

8. Specialized Abbreviations and Acronyms

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| ACATS | Airborne Chromatograph for Atmospheric Trace Species |
| ACCENT | Atmospheric Chemistry and Combustion Effects Near the Tropopause |
| ACE | Aerosol Characterization Experiment |
| AERONET | Aerosol Robotics Network (NASA) |
| AES | Atmospheric Environment Service (Canada) |
| AIRKIT | Air Kitzis sampler |
| ALT | Alert, Canada |
| ANSTO | Australian Nuclear Science and Technology Organization |
| AO | Arctic Oscillation |
| APO | Atmospheric Potential Oxygen |
| ARM | Atmospheric Radiation Measurement (DOE) |
| ARO | Atmospheric Research Observatory (South Pole, Antarctica) |
| ASA | Antarctic Support Associates |
| ATLAS | Arctic Transmissions in the Land-Atmosphere System |
| ATMOS | Atmospheric Trace Molecule Spectroscopy |
| BACPAC | Bromine Air-sea Cruise Pacific |
| BAO | Boulder Atmospheric Observatory |
| BBC | British Broadcasting Company |
| BC | black carbon |
| BIF | Balloon Inflation Facility |
| BND | Bondville, Illinois |
| BRW | Barrow Observatory, Barrow, Alaska (CMDL) |
| BSI | Biospherical Instruments Inc., San Diego, California |
| BSRN | Baseline Surface Radiation Network |
| CAF | Clean Air Facility (South Pole, Antarctica) |
| CAMS | Control and Monitoring System |
| CART | Cloud and Radiation Testbed |
| CATS | Chromatograph for Atmospheric Trace Species |
| CCGG | Carbon Cycle Greenhouse Gases Group (CMDL) |
| CCN | cloud condensation nuclei |
| CEPEX | Central Equatorial Pacific Experiment |
| CERES | Clouds and Earth's Radiant Energy System |
| CFC | chlorofluorocarbon |
| CGO | Cape Grim Observatory, Tasmania, Australia |
| ChEAS | Chequamegon Ecosystem/Atmosphere Study |
| CIRES | Cooperative Institute for Research in Environmental Sciences (University of Colorado) |
| CMDL | Climate Monitoring and Diagnostics Laboratory (NOAA) |
| CN | condensation nuclei |
| CNC | condensation nuclei counter |
| COBRA | CO ₂ Budget and Rectification Airborne |
| CSIRO | The Commonwealth Scientific and Industrial Research Organization (Australia) |
| DEW | distant early warning |
| DIAL | differential absorption lidar |
| DOC | U.S. Department of Commerce |
| DOE | U.S. Department of Energy |
| DSRC | David Skaggs Research Center (Boulder, Colorado) |
| DU | Dobson unit |
| EC1 | equivalent chlorine |
| ECC | electrochemical cell |
| ECD | electron capture detector |
| ECMWF | European Center for Medium-Range Weather Forecasts |
| EECI | effective equivalent chlorine |
| ENEA | Ente per le Nuove Tecnologie, l'Energia e l'Ambiente (Italy) |
| EOS | Earth Observing System |
| EPA | Environmental Protection Agency |
| ETL | Environmental Technology Laboratory (NOAA) |
| FID | flame ionization detector |
| FSU | Former Soviet Union |
| FTIR | Fourier transform infrared (spectrometer) |
| FWHM | full width at half maximum |
| FWNIP | filter wheel normal incidence pyrheliometer |
| FWS | U.S. Fish and Wildlife Service |
| GASEX | Gas Exchange Experiment |
| GAW | Global Atmospheric Watch |
| GC | gas chromatograph |
| GC-ECD | gas chromatograph with electron capture detection |

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| GCM | general circulation model |
| GC-MS | gas chromatograph with mass selective detection |
| GEOSECS | Geochemical Ocean Sections |
| GFDL | Geophysical Fluid Dynamics Laboratory (NOAA) |
| GMCC | Geophysical Monitoring for Climatic Change (now CMDL) (NOAA) |
| GPS | Global Positioning System |
| HALOE | HALogen Occultation Experiment |
| HATS | Halocarbons and other Atmospheric Trace Species Group (CMDL) |
| HCFC | hydrochlorofluorocarbon |
| HFC | hydrofluorocarbon |
| HMF | Harvard Forest, Massachusetts |
| HNH | high northern hemisphere |
| HOA | Health of the Atmosphere Air Quality Research Program (NOAA) |
| HP | Hewlett Packard |
| IAC | Institute of Atmospheric Chemistry (China) |
| ICP | InterComParison |
| INDOEX | Indian Ocean Experiment |
| INSTAAR | Institute for Arctic and Alpine Research (University of Colorado) |
| IPASRC-I | International Pyrgeometer and All-sky Scanning Radiometer Comparison |
| IPC | International Pyrheliometer Comparison |
| IR | infrared |
| ITCZ | Intertropical Convergence Zone |
| ITN | Grifton, North Carolina |
| JGOFS | Joint Global Ocean Flux Study |
| JPL | Jet Propulsion Laboratory |
| KUM | Cape Kumukahi, Hawaii |
| LACE | Lightweight Airborne Chromatograph Experiment |
| LEAPS | Low Electron Attachment Potential Species |
| LEF | Park Falls, Wisconsin |
| MAKS | Martin and Kitzis Sampler |
| MBL | marine boundary layer |
| MFRSR | multifilter rotating shadowband radiometer |
| MHS | Mace Head, Ireland |
| MLO | Mauna Loa Observatory, Hawaii (CMDL) |
| MODTRAN | Moderate Resolution Transmittance Model |
| MOPITT | Measurement Of Pollution In The Troposphere |
| MRI | Meteorology Research, Inc. |
| MSC | Meteorological Service of Canada |
| MSD | mass selective detector |
| MSISE | mass spectrometer incoherent scatter – extended (extended below mesopause from original thermospheric MSIS-86) |
| NARL | Naval Arctic Research Laboratory |
| NASA | National Aeronautics and Space Administration |
| NCAR | National Center for Atmospheric Research |
| NCDC | National Climatic Data Center |
| NCEP | National Centers for Environmental Prediction (NOAA) |
| NDIR | non-dispersive infrared analyzer |
| NDSC | Network for the Detection of Stratospheric Change |
| Nd:YAG | neodymium doped yttrium aluminum garnet (type of laser) |
| NEE | net ecosystem exchange |
| 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 for Water and Atmospheric Research (New Zealand) |
| NOAA | National Oceanic and Atmospheric Administration (U.S. Dept. of Commerce) |
| NOAH | Nitrous Oxide and Halocompounds (CMDL) |
| NPC | NREL Pyrheliometer Comparison |
| NREL | National Renewable Energy Laboratory |
| NRL | Naval Research Laboratory |
| NSA | North Slope, Alaska |
| NSF | National Science Foundation |
| NWR | Niwot Ridge, Colorado |
| NWS | National Weather Service (NOAA) |
| OAR | Oceanic and Atmospheric Research (NOAA) |
| OD | outside diameter |
| ODR | orthogonal distance regression |
| OMS | Observations of the Middle Stratosphere |
| OTTO | automated flask GC-ECD instrument |
| PAN | peroxyacetyl nitrate |
| PANTHER | PAN and Trace Hydrohalocarbon ExpeRiment |
| PAR | photosynthetically active radiation |

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| PBL | planetary boundary layer |
| PCB | polychlorinated biphenyl |
| PEM Tropics | Pacific Exploratory Mission in the Tropics (a global troposphere experiment) |
| PFR | Precision filter radiometer |
| PMOD | Physikalisch-Meteorologisches Observatorium Davos (World Radiation Center) |
| POLARIS | Photochemistry of Ozone Loss in the Arctic Region in Summer |
| PPLN | periodically poled lithium niobate |
| PSA | Palmer Station, Antarctica |
| PSAP | particle soot absorption photometer |
| QBO | quasi-biennial oscillation |
| RAF | Radiative amplification factor |
| RCF | Radiometer Calibration Facility |
| RF | radio frequency |
| RITS | Radiatively Important Trace Species |
| SA | saturation anomaly |
| SAFARI | Southern African Fire-Atmosphere Research Initiative |
| SAGE | Stratospheric Aerosol and Gas Experiment |
| SC | sky cover |
| S.D. | standard deviation |
| SEAREX | Sea-Air Exchange Experiment |
| SEASpan | SEAREX South Pacific Aerosol Network |
| SGP | Southern Great Plains (Lamont, Oklahoma) |
| SHADOZ | Southern Hemisphere Additional Ozone Soundings |
| 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 |
| SOS | Southern Oxidant Study |
| SOWER | Special Observations of Ozone and Water in the Equatorial Region |
| SPCZ | South Pacific Convergence Zone |
| SPO | South Pole Observatory, Antarctica (CMDL) |
| SRF | solar radiation facility |
| SRM | Standard Research Material |
| STAR | Solar and Thermal Atmospheric Radiation Group (CMDL) |
| STRAT | Stratospheric Tracers of Atmospheric Transport |
| SUNY | State University of New York |
| SZA | solar zenith angle |
| TDL | tunable diode laser |
| TEI | thermal electron instrument |
| TIES | Tracer Intercomparison Experiment for SOLVE |
| TMF | Table Mountain Facility |
| TOMS | Total Ozone Mapping Spectrometer |
| TSI | Thermo Systems Incorporated |
| UCI | University of California, Irvine |
| UIC | Ukpeagvik Inupiat Corporation (Alaska) |
| UNEP | United Nations Environmental Programme |
| UPS | uninterruptible power supply |
| URAS | (a commercial CO ₂ analyzer) |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |
| UTC | Universal Time Coordinated |
| UV | ultraviolet |
| UVB | ultraviolet B band |
| VIS | visible |
| WCRP | World Climate Research Program |
| WEPC | water equivalent precipitation |
| WMO | World Meteorological Organization, Geneva, Switzerland |
| WOCE | World Ocean Circulation Experiment |
| WODC | World Ozone Data Centre |
| WOUDC | World Ozone and Ultraviolet Data Centre (Canada) |
| WRC | World Radiation Center |
| WRR | World Radiation Reference |
| WSA | Sable Island, Canada |
| WVMS | Water Vapor Millimeter-wave Spectrometer |