

Abstract Details

Title: Assessment of Vertical Accuracy of Differential GPS: A Case Study in Rohtak District, Haryana

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Abstract: In this study the level transfer is compared by two methods, one is DGPS and other is spirit level. Two points were surveyed which were 5.95km apart and the aerial distance is 4.14 km . In this method the level of one point is assumed and level is transferred to the other point by spirit level. In the second exercise the two points were surveyed by DGPS and the level of the other point was compared by the level by spirit level. Point1 ($28^{\circ}54'56.34''N$, $76^{\circ}31'18.99''E$) and Point2 ($28^{\circ}54'11.93''N$, $76^{\circ}31'58.48''E$) in Rohtak City, Haryana were observed by DGPS and level was transferred by spirit level. In the result deviation of height falls in acceptable range. The comparison was done in two datums, in WGS84 as well as ITRF 2005. It is found that the DGPS method is an efficient method to transfer level in very less time as compare to spirit level.

Keywords: DGPS, Spirit level, Rohtak.