

Lagrange point or libration point – orbital points close to two large celestial bodies (e.g., Sun and Earth) where gravity of those object balances, and creates accessible location for space missions, allowing a constant position of the telescope in relation to the Sun-Earth in space.

Parker Solar Probe – performs observations of the solar corona (the outermost outer part of the Sun's atmosphere), which can be observed during a total solar eclipse. During its journey the probe will approach the Sun at a distance corresponding to 8,5 radii of the Sun.

Lunar Reconnaissance Orbiter – circumpolar satellite designed for the surface and observation of the Moon.

Planck space mission – measures changes of the temperature of the background microwave radiation with extreme precision, angular resolution, and frequency range, giving astronomers the chance to study the very young Universe (300 000 years).

Background microwave radiation

L2 point – a perfect place for space telescopes requiring efficient cooling (for infrared observation or observation of background microwave radiation), thanks to the ease of avoiding solar radiation (incident directly as well as reflected from the Earth and Moon) through the use of specialized shields.

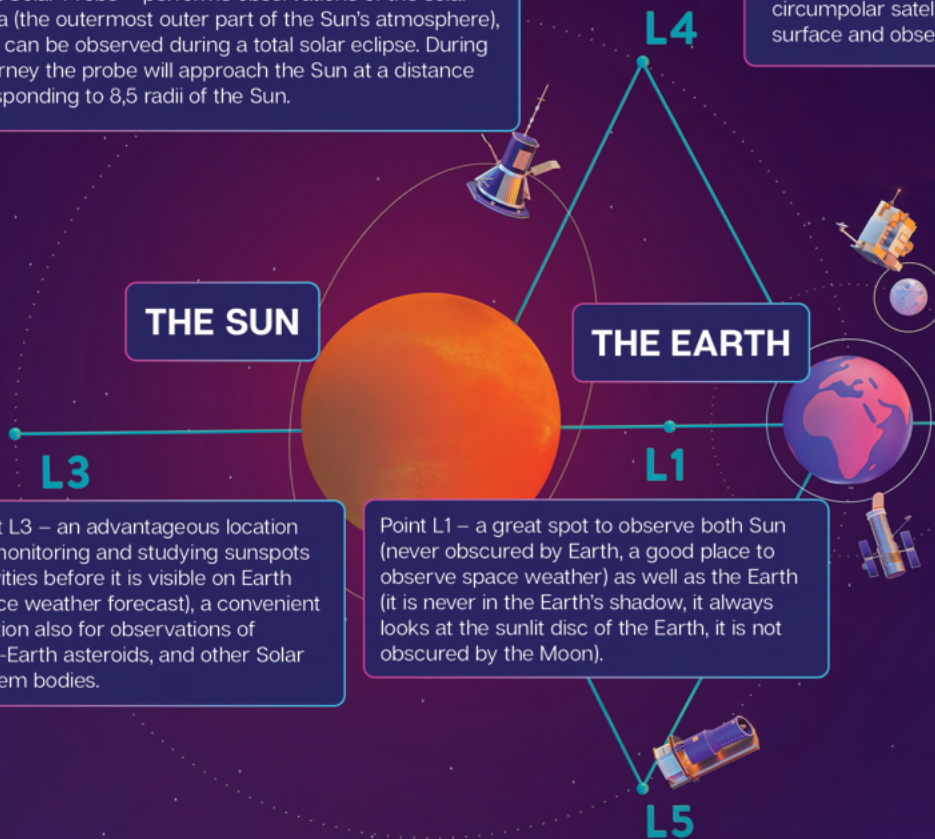
The Hubble Space Telescope – a versatile space telescope in orbit around the Earth. Probably the most famous astronomical instrument.

Spitzer Space Telescope - an overview of space.

Point L4 and L5 – stable orbits around the Sun, ahead of or preceding the Earth in a circular motion. Their specific location can be used to make stereoscopic observations (giving information about the spatial dependence of the observed phenomenon) from both points simultaneously or to provide connectivity to the infrastructure on Mars in the event of a conjunction (when Mars, the Sun and Earth are aligned, and the Sun makes it impossible to maintain direct communications between planets).

Point L1 – a great spot to observe both Sun (never obscured by Earth, a good place to observe space weather) as well as the Earth (it is never in the Earth's shadow, it always looks at the sunlit disc of the Earth, it is not obscured by the Moon).

Point L3 – an advantageous location for monitoring and studying sunspots activities before it is visible on Earth (space weather forecast), a convenient location also for observations of near-Earth asteroids, and other Solar System bodies.



P O L S A

