



Receiver function analysis using AlpArray stations in Hungary

Kalmár Dániel (1), Süle Bálint (2), and Bondár István (2)

(1) Department of Geophysics and Space Science, Eötvös Loránd University, Budapest, Hungary, (2) Research Center for Astronomy and Earth Sciences, Hungarian Academy of Sciences, Budapest, Hungary

The AlpArray temporary seismic network, together with the permanent stations of the Hungarian National Seismological Network provide an unprecedented density and resolution to study the Eastern Alps - Pannonian basin transition zone. Previous receiver function studies (Hetényi et al., 2007, 2015) in the region used a much smaller station density and shorter time period than the present paper. In the analysis we used data from 48 permanent and temporary AlpArray stations in Hungary and neighbouring countries. We present our methodology (P-wave receiver function analysis, H-K grid search and cross-correlation matrix methods), the pitfalls in processing, and finally our result, the detailed Moho map of the region.