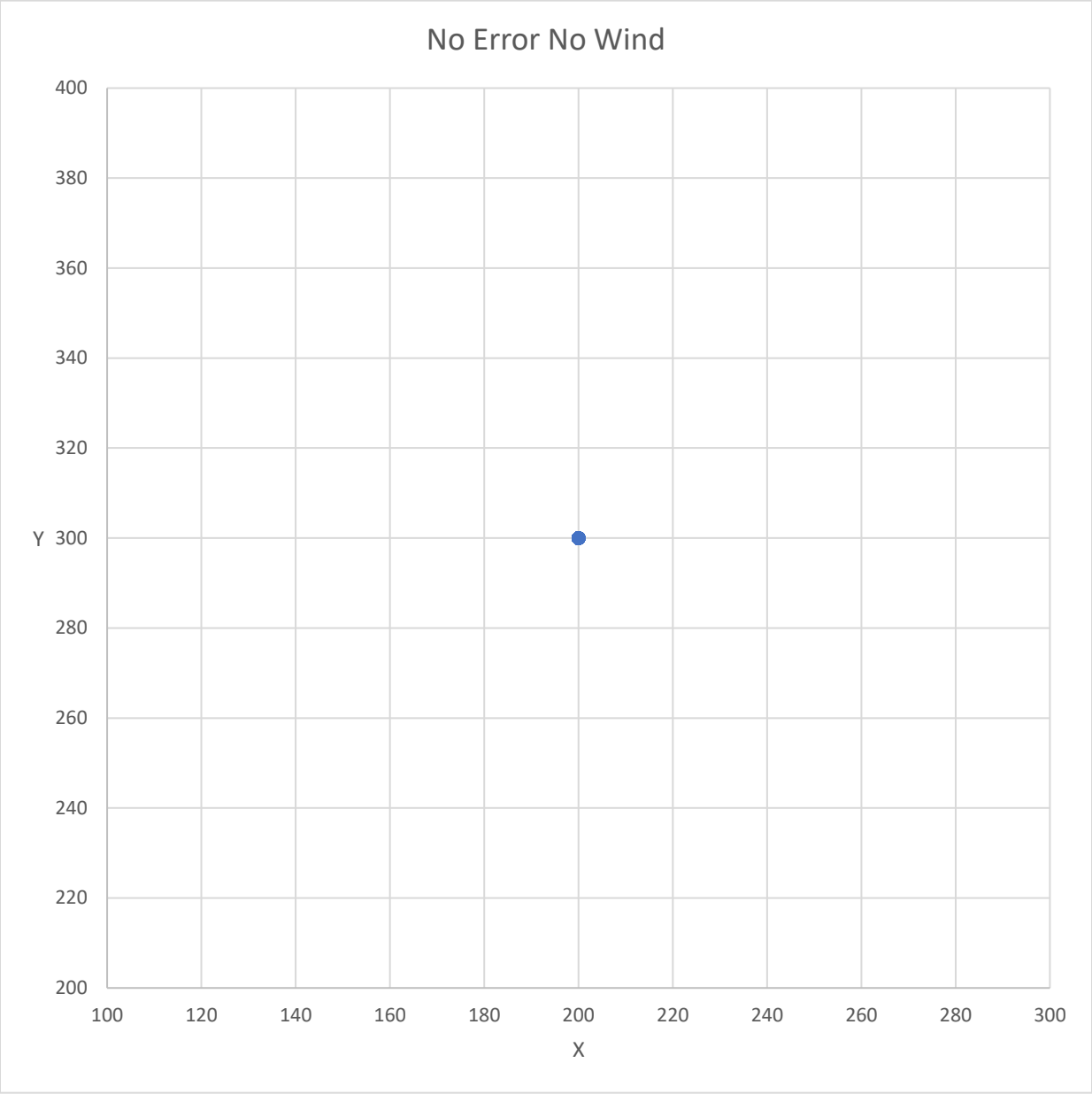
CS 350 Project Part 2: Behavioral Tests

All tests are done with release coordinates (200, 300, 1500), descent speed of 100, and varying error type, error range, wind direction, and wind speed.

All scatterplots are adjusted to fit all data in frame while keeping the plot centered on the original launch coordinates, graphed in a cartesian plane manner.

No Error No Wind

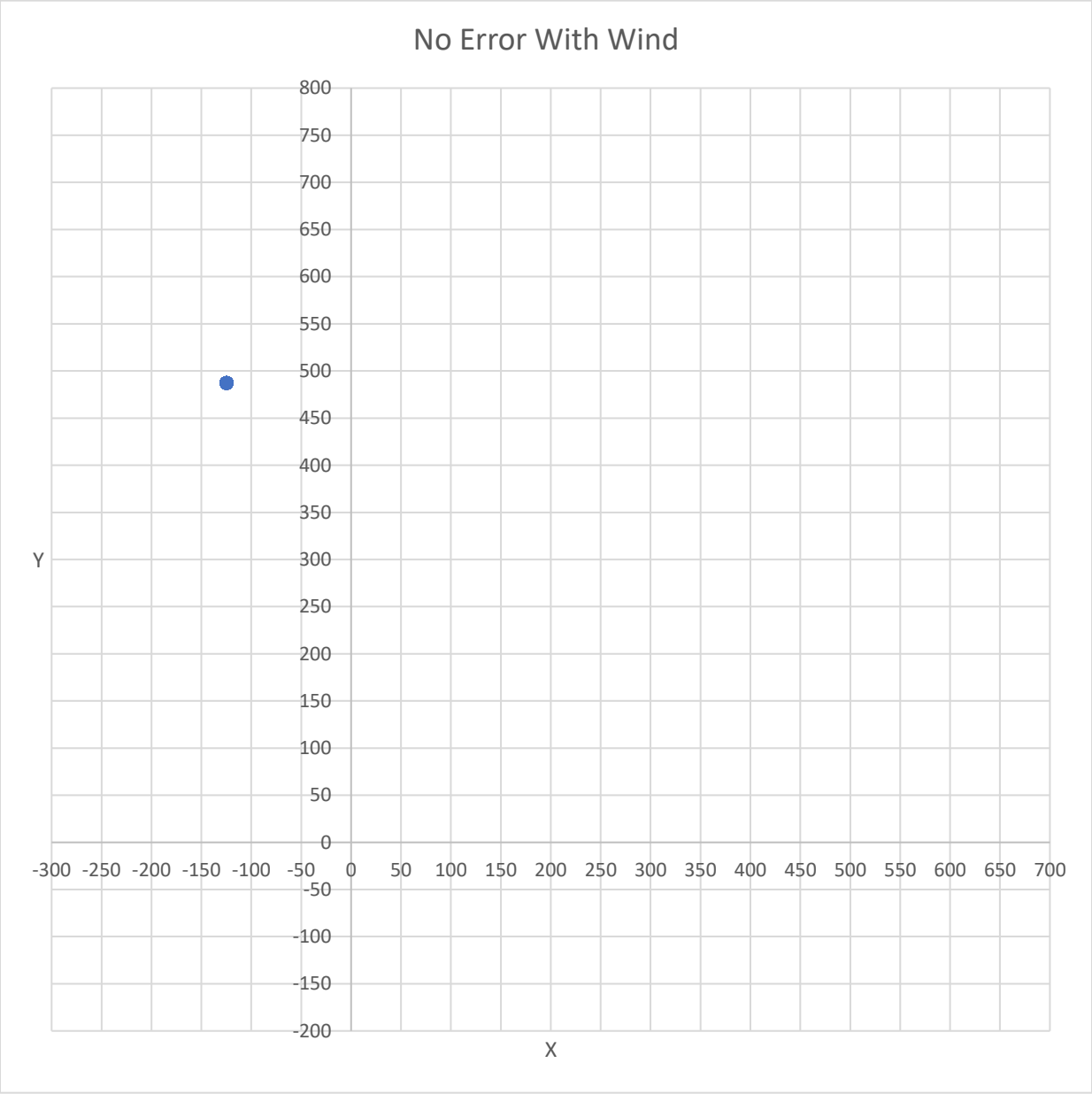


Standard Deviation of the error: 0

Average error: 0

These were the expected results.

No Error With Wind

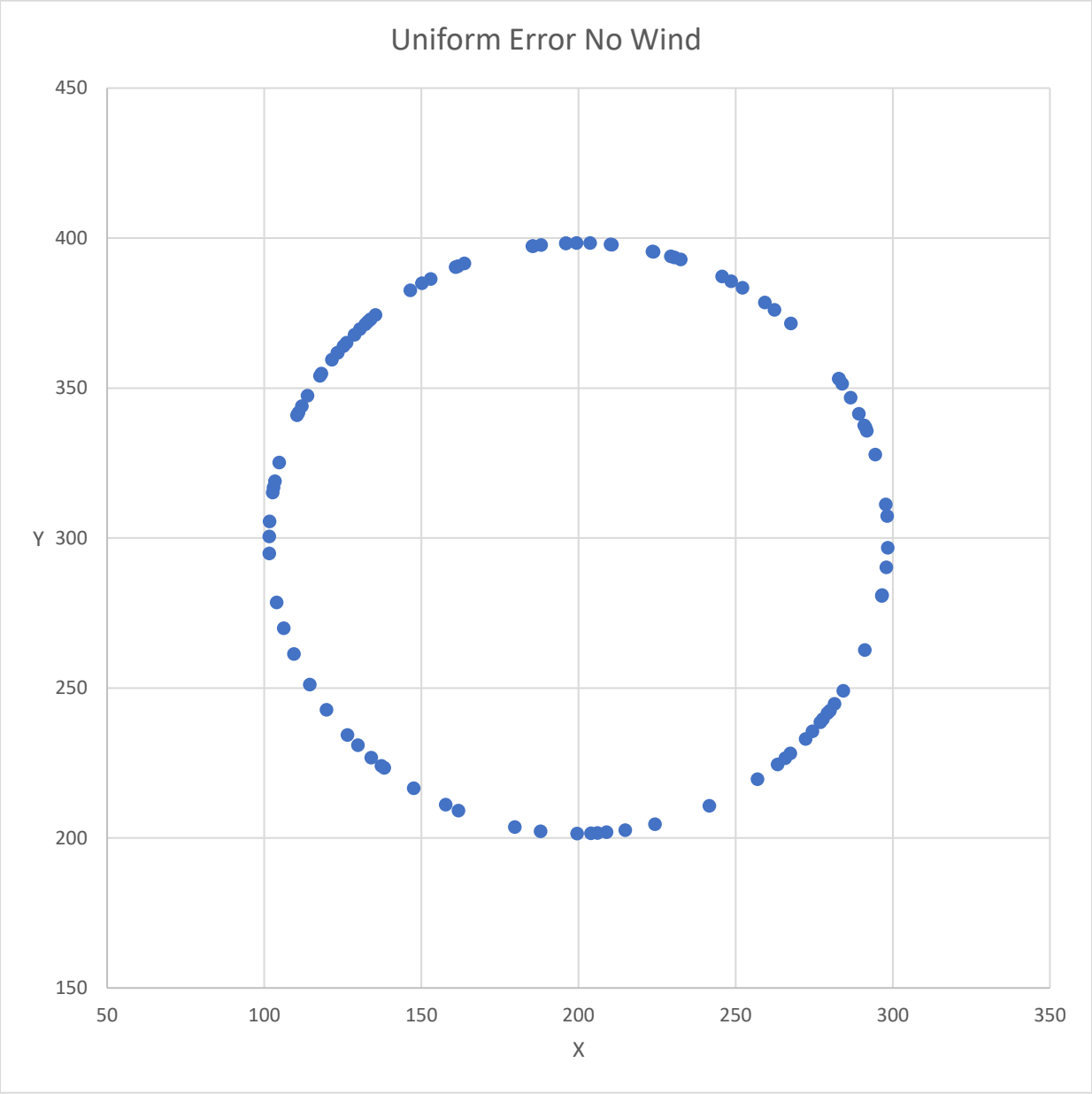


Standard Deviation of the error: 0

Average Error: 375

These were the expected results

Uniform Error No Wind

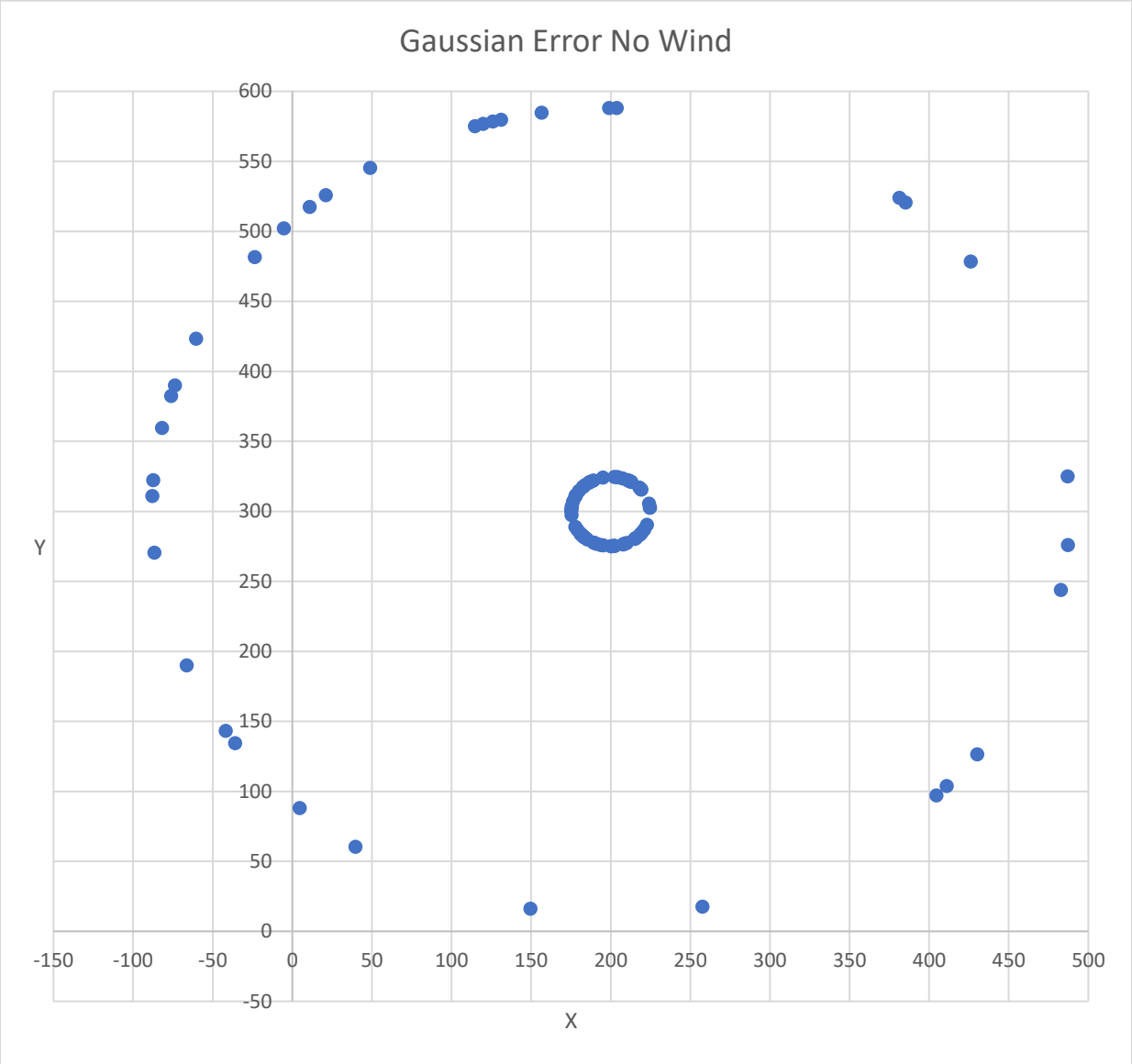


Standard Deviation of the error: 0.032172081

Average error: 98.45220682

These were the expected results.

Gaussian Error No Wind

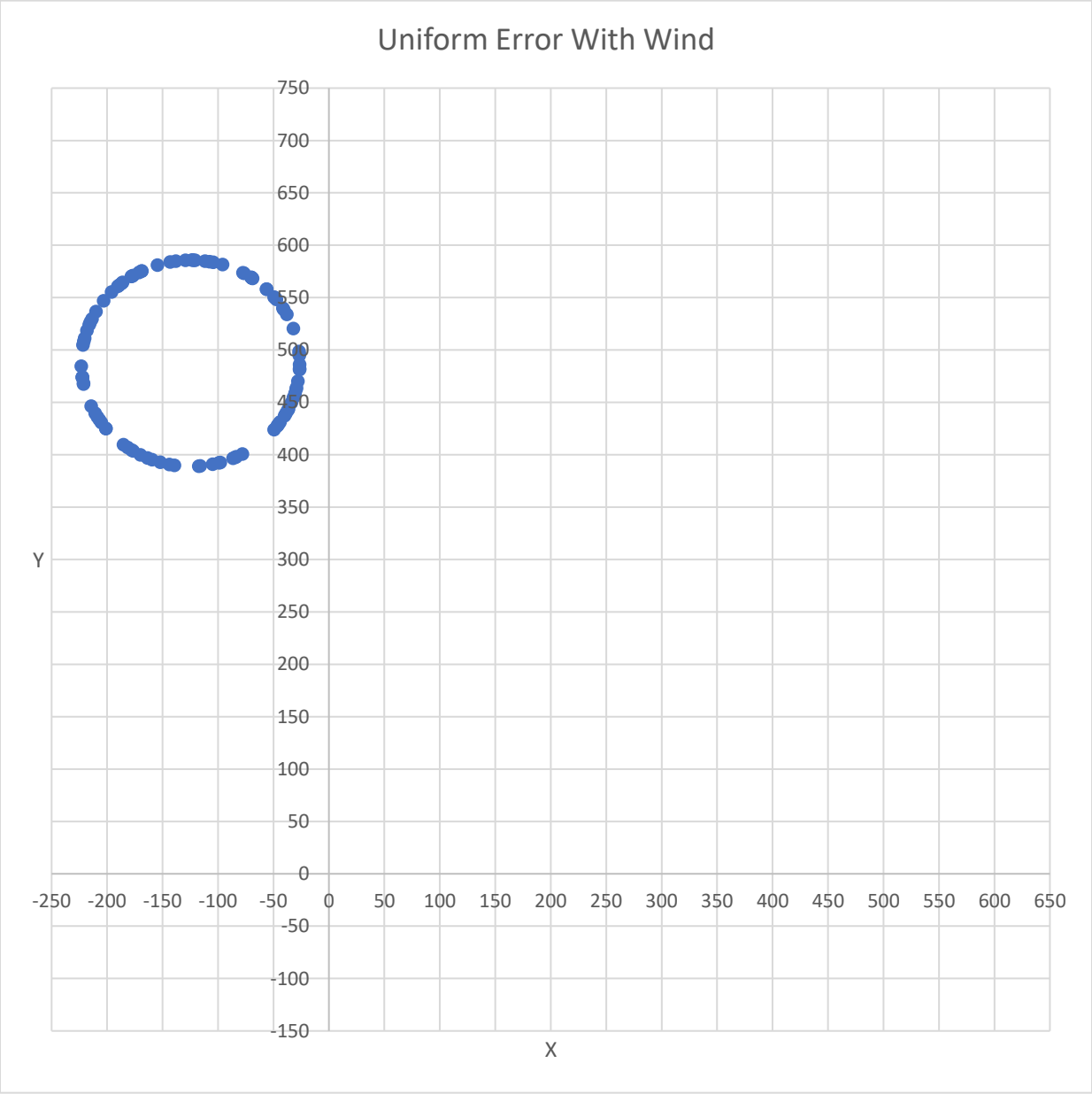


Standard Deviation of the error: 125.6487926

Average error: 116.9378248

These were the expected results.

Uniform Error With Wind

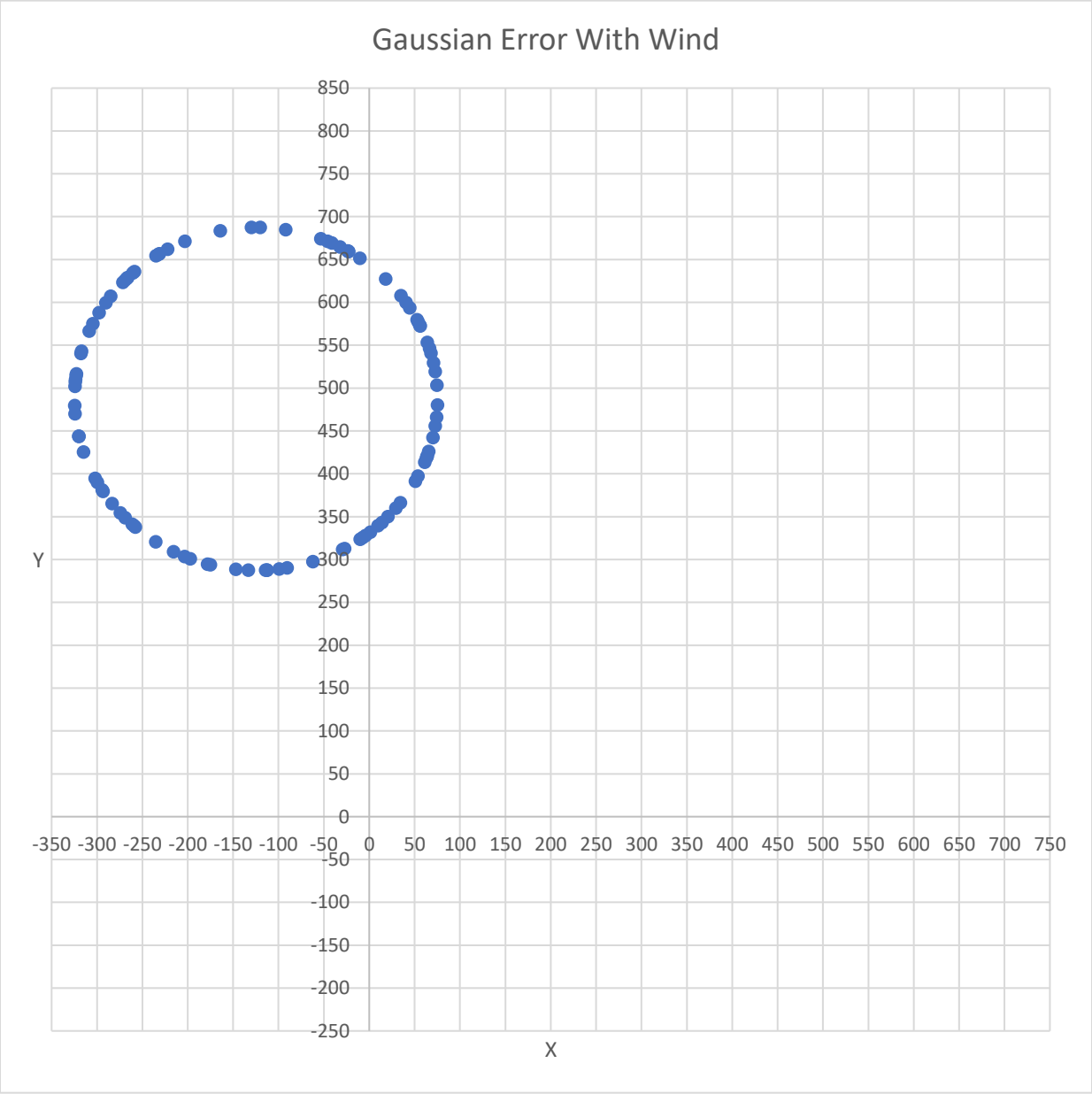


Standard deviation of the error: 70.25019002

Average error: 381.7543457

These were the expected results.

Gaussian Error With Wind



Standard Deviation of the error: 142.2775458

Average error: 394.8721504

These were not quite the expected results, as Gaussian error is meant to be a bell curve error, and the results show no outliers.