

Geographic Data Science for Sustainability

EC2U Autumn School

Date: 07 –10 October 2025
Place: Friedrich Schiller University Jena, Germany
Logistics: “Bring your own laptop” policy



DRAFT PROGRAM:

Before the autumn school:

- Online introductory lecture
- Introduction to R / RStudio

- 07.10.2025**
- Using R as a GIS: Handling and visualizing geospatial data in R
 - Introductory lightning talks by participants
 - Overview of machine learning methods and challenges
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- 08.10.2025**
- Lab class on ML-based modelling landslide susceptibility in R
 - Machine learning model assessment
 - Hyperparameter tuning
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- 09.10.2025**
- Spatial ML models
 - Lab class on ML-based regionalization of environmental contamination
 - Model interpretation and explainability—lecture & lab class
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- 10.10.2025**
- Optional field trip to the Dohlenstein landslide (hiking tour)

Mid-November (date to be determined):

- Submission of data analysis project assignments (only required to obtain ECTS)
- Follow-up online meeting with student presentations of data analysis projects

