

EGU22-5478

<https://doi.org/10.5194/egusphere-egu22-5478>

EGU General Assembly 2022

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## EPOS-Norway Portal

**Jan Michalek**<sup>1</sup>, Kuvvet Atakan<sup>1</sup>, Christian Rønnevik<sup>1</sup>, Sara Kverme<sup>1</sup>, Lars Ottemøller<sup>1</sup>, Øyvind Natvik<sup>1</sup>, Tor Langeland<sup>2</sup>, Ove Daae Lampe<sup>2</sup>, Gro Fønnes<sup>2</sup>, Jeremy Cook<sup>2</sup>, Jon Magnus Christensen<sup>3</sup>, Ulf Baadshaug<sup>3</sup>, Halfdan Pascal Kierulf<sup>4</sup>, Bjørn-Ove Grøtan<sup>5</sup>, Odleiv Olesen<sup>5</sup>, John Dehls<sup>5</sup>, and Valerie Maupin<sup>6</sup>

<sup>1</sup>University of Bergen, Norway

<sup>2</sup>NORCE Norwegian Research Centre AS, Bergen, Norway

<sup>3</sup>NORSAR, Kjeller, Norway

<sup>4</sup>Norwegian Mapping Authority, Hønefoss, Norway

<sup>5</sup>Geological Survey of Norway, Trondheim, Norway

<sup>6</sup>University of Oslo, Oslo, Norway

The European Plate Observing System (EPOS) is a European project about building a pan-European infrastructure for accessing solid Earth science data, governed now by EPOS ERIC (European Research Infrastructure Consortium). The EPOS-Norway project (EPOS-N; RCN-Infrastructure Programme - Project no. 245763) is a Norwegian project funded by National Research Council. The aim of the Norwegian EPOS infrastructure is to integrate data from the seismological and geodetic networks, as well as the data from the geological and geophysical data repositories. Among the six EPOS-N project partners, four institutions are providing data – University of Bergen (UIB), - Norwegian Mapping Authority (NMA), Geological Survey of Norway (NGU) and NORSAR.

In this contribution, we present the EPOS-Norway Portal as an online, open access, interactive tool, allowing visual analysis of multidimensional data. It supports maps and 2D plots with linked visualizations. Currently access is provided to more than 300 datasets (18 web services, 288 map layers and 14 static datasets) from four subdomains of Earth science in Norway. New datasets are planned to be integrated in the future. EPOS-N Portal can access remote datasets via web services like FDSNWS for seismological data and OGC services for geological and geophysical data (e.g. WMS). Standalone datasets are available through preloaded data files. Users can also simply add another WMS server or upload their own dataset for visualization and comparison with other datasets. This portal provides unique way (first of its kind in Norway) for exploration of various geoscientific datasets in one common interface. One of the key aspects is quick simultaneous visual inspection of data from various disciplines and test of scientific or geohazard related hypothesis. One of such examples can be spatio-temporal correlation of earthquakes (1980 until now) with existing critical infrastructures (e.g. pipelines), geological structures, submarine landslides or unstable slopes.

The EPOS-N Portal is implemented by adapting Enlighten-web, a server-client program developed

by NORCE. Enlighten-web facilitates interactive visual analysis of large multidimensional data sets, and supports interactive mapping of millions of points. The Enlighten-web client runs inside a web browser. An important element in the Enlighten-web functionality is brushing and linking, which is useful for exploring complex data sets to discover correlations and interesting properties hidden in the data. The views are linked to each other, so that highlighting a subset in one view automatically leads to the corresponding subsets being highlighted in all other linked views.