

## Estimation of P-wave attenuation area beneath Iwate Volcano using artificial explosions (2)

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The exploration experiments by using the identical shot-points and observation points for 3 years during 1999 to 2001 were carried out. Our study aims to estimate P-wave attenuation area beneath Iwate Volcano by using the fan-shooting technique and the empirical formula for estimating amplitude of initial motion of P-wave.

The observation points were set at the north side and the south side around Iwate Volcano. Using estimated empirical formula, the amplitude anomaly observation points were specified at the south-side of Iwate Volcano. In addition, the following was examined based on the experiments for 3 years; Time change in area where amplitude anomaly observation points were detected.

As the result, amplitude anomaly were found at the each observation points from shot-point S1 ( where was located at the western edge at the south side) to S7. The area of P-wave attenuation anomaly does not change for 3 years.

The P-wave attenuation area was located from 39.83 N to 39.86N in latitude and from 140.96E to 140.99E in longitude. It was located beneath the western Iwate crater and the depth was ranging from 0.5 km above sea level to 1.5km below sea level.