

## Blue moons 1701 - 2400

The year and month with a blue moon that is two full moons in the same month using Greenwich Time for the full moon time which is universal for the whole world. For the 700 years there are only 290 times which is once every other year. In 2018 it will happen twice, all the years are 1741, 1771, 1790, 1809, 1847, 1866, 1885, 1915, 1961, 1999, 2018, 2037, 2094, 2113, 2143, 2162, 2181, 2200, 2219, 2238, 2257, 2295, 2333, 2363, 2371, 2382 and 2390 with two blue moons. The source data is from NASA's moon phase data file

1703 May	1806 Jun	1909 Aug	2012 Aug	<u>2113 May</u>	2216 Jun	2314 May
1705 Nov	<u>1809 Jan</u>	1912 May	2015 Jul	2115 Dec	<u>2219 Jan</u>	2316 Oct
1708 Aug	<u>1809 Mar</u>	<u>1915 Jan</u>	<u>2018 Jan</u>	2118 Aug	<u>2219 Mar</u>	2319 Aug
1711 Jun	1811 Oct	<u>1915 Mar</u>	<u>2018 Mar</u>	2121 Jun	2221 Oct	2322 May
1713 Dec	1814 Aug	1917 Sep	2020 Oct	2124 Jan	2224 Jul	2324 Dec
1714 Mar	1817 May	1920 Jul	2023 Aug	2126 Oct	2227 May	2327 Oct
1716 Oct	1819 Dec	1923 Apr	2026 May	2129 Jul	2229 Dec	2330 Jul
1719 Jul	1822 Sep	1925 Oct	2028 Dec	2132 Mar	2232 Aug	<u>2333 Jan</u>
1722 May	1825 May	1928 Aug	2031 Sep	2134 Dec	2235 Jul	<u>2333 May</u>
1724 Nov	1828 Mar	1931 May	2034 Jul	2137 Aug	<u>2238 Jan</u>	2335 Dec
1727 Aug	1830 Oct	1933 Dec	<u>2037 Jan</u>	2140 May	<u>2238 Mar</u>	2338 Aug
1730 Jun	1833 Jul	1934 Mar	<u>2037 Mar</u>	<u>2143 Jan</u>	2240 Oct	2341 May
1732 Dec	1836 May	1936 Sep	2039 Oct	<u>2143 Mar</u>	2243 Aug	2344 Jan
1735 Oct	1838 Dec	1939 Jul	2042 Aug	2145 Sep	2246 May	2346 Oct
1738 Jul	1841 Sep	1942 Apr	2045 May	2148 Jul	2248 Dec	2349 Jul
<u>1741 Jan</u>	1844 May	1944 Oct	2048 Jan	2151 Apr	2251 Sep	2352 Mar
<u>1741 Apr</u>	<u>1847 Jan</u>	1947 Aug	2050 Sep	2153 Dec	2254 Jul	2354 Dec
1743 Dec	<u>1847 Mar</u>	1950 May	2053 Jul	2156 Aug	<u>2257 Jan</u>	2357 Aug
1746 Aug	1849 Oct	1952 Dec	2056 Mar	2159 Jun	<u>2257 Mar</u>	2360 May
1749 Jun	1852 Jul	1955 Oct	2058 Oct	<u>2162 Jan</u>	2259 Nov	<u>2363 Jan</u>
1752 Jan	1855 May	1958 Jul	2061 Aug	<u>2162 Mar</u>	2262 Aug	<u>2363 Mar</u>
1754 Oct	1857 Dec	<u>1961 Jan</u>	2064 May	2164 Sep	2265 May	2365 Sep
1757 Jul	1860 Aug	<u>1961 Apr</u>	2066 Dec	2167 Aug	2268 Jan	2368 Jul
1760 Mar	1863 Jul	1963 Nov	2067 Mar	2170 Apr	2270 Aug	<u>2371 Jan</u>
1762 Dec	<u>1866 Jan</u>	1966 Aug	2069 Sep	2172 Oct	2273 Jul	<u>2371 Apr</u>
1765 Aug	<u>1866 Mar</u>	1969 May	2072 May	2175 Aug	2276 Mar	2373 Dec
1768 May	1868 Oct	1971 Dec	2075 Apr	2178 May	2278 Oct	2376 Aug
<u>1771 Jan</u>	1871 Jul	1974 Oct	2077 Oct	<u>2181 Jan</u>	2281 Aug	2379 Jun
<u>1771 Mar</u>	1874 May	1977 Jul	2080 Jul	<u>2181 Mar</u>	2284 Apr	<u>2382 Jan</u>
1773 Sep	1876 Dec	1980 Mar	2083 May	2183 Oct	2286 Dec	<u>2382 Mar</u>
1776 Jul	1879 Aug	1982 Dec	2085 Dec	2186 Jul	2287 Mar	2384 Aug
1779 Apr	1882 Jul	1985 Jul	2088 Sep	2189 Apr	2289 Aug	2387 Jul
1781 Dec	<u>1885 Jan</u>	1988 May	2091 Jul	2191 Nov	2292 May	<u>2390 Jan</u>
1784 Aug	<u>1885 Mar</u>	1990 Dec	<u>2094 Jan</u>	2194 Aug	<u>2295 Jan</u>	<u>2390 Mar</u>
1787 May	1887 Oct	1993 Sep	<u>2094 Apr</u>	2197 May	<u>2295 Mar</u>	2392 Oct
<u>1790 Jan</u>	1890 Jul	1996 Jul	2096 Oct	<u>2200 Jan</u>	2297 Oct	2395 Aug
<u>1790 Mar</u>	1893 Apr	<u>1999 Jan</u>	2099 Aug	<u>2200 Mar</u>	2300 Aug	2398 May
1792 Aug	1895 Dec	<u>1999 Mar</u>	2102 Jun	2202 Nov	2303 May	2400 Dec
1795 Jul	1898 Aug	2001 Nov	2104 Dec	2205 Jul	2305 Dec	
1798 Mar	1901 Jul	2004 Jul	2107 Oct	2208 May	2306 Mar	
1800 Dec	1904 Mar	2007 Jun	2110 Jul	2210 Dec	2308 Oct	
1803 Oct	1906 Nov	2009 Dec	<u>2113 Jan</u>	2213 Sep	2311 Jul	

Here are some interesting facts of the table above of the Blue Moons. The 27 years with two Blue Moons in the same year. The first month in all cases is January and the second month is March or April. The next group is the 5 times where consecutive years have a Blue Moon. In every case the first month is December and the second is March. There are 80 times with two years between and 77 times with three years between. The last group is the number of times each month was used. As expected 31 days has the larger number of times of uses. February with the 29 days is not long enough to have two times. The four 30 days months have fewer events except September for some reason comes up with a high count.

<u>1741 Jan</u> <u>1741 Apr</u>	<u>1847 Jan</u> <u>1847 Mar</u>	<u>1961 Jan</u> <u>1961 Apr</u>	<u>2094 Jan</u> <u>2094 Apr</u>	<u>2181 Jan</u> <u>2181 Mar</u>	<u>2257 Jan</u> <u>2257 Mar</u>	<u>2371 Jan</u> <u>2371 Apr</u>
<u>1771 Jan</u> <u>1771 Mar</u>	<u>1866 Jan</u> <u>1866 Mar</u>	<u>1999 Jan</u> <u>1999 Mar</u>	<u>2113 Jan</u> <u>2113 May</u>	<u>2200 Jan</u> <u>2200 Mar</u>	<u>2295 Jan</u> <u>2295 Mar</u>	<u>2382 Jan</u> <u>2382 Mar</u>
<u>1790 Jan</u> <u>1790 Mar</u>	<u>1885 Jan</u> <u>1885 Mar</u>	<u>2018 Jan</u> <u>2018 Mar</u>	<u>2143 Jan</u> <u>2143 Mar</u>	<u>2219 Jan</u> <u>2219 Mar</u>	<u>2333 Jan</u> <u>2333 May</u>	<u>2390 Jan</u> <u>2390 Mar</u>
<u>1809 Jan</u> <u>1809 Mar</u>	<u>1915 Jan</u> <u>1915 Mar</u>	<u>2037 Jan</u> <u>2037 Mar</u>	<u>2162 Jan</u> <u>2162 Mar</u>	<u>2238 Jan</u> <u>2238 Mar</u>	<u>2363 Jan</u> <u>2363 Mar</u>	

1713 Dec - 1714 Mar  
 1933 Dec - 1934 Mar  
 2066 Dec - 2067 Mar  
 2286 Dec - 2287 Mar  
 2286 Dec - 2287 Mar

Jan - 32  
 Feb - 0  
 Mar - 35  
 Apr - 13  
 May - 36  
 Jun - 10  
 Jul - 38  
 Aug - 38  
 Sep - 25  
 Oct - 31  
 Nov - 8  
 Dec - 34