MORPHOTECTONIC INDICES
OF THE DEAD SEA TRANSFORM, JORDAN


Two morphotectonic indices (i.e. mountain front sinuosity (Smf) and valley-floor width to height ratio (Vf)) were measured along the eastern margin of the Dead Sea and the Jordan Valley. The area is subdivided into six mountain fronts, three east of the Dead Sea and the other three at the eastern edge of the Jordan Valley. The subdivision was based on the continuity and trend of the mountain fronts.

The Smf and Vf values for the six fronts are, low indicating active uplift of the eastern shoulder of the Dead Sea transform. The active uplift is very clear east of the Dead Sea two basins. The variation of the Smf and Vf values of the different fronts are very low. The outcropping rocks forming these fronts are mainly sandstone and limestone and their resistance to erosion is generally similar.

KEY WORDS: Morphotectonic indices, Mountain front sinuosity, Dead Sea, Jordan Valley.

(*) Department of Earth and Environmental Sciences, Faculty of Natural Resources and Environment, The Hashemite University, Zarqa 13133, B.O. Box 330159, Jordan - e-mail: maltaj@hu.edu.jo
(**) Department of Environmental and Applied Geology, the University of Jordan, Amman, Jordan.
(***) Department of Earth and Environmental Sciences, Yarmouk University, Irbid, Jordan.