Package 'covid19india'

October 12, 2022

Type Package

Title Pulling Clean Data from Covid19india.org

Version 0.1.4

Description Pull raw and pre-cleaned versions of national and state-level
COVID-19 time-series data from covid19india.org <https://www.covid19india.org>.
Easily obtain and merge case count data, testing data, and vaccine data.
Also assists in calculating the time-varying effective reproduction number
with sensible parameters for COVID-19.

URL https://github.com/maxsal/covid19india

BugReports https://github.com/maxsal/covid19india/issues

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Encoding UTF-8

LazyData true

RoxygenNote 7.1.2

Imports data.table (>= 1.14.1), EpiEstim, cli, gt, httr, glue,
janitor, scales, stringr, magrittr

Depends R (>= 3.6)

NeedsCompilation no

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Repository CRAN

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R topics documented:

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check_for_data_correction

Check for data corrections of X-times magnitude - data.table style

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Description

Check for data corrections of X-times magnitude - data.table style

Usage

```
check_for_data_correction(
  dat,
  var = "daily_cases",
  magnitude = 10,
  min_count = 10
)
```

Arguments

dat	data set
var	variable for which to check for corrections. Default is "daily_cases"
magnitude	magnitude of difference that qualifies as a data correction. Default is 10.
min_count	minimum count of var. Default is 10.

Value

Data set with data correction observations removed

Examples

```
## Not run:
check_for_data_correction(dat = get_nat_counts, var = "daily_cases", magnitude = 10)

## End(Not run)
```

`extract_latest`	*Helper function*

Description

Helper function

Usage

```
extract_latest(dat, group = place, clmns = c("total_tests", "tpr", "ppt"))
```

Arguments

`dat`	data set
`group`	place variable
`clmns`	columns to be extracted

Value

Data set of recent observations of selected variables

Examples

```
## Not run:
extract_latest(dat = get_all_data())

## End(Not run)
```

`get_all_data`	*Pull all covid19india count, test, and vaccine data for states and nation*

Description

Pull all covid19india count, test, and vaccine data for states and nation

Usage

```
get_all_data(keep_nat = TRUE, covind19_name_scheme = FALSE, corr_check = TRUE)
```

Arguments

`keep_nat`	Keep the national data as well. Default is FALSE
`covind19_name_scheme`	
	Variable naming scheme used for development of covind19.org application
`corr_check`	Check for data corrections of X-times magnitude. Default is TRUE

Value

Pulls the district-level time-series case, death, and recovered data directly from `covid19india.org`.

Examples

```
## Not run:
get_all_data()

## End(Not run)
```

---

get_cfr   *Calculate case_fataility rate*

Description

Calculate case_fataility rate

Usage

```
get_cfr(x)
```

Arguments

x   Input dataset. Expects `total_cases` and `total_deaths` variables

Value

Calculates a case-fatality rate estimate and corresponding 95% confidence interval

Examples

```
## Not run:
get_cfr(x = get_nat_counts())

## End(Not run)
```

---

get_district_counts *Pull covid19india district-level data*

Description

Pull covid19india district-level data

Usage

```
get_district_counts(
  path = "https://api.covid19india.org/csv/latest/districts.csv",
  raw = FALSE
)
```

Arguments

path	The URL path for the data. Default: `https://api.covid19india.org/csv/latest/districts.csv`
raw	Pull raw unaltered data. Default is `FALSE`

Value

Pulls the district-level time-series case, death, and recovered data directly from covid19india.org.

Examples

```
## Not run:
get_district_counts()

## End(Not run)
```

---

get_metrics_tables *Create metrics tables*

Description

Create metrics tables

Usage

```
get_metrics_tables(seed = 46342, top20 = NULL, corr_check = TRUE)
```

Arguments

seed	set seed
top20	Vector of state abbreviations for top 20 table
corr_check	Check for data corrections of X-times magnitude. Default is `TRUE`

Value

Creates metrics tables for use in covind19.org

Examples

```
## Not run:
tabs   <- get_metrics_tables()

tabs$full

## End(Not run)
```

---

get_nat_counts *Pull covid19india national time series data*

Description

Pull covid19india national time series data

Usage

```
get_nat_counts(
  path = "https://api.covid19india.org/csv/latest/case_time_series.csv",
  raw = FALSE,
  corr_check = FALSE
)
```

Arguments

path	The URL path for the data. Default: https://api.covid19india.org/csv/latest/case_time_series.csv
raw	Pull raw unaltered data. Default is FALSE
corr_check	Check for data correction. Default is FALSE

Value

Pulls the time-series case, death, and recovered data directly from covid19india.org.

Examples

```
## Not run:
get_nat_counts_dt()

## End(Not run)
```

get_nat_tests   *Pull covid19india national time series test data*

Description

Pull covid19india national time series test data

Usage

```
get_nat_tests(
 path = "https://data.covid19india.org/csv/latest/tested_numbers_icmr_data.csv",
  raw = FALSE
)
```

Arguments

path	The URL path for the data. Default: `https://api.covid19india.org/data.json`
raw	Pull raw unaltered data. Default is `FALSE`

Value

Pulls the time-series test data directly from covid19india.org.

Examples

```
## Not run:
get_nat_tests()

## End(Not run)
```

get_r0   *Calculate r0*

Description

Calculate r0

Usage

```
get_r0(
  dat,
  daily_filter = 0,
  total_filter = 50,
  min_date = "2020-03-23",
  corr_check = FALSE
)
```

Arguments

`dat`	Input dataset. Expects `daily_cases`, `total_cases`, and `place` columns
`daily_filter`	Threshold for minimum daily cases. Default = `0`.
`total_filter`	Threshold for minimum total cases reported to date. Default = 50.
`min_date`	Threshold for earliest date to report R_0. Default = `"2020-03-23"`.
`corr_check`	Check for data corrections of X-times magnitude. Default is `FALSE`

Value

Pulls the time-series state-level testing data directly from covid19india.org. Expects columns named `place`, `daily_cases`, and `total_cases`. Can specify corresponding variables through other arguments.

Examples

```
## Not run:
get_r0(dat = get_nat_counts())

## End(Not run)
```

---

get_r_est	*Helper function for pulling latest R estimates*

Description

Helper function for pulling latest R estimates

Usage

```
get_r_est(x)
```

Arguments

x	data set containing R estimates

Value

Pulls 7-day trailing average R estimates and 95% confidence intervals

Examples

```
## Not run:
get_r_est(x = get_all_data())

## End(Not run)
```

---

get_state_counts *Pull covid19india state*

Description

Pull covid19india state

Usage

```
get_state_counts(
  path = "https://api.covid19india.org/csv/latest/state_wise_daily.csv",
  raw = FALSE,
  keep_nat = FALSE,
  corr_check = FALSE
)
```

Arguments

path	The URL path for the data. Default: `https://api.covid19india.org/csv/latest/state_wise_dail`
raw	Pull raw unaltered data. Default is `FALSE`
keep_nat	Keep the national data as well. Default is `FALSE`
corr_check	Check for data correction. Default is `FALSE`

Value

Pulls the time-series case, death, and recovered data directly from covid19india.org.

Examples

```
## Not run:
get_state_counts()

## End(Not run)
```

---

get_state_tests *Pull covid19india state-level testing data*

Description

Pull covid19india state-level testing data

Usage

```
get_state_tests(
 path = "https://api.covid19india.org/csv/latest/statewise_tested_numbers_data.csv",
  raw = FALSE
)
```

Arguments

path	The URL path for the data. Default: https://api.covid19india.org/csv/latest/statewise_tested_numbers_dat
raw	Pull raw unaltered data. Default is FALSE

Value

Pulls the time-series state-level testing data directly from covid19india.org.

Examples

```
## Not run:
get_state_tests()

## End(Not run)
```

---

get_state_vax   *Pull covid19india state-level vaccine data*

Description

Pull covid19india state-level vaccine data

Usage

```
get_state_vax(
 path = "https://api.covid19india.org/csv/latest/vaccine_doses_statewise_v2.csv",
  raw = FALSE,
  keep_nat = TRUE
)
```

Arguments

path	The URL path for the data. Default: https://api.covid19india.org/csv/latest/vaccine_doses_statewise_v2.c
raw	Pull raw unaltered data. Default is FALSE
keep_nat	Keep national level data? Default is TRUE

Value

Pulls the time-series state-level vaccine data directly from covid19india.org.

Examples

```
## Not run:
get_state_vax()

## End(Not run)
```

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pop *List of places, abbreviations, and populations in India*

Description

This data set contains the names of states and union territories in India along with their respective abbreviations and populations. The population of India is also given. These are 2019 projections as reported in the Unique Identification Authority of India 2019-2020 Annual Report.

Usage

```
pop
```

Format

A data frame with 39 rows and 3 variables: place, abbrev, population

place The name of the place

abbrev The abbreviations corresponding to place

population The population size

References

2019-2020 Annual Report Annexure IV (pg 103), Unique Identification Authority of India https://uidai.gov.in/images/AADHAR_AR_2019_20_ENG_approved.pdf

Index