A Quantitative Extraction Method of Geological Structure Parameter Based on Remote Sensing

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To date, application of remote sensing in structural geology are mainly focus on qualitative expression in nature. This lack of quantitative extraction limits the deeper application of remote sensing in structural geology. Geological attitude is key parameter to express the geological structure. The current measurement of geological attitude is obtained by field work with high-cost and low efficiency, and restricted by area condition.

This paper is dedicated to studying quantitative extraction method of geological attitude with remote sensing. This research has been carried out in three aspects: remote-sensing selection method of geological attitude test points, quantitative method of geological attitude, analysis on influencing factors. A new remote-sensing method of computing attitude of geological contacts is developed and assessed. It can improve the stability and dependability of remote-sensing measurement.

This measurement method of geological attitude with remote sensing is a low-cost inside way. It then provides very rapidly a great number of measurements.

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