Variables	Definition	Example equations and other explanations
sitecode, lat, lon, date	Code given for each site, latitude, longitude, and date of the measurement	
Ray	Extinction due to Rayleigh scattering	
AS, AN, OM, EC, CM, SOIL, SS	Raw extinction components for ammonium sulfate (AS), ammonium nitrate (AN), organic matter (OM), elemental carbon (EC), coarse matter (CM), soil chemical components (SOIL) and sea-salt (SS)	Daily values, denoted Eamm_So4, EAmm_NO3, Eocm, ELAC, ECM, Esoil, ESea_Salt in the "CIRA" file.
Bext	Aerosol bext	sum of components
Total	Total extinction	Includes extinction from Rayleigh scattering
Carbon, dust	Extinction due to carbon and dust components	Carbon = OM+EC Dust = Soil + CM
ECNC2avg, OMNC2avg, CMNC2avg, SoilNC2avg, SSNC2avg, ASNC2avg, ANNC2avg	Natural conditions 2 estimates for the extinction due to each component.	
AnnAvgCM, AnnAvgSoil, AnnAvgOM, AnnAvgEC, AnnAvgAS, AnnAvgAN, AnnAvgSS, AnnAvgCarbon, AnnAvgDust, AvgNC	Annual average extinction for each component, dust, carbon, and the sum of components defined as natural.	
CarbonMinBext95, DustMinBext95	Minimum annual 95th percentile carbon and extinction during the 2000-2014 period	
CE3, DE3, E3	Extinction due to carbon, dust, and total E3 portions	
Dust1, Carbon1, OM1, EC1, Soil1, CM1	Extinction daily carbon and dust components which remain after the E3 portion has been removed.	CM1=CM*DustMinBext95/Dust; Carbon1=OM1+EC1; (Sum of these components + daily E3 portion equals the annual average)
annavgNonE3Dust, annavgNonE3Carbon, annavgNonE3OM, annavgNonE3EC, annavgNonE3CM, annavgNonE3Soil	Annual average of non-E3 portions of each component and carbon/dust.	
CMRoutineNC, SoilRoutineNC, DustRoutineNC, OMRoutineNC, ECRoutineNC, CarbonRoutineNC, ASRoutineNC, ANRoutineNC	Extinction due to routine natural contribution portion of individual components	

Routine_nat	Sum of extinction due to routine natural extinction portion of individual components	
dvRoutine_Nat	Sum of deciviews due to routine natural extinction portion of individual components	
Abext	Extinction due to anthropogenic components	
Natural	Routine_Nat + E3	The total daily natural contribution (= Routine + E3, which varies for each combination of sort, E3_sub, etc)
dvNatural	Deciviews due to natural components	dvNatural=10*log(natural/10);
dvTotal	Total deciviews	
Impairment	dvTotal-dvNatural	
NewNatCondAvg	Extinction from new derived natural conditions	
dvNewNatCondavg	Deciviews from new derived natural conditions	