

Index	Name	Type	Description
1	Rad_Mcica_Sigma	Atm	Fractional standard deviation of sub-grid condensate seen by radiation (controls the overlap of sub-grid clouds)
2	C_R_Correl	Atm	Cloud and rain sub-grid horizontal spatial correlation (determines the accretion rate of cloud drops and aerosols by raindrops)
3	Niter_Bs	Atm	Number of microphysics iteration sub-steps
4	Ent_Fac_Dp	Atm	Entrainment amplitude scale factor (controls the convective mass flux and sensitivity of convection to relative humidity)
5	Amdet_Fac	Atm	Mixing detrainment rate scale factor (controls the rate of humidification of the atmosphere and the shape of the convective heating profile)
6	Dbsdts_Turb_0	Atm	Cloud erosion rate per second (the rate at which unresolved sub-grid motions mix clear and cloudy air)
7	Mparwtr	Atm	Maximum value of the function controlling convective parcel maximum condensate
8	Dec_Thres_Cld	Atm	Threshold for the ratio of buoyancy consumption to production before decoupling occurs
9	Fac_Qsat	Atm	Rate of change in convective parcel maximum condensate with altitude
10	Ageing	Aer	Ageing of hydrophobic aerosols (no. of monolayers of soluble material)
11	Cloud_pH	Aer	pH of cloud droplets (used to calculate the conversion of SO ₂ into sulfate)
12	Carb_BB_Ems	Aer	Carbonaceous biomass burning emissions scale factor
13	Carb_BB_Diam	Aer	Carbonaceous biomass burning emission diameter (nm)
14	Sea_Spray	Aer	Sea spray aerosol scale factor
15	Anth_SO2	Aer	Anthropogenic SO ₂ emission scale factor
16	Volc_SO2	Aer	Volcanic SO ₂ emission scale factor
17	BVOC_SOA	Aer	Biogenic secondary aerosol formation from volatile organic compounds scale factor
18	DMS	Aer	Dimethyl sulfide surface ocean concentration scale factor
19	Dry_Dep_Acc	Aer	Accumulation mode dry deposition velocity scale factor
20	Dry_Dep_SO2	Aer	SO ₂ dry deposition velocity scale factor
21	Kappa_OC	Aer	Kappa-Kohler coefficient of organic carbon
22	Sig_W	Aer	Updraft vertical velocity standard deviation (used to calculate the activation of aerosols into cloud drops)
23	Dust	Aer	Dust emission scale factor
24	Rain_Frac	Aer	Fraction of cloud-covered area in large-scale clouds where aerosol scavenging by raindrops occurs
25	Cloud-Ice_Thresh	Aer	Threshold of cloud ice fraction above which nucleation scavenging is suppressed (restricting further activation of aerosols into cloud drops)
26	BC_RI	Aer	Imaginary part of black carbon refractive index
27	OC_RI	Aer	Imaginary part of organic carbon refractive index