



Image from: [transit](#)
[The 1992 November 15 transit of Mercury... in Astronomy Encyclopedia](#)

Summary Article: **transit**
From *The Columbia Encyclopedia*

in astronomy, passage of a body across a meridian or passage of a small body across the visible disk of a larger one. (The passage of a large body across a smaller one is called an eclipse or occultation.) All of the fixed stars transit the celestial meridian once daily; an observer can determine either his longitude or the sidereal time by noting the time at which a given star transits his meridian and by referring to tables. Transits of small bodies across larger ones can be observed only within the bounds of the solar system. The innermost moons of Jupiter are so close to the planet that they transit it at every orbit. Of the planets, only Mercury and Venus, whose orbits lie inside the earth's orbit, can transit the sun. When such a transit occurs, the planet appears in a special solar telescope as a small black dot on the sun's disk. A solar transit can occur only when one of the two planets is in inferior conjunction and at one of its nodes on the plane of the ecliptic. For Mercury, solar transit can occur only in May or November. The interval between November transits is 7, 13, or 46 years; May transits occur at intervals of 13 or 46 years. Exact timing of Mercury's transits have offered experimental confirmation of the theory of relativity. For Venus, solar transit occurs in June or December. Currently, two transits take place within about 8 years of each other, with an interval of 52 1/2 or 60 1/2 years between pairs of transits. The next two solar transits of Venus will occur in June, 2004, and June, 2012. Venus's solar transits have been used in determining the astronomical unit.

APA

Chicago

Harvard

MLA

transit. (2018). In P. Lagasse, & Columbia University, *The Columbia encyclopedia* (8th ed.). New York, NY: Columbia University Press. Retrieved from <https://search.credoreference.com/content/topic/transit>



The Columbia Encyclopedia, © Columbia University Press 2018



The Columbia Encyclopedia, © Columbia University Press 2018

APA

transit. (2018). In P. Lagasse, & Columbia University, *The Columbia encyclopedia* (8th ed.). New York, NY: Columbia University Press. Retrieved from <https://search.credoreference.com/content/topic/transit>

Chicago

"transit." In *The Columbia Encyclopedia*, by Paul Lagasse, and Columbia University. 8th ed. Columbia University Press, 2018. <https://search.credoreference.com/content/topic/transit>

Harvard

transit. (2018). In P. Lagasse & Columbia University, *The Columbia encyclopedia*. (8th ed.). [Online]. New York: Columbia University Press. Available from: <https://search.credoreference.com/content/topic/transit> [Accessed 15 November 2019].

MLA

"transit." *The Columbia Encyclopedia*, Paul Lagasse, and Columbia University, Columbia University Press, 8th edition, 2018. *Credo Reference*, <https://search.credoreference.com/content/topic/transit>. Accessed 15 Nov. 2019.