

## Behavioral Tests

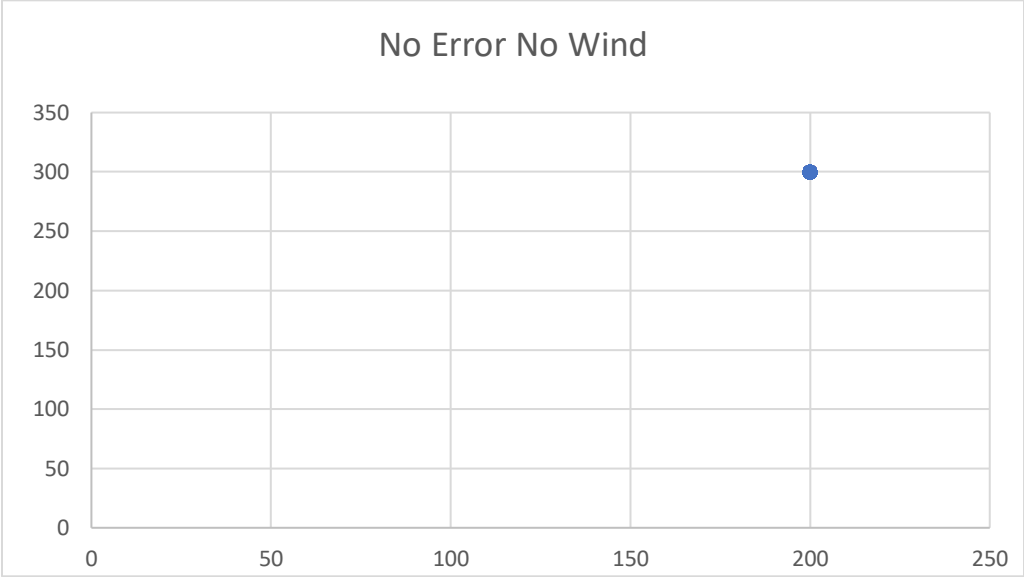
## No Error No Wind:

[illegible]

[illegible]

[illegible]

**Scatterplot:**



**Average Error and Standard Deviation:**

	STD Dev	Mean Error
x	0	0
y	0	0

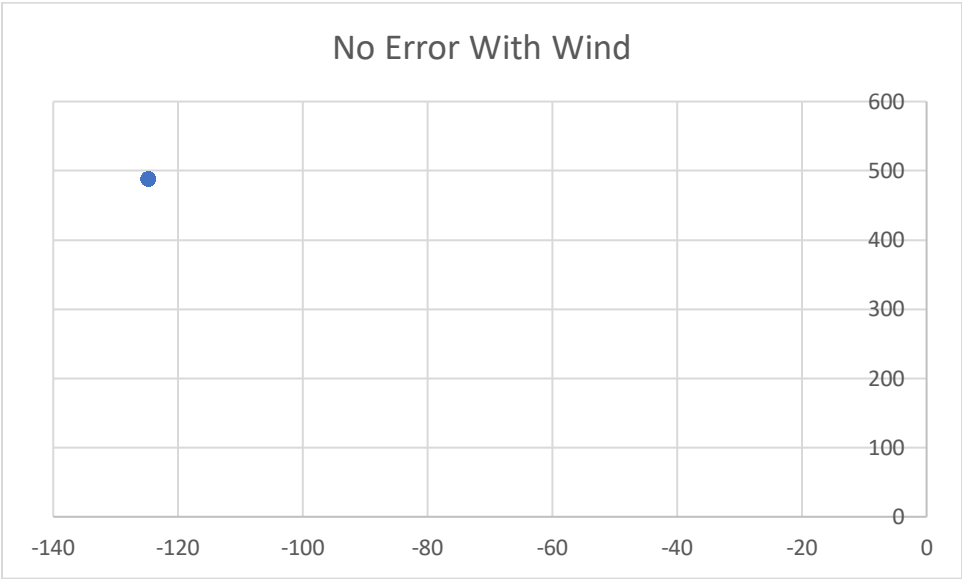
### No Error With Wind:

[illegible]

[illegible]

[illegible]

**Scatterplot:**



**Average Error and Standard Deviation:**

	STD Dev	Mean Error
x	8.57E-14	8.56947E-15
y	0	0



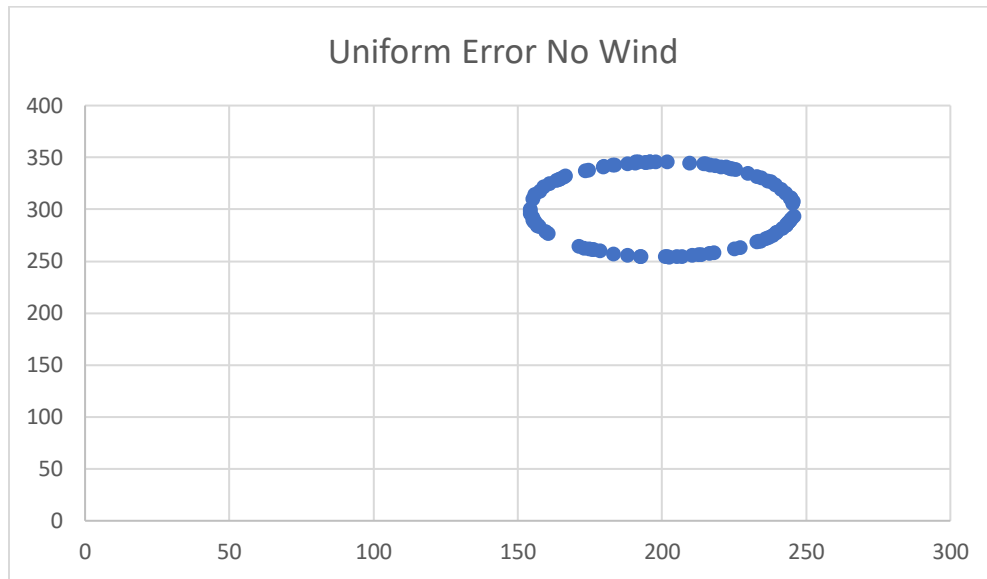
## Uniform Error No Wind:

x	y
238.3864	274.8976
160.6667	276.3829
214.4262	343.4952
164.6358	329.1431
216.6434	342.6959
244.8037	309.6216
234.2927	269.0591
173.0874	262.4628
156.0182	314.0602
222.2211	340.476
161.0211	324.7535
237.6956	326.667
237.1444	272.5704
190.8577	345.3016
159.0521	321.3971
166.6255	331.9486
215.0566	343.6792
183.2712	256.9335
156.6967	283.8942
245.5858	307.5172
245.6679	292.9988
205.1026	254.1488
191.8061	345.4007
202.4089	253.9287
171.2308	263.9692
179.8006	341.4472
155.5821	287.835
192.6548	254.5359
155.1702	289.4538
244.7571	310.8509
192.4683	254.5801
218.4648	342.1752
225.5378	338.3082
165.8461	330.8741
206.9445	254.4866
190.8141	344.607
178.5663	259.8159
194.2969	345.1845

194.4215	345.1865
188.0539	343.9762
220.3864	340.7555
159.7801	278.5763
244.3404	310.5139
243.2868	285.7569
223.9825	338.7486
155.9562	288.358
174.634	337.8412
195.8753	345.3019
155.2917	291.6801
239.7571	278.0332
209.5741	344.3741
154.4625	295.513
245.3942	305.7589
218.0041	257.9328
183.5632	342.7039
243.9987	287.4829
173.3575	337.1853
244.792	290.7134
236.0163	271.7319
229.753	334.7996
155.3127	309.9651
163.3971	327.5042
244.4598	289.1211
174.6861	261.8656
182.9992	342.497
197.8675	345.7217
234.4874	330.0939
156.7989	284.8776
223.4619	339.2227
232.8547	268.2282
243.0292	284.5932
157.4162	283.4019
224.5041	338.5801
242.9903	315.515
225.1746	261.8701
233.6702	269.1137
227.1664	263.2124
210.4809	255.4861
188.1738	255.8245

201.7319	345.6983
201.7879	254.3038
216.5483	257.368
239.5344	277.0138
157.7813	317.541
176.2936	260.9089
154.2823	300.0262
243.0309	284.5583
201.1067	254.2957
236.6049	327.3896
241.7083	281.2776
154.3824	298.2667
195.861	345.4625
212.716	256.1563
232.8723	331.6762
175.9519	261.1972
241.3819	319.2746
239.3218	323.1898
213.5631	256.425
164.6061	328.8099
179.582	340.8148

### Scatterplot:



### Average Error and Standard Deviation:

	STD Dev	Mean Error
x	31.62589	3.1625886
y	33.30089	3.3300893

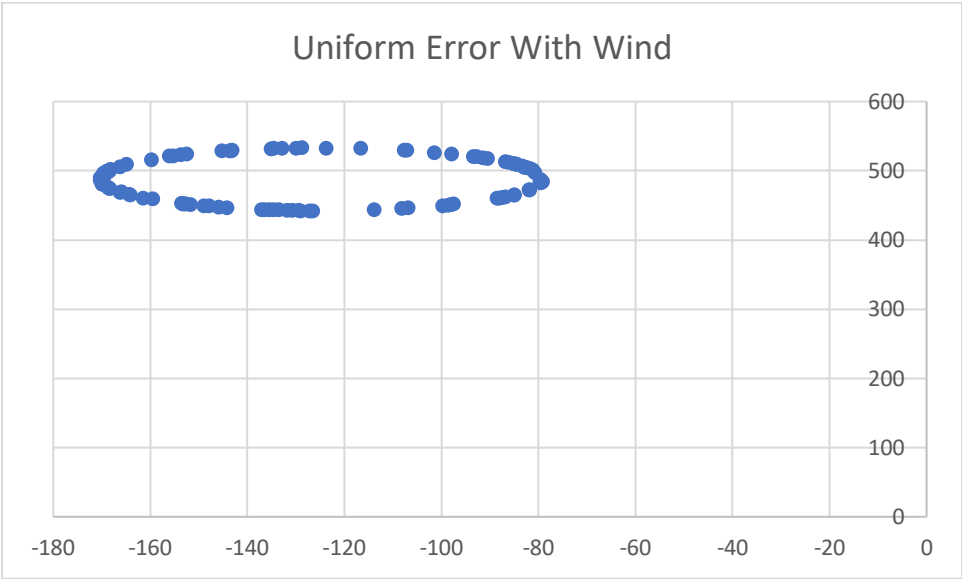
## Uniform Error With Wind:

x	y
-143.705	529.0189
-155.318	521.3953
-134.548	532.1163
-81.7246	502.8106
-88.1872	460.1342
-82.4695	504.7619
-166.281	468.4645
-169.863	480.2828
-128.778	533.0002
-144.155	446.145
-169.607	496.167
-107.196	529.651
-156.082	520.728
-135.449	443.1048
-79.2299	483.9999
-81.1945	501.1852
-143.089	529.3237
-90.4693	517.6559
-169.864	480.375
-153.095	451.6912
-145.917	447.0331
-169.04	498.6566
-168.152	501.7241
-153.246	451.8111
-136.363	443.335
-137.083	443.5305
-161.45	460.3154
-168.333	473.8406
-92.8062	520.0277
-152.457	523.72
-81.816	472.1731
-98.5155	450.2131
-107.724	529.795
-153.671	522.7585
-83.3077	506.4951
-169.116	498.0606
-84.5466	508.9939
-126.541	441.9381

-79.5043	481.9295
-145.278	528.219
-91.4127	518.5975
-170.285	490.0411
-130.801	442.3052
-164.942	509.0501
-85.1129	510.0214
-79.3381	483.6619
-148.887	448.8255
-127.145	441.9792
-86.8801	512.8572
-81.8864	472.0168
-113.88	443.2342
-86.1674	511.7588
-99.719	449.4105
-170.33	486.4386
-164.151	464.5626
-86.8759	462.1491
-152.653	451.3964
-84.9902	465.1412
-129.057	442.0792
-98.0337	450.5237
-151.757	450.7218
-85.0947	510.0437
-108.124	445.0173
-84.4878	508.9406
-87.5417	461.1115
-85.0157	465.1233
-168.785	475.5818
-88.5165	459.81
-132.898	532.3782
-168.613	474.9638
-168.844	499.1979
-147.861	448.7508
-135.075	531.4178
-79.7488	484.4633
-97.4765	451.572
-153.563	452.7791
-164.313	465.8044
-101.511	526.1614
-134.532	443.4582

-129.423	442.6287
-159.539	458.7884
-131.76	442.947
-82.9095	504.3091
-79.6203	487.2503
-116.638	531.9033
-168.484	498.7158
-129.912	532.3449
-80.7524	497.549
-97.9138	523.7893
-106.805	446.0991
-166.177	505.4163
-159.744	516.0037
-143.289	528.6468
-123.702	532.6141
-169.623	492.3621
-169.439	493.3383
-166.007	469.3611
-93.3559	519.8133
-133.465	443.2896
-169.691	490.8906

**Scatterplot:**



**Average Error and Standard Deviation:**

	STD Dev	Mean Error
x	33.23841	3.323841294
y	31.2407	3.124070135



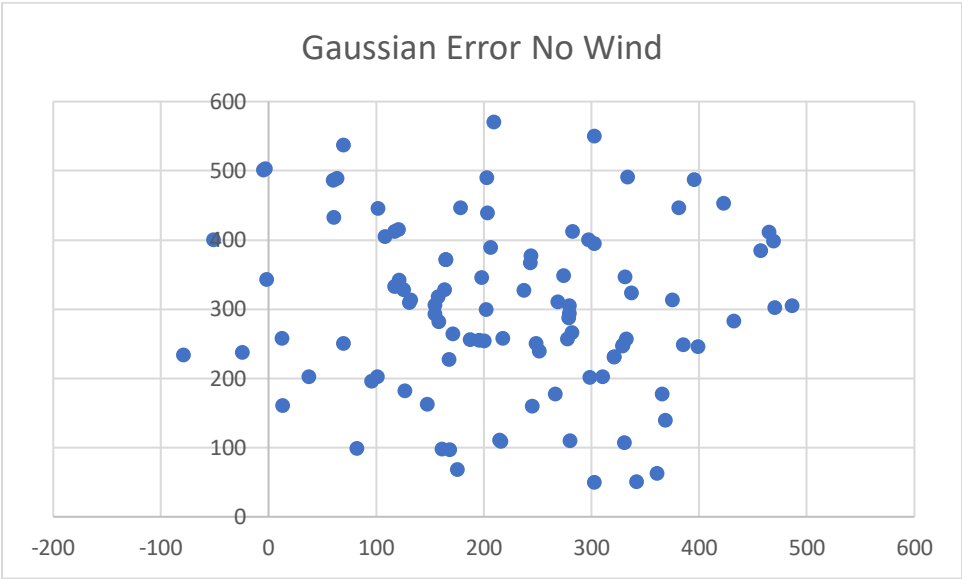
## Gaussian Error No Wind:

x	y
201.9407	298.8007
464.9857	411.0917
341.9915	50.20572
202.4892	489.6964
214.8611	110.8702
37.24552	202.5223
360.8262	62.73335
469.1745	398.5172
-78.9129	233.9082
-2.87766	502.4875
-4.63813	500.7082
486.5918	305.0668
375.3652	312.8407
101.6115	445.731
167.4664	227.3176
125.3533	327.7316
164.8423	371.45
243.1429	366.9318
164.5439	371.3024
251.2437	239.0471
278.5837	287.1246
279.4857	304.816
279.3489	293.2973
12.70797	257.5859
60.81377	432.3044
215.6451	108.6038
384.9912	248.4684
274.3402	348.5022
117.3694	332.4211
277.3812	256.5134
282.0012	266.0185
206.5284	388.523
121.5162	341.4636
243.9067	377.1436
-1.7663	342.5477
160.916	97.53423
365.57	177.0914
168.1026	96.27837

398.8322	245.3586
279.8531	109.8857
248.3261	250.0458
268.7755	310.0382
131.7966	313.3841
131.0911	309.0771
178.524	445.9178
244.7119	159.4508
147.3975	162.2096
95.82413	195.594
310.1947	201.9676
422.9908	452.944
209.488	570.2346
302.532	49.79218
-51.0677	400.4081
302.8878	550.0617
69.70025	536.9361
395.6528	486.6461
456.9363	384.2644
470.3944	301.9019
432.2945	282.6122
330.5824	107.0977
63.87279	489.0303
333.2956	491.0376
82.25952	99.00187
381.2659	446.307
175.4061	68.35759
59.8951	486.1013
13.23556	160.7804
-24.3809	237.4199
368.3336	138.9817
154.852	292.4055
158.0647	281.6302
171.2598	264.3626
197.7035	345.7247
187.0809	256.0783
217.8953	257.86
154.5301	305.3395
195.5934	254.4303
163.5409	327.6903
200.3722	254.2192

237.0715	326.8649
157.6969	317.5061
321.0089	231.0396
126.5436	181.6664
320.87	230.7965
337.2585	323.6387
298.4834	201.5129
331.2915	346.489
203.2761	439.2406
282.3005	412.3624
266.2995	177.513
100.8777	202.156
302.4425	394.3621
120.9693	414.6858
332.2617	256.3475
69.81128	250.5067
108.302	404.834
329.5127	248.7639
117.1365	411.9479
328.5075	246.2924
297.153	399.7997

Scatterplot:



Average Error and Standard Deviation:

	STD Dev	Mean Error
x	127.5898	12.75898174
y	121.7012	12.17011537

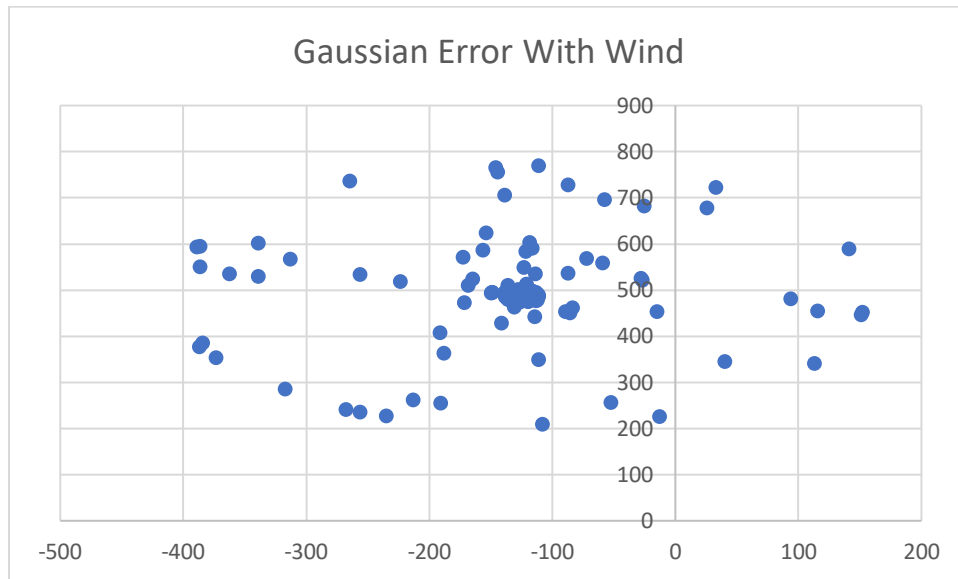
## Gaussian Error With Wind:

x	y
-256.444	532.8629
-188.003	363.4073
-153.982	623.6791
-111.285	348.8742
-85.7225	450.0836
-164.977	523.6444
-113.253	476.3922
-138.05	496.3961
-112.323	477.4449
-120.88	503.0156
-172.366	571.4015
-121.485	583.911
-58.942	558.0255
-72.3649	568.4976
-26.7713	521.4007
-27.9537	524.6426
-116.58	590.8637
-223.767	518.2972
-191.096	407.8102
-156.238	586.2929
151.8173	451.1288
112.7942	341.261
151.0544	445.735
-384.103	384.744
-317.064	285.4191
-146.072	765.6428
-107.85	209.0549
-25.2763	682.0512
-138.96	705.5492
93.65445	480.9857
-339.142	529.7737
-57.4501	695.3859
40.21915	344.2201
-386.796	376.1358
-264.675	735.4698
141.3056	588.8643
-388.9	593.7787
-12.8488	225.696

-256.515	235.0995
-267.955	241.4097
-312.825	566.5529
-114.241	441.4568
25.39294	677.8977
115.5308	454.9793
-52.1465	256.1466
-87.2836	727.0675
-190.542	254.1126
-362.508	535.1744
-213.115	261.6895
-338.966	601.1344
-14.7412	452.828
-118.683	602.6922
-386.231	550.4023
-144.493	755.7065
-122.938	548.5537
-87.4362	535.8513
-141.342	428.713
-130.723	462.6991
-149.62	493.2111
-149.125	495.0497
-121.233	512.763
-136.267	510.2648
-373.2	352.5774
-386.262	594.9395
-111.349	769.8954
-234.981	227.1573
32.86014	722.1978
-148.794	494.9874
-168.578	509.5755
-113.76	535.3162
-83.5996	460.7936
-89.2272	453.6646
-171.666	473.1076
-113.288	494.6186
-119.474	475.0771
-126.26	474.083
-127.725	500.6709
-133.891	477.5564
-112.53	481.7807

-138.197	488.8043
-138.151	489.2131
-112.593	481.649
-111.334	486.0762
-116.226	497.9619
-138.098	485.4109
-111.523	490.1564
-111.264	487.1395
-138.247	488.0852
-119.714	474.9776
-131.593	475.8565
-127.556	474.2922
-111.931	483.2946
-116.134	497.8856
-111.96	483.207
-133.989	497.3527
-131.901	498.957
-120.136	474.8157
-126.941	500.8233
-128.537	500.4615
-135.918	479.9008

### Scatterplot:



### Average Error and Standard Deviation:

	STD Dev	Mean Error
x	114.0436	11.40436307
y	118.9522	11.89522419

The results are consistent for the “No Error No Wind” and the “No Error With Wind” since there is no Error. The results for the “Uniform Error With Wind” and “Uniform Error No Wind” graphs are similar but these results were not expected since there is average error. The results for the “Gaussian Error No Wind” and “Gaussian Error With Wind” the results were also not expected because of the “Gaussian Error No Wind” had average error without wind.