

MAJOR ROUTINE OPERATING AIR MONITORING NETWORKS⁵

Network	Lead Federal Agency	Number of Sites	Initiated	Measurement Parameters	Location of Information and/or Data
State / Local / Federal Networks					
NCore ¹ -- National Core Monitoring Network	EPA	75	2008	O3, NO/NO2/NOy, SO2, CO, PM2.5/PM10-2.5 ² , PM2.5 speciation, NH3, HNO3, Surface Meteorology ³	http://www.epa.gov/ttn/amtic/monstratdoc.html
SLAMS ¹ -- State and Local Ambient Monitoring Stations	EPA	~3000	1978	O3, NOx/NO2, SO2, PM2.5/PM10, CO, Pb	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
STN -- PM2.5 Speciation Trends Network	EPA	300	1999	PM2.5, PM2.5 speciation, Major Ions, Metals	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
PAMS -- Photochemical Assessment Monitoring Network	EPA	75	1994	O3, NOx/NOy, CO, Speciated VOCs, Carbonyls, Surface Meteorology & Upper Air	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
IMPROVE -- Interagency Monitoring of Protected Visual Environments	NPS	110 plus 67 protocol sites	1988	PM2.5/PM10, Major Ions, Metals, Light Extinction, Scattering Coefficient	http://vista.cira.colostate.edu/IMPROVE/
CASTNet -- Clean Air Status and Trends Network	EPA	80+	1987	O3, SO2, Major Ions, Calculated Dry Deposition, Wet Deposition, Total Deposition for Sulfur/Nitrogen, Surface Meteorology	http://www.epa.gov/castnet/
GPMP -- Gaseous Pollutant Monitoring Network	NPS	33	1987	O3, NOx/NO/NO2, SO2, CO, Surface Meteorology, (plus enhanced monitoring of CO, NO, NOx, NOy, and SO2 plus canister samples for VOC at three sites)	http://www2.nature.nps.gov/air/Monitoring/network.cfm#data
POMS -- Portable Ozone Monitoring Stations	NPS	14	2002	O3, surface meteorology, with CastNet-protocol filter pack (optional) sulfate, nitrate, ammonium, nitric acid, sulfur dioxide	http://www2.nature.nps.gov/air/studies/portO3.cfm
Passive Ozone Sampler Monitoring Program	NPS	43	1995	O3 dose (weekly)	http://www2.nature.nps.gov/air/Studies/Passives.cfm
NADP/NTN -- National Atmospheric Deposition Program / National Trends Network	USGS	200+	1978	Major Ions from precipitation chemistry	http://nadp.sws.uiuc.edu/
NADP/MDN -- National Atmospheric Deposition Program / Mercury Deposition Network	None	90+	1996	Mercury from precipitation chemistry	http://nadp.sws.uiuc.edu/mdn/
AIRMoN -- National Atmospheric Deposition Program / Atmospheric Integrated Research Monitoring Network	NOAA	8	1984	Major Ions from precipitation chemistry	http://nadp.sws.uiuc.edu/AIRMoN/
IADN -- Integrated Atmospheric Deposition Network	EPA	20	1990	PAHs, PCBs, and organochlorine compounds are measured in air and precipitation samples	http://www.epa.gov/qlnpo/monitoring/air/
NAPS -- National Air Pollution Surveillance Network	Canada	152+	1969	SO2, CO, O3, NO, NO2, NOx, VOCs, SVOCs, PM10, PM2.5, TSP, metals	http://www.etcentre.org/NAPS/
CAPMon -- Canadian Air and Precipitation Monitoring Network	Canada	29	2002	O3, NO, NO2, NOy, PAN, NH3, PM2.5, PM10 and coarse fraction mass, PM2.5 speciation, major ions for particles and trace gases, precipitation chemistry for major ions	http://www.msc.ec.gc.ca/capmon/index_e.cfm
Mexican Metropolitan Air Quality Network	Mexico	93	???	O3, NOx, CO, SO2, PM10, TSP	See CEC, 1997 ⁷

MAJOR ROUTINE OPERATING AIR MONITORING NETWORKS (continued)

Air Toxics Monitoring Networks

NATTS -- National Air Toxics Trends Stations	EPA	23	2005	VOCs, Carbonyls, PM10 metals ⁴ , Hg	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
State/Local Air Toxics Monitoring	EPA	250+	1987	VOCs, Carbonyls, PM10 metals ⁴ , Hg	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
NDAMN -- National Dioxin Air Monitoring Network	EPA	34	1998 - 2005	CDDs, CDFs, dioxin-like PCBs	http://cfpub2.epa.gov/ncea/cfm/recordisplay.cfm?deid=22423

Tribal Monitoring Networks

Tribal Monitoring ⁶	EPA	120+	1995	O3, NOx/NO2, SO2, PM2.5/PM10, CO, Pb	http://www.epa.gov/ttn/airs/airsags/aqsweb/aqswebhome.htm
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Industry / Research Networks

New Source Permit Monitoring	None	variable	variable	O3, NOx/NO2, SO2, PM2.5/PM10, CO, Pb	Contact specific industrial facilities
HRM Network -- Houston Regional Monitoring Network	None	9	1980	O3, NOx, PM2.5/PM10, CO, SO2, Pb, VOCs, Surface Meteorology	http://hrm.radian.com/houston/how/index.htm
ARIES / SEARCH -- Aerosol Research Inhalation Epidemiology Study / SouthEastern Aerosol Research and Characterization Study experiment	None	8	1992	O3, NO/NO2/NOy, SO2, CO, PM2.5/PM10, PM2.5 speciation, Major Ions, NH3, HNO3, scattering coefficient, Surface Meteorology	http://www.atmospheric-research.com/studies/SEARCH/index.html
SOS - SERON -- Southern Oxidant Study - Southeastern Regional Oxidant Networks	EPA	~40	1990	O3, NO, NOy, VOCs, CO, Surface Meteorology	http://www.ncsu.edu/sos/pubs/sos3/State_of_SOS_3.pdf

National/Global Radiation Networks

RadNet -- formerly Environmental Radiation Ambient Monitoring System (ERAMS)	EPA	200+	1973	Radionuclides and radiation	http://www.epa.gov/enviro/html/erams/
SASP -- Surface Air Sampling Program	DHS	41	1963	⁸⁹ Sr, ⁹⁰ Sr, naturally occurring radionuclides, ⁷ Be, ²¹⁰ Pb	http://www.eml.doe.gov/databases/sasp/
NEWNET -- Neighborhood Environmental Watch Network	DOE	26	1993	Ionizing gamma radiation, Sfc. Meteorology	http://newnet.lanl.gov/stations.asp
CTBT -- Comprehensive Nuclear Test Ban Treaty	DOE	80	1996	Radionuclides and noble gases	http://www.clw.org/archive/coalition/briefv3n14.htm

Other Networks

UV Index -- EPA Sunwise Program	EPA	~50 U.S. cities	2002	Calculated UV radiation index	http://www.epa.gov/sunwise/uvindex.html
UV Net -- Ultraviolet Monitoring Program	EPA	21	2002	Ultraviolet solar radiation (UV-B and UV-A bands)	http://www.epa.gov/uvnet/access.html
UV-B Monitoring and Research Program	USDA	35	1992	Ultraviolet-B radiation	http://uvb.nrel.colostate.edu/UVB/jsp/uvb_climate_network.jsp
SURFRAD -- Surface Radiation Budget Network	NOAA	7	1993	solar and infrared radiation, direct and diffuse solar radiation, photosynthetically active radiation, UVB, spectral solar, and meteorological parameters	http://www.srrb.noaa.gov/surfrad/index.html
PRIMENet -- Park Research & Intensive Monitoring of Ecosystems NETWORK	NPS	14	1997	ozone, wet and dry deposition, visibility, surface meteorology, and ultraviolet radiation	http://www.forestry.umd.edu/research/MFCES/programs/primenet/
BioWatch	No details				

Footnotes:

1. Ncore is a network proposed to replace NAMS, as a component of SLAMS; NAMS are currently designated as national trends sites.
2. PM10-2.5 -- proposed new NAAQS.
3. Surface Meteorology includes wind direction and speed, temperature, precipitation, relative humidity, solar radiation (PAMS only).
4. PM10 metals may include arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and others.
5. Some networks listed separately may also serve as subcomponents of other larger listed networks; as a result, some double counting of the number of individual monitors is likely.
6. The number of sites indicated for tribal monitoring is actually the number of monitors, rather than sites. The number of sites with multiple monitors is probably less than 80.
7. CEC, 1997. Background Document on Air Quality Data Compatibility. Prepared for the North American Monitoring and Modeling Project of the CEC, August 1997