

This project compared three different models of projectile motion. The first model is the simplest and just included a body moving under the effect of gravity after being launched with a fixed speed from the ground. Such model is well known and is described by a parabolic trajectory, hence the trajectory we see on the graph is symmetric.

The second model is the movement of a body under the influence of air drag that is proportional to the square of velocity. We can see how big of a correction the air resistance introduces to the previous model.

However, in reality, we would expect the air resistance to decrease exponentially in accordance with density of the air as the body gets to a higher altitude. We that this elevation effect does not introduce as much of correction on the body but is still significant for any precision calculations.