

# Package ‘shinyTempSignal’

January 22, 2024

**Title** Explore Temporal and Other Phylogenetic Signals

**Version** 0.0.6

## Description

Sequences sampled at different time points can be used to infer molecular phylogenies on natural time scales, but if the sequences records inaccurate sampling times, that are not the actual sampling times, then it will affect the molecular phylogenetic analysis. This shiny application helps exploring temporal characteristics of the evolutionary trees through linear regression analysis and with the ability to identify and remove incorrect labels. The method was extended to support exploring other phylogenetic signals under strict and relaxed models.

**License** GPL-3

**Depends** R (>= 3.3.0)

**Imports** ape, Cairo, config (>= 0.3.1), DescTools, forecast, ggplot2, ggprism, ggpubr, ggtree, golem (>= 0.3.1), shiny (>= 1.6.0), shinydashboard, shinyjs, stringr, treeio, ggpmisc

**Suggests** attempt, conflicted, glue, htmltools, knitr, prettydoc, processx, rmarkdown, testthat (>= 3.0.0), yulab.utils

**VignetteBuilder** knitr

**Encoding** UTF-8

**RoxygenNote** 7.3.0

**Config/testthat/edition** 3

**NeedsCompilation** no

**Author** Guangchuang Yu [aut, cre, cph]  
(<<https://orcid.org/0000-0002-6485-8781>>),  
Xiao Luo [ctb],  
Li Zhan [ctb],  
Xuanan Zhu [ctb],  
Jianfeng Lin [ctb]

**Maintainer** Guangchuang Yu <guangchuangyu@gmail.com>

**Repository** CRAN

**Date/Publication** 2024-01-22 08:40:02 UTC

## R topics documented:

dateNumeric . . . . .	2
MCC_FluA_H3_tree . . . . .	2
run_shinyTempSignal . . . . .	3

<b>Index</b>	<b>5</b>
--------------	----------

---

dateNumeric	<i>Convert dates according to date format</i>
-------------	---

---

### Description

Convert dates according to date format

### Usage

```
dateNumeric(date, format)
```

### Arguments

date	input a data extracted from labels, character
format	input format of the date, character

### Value

Returns a date of numeric type, numeric

### Examples

```
dateNumeric(date="1999-12-07", format="yyyy-MM-dd")
```

---

MCC_FluA_H3_tree	<i>Example data: a tree of 76 H3 hemagglutinin gene sequences of a lineage containing swine and human influenza A viruses</i>
------------------	---

---

### Description

This example data was reported on Liang et al. 2014

### Format

a tree with 76 sequences

**Value**

a tree, phylo

**Examples**

```
data(MCC_FluA_H3_tree)
```

---

run\_shinyTempSignal    *Run the Shiny Application*

---

**Description**

Run the Shiny Application

**Usage**

```
run_shinyTempSignal(  
  onStart = NULL,  
  options = list(),  
  enableBookmarking = NULL,  
  uiPattern = "/",  
  ...  
)
```

**Arguments**

- |                   |   |
|-------------------|---|
| onStart           | A function that will be called before the app is actually run. This is only needed for shinyAppObj, since in the shinyAppDir case, a global.R file can be used for this purpose.  |
| options           | Named options that should be passed to the runApp call (these can be any of the following: "port", "launch.browser", "host", "quiet", "display.mode" and "test.mode"). You can also specify width and height parameters which provide a hint to the embedding environment about the ideal height/width for the app. |
| enableBookmarking | Can be one of "url", "server", or "disable". The default value, NULL, will respect the setting from any previous calls to <a href="#">enableBookmarking()</a> . See <a href="#">enableBookmarking()</a> for more information on bookmarking your app.   |
| uiPattern         | A regular expression that will be applied to each GET request to determine whether the ui should be used to handle the request. Note that the entire request path must match the regular expression in order for the match to be considered successful.   |
| ...               | arguments to pass to golem_opts. See <code>'?golem::get_golem_opts'</code> for more details.  |

**Value**

Shiny application object

**Examples**

```
if (interactive()) {run_shinyTempSignal()}
```

# Index

## \* **data**

MCC\_FluA\_H3\_tree, [2](#)

dateNumeric, [2](#)

enableBookmarking(), [3](#)

MCC\_FluA\_H3\_tree, [2](#)

run\_shinyTempSignal, [3](#)