

analysis of T-wave observed in Ulleungdo of South Korea

Ulleungdo is an island located in the East sea of Korea. Korea Institute Geoscience and Mineral Resources (KIGAM) has operated a seismic array station called ULDAR composed of four CMG-40T sensors and four Q330 digitizers since December, 2007. This study is about the T-wave recorded by ULDAR. The ULDAR recorded various noises and signals different from those recorded at inland stations. We observed a number of events such as earthquakes, underwater explosions and so on. T-wave was generated from some events. For example, from the second and third underground nuclear tests of North Korea, T-wave was observed. The distance between the test site and ULDAR is about 445km. Group velocity is 1.5km/s in good fit with T-wave speed. We classified the T-wave generated by events in the East Sea including the North Korean nuclear tests to understand its features.

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