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# T1.5-O6. Seismic swarm near the capital of Mongolia investigated using double-difference tomography

We focus on the main active seismic zones in the area of Ulaanbaatar which can have the main impact on the seismic risk of the Capital of Mongolia. A seismic activity is taking place near and within Ulaanbaatar area since April of 2005. The seismic swarm observed by local permanent network has reveals the significant increase of seismic activity in the Ulaanbaatar area. For precise study of this seismic activity region, we had installed a number of temporary seismic stations since December of 2008. This study discusses some results of the analysis of this high seismic activity recorded by permanent and temporary networks. We show that relative earthquake location using double-difference methods requires an accurate knowledge of the velocity structure throughout the study region to prevent artifacts in the relative position of hypocenters. The distribution of focal depths indicates that the seismogenic layer in and around Emeelt fault is located in the upper-mid crust with its thickness no deeper than 20 km.

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