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# of Soviet Peaceful Nuclear Explosion Seismograms

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The Geophysical Survey of the Russian Academy of Sciences and Michigan State University are working to recover, preserve, scan, and digitize the historic seismograms of Soviet Peaceful Nuclear Explosions (PNEs). The Soviet Union detonated 122 PNEs from the mid-1960s through the late 1980s. The PNEs were conducted in a wide range of geologic settings and geographic locations, thus representing a unique data set for geophysical studies. These explosions were well recorded by the regional seismic networks, where thousands of seismograms are still retained. We are working to index these irreplaceable legacy analog seismograms and preserve them against loss for future generations. In the process, we are also generating high resolution scans of the seismograms and digitizing them for analysis. Most seismograms are from short period instruments, and when combined with the correct station calibration information, the digitization process accurately recovers ground motion signals to at least 5 Hz.

Promotional text

Thousands of seismograms from Peaceful Nuclear Explosions remain within the vaults of the regional seismic networks of the former Soviet Union. We are indexing, scanning, and accurately digitizing them to preserve these irreplaceable records for future geophysical research.

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