

The February 22nd 2005 Zarand earthquake in central Iran

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On 22 at 02:25:24 GMT, 05:55:24 local time, a shallow destructive earthquake (56.859°E ; 30.813°N ; $M_L=6.4$; IUGT), (56.901°E ; 30.735°N ; $h=14$ km; $M_W=6.3$; NEIC) without any felt foreshock occurred in the central Iran; hundreds of people lost their lives, and many more lost their homes. The focal mechanism solutions shows a thrust faulting with a small horizontal component. In the field observation a maximum surface displacement of ~ 90 cm is observed. This earthquake occurred on a branch of Kuh Banan fault. Since main shock to 28 February 2005 more than 250 aftershocks have been recorded by Yazd local seismic network. Most of aftershocks are small and the largest one is $M_L=4.8$. Aftershock observation started on 25 February 2005 by five portable PDAS system. An overview of the seismology of the area and aftershock activity are presented here.

Keywords: Main shock; Aftershock; Zarand; Iran.

References

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