

Constants and useful numbers

Lengths

One light year: $9.46 \times 10^{15} \text{ m}$

Parsec: $3.09 \times 10^{16} \text{ m}$

Astronomical Units: $1.496 \times 10^{11} \text{ m}$

Mega-parsec: 10^6 parsecs

Kilo-parsec: 10^3 parsecs

Radius of Earth: 6371 km

Radius of Jupiter: 69911 km

Radius of Sun: 695500 km

Masses

Earth Mass: $5.97 \times 10^{24} \text{ kg}$

Jupiter Mass: $1.898 \times 10^{27} \text{ kg}$

Solar Mass: $1.989 \times 10^{30} \text{ kg}$

Luminosities

Solar Luminosity: $3.846 \times 10^{26} \text{ W}$

Physical Constants

Speed of Light: $2.998 \times 10^8 \text{ m/s}$

Gravitational Constant G: $6.67 \times 10^{-11} \text{ m}^3 \text{ kg}^{-1} \text{ s}^{-2}$

Planck's Constant h: $6.62 \times 10^{-34} \text{ m}^2 \text{ kg s}^{-1}$

Stefan-Boltzmann Constant σ : $5.67 \times 10^{-8} \text{ W m}^{-2} \text{ K}^{-4}$

Boltzmann's Constant k: $1.38 \times 10^{-23} \text{ J/K}$

Key wavelengths

