

Parameters	Default value	Sensitivity range	Unit
Geometric mean radius (r_g)	0.15	0.1, 0.15, 0.2, 0.25, 0.3, 0.35, 0.4	μm
Geometric standard deviation (σ_g)	1.5	–	μm
Real refractive index (n_r) at 354 nm	1.5	1.3, 1.35, 1.4, 1.45, 1.5	–
Imaginary refractive index (n_i) at 354 nm	0.06	0.04, 0.06, 0.08, 0.1	–
Aerosol layer geometric central height (z_{aer})	4.5	2.5, 4.5, 6.5, 8.5	km
Aerosol layer geometric thickness (Δz)	1	0.5, 1, 1.5, 2	km
Aerosol optical thickness (τ) at 550 nm	1	0.5, 1, 1.5, 2	–
Surface albedo (a_s)	0.05	0.05, 0.1, 0.5, 1.0	–
Surface pressure (P_s)	1013	1013, 963, 913, 863, 813	hPa
Solar zenith angle (θ_0)	30	0, 15, 30, 45, 60, 75	$^\circ$
Viewing zenith angle (θ)	0	0, 15, 30, 45, 60, 75	$^\circ$
Relative azimuth angle ($\Delta\varphi = \varphi - \varphi_0 + 180^\circ$)	0	0, ± 45 , ± 90 , ± 135 , ± 180	$^\circ$