

## Full-time PhD position in remote sensing and biodiversity in Prague, 3+ years (start October 2024, earlier employment possible)

We offer fully funded, full-time PhD position in space-borne remote sensing, macroecology and biodiversity science. The candidate will join international team of Dr. **Petr Keil** (<https://petrkeil.github.io>) at the Dpt. of Spatial Sciences at the Faculty of Environmental Sciences (<https://www.fzp.czu.cz/en>), Czech University of Life Sciences in Prague, Czech Republic.

The research is part of ERC-funded project BEAST (“Biodiversity dynamics across a continuum of space, time, and their scales”) which studies how biodiversity has changed in time at local, regional, and continental scales, during the last 50 years. The focus is on terrestrial ecosystems, and facets of biodiversity which can be remotely sensed from satellites. For a better idea about our research see our website (<https://petrkeil.github.io>).

The specific role of the candidate will be to study temporal change of remotely sensed spectral diversity, i.e., the diversity of spectra captured by space-borne satellite sensors such as MODIS or SENTINEL. This will be done at multiple spatial scales, and this scaling is an important part of the research. The practical goal is to link spectral diversity with field-measured taxonomic diversity (and to test the so-called “spectral variability hypothesis”) and to investigate if the remotely sensed biodiversity change can be used as a proxy for temporal change of taxonomic diversity.

Training and work will involve processing of geographic data, statistical analysis and modelling, dissemination of results via peer-reviewed publications, conference presentations, and establishing of a network of international collaborators. Candidates will participate in workshops and training, and will assist with teaching.

### We require

- Master’s or equivalent degree/diploma in a project-related field, e.g., ecology, geography, remote sensing, zoology, botany, bioinformatics, biostatistics, environmental sciences. I also encourage holders of degrees in mathematics, statistics, or physics to apply.
- Prior experience with spatial data and GIS, programming, and/or statistical analysis in a command line is advantageous, motivation to learn new computational skills is essential.
- Good spoken and written English.
- **I aim to increase the diversity of my team**, and welcome applicants of all genders, cultures, backgrounds, ages, or countries. I believe that a diverse team will broaden the perspective and enhance the creativity.

### We offer

- **Income**, consisting of two parts:
  - I. Standard employment contract with starting gross salary of **32,000 CZK/month**, which is ca. 26,000 CZK/month net after tax, but the latter varies depending on the family situation and other circumstances. This funding is available until the end of 2027.
  - II. Four entire years of tax-free PhD stipend of **12,000 CZK/month** during the first year. This will grow to 13,000, 14,000, and 16,000 CZK/month in years 2, 3, and 4 respectively.

Roughly, after combining these two parts, the starting net income can be around 38,000 CZK/month (ca. 1,500 EUR/month as of 4<sup>th</sup> Jan 2024). The median salary in the Czech Republic in the first quarter of 2023 was 31,923 CZK/month gross. For costs of accommodation see <https://www.sreality.cz/en>.

- Full medical insurance and social security.
- Funds for travel to conferences and workshops abroad. Funds for additional training.
- Motivating bonus payments for high-quality publications.
- State-of-the-art scientific and computing equipment, software, access to journals and scientific databases, and comfortable office space. This also includes a laptop for the candidate.
- Subsidized meals at the university canteen (Menza).
- International working environment (the working language is English), green campus in Suchbátka in the outskirts of Prague, 30 min to Prague city center by public transport or bike, 15 min walk to several natural protected areas. The campus has sports facilities, including a swimming pool, gym, athletic track, and indoor and outdoor playfields.
- **Starting date of the official PhD program is 1<sup>st</sup> October 2024.** However, earlier employment in our lab in 2024 can be negotiated.

## Applications

To apply, please send by email to [beast@fzp.czu.cz](mailto:beast@fzp.czu.cz) **a single .pdf of less than 10 MB:**

- Motivation letter (1-2 pages) describing your expertise and research interests, stating why you see yourself as a good fit for our group/research, and why you are interested in getting a PhD.
- Your CV, including a list of your publications and any other relevant outputs (code repositories, reports, your personal website, etc.).
- Contact details for 2-3 academic referees, e.g., your former supervisor, boss, or collaborator.
- Indicate if you'd be interested in starting with us earlier than October 2024.
- Put "PhD 2024" and your name in the subject of the email, and in the name of the .pdf file.

**Application deadline is 4<sup>th</sup> of February 2024.**