

Table of Sunrise/Sunset, Moonrise/Moonset, or Twilight Times for an Entire Year

Location: $43^{\circ} 15' N$, $85^{\circ} 04' W$

CENTRAL LAKE, MICHIGAN
Rise and Set for the Sun for 2024

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

Zone: 5h West of Greenwich

| Day | Jan. | | Feb. | | Mar. | | Apr. | | May | | June | | July | | Aug. | | Sept. | | Oct. | | Nov. | | Dec. | |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|
| | 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 | 0819 | 1709 | 0801 | 1748 | 0718 | 1829 | 0621 | 1910 | 0529 | 1948 | 0457 | 2021 | 0458 | 2032 | 0527 | 2007 | 0604 | 1917 | 0640 | 1820 | 0720 | 1728 | 0800 | 1700 |
| 02 | 0820 | 1710 | 0800 | 1750 | 0716 | 1831 | 0619 | 1911 | 0528 | 1949 | 0457 | 2022 | 0459 | 2031 | 0528 | 2006 | 0605 | 1915 | 0641 | 1818 | 0722 | 1727 | 0801 | 1700 |
| 03 | 0820 | 1711 | 0759 | 1751 | 0714 | 1832 | 0617 | 1912 | 0526 | 1950 | 0456 | 2023 | 0459 | 2031 | 0529 | 2004 | 0606 | 1913 | 0642 | 1817 | 0723 | 1725 | 0802 | 1700 |
| 04 | 0819 | 1712 | 0758 | 1752 | 0713 | 1833 | 0615 | 1913 | 0525 | 1951 | 0456 | 2024 | 0500 | 2031 | 0530 | 2003 | 0607 | 1911 | 0644 | 1815 | 0725 | 1724 | 0803 | 1700 |
| 05 | 0819 | 1713 | 0757 | 1754 | 0711 | 1835 | 0613 | 1915 | 0524 | 1952 | 0455 | 2024 | 0501 | 2030 | 0531 | 2002 | 0608 | 1910 | 0645 | 1813 | 0726 | 1723 | 0804 | 1659 |
| 06 | 0819 | 1714 | 0755 | 1755 | 0709 | 1836 | 0611 | 1916 | 0522 | 1954 | 0455 | 2025 | 0502 | 2030 | 0533 | 2000 | 0610 | 1908 | 0646 | 1811 | 0727 | 1721 | 0805 | 1659 |
| 07 | 0819 | 1715 | 0754 | 1757 | 0707 | 1837 | 0609 | 1917 | 0521 | 1955 | 0455 | 2026 | 0502 | 2030 | 0534 | 1959 | 0611 | 1906 | 0647 | 1809 | 0729 | 1720 | 0806 | 1659 |
| 08 | 0819 | 1717 | 0753 | 1758 | 0705 | 1839 | 0608 | 1918 | 0520 | 1956 | 0454 | 2026 | 0503 | 2029 | 0535 | 1957 | 0612 | 1904 | 0649 | 1807 | 0730 | 1719 | 0807 | 1659 |
| 09 | 0819 | 1718 | 0751 | 1800 | 0703 | 1840 | 0606 | 1920 | 0518 | 1957 | 0454 | 2027 | 0504 | 2029 | 0536 | 1956 | 0613 | 1902 | 0650 | 1806 | 0731 | 1718 | 0808 | 1659 |
| 10 | 0818 | 1719 | 0750 | 1801 | 0702 | 1841 | 0604 | 1921 | 0517 | 1958 | 0454 | 2028 | 0505 | 2028 | 0537 | 1954 | 0614 | 1900 | 0651 | 1804 | 0733 | 1717 | 0809 | 1659 |
| 11 | 0818 | 1720 | 0748 | 1803 | 0700 | 1843 | 0602 | 1922 | 0516 | 2000 | 0454 | 2028 | 0505 | 2027 | 0539 | 1953 | 0616 | 1858 | 0652 | 1802 | 0734 | 1715 | 0810 | 1659 |
| 12 | 0817 | 1721 | 0747 | 1804 | 0658 | 1844 | 0600 | 1924 | 0515 | 2001 | 0454 | 2029 | 0506 | 2027 | 0540 | 1951 | 0617 | 1856 | 0654 | 1800 | 0736 | 1714 | 0811 | 1659 |
| 13 | 0817 | 1722 | 0746 | 1805 | 0656 | 1845 | 0559 | 1925 | 0513 | 2002 | 0453 | 2029 | 0507 | 2026 | 0541 | 1950 | 0618 | 1855 | 0655 | 1758 | 0737 | 1713 | 0811 | 1659 |
| 14 | 0817 | 1724 | 0744 | 1807 | 0654 | 1846 | 0557 | 1926 | 0512 | 2003 | 0453 | 2030 | 0508 | 2025 | 0542 | 1948 | 0619 | 1853 | 0656 | 1757 | 0738 | 1712 | 0812 | 1700 |
| 15 | 0816 | 1725 | 0743 | 1808 | 0652 | 1848 | 0555 | 1927 | 0511 | 2004 | 0453 | 2030 | 0509 | 2025 | 0543 | 1947 | 0620 | 1851 | 0658 | 1755 | 0740 | 1711 | 0813 | 1700 |
| 16 | 0815 | 1726 | 0741 | 1810 | 0651 | 1849 | 0553 | 1929 | 0510 | 2005 | 0453 | 2030 | 0510 | 2024 | 0545 | 1945 | 0622 | 1849 | 0659 | 1753 | 0741 | 1710 | 0814 | 1700 |
| 17 | 0815 | 1727 | 0740 | 1811 | 0649 | 1850 | 0552 | 1930 | 0509 | 2007 | 0454 | 2031 | 0511 | 2023 | 0546 | 1943 | 0623 | 1847 | 0700 | 1752 | 0742 | 1709 | 0814 | 1700 |
| 18 | 0814 | 1729 | 0738 | 1813 | 0647 | 1852 | 0550 | 1931 | 0508 | 2008 | 0454 | 2031 | 0512 | 2022 | 0547 | 1942 | 0624 | 1845 | 0701 | 1750 | 0744 | 1708 | 0815 | 1701 |
| 19 | 0814 | 1730 | 0736 | 1814 | 0645 | 1853 | 0548 | 1932 | 0507 | 2009 | 0454 | 2031 | 0513 | 2021 | 0548 | 1940 | 0625 | 1843 | 0703 | 1748 | 0745 | 1708 | 0816 | 1701 |
| 20 | 0813 | 1731 | 0735 | 1815 | 0643 | 1854 | 0547 | 1934 | 0506 | 2010 | 0454 | 2032 | 0514 | 2020 | 0549 | 1938 | 0626 | 1841 | 0704 | 1747 | 0746 | 1707 | 0816 | 1702 |
| 21 | 0812 | 1733 | 0733 | 1817 | 0641 | 1856 | 0545 | 1935 | 0505 | 2011 | 0454 | 2032 | 0515 | 2019 | 0551 | 1937 | 0628 | 1839 | 0705 | 1745 | 0748 | 1706 | 0817 | 1702 |
| 22 | 0811 | 1734 | 0732 | 1818 | 0639 | 1857 | 0543 | 1936 | 0504 | 2012 | 0454 | 2032 | 0516 | 2018 | 0552 | 1935 | 0629 | 1837 | 0707 | 1743 | 0749 | 1705 | 0817 | 1703 |
| 23 | 0810 | 1736 | 0730 | 1820 | 0637 | 1858 | 0542 | 1937 | 0503 | 2013 | 0455 | 2032 | 0517 | 2017 | 0553 | 1933 | 0630 | 1835 | 0708 | 1742 | 0750 | 1705 | 0818 | 1703 |
| 24 | 0810 | 1737 | 0728 | 1821 | 0636 | 1859 | 0540 | 1939 | 0502 | 2014 | 0455 | 2032 | 0518 | 2016 | 0554 | 1931 | 0631 | 1834 | 0709 | 1740 | 0751 | 1704 | 0818 | 1704 |
| 25 | 0809 | 1738 | 0726 | 1822 | 0634 | 1901 | 0539 | 1940 | 0502 | 2015 | 0455 | 2032 | 0519 | 2015 | 0555 | 1930 | 0632 | 1832 | 0711 | 1738 | 0753 | 1703 | 0818 | 1705 |
| 26 | 0808 | 1740 | 0725 | 1824 | 0632 | 1902 | 0537 | 1941 | 0501 | 2016 | 0456 | 2032 | 0520 | 2014 | 0556 | 1928 | 0634 | 1830 | 0712 | 1737 | 0754 | 1703 | 0819 | 1705 |
| 27 | 0807 | 1741 | 0723 | 1825 | 0630 | 1903 | 0535 | 1943 | 0500 | 2017 | 0456 | 2032 | 0521 | 2013 | 0558 | 1926 | 0635 | 1828 | 0714 | 1735 | 0755 | 1702 | 0819 | 1706 |
| 28 | 0806 | 1742 | 0721 | 1826 | 0628 | 1904 | 0534 | 1944 | 0459 | 2018 | 0457 | 2032 | 0522 | 2012 | 0559 | 1924 | 0636 | 1826 | 0715 | 1734 | 0756 | 1702 | 0819 | 1707 |
| 29 | 0805 | 1744 | 0720 | 1828 | 0626 | 1906 | 0532 | 1945 | 0459 | 2019 | 0457 | 2032 | 0523 | 2011 | 0600 | 1923 | 0637 | 1824 | 0716 | 1732 | 0758 | 1701 | 0819 | 1708 |
| 30 | 0804 | 1745 | | | 0624 | 1907 | 0531 | 1946 | 0458 | 2020 | 0458 | 2032 | 0525 | 2010 | 0601 | 1921 | 0639 | 1822 | 0718 | 1731 | 0759 | 1701 | 0819 | 1708 |
| 31 | 0803 | 1747 | | | 0622 | 1908 | | | 0458 | 2020 | | | 0526 | 2008 | 0602 | 1919 | | | 0719 | 1730 | | | 0819 | 1709 |

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