



Institut für Geophysik Geophysikalisches Kolloquium Sommersemester 2025

Montag, 07.04.2025

Dr. Peter Voss

Geological Survey of Denmark and Greenland (GEUS)

The Earthquake Observatory at GEUS

In this presentation, I will provide an overview of the background and key tasks carried out by the Seismological Service at the Geological Survey of Denmark and Greenland (GEUS). Additionally, I will introduce the broader seismological observational landscape beyond academia.

Since 2005, GEUS has hosted the Seismological Service of the Kingdom of Denmark. However, the service itself dates back approximately 100 years, having been established under the leadership of Inge Lehmann as part of the Ministry of War. Over the years, it has evolved significantly, transitioning from smoke paper seismograms to the World-Wide Standardized Seismograph Network and, eventually, to modern digital broadband sensors. Today, the service also incorporates fiber optic observations using Distributed Acoustic Sensing (DAS).

The primary mission of the Seismological Service has always been to collect high-quality data on seismic shaking from earthquakes and other events. To ensure the accuracy and reliability of these observations, the service has consistently been supported by research efforts. In this presentation, I will highlight some of our recent research projects, illustrating how seismology operates in a country without major earthquakes or nuclear power plants.

International collaboration is essential for most earthquake observatories and is supported by numerous organizations, including ORFEUS, EMSC, EPOS, ISC, ESC, IASPEI, IUGG, FDSN, and CTBTO. I will describe the roles and significance of these organizations and discuss how students can benefit from their work.

Das Kolloquium findet um 16:00 Uhr im Seminarraum GEO 315, Corrensstr. 24, 48149 Münster statt. Alle an dem Thema Interessierten sind hierzu herzlich eingeladen.

Die Dozenten des Instituts für Geophysik