

Package: hubExamples (via r-universe)

August 26, 2024

Title Example Hub Data

Version 0.0.1

Description This package provides example data for forecasting and scenario modeling hubs in the hubverse format.

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Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.1

Suggests dplyr, ggplot2, hubVis, knitr, rmarkdown, testthat (>= 3.0.0)

Remotes hubverse-org/hubVis

Config/testthat/edition 3

URL <https://github.com/hubverse-org/hubExamples>

BugReports <https://github.com/hubverse-org/hubExamples/issues>

Config/Needs/website hubverse-org/hubStyle

Depends R (>= 2.10)

LazyData true

VignetteBuilder knitr

Repository <https://hubverse-org.r-universe.dev>

RemoteUrl <https://github.com/hubverse-org/hubExamples>

RemoteRef 0.0.1

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 forecast_data

Example forecast hub data

Description

The hubExamples package provides three data sets that contain example model output and target data for an example forecast hub: forecast_outputs, forecast_target_ts, and forecast_target_observations.

forecast_outputs contains example forecast data that represents model outputs from a forecast hub with predictions for three influenza-related targets (wk inc flu hosp, wk flu hops rate category, and wk flu hosp rate) for two reference dates in 2022. This dataset reflect forecast outputs as they look when retrieved from a hub via the hubData package (which is slightly different than they look when originally submitted by modelers).

forecast_target_ts contains time series target data from a hub that predicts influenza-related targets.

forecast_target_observations contains target data that represents the source of "truth" that model output data will be scored against. This example represents influenza-related targets.

Usage

forecast_outputs

forecast_target_ts

forecast_target_observations

Format

forecast_outputs:

A data frame with 5,424 rows and 9 columns:

location FIPS code identifying a location

reference_date the starting point of the forecast in yyyy-mm-dd format

horizon number of time units ahead being forecasted relative to the reference_date, in units of weeks

target_end_date the date of occurrence of the outcome of interest in yyyy-mm-dd format; this can be calculated directly from the reference_date and horizon as follows: target_end_date = reference_date + 7*horizon

target a unique identifier for the target

output_type the type of representation of the prediction

output_type_id more identifying information specific to the output type; output_type_id is not relevant for every kind of output_type (for example, hubs will not expect output_type_id values when the output_type is mean or median)

value the model's prediction

model_id the name of the model

forecast_target_ts:

A data frame with 10,255 rows and 3 columns:

date the date of the target observation in yyyy-mm-dd format

location FIPS code identifying a location

observation a count of hospital admissions in the given location in the week ending on the given date.

forecast_target_observations:

A data frame with 198,485 rows and 6 columns:

location FIPS code identifying a location

target_end_date the target's observation date in yyyy-mm-dd format; this is used to match on the target_end_date field in model output data submitted to the hub

target a unique identifier for the target

output_type the type of representation of the prediction

output_type_id more identifying information specific to the output type; as in the model output data, output_type_id is not relevant for output_type of mean and median; target data that represents quantile output_type will not have an output_type_id.

observation the observed value of the target

Source

<https://github.com/hubverse-org/example-complex-forecast-hub/>

scenario_data

Example scenario hub data

Description

The hubExamples package provides two data sets that contain example model output and target data for an example scenario hub: scenario_outputs and scenario_target_ts.

scenario_outputs contains example scenario projection data that represents model outputs and an ensemble from a scenario hub with predictions for one target (inc hosp) in one location ("US"), one round ("2021-03-07") and four scenarios. This dataset reflects scenario projection outputs as they look when retrieved from a hub via the hubData package (which is slightly different than they look when originally submitted by modelers), and with a "mean" ensemble calculated with the hubEnsemble package simple_ensemble() function with default parameters. The date of occurrence of the outcome of interest in yyyy-mm-dd format can be calculated directly from the origin_date and horizon as follows: target_end_date = origin_date + (7 * horizon) - 1

scenario_target_ts contains time series target data associated with the scenario projection data.

Usage

scenario_outputs

scenario_target_ts

Format

scenario_outputs:

A data frame with 7,176 rows and 9 columns:

model_id the name of the model

origin_date the starting point of the projection in yyyy-mm-dd format

scenario_id a unique identifier for the scenario

location FIPS code identifying a location

target a unique identifier for the target

horizon number of time units ahead being projected relative to the origin_date, in units of weeks

output_type the type of representation of the prediction; in this example, all values for the output_type are "quantile".

output_type_id more identifying information specific to the output type; here, the output_type_id specifies the probability level for the quantile prediction

value the model's prediction

scenario_target_ts:

A data frame with 127 rows and 3 columns:

location FIPS code identifying a location

date the date of the target observation in yyyy-mm-dd format

observation a count of incident cases in the given location in the week ending on the given date.

target a unique identifier for the target

Source

<https://github.com/hubverse-org/example-complex-scenario-hub/>

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