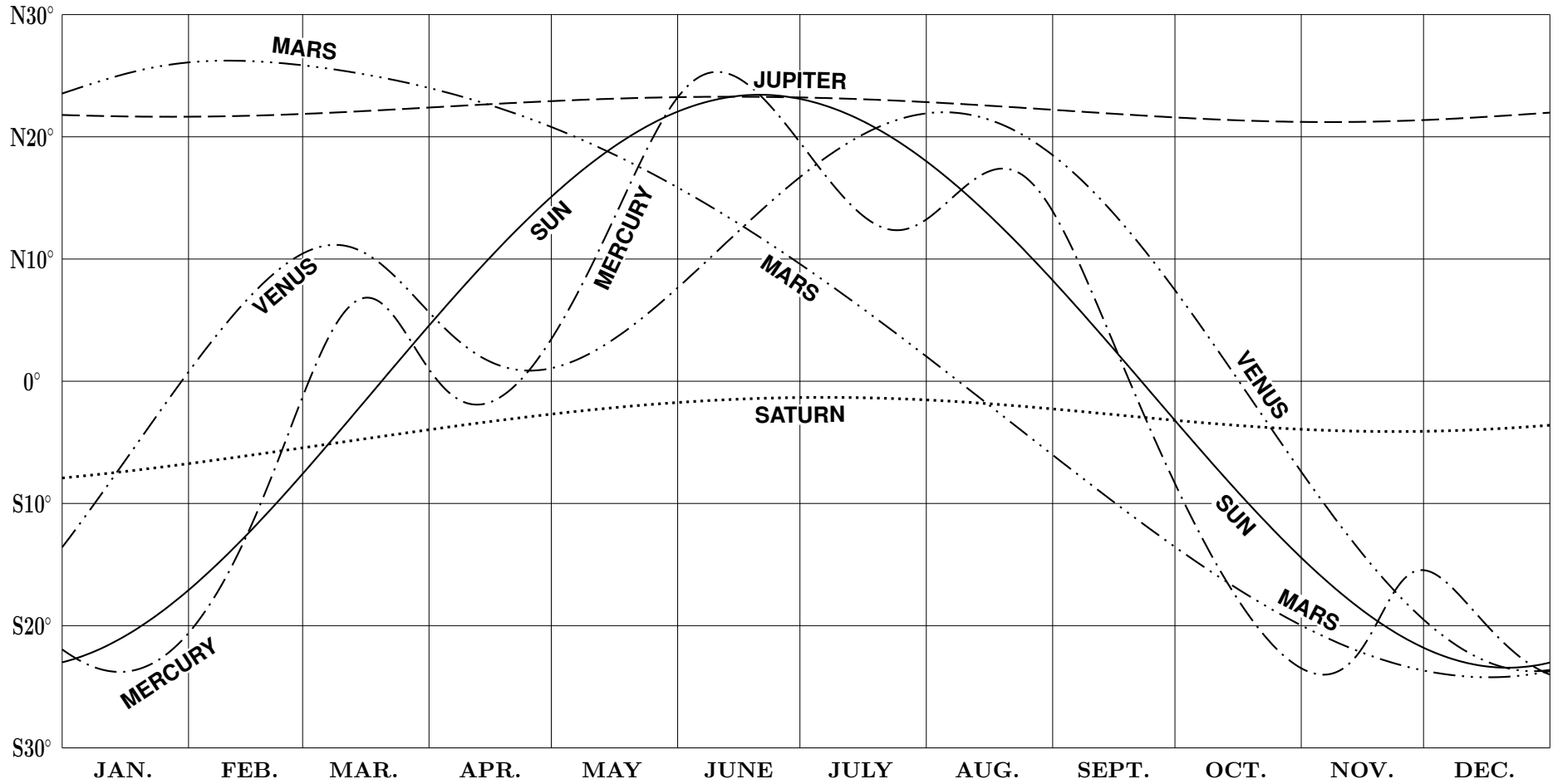


DECLINATION OF SUN AND PLANETS, 2025



PHENOMENA, 2025

VISIBILITY OF PLANETS AT LATITUDE 51.5°N

MERCURY can only be seen low in the east before sunrise, or low in the west after sunset (about the time of civil dawn and civil dusk).

It is visible in the *mornings* between the following approximate dates: beginning of the year to January 26, March 30 to May 21, August 7 to September 3 and November 25 to end of the year. The planet is brighter at the end of each period. (The best conditions in northern latitudes occur from the first half of December to the second half of December and in southern latitudes from the second half of April to early May).

It is visible in the *evenings* between the following approximate dates: February 20 to end of the year, June 9 to end of the year and September 25 to end of the year. The planet is brighter at the beginning of each period. (The best conditions in northern latitudes occur in the the first week of March and in southern latitudes from the second half of October to the first half of November).

VENUS is a brilliant object in the evening sky from the beginning of the year until March 14 when it becomes too close to the Sun for observation. From the end of the fourth week of March it reappears in the morning sky. Venus is in superior conjunction on June 4 16h; in inferior conjunction on March 23 01h. Venus is in conjunction with Mercury on August 6 15h (Mercury 5.9°S. of Venus) and March 9 11h (Mercury 6.3°S. of Venus); with Mars on February 22 16h (Venus 0.6°N. of Mars); with Jupiter on August 12 08h (Venus 0.9°S. of Jupiter) and with Saturn on March 22 02h (Venus 0.3°N. of Saturn), January 20 05h (Venus 2.5°N. of Saturn) and April 29 02h (Venus 3.7°N. of Saturn).

MARS rises 10.4 hours before sunrise at the beginning of the year. On January 18 Mars moves into the evening sky. Mars is at opposition on January 16 02h, when it can be seen throughout the night. Its westward elongation gradually increases until January 16 after which its eastward elongation decreases. Mars is in conjunction with Mercury on January 27 16h (Mercury 0.2°N. of Mars), October 21 06h (Mercury 2.1°S. of Mars) and November 12 19h (Mercury 1.3°S. of Mars); with Venus on February 22 16h (Venus 0.6°N. of Mars); with Jupiter on August 14 17h (Mars 0.3°N. of Jupiter) and with Saturn on April 11 03h (Mars 0.5°N. of Saturn).

JUPITER sets 10.0 hours after sunset at the beginning of the year. In the first half of June it becomes too close to the Sun for observation and reappears in the first half of July and remains in the morning sky for the remainder of the year. Jupiter is at opposition on December 7 21h, when it is visible throughout the night. Jupiter is in conjunction with Mercury on December 4 11h (Mercury 44.0°S. of Jupiter); with Venus on August 12 08h (Venus 0.9°S. of Jupiter) and with Mars on August 14 17h (Mars 0.3°N. of Jupiter).

SATURN sets 4.3 hours after sunset at the beginning of the year. In late February it becomes too close to the Sun for observation and reappears in late March in the morning sky. On September 20 Saturn moves into the evening sky. Saturn is at opposition on September 8 04h, when it is visible throughout the night. Saturn is at opposition on September 21 05h, when it is visible throughout the night. Saturn is in conjunction with Venus on March 22 02h (Venus 0.3°N. of Saturn), January 20 05h (Venus 2.5°N. of Saturn), March 30 06h (Venus 10.3°N. of Saturn) and April 29 02h (Venus 3.7°N. of Saturn) and with Mars on April 11 03h (Mars 0.5°N. of Saturn).

URANUS sets 8.6 hours after sunset at the beginning of the year. In late April it becomes too close to the Sun for observation and reappears in the first half of June in the morning sky. On November 18 Uranus moves into the evening sky. Uranus is at opposition on November 17 02h. Uranus is at opposition on November 21 12h.

NEPTUNE sets 5.1 hours after sunset at the beginning of the year. In end of February it becomes too close to the Sun for observation and reappears in the first half of April in the morning sky. On September 22 Neptune moves into the evening sky. Neptune is at opposition on September 21 00h. Neptune is at opposition on September 23 13h.

DO NOT CONFUSE (1) **Mercury with Mars** between Oct 14 and Oct 29 and between Nov 8 and Nov 16; **with Jupiter** between Jun 9 and Jun 9; **with Saturn** between Feb 23 and Feb 25 and between Apr 2 and Apr 18. (2) **Venus with Mercury** between Nov 25 and Nov 27; **with Jupiter** between Aug 8 and Aug 17; **with Saturn** between Jan 14 and Jan 24 and between Apr 22 and May 5.

VISIBILITY OF PLANETS IN MORNING AND EVENING TWILIGHT

Based on N 50° 30'

	Morning	Evening
Venus	March 27 - November 28	January 1 - March 14
Mars	January 1 - January 18	January 18 - November 17
Jupiter	July 10 - December 31	January 1 - June 9
Saturn	March 30 - September 20	January 1 - February 25 September 20 - December 31