

	Sample	Particles analysed	$A$	$B/\text{nm}^2$	$C/\text{nm}^4$	Real refractive index (589 nm)	Radius range/ $\mu\text{m}$
Urban	Spring	3	$1.478 \pm 0.010$	$3750 \pm 3250$	0	1.489	0.49–0.762
	Summer	4	$1.465 \pm 0.005$	$4625 \pm 1200$	0	1.478	0.474–1.252
	Autumn	1	1.505	6000	0	1.522	0.492
	Winter	2	$1.495 \pm 0.007$	4000	0	1.507	0.515
Remote	Antarctic summer 2015	1	1.467	1000	0	1.470	0.503
Woodsmoke	Extract $A$	6	1.543	$15\,700 \pm 750$	0	$1.588 \pm 0.002$	0.500–0.723
	Extract $B$	6	$1.541 \pm 0.003$	$14\,800 \pm 2900$	0	$1.584 \pm 0.007$	0.475–0.593
Test	Humic acid (aqueous)	1	1.449	3425	$1.25 \times 10^{-8}$	1.460	1.307