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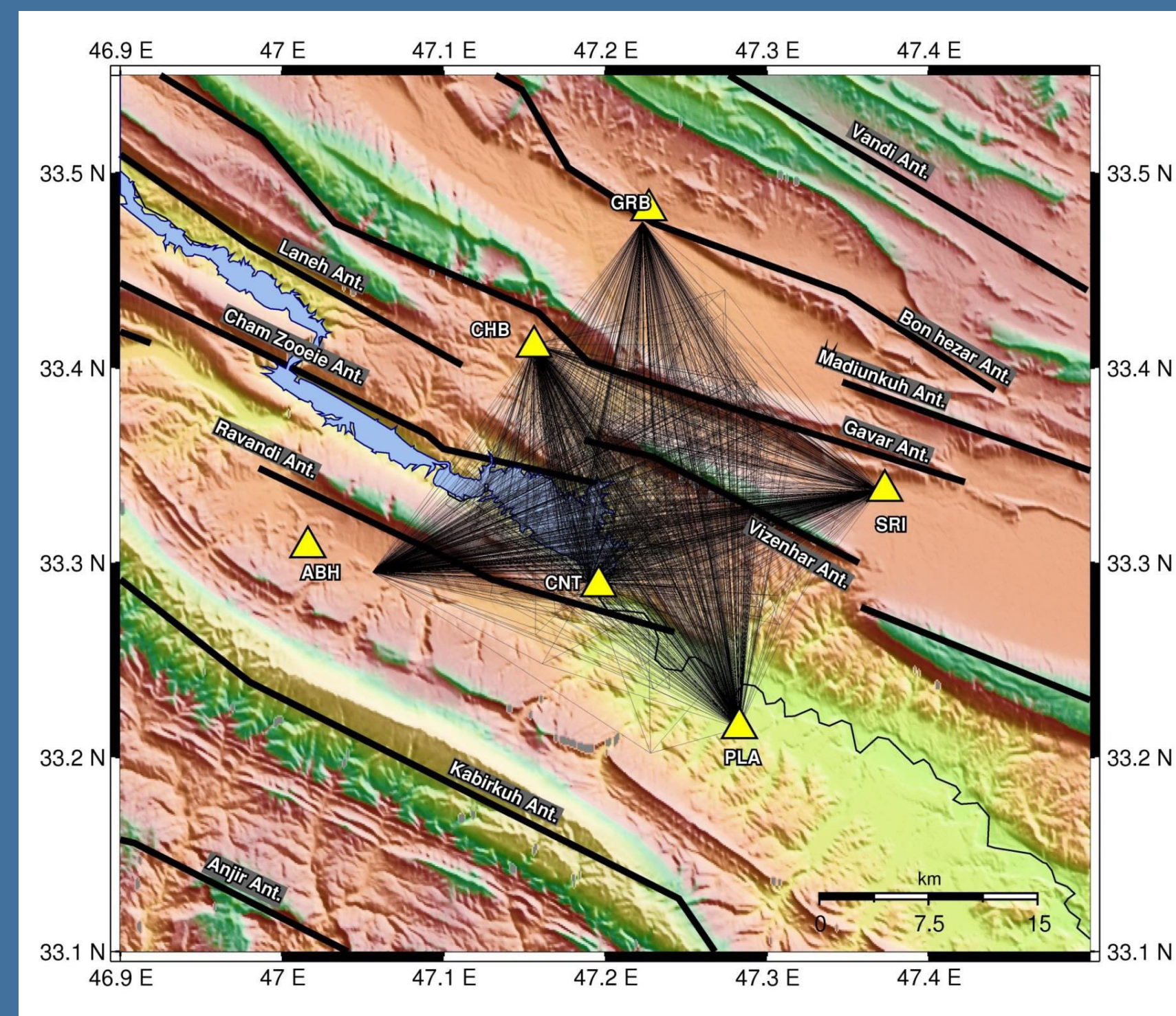
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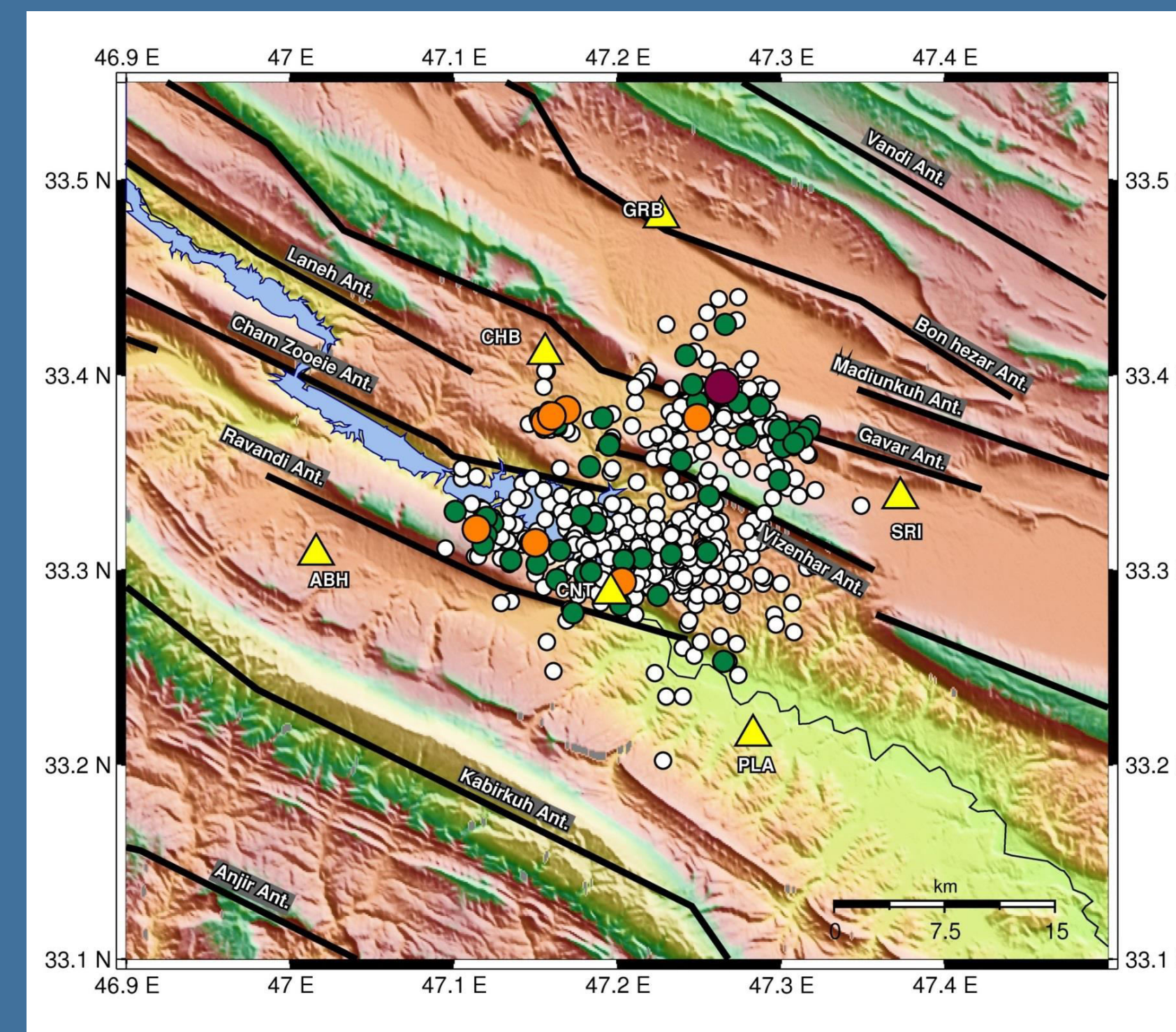
(T3.5-P55)

The velocity structural model of Seymareh dam, central Zagros region, is computed using recorded data from local seismic network of Seymareh dam and Velest one-dimensional inversion technique. The study has performed after creating the catalog by phase picking of all data recorded during the network operation from 2010 to 2015. 3000 events were processed, at radii of 50 km and filtered down to 474 events for Velest run considering conditions of azimuthal gap less than 180, residual RMS less than 0.5, and uncertainties in epicenter less than 6 km. Vp/Vs ratio was computed to be about 1.74 and a four layer velocity model is resolved where the top layers are 3, 4, 6 and 12 km respectively. Using hypoDD, the resulted velocity model was used relocating the seismic events. The relocated map of distribution and depth cross section for the area are prepared and presented.

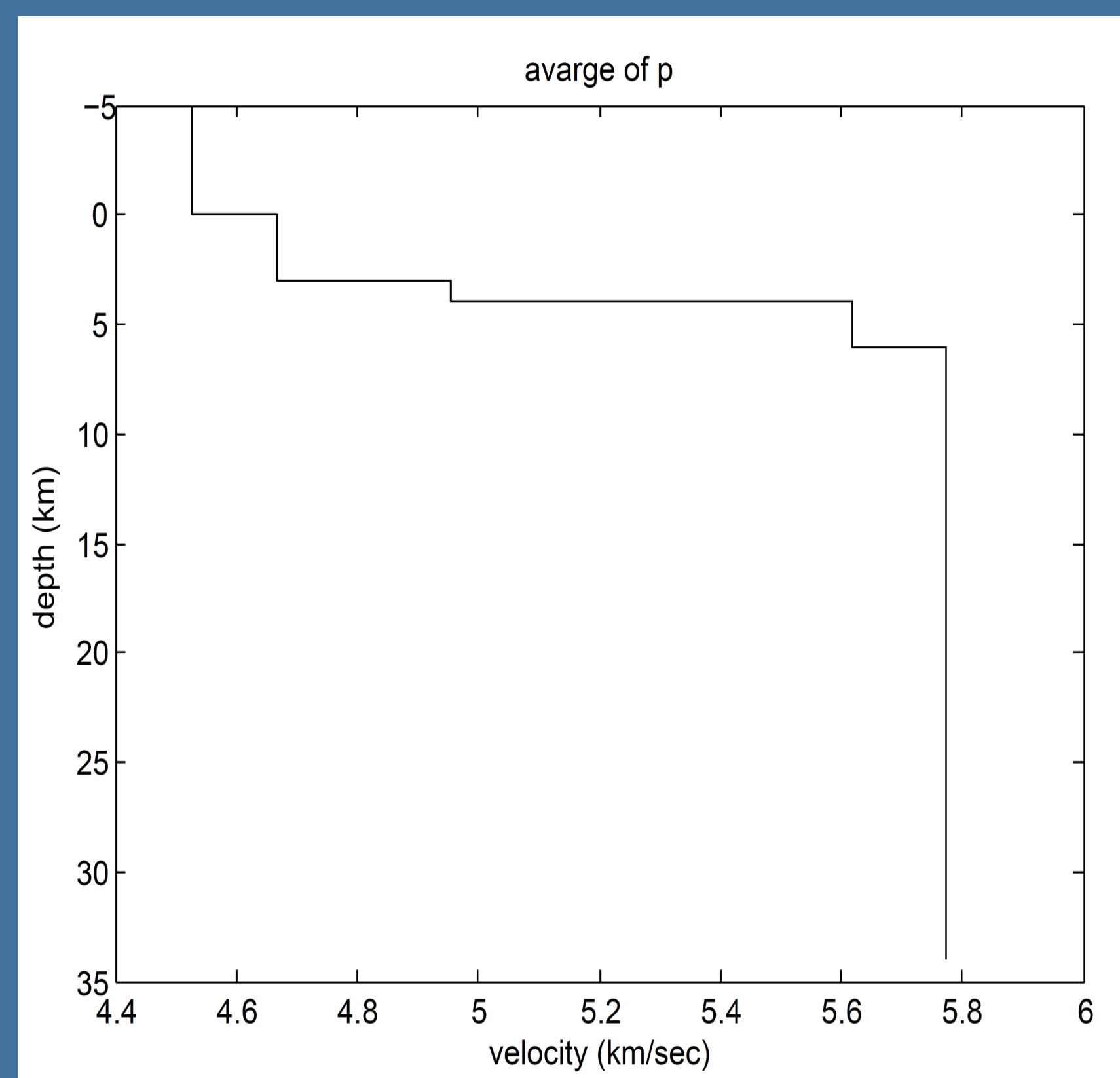
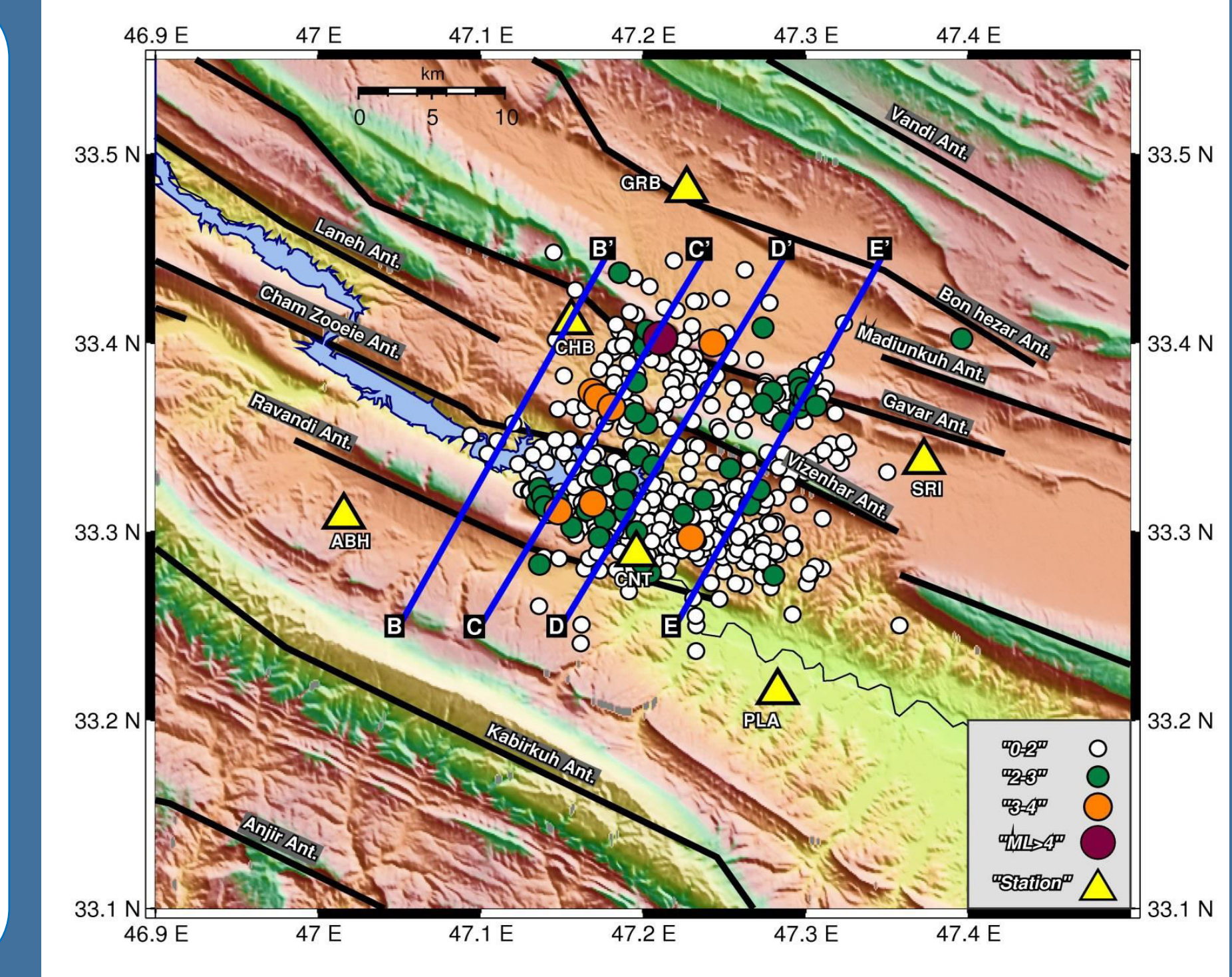


3000 events were processed, at radii of 50 km and filtered down to 474 events for Velest run considering conditions of azimuthal gap less than 180, residual RMS less than 0.5, and uncertainties in epicenter less than 6 km.

Velocity model is resolved with selected data and Velest one-dimensional inversion technique.



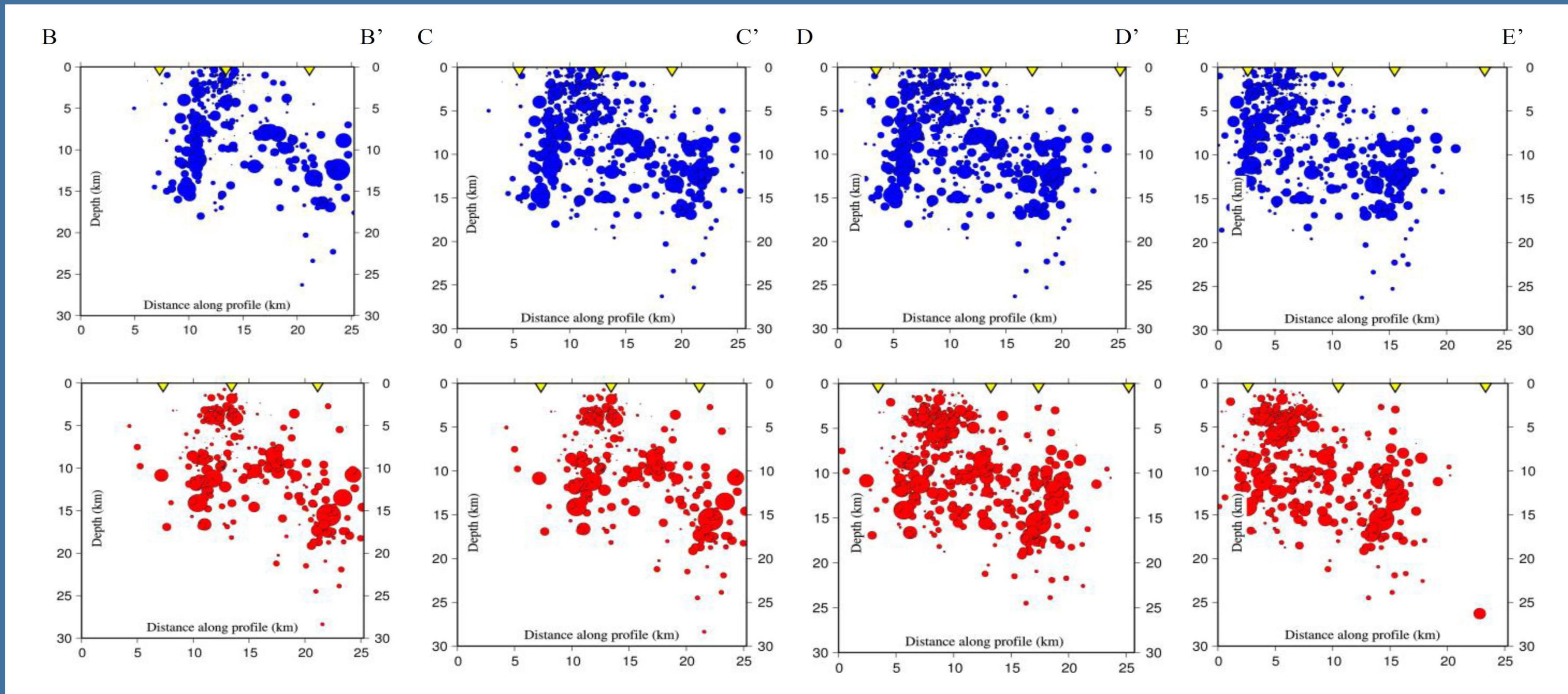
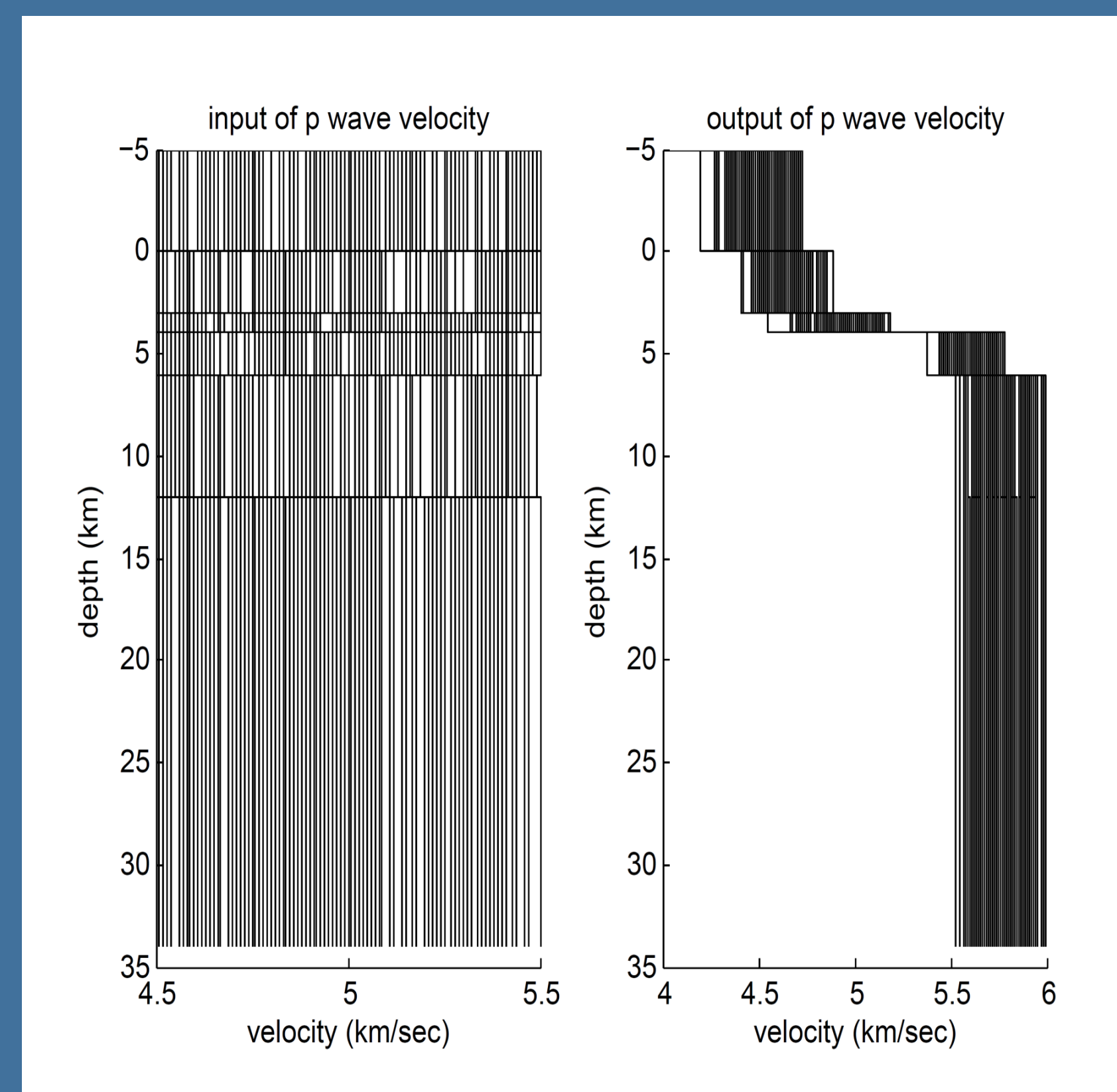
Relocated events and cross-sections. Blue lines are cross-sections. The width of the cross-sections is 20 km. The Yellow triangles are Seymareh Dam stations.



Convergence of the final calculated velocity model by 1-D inversion of travel times. (a) Randomly distributed starting models. (b) Final velocity models.

Vp/Vs ratio was computed to be about 1.74 and a four layer velocity model is resolved where the top layers are 3, 4, 6 and 12 km respectively.

Top Layer (km)	Velocity (kms <sup>-1</sup> )
0	4.38
3	4.54
4	4.81
6	5.59
12	5.74



The double difference earthquake location algorithm, implemented in the program HYPODD, was used to relocate a data set of approximately 474 earthquakes in the Seymareh dam region, using a recently developed velocity model. The double difference algorithm is used to calculate accurate relative hypocenter locations by removing the effects of un-modeled velocity structure. (Shapes with blue circles before used HYPODD and red circles are relocated with HYPODD)