

Supplementary Materials

Table S1. Regression statistics for systematic relationship between (a) σ_{sp} and σ_{ap} , (b) σ_{sp} and SSA, and (c) σ_{sp} and SÅE.

Source Region	(a)		(b)		(c)	
	Slope (Unitless)	Intercept (Mm ⁻¹)	Slope (Mm)	Intercept (Unitless)	Slope (Mm)	Intercept (Unitless)
Pacific Ocean	7.89×10^{-2}	-0.008	5.55×10^{-3}	0.886	4.01×10^{-2}	0.954
NE Asia	4.31×10^{-2}	0.060	2.75×10^{-3}	0.889	-3.58×10^{-2}	1.090
SE Asia	1.27×10^{-1}	0.034	5.58×10^{-3}	0.861	6.67×10^{-2}	0.835

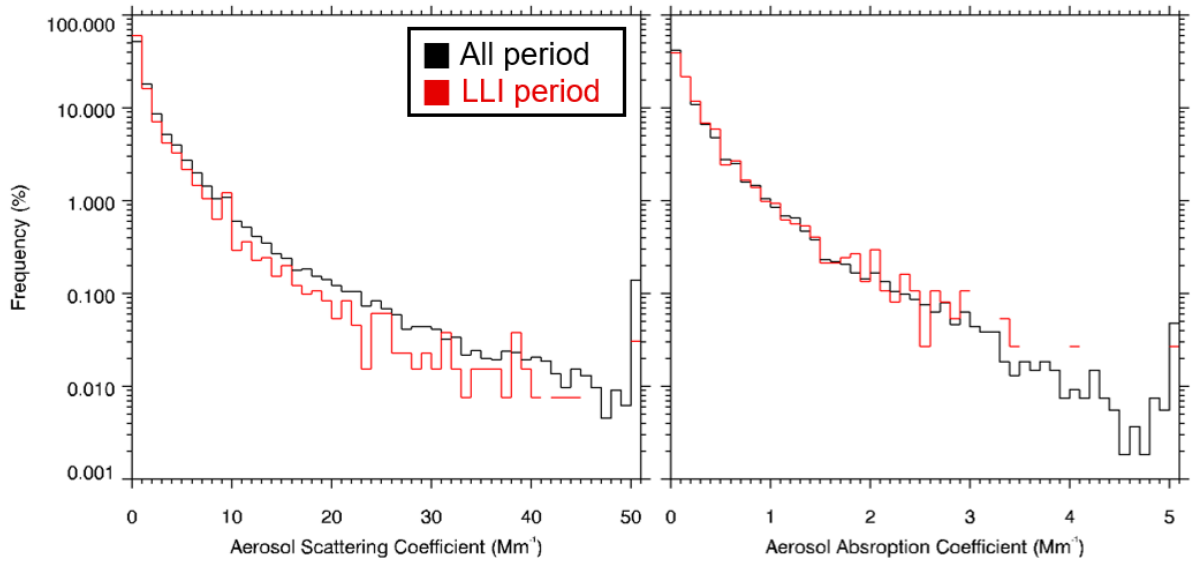


Fig. S1. Histograms for aerosol scattering (left panel) and absorption (right panel) coefficients during 1974-2015 at MLO for all period (black) and LLI period (red), respectively.