

1-exercise

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Question 1

Assess S claims of battery failure from temperatures from a sample of previous batteries that experienced failure and from a sample in general

- a. Perform a kernel density estimation for temps-7 and temps-other using what you consider is the most adequate bandwidth. Since the temperatures are positive, is it required to perform any transformation?.
- b. Is there any important difference on the results from considering the LSCV selector over the DPI selector?
- c. It seems that in temps-7 there is a secondary mode. Compute a kernel derivative estimation for temps-7 and temps-other using what you consider are the most adequate bandwidths.
- d. Precisely determine the location of the extreme points
- e. Check with a kernel second derivative that the extreme points are actually modes.