

TERMINOLOGY

CCM	chemistry-climate model
CFC	chlorofluorocarbon, a group of industrial compounds that contains at least one chlorine, fluorine, and carbon atom
CFC-11-equivalent	a unit for the measure of the mass of emission of an ODS, equal to the product of the actual mass emission of the ODS times its ODP
CO₂-equivalent	a unit for the measure of the mass of emission of a GHG, equal to the product of the actual mass emission of the GHG times its GWP
DU	Dobson unit, a measure of total column ozone; 1 DU = 2.687×10^{16} molecules/cm ²
EEAP	Environmental Effects Assessment Panel of the Montreal Protocol
EESC	equivalent effective stratospheric chlorine, a measure of the total amount of reactive and reservoir chlorine and bromine gases in the stratosphere that is available to deplete stratospheric ozone
GHG	greenhouse gas
gigatonne	1 billion (10 ⁹) metric tons = 1 trillion (10 ¹²) kilograms
GWP	global warming potential, a measure of the effectiveness of the emission of a gas to cause an increase in the radiative forcing of climate, relative to the radiative forcing caused by the emission of the same mass of CO ₂ ; all GWPs used here are for a 100-year time interval
halogen	elements fluorine, chlorine, bromine, iodine, and astatine that form group 7A of the periodic table
halon	a group of industrial compounds that contain at least one bromine and carbon atom; may or may not contain a chlorine atom
HCFC	hydrochlorofluorocarbon, a group of industrial compounds that contain at least one hydrogen, chlorine, fluorine, and carbon atom
HFC	hydrofluorocarbon, a group of industrial compounds that contain at least one hydrogen, fluorine, and carbon atom and no chlorine or bromine atoms
HFO	hydrofluoroolefin, a group of industrial compounds that contain at least one hydrogen, fluorine, and carbon atom and no chlorine or bromine atoms, and also include a double carbon bond that causes these gases to be more reactive in the troposphere than other HFCs
IPCC	Intergovernmental Panel on Climate Change
kilotonne	1000 metric tons = 1 million (10 ⁶) kilograms
megatonne	1 million (10 ⁶) metric tons = 1 billion (10 ⁹) kilograms
MMM	multi-model mean
mPa	pascal (Pa) is a unit of pressure; 1 mPa (millipascal) equals 0.001 Pa.
nm	nanometer, one billionth of a meter (10 ⁻⁹ m)
ODP	ozone depletion potential, a measure of the effectiveness of the emission of a gas to deplete the ozone layer, relative to the ozone depletion caused by the emission of the same mass of CFC-11
ODS	ozone-depleting substance
ozone layer	the region in the stratosphere with the highest concentration of ozone, between about 15 and 35 km altitude
ppb	parts per billion; 1 part per billion equals the presence of one molecule of a gas per billion (10 ⁹) total air molecules
ppm	parts per million; 1 part per million equals the presence of one molecule of a gas per million (10 ⁶) total air molecules
ppt	parts per trillion; 1 part per trillion equals the presence of one molecule of a gas per trillion (10 ¹²) total air molecules
PFC	perfluorocarbon, a group of industrial compounds that contain only carbon and fluorine atoms
PSC	polar stratospheric cloud
RF	radiative forcing of climate

SAI	stratospheric aerosol injection
SAOD	stratospheric aerosol optical depth
source gas	a halogen-containing chemical with a sufficiently long atmospheric lifetime that its emissions contribute to the stratospheric abundance of chlorine or bromine molecules, which participate in chemical reactions that deplete ozone
SAP	Scientific Assessment Panel of the Montreal Protocol
SSP	Shared Socioeconomic Pathway
stratosphere	layer of the atmosphere above the troposphere that extends up to around 50 km altitude, and that includes the ozone layer
TEAP	Technology and Economic Assessment Panel of the Montreal Protocol
TFA	trifluoroacetic acid, a decomposition product of HFCs, HCFCs, and HFOs
troposphere	lower layer of the atmosphere that extends from the surface up to about 10–15 km (6–9 miles) altitude
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UV	ultraviolet radiation
UV-A	ultraviolet radiation between wavelengths of 315 and 400 nm
UV-B	ultraviolet radiation between wavelengths of 280 and 315 nm
UV-C	ultraviolet radiation between wavelengths of 100 and 280 nm
UVI	ultraviolet radiation index
VSL	very short-lived
WMO	World Meteorological Organization