Recent Seismicity in the Northern Hokkaido and Southern Sakhalin area

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We need to make the shallow seismicity clearly to understand where the plate boundary between the Okhotsk and Amur plate is running in this area. We have been carried out temporal dense seismic observations during the summer in both regions since 1995.

In the results, the seismic zone is restricted in the Japan-sea side and the contrary the Okhotsk-sea side is aseismic.

In Northern Hokkaido area, we could obtaine one-dimensional P wave velocity models of the upper crust and station corrections. P-wave velocity structure in this area shows very low velocity at shallow depth. And a distinct contrast in P-wave station correction is obtained in an east-west direction.

We also found a good correlation between P-wave station anomally, and both geology and gravity anomally.