

Effects of dehydration of rocks on seismic velocity

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<http://psmac0.ess.sci.osaka-u.ac.jp/matsudalab-j.html>

We compile elastic-wave velocity data on hydrous minerals and rocks at high pressure and temperature. We investigate effects of hydrous minerals and dehydration on seismic velocity in rocks. Two to three dehydration reactions may proceed in rocks that consist of several hydrous minerals. Each reaction causes unique changes in physical properties of rocks. We examine rock velocities from the geometry and amount of H₂O fluid.

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