

## **Scandinavian Earthquake Archive**

Scandinavian earthquakes have been subjected to scientific research since the 1880's when a surge in the interest for natural phenomena was experienced within many disciplines, seismology included. Naturally, only felt information was available at that time, based on a scale (from I to XII) for what is termed earthquake intensity. Following the large Oslofjord earthquake of October 23, 1904, the first recording instrument (seismograph) in Norway was installed in 1905, in Bergen. For a long time, however, macroseismic data continued to represent the backbone of earthquake research in Norway, and such data are still being used as an important supplement to instrumental data.

The Scandinavian Earthquake Archive was established in 1983, during the course of a project on North Sea Seismicity, funded by the UK Department of Energy. The project extended from 1983 to 1985, and culminated in a summary report published in 1986 by HMSO (Her Majesty's Stationery Office). The motivation for the archive was the need to review the information available about past earthquakes affecting the North Sea.

The concept of a historical archive follows the compilation of the British Earthquake Archive, which was established in 1982, during the course of an extensive review of British seismicity. This review was conducted by Principia Mechanica Ltd., as was the North Sea seismicity project. The principal developers of both archives were Dr. Robert Muir Wood and Dr. Gordon Woo, both of whom now are affiliated with Risk Management Solutions Ltd., London.

The cooperation between Norway and UK within historical seismicity was strengthened through the industry project "Earthquake Loading on the Norwegian Continental Shelf" (ELOCS) during 1985-88, building on the present Scandinavian Earthquake Archive. As the project title indicates it was the exploitation of petroleum resources offshore Norway that was the motivation for this project, based on the need for improved seismic hazard and risk estimation. This seismological cooperation across the sector line in the North Sea, with and without support from the petroleum industry, has continued since then.

Since the Scandinavian Earthquake Archive was established in 1983, a considerable amount of research and development related to earthquakes in Norway have been conducted, mainly at the University of Bergen and NORSAR. The number of projects and related publications is too numerous to be covered here, with one exception, International Centre of Geohazards, which is being organized at present, supported by the Research Council of Norway.

Even with the advanced level of theoretical and empirical seismological research conducted today, the observational basis provided by the Scandinavian Earthquake Archive is still very important. Moreover, the preservation of this archive is important also for historical reasons. This is the motivation for the present scanned edition of the archive. The work has been supported by Oljeindustriens Landforening (OLF), which also for many years has been supporting the operation of seismological stations in Norway.

Kjeller, Norway, April 8, 2003.

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