

## **STRUCTURAL EVOLUTION OF IRAN PLATEAU: A CASE STUDY FROM NEYRIZ AREA, SOUTH IRAN**

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This study employs the major structural elements in three different geological zones of Neyriz area to investigate the evolution of Iran plateau in the region. The Sanandaj-Sirjan Metamorphic Zone, Ophiolitic belt, and Zagros Zone (High and Folded Zagros) are the geological zones of the region studied for this purpose. Results from this study provide a base for reconstruction of Iran paleogeography. The structural elements of the zones show a significant difference in type, frequency, and trend. A remarkable scattering in the folds axis and fractures is recorded in Sanandaj-Sirjan part. This is related to an intensive faulting in the zone, abundance of rotated and antithetic structures, and allochthonous nature of the units. A constant trend in the axis of refolded structures in this area is related to a continuous and uniform deformation. In the Ophiolitic zone, the V3 (Eigen Analysis) calculated from fractures of ophiolites, the trend of extensional joints, gabbros and peridotites, and the major trend of folds axis in radiolarites show an east-west trend. Correcting the replacement of the rocks during/after emplacement, their trend satisfactorily correlates with that of Zagros. So that, the structural elements were mainly affected by Zagros thrust. The slickenside trends in the thrust and nappes of the Ophiolitic Zone support such an indication. The higher plunges of the fold axis in the High Zagros reflect more intensive deformation relative to Folded Zagros. The study leads to the conclusion that Zagros Thrust mainly controlled the trends of all structures.