## Package 'swissdd'

May 15, 2020

Type Package

Title Get Swiss Federal and Cantonal Vote Results from Opendata.swiss

Version 1.0.3

Description Builds upon the real time data service as well as the archive for national votes <a href="https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-eidgenoessischen-abstimmungsvorlagen> and cantonal votes <a href="https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungstag-zu-kantonalen-abstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">https://opendata.swiss/api/3/action/package\_show?id=echtzeitdaten-amabstimmungsvorlagen>">h

**Imports** purrr, dplyr, tidyr (>= 1.0.0), jsonlite, magrittr, tibble, curl

URL https://github.com/politanch/swissdd

BugReports https://github.com/politanch/swissdd/issues

License GPL-2

**Encoding** UTF-8

LazyData true

RoxygenNote 6.1.1

NeedsCompilation no

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Repository CRAN

**Date/Publication** 2020-05-15 14:30:02 UTC

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available\_votedates

Get a vector of available vote dates via 'get\_nationalvotes' and 'get\_cantonalvotes"

## Description

available\_votedates is a utility function to get the available votedates.

## Usage

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```
available_votedates(geolevel = "national")
```

## **Arguments**

geolevel

geographical level for which available votedates should be displayed. options "national" or "canton"

## **Details**

available\_votedates - get available votedates of federal and cantonal popular votes

#### Value

```
a vector of votedates (Format: YYYY-MM-DD)
```

```
# Get vector of all available dates
federal_votedates <- available_votedates()
cantonal_votedates <- available_votedates(geolevel="canton")</pre>
```

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canton_json_to_dfr	Transform a opendata.swiss cantonal results json into a tibble	

## **Description**

canton\_json\_to\_dfr Tranforms a single results json for a selected cantonal votedate into a tibble.

#### Usage

```
canton_json_to_dfr(votedate = NULL, geolevel = "municipality",
  dataurl = NULL, index = NULL)
```

#### **Arguments**

votedate date of the ballot. Default: most recent ballot available.

geolevel geographical level for which the results should be loaded. options."canton", "district"

or "municipality"

dataurl list of datasets / metadata for the given dataset and its resources OR url of the

dcat dataset on opendata.swiss

index selection by index of the resource (last published = 1).

#### Value

a tibble containing the results

## **Examples**

```
# get and transform the json for the most recent vote
results <- canton_json_to_dfr()

# get and transform the json for a single votedate at counting district level
canton_json_to_dfr(votedate="2020-02-09",geolevel = "zh_counting_districts")</pre>
```

get\_cantonalvotes Get national results and counting status in real time or for selected dates or a time range in the past

#### **Description**

get\_cantonalsvotes is one of the two main functions of swissvote package. It allows to retrieve the results and the counting status for national ballots.

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#### Usage

```
get_cantonalvotes(geolevel = "municipality", votedates = NULL,
  from_date = NULL, to_date = NULL)
```

## **Arguments**

geolevel	geographical level for which the results should be loaded. options: "canton", "district", "municipality" or "zh_counting_districts"
votedates	dates of the ballots to be selected. Default: most recent ballot available. Format = "YYYY-MM-DD"
from_date	starting point in time from which vote-results should be retrived. Format = "YYYY-MM-DD"
to_date	end point in time to which vote-results should be retrived. Format = "YYYY-MM-DD"

#### **Details**

get\_cantonalvotes - retrieve vote results for cantonal ballots at district- or municipality level for selected dates or a given date range.

## Value

a tibble containing the results

```
# select by range
results <- get_cantonalvotes(geolevel="district",from_date = "2019-01-01",to_date="2019-12-31")
# select specific votedate(s)
get_cantonalvotes(votedates="2019-02-10")
# get the results at counting district level
# yields the same result as the municipality level, with the
# exception of Winterthur and Zurich,
# where detailed counting district results are returned instead.
get_cantonalvotes(votedate="2019-09-22",geolevel = "zh_counting_districts")</pre>
```

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get_nationalvotes	Get national results and counting status in real time or for selected dates or a time range in the past

## **Description**

get\_nationalvotes is one of the two main functions of swissvote package. It allows to retrieve the results and the counting status for national ballots.

### Usage

```
get_nationalvotes(geolevel = "municipality", votedates = NULL,
  from_date = NULL, to_date = NULL)
```

## **Arguments**

geolevel	geographical level for which the results should be loaded. options: "national", "canton", "district", "municipality" or "zh_counting_districts"
votedates	dates of the ballots to be selected. Default: most recent ballot available. Format = "YYYY-MM-DD"
from_date	starting point in time from which vote-results should be retrived. Format = "YYYY-MM-DD"
to_date	end point in time to which vote-results should be retrived. Format = "YYYY-MM-DD"

### **Details**

get\_nationalvotes - retrieve vote results for national ballots at district- or municipality level for selected dates or a given date range.

## Value

a tibble containing the results

```
# Selection by enddate only
get_nationalvotes(to_date="1983-12-04")

# Selection of a specific votedate
get_nationalvotes(votedates="2014-02-09")
```

get\_swissvotes

get_swissvotes	Download additional data collected by annee politique suisse (the complete SwissVotes-Database)
	complete simustroles suitable)

## Description

get\_swissvotes downloads additional data collected by annee politique suisse. It allows for completely downloading their database. Please cite data.

## Usage

```
get_swissvotes(DB = T, savecitation = F, codebook = F)
```

## Arguments

DB get database

savecitation by default = FALSE. Saves the citation within a .txt file in the working directory

if TRUE.

codebook by default = FALSE. If TRUE navigates your browser to the codebook.

#### **Details**

get\_swissvotes - retrieve data on votes. The unit of analysis are votes.

#### Value

a tibble containing the results

```
# See codebook only
  get_swissvotes(codebook=FALSE)
```

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*Obtain similarities a vote result shares with other votes* 

## Description

similar\_votes allows to obtain correlations of specified vote with other votes.

## Usage

```
similar_votes(federalvotes = NULL, id = NULL, corr = TRUE,
  from = NULL, to = NULL)
```

## **Arguments**

federalvotes	tibble or data.frame that is returned by 'get_swissvotes'.
id	identification number of the vote, needs four digits. Vote 626 (Zersiedelungsinitiative) needs $6260$ .
corr	set to TRUE by default. If FALSE return the variance-covariance matrix.
from	lower limit of correlations.
to	upper limit of correlations.

## Value

a tibble containing the results

```
fedvotes <- get_nationalvotes(geolevel = "canton", from_date = "2010-03-07", to_date="2019-02-10")
#Find correlating votes for the 'Zersiedelungsinitiative', 2019-02-10
results <- similar_votes(fedvotes, id=6260)

#Zersiedelungsinitiative, 2019-02-10, filter stronger correlations (>0.5)
results <- similar_votes(fedvotes, id=6260, from = 0.5)</pre>
```

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swiss\_json\_to\_dfr

Transform a opendata.swiss national results json into a tibble

## **Description**

swiss\_json\_to\_dfr Transforms the json containing the results of a selected federal votedate into a tibble.

#### Usage

```
swiss_json_to_dfr(votedate = NULL, geolevel = "municipality",
  dataurl = NULL, index = NULL)
```

## **Arguments**

votedate date of the ballot. Default: most recent ballot available. To select multiple

ballots use the 'get\_swissvotes'-function. Format = YYYYMMDD

geolevel geographical level for which the results should be loaded. options "national",

"canton", "district" or "municipality"

dataurl url of the dataset on opendata-swiss

index selection by index of the resource (last published = 1).

#### Value

a tibble containing the results

```
# transform the json of the most recent vote
results <- swiss_json_to_dfr()

# transform the json of a selected votedate
swiss_json_to_dfr(votedate = "2019-02-10")</pre>
```

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