

## Relation between the geometric features of caldera's outlines and tectonic stress conditions

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The geometric features of the caldera's outlines that are evaluated quantitatively are compared with ambient tectonic stress conditions. The analysis reveals that the linear rims tend to correspond to active faults in the area in their azimuths. Furthermore the direction of long axis of a caldera's outline is sometimes perpendicular and sometimes oblique intersection in the 20 to 40 degree range to the direction of the maximum horizontal stress. These directions correspond to existing reverse faults and strike slip faults. So we propose that the caldera formation and/or later modification of its topography are controlled by the existing faults in the area.