Table 26.2 Observational techniques relevant for Solar System objects and their astrometric accuracies (from Arlot 2008). On the tangent plane, 1 mas $\sim$ 1 km at 1 AU.

Method	Accuracy			Sources
	angular	range	size	
Photographic plates	100–500 mas			planets, satellites, asteroids
Transit instruments	50–300 mas			planets, asteroids, satellites
Optical CCD	20–100 mas			asteroids, satellites
Stellar occultation	50–100 mas		5 km	asteroids, satellites
Mutual phenomena	10 mas			satellites, binary asteroids
Radar		100–500 m	1 km	Venus, Mercury, asteroids
Lunar laser ranging		3 cm		the Moon
VLBI	5 mas			link with an orbiting spacecraft
Space astrometry	100 μas		10 km	asteroids, satellites