

Blog Entry © Wednesday, May 28, 2025, More C/C++ Siacci Method Ballistic Screenshots
by James Pate Williams, Jr., BA, BS, MSWE, PhD

Ballistic Table Data Dialog

| Range Yards | Start Degrees | Angle Minutes | Final Degrees | Angle Minutes | Time Sec | V1 FPS | Y-Max Feet |
|----------------|------------------|------------------|------------------|------------------|-------------|-----------|---------------|
| 1000 | 0 | 26.9 | 0 | 27.2 | 1.21 | 2454 | 6 |
| 1100 | 0 | 29.6 | 0 | 30.0 | 1.33 | 2449 | 7 |
| 1200 | 0 | 32.3 | 0 | 32.8 | 1.46 | 2444 | 9 |
| 1300 | 0 | 35.1 | 0 | 35.7 | 1.58 | 2440 | 10 |
| 1400 | 0 | 37.8 | 0 | 38.5 | 1.70 | 2435 | 12 |
| 1500 | 0 | 40.5 | 0 | 41.4 | 1.83 | 2431 | 13 |
| 1600 | 0 | 43.3 | 0 | 44.3 | 1.95 | 2426 | 15 |
| 1700 | 0 | 46.1 | 0 | 47.1 | 2.07 | 2422 | 17 |
| 1800 | 0 | 48.9 | 0 | 50.0 | 2.20 | 2417 | 19 |
| 1900 | 0 | 51.6 | 0 | 52.9 | 2.32 | 2413 | 22 |
| 2000 | 0 | 54.4 | 0 | 55.8 | 2.45 | 2408 | 24 |
| 2100 | 0 | 57.2 | 0 | 58.8 | 2.57 | 2404 | 27 |

Ok Cancel

Figure 1 Range Table 1000 to 2100 Yards 0 to 1 Degree Elevation

Siacci's Method Dialog

| | | | |
|------------------|--------------|----------------------|-------------|
| Input Data | | | |
| Theta0 (Degrees) | 0.000000 | Trunnion (Feet) | 0.000000 |
| Theta1 (Degrees) | 1.000000 | Target Height (Feet) | 0.000000 |
| Theta Steps | 10.000000 | Density Air SI | 1.203400 |
| Time0 (Seconds) | 0.000000 | Coefficient of Form | 0.500000 |
| Time1 (Seconds) | 60.000000 | Diameter (Inches) | 16.000000 |
| u Steps | 20000.000000 | Weight (Pounds) | 2700.000000 |
| V0 (Feet/Second) | 2500.000000 | Runtime (Seconds) | 0.814 |

Compare Draw Table Ok Cancel

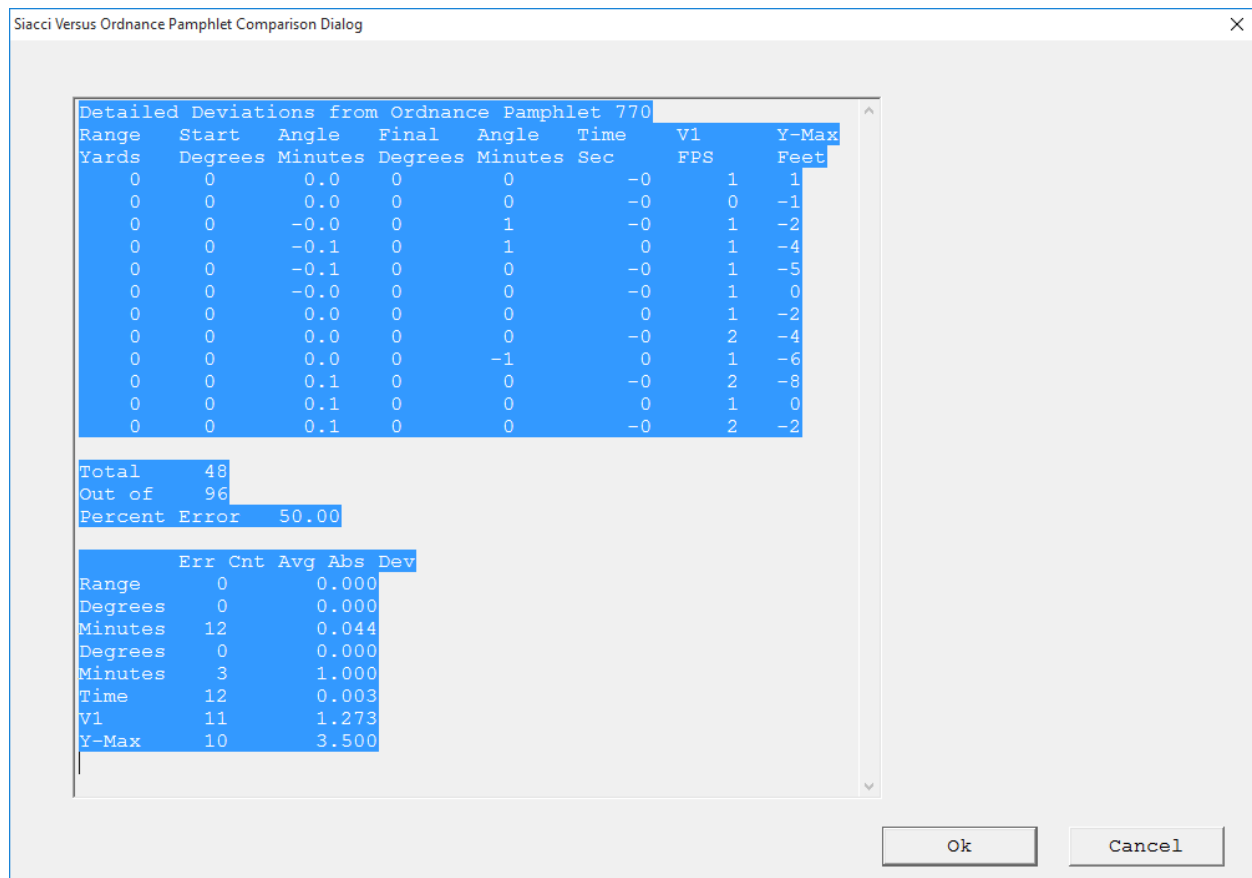


Figure 2 Detailed Deviations 1000 to 2100 Yards Range 0 to 1 Degree Elevation

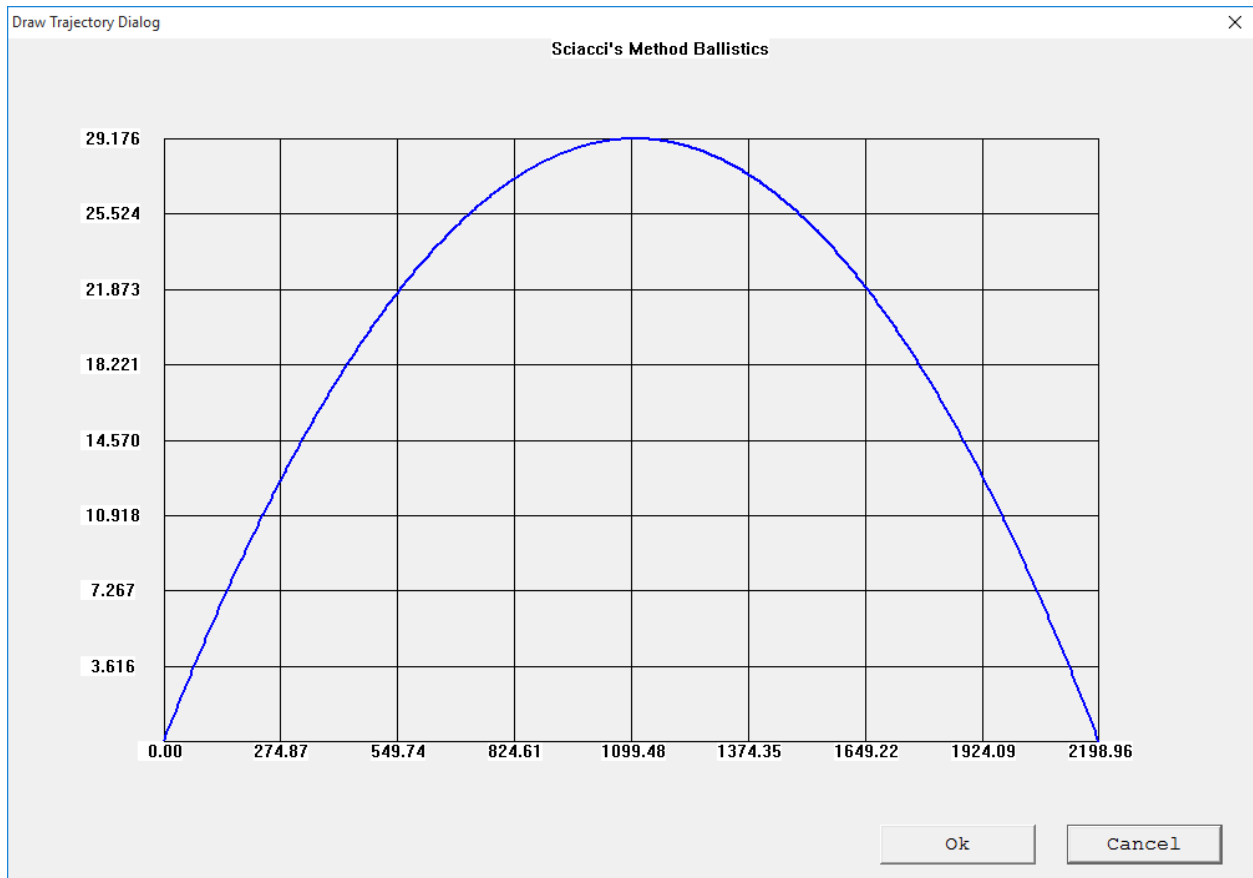


Figure 3 1 Degree Elevation

Ballistic Table Data Dialog

| Range | Start | Angle | Final | Angle | Time | V1 | Y-Max |
|-------|---------|---------|---------|---------|------|------|-------|
| Yards | Degrees | Minutes | Degrees | Minutes | Sec | FPS | Feet |
| 2200 | 1 | 0.0 | 1 | 1.7 | 2.70 | 2399 | 29 |
| 2300 | 1 | 2.8 | 1 | 4.7 | 2.82 | 2395 | 32 |
| 2400 | 1 | 5.6 | 1 | 7.7 | 2.95 | 2390 | 35 |
| 2500 | 1 | 8.4 | 1 | 10.7 | 3.07 | 2386 | 38 |
| 2600 | 1 | 11.3 | 1 | 13.7 | 3.20 | 2381 | 41 |
| 2700 | 1 | 14.1 | 1 | 16.8 | 3.32 | 2377 | 44 |
| 2800 | 1 | 17.0 | 1 | 19.8 | 3.45 | 2373 | 48 |
| 2900 | 1 | 19.8 | 1 | 22.9 | 3.58 | 2368 | 51 |
| 3000 | 1 | 22.7 | 1 | 25.9 | 3.70 | 2364 | 55 |
| 3100 | 1 | 25.6 | 1 | 29.0 | 3.83 | 2359 | 59 |
| 3200 | 1 | 28.5 | 1 | 32.1 | 3.96 | 2355 | 63 |
| 3300 | 1 | 31.3 | 1 | 35.2 | 4.09 | 2351 | 67 |
| 3400 | 1 | 34.2 | 1 | 38.4 | 4.21 | 2346 | 71 |
| 3500 | 1 | 37.1 | 1 | 41.5 | 4.34 | 2342 | 76 |
| 3600 | 1 | 40.0 | 1 | 44.7 | 4.47 | 2337 | 80 |
| 3700 | 1 | 42.9 | 1 | 47.9 | 4.60 | 2333 | 85 |
| 3800 | 1 | 45.9 | 1 | 51.1 | 4.73 | 2329 | 90 |
| 3900 | 1 | 48.8 | 1 | 54.3 | 4.86 | 2324 | 95 |
| 4000 | 1 | 51.7 | 1 | 57.5 | 4.99 | 2320 | 100 |
| 4100 | 1 | 54.6 | 2 | 0.8 | 5.12 | 2316 | 105 |
| 4200 | 1 | 57.6 | 2 | 4.0 | 5.25 | 2312 | 111 |

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Figure 4 Range Table 2200 to 4200 Yards 2 to 3 Degrees Elevation

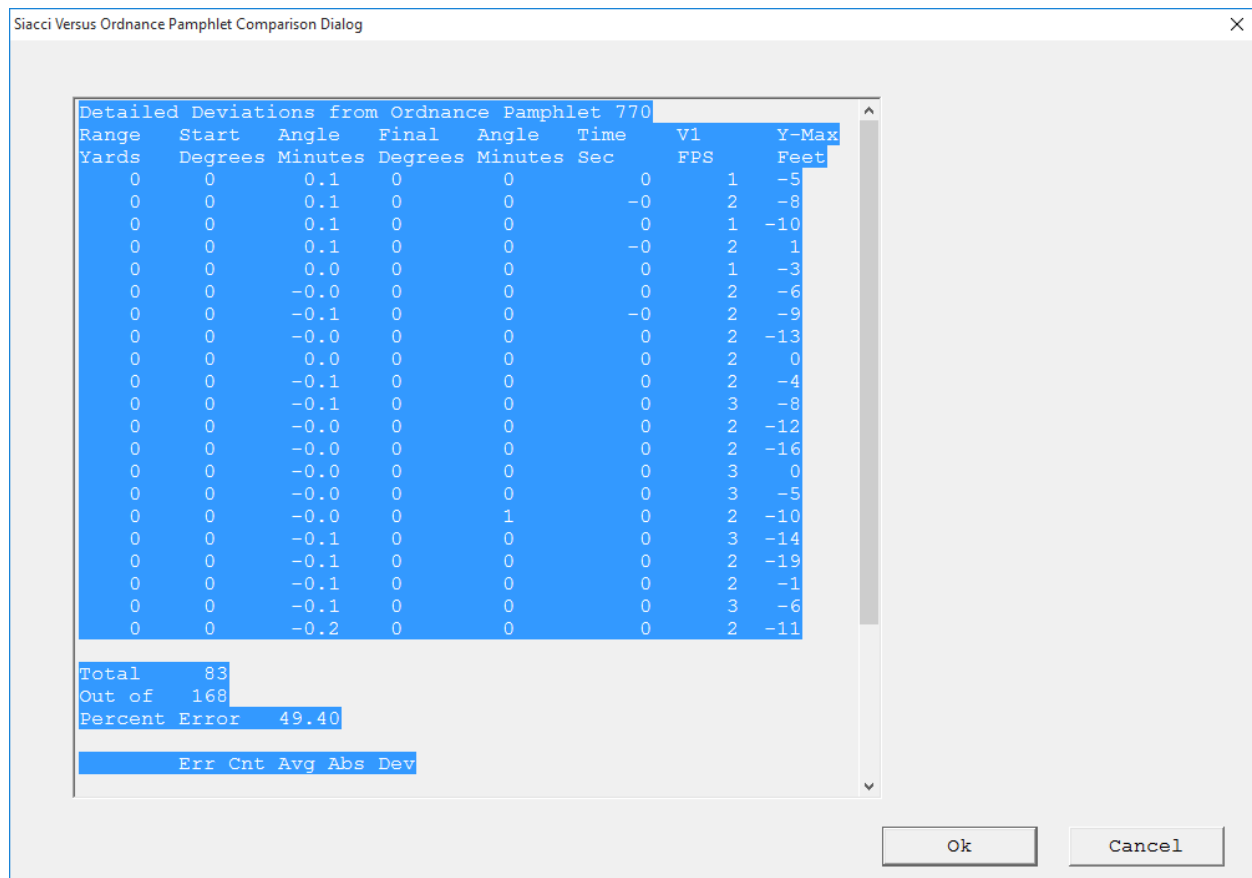


Figure 5 Detailed Deviations for 2200 to 4200 Yards 2 to 3 Degrees Elevation

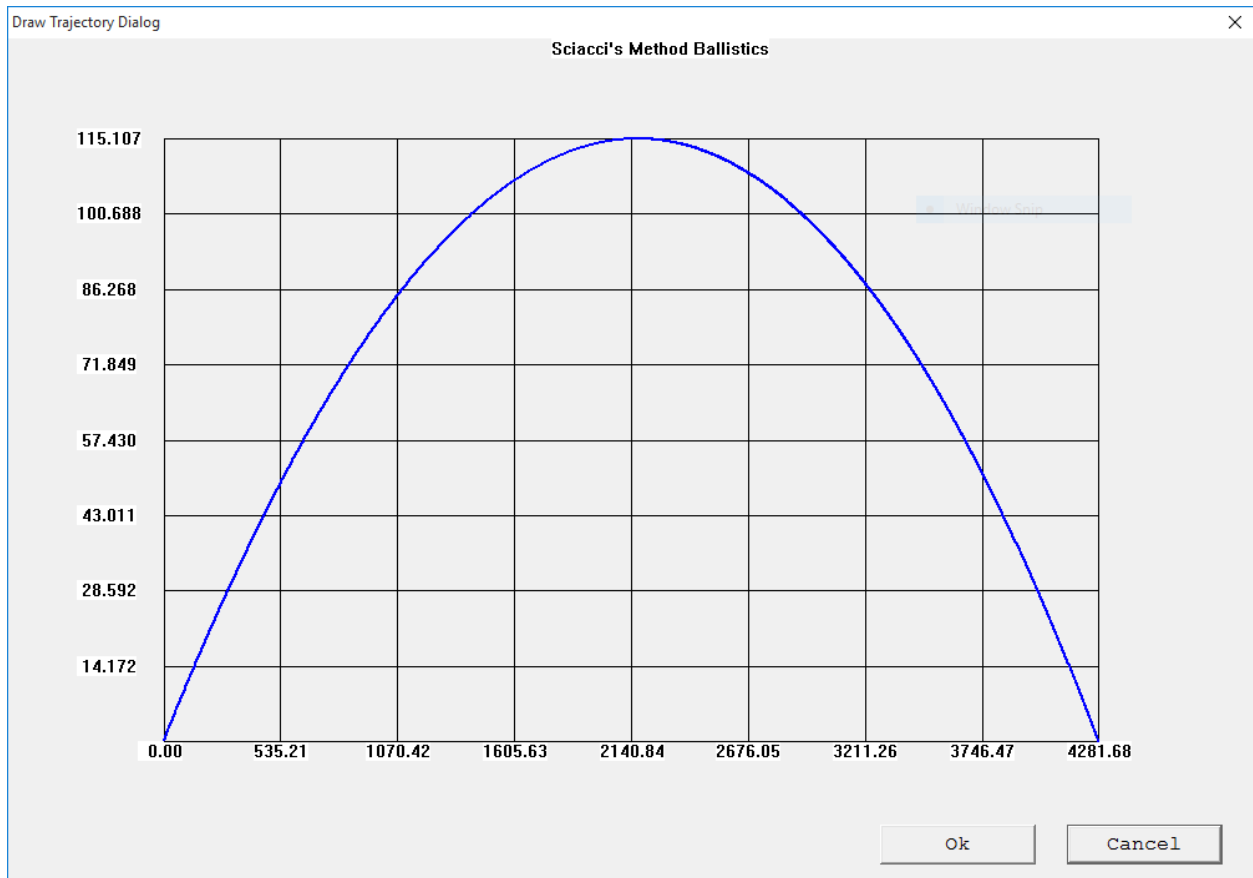


Figure 6 Graph for 2 Degrees Elevation

Ballistic Table Data Dialog

| Range Yards | Start Degrees | Angle Minutes | Final Degrees | Angle Minutes | Time Sec | V1 FPS | Y-Max Feet |
|----------------|------------------|------------------|------------------|------------------|-------------|-----------|---------------|
| 4300 | 2 | 0.5 | 2 | 7.3 | 5.38 | 2307 | 116 |
| 4400 | 2 | 3.5 | 2 | 10.6 | 5.51 | 2303 | 122 |
| 4500 | 2 | 6.5 | 2 | 13.9 | 5.64 | 2299 | 128 |
| 4600 | 2 | 9.5 | 2 | 17.2 | 5.77 | 2294 | 134 |
| 4700 | 2 | 12.5 | 2 | 20.5 | 5.90 | 2290 | 140 |
| 4800 | 2 | 15.5 | 2 | 23.9 | 6.03 | 2286 | 146 |
| 4900 | 2 | 18.5 | 2 | 27.2 | 6.16 | 2282 | 153 |
| 5000 | 2 | 21.5 | 2 | 30.7 | 6.29 | 2278 | 159 |
| 5100 | 2 | 24.5 | 2 | 34.1 | 6.43 | 2273 | 166 |
| 5200 | 2 | 27.5 | 2 | 37.5 | 6.56 | 2269 | 173 |
| 5300 | 2 | 30.6 | 2 | 40.9 | 6.69 | 2265 | 180 |
| 5400 | 2 | 33.6 | 2 | 44.4 | 6.82 | 2261 | 187 |
| 5500 | 2 | 36.7 | 2 | 47.9 | 6.96 | 2257 | 195 |
| 5600 | 2 | 39.8 | 2 | 51.3 | 7.09 | 2253 | 202 |
| 5700 | 2 | 42.8 | 2 | 54.8 | 7.22 | 2248 | 210 |
| 5800 | 2 | 45.9 | 2 | 58.4 | 7.36 | 2244 | 218 |
| 5900 | 2 | 49.0 | 3 | 1.9 | 7.49 | 2240 | 226 |
| 6000 | 2 | 52.1 | 3 | 5.5 | 7.63 | 2236 | 234 |

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Figure 7 Range Table 4300 to 6000 Yards 2 to 3 Degrees Elevation

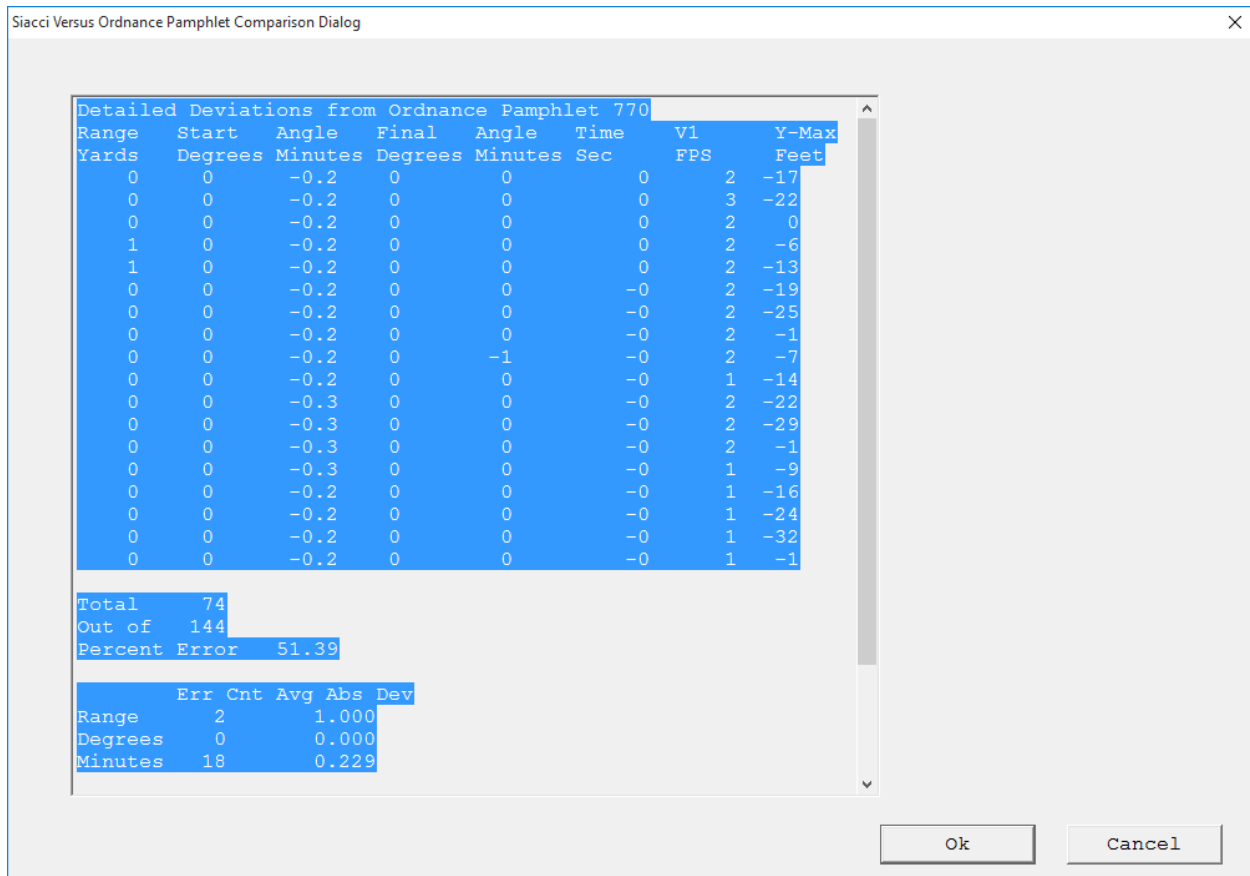


Figure 8 Detailed Deviations for 4300 to 6000 Yards 2 to 3 Degrees Elevation

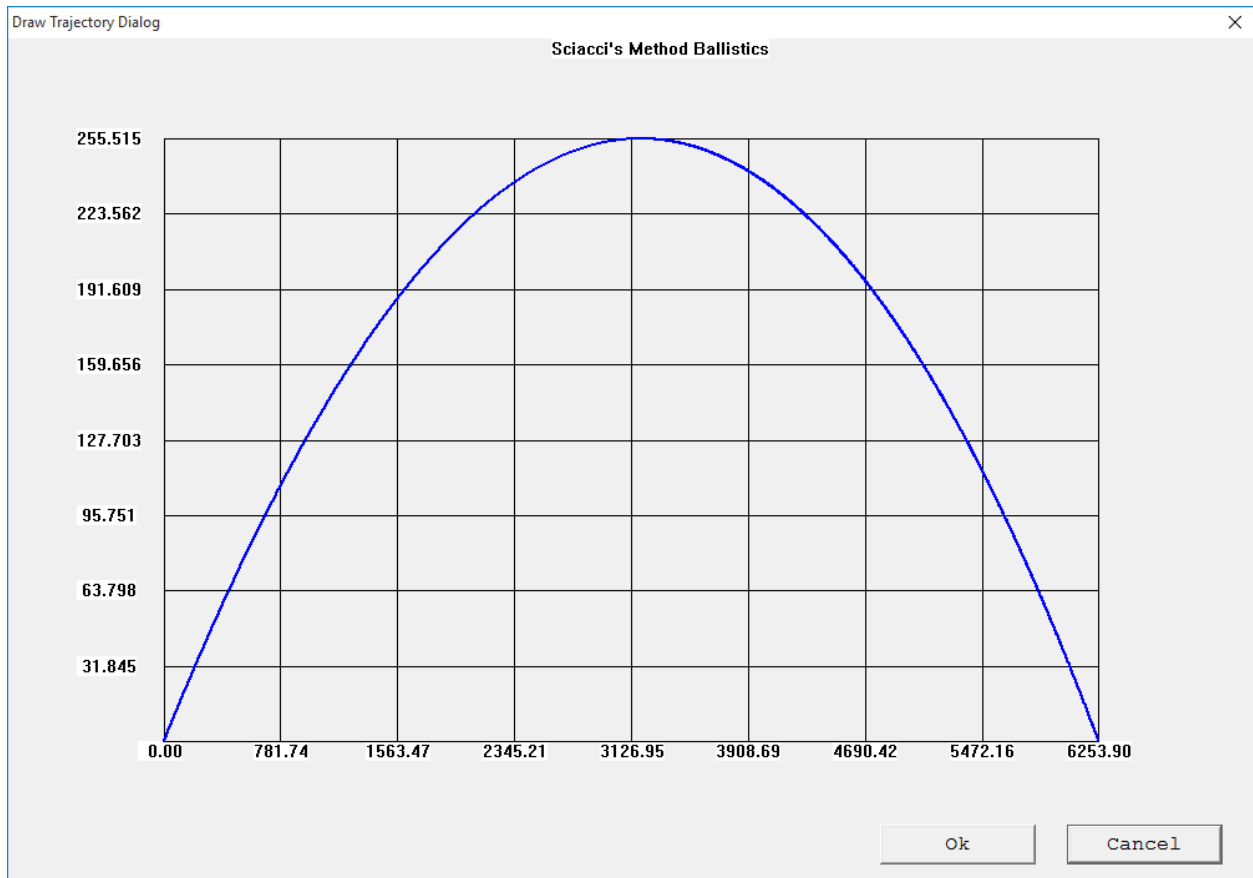


Figure 9 Graph for 3 Degrees Elevation

Ballistic Table Data Dialog

| Range Yards | Start Degrees | Angle Minutes | Final Degrees | Angle Minutes | Time Sec | V1 FPS | Y-Max Feet |
|----------------|------------------|------------------|------------------|------------------|-------------|-----------|---------------|
| 6300 | 3 | 1.4 | 3 | 16.2 | 8.03 | 2224 | 260 |
| 6400 | 3 | 4.6 | 3 | 19.9 | 8.17 | 2220 | 268 |
| 6500 | 3 | 7.7 | 3 | 23.5 | 8.30 | 2216 | 277 |
| 6600 | 3 | 10.8 | 3 | 27.1 | 8.44 | 2212 | 287 |
| 6700 | 3 | 14.0 | 3 | 30.8 | 8.58 | 2208 | 296 |
| 6800 | 3 | 17.1 | 3 | 34.5 | 8.71 | 2204 | 305 |
| 6900 | 3 | 20.3 | 3 | 38.3 | 8.85 | 2200 | 315 |
| 7000 | 3 | 23.5 | 3 | 42.0 | 8.99 | 2196 | 325 |
| 7100 | 3 | 26.7 | 3 | 45.7 | 9.12 | 2192 | 335 |
| 7200 | 3 | 29.9 | 3 | 49.5 | 9.26 | 2188 | 345 |
| 7300 | 3 | 33.1 | 3 | 53.3 | 9.40 | 2184 | 355 |
| 7400 | 3 | 36.3 | 3 | 57.1 | 9.54 | 2180 | 366 |
| 7500 | 3 | 39.5 | 4 | 0.9 | 9.68 | 2176 | 377 |
| 7600 | 3 | 42.7 | 4 | 4.7 | 9.82 | 2172 | 388 |
| 7700 | 3 | 46.0 | 4 | 8.6 | 9.95 | 2168 | 399 |
| 7800 | 3 | 49.2 | 4 | 12.5 | 10.09 | 2164 | 410 |
| 7900 | 3 | 52.5 | 4 | 16.4 | 10.23 | 2160 | 421 |

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Figure 10 Range Table for 6300 to 7900 Yards 3 to 4 Degrees Elevation

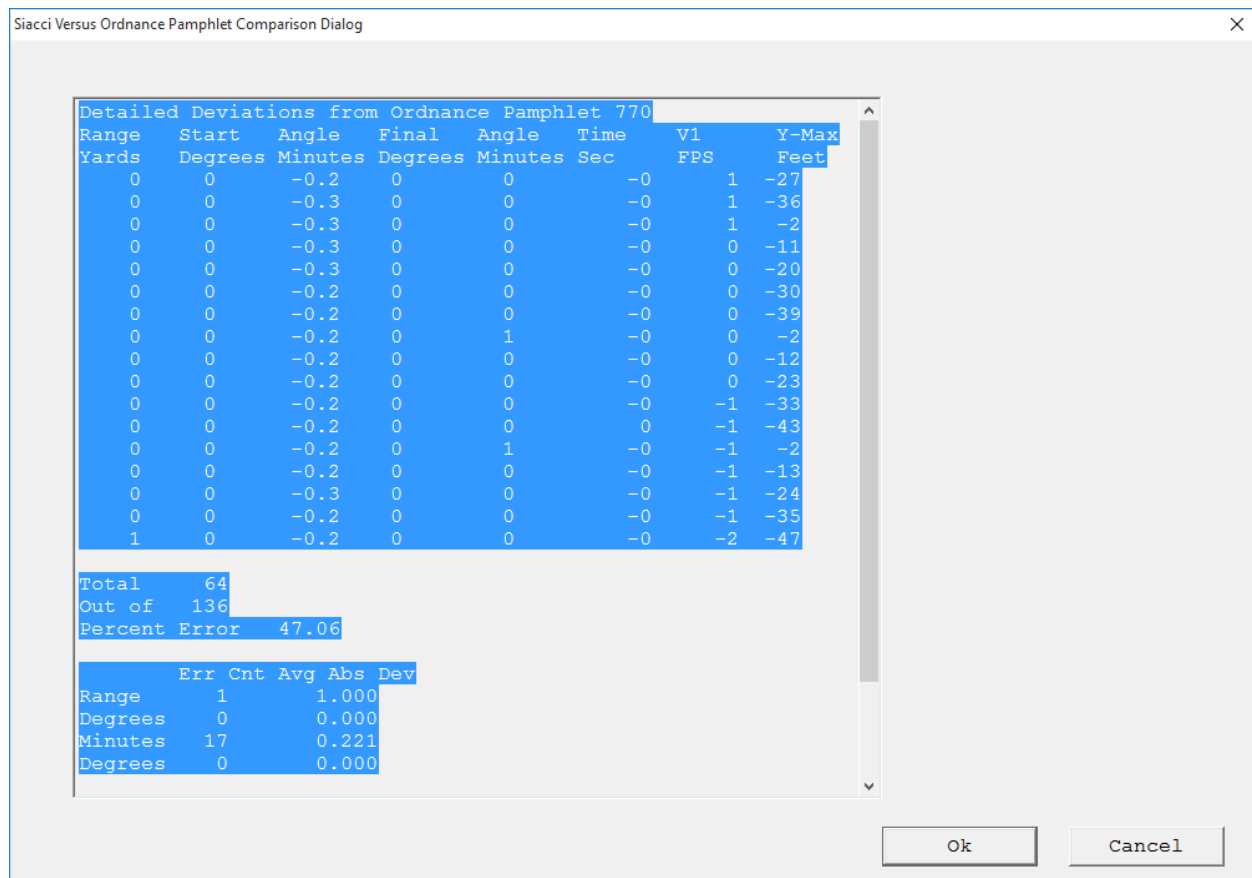


Figure 11 Detailed Deviations for 6300 to 7900 Yards 3 to 4 Degrees Elevation

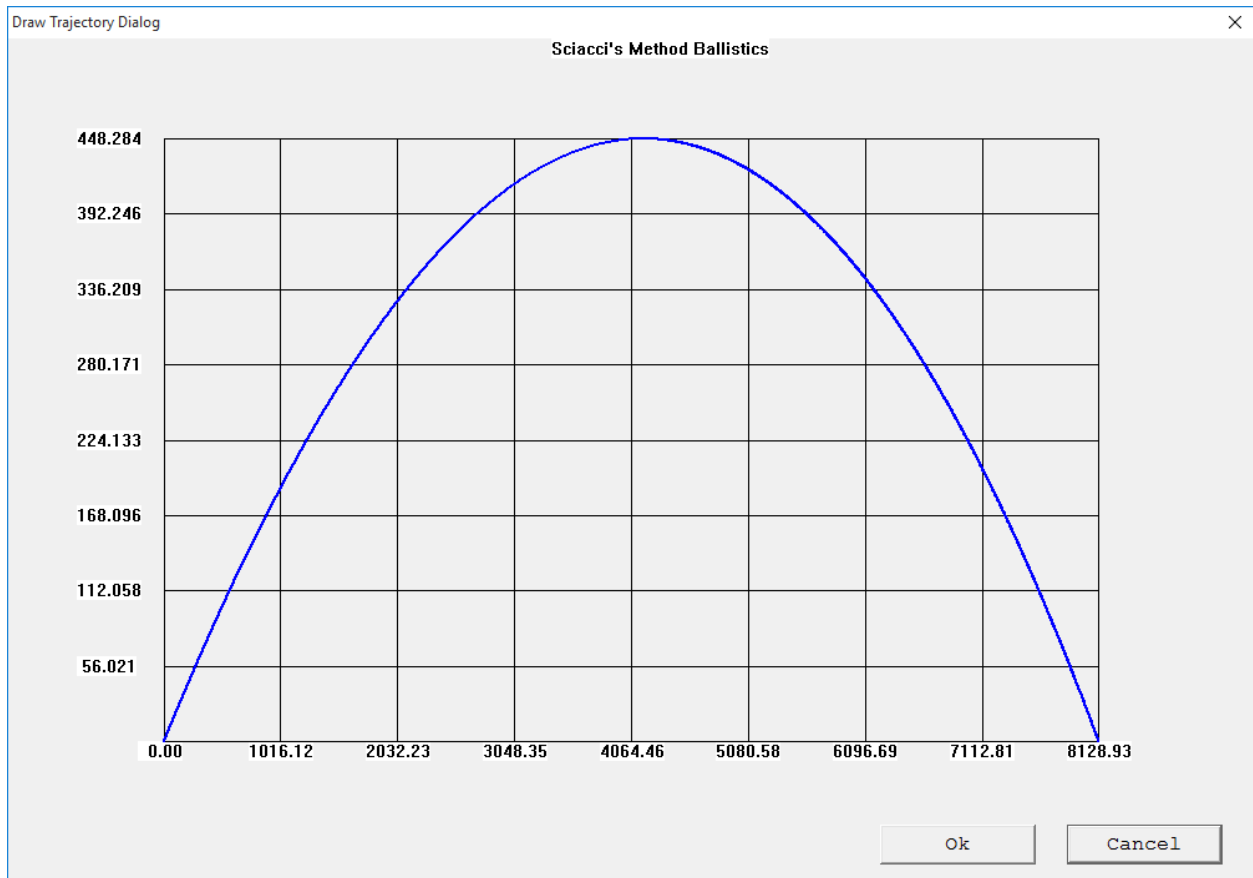


Figure 12 Graph for 4 Degrees Elevation

Ballistic Table Data Dialog

| Range Yards | Start Degrees | Angle Minutes | Final Degrees | Angle Minutes | Time Sec | V1 FPS | Y-Max Feet |
|----------------|------------------|------------------|------------------|------------------|-------------|-----------|---------------|
| 8200 | 4 | 2.3 | 4 | 28.1 | 10.65 | 2148 | 457 |
| 8300 | 4 | 5.6 | 4 | 32.1 | 10.80 | 2145 | 469 |
| 8400 | 4 | 8.9 | 4 | 36.1 | 10.94 | 2141 | 481 |
| 8500 | 4 | 12.2 | 4 | 40.1 | 11.08 | 2137 | 494 |
| 8600 | 4 | 15.5 | 4 | 44.1 | 11.22 | 2133 | 506 |
| 8700 | 4 | 18.8 | 4 | 48.2 | 11.36 | 2129 | 519 |
| 8800 | 4 | 22.2 | 4 | 52.2 | 11.50 | 2125 | 532 |
| 8900 | 4 | 25.5 | 4 | 56.3 | 11.65 | 2122 | 546 |
| 9000 | 4 | 28.9 | 5 | 0.4 | 11.79 | 2118 | 559 |
| 9100 | 4 | 32.2 | 5 | 4.5 | 11.93 | 2114 | 573 |
| 9200 | 4 | 35.6 | 5 | 8.6 | 12.07 | 2110 | 587 |
| 9300 | 4 | 39.0 | 5 | 12.8 | 12.22 | 2107 | 601 |
| 9400 | 4 | 42.4 | 5 | 17.0 | 12.36 | 2103 | 615 |
| 9500 | 4 | 45.8 | 5 | 21.1 | 12.51 | 2099 | 629 |
| 9600 | 4 | 49.2 | 5 | 25.3 | 12.65 | 2096 | 644 |
| 9700 | 4 | 52.6 | 5 | 29.6 | 12.79 | 2092 | 659 |

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Figure 13 Range Table for 8200 to 9700 Yards 4 to 5 Degrees Elevation

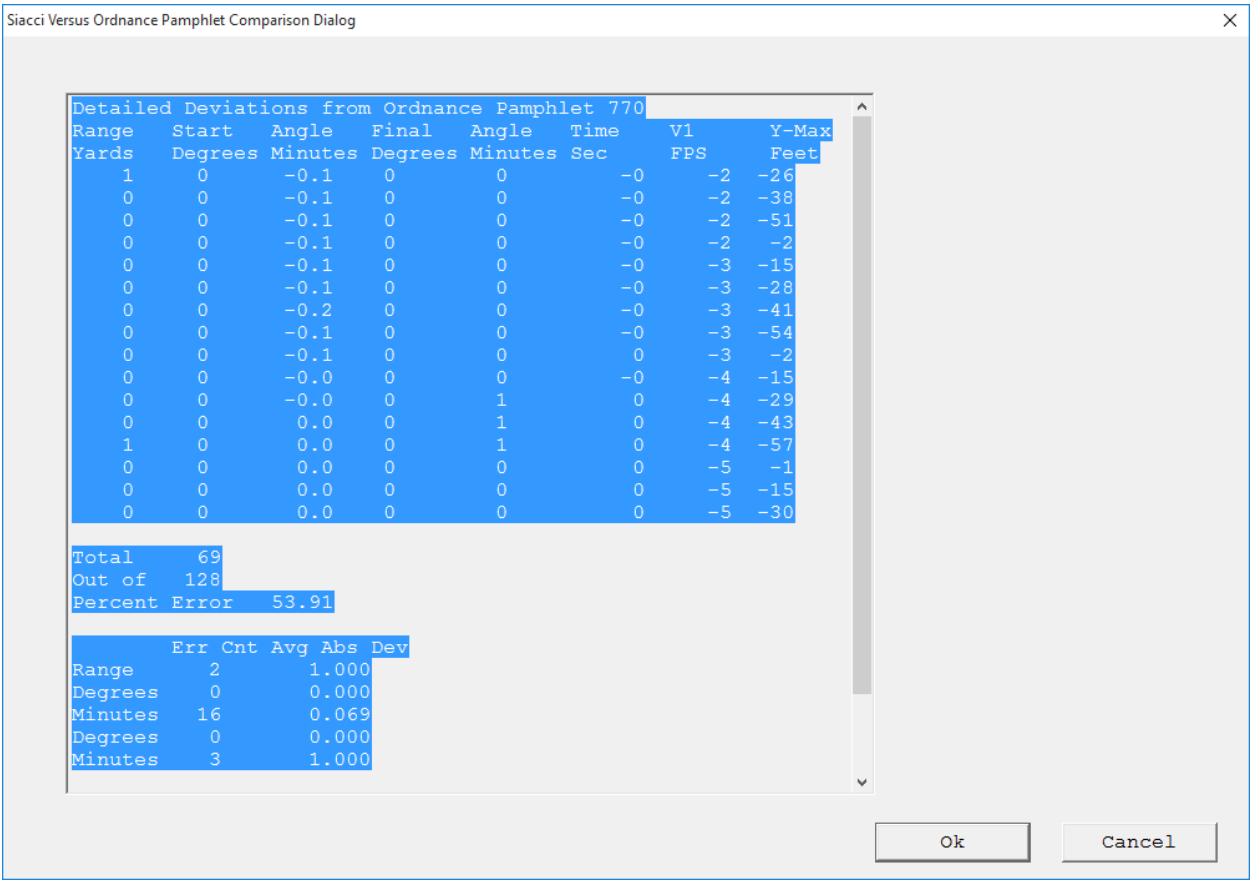


Figure 14 Detailed Deviations for 8200 to 9700 Yards and 4 to 5 Degrees Elevation

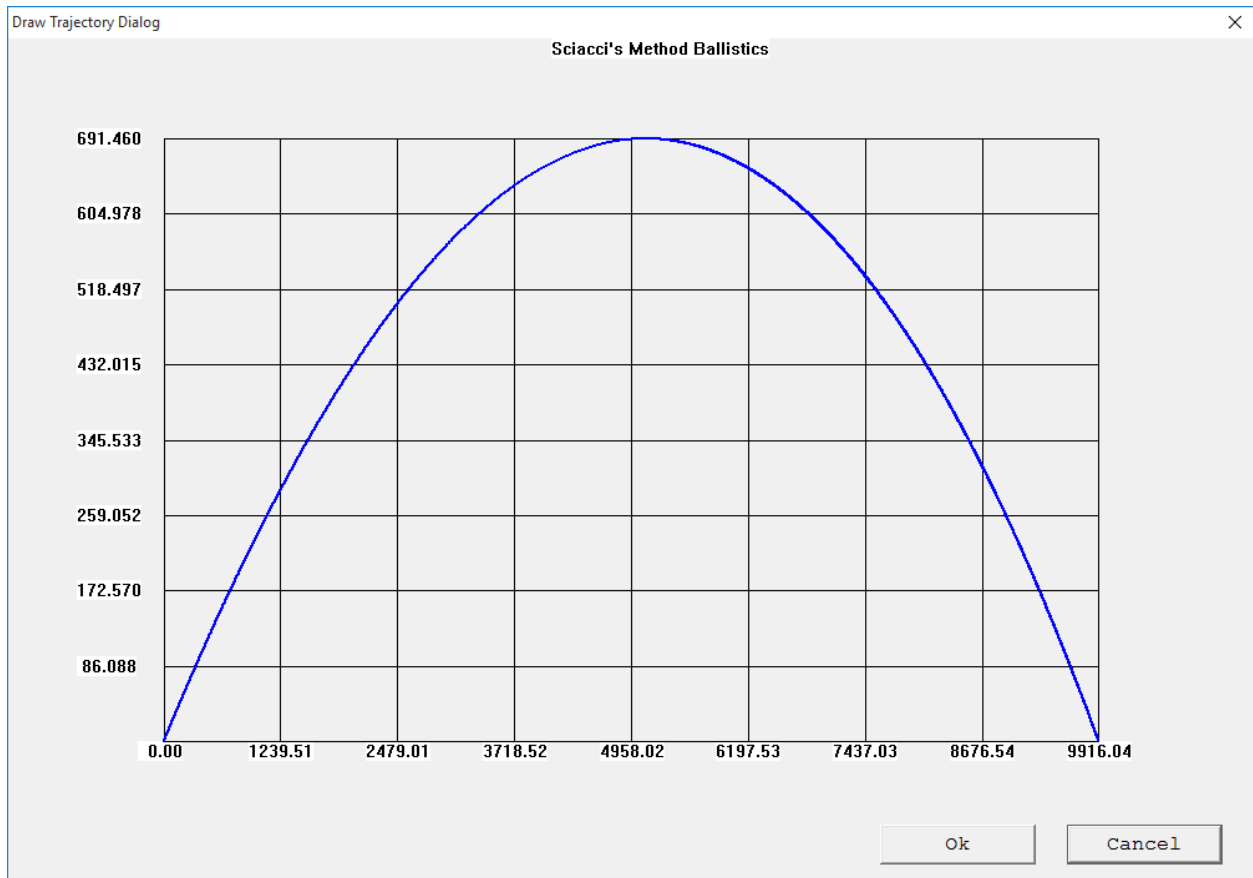


Figure 15 Graph for 5 Degrees Elevation