

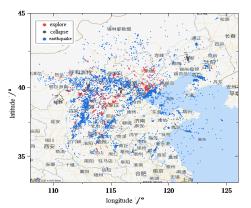
Discrimination of Seismic Event Based on Waveform Characteristics of **Different Seismic Phases**

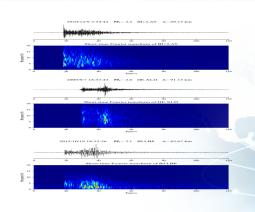


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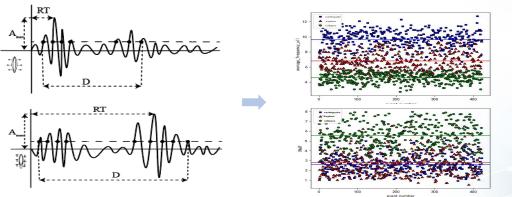
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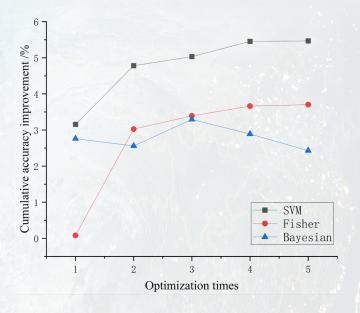


Three seismic event types (natural earthquake, blasting and goaf collapse) with a magnitude below 3.0 ML around Beijing were collected.



- Characters from the whole stream, P/S phases and ratio of P/S phases were applied to investigate the accuracy.
- Three methods (SVM, Fisher, and Bayesian probability) were utilized for the event type discrimination.

CONCLUSIONS



- The discrimination accuracy based on P wave or S wave is lower than the accuracy based on the whole waveform.
- The discrimination accuracy can be improved by adding the ratio parameter of P and S wave characteristics.