A Comparison of Design-Based and Model-Based Approaches for Spatial Data

(in alphabetical order) Michael Dumelle and Matthew Higham and Others

Overview

- Design-Based Overview
  - A classic text overviewing design-based approaches (Särndal et al., 2003)
  - A classic text overviewing design-based approaches (Lohr, 2009)
- Model-Based Overview
  - A classic text overviewing model-based approaches to analyzing spatial data (Cressie, 2015)
  - A classic text overviewing model-based approaches to analyzing spatial data (Schabenberger and Gotway, 2017)
- Model-based and Design-based Comparisons
  - A comparison of design-based and model-based approaches (Hansen et al., 1983)
  - A comparison of design-based and model-based approaches (Brus and De Gruijter, 1997)
  - A comparison of design-based and model-based approaches for spatial data (Ver Hoef, 2002)
  - A comparison of design-based and model-based approaches for spatial data (Cooper, 2006)
  - A comparison of design-based and model-based approaches(Sterba, 2009)
  - A comparison of design-based and model-based approaches for spatial data (Brus, 2020)
  - A Bayesian approach to design-based approaches for spatial data (Chan-Golston et al., 2020)
- Spatially Balanced Design and Analysis

  - GRTS sampling (Stevens Jr and Olsen, 2004)
  - Local neighborhood variance estimation (Stevens Jr and Olsen, 2003)
- Block Kriging
  - Finite Population Block Kriging (with an overview of Block Kriging) (Ver Hoef, 2008)

OUTLINE

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3.1 Simulation-Based

3.2 Data-Based

3.3 Software

4. DISCUSSION

References

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