عنوان مقاله:

Multi Object Optimization Of Geodetic Network

محل انتشار:

همایش ژئوماتیک 82 (سال: 1382)

تعداد صفحات اصل مقاله: 14

نویسنده:

Ramin Kiamehr - *Royal Institute of Technology, Geodesy Division, SE -۱۰۰ ۴۴ Stockholm, Sweden Member of Department of Surveying Engineering , Zanjan University, Iran*

خلاصه مقاله:

networks based on well-specified quantitative considerations and techniques, it suggests planning for the best solution. In particular with respect to terrain difficulties and the choice of methods of measurement, the planning of networks means in practice that one starts with a solution that is feasible under the given circumstances and available material means, and then introduces improvement until the plan in not too expensive and good enough (Alberda-1974). However in the surveying engineering and geodetic science in order to mapping and staking out of civil engineering projects, GIS, earthquake and land slid hazard assessment, monitoring of deformation of civil structure such as dams and towers, aerial photography and in many other applications we need a framework of points that we called geodetic network. The main purpose of network optimization is designing an optimal network configuration and optimum-observing plan in the sense that they will satisfy the present network quality requirement at a minimum cost. In this case by avoiding any unnecessary observation we are saving considerable time and effort in the field. An optimized surveying scheme also will help in identifying and eliminating gross errors in observations as well as in eliminating the effects of undetectable gross errors existing in the observation. The purpose of this paper is to explain a fully analytical mathematical procedure to solve for the optimal improvements to the initial design in the positioning .networks with one numerical example

کلمات کلیدی: