

different degrees of their alteration. The values of remanent magnetic polarization (Tab. 1) varies from 0.3 to 35.6 nT and the bulk magnetic susceptibility from 0.8 to $622.5 \cdot 10^{-6}$ SI u.)

The main carriers of magnetism in rocks are magnetite, biotite and rarely hematite and pyrrhotite. Considering the results of demagnetization tests and knowledge about magnetic materials we can say that the RMP of most of the studied rocks is a secondary one.

Obtained results will be used in interpretation of data of the geophysical prospection. They also give information about the thermal history of geophysical units. Several of them, in which we can establish the stable magnetization, will find application in tectonic reconstruction of the development in the studied area.

THE THICKNESS OF THE EARTH'S CRUST AT EASTERN ALPS AND BOHEMIAN MASSIF DERIVED FROM TELESEISMIC EARTHQUAKES ANALYSIS

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The structure of the earth's crust in the Eastern Alps, especially at the 3-components station Zwettl (granitic bed-rock) was inspected from earthquake records. Crust discontinuities generates reflexions, which superpose the first arriving P-wave and the resulting signal describes a long wavetrain.

Reflexion and transmission functions (for a horizontal layered medium) with different crust models were computed and their impulse responses provided. The convolution of these impulse responses with a special input signal produce synthetic seismograms. These, when compared with the original records of earthquakes provide models of the crust. On the assumption of one mean P-velocity we calculated the thickness of the crust for all 8 stations. The influence of S-waves was also considered at the station Zwettl to calculate models analogous to the above discussed procedure. Compared to the P-model there are twice more data to consider because of the horizontal displacement, caused by the S-waves which contain additional information.

The computed depth of the Moho by the S-model is the same by the P-model. The accuracy of P- and S-wave models is ± 1 km. The thickness of the crust at the stations is: at Bleiberg 40 km, at Klagenfurt 45 km, at Sonnblick 47 km, at Mariazell 32 km, at Glashütten/Lockenhaus 36 km, at Pitten 33 km and at Zwettl 34 km. These qualitative results complete the available map of the Moho Depth from Austria and adjacent areas.