowing dust
7/21/2023	10:51 pm	SSE	26	G	45	3	Blowing dust
7/21/2023	10:50 pm	SSE	23	G	33	3	Blowing dust
7/21/2023	10:45 pm	SSE	25	G	36	5	Haze
7/21/2023	10:40 pm	S	24	G	43	10	
7/21/2023	10:35 pm	SSE	14			10	
7/21/2023	10:30 pm	SSE	14			10	
7/21/2023	10:25 pm	S	12	G	17	10	
7/21/2023	10:20 pm	SSE	12			10	
7/21/2023	10:15 pm	SSE	13			10	
7/21/2023	10:10 pm	SSE	10			10	
7/21/2023	10:05 pm	SSE	10			10	
7/21/2023	10:00 pm	SE	9			10	
7/21/2023	9:55 pm	ESE	10			10	
7/21/2023	9:51 pm	ESE	12			10	
7/21/2023	9:50 pm	ESE	13			10	
7/21/2023	9:45 pm	ESE	12			10	
7/21/2023	9:40 pm	E	10			10	
7/21/2023	9:35 pm	E	10			10	
7/21/2023	9:30 pm	E	12			10	
7/21/2023	9:25 pm	E	12			10	
7/21/2023	9:20 pm	E	9			10	
7/21/2023	9:15 pm	E	10			10	
7/21/2023	9:10 pm	E	10			10	
7/21/2023	9:05 pm	E	12			10	
7/21/2023	9:00 pm	E	13			10	
7/21/2023	8:55 pm	E	13			10	
7/21/2023	8:51 pm	E	13			10	
7/21/2023	8:50 pm	E	14			10	
7/21/2023	8:45 pm	ENE	17			8	
7/21/2023	8:40 pm	E	17			7	
7/21/2023	8:35 pm	ENE	21			7	
7/21/2023	8:30 pm	ENE	18			8	
7/21/2023	8:25 pm	ENE	25			9	
7/21/2023	8:20 pm	NNE	14	G	20	10	
7/21/2023	8:15 pm	NE	10			10	
7/21/2023	8:10 pm	NNE	10			10	
7/21/2023	8:05 pm	NNE	10			10	
7/21/2023	8:00 pm	NNE	9			10	
7/21/2023	7:55 pm	N	12			10	
7/21/2023	7:51 pm	N	13	G	22	10	
7/21/2023	7:50 pm	N	12			10	
7/21/2023	7:45 pm	NNW	10	G	22	10	
7/21/2023	7:40 pm	NNW	9			10	
7/21/2023	7:35 pm	NNW	13	G	22	10	
7/21/2023	7:30 pm	NW	12			9	
7/21/2023	7:26 pm	NNW	13	G	26	10	
7/21/2023	7:25 pm	NNW	15	G	25	10	
7/21/2023	7:20 pm	NNW	14			10	
7/21/2023	7:15 pm	NW	16	G	25	10	

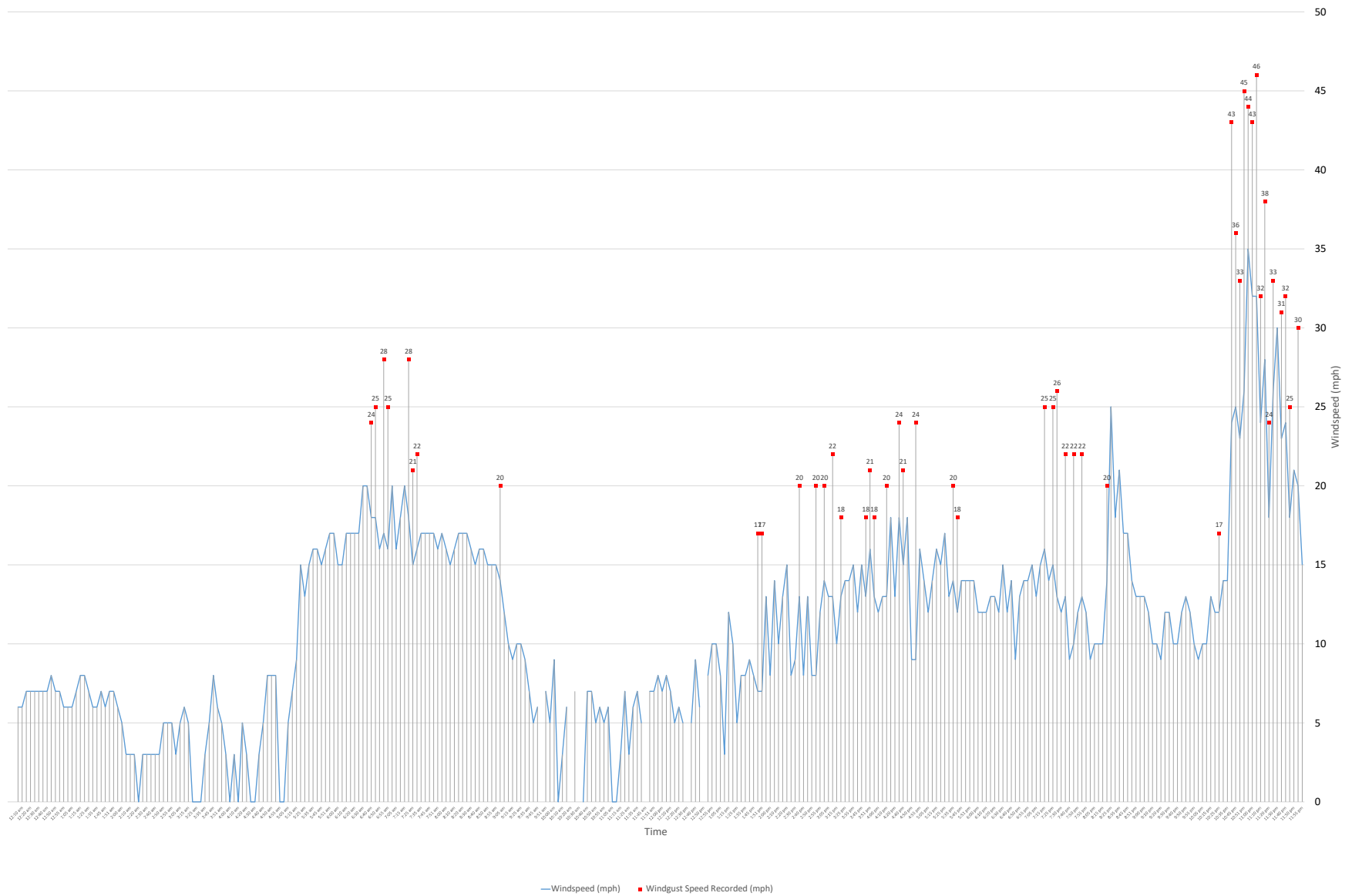
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather conditions
7/21/2023	7:10 pm	WNW	15			10	
7/21/2023	7:05 pm	W	13			10	
7/21/2023	7:00 pm	W	15			10	
7/21/2023	6:55 pm	W	14			10	
7/21/2023	6:51 pm	W	14			10	
7/21/2023	6:50 pm	W	13			10	
7/21/2023	6:45 pm	WSW	9			10	
7/21/2023	6:40 pm	WSW	14			10	
7/21/2023	6:35 pm	WSW	12			10	
7/21/2023	6:30 pm	W	15			10	
7/21/2023	6:25 pm	W	12			10	
7/21/2023	6:20 pm	WSW	13			10	
7/21/2023	6:15 pm	W	13			10	
7/21/2023	6:10 pm	WSW	12			10	
7/21/2023	6:05 pm	WSW	12			10	
7/21/2023	6:00 pm	W	12			10	
7/21/2023	5:55 pm	W	14			10	
7/21/2023	5:51 pm	W	14			10	
7/21/2023	5:50 pm	W	14			10	
7/21/2023	5:45 pm	WSW	14			10	
7/21/2023	5:40 pm	WSW	12	G	18	10	
7/21/2023	5:35 pm	W	14	G	20	10	
7/21/2023	5:30 pm	W	13			10	
7/21/2023	5:25 pm	W	17			10	
7/21/2023	5:20 pm	WNW	15			10	
7/21/2023	5:15 pm	W	16			10	
7/21/2023	5:10 pm	WNW	14			10	
7/21/2023	5:05 pm	W	12			10	
7/21/2023	5:00 pm	W	14			10	
7/21/2023	4:55 pm	W	16			10	
7/21/2023	4:51 pm	WSW	9	G	24	10	
7/21/2023	4:50 pm	W	9			10	
7/21/2023	4:45 pm	WNW	18			10	
7/21/2023	4:40 pm	W	15	G	21	10	
7/21/2023	4:30 pm	WNW	18	G	24	10	
7/21/2023	4:20 pm	WNW	13			10	
7/21/2023	4:15 pm	W	18			10	
7/21/2023	4:10 pm	W	13	G	20	10	
7/21/2023	4:05 pm	W	13			10	
7/21/2023	4:00 pm	WSW	12			10	
7/21/2023	3:55 pm	W	13	G	18	10	
7/21/2023	3:51 pm	WNW	16	G	21	10	
7/21/2023	3:50 pm	WNW	13	G	18	10	
7/21/2023	3:45 pm	WNW	15			10	
7/21/2023	3:40 pm	W	12			10	
7/21/2023	3:35 pm	WNW	15			10	
7/21/2023	3:30 pm	WNW	14			10	
7/21/2023	3:25 pm	WNW	14			10	
7/21/2023	3:20 pm	W	13	G	18	10	
7/21/2023	3:15 pm	WSW	10			10	
7/21/2023	3:10 pm	WNW	13	G	22	10	
7/21/2023	3:05 pm	WSW	13			10	
7/21/2023	3:00 pm	W	14	G	20	10	
7/21/2023	2:55 pm	W	12			10	
7/21/2023	2:51 pm	WSW	8	G	20	10	
7/21/2023	2:50 pm	WSW	8			10	
7/21/2023	2:45 pm	W	13			10	
7/21/2023	2:40 pm	WSW	8			10	
7/21/2023	2:35 pm	W	13	G	20	10	
7/21/2023	2:30 pm	WSW	9			10	
7/21/2023	2:25 pm	W	8			10	
7/21/2023	2:20 pm	W	15			10	
7/21/2023	2:15 pm	W	13			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather conditions
7/21/2023	2:10 pm	WSW	10			10	
7/21/2023	2:05 pm	W	14			8	
7/21/2023	2:00 pm	SW	8			8	
7/21/2023	1:55 pm	SSW	13			9	
7/21/2023	1:51 pm	W	7	G	17	10	
7/21/2023	1:50 pm	W	7	G	17	10	
7/21/2023	1:45 pm	WNW	8			10	
7/21/2023	1:40 pm	W	9			10	
7/21/2023	1:35 pm	NW	8			10	
7/21/2023	1:30 pm	WSW	8			10	
7/21/2023	1:25 pm	WSW	5			9	
7/21/2023	1:20 pm	W	10			9	
7/21/2023	1:15 pm	W	12			10	
7/21/2023	1:10 pm	W	3			10	
7/21/2023	1:05 pm	WNW	8			10	
7/21/2023	1:00 pm	W	10			10	
7/21/2023	12:55 pm	W	10			10	
7/21/2023	12:51 pm	W	8			10	
7/21/2023	12:50 pm					10	
7/21/2023	12:45 pm	SSE	6			10	
7/21/2023	12:40 pm	S	9			10	
7/21/2023	12:35 pm	S	5			8	
7/21/2023	12:30 pm					8	
7/21/2023	12:25 pm	WSW	5			9	
7/21/2023	12:20 pm	NW	6			10	
7/21/2023	12:15 pm	WNW	5			10	
7/21/2023	12:10 pm	W	7			10	
7/21/2023	12:05 pm	WSW	8			10	
7/21/2023	12:00 pm	SSW	7			10	
7/21/2023	11:55 am	SW	8			10	
7/21/2023	11:51 am		7			10	
7/21/2023	11:50 am	W	7			10	
7/21/2023	11:45 am					10	
7/21/2023	11:40 am	S	5			9	
7/21/2023	11:35 am	SSW	7			9	
7/21/2023	11:30 am	W	6			9	
7/21/2023	11:25 am	SSW	3			9	
7/21/2023	11:20 am	S	7			9	
7/21/2023	11:15 am	ESE	3			9	
7/21/2023	11:10 am	N	0			10	
7/21/2023	11:05 am	N	0			10	
7/21/2023	11:00 am	SSW	6			9	
7/21/2023	10:55 am	S	5			9	
7/21/2023	10:51 am	WSW	6			10	
7/21/2023	10:50 am	SW	5			10	
7/21/2023	10:45 am	SW	7			10	
7/21/2023	10:40 am	S	7			9	
7/21/2023	10:35 am	N	0			9	
7/21/2023	10:30 am					9	
7/21/2023	10:25 am	W	7			10	
7/21/2023	10:20 am					10	
7/21/2023	10:15 am	SW	6			10	
7/21/2023	10:10 am	NNW	3			10	
7/21/2023	10:05 am	N	0			10	
7/21/2023	10:00 am	WNW	9			10	
7/21/2023	9:55 am	NNW	5			10	
7/21/2023	9:51 am	NW	7			10	
7/21/2023	9:50 am					10	
7/21/2023	9:45 am	NW	6			10	
7/21/2023	9:40 am	NW	5			10	
7/21/2023	9:35 am	NW	7			10	
7/21/2023	9:30 am	NW	9			10	
7/21/2023	9:25 am	NW	10			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather conditions
7/21/2023	9:20 am	WNW	10			9	
7/21/2023	9:15 am	WNW	9			9	
7/21/2023	9:10 am	WNW	10			9	
7/21/2023	9:05 am	WNW	12			8	
7/21/2023	9:00 am	WNW	14	G	20	8	
7/21/2023	8:55 am	NW	15			9	
7/21/2023	8:51 am	NW	15			10	
7/21/2023	8:50 am	NW	15			10	
7/21/2023	8:45 am	NW	16			10	
7/21/2023	8:40 am	WNW	16			10	
7/21/2023	8:35 am	NW	15			10	
7/21/2023	8:30 am	NW	16			10	
7/21/2023	8:25 am	NW	17			10	
7/21/2023	8:20 am	WNW	17			10	
7/21/2023	8:15 am	WNW	17			10	
7/21/2023	8:10 am	WNW	16			10	
7/21/2023	8:05 am	W	15			10	
7/21/2023	8:00 am	WNW	16			8	
7/21/2023	7:55 am	WNW	17			8	
7/21/2023	7:51 am	W	16			10	
7/21/2023	7:50 am	W	17			10	
7/21/2023	7:45 am	WNW	17			10	
7/21/2023	7:40 am	WNW	17			10	
7/21/2023	7:35 am	WNW	17			10	
7/21/2023	7:30 am	WNW	16	G	22	10	
7/21/2023	7:25 am	NW	15	G	21	10	
7/21/2023	7:20 am	NW	18	G	28	10	
7/21/2023	7:15 am	WNW	20			10	
7/21/2023	7:10 am	NW	18			10	
7/21/2023	7:05 am	WNW	16			6	Haze
7/21/2023	7:00 am	WNW	20			6	Haze
7/21/2023	6:55 am	NW	16	G	25	6	Haze
7/21/2023	6:51 am	NW	17	G	28	10	
7/21/2023	6:50 am	NW	16			10	
7/21/2023	6:45 am	WNW	18	G	25	10	
7/21/2023	6:40 am	WNW	18	G	24	10	
7/21/2023	6:35 am	WNW	20			10	
7/21/2023	6:30 am	WNW	20			10	
7/21/2023	6:25 am	WNW	17			10	
7/21/2023	6:20 am	W	17			10	
7/21/2023	6:15 am	W	17			10	
7/21/2023	6:10 am	WNW	17			10	
7/21/2023	6:05 am	WNW	15			10	
7/21/2023	6:00 am	WNW	15			10	
7/21/2023	5:55 am	W	17			6	Haze
7/21/2023	5:51 am	W	17			10	
7/21/2023	5:50 am	W	16			10	
7/21/2023	5:45 am	WNW	15			10	
7/21/2023	5:40 am	WNW	16			7	
7/21/2023	5:35 am	WNW	16			8	
7/21/2023	5:30 am	WNW	15			10	
7/21/2023	5:25 am	NW	13			10	
7/21/2023	5:20 am	WNW	15			10	
7/21/2023	5:15 am	WNW	9			10	
7/21/2023	5:10 am	NW	7			10	
7/21/2023	5:05 am	W	5			10	
7/21/2023	5:00 am	N	0			10	
7/21/2023	4:55 am	N	0			10	
7/21/2023	4:51 am	SSE	8			10	
7/21/2023	4:50 am	SSE	8			10	
7/21/2023	4:45 am	S	8			10	
7/21/2023	4:40 am	SSW	5			10	
7/21/2023	4:35 am	WSW	3			9	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather conditions
7/21/2023	4:30 am	N	0			9	
7/21/2023	4:25 am	N	0			9	
7/21/2023	4:20 am	E	3			10	
7/21/2023	4:15 am	ESE	5			10	
7/21/2023	4:10 am	N	0			10	
7/21/2023	4:05 am	N	3			10	
7/21/2023	4:00 am	N	0			10	
7/21/2023	3:55 am	NE	3			10	
7/21/2023	3:51 am	ENE	5			10	
7/21/2023	3:50 am	ENE	6			10	
7/21/2023	3:45 am	E	8			10	
7/21/2023	3:40 am	ENE	5			10	
7/21/2023	3:35 am	NE	3			10	
7/21/2023	3:30 am	N	0			10	
7/21/2023	3:25 am	N	0			10	
7/21/2023	3:20 am	N	0			10	
7/21/2023	3:15 am	NW	5			10	
7/21/2023	3:10 am	NW	6			10	
7/21/2023	3:05 am	NW	5			10	
7/21/2023	3:00 am	NW	3			10	
7/21/2023	2:55 am	NNW	5			10	
7/21/2023	2:51 am	NNW	5			10	
7/21/2023	2:50 am	N	5			10	
7/21/2023	2:45 am	N	3			10	
7/21/2023	2:40 am	W	3			10	
7/21/2023	2:35 am	WSW	3			10	
7/21/2023	2:30 am	SW	3			10	
7/21/2023	2:25 am	SW	3			10	
7/21/2023	2:20 am	N	0			10	
7/21/2023	2:15 am	W	3			10	
7/21/2023	2:10 am	WSW	3			10	
7/21/2023	2:05 am	WSW	3			10	
7/21/2023	2:00 am	WSW	5			10	
7/21/2023	1:55 am	WSW	6			10	
7/21/2023	1:51 am	WSW	7			10	
7/21/2023	1:50 am	WSW	7			10	
7/21/2023	1:45 am	WSW	6			10	
7/21/2023	1:40 am	SW	7			10	
7/21/2023	1:35 am	SW	6			10	
7/21/2023	1:30 am	W	6			10	
7/21/2023	1:25 am	W	7			10	
7/21/2023	1:20 am	W	8			10	
7/21/2023	1:15 am	W	8			10	
7/21/2023	1:10 am	W	7			10	
7/21/2023	1:05 am	W	6			10	
7/21/2023	1:00 am	W	6			10	
7/21/2023	12:55 am	W	6			10	
7/21/2023	12:51 am	W	7			10	
7/21/2023	12:50 am	W	7			10	
7/21/2023	12:45 am	W	8			10	
7/21/2023	12:40 am	WNW	7			10	
7/21/2023	12:35 am	W	7			10	
7/21/2023	12:30 am	W	7			10	
7/21/2023	12:25 am	W	7			10	
7/21/2023	12:20 am	W	7			10	
7/21/2023	12:15 am	W	7			10	
7/21/2023	12:10 am	W	6			10	
7/21/2023	12:05 am	W	6			10	

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 07/21/2023



Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/26/2023	11:55 pm	SSE	15			10	
7/26/2023	11:51 pm	SSE	16	G	23	10	
7/26/2023	11:50 pm	SSE	15			10	
7/26/2023	11:45 pm	SE	13	G	24	10	
7/26/2023	11:40 pm	SSE	14			10	
7/26/2023	11:35 pm	SSE	12	G	17	10	
7/26/2023	11:30 pm	SSE	10			10	
7/26/2023	11:25 pm	E	6			10	
7/26/2023	11:20 pm	N	0			10	
7/26/2023	11:15 pm	N	0			10	
7/26/2023	11:10 pm	N	0			10	
7/26/2023	11:05 pm	SSE	8			10	
7/26/2023	11:00 pm	SE	12			10	
7/26/2023	10:55 pm	E	16			10	
7/26/2023	10:51 pm	E	18	G	30	9	Thunder
7/26/2023	10:50 pm	E	20			9	
7/26/2023	10:45 pm	E	23			8	
7/26/2023	10:43 pm	E	26	G	35	8	Thunder
7/26/2023	10:40 pm	ENE	25	G	31	8	
7/26/2023	10:35 pm	E	22	G	30	6	Blowing dust
7/26/2023	10:30 pm	E	22	G	31	3	Blowing dust
7/26/2023	10:25 pm	ESE	23	G	43	2.5	Blowing dust
7/26/2023	10:20 pm	SE	25	G	43	2	Blowing dust
7/26/2023	10:18 pm	SE	29	G	41	0.5	
7/26/2023	10:15 pm	SSE	23	G	36	0.5	
7/26/2023	10:10 pm	SSE	23	G	29	0.5	
7/26/2023	10:05 pm	SSE	25	G	38	0.5	
7/26/2023	10:00 pm	S	17			0.5	
7/26/2023	9:57 pm	S	17	G	43	0.5	
7/26/2023	9:55 pm	SSE	18			1.75	Blowing dust
7/26/2023	9:51 pm	SSE	25	G	43	3	Blowing dust
7/26/2023	9:50 pm	SSE	20	G	41	6	Blowing dust
7/26/2023	9:45 pm	S	8			10	
7/26/2023	9:40 pm	WSW	7			10	
7/26/2023	9:35 pm	WSW	8			10	
7/26/2023	9:30 pm	WSW	8			10	
7/26/2023	9:25 pm	WSW	8			10	
7/26/2023	9:20 pm	WSW	10			10	
7/26/2023	9:15 pm	W	10			10	
7/26/2023	9:10 pm	WSW	8			10	
7/26/2023	9:05 pm	WSW	10			10	
7/26/2023	9:00 pm	WSW	9			10	
7/26/2023	8:55 pm	WSW	10			10	
7/26/2023	8:51 pm	WSW	10			10	
7/26/2023	8:50 pm	WSW	10			10	
7/26/2023	8:45 pm	WSW	10			10	
7/26/2023	8:40 pm	W	12			10	
7/26/2023	8:35 pm	W	8			10	
7/26/2023	8:30 pm	WSW	10			10	
7/26/2023	8:25 pm	WSW	9			10	
7/26/2023	8:15 pm	W	9			10	
7/26/2023	8:10 pm	W	10			10	
7/26/2023	8:05 pm	W	9			10	
7/26/2023	8:00 pm	W	12			10	
7/26/2023	7:55 pm	W	12			10	
7/26/2023	7:51 pm	W	13			10	
7/26/2023	7:50 pm	W	12	G	17	10	
7/26/2023	7:45 pm	W	13			10	
7/26/2023	7:40 pm	W	13			10	
7/26/2023	7:35 pm	W	14			10	
7/26/2023	7:30 pm	W	10			10	
7/26/2023	7:25 pm	W	14			10	
7/26/2023	7:20 pm	WSW	9			10	

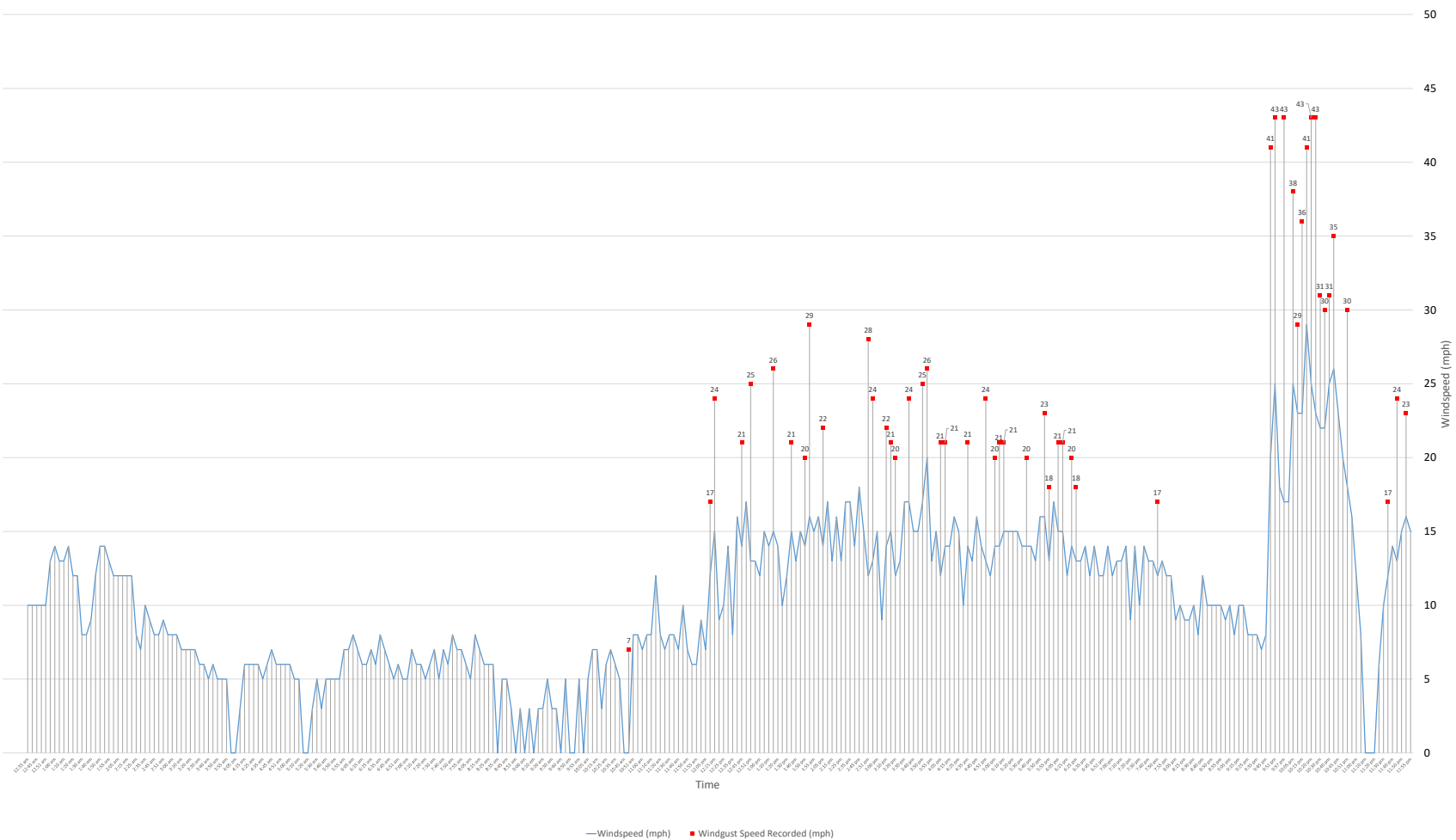
Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/26/2023	7:15 pm	WSW	14			10	
7/26/2023	7:10 pm	WSW	13			10	
7/26/2023	7:05 pm	W	13			10	
7/26/2023	7:00 pm	W	12			10	
7/26/2023	6:55 pm	WSW	14			10	
7/26/2023	6:51 pm	W	12			10	
7/26/2023	6:50 pm	W	12			10	
7/26/2023	6:45 pm	W	14			10	
7/26/2023	6:40 pm	WSW	12			10	
7/26/2023	6:35 pm	W	14			10	
7/26/2023	6:30 pm	WSW	13			10	
7/26/2023	6:25 pm	W	13	G	18	10	
7/26/2023	6:20 pm	WSW	14	G	20	10	
7/26/2023	6:15 pm	WSW	12			10	
7/26/2023	6:10 pm	WSW	15	G	21	10	
7/26/2023	6:05 pm	W	15	G	21	10	
7/26/2023	6:00 pm	W	17			10	
7/26/2023	5:55 pm	W	13	G	18	10	
7/26/2023	5:51 pm	WSW	16	G	23	10	
7/26/2023	5:50 pm	WSW	16			10	
7/26/2023	5:45 pm	W	13			10	
7/26/2023	5:40 pm	W	14			10	
7/26/2023	5:35 pm	W	14	G	20	10	
7/26/2023	5:30 pm	W	14			10	
7/26/2023	5:25 pm	WSW	15			10	
7/26/2023	5:20 pm	W	15			10	
7/26/2023	5:15 pm	W	15			10	
7/26/2023	5:10 pm	W	15	G	21	10	
7/26/2023	5:05 pm	W	14	G	21	10	
7/26/2023	5:00 pm	WSW	14	G	20	10	
7/26/2023	4:55 pm	W	12			10	
7/26/2023	4:51 pm	WSW	13	G	24	10	
7/26/2023	4:50 pm	W	14			10	
7/26/2023	4:45 pm	W	16			10	
7/26/2023	4:40 pm	W	13			10	
7/26/2023	4:35 pm	W	14	G	21	10	
7/26/2023	4:30 pm	WNW	10			10	
7/26/2023	4:25 pm	W	15			10	
7/26/2023	4:20 pm	W	16			10	
7/26/2023	4:15 pm	WSW	14			10	
7/26/2023	4:10 pm	W	14	G	21	10	
7/26/2023	4:05 pm	WSW	12	G	21	10	
7/26/2023	4:00 pm	W	15			10	
7/26/2023	3:55 pm	W	13			10	
7/26/2023	3:51 pm	W	20	G	26	10	
7/26/2023	3:50 pm	W	17	G	25	10	
7/26/2023	3:45 pm	W	15			10	
7/26/2023	3:40 pm	WSW	15			10	
7/26/2023	3:35 pm	W	17	G	24	10	
7/26/2023	3:30 pm	W	17			10	
7/26/2023	3:25 pm	W	13			10	
7/26/2023	3:20 pm	W	12	G	20	10	
7/26/2023	3:15 pm	WNW	15	G	21	10	
7/26/2023	3:10 pm	WNW	14	G	22	10	
7/26/2023	3:05 pm	W	9			10	
7/26/2023	3:00 pm	W	15			10	
7/26/2023	2:55 pm	W	13	G	24	10	
7/26/2023	2:51 pm	W	12	G	28	10	
7/26/2023	2:50 pm	W	15			10	
7/26/2023	2:45 pm	W	18			10	
7/26/2023	2:40 pm	W	14			10	
7/26/2023	2:35 pm	W	17			10	
7/26/2023	2:30 pm	W	17			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/26/2023	2:25 pm	WNW	13			10	
7/26/2023	2:20 pm	W	16			10	
7/26/2023	2:15 pm	WSW	13			10	
7/26/2023	2:10 pm	W	17			10	
7/26/2023	2:05 pm	WSW	14	G	22	10	
7/26/2023	2:00 pm	WNW	16			10	
7/26/2023	1:55 pm	WSW	15			10	
7/26/2023	1:51 pm	WSW	16	G	29	10	
7/26/2023	1:50 pm	WSW	14	G	20	10	
7/26/2023	1:45 pm	W	15			10	
7/26/2023	1:40 pm	WSW	13			10	
7/26/2023	1:35 pm	WSW	15	G	21	10	
7/26/2023	1:30 pm	W	12			10	
7/26/2023	1:25 pm	WSW	10			10	
7/26/2023	1:20 pm	W	14			10	
7/26/2023	1:15 pm	W	15	G	26	10	
7/26/2023	1:10 pm	W	14			10	
7/26/2023	1:05 pm	W	15			10	
7/26/2023	1:00 pm	WSW	12			10	
7/26/2023	12:55 pm	WSW	13			10	
7/26/2023	12:51 pm	W	13	G	25	10	
7/26/2023	12:50 pm	W	17			10	
7/26/2023	12:45 pm	WNW	14	G	21	10	
7/26/2023	12:40 pm	WNW	16			10	
7/26/2023	12:35 pm	W	8			10	
7/26/2023	12:30 pm	W	14			9	
7/26/2023	12:25 pm	W	10			9	
7/26/2023	12:20 pm	W	9			9	
7/26/2023	12:15 pm	W	15	G	24	10	
7/26/2023	12:10 pm	W	12	G	17	10	
7/26/2023	12:05 pm	NW	7			10	
7/26/2023	12:00 pm	W	9			10	
7/26/2023	11:55 am	NW	6			10	
7/26/2023	11:51 am		6			10	
7/26/2023	11:50 am	W	7			10	
7/26/2023	11:45 am	WNW	10			8	
7/26/2023	11:40 am	SW	7			9	
7/26/2023	11:35 am	SW	8			10	
7/26/2023	11:30 am	WSW	8			10	
7/26/2023	11:25 am	WSW	7			10	
7/26/2023	11:20 am	WNW	8			10	
7/26/2023	11:15 am	WNW	12			10	
7/26/2023	11:10 am	W	8			10	
7/26/2023	11:05 am	SW	8			10	
7/26/2023	11:00 am	SW	7			10	
7/26/2023	10:55 am	W	8			10	
7/26/2023	10:51 am	SW	8			10	
7/26/2023	10:50 am	SW	8G	1	7	10	
7/26/2023	10:45 am	N	0			10	
7/26/2023	10:40 am	W	5			10	
7/26/2023	10:35 am	SW	6			10	
7/26/2023	10:30 am	WSW	7			10	
7/26/2023	10:25 am	SW	6			10	
7/26/2023	10:20 am	W	3			10	
7/26/2023	10:15 am	NW	7			10	
7/26/2023	10:10 am	WNW	7			10	
7/26/2023	10:05 am	WSW	5			10	
7/26/2023	10:00 am	N	0			10	
7/26/2023	9:55 am	WNW	5			10	
7/26/2023	9:51 am	N	0			10	
7/26/2023	9:50 am	N	0			10	
7/26/2023	9:45 am	W	5			10	
7/26/2023	9:40 am	N	0			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/26/2023	9:35 am	ESE	3			10	
7/26/2023	9:30 am	S	3			10	
7/26/2023	9:25 am	S	5			10	
7/26/2023	9:20 am	ENE	3			10	
7/26/2023	9:15 am	SSE	3			10	
7/26/2023	9:10 am	N	0			10	
7/26/2023	9:05 am	SE	3			10	
7/26/2023	9:00 am	N	0			10	
7/26/2023	8:55 am	ENE	3			10	
7/26/2023	8:51 am	N	0			9	
7/26/2023	8:50 am	SE	3			9	
7/26/2023	8:45 am	E	5			10	
7/26/2023	8:40 am	ESE	5			10	
7/26/2023	8:35 am	N	0			10	
7/26/2023	8:30 am	E	6			10	
7/26/2023	8:25 am	E	6			10	
7/26/2023	8:20 am	E	6			10	
7/26/2023	8:15 am	ESE	7			10	
7/26/2023	8:10 am	E	8			10	
7/26/2023	8:05 am	E	5			10	
7/26/2023	8:00 am	E	6			9	
7/26/2023	7:55 am	E	7			9	
7/26/2023	7:51 am	E	7			10	
7/26/2023	7:50 am	E	8			10	
7/26/2023	7:45 am	E	6			10	
7/26/2023	7:40 am	ESE	7			10	
7/26/2023	7:35 am	ESE	5			10	
7/26/2023	7:30 am	SE	7			10	
7/26/2023	7:25 am	ESE	6			10	
7/26/2023	7:20 am	ESE	5			10	
7/26/2023	7:15 am	E	6			7	
7/26/2023	7:10 am	E	6			8	
7/26/2023	7:05 am	E	7			9	
7/26/2023	7:00 am	E	5			10	
7/26/2023	6:55 am	E	5			10	
7/26/2023	6:51 am	E	6			10	
7/26/2023	6:50 am	E	5			10	
7/26/2023	6:45 am	ESE	6			10	
7/26/2023	6:40 am	E	7			10	
7/26/2023	6:35 am	ESE	8			7	
7/26/2023	6:30 am	ESE	6			7	
7/26/2023	6:25 am	E	7			10	
7/26/2023	6:20 am	E	6			10	
7/26/2023	6:15 am	E	6			10	
7/26/2023	6:10 am	E	7			10	
7/26/2023	6:05 am	E	8			10	
7/26/2023	6:00 am	ENE	7			10	
7/26/2023	5:55 am	ENE	7			10	
7/26/2023	5:51 am	ENE	5			10	
7/26/2023	5:50 am	ENE	5			10	
7/26/2023	5:45 am	ENE	5			10	
7/26/2023	5:40 am	NE	5			10	
7/26/2023	5:35 am	ENE	3			10	
7/26/2023	5:30 am	ENE	5			10	
7/26/2023	5:25 am	NE	3			10	
7/26/2023	5:20 am	N	0			10	
7/26/2023	5:15 am	N	0			10	
7/26/2023	5:10 am	NNE	5			10	
7/26/2023	5:05 am	N	5			10	
7/26/2023	5:00 am	NNW	6			10	
7/26/2023	4:55 am	NW	6			10	
7/26/2023	4:51 am	NW	6			10	
7/26/2023	4:50 am	NW	6			10	

Date	Time	Wind Direction	Wind (mph)	Wind Gust Recorded?	Wind Gust (mph)	Visibility (miles)	Weather Condition
7/26/2023	4:45 am	NW	7			10	
7/26/2023	4:40 am	NW	6			10	
7/26/2023	4:35 am	NW	5			10	
7/26/2023	4:30 am	NW	6			10	
7/26/2023	4:25 am	WNW	6			10	
7/26/2023	4:20 am	WNW	6			10	
7/26/2023	4:15 am	W	6			10	
7/26/2023	4:10 am	WSW	3			10	
7/26/2023	4:05 am	N	0			10	
7/26/2023	4:00 am	N	0			10	
7/26/2023	3:55 am	SW	5			10	
7/26/2023	3:51 am	WSW	5			10	
7/26/2023	3:50 am	W	5			10	
7/26/2023	3:45 am	W	6			10	
7/26/2023	3:40 am	WNW	5			10	
7/26/2023	3:35 am	W	6			10	
7/26/2023	3:30 am	W	6			10	
7/26/2023	3:25 am	W	7			10	
7/26/2023	3:20 am	W	7			10	
7/26/2023	3:15 am	W	7			10	
7/26/2023	3:10 am	W	7			9	
7/26/2023	3:05 am	W	8			9	
7/26/2023	3:00 am	W	8			10	
7/26/2023	2:55 am	W	8			10	
7/26/2023	2:51 am	WNW	9			10	
7/26/2023	2:50 am	W	8			10	
7/26/2023	2:45 am	WNW	8			10	
7/26/2023	2:40 am	W	9			10	
7/26/2023	2:35 am	W	10			10	
7/26/2023	2:30 am	W	7			10	
7/26/2023	2:25 am	W	8			10	
7/26/2023	2:20 am	W	12			10	
7/26/2023	2:15 am	W	12			10	
7/26/2023	2:10 am	W	12			10	
7/26/2023	2:05 am	W	12			10	
7/26/2023	2:00 am	W	12			10	
7/26/2023	1:55 am	W	13			10	
7/26/2023	1:51 am	W	14			10	
7/26/2023	1:50 am	W	14			10	
7/26/2023	1:45 am	W	12			10	
7/26/2023	1:40 am	W	9			10	
7/26/2023	1:35 am	WSW	8			10	
7/26/2023	1:30 am	W	8			10	
7/26/2023	1:25 am	W	12			10	
7/26/2023	1:20 am	W	12			10	
7/26/2023	1:15 am	W	14			10	
7/26/2023	1:10 am	W	13			10	
7/26/2023	1:05 am	W	13			10	
7/26/2023	1:00 am	W	14			10	
7/26/2023	12:55 am	W	13			10	
7/26/2023	12:51 am	W	10			10	
7/26/2023	12:50 am	W	10			10	
7/26/2023	12:45 am	W	10			10	
7/26/2023	12:40 am	W	10			10	
7/26/2023	12:35 am	W	10			10	

5-Minute Wind Speed at Phoenix Sky Harbor International Airport, 07/26/2023



Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	11:55 pm	73	43	33		SW	3			10		FEW120		28.64	29.82
10/1/2023	11:51 pm	74	43	33		SW	5			10		FEW120	1008.3	28.64	29.82
10/1/2023	11:50 pm	73	43	33		SW	5			10		FEW120		28.64	29.82
10/1/2023	11:45 pm	73	43	33		SW	6			10		FEW120		28.64	29.82
10/1/2023	11:40 pm	73	43	33		SW	6			10		FEW120		28.65	29.83
10/1/2023	11:35 pm	73	43	33		SW	7			10		FEW120		28.65	29.83
10/1/2023	11:30 pm	73	43	33		SW	7			10		FEW120		28.65	29.83
10/1/2023	11:25 pm	73	43	33		SW	7			10		FEW120		28.65	29.83
10/1/2023	11:20 pm	73	43	33		SW	7			10		FEW120		28.65	29.83
10/1/2023	11:15 pm	75	45	34		SW	7			10		FEW120		28.65	29.83
10/1/2023	11:10 pm	75	45	34		SW	6			10		FEW120		28.65	29.83
10/1/2023	11:05 pm	75	45	34		SW	5			10		FEW120		28.65	29.83
10/1/2023	11:00 pm	75	45	34		SW	6			10		FEW120		28.64	29.82
10/1/2023	10:55 pm	75	45	34		SW	6			10		FEW120		28.64	29.82
10/1/2023	10:51 pm	75	44	33		SW	6			10		FEW120	1008.2	28.64	29.82
10/1/2023	10:50 pm	75	45	34		SW	6			10		FEW120		28.64	29.82
10/1/2023	10:45 pm	75	45	34		SW	7			10		FEW120		28.64	29.82
10/1/2023	10:40 pm	75	45	34		WSW	7			10		FEW120		28.64	29.82
10/1/2023	10:35 pm	75	45	34		WSW	6			10		CLR		28.64	29.82
10/1/2023	10:30 pm	75	45	34		SW	6			10		CLR		28.64	29.82
10/1/2023	10:25 pm	75	45	34		SW	7			10		CLR		28.64	29.82
10/1/2023	10:20 pm	75	45	34		SW	7			10		CLR		28.63	29.81
10/1/2023	10:15 pm	75	45	34		SW	7			10		CLR		28.63	29.81
10/1/2023	10:10 pm	75	45	34		SW	7			10		CLR		28.63	29.81
10/1/2023	10:05 pm	75	45	34		SW	7			10		CLR		28.63	29.81
10/1/2023	10:00 pm	75	45	34		SW	8			10		CLR		28.63	29.81
10/1/2023	9:55 pm	75	45	34		WSW	8			10		CLR		28.63	29.81
10/1/2023	9:51 pm	76	45	33		WSW	7			10		CLR	1007.8	28.63	29.81
10/1/2023	9:50 pm	75	45	34		SW	7			10		CLR		28.63	29.81
10/1/2023	9:45 pm	75	45	34		SW	6			10		CLR		28.63	29.81
10/1/2023	9:40 pm	77	45	32		SW	6			10		CLR		28.63	29.81
10/1/2023	9:35 pm	77	45	32		SW	7			10		CLR		28.62	29.8
10/1/2023	9:30 pm	77	45	32		SW	7			10		CLR		28.62	29.8
10/1/2023	9:25 pm	77	45	32		SW	7			10		CLR		28.62	29.8
10/1/2023	9:20 pm	79	43	28		W	9			10		CLR		28.62	29.8
10/1/2023	9:15 pm	79	43	28		W	9			10		CLR		28.62	29.8
10/1/2023	9:10 pm	79	43	28		WNW	7			10		CLR		28.62	29.8
10/1/2023	9:05 pm	79	43	28		WNW	8			10		CLR		28.62	29.8
10/1/2023	9:00 pm	79	43	28		WNW	9			10		CLR		28.62	29.8
10/1/2023	8:55 pm	79	45	30		W	7			10		CLR		28.62	29.8
10/1/2023	8:51 pm	78	45	31		WSW	8			10		CLR	1007.4	28.62	29.8
10/1/2023	8:50 pm	79	45	30		WSW	8			10		CLR		28.62	29.8
10/1/2023	8:45 pm	79	45	30		SW	9			10		CLR		28.61	29.79
10/1/2023	8:40 pm	79	45	30		SW	9			10		CLR		28.61	29.79
10/1/2023	8:35 pm	79	45	30		WSW	8			10		CLR		28.61	29.79
10/1/2023	8:30 pm	79	45	30		WSW	8			10		CLR		28.61	29.79
10/1/2023	8:25 pm	79	45	30		SW	9			10		CLR		28.61	29.79

Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	8:20 pm	81	45	28	80	W	9			10	CLR			28.61	29.79
10/1/2023	8:15 pm	81	45	28	80	W	13			10	CLR			28.6	29.78
10/1/2023	8:10 pm	81	45	28	80	W	13			10	CLR			28.6	29.78
10/1/2023	8:05 pm	81	45	28	80	W	12			10	CLR			28.6	29.78
10/1/2023	8:00 pm	81	45	28	80	W	13			10	CLR			28.6	29.78
10/1/2023	7:55 pm	81	45	28	80	W	13			10	CLR			28.6	29.78
10/1/2023	7:51 pm	81	44	27	80	W	12			10	CLR		1006.7	28.6	29.78
10/1/2023	7:50 pm	81	45	28	80	W	12			10	CLR			28.6	29.78
10/1/2023	7:45 pm	81	45	28	80	W	12			10	CLR			28.6	29.78
10/1/2023	7:40 pm	81	45	28	80	W	13			10	CLR			28.59	29.77
10/1/2023	7:35 pm	81	45	28	80	W	9			10	CLR			28.59	29.77
10/1/2023	7:30 pm	81	45	28	80	W	12			10	CLR			28.59	29.77
10/1/2023	7:25 pm	81	45	28	80	W	13			10	CLR			28.59	29.77
10/1/2023	7:20 pm	81	45	28	80	W	13			10	CLR			28.59	29.77
10/1/2023	7:15 pm	81	45	28	80	W	13			10	CLR			28.59	29.77
10/1/2023	7:10 pm	81	45	28	80	WNW	13			10	CLR			28.59	29.77
10/1/2023	7:05 pm	81	45	28	80	W	13			10	CLR			28.58	29.76
10/1/2023	7:00 pm	81	45	28	80	W	13			10	CLR			28.58	29.76
10/1/2023	6:55 pm	82	45	27	81	W	14			10	CLR			28.58	29.76
10/1/2023	6:51 pm	82	44	26	80	W	14			10	CLR		1006.2	28.58	29.76
10/1/2023	6:50 pm	82	45	27	81	W	14			10	CLR			28.58	29.76
10/1/2023	6:45 pm	82	45	27	81	W	14			10	CLR			28.58	29.76
10/1/2023	6:40 pm	82	45	27	81	W	15			10	CLR			28.58	29.76
10/1/2023	6:35 pm	82	45	27	81	W	15			10	CLR			28.58	29.76
10/1/2023	6:30 pm	82	45	27	81	W	15			10	CLR			28.58	29.76
10/1/2023	6:25 pm	82	45	27	81	W	16			10	CLR			28.57	29.75
10/1/2023	6:20 pm	82	45	27	81	W	17			10	CLR			28.57	29.75
10/1/2023	6:15 pm	82	45	27	81	W	14			10	CLR			28.57	29.75
10/1/2023	6:10 pm	82	45	27	81	WNW	16			10	CLR			28.57	29.75
10/1/2023	6:05 pm	82	45	27	81	W	16			10	CLR			28.57	29.75
10/1/2023	6:00 pm	82	45	27	81	WNW	16			10	CLR			28.57	29.75
10/1/2023	5:55 pm	82	45	27	81	WNW	15			10	CLR			28.58	29.76
10/1/2023	5:51 pm	83	44	26	81	W	15	G	24	10	FEW100		1005.9	28.57	29.75
10/1/2023	5:50 pm	82	45	27	81	W	16			10	FEW100			28.57	29.75
10/1/2023	5:45 pm	82	45	27	81	WNW	15			10	FEW100			28.57	29.75
10/1/2023	5:40 pm	84	45	25	82	WNW	15			10	FEW100			28.57	29.75
10/1/2023	5:35 pm	82	45	27	81	W	12			10	FEW100			28.57	29.75
10/1/2023	5:30 pm	84	45	25	82	WNW	12	G	17	10	FEW100			28.57	29.75
10/1/2023	5:25 pm	84	45	25	82	W	15			10	FEW100			28.57	29.75
10/1/2023	5:20 pm	84	45	25	82	WNW	17			10	FEW100			28.57	29.75
10/1/2023	5:15 pm	84	45	25	82	WNW	14			10	FEW100			28.57	29.75
10/1/2023	5:10 pm	84	45	25	82	WNW	15			10	FEW100			28.57	29.75
10/1/2023	5:05 pm	84	45	25	82	WNW	16			10	FEW100			28.57	29.75
10/1/2023	5:00 pm	84	45	25	82	WNW	14			10	FEW100			28.57	29.75
10/1/2023	4:55 pm	84	45	25	82	WNW	15			10	CLR			28.57	29.75
10/1/2023	4:51 pm	84	45	26	82	WNW	14			9	FEW100		1005.7	28.57	29.75
10/1/2023	4:50 pm	84	45	25	82	WNW	15			9	FEW100			28.57	29.75

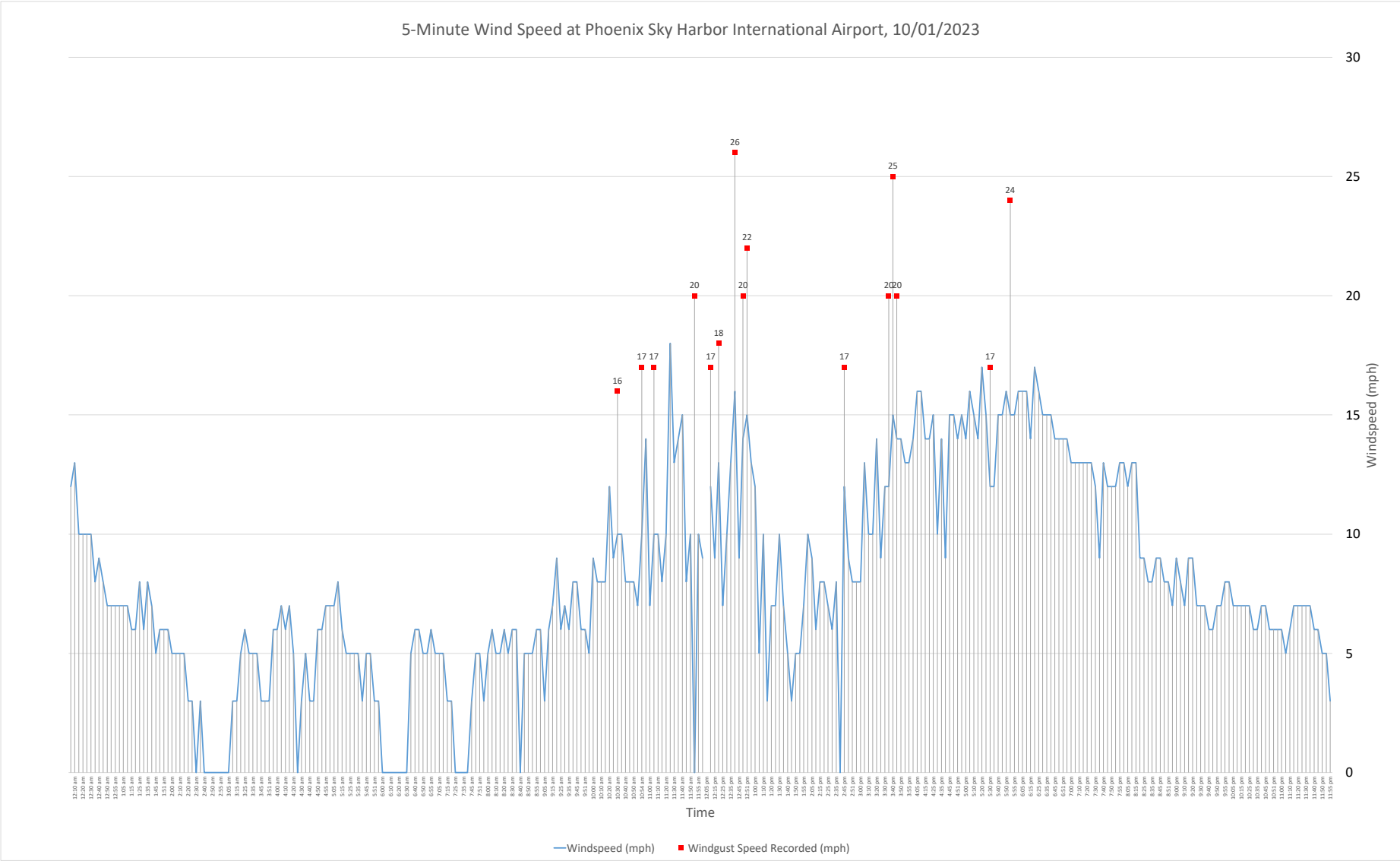
Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	4:45 pm	84	45	25	82	NW	15			9		CLR		28.57	29.75
10/1/2023	4:40 pm	84	45	25	82	WNW	9			9		CLR		28.57	29.75
10/1/2023	4:35 pm	84	45	25	82	NW	14			9		CLR		28.56	29.74
10/1/2023	4:30 pm	84	45	25	82	NW	10			10		CLR		28.57	29.75
10/1/2023	4:25 pm	84	45	25	82	NW	15			10		CLR		28.57	29.75
10/1/2023	4:20 pm	84	45	25	82	WNW	14			10		CLR		28.57	29.75
10/1/2023	4:15 pm	84	47	27	82	WNW	14			10		CLR		28.57	29.75
10/1/2023	4:10 pm	86	47	25	83	W	16			8		CLR		28.57	29.75
10/1/2023	4:05 pm	86	47	25	83	WNW	16			8		CLR		28.57	29.75
10/1/2023	4:00 pm	84	47	27	82	WNW	14			10		CLR		28.57	29.75
10/1/2023	3:55 pm	84	47	27	82	WNW	13			9		CLR		28.57	29.75
10/1/2023	3:51 pm	85	46	26	82	WNW	13			9		SCT090	1005.8	28.57	29.75
10/1/2023	3:50 pm	84	47	27	82	WNW	14			9		SCT090		28.57	29.75
10/1/2023	3:45 pm	84	47	27	82	WNW	14	G	20	10		SCT090		28.57	29.75
10/1/2023	3:40 pm	84	47	27	82	NW	15	G	25	10		SCT090		28.57	29.75
10/1/2023	3:35 pm	84	47	27	82	NW	12	G	20	10		SCT090		28.57	29.75
10/1/2023	3:30 pm	84	47	27	82	WNW	12			10		SCT090		28.57	29.75
10/1/2023	3:25 pm	84	47	27	82	NW	9			10		SCT090		28.57	29.75
10/1/2023	3:20 pm	84	47	27	82	W	14			10		SCT090		28.58	29.76
10/1/2023	3:15 pm	86	47	25	83	WNW	10			10		SCT090		28.58	29.76
10/1/2023	3:10 pm	84	47	27	82	W	10			10		SCT090		28.58	29.76
10/1/2023	3:05 pm	86	47	25	83	W	13			10		SCT090		28.58	29.76
10/1/2023	3:00 pm	86	47	25	83	W	8			10		CLR		28.58	29.76
10/1/2023	2:55 pm	84	47	27	82	W	8			9		CLR		28.58	29.76
10/1/2023	2:51 pm	85	47	27	82	NW	8			10		SCT090	1005.9	28.58	29.76
10/1/2023	2:50 pm	84	47	27	82	WNW	9			10		SCT090		28.58	29.76
10/1/2023	2:45 pm	86	47	25	83	NW	12	G	17	10		SCT095		28.58	29.76
10/1/2023	2:40 pm	84	47	27	82	N	0			10		SCT095		28.58	29.76
10/1/2023	2:35 pm	86	48	27	83	WSW	8			10		FEW065		28.59	29.77
10/1/2023	2:30 pm	84	48	29	82	SW	6			10		FEW065		28.59	29.77
10/1/2023	2:25 pm	86	48	27	83	SW	7			10		FEW065		28.59	29.77
10/1/2023	2:20 pm	86	48	27	83	WSW	8			10		FEW065		28.59	29.77
10/1/2023	2:15 pm	84	48	29	82	WNW	8			10		FEW065		28.59	29.77
10/1/2023	2:10 pm	84	48	29	82	WNW	6			10		FEW065		28.59	29.77
10/1/2023	2:05 pm	88	48	26	85	SW	9			10		FEW065		28.59	29.77
10/1/2023	2:00 pm	86	48	27	83	WSW	10			10		FEW065		28.6	29.78
10/1/2023	1:55 pm	84	48	29	82	W	7			10		FEW065		28.6	29.78
10/1/2023	1:51 pm	84	49	30	82		5			10		FEW065	1006.6	28.6	29.78
10/1/2023	1:50 pm	84	48	29	82	WNW	5			10		FEW065		28.6	29.78
10/1/2023	1:45 pm	84	48	29	82	ESE	3			10		FEW065		28.6	29.78
10/1/2023	1:40 pm	86	48	27	83	E	5			10		FEW065		28.6	29.78
10/1/2023	1:35 pm	88	48	26	85	SE	7			10		FEW065		28.61	29.79
10/1/2023	1:30 pm	88	48	26	85	SSW	10			10		FEW065		28.61	29.79
10/1/2023	1:25 pm	84	48	29	82	WSW	7			10		FEW065		28.61	29.79
10/1/2023	1:20 pm	84	48	29	82	W	7			10		FEW065		28.62	29.8
10/1/2023	1:15 pm	84	48	29	82	SSW	3			10		FEW065		28.62	29.8
10/1/2023	1:10 pm	84	48	29	82	SW	10			10		FEW065		28.62	29.8

Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	1:05 pm	82	48	30	81	WNW	5			10		FEW065		28.62	29.8
10/1/2023	1:00 pm	84	48	29	82	W	12			10		FEW065		28.63	29.81
10/1/2023	12:55 pm	88	48	26	85	SW	13			10		FEW065		28.63	29.81
10/1/2023	12:51 pm	86	49	28	84	S	15	G	22	10		FEW065	1007.7	28.63	29.81
10/1/2023	12:50 pm	86	48	27	83	S	14	G	20	10		FEW065		28.63	29.81
10/1/2023	12:45 pm	86	48	27	83	SSW	9			10		FEW065		28.64	29.82
10/1/2023	12:40 pm	86	50	29	84	S	16	G	26	10		FEW065		28.64	29.82
10/1/2023	12:35 pm	84	48	29	82	SSE	13			10		FEW065		28.64	29.82
10/1/2023	12:30 pm	84	48	29	82	S	10			10		FEW065		28.64	29.82
10/1/2023	12:25 pm	84	48	29	82	S	7			10		FEW065		28.65	29.83
10/1/2023	12:20 pm	86	50	29	84	S	13	G	18	10		FEW065		28.65	29.83
10/1/2023	12:15 pm	84	52	33	82	S	9			10		FEW065		28.65	29.83
10/1/2023	12:10 pm	84	52	33	82	S	12	G	17	10		FEW065		28.65	29.83
10/1/2023	12:05 pm	82	52	35	81					10		FEW065		28.66	29.84
10/1/2023	12:00 pm	84	52	33	82	SSE	9			10		FEW065		28.66	29.84
10/1/2023	11:55 am	84	52	33	82	S	10			10		CLR		28.66	29.84
10/1/2023	11:51 am	84	51	32	82	S	9G	G	20	10		FEW065	1008.8	28.66	29.84
10/1/2023	11:50 am	82	52	35	81	S	10			10		FEW065		28.66	29.84
10/1/2023	11:45 am	84	52	33	82	SSW	8			10		FEW065		28.67	29.85
10/1/2023	11:40 am	84	52	33	82	S	15			10		FEW065		28.66	29.84
10/1/2023	11:35 am	82	52	35	81	S	14			10		FEW065		28.67	29.85
10/1/2023	11:30 am	82	52	35	81	SSE	13			10		FEW065		28.67	29.85
10/1/2023	11:25 am	82	52	35	81	S	18			10		FEW065		28.67	29.85
10/1/2023	11:20 am	84	54	35	83	S	10			10		FEW065		28.67	29.85
10/1/2023	11:15 am	82	52	35	81	SSE	8			10		FEW065		28.67	29.85
10/1/2023	11:10 am	82	52	35	81	S	10			10		FEW065		28.67	29.85
10/1/2023	11:05 am	81	52	37	80	SSE	10	G	17	10		FEW065		28.67	29.85
10/1/2023	11:00 am	81	52	37	80	S	7			10		FEW065		28.68	29.86
10/1/2023	10:55 am	81	52	37	80	S	14			10		FEW065		28.68	29.86
10/1/2023	10:54 am	81	52	37	80	SE	10	G	17	10		FEW065		28.68	29.86
10/1/2023	10:51 am	81	51	35	80		7			10		FEW065	1009.3	28.68	29.86
10/1/2023	10:50 am	81	52	37	80	SE	8			10		FEW065		28.68	29.86
10/1/2023	10:45 am	82	52	35	81	SSE	8			9		FEW065		28.68	29.86
10/1/2023	10:40 am	81	52	37	80	SE	8			9		FEW065		28.68	29.86
10/1/2023	10:35 am	81	52	37	80	SSE	10			9		FEW065		28.68	29.86
10/1/2023	10:30 am	81	52	37	80	SSE	10	G	16	9		FEW065		28.68	29.86
10/1/2023	10:25 am	81	52	37	80	SSE	9			9		FEW065		28.68	29.86
10/1/2023	10:20 am	81	52	37	80	SE	12			9		FEW065		28.68	29.86
10/1/2023	10:15 am	81	52	37	80	S	8			9		FEW065		28.68	29.86
10/1/2023	10:10 am	79	52	39		SSE	8			9		FEW065		28.68	29.86
10/1/2023	10:05 am	81	52	37	80	SSE	8			9		FEW065		28.68	29.86
10/1/2023	10:00 am	81	52	37	80	S	9			9		FEW065		28.68	29.86
10/1/2023	9:55 am	81	52	37	80	S	5			9		FEW065		28.68	29.86
10/1/2023	9:51 am	79	51	38			6			9		FEW065	1009.6	28.69	29.87
10/1/2023	9:50 am	79	52	39		SSW	6			9		FEW065		28.69	29.87
10/1/2023	9:45 am	81	52	37	80	SSW	8			9		SCT065		28.69	29.87
10/1/2023	9:40 am	79	52	39		S	8			9		SCT065		28.68	29.86

Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	9:35 am	81	48	32	80	SSW	6			8		SCT065		28.68	29.86
10/1/2023	9:30 am	81	48	32	80	S	7			8		SCT065		28.68	29.86
10/1/2023	9:25 am	79	46	32		S	6			7		SCT065		28.68	29.86
10/1/2023	9:20 am	79	46	32		SSE	9			7		SCT065		28.68	29.86
10/1/2023	9:15 am	79	46	32		SSE	7			7		SCT065		28.68	29.86
10/1/2023	9:10 am	77	46	34		E	6			7		SCT065		28.68	29.86
10/1/2023	9:05 am	79	46	32		E	3			7		SCT065		28.68	29.86
10/1/2023	9:00 am	79	46	32		SE	6			7		SCT065		28.68	29.86
10/1/2023	8:55 am	75	46	36		SSE	6			7		SCT065		28.68	29.86
10/1/2023	8:51 am	77	46	33		SE	5			7		SCT065	1009.3	28.68	29.86
10/1/2023	8:50 am	77	46	34		ESE	5			7		SCT065		28.68	29.86
10/1/2023	8:45 am	75	46	36		E	5			7		SCT065		28.68	29.86
10/1/2023	8:40 am	75	46	36		N	0			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:35 am	75	46	36		NE	6			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:30 am	75	46	36		ENE	6			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:25 am	75	46	36		E	5			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:20 am	75	46	36		ENE	6			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:15 am	75	46	36		E	5			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:10 am	75	46	36		E	5			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:05 am	75	46	36		ESE	6			7		FEW048 SCT060		28.67	29.85
10/1/2023	8:00 am	73	46	38		ESE	5			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:55 am	73	46	38		ESE	3			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:51 am	73	46	38		SE	5			7		FEW048 SCT060	1008.9	28.66	29.84
10/1/2023	7:50 am	73	46	38		SE	5			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:45 am	73	46	38		ESE	3			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:40 am	73	46	38		N	0			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:35 am	72	46	41		N	0			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:30 am	72	46	41		N	0			7		FEW048 SCT060		28.66	29.84
10/1/2023	7:25 am	72	46	41		N	0			7		FEW048 SCT060		28.65	29.83
10/1/2023	7:20 am	72	46	41		S	3			7		FEW048 SCT060		28.65	29.83
10/1/2023	7:15 am	72	46	41		SSE	3			7		FEW048 SCT060		28.65	29.83
10/1/2023	7:10 am	72	46	41		SSE	5			7		FEW048 SCT060		28.65	29.83
10/1/2023	7:05 am	72	46	41		SE	5			7		FEW048 SCT060		28.65	29.83
10/1/2023	7:00 am	72	46	41		SE	5			7		FEW048 SCT060		28.64	29.82
10/1/2023	6:55 am	72	46	41		SE	6			7		FEW048 SCT060		28.64	29.82
10/1/2023	6:51 am	71	46	41		SE	5			7		FEW048 SCT060	1008.1	28.64	29.82
10/1/2023	6:50 am	72	46	41		SE	5			7		CLR		28.64	29.82
10/1/2023	6:45 am	72	46	41		SE	6			7		FEW046 SCT060		28.64	29.82
10/1/2023	6:40 am	72	46	41		SE	6			7		FEW046 SCT060		28.64	29.82
10/1/2023	6:35 am	72	46	41		SE	5			7		FEW046 SCT060		28.63	29.81
10/1/2023	6:30 am	72	45	38		N	0			7		FEW046 SCT060		28.63	29.81
10/1/2023	6:25 am	72	45	38		N	0			8		FEW046 SCT060		28.63	29.81
10/1/2023	6:20 am	72	45	38		N	0			8		FEW046 SCT060		28.63	29.81
10/1/2023	6:15 am	72	45	38		N	0			8		CLR		28.63	29.81
10/1/2023	6:10 am	72	45	38		N	0			8		CLR		28.62	29.8
10/1/2023	6:05 am	72	45	38		N	0			8		FEW045		28.63	29.81
10/1/2023	6:00 am	72	45	38		N	0			8		FEW044 FEW060		28.62	29.8

Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	5:55 am	72	46	41		SSW	3			8		FEW044 SCT060		28.62	29.8
10/1/2023	5:51 am	72	45	38		SW	3			8		FEW046 BKN060	1007.3	28.62	29.8
10/1/2023	5:50 am	73	45	36		SSW	5			8		FEW046 SCT060		28.62	29.8
10/1/2023	5:45 am	72	46	41		SSW	5			8		SCT046 BKN060		28.62	29.8
10/1/2023	5:40 am	72	46	41		SW	3			8		SCT046 BKN060		28.62	29.8
10/1/2023	5:35 am	72	46	41		WSW	5			8		FEW046 BKN060		28.62	29.8
10/1/2023	5:30 am	72	46	41		WSW	5			8		FEW046 BKN060		28.62	29.8
10/1/2023	5:25 am	72	46	41		W	5			8		FEW045 BKN055		28.61	29.79
10/1/2023	5:20 am	73	46	38		W	5			8		FEW046 SCT055		28.61	29.79
10/1/2023	5:15 am	73	46	38		W	6			8		FEW046 FEW055		28.61	29.79
10/1/2023	5:10 am	73	46	38		W	8			8		FEW050		28.61	29.79
10/1/2023	5:05 am	73	46	38		W	7			8		FEW055		28.61	29.79
10/1/2023	5:00 am	73	46	38		W	7			8		CLR		28.61	29.79
10/1/2023	4:55 am	73	46	38		WNW	7			9		CLR		28.6	29.78
10/1/2023	4:51 am	74	46	37		NNW	6			9		SCT055	1006.6	28.6	29.78
10/1/2023	4:50 am	73	46	38		NNW	6			9		SCT055		28.6	29.78
10/1/2023	4:45 am	73	46	38		NNW	3			9		FEW055		28.6	29.78
10/1/2023	4:40 am	73	46	38		NNW	3			9		FEW055		28.6	29.78
10/1/2023	4:35 am	73	46	38		NNW	5			9		FEW055		28.6	29.78
10/1/2023	4:30 am	73	45	36		WNW	3			10		CLR		28.6	29.78
10/1/2023	4:25 am	73	45	36		N	0			10		CLR		28.6	29.78
10/1/2023	4:20 am	73	45	36		W	5			10		CLR		28.59	29.77
10/1/2023	4:15 am	73	45	36		W	7			10		CLR		28.59	29.77
10/1/2023	4:10 am	73	45	36		W	6			10		CLR		28.59	29.77
10/1/2023	4:05 am	73	45	36		W	7			10		CLR		28.59	29.77
10/1/2023	4:00 am	73	45	36		W	6			10		CLR		28.59	29.77
10/1/2023	3:55 am	73	45	36		SW	6			9		CLR		28.59	29.77
10/1/2023	3:51 am	74	45	36		SSW	3			9		FEW050	1006	28.59	29.77
10/1/2023	3:50 am	73	45	36		S	3			9		FEW050		28.59	29.77
10/1/2023	3:45 am	75	45	34		S	3			10		CLR		28.59	29.77
10/1/2023	3:40 am	75	45	34		SSW	5			10		CLR		28.59	29.77
10/1/2023	3:35 am	75	45	34		S	5			10		FEW050		28.59	29.77
10/1/2023	3:30 am	75	45	34		S	5			10		FEW050		28.58	29.76
10/1/2023	3:25 am	75	45	34		S	6			9		FEW050		28.58	29.76
10/1/2023	3:20 am	75	45	34		S	5			9		FEW050		28.58	29.76
10/1/2023	3:15 am	75	45	34		S	3			9		FEW050		28.58	29.76
10/1/2023	3:10 am	75	45	34		S	3			9		FEW050		28.58	29.76
10/1/2023	3:05 am	75	45	34		N	0			9		CLR		28.58	29.76
10/1/2023	3:00 am	75	45	34		N	0			9		CLR		28.58	29.76
10/1/2023	2:55 am	75	45	34		N	0			9		CLR		28.58	29.76
10/1/2023	2:51 am	76	45	33		N	0			9		FEW120 FEW250	1005.7	28.58	29.76
10/1/2023	2:50 am	75	45	34		N	0			9		FEW120		28.58	29.76
10/1/2023	2:45 am	75	45	34		N	0			9				28.58	29.76
10/1/2023	2:40 am	75	45	34		N	0			9		CLR		28.58	29.76
10/1/2023	2:35 am	75	45	34		S	3			9		CLR		28.58	29.76
10/1/2023	2:30 am	75	45	34		N	0			9		CLR		28.58	29.76
10/1/2023	2:25 am	75	45	34		SW	3			9		CLR		28.58	29.76

Date	Time	Temp.	Dew	Relative	Heat	Wind	Wind2	Wind Gust	Wind Gust	Visibility	Weather	Clouds	Sea Level	Station	Altimeter
(L)		(°F)	(°F)	(%)	(°F)		(mph)	Recorded?	(mph)	(miles)		(x100 ft)	(mb)	(in Hg)	(in Hg)
10/1/2023	2:20 am	75	45	34		SW	3			9		CLR		28.58	29.76
10/1/2023	2:15 am	75	45	34		WSW	5			9		CLR		28.58	29.76
10/1/2023	2:10 am	75	45	34		SW	5			8		CLR		28.58	29.76
10/1/2023	2:05 am	75	45	34		WSW	5			8		CLR		28.58	29.76
10/1/2023	2:00 am	75	45	34		WSW	5			8		CLR		28.58	29.76
10/1/2023	1:55 am	77	45	32		WSW	6			8		CLR		28.58	29.76
10/1/2023	1:51 am	77	45	32		WSW	6			8		FEW250	1005.6	28.58	29.76
10/1/2023	1:50 am	77	45	32		WSW	6			8				28.58	29.76
10/1/2023	1:45 am	77	45	32		WSW	5			8				28.57	29.75
10/1/2023	1:40 am	77	45	32		SW	7			8				28.57	29.75
10/1/2023	1:35 am	77	45	32		SSW	8			8		CLR		28.57	29.75
10/1/2023	1:30 am	77	45	32		SSW	6			8		CLR		28.57	29.75
10/1/2023	1:25 am	77	45	32		SSW	8			8		CLR		28.57	29.75
10/1/2023	1:20 am	77	45	32		SSW	6			7		CLR		28.57	29.75
10/1/2023	1:15 am	77	45	32		SSW	6			7		CLR		28.57	29.75
10/1/2023	1:10 am	77	45	32		SSW	7			7		CLR		28.57	29.75
10/1/2023	1:05 am	77	45	32		SW	7			7		CLR		28.57	29.75
10/1/2023	1:00 am	79	45	30		SW	7			7		CLR		28.57	29.75
10/1/2023	12:55 am	79	45	30		WSW	7			7		CLR		28.57	29.75
10/1/2023	12:51 am	78	45	31		WSW	7			8		FEW250	1005.2	28.57	29.75
10/1/2023	12:50 am	79	45	30		WSW	7			8				28.57	29.75
10/1/2023	12:45 am	79	45	30		SW	8			7				28.57	29.75
10/1/2023	12:40 am	79	45	30		SW	9			7		CLR		28.56	29.74
10/1/2023	12:35 am	79	45	30		SW	8			7		CLR		28.57	29.75
10/1/2023	12:30 am	79	45	30		WSW	10			7		CLR		28.57	29.75
10/1/2023	12:25 am	79	45	30		WSW	10			7		CLR		28.57	29.75
10/1/2023	12:20 am	79	45	30		SW	10			7		CLR		28.57	29.75
10/1/2023	12:15 am	79	46	32		SW	10			7		CLR		28.56	29.74
10/1/2023	12:10 am	79	45	30		SW	13			7		CLR		28.56	29.74
10/1/2023	12:05 am	79	45	30		WSW	12			7		CLR		28.56	29.74
10/1/2023	12:00 am	79	46	32		WSW	9			7		CLR		28.56	29.74

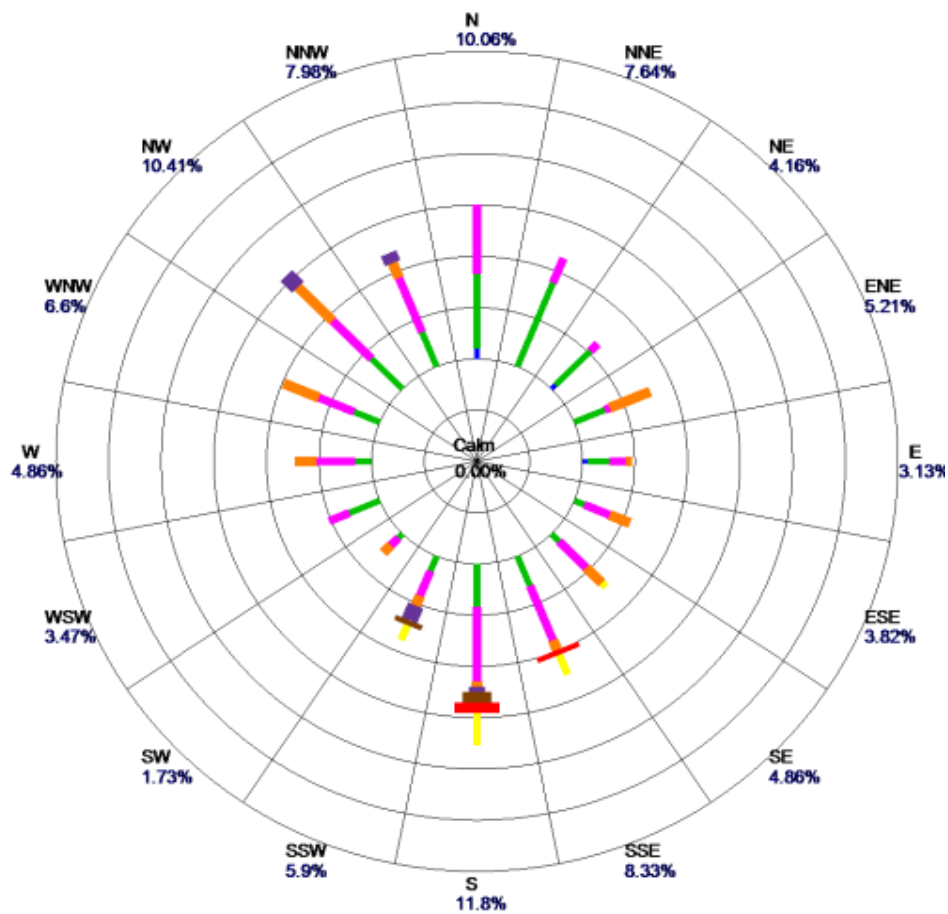
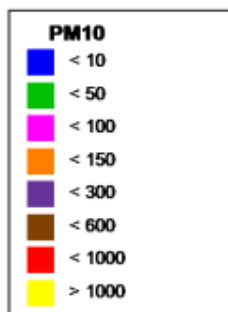




Appendix C: Maricopa County Air Quality Department Planning & Analysis Division – Air Quality Monitor Data 5-Minute and 1-Hour PM₁₀ Wind Roses

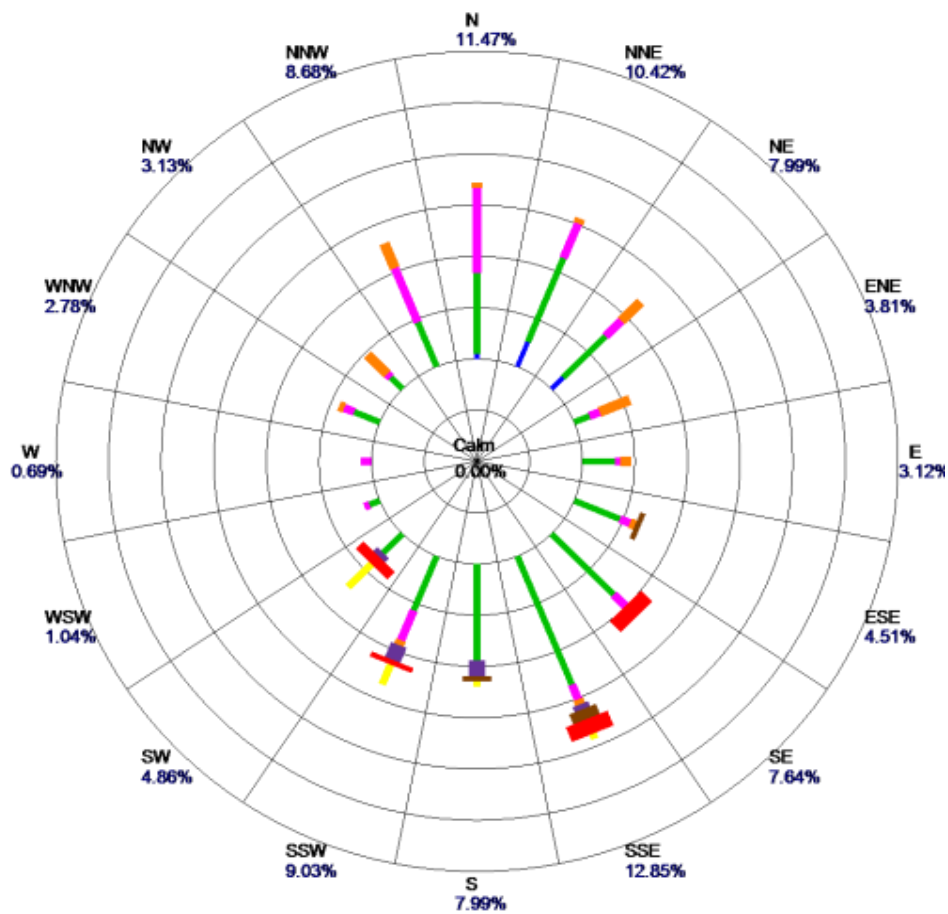
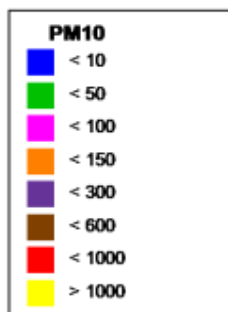
5-Minute PM10 Wind Roses for MCAQD Air Quality Monitors

Site: Dysart
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



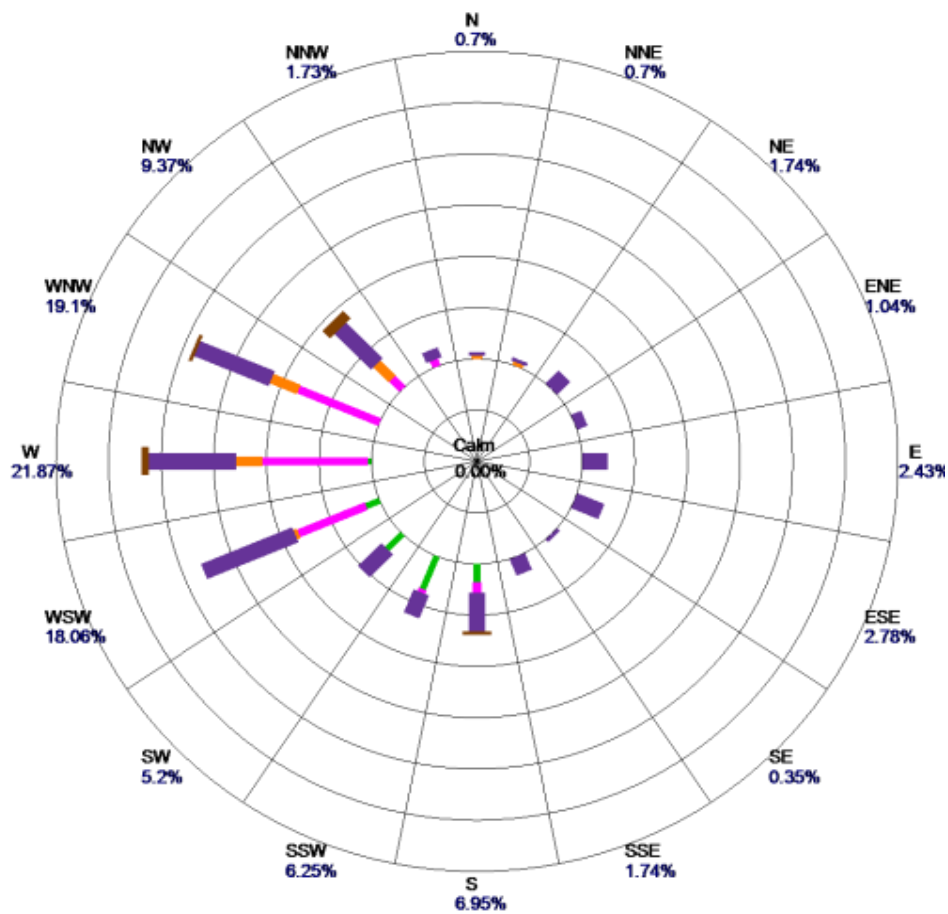
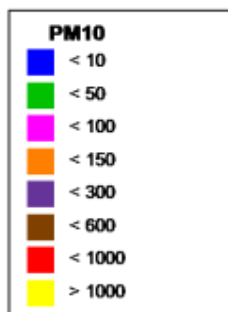
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: Zuni Hills
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



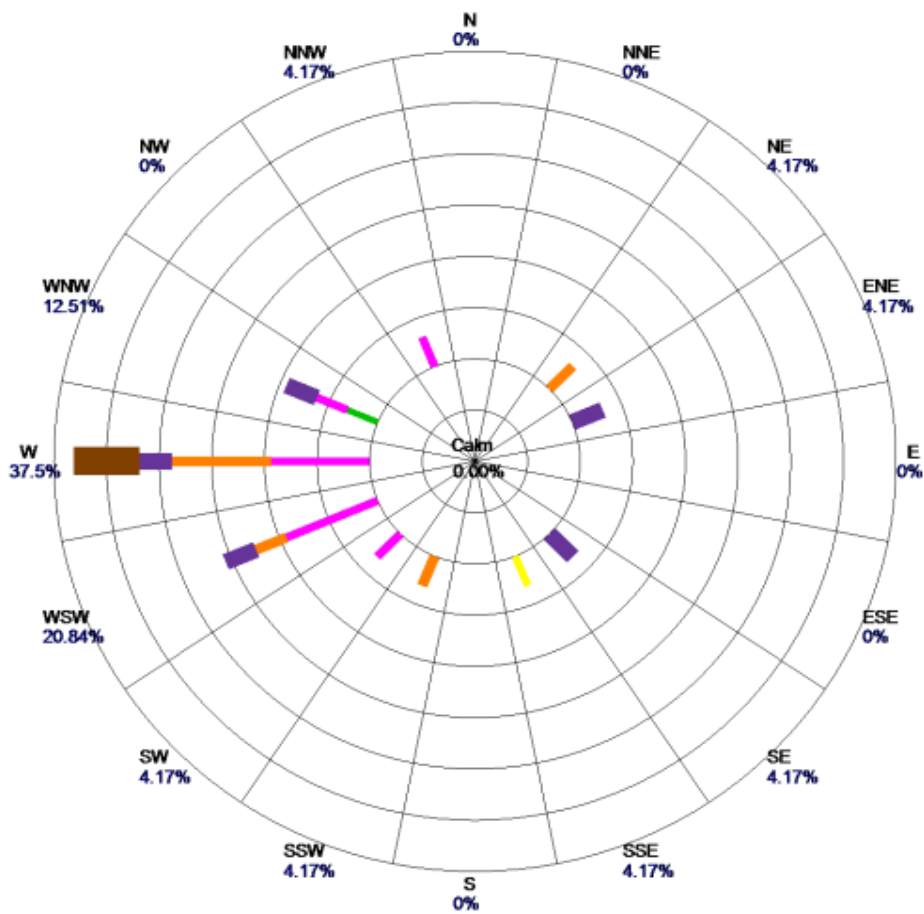
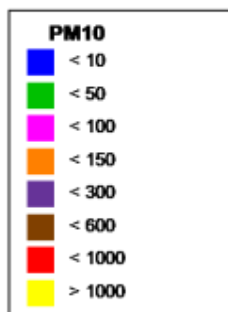
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: West 43rd Ave
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



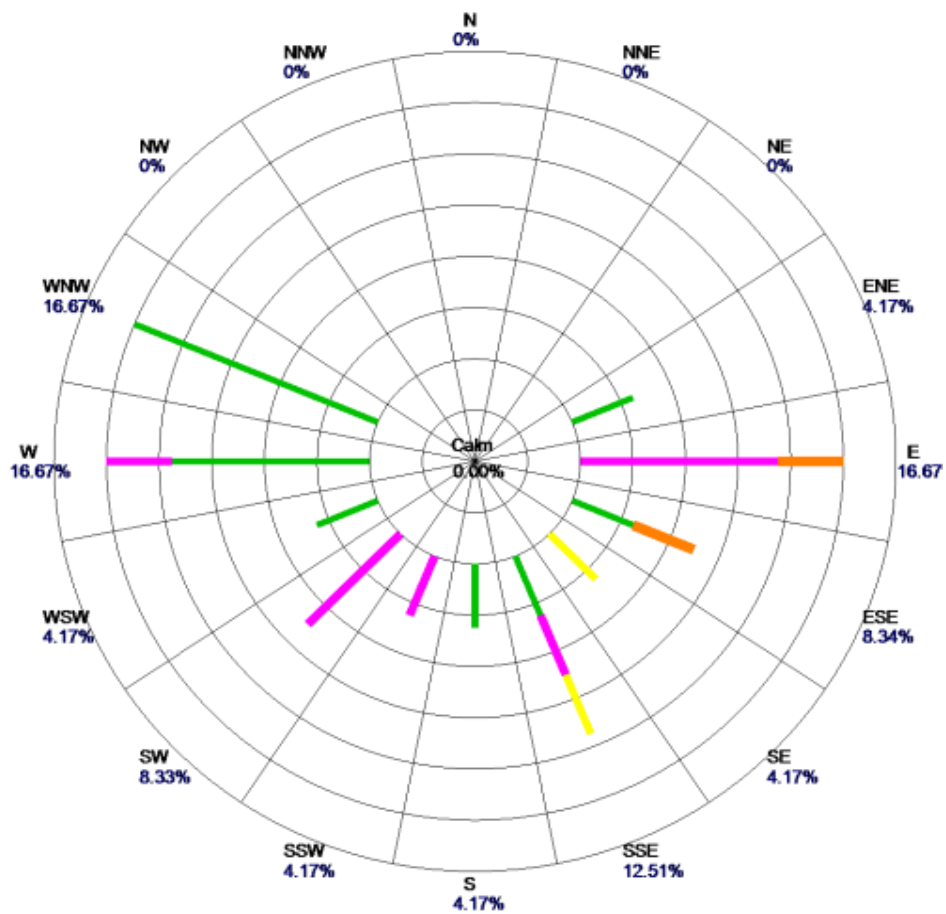
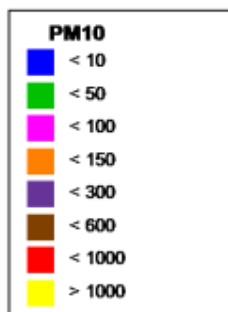
Period: 2023-10-01 00:00 - 2023-10-01 23:59

Site: West 43rd Ave
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



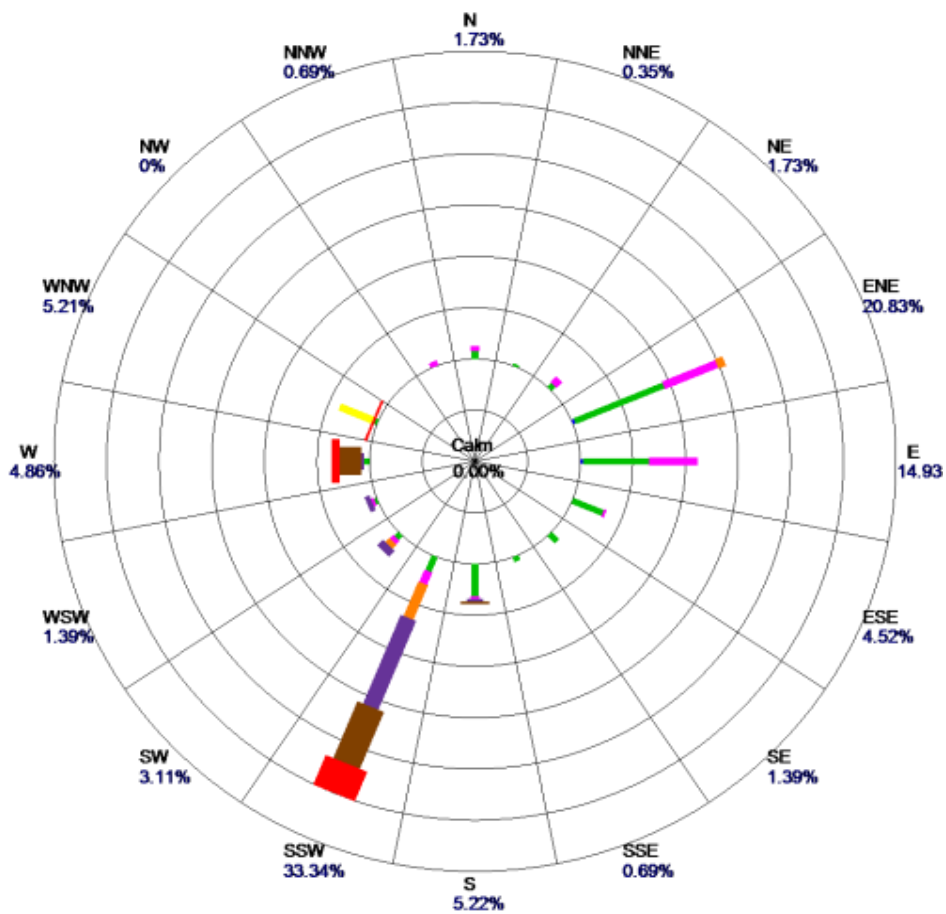
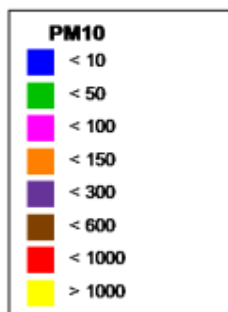
Period: 2023-07-21 00:00 - 2023-07-21 23:59

Site: Higley
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



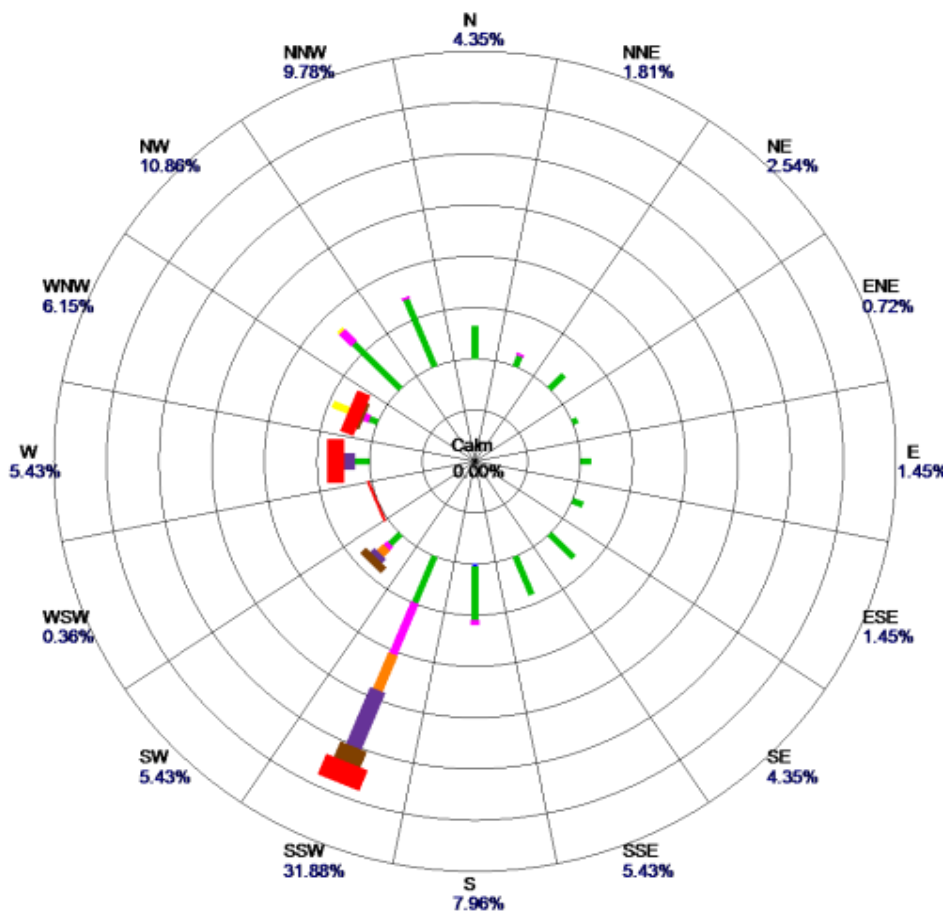
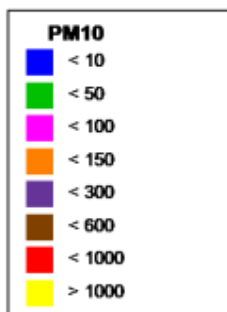
Period: 2023-07-26 00:00 - 2023-07-26 23:59

Site: Buckeye
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



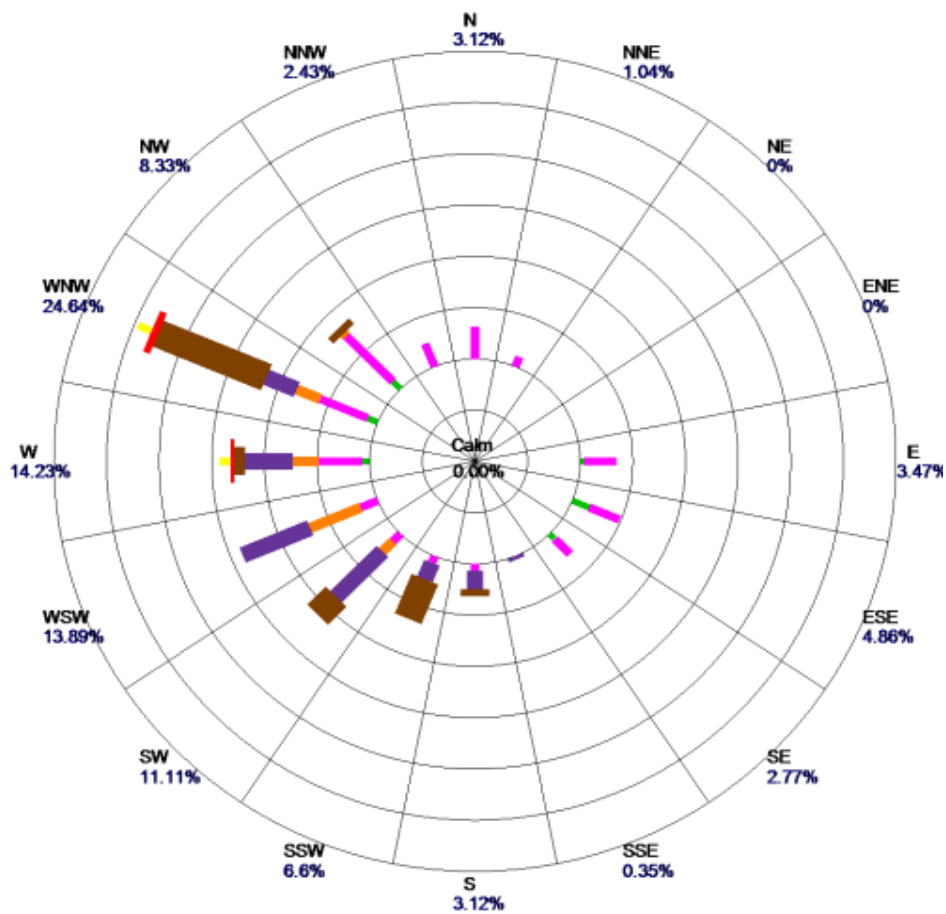
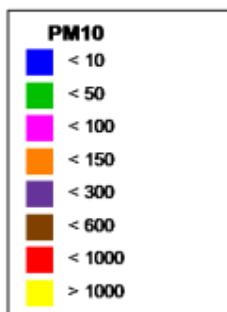
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Dysart
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



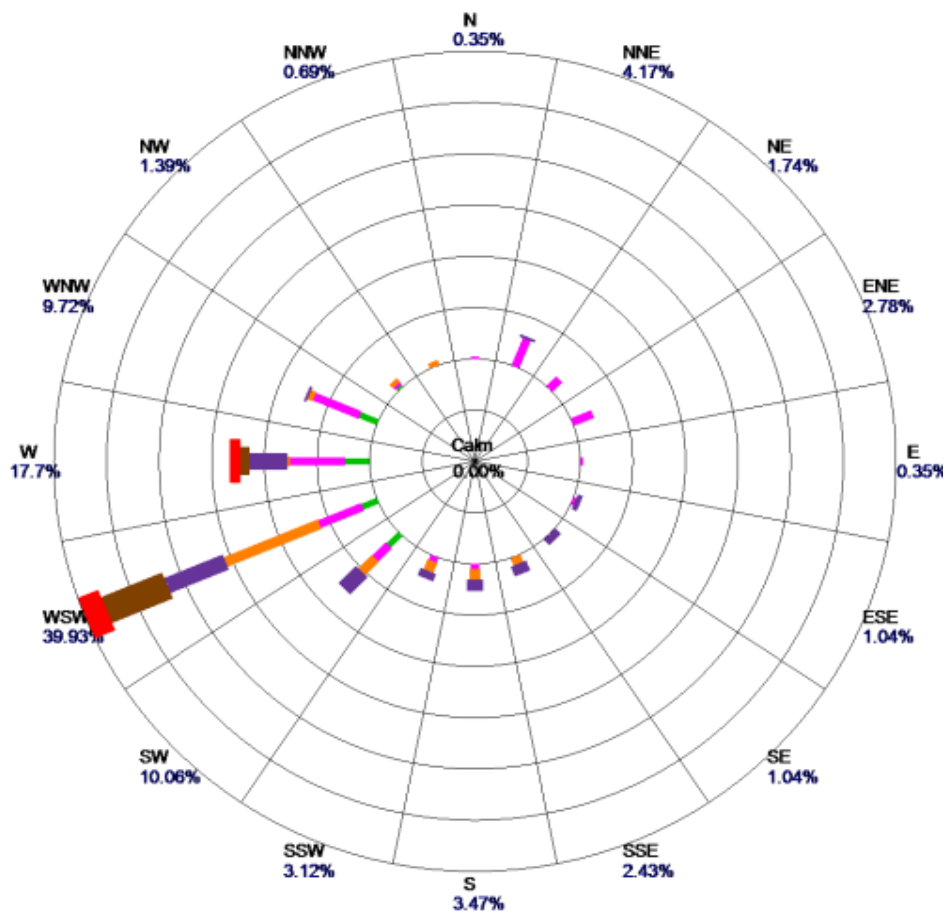
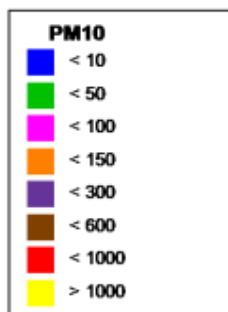
Period: 2021-10-11 00:00 - 2021-10-11 23:59

Site: Higley
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



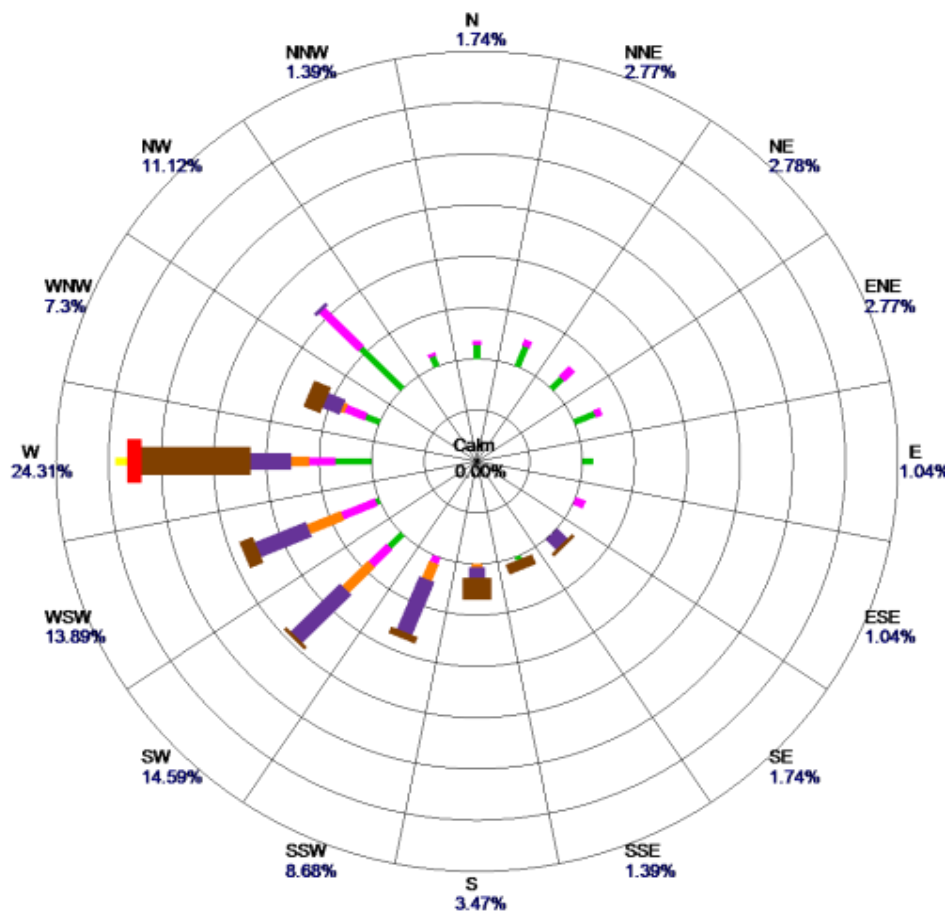
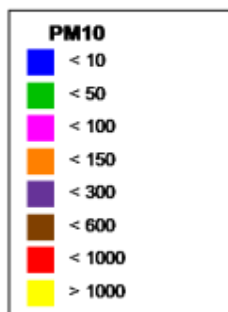
Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: South Scottsdale
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

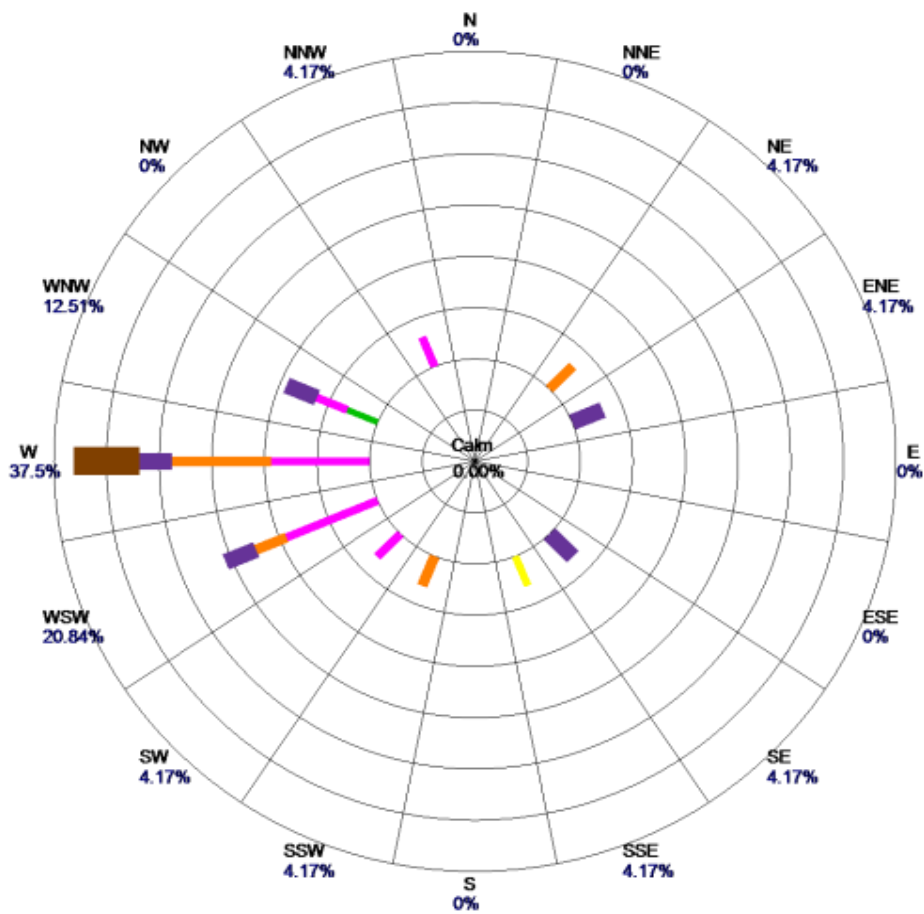
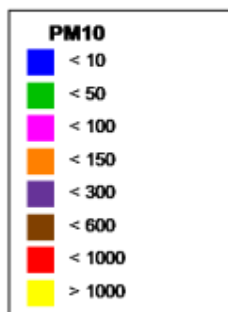
Site: West Chandler
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

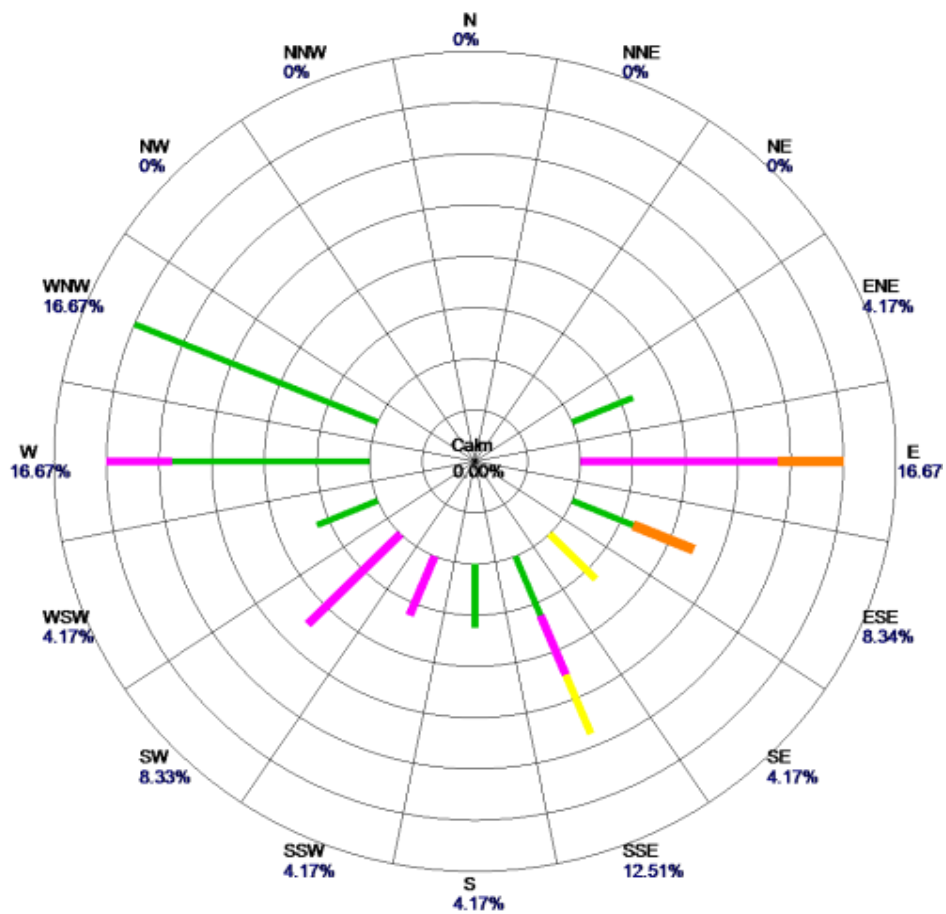
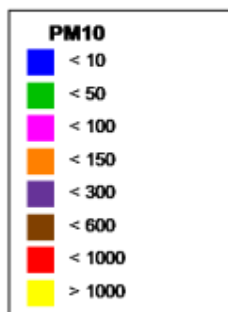
1-Hour PM10 Wind Roses for MCAQD Air Quality Monitors

Site: West 43rd Ave
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



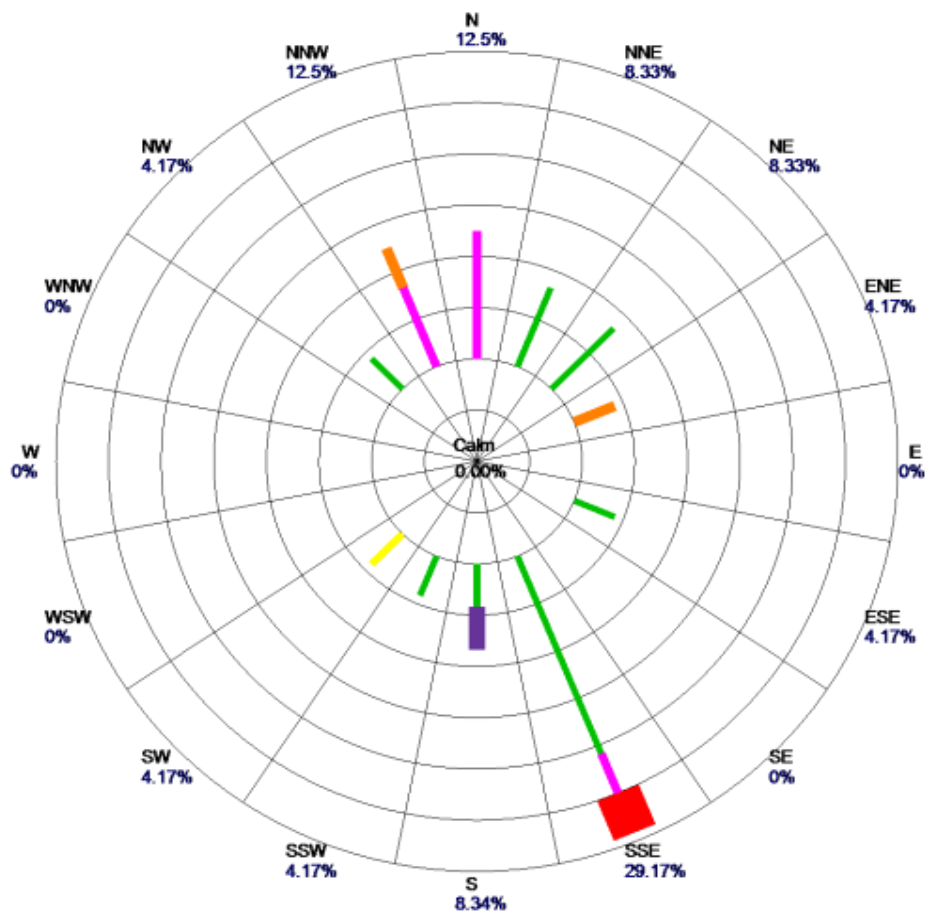
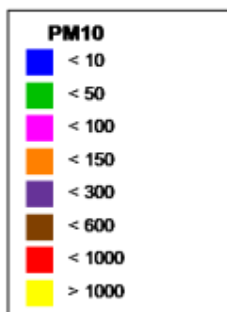
Period: 2023-07-21 00:00 - 2023-07-21 23:59

Site: Higley
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



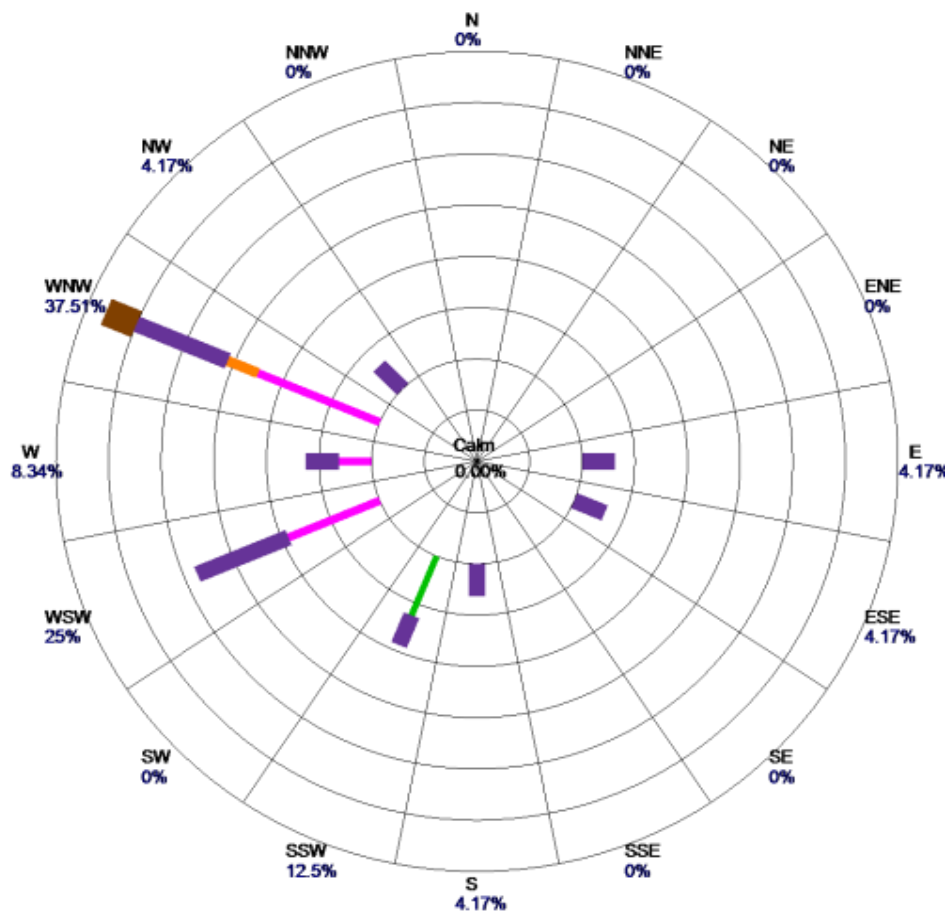
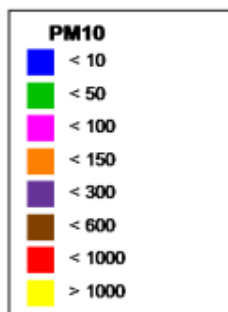
Period: 2023-07-26 00:00 - 2023-07-26 23:59

Site: Zuni Hills
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



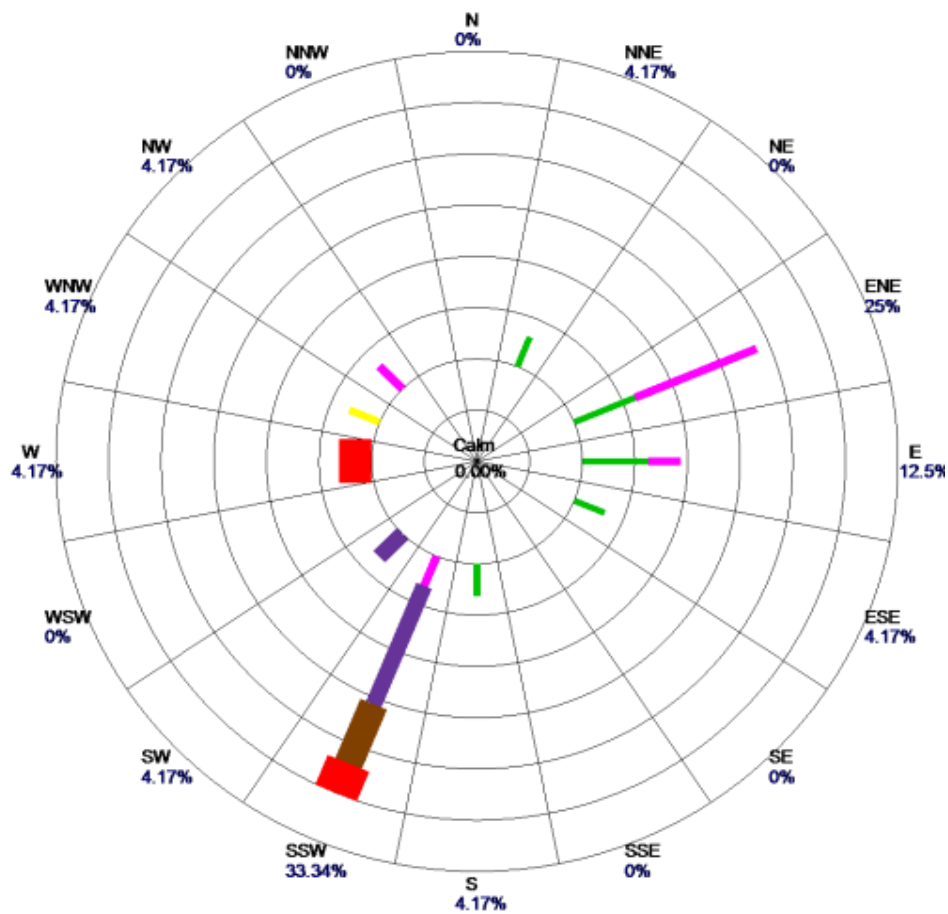
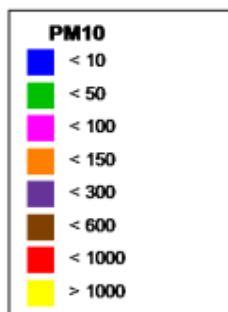
Period: 2022-09-02 00:00 - 2022-09-02 23:59

Site: West 43rd Ave
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



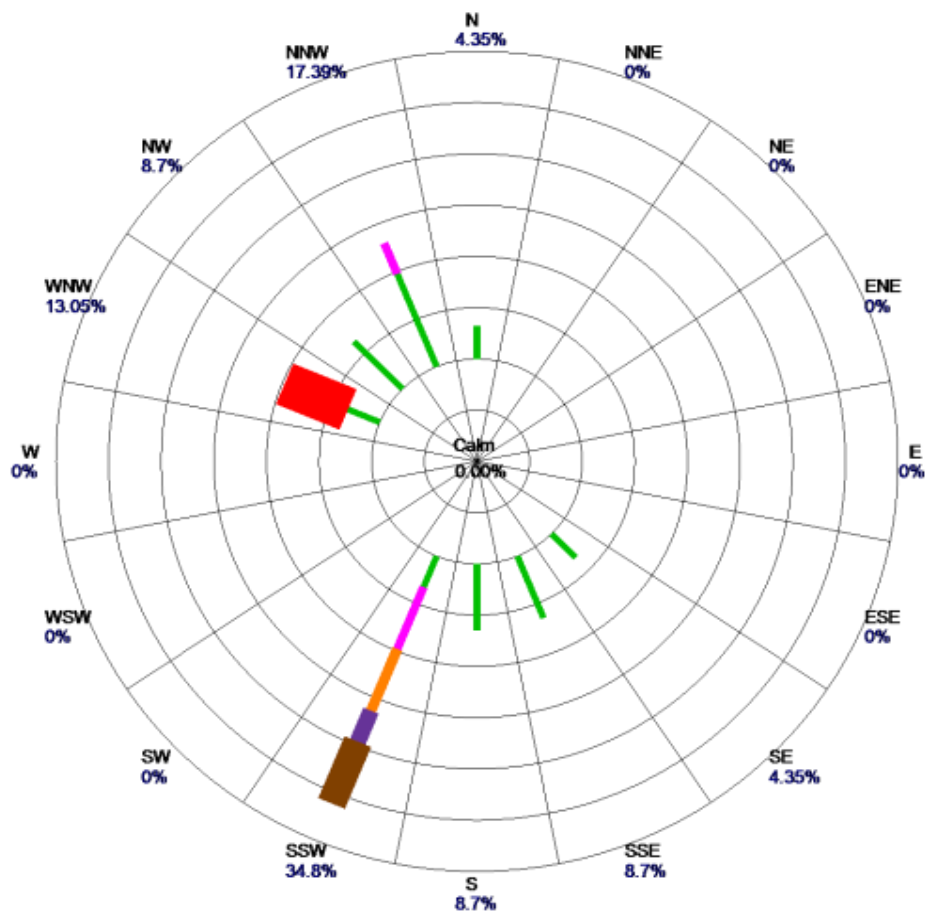
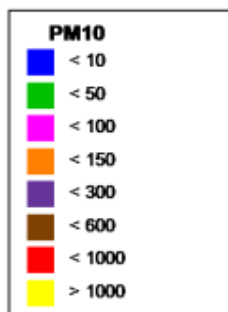
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Units: UG/M3
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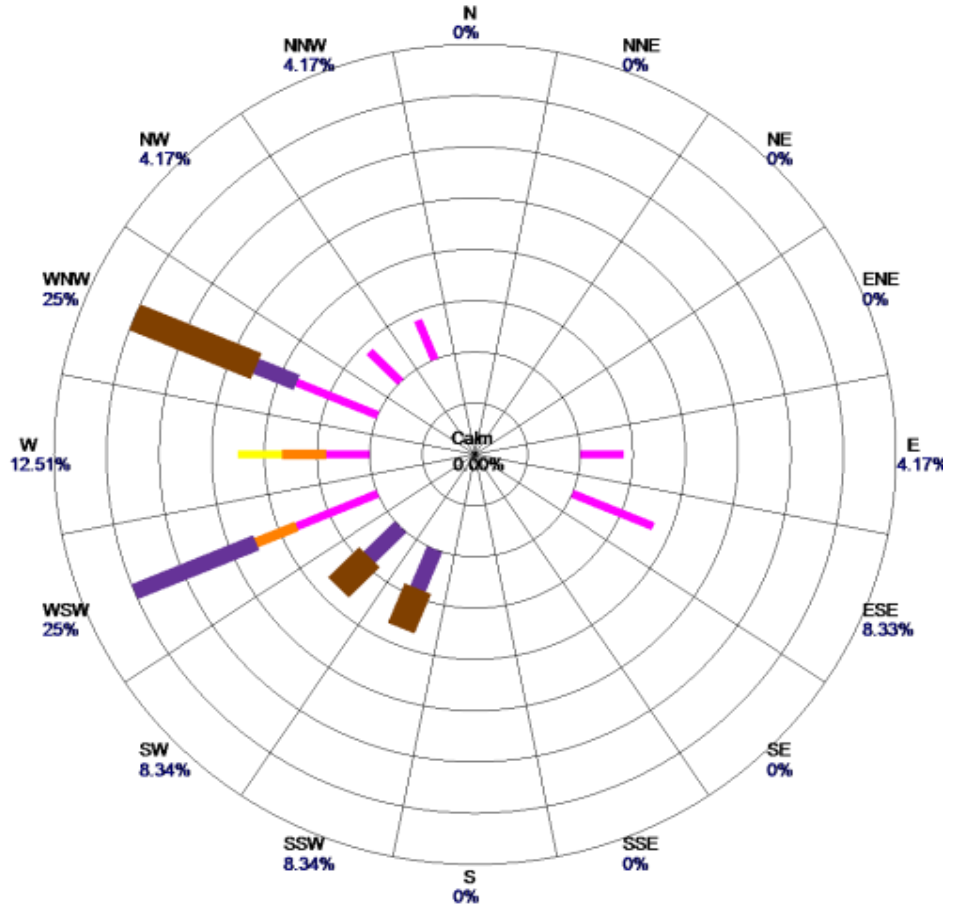
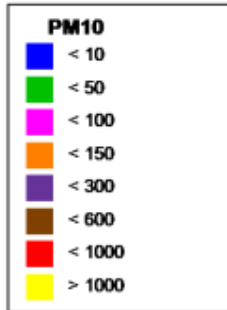
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Site: Dysart
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



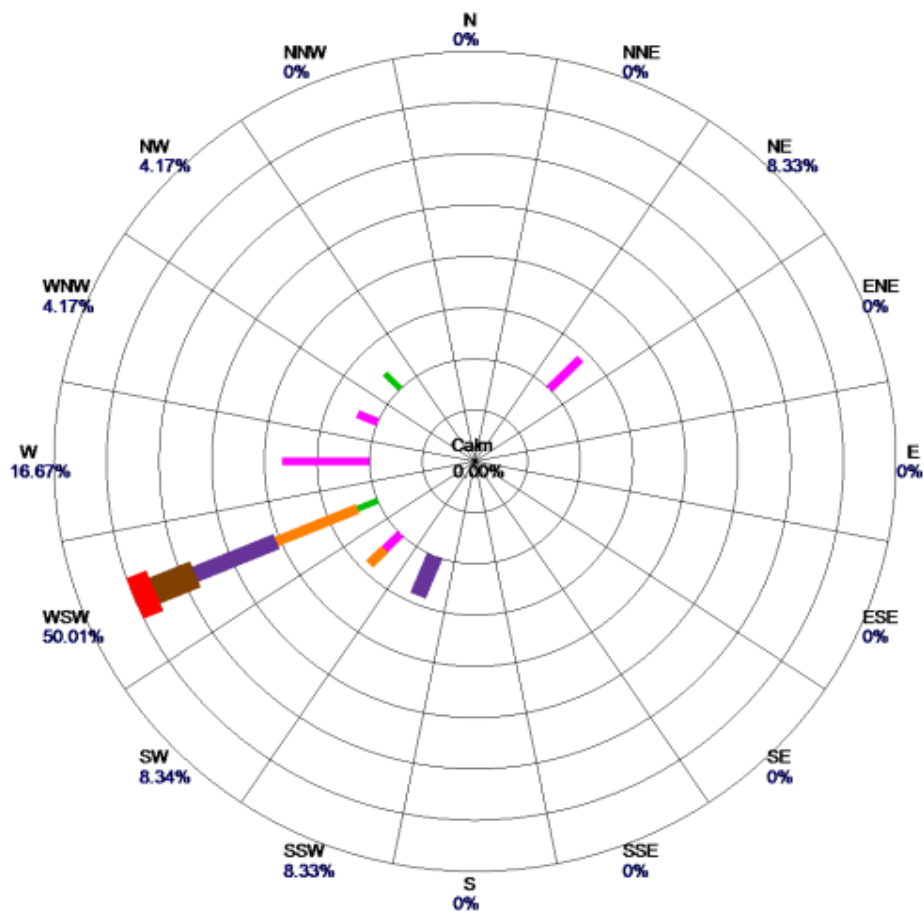
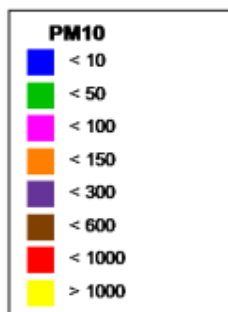
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Site: Higley
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



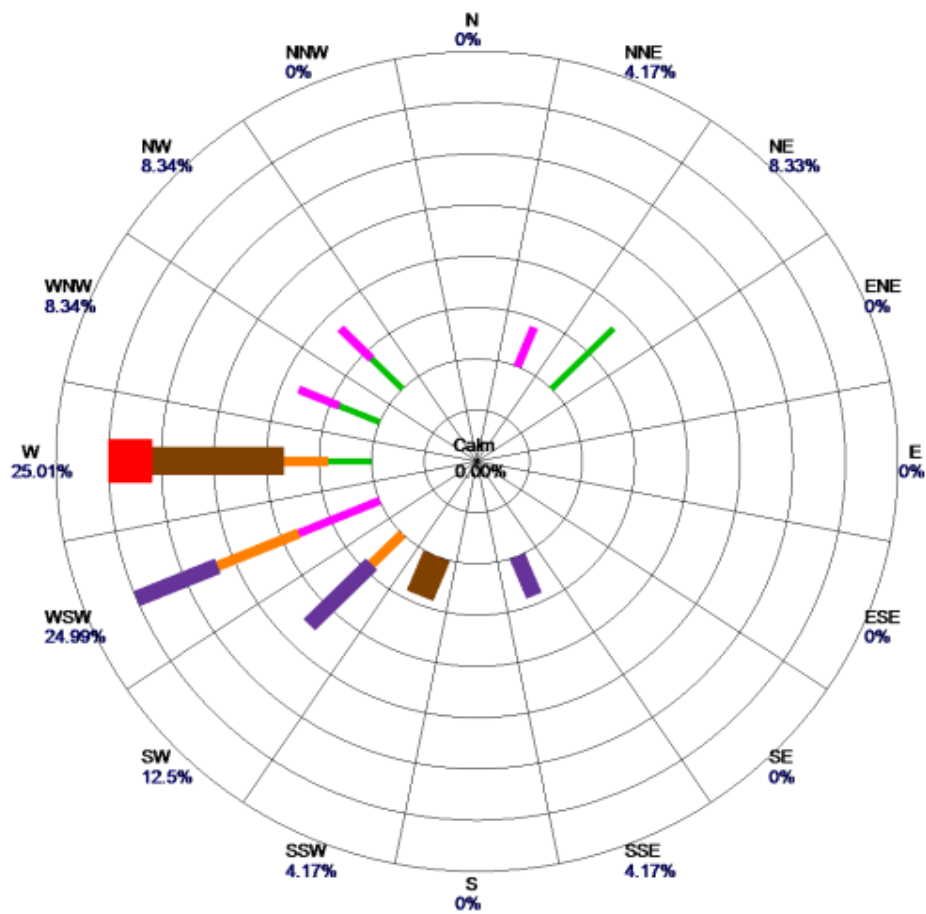
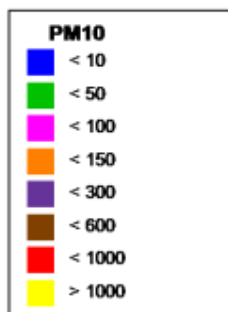
Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: South Scottsdale
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59

Site: West Chandler
Parameter: PM10
Units: UG/M3
Direction: FROM Origin



Period: 2021-10-12 00:00 - 2021-10-12 23:59



Appendix D: Maricopa County Air Quality Department Planning & Analysis Division – Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021

September 2023

Atypical Event Identification at Higley and West Chandler Sites for 2020 and 2021

**Maricopa County
Air Quality Department
Planning & Analysis Division**

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Summary

This report examines the days in 2020 and 2021 which had the highest 24-hour average concentrations of particulate matter less than 10 microns in diameter (PM₁₀) at the Higley and West Chandler air monitoring sites. Days in which atypical events, i.e., dust storms, were occurring in the region and impacting Higley or West Chandler are identified. Because regional atypical events were occurring on these days, it is inappropriate to consider these days when calculating background PM₁₀ concentrations for hot spot analyses.

Information regarding each atypical event includes:

- Air pollution forecasts issued by the Arizona Department of Environmental Quality (ADEQ)
- National Weather Service's (NWS) historical Area Forecast Discussions (AFD)
- An analysis of hourly averaged and maximum gust wind speed at the monitoring site
- 24-hour average PM₁₀ concentrations at air monitors in the region
- Wind and pollution roses for the Higley and West Chandler sites
- A six-hour Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) back-trajectory analysis
- List of the nearest and farthest PM₁₀ exceeding site from the Higley and West Chandler sites
- The PM₁₀/PM_{2.5} ratio and coarse particulate matter (PM_c) concentrations in the region
- Visibility pictures for the region. These pictures come from the ADEQ's visibility network cameras. Cameras used for this report were:
 - South Mountain—The view is from North Mountain looking toward the Phoenix downtown skyline with the South Mountains in the distance.
 - Camelback— The view is from the Capital Mall area of downtown Phoenix looking northeast toward Camelback Mountain.
 - Superstition Mountain— The view is looking east from downtown Mesa with the community of Apache Junction between the camera and the mountain vista.
- Information about facility inspections and dust citizen complaint responses, and any associated enforcement actions, in the vicinity of the Higley and West Chandler sites
- The Appendix includes charts of 5-minute and hourly PM₁₀ and wind data for the Higley and West Chandler sites, as well as any sites that exceeded the 24-hour PM₁₀ National Ambient Air Quality Standards (NAAQS) for all events listed in this report

Finally, after removing days in which an atypical event occurred, the fourth highest 24-hour PM₁₀ concentration is identified for the period of 2020 through 2021 (see Table 2 and Table 3). This concentration is suitable for use as a reasonable background concentration for the site.

The fourth highest PM₁₀ concentrations identified by this report for each site are:

- Higley: 94.0 µg/m³ on August 6, 2021
- West Chandler: 80.8 µg/m³ on August 11, 2020

PM₁₀ Air Monitoring Sites

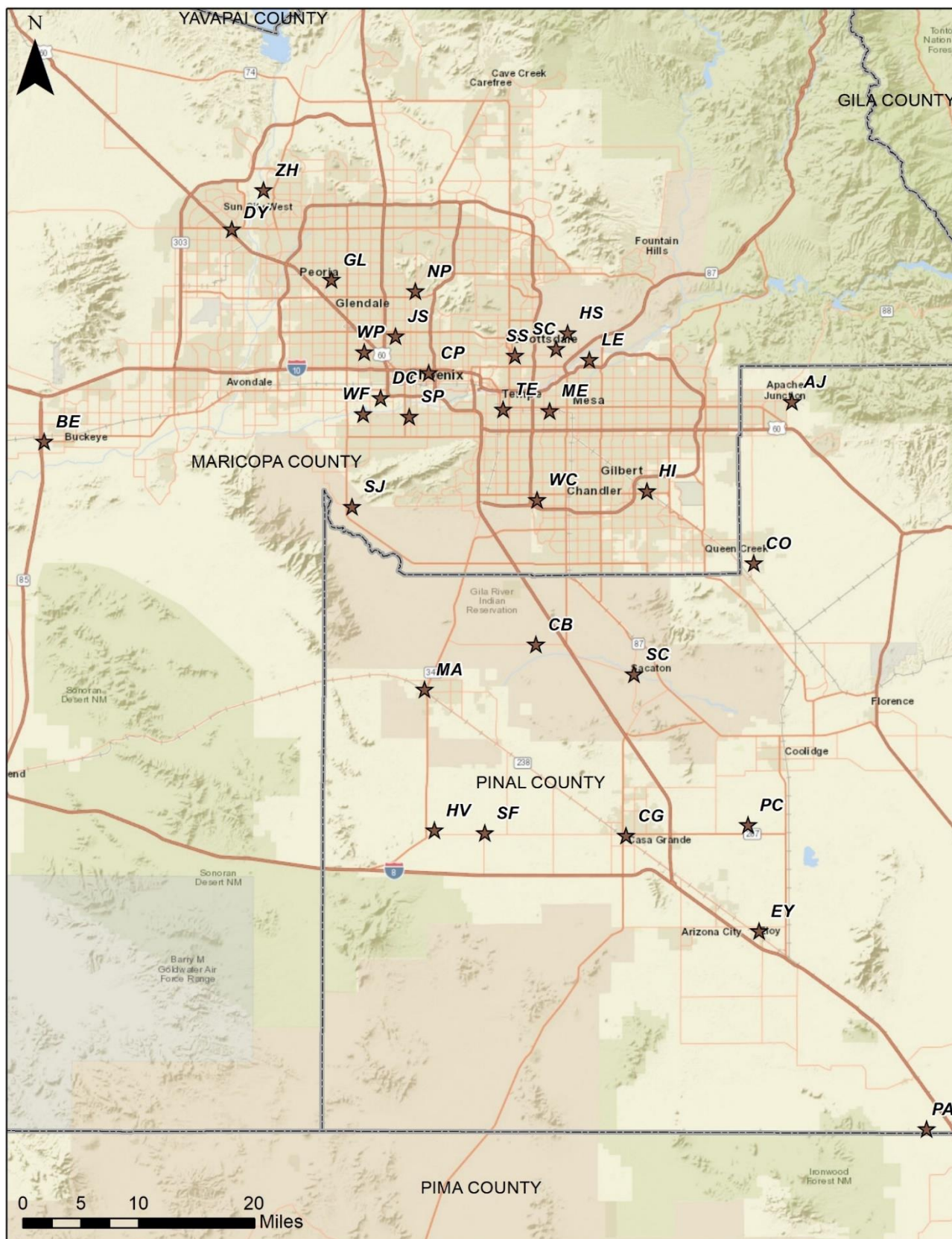
Table 1 lists the PM air monitoring sites that were operating in 2020 and 2021 within Maricopa and Pinal counties. Information on which agency operated the site, the type of PM monitoring instruments at the site (i.e., PM₁₀ or PM_{2.5}), and the availability of site wind data in the U.S. Environmental Protection Agency (EPA) Air Quality System (AQS) database is listed. Figure 1 is a map of the region which shows the locations of these sites. Agencies operating monitoring sites include ADEQ, Gila River Indian Community (GRIC), Maricopa County Air Quality Department (MCAQD), Pinal County Air Quality Department (PCAQD), and Salt River Pima-Maricopa Indian Community (SRPMIC).

Table 1. PM monitoring sites in Maricopa and Pinal counties.

AQS Number	Local Site Name	Site Acronym	Agency	PM Monitoring Instruments	Wind Data (In AQS)
04-013-0019	West Phoenix	WP	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-1003	Mesa	ME	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-1004	North Phoenix	NP	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-2001	Glendale	GL	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-3002	Central Phoenix	CP	MCAQD	PM ₁₀	Speed/Direction
04-013-3003	South Scottsdale	SS	MCAQD	PM ₁₀	Speed/Direction
04-013-4003	South Phoenix	SP	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-4004	West Chandler	WC	MCAQD	PM ₁₀	Speed/Direction
04-013-4005	Tempe	TE	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-4006	Higley	HI	MCAQD	PM ₁₀	Speed/Direction
04-013-4009	West 43rd Avenue	WF	MCAQD	PM ₁₀	Speed/Direction
04-013-4010	Dysart	DY	MCAQD	PM ₁₀	Speed/Direction
04-013-4011	Buckeye	BE	MCAQD	PM ₁₀	Speed/Direction
04-013-4016	Zuni Hills	ZH	MCAQD	PM ₁₀	Speed/Direction

AQS Number	Local Site Name	Site Acronym	Agency	PM Monitoring Instruments	Wind Data (In AQS)
04-013-7003	St Johns	SJ	GRIC	PM ₁₀	
04-013-7020	Senior Center	SC	SRPMIC	PM ₁₀ , PM _{2.5}	
04-013-7022	Lehi	LE	SRPMIC	PM ₁₀	
04-013-7024	High School	HS	SRPMIC	PM ₁₀	
04-013-9812	Durango Complex	DC	MCAQD	PM ₁₀ , PM _{2.5}	Speed/Direction
04-013-9997	JLG Supersite	JS	ADEQ	PM ₁₀ , PM _{2.5}	Speed/Direction
04-021-0001	Casa Grande Downtown	CG	PCAQD	PM ₁₀ , PM _{2.5}	
04-021-3002	AJ Fire Station	AJ	PCAQD	PM ₁₀ , PM _{2.5}	
04-021-3007	Pinal Air Park	PA	PCAQD	PM ₁₀	
04-021-3008	Stanfield	SF	PCAQD	PM ₁₀	
04-021-3009	Combs	CO	PCAQD	PM ₁₀	
04-021-3011	Pinal County Housing	PC	PCAQD	PM ₁₀	
04-021-3014	Eloy	EY	PCAQD	PM ₁₀	
04-021-3015	Hidden Valley	HV	PCAQD	PM ₁₀ , PM _{2.5}	
04-021-3016	Maricopa 1405	MA	PCAQD	PM ₁₀	
04-021-7001	Sacaton	SC	GRIC	PM ₁₀	
04-021-7004	Casa Blanca	CB	GRIC	PM ₁₀	

Figure 1. PM monitoring sites in Maricopa and Pinal counties. Acronyms for site names are listed in Table 1.



Compliance and Enforcement Summary

MCAQD is prepared to proactively respond to high wind events and protect human health and well-being. MCAQD's approach consists of two primary components: routine proactive inspections, as well as surveillance inspections, conducted both during and after significant events. MCAQD routinely inspects sites operating under dust control permits, and sites permitted to disturb more than ten acres are inspected more frequently. Nonmetallic mineral processing facilities, which are subject to Rule 316 (Nonmetallic Mineral Processing), are inspected five times every year. Maricopa County also responds to the majority of citizen complaints about air quality within 24 hours.

MCAQD monitors the ADEQ Dust Control Forecast to identify the potential for elevated PM₁₀ pollution levels due to high winds or stagnant conditions. When a High Pollution Advisory (HPA) is issued for Maricopa County, MCAQD conducts additional increased surveillance before, during, and after the forecast event(s). MCAQD also conducts event surveillance and post-event activities after an exceptional event that had not been forecast (i.e., those instances in which an HPA had not been issued).

Pre-event surveillance consists of surveying high-risk areas for any dust-generating activities, educating sources of the impending HPA event, and issuing violations for failure to comply with local, state, or federal regulations. During the event, MCAQD inspectors survey high-risk areas to confirm that control measures are in place, document any violations, and contact other regulatory agencies if necessary. Post-event activities include continued surveys of high-risk areas, re-inspecting sources within two business days of receiving a violation, and an internal MCAQD debriefing of event activities.

Currently, a total of 15 MCAQD air monitoring sites are equipped to allow the automatic reporting of monitored readings at 5-minute intervals. The real-time data reporting system includes a mechanism to alert MCAQD inspectors when PM₁₀ concentrations are elevated. The system allows MCAQD inspectors to review concentrations at the monitor and to consult the National Weather Service website to check for weather event activity. This capability allows the MCAQD responder to identify regional events and monitor specific issues. If necessary, the MCAQD responders can inform nearby stakeholders and local governments of the elevated PM₁₀ concentrations.

A summary of inspection and enforcement activity is provided for each atypical event day listed in this report. This summary will cover a period three days before and three days after the atypical event day. If any enforcement activity during this seven-day period occurred within a four-mile radius of the Higley or West Chandler monitoring sites, that will be noted. Complaint activity, inspections, and findings will also be listed for this seven-day period. Any complaints focused on an area within four miles of the Higley or West Chandler monitoring sites will be described in greater detail.

Higley Atypical Events

Table 2. Identification of the ten highest 24-hour average PM₁₀ concentrations at the Higley air monitoring site in 2020 and 2021.

Date	24-hour Average PM ₁₀ Concentration (µg/m ³)	Number of Sites in Maricopa and Pinal Counties Exceeding PM ₁₀ NAAQS	PM ₁₀ NAAQS Exceedances flagged as an Exceptional Event	Identified as an Atypical Event	Nearest Exceeding Site (from Higley)	Farthest Exceeding Site (from Higley)
10/12/2021	219.8	22	✓	✓	West Chandler (9.5 miles away)	Pinal Air Park (60 miles away)
03/03/2021	208.0	8	✓	✓	Casa Blanca (16 miles away)	Eloy (39.2 miles away)
10/11/2021	134.7	5	✓	✓	West Chandler (9.5 miles away)	Buckeye (52.3 miles away)
08/16/2020	131.5	11	✓	✓	West Chandler (9.5 miles away)	Eloy (39.2 miles away)
07/09/2021	131.2	5	✓	✓	West Chandler (9.5 miles away)	St. Johns (25.5 miles away)
04/21/2021	117.1	3	✓	✓	Pinal County Housing (30.1 miles away)	Eloy (39.2 miles away)
07/22/2021	108.5	0				
09/29/2020	107.6	0				
08/11/2020	107.3	1	✓		Stanfield (32.7 miles away)	Stanfield (32.7 miles away)
8/06/2021	94.0	0				

West Chandler Atypical Events

Table 3. Identification of the ten highest 24-hour average PM₁₀ concentrations at the West Chandler air monitoring site in 2020 and 2021.

Date	24-hour Average PM ₁₀ Concentration (µg/m ³)	Number of Sites in Maricopa and Pinal Counties Exceeding PM ₁₀ NAAQS	PM ₁₀ NAAQS Exceedances flagged as an Exceptional Event	Identified as an Atypical Event	Nearest Exceeding Site (from West Chandler)	Farthest Exceeding Site (from West Chandler)
08/16/2020	263.9	11	✓	✓	Casa Blanca (12.5 miles away)	Eloy (42 miles away)
10/12/2021	181.5	22	✓	✓	Mesa (7.8 miles away)	Pinal Air Park (64 miles away)
07/09/2021	166.4	5	✓	✓	Mesa (7.8 miles away)	St. Johns (16 miles away)
10/11/2021	160.9	5	✓	✓	Casa Blanca (12.5 miles away)	Buckeye (43 miles away)
03/03/2021	154.3	8	✓	✓	Casa Blanca (12.5 miles away)	Eloy (42 miles away)
07/22/2021	122.5	0				
09/29/2020	89.9	0				
07/13/2021	89.6	0				
08/11/2020	80.8	1	✓		Stanfield (29 miles away)	Stanfield (29 miles away)
11/19/2021	76.8	0				

Atypical Event: August 16, 2020

A high-wind event from monsoon storm activity occurred on this date and caused widespread blowing dust throughout the region. Eleven monitoring sites, in both Maricopa and Pinal counties, exceeded the 24-hour PM₁₀ NAAQS on this date.

ADEQ Pollution Forecast

Note that ADEQ forecasts are not done on the weekends, so an archived forecast for Sunday, August 16, 2020, is not available. The following selected portion of the forecast was made on [Friday, August 14, 2020](#), and includes anticipated conditions for the weekend.

“Ozone levels continue to stay in the upper Moderate AQI range and we don't expect a lot of change. We forecast slight improvement over the coming days with better mid-level winds, but nothing significant. PM₁₀ may end up being the more interesting story this weekend. The ridge over the region is forecast to push north, which is looking a little more monsoon-like. Right now it looks like there is a chance of thunderstorm outflows to affect the Phoenix area Sunday evening. As a result, we are forecasting blowing dust to move through the area causing elevated PM₁₀ concentrations for a few hours Sunday evening. The rest of the forecast period isn't expected to have any major dust issues, just the more typical upper Good/lower Moderate AQI range. PM_{2.5} is forecast to remain in the Good AQI range through the forecast period.”

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [2:30 p.m. MST Sunday August 16, 2020](#).

Synopsis:

“Strong high pressure will remain situated across the southwestern U.S. through at least the middle of the week keeping hot conditions in place. High temperatures across the lower deserts will approach or exceed 115 degrees through at least the middle of the week. Isolated thunderstorms and areas of blowing dust will be possible this afternoon and evening across south-central Arizona. A slightly more favorable monsoon pattern develops as the week progresses. “

Selected portions of the discussion:

“One of the days that does show more promise for significant storms/dust storms into the central deserts will be today. Most of the CAMS as well as HREF guidance depict a rather organized line of convection to move across eastern Arizona and into the central deserts late this afternoon through the evening.

Gusty outflow wind from these storms will likely move into portion of the low desert and the Phoenix area this evening stirring up patchy dense blowing dust.”

Environmental Conditions at Air Monitoring Sites

Table 4. PM₁₀ and wind data for air monitoring sites in Maricopa and Pinal counties on August 16, 2020.

Site	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	120	7.p2	3:00 p.m.	24.1	6:00 p.m.
Mesa	129	10.2	6:00 p.m.	25.7	12:00 a.m.
North Phoenix	116	5.9	10:00 p.m.	25.5	6:00 p.m.
Glendale	76	9.1	6:00 p.m.	30.2	6:00 p.m.
Central Phoenix	214 [#]	8.0	2:00 p.m.	21.6	3:00 p.m.
South Scottsdale	192 [#]	10.4	12:00 a.m.	27.1	6:00 p.m.
South Phoenix	98	6.6	3:00 p.m.	18.7	3:00 p.m.
West Chandler	263 [#]	13.6	6:00 p.m.	31.6	6:00 p.m.
Tempe	134	7.2	12:00 a.m.	20.4	6:00 p.m.
Higley	131	12.9	6:00 p.m.	31.1	5:00 p.m.
West 43 rd Avenue	199 [#]	8.7	3:00 p.m.	23.0	6:00 p.m.
Dysart	136	14.1	6:00 p.m.	48.8	6:00 p.m.
Buckeye	127	10.7	12:00 a.m.	31.3	6:00 p.m.
Zuni Hills	111	14.6	6:00 p.m.	44.9	5:00 p.m.
St Johns	195 [#]	*	*	*	*
Senior Center	168 [#]	*	*	*	*
Lehi	186 [#]	*	*	*	*

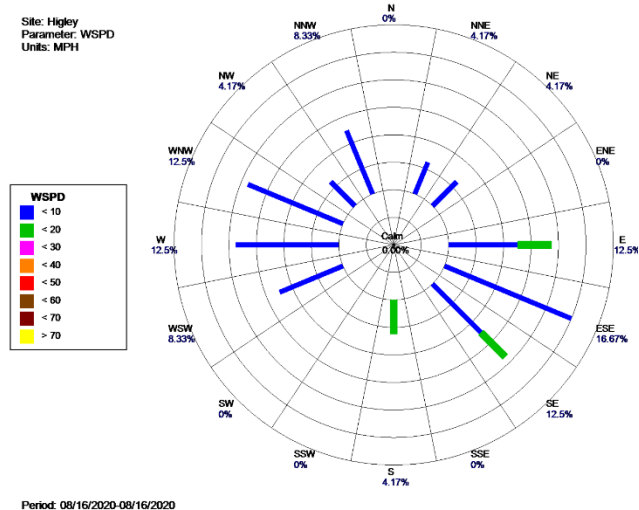
Site	24-hour average PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
High School	191 [#]	*	*	*	*
Durango Complex	141	8.9	3:00 p.m.	20.9	2:00 p.m.
JLG Supersite	139	5.1	6:00 p.m.	*	
Casa Grande Downtown	118	*	*	*	*
AJ Fire Station	33	19.6	5:00 p.m.	24.5	5:00 p.m.
Pinal Air Park	58	*	*	*	*
Stanfield	75	17.0	6:00 p.m.	31.9	6:00 p.m.
Combs	90	*	*	*	*
Pinal County Housing	50	27.4	5:00 p.m.	56.8	5:00 p.m.
Eloy	1228 [#]	*	*	*	*
Hidden Valley	97	20.1	6:00 p.m.	45.5	5:00 p.m.
Maricopa 1405	57	*	*	*	*
Sacaton	200 [#]	*	*	*	*
Casa Blanca	221 [#]	*	*	*	*

*Not available

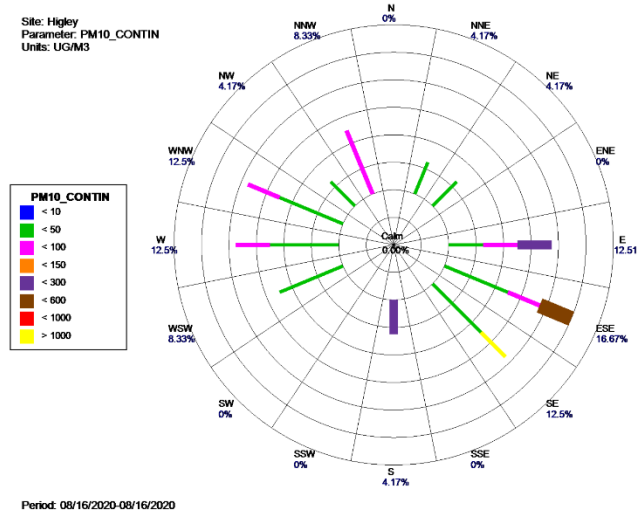
[#]Exceedance of the 24-hour PM₁₀ NAAQS

Pollution and Wind Roses for Higley and West Chandler Sites on August 16, 2020

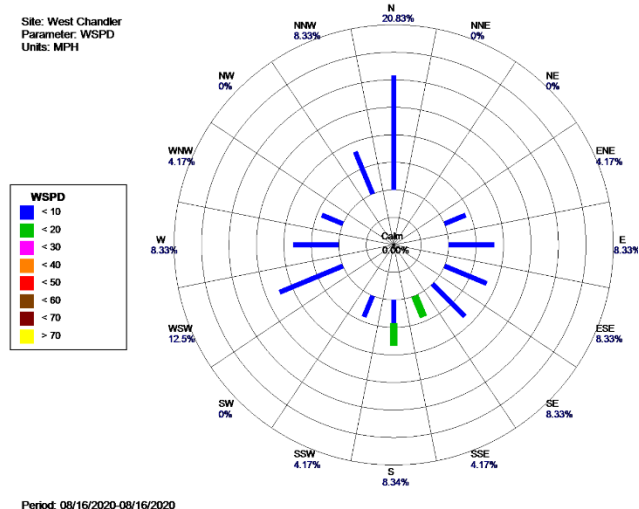
Higley Wind Rose



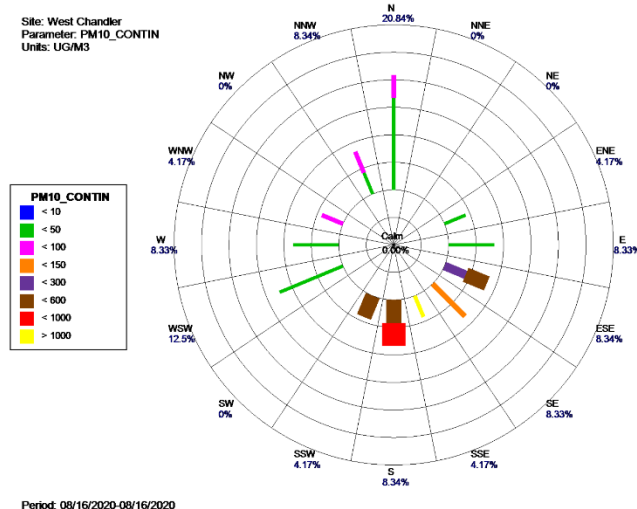
Higley PM₁₀ Rose



West Chandler Wind Rose

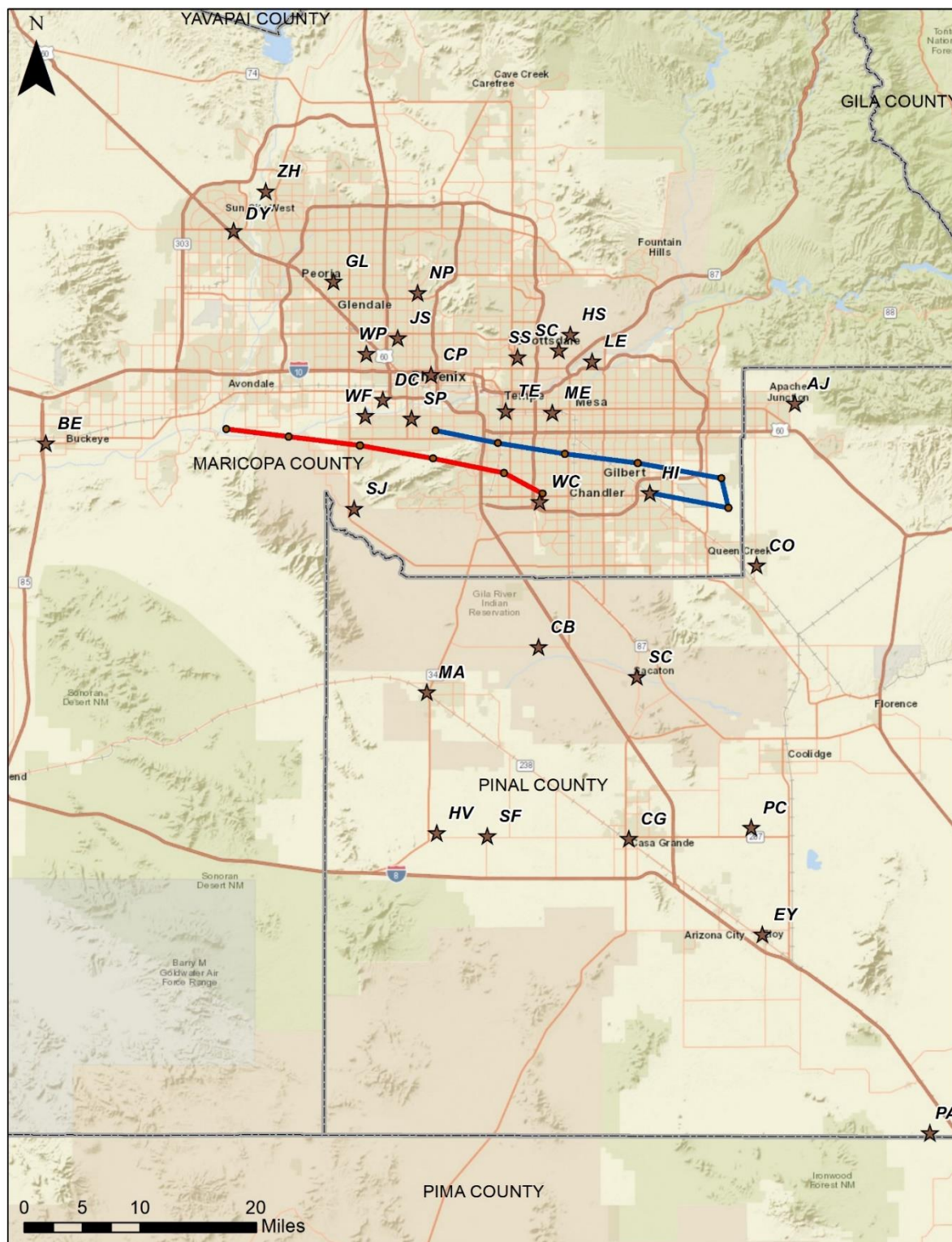


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 2. HYSPLIT 6-hour back-trajectory ending at 6:00 p.m. on August 16, 2020, at both the Higley and West Chandler sites. Elevation at end time is 100 meters above ground level (m AGL).



Proximity of Other Exceeding Sites to West Chandler and Higley

Note that the Higley monitor did not exceed the 24-hour PM₁₀ NAAQS on this date.

- Higley
 - Closest exceeding site: West Chandler (9.5 miles away)
 - Farthest exceeding site: Eloy (39.2 miles away)
- West Chandler
 - Closest exceeding site: Casa Blanca (12.5 miles away)
 - Farthest exceeding site: Eloy (42 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

Table 5. Hourly-averaged PM₁₀, PM_{2.5}, and PM_C for sites in Maricopa and Pinal counties having a continuous PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on August 16, 2020.

Site	Time	PM ₁₀	PM _{2.5}	PM _C	Ratio PM _{2.5} /PM ₁₀
West Phoenix	8:00 p.m.	694.0	82.4	611.4	0.12
Mesa	7:00 p.m.	896.3	90.8	805.2	0.10
North Phoenix	8:00 p.m.	624.8	71.2	555.3	0.11
Glendale	11:00 p.m.	233.5	24.3	208.9	0.10
South Phoenix	9:00 p.m.	349.1	33.8	315.2	0.10
Tempe	7:00 p.m.	1332.4	117.9	1215.6	0.09
Durango Complex	7:00 p.m.	1079.8	93.9	985.1	0.09
JLG Supersite	7:00 p.m.	694	80	614	0.12
Casa Grande Downtown	6:00 p.m.	1625	53	1572	0.03
Hidden Valley	8:00 p.m.	564	78	486	0.14

ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive for August 16, 2020. The image on the left reflects a time before the dust storm occurred and on the right during or after the storm's passage. The storm hit the Phoenix area at approximately 6:00-7:00 p.m.

South Mountain Camera, 6:00 p.m.



South Mountain Camera, 6:15 p.m.



Camelback Mountain Camera, 6:15 p.m.



Camelback Mountain Camera, 6:30 p.m.



Superstition Mountains Camera, 6:30 p.m.



Superstition Mountains Camera, 6:45 p.m.



Compliance and Enforcement Activities

An evaluation of all inspections and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of August 13 through 19, 2020.

During this seven-day period the following activity took place:

- Number of inspections of permitted facilities: 112
 - Number of those facilities that were fugitive dust sources: 88
- Number of inspections that resulted in an enforcement action for PM₁₀ and non-PM₁₀-related violations: 20
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 0
- Number of complaints received: 40
 - Number of those complaints that were windblown dust or PM₁₀ related: 28
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 2
 - Details on complaints within four-mile radius: One complaint was regarding leaf-blowing activity and the other was regarding dirt roads. No violations were noted during complaint responses.

Atypical Event: March 3, 2021

A high-wind event due to a low-pressure system moving through the state occurred on this date. This caused widespread blowing dust throughout the region. Nine monitoring sites, in both Maricopa and Pinal counties, exceeded the 24-hour PM₁₀ NAAQS due to this storm.

ADEQ Pollution Forecast

The following selected portion of the ADEQ forecast was made for [Wednesday March 3, 2021](#).

“The low-pressure system we've been discussing all week will be arriving in our region this afternoon. Winds between 20 and 30 mph are in the forecast, with even higher gusts possible. The possible chance of precipitation associated with this system will take place in the overnight hours into tomorrow morning. Parts of the valley could see a few sprinkles but nothing very exciting. With the warm temperatures, recent dry conditions, and high winds, the National Weather Service has issued a Red Flag Warning in effect from 11 am today to 6 pm tonight.”

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [1:10 p.m. MST Wednesday March 3, 2021](#).

“Meanwhile, further east, the tightening pressure gradient due to the approaching low is increasing the southerly wind flow across the forecast area. The short-term forecast concerns related to this system are for wind and blowing dust potential, fire weather, and a chance of showers or an isolated thunderstorm this evening.

Considering the wind, wind speeds are rapidly increasing as the low-level stable layer has eroded and high winds from aloft are now mixing throughout the depth of the boundary layer. Wind gusts are exceeding 30 mph near Yuma, with 20-30 mph over much of the rest of the forecast area. Wind speeds at 850 hPa are expected to increase to 40-50 kts across the area this afternoon as the cold front approaches. Because this will coincide with peak heating, very efficient mixing will allow for wind gusts to continue to increase the next few hours, which is consistent with the forecast message over the last few days. Accordingly, the wind advisory will remain in effect with widespread wind gusts of 35-40 mph, with a few locations reaching up to 50 mph west of the Phoenix area. Blowing dust is not typically a huge concern this time of year, but with such strong wind speeds isolated corridors of blowing dust will be possible, which may locally lower visibilities wherever it occurs. Some visibility reduction near Yuma has already been noted, with a few observations showing 4-7mi visibilities. Wind speeds are also increasing in southwest Imperial County, where westerly wind gusts will increase to 50-55mph behind the cold front this afternoon.”

Environmental Conditions at Air Monitoring Sites

Table 6. PM₁₀ and wind data for PM air monitoring sites in Maricopa and Pinal counties on March 3, 2021.

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	ND	18.2	5:00 p.m.	42.1	4:00 p.m.
Mesa	62	19.0	4:00 p.m.	42.5	5:00 p.m.
North Phoenix	43	15.6	3:00 p.m.	41.2	3:00 p.m.
Glendale	ND	25.1	5:00 p.m.	45.6	5:00 p.m.
Central Phoenix	97	19.4	3:00 p.m.	44.3	3:00 p.m.
South Scottsdale	71	19.9	4:00 p.m.	44.8	4:00 p.m.
South Phoenix	58	13.2	4:00 p.m.	35.9	3:00 p.m.
West Chandler	153	20.8	4:00 p.m.	42.9	4:00 p.m.
Tempe	58	16.1	4:00 p.m.	37.6	4:00 p.m.
Higley	207 [#]	22.3	4:00 p.m.	45.3	5:00 p.m.
West 43rd Avenue	177 [#]	18.7	3:00 p.m.	39.0	5:00 p.m.
Dysart	68	20.5	4:00 p.m.	45.8	4:00 p.m.
Buckeye	81	19.1	4:00 p.m.	44.0	4:00 p.m.
Zuni Hills	61	26.0	4:00 p.m.	44.7	4:00 p.m.
St Johns	61	*	*	*	*
Senior Center	133	*	*	*	*
Lehi	84	*	*	*	*
High School	103	*	*	*	*

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
Durango Complex	90	15.9	3:00 p.m.	38.8	3:00 p.m.
JLG Supersite	75	18.0	3:00 p.m.	*	*
Casa Grande Downtown	171 [#]	*	*	*	*
AJ Fire Station	89	*	*	*	*
Pinal Air Park	113	*	*	*	*
Stanfield	225 [#]	22.1	4:00 p.m.	42.9	5:00 p.m.
Combs	131	*	*	*	*
Pinal County Housing	169 [#]	26.2	2:00 p.m.	42.7	5:00 p.m.
Eloy	170	*	*	*	*
Hidden Valley	134	*	*	*	*
Maricopa 1405	184 [#]	*	*	*	*
Sacaton	96	*	*	*	*
Casa Blanca	165 [#]	*	*	*	*

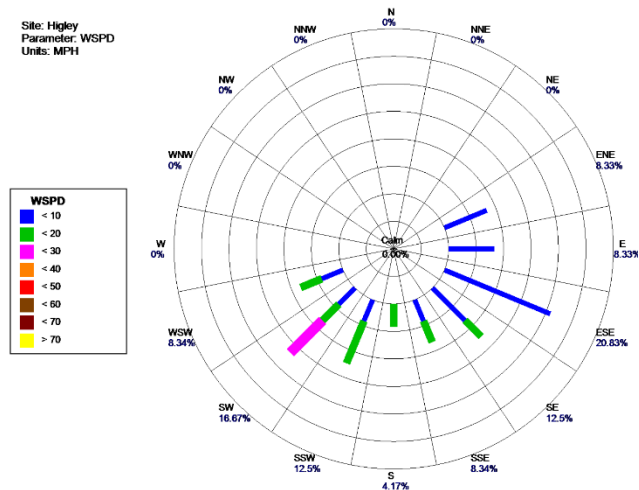
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[#]Exceedance of the 24-hour PM₁₀ NAAQS

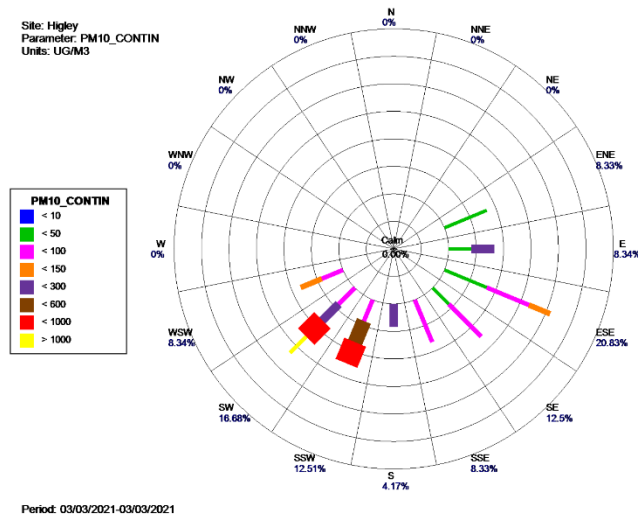
ND: No data available in AQS for this day

Pollution and Wind Roses for Higley and West Chandler Sites on March 3, 2021

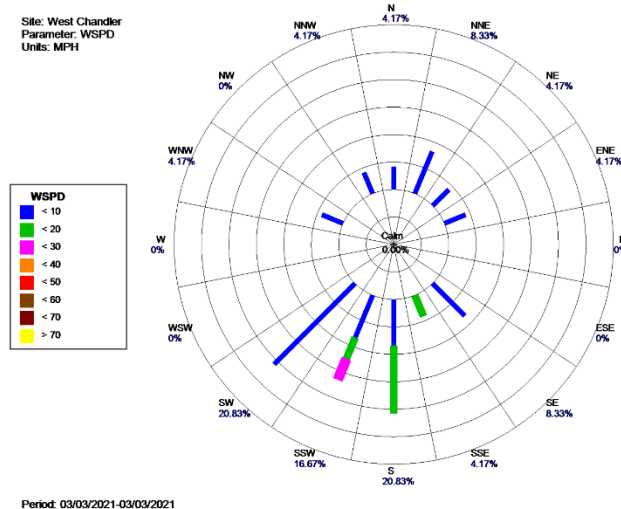
Higley Wind Rose



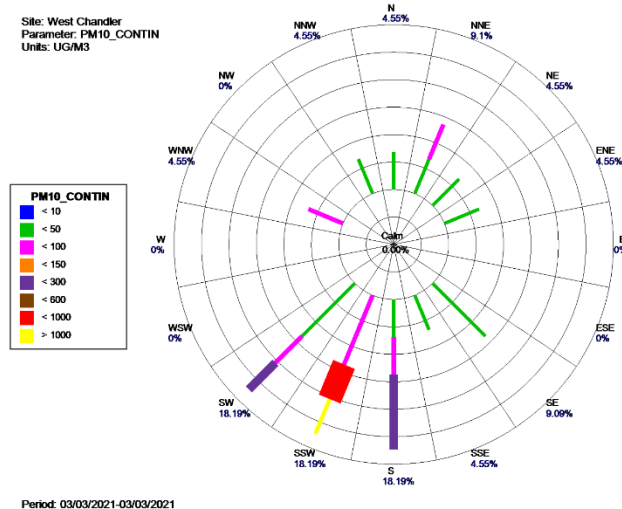
Higley PM₁₀ Rose



West Chandler Wind Rose

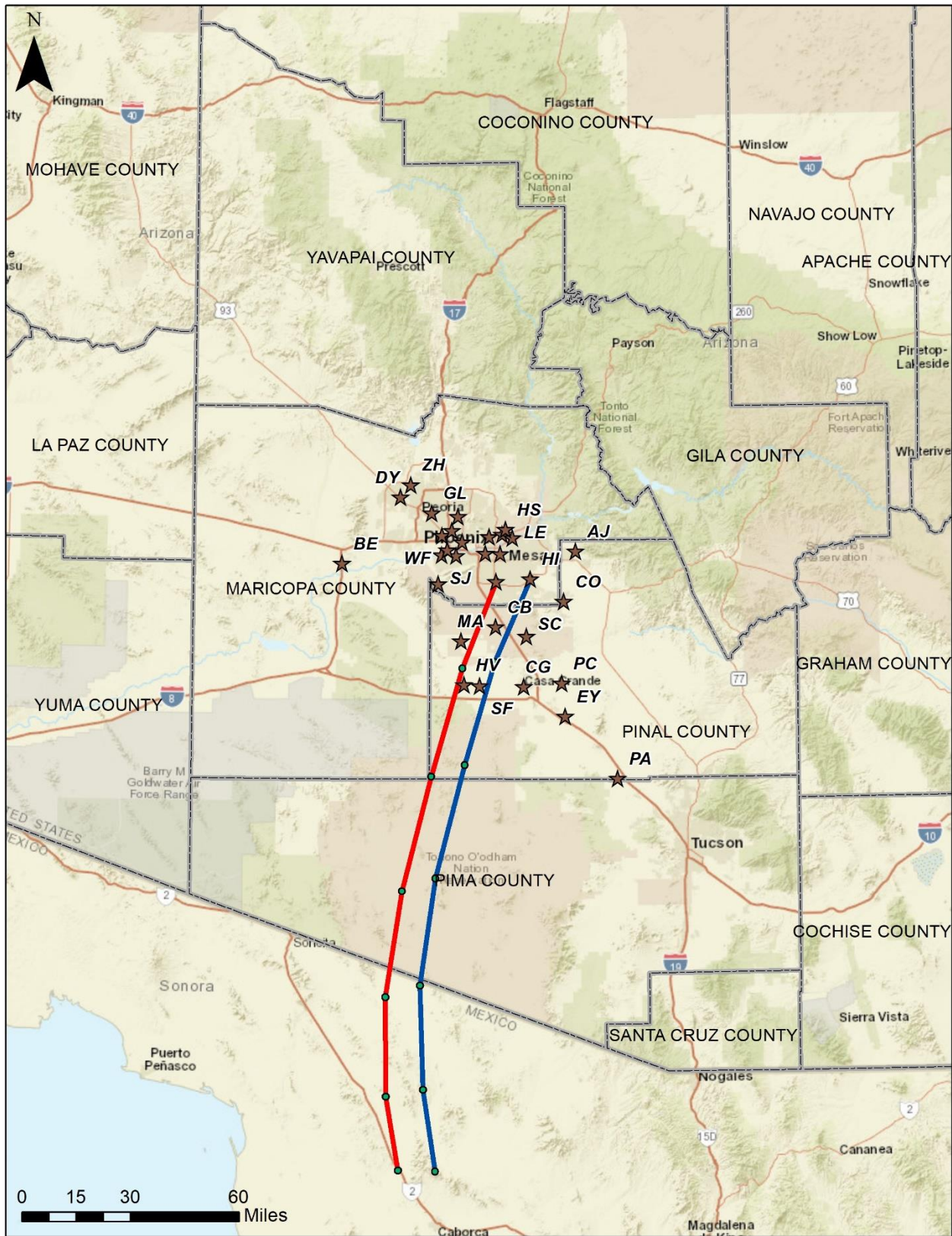


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 3. HYSPLIT 6-hour back-trajectory ending at 4:00 p.m. on March 3, 2021, at both the Higley and West Chandler sites. Elevation at end time is 100 m AGL.



Proximity of Other Exceeding Sites to West Chandler and Higley

Note that Higley exceeded the 24-hour PM₁₀ NAAQS on this date.

- Higley
 - Closest exceeding site: Casa Blanca (16 miles away)
 - Farthest exceeding site: Eloy (39.2 miles away)
- West Chandler
 - Closest exceeding site: Casa Blanca (12.5 miles away)
 - Farthest exceeding site: Eloy (42 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

Table 7. Hourly-averaged PM₁₀, PM_{2.5}, and PM_c for sites in Maricopa and Pinal counties having a continuous PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on March 3, 2021.

Site	Time	PM ₁₀	PM _{2.5}	PM _c	Ratio PM _{2.5} /PM ₁₀
West Phoenix	ND	ND	ND	ND	ND
Mesa	5:00 p.m.	358.0	28.7	329.2	0.08
North Phoenix	5:00 p.m.	167.8	14.6	153.1	0.09
Glendale	ND	ND	ND	ND	ND
South Phoenix	4:00 p.m.	318.3	16.9	301.1	0.05
Tempe	5:00 p.m.	257.3	15.1	252.5	0.06
Durango Complex	3:00 p.m.	339.1	12.2	326.4	0.04
JLG Supersite	3:00 p.m.	543	27	516	0.05
Casa Grande Downtown	4:00 p.m.	889	45	844	0.05
Hidden Valley	4:00 p.m.	469	ND	ND	ND

ND: No data available in AQS for this day

ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive for March 3, 2021. The image on the left reflects a time before the dust storm occurred and on the right during or after the storm's passage. The storm hit the Phoenix area at approximately 3:00-5:00 p.m.

South Mountain Camera, 12:00 p.m.



South Mountain Camera, 4:45 p.m.



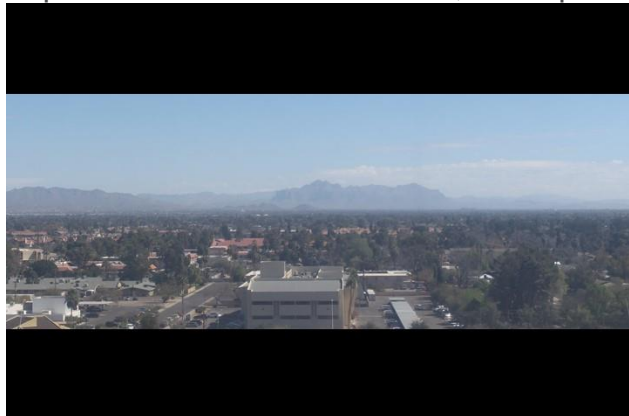
Camelback Mountain Camera, 1:00 p.m.



Camelback Mountain Camera, 3:45 p.m.



Superstition Mountains Camera, 12:00 p.m.



Superstition Mountains Camera, 5:00 p.m.



Compliance and Enforcement Activities

An evaluation of all inspections and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of February 28 through March 6, 2021.

During this seven-day period the following activity took place:

- Number of inspections of permitted facilities: 289
 - Number of those facilities that were fugitive dust sources: 232
- Number of inspections that resulted in an enforcement action for PM₁₀ and non-PM₁₀-related violations: 43
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 5
 - Details on enforcement actions: Four of the five violations that were noted during these inspections were for recordkeeping errors. The fifth violation was for excessive trackout at a construction site, which was required to be cleaned up immediately. Visible emissions of dust were not noted during any of these inspections.
- Number of complaints received: 58
 - Number of those complaints that were windblown dust or PM₁₀ related: 50
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 1
 - Details on complaints within four-mile radius: Complaint was regarding earthmoving at a facility. No violations were noted during complaint inspections.

Atypical Event: April 21, 2021

A high-wind event due to a low-pressure system moving through the state occurred on this date. Three monitoring sites in Pinal County exceeded the 24-hour PM₁₀ NAAQS due to this storm.

ADEQ Pollution Forecast

The following selected portion of the forecast was made on [Wednesday, April 21, 2021](#).

"A low pressure wave positioned over the California/Nevada area this morning will gradually advance eastward into Arizona today. This wave will result in windy conditions across Arizona, including Maricopa and Pinal Counties. Winds are expected to be relatively strong this afternoon, around 20-30 mph at least, with higher gusts too. Therefore, the main concern for Phoenix's air quality today will be blowing dust.

Blowing dust in the Valley could include both dust from local desert areas as well as dust brought in from the south/south-southwest. Already this morning, local dust-prone areas have seen elevated PM₁₀ (dust) levels. PM₁₀ could end up in the Moderate Air Quality Index (AQI) category at multiple monitors in the Valley today."

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [2:27 p.m. MST Wednesday April 21, 2021](#).

"Objective analysis shows a shortwave centered over southern Nevada with a moderate pressure gradient stepping over into Arizona. Analysis also shows a strong southerly 30-45 kt 850 mb jet that stretches from northern Sonora northward into south-central AZ. There have already been several wind gusts the 30-40 mph range and localized areas of blowing dust south and southwest of the Valley. Meanwhile, temperatures have already warmed up to mid to upper 80s under mostly sunny skies which will mix down those aforementioned stronger 850 mb winds to the surface this afternoon and evening.

Wind gusts of 25 to 35 mph are anticipated to become more common this afternoon and evening across south-central AZ. The threat for new areas of blowing dust could grow this afternoon as long as the wind speeds remain this strong. A broad brush Blowing Dust Advisory has been issued for the areas south of the Phoenix metro where proximity to open desert and/or fallow fields is most prone to blowing dust. Farther west, stronger winds of 40 to 50 mph will continue in the Mountain Springs area but there is about a 50% chance for sundowner wind gusts of 30 to 40 mph to reach the Imperial Valley between 6 pm and 10 pm this evening. With conditions generally dry and the fire danger high, these winds

will exacerbate fire weather concerns with conditions reaching critical thresholds for numerous areas. Fortunately, these strong winds are expected to subside a few hours after sunset.”

Environmental Conditions at Air Monitoring Sites

Table 8. PM₁₀ and wind data for PM air monitoring sites in Maricopa and Pinal counties on April 21, 2021.

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	43	15.8	5:00 p.m.	32.1	5:00 p.m.
Mesa	33	13.6	10:00 a.m.	32.6	3:00 p.m.
North Phoenix	42	13.2	4:00 p.m.	38.7	5:00 p.m.
Glendale	44	20.6	4:00 p.m.	37.7	4:00 p.m.
Central Phoenix	67	17.2	5:00 p.m.	35.2	5:00 p.m.
South Scottsdale	47	15.4	5:00 p.m.	31.4	12:00 p.m.
South Phoenix	50	11.5	4:00 p.m.	26.3	5:00 p.m.
West Chandler	65	16.8	10:00 a.m.	35.8	2:00 p.m.
Tempe	39	9.1	5:00 p.m.	25.7	10:00 a.m.
Higley	116	17.1	4:00 p.m.	35.7	4:00 p.m.
West 43rd Avenue	118	16.7	5:00 p.m.	33.2	4:00 p.m.
Dysart	55	14.5	5:00 p.m.	33.0	4:00 p.m.
Buckeye	85	16.8	5:00 p.m.	38.0	3:00 p.m.
Zuni Hills	48	22.2	4:00 p.m.	37.3	4:00 p.m.
St Johns	39	*	*	*	*
Senior Center	58	*	*	*	*

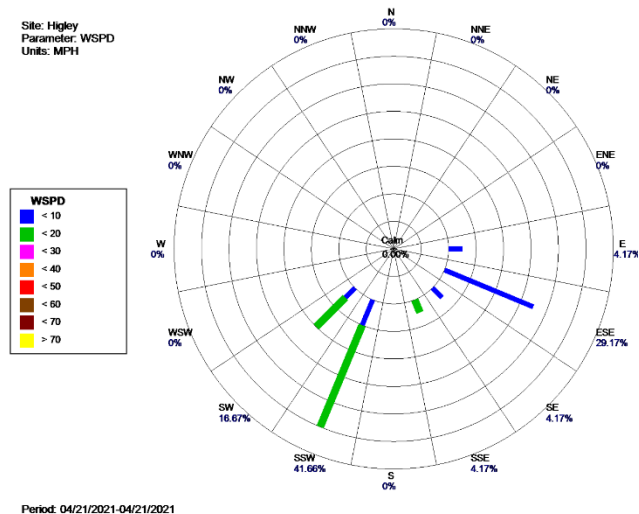
Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
Lehi	58	*	*	*	*
High School	81	*	*	*	*
Durango Complex	48	13.4	5:00 p.m.	28.5	5:00 p.m.
JLG Supersite	43	9.3	4:00 p.m.	*	*
Casa Grande Downtown	106	*	*	*	*
AJ Fire Station	49	21.3	10:00 a.m.	23.7	10:00 a.m.
Pinal Air Park	97	*	*	*	*
Stanfield	202	19.9	1:00 p.m.	32.9	1:00 p.m.
Combs	93	*	*	*	*
Pinal County Housing	206 [#]	*	*	*	*
Eloy	233 [#]	*	*	*	*
Hidden Valley	108	22.8	12:00 p.m. & 3:00 p.m.	42.3	11:00 a.m.
Maricopa 1405	129	*	*	*	*
Sacaton	65	*	*	*	*
Casa Blanca	90	*	*	*	*

*Not available

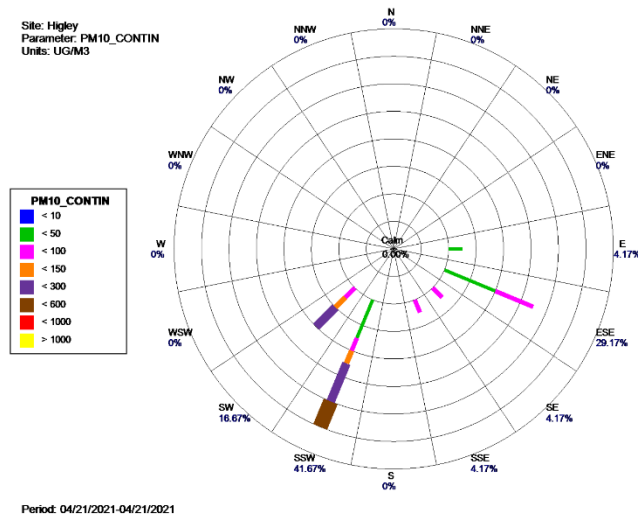
[#]Exceedance of the 24-hour PM₁₀ NAAQS

Pollution and Wind Roses for Higley and West Chandler Sites on April 21, 2021

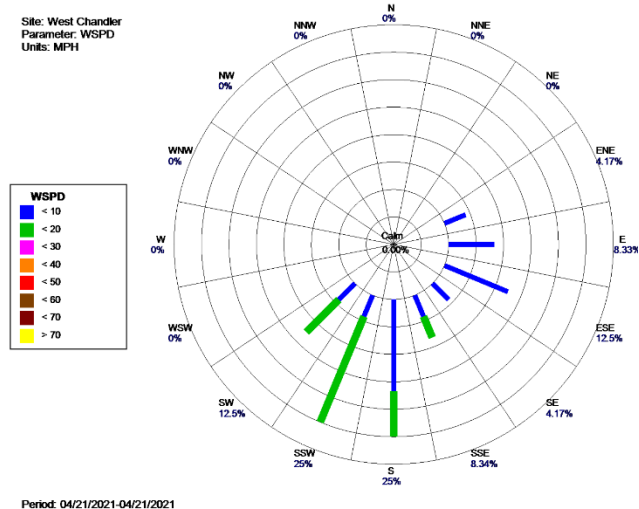
Higley Wind Rose



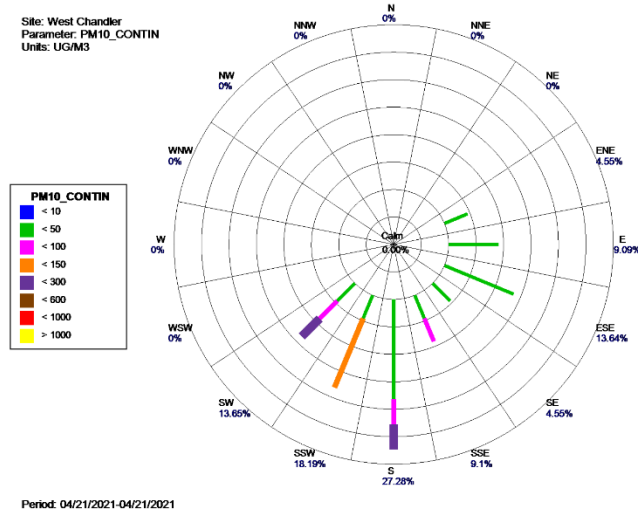
Higley PM₁₀ Rose



West Chandler Wind Rose

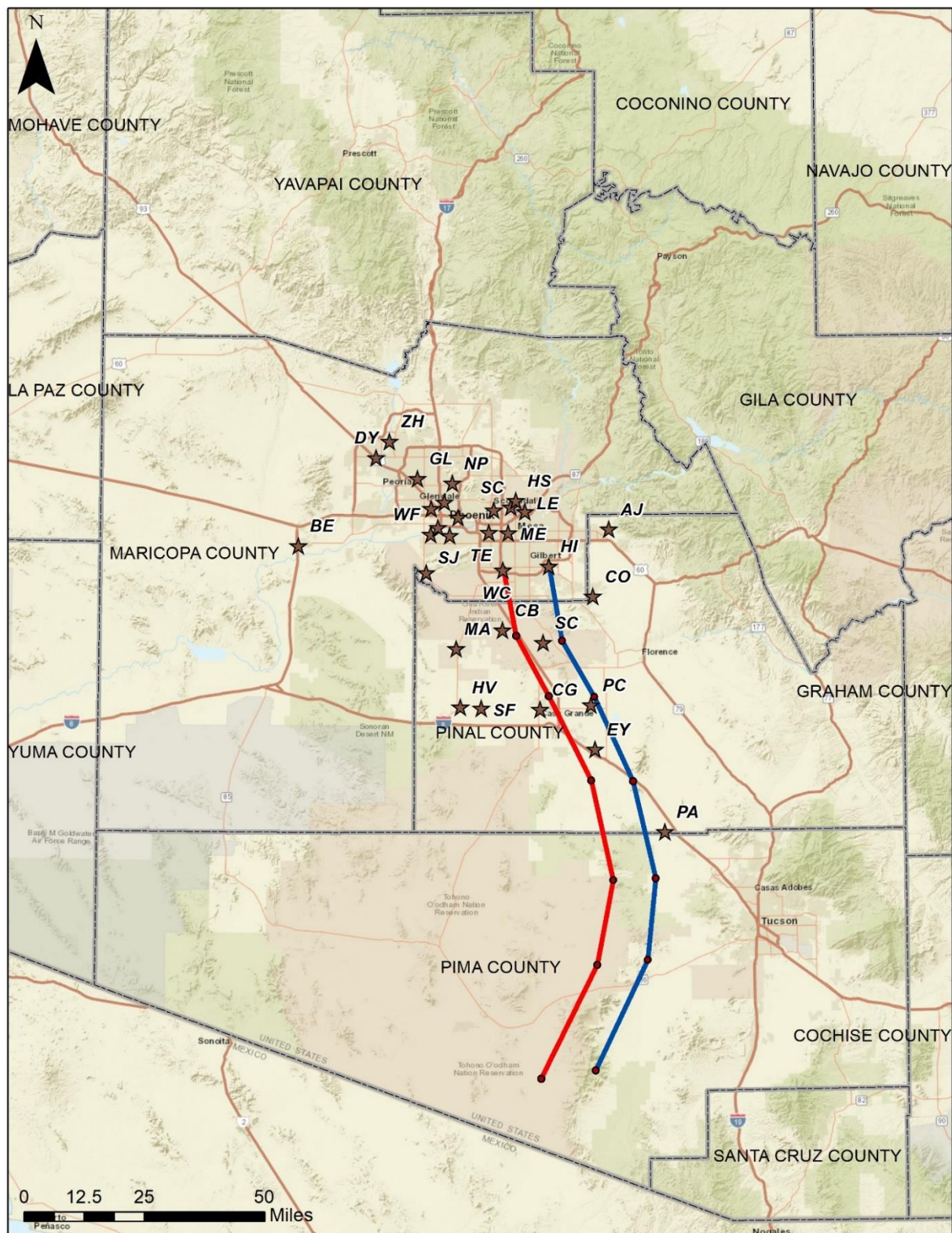


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 4. HYSPLIT 6-hour back-trajectory ending at 10:00 a.m. on April 21, 2021, at both the Higley and West Chandler sites. Elevation at end time is 100 m AGL.



Proximity of Other Exceeding Sites to West Chandler and Higley

- Higley
 - Closest exceeding site: Pinal County Housing (30.1 miles away)
 - Farthest exceeding site: Eloy (39.2 miles away)
- West Chandler
 - Closest exceeding site: Stanfield (29.1 miles away)
 - Farthest exceeding site: Eloy (42 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

Table 9. Hourly-averaged PM₁₀, PM_{2.5}, and PM_C for sites in Maricopa and Pinal counties having a continuous PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on April 21, 2021.

Site	Time	PM ₁₀	PM _{2.5}	PM _C	Ratio PM _{2.5} /PM ₁₀
West Phoenix	5:00 p.m.	211.6	22.9	188.6	0.11
Mesa	11:00 a.m.	85.9	7.7	78.1	0.09
North Phoenix	5:00 p.m.	204.2	21.3	182.8	0.10
Glendale	4:00 p.m.	216.2	19.2	196.9	0.09
South Phoenix	3:00 p.m.	137.4	13.7	123.4	0.10
Tempe	11:00 a.m.	114.6	9.3	105.2	0.08
Durango Complex	5:00 p.m.	138.1	13.0	124.9	0.09
JLG Supersite	5:00 p.m.	186	17	169	0.09
Casa Grande Downtown	11:00 a.m.	346	26	320	0.08
Hidden Valley	8:00 a.m.	428	27	401	0.06

ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive for April 21, 2021. The image on the left reflects a time before the dust storm occurred and on the right during or after the storm's passage. The main storm hit the Phoenix area at approximately 4:00-5:00 p.m.

South Mountain Camera, 1:00 p.m.



South Mountain Camera, 4:30 p.m.



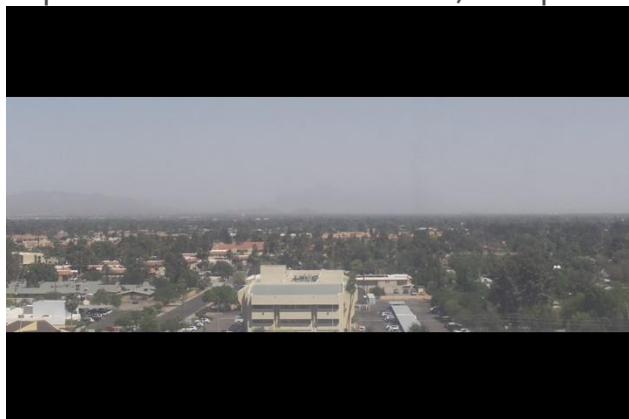
Camelback Mountain Camera, 12:00 p.m.



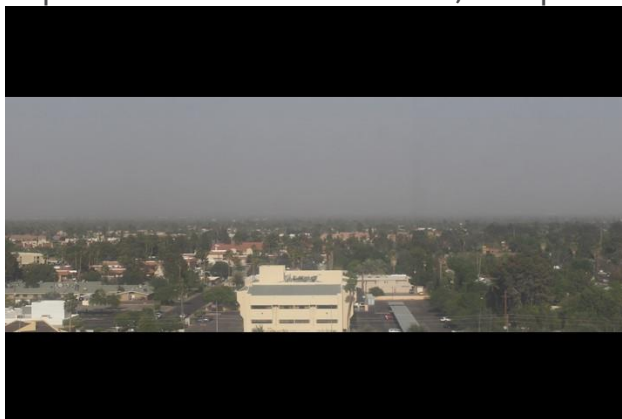
Camelback Mountain Camera, 4:45 p.m.



Superstition Mountains Camera, 2:00 p.m.



Superstition Mountains Camera, 5:15 p.m.



Compliance and Enforcement Activities

An evaluation of all inspections and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of April 18 through April 24, 2021.

During this seven-day period the following activity took place:

- Number of inspections of permitted facilities: 239
 - Number of those facilities that were fugitive dust sources: 179
- Number of inspections that resulted in an enforcement action for PM₁₀ and non-PM₁₀-related violations: 47
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 3
 - Details on enforcement actions: The three violations that were noted during inspections were for recordkeeping errors. Visible emissions of dust were not noted during any of these inspections.
- Number of complaints received: 58
 - Number of those complaints that were windblown dust or PM₁₀ related: 47
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 3
 - Details on complaints within four-mile radius: One complaint was regarding residential construction activity and the other two were regarding construction activity at the same existing facility. No violations were noted during the complaint inspections.

Atypical Event: July 9, 2021

This high-wind event was due to summer monsoon storm activity which caused widespread blowing dust throughout the region. Five monitoring sites in Maricopa County exceeded the 24-hour PM₁₀ NAAQS on this date.

ADEQ Pollution Forecast

The following selected portion of the forecast was made on [Friday, July 9, 2021](#).

“Strong to severe thunderstorms formed in the higher terrain northeast/east of Phoenix yesterday afternoon, but they quickly fell apart as they moved west/southwest off the higher terrain. So what will happen today?

Latest water vapor satellite shows high pressure is now elongated along the Arizona/Utah border, which is providing an east/northeast flow over eastern and central Arizona. This is a good pattern to bring storms that develop along the rim down into the Valley if storms can survive off the higher terrain. For the most part, today looks like it will be very similar to the storm activity we saw yesterday. The best chance of storms this afternoon will be across the northern and eastern portion of the Valley, with a better chance of gusty outflows winds across the entire Valley. As was the case yesterday, with outflows winds coming from the east/northeast, not expecting widespread dust, but there could certainly be isolated pockets of dust, so use caution traveling.”

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [2:32 p.m. MST Friday, July 9, 2021](#).

“Yesterday's forecast went as expected through the early evening with fairly strong storms propagating off the Rim and White Mountains into southern Gila and eastern Maricopa Counties. However, upper level support and outflow boundary interactions needed for lower desert storms did not pan out. Favorable parameters for convection, as discussed yesterday, are generally still in play for today. Storm chances and/or impacts more likely over the higher terrain compared to the lower desert. Warming temperatures will again mix through a deep boundary layer, eradicating a low level inversion, and further eating into the stronger midlevel inversion. The latest HREF indicates better potential for storms pushing through southern Yavapai County that could send strong outflows into northwestern Maricopa County. This activity is better situated to impact the Wickenburg area but could stretch as far east as the northwest Valley. Overall, storm chances in the Valley (or anywhere in the lower desert) are still low, around 10-20%. Any storms that do develop, whether in Gila County or elsewhere, will be capable of producing strong localized wind gusts of 40-60 mph, outflow winds, and locally heavy rain.”

Environmental Conditions at Air Monitoring Sites

Table 10. PM₁₀ and wind data for PM air monitoring sites in Maricopa and Pinal counties on July 9, 2021.

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	126	9.8	11:00 p.m.	32.6	10:00 p.m.
Mesa	199 [#]	10.3	10:00 p.m.	41.9	10:00 p.m.
North Phoenix	98	9.3	11:00 p.m.	36.9	10:00 p.m.
Glendale	107	15.2	11:00 p.m.	32.5	11:00 p.m.
Central Phoenix	122	11.3	1:00 a.m.	33.6	10:00 p.m.
South Scottsdale	188 [#]	9.5	12:00 a.m.	36.1	10:00 p.m.
South Phoenix	90	9.1	11:00 p.m.	34.9	10:00 p.m.
West Chandler	165 [#]	13.0	10:00 p.m.	47.5	10:00 p.m.
Tempe	208 [#]	7.8	11:00 p.m.	34.5	10:00 p.m.
Higley	130	21.1	10:00 p.m.	63.8	10:00 p.m.
West 43rd Avenue	143	11.0	11:00 p.m.	39.6	10:00 p.m.
Dysart	111	12.2	11:00 p.m.	29.4	11:00 p.m.
Buckeye	35	11.5	9:00 p.m.	28.3	11:00 p.m.
Zuni Hills	84	13.8	6:00 p.m.	31.8	11:00 p.m.
St Johns	182 [#]	*	*	*	*
Senior Center	51	*	*	*	*
Lehi	39	*	*	*	*
High School	51	*	*	*	*

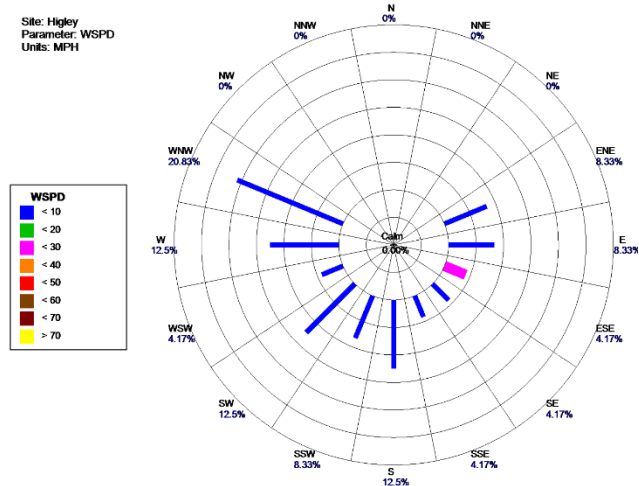
Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly- Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
Durango Complex	131	10.5	11:00 p.m.	29.4	10:00 p.m.
JLG Supersite	116	8.4	11:00 p.m.	*	*
Casa Grande Downtown	76	*	*	*	*
AJ Fire Station	33	*	*	*	*
Pinal Air Park	46	*	*	*	*
Stanfield	60	*	*	*	*
Combs	32	*	*	*	*
Pinal County Housing	53	*	*	*	*
Eloy	93	*	*	*	*
Hidden Valley	107	*	*	*	*
Maricopa 1405	37	*	*	*	*
Sacaton	30	*	*	*	*
Casa Blanca	49	*	*	*	*

*Not available

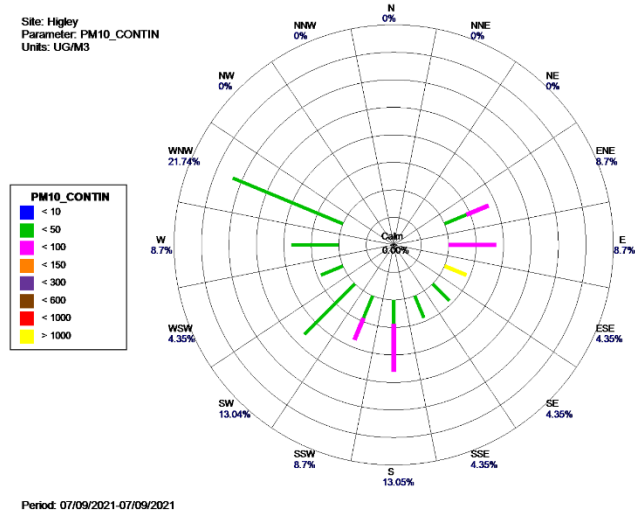
#Exceedance of the 24-hour PM₁₀ NAAQS

Pollution and Wind Roses for Higley and West Chandler Sites on July 9, 2021

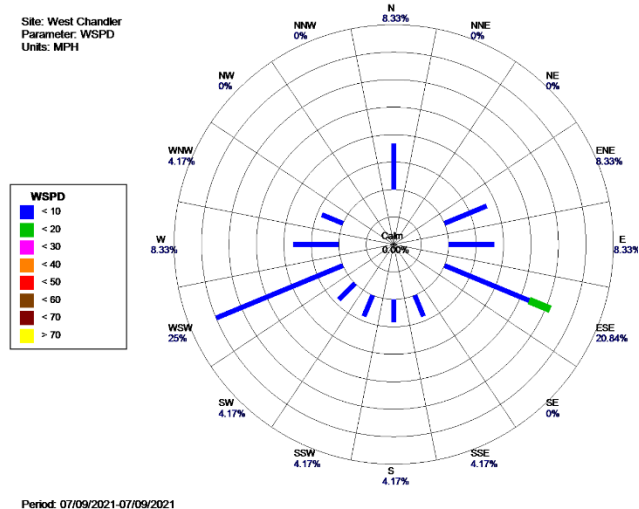
Higley Wind Rose



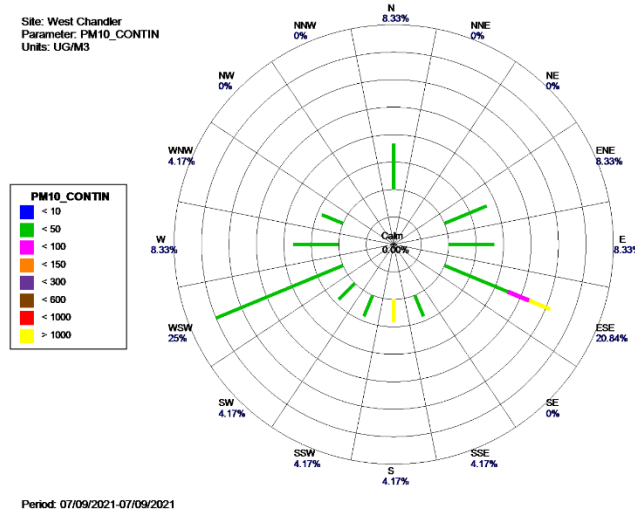
Higley PM₁₀ Rose



West Chandler Wind Rose

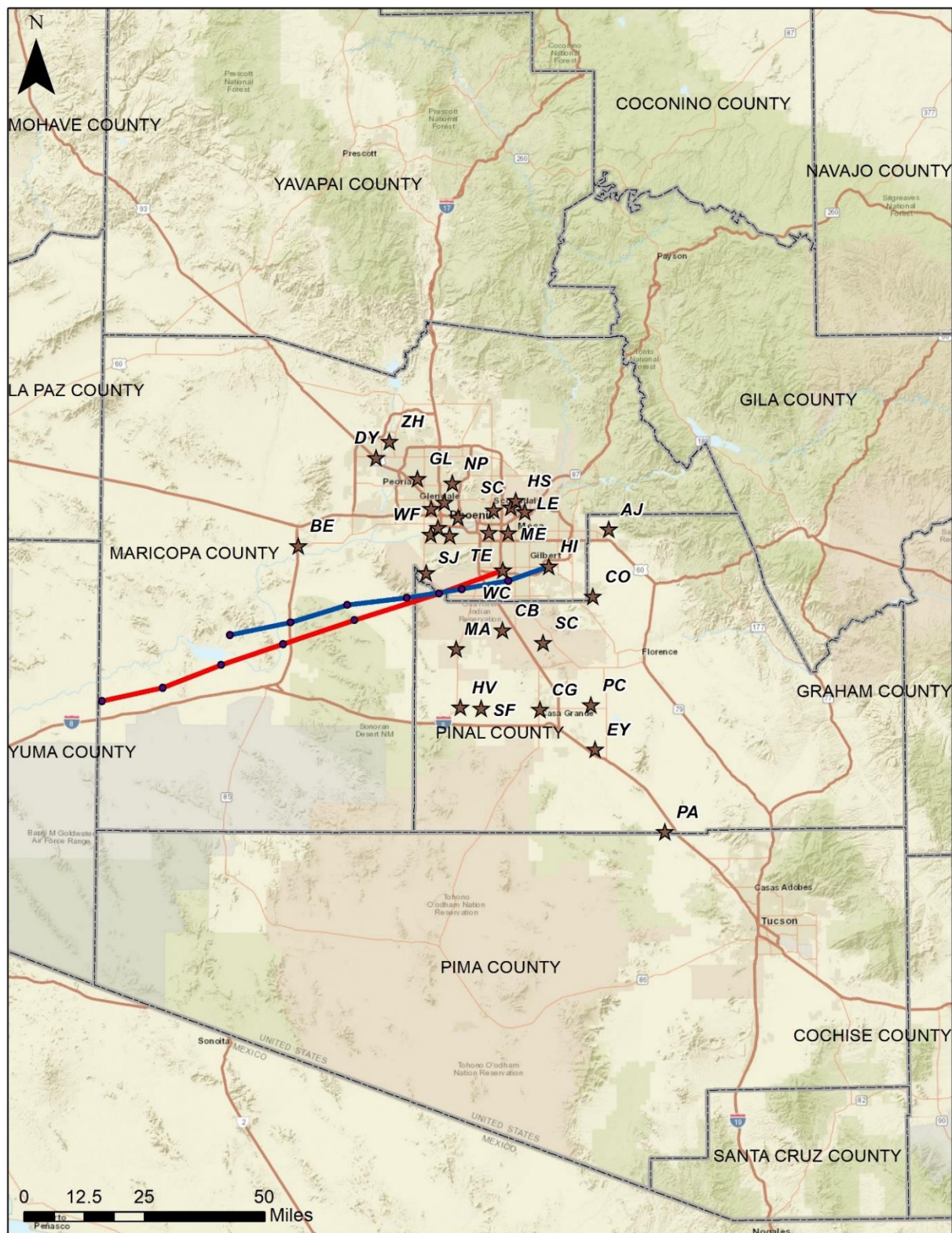


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 5. HYSPLIT 6-hour back-trajectory ending at 10:00 p.m. on July 9, 2021, at both the Higley and West Chandler sites. Elevation at end time is 100 m AGL.



Proximity of Other Exceeding Sites to West Chandler and Higley

Note that West Chandler exceeded the 24-hour PM₁₀ NAAQS on this date.

- Higley
 - Closest exceeding site: West Chandler (9.5 miles away)
 - Farthest exceeding site: St. Johns (25.5 miles away)
- West Chandler
 - Closest exceeding site: Mesa (7.8 miles away)
 - Farthest exceeding site: St. Johns (16 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

Table 11. Hourly-averaged PM₁₀, PM_{2.5}, and PM_C for sites in Maricopa and Pinal counties having a continuous PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on July 9, 2021.

Site	Time	PM ₁₀	PM _{2.5}	PM _C	Ratio PM _{2.5} /PM ₁₀
West Phoenix	11:00 p.m.	2669.0	197.8	2470.0	0.07
Mesa	11:00 p.m.	3741.1	333.7	3407.3	0.09
North Phoenix	11:00 p.m.	2007.8	152.3	1855.7	0.08
Glendale	11:00 p.m.	2132.6	187.0	1945.2	0.09
South Phoenix	11:00 p.m.	1584.5	126.9	1465.9	0.08
Tempe	11:00 p.m.	3957.5	179.5	3777.2	0.05
Durango Complex	11:00 p.m.	2644.9	202.8	2439.2	0.08
JLG Supersite	11:00 p.m.	2305	178	2127	0.08
Casa Grande Downtown	10:00 p.m.	1118	143	975	0.13
Hidden Valley	10:00 p.m.	1017	72	945	0.07

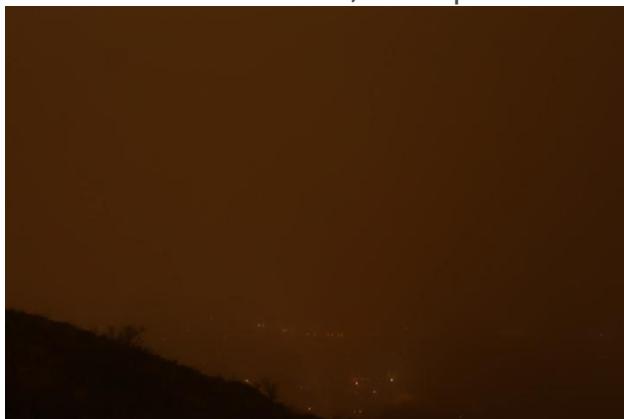
ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive July 9, 2021. The image on the left reflects a time before the dust storm occurred and on the right during or after the storm's passage. The storm hit the Phoenix area at approximately 10:00 p.m.

South Mountain Camera, 10:30 p.m.



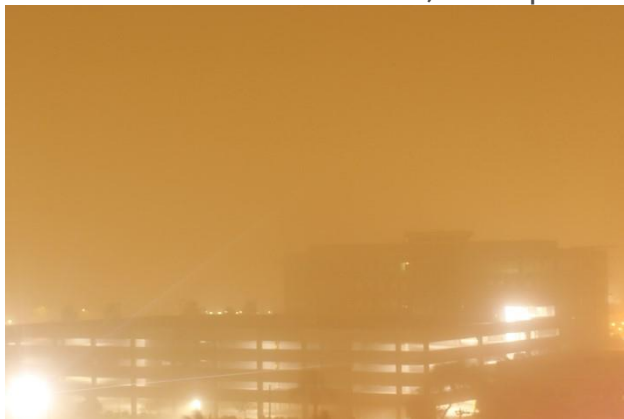
South Mountain Camera, 11:15 p.m.



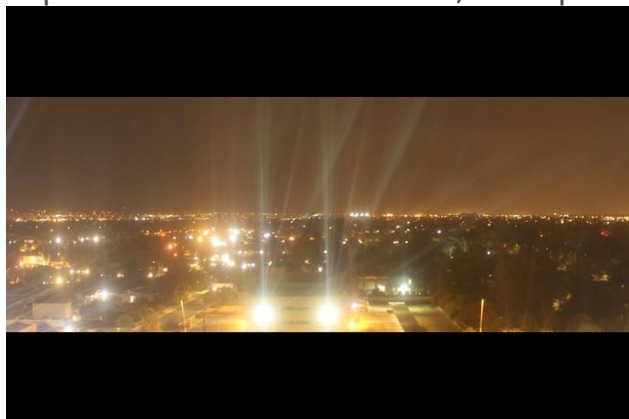
Camelback Mountain Camera, 10:00 p.m.



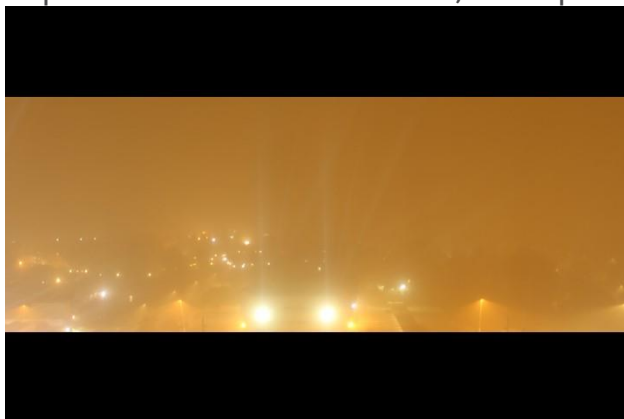
Camelback Mountain Camera, 11:00 p.m.



Superstition Mountains Camera, 10:15 p.m.



Superstition Mountains Camera, 10:45 p.m.



Compliance and Enforcement Activities

An evaluation of all inspections and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of July 6 through July 12, 2021.

During this seven-day period the following activity took place:

- Number of inspections of permitted facilities: 179
 - Number of those facilities that were fugitive dust sources: 174
- Number of inspections that resulted in an enforcement action for PM₁₀ and non-PM₁₀-related violations: 12
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 1
 - Details on enforcement actions: The one violation that was noted during this inspection was for a recordkeeping error. Visible emissions of dust were not noted during this inspection.
- Number of complaints received: 23
 - Number of those complaints that were windblown dust or PM₁₀ related: 22
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 0

Atypical Event: October 11, 2021

A high-wind event due to a low-pressure system moving through the state occurred on this date and caused widespread blowing dust throughout the region. The storm occurred late evening on October 11 and continued into October 12. Five monitoring sites, in both Maricopa and Pinal counties, exceeded the 24-hour PM₁₀ NAAQS on October 11.

ADEQ Pollution Forecast

The following selected portions of the forecast was made on [Friday, October 8, 2021](#), and includes anticipated conditions for the entire weekend.

“...Two fairly strong low pressure troughs (waves) will batter the Southwest during this forecast period...”

“...However, in regards to PM₁₀ (dust), average PM₁₀ levels are a little more volatile during this time of year. This is because PM₁₀ levels generally rise and fall with the low pressure troughs that are common during this season.

The first wave in line to affect the Southwest during this forecast period will result in breezy westerly winds in the afternoons today and Saturday. Pockets of dust may be possible. But the second wave, set to move in by Monday, will bring stronger winds out of the southwest (10-20 mph with higher gusts). Winds will then shift to out of the northwest on Tuesday. Elevated PM₁₀ levels will be possible on both Monday and Tuesday.”

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [2:10 p.m. MST Monday, October 11, 2021](#).

“The low pressure system responsible for the windy conditions continues to plunge southward through the Sierra Nevada of central California. The well-defined vort max evident on water vapor will blast through southeastern California this afternoon and winds will then increase in response to a tightening pressure gradient. Latest visible satellite imagery already reveals areas of blowing dust near the Salton Sea. The dust is expected to expand rapidly eastward this afternoon and this evening, and a Blowing Dust Advisory has been issued for the lower deserts.

Latest deterministic models continue to trend even stronger with the wind fields 850 mb and below. Wind gusts will be maximized later this afternoon across southeastern California, and this evening across central Arizona just ahead of the eastward advancing cold front. Latest forecast soundings and HREF ensemble maxes suggest peak gusts to 55 mph will not be out of the question across the western deserts. Peak gusts could also reach up to 45 mph in the Phoenix area, which will certainly be strong

enough to send decorations airborne. Wind gusts up to 70 will also be possible along I-8 in extreme southwestern Imperial County.”

Environmental Conditions at Air Monitoring Sites

Table 12. PM₁₀ and wind data for PM air monitoring sites in Maricopa and Pinal counties on October 11, 2021.

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	59	12.8	8:00 p.m.	43.2	10:00 p.m.
Mesa	74	15.3	9:00 p.m.	36.2	10:00 p.m.
North Phoenix	47	11.6	9:00 p.m.	39.4	10:00 p.m.
Glendale	61	20.3	8:00 p.m.	46.0	10:00 p.m.
Central Phoenix	94	16.7	8:00 p.m.	56.3	10:00 p.m.
South Scottsdale	88	14.5	10:00 p.m.	44.7	10:00 p.m.
South Phoenix	69	14.4	8:00 p.m.	44.7	10:00 p.m.
West Chandler	160 [#]	19.9	9:00 p.m.	45.6	10:00 p.m.
Tempe	83	10.3	9:00 p.m.	41.1	10:00 p.m.
Higley	134	18.4	7:00 p.m.	36.2	7:00 p.m.
West 43rd Avenue	110	14.6	8:00 p.m.	38.5	9:00 p.m.
Dysart	155 [#]	15.4	10:00 p.m.	36.9	9:00 p.m.
Buckeye	258 [#]	22.9	10:00 p.m.	46.1	10:00 p.m.
Zuni Hills	122	19.2	9:00 p.m.	55.1	10:00 p.m.
St Johns	134	*	*	*	*
Senior Center	115	*	*	*	*
Lehi	ND	*	*	*	*

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
High School	101	*	*	*	*
Durango Complex	79	15.0	8:00 p.m.	38.1	10:00 p.m.
JLG Supersite	79	11.3	9:00 p.m.	*	*
Casa Grande Downtown	112	*	*	*	*
AJ Fire Station	59	21.3	10:00 p.m.	24.0	10:00 p.m.
Pinal Air Park	36	*	*	*	*
Stanfield	150	20.1	11:00 p.m.	38.3	11:00 p.m.
Combs	79	*	*	*	*
Pinal County Housing	143	25.5	11:00 p.m.	42.7	10:00 p.m.
Eloy	129	*	*	*	*
Hidden Valley	184 [#]	30.2	9:00 p.m.	48.3	10:00 p.m.
Maricopa 1405	106	*	*	*	*
Sacaton	87	*	*	*	*
Casa Blanca	158 [#]	*	*	*	*

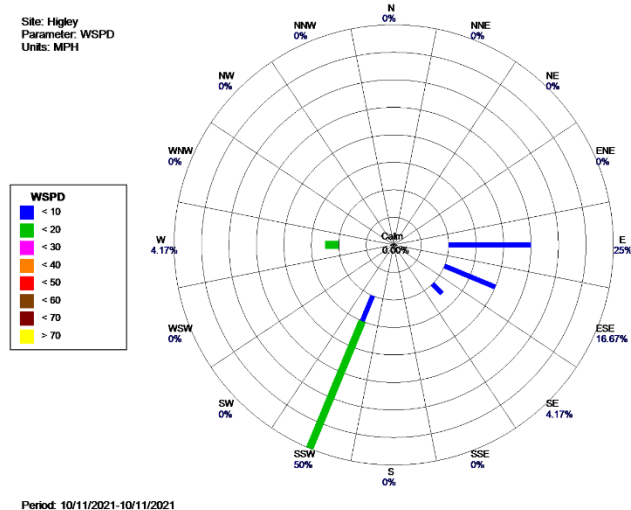
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[#]Exceedance of the 24-hour PM₁₀ NAAQS

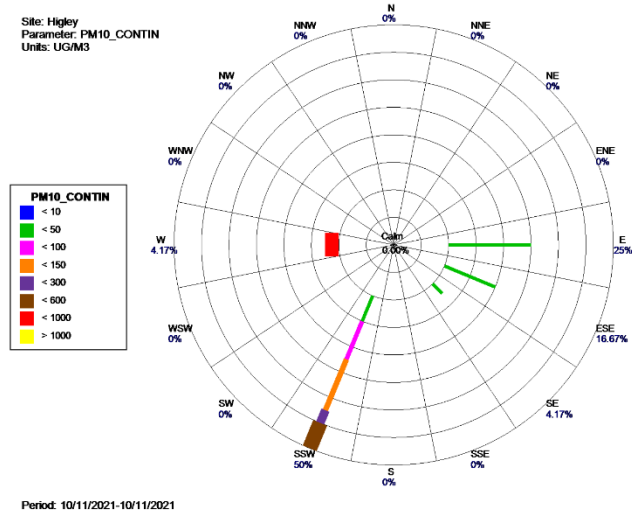
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Pollution and Wind Roses for Higley and West Chandler Sites on October 11, 2021

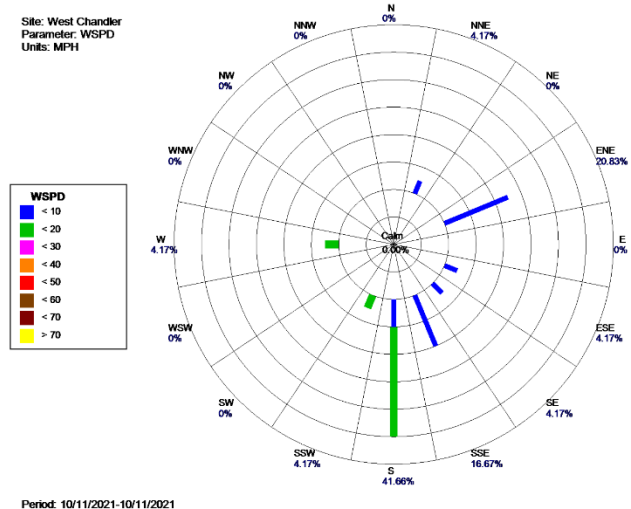
Higley Wind Rose



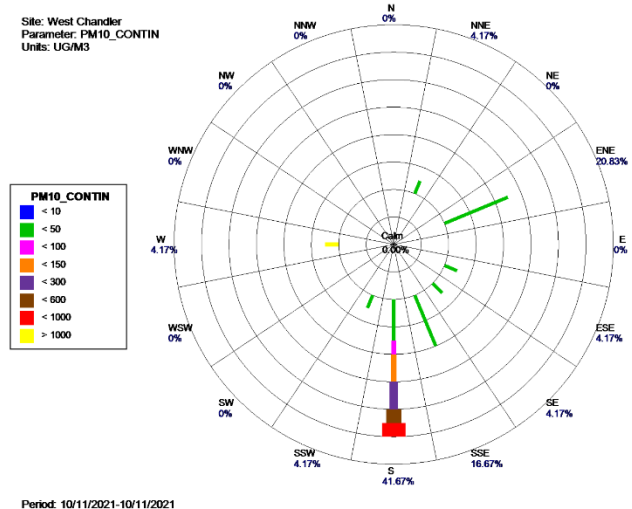
Higley PM₁₀ Rose



West Chandler Wind Rose

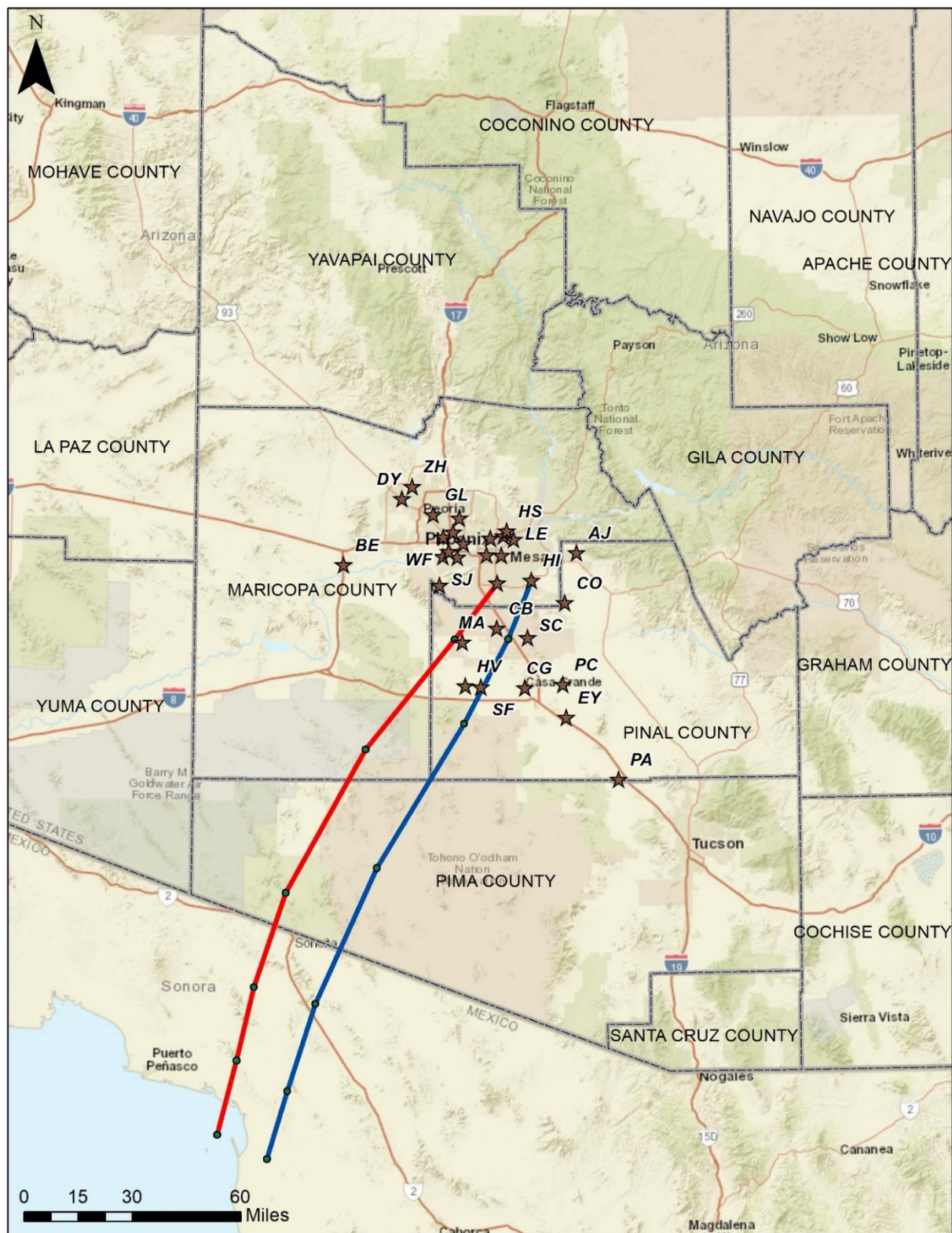


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 6. HYSPLIT 6-hour back-trajectory ending at 11:00 p.m. on October 11, 2021, at both the Higley and West Chandler sites. Elevation at end time is 100 m AGL.



Proximity of Other Exceeding Sites to West Chandler and Higley

Note that West Chandler exceeded the 24-hour PM₁₀ NAAQS on this date.

- Higley
 - Closest exceeding site: West Chandler (9.5 miles away)
 - Farthest exceeding site: Buckeye (52.3 miles away)
- West Chandler
 - Closest exceeding site: Casa Blanca (12.5 miles away)
 - Farthest exceeding site: Buckeye (43 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

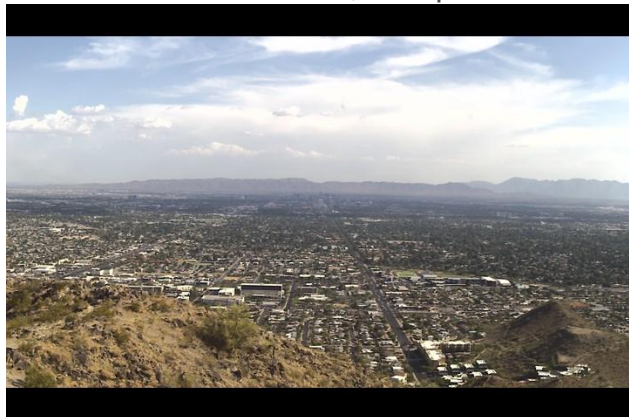
Table 13. Hourly-averaged PM₁₀, PM_{2.5} and PM_C for sites in Maricopa and Pinal counties having a continuous PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on October 11, 2021.

Site	Time	PM ₁₀	PM _{2.5}	PM _C	Ratio PM _{2.5} /PM ₁₀
West Phoenix	11:00 p.m.	560.0	71.9	487.7	0.13
Mesa	11:00 p.m.	657.3	85.5	571.6	0.13
North Phoenix	11:00 p.m.	505.6	71.9	433.6	0.14
Glendale	11:00 p.m.	609.2	91.4	517.5	0.15
South Phoenix	11:00 p.m.	809.0	107.2	706.9	0.13
Tempe	11:00 p.m.	686.5	102.6	583.2	0.15
Durango Complex	11:00 p.m.	820.0	102.3	717.1	0.12
JLG Supersite	11:00 p.m.	925	111	814	0.12
Casa Grande Downtown	11:00 p.m.	825	47	778	0.06
Hidden Valley	11:00 p.m.	540	61	479	0.11

ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive for October 11, 2021. The image on the left reflects a time before the dust storm occurred and on the right during or after the storm's passage. The storm hit the Phoenix area at approximately 9:00-10:00 p.m.

South Mountain Camera, 4:30 p.m.



Note: There are no images available in the archive for South Mountain camera after 4:30 p.m. on October 11, 2021

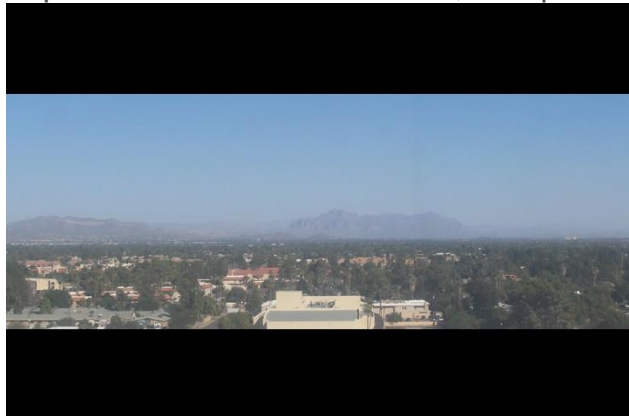
Camelback Mountain Camera, 9:15 p.m.



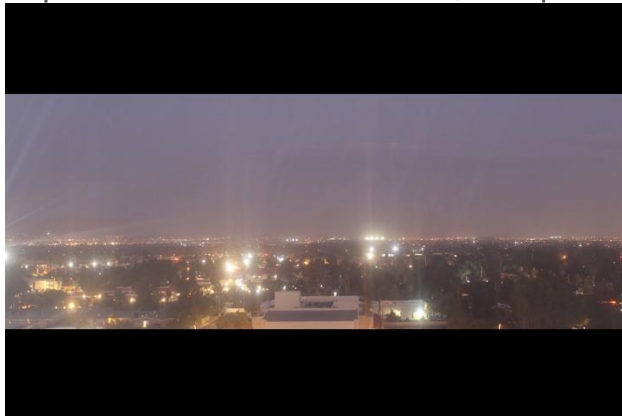
Camelback Mountain Camera, 11:00 p.m.



Superstition Mountains Camera, 3:00 p.m.



Superstition Mountains Camera, 6:30 p.m.



Note: There are no images available in the archive for Superstition Mountains Camera after 6:30 p.m. on October 11, 2021

Compliance and Enforcement Activities

An evaluation of all inspection reports and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of October 8 through October 14, 2021.

During this seven-day period the following activity took place:

- Number of inspections of permitted facilities: 205
 - Number of those facilities that were fugitive dust sources: 157
- Number of inspections that resulted in an enforcement action taken for PM₁₀ and non-PM₁₀-related violations: 35
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 1
 - Details on enforcement actions: The one violation that was noted during this inspection was for a recordkeeping error. Visible emissions of dust were not noted during this inspection.
- Number of complaints received: 25
 - Number of those complaints that were windblown dust or PM₁₀ related: 17
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 0

Atypical Event: October 12, 2021

A high-wind event due to a low-pressure system moving through the state occurred on this date. This caused widespread blowing dust throughout the region. The storm occurred late evening on October 11 and continued into October 12. Twenty-one monitoring sites, in both Maricopa and Pinal counties, exceeded the 24-hour PM₁₀ NAAQS on October 12, 2021.

ADEQ Pollution Forecast

The following selected portion of forecast was made for [Tuesday, October 12, 2021](#).

“Valley residents have woken up to a cool, hazy morning, thanks to a strong low pressure system over the region and its cold front that swept through Arizona last night. Both PM₁₀ (dust) and PM_{2.5} (smoke) reached significant levels around midnight and are still elevated from West Valley to East Valley (as of 8 a.m.).

Looking ahead, today will be the coolest day of the week, with highs only forecast to max out around 70°F--maybe even lower. Winds will also increase out of the west in the afternoon, but they won't be near as strong as yesterday's winds. Daytime heating and winds should help to disperse this morning's high PM₁₀ and PM_{2.5} levels. But the damage has already been done, and PM₁₀ will most likely exceed the health standard today because of the morning levels. Therefore, we've issued a PM₁₀ High Pollution Advisory. PM_{2.5} will easily reach the Moderate Air Quality Index (AQI) category.”

NWS Area Forecast Discussion

The following selected portions of the Area Forecast Discussion are from the National Weather Service office in Phoenix, AZ, for [4:54 a.m. MST Tuesday, October 12, 2021](#). Note that the storm hit the Phoenix area on October 11 before 11:59 p.m. The storm was forecasted on October 11 and the following post-storm discussion was issued early in the morning on October 12.

“An anomalously cold upper level low continues to track across the Desert Southwest early this morning with the low center across northern Arizona. The associated cold front has already swept through most of Arizona with winds diminishing fairly quickly behind the front. Gusty winds to around 30-40 mph across eastern Arizona will remain an issue through around sunrise, but winds will continue to decrease through the rest of the morning as the system continues to track to northeast.”

Environmental Conditions at Air Monitoring Sites

Table 14. PM₁₀ and wind data for PM air monitoring sites in Maricopa and Pinal counties on October 12, 2021.

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
West Phoenix	141	11.5	12:00 a.m.	32.7	3:00 p.m.
Mesa	170 [#]	8.3	12:00 a.m.	28.5	12:00 a.m.
North Phoenix	143	7.9	1:00 a.m.	22.8	1:00 a.m.
Glendale	140	12.5	1:00 a.m.	23.0	12:00 a.m.
Central Phoenix	170 [#]	17.4	12:00 a.m.	34.8	12:00 a.m.
South Scottsdale	180 [#]	14.2	1:00 a.m.	32.9	1:00 a.m.
South Phoenix	144	12.3	12:00 a.m.	30.3	12:00 a.m.
West Chandler	181 [#]	9.4	12:00 a.m.	28.1	12:00 a.m.
Tempe	158 [#]	6.8	12:00 a.m.	26.3	12:00 a.m.
Higley	219 [#]	11.6	12:00 a.m.	30.1	12:00 a.m.
West 43rd Avenue	166 [#]	11.2	12:00 a.m.	27.4	12:00 a.m.
Dysart	137	6.5	1:00 a.m.	19.8	1:00 a.m.
Buckeye	149	10.1	1:00 a.m.	31.0	1:00 a.m.
Zuni Hills	142	10.5	2:00 a.m.	25.1	1:00 a.m.
St Johns	142	*	*	*	*
Senior Center	174 [#]	*	*	*	*

Site	24-hour PM ₁₀ (µg/m ³)	Max Hourly-Averaged Wind Speed (MPH)	Time	Max Wind Gust (MPH)	Time
Lehi	ND	*	*	*	*
High School	156 [#]	*	*	*	*
Durango Complex	163 [#]	13.6	12:00 a.m.	33.5	12:00 p.m.
JLG Supersite	144	7.3	1:00 a.m.	*	*
Casa Grande Downtown	264 [#]	*	*	*	*
AJ Fire Station	179 [#]	14.4	1:00 a.m.	17.3	1:00 a.m.
Pinal Air Park	180 [#]	*	*	*	*
Stanfield	235 [#]	18.4	12:00 a.m. & 1:00 a.m.	29.5	12:00 a.m.
Combs	242 [#]	*	*	*	*
Pinal County Housing	263 [#]	18.7	2:00 a.m.	36.5	12:00 a.m.
Eloy	219 [#]	*	*	*	*
Hidden Valley	222 [#]	17.4	1:00 a.m.	35.3	2:00 a.m.
Maricopa 1405	217 [#]	*	*	*	*
Sacaton	285 [#]	*	*	*	*
Casa Blanca	259 [#]	*	*	*	*

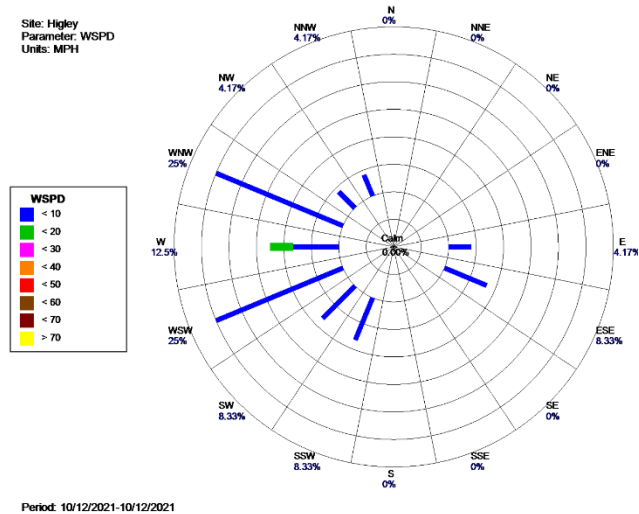
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[#]Exceedance of the 24-hour PM₁₀ NAAQS

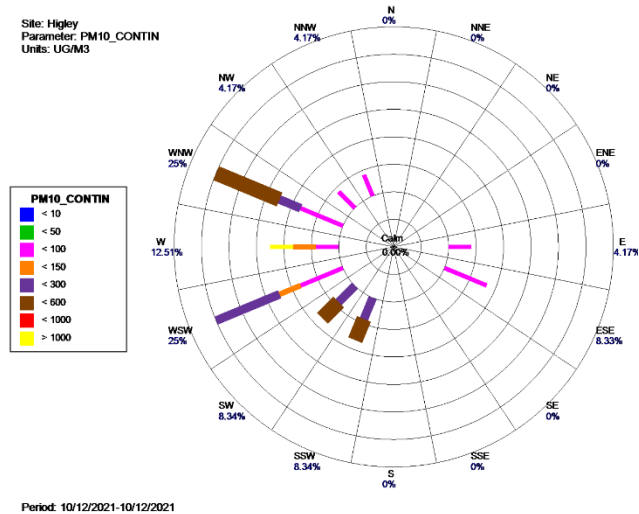
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Pollution and Wind Roses for Higley and West Chandler Sites on October 12, 2021

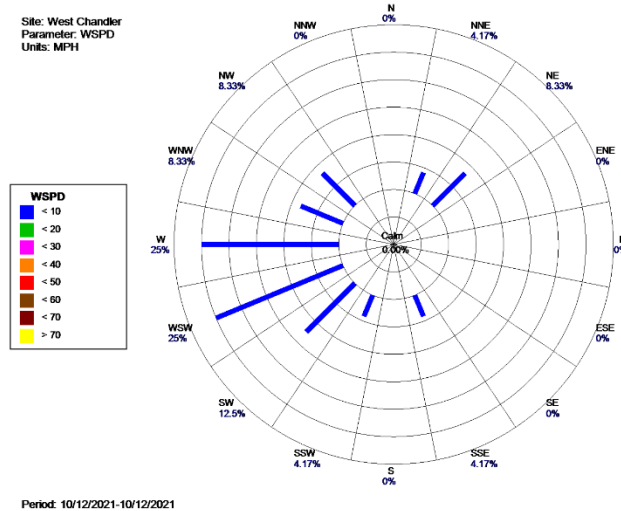
Higley Wind Rose



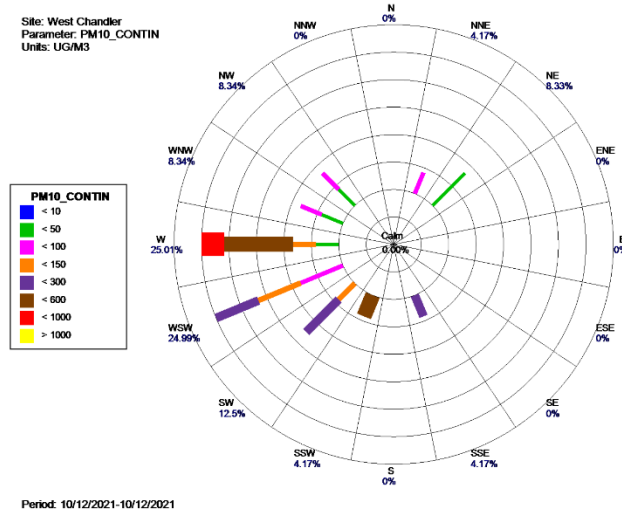
Higley PM₁₀ Rose



West Chandler Wind Rose

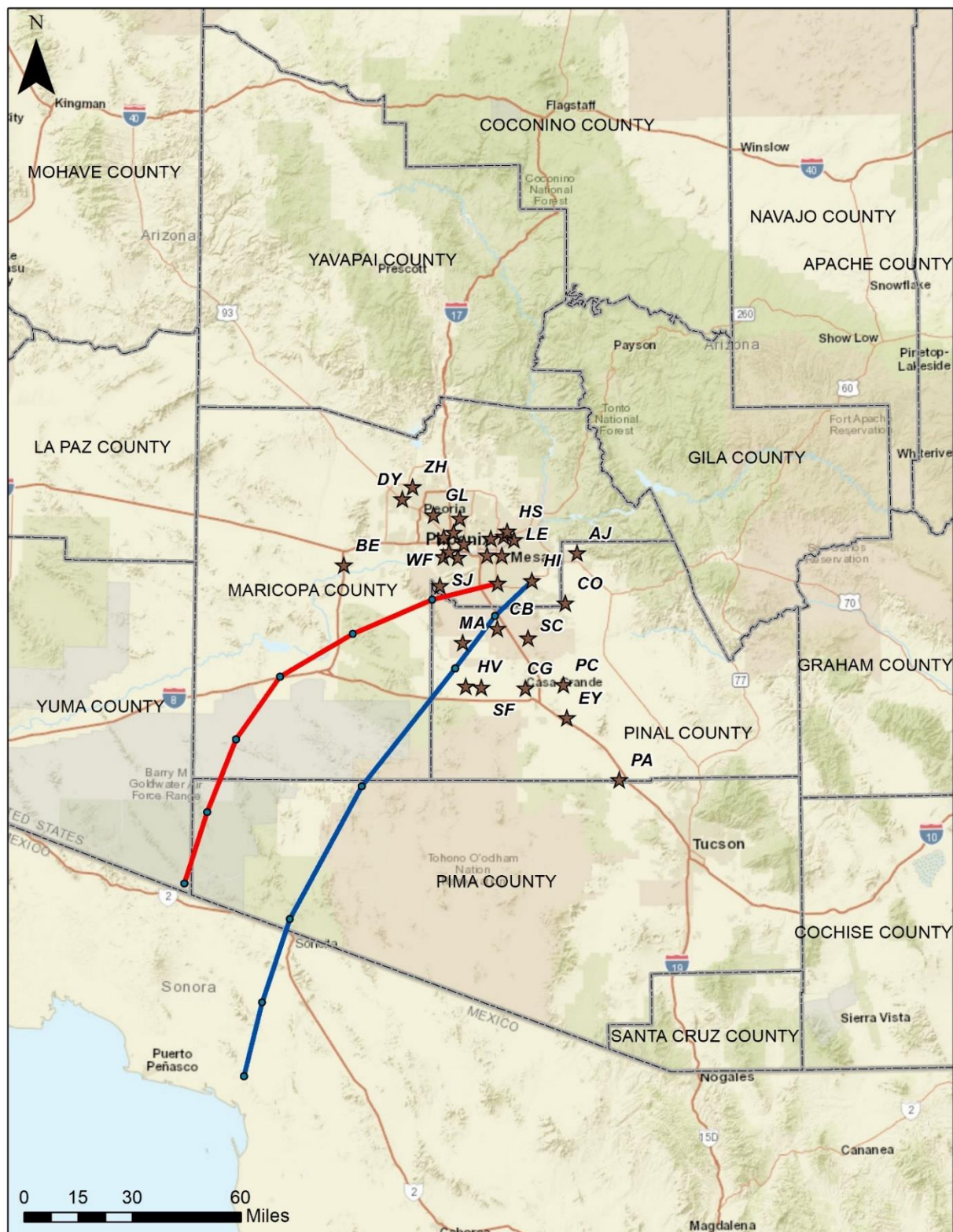


West Chandler PM₁₀ Rose



HYSPLIT Back-Trajectory Analyses

Figure 7. HYSPLIT 6-hour back-trajectory ending at 12:00 a.m. on October 12, 2021, at both the Higley and West Chandler sites. Elevation at end time is 100 m AGL.



Proximity of Other Exceeding Sites to West Chandler and Higley

Note that both West Chandler and Higley exceeded the 24-hour PM₁₀ NAAQS on this date.

- Higley
 - Closest exceeding site: West Chandler (9.5 miles away)
 - Farthest exceeding site: Pinal Air Park (60 miles away)
- West Chandler
 - Closest exceeding site: Mesa (7.8 miles away)
 - Farthest exceeding site: Eloy Pinal Air Park (64 miles away)

PM₁₀/PM_{2.5} Ratios for Regional Air Monitors

Table 15. Hourly-averaged PM₁₀, PM_{2.5} and PM_C for sites in Maricopa and Pinal counties having a PM_{2.5} monitor. Note that time reflects the hour of highest PM₁₀ concentration on October 12, 2021.

Site	Time	PM ₁₀	PM _{2.5}	PM _C	Ratio PM _{2.5} /PM ₁₀
West Phoenix	12:00 a.m.	699.1	95.5	603.3	0.14
Mesa	12:00 a.m.	1018.0	144.4	872.9	0.14
North Phoenix	12:00 a.m.	738.6	96.4	641.9	0.13
Glendale	12:00 a.m.	710.6	106.0	604.6	0.15
South Phoenix	12:00 a.m.	857.4	106.6	744.9	0.12
Tempe	12:00 a.m.	953.8	160.0	793.6	0.17
Durango Complex	12:00 a.m.	914.7	102.6	811.6	0.11
JLG Supersite	12:00 a.m.	563	58	505	0.10
Casa Grande Downtown	12:00 a.m.	1836	198	1638	0.11
Hidden Valley	12:00 a.m.	1307	165	1142	0.13

ADEQ Visibility Camera Historical Archive

Archived photos from ADEQ's Visibility Camera Historical Archive for October 12, 2021. The storm on this date began on October 11 before midnight, so the image on the left is at midnight during the storm and on the right is in the morning; the storm has passed, but dust is still lingering. Note: There are no images available in the archive for South Mountain or Superstition Mountain cameras on October 12, 2021.

Camelback Mountain Camera, 12:00 a.m.



Camelback Mountain Camera, 6:00 a.m.



Compliance and Enforcement Activities

An evaluation of all inspection reports and air quality complaints indicates no evidence of unusual anthropogenic PM₁₀ emissions during the time period of October 9 through October 15, 2021.

During this seven-day period the following activity took place:

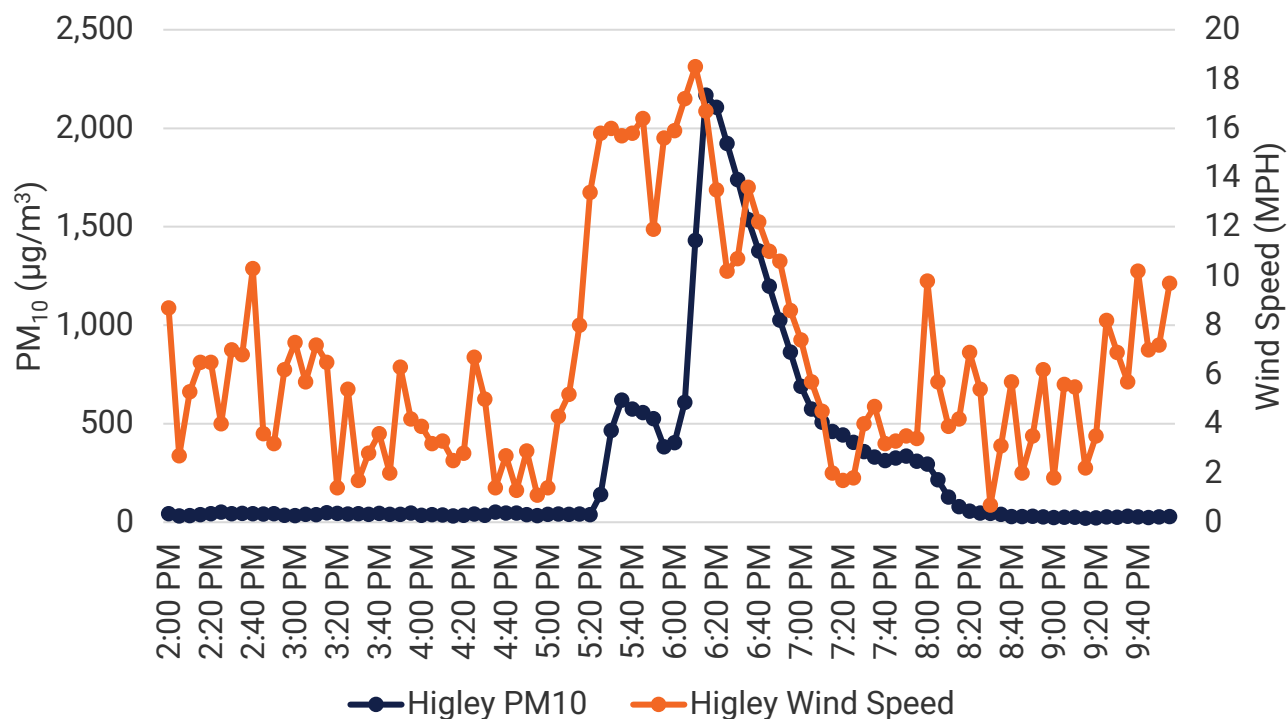
- Number of inspections of permitted facilities: 178
 - Number of those facilities that were fugitive dust sources: 132
- Number of inspections that resulted in an enforcement action taken for PM₁₀ and non-PM₁₀-related violations: 31
 - Number of enforcement actions that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 1
 - Details on enforcement actions: The one violation that was noted during this inspection was for a recordkeeping error. Visible emissions of dust were not noted during this inspection.
- Number of complaints received: 22
 - Number of those complaints that were windblown dust or PM₁₀ related: 14
 - Number of those complaints that occurred at facilities within a four-mile radius of the Higley or West Chandler monitoring sites: 0

Appendix I

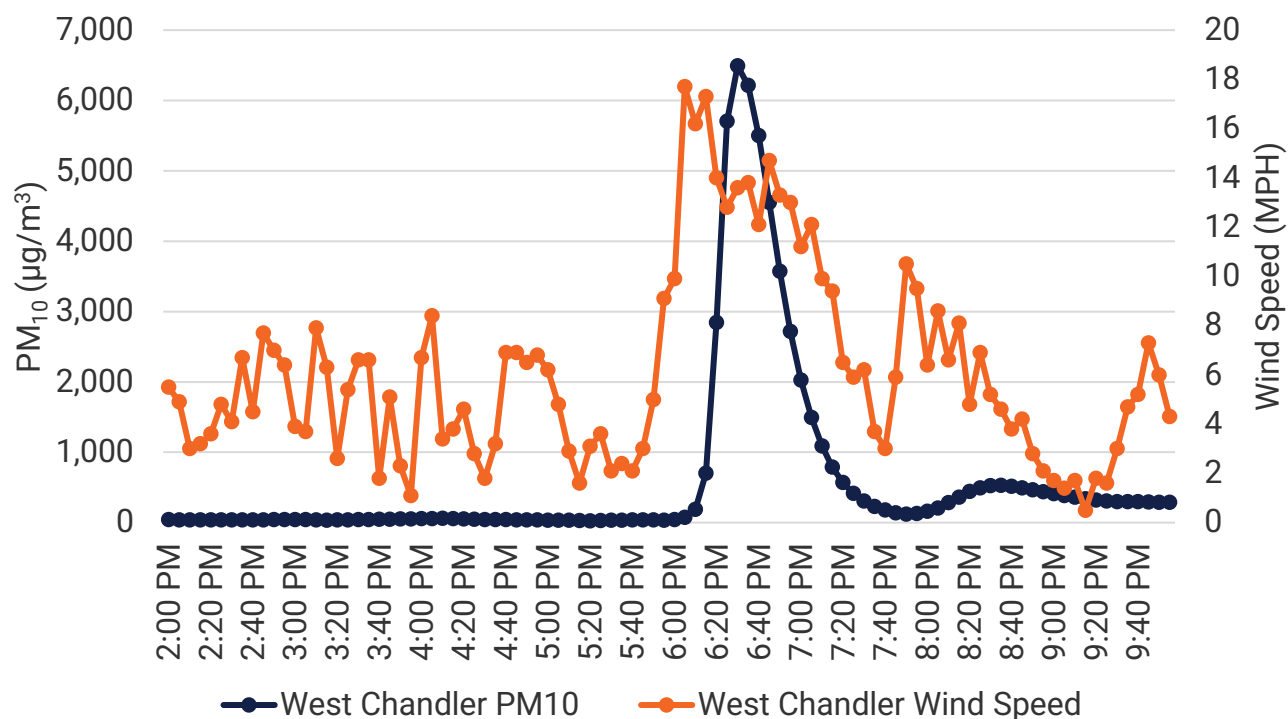
Charts of 5-minute and hourly PM₁₀, wind speed, and maximum wind gust for all atypical events listed in this report. Charts include the Higley and West Chandler sites as well as any sites that exceeded the 24-hour PM₁₀ NAAQS for those dates.

August 16, 2020

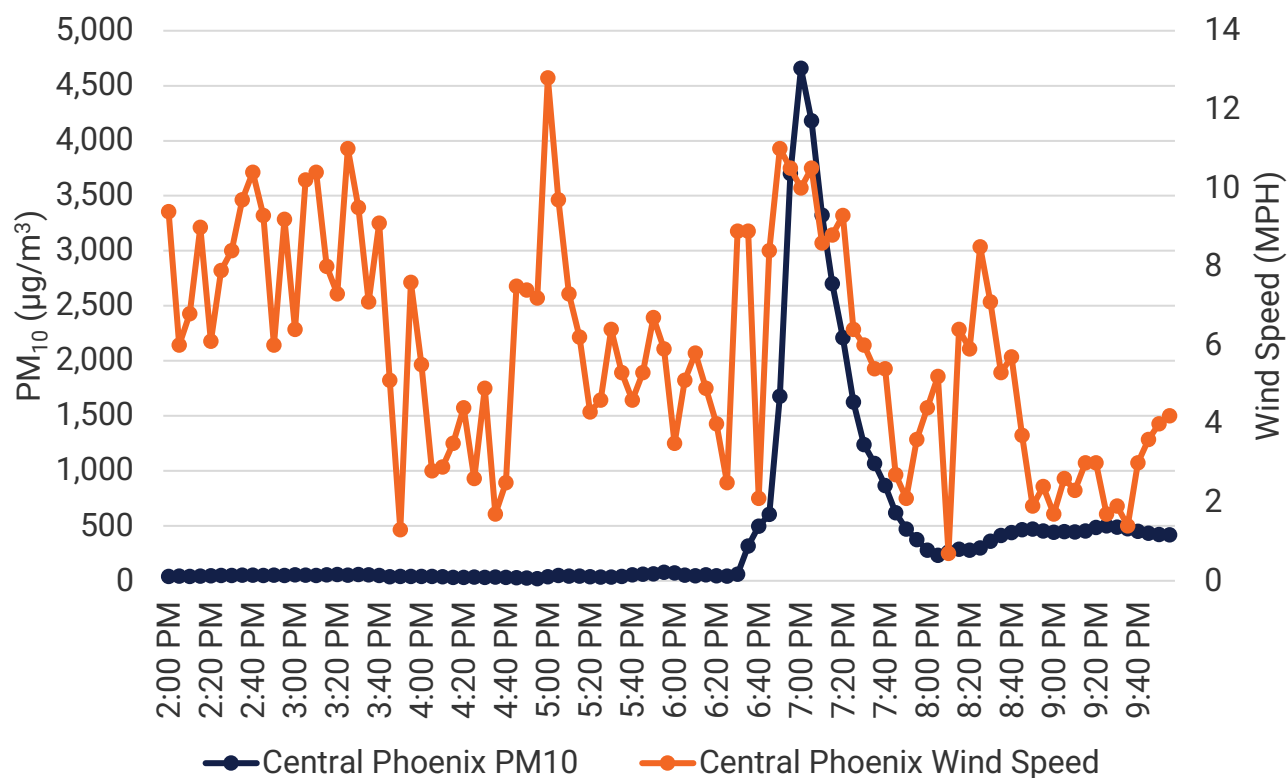
5-Minute PM₁₀ and Wind Speed at Higley



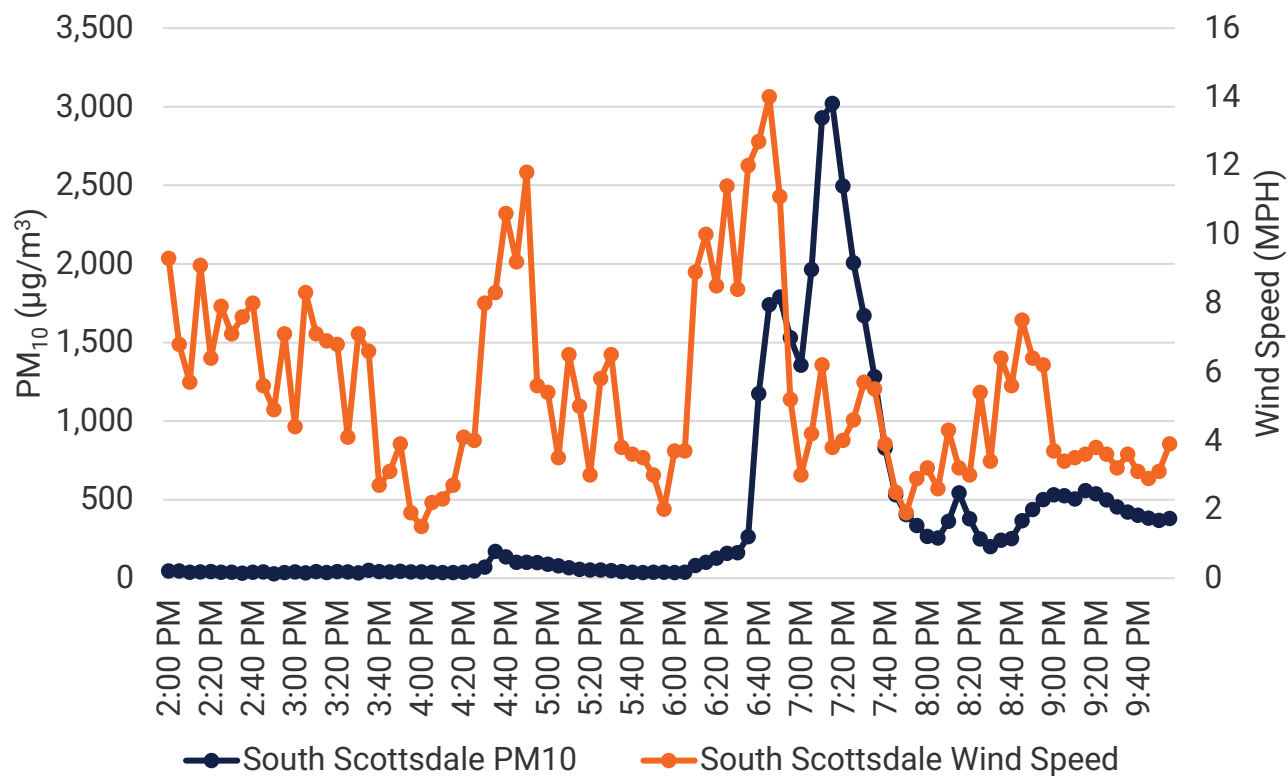
5-Minute PM₁₀ and Wind Speed at West Chandler



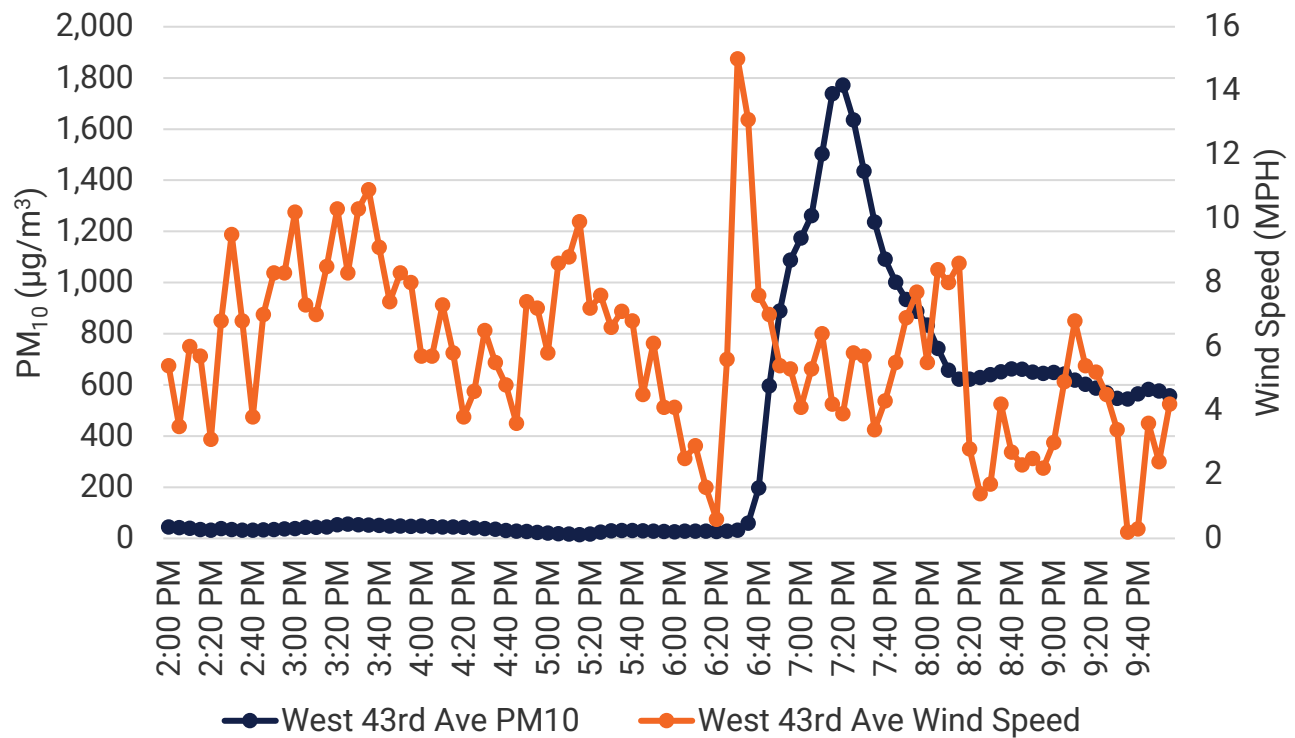
5-Minute PM₁₀ and Wind Speed at Central Phoenix



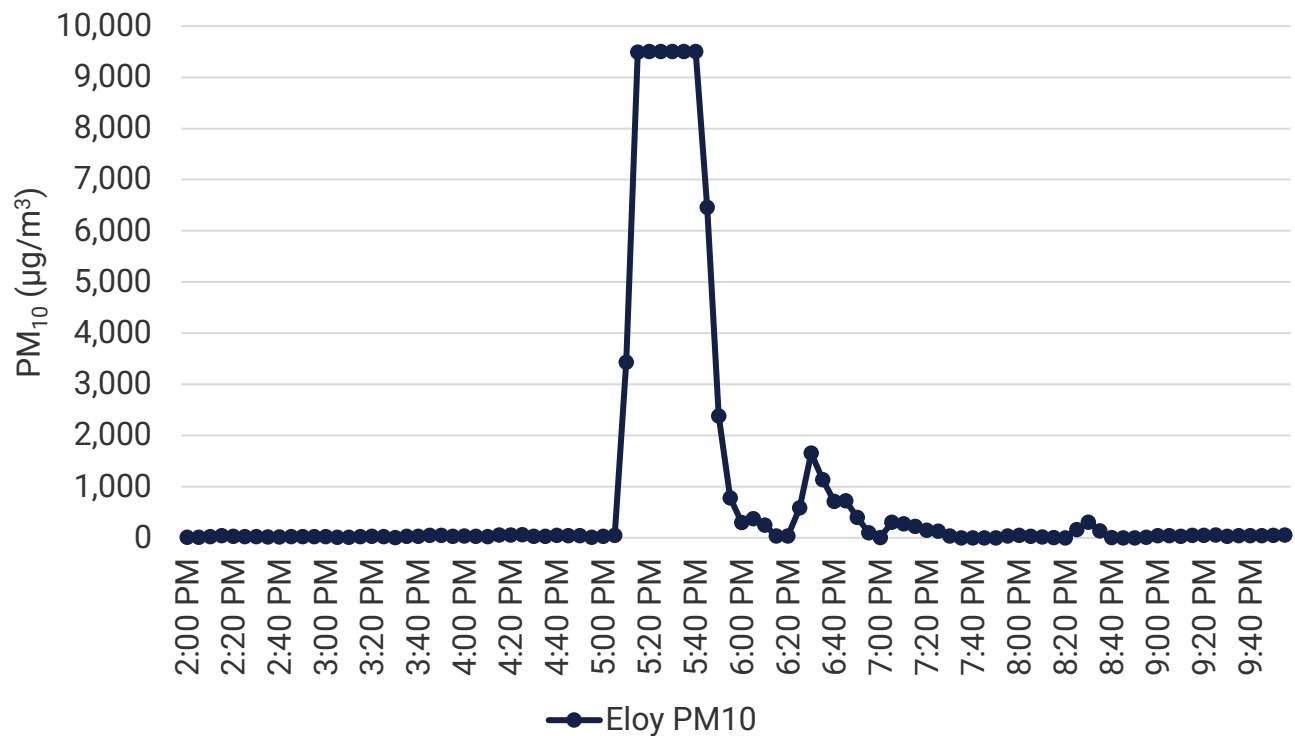
5-Minute PM₁₀ and Wind Speed at South Scottsdale



5-Minute PM₁₀ and Wind Speed at West 43rd Avenue

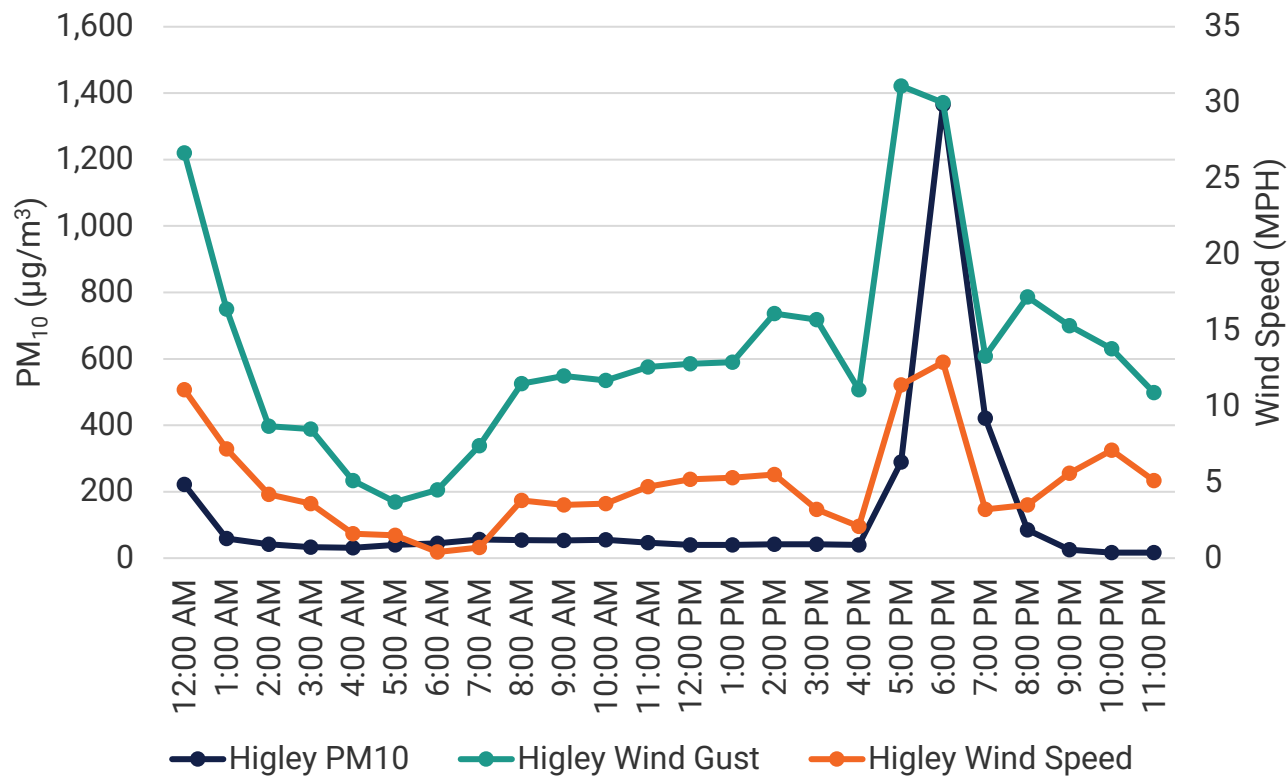


5-Minute PM₁₀ at Eloy

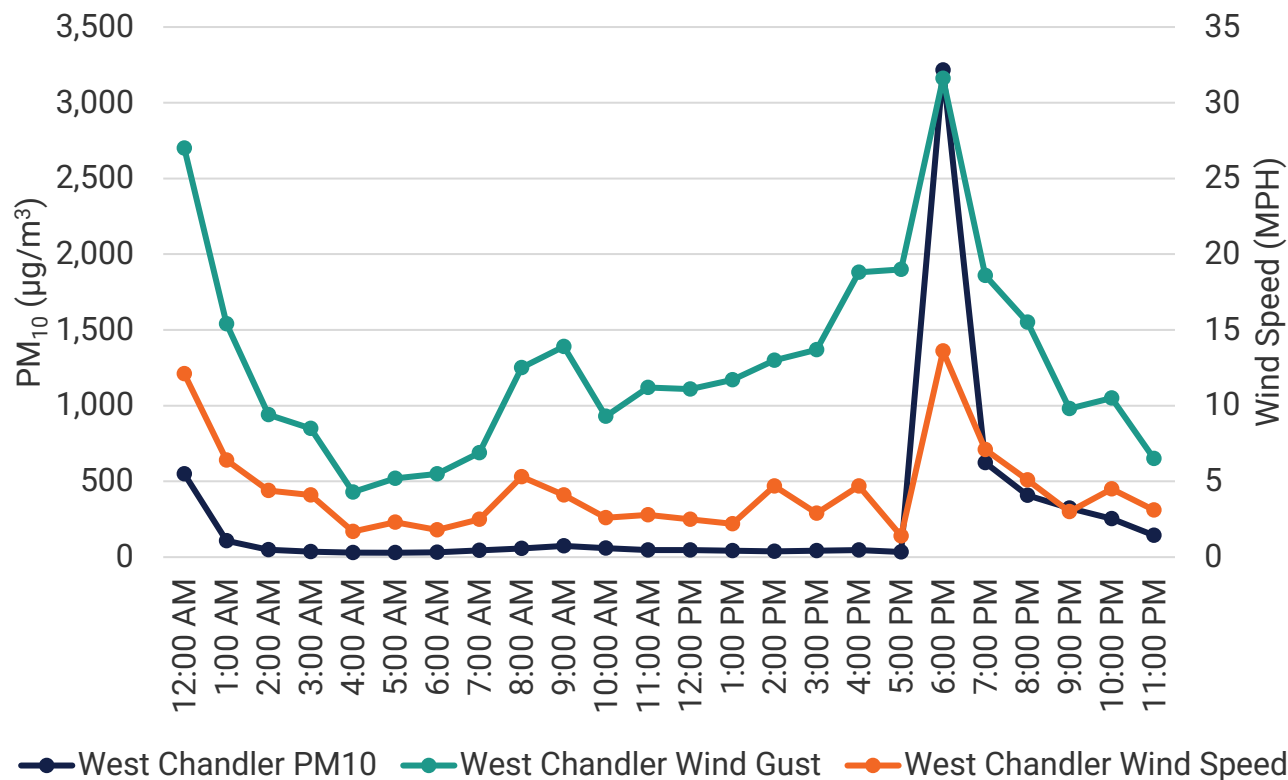


Note: Hourly average at Eloy for 5:00 p.m. on August 16, 2020, was 28,161 $\mu\text{g}/\text{m}^3$; 5-minute readings appear to be machine limited to 9504 $\mu\text{g}/\text{m}^3$.

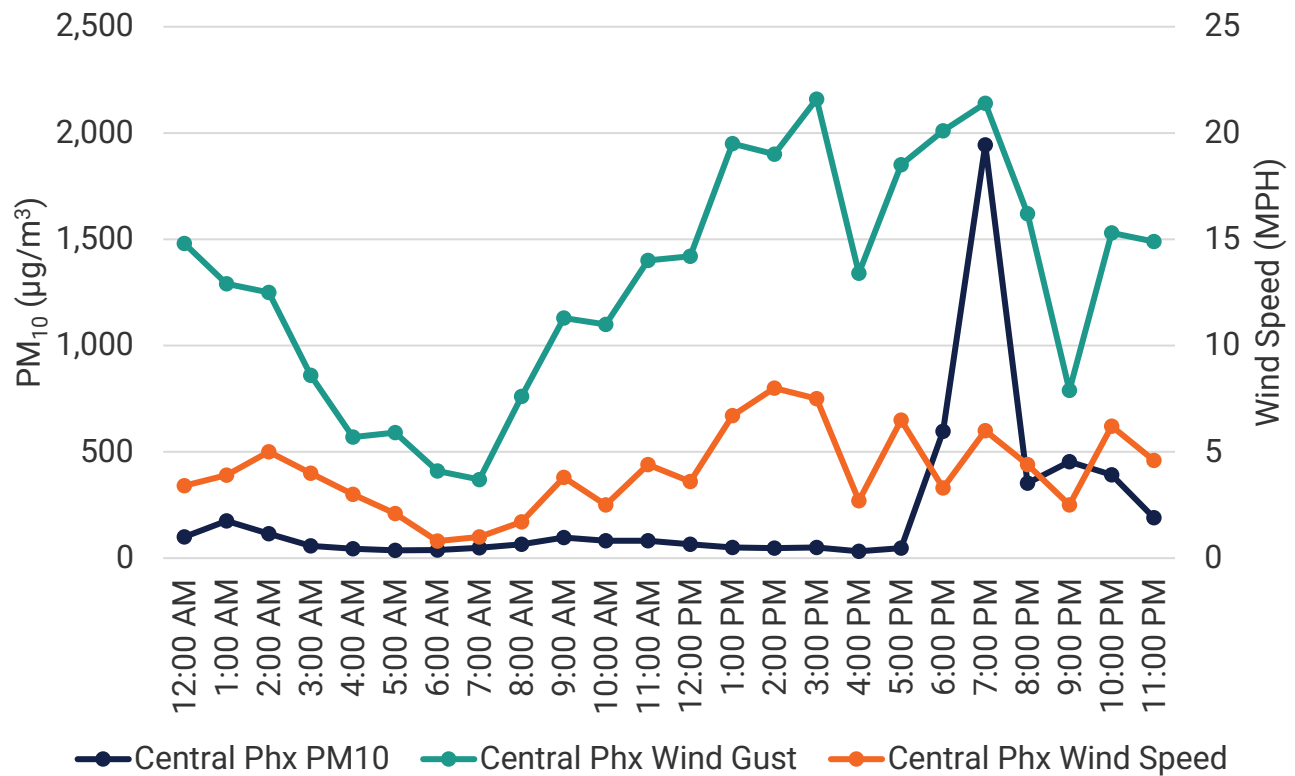
Hourly PM₁₀ and Wind Speed at Higley



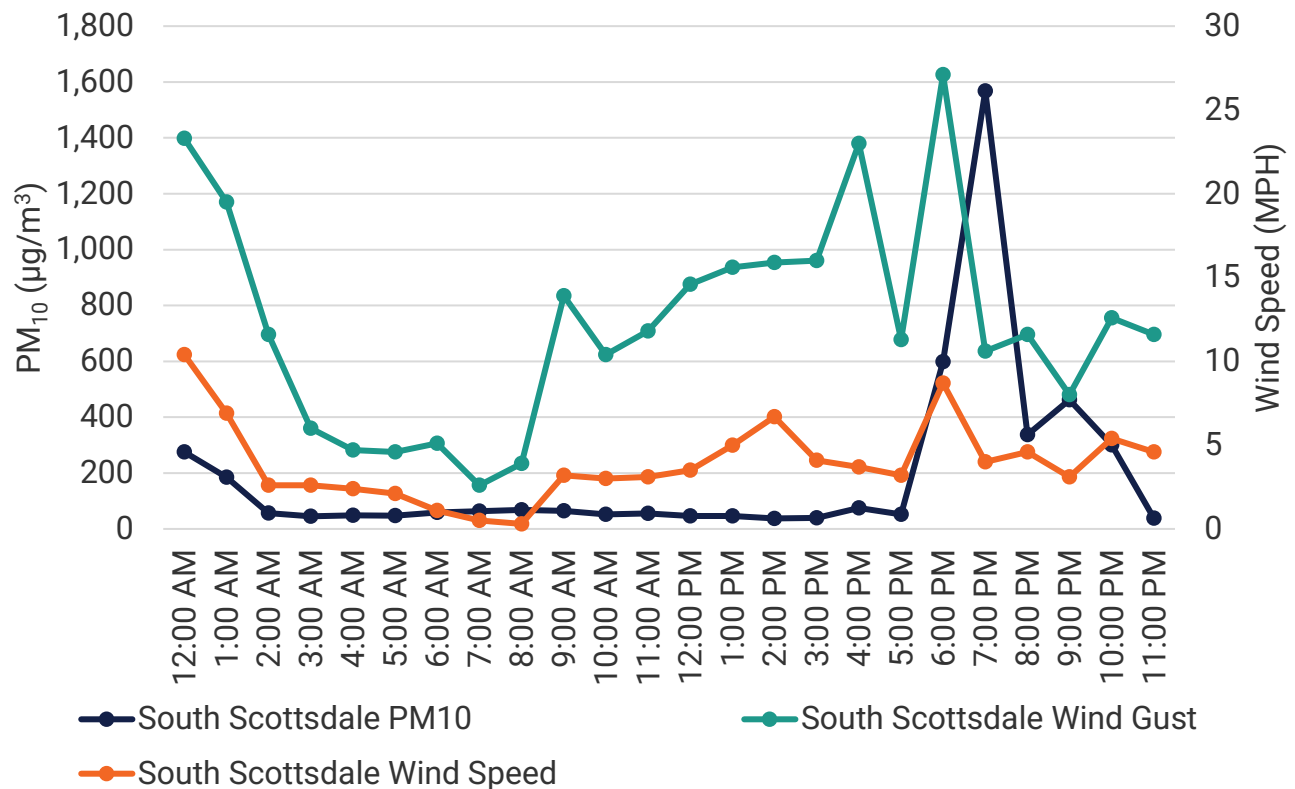
Hourly PM₁₀ and Wind Speed at West Chandler



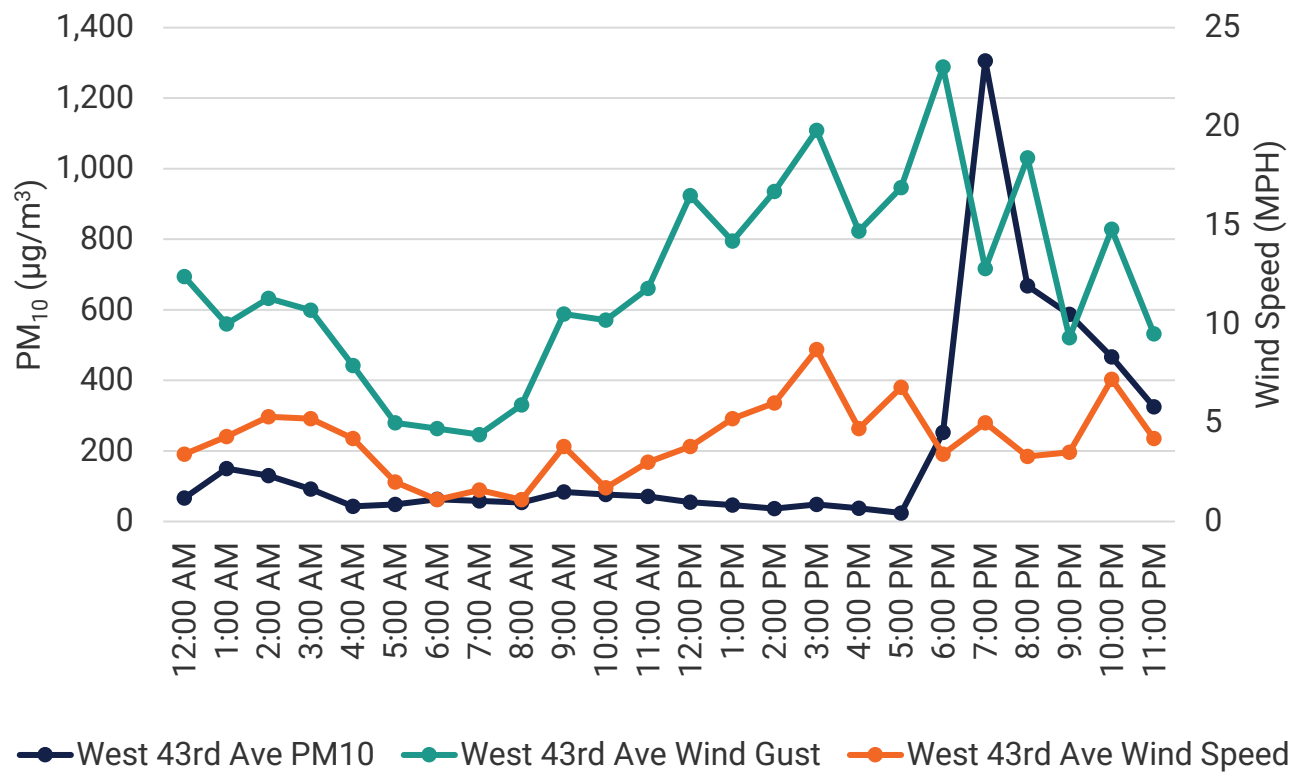
Hourly PM₁₀ and Wind Speed at Central Phoenix



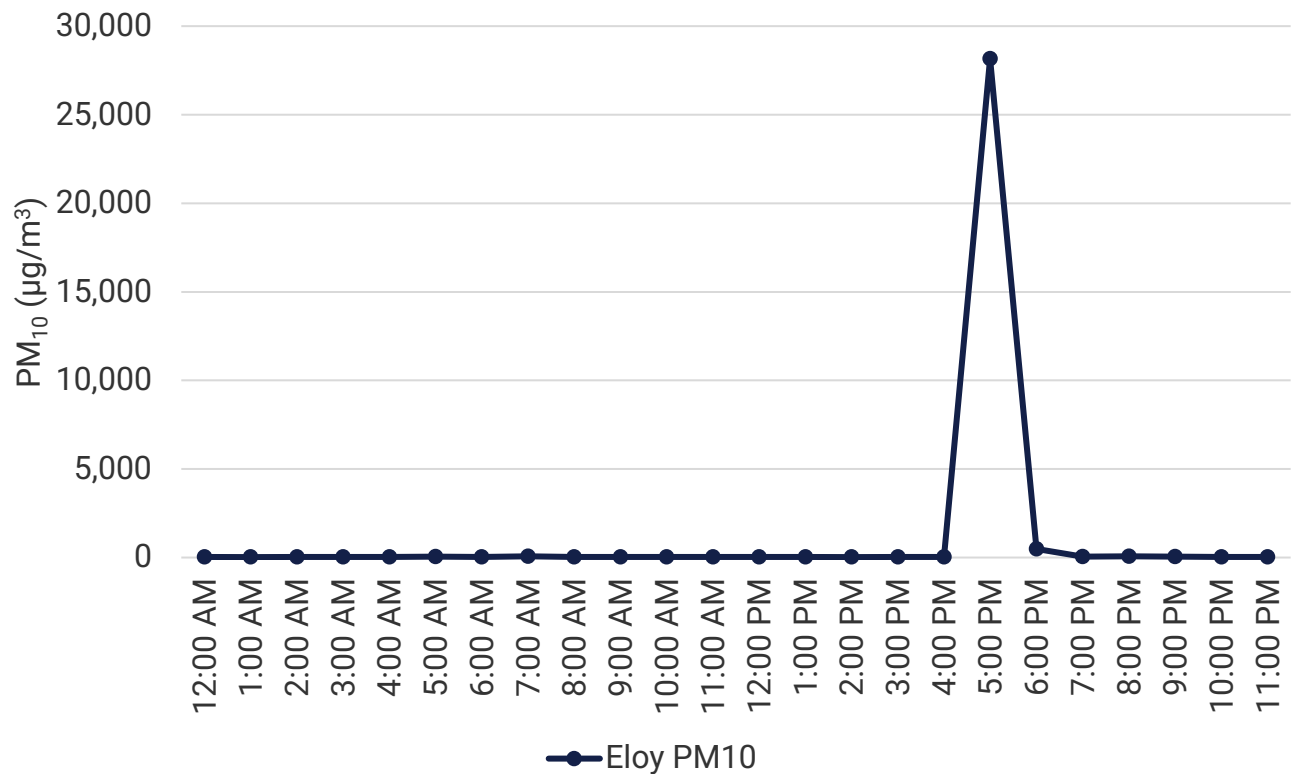
Hourly PM₁₀ and Wind Speed at South Scottsdale



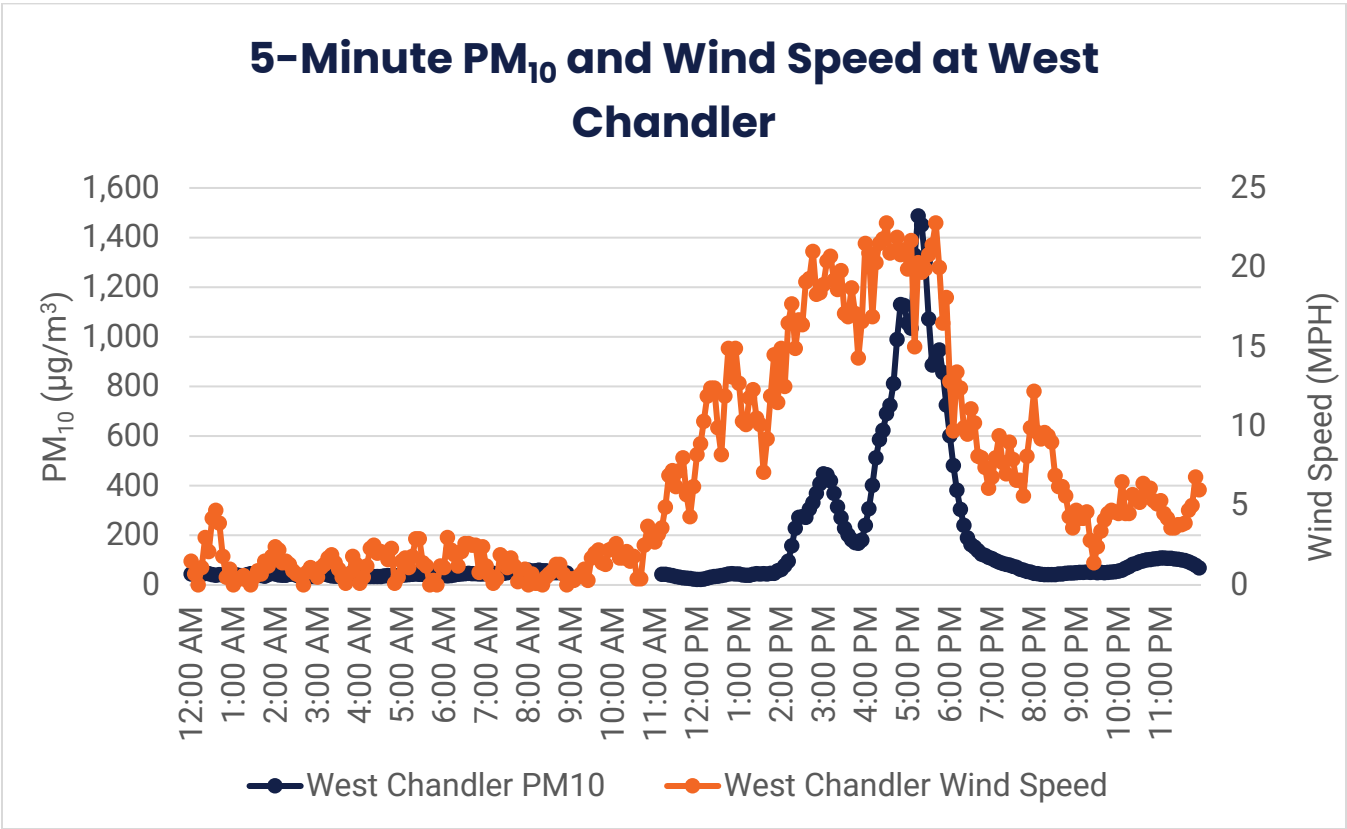
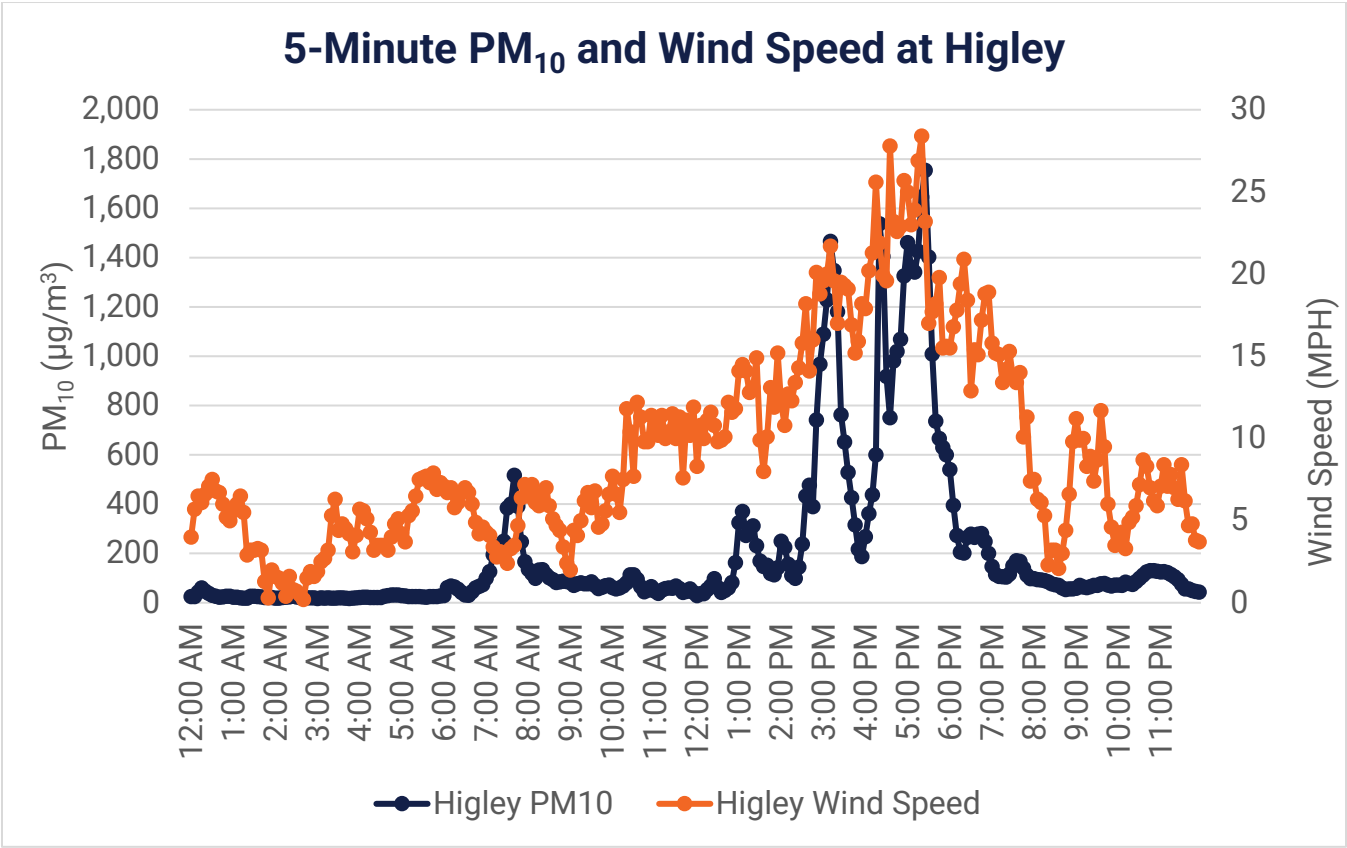
Hourly PM₁₀ and Wind Speed at West 43rd Avenue



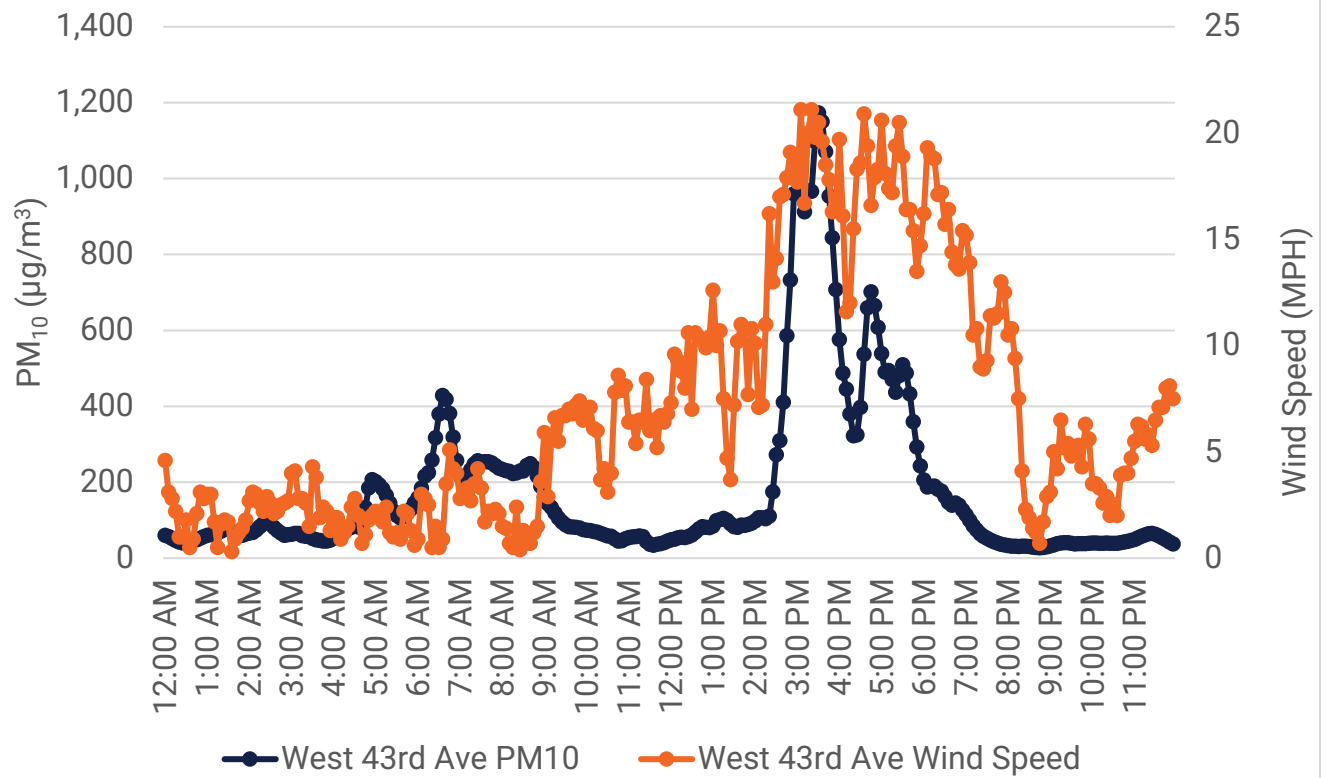
Hourly PM₁₀ at Eloy



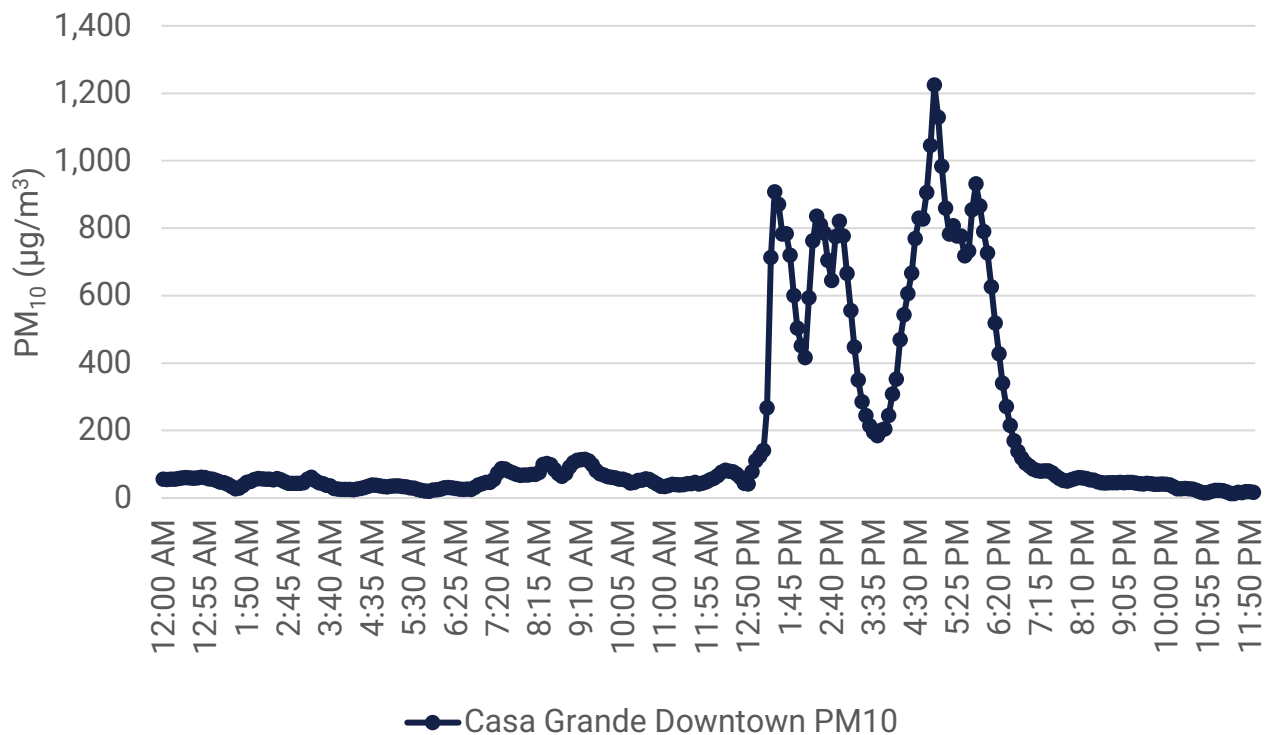
March 3, 2021



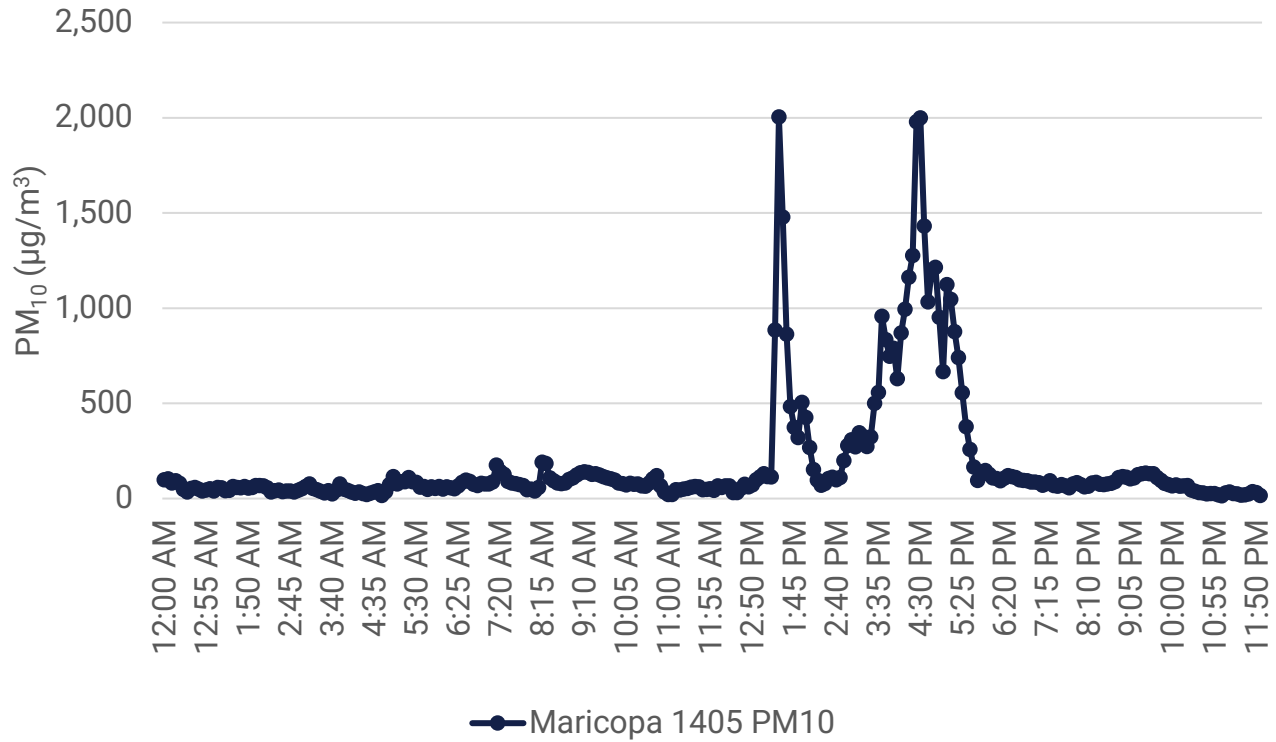
5-Minute PM₁₀ and Wind Speed at West 43rd Avenue



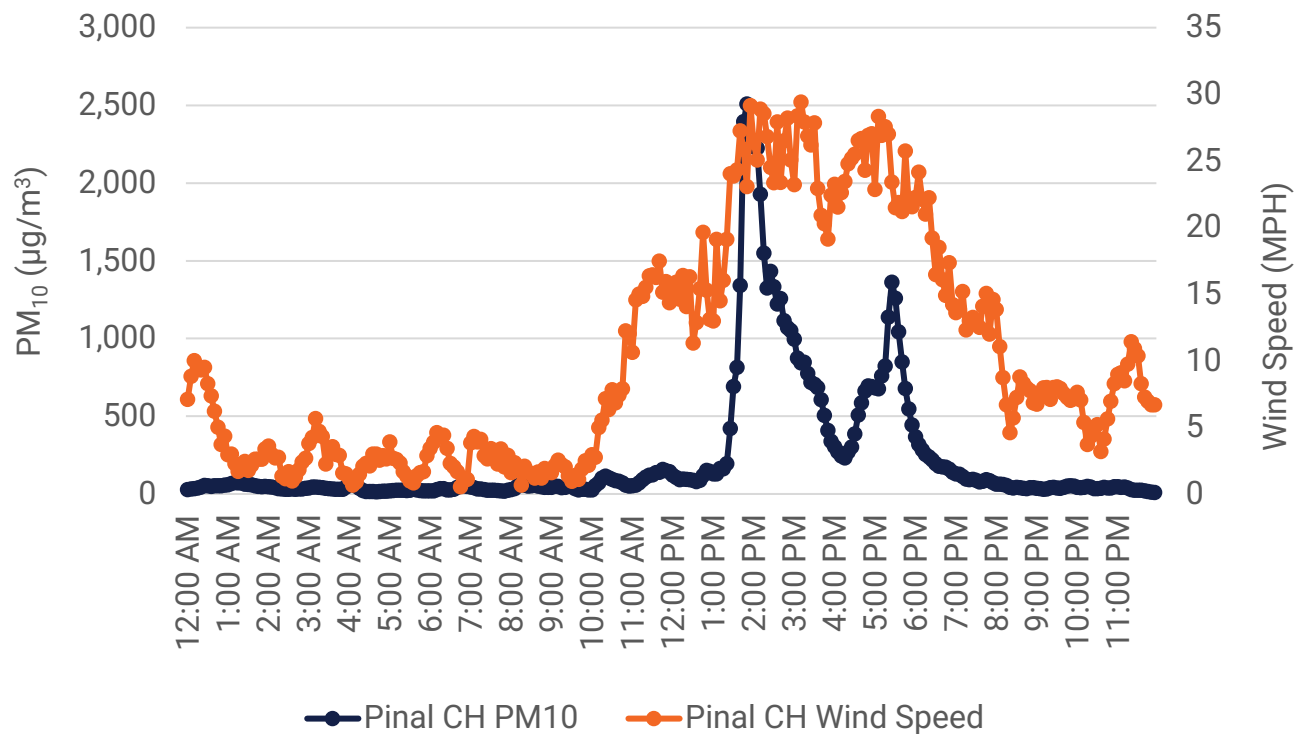
5-Minute PM₁₀ at Casa Grande Downtown



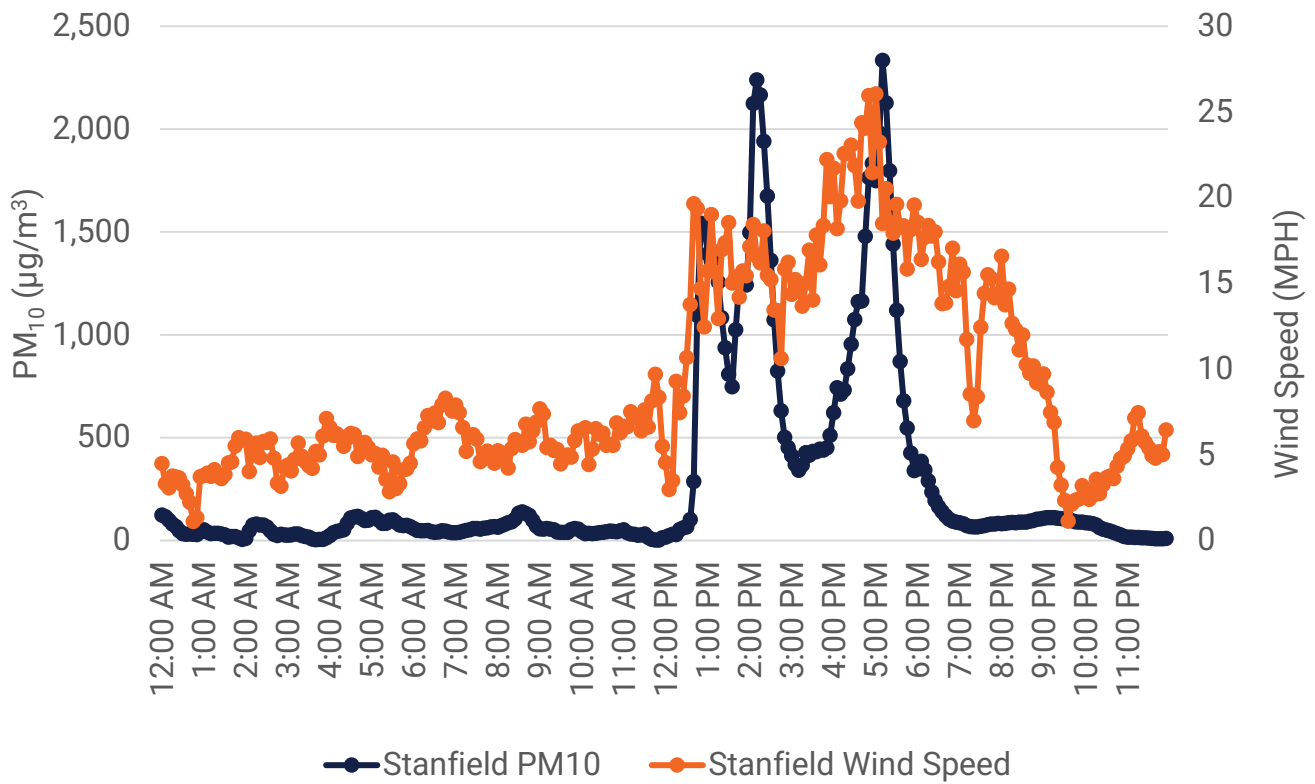
5-Minute PM₁₀ at Maricopa 1405



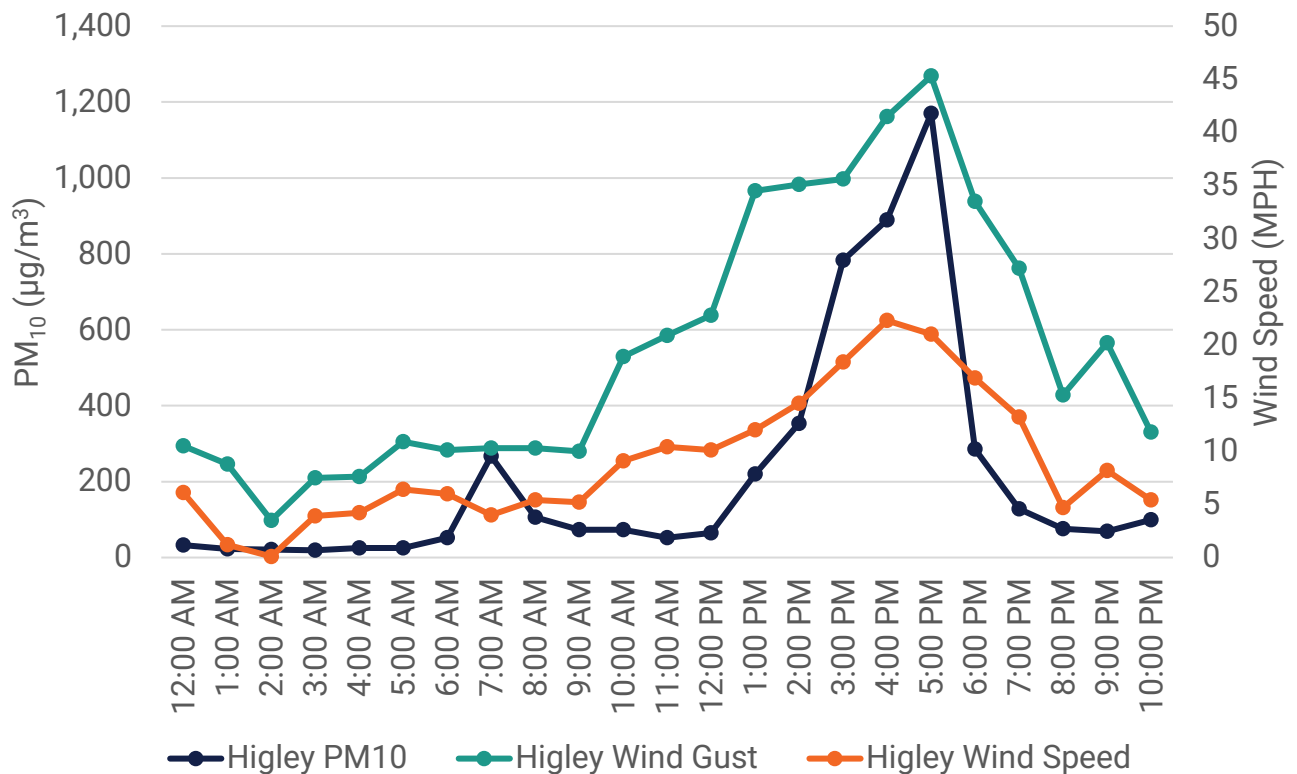
5-Minute PM₁₀ and Wind Speed at Pinal County Housing



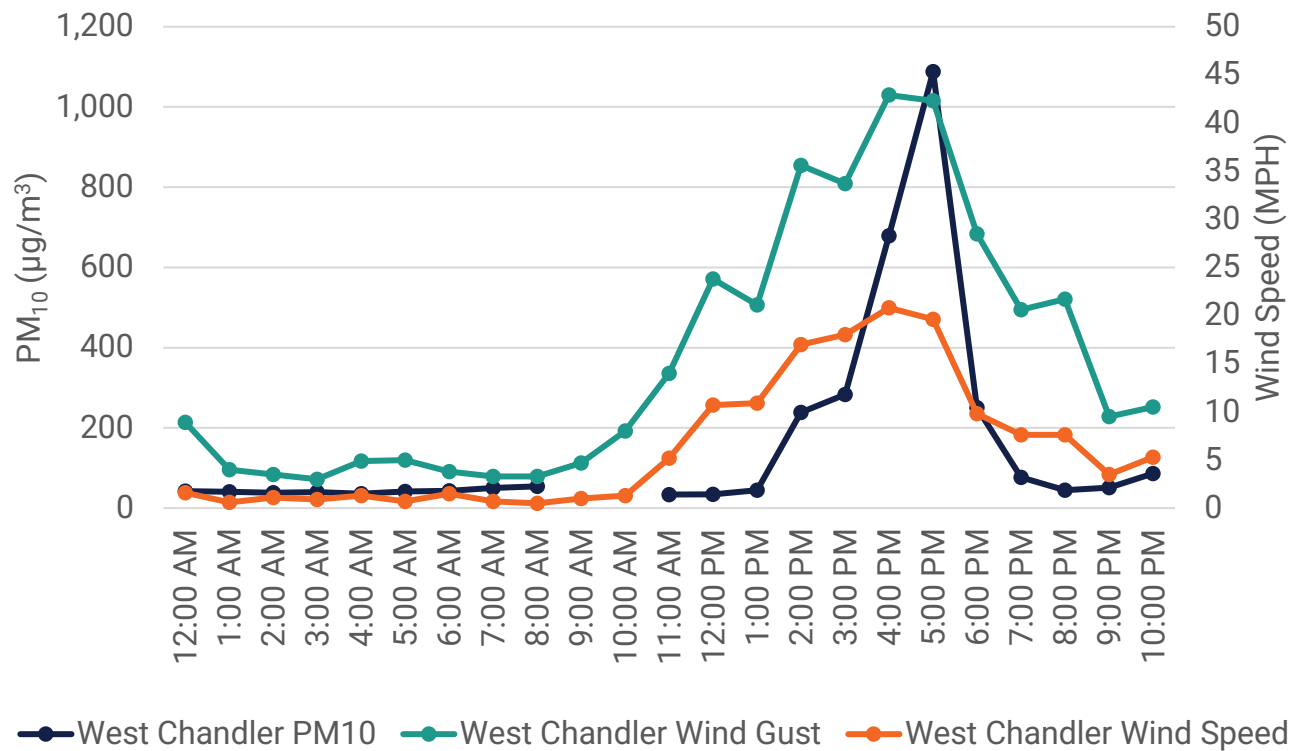
5-Minute PM₁₀ and Wind Speed at Stanfield



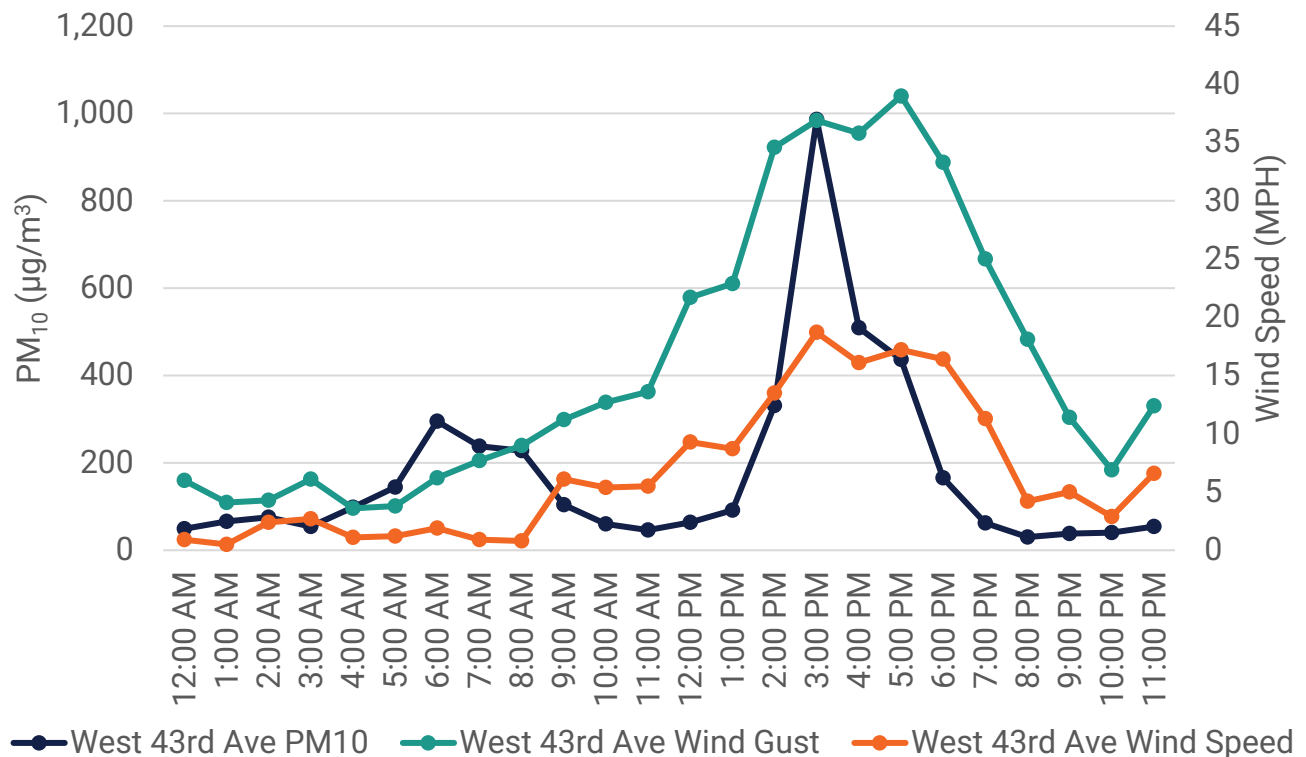
Hourly PM₁₀ and Wind Speed at Higley



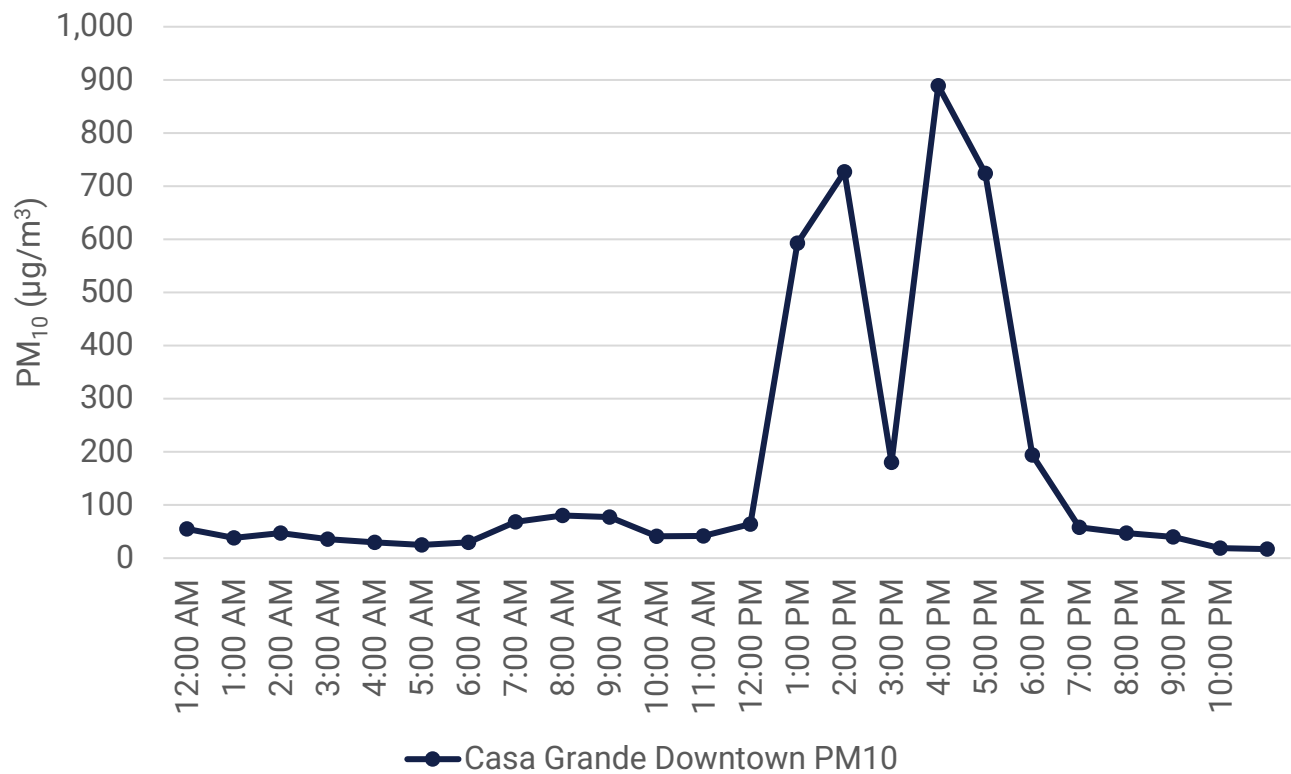
Hourly PM₁₀ and Wind Speed at West Chandler



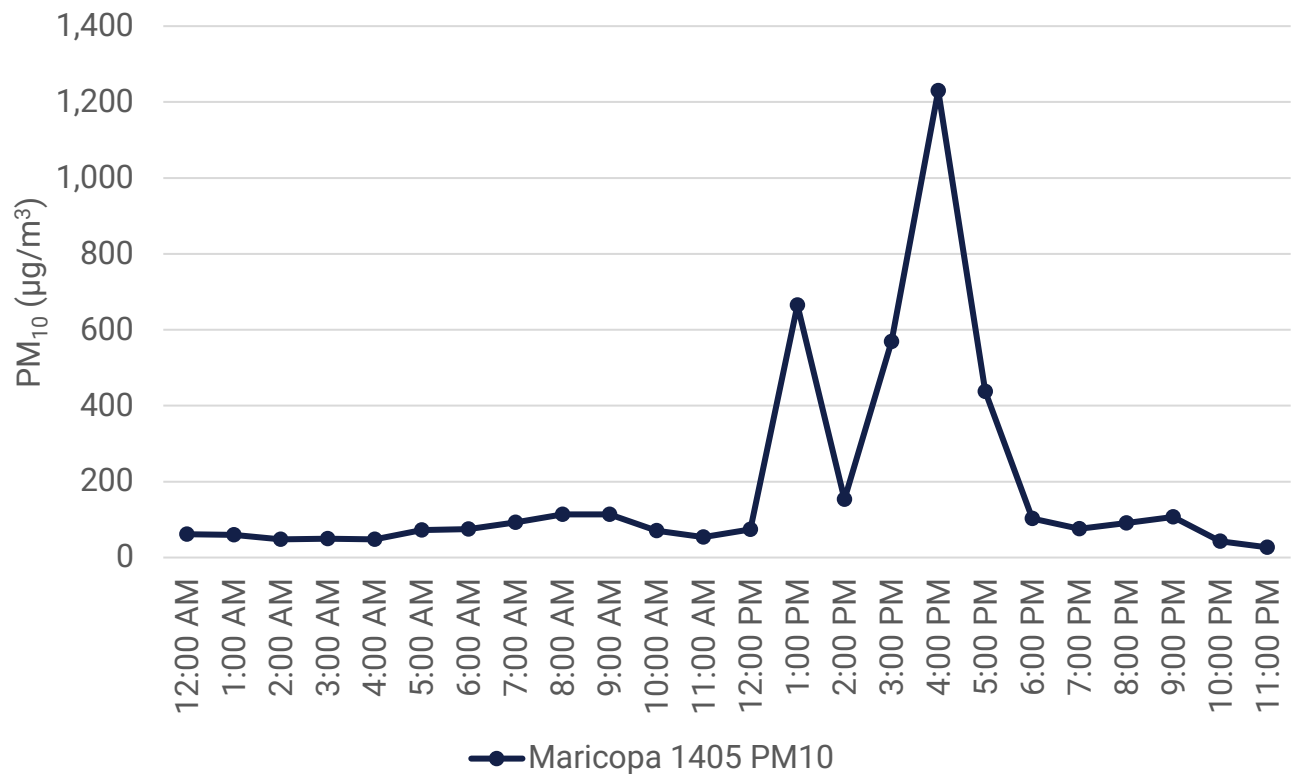
Hourly PM₁₀ and Wind Speed at West 43rd Avenue



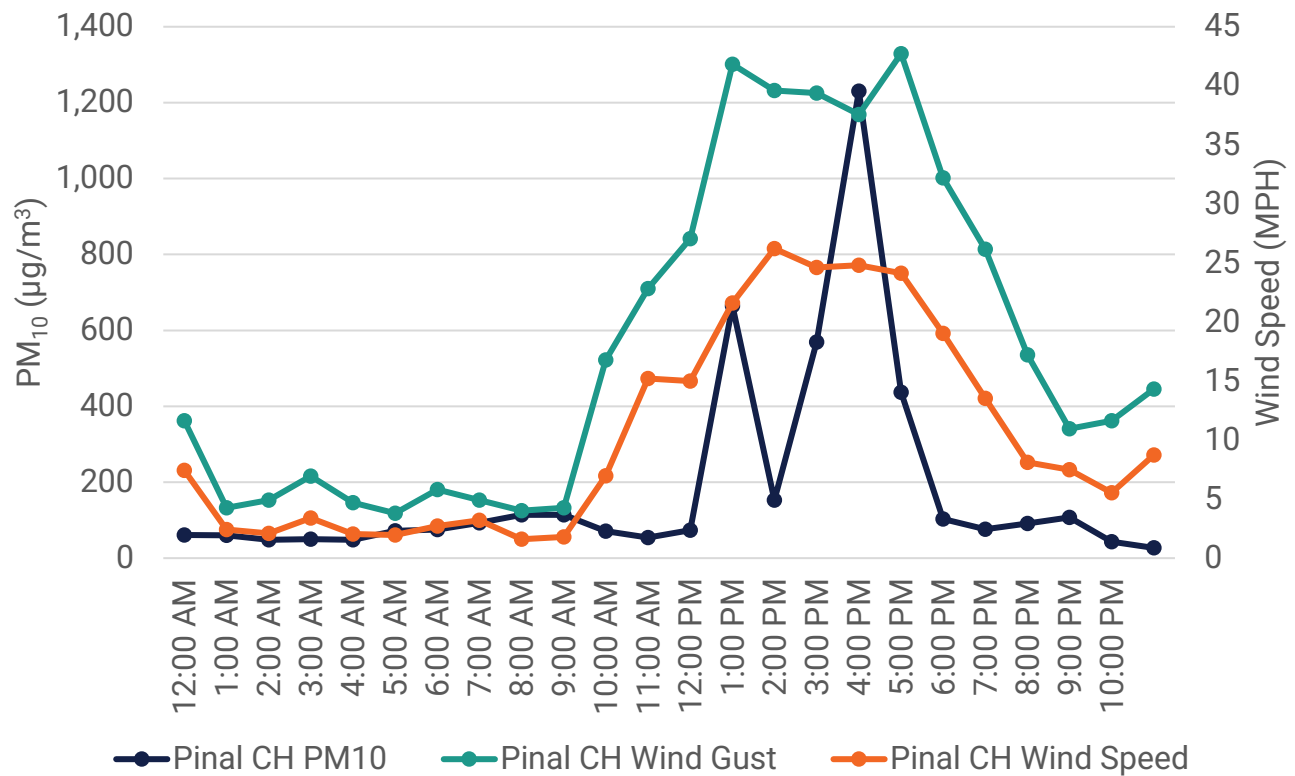
Hourly PM₁₀ at Casa Grande Downtown



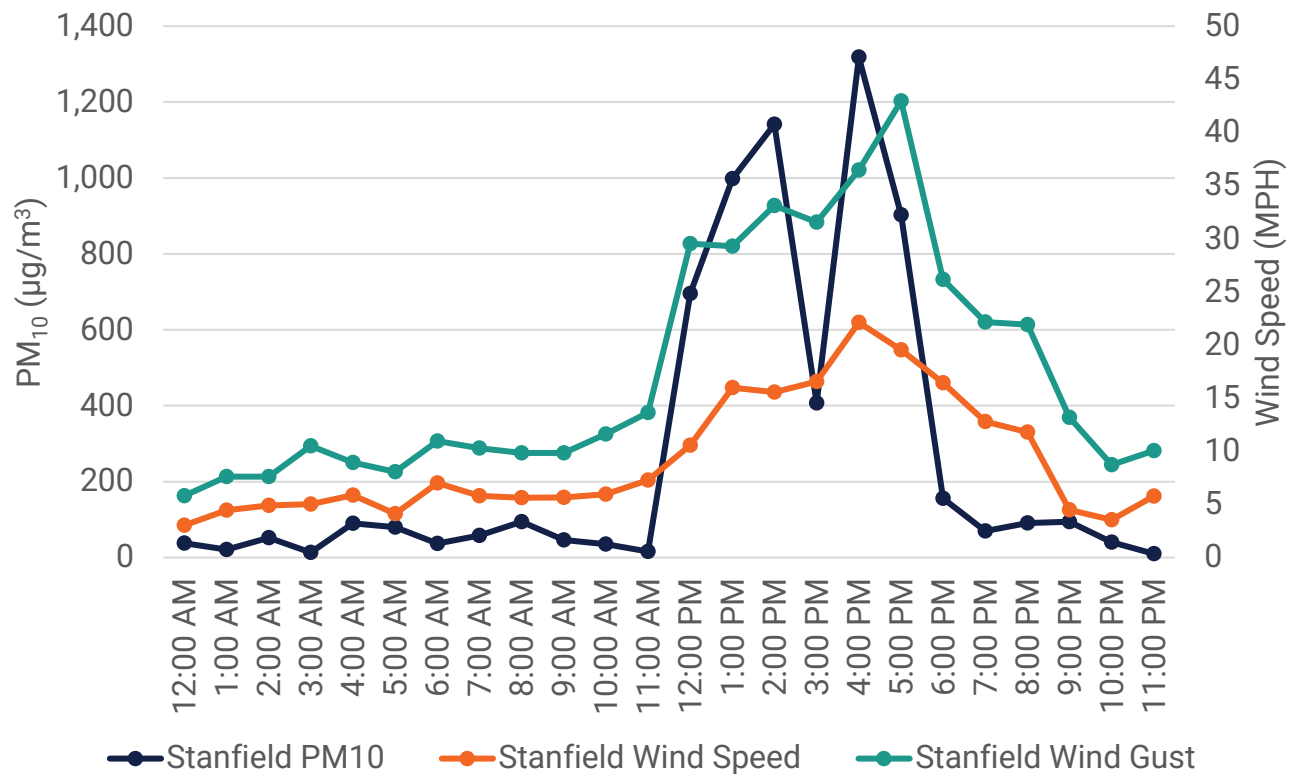
Hourly PM₁₀ at Maricopa 1405



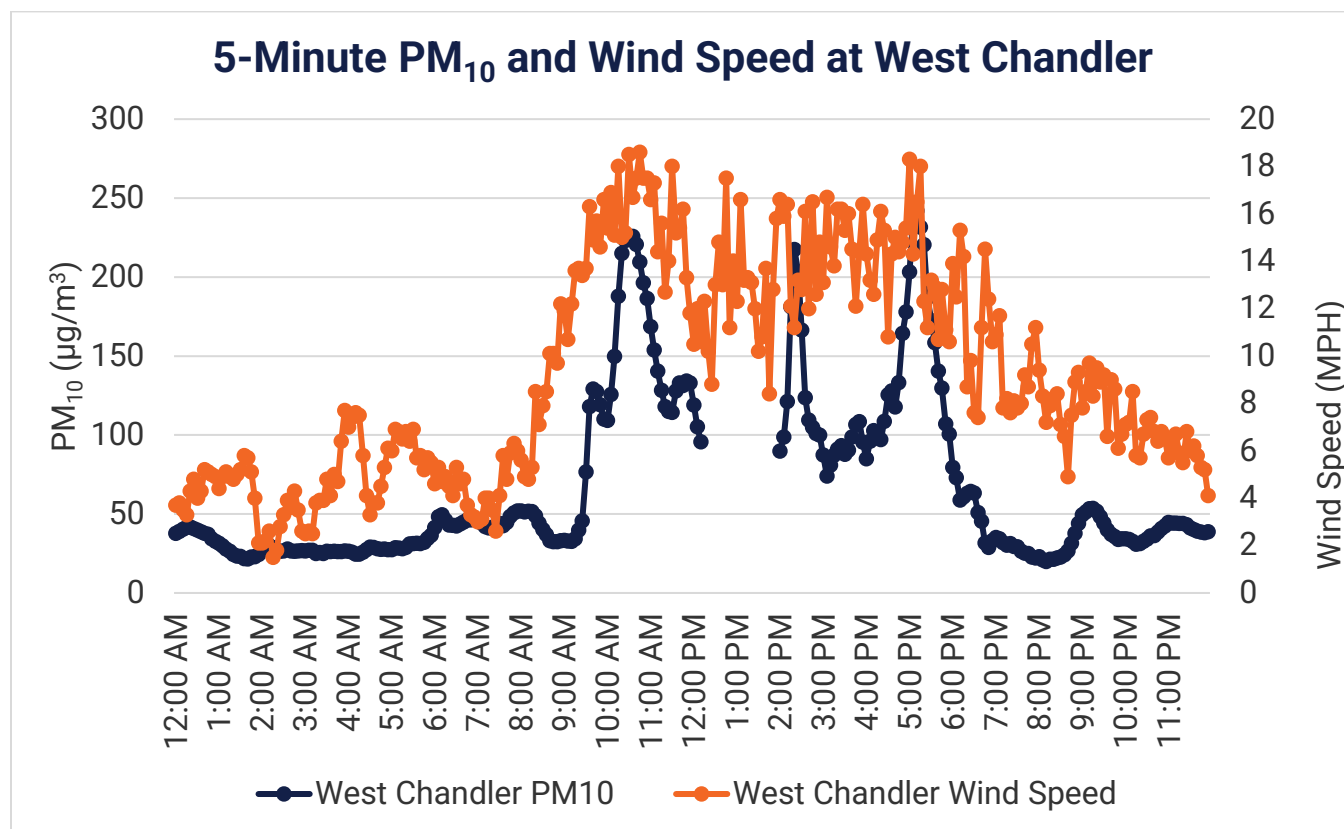
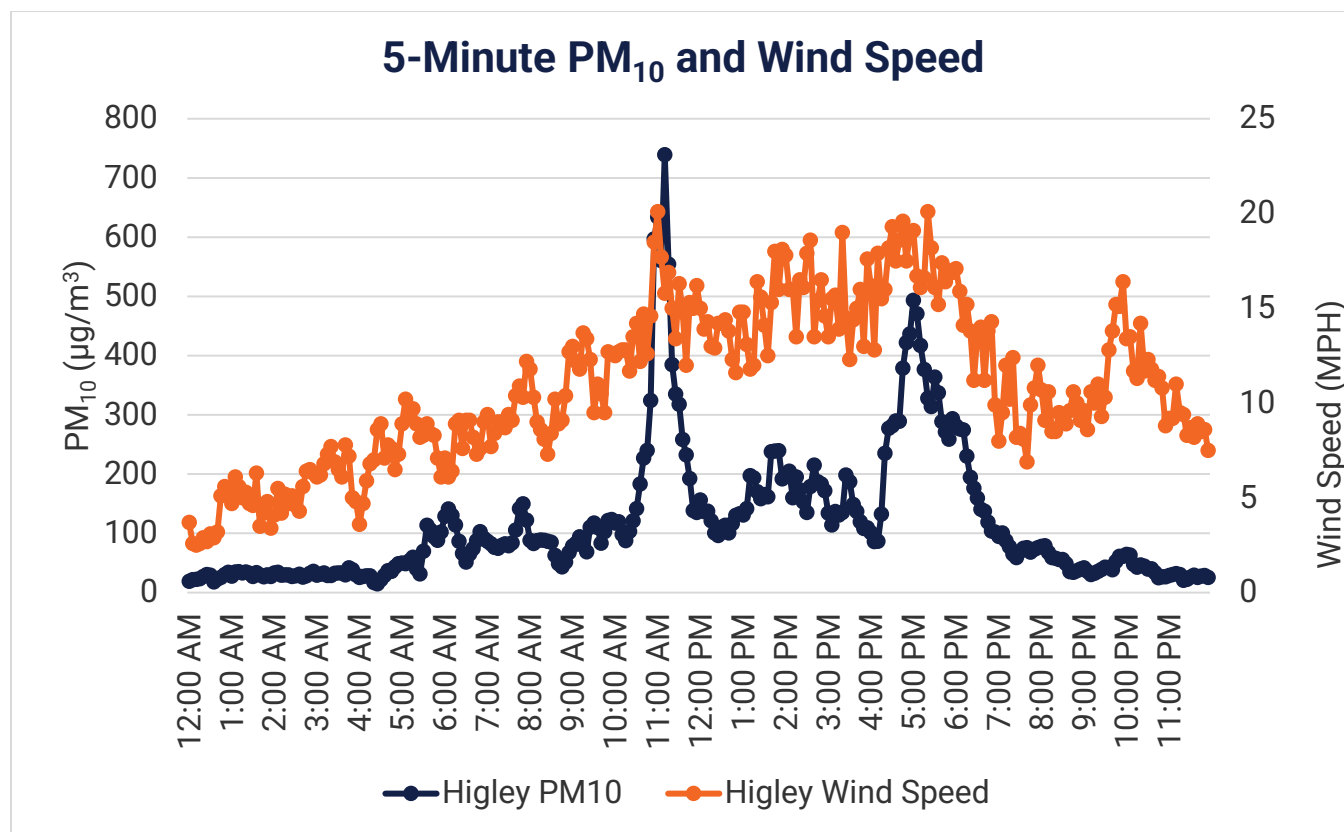
Hourly PM₁₀ and Wind Speed at Pinal County Housing



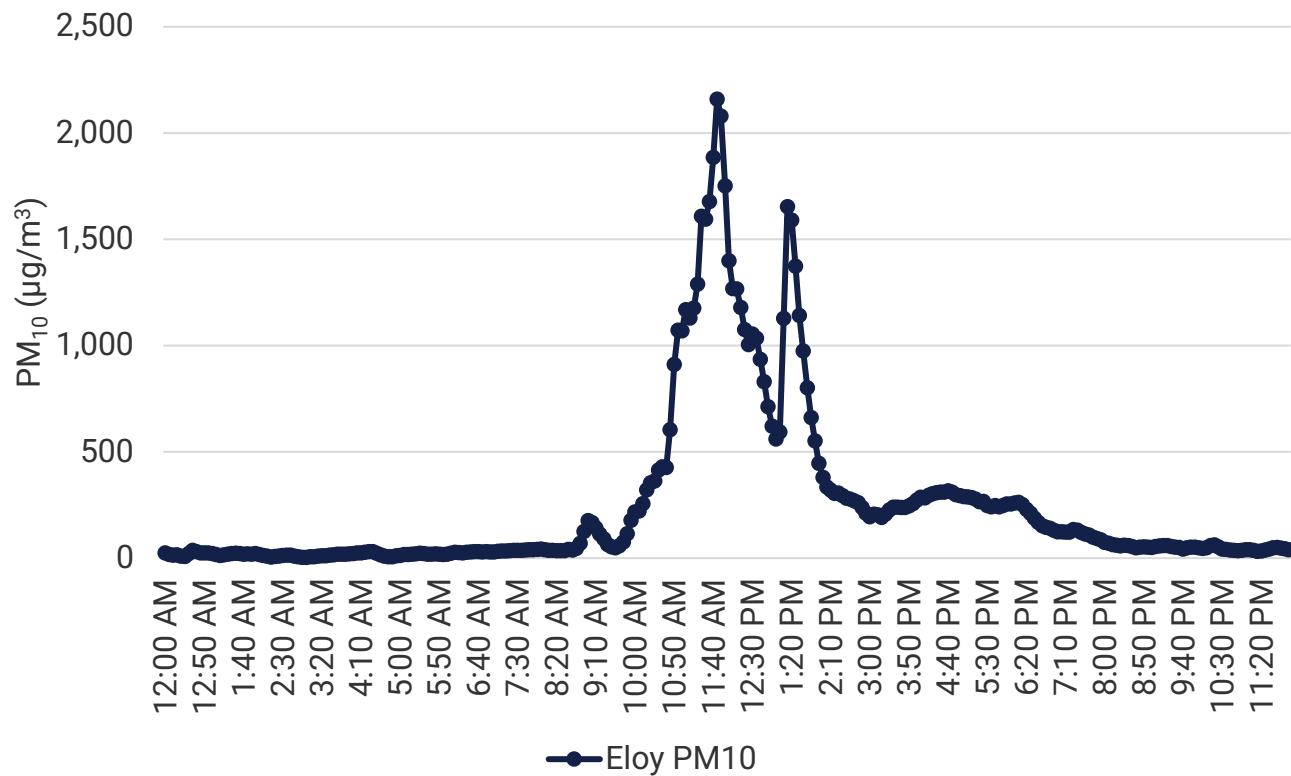
Hourly PM₁₀ and Wind Speed at Stanfield



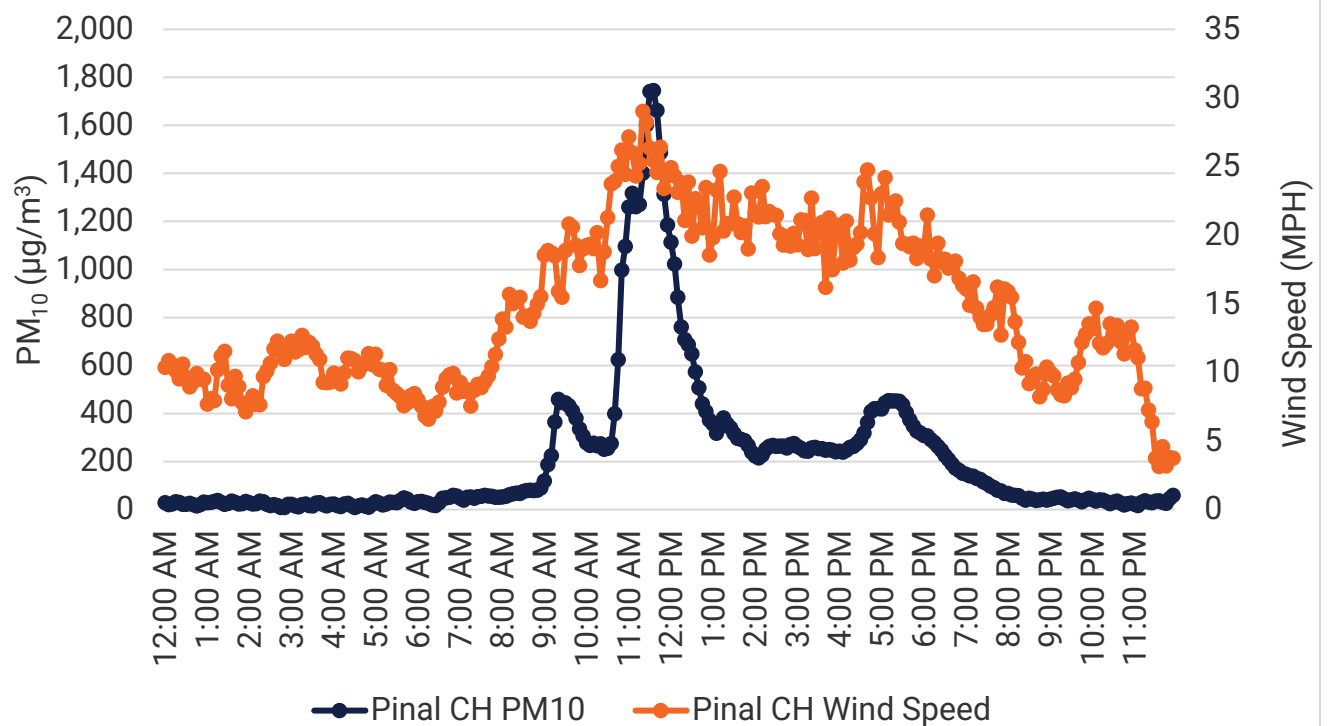
April 21, 2021



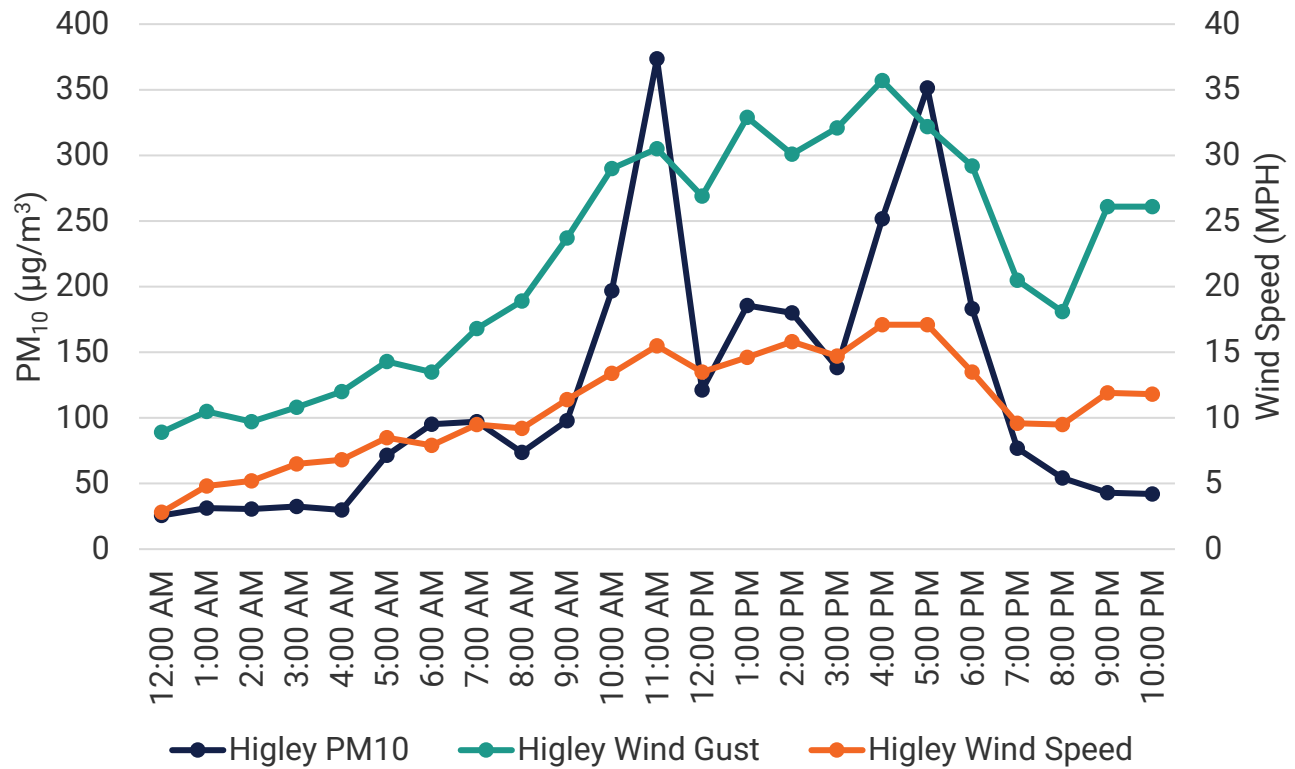
5-Minute PM₁₀ at Eloy



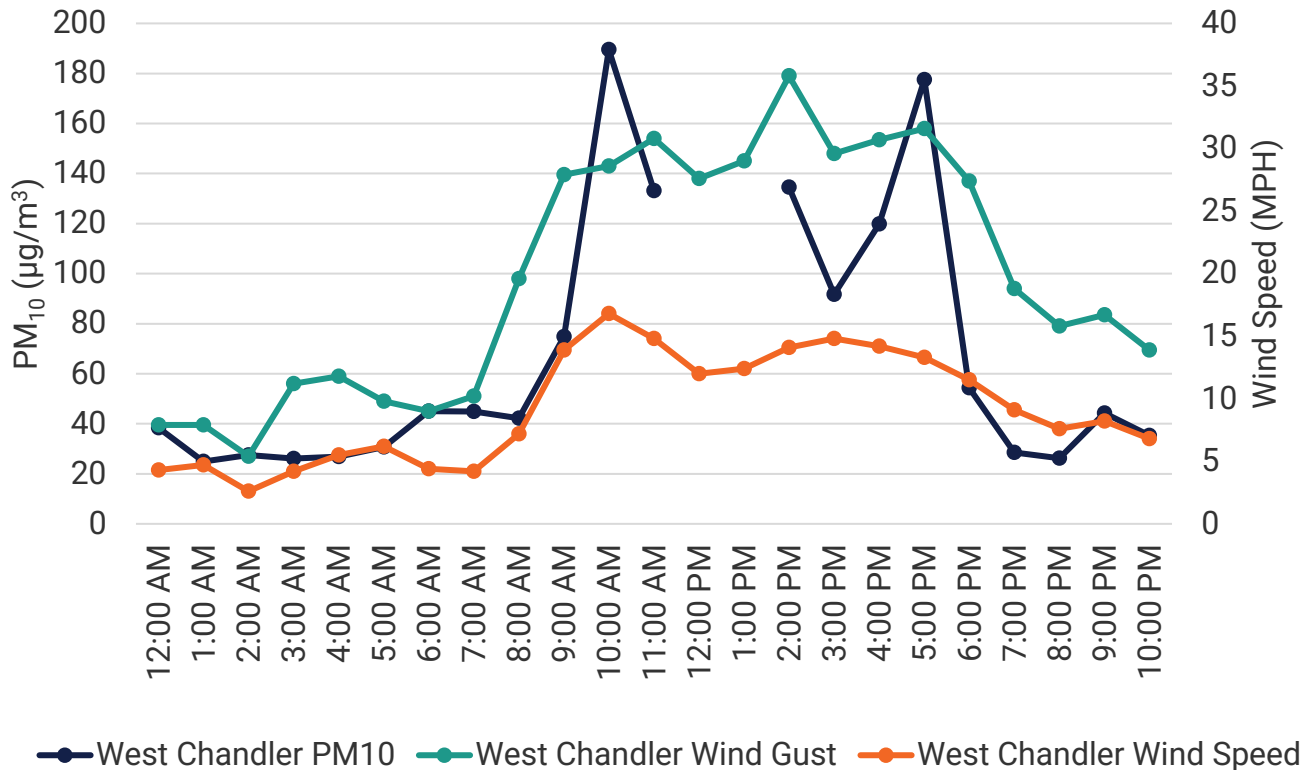
5-Minute PM₁₀ and Wind Speed at Pinal County Housing



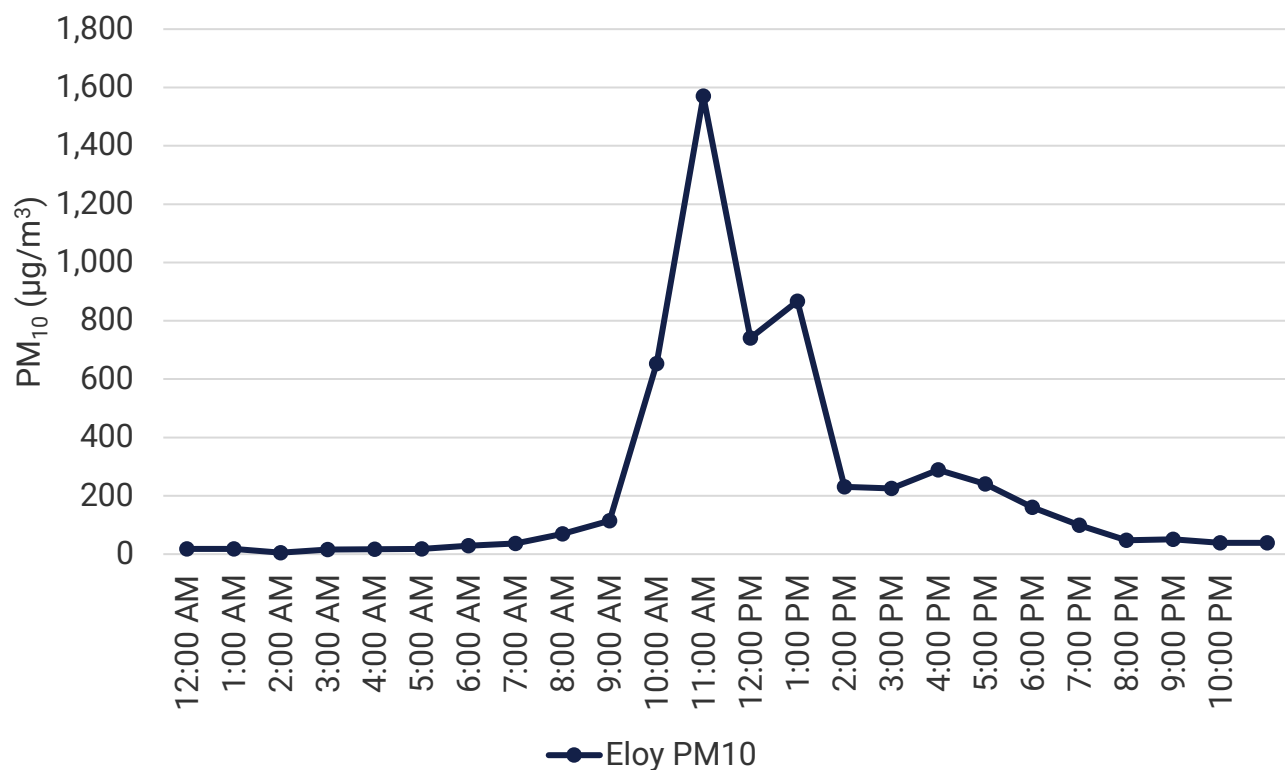
Hourly PM₁₀ and Wind Speed at Higley



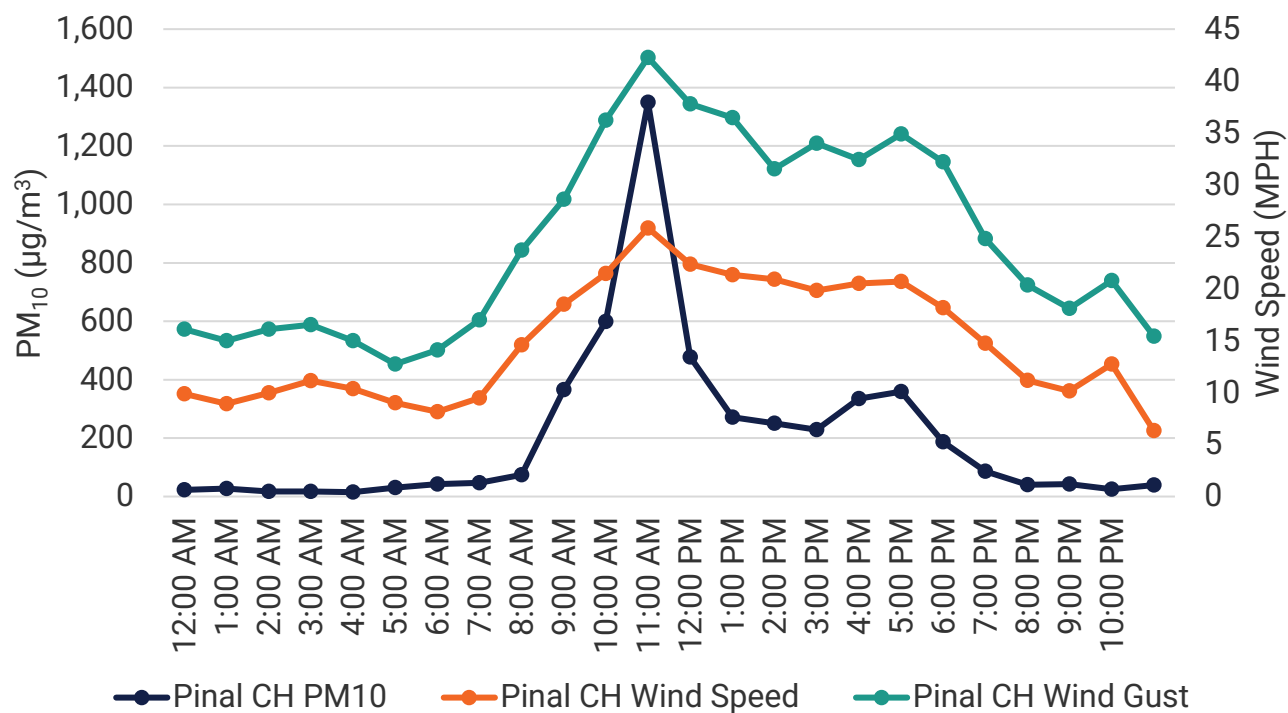
Hourly PM₁₀ and Wind Speed at West Chandler



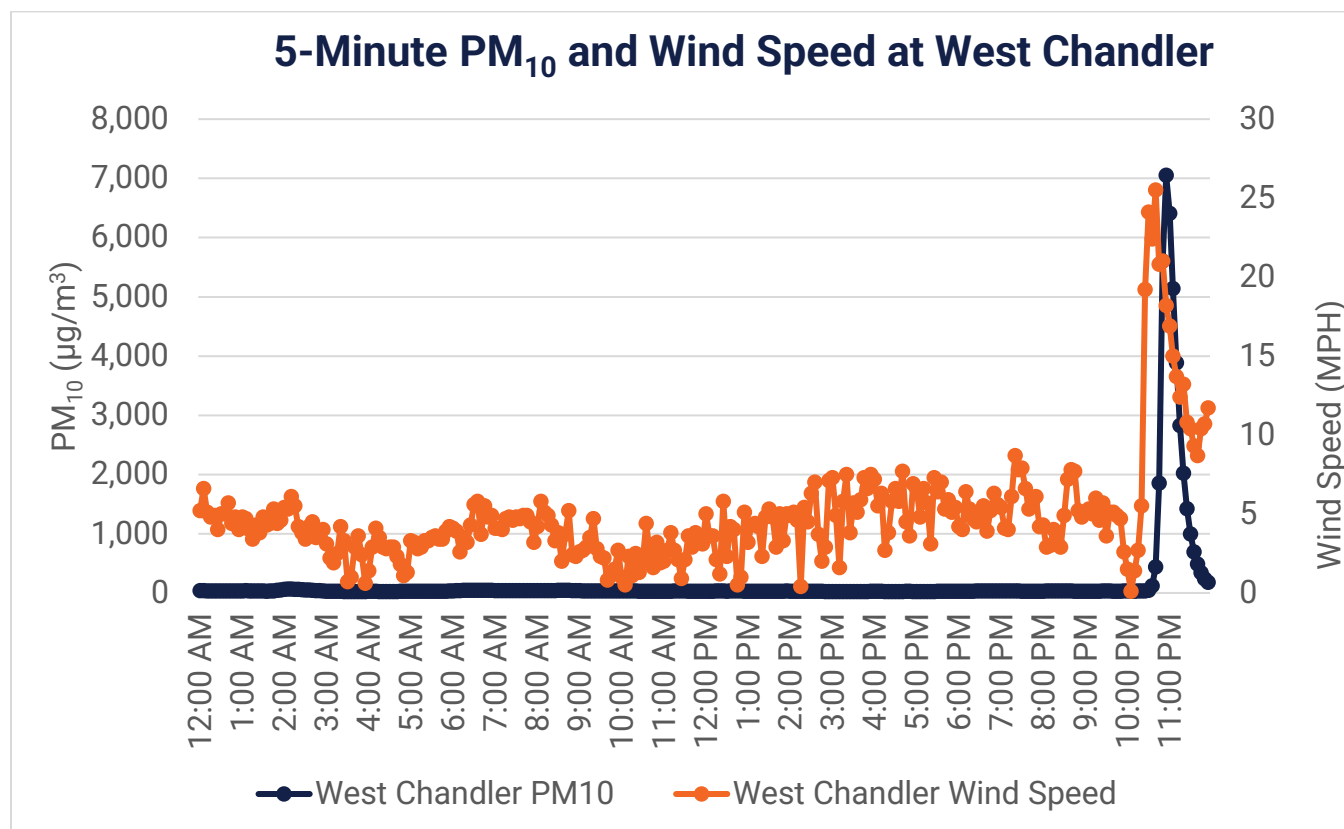
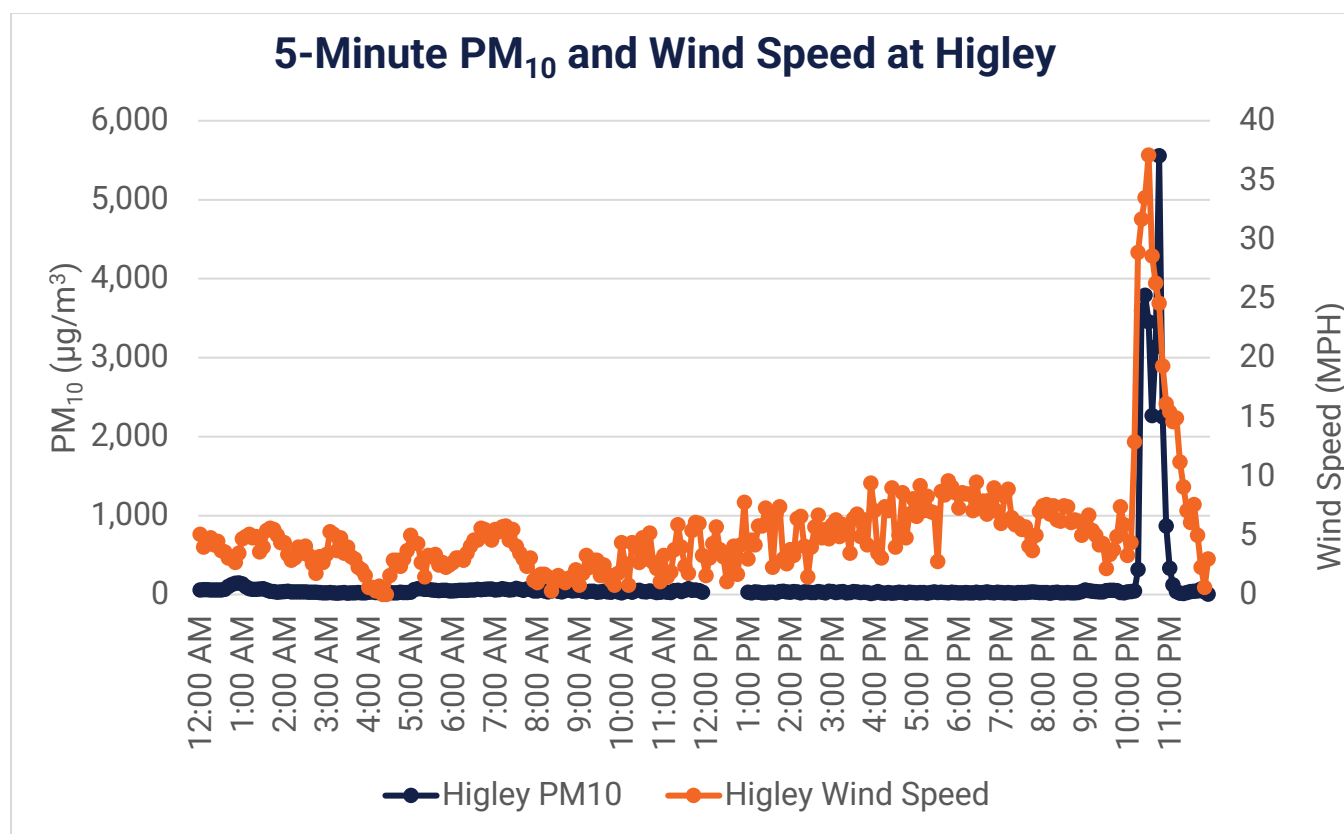
Hourly PM₁₀ at Eloy



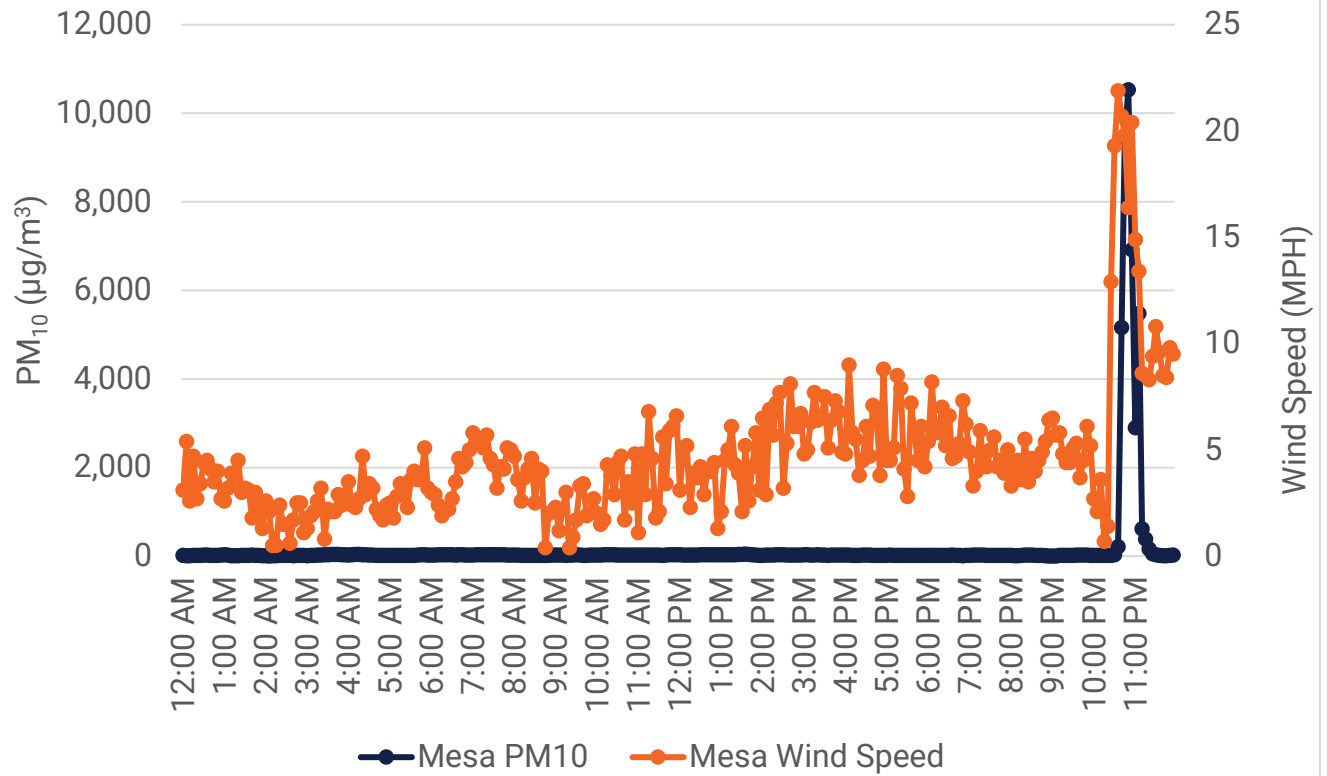
Hourly PM₁₀ and Wind Speed at Pinal County Housing



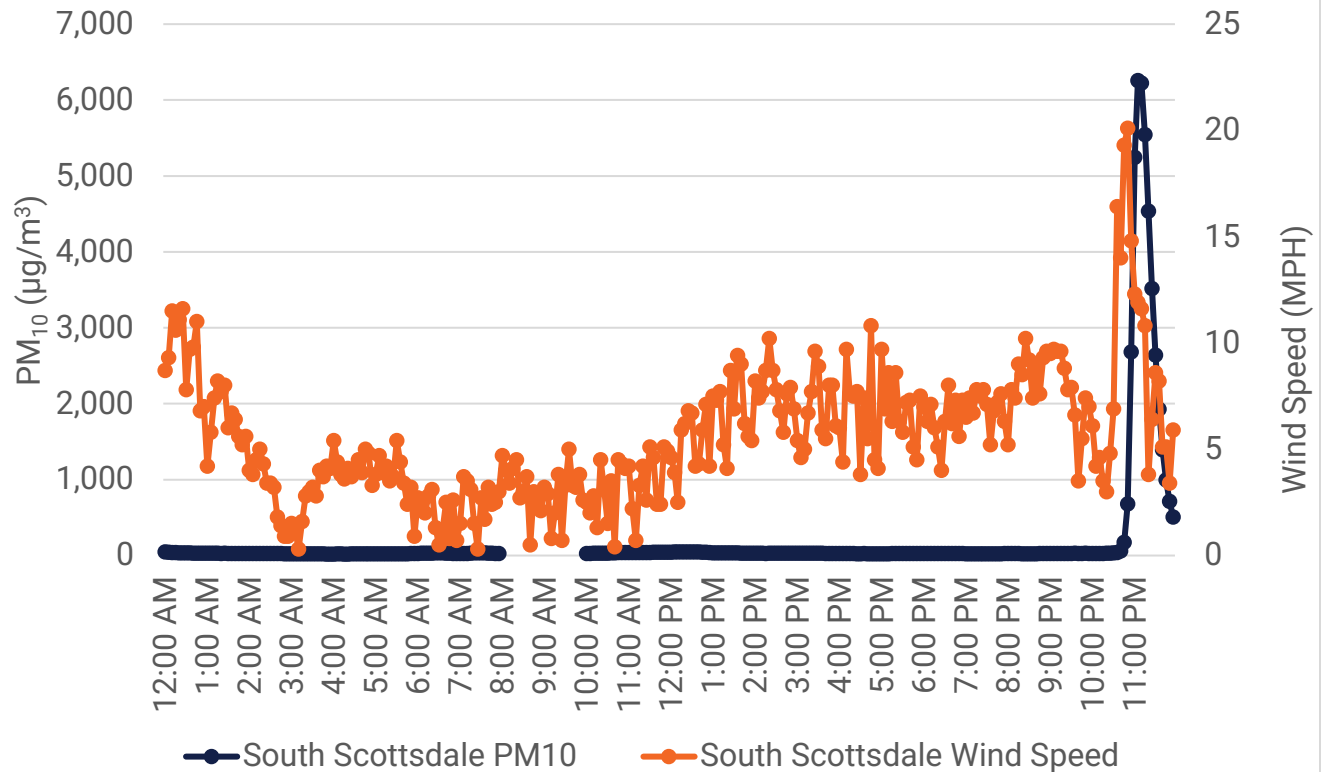
July 9, 2021



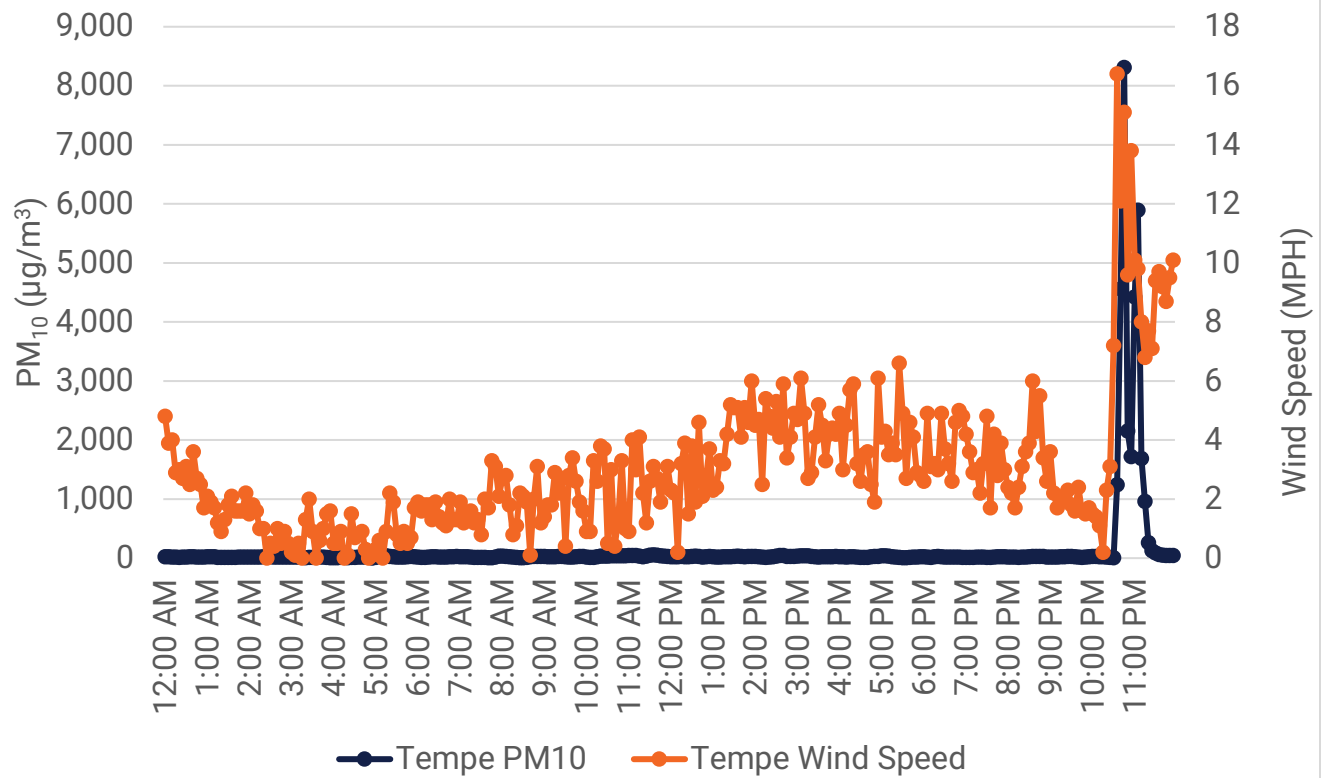
5-Minute PM₁₀ and Wind Speed at Mesa



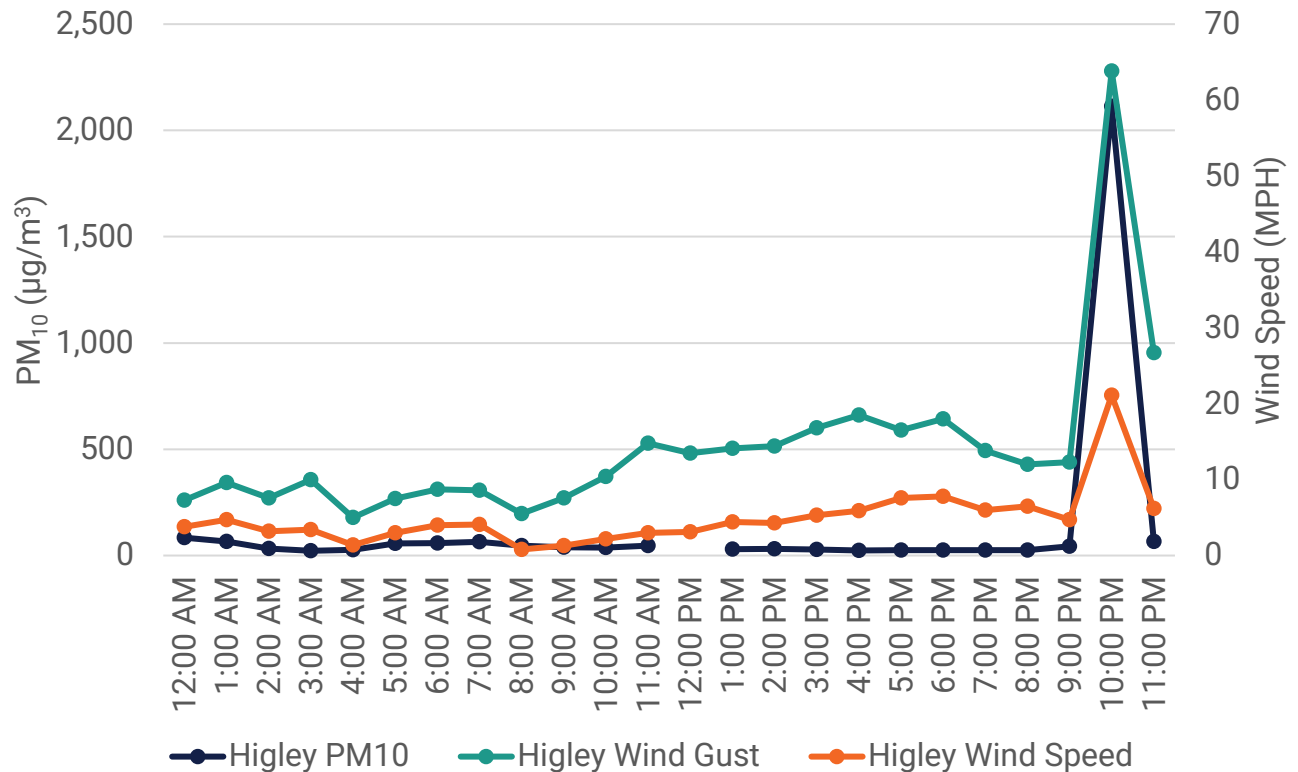
5-Minute PM₁₀ and Wind Speed at South Scottsdale



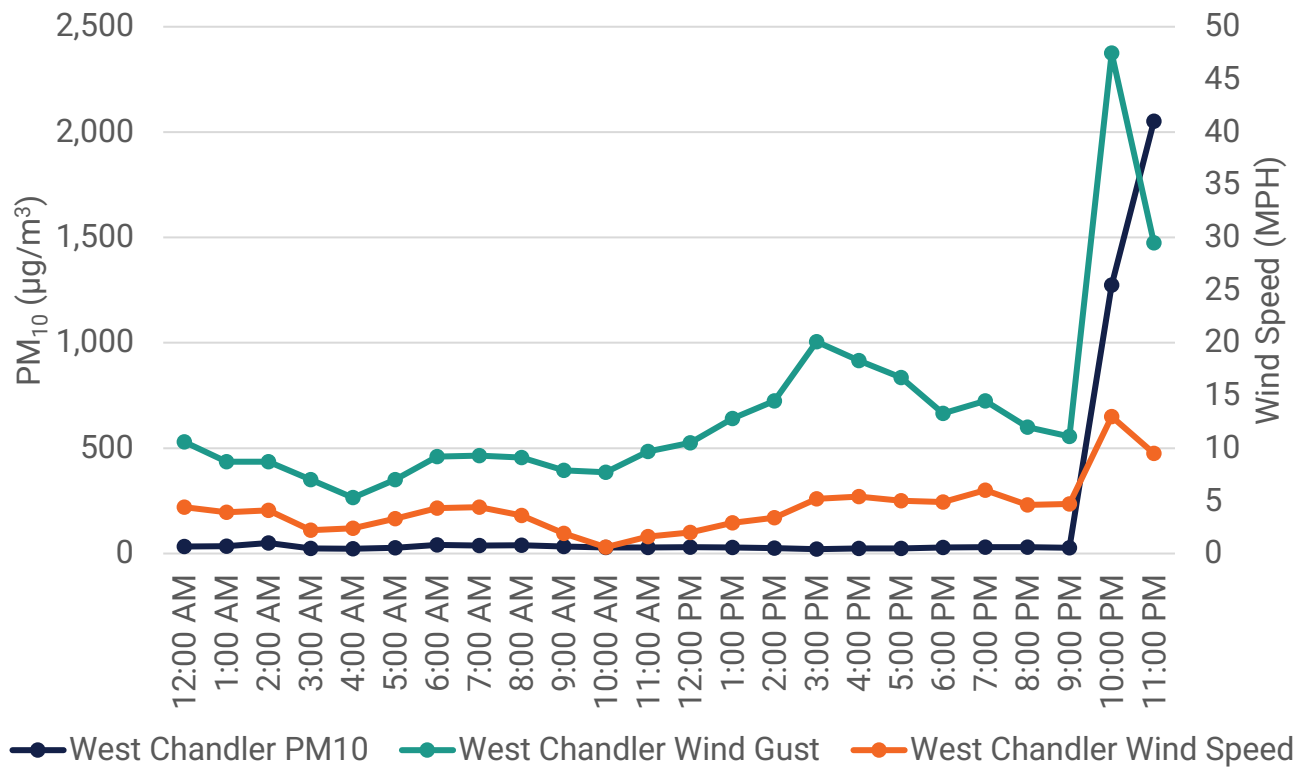
5-Minute PM₁₀ and Wind Speed at Tempe



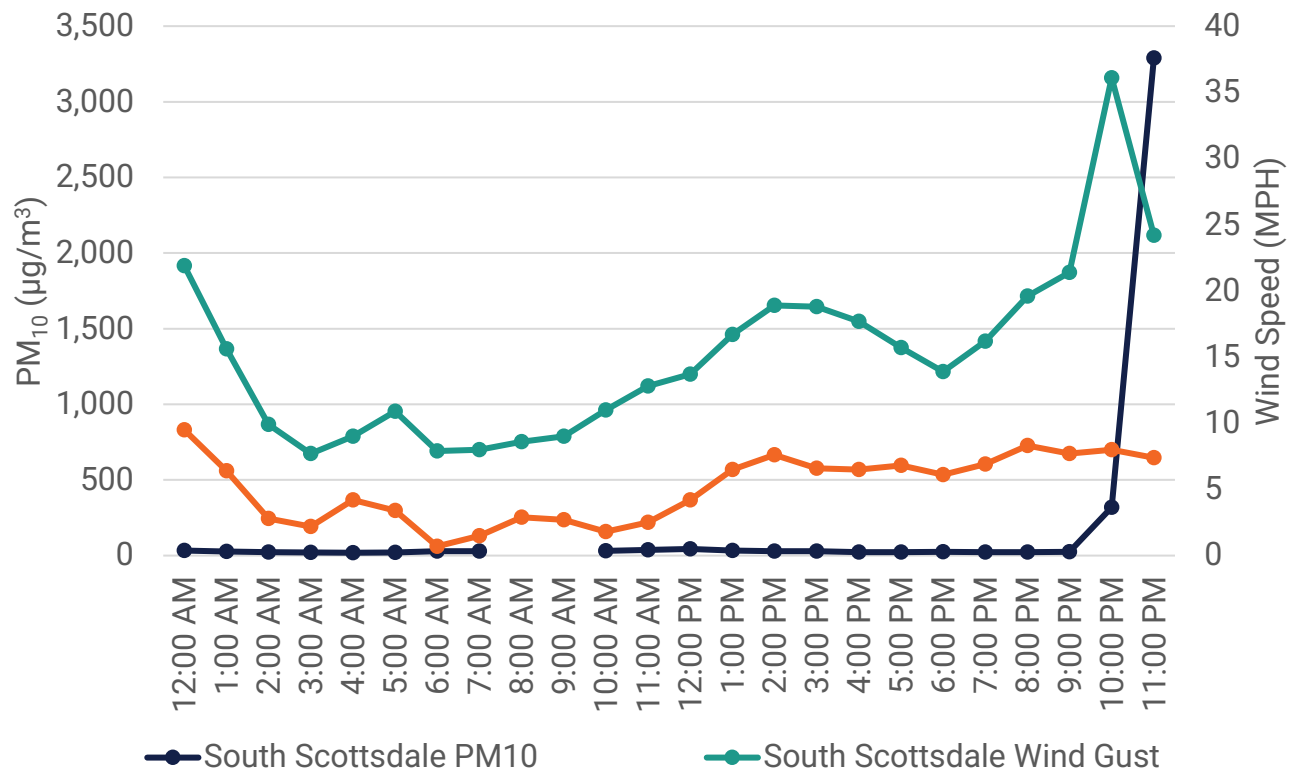
Hourly PM₁₀ and Wind Speed at Higley



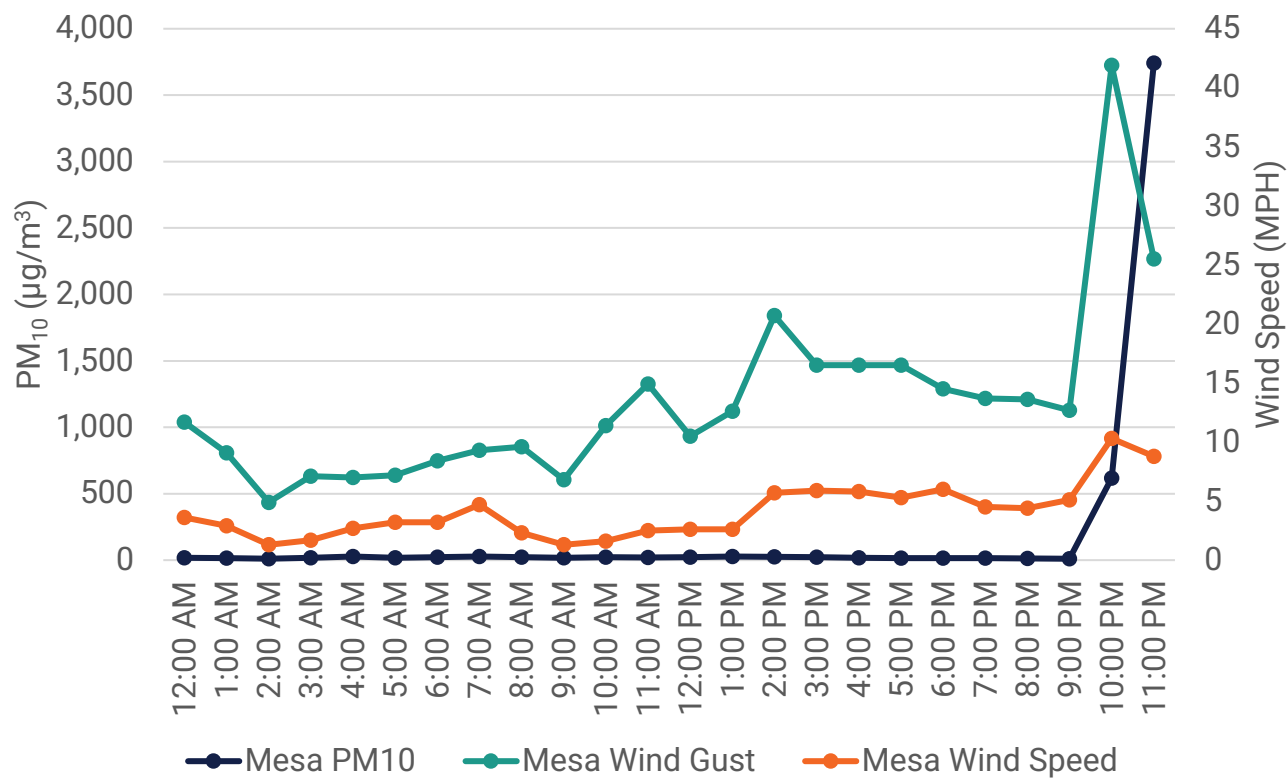
Hourly PM₁₀ and Wind Speed at West Chandler



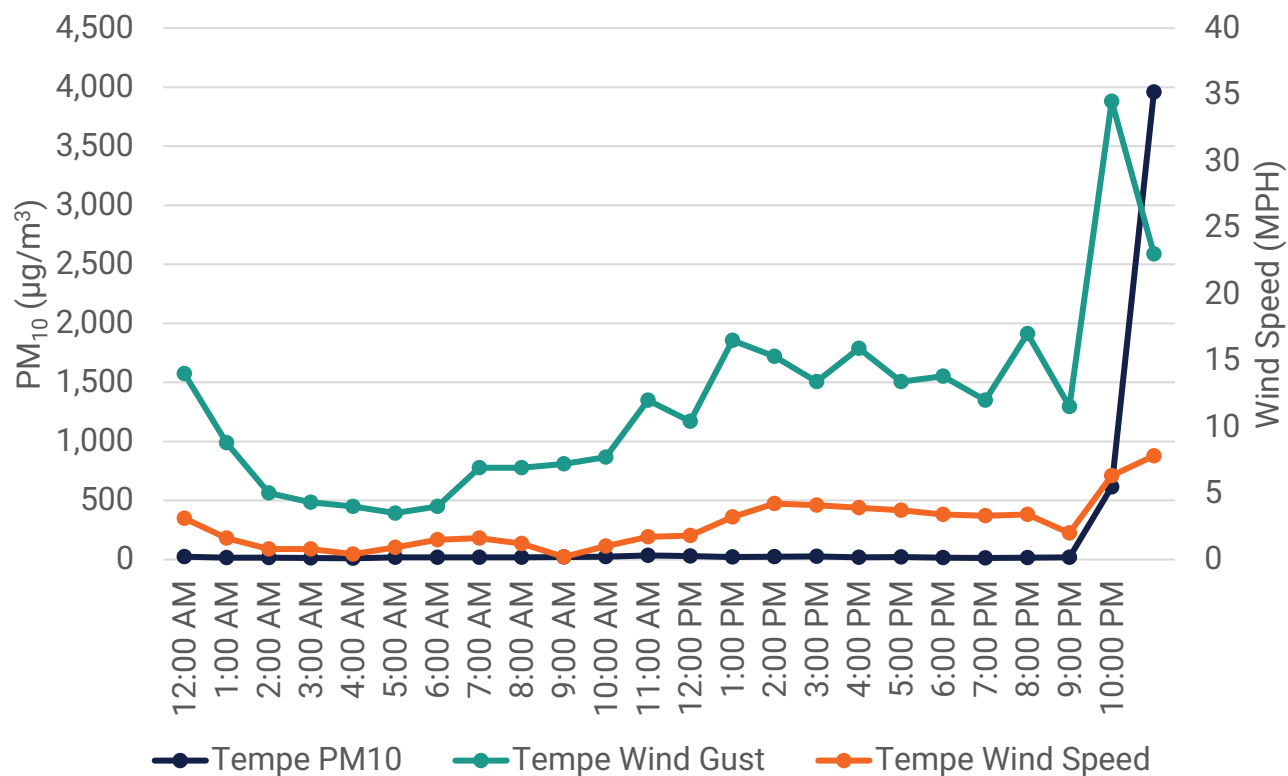
Hourly PM₁₀ and Wind Speed at South Scottsdale



Hourly PM₁₀ and Wind Speed at Mesa

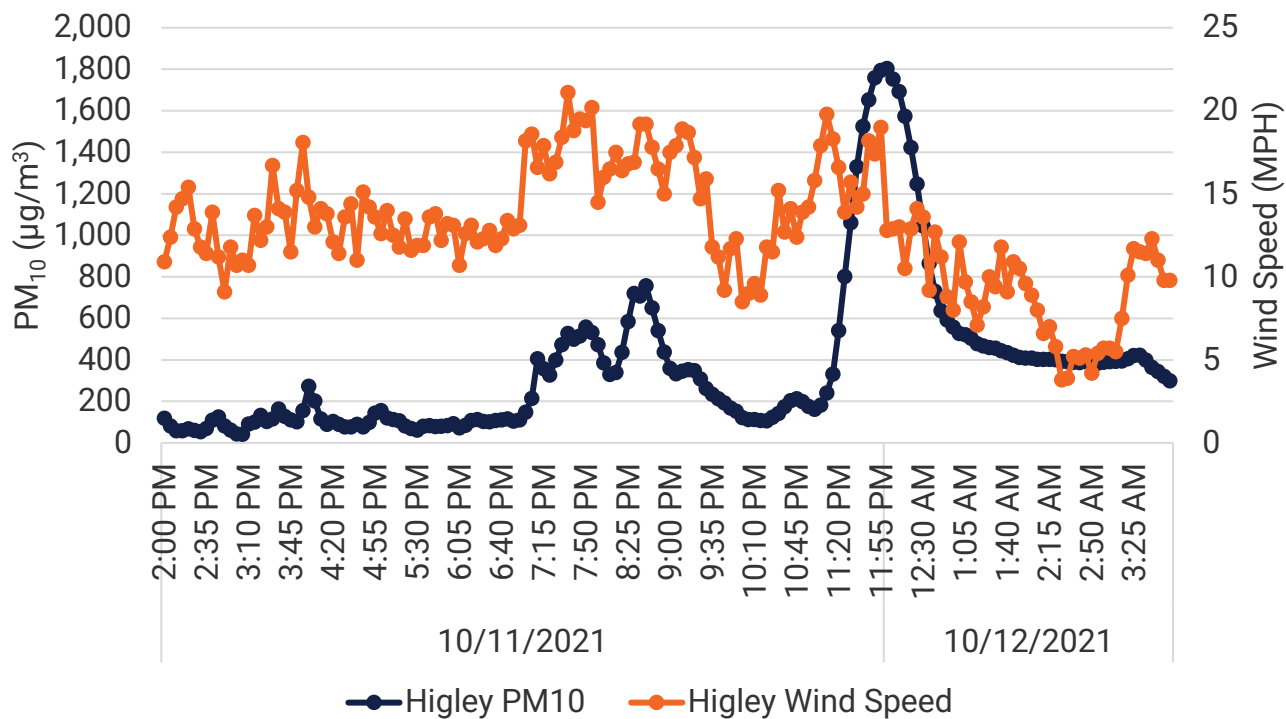


Hourly PM₁₀ and Wind Speed at Tempe

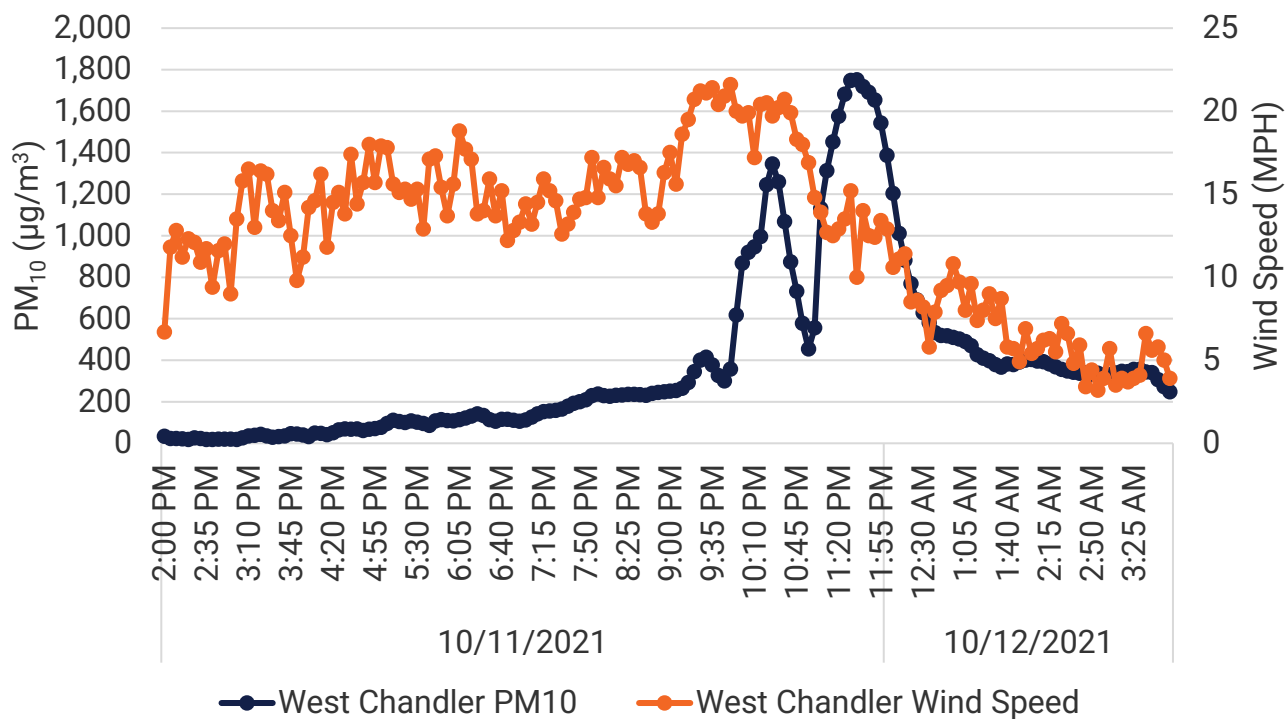


October 11-12, 2021

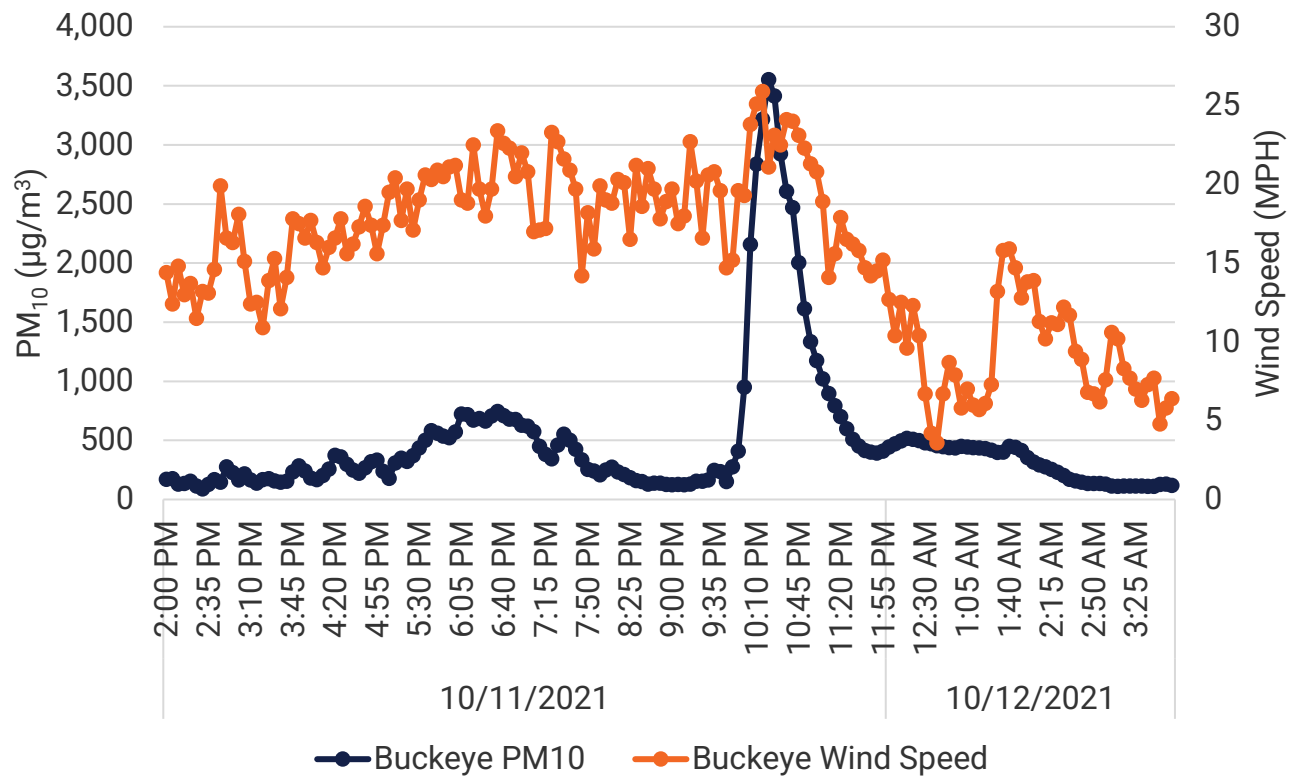
5-Minute PM₁₀ and Wind Speed at Higley



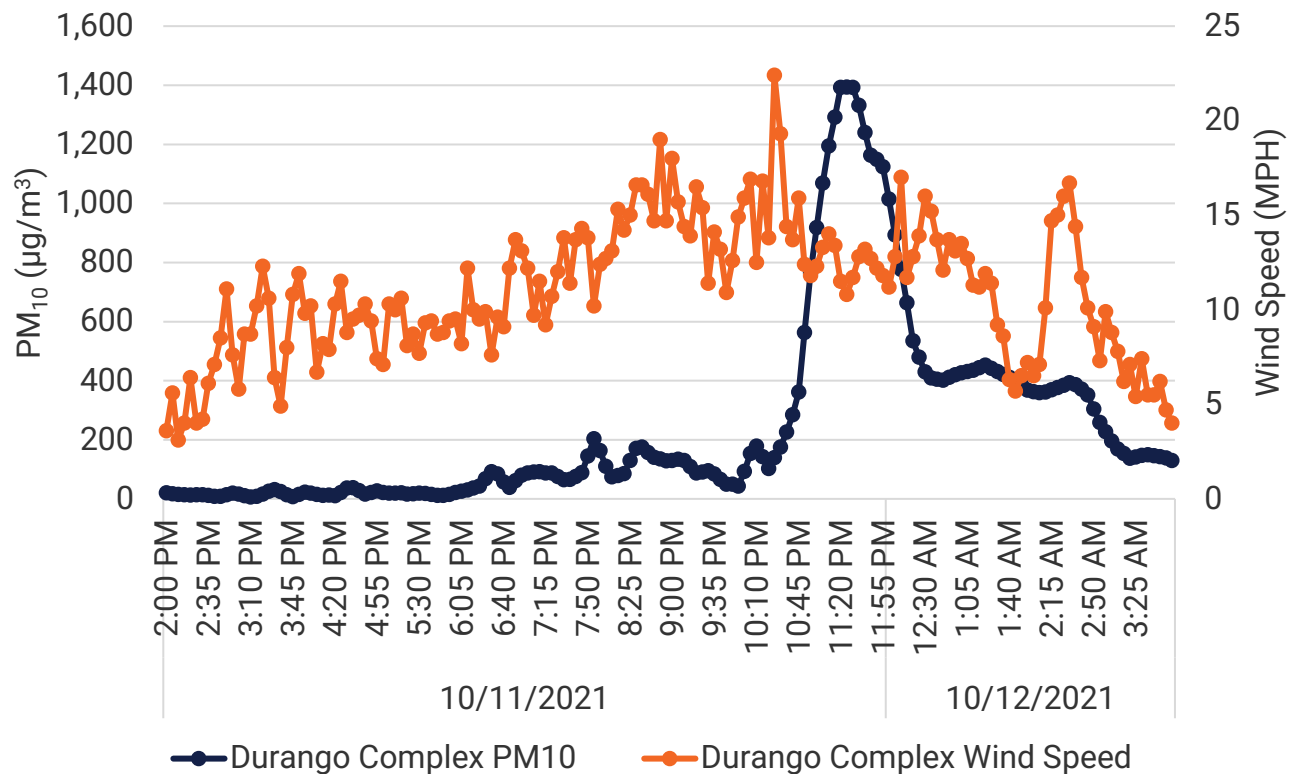
5-Minute PM₁₀ and Wind Speed at West Chandler



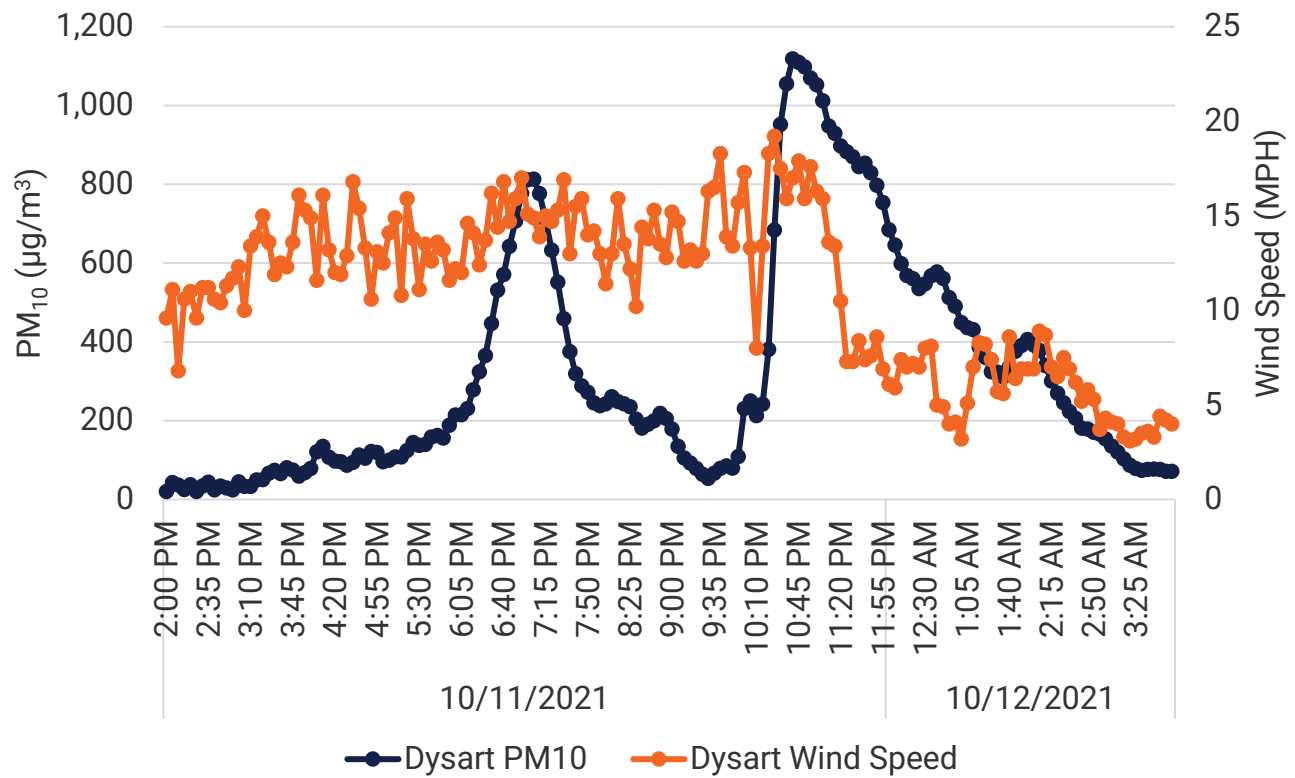
5-Minute PM₁₀ and Wind Speed at Buckeye



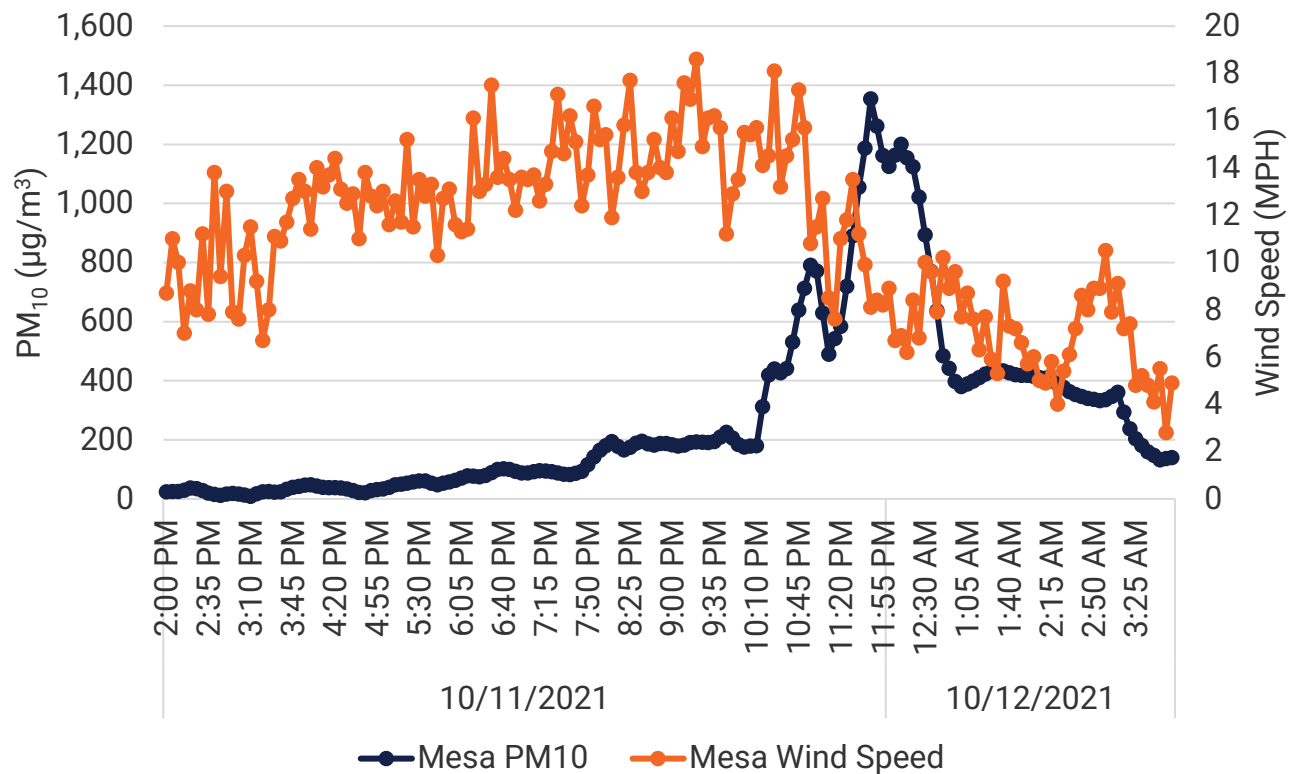
5-Minute PM₁₀ and Wind Speed at Durango Complex



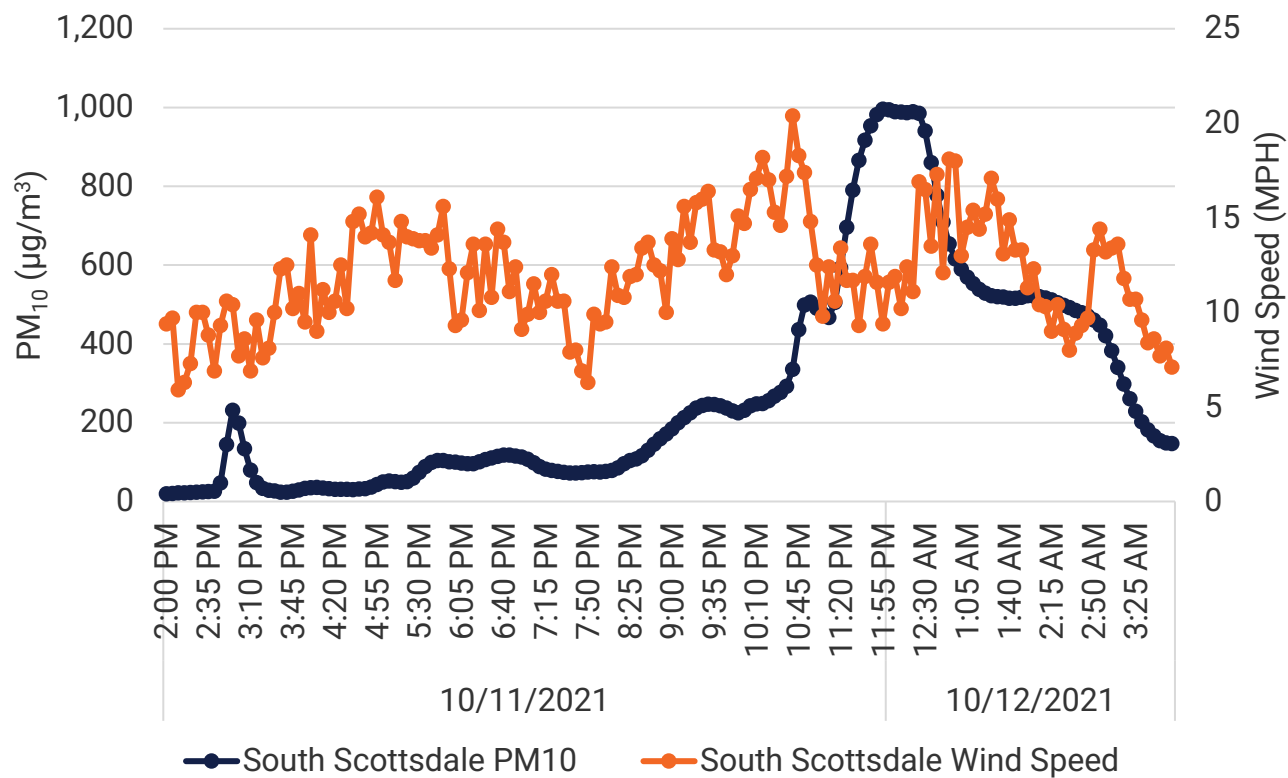
5-Minute PM₁₀ and Wind Speed at Dysart



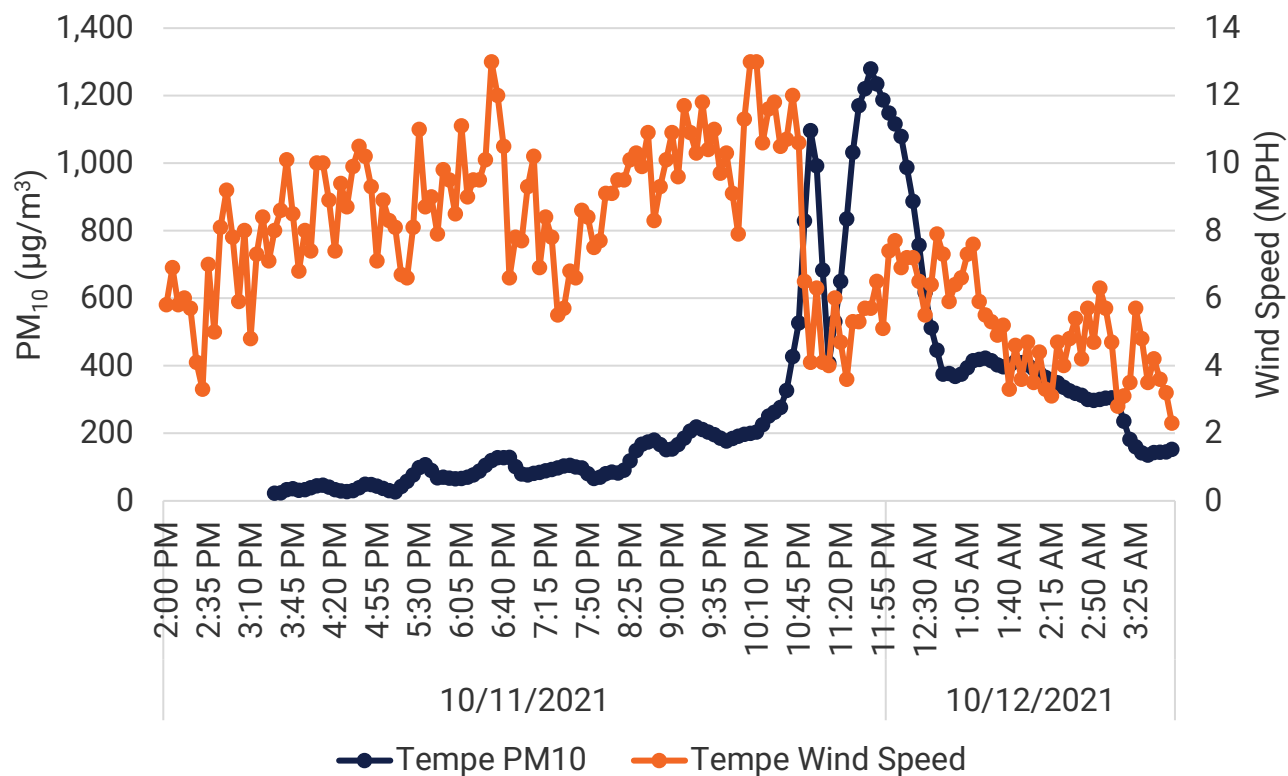
5-Minute PM₁₀ and Wind Speed at Mesa



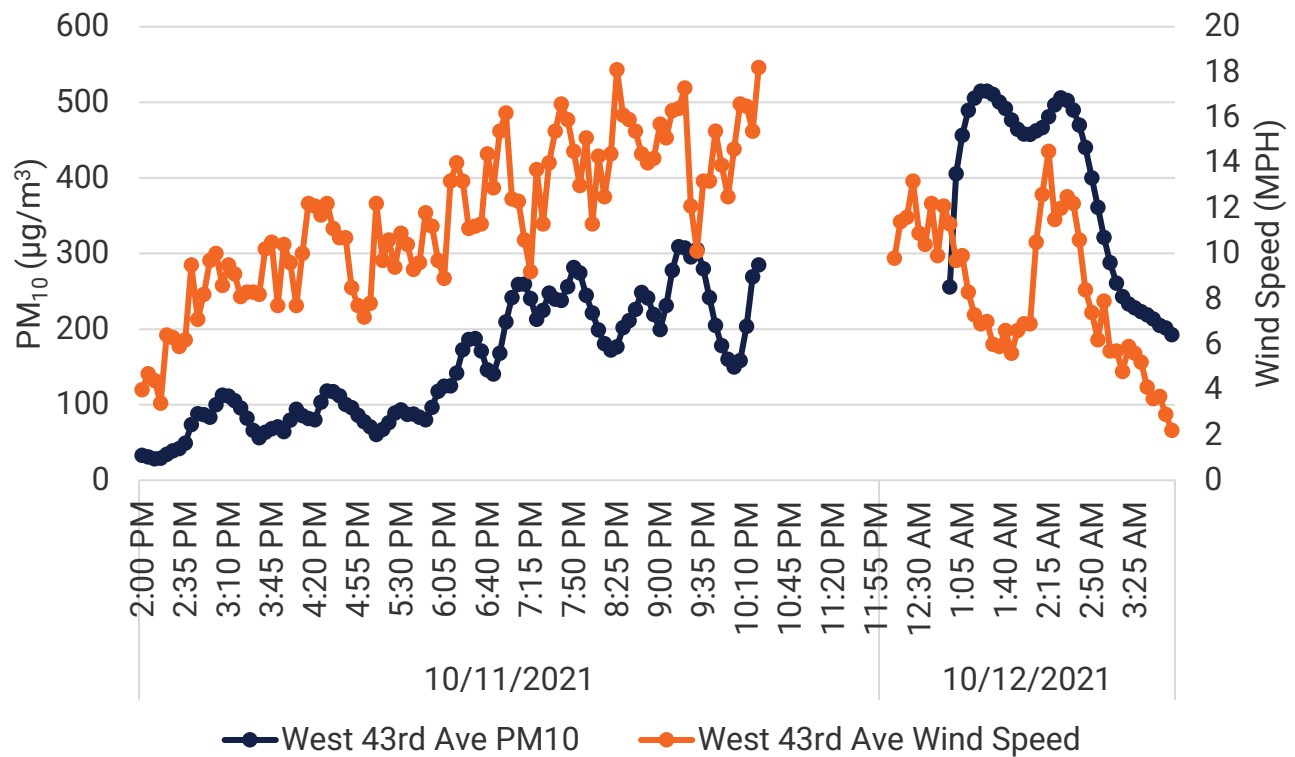
5-Minute PM₁₀ and Wind Speed at South Scottsdale



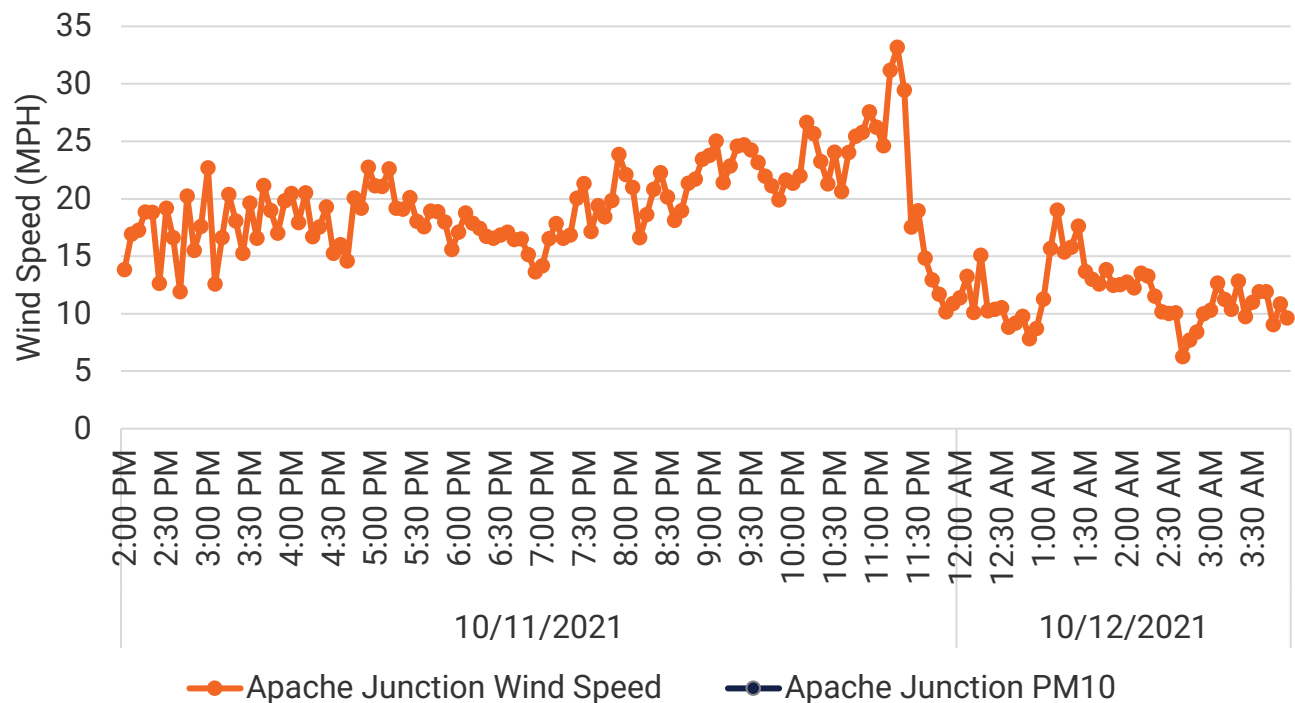
5-Minute PM₁₀ and Wind Speed at Tempe



5-Minute PM₁₀ and Wind Speed at West 43rd Avenue

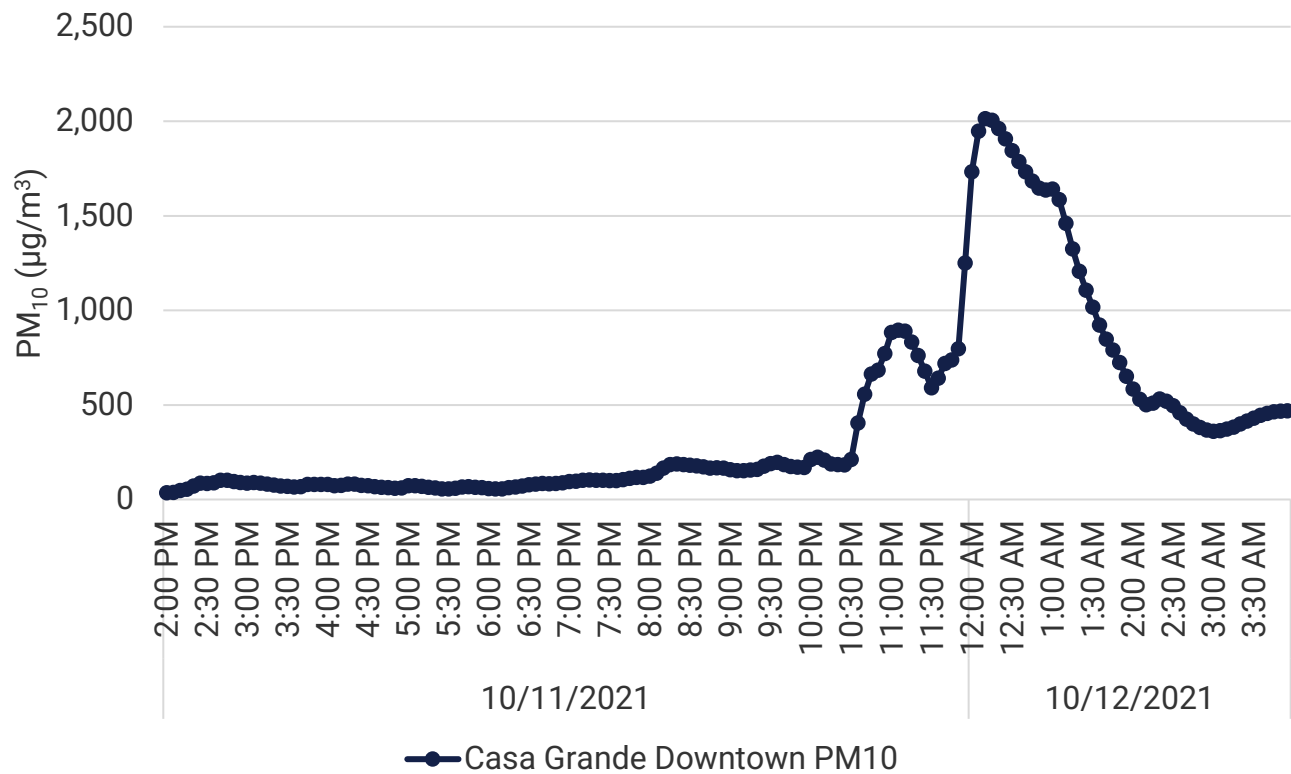


5-Minute PM₁₀ and Wind Speed at Apache Junction

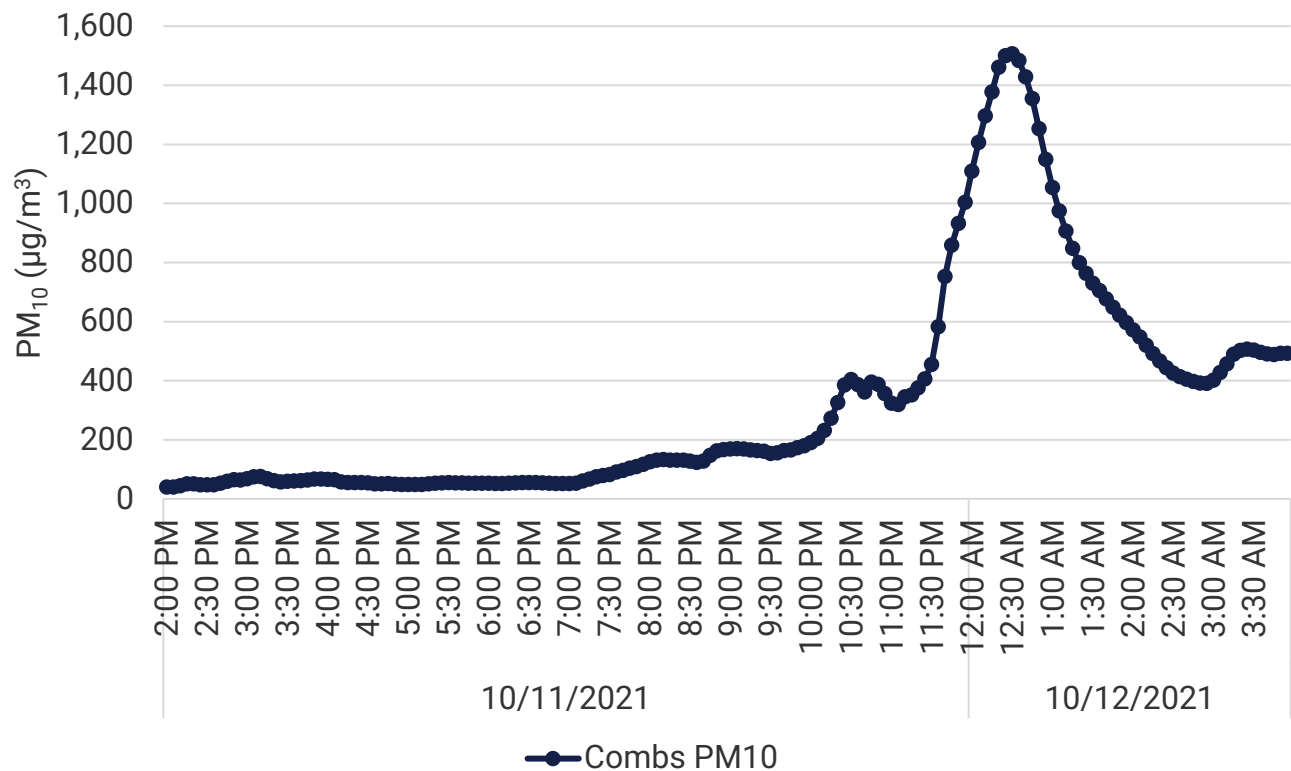


Note: 5-minute PM₁₀ data at Apache Junction were not valid for this time period.

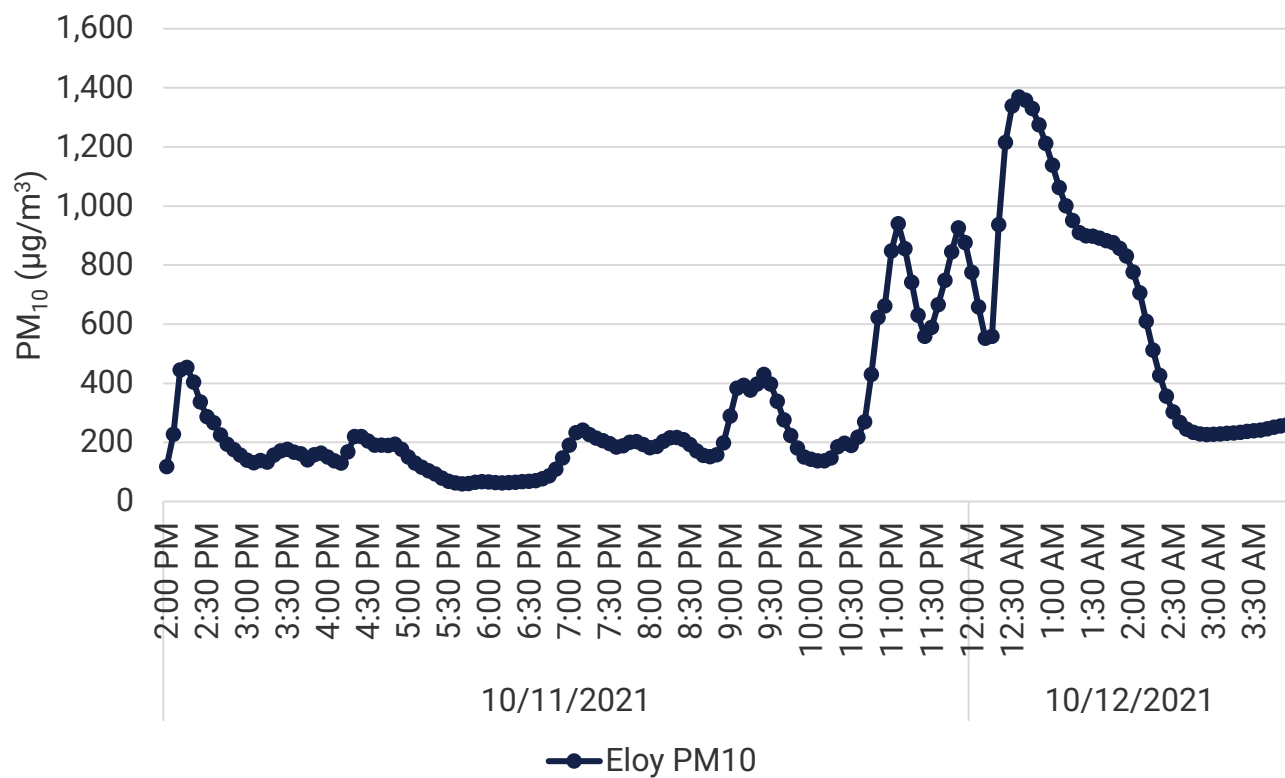
5-Minute PM₁₀ at Casa Grande Downtown



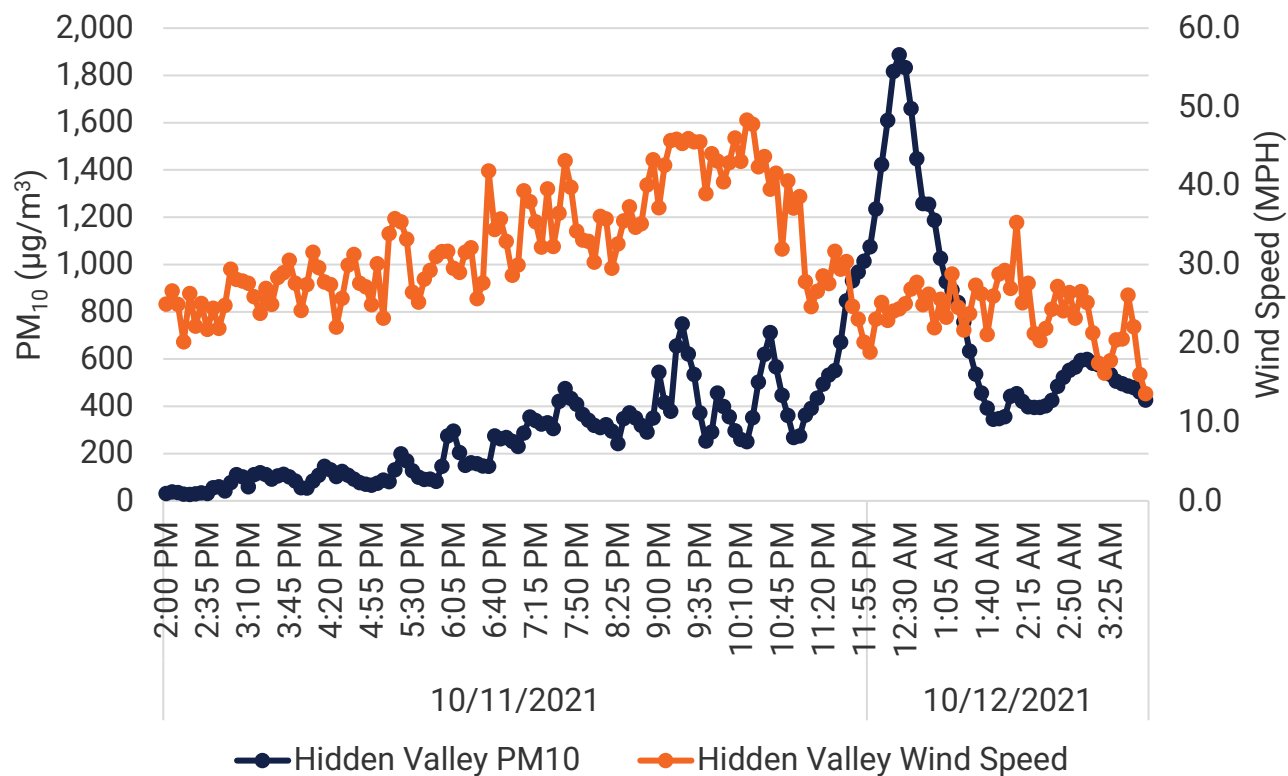
5-Minute PM₁₀ at Combs



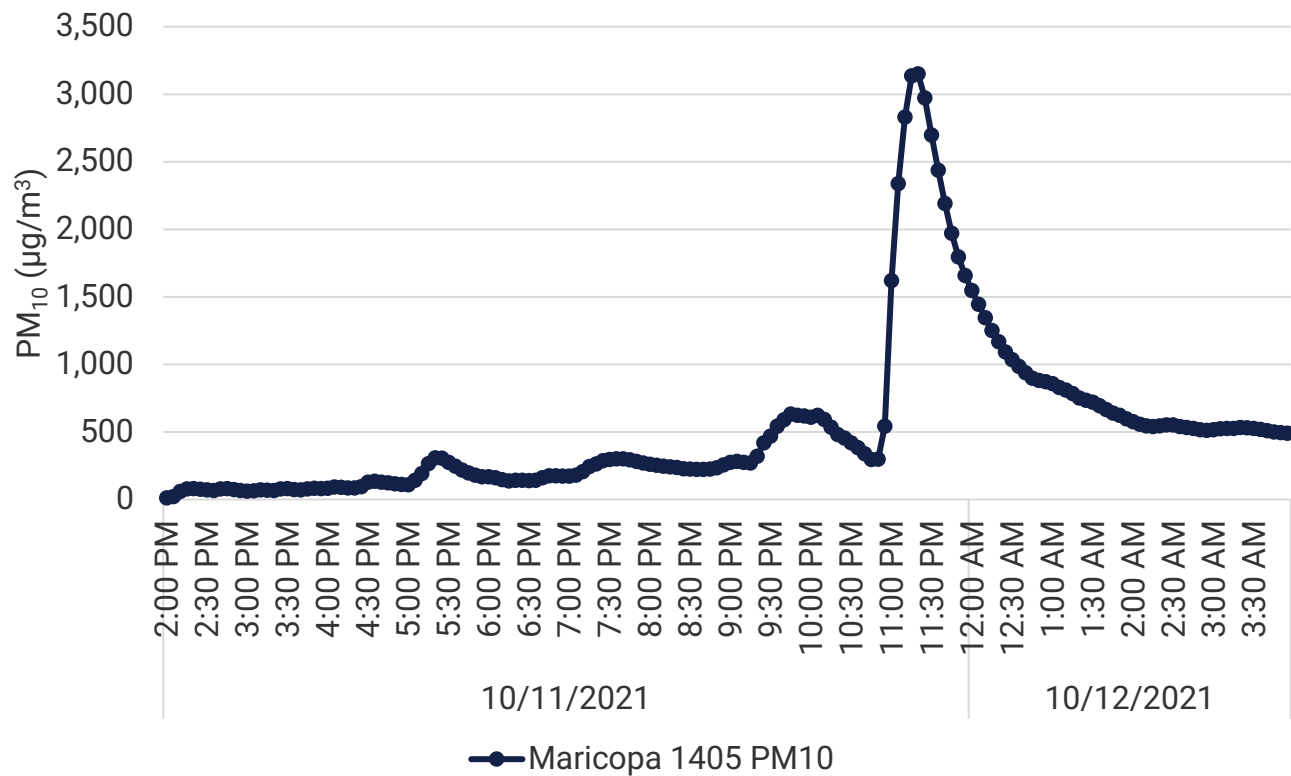
5-Minute PM₁₀ at Eloy



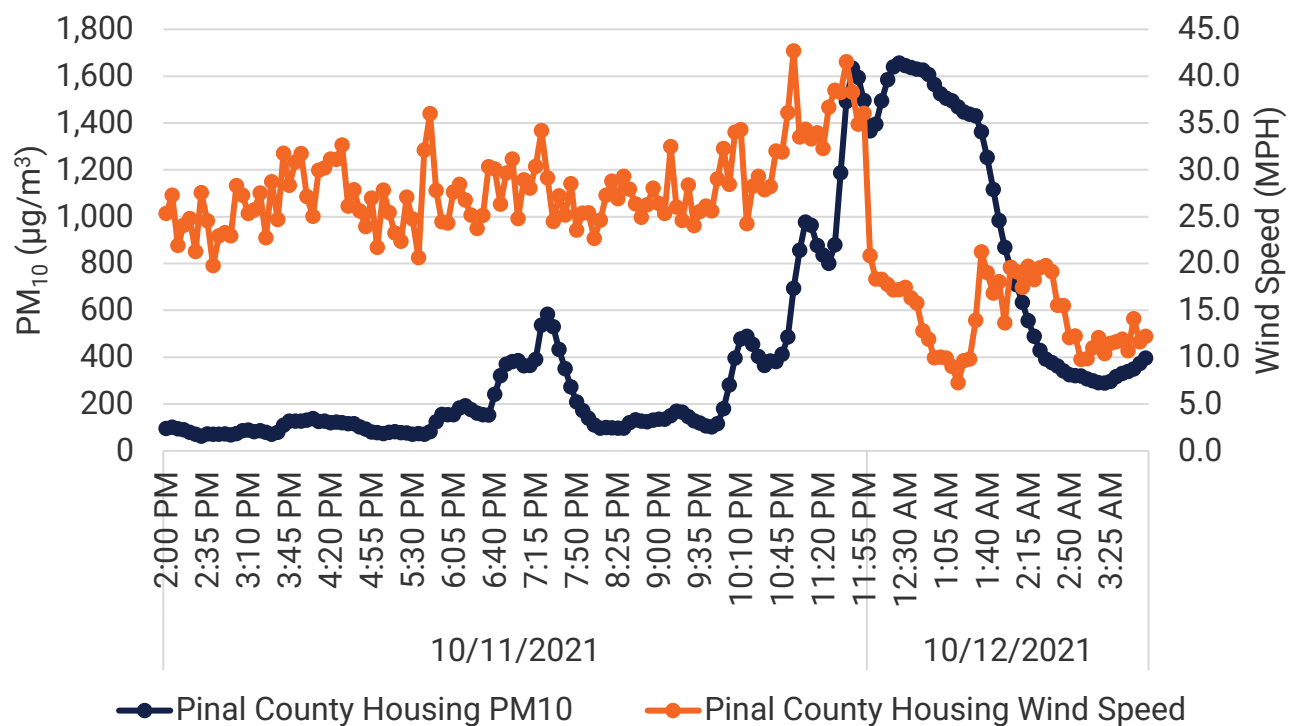
5-Minute PM₁₀ and Wind Speed at Hidden Valley



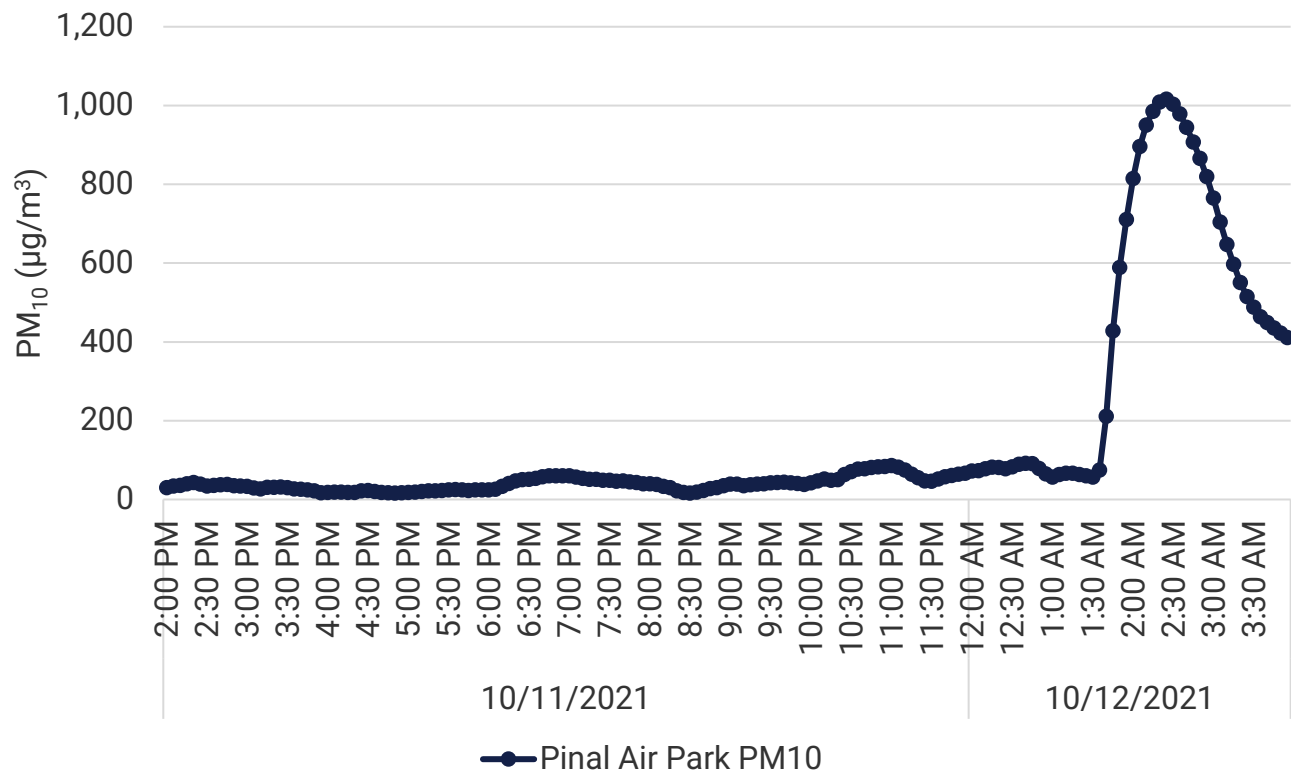
5-Minute PM₁₀ at Maricopa 1405



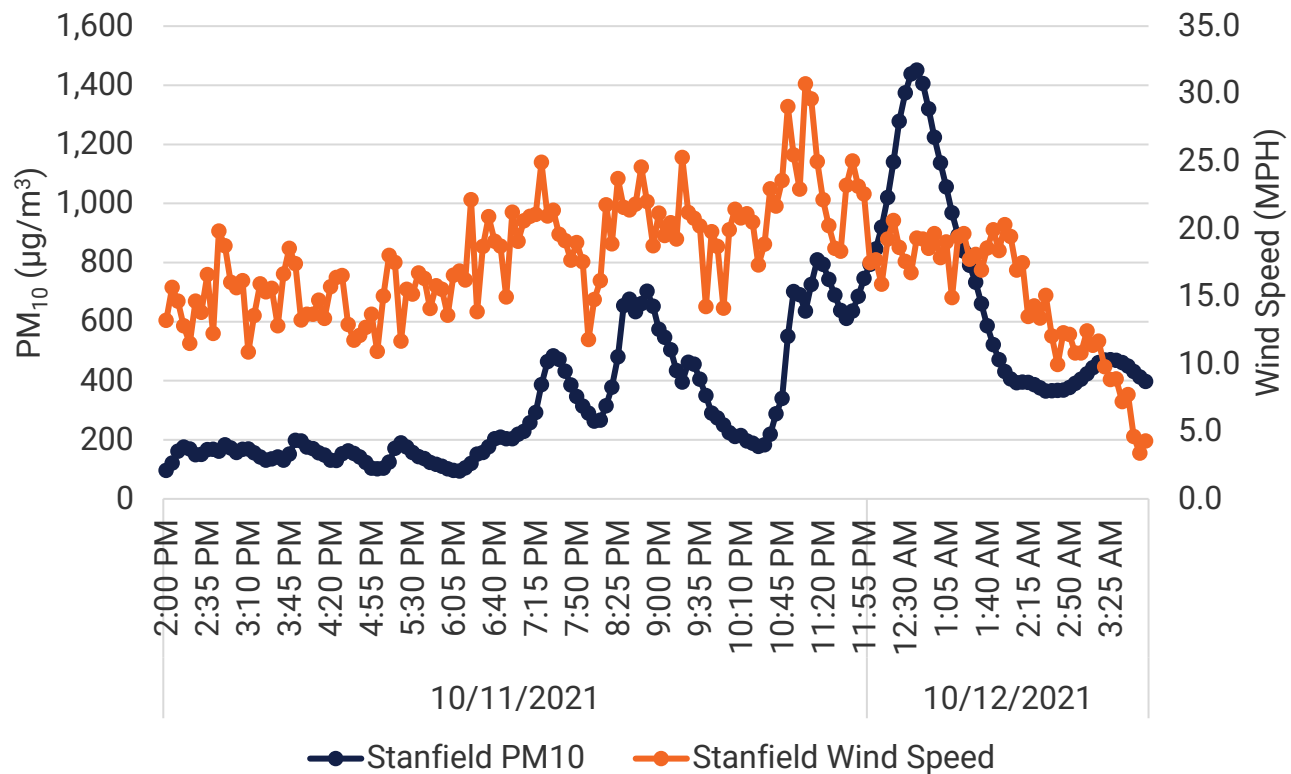
5-Minute PM₁₀ and Wind Speed at Pinal County Housing



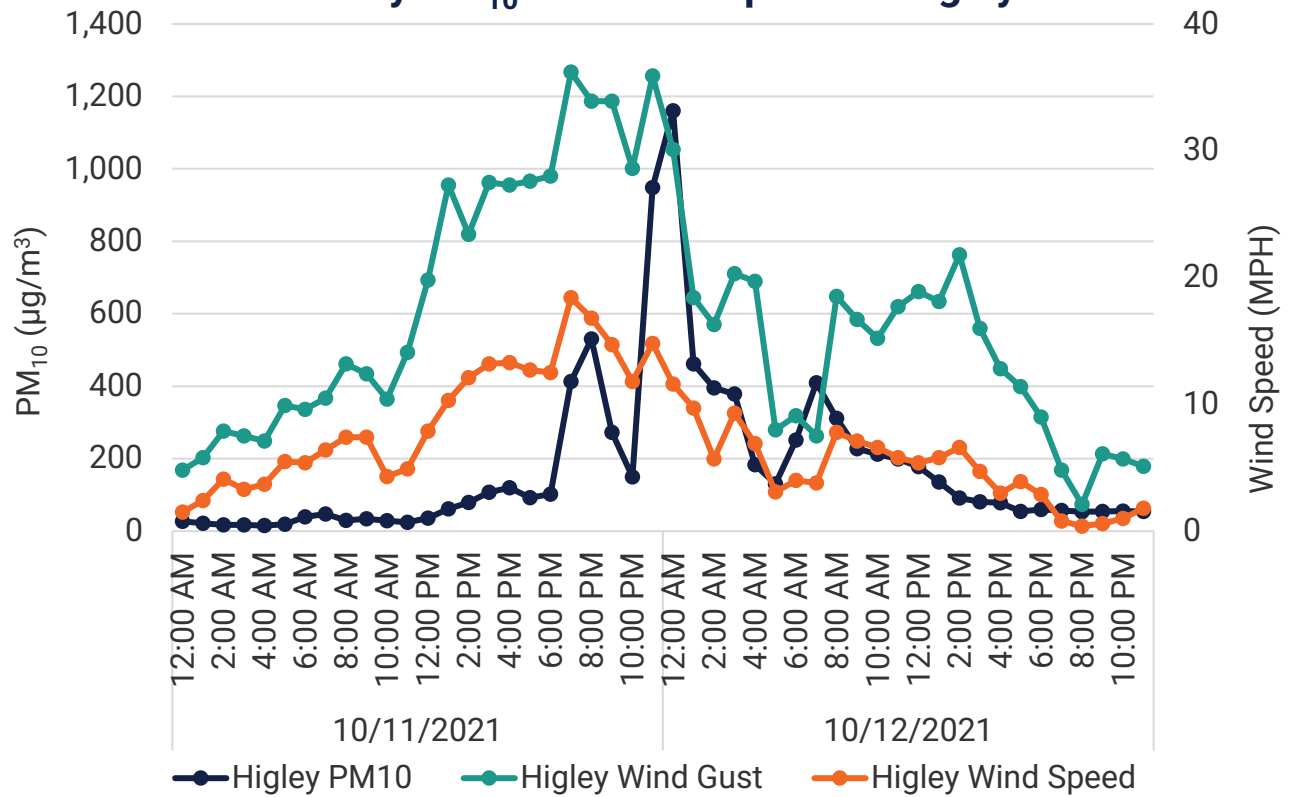
5-Minute PM₁₀ at Pinal Air Park



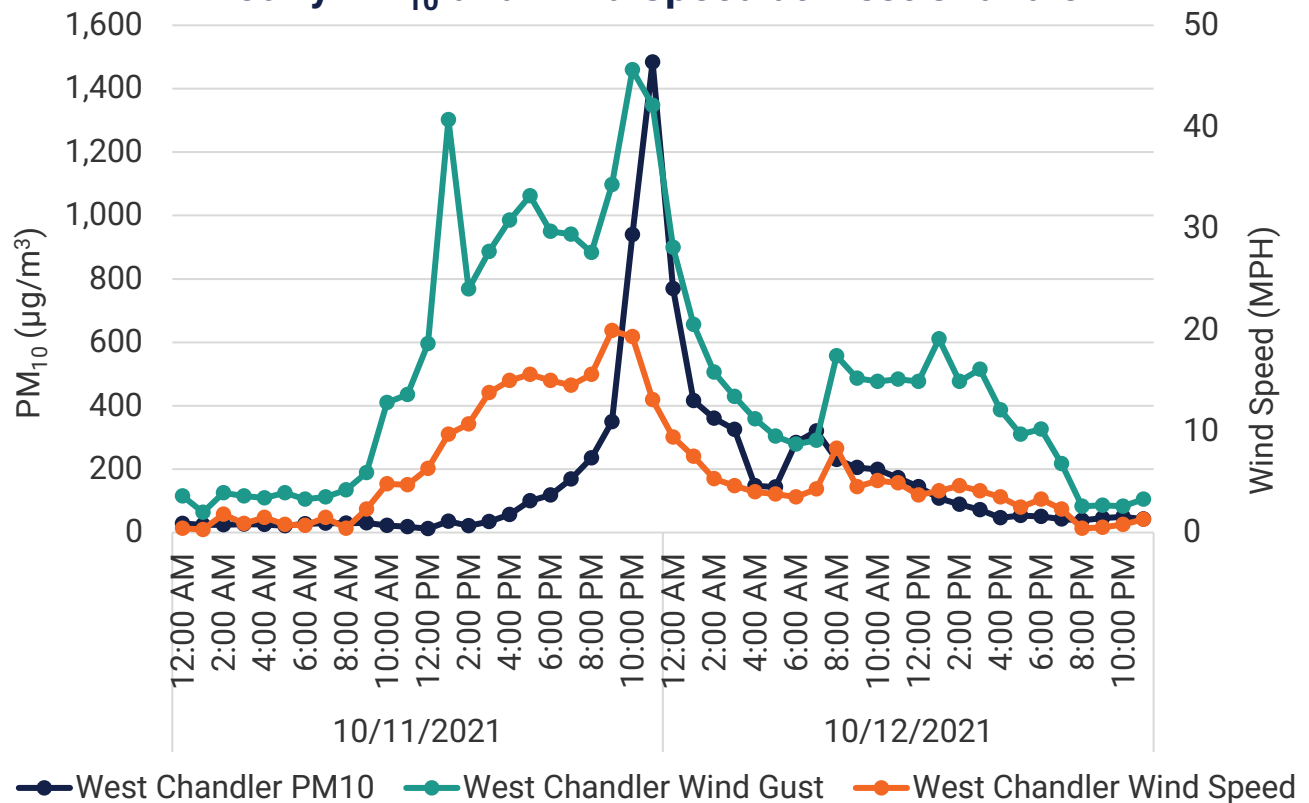
5-Minute PM₁₀ and Wind Speed at Stanfield



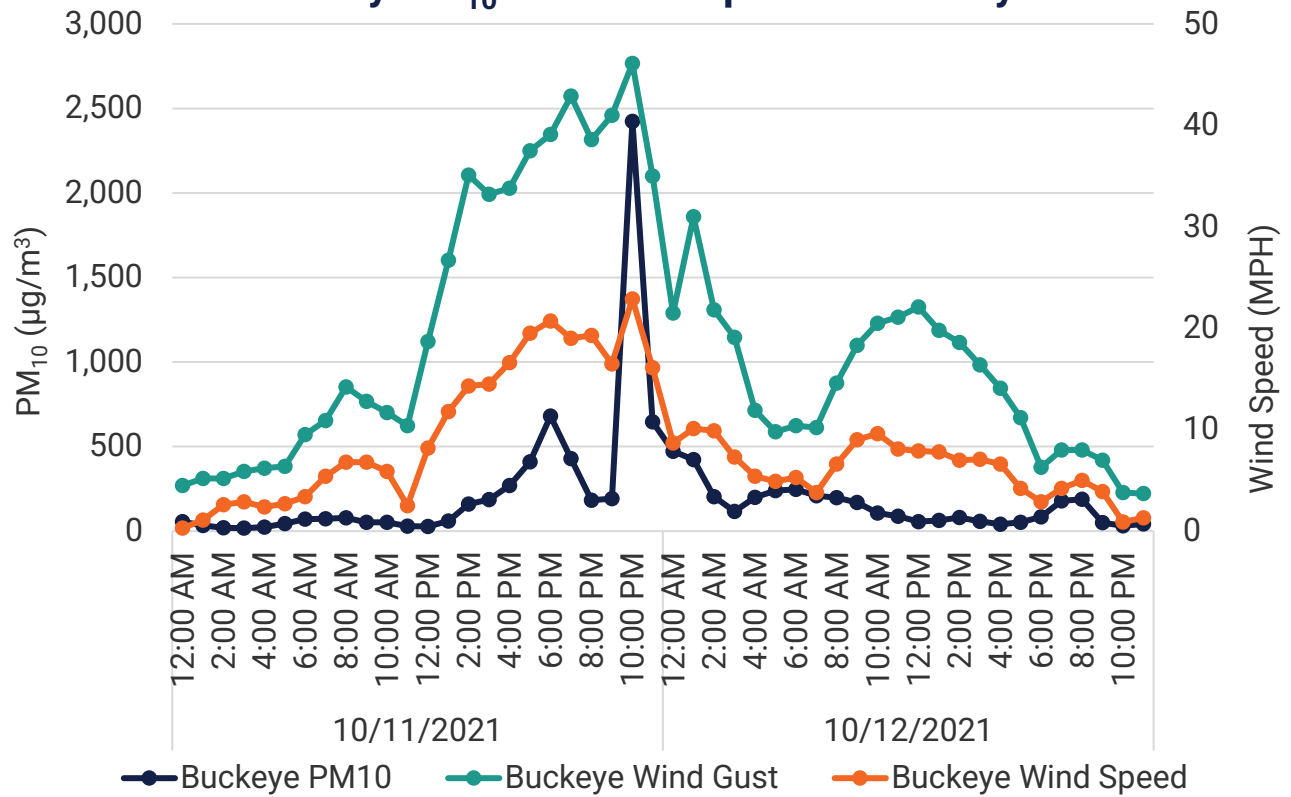
Hourly PM₁₀ and Wind Speed at Higley



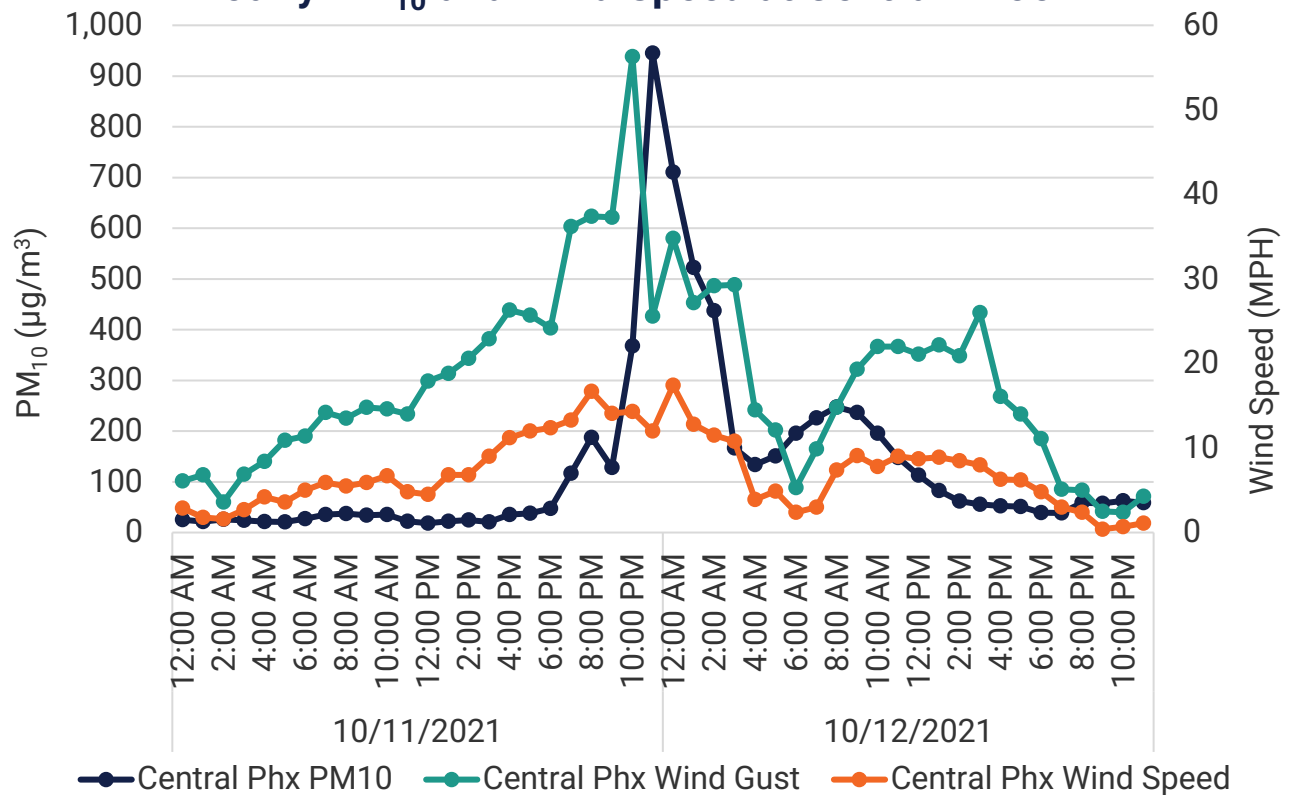
Hourly PM₁₀ and Wind Speed at West Chandler



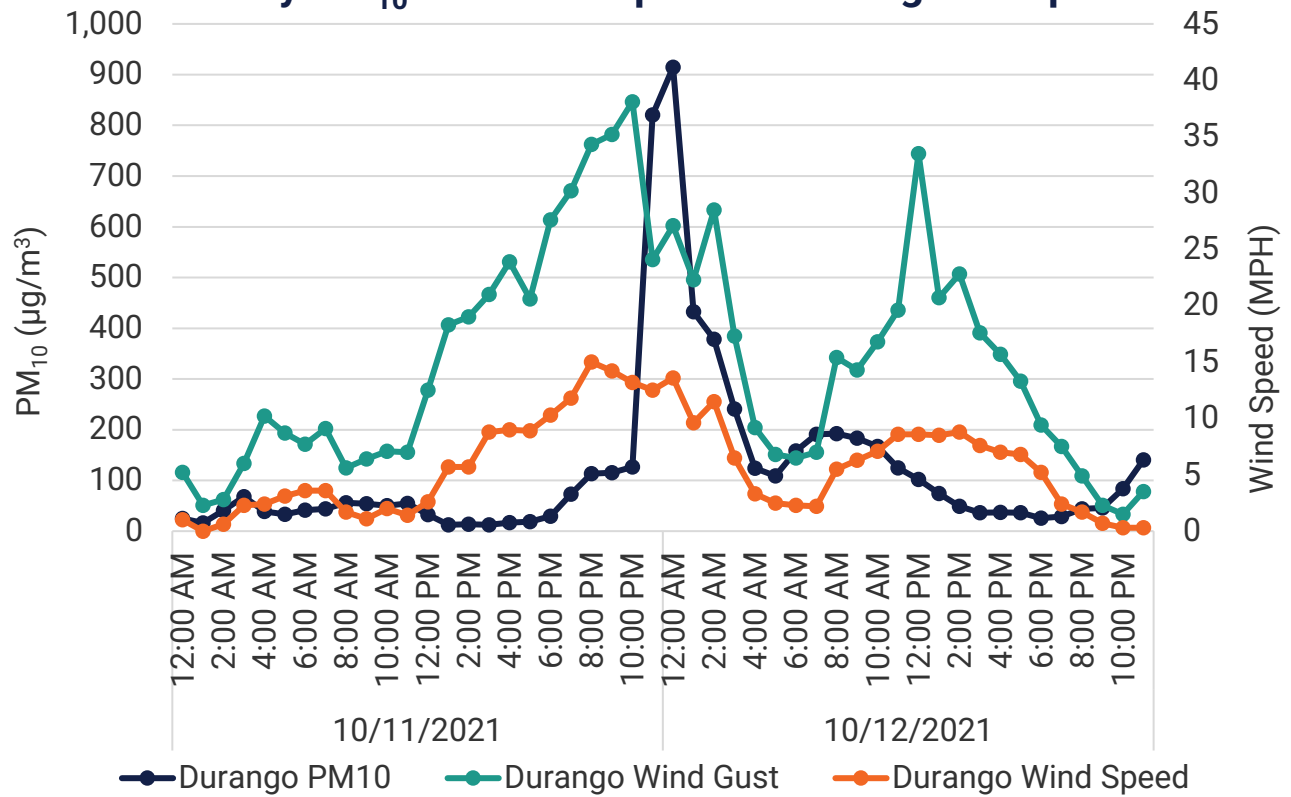
Hourly PM₁₀ and Wind Speed at Buckeye



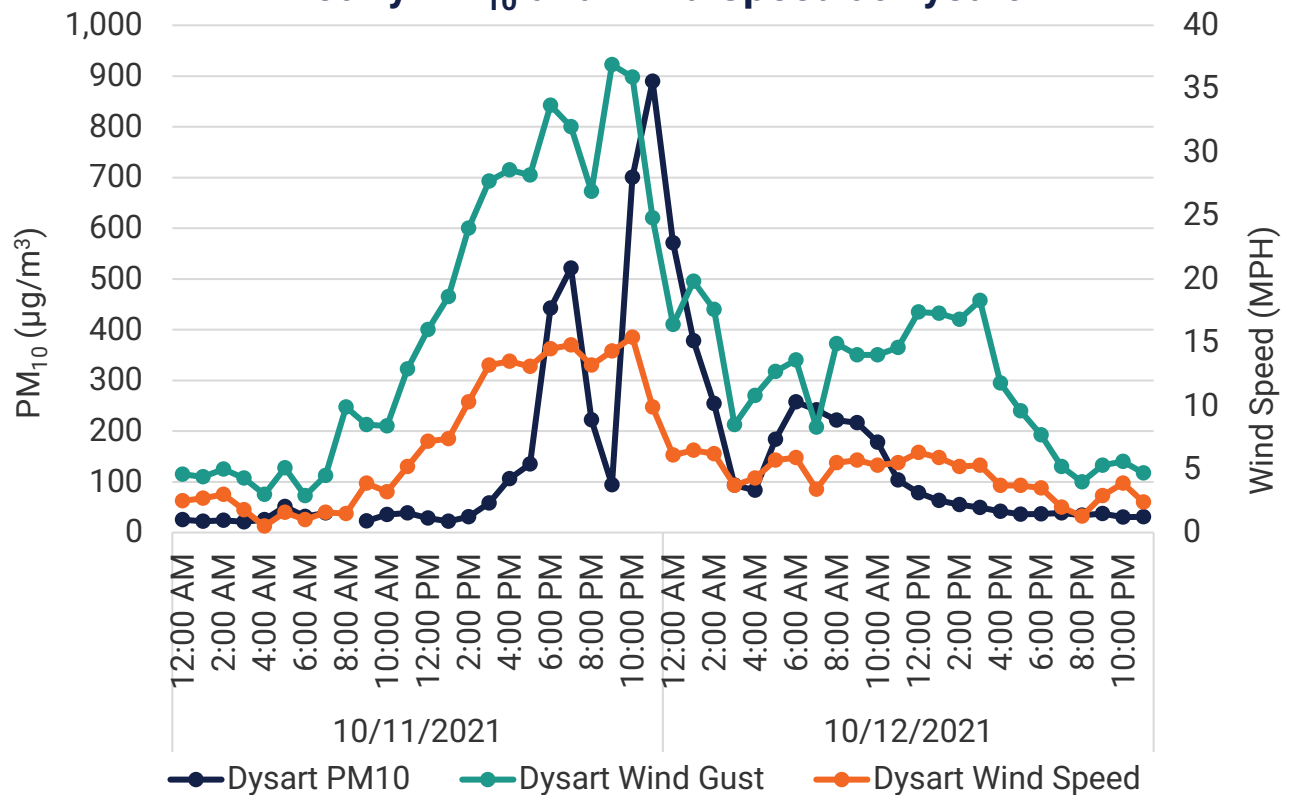
Hourly PM₁₀ and Wind Speed at Central Phoenix



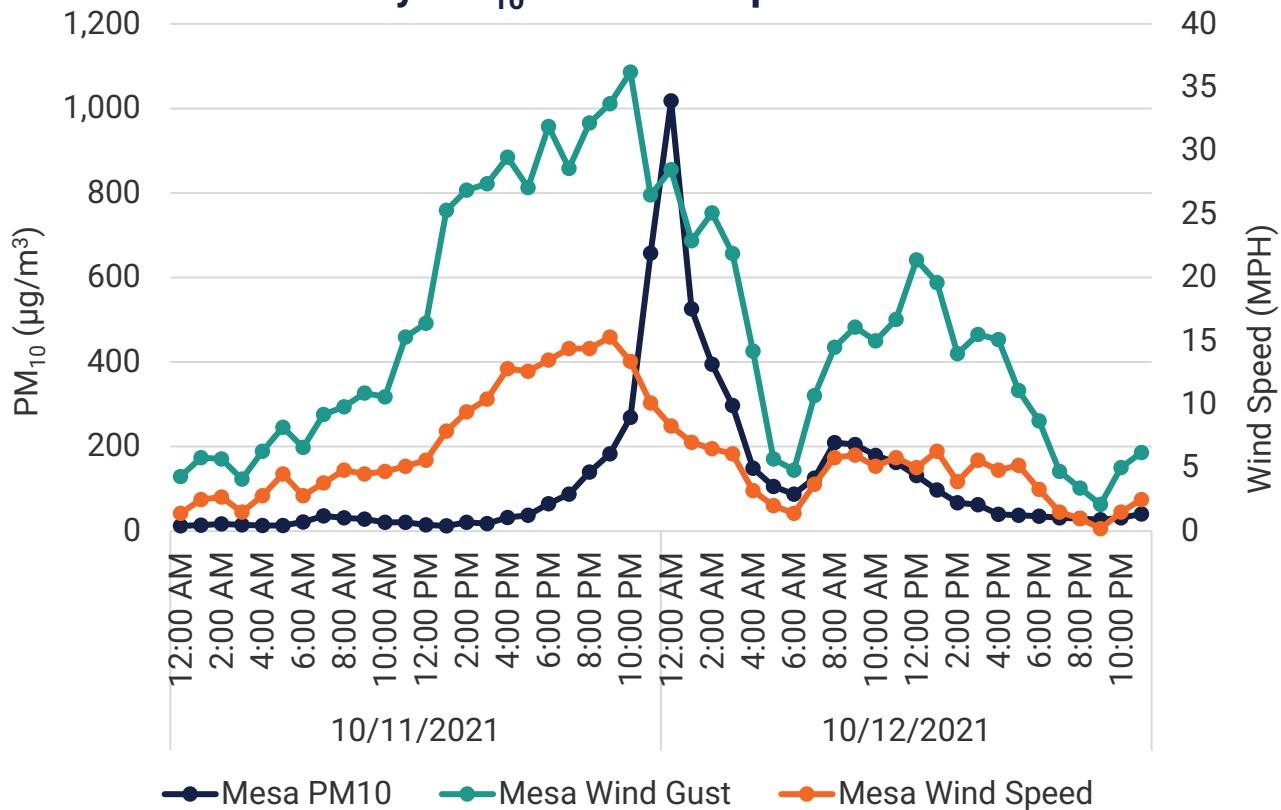
Hourly PM₁₀ and Wind Speed at Durango Complex



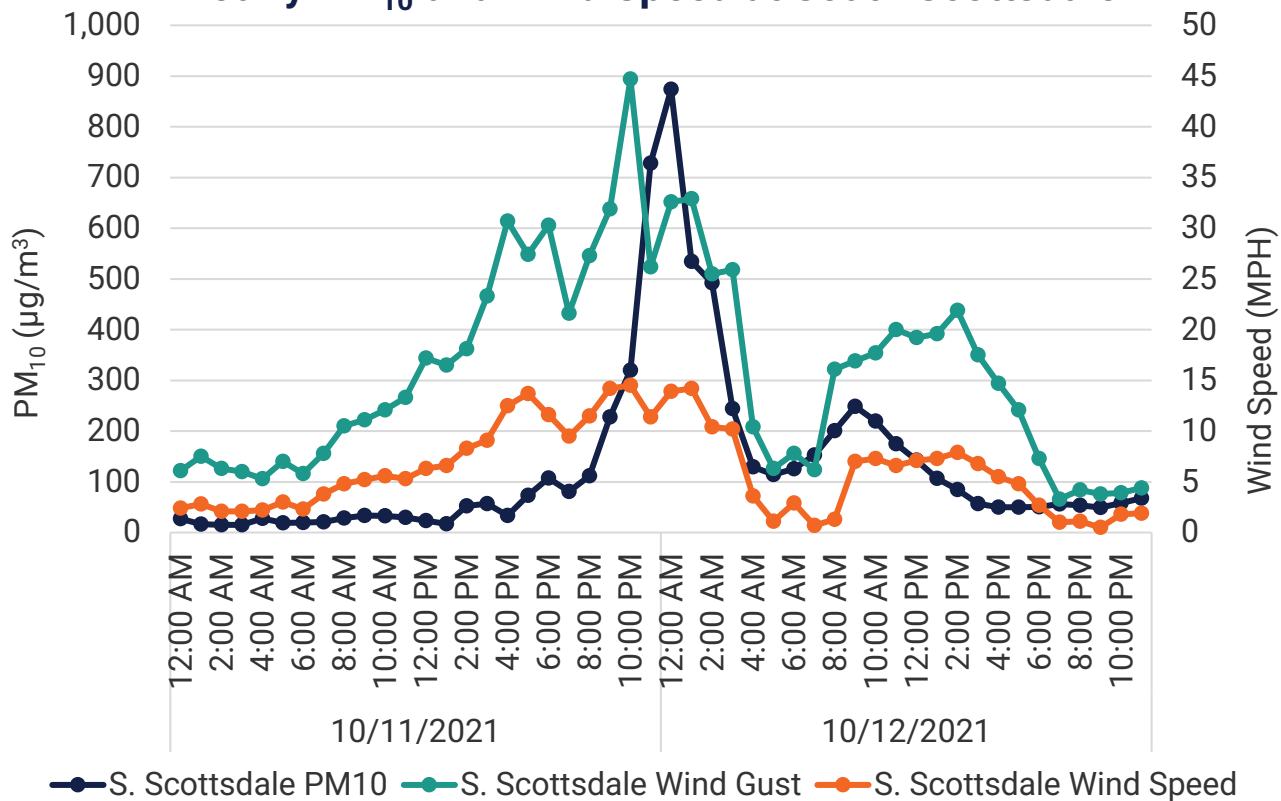
Hourly PM₁₀ and Wind Speed at Dysart



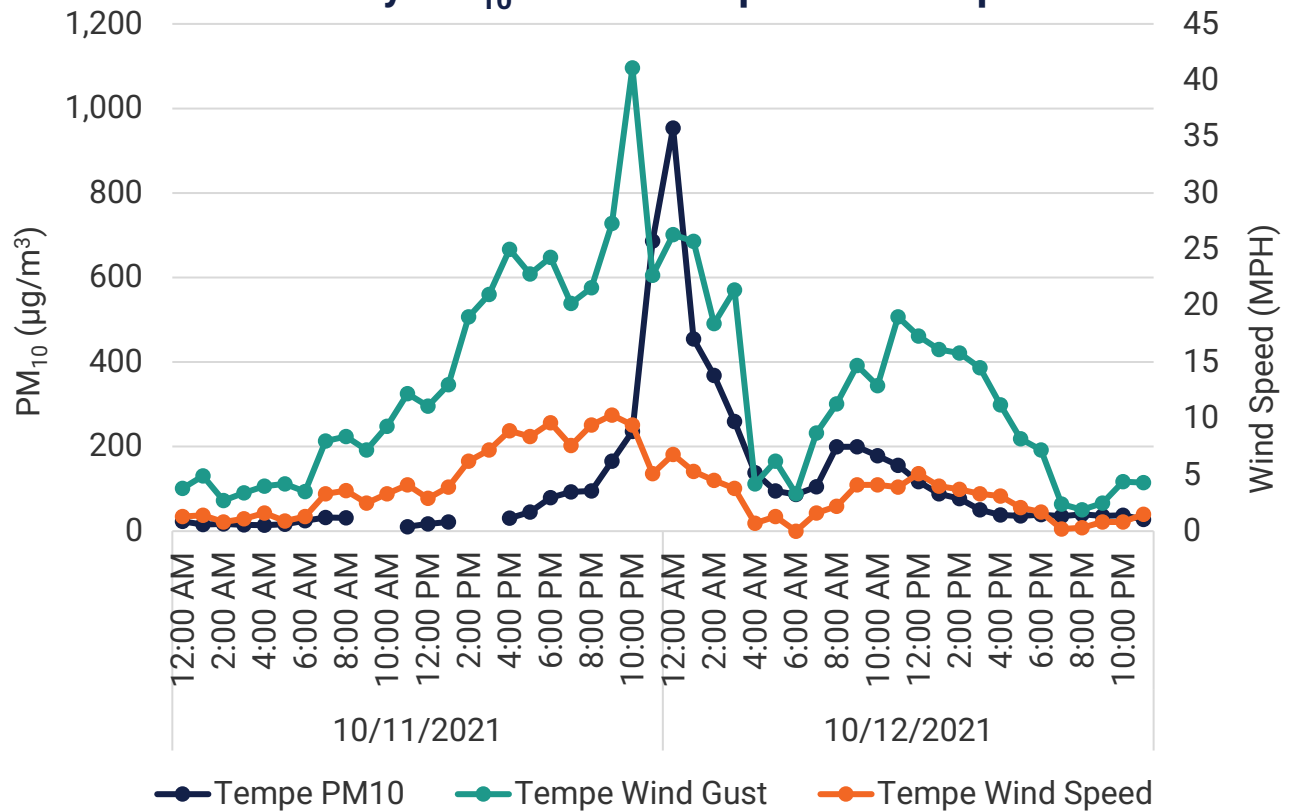
Hourly PM₁₀ and Wind Speed at Mesa



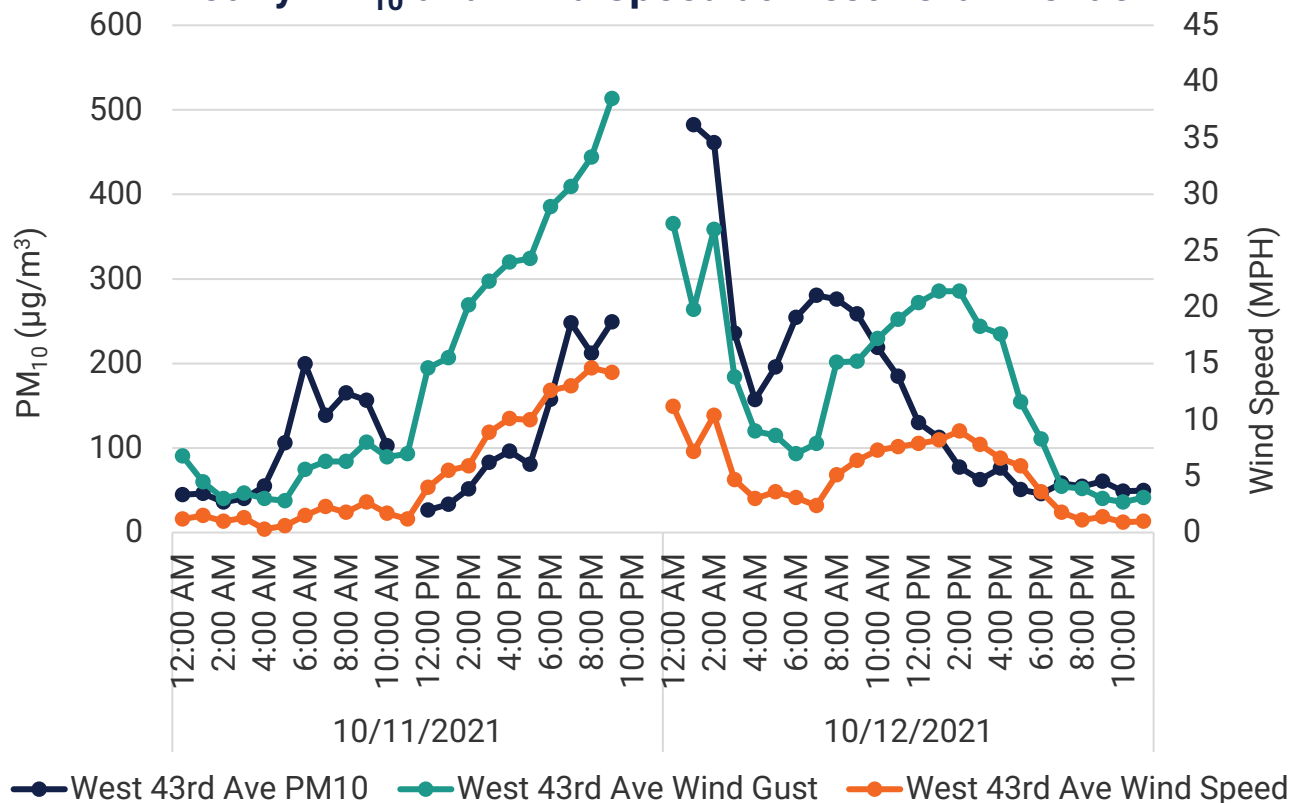
Hourly PM₁₀ and Wind Speed at South Scottsdale



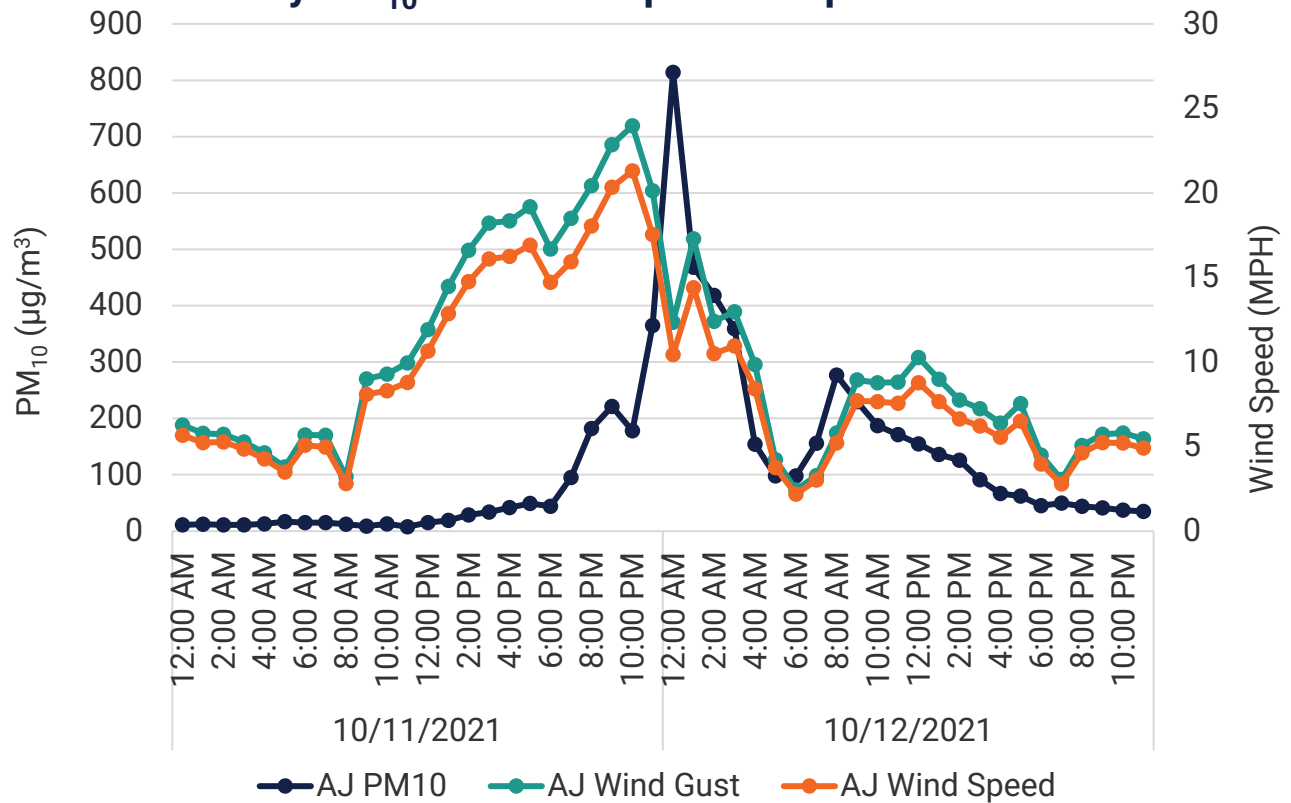
Hourly PM₁₀ and Wind Speed at Tempe



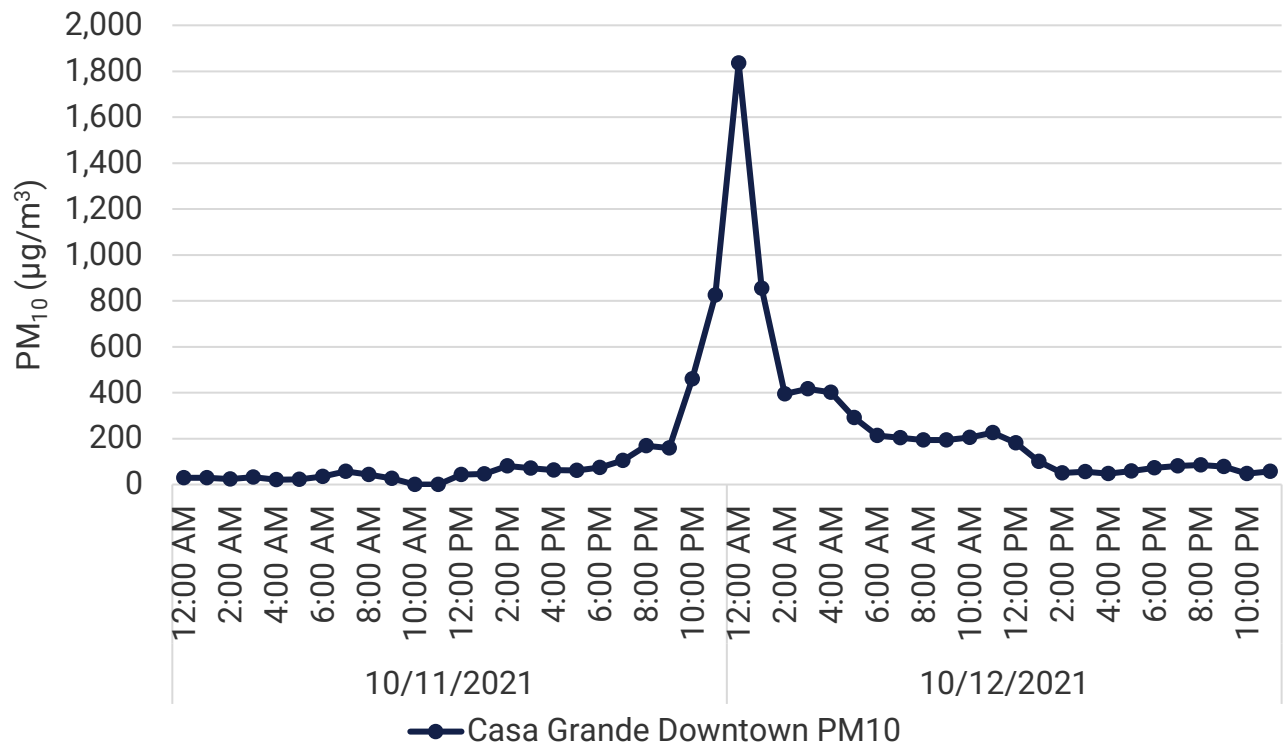
Hourly PM₁₀ and Wind Speed at West 43rd Avenue



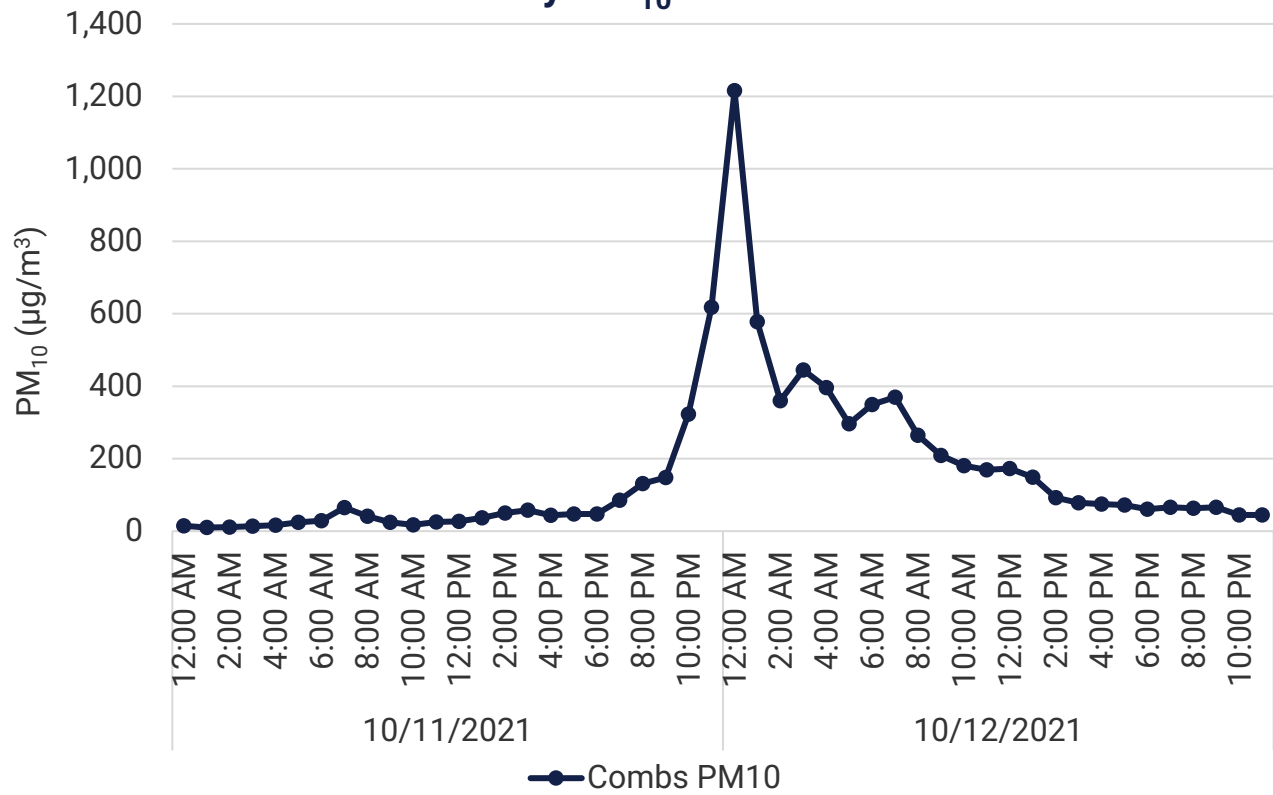
Hourly PM₁₀ and Wind Speed at Apache Junction



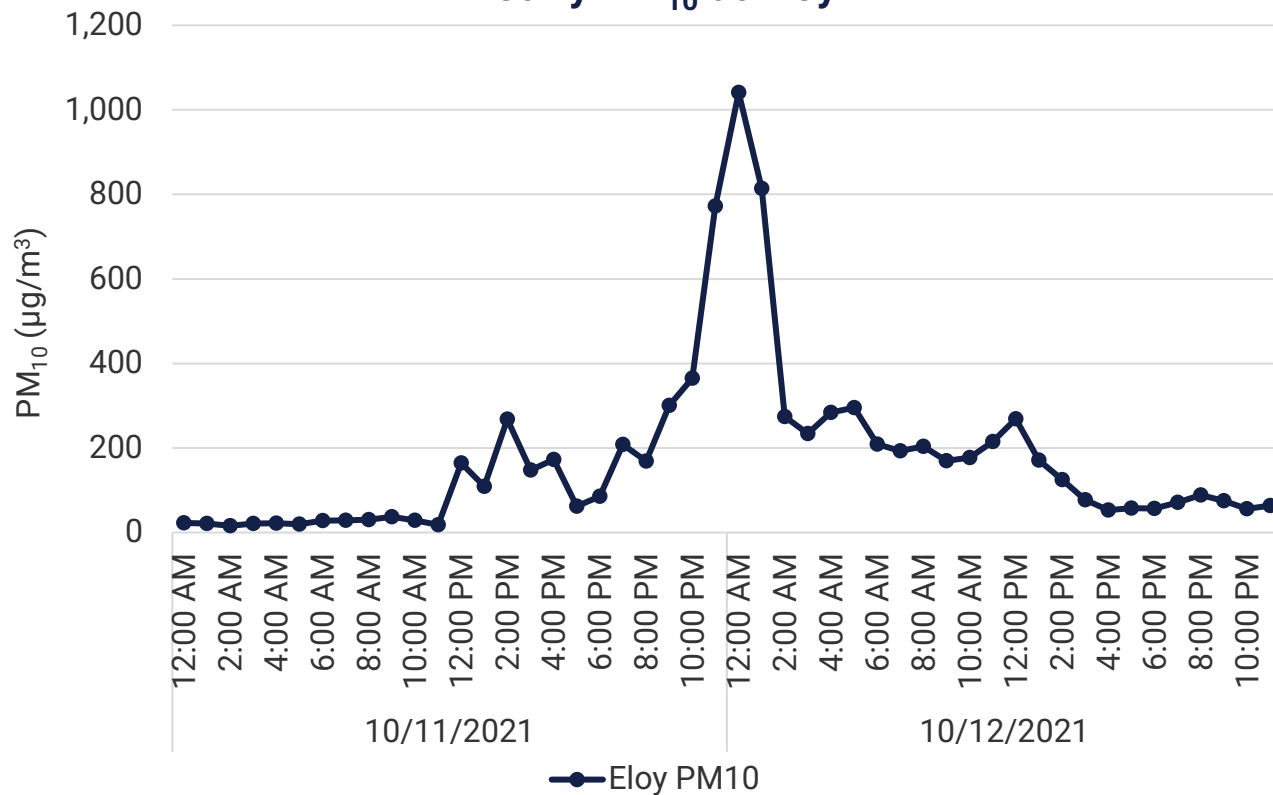
Hourly PM₁₀ at Casa Grande Downtown



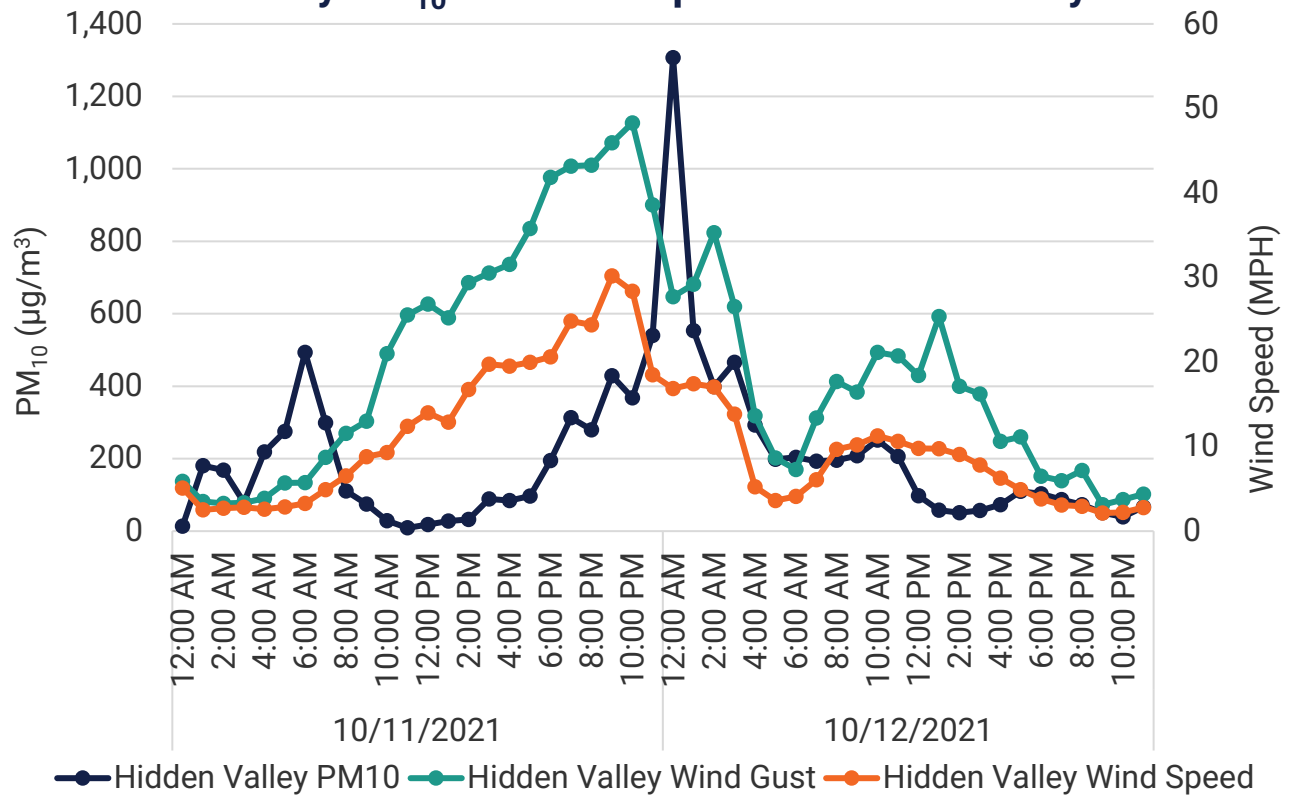
Hourly PM₁₀ at Combs



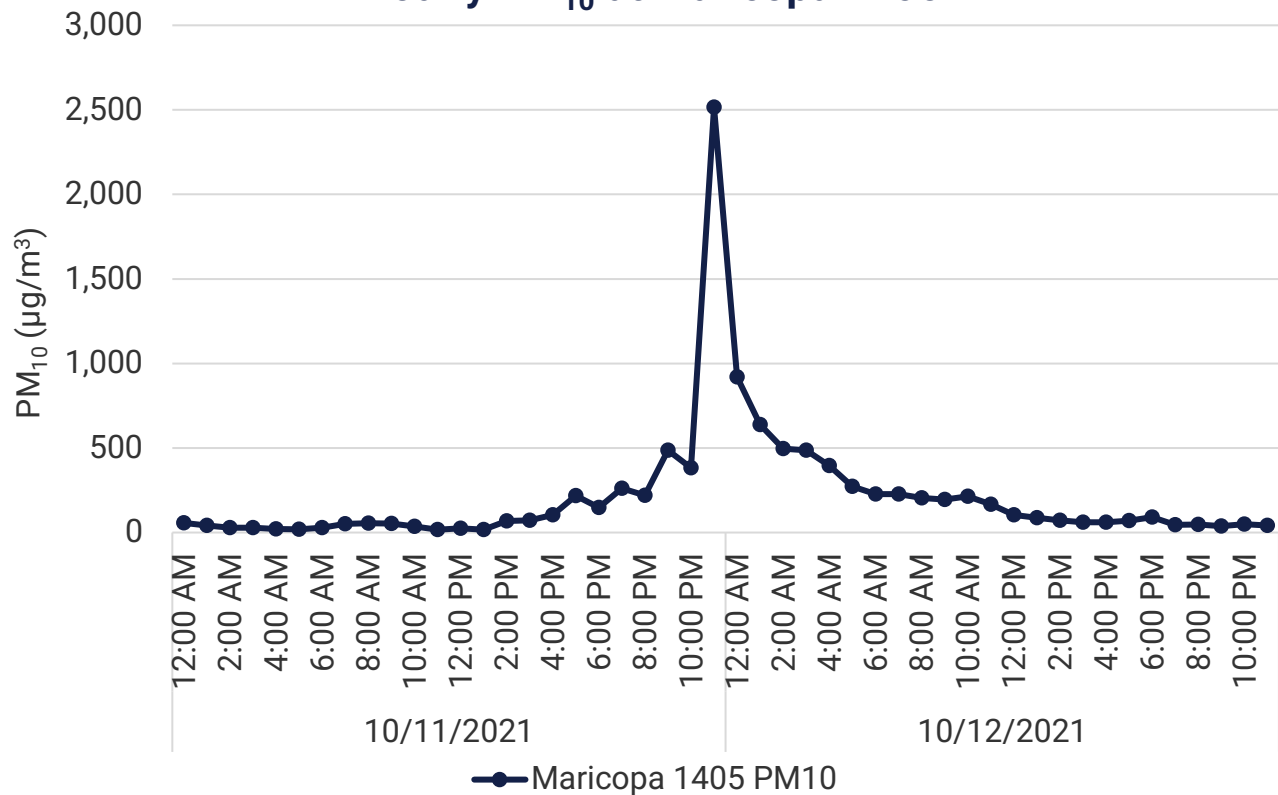
Hourly PM₁₀ at Eloy



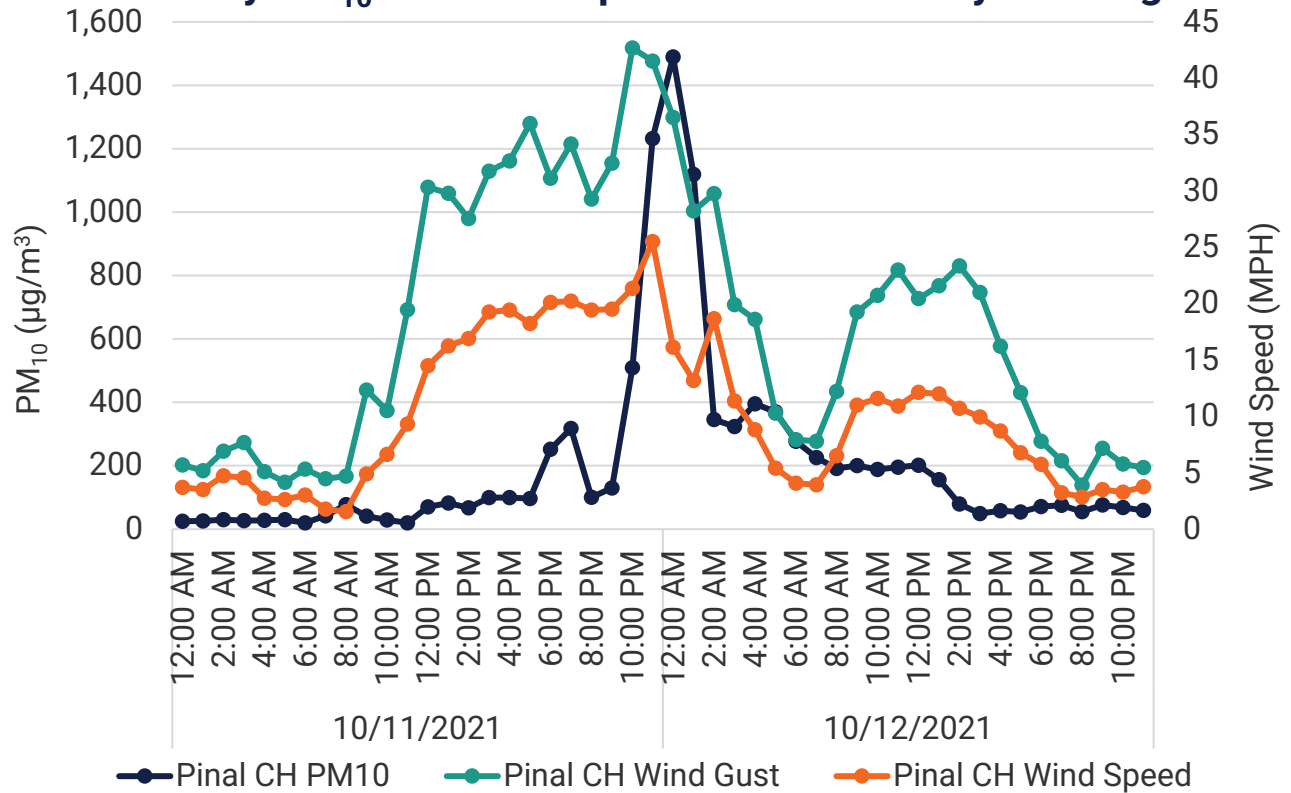
Hourly PM₁₀ and Wind Speed at Hidden Valley



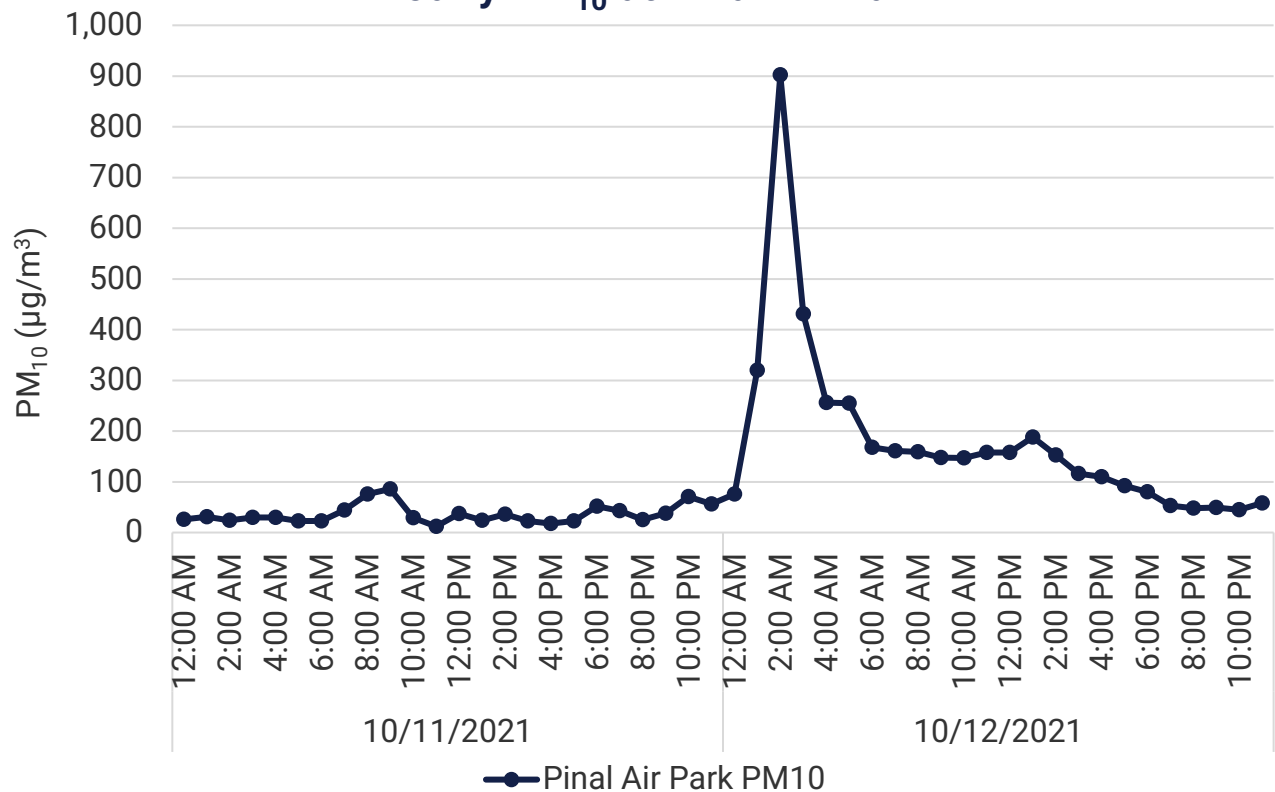
Hourly PM₁₀ at Maricopa 1405



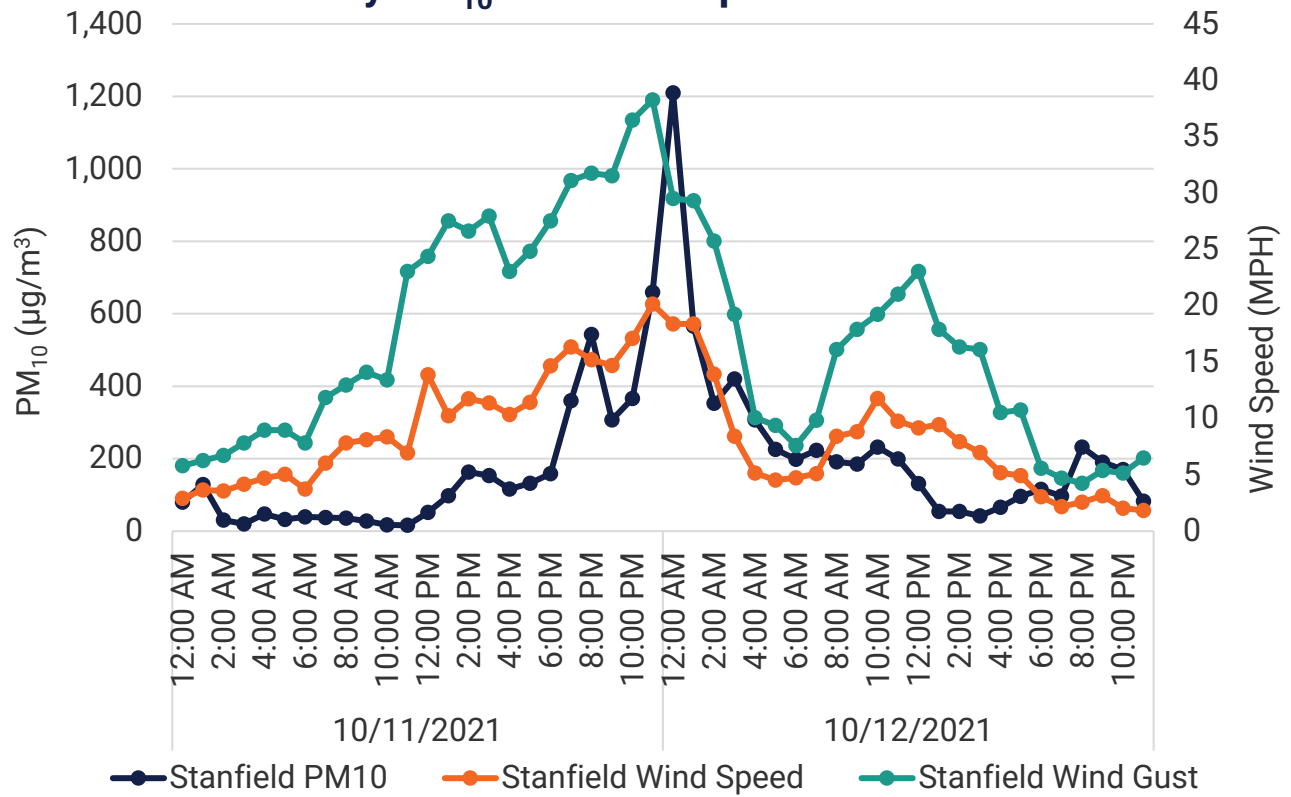
Hourly PM₁₀ and Wind Speed at Pinal County Housing



Hourly PM₁₀ at Pinal Air Park



Hourly PM₁₀ and Wind Speed at Stanfield



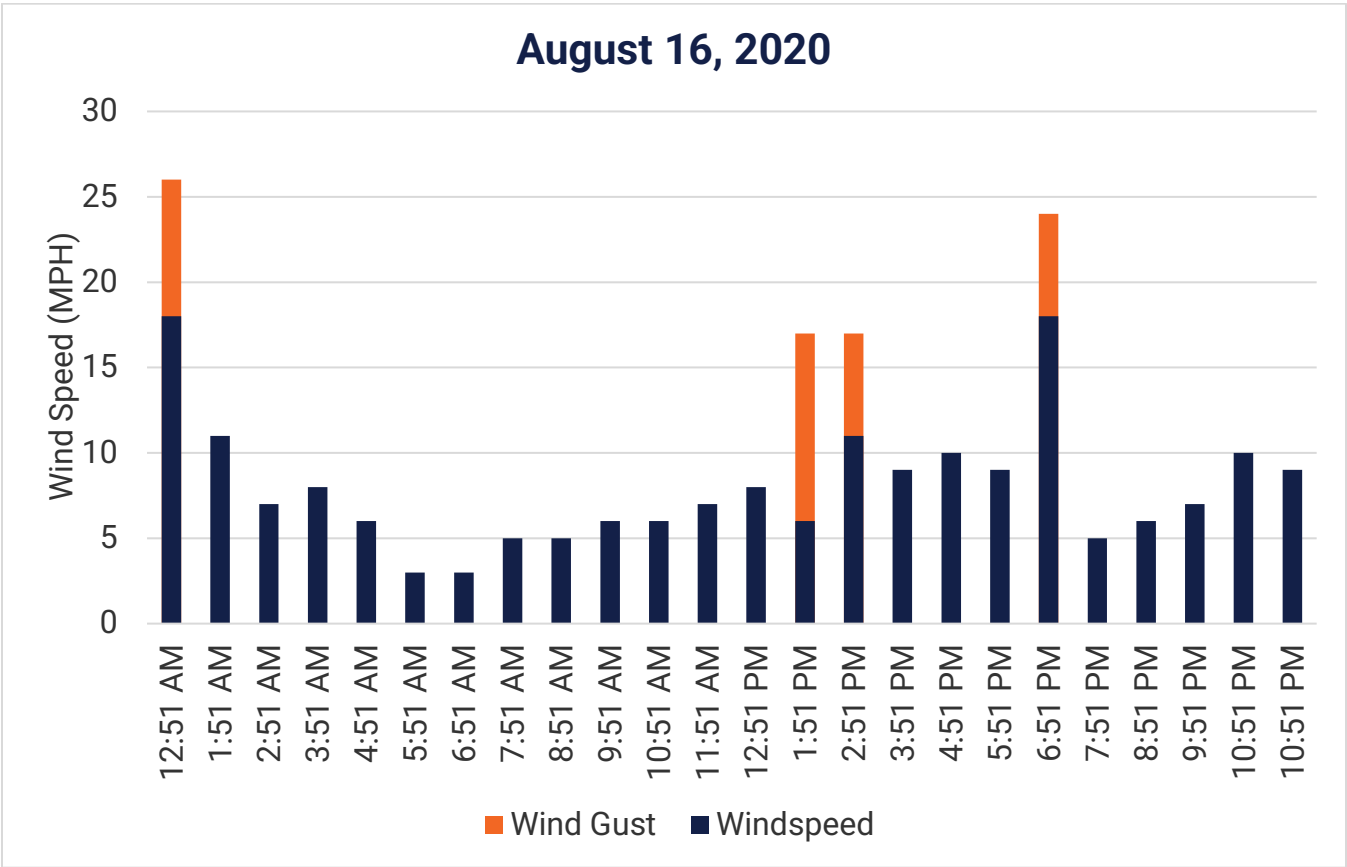


**Maricopa County
Air Quality Department
Planning and Analysis Division
Maricopa.gov/AQ**

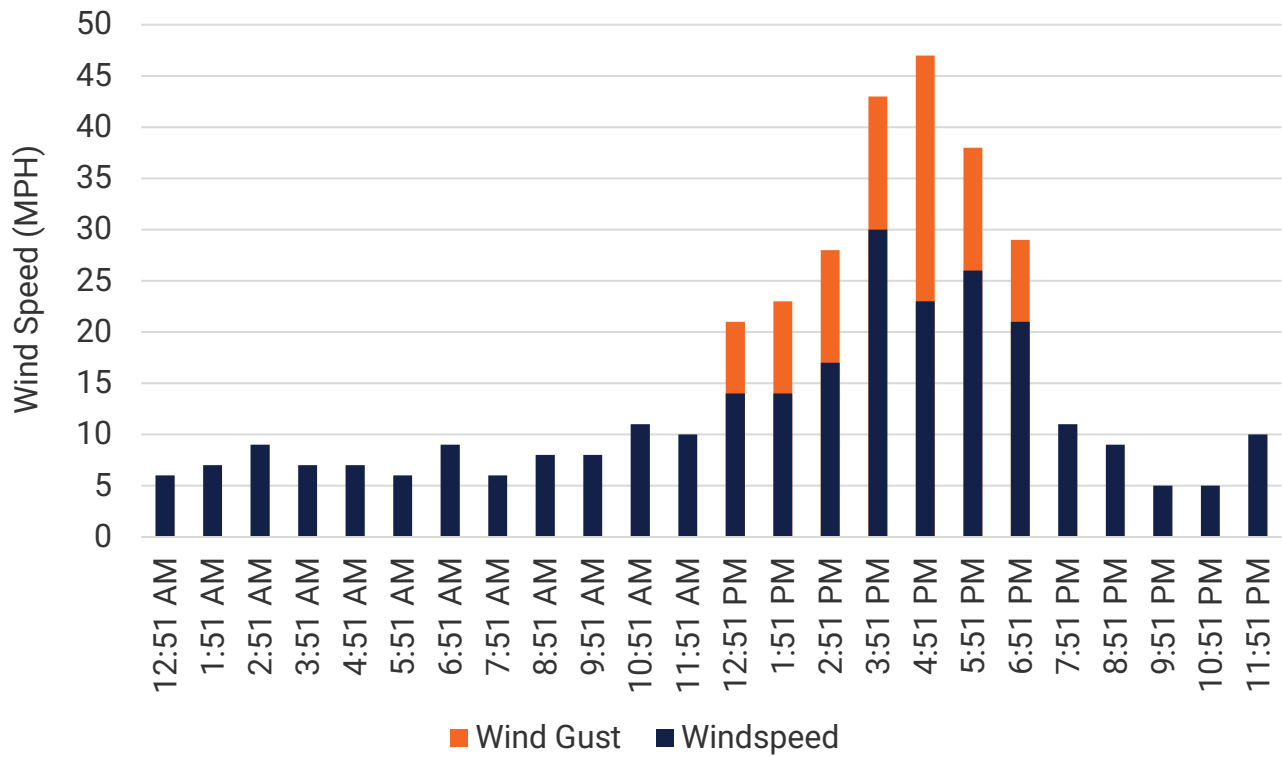
Appendix II

Charts of hourly windspeed and wind gust data from the Phoenix Sky Harbor Airport (KPHX), NOAA station ID WBAN:23183. Charts are presented for each of the atypical event dates listed in this report. Data were obtained from [NOAA National Centers for Environmental Information site](#) and were specified with the FM-15 report code (i.e., hourly METAR aviation routine weather report).

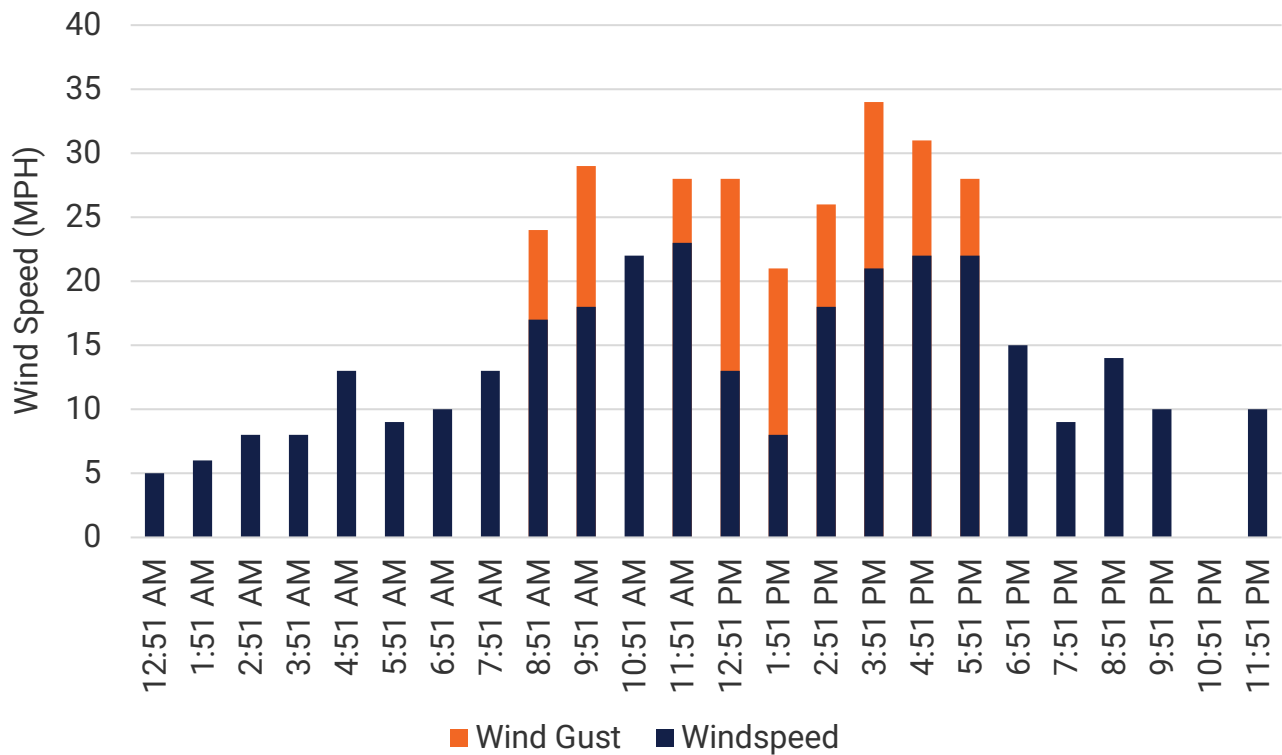
Note that wind gusts on these charts are defined by the National Weather Service as “a sudden, brief increase in speed of the wind. According to U.S. weather observing practice, gusts are reported when the peak wind speed reaches at least 16 knots and the variation in wind speed between the peaks and lulls is at least 9 knots. The duration of a gust is usually less than 20 seconds.”



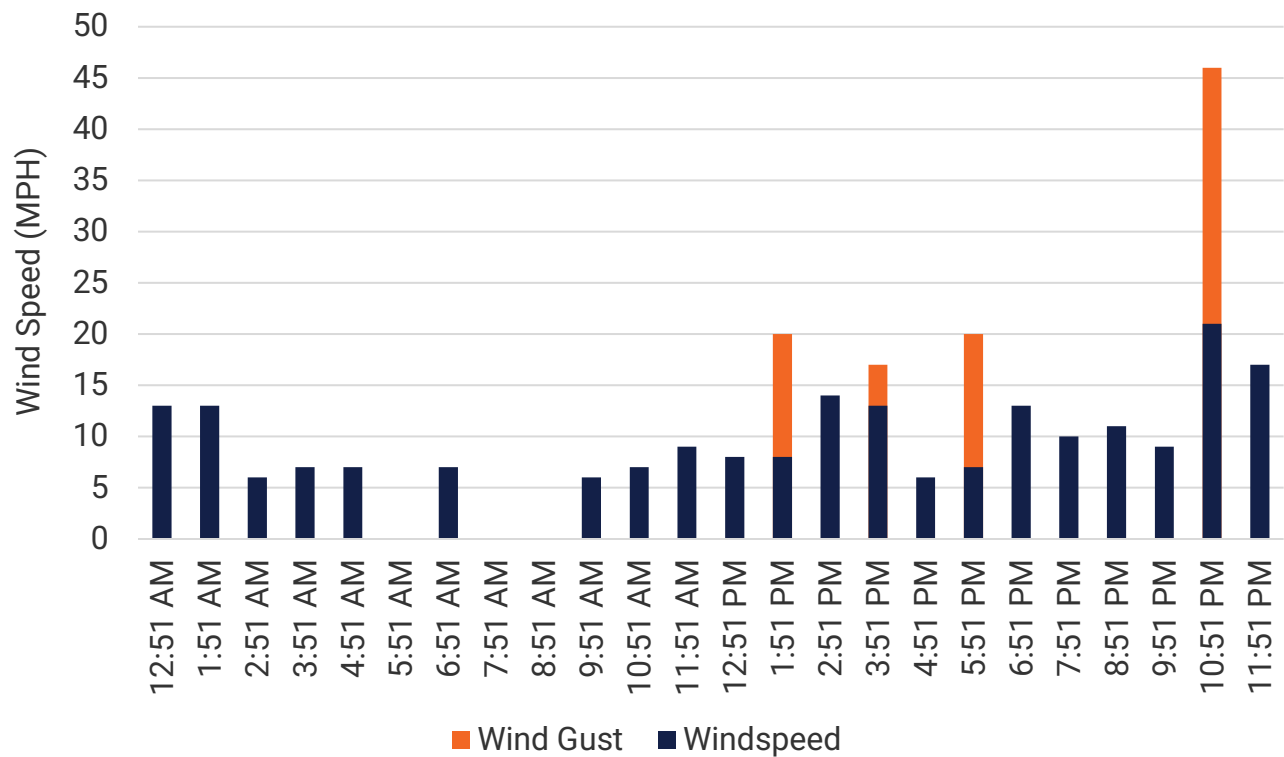
March 3, 2021



April 21, 2021



July 9, 2021



October 11-12, 2021

