

8. Specialized Abbreviations and Acronyms

ABL	atmospheric boundary layer
ACATS	Airborne Chromatograph for Atmospheric Trace Species
ACE	Aerosol Characterization Experiment
ACE-Asia	Asian Pacific Regional Aerosol Characterization Experiment
A/D wavelength	Ultraviolet wavelengths A and D
AEROCARB	Airborne European Regional Observations of Carbon Balance
AERONET	Aerosol Robotics Network (NASA)
AES	Atmospheric Environment Service (Canada)
AFEAS	Alternate Fluorocarbon Environmental Assessment Study
AFRL	Air Force Research Laboratory
AGAGE	Advanced Global Atmospheric Gases Experiment
AHTD	average horizontal transport difference
AIRKIT	Air Kitzis sampler
AIRS	Atmospheric Infrared Sounder
AL	Aeronomy Laboratory, Boulder, Colorado (NOAA)
ALE	Atmospheric Lifetime Experiment
ALT	Alert, Canada, sampling site
AMOS	Atmospheric Infrared Sounder Mobile Operating System
AMT	Tall tower near Argyle, Maine
ANSTO	Australian Nuclear Science and Technology Organization
AO	Arctic Oscillation
AOD	aerosol optical depth
AOT	aerosol optical thickness
ARL	Air Resources Laboratory (NOAA)
ARM	Atmospheric Radiation Measurement (DOE)
ARO	Atmospheric Research Observatory (South Pole, Antarctica)
ASA	Antarctic Support Associates
ASL	above sea level
AVHRR	Advanced Very High Resolution Radiometer
AWEX	Atmospheric Infrared Sounder Water vapor Experiment
AWI	Alfred Wegener Institute
BAO	Boulder Atmospheric Observatory
BASC	Barrow Arctic Science Consortium
BIF	Balloon Inflation Facility
BND	Bondville, Illinois, sampling site
BRM	Bermuda sampling site
BRW	Barrow Observatory, Barrow, Alaska (CMDL)
BSI	Biospherical Instruments Inc., San Diego, California
BSRN	Baseline Surface Radiation Network
CADIC	Centro Austral de Investigaciones Cientificas, Argentina
CALTECH	California Institute of Technology
CART	Cloud and Radiation Testbed
CAS	Clean Air Sector
CATS	Chromatograph for Atmospheric Trace Species
CCD	charge coupled device
CCGG	Carbon Cycle Greenhouse Gases group (CMDL)
CCN	cloud condensation nuclei
CDIAC	Carbon Dioxide Information Analysis Center
CFC	chlorofluorocarbon
CFH	cryogenic frost-point hygrometer
CGO	Cape Grim Observatory, Tasmania, Australia
ChEAS	Chequamegon Ecosystem/Atmosphere Study
CIFEX	Cloud Indirect Effects Experiments
CIRES	Cooperative Institute for Research in Environmental Sciences (University of Colorado)
CLaMS	Chemical Lagrangian Model of the Stratosphere
CLidar	CCD camera lidar

CMDL	Climate Monitoring and Diagnostics Laboratory (NOAA)
CMR	constant mixing ratio
COBRA	CO ₂ Budget and Rectification Airborne program
COBRA-NA	CO ₂ Budget and Rectification Airborne program - North America
COBRA-ME	CO ₂ Budget and Rectification Airborne - Maine
CN	condensation nuclei
CNC	condensation nuclei counter
CP	compressor package
CPC	condensation particle counters
CRN	Climate Reference Network (NOAA)
CSIRO	Commonwealth Scientific and Industrial Research Organization (Australia)
CU	University of Colorado
DARF	Direct Radiative Forcing
DAS	data acquisition system
DMS	dimethyl sulfide
DOE	U.S. Department of Energy
DOY	day of year
DSRC	David Skaggs Research Center (Boulder, Colorado)
DU	Dobson unit
DU	University of Denver
ECC	electrochemical concentration cell
ECD	electron capture detector
ECl	equivalent chlorine
ECMWF	European Centre for Medium-Range Weather Forecasts
EDGAR3	Emissions Database for Global Atmospheric Research
EMPA	Swiss Federal Laboratory for Materials and Testing
EML	Environmental Measurements Laboratory (DOE)
ENSCI	Environmental Science Corporation
ENSO	El Niño/Southern Oscillation
EPA	Environmental Protection Agency
ET	Evapotranspiration
FMI	Finnish Meteorological Institute
FP	frost point
FSU	Former Soviet Union
FT	free troposphere
FTIR	Fourier transform infrared (spectrometer)
FTP	File Transfer Protocol
FTS	Fourier transform spectrometer
FWHM	full width at half maximum
FWNIP	filter wheel normal incidence pyrheliometer
GAGE	Global Atmospheric Gases Experiment
GAW	Global Atmosphere Watch
GC	gas chromatograph
GCM	global circulation model
GC-MS	gas chromatograph-mass spectrometer
GCRG	Global Change Research Group, San Diego State University
GEIA	Global Emissions Inventory Activity
GEWEX	Global Energy and Water Cycle Experiment
GMCC	Geophysical Monitoring for Climatic Change (now CMDL) (NOAA)
GPS	Global Positioning System
HAO	High Altitude Observatory
HATS	Halocarbons and other Atmospheric Trace Species group (CMDL)
HCFC	hydrochlorofluorocarbon
HFC	hydrofluorocarbon
HP	Hewlett-Packard Company
HST	Hawaiian Standard Time
HSU	Humboldt State University, California
HVO	Hawaii Volcano Observatory
IABS	Integrated Aerosol Backscatter

IADV	interactive atmospheric data visualization
IAP	in situ aerosol profiling
IBP	International Biological Programme
ICP	intercomparison
IGAC	International Global Atmospheric Chemistry
INDOEX	Indian Ocean Experiment
INSTAAR	Institute for Arctic and Alpine Research (University of Colorado)
IOP	intensive observational period
IPC	International Pyrheliometer Comparison
IPCC	Intergovernmental Panel on Climate Change
IPV	isentropic Ertel's potential vorticity
IR	infrared
IRT	infrared thermometer
ISCAT	Investigation of Sulfur Chemistry in the Antarctic Troposphere
ITCT	Intercontinental Transport and Chemical Transformation
ITCT 2K2	Intercontinental Transport and Chemical Transformation 2002 experiment
ITCZ	Intertropical Convergence Zone
ITN	Grifton, North Carolina, sampling site
JPL	Jet Propulsion Laboratory
KUM	Cape Kumukahi, Hawaii, sampling site
KWJ	Kwajalein, Marshall Islands, sampling site
LACE	Lightweight Airborne Chromatograph Experiment
LBA	Large Scale Biosphere Atmosphere
LEAPS	Low Electron Attachment Potential Species
LEF	Wisconsin sampling site
LMD	Laboratoire de Meteorologie Dynamique, Centre National de Recherche Scientifique, France
LSCE	Laboratoire des Sciences du Climat et de l'Environnement, France
MAGICC	Measurements of Atmospheric Gases Influencing Climate Change
MAKS	Martin and Kitzis Sampler
MBL	marine boundary layer
MFRSR	multi-filter rotating shadowband radiometer
MHD	Mace Head, Ireland, sampling site
MIMOSA	Modele Isentropie du transport Meo-echelle de l'Ozone Stratospherique par Advection
MLO	Mauna Loa Observatory, Hawaii (CMDL)
MODIS	Moderate-Resolution Spectroradiometer
MODTRAN	Moderate Resolution Transmittance
MOPITT	Measurement of Pollution in the Troposphere
MOS	Mobile Observing System
MOZART	Model for Ozone and Related Tracers
MPI-BGC	Max Planck Institute of Biogeochemistry, Germany
MRI	Meteorology Research, Inc.
MSA	methane sulfonate
MSC	Meteorological Service of Canada
MSD	mass selective detector
NACP	North American Carbon Program
NASA	National Aeronautics and Space Administration
NAVSWC	Naval Surface Weapons Center
NCAR	National Center for Atmospheric Research
NCEP	National Centers for Environmental Prediction (NOAA)
NDIR	non-dispersive infrared analyzer
NDSC	Network for the Detection of Stratospheric Change
NDVI	Normalized Difference Vegetation Index
NEE	Net ecosystem CO ₂ exchange
NERL	National Exposure Research Laboratory
NH	northern hemisphere
NILU	Norwegian Institute for Air Research
NIP	normal incidence pyrheliometer
NIST	National Institute of Standards and Technology (U.S. Dept. of Commerce)
NIWA	National Institute of Water and Atmospheric Research (New Zealand)

NOAA	National Oceanic and Atmospheric Administration (U.S. Dept. of Commerce)
NPC	NREL Pyrheliometer Comparison
NRC	National Research Council
NRL	Naval Research Laboratory
NSF	National Science Foundation
NWR	Niwot Ridge, Colorado, sampling site
NWS	National Weather Service (NOAA)
NYA	Ny-Ålesund, Norway
OAR	Oceanic and Atmospheric Research (NOAA)
OEC	optical extinction cell
OD	outside diameter
OHP	l'Observatoire Haute Provence
OMS	Observations of the Middle Stratosphere
OPP	Office of Polar Programs (NSF)
OTTO	automated flask GC-ECD instrument (not an acronym)
PAERI	Polar Atmospheric Emitted Radiance Interferometer
PAN	peroxyacetyl nitrate
PANTHER	PAN and other Trace Hydrohalocarbons Experiment
PAR	photosynthetically active radiation
PC	personal computer
PCPs	Programmable Compressor Packages
PEM Tropics	Pacific Exploratory Mission in the Tropics
PFC	perfluorocarbon
PFPs	Programmable Flask Packages
PFR	precision filter radiometer
PMEL	Pacific Marine Environmental Laboratory (NOAA)
PMOD	Physikalisch-Meteorologisches Observatorium Davos (World Radiation Center)
POES	Polar Operational Environmental Satellite
ppb	parts per billion
ppt	parts per trillion
PSA	Palmer Station, Antarctica, sampling site
PSAP	particle soot absorption photometer
PST	Pacific Standard Time
PV	potential vorticity
QBO	quasi-biennial oscillation
QUOBI	Quantitative Understanding of Ozone Losses by Bipolar Investigations
RAOS	Reno Aerosol Optics Study
RGA	Reduction Gas Analyzer
RH	relative humidity
RITS	Radiatively Important Trace Species
RMS	root mean square
RPSC	Raytheon Polar Services Company
RT	Radiative Transfer
RWB	Rossby wave breaking
SAGE	Stratospheric Aerosol and Gas Experiment
SASP	Surface Air Sampling Program
SBUV	solar backscatter ultraviolet
SEARCH	Study of Environmental Arctic Change
SEASPAN	SEAREX South Pacific Aerosol Network
SFE	surface forcing efficiency
SGP	Southern Great Plains (Lamont, Oklahoma)
SH	Southern Hemisphere
SHADOZ	Southern Hemisphere Additional Ozonesondes
SHEBA	Study of the Heat Budget in the Arctic
SIO	Scripps Institution of Oceanography (University of California, San Diego)
SMO	Samoa Observatory, American Samoa (CMDL)
SOLVE	SAGE III Ozone Loss and Validation Experiment
SOWER	Soundings of Ozone and Water in the Equatorial Region
SPO	South Pole Observatory, Antarctica (CMDL)

SRF	Solar Radiation Facility (CMDL)
SRM	Standard Reference Material
SST	sea surface temperature
STAR	Solar and Thermal Atmospheric Radiation group (CMDL)
STE	Stratosphere-Troposphere Exchange
SUNY	State University of New York
SVTD	signed vertical transport difference
SW	shortwave irradiance
SW	Snow White hygrometer made by Meteolabor
SZA	solar zenith angle
TDF	Ushuaia Observatory (near Tierra del Fuego, Argentina), sampling site
TEI	Thermo Environmental Instruments, Inc.
TFA	trifluoroacetate
THD	Trinidad Head, California, sampling site
THESEO	Third European Stratospheric Experiment on Ozone
TML	Telonicher Marine Laboratory
TM3	Tracer Model 3
TNB	Terra Nova Bay, Antarctica, sampling site
TOMS	Total Ozone Mapping Spectrometer
TROICA	TRans-siberian Observations Into the Chemistry of the Atmosphere
TSI	Thermo Systems, Incorporated
UAF	University of Alaska, Fairbanks
UCAR	University Corporation for Atmospheric Research, Boulder, Colorado
UCI	University of California, Irvine
UCSD	University of California, San Diego
UIC	Ukpeagvik Inupiat Corporation (Alaska)
UNAVCO	University NAVSTAR Constortium (NAVSTAR is a type of GPS)
UNEP	United Nations Environmental Programme
UNIX	Uniplexed Information and Computing System
USAP	U.S. Antarctic Program
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UTC	Universal Time Coordinated
UV	ultraviolet
UVB	ultraviolet B band
VOGNET	Volcano Gas observatory Network
VURF	Vacuum Ultraviolet Resonance Fluorescence detector
WCRP	World Climate Research Program
WKT	Moody, Texas, sampling site
WMO	World Meteorological Organization, Geneva, Switzerland
WOUDC	World Ozone and Ultraviolet Data Centre (Canada)
WRR	World Radiation Reference
WSA	Sable Island, Canada, sampling site