

Registration of Events from DPRK Test Site in 2016 by Facilities of Main Center of Special Monitoring

Both events in 2016 from DPRK test site were confidently registered by all national stations including primary IMS station PS45. The information about event was processed very quick and forwarded to superior authorities. To identification of the seismic signal from DPRK the cross-correlation analysis between the first arrivals of registered seismic signal and a previously registered signal from UNE, selected as the reference was applied. As reference signal, we used signal from DPRK UNE 09.10.2006. The average cross-correlation coefficients for our stations between the signals from the DPRK UNE and the reference signal were about 0,96. Also for identification of event nature used method, which is based on differences in the change of amplitudes of the envelope signals from earthquakes and explosions, depending on the frequency. The method is based on linear filtration of input signal by set of narrowband filters and calculating of the amplitudes of the envelopes of the seismic signals. Simultaneous use of several methods increases the reliability of identification and facilitates decision-making in complex analysis of seismic signals.

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