

Seismic and infrasonic monitoring in Spitsbergen

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Abstract. At the end of 2011 Kola Branch of the Geophysical Survey of the Russian Academy of Sciences installed in Svalbard a system for conducting seismo-infrasound monitoring. So far the system is the only instrument which allows making a joint monitoring of seismic and infrasound events in that part of Arctic. The paper considers software and hardware organization of monitoring and data transfer subsystems, provides description of automatic detector of infrasound events. The hardware is based on widely distributed and series-produced parts. We also provided results of seismo-infrasound monitoring in Svalbard for 2011 and suggested a hypothesis that the infrasound and seismic emissions connected with processes taking place in the archipelago cryosphere.

Keywords: Svalbard, seismic monitoring, acoustic monitoring, software, hardware, signal detection.