









HENS GEOENVIRONMENT GEOLOGY







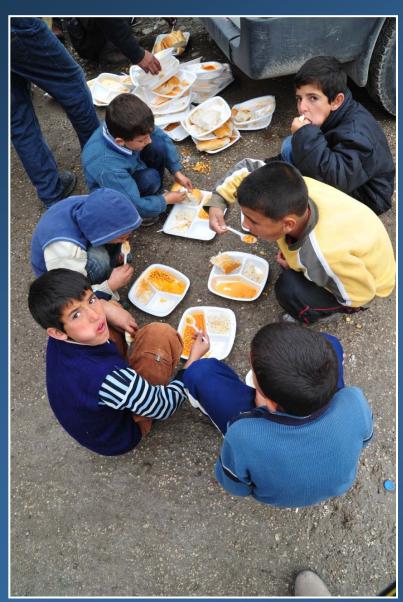
















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- Van earthquake is another event in a series of earthquakes (Dinar 1995, Adana 1998, Bingol 2003), triggered by the movement of the Arabian Plate towards the Turkish Micro Plate. It occurred on an unmapped fault.
- The focal mechanism of the main earthquake shows thrust movement on either or the two E-W nodal planes, dipping either north or south (USGS, EMSC-CSEM, KOERI).
- The results of the DinSAR match the previous conclusions, with a rupture plane dipping either to the south or to the north, the latter being a more probable option.
- Fieldwork data, notably the location of the surface seismic ruptures with general W-E strike, match the instrumental data, especially the scenario of a thrust fault dipping to the north.
- This can interpret the fact that the macroseismic Intensity (EMS₁₉₉₈) at the city of Ercis (north block) was greater by 2 degrees than the Intensity at the city of Van (south block)
- Moreover, secondary geodynamic phenomena (landslides, rock falls, liquefaction) were manifested only at the north part (hanging wall) of the uplifting block (Ercis area) and not to the south (Van area).



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