

Method for determining deformations of a rock mass comprising drilling exploration wells, conducting standard geological and geophysical research operations, and determining bottom elevations of a target stratum, based on which a structural map or a hypsometric plan is constructed. Section lines are plotted, along which an assessment of relative linear deformations is performed, a length of a curve connecting selected reference points is determined, and a directional distance between said points is determined. Calculation of a value of a sought coefficient of relative linear deformation of the target stratum is carried out by dividing the corresponding determined length of the curve by a length of a straight line segment connecting the selected points. A segment between the determined points is divided into separate interval segments with a step corresponding to a contour line interval on the structural map or the hypsometric plan. Coordinates x, y, z are determined at each point, and a length of each separate segment is found using the Euclidean distance formula $(\sqrt{(x_1-x_2)^2+(y_1-y_2)^2+(z_1-z_2)^2})$. The sought length of the curve is calculated as a sum of all separate segments.