Unleashing the Potential of Geography in Social Sciences: An Introduction to GIS with R.  
ViDSS International Workshop on Geopolitical Data organised by the Empirical Political Science PhD Club

Over the past few years, geography and spatial analysis have become indispensable tools in the social sciences. Geographic Information Systems (GIS) have made it possible to visualise and analyse all types of spatial data, ranging from the distribution of social and political variables to the location of historical and political events. This workshop aims at providing students with a strong foundation in geospatial data and its practical applications in social sciences. Participants will learn how to organise and utilise spatial data for analysis in diverse social science contexts, visualise it on maps, and geolocation various social patterns. They will also explore geo-computing distances for research purposes. By the end of the workshop, participants will have the necessary skills to apply their newfound knowledge in their respective fields, enabling them to appreciate the immense potential of geography and spatial analysis in social sciences.

Lecturer: Fernando de la Cuesta, postdoctoral research fellow at the University Complutense of Madrid and visiting research fellow at the Department of Government, University of Vienna

Date: 12, 13 and 14 June 2023 from 9:00 to 13:00

Venue: Conference Room of the Faculty of Social Sciences, Neues Institutsgebäude (NIG), Universitätsstraße 7, 1010 Vienna, 6th floor, staircase III (room C628A)

TIME AND CONTENT:

**Day 1: 12/06/2023 from 9 to 13**
Introduction to R and R packages for spatial data analysis.
Handling spatial data in R: reading, manipulating, and visualising spatial data.

**Day 2: 13/06/2023 from 9 to 13**
Data exploration and visualisation: using R to explore spatial data, creating maps, and visualising patterns.
Spatial analysis with R: principles of spatial analysis, spatial patterns, and spatial relationships.
Geospatial statistics with R: understanding and analysing spatial data using statistical methods.

**Day 3: 14/06/2023 from 9 to 13**
Geolocation with R: techniques for geolocation social patterns, events, and phenomena.
Geo-computing distances with R: distance measures and network analysis in R.
G.I.S with R in quasi-experimental design: using GIS and spatial analysis to exploit natural experiments.

REQUIREMENTS:

To attend the workshop, basic knowledge of quantitative methods in the social sciences is required, as well as basic knowledge of R software.

The workshop is open to student members of the Vienna Doctoral School of Social Sciences (ViDSS). Doctoral candidates receive 2 ECTS upon participation. If there are more interested participants than spots available, the assignation of places will be according to the order of registration as well as the fulfillment of the basic knowledge requirements (proof of educational background in quantitative methods). Postdoctoral researchers can also apply, but doctoral candidates will be prioritised.

Please register for the event by sending an email to beatriz.lasheras.mas@univie.ac.at. Candidates need to submit a CV together with their registration. Maximum: 17 participants

Registration deadline: 29 May 2023 at midnight