

EPOS-NL: Dutch participation to the European Research Infrastructure for solid Earth sciences (EPOS)

Martyn Drury (1), Richard Wessels (1), Ernst Willingshofer (1), Otto Lange (2), Kees Wapenaar (3), David Bruhn (3), Anke Dähmann (3), Phil Vardon (3), Reinoud Sleeman (4) and Bernard Dost (4)

(1) Utrecht University, Department of Earth Sciences, Utrecht, The Netherlands

(2) Utrecht University, University Library, Utrecht, The Netherlands

(3) Delft University of Technology, Department of Geoscience & Engineering, Delft, The Netherlands

(4) Koninklijk Nederlands Meteorologisch Instituut, De Bilt, The Netherlands

EPOS-NL is the Dutch contribution to the European Plate Observing System (EPOS). EPOS is a pan-European project with the goal to improve and facilitate the integration, access, and (re-)use of solid Earth science data (products), services, and facilities.

EPOS-NL is a consortium of Utrecht University, KNMI, and TU Delft, and is on the Dutch National Roadmap for Large Scale Research Infrastructures. Its objective is to integrate and expand the national infrastructure for frontier-breaking research on geo(thermal)-energy, geological storage of energy and CO₂, and human-induced earthquakes.

This new research infrastructure supports multi-scale, multi-physics research that delivers a quantum leap in imaging of subsurface structure and processes and in predictive modelling, and fosters development of open access data services. EPOS-NL comprises a cluster of facilities including:

- The Groningen gas field seismological network and ORFEUS data centre (KNMI).
- The (UU) Earth Simulation Laboratory (ESL) for multi-scale, rock physics and analogue experiments.
- A distributed facility for multi-scale imaging and tomography (MINT) of geo-materials.
- The TUD deep geothermal research facility (DAPwell).