

libRadTran input parameters used in simulations to obtain the effective wavelength

Input parameters	Range	Step
Latitude	39.507081	-
Longitude	-0.420269	-
Altitude	40	-
SZA	10° - 80°	10°
Angstrom exponent	0.2 - 1.8	0.4
AOD at 1μm	0.01 - 0.21	0.05
Asymmetry parameter	0.7	-
SSA	0.9	-
TOC (DU)	300	-

Input parameters of RTM simulations used in the radiative calibration*

Parameters	Values	Data source
Latitude	39.507081	BASS
Longitude	-0.420269	BASS
Altitude	40 m	BASS
Wavelengths (nm)	480, 541, 615 (B, G, R)	(own calcs)
SZA	20 to 80° (step 0.5°)	-
Atmosphere	Midlatitude Summer	libRadtran
Surface Albedo	0.09, 0.11, 0.13 (B, G, R)	AERONET
TOC	287-359 DU	AERONET
CWV	6- 38 mm	AERONET
SSA	0.78 -1 (B, G, R)	AERONET
Asymmetry parameter	0.60-0.79,0.59-0.78,0.57-0.77 (B, G, R)	AERONET
AOD 500 nm	0.02-0.41	AERONET

* The spectral parameters are separated with colons, and ordered as the Blue, Green, Red (B, G, R).