CMD to run program:

go run main.go PointCloud1.xyz 0.99 0.1 0.1

go run main.go PointCloud2.xyz 0.99 0.1 0.1

go run main.go PointCloud3.xyz 0.99 0.1 0.1

Note:

If error in the following picture appears, temporarily disable defender firewall and compile again

A picture containing text

Description automatically generated

Iteration time: 4603

|  |  |
| --- | --- |
| Thread | Time |
| 1 | 36.0094094s |
| 2 | 15.1813466s |
| 3 | 13.6800959s |
| 5 | 7.1361728s |
| 10 | 5.2485423s |
| 15 | 4.5234918s |
| 20 | 4.5618679s |
| 25 | 4.3680823s |
| 30 | 4.4388816s |
| 40 | 4.602101s |
| 70 | 4.4617522s |
| 100 | 4.5605281s |
| 700 | 4.4057191s |
| 3000 | 4.4568694s |

Conclusion: around 25 threads should be used to efficiently find the dominant planes.