The Effects of Geodetic Configuration of the Network in Deformation Analysis

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ABSTRACT

The optimization and design of monitoring scheme should precede the field observation and analysis procedures. Optimized monitoring schemes ensure the detection of predicted deformations according to a selected tolerance criterion. In this study, the effects of configuration of Gerede micro geodetic network in deformation analysis were researched. In this network, at first the deformation analysis has been carried out with respect to the results obtained through the direction and distance measurements made in 1983, and 1985. Then, measurement plans in two epochs were optimized. According to the optimized measurement plan deformation analysis has been carried out. Finally, deformation analysis results, which were obtained after optimization of measurement plan were compared and interpreted with the results that were obtained before optimization of measurement.