

Planet Visibility

2026 – 2027

The following diagrams show, in graphical form, when the five “naked-eye” planets Mercury, Venus, Mars, Jupiter and Saturn are visible in the night sky during the period July 2026 – June 2027.

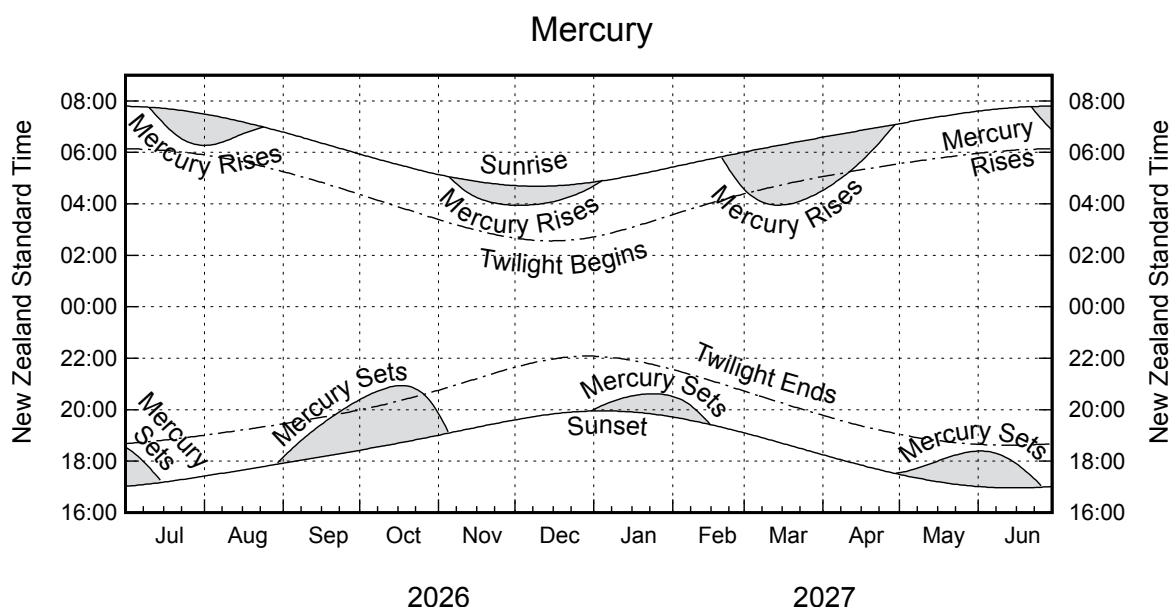
Each diagram spans the hours of darkness, covering the period from 16:00 to 08:00 with midnight being represented by the central line across the diagram. For a given date, time runs from the bottom to the top of the diagram. Times are shown in terms of New Zealand Standard Time; one hour must be added when New Zealand Daylight Time is in force. Each diagram is plotted for Wellington; time differences at other locations in New Zealand will generally not exceed an hour.

In addition to the planet information, the diagrams show the time of sunset and sunrise as well as the end and start of astronomical twilight which is the time when the Sun is 18° below the horizon. The shaded area of each diagram indicates the range of dates/times that the planet is visible in the night sky.

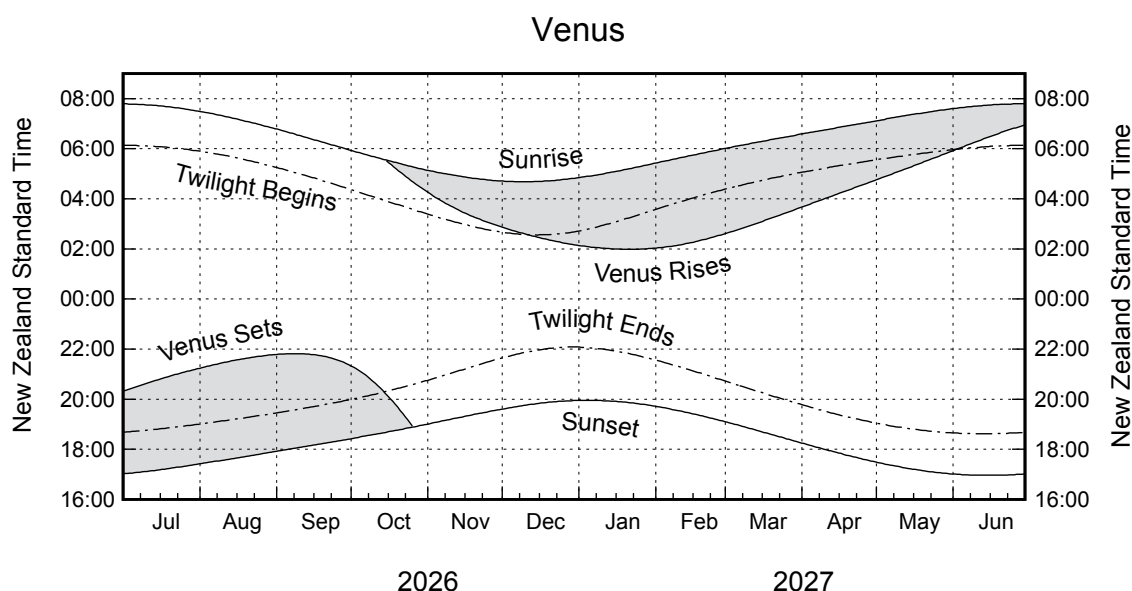
Appearance of the planets

Unless they are near to the horizon, planets can be distinguished from the twinkling stars by their more steady appearance. Twinkling is caused by turbulence in the atmosphere which has a greater effect on the light coming from point sources (stars) than on the light from much closer planets which are not point sources. Another pointer to identifying planets is that they are usually one of the brightest of the objects in the night sky.

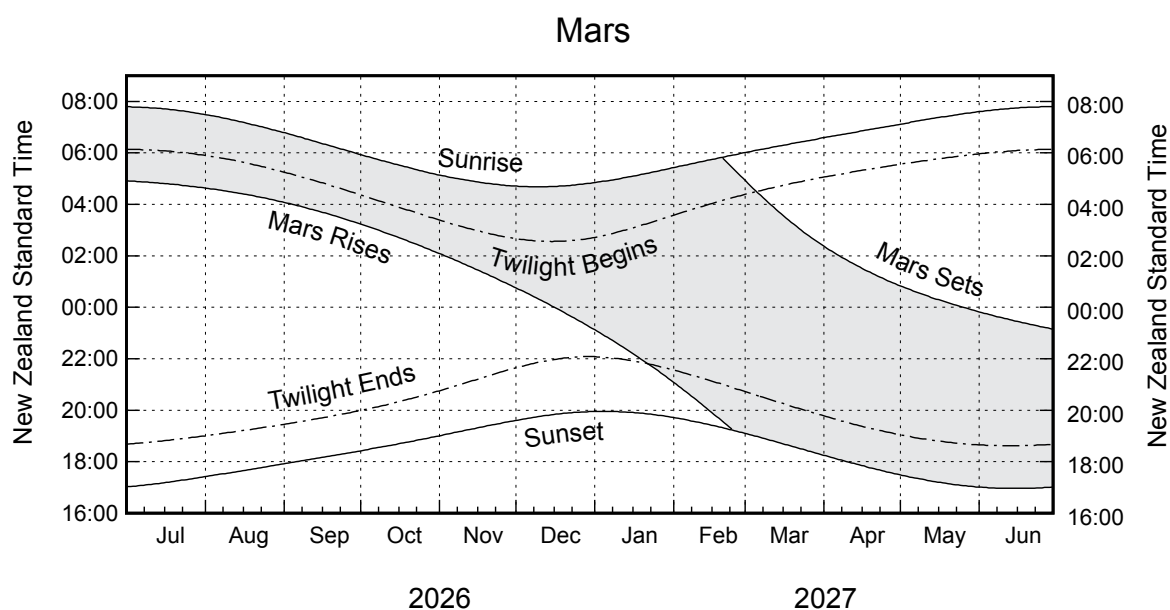
Mercury is the most difficult to see of the bright planets; due to its close proximity to the Sun it is seldom seen in fully dark skies. Venus is readily identified by its brightness – being exceeded by only the Sun and Moon. Venus is often referred to as either the Evening Star (when visible in the west after sunset) or the Morning Star (in the east before sunrise). Mars is notable for its orange-red appearance and is popularly known as the Red Planet. Jupiter’s white light always outshines all of the stars whilst pale yellow Saturn is usually the least conspicuous of the five naked-eye planets.



Mercury is the most difficult of the bright planets to see as it always appears in close proximity to the Sun. This means it is visible only in the twilight sky towards the horizon. The best period to see Mercury in the morning sky will occur during the period from the end of February to early April when the planet rises before twilight begins. Appearances during July – August, November – December and late June are less favourable as Mercury rises during the dawn period. The best time to see Mercury in the evening will occur between mid-September and late October when it will set after twilight has ended. Other appearances at the beginning of July, January to mid-February and May – June are less favourable as Mercury sets before twilight ends.

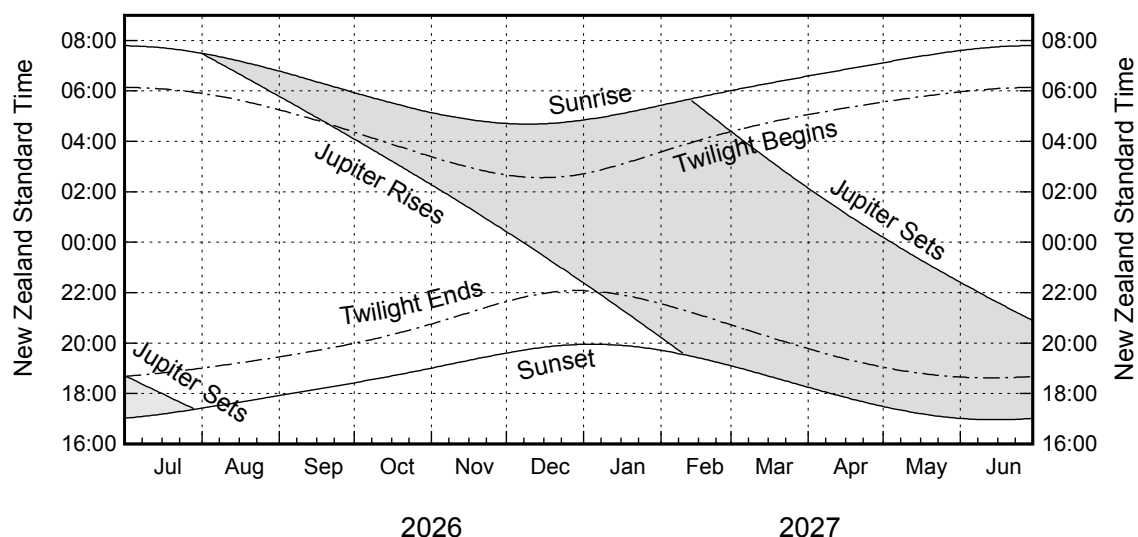


Venus will be visible as a bright object in the western sky until mid-October when it will set at the end of twilight. Venus will be quickly lost to the twilight glare before emerging in the morning twilight from late October to mid-December. During the rest of summer, Venus will be rising before twilight begins but by the beginning of June Venus will be drawing closer to the Sun and rising as twilight begins.



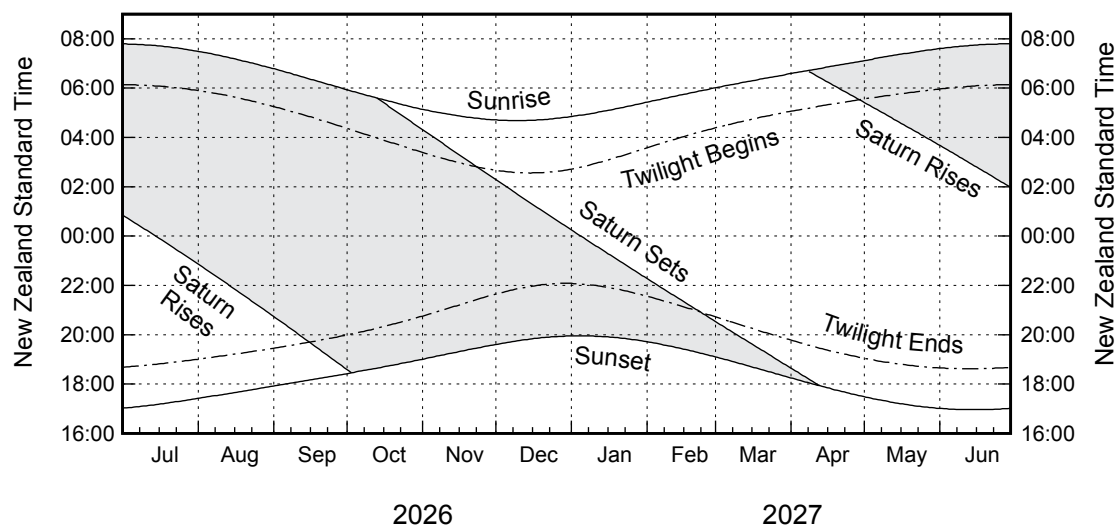
Mars will rise a little more than 2 hours before the Sun during the period July – September. This interval will slowly increase and by late December Mars will rise at midnight. At the beginning of March, the red planet will rise as the Sun sets and be visible all night long. Mars will then begin to set earlier during the morning hours and after mid-June it will set before midnight.

Jupiter



Jupiter sets shortly before twilight ends at the beginning of July and, within 3 weeks, will set with the Sun. During August Jupiter will reappear in the eastern sky ahead of sunrise and by mid-September the planet will be rising as twilight commences. Jupiter will rise progressively earlier during the night until the beginning of February when it will be rising at sunset and be visible throughout the night. Jupiter will then begin setting earlier – by late April this will occur at midnight and at the end of June Jupiter will set shortly before 9 p.m.

Saturn



Saturn rises after midnight at the beginning of July and will be visible throughout the night by early October. The ringed planet will then start setting during the early morning hours, and before midnight from mid-January. During March, Saturn will set during twilight and will become increasingly difficult to see as the month progresses. The planet will then reappear in the eastern sky, rising during twilight in April, then progressively earlier until it rises at 2 a.m. at the end of June.