

Grange Observatory

LUNAR OCCULTATIONS FOR YEAR 2012

TABLES LEGEND

Date/Day/Time	the time scale herein used is Universal Time (UT)
A	estimated calculation error in time of event
P	phenomenon
D	star disappearance
R	star reappearance
SAO	Smithsonian Astronomical Observatory catalogue star number
Mag	star magnitude in SAO catalogue
Al	star height above horizon
Az	azimuth
Sn	Sun height above horizon (negative = below horizon)
K	Moon's illumination (phase)
PA	occulted star position angle on Moon limb
Elg	star elongation (angular distance from the Sun)
Dia	needed scope minimum diameter (up to 30 cm)
Name	(when present) classic star designation

Occultations 2012 for Grange Observatory WGS 84 coordinates

Date	Day	Time	A P	SAO	Mag	Al	Az	Sn	K	Elg	Dia Name
d m y		h m s							%	°	cm
03-01-2012	Tue	21:43:56	2 D	93022	6.4	48	242	-58	74%+	118°E	7 27 Arietis
06-01-2012	Fri	00:41:25	1 D	76541	5.6	38	263	-64	89%+	142°E	5 51 Tauri
06-01-2012	Fri	01:29:17	2 D	76551	5.4	30	272	-58	89%+	142°E	5 56 Tauri (V724)
10-01-2012	Tue	02:50:11	1 R	97429	6.2	47	241	-45	99%-	170°W	8 2 B. Cancri
11-01-2012	Wed	05:10:58	R	98235	5.7	29	257	-20	96%-	156°W	7 60 Cancri
11-01-2012	Wed	06:20:41	2 R	98267	4.3	17	270	-8	96%-	156°W	4 Acubens (Alpha Cancri)
14-01-2012	Sat	00:44:05	1 R	138190	6.7	31	131	-63	75%-	120°W	7
14-01-2012	Sat	04:18:00	1 R	138238	6.4	41	196	-29	74%-	119°W	7 87 Leonis
25-01-2012	Wed	18:49:04	4 D	145993	5.8	4	259	-25	6%+	30°E	4 44 Aquarii
29-01-2012	Sun	18:46:24	2 D	109899	7.0	45	235	-23	37%+	75°E	6
30-01-2012	Mon	17:21:45	2 D	92803	7.5	60	189	-9	46%+	85°E	7
03-02-2012	Fri	19:09:15	2 D	77313	6.7	63	144	-26	82%+	130°E	7
03-02-2012	Fri	21:05:41	1 D	77358	6.3	65	207	-46	83%+	131°E	7
04-02-2012	Sat	17:05:34	1 D	78395	6.6	36	96	-5	89%+	141°E	8 15 Geminorum
07-02-2012	Tue	00:00:19	1 D	97843	5.9	56	209	-60	99%+	168°E	7 29 Cancri
08-02-2012	Wed	04:34:19	1 R	117717	5.5	20	263	-23	100%-	174°W	7 Omega Leonis
09-02-2012	Thu	21:35:13	1 R	118634	6.2	23	116	-49	94%-	153°W	8 62 Leonis
11-02-2012	Sat	03:49:08	1 R	138594	6.7	34	208	-30	86%-	137°W	8 RW Virginis
16-02-2012	Thu	03:19:55	1 R	184822	5.6	7	133	-34	34%-	71°W	4 24 Ophiuchi
17-02-2012	Fri	04:25:14	1 R	186037	6.9	9	134	-23	23%-	58°W	7 14 B. Sagitarii
17-02-2012	Fri	04:35:35	1 R	186053	7.5	10	136	-21	23%-	58°W	8
17-02-2012	Fri	05:00:02	1 R	186069	7.5	13	141	-17	23%-	58°W	8
18-02-2012	Sat	04:17:30	2 R	187498	5.1	2	122	-24	15%-	45°W	4 XI 1 Sagitarii
18-02-2012	Sat	04:26:55	2 R	187504	3.6	3	124	-22	15%-	45°W	4 XI 2 Sagitarii
27-02-2012	Mon	20:07:10	2 D	93073	7.5	30	265	-31	29%+	65°E	7
27-02-2012	Mon	20:26:34	1 D	93081	6.5	27	269	-34	29%+	66°E	4 36 Arietis
28-02-2012	Tue	21:51:36	1 D	93557	7.6	22	277	-46	39%+	77°E	8
29-02-2012	Wed	18:21:41	2 D	76565	7.1	63	214	-12	47%+	87°E	7
29-02-2012	Wed	21:20:31	2 D	76609	7.5	36	265	-41	48%+	88°E	8
02-03-2012	Fri	20:42:14	1 D	78077	6.9	58	230	-35	67%+	110°E	7
04-03-2012	Sun	19:54:45	2 D	97429	6.2	60	159	-27	85%+	134°E	7 2 B. Cancri
05-03-2012	Mon	23:39:32	1 D	98267	4.3	47	229	-50	92%+	148°E	4 Acubens (Alpha Cancri)
13-03-2012	Tue	01:51:48	2 R	183646	5.9	19	152	-39	72%-	115°W	6 172 B. Librae
16-03-2012	Fri	05:32:21	2 R	187234	6.4	22	163	-2	37%-	75°W	8 128 B. Sagitarii
17-03-2012	Sat	02:53:04	1 R	162809	6.1	1	118	-29	28%-	64°W	7 266 B. Sagitarii
25-03-2012	Sun	19:18:48	1 D	92957	7.3	16	277	-16	9%+	35°E	6
26-03-2012	Mon	20:57:16	1 D	93386	7.3	9	288	-31	15%+	46°E	7
28-03-2012	Wed	22:31:30	1 D	76939	6.3	11	289	-39	32%+	69°E	5 330 B. Tauri
29-03-2012	Thu	18:33:51	1 D	77596	7.2	58	230	-7	40%+	78°E	7
01-04-2012	Sun	19:17:18	2 D	97843	5.9	59	179	-14	70%+	114°E	5 29 Cancri
01-04-2012	Sun	22:48:31	1 D	97913	6.4	36	250	-39	71%+	115°E	7 84 B. Cancri
02-04-2012	Mon	23:47:32	1 D	117717	5.5	32	249	-39	81%+	128°E	5 Omega Leonis
13-04-2012	Fri	02:34:40	2 R	162643	6.4	15	138	-22	54%-	94°W	6 226 B. Sagitarii
14-04-2012	Sat	04:15:15	2 R	163437	7.4	23	147	-6	42%-	81°W	8 AE Capricorni
25-04-2012	Wed	20:35:13	2 D	77336	2.9	18	282	-19	17%+	49°E	4 Zeta Tauri
27-04-2012	Fri	21:51:48	1 D	96839	7.4	19	276	-27	35%+	72°E	8
28-04-2012	Sat	20:23:09	5 D	97628	6.1	40	248	-17	44%+	83°E	5 30 B. Cancri
29-04-2012	Sun	23:02:28	2 D	98378	5.2	19	266	-30	55%+	96°E	4 Kappa Cancri
10-05-2012	Thu	00:59:00	1 R	187514	6.7	17	146	-24	79%-	126°W	8
12-05-2012	Sat	02:30:46	2 R	163946	7.0	22	139	-14	58%-	100°W	8 87 B. Aquarii
13-05-2012	Sun	03:34:04	2 R	145637	5.3	28	141	-5	48%-	87°W	4 46 Capricorni
13-05-2012	Sun	03:39:03	1 R	145635	7.1	28	142	-5	47%-	87°W	7 117 G. Capricorni
25-05-2012	Fri	19:24:37	1 D	97399	6.0	30	262	-4	20%+	54°E	5 1 Cancri
26-05-2012	Sat	19:16:08	1 D	98117	5.7	37	247	-2	29%+	65°E	6 50 Cancri (A 2)
27-05-2012	Sun	20:09:49	1 D	117819	7.6	33	245	-9	39%+	78°E	8
28-05-2012	Mon	21:53:03	1 D	99210	6.6	20	253	-20	51%+	91°E	6
08-06-2012	Fri	02:03:02	1 R	163645	6.2	29	165	-14	83%-	131°W	7 27 G. Capricorni
16-06-2012	Sat	01:53:44	1 R	93178	6.9	4	68	-14	11%-	39°W	6 44 Arietis
03-07-2012	Tue	20:35:33	2 R	187498	5.1	12	136	-11	100%-	178°W	7 XI 1 Sagitarii
07-07-2012	Sat	23:36:13	1 R	165285	6.4	23	121	-22	79%-	126°W	7 207 B. Aquarii
10-07-2012	Tue	02:38:49	2 R	109145	7.2	43	137	-11	59%-	101°W	8
14-07-2012	Sat	00:21:42	1 R	93436	6.4	2	65	-22	23%-	58°W	8 175 B. Tauri
15-07-2012	Sun	02:41:02	2 R	76571	6.1	18	78	-11	15%-	46°W	4 224 B. Tauri
27-07-2012	Fri	22:00:33	1 D	183533	6.1	10	227	-22	67%+	110°E	7 147 B. Librae
30-07-2012	Mon	23:04:57	1 D	187086	5.9	21	202	-26	94%+	151°E	7 121 B. Sagitarii
31-07-2012	Tue	22:31:34	3 D	162816	5.9	27	181	-25	98%+	164°E	8 267 B. Sagitarii
09-08-2012	Thu	22:37:18	1 R	93284	6.1	5	69	-28	48%-	88°W	7 53 Arietis (UW)
13-08-2012	Mon	01:24:30	1 R	77516	6.5	10	71	-25	20%-	54°W	4 Y Tauri
13-08-2012	Mon	02:31:26	2 R	77578	5.9	21	81	-18	20%-	53°W	4
14-08-2012	Tue	02:14:02	2 R	95968	7.4	9	71	-21	13%-	42°W	7
15-08-2012	Wed	02:14:29	1 R	96985	5.6	0	65	-21	7%-	31°W	4 162 B. Geminorum
23-08-2012	Thu	19:58:32	1 D	159090	4.7	10	228	-16	41%+	80°E	4 Iota Librae
23-08-2012	Thu	20:22:23	1 D	159105	6.0	7	233	-19	41%+	80°E	5 25 Librae
24-08-2012	Fri	20:38:40	2 D	184240	6.7	11	224	-22	53%+	93°E	8 83 B. Scorpii
26-08-2012	Sun	19:44:18	2 D	186509	5.7	23	185	-15	75%+	120°E	5 14 Sagitarii
27-08-2012	Mon	21:23:17	1 D	162394	6.7	24	196	-28	84%+	133°E	8 R Sagitarii
27-08-2012	Mon	22:33:25	3 D	162413	5.0	20	213	-34	84%+	133°E	5 43 Sagitarii
03-09-2012	Mon	02:34:36	2 R	109262	5.7	48	211	-23	93%-	150°W	6 51 Piscium
08-09-2012	Sat	02:33:03	2 R	76680	5.8	51	117	-25	54%-	95°W	4 129 Hl. Tauri (HU)
09-09-2012	Sun	00:07:00	1 R	77157	6.8	19	79	-39	45%-	85°W	7
09-09-2012	Sun	02:41:20	2 R	77215	6.8	45	107	-24	44%-	84°W	6
10-09-2012	Mon	02:37:11	1 R	95576	7.3	35	97	-25	35%-	73°W	7
12-09-2012	Wed	03:09:51	1 R	97556	7.8	21	89	-20	17%-	49°W	8
13-09-2012	Thu	02:27:19	1 R	98235	5.7	3	76	-27	10%-	38°W	4 60 Cancri

Date	Day	Time	A	P	SAO	Mag	Al	Az	Sn	K	Elg	Dia	Name
d	m	y	h	m	s					%	°	cm	
13-09-2012	Thu	03:17:50	2	R	98267	4.3	11	85	-19	10%-	37°W	4	Acubens (Alpha Cancri)
20-09-2012	Thu	19:57:39	1	D	183972	5.9	1	239	-25	28%+	64°E	7	10 G. Scorpii
26-09-2012	Wed	22:00:04	6	D	145637	5.3	34	200	-43	89%+	141°E	5	46 Capricorni
26-09-2012	Wed	22:16:33	6	R	145637	5.3	33	205	-44	89%+	141°E	6	46 Capricorni
04-10-2012	Thu	19:49:31	1	R	93785	5.7	5	66	-29	81%-	128°W	8	43 Tauri
05-10-2012	Fri	23:48:11	1	R	76971	5.3	37	98	-50	71%-	115°W	4	106 Tauri
06-10-2012	Sat	22:18:23	1	R	77730	4.8	13	75	-48	63%-	105°W	4	U Orionis
07-10-2012	Sun	02:56:54	1	R	77911	4.7	58	134	-29	61%-	103°W	4	Chi 2 Orionis
09-10-2012	Tue	02:47:48	2	R	97222	7.4	40	108	-31	42%-	81°W	7	
10-10-2012	Wed	01:21:05	1	R	97913	6.4	15	86	-43	33%-	70°W	5	84 B. Cancri
11-10-2012	Thu	03:35:24	1	R	117717	5.5	27	105	-23	22%-	57°W	4	Omega Leonis
17-10-2012	Wed	17:50:30	1	D	159317	6.1	0	241	-13	7%+	31°E	7	150 B. Librae
20-10-2012	Sat	18:21:23	2	D	187108	6.8	19	212	-19	34%+	72°E	7	87 G. Sagitarii
24-10-2012	Wed	23:28:25	1	D	146067	5.8	19	242	-57	78%+	124°E	6	51 Aquarii
26-10-2012	Fri	17:47:49	2	D	128427	5.8	30	120	-15	91%+	146°E	6	22 Piscium
01-11-2012	Thu	04:51:57	2	R	93785	5.7	36	262	-14	95%-	155°W	6	43 Tauri
03-11-2012	Sat	23:50:01	3	R	95852	6.9	41	105	-59	78%-	124°W	8	22 Geminorum
05-11-2012	Mon	04:24:31	2	R	96985	5.6	62	190	-20	68%-	111°W	4	162 B. Geminorum
05-11-2012	Mon	22:19:20	1	R	97628	6.1	7	76	-59	60%-	102°W	7	30 B. Cancri
07-11-2012	Wed	02:25:40	1	R	98378	5.2	37	116	-41	49%-	89°W	4	Kappa Cancri
09-11-2012	Fri	05:34:57	2	R	118550	6.3	41	148	-9	27%-	63°W	4	237 B. Leonis
10-11-2012	Sat	04:43:01	1	R	138365	7.2	25	125	-18	18%-	51°W	6	
11-11-2012	Sun	04:33:15	2	R	138878	6.9	12	115	-20	10%-	37°W	6	
12-11-2012	Mon	05:13:15	1	R	158021	5.8	6	116	-13	4%-	23°W	4	550 B. Virginis
16-11-2012	Fri	16:18:50	1	D	186497	3.8	17	213	-4	11%+	39°E	4	Mu Sagitarii
16-11-2012	Fri	17:14:09	1	D	186543	5.4	11	225	-13	11%+	39°E	4	15 Sagitarii
17-11-2012	Sat	17:26:03	2	D	162413	5.0	18	216	-15	20%+	53°E	4	43 Sagitarii
17-11-2012	Sat	17:39:20	1	D	162432	6.8	17	219	-17	20%+	53°E	5	
17-11-2012	Sat	17:47:08	1	D	162442	7.4	16	221	-19	20%+	53°E	7	
17-11-2012	Sat	17:53:59	1	D		7.7	15	222	-20	20%+	53°E	8	
17-11-2012	Sat	19:31:13	1	D	162521	6.0	3	241	-37	20%+	54°E	4	45 Sagitarii
18-11-2012	Sun	20:24:14	1	D	163471	6.2	6	243	-46	31%+	67°E	6	Dabih Minor (16 B. Capricorni)
18-11-2012	Sun	20:28:13	1	D	163481	3.2	5	243	-47	31%+	67°E	4	Dabih Major (Beta Capricorni)
19-11-2012	Mon	17:24:21	4	D	164182	4.5	33	191	-15	40%+	79°E	4	Nu Aquarii
21-11-2012	Wed	22:38:11	1	D	146415	6.4	18	249	-64	63%+	105°E	7	
23-11-2012	Fri	22:12:30	3	D	109262	5.7	41	230	-62	81%+	128°E	5	51 Piscium
24-11-2012	Sat	16:29:49	1	D	92304	6.6	29	105	-6	87%+	138°E	8	210 B. Piscium
30-11-2012	Fri	03:04:22	1	R	77255	6.1	50	245	-39	98%-	164°W	7	372 B. Tauri
30-11-2012	Fri	19:08:58	1	R	95359	5.7	15	77	-34	96%-	156°W	7	68 Orionis
03-12-2012	Mon	06:47:12	2	R	97628	6.1	32	258	-2	82%-	129°W	7	30 B. Cancri
03-12-2012	Mon	22:29:33	1	R	98117	5.7	20	92	-65	76%-	121°W	5	50 Cancri (A 2)
04-12-2012	Tue	04:10:24	2	R	98235	5.7	56	196	-28	74%-	119°W	5	60 Cancri
05-12-2012	Wed	23:49:48	1	R	118299	6.7	12	97	-67	56%-	97°W	7	84 B. Sextantis (RX)
06-12-2012	Thu	00:44:45	1	R	118314	7.2	21	107	-62	56%-	97°W	8	
07-12-2012	Fri	06:07:48	2	R	138190	6.7	42	186	-8	43%-	83°W	6	
18-12-2012	Tue	20:49:34	1	D	146239	6.4	13	251	-51	36%+	73°E	5	207 B. Aquarii
19-12-2012	Wed	16:28:43	2	D	128156	6.5	45	169	-7	45%+	84°E	5	22 B. Piscium
19-12-2012	Wed	19:26:29	1	D	128188	6.4	36	226	-37	45%+	85°E	5	9 Piscium
19-12-2012	Wed	19:46:37	3	D	128186	4.9	33	231	-40	45%+	85°E	4	Kappa Piscium
26-12-2012	Wed	18:14:27	1	D	76971	5.3	35	95	-24	98%+	162°E	5	106 Tauri
27-12-2012	Thu	16:51:07	1	D	77730	4.8	12	74	-9	100%+	172°E	6	U Orionis
27-12-2012	Thu	21:14:59	2	D	77911	4.7	56	127	-55	100%+	174°E	4	Chi 2 Orionis
28-12-2012	Fri	02:40:11	1	D	95359	5.7	41	256	-46	100%+	175°E	7	68 Orionis
30-12-2012	Sun	21:50:35	1	R	97913	6.4	34	107	-59	94%-	152°W	8	84 B. Cancri
31-12-2012	Mon	03:39:58	5	R	98069	5.7	48	229	-36	93%-	149°W	7	45 Cancri (A 1)
31-12-2012	Mon	06:31:26	1	R	98117	5.7	20	267	-7	93%-	149°W	7	50 Cancri (A 2)