



# Sunrise and Sunset Definition

for  
Midpeninsula Regional Open Space District

In addition to the Merriam-Webster's dictionary definitions\* of sunrise and sunset, the Midpeninsula Regional Open Space District (Midpen) uses the [US Naval Observatory \(USNO\)](#) to determine sunrise and sunset times. The USNO, founded in 1830, is recognized as the world's foremost authority on spatial and temporal reference frames. It provides a wide range of astronomical data and products, serves as the official source of time for the U.S. Department of Defense, and a standard of time for the entire U.S. It establishes official sunrise and sunset times based on location (latitude and longitude). Midpen rangers are provided with a list of sunrise and sunset times from USNO for each calendar year to enforce after hour ordinances.

The official sunrise and sunset times for Midpen are determined by times provided by the USNO for the latitude and longitude of Midpen's headquarters office, located at 5050 El Camino Real, Los Altos, CA 94022. To compensate for the distance to the preserves from the headquarters office, rangers account for the <2-minute differential based on preserve location.\*\* Additionally, rangers typically wait at least 15 minutes after closure to issue any citations.

\* **Sunset:** the time when the upper limb of the sun disappears below the horizon as a result of the diurnal rotation of the earth, <https://www.merriam-webster.com/dictionary/sunset>

**Sunrise:** the time when the upper limb of the sun appears above the horizon as a result of the diurnal rotation of the earth, <https://www.merriam-webster.com/dictionary/sunrise>

\*\* The difference between sunrise/sunsets based on location is approximately 1 minute per 17 miles. Midpen's geographical radius extends no more than 25 miles from the Los Altos headquarters office, so the differential within Midpen's preserves would be no more than 2 minutes for any location.

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Location: W122 06, N37 24

MROSD  
Rise and Set for the Sun for 2025

Astronomical Applications Dept.  
U. S. Naval Observatory  
Washington, DC 20392-5420

Zone: 8h West of Greenwich

	Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.		Sept.		Oct.		Nov.		Dec.	
Day	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set	Rise	Set
	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
01	0723	1702	0711	1733	0639	1803	0553	1831	0513	1859	0449	1924	0452	1933	0513	1916	0539	1837	0604	1751	0634	1710	0704	1651
02	0723	1703	0710	1734	0638	1804	0552	1832	0512	1859	0449	1925	0452	1933	0514	1915	0540	1835	0605	1749	0635	1709	0705	1651
03	0723	1703	0709	1735	0636	1805	0550	1833	0511	1900	0448	1925	0453	1933	0515	1914	0541	1834	0606	1748	0636	1708	0706	1650
04	0723	1704	0709	1737	0635	1806	0549	1834	0510	1901	0448	1926	0453	1933	0516	1913	0542	1832	0607	1746	0637	1707	0707	1650
05	0723	1705	0708	1738	0633	1807	0547	1835	0508	1902	0448	1926	0454	1932	0517	1912	0543	1831	0608	1745	0638	1706	0708	1650
06	0723	1706	0707	1739	0632	1808	0546	1836	0507	1903	0448	1927	0454	1932	0517	1911	0543	1829	0609	1743	0639	1705	0709	1650
07	0723	1707	0706	1740	0631	1809	0544	1837	0506	1904	0448	1927	0455	1932	0518	1909	0544	1828	0610	1742	0640	1704	0710	1650
08	0723	1708	0705	1741	0629	1809	0543	1838	0505	1905	0447	1928	0455	1932	0519	1908	0545	1826	0610	1741	0641	1703	0711	1650
09	0723	1709	0704	1742	0628	1810	0542	1839	0504	1906	0447	1928	0456	1931	0520	1907	0546	1825	0611	1739	0642	1702	0711	1650
10	0723	1710	0703	1743	0626	1811	0540	1840	0503	1907	0447	1929	0457	1931	0521	1906	0547	1823	0612	1738	0643	1701	0712	1651
11	0723	1711	0701	1744	0625	1812	0539	1840	0503	1907	0447	1929	0457	1931	0522	1905	0547	1822	0613	1736	0644	1701	0713	1651
12	0722	1712	0700	1745	0623	1813	0537	1841	0502	1908	0447	1930	0458	1930	0522	1904	0548	1820	0614	1735	0645	1700	0714	1651
13	0722	1713	0659	1746	0622	1814	0536	1842	0501	1909	0447	1930	0459	1930	0523	1902	0549	1818	0615	1733	0646	1659	0714	1651
14	0722	1714	0658	1747	0620	1815	0535	1843	0500	1910	0447	1931	0459	1929	0524	1901	0550	1817	0616	1732	0647	1658	0715	1651
15	0721	1715	0657	1748	0619	1816	0533	1844	0459	1911	0447	1931	0500	1929	0525	1900	0551	1815	0617	1731	0648	1658	0716	1652
16	0721	1716	0656	1749	0617	1817	0532	1845	0458	1912	0447	1931	0501	1928	0526	1859	0552	1814	0618	1729	0649	1657	0716	1652
17	0721	1717	0655	1751	0616	1818	0530	1846	0458	1913	0447	1932	0501	1928	0527	1857	0552	1812	0619	1728	0650	1656	0717	1652
18	0720	1718	0653	1752	0614	1819	0529	1847	0457	1913	0447	1932	0502	1927	0528	1856	0553	1811	0620	1727	0651	1656	0718	1653
19	0720	1719	0652	1753	0613	1820	0528	1848	0456	1914	0448	1932	0503	1926	0528	1855	0554	1809	0621	1725	0652	1655	0718	1653
20	0719	1720	0651	1754	0611	1821	0526	1849	0455	1915	0448	1932	0504	1926	0529	1854	0555	1808	0622	1724	0654	1654	0719	1654
21	0719	1721	0650	1755	0610	1822	0525	1849	0455	1916	0448	1933	0504	1925	0530	1852	0556	1806	0623	1723	0655	1654	0719	1654
22	0718	1722	0648	1756	0608	1822	0524	1850	0454	1917	0448	1933	0505	1924	0531	1851	0557	1805	0624	1721	0656	1653	0720	1655
23	0718	1723	0647	1757	0607	1823	0522	1851	0453	1917	0449	1933	0506	1924	0532	1849	0557	1803	0625	1720	0657	1653	0720	1655
24	0717	1724	0646	1758	0605	1824	0521	1852	0453	1918	0449	1933	0507	1923	0533	1848	0558	1802	0626	1719	0658	1653	0721	1656
25	0717	1725	0644	1759	0604	1825	0520	1853	0452	1919	0449	1933	0507	1922	0533	1847	0559	1800	0627	1718	0659	1652	0721	1657
26	0716	1727	0643	1800	0602	1826	0519	1854	0452	1920	0450	1933	0508	1921	0534	1845	0600	1758	0628	1717	0700	1652	0721	1657
27	0715	1728	0642	1801	0601	1827	0518	1855	0451	1920	0450	1933	0509	1920	0535	1844	0601	1757	0629	1715	0701	1652	0722	1658
28	0714	1729	0640	1802	0559	1828	0516	1856	0451	1921	0450	1933	0510	1919	0536	1842	0602	1755	0630	1714	0702	1651	0722	1659
29	0714	1730			0558	1829	0515	1857	0450	1922	0451	1933	0511	1919	0537	1841	0603	1754	0631	1713	0703	1651	0722	1659
30	0713	1731			0556	1830	0514	1858	0450	1923	0451	1933	0512	1918	0538	1840	0603	1752	0632	1712	0703	1651	0722	1700
31	0712	1732			0555	1831			0449	1923			0512	1917	0538	1838			0633	1711			0723	1701

Add one hour for daylight time, if and when in use.