



Morphotectonic analysis of Darband area (Southwest of Azna) through Digital Evaluation Model (DEM)

Siamak Baharvand^{1*}, Jafar Rahnamarad²

*1)Department of Geology, Khorramabad Branch, Islamic Azad University, Khorramabad, Iran

Email: Baharvand_si@yahoo.com

2) Department of Geology, Zahedan Branch, Islamic Azad University, Zahedan, Iran

Email: jrahnama2003@yahoo.com

***Corresponding Author**

Abstract

Morphotectonic indices are useful tools for the evaluation of neotectonics of areas. The advantage of these indices is their quickness in analysis and their capability in determining neotectonic activities. In order to analyze the neotectonic activities of Kohesefid area in western Iran, some morphotectonic indices including sinuosity of the mountain front (Smf), valley floor width to valley height ratio (Vf), sinuosity of river's channel (S), Asymmetry factor (Af), Steram length - gradient index (SL) and condition of alluvial fans were measured and investigated using Digital elevation model (DEM) and some remote sensing techniques in GIS environment. The measured Results showed that the studied area in terms of morphotectonic has high activity to moderate Democrats.

Keywords: Morphotectonic, Neotectonic, Lorestan, Kohesefid of Azna