

EUROPE	Andenes(955); Andenes; Arcachon(1506); Arcachon; Aubiere_LAMP(1752); Aubiere_LAMP; Autilla(1718); Autilla; Avignon(3092); Avignon; BORDEAUX(394); BORDEAUX; Barcelona(3641); Barcelona; Bari_University(432); Bari_University; Bayfordbury(795); Bayfordbury; Belsk(2523); Belsk; Berlin_FUB(350); Berlin_FUB; Birkenes(1162); Birkenes; Brno_Airport(353); Brno_Airport; Brussels(1720); Brussels; Bucharest_Inoe(1324); Bucharest_Inoe; Bure_OPE(978); Bure_OPE; CENER(1135); CENER; CLUJ_UBB(1466); CLUJ_UBB; Cabauw(2052); Cabauw; Camborne_MO(330); Camborne_MO; Carpentras(4198); Carpentras; Chilbolton(1878); Chilbolton; Coruna(1381); Coruna; Creteil(353); Creteil; Dunkerque(2264); Dunkerque; Edinburgh(647); Edinburgh; Eforie(1193); Eforie; Ers(2432); Ers; FZJ-JOYCE(1111); FZJ-JOYCE; Fontainebleau(1014); Fontainebleau; Frioul(1360); Frioul; Gotland(512); Gotland; Hamburg(2258); Hamburg; Helgoland(1166); Helgoland; Helsinki(1353); Helsinki; HohenpeissenbergDWD(1176); HohenpeissenbergDWD; Hyttiala(1159); Hyttiala; IMAA_Potenza(2262); IMAA_Potenza; ISDGM_CNR(932); ISDGM_CNR; Iasi_LOASL(1095); Iasi_LOASL; Ispra(2833); Ispra; Karlsruhe(1497); Karlsruhe; Kuopio(1418); Kuopio; Kyiv(2355); Kyiv; LAQUILA_Coppito(907); LAQUILA_Coppito; Laegeren(1524); Laegeren; Le_Fauga(1264); Le_Fauga; Lecce_University(3463); Lecce_University; Leipzig(2893); Leipzig; Lille(3399); Lille; Loftus_MO(407); Loftus_MO; Madrid(1946); Madrid; Magurele_Inoe(893); Magurele_Inoe; Mainz(2393); Mainz; Martova(869); Martova; MetObs_Lindenberg(668); MetObs_Lindenberg; Minsk(2708); Minsk; Modena(2088); Modena; Moldova(3765); Moldova; Moscow_MSU_MO(2978); Moscow_MSU_MO; Munich_University(2202); Munich_University; Napoli_CeSMA(550); Napoli_CeSMA; OHP_OBSERVATOIRE(3180); OHP_OBSERVATOIRE; Oostende(1810); Oostende; Oxford(334); Oxford; Palaiseau(3177); Palaiseau; Palencia(3306); Palencia; Paris(2471); Paris; Poprad-Ganovce(692); Poprad-Ganovce; Porquerolles(737); Porquerolles; Raciborz(683); Raciborz; Rame_Head(662); Rame_Head; Rome_La_Sapienza(386); Rome_La_Sapienza; Rome_Tor_Vergata(3617); Rome_Tor_Vergata; SMHI(368); SMHI; Sevastopol(1784); Sevastopol; Seysses(737); Seysses; Sirmione_Museo_GC(571); Sirmione_Museo_GC; Sodankyla(886); Sodankyla; Strzyzow(871); Strzyzow; The_Hague(512); The_Hague; Thessaloniki(3175); Thessaloniki; Timisoara(556); Timisoara; Toravere(2628); Toravere; Toulon(2604); Toulon; Toulouse_MF(1070); Toulouse_MF; Valladolid(1668); Valladolid; Venise(1747); Venise; Vienna_UNIVIE(476); Vienna_UNIVIE; Villefranche(2239); Villefranche; Watnall_MO(471); Watnall_MO; Wytham_Woods(646); Wytham_Woods; Xanthi(721); Xanthi; Zaragoza(1565); Zaragoza; Zvenigorod(1315); Zvenigorod
ASIA	Amnyon(1655); Amnyon; Bac_Giang(834); Bac_Giang; Bac_Lieu(1231); Bac_Lieu; Baengnyeong(895); Baengnyeong; Bahrain(1126); Bahrain; Beijing(3714); Beijing; Beijing-CAMS(1382); Beijing-CAMS; Bhola(873); Bhola; Chen-Kung_Univ(2494); Chen-Kung_Univ; Chiang_Mai_Met_Sta(2156); Chiang_Mai_Met_Sta; Chiayi(931); Chiayi; Chiba_University(657); Chiba_University; Dhahi(803); Dhahi; Dhadnah(1533); Dhadnah; Dhaka_University(1304); Dhaka_University; Dongsha_Island(754); Dongsha_Island; Dushanbe(1626); Dushanbe; EPA-NCU(1541); EPA-NCU; Fukuoka(1393); Fukuoka; Gandhi_College(1702); Gandhi_College; Gangneung_WNU(1242); Gangneung_WNU; Gosan_SNU(1279); Gosan_SNU; Gual_Pahari(390); Gual_Pahari; Gwangju_GIST(2152); Gwangju_GIST; Hamim(865); Hamim; Hankuk_UFS(851); Hankuk_UFS; Hokkaido_University(614); Hokkaido_University; Hong_Kong_PolyU(1382); Hong_Kong_PolyU; Hong_Kong_Sheung(501); Hong_Kong_Sheung; Irkutsk(1347); Irkutsk; Jaipur(1905); Jaipur; Kaashidho(475); Kaashidho; Kanpur(4087); Kanpur; Kaohsiung(325); Kaohsiung; Karachi(1558); Karachi; Kuching(619); Kuching; Kuwait_University(422); Kuwait_University; Lahore(1546); Lahore; Luang_Namtha(1113); Luang_Namtha; Lumbini(508); Lumbini; MALE(325); MALE; MCO-Hanimaadho(1763); MCO-Hanimaadho; Manila_Observatory(1440); Manila_Observatory; Masdar_Institute(1324); Masdar_Institute; Mezaira(2245); Mezaira; Mukdahan(1339); Mukdahan; Mussafa(887); Mussafa; NCU_Taiwan(1290); NCU_Taiwan; ND_Marbel_Univ(1209); ND_Marbel_Univ; NGHIA_DO(705); NGHIA_DO; NhaTrang(877); NhaTrang; Niigata(490); Niigata; Nong_Khai(475); Nong_Khai; Noto(1323); Noto; Osaka(3427); Osaka; Pantnagar(365); Pantnagar; Pimai(738); Pimai; Pokhara(2060); Pokhara; Pontianak(1092); Pontianak; Pune(1424); Pune; Pusan_NU(519); Pusan_NU; Seoul_SNU(1448); Seoul_SNU; Shirahama(3032); Shirahama; Silpakorn_Univ(2184); Silpakorn_Univ; Singapore(2281); Singapore; Solar_Village(3925); Solar_Village; Son_La(368); Son_La; Songkhla_Met_Sta(1381); Songkhla_Met_Sta; Tai_Ping(461); Tai_Ping(461); Taipei_CWB(1894); Taipei_CWB; Toms(1453); Toms; Toms_22(891); Toms_22; USM_Penang(1260); USM_Penang; Ubun_Ratchathani(1139); Ubun_Ratchathani; Ussuriysk(1863); Ussuriysk; Vientiane(328); Vientiane; XiangHe(3250); XiangHe; Xinglong(1293); Xinglong; Yekaterinburg(1599); Yekaterinburg; Yonsei_University(2073); Yonsei_University
NAMERICA	ARM_Olitiok_AK(324); ARM_Olitiok_AK; Ames(2080); Ames; Appledore_Island(403); Appledore_Island; BONDVILLE(3970); BONDVILLE; Bakersfield; Bermuda(999); Bermuda; Billerica(2869); Billerica; Bonanza_Creek(2090); Bonanza_Creek; Bratts_Lake(3021); Bratts_Lake; Brookhaven(813); Brookhaven; CARTEL(3322); CARTEL; CCNY(2678); CCNY; COVE(1723); COVE; CalTech(1192); CalTech; Camaguey(1196); Camaguey; Chapais(1542); Chapais; Chequamegon(569); Chequamegon; Churchill(1300); Churchill; Columbia_SC(526); Columbia_SC; Dayton(1064); Dayton; Dry_Tortugas(1440); Dry_Tortugas; EPA-Res_Triangle_Pk(1217); EPA-Res_Triangle_Pk; Easton-MDE(886); Easton-MDE; Easton_Airport(711); Easton_Airport; Egbert(3819); Egbert; El_Segundo(1276); El_Segundo; Fort_McKay(844); Fort_McKay; Fort_McMurray(2079); Fort_McMurray; Frenchman_Flat(1759); Frenchman_Flat; Fresno(1999); Fresno; Fresno_2(1424); Fresno_2; GISS(430); GISS; GSFC(6316); GSFC; Georgia_Tech(1235); Georgia_Tech; Grand_Forks(891); Grand_Forks; HJAndrews(1848); HJAndrews; Halifax(2885); Halifax; Harvard_Forest(1744); Harvard_Forest; Hermosillo(735); Hermosillo; Howland(1618); Howland; IMPROVE-MammothCave(1087); IMPROVE-MammothCave; Igaluit(546); Igaluit; KONZA_EDC(2450); KONZA_EDC; Kangerlussuaq(1153); Kangerlussuaq; Kellogg_LTER(1214); Kellogg_LTER; Kelowna_UAS(2350); Kelowna_UAS; Key_Biscayne(1840); Key_Biscayne; Key_Biscayne2(1246); Key_Biscayne2; Kuujuaq(616); Kuujuaq; La_Jolla(1927); La_Jolla; MD_Science_Center(4440); MD_Science_Center; Maricao(2052); Maricao; Mingo(721); Mingo; Missoula(2889); Missoula; Modesto(526); Modesto; Monterey(2111); Monterey; NASA_KSC(474); NASA_KSC; NASA_LaRC(1595); NASA_LaRC; NEON-Disney(827); NEON-Disney; NEON_CLBJ(539); NEON_CLBJ; NEON_GRS(486); NEON_GRS; NEON_HEAL(329); NEON_HEAL; NEON_Harvard(835); NEON_Harvard; NEON_KONZ(721); NEON_KONZ; NEON_OAES(896); NEON_OAES; NEON_ORNL(898); NEON_ORNL; NEON_OSBS(891); NEON_OSBS; NEON_SCBI(798); NEON_SCBI; NEON_SERC(665); NEON_SERC; NEON_TALL(930); NEON_TALL; NEON_UKFS(702); NEON_UKFS; NEON_UNDE(746); NEON_UNDE; NEON_WOOD(488); NEON_WOOD; OPAL(747); OPAL; Oyster(344); Oyster; PNNL(398); PNNL; Pickle_Lake(2016); Pickle_Lake; Resolute_Bay(740); Resolute_Bay; Rimrock(3613); Rimrock; Rogers_Dry_Lake(1572); Rogers_Dry_Lake; SDSU_IPLab(326); SDSU_IPLab; SEARCH-Centreville(749); SEARCH-Centreville; SEARCH-OLF(847); SEARCH-OLF; SEARCH-Yorkville(604); SEARCH-Yorkville; SERC(3062); SERC; SP_Bayboro(1122); SP_Bayboro; Sable_Island(490); Sable_Island; San_Nicolas(1179); San_Nicolas; Santa_Monica_Col(1456); Santa_Monica_Col; Saturn_Island(2725); Saturn_Island; Sigma_Space_Corp(466); Sigma_Space_Corp; Sioux_Falls(2719); Sioux_Falls; St_Louis_University(969); St_Louis_University; Stennis(734); Stennis; Tallahassee(1102); Tallahassee; Thompson(559); Thompson; Thompson_Farm(2321); Thompson_Farm; Thule(1216); Thule; Toronto(2501); Toronto; Trinidad_Head(1918); Trinidad_Head; Tucson(2161); Tucson; Tudor_Hill(1061); Tudor_Hill; UAHUntersville(668); UAHUntersville; UCLA(670); UCLA; UCSB(2452); UCSB; UH_Coastal_Center(647); UH_Coastal_Center; UMBC(1585); UMBC; U_of_Wisconsin_SSEC(1054); U_of_Wisconsin_SSEC; Univ_of_Houston(2446); Univ_of_Houston; Univ_of_Lethbridge(1388); Univ_of_Lethbridge; Walker_Branch(1861); Walker_Branch; Wallops(3832); Wallops; Waskesiu(1656); Waskesiu; Yellowknife_Aurora(982); Yellowknife_Aurora; Yuma(862); Yuma
SAMERICA	Abracos_Hill(1120); Abracos_Hill; Alta_Floresta(3666); Alta_Floresta; Amazon_ATTOTower(468); Amazon_ATTOTower; Arica(3783); Arica; Balbina(514); Balbina; Barbados(519); Barbados; Belterra(876); Belterra; CEILAP-BA(4209); CEILAP-BA; CEILAP-Bariloche(752); CEILAP-Bariloche; CEILAP-Comodoro(993); CEILAP-Comodoro; CEILAP-Neuquen(966); CEILAP-Neuquen; CEILAP-RG(2401); CEILAP-RG; CUIABA-MIRANDA(3233); CUIABA-MIRANDA; Campo_Grande_SONDA(1670); Campo_Grande_SONDA; Cape_San_Juan(1627); Cape_San_Juan; Cordoba-CETT(1999); Cordoba-CETT; Guadeloup(2319); Guadeloup; Itajuba(482); Itajuba; Ji_Parana_SE(1857); Ji_Parana_SE; La_Parguera(3943); La_Parguera; Manaus_EMBRAPA(966); Manaus_EMBRAPA; NEON_GUAN(420); NEON_GUAN; Petrolina_SONDA(1327); Petrolina_SONDA; Pilar_Cordoba(354); Pilar_Cordoba; Puerto_Madryn(423); Puerto_Madryn; Ragged_Point(2235); Ragged_Point; Rio_Branco(2901); Rio_Branco; SANTA_CRUZ(713); SANTA_CRUZ; SANTA_CRUZ_UTEPSA(1425); SANTA_CRUZ_UTEPSA; San_Cristobal_USFQ(418); San_Cristobal_USFQ; Santiago_Beauchef(628); Santiago_Beauchef; Sao_Martinho_SONDA(875); Sao_Martinho_SONDA; Sao_Paulo(2253); Sao_Paulo; Surinam(353); Surinam; Trelew(2861); Trelew; Tuxtla_Gutierrez(1054); Tuxtla_Gutierrez; UPRM-Lidar_Lab(614); UPRM-Lidar_Lab; UdeConcepcion-CEFO(400); UdeConcepcion-CEFO
NAFRICA	ATHENS-NOA(1954); ATHENS-NOA; AgiaMarina_Xyliatou(1079); AgiaMarina_Xyliatou; Agoufou(2105); Agoufou; Badajoz(733); Badajoz; Banizoumbou(5715); Banizoumbou; Ben_Salem(1382); Ben_Salem; Bidi_Bahn(374); Bidi_Bahn; Blida(1639); Blida; Burjassot(3044); Burjassot; CUT-TEPAK(1611); CUT-TEPAK; Cabo_da_Roca(2277); Cabo_da_Roca; Caceres(1602); Caceres; Cairo_EMA_2(2222); Cairo_EMA_2; DMN_Maine_Soraa(1094); DMN_Maine_Soraa; Dahkla(639); Dahkla; Dakar(4117); Dakar; Djougou(692); Djougou; ETNA(1287); ETNA; Eilat(2124); Eilat; El_Arenosillo(3420); El_Arenosillo; El_Farafra(1292); El_Farafra; Evora(3630); Evora; FORTH_CRETE(2785); FORTH_CRETE; Gozo(497); Gozo; Granada(3011); Granada; Hada_El-Sham(385); Hada_El-Sham; Huelva(1451); Huelva; IER_Cinzana(3826); IER_Cinzana; IMC_Oristano(905); IMC_Oristano; IMS-METU-ERDEMLI(3627); IMS-METU-ERDEMLI; Ilorin(3231); Ilorin; KAUST_Campus(868); KAUST_Campus; Koforidua_ANUC(533); Koforidua_ANUC; Kuwait_University(422); Kuwait_University; LAMTO-STATION(422); LAMTO-STATION; La_Laguna(1777); La_Laguna; Lamezia_Terme(567); Lamezia_Terme; Lampedusa(2243); Lampedusa; Malaga(1715); Malaga; Medenine-IRA(1216); Medenine-IRA; Messina(1965); Messina; Murcia(1966); Murcia; Nes_Ziona(3168); Nes_Ziona; Ouagadougou(2039); Ouagadougou; Oujda(1027); Oujda; Palma_de_Mallorca(2001); Palma_de_Mallorca; Ras_El_Ain(420); Ras_El_Ain; SAGRES(309); SAGRES; SEDE_BOKER(6046); SEDE_BOKER; Saada(2974); Saada; Santa_Cruz_Tenerife(3639); Santa_Cruz_Tenerife; Solar_Village(3925); Solar_Village; TUBITAK_UZAY_Ankara(468); TUBITAK_UZAY_Ankara; Tabernas_PSA-DLR(1225); Tabernas_PSA-DLR; Technion_Haifa_IL(574); Technion_Haifa_IL; Tizi_Ouzou(868); Tizi_Ouzou; Tunis_Carthage(1054); Tunis_Carthage; Weizmann_Institute(939); Weizmann_Institute; Zinder_Airport(2278); Zinder_Airport
AUSTRALIA	ARM_Darwin(966); ARM_Darwin; Birdsville(2369); Birdsville; Brisbane-Uni_of_QLD(510); Brisbane-Uni_of_QLD; Canberra(3229); Canberra; Darwin(706); Darwin; Fowlers_Gap(1044); Fowlers_Gap; Jabiru(3002); Jabiru; Lake_Argyle(3212); Lake_Argyle; Lake_Lefroy(1179); Lake_Lefroy; Rottnest_Island(484); Rottnest_Island; Tinga_Tingana(1599); Tinga_Tingana

Table 1. List of observation stations (and number of measurements) used for the computation of AOD and AE regional time series.

Region	Sites
EUROPE	Andenes(920); Andenes; Arcachon(674); Arcachon; Aubiere_LAMP(1166); Aubiere_LAMP; Autilla(1710); Autilla; Bari_University(431); Bari_University; Bayfordbury(784); Bayfordbury; Belsk(2521); Belsk; Berlin_FUB(349); Berlin_FUB; Birkenes(1159); Birkenes; Brno_Airport(352); Brno_Airport; Brussels(1667); Brussels; Bucharest_Innoe(1322); Bucharest_Innoe; Bure_OPE(978); Bure_OPE; CENER(1121); CENER; CLUI_UBB(1401); CLUI_UBB; Camborne_MO(328); Camborne_MO; Carpentras(3778); Carpentras; Chilbolton(1873); Chilbolton; Coruna(1378); Coruna; Dunkerque(2084); Dunkerque; Edinburgh(639); Edinburgh; Eforie(1193); Eforie; Ersat(1202); Ersat; FZJ-JOYCE(1107); FZJ-JOYCE; Fontainebleau(1010); Fontainebleau; Frioul(1054); Frioul; Galata_Platform(1057); Galata_Platform; Gloria(1867); Gloria; Gotland(510); Gotland; Gustav_Dalen_Tower(1439); Gustav_Dalen_Tower; Hamburg(2153); Hamburg; Helgoland(1128); Helgoland; Helsinki(1353); Helsinki; Helsinki_Lighthouse; HohenpeissenbergDWD(1169); HohenpeissenbergDWD; Hyytiala(1147); Hyytiala; IMAA_Potenza(2195); IMAA_Potenza; ISDGM_CNR(920); ISDGM_CNR; Iasi_LOASL(1002); Iasi_LOASL; Ispra(3888); Ispra; Karlsruhe(1412); Karlsruhe; Kuopio(1413); Kuopio; Kyiv(1192); Kyiv; LAQUILA_Coppito(904); LAQUILA_Coppito; Laegeren(1468); Laegeren; Lecce_University(3462); Lecce_University; Leipzig(2872); Leipzig; Lille(2403); Lille; Loftus_MO(406); Loftus_MO; Madrid(2048); Madrid; Magurele_Innoe(893); Magurele_Innoe; Mainz(2385); Mainz; Martova(868); Martova; MetObs_Lindenberg(663); MetObs_Lindenberg; Minsk(1065); Minsk; Modena(786); Modena; Moldova(3759); Moldova; Moscow_MSU_MO(2881); Moscow_MSU_MO; Munich_University(2180); Munich_University; Napoli_CeSMA(550); Napoli_CeSMA; OHP_OBSERVATOIRE(2073); OHP_OBSERVATOIRE; Oostende(1747); Oostende; Oxford(333); Oxford; Palaiseau(2068); Palaiseau; Palencia(2145); Palencia; Palgrunden(1096); Palgrunden; Paris(2251); Paris; Poprad-Ganovce(690); Poprad-Ganovce; Raciborz(682); Raciborz; Rame_Head(601); Rame_Head; Rome_La_Sapienza(376); Rome_La_Sapienza; Rome_Tor_Vergata(1647); Rome_Tor_Vergata; SMHI(354); SMHI; Sevastopol(1701); Sevastopol; Sirmione_Museo_GC(569); Sirmione_Museo_GC; Sodankyla(884); Sodankyla; Strzyzow(870); Strzyzow; Thessaloniki(2363); Thessaloniki; Thornton_C-power(576); Thornton_C-power; Timisoara(555); Timisoara; Toravere(2619); Toravere; Toulon(636); Toulon; Toulouse_MF(1069); Toulouse_MF; Valladolid(1663); Valladolid; Venise(4471); Venise; Vienna_UNIVIE(476); Vienna_UNIVIE; Watnall_MO(470); Watnall_MO; Wytham_Woods(646); Wytham_Woods; Xanthi(709); Xanthi; Zaragoza(1565); Zaragoza; Zeebrugge-MOW1(305); Zeebrugge-MOW1; Zvenigorod(1293); Zvenigorod
ASIA	Abu_AI_Bukhooshi(598); Abu_AI_Bukhooshi; Amnyon(1639); Amnyon; Bac_Giang(814); Bac_Giang; Bac_Lieu(1225); Bac_Lieu; Baengnyeong(894); Baengnyeong; Bahrain(1120); Bahrain; Beijing(658); Beijing; Beijing-CAMS(1345); Beijing-CAMS; Bhola(858); Bhola; Chen-Kung_Univ(2451); Chen-Kung_Univ; Chiang_Mai_Met_Sta(2151); Chiang_Mai_Met_Sta; Chiayi(928); Chiayi; Chiba_University(654); Chiba_University; Dhabi(752); Dhabi; Dhahnah(1452); Dhahnah; Dhaka_University(1297); Dhaka_University; Dongsha_Island(747); Dongsha_Island; Dushanbe(1606); Dushanbe; EPA-NCU(1501); EPA-NCU; Fukuoka(1431); Fukuoka; GOT_Seapirism(605); GOT_Seapirism; Gandhi_College(1685); Gandhi_College; Gangneung_WNU(1237); Gangneung_WNU; Gosan_SNU(950); Gosan_SNU; Gual_Pahari(389); Gual_Pahari; Gwangju_GIST(1740); Gwangju_GIST; Hamim(851); Hamim; Hankuk_UFS(848); Hankuk_UFS; Hokkaido_University(610); Hokkaido_University; Hong_Kong_PolyU(1361); Hong_Kong_PolyU; Hong_Kong_Sheung(488); Hong_Kong_Sheung; Ieodo_Station(381); Ieodo_Station; Irkutsk(1334); Irkutsk; Jaipur(1899); Jaipur; Kaashidhoo(441); Kaashidhoo; Kanpur(3860); Kanpur; Kaohsiung(323); Kaohsiung; Karachi(1430); Karachi; Kuching(605); Kuching; Kuwait_University(421); Kuwait_University; Lahore(1529); Lahore; Luang_Namtha(1103); Luang_Namtha; Lumbini(501); Lumbini; MALE(318); MALE; MCO-Hanimaadhoof(1682); MCO-Hanimaadhoof; Manila_Observatory(1421); Manila_Observatory; Masdar_Institute(1323); Masdar_Institute; Mezaira(2108); Mezaira; Mukdahan(1285); Mukdahan; Mussafa(884); Mussafa; NCU_Taiwan(601); NCU_Taiwan; ND_Marbel_Univ(1188); ND_Marbel_Univ; NGHIA_DO(693); NGHIA_DO; NhaTrang(875); NhaTrang; Niigata(886); Niigata; Nong_Khai(473); Nong_Khai; Noto(886); Noto; Osaka(2328); Osaka; Pantnagar(365); Pantnagar; Pimai(735); Pimai; Pokhara(1879); Pokhara; Pontianak(1087); Pontianak; Pusan_NU(516); Pusan_NU; Seoul_SNU(1273); Seoul_SNU; Shirahama(2908); Shirahama; Silpakorn_University(2165); Silpakorn_University; Singapore(2223); Singapore; Socheongcho(548); Socheongcho; Solar_Village(3856); Solar_Village; Son_La(356); Son_La; Songkhla_Met_Sta(1379); Songkhla_Met_Sta; Tai_Ping(370); Tai_Ping; Taihu(1370); Taihu; Taipei_CWB(1806); Taipei_CWB; Toms(1436); Toms; Toms_22(887); Toms_22; USM_Penang(1174); USM_Penang; Ubon_Ratchathani(833); Ubon_Ratchathani; Ussuriysk(1698); Ussuriysk; Vientiane(328); Vientiane; XiangHe(3185); XiangHe; Yekaterinburg(1556); Yekaterinburg; Yonsei_University(2051); Yonsei_University
NAMERICA	ARM_Oliktok_AK(322); ARM_Oliktok_AK; Ames(2069); Ames; Appledore_Island(403); Appledore_Island; BONDVILLE(3920); BONDVILLE; Bakersfield(845); Bakersfield; Bermuda(855); Bermuda; Billerica(1437); Billerica; Bonanza_Creek(2045); Bonanza_Creek; Bratts_Lake(2904); Bratts_Lake; Brookhaven(706); Brookhaven; CARTEL(3241); CARTEL; CCNY(2449); CCNY; COVE; COVE; SEAPRISM(1340); COVE; SEAPRISM; CalTech(1183); CalTech; Camaguey(1196); Camaguey; Chapais(1512); Chapais; Chequamegon(432); Chequamegon; Churchill(1287); Churchill; Columbia_SC(506); Columbia_SC; Dayton(1060); Dayton; Dry_Tortugas(1045); Dry_Tortugas; EPA-Res_Triangle_Pk(1059); EPA-Res_Triangle_Pk; Easton-MDE(856); Easton-MDE; Easton_Airport(711); Easton_Airport; Egbert(3542); Egbert; El_Segundo(1228); El_Segundo; Fort_McKay(826); Fort_McKay; Fort_McMurray(2003); Fort_McMurray; Frenchman_Flat(1693); Frenchman_Flat; Fresno(1912); Fresno; Fresno_2(1421); Fresno_2; GSFC(6195); GSFC; Georgia_Tech(1233); Georgia_Tech; Grand_Forks(889); Grand_Forks; HJAndrews(1763); HJAndrews; Halifax(2832); Halifax; Harvard_Forest(1573); Harvard_Forest; Hermosillo(603); Hermosillo; Howland(1586); Howland; IMPROVE-MammothCave(1083); IMPROVE-MammothCave; Iqaluit(533); Iqaluit; KONZA_EDC(2405); KONZA_EDC; Kangerlussuaq(1149); Kangerlussuaq; Kellogg_ITER(1415); Kellogg_ITER; Kelowna_UAS(2171); Kelowna_UAS; Key_Biscayne(1786); Key_Biscayne; Key_Biscayne2(1245); Key_Biscayne2; Kuujuaerapik(610); Kuujuaerapik; LISCO(1659); LISCO; La_Jolla(1872); La_Jolla; MD_Science_Center(4370); MD_Science_Center; MSCO(1799); MSCO; Maricopa(2005); Maricopa; Mingo(720); Mingo; Missoula(2881); Missoula; Modesto(525); Modesto; Monterey(2028); Monterey; NASA_KSC(472); NASA_KSC; NASA_LaRC(1582); NASA_LaRC; NEON-Disney(826); NEON-Disney; NEON_CLBJ(538); NEON_CLBJ; NEON_GRSMA(486); NEON_GRSMA; NEON_HEAL(326); NEON_HEAL; NEON_Harvard(830); NEON_Harvard; NEON_KONZ(721); NEON_KONZ; NEON_OAES(893); NEON_OAES; NEON_ORNL(897); NEON_ORNL; NEON_OSBS(890); NEON_OSBS; NEON_SCBI(796); NEON_SCBI; NEON_SERC(665); NEON_SERC; NEON_TALL(929); NEON_TALL; NEON_UKFS; NEON_UKFS; NEON_UNDE(741); NEON_UNDE; NEON_WOOD(487); NEON_WOOD; OPAL(720); OPAL; PNNL(394); PNNL; Pickle_Lake(2003); Pickle_Lake; Resolute_Bay(738); Resolute_Bay; Rimrock(3587); Rimrock; Rogers_Dry_Lake(1556); Rogers_Dry_Lake; SDSU_IPLab(326); SDSU_IPLab; SEARCH-Centreville(729); SEARCH-Centreville; SEARCH-OLF(845); SEARCH-OLF; SEARCH-Yorkville(604); SEARCH-Yorkville; SERC(3014); SERC; SP_Bayboro(1120); SP_Bayboro; Sable_Island(488); Sable_Island; San_Nicolas(1158); San_Nicolas; Santa_Monica_Col(1454); Santa_Monica_Col; Saturn_Island(2712); Saturn_Island; Sigma_Space_Corp(441); Sigma_Space_Corp; Sioux_Falls(2389); Sioux_Falls; St_Louis_University(961); St_Louis_University; Stennis(710); Stennis; Tallahassee(1022); Tallahassee; Thompson(512); Thompson; Thompson_Farm(2309); Thompson_Farm; Thule(1212); Thule; Toronto(2316); Toronto; Trinidad_Head(1844); Trinidad_Head; Tucson(2127); Tucson; Tudor_Hill(1038); Tudor_Hill; UAHuntsville(667); UAHuntsville; UCLA(669); UCLA; UCSB(2428); UCSB; UH_Coastal_Center(647); UH_Coastal_Center; UMBEC(1582); UMBEC; USC_SEAPRISM(1106); USC_SEAPRISM; USC_SEAPRISM_2(305); USC_SEAPRISM_2; U_of_Wisconsin_SSEC(1041); U_of_Wisconsin_SSEC; Univ_of_Houston(2443); Univ_of_Houston; Univ_of_Lethbridge(1370); Univ_of_Lethbridge; Walker_Branch(1824); Walker_Branch; Wallops(3299); Wallops; Waskesiu(1630); Waskesiu; WaveCIS_Site_CSL_6(1857); WaveCIS_Site_CSL_6; Yellowstone_Aurora(975); Yellowstone_Aurora; Yuma(861); Yuma; Abracos_Hill(1089); Abracos_Hill; Alta_Floresta(3369); Alta_Floresta; Amazon_ATTTO_Tower(456); Amazon_ATTTO_Tower; Arica(3745); Arica; Balbina(483); Balbina; Belterra(839); Belterra; CEILAP-BA(4008); CEILAP-BA; CEILAP-Bariloche(630); CEILAP-Bariloche; CEILAP-Comodoro(970); CEILAP-Comodoro; CEILAP-Neuquen(966); CEILAP-Neuquen; CEILAP-RG(2272); CEILAP-RG; CUIABA-MIRANDA(3120); CUIABA-MIRANDA; Campo_Grande_SONDA(1657); Campo_Grande_SONDA; Cape_San_Juan(1430); Cape_San_Juan; Cordoba-CETT(1968); Cordoba-CETT; Guadeloup(1456); Guadeloup; Itajuba(478); Itajuba; Ji_Parana_SE(1709); Ji_Parana_SE; La_Parguera(3168); La_Parguera; Manaus_EMBRAPA(945); Manaus_EMBRAPA; NEON_GUAN(420); NEON_GUAN; Petrolina_SONDA(1316); Petrolina_SONDA; Pilar_Cordoba(344); Pilar_Cordoba; Puerto_Madryn(375); Puerto_Madryn; Ragged_Point(2220); Ragged_Point; Rio_Branco(2826); Rio_Branco; SANTA_CRUZ(673); SANTA_CRUZ; SANTA_CRUZ_UTEPSA(1260); SANTA_CRUZ_UTEPSA; San_Cristobal_USFQ(415); San_Cristobal_USFQ; Santiago_Beauchef(627); Santiago_Beauchef; Sao_Martinho_SONDA(701); Sao_Martinho_SONDA; Sao_Paulo(2440); Sao_Paulo; Trelew(2681); Trelew; Tuxtla_Gutierrez(991); Tuxtla_Gutierrez; UPC-GEAB-Valledupar(380); UPC-GEAB-Valledupar; UPRM_Lidar_Lab(564); UPRM_Lidar_Lab; UdeConcepcion-CEFO(392); UdeConcepcion-CEFO
NAFRICA	ATHENS-NOA(1603); ATHENS-NOA; AgiaMarina_Xyliatou(461); AgiaMarina_Xyliatou; Badajoz(733); Badajoz; Ben_Salem(608); Ben_Salem; Blida(1637); Blida; Burjassot(2713); Burjassot; CUT-TEPAK(1519); CUT-TEPAK; Cabo_da_Roca(1598); Cabo_da_Roca; Caceres(1578); Caceres; Cairo_EMA_2(2219); Cairo_EMA_2; Dahlkla(636); Dahlkla; Dakar(1973); Dakar; EITNA(1287); EITNA; Eilat(2075); Eilat; El_Arenosillo(1084); El_Arenosillo; El_Farafra(325); El_Farafra; Evora(2320); Evora; FORTH_CRETE(2703); FORTH_CRETE; Gozo(493); Gozo; Granada(3007); Granada; Hada_El-Sham(373); Hada_El-Sham; IMS-METU-ERDEMLI(2869); IMS-METU-ERDEMLI; Ilorin(3202); Ilorin; KAUST_Campus(1664); KAUST_Campus; Koforidua_ANUC(531); Koforidua_ANUC; Kuwait_University(421); Kuwait_University; La_Laguna(1764); La_Laguna; Lamezia_Terme(567); Lamezia_Terme; Lampedusa(1446); Lampedusa; Malaga(1714); Malaga; Murcia(1963); Murcia; Nes_Ziona(3080); Nes_Ziona; Oujda(1021); Oujda; Palma_de_Mallorca(1998); Palma_de_Mallorca; SAGRES(511); SAGRES; SEDE_BOKER(5988); SEDE_BOKER; Santa_Cruz_Tenerife(3504); Santa_Cruz_Tenerife; Solar_Village(3856); Solar_Village; TUBITAK_UZAY_Ankara(466); TUBITAK_UZAY_Ankara; Tabernas_PSA-DLR(1223); Tabernas_PSA-DLR; Technion_Haifa_IL(571); Technion_Haifa_IL; Tizi_Ouzou(868); Tizi_Ouzou; Tunis_Carthage(1054); Tunis_Carthage; Weizmann_Institute(935); Weizmann_Institute
AUSTRALIA	ARM_Darwin(953); ARM_Darwin; Birdsville(2330); Birdsville; Brisbane-Uni_of_QLD(502); Brisbane-Uni_of_QLD; Canberra(3155); Canberra; Darwin(691); Darwin; Fowlers_Gap(1025); Fowlers_Gap; Jabiru(2674); Jabiru; Lake_Argyle(3107); Lake_Argyle; Lake_Lefroy(932); Lake_Lefroy; Lucinda(932); Lucinda; Rottneest_Island(473); Rottneest_Island; Tinga_Tingana(1102); Tinga_Tingana

Table 2. Same as Table 1 for AOD<1μm and AOD>1μm.

Region	Sites
EUROPE	Aspvreten(6389); Aspvreten; Auchencorth Moss(4315); Auchencorth Moss; Bilthoven(360); Bilthoven; Birkenes II(604); Birkenes II; Bredkålen(2751); Bredkålen; Cabauw Wielsekade(2024); Cabauw Wielsekade; Cabauw Zijdweg(786); Cabauw Zijdweg; Cabo de Creus(5076); Cabo de Creus; Chilbolton Observatory(1033); Chilbolton Observatory; De Zilk(3116); De Zilk; Deuselbach(1390); Deuselbach; Diabla Gora(3152); Diabla Gora; Els Torms(5223); Els Torms; Farkasfa(483); Farkasfa; Guipry(1366); Guipry; Harwell(5462); Harwell; Hurdal(431); Hurdal; Hyttälä(285); Hyttälä; Illmitz(6289); Illmitz; Iskrba(4629); Iskrba; Ispra(4696); Ispra; K-pusztai(1880); K-pusztai; Kollumerwaard(3120); Kollumerwaard; Kosetice (NOAK)(515); Kosetice (NOAK); Kärvatn(438); Kärvatn; La Coulonche(2243); La Coulonche; La Tardière(3093); La Tardière; Lahemaa(3379); Lahemaa; Lecce (ECO)(694); Lecce (ECO); Lille Valby(673); Lille Valby; Lista(146); Lista; Mace Head(1149); Mace Head; Melpitz(4265); Melpitz; Montelibretti(973); Montelibretti; Montseny(647); Montseny; Morvan(1351); Morvan; Neuglobsow(2705); Neuglobsow; Niembro(5586); Niembro; Norunda Stenen(322); Norunda Stenen; O Saviñao(4707); O Saviñao; Pallas (Matorova)(1707); Pallas (Matorova); Payerne(4898); Payerne; Penausende(5292); Penausende; Peyrusse Vieille(2478); Peyrusse Vieille; Revin(3292); Revin; Rucava(2947); Rucava; Råö(3481); Råö; Saint-Nazaire-le-Désert(1445); Saint-Nazaire-le-Désert; Schmücke(2664); Schmücke; Utö(2128); Utö; Vavihill(4115); Vavihill; Verneuil(1430); Verneuil; Vilsandi(3375); Vilsandi; Vindeln(501); Vindeln; Virolahti II(1590); Virolahti II; Virolahti III(1090); Virolahti III; Vredepeel(3267); Vredepeel; Waldhof(6663); Waldhof; Zielonka(1032); Zielonka; Zoebelboden(689); Zoebelboden; Zoseni(844); Zoseni
NAMERICA	Acadia National Park-McFarland Hill (ME98)(211); Acadia National Park-McFarland Hill (ME98); Addison Pinnacle(195); Addison Pinnacle; Agua Tibia(240); Agua Tibia; Arendtsville (PA00)(195); Arendtsville (PA00); Atlanta(40); Atlanta; Badlands NP(210); Badlands NP; Baltimore(78); Baltimore; Birmingham(88); Birmingham; Blue Mounds(156); Blue Mounds; Bondville (IL11)(196); Bondville (IL11); Boundary Waters Canoe Area(210); Boundary Waters Canoe Area; Breton(132); Breton; Bridgton (ME02)(242); Bridgton (ME02); Brigantine NWR(204); Brigantine NWR; Cadiz(191); Cadiz; Caney Creek(274); Caney Creek; Cape Cod(191); Cape Cod; Cape Romain National Wildlife Refuge(209); Cape Romain National Wildlife Refuge; Casco Bay-Wolfe's Neck Farm (ME96)(196); Casco Bay-Wolfe's Neck Farm (ME96); Cedar Bluff(158); Cedar Bluff; Chassahowitzka National Wildlife Refuge (FL05)(113); Chassahowitzka National Wildlife Refuge (FL05); Cherokee Nation(156); Cherokee Nation; Chicago(38); Chicago; Cohutta(173); Cohutta; Columbia Gorge 1(195); Columbia Gorge 1; Columbia River Gorge(228); Columbia River Gorge; Connecticut Hill(169); Connecticut Hill; Death Valley NP(208); Death Valley NP; Denali National Park-Mt. McKinley (AK03)(205); Denali National Park-Mt. McKinley (AK03); Detroit(34); Detroit; Dome Lands Wilderness(224); Dome Lands Wilderness; Egbert(52); Egbert; El Dorado Springs(151); El Dorado Springs; Ellis(154); Ellis; Everglades National Park-Research Center (FL11)(200); Everglades National Park-Research Center (FL11); Fort Peck (IMPROVE)(152); Fort Peck (IMPROVE); Fresno(71); Fresno; Frostberg Reservoir (Big Piney Run)(87); Frostberg Reservoir (Big Piney Run); Glacier National Park-Fire Weather Station (MT05)(204); Glacier National Park-Fire Weather Station (MT05); Great Gulf Wilderness(206); Great Gulf Wilderness; Great River Bluffs(171); Great River Bluffs; Great Smoky Mountains NP(211); Great Smoky Mountains NP; Hells Canyon(202); Hells Canyon; Hercules-Glades(200); Hercules-Glades; Houston(69); Houston; Isle Royale NP(209); Isle Royale NP; James River Face Wilderness(211); James River Face Wilderness; Kalmiopsis(210); Kalmiopsis; Lake Sugema 1(96); Lake Sugema 1; Lake Sugema 2(57); Lake Sugema 2; Linville Gorge(202); Linville Gorge; Livonia(200); Livonia; Lostwood(211); Lostwood; M.K. Goddard(194); M.K. Goddard; Mammoth Cave National Park-Houchin Meadow(209); Mammoth Cave National Park-Houchin Meadow; Martha's Vineyard(151); Martha's Vineyard; Meadowview(148); Meadowview; Medicine Lake(253); Medicine Lake; Mingo(249); Mingo; Mohawk Mt.(171); Mohawk Mt.; Moosehorn NWR(208); Moosehorn NWR; Mount Rainier National Park-Tahoma Woods (WA99)(203); Mount Rainier National Park-Tahoma Woods (WA99); Nebraska NF(154); Nebraska NP; New York City(74); New York City; North Cascades(185); North Cascades; Okefenokee National Wildlife Refuge (GA09)(210); Okefenokee National Wildlife Refuge (GA09); Old Town(194); Old Town; Olympic(185); Olympic; Omaha(119); Omaha; Organ Pipe Cactus National Monument(152); Organ Pipe Cactus National Monument; Petersburg(77); Petersburg; Phoenix(186); Phoenix; Phoenix Colocated Sampler(60); Phoenix Colocated Sampler; Pinnacles National Monument-Bear Valley (CA66)(209); Pinnacles National Monument-Bear Valley (CA66); Pittsburgh(29); Pittsburgh; Point Reyes National Seashore(204); Point Reyes National Seashore; Presque Isle(199); Presque Isle; Proctor Maple R. F.(213); Proctor Maple R. F.; Puget Sound(164); Puget Sound; Quabbin Summit(195); Quabbin Summit; Quaker City(193); Quaker City; Queen Valley(189); Queen Valley; Redwood NP(259); Redwood NP; Rubidoux(47); Rubidoux; Sac and Fox(137); Sac and Fox; Saguaro NM(224); Saguaro NM; Saguaro West(166); Saguaro West; San Rafael(190); San Rafael; Seney(207); Seney; Sequoia NP(200); Sequoia NP; Sikes(192); Sikes; Sipsy Wilderness(253); Sipsy Wilderness; Spokane Res.(135); Spokane Res.; St. Marks(195); St. Marks; Swanquarter(138); Swanquarter; Tallgrass(157); Tallgrass; Theodore Roosevelt National Park-Painted Canyon(196); Theodore Roosevelt National Park-Painted Canyon; Three Sisters Wilderness(208); Three Sisters Wilderness; Tonto NM(200); Tonto NM; UL Bend(203); UL Bend; Upper Buffalo Wilderness(209); Upper Buffalo Wilderness; Viking Lake(156); Viking Lake; Voyageurs NP 2(203); Voyageurs NP 2; Washington D.C.(203); Washington D.C.; Wichita Mountains(198); Wichita Mountains

Table 3. Same as Table 1 for PM2.5

Region	Sites
EUROPE	Aspvreten(663); Aspvreten; Auchencorth Moss(3434); Auchencorth Moss; Beromünster(900); Beromünster; Birkenes II(628); Birkenes II; Braganca(49); Braganca; Bredkälen(2808); Bredkälen; CEH Edingburgh(49); CEH Edingburgh; Cabaauw Wielesekade(2050); Cabaauw Wielesekade; Cabo de Creus(5190); Cabo de Creus; Chilbolton Observatory(1018); Chilbolton Observatory; De Zilk(3994); De Zilk; Deuselbach(1947); Deuselbach; Diabla Gora(4190); Diabla Gora; Eibergen(4715); Eibergen; Els Torms(5029); Els Torms; Farkasfa(452); Farkasfa; Guipry(1433); Guipry; Harwell(4875); Harwell; Hohenpeissenberg(3689); Hohenpeissenberg; Hurdal(434); Hurdal; Hyytiälä(285); Hyytiälä; ISAC Bologna(50); ISAC Bologna; Illmitz(917); Illmitz; Iskrba(4699); Iskrba; Ispra(209); Ispra; K-puszt(2306); K-puszt; Kamenicki vis(1149); Kamenicki vis; Karpdalen(39); Karpdalen; Keldsnor(2465); Keldsnor; Kollumerwaard(524); Kollumerwaard; Kosetice (NOAK)(618); Kosetice (NOAK); Kärvatn(438); Kärvatn; La Coulonche(2345); La Coulonche; La Tardière(3250); La Tardière; Lahemaa(465); Lahemaa; Lecce (ECO)(665); Lecce (ECO); Leova II(1504); Leova II; Liesek(193); Liesek; Lille Valby(372); Lille Valby; Lough Navar(7587); Lough Navar; Mace Head(59); Mace Head; Melpitz(5480); Melpitz; Montandon(2340); Montandon; Montelibretti(4267); Montelibretti; Montseny(599); Montseny; Morvan(2020); Morvan; Narberth(6880); Narberth; Neuglobsow(6860); Neuglobsow; Niembro(5612); Niembro; Noia(2616); Noia; Norunda Stenen(326); Norunda Stenen; O Saviñao(4969); O Saviñao; Pallas (Sammaltunturi)(364); Pallas (Sammaltunturi); Payerne(7926); Payerne; Penausende(5012); Penausende; Peyrusse Vieille(3264); Peyrusse Vieille; Poiana Stampei(1439); Poiana Stampei; Revin(3515); Revin; Risoe(699); Risoe; Rucava(3251); Rucava; Rão(3126); Rão; Saint-Nazaire-le-Désert(1447); Saint-Nazaire-le-Désert; Schmücke(6246); Schmücke; St. Koloman(1238); St. Koloman; Starina(471); Starina; Stará Lesná(502); Stará Lesná; Svanvik(48); Svanvik; Svratouch(394); Svratouch; Topolniky(300); Topolniky; Tánikon(7965); Tánikon; University of Gent(52); University of Gent; Vavihill(5079); Vavihill; Vindeln(2265); Vindeln; Virolahti II(179); Virolahti II; Virolahti III(1079); Virolahti III; Vredepeel(4722); Vredepeel; Waldhof(6829); Waldhof; Westerland(6357); Westerland; Zielonka(1380); Zielonka; Zingst(6199); Zingst; Zoebelboden(3636); Zoebelboden; Zoseni(807); Zoseni
NAMERICA	Acadia National Park-McFarland Hill (ME98)(210); Acadia National Park-McFarland Hill (ME98); Addison Pinnacle(192); Addison Pinnacle; Agua Tibia(243); Agua Tibia; Arendtsville (PA00)(195); Arendtsville (PA00); Atlanta(40); Atlanta; Badlands NP(211); Badlands NP; Baltimore(78); Baltimore; Birmingham(88); Birmingham; Blue Mounds(155); Blue Mounds; Bondville (IL11)(200); Bondville (IL11); Boundary Waters Canoe Area(214); Boundary Waters Canoe Area; Breton(131); Breton; Bridgton (ME02)(239); Bridgton (ME02); Brigantine NWR(201); Brigantine NWR; Cadiz(182); Cadiz; Caney Creek(221); Caney Creek; Cape Cod(185); Cape Cod; Cape Romain National Wildlife Refuge(209); Cape Romain National Wildlife Refuge; Casco Bay-Wolfe's Neck Farm (ME96)(197); Casco Bay-Wolfe's Neck Farm (ME96); Cedar Bluff(156); Cedar Bluff; Chassahowitzka National Wildlife Refuge (FL05)(207); Chassahowitzka National Wildlife Refuge (FL05); Cherokee Nation(158); Cherokee Nation; Chicago(31); Chicago; Cohutta(174); Cohutta; Columbia Gorge 1(195); Columbia Gorge 1; Columbia River Gorge(208); Columbia River Gorge; Connecticut Hill(167); Connecticut Hill; Death Valley NP(203); Death Valley NP; Denali National Park-Mt. McKinley (AK03)(209); Denali National Park-Mt. McKinley (AK03); Detroit(61); Detroit; Dome Lands Wilderness(226); Dome Lands Wilderness; Egbert(52); Egbert; El Dorado Springs(148); El Dorado Springs; Ellis(154); Ellis; Everglades National Park-Research Center (FL11)(199); Everglades National Park-Research Center (FL11); Fort Peck (IMPROVE)(149); Fort Peck (IMPROVE); Fresno(68); Fresno; Frostberg Reservoir (Big Piney Run)(87); Frostberg Reservoir (Big Piney Run); Glacier National Park-Fire Weather Station (MT05)(198); Glacier National Park-Fire Weather Station (MT05); Great Gulf Wilderness(196); Great Gulf Wilderness; Great River Bluffs(172); Great River Bluffs; Great Smoky Mountains NP(209); Great Smoky Mountains NP; Hells Canyon(202); Hells Canyon; Hercules-Glades(201); Hercules-Glades; Houston(68); Houston; Isle Royale NP(210); Isle Royale NP; James River Face Wilderness(210); James River Face Wilderness; Kalmiopsis(208); Kalmiopsis; Lake Sugema 1(96); Lake Sugema 1; Lake Sugema 2(57); Lake Sugema 2; Linville Gorge(201); Linville Gorge; Livonia(200); Livonia; Lostwood(211); Lostwood; M.K. Goddard(195); M.K. Goddard; Mammoth Cave National Park-Houchin Meadow(209); Mammoth Cave National Park-Houchin Meadow; Martha's Vineyard(149); Martha's Vineyard; Meadowview(144); Meadowview; Medicine Lake(253); Medicine Lake; Mingo(248); Mingo; Mohawk Mt.(170); Mohawk Mt.; Moosehorn NWR(208); Moosehorn NWR; Mount Rainier National Park-Tahoma Woods (WA99)(203); Mount Rainier National Park-Tahoma Woods (WA99); Nebraska NF(153); Nebraska NF; New York City(75); New York City; North Cascades(188); North Cascades; Okfenokee National Wildlife Refuge (GA09)(210); Okfenokee National Wildlife Refuge (GA09); Old Town(191); Old Town; Olympic(176); Olympic; Omaha(119); Omaha; Organ Pipe Cactus National Monument(156); Organ Pipe Cactus National Monument; Petersburg(77); Petersburg; Phoenix(182); Phoenix; Phoenix Colocated Sampler(48); Phoenix Colocated Sampler; Pinnacles National Monument-Bear Valley (CA66)(202); Pinnacles National Monument-Bear Valley (CA66); Pittsburgh(29); Pittsburgh; Point Reyes National Seashore(276); Point Reyes National Seashore; Presque Isle(198); Presque Isle; Proctor Maple R. F.(198); Proctor Maple R. F.; Puget Sound(149); Puget Sound; Quabbin Summit(210); Quabbin Summit; Quaker City(192); Quaker City; Queen Valley(190); Queen Valley; Redwood NP(258); Redwood NP; Rubidoux(45); Rubidoux; Sac and Fox(155); Sac and Fox; Saguaro NM(188); Saguaro NM; Saguaro West(166); Saguaro West; San Rafael(191); San Rafael; Seney(208); Seney; Sequoia NP(198); Sequoia NP; Sikes(191); Sikes; Sipsy Wilderness(250); Sipsy Wilderness; Spokane Res.(135); Spokane Res.; St. Marks(227); St. Marks; Swanquarter(158); Swanquarter; Tallgrass(155); Tallgrass; Theodore Roosevelt National Park-Painted Canyon(200); Theodore Roosevelt National Park-Painted Canyon; Three Sisters Wilderness(210); Three Sisters Wilderness; Tonto NM(202); Tonto NM; UL Bend(207); UL Bend; Upper Buffalo Wilderness(205); Upper Buffalo Wilderness; Viking Lake(157); Viking Lake; Voyageurs NP 2(203); Voyageurs NP 2; Washington D.C.(201); Washington D.C.; Wichita Mountains(200); Wichita Mountains
NAFRICA	Agia Marina Xyliatou ; Cyprus Atmospheric Observatory(5271); Agia Marina Xyliatou ; Cyprus Atmospheric Observatory; Aliartos(218); Aliartos; Barcarrota(5004); Barcarrota; Cairo(1717); Cairo; Can Llompарт(17); Can Llompарт; Doñana(2591); Doñana; Finokalia(1313); Finokalia; Hurghada(784); Hurghada; Lamezia Terme(625); Lamezia Terme; Mahón(2331); Mahón; San Pablo de los Montes(2860); San Pablo de los Montes; Zarra(5211); Zarra

Table 4. Same as Table 1 for PM10

Table 5. Same as Table 1 for SO₄ concentration

Region	Sites
EUROPE	Birkenes II(3120); Birkenes II; Cabauw Zijdegweg(1578); Cabauw Zijdegweg; Hohenpeissenberg(4170); Hohenpeissenberg; Hyytiälä(2479); Hyytiälä; Ispra(4046); Ispra; K-puszt(2915); K-puszt; Kosetice (NOAK)(1464); Kosetice (NOAK); Mace Head(4115); Mace Head; Melpitz(1075); Melpitz; Observatoire Perenne de l'Environnement(1330); Observatoire Perenne de l'Environnement; Pallas (Sammaltunturi)(4123); Pallas (Sammaltunturi); SIRTa Atmospheric Research Observatory(588); SIRTa Atmospheric Research Observatory; Vaviihill(412); Vaviihill
NAMERICA	Acadia National Park-McFarland Hill (ME98)(1352); Acadia National Park-McFarland Hill (ME98); Bondville(6139); Bondville; Boundary Waters Canoe Area(330); Boundary Waters Canoe Area; Cedar Bluff(607); Cedar Bluff; Columbia River Gorge(1780); Columbia River Gorge; Glacier National Park-Fire Weather Station (MT05)(583); Glacier National Park-Fire Weather Station (MT05); Great Gulf Wilderness(524); Great Gulf Wilderness; Great Smoky Mountains NP(1873); Great Smoky Mountains NP; James River Face Wilderness(442); James River Face Wilderness; Mammoth Cave National Park-Houchin Meadow(1490); Mammoth Cave National Park-Houchin Meadow; Mount Rainier National Park-Tahoma Woods (WA99)(959); Mount Rainier National Park-Tahoma Woods (WA99); Okefenokee National Wildlife Refuge (GA09)(404); Okefenokee National Wildlife Refuge (GA09); Organ Pipe Cactus National Monument(2310); Organ Pipe Cactus National Monument; Saguaro NM - Tucson Mountain 1(1352); Saguaro NM - Tucson Mountain 1; Southern Great Plains E13(4514); Southern Great Plains E13; Three Sisters Wilderness(891); Three Sisters Wilderness; Trinidad Head(5176); Trinidad Head; Upper Buffalo Wilderness(787); Upper Buffalo Wilderness; Wichita Mountains(616); Wichita Mountains

Table 6. Same as Table 1 for Scat. Coef.

Region	Sites
EUROPE	Annaberg-Buchholz(686); Annaberg-Buchholz; Aspveten(817); Aspveten; Birkenes II(3228); Birkenes II; Bösel(1241); Bösel; Cabauw Zijdeweg(2765); Cabauw Zijdeweg; Harwell(401); Harwell; Hohenpeissenberg(4635); Hohenpeissenberg; Hyytiälä(3781); Hyytiälä; Ispra(4699); Ispra; K-puszt(2577); K-puszt; Kosetice (NOAK)(1316); Kosetice (NOAK); Leipzig(2496); Leipzig; Leipzig-Eisenbahnstrasse(984); Leipzig-Eisenbahnstrasse; Leipzig-West(1328); Leipzig-West; Mace Head(651); Mace Head; Melpitz(4085); Melpitz; Montseny(3186); Montseny; Neuglobsow(1451); Neuglobsow; Observatoire Perenne de l'Environnement(1927); Observatoire Perenne de l'Environnement; Pallas (Sammaltunturi)(3693); Pallas (Sammaltunturi); SIRTAs Atmospheric Research Observatory(308); SIRTAs Atmospheric Research Observatory; Vavihill(633); Vavihill; Waldhof(2082); Waldhof
NAMERICA	Bondville(6659); Bondville; Sable Island(1176); Sable Island; Southern Great Plains E13(6649); Southern Great Plains E13; Trinidad Head(5049); Trinidad Head

Table 7. Same as Table 1 for Abs. Coef.