Package 'adarvmapsr'

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Title Interactive Epidemiological Spot Maps for India

Version 0.1.20

Description Build interactive spot maps for epidemiological case-control data in India. Supports automatic detection of latitude, longitude, and outcome columns, spatial joining with bundled state and district boundaries, and produces interactive 'HTML' maps with dot-density and spot-pin display modes. The bundled India state and district boundaries are sourced from the Survey of India and used under the Government Open Data License - India (GODL-India, <https://data.gov.in/government-open-data-license-india>).

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URL https://github.com/ADARV-Epi-hub/adarvmapsr

BugReports https://github.com/ADARV-Epi-hub/adarvmapsr/issues

Encoding UTF-8

Depends R (>= 4.1.0)

Imports sf, leaflet, htmltools, htmlwidgets, readr, readxl, stats, utils

Suggests testthat (>= 3.0.0), knitr, rmarkdown

Config/testthat/edition 3

Config/roxygen2/version 8.0.0

NeedsCompilation no

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Contents

adarvmapsr 2
detect_lat_lon 3
detect_outcome 4
load_data 4
run_interactive 5

Index **6**

`adarvmapsr` *Build an interactive epidemiological spot map for India*

Description

Build an interactive epidemiological spot map for India

Usage

```
adarvmapsr(
  data,
  state_shp = NULL,
  district_shp = NULL,
  lat_col = NULL,
  lon_col = NULL,
  outcome_col = NULL,
  case_value = NULL,
  all_cases = FALSE,
  count_cutoff = 2L,
  margin_deg = 1,
  cluster_color = "#E85252",
  case_color = "#D55757",
  control_color = "#7676E7",
  case_label = NULL,
  control_label = NULL,
  output = NULL
)

adarvmaps(...)
```

Arguments

`data`	Path to a CSV/Excel/TSV file, or a data.frame.
`state_shp`	Optional custom state boundary file path.
`district_shp`	Optional custom district boundary file path.
`lat_col`	Latitude column name. Auto-detected when NULL.
`lon_col`	Longitude column name. Auto-detected when NULL.

outcome_col	Outcome column name. Auto-detected when NULL.
case_value	Value representing a case. Auto-detected when NULL.
all_cases	If TRUE, skip outcome detection and treat every row as a case (no controls on the map). Useful for outbreak surveillance or case-only datasets that don't have a control group. Defaults to FALSE.
count_cutoff	District count threshold for zoom level (default 2).
margin_deg	Padding in degrees around bounding box (default 1.0).
cluster_color	Hex colour for dot-density clusters.
case_color	Hex colour for case pins.
control_color	Hex colour for control pins.
case_label	Word shown for the main group on the map (legend, pop-ups, menu). Defaults to the actual value from the grouping column (e.g. "Dead"). Pass a string only to override.
control_label	Word shown for the other group. Defaults to the other value in the grouping column when there is exactly one (e.g. "Alive"), otherwise "Others". Pass a string only to override.
output	Path to save the HTML file. If NULL, returns the leaflet widget.
...	Arguments passed on to adarvmapsr() (used by the adarvmaps() alias).

Value

A leaflet widget (invisibly if saved to file).

Examples

```
## Not run:
adarvmapsr("cases.csv", output = "map.html")

# Or with a data.frame
adarvmapsr(my_df, lat_col = "lat", lon_col = "lon",
         outcome_col = "status", case_value = "case")

## End(Not run)
```

---

detect_lat_lon *Detect latitude and longitude columns*

Description

Detect latitude and longitude columns

Usage

```
detect_lat_lon(df, lat_col = NULL, lon_col = NULL)
```

Arguments

df	A data.frame.
lat_col	Optional explicit latitude column name.
lon_col	Optional explicit longitude column name.

Value

A named list with elements lat (column name), lon (column name), and df (the data.frame; may have new .adarvmapsr_auto_lat/.adarvmapsr_auto_lon columns appended if a combined column was split).

---

detect_outcome *Detect the outcome column and case value*

Description

Detect the outcome column and case value

Usage

```
detect_outcome(df, outcome_col = NULL, case_value = NULL)
```

Arguments

df	A data.frame.
outcome_col	Optional explicit outcome column name.
case_value	Optional explicit value that represents a case.

Value

A named list with elements outcome_col and case_value.

---

load_data *Read a data file (CSV, Excel, or TSV) into a data frame*

Description

Read a data file (CSV, Excel, or TSV) into a data frame

Usage

```
load_data(path)
```

Arguments

path	Path to data file.

Value

A data.frame.

`run_interactive` *Run an interactive wizard to build a AdarvMaps*

Description

Guides users through choosing a data file, selecting columns, and generating the map step by step. Designed for users who prefer a guided experience.

Usage

```
run_interactive(output_path = .default_output())
```

Arguments

output_path	Where to save the HTML map. When omitted, defaults to a dated file like "adarvmaps_200926.html".

Value

Invisible NULL.

Index

adarvmaps *(adarvmapsr)*, 2
adarvmapsr, 2

detect_lat_lon, 3
detect_outcome, 4

load_data, 4

run_interactive, 5