

Important Constants

Acceleration of gravity	g	9.81 m/s^2
Boltzmann constant		$=1.38064852 \cdot 10^{-23} \text{ m}^2 \text{ kg s}^{-2} \text{ K}^{-1}$
Dry adiabatic lapse rate	Γ	-0.98 K/100m
Individual gas constant for dry air	R_d	287 J/K
Individual gas constant for water vapor	R_v	461 J/K
Planck's constant	h	$6.62607004 \cdot 10^{-34} \text{ m}^2 \text{ kg / s}$
Specific heat capacity at constant pressure	c_p	1004 J/K
Specific heat capacity at constant volume	c_v	717 J/K
Speed of light in vacuum	c	299792458 m/s
Stefan-Boltzmann constant	σ	$5.67 \cdot 10^{-8} \text{ kg s}^{-3} \text{ K}^{-4}$
Universal gas constant	R^*	$8.3144598 \text{ kg m}^2 \text{ s}^{-2} \text{ K}^{-1} \text{ mol}^{-1}$
Universal gas constant in chemical units	R_c^*	$0.082057338 \text{ L atm K}^{-1} \text{ mol}^{-1}$