# Package 'fitzRoy'

January 10, 2022

```
Title Easily Scrape and Process AFL Data
Version 1.1.0
Description An easy package for scraping and processing Australia Rules Football (AFL)
               data. 'fitzRoy' provides a range of functions for accessing publicly available data
               from 'AFL Tables' <a href="https://afltables.com/afl/afl_index.html">https://afltables.com/afl/afl_index.html</a>, 'Footy Wire' <a href="https://afltables.com/afl/afl_index.html">https://afltables.com/afl/afl_index.html</a>, 'Footy Wire' <a href="https://afltables.com/afl/afl_index.html">https://afltables.com/afl/afl_index.html</a>, 'Footy Wire' <a href="https://afltables.com/afl/afl_index.html">https://afltables.com/afl/afl_index.html</a>, 'Footy Wire' <a href="https://afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afltables.com/afl
               //www.footywire.com> and
               'The Squiggle' <a href="https://squiggle.com.au">https://squiggle.com.au</a>. Further functions allow for easy processing,
               cleaning and transformation of this data into formats that can be used for analysis.
License GPL-3
URL https://jimmyday12.github.io/fitzRoy/,
               https://github.com/jimmyday12/fitzRoy
BugReports https://github.com/jimmyday12/fitzRoy/issues
Depends R (>= 3.5)
Imports dplyr, httr, jsonlite, lubridate, magrittr, purrr, readr,
               rlang (>= 0.1.2), rvest, stringr (>= 1.3.0), tidyr (>= 1.0.0),
               tidyselect, xml2, tibble, progress, glue, cli
Suggests covr, ggplot2, knitr, rmarkdown, testthat, roxygen2,
               spelling, curl
VignetteBuilder knitr
ByteCompile true
Encoding UTF-8
RoxygenNote 7.1.1
Language en-GB
Config/testthat/edition 3
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# **R** topics documented:

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```
calculate_coaches_vote_possibilities

Calculate Coaches Vote Possibilities
```

## Description

calculate\_coaches\_vote\_possibilities returns all possible breakdowns of coaches votes between two coaches, given a breakdown of AFLCA coaches votes

## Usage

```
calculate_coaches_vote_possibilities(df, output_type)
```

## **Arguments**

df Requires the following column names: Player.Name, Coaches.Votes. These can be returned from the function fetch\_coaches\_votes.

output\_type One of "Coach View", "Player View". Defaults to "Coach View".

#### Value

For output\_type "Coach View" - A list of data frames with columns: Votes, C1, C2 For output\_type "Player View" - A list of data frames with columns: Player, V1, V2

```
## Not run:
# Return coaches votes for a particular match, then find the possibilities
df <- fetch_coaches_votes(comp = "AFLM", season = 2021, round = 24, team = "Western Bulldogs")
calculate_coaches_vote_possibilities(df, "Coach View")
df <- fetch_coaches_votes(comp = "AFLW", season = 2021, round = 9, team = "Western Bulldogs")</pre>
calculate_coaches_vote_possibilities(df, "Player View")
# Create a manual data frame to calculate possibilities
df <- data.frame(</pre>
  Player.Name = c(
    "Tom Liberatore", "Jack Macrae",
    "Marcus Bontempelli", "Cody Weightman",
    "Darcy Parish", "Aaron Naughton", "Jordan Ridley"
  ),
  Coaches. Votes = c(7, 6, 5, 5, 4, 2, 1)
)
calculate_coaches_vote_possibilities(df, "Player View")
## End(Not run)
```

```
fetch_betting_odds_footywire
```

Fetch AFL match betting odds from https://www.footywire.com

## Description

fetch\_betting\_odds\_footywire returns a data frame containing betting odds and basic match info for Men's AFL matches.

## Usage

```
fetch_betting_odds_footywire(
  start_season = "2010",
  end_season = lubridate::year(Sys.Date())
)
```

#### **Arguments**

start\_season First season to return, in yyyy format. Earliest season with data available is

2010.

end\_season Last season to return, in yyyy format

#### **Details**

The data frame contains the home and away team as well as venue.

#### Value

Returns a data frame containing betting odds and basic match info

```
## Not run:
fetch_betting_odds_footywire(2012, 2018)
## End(Not run)
```

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fetch\_coaches\_votes Fetch Coaches Votes

#### **Description**

fetch\_coaches\_votes returns all coaches votes for input season/s, round/s, and/or team's matches. The function calls a core scrape\_coaches\_votes function which scrapes the AFLCA website for coaches votes for a particular season, round and competition.

#### Usage

```
fetch_coaches_votes(
  season = NULL,
  round_number = NULL,
  comp = "AFLM",
  team = NULL
)
```

#### **Arguments**

season Season in YYYY format. This can be an array of seasons. Defaults to null in

which case the season that matches Sys.Date() is used.

round\_number Round number. For finals this is the number of H&A rounds plus the Finals

week. Defaults to null in which case all rounds are used.

comp One of "AFLM" (default) or "AFLW"

team Team or teams whose matches should be retrieved. Defaults to null in which

case all teams are used.

#### Value

A data frame with columns: Season, Round, Finals, Home. Team, Away. Team, Player. Name, Coaches. Votes

```
## Not run:
# Return all coaches votes across all seasons
fetch_coaches_votes(season = 2007:2021, comp = "AFLM")
fetch_coaches_votes(season = 2018:2021, comp = "AFLW")

# Return all coaches votes for a particular round
fetch_coaches_votes(season = 2021, round_number = 24, comp = "AFLM")
fetch_coaches_votes(season = 2021, round_number = 9, comp = "AFLW")

# Return all coaches votes for a particular team
fetch_coaches_votes(season = 2021, comp = "AFLM", team = "Western Bulldogs")
fetch_coaches_votes(season = 2021, comp = "AFLW", team = "Western Bulldogs")
# Return all coaches votes for a particular match
```

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```
fetch_coaches_votes(season = 2021, round_number = 24, comp = "AFLM", team = "Western Bulldogs")
fetch_coaches_votes(season = 2021, round_number = 9, comp = "AFLW", team = "Western Bulldogs")
## End(Not run)
```

fetch\_fixture

Return the fixture for a particular round of matches

#### **Description**

fetch\_fixture returns the Fixture for a given AFL Round. Internally, it calls a corresponding fetch\_fixture\_\* function that depends on the source given. By default the source used will be the official AFL website.

fetch\_fixture\_afl(), fetch\_fixture\_footywire(), fetch\_fixture\_squiggle() can be called directly and return data from AFL website, AFL Tables and Squiggle, respectively.

#### Usage

```
fetch_fixture(
    season = NULL,
    round_number = NULL,
    comp = "AFLM",
    source = "AFL",
    ...
)

fetch_fixture_afl(season = NULL, round_number = NULL, comp = "AFLM")

fetch_fixture_footywire(
    season = NULL,
    round_number = NULL,
    convert_date = FALSE
)

fetch_fixture_squiggle(season = NULL, round_number = NULL)
```

#### **Arguments**

season	Season in YYYY format, defaults to NULL which returns the year corresponding the Sys.Date()
round_number	Round number, defaults to NULL which returns latest round
comp	One of "AFLM" (default) or "AFLW"

Source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"

Optional parameters passed onto various functions depending on source.

convert\_date logical, if TRUE, converts date column to date format instead of date time.

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#### Value

A Tibble with the fixture from the relevant season and round.

#### See Also

- fetch\_fixture\_afl for official AFL data.
- fetch\_fixture\_footywire for AFL Tables data.
- fetch\_fixture\_squiggle for Squiggle data.

Other fetch fixture functions: fetch\_player\_stats()

## **Examples**

```
## Not run:
# Return data for whole season from AFL Website
fetch_fixture(2020)
# This is equivalent to
fetch_fixture(2020, source = "AFL")
fetch_fixture_afl(2020)
# Return AFLW data
fetch_fixture(2020, comp = "AFLW", source = "AFL")
fetch_fixture_afl(2020, comp = "AFLW")
# Not all sources have AFLW data and will return a warning
fetch_fixture(2020, comp = "AFLW", source = "footywire")
fetch_fixture(2020, comp = "AFLW", source = "squiggle")
# Different sources
fetch_fixture(2015, round = 5, source = "footywire")
fetch_fixture(2015, round = 5, source = "squiggle")
# Directly call functions for each source
fetch_fixture_afl(2018, round = 9)
fetch_fixture_footywire(2018, round = 9)
fetch_fixture_squiggle(2018, round = 9)
## End(Not run)
```

fetch\_ladder

Fetch Ladder

#### **Description**

fetch\_ladder returns the Ladder for a given AFL Round. Internally, it calls a corresponding fetch\_ladder\_\* function that depends on the source given. By default the source used will be the official AFL website.

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fetch\_ladder\_afl(), fetch\_ladder\_afltables(), fetch\_ladder\_squiggle() can be called directly and return data from AFL website, AFL Tables and Squiggle, respectively.

## Usage

```
fetch_ladder(
    season = NULL,
    round_number = NULL,
    comp = "AFLM",
    source = "AFL",
    ...
)

fetch_ladder_afl(season = NULL, round_number = NULL, comp = "AFLM")

fetch_ladder_afltables(
    season = NULL,
    round_number = NULL,
    match_results_df = NULL
)

fetch_ladder_squiggle(season = NULL, round_number = NULL)
```

#### **Arguments**

round_number Round number, defaults to NULL which returns latest round  comp One of "AFLM" (default) or "AFLW"  source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"  Optional parameters passed onto various functions depending on source.  match_results_df  (optional) A dataframe from fetch_results_afltables(), provide this to pre-	season	Season in YYYY format, defaults to NULL which returns the year corresponding the Sys.Date()	
source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle" Optional parameters passed onto various functions depending on source. match_results_df	round_number	Round number, defaults to NULL which returns latest round	
Optional parameters passed onto various functions depending on source.  match_results_df	comp	One of "AFLM" (default) or "AFLW"	
match_results_df	source	One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"	
		Optional parameters passed onto various functions depending on source.	
(optional) A dataframe from fetch_results_afltables(), provide this to pre-	match_results_df		
		$(optional)Adata framefrom {\tt fetch\_results\_afltables()}, provide this to pre- {\tt results\_afltables()}, provide this to $	

## Value

A Tibble with the ladder from the relevant season and round.

vent having to download results again.

#### See Also

- fetch\_ladder\_afl for official AFL data.
- fetch\_ladder\_afltables for AFL Tables data.
- fetch\_ladder\_squiggle for Squiggle data.

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#### **Examples**

```
## Not run:
# Return data from AFL Website
fetch_ladder(2020, round = 1)
# This is equivalent to
fetch_ladder(2020, round = 1, source = "AFL")
fetch_ladder_afl(2020, round = 1)
# Return AFLW data
fetch_ladder(2020, round = 1, comp = "AFLW", source = "AFL")
fetch_ladder_afl(2020, round = 1, comp = "AFLW")
# Not all sources have AFLW data and will return a warning
fetch_ladder(2020, round = 1, comp = "AFLW", source = "afltables")
fetch_ladder(2020, round = 1, comp = "AFLW", source = "squiggle")
# Different sources
fetch_ladder(2015, round = 5, source = "afltables")
fetch_ladder(2015, round = 5, source = "squiggle")
# Directly call functions for each source
fetch_ladder_afl(2018, round = 9)
fetch_ladder_afltables(2018, round = 9)
fetch_ladder_squiggle(2018, round = 9)
## End(Not run)
```

fetch\_lineup

Return the selected lineup for any completed or upcoming matches

#### **Description**

fetch\_lineup returns the Lineup for matches in given AFL Round. Internally, it calls a corresponding fetch\_lineup\_\* function that depends on the source given. By default the source used will be the official AFL website.

fetch\_lineup\_afl() can be called directly and return data from AFL website.

#### Usage

```
fetch_lineup(
   season = NULL,
   round_number = NULL,
   comp = "AFLM",
   source = "AFL",
   ...
)

fetch_lineup_afl(season = NULL, round_number = NULL, comp = "AFLM")
```

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#### **Arguments**

season Season in YYYY format, defaults to NULL which returns the year correspond-

ing the Sys.Date()

round\_number Round number, defaults to NULL which returns latest round

comp One of "AFLM" (default) or "AFLW"

source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"

. . . Optional parameters passed onto various functions depending on source.

#### Value

A Tibble with the lineup from the relevant season and round.

#### See Also

• fetch\_lineup\_afl for official AFL data.

```
## Not run:
# Return data for whole season from AFL Website
fetch_lineup(2020)

# This is equivalent to
fetch_lineup(2020, source = "AFL")
fetch_lineup_afl(2020)

# Return AFLW data
fetch_lineup(2020, comp = "AFLW", source = "AFL")
fetch_lineup_afl(2020, comp = "AFLW")

# Not all sources have lineup data and will return a warning
fetch_lineup(2020, source = "footywire")
fetch_lineup(2020, source = "squiggle")

# Directly call functions for each source
fetch_lineup_afl(2018, round = 9)

## End(Not run)
```

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#### **Description**

fetch\_player\_details returns player details such as date of birth, debut and other details. The exact details that are returned will depend on which source is provided.

By default the source used will be the official AFL website.

fetch\_player\_details\_afl(), fetch\_player\_details\_afltables() and fetch\_player\_details\_footywire() can be called directly and return data from the AFL website, AFL Tables and Footywire respectively.

The function will typically be used to return the current team lists. For historical data, you can use the current argument set to FALSE. This will return all historical data for AFL.com and Footywire data. AFLTables data will always return historical data.

#### Usage

```
fetch_player_details(
  team = NULL,
  current = TRUE,
  comp = "AFLM",
  source = "AFL",
  ...
)

fetch_player_details_afl(season, team = NULL, comp = "AFLM")

fetch_player_details_afltables(team = NULL)

fetch_player_details_footywire(team, current = TRUE)
```

#### **Arguments**

team	team the player played for in the season for, defaults to NULL which returns all teams
current	logical, return the current team list for the current calendar year or all historical data
comp	One of "AFLM" (default) or "AFLW"
source	One of "AFL" (default), "footywire", "afltables"
	Optional parameters passed onto various functions depending on source.
season	Season in YYYY format

#### Value

A Tibble with the details of the relevant players.

#### See Also

- fetch\_player\_details\_afl for AFL.com data.
- fetch\_player\_details\_footywire for Footywire data.
- fetch\_player\_details\_footywire for AFL Tables data.

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#### **Examples**

```
## Not run:
# Return data for current Hawthorn players
fetch_player_details("Hawthorn")
fetch_player_details("Adelaide", current = FALSE, comp = "AFLW")
fetch_player_details("GWS", current = TRUE, csource = "footywire")
## End(Not run)
```

fetch\_player\_stats

Fetch Player Stats

#### **Description**

fetch\_player\_stats returns the Individual Player Statistics for AFL games. Internally, it calls a corresponding fetch\_player\_stats\_\* function that depends on the source given. By default the source used will be the official AFL website.

fetch\_player\_stats\_footywire(), fetch\_player\_stats\_afltables(), fetch\_player\_stats\_fryzigg() can be called directly and return data from AFL website, AFL Tables and Squiggle, respectively.

#### Usage

```
fetch_player_stats(
    season = NULL,
    round_number = NULL,
    comp = "AFLM",
    source = "AFL",
    ...
)

fetch_player_stats_afl(season = NULL, round_number = NULL, comp = "AFLM")

fetch_player_stats_afltables(season = NULL, round_number = NULL)

fetch_player_stats_fryzigg(season = NULL, round_number = NULL, comp = "AFLM")

fetch_player_stats_footywire(
    season = NULL,
    round_number = NULL,
    check_existing = TRUE
)
```

#### Arguments

season

Season in YYYY format, defaults to NULL which returns the year corresponding the Sys.Date()

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round\_number Round number, defaults to NULL which returns latest round

comp One of "AFLM" (default) or "AFLW"

source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"

... Optional parameters passed onto various functions depending on source.

check\_existing logical, should we check existing data. This will likely be removed in future version as it takes a long time to re-scrape data

#### Value

A Tibble with the player stats from the relevant season and round.

#### See Also

- fetch\_player\_stats\_footywire for Footywire data.
- fetch\_player\_stats\_afltables for AFL Tables data.
- fetch\_player\_stats\_fryzigg for Fryzigg data.

Other fetch fixture functions: fetch\_fixture()

```
## Not run:
# Return data for whole season from footywire
fetch_player_stats(source = "footywire")

# This is equivalent to
fetch_player_stats_footywire()

# Currently there is no AFLW data and will return a warning
fetch_player_stats(2020, comp = "AFLW", source = "footywire")

# Different sources
fetch_player_stats(2015, round = 5, source = "footywire")
fetch_player_stats(2015, round = 5, source = "fryzigg")

# Directly call functions for each source
fetch_player_stats_afltables(2020)
fetch_fixture_fryzigg(2020)
fetch_player_stats_footywire(2020)

## End(Not run)
```

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fetch\_results Fetch Results

#### **Description**

fetch\_results returns the results for a given AFL Round. Internally, it calls a corresponding fetch\_results\_\* function that depends on the source given. By default the source used will be the official AFL website.

fetch\_results\_afl(), fetch\_results\_afltables(), fetch\_results\_footywire(), fetch\_results\_squiggle() can be called directly and return data from AFL website, AFL Tables, Footywire and Squiggle, respectively.

#### Usage

```
fetch_results(
    season = NULL,
    round_number = NULL,
    comp = "AFLM",
    source = "AFL",
    ...
)

fetch_results_afl(season = NULL, round_number = NULL, comp = "AFLM")

fetch_results_afltables(season = NULL, round_number = NULL)

fetch_results_footywire(
    season = NULL,
    round_number = NULL,
    last_n_matches = NULL
)

fetch_results_squiggle(season = NULL, round_number = NULL)
```

## Arguments

season Season in YYYY format, defaults to NULL which returns the year correspond-
---

ing the Sys.Date()

round\_number Round number, defaults to NULL which returns latest round

comp One of "AFLM" (default) or "AFLW"

source One of "AFL" (default), "footywire", "fryzigg", "afltables", "squiggle"
... Optional parameters passed onto various functions depending on source.

last\_n\_matches number of matches to return, starting from the most recent

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#### Value

A Tibble with the results from the relevant season and round.

#### See Also

- fetch\_results\_afl for official AFL data.
- fetch\_results\_afltables for AFL Tables data.
- fetch\_results\_footywire for Footywire data.
- fetch\_results\_squiggle for Squiggle data.

#### **Examples**

```
## Not run:
# Return data for whole season from AFL Website
fetch_results(2020)
# This is equivalent to
fetch_results(2020, source = "AFL")
fetch_results_afl(2020)
# Return AFLW data
fetch_results(2020, comp = "AFLW", source = "AFL")
fetch_results_afl(2020, comp = "AFLW")
# Not all sources have AFLW data and will return a warning
fetch_results(2020, comp = "AFLW", source = "footywire")
fetch_results(2020, comp = "AFLW", source = "afltables")
fetch_results(2020, comp = "AFLW", source = "squiggle")
# Different sources
fetch_results(2015, round = 5, source = "footywire")
fetch_results(2015, round = 5, source = "afltables")
fetch_results(2015, round = 5, source = "squiggle")
# Directly call functions for each source
fetch_results_afl(2018, round = 9)
fetch_results_footywire(2018, round = 9)
fetch_results_afltables(2018, round = 9)
fetch_results_squiggle(2018, round = 9)
## End(Not run)
```

#### **Description**

Use fetch\_squiggle\_data to access the Squiggle API. See instructions at api.squiggle.com.au.

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#### Usage

#### Arguments

query A text string. The main query to use with the API. Must be one of sources, games, tips, ladder or standings
 ... (optional) An optional argument provided to the Squiggle API. See details for more info.

#### **Details**

The optional arguments to squiggle can be one of the following.

#

- year: an integer specifying the year to return data from, e.g. year = 2018
- round: an integer specifying the round to return data from, e.g. round = 12
- game: an integer specifying the game ID to return data from, e.g. game = 10
- source: an integer specifying the ID of the source to return data from, e.g. source = 1

For full instructions, see api.squiggle.com.au

#### Value

A dataframe, with the resultant data that matches the query specified in query, as well as any optional filters.

```
## Not run:
# Return a list of the sources, with ID's
sources <- get_squiggle_data("sources")

# Get tips for Round 1, 2018
tips <- get_squiggle_data(query = "tips", round = 1, year = 2018)

# Get tips from Squiggle 2019
squiggle <- get_squiggle_data(query = "tips", source = 1, year = 2019)

## End(Not run)</pre>
```

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```
get_afltables_stats
Return afltables match stats
```

#### **Description**

get\_afltables\_stats returns a data frame containing match stats for each game within the specified date range

## Usage

```
get_afltables_stats(start_date = "1897-01-01", end_date = Sys.Date())
```

#### **Arguments**

```
start_date character string for start date return to URLs from, in "dmy" or "ymd" format end_date optional, character string for end date to return URLS, in "dmy" or "ymd" format
```

#### **Details**

This function returns a data frame containing match stats for each game within the specified date range. The data from contains all stats on afltables match pages and returns 1 row per player.

The data for this function is hosted on github to avoid extensive scraping of historical data from afltables.com. This will be updated regularly.

## Value

a data table containing player stats for each game between start date and end date

```
#
## Not run:
# Gets all data
get_afltables_stats()
# Specify a date range
get_afltables_stats("01/01/2018", end_date = "01/04/2018")
## End(Not run)
```

get\_aflw\_cookie

Get AFL Stats cookie (internal function)

#### **Description**

Gets a cookie from http://www.afl.com.au/womens/matches/stats to authenticate further requests.

#### Usage

```
get_aflw_cookie()
```

#### Value

token code

#### **Examples**

```
## Not run:
cookie <- get_aflw_cookie()
## End(Not run)</pre>
```

```
get_aflw_detailed_data
```

Get detailed AFLW data

## Description

Get detailed AFLW data

## Usage

```
get_aflw_detailed_data(matchids)
```

## Arguments

matchids

vector of match IDs, like those returned by get\_aflw\_match\_data()

#### Value

Dataframe with detailed match data. Each row is a match.

```
## Not run:
get_aflw_detailed_data(c("CD_M20172640101", "CD_M20172640102"))
## End(Not run)
```

```
get_aflw_detailed_match_data
```

Get detailed womens match data (internal function)

#### **Description**

Gets detailed match data for a given match. Requires the match, round, and competition IDs, which are given in the tables produced by get\_aflw\_round\_data()

#### Usage

```
get_aflw_detailed_match_data(matchid, roundid, competitionid, cookie)
```

#### **Arguments**

```
matchid matchid from get_match_data()
roundid roundid from get_match_data()
competitionid competitionid from get_match_data()
cookie cookie from get_womens_cookie()
```

#### Value

Dataframe with detailed match data (wide)

#### **Examples**

```
## Not run:
get_aflw_detailed_match_data(
    "CD_M20172640101",
    "CD_R201726401", "CD_S2017264", get_aflw_cookie()
)
## End(Not run)
```

```
get_aflw_match_data
Get AFLW match data
```

#### Description

Retrieves AFLW match data for all available matches. Sources data from <a href="https://www.womens.afl/">https://www.womens.afl/</a>

#### Usage

```
get_aflw_match_data(start_year = 2017)
```

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#### **Arguments**

```
start_year optional, integer for start year to return match data onwards from
```

#### Value

a data frame of data for all available AFLW matches

#### **Examples**

```
## Not run:
# All data
get_aflw_match_data()

# 2018 data onward
get_aflw_match_data(start_year = 2018)
## End(Not run)
```

get\_aflw\_player\_stats Return get match stats for all current AFLW matches

#### Description

get\_aflw\_player\_stats returns a data frame containing match stats for each game within the specified date range

## Usage

```
get_aflw_player_stats(
   start = 2017,
   end = as.numeric(format(Sys.Date(), "%Y"))
)
```

#### **Arguments**

start optional, character string or numeric for start year, in "YYYY" format optional, character string or numeric for end year, in "YYYY" format

#### **Details**

This function returns a data frame containing match stats for each game within the specified date range. Returns 1 row per player.

The date for this function is called from an API with data stored in a PostgreSQL database on AWS. Updated at the conclusion of every game. A cached version to come.

#### Value

a data table containing player stats for each game between start and end years

get\_aflw\_rounds 21

## **Examples**

```
# ## Not run:
# Gets all data
get_aflw_player_stats()
# Specify a date range
get_aflw_player_stats(start = 2018, end = 2019)
## End(Not run)
```

get\_aflw\_rounds

Get rounds (internal function)

## Description

Returns data frame for available round data. Includes the rounds played, as well as identifiers to make further requests, importantly the roundId.

## Usage

```
get_aflw_rounds(cookie)
```

#### **Arguments**

cookie

a cookie produced by get\_aflw\_cookie()

#### Value

A dataframe with information about each round

```
## Not run:
get_aflw_rounds(get_aflw_cookie())
## End(Not run)
```

## **Description**

For a given round ID, get the data for each match played in that round. Use the column roundId in the dataframe created by the get\_rounds() function to specify matches to fetch.

#### Usage

```
get_aflw_round_data(roundid, cookie)
```

## **Arguments**

roundid a round ID string

cookie a cookie produced by get\_womens\_cookie()

#### Value

a dataframe containing match data

#### **Examples**

```
## Not run:
get_aflw_round_data("CD_R201826401", get_aflw_cookie())
## End(Not run)
```

```
get_afl_colour_palettes
```

Returns a table with the colour palettes for all teams

#### **Description**

get\_afl\_colour\_palettes returns a data frame containing the AFL team's primary, secondary and tertiary colours as applicable The data for this function is hosted on github.

## Usage

```
get_afl_colour_palettes()
```

#### Value

a data table containing team long name, team abbreviation, and colours

get\_afl\_cookie 23

#### **Examples**

```
## Not run:
# Gets all data
get_afl_colour_palettes()
## End(Not run)
```

get\_afl\_cookie

Get AFL Stats cookie (internal function)

## Description

Gets a cookie from http://www.afl.com.au/ to authenticate further requests.

#### Usage

```
get_afl_cookie()
```

#### Value

token code

## **Examples**

```
## Not run:
cookie <- get_afl_cookie()
## End(Not run)</pre>
```

get\_afl\_fixture

Get AFL fixture

## **Description**

Returns the Fixture for the relevant Season and Round from the AFL.com.au website.

#### Usage

```
get_afl_fixture(season = NULL, round_number = NULL, comp = "AFLM")
```

## Arguments

season in YYYY format

round\_number round number

comp One of "AFLM" or "AFLW"

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## Value

returns a dataframe with the fixture that matches season, round.

## **Examples**

```
## Not run:
get_afl_fixture(2020, round = 1)
## End(Not run)
```

get\_fixture

Get upcoming fixture from https://www.footywire.com

## Description

get\_fixture returns a dataframe containing upcoming AFL Men's season fixture.

#### Usage

```
get_fixture(season = lubridate::year(Sys.Date()), convert_date = FALSE)
```

#### **Arguments**

season Season to return, in yyyy format

convert\_date logical, if TRUE, converts date column to date format instead of date time.

#### **Details**

The dataframe contains the home and away team as well as venue.

#### Value

Returns a data frame containing the date, teams and venue of each game

```
## Not run:
get_fixture(2018)
## End(Not run)
```

```
get_footywire_betting_odds
```

Get AFL match betting odds from https://www.footywire.com

## Description

get\_footywire\_betting\_odds returns a data frame containing betting odds and basic match info for Men's AFL matches.

## Usage

```
get_footywire_betting_odds(
  start_season = "2010",
  end_season = lubridate::year(Sys.Date())
)
```

#### **Arguments**

start\_season First season to return, in yyyy format. Earliest season with data available is

2010.

end\_season Last season to return, in yyyy format

#### **Details**

The data frame contains the home and away team as well as venue.

#### Value

Returns a data frame containing betting odds and basic match info

```
## Not run:
get_footywire_betting_odds(2012, 2018)
## End(Not run)
```

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#### **Description**

Returns the results of matches played in a particular season. You can limit how many results you return with the last\_n\_results parameter.

#### Usage

```
get_footywire_match_results(season, last_n_matches = NULL)
```

## **Arguments**

```
season season to return results for

last_n_matches number of matches to return, starting from the most recent
```

#### **Details**

For example - you might just want to return the results from last round so you'd set last\_n\_results = 9.

If you want to return a large amount of results, it is more efficient to use get\_match\_results() however this can sometimes take some time to update the latest rounds results.

#### Value

Returns a data frame of match results from the year and number of results

## **Examples**

```
## Not run:
get_footywire_match_results(2020, last_n_matches = 5)
## End(Not run)
```

```
{\tt get\_footywire\_stats} \qquad \textit{Scrape footywire player statistics}.
```

#### **Description**

get\_footywire\_stats returns a dataframe containing player match stats from footywire from 2010 onwards.

get\_fryzigg\_stats 27

#### Usage

```
get_footywire_stats(ids)
```

#### **Arguments**

ids

A vector containing match id's to return. Can be a single value or vector of values.

#### **Details**

The dataframe contains both basic and advanced player statistics from each match specified in the match\_id input. To find match ID, find the relevant matches on https://www.footywire.com

#### Value

Returns a data frame containing player match stats for each match ID

#### **Examples**

```
## Not run:
get_footywire_stats(ids = 5000:5100)
## End(Not run)
```

get\_fryzigg\_stats

Return get match stats from fryziggafl.net/api/

#### Description

get\_fryzigg\_stats returns a data frame containing match stats for each game within the specified date range

#### Usage

```
get_fryzigg_stats(start = 1897, end = as.numeric(format(Sys.Date(), "%Y")))
```

## Arguments

start optional, character string or numeric for start year, in "YYYY" format optional, character string or numeric for end year, in "YYYY" format

#### **Details**

This function returns a data frame containing match stats for each game within the specified date range. The data from contains all stats from the fryziggafl api and returns 1 row per player.

The date for this function is called from an API with data stored in a PostgreSQL database on AWS. Updated at the conclusion of every game. A cached version to come.

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#### Value

a data table containing player stats for each game between start and end years

## **Examples**

```
#
## Not run:
# Gets all data
get_fryzigg_stats()
# Specify a date range
get_fryzigg_stats(start = 2018, end = 2019)
## End(Not run)
```

get\_match\_results

Get basic match results from afltables.com

## Description

get\_match\_results returns a dataframe containing all match results from 1897-current

#### Usage

```
get_match_results()
```

#### **Details**

The dataframe contains information about the Date, teams involved, scores and venue. It comes from afltables 'big lists' section. This is a limited dataset but is very fast to access. It generally is updated on the day after the last game

#### Value

Returns a data frame containing a line for each match

```
## Not run:
get_match_results()
## End(Not run)
```

```
get_score_progression_raw

Get raw score progression data
```

#### **Description**

get\_score\_progression\_raw returns a dataframe raw, unprocessed scoring progression data from afftables.

#### Usage

```
get_score_progression_raw()
```

#### **Details**

The data is unprocessed and unstructured but is a starting point for analysis. It only exists for 2010 to 2017.

#### Value

Returns a data frame containing raw score progression data

#### **Examples**

```
## Not run:
get_score_progession_raw()
## End(Not run)
```

get\_squiggle\_data

Access Squiggle data using the squiggle API service.

## Description

Use get\_squiggle\_data to access the Squiggle API. See instructions at api.squiggle.com.au.

## Usage

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#### Arguments

query

A text string. The main query to use with the API. Must be one of sources, games, tips, ladder or standings

... (optional) An optional argument provided to the Squiggle API. See details for more info.

#### **Details**

The optional arguments to squiggle can be one of the following.

#

- year: an integer specifying the year to return data from, e.g. year = 2018
- round: an integer specifying the round to return data from, e.g. round = 12
- game: an integer specifying the game ID to return data from, e.g. game = 10
- source: an integer specifying the ID of the source to return data from, e.g. source = 1

For full instructions, see api.squiggle.com.au

#### Value

A dataframe, with the resultant data that matches the query specified in query, as well as any optional filters.

#### **Examples**

```
## Not run:
# Return a list of the sources, with ID's
sources <- get_squiggle_data("sources")

# Get tips for Round 1, 2018
tips <- get_squiggle_data(query = "tips", round = 1, year = 2018)

# Get tips from Squiggle 2019
squiggle <- get_squiggle_data(query = "tips", source = 1, year = 2019)
## End(Not run)</pre>
```

replace\_teams

Internal function to ensure names match between different sources and also name changes. This gets applied to any web scraper

## Description

Internal function to ensure names match between different sources and also name changes. This gets applied to any web scraper

replace\_venues 31

#### Usage

```
replace_teams(team)
```

#### **Arguments**

team	Team name	
replace_venues	Internal function to ensure venue names match between different sources and also name changes across time. This gets applied to any	
	web scraper, transforming all of them to AFL Tables naming conven- tions.	

## **Description**

Internal function to ensure venue names match between different sources and also name changes across time. This gets applied to any web scraper, transforming all of them to AFL Tables naming conventions.

#### Usage

```
replace_venues(venue)
```

#### **Arguments**

venue	Venue name	
return_ladder	Recreate the ladder for every or any given round and/or season	

## **Description**

return\_ladder returns a dataframe containing the ladder for either all seasons and rounds since 1987, or individual rounds/seasons

## Usage

```
return_ladder(match_results_df = NA, season_round = NA, season = NA)
```

#### **Arguments**

match\_results\_df

A dataframe that has been returned from get\_match\_results. If empty get\_match\_results

will execute first

season\_round An integer of the round or vector of integers for multiple rounds. If empty, all

rounds returned

season An integer of the season or vector of integers for multiple seasons. If empty, all

seasons returned

#### **Details**

The dataframe contains information about the Round, Season, Points For/Against, Ladder Position. It can either take in a data frame created using get\_match\_results, or if match\_results\_df is unspecified, will extract all games using get\_match\_results. Will only allow selecting rounds of the premiership season, not finals.

#### Value

Returns a data frame containing a line for each team's ladder position at each round of a season

#### **Examples**

```
## Not run:
return_ladder()
return_ladder(match_results_df = get_match_results_df, season_round = 23, season = 1990:2019)
return_ladder(season_round = 10, season = 2019)
## End(Not run)
```

team\_abr\_afl

Internal function to return team name abbreviation for AFL API

#### Description

Internal function to return team name abbreviation for AFL API

#### **Usage**

```
team_abr_afl(team)
```

#### **Arguments**

team

Team name

```
update_footywire_stats
```

Update the included footywire stats data to the specified date.

#### **Description**

update\_footywire\_stats returns a dataframe containing player match stats from footywire

#### Usage

```
update_footywire_stats(check_existing = TRUE)
```

## **Arguments**

check\_existing A logical specifying if we should check against existing dataset. Defaults to TRUE. Making it false will download all data from all history which will take some time.

#### **Details**

The dataframe contains both basic and advanced player statistics from each match from 2010 to the specified end date.

This function utilised the included ID's dataset to map known ID's. It looks for any new data that isn't already loaded and proceeds to download it.

#### Value

Returns a data frame containing player match stats for each match ID

```
## Not run:
update_footywire_stats()
## End(Not run)
```

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