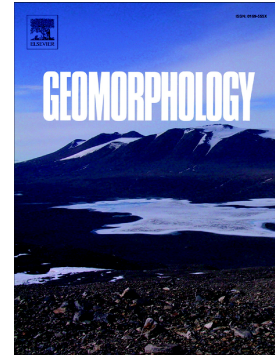


## Accepted Manuscript

The role of intraplate strike-slip faults in shaping the surrounding morphology: The Ovacık Fault (eastern Turkey) as a case study

Müge Yazıcı, Cengiz Zabcı, Taylan Sançar, Boris A. Natalin



PII: S0169-555X(18)30319-2  
DOI: doi:[10.1016/j.geomorph.2018.08.022](https://doi.org/10.1016/j.geomorph.2018.08.022)  
Reference: GEOMOR 6485  
To appear in: *Geomorphology*  
Received date: 9 February 2018  
Revised date: 12 August 2018  
Accepted date: 14 August 2018

Please cite this article as: Müge Yazıcı, Cengiz Zabcı, Taylan Sançar, Boris A. Natalin , The role of intraplate strike-slip faults in shaping the surrounding morphology: The Ovacık Fault (eastern Turkey) as a case study. Geomor (2018), doi:[10.1016/j.geomorph.2018.08.022](https://doi.org/10.1016/j.geomorph.2018.08.022)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## The role of intraplate strike-slip faults in shaping the surrounding morphology: the Ovacık Fault (eastern Turkey) as a case study

Müge Yazıcı<sup>1\*</sup>, Cengiz Zabcı<sup>1</sup>, Taylan Sançar<sup>2</sup>, and Boris A. Natalin<sup>1</sup>

<sup>1</sup>*İstanbul Teknik Üniversitesi, Ayazağa Yerleşkesi, Maden Fakültesi, Jeoloji Mühendisliği, 34469 Maslak, İstanbul, Turkey*

<sup>2</sup>*Munzur Üniversitesi, Aktuluk Yerleşkesi, Mühendislik Fakültesi, Jeoloji Müh. Bölümü, 62000 Tunceli, Turkey*

\*Corresponding author e-mail: yazicimug@itu.edu.tr, Tel: +90 212 2856162

### Abstract

Although the westward extrusion of the Anatolian Block is mainly compensated along its boundary faults, the North Anatolian and the East Anatolian shear zones, it is internally deformed in a dominant manner by some strike-slip faults as well. To obtain a better understanding about this intraplate deformation of the Anatolian Block, we investigate the tectonic geomorphology of the Ovacık Fault (OF), which is the northeastern member of the Malatya-Ovacık Fault Zone (MOFZ). Further, we apply the most common geomorphic indices, such as the hypsometric curve and integral, longitudinal channel profiles, channel steepness and concavity, mountain front sinuosity, and valley height-width ratio to characterise and quantify the deformation along the OF and the surrounding region where the regional morphology is shaped with the joint effect of palaeo- and neotectonics and other morphological factors such as palaeoglacial processes. The highest hypsometric integral, steepness and concavity values are generally observed along the northeastern strand of the OF (the Munzur Mountains) and the Kemaliye region. Further, we interpret that high HI and

Download English Version:

<https://daneshyari.com/en/article/10130524>

Download Persian Version:

<https://daneshyari.com/article/10130524>

[Daneshyari.com](https://daneshyari.com)