

Seismic station control

Instrumental seismology is based mainly on the precision of the recording instruments and their operating States. It is important to know the response of the association digitizer-sensor to the ground excitation. For the purposes of the CGS, aftershocks recording seismic array, we suggest a simple method to evaluate the operation of the short seismic stations to each other. Ten seismometers have been installed inside a gallery of flow-through dam for a period of one week, the sensors are 50cm apart from each other. The dam offers the possibility of earthquakes recording in a short time and in an environment of low noise. The test shows that the stations have a similar response for the same excitation. The time is an important parameter for seismology without it the locations may take a significant error. In order to observe the behavior of the instrument internal clock, two stations was installed at the same place, the first station operated for one month without clock correction (GPS time), a second one is installed for a 24h duration. During this time, an earthquake was recorded allowing the drift rate evaluation of the internal clock, thus offer the possibility to correct the clock drift if necessary.

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