



Norsk institutt for luftforskning  
Norwegian Institute for Air Research

NILU – Norwegian Institute for Air Research aims to increase the understanding of processes and effects of climate change, of the composition of the atmosphere, of air quality and of hazardous substances. The institute holds a strong position both on the national and international level within its core fields of research.



## PhD research fellowship Satellite remote sensing and spatial data science

Applications are invited for a 3-year PhD research fellowship position in satellite remote sensing at the Norwegian Institute for Air Research (NILU) in association with the Department of Geosciences at the University of Oslo, Norway. The candidate's research activities will be based at NILU while the formal PhD program will be carried out at the University of Oslo. The fellowship requires admission to the PhD program at the Faculty of Mathematics and Natural Sciences.

The research will focus on the synergistic exploitation of atmospheric satellite remote sensing data (e.g. from Sentinel-5P) by combining them with other suitable datasets (e.g. from low-cost sensor networks or dispersion models), with the goal of contributing to improved societal relevance of the underlying data. The research will combine techniques from satellite remote sensing with elements from statistics, spatial data analysis, and machine learning. The exact research topic can to some extent be shaped in discussions with the successful applicant depending on his/her primary interests and qualifications.

### The following requirements of the applicant are essential:

- Master degree or equivalent in a geoscience discipline, physics, or a related natural science field
- Programming skills
- Excellent knowledge of both written and spoken English

### The following qualifications of the applicant are a bonus:

- Knowledge in R and/or Python
- Experience with satellite remote sensing
- Experience with handling and processing (large) geospatial datasets
- Knowledge of atmospheric chemistry or air pollution
- Knowledge in statistics and machine learning techniques

We are looking for a motivated candidate who can work independently, efficiently, and is proactive in solving problems. The candidate should be interested in working in an international team with a diverse set of backgrounds, where sharing of resources and teamwork is important.

**The application must include (as a single complete PDF file):**

- Application letter including a statement of motivation and research interest
- CV (summarizing education, positions and academic work)
- List of 2-3 references (name, relation to candidate, e-mail and phone number)
- Copies of educational certificates and degrees

Foreign applicants are advised to attach an explanation of their University's grading system. Please remember that all documents should be in English or a Scandinavian language. Applications with documents missing will not be considered further. Original documentation may be requested.

**We can offer:**

- International environment with professional and friendly colleagues from all over the world, and broad experience and complementary competence
- Access to a wide network of national and international collaborators
- An environment for learning with conferences, workshops, and international training events
- Flexible working hours
- Open source and open access philosophy regarding software and data
- Excellent pension, welfare, and insurance schemes, and a competitive salary
- Easy access to the greater Oslo region with plenty of opportunities for cultural and outdoor activities

Appointment to the research fellowship is conditional upon admission to the PhD program at the University of Oslo (see <https://www.mn.uio.no/english/research/phd/application/application.html> for details).

Our main office is located at Kjeller, just outside Oslo. We have extensive collaboration with national and international research institutes and universities. Details about NILU can be found at [www.nilu.no](http://www.nilu.no). Informal enquiries about the available position can be directed to Senior scientist Philipp Schneider ([ps@nilu.no](mailto:ps@nilu.no)) or Senior Scientist Kerstin Stebel ([kst@nilu.no](mailto:kst@nilu.no)). Applications should be sent through [www.finn.no](http://www.finn.no) (ref. number 179394864) as soon as possible and no later than **1 July 2020**.

**URLs:**

<https://www.finn.no/job/fulltime/ad.html?finnkode=179394864>

<https://euraxess.ec.europa.eu/jobs/525182>