
Effect of Wind, Solar Radiation, and Barometric Pressure

For the effects of wind, solar radiation, and barometric pressure on sultriness, see the following article:

Steadman, R.G., 1979. The Assessment of Sultriness. Part II: Effects of Wind, Extra Radiation and Barometric Pressure on Apparent Temperature. *Journal of Applied Meteorology*, July 1979.

In this article, Steadman derives an apparent temperature scale in which any likely combination of summer temperature, humidity, wind, and extra radiation can be expressed. Radiation (direct and indirect sunlight, terrestrial and sky radiation) has the greatest effect on sultriness. Wind effects in summer are slight. The direct effect of altitude (barometric pressure) is negligible. Maps record the summer-noon apparent temperatures across North America.

To obtain a copy of the article, go to the American Meteorological Society's online journals. This article can be found at: <http://journals.ametsoc.org/doi/pdf/10.1175/1520-450%281979%29018%3C0874%3ATAOSPI%3E2.0.CO%3B2> .

NOTE: This information may also be used for Vantage Vue Systems that are using WeatherLink.

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For Vantage Pro Stations: #6150, 6150C, 6151, 6151C

For Vantage Pro2 Stations: #6162, 6162C, 6163

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