

SPACE AND THE UNIVERSE INTEREST GROUP

Astronomical distance units¹

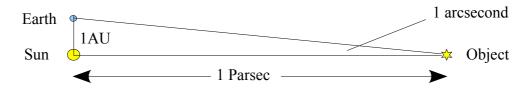
How many	In one Kilometer	In one Mile	In one Astronomical Unit (AU)	In one Light Year	In one Parsec
Kilometers	1	1.6090	149,600,000 (149.6 million)	9,461,000,000,000 (9.461 trillion)	30,86,000,000,000 (30.860 trillion)
Miles		1	92,960,000 (92.96 million)	5,879,000,000,000 (5.879 trillion)	19.170,000,000,000 19.170 trillion
Astronomical Units (AU)			1	63,240	206,300
Light Years				1	3.2616

(To 4 significant figures only)

Astronomical Unit (AU): Distance from the Earth to the Sun. (Slightly simplified explanation)

Light Year: Distance light travels in one Earth year.

Parsec: Distance to an object which at which the Earth-Sun distance (i.e.1AU) would subtend an angle of one arcsecond. (60 arcseconds in one minute of arc, 60 minutes of arc in one degree).



Distance examples (approximate)

Earth to The Moon: 384,000 km or 239,000 miles

Earth to the Sun: 1 Astronomical Unit

Neptune (outermost planet) to the Sun: 30 Astronomical Units

Sun to nearest star (Proxima Centauri) 4.2 Light Years

Diameter of our galaxy (Milky Way): 110,000 Light Years

Distance to the Andromeda Galaxy (nearest spiral galaxy): 2,540,000 (2.54 million) Light Years

Diameter of the local group of galaxies: 10,000,000 (10 million) Light Years

Distance to the edge of the observable universe: 47,000,000,000 (47 billion) Light Years

1 Information Sources: Wikipedia 14/01/2012 and Royal Astronomical Soc. Diary 2012