

List of abbreviations

ASL	above sea level	NOAA	National Oceanic and Atmospheric Administration, USA
BCC	basal cell carcinoma (s)	NOEC	no observed effect concentration
Br	bromine (an ozone depleting chemical)	OCS	carbonyl sulfide
CAS	Chemical Abstracts Service	CDFA	chlorodifluoroacetic acid
CC	cortical cataract(s)	ODS	ozone depleting substance(s)
CDK	climatic droplet keratopathy	OH	hydroxyl radical (and important atmospheric cleaning agent)
CDOC	colored dissolved organic carbon	PAR	photosynthetically active radiation, 400–700 nm waveband
CDOM	colored (or chromophoric) dissolved organic matter	PAUR II	Photochemical Activity and solar Ultraviolet Radiation campaign 2
CFC	chlorofluorocarbons	PEC	predicted environmental concentration
CH	contact hypersensitivity	POC	particulate organic carbon
CH ₄	methane (a greenhouse gas)	PSC	posterior subcapsular cataract(s)
Cl	chlorine (an ozone depleting chemical)	PSC	Polar Stratospheric Cloud (ice crystals which form at high altitudes in Polar regions when the temperature is below a critical threshold)
CM	cutaneous melanoma	PNEC	predicted no effect concentration
CO ₂	carbon dioxide (a greenhouse gas)	Ptc	murine 'patch' protein (gene in italics)
CPD	cyclobutane pyrimidine dimers	PTCH	human 'patch' protein (gene in italics)
DIC	dissolved inorganic carbon	QBO	quasi biennial oscillation (a shift in wind patterns – especially over the tropics- with a period of approximately 2.2 years)
DMS	dimethyl sulfide	RAF	radiation amplification factor (a measure of sensitivity to ozone change)
DNA	deoxyribonucleic acid	ROS	reactive oxygen species
DOC	dissolved organic carbon	SAGE	Stratospheric Aerosol and Gas Experiment, a satellite-based instrument
DOM	dissolved organic matter	SCC	squamous cell carcinoma
DTH	delayed type hypersensitivity	SZA	solar zenith angle (ie the angle between zenith and the centre of the solar disk)
DU	Dobson Unit (used for the measurement of total column ozone (1 DU=2.69 × 10 ¹⁶ molecule cm ⁻²))	TFA	trifluoroacetic acid
EDUCE	European Database for Ultraviolet Radiation Climatology and Evaluation	TFM	the lampricide 3-fluoromethyl-4-nitrophenol
EP	Earth Probe (a NASA satellite)	TOMS	Total Ozone Mapping Spectrometer, a satellite-based instrument
EPA	Environmental Protection Agency	Troposphere	lowest part of the Earth's atmosphere (0–16 km)
GHG	greenhouse gas	UCA	urocanic acid
Halon	bromine-containing compound	UV	ultraviolet
HALS	Hindered Amine Light Stabilizer	UV-A	electromagnetic radiation of wavelengths in the 315 to 400 nm range
HCFC	hydrochlorofluorocarbon	UV-B	electromagnetic radiation of wavelengths in the 280 to 315 nm range
HFC	hydrofluorocarbon	UV-C	electromagnetic radiation of wavelengths in the 100 to 280 nm range
HIV	human immunodeficiency virus	UV index	A standardised unit for providing UV information to the public
HPV	human papilloma virus	VOC	volatile organic compounds
IL	interleukin	WOUDC	world ozone and UV data centre
INK4a	human inhibitor of kinase 4a protein (gene in italics)	XP	xeroderma pigmentosum
Ink4a	murine inhibitor of kinase 4a protein (gene in italics)		
kda	kilodalton		
MAA	mycosporine-like amino acids		
NC	nuclear cataract(s)		
NaTFA	sodium trifluoroacetate		
NCAR	National Centre for Atmospheric Research, USA		
NIMBUS-7	a NASA satellite		
NMHCs	non-methane hydrocarbons		
NO	nitric oxide (an ozone depleting gas)		
NO ₂	nitrogen dioxide (an ozone depleting gas)		
N ₂ O	nitrous oxide (a greenhouse gas that is also a source of NO ₂)		
NO _x	nitrogen oxides		