

DISCLAIMER: READ BEFORE CONTINUING

THE LOWER PLATTE NORTH NATURAL RESOURCE DISTRICT MAKES NO GUARANTEE OF THE ACCURACY OF THIS DATA AND TAKES NO RESPONSIBILITY FOR THE CONSEQUENCES THAT MAY COME FROM APPLYING THIS DATA

The METOS weather station network, accessed through FieldClimate, is a free service that is offered by the Lower Platte North Natural Resource District (referred to as LPNNRD) for users that live within the district.

Data is collected by various weather stations placed in various locations within varying topography and physical land features. NONE of this data is reviewed by professional meteorologists or agrometeorologists.

The LPNNRD strongly advises against the use of this collected data alone for critical decision-making within agriculture, irrigation, or various other industries or applications that are dependent or influenced by weather. The LPNNRD specifically disclaims responsibility or liability for individuals or entities using the METOS weather station network in place of professional advice or consulting including, but not limited to, disclaiming all implied warranties of merchantability, fitness for a particular purpose, title, and non-infringement. It is always advised to consult professionals on critical decisions.

Along with claiming no liability or responsibility for the use of the provided data from the weather station network, the LPNNRD has no responsibility for the results of individuals or entities that may use the data in decision-making. This includes not being responsible for a loss of profit or any damage that may follow based upon the unsanctioned application of data from the LPNNRD weather station network.

By using FieldClimate through the LPNNRD public account, you are acknowledging that any reliance upon the information is at your own risk, that the content may include technical inaccuracies or errors, and that you agree to not hold LPNNRD responsible for any consequences that may come from the interpretation or application of this data.

Accessing the Lower Platte North NRD Weather Station Network

- 1) The online platform that our data is organized on is FieldClimate. To access FieldClimate, go to the following link:

<https://www.fieldclimate.com/auth/login>

- 2) The login for the **shared, public** account is as follows:

NOTE: This is a SHARED account across the district. Do not change any of the settings on the account itself or on the stations.

Username: LPNNRDpublic

Password: LPNNRDpublic

- 3) Selecting the desired weather station data to view.

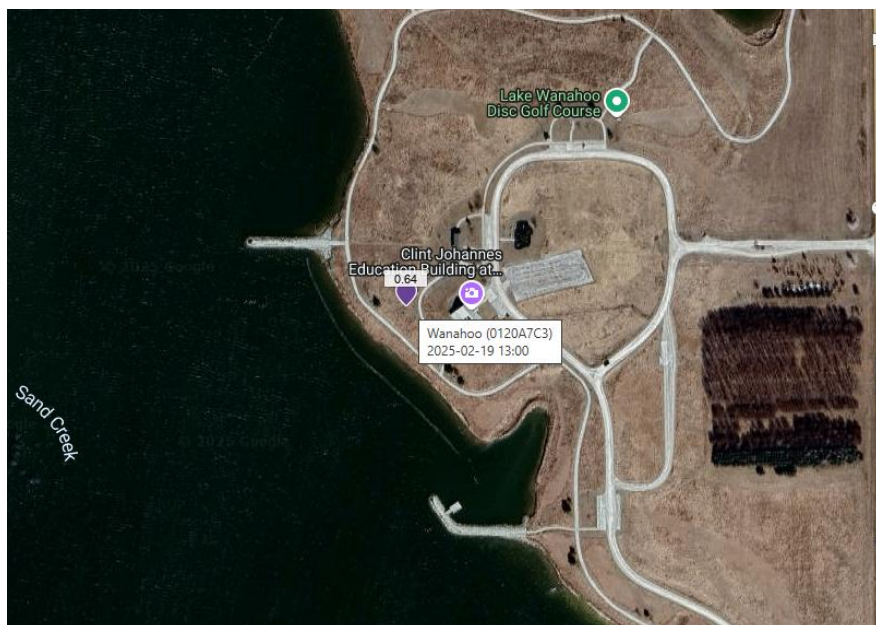
You have two options:

Option 1: You will see a map with dots on it and a number floating above each of the dots (this is the temperature of the latest reading). Each of these dots are weather stations.



You can zoom in and out using the cursor on your mouse. To move your view, you can click and drag. Both these actions can be done to zero in on your desired station to view.

Once you find your desired station, you can hover your mouse over the dot. A box will pop up and tell you the station name, station ID number, and the date and time of the latest reading. You can then click on this dot, and the station data will pull up.



Option 2: If you want to instead find your station via a station list, scroll on the main dashboard page to underneath the stations map. Here you will find the stations list.

20250217 58dc3b9 / Quebracho

FieldClimate by Pessl Instruments

Stations List

RAIN, 24 HOURS

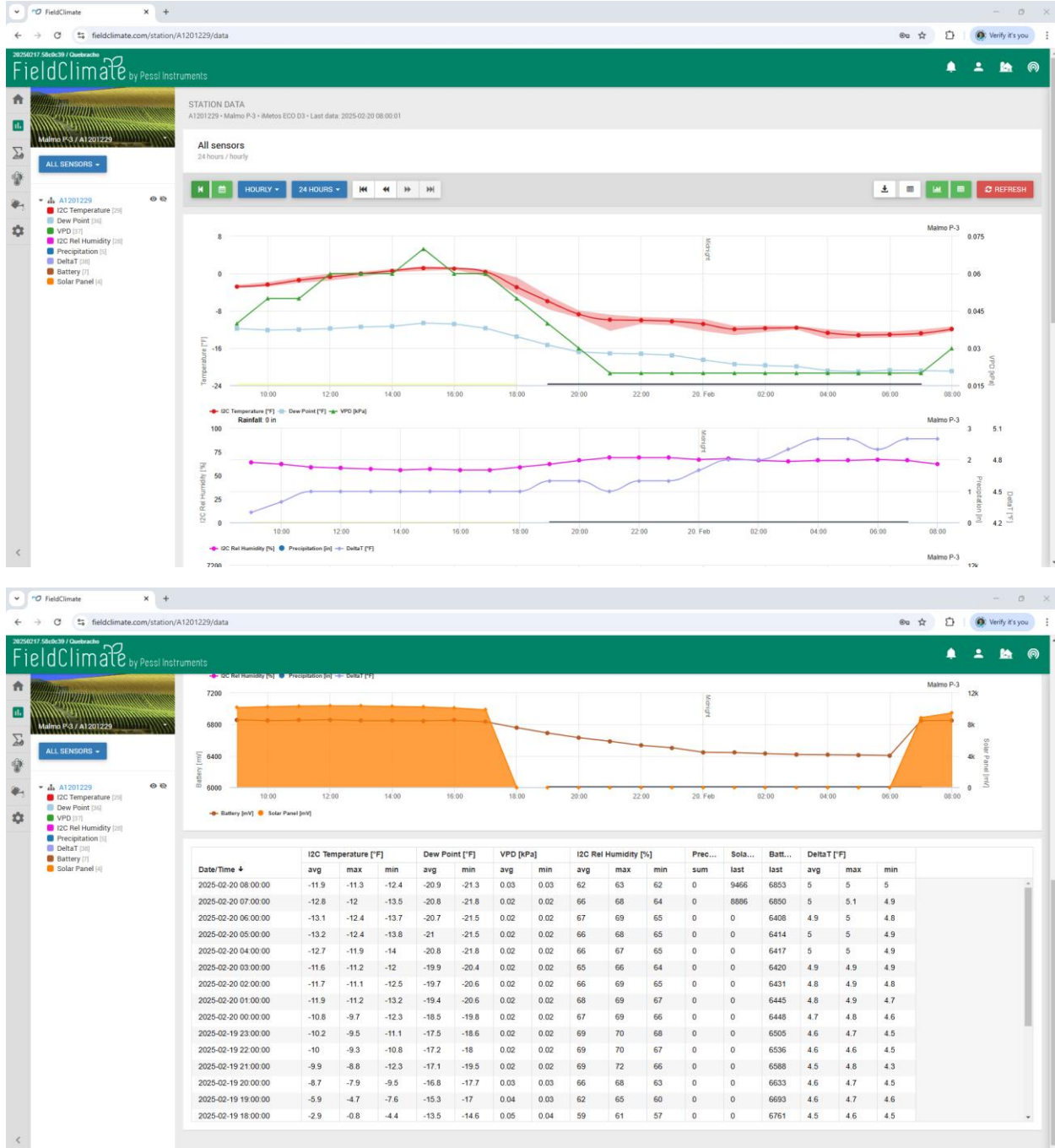
STATION ID ↑	STATION NAME	DEVICE TYPE	LAST DATA READING	BATTERY [mV]
0120A068	USC-03	IMetos ECO D3	2025-02-19 15:00:01	6776
0120A07B	Platte 1	IMetos ECO D3	2025-02-19 15:30:01	6815
0120A674	Wahoo Schools	IMetos ECO D3	2025-02-19 15:00:01	6835
0120A6B7	Abie	IMetos ECO D3	2025-02-19 15:00:01	6747
0120A7A0	Bellwood	IMetos ECO D3	2025-02-19 15:00:01	6818
0120A7A1	Lindsay	IMetos ECO D3	2025-02-19 15:00:01	6827
0120A7B0	Swedeburg	IMetos ECO D3	2025-02-19 15:00:01	6776
0120A7C0	Saunders 2	IMetos ECO D3	2025-02-19 15:00:01	6824
0120A7C3	Wanhoo	IMetos ECO D3	2025-02-19 15:00:01	6770
A1201223	Saunders 1	IMetos ECO D3	2025-02-19 15:00:01	6759
A1201224	NB-01	IMetos ECO D3	2025-02-19 15:00:01	6796
A1201225	Mead	IMetos ECO D3	2025-02-19 15:00:01	6835
A1201226	Butler 1	IMetos ECO D3	2025-02-19 15:00:01	6776
A1201229	Malmö P-3	IMetos ECO D3	2025-02-19 15:00:01	6844
A120122A	Colfax 2	IMetos ECO D3	2025-02-19 15:00:01	6801

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Under the 'STATION NAME' column, you will find the names of all active stations. Find the name of the desired station that you want to view, and then click on the corresponding station ID (to the left of the station name) to pull up the data viewing page for that station.

Viewing the Data

Following the steps from above, you will be brought to the following display page for your selected station:



What data is shown?

The following data is organized into three graphs, as well as a table underneath the graphs:

First Graph (Top Graph)

- I2C Temperature = the air temperature is collected in Fahrenheit.
- Dew Point = The temperature at which air is so cool that water vapor in the air turns into liquid water. Truly, this is a measurement of how much moisture is in the air.
- VPD = Vapor Pressure Deficit. The difference between the amount of moisture that is currently in the air versus the maximum amount of moisture the air can hold at a given temperature. Basically, this tells you how much room there is in the air for more moisture before the air is saturated. The lower the VPD, the closer the air moisture is to saturation. Given in units of pressure (kPa).

Second Graph (Middle Graph)

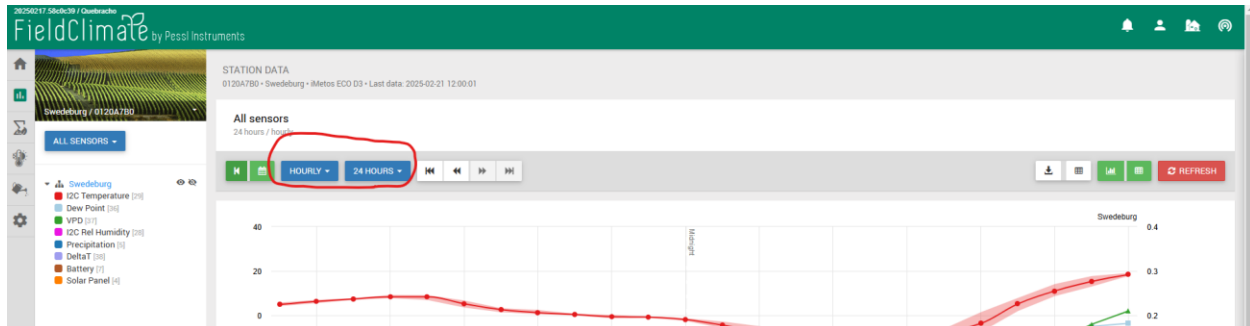
- I2C Relative Humidity = The measure of the amount of moisture that is in the air versus the amount of moisture the air can hold at a given temperature. Given in terms of a percentage (%).
- Precipitation = The rainfall or melted snowfall that passed through the rain funnel on the weather station. Given in units of inches (in).
- DeltaT = This is an indicator for suitable spraying conditions for pest management. It is based on a relationship between the relative humidity and the air temperature. This is given in degrees Fahrenheit. The range that is ideal for effective pesticide use is 35.5 F to 46.5 F (DeltaT, NOT air temperature).

Third Graph (Bottom Graph)

- Battery = Measurement of the battery output in the weather station. Given in milliVolts (mV). If the reading is between 6,800mV – 6,300mV, this battery is good. Please contact us if you notice a station with a battery at or below 6,300mV.
- Solar Panel = The weather station is powered by a solar panel. This is a measurement of the power that is being input into the battery to recharge it. Given in milliVolts (mV).

Selecting Displayed Data

The graphs default to showing hourly data for the past 24 hrs. This can be changed by changing the settings in the two boxes circled in the screenshot below.

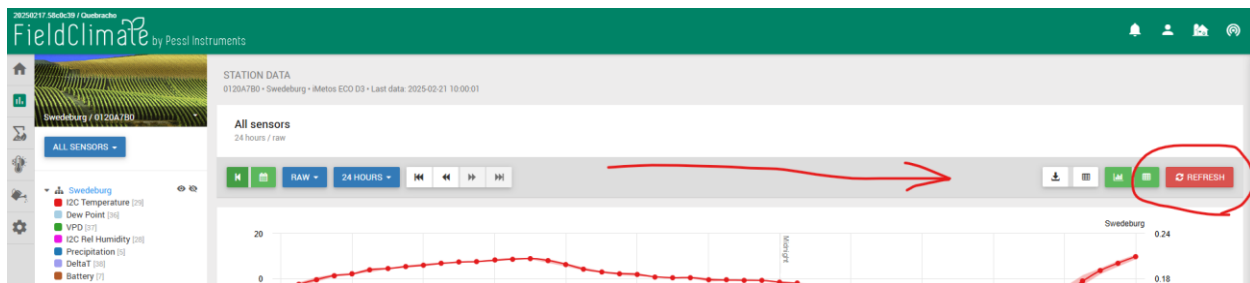


The box on the left that says 'HOURLY' is the frequency of data points that you want to show. The options are:

- Raw = Shows all the readings that the station takes without averaging them over a period. For example, in the winter, the station is set to transfer a reading every 30 minutes. This setting will then show a data point for every 30 minutes.
- Hourly = Takes all the data points taken within an hour, averages them, and shows this as a data point.
- Daily = Averages all data points taken within a 24-hour period.
- Monthly = Averages all data points taken within a month.

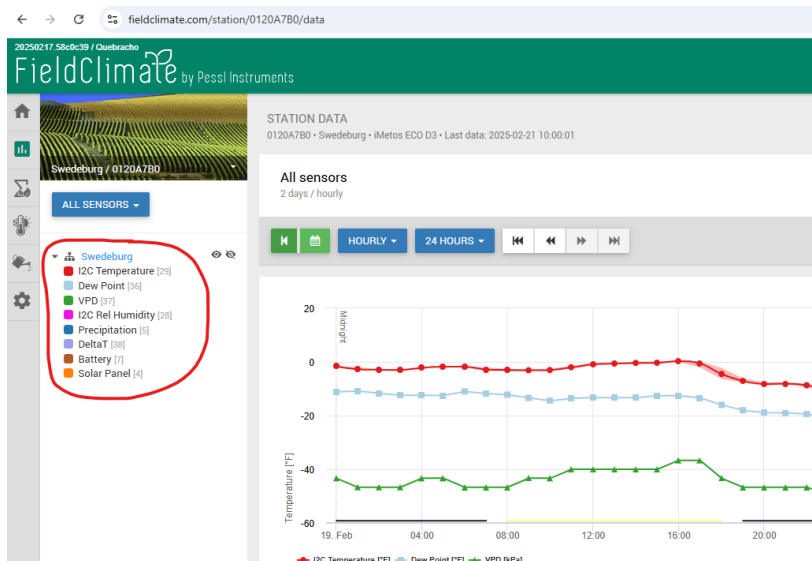
Once the frequency of data is chosen, the blue box to the right (in the screenshot above, it says '24 HOURS') can be used to select the range of time that you want the graphs to display.

Once these two boxes are selected as desired, click the red 'REFRESH' button to the right.

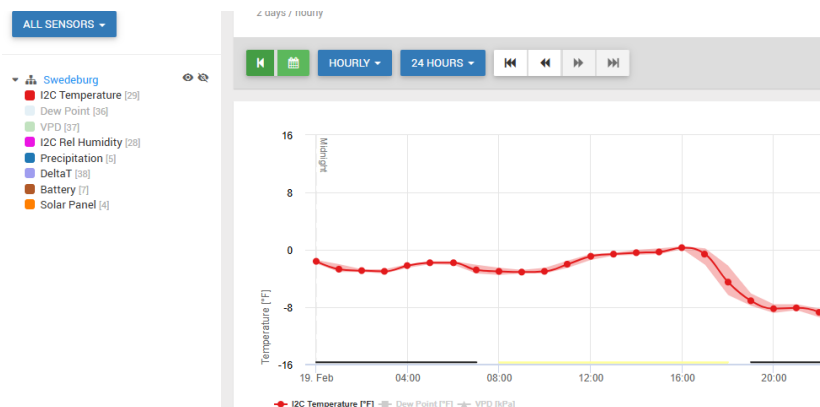


Note: As you change the frequency of data, the options for the range of displayed data on the graphs change. For example, if you turn frequency of data to monthly, you can then make the range of time displayed on the graphs go all the way back to 36 months.

If you want to view only certain data types on the graphs and not others, you can turn off the visibility of individual data types. Go to the column on the left side of the page, underneath the blue box that says 'All Sensors'.



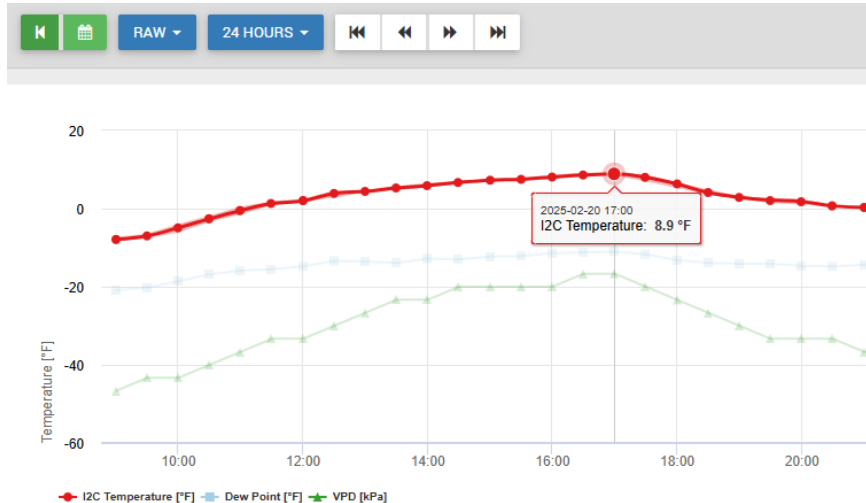
For the sensors that you want to make invisible on the graphs, click them. They will then be darkened in the column and invisible on the graphs. See the screenshot below.



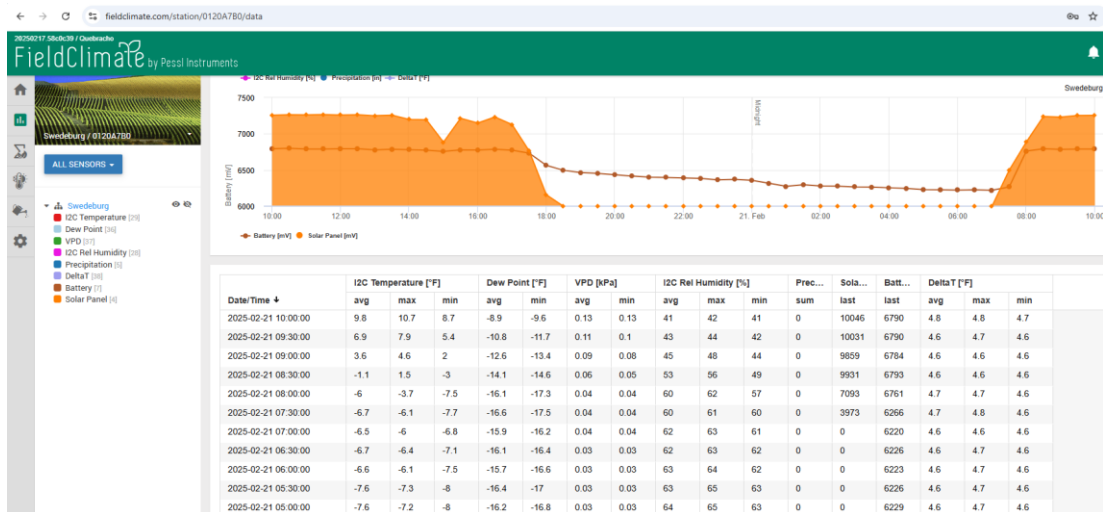
Note: If you do make any data types invisible, as shown above, ALWAYS turn their visibility back on afterwards (go back to the column on the left and click on the darkened, turned off data types to turn them back on). People might be confused and question if the station is working properly if they log on and see only some of the data showing.

Analyzing Data

On the graphs, you can hover your mouse over data points and a box will pop up telling you the date, time, data type, and the measurement of this data type at the given time/date.



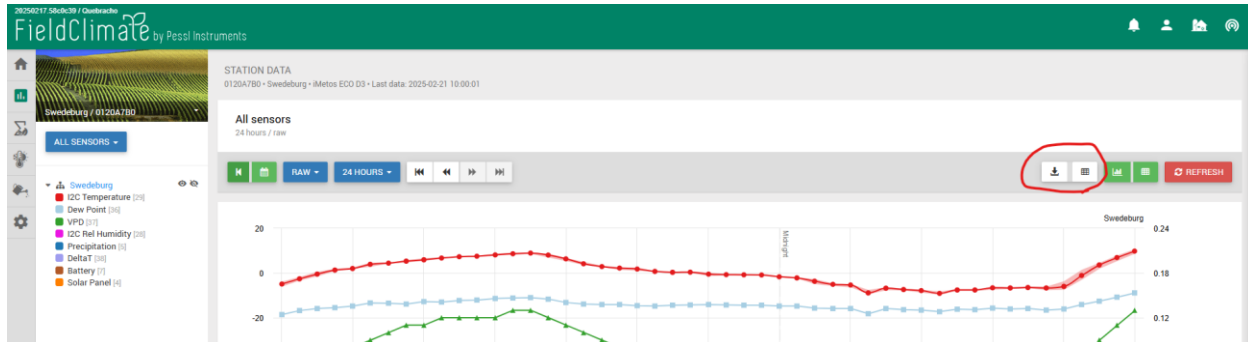
There is also a table that is present at the bottom of the page, underneath the graphs. It displays all the data that is shown in the graphs, just in a numeric, table format.



Note: Adjusting the frequency of data points shown and the range of time that you want displayed, as shown earlier, also changes this table as well as the graphs. Don't forget to click the red 'REFRESH' button!

Exporting Data

You can export this data as an Excel sheet or download a .png file of the graphs. First, make sure that the frequency of data points that you want is set, as well as the range of time that you want exported. This is done, as shown earlier, by changing the two blue boxes that are above the first graph. Once this is set, refresh the page using the red 'REFRESH' button to the right. Then, click the left circled button to download the picture of the graphs or the right circled button to download the Excel sheet.



Contact Info

If problems or questions arise, please reach out to us at the Lower Platte North NRD.

Phone: 402-443-4675

Email: jstover@lpnnrd.org

I hope that this weather network is useful to you as well as anyone else in the district that uses it. Thank you!