

# Topocentric ephemeris of the Moon

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
1	2026 01 01	00:00	4h 12m 27,8s	+26° 2' 45"	Tau	355369	11d 22h 17m -12,41	2017	91,2	145,7° E	145,4°	15:01	23:08	06:06	75,3°	232,4°	126,6°	
2	2026 01 02	00:00	5h 20m 18,6s	+27° 53' 18"	Tau	354235	12d 22h 17m -12,60	2024	96,8	160,0° E	159,5°	16:06		07:19	77,3°	231,8°	128,4°	
3	2026 01 03	00:00	6h 29m 11,6s	+27° 36' 4"	Gem	355173	13d 22h 17m -12,77	2019	99,6	174,2° E	172,8°	17:20		08:20	74,4°	234,5°	126,8°	
4	2026 01 04	00:00	7h 35m 45,1s	+25° 15' 7"	Gem	358178	14d 22h 17m -12,74	2002	99,4	171,7° W	171,0°	18:39	01:20	09:08	70,1°	239,9°	122,4°	
5	2026 01 05	00:00	8h 37m 35,4s	+21° 13' 6"	Cnc	363008	15d 22h 17m -12,54	1975	96,3	158,0° W	157,8°	19:56	02:19	09:45	64,6°	247,1°	116,0°	
6	2026 01 06	00:00	9h 33m 58,4s	+16° 1' 18"	Leo	369230	16d 22h 17m -12,32	1942	90,8	144,7° W	144,7°	21:08	03:12	10:14	58,5°	255,2°	108,4°	
7	2026 01 07	00:00	10h 25m 27,1s	+10° 9' 48"	Leo	376293	17d 22h 17m -12,10	1905	83,5	131,9° W	131,9°	22:17	04:00	10:39	52,1°	263,6°	100,3°	
8	2026 01 08	00:00	11h 13m 11,8s	+4° 2' 50"	Leo	383616	18d 22h 17m -11,86	1869	74,9	119,7° W	119,7°	23:22	04:44	11:00	45,8°	271,9°	92,1°	
9	2026 01 09	00:00	11h 58m 32,0s	-2° 1' 48"	Vir	390661	19d 22h 17m -11,61	1835	65,5	107,9° W	107,9°	08:34	05:27	11:21	39,9°	280,0°	84,2°	
10	2026 01 10	00:00	12h 42m 43,9s	-7° 51' 7"	Vir	396980	20d 22h 17m -11,34	1806	55,8	96,5° W	96,5°	00:25	06:08	11:42	39,9°	280,0°	76,6°	
11	2026 01 11	00:00	13h 26m 55,6s	-13° 14' 59"	Vir	402242	21d 22h 17m -11,06	1782	46,1	85,4° W	85,4°	01:27	06:50	12:04	34,4°	287,5°	69,5°	
12	2026 01 12	00:00	14h 12m 5,9s	-18° 4' 21"	Vir	406236	22d 22h 17m -10,77	1765	36,8	74,5° W	74,5°	02:30	07:33	12:28	29,5°	294,3°	63,2°	
13	2026 01 13	00:00	14h 59m 1,1s	-22° 10' 7"	Lib	408868	23d 22h 17m -10,45	1753	28,1	63,7° W	63,8°	03:32	08:18	12:58	25,5°	300,2°	57,9°	
14	2026 01 14	00:00	15h 48m 9,3s	-25° 22' 29"	Sco	410143	24d 22h 17m -10,10	1748	20,2	53,0° W	53,2°	04:35	09:06	13:33	22,5°	304,8°	53,9°	
15	2026 01 15	00:00	16h 39m 33,5s	-27° 31' 25"	Sco	410151	25d 22h 17m -9,72	1748	13,2	42,3° W	42,6°	05:35	09:57	14:16	20,7°	307,8°	51,7°	
16	2026 01 16	00:00	17h 32m 45,7s	-28° 27' 56"	Oph	409037	26d 22h 17m -9,31	1753	7,6	31,5° W	31,9°	06:30	10:49	15:08	20,3°	308,7°	51,4°	
17	2026 01 17	00:00	18h 26m 50,3s	-28° 6' 1"	Sgr	406982	27d 22h 17m -8,85	1762	3,4	20,6° W	21,1°	07:19	11:41	16:07	21,3°	307,5°	53,4°	
18	2026 01 18	00:00	19h 20m 38,6s	-26° 24' 24"	Sgr	404180	28d 22h 17m -8,34	1774	0,8	9,5° W	10,4°	07:59	12:33	17:12	23,9°	304,3°	57,4°	
19	2026 01 19	00:00	20h 13m 10,6s	-23° 27' 17"	Cap	400812	0d 4h 08m -8,02	1789	0,1	1,8° E	3,9°	08:34	13:23	18:19	27,7°	299,3°	63,1°	
20	2026 01 20	00:00	21h 3m 52,2s	-19° 23' 28"	Cap	397035	1d 4h 08m -8,55	1806	1,4	13,2° E	13,4°	09:03	14:11	19:27	32,6°	292,9°	70,2°	
21	2026 01 21	00:00	21h 52m 41,5s	-14° 24' 50"	Cap	392967	2d 4h 08m -9,10	1824	4,7	24,8° E	24,9°	09:28	14:56	20:35	38,3°	285,5°	78,1°	
22	2026 01 22	00:00	22h 40m 5,2s	-8° 44' 46"	Aqr	388698	3d 4h 08m -9,62	1844	9,9	36,7° E	36,7°	09:50	15:41	21:42	44,7°	277,5°	86,6°	
23	2026 01 23	00:00	23h 26m 50,8s	-2° 37' 22"	Psc	384291	4d 4h 08m -10,09	1866	17,1	48,7° E	48,7°	10:12	16:25	22:51	51,3°	269,0°	95,4°	
24	2026 01 24	00:00	0h 14m 0,3s	+3° 42' 37"	Psc	379813	5d 4h 08m -10,51	1888	25,9	61,1° E	61,1°	10:34	17:11		51,3°	260,5°	95,4°	
25	2026 01 25	00:00	1h 2m 45,2s	+9° 59' 4"	Psc	375351	6d 4h 08m -10,90	1910	36,0	73,6° E	73,7°	10:59	17:59	00:01	57,9°	252,2°	104,1°	
26	2026 01 26	00:00	1h 54m 20,1s	+15° 53' 28"	Ari	371045	7d 4h 08m -11,25	1932	47,1	86,5° E	86,5°	11:28	18:52	01:14	64,2°	244,5°	112,4°	
27	2026 01 27	00:00	2h 49m 51,6s	+21° 3' 47"	Ari	367098	8d 4h 08m -11,56	1953	58,5	99,6° E	99,6°	12:03	19:50	02:30	69,8°	238,0°	119,6°	
28	2026 01 28	00:00	3h 49m 56,1s	+25° 4' 38"	Tau	363774	9d 4h 08m -11,83	1971	69,6	113,0° E	113,0°	12:49	20:52	03:47	74,1°	233,4°	125,2°	
29	2026 01 29	00:00	4h 54m 8,4s	+27° 30' 11"	Tau	361379	10d 4h 08m -12,08	1984	79,8	126,7° E	126,5°	13:46	21:56	05:00	76,9°	231,5°	128,2°	
30	2026 01 30	00:00	6h 0m 41,0s	+28° 0' 42"	Tau	360218	11d 4h 08m -12,29	1990	88,5	140,4° E	140,2°	14:55	23:00	06:05	77,5°	232,7°	128,1°	
31	2026 01 31	00:00	7h 6m 47,8s	+26° 30' 20"	Gem	360530	12d 4h 08m -12,49	1989	94,9	154,2° E	153,9°	16:11		06:58	76,0°	236,8°	125,0°	
32	2026 02 01	00:00	8h 9m 51,9s	+23° 10' 28"	Cnc	362436	13d 4h 08m -12,66	1978	98,8	167,9° E	167,5°	17:29	00:01	07:39	67,5°	243,3°	119,4°	
33	2026 02 02	00:00	9h 8m 26,0s	+18° 25' 19"	Cnc	365892	14d 4h 08m -12,77	1959	100,0	178,7° W	177,7°	18:44	00:57	08:12	61,6°	251,1°	112,3°	
34	2026 02 03	00:00	10h 2m 22,1s	+12° 43' 51"	Leo	370688	15d 4h 08m -12,60	1934	98,4	165,6° W	165,6°	19:55	01:48	08:38	55,2°	259,5°	104,3°	
35	2026 02 04	00:00	10h 52m 24,5s	+6° 33' 11"	Leo	376466	16d 4h 08m -12,40	1904	94,5	152,9° W	152,9°	21:03	02:35	09:01	48,7°	268,1°	96,0°	
36	2026 02 05	00:00	11h 39m 40,4s	+0° 15' 38"	Vir	382775	17d 4h 08m -12,19	1873	88,7	140,6° W	140,6°	22:08	03:19	09:23	42,4°	276,6°	87,7°	
37	2026 02 06	00:00	12h 25m 21,2s	-5° 51' 37"	Vir	389130	18d 4h 08m -11,97	1842	81,3	128,7° W	128,6°	23:12	04:01	09:44	36,5°	284,5°	79,7°	
38	2026 02 07	00:00	13h 10m 34,2s	-11° 35' 16"	Vir	395067	19d 4h 08m -11,75	1815	72,9	117,2° W	117,1°	04:21	08:40	10:05	31,3°	291,8°	72,2°	
39	2026 02 08	00:00	13h 56m 18,7s	-16° 44' 36"	Vir	400189	20d 4h 08m -11,51	1792	63,8	105,9° W	105,9°	00:16	05:27	10:29	31,3°	291,8°	65,5°	
40	2026 02 09	00:00	14h 43m 23,2s	-21° 9' 59"	Lib	404186	21d 4h 08m -11,27	1774	54,4	95,0° W	94,9°	01:20	06:11	10:57	26,8°	298,2°	59,7°	
41	2026 02 10	00:00	15h 32m 20,6s	-24° 42' 8"	Lib	406859	22d 4h 08m -11,00	1762	45,0	84,1° W	84,1°	02:23	06:59	11:30	23,4°	303,4°	55,1°	
42	2026 02 11	00:00	16h 23m 22,3s	-27° 11' 48"	Sco	408116	23d 4h 08m -10,72	1757	35,9	73,3° W	73,4°	03:24	07:48	12:10	21,1°	307,0°	52,2°	
43	2026 02 12	00:00	17h 16m 12,3s	-28° 30' 32"	Oph	407970	24d 4h 08m -10,41	1757	27,2	62,6° W	62,7°	04:21	08:40	12:58	20,2°	308,8°	51,1°	
44	2026 02 13	00:00	18h 10m 7,8s	-28° 32' 1"	Sgr	406528	25d 4h 08m -10,07	1764	19,2	51,7° W	51,9°	05:13	09:32	13:54	20,6°	308,4°	52,2°	
45	2026 02 14	00:00	19h 4m 9,0s	-27° 13' 37"	Sgr	403976	26d 4h 08m -9,68	1775	12,3	40,7° W	40,9°	05:56	10:24	14:57	22,6°	306,0°	55,4°	
46	2026 02 15	00:00	19h 57m 17,5s	-24° 37' 23"	Sgr	400558	27d 4h 08m -9,25	1790	6,6	29,4° W	29,7°	06:33	11:15	16:04	25,9°	301,6°	60,6°	
47	2026 02 16	00:00	20h 48m 53,5s	-20° 50' 1"	Cap	396549	28d 4h 08m -8,75	1808	2,5	18,0° W	18,2°	07:04	12:04	17:13	30,5°	295,6°	67,2°	
48	2026 02 17	00:00	21h 38m 45,9s	-16° 1' 56"	Cap	392231	29d 4h 08m -8,19	1828	0,3	6,3° W	6,5°	07:31	12:51	18:22	36,1°	288,4°	75,0°	
49	2026 02 18	00:00	22h 27m 11,5s	-10° 26' 9"	Aqr	387861	0d 11h 59m -8,21	1848	0,3	5,7° E	5,8°	07:54	13:37	19:31	42,4°	280,4°	83,6°	
50	2026 02 19	00:00	23h 14m 48,9s	-4° 17' 29"	Aqr	383653	1d 11h 59m -8,84	1869	2,4	18,0° E	18,0°	08:17	14:23	20:41	49,1°	271,9°	92,5°	

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date yyyy mm dd	Hour hh:mm	R. A. (2000.0) topocentric	Decl. (2000.0) topocentric	Const.	Dist. E. km	Age days	Magn. mV	Diam. "	Illum. %	Elong. °	Separ. °	Rise hh:mm	Transit hh:mm	Set hh:mm	Elevation (max.)	Azimuth at rise	Azimuth at set
51	2026 02 20	00:00	0h 2m 32,4s	+2° 7' 53"	Psc	379761	2d 11h 59m	-9,41	1888	6,9	30,4° E	30,5°	08:39	15:09	21:52	55,9°	263,2°	101,5°
52	2026 02 21	00:00	0h 51m 25,3s	+8° 32' 12"	Psc	376280	3d 11h 59m	-9,92	1905	13,6	43,1° E	43,2°	09:03	15:57	23:05	62,4°	254,6°	110,1°
53	2026 02 22	00:00	1h 42m 34,5s	+14° 35' 56"	Psc	373258	4d 11h 59m	-10,38	1921	22,2	56,0° E	56,1°	09:31	16:49		62,4°	246,6°	110,1°
54	2026 02 23	00:00	2h 36m 59,8s	+19° 57' 25"	Ari	370717	5d 11h 59m	-10,79	1934	32,3	69,1° E	69,2°	10:04	17:44	00:20	68,3°	239,7°	117,7°
55	2026 02 24	00:00	3h 35m 16,6s	+24° 13' 14"	Tau	368683	6d 11h 59m	-11,14	1945	43,4	82,3° E	82,3°	10:46	18:44	01:37	73,1°	234,5°	123,8°
56	2026 02 25	00:00	4h 37m 12,4s	+27° 0' 29"	Tau	367208	7d 11h 59m	-11,45	1952	54,9	95,6° E	95,5°	11:38	19:47	02:50	76,3°	231,7°	127,7°
57	2026 02 26	00:00	5h 41m 28,5s	+28° 1' 10"	Tau	366375	8d 11h 59m	-11,72	1957	66,2	108,9° E	108,8°	12:41	20:49	03:56	77,6°	231,8°	128,6°
58	2026 02 27	00:00	6h 45m 52,5s	+27° 7' 52"	Gem	366300	9d 11h 59m	-11,96	1957	76,7	122,2° E	122,1°	13:53	21:50	04:52	76,8°	234,8°	126,6°
59	2026 02 28	00:00	7h 48m 7,0s	+24° 26' 45"	Gem	367102	10d 11h 59m	-12,17	1953	85,6	135,4° E	135,3°	15:08	22:46	05:36	74,1°	240,3°	122,0°
60	2026 03 01	00:00	8h 46m 41,2s	+20° 15' 38"	Cnc	368875	11d 11h 59m	-12,35	1944	92,7	148,6° E	148,5°	16:23	23:37	06:10	69,8°	247,4°	115,6°
61	2026 03 02	00:00	9h 41m 10,3s	+14° 58' 32"	Leo	371648	12d 11h 59m	-12,51	1929	97,4	161,5° E	161,5°	17:35		06:39	58,2°	255,6°	108,0°
62	2026 03 03	00:00	10h 32m 1,3s	+9° 0' 18"	Leo	375359	13d 11h 59m	-12,66	1910	99,8	174,3° E	174,3°	18:44	00:25	07:03	51,7°	264,1°	99,9°
63	2026 03 04	00:00	11h 20m 8,9s	+2° 43' 34"	Leo	379841	14d 11h 59m	-12,63	1887	99,6	173,3° W	173,1°	19:50	01:10	07:25	45,2°	272,7°	91,5°
64	2026 03 05	00:00	12h 6m 36,9s	-3° 32' 28"	Vir	384835	15d 11h 59m	-12,45	1863	97,3	161,1° W	161,0°	20:55	01:53	07:46	39,1°	281,0°	83,3°
65	2026 03 06	00:00	12h 52m 28,2s	-9° 31' 48"	Vir	390010	16d 11h 59m	-12,26	1838	92,9	149,3° W	149,1°	21:59	02:36	08:07	33,5°	288,7°	75,5°
66	2026 03 07	00:00	13h 38m 39,6s	-15° 1' 4"	Vir	394999	17d 11h 59m	-12,07	1815	87,0	137,7° W	137,6°	23:04	03:19	08:30	28,6°	295,6°	68,3°
67	2026 03 08	00:00	14h 25m 58,2s	-19° 48' 37"	Lib	399440	18d 11h 59m	-11,87	1795	79,7	126,5° W	126,3°		04:04	08:56	24,7°	301,4°	62,0°
68	2026 03 09	00:00	15h 14m 56,8s	-23° 44' 1"	Lib	403007	19d 11h 59m	-11,66	1779	71,5	115,4° W	115,3°	00:08	04:51	09:27	24,7°	301,4°	56,8°
69	2026 03 10	00:00	16h 5m 48,8s	-26° 37' 40"	Sco	405438	20d 11h 59m	-11,44	1768	62,6	104,5° W	104,4°	01:11	05:39	10:04	21,9°	305,7°	53,2°
70	2026 03 11	00:00	16h 58m 22,7s	-28° 21' 20"	Oph	406554	21d 11h 59m	-11,21	1763	53,3	93,6° W	93,6°	02:10	06:30	10:49	20,4°	308,3°	51,3°
71	2026 03 12	00:00	17h 52m 2,5s	-28° 48' 54"	Sgr	406275	22d 11h 59m	-10,96	1765	43,9	82,8° W	82,8°	03:04	07:22	11:41	20,3°	308,8°	51,5°
72	2026 03 13	00:00	18h 45m 55,3s	-27° 57' 30"	Sgr	404622	23d 11h 59m	-10,68	1772	34,6	71,9° W	72,0°	03:50	08:14	12:41	21,6°	307,3°	53,8°
73	2026 03 14	00:00	19h 39m 7,4s	-25° 48' 14"	Sgr	401719	24d 11h 59m	-10,37	1785	25,8	60,8° W	60,9°	04:30	09:05	13:46	24,3°	303,7°	58,1°
74	2026 03 15	00:00	20h 31m 0,1s	-22° 26' 2"	Cap	397784	25d 11h 59m	-10,02	1802	17,7	49,5° W	49,6°	05:03	09:54	14:53	28,3°	298,5°	64,1°
75	2026 03 16	00:00	21h 21m 19,8s	-17° 59' 10"	Cap	393115	26d 11h 59m	-9,61	1824	10,6	37,9° W	38,0°	05:31	10:42	16:02	33,4°	291,8°	71,4°
76	2026 03 17	00:00	22h 10m 19,2s	-12° 38' 27"	Aqr	388064	27d 11h 59m	-9,14	1847	5,1	26,0° W	26,0°	05:56	11:29	17:12	39,5°	284,1°	79,7°
77	2026 03 18	00:00	22h 58m 33,0s	-6° 36' 59"	Aqr	383008	28d 11h 59m	-8,59	1872	1,4	13,7° W	13,7°	06:19	12:15	18:22	46,1°	275,7°	88,6°
78	2026 03 19	00:00	23h 46m 51,5s	-0° 10' 12"	Psc	378304	29d 11h 59m	-8,02	1895	0,0	1,1° W	1,6°	06:42	13:02	19:34	53,0°	266,9°	97,8°
79	2026 03 20	00:00	0h 36m 15,4s	+6° 23' 47"	Psc	374255	0d 22h 37m	-8,59	1916	1,1	11,8° E	12,0°	07:06	13:50	20:49	59,9°	258,0°	106,8°
80	2026 03 21	00:00	1h 27m 48,6s	+12° 43' 56"	Psc	371072	1d 22h 37m	-9,22	1932	4,8	25,0° E	25,2°	07:33	14:42	22:06	66,2°	249,5°	115,1°
81	2026 03 22	00:00	2h 22m 28,9s	+18° 26' 25"	Ari	368860	2d 22h 37m	-9,77	1944	10,9	38,4° E	38,5°	08:05	15:38	23:24	71,6°	242,0°	122,0°
82	2026 03 23	00:00	3h 20m 50,0s	+23° 5' 50"	Ari	367620	3d 22h 37m	-10,26	1950	19,3	51,8° E	51,9°	08:44	16:38		71,6°	236,0°	122,0°
83	2026 03 24	00:00	4h 22m 39,1s	+26° 17' 56"	Tau	367276	4d 22h 37m	-10,68	1952	29,2	65,2° E	65,3°	09:34	17:40	00:41	75,4°	232,3°	126,7°
84	2026 03 25	00:00	5h 26m 39,8s	+27° 44' 21"	Tau	367707	5d 22h 37m	-11,03	1950	40,3	78,6° E	78,7°	10:34	18:43	01:50	77,4°	231,5°	128,6°
85	2026 03 26	00:00	6h 30m 44,5s	+27° 17' 42"	Gem	368787	6d 22h 37m	-11,34	1944	51,7	91,9° E	91,9°	11:43	19:44	02:49	77,2°	233,7°	127,4°
86	2026 03 27	00:00	7h 32m 40,3s	+25° 3' 52"	Gem	370415	7d 22h 37m	-11,61	1936	63,0	104,9° E	104,9°	12:57	20:40	03:35	75,1°	238,4°	123,6°
87	2026 03 28	00:00	8h 30m 59,0s	+21° 19' 25"	Cnc	372522	8d 22h 37m	-11,83	1925	73,4	117,8° E	117,8°	14:10	21:32	04:12	71,3°	244,9°	117,8°
88	2026 03 29	00:00	9h 25m 15,5s	+16° 26' 19"	Leo	375074	9d 22h 37m	-12,03	1911	82,6	130,5° E	130,5°	15:21	22:20	04:42	66,3°	252,6°	110,8°
89	2026 03 30	00:00	10h 15m 55,6s	+10° 47' 6"	Leo	378049	10d 22h 37m	-12,20	1896	90,0	143,0° E	143,0°	16:30	23:05	05:07	60,5°	260,8°	103,0°
90	2026 03 31	00:00	11h 3m 52,5s	+4° 42' 28"	Leo	381419	11d 22h 37m	-12,36	1880	95,4	155,3° E	155,3°	17:36	23:48	05:29	54,2°	269,3°	94,8°
91	2026 04 01	00:00	11h 50m 9,1s	-1° 29' 25"	Vir	385121	12d 22h 37m	-12,50	1862	98,8	167,4° E	167,2°	18:41		05:50	41,6°	277,6°	86,6°
92	2026 04 02	00:00	12h 35m 48,0s	-7° 32' 35"	Vir	389045	13d 22h 37m	-12,61	1843	99,9	179,3° E	176,5°	19:45	00:31	06:11	35,8°	285,5°	78,7°
93	2026 04 03	00:00	13h 21m 46,3s	-13° 12' 47"	Vir	393026	14d 22h 37m	-12,49	1824	99,0	169,1° W	168,3°	20:50	01:14	06:33	30,6°	292,8°	71,3°
94	2026 04 04	00:00	14h 8m 51,7s	-18° 16' 54"	Vir	396852	15d 22h 37m	-12,32	1807	96,1	157,6° W	157,1°	21:54	01:58	06:58	26,3°	299,0°	64,6°
95	2026 04 05	00:00	14h 57m 38,0s	-22° 32' 50"	Lib	400276	16d 22h 37m	-12,15	1791	91,5	146,4° W	146,0°	22:58	02:44	07:27	23,0°	304,0°	58,9°
96	2026 04 06	00:00	15h 48m 19,6s	-25° 49' 30"	Sco	403042	17d 22h 37m	-11,97	1779	85,4	135,3° W	135,0°	23:59	03:32	08:01	20,9°	307,3°	54,6°
97	2026 04 07	00:00	16h 40m 45,6s	-27° 57' 34"	Sco	404908	18d 22h 37m	-11,79	1771	78,2	124,3° W	124,1°		04:22	08:43	20,3°	308,7°	52,0°
98	2026 04 08	00:00	17h 34m 20,0s	-28° 50' 19"	Oph	405670	19d 22h 37m	-11,60	1767	69,9	113,4° W	113,3°	00:55	05:13	09:32	20,3°	308,7°	51,3°
99	2026 04 09	00:00	18h 28m 9,0s	-28° 24' 43"	Sgr	405188	20d 22h 37m	-11,39	1769	61,0	102,6° W	102,5°	01:44	06:05	10:28	21,0°	308,0°	52,8°
100	2026 04 10	00:00	19h 21m 17,2s	-26° 41' 48"	Sgr	403403	21d 22h 37m	-11,16	1777	51,6	91,6° W	91,6°	02:25	06:55	11:30	23,1°	305,3°	56,2°

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
101	2026 04 11	00:00	20h 13m 4,3s	-23° 46' 13"	Cap	400349	22d 22h 37m -10,91	1791	41,9	80,5° W	80,6°	03:00	07:45	12:35	26,5°	300,8°	61,4°	
102	2026 04 12	00:00	21h 3m 15,1s	-19° 45' 21"	Cap	396168	23d 22h 37m -10,63	1810	32,4	69,2° W	69,3°	03:30	08:32	13:43	31,1°	294,9°	68,0°	
103	2026 04 13	00:00	21h 52m 1,3s	-14° 48' 24"	Cap	391106	24d 22h 37m -10,30	1833	23,3	57,6° W	57,6°	03:56	09:18	14:51	36,6°	287,8°	75,7°	
104	2026 04 14	00:00	22h 39m 57,3s	-9° 6' 5"	Aqr	385504	25d 22h 37m -9,92	1860	15,1	45,6° W	45,6°	04:20	10:04	15:59	42,9°	279,8°	84,3°	
105	2026 04 15	00:00	23h 27m 53,9s	-2° 51' 2"	Psc	379781	26d 22h 37m -9,47	1888	8,2	33,2° W	33,2°	04:42	10:50	17:11	49,6°	271,2°	93,3°	
106	2026 04 16	00:00	0h 16m 53,5s	+3° 41' 14"	Psc	374388	27d 22h 37m -8,94	1915	3,1	20,3° W	20,4°	05:06	11:38	18:24	56,6°	262,3°	102,5°	
107	2026 04 17	00:00	1h 8m 4,1s	+10° 11' 13"	Psc	369764	28d 22h 37m -8,35	1939	0,4	7,1° W	7,6°	05:32	12:30	19:42	63,3°	253,5°	111,4°	
108	2026 04 18	00:00	2h 2m 30,6s	+16° 14' 56"	Ari	366272	0d 12h 08m -8,39	1957	0,4	6,5° E	7,4°	06:02	13:25	21:02	69,3°	245,3°	119,1°	
109	2026 04 19	00:00	3h 0m 57,7s	+21° 24' 33"	Ari	364149	1d 12h 08m -9,04	1969	3,2	20,3° E	20,7°	06:39	14:25	22:22	73,9°	238,4°	124,9°	
110	2026 04 20	00:00	4h 3m 23,0s	+25° 11' 26"	Tau	363472	2d 12h 08m -9,62	1972	8,8	34,2° E	34,4°	07:26	15:29	23:38	76,7°	233,6°	128,0°	
111	2026 04 21	00:00	5h 8m 33,3s	+27° 12' 8"	Tau	364162	3d 12h 08m -10,12	1969	16,7	48,0° E	48,2°	08:25	16:34		76,7°	231,7°	128,0°	
112	2026 04 22	00:00	6h 14m 10,3s	+27° 15' 19"	Gem	366011	4d 12h 08m -10,55	1959	26,4	61,6° E	61,7°	09:33	17:37	00:42	77,3°	232,9°	127,9°	
113	2026 04 23	00:00	7h 17m 39,7s	+25° 25' 26"	Gem	368743	5d 12h 08m -10,91	1944	37,2	75,0° E	75,0°	10:47	18:36	01:33	75,8°	237,0°	124,8°	
114	2026 04 24	00:00	8h 17m 13,7s	+22° 0' 0"	Cnc	372066	6d 12h 08m -11,22	1927	48,4	88,1° E	88,1°	12:01	19:30	02:14	72,5°	243,0°	119,5°	
115	2026 04 25	00:00	9h 12m 18,1s	+17° 22' 38"	Cnc	375718	7d 12h 08m -11,47	1908	59,5	100,8° E	100,8°	13:13	20:19	02:45	67,8°	250,4°	112,8°	
116	2026 04 26	00:00	10h 3m 18,3s	+11° 56' 59"	Leo	379495	8d 12h 08m -11,70	1889	69,8	113,3° E	113,3°	14:22	21:04	03:11	62,2°	258,4°	105,2°	
117	2026 04 27	00:00	10h 51m 12,0s	+6° 3' 37"	Sex	383259	9d 12h 08m -11,89	1871	79,1	125,4° E	125,4°	15:28	21:47	03:34	56,1°	266,7°	97,3°	
118	2026 04 28	00:00	11h 37m 7,8s	-0° 0' 14"	Leo	386923	10d 12h 08m -12,06	1853	86,8	137,4° E	137,3°	16:32	22:29	03:55	49,8°	274,9°	89,2°	
119	2026 04 29	00:00	12h 22m 13,5s	-5° 59' 48"	Vir	390436	11d 12h 08m -12,21	1836	92,9	149,1° E	149,0°	17:35	23:11	04:16	43,6°	282,8°	81,3°	
120	2026 04 30	00:00	13h 7m 31,2s	-11° 41' 51"	Vir	393758	12d 12h 08m -12,35	1821	97,1	160,7° E	160,3°	18:39	23:54	04:37	37,7°	290,2°	73,8°	
121	2026 05 01	00:00	13h 53m 53,9s	-16° 53' 40"	Vir	396839	13d 12h 08m -12,48	1807	99,4	172,1° E	170,8°	19:43		05:01	27,8°	296,8°	66,9°	
122	2026 05 02	00:00	14h 42m 1,0s	-21° 22' 49"	Lib	399604	14d 12h 08m -12,51	1794	99,7	176,6° W	173,6°	20:47	00:39	05:28	24,2°	302,2°	60,9°	
123	2026 05 03	00:00	15h 32m 12,5s	-24° 57' 11"	Lib	401947	15d 12h 08m -12,38	1784	98,2	165,4° W	164,4°	21:49	01:26	06:01	21,7°	306,1°	56,1°	
124	2026 05 04	00:00	16h 24m 22,3s	-27° 25' 55"	Sco	403730	16d 12h 08m -12,22	1776	94,9	154,4° W	153,8°	22:46	02:16	06:40	20,5°	308,2°	52,9°	
125	2026 05 05	00:00	17h 17m 55,1s	-28° 40' 45"	Oph	404798	17d 12h 08m -12,07	1771	90,0	143,4° W	143,1°	23:38	03:07	07:26	20,8°	308,2°	51,6°	
126	2026 05 06	00:00	18h 11m 53,7s	-28° 37' 26"	Sgr	404996	18d 12h 08m -11,90	1770	83,7	132,5° W	132,3°		03:58	08:20	22,4°	306,2°	52,3°	
127	2026 05 07	00:00	19h 5m 14,7s	-27° 16' 28"	Sgr	404186	19d 12h 08m -11,73	1774	76,2	121,6° W	121,5°	00:22	04:49	09:20	22,4°	306,2°	55,0°	
128	2026 05 08	00:00	19h 57m 8,7s	-24° 42' 38"	Sgr	402273	20d 12h 08m -11,54	1782	67,7	110,6° W	110,6°	00:59	05:38	10:23	25,3°	302,4°	59,5°	
129	2026 05 09	00:00	20h 47m 13,2s	-21° 3' 44"	Cap	399229	21d 12h 08m -11,34	1796	58,4	99,5° W	99,5°	01:30	06:25	11:28	29,3°	297,1°	65,4°	
130	2026 05 10	00:00	21h 35m 35,2s	-16° 29' 2"	Cap	395109	22d 12h 08m -11,11	1815	48,5	88,2° W	88,2°	01:56	07:11	12:34	34,3°	290,6°	72,5°	
131	2026 05 11	00:00	22h 22m 46,9s	-11° 8' 29"	Aqr	390071	23d 12h 08m -10,84	1838	38,5	76,5° W	76,5°	02:20	07:55	13:40	40,1°	283,2°	80,5°	
132	2026 05 12	00:00	23h 9m 38,8s	-5° 12' 49"	Aqr	384383	24d 12h 08m -10,53	1865	28,6	64,5° W	64,5°	02:43	08:40	14:48	46,5°	275,1°	89,1°	
133	2026 05 13	00:00	23h 57m 14,4s	+1° 5' 34"	Psc	378416	25d 12h 08m -10,16	1895	19,4	52,1° W	52,1°	03:05	09:26	15:59	53,3°	266,5°	98,1°	
134	2026 05 14	00:00	0h 46m 46,2s	+7° 31' 6"	Psc	372627	26d 12h 08m -9,73	1924	11,3	39,2° W	39,2°	03:30	10:15	17:14	60,0°	257,8°	107,0°	
135	2026 05 15	00:00	1h 39m 28,8s	+13° 43' 25"	Psc	367507	27d 12h 08m -9,21	1951	5,1	25,8° W	26,0°	03:57	11:08	18:32	66,4°	249,4°	115,3°	
136	2026 05 16	00:00	2h 36m 26,0s	+19° 16' 31"	Ari	363528	28d 12h 08m -8,62	1972	1,2	12,0° W	12,6°	04:31	12:06	19:54	71,8°	241,7°	122,2°	
137	2026 05 17	00:00	3h 38m 5,0s	+23° 40' 0"	Tau	361062	0d 3h 59m -8,27	1986	0,2	2,0° E	4,6°	05:14	13:10	21:14	75,5°	235,8°	126,7°	
138	2026 05 18	00:00	4h 43m 41,6s	+26° 24' 17"	Tau	360315	1d 3h 59m -8,85	1990	2,1	16,2° E	16,7°	06:09	14:17	22:26	77,2°	232,4°	128,0°	
139	2026 05 19	00:00	5h 51m 5,6s	+27° 9' 15"	Tau	361296	2d 3h 59m -9,45	1984	7,0	30,3° E	30,5°	07:16	15:23	23:25	76,5°	232,3°	126,0°	
140	2026 05 20	00:00	6h 57m 17,0s	+25° 52' 7"	Gem	363816	3d 3h 59m -9,97	1971	14,3	44,2° E	44,3°	08:31	16:26		76,5°	235,4°	126,0°	
141	2026 05 21	00:00	7h 59m 44,0s	+22° 47' 59"	Gem	367543	4d 3h 59m -10,40	1951	23,5	57,8° E	57,8°	09:48	17:24	00:11	73,7°	241,0°	121,4°	
142	2026 05 22	00:00	8h 57m 16,7s	+18° 22' 32"	Cnc	372067	5d 3h 59m -10,77	1927	33,8	71,0° E	71,0°	11:03	18:15	00:46	69,3°	248,2°	114,9°	
143	2026 05 23	00:00	9h 50m 4,2s	+13° 3' 1"	Leo	376978	6d 3h 59m -11,07	1902	44,7	83,7° E	83,7°	12:14	19:02	01:15	63,8°	256,1°	107,4°	
144	2026 05 24	00:00	10h 39m 2,8s	+7° 13' 7"	Leo	381913	7d 3h 59m -11,33	1877	55,4	96,1° E	96,1°	13:21	19:46	01:39	57,8°	264,4°	99,5°	
145	2026 05 25	00:00	11h 25m 26,3s	+1° 11' 35"	Leo	386594	8d 3h 59m -11,55	1855	65,7	108,1° E	108,1°	14:25	20:28	02:00	51,5°	272,6°	91,4°	
146	2026 05 26	00:00	12h 10m 29,3s	-4° 46' 47"	Vir	390833	9d 3h 59m -11,74	1834	75,0	119,9° E	119,8°	15:29	21:10	02:21	45,3°	280,6°	83,5°	
147	2026 05 27	00:00	12h 55m 21,2s	-10° 29' 32"	Vir	394523	10d 3h 59m -11,91	1817	83,1	131,4° E	131,3°	16:32	21:53	02:42	39,4°	288,1°	75,9°	
148	2026 05 28	00:00	13h 41m 2,1s	-15° 45' 11"	Vir	397623	11d 3h 59m -12,07	1803	89,7	142,8° E	142,5°	17:35	22:37	03:05	33,9°	294,9°	68,9°	
149	2026 05 29	00:00	14h 28m 20,1s	-20° 22' 16"	Lib	400128	12d 3h 59m -12,21	1792	94,8	154,0° E	153,5°	18:38	23:23	03:31	29,1°	300,6°	62,7°	
150	2026 05 30	00:00	15h 17m 44,9s	-24° 9' 2"	Lib	402052	13d 3h 59m -12,35	1783	98,1	165,1° E	164,1°	19:41		04:02	25,2°	305,0°	57,6°	

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
151	2026 05 31	00:00	16h 9m 20,8s	-26° 54' 5"	Sco	403402	14d 3h 59m	-12,47	1777	99,6	176,2° E	173,1°	20:40	00:12	04:39	20,8°	307,6°	53,9°
152	2026 06 01	00:00	17h 2m 40,8s	-28° 27' 44"	Oph	404167	15d 3h 59m	-12,44	1774	99,4	172,8° W	170,9°	21:33	01:02	05:23	20,7°	308,2°	52,0°
153	2026 06 02	00:00	17h 56m 49,5s	-28° 43' 53"	Sgr	404312	16d 3h 59m	-12,31	1773	97,3	161,8° W	161,1°	22:20	01:54	06:15	21,9°	306,8°	52,0°
154	2026 06 03	00:00	18h 50m 37,5s	-27° 41' 28"	Sgr	403777	17d 3h 59m	-12,16	1776	93,6	150,9° W	150,5°	22:59	02:45	07:13	24,4°	303,6°	54,2°
155	2026 06 04	00:00	19h 43m 3,6s	-25° 24' 32"	Sgr	402488	18d 3h 59m	-12,01	1781	88,2	139,9° W	139,7°	23:31	03:34	08:15	28,0°	298,7°	58,1°
156	2026 06 05	00:00	20h 33m 31,9s	-22° 1' 9"	Cap	400377	19d 3h 59m	-11,85	1791	81,4	128,8° W	128,7°	23:59	04:21	09:19	32,7°	292,7°	63,6°
157	2026 06 06	00:00	21h 21m 58,9s	-17° 41' 26"	Cap	397399	20d 3h 59m	-11,68	1804	73,3	117,6° W	117,6°		05:07	10:23	38,1°	285,7°	70,2°
158	2026 06 07	00:00	22h 28m 49,5s	-12° 36' 8"	Aqr	393559	21d 3h 59m	-11,49	1822	64,1	106,2° W	106,2°	00:23	05:51	11:28	38,1°	285,7°	77,7°
159	2026 06 08	00:00	22h 54m 49,5s	-6° 56' 6"	Aqr	388934	22d 3h 59m	-11,27	1843	54,1	94,5° W	94,5°	00:45	06:34	12:33	44,2°	278,0°	85,9°
160	2026 06 09	00:00	23h 40m 59,8s	-0° 52' 34"	Psc	383692	23d 3h 59m	-11,01	1869	43,6	82,5° W	82,5°	01:07	07:18	13:40	50,6°	269,9°	94,4°
161	2026 06 10	00:00	0h 28m 31,4s	+5° 21' 35"	Psc	378107	24d 3h 59m	-10,71	1896	33,1	70,1° W	70,1°	01:29	08:04	14:51	57,1°	261,5°	103,1°
162	2026 06 11	00:00	1h 18m 41,9s	+11° 30' 12"	Psc	372552	25d 3h 59m	-10,36	1924	23,1	57,3° W	57,3°	01:54	08:53	16:05	63,5°	253,1°	111,5°
163	2026 06 12	00:00	2h 12m 47,1s	+17° 12' 7"	Ari	367473	26d 3h 59m	-9,93	1951	14,1	43,9° W	44,0°	02:24	09:48	17:24	69,3°	245,2°	119,1°
164	2026 06 13	00:00	3h 11m 42,3s	+22° 0' 27"	Ari	363348	27d 3h 59m	-9,42	1973	6,9	30,2° W	30,4°	03:02	10:48	18:45	73,8°	238,5°	124,8°
165	2026 06 14	00:00	4h 15m 29,5s	+25° 24' 50"	Tau	360609	28d 3h 59m	-8,82	1988	2,1	16,1° W	16,6°	03:51	11:53	20:02	76,6°	233,8°	127,7°
166	2026 06 15	00:00	5h 22m 43,7s	+26° 58' 12"	Tau	359568	29d 3h 59m	-8,24	1994	0,1	1,9° W	4,2°	04:52	13:01	21:08	77,1°	232,0°	127,3°
167	2026 06 16	00:00	6h 30m 36,3s	+26° 26' 45"	Gem	360353	0d 21h 06m	-8,65	1990	1,2	12,3° E	12,7°	06:05	14:08	22:01	75,2°	233,7°	123,6°
168	2026 06 17	00:00	7h 36m 0,5s	+23° 56' 26"	Gem	362874	1d 21h 06m	-9,26	1976	5,3	26,4° E	26,5°	07:25	15:10	22:42	71,3°	238,4°	117,7°
169	2026 06 18	00:00	8h 36m 51,4s	+19° 49' 51"	Cnc	366847	2d 21h 06m	-9,78	1954	11,8	40,1° E	40,1°	08:44	16:06	23:15	66,0°	245,2°	110,3°
170	2026 06 19	00:00	9h 32m 36,8s	+14° 36' 43"	Leo	371854	3d 21h 06m	-10,22	1928	20,2	53,4° E	53,4°	09:59	16:56	23:41	60,0°	253,2°	102,2°
171	2026 06 20	00:00	10h 23m 53,7s	+8° 45' 18"	Leo	377415	4d 21h 06m	-10,59	1900	29,9	66,2° E	66,2°	11:09	17:43		60,0°	261,6°	102,2°
172	2026 06 21	00:00	11h 11m 51,9s	+2° 38' 28"	Leo	383066	5d 21h 06m	-10,90	1872	40,2	78,6° E	78,6°	12:16	18:26	00:04	53,6°	270,1°	94,0°
173	2026 06 22	00:00	11h 57m 49,4s	-3° 26' 22"	Vir	388412	6d 21h 06m	-11,17	1846	50,7	90,6° E	90,6°	13:21	19:09	00:25	47,2°	278,3°	85,8°
174	2026 06 23	00:00	12h 43m 0,5s	-9° 15' 51"	Vir	393153	7d 21h 06m	-11,40	1824	60,7	102,3° E	102,3°	14:24	19:51	00:47	41,1°	286,0°	78,1°
175	2026 06 24	00:00	13h 28m 31,8s	-14° 38' 44"	Vir	397095	8d 21h 06m	-11,60	1805	70,2	113,7° E	113,6°	15:28	20:35	01:09	35,4°	293,1°	70,8°
176	2026 06 25	00:00	14h 15m 18,6s	-19° 24' 34"	Vir	400142	9d 21h 06m	-11,78	1792	78,6	125,0° E	124,8°	16:31	21:20	01:34	30,4°	299,1°	64,4°
177	2026 06 26	00:00	15h 4m 0,5s	-23° 22' 43"	Lib	402278	10d 21h 06m	-11,94	1782	85,9	136,1° E	135,8°	17:34	22:08	02:03	26,2°	303,9°	58,9°
178	2026 06 27	00:00	15h 54m 53,9s	-26° 22' 23"	Sco	403546	11d 21h 06m	-12,10	1777	91,8	147,1° E	146,6°	18:34	22:58	02:38	23,1°	307,0°	54,8°
179	2026 06 28	00:00	16h 47m 45,7s	-28° 13' 33"	Sco	404020	12d 21h 06m	-12,25	1775	96,2	158,1° E	157,4°	19:29	23:49	03:20	21,2°	308,3°	52,3°
180	2026 06 29	00:00	17h 41m 50,7s	-28° 48' 42"	Oph	403790	13d 21h 06m	-12,39	1776	98,9	169,1° E	167,8°	20:18		04:10	21,4°	307,4°	51,8°
181	2026 06 30	00:00	18h 36m 2,1s	-28° 4' 45"	Sgr	402935	14d 21h 06m	-12,50	1779	99,8	179,9° W	175,1°	20:59	00:41	05:06	23,5°	304,7°	53,3°
182	2026 07 01	00:00	19h 29m 11,5s	-26° 3' 59"	Sgr	401516	15d 21h 06m	-12,41	1786	98,9	168,9° W	168,1°	21:33	01:31	06:08	26,9°	300,2°	56,8°
183	2026 07 02	00:00	20h 20m 30,3s	-22° 53' 32"	Cap	399566	16d 21h 06m	-12,27	1794	96,2	157,7° W	157,5°	22:02	02:19	07:11	31,3°	294,5°	61,9°
184	2026 07 03	00:00	21h 9m 40,9s	-18° 43' 46"	Cap	397096	17d 21h 06m	-12,13	1805	91,7	146,5° W	146,4°	22:27	03:05	08:16	36,5°	287,7°	68,2°
185	2026 07 04	00:00	21h 56m 56,7s	-13° 46' 28"	Cap	394105	18d 21h 06m	-11,98	1819	85,5	135,1° W	135,1°	22:49	03:49	09:20	42,4°	280,3°	75,5°
186	2026 07 05	00:00	22h 42m 55,0s	-8° 13' 40"	Aqr	390596	19d 21h 06m	-11,81	1836	77,7	123,5° W	123,5°	23:11	04:32	10:25	48,6°	272,4°	83,4°
187	2026 07 06	00:00	23h 28m 30,1s	-2° 17' 23"	Psc	386604	20d 21h 06m	-11,62	1854	68,6	111,7° W	111,7°	23:32	05:15	11:30	55,0°	264,2°	91,7°
188	2026 07 07	00:00	0h 14m 47,3s	+3° 49' 49"	Psc	382214	21d 21h 06m	-11,40	1876	58,5	99,6° W	99,6°	23:56	05:59	12:37	61,3°	256,0°	100,2°
189	2026 07 08	00:00	1h 2m 59,8s	+9° 53' 39"	Psc	377585	22d 21h 06m	-11,15	1899	47,7	87,2° W	87,2°	06:45	13:48		67,1°	248,2°	108,5°
190	2026 07 09	00:00	1h 54m 23,5s	+15° 36' 33"	Ari	372961	23d 21h 06m	-10,85	1922	36,7	74,4° W	74,4°	00:22	07:36	15:02	67,1°	248,2°	116,2°
191	2026 07 10	00:00	2h 50m 4,6s	+20° 36' 28"	Ari	368667	24d 21h 06m	-10,50	1945	26,1	61,2° W	61,3°	00:55	08:31	16:20	72,1°	241,1°	122,6°
192	2026 07 11	00:00	3h 50m 36,2s	+24° 26' 57"	Tau	365083	25d 21h 06m	-10,07	1964	16,4	47,6° W	47,7°	01:37	09:33	17:37	75,6°	235,5°	126,8°
193	2026 07 12	00:00	4h 55m 24,9s	+26° 40' 45"	Tau	362594	26d 21h 06m	-9,57	1977	8,6	33,7° W	34,0°	02:31	10:39	18:48	77,2°	232,4°	128,0°
194	2026 07 13	00:00	6h 2m 30,7s	+26° 57' 31"	Gem	361529	27d 21h 06m	-8,98	1983	3,0	19,7° W	20,0°	03:38	11:46	19:47	76,4°	232,4°	125,9°
195	2026 07 14	00:00	7h 8m 57,3s	+25° 12' 21"	Gem	362089	28d 21h 06m	-8,31	1980	0,3	5,7° W	6,3°	04:55	12:50	20:34	73,5°	235,7°	120,9°
196	2026 07 15	00:00	8h 12m 6,8s	+21° 38' 46"	Cnc	364297	0d 14h 17m	-8,40	1968	0,5	8,3° E	8,4°	06:16	13:50	21:11	68,7°	241,7°	113,9°
197	2026 07 16	00:00	9h 10m 38,3s	+16° 43' 3"	Cnc	367984	1d 14h 17m	-9,02	1948	3,6	21,9° E	21,9°	07:35	14:44	21:40	62,8°	249,4°	105,9°
198	2026 07 17	00:00	10h 4m 32,2s	+10° 55' 14"	Leo	372817	2d 14h 17m	-9,56	1923	9,2	35,2° E	35,2°	08:50	15:34	22:05	56,3°	257,9°	97,4°
199	2026 07 18	00:00	10h 54m 39,9s	+4° 42' 27"	Leo	378355	3d 14h 17m	-10,01	1895	16,7	48,1° E	48,1°	10:00	16:20	22:28	49,7°	266,7°	89,0°
200	2026 07 19	00:00	11h 42m 12,8s	-1° 33' 39"	Vir	384120	4d 14h 17m	-10,39	1866	25,5	60,5° E	60,6°	11:08	17:04	22:50	43,3°	275,3°	80,8°

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date yyyy mm dd	Hour hh:mm	R. A. (2000.0) topocentric	Decl. (2000.0) topocentric	Const.	Dist. E. km	Age days	Magn. mV	Diam. "	Illum. %	Elong. °	Separ. °	Rise hh:mm	Transit hh:mm	Set hh:mm	Elevation (max.)	Azimuth at rise	Azimuth at set	
201	2026	07 20	00:00	12h 28m 25,2s	-7° 36' 32"	Vir	389660	5d 14h 17m	-10,71	1840	35,2	72,6° E	72,6°	12:13	17:47	23:12	37,3°	283,4°	73,2°
202	2026	07 21	00:00	13h 14m 25,7s	-13° 13' 24"	Vir	394594	6d 14h 17m	-10,99	1817	45,1	84,3° E	84,3°	13:18	18:31	23:36	31,9°	290,9°	66,3°
203	2026	07 22	00:00	14h 1m 13,2s	-18° 13' 25"	Vir	398639	7d 14h 17m	-11,23	1798	55,0	95,7° E	95,6°	14:22	19:17		31,9°	297,3°	66,3°
204	2026	07 23	00:00	14h 49m 33,3s	-22° 26' 32"	Lib	401621	8d 14h 17m	-11,45	1785	64,5	106,8° E	106,8°	15:26	20:04	00:04	27,4°	302,6°	60,5°
205	2026	07 24	00:00	15h 39m 52,1s	-25° 42' 52"	Lib	403467	9d 14h 17m	-11,64	1777	73,4	117,9° E	117,7°	16:27	20:53	00:37	23,9°	306,3°	55,8°
206	2026	07 25	00:00	16h 32m 9,1s	-27° 52' 56"	Sco	404194	10d 14h 17m	-11,82	1774	81,3	128,9° E	128,6°	17:24	21:44	01:17	21,6°	308,2°	52,8°
207	2026	07 26	00:00	17h 25m 53,5s	-28° 48' 56"	Oph	403894	11d 14h 17m	-11,99	1775	88,1	139,8° E	139,5°	18:15	22:36	02:04	20,5°	308,0°	51,6°
208	2026	07 27	00:00	18h 20m 9,2s	-28° 26' 19"	Sgr	402706	12d 14h 17m	-12,16	1780	93,5	150,8° E	150,4°	18:59	23:27	02:58	20,9°	305,8°	52,5°
209	2026	07 28	00:00	19h 13m 50,2s	-26° 45' 17"	Sgr	400799	13d 14h 17m	-12,32	1789	97,4	161,9° E	161,4°	19:35		03:59	22,6°	301,9°	55,4°
210	2026	07 29	00:00	20h 6m 1,3s	-23° 51' 1"	Sgr	398346	14d 14h 17m	-12,48	1800	99,5	173,1° E	172,2°	20:06	00:16	05:03	29,8°	296,4°	60,1°
211	2026	07 30	00:00	20h 56m 13,6s	-19° 52' 42"	Cap	395508	15d 14h 17m	-12,53	1813	99,8	175,6° W	175,0°	20:32	01:03	06:08	34,9°	289,9°	66,1°
212	2026	07 31	00:00	21h 44m 28,3s	-15° 2' 2"	Cap	392415	16d 14h 17m	-12,40	1827	98,1	164,1° W	164,1°	20:55	01:48	07:13	40,6°	282,6°	73,2°
213	2026	08 01	00:00	22h 31m 12,6s	-9° 31' 54"	Aqr	389164	17d 14h 17m	-12,25	1842	94,4	152,5° W	152,5°	21:16	02:31	08:18	46,8°	274,7°	81,1°
214	2026	08 02	00:00	23h 17m 12,1s	-3° 35' 36"	Aqr	385820	18d 14h 17m	-12,10	1858	88,7	140,6° W	140,6°	21:38	03:14	09:23	53,1°	266,6°	89,3°
215	2026	08 03	00:00	0h 3m 25,0s	+2° 33' 3"	Psc	382426	19d 14h 17m	-11,93	1875	81,2	128,5° W	128,5°	22:00	03:58	10:29	59,5°	258,4°	97,8°
216	2026	08 04	00:00	0h 50m 57,6s	+8° 39' 17"	Psc	379028	20d 14h 17m	-11,74	1892	72,2	116,2° W	116,2°	22:25	04:43	11:38	65,4°	250,5°	106,1°
217	2026	08 05	00:00	1h 40m 59,4s	+14° 26' 18"	Psc	375689	21d 14h 17m	-11,52	1908	61,9	103,6° W	103,6°	22:55	05:31	12:50	70,6°	243,2°	113,9°
218	2026	08 06	00:00	2h 34m 34,7s	+19° 34' 27"	Ari	372517	22d 14h 17m	-11,26	1925	50,8	90,8° W	90,8°	23:32	06:23	14:04	74,6°	237,2°	120,6°
219	2026	08 07	00:00	3h 32m 25,5s	+23° 40' 55"	Tau	369674	23d 14h 17m	-10,96	1939	39,4	77,6° W	77,7°		07:21	15:20	76,9°	233,2°	125,6°
220	2026	08 08	00:00	4h 34m 25,3s	+26° 21' 33"	Tau	367375	24d 14h 17m	-10,61	1952	28,4	64,3° W	64,3°	00:19	08:23	16:31	76,9°	233,2°	128,0°
221	2026	08 09	00:00	5h 39m 16,9s	+27° 15' 49"	Tau	365868	25d 14h 17m	-10,18	1960	18,5	50,7° W	50,8°	01:19	09:28	17:34	77,1°	231,8°	127,3°
222	2026	08 10	00:00	6h 44m 40,6s	+26° 13' 43"	Gem	365394	26d 14h 17m	-9,69	1962	10,2	37,0° W	37,1°	02:30	10:32	18:25	75,2°	233,7°	123,6°
223	2026	08 11	00:00	7h 48m 5,2s	+23° 20' 30"	Gem	366138	27d 14h 17m	-9,11	1958	4,1	23,3° W	23,4°	03:48	11:33	19:05	71,3°	238,4°	117,6°
224	2026	08 12	00:00	8h 47m 48,0s	+18° 55' 12"	Cnc	368179	28d 14h 17m	-8,46	1947	0,7	9,7° W	9,8°	05:08	12:30	19:38	65,9°	245,4°	110,0°
225	2026	08 13	00:00	9h 43m 18,4s	+13° 24' 23"	Leo	371460	0d 6h 23m	-8,11	1930	0,1	3,7° E	3,7°	06:25	13:22	20:05	59,6°	253,6°	101,6°
226	2026	08 14	00:00	10h 35m 3,9s	+7° 15' 35"	Leo	375779	1d 6h 23m	-8,74	1908	2,2	16,8° E	16,9°	07:38	14:10	20:29	52,8°	262,5°	92,9°
227	2026	08 15	00:00	11h 24m 2,2s	+0° 53' 9"	Leo	380811	2d 6h 23m	-9,29	1883	6,6	29,6° E	29,7°	08:48	14:55	20:51	46,1°	271,4°	84,4°
228	2026	08 16	00:00	12h 11m 20,6s	-5° 22' 56"	Vir	386159	3d 6h 23m	-9,76	1857	12,9	41,9° E	42,1°	09:56	15:40	21:14	39,8°	280,0°	76,4°
229	2026	08 17	00:00	12h 58m 4,8s	-11° 16' 48"	Vir	391397	4d 6h 23m	-10,16	1832	20,8	54,0° E	54,1°	11:03	16:25	21:38	34,0°	287,9°	69,0°
230	2026	08 18	00:00	13h 45m 13,3s	-16° 35' 37"	Vir	396128	5d 6h 23m	-10,50	1810	29,6	65,6° E	65,8°	12:09	17:10	22:04	29,0°	295,0°	62,6°
231	2026	08 19	00:00	14h 33m 32,6s	-21° 8' 25"	Lib	400015	6d 6h 23m	-10,79	1792	39,0	77,0° E	77,1°	13:13	17:57	22:36	25,1°	300,8°	57,3°
232	2026	08 20	00:00	15h 23m 32,8s	-24° 45' 17"	Lib	402811	7d 6h 23m	-11,06	1780	48,6	88,2° E	88,2°	14:17	18:47	23:13	22,2°	305,2°	53,6°
233	2026	08 21	00:00	16h 15m 20,9s	-27° 17' 13"	Sco	404368	8d 6h 23m	-11,29	1773	58,1	99,2° E	99,1°	15:16	19:37	23:57	20,7°	307,8°	51,7°
234	2026	08 22	00:00	17h 8m 37,1s	-28° 36' 42"	Oph	404640	9d 6h 23m	-11,51	1772	67,2	110,1° E	110,0°	16:09	20:29		20,7°	308,4°	51,7°
235	2026	08 23	00:00	18h 2m 37,0s	-28° 38' 50"	Sgr	403680	10d 6h 23m	-11,71	1776	75,8	121,0° E	120,9°	16:56	21:20	00:49	20,5°	307,0°	51,9°
236	2026	08 24	00:00	18h 56m 22,8s	-27° 22' 31"	Sgr	401623	11d 6h 23m	-11,90	1785	83,4	132,0° E	131,9°	17:35	22:10	01:48	21,8°	303,6°	54,0°
237	2026	08 25	00:00	19h 49m 1,4s	-24° 50' 56"	Sgr	398675	12d 6h 23m	-12,08	1798	90,0	143,1° E	143,0°	18:07	22:58	02:50	24,3°	298,7°	58,1°
238	2026	08 26	00:00	20h 39m 59,3s	-21° 11' 15"	Cap	395087	13d 6h 23m	-12,26	1815	95,1	154,4° E	154,3°	18:35	23:44	03:56	28,1°	292,4°	63,7°
239	2026	08 27	00:00	21h 29m 10,0s	-16° 33' 32"	Cap	391134	14d 6h 23m	-12,44	1833	98,5	166,0° E	165,9°	18:59		05:01	38,5°	285,3°	70,5°
240	2026	08 28	00:00	22h 16m 52,4s	-11° 9' 51"	Aqr	387083	15d 6h 23m	-12,61	1852	100,0	177,7° E	177,7°	19:22	00:28	06:07	44,6°	277,5°	78,2°
241	2026	08 29	00:00	23h 3m 45,0s	-5° 13' 41"	Aqr	383170	16d 6h 23m	-12,53	1871	99,3	170,3° W	170,3°	19:43	01:12	07:13	51,1°	269,3°	86,5°
242	2026	08 30	00:00	23h 50m 39,6s	+1° 0' 14"	Psc	379584	17d 6h 23m	-12,39	1889	96,4	158,0° W	158,0°	20:05	01:56	08:20	57,5°	260,9°	95,1°
243	2026	08 31	00:00	0h 38m 36,7s	+7° 15' 43"	Psc	376448	18d 6h 23m	-12,23	1905	91,2	145,5° W	145,4°	20:30	02:41	09:29	63,7°	252,8°	103,6°
244	2026	09 01	00:00	1h 28m 40,0s	+13° 14' 40"	Psc	373827	19d 6h 23m	-12,05	1918	84,0	132,8° W	132,7°	20:58	03:28	10:40	69,2°	245,3°	111,6°
245	2026	09 02	00:00	2h 21m 48,4s	+18° 36' 47"	Ari	371742	20d 6h 23m	-11,86	1929	75,0	119,9° W	119,8°	21:32	04:20	11:54	73,5°	238,9°	118,8°
246	2026	09 03	00:00	3h 18m 41,7s	+22° 59' 48"	Ari	370189	21d 6h 23m	-11,63	1937	64,6	106,9° W	106,8°	22:15	05:15	13:09	76,4°	234,2°	124,3°
247	2026	09 04	00:00	4h 19m 18,6s	+26° 1' 8"	Tau	369166	22d 6h 23m	-11,36	1942	53,3	93,7° W	93,7°	23:09	06:15	14:21	77,3°	231,9°	127,6°
248	2026	09 05	00:00	5h 22m 38,2s	+27° 21' 45"	Tau	368695	23d 6h 23m	-11,05	1945	41,8	80,4° W	80,4°		07:17	15:25	76,2°	232,6°	128,0°
249	2026	09 06	00:00	6h 26m 43,7s	+26° 51' 26"	Gem	368827	24d 6h 23m	-10,70	1944	30,7	67,1° W	67,1°	00:15	08:20	16:19	76,2°	232,6°	125,4°
250	2026	09 07	00:00	7h 29m 21,0s	+24° 32' 33"	Gem	369639	25d 6h 23m	-10,28	1940	20,6	53,8° W	53,8°	01:29	09:21	17:02	73,1°	236,2°	120,4°



# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
251	2026 09 08	00:00	8h 28m 50,2s	+20° 39' 33"	Cnc	371210	26d 6h 23m	-9,81	1931	12,1	40,5° W	40,6°	02:46	10:18	17:36	68,4°	242,2°	113,5°
252	2026 09 09	00:00	9h 24m 32,2s	+15° 34' 34"	Leo	373590	27d 6h 23m	-9,26	1919	5,6	27,4° W	27,4°	04:02	11:10	18:05	62,5°	249,8°	105,5°
253	2026 09 10	00:00	10h 16m 42,5s	+9° 42' 7"	Leo	376770	28d 6h 23m	-8,65	1903	1,6	14,4° W	14,4°	05:16	11:59	18:30	56,0°	258,3°	97,0°
254	2026 09 11	00:00	11h 6m 9,0s	+3° 25' 41"	Leo	380656	29d 6h 23m	-8,01	1883	0,1	1,6° W	2,7°	06:27	12:46	18:53	49,3°	267,2°	88,4°
255	2026 09 12	00:00	11h 53m 52,5s	-2° 53' 58"	Vir	385063	0d 20h 33m	-8,43	1862	1,0	10,9° E	11,3°	07:36	13:31	19:15	42,7°	276,0°	80,1°
256	2026 09 13	00:00	12h 40m 55,0s	-8° 59' 5"	Vir	389725	1d 20h 33m	-8,99	1840	4,1	23,1° E	23,4°	08:44	14:16	19:39	36,6°	284,3°	72,3°
257	2026 09 14	00:00	13h 28m 12,4s	-14° 34' 34"	Vir	394324	2d 20h 33m	-9,47	1818	9,2	35,0° E	35,3°	09:51	15:02	20:04	31,2°	291,9°	65,3°
258	2026 09 15	00:00	14h 16m 30,3s	-19° 27' 29"	Vir	398520	3d 20h 33m	-9,88	1799	15,8	46,5° E	46,8°	10:58	15:49	20:34	26,7°	298,4°	59,5°
259	2026 09 16	00:00	15h 6m 18,5s	-23° 26' 33"	Lib	401988	4d 20h 33m	-10,25	1784	23,6	57,9° E	58,1°	12:03	16:38	21:09	23,3°	303,5°	55,0°
260	2026 09 17	00:00	15h 57m 46,3s	-26° 22' 7"	Sco	404449	5d 20h 33m	-10,57	1773	32,3	69,0° E	69,1°	13:04	17:29	21:51	21,2°	306,9°	52,4°
261	2026 09 18	00:00	16h 50m 38,0s	-28° 6' 31"	Sco	405694	6d 20h 33m	-10,86	1767	41,4	79,9° E	80,0°	14:00	18:20	22:40	20,5°	308,3°	51,7°
262	2026 09 19	00:00	17h 44m 15,1s	-28° 34' 47"	Sgr	405605	7d 20h 33m	-11,12	1768	50,8	90,8° E	90,8°	14:50	19:11	23:36	21,2°	307,7°	53,0°
263	2026 09 20	00:00	18h 37m 45,8s	-27° 45' 32"	Sgr	404159	8d 20h 33m	-11,36	1774	60,2	101,7° E	101,6°	15:31	20:02		21,2°	305,1°	53,0°
264	2026 09 21	00:00	19h 30m 20,5s	-25° 41' 5"	Sgr	401436	9d 20h 33m	-11,59	1786	69,3	112,6° E	112,6°	16:06	20:50	00:37	23,2°	300,8°	56,3°
265	2026 09 22	00:00	20h 21m 26,4s	-22° 27' 3"	Cap	397612	10d 20h 33m	-11,80	1803	77,8	123,7° E	123,7°	16:36	21:37	01:41	26,5°	295,1°	61,2°
266	2026 09 23	00:00	21h 10m 55,2s	-18° 11' 36"	Cap	392954	11d 20h 33m	-12,01	1825	85,4	135,1° E	135,0°	17:01	22:22	02:46	30,8°	288,4°	67,6°
267	2026 09 24	00:00	21h 59m 2,3s	-13° 4' 45"	Aqr	387797	12d 20h 33m	-12,21	1849	91,8	146,7° E	146,7°	17:25	23:06	03:52	36,1°	280,8°	74,9°
268	2026 09 25	00:00	22h 46m 23,3s	-7° 18' 8"	Aqr	382519	13d 20h 33m	-12,40	1874	96,6	158,7° E	158,7°	17:47	23:50	04:58	42,0°	272,7°	83,0°
269	2026 09 26	00:00	23h 33m 47,4s	-1° 5' 17"	Psc	377506	14d 20h 33m	-12,59	1899	99,4	171,0° E	170,9°	18:09		06:05	55,0°	264,2°	91,6°
270	2026 09 27	00:00	0h 22m 13,6s	+5° 17' 47"	Psc	373108	15d 20h 33m	-12,66	1922	99,8	176,3° W	175,5°	18:33	00:36	07:15	61,4°	255,9°	100,3°
271	2026 09 28	00:00	1h 12m 44,8s	+11° 32' 1"	Psc	369604	16d 20h 33m	-12,52	1940	97,8	163,4° W	163,0°	19:00	01:23	08:27	67,3°	247,9°	108,7°
272	2026 09 29	00:00	2h 6m 19,7s	+17° 15' 13"	Ari	367165	17d 20h 33m	-12,36	1953	93,3	150,2° W	149,9°	19:33	02:14	09:42	72,2°	240,9°	116,4°
273	2026 09 30	00:00	3h 3m 38,1s	+22° 2' 42"	Ari	365850	18d 20h 33m	-12,18	1960	86,4	136,8° W	136,6°	20:14	03:10	10:58	75,6°	235,6°	122,7°
274	2026 10 01	00:00	4h 4m 38,5s	+25° 29' 41"	Tau	365609	19d 20h 33m	-11,97	1961	77,5	123,4° W	123,2°	21:05	04:09	12:12	77,1°	232,5°	126,7°
275	2026 10 02	00:00	5h 8m 18,7s	+27° 15' 45"	Tau	366317	20d 20h 33m	-11,73	1957	67,1	109,9° W	109,9°	22:07	05:11	13:19	76,6°	232,3°	128,0°
276	2026 10 03	00:00	6h 12m 39,9s	+27° 10' 18"	Gem	367810	21d 20h 33m	-11,45	1949	55,9	96,6° W	96,6°	23:18	06:14	14:16	74,1°	235,0°	126,3°
277	2026 10 04	00:00	7h 15m 26,3s	+25° 15' 48"	Gem	369929	22d 20h 33m	-11,14	1938	44,4	83,4° W	83,4°		07:15	15:01	70,0°	240,1°	122,1°
278	2026 10 05	00:00	8h 14m 56,8s	+21° 46' 33"	Cnc	372540	23d 20h 33m	-10,79	1924	33,3	70,3° W	70,3°	00:33	08:12	15:37	70,0°	240,1°	115,9°
279	2026 10 06	00:00	9h 10m 32,8s	+17° 3' 42"	Cnc	375550	24d 20h 33m	-10,39	1909	23,2	57,4° W	57,4°	01:48	09:04	16:07	64,7°	247,1°	108,5°
280	2026 10 07	00:00	10h 2m 30,8s	+11° 30' 7"	Leo	378900	25d 20h 33m	-9,94	1892	14,5	44,7° W	44,7°	03:01	09:53	16:32	58,5°	255,1°	100,4°
281	2026 10 08	00:00	10h 51m 39,8s	+5° 27' 21"	Leo	382545	26d 20h 33m	-9,44	1874	7,7	32,2° W	32,2°	04:11	10:39	16:56	52,0°	263,7°	91,9°
282	2026 10 09	00:00	11h 39m 1,6s	-0° 45' 19"	Vir	386430	27d 20h 33m	-8,88	1855	3,0	19,9° W	20,0°	05:20	11:24	17:18	45,5°	272,3°	83,6°
283	2026 10 10	00:00	12h 25m 39,1s	-6° 50' 49"	Vir	390469	28d 20h 33m	-8,30	1836	0,6	7,7° W	8,6°	06:27	12:09	17:41	39,2°	280,8°	75,6°
284	2026 10 11	00:00	13h 12m 29,3s	-12° 33' 47"	Vir	394528	0d 8h 10m	-8,13	1817	0,3	4,2° E	6,1°	07:34	12:54	18:05	33,5°	288,6°	68,3°
285	2026 10 12	00:00	14h 0m 19,1s	-17° 40' 15"	Vir	398425	1d 8h 10m	-8,64	1799	2,1	15,8° E	16,6°	08:41	13:41	18:34	28,6°	295,6°	61,9°
286	2026 10 13	00:00	14h 49m 40,1s	-21° 57' 30"	Lib	401937	2d 8h 10m	-9,14	1784	5,8	27,2° E	27,7°	09:47	14:30	19:07	24,7°	301,4°	56,9°
287	2026 10 14	00:00	15h 40m 43,0s	-25° 14' 25"	Lib	404818	3d 8h 10m	-9,57	1771	11,1	38,4° E	38,8°	10:51	15:20	19:46	22,1°	305,5°	53,5°
288	2026 10 15	00:00	16h 33m 13,3s	-27° 22' 5"	Sco	406824	4d 8h 10m	-9,96	1762	17,7	49,5° E	49,7°	11:49	16:11	20:32	20,8°	307,8°	51,9°
289	2026 10 16	00:00	17h 26m 32,5s	-28° 14' 49"	Oph	407735	5d 8h 10m	-10,32	1758	25,5	60,3° E	60,5°	12:42	17:03	21:25	20,9°	308,0°	52,5°
290	2026 10 17	00:00	18h 19m 48,0s	-27° 50' 51"	Sgr	407385	6d 8h 10m	-10,63	1760	34,0	71,1° E	71,2°	13:26	17:53	22:24	22,4°	306,1°	55,0°
291	2026 10 18	00:00	19h 12m 8,0s	-26° 12' 22"	Sgr	405678	7d 8h 10m	-10,93	1767	43,1	81,9° E	81,9°	14:03	18:42	23:26	25,1°	302,6°	59,2°
292	2026 10 19	00:00	20h 2m 57,7s	-23° 24' 47"	Sgr	402609	8d 8h 10m	-11,20	1781	52,5	92,8° E	92,8°	14:35	19:29		25,1°	297,5°	59,2°
293	2026 10 20	00:00	20h 52m 6,8s	-19° 35' 36"	Cap	398275	9d 8h 10m	-11,45	1800	62,0	103,8° E	103,8°	15:02	20:14	00:30	29,0°	291,3°	64,9°
294	2026 10 21	00:00	21h 39m 49,8s	-14° 53' 26"	Cap	392883	10d 8h 10m	-11,70	1825	71,3	115,1° E	115,1°	15:25	20:58	01:34	33,7°	284,2°	71,7°
295	2026 10 22	00:00	22h 26m 41,9s	-9° 27' 46"	Aqr	386749	11d 8h 10m	-11,93	1854	80,0	126,7° E	126,7°	15:48	21:41	02:39	39,3°	276,4°	79,3°
296	2026 10 23	00:00	23h 13m 33,2s	-3° 29' 21"	Aqr	380281	12d 8h 10m	-12,15	1885	87,6	138,7° E	138,7°	16:10	22:26	03:45	45,5°	268,1°	87,6°
297	2026 10 24	00:00	0h 1m 25,0s	+2° 48' 43"	Psc	373959	13d 8h 10m	-12,36	1917	93,8	151,2° E	151,1°	16:33	23:13	04:54	51,9°	259,7°	96,3°
298	2026 10 25	00:00	0h 51m 25,1s	+9° 9' 38"	Psc	368281	14d 8h 10m	-12,56	1947	98,0	164,2° E	163,8°	16:59		06:05	58,5°	251,5°	104,9°
299	2026 10 26	00:00	1h 44m 41,2s	+15° 11' 50"	Psc	363711	15d 8h 10m	-12,73	1971	99,8	177,5° E	175,2°	17:31	00:03	07:20	70,2°	243,9°	113,1°
300	2026 10 27	00:00	2h 42m 6,2s	+20° 28' 56"	Ari	360610	16d 8h 10m	-12,66	1988	98,9	168,8° W	167,9°	18:10	00:58	08:38	74,3°	237,6°	120,2°

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
301	2026 10 28	00:00	3h 43m 52,9s	+24° 31' 48"	Tau	359180	17d 8h 10m	-12,49	1996	95,2	154,9° W	154,5°	18:59	01:58	09:56	76,6°	233,6°	125,3°
302	2026 10 29	00:00	4h 49m 5,5s	+26° 54' 1"	Tau	359442	18d 8h 10m	-12,30	1995	88,8	141,0° W	140,8°	19:59	03:01	11:08	76,8°	232,3°	127,6°
303	2026 10 30	00:00	5h 55m 33,7s	+27° 19' 32"	Tau	361240	19d 8h 10m	-12,08	1985	80,2	127,2° W	127,1°	21:09	04:06	12:10	74,9°	234,1°	126,9°
304	2026 10 31	00:00	7h 0m 34,0s	+25° 48' 22"	Gem	364290	20d 8h 10m	-11,83	1968	70,1	113,6° W	113,5°	22:24	05:09	12:59	71,2°	238,7°	123,3°
305	2026 11 01	00:00	8h 1m 57,7s	+22° 35' 44"	Cnc	368248	21d 8h 10m	-11,55	1947	59,0	100,2° W	100,2°	23:39	06:08	13:39	66,1°	245,2°	117,6°
306	2026 11 02	00:00	8h 58m 50,9s	+18° 5' 21"	Cnc	372764	22d 8h 10m	-11,24	1923	47,7	87,2° W	87,2°		07:01	14:10	60,3°	252,8°	110,5°
307	2026 11 03	00:00	9h 51m 28,6s	+12° 42' 18"	Leo	377540	23d 8h 10m	-10,90	1899	36,8	74,5° W	74,5°	00:52	07:51	14:37	60,3°	252,8°	102,7°
308	2026 11 04	00:00	10h 40m 45,2s	+6° 48' 54"	Leo	382346	24d 8h 10m	-10,52	1875	26,7	62,1° W	62,1°	02:02	08:37	15:00	54,0°	261,1°	94,5°
309	2026 11 05	00:00	11h 27m 50,1s	+0° 43' 52"	Leo	387026	25d 8h 10m	-10,10	1852	17,9	49,9° W	49,9°	03:10	09:21	15:22	47,6°	269,6°	86,3°
310	2026 11 06	00:00	12h 13m 53,0s	-5° 16' 59"	Vir	391482	26d 8h 10m	-9,64	1831	10,7	37,9° W	38,1°	04:16	10:05	15:44	41,3°	277,9°	78,4°
311	2026 11 07	00:00	12h 59m 57,2s	-10° 59' 39"	Vir	395650	27d 8h 10m	-9,14	1812	5,3	26,2° W	26,5°	05:22	10:49	16:08	35,5°	285,9°	70,9°
312	2026 11 08	00:00	13h 46m 55,5s	-16° 11' 1"	Vir	399474	28d 8h 10m	-8,61	1795	1,8	14,6° W	15,4°	06:28	11:35	16:35	30,4°	293,1°	64,3°
313	2026 11 09	00:00	14h 35m 25,8s	-20° 38' 32"	Lib	402889	29d 8h 10m	-8,11	1780	0,3	3,2° W	6,1°	07:34	12:23	17:06	26,2°	299,2°	58,8°
314	2026 11 10	00:00	15h 25m 45,1s	-24° 10' 21"	Lib	405797	0d 16h 58m	-8,28	1767	0,7	7,9° E	9,5°	08:38	13:12	17:43	23,1°	303,9°	54,8°
315	2026 11 11	00:00	16h 17m 43,9s	-26° 36' 18"	Sco	408075	1d 16h 58m	-8,76	1757	2,9	19,0° E	19,6°	09:39	14:04	18:26	21,3°	306,9°	52,5°
316	2026 11 12	00:00	17h 10m 45,6s	-27° 49' 13"	Oph	409570	2d 16h 58m	-9,22	1750	6,8	29,9° E	30,2°	10:34	14:55	19:17	20,9°	307,8°	52,3°
317	2026 11 13	00:00	18h 3m 54,2s	-27° 46' 7"	Sgr	410119	3d 16h 58m	-9,64	1748	12,2	40,6° E	40,8°	11:21	15:46	20:14	21,9°	306,7°	54,1°
318	2026 11 14	00:00	18h 56m 11,0s	-26° 28' 40"	Sgr	409565	4d 16h 58m	-10,03	1751	18,9	51,3° E	51,4°	12:01	16:35	21:15	24,1°	303,8°	57,7°
319	2026 11 15	00:00	19h 46m 52,2s	-24° 2' 21"	Sgr	407783	5d 16h 58m	-10,38	1758	26,7	62,0° E	62,1°	12:34	17:22	22:17	27,6°	299,3°	62,8°
320	2026 11 16	00:00	20h 35m 40,0s	-20° 35' 8"	Cap	404701	6d 16h 58m	-10,71	1772	35,3	72,8° E	72,8°	13:02	18:07	23:20	31,9°	293,7°	69,0°
321	2026 11 17	00:00	21h 22m 43,8s	-16° 15' 52"	Cap	400326	7d 16h 58m	-11,01	1791	44,6	83,7° E	83,7°	13:26	18:50		31,9°	287,0°	69,0°
322	2026 11 18	00:00	22h 8m 35,8s	-11° 13' 29"	Aqr	394762	8d 16h 58m	-11,30	1816	54,4	94,9° E	94,9°	13:49	19:33	00:23	37,0°	279,7°	76,2°
323	2026 11 19	00:00	22h 54m 5,0s	-5° 37' 5"	Aqr	388230	9d 16h 58m	-11,57	1847	64,2	106,4° E	106,4°	14:10	20:16	01:27	42,8°	271,9°	84,0°
324	2026 11 20	00:00	23h 40m 13,0s	+0° 23' 15"	Psc	381074	10d 16h 58m	-11,83	1881	73,8	118,3° E	118,3°	14:33	21:00	02:32	49,0°	263,7°	92,3°
325	2026 11 21	00:00	0h 28m 11,1s	+6° 34' 57"	Psc	373753	11d 16h 58m	-12,07	1918	82,7	130,8° E	130,7°	14:57	21:48	03:41	55,4°	255,5°	100,7°
326	2026 11 22	00:00	1h 19m 16,4s	+12° 41' 2"	Psc	366818	12d 16h 58m	-12,31	1955	90,3	143,8° E	143,6°	15:25	22:41	04:53	61,7°	247,6°	109,1°
327	2026 11 23	00:00	2h 14m 42,1s	+18° 18' 29"	Ari	360857	13d 16h 58m	-12,52	1987	96,0	157,3° E	156,8°	16:01	23:39	06:10	67,6°	240,6°	116,8°
328	2026 11 24	00:00	3h 15m 15,2s	+22° 58' 5"	Ari	356420	14d 16h 58m	-12,72	2012	99,2	171,2° E	170,0°	16:45		07:29	75,7°	235,4°	122,9°
329	2026 11 25	00:00	4h 20m 40,0s	+26° 7' 47"	Tau	353929	15d 16h 58m	-12,78	2026	99,6	174,6° W	172,9°	17:42	00:42	08:46	76,8°	232,7°	126,7°
330	2026 11 26	00:00	5h 29m 7,1s	+27° 21' 12"	Tau	353594	16d 16h 58m	-12,61	2028	96,9	160,2° W	159,8°	18:51	01:49	09:55	75,7°	233,3°	127,3°
331	2026 11 27	00:00	6h 37m 30,9s	+26° 27' 58"	Gem	355379	17d 16h 58m	-12,41	2017	91,4	146,0° W	145,8°	20:08	02:55	10:52	72,5°	237,0°	124,7°
332	2026 11 28	00:00	7h 42m 47,5s	+23° 38' 21"	Gem	359016	18d 16h 58m	-12,18	1997	83,5	132,0° W	131,9°	21:26	03:58	11:37	67,7°	243,0°	119,5°
333	2026 11 29	00:00	8h 43m 11,3s	+19° 17' 41"	Cnc	364070	19d 16h 58m	-11,93	1969	73,8	118,3° W	118,3°	22:42	04:56	12:12	62,0°	250,6°	112,7°
334	2026 11 30	00:00	9h 38m 30,2s	+13° 56' 3"	Leo	370032	20d 16h 58m	-11,66	1938	63,1	105,1° W	105,1°	23:54	05:48	12:40	55,7°	258,9°	104,9°
335	2026 12 01	00:00	10h 29m 34,0s	+8° 0' 39"	Leo	376405	21d 16h 58m	-11,35	1905	52,1	92,3° W	92,3°		06:35	13:05	49,3°	267,3°	96,7°
336	2026 12 02	00:00	11h 17m 37,8s	+1° 53' 13"	Leo	382764	22d 16h 58m	-11,03	1873	41,4	79,9° W	79,9°	01:03	07:21	13:27	49,3°	267,3°	88,5°
337	2026 12 03	00:00	12h 4m 0,0s	-4° 9' 31"	Vir	388787	23d 16h 58m	-10,67	1844	31,3	67,9° W	67,9°	02:09	08:04	13:49	43,0°	275,7°	80,5°
338	2026 12 04	00:00	12h 49m 52,9s	-9° 54' 4"	Vir	394259	24d 16h 58m	-10,28	1818	22,3	56,1° W	56,2°	03:14	08:48	14:12	37,1°	283,7°	73,0°
339	2026 12 05	00:00	13h 36m 17,6s	-15° 8' 36"	Vir	399057	25d 16h 58m	-9,87	1797	14,6	44,6° W	44,8°	04:19	09:33	14:38	31,8°	291,0°	66,2°
340	2026 12 06	00:00	14h 24m 1,0s	-19° 41' 54"	Lib	403124	26d 16h 58m	-9,41	1778	8,5	33,4° W	33,7°	05:24	10:19	15:07	27,4°	297,4°	60,4°
341	2026 12 07	00:00	15h 13m 30,1s	-23° 23' 1"	Lib	406444	27d 16h 58m	-8,93	1764	3,9	22,3° W	22,8°	06:29	11:08	15:42	24,0°	302,5°	56,0°
342	2026 12 08	00:00	16h 4m 46,1s	-26° 1' 46"	Sco	409014	28d 16h 58m	-8,42	1753	1,2	11,3° W	12,4°	07:30	11:58	16:23	21,8°	306,0°	53,2°
343	2026 12 09	00:00	16h 57m 20,9s	-27° 30' 4"	Oph	410820	29d 16h 58m	-8,01	1745	0,2	0,4° W	4,8°	08:27	12:49	17:11	21,0°	307,6°	52,3°
344	2026 12 10	00:00	17h 50m 21,6s	-27° 43' 31"	Sgr	411831	0d 23h 08m	-8,35	1741	1,0	10,3° E	11,2°	09:17	13:41	18:07	21,5°	307,2°	53,5°
345	2026 12 11	00:00	18h 42m 45,3s	-26° 42' 24"	Sgr	411984	1d 23h 08m	-8,83	1740	3,4	21,0° E	21,3°	09:59	14:30	19:06	23,4°	304,8°	56,5°
346	2026 12 12	00:00	19h 33m 38,6s	-24° 31' 36"	Sgr	411200	2d 23h 08m	-9,29	1744	7,5	31,6° E	31,7°	10:34	15:18	20:08	26,4°	300,8°	61,2°
347	2026 12 13	00:00	20h 22m 31,8s	-21° 19' 16"	Cap	409388	3d 23h 08m	-9,72	1751	13,1	42,3° E	42,3°	11:03	16:03	21:10	30,5°	295,5°	67,0°
348	2026 12 14	00:00	21h 9m 23,9s	-17° 15' 1"	Cap	406469	4d 23h 08m	-10,11	1764	20,0	53,0° E	53,0°	11:29	16:46	22:12	35,3°	289,2°	73,8°
349	2026 12 15	00:00	21h 54m 38,8s	-12° 28' 43"	Cap	402399	5d 23h 08m	-10,48	1782	28,1	63,9° E	63,9°	11:51	17:28	23:15	40,8°	282,3°	81,2°
350	2026 12 16	00:00	22h 38m 59,4s	-7° 9' 46"	Aqr	397196	6d 23h 08m	-10,82	1805	37,1	75,0° E	75,0°	12:12	18:10		40,8°	274,8°	81,2°

# Topocentric ephemeris of the Moon (following)

Times are given in UT for Aveiro (8° 37' 48" W, 40° 36' 7" N, zone Z).

	Date	Hour	R. A. (2000.0)	Decl. (2000.0)	Const.	Dist. E.	Age	Magn.	Diam.	Illum.	Elong.	Separ.	Rise	Transit	Set	Elevation	Azimuth	Azimuth
	yyyy mm dd	hh:mm	topocentric	topocentric		km	days	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	(max.)	at rise	at set
351	2026 12 17	00:00	23h 23m 22,2s	-1° 27' 26"	Psc	390965	7d 23h 08m	-11,14	1834	46,9	86,3° E	86,3°	12:34	18:52	00:17	46,6°	267,0°	89,1°
352	2026 12 18	00:00	0h 8m 54,5s	+4° 28' 6"	Psc	383926	8d 23h 08m	-11,44	1867	57,2	98,1° E	98,1°	12:56	19:37	01:22	52,8°	259,0°	97,2°
353	2026 12 19	00:00	0h 56m 52,5s	+10° 24' 16"	Psc	376421	9d 23h 08m	-11,72	1905	67,5	110,4° E	110,4°	13:21	20:25	02:30	58,9°	251,2°	105,4°
354	2026 12 20	00:00	1h 48m 37,0s	+16° 3' 56"	Ari	368922	10d 23h 08m	-11,99	1943	77,4	123,2° E	123,1°	13:52	21:19	03:42	64,9°	243,9°	113,2°
355	2026 12 21	00:00	2h 45m 20,7s	+21° 3' 46"	Ari	362002	11d 23h 08m	-12,23	1981	86,2	136,6° E	136,4°	14:31	22:19	04:59	70,1°	237,8°	120,0°
356	2026 12 22	00:00	3h 47m 40,1s	+24° 54' 7"	Tau	356282	12d 23h 08m	-12,47	2012	93,4	150,5° E	150,1°	15:21	23:24	06:17	74,2°	233,7°	125,1°
357	2026 12 23	00:00	4h 54m 53,4s	+27° 3' 27"	Tau	352342	13d 23h 08m	-12,68	2035	98,1	164,7° E	164,1°	16:24		07:31	76,5°	232,6°	127,4°
358	2026 12 24	00:00	6h 4m 36,0s	+27° 8' 17"	Gem	350614	14d 23h 08m	-12,85	2045	99,9	179,2° E	176,2°	17:40	00:32	08:35	74,2°	234,9°	126,3°
359	2026 12 25	00:00	7h 13m 20,5s	+25° 4' 14"	Gem	351295	15d 23h 08m	-12,71	2041	98,5	166,2° W	166,0°	19:00	01:38	09:27	70,0°	240,1°	122,2°
360	2026 12 26	00:00	8h 18m 11,2s	+21° 8' 45"	Cnc	354292	16d 23h 08m	-12,51	2024	94,1	151,9° W	151,9°	20:21	02:41	10:07	64,4°	247,3°	115,8°
361	2026 12 27	00:00	9h 17m 50,2s	+15° 52' 59"	Cnc	359254	17d 23h 08m	-12,28	1996	87,1	137,9° W	137,9°	21:38	03:37	10:39	58,0°	255,7°	108,0°
362	2026 12 28	00:00	10h 12m 31,4s	+9° 50' 21"	Leo	365648	18d 23h 08m	-12,04	1961	78,3	124,3° W	124,3°	22:50	04:29	11:06	51,4°	264,5°	99,6°
363	2026 12 29	00:00	11h 3m 19,3s	+3° 29' 22"	Leo	372866	19d 23h 08m	-11,77	1923	68,2	111,3° W	111,3°	23:59	05:16	11:30	44,8°	273,2°	91,1°
364	2026 12 30	00:00	11h 51m 34,9s	-2° 48' 14"	Vir	380322	20d 23h 08m	-11,48	1885	57,7	98,7° W	98,7°		06:02	11:53	38,7°	281,5°	82,8°
365	2026 12 31	00:00	12h 38m 36,5s	-8° 46' 23"	Vir	387520	21d 23h 08m	-11,17	1850	47,2	86,6° W	86,6°	01:06	06:46	12:16	38,7°	281,5°	75,1°
366	2027 01 01	00:00	13h 25m 32,8s	-14° 12' 39"	Vir	394084	22d 23h 08m	-10,84	1819	37,1	74,9° W	74,9°	02:12	07:31	12:41	33,2°	289,1°	68,0°