# Package: volleystat (via r-universe)

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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

License CC0 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 Repository https://bozhinvi.r-universe.dev RemoteUrl https://github.com/bozhinvi/volleystat

RemoteRef HEAD

RemoteSha c38586571a6f0d3cc3f42ebb457410020eb8898b

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#### matches

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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

#### matchstats

### Examples

matchstats

|--|

# 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

| <pre>match_adresses</pre> |
|---------------------------|
|---------------------------|

# 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

#### players

#### Examples

match\_adresses

```
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

# 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

# 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

# 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

# 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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