

# Package ‘runR’

March 10, 2018

**Title** Load,

**Version** 0.0.0.9000

**Description** The runR package allows you to import your runs, ski trips, bike rides and other movements and analyze, visualize and optimize your efforts.

**Depends** R (>= 3.4.1),  
ggplot2,  
rgdal,  
sp

**License** MIT

**Encoding** UTF-8

**URL** <https://www.schliebs.github.io/runR>

**BugReports** <https://www.github.com/schliebs/runR>

**LazyData** true

**Imports** plyr,  
tidyverse,  
hrbrthemes,  
leaflet,  
lubridate,  
magrittr,  
rgdal,  
sp,  
stringr

**RoxygenNote** 6.0.1

**Collate** 'create\_manual.R'  
'importFrom.R'  
'data\_import.R'  
'summarize\_run.R'  
'weather\_data.R'  
'elevPlot.R'  
'runPlot.R'  
'data.R'

**Suggests** knitr,  
rmarkdown

**VignetteBuilder** knitr

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alpine_skiing	<i>Example Alpine Skiing</i>
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**Description**

An alpine skiing afternoon in St. Moritz, Switzerland

**Usage**

alpine\_skiing

**Format**

A data frame with 4707 rows and 7 variables:

- pointID** ID for each track point
- ele** elevation above sealevel in meters
- time** time (in POSIXct-format)
- distance** distance since the last trackpoint
- cumulative.distance** cumulative distance since the beginnning
- x** x-coordinate (longitude (East-West-Dimension))
- y** y-coordinate (longitude (North-South-Dimension))

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cc_skiing	<i>Example 15k cross country skiing</i>
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**Description**

A 15k cross country skiing session in St. Moritz, Switzerland

**Usage**

cc\_skiing

**Format**

A data frame with 1559 rows and 7 variables:

**pointID** ID for each track point  
**ele** elevation above sealevel in meters  
**time** time (in POSIXct-format)  
**distance** distance since the last trackpoint  
**cumulative.distance** cumulative distance since the beginnning  
**x** x-coordinate (longitude (East-West-Dimension))  
**y** y-coordinate (longitude (North-South-Dimension))

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fn\_running

*Example 5k run.*


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**Description**

A 5k run I did in my current university town Friedrichshafen, Germany.

**Usage**

```
fn_running
```

**Format**

A data frame with 500 rows and 7 variables:

**pointID** ID for each track point  
**ele** elevation above sealevel in meters  
**time** time (in POSIXct-format)  
**distance** distance since the last trackpoint  
**cumulative.distance** cumulative distance since the beginnning  
**x** x-coordinate (longitude (East-West-Dimension))  
**y** y-coordinate (longitude (North-South-Dimension))

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import_logfolder	<i>Import log-file folder</i>
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**Description**

Import a folder of log files to a list.

**Usage**

```
import_logfolder(folderpath = "data", type = "gpx", track_progress = TRUE)
```

**Arguments**

folderpath	path of the folder containing the files.
type	Type of log-files: currently, only gpx is supported.
track_progress	T/F if data loading progress tracking is wished for

**Value**

A list containing a data frame for each logfile.

**Remark**

So far, only the gpx-format from Sportstracker is implemented.

**Examples**

```
## Not run:
runlist <- import_logfolder(folderpath = 'data', type = 'gpx')
head(test[[1]])

## End(Not run)
```

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import_run	<i>Import Run</i>
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**Description**

Import Run (Standard: GPX) to Data Frame

**Usage**

```
import_run(file = "data/2017-11-06.gpx", type = "gpx",
  track_progress = TRUE)
```

**Arguments**

file	path and file name.
type	Type of log-file: currently, only gpx is supported.
track_progress	T/F if data loading progress tracking is wished for

**Value**

A data frame data about XXXXXXXX.

**Remark**

So far, only the gpx-format from Sportstracker is implemented.

**Examples**

```
## Not run:  
run <- import_run(file = 'data/2017-11-06.gpx', type = 'gpx')  
head(run)  
  
## End(Not run)
```

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run2elev

*RunElecation*

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**Description**

Visualize ...

**Usage**

```
run2elev(data = alpine_skiing, mapping, smooth = 1)
```

**Arguments**

run                      a run data frame returned by import\_run.

**Value**

A ggplot object.

**Examples**

```
data("alpine_skiing")  
run2elev(data = alpine_skiing,  
          smooth = 0.3)
```

run2map

*Run2Map***Description**

Visualize Run2Map

**Usage**

```
run2map(run_track = import_run(file = "data/2017-11-06.gpx", layer =
  "tracks"))
```

**Arguments**

**run** a run data frame returned by `import_run`.

**Value**

A ggplot object.

**Warning**

Do not operate heavy machinery within 8 hours of using this function.

**Examples**

```
run <- import_run(file = 'data/2017-11-06.gpx', type = 'gpx')
head(run)
```

stuggi\_running

*Example 10k run***Description**

A 10k run I did in my home town Stuttgart, Germany.

**Usage**

```
stuggi_running
```

**Format**

A data frame with 1060 rows and 7 variables:

**pointID** ID for each track point

**ele** elevation above sealevel in meters

**time** time (in POSIXct-format)

**distance** distance since the last trackpoint

**cumulative.distance** cumulative distance since the beginnning

**x** x-coordinate (longitude (East-West-Dimension))

**y** y-coordinate (longitude (North-South-Dimension))

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`summariseRun`*SummarizeRun*

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**Description**

Get summary statistics for run

**Usage**

```
summariseRun(run = stuggi_running)
```

**Arguments**

`run` a run data frame returned by `import_run`.

**Value**

A list with summary statistics.

**total\_duration** Total duration as Formal `Duration` class

**total\_duration\_seconds** Total duration in seconds

**total\_duration\_hours** Total duration in hours

**average\_speed\_kph** Average speed in kilometers per hour

**total\_distance** The total distance in kilometers

**Examples**

```
data(stuggi_running)
summariseRun(run = stuggi_running)
```

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