CHARACTERISTICS OF SEISMOGENIC STRUCTURES OF HISTORICAL EARTHQUAKES IN DINAVAR REGION, NORTHEAST BOUNDARY OF ZAGROS MOUNTAINS, WESTERN IRAN

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Two major faults dominate the tectonics of northeastern boundaryof the Zagros; the Main Zagros Reverse Fault and the Main RecentFault. The Main Zagros Reverse Fault has NW-SE strike from western Iran to the area north of the Strait of Hormoz and Main Recent Fault is a major right-lateral strike-slip seismogenic structure, broadly parallel but quite distinct from and youngerthan the Main Zagros Reverse Fault which transects it in several places. A destructive earthquake on 27 April 1008, devastated the important city of Dinavar. The city completely destroyed with the loss of more than 16000 people. It is one of the most intense earthquakes in Zagros that most possibly is generated by Sahneh Fault segment of Main Recent Fault. Sahneh Fault is a distinct positive flower (palm tree) structure that is formed during compressional strike-slip (transpression) motion.Magnitude of the April 1008 earthquake is estimated to be Ms=7.0. Large number of fatalities and existence of a considerably large fault scarp in the region, implies that its magnitude is underestimated. Another earthquake of Ms=6.5 inSeptember 1107, strongly shocked the Dinavar region. This earthquake, most possibly, was nucleated by the Sahneh Fault.