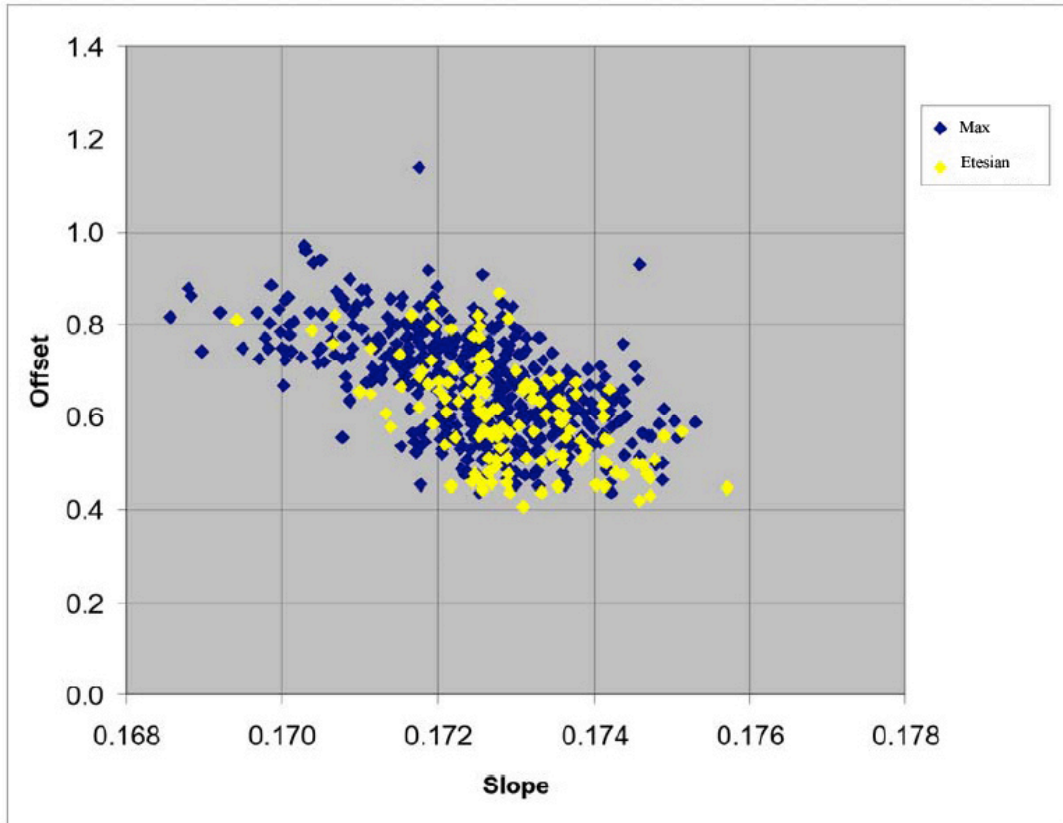


Etesian Technologies Industry Standard Anemometers Tunnel Test Results



Anemometer testing was done at the Wright Brothers Wind Tunnel at the Massachusetts Institute of Technology (MIT). The calibration slope and offset are the linear regression fit of sensor Hertz output to wind tunnel speed. Test data collected with unmodified NOMAD data loggers recording one minute averages from accumulated counts. The tunnel reference sensor speed is checked against the MIT tunnel measurement system. The tunnel system measures static and dynamic air pressure, and air temperature to determine wind speed by fundamental physical principles. The tunnel measurement system uses four pressure taps in the test section plane and corrects for tunnel blockage. Tunnel speed shown is speed at reference sensor location. Local tunnel reference speed (at location of test sensor) is reference sensor speed multiplied by position adjustment factors determined by careful experiment. The reference unit is a Gill-type propeller design made by R. M. Young. The individual calibration results for a specific sensor reflect the sensor characteristics and experimental error associated with the calibration process. The calibration procedure serves to confirm normal operation of the specific sensor. A recent NREL- funded study concludes that the boot accessory affects the calibration. These tests were performed with the boot installed.