Geophysical Research Abstracts,
Vol. 11, EGU2009-7135-1, 2009
EGU General Assembly 2009

Investigating 2008 earthquake sequence of Qeshm Island in Iran using SAR Interferometry

P. Lashgary (1), M. Motagh (1,2), and M.R. Saradjian (1)

(1) Department of Surveying and Geomatics Engineering, University of Tehran, Iran, (2) Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences, 14473 Potsdam, Germany

Qeshm is an Island situated a few kilometers off the southern coast of Iran in the north of Hormoz straight. The region was struck by a series of moderate earthquakes between September and December 2008. We combine interferometric synthetic aperture radar (InSAR) and spectral diversity approach to study the largest earthquakes in a sequence of events that hit Qeshm during this period. InSAR measurements made with Envisat data provide a uniquely detailed picture of the coseismic displacement field, supply constraints on the fault geometry and allow for the analysis of the slip distribution on the faults that ruptured during the main events.