Package 'baseballr'

September 9, 2022

```
Title Acquiring and Analyzing Baseball Data
Version 1.3.0
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 (>= 3.0.0), data.table (>= 1.14.0), dplyr, ggplot2, glue,
      httr (>= 0.5), janitor, jsonlite, lubridate, magrittr, purrr
      (>= 0.3.0), Rcpp, RcppParallel, rlang (>= 0.4.0), rvest (>=
      1.0.0), stringr (>= 1.3.0), tibble (>= 3.0), tidyr (>= 1.0.0)
Suggests crayon (>= 1.3.4), curl, DBI, furrr, future, ggrepel, knitr,
      pacman, progressr (>= 0.6.0), qs (>= 0.25.1), reshape2,
      rmarkdown, RSQLite, scales, stringi, stats, testthat, usethis
      (>= 1.6.0), xml2 (>= 1.3), zoo
VignetteBuilder knitr
Encoding UTF-8
LazyData true
RoxygenNote 7.2.0
NeedsCompilation no
Author Bill Petti [aut],
      Saiem Gilani [aut, cre],
      Ben Baumer [ctb],
      Ben Dilday [ctb],
      Robert Frey [ctb],
      Camden Kay [ctb]
```

Maintainer Saiem Gilani <saiem.gilani@gmail.com>
Repository CRAN

Date/Publication 2022-09-09 07:52:55 UTC

R topics documented:

batter_game_logs_fg	6
bref	6
bref_daily_batter	7
bref_daily_pitcher	8
bref_standings_on_date	10
bref_team_results	11
chadwick	12
chadwick_player_lu	12
code_barrel	14
	14
	15
daily_pitcher_bref	15
$\mathcal{E} =$	16
edge_frequency	17
fangraphs	17
fg_batter_game_logs	18
fg_batter_leaders	20
fg_bat_leaders	27
fg_guts	28
fg_milb_batter_game_logs	28
6	30
$fg_park \dots \dots \dots \dots \dots \dots \dots \dots \dots $	31
fg_pitcher_game_logs	33
fg_pitcher_leaders	36
fg_pitch_leaders	43
<u>6</u>	14
fg_team_pitcher	51
1 - 1	58
get_batting_orders	50
	51
get_game_info_mlb	51
get_game_info_sup_petti	52
get_game_pks_mlb	52
get_ncaa_baseball_pbp	53
get_ncaa_baseball_roster	53
get_ncaa_game_logs	54
get_ncaa_lineups	54
get_ncaa_park_factor	55
get_ncaa_schedule_info	55
C =1 1=	56
get_probables_mlb	56

get_retrosheet_data	. 67
get_umpire_ids_petti	. 67
ggspraychart	. 68
label_statcast_imputed_data	
linear_weights_savant	. 72
load_game_info_sup	
load_umpire_ids	
metrics	
milb_batter_game_logs_fg	
milb_pitcher_game_logs_fg	
$mlb \ \ldots $	
mlb_all_star_ballots	
mlb_all_star_final_vote	
mlb_all_star_write_ins	
mlb_attendance	
mlb_award	
mlb_awards	
mlb_awards_recipient	
mlb_baseball_stats	
mlb_batting_orders	
mlb_conferences	
mlb_divisions	
mlb_draft	
mlb_draft_latest	
mlb_draft_prospects	
mlb_event_types	
₹ 2	
mlb_fielder_detail_types	
mlb_game_changes	
mlb_game_content	
mlb_game_context_metrics	
mlb_game_info	
mlb_game_linescore	
mlb_game_pace	
mlb_game_pks	
mlb_game_status_codes	
$mlb_game_timecodes \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $	
mlb_game_types	
mlb_game_wp	
mlb_high_low_stats	
mlb_high_low_types	
mlb_hit_trajectories	
mlb_homerun_derby	. 118
mlb_homerun_derby_bracket	. 120
$mlb_homerun_derby_players \ . \ . \ . \ . \ . \ . \ . \ . \ . \ $. 122
$mlb_jobs \dots $. 124
mlb_jobs_datacasters	. 125
mlb_jobs_official_scorers	. 126
mlh johs umpires	126

mlb_job_types	
mlb_languages	
mlb_league	
mlb_league_leader_types	129
mlb_logical_events	
mlb_metrics	130
mlb_pbp_diff	
mlb_people	
mlb people free agents	
mlb_pitch_codes	
mlb_pitch_types	
mlb_player_game_stats	
± • • •	
mlb_player_game_stats_current	
mlb_player_status_codes	
mlb_positions	
mlb_probables	
mlb_review_reasons	
mlb_rosters	
mlb_roster_types	
mlb_runner_detail_types	
mlb_schedule	
mlb_schedule_event_types	154
mlb_schedule_games_tied	
mlb_schedule_postseason	
mlb_schedule_postseason_series	
mlb_seasons	
mlb_seasons_all	
mlb_situation_codes	
mlb_sky	
mlb_sports	
— 1	
mlb_sports_info	
mlb_sports_players	
mlb_standings	
mlb_standings_types	
mlb_stats	
mlb_stats_leaders	176
mlb_stat_groups	178
mlb_stat_types	179
mlb_teams	179
mlb_teams_stats	
mlb_teams_stats_leaders	
mlb_team_affiliates	
mlb_team_alumni	
mlb_team_coaches	
mlb_team_history	
mlb_team_info	
mlb_team_mlo	
mid leam leaders	191

Index

237

mlb_team_personnel
mlb_team_stats
mlb_venues
mlb_wind_direction_codes
most_recent_mlb_season
most_recent_ncaa_baseball_season
ncaa
ncaa_baseball_pbp
ncaa_baseball_roster
ncaa_game_logs
ncaa_lineups
ncaa_park_factor
ncaa_schedule_info
ncaa_school_id_lu
ncaa_scrape
ncaa_season_id_lu
ncaa_team_lu
pitcher_game_logs_fg
playerid_lookup
playername_lookup
process_statcast_payload
retrosheet_data
run_expectancy_code
school_id_lu
scrape_savant_leaderboards
scrape_statcast_savant
sptrc_league_payrolls
sptrc_team_active_payroll
standings_on_date_bref
statcast
statcast_impute
statcast_leaderboards
statcast_search
statline_from_statcast
stats_api_live_empty_df
teams_lu_table
team_consistency
team_results_bref
woba_plus

6 bref

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

8 bref_daily_pitcher

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("2015-05-10", "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

12 chadwick_player_lu

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"

16 edge_code

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 | | IPITCHE 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
FBall_pct FBv	
FBall_pct FBv SL_pct	numeric
FBall_pct FBv SL_pct SLv	numeric numeric
FBall_pct FBv SL_pct SLv CT_pct	numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTV	numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct	numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv	numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct	numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv	numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct	numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv	numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct KNv	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct KNv XX_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct KNv XX_pct PO_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct KNv XX_pct PO_pct wFB	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
FBall_pct FBv SL_pct SLv CT_pct CTv CB_pct CBv CH_pct CHv SF_pct SFv KN_pct KNv XX_pct PO_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric 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)	

***C C ()	
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
FA pct pi	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
vFA ni	numeric
vFC ni	numeric
vFC_pi vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSI_pi	numeric
vSL_pi	numeric
, 5 . 2_p.	1141116116

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
wCS C pi	numeric
wcs_c_pi	numeric
wcu_c_pi	
WFA_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
wSL C ni	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
<u></u>	

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 = 400))
```

 $fg_bat_leaders$

(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

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.

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

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	characte
minor_playerid	characte
Date	character
Team	character
Level	character
Opp	character
W	numeric
L	numeric
ERA	numeric
G	numeric

fg_park 31

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
gamedate	character
dh	integer

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.

32 fg_park

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
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.

types
integer
character
integer

fg_pitcher_game_logs 33

Examples

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

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
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
H/9	numeric
K/BB	numeric
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	
E-F	numeric
	numeric
xFIP ERA-	numeric
	numeric
FIP-	numeric
xFIP-	numeric
GB/FB	numeric
LD%	numeric
GB%	numeric
FB%	numeric
IFFB%	numeric
HR/FB	numeric
RS	numeric

fg_pitcher_game_logs 35

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	numeric
wCB/C	numeric
wCH/C	numeric
O-Swing%	numeric numeric
Z-Swing%	
Swing%	numeric
O-Contact%	numeric
Z-Contact%	numeric
Contact%	numeric
Zone%	numeric

36 fg_pitcher_leaders

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

First season for which you want data. Χ Last season for which you want data. If multiple years selected, data returned У will be aggregate data for the date range. If y = x, function will return singleseason 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". Whether you want only starting pitchers, relievers, or all pitchers that meet the pitcher_type 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 IΡ numeric **TBF** numeric Η numeric R numeric ER numeric HR numeric BBnumeric **IBB** numeric **HBP** numeric WP numeric BKnumeric

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	
Relief_IP numeric	
RAR numeric	
WAR numeric	
Dollars numeric	
tERA numeric	
xFIP numeric	
WPA numeric	
WPA_minus numeric	•
WPA_plus numeric	
WPA_plus numeric RE24 numeric	
WPA_plus numeric RE24 numeric REW numeric	;
WPA_plus numeric RE24 numeric REW numeric pLI numeric	;
WPA_plus numeric RE24 numeric REW numeric pLI numeric inLI numeric	
WPA_plus numeric RE24 numeric REW numeric pLI numeric	

Pulls numeric WPA_LI numeric Clutch numeric FBall_pct numeric FBv numeric SL_pct numeric SLvnumeric CT_pct numeric CTvnumeric numeric CB_pct CBv numeric CH_pct numeric CHvnumeric SF_pct numeric SFv numeric KN_pct numeric KNvnumeric XX_pct numeric PO_pct numeric wFB numeric wSLnumeric 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 ERAnumeric FIPnumeric xFIPnumeric

K_pct	numeric
BB_pct	numeric
SIERA	numeric
RS_9	numeric
E-F	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)	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

T0 7 ()	
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
	numeric
wKC (sc)	numeric
wEP (sc)	
wCH (sc)	numeric
wSC (sc)	numeric
wKN (sc)	numeric
wFA_C (sc)	numeric
wFT_C (sc) wFC_C (sc)	numeric
wFC_C (sc)	numeric
wFS_C (sc)	numeric
wFO_C (sc)	numeric
wSI_C (sc)	numeric
wSL_C (sc)	numeric
wSL_C (sc) 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
CH_pct_pi	numeric
CS_pct_pi	numeric
CU_pct_pi	numeric
EA not 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 XX_pct_pi	numeric
XX_pct_pi	numeric
vCH_pi	numeric
vCS_pi	numeric
vCU_pi	numeric
vFA_pi vFC_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
CH-X_pi CS-X_pi CU-X_pi FA-X_pi FC-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
ra-z_pi	
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
wSL_pi	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
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.
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 =

Value

A data frame of pitcher data.

fg_team_batter	Scrape Team Batter Leaderboards from FanGraphs
<u> </u>	1

split seasons, 0 = aggregate seasons.

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
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
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 met (se)	
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

99	
SC_pct (sc)	numeric
KN_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
* /	numeric
KC-Z (sc) EP-Z (sc)	numeric
CH-Z (sc)	numeric
	numeric
SC-Z (sc)	numeric
KN-Z (sc)	
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)	
wCU_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
Lg	numeric
wGDP	numeric
Pull_pct	numeric
Cent_pct	numeric
Oppo_pct	numeric
Soft_pct	numeric
Med not	numeric
Med_pct Hard_pct TTO_pct	numeric
TTO pet	numeric
CH_pct_pi	numeric
Ch_pet_pi CS_pct_pi	
CN_pct_pl	numeric
CU_pct_pi FA_pct_pi	numeric
FC mat m	numeric
FC_pct_pi FS_pct_pi	numeric
r5_pct_p1	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
	numeric
SL-X_pi	numeric numeric
SL-X_pi XX-X_pi	numeric
SL-X_pi XX-X_pi CH-Z_pi	numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi	numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi	numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi	numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi	numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi	numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi	numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi	numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi	numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi WCH_pi wCS_pi wCU_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wCU_pi wFA_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CS-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wCU_pi wFA_pi wFC_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi XX-Y_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wFA_pi wFC_pi wFS_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi CH-Z_pi CS-Z_pi CS-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wCU_pi wFA_pi wFC_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wCU_pi wFA_pi wFC_pi wFS_pi wKN_pi	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
SL-X_pi XX-X_pi XX-X_pi CH-Z_pi CS-Z_pi CU-Z_pi FA-Z_pi FC-Z_pi FS-Z_pi KN-Z_pi SB-Z_pi SI-Z_pi SL-Z_pi XX-Z_pi wCH_pi wCS_pi wCU_pi wFA_pi wFC_pi wFS_pi wKN_pi wSB_pi	numeric 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
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

Examples

```
try(fg_team_batter(x = 2015, y = 2015, qual = 400))
```

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	vou 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.

col_name types Season character # character Team character W numeric L numeric **ERA** numeric G numeric GS numeric CG numeric ShO numeric SVnumeric BS numeric IΡ numeric **TBF** numeric Η numeric R numeric ER numeric HR numeric BB numeric **IBB** numeric **HBP** numeric WP numeric BKnumeric 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
ID not	numeric
LD_pct	
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
	numeric
WPA_LI	
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
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 O Contact pat	numeric
O-Contact_pct	numeric
O-Contact_pct Z-Contact_pct	numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct	numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct	numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct	numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct	numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD	numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD	numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD	numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA-	numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP-	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP-	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Zone_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Zone_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA-FIP- xFIP- K_pct BB_pct SIERA	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F FA_pct (sc)	numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric numeric
O-Contact_pct Z-Contact_pct Z-Contact_pct Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F FA_pct (sc) FT_pct (sc)	numeric numeric
O-Contact_pct Z-Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F FA_pct (sc) FT_pct (sc) FC_pct (sc)	numeric numeri
O-Contact_pct Z-Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F FA_pct (sc) FT_pct (sc) FC_pct (sc) FS_pct (sc)	numeric numeri
O-Contact_pct Z-Contact_pct Zone_pct F-Strike_pct SwStr_pct HLD SD MD ERA- FIP- xFIP- K_pct BB_pct SIERA RS_9 E-F FA_pct (sc) FT_pct (sc) FC_pct (sc)	numeric numeri

~~ · ·	
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)	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
	numeric
vKN (sc)	
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
X/	

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
wEi (sc) wCH (sc)	numeric
wSC (sc)	numeric
wKN (sc)	numeric
wFA_C (sc)	numeric
wFT_C (sc)	numeric
wFC_C (sc)	numeric
wFC_C (sc) wFS_C (sc)	numeric
wFO_C (sc)	numeric
wSI_C (sc)	numeric
wSL_C (sc)	numeric
wSL_C (sc) wCU_C (sc) wKC_C (sc)	numeric
wKC C (sc)	numeric
wEP C (sc)	numeric
wEP_C (sc) wCH_C (sc) wSC_C (sc) wKN_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_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 vXX_pi	numeric
vXX_pi	numeric
CH-X_pi	numeric
CS-X_pi	numeric
CU-X_pi	numeric
CH-X_pi CS-X_pi CU-X_pi FA-X_pi FC-X_pi FS-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
KN-X_pi	numeric
CR V ni	numeric
SI-X_pi	numeric
SI-X_pi SI-X_pi SL-X_pi XX-X_pi CH-Z_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CO-7/ DI	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 wCS_pi wCU_pi	numeric
wCS_pi	numeric
wCU_pi	numeric
wFA_pi	numeric
wFC_pi	numeric

fip_plus

wFS_pi	numeric
wKN_pi	numeric
wSB_pi	numeric
wSI_pi	numeric
wSL_pi	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
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_{eq} = 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)
```

fip_plus 59

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
IP	numeric
Н	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

60 get_batting_orders

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>
```

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 61

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

 (\mbox{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

 ${\sf game_pk}$

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

62 get_game_pks_mlb

```
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.

get_ncaa_baseball_pbp

Value

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

63

```
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
```

Usage

```
get_ncaa_baseball_pbp(game_info_url)
```

Arguments

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

Value

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

```
get_ncaa_baseball_roster
```

(legacy) Get NCAA Baseball Rosters

Description

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

Usage

```
get_ncaa_baseball_roster(teamid = NA, team_year)
```

Arguments

teamid NCAA id for a school team_year The year of interest

Value

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

get_ncaa_lineups

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.

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, year)
```

Arguments

game_info_url The unique game info url

year The year the game was played in

Value

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

get_ncaa_park_factor 65

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(teamid, years, type = "conference")
```

Arguments

teamid 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'.

Value

A data frame with the following fields: school, home_game, away_game, runs_scored_home, runs_allowed_home, runs_scored_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(teamid = NULL, year = NULL)
```

Arguments

teamid The team's unique NCAA id.

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

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_probables_mlb

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)
```

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 67

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
)
```

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

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

Description

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

68 ggspraychart

Usage

```
get_umpire_ids_petti()
```

Value

Function returns a tibble with the following columns:

- id
- position,
- name
- game_pk
- game_date

ggspraychart

Generate spray charts with ggplot2

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_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 ggplot2::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		

Details

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

plots. For density plots be sure your variable is a factor.

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

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 numeric release_pos_z player_name character batter numeric pitcher numeric events character description character spin_dir logical spin_rate_deprecated logical break_angle_deprecated logical logical break_length_deprecated numeric zone character des game_type character stand character p_throws character home_team character away_team character character type hit_location integer character bb_type 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 hc x numeric hc_y numeric tfs_deprecated logical tfs_zulu_deprecated logical $fielder_2$ numeric umpire logical

sv_id	logical
vx0	numeric
vy0	numeric
vz0	numeric
ax	numeric
ay	numeric
az	numeric
sz_top	numeric
sz_top sz bot	numeric
hit_distance_sc	numeric
launch_speed	numeric
launch_angle	numeric
effective_speed	numeric
<u> </u>	numeric
release_spin_rate	
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
ucita_nome_wm_exp	numenc

72 linear_weights_savant

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>
```

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_nametypeseventscharacterlinear_weights_above_averagenumericlinear_weights_above_outsnumeric

Examples

load_game_info_sup 73

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())
```

74 metrics

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()
```

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

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.

76 mlb

```
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)
```

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_all_star_ballots 77

```
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)
```

```
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
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 logical is_verified draft_year integer mlb_debut_date character $name_first_last$ character character name_slug 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 numeric season

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 character middle_name 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

80 mlb_all_star_write_ins

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_final_vote(league_id = 103, season = 2021))
```

mlb_all_star_write_ins

Find MLB All-Star Write-ins

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 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

Examples

82 mlb_attendance

mlb_attendance

MLB Attendance

Description

MLB Attendance

Usage

```
mlb_attendance(
  team_id = NULL,
  league_id = NULL,
  season = NULL,
  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_attendance 83

- 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 openings_total_lost integer games_total integer integer games_away_total games_home_total integer year character attendance_average_away integer 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 character game_type_id game_type_description character team_id integer team_name character team_link character

Examples

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

84 mlb_award

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.
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))

85 mlb_awards_recipient

 mlb_awards

MLB Awards

Description

MLB Awards

Usage

mlb_awards()

Value

Returns a tibble with the following columns

types
character
character
character
integer
character
integer
character
integer
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,
```

86 mlb_baseball_stats

```
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'

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

Value

Returns a tibble with the following columns

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

mlb_batting_orders 87

Usage

```
mlb_baseball_stats()
```

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_group	character

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

88 mlb_conferences

batting_order character
batting_position_num character
team character
teamName character
teamID integer

Examples

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

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

col_name types $conference_id$ integer conference_name character character link conference_abbreviation character has_wildcard logical name_short character league_id integer league_link character sport_id integer sport_link character

mlb_divisions 89

Examples

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

mlb_divisions

MLB Divisions

Description

MLB Divisions

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 season character 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

90 mlb_draft

```
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)

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 character signing_bonus character scouting_report blurb character headshot_link character is_drafted logical logical is_pass character year 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 person link character character person_first_name person_last_name character

mlb_draft 91

person_primary_number character person_birth_date character person_current_age integer character person_birth_city 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 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_pronunciation character person_name_title character person_mlb_debut_date character person_name_matrilineal character person_primary_position_code character person_primary_position_name character person_primary_position_type character 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_all_star_status character team spring league id integer character team_spring_league_name team_spring_league_link character team_spring_league_abbreviation character draft_type_code character draft_type_description character 92 mlb_draft_latest

Examples

```
try(mlb_draft(year = 2020))
```

mlb_draft_latest

Retrieve latest draft information by year

Description

Retrieve latest draft information by year

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

mlb_draft_latest 93

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 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 integer team_season team_venue_id integer team venue name character 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

94 mlb_draft_prospects

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 team_club_name character team_spring_league_id integer team_spring_league_name character team_spring_league_link character team_spring_league_abbreviation character team_all_star_status character team_active logical draft_type_code character draft_type_description character is_drafted logical is_pass logical year 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 character year 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 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 person_active logical person_use_name character person_middle_name character person_boxscore_name character person_gender character person_is_player logical logical person_is_verified person_draft_year integer person_name_first_last character character person name slug 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

96 mlb_draft_prospects

numeric person_strike_zone_top 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 person death date character 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 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 character team_team_code team file code character team_abbreviation character team_team_name character team_location_name character team_first_year_of_play character 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 team_spring_venue_link 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_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_name types
plate_appearance logical
hit logical
event_code character
base_running_event logical
event_description character

Examples

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

mlb_fielder_detail_types

MLB Fielder Detail Types

98 mlb_game_changes

Description

MLB Fielder Detail Types

Usage

```
mlb_fielder_detail_types()
```

Value

Returns a tibble with the following columns

col_name types
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

mlb_game_changes 99

total_items integer total_events integer total_games integer total_games_in_progress integer game_pk integer link character game_type character character season game date character official_date 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 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 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

100 mlb_game_content

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
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 logical fox_auth_required tbs_auth_required logical espn_auth_required logical logical fs1auth_required mlbn_auth_required logical logical free_game type character character description 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

link character character game_type season character game_date character official date 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_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 character teams_home_team_name 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

mlb_game_info

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 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

104 mlb_game_linescore

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
home_league_id	integer
gameday_sw	character

Examples

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

 ${\tt mlb_game_linescore}$

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

types
numeric
character
character
character
character
integer

mlb_game_linescore 105

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 home_team_venue_name character home_team_venue_link character 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

106 mlb_game_linescore

character away_team_link 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 away_team_first_year_of_play character away_team_league_id character 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 character away_team_sport_link 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 107

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,
    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_nametypeshits_per9innnumericruns_per9innnumericpitches_per9innnumericplate_appearances_per9innnumerichits_per_gamenumeric
```

108 mlb_game_pace

numeric runs_per_game 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 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 character time_per7inn_game 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

mlb_game_pks 109

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))
```

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 character gameDate officialDate character isTie logical gameNumber integer publicFacing logical doubleHeader character gamedayType character tiebreaker character calendarEventID character seasonDisplay character 110 mlb_game_pks

dayNight character scheduledInnings integer reverseHomeAwayStatus logical inningBreakLength integer gamesInSeries integer seriesGameNumber integer seriesDescription character recordSource character ifNecessary character ifNecessaryDescription character status.abstractGameStatecharacter status.codedGameState character status.detailedState character status.statusCode character status.startTimeTBD logical status. abstract Game Codecharacter teams.away.score integer teams.away.isWinner logical teams.away.splitSquad logical teams.away.seriesNumber integer teams.away.leagueRecord.wins integer teams.away.leagueRecord.losses integer teams.away.leagueRecord.pct character teams.away.team.id integer character teams.away.team.name 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"))

mlb_game_timecodes 111

 $\verb|mlb_game_status_codes| MLB Game Status Codes|$

Description

MLB Game Status Codes

Usage

```
mlb_game_status_codes()
```

Value

Returns a tibble with the following columns

col_name	types
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

mlb_game_timecodes

Value

Returns a tibble that includes time codes from the game_pk requested

mlb_game_wp

col_name types timecodes (MMDDYYYY_HHMMSS) numeric

Examples

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

mlb_game_types

MLB Game Types

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)
```

114 mlb_high_low_stats

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
```

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
```

mlb_high_low_stats 115

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
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

mlb_high_low_stats

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 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 rank integer 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

mlb_high_low_types 117

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

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

118 mlb_homerun_derby

Examples

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

Description

MLB Hit Trajectories

Usage

```
mlb_hit_trajectories()
```

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

119

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 character venue name round integer integer num batters batter character batter_id integer batter_link character top_seed_started logical top_seed_complete logical top_seed_winner logical bonus_time logical home_run logical tie breaker logical is_home_run logical time_remaining character is_bonus_time logical 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 logical bottom_seed_started

bottom_seed_complete logical logical bottom_seed_winner integer bottom_seed_seed bottom_seed_is_winner logical bottom_seed_is_complete logical bottom_seed_is_started logical integer bottom_seed_num_home_runs 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

character event_name event_type_code character event_type_name character event_date character venue id integer venue_name character venue link character logical is multi day is_primary_calendar logical file_code character event_number integer public_facing logical round integer integer num_batters top_seed_complete logical top_seed_started logical 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 bottom_seed_started 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

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 integer game_pk 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 player_nick_name character player_gender character

logical player_is_player 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 player_current_team_name character 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 character player_current_team_spring_venue_link 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 character player_current_team_sport_name player_current_team_spring_league_id integer

124 mlb_jobs

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 logical is_primary_calendar file_code character event_number integer public_facing logical

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

<pre>job_type</pre>	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.

mlb_jobs_datacasters 125

Value

Returns a tibble with the following columns

col_name types	
jersey_number charac	ter
job charac	ter
job_code charac	ter
title charac	ter
person_id integer	•
person_full_name charac	ter
person_link charac	ter

Examples

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

 $\verb|mlb_jobs_datacasters| & MLB Jobs Datacasters| \\$

MLB Jobs Datacasters

Usage

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

Arguments

Description

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

126 mlb_jobs_umpires

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.

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

mlb_job_types 127

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

Examples

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

 ${\tt mlb_job_types}$

MLB Job Types

Description

MLB Job Types

Usage

```
mlb_job_types()
```

Value

Returns a tibble with the following columns

col_name types

mlb_league

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

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_metrics

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())
```

 ${\tt mlb_metrics}$

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

mlb_pbp 131

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 character game_date index integer startTime character endTime character isPitch logical character type playId character pitchNumber integer details.description character details.event character details.awayScore integer details.homeScore integer logical details.isScoringPlay details.hasReview logical details.code character mlb_pbp

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 about.hasOut logical about.captivatingIndex integer count.balls.end integer

mlb_pbp 133

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
isSubstitution	logical
about.isTopInning	logical
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 type character playId character integer pitchNumber 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 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 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

mlb_people

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

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:

types
integer
character
integer
character
character
character

height character weight integer active logical use_name character middle_name character boxscore_name character nick_name character gender character is_player logical logical is_verified draft_year integer mlb_debut_date character $name_first_last$ character character name_slug 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 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

mlb_pitch_codes

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
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))
```

 ${\tt mlb_pitch_codes}$

MLB Pitch Codes

Description

MLB Pitch Codes

Usage

mlb_pitch_codes()

mlb_player_game_stats 141

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

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())
```

mlb_player_game_stats Find MLB Player Game Stats

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 character group assists integer integer put_outs errors integer chances integer fielding character caught_stealing integer passed_ball integer stolen_bases integer stolen_base_percentage character pickoffs integer integer games_played games_started integer fly_outs integer ground_outs integer air_outs integer integer runs 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 avg character 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_nametypestypecharactergroupcharacterstat_assistsinteger

integer stat_put_outs stat_errors integer stat_chances integer character stat_fielding stat_caught_stealing integer stat_passed_ball integer stat stolen bases integer 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 stat_runs integer 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 stat_at_bats_per_home_run character character game_type integer num_teams character stat_avg stat_obp character stat_slg character stat_ops character stat_outs_pitched integer stat_whip character 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 character team_link 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

mlb_positions 147

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()
```

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

mlb_probables

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
outfield	logical
position_display_name	character

Examples

```
try(mlb_positions())
```

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

mlb_rosters 149

Examples

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

mlb_review_reasons

MLB Review Reasons

Description

MLB Review Reasons

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())
```

 ${\tt mlb_rosters}$

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)
```

150 mlb_roster_types

Arguments

team_id team_id to return team roster information for a particular club.

Year to return team roster information for a particular club in a specific season.

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 person_link character position_code character position_name character position_type character position_abbreviation character status_code character status_description character link character team_id integer roster_type character numeric season date character

Examples

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

mlb_roster_types

MLB Roster Types

Description

MLB Roster Types

```
mlb_runner_detail_types
```

151

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())
```

```
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

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
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

mlb_schedule 153

integer total_games_in_progress integer game_pk link character character game_type 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 if_necessary character if_necessary_description character character status_abstract_game_state status coded game state character status_detailed_state character character status_status_code logical status_start_time_tbd character status_reason character status_abstract_game_code 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 logical teams_home_split_squad 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 character teams_home_team_name 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 logical teams_away_is_winner teams_home_score integer teams_home_is_winner logical character reschedule_date 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 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_name types
schedule_event_type_code character
schedule_event_type_name character
```

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

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 date character total_items integer total_events integer total games integer total_games_in_progress integer game_pk integer link character game_type character character season 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 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 logical teams_away_split_squad integer teams_away_series_number 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 teams_away_is_winner logical teams_home_score integer teams_home_is_winner logical reschedule_date character character reschedule_game_date 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 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
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 character official_date 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 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 character status_coded_game_state status detailed state character status_status_code character status_start_time_tbd logical character status_abstract_game_code integer teams_away_score 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 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
inning_break_length	integer
reschedule_date	character
reschedule_game_date	character
status_reason	character
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 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 total_items integer integer total_games total_games_in_progress integer game_pk integer link character character game_type 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 games_in_series integer series_game_number integer character series_description 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 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 reschedule date character reschedule_game_date character rescheduled from character rescheduled from date character status_reason character integer sort_order series id character series_sort_number integer logical series_is_default series_game_type character mlb_seasons 163

Examples

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

mlb_seasons

Find MLB Seasons

Description

Find MLB Seasons

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

mlb_seasons_all

```
game_level_gameday_type character
qualifier_plate_appearances numeric
qualifier_outs_pitched integer
```

Examples

```
mlb_seasons(sport_id = 1)
```

mlb_seasons_all

Find 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

mlb_situation_codes 165

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

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

mlb_sports

Examples

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

mlb_sky

MLB Sky (Weather) Codes

Description

MLB Sky (Weather) Codes

Usage

mlb_sky()

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.

mlb_sports_info 167

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
sort_order	integer
active_status	logical

and the following values:

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
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
508 509 510 22	nat nae nas bbc	/api/v1/sports/51 /api/v1/sports/508 /api/v1/sports/509 /api/v1/sports/510 /api/v1/sports/22	International Baseball International Baseball (Collegiate) International Baseball (18 and under) International Baseball (16 and under) College Baseball	INTC 18U 16U College		3502 3503 3505 5101

Examples

try(mlb_sports())

Description

MLB Sport IDs Information

168 mlb_sports_players

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

types
integer
character
character
character
character
integer
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.

mlb_sports_players

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 character use_name middle_name character boxscore name character nick_name character gender character is_player logical is_verified logical pronunciation character mlb debut date character name_first_last character name_slug character character first_last_name 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 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 character current_team_link primary_position_code character primary_position_name character primary_position_type character primary_position_abbreviation character

169

170 mlb_standings

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

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

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.

mlb_standings 171

Value

Returns a tibble with the following columns

col_name types standings_type character last_updated character team records season character 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 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 team_records_division_leader logical 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 team records streak streak code character 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_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_standings_types

MLB Standings Types

Description

MLB Standings Types

Usage

```
mlb_standings_types()
```

Value

Returns a tibble with the following columns

col_name types standings_type_name character standings_type_description character

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,
    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 type

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
- RHR
- B
- X

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

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_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.

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 integer rank 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 character obp 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 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 character at_bats_per_home_run team id integer team_name character team_link character player_id integer player_full_name character player_link character character player_first_name 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 character position_type position_abbreviation character splits_tied_with_offset list splits_tied_with_limit list player_pool character type_display_name character group_display_name character 176 mlb_stats_leaders

Examples

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

mlb_stats_leaders

MLB Stats Leaders

Description

MLB Stats Leaders

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.

mlb_stats_leaders 177

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
- 01
- IF
- SP
- RP
- CP
- UT
- UI
- UO
- RHP
- LHP
- RHS
- LHS
- LHR
- RHR
- B
- X

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.

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 particular 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 particular date range. Format: MM/DD/YYYY end_date must be coupled with start_date and byDateRange stat_type

mlb_stat_groups

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 character sport_link 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

mlb_teams 179

Usage

```
mlb_stat_groups()
```

Value

Returns a tibble with the following columns

col_name types stat_group_name character

Examples

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

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

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
)
```

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

types
integer
character
character
integer
character
logical
integer
character
character

mlb_teams_stats 181

spring_venue_id integer character spring_venue_link 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

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.

182 mlb_teams_stats

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

ular 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 ground_outs integer air_outs integer integer runs doubles integer triples integer home_runs integer strike_outs integer base on balls integer intentional_walks integer integer hits 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 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 splits_tied_with_limit
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 statistic.

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.

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.
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 particular 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 particular 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 leader_category character rank integer value character season character num_teams integer integer team_id team_name character team_link character league_id integer character league_name 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 mlb_team_affiliates 185

Examples

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

mlb_team_affiliates

MLB Team Affiliates

Description

MLB Team Affiliates

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 integer season 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 character parent_org_name parent_org_id integer spring_league_id integer spring_league_name character spring_league_link character mlb_team_alumni

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
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 particular team.
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.

mlb_team_alumni 187

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 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 character name_slug 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 alumni_last_season character birth_state_province character draft_year integer 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

mlb_team_coaches

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)
```

Arguments

team_id Team ID to return team coach information for.

Date to return team coach information for.

Year to return team coach information for.

Value

Returns a tibble with the following columns

col_name types jersey_number character character job 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 189

mlb_team_history

MLB Teams History

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.

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

year.

Value

Returns a tibble with the following columns

col name types all_star_status character team_id integer team_full_name character link character integer season team_code character file_code character team_abbreviation character character team_name 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

mlb_team_info

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)
```

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 character link 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

mlb_team_leaders 191

venue_id integer character venue_name venue_link character integer spring_venue_id 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

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.

mlb_team_personnel

Value

Returns a tibble with the following columns

col_name	types
leader_category	character
rank	integer
value	character
season	character
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
sport_link	character
sport_abbreviation	character
stat_group	character
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)
```

mlb_team_stats 193

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 integer person_id person_full_name character person_link character

Examples

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

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

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

ular team.

stat_type Stat type to return statistics for.

194 mlb_team_stats

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 partic-

ular 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.

Value

Returns a tibble with the following columns

col_name types 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 hits integer hit_by_pitch integer avg character integer at_bats character obp 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 mlb_venues 195

```
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

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

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

NCAA Functions Overview

Description

ncaa_scrape(): 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_baseball_pbp(): Get Play-By-Play Data for NCAA Baseball Games.
```

ncaa_baseball_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)

Details

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

```
ncaa_scrape(teamid=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_baseball_pbp(game_info_url = x)</pre>
```

Get NCAA Baseball Rosters:

198 ncaa_baseball_pbp

```
ncaa_baseball_roster(teamid = 104, team_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(teamid = 736, years = c(2017:2019), type = "conference")
```

Get Schedule and Results for NCAA Baseball Teams:

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

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

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

ncaa_baseball_pbp

Get Play-By-Play Data for NCAA Baseball Games

Description

Get Play-By-Play Data for NCAA Baseball Games

Usage

```
ncaa_baseball_pbp(game_info_url)
```

Arguments

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

Value

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

col_name	types
date	character
location	character
attendance	logical
inning	character
inning_top_bot	character
score	character
batting	character
fielding	character
description	character

ncaa_baseball_roster 199

Examples

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

ncaa_baseball_roster Get NCAA Baseball Rosters

Description

Get NCAA Baseball Rosters

Usage

```
ncaa_baseball_roster(teamid = NA, team_year)
```

Arguments

teamid NCAA id for a school team_year The year of interest

Value

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

col_name types name character class character player_id character season numeric number character position character player_url character school character conference character school_id numeric division numeric conference_id numeric

Examples

```
try(ncaa_baseball_roster(teamid = 104, team_year = 2021))
```

200 ncaa_game_logs

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")
```

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.

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 numeric App G numeric GS numeric IΡ numeric CGnumeric Н numeric R numeric ER numeric BBnumeric SO numeric SHO numeric BF numeric P-OAB numeric 2B-A numeric 3B-A numeric Bk numeric

ncaa_lineups 201

HR-A	numeric
WP	numeric
НВ	numeric
IBB	numeric
Inh Run	numeric
Inh Run Score	numeric
SHA	numeric
SFA	numeric
Pitches	numeric
GO	numeric
FO	numeric
W	numeric
Ĺ	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 = 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, year)
```

Arguments

```
game_info_url The unique game info url
year The year the game was played in
```

202 ncaa_park_factor

Value

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

col_name types
year numeric
playerName character
position character
batting_order character
school types
numeric
character
character

Examples

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

ncaa_park_factor

Get Park Effects for NCAA Baseball Teams

Description

Get Park Effects for NCAA Baseball Teams

Usage

```
ncaa_park_factor(teamid, years, type = "conference")
```

Arguments

teamid 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'.

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 school character home_game numeric away_game numeric ncaa_schedule_info 203

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

Examples

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

ncaa_schedule_info

Get Schedule and Results for NCAA Baseball Teams

Description

Get Schedule and Results for NCAA Baseball Teams

Usage

```
ncaa_schedule_info(teamid = NULL, year = NULL)
```

Arguments

teamid The team's unique NCAA id.

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

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
date	character
opponent	character
result	character
score	character
innings	character
opponent_slug	character
slug	character
game_info_url	character

204 ncaa_scrape

Examples

```
try(ncaa_schedule_info(teamid = 736, year = 2021))
```

ncaa_school_id_lu

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

Description

This function allows the user to look up the school_id needed for the ncaa_scrape() function.

Usage

```
ncaa_school_id_lu(school_name = NULL)
```

Arguments

school_name

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

Value

Returns a tibble with school identification data: school, conference, school_id, year, division, conference_id

col_name	types
school	character
conference	character
school_id	numeric
year	numeric
division	numeric
conference_id	numeric

Examples

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

ncaa_scrape

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

ncaa_scrape 205

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_scrape(teamid, year, type = "batting")
```

Arguments

teamid 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

Value

A data frame with the following variables

col_name types year integer school character conference character division numeric Jersey character Player character Yr character Pos character GP numeric GS numeric BA numeric **OBPct** numeric SlgPct numeric R numeric AB numeric Η numeric 2Bnumeric 3B numeric TB numeric HR numeric **RBI** numeric BBnumeric **HBP** numeric SF numeric SH numeric K numeric numeric DP

206 ncaa_season_id_lu

CS	numeric
Picked	numeric
SB	numeric
RBI2out	numeric
teamid	numeric
conference_id	integer
player_id	integer
player_url	character

Examples

```
try(ncaa_scrape(teamid=255, year=2013, type = "batting"))
```

ncaa_season_id_lu

A data set of college baseball seasons

Description

A data set college baseball

Usage

```
data(ncaa_season_id_lu)
```

Format

A data frame with 4 variables:

• season: Year date

• id: Season id

• batting_id: Batting id

• pitching_id: Pitching id

ncaa_team_lu 207

ncaa_team_lu

A data set colleges and their athletic conferences and divisions

Description

A data set colleges and their athletic conferences and divisions keyed by school and year.

Usage

```
data(ncaa_team_lu)
```

Format

A data frame with 6 variables

• school: School name

• conference: Conference name

• school_id: School id

• year: Year date

• division: School division

• conference_id: School conference id

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.

208 playername_lookup

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.

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.

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

210 retrosheet_data

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

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.

run_expectancy_code 211

Details

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

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 pitch_type character game date Date release_speed numeric release_pos_x numeric release_pos_z numeric player_name character batter numeric numeric pitcher events character description character spin_dir logical

212 run_expectancy_code

spin_rate_deprecated logical logical break_angle_deprecated break_length_deprecated logical numeric zone des character game_type character stand character p_throws character home_team character character away_team type character hit_location integer bb_type character balls integer strikes integer game_year integer pfx_x numeric numeric pfx_z plate_x numeric plate_z numeric on_3b numeric on_2b numeric on_1b numeric outs_when_up integer numeric inning inning_topbot character hc_x numeric numeric hc_y tfs_deprecated logical tfs_zulu_deprecated logical fielder_2 numeric umpire logical character sv_id vx0numeric vy0 numeric vz0 numeric 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

run_expectancy_code 213

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
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

(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(school_name = NULL)
```

Arguments

school_name

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

Value

Returns a tibble with school identification data: school, conference, school_id, year, division, conference_id

```
scrape_savant_leaderboards
```

(legacy) Query Baseball Savant Leaderboards

Description

(legacy) Query Baseball Savant Leaderboards

Usage

```
scrape_savant_leaderboards(
  leaderboard = "exit_velocity_barrels",
 year = 2018,
 abs = 50,
 min_pa = "q",
 min_pitches = 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.
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_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'.

216 scrape_statcast_savant

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
```

(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, ...)
```

sptrc_league_payrolls 217

```
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.

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
year numeric
team character
player_name character
roster_status character

age	numeric
pos	numeric
status	numeric
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 221

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:

222 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.

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 = 2018,
  abs = 50,
  min_pa = "q",
  min_pitches = 100,
  min_field = "q",
  min_run = 0,
```

statcast_leaderboards 223

```
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.

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_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.

hand 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 = "exit_velocity_barrels", year = 2018))
```

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 character events 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

```
### Correa
x<- try(statcast_search(start_date = "2016-04-06",</pre>
```

232 statline_from_statcast

```
end_date = "2016-04-15",
                     playerid = 621043,
                     player_type = 'batter'))
### Noah
try(statcast_search(start_date = "2016-04-06",
                    end_date = "2016-04-15",
                     playerid = 592789,
                    player_type = 'pitcher'))
### Daily
try(statcast_search(start_date = "2016-04-06",
                    end_date = "2016-04-06"))
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.

234 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.

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

Examples

```
try(team_consistency(year=2021))
```

team_results_bref

(legacy) Scrape Team Results

Description

```
(legacy) Scrape Team Results
```

Usage

```
team_results_bref(Tm, year)
```

woba_plus 235

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

236 woba_plus

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>
```

Index

* datasets	<pre>bref_daily_pitcher, 8</pre>	
column_structure_draft_mlb, 14	bref_standings_on_date, 10	
ncaa_season_id_lu, 206	bref_team_results, 11	
ncaa_team_lu, 207		
statcast_impute, 222	chadwick, 12	
stats_api_live_empty_df, 233	<pre>chadwick_player_lu, 12</pre>	
teams_lu_table, 233	code_barrel, 14	
* legacy	<pre>column_structure_draft_mlb, 14</pre>	
batter_game_logs_fg,6	1.3	
daily_batter_bref, 15	daily_batter_bref, 15	
daily_pitcher_bref, 15	daily_pitcher_bref, 15	
fg_bat_leaders, 27	edge_code, 16	
fg_pitch_leaders, 43	edge_frequency, 17	
get_batting_orders, 60	eage_frequency, 17	
get_draft_mlb, 61	fangraphs, 17	
<pre>get_game_info_mlb, 61</pre>	fg_bat_leaders, 27	
<pre>get_game_info_sup_petti,62</pre>	fg_batter_game_logs, 18	
<pre>get_game_pks_mlb, 62</pre>	fg_batter_leaders, 20	
<pre>get_ncaa_baseball_pbp, 63</pre>	fg_guts, 28	
<pre>get_ncaa_baseball_roster, 63</pre>	fg_milb_batter_game_logs, 28	
<pre>get_ncaa_game_logs, 64</pre>	fg_milb_pitcher_game_logs, 30	
<pre>get_ncaa_lineups, 64</pre>	fg_park, 31	
<pre>get_ncaa_park_factor, 65</pre>	fg_park_hand (fg_park), 31	
<pre>get_ncaa_schedule_info, 65</pre>	fg_pitch_leaders, 43	
<pre>get_pbp_mlb, 66</pre>	fg_pitcher_game_logs, 33	
<pre>get_probables_mlb, 66</pre>	fg_pitcher_leaders, 36	
get_retrosheet_data, 67	fg_team_batter,44	
<pre>get_umpire_ids_petti,67</pre>	fg_team_pitcher, 51	
<pre>milb_batter_game_logs_fg,75</pre>	fip_plus, 58	
milb_pitcher_game_logs_fg,76		
<pre>pitcher_game_logs_fg, 207</pre>	get_batting_orders, 60	
school_id_lu, 214	<pre>get_chadwick_lu(chadwick_player_lu), 12</pre>	
scrape_savant_leaderboards, 214	<pre>get_draft_mlb, 61</pre>	
scrape_statcast_savant, 216	<pre>get_game_info_mlb, 61</pre>	
standings_on_date_bref, 220	<pre>get_game_info_sup_petti, 62</pre>	
team_results_bref, 234	<pre>get_game_pks_mlb, 62</pre>	
	<pre>get_ncaa_baseball_pbp, 63</pre>	
batter_game_logs_fg, 6	<pre>get_ncaa_baseball_roster, 63</pre>	
bref, 6	<pre>get_ncaa_game_logs, 64</pre>	
<pre>bref_daily_batter, 7</pre>	get_ncaa_lineups, 64	

238 INDEX

get_ncaa_park_factor, 65	mlb_homerun_derby_players, 122
<pre>get_ncaa_schedule_info, 65</pre>	<pre>mlb_job_types, 127</pre>
<pre>get_pbp_mlb, 66</pre>	mlb_jobs, 124
<pre>get_probables_mlb, 66</pre>	mlb_jobs_datacasters, 125
get_retrosheet_data, 67	mlb_jobs_official_scorers, 126
<pre>get_umpire_ids_petti, 67</pre>	mlb_jobs_umpires, 126
ggspraychart, 68	mlb_languages, 128
	mlb_league, 128
<pre>label_statcast_imputed_data, 69</pre>	mlb_league_leader_types, 129
linear_weights_savant,72	mlb_logical_events, 130
<pre>load_game_info_sup, 73</pre>	mlb_metrics, 130
<pre>load_umpire_ids, 74</pre>	mlb_pbp, 131
	mlb_pbp_diff, 134
metrics, 74	mlb_people, 138
milb_batter_game_logs_fg,75	mlb_people_free_agents, 139
milb_pitcher_game_logs_fg,76	mlb_pitch_codes, 140
mlb, 76	mlb_pitch_types, 141
mlb_all_star_ballots,77	• • • • • • • • • • • • • • • • • • • •
mlb_all_star_final_vote, 78	mlb_player_game_stats, 141
mlb_all_star_write_ins, 80	mlb_player_game_stats_current, 144
mlb_attendance, 82	mlb_player_status_codes, 147
mlb_award, 84	mlb_positions, 147
mlb_awards, 85	mlb_probables, 148
mlb_awards_recipient, 85	mlb_review_reasons, 149
mlb_baseball_stats, 86	mlb_roster_types, 150
mlb_batting_orders, 87	mlb_rosters, 149
mlb_conferences, 88	<pre>mlb_runner_detail_types, 151</pre>
mlb_divisions, 89	mlb_schedule, 152
mlb_draft, 90	<pre>mlb_schedule_event_types, 154</pre>
mlb_draft_latest, 92	mlb_schedule_games_tied, 155
mlb_draft_prospects, 94	<pre>mlb_schedule_postseason, 157</pre>
mlb_event_types, 97	<pre>mlb_schedule_postseason_series, 160</pre>
mlb_fielder_detail_types, 97	mlb_seasons, 163
mlb_game_changes, 98	mlb_seasons_all, 164
mlb_game_content, 100	mlb_situation_codes, 165
mlb_game_context_metrics, 101	mlb_sky, 166
mlb_game_info, 103	mlb_sports, 166
mlb_game_linescore, 104	mlb_sports_info, 167
mlb_game_pace, 107	mlb_sports_players, 168
mlb_game_pks, 109	mlb_standings, 170
mlb_game_status_codes, 111	mlb_standings_types, 172
mlb_game_timecodes, 111	mlb_stat_groups, 178
mlb_game_types, 113	mlb_stat_types, 179
mlb_game_wp, 113	mlb_stats, 172
mlb_high_low_stats, 114	mlb_stats_leaders, 176
mlb_high_low_types, 117	mlb_team_affiliates, 185
mlb_hit_trajectories, 118	mlb_team_alumni, 186
mlb_homerun_derby, 118	mlb_team_coaches, 188
mlb_homerun_derby_bracket, 120	mlb_team_history, 189

INDEX 239

mlb_team_info, 190 mlb_team_leaders, 191 mlb_team_personnel, 192 mlb_team_stats, 193 mlb_teams, 179 mlb_teams_stats, 181 mlb_teams_stats_leaders, 183 mlb_venues, 195 mlb_wind_direction_codes, 196 most_recent_mlb_season, 196 most_recent_ncaa_baseball_season, 197	<pre>statcast_search, 224 statcast_search_batters</pre>
ncaa, 197 ncaa_baseball_pbp, 198 ncaa_baseball_roster, 199 ncaa_game_logs, 200 ncaa_lineups, 201 ncaa_park_factor, 202 ncaa_schedule_info, 203 ncaa_school_id_lu, 204 ncaa_scrape, 204 ncaa_season_id_lu, 206 ncaa_team_lu, 207	woba_plus, 235
pitcher_game_logs_fg, 207 playerid_lookup, 208 playername_lookup, 208 process_statcast_payload, 209 retrosheet_data, 210 run_expectancy_code, 211	
school_id_lu, 214 scrape_savant_leaderboards, 214 scrape_statcast_savant, 216 scrape_statcast_savant_batter	