

Instrument	Parameter	Details
Aethalometer AE31	Aerosol absorption coefficient	Wavelengths (nm): 370; 470; 520; 590; 660; 880; 950
Continuous soot measuring system (COSMOS)	Black carbon mass concentration	Wavelength (nm): 565
Nephelometer model 3563	Aerosol scattering and backscattering coefficient	Wavelengths (nm): 450; 500; 700
Single-particle soot photometer (SP2)	Mass concentration and size distribution of refractory black carbon as well as coating thickness of BC cores	Size range for rBC cores: $D_{\text{rBC}} = 80\text{--}604$ nm Size range of rBC cores for coating quantification: $D_{\text{rBC}} = 220\text{--}260$ nm
Precision sun radiometer	Aerosol optical depth	Wavelengths (nm): 368; 412; 500; 862