

## **Micro-Lineament Analysis, a Tool to Depict the Stress Distribution System in Parts of Zagros Structural Belt, SW Iran Using Remote Sensing.**

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The Zagros Structural Belt (ZSB) of Sw Iran is believed to be the type example of the folded mountain and is originated by the continental collision of Iranian-Arabian Plates. This has resulted in the formation of complex fracture system which need careful study both in micro and macro scales.

The present communication uses the advantage of synoptic viewing of satellite data to map out the fracture system in selected part of this mountain belt.

The study reveals that various treatment of fracture system such as Isofracture, Incidence and Intersection density analysis etc proved to be helpful to understand the trend of structural evolution of this mountain system which are summarised as follows, 1. Different lithotectonic zones of ZSB exhibit different fracture density and pattern 2. Eastern and western parts of the study area show different degree of fold tightness and fracture density which possibly is result of reactivation of old basement faults 3. The kinematic model developed for the study area indicates that during Tertiary the Maximum stress trajectory acted in NNE direction and 4. Continuation of post tectonic movements resulted in anti-clockwise rotation of maximum stress trajectory to N13E direction and development of wrench faulting and subvertical fracturing. This could be related to continued opening of the Red Sea.