Birds Hill Project

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Gravity/Elevation Survey

Group 1 performed the Birds Hill project gravity and elevation survey at site 1 off North Drive towards the beach. The collected data is shown in the file “Birds Hill Group 1 GravityElevation Table” and a map of the survey area is shown in file” “.

For the elevation survey, a 100 m line was laid with stations of 20 m spacing. We leveled the Brunton compass between a back shot and forward shot with the compass higher than both points. A ruler was held vertically from the ground at the back shot point and a measurement in-plane with the compass was sighted. From there the compass was rotated towards the forward shot point to acquire a measurement downslope, also in-plane with the compass. These two measurements are used to calculate the difference in elevation between the two points. This process was continued down the line which is 100 m in length.

For the gravity survey, the same line and spacing were used. The gravimeter was levelled on a plate at the base station (0 m) 3 times and the dial unit measurements were averaged. The gravimeter was then moved to each station, taking two measurements at each and averaging the dial unit measurements.