

# Package ‘MBGapp’

July 10, 2026

**Type** Package

**Title** Interactive 'shiny' Application for Model-Based Geostatistics

**Version** 0.1.0

**Description** Provides an interactive 'shiny' application for teaching and applied analysis of geostatistical data. Users can explore spatial data, assess spatial correlation through the empirical variogram, fit model-based geostatistical models for continuous, prevalence and count outcomes, produce spatial predictions, and download reports. The methodology follows the model-based geostatistics framework of Diggle and Giorgi (2019, ISBN:9781138732353).

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**URL** <https://github.com/olatunjijohnson/MBGapp>

**BugReports** <https://github.com/olatunjijohnson/MBGapp/issues>

**Encoding** UTF-8

**RoxygenNote** 7.3.1

**Imports** geoR, ggplot2, shiny, sf, dplyr, readr, tidyr, magrittr,  
leaflet, leafem, tidyterra, stars, RiskMap, terra, grDevices,  
shinyjs, splines, httr2, rmarkdown

**Suggests** INLA, covr, testthat (>= 3.0.0)

**Additional\_repositories** <https://inla.r-inla-download.org/R/stable>

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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run_app	<i>Launch the MBGapp Shiny application</i>
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### Description

Runs the interactive Shiny application for model-based geostatistical analysis that is bundled with the package. The application lets the user upload data, explore it, fit geostatistical models and produce predictions and reports.

### Usage

```
run_app()
```

### Value

No return value; called for the side effect of launching the Shiny application.

### Examples

```
if (interactive()) {  
  run_app()  
}
```

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