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Who Built the Better Car?

The purpose of this investigation was to test if 21st century cars really had better aerodynamics than 20th century cars. The researcher hypothesized that if 12 cars, (6 from the 20th century, 6 from the 21st), were tested for deflection in centimeters, the 21st century cars would have a lower deflection rate average over the other 6 cars. The cars were paired so the researcher had 2 SUVs, 2 coups and so on.

The experiment was carried out by constructing a small rectangular wind tunnel and placing a fog system in front of the “honeycomb” of straws. A vacuum hose was put in the opposite end and sealed. The background then was lined with graph paper and taped in place. A single car was placed in the tunnel and the smoke was activated and the vacuum was started causing the fog to pass over the car. At the same time, a video camera was able to record the car and the deflection of the smoke off of the back side of the car.

The data collected proved my hypothesis false. For 21st century cars, the average of all of the tests was a deflection of 9.9375 cm, while the 20th cars had a deflection of 7 cm, which is lower and better for the car.

These findings led to the conclusion that 20th century cars do have a lower and therefore better deflection of wind compared to the 21st century cars.