Package 'exmort'

November 26, 2026

Title All-Cause and Excess Mortality Calculator

Version 0.1.2

Description An interactive 'shiny' application that estimates all-cause mortality and excess mortality from country-level weekly or monthly death counts. Monthly cause-specific analyses use historical-average or negative-binomial baselines. For all-cause mortality, users supply observed deaths and an event calendar (for example COVID-19 waves or typhoons); the app fits one or more statistical baseline models (historical average, negative binomial regression, quasi-Poisson regression, zero-inflated Poisson regression, ARIMA (autoregressive integrated moving average) and SARIMA (seasonal ARIMA) models, GAM (generalized additive model) splines, and the model of Karlinsky and Kobak (2021) <doi:10.7554/eLife.69336>) using periods outside the supplied events, estimates expected deaths across the observed series, and reports excess deaths, P-scores (excess deaths as a percentage of expected deaths) and confidence limits with tables, plots and downloadable reports. Launch the application with run_app().

License GPL-3

Encoding UTF-8

Language en-GB

Imports base64enc, data.table, dplyr, DT, flextable, forecast, ggplot2, ggrepel, htmltools, ISOweek, jsonlite, kableExtra, knitr, lubridate, mgcv, openxlsx, parallel, plotly, reactable, readxl, RColorBrewer, reshape2, rmarkdown, scales, shiny, shinyalert, shinycssloaders, shinyjs, stringr, tibble, tidyr, withr, zoo

Suggests DSIR, officedown, testthat (>= 3.0.0), tinytex

Config/testthat/edition 3

SystemRequirements pandoc (>= 1.14) for report rendering; a LaTeX installation (for example TinyTeX) is required only for PDF reports.

VignetteBuilder knitr

URL https://github.com/shanlong-who/exmort,
https://shanlong-who.github.io/exmort/

BugReports https://github.com/shanlong-who/exmort/issues

Config/roxygen2/version 8.1.0

NeedsCompilation no

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Repository CRAN

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`run_app` *Launch the All-Cause and Excess Mortality Calculator*

Description

Starts the bundled 'shiny' application in your default web browser. The app runs entirely on your own machine and does not upload any data.

Usage

```
run_app(launch.browser = interactive(), ...)
```

Arguments

`launch.browser`	Logical; whether to open the app in a web browser. Defaults to `interactive()`.
`...`	Additional arguments passed on to `runApp` (for example `port` or `host`).

Details

The application is copied to a per-session temporary directory before it is launched, so it never writes into the (possibly read-only) package installation directory.

Value

Called for its side effect of running the Shiny application; invisibly returns `NULL` when the app is closed.

Examples

```
if (interactive()) {
  # Launch the calculator in your browser:
  run_app()
}
```

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