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A temporary seismic small-sized network around Masi, Finnmark, for monitoring the Stuoragurra micro-seismicity.

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The postglacial structures in northern Fennoscandia are remarkable expressions of up to magnitude 8 earthquakes in a presently stable region. The Stuoragurra Fault in northern Norway is one of these faults that can be traced for a length of 80 km. The Sautso dam in the Alta river is the largest concrete arch dam in Norway and is located only 15 km from the Stuoragurra Fault. It is of course of great importance to reveal if this fault has the capacity to release another major earthquake. The ARCES seismic array is located some 60 km from the Stuoragurra Fault and has recorded signals that demonstrate a weak seismic activity along the fault zone. However, the spatial resolution of these recordings is too low to resolve a detailed location or foal depth determination. In an attempt to understand more of the present day activity, three 3-component high-frequency seismic stations have been deployed near Masi for continuous recording during the fall and winter of 2011/2012. We will present the preliminary results from this mini-network placed on top of the presumed active fault.