

### **3.3-P07. Data processing in Ukrainian National Data Centre (UANDC)**

UANDC performs processing of seismic and infrasound data 24/7. UANDC uses data from IMS station, IRIS and GEOFON servers and data from national system of observation. Data processing of seismic data performs in real-time and in three steps. The first one is automatic analysis. The 3-pipeline SeisComp3 system for different regions of interest and own software are used. Automatic processing used just as preliminary result and initial data for manual analysis. The second step is manual processing. For manual processing, we use Geotool, SeisComp3 and our own software developed by UANDC specialists. UANDC software are used to accurate results of processing such as depth, magnitudes etc., and perform cross-correlation analysis in some cases such as nuclear tests. The last step is expert group analysis. For this step, we use all available data and software. Expert analysis performs only in cases when on-duty analyst has doubts about nature of source (for example nuclear test) or source can cause consequences on the Ukrainian territory (events from Romania). For infrasound data, on-duty analyst uses PMCC (WinPMCC) software. Such schema allows in short terms provide reports, about results of processing, to different state authorities.

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