



An up-to-date GPS velocity field of Iran

Fateme Khorrani (1), Frederic Masson (2), Faramarz Nilfouroushan (3,4), Philippe Vernant (5), Seyed Abdoreza Saadat (1), Hamidreza Nankali (1), Sedigheh Hosseini (1), and Azadeh Aghamohamadi (1)

(1) National Cartographic Center, Tehran, Iran, (2) IPGS/EOST CNRS/University Strasbourg, France, (3) University of Gävle, Sweden, (4) Lantmäteriet, Gävle, Sweden, (5) Géosciences Montpellier, CNRS/University Montpellier, France

In this study we present an up-to-date velocity field of Iran, including the largest number of data ever presented on this region. It includes both a synthesis of all previously published campaign data (Raeesi et al., 2016) and all data from the Iranian Permanent GNSS Network (IPGN). The IPGN data cover some parts of Iran which were previously scarcely documented. These stations have been measured for 7 years. In total, more than 400 instrumented sites are presented. From this velocity field, we calculated the strain rate.

In this paper, we will show the contribution of this very dense velocity field to the detailed understanding of the active tectonics of the various regions of Iran (Makran, Zagros, Alborz, ...).