Package 'cricketr'

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Type Package

Title Analyze Cricketers and Cricket Teams Based on ESPN Cricinfo Statsguru

Description Tools for analyzing performances of cricketers based on stats in ESPN Cricinfo Statsguru. The toolset can be used for analysis of Tests,ODIs and Twenty20 matches of both batsmen and bowlers. The package can also be used to analyze team performances.

Version 0.0.26

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Depends R (>= 3.1.2)

Imports dplyr, plotrix, ggplot2, scatterplot3d, forecast, lubridate, XML, graphics, grDevices, httr, stats, utils

URL https://github.com/tvganesh/cricketr

BugReports https://github.com/tvganesh/cricketr/issues

RoxygenNote 7.1.1

NeedsCompilation no

Repository CRAN

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R topics documented:

`cricketr-package` *Analyze Cricketers and Cricket Teams Based on ESPN Cricinfo Statsguru This package analyzes the performances of cricketers using ESPN Cricinfo Statsguru data. The analysis can be done for Test, ODI and Twenty20 cricket for both batsman & bowlers*

Description

Tools for analyzing performances of cricketers based on stats in ESPN Cricinfo Statsguru. The toolset can be used for analysis of Tests,ODIs and Twenty20 matches of both batsmen and bowlers. The package can also be used to analyze team performances. This package analyzes the performances of cricketers using ESPN Cricinfo Statsguru data. The analysis can be done for Test, ODI and Twenty20 cricket for both batsman & bowlers

Details

The DESCRIPTION file:

Package:	cricketr
Type:	Package
Title:	Analyze Cricketers and Cricket Teams Based on ESPN Cricinfo Statsguru
Description:	Tools for analyzing performances of cricketers based on stats in ESPN Cricinfo Statsguru. The toolset can be
Version:	0.0.26
Date:	2021-03-22
Author:	Tinniam V Ganesh
Maintainer:	Tinniam V Ganesh <tvganesh.85@gmail.com>
License:	MIT + file LICENSE
Depends:	R (>= 3.1.2)
Imports:	dplyr, plotrix, ggplot2, scatterplot3d, forecast, lubridate, XML, graphics, grDevices, httr, stats, utils
URL:	https://github.com/tvganesh/cricketr
BugReports:	https://github.com/tvganesh/cricketr/issues
RoxygenNote:	7.1.1

Index of help topics:

batsmanAvgRunsGround	This function computes and plots the Average runs scored in the different grounds played by batsman
batsmanAvgRunsOpposition	This function computes and plots the Average runs against different opposition played by batsman
batsmanContributionWonLost	Disply the batsman's contribution in matches that were won and those that were lost
batsmanCumulativeAverageRuns	Batsman's cumulative average runs
batsmanCumulativeStrikeRate	Batsman's cumulative average strike rate
batsmanDismissals	Display a 3D Pie Chart of the dismissals of the batsman
batsmanMeanStrikeRate	Calculate and plot the Mean Strike Rate of the batsman on total runs scored
batsmanMovingAverage	Calculate and plot the Moving Average of the batsman in his career
batsmanPerfBoxHist	Make a boxplot and a histogram of the runs scored by the batsman
batsmanPerfForecast	Forecast the batting performance based on past performances using Holt-Winters forecasting
batsmanPerfHomeAway	This function analyses the performance of the batsman at home and overseas
batsmanRunsFreqPerf	Calculate and run frequencies in ranges of 10 runs and plot versus Runs the performance of the batsman
batsmanRunsLikelihood	This function uses K-Means to determine the likelihood of the batsman to get runs
batsmanRunsPredict	Predict the runs for the batsman given the Balls Faced and Minutes in crease
batsmanRunsRanges	Compute and plot a histogram of the runs scored in ranges of 10
batsmanScoringRateODTT	Compute and plot the predicted scoring rate for a One day batsman or Twenty20
battingPerf3d	Make a 3D scatter plot of the Runs scored versus the Balls Faced and Minutes at Crease.
bowlerAvgWktsGround	This function computes and plot the average wickets in different ground
bowlerAvgWktsOpposition	This function computes and plot the average wickets against different oppositon
bowlerContributionWonLost	Display the bowler's contribution in matches that were won and those that were lost

bowlerCumulativeAvgEconRate	Bowler's cumulative average economy rate
bowlerCumulativeAvgWickets	Bowler's cumulative average wickets
bowlerEconRate	Compute and plot the Mean Economy Rate versus wickets taken
bowlerHistWickets	Plot a histogram of Wicket percentages versus wickets taken
bowlerMovingAverage	Compute and plot the moving average of the wickets taken for a bowler
bowlerPerfForecast	Forecast the bowler performance based on past performances using Holt-Winters forecasting
bowlerPerfHomeAway	This function analyses the performance of the bowler at home and overseas
bowlerWktRateTT	Compute and plot the Mean number of deliveries versus wickets taken
bowlerWktsFreqPercent	Plot the Wickets Frequency as a percentage against wickets taken
bowlerWktsRunsPlot	Compute and plot the runs conceded versus the wickets taken
checkBatsmanInForm	Check whether the batsman is In-Form or Out-Of-Form by looking at his last 10 percent scores
checkBowlerInForm	Check whether the bowler is In-Form or Out-Of-Form by looking at his last 10 percent scores
clean	Create a batsman data frame given the batsman's CSV file
cleanBowlerData	Clean the bowlers data frame
cleanTeamData	Clean the team data for Test, ODI and T20
cricketr-package	Analyze Cricketers and Cricket Teams Based on ESPN Cricinfo Statsguru This package analyzes the performances of cricketers using ESPN Cricinfo Statsguru data. The analysis can be done for Test, ODI and Twenty20 cricket for both batsman & bowlers
devilliers	Data set for AB Devilliers
ganguly	Data set for Sourav Ganguly
gayle	Data set for Chris Gayle
getMatchType	Get the number of the match type viz.for Test, ODI and T20
getPlayerData	Get the player data from ESPN Cricinfo based on specific inputs and store in a file in a given directory
getPlayerDataHA	Return the CSV file and a dataframe of a player's matches along with home/away column
getPlayerDataOD	Get the One day player data from ESPN Cricinfo based on specific inputs and store in a file in

	a given directory
getPlayerDataOppnHA	Return a filtered CSV file for a player against specified opposition, at home/away venues during an interval
getPlayerDataSp	Get the player data along with venue and
getPlayerDataTT	Get the Twenty20 International player data from ESPN Cricinfo based on specific inputs and store in a file in a given directory~
getTeamData	Get the data for a team in a match type viz.for Test, ODI and T20
getTeamDataHomeAway	Get the data for a team in a match type viz.for Test, ODI and T20 with the home/overseas/neutral
getTeamNumber	Get the number of the Team
kohli	Data set for Virat Kohli
kohli1	Data set for Virat Kohli
kumble	Data set for Anil Kumble
kumble1	Data set for Anil Kumble
kumblesp	Data set for Anil Kumble
malinga	Data set for Lasith Malinga
malinga1	Data set for Lasith Malinga
maxwell	Data set for Glenn Maxwell
mendis	Data set for Ajantha Mendis
mitchell	Data set for Mitchell Johnson
murali	Data set for Muthiah Muralitharan
narine	Data set for Sunil Narine
percentRuns	Calculate the percent runs in each run range
percentWkts	Calculate the percentage of wickets taken by bowler
plotTimelineofWinsLosses	Plot the time line of wins/losses/draw/tied etc for a Team in Test, ODI or T20
relativeBatsmanCumulativeAvgRuns	Relative batsman's cumulative average runs
relativeBatsmanCumulativeStrikeRate	Relative batsmen cumulative average strike rate
relativeBatsmanSR	Calculate and plot the relative Mean Strike Rate (SR) for each batsman
relativeBatsmanSRODTT	Calculate and plot the relative Mean Strike Rate (SR) for each batsman for ODI or Twenty20 batsmen
relativeBowlerCumulativeAvgEconRate	Relative Bowler's cumulative average economy rate
relativeBowlerCumulativeAvgWickets	Relative bowlers cumulative average wickets
relativeBowlingER	Compute and plot the relative mean Economy Rate(ER) of the bowlers

relativeBowlingERODTT	Compute and plot the relative mean Economy Rate(ER) of the bowlers for ODI or Twenty20
relativeBowlingPerf	Plot the relative performances of bowlers
relativeRunsFreqPerf	Calculate and compute the relative run frequencies of a list of cricketers
relativeRunsFreqPerfODTT	Calculate and compute the relative run frequencies of a list of cricketers
relativeWktRateTT	Compute and plot the relative Mean Wicket Rate of the bowlers in Twenty20 International
sehwag	Data set for Virendar Sehwag
sehwag1	Data set for Virendar Sehwag
sehwag2	Data set for Virendar Sehwag
southee	Data set for Tim Southee
steyn	Data set for Dale Steyn
teamWinLossStatusAtGrounds	Compute the wins/losses/draw/tied etc for a Team in Test, ODI or T20 at venues
teamWinLossStatusVsOpposition	Compute the wins/losses/draw/tied etc for a Team in Test, ODI or T20 against opposition
tendulkar	Data set for Sachin Tendulkar
tendulkar1	Data set for Sachin Tendulkar
tendulkar2	Data set for Sachin Tendulkar
tendulkarsp	Data set for Sachin Tendulkar
warne	Data set for Shane Warne

Tools for analyzing performances of cricketers based on stats in ESPN Cricinfo Statsguru. The toolset can be used for analysis of Tests,ODIs and Twenty20 matches of both batsmen and bowlers.

Author(s)

Tinniam V Ganesh Tinniam V Ganesh Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com> Tinniam V Ganesh tvganesh.85@gmail.com

References

Details in my post https://gigadom.in/2015/07/04/introducing-cricketr-a-r-package-to-analyze-performances-of-cricketers/

See Also

https://www.youtube.com/edit?o=U&video_id=q9uMPFVsXsI

Examples

```
## Not run:
getPlayerData(profile,opposition="",host="",dir="./data",file="player001.csv",
type="batting", homeOrAway=c(1,2),result=c(1,2,4))
getPlayerDataOD(profile, opposition="",host="",dir = "../", file = "player001.csv",
```

```
type = "batting", homeOrAway = c(1, 2, 3), result = c(1, 2, 3,5))
getPlayerDataTT(profile, opposition="",host="",dir = "./data", file = "player001.csv",
type = "batting", homeOrAway = c(1, 2, 3), result = c(1, 2, 3,5))
batsmanAvgRunsGround(file, name = "A Latecut")
bowlerAvgWktsGround(file, name = "A Chinaman")
tendulkar <- system.file("data", "tendulkar.csv", package = "cricketr")
ganguly <- system.file("data", "ganguly.csv", package = "cricketr")
dravid <- system.file("data", "dravid.csv", package = "cricketr")
batsmen <- list(tendulkar,dravid,ganguly)
names <- list("Tendulkar","Dravid","Ganguly")
relativeBatsmanCumulativeAvgRuns(batsmen,names)

## End(Not run)
```

---

ashwin *Data set for Ravichandran Ashwin*

Description

CSV file Ravichandran Ashwin

Usage

```
data("ashwin")
```

Format

The format is: chr "ashwin"

Details

CSV file Ravichandran Ashwin

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

ashwin1 *Data set for Ravichander Ashwin*

Description

Data set for Ravichander Ashwin

Usage

```
data("ashwin1")
```

Format

The format is: chr "ashwin1"

Details

Data set for Ravichander Ashwin

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

badree *Data set for Samuel Badree*

Description

CSV file Samuel Badree

Usage

```
data("badree")
```

Format

The format is: chr "badree"

Details

CSV file Samuel Badree

Source

ESPN Cricinfo Statsguru

References

https://www.espncricinfo.com/ci/content/stats/index.html

`batsman4s` *Plot the numbers of 4s against the runs scored by batsman*

Description

This function plots the number of 4s against the total runs scored by batsman. A 2nd order polynomial regression curve is also plotted. The predicted number of 4s for 50 runs and 100 runs scored is also plotted

Usage

```
batsman4s(file, name="A Hookshot")
```

Arguments

`file`	This is the <batsman>.csv file obtained with an initial getPlayerData()
`name`	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsman6s

Examples

```
## Not run:


# Get or use the <batsman>.csv obtained with getPlayerData()
#tendulkar  <- getPlayerData(35320,dir="../",file="tendulkar.csv",type="batting",
#homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsman4s(pathToFile, "Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory. The
# general format is pkg-function(pathToFile,par1,...)


## End(Not run)
```

---

batsman4s6s *Compute and plot a stacked barplot of runs,4s and 6s*

Description

Compute and plot a stacked barplot of percentages of runs in (1s,2s and 3s),4s and 6s

Usage

```
batsman4s6s(frames, names)
```

Arguments

frames	List of batsman
names	Names of batsman

Details

More details can be found in my short video tutorial in Youtubehttps://www.espncricinfo.com/ci/content/stats/index.html https://gigadom.in/ https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

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Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanScoringRateODTT, relativeRunsFreqPerfODTT, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerDataOD()
#sehwag <-getPlayerData(35263,dir="./data", file="sehwag.csv",type="batting",
#homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsman4s6s(pathToFile, "Sachin Tendulkar")

#Note: This example uses the file tendulkar.csv from the /data directory. However
#you can use any directory as long as the data file exists in that directory.
#The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsman6s *Plot the run range against the number of 6s*

Description

Compute and plot the number of 6s in the total runs scored by batsman

Usage

```
batsman6s(file, name="A Hookshot")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsman4s

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsman6s(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
#The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanAvgRunsGround *This function computes and plots the Average runs scored in the different grounds played by batsman*

Description

This function computed the Average Runs scored on different pitches and also indicates the number of innings played at these venues

Usage

```
batsmanAvgRunsGround(file, name = "A Latecut")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanAvgRunsGround(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
#The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

batsmanAvgRunsOpposition *This function computes and plots the Average runs against different opposition played by batsman*

Description

This function computes the mean runs scored by batsman against different opposition

Usage

```
batsmanAvgRunsOpposition(file, name = "A Latecut")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

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References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist batsmanAvgRunsGround

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
path <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanAvgRunsOpposition(path,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.

## End(Not run)
```

---

batsmanContributionWonLost *Disply the batsman's contribution in matches that were won and those that were lost*

Description

Plot the comparative contribution of the batsman in matches that were won and lost as box plots

Usage

```
batsmanContributionWonLost(file, name = "A Hitter")
```

Arguments

file	CSV file of batsman from ESPN Cricinfo obtained with getPlayerDataSp()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanMovingAverage batsmanRunsPredict batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#tendulkarsp <-getPlayerDataSp(35320,".","tendulkarsp.csv","batting")
# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkarsp.csv", package = "cricketr")
batsmanContributionWonLost(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanCumulativeAverageRuns

Batsman's cumulative average runs

Description

This function computes and plots the cumulative average runs of a batsman

Usage

```
batsmanCumulativeAverageRuns(file,name= "A Leg Glance")
```

Arguments

file	Data frame
name	Name of batsman

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanCumulativeStrikeRate bowlerCumulativeAvgEconRate bowlerCumulativeAvgWickets

Examples

```
## Not run:
# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanCumulativeAverageRuns(pathToFile, "Sachin Tendulkar")

## End(Not run)
```

---

batsmanCumulativeStrikeRate

Batsman's cumulative average strike rate

Description

This function computes and plots the cumulative average strike rate of a batsman

Usage

```
batsmanCumulativeStrikeRate(file,name= "A Leg Glance")
```

Arguments

file	Data frame
name	Name of batsman

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanCumulativeAverageRuns bowlerCumulativeAvgEconRate bowlerCumulativeAvgWickets

Examples

```
## Not run:
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanCumulativeStrikeRate(pathToFile, "Sachin Tendulkar")

## End(Not run)
```

---

batsmanDismissals *Display a 3D Pie Chart of the dismissals of the batsman*

Description

Display the dismissals of the batsman (caught, bowled, hit wicket etc) as percentages

Usage

```
batsmanDismissals(file, name="A Squarecut")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

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References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanMeanStrikeRate, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanDismissals(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanMeanStrikeRate *Calculate and plot the Mean Strike Rate of the batsman on total runs scored*

Description

This function calculates the Mean Strike Rate of the batsman for each interval of runs scored

Usage

```
batsmanMeanStrikeRate(file, name = "A Hitter")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanMeanStrikeRate(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanMovingAverage *Calculate and plot the Moving Average of the batsman in his career*

Description

This function calculates and plots the Moving Average of the batsman in his career

Usage

```
batsmanMovingAverage(file,name="A Squarecut")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

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References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMeanStrikeRate, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanMovingAverage(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanPerfBoxHist *Make a boxplot and a histogram of the runs scored by the batsman*

Description

Make a boxplot and histogram of the runs scored by the batsman. Plot the Mean, Median, 25th and 75th quantile

Usage

```
batsmanPerfBoxHist(file, name="A Hitter")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMeanStrikeRate, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsman4s(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)


## End(Not run)
```

`batsmanPerfForecast` *Forecast the batting performance based on past performances using Holt-Winters forecasting*

Description

This function forecasts the performance of the batsman based on past performances using HoltWinters forecasting model

Usage

```
batsmanPerfForecast(file, name="A Squarecut")
```

Arguments

`file`	This is the <batsman>.csv file obtained with an initial getPlayerData()
`name`	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`batsmanDismissals`, `batsmanMeanStrikeRate`, `batsmanMovingAverage`, `batsmanPerfBoxHist`

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanPerfForecast(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

`batsmanPerfHomeAway` *This function analyses the performance of the batsman at home and overseas*

Description

This function plots the runs scored by the batsman at home and overseas

Usage

```
batsmanPerfHomeAway(file, name = "A Hitter")
```

Arguments

`file`	CSV file of batsman from ESPN Cricinfo obtained with getPlayerDataSp()
`name`	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanMovingAverage batsmanRunsPredict batsmanPerfBoxHist bowlerContributionWonLost

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#tendulkarSp <-getPlayerDataSp(35320,".","tendulkarsp.csv","batting")

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkarsp.csv", package = "cricketr")
batsmanPerfHomeAway(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanRunsFreqPerf *Calculate and run frequencies in ranges of 10 runs and plot versus Runs the performance of the batsman*

Description

This function calculates frequencies of runs in 10 run buckets and plots this percentage

Usage

```
batsmanRunsFreqPerf(file, name="A Hookshot")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanRunsFreqPerf(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanRunsLikelihood *This function uses K-Means to determine the likelihood of the batsman to get runs*

Description

This function used K-Means to get the likelihood of getting runs based on clusters of runs the batsman made in the past.It uses K-Means for this.

Usage

```
batsmanRunsLikelihood(file, name = "A Squarecut")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanMovingAverage batsmanRunsPredict battingPerf3d batsmanContributionWonLost

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanRunsLikelihood(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanRunsPredict *Predict the runs for the batsman given the Balls Faced and Minutes in crease*

Description

Fit a linear regression plane between Runs scored and Minutes in Crease and Balls Faced. This will be used to predict the batsman runs for time in crease and balls faced

Usage

```
batsmanRunsPredict(file, name="A Coverdrive", newdataframe)
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman
newdataframe	This is a data frame with 2 columns BF(Balls Faced) and Mins(Minutes)

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns a data frame with the predicted runs for the Balls Faced and Minutes at crease

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanMovingAverage battingPerf3d batsmanContributionWonLost

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# tendulkar <- getPlayerData(35320,file="tendulkar.csv",type="batting",
# homeOrAway=c(1,2), result=c(1,2,4))

# Use a single value for BF and Mins
BF <- 30
Mins <- 20

# retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanRunsPredict(pathToFile,"Sachin Tendulkar",newdataframe=data.frame(BF,Mins))

#or give a data frame
#BF <- seq(20,200, length=15)
#Mins <- seq(30,220,length=15)

#values <- batsmanRunsPredict("../cricketr/data/tendulkar.csv","Sachin Tendulkar",
```

```
    #newdataframe=data.frame(BF,Runs)
#print(values)

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanRunsRanges *Compute and plot a histogram of the runs scored in ranges of 10*

Description

Compute and plot a histogram of the runs scored in ranges of 10

Usage

```
batsmanRunsRanges(file, name="A Hookshot")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
# <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
batsmanRunsRanges(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

batsmanScoringRateODTT

Compute and plot the predicted scoring rate for a One day batsman or Twenty20

Description

This function computes and plots a 2nd order polynomial between the balls faced and runs scored for ODI or Twenty20

Usage

```
batsmanScoringRateODTT(file, name = "A Hookshot")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerDataOD() or getPlayerTT()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsman6s relativeBatsmanSRODTT relativeRunsFreqPerfODTT

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerDataOD() or or getPlayerTT()
#sehwag <-getPlayerData(35263,dir="./mytest", file="sehwag.csv",type="batting",
# homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "sehwag.csv", package = "cricketr")
batsmanScoringRateODTT(pathToFile,"Sehwag")

# Note: This example uses the file sehwag.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

battingPerf3d *Make a 3D scatter plot of the Runs scored versus the Balls Faced and Minutes at Crease.*

Description

Make a 3D plot of the Runs scored by batsman vs Minutes in crease and Balls faced. Fit a linear regression plane

Usage

```
battingPerf3d(file, name="A Hookshot")
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMeanStrikeRate, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  tendulkar<- getPlayerData(35320,file="tendulkar.csv",type="batting",
#homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
battingPerf3d(pathToFile,"Sachin Tendulkar")

# Note: The above example uses the file tendulkar.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

bowlerAvgWktsGround *This function computes and plot the average wickets in different ground*

Description

This function computes the average wickets taken against different grounds by the bowler. It also shows the number innings at each venue

Usage

```
bowlerAvgWktsGround(file, name = "A Chinaman")
```

Arguments

file	This is the <bowler>.csv file obtained with an initial getPlayerData()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerAvgWktsGround(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

`bowlerAvgWktsOpposition` *This function computes and plot the average wickets against different oppositon*

Description

This function computes the average wickets taken against different opposition by the bowler. It also shows the number innings against each opposition

Usage

```
bowlerAvgWktsOpposition(file, name = "A Chinaman")
```

Arguments

`file`	This is the <bowler>.csv file obtained with an initial getPlayerData()
`name`	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf bowlerAvgWktsGround

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerAvgWktsOpposition(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

bowlerContributionWonLost

Display the bowler's contribution in matches that were won and those that were lost

---

Description

Plot the comparative contribution of the bowler in matches that were won and lost as box plots

Usage

```
bowlerContributionWonLost(file, name = "A Doosra")
```

Arguments

file	CSV file of bowler from ESPN Cricinfo obtained with getPlayerDataSp()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerMovingAverage bowlerPerfForecast checkBowlerInForm

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerDataSp()
#kumbleSp <-getPlayerDataSp(30176,".","kumblesp.csv","bowling")
# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumblesp.csv", package = "cricketr")
bowlerContributionWonLost(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

bowlerCumulativeAvgEconRate

Bowler's cumulative average economy rate

Description

This function computes and plots the cumulative average economy rate of a bowler

Usage

```
bowlerCumulativeAvgEconRate(file,name)
```

Arguments

file	Data frame
name	Name of batsman

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanCumulativeAverageRuns bowlerCumulativeAvgWickets batsmanCumulativeStrikeRate

Examples

```
## Not run: )
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerCumulativeAvgEconRate(pathToFile,"Anil Kumble")

## End(Not run)
```

---

bowlerCumulativeAvgWickets

Bowler's cumulative average wickets

Description

This function computes and plots the cumulative average wickets of a bowler

Usage

```
bowlerCumulativeAvgWickets(file,name)
```

Arguments

file	Data frame
name	Name of batsman

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanCumulativeAverageRuns bowlerCumulativeAvgEconRate batsmanCumulativeStrikeRate

Examples

```
## Not run: )
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerCumulativeAvgWickets(pathToFile,"Anil Kumble")

## End(Not run)
```

---

bowlerEconRate *Compute and plot the Mean Economy Rate versus wickets taken*

Description

This function computes the mean economy rate for the wickets taken and plot this

Usage

```
bowlerEconRate(file, name = "A Bowler")
```

Arguments

file	This is the <bowler>.csv file obtained with an initial getPlayerData()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# kumble <- getPlayerData(30176,dir=".", file="kumble.csv",type="batting",
# homeOrAway=c(1,2),result=c(1,2,4))


# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerEconRate(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

bowlerHistWickets *Plot a histogram of Wicket percentages versus wickets taken*

Description

This function computes the percentages of wickets taken versus wickets in the bowler's career

Usage

```
bowlerHistWickets(file,name="A Googly")
```

Arguments

file	This is the <bowler>.csv file obtained with an initial getPlayerData()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(30176,file="kumble.csv",type="bowling", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerHistWickets(pathToFile, "Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)


## End(Not run)
```

`bowlerMovingAverage` *Compute and plot the moving average of the wickets taken for a bowler*

Description

This function plots the wickets taken by a bowler as a time series and plots the moving average over the career

Usage

```
bowlerMovingAverage(file, name = "A Doosra")
```

Arguments

`file`	This is the <bowler>.csv file obtained with an initial getPlayerData()
`name`	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`bowlerWktsFreqPercent` `relativeBowlingER` `relativeBowlingPerf`

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerMovingAverage(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.

## End(Not run)
```

`bowlerPerfForecast` *Forecast the bowler performance based on past performances using Holt-Winters forecasting*

Description

This function forecasts the performance of the bowler based on past performances using HoltWinters forecasting model

Usage

```
bowlerPerfForecast(file, name = "A Googly")
```

Arguments

`file`	This is the <bowler>.csv file obtained with an initial getPlayerData()
`name`	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerEconRate, bowlerMovingAverage, bowlerContributionWonLost

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerPerfForecast(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

bowlerPerfHomeAway *This function analyses the performance of the bowler at home and overseas*

Description

This function plots the Wickets taken by the batsman at home and overseas

Usage

```
bowlerPerfHomeAway(file, name = "A Googly")
```

Arguments

file	CSV file of the bowler from ESPN Cricinfo (for e.g. Kumble's profile no:30176)
name	Name of bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerMovingAverage bowlerPerfForecast checkBowlerInForm bowlerContributionWonLost

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerDataSp()
#kumbleSp <-getPlayerDataSp(30176,".","kumblesp.csv","bowling")

# Retrieve the file path of a data file installed with cricketr
path <- system.file("data", "kumblesp.csv", package = "cricketr")
bowlerPerfHomeAway(path,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.


## End(Not run)
```

---

bowlerWktRateTT *Compute and plot the Mean number of deliveries versus wickets taken*

Description

This function computes and plots the Mean number of deliveries versus wickets taken for bowlers in Twenty20 Internation

Usage

```
bowlerWktRateTT(file, name = "A Bowler")
```

Arguments

file	his is the <bowler>.csv file obtained with an initial getPlayerDataTT()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerDataTT(26421,dir=".",file="ashwin.csv",type="bowling",
# homeOrAway=c(1,2,3), result=c(1,2,3,5))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "ashwin.csv", package = "cricketr")
bowlerWktRateTT(pathToFile,"R Ashwin")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

`bowlerWktsFreqPercent` *Plot the Wickets Frequency as a percentage against wickets taken*

Description

This function calculates the Wickets frequency as a percentage of total wickets taken and plots this agains the wickets taken.

Usage

```
bowlerWktsFreqPercent(file, name="A Bowler")
```

Arguments

`file`	This is the <bowler>.csv file obtained with an initial getPlayerData()
`name`	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`bowlerWktsFreqPercent` `relativeBowlingER` `relativeBowlingPerf`

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerWktsFreqPercent(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

bowlerWktsRunsPlot *Compute and plot the runs conceded versus the wickets taken*

Description

This function creates boxplots on the runs conceded for wickets taken for the bowler

Usage

```
bowlerWktsRunsPlot(file, name = "A Googly")
```

Arguments

file	This is the <bowler>.csv file obtained with an initial getPlayerData()
name	Name of the bowler

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER relativeBowlingPerf bowlerHistWickets

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
bowlerWktsRunsPlot(pathToFile,"Anil Kumble")

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

checkBatsmanInForm *Check whether the batsman is In-Form or Out-Of-Form by looking at his last 10 percent scores*

Description

This function checks whether the batsman is In-Form or Out-Of-Form by doing hypothesis testing and generating a p-value. The last 10 percent of runs scored (sample) are used as a sample against the rest 90 percent of runs scored (population) by the batsman.A significance value of 0.05 is used. The lower tail is checked. The NULL hypothesis is that the batsman is In-Form with the sample mean being within 95 percent confidence interval. If the sample mean is outside this 95 percent range and the p-value is less than the significance value the batsman is considered to be Out-Of-Form

Usage

```
checkBatsmanInForm(file, name = "A Hitter", alpha = 0.05)
```

Arguments

file	This is the <batsman>.csv file obtained with an initial getPlayerData()
name	Name of the batsman
alpha	Significance value

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMeanStrikeRate, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
checkBatsmanInForm(pathToFile,"Sachin Tendulkar")

#Note: This example uses the file tendulkar.csv from the /data directory. However
#you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

---

checkBowlerInForm *Check whether the bowler is In-Form or Out-Of-Form by looking at his last 10 percent scores*

Description

This function checks whether the bowler is In-Form or Out-Of-Form by doing hypothesis testing and generating a p-value. The last 10 percent of runs scored (sample) are used as a sample against the rest 90 percent of runs scored (population) by the bowler.A significance value of 0.05 is used. The lower tail is checked. The NULL hypothesis is that the bowler is In-Form with the sample mean being within 95 percent confidence interval. If the sample mean is outside this 95 percent range and the p-value is less than the significance value the bowler is considered to be Out-Of-Form

Usage

```
checkBowlerInForm(file, name = "A N Inswinger", alpha = 0.05)
```

Arguments

file	This is the <bowler>.csv file obtained with an initial getPlayerData()
name	Name of the bowler
alpha	Significance value

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.wordpress.com/

See Also

bowlerMovingAverage batsmanPerfForecast bowlerContributionWonLost

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(30176,file="kumble.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
checkBowlerInForm(pathToFile,"Anil Kumble")

#Note: This example uses the file kumble.csv from the /data directory. However
#you can use any directory as long as the data file exists in that directory.
# The general format is pkg-function(pathToFile,par1,...)

## End(Not run)
```

clean *Create a batsman data frame given the batsman's CSV file*

Description

The function removes rows from the batsman dataframe where the batsman did not bat (DNB) or the team did not bat (TDNB). COnverts not outs '*' (97*, 128*) to 97,128 by stripping the '*' character. It picks all the complete cases and returns the data frame

Usage

```
clean(file)
```

Arguments

file	CSV file with the batsman data obtained with getPlayerData

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns the cleaned batsman dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

cleanBowlerData getPlayerData batsman4s batsmanMovingAverage

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerData()
#  <- getPlayerData(35320,file="tendulkar.csv",type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# clean the dataframe
pathToFile <- system.file("data", "tendulkar.csv", package = "cricketr")
clean(pathToFile)

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.

## End(Not run)
```

`cleanBowlerData` *Clean the bowlers data frame*

Description

Clean the bowler's CSV fileand remove rows DNB(Did not bowl) & TDNB (Team did not bowl). Also normalize all 8 ball over to a 6 ball over for earlier bowlers

Usage

```
cleanBowlerData(file)
```

Arguments

`file`	The <bowler>.csv file

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

A cleaned bowler data frame with complete cases

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

clean

Examples

```
## Not run:

# Get bowling data and store in file for future
# kumble <- getPlayerData(30176,dir="./mytest", file="kumble.csv",type="bowling",
# homeOrAway=c(1),result=c(1,2))

pathToFile <- system.file("data", "kumble.csv", package = "cricketr")
cleanBowlerData(pathToFile)

# Note: This example uses the file kumble.csv from the /data directory. However
# you can use any directory as long as the data file exists in that directory.

## End(Not run)
```

---

cleanTeamData *Clean the team data for Test, ODI and T20*

Description

This function cleans the team data for Test, ODI and T20

Usage

```
cleanTeamData(df,matchType)
```

Arguments

df	Data frame
matchType	Match type - Test, ODI, T20

Value

The cleaned Data frame

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests
df<-getTeamDataHomeAway(file="india.csv",teamName="India",matchType='Test')
df1 <-cleanTeamData(df,"Test")

## End(Not run)
```

---

devilliers *Data set for AB Devilliers*

Description

Data set for AB Devilliers

Usage

```
data("devilliers")
```

Format

The format is: chr "devilliers"

Details

Data set for AB Devilliers

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

ER *Calculate the mean Economy Rate*

Description

Calculate the mean Economy Rate

Usage

```
ER(file)
```

Arguments

file	Input

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

ganguly *Data set for Sourav Ganguly*

Description

Data set for Sourav Ganguly

Usage

```
data("ganguly")
```

Format

The format is: chr "ganguly"

Details

Data set for Sourav Ganguly

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

gayle *Data set for Chris Gayle*

Description

Data set for Chris Gayle

Usage

```
data("gayle")
```

Format

The format is: chr "gayle"

Details

Data set for Chris Gayle

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`getMatchType` *Get the number of the match type viz.for Test, ODI and T20*

Description

This function returns the number of the match type

Usage

```
getMatchType(matchType)
```

Arguments

`matchType`	The match type - Test, ODI or T20

Value

The numerical value of match type

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`teamWinLossStatusVsOpposition` `teamWinLossStatusAtGrounds` `plotTimelineofWinsLosses`

Examples

```
## Not run:
#Get the team data for India for Tests

match <-getMatchType("Test")

## End(Not run)
```

`getPlayerData` *Get the player data from ESPN Cricinfo based on specific inputs and store in a file in a given directory*

Description

Get the player data given the profile of the batsman. The allowed inputs are home,away or both and won,lost or draw of matches. The data is stored in a <player>.csv file in a directory specified. This function also returns a data frame of the player

Usage

```
getPlayerData(profile,opposition="",host="",dir="./data",file="player001.csv",
type="batting", homeOrAway=c(1,2,3),result=c(1,2,4))
```

Arguments

`profile`	This is the profile number of the player to get data. This can be obtained from https://www.espncricinfo.com/ci/content/player/index.html. Type the name of the player and click search. This will display the details of the player. Make a note of the profile ID. For e.g For Sachin Tendulkar this turns out to be httsp://www.espncricinfo.com/india/content/player/35320.html. Hence the profile for Sachin is 35320
`opposition`	The numerical value of the opposition country e.g.Australia,India, England etc. The values are Australia:2,Bangladesh:25,England:1,India:6,New Zealand:5,Pakistan:7,South Africa:3,Sri Lanka:8, West Indies:4, Zimbabwe:9
`host`	The numerical value of the host country e.g.Australia,India, England etc. The values are Australia:2,Bangladesh:25,England:1,India:6,New Zealand:5,Pakistan:7,South Africa:3,Sri Lanka:8, West Indies:4, Zimbabwe:9
`dir`	Name of the directory to store the player data into. If not specified the data is stored in a default directory "./data". Default="./data"
`file`	Name of the file to store the data into for e.g. tendulkar.csv. This can be used for subsequent functions. Default="player001.csv"
`type`	type of data required. This can be "batting" or "bowling"
`homeOrAway`	This is onw of 1,2,3. 1 is for home 2 is for away and 3 is for neutral venue
`result`	This is a vector that can take values 1,2,4. 1 - won match 2- lost match 4- draw

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns the player's dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

getPlayerDataSp

Examples

```
## Not run:
# Both home and away. Result = won,lost and drawn
tendulkar <-getPlayerData(35320,dir="../cricketr/data", file="tendulkar1.csv",
type="batting", homeOrAway=c(1,2,3),result=c(1,2,4))

# Only away. Get data only for won and lost innings
tendulkar <-getPlayerData(35320,dir="../cricketr/data", file="tendulkar2.csv",
type="batting",homeOrAway=c(2),result=c(1,2))

# Get bowling data and store in file for future
kumble <- getPlayerData(30176,dir="../cricketr/data",file="kumble1.csv",
type="bowling",homeOrAway=c(1),result=c(1,2))

#Get the Tendulkar's Performance against Australia in Australia
tendulkar <-getPlayerData(35320, opposition = 2,host=2,dir=".",
file="tendulkarVsAusInAus.csv",type="batting")

## End(Not run)
```

`getPlayerDataHA` *Return the CSV file and a dataframe of a player's matches along with home/away column*

Description

This function saves the players data as a CSV file and also returns a data frame. A new column home/away/neutral is added

Usage

```
getPlayerDataHA(profileNo,tdir=".",tfile="player001.csv",type="batting",
                    matchType="Test")
```

Arguments

`profileNo`	The profile number of the player
`tdir`	The name of the directory to save the CSV file
`tfile`	The name of the CSV file
`type`	This parameter should be 'batting' for batsman data and 'bowling' for bowlers
`matchType`	Match type - Test, ODI or T20

Value

dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`teamWinLossStatusVsOpposition` `batsman4s`

Examples

```
## Not run:
#Get data for Tendulkar
df=getPlayerDataHA(profileno=35320,tfile="tendulkarHA.csv")
#Get the bowling data for Jadeja in ODIs
df=getPlayerDataHA(profileNo=234675,tfile="jadejaODIHA.csv",type="bowling",matchType='ODI')
# Get the data for Kohli in T20s for batting
df=getPlayerDataHA(profileNo=253802,tfile="kohliT20HA.csv",matchType="T20")

## End(Not run)
```

`getPlayerDataOD` *Get the One day player data from ESPN Cricinfo based on specific inputs and store in a file in a given directory*

Description

Get the player data given the profile of the batsman. The allowed inputs are home,away or both and won,lost or draw of matches. The data is stored in a <player>.csv file in a directory specified. This function also returns a data frame of the player

Usage

```
getPlayerDataOD(profile, opposition="",host="",dir = "../", file = "player001.csv",
type = "batting", homeOrAway = c(1, 2, 3), result = c(1, 2, 3,5))
```

Arguments

`profile`	This is the profile number of the player to get data. This can be obtained from https://www.espncricinfo.com/ci/content/player/index.html. Type the name of the player and click search. This will display the details of the player. Make a note of the profile ID. For e.g For Virender Sehwag this turns out to be https://www.espncricinfo.com/india Hence the profile for Sehwag is 35263
`opposition`	The numerical value of the opposition country e.g.Australia,India, England etc. The values are Australia:2,Bangladesh:25,Bermuda:12, England:1,Hong Kong:19,India:6,Ireland:29, Netherlands:15,New Zealand:5,Pakistan:7,Scotland:30,South Africa:3,Sri Lanka:8,United Arab Emirates:27, West Indies:4, Zimbabwe:9; Africa XI:405 Note: If no value is entered for opposition then all teams are considered
`host`	The numerical value of the host country e.g.Australia,India, England etc. The values are Australia:2,Bangladesh:25,England:1,India:6,Ireland:29,Malaysia:16,New Zealand:5,Pakistan:7, Scotland:30,South Africa:3,Sri Lanka:8,United Arab Emirates:27,West Indies:4, Zimbabwe:9 Note: If no value is entered for host then all host countries are considered
`dir`	Name of the directory to store the player data into. If not specified the data is stored in a default directory "../data". Default="../data"

file	Name of the file to store the data into for e.g. tendulkar.csv. This can be used for subsequent functions. Default="player001.csv"
type	type of data required. This can be "batting" or "bowling"
homeOrAway	This is vector with either or all 1,2, 3. 1 is for home 2 is for away, 3 is for neutral venue
result	This is a vector that can take values 1,2,3,5. 1 - won match 2- lost match 3-tied 5- no result

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns the player's dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

getPlayerDataSp getPlayerData

Examples

```
## Not run:
# Both home and away. Result = won,lost and drawn
sehwag <-getPlayerDataOD(35263,dir="../cricketr/data", file="sehwag1.csv",
type="batting", homeOrAway=c(1,2),result=c(1,2,3,5))

# Only away. Get data only for won and lost innings
sehwag <-getPlayerDataOD(35263,dir="../cricketr/data", file="sehwag2.csv",
type="batting",homeOrAway=c(2),result=c(1,2))

# Get bowling data and store in file for future
malinga <- getPlayerData(49758,dir="../cricketr/data",file="malinga1.csv",
type="bowling")

# Get Dhoni's ODI record in Australia against Australua
```

```
dhoni <- getPlayerDataOD(28081,opposition = 2,host=2,dir=".",
file="dhoniVsAusinAusOD",type="batting")

## End(Not run)
```

`getPlayerDataOppnHA` *Return a filtered CSV file for a player against specified opposition, at home/away venues during an interval*

Description

This function saves the filtered players data as a CSV file for matches against specified opposition, at home.away venues for a specified interval

Usage

```
getPlayerDataOppnHA(infile,outfile,dir=".",opposition=c("all"),homeOrAway=c("all"),
                            startDate="2001-01-01",endDate="2019-01-01")
```

Arguments

`infile`	The input CSV HA file for the player
`outfile`	The name of the output CSV file which is filtered file based on opposition,home/away for a period
`dir`	The name of the directory to store output file
`opposition`	This is a vector of opposition for e.g. c("Australia","India","South Africa"). Default is c("all")
`homeOrAway`	This is a vector of "home","away" or "neutral". Default is c("all")
`startDate`	This is a date from which you would like the data for player "yyyy-mm-dd" format
`endDate`	This is a end date till which you need data to be filtered of "yyyy-mm-dd" format

Value

dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition batsman4s6s

Examples

```
## Not run:
#Get data for Kohli  against England in 'away' venues in the year 2014
df=getPlayerDataOppnHA(infile="kohliHA.csv",outfile="kohliEAN2014.csv",
            opposition=c("England","Australia","New Zealand"),
homeOrAway=c("away"),startDate="2014-01-01",endDate="2015-01-01")

# Get data for Tendulkar between 2001 and 2002
df1=getPlayerDataOppnHA(file,outfile="tendulkar2001.csv",startDate="2001-01-01",
                                                        endDate="2002-01-01")


## End(Not run)
```

---

getPlayerDataSp *Get the player data along with venue and*

Description

This function is a specialized version of getPlayer Data. This function gets the players data along with details on matches' venue (home/abroad) and the result of match(won,lost,drawn) as 2 separate columns (ha & result). The column ha has 1:home and 2: overseas. The column result has values 1:won , 2;lost and :drawn match

Usage

```
getPlayerDataSp(profileNo, tdir = "./data", tfile = "player001.csv",
ttype = "batting")
```

Arguments

profileNo	This is the profile number of the player to get data. This can be obtained from https://www.espncricinfo.com/ci/content/player/index.html. Type the name of the player and click search. This will display the details of the player. Make a note of the profile ID. For e.g For Sachin Tendulkar this turns out to be https://www.espncricinfo.com/india/content/player/35320.html. Hence the profile for Sachin is 35320

tdir	Name of the directory to store the player data into. If not specified the data is stored in a default directory "./data". Default="./tdata"
tfile	Name of the file to store the data into for e.g. tendulkar.csv. This can be used for subsequent functions. Default="player001.csv"
ttype	type of data required. This can be "batting" or "bowling"

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns the player's dataframe along with the homeAway and the result columns

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

getPlayerData

Examples

```
## Not run:
# Only away. Get data only for won and lost innings
tendulkar <-getPlayerDataSp(35320,tdir="../cricketr/data", tfile="tendulkarsp.csv",ttype="batting")

# Get bowling data and store in file for future
kumble <- getPlayerDataSp(30176,tdir="../cricketr/data",tfile="kumblesp.csv",ttype="bowling")

## End(Not run)
```

`getPlayerDataTT` *Get the Twenty20 International player data from ESPN Cricinfo based on specific inputs and store in a file in a given directory~*

Description

Get the Twenty20 player data given the profile of the batsman/bowler. The allowed inputs are home,away, neutralboth and won,lost,tied or no result of matches. The data is stored in a <player>.csv file in a directory specified. This function also returns a data frame of the player

Usage

```
getPlayerDataTT(profile, opposition="",host="",dir = "./data", file = "player001.csv",
type = "batting", homeOrAway = c(1, 2, 3), result = c(1, 2, 3,5))
```

Arguments

`profile`	This is the profile number of the player to get data. This can be obtained from https://www.espncricinfo.com/ci/content/player/index.html. Type the name of the player and click search. This will display the details of the player. Make a note of the profile ID. For e.g For Virat Kohli this turns out to be 253802 https://www.espncricinfo.com/india/content/player/35263.html. Hence the profile for Sehwag is 35263
`opposition`	The numerical value of the opposition country e.g.Australia,India, England etc. The values are Afghanistan:40,Australia:2,Bangladesh:25,England:1,Hong Kong:19,India:6,Ireland:29, New Zealand:5,Pakistan:7,Scotland:30,South Africa:3,Sri Lanka:8,United Arab Emirates:27, West Indies:4, Zimbabwe:9; Note: If no value is entered for opposition then all teams are considered
`host`	The numerical value of the host country e.g.Australia,India, England etc. The values are Australia:2,Bangladesh:25,England:1,India:6,New Zealand:5, South Africa:3,Sri Lanka:8,United States of America:11,West Indies:4, Zimbabwe:9 Note: If no value is entered for host then all host countries are considered
`dir`	Name of the directory to store the player data into. If not specified the data is stored in a default directory "./data". Default="./data"
`file`	Name of the file to store the data into for e.g. kohli.csv. This can be used for subsequent functions. Default="player001.csv"
`type`	type of data required. This can be "batting" or "bowling"
`homeOrAway`	This is vector with either or all 1,2, 3. 1 is for home 2 is for away, 3 is for neutral venue
`result`	This is a vector that can take values 1,2,3,5. 1 - won match 2- lost match 3-tied 5- no result

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

Returns the player's dataframe

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktRateTT getPlayerData

Examples

```
## Not run:
# Only away. Get data only for won and lost innings
kohli <-getPlayerDataTT(253802,dir="../cricketr/data", file="kohli1.csv",
type="batting")

# Get bowling data and store in file for future
ashwin <- getPlayerDataTT(26421,dir="../cricketr/data",file="ashwin1.csv",
type="bowling")

kohli <-getPlayerDataTT(253802,opposition = 2,host=2,dir="../cricketr/data",
file="kohli1.csv",type="batting")

## End(Not run)
```

---

getTeamData *Get the data for a team in a match type viz.for Test, ODI and T20*

Description

This function returns team data as a CSV file and/or a dataframe for Test, ODI and T20

Usage

```
getTeamData(dir=".",file="team001.csv",matchType="Test",
      homeOrAway=c(1,2,3),result=c(1,2,3,4),teamView="bat",save=FALSE,teamName)
```

Arguments

dir	The directory where the team data CSV file be saved
file	The name of the CSV file to save to
matchType	The match type - Test, ODI , T20
homeOrAway	Whether the data has to be got for home-1, away(overseas)-2 or neutral -3
result	The result of the match for which data is to be saved - won-1, lost -2, tied-3, draw-4
teamView	This can be 'bat' - batting team or 'bowl' - bowling team
save	This can be set as TRUE or FALSE
teamName	This is team name

Value

The required data frame

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests

df=getTeamData(dir=".",file="australia.csv", matchType="Test",homeOrAway=c(1,2,3),
       result=c(1,2,3, 4),teamView='bat',teamName="Australia")

## End(Not run)
```

getTeamDataHomeAway *Get the data for a team in a match type viz.for Test, ODI and T20 with the home/overseas/neutral*

Description

This function returns team data as a CSV file and/or a dataframe for Test, ODI and T20 with an additional column showing home, away or neutral venue where the match was played

Usage

```
getTeamDataHomeAway(dir=".",teamView="bat",matchType="Test",file="team001HA.csv",
save=TRUE,teamName)
```

Arguments

dir	The directory where the team data CSV file be saved
teamView	Team view can be either 'bat' (batting team) or 'bowl' (bowling team)
matchType	The match type - Test, ODI , T20
file	The name of te file to save to
save	This can be TRUE or FALSE
teamName	Team name is the team namely - Australia, India, England etc

Value

The required data frame

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests

getTeamDataHomeAway(teamName="India",file="india.csv")

## End(Not run)
```

`getTeamNumber` *Get the number of the Team*

Description

This function returns the number of the Team for which analysis is to be done

Usage

```
getTeamNumber(teamName,matchType)
```

Arguments

`teamName`	The name of the team e.g Australia, India, Ghana etc
`matchType`	The match type - Test, ODI or T20

Value

The numerical value of the team

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`teamWinLossStatusVsOpposition` `teamWinLossStatusAtGrounds` `plotTimelineofWinsLosses`

Examples

```
## Not run:
#Get the team data for India for Tests

teamNi <-getTeamNumber(teamName="India",matchType="Test")

## End(Not run)
```

---

kohli *Data set for Virat Kohli*

Description

CSV file Virat Kohl

Usage

```
data("kohli")
```

Format

The format is: chr "kohli"

Details

CSV file Virat Kohli

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

kohli1 *Data set for Virat Kohli*

Description

Data set for Virat Kohli

Usage

```
data("kohli1")
```

Format

The format is: chr "kohli1"

Details

Data set for Virat Kohli

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

kumble *Data set for Anil Kumble*

Description

Data set for Anil Kumble

Usage

```
data("kumble")
```

Format

The format is: chr "kumble"

Details

Data set for Anil Kumble

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`kumble1` *Data set for Anil Kumble*

Description

Data set for Anil Kumble

Usage

```
data("kumble1")
```

Format

The format is: chr "kumble1"

Details

Data set for Anil Kumble

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

kumblesp *Data set for Anil Kumble*

Description

Data set for Anil Kumble

Usage

```
data("kumblesp")
```

Format

The format is: chr "kumblesp"

Details

Data set for Anil Kumble

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

malinga *Data set for Lasith Malinga*

Description

Data set for Lasith Malinga

Usage

```
data("malinga")
```

Format

The format is: chr "malinga"

Details

Data set for Lasith Malinga

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

Examples

```
data(malinga)
## maybe str(malinga) ; plot(malinga) ...
```

`malinga1` *Data set for Lasith Malinga*

Description

Data set for Lasith Malinga

Usage

```
data("malinga1")
```

Format

The format is: chr "malinga1"

Details

Data set for Lasith Malinga

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

maxwell *Data set for Glenn Maxwell*

Description

Data set for Glenn Maxwell

Usage

```
data("maxwell")
```

Format

The format is: chr "maxwell"

Details

Data set for Glenn Maxwell

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

mendis *Data set for Ajantha Mendis*

Description

Data set for Ajantha Mendis

Usage

```
data("mendis")
```

Format

The format is: chr "mendis"

Details

Data set for Ajantha Mendis

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`mitchell` *Data set for Mitchell Johnson*

Description

Data set for Mitchell Johnson

Usage

```
data("mitchell")
```

Format

The format is: chr "mitchell"

Details

Data set for Mitchell Johnson

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

murali *Data set for Muthiah Muralitharan*

Description

Data set for Muthiah Muralitharan

Usage

```
data("murali")
```

Format

The format is: chr "murali"

Details

Data set for Muthiah Muralitharan

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

narine *Data set for Sunil Narine*

Description

Data set for Sunil Narine

Usage

```
data("narine")
```

Format

The format is: chr "narine"

Details

Data set for Sunil Narine

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`percentRuns` *Calculate the percent runs in each run range*

Description

Calculate the percent runs in each 10 run range

Usage

```
percentRuns(file)
```

Arguments

`file`	Input

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

`percentWkts` *Calculate the percentage of wickets taken by bowler*

Description

Calculate the percentage wickets taken by bowler

Usage

```
percentWkts(file)
```

Arguments

`file`	Data frame

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None.

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

plotTimelineofWinsLosses *Plot the time line of wins/losses/draw/tied etc for a Team in Test, ODI or T20*

Description

This function returns plots a time line of won,lost,draw,tied or no result for a team against other teams in home/away or neutral venues

Usage

```
plotTimelineofWinsLosses(file,teamName,opposition=c("all"),homeOrAway=c("all"),
      startDate="2001-01-01",endDate="2019-01-01",matchType="Test")
```

Arguments

file	The CSV file for which the plot is required
teamName	The name of the team for which plot is required
opposition	Opposition is a vector namely c("all") or c("Australia", "India", "England")
homeOrAway	This parameter is a vector which is either c("all") or a vector of venues c("home","away","neutral")
startDate	The start date from which time line is required
endDate	The end data for which the time line plot is required
matchType	Match type - Test, ODI or T20

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests

df <- getTeamDataHomeAway(teamName="India",file="indiaOD.csv",matchType="ODI")
plotTimelineofWinsLosses("indiaOD.csv",teamName="India",
        startDate="2015-01-01",endDate="2019-01-01", matchType="ODI")

## End(Not run)
```

`relativeBatsmanCumulativeAvgRuns`
Relative batsman's cumulative average runs

Description

This function computes and plots the relative cumulative average runs of batsmen

Usage

```
relativeBatsmanCumulativeAvgRuns(frames, names)
```

Arguments

`frames`	This is a list of <batsman>.csv files obtained with an initial getPlayerData()
`names`	A list of batsmen names who need to be compared

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

relativeBatsmanCumulativeStrikeRate relativeBowlerCumulativeAvgEconRate relativeBowlerCumulativeAvgW

Examples

```
## Not run:
# Retrieve the file path of a data file installed with cricketr
tendulkar <- system.file("data", "tendulkar.csv", package = "cricketr")
ganguly <- system.file("data", "ganguly.csv", package = "cricketr")

batsmen <- list(tendulkar,ganguly)
names <- list("Tendulkar","Ganguly")
relativeBatsmanCumulativeAvgRuns(batsmen,names)

## End(Not run)
```

`relativeBatsmanCumulativeStrikeRate` *Relative batsmen cumulative average strike rate*

Description

This function computes and plots the cumulative average strike rate of batsmen

Usage

```
relativeBatsmanCumulativeStrikeRate(frames, names)
```

Arguments

`frames`	This is a list of <batsman>.csv files obtained with an initial getPlayerData()
`names`	A list of batsmen names who need to be compared

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`relativeBatsmanCumulativeAvgRuns` `relativeBowlerCumulativeAvgEconRate` `relativeBowlerCumulativeAvgWicke`

Examples

```
## Not run:
# Retrieve the file path of a data file installed with cricketr
tendulkar <- system.file("data", "tendulkar.csv", package = "cricketr")
ganguly <- system.file("data", "ganguly.csv", package = "cricketr")

batsmen <- list(tendulkar,ganguly)
names <- list("Tendulkar","Ganguly")
relativeBatsmanCumulativeStrikeRate(batsmen,names)

## End(Not run)
```

`relativeBatsmanSR` *Calculate and plot the relative Mean Strike Rate (SR) for each batsman*

Description

Calculate and plot the relative MEan Strike Rate (SR) for each batsman

Usage

```
relativeBatsmanSR(frames, names)
```

Arguments

`frames`	This is a list of <batsman>.csv files obtained with an initial getPlayerData()
`names`	A list of batsmen names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanDismissals, batsmanMovingAverage, batsmanPerfBoxHist

Examples

```
## Not run:
# Get the list of the <batsman>.csv files obtained with getPlayerData() for batsmen to be compared
# tendulkar  <- getPlayerData(35320,file="tendulkar.csv",
#type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
tendulkar <- system.file("data", "tendulkar.csv", package = "cricketr")
ganguly <- system.file("data", "ganguly.csv", package = "cricketr")

batsmen <- list(tendulkar,ganguly)
names <- list("Tendulkar","Ganguly")
relativeBatsmanSR(batsmen,names)

#Note: This example uses the /data directory for the files. However
#you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

---

relativeBatsmanSRODTT *Calculate and plot the relative Mean Strike Rate (SR) for each batsman for ODI or Twenty20 batsmen*

Description

Calculate and plot the relative MEan Strike Rate (SR) for each batsman for ODI or Twenty20 batsmen

Usage

```
relativeBatsmanSRODTT(frames, names)
```

Arguments

frames	This is a list of <batsman>.csv files obtained with an initial getPlayerDataOD() or getPlayerTT()
names	A list of batsmen names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanScoringRateODTT relativeRunsFreqPerfODTT batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerDataOD() or getPlayerTT()
#sehwag <-getPlayerData(35263,dir="./mytest", file="sehwag.csv",
#type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
sehwag <- system.file("data", "sehwag.csv", package = "cricketr")
devilliers <- system.file("data", "devilliers.csv", package = "cricketr")
gayle <- system.file("data", "gayle.csv", package = "cricketr")
maxwell <- system.file("data", "maxwell.csv", package = "cricketr")

batsmen <- list(sehwag,devilliers,gayle,maxwell)
names <- list("Sehwag","Devilliers","Gayle","Maxwell")
relativeBatsmanSRODTT(batsmen,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

---

relativeBowlerCumulativeAvgEconRate

Relative Bowler's cumulative average economy rate

Description

This function computes and plots the relative cumulative average economy rate of bowlers

Usage

```
relativeBowlerCumulativeAvgEconRate(frames, names)
```

Arguments

frames	This is a list of <bowler>.csv files obtained with an initial getPlayerData()
names	A list of Twenty20 bowlers names who need to be compared

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

relativeBatsmanCumulativeAvgRuns relativeBowlerCumulativeAvgWickets relativeBatsmanCumulativeStrikeRa

Examples

```
## Not run:
# Retrieve the file path of a data file installed with cricketr
kumble <- system.file("data", "kumble.csv", package = "cricketr")
warne <- system.file("data", "warne.csv", package = "cricketr")
murali <- system.file("data", "murali.csv", package = "cricketr")

frames <- list(kumble,warne,murali)
names <- c("Kumble","Warne","Murali")
relativeBowlerCumulativeAvgEconRate(frames,names)

## End(Not run)
```

---

relativeBowlerCumulativeAvgWickets

Relative bowlers cumulative average wickets

Description

This function computes and plots the relative cumulative average wickets of a bowler

Usage

```
relativeBowlerCumulativeAvgWickets(frames, names)
```

Arguments

frames	This is a list of <bowler>.csv files obtained with an initial getPlayerData()
names	A list of Twenty20 bowlers names who need to be compared

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

relativeBatsmanCumulativeAvgRuns relativeBowlerCumulativeAvgEconRate relativeBatsmanCumulativeStrikeR

Examples

```
## Not run: )

# Retrieve the file path of a data file installed with cricketr
kumble <- system.file("data", "kumble.csv", package = "cricketr")
warne <- system.file("data", "warne.csv", package = "cricketr")
murali <- system.file("data", "murali.csv", package = "cricketr")

frames <- list(kumble,warne,murali)
names <- c("Kumble","Warne","Murali")
relativeBowlerCumulativeAvgWickets(frames,names)

## End(Not run)
```

`relativeBowlingER` *Compute and plot the relative mean Economy Rate(ER) of the bowlers*

Description

This function computes and plots the relative Economy Rate of the bowlers

Usage

```
relativeBowlingER(frames, names)
```

Arguments

`frames`	This is a list of <bowler>.csv files obtained with an initial getPlayerData()
`names`	A list of Twenty20 bowlers names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`bowlerWktsFreqPercent` `relativeBowlingPerf` `bowlerHistWickets`

Examples

```
## Not run:
# Get the list of the <batsman>.csv files obtained with getPlayerData() for batsmen to be compared
# kumble  <- getPlayerData(30176,file="kumble.csv",type="bowling",
# homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
kumble <- system.file("data", "kumble.csv", package = "cricketr")
warne <- system.file("data", "warne.csv", package = "cricketr")
murali <- system.file("data", "murali.csv", package = "cricketr")

frames <- list(kumble,warne,murali)
names <- c("Kumble","Warne","Murali")
relativeBowlingER(frames,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

---

relativeBowlingERODTT *Compute and plot the relative mean Economy Rate(ER) of the bowlers for ODI or Twenty20*

Description

This function computes and plots the relative Economy Rate of the bowlers for ODI or Twenty20

Usage

```
relativeBowlingERODTT(frames, names)
```

Arguments

frames	This is a list of <bowler>.csv files obtained with an initial getPlayerDataOD() or getPlayerTT()
names	A list of bowlers names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

relativeBatsmanSRODTT relativeRunsFreqPerfODTT

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerData(47492,file="steyn.csv",type="bowling",
# homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
steyn <- system.file("data", "steyn.csv", package = "cricketr")
mitchell <- system.file("data", "mitchell.csv", package = "cricketr")
southee <- system.file("data", "southee.csv", package = "cricketr")
malinga <- system.file("data", "malinga.csv", package = "cricketr")

frames <- list(steyn,mitchell,southee,malinga)
names <- c("Steyn","Mitchell","Southee","Malinga")
relativeBowlingERODTT(frames,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

---

relativeBowlingPerf *Plot the relative performances of bowlers*

Description

This function calculates and plots the relative performance of the suers

Usage

```
relativeBowlingPerf(frames, names)
```

Arguments

frames	This is a list of <bowler>.csv files obtained with an initial getPlayerData()
names	A list of bowlers names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingER bowlerHistWickets

Examples

```
## Not run:
# Get the list of the <batsman>.csv files obtained with getPlayerData() for batsmen to be compared
# kumble  <- getPlayerData(30176,file="kumble.csv",type="bowling",
# homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
kumble <- system.file("data", "kumble.csv", package = "cricketr")
warne <- system.file("data", "warne.csv", package = "cricketr")
murali <- system.file("data", "murali.csv", package = "cricketr")

frames <- list(kumble,warne,murali)
names <- c("Kumble","Warne","Murali")
relativeBowlingPerf(frames,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

`relativeRunsFreqPerf` *Calculate and compute the relative run frequencies of a list of cricketers*

Description

This function computes the run frequencies in ranges of 10 and plots these for a list of batsmen

Usage

```
relativeRunsFreqPerf(frames, names)
```

Arguments

`frames`	This is a list of <batsman>.csv files obtained with an initial getPlayerData()
`names`	A list of batsmen names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

`batsmanDismissals`, `batsmanMovingAverage`, `batsmanPerfBoxHist`

Examples

```
## Not run:
# Get the list of the <batsman>.csv files obtained with getPlayerData() for batsmen to be compared
# tendulkar <- getPlayerData(35320,file="tendulkar.csv",type="batting",
# homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
tendulkar <- system.file("data", "tendulkar.csv", package = "cricketr")
ganguly <- system.file("data", "ganguly.csv", package = "cricketr")

batsmen <- list(tendulkar,ganguly)
names <- list("Tendulkar","Ganguly")
relativeRunsFreqPerf(batsmen,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

`relativeRunsFreqPerfODTT` *Calculate and compute the relative run frequencies of a list of cricketers*

Description

This function computes the run frequencies in ranges of 10 and plots these for a list of batsmen

Usage

```
relativeRunsFreqPerfODTT(frames, names)
```

Arguments

`frames`	This is a list of <batsman>.csv files obtained with an initial getPlayerDataOD() or getPlayerTT()
`names`	A list of batsmen names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

batsmanScoringRateODTT, relativeRunsFreqPerfODTT, batsmanPerfBoxHist

Examples

```
## Not run:
# Get or use the <batsman>.csv obtained with getPlayerDataOD() or getPlayerTT()
#sehwag <-getPlayerData(35263,dir="./mytest", file="sehwag.csv",
#type="batting", homeOrAway=c(1,2),result=c(1,2,4))

# Retrieve the file path of a data file installed with cricketr
sehwag <- system.file("data", "sehwag.csv", package = "cricketr")
devilliers <- system.file("data", "devilliers.csv", package = "cricketr")
gayle <- system.file("data", "gayle.csv", package = "cricketr")
maxwell <- system.file("data", "maxwell.csv", package = "cricketr")

batsmen <- list(sehwag,devilliers,gayle,maxwell)
names <- list("Sehwag","Devilliers","Gayle","Maxwell")
relativeRunsFreqPerfODTT(batsmen,names)

# Note: This example uses the /data directory for the files. However
# you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

---

relativeWktRateTT *Compute and plot the relative Mean Wicket Rate of the bowlers in Twenty20 International*

Description

This function computes and plots the relative Wicket Rate of the bowlers in Twenty20 International

Usage

```
relativeWktRateTT(frames, names)
```

Arguments

frames	This is a list of Twenty20 <bowler>.csv files obtained with an initial getPlayerDataTT()
names	A list of bowlers names who need to be compared

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

bowlerWktsFreqPercent relativeBowlingPerf bowlerHistWickets bowlerWktRateTT

Examples

```
## Not run:
# Get or use the <bowler>.csv obtained with getPlayerData()
# a <- getPlayerDataTT(26421,dir=".",file="ashwin.csv",type="bowling",
# homeOrAway=c(1,2,3), result=c(1,2,3,5))

# Retrieve the file path of a data file installed with cricketr
mendis <- system.file("data", "mendis.csv", package = "cricketr")
narine  <- system.file("data", "narine.csv", package = "cricketr")
badree <- system.file("data", "badree.csv", package = "cricketr")

frames <- list(mendis, badree,narine)
names <- c("Mendis","Badree","Narine")
relativeWktRateTT(frames,names)

#Note: This example uses the /data directory for the files. However
#you can use any directory as long as the data files exists in that directory.

## End(Not run)
```

sehwag *Data set for Virendar Sehwag*

Description

Data set for Virendar Sehwag

Usage

```
data("sehwag")
```

Format

The format is: chr "sehwag"

Details

Data set for Virendar Sehwag

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

sehwag1 *Data set for Virendar Sehwag*

Description

Data set for Virendar Sehwag

Usage

```
data("sehwag1")
```

Format

The format is: chr "sehwag1"

Details

Data set for Virendar Sehwag

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`sehwag2` *Data set for Virendar Sehwag*

Description

Data set for Virendar Sehwag

Usage

```
data("sehwag2")
```

Format

The format is: chr "sehwag2"

Details

Data set for Virendar Sehwag

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

southee *Data set for Tim Southee*

Description

Data set for Tim Southee

Usage

```
data("southee")
```

Format

The format is: chr "southee"

Details

Data set for Tin Southee

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

steyn *Data set for Dale Steyn*

Description

Data set for Dale Steyn

Usage

```
data("steyn")
```

Format

The format is: chr "steyn"

Details

Data set for Dale Steyn

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`teamWinLossStatusAtGrounds`

Compute the wins/losses/draw/tied etc for a Team in Test, ODI or T20 at venues

---

Description

This function computes the won,lost,draw,tied or no result for a team against other teams in home/away or neutral venues and either returns a dataframe or plots it for grounds

Usage

```
teamWinLossStatusAtGrounds(file,teamName,opposition=c("all"),homeOrAway=c("all"),
              matchType="Test",plot=FALSE)
```

Arguments

`file`	The CSV file for which the plot is required
`teamName`	The name of the team for which plot is required
`opposition`	Opposition is a vector namely c("all") or c("Australia", "India", "England")
`homeOrAway`	This parameter is a vector which is either c("all") or a vector of venues c("home","away","neutral")
`matchType`	Match type - Test, ODI or T20
`plot`	If plot=FALSE then a data frame is returned, If plot=TRUE then a plot is generated

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests

df <- getTeamDataHomeAway(teamName="India",file="indiaOD.csv",matchType="ODI")
teamWinLossStatusAtGrounds("india.csv",teamName="India",opposition=c("Australia","England","India"),
                           homeOrAway=c("home","away"),plot=TRUE)

## End(Not run)
```

---

teamWinLossStatusVsOpposition

Compute the wins/losses/draw/tied etc for a Team in Test, ODI or T20 against opposition

---

Description

This function computes the won,lost,draw,tied or no result for a team against other teams in home/away or neutral venues and either returns a dataframe or plots it against opposition

Usage

```
teamWinLossStatusVsOpposition(file,teamName,opposition=c("all"),homeOrAway=c("all"),
      matchType="Test",plot=FALSE)
```

Arguments

file	The CSV file for which the plot is required
teamName	The name of the team for which plot is required
opposition	Opposition is a vector namely c("all") or c("Australia", "India", "England")
homeOrAway	This parameter is a vector which is either c("all") or a vector of venues c("home","away","neutral")
matchType	Match type - Test, ODI or T20
plot	If plot=FALSE then a data frame is returned, If plot=TRUE then a plot is generated

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

See Also

teamWinLossStatusVsOpposition teamWinLossStatusAtGrounds plotTimelineofWinsLosses

Examples

```
## Not run:
#Get the team data for India for Tests

df <- getTeamDataHomeAway(teamName="India",file="indiaOD.csv",matchType="ODI")
teamWinLossStatusAtGrounds("india.csv",teamName="India",opposition=c("Australia","England","India"),
                           homeOrAway=c("home","away"),plot=TRUE)

## End(Not run)
```

---

tendulkar *Data set for Sachin Tendulkar*

Description

Data set for Sachin Tendulkar

Usage

```
data("tendulkar")
```

Format

The format is: chr "tendulkar"

Details

Data set for Sachin Tendulkar

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`tendulkar1` *Data set for Sachin Tendulkar*

Description

Data set for Sachin Tendulkar

Usage

```
data("tendulkar1")
```

Format

The format is: chr "tendulkar1"

Details

Data set for Sachin Tendulkar

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

tendulkar2 *Data set for Sachin Tendulkar*

Description

Data set for Sachin Tendulkar

Usage

```
data("tendulkar2")
```

Format

The format is: chr "tendulkar2"

Details

Data set for Sachin Tendulkar

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

tendulkarsp *Data set for Sachin Tendulkar*

Description

Data set for Sachin Tendulkar

Usage

```
data("tendulkarsp")
```

Format

The format is: chr "tendulkarsp"

Details

Data set for Sachin Tendulkar

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

`warne` *Data set for Shane Warne*

Description

Data set for Shane Warne

Usage

```
data("warne")
```

Format

The format is: chr "warne"

Details

Data set for Shane Warne

Source

https://www.espncricinfo.com/ci/content/stats/index.html

References

https://www.espncricinfo.com/ci/content/stats/index.html

WR *This function caculates the wicket rate vs mean number of deliveries*

Description

This function caculates the wicket rate vs mean number of deliveries

Usage

```
WR(file)
```

Arguments

file	Name of file

Details

More details can be found in my short video tutorial in Youtube https://www.youtube.com/watch?v=q9uMPFVsXsI

Value

None

Note

Maintainer: Tinniam V Ganesh <tvganesh.85@gmail.com>

Author(s)

Tinniam V Ganesh

References

https://www.espncricinfo.com/ci/content/stats/index.html
https://gigadom.in/

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (file)
{
    bowler <- clean(file)
    wktRate <- NULL
    w <- NULL
    for (i in 0:max(as.numeric(as.character(bowler$Wkts)))) {
```

```
        balls <- bowler[bowler$Wkts == i, ]$Overs * 6
        if (length(balls != 0)) {
            wktRate[i] <- lapply(list(balls), mean)
            w[i] <- i
        }
    }
    a <- sapply(wktRate, is.null)
    wktRate[a] <- NaN
    wktRate
}
```

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