GEOSTAT 2018 Prague

The IBOT, Prague 2018 Summer School is the 13th in a series of summer schools organized by R and Open Source (OS) GIS developers and enthusiasts.

**Date:**
Sunday, August 19, 2018 - 16:00 to Saturday, August 25, 2018 - 21:00

**Body:**

The IBOT, Prague 2018 Summer School is the 13th in a series of summer schools organized by R and Open Source (OS) GIS developers and enthusiasts. GEOSTAT aims at PhD students and researchers in a range of environmental and GIS sciences, especially those focusing on analyzing spatial and spatio-temporal gridded data in R and OS GIS. The main idea of GEOSTAT is to promote various aspects of statistical analysis of spatial and spatio-temporal data using Open Source / free GIS languages and tools: R, Python, GRASS GIS, QGIS, SAGA GIS and similar.

The registrations are now closed. We have received 90 valid registrations [1]. Top 65 applicants on the rankings list will be selected and invited individually with detailed instructions (travel, accommodation, registration fees and similar). The organizers are now busy with processing all documents.

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**Working programme**

Lecturers / topics (unsorted):

1. **Edzer Pebesma** [2] (IfI University of Muenster, Muenster Germany):
   - Simple features for R?,
   - Tidy spatial data analysis with R?,
   - Scalable raster data analysis in the cloud with R?,

2. **Roger Bivand** [3] (Department of Economics, Norwegian School of Economics, Bergen, Norway):
   - A practical history of R (where things came from)?,
   - Spatial processes and support (multi-level models)?,
   - Applied spatial econometrics?,

   - Analysing environmental data with GRASS GIS?

4. **Barry Rowlingson** [5] (Lancaster Medical School, Lancaster, UK):
   - Spatial analysis in epidemiology?
   - Combining R and Python for spatial analysis?

5. **Tim Appelhans** [6] (GfK Geomarketing, Germany):
   - Using mapview and mapedit to visualise and edit geo-spatial data interactively in
   - ?Geocomputation with R?,
   - ?Integrating spatial data in dplyr workflows: pitfalls and potential?,
   - ?Modelling transport data with R?

7. **Jannes Münchow** [8] (Geographic Information Science, Friedrich Schiller University Jena, Jena, Germany)
   - ?R-GIS bridges: the examples of RQGIS and RSAGA?,
   - ?Spatial modeling using frequentist models, e.g., modeling species richness, single species and/or landslides (RQGIS, RSAGA and rgrass7 tutorials)?
   - ?The importance of spatial cross-validation in predictive modeling?

8. **Jakub Nowosad** [9] (Space Informatics Lab, University of Cincinnati, Ohio USA):
   - ?GeoPAT 2.0 - analysis of spatial and temporal patterns?

9. **Veronica Andreo** [10] (current: ITC, Twente University; pending: National Institute of Tropical Medicine INMeT, Argentina)
   - "Spatiotemporal data processing and visualization in GRASS GIS"

10. **Hanna Meyer** [11] (Environmental Informatics, Philipps University Marburg, Germany)
    - "Machine-learning based modelling of spatial and spatio-temporal data"

11. **Tomislav Hengl** [12] (Wageningen, the Netherlands):
    - ?Mapping biomes and tree species using Machine Learning?
    - ?Computing with large rasters in R: tiling, parallelization, optimization?

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The GEOSTAT 2018 will include:

- *Training sessions / R package and GIS software tutorials;*
- *Discussion sessions;*
- *Spatial prediction competition game;*
- *Orientation game;*
- *Excursion (outdoor hiking);*
Dates

The Summer school will be held on:

- **Sun 19th August ? Sun 26 August 2018** (arrival Sunday, departure Sunday; 7 night accommodation)

Other important dates:

- **February 1st 2018** [14] ? Registration deadline;
- Early March 2018 ? All invitation letters send to applicants;
- **May 1st 2018** ? Deadline for settling registration fees (working programme confirmed);
- July 15th 2018 ? Final programme, data sets and exercises published;

Registration fees

The registrations fees for this Summer School are **590 EUR** (see also the payment and refunding policy [15]). Registration fees cover costs of using facilities, lunch and coffee breaks, administration costs, local travel costs, and costs of travel and accommodation for lecturers. Participants from ODA countries (employed by an organization or company in ODA-listed country) and full-time students typically receive a subsidized price of 380 EUR for the
registration costs. GEOSTAT makes no profit. All lecturers are volunteers. None of the lecturers receives any honorarium payment or is contracted by the local organizers.

Venue

Institute of Botany of the CAS \[16\] | Zámek 1, Práhonice 252 43, Czech Republic

The GEOSTAT 2018 Summer School will be hosted by the Institute of Botany (IBOT) which is part of the Czech largest national research institution - The Czech academy of Sciences. IBOT seat in village near Prague, in Pruhonice in ancient castle with huge park. Pruhonice castle and park are listed by UNESCO.

Summer school hosts:

Matej Man \[17\]: Works for IBOT’s department of GIS and remote sensing. Ask him if need any help with directions, accommodation, visa or local tricks.

Jan Wild \[18\]: Head of Department.
Accommodation

It is recommended (but is not required) that the invited participants stay in Hotel Floret, which is just neighbouring building to castle, the place of workshop. There are double or triple rooms, so the best way is to share a room. In the hotel we will also have breakfasts, lunches and dinners. **Organizers have already booked some 50+ rooms for the purpose of this event.** Estimated price for whole double room is about 70 EUR and less. So in case of sharing, 35 EUR per night.

Of interest

City center: You can get there easily by public transport. From Pruhonice square by bus 363 or 385 to their last stop ?Opatov? there Change for the underground in direction ?Letnany?. You can exit the underground at station ?Muzeum? which is real heart of the old town. From there you can easily reach Vecenslav?s square, Old town square, charles Bridge...

To visit prague Castle it is best change the underground line. ?Muzeum? is transfer station to the green line ?A?. Using green line you can easily reach ?Hradcanska? station, which is the closest underground station to the Prague Castle.
Register for GEOSTAT course

Summer School on combining geospatial data and statistical analysis

Who is invited?

What does the course look like?

R spatial — sp

R and R-spatial — when now?

Representing spatial data

Olinda Hansens Disease data set

Spatial objects

Raster data

Using Spatial family objects

Spatial-temporal data