New Seismic Attributes for Structural Analysis

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Abstract: The paper describes a new approach to calculation of attributes for identification of structural faults on the basis of three-dimensional seismic exploration. The proposed set of seismic attributes enables to produce more accurate data on location of structural defaults; it lack disadvantages typical of other methods applied to identify these faults. The described method allows estimating formation dip which is essential for structural analysis. As opposed to the majority of the existing methods this estimation isn't local which improves the quality of final results. The paper presents mathematical description of the proposed method and its differences from alternative methods.