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# Adria-Europe crustal structure relationship in the Eastern Alps (project EASI)

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Project EASI is the first implemented Complementary Experiment within the AlpArray program (http://www.alparray.ethz.ch) and stands for Eastern Alpine Seismic Investigation. The seismological field experiment ran for one year, from Summer 2014 to Summer 2015, composed of 55 broadband stations deployed in zig-zag in a ca. 15 km-wide band along longitude 13.35°E, spanning 540 km from the Czech-German border to the Adriatic Sea.

Here we present first results using P-to-S converted waves from teleseismic distances. The variation of Moho depth along the profile is analyzed and linked to the two colliding plates, Adria and Europe, as well as to the overlying lithospheric blocks of the Bohemian Massif. The suggested Moho “hole” between Adria and Europe is characterized. We investigate the anisotropic nature of the lower crust of both plates. We conclude on the structural relationship of Adria and Europe at the crustal level, and infer their respective positions at depth. Furthermore, preliminary S-to-P conversions illuminating the lithosphere-asthenosphere boundary test the significant depth variation of this boundary along the EASI transect and complement our receiver function study.