

Location: KDAA

Lat: 38.43 N Long: 77.11 W

Time from UTC: -4

Date	Sun R	Sun S	C Twi B	C Twi E	N Twi B	N Twi E	A Twi B	A Twi E	Moon R	Moon S	Moon Illum
20251001	0705	1851	0638	1917	0607	1948	0537	2018	1601	0034	61.8%
20251002	0706	1849	0639	1916	0608	1946	0538	2017	1635	0141	71.4%
20251003	0706	1848	0640	1914	0609	1945	0539	2015	1704	0250	80.4%
20251004	0707	1846	0641	1913	0610	1943	0540	2014	1731	0401	88.3%
20251005	0708	1844	0642	1911	0611	1942	0541	2012	1757	0512	94.5%
20251006	0709	1843	0642	1910	0612	1940	0541	2011	1822	0625	98.6%
20251007	0710	1841	0643	1908	0613	1939	0542	2009	1851	0740	100%
20251008	0711	1840	0644	1907	0614	1937	0543	2008	1924	0858	98.4%
20251009	0712	1838	0645	1905	0615	1936	0544	2006	2003	1018	94%
20251010	0713	1837	0646	1904	0615	1935	0545	2005	2052	1137	87.1%
20251011	0714	1835	0647	1902	0616	1933	0546	2003	2151	1249	78.1%
20251012	0715	1834	0648	1901	0617	1932	0547	2002	2257	1352	67.7%
20251013	0716	1833	0649	1859	0618	1930	0548	2001	----	1442	56.7%
20251014	0717	1831	0650	1858	0619	1929	0549	1959	0007	1523	45.6%
20251015	0718	1830	0651	1857	0620	1928	0550	1958	0118	1554	35.1%
20251016	0719	1828	0652	1855	0621	1926	0551	1957	0225	1621	25.5%
20251017	0720	1827	0653	1854	0622	1925	0552	1955	0330	1644	17.1%
20251018	0721	1826	0654	1852	0623	1924	0553	1954	0432	1705	10.3%
20251019	0722	1824	0655	1851	0624	1922	0554	1953	0532	1726	5.1%
20251020	0723	1823	0656	1850	0625	1921	0554	1952	0632	1748	1.7%
20251021	0724	1821	0657	1849	0626	1920	0555	1950	0732	1811	0.2%
20251022	0725	1820	0658	1847	0627	1918	0556	1949	0833	1838	0.5%
20251023	0726	1819	0659	1846	0628	1917	0557	1948	0935	1909	2.6%
20251024	0727	1818	0700	1845	0629	1916	0558	1947	1036	1947	6.4%
20251025	0728	1816	0701	1843	0629	1915	0559	1946	1135	2031	11.8%
20251026	0729	1815	0702	1842	0630	1914	0600	1944	1229	2123	18.5%
20251027	0730	1814	0703	1841	0631	1913	0601	1943	1317	2222	26.5%
20251028	0731	1813	0704	1840	0632	1911	0602	1942	1358	2326	35.4%
20251029	0732	1812	0705	1839	0633	1910	0603	1941	1432	----	45.1%
20251030	0733	1810	0706	1838	0634	1909	0604	1940	1503	0032	55.2%
20251031	0734	1809	0707	1837	0635	1908	0605	1939	1530	0140	65.4%

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.