# Package: cricketr (via r-universe)

August 30, 2024

Type Package
<b>Title</b> Analyze Cricketers and Cricket Teams Based on ESPN Cricinfo Statsguru
<b>Description</b> 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.
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Author Tinniam V Ganesh
Maintainer Tinniam V Ganesh < tvganesh . 85@gmail.com>
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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**

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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 <a href="mailto:tvganesh.85@gmail.com">tvganesh.85@gmail.com</a> 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")</pre>
```

ashwin 5

```
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)</pre>
```

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")
```

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# **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 7

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

8 batsman4s6s

### **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)</pre>
```

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

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

batsman6s 9

### Author(s)

Tinniam V Ganesh

#### References

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

#### See Also

batsman Scoring Rate ODTT, relative Runs Freq Perf ODTT, batsman Perf Box Hist Rate Control of the Control of

# **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)</pre>
```

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 <base>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)</pre>
```

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 <base>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)</pre>
```

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 <base>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 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)</pre>
```

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)</pre>
```

bats man Cumulative Average Runs

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

 $bats man Cumulative Strike Rate\ bowler Cumulative Avg Econ Rate\ bowler Cumulative Avg Wickets$ 

# **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)</pre>
```

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

16 batsmanDismissals

### References

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

#### See Also

 $bats man Cumulative Average Runs\ bowler Cumulative Avg Econ Rate\ bowler Cumulative Avg Wickets$ 

# **Examples**

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

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 <base>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

batsmanMeanStrikeRate 17

#### 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 <baselines.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)</pre>
```

 ${\it batsmanMeanStrikeRate} \quad {\it Calculate \ and \ plot \ the \ Mean \ Strike \ Rate \ of \ the \ batsman \ on \ total \ runs} \\ scored$ 

#### **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)</pre>
```

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

batsmanPerfBoxHist 19

#### **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, 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)</pre>
```

 $bats {\it manPerfBoxHist}$ 

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

20 batsmanPerfBoxHist

### Usage

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

### **Arguments**

file This is the <base>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,...)</pre>
## End(Not run)
```

batsmanPerfForecast 21

 $batsman PerfForecast \quad \textit{Forecast the batting performance based on past performances using}$ 

**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 <base>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

bats man Dismissals, bats man Mean Strike Rate, bats man Moving Average, bats man Perf Box Hist Manager Mana

# **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</pre>
```

# **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

 $bats man Moving Average\ bats man Runs Predict\ bats man Perf Box Hist\ bowler Contribution Won Lost$ 

# **Examples**

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 <base>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>

24 batsmanRunsLikelihood

### 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)</pre>
```

 $\begin{tabular}{ll} \textbf{batsmanRunsLikelihood} & \textit{This function uses K-Means to determine the likelihood of the batsman} \\ & \textit{to get runs} \end{tabular}$ 

### **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

batsmanRunsPredict 25

### 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

 $bats man Moving Average\ bats man Runs Predict\ batting Perf3d\ bats man Contribution Won Lost$ 

# **Examples**

```
## Not run:
# Get or use the <baselinest 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)</pre>
```

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)
```

26 batsmanRunsPredict

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

batsmanRunsRanges 27

```
#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 <base>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)</pre>
```

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 <baseling the data and the state of the

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>

battingPerf3d 29

### 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)</pre>
```

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

30 battingPerf3d

# **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)</pre>
```

# **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

 $bowler \verb|WktsFreqPercent| relative Bowling ER| relative Bowling Perf|$ 

### **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)</pre>
```

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)</pre>
```

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)</pre>
```

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

 $bats man Cumulative Average Runs\ bowler Cumulative Avg Wickets\ bats man Cumulative Strike Rate$ 

# **Examples**

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

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

36 bowlerEconRate

### 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

 $bats man Cumulative Average Runs\ bowler Cumulative Avg Econ Rate\ bats man Cumulative Strike Rate$ 

# **Examples**

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

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

bowlerHistWickets 37

### 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)</pre>
```

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

38 bowlerHistWickets

## **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)</pre>
```

bowlerMovingAverage 39

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

 $bowler \verb|WktsFreqPercent| relative Bowling ER| relative Bowling Perf|$ 

40 bowlerPerfForecast

### **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)</pre>
```

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

bowlerPerfHomeAway 41

### 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)</pre>
```

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

42 bowlerWktRateTT

#### 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

 $bowler Moving Average\ bowler Perf Forecast\ check Bowler In Form\ bowler Contribution Won Lost$ 

## **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)</pre>
```

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

bowlerWktRateTT 43

### **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)</pre>
```

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

 $bowler \verb|WktsFreqPercent| relative Bowling ER| relative Bowling Perf|$ 

bowlerWktsRunsPlot 45

### **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)</pre>
```

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

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#### 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")</pre>
 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**

f11	e Th	118 18 the $<$	batsman>.csv	file o	btained	with	an ınıtıal	getPlay	/erData()	
-----	------	----------------	--------------	--------	---------	------	------------	---------	-----------	--

Name of the batsman name Significance value alpha

checkBowlerInForm 47

#### **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)

Check whether the bowler is In-Form or Out-Of-Form by looking at
his last 10 percent scores</pre>
```

## 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

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#### 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

 $bowler {\tt Moving Average}\ bats {\tt manPerfForecast}\ bowler {\tt Contribution WonLost}$ 

### **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)</pre>
```

clean 49

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

50 cleanBowlerData

### **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)</pre>
```

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/

cleanTeamData 51

### 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)</pre>
```

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

52 devilliers

### References

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

### See Also

 $team WinLoss Status Vs Opposition\ team WinLoss Status At Grounds\ plot Time line of WinsLosses$ 

## **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)</pre>
```

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

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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/

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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

getMatchType 55

### **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

 $team \verb|WinLossStatusVsOpposition| team \verb|WinLossStatusAtGrounds| plotTimeline of \verb|WinsLosses| team \verb|WinLossStatusAtGrounds| plotTimeline of \verb|WinsLosses| team \verb|WinLossStatusAtGrounds| team \verb|WinsLosses| team \verb|WinsLossStatusAtGrounds| team \| team \$ 

56 getPlayerData

## **Examples**

```
## Not run:
#Get the team data for India for Tests
match <-getMatchType("Test")
## End(Not run)</pre>
```

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

```
\label{lem:continuous} 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

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### **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)</pre>
```

58 getPlayerDataHA

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

## 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

getPlayerDataOD 59

## **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

	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

This is the profile number of the player to get data. This can be obtained from

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"

60 getPlayerDataOD

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=".",</pre>
```

getPlayerDataOppnHA 61

```
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

```
\label{lem:continuous} 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/
```

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### See Also

teamWinLossStatusVsOpposition batsman4s6s

## **Examples**

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"

getPlayerDataTT 63

#### **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**

# Description

#### Usage

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

64 getPlayerDataTT

#### **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 pro-

file 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 oppo-

sition 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/

getTeamData 65

### 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)</pre>
```

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

 $team Win Loss Status Vs Opposition\ team Win Loss Status At Grounds\ plot Time line of Win s Losses$ 

## **Examples**

### **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

```
\label{lem:csv} 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

getTeamNumber 67

## 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

 $team Win Loss Status Vs Opposition\ team Win Loss Status At Grounds\ plot Time line of Win s Losses$ 

### **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

68 kohli

## 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

 $team \verb|WinLossStatusVsOpposition| team \verb|WinLossStatusAtGrounds| plot \verb|Timeline of WinsLosses| team \verb|WinLossStatusAtGrounds| plot \verb|Timeline of WinsLosses| team \verb|WinLossStatusAtGrounds| team \| te$ 

## **Examples**

```
## Not run:
#Get the team data for India for Tests
teamNi <-getTeamNumber(teamName="India",matchType="Test")
## End(Not run)</pre>
```

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

kohli1 69

## 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"

70 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

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 71

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

72 malinga1

## **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 73

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

74 mitchell

## 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 75

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

76 percentRuns

#### **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 77

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

#### **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

 $team \verb|WinLossStatusVsOpposition| team \verb|WinLossStatusAtGrounds| plotTimeline of \verb|WinsLosses| team \verb|WinLossStatusAtGrounds| team \| team$ 

#### **Examples**

relative Batsman Cumulative AvgRuns

Relative batsman's cumulative average runs

# Description

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

## Usage

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

## **Arguments**

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

 $relative Batsman Cumulative Strike Rate\ relative Bowler Cumulative Avg Econ Rate\ relative Bowler Cumulative Avg World Cumulative Av$ 

## **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)</pre>
```

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 <baseline contained 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

relativeBatsmanSR 81

#### **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)</pre>
```

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**

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)</pre>
```

 $\label{lem:continuous} \textit{Calculate and plot the relative Mean Strike Rate (SR) for each batsman} \\ \textit{for ODI or Twenty20 batsmen}$ 

## 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 <baseline contained 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)</pre>
```

relative Bowler Cumulative Avg Econ Rate

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

 $relative Batsman Cumulative AvgRuns\ relative Bowler Cumulative AvgWickets\ relative Batsman Cumulative Strike Relative Batsman Cumulative AvgRuns\ relative Bowler Cumulative AvgWickets\ relative Batsman Cumulative AvgRuns\ relative Bowler Cumulative AvgWickets\ relative Batsman Cumulative AvgRuns\ relative Bowler Cumulative AvgWickets\ relative Batsman Cumulative Batsman C$ 

## **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)</pre>
```

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 relativeBatsmanCumulativeStrike

#### **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)</pre>
```

86 relativeBowlingER

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

 $bowler \verb|WktsFreqPercent| relative Bowling \verb|Perf| bowler \verb|HistWickets| \\$ 

## **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)</pre>
```

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>

88 relativeBowlingPerf

#### Author(s)

Tinniam V Ganesh

#### References

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

#### See Also

 $relative Batsman SRODTT \ relative Runs Freq PerfODTT$ 

## **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)</pre>
```

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

relativeBowlingPerf 89

#### **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)</pre>
```

relativeRunsFreqPerf Calculate and compute the relative run frequencies of a list of crick-

## **Description**

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

## Usage

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

# **Arguments**

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

bats man Dismissals, bats man Moving Average, bats man Perf Box Hist

## **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",</pre>
 # 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")</pre>
 ganguly <- system.file("data", "ganguly.csv", package = "cricketr")</pre>
 batsmen <- list(tendulkar,ganguly)</pre>
 names <- list("Tendulkar","Ganguly")</pre>
 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 <base>batsman>.csv files obtained with an initial getPlayerDataOD()

or getPlayerTT()

A list of batsmen names who need to be compared names

## **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>

92 relativeWktRateTT

#### Author(s)

Tinniam V Ganesh

#### References

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

#### See Also

bats man Scoring Rate ODTT, relative Runs Freq Perf ODTT, bats man Perf Box Hist Rate of the Storing Rat

#### **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)</pre>
```

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)
```

relativeWktRateTT 93

#### **Arguments**

frames This is a list of Twenty20 <bowler>.csv files obtained with an initial getPlayer-

DataTT()

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

 $bowler \verb|WktsFreq| Percent relative Bowling Perf bowler \verb|HistWickets| bowler \verb|WktRateTT| and the property of the property$ 

## **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)</pre>
```

94 sehwag1

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

sehwag2 95

## 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

96 steyn

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

# **Arguments**

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 gener-

ated

#### 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

 $team Win Loss Status Vs Opposition\ team Win Loss Status At Grounds\ plot Time line of Win s Losses$ 

## **Examples**

teamWinLossStatusVsOpposition

ated

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

```
\label{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 gener-

tendulkar 99

## 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

 $team Win Loss Status Vs Opposition\ team Win Loss Status At Grounds\ plot Time line of Win s Losses$ 

## **Examples**

tendulkar

Data set for Sachin Tendulkar

# Description

Data set for Sachin Tendulkar

## Usage

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

#### **Format**

The format is: chr "tendulkar"

100 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

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

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

102 warne

## 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 103

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)))) {</pre>
```

104 WR

```
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
}</pre>
```

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