

	Maritime – ocean	A priori	Continental – land	A priori
Fine-size-mode AOT	0.018, 0.054, 0.090	0.154	0.045, 0.135, 0.225	0.154
Fine AOT fraction	36 %		90 %	
Fine-mode refractive index	1.37 – $i0.001$		1.40 – $i0.003$	$i0.01$
Fine eff. radius	0.135 μm	0.035	0.170 μm	0.035
Fine eff. variance	0.193		0.155	
Coarse-size-mode AOT	0.032, 0.096, 0.16	0.154	0.005, 0.015, 0.025	0.154
Coarse-mode refractive index	1.37 – $i0.001$		1.40 – $i0.003$	$i0.01$
Coarse eff. radius	3.36 μm	1.310	5.52 μm	
Coarse eff. variance	0.704		0.755	
Surface	Chl $a = \mathbf{0.03}$ mg m^{-3}	5	parameterization:	
	Wind speed = 8 m s^{-1}	2.5	3 spectrally invariant +1 for each channel	1.0, 0.5, 0.2 0.05
Total free parameters	6		11	