Package 'volleystat'

May 20, 2019

Title Detailed Statistics on Volleyball Matches

Version 0.2.0

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Description

Volleyball match statistics of the German volleyball first division league (seasons 2013/2014 to 2018/2019). The data has been collected from the official volleyball first division homepage (<www.volleyball-bundesliga.de>) and contains information on teams, staff, sets, matches, and player-in-match statistics (extracted automatically from the official match reports).

URL http://github.com/bozhinvi/volleystat

BugReports https://github.com/bozhinvi/volleystat/issues

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Encoding UTF-8

LazyData true

RoxygenNote 6.1.1

Depends R (>= 2.10)

Suggests dplyr, tidyr, knitr, rmarkdown, ggplot2, diverse, geosphere, foreign, tibble

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

Date/Publication 2019-05-20 21:10:04 UTC

R topics documented:

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matches   *Matches data*

Description

A dataset containing all matches of the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019. Note that all matches are included twice in the dataset, i.e., from the perspective of the home team and from the perspective of the away team.

Usage

    matches

Format

Data frame with 3392 rows and 12 columns.

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

competition_stage Stage of the competition, i.e., main round or play-offs.

match_id Official VBL match id. Unique within seasons.

match Factor variable identifying whether observation is from the home team's perspective or from the away team's perspective.

match_day Match day (only main round, see competition_stage).

date_time POSIXct date-time variable of the match.

spectators Number of spectators in the gym.

match_duration Length of match in minutes.

team_id Team identifier which is unique across all teams and seasons.

team_name Official name of the team. Note that VCO Berlin has a team in men's and women's league.

set_won Number of sets won by the team.

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_archiv/1blf_tabellen_ergebnisse.xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_archiv/1blm_tabellen_ergebnisse.xhtml

Examples

```
matchstats
```

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matchstats	*Matchstats data*

Description

A dataset containing match-player level statistics of the German first division volleyball league for each match and each season starting in 2013/2014 and ending in 2018/2019.

Usage

```
matchstats
```

Format

Data frame with 32755 rows and 23 columns.

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

match_id Official VBL match id. Unique within seasons.

team_id Team identifier which is unique across all teams and seasons.

player_id Player identifier which is unique within a team in a season. This identifier equals to the shirt number of the player. However, in cases where more than one player has the same shirt number, the identifier is replaced by a 3-digit number starting at 100.

shirt_number Official shirt number, not unique within teams (see player_id).

vote Score computed according to the DataVolley settings. NA if not reported as numeric in the match report.

pt_tot Total points scored.

pt_bp Total break points scored.

pt_profloss Won minus lost points. More precisely, this variable is computed according to the following equation: serv_pt + att_pt + blo_pt - serv_err - rec_err - att_err - att_blo.

serv_tot Total number of serves.

ser_err Number of serving errors.

serv_pt Number of scored points at service, e.g., aces.

rec_tot Number of receptions.

rec_err Number of errors in reception.

rec_pos Share of positive receptions.

rec_per Share of perfect receptions.

att_tot Number of total attacks.

att_err Number of failed attacks.

att_blo Number of blocked attacks.

att_pt Number of successful attacks.

att_per Share of successful attacks.

blo_pt Number of successful blocks.

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_archiv/1blf_tabellen_ergebnisse.xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_archiv/1blm_tabellen_ergebnisse.xhtml

Examples

```
matchstats
```

---

match_adresses	*Match adresses data*

Description

A dataset containing name, adress, and coordinates of the gym of each match in the German first division volleyball league between 2013/2014 and ending in 2018/2019.

Usage

```
match_adresses
```

Format

Data frame with 1718 rows and 6 columns.

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

match_id Official VBL match id. Unique within seasons.

gym Official name of arena.

adress ZIP code and city.

lon Longitude of arena.

lat Latitude of arena.

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_clubsspieler/1blf_spielhallen.xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_clubsspieler/1blm_spielhallen.xhtml

Examples

```
match_adresses
```

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players	*Players data*

Description

A dataset containing attributes of all players in the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019.

Usage

```
players
```

Format

Data frame with 1853 rows and 13 columns.

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

team_id Team identifier which is unique across all teams and seasons.

team_name Official name of the team. Note that VCO Berlin has a team in men's and women's league.

player_id Player identifier which is unique within a team in a season. This identifier equals to the shirt number of the player. However, in cases where more than one player has the same shirt number, the identifier is replaced by a 3-digit number starting at 100.

shirt_number Official shirt number, not unique within teams (see player_id).

position Player's specialization

firstname First name of the player

lastname Last name of the player

gender Player's gender: male or female.

birthdate Date of birth

height Height in cm

nationality Nationality of player

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_archiv/1blf_tabellen_ergebnisse.xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_archiv/1blm_tabellen_ergebnisse.xhtml

Examples

```
players
```

---

sets	*Sets data*

Description

A dataset containing all matches of the German first division volleyball league for each season on set level. starting in 2013/2014 and ending in 2018/2019. Note that all sets are included twice in the dataset, i.e., from the perspective of the home team and from the perspective of the away team.

Usage

```
sets
```

Format

Data frame with 12660 rows and 9 columns.

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

match_id Official VBL match id. Unique within seasons.

match Factor variable identifying whether observation is from the home team's perspective or from the away team's perspective.

team_id Team identifier which is unique across all teams and seasons.

team_name Official name of the team. Note that VCO Berlin has a team in men's and women's league.

set Set identifier.

set_duration Length of set in minutes.

pt_set Points scored in set.

Source

<https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_archiv/1blf_tabellen_ergebnisse.xhtml> <https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_archiv/1blm_tabellen_ergebnisse.xhtml>

Examples

```
matchstats
```

staff	*Team staff data*

Description

A dataset containing attributes of all staff members of teams in the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019.

Usage

```
staff
```

Format

A data frame with 1214 rows and 10 variables:

league_gender Men or women's league.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

team_id Team identifier which is unique across all teams and seasons.

team_name Official name of the team. Note that VCO Berlin has a team in men's and women's league.

firstname First name of the player

lastname Last name of the player

gender Player's gender: male or female.

birthdate Date of birth

position Person's role in the team, e.g., couch, statistician, or assistant couch.

nationality Nationality of team member.

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_archiv/1blf_tabellen_ergebnisse.xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_archiv/1blm_tabellen_ergebnisse.xhtml

Examples

```
staff
```

---

team_adresses	*Team adresses data*

Description

A dataset containing name, adress, and coordinates of the home gym of each team in the German first division volleyball league between 2013/2014 and ending in 2018/2019.

Usage

```
team_adresses
```

Format

Data frame with 137 rows and 8 columns.

season_id ID for each season unique within league_gender. It consists of the last two digits of the season years, e.g., the season_id of season 2014/2015 equals 1415.

league_gender Men or women's league.

team_id Team identifier which is unique across all teams and seasons.

team_name Official name of the team. Note that VCO Berlin has a team in men's and women's league.

gym_adress ZIP code and city.

max_spectator Maximum capacity

lon Longitude of arena.

lat Latitude of arena.

Source

https://www.volleyball-bundesliga.de/cms/home/1blf/1blf_clubsspieler/1blf_spielhallen. xhtml https://www.volleyball-bundesliga.de/cms/home/1blm/1blm_clubsspieler/1blm_ spielhallen.xhtml

Examples

```
team_adresses
```

| volleystat | *volleystat: Volleyball match statistics* |

Description

This packages provides data on match statistics of the German volleyball first division league (seasons 2013/2014 to 2018/2019). The data has been collected from the official volleyball first division homepage (www.volleyball-bundesliga.de) and contains information on teams, staff, sets, matches, and player-in-match statistics (extracted automatically using tabulizer from the PDFs of the official match reports).

players

A dataset containing attributes of all players in the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019.

staff

A dataset containing attributes of all staff members of teams in the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019.

matches

A dataset containing all matches of the German first division volleyball league for each season starting in 2013/2014 and ending in 2018/2019. Note that all matches are included twice in the dataset, i.e., from the perspective of the home team and from the perspective of the away team.

sets

A dataset containing all matches of the German first division volleyball league for each season on set level. starting in 2013/2014 and ending in 2018/2019. Note that all sets are included twice in the dataset, i.e., from the perspective of the home team and from the perspective of the away team.

matchstats

A dataset containing match-player level statistics of the German first division volleyball league for each match and each season starting 2013/2014 and ending 2018/2019.

match_adresses

A dataset containing adresses and coordinates of all matches of the German first division volleyball league for each match and each season starting 2013/2014 and ending 2018/2019.

team_adresses

A dataset containing adresses and coordinates of all teams of the German first division volleyball league for each match and each season starting 2013/2014 and ending 2018/2019.

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