

GRAZING LUNAR OCCULTATIONS FOR 2017

This table lists lunar grazing occultation predictions for much of North America (p. 171). Graze tracks are shown in the 6 maps on pp. 176–178. For each graze, the table provides:

- No.** a chronological sequential number used on the maps
- Date** the date
- USNO d...** the star's USNO (U.S. Naval Observatory) reference number and its double-star code (in the "d" column)—(see the bottom of the facing page)
- m** its visual magnitude
- %sl** the percent of the Moon sunlit (+ for waxing, – for waning, E for lunar eclipses)
- L** whether the track is a northern (N) or southern (S) limit
- W.U.T.** the Universal Time at the west end of the track
- Lo., La.** the longitude and latitude of the west end of the track

No.	Date	USNO d	m	%sl	L	W.U.T.	Lo.	La.	No.	Date	USNO d	m	%sl	L	W.U.T.	Lo.	La.
1	Jan. 3	3325	U	6.9	21+	S	2:16.8	-122 20	47	Mar. 5	672	O	6.7	44+	N	0:55.1	-67 54
2	4	X31608		7.0	30+	S	1:32.6	-84 20	48	5	680	V	6.5	44+	S	1:02.4	-102 24
3	5	55	M	6.4	42+	N	5:01.6	-111 31	49	5	677	X	4.8	44+	N	1:43.3	-62 55
4	6	192	5.1	53+	N	2:28.6	-130 24	50	5	682*	V	6.0	44+	S	1:22.5	-110 44	
5	6	202	6.9	54+	N	6:32.7	-130 30	51	5	692*	A	0.9	45+	N	3:25.3	-130 49	
6	7	327	K	4.4	64+	N	4:20.7	-111 21	52	5	685	6.6	45+	S	2:12.9	-119 21	
7	9	627	6.6	86+	N	7:46.6	-130 29	53	5	685	6.6	45+	N	2:53.8	-88 55		
8	10	814	T	5.4	94+	N	11:28.2	-130 53	54	5	699	5.8	46+	S	4:26.8	-130 49	
9	17	1732	6.8	74-	S	9:06.7	-100 35	55	5	704	4.7	46+	S	5:21.0	-90 55		
10	18	1821	O	2.8	66-	N	5:51.9	-81 55	56	5	806	C	5.0	55+	S	22:36.6	-71 48
11	19	1941	4.7	56-	S	8:31.9	-92 55	57	6	814	T	5.4	55+	N	0:01.7	-82 51	
12	22	2280	6.5	27-	S	11:00.2	-106 51	58	6	823	T	6.7	56+	N	1:23.8	-82 29	
13	Feb. 1	12	6.4	17+	S	0:37.4	-104 35	59	6	829	6.8	56+	N	2:18.1	-94 39		
14	1	13	J	6.2	17+	S	0:53.8	-107 32	60	6	836	5.7	56+	N	3:05.3	-108 24	
15	1	15	K	7.0	17+	S	1:17.3	-109 22	61	8	1158	K	5.0	79+	N	6:31.1	-112 55
16	1	X00144	6.8	17+	S	1:22.7	-122 47	62	20	2571	6.8	52-	S	10:56.8	-130 35		
17	1	128	7.0	25+	S	23:25.0	-84 31	63	23	2989	6.7	24-	S	11:51.0	-125 28		
18	3	303	X	6.4	39+	N	6:41.9	-130 44	64	25	3262	K	6.9	9-	S	11:30.5	-96 36
19	5	692*	A	0.9	69+	N	20:11.6	-104 22	65	30	X03132	6.8	5+	S	1:57.9	-110 48	
20	5	695	D	6.6	69+	S	21:12.7	-59 50	66	30	462	K	6.0	11+	S	23:35.9	-76 41
21	5	704	4.7	69+	S	22:13.8	-80 53	67	Apr. 1	626	6.3	20+	S	1:56.5	-111 39		
22	6	741	V	5.5	73+	N	6:58.4	-130 55	68	1	627	6.6	20+	N	2:52.9	-109 25	
23	7	878	K	5.5	81+	S	1:29.8	-123 47	69	1	635	K	3.6	21+	S	3:44.2	-130 35
24	7	886	X	6.8	81+	N	4:31.0	-88 39	70	1	661	V	4.5	22+	S	6:28.9	-130 47
25	7	X07736	7.0	81+	N	4:39.4	-87 46	71	2	806	C	5.0	32+	S	5:28.1	-130 54	
26	9	1207	X	5.6	96+	N	7:59.4	-130 44	72	2	814	T	5.4	33+	N	6:43.7	-130 52
27	16	2008	V	6.6	73-	S	7:07.9	-110 40	73	2	934	6.4	40+	S	23:38.2	-73 51	
28	16	2020	K	6.5	72-	S	11:05.3	-130 49	74	3	943	6.6	41+	N	0:53.7	-76 50	
29	18	2223	T	3.9	55-	S	8:12.3	-103 51	75	3	947	A	5.2	41+	N	1:08.9	-102 23
30	19	2352	M	7.0	45-	S	7:40.7	-83 42	76	3	951	V	6.6	41+	S	1:30.9	-103 42
31	21	2611	7.0	27-	S	9:17.5	-74 48	77	3	X08716	7.0	41+	N	2:15.9	-106 37		
32	21	2629	H	6.4	26-	S	12:05.1	-110 53	78	3	985	A	6.8	44+	N	6:25.0	-130 42
33	Mar. 2	249	4.5	14+	S	1:43.6	-116 31	79	4	1114	6.8	54+	N	5:02.0	-130 47		
34	3	398	V	6.5	24+	N	4:37.0	-124 37	80	4	1124	A	6.9	55+	N	6:31.9	-130 47
35	3	401	V	6.3	24+	N	4:56.6	-130 27	81	15	2396	V	6.7	85-	S	8:39.6	-130 46
36	3	405	V	4.3	25+	S	5:39.6	-130 40	82	18	2798	O	6.1	61-	S	7:33.4	-95 42
37	3	498	V	6.3	32+	S	22:48.3	-72 43	83	21	3206	5.1	30-	S	12:13.0	-126 55	
38	4	508	V	4.1	32+	S	0:14.7	-95 43	84	28	692*	A	0.9	7+	S	16:34.4	-75 20
39	4	516	K	6.9	33+	N	2:14.2	-90 36	85	28	692*	A	0.9	7+	N	16:34.1	-130 41
40	4	526	6.7	35+	N	4:32.1	-121 49	86	29	741	V	5.5	10+	S	3:13.3	-126 33	
41	4	669	V	3.8	44+	S	22:50.7	-118 20	87	May 3	1337	5.7	49+	N	2:23.9	-114 31	
42	4	671	V	3.4	44+	S	22:36.3	-130 21	88	3	1336	5.2	49+	N	2:24.0	-106 47	
43	4	661	V	4.5	43+	S	23:04.5	-78 45	89	4	1547	M	3.8	68+	S	20:17.4	-86 27
44	5	667	V	5.0	44+	N	0:27.9	-84 40	90	15	2729	U	6.9	84-	S	3:58.7	-66 48
45	5	678	5.5	44+	S	0:50.5	-104 52	91	15	2734	5.2	84-	S	5:01.4	-75 54		
46	5	677	X	4.8	44+	S	0:54.5	-102 21	92	15	X25958	V	6.8	84-	S	5:34.9	-84 51

*ZC 692 = Aldebaran

No.	Date	USNO	d	m	%sl	L	W.U.T.	Lo.	La.	No.	Date	USNO	d	m	%sl	L	W.U.T.	Lo.	La.
93	May 17	3022		7.0	67-	S	9:17.6	-130	27	151	Sep. 16	1262	K	6.1	17-	N	8:15.5	-96	51
94	27	832		4.3	3+	N	2:40.5	-115	34	152	17	1396		6.8	9-	N	9:45.3	-98	49
95	29	1158	K	5.0	15+	S	2:57.3	-108	47	153	23	2128		5.8	14+	N	22:55.1	-73	44
96	31	1425	X	7.0	35+	N	4:08.8	-130	37	154	24	2245		6.3	21+	N	23:03.8	-75	47
97	31	1427		7.0	36+	N	4:45.1	-128	49	155	26	2399		4.9	31+	N	3:58.4	-130	35
98	Jun. 1	1522		6.8	44+	N	0:06.0	-79	22	156	28	2639	A	6.0	48+	S	0:41.9	-83	31
99	1	1550	H	5.6	47+	S	6:01.1	-112	55	157	28	2642	V	7.0	49+	S	1:23.1	-84	51
100	2	1644		4.0	56+	N	2:23.7	-130	37	158	29	2798	O	6.1	59+	N	1:52.0	-119	31
101	3	1749		6.0	66+	N	2:49.2	-116	29	159	30	2935		7.0	70+	S	6:41.6	-128	20
102	5	1985		6.9	84+	S	8:58.1	-119	41	160	Oct. 9	627		6.6	83-	N	10:26.2	-130	31
103	18	76		5.9	41-	N	8:06.1	-70	45	161	9	636	O	7.0	83-	N	12:23.1	-130	28
104	20	364		4.3	19-	S	9:36.0	-107	31	162	11	947	A	5.2	64-	N	8:59.8	-130	50
105	21	508	V	4.1	10-	S	11:28.7	-118	20	163	13	1236	Z	5.1	41-	N	8:13.9	-128	52
106	22	661	V	4.5	4-	S	9:38.0	-86	36	164	13	X12393	X	6.2	41-	N	8:14.1	-127	52
107	22	671	V	3.4	4-	S	10:21.5	-94	25	165	13	1241	A	6.5	41-	N	8:54.0	-130	47
108	22	667	V	5.0	4-	N	10:34.1	-97	30	166	15	1487	A	1.4	20-	N	9:56.6	-119	44
109	22	682	V	6.0	4-	S	11:46.6	-115	37	167	17	1728		6.7	5-	N	13:04.0	-128	33
110	22	692*	A	0.9	4+	N	2:49.6	-90	20	168	25	2591	K	6.2	24+	S	1:31.2	-116	22
111	22	692*	A	0.9	4-	N	13:48.4	-130	49	169	25	2729	U	6.9	31+	N	23:54.6	-99	41
112	26	1236	Z	5.1	5+	N	1:56.7	-103	26	170	26	2734		5.2	32+	N	0:37.6	-114	49
113	27	1371		4.3	12+	N	2:00.6	-100	31	171	26	X25958	V	6.8	32+	N	1:19.7	-122	45
114	29	1609	C	4.6	30+	N	3:22.5	-119	38	172	27	2886		4.9	42+	S	4:18.8	-130	27
115	Jul. 1	1821	O	2.8	50+	S	2:02.6	-130	47	173	27	2981	M	5.1	50+	N	22:57.1	-85	37
116	3	2043	K	6.5	70+	N	2:42.9	-111	31	174	28	2993	P	6.7	50+	S	0:08.3	-95	35
117	3	2047		6.6	70+	N	3:09.0	-113	38	175	28	2994	A	5.9	50+	S	0:08.5	-95	34
118	5	2280		6.5	86+	S	7:47.7	-106	20	176	28	3017		5.2	53+	S	5:59.8	-130	48
119	16	170		6.0	56-	N	6:13.4	-87	34	177	30	3268		5.3	71+	S	3:09.3	-130	46
120	16	178		6.5	56-	N	7:32.6	-99	52	178	Nov. 5	667	V	5.0	95-	N	22:47.6	-62	47
121	17	306		6.8	44-	N	7:38.8	-104	40	179	7	836		5.7	89-	N	0:05.3	-71	52
122	19	608	\$	6.0	21-	N	11:42.1	-130	45	180	7	895	U	5.9	87-	N	8:39.4	-112	20
123	20	741	V	5.5	13-	N	7:30.0	-80	50	181	11	1466	V	5.3	44-	S	11:19.0	-108	41
124	30	2008	V	6.6	44+	S	3:07.5	-88	37	182	11	1487	A	1.4	41-	N	16:43.9	-128	55
125	Aug. 1	2223	T	3.9	63+	S	3:11.6	-98	26	183	15	1923	M	7.0	8-	N	14:11.8	-130	44
126	1	2231		6.8	64+	N	3:42.9	-126	36	184	21	2666	M	4.9	9+	N	20:19.1	-65	53
127	3	2497	X	6.5	82+	S	7:10.2	-122	30	185	22	2697		6.5	11+	S	1:35.3	-126	29
128	14	405	V	4.3	59-	N	6:33.6	-111	27	186	22	2829		6.7	17+	S	23:44.2	-103	40
129	16	692*	A	0.9	36-	N	5:43.9	-81	30	187	24	2963	A	5.3	26+	S	3:19.1	-130	36
130	17	871		6.7	24-	N	9:23.3	-113	26	188	24	3071	V	6.1	32+	S	22:34.3	-86	38
131	19	X11708	A	7.0	7-	N	9:39.6	-91	35	189	25	3079	A	4.1	33+	S	1:00.8	-122	33
132	19	X11721		6.9	7-	N	10:01.6	-100	44	190	25	3091		6.7	34+	S	4:12.3	-108	20
133	30	2448	K	6.3	58+	S	5:40.9	-130	40	191	27	3347		6.2	54+	S	3:25.7	-130	36
134	Sep. 3	2981	M	5.1	90+	S	6:09.8	-124	23	192	27	3355		6.7	55+	S	6:31.1	-130	40
135	9	249		4.5	89-	N	8:45.3	-116	20	193	29	49		6.1	73+	S	1:04.1	-103	22
136	10	X03361		7.0	82-	N	5:19.6	-120	28	194	Dec. 3	692*	A	0.9	100+	S	14:33.6	-130	43
137	11	491		6.0	73-	N	5:24.4	-116	46	195	5	995	B	4.1	96-	N	6:55.1	-118	20
138	11	516	K	6.9	71-	N	9:39.1	-117	20	196	7	1275	X	5.3	82-	N	5:02.6	-92	20
139	11	526		6.7	70-	N	13:07.1	-130	47	197	8	1420		6.6	71-	N	8:40.9	-130	53
140	12	635	K	3.6	62-	N	4:59.5	-107	51	198	8	1434		5.4	70-	N	11:34.8	-130	51
141	12	659		6.6	61-	N	7:19.1	-130	49	199	9	1529		6.6	62-	N	5:37.7	-96	36
142	12	671	V	3.4	61-	S	7:51.9	-130	22	200	11	1758		6.9	39-	N	8:11.1	-103	49
143	12	667	V	5.0	61-	N	8:06.0	-130	26	201	13	1978	V	6.6	21-	S	8:21.3	-63	51
144	12	672	O	6.7	61-	N	8:45.6	-130	49	202	15	2223	T	3.9	7-	S	14:25.5	-130	35
145	12	692*	A	0.9	60-	S	11:36.1	-127	20	203	16	2352	M	7.0	3-	N	13:39.6	-109	42
146	13	823	T	6.7	49-	N	8:59.4	-130	33	204	22	3041		6.2	11+	S	0:03.7	-101	29
147	13	832		4.3	49-	N	10:11.6	-130	28	205	26	20		6.7	47+	S	4:13.7	-122	20
148	13	836		5.7	48-	N	10:58.9	-130	37	206	27	150	A	6.1	58+	S	5:55.3	-130	31
149	14	X08716		7.0	39-	N	4:23.8	-66	46	207	30	692*	A	0.9	93+	S	23:08.6	-102	20
150	15	1151		6.8	26-	N	12:16.4	-130	24										

*ZC 692 = Aldebaran