Introduction to lifelogr's visualization functions

2017-05-12

```
library(lifelogr)
```

There are 3 functions which allow for a series of plots with just one function call: `plot_sleep_all`, `plot_daily_all`, and `plot_intraday_all`. Each acts like the `plot.lm` function, where users must click "enter" to see the next plot.

Each plot within the generic plot function can also be called individually.
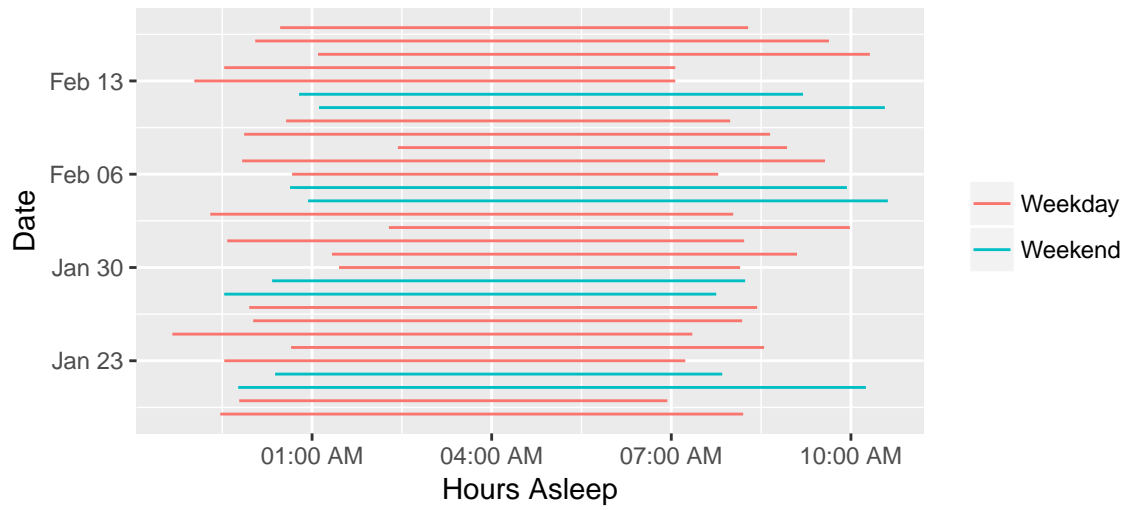
Sleep Plots

Here are the sleep plots for EX:
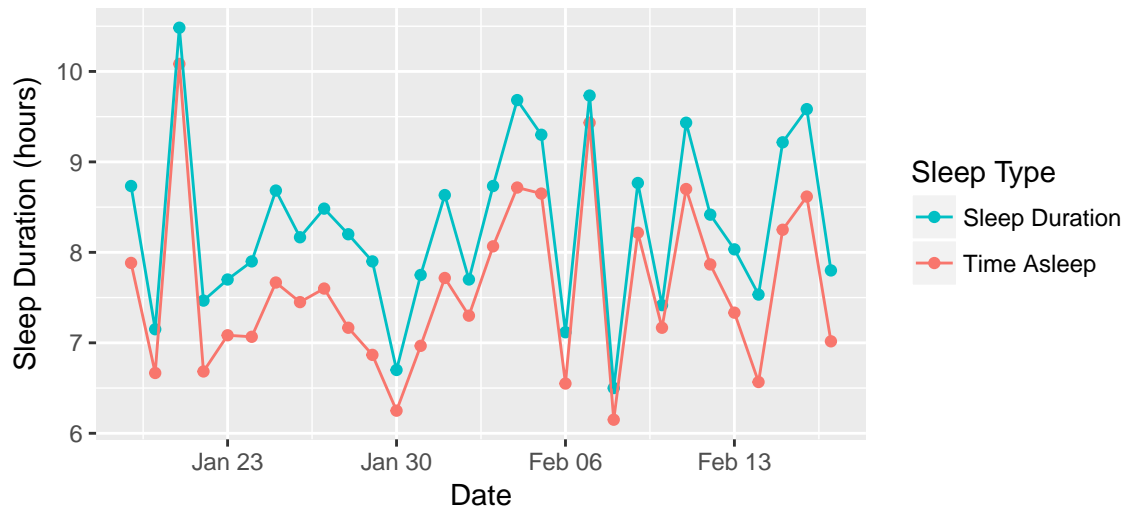
```
plot_sleep_all(EX)
```

Hours of Sleep by Day of the Week
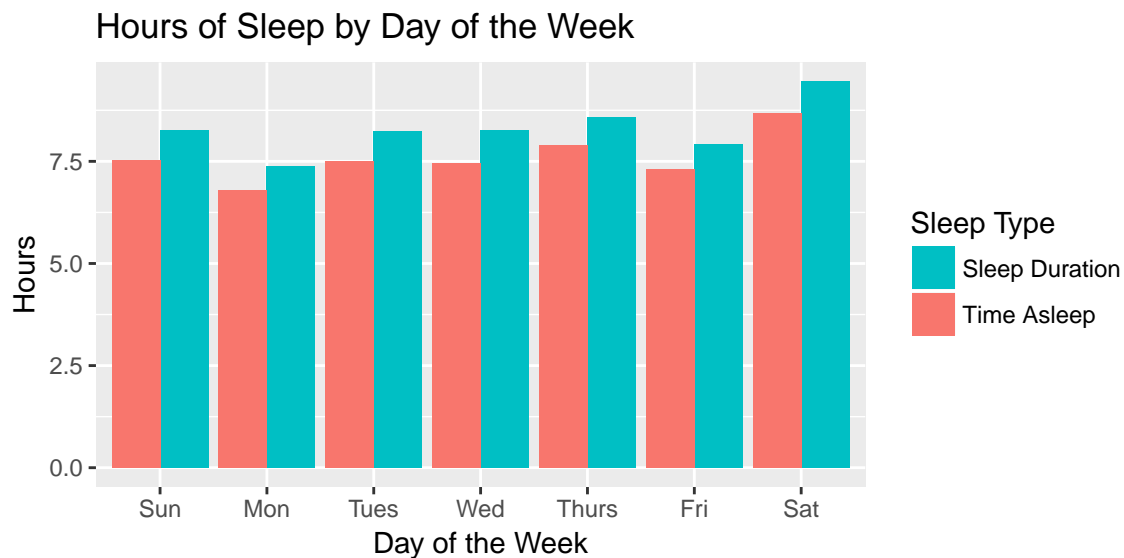

```
#> Press [enter] to continue
```

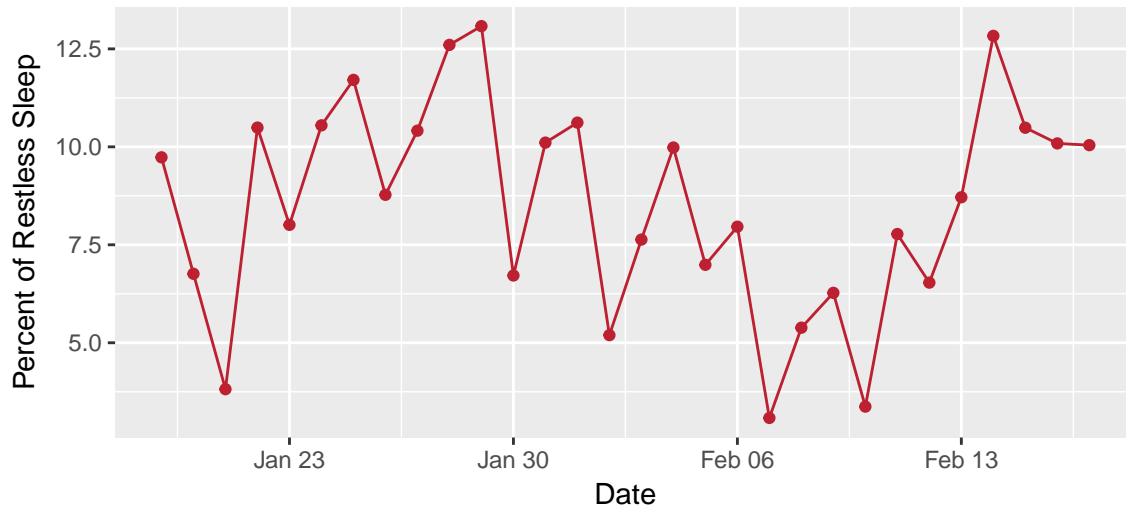## Sleep Start and End Times


```
#> Press [enter] to continue
```
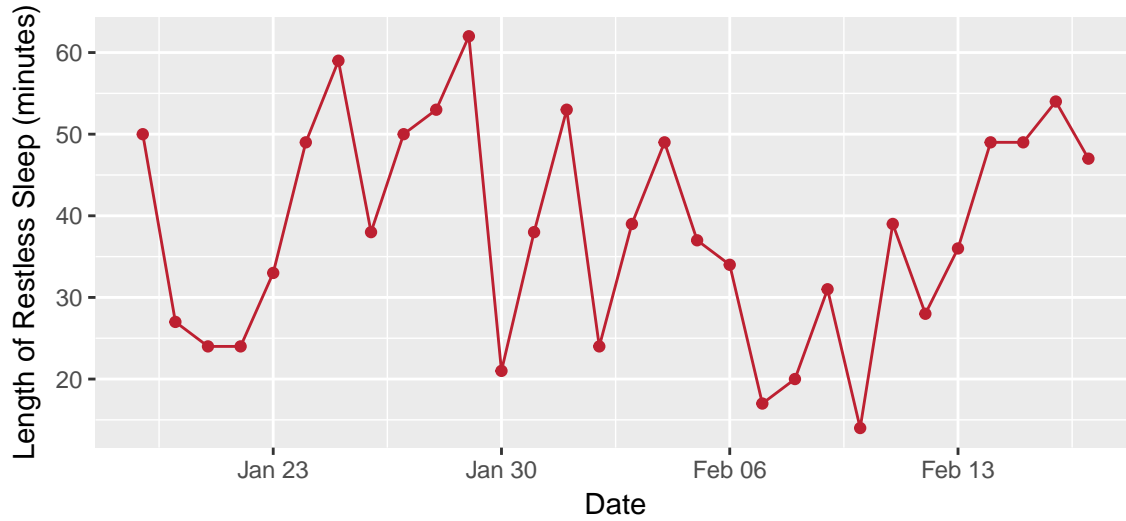
Sleep Over Time


```
#> Press [enter] to continue
```
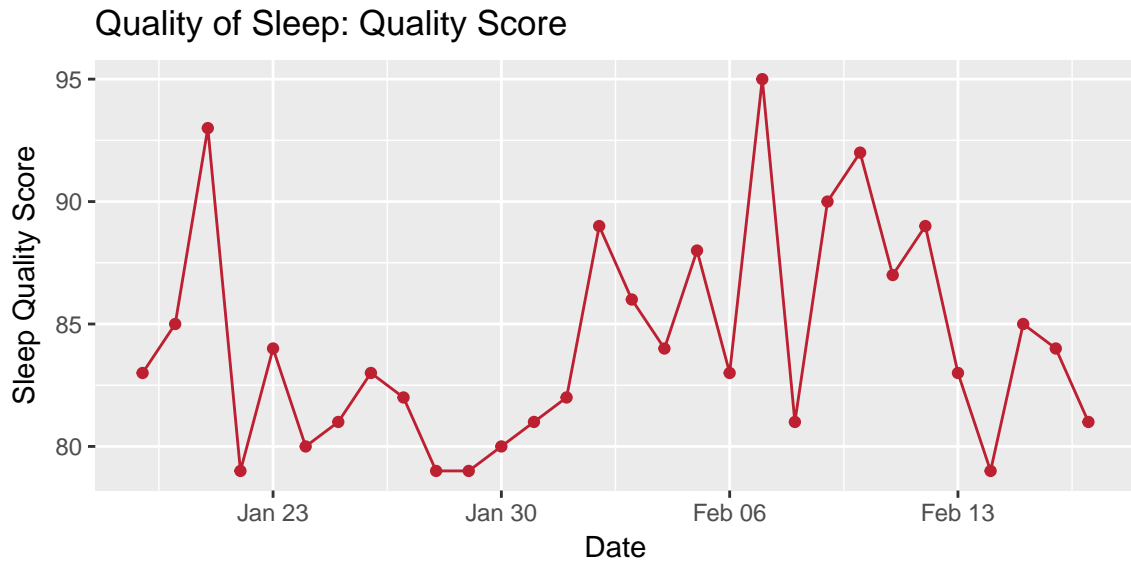
Quality of Sleep: Restlessness (%)

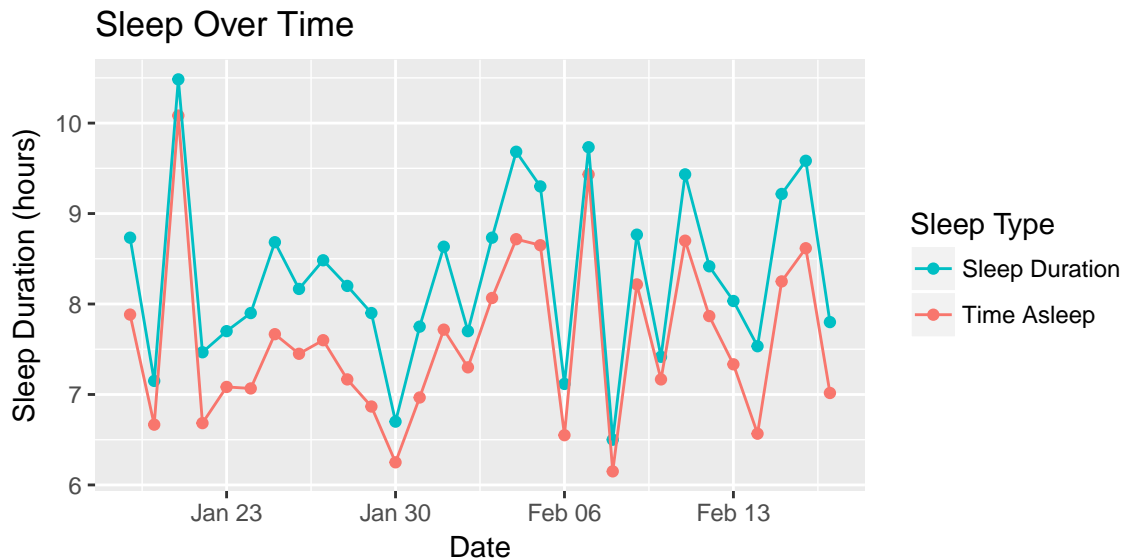#> Press [enter] to continue

Quality of Sleep: Restlessness (mins)

#> Press [enter] to continue

Quality of Sleep: Quality Score

Users can also call each function individually using `plot_sleep(person, plot_type)`. For example:

```
plot_sleep(EX, "by_datetime")
```
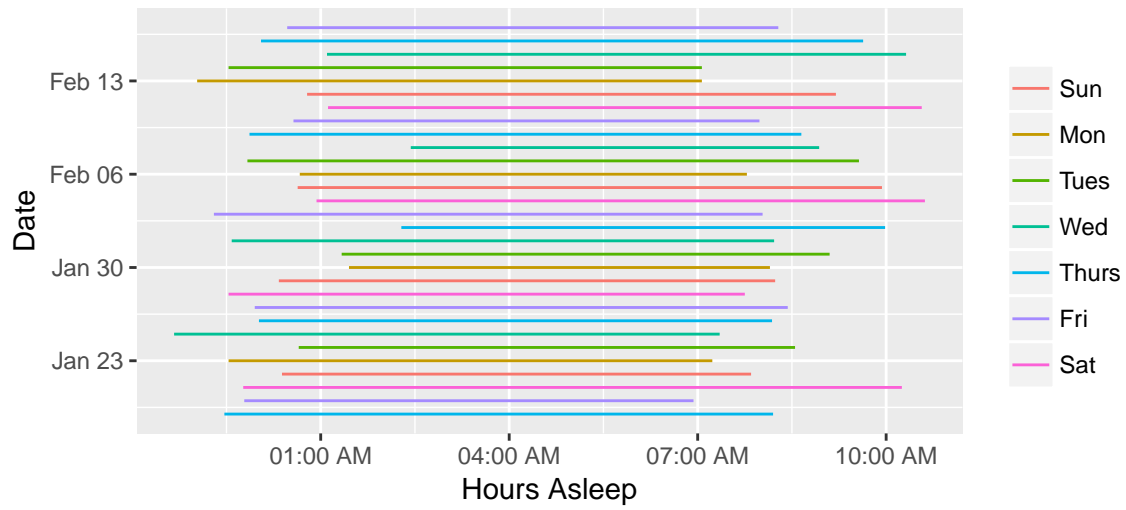

Sleep Over Time

Some plots have other options.

For example, `plot_sleep_start_end` has a `color_var = "day_of_week"` argument to color the lines by day of the week instead of weekend/weekday.

```
plot_sleep_start_end(EX, "day_of_week")
```
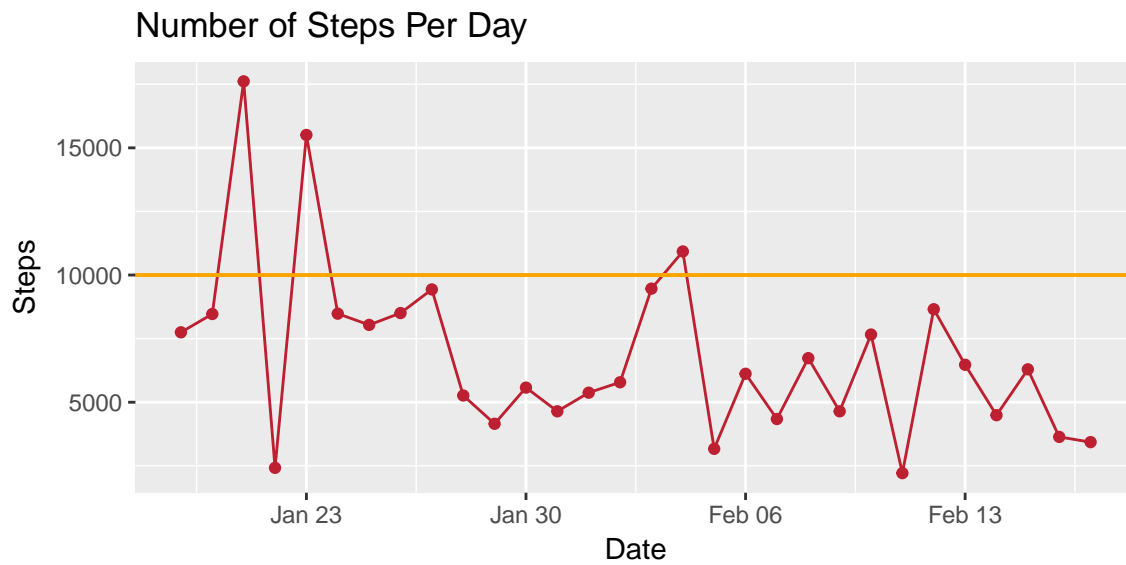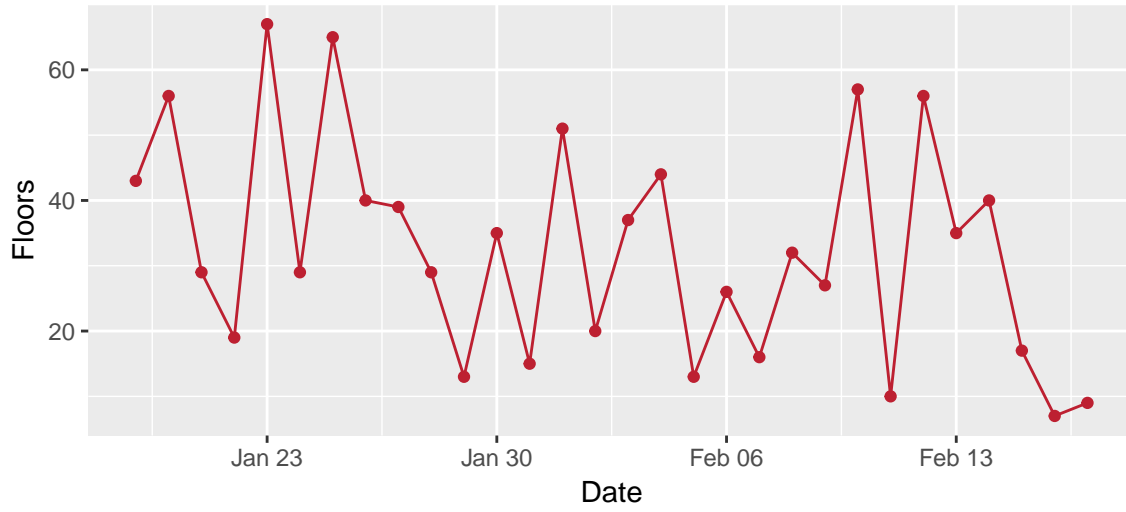
Sleep Start and End Times

Daily Total Plots

Here are the plots for the daily totals for EX:
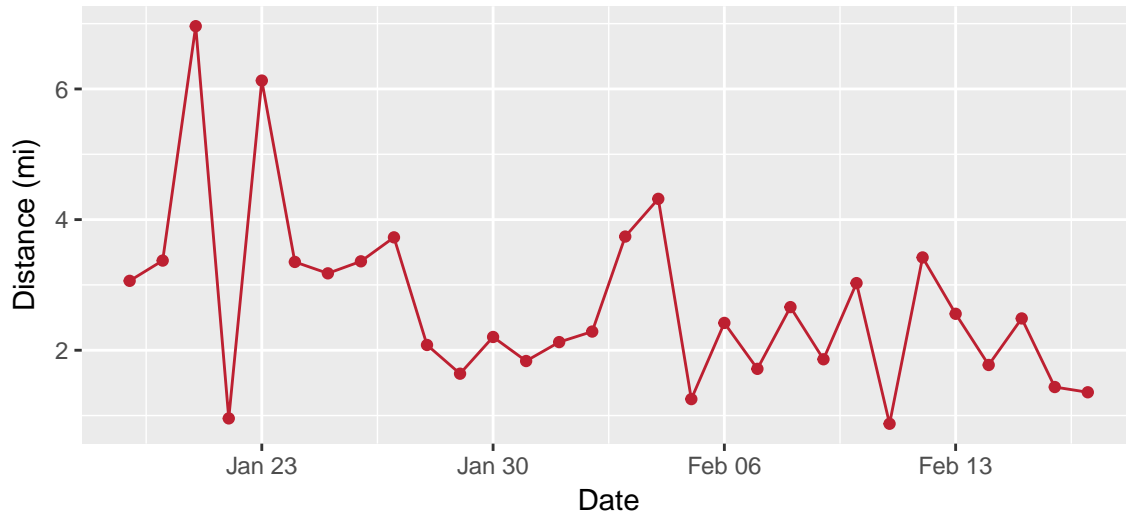
```
plot_daily_all(EX)
```

Number of Steps Per Day


```
#> Press [enter] to continue
```

Number of Floors Per Day

#> Press [enter] to continue

Distance

#> Press [enter] to continue

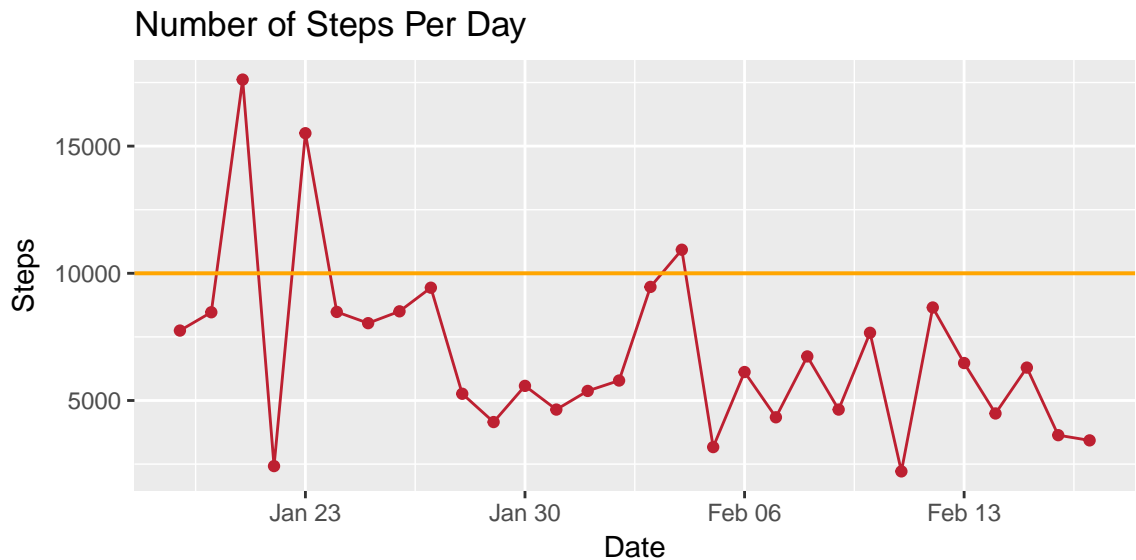## Calories Burned

Time Spent 'Very Active' by Day

Resting Heart Rate
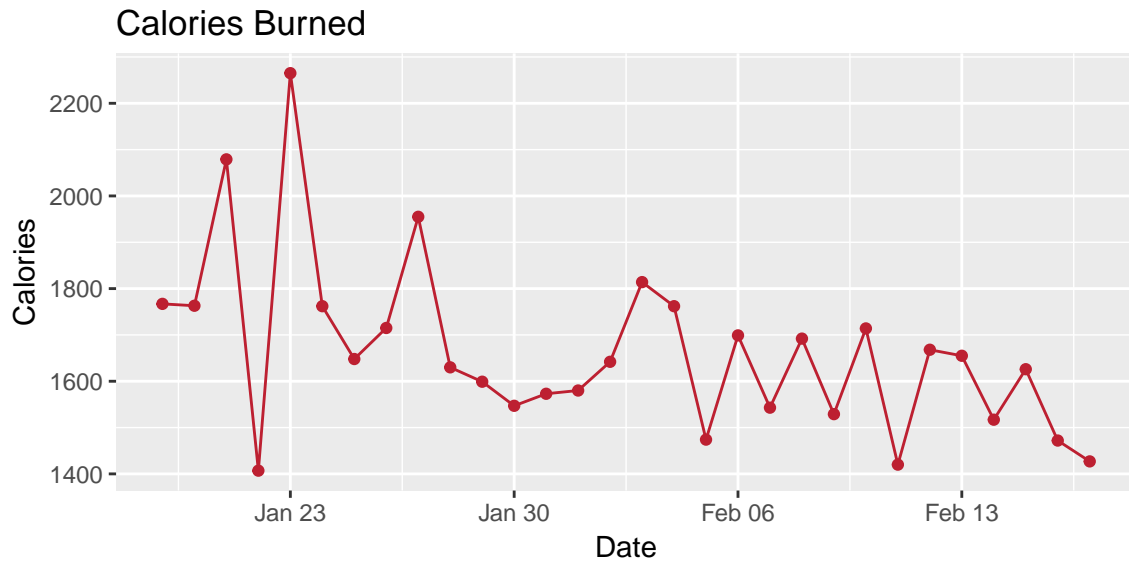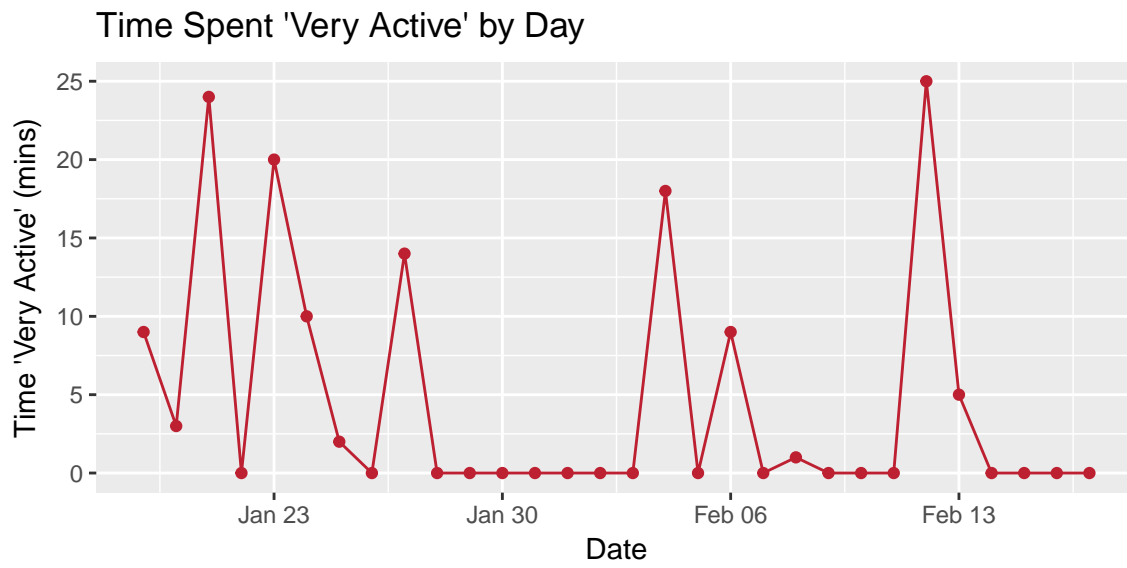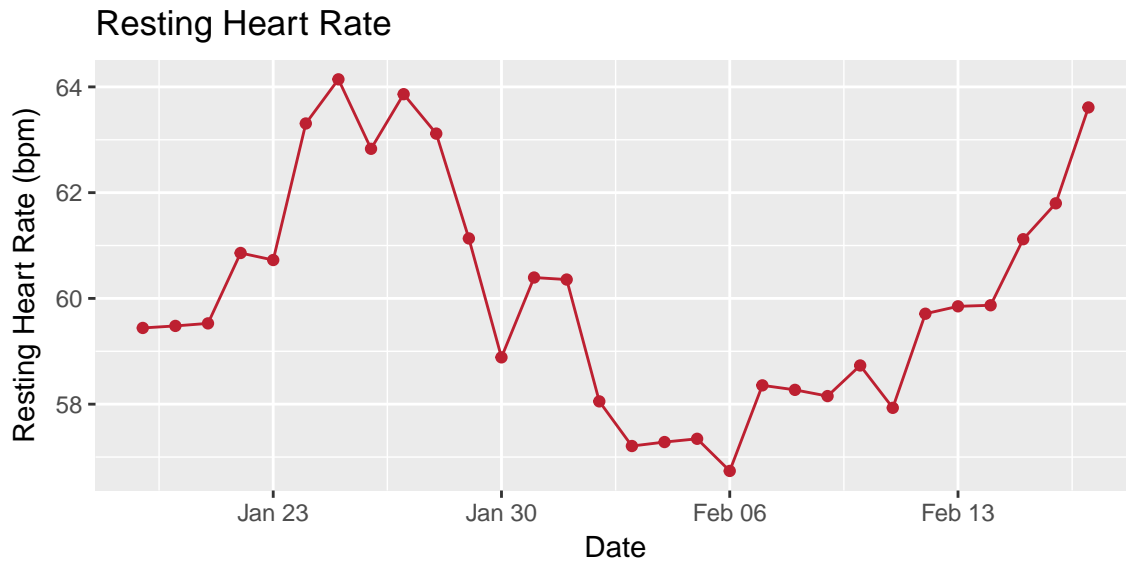

```
#> Press [enter] to continue
```

Users can also call each function individually using:

```
plot_daily(EX, "steps")
```
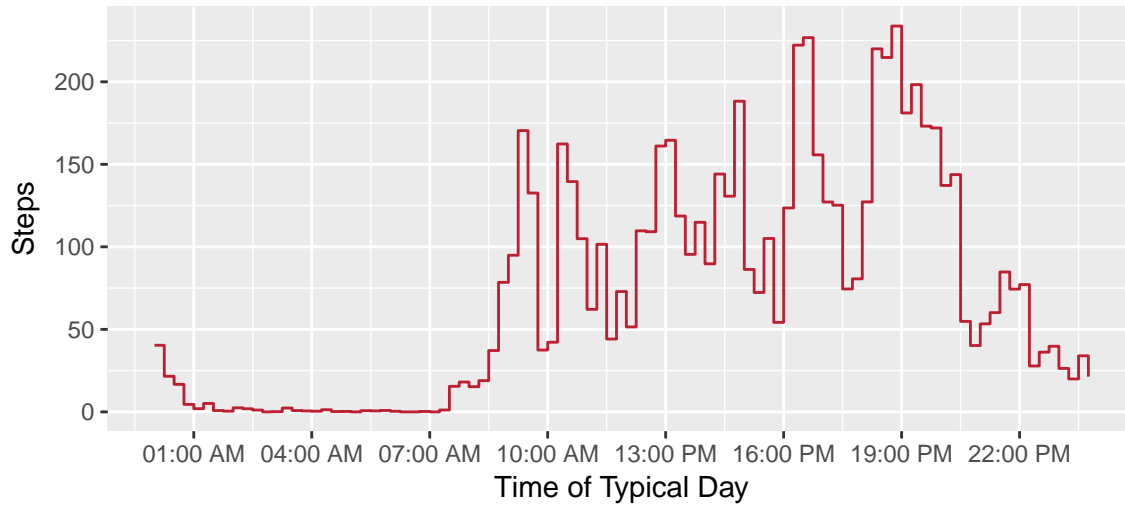
Number of Steps Per Day

Within Each day Plots

Here are the plots for intraday data (multiple data points collected within each day). The default is to aggregate the data by time intervals within each day so that data for a "typical day" is displayed.
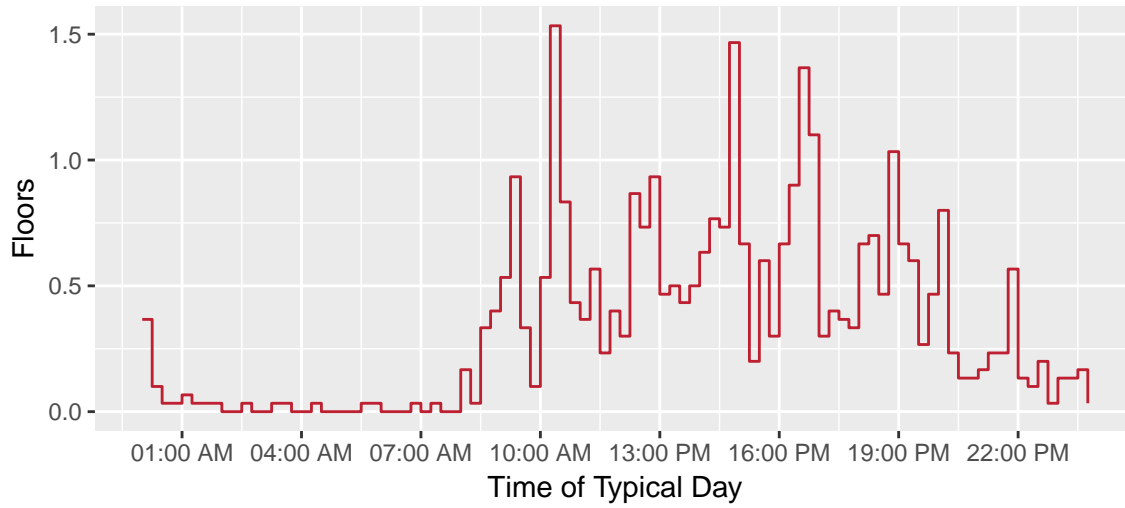
```
plot_intraday_all(EX)
```
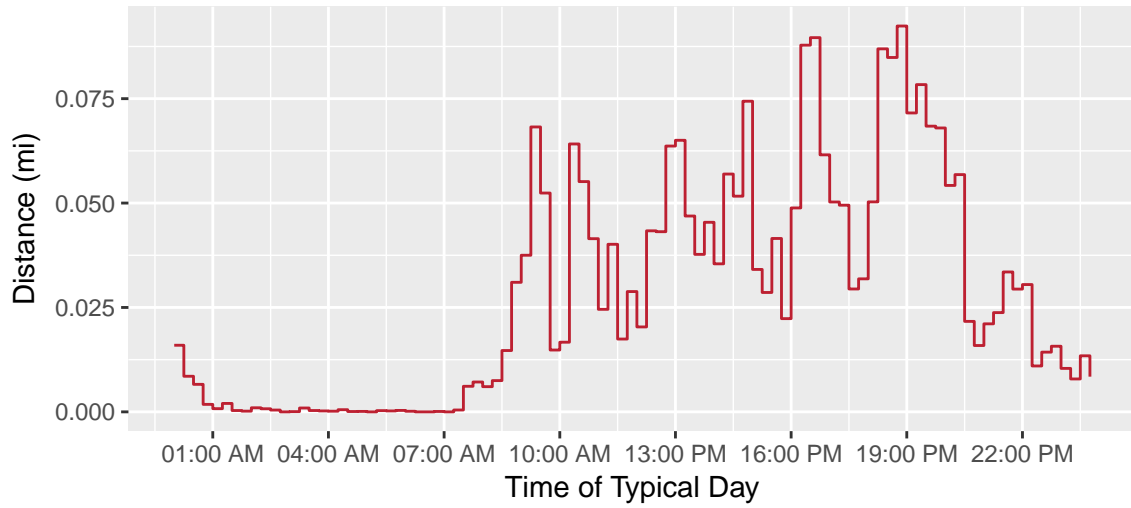
Average Steps Per 15 Min Interval vs Time of Day

#> Press [enter] to continue

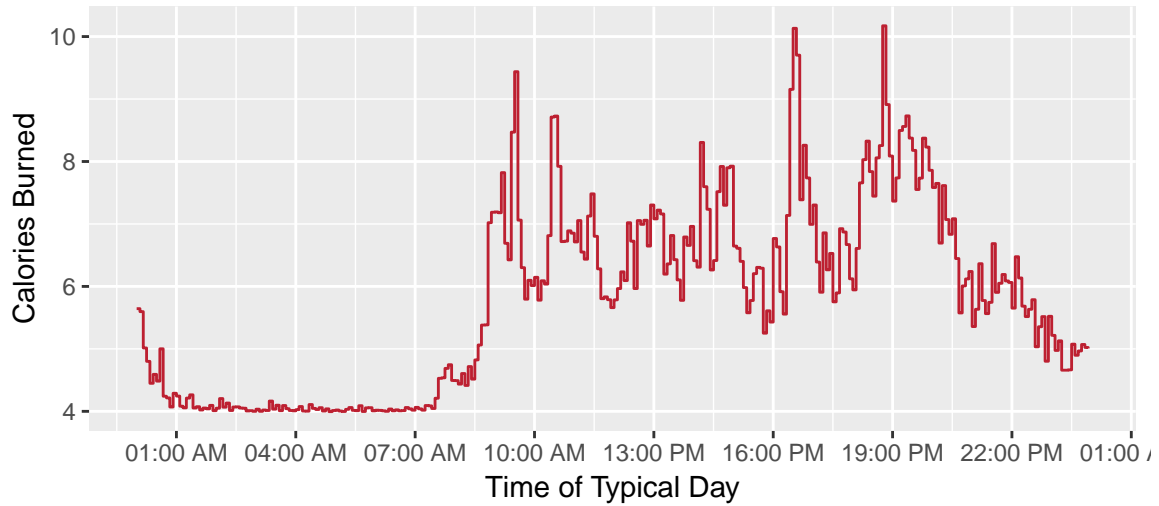## Average Floors Per 15 Min Interval vs Time of Day

#> Press [enter] to continue

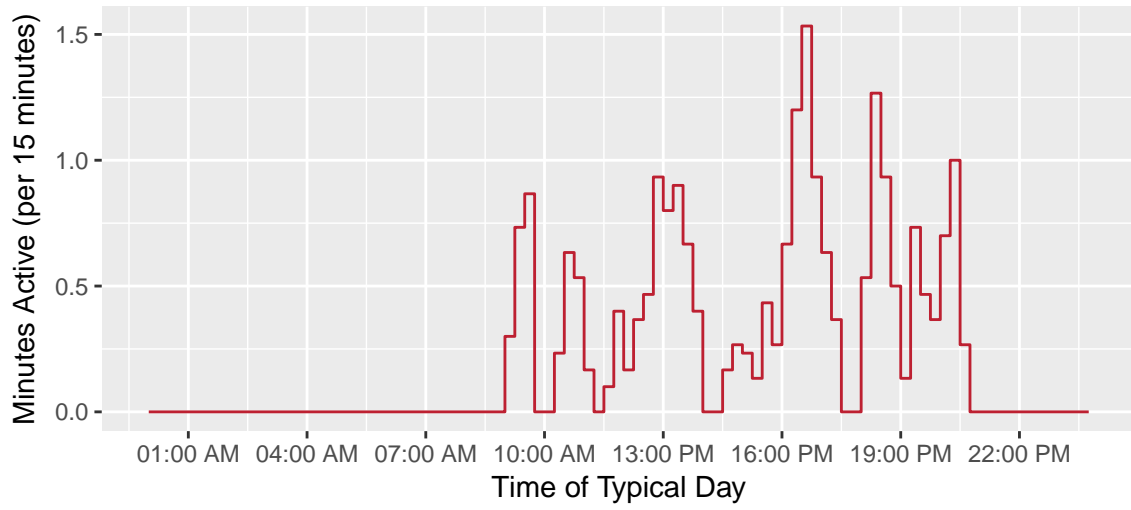## Average Distance Per 15 Min Interval vs Time of Day

#> Press [enter] to continue

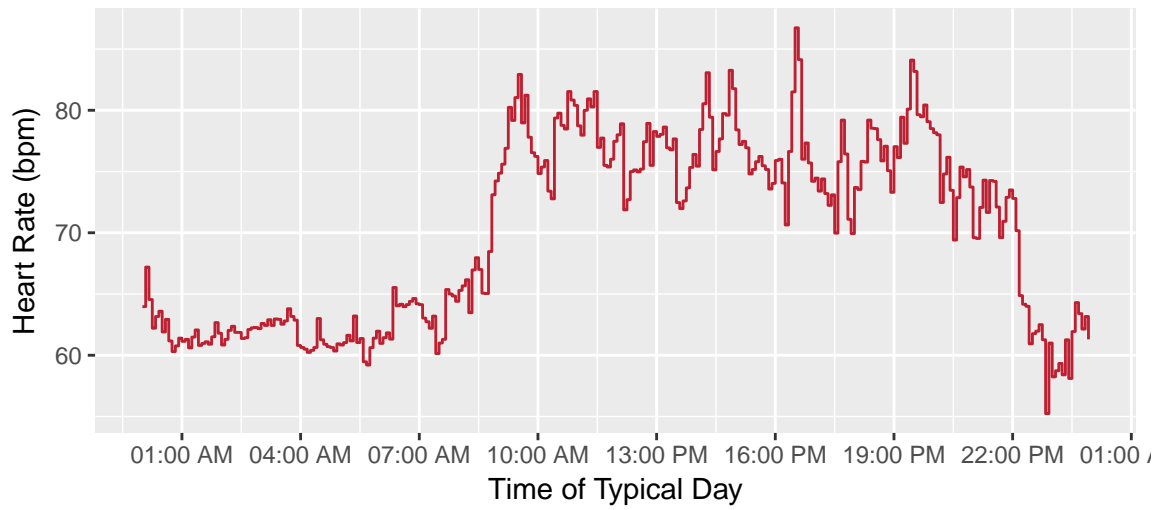## Average Calories Burned Per 15 Min Interval vs Time of Day

#> Press [enter] to continue

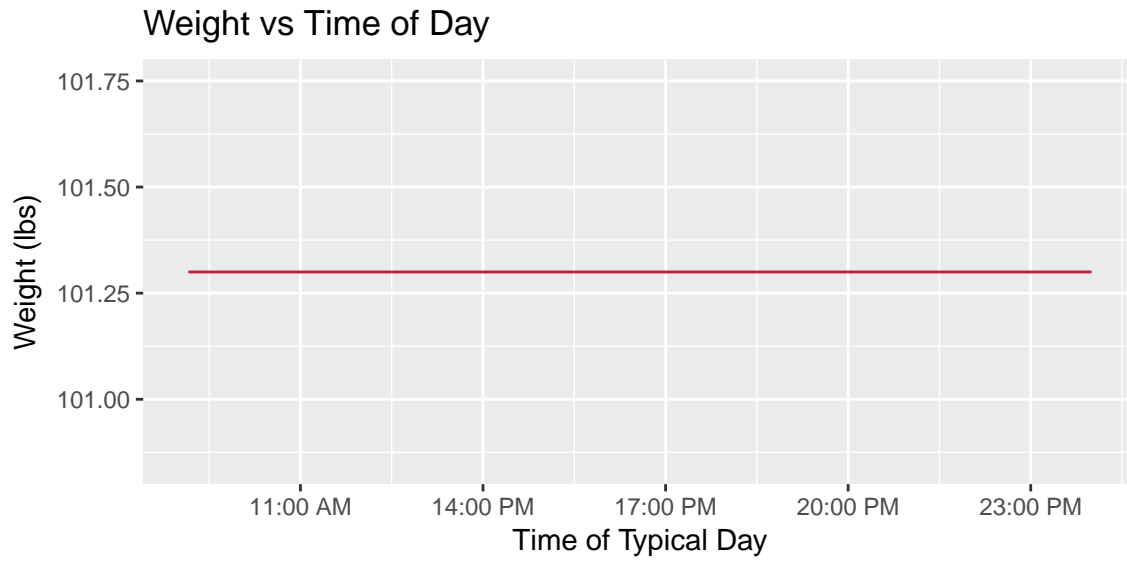## Average Active Minutes Per 15 Min Interval vs Time of Day

Average Heart Rate Per 5 Min Interval vs Time of Day

#> Press [enter] to continue
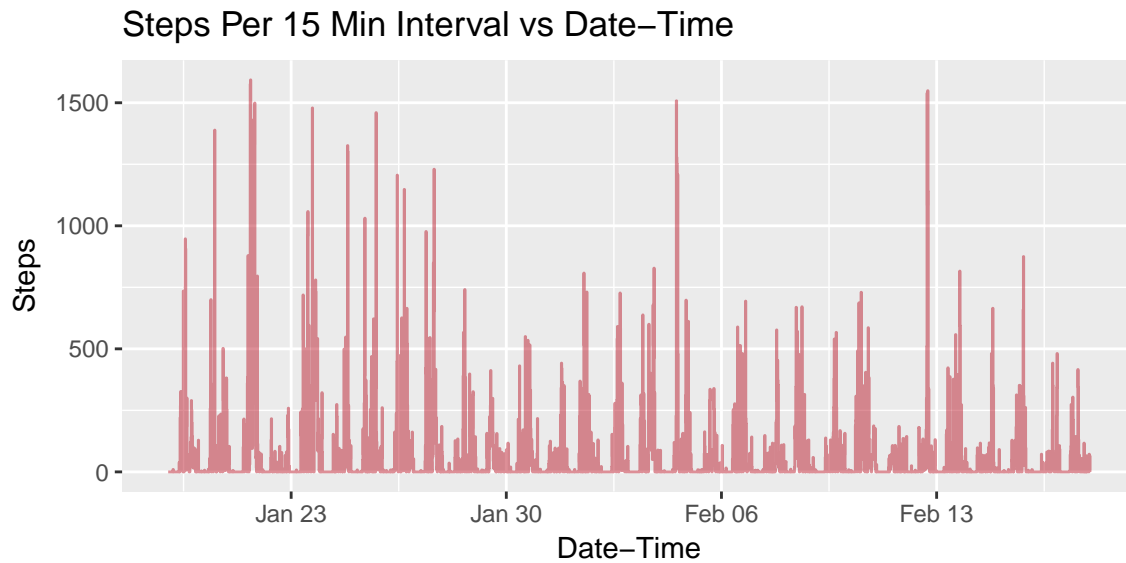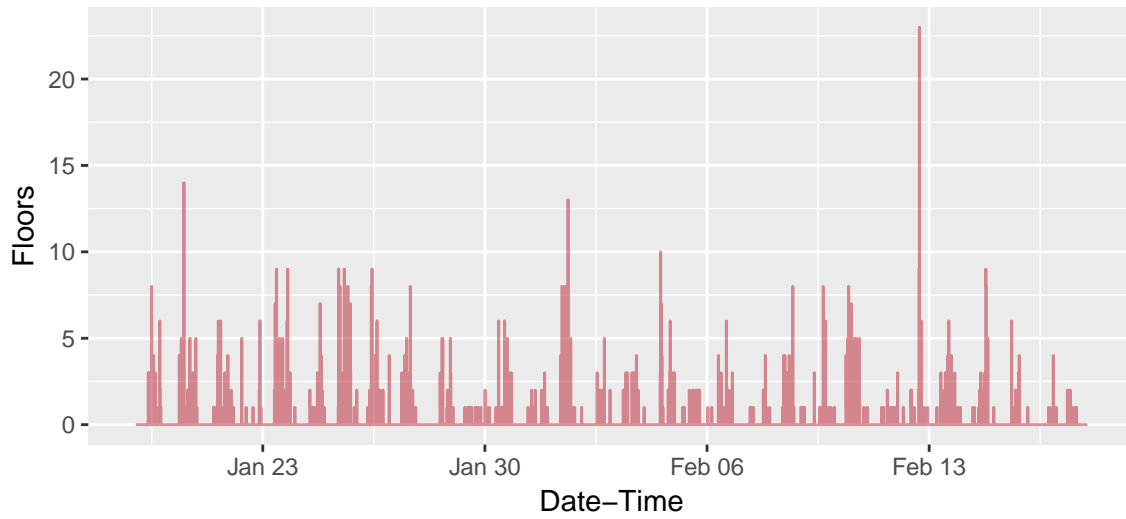
Weight vs Time of Day

However, it is also possible to specify that the plots use the raw data and plot over all date-times.
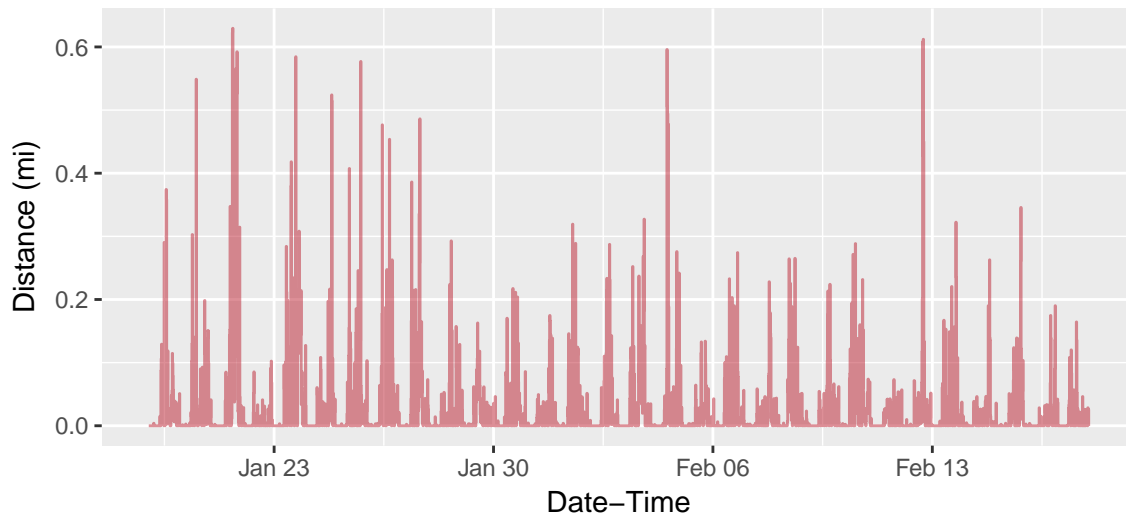
```
plot_intraday_all(EX, FALSE)
```

Steps Per 15 Min Interval vs Date–Time

Floors Per 15 Min Interval vs Date−Time

Distance Per 15 Min Interval vs Date−Time
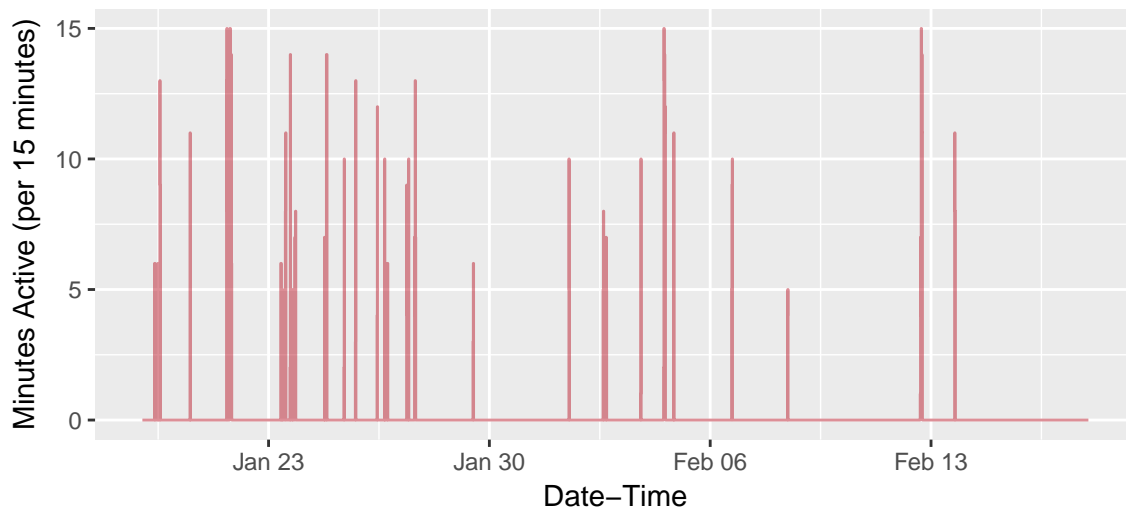
Calories Burned Per 15 Min Interval vs Date−Time
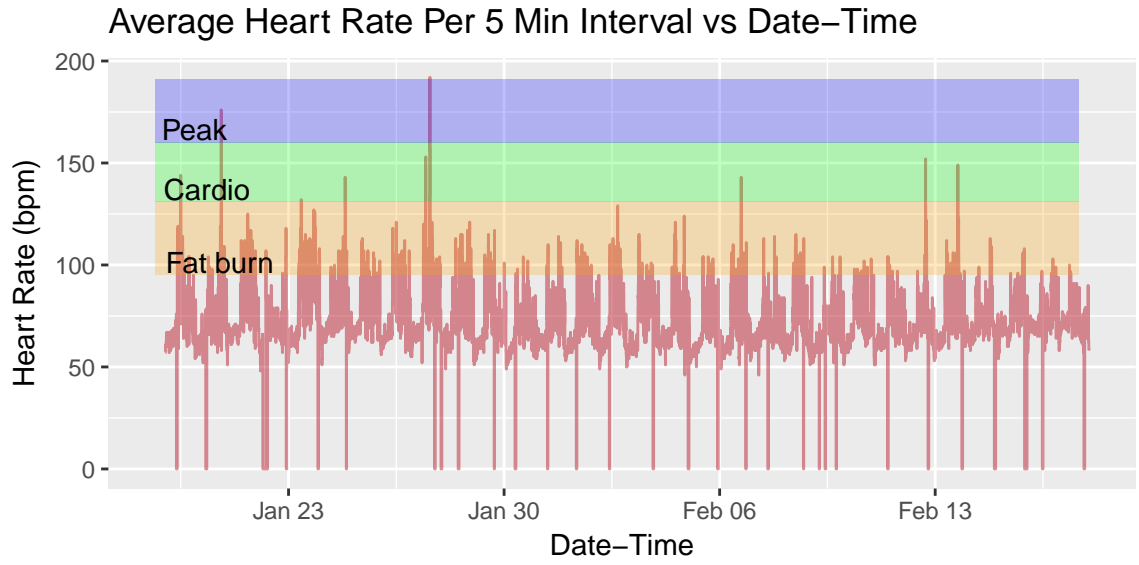

#> Press [enter] to continue

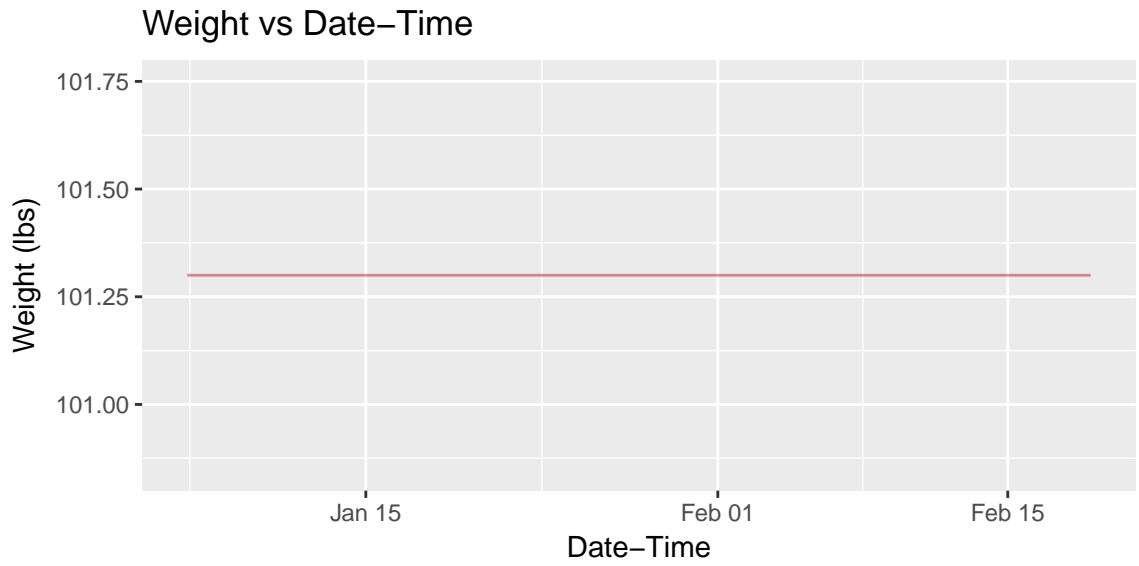## Average Active Minutes Per 15 Min Interval vs Date−Time

#> Press [enter] to continue

Average Heart Rate Per 5 Min Interval vs Date–Time

Heart Rate (bpm)

Peak

Cardio

Fat burn

200

150

100

50

0

Jan 23   Jan 30   Feb 06   Feb 13

Date–Time

#> Press [enter] to continue

Weight vs Date–Time

Weight (lbs)

101.75

101.50

101.25

101.00

Jan 15   Feb 01   Feb 15

Date–Time

#> Press [enter] to continue