

Introduction to lifelogr's visualization functions

2017-03-21

```
library(lifelogr)
```

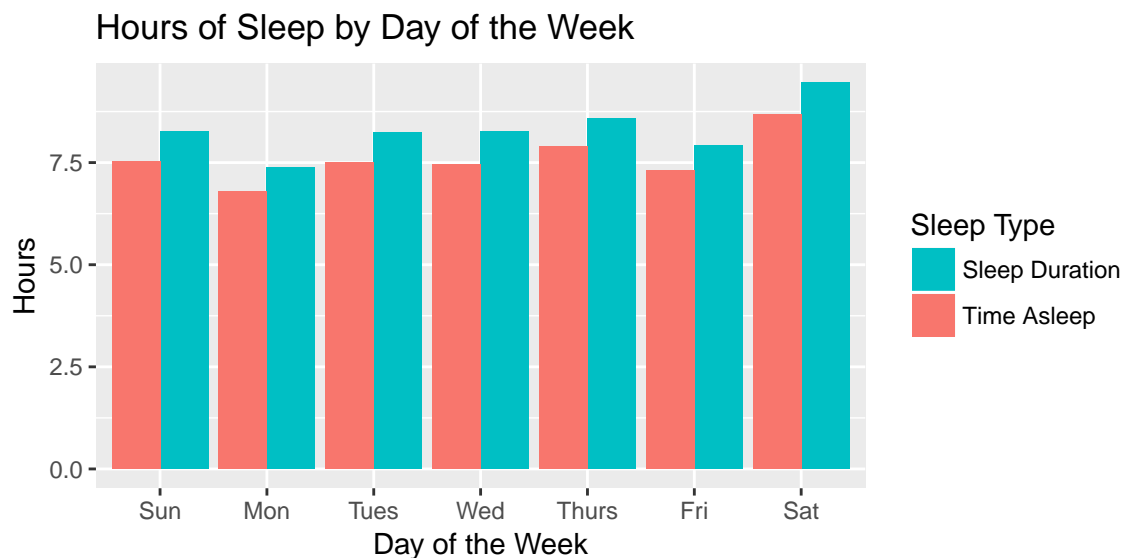
There are 3 functions which allow for a series of plots with just one function call: `plot_sleep_all`, `plot_daily_all`, and `plot_intraday_all`. Each acts like the `plot.lm` function, where users must click “enter” to see the next plot.

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

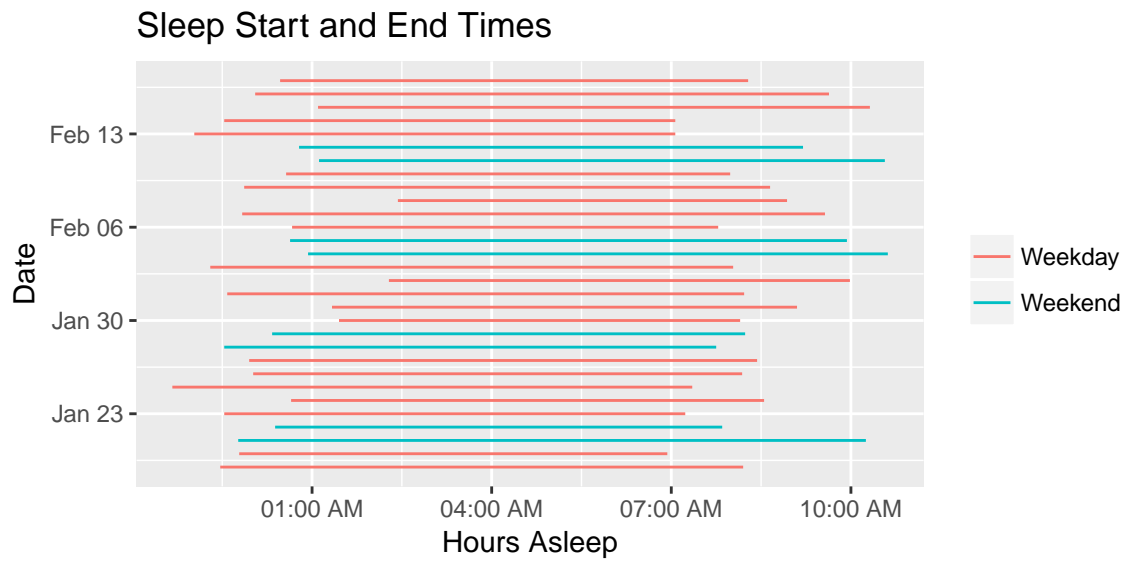
Sleep Plots

Here are the sleep plots for EX:

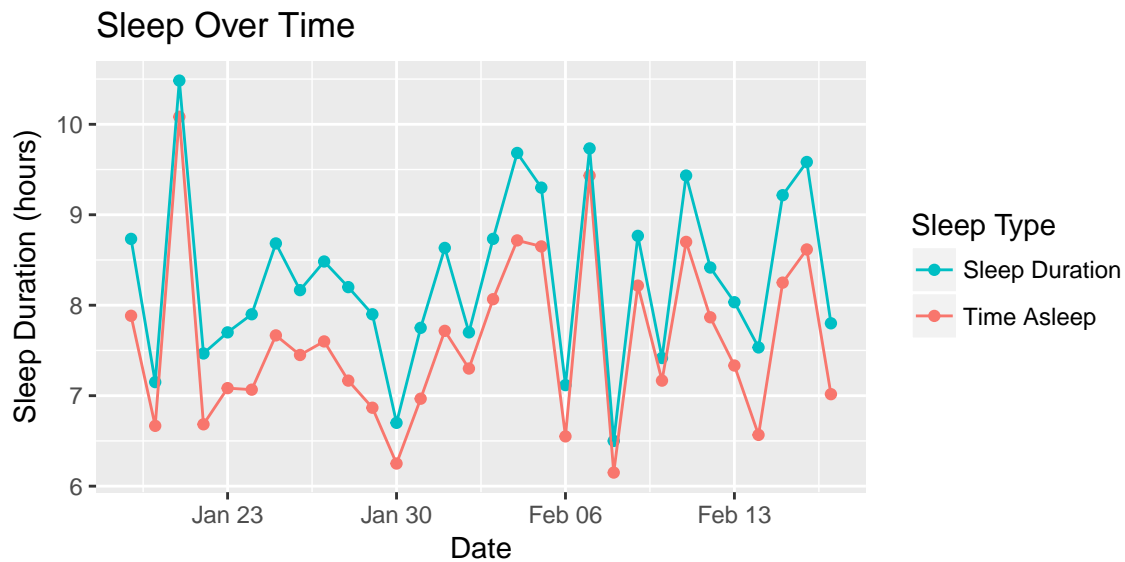
```
plot_sleep_all(EX)
```



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

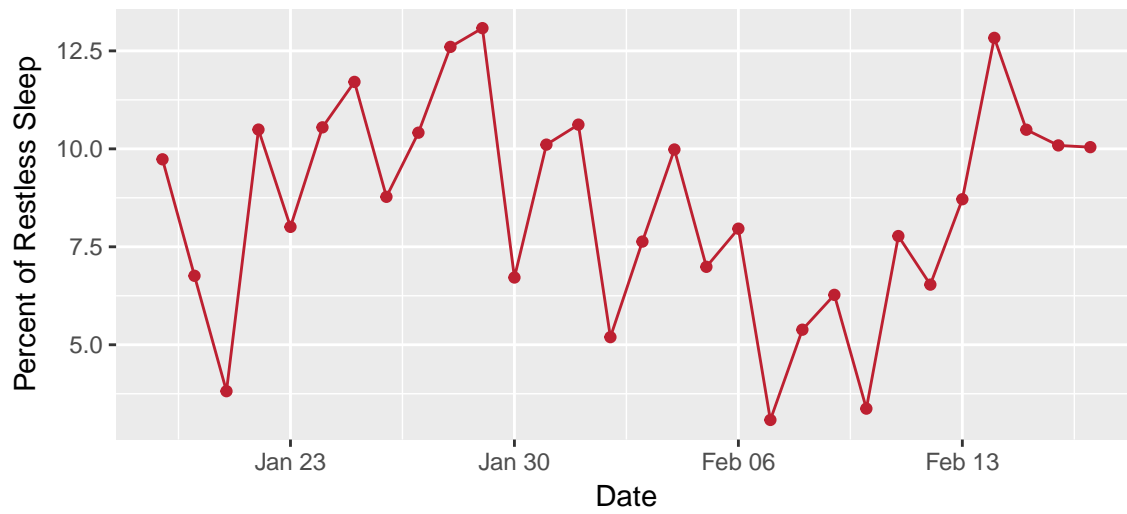


#> Press [enter] to continue



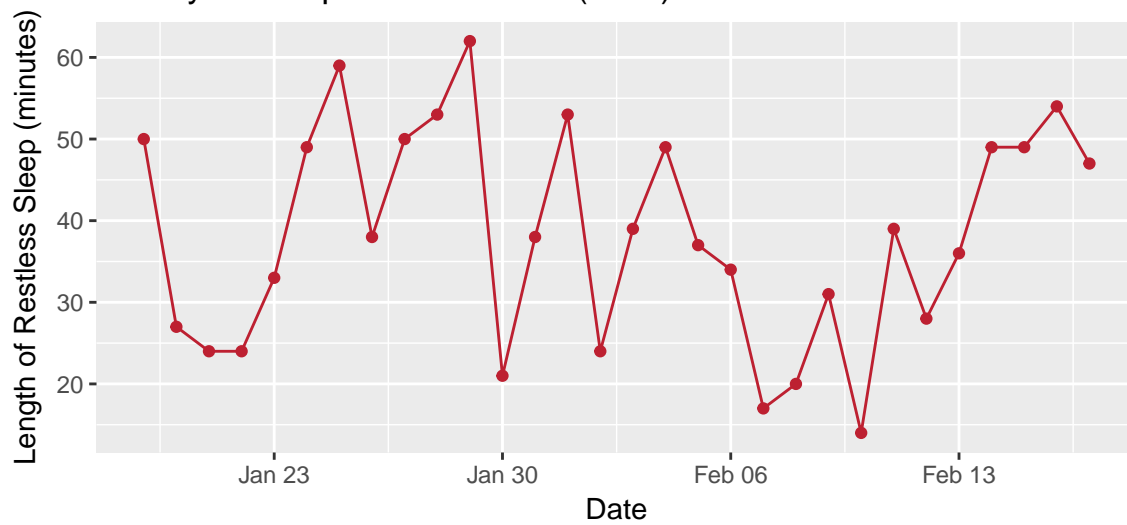
#> Press [enter] to continue

Quality of Sleep: Restlessness (%)

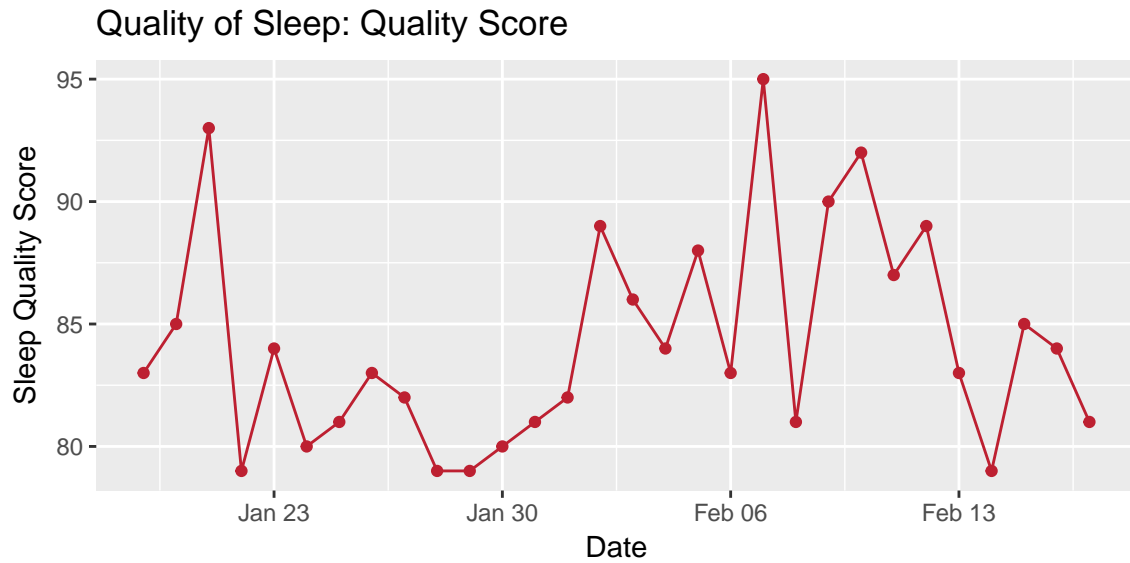


#> Press [enter] to continue

Quality of Sleep: Restlessness (mins)



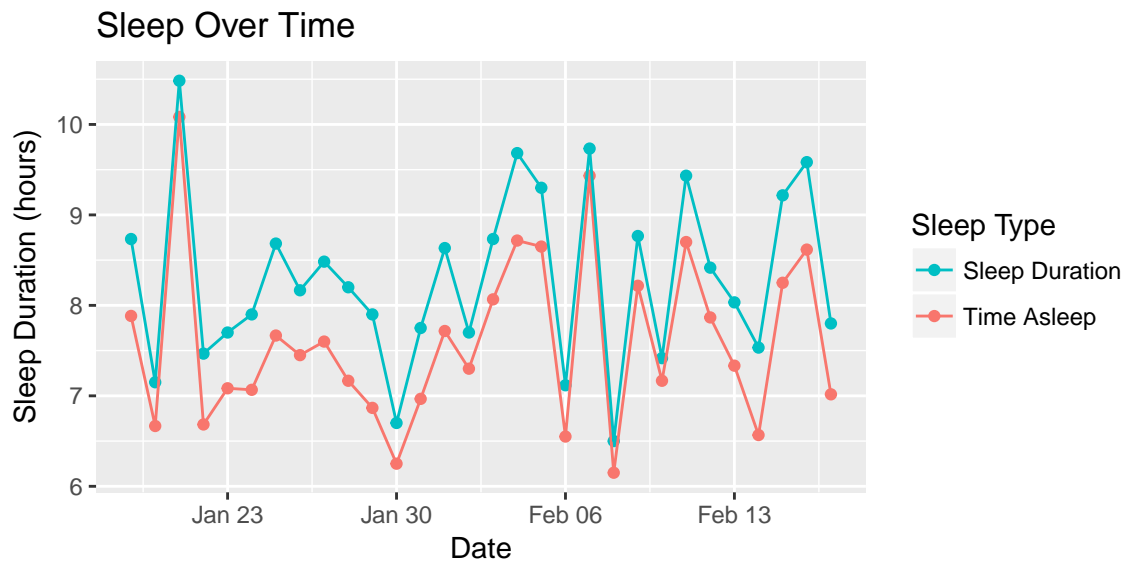
#> Press [enter] to continue



#> Press [enter] to continue

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

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

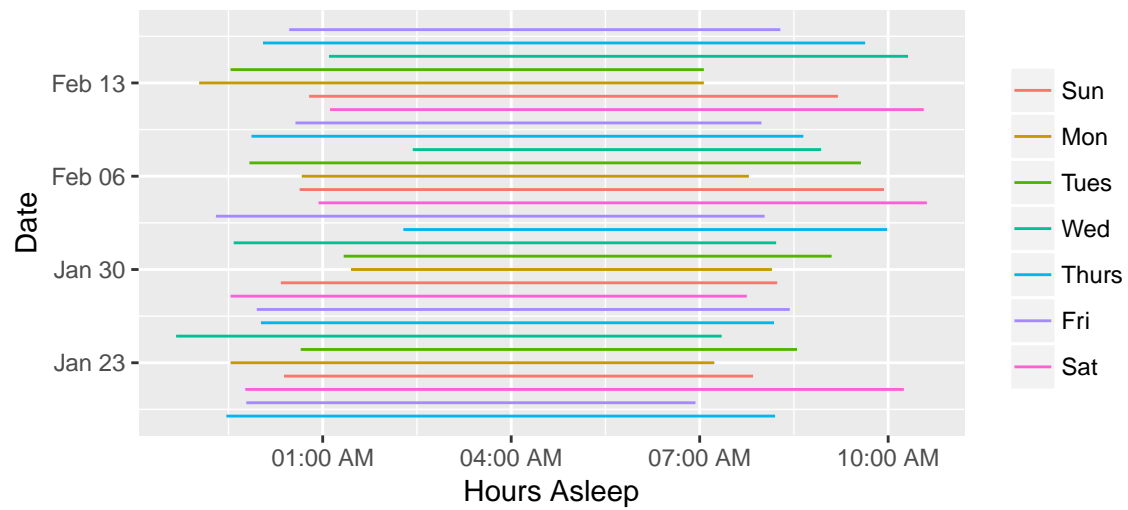


Some plots have other options.

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")
```

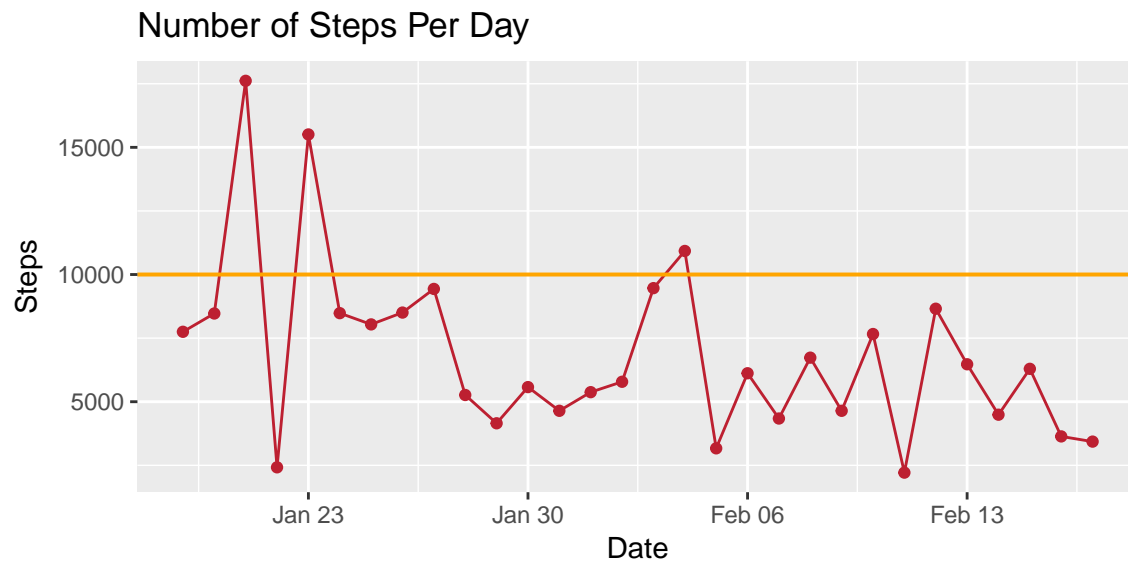
Sleep Start and End Times



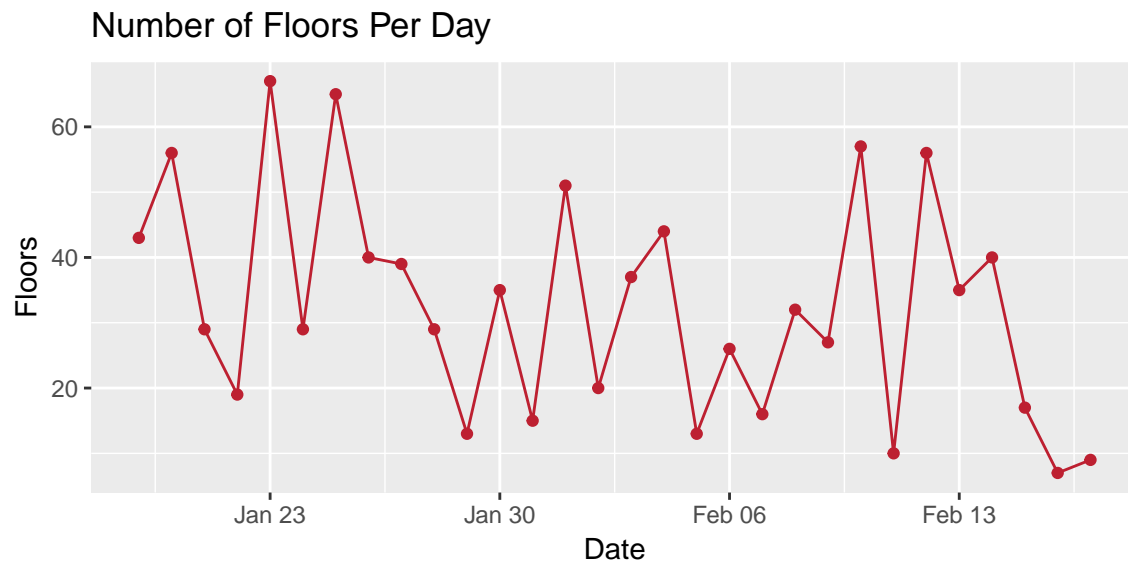
Daily Total Plots

Here are the plots for the daily totals for EX:

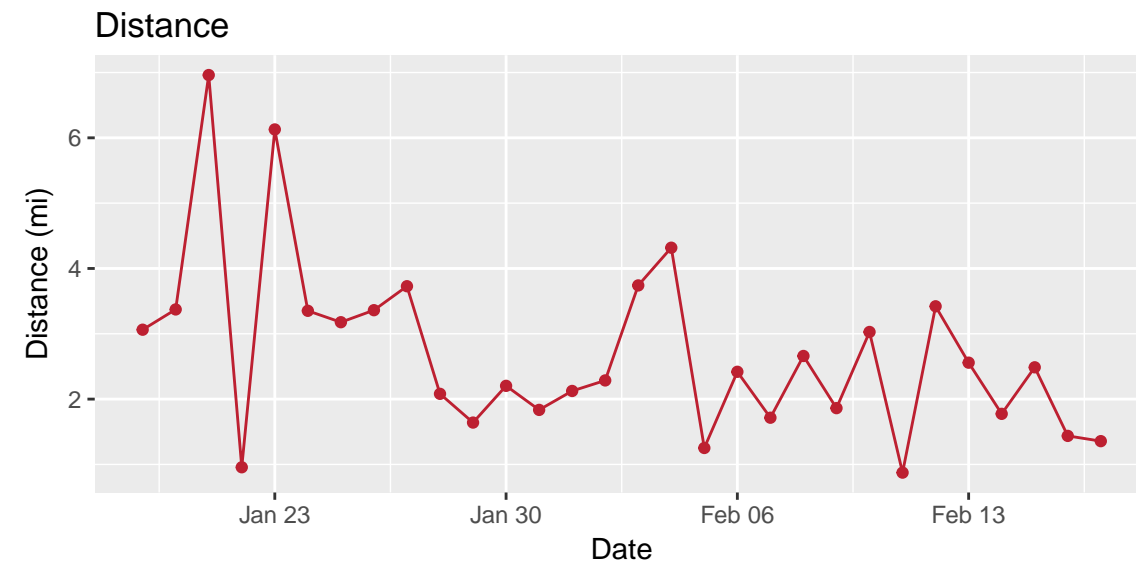
```
plot_daily_all(EX)
```



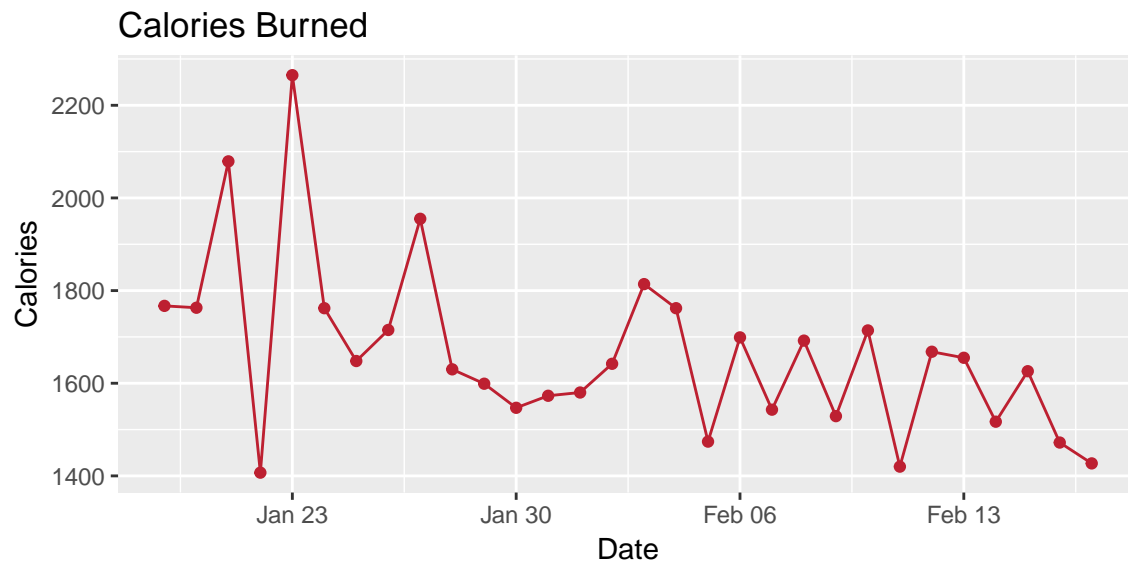
```
#> Press [enter] to continue
```



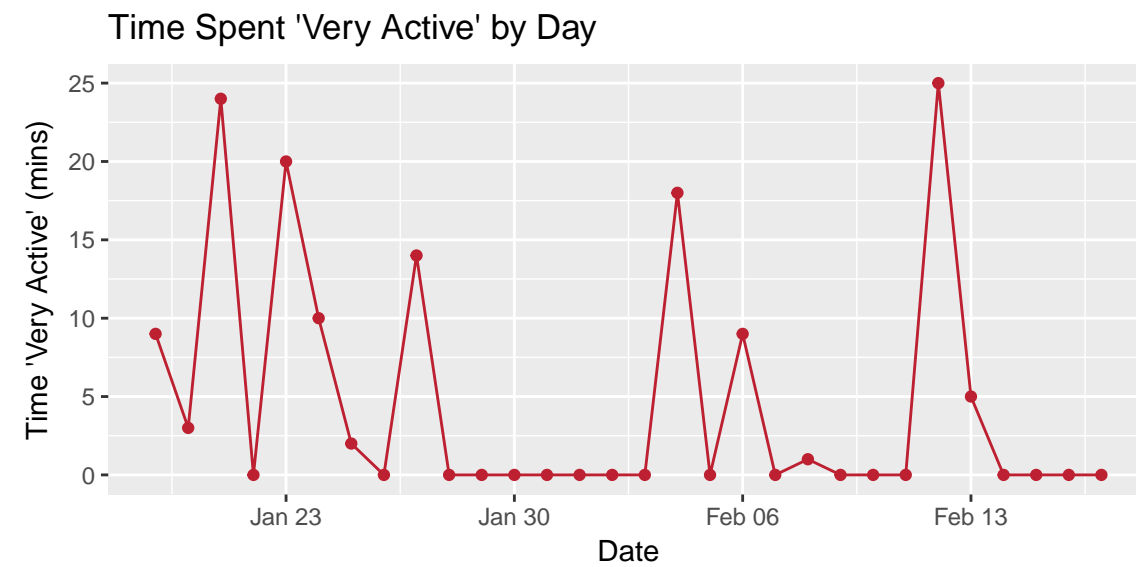
#> Press [enter] to continue



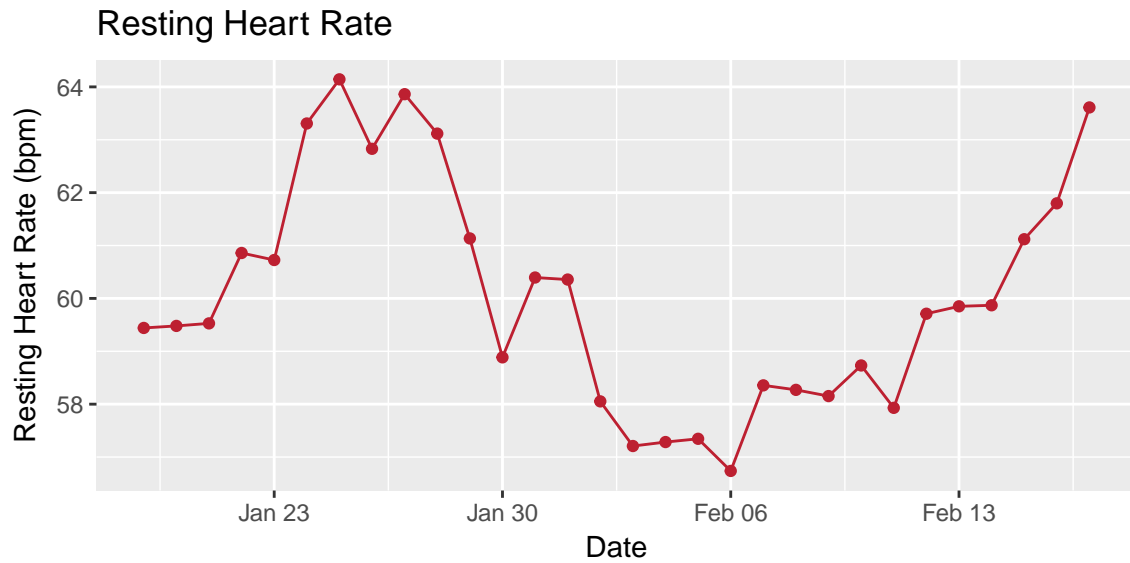
#> Press [enter] to continue



#> Press [enter] to continue



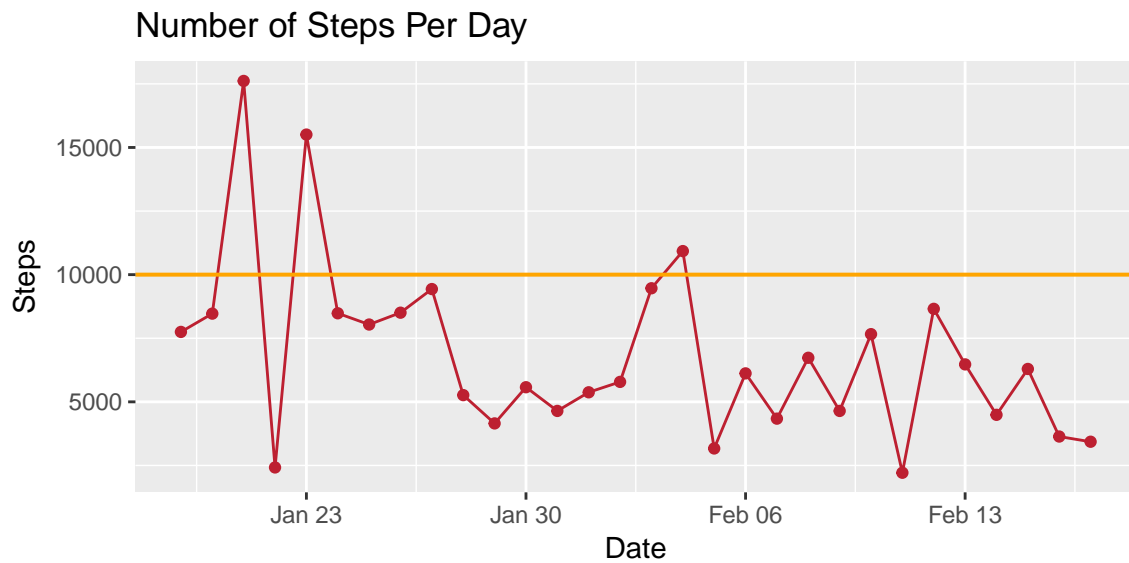
#> Press [enter] to continue



#> Press [enter] to continue

Users can also call each function individually using:

```
plot_daily(EX, "steps")
```

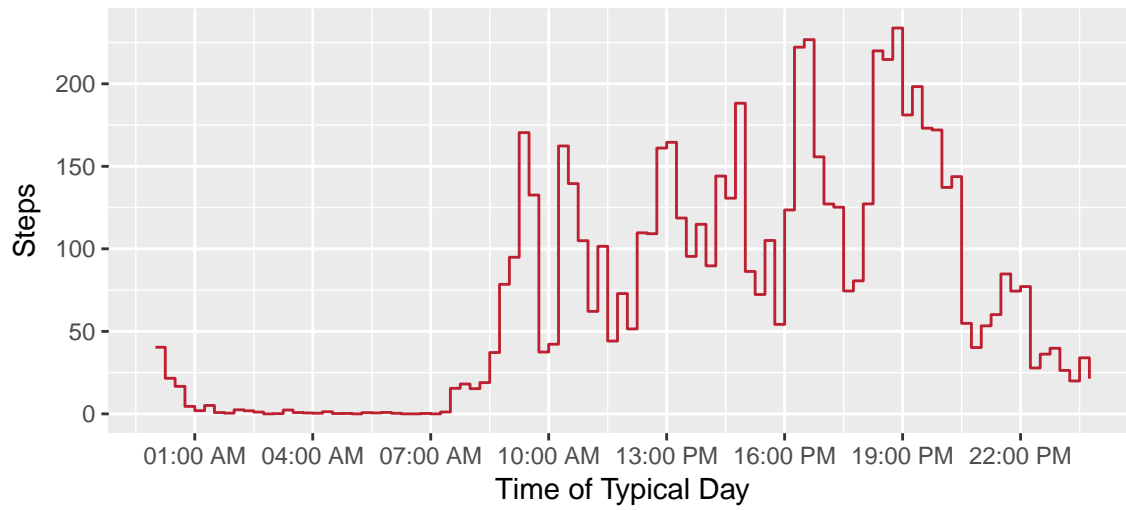


Within each day Plots

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.

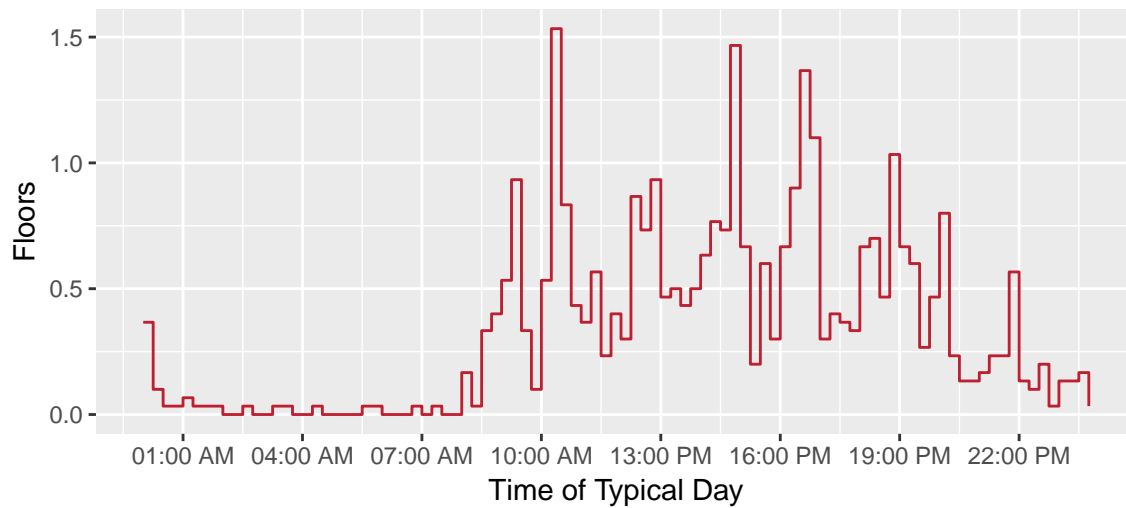
```
plot_intraday_all(EX)
```


Average Steps Per 15 Min Interval vs Time of Day



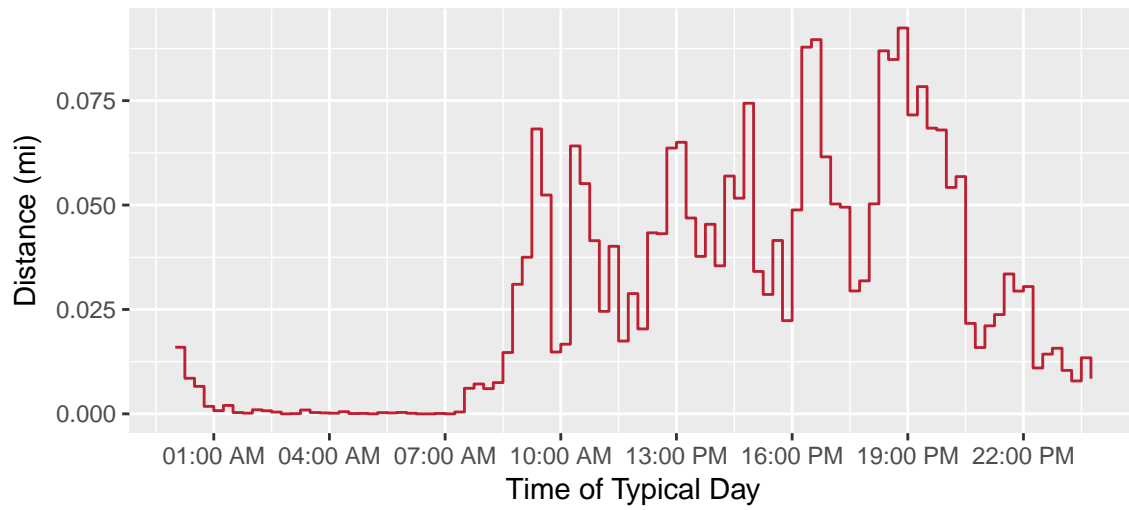
#> Press [enter] to continue

Average Floors Per 15 Min Interval vs Time of Day



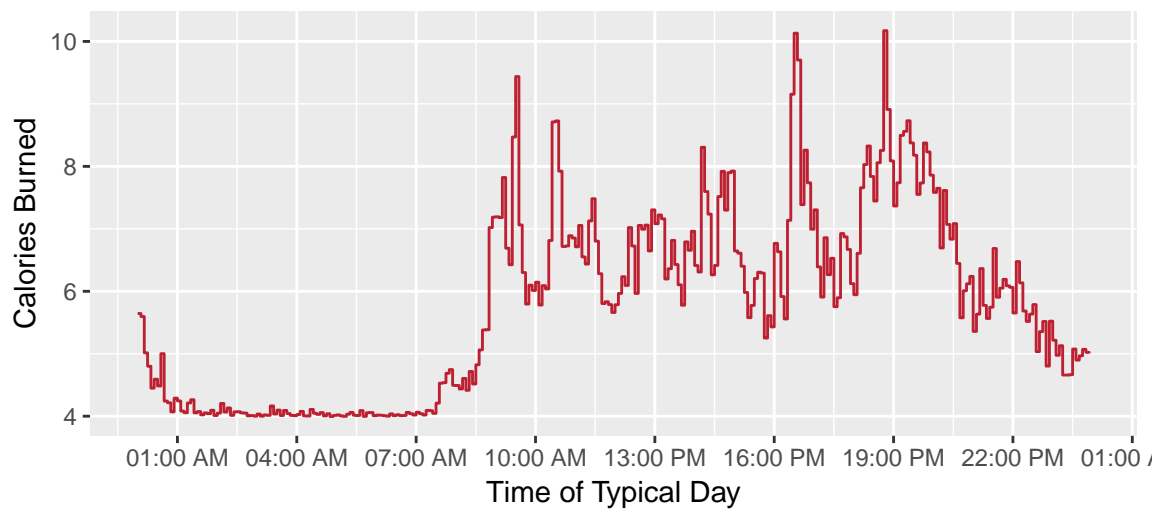
#> Press [enter] to continue

Average Distance Per 15 Min Interval vs Time of Day



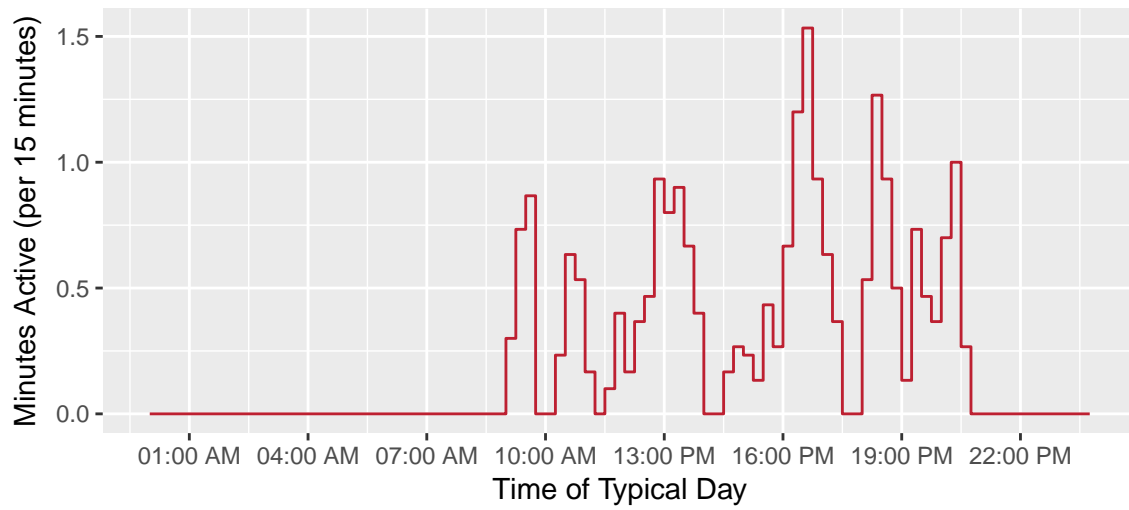
#> Press [enter] to continue

Average Calories Burned Per 15 Min Interval vs Time of Day



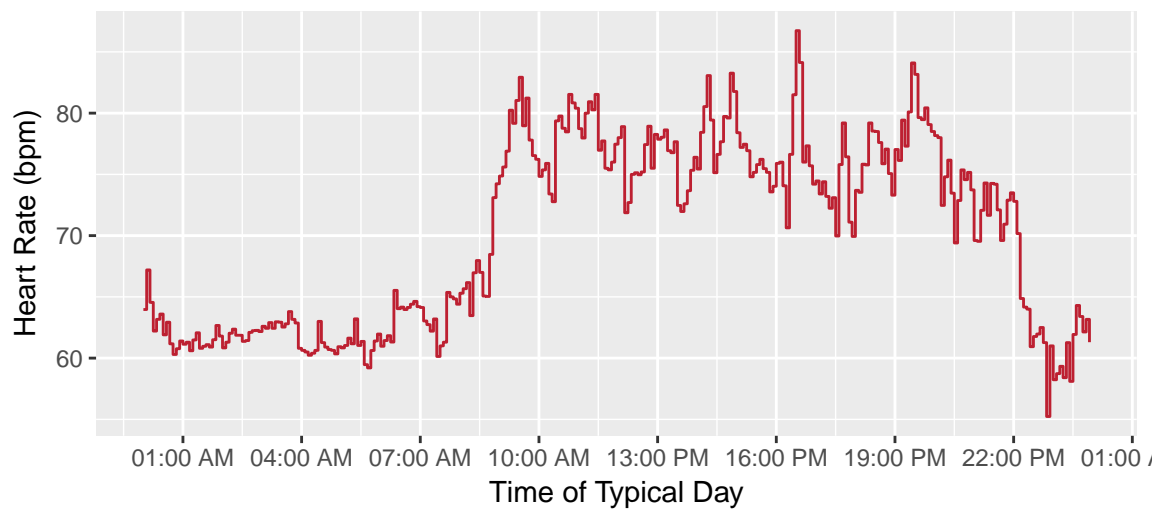
#> Press [enter] to continue

Average Active Minutes Per 15 Min Interval vs Time of Day

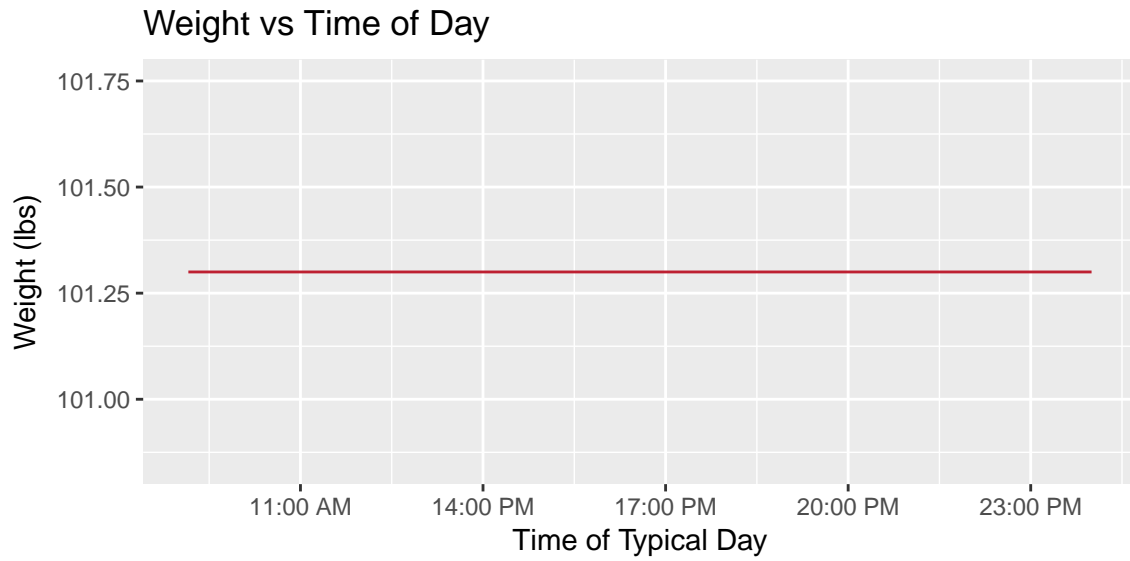


#> Press [enter] to continue

Average Heart Rate Per 5 Min Interval vs Time of Day



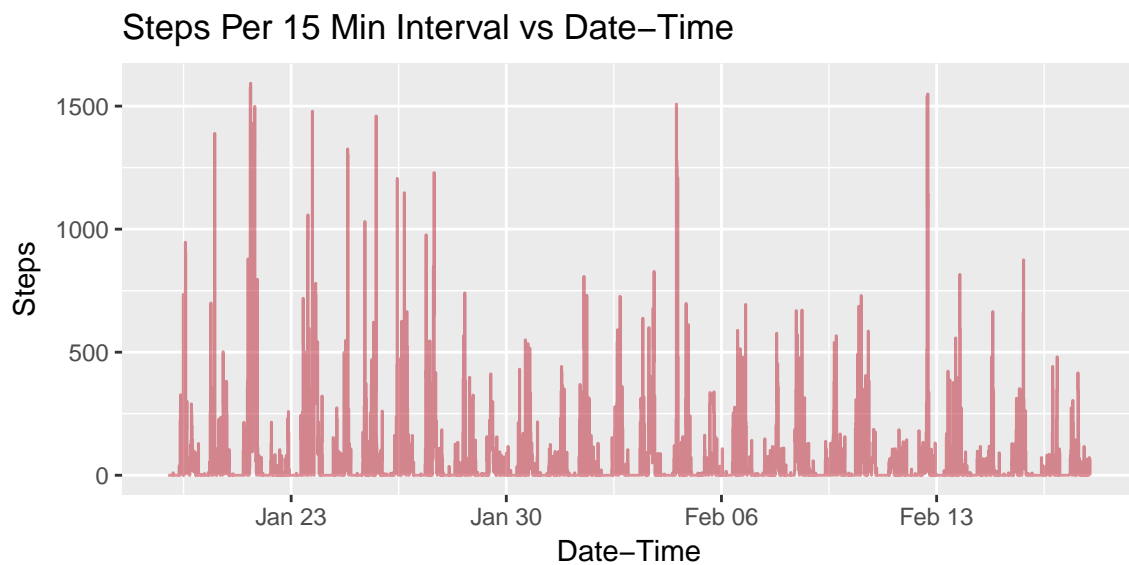
#> Press [enter] to continue



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

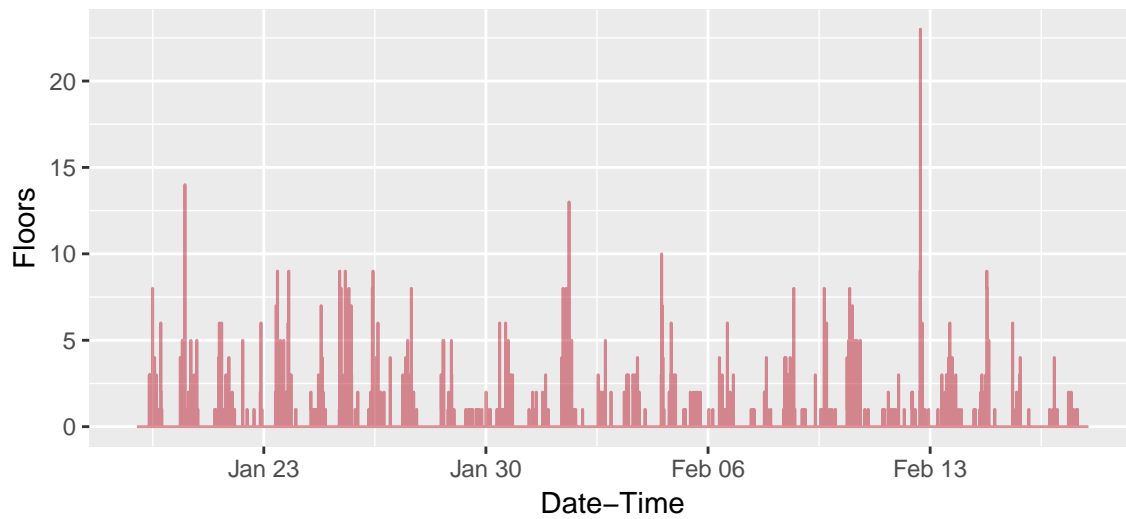
However, it is also possible to specify that the plots use the raw data and plot over all date-times.

```
plot_intraday_all(EX, FALSE)
```



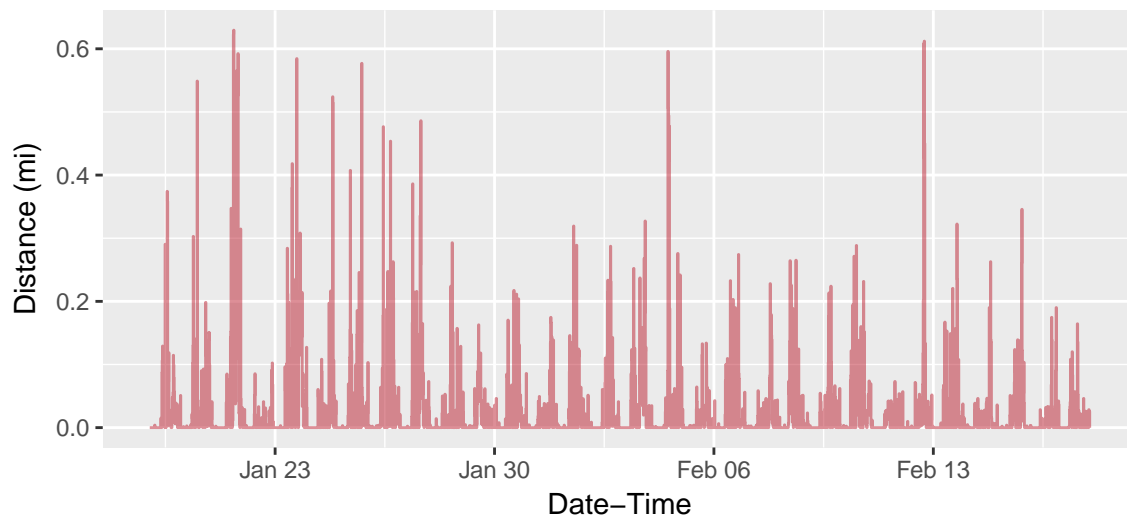
```
#> Press [enter] to continue
```

Floors Per 15 Min Interval vs Date-Time



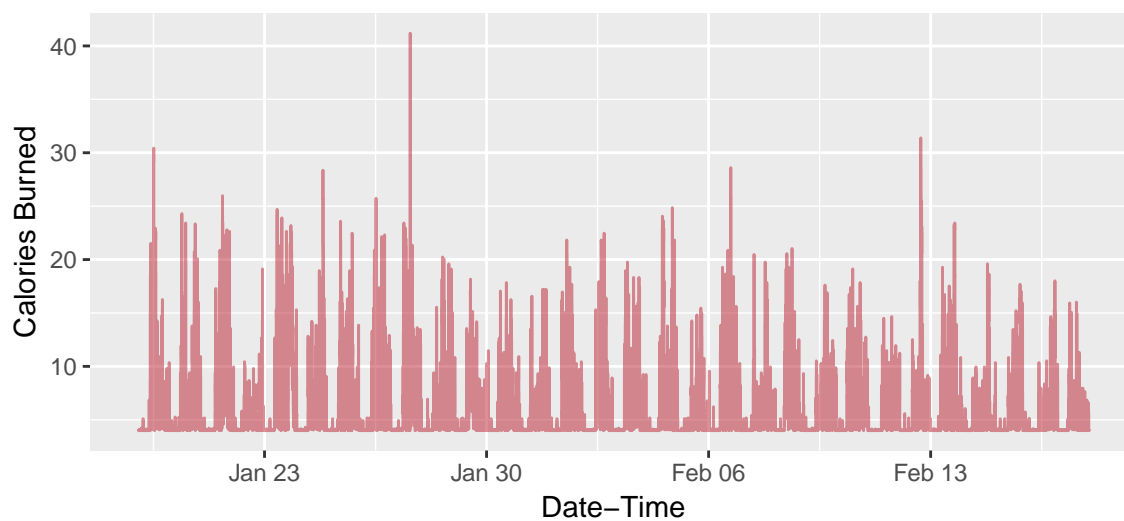
#> Press [enter] to continue

Distance Per 15 Min Interval vs Date-Time



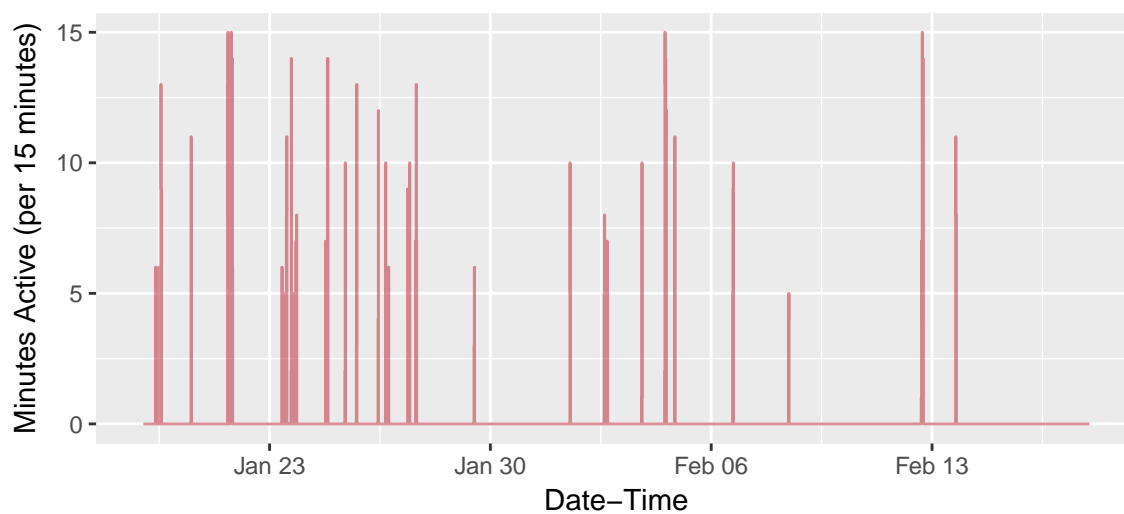
#> Press [enter] to continue

Calories Burned Per 15 Min Interval vs Date-Time

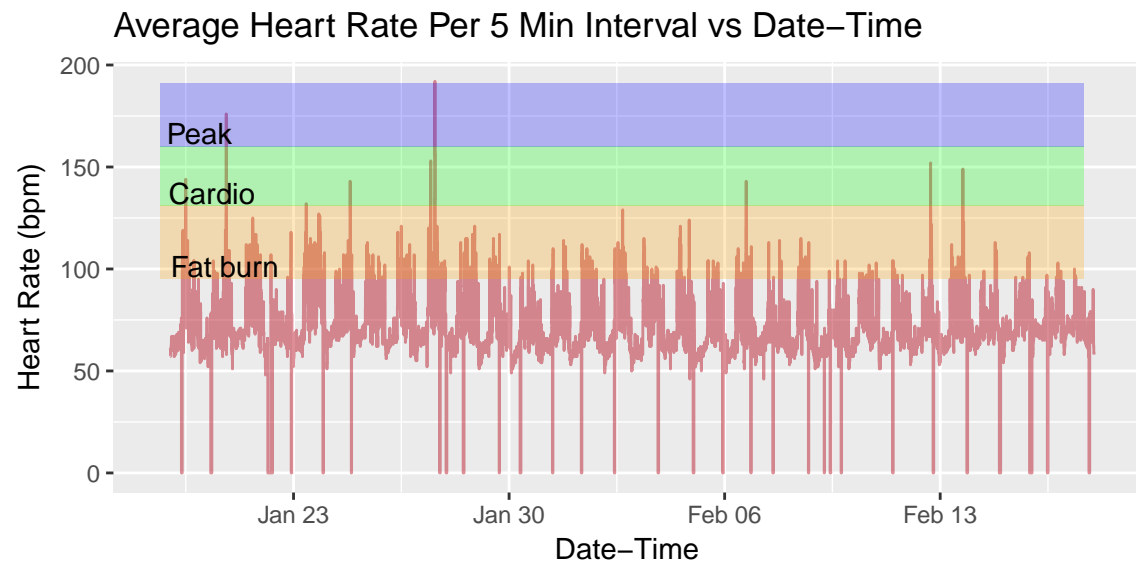


#> Press [enter] to continue

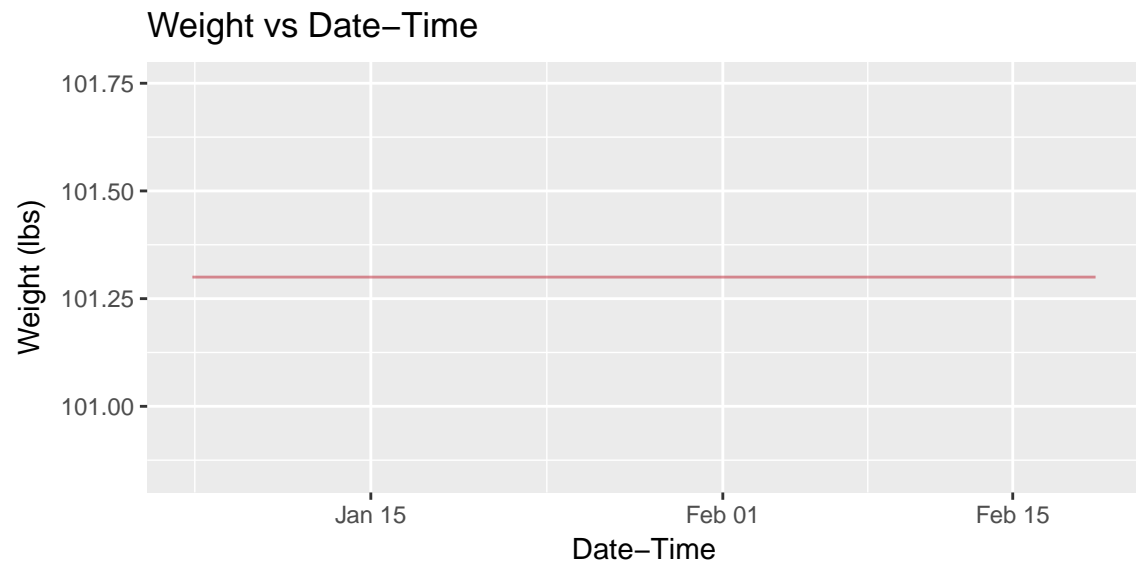
Average Active Minutes Per 15 Min Interval vs Date-Time



#> Press [enter] to continue



#> Press [enter] to continue



#> Press [enter] to continue