

Exercise 008!

The situation

It is well known that many hormones have diurnal fluctuations. Your boss wants a descriptive function to describe this fluctuation over the course of a single day. She has data on relative melatonin level vs. relative time of day that you can use.

Your mission:

- try a straight line it and see if that works
- show your reasons for accepting or rejecting this fit as decent
- find a fit that works for you, assuming the straight line doesn't
- show your steps for coming to be at peace with your fit
- make a pretty plot of the data and your fit to show your boss how awesome you are