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## Negative Velocity Gradients in the uppermost Mantle below the larger Alpine Area

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In the frame of the Alparray project we analyse teleseismic data from permanent and temporary stations of the greater Alpine area to study the structure of the crust and the uppermost mantle. We use S-to-p and P-to-s converted waves below the seismic stations which are aligned along the arrival times of the generating P and SV signals. The broadband data used are unfiltered, amplitude normalized and sign corrected. Profiles of migrated data are constructed through the entire Alpine area and compared with results of tomographic, controlled-source and receiver function studies. Thereby we provide additional constraints regarding the ongoing controversies regarding the configuration of the various slabs whose existence was postulated by previous authors within the larger Alpine area including the Western Carpathians. Special attention is given to the possibility of a reversal of subduction polarity in the eastern Alps.