Interactive comment on “The influence of temperature calibration on the OC-EC results from a dual optics thermal carbon analyzer” by J. Pavlovic et al.

Anonymous Referee #2

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The MS is a highly useful contribution to the field of OC/EC measurement techniques. There are many papers comparing one thermo-optical protocol to another, or discussing the differences between methods and instruments, but although the necessity of accurate temperature calibration is often acknowledged, very little is known quantitatively on the effect of temperature calibration on EC/OC splits for the different methods. The authors investigate this effect with only one instrument, which, however, can be run with different protocols and has the capability for both reflectance and transmittance correction. I suggest publication after a few minor points have been dealt with.

p. 3329, lines 13-14: why was only the TOT correction considered for the NIOSH
protocol? The instrument automatically gives OC and EC for TOT and TOR anyway?

p 3330, lines 17-20: please clarify sentence

p 3332, section 3.2.1: please clarify. If there is no difference in TC and EC concentrations obtained by TOT and TOT before and after TCAL: why should there then be a difference in the OC?

p 3335, first sentence: why is there a range (10-12%) instead of a number as in the other instances?