

Appendix VI

Units

SI (Systeme Internationale) Units:

| Physical Quantity | Name of Unit | Symbol |
|---------------------------|--------------|--------|
| length | metre | m |
| mass | kilogram | kg |
| time | second | s |
| thermodynamic temperature | kelvin | K |
| amount of substance | mole | mol |

| Fraction | Prefix | Symbol | Multiple | Prefix | Symbol |
|------------|--------|--------|-----------|--------|--------|
| 10^{-1} | deci | d | 10 | deca | da |
| 10^{-2} | centi | c | 10^2 | hecto | h |
| 10^{-3} | milli | m | 10^3 | kilo | k |
| 10^{-6} | micro | μ | 10^6 | mega | M |
| 10^{-9} | nano | n | 10^9 | giga | G |
| 10^{-12} | pico | p | 10^{12} | tera | T |
| 10^{-15} | femto | f | 10^{15} | peta | P |

Special Names and Symbols for Certain SI-Derived Units:

| Physical Quantity | Name of SI Unit | Symbol for SI Unit | Definition of Unit |
|-------------------|-----------------|--------------------|--|
| force | newton | N | kg m s^{-2} |
| pressure | pascal | Pa | $\text{kg m}^{-1} \text{s}^{-2}$ (=N m ⁻²) |
| energy | joule | J | $\text{kg m}^2 \text{s}^{-2}$ |
| power | watt | W | $\text{kg m}^2 \text{s}^{-3}$ (=J s ⁻¹) |
| frequency | hertz | Hz | s ⁻¹ (cycles per second) |

Decimal Fractions and Multiples of SI Units Having Special Names:

| Physical Quantity | Name of Unit | Symbol for Unit | Definition of Unit |
|-------------------|--------------|-----------------|--|
| length | Ångstrom | Å | $10^{-10} \text{ m} = 10^{-8} \text{ cm}$ |
| length | micron | μm | 10^{-6} m |
| area | hectare | ha | 10^4 m^2 |
| force | dyne | dyn | 10^{-5} N |
| pressure | bar | bar | $10^5 \text{ N m}^{-2} = 10^5 \text{ Pa}$ |
| pressure | millibar | mb | $10^2 \text{ N m}^{-2} = 1 \text{ hPa}$ |
| mass | tonne | t | 10^3 kg |
| mass | gram | g | 10^{-3} kg |
| column density | Dobson units | DU | $2.687 \times 10^{16} \text{ molecules cm}^{-2}$ |
| streamfunction | Sverdrup | Sv | $10^6 \text{ m}^3 \text{ s}^{-1}$ |

Non-SI Units:

| | |
|------|--|
| °C | degree Celsius (0 °C = 273 K approximately) Temperature differences are also given in °C (=K) rather than the more correct form of “Celsius degrees”. |
| ppmv | parts per million (10^6) by volume |
| ppbv | parts per billion (10^9) by volume |
| pptv | parts per trillion (10^{12}) by volume |
| yr | year |
| ky | thousands of years |
| bp | before present |

The units of mass adopted in this report are generally those which have come into common usage and have deliberately not been harmonised, e.g.,

| | |
|----------------------|--|
| GtC | gigatonnes of carbon (1 GtC = 3.7 Gt carbon dioxide) |
| PgC | petagrams of carbon (1 PgC = 1 GtC) |
| MtN | megatonnes of nitrogen |
| TgC | teragrams of carbon (1 TgC = 1 MtC) |
| Tg(CH ₄) | teragrams of methane |
| TgN | teragrams of nitrogen |
| TgS | teragrams of sulphur |