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Identification of S wave onsets in the shallow seismic

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Identification of P and S waves is the crucial problem in seismogram analysis. S waves arrivals are usually heavy disturbed by faster P waves. Short source – receiver distances and thus only short time interval between P and S waves make situation even worse in the shallow seismic.

Number of techniques for P and S waves arrivals separation has been introduced so far, but non of them being absolutely reliable. These techniques are based either on comparing individual components of multicomponent records or using advantages of seismic sources with controlled direction of initiative force.

Our approach combines advantages of both methods. Using a hammer as a source enables us to generate seismic impulses with accentuated amount of transversal or radial waves. Three-component records are used for additional P and S waves seismogram's separations.

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