空间广义线性混合效应模型及其应用

毕业答辩

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Outline 目录

1. Introduction (Motivations and goals)
2. Literature reviews
3. Geostatistical model (SGLMM)
4. Computing details and simulations
5. Real data analysis (Applications)
6. Discussion

背景

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Frameworks, Packages and Softwares I

R: geoR geoRglm spatial PrevMap
Ribeiro Jr and Diggle (2016); Christensen and Ribeiro Jr (2015); Ripley (2015); Giorgi and Diggle (2016)

Stan: Stan [1] interfaces with R (RStan) ,Python (PyStan) , MATLAB (MatlabStan) and more
Gelman et al. (2015); Bob et al. (2017)

PyMC3: Probabilistic programming in Python using PyMC3
Salvatier et al. (2016)

JAGS: **J**ust **A**nother **G**ibbs **S**ampler [2]
Bayesian hierarchical models using Markov chain Monte Carlo (MCMC)

BUGS: **B**ayesian inference **U**sing **G**ibbs **S**ampling , such as winBUGS, OpenBUGS

R-INLA: **I**ntegrated **N**ested **L**aplace **A**pproximations
Rue et al. (2009, 2016); Gómez-Rubio and Rue (2017)

[1] `http://mc-stan.org/`

[2] `https://en.wikipedia.org/wiki/Just_another_Gibbs_sampler`

Thank You

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https://github.com/Cloud2016

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