Package 'baseballr'

March 21, 2023

```
Title Acquiring and Analyzing Baseball Data
Version 1.5.0
Description Provides numerous utilities for acquiring and analyzing
      baseball data from online sources such as 'Baseball Reference' <a href="https:">https:</a>
      //www.baseball-reference.com/>,
      'FanGraphs' <a href="https://www.fangraphs.com/">https://www.fangraphs.com/</a>, and the 'MLB Stats' API <a href="https://www.fangraphs.com/">https://www.fangraphs.com/</a>,
      //www.mlb.com/>.
License MIT + file LICENSE
URL https://billpetti.github.io/baseballr/,
      https://github.com/BillPetti/baseballr
BugReports https://github.com/BillPetti/baseballr/issues
Depends R (>= 4.0.0)
Imports cli (>= 3.4.1), data.table (>= 1.14.0), dplyr (>= 1.0.10),
      ggplot2, glue, httr (>= 0.5), janitor, jsonlite, lubridate,
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batter_game_logs_fg (legacy);

(legacy) Scrape Batter Game Logs from FanGraphs

Description

(legacy) Scrape Batter Game Logs from FanGraphs

Usage

```
batter_game_logs_fg(playerid, year = 2017)
```

Arguments

playerid This is the playerid used by FanGraphs for a given player

year The season for which game logs should be returned (use the YYYY format)

Value

A data frame of batter game logs.

bref

Baseball Reference Functions Overview

Description

```
bref_daily_batter() Scrape Batter Performance Data Over a Custom Time Frame
bref_daily_pitcher() Scrape Pitcher Performance Data Over a Custom Time Frame
bref_standings_on_date() Scrape MLB Standings on a Given Date
bref_team_results() Scrape Team Results
```

Details

Scrape Batter Performance Data Over a Custom Time Frame:

```
bref_daily_batter("2015-05-10", "2015-06-20")
```

Scrape Pitcher Performance Data Over a Custom Time Frame:

```
bref_daily_batter("2015-05-10", "2015-06-20")
```

Scrape MLB Standings on a Given Date:

```
bref_standings_on_date(date = "2015-08-04", division = "AL East")
```

Scrape Team Results:

bref_daily_batter 7

```
bref_team_results("NYM", 2015)
bref_team_results(Tm="TBR", year=2008)
```

Team Level Consistency:

Uses bref_team_results() to calculate team consistency metrics

```
team_consistency(year=2015)
```

bref_daily_batter

Scrape Batter Performance Data Over a Custom Time Frame

Description

This function allows you to scrape basic batter statistics over a custom time frame. Data is sourced from Baseball-Reference.com.

Usage

```
bref_daily_batter(t1, t2)
```

Arguments

t1 First date data should be scraped from. Should take the form "YEAR-MONTH-DAY"

Last date data should be scraped from. Should take the form "YEAR-MONTH-DAY"

Value

Returns a tibble of batter performance with the following columns:

col_name	types
bbref_id	character
season	integer
Name	character
Age	numeric
Level	character
Team	character
G	numeric
PA	numeric
AB	numeric
R	numeric
Н	numeric
X1B	numeric
X2B	numeric
X3B	numeric
HR	numeric
RBI	numeric

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BB	numeric
IBB	numeric
uBB	numeric
SO	numeric
HBP	numeric
SH	numeric
SF	numeric
GDP	numeric
SB	numeric
CS	numeric
BA	numeric
OBP	numeric
SLG	numeric
OPS	numeric

Examples

```
try(bref_daily_batter(t1="2015-05-10", t2="2015-06-20"))
```

bref_daily_pitcher

Scrape Pitcher Performance Data Over a Custom Time Frame

Description

This function allows you to scrape basic pitcher statistics over a custom time frame. Data is sourced from Baseball-Reference.com.

Usage

```
bref_daily_pitcher(t1, t2)
```

Arguments

t1	First date data should be scraped from. Should take the form "YEAR-MONTH-DAY"
t2	Last date data should be scraped from. Should take the form "YEAR-MONTH-DAY"

Value

Returns a tibble of pitcher performance with the following columns:

col_name types bbref_id character bref_daily_pitcher 9

season	integer
Name	characte
Age	numeric
Level	characte
Team	characte
G	numeric
GS	numeric
W	numeric
L	numeric
SV	numeric
IP	numeric
H	numeric
R	numeric
ER	numeric
uBB	numeric
ВВ	numeric
SO	numeric
HR	numeric
HBP	numeric
ERA	numeric
AB	numeric
X1B	numeric
X2B	numeric
X3B	numeric
IBB	numeric
GDP	numeric
SF	numeric
SB	numeric
CS	numeric
PO	numeric
BF	numeric
Pit	numeric
Str	numeric
StL	numeric
StS	numeric
GB.FB	numeric
LD	numeric
PU	numeric
WHIP	numeric
BAbip	numeric
SO9	numeric
SO.W	numeric
SO_perc	numeric
uBB_perc	numeric
SO_uBB	numeric
50_uDD	11G11IC11C

Examples

```
try(bref_daily_pitcher("2015-05-10", "2015-06-20"))
```

bref_standings_on_date

Scrape MLB Standings on a Given Date

Description

This function allows you to scrape the standings from MLB for any date you choose.

Usage

```
bref_standings_on_date(date, division, from = FALSE)
```

Arguments

date a date object

division One or more of AL East, AL Central, AL West, AL Overall, NL East, NL Cen-

tral, NL West, and NL Overall

from a logical indicating whether you want standings up to and including the date

(FALSE, default) or rather standings for games played after the date

Value

Returns a tibble of MLB standings with the following columns:

col_name types Tm character W integer L integer W-L% numeric GB character RS integer RA integer pythW-L% numeric

Examples

```
try(bref_standings_on_date(date = "2015-08-04", division = "AL East"))
```

bref_team_results 11

href	team	results	Scr

Scrape Team Results

Description

This function allows you to scrape schedule and results for a major league team from Baseball-Reference.com

Usage

```
bref_team_results(Tm, year)
```

Arguments

Tm The abbreviation used by Baseball-Reference.com for the team whose results

you want to scrape.

year Season for which you want to scrape the park factors.

Value

Returns a tibble of MLB team results and the following columns:

col_name types Gmnumeric Date character Tm character H_A character Opp character Result character R numeric RA numeric Inn character character Record Rank numeric GB character Win character Loss character Save character Time character D/N character Attendance numeric cLI numeric Streak numeric Orig_Scheduled character Year numeric

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Examples

```
try(bref_team_results("NYM", 2015))
try(bref_team_results(Tm="TBR", year=2008))
```

chadwick

Chadwick Bureau Register Player Lookup

Description

```
chadwick_player_lu(): Directly download the Chadwick Bureau's public register of baseball
    players and the various IDs associated with them in different systems of record.
playername_lookup(): Look up Baseball Player Name.
playerid_lookup(): Look up Baseball Player IDs.
```

Details

Directly download the Chadwick Bureau's public register of baseball players.:

```
chadwick_player_lu()
```

Look up baseball player name by ID:

```
playername_lookup(4885)
playername_lookup("kaaihki01")
```

Look up baseball player IDs by player name:

```
playerid_lookup("Garcia", "Karim")
```

chadwick_player_lu

Download the Chadwick Bureau's public register of baseball players

Description

Download the Chadwick Bureau's public register of baseball players

Usage

```
chadwick_player_lu()
get_chadwick_lu()
```

Value

A data frame of baseball players and the various IDs associated with them in different systems of record and the following columns:

chadwick_player_lu 13

col_name types key_person character character key_uuid key_mlbam integer key_retro character key_bbref character key_bbref_minors character key_fangraphs integer key_npb integer key_sr_nfl character key_sr_nba character key_sr_nhl character key_findagrave integer name_last character name_first character name_given character name_suffix character name_matrilineal character name_nick character birth_year integer birth_month integer birth_day integer death_year integer death_month integer death_day integer pro_played_first integer pro_played_last integer mlb_played_first integer mlb_played_last integer col_played_first integer col_played_last integer pro_managed_first integer pro_managed_last integer mlb_managed_first integer mlb_managed_last integer col_managed_first integer col_managed_last integer pro_umpired_first integer pro_umpired_last integer mlb_umpired_first integer mlb_umpired_last integer

A data frame of baseball players and the various IDs associated with them in different systems of record.

Examples

try(chadwick_player_lu())

code_barrel

Helper for determining whether a batted ball is a "barrel"

Description

This function allows you to code a batted ball as a barrel as defined by the Statcast research team using data as provided by baseballsavant.mlb.com.

Usage

```
code_barrel(df)
```

Arguments

df

A dataframe generated by baseballsavant.mlb.com that must include the following variables: launch_angle and launch_speed.

Value

Returns a tibble with the additional column, barrel.

column_structure_draft_mlb

Column structure of the MLB Draft data

Description

A tibble giving column structure of MLB Draft data

Usage

```
column_structure_draft_mlb
```

Format

An object of class tbl_df (inherits from tbl, data.frame) with 0 rows and 72 columns.

daily_batter_bref 15

daily_batter_bref	(legacy) Scrape Batter Performance Data Over a Custom Time Frame
-------------------	--

Description

(legacy) Scrape Batter Performance Data Over a Custom Time Frame

Usage

```
daily_batter_bref(t1, t2)
```

Arguments

t1 First date data should be scraped from. Should take the form "YEAR-MONTH-

DAY"

t2 Last date data should be scraped from. Should take the form "YEAR-MONTH-

DAY"

Value

Returns a tibble of batter performance

See Also

```
bref_daily_batter()
```

daily_pitcher_bref (legacy) Scrape Pitcher Performance Data Over a Custom Time Frame

Description

(legacy) Scrape Pitcher Performance Data Over a Custom Time Frame

Usage

```
daily_pitcher_bref(t1, t2)
```

Arguments

t1 First date data should be scra	ped from. Should take the form "YEAR-MONTH-
-----------------------------------	---

DAY"

t2 Last date data should be scraped from. Should take the form "YEAR-MONTH-

DAY"

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Value

Returns a tibble of pitcher performance

See Also

```
bref_daily_pitcher()
```

edge_code

Edge Code

Description

This function allows you to classify individual pitches based on the various categories from the Edge% metric. The dataframe passed to the function must include the batter's handedness, the px and pz coordinates from the PITCHf/x system, and the batter's height.

Usage

```
edge_code(df, height_var_name = "b_height")
```

Arguments

df

A dataframe that, at a minimum, includes the following columns: batter height (b_height), the batter's handedness (stand), vertical location of the pitch (pz), and then horizontal location of the pitch (pz)

height_var_name

The name of the variable in the data set that includes the batter's height. Defaults to b_height which assumes an height + inch format. If the variable name is "Height" it assumes the variable is already converted to inches (as is the case in some databases)

Value

Returns a tibble with the additional edge columns necessary for calculations.

edge_frequency 17

Edge Percentage Frequency

Description

This function allows you to calculate the percent of pitches thrown to different edges of the strike zone for a pitch by pitch data set that has been coded using the edge_code() function.

Usage

```
edge_frequency(df, group = NULL)
```

Arguments

df A data frame of pitch by pitch data that has been coded using the edge_code()

function.

group Character string indicating what column to group the frequency by. For exam-

ple, "pitcher" or "batter". Defaults to NULL, which calculates the frequencies

across the entire data set.

Value

Returns a tibble with the additional edge columns necessary for frequency calculations.

fangraphs

FanGraphs Functions Overview

Description

```
fg_pitcher_game_logs(): Scrape Pitcher Game Logs from FanGraphs.
```

fg_batter_game_logs(): Scrape Batter Game Logs from FanGraphs.

fg_milb_pitcher_game_logs(): Scrape MiLB game logs for pitchers from Fangraphs, combining 'standard' and 'advanced' tabs.

fg_milb_batter_game_logs(): Scrape MiLB game logs for batters from Fangraphs, combining 'standard' and 'advanced' tabs.

fg_batter_leaders(): Scrape Batter Leaderboards from FanGraphs.

fg_pitcher_leaders(): Scrape Pitcher Leaderboards from FanGraphs.

fg_guts(): Scrape FanGraphs.com Guts!.

fg_park(): Scrape Park Factors from FanGraphs.com.

fg_park_hand(): Scrape Park Factors by handedness from FanGraphs.com.

Details

Scrape Pitcher Game Logs from FanGraphs:

```
fg_pitcher_game_logs(playerid = 104, year = 2006)
```

Scrape Batter Game Logs from FanGraphs:

```
fg_batter_game_logs(playerid = 6184, year = 2017)
```

Scrape MiLB game logs for pitchers from Fangraphs:

```
fg_milb_pitcher_game_logs(playerid = "sa3004210", year=2017)
```

Scrape MiLB game logs for batters from Fangraphs:

```
fg_milb_batter_game_logs(playerid = "sa917940", year=2018)
```

Scrape Batter Leaderboards from FanGraphs:

```
fg_batter_leaders(x = 2015, y = 2015, qual = 400)
```

Scrape Pitcher Leaderboards from FanGraphs:

```
fg_pitcher_leaders(x = 2015, y = 2015, qual = 150)
```

Scrape FanGraphs.com Guts!:

```
fg_guts()
```

Scrape Park Factors from FanGraphs.com:

```
fg_park(2013)
```

Scrape Park Factors by handedness from FanGraphs.com:

```
fg_park_hand(2013)
```

fg_batter_game_logs

Scrape Batter Game Logs from FanGraphs

Description

This function allows you to scrape game logs by year for a batter from FanGraphs.com.

Usage

```
fg_batter_game_logs(playerid, year = 2017)
```

Arguments

playerid This is the playerid used by FanGraphs for a given player

year The season for which game logs should be returned (use the YYYY format)

Value

A data frame of batter game logs. |col_name |types | |:-----|:----| |PlayerName |character | |playerid | integer | |Date |character | |Team |character | |Opp |character | |season |integer | |Age Inumeric | ISB Inumeric | ICS Inumeric | IAVG Inumeric | IGB Inumeric | IFB Inumeric | ILD Inumeric | IFFB | | Inumeric | Pitches | | IPitches | | IPitches | Inumeric | IStrikes | Inumeric | IFH | Inumeric | IBU | Inumeric | IPITCHE | IPITCHE | INUMERICA | INUME meric | |BUH |numeric | |BB% |numeric | |K% |numeric | |BB/K |numeric | |OBP |numeric | |SLG | Inumeric | IOPS | Inumeric | IISO | Inumeric | IBABIP | Inumeric | IGB/FB | Inumeric | ILD% | Inumer | Inumeric | IwOBA | Inumeric | IwRAA | Inumeric | IwRC | Inumeric | Ispd | Inumeric | IwRC+ Inumeric | | lwBSR | numeric | | WPA | numeric | | -WPA | numeric | | +WPA | numeric | | RE24 | numeric | | REW | numeric | |pLI |numeric | |phLI |numeric | |PH |numeric | |WPA/LI |numeric | |Clutch |numeric | |FB%1 Inumeric | IFBv Inumeric | ISL% Inumeric | ISLv Inumeric | ICT% Inumeric | ICTv Inumeric | ICB% | Inumeric | ICBv | Inumeric | ICH% | Inumeric | ICHv | Inumeric | ISF% | Inumeric | ISFv | Inumeric | IKN% | Inumeric | | KNv | Inumeric | | XX% | Inumeric | | wFB | Inumeric | | wSL | Inumeric | | wCT | Inumeric | | wCB | Inumeric | IwCH | Inumeric | IwSF | Inumeric | IwKN | Inumeric | IwFB/C | Inumeric | IwSL/C | Inumeric | | wCT/C | numeric | | wCB/C | numeric | | wCH/C | numeric | | wSF/C | numeric | | wKN/C | numeric | | O-Swing% Inumeric | IZ-Swing% Inumeric | ISwing% Inumeric | IO-Contact% Inumeric | IZ-Contact% | Inumeric | | Contact% | Inumeric | | Zone% | Inumeric | | F-Strike% | Inumeric | | SwStr% | Inumeric | | Pull | Inumeric | Cent | Inumeric | Oppo | Inumeric | Soft | Inumeric | Med | Inumeric | Hard | Inumeric | Ibip-Count Inumeric | IPull% Inumeric | ICent% Inumeric | IOppo% Inumeric | ISoft% Inumeric | IMed% | Inumeric | | Hard% | Inumeric | | IpfxFA% | Inumeric | | IpfxFT% | Inumeric | IpfxFC% | Inumeric | IpfxFS% | | Inumeric | IpfxFO% | Inumeric | IpfxSI% | Inumeric | IpfxSL% | Inumeric | IpfxCU% | Inumeric | IpfxKC% | Inumeric | IpfxCH% | Inumeric | IpfxKN% | Inumeric | IpfxvFA | Inumeric | IpfxvFT | Inumeric | IpfxvFC | Inumeric | IpfxvFS | Inumeric | IpfxvFO | Inumeric | IpfxvSI | Inumeric | IpfxvSL | Inumeric | IpfxvCU | Inumeric | IpfxvFO | Inumeri meric | |pfxvKC |numeric | |pfxvCH |numeric | |pfxvKN |numeric | |pfxFA-X |numeric | |pfxFT-X | Inumeric | IpfxFC-X | Inumeric | IpfxFS-X | Inumeric | IpfxFO-X | Inumeric | IpfxSI-X | Inumeric | IpfxSL-X | Inumeric | IpfxSL-X | Inumeric | IpfxSL-X | Inumeric | IpfxSI-X X Inumeric | IpfxCU-X Inumeric | IpfxKC-X Inumeric | IpfxCH-X Inumeric | IpfxKN-X Inumeric | lpfxFA-Z lnumeric | lpfxFT-Z lnumeric | lpfxFC-Z lnumeric | lpfxFS-Z lnumeric | lpfxFO-Z lnumeric | lpfxSI-Z | lnumeric | lpfxSL-Z | lnumeric | lpfxCU-Z | lnumeric | lpfxKC-Z | lnumeric | lpfxCH-Z | lnumeric meric | |pfxKN-Z | |numeric | |pfxwFA | |numeric | |pfxwFT | |numeric | |pfxwFC | | |pfxwFC | | | Inumeric | IpfxwFO | Inumeric | IpfxwSI | Inumeric | IpfxwSL | Inumeric | IpfxwCU | Inumeric | IpfxwKC | Inumeric | IpfxwCH | Inumeric | IpfxwKN | Inumeric | IpfxwFA/C | Inumeric | IpfxwFT/C | Inumeric | |pfxwFC/C |numeric | |pfxwFS/C |numeric | |pfxwFO/C |numeric | |pfxwSL/C |numeric | |pfxwSL/C | | Inumeric | IpfxwCU/C | Inumeric | IpfxwKC/C | Inumeric | IpfxwCH/C | Inumeric | IpfxwKN/C | Inumeric | IpfxwCH/C | Inumeric | IpfxwKN/C | Inumeric | IpfxwCH/C | lpfxO-Swing% | lnumeric | lpfxZ-Swing% | lnumeric | lpfxSwing% | lnumeric | lpfxO-Contact% | lnumeric | meric | lpfxZ-Contact% | lnumeric | lpfxContact% | lnumeric | lpfxZone% | lnumeric | lpfxPace | lnumeric | lnu | lpiCH% | lnumeric | lpiCS% | lnumeric | lpiCU% | lnumeric | lpiFA% | lnumeric | lpiFC% | lnumeric | | Inumeric | IpivCS | Inumeric | IpivFO | Inumeric | IpivFA | Inumeric | IpivFC | Inumeric | IpivFS | Inumeric | |pivKN |numeric | |pivSI |numeric | |pivSL |numeric | |pivXX |numeric | |piCH-X |numeric | |piCS-X | Inumeric | IpiCU-X | Inumeric | IpiFA-X | Inumeric | IpiFC-X | Inumeric | IpiFS-X | Inumeric | IpiKN-X | Inumeric | IpiSI-X | Inumeric | IpiSL-X | Inumeric | IpiXX-X | Inumeric | IpiCH-Z | Inumeric | IpiCS-Z | Inumeric | IpiCU-Z | Inumeric | IpiFA-Z | Inumeric | IpiFC-Z | Inumeric | IpiFS-Z | Inumeric | IpiFN-Z | Inumeri meric | lpiSI-Z |numeric | lpiSL-Z |numeric | lpiXX-Z |numeric | lpiwCH |numeric | lpiwCS |numeric l |piwCU |numeric | |piwFA |numeric | |piwFC |numeric | |piwFS |numeric | |piwKN |numeric | |piwSI

| Inumeric | IpiwSL | Inumeric | IpiwXX | Inumeric | IpiwCH/C | Inumeric | IpiwCS/C | Inumeric | IpiwCU/C | Inumeric | IpiwFA/C | Inumeric | IpiwFC/C | Inumeric | IpiwFS/C | Inumeric | IpiwKN/C | Inumeric | IpiwSI/C | Inumeric | IpiWSI/C | Inumeric | IpiO-Swing% | Inumeric | IpiZ-Swing% | Inumeric | IpiSwing% | Inumeric | IpiO-Contact% | Inumeric | IpiZ-Contact% | Inumeric | IpiZone% | Inumeric | IEV | Inumeric | ILA | Inumeric | IBarrels | Inumeric | IBarrels | Inumeric | ImaxEV | Inumeric | IHardHit | Inumeric | IHardHit% | Inumeric | Igamedate | Icharacter | Idh | Initeger |

Examples

```
try(fg_batter_game_logs(playerid = 6184, year = 2017))
```

fg_batter_leaders

Scrape Batter Leaderboards from FanGraphs

Description

This function allows you to scrape all leaderboard statistics (basic and advanced) from FanGraphs.com.

Usage

```
fg_batter_leaders(x, y, league = "all", qual = "y", ind = 1, exc_p = TRUE)
```

Arguments

x	First season for which you want data.
У	Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If $y = x$, function will return single-season data.
league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 =$ split seasons, $0 =$ aggregate seasons.
exc_p	(logical) Whether or not to exclude pitchers from the batter leaderboards. TRUE = exclude pitchers, FALSE = retain pitchers.

Value

A data frame of batter data.

col_name	types
playerid	character
#	character
Season	character
Name	character
Team	character
Age	numeric
G	numeric
AB	numeric
PA	numeric
Н	numeric
1B	numeric
2B	numeric
3B	numeric
HR	numeric
R	numeric
RBI	numeric
BB	numeric
IBB	numeric
SO	numeric
HBP	numeric
SF	numeric
SH	numeric
GDP	numeric
SB	numeric
CS	numeric
AVG	numeric
GB	numeric
FB	numeric
LD	numeric
IFFB	numeric
Pitches	numeric
Balls	numeric
Strikes	numeric
IFH	numeric
BU	numeric
BUH	numeric
BB_pct	numeric
K_pct	numeric
BB_K	numeric
OBP	numeric
SLG	numeric
OPS	numeric
ISO	numeric
BABIP	numeric
· 	

GB_FB	numeric
LD_pct	numeric
GB_pct	numeric
FB_pct	numeric
IFFB_pct	numeric
HR_FB	numeric
IFH_pct	numeric
BUH_pct	numeric
wOBA	numeric
wRAA	numeric
wRC	numeric
Bat	numeric
Fld	numeric
Rep	numeric
Pos	numeric
RAR	numeric
WAR	numeric
Dol	numeric
Spd	numeric
wRC_plus	numeric
WPA	numeric
WPA_minus	numeric
WPA_plus	numeric
RE24	numeric
REW	numeric
pLI	numeric
phLI	numeric
PH	numeric
WPA_LI	numeric
Clutch	numeric
FBall_pct	numeric
FBv	numeric
SL_pct	numeric
SLv	numeric
CT_pct	numeric
CTv	numeric
CB_pct	numeric
CBv	numeric
CH_pct	numeric
CHv	numeric
SF_pct	numeric
SFv	numeric
KN_pct	numeric
KNv	numeric
X X nct	numaria
XX_pct	numeric
PO_pct	numeric
PO_pct wFB	numeric numeric
PO_pct	numeric

wCT	numeric
wCB	numeric
wCH	numeric
wSF	numeric
wKN	numeric
wFB_C	numeric
wSL C	numeric
wCT_C	numeric
wCB_C	numeric
wCH_C	numeric
wSF_C	numeric
wKN_C	numeric
O-Swing_pct	numeric
Z-Swing_pct	numeric
Swing_pct	numeric
O-Contact_pct	numeric
Z-Contact_pct	numeric
Contact_pct	numeric
Zone_pct	numeric
F-Strike_pct	numeric
SwStr_pct	numeric
BsR	numeric
FA_pct (sc)	numeric
FT_pct (sc) FC_pct (sc)	numeric
FC_pct (sc)	numeric
FS_pct (sc)	numeric
FO_pct (sc)	numeric
SI_pct (sc)	numeric
SL_pct (sc)	numeric
CU_pct (sc) KC_pct (sc)	numeric
KC_pct (sc)	numeric
EP_pct (sc)	numeric
CH_pct (sc)	numeric
SC_pct (sc)	numeric
KN_pct (sc) UN_pct (sc)	numeric
UN_pct (sc)	numeric
vFA (sc)	numeric
vFT (sc)	numeric
vFC (sc)	numeric
vFS (sc)	numeric
vFO (sc)	numeric
vSI (sc)	numeric
vSL (sc)	numeric
vCU (sc)	numeric
vKC (sc)	numeric
vEP (sc)	numeric
vCH (sc)	numeric
vSC (sc)	numeric

vKN (sc)	numeric
FA-X (sc)	numeric
FT-X (sc)	numeric
FC-X (sc)	numeric
FS-X (sc)	numeric
FO-X (sc)	numeric
SI-X (sc)	numeric
SL-X (sc)	numeric
CU-X (sc)	numeric
KC-X (sc)	numeric
EP-X (sc)	numeric
CH-X (sc)	numeric
SC-X (sc)	numeric
KN-X (sc)	numeric
FA-Z (sc)	numeric
FT-Z (sc)	numeric
FC-Z (sc)	numeric
FS-Z (sc)	numeric
FO-Z (sc)	numeric
SI-Z (sc)	numeric
SL-Z (sc)	numeric
CU-Z (sc)	numeric
KC-Z (sc)	numeric
EP-Z (sc)	numeric
CH-Z (sc)	numeric
SC-Z (sc)	numeric
KN-Z (sc)	numeric
wFA (sc)	numeric
wFT (sc)	numeric
wFC (sc)	numeric
wFS (sc)	numeric
wFO (sc)	numeric
wSI (sc)	numeric
wSL (sc)	numeric
wCU (sc)	numeric
wKC (sc)	numeric
wEP (sc)	numeric
wCH (sc)	numeric
wSC (sc)	numeric
wKN (sc)	numeric
wFA_C (sc)	numeric
wFT C (sc)	numeric
wFC_C (sc)	numeric
wFS_C (sc)	numeric
wFO_C (sc)	numeric
wSI_C (sc)	numeric
wSL_C (sc)	numeric
wCU_C (sc)	numeric
30_0 (30)	

WG G ()	
wKC_C (sc)	numeric
wEP_C (sc)	numeric
wCH_C (sc)	numeric
wSC_C (sc)	numeric
wKN_C (sc)	numeric
O-Swing_pct (sc)	numeric
Z-Swing_pct (sc)	numeric
Swing_pct (sc)	numeric
O-Contact_pct (sc)	numeric
Z-Contact_pct (sc)	numeric
Contact_pct (sc)	numeric
Zone_pct (sc)	numeric
Pace	numeric
Def	numeric
wSB	numeric
UBR	numeric
AgeRng	numeric
Off	numeric
Lg	numeric
wGDP	numeric
Pull_pct	numeric
Cent_pct	numeric
Oppo_pct	numeric
Soft_pct	numeric
Med_pct	numeric
Hard_pct	numeric
TTO_pct	numeric
CH_pct_pi	numeric
CS_pct_pi	numeric
CU_pct_pi	numeric
EA net ni	numeric
FA_pct_pi FC_pct_pi	numeric
FS_pct_pi	numeric
KN_pct_pi	numeric
SB_pct_pi	numeric
SI_pct_pi	numeric
Sl_pct_pi	numeric
XX_pct_pi	numeric
vCH_pi	numeric
vCS_pi	numeric
vCU_pi vFA_pi	numeric
vrA_pı	numeric
vFC_pi vFS_pi	numeric
vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSI_pi	numeric
vSL_pi	numeric

vXX_pi	numeric
CH-X_pi	numeric
CS-X_pi	numeric
CU-X_pi	numeric
FA-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
VN V	
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CS-Z_pi	numeric
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric
FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi	numeric
wCU_pi	numeric
wFA_pi	numeric
wFA_pi wFC_pi	numeric
wFS_pi	numeric
wKN_pi	numeric
an i	numeric
wSI pi	numeric
wSL pi	numeric
wXX ni	numeric
wCH C ni	numeric
wCi_c_pi	numeric
wCJ_C_pi	numeric
wco_c_pi	
wra_C_pi	numeric
wFC_C_pi	numeric
wSB_pi wSI_pi wSL_pi wSL_pi wXX_pi wCH_C_pi wCS_C_pi wCU_C_pi wFA_C_pi wFC_C_pi wFS_C_pi wKN_C_pi	numeric
wKN_C_pi	numeric
	numeric
wSI_C_pi	numeric
wSL_C_pi wXX_C_pi	numeric
wXX_C_pi	numeric
O-Swing_pct_pi Z-Swing_pct_pi	numeric
Z-Swing_pct_pi	numeric
Swing_pct_pi	numeric

O-Contact_pct_pi	numeric
Z-Contact_pct_pi	numeric
Contact_pct_pi	numeric
Zone_pct_pi	numeric
Pace_pi	numeric

Examples

```
try(fg\_batter\_leaders(x = 2015, y = 2015, qual = 200))
```

fg_bat_leaders

(legacy) Scrape Batter Leaderboards from FanGraphs

Description

(legacy) Scrape Batter Leaderboards from FanGraphs

Usage

```
fg_bat_leaders(x, y, league = "all", qual = "y", ind = 1, exc_p = TRUE)
```

Arguments

х	First season for which you want data.
У	Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If $y = x$, function will return single-season data.
league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 =$ split seasons, $0 =$ aggregate seasons.
exc_p	(logical) Whether or not to exclude pitchers from the batter leaderboards. TRUE = exclude pitchers, FALSE = retain pitchers.

Value

A data frame of batter data.

fg_guts

Scrape FanGraphs.com Guts!

Description

Scrape historical FanGraphs Guts! table, wOBA, FIP coefficients and constants

Usage

```
fg_guts()
```

Value

Returns a tibble of seasonal constants from FanGraphs

col_name	types
season	integer
lg_woba	numeric
woba_scale	numeric
wBB	numeric
wHBP	numeric
w1B	numeric
w2B	numeric
w3B	numeric
wHR	numeric
runSB	numeric
runCS	numeric
lg_r_pa	numeric
lg_r_w	numeric
cFIP	numeric

Examples

```
try(fg_guts())
```

```
{\tt fg\_milb\_batter\_game\_logs}
```

Scrape MiLB game logs for batters from FanGraphs

Description

This function allows you to scrape MiLB game logs for individual batters from FanGraphs.

Usage

```
fg_milb_batter_game_logs(playerid, year)
```

Arguments

playerid The batter's minor league ID from FanGraphs.

year The season for which game logs should be returned.

Value

Returns a tibble of Minor League batter game logs with the following columns:

col name	types
player_name	character
minor_playerid	character
Date	character
Team	character
Level	character
Opp	character
G G	numeric
AB	numeric
PA	numeric
Н	numeric
1B	numeric
2B	numeric
3B	numeric
HR	numeric
R	numeric
RBI	numeric
BB	numeric
IBB	numeric
SO	numeric
HBP	numeric
SF	numeric
SH	numeric
GDP	numeric
SB	numeric
CS	numeric
AVG	numeric
BB%	numeric
K%	numeric
BB/K	numeric
OBP	numeric
SLG	numeric
OPS	numeric
ISO	numeric
Spd	numeric
BABIP	numeric

wRC	numeric
wRAA	numeric
wOBA	numeric
wRC+	numeric
wBsR	numeric
gamedate	character
dh	integer
UPId	character
MLBAMId	character
MinorMasterId	character
RRId	character
FirstName	character
LastName	character
firstLastName	character
Height	character
Weight	character
BirthDate	character
Bats	character
Throws	character
Position	character
BirthCity	character
College	character
Age	character

Examples

```
try(fg_milb_batter_game_logs(playerid = "sa3010868", year=2021))
```

```
fg_milb_pitcher_game_logs
```

Scrape MiLB game logs for pitchers from FanGraphs

Description

This function allows you to scrape MiLB game logs for individual batters from FanGraphs.com.

Usage

```
fg_milb_pitcher_game_logs(playerid, year)
```

Arguments

playerid The pitcher's minor league ID from FanGraphs.com. year The season for which game logs should be returned.

Value

Returns a tibble of Minor League pitcher game logs.

col_name	types
player_name	character
minor_playerid	character
Date	character
Team	character
Level	character
Opp	character
W	numeric
L	numeric
ERA	numeric
G	numeric
GS	numeric
CG	numeric
ShO	numeric
SV	numeric
IP	numeric
TBF	numeric
Н	numeric
R	numeric
ER	numeric
HR	numeric
BB	numeric
IBB	numeric
HBP	numeric
WP	numeric
BK	numeric
SO	numeric
K/9	numeric
BB/9	numeric
K/BB	numeric
HR/9	numeric
K%	numeric
K-BB%	numeric
BB%	numeric
AVG	numeric
WHIP	numeric
BABIP	numeric
LOB%	numeric
FIP	numeric
	character
gamedate dh	
G11	integer
UPId MLDAMIA	character
MLBAMId	character
MinorMasterId	character
RRId	character

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character
character

Examples

```
fg_milb_pitcher_game_logs(playerid = "sa3005315", year=2021)
```

fg_park

Scrape Park Factors from FanGraphs

Description

This function allows you to scrape park factors for a given season from FanGraphs.com.

This function allows you to scrape park factors by handedness from FanGraphs.com for a given single year.

Usage

```
fg_park(yr)
fg_park_hand(yr)
```

Arguments

yr

Season for which you want to scrape the park factors.

Value

Returns a tibble of park factors.

col_name types season integer home_team character basic_5yr integer fg_pitcher_game_logs 33

3yr	integer
1yr	integer
single	integer
double	integer
triple	integer
hr	integer
so	integer
UIBB	integer
GB	integer
FB	integer
LD	integer
IFFB	integer
FIP	integer

Returns a tibble of park factors by handedness.

col name	types
season	integer
home_team	character
single_as_LHH	integer
single_as_RHH	integer
double_as_LHH	integer
double_as_RHH	integer
triple_as_LHH	integer
triple_as_RHH	integer
hr_as_LHH	integer
hr_as_RHH	integer

Examples

```
try(fg_park(2013))
try(fg_park_hand(2013))
```

 ${\tt fg_pitcher_game_logs} \quad \textbf{Scrape Pitcher Game Logs from FanGraphs}$

Description

This function allows you to scrape game logs by year for a pitcher from FanGraphs.com.

Usage

```
fg_pitcher_game_logs(playerid, year = 2017)
```

Arguments

playerid This is the playerid used by FanGraphs for a given player

year The season for which game logs should be returned (use the YYYY format)

Value

Returns a tibble of pitcher game logs with the following columns:

col_name types PlayerName character playerid integer Date character Opp character teamid integer season integer Team character HomeAway character Age integer W numeric L numeric **ERA** numeric G numeric GS numeric CG numeric ShO numeric SVnumeric HLD numeric BS numeric IΡ numeric **TBF** numeric Η numeric R numeric ER numeric HR numeric BBnumeric **IBB** numeric **HBP** numeric WP numeric BKnumeric SO numeric K/9 numeric **BB/9** numeric H/9 numeric K/BB numeric

fg_pitcher_game_logs

IFH%	numeric
BUH%	numeric
GB	numeric
FB	numeric
LD	numeric
IFFB	numeric
IFH	numeric
BU	numeric
BUH	numeric
K%	numeric
BB%	numeric
K-BB%	numeric
SIERA	numeric
HR/9	numeric
AVG	numeric
WHIP	numeric
BABIP	numeric
LOB%	numeric
FIP	numeric
E-F	numeric
xFIP	numeric
ERA-	numeric
FIP-	numeric
xFIP-	numeric
GB/FB	numeric
LD%	numeric
GB%	numeric
FB%	numeric
IFFB%	numeric
HR/FB	numeric
RS	numeric
RS/9	numeric
Balls	numeric
Strikes	numeric
Pitches	numeric
WPA	numeric
-WPA	numeric
+WPA	numeric
RE24	numeric
REW	numeric
pLI	numeric
inLI	numeric
gmLI	numeric
exLI	numeric
Pulls	numeric
Games	numeric
WPA/LI	numeric
Clutch	numeric

SD	numeric
MD	numeric
FB%1	numeric
FBv	numeric
SL%	numeric
SLv	numeric
CT%	numeric
CTv	numeric
CB%	numeric
CBv	numeric
CH%	numeric
CHv	numeric
XX%	numeric
PO%	numeric
wFB	numeric
wSL	numeric
wCT	numeric
wCB	numeric
wCH	numeric
wFB/C	numeric
wSL/C	numeric
wCT/C wCB/C	numeric
wCB/C	numeric
wCH/C	numeric
O-Swing%	numeric
Z-Swing%	numeric
Swing%	numeric
O-Contact%	numeric
Z-Contact%	numeric
Contact%	numeric
Zone%	numeric
F-Strike%	numeric
SwStr%	numeric
Pull	numeric
Cent	numeric
Oppo	numeric
Soft	numeric
Med	numeric
Hard	numeric
bipCount	numeric
Pull%	numeric
Cent%	numeric
Oppo%	numeric
Soft%	numeric
Med%	numeric
Hard%	numeric
tERA	numeric
GSv2	numeric

Events numeric gamedate character dh integer

Examples

```
try(fg_pitcher_game_logs(playerid = 104, year = 2006))
```

fg_pitcher_leaders

Scrape Pitcher Leaderboards from FanGraphs

Description

Scrape Pitcher Leaderboards from FanGraphs

Usage

```
fg_pitcher_leaders(
    x,
    y,
    league = "all",
    qual = "y",
    pitcher_type = "pit",
    ind = 1
)
```

Arguments

X	First season for which you want data.
у	Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If $y = x$, function will return single-season data.
league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
pitcher_type	Whether you want only starting pitchers, relievers, or all pitchers that meet the criteria specified in the qual argument. Options include "pit", "sta", "rel".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 = $ split seasons, $0 = $ aggregate seasons.

Value

A data frame of pitcher data.

col_name types playerid character character Season character Name character Team character Age numeric W numeric L numeric **ERA** numeric G numeric GS numeric CG numeric ShO numeric SVnumeric BS numeric ΙP numeric TBF numeric Η numeric R numeric ER numeric HR numeric BBnumeric **IBB** numeric **HBP** numeric WP numeric BK numeric SO numeric GB numeric FΒ numeric LD numeric **IFFB** numeric Balls numeric Strikes numeric Pitches numeric RS numeric **IFH** numeric BU numeric BUH numeric K_9 numeric BB_9 numeric K_BB numeric H_9 numeric HR_9 numeric AVG numeric WHIP numeric **BABIP** numeric LOB_pct numeric

FIP	numeric
GB_FB	numeric
LD_pct	numeric
GB_pct	numeric
FB_pct	numeric
IFFB_pct	numeric
HR_FB	numeric
IFH_pct	numeric
BUH_pct	numeric
Starting	numeric
Start_IP	numeric
Relieving	numeric
Relief_IP	numeric
RAR	numeric
WAR	numeric
Dollars	numeric
tERA	numeric
xFIP	numeric
WPA	numeric
WPA_minus	numeric
WPA_plus	numeric
RE24	numeric
REW	numeric
pLI	numeric
inLI	numeric
gmLI	numeric
exLI	numeric
Pulls	numeric
WPA_LI	numeric
Clutch	numeric
FBall_pct	numeric
FBv	numeric
SL_pct	numeric
SLv	numeric
CT_pct	numeric
CTv	numeric
CB_pct	numeric
CB_pet CBv	numeric
CH_pct	numeric
CH ₂ CH ₂	numeric
SF_pct	numeric
SFv	numeric
KN_pct	numeric
KNv	numeric
XX_pct	numeric
PO_pct	numeric
wFB	numeric
wSL	numeric

wCT	numeric
wCB	numeric
wCH	numeric
wSF	numeric
wKN	numeric
wFB_C	numeric
wSL C	numeric
wCT_C	numeric
wCB_C	numeric
wCH_C	numeric
wSF_C	numeric
wKN_C	numeric
O-Swing_pct	numeric
Z-Swing_pct	numeric
Swing_pct	numeric
O-Contact_pct	numeric
Z-Contact_pct	numeric
Contact_pct	numeric
Zone_pct	numeric
F-Strike_pct	numeric
SwStr_pct	numeric
HLD	numeric
SD	numeric
MD	numeric
ERA-	numeric
FIP-	numeric
xFIP-	numeric
K_pct	numeric
BB_pct	numeric
SIERA	numeric
RS_9	numeric
E-F	numeric
FA_pct (sc) FT_pct (sc) FC_pct (sc)	numeric
FT_pct (sc)	numeric
FC_pct (sc)	numeric
FS_pct (sc)	numeric
FO_pct (sc)	numeric
SI_pct (sc) SL_pct (sc)	numeric
SL_pct (sc)	numeric
CU_pct (sc)	numeric
KC_pct (sc) EP_pct (sc)	numeric
EP_pct (sc)	numeric
CH_pct (sc)	numeric
SC_pct (sc)	numeric
KN_pct (sc) UN_pct (sc)	numeric
UN_pct (sc)	numeric
vFA (sc)	numeric
vFT (sc)	numeric

vFC (sc)	numeric
vFS (sc)	numeric
vFO (sc)	numeric
vSI (sc)	numeric
vSL (sc)	numeric
vCU (sc)	numeric
vKC (sc)	numeric
vEP (sc)	numeric
vCH (sc)	numeric
vSC (sc)	numeric
vKN (sc)	numeric
FA-X (sc)	numeric
FT-X (sc)	numeric
FC-X (sc)	numeric
FS-X (sc)	numeric
FO-X (sc)	numeric
SI-X (sc)	numeric
SL-X (sc)	numeric
CU-X (sc)	numeric
KC-X (sc)	numeric
EP-X (sc)	numeric
CH-X (sc)	numeric
SC-X (sc)	numeric
KN-X (sc)	numeric
FA-Z (sc)	numeric
FT-Z (sc)	numeric
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FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) WFA (sc) WFT (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) KN-Z (sc) wFA (sc) wFT (sc) wFC (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) KN-Z (sc) wFA (sc) wFT (sc) wFC (sc) wFS (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) KN-Z (sc) wFA (sc) wFC (sc) wFS (sc) wFO (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) KN-Z (sc) wFA (sc) wFC (sc) wFS (sc) wFO (sc) wSI (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) WFA (sc) WFT (sc) WFS (sc) WFO (sc) WSI (sc) WSL (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) WFA (sc) WFT (sc) WFC (sc) WFO (sc) WSI (sc) WSL (sc) WCU (sc)	numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) SC-Z (sc) KN-Z (sc) wFA (sc) wFT (sc) wFC (sc) wFO (sc) wSI (sc) wCU (sc) wKC (sc)	numeric numeric
FT-Z (sc) FC-Z (sc) FS-Z (sc) FO-Z (sc) SI-Z (sc) SL-Z (sc) CU-Z (sc) KC-Z (sc) EP-Z (sc) CH-Z (sc) WFA (sc) WFT (sc) WFC (sc) WFO (sc) WSI (sc) WSL (sc) WCU (sc)	numeric numeric

997	
wSC (sc)	numeric
wKN (sc)	numeric
wFA_C (sc)	numeric
wFT_C (sc)	numeric
wFC_C (sc)	numeric
wFS_C (sc)	numeric
wFO_C (sc)	numeric
wSI_C (sc)	numeric
wSL_C (sc)	numeric
wCU_C (sc)	numeric
wKC_C (sc)	numeric
wEP_C (sc)	numeric
wCH_C (sc)	numeric
wSC_C (sc)	numeric
wKN_C (sc)	numeric
O-Swing_pct (sc)	numeric
Z-Swing_pct (sc)	numeric
Swing_pct (sc)	numeric
O-Contact_pct (sc)	numeric
Z-Contact_pct (sc)	numeric
Contact_pct (sc)	numeric
Zone_pct (sc)	numeric
Pace	numeric
RA9-WAR	numeric
BIP-Wins	numeric
LOB-Wins	numeric
FDP-Wins	numeric
AgeRng	numeric
K-BB_pct	numeric
Pull_pct	numeric
Cent_pct	numeric
Oppo_pct	numeric
Soft_pct	numeric
Med_pct	numeric
Hard_pct	numeric
kwERA	numeric
TTO_pct	numeric
	numeric
CH_pct_pi CS_pct_pi	
	numeric
CU_pct_pi	numeric
FA_pct_pi	numeric
FC_pct_pi	numeric
FS_pct_pi	numeric
KN_pct_pi	numeric
SB_pct_pi	numeric
SI_pct_pi	numeric
SL_pct_pi	numeric
XX_pct_pi	numeric

vCH_pi	numeric
vCS_pi	numeric
vCU_pi	numeric
vFA_pi	numeric
vFC_pi	numeric
vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSI_pi	numeric
vSL_pi	numeric
vXX_pi	numeric
CH-X_pi	numeric
CS-X_pi	numeric
CU-X_pi	numeric
FA-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CS-Z_pi	numeric
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric
FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi wCU_pi	numeric
wCU_pi	numeric
WFA pi	numeric
wFC_pi	numeric
wFS_pi	numeric
wKN_pi	numeric
wSB_pi	numeric
wSI_pi wSL_pi	numeric
wst_pi	numeric
wXX_pi	numeric numeric
wCH_C_pi wCS_C_pi	numeric
wCS_C_pi wCU_C_pi	numeric
wFA_C_pi	numeric
w1A_C_pi	nument

```
wFC_C_pi
                   numeric
wFS_C_pi
                   numeric
wKN_C_pi
                   numeric
wSB_C_pi
                  numeric
wSI_C_pi
                   numeric
wSL_C_pi
                  numeric
wXX_C_pi
                   numeric
O-Swing_pct_pi
                   numeric
Z-Swing_pct_pi
                   numeric
Swing_pct_pi
                   numeric
O-Contact_pct_pi
                   numeric
Z-Contact_pct_pi
                   numeric
Contact_pct_pi
                   numeric
Zone_pct_pi
                   numeric
Pace_pi
                   numeric
Dol
                   numeric
```

Examples

```
fg_pitcher_leaders(x = 2015, y = 2015, qual = 150)
```

fg_pitch_leaders

(legacy) Scrape Pitcher Leaderboards from FanGraphs

Description

(legacy) Scrape Pitcher Leaderboards from FanGraphs

Usage

```
fg_pitch_leaders(
    x,
    y,
    league = "all",
    qual = "y",
    pitcher_type = "pit",
    ind = 1
)
```

Arguments

x First season for which you want data.

Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If y = x, function will return single-season data.

league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
pitcher_type	Whether you want only starting pitchers, relievers, or all pitchers that meet the criteria specified in the qual argument. Options include "pit", "sta", "rel".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 =$ split seasons, $0 =$ aggregate seasons.

Value

A data frame of pitcher data.

fg_team_batter	Scrape Team Batter Leaderboards from FanGraphs	

Description

This function allows you to scrape all leaderboard statistics (basic and advanced) from FanGraphs.com.

Usage

```
fg_team_batter(x, y, league = "all", qual = "y", ind = 1, exc_p = TRUE)
```

Arguments

X	First season for which you want data.
У	Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If $y = x$, function will return single-season data.
league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 =$ split seasons, $0 =$ aggregate seasons.
exc_p	(logical) Whether or not to exclude pitchers from the batter leaderboards. TRUE = exclude pitchers, FALSE = retain pitchers.

Value

A data frame of batter data.

col_name types Season character character # Team character G numeric AB numeric PA numeric Η numeric 1B numeric 2Bnumeric 3B numeric HR numeric R numeric **RBI** numeric BBnumeric **IBB** numeric SO numeric **HBP** numeric SF numeric SH numeric **GDP** numeric SBnumeric CS numeric **AVG** numeric GB numeric FB numeric LD numeric **IFFB** numeric Pitches numeric Balls numeric Strikes numeric **IFH** numeric BU numeric BUH numeric BB_pct numeric K_pct numeric BB_K numeric OBP numeric SLG numeric **OPS** numeric ISO numeric **BABIP** numeric GB_FB numeric LD_pct numeric GB_pct numeric FB_pct numeric IFFB_pct numeric HR_FB numeric

IFH_pct numeric BUH_pct numeric wOBA numeric wRAA numeric wRC numeric Bat numeric Fld numeric Rep numeric Pos numeric RAR numeric WAR numeric Dol numeric Spd numeric wRC_plus numeric **WPA** numeric WPA_minus numeric WPA_plus numeric RE24 numeric REW numeric pLI numeric phLI numeric PΗ numeric WPA_LI numeric Clutch numeric FBall_pct numeric FBv numeric SL_pct numeric SLvnumeric CT_pct numeric CTvnumeric CB_pct numeric CBv numeric CH_pct numeric CHvnumeric SF_pct numeric SFv numeric KN_pct numeric KNv numeric XX_pct numeric PO_pct numeric wFB numeric wSL numeric wCT numeric wCB numeric wCH numeric wSF numeric wKN numeric wFB_C numeric

wSL_C	numeric
wCT_C	numeric
wCB_C	numeric
wCH_C	numeric
wSF_C	numeric
wKN_C	numeric
O-Swing_pct	numeric
Z-Swing_pct	numeric
Swing_pct	numeric
O-Contact_pct	numeric
Z-Contact_pct	numeric
Contact_pct	numeric
Zone_pct	numeric
F-Strike_pct	numeric
SwStr_pct	numeric
BsR	numeric
FA_pct (sc)	numeric
FT_pct (sc)	numeric
FC_pct (sc)	numeric
FS_pct (sc)	numeric
FO_pct (sc)	numeric
SI_pct (sc)	numeric
SL_pct (sc)	numeric
CU_pct (sc)	numeric
KC_pct (sc)	numeric
EP_pct (sc)	numeric
CH_pct (sc)	numeric
SC_pct (sc)	numeric
KN_pct (sc) UN_pct (sc)	numeric
UN_pct (sc)	numeric
vFA (sc)	numeric
vFT (sc)	numeric
vFC (sc)	numeric
vFS (sc)	numeric
vFO (sc)	numeric
vSI (sc)	numeric
vSL (sc)	numeric
vCU (sc)	numeric
vKC (sc)	numeric
vEP (sc)	numeric
vCH (sc)	numeric
vSC (sc)	numeric
vKN (sc)	numeric
FA-X (sc)	numeric
FT-X (sc)	numeric
FC-X (sc)	numeric
FS-X (sc)	numeric
FO-X (sc)	numeric

SI-X (sc)	numeric
SL-X (sc)	numeric
CU-X (sc)	numeric
KC-X (sc)	numeric
EP-X (sc)	numeric
CH-X (sc)	numeric
SC-X (sc)	numeric
KN-X (sc)	numeric
FA-Z (sc)	numeric
FT-Z (sc)	numeric
FC-Z (sc)	numeric
FS-Z (sc)	numeric
FO-Z (sc)	numeric
SI-Z (sc)	numeric
SL-Z (sc)	numeric
CU-Z (sc)	numeric
KC-Z (sc)	numeric
EP-Z (sc)	numeric
CH-Z (sc)	numeric
SC-Z (sc)	numeric
KN-Z (sc)	numeric
wFA (sc)	numeric
wFT (sc)	numeric
wFC (sc)	numeric
wFS (sc)	numeric
wFO (sc)	numeric
wSI (sc)	numeric
wSL (sc)	numeric
wCU (sc)	numeric
wKC (sc)	numeric
wEP (sc)	numeric
wEr (sc)	numeric
wSC (sc)	numeric
wSC (sc) wKN (sc)	numeric
	numeric
wFA_C (sc) wFT_C (sc)	numeric
wFC_C (sc)	numeric
wFC_C (sc) wFS_C (sc)	
	numeric
wFO_C (sc) wSI_C (sc)	numeric
wsi_C (sc)	numeric
wSL_C (sc) wCU_C (sc)	numeric
wCU_C (sc) wKC_C (sc)	numeric
wkc_c (sc)	numeric
wEP_C (sc) wCH_C (sc)	numeric
WCH_C (sc)	numeric
wSC_C (sc)	numeric
wKN_C (sc)	numeric
O-Swing_pct (sc)	numeric

Z-Swing_pct (sc) numeric Swing_pct (sc) numeric O-Contact_pct (sc) numeric Z-Contact_pct (sc) numeric Contact_pct (sc) numeric Zone_pct (sc) numeric Pace numeric Def numeric wSB numeric **UBR** numeric AgeRng numeric Off numeric numeric Lg wGDP numeric Pull_pct numeric Cent_pct numeric Oppo_pct numeric Soft_pct numeric Med_pct numeric Hard_pct numeric TTO_pct numeric CH_pct_pi numeric CS_pct_pi numeric CU_pct_pi numeric FA_pct_pi numeric FC_pct_pi numeric FS_pct_pi numeric KN_pct_pi numeric SB_pct_pi numeric SI_pct_pi numeric SL_pct_pi numeric numeric XX_pct_pi vCH_pi numeric vCS_pi numeric vCU_pi numeric numeric vFA_pi vFC_pi numeric vFS_pi numeric vKN_pi numeric vSB_pi numeric vSI_pi numeric vSL_pi numeric vXX_pi numeric CH-X_pi numeric CS-X_pi numeric CU-X_pi numeric FA-X_pi numeric FC-X_pi numeric

FS-X_pi	numeric
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CS-Z_pi	numeric
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric
FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi	numeric
wCU_pi	numeric
wFA_pi	numeric
wFC_pi	numeric
wFS_pi	numeric
wKN_pi	numeric
wSB_pi	numeric
wSI_pi	numeric
CI:	numeric
wXX_pi	numeric
wCH_C_pi	numeric
wCS_C_pi	numeric
wCU_C_pi	numeric
wFA_C_pi	numeric
wFC_C_pi	numeric
wFS_C_pi	numeric
wSL_pi wXX_pi wCH_C_pi wCS_C_pi wCU_C_pi wFA_C_pi wFC_C_pi wFS_C_pi wKN_C_pi wSB_C_pi	numeric
wSB_C_pi	numeric
WOI C PI	numeric
wSL_C_pi	numeric
wSL_C_pi wXX_C_pi	numeric
O-Swing_pct_pi Z-Swing_pct_pi	numeric
Z-Swing_pct_pi	numeric
Swing_pct_pi O-Contact_pct_pi Z-Contact_pct_pi	numeric
O-Contact_pct_pi	numeric
Z-Contact_pct_pi	numeric
Contact_pct_pi	numeric
Zone_pct_pi	numeric
Pace_pi	numeric

Examples

```
try(fg\_team\_batter(x = 2015, y = 2015, qual = 200))
```

 $fg_team_pitcher$

Scrape Team Pitcher Leaderboards from FanGraphs

Description

Scrape Team Pitcher Leaderboards from FanGraphs

Usage

```
fg_team_pitcher(x, y, league = "all", qual = 0, pitcher_type = "pit", ind = 1)
```

Arguments

x	First season for which you want data.
у	Last season for which you want data. If multiple years selected, data returned will be aggregate data for the date range. If $y = x$, function will return single-season data.
league	Option for limiting results to different leagues or overall results. Options are "al", "nl", or "all".
qual	Whether you want only batters/pitchers that qualified in a given season, or the minimum number of plate appearances for inclusion. If you only want qualified hitters, use qual. If a minimum number of plate appearaces/innings pitched, use the number desired. Defaults to "y".
pitcher_type	Whether you want only starting pitchers, relievers, or all pitchers that meet the criteria specified in the qual argument. Options include "pit", "sta", "rel".
ind	Whether or not to break the seasons out individual, or roll them up together. $1 = $ split seasons, $0 = $ aggregate seasons.

Value

A data frame of pitcher data.

col_name	types
Season	character
#	character
Team	character
W	numeric
L	numeric
ERA	numeric
G	numeric
GS	numeric

CG	numeric
ShO	numeric
SV	numeric
BS	numeric
IP	numeric
TBF	numeric
Н	numeric
R	numeric
ER	numeric
HR	numeric
BB	numeric
IBB	numeric
HBP	numeric
WP	numeric
BK	numeric
SO	numeric
GB	numeric
FB	numeric
LD	numeric
IFFB	numeric
Balls	numeric
Strikes	numeric
Pitches	numeric
RS	numeric
IFH	numeric
BU	numeric
BUH	numeric
K_9	numeric
BB_9	numeric
K_BB	numeric
H_9	numeric
HR_9	numeric
AVG	numeric
WHIP	numeric
BABIP	numeric
LOB_pct	numeric
FIP	numeric
GB_FB	numeric
LD_pct	numeric
GB_pct	numeric
FB_pct	numeric
IFFB_pct	numeric
HR_FB	numeric
IFH_pct	numeric
BUH_pct	numeric
Starting	numeric
Start_IP	numeric
Relieving	numeric
110110,11116	

Relief_IP	numeric
RAR	numeric
WAR	numeric
Dollars	numeric
tERA	numeric
xFIP	numeric
WPA	numeric
WPA_minus	numeric
WPA_plus	numeric
RE24	numeric
REW	numeric
pLI	numeric
inLI	numeric
gmLI	numeric
exLI	numeric
Pulls	numeric
WPA_LI	numeric
Clutch	numeric
FBall_pct	numeric
FBv	numeric
SL_pct	numeric
SL _{pet}	
	numeric
CT_pct	numeric
CTv	numeric
CB_pct	numeric
CBv	numeric
CH_pct	numeric
CHv	numeric
SF_pct	numeric
SFv	numeric
KN_pct	numeric
KNv	numeric
XX_pct	numeric
PO_pct	numeric
wFB	numeric
wSL	numeric
wCT	numeric
wCB	numeric
wCH	numeric
wSF	numeric
wKN	numeric
wFB_C	numeric
wSL_C	numeric
wCT_C	numeric
wCB_C	numeric
wCH_C	numeric
wSF_C	numeric
wSr_C wKN_C	numeric
WINI_C	numeric

O-Swing_pct	numeric
Z-Swing_pct	numeric
Swing_pct	numeric
O-Contact_pct	numeric
Z-Contact_pct	numeric
Contact_pct	numeric
Zone_pct	numeric
F-Strike_pct	numeric
SwStr_pct	numeric
HLD	numeric
SD	numeric
MD	numeric
ERA-	numeric
FIP-	numeric
xFIP-	numeric
K_pct	numeric
BB_pct	numeric
SIERA	numeric
RS_9	numeric
E-F	numeric
FA_pct (sc) FT_pct (sc) FC_pct (sc)	numeric
FT_pct (sc)	numeric
FC_pct (sc)	numeric
FS_pct (sc)	numeric
FO_pct (sc)	numeric
SI_pct (sc)	numeric
SL_pct (sc)	numeric
CU_pct (sc)	numeric
KC_pct (sc)	numeric
EP_pct (sc)	numeric
CH_pct (sc)	numeric
SC_pct (sc)	numeric
KN_pct (sc) UN_pct (sc)	numeric
UN_pct (sc)	numeric
vFA (sc)	numeric
vFT (sc)	numeric
vFC (sc)	numeric
vFS (sc)	numeric
vFO (sc)	numeric
vSI (sc)	numeric
vSL (sc)	numeric
vCU (sc)	numeric
vKC (sc)	numeric
vEP (sc)	numeric
vCH (sc)	numeric
vSC (sc)	numeric
vKN (sc)	numeric
FA-X (sc)	numeric

FT-X (sc)	numeric
FC-X (sc)	numeric
FS-X (sc)	numeric
FO-X (sc)	numeric
SI-X (sc)	numeric
SL-X (sc)	numeric
CU-X (sc)	numeric
KC-X (sc)	numeric
EP-X (sc)	numeric
CH-X (sc)	numeric
SC-X (sc)	numeric
KN-X (sc)	numeric
FA-Z (sc)	numeric
FT-Z (sc)	numeric
FC-Z (sc)	numeric
FS-Z (sc)	numeric
FO-Z (sc)	numeric
SI-Z (sc)	numeric
SL-Z (sc)	numeric
CU-Z (sc)	numeric
KC-Z (sc)	numeric
EP-Z (sc)	numeric
CH-Z (sc)	numeric
SC-Z (sc)	numeric
KN-Z (sc)	numeric
wFA (sc)	numeric
wFT (sc)	numeric
wFC (sc)	numeric
wFS (sc)	numeric
wFO (sc)	numeric
wSI (sc)	numeric
wSL (sc)	numeric
wCU (sc)	numeric
wKC (sc)	numeric
wEP (sc)	numeric
wCH (sc)	numeric
wSC (sc)	numeric
wKN (sc)	numeric
wFA_C (sc)	numeric
wFT_C (sc)	numeric
wFC_C (sc)	numeric
wFS_C (sc)	numeric
wFO_C (sc)	numeric
wSI_C (sc)	numeric
wSI_C (sc)	numeric
wSL_C (sc) wCU_C (sc)	numeric
wKC_C (sc)	numeric
wEP_C (sc)	numeric
WEI _C (SC)	numenc

wCH_C (sc)	numeric
wSC_C (sc)	numeric
wKN_C (sc)	numeric
O-Swing_pct (sc)	numeric
Z-Swing_pct (sc)	numeric
Swing_pct (sc)	numeric
O-Contact_pct (sc)	numeric
Z-Contact_pct (sc)	numeric
Contact_pct (sc)	numeric
Zone_pct (sc)	numeric
Pace	numeric
RA9-WAR	numeric
BIP-Wins	numeric
LOB-Wins	numeric
FDP-Wins	numeric
AgeRng	numeric
K-BB_pct	numeric
Pull_pct	numeric
Cent_pct	numeric
Oppo_pct	numeric
Soft_pct	numeric
Med_pct	numeric
Hard_pct	numeric
kwERA	numeric
TTO_pct	numeric
CH_pct_pi	numeric
CS_pct_pi	numeric
CU_pct_pi	numeric
FA net ni	numeric
FA_pct_pi FC_pct_pi FS_pct_pi	numeric
FS not ni	numeric
KN_pct_pi	numeric
SB_pct_pi	numeric
SI_pct_pi	numeric
SL_pct_pi	numeric
XX_pct_pi	numeric
vCH_pi	numeric
vCS ni	numeric
vCS_pi vCU_pi vFA_pi	numeric
vE0_pi vEΔ_pi	numeric
vFC_pi	numeric
vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSD_pi vSI_ni	numeric
vSI_pi vSL_pi	numeric
vXX_pi	numeric
CH-X_pi	numeric
C11-A_p1	numeric

CS-X_pi	numeric
CU-X_pi	numeric
FA-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
	numeric
CH-Z_pi	numeric
CS-Z_pi	
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric
FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi	numeric
wCU_pi	numeric
wFA_pi	numeric
wFA_pi wFC_pi	numeric
wFS_pi	numeric
wKN_pi	numeric
wSB_pi	numeric
CT .	numeric
wSI_pi wSL_pi wXX_pi wCH_C_pi wCS_C_pi wCU_C_pi wFA_C_pi wFC_C_pi wFS_C_pi	numeric
wXX_pi	numeric
wCH C pi	numeric
wCS C pi	numeric
wCU C pi	numeric
wFA C ni	numeric
wFC C ni	numeric
wFS C ni	numeric
wKN_C_pi	numeric
wSB_C_pi	numeric
wSI_C_pi	numeric
wSi_C_pi	
wSL_C_pi wXX_C_pi	numeric numeric
WAA_C_pi	
O-Swing_pct_pi Z-Swing_pct_pi	numeric
Z-Swing_pct_pi	numeric
Swing_pct_pi	numeric
O-Contact_pct_pi	numeric
Z-Contact_pct_pi	numeric

fip_plus

Contact_pct_pi	numeric
Zone_pct_pi	numeric
Pace_pi	numeric
Dol	numeric

Examples

```
fg_{em_{pitcher}}(x = 2015, y = 2015, qual = 150)
```

fip_plus

Calculate FIP and related metrics for any set of data

Description

This function allows you to calculate FIP and related metrics for any given set of data, provided the right variables are in the data set. The function currently returns both FIP per inning pitched, wOBA against (based on batters faced), and wOBA against per instance of fair contact.

Usage

```
fip_plus(df)
```

Arguments

df

A data frame of statistics that includes, at a minimum, the following columns: IP (innings pitched), BF (batters faced), uBB (unintentional walks), HBP (Hit By Pitch), x1B (singles), x2B (doubles), x3B (triples), HR (home runs), AB (at-bats), SH (sacrifice hits), SO (strike outs), and season.

Value

Returns a tibble with the following columns:

col_name	types
bbref_id	character
season	integer
Name	character
Age	numeric
Level	character
Team	character
G	numeric
GS	numeric
W	numeric
L	numeric
SV	numeric

fip_plus 61

IP	numeric
H	numeric
R	numeric
ER	numeric
uBB	numeric
BB	numeric
SO	numeric
HR	numeric
HBP	numeric
ERA	numeric
AB	numeric
X1B	numeric
X2B	numeric
X3B	numeric
IBB	numeric
GDP	numeric
SF	numeric
SB	numeric
CS	numeric
PO	numeric
BF	numeric
Pit	numeric
Str	numeric
StL	numeric
StS	numeric
GB.FB	numeric
LD	numeric
PU	numeric
WHIP	numeric
BAbip	numeric
SO9	numeric
SO.W	numeric
SO_perc	numeric
uBB_perc	numeric
SO_uBB	numeric
FIP	numeric
wOBA_against	numeric
wOBA_CON_against	numeric

Examples

```
df <- bref_daily_pitcher("2015-04-05", "2015-04-30")
try(fip_plus(df))</pre>
```

62 get_draft_mlb

get_batting_orders

(legacy) Retrieve batting orders for a given MLB game

Description

(legacy) Retrieve batting orders for a given MLB game

Usage

```
get_batting_orders(game_pk, type = "starting")
```

Arguments

game_pk The unique game_pk identifier for the game

type Whether to just return the starting lineup ('starting') or all batters that appeared

('all')

Value

Returns a tibble that includes probable starting pitchers and the home plate umpire for the game_pk requested

get_draft_mlb

(legacy) Retrieve draft pick information by year

Description

(legacy) Retrieve draft pick information by year

Usage

```
get_draft_mlb(year)
```

Arguments

year

The year for which to return data

Value

Returns a tibble with information for every draft pick in every round for the year requested

get_game_info_mlb 63

get_game_info_mlb

(legacy) Retrieve additional game information for major and minor league games

Description

(legacy) Retrieve additional game information for major and minor league games

Usage

```
get_game_info_mlb(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tibble that includes supplemental information, such as weather, official scorer, attendance, etc., for the game_pk provided

```
get_game_info_sup_petti
```

(legacy) Download a data frame of supplemental data about MLB games since 2008.

Description

(legacy) Download a data frame of supplemental data about MLB games since 2008.

Usage

```
get_game_info_sup_petti()
```

Value

Function returns a tibble with various columns, including:

- game_pk
- game_date
- venue id
- attendance
- game temperature
- · wind speed
- · direction
- start time
- end time

get_game_pks_mlb

(legacy) Get MLB Game Info by Date and Level

Description

```
(legacy) Get MLB Game Info by Date and Level
```

Usage

```
get_game_pks_mlb(date, level_ids = c(1))
```

Arguments

date The date for which you want to find game_pk values for MLB games

level_ids A numeric vector with ids for each level where game_pks are desired. See below

for a reference of level ids.

Value

Returns a tibble that includes game_pk values and additional information for games scheduled or played

```
get_ncaa_baseball_pbp (legacy) Get Play-By-Play Data for NCAA Baseball Games
```

Description

```
(legacy) Get Play-By-Play Data for NCAA Baseball Games
(legacy) Get Play-By-Play Data for NCAA Baseball Games
```

Usage

```
get_ncaa_baseball_pbp(
  game_info_url = NA_character_,
  game_pbp_url = NA_character_,
  raw_html_to_disk = FALSE,
  raw_html_path = "/",
  read_from_file = FALSE,
  file = NA_character_,
  ...
)

ncaa_baseball_pbp(
  game_info_url = NA_character_,
  game_pbp_url = NA_character_,
```

get_ncaa_game_logs 65

```
raw_html_to_disk = FALSE,
raw_html_path = "/",
read_from_file = FALSE,
file = NA_character_,
...
)
```

Arguments

game_info_url The url for the game's boxscore data. This can be found using the ncaa_schedule_info

function.

game_pbp_url The url for the game's play-by-play data. This can be found using the ncaa_schedule_info

function.

raw_html_to_disk

Write raw html to disk (saves as game_pbp_id.html in raw_html_path direc-

tory)

raw_html_path Directory path to write raw html read_from_file Read from raw html on disk

file File with full path to read raw html

... Additional arguments passed to an underlying function like httr.

Value

A data frame with play-by-play data for an individual game.

A data frame with play-by-play data for an individual game.

```
get_ncaa_game_logs (legacy) Get NCAA Baseball Game Logs
```

Description

(legacy) Get NCAA Baseball Game Logs

Usage

```
get_ncaa_game_logs(player_id, year, type = "batting", span = "game", ...)
```

Arguments

player_id A player's unique id. Can be found using the get_ncaa_baseball_roster function.

year The year of interest.

type The kind of statistics you want to return. Current options are 'batting' or 'pitch-

ing'.

span The span of time; can either be 'game' for game logs in a season, or 'career'

which returns seasonal stats for a player's career.

. . . Additional arguments passed to an underlying function like httr.

Value

A data frame containing player and school information as well as game by game statistics

get_ncaa_lineups	(legacy) Retrieve	lineups	for a	given	NCAA	game	via	its
	game_info_url							

Description

```
(legacy) Retrieve lineups for a given NCAA game via its game_info_url
```

Usage

```
get_ncaa_lineups(game_info_url = NULL, ...)
```

Arguments

```
game_info_url The unique game info url
... Additional arguments passed to an underlying function like httr.
```

Value

Returns a tibble of each school's starting lineup and starting pitcher

```
get_ncaa_park_factor (legacy) Get Park Effects for NCAA Baseball Teams
```

Description

```
(legacy) Get Park Effects for NCAA Baseball Teams
```

Usage

```
get_ncaa_park_factor(team_id, years, type = "conference", ...)
```

Arguments

team_id	The team's unique NCAA id.
years	The season or seasons (i.e. use 2016 for the 2015-2016 season, etc., limited to just 2013-2020 seasons).
type	default is conference. the conference parameter adjusts for the conference the school plays in, the division parameter calculates based on the division the school plays in 1,2,or 3. Defaults to 'conference'.
	Additional arguments passed to an underlying function like httr.

get_ncaa_schedule_info

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Value

A data frame with the following fields: school, home_game, away_game, runs_scored_home, runs_allowed_home, runs_allowed_away, runs_allowed_away, base_pf (base park factor), home_game_adj (an adjustment for the percentage of home games played) final_pf (park factor after adjustments)

```
get_ncaa_schedule_info
```

(legacy) Get Schedule and Results for NCAA Baseball Teams

Description

(legacy) Get Schedule and Results for NCAA Baseball Teams

Usage

```
get_ncaa_schedule_info(team_id = NULL, year = NULL, pbp_links = FALSE, ...)
```

Arguments

team_id The team's unique NCAA id.

year The season (i.e. use 2016 for the 2015-2016 season, etc.)

pbp_links Logical parameter to run process for scraping play_by_play urls for each game

. . . Additional arguments passed to an underlying function like httr.

Value

A data frame with the following fields: date, opponent, result, score, innings (if more than regulation), and the url for the game itself.

get_pbp_mlb

(legacy) Acquire pitch-by-pitch data for Major and Minor League games

Description

```
(legacy) Acquire pitch-by-pitch data for Major and Minor League games (legacy) Acquire pitch-by-pitch data for Major and Minor League games
```

Usage

```
get_pbp_mlb(game_pk)
get_pbp_mlb(game_pk)
```

68 get_retrosheet_data

Arguments

game_pk

The date for which you want to find game_pk values for MLB games

Value

Returns a tibble that includes over 100 columns of data provided by the MLB Stats API at a pitch level

Returns a tibble that includes over 100 columns of data provided by the MLB Stats API at a pitch level.

get_probables_mlb

(legacy) Retrieve probable starters for a given MLB game

Description

(legacy) Retrieve probable starters for a given MLB game

Usage

```
get_probables_mlb(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tibble that includes probable starting pitchers and the home plate umpire for the game_pk requested

get_retrosheet_data

(legacy) Get, Parse, and Format Retrosheet Event and Roster Files

Description

(legacy) Get, Parse, and Format Retrosheet Event and Roster Files

Usage

```
get_retrosheet_data(
  path_to_directory = NULL,
  years_to_acquire = most_recent_mlb_season() - 1,
  sequence_years = FALSE
)
```

get_umpire_ids_petti 69

Arguments

path_to_directory

(default: NULL) A file path that if set, either:

- 1. creates a new directory, or
- 2. uses the path to an existing directory

years_to_acquire

(format: YYYY) The seasons to collect. Single, multiple, and sequential years can be passed. If passing multiple years, enclose in a vector (i.e. c(2017,2018)). Defaults to most_recent_mlb_season().

sequence_years

(logical, default: FALSE): If the seasons passed in the years_to_acquire parameter should be sequenced so that the function returns all years including and between the vector passed, set the argument to TRUE. Defaults to FALSE.

Value

If path_to_directory is not set (default), the process will return a named list of tibbles: 'events' and 'rosters' for each season provided to years_to_acquire If path_to_directory is set, will also write two csv files to the unzipped directory: 1) a combined csv of the event data for a given year and 2) a combined csv of each team's roster for each year provided to years_to_acquire

get_umpire_ids_petti

(legacy) Download a data frame of all umpires and their MLBAM IDs for games since 2008

Description

(legacy) Download a data frame of all umpires and their MLBAM IDs for games since 2008

Usage

```
get_umpire_ids_petti()
```

Value

Function returns a tibble with the following columns:

- id
- position,
- name
- game_pk
- game_date

70 ggspraychart

Description

This function allows you to create spray charts with ggplots given a data frame with batted ball location coordinates.

Usage

```
ggspraychart(
  data,
  x_value = "hc_x",
  y_value = "-hc_y",
  fill_value = NULL,
  fill_palette = NULL,
  fill_legend_title = NULL,
  density = FALSE,
  bin_size = 15,
  point_alpha = 0.75,
  point_size = 2,
  frame = NULL
)
```

Arguments

data	A data frame that includes batted ball coordinates. Typically, this coordinates will come from the GameDay xml feed or downloads from baseballsavant.com	
x_value	The x coordindate. Typically hc_x.	
y_value	The y coordinate. Typically hc_y. You generally need the inverse or negative of the hc_y values, so it is recommended you calculate before plotting.	
fill_value	The categorical variable that you want the geom_points to base the fill on. Pass as a string. If left blank, defaults to blue.	
fill_palette	An object containing a customer palette to be used with ggplot2::scale_fill_manual.	
fill_legend_title		
	$A string \ containing \ a \ custom \ legend \ title \ to \ be \ used \ with \ ggplot 2:: scale_fill_manual.$	
density	Chooses between a 2d density plot or a point plot. Defaults to FALSE.	
bin_size	Size of bins used when building a density plot. Defaults to 15.	
point_alpha	Alpha value whenever geom_point is used. Defaults to .75. Recommend .3 for density plots. To remove points on density points set use point_alpha = 0.	
point_size	Set the size of geom_point if used.	
frame	Variable to use as the frame argument if using gganimate to create animated plots. For density plots be sure your variable is a factor.	

Details

```
ggspraychart(df, x_value = "hc_x", y_value = "-hc_y", fill_value = "events")
```

Value

A plot of the spraychart for the supplied dataset

```
label_statcast_imputed_data
```

Label Statcast data as imputed

Description

Based on a series of heuristics, this function attempts to label Statcast data for which the launch angle and speed have been imputed.

Usage

```
label_statcast_imputed_data(
  statcast_df,
  impute_file = NULL,
  inverse_precision = 10000
)
```

Arguments

statcast_df A dataframe containing Statcast batted ball data

impute_file A CSV file giving the launch angle, launch speed, bb_type, events fields to label

as imputed. if NULL then it's read from the extdata folder of the package.

inverse_precision

inverse of how many digits to truncate the launch angle and speed to for comparison. Default is 10000, i.e. keep 4 digits of precision.

Value

A copy of the input dataframe with a new column imputed appended. imputed is 1 if launch angle and launch speed are likely imputed, 0 otherwise. Returns a tibble with the following columns:

col_name	types
pitch_type	character
game_date	Date
release_speed	numeric
release_pos_x	numeric
release_pos_z	numeric
player_name	character
batter	numeric
pitcher	numeric

events character character description logical spin_dir spin_rate_deprecated logical break_angle_deprecated logical break_length_deprecated logical zone numeric character des game_type character character stand p_throws character character home_team away_team character character type hit_location integer bb_type character balls integer strikes integer game_year integer pfx_x numeric pfx_z numeric plate_x numeric plate_z numeric on_3b numeric on_2b numeric on_1b numeric outs_when_up integer inning numeric inning_topbot character hc_x numeric numeric hc_y tfs_deprecated logical tfs_zulu_deprecated logical $fielder_2$ numeric umpire logical sv_id logical vx0 numeric vy0numeric vz0 numeric numeric ax ay numeric numeric az sz_top numeric sz_bot numeric hit_distance_sc numeric launch_speed numeric launch_angle numeric effective_speed numeric

release_spin_rate	numeric
release_extension	numeric
game_pk	numeric
pitcher_1	numeric
fielder 2 1	numeric
fielder_3	numeric
fielder_4	numeric
fielder_5	numeric
fielder_6	numeric
fielder_7	numeric
fielder_8	numeric
fielder_9	numeric
release_pos_y	numeric
estimated_ba_using_speedangle	numeric
estimated_woba_using_speedangle	numeric
woba_value	numeric
woba_denom	integer
babip_value	integer
iso_value	integer
launch_speed_angle	integer
at_bat_number	numeric
pitch_number	numeric
pitch_name	character
home_score	numeric
away_score	numeric
bat_score	numeric
fld_score	numeric
post_away_score	numeric
post_home_score	numeric
post_bat_score	numeric
post_fld_score	numeric
if_fielding_alignment	character
of_fielding_alignment	character
spin_axis	numeric
delta_home_win_exp	numeric
delta_run_exp	numeric
ila	integer
ils	integer
imputed	numeric

Examples

```
statcast_df <- statcast_search("2017-05-01", "2017-05-02")
sc_df <- label_statcast_imputed_data(statcast_df)
mean(sc_df$imputed)</pre>
```

74 load_game_info_sup

linear_weights_savant Generate linear weight values for events using Baseball Savant data

Description

This function allows a user to generate linear weight values for events using Baseball Savant data. Output includes both linear weights above average and linear weights above outs for home runs, triples, doubles, singles, walks, hit by pitches, and outs.

Usage

```
linear_weights_savant(df, level = "plate appearance")
```

Arguments

df A data frame generated from Baseball Savant that has been run through the

run_expectancy_code() function.

level Whether to calculate linear weights the plate appearance or pitch level. Defaults

to 'plate appearance'.

Value

Returns a tibble with the following columns:

col_name types
events character
linear_weights_above_average numeric
linear_weights_above_outs numeric

Examples

load_game_info_sup

Download a data frame of supplemental data about MLB games since 2008.

Description

Download a data frame of supplemental data about MLB games since 2008.

Usage

```
load_game_info_sup()
```

Value

Function returns a tibble with various columns, including:

- game_pk
- game_date
- venue id
- attendance
- game temperature
- · wind speed
- · direction
- start time
- end time

Examples

```
try(load_game_info_sup())
```

load_ncaa_baseball_pbp

Load cleaned NCAA baseball play-by-play data from the baseballr data repo

Description

helper that loads multiple seasons from the data repo either into memory or writes it into a db using some forwarded arguments in the dots

Usage

```
load_ncaa_baseball_pbp(
  seasons = most_recent_ncaa_baseball_season(),
  ...,
  dbConnection = NULL,
  tablename = NULL
)
```

Arguments

seasons A vector of 4-digit years associated with given NCAA college baseball seasons.

(Min: 2022)

... Additional arguments passed to an underlying function that writes the season

data into a database.

dbConnection A DBIConnection object, as returned by

tablename The name of the schedule data table within the database

Value

Returns a tibble

Examples

```
load_ncaa_baseball_pbp(seasons = 2021)
```

load_ncaa_baseball_schedule

Load cleaned NCAA baseball schedule from the baseballr data repo

Description

helper that loads multiple seasons from the data repo either into memory or writes it into a db using some forwarded arguments in the dots

Usage

```
load_ncaa_baseball_schedule(
  seasons = most_recent_ncaa_baseball_season(),
  ...,
  dbConnection = NULL,
  tablename = NULL
)
```

Arguments

seasons A vector of 4-digit years associated with given NCAA college baseball seasons.

(Min: 2012)

... Additional arguments passed to an underlying function that writes the season

data into a database.

dbConnection A DBIConnection object, as returned by

tablename The name of the schedule data table within the database

Value

Returns a tibble

Examples

```
load_ncaa_baseball_schedule(seasons = 2022)
```

load_ncaa_baseball_season_ids

Load cleaned NCAA men's college baseball season IDs from the baseballr data repo

Description

helper that loads multiple seasons of season IDs from the data repo either into memory or writes it into a db using some forwarded arguments in the dots

Usage

```
load_ncaa_baseball_season_ids(..., dbConnection = NULL, tablename = NULL)
```

Arguments

... Additional arguments passed to an underlying function that writes the season

data into a database.

dbConnection A DBIConnection object, as returned by

tablename The name of the data table within the database

Value

Returns a tibble

Examples

```
load_ncaa_baseball_season_ids()
```

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load_ncaa_baseball_teams

Load cleaned NCAA men's college baseball teams from the baseballr data repo

Description

helper that loads multiple seasons of teams from the data repo either into memory or writes it into a db using some forwarded arguments in the dots

Usage

```
load_ncaa_baseball_teams(..., dbConnection = NULL, tablename = NULL)
```

Arguments

... Additional arguments passed to an underlying function that writes the season

data into a database.

dbConnection A DBIConnection object, as returned by

tablename The name of the data table within the database

Value

Returns a tibble

Examples

load_ncaa_baseball_teams()

load_umpire_ids

Download a data frame of all umpires and their mlbamids for games since 2008

Description

Download a data frame of all umpires and their mlbamids for games since 2008

Usage

```
load_umpire_ids()
```

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Value

Function returns a tibble with the following columns:

- id
- position
- name
- game_pk
- game_date

Examples

```
try(load_umpire_ids())
```

metrics

Metrics Functions Overview

Description

```
fip_plus(): Calculate FIP and related metrics for any set of data.
```

woba_plus() Calculate wOBA and related metrics for any set of data.

team_consistency() Calculate Team-level Consistency.

label_statcast_imputed_data() Label Statcast data as imputed.

run_expectancy_code() Generate run expectancy and related measures from Baseball Savant data.

linear_weights_savant() Generate linear weight values for events using Baseball Savant data.

Details

Calculate Team-level Consistency:

```
team_consistency(year=2015)
```

Calculate FIP and related metrics for any set of data:

```
fips_plus(df)
```

Calculate wOBA and related metrics for any set of data:

```
woba_plus(df)
```

Label Statcast data as imputed:

```
statcast_df <- scrape_statcast_savant("2017-05-01", "2017-05-02")
sc_df <- label_statcast_imputed_data(statcast_df)
mean(sc_df$imputed)</pre>
```

Generate run expectancy and related measures from Baseball Savant data:

Generate linear weight values for events using Baseball Savant data:

milb_batter_game_logs_fg

(legacy) Scrape MiLB game logs for batters from FanGraphs

Description

(legacy) Scrape MiLB game logs for batters from FanGraphs

Usage

```
milb_batter_game_logs_fg(playerid, year)
```

Arguments

 ${\bf playerid} \qquad \qquad {\bf The\ batter's\ minor\ league\ ID\ from\ FanGraphs}.$

year The season for which game logs should be returned.

Value

Returns a tibble of Minor League batter game logs.

```
milb_pitcher_game_logs_fg
```

(legacy) Scrape MiLB game logs for pitchers from FanGraphs

Description

(legacy) Scrape MiLB game logs for pitchers from FanGraphs

Usage

```
milb_pitcher_game_logs_fg(playerid, year)
```

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Arguments

playerid The pitcher's minor league ID from FanGraphs.com. year The season for which game logs should be returned.

Value

Returns a tibble of Minor League pitcher game logs.

mlb

MLB Functions Overview

Description

```
mlb_batting_orders(): Retrieve batting orders for a given MLB game.
mlb_draft(): Retrieve draft pick information by year.
mlb_pbp(): Acquire pitch-by-pitch data for Major and Minor League games.
mlb_game_info(): Retrieve additional game information for major and minor league games.
mlb_game_pks(): Get MLB Game Info by Date and Level.
mlb_schedule(): Find game_pk values for professional baseball games (major and minor leagues).
mlb_probables(): Retrieve probable starters for a given MLB game.
```

Details

Retrieve batting orders for a given MLB game:

```
mlb_batting_orders(game_pk=566001)
```

Retrieve draft pick information by year:

```
mlb_draft(year= 2018)
```

Acquire pitch-by-pitch data for Major and Minor League games:

```
mlb_pbp(game_pk = 575156)
```

Retrieve additional game information for major and minor league games:

```
mlb_game_info(game_pk = 566001)
```

Get MLB Game Info by Date and Level:

```
mlb_game_pks("2019-04-29")
```

Find game_pk values for professional baseball games (major and minor leagues):

```
mlb_schedule(season = "2019")
```

Retrieve probable starters for a given MLB game:

```
mlb_probables(566001)
```

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mlb_all_star_ballots Find MLB All-Star Ballots

Description

Find MLB All-Star Ballots

Usage

```
mlb_all_star_ballots(league_id = NULL, season = NULL)
```

Arguments

league_id League ID for league all-star ballot of interest.

season The season of the all-star ballot.

Value

Returns a tibble with the following columns:

col_name types player_id integer full name character link character first name character last_name character primary_number character birth_date character current_age integer character birth_city birth_state_province character birth_country character height character weight integer active logical use_name character middle_name character boxscore_name character nick name character gender character logical is_player is_verified logical draft_year integer mlb_debut_date character $name_first_last$ character name_slug character first_last_name character

last_first_name	character
last_init_name	character
init_last_name	character
full_fml_name	character
full_lfm_name	character
strike_zone_top	numeric
strike_zone_bottom	numeric
pronunciation	character
name_matrilineal	character
name_title	character
primary_position_code	character
primary_position_name	character
primary_position_type	character
primary_position_abbreviation	character
bat_side_code	character
bat_side_description	character
pitch_hand_code	character
pitch_hand_description	character
league_id	numeric
season	numeric

Examples

```
try(mlb_all_star_ballots(league_id = 103, season = 2021))
```

```
mlb_all_star_final_vote
```

Find MLB All-Star Final Vote

Description

Find MLB All-Star Final Vote

Usage

```
mlb_all_star_final_vote(league_id = NULL, season = NULL)
```

Arguments

league_id League ID for league all-star ballot of interest.

season The season of the all-star ballot.

Value

Returns a tibble with the following columns:

col_name types player_id integer full_name character link character first_name character last_name character primary_number character birth_date character current_age integer birth_city character birth_state_province character birth_country character height character weight integer active logical use_name character middle_name character boxscore_name character nick_name character gender character is_player logical is_verified logical draft_year integer mlb_debut_date character name_first_last character name slug character first_last_name character last_first_name character character last_init_name init_last_name character full_fml_name character full_lfm_name character strike_zone_top numeric strike_zone_bottom numeric pronunciation character name_matrilineal character name title character primary_position_code character primary_position_name character primary_position_type character primary_position_abbreviation character bat_side_code character bat_side_description character pitch_hand_code character pitch_hand_description character league_id numeric season numeric

mlb_all_star_write_ins

Examples

```
try(mlb_all_star_final_vote(league_id = 103, season = 2021))
```

```
mlb_all_star_write_ins
```

Find MLB All-Star Write-ins

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Description

Find MLB All-Star Write-ins

Usage

```
mlb_all_star_write_ins(league_id = NULL, season = NULL)
```

Arguments

league_id League ID for league all-star ballot of interest.

season The season of the all-star ballot.

Value

Returns a tibble with the following columns:

col_name types player_id integer full_name character link character first name character last_name character primary_number character birth_date character current_age integer birth_city character birth_state_province character birth_country character height character weight integer active logical use_name character middle name character character boxscore_name nick_name character gender character is_player logical

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is_verified	logical
draft_year	integer
mlb_debut_date	character
name_first_last	character
name_slug	character
first_last_name	character
last_first_name	character
last_init_name	character
init_last_name	character
full_fml_name	character
full_lfm_name	character
strike_zone_top	numeric
strike_zone_bottom	numeric
pronunciation	character
name_matrilineal	character
name_title	character
primary_position_code	character
primary_position_name	character
primary_position_type	character
primary_position_abbreviation	character
bat_side_code	character
bat_side_description	character
pitch_hand_code	character
pitch_hand_description	character
league_id	numeric
season	numeric

Examples

```
try(mlb_all_star_write_ins(league_id = 103, season = 2021))
```

mlb_attendance

MLB Attendance

Description

MLB Attendance

Usage

```
mlb_attendance(
  team_id = NULL,
  league_id = NULL,
  season = NULL,
```

mlb_attendance 87

```
date = NULL,
league_list_id = NULL
)
```

Arguments

team_id Return attendance information for a particular team_id(s).

league_id Return attendance information for a particular league_id(s). Format: '103,104'

season Return attendance information for particular year(s).

date Return attendance information on a particular date. Format: MM/DD/YYYY

league_list_id Unique league list identifier to return a directory of attendance for a specific league list_id Valid values include:

- milb full
- milb_short
- milb_complex
- milb_all
- milb_all_nomex
- milb_all_domestic
- milb_noncomp
- milb_noncomp_nomex
- milb_domcomp
- milb_intcomp
- · win_noabl
- win_caribbean
- win_all
- abl
- mlb
- mlb_hist
- mlb_milb
- mlb_milb_hist
- mlb_milb_win
- baseball all

Value

Returns a tibble with the following columns

col_name types openings_total integer openings_total_away integer openings_total_home integer integer openings_total_lost games_total integer games_away_total integer games_home_total integer

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year character integer attendance_average_away attendance_average_home integer attendance_average_ytd integer attendance_high integer attendance_high_date character attendance_low integer attendance low date character attendance_opening_average integer attendance_total integer attendance_total_away integer attendance_total_home integer attendance_high_game_game_pk integer attendance_high_game_link character attendance_high_game_day_night character attendance_high_game_content_link character attendance_low_game_game_pk integer attendance_low_game_link character attendance_low_game_day_night character attendance_low_game_content_link character game_type_id character game_type_description character team_id integer team_name character character team_link

Examples

try(mlb_attendance(team_id = 109, season = 2021))

mlb_award

MLB All-Star, Awards, Home Run Derby Functions

Description

```
mlb_all_star_ballots(): Find MLB All-Star Ballots.
mlb_all_star_final_vote(): Find MLB All-Star Final Vote.
mlb_all_star_write_ins(): Find MLB All-Star Write-ins.
mlb_awards(): Find MLB Awards.
mlb_awards_recipient(): Find MLB Award Recipients.
mlb_homerun_derby(): Retrieve MLB Home Run Derby Data.
mlb_homerun_derby_bracket(): Retrieve MLB Home Run Derby Bracket.
mlb_homerun_derby_players(): Retrieve MLB Home Run Derby Players.
```

mlb_awards 89

Details

```
Find MLB All-Star Ballots:
```

```
try(mlb_all_star_ballots(league_id = 103, season = 2021))
```

Find MLB All-Star Final Vote:

```
try(mlb_all_star_final_vote(league_id = 103, season = 2021))
```

Find MLB All-Star Write-ins:

```
try(mlb_all_star_write_ins(league_id = 103, season = 2021))
```

Find MLB Awards:

```
try(mlb_awards())
```

Find MLB Award Recipients:

```
try(mlb_awards_recipient(award_id = 'MLBHOF', season = 2020))
```

Retrieve MLB Home Run Derby Data:

```
try(mlb_homerun_derby(game_pk = 511101))
```

Retrieve MLB Home Run Derby Bracket:

```
try(mlb_homerun_derby_bracket(game_pk = 511101))
```

Retrieve MLB Home Run Derby Players:

```
try(mlb_homerun_derby_players(game_pk = 511101))
```

mlb_awards

MLB Awards

Description

MLB Awards

Usage

mlb_awards()

Value

Returns a tibble with the following columns

col_name	types
award_id	character
award_name	character
award_description	character
sort_order	integer
notes	character
sport_id	integer
sport_link	character
league_id	integer
league_link	character

Examples

```
try(mlb_awards())
```

mlb_awards_recipient MLB Award Recipients

Description

MLB Award Recipients

Usage

```
mlb_awards_recipient(
  award_id = NULL,
  sport_id = NULL,
 league_id = NULL,
  season = NULL
)
```

Arguments

award_id award_id to return a directory of players for a given award.

sport_id sport_id to return a directory of players for a given aware in a specific sport. league_id league_id(s) to return a directory of players for a given award in a specific

league. Format '103,104'

Year(s) to return a directory of players for a given award in a given season. season

Value

Returns a tibble with the following columns

mlb_baseball_stats 91

col_name types award_id character award_name character date character season character votes integer notes character player_id integer player_link character player_name_first_last character player_primary_position_code character player_primary_position_name character player_primary_position_type character player_primary_position_abbreviation character team_id integer team_link character

Examples

```
try(mlb_awards_recipient(award_id = 'MLBHOF', season = 2020))
```

mlb_baseball_stats

MLB Baseball Stats

Description

MLB Baseball Stats

Usage

```
mlb_baseball_stats()
```

Value

Returns a tibble with the following columns:

col_name types
stat_name character
stat_lookup_param is_counting logical
stat_label character
stat_group character

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Examples

```
try(mlb_baseball_stats())
```

mlb_batting_orders

Retrieve batting orders for a given MLB game

Description

Retrieve batting orders for a given MLB game

Usage

```
mlb_batting_orders(game_pk, type = "starting")
```

Arguments

game_pk The unique game_pk identifier for the game

type Whether to just return the starting lineup ('starting') or all batters that appeared

('all')

Value

Returns a tibble that includes probable starting pitchers and the home plate umpire for the game_pk requested

col_name types id integer fullName character abbreviation character batting_order character batting_position_num character team character teamName character teamID integer

Examples

```
try(mlb_batting_orders(game_pk=566001))
```

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mlb_conferences

View all PCL conferences

Description

View all PCL conferences

Usage

```
mlb_conferences(conference_id = NULL, season = NULL)
```

Arguments

conference_id Conference ID to return information for.

season Year to return to return conference information for.

Value

Returns a tibble with the following columns

types
integer
character
character
character
logical
character
integer
character
integer
character

Examples

```
try(mlb_conferences())
try(mlb_conferences(conference_id = 301, season = 2020))
```

mlb_divisions

MLB Divisions

Description

MLB Divisions

94 mlb_draft

Usage

```
mlb_divisions(division_id = NULL, league_id = NULL, sport_id = NULL)
```

Arguments

division_id Return division(s) data for a specific division

league_id Return division(s) data for all divisions in a specific league sport_id Return division(s) for all divisions in a specific sport.

Value

Returns a tibble with the following columns

col_name types division_id integer division_name character character season division_name_short character division_link character division_abbreviation character has_wildcard logical sort order integer num_playoff_teams integer active logical league_id integer league_link character sport_id integer sport_link character

Examples

```
try(mlb_divisions(sport_id = 1))
```

mlb_draft

Retrieve draft pick information by year

Description

Retrieve draft pick information by year

Usage

```
mlb_draft(year)
```

mlb_draft 95

Arguments

year The year for which to return data

Value

Returns a tibble with information for every draft pick in every round for the year requested

col_name types bis_player_id integer pick_round character pick_number integer round_pick_number integer rank integer pick_value character signing_bonus character scouting report character blurb character headshot link character is_drafted logical logical is_pass year character home_city character home_state character home_country character school_name character school_school_class character school_country character school_state character person_id integer person_full_name character character person_link person_first_name character person_last_name character person_primary_number character person birth date character person_current_age integer person_birth_city character person_birth_state_province character person_birth_country character person_height character person_weight integer person_active logical person_use_name character person_middle_name character person_boxscore_name character character person_gender person_is_player logical person_is_verified logical

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person_draft_year	• •	integer
person_name_firs	t_last	character
person_name_slug	g	character
person_first_last_	name	character
person_last_first_		character
person_last_init_r	name	character
person_init_last_r	name	character
person_full_fml_1	name	character
person_full_lfm_1	name	character
person_strike_zor	ne_top	numeric
person_strike_zor	ne_bottom	numeric
person_pronuncia	tion	character
person_name_title	e	character
person_mlb_debu	t_date	character
person_name_ma	trilineal	character
person_primary_p	osition_code	character
person_primary_p	osition_name	character
person_primary_p	osition_type	character
person_primary_p	osition_abbreviation	character
person_bat_side_o	code	character
person_bat_side_o	description	character
person_pitch_han	d_code	character
person_pitch_han	d_description	character
team_id		integer
team_name		character
team_link		character
team_all_star_stat	tus	character
team_spring_leag	ue_id	integer
team_spring_leag	ue_name	character
team_spring_leag	ue_link	character
team_spring_leag	ue_abbreviation	character
draft_type_code		character
draft_type_descrip	ption	character

Examples

 $try(mlb_draft(year = 2020))$

mlb_draft_latest

Retrieve latest draft information by year

Description

Retrieve latest draft information by year

mlb_draft_latest 97

Usage

mlb_draft_latest(year)

Arguments

year The year for which to return data

Value

Returns a tibble with the latest draft information for the year requested:

col_name types bis_player_id integer pick_round character pick_number integer round_pick_number integer rank integer pick_value character signing_bonus character home_city character home_state character home_country character scouting_report character school_name character school_school_class character school country character school_state character blurb character headshot_link character person id integer person_full_name character person_link character person_first_name character person_last_name character person_primary_number character person_birth_date character person_current_age integer person_birth_city character person_birth_state_province character person_birth_country character person_height character person_weight integer person active logical person_primary_position_code character person_primary_position_name character person_primary_position_type character person_primary_position_abbreviation character person_use_name character person_middle_name character

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person_boxscore_name character person_gender character person_is_player logical person_is_verified logical person_draft_year integer person_bat_side_code character person bat side description character person_pitch_hand_code character person_pitch_hand_description character person_name_first_last character person_name_slug character person_first_last_name character person_last_first_name character person_last_init_name character person_init_last_name character person_full_fml_name character person_full_lfm_name character person_strike_zone_top numeric person_strike_zone_bottom numeric team id integer team_name character team link character team_season integer team_venue_id integer character team_venue_name team venue link character team_spring_venue_id integer team_spring_venue_link character team_team_code character team_file_code character team_abbreviation character team_team_name character team_location_name character team_first_year_of_play character team_league_id integer team_league_name character team league link character team_division_id integer team division name character team_division_link character team_sport_id integer team_sport_link character team sport name character team_short_name character team_franchise_name character character team_club_name team_spring_league_id integer team_spring_league_name character mlb_draft_prospects 99

character
character
character
logical
character
character
logical
logical
character

Examples

```
try(mlb_draft_latest(year = 2020))
```

mlb_draft_prospects

Retrieve draft prospect information by year

Description

Retrieve draft prospect information by year

Usage

mlb_draft_prospects(year)

Arguments

year

The year for which to return data

Value

Returns a tibble with information for every draft prospect for the year requested:

col_name types bis_player_id integer pick_round character pick_number integer rank integer scouting_report character blurb character headshot_link character is_drafted logical year character character home_city home_state character

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home_country character school_name character school school class character school_country character school state character person_id integer person_full_name character person link character person first name character person_last_name character person_birth_date character person_current_age integer person_birth_city character person_birth_state_province character person_birth_country character person_height character person_weight integer logical person_active person_use_name character person middle name character person_boxscore_name character person_gender character person_is_player logical person_is_verified logical person_draft_year integer person name first last character person_name_slug character person_first_last_name character person_last_first_name character person_last_init_name character person_init_last_name character person_full_fml_name character person_full_lfm_name character person_strike_zone_top numeric person_strike_zone_bottom numeric person_primary_number character person pronunciation character person_name_title character person mlb debut date character person_name_matrilineal character person_nick_name character character person death date person death city character person_death_state_province character person_death_country character person_primary_position_code character person_primary_position_name character person_primary_position_type character

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person_primary_position_abbreviation character person_bat_side_code character person_bat_side_description character person_pitch_hand_code character person_pitch_hand_description character team_id integer team_name character team_link character team season integer team_team_code character team_file_code character team_abbreviation character team_team_name character team_location_name character character team_first_year_of_play team_short_name character team_franchise_name character team_club_name character team_all_star_status character team_active logical team_venue_id integer team_venue_name character team_venue_link character team_spring_venue_id integer character team_spring_venue_link team league id integer team_league_name character team_league_link character team_division_id integer team_division_name character team_division_link character team_sport_id integer team_sport_link character team_sport_name character team_spring_league_id integer team_spring_league_name character team_spring_league_link character team_spring_league_abbreviation character draft type code character draft_type_description character

Examples

try(mlb_draft_prospects(year = 2020))

mlb_event_types

MLB Event Types

Description

MLB Event Types

Usage

```
mlb_event_types()
```

Value

Returns a tibble with the following columns

col_nametypesplate_appearancelogicalhitlogicalevent_codecharacterbase_running_eventlogicalevent_descriptioncharacter

Examples

```
try(mlb_event_types())
```

```
mlb_fielder_detail_types
```

MLB Fielder Detail Types

Description

MLB Fielder Detail Types

Usage

```
mlb_fielder_detail_types()
```

Value

Returns a tibble with the following columns

col_name types

mlb_game_changes 103

stat_name character code character names character chance logical error logical

Examples

```
try(mlb_fielder_detail_types())
```

mlb_game_changes

Acquire time codes for Major and Minor League games

Description

Acquire time codes for Major and Minor League games

Usage

```
mlb_game_changes(updated_since, sport_id)
```

Arguments

updated_since Updated since date time
sport_id Return division(s) for all divisions in a specific sport.

Value

Returns a tibble that includes time codes from the game_pk requested

col_name types date character total_items integer total_events integer total_games integer total_games_in_progress integer game_pk integer link character game_type character season character character game_date official_date character logical is_tie game_number integer

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public_facing logical double_header character gameday_type character tiebreaker character calendar_event_id character season_display character day_night character description character scheduled innings integer reverse_home_away_status logical inning_break_length integer games_in_series integer series_game_number integer series_description character record_source character if_necessary character if_necessary_description character status_abstract_game_state character status_coded_game_state character status_detailed_state character status_status_code character status_start_time_tbd logical status_abstract_game_code character teams_away_score integer logical teams_away_is_winner teams_away_split_squad logical teams_away_series_number integer teams_away_league_record_wins integer teams_away_league_record_losses integer character teams_away_league_record_pct teams_away_team_id integer teams_away_team_name character teams_away_team_link character teams_home_score integer logical teams_home_is_winner teams_home_split_squad logical teams home series number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams_home_team_id integer teams_home_team_name character teams home team link character venue_id integer venue_name character venue_link character content_link character status_reason character

mlb_game_content 105

rescheduled_from	character
rescheduled_from_date	character
resumed_from	character
resumed_from_date	character
events	list

Examples

```
try(mlb_game_changes(updated_since = "2021-08-10T19:08:24.000004Z", sport_id = 1))
```

mlb_game_content

Retrieve additional game content for major and minor league games

Description

Retrieve additional game content for major and minor league games

Usage

```
mlb_game_content(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tibble of game content data with the following columns:

col_name types title character epg_id integer content_id character media_id character media_state character media_feed_type character media_feed_sub_type character call_letters character fox_auth_required logical logical tbs_auth_required espn_auth_required logical fs1auth_required logical mlbn_auth_required logical free_game logical

type character description character rendition_name character language character

Examples

```
try(mlb_game_content(game_pk = 566001))
```

mlb_game_context_metrics

Acquire game context metrics for Major and Minor League games

Description

Acquire game context metrics for Major and Minor League games

Usage

```
mlb_game_context_metrics(game_pk, timecode)
```

Arguments

game_pk The game_pk for the game requested

timecode The time code for the MLB game (format: MMDDYYYY_HHMMSS)

Value

Returns a tibble that includes time codes from the game_pk requested

col_name types game_pk integer character link character game_type season character game_date character official_date character status_abstract_game_state character status coded game state character character status_detailed_state status_status_code character status_start_time_tbd logical status_abstract_game_code character teams_away_league_record_wins integer

teams_away_league_record_losses integer teams_away_league_record_pct character teams_away_score integer teams_away_team_id integer teams_away_team_name character teams_away_team_link character teams away is winner logical teams_away_probable_pitcher_id integer teams_away_probable_pitcher_full_name character teams_away_probable_pitcher_link character teams_away_split_squad logical teams_away_series_number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams_home_score integer teams_home_team_id integer teams_home_team_name character teams_home_team_link character teams_home_is_winner logical teams_home_probable_pitcher_id integer teams home probable pitcher full name character teams_home_probable_pitcher_link character teams_home_split_squad logical teams_home_series_number integer venue id integer venue_name character venue_link character link_1 character is_tie logical game_number integer public_facing logical double_header character gameday_type character tiebreaker character calendar_event_id character season display character day_night character scheduled innings integer reverse_home_away_status logical inning_break_length integer games_in_series integer series game number integer series_description character record_source character if_necessary character if_necessary_description character game_id character mlb_game_info

home_win_probability	numeric
away_win_probability	numeric

Examples

```
try(mlb_game_context_metrics(game_pk = 531060, timecode = "20180803_182458"))
```

mlb_game_info

Retrieve additional game information for major and minor league games

Description

Retrieve additional game information for major and minor league games

Usage

```
mlb_game_info(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tibble that includes supplemental information, such as weather, official scorer, attendance, etc., for the game_pk provided

_	
col_name	types
game_date	character
game_pk	numeric
venue_name	character
venue_id	integer
temperature	character
other_weather	character
wind	character
attendance	character
start_time	character
elapsed_time	character
game_id	character
game_type	character
home_sport_code	character
official_scorer	character
date	character
status_ind	character

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```
home_league_id integer
gameday_sw character
```

Examples

```
try(mlb_game_info(game_pk = 566001))
```

mlb_game_linescore

Retrieve game linescores for major and minor league games

Description

Retrieve game linescores for major and minor league games

Usage

```
mlb_game_linescore(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tibble with the following columns

col_name	types
game_pk	numeric
home_team_id	character
home_team_name	character
away_team_id	character
away_team_name	character
num	integer
ordinal_num	character
home_runs	integer
home_hits	integer
home_errors	integer
home_left_on_base	integer
away_runs	integer
away_hits	integer
away_errors	integer
away_left_on_base	integer
home_team_link	character
home_team_season	character
home_team_venue_id	character

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home_team_venue_name character character home_team_venue_link home team team code character home_team_file_code character home_team_abbreviation character home_team_team_name character home team location name character home team first year of play character home team league id character home_team_league_name character home_team_league_link character home_team_division_id character home_team_division_name character home_team_division_link character home_team_sport_id character home_team_sport_link character home_team_sport_name character home_team_short_name character home_team_record_games_played character home team record wild card games back character home_team_record_league_games_back character home_team_record_spring_league_games_back character home_team_record_sport_games_back character home_team_record_division_games_back character home team record conference games back character home team record league record wins character home_team_record_league_record_losses character home_team_record_league_record_pct character home_team_record_division_leader character home_team_record_wins character home_team_record_losses character home_team_record_winning_percentage character home_team_franchise_name character home_team_club_name character home_team_all_star_status character home_team_active character away team link character character away_team_season away team venue id character away_team_venue_name character away team venue link character away team team code character away team file code character away_team_abbreviation character away_team_team_name character away_team_location_name character character away_team_first_year_of_play away_team_league_id character mlb_game_pace 111

away_team_league_name	character
away_team_league_link	character
away_team_division_id	character
away_team_division_name	character
away_team_division_link	character
away_team_sport_id	character
away_team_sport_link	character
away_team_sport_name	character
away_team_short_name	character
away_team_record_games_played	character
away_team_record_wild_card_games_back	character
away_team_record_league_games_back	character
away_team_record_spring_league_games_back	character
away_team_record_sport_games_back	character
away_team_record_division_games_back	character
away_team_record_conference_games_back	character
away_team_record_league_record_wins	character
away_team_record_league_record_losses	character
away_team_record_league_record_pct	character
away_team_record_division_leader	character
away_team_record_wins	character
away_team_record_losses	character
away_team_record_winning_percentage	character
away_team_franchise_name	character
away_team_club_name	character
away_team_all_star_status	character
away_team_active	character

Examples

```
try(mlb_game_linescore(game_pk = 566001))
```

 mlb_game_pace

Retrieve game pace metrics for major and minor league

Description

Retrieve game pace metrics for major and minor league

Usage

```
mlb_game_pace(
   season,
   league_ids = NULL,
```

mlb_game_pace

```
sport_ids = NULL,
team_ids = NULL,
game_type = NULL,
venue_ids = NULL,
org_type = NULL,
start_date = NULL,
end_date = NULL
```

Arguments

season	Year for which to return information (<i>Required</i>).
league_ids	The league_id(s) for which to return information.
sport_ids	The sport_id(s) for which to return information.
team_ids	The team_id(s) for which to return information.
game_type	The game_type for which to return information.
venue_ids	Venue directorial information based venue_id.
org_type	pace of game metrics based on team ('T'), league ('L') or sport('S')
start_date	Date of first game for which you want data. Format must be in MM/DD/YYYY format.
end_date	Date of last game for which you want data. Format must be in MM/DD/YYYY format.

Value

Returns a tibble with the following columns

```
col_name
                                                      types
hits_per9inn
                                                      numeric
runs_per9inn
                                                      numeric
pitches_per9inn
                                                      numeric
plate_appearances_per9inn
                                                      numeric
hits_per_game
                                                      numeric
runs_per_game
                                                      numeric
innings_played_per_game
                                                      numeric
pitches_per_game
                                                      numeric
pitchers_per_game
                                                      numeric
plate_appearances_per_game
                                                      numeric
total_game_time
                                                      character
total_innings_played
                                                      integer
total_hits
                                                      integer
total_runs
                                                      integer
total_plate_appearances
                                                      integer
total_pitchers
                                                      integer
total_pitches
                                                      integer
total_games
                                                      integer
total7inn_games
                                                      integer
```

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total9inn_games	integer
total_extra_inn_games	integer
time_per_game	character
time_per_pitch	character
time_per_hit	character
time_per_run	character
time_per_plate_appearance	character
time_per9inn	character
time_per77plate_appearances	character
total_extra_inn_time	character
time_per7inn_game	character
time_per7inn_game_without_extra_inn	character
total7inn_games_scheduled	integer
total7inn_games_without_extra_inn	integer
total9inn_games_completed_early	integer
total9inn_games_without_extra_inn	integer
total9inn_games_scheduled	integer
hits_per_run	numeric
pitches_per_pitcher	numeric
season	character
sport_id	integer
sport_code	character
sport_link	character
pr_portal_calculated_fields_total7inn_games	integer
pr_portal_calculated_fields_total9inn_games	integer
pr_portal_calculated_fields_total_extra_inn_games	integer
pr_portal_calculated_fields_time_per7inn_game	character
pr_portal_calculated_fields_time_per9inn_game	character
pr_portal_calculated_fields_time_per_extra_inn_game	character

Examples

```
try(mlb_game_pace(season = 2021, start_date = "09/14/2021", end_date = "09/16/2021"))
```

 mlb_game_pks

Get MLB Game Info by Date and Level

Description

Find game_pk values for professional baseball games (major and minor leagues) via the MLB api https://www.mlb.com/

Usage

```
mlb_game_pks(date, level_ids = c(1))
```

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Arguments

date The date for which you want to find game_pk values for MLB games

level_ids A numeric vector with ids for each level where game_pks are desired. See below

for a reference of level ids.

Details

Level IDs:

The following IDs can be passed to the level_ids argument:

1 = MLB 11 = Triple-A 12 = Doubl-A 13 = Class A Advanced 14 = Class A 15 = Class A Short Season 5442 = Rookie Advanced 16 = Rookie 17 = Winter League

Value

Returns a tibble that includes game_pk values and additional information for games scheduled or played with the following columns:

col_name types game_pk integer link character gameType character season character gameDate character officialDate character isTie logical gameNumber integer publicFacing logical doubleHeader character character gamedayType tiebreaker character calendar Event IDcharacter seasonDisplay character dayNight character scheduledInnings integer reverseHomeAwayStatus logical inningBreakLength integer gamesInSeries integer seriesGameNumber integer seriesDescription character recordSource character ifNecessary character ifNecessaryDescription character status.abstractGameState character status.codedGameState character status.detailedState character status.statusCode character status.startTimeTBD logical status.abstractGameCode character teams.away.score integer logical teams.away.isWinner logical teams.away.splitSquad teams.away.seriesNumber integer teams.away.leagueRecord.wins integer teams. away. league Record. lossesinteger teams.away.leagueRecord.pct character teams.away.team.id integer teams.away.team.name character teams.away.team.link character teams.home.score integer teams.home.isWinner logical teams.home.splitSquad logical teams.home.seriesNumber integer teams.home.leagueRecord.wins integer teams.home.leagueRecord.losses integer teams.home.leagueRecord.pct character teams.home.team.id integer teams.home.team.name character teams.home.team.link character venue.id integer venue.name character venue.link character content.link character

Examples

try(mlb_game_pks("2019-04-29"))

Description

MLB Game Status Codes

Usage

mlb_game_status_codes()

Value

Returns a tibble with the following columns

col_name

types

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abstract_game_state character coded_game_state character detailed_state character status_code character reason character abstract_game_code character

Examples

```
try(mlb_game_status_codes())
```

mlb_game_timecodes

Acquire time codes for Major and Minor League games

Description

Acquire time codes for Major and Minor League games

Usage

```
mlb_game_timecodes(game_pk)
```

Arguments

game_pk

The game_pk for the game requested

Value

Returns a tibble that includes time codes from the game_pk requested

```
col_name types timecodes (MMDDYYYY_HHMMSS) numeric
```

Examples

```
try(mlb_game_timecodes(game_pk = 632970))
```

mlb_game_types

MLB Game Types

mlb_game_wp

Description

MLB Game Types

Usage

```
mlb_game_types()
```

Value

Returns a tibble with the following columns

```
col_name types
game_type_id character
game_type_description character
```

Examples

```
try(mlb_game_types())
```

mlb_game_wp

Acquire win probability for Major and Minor League games

Description

Acquire win probability for Major and Minor League games

Usage

```
mlb_game_wp(game_pk, timecode = NULL)
```

Arguments

game_pk The game_pk for the game requested

timecode The time code for the MLB game (format: MMDDYYYY_HHMMSS)

Value

Returns a tibble that includes time codes from the game_pk requested

col_name	types
home_team_win_probability	numeric
away_team_win_probability	numeric
home_team_win_probability_added	numeric
at_bat_index	integer
leverage_index	numeric

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Examples

```
try(mlb_game_wp(game_pk = 531060))
```

mlb_high_low_stats

Acquire high/low stats for Major and Minor Leagues

Description

Acquire high/low stats for Major and Minor Leagues

Usage

```
mlb_high_low_stats(
  org_type,
  season,
  sort_stat,
  team_ids = NULL,
  league_ids = NULL,
  sport_ids = NULL,
  game_type = NULL,
  stat_group = NULL,
  limit = NULL
)
```

Arguments

org_type

The organization type for return information (Required). Valid values include:

- player
- team
- division
- league
- sport

season

The season for which you want to return information (Required).

sort_stat

The stat to sort the return (*Required*). Valid values can be found from 'stat_lookup_param' below

stat_name	stat_lookup_param	is_counting	stat_label	stat_groups
at_bats	atBats	TRUE	At bats	hitting, pitching
total_plate_appearances	plateAppearances	TRUE	Total plate appearances	hitting
runs	runs	TRUE	Runs	hitting
runs_batted_in	rbi	TRUE	Runs batted in	hitting
home_team_runs	runs	TRUE	Home team runs	hitting
away_team_runs	runs	TRUE	Away team runs	hitting
hits	hits	TRUE	Hits	hitting

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hits_risp	hitsRisp	TRUE	Hits risp	hitting
home_team_hits	hits	TRUE	Home team hits	hitting
away_team_hits	hits	TRUE	Away team hits	hitting
total_bases	totalBases	TRUE	Total bases	hitting, pitching
doubles	doubles	TRUE	Doubles	hitting, pitching
triples	triples	TRUE	Triples	hitting
home_runs	homeRuns	TRUE	Home runs	hitting, pitching
extra_base_hits	extraBaseHits	TRUE	Extra base hits	hitting
walks	baseOnBalls	TRUE	Walks	hitting, pitching
strikeouts	strikeouts	TRUE	Strikeouts	hitting, pitching
stolen_bases	stolenBases	TRUE	Stolen bases	hitting
caught_stealing	caughtStealing	TRUE	Caught stealing	hitting, pitching, fielding
sacrifice_flies	sacFlies	TRUE	Sacrifice flies	hitting
sacrifice_bunts	sacBunts	TRUE	Sacrifice bunts	hitting
hit_by_pitches	hitByPitch	TRUE	Hit by pitches	hitting, pitching
left_on_base	leftOnBase	TRUE	Left on base	hitting
ground_into_double_plays	groundIntoDoublePlay	TRUE	Ground into double plays	hitting, pitching
strikes	strikes	TRUE	Strikes	pitching
pitches	pitchesThrown	TRUE	Pitches	pitching
balks	balks	TRUE	Balks	pitching
innings_pitched	inningsPitched	TRUE	Innings pitched	pitching
errors	errors	TRUE	Errors	fielding
home_team_errors	errors	TRUE	Home team errors	fielding
away_team_errors	errors	TRUE	Away team errors	fielding
chances	chances	TRUE	Chances	fielding
put_outs	putOuts	TRUE	Put outs	fielding
assists	assists	TRUE	Assists	fielding
double_plays	doublePlays	TRUE	Double plays	fielding
attendance	attendance	TRUE	Attendance	game
game_time	gameDuration	TRUE	Game time	game
delay_time	gameDuration	TRUE	Delay time	game
longest	gameDuration	TRUE	Longest	game
shortest	gameDuration	TRUE	Shortest	game
inning	innings	TRUE	Inning	game
win_streak	winStreak	TRUE	Win streak	streak
loss_streak	lossStreak	TRUE	Loss streak	streak

team_ids	The team_id(s) for which to return information.
league_ids	The league_id(s) for which to return information.
sport_ids	The sport_id(s) for which to return information.
game_type	The game_type for which to return information.
stat_group	Stat group for which to return information. Valid values include:

stat_group hitting pitching 120 mlb_high_low_stats

fielding catching running game team streak

limit Number of records as the limit of the return.

Value

Returns a tibble with the following columns

col name types total_splits integer season integer date character is_home logical integer rank game_innings integer stat_at_bats integer team_id integer team_name character team_link character opponent id integer opponent_name character opponent_link character game_pk integer game_link character game_number integer game_content_link character home_team_id integer home_team_name character home_team_link character away_team_id integer away_team_name character away_team_link character combined_stats logical group_display_name character game_type_id character game_type_description character sort stat name character sort_stat_lookup_param character sort_stat_is_counting logical $sort_stat_label$ character

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Examples

```
try(mlb_high_low_stats(org_type = 'Team', season = 2020, sort_stat = 'atBats'))
```

mlb_high_low_types

MLB Stat High/Low Types

Description

MLB Stat High/Low Types

Usage

```
mlb_high_low_types()
```

Value

Returns a tibble with the following columns

col_name	types
stat_name	character
stat_lookup_param	character
is_counting	logical
stat_label	character
stat_groups	list
org_types	list
high_low_types	list

Examples

```
try(mlb_high_low_types())
```

mlb_hit_trajectories MLB Hit Trajectories

Description

MLB Hit Trajectories

Usage

```
mlb_hit_trajectories()
```

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Value

Returns a tibble with the following columns

col_name types hit_trajectory_code character hit_trajectory_description character

Examples

```
try(mlb_hit_trajectories())
```

mlb_homerun_derby

Retrieve Homerun Derby data

Description

Retrieve Homerun Derby data

Usage

```
mlb_homerun_derby(game_pk)
```

Arguments

game_pk

The game_pk for which you want to return data

Value

Returns a tibble with the following columns

col_name types game_pk integer event name character event_date character event_type_code character event_type_name character venue_id integer venue_name character round integer $num_batters$ integer batter character batter_id integer batter_link character top_seed_started logical

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top_seed_complete logical top_seed_winner logical logical bonus time home_run logical tie breaker logical is_home_run logical time remaining character logical is_bonus_time is tie breaker logical hit_data_launch_speed integer hit_data_launch_angle integer hit_data_total_distance integer hit_data_coordinates_coord_x numeric hit_data_coordinates_coord_y numeric hit_data_coordinates_landing_pos_x numeric hit_data_coordinates_landing_pos_y numeric hit_data_trajectory_data_trajectory_polynomial_x list hit_data_trajectory_data_trajectory_polynomial_y list hit_data_trajectory_data_trajectory_polynomial_z list hit_data_trajectory_data_valid_time_interval list top_seed_seed integer top_seed_is_winner logical top_seed_is_complete logical top_seed_is_started logical top seed num home runs integer top seed player id integer top_seed_player_full_name character top_seed_player_link character top_seed_top_derby_hit_data_launch_speed integer top_seed_top_derby_hit_data_total_distance integer bottom_seed_started logical bottom_seed_complete logical bottom_seed_winner logical bottom_seed_seed integer bottom_seed_is_winner logical bottom_seed_is_complete logical bottom seed is started logical bottom_seed_num_home_runs integer bottom_seed_player_id integer bottom_seed_player_full_name character bottom_seed_player_link character bottom seed top derby hit data launch speed integer bottom seed top derby hit data total distance integer venue link character is multi day logical is_primary_calendar logical file_code character event_number integer

public_facing logical

Examples

```
try(mlb\_homerun\_derby(game\_pk = 511101))
```

mlb_homerun_derby_bracket

Retrieve Homerun Derby Bracket

Description

Retrieve Homerun Derby Bracket

Usage

```
mlb_homerun_derby_bracket(game_pk)
```

Arguments

game_pk

The game_pk for which you want to return data

Value

Returns a tibble with the following columns

col_name types game_pk integer event_name character event_type_code character event_type_name character event_date character venue id integer venue_name character venue_link character is_multi_day logical is_primary_calendar logical file_code character event_number integer public_facing logical round integer $num_batters$ integer logical top_seed_complete logical top_seed_started top_seed_winner logical

top_seed_seed integer top_seed_is_winner logical logical top_seed_is_complete top_seed_is_started logical top_seed_num_home_runs integer top_seed_player_id integer top_seed_player_full_name character top_seed_player_link character top_seed_top_derby_hit_data_launch_speed integer top_seed_top_derby_hit_data_total_distance integer bottom_seed_complete logical logical bottom_seed_started bottom_seed_winner logical integer bottom_seed_seed logical bottom_seed_is_winner bottom_seed_is_complete logical $bottom_seed_is_started$ logical bottom_seed_num_home_runs integer bottom_seed_player_id integer bottom_seed_player_full_name character bottom_seed_player_link character bottom_seed_top_derby_hit_data_launch_speed integer bottom_seed_top_derby_hit_data_total_distance integer

Examples

try(mlb_homerun_derby_bracket(game_pk = 511101))

mlb_homerun_derby_players

Retrieve Homerun Derby Players

Description

Retrieve Homerun Derby Players

Usage

```
mlb_homerun_derby_players(game_pk)
```

Arguments

game_pk The game_pk for which you want to return data

Value

Returns a tibble with the following columns

col_name types game_pk integer event_name character event date character event_type_code character event_type_name character venue_id integer venue_name character player_id integer player_full_name character player_link character player_first_name character player_last_name character player_primary_number character player_birth_date character player_current_age integer player_birth_city character player_birth_state_province character player_birth_country character player_height character player_weight integer player_active logical player_use_name character player_middle_name character player_boxscore_name character character player_nick_name player_gender character player_is_player logical player_is_verified logical player_draft_year integer player_pronunciation character player_mlb_debut_date character player_name_first_last character player_name_slug character player_first_last_name character player_last_first_name character player_last_init_name character player_init_last_name character player_full_fml_name character player_full_lfm_name character player_strike_zone_top numeric player_strike_zone_bottom numeric player_name_matrilineal character player_current_team_id integer character player_current_team_name

player_current_team_link character player_current_team_season integer player_current_team_team_code character player_current_team_file_code character player_current_team_abbreviation character player_current_team_team_name character player current team location name character player current team first year of play character player current team short name character player_current_team_franchise_name character player_current_team_club_name character player_current_team_all_star_status character player_current_team_active logical player_current_team_parent_org_name character player_current_team_parent_org_id integer player_current_team_venue_id integer player_current_team_venue_name character player_current_team_venue_link character player_current_team_spring_venue_id integer player_current_team_spring_venue_link character player_current_team_league_id integer player_current_team_league_name character player_current_team_league_link character player_current_team_division_id integer player_current_team_division_name character player current team division link character player_current_team_sport_id integer player_current_team_sport_link character player_current_team_sport_name character player_current_team_spring_league_id integer player_current_team_spring_league_name character player_current_team_spring_league_link character player_current_team_spring_league_abbreviation character player_primary_position_code character player_primary_position_name character player_primary_position_type character player_primary_position_abbreviation character player_bat_side_code character player bat side description character player_pitch_hand_code character player_pitch_hand_description character venue link character is multi day logical is_primary_calendar logical file code character event_number integer public_facing logical

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Examples

```
try(mlb_homerun_derby_players(game_pk = 511101))
```

mlb_jobs

MLB Jobs

Description

MLB Jobs

Usage

```
mlb_jobs(job_type = "UMPR", sport_id = NULL, date = NULL)
```

Arguments

job_type Return information for a given job_type. See mlb_job_types()

sport_id Return information for a given sport_id.
date Return information for a given date.

Value

Returns a tibble with the following columns

col_name types character jersey_number character job job_code character title character person_id integer person_full_name character person_link character

Examples

```
try(mlb_jobs(job_type='UMPR'))
```

mlb_jobs_datacasters MLB Jobs Datacasters

Description

MLB Jobs Datacasters

Usage

```
mlb_jobs_datacasters(sport_id = NULL, date = NULL)
```

Arguments

sport_id Return information for a given sport_id.
date Return information for a given date.

Value

Returns a tibble with the following columns

col_name	types
jersey_number	character
job	character
job_code	character
title	character
person_id	integer
person_full_name	character
person_link	character

Examples

```
try(mlb_jobs_datacasters(sport_id=1))
```

```
mlb_jobs_official_scorers
```

MLB Jobs Official Scorers

Description

MLB Jobs Official Scorers

Usage

```
mlb_jobs_official_scorers(sport_id = NULL, date = NULL)
```

Arguments

sport_id Return information for a given sport_id.
date Return information for a given date.

mlb_jobs_umpires

Value

Returns a tibble with the following columns

col_name	types
jersey_number	character
job	character
job_code	character
title	character
person_id	integer
person_full_name	character
person_link	character

Examples

```
try(mlb_jobs_official_scorers(sport_id=1))
```

mlb_jobs_umpires

MLB Jobs Umpires

Description

MLB Jobs Umpires

Usage

```
mlb_jobs_umpires(sport_id = NULL, date = NULL)
```

Arguments

sport_id Return information for a given sport_id.
date Return information for a given date.

Value

Returns a tibble with the following columns

col_name	types
jersey_number	character
job	character
job_code	character
title	character
person_id	integer
person_full_name	character
person_link	character

mlb_languages 131

Examples

```
try(mlb_jobs_umpires(sport_id=1))
```

mlb_job_types

MLB Job Types

Description

MLB Job Types

Usage

```
mlb_job_types()
```

Value

Returns a tibble with the following columns

col_name types job_code character job character sort_order integer

Examples

```
try(mlb_job_types())
```

mlb_languages

MLB API Language Options

Description

MLB API Language Options

Usage

```
mlb_languages()
```

Value

Returns a tibble with the following columns

col_name types language_name character language_code character locale character

Examples

```
try(mlb_languages())
```

mlb_league

MLB Leagues

Description

MLB Leagues

Usage

```
mlb_league(seasons = NULL, sport_id = NULL, league_id = NULL)
```

Arguments

seasons Year(s) to return to return league information for.

sport_id The sport_id to return league information for.

league_id The league_id(s) to return league information for.

Value

Returns a tibble with the following columns

col_name types leader_type character

Examples

```
try(mlb_league(seasons = 2021, sport_id = 1))
```

mlb_league_leader_types

MLB League Leader Types

mlb_logical_events 133

Description

MLB League Leader Types

Usage

```
mlb_league_leader_types()
```

Value

Returns a tibble with the following columns

```
col_name types
leader_type character
```

Examples

```
try(mlb_league_leader_types())
```

mlb_logical_events

MLB Logical Events

Description

MLB Logical Events

Usage

```
mlb_logical_events()
```

Value

Returns a tibble with the following columns

col_name types event_code character

Examples

```
try(mlb_logical_events())
```

 $mlb_metrics$

MLB Metrics

Description

MLB Metrics

Usage

```
mlb_metrics()
```

Value

Returns a tibble with the following columns

col_name	types
metric_name	character
metric_id	integer
stat_group	character
metric_unit	character

Examples

```
try(mlb_metrics())
```

mlb_pbp

Acquire pitch-by-pitch data for Major and Minor League games

Description

Acquire pitch-by-pitch data for Major and Minor League games

Usage

```
mlb_pbp(game_pk)
```

Arguments

game_pk

The date for which you want to find game_pk values for MLB games

Value

Returns a tibble that includes over 100 columns of data provided by the MLB Stats API at a pitch level

Some data will vary depending on the park and the league level, as most sensor data is not available in minor league parks via this API. Note that the column names have mostly been left as-is and there are likely duplicate columns in terms of the information they provide. I plan to clean the output up down the road, but for now I am leaving the majority as-is.

Both major and minor league pitch-by-pitch data can be pulled with this function.

col_name types game_pk numeric game_date character index integer startTime character endTime character isPitch logical type character playId character pitchNumber integer details.description character details.event character details.awayScore integer details.homeScore integer details.isScoringPlay logical details.hasReview logical details.code character details.ballColor character details.isInPlay logical details.isStrike logical details.isBall logical details.call.code character details.call.description character count.balls.start integer count.strikes.start integer count.outs.start integer player.id integer player.link character pitchData.strikeZoneTop numeric pitchData.strikeZoneBottom numeric details.fromCatcher logical pitchData.coordinates.x numeric pitchData.coordinates.y numeric hitData.trajectory character hitData.hardness character hitData.location character hitData.coordinates.coordX numeric hitData.coordinates.coordY numeric actionPlayId character

details.eventType character details.runnerGoing logical position.code character position.name character position.type character position.abbreviation character battingOrder character atBatIndex character result.type character result.event character result.eventType character result.description character result.rbi integer result.awayScore integer result.homeScore integer about.atBatIndex integer about.halfInning character about.inning integer about.startTime character about.endTime character about.isComplete logical about.isScoringPlay logical about.hasReview logical logical about.hasOut about.captivatingIndex integer count.balls.end integer count.strikes.end integer count.outs.end integer matchup.batter.id integer matchup.batter.fullName character matchup.batter.link character matchup.batSide.code character matchup.batSide.description character matchup.pitcher.id integer matchup.pitcher.fullName character matchup.pitcher.link character matchup.pitchHand.code character matchup.pitchHand.description character matchup.splits.batter character matchup.splits.pitcher character matchup.splits.menOnBase character batted.ball.result factor home team character home_level_id integer home_level_name character home_parentOrg_id integer home_parentOrg_name character home_league_id integer

home_league_name character away_team character away_level_id integer away_level_name character away_parentOrg_id integer away_parentOrg_name character away_league_id integer away_league_name character batting_team character fielding_team character last.pitch.of.ab character pfxId character details.trailColor character details.type.code character details.type.description character pitchData.startSpeed numeric pitchData.endSpeed numeric pitchData.zone integer pitchData.typeConfidence numeric pitchData.plateTime numeric pitchData.extension numeric pitchData.coordinates.aY numeric pitchData.coordinates.aZ numeric pitchData.coordinates.pfxX numeric pitchData.coordinates.pfxZ numeric pitchData.coordinates.pX numeric pitchData.coordinates.pZ numeric pitchData.coordinates.vX0 numeric pitchData.coordinates.vY0 numeric pitchData.coordinates.vZ0 numeric pitchData.coordinates.x0 numeric pitchData.coordinates.y0 numeric pitchData.coordinates.z0 numeric pitchData.coordinates.aX numeric pitchData.breaks.breakAngle numeric pitchData.breaks.breakLength numeric pitchData.breaks.breakY numeric pitchData.breaks.spinRate integer pitchData.breaks.spinDirection integer hitData.launchSpeed numeric hitData.launchAngle numeric hitData.totalDistance numeric injuryType character umpire.id integer umpire.link character isBaseRunningPlay logical is Substitutionlogical about.isTopInning logical

mlb_pbp_diff

matchup.postOnFirst.id	integer
matchup.postOnFirst.fullName	character
matchup.postOnFirst.link	character
matchup.postOnSecond.id	integer
matchup.postOnSecond.fullName	character
matchup.postOnSecond.link	character
matchup.postOnThird.id	integer
matchup.postOnThird.fullName	character
matchup.postOnThird.link	character

Examples

```
try(mlb_pbp(game_pk = 632970))
```

mlb_pbp_diff

Acquire pitch-by-pitch data between two timecodes for Major and Minor League games

Description

Acquire pitch-by-pitch data between two timecodes for Major and Minor League games

Usage

```
mlb_pbp_diff(game_pk, start_timecode, end_timecode)
```

Arguments

game_pk	The date for which you want to find game_pk values for MLB games
start_timecode	The start time code for the MLB game (format: MMDDYYYY_HHMMSS)
end_timecode	The end time code for the MLB game (format: MMDDYYYY_HHMMSS)

Value

Returns a tibble that includes over 100 columns of data provided by the MLB Stats API at a pitch level between the start_timecode and end_timecode

col_name	types
game_pk	numeric
game_date	character
index	integer
startTime	character
endTime	character
isPitch	logical

mlb_pbp_diff

character type character playId pitchNumber integer details.description character details.event character details.awayScore integer details.homeScore integer details.isScoringPlay logical details.hasReview logical character details.code details.ballColor character details.isInPlay logical details.isStrike logical logical details.isBall details.call.code character details.call.description character count.balls.start integer count.strikes.start integer count.outs.start integer integer player.id player.link character pitchData.strikeZoneTop numeric pitchData.strikeZoneBottom numeric details.fromCatcher logical pitchData.coordinates.x numeric pitchData.coordinates.y numeric hitData.trajectory character hitData.hardness character hitData.location character hitData.coordinates.coordX numeric hitData.coordinates.coordY numeric actionPlayId character details.eventType character details.runnerGoing logical position.code character position.name character position.type character position.abbreviation character battingOrder character atBatIndex character result.type character result.event character result.eventType character result.description character result.rbi integer result.awayScore integer result.homeScore integer about.atBatIndex integer

mlb_pbp_diff

about.halfInning character about.inning integer about.startTime character about.endTime character about.isComplete logical about.isScoringPlay logical about.hasReview logical about.hasOut logical about.captivatingIndex integer count.balls.end integer count.strikes.end integer count.outs.end integer matchup.batter.id integer matchup.batter.fullName character matchup.batter.link character matchup.batSide.code character matchup.batSide.description character matchup.pitcher.id integer matchup.pitcher.fullName character matchup.pitcher.link character matchup.pitchHand.code character matchup.pitchHand.description character matchup.splits.batter character matchup.splits.pitcher character matchup.splits.menOnBase character batted.ball.result factor home team character home_level_id integer home_level_name character home_parentOrg_id integer home_parentOrg_name character home_league_id integer home_league_name character away_team character away_level_id integer away_level_name character away_parentOrg_id integer away_parentOrg_name character away_league_id integer away_league_name character batting_team character fielding team character last.pitch.of.ab character pfxId character details.trailColor character details.type.code character details.type.description character pitchData.startSpeed numeric

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pitchData.endSpeed numeric pitchData.zone integer pitchData.typeConfidence numeric pitchData.plateTime numeric pitchData.extension numeric pitchData.coordinates.aY numeric pitchData.coordinates.aZ numeric pitchData.coordinates.pfxX numeric pitchData.coordinates.pfxZ numeric pitchData.coordinates.pX numeric pitchData.coordinates.pZ numeric pitchData.coordinates.vX0 numeric pitchData.coordinates.vY0 numeric pitchData.coordinates.vZ0 numeric pitchData.coordinates.x0 numeric pitchData.coordinates.y0 numeric pitchData.coordinates.z0 numeric pitchData.coordinates.aX numeric pitchData.breaks.breakAngle numeric pitchData.breaks.breakLength numeric pitchData.breaks.breakY numeric pitchData.breaks.spinRate integer pitchData.breaks.spinDirection integer hitData.launchSpeed numeric hitData.launchAngle numeric hitData.totalDistance numeric injuryType character umpire.id integer umpire.link character about.isTopInning logical matchup.postOnFirst.id integer matchup.postOnFirst.fullName character matchup.postOnFirst.link character

Examples

mlb_people

Find Biographical Information for MLB Players

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Description

Find Biographical Information for MLB Players

Usage

```
mlb_people(person_ids = NULL)
```

Arguments

person_ids MLBAMIDs for players of interest. Multiple IDs should be provided in a vector separated by a comma.

Value

Returns a tibble with the following columns:

col_name types id integer full_name character link character first_name character last name character primary_number character birth_date character current_age integer birth_city character birth_state_province character birth_country character height character weight integer active logical use_name character middle name character boxscore_name character nick name character gender character is_player logical is_verified logical draft year integer mlb_debut_date character name_first_last character name_slug character first_last_name character character last_first_name last_init_name character init_last_name character full_fml_name character full_lfm_name character strike_zone_top numeric

strike_zone_bottom	numeric
pronunciation	character
primary_position_code	character
primary_position_name	character
primary_position_type	character
primary_position_abbreviation	character
bat_side_code	character
bat_side_description	character
pitch_hand_code	character
pitch_hand_description	character

Examples

```
try(mlb_people(person_ids = 502671))
try(mlb_people(person_ids = c(502671,605151)))
```

```
mlb_people_free_agents
```

Find Information About MLB Free Agents

Description

Find Information About MLB Free Agents

Usage

```
mlb_people_free_agents(season = NULL)
```

Arguments

season Season preceding free agency

Value

Returns a tibble with the following columns:

col_name	types
date_declared	character
notes	character
date_signed	character
sort_order	integer
player_id	integer
player_full_name	character
player_link	character
original_team_id	integer

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original_team_name	character
original_team_link	character
position_code	character
position_name	character
position_type	character
position_abbreviation	character
new_team_id	integer
new_team_name	character
new_team_link	character

Examples

```
try(mlb_people_free_agents(season = 2018))
```

 mlb_pitch_codes

MLB Pitch Codes

Description

MLB Pitch Codes

Usage

mlb_pitch_codes()

Value

Returns a tibble with the following columns

col_name types pitch_code character pitch_description character

Examples

try(mlb_pitch_codes())

mlb_pitch_types

MLB Pitch Types

mlb_player_game_stats 145

Description

MLB Pitch Types

Usage

```
mlb_pitch_types()
```

Value

Returns a tibble with the following columns

col_name	types
pitch_type_code	character
pitch_type_description	character

Examples

```
try(mlb_pitch_types())
```

Description

Find MLB Player Game Stats

Usage

```
mlb_player_game_stats(person_id = NULL, game_pk = NULL)
```

Arguments

person_id MLBAMIDs for player of interest.

game_pk The game_pk to return game_log statistics for a specific player in a specific

game and to complete the call.

Value

Returns a tibble with the following columns:

col_name	types
type	character
group	character
assists	integer

put_outs integer errors integer chances integer fielding character caught_stealing integer passed_ball integer stolen bases integer stolen_base_percentage character pickoffs integer games_played integer games_started integer fly_outs integer ground_outs integer air_outs integer runs integer doubles integer triples integer home_runs integer strike_outs integer base_on_balls integer intentional_walks integer hits integer hit_by_pitch integer at_bats integer number_of_pitches integer innings_pitched character wins integer losses integer saves integer save_opportunities integer holds integer blown_saves integer earned_runs integer batters_faced integer outs integer games_pitched integer complete_games integer shutouts integer pitches_thrown integer balls integer strikes integer strike_percentage character hit batsmen integer balks integer wild_pitches integer rbi integer games_finished integer runs_scored_per9 character home_runs_per9 character inherited_runners integer inherited_runners_scored integer catchers_interference integer sac_bunts integer sac_flies integer ground_into_double_play integer ground_into_triple_play integer plate_appearances integer total_bases integer left_on_base integer at_bats_per_home_run character character game_type num_teams integer character avg obp character slg character ops character outs_pitched integer whip character ground_outs_to_airouts character pitches_per_inning character strikeout_walk_ratio character strikeouts_per9inn character walks_per9inn character hits_per9inn character team_id integer team_name character team_link character opponent_id integer opponent_name character opponent_link character pitcher_id integer pitcher_full_name character pitcher_link character pitcher_first_name character pitcher_last_name character batter_id integer batter_full_name character batter_link character batter_first_name character batter_last_name character total_splits integer type_display_name character group_display_name character player_id numeric game_pk numeric

Examples

```
try(mlb_player_game_stats(person_id = 605151, game_pk = 531368))
```

```
mlb_player_game_stats_current
```

Find MLB Player Game Stats - Current Game

Description

Find MLB Player Game Stats - Current Game

Usage

```
mlb_player_game_stats_current(person_id = NULL)
```

Arguments

person_id MLBAMIDs for player of interest.

Value

Returns a tibble with the following columns:

col_name types character type character group integer stat_assists stat_put_outs integer stat errors integer stat_chances integer stat_fielding character stat_caught_stealing integer stat_passed_ball integer integer stat_stolen_bases stat_stolen_base_percentage character stat_pickoffs integer stat_games_played integer stat_games_started integer stat_fly_outs integer stat_ground_outs integer stat_air_outs integer integer stat_runs stat_doubles integer stat triples integer stat_home_runs integer

stat_strike_outs integer stat_base_on_balls integer stat_intentional_walks integer stat_hits integer stat_hit_by_pitch integer stat_at_bats integer stat number of pitches integer stat_innings_pitched character stat wins integer stat_losses integer stat_saves integer stat_save_opportunities integer stat_holds integer stat_blown_saves integer stat_earned_runs integer stat_batters_faced integer stat_outs integer stat_games_pitched integer stat_complete_games integer stat shutouts integer stat_pitches_thrown integer stat balls integer stat_strikes integer stat_strike_percentage character stat hit batsmen integer stat balks integer stat_wild_pitches integer stat rbi integer stat_games_finished integer stat_runs_scored_per9 character stat_home_runs_per9 character stat_inherited_runners integer stat_inherited_runners_scored integer stat_catchers_interference integer stat_sac_bunts integer stat_sac_flies integer stat_ground_into_double_play integer stat_ground_into_triple_play integer stat_plate_appearances integer stat_total_bases integer stat_left_on_base integer character stat_at_bats_per_home_run game_type character num_teams integer stat_avg character character stat_obp stat_slg character stat_ops character

stat_outs_pitched integer character stat_whip stat_ground_outs_to_airouts character stat_pitches_per_inning character stat_strikeout_walk_ratio character stat_strikeouts_per9inn character stat_walks_per9inn character stat_hits_per9inn character team_id integer team_name character team_link character opponent_id integer opponent_name character opponent_link character pitcher_id integer pitcher_full_name character pitcher_link character pitcher_first_name character pitcher_last_name character batter_id integer batter_full_name character batter_link character batter_first_name character batter_last_name character total_splits integer type_display_name character group_display_name character player_id numeric game_pk numeric

Examples

try(mlb_player_game_stats_current(person_id = 660271))

mlb_player_status_codes

MLB Player Status Codes

Description

MLB Player Status Codes

Usage

```
mlb_player_status_codes()
```

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Value

Returns a tibble with the following columns

col_name types
player_status_code character
player_status_description character

Examples

```
mlb_player_status_codes()
```

mlb_positions

MLB Positions

Description

MLB Positions

Usage

mlb_positions()

Value

Returns a tibble with the following columns

col_name types position_short_name character position_full_name character position_abbreviation character position_code character position_type character position_formal_name character game_position logical pitcher logical fielder logical logical outfield position_display_name character

Examples

try(mlb_positions())

mlb_review_reasons

mlb_probables

Retrieve probable starters for a given MLB game

Description

Retrieve probable starters for a given MLB game

Usage

```
mlb_probables(game_pk)
```

Arguments

game_pk

The unique game_pk identifier for the game

Value

Returns a tiible that includes probable starting pitchers and the home plate umpire for the game_pk requested including the following columns:

col_name	types
game_pk	integer
game_date	character
fullName	character
id	integer
team	character
team_id	integer
home_plate_full_name	character
home_plate_id	integer

Examples

```
try(mlb_probables(566001))
```

mlb_review_reasons

MLB Review Reasons

Description

MLB Review Reasons

mlb_rosters 153

Usage

```
mlb_review_reasons()
```

Value

Returns a tibble with the following columns

col_name types review_reason_code character review_reason_description character

Examples

```
try(mlb_review_reasons())
```

m I	n	rosters

Find MLB Rosters by Roster Type

Description

Find MLB Rosters by Roster Type

Usage

```
mlb_rosters(team_id = NULL, season = NULL, date = NULL, roster_type = NULL)
```

Arguments

team_id	team_id to return team roster information for a particular club.
season	Year to return team roster information for a particular club in a specific season.
date	Date to return team roster and their coaching staff directorial information for a particular team.
roster_type	roster_type to return team directorial information for. See mlb_roster_types() for more options. Valid options include: '40Man', 'fullSeason', 'fullRoster', 'nonRosterInvitees', 'active', 'allTime', 'depthChart', 'gameday', 'coach'

Value

Returns a tibble with the following columns:

col_name types jersey_number character person_id integer person_full_name character 154 mlb_roster_types

character
character
integer
character
numeric
character

Examples

```
try(mlb_rosters(team_id = 109, season = 2018, roster_type = 'active'))
try(mlb_rosters(team_id = 109, season = 2018, roster_type = 'coach'))
```

 ${\tt mlb_roster_types}$

MLB Roster Types

Description

MLB Roster Types

Usage

```
mlb_roster_types()
```

Value

Returns a tibble with the following columns

col_name types
roster_type_description character
roster_type_lookup_name character
roster_type_parameter character

Examples

```
try(mlb_roster_types())
```

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mlb_runner_detail_types

MLB Runner Detail Types

Description

MLB Runner Detail Types

Usage

```
mlb_runner_detail_types()
```

Value

Returns a tibble with the following columns

col_name types stat_name character

Examples

```
try(mlb_runner_detail_types())
```

mlb_schedule

Find game_pk values for professional baseball games (major and minor leagues)

Description

Find game_pk values for professional baseball games (major and minor leagues)

Usage

```
mlb_schedule(season = 2019, level_ids = "1")
```

Arguments

season The season for which you want to find game_pk values for MLB games

level_ids A numeric vector with ids for each level where game_pks are desired. See below

for a reference of level ids.

sport_id sport_code sport_link sport_name sport_abbreviation sort_order active 1 mlb /api/v1/sports/1 Major League Baseball MLB 11 TRUI

mlb_schedule

11	aaa	/api/v1/sports/11	Triple-A	AAA	101	TRUI
12	aax	/api/v1/sports/12	Double-A	AA	201	TRUI
13	afa	/api/v1/sports/13	High-A	A+	301	TRUI
14	afx	/api/v1/sports/14	Low-A	A	401	TRUI
16	rok	/api/v1/sports/16	Rookie	ROK	701	TRUI
17	win	/api/v1/sports/17	Winter Leagues	WIN	1301	TRUI
8	bbl	/api/v1/sports/8	Organized Baseball	Pros	1401	TRUI
21	min	/api/v1/sports/21	Minor League Baseball	Minors	1402	TRUI
23	ind	/api/v1/sports/23	Independent Leagues	IND	2101	TRUI
51	int	/api/v1/sports/51	International Baseball	INT	3501	TRUI
508	nat	/api/v1/sports/508	International Baseball (Collegiate)	INTC	3502	TRUI
509	nae	/api/v1/sports/509	International Baseball (18 and under)	18U	3503	TRUI
510	nas	/api/v1/sports/510	International Baseball (16 and under)	16U	3505	TRUI
22	bbc	/api/v1/sports/22	College Baseball	College	5101	TRUI
586	hsb	/api/v1/sports/586	High School Baseball	H.S.	6201	TRUI

Value

Returns a tibble which includes game_pk values and additional information for games scheduled or played with the following columns:

col_name	types
date	character
total_items	integer
total_events	integer
total_games	integer
total_games_in_progress	integer
game_pk	integer
link	character
game_type	character
season	character
game_date	character
official_date	character
game_number	integer
public_facing	logical
double_header	character
gameday_type	character
tiebreaker	character
calendar_event_id	character
season_display	character
day_night	character
scheduled_innings	integer
reverse_home_away_status	logical
inning_break_length	integer
games_in_series	integer
series_game_number	integer
series_description	character
record_source	character

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if_necessary character if_necessary_description character status_abstract_game_state character status_coded_game_state character status_detailed_state character status_status_code character status_start_time_tbd logical character status_reason status_abstract_game_code character teams_away_split_squad logical teams_away_series_number integer teams_away_league_record_wins integer teams_away_league_record_losses integer teams_away_league_record_pct character teams_away_team_id integer teams_away_team_name character teams_away_team_link character teams_home_split_squad logical teams_home_series_number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams_home_team_id integer teams_home_team_name character teams home team link character venue id integer venue_name character venue_link character content_link character logical is_tie description character teams_away_score integer teams_away_is_winner logical teams_home_score integer teams_home_is_winner logical reschedule_date character reschedule game date character rescheduled_from character rescheduled_from_date character character resume_date resume_game_date character resumed from character resumed from date character list events

Level IDs

The following IDs can be passed to the level_ids argument:

```
1 = MLB
```

11 = Triple-A

12 = Doubl-A

13 = Class A Advanced

14 = Class A

15 = Class A Short Season

5442 = Rookie Advanced

16 = Rookie

17 = Winter League

Examples

```
try(mlb_schedule(season = "2019"))
```

```
mlb_schedule_event_types
```

MLB Schedule Event Types

Description

MLB Schedule Event Types

Usage

```
mlb_schedule_event_types()
```

Value

Returns a tibble with the following columns

```
col_nametypesschedule_event_type_codecharacterschedule_event_type_namecharacter
```

Examples

```
try(mlb_schedule_event_types())
```

mlb_schedule_games_tied

 $Find\ game_pk\ values\ for\ professional\ baseball\ games\ (major\ and\ minor\ leagues)\ that\ are\ tied$

Description

Find game_pk values for professional baseball games (major and minor leagues) that are tied

Usage

```
mlb_schedule_games_tied(season = 2021, game_type = "S")
```

Arguments

season	The season for which you want to find game_pk values for MLB games
game_type	game_type to return schedule information for all tied games in a particular game_type

S	Spring Training
R	Regular Season
F	Wild Card Game
D	Division Series
L	League Championship Series
W	World Series
C	Championship
N	Nineteenth Century Series
P	Playoffs
Α	All-Star Game
I	Intrasquad
E	Exhibition

game_type_id game_type_description

Value

Returns a tibble that includes game_pk values and additional information for games scheduled or played

col_name	types
date	character
total_items	integer
total_events	integer
total_games	integer
total_games_in_progress	integer
game_pk	integer
link	character

character game_type character season game_date character official_date character game_number integer public_facing logical double_header character character gameday_type tiebreaker character calendar_event_id character season_display character day_night character scheduled_innings integer logical reverse_home_away_status inning_break_length integer games_in_series integer series_game_number integer series_description character record_source character if necessary character if_necessary_description character status abstract game state character status_coded_game_state character status_detailed_state character character status_status_code status start time tbd logical character status_reason status_abstract_game_code character teams_away_split_squad logical teams_away_series_number integer teams_away_league_record_wins integer teams_away_league_record_losses integer teams_away_league_record_pct character teams_away_team_id integer teams_away_team_name character teams_away_team_link character teams home split squad logical teams_home_series_number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams home team id integer teams home team name character teams_home_team_link character venue id integer venue_name character venue_link character content_link character

is_tie logical character description teams_away_score integer logical teams_away_is_winner teams_home_score integer teams_home_is_winner logical reschedule_date character reschedule_game_date character $rescheduled_from$ character rescheduled_from_date character resume_date character resume_game_date character resumed_from character resumed_from_date character events list

Examples

```
try(mlb_schedule_games_tied(season = 2021))
```

mlb_schedule_postseason

Find game_pk values for professional baseball postseason games (major and minor leagues)

Description

Find game_pk values for professional baseball postseason games (major and minor leagues)

Usage

```
mlb_schedule_postseason(
  season = 2021,
  game_type = NULL,
  series_number = NULL,
  sport_id = 1,
  team_id = NULL
)
```

Arguments

season The season for which you want to find game_pk values for MLB games
game_type game_type to return schedule information for all tied games in a particular
game_type

series_number The Series number to return schedule information for all tied games in a partic-

ular series number

sport_id The sport_id to return schedule information for.

team_id The team_id to return schedule information for.

game_type_id game_type_description
S Spring Training
R Regular Season
F Wild Card Game
D Division Series

L League Championship Series

W World Series
C Championship

N Nineteenth Century Series

P Playoffs
A All-Star Game
I Intrasquad
E Exhibition

Value

Returns a tibble that includes game_pk values and additional information for games scheduled or played

col name types character date total_items integer total_events integer integer total_games total_games_in_progress integer game_pk integer link character game_type character season character game_date character official_date character logical is_tie is_featured_game logical game_number integer public_facing logical double_header character gameday_type character tiebreaker character calendar_event_id character season_display character day_night character description character

scheduled_innings integer reverse_home_away_status logical games_in_series integer integer series_game_number series_description character record_source character if_necessary character if_necessary_description character status_abstract_game_state character status_coded_game_state character status_detailed_state character status_status_code character logical status_start_time_tbd character status_abstract_game_code teams_away_score integer teams_away_is_winner logical teams_away_split_squad logical teams_away_series_number integer teams_away_league_record_wins integer teams_away_league_record_losses integer teams_away_league_record_pct character teams_away_team_id integer character teams_away_team_name teams_away_team_link character teams home score integer teams_home_is_winner logical teams_home_split_squad logical teams_home_series_number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams_home_team_id integer teams_home_team_name character teams_home_team_link character venue_id integer venue_name character venue link character content link character inning_break_length integer reschedule_date character reschedule_game_date character character status reason rescheduled from character rescheduled_from_date character is_default_game logical events list

Examples

```
try(mlb_schedule_postseason(season = 2021))
```

mlb_schedule_postseason_series

Find game_pk values for professional baseball postseason series games (major and minor leagues)

Description

Find game_pk values for professional baseball postseason series games (major and minor leagues)

Usage

```
mlb_schedule_postseason_series(
  season = 2021,
  game_type = NULL,
  series_number = NULL,
  sport_id = 1,
  team_id = NULL
)
```

Arguments

season	The season for which you want to find game_pk values for MLB games
game_type	game_type to return schedule information for all tied games in a particular game_type
series_number	The Series number to return schedule information for all tied games in a particular series number
sport_id	The sport_id to return schedule information for.
team_id	The team_id to return schedule information for.

game_type_id	game_type_description
S	Spring Training
R	Regular Season
F	Wild Card Game
D	Division Series
L	League Championship Series
W	World Series
C	Championship
N	Nineteenth Century Series
P	Playoffs
A	All-Star Game

I Intrasquad E Exhibition

Value

Returns a tibble that includes game_pk values and additional information for games scheduled or played

col_name types total_items integer total_games integer total_games_in_progress integer game_pk integer link character game_type character season character game_date character official date character is tie logical is_featured_game logical game_number integer public_facing logical double_header character gameday_type character tiebreaker character calendar_event_id character season_display character day_night character description character scheduled_innings integer reverse_home_away_status logical inning_break_length integer integer games_in_series series_game_number integer series_description character record source character if_necessary character if_necessary_description character is_default_game logical status_abstract_game_state character status_coded_game_state character status_detailed_state character status_status_code character status_start_time_tbd logical character status_abstract_game_code teams_away_score integer teams_away_is_winner logical teams_away_split_squad logical

mlb_seasons

teams_away_series_number integer teams_away_league_record_wins integer teams_away_league_record_losses integer teams_away_league_record_pct character teams_away_team_id integer teams_away_team_name character teams away team link character teams_home_score integer teams_home_is_winner logical teams_home_split_squad logical teams_home_series_number integer teams_home_league_record_wins integer teams_home_league_record_losses integer teams_home_league_record_pct character teams_home_team_id integer teams_home_team_name character teams_home_team_link character venue_id integer venue_name character venue_link character content_link character reschedule date character reschedule_game_date character rescheduled_from character rescheduled_from_date character status_reason character sort_order integer series_id character integer series_sort_number series_is_default logical character series_game_type

Examples

try(mlb_schedule_postseason_series(season = 2021, sport_id = 1))

mlb_seasons

Find MLB Seasons

Description

Find MLB Seasons

mlb_seasons_all 167

Usage

```
mlb_seasons(sport_id = 1, with_game_type_dates = TRUE)
```

Arguments

Value

Returns a tibble with the following columns:

col_name	types	
season_id	character	
has_wildcard	logical	
pre_season_start_date	character	
pre_season_end_date	character	
season_start_date	character	
spring_start_date	character	
spring_end_date	character	
regular_season_start_date	character	
last_date1st_half	character	
all_star_date	character	
first_date2nd_half	character	
regular_season_end_date	character	
post_season_start_date	character	
post_season_end_date	character	
season_end_date	character	
offseason_start_date	character	
off_season_end_date	character	
season_level_gameday_type	character	
game_level_gameday_type	character	
qualifier_plate_appearances	numeric	
qualifier_outs_pitched	integer	

Examples

```
mlb\_seasons(sport\_id = 1)
```

mlb_seasons_all

Description

Find MLB Seasons all

Usage

```
mlb_seasons_all(
  sport_id = 1,
  division_id = NULL,
  league_id = NULL,
  with_game_type_dates = TRUE
)
```

Arguments

Value

Returns a tibble with the following columns:

col_name	types		
season_id	character		
has_wildcard	logical		
pre_season_start_date	character		
season_start_date	character		
regular_season_start_date	character		
regular_season_end_date	character		
season_end_date	character		
offseason_start_date	character		
off_season_end_date	character		
season_level_gameday_type	character		
game_level_gameday_type	character		
qualifier_plate_appearances	numeric		
qualifier_outs_pitched	integer		
post_season_start_date	character		
post_season_end_date	character		
last_date1st_half	character		
all_star_date	character		
first_date2nd_half	character		
pre_season_end_date	character		
spring_start_date	character		
spring_end_date	character		

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Examples

```
mlb_seasons_all(sport_id = 1)
```

mlb_situation_codes

MLB Situation Codes

Description

MLB Situation Codes

Usage

```
mlb_situation_codes()
```

Value

Returns a tibble with the following columns

col_name	types
situation_code	character
sort_order	integer
navigation_menu	character
situation_code_description	character
team	logical
batting	logical
fielding	logical
pitching	logical

Examples

```
try(mlb_situation_codes())
```

mlb_sky

MLB Sky (Weather) Codes

Description

```
MLB Sky (Weather) Codes
```

Usage

```
mlb_sky()
```

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Value

Returns a tibble with the following columns

col_name types sky_code character sky_description character

Examples

```
try(mlb_sky())
```

mlb_sports

MLB Sport IDs

Description

MLB Sport IDs

Usage

```
mlb_sports(sport_id = NULL)
```

Arguments

sport_id

The sport_id to return information for.

Value

Returns a tibble with the following columns

col_name types sport_id integer sport_code character sport_link character character sport_name sport_abbreviation character sort_order integer active_status logical

and the following values:

sport_id sport_code sport_link sport_name 1 mlb /api/v1/sports/1 Major League Baseball sport_abbreviation sort_order MLB

active

TRU

11

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11	aaa	/api/v1/sports/11	Triple-A	AAA	101	TRUI
12	aax	/api/v1/sports/12	Double-A	AA	201	TRUI
13	afa	/api/v1/sports/13	High-A	A+	301	TRUI
14	afx	/api/v1/sports/14	Low-A	A	401	TRUI
16	rok	/api/v1/sports/16	Rookie	ROK	701	TRUI
17	win	/api/v1/sports/17	Winter Leagues	WIN	1301	TRUI
8	bbl	/api/v1/sports/8	Organized Baseball	Pros	1401	TRUI
21	min	/api/v1/sports/21	Minor League Baseball	Minors	1402	TRUI
23	ind	/api/v1/sports/23	Independent Leagues	IND	2101	TRUI
51	int	/api/v1/sports/51	International Baseball	INT	3501	TRUI
508	nat	/api/v1/sports/508	International Baseball (Collegiate)	INTC	3502	TRUI
509	nae	/api/v1/sports/509	International Baseball (18 and under)	18U	3503	TRUI
510	nas	/api/v1/sports/510	International Baseball (16 and under)	16U	3505	TRUI
22	bbc	/api/v1/sports/22	College Baseball	College	5101	TRUI
586	hsb	/api/v1/sports/586	High School Baseball	H.S.	6201	TRUI

Examples

try(mlb_sports())

mlb_sports_info

MLB Sport IDs Information

Description

MLB Sport IDs Information

Usage

```
mlb_sports_info(sport_id = 1)
```

Arguments

sport_id The sport_id to return information for.

Value

Returns a tibble with the following columns

col_name	types
sport_id	integer
sport_code	character
sport_link	character
sport_name	character
sport_abbreviation	character

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sort_order integer active_status logical

Examples

```
try(mlb_sports_info(sport_id = 1))
```

mlb_sports_players

MLB Sport Players

Description

MLB Sport Players

Usage

```
mlb_sports_players(sport_id = 1, season = 2021)
```

Arguments

sport_id The sport_id to return information for.
season The season to return information for.

Value

Returns a tibble with the following columns:

col_name types player_id integer full_name character link character first_name character last_name character primary_number character birth_date character current_age integer birth_city character birth_country character height character weight integer active logical use_name character middle_name character boxscore_name character mlb_standings 173

nick_name character gender character logical is_player is_verified logical pronunciation character mlb_debut_date character name first last character name_slug character first_last_name character last_first_name character last_init_name character init_last_name character full_fml_name character character full_lfm_name strike_zone_top numeric strike_zone_bottom numeric birth_state_province character draft_year integer name_matrilineal character name_title character last_played_date character current_team_id integer current_team_name character current_team_link character primary_position_code character primary_position_name character primary_position_type character primary_position_abbreviation character bat_side_code character bat_side_description character pitch_hand_code character pitch_hand_description character

Examples

try(mlb_sports_players(sport_id = 1, season = 2021))

mlb_standings

MLB Standings

Description

MLB Standings

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Usage

```
mlb_standings(
  season = NULL,
  date = NULL,
  standings_type = NULL,
  league_id = NULL
)
```

Arguments

season Year(s) to return to return standings information for.

Date to return to return standings information for.

standings_type The standings_type(s) to return standings information for. **Description of all standings_types**

- 1. regularSeason Regular Season Standings
- 2. wildCard Wild card standings
- 3. divisionLeaders Division Leader standings
- 4. wildCardWithLeaders Wild card standings with Division Leaders
- 5. firstHalf First half standings. Only valid for leagues with a split season (Mexican League).
- 6. secondHalf Second half standings. Only valid for leagues with a split season (Mexican League).
- 7. springTraining Spring Training Standings
- 8. postseason Postseason Standings
- 9. by Division Standings by Division
- 10. byConference Standings by Conference
- 11. byLeague Standings by League

league_id The league_id(s) to return standings information for.

Value

Returns a tibble with the following columns

col name types standings_type character last updated character character team_records_season team_records_clinch_indicator character team records division rank character team_records_league_rank character team_records_sport_rank character team_records_games_played integer team_records_games_back character team_records_wild_card_games_back character team_records_league_games_back character team_records_spring_league_games_back character

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team_records_sport_games_back character team_records_division_games_back character team records conference games back character team_records_last_updated character team_records_runs_allowed integer team_records_runs_scored integer team_records_division_champ logical logical team records division leader team records has wildcard logical team_records_clinched logical team records elimination number character team_records_wild_card_elimination_number character team_records_magic_number character team_records_wins integer team_records_losses integer team_records_run_differential integer team_records_winning_percentage character team_records_wild_card_rank character team_records_wild_card_leader logical team records team id integer team_records_team_name character team records team link character team_records_streak_streak_type character team_records_streak_streak_number integer character team records streak streak code team records league record wins integer team_records_league_record_losses integer team_records_league_record_ties integer team_records_league_record_pct character team_records_records_split_records list team_records_records_division_records list team_records_records_overall_records list team_records_league_records list team_records_records_expected_records list league_id integer league_link character division id integer division_link character sport id integer sport_link character

Examples

try(mlb_standings(season = 2021, league_id = 103))

mlb_stats

 ${\tt mlb_standings_types}$

MLB Standings Types

Description

MLB Standings Types

Usage

```
mlb_standings_types()
```

Value

Returns a tibble with the following columns

```
col_nametypesstandings_type_namecharacterstandings_type_descriptioncharacter
```

Examples

```
try(mlb_standings_types())
```

mlb_stats

MLB Stats

Description

MLB Stats

Usage

```
mlb_stats(
    stat_type = NULL,
    player_pool = NULL,
    game_type = NULL,
    team_id = NULL,
    position = NULL,
    stat_group = NULL,
    season = NULL,
    league_id = NULL,
    sport_ids = NULL,
    sort_stat = NULL,
```

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```
order = NULL,
 limit = 1000,
 offset = NULL
)
```

Arguments

stat_type

Stat type to return statistics for.

player_pool

There are 4 different types of player pools to return statistics for a particular player pool across a sport. Acceptable values include: All, Qualified, Rookies, or Qualified_rookies

game_type

Game type to return information for a particular statistic in a particular game

team_id

Team ID to return information and ranking for a particular statistic for a particular team.

position

Position to return statistics for a given position. Default to "Qualified" player pool Acceptable values include:

- P
- C
- 1B
- 2B
- 3B
- SS
- LF
- CF • RF
- DH
- PH
- PR
- BR
- OF
- IF
- SP
- RP
- CP
- UT
- UI
- UO
- RHP
- LHP
- RHS
- LHS
- LHR

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• RHR

• B

• X

Stat group to return information and ranking for a particular statistic in a particstat_group

ular group.

Year to return information and ranking for a particular statistic in a given year. season

league_id League ID to return statistics for a given league. Default to "Qualified" player

sport_ids The sport_id(s) to return information and ranking information for.

Sort return based on stat. sort_stat

Order return based on either desc or asc. order

limit A limit to limit return to a particular number of records.

offset An offset to returns i+1 as the first record in the set of players.

Value

Returns a tibble with the following columns

col_name types total_splits integer character season num_teams integer rank integer games_played integer ground_outs integer air_outs integer runs integer doubles integer triples integer home_runs integer strike_outs integer base on balls integer intentional walks integer hits integer hit_by_pitch integer avg character at_bats integer obp character slg character ops character caught_stealing integer stolen_bases integer stolen_base_percentage character ground_into_double_play integer number_of_pitches integer plate_appearances integer

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total_bases integer integer rbi left_on_base integer sac_bunts integer sac_flies integer babip character ground_outs_to_airouts character catchers_interference integer at_bats_per_home_run character team_id integer team_name character team_link character player_id integer player_full_name character player_link character player_first_name character player_last_name character league_id integer league_name character league_link character sport_id integer sport_link character sport_abbreviation character position_code character position_name character position_type character position_abbreviation character splits_tied_with_offset list splits_tied_with_limit list player_pool character type_display_name character group_display_name character

Examples

```
try(mlb_stats(stat_type = 'season', stat_group = 'hitting', season = 2021))
```

mlb_stats_leaders

MLB Stats Leaders

Description

MLB Stats Leaders

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Usage

```
mlb_stats_leaders(
  leader_categories = NULL,
  player_pool = NULL,
  leader_game_types = NULL,
  sit_codes = NULL,
  position = NULL,
  stat_group = NULL,
  season = NULL,
  league_id = NULL,
  sport_id = NULL,
  start_date = NULL,
  end_date = NULL,
  stat_type = NULL,
  limit = 1000
)
```

Arguments

leader_categories

League leader category to return information and ranking for a particular statistic.

player_pool

There are 4 different types of player pools to return statistics for a particular player pool across a sport. Acceptable values include: All, Qualified, Rookies, or Qualified_rookies

leader_game_types

Game type to return information and ranking for a particular statistic in a particular game type.

sit_codes

Situation code to return information and ranking for a particular statistic in a particular game type.

position

Position to return statistics for a given position. Default to "Qualified" player pool Acceptable values include:

- P
- C
- 1B
- 2B
- 3B
- SS
- LF
- CF
- RF
- Kr
- DH
- PH
- PRBR

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- OF
- IF
- SP
- RP
- CP
- UT
- UI
- UO
- RHP
- LHP • RHS
- LHS
- LHR
- RHR
- B
- X

Stat group to return information and ranking for a particular statistic in a particstat_group ular group.

Year to return information and ranking for a particular statistic in a given year. season

League ID to return statistics for a given league. Default to "Qualified" player league_id

pool.

The sport_id to return information and ranking information for. sport_id

Start date to return information and ranking for a particular statistic for a parstart_date

ticular date range. Format: MM/DD/YYYY start_date must be coupled with

end_date and byDateRange stat_type

end_date End date to return information and ranking for a particular statistic for a par-

ticular date range. Format: MM/DD/YYYY end_date must be coupled with

start_date and byDateRange stat_type

stat_type The stat_type to return information and ranking for a particular statistic for a

particular stat type.

limit A limit to limit return to a particular number of records.

Value

Returns a tibble with the following columns

col_name types character leader_category rank integer value character character season num_teams integer team id integer character team_name

mlb_stat_groups

team_link	character
league_id	integer
league_name	character
league_link	character
person_id	integer
person_full_name	character
person_link	character
person_first_name	character
person_last_name	character
sport_id	integer
sport_link	character
sport_abbreviation	character
stat_group	character
total_splits	integer
game_type_id	character
game_type_description	character

Examples

```
try(mlb_stats_leaders(leader_categories='homeRuns',sport_id=1, season = 2021))
```

mlb_stat_groups

MLB Stat Groups

Description

MLB Stat Groups

Usage

mlb_stat_groups()

Value

Returns a tibble with the following columns

col_name types stat_group_name character

Examples

```
try(mlb_stat_groups())
```

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 mlb_stat_types

MLB Stat Types

Description

MLB Stat Types

Usage

```
mlb_stat_types()
```

Value

Returns a tibble with the following columns

```
col_name types
stat_type_name character
```

Examples

```
try(mlb_stat_types())
```

 mlb_teams

MLB Teams

Description

MLB Teams

Usage

```
mlb_teams(
   season = NULL,
   active_status = NULL,
   all_star_statuses = NULL,
   league_ids = NULL,
   sport_ids = NULL,
   game_type = NULL
)
```

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Arguments

season Year to return to return team information for.

active_status
The active statuses to populate teams for a given season.

all_star_statuses

The all-star statuses to populate teams for a given season.

league_ids The league_id(s) to return team information for.
sport_ids The sport_id(s) to return team information for.
game_type The game_type to return team information for.

Value

Returns a tibble with the following columns

col name types team_id integer character team full name link character season integer character team_code file code character team_abbreviation character team_name character location_name character first_year_of_play character short_name character franchise_name character club_name character all_star_status character active logical integer venue_id venue name character venue_link character spring_venue_id integer spring_venue_link character league_id integer league_name character league link character division_id integer division_name character division_link character sport_id integer sport_link character sport_name character spring_league_id integer spring_league_name character spring_league_link character spring_league_abbreviation character

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Examples

```
try(mlb_teams(season = 2021, sport_ids = c(1)))
```

 mlb_teams_stats

MLB Teams Stats

Description

MLB Teams Stats

Usage

```
mlb_teams_stats(
    stat_type = NULL,
    game_type = NULL,
    stat_group = NULL,
    season = NULL,
    sport_ids = NULL,
    sort_stat = NULL,
    order = NULL
```

Arguments

stat_type	Stat type to return statistics for.
game_type	Game type to return information for a particular statistic in a particular game type.
stat_group	Stat group to return information and ranking for a particular statistic in a particular group.
season	Year to return information and ranking for a particular statistic in a given year.
sport_ids	The sport_id(s) to return information and ranking information for.
sort_stat	Sort return based on stat.
order	Order return based on either desc or asc.

Value

Returns a tibble with the following columns

col_name	types
total_splits	integer
season	character
rank	integer
games_played	integer

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ground_outs integer air_outs integer runs integer doubles integer triples integer home_runs integer strike_outs integer base_on_balls integer intentional_walks integer hits integer hit_by_pitch integer character avg at_bats integer obp character character slg ops character $caught_stealing$ integer stolen_bases integer stolen_base_percentage character ground_into_double_play integer number_of_pitches integer plate_appearances integer total_bases integer rbi integer left_on_base integer sac_bunts integer sac_flies integer babip character ground_outs_to_airouts character catchers_interference integer at_bats_per_home_run character team_id integer team_name character team_link character splits_tied_with_offset list splits_tied_with_limit list type_display_name character group_display_name character

Examples

```
try(mlb_teams_stats(stat_type = 'season', stat_group = 'hitting', season = 2021))
```

```
mlb_teams_stats_leaders
```

MLB Teams Stats Leaders

Description

MLB Teams Stats Leaders

Usage

```
mlb_teams_stats_leaders(
   leader_categories = NULL,
   leader_game_types = NULL,
   sit_codes = NULL,
   stat_group = NULL,
   season = NULL,
   league_id = NULL,
   sport_id = NULL,
   start_date = NULL,
   end_date = NULL,
   stat_type = NULL,
   limit = 1000
)
```

Arguments

leader_categories

League leader category to return information and ranking for a particular statis-

leader_game_types

Game type to return information and ranking for a particular statistic in a particular

ular game type.

sit_codes Situation code to return information and ranking for a particular statistic in a

particular game type.

stat_group Stat group to return information and ranking for a particular statistic in a particular

ular group.

season Year to return information and ranking for a particular statistic in a given year.

league_id League ID to return statistics for a given league. Default to "Qualified" player

pool.

sport_id The sport_id to return information and ranking information for.

start_date Start date to return information and ranking for a particular statistic for a par-

ticular date range. Format: MM/DD/YYYY start_date must be coupled with

end_date and byDateRange stat_type

end_date End date to return information and ranking for a particular statistic for a par-

ticular date range. Format: MM/DD/YYYY end_date must be coupled with

start_date and byDateRange stat_type

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stat_type The stat_type to return information and ranking for a particular statistic for a

particular stat type.

limit A limit to limit return to a particular number of records.

Value

Returns a tibble with the following columns

col name types character leader_category rank integer value character season character num_teams integer integer team_id team_name character team_link character league_id integer league_name character league_link character person_id integer person_full_name character person_link character person_first_name character person_last_name character sport_id integer sport_link character sport_abbreviation character stat_group character total_splits integer game_type_id character game_type_description character

Examples

```
try(mlb_teams_stats_leaders(leader_categories='homeRuns',sport_id=1, season = 2021))
```

mlb_team_affiliates MLB Team Affiliates

Description

MLB Team Affiliates

mlb_team_affiliates 189

Usage

```
mlb_team_affiliates(team_ids = NULL, sport_ids = NULL, season = NULL)
```

Arguments

team_ids The team_id(s) to return affiliates data for.

sport_ids The sport_id to return team affiliates information for.

season The season to return team affiliates data for the particular season.

Value

Returns a tibble with the following columns

col_name types all_star_status character team_id integer team_full_name character link character season integer team code character file_code character team abbreviation character team_name character location name character first_year_of_play character short_name character franchise_name character club_name character active logical parent_org_name character parent_org_id integer spring_league_id integer spring_league_name character character spring_league_link spring_league_abbreviation character venue_id integer venue_name character venue_link character spring venue id integer spring_venue_link character league_id integer league_name character league_link character division_id integer division_name character division_link character sport_id integer sport_link character 190 mlb_team_alumni

sport_name

character

Examples

```
try(mlb_team_affiliates(team_ids = 147))
```

mlb_team_alumni

MLB Team Alumni

Description

MLB Team Alumni

Usage

```
mlb_team_alumni(team_id = NULL, stat_group = NULL, season = NULL)
```

Arguments

team_id Team ID to return information and ranking for a particular statistic for a partic-

ular team.

stat_group Stat group to return information and ranking for a particular statistic in a particul

ular group.

season Year to return information and ranking for a particular statistic in a given year.

Value

Returns a tibble with the following columns

col_name types player_id integer player_full_name character link character first_name character last_name character primary_number character birth_date character current_age integer birth_city character birth_country character height character weight integer active logical character use_name

mlb_team_coaches 191

middle_name character boxscore_name character nick_name character gender character name_matrilineal character is_player logical is_verified logical pronunciation character mlb_debut_date character name_first_last character name_slug character first_last_name character last_first_name character last_init_name character character init_last_name full_fml_name character full_lfm_name character strike_zone_top numeric strike_zone_bottom numeric alumni_last_season character birth_state_province character draft_year integer primary_position_code character primary_position_name character character primary_position_type primary_position_abbreviation character bat_side_code character bat_side_description character pitch_hand_code character pitch_hand_description character

Examples

try(mlb_team_alumni(team_id = 137, stat_group = 'hitting', season = 2021))

mlb_team_coaches

MLB Team Coaches

Description

MLB Team Coaches

Usage

```
mlb_team_coaches(team_id = NULL, date = NULL, season = NULL)
```

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Arguments

team_id Team ID to return team coach information for.

date Date to return team coach information for.

season Year to return team coach information for.

Value

Returns a tibble with the following columns

col_name	types
jersey_number	character
job	character
job_id	character
title	character
person_id	integer
person_full_name	character
person_link	character

Examples

```
try(mlb_team_coaches(team_id = 137, season = 2021))
```

mlb team history	MLB Teams History
IIITD LEAIII HITSLOFV	WILD TEAMS MISSORY

Description

MLB Teams History

Usage

```
mlb_team_history(team_ids = NULL, start_season = NULL, end_season = NULL)
```

Arguments

team_ids The team_id(s) to return historical data for.

start_season The start_season to return historical data for from the given year to present.

The end_season to return historical data for from the the creation to the given

year.

Value

Returns a tibble with the following columns

mlb_team_info

col_name types character all_star_status integer team_id team_full_name character link character season integer team_code character file_code character team_abbreviation character team_name character location_name character first_year_of_play character short_name character franchise_name character club_name character active logical venue_id integer venue_name character venue_link character spring_venue_id integer spring_venue_link character league_id integer league_name character league_link character sport_id integer sport_link character sport_name character

Examples

```
try(mlb_team_history(team_ids = 147))
```

mlb_team_info

MLB Team Info

Description

MLB Team Info

Usage

```
mlb_team_info(team_id = NULL, season = NULL, sport_id = NULL)
```

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Arguments

team_id The team_id to return team data for.

season The season to return team data for the given year.

sport_id The sport_id to return a directory of team data for a particular club in a sport.

Value

Returns a tibble with the following columns

col_name types all_star_status character team_id integer team_full_name character link character season integer team_code character file_code character team_abbreviation character team_name character location_name character first_year_of_play character short_name character franchise_name character club_name character active logical venue id integer character venue_name venue_link character spring_venue_id integer spring_venue_link character league id integer league_name character league_link character sport_id integer sport_link character sport_name character

Examples

```
try(mlb_team_info(team_id = 147))
```

mlb_team_leaders

MLB Team Leaders

mlb_team_leaders 195

Description

MLB Team Leaders

Usage

```
mlb_team_leaders(
  team_id = NULL,
  leader_categories = NULL,
  leader_game_types = NULL,
  season = NULL,
  limit = 1000
)
```

Arguments

team_id Team ID to return team leader information for.

leader_categories

Team leader category to return information and ranking for a particular statistic.

leader_game_types

Game type to return information and ranking for a particular statistic in a partic-

ular game type.

season Season to return team leader information for.

limit A limit to limit return to a particular number of records.

Value

Returns a tibble with the following columns

col_name types leader_category character rank integer character value character season team id integer team_name character team_link character league_id integer league name character league_link character person_id integer person_full_name character person_link character person_first_name character person_last_name character sport_id integer character sport_link sport_abbreviation character stat_group character

mlb_team_personnel

```
total_splits integer
game_type_id character
game_type_description character
```

Examples

```
try(mlb_team_leaders(team_id = 137, leader_categories = "homeRuns", season = 2021))
```

mlb_team_personnel

MLB Team Personnel

Description

MLB Team Personnel

Usage

```
mlb_team_personnel(team_id = NULL, date = NULL)
```

Arguments

team_id Team ID to return team coach information for.

date Date to return team coach information for.

Value

Returns a tibble with the following columns

col_name types jersey_number character job character job_id character title character person id integer person_full_name character person_link character

Examples

```
try(mlb_team_personnel(team_id = 137, date = "08/28/2016"))
```

mlb_team_stats 197

mlb_team_stats

MLB Team Individual Stats

Description

MLB Team Individual Stats

Usage

```
mlb_team_stats(
   team_id = NULL,
   stat_type = NULL,
   game_type = NULL,
   stat_group = NULL,
   season = NULL,
   sport_ids = NULL
)
```

Arguments

t	eam_id	Team ID to return information and ranking for a particular statistic for a particular team.
S	tat_type	Stat type to return statistics for.
g	ame_type	Game type to return information for a particular statistic in a particular game type.
S	tat_group	Stat group to return information and ranking for a particular statistic in a particular group.
S	eason	Year to return information and ranking for a particular statistic in a given year.
s	port_ids	The sport_id(s) to return information and ranking information for.

Value

Returns a tibble with the following columns

col name	types
	7 I
season	character
games_played	integer
ground_outs	integer
air_outs	integer
runs	integer
doubles	integer
triples	integer
home_runs	integer
strike_outs	integer
base_on_balls	integer
intentional_walks	integer

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hits integer hit_by_pitch integer avg character at_bats integer obp character slg character character ops caught_stealing integer stolen_bases integer stolen_base_percentage character ground_into_double_play integer number_of_pitches integer plate_appearances integer total_bases integer rbi integer left_on_base integer sac_bunts integer sac_flies integer babip character ground_outs_to_airouts character catchers_interference integer at_bats_per_home_run character team_id integer team_name character team_link character type_display_name character group_display_name character

Examples

```
try(mlb_team_stats(team_id = 137, stat_type = 'season', stat_group = 'hitting', season = 2021))
```

mlb_venues

Find MLB Venues

Description

Find MLB Venues

Usage

```
mlb_venues(venue_ids = NULL, sport_ids = NULL, season = NULL)
```

Arguments

venue_ids Venue directorial information based venue_id.

sport_ids The sport_id(s) for which to return venue directorial information.

season Year for which to return venue directorial information for a given season.

Value

Returns a tibble with the following columns:

col_name types
venue_id integer
venue_name character
venue_link character
active logical
season logical

Examples

```
try(mlb_venues())
try(mlb_venues(venue_ids = 4781))
try(mlb_venues(sport_ids = 1))
```

mlb_wind_direction_codes

MLB Wind Direction Codes

Description

MLB Wind Direction Codes

Usage

```
mlb_wind_direction_codes()
```

Value

Returns a tibble with the following columns

col_name types wind_direction_code character wind_direction_description character

Examples

```
try(mlb_wind_direction_codes())
```

most_recent_mlb_season

Most Recent MLB Season

Description

Most Recent MLB Season

Usage

```
most_recent_mlb_season()
```

Value

An integer indicating the year of the most recent season of Major League Baseball

 ${\tt most_recent_ncaa_baseball_season}$

Most Recent NCAA Baseball Season

Description

Most Recent NCAA Baseball Season

Usage

```
most_recent_ncaa_baseball_season()
```

Value

An integer indicating the year of the most recent season of NCAA baseball

ncaa 201

ncaa

NCAA Functions Overview

Description

```
ncaa_team_player_stats(): This function allows the user to obtain batting or pitching statistics for any school affiliated with the NCAA at the division I, II, or III levels. The function acquires data from the NCAA's website (stats.ncaa.org) and returns a tibble.

ncaa_pbp(): Get Play-By-Play Data for NCAA Baseball Games.

ncaa_roster(): Get NCAA Baseball Rosters.

ncaa_game_logs(): Get NCAA Baseball Game Logs.

ncaa_lineups(): Get NCAA Baseball Game Lineups.

ncaa_park_factor(): Get Park Effects for NCAA Baseball Teams.

ncaa_schedule_info(): Get Schedule and Results for NCAA Baseball Teams.

ncaa_school_id_lu(): Lookup NCAA School IDs (Division I, II, and III)

ncaa_teams(): Lookup NCAA Teams by Division (I, II, and III) and Season
```

Details

Scrape NCAA baseball data (Division I, II, and III):

```
ncaa_team_player_stats(team_id = 255, year = 2013, type = "batting")
```

Get Play-By-Play Data for NCAA Baseball Games:

```
x <- ncaa_schedule_info(736, 2021)$game_info_url[2]
ncaa_pbp(game_info_url = x)</pre>
```

Get NCAA Baseball Rosters:

```
ncaa_roster(team_id = 104, year = 2021)
```

Get NCAA Baseball Game Logs:

```
ncaa_game_logs(player_id = 2113782, year = 2021, type = "pitching", span = "game")
```

Get NCAA Baseball Game Lineups:

```
ncaa_lineups(game_info_url="https://stats.ncaa.org/game/index/4587474?org_id=528",year=2018)
```

Get Park Effects for NCAA Baseball Teams:

```
ncaa_park_factor(team_id = 736, years = c(2017:2019), type = "conference")
```

Get Schedule and Results for NCAA Baseball Teams:

```
ncaa_schedule_info(team_id = 736, year = 2021)
```

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Lookup NCAA School IDs (Division I, II, and III):

```
ncaa_school_id_lu("VAN")
```

Scrape NCAA baseball Teams (Division I, II, and III):

```
ncaa_teams(year = 2023, division = 1)
```

ncaa_baseball_roster (legacy) Get NCAA Baseball Rosters

Description

```
(legacy) Get NCAA Baseball Rosters
(legacy) Get NCAA Baseball Rosters
```

Usage

```
ncaa_baseball_roster(team_id = NULL, year, ...)
get_ncaa_baseball_roster(team_id = NULL, year, ...)
```

Arguments

team_id NCAA id for a school year The year of interest

... Additional arguments passed to an underlying function like httr.

Value

A data frame containing roster information, including IDs and urls for each player (if available) A data frame containing roster information, including IDs and urls for each player (if available)

ncaa_game_logs

Get NCAA Baseball Game Logs

Description

Get NCAA Baseball Game Logs

Usage

```
ncaa_game_logs(player_id, year, type = "batting", span = "game", ...)
```

ncaa_game_logs 203

Arguments

player_id A player's unique id. Can be found using the get_ncaa_baseball_roster function. year The year of interest.

type The kind of statistics you want to return. Current options are 'batting' or 'pitch-

ing'.

span The span of time; can either be 'game' for game logs in a season, or 'career'

which returns seasonal stats for a player's career.

... Additional arguments passed to an underlying function like httr.

Value

A data frame containing player and school information as well as game by game statistics

col_name types player_id numeric player_name character Date character Opponent character Result character App numeric G numeric GS numeric IΡ numeric CG numeric Η numeric R numeric ER numeric BBnumeric SO numeric SHO numeric BF numeric P-OAB numeric 2B-Anumeric 3B-A numeric Bk numeric HR-A numeric WP numeric HB numeric **IBB** numeric Inh Run numeric Inh Run Score numeric SHA numeric SFA numeric Pitches numeric GO numeric FO numeric W numeric

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L	numeric
SV	numeric
OrdAppeared	numeric
KL	numeric
pickoffs	character

Examples

```
try(ncaa_game_logs(player_id = 2113782, year = 2021, type = "pitching", span = "game"))
try(ncaa_game_logs(player_id = 2113782, year = 2021, type = "pitching", span = "career"))
try(ncaa_game_logs(player_id = 1879650, year = 2019, type = "batting", span = "game"))
try(ncaa_game_logs(player_id = 1879650, year = 2019, type = "batting", span = "career"))
```

ncaa_lineups

Retrieve lineups for a given NCAA game via its game_info_url

Description

Retrieve lineups for a given NCAA game via its game_info_url

Usage

```
ncaa_lineups(game_info_url = NULL, ...)
```

Arguments

```
game_info_url The unique game info url
... Additional arguments passed to an underlying function like httr.
```

Value

Returns a tibble of each school's starting lineup and starting pitcher

col_name	types
year	numeric
player_name	character
position	character
slug	character
batting_order	character
team_name	character
sub	numeric
attendance	character
game_date	character
location	character
player_id	integer

ncaa_park_factor 205

team_id	numeric
team_url	character
conference_id	numeric
conference	character
division	numeric
season_id	numeric

Examples

```
try(ncaa_lineups(game_info_url="https://stats.ncaa.org/contests/2167178/box_score"))
try(ncaa_lineups(game_info_url="https://stats.ncaa.org/game/index/4587474?org_id=528"))
```

ncaa_park_factor

Get Park Effects for NCAA Baseball Teams

Description

Get Park Effects for NCAA Baseball Teams

Usage

```
ncaa_park_factor(team_id, years, type = "conference", ...)
```

Arguments

team_id	The team's unique NCAA id.
years	The season or seasons (i.e. use 2016 for the 2015-2016 season, etc., limited to just 2013-2020 seasons).
type	default is conference. the conference parameter adjusts for the conference the school plays in, the division parameter calculates based on the division the school plays in 1,2,or 3. Defaults to 'conference'.
	Additional arguments passed to an underlying function like httr.

Details

```
try(ncaa_park_factor(team_id = 736, years = c(2018:2019), type = "conference"))
```

Value

A data frame with the following fields: school, home_game, away_game, runs_scored_home, runs_allowed_home, runs_allowed_away, runs_allowed_away, base_pf (base park factor), home_game_adj (an adjustment for the percentage of home games played) final_pf (park factor after adjustments)

col_name types

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school	character
home_game	numeric
away_game	numeric
runs_scored_home	numeric
runs_allowed_home	numeric
runs_scored_away	numeric
runs_allowed_away	numeric
base_pf	numeric
home_game_adj	numeric
final_pf	numeric

ncaa_pbp

Get Play-By-Play Data for NCAA Baseball Games

Description

Get Play-By-Play Data for NCAA Baseball Games

Usage

```
ncaa_pbp(
  game_info_url = NA_character_,
  game_pbp_url = NA_character_,
  raw_html_to_disk = FALSE,
  raw_html_path = "/",
  read_from_file = FALSE,
  file = NA_character_,
  ...
)
```

Arguments

```
game_info_url The url for the game's boxscore data. This can be found using the ncaa_schedule_info function.

game_pbp_url The url for the game's play-by-play data. This can be found using the ncaa_schedule_info function.

raw_html_to_disk Write raw html to disk (saves as game_pbp_id.html in raw_html_path directory)

raw_html_path Directory path to write raw html

read_from_file Read from raw html on disk

file File with full path to read raw html

Additional arguments passed to an underlying function like httr.
```

ncaa_roster 207

Value

A data frame with play-by-play data for an individual game.

col_name	types
game_date	character
location	character
attendance	logical
inning	character
inning_top_bot	character
score	character
batting	character
fielding	character
description	character
game_pbp_url	character
game_pbp_id	integer

Examples

```
try(ncaa_pbp(game_info_url = "https://stats.ncaa.org/contests/2167178/box_score"))
```

ncaa_roster

Get NCAA Baseball Rosters

Description

Get NCAA Baseball Rosters

Usage

```
ncaa_roster(team_id = NULL, year, ...)
```

Arguments

team_id	NCAA id for a school
year	The year of interest

... Additional arguments passed to an underlying function like httr.

Value

A data frame containing roster information, including IDs and urls for each player (if available)

col_name types player_name character class character 208 ncaa_schedule_info

player_id	character
season	numeric
number	character
position	character
player_url	character
team_name	character
conference	character
team_id	numeric
division	numeric
conference_id	numeric

Examples

```
try(ncaa_roster(team_id = 104, year = 2021))
```

ncaa_schedule_info

Get Schedule and Results for NCAA Baseball Teams

Description

Get Schedule and Results for NCAA Baseball Teams

Usage

```
ncaa_schedule_info(team_id = NULL, year = NULL, pbp_links = FALSE, ...)
```

Arguments

team_id The team's unique NCAA id.

year The season (i.e. use 2016 for the 2015-2016 season, etc.)

pbp_links Logical parameter to run process for scraping play_by_play urls for each game

... Additional arguments passed to an underlying function like httr.

Details

```
try(ncaa_schedule_info(team_id = 736, year = 2019))
```

Value

A data frame with the following fields: date, opponent, result, score, innings (if more than regulation), and the url for the game itself.

col_name types year integer ncaa_school_id_lu 209

season_id integer date character home_team character home_team_id integer home_team_conference character home_team_conference_id integer home team slug character home_team_division integer away_team character away_team_id integer away_team_conference character away_team_conference_id integer away_team_slug character away_team_division integer neutral_site character result character score character innings character character slug game_info_url character contest_id integer

ncaa_school_id_lu

Lookup NCAA baseball school IDs (Division I, II, and III)

Description

This function allows the user to look up the team_id needed for the ncaa_team_player_stats() function.

Usage

```
ncaa_school_id_lu(team_name = NULL)
```

Arguments

team_name

A string that will be searched for in the names of the teams.

Value

Returns a tibble with school identification data: team_id, team_name, team_url, conference, conference_id, division, year, and season_id

col_name types team_id numeric team_name character 210 ncaa_scrape

> team_url character conference_id numeric conference character division numeric year numeric season_id numeric

Examples

```
try(ncaa_school_id_lu("Van"))
```

ncaa_scrape

(legacy) Scrape NCAA baseball Team Player Stats (Division I, II, and III)

Description

(legacy) Scrape NCAA baseball Team Player Stats (Division I, II, and III)

Usage

```
ncaa_scrape(
  team_id,
  year = most_recent_ncaa_baseball_season(),
  type = "batting",
)
```

Arguments

team_id The numerical ID that the NCAA website uses to identify a team year

The season for which data should be returned, in the form of "YYYY". Years

currently available: 2013-2017.

A string indicating whether to return "batting" or "pitching" statistics type

Additional arguments passed to an underlying function like httr. . . .

Value

A data frame with the following variables

col_name types year integer character team_name team id numeric

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conference_id	integer
conference	character
division	numeric
player_id	integer
player_url	character
player_name	character
Yr	character
Pos	character
Jersey	character
GP	numeric
GS	numeric
BA	numeric
OBPct	numeric
SlgPct	numeric
R	numeric
AB	numeric
Н	numeric
2B	numeric
3B	numeric
TB	numeric
HR	numeric
RBI	numeric
BB	numeric
HBP	numeric
SF	numeric
SH	numeric
K	numeric
DP	numeric
CS	numeric
Picked	numeric
SB	numeric
RBI2out	numeric

ncaa_teams

Scrape NCAA baseball Teams (Division I, II, and III)

Description

This function allows the user to obtain NCAA teams by year and division

Usage

```
ncaa_teams(year = most_recent_ncaa_baseball_season(), division = 1, ...)
```

Arguments

year The season for which data should be returned, in the form of "YYYY". Years

currently available: 2002 onward.

division Division - 1, 2, 3

. . . Additional arguments passed to an underlying function like httr.

Details

```
ncaa_teams(2023, 1)
```

Value

A data frame with the following variables

col_name	types
team_id	character
team_name	character
team_url	character
conference_id	character
conference	character
division	numeric
year	numeric
season_id	character

```
ncaa_team_player_stats
```

Scrape NCAA baseball Team Player Stats (Division I, II, and III)

Description

This function allows the user to obtain batting or pitching statistics for any school affiliated with the NCAA at the division I, II, or III levels. The function acquires data from the NCAA's website (stats.ncaa.org) and returns a tibble.

Usage

```
ncaa_team_player_stats(
  team_id,
  year = most_recent_ncaa_baseball_season(),
  type = "batting",
  ...
)
```

Arguments

team_id The numerical ID that the NCAA website uses to identify a team

year The season for which data should be returned, in the form of "YYYY". Years

currently available: 2013-2017.

type A string indicating whether to return "batting" or "pitching" statistics

... Additional arguments passed to an underlying function like httr.

Value

A data frame with the following variables

col_name types integer year team_name character team id numeric conference_id integer conference character division numeric player_id integer player_url character player_name character Yr character Pos character Jersey character GP numeric GS numeric BA numeric **OBPct** numeric SlgPct numeric R numeric AB numeric Η numeric 2B numeric 3B numeric TΒ numeric HR numeric **RBI** numeric BB numeric **HBP** numeric SF numeric SHnumeric K numeric DP numeric CS numeric Picked numeric SB numeric RBI2out numeric

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Examples

```
try(ncaa_team_player_stats(team_id = 234, year = 2023, type = "batting"))
```

```
pitcher_game_logs_fg (legacy) Scrape Pitcher Game Logs from FanGraphs
```

Description

```
(legacy) Scrape Pitcher Game Logs from FanGraphs
```

Usage

```
pitcher_game_logs_fg(playerid, year = 2017)
```

Arguments

playerid This is the playerid used by FanGraphs for a given player

year The season for which game logs should be returned (use the YYYY format)

Value

A data frame of pitcher game logs.

playerid_lookup

Look up Baseball Player IDs by Player Name

Description

This function allows you to query the Chadwick Bureau's public register of baseball players and the various IDs associated with them in different systems of record.

Usage

```
playerid_lookup(last_name = NULL, first_name = NULL)
```

Arguments

last_name A text string used to return results for players with that string in their last name.

A text string used to return results for players with that string in their first name.

A text string used to return results for players with that string in their first name.

Value

A data frame of baseball players and the various IDs associated with them in different systems of record.

playername_lookup 215

col_name	types
first_name	character
last_name	character
given_name	character
name_suffix	character
nick_name	character
birth_year	integer
mlb_played_first	integer
mlbam_id	integer
retrosheet_id	character
bbref_id	character
fangraphs_id	integer

Examples

```
try(playerid_lookup("Garcia", "Karim"))
```

playername_lookup

Look up Baseball Player Name by ID

Description

This function allows you to query the Chadwick Bureau's public register of baseball players and the various IDs associated with them in different systems of record.

Usage

```
playername_lookup(id)
```

Arguments

id

An integer or character string representing a player ID in a baseball database, cross-referenced through the Chadwick Bureau's public register of baseball players.

Value

A data frame of baseball players and the various IDs associated with them in different systems of record.

col_name	types
name_first	character
name_last	character
name_given	character
name_suffix	character

name_nick	character
birth_year	integer
mlb_played_first	integer
key_mlbam	integer
key_retro	character
key_bbref	character
key_fangraphs	integer

Examples

```
try(playername_lookup(4885))
try(playername_lookup("kaaihki01"))
```

```
process_statcast_payload
```

Process Baseball Savant CSV payload

Description

This is a helper function for all statcast_search() functions. The function processes the initial csv payload acquired from Baseball Savant to ensure consistency in formatting across downloads

Usage

```
process_statcast_payload(payload)
```

Arguments

payload

payload from a Baseball Savant request

Value

A tibble with the processed Statcast data coerced to the correct types.

retrosheet_data 217

retrosheet data

Get, Parse, and Format Retrosheet Event and Roster Files

Description

This function requires the use of the Chadwick CLI. Follow the directions at the repository for installation of the CLI release for your platform. Specifically from the Chadwick CLI tools, this function requires the cwevent application to be available from the command line. For unix platform users: the retrosheet_data() function uses the system() interface under the hood. For Windows and other platform users: the retrosheet_data() function interacts with the cwevent application using the shell() interface under the hood.

Usage

```
retrosheet_data(
  path_to_directory = NULL,
 years_to_acquire = most_recent_mlb_season() - 1,
  sequence_years = FALSE
)
```

Arguments

```
path_to_directory
                   (default: NULL) A file path that if set, either:
                     1. creates a new directory, or
```

2. uses the path to an existing directory

years_to_acquire

(format: YYYY) The seasons to collect. Single, multiple, and sequential years can be passed. If passing multiple years, enclose in a vector (i.e. c(2017,2018)). Defaults to most_recent_mlb_season().

sequence_years (logical, default: FALSE): If the seasons passed in the years_to_acquire parameter should be sequenced so that the function returns all years including and between the vector passed, set the argument to TRUE. Defaults to FALSE.

Details

```
retrosheet_data(path_to_directory = NULL,
                years_to_acquire = most_recent_mlb_season()-1,
                sequence_years = FALSE)
```

Value

If path_to_directory is not set (default), the process will return a named list of tibbles: 'events' and 'rosters' for each season provided to years_to_acquire If path_to_directory is set, will also write two csv files to the unzipped directory: 1) a combined csv of the event data for a given year and 2) a combined csv of each team's roster for each year provided to years_to_acquire

218 run_expectancy_code

run_expectancy_code

Generate run expectancy and related measures from Baseball Savant data

Description

These functions allow a user to generate run expectancy and related measures and variables from Baseball Savant data. Measures and variables will be added to the data frame.

Usage

```
run_expectancy_code(df, level = "plate appearance")
```

Arguments

df A data frame generated from Baseball Savant.

level Whether you want run expectancy calculated at the plate appearance or pitch

level. Defaults to plate appearance.

Value

Returns a tibble with the following columns:

col name types character pitch_type game_date Date release_speed numeric numeric release_pos_x release_pos_z numeric player_name character numeric batter pitcher numeric events character description character spin_dir logical spin_rate_deprecated logical break_angle_deprecated logical break_length_deprecated logical zone numeric character des game_type character stand character p_throws character character home_team character away_team character type hit_location integer

run_expectancy_code 219

bb_type character balls integer strikes integer integer game_year pfx_x numeric pfx_z numeric plate_x numeric plate_z numeric on_3b numeric on_2b numeric on_1b numeric outs_when_up integer inning numeric inning_topbot character numeric hc_x hc_y numeric tfs_deprecated logical tfs_zulu_deprecated logical fielder_2 numeric umpire logical sv_id character vx0numeric vy0 numeric vz0numeric numeric ax ay numeric numeric aznumeric sz_top sz_bot numeric hit_distance_sc numeric launch_speed numeric launch_angle numeric effective_speed numeric release_spin_rate numeric release_extension numeric game_pk numeric pitcher_1 numeric fielder_2_1 numeric fielder_3 numeric fielder_4 numeric fielder_5 numeric fielder_6 numeric fielder_7 numeric fielder_8 numeric fielder_9 numeric release_pos_y numeric estimated_ba_using_speedangle numeric estimated_woba_using_speedangle numeric

220 run_expectancy_code

woba_value numeric woba_denom integer babip_value integer iso_value integer launch_speed_angle integer at_bat_number numeric pitch_number numeric character pitch_name home_score numeric away_score numeric bat_score numeric fld_score numeric numeric post_away_score post_home_score numeric post_bat_score numeric post_fld_score numeric if_fielding_alignment character of_fielding_alignment character spin_axis numeric delta_home_win_exp numeric delta_run_exp numeric final_pitch_game numeric final_pitch_at_bat numeric runs_scored_on_pitch numeric bat_score_after numeric final_pitch_inning numeric bat_score_start_inning numeric bat_score_end_inning numeric cum_runs_in_inning numeric runs_to_end_inning numeric count_base_out_state character avg_re numeric next_count_base_out_state character next_avg_re numeric change_re numeric re24 numeric

Examples

school_id_lu 221

school_id_lu

(legacy) Lookup NCAA baseball school IDs (Division I, II, and III)

Description

```
(legacy) Lookup NCAA baseball school IDs (Division I, II, and III)
```

Usage

```
school_id_lu(team_name = NULL)
```

Arguments

team_name

A string that will be searched for in the names of the teams.

Value

Returns a tibble with school identification data: team_id, team_name, team_url, conference, conference_id, division, year, and season_id

```
scrape_savant_leaderboards
```

(legacy) Query Baseball Savant Leaderboards

Description

(legacy) Query Baseball Savant Leaderboards

Usage

```
scrape_savant_leaderboards(
  leaderboard = "exit_velocity_barrels",
  year = 2020,
  abs = 50,
  min_pa = "q",
  min_pitches = 100,
  min_throws = 100,
  min_field = "q",
  min_run = 0,
  player_type = "batter",
  fielding_type = "player",
  oaa_position = "",
  oaa_roles = "",
  team = "",
  arsenal_type = "n_",
```

```
run_type = "raw",
min2b = 5,
min3b = 0,
position = "",
bats = "",
hand = ""
```

Arguments

leaderboard	The type of leaderboard to retrieve, input as a string. Current options include exit_velocity_barrels, expected_statistics, pitch_arsenal, outs_above_average, directional_oaa, catch_probability, pop_time, sprint_speed, and running_splits_90_ft, arm_strength.
year	The season for which you want data.
abs	The minimum number of batted balls. Applies only to exit_velocity_barrels leaderboards.
min_pa	Minimum number of plate appearances. Can be a number or 'q' for qualified batters.
min_pitches	Minimum number of pitches thrown.
min_throws	Minimum number of throwing opportunities.
min_field	Minimum number of fieding opportunities.
min_run	Minimum number of running opportunities.
player_type	One of either 'batter' or pitcher. For the expected_statistics leaderboard, 'batterteam' and 'pitcher-team' are also available.
fielding_type	One of either 'player' or 'team'.
oaa_position	Can be either the number position of a player or 'if' or 'of' for position categories.
oaa_roles	Can be either the number position of a player or 'if' or 'of' for position categories.
team	An abbreviation for a team. Can be left blank.
arsenal_type	One of either 'n_', 'avg_spin', or 'avg_speed'.
run_type	One of either 'percent' or 'raw'.
min2b	The minimum number of throwing attempts to second base.
min3b	The minimum number of throwing attempts to third base.
position	The numeric position of the player. For DH use 10. Can be left blank.
bats	The handedness of the batter. One of 'R' or 'L'. Can be left blank.
hand	The handedness of the pitcher. One of 'R' or 'L'. Can be left blank.

Value

Returns a tibble of Statcast leaderboard data.

scrape_statcast_savant 223

```
scrape_statcast_savant
```

(legacy) Query Statcast by Date Range and Players

Description

(legacy) Query Statcast by Date Range and Players

Usage

```
scrape_statcast_savant(
 start_date = Sys.Date() - 1,
 end_date = Sys.Date(),
 playerid = NULL,
 player_type = "batter",
)
scrape_statcast_savant.Date(
  start_date = Sys.Date() - 1,
 end_date = Sys.Date(),
 playerid = NULL,
 player_type = "batter",
)
scrape_statcast_savant.default(
 start_date = Sys.Date() - 1,
 end_date = Sys.Date(),
 playerid = NULL,
 player_type = "batter",
)
scrape_statcast_savant_batter(start_date, end_date, batterid = NULL, ...)
scrape_statcast_savant_batter_all(start_date, end_date, batterid = NULL, ...)
scrape_statcast_savant_pitcher(start_date, end_date, pitcherid = NULL, ...)
scrape_statcast_savant_pitcher_all(start_date, end_date, pitcherid = NULL, ...)
```

Arguments

start_date

Date of first game for which you want data. Format must be in YYYY-MM-DD format.

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end_date Date of last game for which you want data. Format must be in YYYY-MM-DD

format.

playerid The MLBAM ID for the player whose data you want to query.

player_type The player type. Can be batter or pitcher. Default is batter

... currently ignored

batterid The MLBAM ID for the batter whose data you want to query.

pitcherid The MLBAM ID for the pitcher whose data you want to query.

Value

Returns a tibble with Statcast data.

Description

This function allows you to scrape each team's payroll from Spotrac.

Usage

```
sptrc_league_payrolls(year = most_recent_mlb_season())
```

Arguments

year Year to load

Value

A data frame of contract data.

col_name types
year character
team character
team_abbr character
rank numeric
win_percent numeric
roster numeric

active_man_payroll numeric injured_reserve numeric retained numeric buried numeric suspended numeric yearly_total_payroll numeric

Examples

```
try(sptrc_league_payrolls(year = most_recent_mlb_season()))
```

```
sptrc_team_active_payroll
```

Scrape Team Active Payroll Breakdown from Spotrac

Description

This function allows you to scrape a team's active payroll from Spotrac.

Usage

```
sptrc_team_active_payroll(team_abbr, year = most_recent_mlb_season())
```

Arguments

team_abbr Team abbreviation year Year to load

Value

A data frame of contract data.

col_name types numeric year character team player_name character roster_status character age numeric numeric pos numeric status waiver_options numeric base_salary numeric signing_bonus numeric payroll_salary numeric

adj_salary numeric payroll_percent numeric lux_tax_salary numeric total_salary numeric

Examples

```
try(sptrc_team_active_payroll(team_abbr = "BAL", year = most_recent_mlb_season()))
```

standings_on_date_bref

(legacy) Scrape MLB Standings on a Given Date

Description

(legacy) Scrape MLB Standings on a Given Date

Usage

```
standings_on_date_bref(date, division, from = FALSE)
```

Arguments

date a date object

division One or more of AL East, AL Central, AL West, AL Overall, NL East, NL Cen-

tral, NL West, and NL Overall

from a logical indicating whether you want standings up to and including the date

(FALSE, default) or rather standings for games played after the date

Value

Returns a tibble of MLB standings

statcast 227

statcast

Statcast Functions Overview

Description

```
statcast_search(): Query Statcast by Date Range and Players.
statcast_search_batters(): Query Statcast Batters by Date Range and Player.
statcast_search_pitchers(): Query Statcast Pitchers by Date Range and Player.
statcast_leaderboards(): Query Baseball Savant Leaderboards.
```

Details

Query Statcast Batters by Date Range:

Query Statcast Pitchers by Date Range:

Query Statcast Batters by Date Range and Player ID:

Query Statcast Pitchers by Date Range and Player ID:

228 statcast_leaderboards

Query Baseball Savant Leaderboards:

```
statcast_leaderboards(leaderboard = "exit_velocity_barrels", year = 2021)
```

statcast_impute

Statcast Label Imputation

Description

Statcast Label Imputation

Usage

```
statcast_impute
```

Format

An object of class data. frame with 44 rows and 4 columns.

```
statcast_leaderboards    Query Baseball Savant Leaderboards
```

Description

This function allows you to read leaderboard data from BaseballSavant directly into R as data frame.

Usage

```
statcast_leaderboards(
  leaderboard = "exit_velocity_barrels",
  year = 2020,
  abs = 50,
  min_pa = "q",
  min_pitches = 100,
  min_throws = 100,
  min_field = "q",
```

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```
min_run = 0,
player_type = "batter",
fielding_type = "player",
oaa_position = "",
oaa_roles = "",
team = "",
arsenal_type = "n_",
run_type = "raw",
min2b = 5,
min3b = 0,
position = "",
bats = "",
hand = ""
```

Arguments

leaderboard The type of leaderboard to retrieve, input as a string. Current options include

exit_velocity_barrels, expected_statistics, pitch_arsenal, outs_above_average, directional_oaa, catch_probability, pop_time, sprint_speed, and running_splits_90_ft,

arm_strength.

year The season for which you want data.

abs The minimum number of batted balls. Applies only to exit_velocity_barrels

leaderboards.

min_pa Minimum number of plate appearances. Can be a number or 'q' for qualified

batters.

min_pitches Minimum number of pitches thrown.

min_throws Minimum number of throwing opportunities.
min_field Minimum number of fieding opportunities.
min_run Minimum number of running opportunities.

player_type One of either 'batter' or pitcher. For the expected_statistics leaderboard, 'batter-

team' and 'pitcher-team' are also available.

fielding_type One of either 'player' or 'team'.

oaa_position Can be either the number position of a player or 'if' or 'of' for position cate-

gories.

oaa_roles Can be either the number position of a player or 'if' or 'of' for position cate-

gories.

team An abbreviation for a team. Can be left blank. arsenal_type One of either 'n_', 'avg_spin', or 'avg_speed'.

run_type One of either 'percent' or 'raw'.

min2b The minimum number of throwing attempts to second base.

min3b The minimum number of throwing attempts to third base.

position The numeric position of the player. For DH use 10. Can be left blank. The handedness of the batter. One of 'R' or 'L'. Can be left blank. The handedness of the pitcher. One of 'R' or 'L'. Can be left blank.

Details

oaa_roles argument: 30 = 1B - Straight Up 31 = 1B - Towards 1B/2B Hole 32 = 1B - Close to Line 40 = 2B - Straight Up 41 = 2B - Shaded Towards 2B Bag 42 = 2B - Towards 1B/2B Hole 43 = 2B - Behind First Basemen 46 = 2B - Up the Middle 60 = SS - Straight Up 61 = SS - Towards 3B/SS Hole 62 = SS - Shaded Towards 2B Bag 64 = SS - Up the Middle 50 = 3B - Straight Up 51 = 3B - Close to Line 52 = 3B - Towards 3B/SS Hole 77 = LF - Close to Line 71 = LF - Leaning Left 70 = LF - Straight Up 72 = LF - Leaning Right 78 = LF - LF Gap 87 = CF - LF Gap 81 = CF - Leaning Left 90 = RF - Straight Up 92 = RF - Leaning Right 99 = RF - Close to Line

Value

Returns a tibble of Statcast leaderboard data with the following columns (for leaderboard: 'exit_velocity_barrels'):

col_name	types
year	numeric
last_name	character
first_name	character
player_id	integer
attempts	integer
avg_hit_angle	numeric
anglesweetspotpercent	numeric
max_hit_speed	numeric
avg_hit_speed	numeric
fbld	numeric
gb	numeric
max_distance	integer
avg_distance	integer
avg_hr_distance	integer
ev95plus	integer
ev95per-swing	numeric
ev95percent	numeric
barrels	integer
brl_percent	numeric
brl_pa	numeric

Examples

```
try(statcast_leaderboards(leaderboard = "expected_statistics", year = 2018))
try(statcast_leaderboards(leaderboard = "arm_strength", year = 2020))
```

Description

This function allows you to query Statcast data as provided on https://baseballsavant.mlb.com

Usage

```
statcast_search(
   start_date = Sys.Date() - 1,
   end_date = Sys.Date(),
   playerid = NULL,
   player_type = "batter",
   ...
)

statcast_search.default(
   start_date = Sys.Date() - 1,
   end_date = Sys.Date(),
   playerid = NULL,
   player_type = "batter",
   ...
)

statcast_search_batters(start_date, end_date, batterid = NULL, ...)

statcast_search_pitchers(start_date, end_date, pitcherid = NULL, ...)
```

Arguments

start_date	Date of first game for which you want data. Format must be in YYYY-MM-DD format.
end_date	Date of last game for which you want data. Format must be in YYYY-MM-DD format.
playerid	The MLBAM ID for the player whose data you want to query.
player_type	The player type. Can be batter or pitcher. Default is batter
	currently ignored
batterid	The MLBAM ID for the batter whose data you want to query.
pitcherid	The MLBAM ID for the pitcher whose data you want to query.

Value

Returns a tibble with Statcast data with the following columns:

col_name	types
pitch_type	character
game_date	Date
release_speed	numeric
release_pos_x	numeric
release_pos_z	numeric

player_name character numeric batter pitcher numeric events character description character logical spin_dir spin_rate_deprecated logical break_angle_deprecated logical logical break_length_deprecated numeric zone des character character game_type stand character character p_throws home_team character away_team character type character hit_location integer bb_type character balls integer strikes integer game_year integer pfx_x numeric pfx_z numeric numeric plate_x plate_z numeric on_3b numeric on_2b numeric on_1b numeric outs_when_up integer inning numeric inning_topbot character hc_x numeric hc_y numeric tfs_deprecated logical tfs_zulu_deprecated logical fielder_2 numeric umpire logical sv_id character vx0numeric vy0 numeric vz0numeric ax numeric numeric ay az numeric numeric sz_top sz_bot numeric hit_distance_sc numeric

launch_speed	numeric
launch_angle	numeric
effective_speed	numeric
release_spin_rate	numeric
release_extension	numeric
game_pk	numeric
pitcher_1	numeric
fielder_2_1	numeric
fielder_3	numeric
fielder_4	numeric
fielder_5	numeric
fielder_6	numeric
fielder_7	numeric
fielder_8	numeric
fielder_9	numeric
release_pos_y	numeric
estimated_ba_using_speedangle	numeric
estimated_woba_using_speedangle	numeric
woba_value	numeric
woba_denom	integer
babip_value	integer
iso_value	integer
launch_speed_angle	integer
at_bat_number	numeric
pitch_number	numeric
pitch_name	character
home_score	numeric
away_score	numeric
bat_score	numeric
fld_score	numeric
post_away_score	numeric
post_home_score	numeric
post_bat_score	numeric
post_fld_score	numeric
if_fielding_alignment	character
of_fielding_alignment	character
spin_axis	numeric
delta_home_win_exp	numeric
delta_run_exp	numeric

Returns a tibble with Statcast data.

Returns a tibble with Statcast data with the following columns:

col_name	types
pitch_type	character
game_date	Date
release_speed	numeric

release_pos_x numeric numeric release_pos_z player_name character batter numeric pitcher numeric events character description character logical spin_dir logical spin_rate_deprecated logical break_angle_deprecated break_length_deprecated logical numeric zone des character character game_type stand character p_throws character $home_team$ character character away_team character type hit_location integer character bb_type balls integer strikes integer game_year integer numeric pfx_x pfx_z numeric plate_x numeric plate_z numeric on_3b numeric on_2b numeric on_1b numeric outs_when_up integer inning numeric inning_topbot character numeric hc_x hc_y numeric tfs_deprecated logical tfs_zulu_deprecated logical fielder_2 numeric umpire logical character sv_id vx0 numeric vy0 numeric vz0numeric ax numeric numeric ay az numeric sz_top numeric

 sz_bot numeric hit_distance_sc numeric launch_speed numeric launch_angle numeric effective_speed numeric release_spin_rate numeric release_extension numeric game_pk numeric pitcher_1 numeric fielder_2_1 numeric fielder_3 numeric fielder_4 numeric fielder_5 numeric fielder_6 numeric fielder_7 numeric fielder_8 numeric fielder_9 numeric release_pos_y numeric estimated_ba_using_speedangle numeric estimated_woba_using_speedangle numeric woba_value numeric woba_denom integer babip_value integer iso_value integer launch_speed_angle integer at bat number numeric pitch_number numeric pitch_name character home_score numeric away_score numeric bat_score numeric fld_score numeric post_away_score numeric post_home_score numeric post_bat_score numeric post_fld_score numeric if_fielding_alignment character of_fielding_alignment character spin_axis numeric delta_home_win_exp numeric delta_run_exp numeric

Returns a tibble with Statcast data with the following columns:

col_name	types
pitch_type	character
game_date	Date

release_speed numeric numeric release_pos_x release_pos_z numeric player_name character batter numeric pitcher numeric events character description character spin_dir logical logical spin_rate_deprecated break_angle_deprecated logical break_length_deprecated logical zone numeric character des game_type character stand character p_throws character home_team character away_team character character type hit_location integer bb_type character balls integer strikes integer integer game_year pfx_x numeric pfx_z numeric plate_x numeric numeric plate_z on_3b numeric on_2b numeric on_1b numeric outs_when_up integer inning numeric inning_topbot character hc_x numeric hc_y numeric tfs_deprecated logical tfs_zulu_deprecated logical fielder_2 numeric umpire logical sv_id character vx0numeric vy0 numeric vz0numeric numeric ax numeric ay numeric az

sz_top	numeric
sz_bot	numeric
hit_distance_sc	numeric
launch_speed	numeric
launch_angle	numeric
effective_speed	numeric
release_spin_rate	numeric
release_extension	numeric
game_pk	numeric
pitcher_1	numeric
fielder_2_1	numeric
fielder_3	numeric
fielder_4	numeric
fielder_5	numeric
fielder_6	numeric
fielder_7	numeric
fielder_8	numeric
fielder_9	numeric
release_pos_y	numeric
estimated_ba_using_speedangle	numeric
estimated_woba_using_speedangle	numeric
woba_value	numeric
woba_denom	integer
babip_value	integer
iso_value	integer
launch_speed_angle	integer
at_bat_number	numeric
pitch_number	numeric
pitch_name	character
home_score	numeric
away_score	numeric
bat_score	numeric
fld_score	numeric
post_away_score	numeric
post_home_score	numeric
post_bat_score	numeric
post_fld_score	numeric
if_fielding_alignment	character
of_fielding_alignment	character
spin_axis	numeric
delta_home_win_exp	numeric
delta_run_exp	numeric

Examples

```
### Harper
try(statcast_search(start_date = "2022-10-06",
```

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```
end_date = "2022-10-16",
                     playerid = 547180,
                     player_type = 'batter'))
### Framber
try(statcast_search(start_date = "2022-10-06",
                    end_date = "2022-10-16",
                     playerid = 664285,
                     player_type = 'pitcher'))
### Daily
try(statcast_search(start_date = "2022-11-04",
                    end_date = "2022-11-06"))
correa <- statcast_search_batters(start_date = "2016-04-06",</pre>
  end_date = "2016-04-15", batterid = 621043)
daily <- statcast_search_batters(start_date = "2016-04-06",</pre>
  end_date = "2016-04-06", batterid = NULL)
x <- statcast_search_pitchers(start_date = "2016-04-06",</pre>
  end_date = "2016-04-15", pitcherid = 592789)
daily <- statcast_search_pitchers(start_date = "2016-04-06",</pre>
  end_date = "2016-04-06", pitcherid = NULL)
```

statline_from_statcast

Create stat lines from Statcast data

Description

This function allows you to create stat lines of statistics for players or groups of players from raw Statcast. When calculating wOBA, the most recent year in the data frame is used for weighting.

Usage

```
statline_from_statcast(df, base = "pa")
```

Arguments

A data frame of statistics that includes, at a minimum, the following columns:

events, description, game date, and type.

Tells the function what to use as the population of pitches to use for the stat line.

Options include "swings", "contact", or "pa". Defaults to "pa".

Details

```
statline_from_statcast(df, base = "contact")
```

Value

A tibble with the additional columns calculated using the Statcast data.

```
stats_api_live_empty_df
```

Column structure of MLB Stats Live Game API data frame

Description

An empty tibble

Usage

```
stats_api_live_empty_df
```

Format

An object of class tbl_df (inherits from tbl, data.frame) with 0 rows and 131 columns.

teams_lu_table

A Team Lookup Table

Description

A Team Lookup Table

Usage

```
teams_lu_table
```

Format

An object of class data. frame with 797 rows and 31 columns.

240 team_results_bref

team_consistency

Calculate Team-level Consistency

Description

This function allows you to calculate team-level consistency in run scoring and run prevention over the course of an entire season.

Usage

```
team_consistency(year)
```

Arguments

year

Season consistency should be run for.

Details

```
try(team_consistency(year=2021))
```

Value

Returns a tibble with the following columns

col_name	types
Team	character
Con_R	numeric
Con_RA	numeric
Con_R_Ptile	numeric
Con_RA_Ptile	numeric

team_results_bref

(legacy) Scrape Team Results

Description

```
(legacy) Scrape Team Results
```

Usage

```
team_results_bref(Tm, year)
```

woba_plus 241

Arguments

Tm The abbreviation used by Baseball-Reference.com for the team whose results

you want to scrape.

year Season for which you want to scrape the park factors.

Value

Returns a tibble of MLB team results

woba_plus

Calculate wOBA and related metrics for any set of data

Description

This function allows you to calculate wOBA for any given set of data, provided the right variables are in the data set. The function currently returns both wOBA per plate appearance on wOBA per instance of fair contact.

Usage

woba_plus(df)

Arguments

df

A data frame of statistics that includes, at a minimum, the following columns: uBB (unintentional walks), HBP (Hit By Pitch), X1B (singles), X2B (doubles), X3B (triples), HR (home runs), AB (at-bats), SH (sacrifice hits), SO (strike outs), and season.

Value

Returns a tibble with the wOBA factors calculated and the following columns:

col_name	types
bbref_id	character
season	integer
Name	character
Age	numeric
Level	character
Team	character
G	numeric
PA	numeric
AB	numeric
R	numeric
H	numeric
X1B	numeric
X2B	numeric

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X3B	numeric
HR	numeric
RBI	numeric
BB	numeric
IBB	numeric
uBB	numeric
SO	numeric
HBP	numeric
SH	numeric
SF	numeric
GDP	numeric
SB	numeric
CS	numeric
BA	numeric
OBP	numeric
SLG	numeric
OPS	numeric
wOBA	numeric
wOBA_CON	numeric

Examples

```
df <- bref_daily_batter("2015-08-01", "2015-10-03")
try(woba_plus(df))</pre>
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