

# Anemometer Accuracy Testing

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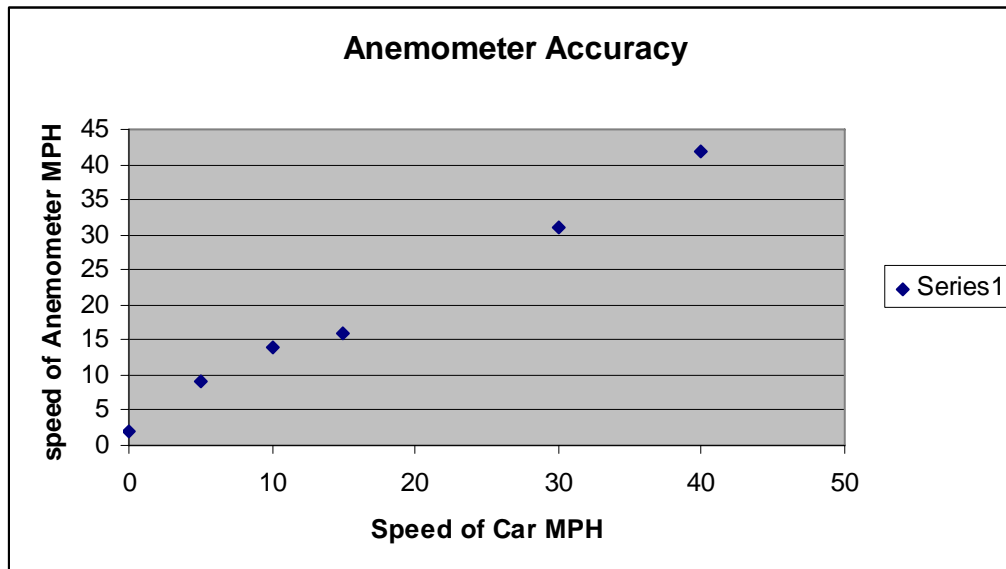
The following report is a basic test to see the accuracy of an anemometer. The Anemometer is a tool used to measure wind speed in various units. In this report you should know the approximate accuracy of a anemometer tool.

Definition: An instrument used for measuring the speed of wind. Often found on agricultural buildings for measuring the wind speed by a crop.

Hypothesis:

**How accurate is an anemometer under standard conditions?**

Test: We thought that it would be a good test to drive in a car and compare the speed of the car to the speed read on the anemometer. We will do so by holding the anemometer out the window at different speeds of the car and compare the results using the cars speed as the constant.



Analysis: From the above graph we have concluded that anemometer has a semi accurate linear fit to the speed of the car relative to the speed read on the anemometer.

Precision: this instrument is precise because the way the instrument is built you are bound to get the same results every time if you are in controlled conditions. Controlled

conditions is that of being in place where the wind does not change drastically (i.e. 0 to 60MPH then back to 0).

Accuracy: This device is accurate from the conditions that we know. The device could have been reading more because of vehicle draft when we were driving. From the data we received we believe the accuracy all depends on the conditions because of vehicle draft.

Conclusion: From the equipment testing we have concluded that this instrument is accurate if you are only taking one set of data. If you are in a controlled environment such of one where there is not an un-wanted draft.