

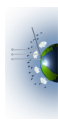
3 Appendix

3.1 ACRONYM LIST

ACP.....	Aerosol Climatology Product
AGP	Ancillary Geographic Product
AOD.....	Aerosol Optical Depth
APOP	Aerosol Physical and Optical Properties
ATBD.....	Algorithm Theoretical Basis Document
AU.....	Astronomical Unit
CF.....	Climate and Forecast
DAAC	Distributed Active Archive Center
DID	DTED Intermediate Dataset
DMS.....	Degrees Minutes Seconds
DTED.....	Digital Terrain Elevation Dataset
ECS	EOSDIS Core System
EOF	Empirical Orthogonal Function
EOS.....	Earth Observing System
EOSDIS	Earth Observing System Data and Information System
ESDT.....	Earth Science Data Type
GCTP	General Cartographic Transformation Package
GSFC	Goddard Space Flight Center
HDF	Hierarchical Data Format
HDF-EOS.....	Hierarchical Data Format for EOS
ISO.....	International Organization for Standardization
JPL	Jet Propulsion Laboratory
LaRC.....	Langley Research Center
LUT.....	Look Up Table
MISR.....	Multi-angle Imaging SpectroRadiometer
NASA.....	National Aeronautics and Space Administration
NetCDF.....	Network Common Data Format
PGE.....	Product Generation Executable
RCCT	Radiometric Camera-by-camera Cloud mask Threshold
SCF	Science Computing Facility
SDP	Science Data Processing

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SMART.....Simulated MISR Ancillary Radiative Transfer
SOM.....Space-Oblique Mercator
SSASingle Scattering Albedo
TASCTerrestrial Atmosphere and Surface Climatology
TOATop-Of-Atmosphere
UTC.....Coordinated Universal Time
WGS84.....World Geodetic System 1984



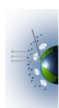
3.2 COMPONENT PARTICLE PROPERTIES SUMMARY TABLE

Part 1: Physical properties

Component particle number	Minimum radius (micrometers)	Maximum radius (micrometers)	Log normal characteristic radius (micrometers)	Log normal characteristic width (micrometers)	Density (g/cm ³)	Bottom (km)	Top (km)	Scale height (km)	Shape (see shape types below)	Component particle name (*see note)
(1)	0.00100	0.400	0.0300	1.65	1.70	0.00	10.0	2.00	<1>	spherical_nonabsorbing_0.06 (sulfate, sea salt, organic)
(2)	0.00100	0.750	0.0600	1.70	1.77	0.00	10.0	2.00	<1>	spherical_nonabsorbing_0.12 (sulfate, sea salt, organic)
(3)	0.0100	1.50	0.120	1.75	1.84	0.00	10.0	2.00	<1>	spherical_nonabsorbing_0.26 (sulfate, sea salt, organic)
(4)	0.0100	4.00	0.240	1.80	1.91	0.00	10.0	2.00	<1>	spherical_nonabsorbing_0.57 (sulfate, sea salt, organic)
(5)	0.0100	8.00	0.500	1.85	1.99	0.00	10.0	2.00	<1>	spherical_nonabsorbing_1.28 (sea salt, organic)
(6)	0.100	50.0	1.00	1.90	2.13	0.00	10.0	2.00	<1>	spherical_nonabsorbing_2.80 (sea salt, organic)
(7)	0.00100	0.400	0.0300	1.65	1.70	0.00	10.0	2.00	<1>	spherical_absorbing_0.06_ssa_green_0.9 (sulfate, sea salt, organic)
(8)	0.00100	0.750	0.0600	1.70	1.77	0.00	10.0	2.00	<1>	spherical_absorbing_0.12_ssa_green_0.9 (sulfate, sea salt, organic)
(9)	0.0100	1.50	0.120	1.75	1.84	0.00	10.0	2.00	<1>	spherical_absorbing_0.26_ssa_green_0.9 (sulfate, sea salt, organic)
(10)	0.0100	4.00	0.240	1.80	1.91	0.00	10.0	2.00	<1>	spherical_absorbing_0.57_ssa_green_0.9 (sulfate, sea salt, organic)
(11)	0.0100	8.00	0.500	1.85	1.99	0.00	10.0	2.00	<1>	spherical_absorbing_1.28_ssa_green_0.9 (sea salt, organic)
(12)	0.100	50.0	1.00	1.90	2.13	0.00	10.0	2.00	<1>	spherical_absorbing_2.80_ssa_green_0.9 (sea salt, organic)
(13)	0.00100	0.400	0.0300	1.65	1.70	0.00	10.0	2.00	<1>	spherical_absorbing_0.06_ssa_green_0.8 (sulfate, sea salt, organic)
(14)	0.00100	0.750	0.0600	1.70	1.77	0.00	10.0	2.00	<1>	spherical_absorbing_0.12_ssa_green_0.8 (sulfate, sea salt, organic)
(15)	0.0100	1.50	0.120	1.75	1.84	0.00	10.0	2.00	<1>	spherical_absorbing_0.26_ssa_green_0.8 (sulfate, sea salt, organic)
(16)	0.0100	4.00	0.240	1.80	1.91	0.00	10.0	2.00	<1>	spherical_absorbing_0.57_ssa_green_0.8 (sulfate, sea salt, organic)
(17)	0.0100	8.00	0.500	1.85	1.99	0.00	10.0	2.00	<1>	spherical_absorbing_1.28_ssa_green_0.8 (sea salt, organic)
(18)	0.100	50.0	1.00	1.90	2.13	0.00	10.0	2.00	<1>	spherical_absorbing_2.80_ssa_green_0.8 (sea salt, organic)
(19)	0.100	1.00	0.500	1.50	2.60	3.00	6.00	10.0	<2>	grains_model_h1 (dust)
(20)	0.100	1.00	0.500	1.50	2.60	3.00	6.00	10.0	<3>	grains_model_h4 (dust)
(21)	0.100	6.00	1.00	2.00	2.60	3.00	6.00	10.0	<4>	spheroidal_mode2_h1 (dust)

Part 2: Optical properties

Component particle number	Band	Spectral refractive index real	Spectral refractive index imaginary	Spectral extinction cross-section (micrometers ²)	Spectral single scattering albedo	Spectral anisotropy parameter (g factor)	Component particle name (*see note)
(1)	blue	1.45	0.00	0.000772	1.00	0.431	spherical_nonabsorbing_0.06 (sulfate, sea salt, organic)
	green	1.45	0.00	0.000396	1.00	0.352	
	red	1.45	0.00	0.000217	1.00	0.287	
	nir	1.45	0.00	9.09e-05	1.00	0.207	
(2)	blue	1.45	0.00	0.0207	1.00	0.654	spherical_nonabsorbing_0.12 (sulfate, sea salt, organic)
	green	1.45	0.00	0.0134	1.00	0.609	
	red	1.45	0.00	0.00885	1.00	0.563	
	nir	1.45	0.00	0.00467	1.00	0.488	
(3)	blue	1.45	0.00	0.216	1.00	0.726	spherical_nonabsorbing_0.26 (sulfate, sea salt, organic)
	green	1.45	0.00	0.182	1.00	0.717	
	red	1.45	0.00	0.150	1.00	0.703	
	nir	1.45	0.00	0.105	1.00	0.674	
(4)	blue	1.45	0.00	1.02	1.00	0.718	spherical_nonabsorbing_0.57 (sulfate, sea salt, organic)
	green	1.45	0.00	1.04	1.00	0.722	
	red	1.45	0.00	1.03	1.00	0.725	
	nir	1.45	0.00	0.952	1.00	0.726	
(5)	blue	1.45	0.00	4.02	1.00	0.741	spherical_nonabsorbing_1.28 (sea salt, organic)
	green	1.45	0.00	4.19	1.00	0.728	
	red	1.45	0.00	4.35	1.00	0.721	
	nir	1.45	0.00	4.59	1.00	0.718	
(6)	blue	1.45	0.00	15.9	1.00	0.786	spherical_nonabsorbing_2.80 (sea salt, organic)
	green	1.45	0.00	16.2	1.00	0.775	
	red	1.45	0.00	16.5	1.00	0.763	
	nir	1.45	0.00	17.0	1.00	0.747	
(7)	blue	1.45	0.00550	0.000822	0.928	0.431	spherical_absorbing_0.06_ssa_green_0.9 (sulfate, sea salt, organic)
	green	1.45	0.00550	0.000436	0.900	0.351	
	red	1.45	0.00550	0.000250	0.863	0.287	
	nir	1.45	0.00550	0.000115	0.785	0.207	
(8)	blue	1.45	0.0147	0.0212	0.911	0.659	spherical_absorbing_0.12_ssa_green_0.9 (sulfate, sea salt, organic)
	green	1.45	0.0147	0.0141	0.900	0.612	
	red	1.45	0.0147	0.00953	0.885	0.564	
	nir	1.45	0.0147	0.00527	0.853	0.487	
(9)	blue	1.45	0.0179	0.213	0.894	0.748	spherical_absorbing_0.26_ssa_green_0.9 (sulfate, sea salt, organic)
	green	1.45	0.0179	0.181	0.900	0.733	
	red	1.45	0.0179	0.150	0.901	0.716	
	nir	1.45	0.0179	0.107	0.897	0.682	
(10)	blue	1.45	0.0108	1.01	0.879	0.753	spherical_absorbing_0.57_ssa_green_0.9 (sulfate, sea salt, organic)
	green	1.45	0.0108	1.03	0.900	0.750	
	red	1.45	0.0108	1.02	0.913	0.748	
	nir	1.45	0.0108	0.942	0.926	0.743	
(11)	blue	1.45	0.00446	4.02	0.878	0.774	spherical_absorbing_1.28_ssa_green_0.9 (sea salt, organic)
	green	1.45	0.00446	4.18	0.899	0.756	
	red	1.45	0.00446	4.35	0.915	0.745	
	nir	1.45	0.00446	4.58	0.934	0.737	
(12)	blue	1.45	0.00205	15.9	0.881	0.818	spherical_absorbing_2.80_ssa_green_0.9 (sea salt, organic)
	green	1.45	0.00205	16.2	0.899	0.801	
	red	1.45	0.00205	16.5	0.913	0.787	
	nir	1.45	0.00205	17.0	0.930	0.766	
(13)	blue	1.45	0.0123	0.000883	0.852	0.430	spherical_absorbing_0.06_ssa_green_0.8 (sulfate, sea salt, organic)
	green	1.45	0.0123	0.000485	0.800	0.351	
	red	1.45	0.0123	0.000290	0.738	0.286	
	nir	1.45	0.0123	0.000145	0.619	0.206	
(14)	blue	1.45	0.0325	0.0219	0.821	0.664	spherical_absorbing_0.12_ssa_green_0.8 (sulfate, sea salt, organic)
	green	1.45	0.0325	0.0149	0.800	0.614	
	red	1.45	0.0325	0.0103	0.773	0.564	
	nir	1.45	0.0325	0.00599	0.720	0.486	
(15)	blue	1.45	0.0412	0.209	0.792	0.767	spherical_absorbing_0.26_ssa_green_0.8 (sulfate, sea salt, organic)
	green	1.45	0.0412	0.179	0.800	0.748	
	red	1.45	0.0412	0.150	0.800	0.727	
	nir	1.45	0.0412	0.110	0.791	0.689	
(16)	blue	1.45	0.0268	0.999	0.768	0.787	spherical_absorbing_0.57_ssa_green_0.8 (sulfate, sea salt, organic)
	green	1.45	0.0268	1.02	0.800	0.778	
	red	1.45	0.0268	1.00	0.821	0.772	



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(17)	nir	1.45	0.0268	0.929	0.842	0.761	spherical_absorbing_1.28_ssa_green_0.8 (sea salt, organic)
	blue	1.45	0.0111	4.02	0.767	0.806	
	green	1.45	0.0111	4.18	0.799	0.785	
	red	1.45	0.0111	4.33	0.826	0.771	
(18)	nir	1.45	0.0111	4.56	0.859	0.758	spherical_absorbing_2.80_ssa_green_0.8 (sea salt, organic)
	blue	1.45	0.00520	15.9	0.771	0.847	
	green	1.45	0.00520	16.2	0.799	0.828	
	red	1.45	0.00520	16.5	0.822	0.811	
(19)	nir	1.45	0.00520	17.0	0.852	0.787	grains_model_h1 (dust)
	blue	1.50	0.00410	2.84	0.919	0.705	
	green	1.51	0.00210	3.17	0.977	0.711	
	red	1.51	0.000650	3.37	0.994	0.729	
(20)	nir	1.51	0.000470	3.42	0.997	0.747	grains_model_h4 (dust)
	blue	1.54	0.0210	2.81	0.722	0.772	
	green	1.54	0.00890	3.13	0.908	0.715	
	red	1.54	0.00240	3.36	0.979	0.711	
(21)	nir	1.54	0.00160	3.45	0.990	0.729	spheroidal_mode2_h1 (dust)
	blue	1.51	0.00411	15.3	0.810	0.791	
	green	1.51	0.00210	15.5	0.902	0.772	
	red	1.51	0.000650	15.8	0.971	0.741	
	nir	1.51	0.000470	16.3	0.983	0.720	

Shape types:

<1> = Spherical
 <2> = Grains Model H1
 <3> = Grains Model H4
 <4> = spheroids Mode2 H1

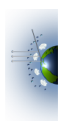
See reference [1] for a description of grains and spheroids.

Notes:

- Not all particles are used in the current MISR aerosol standard retrieval algorithm. The set of particles used is controlled by the "MIXTURE" part of the MISR Aerosol Climatology Product (ACP). The ACP MIXTURE content is copied into the MIXTURE_INFORMATION group of the MISR Level 2 Aerosol Parameters product. Within that group, is a "Summary_Table" variable including the list of particles used.
- * The decimal number immediately following the word "absorbing" or "nonabsorbing" in each spherical particle name is the effective radius of the particle in micrometers. The decimal number following "ssa_green" is single-scattering albedo in the green (558 nm) band.
- ** Particle density is included as a suggested value, for information only; we do not use this quantity in the retrieval process.
- *** The asymmetry parameter (g) may be useful for calculating radiative fluxes from the MISR product, but to calculate radiances accurately, the full single scattering phase function is needed. The spectral phase functions are contained in the HDF structure named "Spectral Phase Functions" in the "APOP" part of the MISR Aerosol Climatology Product (ACP). ACP APOP content can also be found in the COMPONENT_PARTICLE_INFORMATION group of the Level 2 Aerosol product.

References:

- [1] Kalashnikova, O.V., R. Kahn, I.N. Sokolik and W.-H Li, "The ability of multi-angle remote sensing observations to identify and distinguish mineral dust types: Part 1. Optical models and retrievals of optically thick plumes.", J. Geophys. Res., 2004



3.3 MIXTURE PROPERTIES SUMMARY TABLE

Mix #	Component Fractional Amount in Green Band (558 nm)		AOT rel/to green		Single Scattering Albedo			Angstrom exponent	Mixture name (*see note)	
			blue	green	blue	green	red			nir
1	1.00 (1)		1.950	1.000	0.230	1.000	1.000	1.000	3.228 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
2	0.95 (1)	0.05 (6)	1.902	1.000	0.271	1.000	1.000	1.000	2.943 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
3	0.90 (1)	0.10 (6)	1.853	1.000	0.312	1.000	1.000	1.000	2.692 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
4	0.80 (1)	0.20 (6)	1.756	1.000	0.394	1.000	1.000	1.000	2.257 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
5	0.70 (1)	0.30 (6)	1.660	1.000	0.476	1.000	1.000	1.000	1.884 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
6	0.60 (1)	0.40 (6)	1.563	1.000	0.558	1.000	1.000	1.000	1.551 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
7	0.50 (1)	0.50 (6)	1.466	1.000	0.641	1.000	1.000	1.000	1.245 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
8	0.40 (1)	0.60 (6)	1.370	1.000	0.723	1.000	1.000	1.000	0.959 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
9	0.30 (1)	0.70 (6)	1.273	1.000	0.805	1.000	1.000	1.000	0.685 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
10	0.20 (1)	0.80 (6)	1.176	1.000	0.887	1.000	1.000	1.000	0.420 Spherical_Reff_0.06_Reff_2.80_Nonabsorbing	
11	1.00 (2)		1.541	1.000	0.348	1.000	1.000	1.000	2.245 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
12	0.95 (2)	0.05 (6)	1.513	1.000	0.384	1.000	1.000	1.000	2.073 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
13	0.90 (2)	0.10 (6)	1.485	1.000	0.419	1.000	1.000	1.000	1.913 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
14	0.80 (2)	0.20 (6)	1.429	1.000	0.489	1.000	1.000	1.000	1.621 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
15	0.70 (2)	0.30 (6)	1.374	1.000	0.559	1.000	1.000	1.000	1.357 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
16	0.60 (2)	0.40 (6)	1.318	1.000	0.630	1.000	1.000	1.000	1.115 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
17	0.50 (2)	0.50 (6)	1.262	1.000	0.700	1.000	1.000	1.000	0.889 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
18	0.40 (2)	0.60 (6)	1.206	1.000	0.770	1.000	1.000	1.000	0.676 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
19	0.30 (2)	0.70 (6)	1.150	1.000	0.841	1.000	1.000	1.000	0.472 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
20	0.20 (2)	0.80 (6)	1.094	1.000	0.911	1.000	1.000	1.000	0.276 Spherical_Reff_0.12_Reff_2.80_Nonabsorbing	
21	1.00 (3)		1.185	1.000	0.576	1.000	1.000	1.000	1.090 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
22	0.95 (3)	0.05 (6)	1.175	1.000	0.600	1.000	1.000	1.000	1.016 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
23	0.90 (3)	0.10 (6)	1.165	1.000	0.624	1.000	1.000	1.000	0.945 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
24	0.80 (3)	0.20 (6)	1.144	1.000	0.671	1.000	1.000	1.000	0.807 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
25	0.70 (3)	0.30 (6)	1.124	1.000	0.719	1.000	1.000	1.000	0.677 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
26	0.60 (3)	0.40 (6)	1.104	1.000	0.766	1.000	1.000	1.000	0.553 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
27	0.50 (3)	0.50 (6)	1.084	1.000	0.814	1.000	1.000	1.000	0.434 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
28	0.40 (3)	0.60 (6)	1.064	1.000	0.861	1.000	1.000	1.000	0.320 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
29	0.30 (3)	0.70 (6)	1.043	1.000	0.909	1.000	1.000	1.000	0.209 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
30	0.20 (3)	0.80 (6)	1.023	1.000	0.956	1.000	1.000	1.000	0.102 Spherical_Reff_0.26_Reff_2.80_Nonabsorbing	
31	1.00 (8)		1.507	1.000	0.375	0.911	0.900	0.885	0.853	2.102 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
32	0.95 (8)	0.05 (6)	1.480	1.000	0.408	0.914	0.905	0.893	0.872	1.945 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
33	0.90 (8)	0.10 (6)	1.454	1.000	0.442	0.917	0.910	0.902	0.888	1.798 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
34	0.80 (8)	0.20 (6)	1.402	1.000	0.510	0.924	0.920	0.916	0.914	1.528 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
35	0.70 (8)	0.30 (6)	1.349	1.000	0.578	0.931	0.930	0.930	0.933	1.282 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
36	0.60 (8)	0.40 (6)	1.297	1.000	0.645	0.938	0.940	0.943	0.949	1.054 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
37	0.50 (8)	0.50 (6)	1.245	1.000	0.713	0.946	0.950	0.954	0.961	0.841 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
38	0.40 (8)	0.60 (6)	1.192	1.000	0.781	0.955	0.960	0.965	0.972	0.638 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
39	0.30 (8)	0.70 (6)	1.140	1.000	0.848	0.965	0.970	0.975	0.981	0.445 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
40	0.20 (8)	0.80 (6)	1.087	1.000	0.916	0.975	0.980	0.984	0.988	0.258 Spherical_Reff_0.12_SSA_green_0.9_Reff_2.80_SSA_green_1.0_Absorbing
41	1.00 (14)		1.470	1.000	0.403	0.821	0.800	0.773	0.720	1.954 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
42	0.95 (14)	0.05 (6)	1.445	1.000	0.435	0.827	0.810	0.790	0.754	1.812 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
43	0.90 (14)	0.10 (6)	1.421	1.000	0.468	0.833	0.820	0.805	0.783	1.678 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
44	0.80 (14)	0.20 (6)	1.372	1.000	0.533	0.847	0.840	0.834	0.831	1.430 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
45	0.70 (14)	0.30 (6)	1.323	1.000	0.598	0.861	0.860	0.861	0.868	1.201 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
46	0.60 (14)	0.40 (6)	1.275	1.000	0.662	0.876	0.880	0.885	0.898	0.989 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
47	0.50 (14)	0.50 (6)	1.226	1.000	0.727	0.893	0.900	0.908	0.922	0.788 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
48	0.40 (14)	0.60 (6)	1.177	1.000	0.792	0.911	0.920	0.929	0.943	0.598 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
49	0.30 (14)	0.70 (6)	1.129	1.000	0.857	0.930	0.940	0.949	0.961	0.415 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
50	0.20 (14)	0.80 (6)	1.080	1.000	0.922	0.951	0.960	0.967	0.976	0.238 Spherical_Reff_0.12_SSA_green_0.8_Reff_2.80_SSA_green_1.0_Absorbing
51	0.72 (2)	0.08 (6)	1.367	1.000	0.551	0.989	0.995	0.998	0.999	1.372 Spherical_Reff_0.12_Reff_2.80_Med_Dust
52	0.48 (2)	0.32 (6)	1.233	1.000	0.720	0.988	0.995	0.999	0.999	0.812 Spherical_Reff_0.12_Reff_2.80_Med_Dust
53	0.16 (2)	0.64 (6)	1.054	1.000	0.945	0.986	0.995	0.999	0.999	0.165 Spherical_Reff_0.12_Reff_2.80_Med_Dust
54	0.54 (2)	0.06 (6)	1.249	1.000	0.683	0.977	0.991	0.997	0.998	0.909 Spherical_Reff_0.12_Reff_2.80_Med_Dust
55	0.36 (2)	0.24 (6)	1.149	1.000	0.809	0.975	0.991	0.997	0.998	0.526 Spherical_Reff_0.12_Reff_2.80_Med_Dust
56	0.12 (2)	0.48 (6)	1.015	1.000	0.978	0.972	0.991	0.998	0.999	0.054 Spherical_Reff_0.12_Reff_2.80_Med_Dust
57	0.36 (2)	0.04 (6)	1.131	1.000	0.815	0.962	0.986	0.996	0.998	0.491 Spherical_Reff_0.12_Reff_2.80_Med_Dust
58	0.24 (2)	0.16 (6)	1.064	1.000	0.899	0.959	0.986	0.996	0.998	0.251 Spherical_Reff_0.12_Reff_2.80_Med_Dust
59	0.08 (2)	0.32 (6)	0.975	1.000	1.012	0.956	0.986	0.997	0.998	-0.058 Spherical_Reff_0.12_Reff_2.80_Med_Dust
60	0.18 (2)	0.02 (6)	1.013	1.000	0.947	0.943	0.982	0.995	0.997	0.099 Spherical_Reff_0.12_Reff_2.80_Med_Dust
61	0.12 (2)	0.08 (6)	0.980	1.000	0.989	0.941	0.982	0.995	0.997	-0.017 Spherical_Reff_0.12_Reff_2.80_Med_Dust
62	0.04 (2)	0.16 (6)	0.935	1.000	1.045	0.938	0.982	0.995	0.997	-0.169 Spherical_Reff_0.12_Reff_2.80_Med_Dust
63	0.40 (2)	0.48 (19)	1.165	1.000	0.783	0.951	0.977	0.993	0.995	0.596 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
64	0.40 (2)	0.36 (19)	1.176	1.000	0.780	0.940	0.968	0.990	0.993	0.617 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
65	0.40 (2)	0.24 (19)	1.187	1.000	0.776	0.928	0.959	0.986	0.991	0.639 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
66	0.40 (2)	0.12 (19)	1.199	1.000	0.773	0.918	0.950	0.983	0.988	0.660 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
67	0.20 (2)	0.64 (19)	1.039	1.000	0.928	0.927	0.970	0.991	0.995	0.167 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
68	0.20 (2)	0.48 (19)	1.054	1.000	0.924	0.910	0.958	0.987	0.992	0.197 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
69	0.20 (2)	0.32 (19)	1.069	1.000	0.919	0.894	0.946	0.983	0.990	0.226 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
70	0.20 (2)	0.16 (19)	1.084	1.000	0.914	0.879	0.934	0.979	0.987	0.255 Spherical_Reff_0.12_Med_Dust_Coarse_Dust
71	0.80 (19)	0.20 (21)	0.914	1.000	1.073	0.896	0.962	0.990	0.994	-0.243 Med_Dust_Coarse_Dust
72	0.60 (19)	0.40 (21)	0.933	1.000	1.067	0.873	0.947	0.985	0.991	-0.205 Med_Dust_Coarse_Dust
73	0.40 (19)	0.60 (21)	0.951	1.000	1.062	0.851	0.932	0.980	0.989	-0.166 Med_Dust_Coarse_Dust
74	0.20 (19)	0.80 (21)	0.970	1.000	1.056	0.830	0.917	0.976	0.986	-0.129 Med_Dust_Coarse_Dust

Component particle names:

- (1) = spherical_nonabsorbing_0.06 (sulfate, sea salt, organic)
- (2) = spherical_nonabsorbing_0.12 (sulfate, sea salt, organic)
- (3) = spherical_nonabsorbing_0.26 (sulfate, sea salt, organic)
- (6) = spherical_nonabsorbing_2.80 (sea salt, organic)
- (8) = spherical_absorbing_0.12_ssa_green_0.9 (sulfate, sea salt, organic)
- (14) = spherical_absorbing_0.12_ssa_green_0.8 (sulfate, sea salt, organic)
- (19) = grains_model_h1 (dust)
- (21) = spheroidal_mode2_h1 (dust)

Physical and optical properties for component particles are contained in the APOP part of the MISR Aerosol Climatology Product (ACP). ACP APOP content can also be found in the COMPONENT_PARTICLE_INFORMATION group of the Level 2 Aerosol product.

Notes:

* Mixture names are constructed such that they indicate some properties of the component particles. "Spherical" indicates one or more components are spherical in shape. "Reff <value>" indicates effective radius (e.g. Reff_2.80). "SSA green <value>" indicates single-scattering albedo in the green (558 nm) band (e.g. SSA_green_0.9). "Absorbing" mixtures have one or more components with single-scattering albedo less than 1.0. "Nonabsorbing" mixtures have single-scattering albedo of 1.0 for all components.

