

## CRUSTAL SHORTENING AND ROTATIONS IN SULAIMAN RANGE: STRUCTURAL AND PALEOMAGNETIC STUDY OF MUSLIM BAGH-KILA SAIFULLAH AREA

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The Sulaiman fold-and-thrust belt is formed, at the western margin of Indian continent because of collision with Eurasia. The study area is divided into three geologic terrains, from north to south: Flysch Zone, Ophiolite Zone and Calcareous Zone. The present work is result of geological mapping and paleomagnetic study of Calcareous Zone in Muslim Bagh Kila - Saifullah area. The Calcareous Zone mainly consists of shales and limestones with a set of volcanics intrastratified at Upper Cretaceous level. The present paleomagnetic studies were restricted to this volcanic level. The studied area is characterized by tightly folded nappes. The structure in this area can be interpreted as large duplex thrusting and subsequent folding. The shortening ratio is calculated about 64 percent, compared to 52 percent in the central and about 57 percent in Eastern Sulaiman Range. The relatively less amount of shortening in central part of the range might be due to south-eastward translational movement. This relative south-eastward movement of the central part of the Sulaiman Range is also supported by clock wise rotation of paleomagnetic data.