



# Accuracy Report (ft)

R3 Pro with Traditional Survey  
Points from a Traverse!

**ROCK** robotic

|                        |                                      |
|------------------------|--------------------------------------|
| Date:                  | 2025-08-09 09:47:50                  |
| Project Date:          | 2023-08-13 07:25:12                  |
| Location               | 33.345595653808,<br>-84.115766370146 |
| Lidar                  | ROCK R3Pro                           |
| Acquisition<br>Vehicle | DJI M300                             |

Powered by **ROCK** robotic

# Overview

This accuracy report describes the relationship between the ground control points and the LiDAR data. Each GCP is placed on the LiDAR data and a Z deviation is determined. The RMS takes into account the roughness of the LiDAR data to give a higher weight to GCP points on smoother surfaces.

## Project Description

1,292 Points Per Square Meter!

120 Points per Square Foot

Traverse Points provided by Registered Survey Firm

Points taken by a Total Station

Heavily Vegetated Site with thick trees and grass

### Horizontal Projection:

NAD83 / Georgia West (ftUS)

EPSG: 2240 Unit: ft

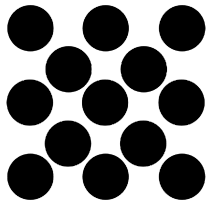
### Vertical Projection:

NAVD88 height (geoid18) (ftUS)

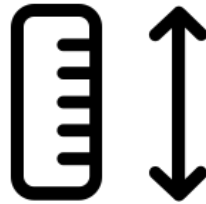
EPSG: 6360 Unit: ft

View the data: [Click here](#) or go to <https://cloud.rockrobotic.com/project/46169>.

# GCP Accuracy Summary



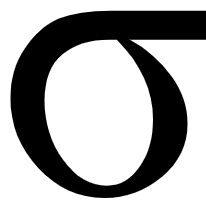
Point Density  
120 points per sq ft



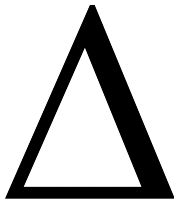
Vertical Accuracy  
RMS  
0.089 ft



Coverage  
37 Acres



Standard Deviation  
Elevation Delta  
0.089 ft



Mean delta  
in elevation  
0.004 ft

# Ground Control Points

| GCP Name | X           | Y           | Z-GCP (ft) | Z-LiDAR (ft) | Delta-Z (ft) | Disabled | Description |
|----------|-------------|-------------|------------|--------------|--------------|----------|-------------|
| 10       | 2311750.334 | 1217004.872 | 804.7446   | 804.639      | 0.106        | No       | TRAV10      |
| 11       | 2311667.638 | 1216888.295 | 806.9616   | 806.872      | 0.09         | No       | TRAV 11     |
| 12       | 2311714.475 | 1216364.509 | 820.0517   | 820.181      | -0.129       | No       | TRAV 12     |
| 13       | 2311802.252 | 1216219.905 | 837.5148   | 837.345      | 0.17         | No       | TRAV13      |
| 20063    | 2312532.662 | 1216160.617 | 832.7285   | 832.691      | 0.038        | No       | G           |
| 20064    | 2312530.189 | 1216161.861 | 832.1233   | 832.213      | -0.09        | No       | G           |
| 20139    | 2312580.333 | 1216502.656 | 835.2816   | 835.269      | 0.013        | No       | G           |
| 20140    | 2312580.036 | 1216549.692 | 833.6007   | 833.595      | 0.006        | No       | G           |
| 20155    | 2312571.826 | 1216604.367 | 831.669    | 831.78       | -0.111       | No       | G           |
| 20185    | 2312528.872 | 1216746.956 | 826.804    | 826.816      | -0.012       | No       | G           |
| 20186    | 2312488.915 | 1216751.468 | 825.1832   | 825.264      | -0.081       | No       | G           |
| 20265    | 2312558.745 | 1217131.479 | 820.5699   | 820.531      | 0.039        | No       | G           |
| 20268    | 2312558.904 | 1217189.486 | 819.9632   | 819.934      | 0.029        | No       | G           |
| 20283    | 2312557.51  | 1217241.91  | 821.2929   | 821.261      | 0.032        | No       | G           |

| GCP Name | X           | Y           | Z-GCP (ft) | Z-LiDAR (ft) | Delta-Z (ft) | Disabled | Description |
|----------|-------------|-------------|------------|--------------|--------------|----------|-------------|
| 20286    | 2312563.801 | 1217294.196 | 823.5962   | 823.683      | -0.087       | No       | G           |
| 3        | 2312570.681 | 1216181.031 | 833.503    | 833.533      | -0.03        | No       | TRAV 3      |
| 4        | 2312607.994 | 1216648.295 | 831.173    | 831.23       | -0.057       | No       | TRAV 4      |
| 5        | 2312556.85  | 1217248.752 | 821.4512   | 821.657      | -0.206       | No       | TRAV5       |
| 6        | 2312206.205 | 1217246.083 | 812.5042   | 812.403      | 0.101        | No       | TRAV 6      |
| 7        | 2312056.584 | 1217267.582 | 798.3491   | 798.315      | 0.034        | No       | TRAV 7      |
| 8        | 2311915.585 | 1217298.352 | 792.8905   | 792.804      | 0.086        | No       | TRAV 8      |
| 9        | 2311740.566 | 1217240.809 | 774.366    | 774.279      | 0.087        | No       | TRAV 9      |
| OPUS     | 2312571.572 | 1216180.59  | 833.503    | 833.433      | 0.07         | No       |             |