

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	
20240601	0546	2028	0514	2100	0435	2139	0351	2223	0238	1510	33.7%
20240602	0545	2029	0514	2100	0434	2140	0350	2224	0303	1623	23.3%
20240603	0545	2029	0514	2101	0434	2141	0350	2225	0330	1737	14.2%
20240604	0545	2030	0513	2102	0433	2141	0349	2226	0401	1852	7.2%
20240605	0545	2030	0513	2102	0433	2142	0349	2227	0438	2007	2.5%
20240606	0544	2031	0513	2103	0433	2143	0348	2228	0523	2116	0.3%
20240607	0544	2032	0512	2104	0432	2144	0348	2228	0616	2216	0.7%
20240608	0544	2032	0512	2104	0432	2144	0347	2229	0717	2306	3.5%
20240609	0544	2033	0512	2105	0432	2145	0347	2230	0822	2346	8.3%
20240610	0544	2033	0512	2105	0432	2145	0346	2231	0928	----	14.7%
20240611	0544	2034	0512	2106	0431	2146	0346	2231	1032	0018	22.4%
20240612	0544	2034	0512	2106	0431	2146	0346	2232	1134	0045	31%
20240613	0544	2035	0512	2107	0431	2147	0346	2232	1234	0108	40.2%
20240614	0544	2035	0512	2107	0431	2147	0346	2233	1332	0129	49.6%
20240615	0544	2035	0512	2108	0431	2148	0346	2233	1430	0149	59.1%
20240616	0544	2036	0512	2108	0431	2148	0346	2234	1530	0209	68.2%
20240617	0544	2036	0512	2108	0431	2149	0346	2234	1631	0231	76.7%
20240618	0544	2036	0512	2108	0431	2149	0346	2235	1736	0256	84.4%
20240619	0544	2036	0512	2109	0431	2149	0346	2235	1843	0327	90.9%
20240620	0544	2037	0512	2109	0432	2149	0346	2235	1950	0404	95.9%
20240621	0545	2037	0513	2109	0432	2150	0346	2235	2054	0451	98.9%
20240622	0545	2037	0513	2109	0432	2150	0346	2235	2150	0549	99.8%
20240623	0545	2037	0513	2109	0432	2150	0347	2236	2237	0656	98.3%
20240624	0545	2037	0513	2110	0433	2150	0347	2236	2316	0809	94.3%
20240625	0546	2037	0514	2110	0433	2150	0347	2236	2349	0924	88%
20240626	0546	2037	0514	2110	0433	2150	0348	2235	----	1038	79.6%
20240627	0546	2037	0514	2110	0434	2150	0348	2235	0016	1151	69.7%
20240628	0547	2037	0515	2110	0434	2150	0349	2235	0042	1302	58.7%
20240629	0547	2037	0515	2110	0435	2150	0350	2235	0107	1413	47.2%
20240630	0548	2037	0516	2109	0435	2149	0350	2235	0133	1525	36%
20240701	0548	2037	0516	2109	0436	2149	0351	2234	0201	1638	25.5%

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.