

Figure S1. Validation of CARSNET AOD at each wavelength against AERONET AOD. One-one line, linear regression line, and the EE envelopes of  $\pm$  (0.05 + 10%) are plotted as red dashed, green solid and black dashed lines.

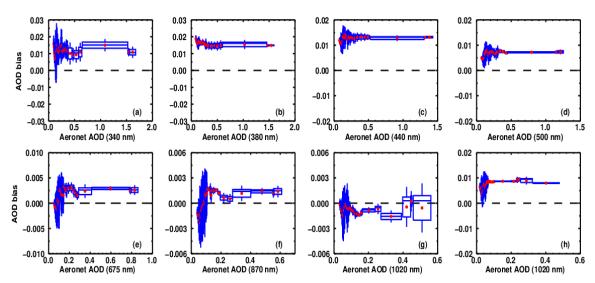


Figure S2. AOD bias box diagrams of CARSNET AOD and AERONET AOD using 25% and 75% percentiles with 20 bins. One-one line is dashed and means zero bias. The red dot, middle line, and upper and low hinges in each box represent the mean, median of the AOD bias, and 25% and 75% percentiles, respectively.