

Name	Source	Description	PDF
Rad_Mcica_Sigma	Atm	Fractional standard deviation of sub-grid condensate seen by radiation	Trapezoid (0.1,0.4,1.5,2.2,2,2)
C_R_Correl	Atm	Cloud and rain sub-grid horizontal spatial correlation	Trapezoid (0.0, 0.6, 0.9, 1.0, 1.8, 1. 1, 1.5)
Niter_BS	Atm	Number of microphysics iteration sub-steps	Uniform (5, 20)
Ent_Fac_Dp	Atm	Entrainment amplitude scale factor	Trapezoid (0, 0.5, 2, 4, 2, 2)
Amdet_Fac	Atm	Mixing detrainment rate scale factor	Trapezoid (0, 0.5, 10.0, 15.0, 2, 2)
Dbsdtbs_Turb_0	Atm	Cloud erosion rate (s^{-1})	Trapezoid ($0, 1 \times 10^{-4}, 5 \times 10^{-4}, 1 \times 10^{-3}, 2, 2$)
Mparwtr	Atm	Maximum value of function controlling convective parcel maximum condensate	Trapezoid ($1 \times 10^{-3}, 1 \times 10^{-3}, 1.5 \times 10^{-3}, 2 \times 10^{-3}, 2, 2$)
Dec_Thres_Cld	Atm	Threshold for cloudy boundary layer decoupling	Trapezoid (0.01, 0.011, 0.1, 0.8, 2, 4, 4)
Fac_Qsat	Atm	Rate of change in convective parcel maximum condensate	Uniform (0.25, 1)
Ageing	Aer	Ageing of hydrophobic aerosols (no. of monolayers of organic material)	Trapezoid (0.3, 1, 5, 10, 2, 2)
Cloud_pH	Aer	pH of cloud droplets	Trapezoid (4.6, 5.3, 6.3, 7, 4, 2)
Carb_BB_Ems	Aer	Carbonaceous biomass burning emission scale factor	Trapezoid (0.25,0.8,2.2,4,2,2)
Carb_BB_Diam	Aer	Carbonaceous biomass burning emission diameter (nm)	Trapezoid (90, 160, 240, 300, 2, 2)
Sea_Spray	Aer	Sea spray aerosol emission scale factor	Trapezoid (0.125, 0.6, 3, 8, 4, 3)
Anth_SO2	Aer	Anthropogenic SO ₂ emission scale factor	Trapezoid (0.6, 0.81, 1.09, 1.5, 2, 2)
Volc_SO2	Aer	Volcanic SO ₂ emission scale factor	Trapezoid (0.71, 0.99, 1.7, 2.38, 4, 1.1)
BVOC_SOA	Aer	Biogenic secondary aerosol formation from volatile organic compound scale factor	Trapezoid (0.81, 1.08, 3.5, 5.4, 3, 3)
DMS	Aer	Dimethylsulfide surface ocean SO ₂ concentration scale factor	Trapezoid (0.5, 1.26, 1.82, 2, 2, 3)
Dry_Dep_Acc	Aer	Accumulation mode dry-deposition velocity scale factor	Trapezoid (0.1, 0.32, 3.16, 10, 2, 2)
Dry_Dep_SO2	Aer	SO ₂ dry-deposition velocity scale factor	Trapezoid (0.2, 0.56, 1.78, 5, 2, 2)
Kappa_OC	Aer	Köhler coefficient of organic carbon	Trapezoid (0.1, 0.14, 0.25, 0.6, 4, 4)
Sig_W	Aer	Updraft vertical velocity standard deviation	Trapezoid (0.1, 0.36, 0.44, 0.7, 2, 2)
Dust	Aer	Dust emission scale factor	Trapezoid (0.5, 0.7, 1.4, 2, 2, 2)
Rain_Frac	Aer	Fraction of cloud-covered area in large-scale clouds where scavenging occurs	Trapezoid (0.3, 0.31, 0.55, 0.7, 2, 3)
Cloud_Ice_Thresh	Aer	Threshold of cloud ice fraction above which nucleation scavenging is suppressed	Trapezoid (0.1, 0.105, 0.35, 0.5, 2, 3)
BC_RI	Aer	Imaginary part of the black carbon refractive index	Trapezoid (0.2, 0.352, 0.616, 0.8, 4, 2)
OC_RI	Aer	Imaginary part of the organic carbon refractive index	Trapezoid (0, 0, 0.05, 0.1, 2, 6)