# Package 'NDS'

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Type	pe Package					
Title	<b>tle</b> An R package for manipulating Nat (NDS).	turalistic Driving	g Datasets			
Versi	ersion 0.1.0					
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Desci	escription An R package for manipulat	ing Naturalistic	Driving Da	tasets (NDS)	).	
Licer	cense MIT License					
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## Description

NDS provides high-performance data separation, aggregation, reorganize, and fuzzy joining toolkits to handle high-resolution naturalistic driving datasets.

2 segment

#### **Details**

- Aggregate large real-time ping data to trips or shifts.
- Separate trips or shifts to equal-length time intervals.
- Merge Safety Critical-Events with trips, shifts, and time intervals.

To learn more about NDS, you can start with the vignettes: 'browseVignettes(package = "NDS")'

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agg\_trip

aggregate NDS ping data to shift or trips new datasets.

#### Description

This function produce new datasets with starting and ending variables, which may include date and time, latitude, longitude.

#### Usage

```
agg_trip(data, trip_id)
```

#### **Arguments**

data The data to be passed on.

trip\_id The ID column generated by the 'segment()' function.

threhold The threshold you want to separate the ping (in minutes). It is recommended to

use 30 minutes to separate into trips, and 8\*60 minutes to separate into shifts.

time\_diff The time difference between the nearest two pings.

### **Examples**

```
`agg_trip(data = dat, trip_id = id)`
```

segment

'segment' NDS ping data by adding a trip or shift ID column.

#### Description

This function segments NDS ping data to shifts and trips

#### Usage

```
segment(speed, threshold, time_diff)
```

segment 3

#### Arguments

speed Real time speed of the ping

time\_diff The time difference between the nearest two pings.

threhold The threshold you want to separate the ping (in minutes). It is recommended to

use 30 minutes to separate into trips, and 8\*60 minutes to separate into shifts.

### **Examples**

`segment(dat\$speed, 30, d\$time\_diff)`

## **Index**

```
*Topic aggregate

agg_trip, 2

*Topic ping

segment, 2

*Topic shift

segment, 2

*Topic threshold

segment, 2

*Topic trip

segment, 2

Agg_trip, 2

NDS (NDS-package), 1

NDS-package, 1

segment, 2
```