Package 'baseballr'

April 25, 2022

Title Acquiring and Analyzing Baseball Data

Version 1.2.0

Description Provides numerous utilities for acquiring and analyzing
baseball data from online sources such as Baseball Reference <https://www.baseball-reference.com/>,
FanGraphs <https://www.fangraphs.com/>, and the MLB Stats API <https://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,
progressr (>= 0.6.0), pitchRx, 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, qs (>= 0.25.1), reshape2, rmarkdown, RSQLite, stringi,
stats, testthat, usethis (>= 1.6.0), xml2 (>= 1.3), zoo

VignetteBuilder knitr

Encoding UTF-8

LazyData true

RoxygenNote 7.1.2

NeedsCompilation no

Author Bill Petti [aut],
Saiem Gilani [aut, cre],
Ben Baumer [ctb],
Ben Dilday [ctb],
Robert Frey [ctb]

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

Repository CRAN

Date/Publication 2022-04-25 07:20:12 UTC

R **topics documented:**

---

batter_game_logs_fg   **(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_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"
t2	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
H	numeric
X1B	numeric
X2B	numeric
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

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
season	integer
Name	character
Age	numeric
Level	character
Team	character
G	numeric
GS	numeric

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

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 Central, 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   **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
Gm	numeric
Date	character
Tm	character
H_A	character
Opp	character
Result	character
R	numeric
RA	numeric
Inn	character
Record	character
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

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:

col_name	types
key_person	character
key_uuid	character
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	**(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 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

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 **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 example, "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 |integer | |BatOrder |character | |Pos |character | |G |numeric | |AB |numeric | |PA |numeric | |H |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% |numeric | |K% |numeric | |BB/K |numeric | |OBP |numeric | |SLG |numeric | |OPS |numeric | |ISO |numeric | |BABIP |numeric | |GB/FB |numeric | |LD% |numeric | |GB% |numeric | |FB% |numeric | |IFFB% |numeric | |HR/FB |numeric | |IFH% |numeric | |BUH% |numeric | |wOBA |numeric | |wRAA |numeric | |wRC |numeric | |Spd |numeric | |wRC+ |numeric | |wBSR |numeric | |WPA |numeric | |-WPA |numeric | |+WPA |numeric | |RE24 |numeric | |REW |numeric | |pLI |numeric | |phLI |numeric | |PH |numeric | |WPA/LI |numeric | |Clutch |numeric | |FB%1 |numeric | |FBv |numeric | |SL% |numeric | |SLv |numeric | |CT% |numeric | |CTv |numeric | |CB% |numeric | |CBv |numeric | |CH% |numeric | |CHv |numeric | |SF% |numeric | |SFv |numeric | |KN% |numeric | |KNv |numeric | |XX% |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% |numeric | |Z-Swing% |numeric | |Swing% |numeric | |O-Contact% |numeric | |Z-Contact% |numeric | |Contact% |numeric | |Zone% |numeric | |F-Strike% |numeric | |SwStr% |numeric | |Pull |numeric | |Cent |numeric | |Oppo |numeric | |Soft |numeric | |Med |numeric | |Hard |numeric | |bipCount |numeric | |Pull% |numeric | |Cent% |numeric | |Oppo% |numeric | |Soft% |numeric | |Med% |numeric | |Hard% |numeric | |pfxFA% |numeric | |pfxFT% |numeric | |pfxFC% |numeric | |pfxFS% |numeric | |pfxFO |numeric | |pfxSI% |numeric | |pfxSL% |numeric | |pfxCU% |numeric | |pfxKC% |numeric | |pfxCH% |numeric | |pfxKN% |numeric | |pfxvFA |numeric | |pfxvFT |numeric | |pfxvFC |numeric | |pfxvFS |numeric | |pfxvFO |numeric | |pfxvSI |numeric | |pfxvSL |numeric | |pfxvCU |numeric | |pfxvKC |numeric | |pfxvCH |numeric | |pfxvKN |numeric | |pfxFA-X |numeric | |pfxFT-X |numeric | |pfxFC-X |numeric | |pfxFS-X |numeric | |pfxFO-X |numeric | |pfxSI-X |numeric | |pfxSL-X |numeric | |pfxCU-X |numeric | |pfxKC-X |numeric | |pfxCH-X |numeric | |pfxKN-X |numeric | |pfxFA-Z |numeric | |pfxFT-Z |numeric | |pfxFC-Z |numeric | |pfxFS-Z |numeric | |pfxFO-Z |numeric | |pfxSI-Z |numeric | |pfxSL-Z |numeric | |pfxCU-Z |numeric | |pfxKC-Z |numeric | |pfxCH-Z |numeric | |pfxKN-Z |numeric | |pfxwFA |numeric | |pfxwFT |numeric | |pfxwFC |numeric | |pfxwFS |numeric | |pfxwFO |numeric | |pfxwSI |numeric | |pfxwSL |numeric | |pfxwCU |numeric | |pfxwKC |numeric | |pfxwCH |numeric | |pfxwKN |numeric | |pfxwFA/C |numeric | |pfxwFT/C |numeric | |pfxwFC/C |numeric | |pfxwFS/C |numeric | |pfxwFO/C |numeric | |pfxwSI/C |numeric | |pfxwSL/C |numeric | |pfxwCU/C |numeric | |pfxwKC/C |numeric | |pfxwCH/C |numeric | |pfxwKN/C |numeric | |pfxO-Swing% |numeric | |pfxZ-Swing% |numeric | |pfxSwing% |numeric | |pfxO-Contact% |numeric | |pfxZ-Contact% |numeric | |pfxContact% |numeric | |pfxZone% |numeric | |pfxPace |numeric | |piCH% |numeric | |piCS% |numeric | |piCU% |numeric | |piFA% |numeric | |piFC% |numeric | |piFS% |numeric | |piKN% |numeric | |piSI% |numeric | |piSL% |numeric | |piXX% |numeric | |pivCH |numeric | |pivCS |numeric | |pivCU |numeric | |pivFA |numeric | |pivFC |numeric | |pivFS |numeric | |pivKN |numeric | |pivSI |numeric | |pivSL |numeric | |pivXX |numeric | |piCH-X |numeric | |piCS-X |numeric | |piCU-X |numeric | |piFA-X |numeric | |piFC-X |numeric | |piFS-X |numeric | |piKN-X |numeric | |piSI-X |numeric | |piSL-X |numeric | |piXX-X |numeric | |piCH-Z |numeric | |piCS-Z |numeric | |piCU-Z |numeric | |piFA-Z |numeric | |piFC-Z |numeric | |piFS-Z |numeric | |piKN-Z |numeric | |piSI-Z |numeric | |piSL-Z |numeric | |piXX-Z |numeric | |piwCH |numeric | |piwCS |numeric | |piwCU |numeric | |piwFA |numeric | |piwFC |numeric | |piwFS |numeric | |piwKN |numeric | |piwSI

|numeric | |piwSL |numeric | |piwXX |numeric | |piwCH/C |numeric | |piwCS/C |numeric | |piwCU/C |numeric | |piwFA/C |numeric | |piwFC/C |numeric | |piwFS/C |numeric | |piwKN/C |numeric | |piwSI/C |numeric | |piwSL/C |numeric | |piwXX/C |numeric | |piO-Swing% |numeric | |piZ-Swing% |numeric | |piSwing% |numeric | |piO-Contact% |numeric | |piZ-Contact% |numeric | |piContact% |numeric | |piZone% |numeric | |Events |numeric | |EV |numeric | |LA |numeric | |Barrels |numeric | |Barrel% |numeric | |maxEV |numeric | |HardHit |numeric | |HardHit% |numeric | |gamedate |character | |dh |integer |

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.
y	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
H	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_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
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

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
FC_pct_pi	numeric
FS_pct_pi	numeric
KN_pct_pi	numeric
SB_pct_pi	numeric
SI_pct_pi	numeric
SL_pct_pi	numeric
XX_pct_pi	numeric
vCH_pi	numeric
vCS_pi	numeric
vCU_pi	numeric
vFA_pi	numeric
vFC_pi	numeric
vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSI_pi	numeric
vSL_pi	numeric

vXX_pi	numeric
CH-X_pi	numeric
CS-X_pi	numeric
CU-X_pi	numeric
FA-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CS-Z_pi	numeric
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric
FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi	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

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.
y	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())
```

---

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	numeric
AB	numeric
PA	numeric
H	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	character
minor_playerid	character
Date	character
Team	character
Level	character
Opp	character
W	numeric
L	numeric
ERA	numeric
G	numeric

GS	numeric
CG	numeric
ShO	numeric
SV	numeric
IP	numeric
TBF	numeric
H	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.

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.

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

Examples

```
try(fg_park(2013))


try(fg_park_hand(2013))
```

---

fg_pitcher_game_logs   **Scrape Pitcher Game Logs from FanGraphs**

Description

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

Usage

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

Arguments

playerid	This is the playerid used by FanGraphs for a given player
year	The season for which game logs should be returned (use the YYYY format)

Value

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

col_name	types
PlayerName	character
playerid	integer
Date	character
Opp	character
teamid	integer
season	integer
Team	character
HomeAway	character
Age	integer
W	numeric
L	numeric
ERA	numeric
G	numeric
GS	numeric
CG	numeric
ShO	numeric
SV	numeric
HLD	numeric

BS	numeric
IP	numeric
TBF	numeric
H	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	numeric
E-F	numeric
xFIP	numeric
ERA-	numeric
FIP-	numeric
xFIP-	numeric
GB/FB	numeric
LD%	numeric
GB%	numeric
FB%	numeric
IFFB%	numeric
HR/FB	numeric
RS	numeric

RS/9	numeric
Balls	numeric
Strikes	numeric
Pitches	numeric
WPA	numeric
-WPA	numeric
+WPA	numeric
RE24	numeric
REW	numeric
pLI	numeric
inLI	numeric
gmLI	numeric
exLI	numeric
Pulls	numeric
Games	numeric
WPA/LI	numeric
Clutch	numeric
SD	numeric
MD	numeric
FB%1	numeric
FBv	numeric
SL%	numeric
SLv	numeric
CT%	numeric
CTv	numeric
CB%	numeric
CBv	numeric
CH%	numeric
CHv	numeric
XX%	numeric
PO%	numeric
wFB	numeric
wSL	numeric
wCT	numeric
wCB	numeric
wCH	numeric
wFB/C	numeric
wSL/C	numeric
wCT/C	numeric
wCB/C	numeric
wCH/C	numeric
O-Swing%	numeric
Z-Swing%	numeric
Swing%	numeric
O-Contact%	numeric
Z-Contact%	numeric
Contact%	numeric
Zone%	numeric

F-Strike%	numeric
SwStr%	numeric
Pull	numeric
Cent	numeric
Oppo	numeric
Soft	numeric
Med	numeric
Hard	numeric
bipCount	numeric
Pull%	numeric
Cent%	numeric
Oppo%	numeric
Soft%	numeric
Med%	numeric
Hard%	numeric
tERA	numeric
GSv2	numeric
Events	numeric
gamedate	character
dh	integer

Examples

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

---

fg_pitcher_leaders   **Scrape Pitcher Leaderboards from FanGraphs**

Description

Scrape Pitcher Leaderboards from FanGraphs

Usage

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

Arguments

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

Value

A data frame of pitcher data.

col_name	types
playerid	character
#	character
Season	character
Name	character
Team	character
Age	numeric
W	numeric
L	numeric
ERA	numeric
G	numeric
GS	numeric
CG	numeric
ShO	numeric
SV	numeric
BS	numeric
IP	numeric
TBF	numeric
H	numeric
R	numeric
ER	numeric
HR	numeric
BB	numeric
IBB	numeric
HBP	numeric
WP	numeric
BK	numeric

SO	numeric
GB	numeric
FB	numeric
LD	numeric
IFFB	numeric
Balls	numeric
Strikes	numeric
Pitches	numeric
RS	numeric
IFH	numeric
BU	numeric
BUH	numeric
K_9	numeric
BB_9	numeric
K_BB	numeric
H_9	numeric
HR_9	numeric
AVG	numeric
WHIP	numeric
BABIP	numeric
LOB_pct	numeric
FIP	numeric
GB_FB	numeric
LD_pct	numeric
GB_pct	numeric
FB_pct	numeric
IFFB_pct	numeric
HR_FB	numeric
IFH_pct	numeric
BUH_pct	numeric
Starting	numeric
Start_IP	numeric
Relieving	numeric
Relief_IP	numeric
RAR	numeric
WAR	numeric
Dollars	numeric
tERA	numeric
xFIP	numeric
WPA	numeric
WPA_minus	numeric
WPA_plus	numeric
RE24	numeric
REW	numeric
pLI	numeric
inLI	numeric
gmLI	numeric
exLI	numeric

Pulls	numeric
WPA_LI	numeric
Clutch	numeric
FBall_pct	numeric
FBv	numeric
SL_pct	numeric
SLv	numeric
CT_pct	numeric
CTv	numeric
CB_pct	numeric
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
HLD	numeric
SD	numeric
MD	numeric
ERA-	numeric
FIP-	numeric
xFIP-	numeric

K_pct	numeric
BB_pct	numeric
SIERA	numeric
RS_9	numeric
E-F	numeric
FA_pct (sc)	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

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
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
FA_pct_pi	numeric
FC_pct_pi	numeric
FS_pct_pi	numeric
KN_pct_pi	numeric
SB_pct_pi	numeric
SI_pct_pi	numeric
SL_pct_pi	numeric
XX_pct_pi	numeric
vCH_pi	numeric
vCS_pi	numeric
vCU_pi	numeric
vFA_pi	numeric
vFC_pi	numeric
vFS_pi	numeric
vKN_pi	numeric
vSB_pi	numeric
vSI_pi	numeric
vSL_pi	numeric
vXX_pi	numeric
CH-X_pi	numeric
CS-X_pi	numeric
CU-X_pi	numeric
FA-X_pi	numeric
FC-X_pi	numeric
FS-X_pi	numeric
KN-X_pi	numeric
SB-X_pi	numeric
SI-X_pi	numeric
SL-X_pi	numeric
XX-X_pi	numeric
CH-Z_pi	numeric
CS-Z_pi	numeric
CU-Z_pi	numeric
FA-Z_pi	numeric
FC-Z_pi	numeric

FS-Z_pi	numeric
KN-Z_pi	numeric
SB-Z_pi	numeric
SI-Z_pi	numeric
SL-Z_pi	numeric
XX-Z_pi	numeric
wCH_pi	numeric
wCS_pi	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.
y	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.

---

fip_plus   **Calculate FIP and related metrics for any set of data**

Description

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

Usage

```
fip_plus(df)
```

Arguments

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

Value

Returns a tibble with the following columns:

col_name	types
bbref_id	character
season	integer
Name	character
Age	numeric
Level	character
Team	character
G	numeric
GS	numeric
W	numeric
L	numeric
SV	numeric
IP	numeric
H	numeric
R	numeric
ER	numeric
uBB	numeric
BB	numeric
SO	numeric
HR	numeric
HBP	numeric
ERA	numeric
AB	numeric
X1B	numeric
X2B	numeric
X3B	numeric
IBB	numeric
GDP	numeric
SF	numeric
SB	numeric
CS	numeric
PO	numeric
BF	numeric
Pit	numeric
Str	numeric

StL	numeric
StS	numeric
GB.FB	numeric
LD	numeric
PU	numeric
WHIP	numeric
BAbip	numeric
SO9	numeric
SO.W	numeric
SO_perc	numeric
uBB_perc	numeric
SO_uBB	numeric
FIP	numeric
wOBA_against	numeric
wOBA_CON_against	numeric

Examples

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

---

get_batting_orders   **(legacy) Retrieve batting orders for a given MLB game**

Description

(legacy) Retrieve batting orders for a given MLB game

Usage

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

Arguments

game_pk	The unique game_pk identifier for the game
type	Whether to just return the starting lineup ('starting') or all batters that appeared ('all')

Value

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

---

get_draft_mlb **(legacy) Retrieve draft pick information by year**

Description

(legacy) Retrieve draft pick information by year

Usage

```
get_draft_mlb(year)
```

Arguments

year   The year for which to return data

Value

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

---

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

Description

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

Usage

```
get_game_info_mlb(game_pk)
```

Arguments

game_pk   The unique game_pk identifier for the game

Value

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

---

`get_game_info_sup_petti`

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

Description

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

Usage

```
get_game_info_sup_petti()
```

Value

Function returns a tibble with various columns, including:

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

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

Description

(legacy) Get MLB Game Info by Date and Level

Usage

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

Arguments

date	The date for which you want to find game_pk values for MLB games
level_ids	A numeric vector with ids for each level where game_pks are desired. See below for a reference of level ids.

Value

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

---

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

Description

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

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_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 'pitching'.
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 **(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, run_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_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	(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

---

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

Description

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

Usage

```
get_umpire_ids_petti()
```

Value

Function returns a tibble with the following columns:

- id
- position,
- name
- game_pk
- game_date

---

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_palette = NULL,
  fill_legend_title = NULL,
  density = FALSE,
  bin_size = 15,
  point_alpha = 0.75,
  point_size = 2,
  frame = NULL
)
```

Arguments

data	A data frame that includes batted ball coordinates. Typically, this coordinates will come from the GameDay xml feed or downloads from baseballsavant.com
x_value	The x coordindate. Typically hc_x.
y_value	The y coordinate. Typically hc_y. You generally need the inverse or negative of the hc_y values, so it is recommended you calculate before plotting.

fill_value | The categorical variable that you want the geom_points to base the fill on. Pass
    as a string. If left blank, defaults to blue.

fill_palette | An object containing a customer palette to be used with ggplot2::scale_fill_manual.

fill_legend_title

    A string containing a custom legend title to be used with 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
    plots. For density plots be sure your variable is a factor.

Details

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

Value

A plot of the spraychart for the supplied dataset

```
label_statcast_imputed_data
```
Label Statcast data as imputed

Description

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

Usage

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

Arguments

statcast_df | A dataframe containing Statcast batted ball data

impute_file | A CSV file giving the launch angle, launch speed, bb_type, events fields to label
    as imputed. if NULL then it's read from the extdata folder of the package.

inverse_precision

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

Value

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

col_name	types
pitch_type	character
game_date	Date
release_speed	numeric
release_pos_x	numeric
release_pos_z	numeric
player_name	character
batter	numeric
pitcher	numeric
events	character
description	character
spin_dir	logical
spin_rate_deprecated	logical
break_angle_deprecated	logical
break_length_deprecated	logical
zone	numeric
des	character
game_type	character
stand	character
p_throws	character
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
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_bot	numeric
hit_distance_sc	numeric
launch_speed	numeric
launch_angle	numeric
effective_speed	numeric
release_spin_rate	numeric
release_extension	numeric
game_pk	numeric
pitcher_1	numeric
fielder_2_1	numeric
fielder_3	numeric
fielder_4	numeric
fielder_5	numeric
fielder_6	numeric
fielder_7	numeric
fielder_8	numeric
fielder_9	numeric
release_pos_y	numeric
estimated_ba_using_speedangle	numeric
estimated_woba_using_speedangle	numeric
woba_value	numeric
woba_denom	integer
babip_value	integer
iso_value	integer
launch_speed_angle	integer
at_bat_number	numeric
pitch_number	numeric
pitch_name	character
home_score	numeric
away_score	numeric
bat_score	numeric
fld_score	numeric
post_away_score	numeric
post_home_score	numeric
post_bat_score	numeric
post_fld_score	numeric
if_fielding_alignment	character
of_fielding_alignment	character
spin_axis	numeric
delta_home_win_exp	numeric

delta_run_exp	numeric
ila	integer
ils	integer
imputed	numeric

Examples

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

---

linear_weights_savant   **Generate linear weight values for events using Baseball Savant data**

Description

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

Usage

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

Arguments

df	A data frame generated from Baseball Savant that has been run through the run_expectancy_code() function.
level	Whether to calculate linear weights the plate appearance or pitch level. Defaults to 'plate appearance'.

Value

Returns a tibble with the following columns:

col_name	types
events	character
linear_weights_above_average	numeric
linear_weights_above_outs	numeric

Examples

```
df <- statcast_search(start_date = "2016-04-06", end_date = "2016-04-15",
                      playerid = 621043, player_type = 'batter')
df <- run_expectancy_code(df, level = "plate appearances")
try(linear_weights_savant(df, level = "plate appearance"))
```

---

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

Description

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

Usage

```
load_game_info_sup()
```

Value

Function returns a tibble with various columns, including:

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

Examples

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

---

load_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)
```

Generate run expectancy and related measures from Baseball Savant data:

```
df <- statcast_search(start_date = "2016-04-06", end_date = "2016-04-15",
                      playerid = 621043, player_type = 'batter')
run_expectancy_code(df, level = "plate appearances")
```

Generate linear weight values for events using Baseball Savant data:

```
df <- statcast_search(start_date = "2016-04-06", end_date = "2016-04-15",
                      playerid = 621043, player_type = 'batter')
df <- run_expectancy_code(df, level = "plate appearances")
linear_weights_savant(df, level = "plate appearance")
```

```
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.

---

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

Examples

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

mlb_all_star_final_vote

Find MLB All-Star Final Vote

Description

Find MLB All-Star Final Vote

Usage

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

Arguments

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

season   The season of the all-star ballot.

Value

Returns a tibble with the following columns:

col_name	types
player_id	integer
full_name	character
link	character
first_name	character
last_name	character
primary_number	character
birth_date	character
current_age	integer
birth_city	character
birth_state_province	character
birth_country	character
height	character
weight	integer
active	logical
use_name	character
middle_name	character
boxscore_name	character
nick_name	character
gender	character
is_player	logical
is_verified	logical
draft_year	integer
mlb_debut_date	character
name_first_last	character
name_slug	character
first_last_name	character
last_first_name	character
last_init_name	character
init_last_name	character
full_fml_name	character
full_lfm_name	character

strike_zone_top	numeric
strike_zone_bottom	numeric
pronunciation	character
name_matrilineal	character
name_title	character
primary_position_code	character
primary_position_name	character
primary_position_type	character
primary_position_abbreviation	character
bat_side_code	character
bat_side_description	character
pitch_hand_code	character
pitch_hand_description	character
league_id	numeric
season	numeric

Examples

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

Examples

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

---

mlb_attendance   **MLB Attendance**

Description

MLB Attendance

Usage

```
mlb_attendance(
  team_id = NULL,
  league_id = NULL,
  season = NULL,
  date = NULL,
  league_list_id = NULL
)
```

Arguments

team_id	Return attendance information for a particular team_id(s).
league_id	Return attendance information for a particular league_id(s). Format: '103,104'
season	Return attendance information for particular year(s).
date	Return attendance information on a particular date. Format: MM/DD/YYYY
league_list_id	Unique league list identifier to return a directory of attendance for a specific league list_id Valid values include:

- milb_full
- milb_short
- milb_complex
- milb_all
- milb_all_nomex
- milb_all_domestic
- milb_noncomp
- milb_noncomp_nomex
- milb_domcomp
- milb_intcomp
- win_noabl
- win_caribbean
- win_all
- abl
- mlb
- mlb_hist

- mlb_milb
- mlb_milb_hist
- mlb_milb_win
- baseball_all

Value

Returns a tibble with the following columns

col_name	types
openings_total	integer
openings_total_away	integer
openings_total_home	integer
openings_total_lost	integer
games_total	integer
games_away_total	integer
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
game_type_id	character
game_type_description	character
team_id	integer
team_name	character
team_link	character

Examples

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

mlb_award   **MLB All-Star, Awards, Home Run Derby Functions**

Description

mlb_all_star_ballots(): Find MLB All-Star Ballots.

mlb_all_star_final_vote(): Find MLB All-Star Final Vote.

mlb_all_star_write_ins(): Find MLB All-Star Write-ins.

mlb_awards(): Find MLB Awards.

mlb_awards_recipient(): Find MLB Award Recipients.

mlb_homerun_derby(): Retrieve MLB Home Run Derby Data.

mlb_homerun_derby_bracket(): Retrieve MLB Home Run Derby Bracket.

mlb_homerun_derby_players(): Retrieve MLB Home Run Derby Players.

Details

Find MLB All-Star Ballots:

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

Find MLB All-Star Final Vote:

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

Find MLB All-Star Write-ins:

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

Find MLB Awards:

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

Find MLB Award Recipients:

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

Retrieve MLB Home Run Derby Data:

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

Retrieve MLB Home Run Derby Bracket:

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

Retrieve MLB Home Run Derby Players:

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

`mlb_awards` **MLB Awards**

Description

MLB Awards

Usage

```
mlb_awards()
```

Value

Returns a tibble with the following columns

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

Examples

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

`mlb_awards_recipient` **MLB Award Recipients**

Description

MLB Award Recipients

Usage

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

```
    season = NULL
)
```

Arguments

`award_id`	award_id to return a directory of players for a given award.
`sport_id`	sport_id to return a directory of players for a given aware in a specific sport.
`league_id`	league_id(s) to return a directory of players for a given award in a specific league. Format '103,104'
`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

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

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
link	character
conference_abbreviation	character
has_wildcard	logical
name_short	character
league_id	integer
league_link	character
sport_id	integer
sport_link	character

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

```
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
signing_bonus	character
scouting_report	character
blurb	character
headshot_link	character
is_drafted	logical
is_pass	logical
year	character
home_city	character
home_state	character
home_country	character
school_name	character
school_school_class	character
school_country	character
school_state	character
person_id	integer
person_full_name	character
person_link	character
person_first_name	character
person_last_name	character

person_primary_number	character
person_birth_date	character
person_current_age	integer
person_birth_city	character
person_birth_state_province	character
person_birth_country	character
person_height	character
person_weight	integer
person_active	logical
person_use_name	character
person_middle_name	character
person_boxscore_name	character
person_gender	character
person_is_player	logical
person_is_verified	logical
person_draft_year	integer
person_name_first_last	character
person_name_slug	character
person_first_last_name	character
person_last_first_name	character
person_last_init_name	character
person_init_last_name	character
person_full_fml_name	character
person_full_lfm_name	character
person_strike_zone_top	numeric
person_strike_zone_bottom	numeric
person_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
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(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

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
team_season	integer
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

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
year	character
home_city	character
home_state	character
home_country	character
school_name	character
school_school_class	character
school_country	character
school_state	character
person_id	integer
person_full_name	character
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
person_is_verified	logical
person_draft_year	integer
person_name_first_last	character
person_name_slug	character
person_first_last_name	character
person_last_first_name	character
person_last_init_name	character
person_init_last_name	character
person_full_fml_name	character
person_full_lfm_name	character

person_strike_zone_top	numeric
person_strike_zone_bottom	numeric
person_primary_number	character
person_pronunciation	character
person_name_title	character
person_mlb_debut_date	character
person_name_matrilineal	character
person_nick_name	character
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
team_team_code	character
team_file_code	character
team_abbreviation	character
team_team_name	character
team_location_name	character
team_first_year_of_play	character
team_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

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

total_items	integer
total_events	integer
total_games	integer
total_games_in_progress	integer
game_pk	integer
link	character
game_type	character
season	character
game_date	character
official_date	character
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
status_abstract_game_code	character
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
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
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
fox_auth_required	logical
tbs_auth_required	logical
espn_auth_required	logical
fs1auth_required	logical
mlbn_auth_required	logical
free_game	logical
type	character
description	character
rendition_name	character
language	character

Examples

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

mlb_game_context_metrics

Acquire game context metrics for Major and Minor League games

Description

Acquire game context metrics for Major and Minor League games

Usage

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

Arguments

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

Value

Returns a tibble that includes time codes from the game_pk requested

col_name	types
game_pk	integer

link	character
game_type	character
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
teams_home_team_name	character
teams_home_team_link	character
teams_home_is_winner	logical
teams_home_probable_pitcher_id	integer
teams_home_probable_pitcher_full_name	character
teams_home_probable_pitcher_link	character
teams_home_split_squad	logical
teams_home_series_number	integer
venue_id	integer
venue_name	character
venue_link	character
link_1	character
is_tie	logical
game_number	integer
public_facing	logical
double_header	character
gameday_type	character
tiebreaker	character
calendar_event_id	character

season_display	character
day_night	character
scheduled_innings	integer
reverse_home_away_status	logical
inning_break_length	integer
games_in_series	integer
series_game_number	integer
series_description	character
record_source	character
if_necessary	character
if_necessary_description	character
game_id	character
home_win_probability	numeric
away_win_probability	numeric

Examples

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

`mlb_game_info`	**Retrieve additional game information for major and minor league games**

Description

Retrieve additional game information for major and minor league games

Usage

```
mlb_game_info(game_pk)
```

Arguments

game_pk   The unique game_pk identifier for the game

Value

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

col_name	types
game_date	character
game_pk	numeric
venue_name	character
venue_id	integer

temperature	character
other_weather	character
wind	character
attendance	character
start_time	character
elapsed_time	character
game_id	character
game_type	character
home_sport_code	character
official_scorer	character
date	character
status_ind	character
home_league_id	integer
gameday_sw	character

Examples

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

---

mlb_game_linescore	**Retrieve game linescores for major and minor league games**

Description

Retrieve game linescores for major and minor league games

Usage

```
mlb_game_linescore(game_pk)
```

Arguments

game_pk   The unique game_pk identifier for the game

Value

Returns a tibble with the following columns

col_name	types
game_pk	numeric
home_team_id	character
home_team_name	character
away_team_id	character
away_team_name	character
num	integer

ordinal_num	character
home_runs	integer
home_hits	integer
home_errors	integer
home_left_on_base	integer
away_runs	integer
away_hits	integer
away_errors	integer
away_left_on_base	integer
home_team_link	character
home_team_season	character
home_team_venue_id	character
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

away_team_link	character
away_team_season	character
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
away_team_sport_link	character
away_team_sport_name	character
away_team_short_name	character
away_team_record_games_played	character
away_team_record_wild_card_games_back	character
away_team_record_league_games_back	character
away_team_record_spring_league_games_back	character
away_team_record_sport_games_back	character
away_team_record_division_games_back	character
away_team_record_conference_games_back	character
away_team_record_league_record_wins	character
away_team_record_league_record_losses	character
away_team_record_league_record_pct	character
away_team_record_division_leader	character
away_team_record_wins	character
away_team_record_losses	character
away_team_record_winning_percentage	character
away_team_franchise_name	character
away_team_club_name	character
away_team_all_star_status	character
away_team_active	character

Examples

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

mlb_game_pace   **Retrieve game pace metrics for major and minor league**

Description

Retrieve game pace metrics for major and minor league

Usage

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

Value

Returns a tibble with the following columns

col_name	types
hits_per9inn	numeric
runs_per9inn	numeric
pitches_per9inn	numeric
plate_appearances_per9inn	numeric
hits_per_game	numeric

runs_per_game	numeric
innings_played_per_game	numeric
pitches_per_game	numeric
pitchers_per_game	numeric
plate_appearances_per_game	numeric
total_game_time	character
total_innings_played	integer
total_hits	integer
total_runs	integer
total_plate_appearances	integer
total_pitchers	integer
total_pitches	integer
total_games	integer
total7inn_games	integer
total9inn_games	integer
total_extra_inn_games	integer
time_per_game	character
time_per_pitch	character
time_per_hit	character
time_per_run	character
time_per_plate_appearance	character
time_per9inn	character
time_per77plate_appearances	character
total_extra_inn_time	character
time_per7inn_game	character
time_per7inn_game_without_extra_inn	character
total7inn_games_scheduled	integer
total7inn_games_without_extra_inn	integer
total9inn_games_completed_early	integer
total9inn_games_without_extra_inn	integer
total9inn_games_scheduled	integer
hits_per_run	numeric
pitches_per_pitcher	numeric
season	character
sport_id	integer
sport_code	character
sport_link	character
pr_portal_calculated_fields_total7inn_games	integer
pr_portal_calculated_fields_total9inn_games	integer
pr_portal_calculated_fields_total_extra_inn_games	integer
pr_portal_calculated_fields_time_per7inn_game	character
pr_portal_calculated_fields_time_per9inn_game	character
pr_portal_calculated_fields_time_per_extra_inn_game	character

Examples

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

---

mlb_game_pks   **Get MLB Game Info by Date and Level**

Description

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

Usage

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

Arguments

date	The date for which you want to find game_pk values for MLB games
level_ids	A numeric vector with ids for each level where game_pks are desired. See below for a reference of level ids.

Details

Level IDs:

The following IDs can be passed to the level_ids argument:

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

Value

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

col_name	types
game_pk	integer
link	character
gameType	character
season	character
gameDate	character
officialDate	character
isTie	logical
gameNumber	integer
publicFacing	logical
doubleHeader	character
gamedayType	character
tiebreaker	character
calendarEventID	character
seasonDisplay	character

dayNight	character
scheduledInnings	integer
reverseHomeAwayStatus	logical
inningBreakLength	integer
gamesInSeries	integer
seriesGameNumber	integer
seriesDescription	character
recordSource	character
ifNecessary	character
ifNecessaryDescription	character
status.abstractGameState	character
status.codedGameState	character
status.detailedState	character
status.statusCode	character
status.startTimeTBD	logical
status.abstractGameCode	character
teams.away.score	integer
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
teams.away.team.name	character
teams.away.team.link	character
teams.home.score	integer
teams.home.isWinner	logical
teams.home.splitSquad	logical
teams.home.seriesNumber	integer
teams.home.leagueRecord.wins	integer
teams.home.leagueRecord.losses	integer
teams.home.leagueRecord.pct	character
teams.home.team.id	integer
teams.home.team.name	character
teams.home.team.link	character
venue.id	integer
venue.name	character
venue.link	character
content.link	character

Examples

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

`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

Value

Returns a tibble that includes time codes from the game_pk requested

col_name	types
timecodes (MMDDYYYY_HHMMSS)	numeric

Examples

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

---

mlb_game_types   **MLB Game Types**

Description

MLB Game Types

Usage

```
mlb_game_types()
```

Value

Returns a tibble with the following columns

col_name	types
game_type_id	character
game_type_description	character

Examples

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

---

mlb_game_wp   **Acquire win probability for Major and Minor League games**

Description

Acquire win probability for Major and Minor League games

Usage

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

Arguments

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

Value

Returns a tibble that includes time codes from the game_pk requested

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

Examples

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

---

mlb_high_low_stats   **Acquire high/low stats for Major and Minor Leagues**

Description

Acquire high/low stats for Major and Minor Leagues

Usage

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

Arguments

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

- player
- team
- division
- league
- sport

`season`	The season for which you want to return information (*Required*).
`sort_stat`	The stat to sort the return (*Required*). Valid values can be found from 'stat_lookup_param' below

stat_name	stat_lookup_param	is_counting	stat_label	stat_groups
at_bats	atBats	TRUE	At bats	hitting , pitching
total_plate_appearances	plateAppearances	TRUE	Total plate appearances	hitting
runs	runs	TRUE	Runs	hitting
runs_batted_in	rbi	TRUE	Runs batted in	hitting
home_team_runs	runs	TRUE	Home team runs	hitting
away_team_runs	runs	TRUE	Away team runs	hitting
hits	hits	TRUE	Hits	hitting
hits_risp	hitsRisp	TRUE	Hits risp	hitting
home_team_hits	hits	TRUE	Home team hits	hitting
away_team_hits	hits	TRUE	Away team hits	hitting
total_bases	totalBases	TRUE	Total bases	hitting , pitching
doubles	doubles	TRUE	Doubles	hitting , pitching
triples	triples	TRUE	Triples	hitting
home_runs	homeRuns	TRUE	Home runs	hitting , pitching
extra_base_hits	extraBaseHits	TRUE	Extra base hits	hitting
walks	baseOnBalls	TRUE	Walks	hitting , pitching
strikeouts	strikeouts	TRUE	Strikeouts	hitting , pitching
stolen_bases	stolenBases	TRUE	Stolen bases	hitting
caught_stealing	caughtStealing	TRUE	Caught stealing	hitting , pitching, fielding
sacrifice_flies	sacFlies	TRUE	Sacrifice flies	hitting
sacrifice_bunts	sacBunts	TRUE	Sacrifice bunts	hitting
hit_by_pitches	hitByPitch	TRUE	Hit by pitches	hitting , pitching
left_on_base	leftOnBase	TRUE	Left on base	hitting
ground_into_double_plays	groundIntoDoublePlay	TRUE	Ground into double plays	hitting , pitching
strikes	strikes	TRUE	Strikes	pitching
pitches	pitchesThrown	TRUE	Pitches	pitching
balks	balks	TRUE	Balks	pitching
innings_pitched	inningsPitched	TRUE	Innings pitched	pitching
errors	errors	TRUE	Errors	fielding
home_team_errors	errors	TRUE	Home team errors	fielding
away_team_errors	errors	TRUE	Away team errors	fielding
chances	chances	TRUE	Chances	fielding
put_outs	putOuts	TRUE	Put outs	fielding
assists	assists	TRUE	Assists	fielding
double_plays	doublePlays	TRUE	Double plays	fielding

attendance	attendance	TRUE	Attendance	game
game_time	gameDuration	TRUE	Game time	game
delay_time	gameDuration	TRUE	Delay time	game
longest	gameDuration	TRUE	Longest	game
shortest	gameDuration	TRUE	Shortest	game
inning	innings	TRUE	Inning	game
win_streak	winStreak	TRUE	Win streak	streak
loss_streak	lossStreak	TRUE	Loss streak	streak

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

stat_group
hitting
pitching
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

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

Examples

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

---

mlb_hit_trajectories   **MLB Hit Trajectories**

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

Value

Returns a tibble with the following columns

col_name	types
game_pk	integer
event_name	character
event_date	character
event_type_code	character
event_type_name	character
venue_id	integer
venue_name	character
round	integer
num_batters	integer
batter	character
batter_id	integer
batter_link	character
top_seed_started	logical
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
bottom_seed_started	logical

bottom_seed_complete	logical
bottom_seed_winner	logical
bottom_seed_seed	integer
bottom_seed_is_winner	logical
bottom_seed_is_complete	logical
bottom_seed_is_started	logical
bottom_seed_num_home_runs	integer
bottom_seed_player_id	integer
bottom_seed_player_full_name	character
bottom_seed_player_link	character
bottom_seed_top_derby_hit_data_launch_speed	integer
bottom_seed_top_derby_hit_data_total_distance	integer
venue_link	character
is_multi_day	logical
is_primary_calendar	logical
file_code	character
event_number	integer
public_facing	logical

Examples

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

```
mlb_homerun_derby_bracket
```
Retrieve Homerun Derby Bracket

Description

Retrieve Homerun Derby Bracket

Usage

```
mlb_homerun_derby_bracket(game_pk)
```

Arguments

game_pk   The game_pk for which you want to return data

Value

Returns a tibble with the following columns

col_name	types
game_pk	integer

event_name	character
event_type_code	character
event_type_name	character
event_date	character
venue_id	integer
venue_name	character
venue_link	character
is_multi_day	logical
is_primary_calendar	logical
file_code	character
event_number	integer
public_facing	logical
round	integer
num_batters	integer
top_seed_complete	logical
top_seed_started	logical
top_seed_winner	logical
top_seed_seed	integer
top_seed_is_winner	logical
top_seed_is_complete	logical
top_seed_is_started	logical
top_seed_num_home_runs	integer
top_seed_player_id	integer
top_seed_player_full_name	character
top_seed_player_link	character
top_seed_top_derby_hit_data_launch_speed	integer
top_seed_top_derby_hit_data_total_distance	integer
bottom_seed_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
game_pk	integer
event_name	character
event_date	character
event_type_code	character
event_type_name	character
venue_id	integer
venue_name	character
player_id	integer
player_full_name	character
player_link	character
player_first_name	character
player_last_name	character
player_primary_number	character
player_birth_date	character
player_current_age	integer
player_birth_city	character
player_birth_state_province	character
player_birth_country	character
player_height	character
player_weight	integer
player_active	logical
player_use_name	character
player_middle_name	character
player_boxscore_name	character
player_nick_name	character
player_gender	character

player_is_player	logical
player_is_verified	logical
player_draft_year	integer
player_pronunciation	character
player_mlb_debut_date	character
player_name_first_last	character
player_name_slug	character
player_first_last_name	character
player_last_first_name	character
player_last_init_name	character
player_init_last_name	character
player_full_fml_name	character
player_full_lfm_name	character
player_strike_zone_top	numeric
player_strike_zone_bottom	numeric
player_name_matrilineal	character
player_current_team_id	integer
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
player_current_team_spring_venue_link	character
player_current_team_league_id	integer
player_current_team_league_name	character
player_current_team_league_link	character
player_current_team_division_id	integer
player_current_team_division_name	character
player_current_team_division_link	character
player_current_team_sport_id	integer
player_current_team_sport_link	character
player_current_team_sport_name	character
player_current_team_spring_league_id	integer

player_current_team_spring_league_name	character
player_current_team_spring_league_link	character
player_current_team_spring_league_abbreviation	character
player_primary_position_code	character
player_primary_position_name	character
player_primary_position_type	character
player_primary_position_abbreviation	character
player_bat_side_code	character
player_bat_side_description	character
player_pitch_hand_code	character
player_pitch_hand_description	character
venue_link	character
is_multi_day	logical
is_primary_calendar	logical
file_code	character
event_number	integer
public_facing	logical

Examples

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

---

mlb_jobs	**MLB Jobs**

Description

MLB Jobs

Usage

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

Arguments

job_type	Return information for a given job_type. See `mlb_job_types()`
sport_id	Return information for a given sport_id.
date	Return information for a given date.

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_jobs_datacasters   **MLB Jobs Datacasters**

Description

MLB Jobs Datacasters

Usage

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

Arguments

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

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_jobs_official_scorers
MLB Jobs Official Scorers

Description

MLB Jobs Official Scorers

Usage

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

Arguments

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

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_jobs_umpires **MLB Jobs Umpires**

Description

MLB Jobs Umpires

Usage

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

Arguments

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

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_job_types	**MLB Job Types**

Description

MLB Job Types

Usage

```
mlb_job_types()
```

Value

Returns a tibble with the following columns

col_name	types

job_code	character
job	character
sort_order	integer

Examples

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

`mlb_languages`	**MLB API Language Options**

Description

MLB API Language Options

Usage

```
mlb_languages()
```

Value

Returns a tibble with the following columns

col_name	types
language_name	character
language_code	character
locale	character

Examples

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

`mlb_league`	**MLB Leagues**

Description

MLB Leagues

Usage

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

Arguments

seasons	Year(s) to return to return league information for.
sport_id	The sport_id to return league information for.
league_id	The league_id(s) to return league information for.

Value

Returns a tibble with the following columns

col_name	types
leader_type	character

Examples

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

```
mlb_league_leader_types
```
MLB League Leader Types

Description

MLB League Leader Types

Usage

```
mlb_league_leader_types()
```

Value

Returns a tibble with the following columns

col_name	types
leader_type	character

Examples

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

`mlb_logical_events`   **MLB Logical Events**

Description

MLB Logical Events

Usage

```
mlb_logical_events()
```

Value

Returns a tibble with the following columns

col_name	types
event_code	character

Examples

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

`mlb_metrics`   **MLB Metrics**

Description

MLB Metrics

Usage

```
mlb_metrics()
```

Value

Returns a tibble with the following columns

col_name	types
metric_name	character
metric_id	integer
stat_group	character
metric_unit	character

Examples

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

| mlb_pbp | **Acquire pitch-by-pitch data for Major and Minor League games** |

Description

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

Usage

```
mlb_pbp(game_pk)
```

Arguments

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

Value

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

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

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

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

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

hitData.hardness	character
hitData.location	character
hitData.coordinates.coordX	numeric
hitData.coordinates.coordY	numeric
actionPlayId	character
details.eventType	character
details.runnerGoing	logical
position.code	character
position.name	character
position.type	character
position.abbreviation	character
battingOrder	character
atBatIndex	character
result.type	character
result.event	character
result.eventType	character
result.description	character
result.rbi	integer
result.awayScore	integer
result.homeScore	integer
about.atBatIndex	integer
about.halfInning	character
about.inning	integer
about.startTime	character
about.endTime	character
about.isComplete	logical
about.isScoringPlay	logical
about.hasReview	logical
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

umpire.id	integer
umpire.link	character
about.isTopInning	logical
matchup.postOnFirst.id	integer
matchup.postOnFirst.fullName	character
matchup.postOnFirst.link	character

Examples

```
try(mlb_pbp_diff(game_pk = 632970,
                 start_timecode = "20210808_231704",
                 end_timecode = "20210808_233711"))
```

---

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:

col_name	types
id	integer
full_name	character
link	character
first_name	character
last_name	character
primary_number	character
birth_date	character
current_age	integer
birth_city	character
birth_state_province	character
birth_country	character

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

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))
```

---

mlb_pitch_codes   **MLB Pitch Codes**

Description

MLB Pitch Codes

Usage

```
mlb_pitch_codes()
```

Value

Returns a tibble with the following columns

col_name	types
pitch_code	character
pitch_description	character

Examples

```
try(mlb_pitch_codes())
```

`mlb_pitch_types` **MLB Pitch Types**

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
group	character
assists	integer
put_outs	integer
errors	integer
chances	integer
fielding	character
caught_stealing	integer
passed_ball	integer
stolen_bases	integer
stolen_base_percentage	character
pickoffs	integer
games_played	integer
games_started	integer
fly_outs	integer
ground_outs	integer
air_outs	integer
runs	integer
doubles	integer
triples	integer
home_runs	integer
strike_outs	integer
base_on_balls	integer
intentional_walks	integer
hits	integer
hit_by_pitch	integer
at_bats	integer
number_of_pitches	integer
innings_pitched	character
wins	integer
losses	integer
saves	integer
save_opportunities	integer
holds	integer

blown_saves	integer
earned_runs	integer
batters_faced	integer
outs	integer
games_pitched	integer
complete_games	integer
shutouts	integer
pitches_thrown	integer
balls	integer
strikes	integer
strike_percentage	character
hit_batsmen	integer
balks	integer
wild_pitches	integer
rbi	integer
games_finished	integer
runs_scored_per9	character
home_runs_per9	character
inherited_runners	integer
inherited_runners_scored	integer
catchers_interference	integer
sac_bunts	integer
sac_flies	integer
ground_into_double_play	integer
ground_into_triple_play	integer
plate_appearances	integer
total_bases	integer
left_on_base	integer
at_bats_per_home_run	character
game_type	character
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_name	types
type	character
group	character
stat_assists	integer

stat_put_outs	integer
stat_errors	integer
stat_chances	integer
stat_fielding	character
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
game_type	character
num_teams	integer
stat_avg	character
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
team_link	character
opponent_id	integer
opponent_name	character
opponent_link	character
pitcher_id	integer
pitcher_full_name	character
pitcher_link	character
pitcher_first_name	character
pitcher_last_name	character
batter_id	integer
batter_full_name	character
batter_link	character
batter_first_name	character
batter_last_name	character
total_splits	integer
type_display_name	character
group_display_name	character
player_id	numeric
game_pk	numeric

Examples

```
try(mlb_player_game_stats_current(person_id = 660271))
```

```
mlb_player_status_codes
```
MLB Player Status Codes

Description

MLB Player Status Codes

Usage

```
mlb_player_status_codes()
```

Value

Returns a tibble with the following columns

col_name	types
player_status_code	character
player_status_description	character

Examples

```
mlb_player_status_codes()
```

```
mlb_positions
```
MLB Positions

Description

MLB Positions

Usage

```
mlb_positions()
```

Value

Returns a tibble with the following columns

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

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())
```

---

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)
```

Arguments

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

Value

Returns a tibble with the following columns:

col_name	types
jersey_number	character
person_id	integer
person_full_name	character
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
season	numeric
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

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

Value

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

col_name	types
date	character
total_items	integer
total_events	integer
total_games	integer

total_games_in_progress	integer
game_pk	integer
link	character
game_type	character
season	character
game_date	character
official_date	character
game_number	integer
public_facing	logical
double_header	character
gameday_type	character
tiebreaker	character
calendar_event_id	character
season_display	character
day_night	character
scheduled_innings	integer
reverse_home_away_status	logical
inning_break_length	integer
games_in_series	integer
series_game_number	integer
series_description	character
record_source	character
if_necessary	character
if_necessary_description	character
status_abstract_game_state	character
status_coded_game_state	character
status_detailed_state	character
status_status_code	character
status_start_time_tbd	logical
status_reason	character
status_abstract_game_code	character
teams_away_split_squad	logical
teams_away_series_number	integer
teams_away_league_record_wins	integer
teams_away_league_record_losses	integer
teams_away_league_record_pct	character
teams_away_team_id	integer
teams_away_team_name	character
teams_away_team_link	character
teams_home_split_squad	logical
teams_home_series_number	integer
teams_home_league_record_wins	integer
teams_home_league_record_losses	integer
teams_home_league_record_pct	character
teams_home_team_id	integer
teams_home_team_name	character
teams_home_team_link	character
venue_id	integer

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

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
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
status_abstract_game_state	character
status_coded_game_state	character
status_detailed_state	character
status_status_code	character
status_start_time_tbd	logical
status_reason	character
status_abstract_game_code	character
teams_away_split_squad	logical
teams_away_series_number	integer
teams_away_league_record_wins	integer

teams_away_league_record_losses	integer
teams_away_league_record_pct	character
teams_away_team_id	integer
teams_away_team_name	character
teams_away_team_link	character
teams_home_split_squad	logical
teams_home_series_number	integer
teams_home_league_record_wins	integer
teams_home_league_record_losses	integer
teams_home_league_record_pct	character
teams_home_team_id	integer
teams_home_team_name	character
teams_home_team_link	character
venue_id	integer
venue_name	character
venue_link	character
content_link	character
is_tie	logical
description	character
teams_away_score	integer
teams_away_is_winner	logical
teams_home_score	integer
teams_home_is_winner	logical
reschedule_date	character
reschedule_game_date	character
rescheduled_from	character
rescheduled_from_date	character
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

game_type	character
season	character
game_date	character
official_date	character
is_tie	logical
is_featured_game	logical
game_number	integer
public_facing	logical
double_header	character
gameday_type	character
tiebreaker	character
calendar_event_id	character
season_display	character
day_night	character
description	character
scheduled_innings	integer
reverse_home_away_status	logical
games_in_series	integer
series_game_number	integer
series_description	character
record_source	character
if_necessary	character
if_necessary_description	character
status_abstract_game_state	character
status_coded_game_state	character
status_detailed_state	character
status_status_code	character
status_start_time_tbd	logical
status_abstract_game_code	character
teams_away_score	integer
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
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 particular series number
sport_id	The sport_id to return schedule information for.
team_id	The team_id to return schedule information for.

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

Value

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

col_name	types
total_items	integer
total_games	integer
total_games_in_progress	integer
game_pk	integer
link	character
game_type	character
season	character
game_date	character
official_date	character
is_tie	logical
is_featured_game	logical
game_number	integer
public_facing	logical
double_header	character
gameday_type	character
tiebreaker	character
calendar_event_id	character
season_display	character
day_night	character
description	character
scheduled_innings	integer
reverse_home_away_status	logical

inning_break_length	integer
games_in_series	integer
series_game_number	integer
series_description	character
record_source	character
if_necessary	character
if_necessary_description	character
is_default_game	logical
status_abstract_game_state	character
status_coded_game_state	character
status_detailed_state	character
status_status_code	character
status_start_time_tbd	logical
status_abstract_game_code	character
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
teams_away_team_name	character
teams_away_team_link	character
teams_home_score	integer
teams_home_is_winner	logical
teams_home_split_squad	logical
teams_home_series_number	integer
teams_home_league_record_wins	integer
teams_home_league_record_losses	integer
teams_home_league_record_pct	character
teams_home_team_id	integer
teams_home_team_name	character
teams_home_team_link	character
venue_id	integer
venue_name	character
venue_link	character
content_link	character
reschedule_date	character
reschedule_game_date	character
rescheduled_from	character
rescheduled_from_date	character
status_reason	character
sort_order	integer
series_id	character
series_sort_number	integer
series_is_default	logical
series_game_type	character

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

sport_id   The sport_id to return season information for.

with_game_type_dates

                    with_game_type_dates to return season information

Value

Returns a tibble with the following columns:

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

game_level_gameday_type	character
qualifier_plate_appearances	numeric
qualifier_outs_pitched	integer

Examples

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

---

mlb_seasons_all	**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

sport_id	The sport_id to return season information for.
division_id	The division_id to return season information for.
league_id	The league_id to return season information for.
with_game_type_dates	
	with_game_type_dates to return season information for.

Value

Returns a tibble with the following columns:

col_name	types
season_id	character
has_wildcard	logical
pre_season_start_date	character
season_start_date	character
regular_season_start_date	character
regular_season_end_date	character
season_end_date	character

offseason_start_date	character
off_season_end_date	character
season_level_gameday_type	character
game_level_gameday_type	character
qualifier_plate_appearances	numeric
qualifier_outs_pitched	integer
post_season_start_date	character
post_season_end_date	character
last_date1st_half	character
all_star_date	character
first_date2nd_half	character
pre_season_end_date	character
spring_start_date	character
spring_end_date	character

Examples

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

---

mlb_situation_codes   **MLB Situation Codes**

Description

MLB Situation Codes

Usage

```
mlb_situation_codes()
```

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_sky   **MLB Sky (Weather) Codes**

Description

MLB Sky (Weather) Codes

Usage

```
mlb_sky()
```

Value

Returns a tibble with the following columns

col_name	types
sky_code	character
sky_description	character

Examples

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

---

mlb_sports   **MLB Sport IDs**

Description

MLB Sport IDs

Usage

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

Arguments

sport_id   The sport_id to return information for.

Value

Returns a tibble with the following columns

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

Examples

```
try(mlb_sports())
```

---

mlb_sports_info   **MLB Sport IDs Information**

Description

MLB Sport IDs Information

Usage

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

Arguments

sport_id   The sport_id to return information for.

Value

Returns a tibble with the following columns

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

Examples

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

---

mlb_sports_players   **MLB Sport Players**

Description

MLB Sport Players

Usage

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

Arguments

sport_id   The sport_id to return information for.

season   The season to return information for.

Value

Returns a tibble with the following columns:

col_name	types
player_id	integer
full_name	character
link	character
first_name	character
last_name	character
primary_number	character
birth_date	character
current_age	integer
birth_city	character
birth_country	character
height	character
weight	integer
active	logical
use_name	character
middle_name	character
boxscore_name	character
nick_name	character
gender	character
is_player	logical
is_verified	logical
pronunciation	character
mlb_debut_date	character
name_first_last	character
name_slug	character
first_last_name	character
last_first_name	character
last_init_name	character
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
current_team_link	character
primary_position_code	character
primary_position_name	character
primary_position_type	character
primary_position_abbreviation	character

bat_side_code	character
bat_side_description	character
pitch_hand_code	character
pitch_hand_description	character

Examples

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

---

mlb_standings	**MLB Standings**

Description

MLB Standings

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. byDivision - Standings by Division
10. byConference - Standings by Conference
11. byLeague - Standings by League

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

Value

Returns a tibble with the following columns

col_name	types
standings_type	character
last_updated	character
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 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_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
season	character
num_teams	integer
rank	integer
games_played	integer
ground_outs	integer
air_outs	integer
runs	integer
doubles	integer
triples	integer
home_runs	integer

strike_outs	integer
base_on_balls	integer
intentional_walks	integer
hits	integer
hit_by_pitch	integer
avg	character
at_bats	integer
obp	character
slg	character
ops	character
caught_stealing	integer
stolen_bases	integer
stolen_base_percentage	character
ground_into_double_play	integer
number_of_pitches	integer
plate_appearances	integer
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
player_id	integer
player_full_name	character
player_link	character
player_first_name	character
player_last_name	character
league_id	integer
league_name	character
league_link	character
sport_id	integer
sport_link	character
sport_abbreviation	character
position_code	character
position_name	character
position_type	character
position_abbreviation	character
splits_tied_with_offset	list
splits_tied_with_limit	list
player_pool	character
type_display_name	character
group_display_name	character

Examples

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

---

mlb_stats_leaders   **MLB Stats Leaders**

Description

MLB Stats Leaders

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 statis-
> tic.

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 partic-
> ular game type.

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

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

- P
- C
- 1B
- 2B
- 3B
- SS
- LF
- CF
- RF
- 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 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
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_stats_leaders(leader_categories='homeRuns',sport_id=1, season = 2021))
```

---

mlb_stat_groups   **MLB Stat Groups**

Description

MLB Stat Groups

Usage

```
mlb_stat_groups()
```

Value

Returns a tibble with the following columns

col_name	types
stat_group_name	character

Examples

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

---

mlb_stat_types	**MLB Stat Types**

Description

MLB Stat Types

Usage

```
mlb_stat_types()
```

Value

Returns a tibble with the following columns

col_name	types
stat_type_name	character

Examples

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

---

mlb_teams	**MLB Teams**

Description

MLB Teams

Usage

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

Arguments

season	Year to return to return team information for.
active_status	The active statuses to populate teams for a given season.
all_star_statuses	
	The all-star statuses to populate teams for a given season.
league_ids	The league_id(s) to return team information for.
sport_ids	The sport_id(s) to return team information for.
game_type	The game_type to return team information for.

Value

Returns a tibble with the following columns

col_name	types
team_id	integer
team_full_name	character
link	character
season	integer
team_code	character
file_code	character
team_abbreviation	character
team_name	character
location_name	character
first_year_of_play	character
short_name	character
franchise_name	character
club_name	character
all_star_status	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
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.

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

Value

Returns a tibble with the following columns

col_name	types
total_splits	integer
season	character
rank	integer
games_played	integer
ground_outs	integer
air_outs	integer
runs	integer
doubles	integer
triples	integer
home_runs	integer
strike_outs	integer
base_on_balls	integer
intentional_walks	integer
hits	integer
hit_by_pitch	integer
avg	character
at_bats	integer
obp	character
slg	character
ops	character
caught_stealing	integer
stolen_bases	integer
stolen_base_percentage	character
ground_into_double_play	integer
number_of_pitches	integer
plate_appearances	integer
total_bases	integer
rbi	integer
left_on_base	integer
sac_bunts	integer
sac_flies	integer
babip	character
ground_outs_to_airouts	character
catchers_interference	integer
at_bats_per_home_run	character
team_id	integer

team_name	character
team_link	character
splits_tied_with_offset	list
splits_tied_with_limit	list
type_display_name	character
group_display_name	character

Examples

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

---

mlb_teams_stats_leaders

MLB Teams Stats Leaders

Description

MLB Teams Stats Leaders

Usage

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

Arguments

leader_categories

        League leader category to return information and ranking for a particular 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
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_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
season	integer
team_code	character
file_code	character
team_abbreviation	character
team_name	character
location_name	character
first_year_of_play	character
short_name	character
franchise_name	character
club_name	character
active	logical
parent_org_name	character
parent_org_id	integer
spring_league_id	integer
spring_league_name	character
spring_league_link	character

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.

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
use_name	character
middle_name	character
boxscore_name	character
nick_name	character
gender	character
name_matrilineal	character
is_player	logical
is_verified	logical
pronunciation	character
mlb_debut_date	character
name_first_last	character
name_slug	character
first_last_name	character
last_first_name	character
last_init_name	character
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

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	Date to return team coach information for.
season	Year to return team coach information for.

Value

Returns a tibble with the following columns

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

Examples

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

mlb_team_history   **MLB Teams History**

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
season	integer
team_code	character
file_code	character
team_abbreviation	character
team_name	character
location_name	character
first_year_of_play	character
short_name	character
franchise_name	character
club_name	character
active	logical
venue_id	integer
venue_name	character
venue_link	character
spring_venue_id	integer
spring_venue_link	character
league_id	integer
league_name	character
league_link	character
sport_id	integer

	sport_link	character
	sport_name	character

Examples

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

---

mlb_team_info	**MLB Team Info**

Description

MLB Team Info

Usage

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

Arguments

team_id	The team_id to return team data for.
season	The season to return team data for the given year.
sport_id	The sport_id to return a directory of team data for a particular club in a sport.

Value

Returns a tibble with the following columns

col_name	types
all_star_status	character
team_id	integer
team_full_name	character
link	character
season	integer
team_code	character
file_code	character
team_abbreviation	character
team_name	character
location_name	character
first_year_of_play	character
short_name	character
franchise_name	character
club_name	character
active	logical

venue_id	integer
venue_name	character
venue_link	character
spring_venue_id	integer
spring_venue_link	character
league_id	integer
league_name	character
league_link	character
sport_id	integer
sport_link	character
sport_name	character

Examples

```
try(mlb_team_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 particular game type.
season	Season to return team leader information for.
limit	A limit to limit return to a particular number of records.

Value

Returns a tibble with the following columns

col_name	types
leader_category	character
rank	integer
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)
```

Arguments

`team_id`	Team ID to return team coach information for.
`date`	Date to return team coach information for.

Value

Returns a tibble with the following columns

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

Examples

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

`mlb_team_stats`	**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 particular team.
`stat_type`	Stat type to return statistics for.

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

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

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)
```

Get NCAA Baseball Rosters:

```
    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

Examples

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

---

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))
```

---

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 'pitching'.
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
App	numeric
G	numeric
GS	numeric
IP	numeric
CG	numeric
H	numeric
R	numeric
ER	numeric
BB	numeric
SO	numeric
SHO	numeric
BF	numeric
P-OAB	numeric
2B-A	numeric
3B-A	numeric
Bk	numeric

HR-A	numeric
WP	numeric
HB	numeric
IBB	numeric
Inh Run	numeric
Inh Run Score	numeric
SHA	numeric
SFA	numeric
Pitches	numeric
GO	numeric
FO	numeric
W	numeric
L	numeric
SV	numeric
OrdAppeared	numeric
KL	numeric
pickoffs	character

Examples

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

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	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, run_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)

col_name	types
school	character
home_game	numeric
away_game	numeric

runs_scored_home	numeric
runs_allowed_home	numeric
runs_scored_away	numeric
runs_allowed_away	numeric
base_pf	numeric
home_game_adj	numeric
final_pf	numeric

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

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)** |

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
H	numeric
2B	numeric
3B	numeric
TB	numeric
HR	numeric
RBI	numeric
BB	numeric
HBP	numeric
SF	numeric
SH	numeric
K	numeric
DP	numeric

CS	numeric
Picked	numeric
SB	numeric
RBI2out	numeric
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   **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.

---

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

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.

Details

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

Value

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

---

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
pitcher	numeric
events	character
description	character
spin_dir	logical

spin_rate_deprecated	logical
break_angle_deprecated	logical
break_length_deprecated	logical
zone	numeric
des	character
game_type	character
stand	character
p_throws	character
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
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	character
vx0	numeric
vy0	numeric
vz0	numeric
ax	numeric
ay	numeric
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
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

```
df <- statcast_search(start_date = "2016-04-06", end_date = "2016-04-15",
                      playerid = 621043, player_type = 'batter')
try(run_expectancy_code(df, level = "plate appearances"))
```

---

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, '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 categories.
oaa_roles	Can be either the number position of a player or 'if' or 'of' for position categories.
team	An abbreviation for a team. Can be left blank.
arsenal_type	One of either 'n_', 'avg_spin', or 'avg_speed'.

run_type	One of either 'percent' or 'raw'.
min2b	The minimum number of throwing attempts to second base.
min3b	The minimum number of throwing attempts to third base.
position	The numeric position of the player. For DH use 10. Can be left blank.
bats	The handedness of the batter. One of 'R' or 'L'. Can be left blank.
hand	The handedness of the pitcher. One of 'R' or 'L'. Can be left blank.

Value

Returns a tibble of Statcast leaderboard data.

---

scrape_statcast_savant

(legacy) Query Statcast by Date Range and Players

Description

(legacy) Query Statcast by Date Range and Players

Usage

```
scrape_statcast_savant(
  start_date = Sys.Date() - 1,
  end_date = Sys.Date(),
  playerid = NULL,
  player_type = "batter",
  ...
)

scrape_statcast_savant.Date(
  start_date = Sys.Date() - 1,
  end_date = Sys.Date(),
  playerid = NULL,
  player_type = "batter",
  ...
)

scrape_statcast_savant.default(
  start_date = Sys.Date() - 1,
  end_date = Sys.Date(),
  playerid = NULL,
  player_type = "batter",
  ...
)

scrape_statcast_savant_batter(start_date, end_date, batterid = NULL, ...)
```

```
scrape_statcast_savant_batter_all(start_date, end_date, batterid = NULL, ...)

scrape_statcast_savant_pitcher(start_date, end_date, pitcherid = NULL, ...)

scrape_statcast_savant_pitcher_all(start_date, end_date, pitcherid = NULL, ...)
```

Arguments

`start_date`	Date of first game for which you want data. Format must be in YYYY-MM-DD format.
`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.

Returns a tibble with Statcast data.

Returns a tibble with Statcast data.

Returns a tibble with Statcast data.

Returns a tibble with Statcast data.

Returns a tibble with Statcast data.

Returns a tibble with Statcast data.

---

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 Central, 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   **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:

```
statcast_search(start_date = "2016-04-06",
                end_date = "2016-04-15",
                player_type = 'batter')

 ## The above is equivalent to:
statcast_search_batters(start_date = "2016-04-06",
                        end_date = "2016-04-15",
                        batterid = NULL)
```

Query Statcast Pitchers by Date Range:

```
statcast_search(start_date = "2016-04-06",
                end_date = "2016-04-15",
                player_type = 'pitcher')

 ## The above is equivalent to:
statcast_search_pitchers(start_date = "2016-04-06",
                         end_date = "2016-04-15",
                         pitcherid = NULL)
```

Query Statcast Batters by Date Range and Player ID:

```
correa <- statcast_search(start_date = "2016-04-06",
                          end_date = "2016-04-15",
                          playerid = 621043,
                          player_type = 'batter')

## The above is equivalent to:
correa <- statcast_search_batters(start_date = "2016-04-06",
                                  end_date = "2016-04-15",
                                  batterid = 621043)
```

Query Statcast Pitchers by Date Range and Player ID:

```
noah <- statcast_search(start_date = "2016-04-06",
                        end_date = "2016-04-15",
                        playerid = 592789,
                        player_type = 'pitcher')

## The above is equivalent to:
noah <- statcast_search_pitchers(start_date = "2016-04-06",
                                 end_date = "2016-04-15",
                                 pitcherid = 592789)
```

Query Baseball Savant Leaderboards:

```
statcast_leaderboards(leaderboard = "exit_velocity_barrels", year = 2021)
```

---

statcast_impute	**Statcast Label Imputation**

Description

Statcast Label Imputation

Usage

```
statcast_impute
```

Format

An object of class `data.frame` with 44 rows and 4 columns.

---

statcast_leaderboards   **Query Baseball Savant Leaderboards**

Description

This function allows you to read leaderboard data from BaseballSavant directly into R as data frame.

Usage

```
statcast_leaderboards(
  leaderboard = "exit_velocity_barrels",
  year = 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, '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 categories.
oaa_roles	Can be either the number position of a player or 'if' or 'of' for position categories.
team	An abbreviation for a team. Can be left blank.
arsenal_type	One of either 'n_', 'avg_spin', or 'avg_speed'.
run_type	One of either 'percent' or 'raw'.
min2b	The minimum number of throwing attempts to second base.
min3b	The minimum number of throwing attempts to third base.
position	The numeric position of the player. For DH use 10. Can be left blank.
bats	The handedness of the batter. One of 'R' or 'L'. Can be left blank.
hand	The handedness of the pitcher. One of 'R' or 'L'. Can be left blank.

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 82 = CF - Leaning Right 89 = CF - RF Gap 98 = RF - RF Gap 91 = RF - 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))
```

---

statcast_search	**Query Statcast by Date Range and Players**

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
batter	numeric
pitcher	numeric
events	character
description	character
spin_dir	logical
spin_rate_deprecated	logical
break_angle_deprecated	logical
break_length_deprecated	logical
zone	numeric
des	character
game_type	character
stand	character
p_throws	character
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
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	character
vx0	numeric
vy0	numeric
vz0	numeric
ax	numeric
ay	numeric
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.

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
batter	numeric
pitcher	numeric
events	character
description	character
spin_dir	logical
spin_rate_deprecated	logical
break_angle_deprecated	logical
break_length_deprecated	logical
zone	numeric
des	character
game_type	character
stand	character
p_throws	character
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
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	character
vx0	numeric
vy0	numeric
vz0	numeric
ax	numeric
ay	numeric
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
release_pos_x	numeric
release_pos_z	numeric
player_name	character
batter	numeric
pitcher	numeric
events	character
description	character
spin_dir	logical
spin_rate_deprecated	logical
break_angle_deprecated	logical
break_length_deprecated	logical
zone	numeric
des	character
game_type	character
stand	character
p_throws	character
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
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	character
vx0	numeric
vy0	numeric
vz0	numeric
ax	numeric
ay	numeric
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

Examples

```
### Correa
x<- try(statcast_search(start_date = "2016-04-06",
                    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",
  end_date = "2016-04-15", batterid = 621043)
daily <- statcast_search_batters(start_date = "2016-04-06",
  end_date = "2016-04-06", batterid = NULL)


x <- statcast_search_pitchers(start_date = "2016-04-06",
  end_date = "2016-04-15", pitcherid = 592789)
daily <- statcast_search_pitchers(start_date = "2016-04-06",
  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

df   A data frame of statistics that includes, at a minimum, the following columns:
                      events, description, game_date, and type.

base   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.

---

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)
```

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
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))
```

Index