

The Comparison Of The Adjustment Methods In Geoid Determination Method

Ulku Kirici and Yasemin Sisman (Turkey)

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SUMMARY

The measurement number is bigger than required measurement in geodetic application generally. In this case the adjustment methods are applied for unique solution. The most used adjustment are the least square method (LS) and the least absolute value method (LAV).

Geoid determination is an application used frequently in geodesy. In geodetic relations between orthometric height and ellipsoidal height obtained from geoid determination. Orthometric heights are used in engineering applications but the measurements of orthometric height is quite difficult. The ellipsoid height are obtained from the space geodesy technique. A lot of methods are used for the determination of geoid. The methods which are used in this study; polynomial and multiquadratic interpolation. A great number of studies in which polynomial geoid determination technique is used have been conducted in our country. Some of these studies have formed numerical height models by using polynomial interpolation technique. The multiquadratic interpolation of the purpose is to define the research are with only one function.

In this study, the adjustment methods of geoid determination methods were introduced theoretically. The geoid determination was realized using the polynomial and mutliquadratic methods according to LS and LAV method. Thus it decided to the best method for geoid determination.