

## Dataset Title

CHEESEHEAD radar wind profiler, radio acoustic sounding system, and surface meteorology data acquired by the NOAA Physical Sciences Laboratory

## Dataset Authors

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## Time of Interest

Lakeland, WI (ARV): 2019/06/27 17:00:00 UTC to 2019/10/28 01:00:00 UTC

Prentice, WI (PRW): 2019/06/26 16:00:00 UTC to 2019/10/29 01:00:00 UTC

## Area of Interest

ARV: 45.92 N, 89.73 W

PRW: 45.54 N, 90.28 W

## Data Frequency

Wind profiler: ~55-minute average once per hour

Radio acoustic sounding system: ~5-minute average every 30 minutes

Surface meteorology: 2-minute average every 2 minutes

## Data Spatial Type

Horizontal point data, i.e., data acquired at specific latitude/longitude locations

Radar-wind-profiler data is vertically distributed every ~57 m and ~97 m up to ~2.6 km and ~6.8 km, respectively.

Radio-acoustic-sounding-system data is vertically distributed every ~63 m up to ~1.5 km.

## General Dataset Description

Site information

ARV: [https://psl.noaa.gov/data/obs/sites/view\\_site\\_details.php?siteID=arv](https://psl.noaa.gov/data/obs/sites/view_site_details.php?siteID=arv)

PRW: [https://psl.noaa.gov/data/obs/sites/view\\_site\\_details.php?siteID=prw](https://psl.noaa.gov/data/obs/sites/view_site_details.php?siteID=prw)

Radar wind profiler

Instrument description: <https://psl.noaa.gov/data/obs/instruments/WindProfilerDescription.html>

File format: [https://psl.noaa.gov/data/obs/data/view\\_data\\_type\\_info.php?DataTypeID=52](https://psl.noaa.gov/data/obs/data/view_data_type_info.php?DataTypeID=52)

## Radio acoustic sounding system

Instrument description: <https://psl.noaa.gov/data/obs/instruments/RadioAcousticSoundingSystem.pdf>

File format: [https://psl.noaa.gov/data/obs/data/view\\_data\\_type\\_info.php?DataTypeID=53](https://psl.noaa.gov/data/obs/data/view_data_type_info.php?DataTypeID=53)

## Surface meteorology

Instrument descriptions: On the site-information pages listed above, instruments are listed under the 'Inactive Instruments' link, and each "Instrument Name" is linked to the manufacturer documentation.

ARV file format: [https://psl.noaa.gov/data/obs/data/view\\_data\\_type\\_info.php?DataTypeID=14&SiteID=arv](https://psl.noaa.gov/data/obs/data/view_data_type_info.php?DataTypeID=14&SiteID=arv)

PRW file format: [https://psl.noaa.gov/data/obs/data/view\\_data\\_type\\_info.php?DataTypeID=14&SiteID=prw](https://psl.noaa.gov/data/obs/data/view_data_type_info.php?DataTypeID=14&SiteID=prw)

Data notes: The net radiometer domes at PRW were cracked/broken at the time of site removal. It is not known when the damage occurred or how the net-radiometer measurements were affected. The pressure sensor at ARV measured 2 millibars higher than an Omega handheld pressure meter at the time of site removal.

## File Names

File naming convention:

sssYYJJJ.type

where sss = 3-letter site identifier; YY = 2-digit year; JJJ = 3-digit day of the year; type = 'wind' (for wind profiler data), 'vtemp' (for radio acoustic sounding system data), and 'met' (for surface meteorology data)

List of files transferred:

arv19179.wind	arv19197.wind	arv19215.wind	arv19233.wind	arv19251.wind	arv19269.wind	arv19287.wind
arv19180.wind	arv19198.wind	arv19216.wind	arv19234.wind	arv19252.wind	arv19270.wind	arv19288.wind
arv19178.wind	arv19196.wind	arv19214.wind	arv19232.wind	arv19250.wind	arv19268.wind	arv19286.wind
arv19181.wind	arv19199.wind	arv19217.wind	arv19235.wind	arv19253.wind	arv19271.wind	arv19289.wind
arv19182.wind	arv19200.wind	arv19218.wind	arv19236.wind	arv19254.wind	arv19272.wind	arv19290.wind
arv19183.wind	arv19201.wind	arv19219.wind	arv19237.wind	arv19255.wind	arv19273.wind	arv19291.wind
arv19184.wind	arv19202.wind	arv19220.wind	arv19238.wind	arv19256.wind	arv19274.wind	arv19292.wind
arv19185.wind	arv19203.wind	arv19221.wind	arv19239.wind	arv19257.wind	arv19275.wind	arv19293.wind
arv19186.wind	arv19204.wind	arv19222.wind	arv19240.wind	arv19258.wind	arv19276.wind	arv19294.wind
arv19187.wind	arv19205.wind	arv19223.wind	arv19241.wind	arv19259.wind	arv19277.wind	arv19295.wind
arv19188.wind	arv19206.wind	arv19224.wind	arv19242.wind	arv19260.wind	arv19278.wind	arv19296.wind
arv19189.wind	arv19207.wind	arv19225.wind	arv19243.wind	arv19261.wind	arv19279.wind	arv19297.wind
arv19190.wind	arv19208.wind	arv19226.wind	arv19244.wind	arv19262.wind	arv19280.wind	arv19298.wind
arv19191.wind	arv19209.wind	arv19227.wind	arv19245.wind	arv19263.wind	arv19281.wind	arv19299.wind
arv19192.wind	arv19210.wind	arv19228.wind	arv19246.wind	arv19264.wind	arv19282.wind	arv19300.wind
arv19193.wind	arv19211.wind	arv19229.wind	arv19247.wind	arv19265.wind	arv19283.wind	arv19301.wind
arv19194.wind	arv19212.wind	arv19230.wind	arv19248.wind	arv19266.wind	arv19284.wind	
arv19195.wind	arv19213.wind	arv19231.wind	arv19249.wind	arv19267.wind	arv19285.wind	
prw19177.wind	prw19195.wind	prw19213.wind	prw19231.wind	prw19249.wind	prw19267.wind	prw19285.wind
prw19178.wind	prw19196.wind	prw19214.wind	prw19232.wind	prw19250.wind	prw19268.wind	prw19286.wind
prw19179.wind	prw19197.wind	prw19215.wind	prw19233.wind	prw19251.wind	prw19269.wind	prw19287.wind
prw19180.wind	prw19198.wind	prw19216.wind	prw19234.wind	prw19252.wind	prw19270.wind	prw19288.wind
prw19181.wind	prw19199.wind	prw19217.wind	prw19235.wind	prw19253.wind	prw19271.wind	prw19289.wind
prw19182.wind	prw19200.wind	prw19218.wind	prw19236.wind	prw19254.wind	prw19272.wind	prw19290.wind
prw19183.wind	prw19201.wind	prw19219.wind	prw19237.wind	prw19255.wind	prw19273.wind	prw19291.wind
prw19184.wind	prw19202.wind	prw19220.wind	prw19238.wind	prw19256.wind	prw19274.wind	prw19292.wind
prw19185.wind	prw19203.wind	prw19221.wind	prw19239.wind	prw19257.wind	prw19275.wind	prw19293.wind
prw19186.wind	prw19204.wind	prw19222.wind	prw19240.wind	prw19258.wind	prw19276.wind	prw19294.wind
prw19187.wind	prw19205.wind	prw19223.wind	prw19241.wind	prw19259.wind	prw19277.wind	prw19295.wind
prw19188.wind	prw19206.wind	prw19224.wind	prw19242.wind	prw19260.wind	prw19278.wind	prw19296.wind
prw19189.wind	prw19207.wind	prw19225.wind	prw19243.wind	prw19261.wind	prw19279.wind	prw19297.wind



prw19181.met	prw19197.met	prw19213.met	prw19229.met	prw19245.met	prw19261.met	prw19277.met	prw19293.met
prw19182.met	prw19198.met	prw19214.met	prw19230.met	prw19246.met	prw19262.met	prw19278.met	prw19294.met
prw19183.met	prw19199.met	prw19215.met	prw19231.met	prw19247.met	prw19263.met	prw19279.met	prw19295.met
prw19184.met	prw19200.met	prw19216.met	prw19232.met	prw19248.met	prw19264.met	prw19280.met	prw19296.met
prw19185.met	prw19201.met	prw19217.met	prw19233.met	prw19249.met	prw19265.met	prw19281.met	prw19297.met
prw19186.met	prw19202.met	prw19218.met	prw19234.met	prw19250.met	prw19266.met	prw19282.met	prw19298.met
prw19187.met	prw19203.met	prw19219.met	prw19235.met	prw19251.met	prw19267.met	prw19283.met	prw19299.met
prw19188.met	prw19204.met	prw19220.met	prw19236.met	prw19252.met	prw19268.met	prw19284.met	prw19300.met
prw19189.met	prw19205.met	prw19221.met	prw19237.met	prw19253.met	prw19269.met	prw19285.met	prw19301.met
prw19190.met	prw19206.met	prw19222.met	prw19238.met	prw19254.met	prw19270.met	prw19286.met	prw19302.met
prw19191.met	prw19207.met	prw19223.met	prw19239.met	prw19255.met	prw19271.met	prw19287.met	prw19303.met
prw19192.met	prw19208.met	prw19224.met	prw19240.met	prw19256.met	prw19272.met	prw19288.met	
prw19193.met	prw19209.met	prw19225.met	prw19241.met	prw19257.met	prw19273.met	prw19289.met	
prw19194.met	prw19210.met	prw19226.met	prw19242.met	prw19258.met	prw19274.met	prw19290.met	

**Data restrictions**

No restrictions

**Digital Object Identifier (DOI)**

<https://doi.org/10.26023/PQ0Q-T5TH-KY0Q>

**GCMD Keywords**

The following keywords (one row per data type) are all associated with the EARTH SCIENCE category:

- |                         |                         |                          |                     |
|-------------------------|-------------------------|--------------------------|---------------------|
| 1) SPECTRAL/ENGINEERING | RADAR                   | RADIAL VELOCITY          |                     |
| 2) SPECTRAL/ENGINEERING | RADAR                   | RADAR REFLECTIVITY       |                     |
| 3) ATMOSPHERE           | ATMOSPHERIC WINDS       | UPPER LEVEL WINDS        | WIND DIRECTION      |
| 4) ATMOSPHERE           | ATMOSPHERIC WINDS       | UPPER LEVEL WINDS        | WIND SPEED          |
| 5) ATMOSPHERE           | ATMOSPHERIC TEMPERATURE | UPPER AIR TEMPERATURE    | VIRTUAL TEMPERATURE |
| 6) ATMOSPHERE           | ATMOSPHERIC PRESSURE    | SURFACE PRESSURE         |                     |
| 7) ATMOSPHERE           | ATMOSPHERIC TEMPERATURE | SURFACE TEMPERATURE      | AIR TEMPERATURE     |
| 8) ATMOSPHERE           | ATMOSPHERIC WATER VAPOR | WATER VAPOR INDICATORS   | HUMIDITY            |
| 9) ATMOSPHERE           | ATMOSPHERIC WINDS       | SURFACE WINDS            | WIND SPEED          |
| 10) ATMOSPHERE          | ATMOSPHERIC WINDS       | SURFACE WINDS            | WIND DIRECTION      |
| 11) ATMOSPHERE          | ATMOSPHERIC RADIATION   | INCOMING SOLAR RADIATION |                     |
| 12) ATMOSPHERE          | ATMOSPHERIC RADIATION   | NET RADIATION            |                     |
| 13) ATMOSPHERE          | PRECIPITATION           | PRECIPITATION AMOUNT     |                     |

**Publications**

None