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APPENDIX A

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APPENDIX B

MAJOR ACRONYMS AND ABBREVIATIONS

A1	baseline (or most likely) halocarbon scenario of the Ozone Assessment
A1-2006	baseline (or most likely) halocarbon scenario of the 2006 Ozone Assessment
A1-2010	baseline (or most likely) halocarbon scenario of the 2010 Ozone Assessment
A1B	scenario of the IPCC Special Report on Emissions Scenarios (SRES)
A5	Article 5 countries of the Montreal Protocol
AAO	Antarctic Oscillation
ACC	Antarctic Circumpolar Current
ACCMIP	Atmospheric Chemistry and Climate Model Intercomparison Project
ACE-FTS	Atmospheric Chemistry Experiment Fourier Transform Spectrometer
ADEOS	Advanced Earth Observing Satellite
ADM	Assessment for Decision-Makers (of the 2014 WMO/UNEP Ozone Assessment)
AGAGE	Advanced Global Atmospheric Gases Experiment
AGTP	Absolute Global Temperature Potential
AGWP	Absolute Global Warming Potential
AIRS	Atmospheric Infrared Sounder
AMSU	Advanced Microwave Sounding Unit
AO	Arctic Oscillation
AOGCM	atmosphere-ocean general circulation model
AR4	IPCC Fourth Assessment Report
AR5	IPCC Fifth Assessment Report
ARC	Australian Research Council (Australia)
ARCTAS	Arctic Research of the Composition of the Troposphere from Aircraft and Satellites
ARCPAC	Aerosol, Radiation, and Cloud Processes affecting Arctic Climate
ATLAS	Atmospheric Laboratory for Applications and Science
ATTREX	Airborne Tropical TRopopause Experiment
AVE	Aura Validation Experiment
B1	a lower-emissions scenario of the IPCC Special Report on Emissions Scenarios (SRES)
B2	scenario of the IPCC Special Report on Emissions Scenarios (SRES)
BDBP	Binary Database of Profiles
BDC	Brewer-Dobson circulation
BL	boundary layer
BUV	Backscatter (or Backscattered) Ultraviolet (spectrometer)
C	Celsius (unit of temperature)
CALIOP	Cloud-Aerosol Lidar with Orthogonal Polarization
CALIPSO	Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observation
CAM	Community Atmosphere Model
CanESM	Canadian Earth System Model

CARIBIC	Civil Aircraft for the Regular Investigation of the atmosphere Based on an Instrument Container
CAS	Chemical Abstracts Service
CBL	Convective boundary layer
CCM	chemistry-climate model
CCMI	Chemistry-Climate Model Initiative
CCMVal	Chemistry-Climate Model (CCM) Validation Activity (SPARC)
CCMVal-2	Chemistry-Climate Model (CCM) Validation Activity-2 (SPARC)
CCSM	Community Climate System Model
CCSRNIES	Center for Climate-Systems Research–National Institute for Environmental Studies CCM
CDIAC	Carbon Dioxide Information Analysis Center
CDM	Clean Development Mechanism
CDW	circumpolar deep water
CESM	Community Earth System Model
CFC	chlorofluorocarbon
CFSR	Climate Forecast System Reanalysis
CICERO	Center for International Climate and Environmental Research-Oslo (Norway)
CIRES	Cooperative Institute for Research in Environmental Sciences (United States)
CLAES	Cryogenic Limb Array Etalon Spectrometer
CLaMS	Chemical Lagrangian Model of the Stratosphere
cm	centimeters (unit of length)
CMAM	Canadian Middle Atmosphere Model
CMIP3	Couples Model Intercomparison Project Phase 3
CMIP5	Coupled Model Intercomparison Project Phase 5
CMIP5-CHEM	CMIP5 models with chemistry
CNRM	Centre National de Recherches Météorologiques (France)
CNRM-CMM	CNRM Centre de Meteorologie Marine
CNRS	Centre National de la Recherche Scientifique (France)
COBALD	Compact Optical Backscatter Aerosol Detector
CONICET	Consejo de Investigaciones Cientificas y Técnicas (Argentina)
CO_2-eq	carbon dioxide equivalents
COSI	COde for Solar Irradiance
CPT	cold point tropopause
CR-AVE	Costa Rica-Aura Validation Experiment
CRISTA	Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere
CSIRO	Commonwealth Scientific and Industrial Research Organisation (Australia)
CTM	chemical transport model
CUE	critical-use exemption
DJF	December-January-February
DLAPSE	Denitrification by Lagrangian Particle Sedimentation
DLR	Deutschen Zentrum für Luft- und Raumfahrt (Germany)
DMS	dimethyl sulfide
DOAS	Differential Optical Absorption Spectroscopy
DU	Dobson unit
E39CA	a coupled chemistry-climate model of DLR
ECl	Equivalent Chlorine
ECMWF	European Centre for Medium-Range Weather Forecasts (United Kingdom)

EEAP	Environmental Effects Assessment Panel
EESC	Equivalent Effective Stratospheric Chlorine
ENEA	Italian National Agency for New Technologies, Energy (Italy)
ENSO	El Niño-Southern Oscillation
Envisat	Environmental Satellite
EOS	Earth Observing System
EP	Eliassen-Palm
eq	equivalent
ERA	ECMWF Re-Analysis
ERA-40	ECMWF 40-year Re-Analysis
ERA-Interim	ECMWF Interim Re-Analysis
ERF	Effective Radiative Forcing
ESA	European Space Agency
ESA O3-CCI	European Space Agency Ozone Climate Change Initiative
ESRL	Earth System Research Laboratory (NOAA)
FAA	Federal Aviation Administration
FPH	Frost Point Hygrometers
FRF	fractional release factors
FTIR	Fourier transform infrared
FU-Berlin	Freie Universität Berlin (Germany)
GAW	Global Atmosphere Watch
GCM	general circulation model
GDP	Gross Domestic Product
GES DISC	Goddard Earth Sciences Data and Information Services Center
GeoMIP	Geoengineering Model Intercomparison Project
GEOS CHEM	Goddard Earth Observing System global 3-D chemical transport model
GEOSCCM	Goddard Earth Observing System Chemistry-Climate Model (Table 3-1)
GFDL	Geophysical Fluid Dynamics Laboratory (NOAA)
Gg	gigagrams (10^9 grams) (unit of mass)
GHG	greenhouse gas
GISS	Goddard Institute for Space Studies (NASA)
GMD	Global Monitoring Division (NOAA/ESRL)
GODFIT	GOME Direct-FITing
GOME	Global Ozone Monitoring Experiment
GOME-2	Global Ozone Monitoring Experiment-2
GOMOS	Global Ozone Monitoring by Occultation of Stars
GOSAT	Greenhouse gases Observing SATellite
GOZCARDS	Global Ozone Chemistry and Related Trace Gas Data Records for the Stratosphere
GPCP	Global Precipitation Climatology Project
GROMOS	Ground-Based Millimeter-Wave Ozone Spectrometer
GSFC	Goddard Space Flight Center (NASA)
GSG	GOME, SCIAMACY, and GOME-2
Gt	gigatonnes
$GtCO_2$-eq	gigatonnes of carbon dioxide equivalents
GTO	Global Total Ozone
GTP	Global Temperature Potential; Global Temperature change Potential
GWP	Global Warming Potential

HadAT	Hadley Centre radiosonde temperature product
HALOE	Halogen Occultation Experiment
HARMOZ	HARMonized dataset of OZone profiles
HCFC	hydrochlorofluorocarbon
HF	hydrogen fluoride
HFC	hydrofluorocarbon
HFE	hydrofluorinated ether or hydrofluoroether
HFO	hydrofluoro-olefin
HIAPER	High-performance Instrumented Airborne Platform for Environmental Research
HIPPO	HIAPER Pole-to-Pole Observations
HIRDLS	High Resolution Dynamics Limb Sounder
hPa	hectoPascal (10^2 Pascal) (unit of pressure)
HTOC	Halons Technical Options Committee (TEAP)
IAM	Integrated Assessment Models
IASI	Infrared Atmospheric Sounding Interferometer
IGAC	International Global Atmospheric Chemistry
IGACO-O3	Integrated Global Atmospheric Chemistry Observations-Ozone
IHALACE	International Halocarbons in Air Comparison Experiment
INGEBI	Instituto de Investigaciones en Ingeniería Genética y Biología Molecular (Argentina)
INSU	Institut National des Sciences de l'Univers (France)
IO3C	International Ozone Commission
IPCC	Intergovernmental Panel on Climate Change
IPSL	Institut Pierre-Simon Laplace (France)
IR	infrared
IUP	Institute of Environmental Physics, University of Bremen (Germany)
JJA	June-July-August
JMA	Japan Meteorological Agency (Japan)
JPL	Jet Propulsion Laboratory (NASA)
K	Kelvin (unit of temperature)
kg	kilogram (10^3 grams) (unit of mass)
km	kilometer (10^3 meters) (unit of length)
KNMI	Royal Netherlands Meteorological Institute (The Netherlands)
Kt	kilotons (10^3 tons) (unit of mass)
LATMOS	Laboratoire Atmosphères, Milieux, Observations Spatiales (France)
LIMS	Limb Infrared Monitor of the Stratosphere
LMDZrepro	general circulation model of the Laboratory of Dynamic Meteorology (IPSL)
LS	lower stratosphere
LT	local time
LZRH	level of zero radiative heating

m	meter (unit of length)
MAESTRO	Measurements of Aerosol Extinction in the Stratosphere and Troposphere Retrieved by Occultation
MAM	March-April-May
MATCH	Model for Atmospheric Transport and Chemistry
MBL	marine boundary layer
MEaSUREs	Making Earth System Data Records for Use in Research Environments
MERRA	Modern-Era Retrospective Analysis for Research and Applications
MetOp	Meteorological Operational satellite
MFA	monofluoroacetic acid
MIPAS	Michelson Interferometer for Passive Atmospheric Sounding
MLR	multiple linear regression
MLS	Microwave Limb Sounder
mm	millimeters (10^{-3} meters) (unit of length)
µm	micrometer; micron (10^{-6} meters) (unit of length)
MMBtu	million British thermal units (1MMBtu = 1.055 gigajoules)
MMM	multi-model mean
MOD	merged ozone data set
mol	mole (unit, amount of substance)
MRI	Meteorological Research Institute (Japan)
MSR	Multi Sensor Reanalysis
MSU	Microwave Sounding Unit
mW	milliWatt (10^{-3} Watts)
NAM	Northern Annular Mode
NAO	North Atlantic Oscillation
NASA	National Aeronautics and Space Administration (United States)
NAT	nitric acid trihydrate
NCAR	National Center for Atmospheric Research (United States)
NCEP	National Centers for Environmental Prediction (NOAA) (United States)
NDACC	Network for the Detection of Atmospheric Composition Change
NH	Northern Hemisphere
NIES	National Institute for Environmental Studies (Japan)
NIWA	National Institute of Water and Atmospheric Research (New Zealand)
nm	nanometers (10^{-9} meters) (unit of length)
NOAA	National Oceanic and Atmospheric Administration (United States)
nPB	n-propyl bromide
NPLS	nonparametric least-squares fit
NPP	net primary production
NRL	Naval Research Laboratory
NRLSSI	Naval Research Laboratory Solar Spectral Irradiance model
NWS	National Weather Service (NOAA) (United States)
OCS	carbonyl sulfide (also COS)
ODP	Ozone Depletion Potential
ODS	ozone-depleting substance
OMI	Ozone Monitoring Instrument
OMPS	Ozone Mapping and Profiler Suite

OMPS-LP	Ozone Mapping and Profiler Suite-Limb Profiler
OMPS-NM	Ozone Mapping and Profiler Suite-Nadir Mapper
OMPS-NP	Ozone Mapping and Profiler Suite-Nadir Profiler
OSIRIS	Optical Spectrograph and InfraRed Imager System
OSUC	Observatoire des Sciences de l'Univers en région Centre (France)
PCE	perchloroethylene, also known as tetrachloroethylene
PDO	Pacific Decadal Oscillation
PEARL	Polar Environment Atmospheric Research Laboratory
PEM	Pacific Exploratory Mission
PEPACG	Programa para el Estudio de Procesos Atmosféricos en el Cambio Global (Argentina)
PFC	perfluorocarbon
PFOS	perfluorooctanyl sulfonate
PG	product gas
PGI	product gas injection
PI	pre-industrial
PNNL	Pacific Northwest National Laboratory (United States)
POAM	Polar Ozone and Aerosol Measurement
ppb	parts per billion
ppbv	parts per billion by volume
ppm	parts per million
ppmv	parts per million by volume
ppt	parts per trillion
pptv	part per trillion by volume
PSC	polar stratospheric cloud
PTFE	polytetrafluoroethylene
PWLT	piecewise linear trend
QBO	quasi-biennial oscillation
QPS	quarantine and pre-shipment
RCP	Representative Concentration Pathway
RE	radiative efficiencies
REF-B1	reference “future” simulation of SPARC CCMVal-2
REF-B2	reference “future” simulation of SPARC CCMVal-2
RF	radiative forcing
RICH	Radiosonde Innovation Composite Homogenization
RSS	Remote Sensing Systems Inc.
s	second (unit of time)
SABER	Sounding of the Atmosphere using Broadband Emission Radiometry
SAGE	Stratospheric Aerosol and Gas Experiment
SAM	Southern Annular Mode
SAM II	Stratospheric Aerosol Measurement II
SAMW	Subantarctic Mode Water
SAOZ	Système d’Analyse par Observation Zénithale
SAP	Scientific Assessment Panel (Montreal Protocol)

SATIRE	Spectral and Total Irradiance REconstruction
SBUV/SBUV2	Solar Backscatter (or Backscattered) Ultraviolet (spectrometer)
SCIAMACHY	Scanning Imaging Absorption Spectrometer for Atmospheric Chartography
SCISAT	a Canadian satellite also known as Atmospheric Chemistry Experiment (ACE)
SD-WACCM	Specified Dynamics version of the Whole Atmosphere Community Climate Model
SG	source gas
SGI	source gas injection
SH	Southern Hemisphere
SHADOZ	Southern Hemisphere Additional Ozonesondes
SHIVA	Stratospheric Ozone: Halogen Impacts in a Varying Atmosphere
SI2N	SPARC/IO_3C/IGACO-O3/NDACC initiative
SLIMCAT	Single-Layer Isentropic Model of Chemistry and Transport
SLS	Submillimeterwave Heterodyne Limb Sounder
SMILES	Superconducting Submillimeter-Wave Limb-Emission Sounder
SMR	Sub-Millimetre Radiometer (Odin satellite)
SOCOL	modeling tool for studies of Solar-Climate-Ozone Links
SON	September-October-November
SORCE	Solar Radiation and Climate Experiment
SPARC	Stratosphere-troposphere Processes and Their Role in Climate (WCRP)
SRES	Special Report on Emissions Scenarios (IPCC)
SRM	solid rocket motor
SRV	suborbital, reusable vehicles
SSA	stratospheric sulfate aerosol
SSA	single scattering albedo
SSI	spectral solar irradiance
SST	sea surface temperature
SSU	Stratospheric Sounding Unit
SSW	sudden stratospheric warming
STAR	System for Transfer of Atmospheric Radiation
STE	stratosphere-troposphere exchange
STRAT	Stratospheric Tracers of Atmospheric Transport
STS	supercooled ternary solution
Suomi-NPP	Suomi National Polar-orbiting Partnership
SUSIM	Solar Ultraviolet Spectral Irradiance Monitor
SWOOSH	Stratospheric Water and Ozone Satellite Homogenized
SZA	solar zenith angle
2-D	two-dimensional
3-D	three-dimensional
TANSO-FTS	Thermal And Near infrared Sensor for carbon Observation-Fourier Transform Spectrometer
TC4	Tropical Composition, Cloud and Climate Coupling mission
TCE	trichloroethene, trichloroethylene
TEAP	Technology and Economic Assessment Panel (Montreal Protocol)
TES	Tropospheric Emission Spectrometer
TFA	trifluoroacetic acid
Tg	teragrams (10^{12} grams) (unit of mass; equivalent to megatonne)
TOMCAT	Toulouse Off-line Model of Chemistry and Transport
TOMS	Total Ozone Mapping Spectrometer
TOSOMI	SCIAMACHY total ozone retrieval algorithm

TOGOMI	GOME total ozone retrieval algorithm
TOU	Total Ozone Unit
TSAM	time series additive model
TTL	tropical tropopause layer
UAH	University of Alabama–Huntsville
UARS	Upper Atmosphere Research Satellite
UCI	University of California, Irvine
UEA	University of East Anglia (United Kingdom)
UK	United Kingdom
UKCA	United Kingdom Chemistry and Aerosols chemistry-climate model
ULAQ	University of L'Aquila chemistry-climate model (Italy)
UMD	University of Maryland (United States)
UMETRAC	Unified Model with Eulerian Transport and Chemistry
UMSLIMCAT	Unified Model Single-Layer Isentropic Model of Chemistry and Transport CCM
UMUKCA	Unified Model of the UK – Chemistry and Aerosol
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UPMC	Université Pierre et Marie Curie (France)
US, USA	United States of America
UT	upper troposphere
UTLS	upper troposphere/lower stratosphere
UV	ultraviolet
VIRGO	Variability of solar IRadiance and Gravity Oscillations
VSL	very short-lived
VSLS	very short-lived substance(s)
W	watt (unit of energy)
WACCM	Whole-Atmosphere Community Climate Model
WCRP	World Climate Research Programme
WFDOAS	Weighting Function Differential Optical Absorption Spectroscopy
WOUDC	World Ozone and Ultraviolet Data Centre
W/m^2, $W\ m^{-2}$	watts per square meter
WMO	World Meteorological Organization

APPENDIX C
CHEMICAL FORMULAE AND NOMENCLATURE

HALOGEN-CONTAINING SPECIES

Cl	atomic chlorine	Br	atomic bromine
Cl_y	total inorganic chlorine	Br_y	total inorganic bromine
CCl_y	organic chlorine	CBr_y	organic bromine
Cl_2	molecular chlorine	Br_2	molecular bromine
ClO	chlorine monoxide	BrO	bromine monoxide
Cl_2O	dichlorine monoxide	Br_2O	dibromine monoxide
ClO_x	chlorine radicals ([ClO] + 2×[ClOOCl])	BrO_x	bromine radicals
OClO	chlorine dioxide		
ClOO	chloroperoxy radical		
Cl_2O_2, ClOOCl	dichlorine peroxide (ClO dimer)		
$ClONO_2$, $ClNO_3$	chlorine nitrate	$BrONO_2$, $BrNO_3$	bromine nitrate
HCl	hydrogen chloride (hydrochloric acid)	HBr	hydrogen bromide
HOCl	hypochlorous acid	HOBr	hypobromous acid

F	atomic fluorine	I	atomic iodine
F_2	molecular fluorine	I_2	molecular iodine
F_y	total inorganic fluorine	I_y	total inorganic iodine
HF	hydrogen fluoride (hydrofluoric acid)	IO	iodine monoxide
FO_x	fluorine radicals, F + FO	IO_x	iodine radicals
		OIO	iodine dioxide
		HOI	hypoiodous acid

SF_6	sulfur hexafluoride	NF_3	nitrogen trifluoride
SO_2F_2	sulfuryl fluoride	PBr_3	phosphorus tribromide

HALOCARBONS

CHLOROFLUOROCARBONS (CFCS)

CFC-11	CCl_3F
CFC-12	CCl_2F_2
CFC-13	$CClF_3$
CFC-112	CCl_2FCCl_2F
CFC-112a	$CClF_2CCl_3$
CFC-113	CCl_2FCClF_2
CFC-113a	CCl_3CF_3
CFC-114	$CClF_2CClF_2$
CFC-114a	CCl_2FCF_3
CFC-115	$CClF_2CF_3$
CFC-316c	cyclic $C_4Cl_2F_6$

HALONS

halon-1202	CBr_2F_2
halon-1211	$CBrClF_2$
halon-1301	$CBrF_3$
halon-2402	$CBrF_2CBrF_2$
halon-2311(Halothane)	$CHBrClCF_3$

HYDROFLUOROCARBONS (HFCS)

HFC-23	CHF_3
HFC-32	CH_2F_2
HFC-41	CH_3F
HFC-125	CHF_2CF_3
HFC-134	CHF_2CHF_2
HFC-134a	CH_2FCF_3
HFC-143	CH_2FCHF_2
HFC-143a	CH_3CF_3
HFC-152	CH_2FCH_2F
HFC-152a	CH_3CHF_2
HFC-161	CH_3CH_2F
HFC-227ea	CF_3CHFCF_3
HFC-236cb	$CH_2FCF_2CF_3$
HFC-236ea	CHF_2CHFCF_3
HFC-236fa	$CF_3CH_2CF_3$

HYDROCHLOROFLUOROCARBONS (HCFCS)

HCFC-21	$CHCl_2F$
HCFC-22	$CHClF_2$
HCFC-31	CH_2ClF
HCFC-123	$CHCl_2CF_3$
HCFC-123a	$CHClFCF_2Cl$
HCFC-123b	CHF_2CCl_2F
HCFC-124	$CHClFCF_3$
HCFC-124a	CHF_2CClF_2
HCFC-133a	CH_2ClCF_3
HCFC-141b	CH_3CCl_2F
HCFC-142b	CH_3CClF_2
HCFC-225ca	$CHCl_2CF_2CF_3$
HCFC-225cb	$CHClFCF_2CClF_2$
HCFC-234fb	$CF_3CH_2CCl_2F$
HCFC-243cc	$CH_3CF_2CCl_2F$
HCFC-1233zd(*E*)	(*E*)-$CHClCHCF_3$

HFC-245cb	$CH_3CF_2CF_3$
HFC-245ca	$CH_2FCF_2CHF_2$
HFC-245ea	$CHF_2CHFCHF_2$
HFC-245eb	$CH_2FCHFCF_3$
HFC-245fa	$CHF_2CH_2CF_3$
HFC-263fb	$CH_3CH_2CF_3$
HFC-272ca	$CH_3CF_2CH_3$
HFC-281ea	CH_3CHFCH_3
HFC-365mfc	$CH_3CF_2CH_2CF_3$
HFC-356mcf	$CH_2FCH_2CF_2CF_3$
HFC-356mff	$CF_3CH_2CH_2CF_3$
HFC-338pcc	$CHF_2CF_2CF_2CHF_2$
HFC-43-10mee	$CF_3CHFCHFCF_2CF_3$
HFC-458mfcf	$CF_3CH_2CF_2CH_2CF_3$
HFC-55-10mcff	$CF_3CF_2CH_2CH_2CF_2CF_3$

CHLOROCARBONS

CH_3Cl	methyl chloride, chloromethane
CH_2Cl_2	dichloromethane, methylene chloride
$CHCl_3$	chloroform, trichloromethane
CCl_4	carbon tetrachloride, CTC
$CHClCCl_2$	trichloroethylene, trichloroethene, TCE
CCl_2CCl_2	tetrachloroethene, perchloroethene, PCE
CH_3CH_2Cl, C_2H_5Cl	ethyl chloride, chloroethane
CH_2ClCH_2Cl	1,2 dichloroethane
CH_3CCl_3	methyl chloroform
$CH_3CHClCH_3$	isopropylchloride, 2-chloropropane
$CH_3CH_2CH_2Cl$	n-propyl chloride, 1-chloropropane
$COCl_2$, $Cl_2C(O)$	phosgene, carbonyl chloride

BROMOCARBONS

CH_3Br	methyl bromide, bromomethane
CH_2Br_2	dibromomethane, methylene bromide
$CHBr_3$	bromoform, tribromomethane
CH_3CH_2Br, C_2H_5Br	ethyl bromide, bromoethane
CH_2BrCH_2Br	1,2 dibromoethane
$CH_3CH_2CH_2Br$,	n-propyl bromide, n-PB, n-C_3H_7Br, 1-bromopropane
$COBr_2$	carbonyl bromide

IODOCARBONS

CH_3I	methyl iodide, iodomethane
CH_2I_2	diiodomethane
CH_3CH_2I, C_2H_5I	ethyl iodide, iodoethane
CH_3CHICH_3	isopropyl iodide, 2-iodopropane
$CH_3CH_2CH_2I$ (n-C_3H_7I)	n-propyl iodide, 1-iodopropane

OTHERS

$CHBr_2Cl$	dibromochloromethane
CH_2BrCl	bromochloromethane
$CHBrCl_2$	bromodichloromethane
CH_2BrI	bromoiodomethane
$CHBrF_2$	bromodifluoromethane
CH_2ClI	chloroiodomethane
CF_3I	trifluoroiodomethane
CH_2CBrCF_3	bromotrifluoropropene
$CF_3CF_2CF_2I$, C_3F_7I	1-iodo-heptafluoropropane
$COClF$	chlorofluorocarbonyl
CCl_3CHO	trichloroacetaldehyde, chloral
SF_5CF_3	trifluoromethylsulfurpentafluoride

FLUOROCARBONS

CF_4 (PFC-14)	perfluoromethane, carbon tetrafluoride
C_2F_6, CF_3CF_3 (PFC-116)	perfluoroethane
C_3F_8, $CF_3CF_2CF_3$ (PFC-218)	perfluoropropane
c-C_3F_6 (PFC-C216)	perfluorocyclopropane
C_4F_{10} (PFC-31-10)	perfluorobutane
c-C_4F_8 (PFC-C318)	perfluorocyclobutane
C_5F_{12} (PFC-41-12)	perfluoropentane
C_6F_{14} (PFC-51-14)	perfluorohexane
C_7H_{16} (PFC-61-16)	perflouoroheptane
$C_{10}F_{18}$	perfluorodecalin
COF_2	carbonyl fluoride
$CH_2FC(O)OH$	monofluoroacetic acid (MFA)
$CHF_2C(O)OH$	difluoroacetic acid (DFA)
$CF_3C(O)OH$	trifluoroacetic acid (TFA)
CF_3O_x	$CF_3O + CF_3O_2 + CF_3O_2NO_2$

HYDROFLUORO-OLEFINS

CH_2CFCF_3	HFO-1234yf

OTHER CHEMICAL SPECIES

O	atomic oxygen
$O(^3P)$	atomic oxygen (ground state)
$O(^1D)$	atomic oxygen (first excited state)
O_2	molecular oxygen
O_3	ozone
O_x	odd oxygen (O, $O(^1D)$, O_3) or oxidant ($O_3 + NO_2$)

H	atomic hydrogen
H_2	molecular hydrogen
OH	hydroxyl radical
HO_2	hydroperoxyl radical
H_2O	water
HO_x	odd hydrogen (H, OH, HO_2, H_2O_2)

N	atomic nitrogen
N_2	molecular nitrogen
N_2O	nitrous oxide
NO	nitric oxide
NO_2	nitrogen dioxide
NO_3	nitrogen trioxide, nitrate radical
N_2O_5	dinitrogen pentoxide
NO_x	nitrogen oxides ($NO + NO_2$)
NO_y	total reactive nitrogen (usually includes NO, NO_2, NO_3, N_2O_5, $ClONO_2$, HNO_4, HNO_3)

HNO_2, HONO	nitrous acid
HOONO	pernitrous acid
HNO_3	nitric acid
NH_3	ammonia
NH_4NO_3	ammonium nitrate

S	atomic sulfur
SO_2	sulfur dioxide
H_2SO_4	sulfuric acid
CH_3SCH_3	DMS, dimethyl sulfide

H_2S	hydrogen sulfide
CS_2	carbon disulfide
COS, OCS	carbonyl sulfide

C	carbon atom
CO	carbon monoxide

CO_2	carbon dioxide

CH_4	methane
CH_3CH_3	ethane
$CH_3CH_2CH_3$	propane

CH_3OH	methyl alcohol, methanol