

CARBayes GEOMED course

Thank you for registering for the course, enclosed is all the files that you need. The course is split into 3 parts.

Part 1 - Exploratory analysis and mapping.

Part 2 - Spatial modelling with CARBayes.

Part 3 - Spatio-temporal modelling with CARBayesST.

Each part has a short lecture component before a worked example in R. Please download the following files onto your laptop into the same directory.

Lectures - notes

Geomed part 1 - exploratory analysis.pdf

Geomed part 2 - Modelling spatial data.pdf

Geomed part 3 - modelling spatio-temporal data.pdf

Practicals - notes

Geomed_part_1_-_exploratory_analysis_-_practical.pdf

Geomed_part_2_-_Modelling_spatial_data_-_practical.pdf

Geomed_part_3_-_Modelling_spatio-temporal_data_-_practical.pdf

Practicals - R-code

Geomed part 1 - Scotland exploratory analysis.R

Geomed part 2 - Scotland spatial modelling.R

Geomed part 3 - Scotland spatio-temporal modelling.R

Practicals - datasets

Scotland spatial data.csv

Scotland space time data.csv

ScotlandIZ.dbf

ScotlandIZ.shp

When running the R code please bring a laptop and ensure that R (preferably with R studio) is loaded with the following libraries and their dependencies.

Libraries

CARBayes

CARBayesST

ggmap

ggplot2

gridExtra

map tools

Rcolorbrewer

regal
rgeos
shapefiles
sp
spdep