

Vacancy: Spatial or epidemiological data scientist for development of a continental scale Environmental Hazards Data Space (EHDS)

(published 12 March 2025)

Job Description

The Computational Geography group at the Department of Physical Geography, Utrecht University is looking for a researcher to lead the implementation of an Environmental Hazards Data Space (EHDS) providing environmental exposure data at continental scale. EHDS will be part of the SAGE European Green Deal Data Space which will be developed over the coming years.

The impact of environmental factors such as pollution, floods, and heat may lead to poor human health, casualties, and economic losses. Quantifying exposures to these hazards is vital for understanding exposure – health relations, and improving planetary health. Continental scale assessment is increasingly important due to the large-scale impacts – think of climate change - necessitating comprehensive data and analysis tools. The Environmental Hazards Data Space aims to address these challenges by providing a searchable database of environmental data, access to various harmonised data sources and processing tools for exposure assessment. EHDS will run inside the SAGE European Green Deal Data Space containing data space for a large range of other Green Deal domains.

You will contribute to setting up EHDS containing environmental exposure data (e.g., water quality and quantity, air pollution, noise, green space, soil pollution). You will rely on integrating existing data sets as well as compilation of new continental scale data sets. Data sets will be organized in a catalogue. In addition, you will assess environmental exposures at continental scale enabling quantifying environmental poverty and projecting exposures under global change (e.g. climate change, population growth). In creating the data space, you will cooperate with colleagues in the Computational Geography group at the Department of Physical Geography, Utrecht University (<https://www.computationalgeography.org>), partners from SURF (<http://www.surf.nl>) by using their computational and storage facilities, as well as EU consortium members in the SAGE European Green Deal Data Space project which will start soon.

Qualifications

We believe in a balance between individual and collective achievements. That's why we assess both on individual and team performances. We are welcoming colleagues who recognize themselves in these values and meet the following requirements:

- You hold an MSc and/or PhD degree in GIScience, Data Science, Environmental Epidemiology, Geography, Environmental Science, Hydrology, or related fields;
- You have knowledge of and experience in processing spatial or epidemiological data, using scripting languages such as Python or R;
- You show a willingness to cooperate with researchers within our Computational Geography group as well as partners in the SAGE EU project;

- You are sensitive to the fact that successful and impactful research is a team effort;
- You have excellent oral communication and writing skills;
- If you don't meet all the requirements, but you are convinced that you would be a good fit for this position we warmly invite you to apply.

Offer

We offer an exciting position (0.5 - 1.0 FTE) in our Computational Geography group, Department of Physical Geography, Utrecht University, the Netherlands, as Postdoc or Researcher (depending on qualifications) for a period of 2 – 3 years.

The vacancy will be published soon on the Utrecht University website.

If you are interested and for additional information, please contact Prof Dr Derek Karssenbergh, chair Computational Geography, d.karssenbergh@uu.nl