

 **CERTIFIED**
Past Weather Reports

COMPREHENSIVE REPORT

Prepared By:

Zachary Chabala
Forensic Meteorologist
WeatherWorks, LLC

Prepared For:

John Doe
John Doe Insurance

Reference:

Wind Report
Pittsburgh, PA | April 29, 2025

Submitted on:

Wednesday, May 07, 2025



Wednesday, May 07, 2025

Mr. John Doe
John Doe Insurance
1234 Anywhere Drive
Anywhere, PA 55344

**RE: Wind Report
Pittsburgh PA | April 29, 2025**

Dear Mr. Doe,

As you requested, I have reviewed the weather conditions for 1234 Main Street in Pittsburgh, PA for January 15, 2021 - April 29, 2025. Enclosed is our Certified Past Weather Report based on the weather data examined.

If you have any further questions or comments regarding our report, please do not hesitate to give me a call. Should courtroom testimony be required, I would appreciate whatever advance notice is possible.

Sincerely,



Zachary Chabala
Forensic Meteorologist
WeatherWorks, LLC

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WEATHER ANALYSIS

WIND OVERVIEW

Table 1 below contains the list of days that produced 50 mph or higher wind at 1234 Main Street in Pittsburgh, PA from January 1, 2015 – April 29, 2025. **Peak Wind Gust** is the highest wind gust (in mph) during the calendar day. Peak Wind Gust is defined as wind speed averaged over a 3-to-5 second period measured at 33 feet above ground level. The National Weather Service defines severe wind as being 58 mph or stronger.

Table 1. Daily Weather Table – January 1, 2015 – April 29, 2025

Date	Peak Wind Gust
Thursday, August 11, 2016	N 55–65
Wednesday, May 17, 2017	S 50–60
Monday, August 21, 2017	NNW 50–60
Sunday, February 18, 2018	S 50–55
Friday, April 13, 2018	ENE 50–60
Saturday, June 2, 2018	NW 65–70
Thursday, June 28, 2018	NW 60–65
Monday, January 28, 2019	NW 50–55
Sunday, February 23, 2019	NW 50–55
Wednesday, April 10, 2019	E 50–60
Tuesday, May 28, 2019	SW 60–65
Saturday, January 18, 2021	NW 50–55
Wednesday, April 29, 2020	N 50–55
Monday, August 10, 2021	S 50–60
Tuesday, April 29, 2025	W 70–79

WEATHER SUMMARY

On **August 11, 2016**, a line of severe storms storm moved over the property between 8 and 9 PM. These storms produced measured wind gusts between 55 and 65 mph. Law enforcement officials reported downed trees, powerlines, & blown transformers in Anywhere, IA due to these storms.

Rain overspread Anywhere, IA between 3 and 4 PM on **May 17, 2017**. As rain arrived, it briefly produced peak wind gusts of 50–60 mph.

A strong to borderline severe thunderstorm passed over the subject property between 2 and 3 AM on **August 21, 2017**. This storm produced measured 50 – 60 mph wind gusts. The National Weather Service also received reports of several large tree limbs down and damage to a shed in Anywhere, IA.

Under a sunny sky, strong southerly winds produced measured peak wind gusts of 50 – 55 mph on **February 18, 2018**.

A strong to borderline severe storm clipped the subject property on **April 13, 2018** between 4:15 and 4:45 PM. The subject property would have experienced 50 – 60 mph winds. The National Weather Service received reports of damage to outbuildings west of Anywhere, IA.

A line of severe storms passed over the subject property between 1:45 and 2:45 AM on **June 2, 2018**. The incident property would have experienced peak wind gusts of 65–70 mph.

June 28, 2018 saw a severe thunderstorm between 10:45 and 11:30 AM. This storm produced measured wind gusts of 60–65 mph. Also, the National Weather Service received reports of multiple trees down in Anywhere, IA.

Under a cloudy sky, a strong northwest wind produced peak wind gusts between 50–55 mph on **January 28, 2019**.

On **February 23, 2019**, a winter storm produced peak wind gusts of 50 – 55 mph at the subject property.

On **April 10, 2019**, a line of strong to borderline severe storms passed over the subject property between 11:30 and 11:45 PM. A trained spotter in Lewis, IA reported peak wind gusts of 60 mph. The subject property would have also experienced wind gusts near 60 mph.

A severe thunderstorm impacted the area between 5:45 and 6:00 AM on **May 28, 2019**. This storm produced measured wind gusts of 60–65 mph.

On **January 18, 2021**, a strong front passed through the area between 3:30 and 4:30 AM. As the front passed, measured wind gusts of 50–55 mph occurred.

Under a mostly sunny sky, strong northerly wind produced peak wind gusts between 50–55 mph on **April 29, 2020**.

A line of strong to severe storms impacted the area between 9:45 and 10:30 AM on **August 10, 2021**. The National Weather Service received reports of winds estimated to be near 60 mph from an observer just south-southeast of Anywhere, IA.

A line of severe storms impacted Pittsburgh, PA on **April 29, 2025**. Numerous wind gusts ranging from 70 – 79 mph were reported from the Pittsburgh area as the storm moved through and dozens of reports of wind damage were sent into the National Weather Service after the storm had passed. Please refer to image one on the following page for a contoured map of maximum wind gusts from this line of storms.

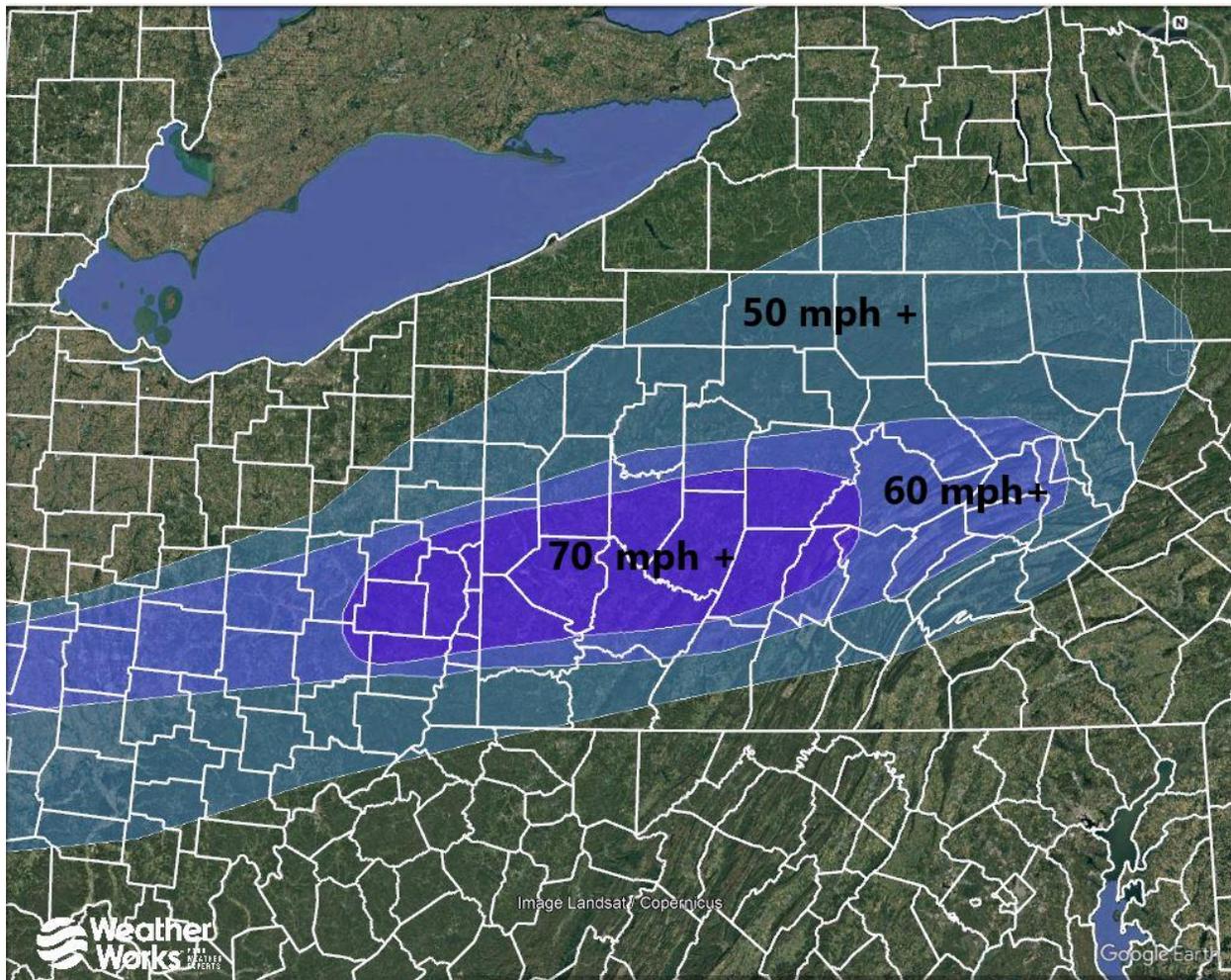


Figure 1 – Map of maximum wind gusts based on measured wind speeds and storm reports (Sources: NCEI / Google Earth)

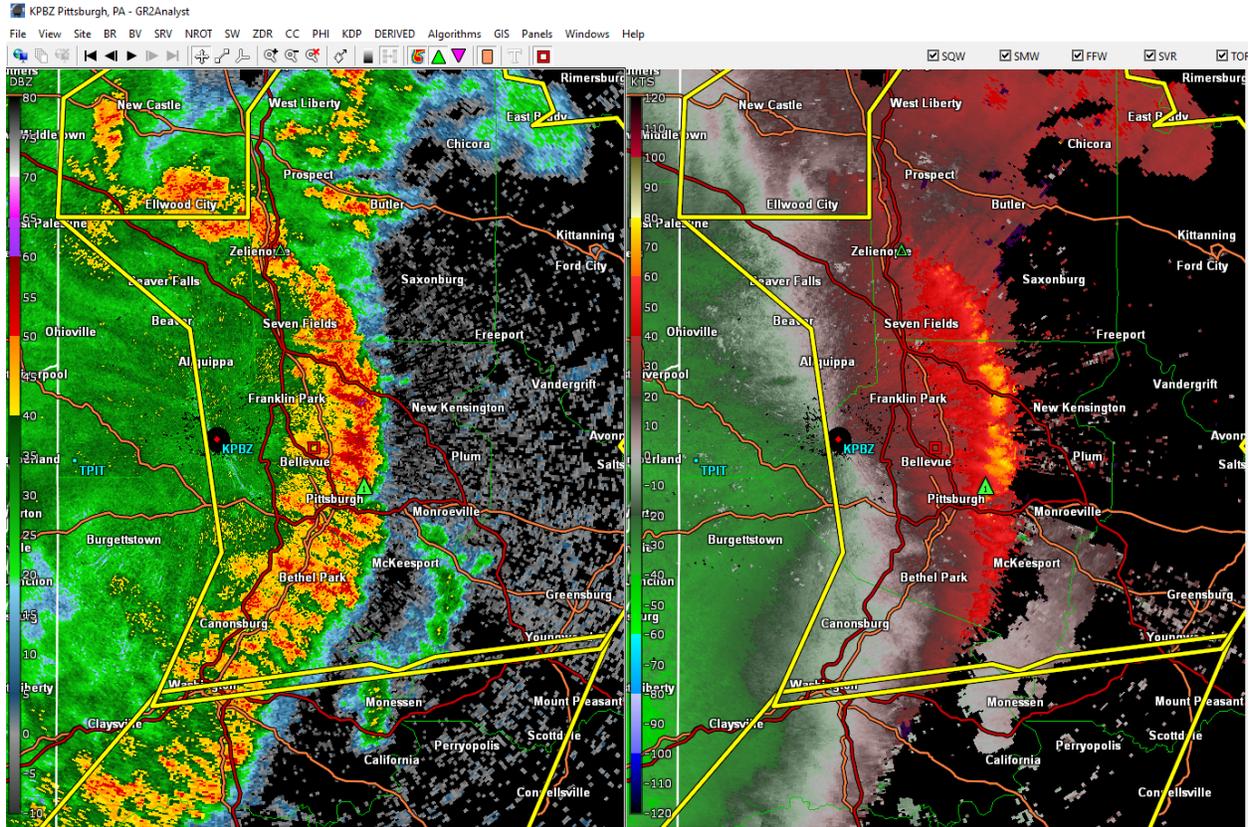


Figure 2 – Doppler radar image from KPBS radar in Pittsburgh, PA taken at 5:09 PM, which shows a line of severe storms moving through Pittsburgh, PA (Sources: NCEI / GR2 Analyst)

DATA SOURCES AND OTHER REFERENCES

The following descriptions provide a review of each source and reference utilized in this report.

AUTOMATED WEATHER OBSERVING SYSTEM (AWOS)

AWOS stations are similar to ASOS stations; however, they are operated and controlled by the Federal Aviation Administration (FAA). Unlike ASOS, AWOS systems generally report in 20-minute increments and do not report observations for rapidly changing weather conditions. These systems are among the longest running automated weather stations and predate the ASOS. NOAA's National Centers for Environmental Information (NCEI) provides access to the data online in the form of Local Climatological Observations (LCD).

DOPPLER RADAR IMAGES

Doppler RADAR is used to detect where precipitation is falling in the atmosphere. There are 160 operational high-resolution Doppler weather RADAR sites across the United States. Radar images were accessed from the National Centers for Environmental Information's NEXRAD Data Archive. The RADAR site used in this report was KDMX, which is located in Des Moines, IA. Radar images were accessed from the NOAA National Centers for Environmental Information (NCEI). Short Range Base Reflectivity images depict the intensity and location of precipitation from approximately 143 miles outward from the Radar site. The resolution of Short Range Base Reflectivity images is approximately 0.16 miles by 0.5 azimuth degree. Depending on the mode of operation used, images are typically available every 4 to 10 minutes.

NCEI STORM EVENTS DATABASE

NOAA Storm Data is an official publication of the National Oceanic and Atmospheric Administration (NOAA) which documents the occurrence of storms and other significant weather phenomena having sufficient intensity to cause loss of life, injuries, significant property damage, and /or disruption to commerce. The NCEI receives their Storm Data from the National Weather Service (NWS) about 60 to 90 days after the end of the data month. The National Weather service receives their information from a variety of sources, which include but are not limited to: county, state and federal emergency management officials, local law enforcement officials, skywarn spotters, NWS damage surveys, newspaper clipping services, the insurance industry and the general public. An effort is made to use the best available information, but because of time and resource constraints, information from these sources may be unverified by the National Weather Service.

NATIONAL WEATHER SERVICE (NWS) PRODUCTS

The National Weather Service Forecast Office is responsible for issuing daily zone forecasts, most watches, warnings, advisories, and special weather statements. Daily zone forecasts are issued several times a day, sometimes more if updates are needed. These forecasts are immediately made available to the public on the internet, local radio, and/or television stations. The watches, warnings, advisories, and special weather statements are issued when impending weather meets certain criteria set by the National Weather Service. Products are available through the NCEI Service Records Retention System (SRRS).

NWS PRELIMINARY LOCAL STORM REPORTS

Preliminary Local Storm Reports are issued by the National Weather Service Forecast Office when severe weather is observed. Some severe weather phenomena that are reported are: hail, damaging winds, tornadoes, flooding, etc. The National Weather Service receives their information from a variety of sources, such as, county, state and federal emergency management officials, local law enforcement officials, skywarn spotters, NWS damage surveys, amateur radio operators, newspaper clipping services, the insurance industry, and the general public. The final and official list of reports is found in the Storm Events Database. Reports are available through the NCEI Service Records Retention System (SRRS).

HOURLY & SUB-HOURLY OBSERVATIONS

- **KPIT: Pittsburgh International Airport, PA (ASOS)**
Elevation 1119 feet; Located 2.9 miles west-northwest
- **KAGC: Allegheny County Airport, PA (ASOS)**
Elevation 1244 feet; Located 6.7 miles east-northeast
- **KLBE: Latrobe / Westmoreland, PA (AWOS)**
Elevation 1199 feet; Located 15.7 miles east-northeast

CERTIFICATION

I certify that the information in this report is true and accurate, and that any estimations, interpolations, or assumptions that have been made were done so by a professional meteorologist with expert accuracy within a reasonable degree of meteorological and scientific certainty. Any conclusions are based on the interpretation of the best available information at the time of the issuance of my report as well as my education, training, and experience. I certify that the analysis provided within this report represents my unbiased opinion as to the weather conditions at the subject property during the stated timeframe. I reserve the right to amend the conclusions made herein upon further discovery of additional meteorological data or other relevant materials. Use of any information within this report is intended for the referenced matter only and should not be utilized for any other purpose.



Zachary Chabala
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ABOUT WEATHERWORKS

Since 1986, WeatherWorks has provided dependable meteorological services to thousands of clients in the private and public sectors by understanding the core principles and complexities of meteorology in addition to utilizing technological advances. For over 30 years, WeatherWorks has prepared detailed, site specific, and easy to understand past weather reports for all types of cases and claims. The professional meteorologists at WeatherWorks have performed site specific analysis on over 3500 plaintiff and defense cases across the United States. Our sound meteorological advice and customized services relating to past, present, and future weather conditions remain vital in each of our client's decision making process, and provide our staff with the continued knowledge of the weather's impact on the spectrum of weather related cases and incidents.