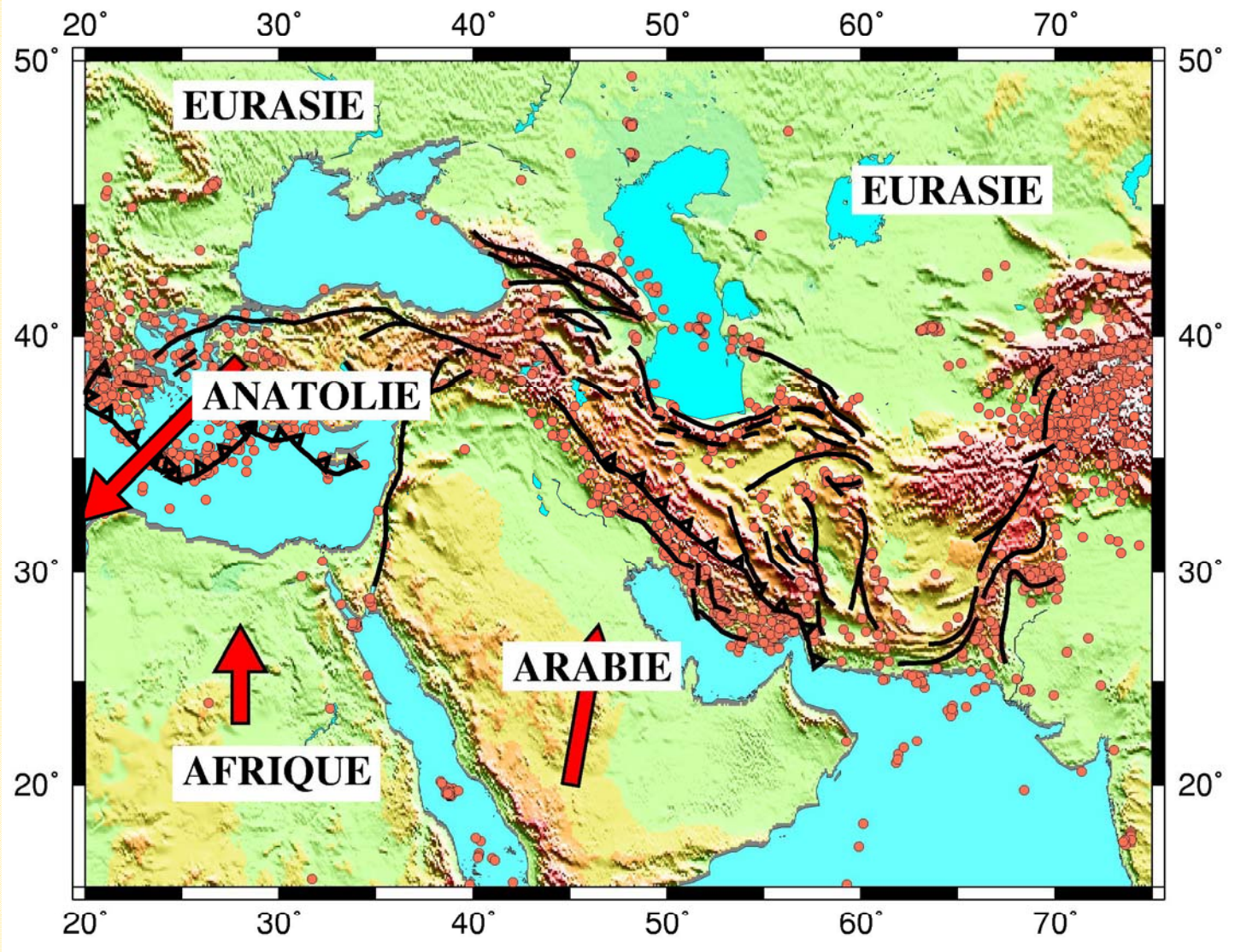
Seismological aspects of the Firoozabad-Kojoor Earthqauke (28 May 2004, Ms=6.3)

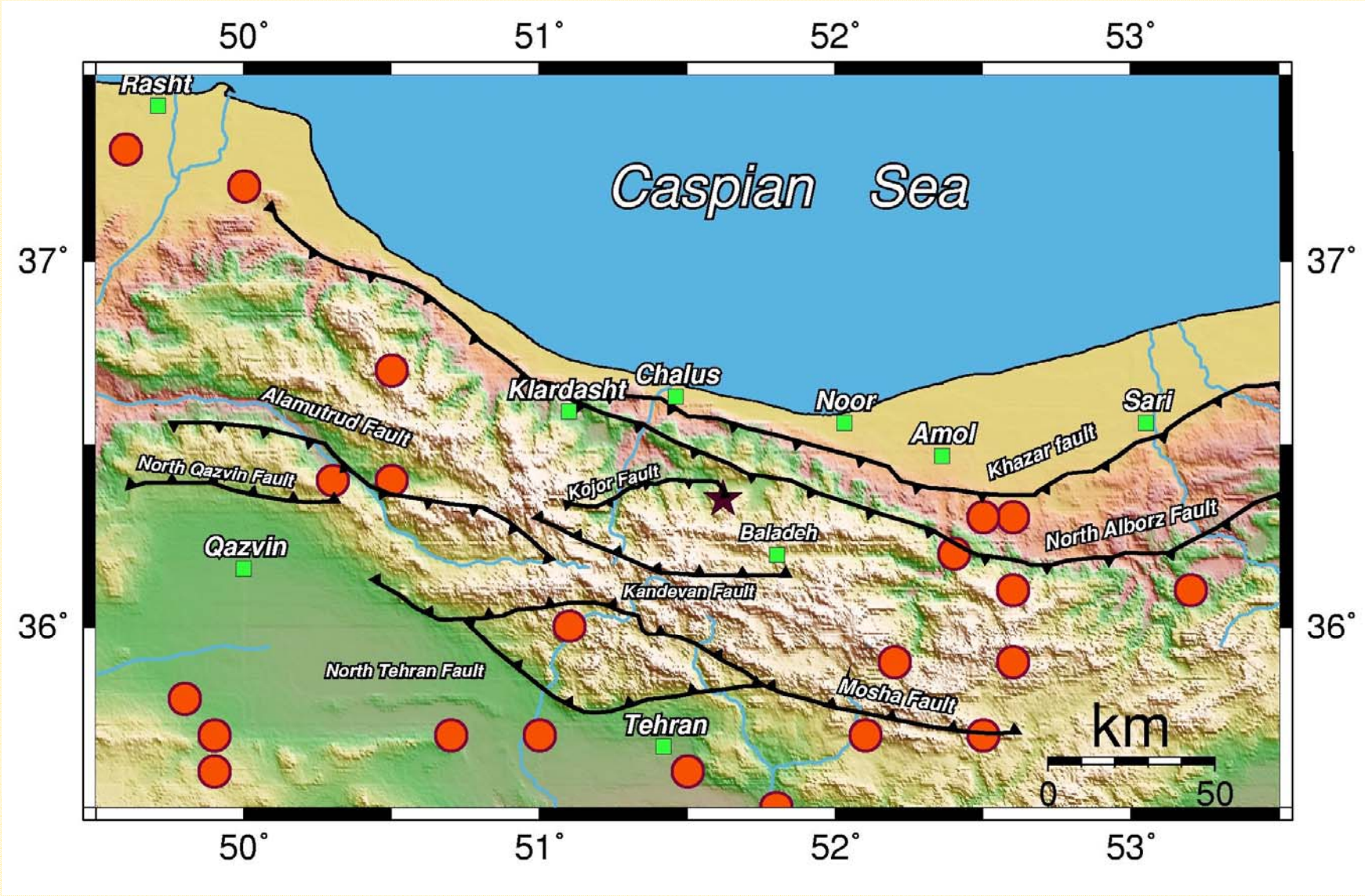
M. Tatar, A.M. Farahbod

IIEES

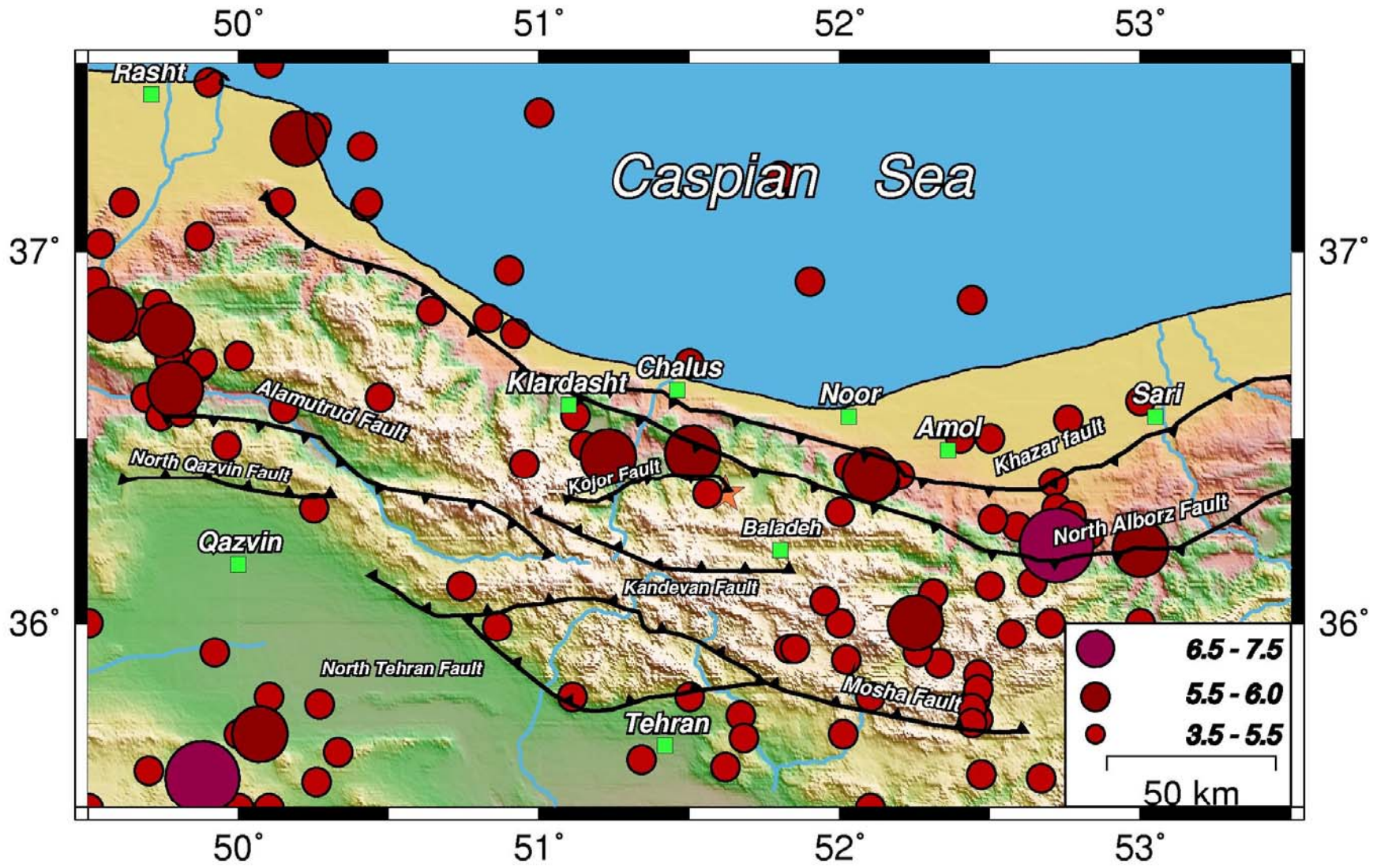
Iran Continental Collision Zone



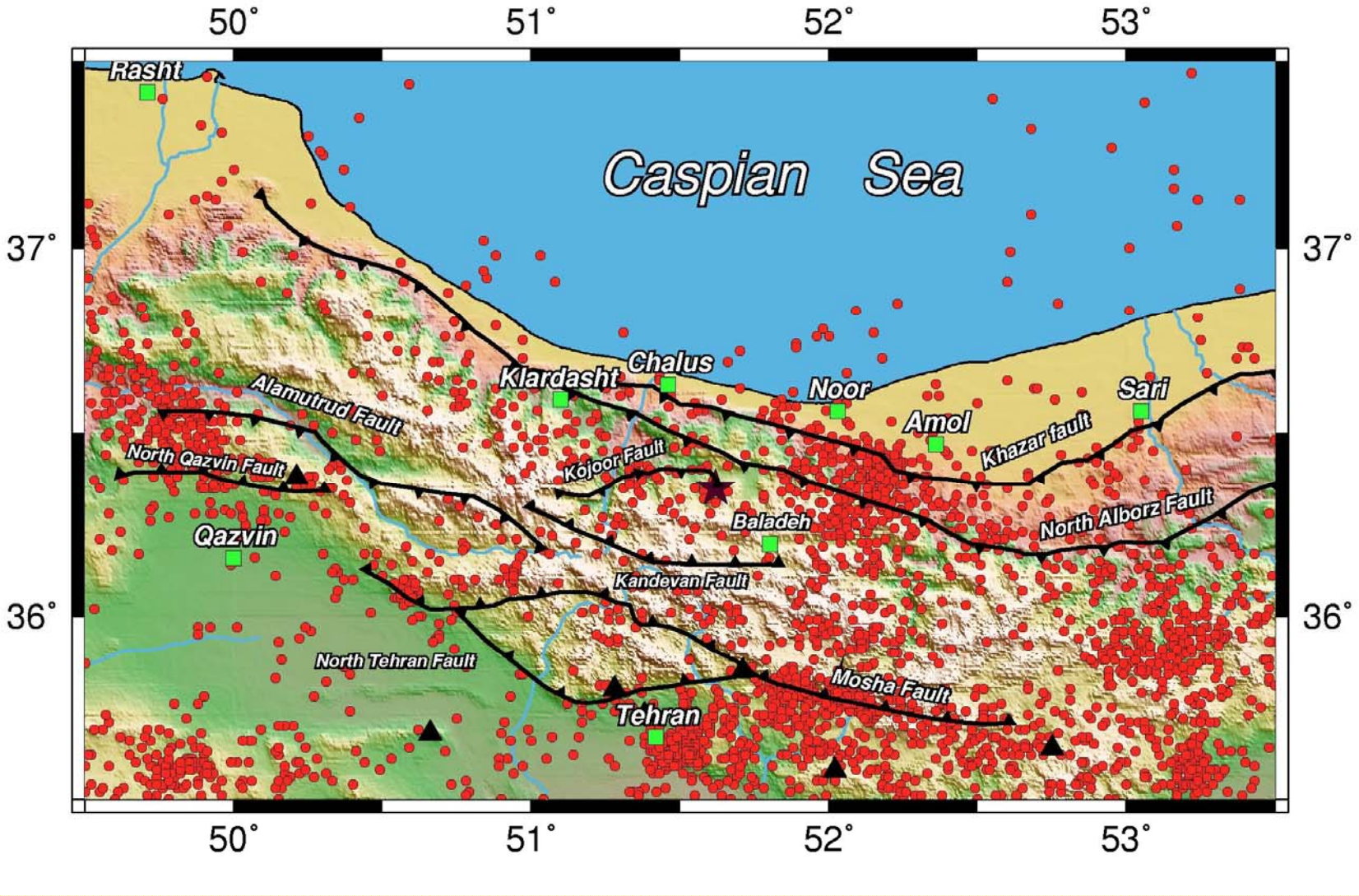
Historical Seismicity



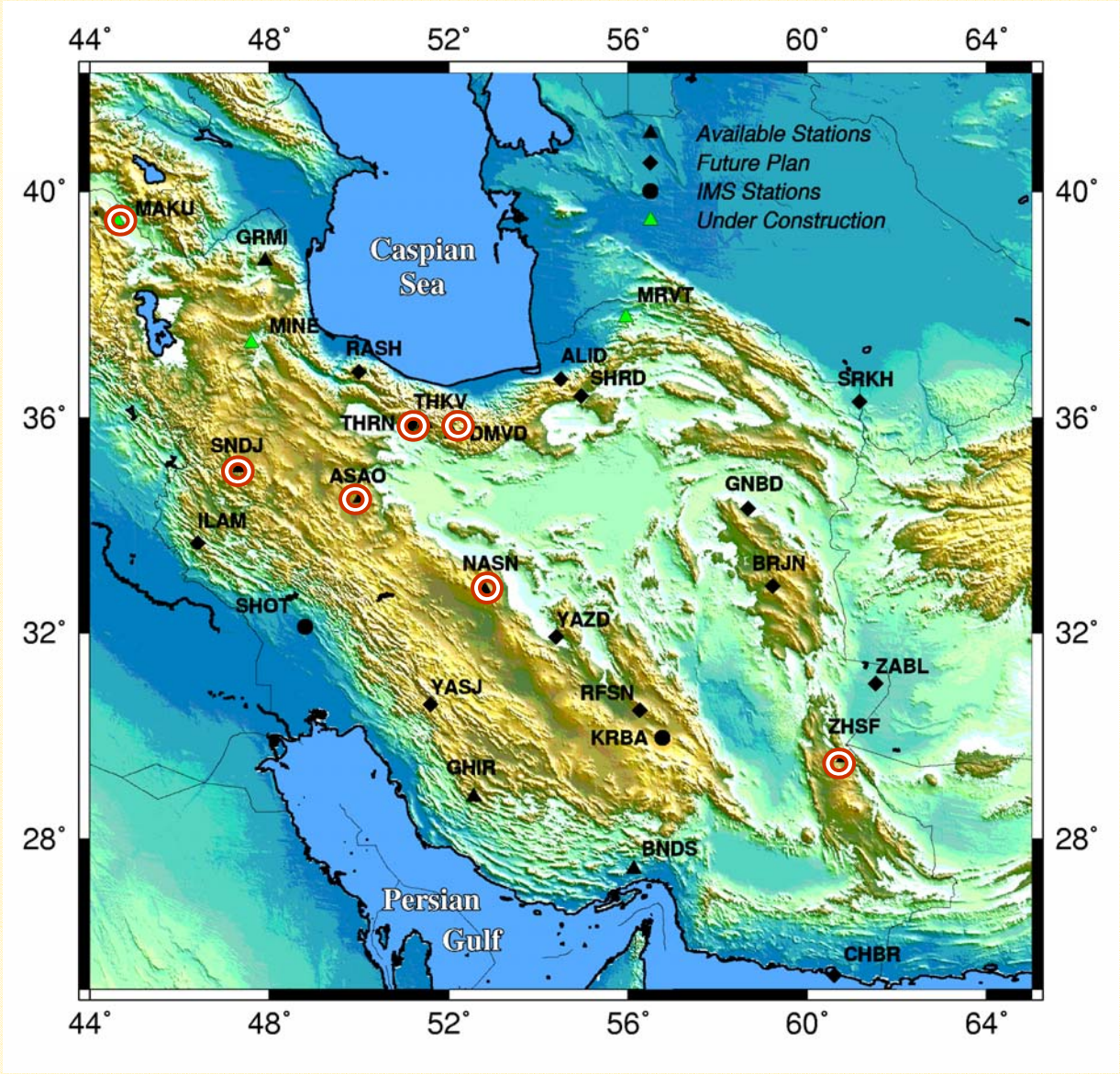
Instrumental Seismicity



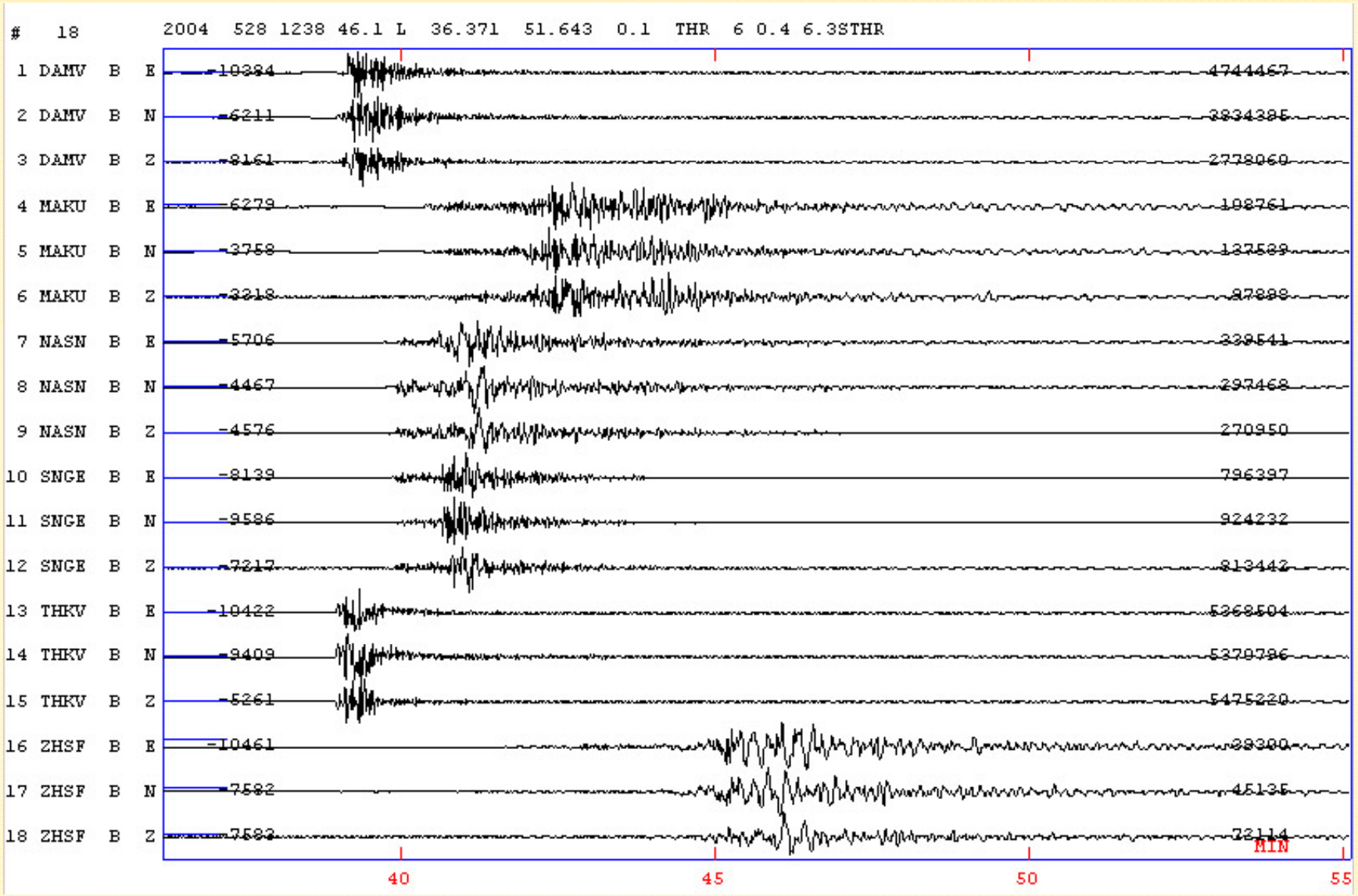
Local Seismicity



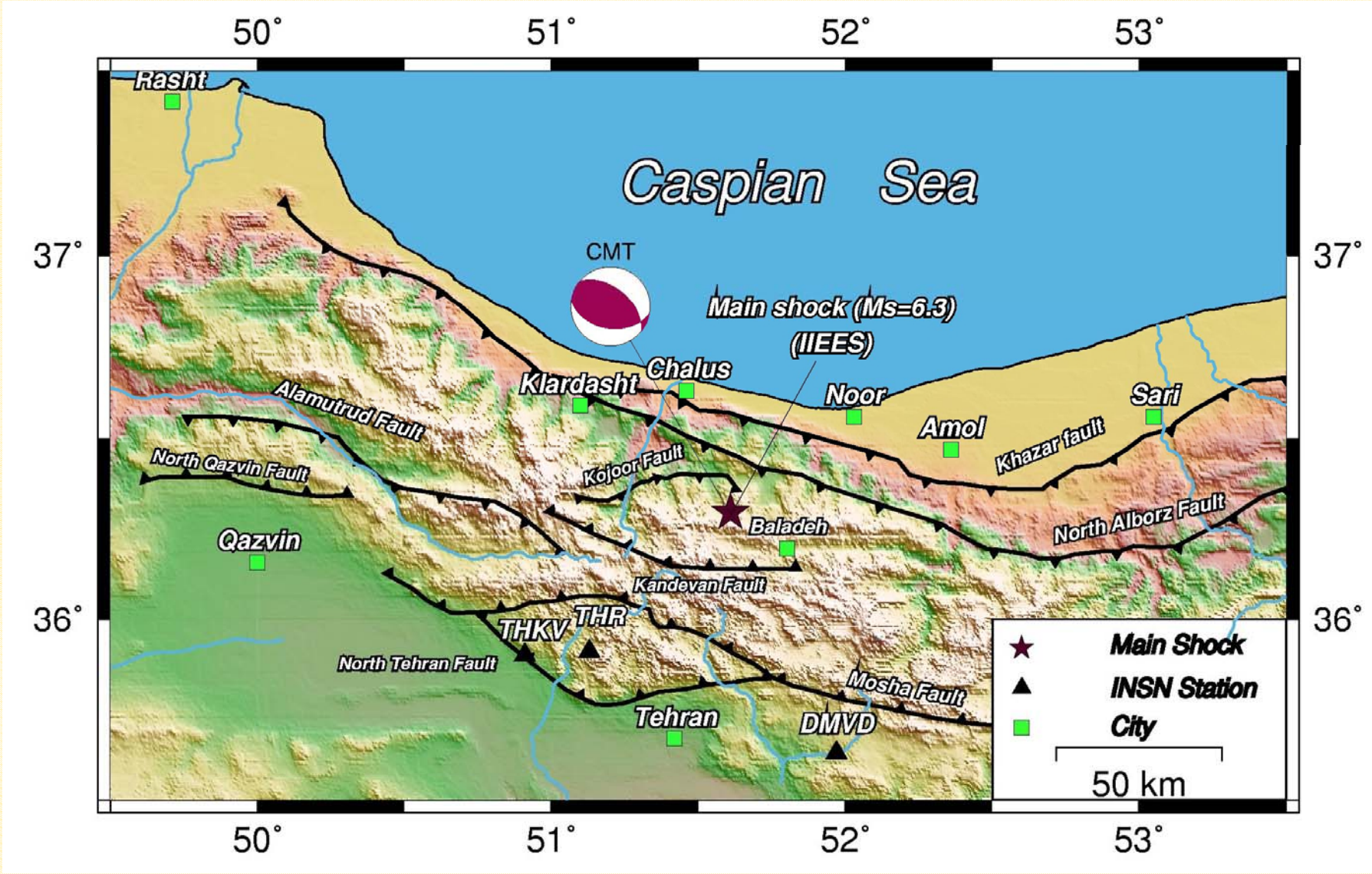
Iranian National Seismic Network (INSN)



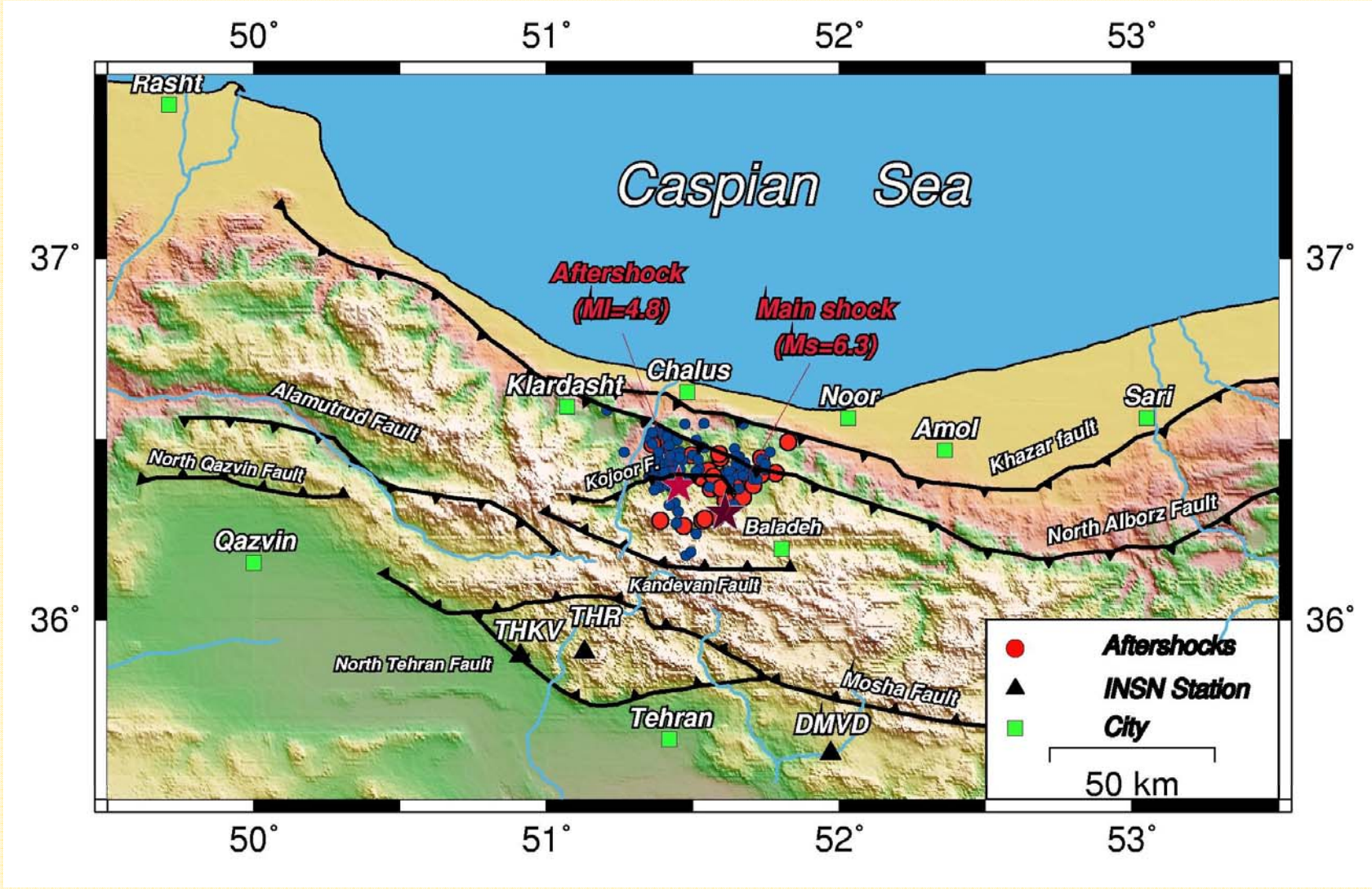
Main shock (Ms=6.3)



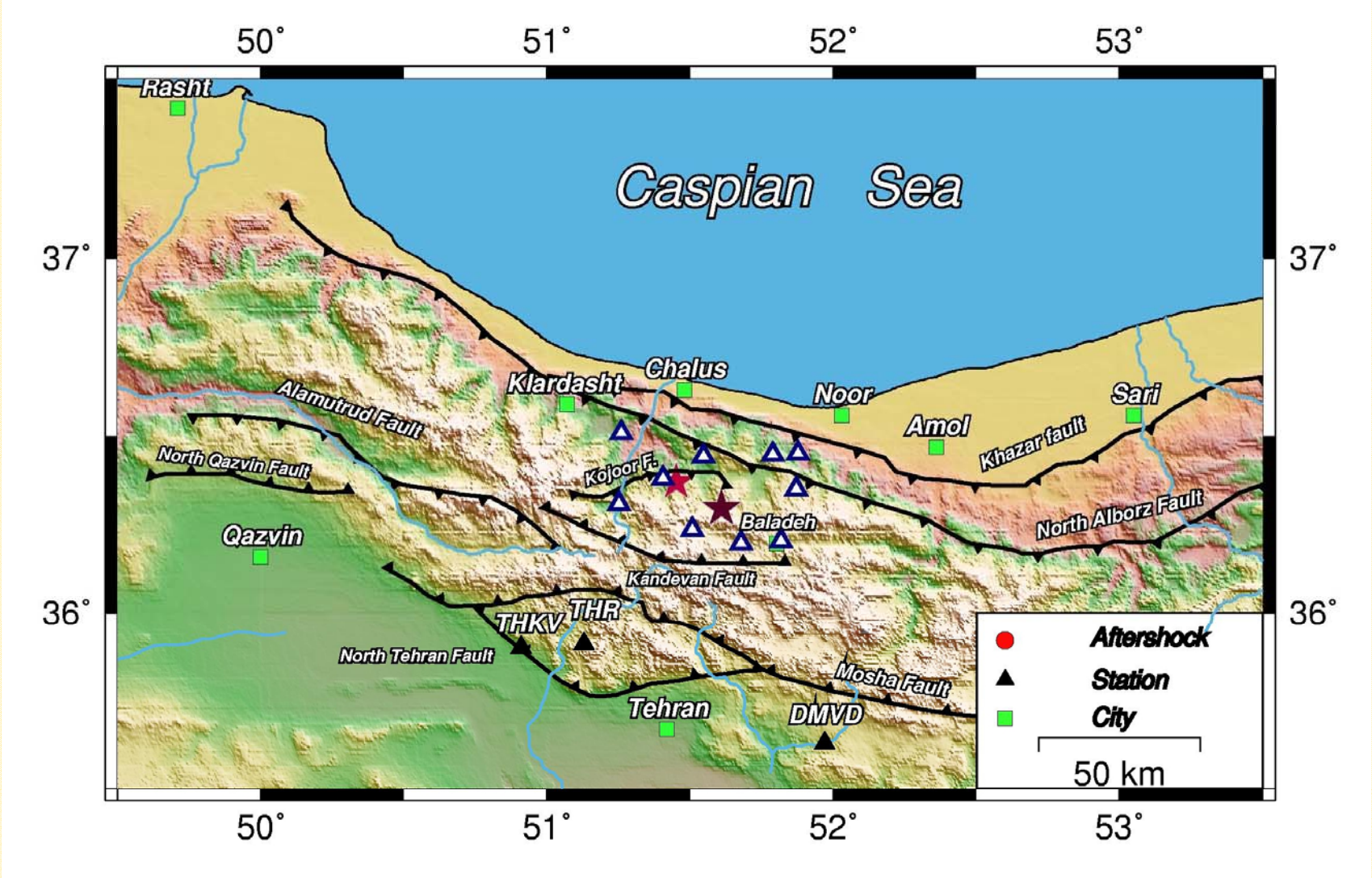
Firoozabad-Kojoor Earthqauke (Ms=6.3)



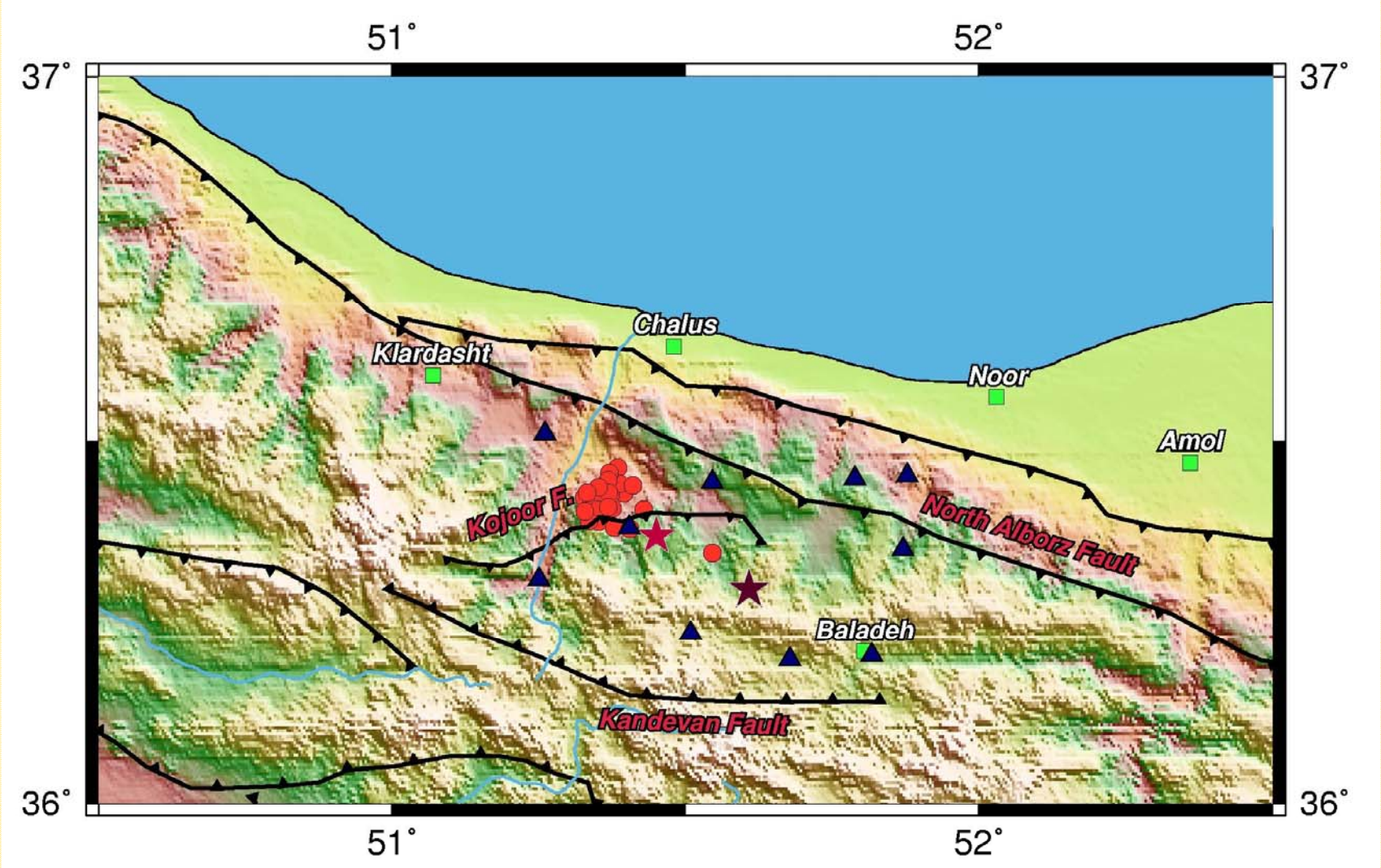
Aftershocks Distribution (INSN)



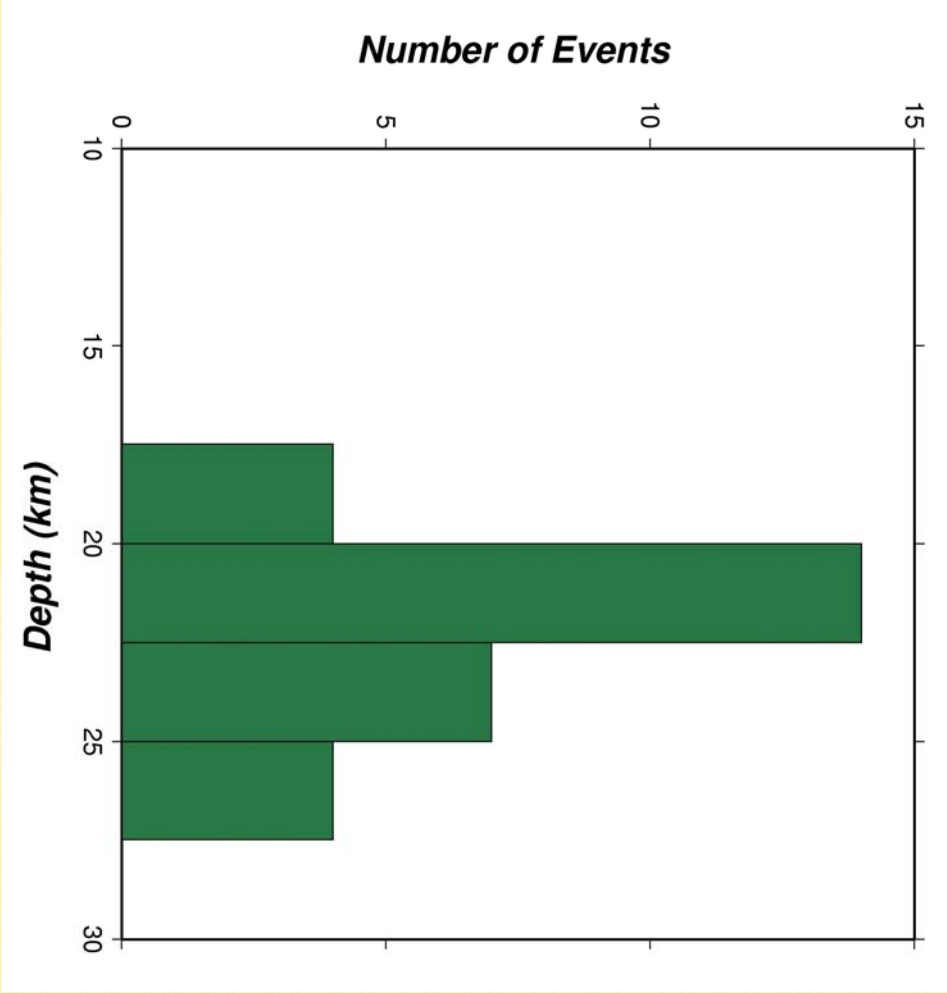
Temporary Local Seismic Network



Aftershocks recorded by Local Network



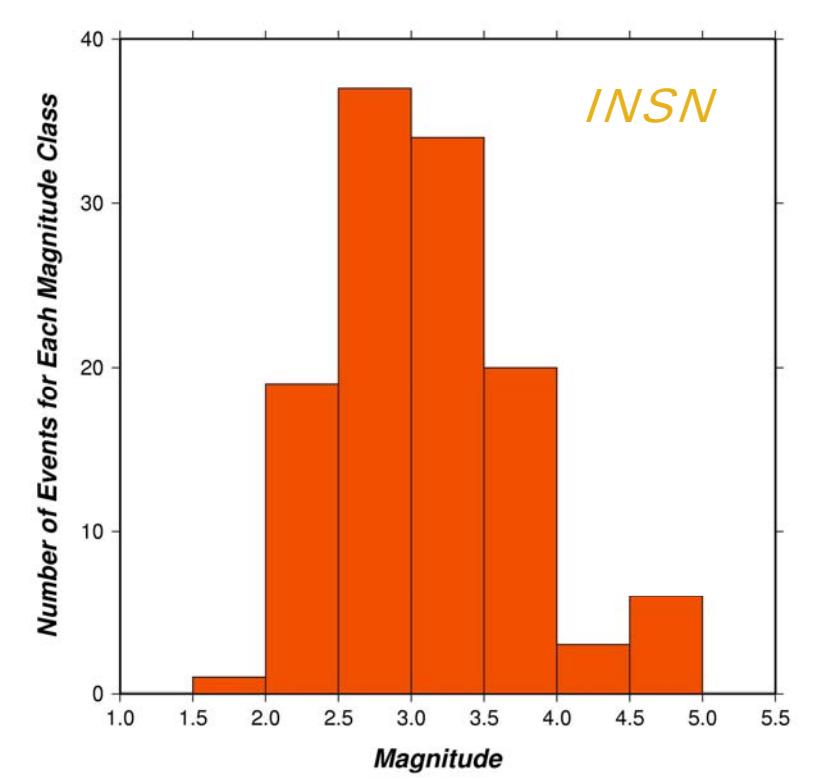
Focal Depths Distribution

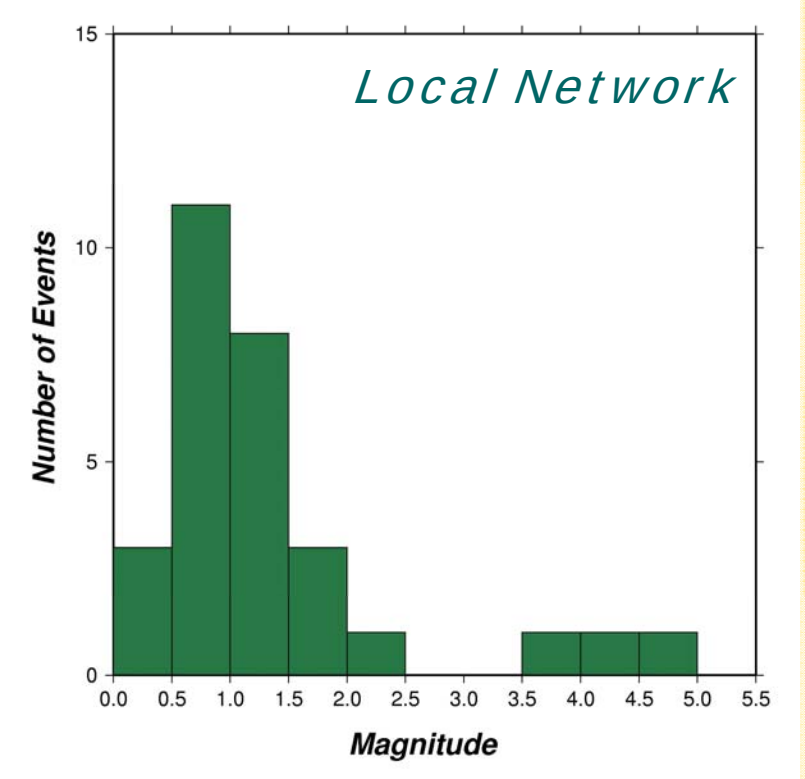


Unusual Focal Depths?!

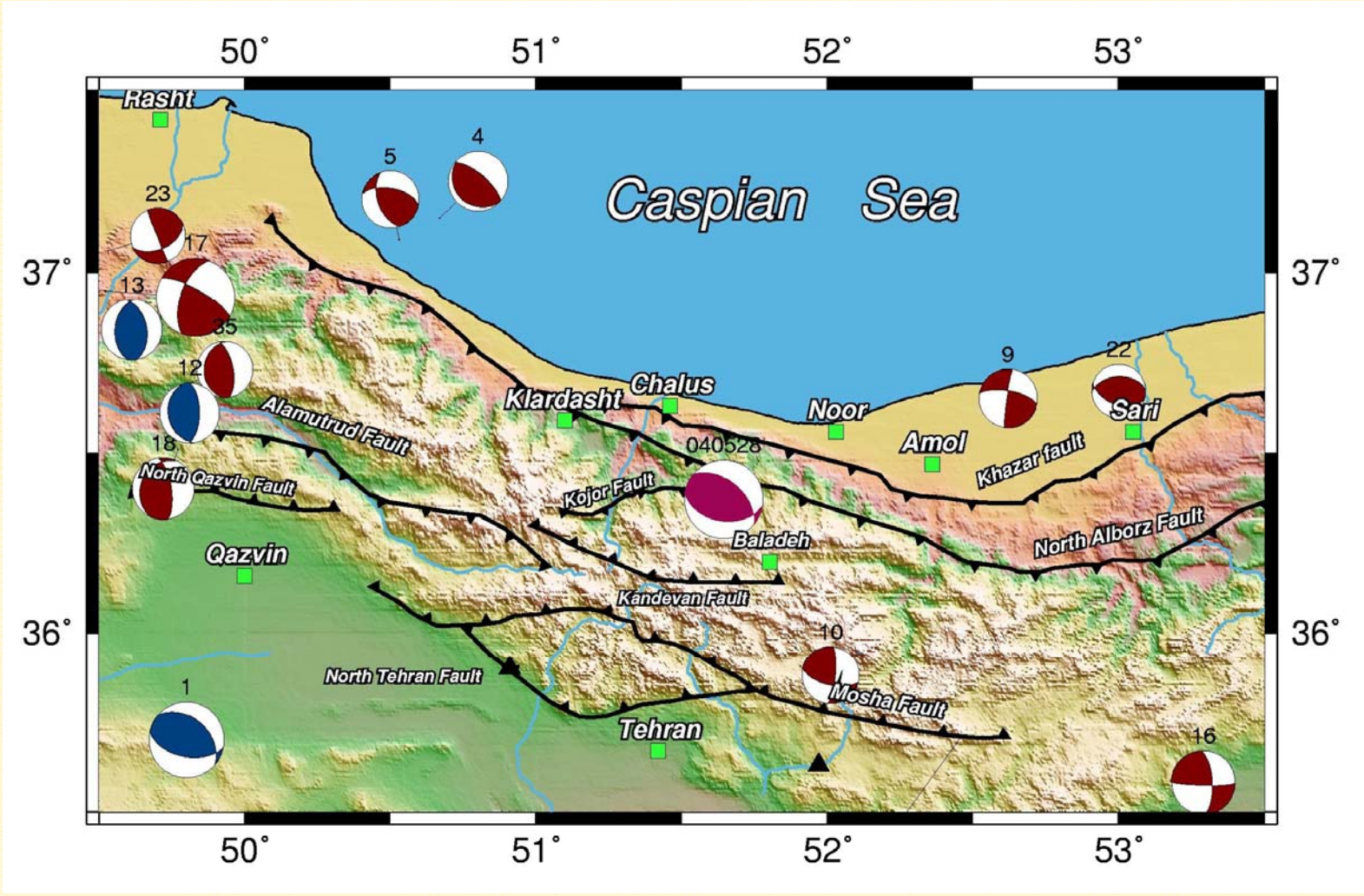
17-27 (+/_ 5) km

Magnitude of Aftershocks





Focal Mechanisms



Conclusion

- ✓ *Existence of two different clusters associated to the main shock (Ms=6.3), and one of the large aftreshock (Ml=4.8)*
- ✓ *Reverse faulting with slightly left lateral strike slip Component.*
- ✓ *Probable dipping (~ 45) toward SW*
- ✓ *Unusual Focal depths (17-27 km)*
- ✓ *Most probably associated to the North Alborz fault*

The Firoozabad-Kojoor Earthquake and its aftershocks represent the accomodation of Arabian-Eurasian Convergence in the Central Alborz (~8 mm/yr) as reverse faulting