

Caldwell Catalogue Observing List

Evening of 2010 Aug 7 at Britstown - Kambro

Sunset 18:02, Twilight ends 19:18, Twilight begins 05:45, Sunrise 07:01, Moon rise 05:25, Moon set 15:08
 Completely dark from 19:18 to 05:25. Waning Crescent Moon. All times local (GMT+2).

Listing All Classes visible above the perfect horizon and in complete darkness after 19:18 and before 05:25.
 The minimum visual difficulty is: visible (at any difficulty).

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Distance	Begin	Optimum	End	S.A.	Ur. 2	Difficulty	Optimum EP
Gal	NGC 4449	MCG 7-26-9	CVn	87.04550	44.0925	5.2'x 3.3'	9.5	13.0 Mly	18:50	19:02	19:18	7	37	challenging	E-Lux 2" 26mm
Gal	NGC 3115	Spindle Galaxy	Sex	51.30815	-7.7185	7.6'x 3.5'	10.0		18:53	19:07	19:25	13	133	challenging	Celestron Plössl 32mm
Gal	NGC 3626	MCG 3-29-32	Leo	70.01600	18.3568	3.0'x 2.0'	11.8		18:55	19:09	19:32	13	72	very challenging	Celestron Plössl 32mm 2.0x
Gal	NGC 4631	Whale Galaxy	CVn	90.53210	32.5428	13.2'x 2.4'	9.5		19:00	19:09	19:23	7	53	difficult	E-Lux 2" 26mm 2.0x
Gal	NGC 5005	MCG 6-29-52	CVn	97.73450	37.0582	5.4'x 2.0'	10.5		19:01	19:09	19:27	7	53	difficult	Celestron Plössl 32mm 2.0x
PNe	NGC 3242	Ghost of Jupiter	Hya	56.19224	-18.6423	40"	8.6	2800 ly	18:54	19:10	19:50	20	151	obvious	E-Lux 2" 26mm 2.0x
Gal	NGC 4559	MCG 5-30-30	Com	88.99040	27.9597	10.0'x 4.3'	10.3		19:04	19:11	19:21	7	72	challenging	E-Lux 2" 40mm
Gal	NGC 4565	MCG 4-30-6	Com	89.08670	25.9874	14.5'x 2.3'	10.1		19:03	19:12	19:24	7	72	challenging	Celestron Plössl 32mm 2.0x
PNe	NGC 2867	He 2-27	Car	40.35557	-58.3113	12"	9.7	6100 ly	18:49	19:12	21:02	25	199	obvious	Celestron Plössl 9mm 2.0x
PNe	NGC 3132	Eight Burst	Vel	51.75738	-40.4364	1.4'	8.2	3600 ly	18:54	19:12	20:11	20	169	obvious	Celestron Plössl 15mm
Gal	NGC 4884	MCG 5-31-77	Com	95.03270	27.9780	2.8'x 1.8'	12.5	290.0 Mly	18:56	19:12	20:00	7	71	very challenging	Celestron Plössl 15mm
Glob	NGC 3201		Vel	54.40417	-46.4117	20.0'	6.9	13000 ly	19:00	19:14	19:54	20	186	detectable	Ultima 42mm
Neb	NGC 3372	Eta Carinae Nebula	Car	61.27500	-59.8667	120.0'	3.0		18:55	19:17	19:33	25	199	easy	Ultima 42mm
Gal	NGC 4039	Arp 244	Crv	80.47415	-18.8850	4.0'x 2.1'	11.2		19:03	19:17	19:46	21	150	detectable	E-Lux 2" 40mm 2.0x
Gal	NGC 4038	The Antennae	Crv	80.47040	-18.8674	4.4'x 2.7'	10.9		19:03	19:17	19:46	21	150	detectable	Ultima 42mm 2.0x
Open	IC 2602	Collinder 229	Car	60.74167	-64.4000	100.0'	1.6	520 ly	18:56	19:17	19:37	25	210	obvious	Plössl 4mm
Open	NGC 3532	Collinder 238	Car	66.41250	-58.7533	50.0'	3.4	1600 ly	18:56	19:17	19:52	25	198	obvious	Celestron Plössl 15mm
Gal	NGC 4697	MCG -1-33-10	Vir	92.14985	-5.8008	5.8'x 3.6'	10.1		19:00	19:18	20:04	14	130	detectable	Celestron Plössl 32mm
Open	NGC 3766	Collinder 248	Cen	74.05833	-61.6083	9.3'	4.6	7200 ly	18:53	19:18	20:26	25	198	obvious	Ultima 42mm
Gal	NGC 5248	MCG 2-35-15	Boo	04.38490	8.8851	4.8'x 3.0'	10.9		19:02	19:18	20:10	14	90	detectable	E-Lux 2" 26mm
Neb	Lambda Centauri Neb	IC 2944	Cen	74.47500	-63.3500	60.0'	4.5		18:59	19:19	20:29	25	209	detectable	Celestron Plössl 15mm
PNe	NGC 3195	He 2-44	Cha	52.33713	-80.8585	40"	11.5	6400 ly	18:57	19:20	19:27	25	217	detectable	E-Lux 2" 26mm 2.0x
Open	NGC 4609	Collinder 263	Cru	90.57500	-62.9950	4.0'	4.5	4000 ly	18:49	19:20	21:34	25	209	obvious	Celestron Plössl 32mm
Open	NGC 4755	Jewel Box	Cru	93.41250	-60.3617	10.0'	5.2	6400 ly	18:53	19:20	21:42	25	198	obvious	Ultima 42mm
Gal	NGC 4945	ESO 219 24	Cen	96.35900	-49.4709	20.4'x 4.3'	9.3	15.0 Mly	19:00	19:20	21:10	21	184	detectable	E-Lux 2" 26mm
Glob	NGC 5139	Omega Centauri	Cen	01.69167	-47.4767	55.0'	3.9	16000 ly	18:57	19:20	21:57	21	184	easy	Celestron Plössl 15mm
Gal	NGC 5128	Centaurus A	Cen	01.36555	-43.0187	27.5'x 18.2'	7.8	12.0 Mly	19:00	19:20	21:23	21	184	detectable	Ultima 42mm
Glob	NGC 4372		Mus	86.43750	-72.6533	5.0'	7.2	20000 ly	18:53	19:21	21:31	25	209	easy	Ultima 42mm

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Distance	Begin	Optimum	End	S.A.	Ur. 2	Difficulty	Optimum EP
Glob	NGC 5286		Cen	06.61250	-51.3733	11.0'	7.4	39000 ly	18:58	19:21	22:16	21	183	easy	Ultima 42mm
Glob	NGC 4833		Mus	94.89167	-70.8750	12.7'	8.4	16000 ly	19:02	19:21	21:41	25	209	difficult	Ultima 42mm
Glob	NGC 5694		Hya	19.90000	-26.5383	4.3'	10.2	100000 ly	18:59	19:22	21:36	21	148	detectable	Ultima 42mm
Open	NGC 5823	Melotte 131	Cir	26.37500	-55.6033	12.0'	8.6	3900 ly	19:00	19:26	22:25	25	196	detectable	Ultima 42mm
Open	NGC 6025	Collinder 296	TrA	40.82083	-60.4317	14.0'	6.0	2500 ly	18:54	19:35	00:51	26	196	obvious	Ultima 42mm
Open	NGC 6067	Collinder 298	Nor	43.29585	-54.2183	14.0'	6.5	4600 ly	18:55	19:39	00:49	26	196	easy	Ultima 42mm
Open	NGC 6124	Collinder 301	Sco	46.33334	-40.6533	39.0'	6.3	1700 ly	19:00	19:48	23:34	22	182	detectable	Celestron Plössl 32mm
Glob	NGC 6101		Aps	46.45417	-72.2017	5.0'	9.2	68000 ly	18:59	19:49	01:29	26	207	detectable	Ultima 42mm
Open	NGC 6193	Collinder 310	Ara	50.33335	-48.7633	14.0'	5.4	3800 ly	18:53	20:03	01:14	22	182	obvious	Ultima 42mm
Open	NGC 6231	Collinder 315	Sco	53.54168	-41.8250	14.0'	3.4	4100 ly	18:50	20:16	01:16	22	181	obvious	Ultima 42mm
PNe	NGC 6302	Bug Nebula	Sco	58.43421	-37.1044	1.2'	12.8	1800 ly	19:03	20:36	23:25	22	164	challenging	E-Lux 2" 26mm 2.0x
Glob	NGC 6352		Ara	61.37083	-48.4233	9.0'	7.8	64000 ly	18:58	20:47	01:30	22	181	easy	Ultima 42mm
Glob	NGC 6397		Ara	65.17500	-53.6733	31.0'	5.3	6500 ly	18:58	21:02	02:07	26	195	easy	Celestron Plössl 32mm
Glob	NGC 6541		CrA	72.00833	-43.7150	15.0'	6.3	13000 ly	18:57	21:30	02:23	22	181	easy	Ultima 42mm
Neb	NGC 6729	Bernes 159	CrA	85.47500	-36.9500	48"x 36"			20:07	22:23	00:39	22	163	challenging	Ultima 42mm
Gal	NGC 6744	ESO 104 42	Pav	87.44125	-63.8577	17.0'x 10.7'	9.1		19:04	22:31	02:51	26	206	detectable	Ultima 42mm
Glob	NGC 6752	Pavo Globular	Pav	87.71667	-59.9817	29.0'	5.3	20000 ly	18:59	22:32	03:58	26	194	easy	Celestron Plössl 32mm
PNe	NGC 6826	Blinking Planetary	Cyg	96.20067	50.5251	27"	8.8	3600 ly	21:03	23:06	01:09	8	33	easy	Celestron Plössl 9mm
Gal	NGC 6822	Barnard's Galaxy	Sgr	96.24070	-14.8031	13.5'x 12.3'	9.4		20:00	23:07	02:13	16	125	detectable	Ultima 42mm
Open	NGC 6885	Collinder 417	Vul	03.00416	26.4783	20.0'	5.7	1900 ly	22:12	23:33	00:55	9	66	easy	Ultima 42mm
Glob	NGC 6934		Del	08.54583	7.4050	7.1'	8.9	62000 ly	21:00	23:55	02:51	16	84	detectable	Ultima 42mm
Neb	NGC 6960	Veil Nebula (West)	Cyg	11.42500	30.7167	63.0'x 6.0'	7.0		21:25	00:07	02:49	9	47	very challenging	Ultima 42mm
Neb	NGC 6992	Veil Nebula (East)	Cyg	14.10000	31.7167	60.0'x 7.0'	7.0		21:37	00:17	02:58	9	47	very challenging	Ultima 42mm
Neb	NGC 6995	Ced 182c	Cyg	14.27500	31.2167	12.0'			21:36	00:18	02:59	9	47	very challenging	Ultima 42mm
Glob	NGC 7006		Del	15.37083	16.1883	3.6'	10.6	160000 ly	22:05	00:23	02:39	16	83	difficult	E-Lux 2" 40mm
PNe	NGC 7009	Saturn Nebula	Aqr	16.04532	-11.3634	28"	8.3	3200 ly	20:19	00:25	04:32	16	123	obvious	Celestron Plössl 9mm
Open	NGC 7243	Collinder 448	Lac	33.78334	49.8983	29.0'	6.7	2600 ly	23:39	01:36	03:33	9	31	challenging	Plössl 4mm
PNe	NGC 7293	Helix	Aqr	37.41045	-20.8371	16.0'	6.3	530 ly	21:36	01:50	05:55	23	142	easy	Ultima 42mm
Gal	NGC 7331	MCG 6-49-45	Peg	39.26790	34.4163	9.1'x 3.4'	10.2		00:14	01:58	03:42	9	46	detectable	E-Lux 2" 26mm
Gal	NGC 7479	MCG 2-58-60	Peg	46.23615	12.3229	3.7'x 2.8'	11.7		00:06	02:26	04:45	17	82	detectable	E-Lux 2" 26mm
PNe	NGC 7662	Blue Snowball	And	51.47487	42.5347	17"	8.6	4600 ly	23:58	02:46	05:34	9	30	obvious	Plössl 6mm
Gal	NGC 7814	MCG 3-1-20	Peg	0.81255	16.1451	4.9'x 2.1'	11.6		01:14	03:24	05:32	17	81	difficult	E-Lux 2" 40mm 2.0x
Gal	NGC 55	MCG -7-1-13	Scl	3.78510	-39.2203	30.2'x 3.4'	8.5	4.9 Mly	23:29	03:35	06:03	18	159	detectable	Celestron Plössl 9mm
Glob	NGC 104	47 Tucanae	Tuc	6.02083	-72.0817	50.0'	4.0	20000 ly	22:04	03:44	06:06	24	204	easy	Celestron Plössl 15mm
Gal	NGC 185	MCG 8-2-10	Cas	9.74145	48.3374	10.7'x 8.9'	10.2		02:00	03:59	05:55	4	30	very challenging	Ultima 42mm
Gal	NGC 247	MCG -4-3-5	Cet	11.78595	-20.7604	20.0'x 5.0'	9.7	8.1 Mly	01:03	04:08	06:01	18	158	detectable	Ultima 42mm
PNe	NGC 246	PN G118.8-74.7	Cet	11.76395	-11.8720	4.0'	10.4	1600 ly	01:05	04:08	06:01	10	140	detectable	Ultima 42mm
Gal	NGC 253	Sculptor Galaxy	Scl	11.88810	-25.2888	28.2'x 5.5'	7.9	13.0 Mly	00:02	04:08	06:05	18	158	easy	Ultima 42mm

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Distance	Begin	Optimum	End	S.A.	Ur. 2	Difficulty	Optimum EP
Gal	NGC 300	MCG -6-3-5	ScI	13.72305	-37.6849	20.0'x 12.3'	8.8	7.1 Mly	00:34	04:15	06:03	18	176	detectable	Ultima 42mm
Glob	NGC 362		Tuc	15.80833	-70.8483	14.0'	6.8	39000 ly	22:43	04:23	06:06	24	204	easy	Ultima 42mm
Gal	IC 1613	MCG 0-3-70	Cet	16.22565	2.1333	15.5'x 13.8'	10.1		02:30	04:25	05:53	10	120	difficult	Ultima 42mm
Open	NGC 457	ET Cluster	Cas	19.89583	58.2867	20.0'	5.1	7900 ly	04:18	04:40	05:02	1	29	challenging	Ultima 42mm
Open	NGC 752	Collinder 23	And	29.42083	37.7850	75.0'	6.6	1500 ly	02:59	05:17	06:05	4	62	very challenging	Celestron Plössl 15mm
Gal	NGC 1097	Arp 77	For	41.57955	-30.2749	9.3'x 5.6'	10.2		02:36	05:31	06:04	18	175	detectable	Ultima 42mm
Gal	NGC 891	MCG 7-5-46	And	35.64000	42.3461	11.7'x 2.3'	10.9		03:34	05:32	06:08	4	44	very challenging	E-Lux 2" 26mm 2.0x
Glob	NGC 1261		Hor	48.06667	-55.2167	6.8'	8.3	95000 ly	01:31	05:32	06:05	24	202	easy	Ultima 42mm
Open	NGC 869	h Persei	Per	34.75000	57.1283	18.0'	4.3	6800 ly	04:48	05:32	06:03	1	29	detectable	Ultima 42mm
Open	NGC 884	Chi Persei	Per	35.57500	57.1367	18.0'	4.4	7600 ly	04:52	05:40	06:03	1	29	detectable	Ultima 42mm
Neb	NGC 2070	Tarantula Nebula	Dor	84.65000	-69.1000	5.0'	8.3		03:21	05:42	06:08	24	212	easy	Ultima 42mm
Glob	NGC 1851		Col	78.52500	-40.0467	12.0'	7.1	55000 ly	03:37	05:43	06:05	19	173	easy	Ultima 42mm
Open	Hyades	Collinder 50	Tau	66.72500	15.8667	5.5°	0.8	150 ly	05:08	05:44	06:04	11	97	easy	Ultima 42mm
Open	NGC 2516	Collinder 172	Car	19.51667	-60.7533	30.0'	3.3	1300 ly	03:34	05:47	06:08	24	200	obvious	Ultima 42mm
Gal	NGC 1275	Perseus A radio sou	Per	49.95090	41.5117	2.5'x 1.7'	12.6	240.0 Mly	04:21	05:47	06:08	4	43	very challenging	Celestron Plössl 15mm
Open	NGC 2477	Collinder 165	Pup	18.04167	-38.5300	15.0'	5.7	4000 ly	04:54	05:49	06:05	19	171	easy	Ultima 42mm
Open	NGC 2362	Collinder 136	CMa	09.67083	-24.9550	5.0'	3.8	4500 ly	04:27	05:49	06:12	19	154	obvious	E-Lux 2" 40mm
Open	NGC 2360	Collinder 134	CMa	09.42917	-15.6417	13.0'	9.1	6200 ly	05:09	05:49	06:05	12	135	challenging	Ultima 42mm
Open	NGC 2244	Collinder 99	Mon	97.97917	4.9417	29.0'	5.2	4700 ly	05:16	05:49	06:03	12	116	easy	Plössl 4mm
Neb	NGC 2238	LBN 948	Mon	97.66792	5.0129	2.0'	6.0		04:48	05:49	06:09	12	116	obvious	Ultima 42mm 2.0x
Open	IC 2391	Collinder 191	Vel	30.13333	-53.0333	60.0'	2.6	570 ly	04:40	05:49	06:07	25	200	obvious	Celestron Plössl 15mm

Symbol Key:

Open	Open Cluster	Doub	Double or Multiple Star	Con	Constellation
Glob	Globular Cluster	Bin	Binary Star (with orbit)	MSS	Major Solar System Object
PNe	Planetary Nebula	Var	Variable Star	Com	Comet
Neb	Diffuse Nebula	DVar	Double & Variable	MP	Minor Planet
Gal	Galaxy	BVar	Binary & Variable		
GalCl	Galaxy Cluster				
Dark	Dark Nebula				
QSO	Quasar				

Observation status: Y = observed, N = not observed, R = re-observe
Quality of opportunity (Q): A = optimum, B = near optimum, F = far from optimum