

Response to Comments

L 255: Change “As shown in Table S2, the E250/E365 values of HULIS (5.3–5.6) are higher than that (4.4–5.1) of WSOC, suggesting that the light-absorbing species in HULIS may have relatively lower aromaticity and/or lower molecular weight than those in WSOC ... Therefore, the HULIS fractions exhibit relatively higher absorption at UV and short visible wavelengths and relatively lower absorption at long visible wavelengths, which results in relatively higher AAE values.”

Re: Changed. Please refer to Lines 255-260 in the present manuscript.

L261: “...which could be related to the evolution of HULIS chromophores at different stages...”

Re: Changed. Please refer to Lines 261-262 in the present manuscript.

L267: change “...tended to the ...” to “resulted in the ...”

Re: Changed. Please refer to Line 267 in the present manuscript.

L269: change “which resulted in no significant AAE variations for HULIS in the entire sampling process.”

Re: Changed. Please refer to Lines 269-270 in the present manuscript.