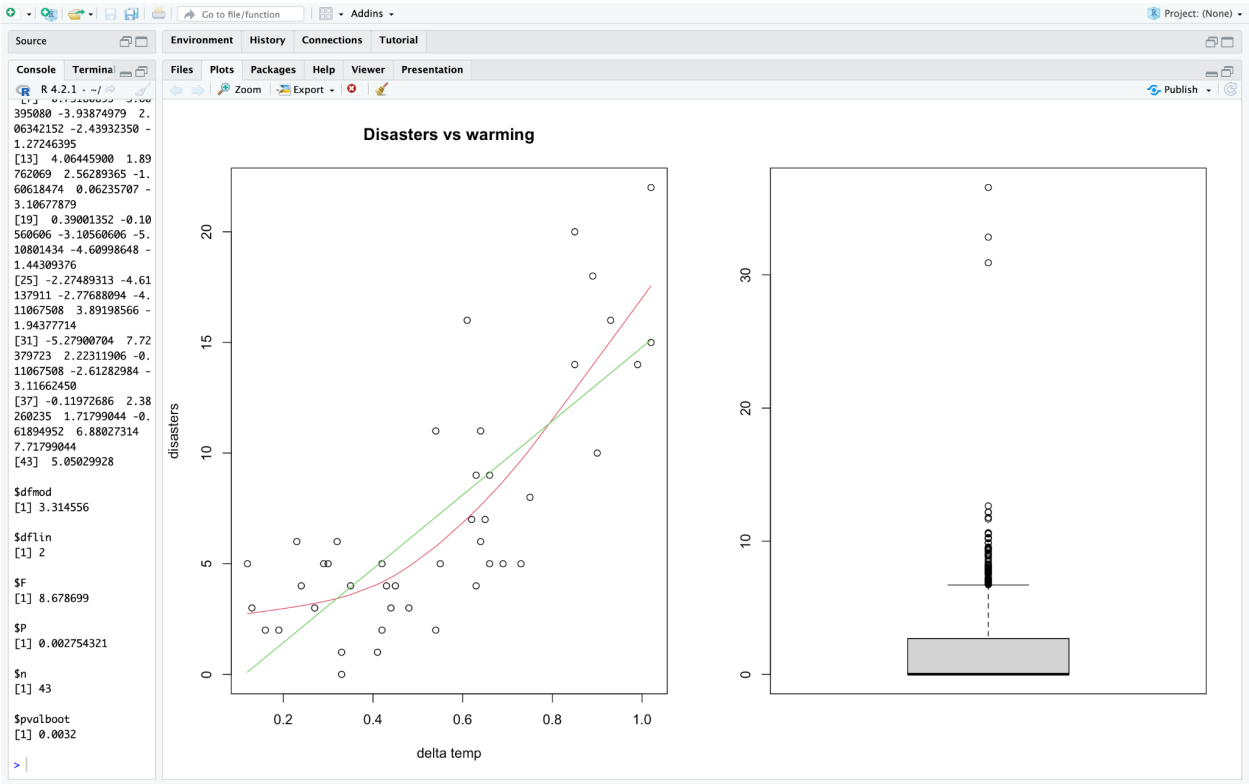
codeday4.pck contains the commented code used to complete this assignment.

Build a function which:

– takes as input a data frame, and the two elements of a frame that you want to model

- And choose whether to take square root or not.

–Plot the data fit with a smoothing spline with the default cross validation, vs the smoothing spline with 2 degrees of freedom (linear fit).



–Test the difference of fit using the F test –(Normal theory based)

–If you wish you can comment my.dat.plot4 from codeday3.pck

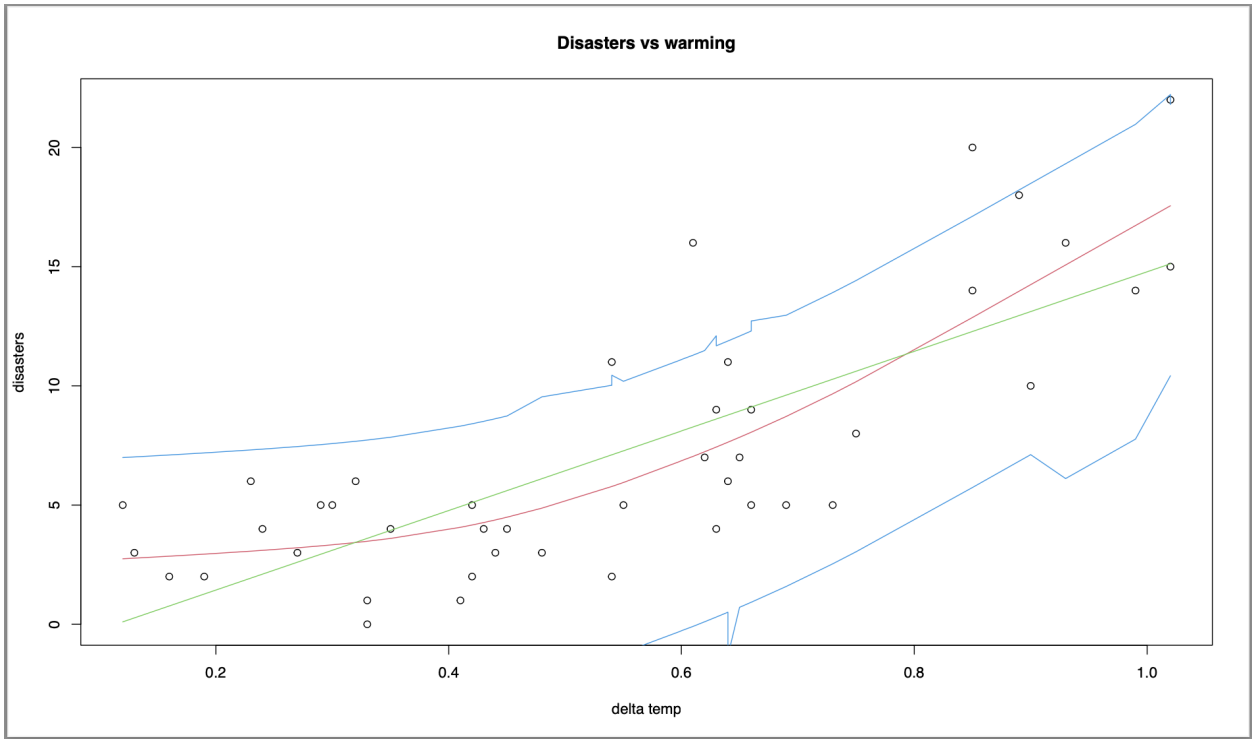
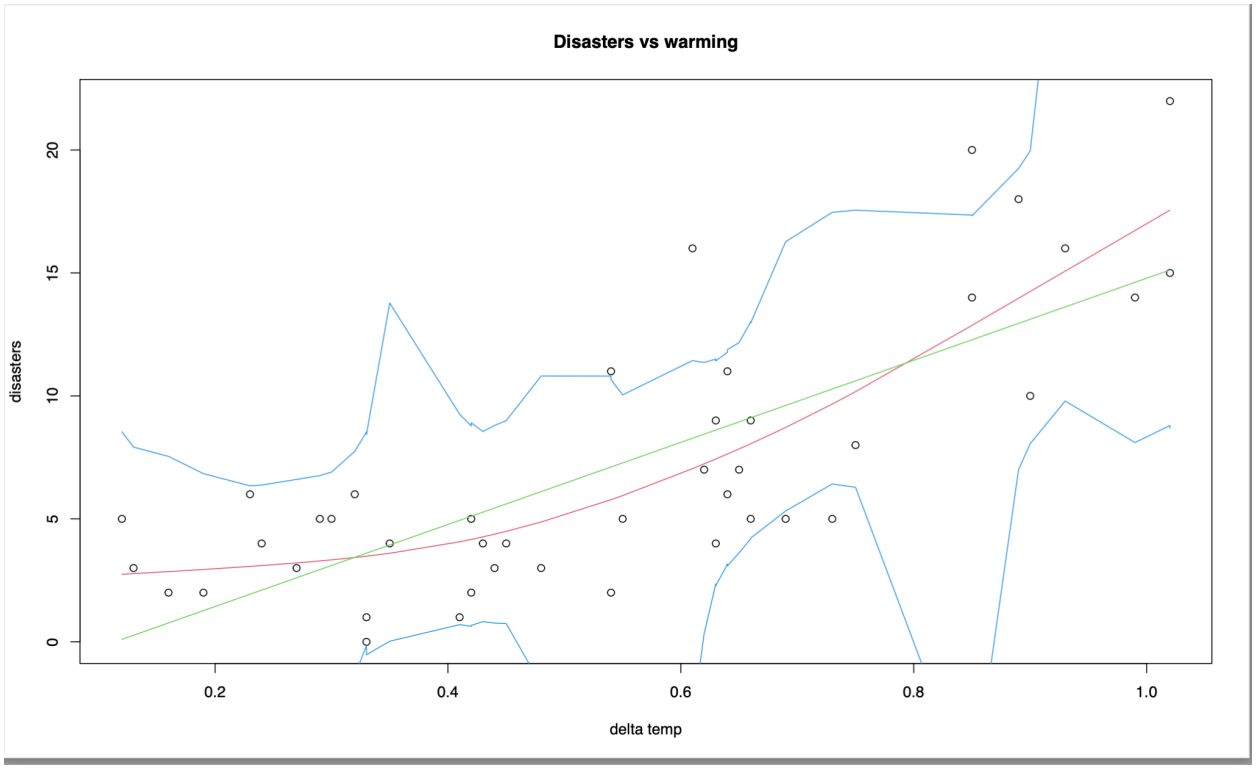
- Advanced part (Lab time) ***(Can use codeday4.pck, and comment it.*** But figure out some of the weird stuff, like Y is do.sqrt turned off inside the bootstrap!?)

–Construct Pvalue using linear fit residual bootstrap (why is this appropriate for testing linearity??, how get Pvalue??)

- Then build bootstrap confidence intervals for the smooth

–Look at XY bootstrap vs residual, Why is XY bootstrap such a mess for these confidence intervals????

Residual bootstrap:



XY bootstrap: