

Location:

Lat: 38.7151 N Long: 77.1811 W

Time from UTC: -4

Date	Sun		C Twi		N Twi		A Twi		Moon		Moon Illum
	R	S	B	E	B	E	B	E	R	S	
20240401	0653	1933	0626	2000	0554	2031	0522	2104	0218	1110	60.5%
20240402	0651	1934	0624	2001	0553	2032	0520	2105	0314	1216	49.8%
20240403	0649	1935	0622	2002	0551	2033	0518	2106	0401	1329	38.8%
20240404	0648	1936	0621	2003	0549	2034	0517	2108	0440	1445	28.1%
20240405	0646	1937	0619	2004	0548	2035	0515	2109	0514	1602	18.2%
20240406	0645	1938	0618	2005	0546	2037	0513	2110	0543	1719	9.8%
20240407	0643	1939	0616	2006	0545	2038	0511	2111	0609	1835	3.8%
20240408	0642	1940	0615	2007	0543	2039	0509	2113	0636	1952	0.5%
20240409	0640	1941	0613	2008	0541	2040	0508	2114	0704	2109	0.3%
20240410	0639	1942	0612	2009	0540	2041	0506	2115	0736	2226	2.9%
20240411	0637	1943	0610	2010	0538	2042	0504	2116	0812	2341	8.2%
20240412	0636	1944	0609	2011	0536	2043	0502	2118	0856	----	15.5%
20240413	0634	1945	0607	2012	0535	2044	0501	2119	0948	0049	24.2%
20240414	0633	1945	0606	2013	0533	2045	0459	2120	1046	0149	33.8%
20240415	0631	1946	0604	2014	0532	2047	0457	2122	1149	0238	43.8%
20240416	0630	1947	0603	2015	0530	2048	0455	2123	1252	0318	53.7%
20240417	0629	1948	0601	2016	0528	2049	0453	2124	1355	0350	63.3%
20240418	0627	1949	0600	2017	0527	2050	0452	2125	1456	0417	72.2%
20240419	0626	1950	0558	2018	0525	2051	0450	2127	1556	0440	80.3%
20240420	0624	1951	0557	2019	0524	2052	0448	2128	1654	0501	87.2%
20240421	0623	1952	0556	2020	0522	2054	0446	2129	1753	0521	92.8%
20240422	0622	1953	0554	2021	0521	2055	0445	2131	1852	0541	96.9%
20240423	0620	1954	0553	2022	0519	2056	0443	2132	1953	0602	99.4%
20240424	0619	1955	0551	2023	0517	2057	0441	2133	2057	0626	99.9%
20240425	0618	1956	0550	2024	0516	2058	0439	2135	2203	0655	98.6%
20240426	0617	1957	0549	2025	0514	2059	0438	2136	2309	0730	95.3%
20240427	0615	1958	0547	2026	0513	2101	0436	2138	----	0812	90.1%
20240428	0614	1959	0546	2027	0511	2102	0434	2139	0012	0905	83%
20240429	0613	2000	0545	2028	0510	2103	0433	2140	0110	1007	74.4%
20240430	0612	2001	0543	2029	0509	2104	0431	2142	0159	1117	64.5%
20240501	0610	2002	0542	2030	0507	2105	0430	2143	0239	1229	53.6%

Key

.... means sun or moon below horizon all day or
twilight never begins

**** means sun or moon above horizon all day
or twilight never ends

---- in rise column means no rise that day and
in set column - no set that day

R - Rise

S - Set

B - Beginning

E - Ending

C Twi - Civil Twilight: Sun is 6 deg below the horizon

N Twi - Nautical Twilight: Sun is 12 deg below the horizon

A Twi - Astonomical Twilight: Sun is 18 deg below the horizon

Moon Illumination is valid 00:01L for that day.