



WHIN Weather Station

3/4/2020

This document describes how to:

- Choose a location for your weather station and send the latitude/longitude to WHIN
- Sign up for a free Davis Weatherlink account and gain access to your weather station. In addition, once you have a Weatherlink account, you can search for other public(non-WHIN) weather stations to view in your web browser or on your smartphone.
- Examples of using Weatherlink.com
- Access WHIN weather station conditions on our website: <https://whin.org/weather>

Contents

Choose a location to put a WHIN Weather Station	2
Signing up and using Davis' Weatherlink website and smartphone app.....	7
Additional HOW-TOs.....	16
How to create a graph of Soil moisture at 4 depths and rainfall.....	16
How to download historical data for your weather stations.....	19
Access WHIN weather station conditions on our website: http://whin.org/weather	22

Choose a location to put a WHIN Weather Station

1) Identify a good location for the WHIN Weather Station

Good locations are close to an area that you'd like to monitor. For example, a farm, a field, community garden, recreational area, etc. Try to identify a location that is safe from vehicles, tractors, mowers. If possible, chose a location that is not too close to a shed or tree line and away from buried utilities.

2) Place a flag at this location. Any kind of flag will do.

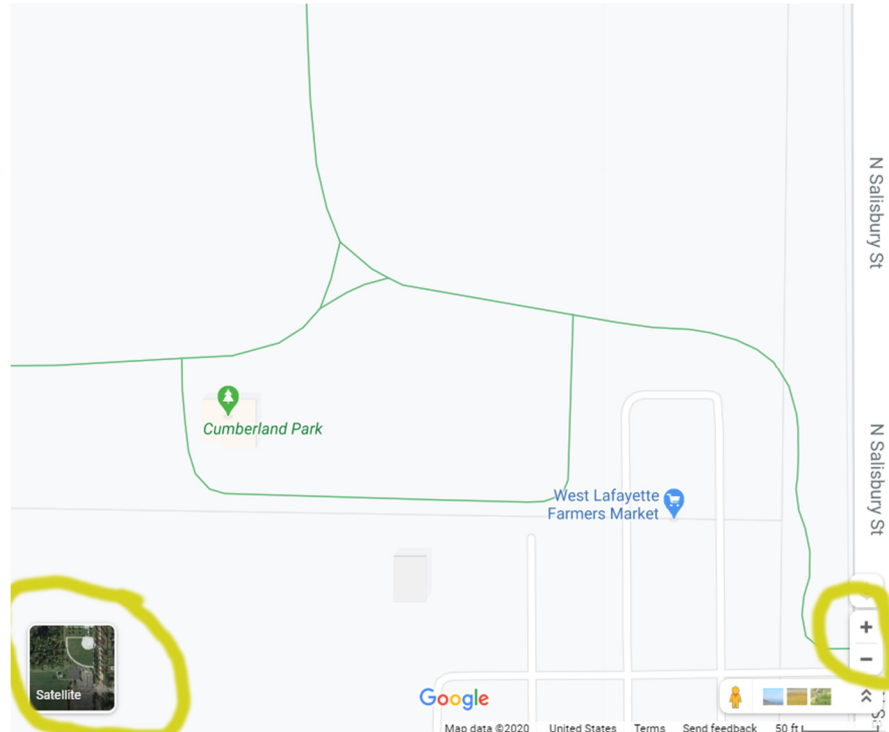


3) Determine the Latitude/Longitude of this location.

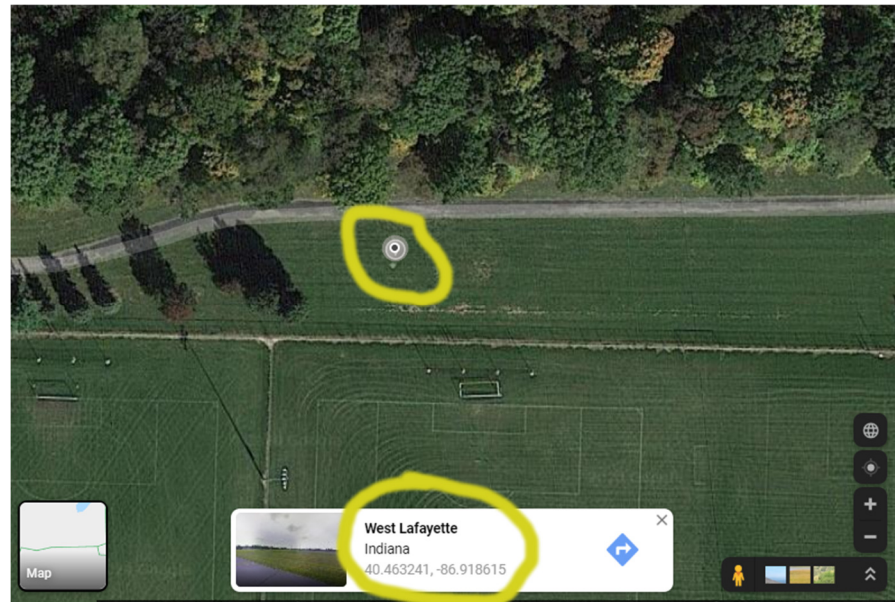
There are 2 fairly simple ways to do this.

- a. Use google maps to find your location on a map and copy the Lat/Lon
<https://www.google.com/maps>

- i. Find your location on the map, turn on satellite view and zoom into the area with +/- buttons

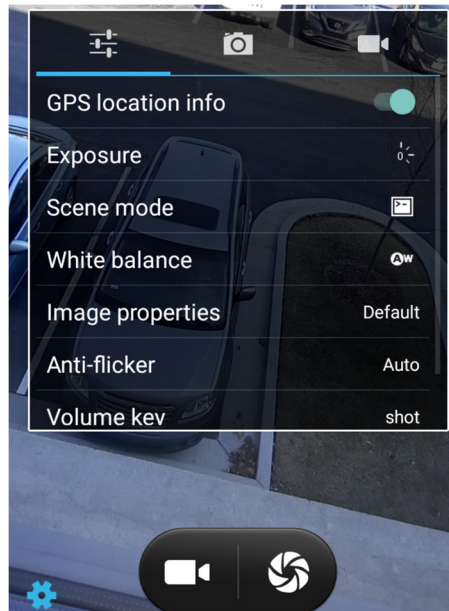


- ii. Now press the left mouse button and continue to hold for several seconds and release. A marker is placed at that location and at the bottom will be the Lat/Lon and you can copy and paste it in an email to jack.stucky@whin.org

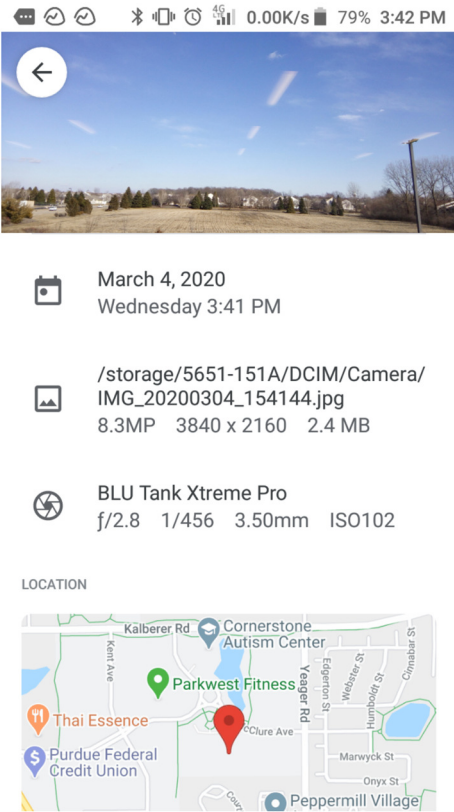


[40.463241, -86.918615](mailto:jack.stucky@whin.org)

- b. By turning on your smartphone's location services when you take a picture, you can simply email a picture of the flag to jack.stucky@whin.org and it will contain the lat/lon.
 - i. For instance on Android, you can turn on *GPS location info*



ii. When you take a picture, it records the lat/lon in the picture



- 4) When sharing your location information with WHIN, please include a phone # and best email to contact you along with any special instructions to access the location. This way we can let you know when we are planning to install the weather station. You don't necessarily need to be there.
- 5) A little information on the installation:
 - Two 6" holes about 15-24" deep and a foot apart will be dug.
 - In one hole, a 10' pole and 30lbs of concrete will be placed.
 - In the other hole, 8 soil temp/moisture sensors will be buried at 2", 5", 10", 15" depth.
 - Roughly a 2' radius around the rain will have the grass killed. If you'd prefer to not have this happen, please let us know.
 - All wind/rain/soil moisture & temp/cellular electronic units will reside on the 10' pole.

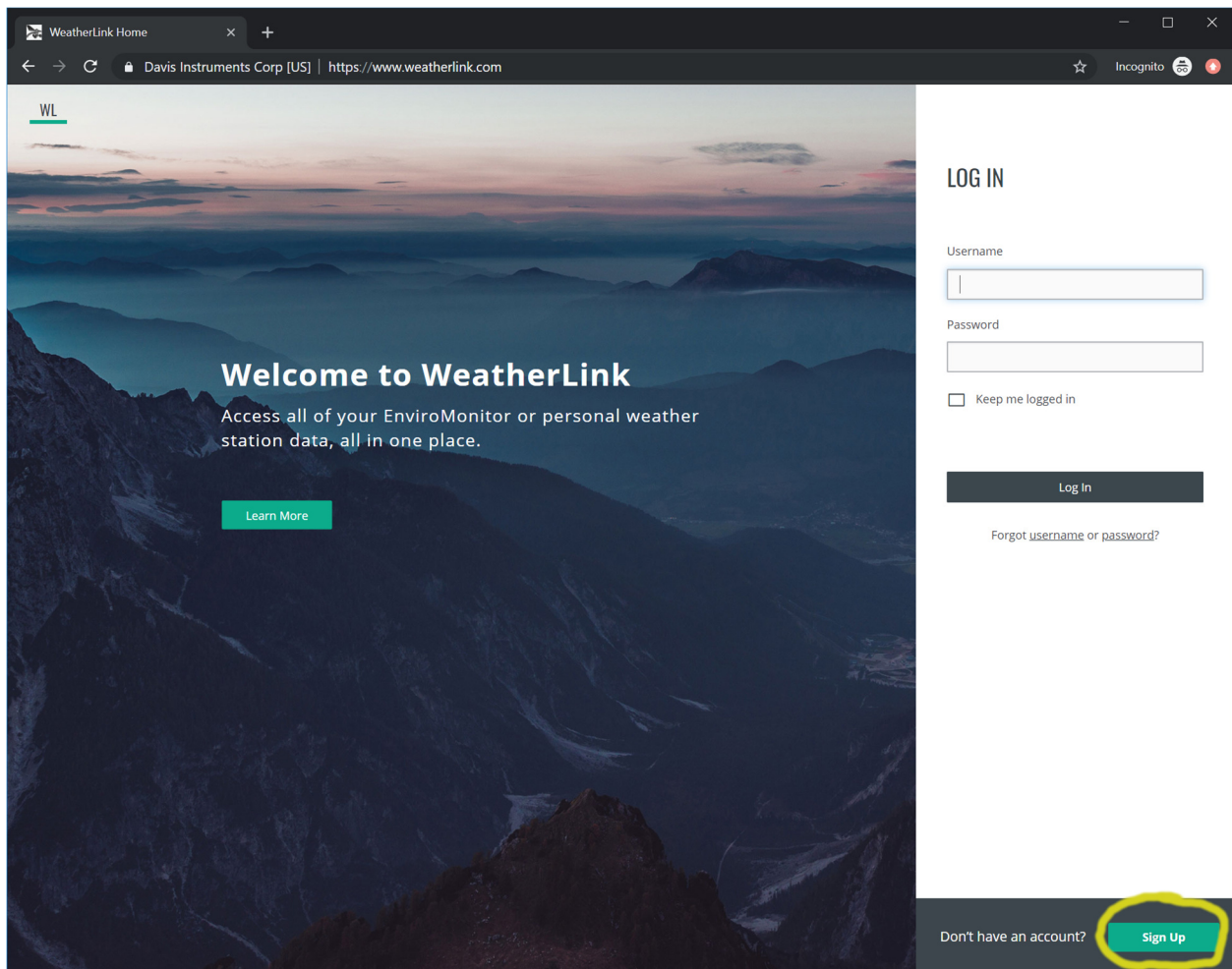
- The WHIN Weather Station is completely self-contained and needs no external power or WiFi connection.



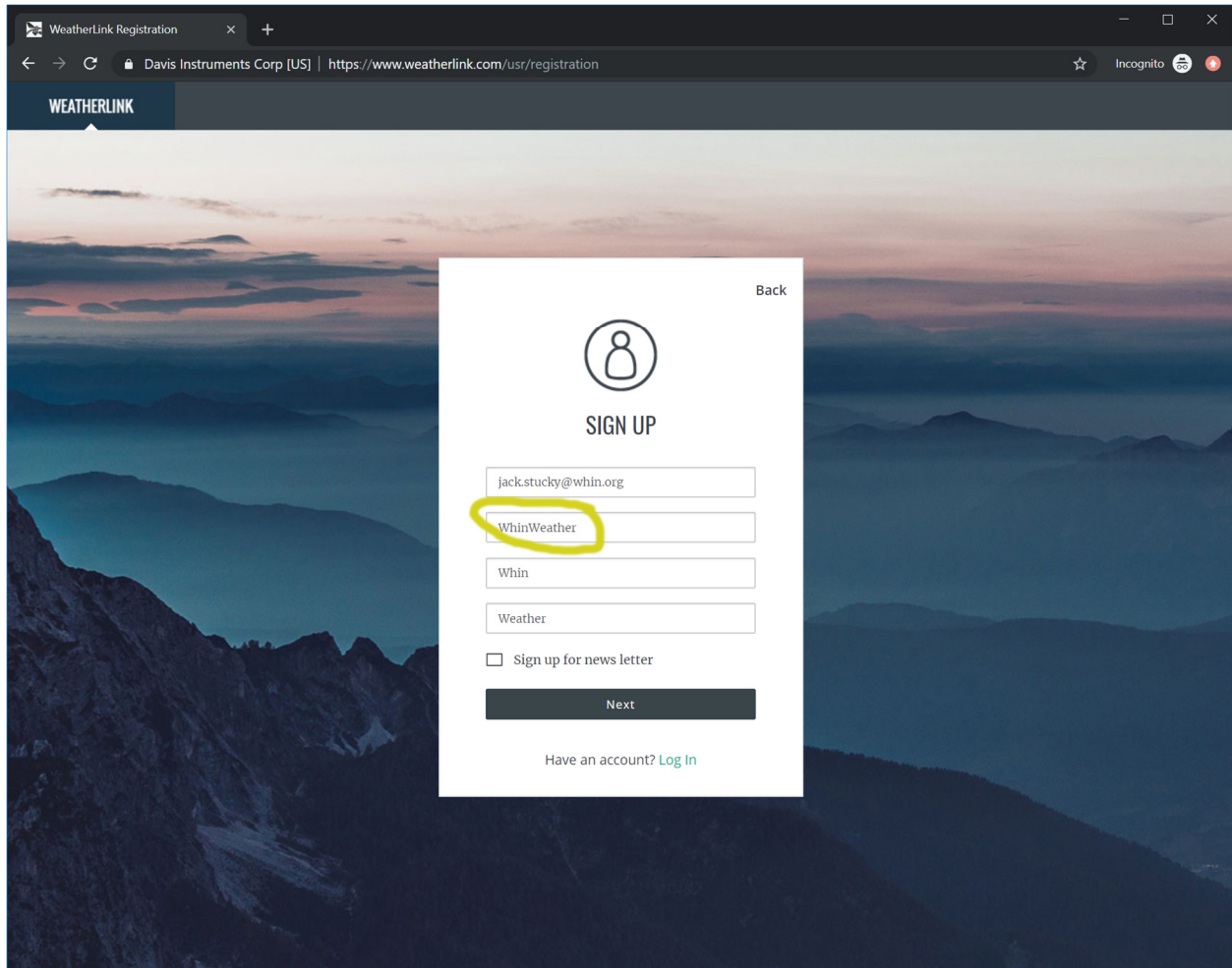


Signing up and using Davis' Weatherlink website and smartphone app

- 1) Sign-up for Davis Weatherlink account to gain access to your weather station data. Go to [weatherlink.com](https://www.weatherlink.com) and choose 'Sign Up'



2) Enter your email address, decide on a 'username', enter your first and last name, click 'next'




The screenshot shows a web browser window with the URL <https://www.weatherlink.com/usr/registration>. The page features a dark header with the "WEATHERLINK" logo. The main content area has a scenic mountain background. A white registration form is centered on the page. The form includes a "Back" link at the top right, a user icon, and the heading "SIGN UP". It contains four input fields: an email field with "jack.stucky@whin.org", a username field with "WhinWeather" (highlighted with a yellow circle), a first name field with "Whin", and a last name field with "Weather". Below these fields is a checkbox for "Sign up for news letter" and a dark "Next" button. At the bottom, there is a link for "Have an account? Log In".

WeatherLink Registration

Davis Instruments Corp [US] | <https://www.weatherlink.com/usr/registration>

WEATHERLINK

Back



SIGN UP

jack.stucky@whin.org

WhinWeather

Whin

Weather

☐ Sign up for news letter

Next

Have an account? [Log In](#)

- User Subscription**

Davis Instruments Corp [US] | https://www.weatherlink.com/accountSubscription#subscriptionIntro

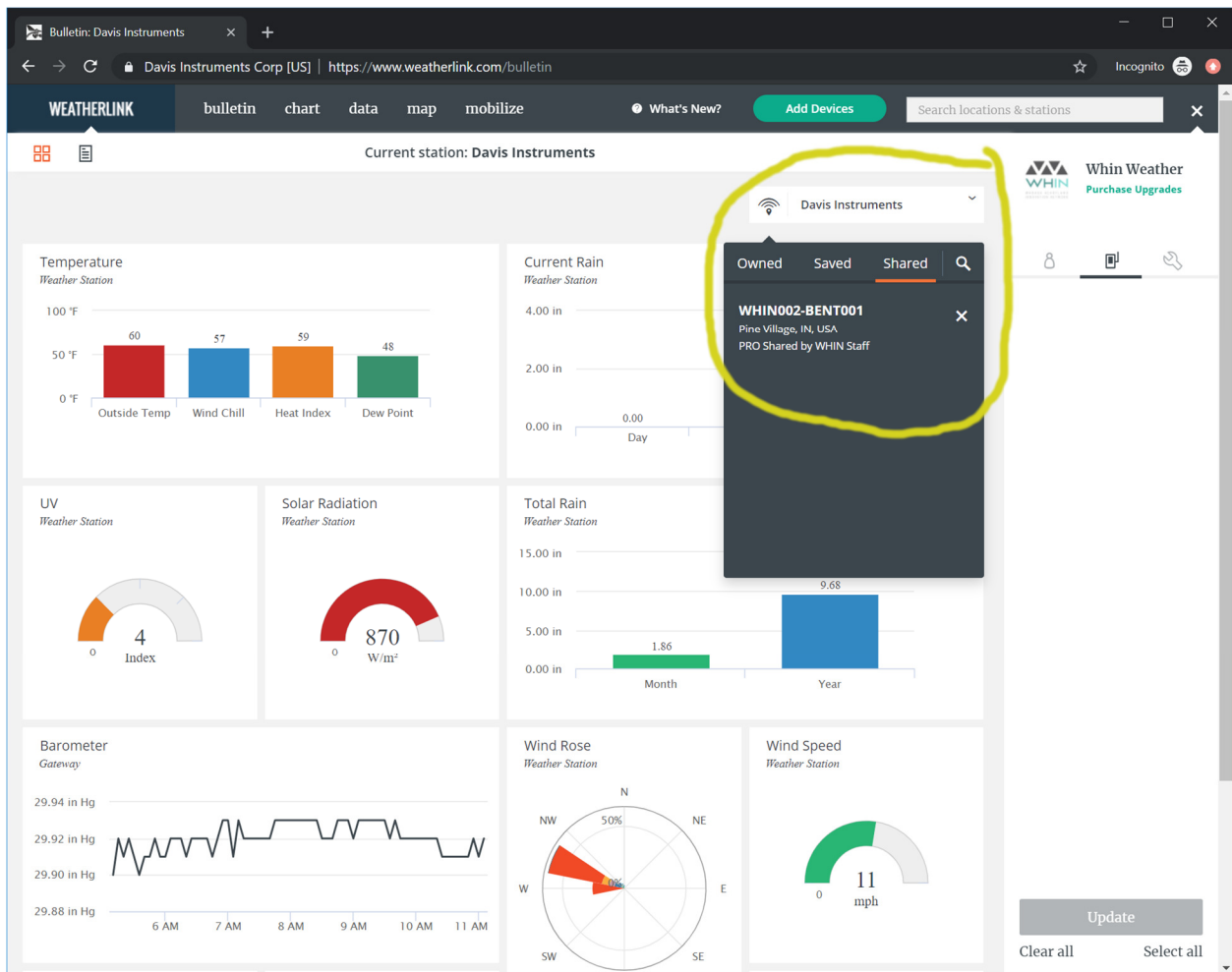
WL

Unlock the full potential of your Weather Station

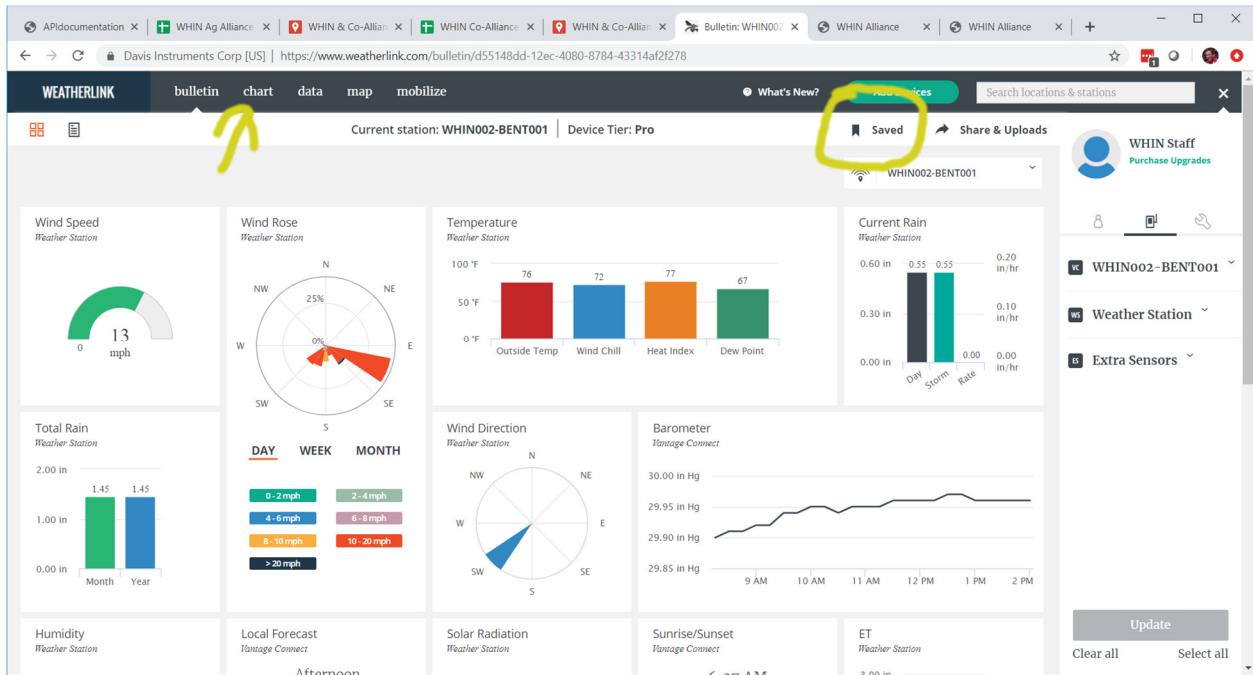
WeatherLink is home for your weather station data. Our Pro and Pro+ plans give you access to analyze and visualize historical weather data on your upgraded station.

	BASIC \$0/mo	Recommended PRO \$3.95/mo per device	PRO+ \$8.95/mo per device	CUSTOM \$\$/mo
Current Conditions	✓	✓	✓	✓
Historical Data ⓘ	✗	✓	✓	✓
Bulletin ⓘ	✓	✓	✓	✓
Map ⓘ	✓	✓	✓	✓
Chart ⓘ	✗	✓	✓	✓
Data ⓘ	✗	✓	✓	✓
Mobilize ⓘ	✗	✓	✓	✓
IPM ⓘ	✗	✗	✓	CUSTOM
Pro Shares ⓘ	0	6	10	CUSTOM
3rd Party Intervals ⓘ	15 Minutes	5 Minutes	Up to 1 minute	Up to 1 minute
	Get Started	Purchase an upgrade <small>Start 30 day trial</small>	Purchase an upgrade	Contact Us at: (800) 678-3669 Sales@davisinstruments.com

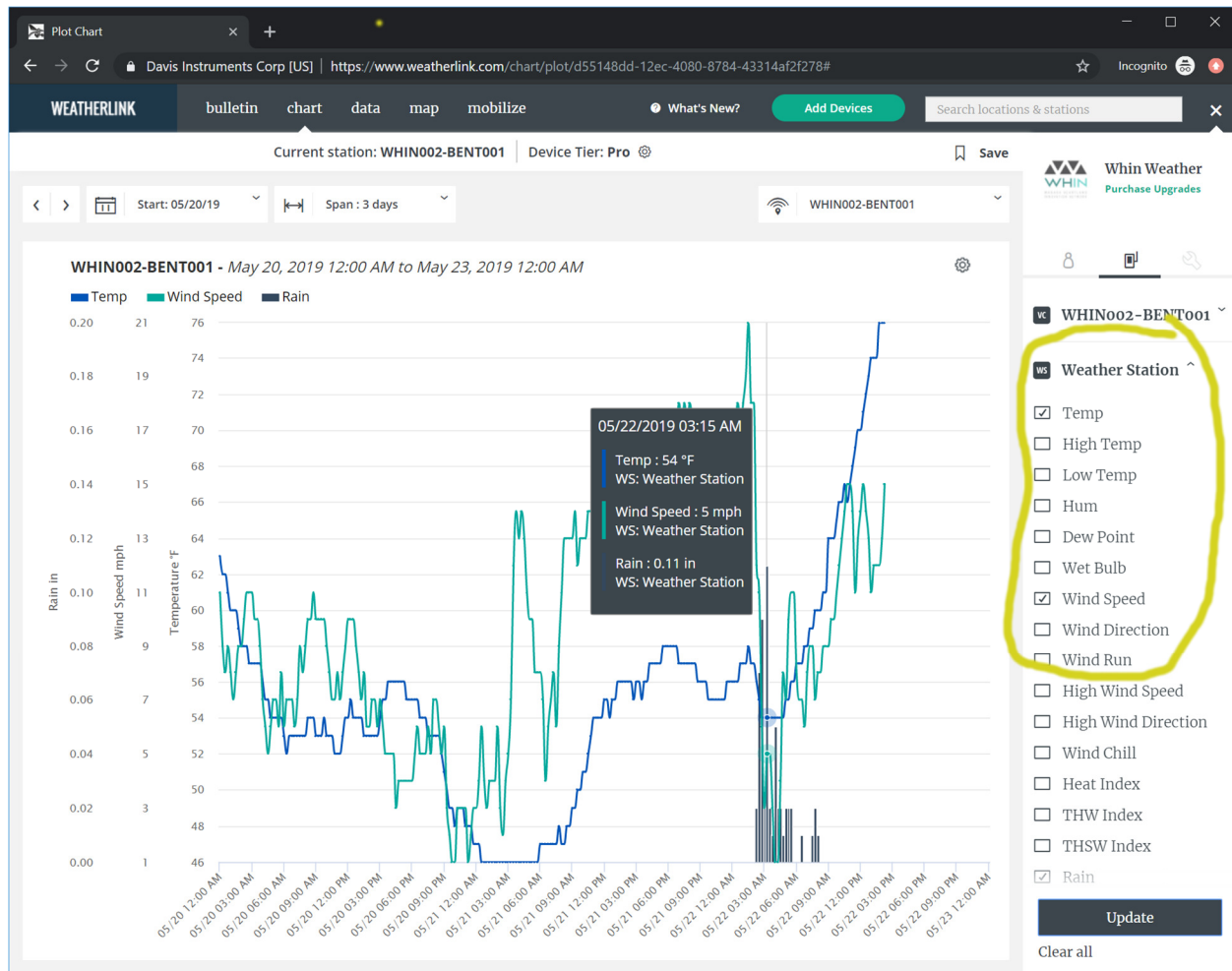
- 4) Now that you have created your weatherlink account, please email your 'username' to jack.stucky@whin.org. Your weather station will be shared with you shortly and you should get an email indicating that you have access to your weather station. Once the weather station is shared with you, you might have to hit refresh on your browser. Click on the down arrow and select the shared tab. Select your weather station to view.



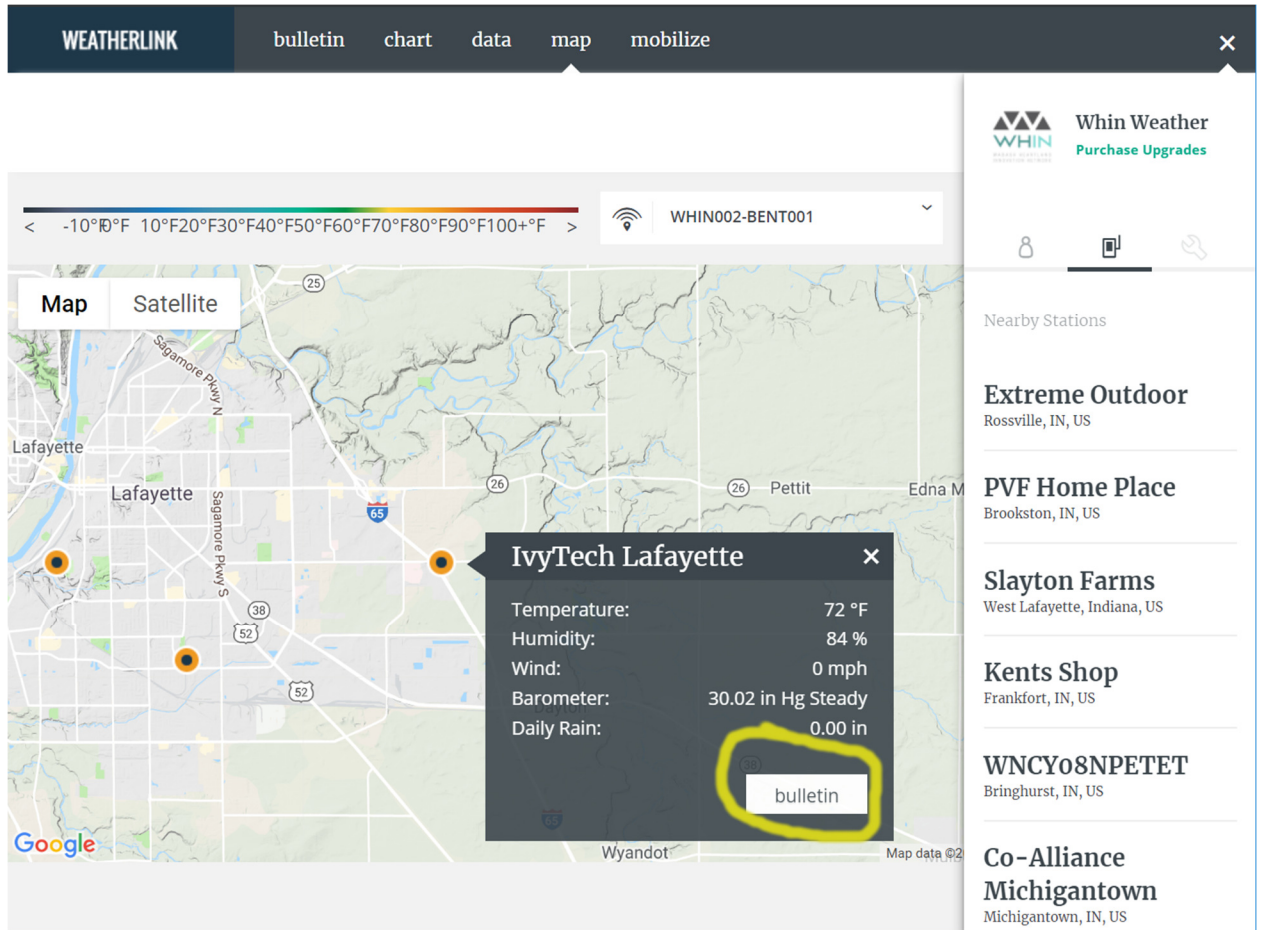
- 5) Once you are viewing your weather station dashboard ('Bulletin'), click on the ribbon that says 'Save' on the upper right portion of the screen. It will change to 'Saved'. Now you will be able to access this weather station if you decide to install weatherlink smartphone app. PRO TIP: Just to reiterate, the secret is to click 'save' on your weather station in the web browser, then you'll be able to see it on the smartphone app.



- 6) If you click on the 'chart' tab, you'll likely see just barometric pressure being graphed. To add additional readings such as temp, wind speed, etc. Click the 'Weather Station' drop down arrow and select other sensor data to graph. After you have done this, click 'Update' to see your additional items.



- 7) To find other 'public' Davis weatherstations, go to the 'Map' tab and search for other weather stations. When you find one you'd like to view, click 'bulletin'. Don't forget to hit the 'Save' ribbon top for quicker access and to see it in your mobile app.



WEATHERLINK bulletin chart data map mobilize

WHIN002-BENT001

Map Satellite

IvyTech Lafayette

Temperature:	72 °F
Humidity:	84 %
Wind:	0 mph
Barometer:	30.02 in Hg Steady
Daily Rain:	0.00 in

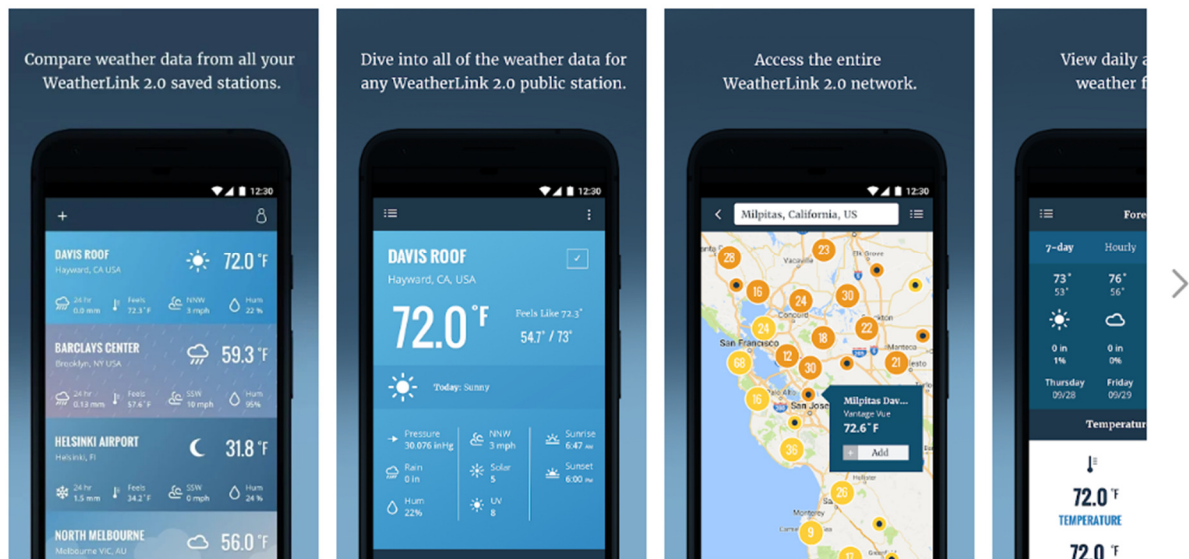
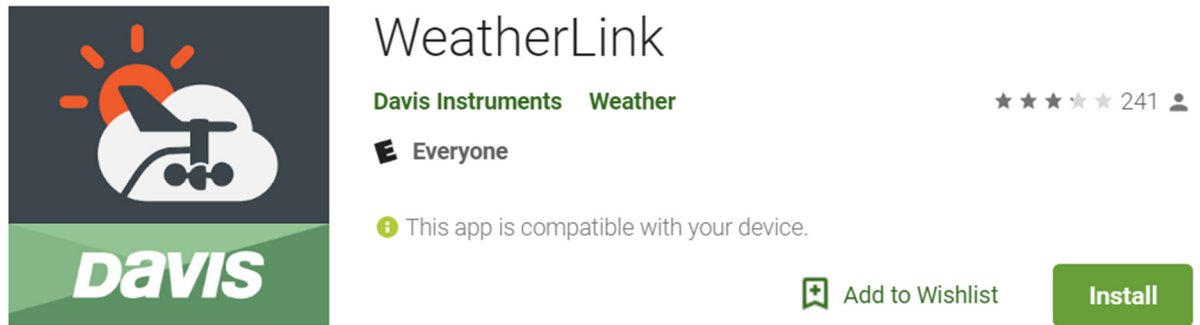
bulletin

Whin Weather
Purchase Upgrades

Nearby Stations

- Extreme Outdoor**
Rossville, IN, US
- PVF Home Place**
Brookston, IN, US
- Slayton Farms**
West Lafayette, Indiana, US
- Kents Shop**
Frankfort, IN, US
- WNCYo8NPETET**
Bringinghurst, IN, US
- Co-Alliance Michigantown**
Michigantown, IN, US

- 8) To install the weatherlink app on your iPhone or Android smartphone go to the Android Play Store or Apple itunes and search for 'weatherlin



The WeatherLink app brings the Davis WeatherLink Network to your phone. Join the worldwide network of businesses, schools and hobbyists who have chosen to share their weather data with the world.

WeatherLink lets you see your personal Davis Instruments weather station data and local forecasts, as well as explore other stations from around the world. Enjoy real time data, forecasts and interactive



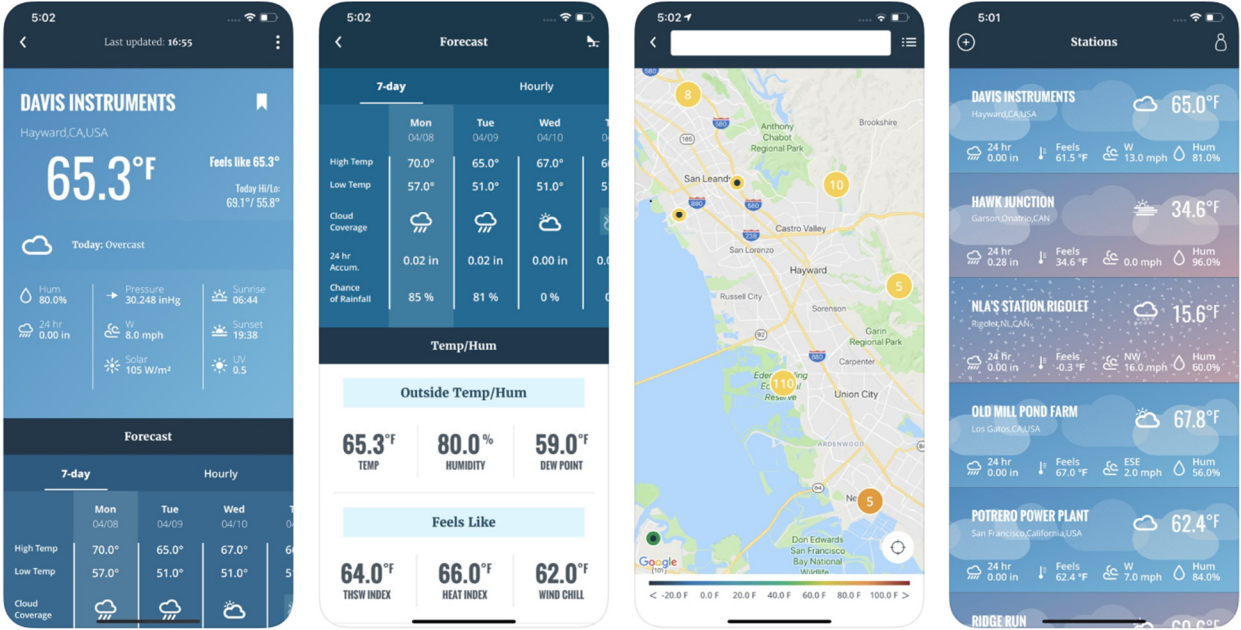
App Store Preview

This app is only available on the App Store for iOS devices.



WeatherLink 4+
From Davis Instruments
Davis Instruments Corp.
#115 in Weather
★ ★ ★ ★ ★ 1.8, 5 Ratings
Free

Screenshots [iPhone](#) [iPad](#)

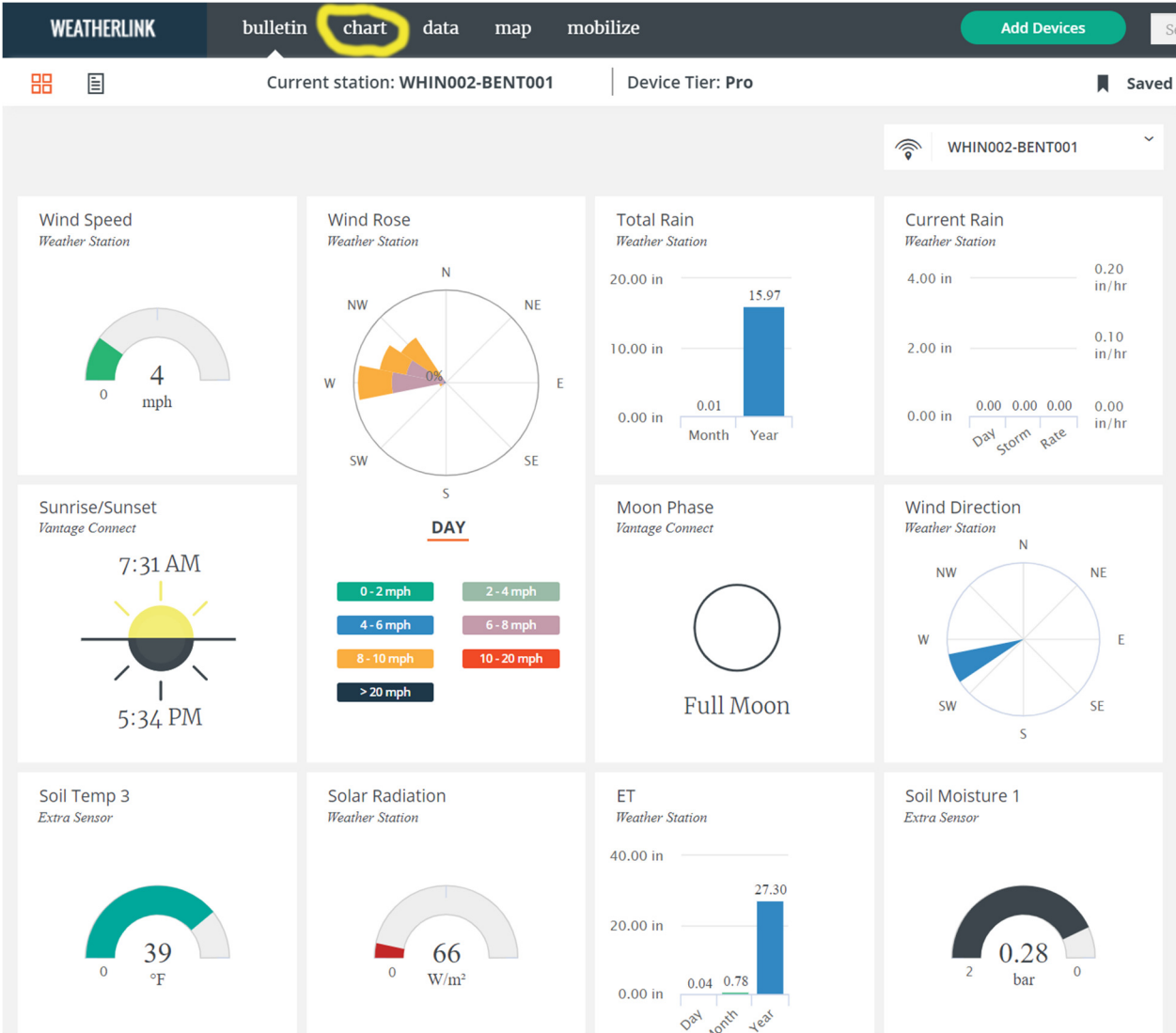


The WeatherLink app brings the Davis WeatherLink Network to your phone. Join the worldwide network of businesses, schools and hobbyists who have chosen to share their weather data with the world.

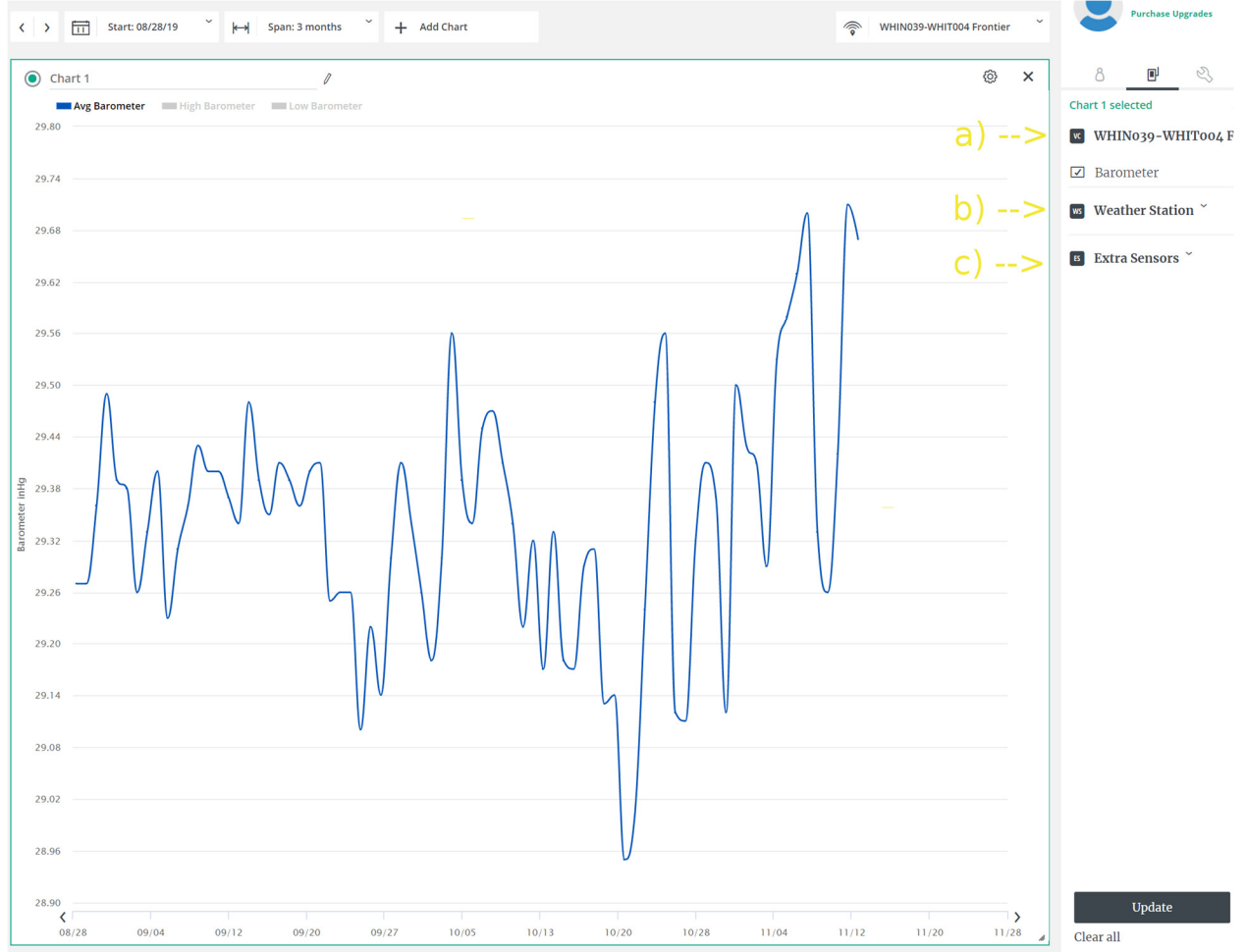
Additional HOW-TOs

How to create a graph of Soil moisture at 4 depths and rainfall.

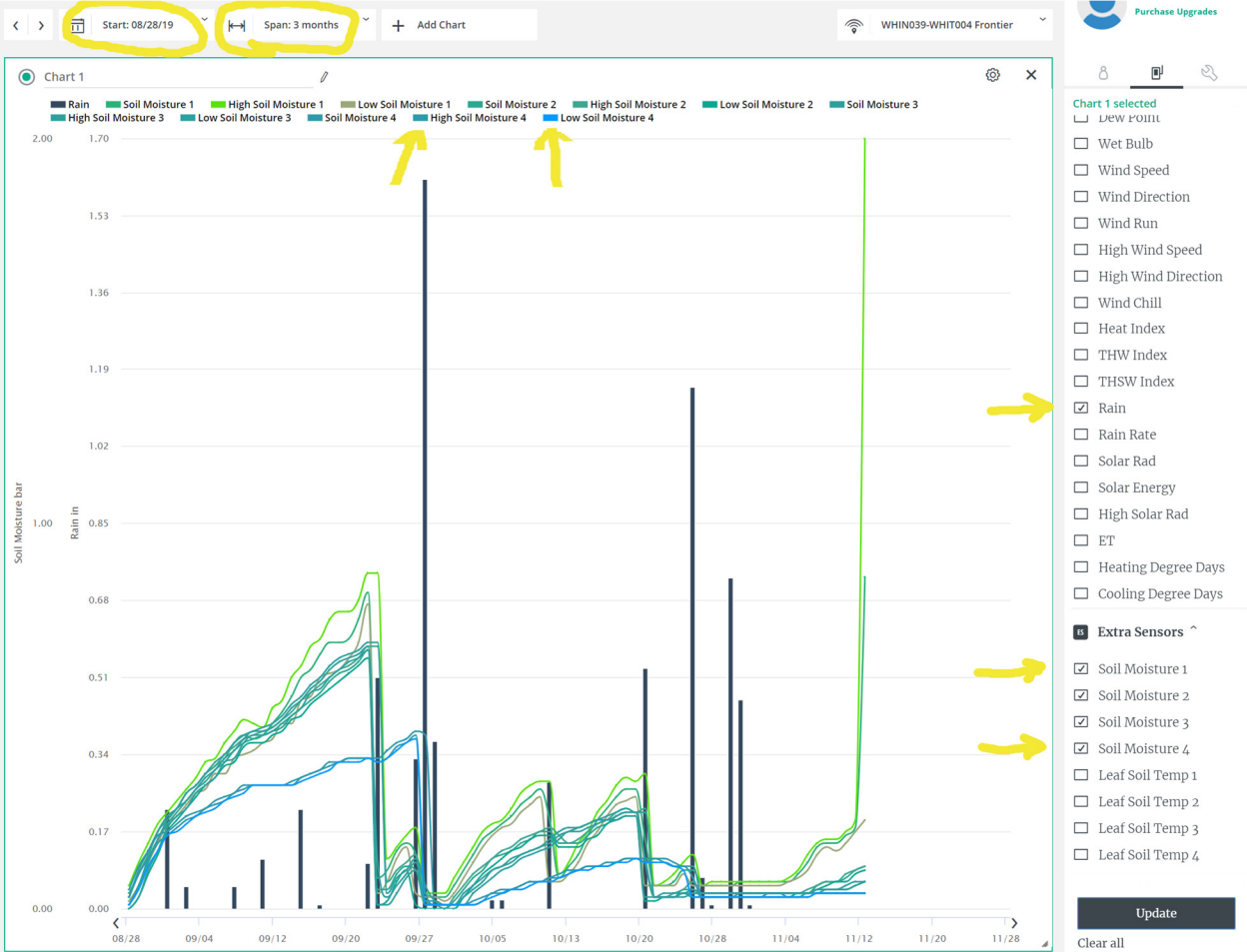
- 1) These instructions will show how the different depths are affected by rainfall and how long moisture stays in the ground. Currently, soil moisture/temp probes are located at 2", 5", 10", 15" at your weather station location.
- 2) Login to your account on <https://www.weatherlink.com/>. Click on chart.



- 3) On the right, expand the WHIN###-ABCD### dropdown (a), deselect Barometer
- 4) On the right, expand b) Weather Station, c) Extra sensors and select Rain, Soil Moisture 1, Soil Moisture 2, Soil Moisture 3, Soil Moisture 4 and press 'Update' button on bottom right.



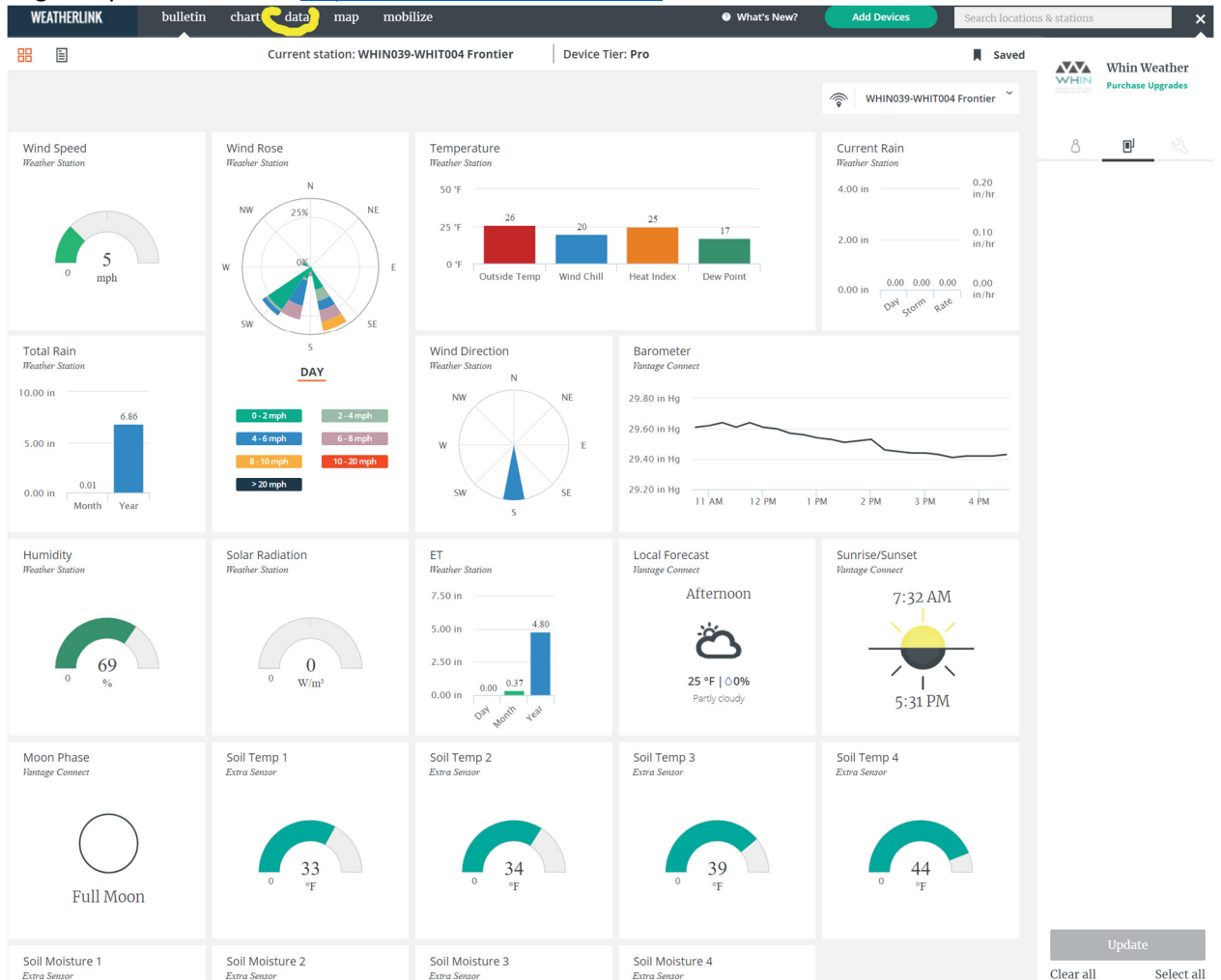
5) Now you can change the start date, span of time and clicking on the low/high settings to hide the if you wish. Notice how the soil moisture values go down after a rainfall event and the deeper probe at 15" (Soil Moisture 4) stays wet the longest.





How to download historical data for your weather stations

- 1) These instructions will show how to download historical data from weatherlink and view it in excel
- 2) Login to your account on <https://www.weatherlink.com/>. Click on data.





- 3) Choose your start date and span, then click on the 'data export' symbol at the top. You can then enter your email address and a link to the data will be sent to you.

WEATHERLINK | bulletin | chart | **data** | map | mobilize | What's New? | Add Devices | Search locations & stations

Data | Monthly Summary | | Current station: WHIN039-WHIT004 Frontier | Device Tier: Pro | Saved

Start: 10/13/19 | Span: 1 month | WHIN039-WHIT004 Frontier

Date & Time ↑	Weather Station											
	Barometer in Hg	Temp °F	High Temp °F	Low Temp °F	Hum %	Dew Point °F	Wet Bulb °F	Wind Speed mph	Wind Direction	Wind Run mi	High Wind Speed mph	High Wind Direction
10/13/2019 - 12:00 AM	29.21	46	46	46	66	35	40	3	SW	0.8	13	SW
10/13/2019 - 12:15 AM	29.21	46	46	46	66	35	40	3	SW	0.8	11	WNW
10/13/2019 - 12:30 AM	29.20	46	46	46	66	35	40	3	SW	0.8	9	WSW
10/13/2019 - 12:45 AM	29.21	46	46	46	67	35	40	2	SW	0.5	10	SSW
10/13/2019 - 1:00 AM	29.20	46	46	45	68	36	40	2	SW	0.5	7	SSW
10/13/2019 - 1:15 AM	29.21	45	46	45	68	35	40	2	SW	0.5	9	WSW
10/13/2019 - 1:30 AM	29.20	46	46	45	68	36	40	2	SW	0.5	14	SW
10/13/2019 - 1:45 AM	29.20	46	46	46	68	36	40	3	SW	0.8	12	SW
10/13/2019 - 2:00 AM	29.19	46	46	46	68	36	40	3	SW	0.8	11	S
10/13/2019 - 2:15 AM	29.19	46	46	46	68	36	40	3	SW	0.8	11	SSE
10/13/2019 - 2:30 AM	29.19	46	46	45	68	36	40	3	SW	0.8	15	W
10/13/2019 - 2:45 AM	29.19	45	45	45	69	36	40	2	SW	0.5	15	SSW
10/13/2019 - 3:00 AM	29.19	45	45	45	70	36	40	2	SW	0.5	13	WSW
10/13/2019 - 3:15 AM	29.18	45	45	45	70	36	40	3	SW	0.8	12	SE
10/13/2019 - 3:30 AM	29.18	45	45	44	70	35	40	3	SW	0.8	9	S
10/13/2019 - 3:45 AM	29.18	44	45	44	71	36	40	3	SW	0.8	11	SSW
10/13/2019 - 4:00 AM	29.17	44	44	44	71	35	40	3	SW	0.8	10	SSE
10/13/2019 - 4:15 AM	29.17	44	44	44	72	35	39	3	SW	0.8	9	SE
10/13/2019 - 4:30 AM	29.17	44	44	44	73	35	39	2	SW	0.5	9	S
10/13/2019 - 4:45 AM	29.18	43	44	43	73	35	39	2	SW	0.5	10	SSW
10/13/2019 - 5:00 AM	29.17	43	43	43	74	35	39	2	SSW	0.5	9	SSE
10/13/2019 - 5:15 AM	29.17	43	43	43	75	35	39	2	SW	0.5	9	SSE
10/13/2019 - 5:30 AM	29.17	42	43	42	75	35	39	2	SW	0.5	9	SW
10/13/2019 - 5:45 AM	29.18	42	42	42	76	35	39	1	SW	0.3	8	WSW
10/13/2019 - 6:00 AM	29.17	42	42	42	77	35	39	1	SW	0.3	7	SSW
10/13/2019 - 6:15 AM	29.17	42	42	42	77	35	38	0	--	0.0	3	WSW
10/13/2019 - 6:30 AM	29.17	42	42	42	78	35	38	1	SW	0.3	7	SSW
10/13/2019 - 6:45 AM	29.17	42	42	41	79	35	38	1	SW	0.3	5	SW
10/13/2019 - 7:00 AM	29.18	42	42	41	79	35	38	1	SW	0.3	6	SSE
10/13/2019 - 7:15 AM	29.17	42	42	42	79	36	39	1	SW	0.3	8	S
10/13/2019 - 7:30 AM	29.18	42	42	42	79	35	38	1	SW	0.3	5	SW
10/13/2019 - 7:45 AM	29.18	41	42	41	79	35	38	0	--	0.0	5	SSE
10/13/2019 - 8:00 AM	29.18	41	41	41	80	35	38	0	--	0.0	6	SSW
10/13/2019 - 8:15 AM	29.18	41	41	41	80	36	39	1	SW	0.3	4	SW

Update | Clear all | Select all

DATA EXPORT

Please make sure you've selected the correct start date and time span.
We'll compile the data and send a link to the provided email(s).

ex. Email@gmail.com, Email2@gmail.com

SEND

Hey jstucky,

Below is the data export you requested on **10/13/19 4:48 PM**

The data is from **WHIN039-WHIT004 Frontier** with a start date of **10/13/19 12:00 AM** and a time span of **1 Month**.

Download Export

This email has been sent to jack.stucky@whin.org at your request.
Davis Instruments Inc., 3465 Diablo Ave, Hayward, CA 94545

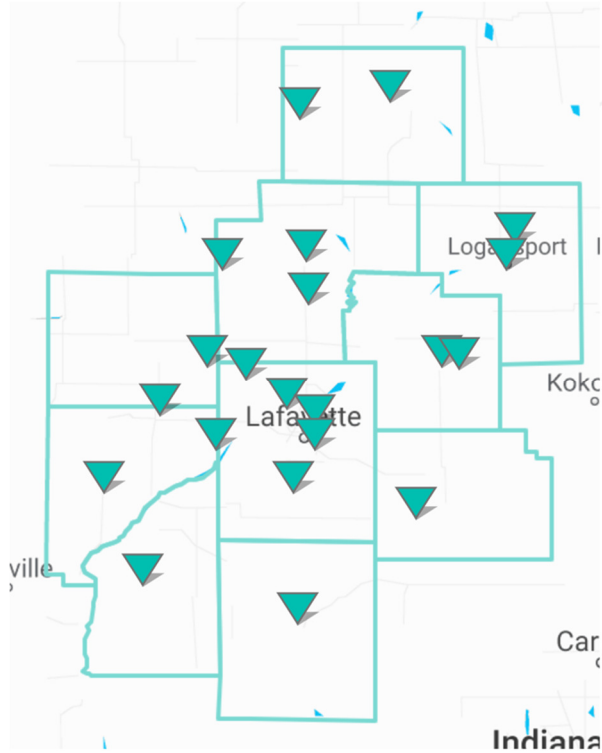


- 4) Click on 'Download Export' and a .CSV file will be downloaded and can be opened in Excel or a text editor. The file contains all the historical data for each of the various sensors such as temperature, humidity, barometric pressure, wind speed, wind direction, soil moisture, soil temperature, solar radiation.

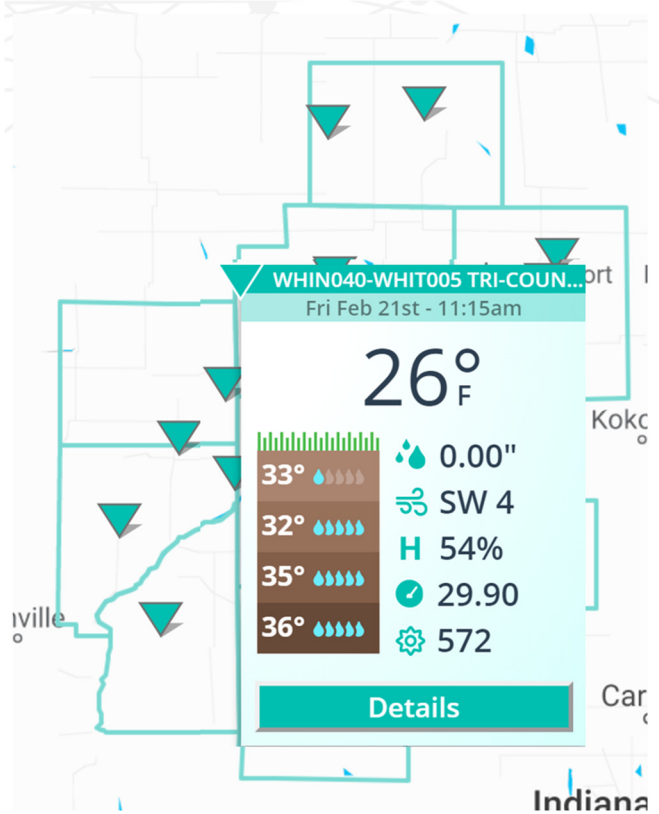
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	
1	WIND939-WH00TA Front																																	
2	10/13/19 12:30 AM: 1 month																																	
3	Gateway Gateway																																	

Access WHIN weather station conditions on our website:

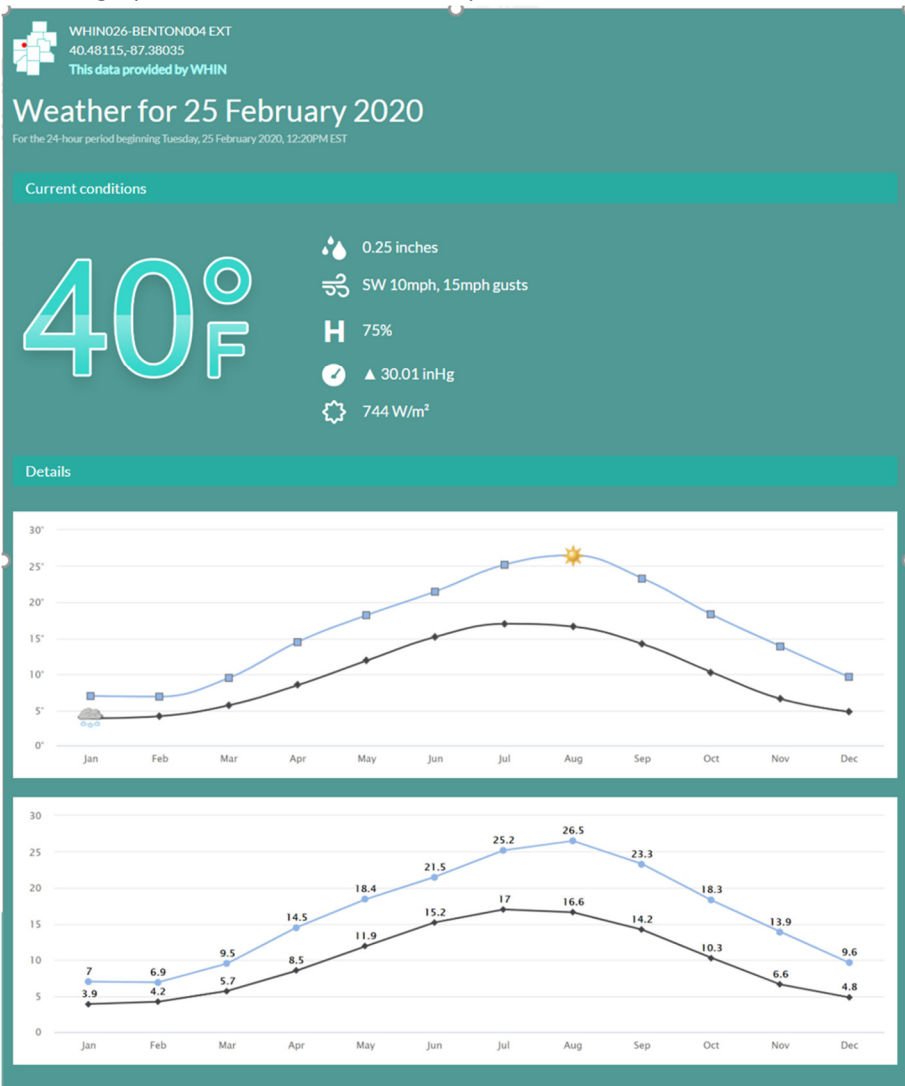
- 1) Go to <http://whin.org/weather>
- 2) Scroll down to the public weather station map and click on one of the triangles



3) Current conditions including Soil temperature/moisture at 2",5",10" & 15" will be displayed.



4) As new graphs and features are added you will be able to access them here



5) Ag Alliance member have additional access to 130+ weather stations in our 10 county region

