

Personal Weather Station Siting Information

The following information provided by Davis (<http://www.davisnet.com>)

The standards for siting a station are to have temperature sensors 4 to 6 feet (1.2 to 2.0 m) above the surface, and 30 feet (9 to 10 m) for wind. But there is more to consider than just height. An anemometer at 33 feet in the narrow alley between two 100-foot buildings and a temp sensor exactly 5 feet above a large black asphalt parking lot will not give you very usable data. But, what if what you want to know is how hot it gets in the parking lot, or how fast the wind whistles down that urban canyon? The point is, you want data that pertains to your specific needs and environment.

Siting standards are guidelines that most users probably can't meet perfectly. You want to mount your weather station as close to the standards as possible, but odds are, you won't be able to find the perfect site.

In the case of the *(Davis) Vantage Vue (or other all-in-one personal weather stations)*, the two sensors cannot be separated, so they must be mounted at the same height. A compromise would work, but perhaps a better way to look at it would be to consider which information is most important to you. If you live where wind is the most interesting weather variable and you have many trees sheltering your yard, mounting on the roof, 6 feet above the surface, will be the best option. (But bear in mind that you will need to access your station for routine maintenance.) If you really are more interested in rain and temp, then finding a spot where the station can be mounted at 5 or 6 feet will give you accurate readings for temp and rain and will allow easy maintenance. (Bear in mind that wind readings will be affected by obstructions on the ground.)

Additional Information on Personal Weather Station siting:

<https://tempest.earth/resources/mounting-weather-station/>

<http://weather.gladstonefamily.net/CWOP-Siting.pdf>

<https://www.wunderground.com/pws/installation-guide>

<http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1260.pdf>