

## Appendix 2.2. 2016–2019 IMPROVE and CSN Annual Mean Mass Concentrations

Table 2.2.1. IMPROVE 2016-2019 annual mean mass concentration ( $\mu\text{g m}^{-3}$ ) for ammonium sulfate (AS), ammonium nitrate (AN), particulate organic matter (POM), elemental carbon (EC), fine dust (FD), sea salt (SS), reconstructed fine mass (RCFM),  $\text{PM}_{2.5}$  gravimetric fine mass (FM),  $\text{PM}_{10}$  gravimetric fine mass ( $\text{PM}_{10}$ ), coarse mass (CM), filter light absorption ( $f_{\text{abs}}$ ,  $\text{Mm}^{-1}$ , 632.8 nm), fine mass residual (FM-RCFM).

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	$\text{PM}_{10}$	CM	$f_{\text{abs}}$	Residual
ACAD	ME	44.377	-68.261	157	0.706	0.248	1.317	0.104	0.124	0.240	2.740	2.848	5.515	2.612	1.258	0.108
AGTI	CA	33.464	-116.971	507	1.054	0.807	1.575	0.188	0.622	0.243	4.487	4.312	11.818	7.446	2.724	-0.175
BADL	SD	43.743	-101.941	736	0.768	0.371	1.508	0.107	0.535	0.016	3.303	3.208	7.398	4.187	1.204	-0.095
BALD	AZ	34.058	-109.441	2508	0.537	0.138	1.075	0.087	0.543	0.026	2.407	2.364	4.763	2.396	1.038	-0.043
BAND	NM	35.78	-106.266	1988	0.514	0.152	1.085	0.094	0.585	0.014	2.444	2.582	5.525	2.934	1.201	0.138
BIBE	TX	29.303	-103.178	1066	1.723	0.220	1.086	0.108	1.058	0.035	4.231	4.526	10.423	5.936	1.508	0.295
BIRM	AL	33.553	-86.815	175	1.902	0.582	4.206	0.928	1.007	0.202	8.826	8.745	18.749	10.038	7.790	-0.081
BLIS	CA	38.976	-120.103	2130	0.428	0.148	1.995	0.124	0.374	0.022	3.091	3.119	5.337	2.227	1.327	0.028
BOAP	NM	33.869	-106.852	1389	0.641	0.202	1.255	0.126	0.878	0.046	3.147	3.138	7.854	4.695	1.668	-0.009
BOLA	WY	42.847	-109.64	2296	0.356	0.117	1.448	0.084	0.381	0.012	2.398	2.390	4.059	1.671	0.908	-0.008
BOND	IL	40.052	-88.373	263	1.648	1.918	2.015	0.270	0.371	0.056	6.279	6.491	12.845	6.395	3.104	0.212
BOWA	MN	47.947	-91.495	526	0.661	0.443	1.414	0.098	0.165	0.059	2.839	2.897	5.223	2.346	1.049	0.058
BRCA	UT	37.618	-112.174	2481	0.442	0.165	1.199	0.083	0.525	0.021	2.434	2.290	4.915	2.607	0.933	-0.145
BRID	WY	42.975	-109.758	2626	0.348	0.124	1.646	0.091	0.351	0.010	2.571	2.468	4.095	1.625	0.871	-0.103
BRIG	NJ	39.465	-74.449	5	1.306	0.845	2.018	0.234	0.264	0.404	5.070	5.166	13.881	8.697	2.715	0.096
BRIS	LA	30.109	-89.762	-7	1.813	0.409	1.990	0.258	0.870	0.298	5.636	5.933	11.850	5.841	3.084	0.296
BYIS		37.966	124.631	100	6.984	5.046	3.353	0.727	1.648	0.493	18.252	18.101	35.305	16.563	6.965	-0.151
CABA	ME	43.833	-70.064	26	0.799	0.356	2.037	0.237	0.160	0.274	3.863	3.857	7.114	3.238	2.776	-0.005
CABI	MT	47.955	-115.671	1441	0.350	0.140	2.768	0.216	0.350	0.025	3.848	3.341	5.641	1.916	1.216	-0.507
CACO	MA	41.976	-70.024	49	0.998	0.413	1.419	0.122	0.172	0.815	3.940	4.154	9.579	5.411	1.666	0.214
CACR	AR	34.454	-94.143	683	1.630	0.502	2.366	0.200	0.743	0.061	5.503	5.777	10.391	4.645	2.255	0.274
CANY	UT	38.459	-109.821	1798	0.464	0.170	0.975	0.069	0.625	0.024	2.327	2.400	5.449	3.057	0.935	0.073
CAPI	UT	38.302	-111.293	1896	0.461	0.178	1.033	0.076	0.735	0.022	2.505	2.492	5.896	3.430	0.958	-0.013
CAVE	NM	32.178	-104.444	1355	1.178	0.359	1.132	0.166	1.859	0.026	4.719	4.702	13.124	8.658	2.418	-0.017
CEBL	KS	38.77	-99.763	665	1.050	0.806	1.668	0.134	0.866	0.023	4.547	4.587	12.565	7.989	1.684	0.040
CHAS	FL	28.748	-82.555	4	1.569	0.407	2.995	0.337	0.781	0.448	6.536	5.970	11.368	5.413	4.057	-0.566
CHIR	AZ	32.009	-109.389	1554	0.738	0.167	0.914	0.078	1.017	0.044	2.958	3.065	9.745	6.682	1.112	0.108
COHU	GA	34.785	-84.627	735	1.289	0.413	2.406	0.213	0.348	0.042	4.712	5.018	8.778	3.773	2.451	0.306

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	PM <sub>10</sub>	CM	f <sub>abs</sub>	Residual
CORI	WA	45.664	-121.001	178	0.649	1.148	2.550	0.234	1.218	0.126	5.925	5.292	17.371	11.965	3.044	-0.633
CRLA	OR	42.896	-122.136	1996	0.292	0.107	3.666	0.252	0.283	0.031	4.631	4.127	5.100	1.015	1.735	-0.504
CRMO	ID	43.46	-113.555	1817	0.343	0.306	1.972	0.120	0.495	0.030	3.265	3.122	6.112	2.982	1.100	-0.143
DENA	AK	63.723	-148.967	658	0.314	0.047	0.965	0.049	0.101	0.052	1.528	1.235	2.391	1.158	0.381	-0.293
DOME	CA	35.728	-118.138	927	0.920	0.467	2.493	0.167	1.069	0.052	5.168	5.185	16.088	10.839	1.873	0.016
DOSO	WV	39.105	-79.426	1182	1.385	0.464	1.653	0.173	0.239	0.026	3.940	4.135	6.623	2.526	1.993	0.195
EGBE	ON	44.231	-79.783	251	1.170	1.499	1.858	0.248	0.214	0.069	5.058	4.976	9.147	4.050	2.554	-0.082
EVER	FL	25.391	-80.681	1	1.626	0.440	4.760	0.181	0.949	0.744	8.700	5.429	12.667	7.273	2.003	-3.271
FCPC	WI	45.565	-88.808	564	0.861	0.956	1.643	0.150	0.174	0.052	3.836	3.776	6.250	2.488	1.607	-0.061
FLAT	MT	47.773	-114.269	1580	0.356	0.144	2.871	0.182	0.305	0.013	3.872	3.490	5.781	2.267	1.104	-0.382
FLTO	CO	39.915	-107.634	2593	0.391	0.115	1.443	0.067	0.509	0.012	2.537	2.034	4.169	2.103	0.695	-0.503
FOPE	MT	48.308	-105.102	638	0.859	0.694	1.731	0.125	0.512	0.023	3.944	3.713	8.473	4.771	1.402	-0.231
FRES	CA	36.782	-119.773	100	1.268	3.544	5.580	0.658	1.762	0.240	13.051	12.190	34.142	21.727	6.549	-0.861
FRRE	MD	39.706	-79.012	767	1.687	0.643	1.872	0.243	0.247	0.034	4.725	4.866	8.015	3.172	2.843	0.141
GAMO	MT	46.826	-111.711	2387	0.298	0.122	1.730	0.092	0.266	0.008	2.516	2.506	3.835	1.311	0.785	-0.009
GICL	NM	33.22	-108.235	1775	0.547	0.113	1.475	0.123	0.658	0.027	2.942	2.817	5.641	2.744	1.110	-0.125
GLAC	MT	48.511	-113.997	975	0.451	0.285	3.285	0.264	0.599	0.020	4.904	4.755	10.572	4.400	2.765	-0.149
GRBA	NV	39.005	-114.216	2065	0.399	0.111	0.991	0.064	0.645	0.022	2.232	2.244	5.171	2.941	0.760	0.013
GRCA	AZ	36.066	-112.154	2164	0.490	0.156	0.823	0.066	0.676	0.034	2.246	2.367	3.861	1.804	0.865	0.121
GRGU	NH	44.308	-71.218	453	0.690	0.169	1.356	0.107	0.128	0.041	2.491	2.723	5.033	2.305	1.240	0.233
GRR1	MN	43.937	-91.405	370	1.039	1.590	1.882	0.204	0.308	0.061	5.085	5.131	9.668	4.509	2.385	0.047
GRSA	CO	37.725	-105.519	2498	0.412	0.126	1.176	0.074	0.902	0.010	2.699	2.542	5.485	2.843	0.953	-0.157
GRSM	TN	35.633	-83.942	810	1.283	0.378	2.390	0.211	0.325	0.040	4.628	4.890	8.644	3.494	2.363	0.263
GUMO	TX	31.833	-104.809	1672	1.052	0.291	1.064	0.111	2.091	0.033	4.641	4.847	12.928	7.923	1.685	0.206
HACR	HI	20.758	-156.248	2158	0.638	0.084	0.149	0.015	0.154	0.113	1.153	1.320	2.307	0.975	0.218	0.167
HAVO	HI	19.431	-155.258	1258	2.027	0.086	0.271	0.024	0.111	0.380	2.898	3.590	5.249	1.642	0.212	0.692
HECA	OR	44.97	-116.844	655	0.355	0.301	2.107	0.126	0.386	0.024	3.299	3.243	6.085	2.872	1.304	-0.056
HEGL	MO	36.614	-92.922	404	1.473	0.726	2.367	0.233	0.586	0.039	5.425	5.570	10.726	5.170	2.677	0.145
HOOV	CA	38.088	-119.177	2560	0.405	0.139	1.841	0.106	0.570	0.023	3.083	2.993	5.143	2.182	1.022	-0.090
IKBA	AZ	34.34	-111.683	1297	0.673	0.254	1.130	0.104	0.963	0.072	3.195	3.079	8.118	5.022	1.429	-0.116
ISLE	MI	47.46	-88.149	182	0.729	0.451	1.340	0.105	0.150	0.057	2.831	2.984	5.317	2.373	1.091	0.154
JARB	NV	41.893	-115.426	1869	0.337	0.096	1.582	0.091	1.008	0.025	3.139	3.132	7.185	4.115	1.047	-0.008

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	PM <sub>10</sub>	CM	f <sub>abs</sub>	Residual
JARI	VA	37.627	-79.512	289	1.375	0.468	2.669	0.336	0.298	0.036	5.182	5.597	8.509	2.929	3.772	0.415
JOSH	CA	34.07	-116.389	1235	0.763	0.534	1.252	0.121	1.011	0.081	3.762	3.687	11.073	7.364	1.783	-0.075
KAIS	CA	37.221	-119.155	2597	0.593	0.302	1.999	0.130	0.610	0.027	3.662	3.634	7.888	4.254	1.472	-0.028
KALM	OR	42.552	-124.059	80	0.410	0.138	3.371	0.228	0.165	0.254	4.565	3.634	6.078	2.344	1.923	-0.931
KPBO	AK	60.012	-151.711	5	0.457	0.130	0.880	0.059	0.267	0.571	2.364	2.297	10.516	8.717	0.759	-0.067
LABE	CA	41.712	-121.507	1459	0.337	0.135	3.454	0.267	0.352	0.028	4.573	4.577	6.526	1.949	1.707	0.004
LASU	IA	40.693	-92.006	229	1.392	1.642	2.037	0.236	0.541	0.052	5.901	5.990	15.842	9.800	2.574	0.089
LAVO	CA	40.54	-121.577	1732	0.386	0.155	3.531	0.209	0.345	0.031	4.658	3.741	6.281	2.327	1.488	-0.916
LIGO	NC	35.972	-81.933	968	1.123	0.262	2.498	0.222	0.252	0.035	4.391	4.931	7.760	2.837	2.315	0.541
LOND	NH	42.862	-71.38	124	0.874	0.469	2.225	0.292	0.198	0.119	4.177	4.121	7.593	3.423	3.375	-0.056
LOST	ND	48.642	-102.402	696	1.025	0.903	1.575	0.175	0.537	0.037	4.252	4.108	10.560	6.436	2.119	-0.144
LTCC	CA	38.925	-119.98	1935	0.428	0.180	2.648	0.268	0.632	0.032	4.188	4.058	9.293	5.223	2.865	-0.129
LYEB	VT	42.956	-72.91	882	0.784	0.437	1.302	0.123	0.146	0.039	2.830	2.913	4.811	1.898	1.426	0.083
MACA	KY	37.132	-86.148	235	1.690	0.870	2.500	0.274	0.342	0.043	5.720	5.798	9.778	3.978	3.243	0.078
MAKA	WA	48.298	-124.625	480	0.383	0.164	1.174	0.069	0.072	0.315	2.177	2.312	3.763	1.468	0.616	0.136
MAVI	MA	41.331	-70.785	2	1.057	0.536	1.321	0.125	0.194	1.079	4.312	4.657	15.730	11.141	1.808	0.344
MEAD	AZ	36.019	-114.068	902	0.602	0.195	0.810	0.066	1.112	0.057	2.841	2.905	8.191	5.278	1.045	0.064
MELA	MT	48.487	-104.476	606	0.894	0.779	1.511	0.128	0.758	0.026	4.096	3.867	9.381	5.597	1.610	-0.229
MEVE	CO	37.198	-108.491	2172	0.442	0.128	0.849	0.063	0.571	0.015	2.069	2.105	4.504	2.427	0.808	0.036
MING	MO	36.972	-90.143	111	1.642	0.812	2.767	0.314	0.844	0.046	6.425	6.564	14.934	8.278	3.648	0.139
MOHO	OR	45.289	-121.784	1531	0.311	0.149	1.283	0.088	0.262	0.072	2.164	2.243	3.830	1.609	0.916	0.079
MOMO	CT	41.821	-73.297	521	0.922	0.535	1.745	0.182	0.183	0.063	3.630	3.672	6.041	2.375	2.174	0.042
MONT	MT	47.122	-113.154	1282	0.334	0.094	4.163	0.199	0.499	0.012	5.300	3.433	6.024	2.621	1.268	-1.868
MOOS	ME	45.126	-67.266	77	0.723	0.218	1.348	0.100	0.126	0.216	2.731	2.799	4.777	2.015	1.181	0.067
MORA	WA	46.758	-122.124	439	0.431	0.127	1.919	0.158	0.139	0.085	2.859	2.965	5.064	2.033	1.733	0.106
MOZI	CO	40.538	-106.677	3243	0.395	0.137	1.146	0.071	0.377	0.012	2.137	2.085	3.959	1.882	0.773	-0.052
NEBR	NE	41.889	-100.339	883	0.840	0.656	1.483	0.113	0.513	0.016	3.621	3.713	8.401	4.683	1.370	0.091
NOAB	WY	44.745	-109.382	2482	0.315	0.114	1.172	0.063	0.322	0.007	1.993	2.020	3.898	1.898	0.682	0.027
NOCA	WA	48.732	-121.065	568	0.376	0.100	2.275	0.122	0.138	0.040	3.050	3.092	4.568	1.415	0.988	0.042
NOCH	MT	45.65	-106.557	1283	0.571	0.217	1.725	0.102	0.429	0.014	3.058	2.958	6.314	3.367	1.054	-0.100
NOGA	AZ	31.337	-110.937	1172	0.839	0.432	3.761	0.886	3.114	0.304	9.336	8.550	28.676	20.090	10.506	-0.786
OKEF	GA	30.74	-82.128	48	1.485	0.331	2.710	0.240	0.665	0.290	5.721	5.852	11.296	5.383	2.837	0.131

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	PM <sub>10</sub>	CM	f <sub>abs</sub>	Residual
OLYM	WA	48.007	-122.973	599	0.453	0.264	1.598	0.122	0.107	0.164	2.709	2.626	4.269	1.484	1.121	-0.083
ORPI	AZ	31.951	-112.802	504	0.902	0.337	0.858	0.079	1.435	0.207	3.817	3.777	11.815	8.047	1.439	-0.040
OWVL	CA	37.361	-118.331	1234	0.514	0.155	2.046	0.144	1.349	0.023	4.230	4.292	11.094	6.838	1.468	0.061
PACK	NH	42.862	-71.879	695	0.710	0.326	1.355	0.137	0.140	0.046	2.714	2.735	4.623	1.891	1.605	0.022
PASA	WA	48.388	-119.927	1627	0.307	0.142	2.559	0.214	0.270	0.018	3.510	3.475	5.225	1.675	1.063	-0.035
PEFO	AZ	35.078	-109.769	1766	0.553	0.172	1.112	0.124	0.915	0.031	2.906	2.935	7.373	4.427	1.755	0.029
PENO	ME	44.948	-68.648	45	0.751	0.280	1.961	0.247	0.233	0.160	3.631	3.600	7.892	4.273	2.778	-0.030
PHOE	AZ	33.504	-112.096	342	0.978	0.870	3.601	0.656	2.444	0.251	8.800	8.074	27.839	19.755	7.929	-0.726
PINN	CA	36.483	-121.157	302	0.736	0.495	2.065	0.188	0.398	0.364	4.246	4.353	10.350	6.001	2.337	0.107
PMRF	VT	44.528	-72.869	401	0.817	0.360	1.516	0.141	0.139	0.050	3.023	3.119	5.027	1.898	1.648	0.096
PORE	CA	38.122	-122.909	97	0.887	0.628	1.583	0.153	0.236	2.294	5.780	6.560	14.778	8.151	0.983	0.780
PRIS	ME	46.696	-68.033	165	0.707	0.235	1.643	0.195	0.366	0.111	3.256	3.270	8.575	5.270	2.340	0.014
PUSO	WA	47.57	-122.312	97	0.710	0.767	3.043	0.498	0.369	0.276	5.664	5.303	9.647	4.419	5.854	-0.362
QUCI	OH	39.943	-81.338	366	1.802	0.940	2.190	0.304	0.307	0.035	5.577	5.859	10.246	4.296	3.520	0.282
RAFA	CA	34.734	-120.007	956	0.818	0.509	1.592	0.102	0.689	0.253	3.963	3.989	11.778	7.786	1.370	0.027
REDW	CA	41.561	-124.084	243	0.552	0.183	2.060	0.102	0.138	1.176	4.210	3.827	8.230	3.862	0.792	-0.384
ROMA	SC	32.941	-79.657	4	1.540	0.372	2.361	0.221	0.508	0.515	5.516	5.932	11.260	5.344	2.718	0.416
ROMO	CO	40.278	-105.546	2760	0.433	0.233	1.292	0.093	0.507	0.010	2.568	2.479	5.343	2.879	1.126	-0.089
SACR	NM	33.46	-104.404	1072	1.248	0.609	1.341	0.147	1.369	0.050	4.764	4.766	16.770	12.006	2.028	0.002
SAGA	CA	34.297	-118.028	1791	0.706	0.678	1.558	0.140	0.674	0.057	3.814	3.286	8.839	5.134	1.595	-0.528
SAGO	CA	34.194	-116.913	1726	0.721	0.829	1.492	0.138	0.618	0.058	3.856	3.490	8.928	5.399	1.866	-0.366
SAGU	AZ	32.175	-110.737	941	0.797	0.315	1.081	0.125	1.520	0.100	3.937	3.811	11.347	7.548	2.004	-0.126
SAMA	FL	30.093	-84.161	7	1.532	0.346	2.527	0.222	0.684	0.446	5.758	5.915	10.877	4.930	2.673	0.157
SAPE	NM	36.014	-106.845	2935	0.439	0.129	0.826	0.062	0.538	0.017	2.010	1.994	3.875	1.887	0.751	-0.016
SAWE	AZ	32.249	-111.218	714	0.843	0.388	1.204	0.158	2.178	0.118	4.888	4.707	15.921	11.212	2.572	-0.181
SAWT	ID	44.171	-114.927	1990	0.287	0.088	3.130	0.182	0.365	0.011	4.063	3.776	5.365	1.623	1.352	-0.287
SENE	MI	46.289	-85.95	214	0.784	0.561	1.381	0.124	0.144	0.043	3.037	3.057	5.051	1.971	1.281	0.020
SEQU	CA	36.489	-118.829	519	1.181	0.868	4.079	0.252	0.967	0.070	7.417	7.516	16.871	9.309	2.665	0.099
SHEN	VA	38.523	-78.435	1079	1.351	0.632	1.903	0.183	0.240	0.038	4.346	4.675	7.463	2.745	2.064	0.329
SHMI	CO	37.304	-107.484	2351	0.418	0.135	1.092	0.079	1.095	0.012	2.831	2.796	7.095	4.326	1.016	-0.036
SHRO	NC	35.394	-82.774	1617	0.996	0.293	1.819	0.146	0.294	0.038	3.586	4.035	6.648	2.665	1.578	0.449
SIME	AK	55.326	-160.506	57	0.728	0.110	0.341	0.058	0.091	1.272	2.600	2.720	6.719	4.007	0.788	0.121

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	PM <sub>10</sub>	CM	f <sub>abs</sub>	Residual
SIPS	AL	34.343	-87.339	286	1.524	0.528	2.979	0.292	0.510	0.059	5.892	6.192	10.109	3.886	3.199	0.300
SNPA	WA	47.422	-121.426	1049	0.378	0.253	1.920	0.144	0.180	0.080	2.956	2.921	4.243	1.315	1.683	-0.035
STAR	OR	45.225	-118.513	1259	0.360	0.240	2.166	0.199	0.383	0.034	3.382	3.396	6.184	2.789	1.410	0.014
STIL	OK	35.751	-94.67	300	1.619	0.848	2.959	0.306	0.688	0.065	6.485	6.614	12.701	6.141	3.293	0.129
SULA	MT	45.86	-114	1895	0.296	0.096	2.423	0.119	0.277	0.014	3.224	2.803	5.011	1.863	0.894	-0.421
SWAN	NC	35.451	-76.207	-3	1.375	0.462	1.929	0.158	0.341	0.505	4.768	5.027	9.908	4.923	1.917	0.259
SYCA	AZ	35.164	-111.982	2046	0.509	0.208	1.547	0.184	3.097	0.042	5.586	5.041	12.590	7.589	2.974	-0.545
TALL	KS	38.434	-96.56	390	1.363	1.076	2.372	0.246	0.679	0.041	5.777	5.743	12.994	6.967	2.731	-0.034
THBA	WY	44.663	-105.287	1195	0.603	0.285	1.658	0.121	0.650	0.011	3.327	3.367	7.709	4.384	1.478	0.039
THRO	ND	46.895	-103.378	852	0.875	0.620	1.573	0.130	0.524	0.022	3.743	3.743	8.919	5.193	1.544	0.000
THSI	OR	44.291	-122.043	885	0.347	0.098	3.118	0.144	0.462	0.038	4.207	4.028	7.864	3.729	1.482	-0.179
TONT	AZ	33.655	-111.107	775	0.780	0.246	1.317	0.126	1.218	0.074	3.759	3.775	10.582	6.764	1.718	0.016
TRCR	AK	62.315	-150.316	155	0.317	0.057	1.054	0.054	0.109	0.070	1.660	1.656	3.500	1.846	0.454	-0.004
TRIN	CA	40.786	-122.805	1014	0.384	0.164	3.837	0.213	0.338	0.064	5.000	4.479	7.182	2.255	1.820	-0.520
ULBE	MT	47.582	-108.72	891	0.619	0.326	1.775	0.102	0.352	0.014	3.188	3.273	6.302	3.034	1.021	0.085
UPBU	AR	35.826	-93.203	722	1.455	0.618	2.383	0.210	0.602	0.051	5.318	5.605	10.152	4.511	2.401	0.286
VIIS	VI	18.336	-64.796	51	1.127	0.311	0.575	0.044	1.949	1.605	5.611	5.788	18.681	13.124	0.825	0.177
VILA	IA	40.969	-95.045	371	1.272	1.495	1.889	0.230	0.597	0.043	5.527	5.785	15.292	9.527	2.605	0.258
VOYA	MN	48.413	-92.829	429	0.701	0.472	1.554	0.113	0.178	0.061	3.080	3.213	5.774	2.568	1.102	0.133
WEMI	CO	37.659	-107.8	2750	0.390	0.099	1.149	0.090	0.478	0.017	2.223	2.183	4.185	2.019	1.079	-0.040
WHIT	NM	33.469	-105.535	2063	0.778	0.177	0.982	0.081	0.782	0.036	2.836	2.905	7.525	4.649	1.004	0.070
WHPA	WA	46.624	-121.388	1827	0.268	0.103	2.244	0.108	0.149	0.029	2.901	2.048	3.126	1.116	0.771	-0.854
WHPE	NM	36.585	-105.452	3366	0.401	0.119	0.801	0.088	0.592	0.011	2.011	2.073	3.727	1.669	1.078	0.062
WHRI	CO	39.154	-106.821	3413	0.337	0.122	0.737	0.059	0.495	0.016	1.765	1.755	3.154	1.399	0.729	-0.010
WICA	SD	43.558	-103.484	1296	0.589	0.286	1.583	0.116	0.488	0.014	3.076	3.078	6.253	3.186	1.218	0.001
WIMO	OK	34.732	-98.713	509	1.512	0.790	1.982	0.191	0.933	0.055	5.461	5.364	12.912	7.539	2.182	-0.097
YELL	WY	44.565	-110.4	2442	0.331	0.140	1.563	0.092	0.266	0.018	2.410	2.420	4.069	1.647	0.889	0.010
YOSE	CA	37.713	-119.706	1603	0.656	0.359	6.753	0.318	0.556	0.037	8.678	6.074	11.400	4.678	1.917	-2.605
ZICA	UT	37.198	-113.151	1215	0.525	0.153	0.944	0.081	1.063	0.032	2.798	2.893	7.674	4.768	1.157	0.094

**Table 2.2.2. CSN 2016-2019 annual mean mass concentration ( $\mu\text{g m}^{-3}$ ) for ammonium sulfate (AS), ammonium nitrate (AN), particulate organic matter (POM), elemental carbon (EC), fine dust (FD), sea salt (SS), reconstructed fine mass (RCFM),  $\text{PM}_{2.5}$  gravimetric fine mass (FM), fine mass residual (FM-RCFM). Missing value = -999.0**

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	Residual
10730023	AL	33.553	-86.815	177	1.800	0.550	4.496	1.144	0.833	0.024	8.847	10.107	1.259
10732003	AL	33.5	-86.924	180	1.549	0.456	4.037	0.559	1.149	0.015	7.765	8.778	1.013
11130003	AL	32.437	-85	25	1.408	0.417	4.710	0.654	0.519	0.009	7.717	9.066	1.350
20900034	AK	64.846	-147.727	132	1.802	0.556	3.714	0.759	0.352	0.030	7.214	8.909	1.695
40139997	AZ	33.504	-112.096	355	0.898	0.811	3.961	0.814	1.448	0.088	8.020	7.879	-0.141
40191028	AZ	32.295	-110.982	710	0.795	0.424	2.047	0.563	1.287	0.039	5.154	5.734	0.580
51190007	AR	34.756	-92.281	77	1.632	0.678	3.886	0.611	0.789	0.004	7.599	9.376	1.778
60190011	CA	36.785	-119.774	22	1.213	3.523	6.011	0.753	1.064	0.039	12.602	13.575	0.973
60290014	CA	35.356	-119.041	118	1.500	4.484	5.727	0.803	1.648	0.045	14.208	13.103	-1.105
60371103	CA	34.067	-118.227	126	1.860	3.828	4.466	0.856	0.865	0.073	11.947	11.723	-0.224
60658001	CA	34	-117.416	250	1.554	4.148	4.415	0.844	1.140	0.051	12.152	12.250	0.098
60670006	CA	38.614	-121.368	19	0.791	1.376	5.296	0.967	0.550	0.110	9.090	9.764	0.675
60731022	CA	32.79	-116.944	144	1.463	1.921	3.882	0.630	0.554	0.127	8.577	8.866	0.289
60850005	CA	37.348	-121.895	21	0.926	1.776	4.592	0.578	0.504	0.284	8.660	9.172	0.512
80010008	CO	39.828	-104.938	1574	0.758	1.548	3.602	0.981	1.614	0.033	8.536	8.781	0.245
80310026	CO	39.779	-105.005	22	0.735	1.553	3.099	0.715	1.271	0.025	7.399	7.053	-0.346
81230008	CO	40.209	-104.824	1464	0.662	2.060	2.654	0.650	1.338	0.012	7.376	7.573	0.197
90090027	CT	41.301	-72.903	5	1.000	1.056	3.254	0.927	0.316	0.024	6.576	6.727	0.151
100032004	DE	39.739	-75.558	31	1.447	1.588	2.884	0.584	0.375	0.019	6.896	7.827	0.931
110010043	DC	38.922	-77.013	31	1.518	1.348	3.368	0.607	0.386	0.011	7.239	7.806	0.568
120110034	FL	26.054	-80.257	2.7	1.524	0.453	1.581	0.304	0.809	0.548	5.219	6.264	1.045
120573002	FL	27.966	-82.23	28	1.555	0.406	2.704	0.447	0.780	0.173	6.065	7.268	1.204
120730012	FL	30.44	-84.346	16	1.303	0.270	3.641	0.566	0.678	0.078	6.537	7.330	0.793
130210007	GA	32.778	-83.641	103	1.437	0.470	4.851	0.633	0.870	0.021	8.281	9.089	0.808
130690002	GA	31.513	-82.75	64	1.187	0.236	3.935	0.429	0.516	0.047	6.350	7.286	0.936
130890002	GA	33.688	-84.29	244	1.275	0.472	4.312	0.851	0.563	0.006	7.479	8.438	0.959
131150003	GA	34.261	-85.323	240	1.504	0.475	3.890	1.016	0.546	0.005	7.436	-999.000	-999.000
132150011	GA	32.429	-84.932	78	1.378	0.349	4.762	0.570	0.467	0.009	7.535	8.645	1.110
132450091	GA	33.433	-82.022	57	1.364	0.470	4.880	0.626	0.520	0.012	7.871	8.874	1.003
132950002	GA	34.979	-85.301	200	1.323	0.503	4.491	0.593	0.444	0.004	7.358	8.188	0.830

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	Residual
150030010	HI	21.324	-158.089	20	1.016	0.179	0.415	0.096	0.213	0.832	2.751	-999.000	-999.000
160010010	ID	43.601	-116.348	853	0.447	1.269	3.787	0.585	0.814	0.014	6.916	7.043	0.127
170310057	IL	41.913	-87.723	185	1.448	2.289	3.168	0.651	0.563	0.033	8.151	8.801	0.650
170310076	IL	41.751	-87.714	188	1.489	2.250	3.166	0.703	0.479	0.020	8.107	8.491	0.384
170314201	IL	42.14	-87.799	194	1.344	2.072	2.364	0.457	0.369	0.007	6.613	7.833	1.220
170434002	IL	41.771	-88.152	213	1.587	1.961	2.668	0.490	0.480	0.013	7.198	-999.000	-999.000
171190024	IL	38.701	-90.145	125	1.774	1.565	3.581	0.715	1.764	0.049	9.447	10.212	0.765
180190006	IN	38.278	-85.74	140	1.868	1.554	3.743	0.607	0.666	0.009	8.447	9.064	0.617
180372001	IN	38.391	-86.929	139	1.975	1.604	2.800	0.697	0.393	0.011	7.480	8.573	1.093
180650003	IN	40.009	-85.523	309	1.631	1.806	2.428	0.352	0.257	0.001	6.476	7.457	0.982
180890022	IN	41.607	-87.305	179	1.580	2.060	2.862	0.637	0.906	0.054	8.099	9.114	1.015
180970078	IN	39.811	-86.115	240	1.772	2.031	3.531	0.684	0.425	0.016	8.459	9.209	0.750
181630021	IN	38.013	-87.578	120	1.904	1.379	3.293	0.553	0.411	0.003	7.543	8.775	1.232
191630015	IA	41.53	-90.588	212	1.340	1.938	2.660	0.398	0.464	0.012	6.812	7.907	1.095
201730010	KS	37.702	-97.315	405	1.445	1.095	3.315	0.478	0.823	0.004	7.159	-999.000	-999.000
202090021	KS	39.117	-94.636	269	1.465	1.355	4.390	0.607	0.686	0.024	8.527	8.872	0.346
211110067	KY	38.229	-85.655	161	1.842	1.409	3.201	0.581	0.393	0.008	7.434	8.302	0.867
220330009	LA	30.462	-91.179	16	2.245	0.675	3.486	0.633	1.221	0.086	8.345	9.156	0.811
240053001	MD	39.311	-76.474	10	1.523	1.419	3.753	0.719	0.386	0.016	7.816	8.170	0.355
240330030	MD	39.055	-76.878	47	1.361	0.991	2.924	0.539	0.399	0.010	6.224	6.628	0.405
250130008	MA	42.194	-72.555	60	0.848	0.701	2.408	0.406	0.244	0.016	4.624	5.163	0.539
250250042	MA	42.329	-71.083	5	0.915	0.762	2.771	0.535	0.285	0.052	5.320	5.442	0.122
260810020	MI	42.984	-85.671	190	1.250	1.994	2.863	0.528	0.402	0.013	7.049	8.239	1.190
260910007	MI	41.996	-83.947	244	1.362	1.821	2.429	0.361	0.512	0.005	6.490	7.684	1.195
261630001	MI	42.229	-83.208	182	1.410	1.870	2.830	0.592	0.584	0.017	7.302	8.703	1.401
261630015	MI	42.303	-83.106	177	1.941	2.179	4.033	0.802	1.329	0.067	10.351	11.148	0.797
261630033	MI	42.307	-83.149	179	1.756	2.010	3.593	0.712	1.378	0.063	9.512	10.340	0.828
270031002	MN	45.138	-93.208	280	0.962	1.610	2.746	0.431	0.328	0.011	6.088	6.639	0.552
270530963	MN	44.954	-93.258	265	1.021	1.724	2.978	0.454	0.399	0.020	6.595	7.210	0.616
280490020	MS	32.329	-90.183	22	1.572	0.474	4.016	0.555	0.729	0.020	7.366	8.563	1.197
290990019	MO	38.449	-90.398	153	1.673	1.344	3.380	0.531	0.619	0.004	7.551	-999.000	-999.000
295100085	MO	38.657	-90.199	144	1.833	1.624	3.678	0.682	0.860	0.020	8.697	9.327	0.630

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	Residual
300490004	MT	46.85	-111.987	22	0.446	0.429	2.336	0.254	0.252	0.000	3.717	4.117	0.400
300930005	MT	46.003	-112.501	1697	0.368	0.778	5.182	1.058	0.635	0.009	8.029	8.938	0.909
310550019	NE	41.248	-95.973	347	1.292	1.562	2.479	0.362	0.571	0.003	6.269	-999.000	-999.000
320030540	NV	36.144	-115.079	542	0.779	0.664	3.881	0.773	1.689	0.052	7.837	7.646	-0.191
320310016	NV	39.525	-119.808	1403	0.436	0.736	3.620	0.611	0.662	0.006	6.070	5.784	-0.286
340070002	NJ	39.934	-75.125	22	1.462	1.517	3.430	0.792	0.748	0.413	8.361	9.172	0.811
340130003	NJ	40.721	-74.193	39	1.214	1.599	3.285	0.703	0.583	0.042	7.425	7.884	0.459
340230011	NJ	40.462	-74.429	19	1.182	1.229	2.873	0.515	0.313	0.011	6.123	6.846	0.723
340273001	NJ	40.788	-74.676	256	1.072	0.891	2.247	0.313	0.227	0.005	4.754	5.738	0.985
340390004	NJ	40.641	-74.208	3	1.371	1.573	3.531	1.181	0.867	0.056	8.579	9.150	0.570
350010023	NM	35.134	-106.585	1578	0.599	0.455	2.450	0.491	0.762	0.006	4.761	-999.000	-999.000
360010005	NY	42.642	-73.755	30	0.940	0.949	2.910	0.501	0.487	0.015	5.802	5.998	0.196
360050110	NY	40.816	-73.902	14	1.217	1.542	3.206	0.823	0.446	0.026	7.260	7.547	0.288
360290005	NY	42.877	-78.81	186	1.317	1.287	2.814	0.510	0.487	0.008	6.423	6.881	0.458
360310003	NY	44.393	-73.859	584	0.774	0.355	1.516	0.117	0.218	0.005	2.985	3.432	0.447
360551007	NY	43.146	-77.548	146	1.284	1.265	2.498	0.448	0.310	0.014	5.819	6.493	0.674
360610134	NY	40.714	-73.995	5	1.262	1.655	4.265	1.041	0.531	0.027	8.779	8.937	0.158
360810124	NY	40.736	-73.822	13	1.189	1.415	2.880	0.600	0.391	0.040	6.516	6.780	0.264
361010003	NY	42.091	-77.21	490	1.154	0.748	1.865	0.226	0.166	0.000	4.158	4.939	0.780
370670022	NC	36.111	-80.227	279	1.317	0.553	3.380	0.484	0.273	0.002	6.008	6.794	0.786
371190041	NC	35.24	-80.786	223	1.312	0.676	3.918	0.592	0.431	0.005	6.933	8.203	1.270
371830014	NC	35.856	-78.574	92	1.283	0.561	3.903	0.535	0.359	0.014	6.655	7.684	1.029
380150003	ND	46.825	-100.768	548	0.945	1.101	1.896	0.229	0.482	0.002	4.655	5.768	1.113
390350038	OH	41.477	-81.682	186	1.884	1.875	3.327	0.631	1.473	0.130	9.319	9.415	0.096
390350060	OH	41.492	-81.678	197	1.778	1.962	3.408	0.842	1.049	0.049	9.087	9.329	0.242
390350065	OH	41.447	-81.662	244	1.703	2.002	3.438	0.956	1.963	0.109	10.170	11.537	1.367
390350076	OH	41.424	-81.648	218	1.568	1.862	3.225	0.624	0.589	0.006	7.875	-999.000	-999.000
390610040	OH	39.129	-84.504	213	1.827	1.551	3.110	0.632	0.342	0.004	7.466	8.312	0.846
390810017	OH	40.366	-80.616	264	2.455	1.499	3.697	0.770	0.761	0.022	9.203	8.685	-0.518
390933002	OH	41.463	-82.114	182	1.504	1.600	2.623	0.440	0.383	0.005	6.555	7.372	0.817
391130038	OH	39.756	-84.199	220	1.703	1.796	3.418	0.643	0.417	0.010	7.987	8.511	0.524
391351001	OH	39.836	-84.72	22	1.641	1.871	2.412	0.433	0.254	0.001	6.612	7.513	0.901



Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	Residual
391510017	OH	40.787	-81.394	334	1.730	1.618	3.660	0.650	0.821	0.123	8.602	9.089	0.487
391530023	OH	41.088	-81.542	313	2.036	2.680	3.626	1.134	0.374	0.014	9.862	7.815	-2.047
401091037	OK	35.614	-97.475	344	1.507	0.969	2.726	0.385	0.752	0.004	6.343	6.948	0.605
401431127	OK	36.205	-95.977	193	1.532	0.925	3.191	0.521	0.741	0.012	6.922	7.588	0.666
410510080	OR	45.497	-122.603	86	0.627	0.729	4.135	0.650	0.287	0.063	6.492	6.844	0.352
420010001	PA	39.92	-77.31	241	1.496	1.185	2.491	0.334	0.216	0.002	5.725	-999.000	-999.000
420030008	PA	40.465	-79.961	312	1.834	1.215	3.547	0.705	0.407	0.123	7.830	8.876	1.046
420030064	PA	40.324	-79.868	279	3.227	1.198	4.973	1.426	0.430	0.447	11.701	12.001	0.300
420210011	PA	40.31	-78.915	455	1.896	0.767	3.170	0.713	0.421	0.029	6.996	-999.000	-999.000
420290100	PA	39.834	-75.768	91	1.452	1.818	2.822	0.442	0.373	0.016	6.921	7.735	0.814
420450002	PA	39.836	-75.372	1	1.459	1.441	3.086	0.606	0.876	0.031	7.498	8.801	1.303
420450109	PA	39.819	-75.414	0	1.483	1.474	2.994	0.829	0.425	0.024	7.229	8.801	1.573
420710007	PA	40.047	-76.283	99	1.485	1.984	3.633	0.650	0.319	0.016	8.086	8.938	0.851
420710012	PA	40.044	-76.112	116	1.464	2.118	3.520	0.658	0.341	0.026	8.127	9.333	1.206
421010048	PA	39.991	-75.081	22	1.386	1.511	3.022	0.872	0.523	0.032	7.346	8.316	0.971
421010055	PA	39.923	-75.187	12	1.346	1.393	3.318	0.762	0.367	0.024	7.208	-999.000	-999.000
421255001	PA	40.445	-80.421	344	1.733	0.776	2.507	0.385	0.440	0.001	5.842	-999.000	-999.000
421290008	PA	40.305	-79.506	378	1.753	0.897	2.971	0.628	0.356	0.005	6.611	-999.000	-999.000
440071010	RI	41.842	-71.361	6	0.943	0.726	2.515	0.412	0.281	0.062	4.939	5.556	0.617
460990008	SD	43.548	-96.701	439	1.038	1.534	2.185	0.294	0.506	0.003	5.562	6.527	0.965
470931020	TN	36.019	-83.874	309	1.336	0.609	3.968	0.559	0.438	0.003	6.912	7.857	0.945
471570075	TN	35.152	-89.85	22	1.612	0.748	3.021	0.426	0.556	0.003	6.365	7.664	1.299
481130069	TX	32.82	-96.86	132	1.896	1.010	3.218	0.586	1.420	0.038	8.168	8.631	0.462
481410044	TX	31.766	-106.455	1128	0.996	0.511	2.737	0.667	2.067	0.039	7.016	8.482	1.466
482011039	TX	29.67	-95.129	9	2.279	0.663	2.532	0.448	1.157	0.227	7.306	-999.000	-999.000
482030002	TX	32.669	-94.168	90	1.732	0.313	3.825	0.433	0.781	0.018	7.101	8.333	1.232
490110004	UT	40.903	-111.884	1307	0.737	2.345	2.380	0.422	0.863	0.057	6.804	7.614	0.810
490353006	UT	40.736	-111.872	1309	0.727	2.384	2.857	0.530	0.909	0.060	7.467	7.985	0.518
490494001	UT	40.341	-111.714	1456	0.608	1.962	2.408	0.447	1.053	0.040	6.519	7.326	0.807
500070012	VT	44.48	-73.214	42	0.841	0.774	2.221	0.547	0.214	0.009	4.607	-999.000	-999.000
510870014	VA	37.556	-77.4	34	1.385	0.709	3.393	0.484	0.313	0.012	6.297	7.098	0.801
530330030	WA	47.597	-122.32	15	0.768	0.891	4.554	1.283	0.713	0.068	8.277	-999.000	-999.000

Site	State	Lat (°)	Lon (°)	Elev (m)	AS	AN	POM	EC	FD	SS	RCFM	FM	Residual
530330080	WA	47.568	-122.309	58	0.674	0.723	3.225	0.641	0.271	0.053	5.587	6.136	0.549
530530029	WA	47.186	-122.452	97	0.691	0.699	4.555	0.831	0.260	0.077	7.112	7.869	0.757
530770009	WA	46.598	-120.499	328	0.531	1.705	4.232	0.853	0.520	0.025	7.866	8.889	1.022
540390020	WV	38.346	-81.621	223.11	1.569	0.678	3.892	1.259	0.443	0.003	7.844	7.137	-0.706
540511002	WV	39.916	-80.734	245	1.953	0.983	4.594	0.867	0.381	0.011	8.789	9.024	0.236
550090005	WI	44.507	-87.993	22	1.029	1.691	2.477	0.380	0.410	0.024	6.012	6.698	0.686
550270001	WI	43.466	-88.621	264	1.084	1.893	2.473	0.314	0.279	0.005	6.047	6.914	0.867
550790026	WI	43.061	-87.913	216	1.188	2.040	2.863	0.472	0.359	0.013	6.936	7.730	0.794
551198001	WI	45.207	-90.597	449	0.873	1.223	1.965	0.212	0.213	0.005	4.490	-999.000	-999.000
560210100	WY	41.182	-104.778	15	0.536	0.486	1.692	0.166	0.387	0.000	3.265	3.529	0.264

## Appendix 2.3. 2016–2019 IMPROVE and CSN Annual Mean Mass Fraction

Table 2.3.1. IMPROVE 2016-2019 annual mean mass fraction (species mass/reconstructed fine mass) for ammonium sulfate (AS), ammonium nitrate (AN), particulate organic matter (POM), elemental carbon (EC), fine dust (FD), sea salt (SS) and coarse mass to PM<sub>10</sub> ratio (CM/PM<sub>10</sub>).

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction	CM/PM <sub>10</sub>
ACAD	ME	44.377	-68.261	157	0.258	0.091	0.481	0.038	0.045	0.088	0.474
AGTI	CA	33.464	-116.971	507	0.235	0.180	0.351	0.042	0.139	0.054	0.630
BADL	SD	43.743	-101.941	736	0.232	0.112	0.457	0.032	0.162	0.005	0.566
BALD	AZ	34.058	-109.441	2508	0.223	0.057	0.447	0.036	0.226	0.011	0.503
BAND	NM	35.78	-106.266	1988	0.210	0.062	0.444	0.039	0.239	0.006	0.531
BIBE	TX	29.303	-103.178	1066	0.407	0.052	0.257	0.026	0.250	0.008	0.570
BIRM	AL	33.553	-86.815	175	0.216	0.066	0.477	0.105	0.114	0.023	0.535
BLIS	CA	38.976	-120.103	2130	0.139	0.048	0.645	0.040	0.121	0.007	0.417
BOAP	NM	33.869	-106.852	1389	0.204	0.064	0.399	0.040	0.279	0.015	0.598
BOLA	WY	42.847	-109.64	2296	0.149	0.049	0.604	0.035	0.159	0.005	0.412
BOND	IL	40.052	-88.373	263	0.263	0.306	0.321	0.043	0.059	0.009	0.498
BOWA	MN	47.947	-91.495	526	0.233	0.156	0.498	0.035	0.058	0.021	0.449
BRCA	UT	37.618	-112.174	2481	0.182	0.068	0.492	0.034	0.216	0.009	0.530
BRID	WY	42.975	-109.758	2626	0.135	0.048	0.640	0.036	0.137	0.004	0.397
BRIG	NJ	39.465	-74.449	5	0.258	0.167	0.398	0.046	0.052	0.080	0.627
BRIS	LA	30.109	-89.762	-7	0.322	0.073	0.353	0.046	0.154	0.053	0.493
BYIS	-9	37.966	124.631	100	0.383	0.277	0.184	0.040	0.090	0.027	0.469
CABA	ME	43.833	-70.064	26	0.207	0.092	0.528	0.061	0.042	0.071	0.455
CABI	MT	47.955	-115.671	1441	0.091	0.036	0.719	0.056	0.091	0.007	0.340
CACO	MA	41.976	-70.024	49	0.253	0.105	0.360	0.031	0.044	0.207	0.565
CACR	AR	34.454	-94.143	683	0.296	0.091	0.430	0.036	0.135	0.011	0.447
CANY	UT	38.459	-109.821	1798	0.199	0.073	0.419	0.030	0.269	0.010	0.561
CAPI	UT	38.302	-111.293	1896	0.184	0.071	0.413	0.030	0.294	0.009	0.582
CAVE	NM	32.178	-104.444	1355	0.250	0.076	0.240	0.035	0.394	0.006	0.660
CEBL	KS	38.77	-99.763	665	0.231	0.177	0.367	0.029	0.190	0.005	0.636
CHAS	FL	28.748	-82.555	4	0.240	0.062	0.458	0.052	0.120	0.069	0.476
CHIR	AZ	32.009	-109.389	1554	0.250	0.057	0.309	0.026	0.344	0.015	0.686
COHU	GA	34.785	-84.627	735	0.274	0.088	0.511	0.045	0.074	0.009	0.430
CORI	WA	45.664	-121.001	178	0.110	0.194	0.430	0.040	0.206	0.021	0.689

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction	CM/PM <sub>10</sub>
CRLA	OR	42.896	-122.136	1996	0.063	0.023	0.792	0.054	0.061	0.007	0.199
CRMO	ID	43.46	-113.555	1817	0.105	0.094	0.604	0.037	0.152	0.009	0.488
DENA	AK	63.723	-148.967	658	0.205	0.031	0.632	0.032	0.066	0.034	0.484
DOME	CA	35.728	-118.138	927	0.178	0.090	0.482	0.032	0.207	0.010	0.674
DOSO	WV	39.105	-79.426	1182	0.351	0.118	0.420	0.044	0.061	0.007	0.381
EGBE	ON	44.231	-79.783	251	0.231	0.296	0.367	0.049	0.042	0.014	0.443
EVER	FL	25.391	-80.681	1	0.187	0.051	0.547	0.021	0.109	0.086	0.574
FCPC	WI	45.565	-88.808	564	0.224	0.249	0.428	0.039	0.045	0.014	0.398
FLAT	MT	47.773	-114.269	1580	0.092	0.037	0.742	0.047	0.079	0.003	0.392
FLTO	CO	39.915	-107.634	2593	0.154	0.045	0.569	0.026	0.201	0.005	0.505
FOPE	MT	48.308	-105.102	638	0.218	0.176	0.439	0.032	0.130	0.006	0.563
FRES	CA	36.782	-119.773	100	0.097	0.272	0.428	0.050	0.135	0.018	0.636
FRRE	MD	39.706	-79.012	767	0.357	0.136	0.396	0.051	0.052	0.007	0.396
GAMO	MT	46.826	-111.711	2387	0.118	0.048	0.688	0.037	0.106	0.003	0.342
GICL	NM	33.22	-108.235	1775	0.186	0.038	0.501	0.042	0.224	0.009	0.486
GLAC	MT	48.511	-113.997	975	0.092	0.058	0.670	0.054	0.122	0.004	0.416
GRBA	NV	39.005	-114.216	2065	0.179	0.050	0.444	0.029	0.289	0.010	0.569
GRCA	AZ	36.066	-112.154	2164	0.218	0.070	0.367	0.030	0.301	0.015	0.467
GRGU	NH	44.308	-71.218	453	0.277	0.068	0.544	0.043	0.052	0.017	0.458
GRRI	MN	43.937	-91.405	370	0.204	0.313	0.370	0.040	0.061	0.012	0.466
GRSA	CO	37.725	-105.519	2498	0.153	0.047	0.436	0.028	0.334	0.004	0.518
GRSM	TN	35.633	-83.942	810	0.277	0.082	0.516	0.046	0.070	0.009	0.404
GUMO	TX	31.833	-104.809	1672	0.227	0.063	0.229	0.024	0.451	0.007	0.613
HACR	HI	20.758	-156.248	2158	0.554	0.073	0.130	0.013	0.133	0.098	0.423
HAVO	HI	19.431	-155.258	1258	0.700	0.030	0.093	0.008	0.038	0.131	0.313
HECA	OR	44.97	-116.844	655	0.108	0.091	0.639	0.038	0.117	0.007	0.472
HEGL	MO	36.614	-92.922	404	0.272	0.134	0.436	0.043	0.108	0.007	0.482
HOOV	CA	38.088	-119.177	2560	0.131	0.045	0.597	0.034	0.185	0.007	0.424
IKBA	AZ	34.34	-111.683	1297	0.211	0.080	0.354	0.033	0.301	0.022	0.619
ISLE	MI	47.46	-88.149	182	0.258	0.159	0.473	0.037	0.053	0.020	0.446
JARB	NV	41.893	-115.426	1869	0.107	0.031	0.504	0.029	0.321	0.008	0.573
JARI	VA	37.627	-79.512	289	0.265	0.090	0.515	0.065	0.058	0.007	0.344

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction	CM/PM <sub>10</sub>
JOSH	CA	34.07	-116.389	1235	0.203	0.142	0.333	0.032	0.269	0.021	0.665
KAIS	CA	37.221	-119.155	2597	0.162	0.083	0.546	0.036	0.167	0.008	0.539
KALM	OR	42.552	-124.059	80	0.090	0.030	0.738	0.050	0.036	0.056	0.386
KPBO	AK	60.012	-151.711	5	0.193	0.055	0.372	0.025	0.113	0.242	0.829
LABE	CA	41.712	-121.507	1459	0.074	0.030	0.755	0.058	0.077	0.006	0.299
LASU	IA	40.693	-92.006	229	0.236	0.278	0.345	0.040	0.092	0.009	0.619
LAVO	CA	40.54	-121.577	1732	0.083	0.033	0.758	0.045	0.074	0.007	0.371
LIGO	NC	35.972	-81.933	968	0.256	0.060	0.569	0.051	0.057	0.008	0.366
LOND	NH	42.862	-71.38	124	0.209	0.112	0.533	0.070	0.047	0.029	0.451
LOST	ND	48.642	-102.402	696	0.241	0.212	0.371	0.041	0.126	0.009	0.610
LTCC	CA	38.925	-119.98	1935	0.102	0.043	0.632	0.064	0.151	0.008	0.562
LYEB	VT	42.956	-72.91	882	0.277	0.155	0.460	0.043	0.052	0.014	0.395
MACA	KY	37.132	-86.148	235	0.296	0.152	0.437	0.048	0.060	0.008	0.407
MAKA	WA	48.298	-124.625	480	0.176	0.075	0.539	0.032	0.033	0.145	0.390
MAVI	MA	41.331	-70.785	2	0.245	0.124	0.306	0.029	0.045	0.250	0.708
MEAD	AZ	36.019	-114.068	902	0.212	0.069	0.285	0.023	0.391	0.020	0.644
MELA	MT	48.487	-104.476	606	0.218	0.190	0.369	0.031	0.185	0.006	0.597
MEVE	CO	37.198	-108.491	2172	0.214	0.062	0.411	0.030	0.276	0.007	0.539
MING	MO	36.972	-90.143	111	0.256	0.126	0.431	0.049	0.131	0.007	0.554
MOHO	OR	45.289	-121.784	1531	0.144	0.069	0.593	0.041	0.121	0.033	0.420
MOMO	CT	41.821	-73.297	521	0.254	0.148	0.481	0.050	0.050	0.017	0.393
MONT	MT	47.122	-113.154	1282	0.063	0.018	0.785	0.038	0.094	0.002	0.435
MOOS	ME	45.126	-67.266	77	0.265	0.080	0.494	0.037	0.046	0.079	0.422
MORA	WA	46.758	-122.124	439	0.151	0.045	0.671	0.055	0.049	0.030	0.401
MOZI	CO	40.538	-106.677	3243	0.185	0.064	0.536	0.033	0.177	0.006	0.475
NEBR	NE	41.889	-100.339	883	0.232	0.181	0.410	0.031	0.142	0.004	0.558
NOAB	WY	44.745	-109.382	2482	0.158	0.057	0.588	0.032	0.162	0.003	0.487
NOCA	WA	48.732	-121.065	568	0.123	0.033	0.746	0.040	0.045	0.013	0.310
NOCH	MT	45.65	-106.557	1283	0.187	0.071	0.564	0.033	0.140	0.005	0.533
NOGA	AZ	31.337	-110.937	1172	0.090	0.046	0.403	0.095	0.334	0.033	0.701
OKEF	GA	30.74	-82.128	48	0.260	0.058	0.474	0.042	0.116	0.051	0.477
OLYM	WA	48.007	-122.973	599	0.167	0.097	0.590	0.045	0.040	0.061	0.348

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction	CM/PM <sub>10</sub>
ORPI	AZ	31.951	-112.802	504	0.236	0.088	0.225	0.021	0.376	0.054	0.681
OWVL	CA	37.361	-118.331	1234	0.121	0.037	0.484	0.034	0.319	0.006	0.616
PACK	NH	42.862	-71.879	695	0.262	0.120	0.499	0.051	0.051	0.017	0.409
PASA	WA	48.388	-119.927	1627	0.088	0.040	0.729	0.061	0.077	0.005	0.321
PEFO	AZ	35.078	-109.769	1766	0.190	0.059	0.383	0.043	0.315	0.011	0.601
PENO	ME	44.948	-68.648	45	0.207	0.077	0.540	0.068	0.064	0.044	0.542
PHOE	AZ	33.504	-112.096	342	0.111	0.099	0.409	0.075	0.278	0.029	0.710
PINN	CA	36.483	-121.157	302	0.173	0.117	0.486	0.044	0.094	0.086	0.580
PMRF	VT	44.528	-72.869	401	0.270	0.119	0.501	0.047	0.046	0.017	0.378
PORE	CA	38.122	-122.909	97	0.154	0.109	0.274	0.026	0.041	0.397	0.552
PRIS	ME	46.696	-68.033	165	0.217	0.072	0.505	0.060	0.112	0.034	0.615
PUSO	WA	47.57	-122.312	97	0.125	0.136	0.537	0.088	0.065	0.049	0.458
QUCI	OH	39.943	-81.338	366	0.323	0.169	0.393	0.055	0.055	0.006	0.419
RAFA	CA	34.734	-120.007	956	0.206	0.128	0.402	0.026	0.174	0.064	0.661
REDW	CA	41.561	-124.084	243	0.131	0.044	0.489	0.024	0.033	0.279	0.469
ROMA	SC	32.941	-79.657	4	0.279	0.067	0.428	0.040	0.092	0.093	0.475
ROMO	CO	40.278	-105.546	2760	0.169	0.091	0.503	0.036	0.197	0.004	0.539
SACR	NM	33.46	-104.404	1072	0.262	0.128	0.282	0.031	0.288	0.010	0.716
SAGA	CA	34.297	-118.028	1791	0.185	0.178	0.409	0.037	0.177	0.015	0.581
SAGO	CA	34.194	-116.913	1726	0.187	0.215	0.387	0.036	0.160	0.015	0.605
SAGU	AZ	32.175	-110.737	941	0.202	0.080	0.275	0.032	0.386	0.026	0.665
SAMA	FL	30.093	-84.161	7	0.266	0.060	0.439	0.039	0.119	0.078	0.453
SAPE	NM	36.014	-106.845	2935	0.218	0.064	0.411	0.031	0.267	0.008	0.487
SAWE	AZ	32.249	-111.218	714	0.172	0.079	0.246	0.032	0.446	0.024	0.704
SAWT	ID	44.171	-114.927	1990	0.071	0.022	0.770	0.045	0.090	0.003	0.303
SENE	MI	46.289	-85.95	214	0.258	0.185	0.455	0.041	0.047	0.014	0.390
SEQU	CA	36.489	-118.829	519	0.159	0.117	0.550	0.034	0.130	0.010	0.552
SHEN	VA	38.523	-78.435	1079	0.311	0.145	0.438	0.042	0.055	0.009	0.368
SHMI	CO	37.304	-107.484	2351	0.148	0.048	0.386	0.028	0.387	0.004	0.610
SHRO	NC	35.394	-82.774	1617	0.278	0.082	0.507	0.041	0.082	0.011	0.401
SIME	AK	55.326	-160.506	57	0.280	0.042	0.131	0.022	0.035	0.489	0.596
SIPS	AL	34.343	-87.339	286	0.259	0.090	0.506	0.050	0.087	0.010	0.384

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction	CM/PM <sub>10</sub>
SNPA	WA	47.422	-121.426	1049	0.128	0.086	0.650	0.049	0.061	0.027	0.310
STAR	OR	45.225	-118.513	1259	0.106	0.071	0.641	0.059	0.113	0.010	0.451
STIL	OK	35.751	-94.67	300	0.250	0.131	0.456	0.047	0.106	0.010	0.484
SULA	MT	45.86	-114	1895	0.092	0.030	0.752	0.037	0.086	0.004	0.372
SWAN	NC	35.451	-76.207	-3	0.288	0.097	0.405	0.033	0.071	0.106	0.497
SYCA	AZ	35.164	-111.982	2046	0.091	0.037	0.277	0.033	0.554	0.007	0.603
TALL	KS	38.434	-96.56	390	0.236	0.186	0.411	0.043	0.118	0.007	0.536
THBA	WY	44.663	-105.287	1195	0.181	0.086	0.498	0.036	0.195	0.003	0.569
THRO	ND	46.895	-103.378	852	0.234	0.166	0.420	0.035	0.140	0.006	0.582
THSI	OR	44.291	-122.043	885	0.083	0.023	0.741	0.034	0.110	0.009	0.474
TONT	AZ	33.655	-111.107	775	0.208	0.065	0.350	0.033	0.324	0.020	0.639
TRCR	AK	62.315	-150.316	155	0.191	0.034	0.635	0.032	0.066	0.042	0.527
TRIN	CA	40.786	-122.805	1014	0.077	0.033	0.768	0.043	0.068	0.013	0.314
ULBE	MT	47.582	-108.72	891	0.194	0.102	0.557	0.032	0.110	0.004	0.481
UPBU	AR	35.826	-93.203	722	0.274	0.116	0.448	0.040	0.113	0.010	0.444
VIIS	VI	18.336	-64.796	51	0.201	0.055	0.103	0.008	0.347	0.286	0.703
VILA	IA	40.969	-95.045	371	0.230	0.271	0.342	0.042	0.108	0.008	0.623
VOYA	MN	48.413	-92.829	429	0.228	0.153	0.505	0.037	0.058	0.020	0.445
WEMI	CO	37.659	-107.8	2750	0.175	0.045	0.517	0.041	0.215	0.008	0.483
WHIT	NM	33.469	-105.535	2063	0.275	0.063	0.346	0.029	0.276	0.013	0.618
WHPA	WA	46.624	-121.388	1827	0.092	0.036	0.774	0.037	0.051	0.010	0.357
WHPE	NM	36.585	-105.452	3366	0.199	0.059	0.398	0.044	0.294	0.005	0.448
WHRI	CO	39.154	-106.821	3413	0.191	0.069	0.418	0.033	0.280	0.009	0.443
WICA	SD	43.558	-103.484	1296	0.192	0.093	0.515	0.038	0.159	0.005	0.510
WIMO	OK	34.732	-98.713	509	0.277	0.145	0.363	0.035	0.171	0.010	0.584
YELL	WY	44.565	-110.4	2442	0.138	0.058	0.648	0.038	0.110	0.007	0.405
YOSE	CA	37.713	-119.706	1603	0.076	0.041	0.778	0.037	0.064	0.004	0.410
ZICA	UT	37.198	-113.151	1215	0.188	0.055	0.338	0.029	0.380	0.011	0.621

**Table 2.3.2. CSN 2016-2019 annual mean mass fraction (species mass/reconstructed fine mass) for ammonium sulfate (AS), ammonium nitrate (AN), particulate organic matter (POM), elemental carbon (EC), fine dust (FD), and sea salt (SS).**

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction
10730023	AL	33.553	-86.815	177	0.203	0.062	0.508	0.129	0.094	0.003
10732003	AL	33.5	-86.924	180	0.199	0.059	0.520	0.072	0.148	0.002
11130003	AL	32.437	-85	25	0.183	0.054	0.610	0.085	0.067	0.001
20900034	AK	64.846	-147.727	132	0.250	0.077	0.515	0.105	0.049	0.004
40139997	AZ	33.504	-112.096	355	0.112	0.101	0.494	0.102	0.181	0.011
40191028	AZ	32.295	-110.982	710	0.154	0.082	0.397	0.109	0.250	0.008
51190007	AR	34.756	-92.281	77	0.215	0.089	0.511	0.080	0.104	0.001
60190011	CA	36.785	-119.774	22	0.096	0.280	0.477	0.060	0.084	0.003
60290014	CA	35.356	-119.041	118	0.106	0.316	0.403	0.057	0.116	0.003
60371103	CA	34.067	-118.227	126	0.156	0.320	0.374	0.072	0.072	0.006
60658001	CA	34	-117.416	250	0.128	0.341	0.363	0.069	0.094	0.004
60670006	CA	38.614	-121.368	19	0.087	0.151	0.583	0.106	0.061	0.012
60731022	CA	32.79	-116.944	144	0.171	0.224	0.453	0.073	0.065	0.015
60850005	CA	37.348	-121.895	21	0.107	0.205	0.530	0.067	0.058	0.033
80010008	CO	39.828	-104.938	1574	0.089	0.181	0.422	0.115	0.189	0.004
80310026	CO	39.779	-105.005	22	0.099	0.210	0.419	0.097	0.172	0.003
81230008	CO	40.209	-104.824	1464	0.090	0.279	0.360	0.088	0.181	0.002
90090027	CT	41.301	-72.903	5	0.152	0.161	0.495	0.141	0.048	0.004
100032004	DE	39.739	-75.558	31	0.210	0.230	0.418	0.085	0.054	0.003
110010043	DC	38.922	-77.013	31	0.210	0.186	0.465	0.084	0.053	0.002
120110034	FL	26.054	-80.257	2.7	0.292	0.087	0.303	0.058	0.155	0.105
120573002	FL	27.966	-82.23	28	0.256	0.067	0.446	0.074	0.129	0.029
120730012	FL	30.44	-84.346	16	0.199	0.041	0.557	0.087	0.104	0.012
130210007	GA	32.778	-83.641	103	0.174	0.057	0.586	0.076	0.105	0.003
130690002	GA	31.513	-82.75	64	0.187	0.037	0.620	0.068	0.081	0.007
130890002	GA	33.688	-84.29	244	0.170	0.063	0.577	0.114	0.075	0.001
131150003	GA	34.261	-85.323	240	0.202	0.064	0.523	0.137	0.073	0.001
132150011	GA	32.429	-84.932	78	0.183	0.046	0.632	0.076	0.062	0.001
132450091	GA	33.433	-82.022	57	0.173	0.060	0.620	0.080	0.066	0.002
132950002	GA	34.979	-85.301	200	0.180	0.068	0.610	0.081	0.060	0.001
150030010	HI	21.324	-158.089	20	0.369	0.065	0.151	0.035	0.077	0.302



Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction
160010010	ID	43.601	-116.348	853	0.065	0.184	0.548	0.085	0.118	0.002
170310057	IL	41.913	-87.723	185	0.178	0.281	0.389	0.080	0.069	0.004
170310076	IL	41.751	-87.714	188	0.184	0.278	0.391	0.087	0.059	0.003
170314201	IL	42.14	-87.799	194	0.203	0.313	0.358	0.069	0.056	0.001
170434002	IL	41.771	-88.152	213	0.221	0.273	0.371	0.068	0.067	0.002
171190024	IL	38.701	-90.145	125	0.188	0.166	0.379	0.076	0.187	0.005
180190006	IN	38.278	-85.74	140	0.221	0.184	0.443	0.072	0.079	0.001
180372001	IN	38.391	-86.929	139	0.264	0.215	0.374	0.093	0.053	0.001
180650003	IN	40.009	-85.523	309	0.252	0.279	0.375	0.054	0.040	0.000
180890022	IN	41.607	-87.305	179	0.195	0.254	0.353	0.079	0.112	0.007
180970078	IN	39.811	-86.115	240	0.209	0.240	0.417	0.081	0.050	0.002
181630021	IN	38.013	-87.578	120	0.252	0.183	0.437	0.073	0.054	0.000
191630015	IA	41.53	-90.588	212	0.197	0.285	0.391	0.058	0.068	0.002
201730010	KS	37.702	-97.315	405	0.202	0.153	0.463	0.067	0.115	0.001
202090021	KS	39.117	-94.636	269	0.172	0.159	0.515	0.071	0.080	0.003
211110067	KY	38.229	-85.655	161	0.248	0.190	0.431	0.078	0.053	0.001
220330009	LA	30.462	-91.179	16	0.269	0.081	0.418	0.076	0.146	0.010
240053001	MD	39.311	-76.474	10	0.195	0.182	0.480	0.092	0.049	0.002
240330030	MD	39.055	-76.878	47	0.219	0.159	0.470	0.087	0.064	0.002
250130008	MA	42.194	-72.555	60	0.183	0.152	0.521	0.088	0.053	0.004
250250042	MA	42.329	-71.083	5	0.172	0.143	0.521	0.101	0.054	0.010
260810020	MI	42.984	-85.671	190	0.177	0.283	0.406	0.075	0.057	0.002
260910007	MI	41.996	-83.947	244	0.210	0.281	0.374	0.056	0.079	0.001
261630001	MI	42.229	-83.208	182	0.193	0.256	0.388	0.081	0.080	0.002
261630015	MI	42.303	-83.106	177	0.188	0.211	0.390	0.078	0.128	0.007
261630033	MI	42.307	-83.149	179	0.185	0.211	0.378	0.075	0.145	0.007
270031002	MN	45.138	-93.208	280	0.158	0.264	0.451	0.071	0.054	0.002
270530963	MN	44.954	-93.258	265	0.155	0.261	0.452	0.069	0.061	0.003
280490020	MS	32.329	-90.183	22	0.213	0.064	0.545	0.075	0.099	0.003
290990019	MO	38.449	-90.398	153	0.222	0.178	0.448	0.070	0.082	0.001
295100085	MO	38.657	-90.199	144	0.211	0.187	0.423	0.078	0.099	0.002
300490004	MT	46.85	-111.987	22	0.120	0.115	0.628	0.068	0.068	0.000

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction
300930005	MT	46.003	-112.501	1697	0.046	0.097	0.645	0.132	0.079	0.001
310550019	NE	41.248	-95.973	347	0.206	0.249	0.396	0.058	0.091	0.001
320030540	NV	36.144	-115.079	542	0.099	0.085	0.495	0.099	0.216	0.007
320310016	NV	39.525	-119.808	1403	0.072	0.121	0.596	0.101	0.109	0.001
340070002	NJ	39.934	-75.125	22	0.175	0.181	0.410	0.095	0.090	0.049
340130003	NJ	40.721	-74.193	39	0.164	0.215	0.442	0.095	0.079	0.006
340230011	NJ	40.462	-74.429	19	0.193	0.201	0.469	0.084	0.051	0.002
340273001	NJ	40.788	-74.676	256	0.225	0.188	0.473	0.066	0.048	0.001
340390004	NJ	40.641	-74.208	3	0.160	0.183	0.412	0.138	0.101	0.007
350010023	NM	35.134	-106.585	1578	0.126	0.096	0.515	0.103	0.160	0.001
360010005	NY	42.642	-73.755	30	0.162	0.164	0.502	0.086	0.084	0.003
360050110	NY	40.816	-73.902	14	0.168	0.212	0.442	0.113	0.061	0.004
360290005	NY	42.877	-78.81	186	0.205	0.200	0.438	0.079	0.076	0.001
360310003	NY	44.393	-73.859	584	0.259	0.119	0.508	0.039	0.073	0.002
360551007	NY	43.146	-77.548	146	0.221	0.217	0.429	0.077	0.053	0.002
360610134	NY	40.714	-73.995	5	0.144	0.189	0.486	0.119	0.061	0.003
360810124	NY	40.736	-73.822	13	0.183	0.217	0.442	0.092	0.060	0.006
361010003	NY	42.091	-77.21	490	0.278	0.180	0.448	0.054	0.040	0.000
370670022	NC	36.111	-80.227	279	0.219	0.092	0.563	0.081	0.045	0.000
371190041	NC	35.24	-80.786	223	0.189	0.098	0.565	0.085	0.062	0.001
371830014	NC	35.856	-78.574	92	0.193	0.084	0.586	0.081	0.054	0.002
380150003	ND	46.825	-100.768	548	0.203	0.237	0.407	0.049	0.104	0.000
390350038	OH	41.477	-81.682	186	0.202	0.201	0.357	0.068	0.158	0.014
390350060	OH	41.492	-81.678	197	0.196	0.216	0.375	0.093	0.115	0.005
390350065	OH	41.447	-81.662	244	0.168	0.197	0.338	0.094	0.193	0.011
390350076	OH	41.424	-81.648	218	0.199	0.237	0.410	0.079	0.075	0.001
390610040	OH	39.129	-84.504	213	0.245	0.208	0.417	0.085	0.046	0.001
390810017	OH	40.366	-80.616	264	0.267	0.163	0.402	0.084	0.083	0.002
390933002	OH	41.463	-82.114	182	0.229	0.244	0.400	0.067	0.058	0.001
391130038	OH	39.756	-84.199	220	0.213	0.225	0.428	0.081	0.052	0.001
391351001	OH	39.836	-84.72	22	0.248	0.283	0.365	0.065	0.038	0.000
391510017	OH	40.787	-81.394	334	0.201	0.188	0.426	0.076	0.095	0.014

Site	State	Lat (°)	Lon (°)	Elev (m)	AS Fraction	AN Fraction	POM Fraction	EC Fraction	FD Fraction	SS Fraction
391530023	OH	41.088	-81.542	313	0.206	0.272	0.368	0.115	0.038	0.001
401091037	OK	35.614	-97.475	344	0.238	0.153	0.430	0.061	0.119	0.001
401431127	OK	36.205	-95.977	193	0.221	0.134	0.461	0.075	0.107	0.002
410510080	OR	45.497	-122.603	86	0.097	0.112	0.637	0.100	0.044	0.010
420010001	PA	39.92	-77.31	241	0.261	0.207	0.435	0.058	0.038	0.000
420030008	PA	40.465	-79.961	312	0.234	0.155	0.453	0.090	0.052	0.016
420030064	PA	40.324	-79.868	279	0.276	0.102	0.425	0.122	0.037	0.038
420210011	PA	40.31	-78.915	455	0.271	0.110	0.453	0.102	0.060	0.004
420290100	PA	39.834	-75.768	91	0.210	0.263	0.408	0.064	0.054	0.002
420450002	PA	39.836	-75.372	1	0.195	0.192	0.412	0.081	0.117	0.004
420450109	PA	39.819	-75.414	0	0.205	0.204	0.414	0.115	0.059	0.003
420710007	PA	40.047	-76.283	99	0.184	0.245	0.449	0.080	0.040	0.002
420710012	PA	40.044	-76.112	116	0.180	0.261	0.433	0.081	0.042	0.003
421010048	PA	39.991	-75.081	22	0.189	0.206	0.411	0.119	0.071	0.004
421010055	PA	39.923	-75.187	12	0.187	0.193	0.460	0.106	0.051	0.003
421255001	PA	40.445	-80.421	344	0.297	0.133	0.429	0.066	0.075	0.000
421290008	PA	40.305	-79.506	378	0.265	0.136	0.450	0.095	0.054	0.001
440071010	RI	41.842	-71.361	6	0.191	0.147	0.509	0.083	0.057	0.013
460990008	SD	43.548	-96.701	439	0.187	0.276	0.393	0.053	0.091	0.001
470931020	TN	36.019	-83.874	309	0.193	0.088	0.574	0.081	0.063	0.001
471570075	TN	35.152	-89.85	22	0.253	0.118	0.475	0.067	0.087	0.000
481130069	TX	32.82	-96.86	132	0.232	0.124	0.394	0.072	0.174	0.005
481410044	TX	31.766	-106.455	1128	0.142	0.073	0.390	0.095	0.295	0.006
482011039	TX	29.67	-95.129	9	0.312	0.091	0.347	0.061	0.158	0.031
482030002	TX	32.669	-94.168	90	0.244	0.044	0.539	0.061	0.110	0.003
490110004	UT	40.903	-111.884	1307	0.108	0.345	0.350	0.062	0.127	0.008
490353006	UT	40.736	-111.872	1309	0.097	0.319	0.383	0.071	0.122	0.008
490494001	UT	40.341	-111.714	1456	0.093	0.301	0.369	0.069	0.162	0.006
500070012	VT	44.48	-73.214	42	0.183	0.168	0.482	0.119	0.047	0.002
510870014	VA	37.556	-77.4	34	0.220	0.113	0.539	0.077	0.050	0.002
530330030	WA	47.597	-122.32	15	0.093	0.108	0.550	0.155	0.086	0.008
530330080	WA	47.568	-122.309	58	0.121	0.129	0.577	0.115	0.049	0.010

<b>Site</b>	<b>State</b>	<b>Lat (°)</b>	<b>Lon (°)</b>	<b>Elev (m)</b>	<b>AS Fraction</b>	<b>AN Fraction</b>	<b>POM Fraction</b>	<b>EC Fraction</b>	<b>FD Fraction</b>	<b>SS Fraction</b>
530530029	WA	47.186	-122.452	97	0.097	0.098	0.640	0.117	0.037	0.011
530770009	WA	46.598	-120.499	328	0.068	0.217	0.538	0.108	0.066	0.003
540390020	WV	38.346	-81.621	223.11	0.200	0.086	0.496	0.161	0.056	0.000
540511002	WV	39.916	-80.734	245	0.222	0.112	0.523	0.099	0.043	0.001
550090005	WI	44.507	-87.993	22	0.171	0.281	0.412	0.063	0.068	0.004
550270001	WI	43.466	-88.621	264	0.179	0.313	0.409	0.052	0.046	0.001
550790026	WI	43.061	-87.913	216	0.171	0.294	0.413	0.068	0.052	0.002
551198001	WI	45.207	-90.597	449	0.194	0.272	0.438	0.047	0.047	0.001
560210100	WY	41.182	-104.778	15	0.164	0.149	0.518	0.051	0.118	0.000