

A 23 Year Long Seismic Bulletin for the European Arctic

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Since 2014, a joint Norwegian-Russian project between the three partners NORSAR in Kjeller, Norway, the Federal Center for Integrated Arctic Research of RAS in Arkhangelsk, Russian Federation, and the Kola Branch of the Geophysical Survey of RAS in Apatity, Russian Federation, has been jointly financed by Norwegian and Russian research agencies. One task of this project is to compile a joint seismic bulletin for the European Arctic for the last decades. The different sources for this bulletin were the data collected at the International Seismological Centre (ISC), the reviewed bulletins of NORSAR and the two Russian project partners. In addition, seismic onsets from permanent and temporary stations read within different projects at NORSAR were added to the new bulletin compilation.

The greatest challenge for this new unified bulletin is removing all the onset readings from different agencies analysing the same seismic stations: due to international data exchange, data from the permanent stations in the European Arctic are in between analysed by five or more institutions and then reported into the international data bases. These institutes are not only processing the data differently, but they may even use different rules to name the seismic onsets.

All these data entries have to be homogenized, to achieve a unified bulletin. The new bulletin contains seismic events observed by at least three seismic stations or arrays at regional distances for the time period autumn 1992 to autumn 2015.