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Evaluating of Babakouhi Anticline Activity by Integrating of Remote Sensing and Morphotectonics in SW of Iran

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Babakouhi anticline in northern part of the Shiraz, Iran is located in tectonic folded - faulted Zagros with general NW – SE trend. Morphotectonic analysis are done by field work, mountain front faceting (Facet %), mountain front sinuosity (Smf), ratio of valley floor width to valley height (Vf), using of air photos and processing of satellite images and detecting and enhancing of lineaments, using different remote sensing methods, preparation of digital elevation model (DEM) and Slope map, Aspect map, Hill Shade images, lineament map and lineament density map to answer ambiguities regarding this anticline and factors affecting the morphotectonic situation of the area. The data shows this area is active from the view point of tectonics and morphotectonics. The pressure is caused by Sabzpushan Strike slip - dextral fault with NW-SE trend and Bamu Strike slip - dextral fault with SW-NE trend. These events have had great impact on the deformation of the area such as: changes in anticline trend, creation of main faults of the area and the creation of the university hill anticline in the north of Shiraz.

Key words: Remote sensing, Morphotectonic, Anticline, Zagros Folded - faulted zone, Strike slip - dextral fault, Iran