Readme for the 'Powerpoint Slides' folder of the Workshop and Tutorial on spatial modelling with R

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The four powerpoint slide sets allow you to enter the material at any level, and gain new knowledge.

MAIN SLIDES FOR WORKSHOP:

Slideset 3

Applied Bayesian Statistics – Hierarchical.pptx and .pdf helps you grasp the Poisson multilevel model and then the intraclass correlation coefficient in that context, all presented in the context of the Bayesian estimation approach.

Note: this file list is for adapted versions of 2022 slides.

This set of powerpoint slides sits in the 2022 Github Repository of Wendy Olsen

In 2023 for the actual BSPS workshop, we shift to a revised repository hosted by Diego Perez Ruiz.

Slideset 4

<u>BasicPoissonandHLMBYM....pptx and .pdf</u> are aimed at introducing the Besag-Yorke-Mollie version 2 model for social-science beginners. If you are expert in geographic statistics already, you may want to focus on the 2-level nature of the discussion here. If you are a beginner, in BYM then you will want to see our Map outputs (these appear in slideset 3).

BACKGROUND SLIDE PACKS:

Slideset 1

<u>Introductory Bayesian Beginners.pptx and .pdf</u> helps with learning about the posterior distribution which is multivariate in a Bayesian estimation routine for any model.

Slideset 2

<u>Bayesian Simulation Routines.pptx and .pdf</u> helps you expand your knowledge into the Monte Carlo simulation routine issues. Here, some readings are summarized which show differences between what Stan package does, what would happen if you used a Stata subcommand for MCMC, etc. For example what is Gibbs sampling; what is the Hastings-Metropolis sampler (which is different). Purely background.