

Bennett Observing List

Evening of 2012 Mar 23 at Karoo Starparty

Sunset 18:38, Twilight ends 19:53, Twilight begins 05:12, Sunrise 06:26, Moon rise 07:57, Moon set 18:52
 Completely dark from 19:53 to 05:12. New Moon. All times local (GMT+2).

Listing All Classes visible above the perfect horizon and in complete darkness after 19:53 and before 05:12.

Cls	Primary ID	Alternate ID	Con	Mag	Size	Distance	RA 2000	Dec 2000	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty	Optimum EP
Gal	NGC 2997	MCG -5-23-12	Ant	10.1	9.8'x 6.8'		09h45m38.8s	-31°11'28"	19:34	22:05	01:53	20	170	39	detectable	Ultima 42mm
Glob	NGC 6101		Aps	9.2	5.0'	68000 ly	16h25m49.0s	-72°12'06"	23:01	04:43	05:31	26	207	60	detectable	Ultima 42mm
Glob	NGC 6981	M 72	Aqr	9.2	6.6'	68000 ly	20h53m28.0s	-12°32'12"	05:02	05:14	05:28	16	124	66	difficult	Ultima 42mm
PNe	NGC 7009	Saturn Nebula	Aqr	8.3	28"	3200 ly	21h04m10.9s	-11°21'48"	03:48	05:16	05:39	16	123	77	obvious	Plössl 10mm
Glob	NGC 7089	M 2	Aqr	6.6	16.0'	49000 ly	21h33m27.0s	-00°49'24"	04:53	05:18	05:30	17	103	77	detectable	Ultima 42mm
Glob	NGC 6362		Ara	8.1	15.0'	23000 ly	17h31m55.0s	-67°02'54"	01:20	05:02	05:29	26	207	60	detectable	Ultima 42mm
Glob	NGC 6397		Ara	5.3	31.0'	6500 ly	17h40m42.0s	-53°40'24"	00:47	05:04	05:33	26	195	58	easy	Celestron Plössl 32mm
Open	NGC 6253	Collinder 321	Ara	10.2	4.0'	4900 ly	16h59m05.0s	-52°42'30"	00:48	05:00	05:33	26	196	58	detectable	Celestron Plössl 32mm
Glob	NGC 6352		Ara	7.8	9.0'	64000 ly	17h25m29.0s	-48°25'24"	00:54	05:04	05:33	22	181	58	easy	Ultima 42mm
Open	NGC 2243	Collinder 98	CMa	10.5	5.0'	15000 ly	06h29m34.0s	-31°17'00"	19:33	19:57	22:24	19	172	29	difficult	E-Lux 2" 40mm
Glob	NGC 2808		Car	6.2	14.0'	26000 ly	09h12m03.0s	-64°51'48"	19:30	21:31	03:04	25	210	40	easy	Ultima 42mm
Open	Collinder 246	Melotte 105	Car	9.4	5.0'	7200 ly	11h19m42.0s	-63°29'00"	19:36	23:39	05:00	25	209	40	detectable	E-Lux 2" 40mm
Open	NGC 5617	Collinder 282	Cen	8.5	10.0'	6500 ly	14h29m44.0s	-60°42'42"	21:50	02:49	05:31	25	197	50	detectable	Ultima 42mm
Open	NGC 3960	Collinder 250	Cen	8.8	5.0'	6000 ly	11h50m33.0s	-55°40'24"	19:35	00:10	05:22	25	198	38	easy	E-Lux 2" 40mm
Glob	NGC 5286		Cen	7.4	11.0'	39000 ly	13h46m27.0s	-51°22'24"	21:11	02:06	05:31	21	183	48	easy	Ultima 42mm
Gal	NGC 4976	ESO 219 29	Cen	11.0	5.9'x 3.3'		13h08m37.4s	-49°30'23"	21:17	01:28	05:21	21	184	49	detectable	E-Lux 2" 26mm
Gal	NGC 4945	ESO 219 24	Cen	9.3	20.4'x 4.3'	15.0 Mly	13h05m26.2s	-49°28'15"	21:01	01:24	05:23	21	184	49	detectable	Celestron Plössl 9mm
Glob	NGC 5139	Omega Centauri	Cen	3.9	55.0'	16000 ly	13h26m46.0s	-47°28'36"	20:37	01:46	05:32	21	184	49	easy	E-Lux 2" 26mm
Gal	NGC 5128	Centaurus A	Cen	7.8	27.5'x 18.2'	12.0 Mly	13h25m27.7s	-43°01'07"	21:17	01:45	05:27	21	184	49	detectable	Ultima 42mm
Gal	NGC 5253	MCG -5-32-60	Cen	10.8	5.0'x 2.1'	12.0 Mly	13h39m55.9s	-31°38'25"	21:47	01:59	05:28	21	167	48	detectable	Ultima 2" LX 17 mm
Gal	NGC 247	MCG -4-3-5	Cet	9.7	20.0'x 5.0'	8.1 Mly	00h47m08.6s	-20°45'38"	19:21	19:33	19:47	18	158	7	not visible	E-Lux 2" 26mm
Gal	NGC 1068	M 77	Cet	9.7	6.6'x 5.8'	70.0 Mly	02h42m40.8s	-00°00'48"	19:33	19:46	20:05	10	119	6	detectable	Ultima 42mm
Glob	NGC 1851		Col	7.1	12.0'	55000 ly	05h14m06.0s	-40°02'48"	19:31	19:54	22:33	19	173	18	easy	Ultima 42mm
Gal	NGC 1792	MCG -6-12-4	Col	10.8	6.0'x 3.0'		05h05m15.0s	-37°58'47"	19:34	19:54	21:57	19	173	18	detectable	Plössl 25mm
Gal	NGC 1808	MCG -6-12-5	Col	10.8	6.8'x 3.0'		05h07m42.3s	-37°30'47"	19:34	19:54	21:53	19	173	18	detectable	Plössl 25mm
Glob	NGC 6541		CrA	6.3	15.0'	13000 ly	18h08m02.0s	-43°42'54"	01:23	05:07	05:35	22	181	69	easy	Ultima 42mm
Con	CruX		Cru	0.0	8.7°x 11.8°		12h26m59.4s	-60°11'11"	-	-	-	25	198	50	not visible	Ultima 42mm
Gal	Large Magellanic Cl	ESO 56 115	Dor	0.8	10.8°x 9.2°	200000 ly	05h23m34.6s	-69°45'22"	19:30	19:58	23:23	24	212	20	easy	Ultima 42mm
Neb	NGC 2070	Tarantula Nebula	Dor	8.3	5.0'		05h38m36.0s	-69°06'00"	19:29	19:58	23:36	24	212	20	easy	Ultima 42mm
Glob	NGC 1818		Dor	9.7	2.5'		05h04m14.8s	-66°26'04"	19:31	19:57	22:59	24	212	20	detectable	Plössl 25mm
Neb	NGC 1763	IC 2115	Dor		25.0'		04h56m48.0s	-66°25'00"	-	-	-	24	212	20	unknown	Celestron Plössl 32mm 2.0x
Glob	NGC 1783		Dor	10.9	1.1'		04h59m08.8s	-65°59'20"	19:32	19:56	22:53	24	212	20	detectable	Plössl 25mm 2.0x
Glob	NGC 1866		Dor	9.8	1.8'		05h13m39.4s	-65°27'54"	19:31	19:57	23:07	24	212	20	easy	Ultima 2" LX 17 mm
Gal	NGC 1672	ESO 118 43	Dor	10.3	6.6'x 5.4'		04h45m42.5s	-59°14'51"	19:34	19:55	22:30	24	202	18	detectable	Ultima 42mm
Gal	NGC 1553	ESO 157 17	Dor	10.3	6.2'x 4.1'		04h16m10.3s	-55°46'51"	19:32	19:54	21:57	24	202	19	detectable	Celestron Plössl 32mm

Cls	Primary ID	Alternate ID	Con	Mag	Size	Distance	RA 2000	Dec 2000	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty	Optimum EP
Gal	NGC 1549	ESO 157 16	Dor	10.7	5.0'x 4.3'		04h15m45.2s	-55°35'32"	19:34	19:54	21:57	24	202	19	detectable	Celestron Plössl 32mm
Gal	NGC 1566	ESO 157 20	Dor	10.3	8.1'x 4.8'		04h20m00.4s	-54°56'16"	19:34	19:54	21:55	24	202	19	detectable	E-Lux 2" 40mm
Gal	NGC 1617	ESO 157 41	Dor	11.2	5.2'x 2.5'		04h31m40.1s	-54°36'06"	19:35	19:54	21:52	24	202	18	detectable	E-Lux 2" 40mm 2.0x
Gal	NGC 1291	MCG -7-7-8	Eri	9.5	9.1'x 6.6'		03h17m18.6s	-41°06'29"	19:34	19:52	20:38	18	190	19	detectable	Ultima 42mm
Gal	NGC 1404	MCG -6-9-13	Eri	10.9	4.7'x 3.7'		03h38m51.7s	-35°35'35"	19:34	19:52	20:49	18	174	19	detectable	Celestron Plössl 32mm
Gal	NGC 1232	Arp 41	Eri	10.6	6.3'x 5.5'		03h09m45.3s	-20°34'51"	19:36	19:50	19:55	18	157	17	difficult	Ultima 42mm
PNe	NGC 1535	Cleopatra's Eye	Eri	9.4	20"	5800 ly	04h14m15.8s	-12°44'22"	19:26	19:51	20:44	11	137	17	obvious	Celestron Plössl 15mm 2.0x
Gal	NGC 1316	Fornax A radio sour	For	9.4	12.6'x 7.9'		03h22m41.5s	-37°12'27"	19:34	19:52	20:36	18	174	19	detectable	Ultima 42mm
Gal	NGC 1365	MCG -6-8-26	For	10.4	10.5'x 6.2'		03h33m36.4s	-36°08'26"	19:36	19:52	20:46	18	174	19	difficult	Ultima 42mm
Gal	NGC 1387	MCG -6-9-7	For	11.7	3.5'x 3.4'		03h36m57.1s	-35°30'24"	19:36	19:52	20:48	18	174	19	difficult	E-Lux 2" 26mm
Gal	NGC 1399	MCG -6-9-12	For	10.4	7.2'x 6.6'		03h38m29.0s	-35°26'58"	19:36	19:52	20:49	18	174	19	detectable	Ultima 42mm
Gal	NGC 1380	MCG -6-9-2	For	10.9	5.1'x 2.8'		03h36m27.5s	-34°58'31"	19:34	19:52	20:48	18	174	19	detectable	Plössl 25mm
Gal	NGC 1350	MCG -6-8-23	For	11.2	5.9'x 3.0'		03h31m08.3s	-33°37'44"	19:36	19:52	20:40	18	174	19	difficult	Plössl 25mm
Gal	NGC 1097	Arp 77	For	10.2	9.3'x 5.6'		02h46m19.1s	-30°16'30"	19:36	19:50	20:28	18	175	8	difficult	Ultima 42mm
Gal	NGC 1398	MCG -4-9-40	For	10.6	7.1'x 5.0'		03h38m52.1s	-26°20'17"	19:35	19:51	20:35	18	156	17	detectable	E-Lux 2" 40mm
PNe	NGC 1360	M 1-3	For	9.4	6.0'	1300 ly	03h33m14.6s	-25°52'18"	19:35	19:51	20:28	18	156	17	difficult	Ultima 42mm
Gal	NGC 7410	MCG -7-47-2	Gru	11.3	5.9'x 1.7'		22h55m00.6s	-39°39'41"	05:00	05:17	05:28	23	160	78	challenging	Celestron Plössl 15mm
Gal	IC 1459	MCG -6-50-16	Gru	11.0	5.1'x 3.5'		22h57m10.5s	-36°27'48"	05:00	05:18	05:28	23	160	78	challenging	E-Lux 2" 26mm
Glob	NGC 1261		Hor	8.3	6.8'	95000 ly	03h12m16.0s	-55°13'00"	19:33	19:52	20:53	24	202	19	detectable	Ultima 42mm
Gal	NGC 1433	ESO 249 14	Hor	10.8	6.2'x 3.6'		03h42m01.5s	-47°13'19"	19:34	19:52	21:10	18	190	19	detectable	Celestron Plössl 32mm
Gal	NGC 1512	MCG -7-9-7	Hor	11.1	7.1'x 3.6'		04h03m54.3s	-43°20'56"	19:36	19:53	21:07	19	189	19	difficult	Celestron Plössl 32mm
Gal	NGC 3621	MCG -5-27-8	Hya	10.1	10.5'x 4.5'		11h18m16.3s	-32°48'43"	19:46	23:38	03:33	20	169	38	detectable	E-Lux 2" 40mm
Gal	NGC 5236	M 83	Hya	7.8	14.1'x 13.2'	15.0 Mly	13h37m00.8s	-29°51'56"	21:19	01:56	05:32	21	167	46	easy	Ultima 42mm
Gal	NGC 3923	MCG -5-28-12	Hya	10.8	6.6'x 4.4'		11h51m02.1s	-28°48'23"	20:28	00:10	03:53	20	150	36	detectable	E-Lux 2" 40mm
Gal	NGC 5061	MCG -4-31-48	Hya	11.2	4.1'x 3.0'		13h18m04.8s	-26°50'10"	21:47	01:37	05:19	21	149	47	detectable	Plössl 25mm
Glob	NGC 4590	M 68	Hya	7.3	11.0'	39000 ly	12h39m28.0s	-26°44'36"	20:41	00:58	05:14	21	150	47	easy	Ultima 42mm
PNe	NGC 3242	Ghost of Jupiter	Hya	8.6	40"	2800 ly	10h24m46.1s	-18°38'32"	19:26	22:44	03:06	20	151	37	obvious	Plössl 10mm
Glob	NGC 1904	M 79	Lep	7.7	9.6'	49000 ly	05h24m11.0s	-24°31'30"	19:32	19:54	22:12	19	155	16	detectable	Ultima 42mm
Glob	NGC 5897		Lib	8.4	11.0'	46000 ly	15h17m24.0s	-21°00'36"	00:07	03:36	05:31	21	148	57	detectable	Ultima 42mm
Glob	NGC 5927		Lup	8.0	6.0'	9800 ly	15h28m01.0s	-50°40'24"	22:35	03:47	05:35	21	182	59	easy	Ultima 42mm
Glob	NGC 5986		Lup	7.6	9.6'	46000 ly	15h46m03.0s	-37°47'12"	23:32	04:05	05:34	21	165	59	easy	Ultima 42mm
Glob	NGC 5824		Lup	9.1	7.4'	150000 ly	15h03m59.0s	-33°04'06"	23:40	03:22	05:31	21	166	59	detectable	Ultima 42mm
Open	NGC 2506	Collinder 170	Mon	8.9	12.0'	11000 ly	08h00m01.0s	-10°46'12"	19:34	20:20	23:29	12	134	26	detectable	Ultima 42mm
Glob	NGC 4372		Mus	7.2	5.0'	20000 ly	12h25m45.0s	-72°39'12"	19:31	00:46	05:33	25	209	50	easy	Ultima 42mm
Glob	NGC 4833		Mus	8.4	12.7'	16000 ly	12h59m34.0s	-70°52'30"	20:40	01:19	05:22	25	209	50	difficult	Ultima 42mm
PNe	NGC 5189	IC 4274	Mus	10.3	2.3'	2000 ly	13h33m33.0s	-65°58'27"	20:34	01:52	05:29	25	208	50	detectable	Plössl 25mm
Open	NGC 6005	Collinder 294	Nor	11.4	5.0'	8800 ly	15h55m48.0s	-57°26'12"	01:34	04:14	05:25	25	196	59	challenging	E-Lux 2" 40mm
Open	NGC 5999	Collinder 293	Nor	9.0	3.0'	6700 ly	15h52m08.0s	-56°28'24"	22:50	04:11	05:36	25	196	59	easy	Ultima 42mm 2.0x
Open	Collinder 295	Trumpler 23	Nor	11.2	9.0'		16h00m48.0s	-53°32'00"	23:02	04:20	05:35	26	196	59	not visible	Ultima 42mm
Open	NGC 6167	Harvard 11	Nor	6.6	7.0'	3600 ly	16h34m34.0s	-49°46'18"	23:40	04:51	05:38	22	182	58	obvious	Ultima 42mm
Open	NGC 6134	Collinder 303	Nor	8.8	6.0'	3000 ly	16h27m46.0s	-49°09'06"	23:49	04:46	05:36	22	182	59	easy	Ultima 42mm
Glob	NGC 6266	M 62	Oph	6.4	15.0'	26000 ly	17h01m13.0s	-30°06'48"	00:46	05:02	05:37	22	164	58	easy	Ultima 42mm
Glob	NGC 6304		Oph	8.3	8.0'	20000 ly	17h14m32.0s	-29°27'42"	01:26	05:04	05:35	22	146	56	detectable	Ultima 42mm
Glob	NGC 6316		Oph	8.1	5.4'	100000 ly	17h16m37.0s	-28°08'24"	01:00	05:05	05:36	22	146	56	easy	Ultima 42mm
Glob	NGC 6293		Oph	8.3	8.2'	39000 ly	17h10m10.0s	-26°34'54"	01:28	05:04	05:35	22	146	56	detectable	Ultima 42mm

Cls	Primary ID	Alternate ID	Con	Mag	Size	Distance	RA 2000	Dec 2000	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty	Optimum EP
Glob	NGC 6273	M 19	Oph	6.8	17.0'	23000 ly	17h02m38.0s	-26°16'06"	01:12	05:02	05:35	22	146	56	easy	Ultima 42mm
Glob	NGC 6284		Oph	8.9	6.2'	55000 ly	17h04m29.0s	-24°45'54"	01:28	05:03	05:34	22	146	56	detectable	Ultima 42mm
Glob	NGC 6287		Oph	9.3	4.8'	33000 ly	17h05m09.0s	-22°42'30"	01:30	05:03	05:34	22	146	56	detectable	Ultima 42mm
Glob	NGC 6235		Oph	8.9	5.0'	52000 ly	16h53m25.0s	-22°10'36"	01:07	05:01	05:35	22	146	56	detectable	Ultima 42mm
Glob	NGC 6333	M 9	Oph	7.8	12.0'	26000 ly	17h19m12.0s	-18°31'00"	01:52	05:05	05:34	22	146	56	detectable	Ultima 42mm
Glob	NGC 6356		Oph	8.2	10.0'	36000 ly	17h23m35.0s	-17°48'48"	02:01	05:06	05:33	15	146	56	detectable	Ultima 42mm
Glob	NGC 6171	M 107	Oph	7.8	13.0'	26000 ly	16h32m32.0s	-13°03'12"	01:21	04:50	05:32	15	127	56	detectable	Ultima 42mm
Glob	NGC 6254	M 10	Oph	6.6	20.0'	23000 ly	16h57m09.0s	-04°06'00"	01:43	05:01	05:34	15	107	56	detectable	Ultima 42mm
Glob	NGC 6402	M 14	Oph	7.6	11.0'	23000 ly	17h37m36.0s	-03°14'48"	02:20	05:08	05:33	15	106	56	detectable	Ultima 42mm
Glob	NGC 6218	M 12	Oph	6.1	16.0'	23000 ly	16h47m14.0s	-01°56'48"	01:22	04:58	05:35	15	107	56	easy	Ultima 42mm
Gal	NGC 6744	ESO 104 42	Pav	9.1	17.0'x 10.7'		19h09m45.9s	-63°51'28"	02:15	05:08	05:30	26	206	70	detectable	Ultima 42mm
Glob	NGC 6752	Pavo Globular	Pav	5.3	29.0'	20000 ly	19h10m52.0s	-59°58'54"	02:03	05:08	05:31	26	194	69	easy	Celestron Plössl 32mm 2.0x
Glob	NGC 2298		Pup	9.3	5.0'	98000 ly	06h48m59.0s	-36°00'18"	19:31	19:58	23:21	19	172	29	detectable	Ultima 42mm
Open	NGC 2489	Collinder 169	Pup	9.3	6.0'	13000 ly	07h56m15.0s	-30°03'48"	19:30	20:18	00:24	19	171	28	detectable	Ultima 42mm
Open	NGC 2467	Collinder 164	Pup	7.1	14.0'	4400 ly	07h52m26.0s	-26°26'12"	19:28	20:14	00:37	19	153	26	easy	Ultima 42mm
Open	NGC 2627	Collinder 188	Pyx	8.4	8.0'	6500 ly	08h37m15.0s	-29°57'18"	19:30	20:57	01:18	20	171	26	easy	Ultima 42mm
Gal	NGC 1313	ESO 82 11	Ret	9.7	9.5'x 7.2'	14.0 Mly	03h18m15.4s	-66°29'51"	19:34	19:53	21:13	24	213	20	detectable	Ultima 42mm
Glob	NGC 6723		Sgr	6.8	13.0'	33000 ly	18h59m33.0s	-36°37'54"	02:26	05:10	05:33	22	163	69	easy	Ultima 42mm
Glob	NGC 6652		Sgr	8.5	6.0'	52000 ly	18h35m46.0s	-32°59'24"	02:20	05:09	05:33	22	163	69	detectable	Ultima 42mm
Glob	NGC 6637	M 69	Sgr	7.7	9.8'	23000 ly	18h31m23.0s	-32°20'54"	02:19	05:09	05:34	22	163	69	detectable	Ultima 42mm
Glob	NGC 6681	M 70	Sgr	7.8	8.0'	65000 ly	18h43m13.0s	-32°17'30"	02:22	05:10	05:33	22	163	69	easy	Ultima 42mm
Glob	NGC 6569		Sgr	8.4	6.4'	96000 ly	18h13m38.0s	-31°49'36"	02:04	05:09	05:34	22	163	69	detectable	Ultima 42mm
Glob	NGC 6809	M 55	Sgr	6.3	19.0'	20000 ly	19h40m00.0s	-30°57'42"	03:14	05:11	05:33	22	162	68	easy	Plössl 4mm 2.0x
Glob	NGC 6715	M 54	Sgr	7.7	12.0'	55000 ly	18h55m03.0s	-30°28'42"	02:52	05:10	05:32	22	163	69	detectable	Ultima 42mm
Glob	NGC 6624		Sgr	7.6	8.8'	42000 ly	18h23m40.0s	-30°21'30"	02:08	05:09	05:35	22	163	69	easy	Ultima 42mm
Glob	NGC 6528		Sgr	9.6	5.0'	140000 ly	18h04m49.0s	-30°03'24"	02:28	05:08	05:32	22	163	69	detectable	Ultima 42mm
Glob	NGC 6522		Sgr	9.9	9.4'	39000 ly	18h03m35.0s	-30°02'06"	03:43	05:08	05:26	22	163	69	challenging	Ultima 42mm
Glob	NGC 6553		Sgr	8.3	9.2'	87000 ly	18h09m17.0s	-25°54'30"	02:26	05:09	05:32	22	145	67	detectable	Ultima 42mm
Glob	NGC 6638		Sgr	9.2	7.3'	49000 ly	18h30m56.0s	-25°29'48"	03:03	05:09	05:31	22	145	67	detectable	Ultima 42mm
Glob	NGC 6544		Sgr	7.5	9.2'	16000 ly	18h07m20.0s	-24°59'54"	02:02	05:09	05:34	22	145	67	easy	Ultima 42mm
Glob	NGC 6626	M 28	Sgr	6.9	13.8'	16000 ly	18h24m33.0s	-24°52'12"	02:19	05:09	05:34	22	145	67	easy	Ultima 42mm
Glob	NGC 6656	M 22	Sgr	5.2	32.0'	9800 ly	18h36m24.0s	-23°54'12"	02:25	05:10	05:33	22	145	67	easy	Celestron Plössl 32mm
Glob	NGC 6642		Sgr	8.9	5.8'		18h31m54.0s	-23°28'30"	02:41	05:10	05:33	22	145	67	detectable	Ultima 42mm
Glob	NGC 6864	M 75	Sgr	8.6	6.8'	95000 ly	20h06m05.0s	-21°55'18"	03:56	05:12	05:30	23	144	66	detectable	Ultima 42mm
Glob	NGC 6440		Sgr	9.3	4.4'	13000 ly	17h48m53.0s	-20°21'36"	02:07	05:08	05:33	22	146	56	detectable	Ultima 42mm
PNe	NGC 6445	He 2-290	Sgr	13.0	35"	4200 ly	17h49m15.1s	-20°00'34"	02:43	05:08	05:32	22	146	56	difficult	Plössl 10mm
Open	NGC 6603	M 24	Sgr	11.1	6.0'	12000 ly	18h18m26.0s	-18°24'24"	03:59	05:10	05:25	15	145	67	challenging	Ultima 42mm
Open	NGC 6618	M 17	Sgr	7.3	25.0'	4200 ly	18h20m47.0s	-16°10'18"	02:57	05:09	05:31	15	126	67	detectable	Ultima 42mm
PNe	NGC 6818	Little Gem	Sgr	10.0	22"	7300 ly	19h43m57.8s	-14°09'12"	03:50	05:13	05:39	16	125	66	obvious	Celestron Plössl 15mm 2.0x
Open	NGC 6216	Collinder 314	Sco	10.1	4.0'	14000 ly	16h49m24.0s	-44°43'42"	00:48	04:58	05:33	22	181	58	detectable	Celestron Plössl 32mm
Glob	NGC 6388		Sco	6.8	10.4'	42000 ly	17h36m17.0s	-44°44'06"	00:49	05:05	05:36	22	181	58	easy	Ultima 42mm
Glob	NGC 6496		Sco	8.6	5.6'	78000 ly	17h59m03.0s	-44°15'48"	01:31	05:07	05:35	22	181	58	detectable	Ultima 42mm
Open	NGC 6192	Collinder 309	Sco	8.5	9.0'	5000 ly	16h40m23.0s	-43°22'00"	00:27	04:54	05:34	22	182	58	detectable	Ultima 42mm
Open	NGC 6318	Collinder 325	Sco	11.8	4.0'	7500 ly	17h16m11.0s	-39°25'30"	03:10	05:04	05:25	22	164	58	challenging	Celestron Plössl 32mm
Glob	NGC 6139		Sco	9.1	8.2'	42000 ly	16h27m40.0s	-38°50'54"	01:06	04:46	05:32	22	165	59	detectable	Ultima 42mm

Cls	Primary ID	Alternate ID	Con	Mag	Size	Distance	RA 2000	Dec 2000	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty	Optimum EP
Glob	NGC 6441		Sco	7.2	9.6'	29000 ly	17h50m13.0s	-37°03'06"	01:21	05:07	05:36	22	164	58	easy	Ultima 42mm
Glob	NGC 6121	M 4	Sco	5.4	36.0'	9800 ly	16h23m36.0s	-26°31'30"	00:32	04:42	05:34	22	147	57	easy	Celestron Plössl 32mm
Glob	NGC 6144		Sco	9.0	7.4'	33000 ly	16h27m14.0s	-26°01'18"	01:07	04:45	05:33	22	147	57	detectable	Ultima 42mm
Glob	NGC 6093	M 80	Sco	7.3	10.0'	36000 ly	16h17m02.0s	-22°58'30"	00:19	04:35	05:34	22	147	57	easy	Ultima 42mm
Gal	NGC 55	MCG -7-1-13	Scl	8.5	30.2'x 3.4'	4.9 Mly	00h15m08.4s	-39°13'13"	19:33	19:38	19:45	18	159	9	very challenging	Celestron Plössl 9mm
Gal	NGC 300	MCG -6-3-5	Scl	8.8	20.0'x 12.3'	7.1 Mly	00h54m53.5s	-37°41'05"	19:37	19:43	19:54	18	176	9	challenging	Ultima 42mm
Gal	NGC 7793	MCG -6-1-9	Scl	9.7	10.0'x 5.9'	12.0 Mly	23h57m49.7s	-32°35'28"	05:12	05:28	05:41	23	159	78	very challenging	Ultima 42mm
Gal	NGC 613	MCG -5-4-44	Scl	10.7	5.5'x 4.4'		01h34m18.6s	-29°25'03"	19:35	19:46	20:01	18	158	6	challenging	E-Lux 2" 40mm
Glob	NGC 288		Scl	8.1	13.0'	39000 ly	00h52m45.0s	-26°35'00"	19:26	19:38	19:54	18	158	7	not visible	Ultima 42mm
Gal	NGC 253	Sculptor Galaxy	Scl	7.9	28.2'x 5.5'	13.0 Mly	00h47m33.1s	-25°17'20"	19:30	19:37	19:43	18	158	7	challenging	Ultima 42mm
Glob	NGC 6712		Sct	8.1	9.8'	23000 ly	18h53m04.0s	-08°42'18"	03:19	05:11	05:31	16	125	67	detectable	Ultima 42mm
Open	NGC 6705	M 11	Sct	6.1	32.0'	6100 ly	18h51m05.0s	-06°16'12"	03:17	05:11	05:32	16	125	67	easy	Celestron Plössl 32mm 2.0x
Gal	NGC 3115	Spindle Galaxy	Sex	10.0	7.6'x 3.5'		10h05m14.0s	-07°43'07"	19:35	22:25	02:05	13	133	37	detectable	E-Lux 2" 26mm
Glob	NGC 6584		Tel	7.9	6.6'	42000 ly	18h18m38.0s	-52°12'54"	01:21	05:07	05:34	26	195	69	easy	Ultima 42mm
Glob	NGC 104	47 Tucanae	Tuc	4.0	50.0'	20000 ly	00h24m05.0s	-72°04'54"	19:33	19:52	22:21	24	204	10	easy	Plössl 4mm
Glob	NGC 362		Tuc	6.8	14.0'	39000 ly	01h03m14.0s	-70°50'54"	19:33	19:52	21:55	24	204	10	detectable	Ultima 42mm
Open	NGC 2972	Collinder 211	Vel	10.2	3.0'	6700 ly	09h40m12.0s	-50°19'24"	19:32	22:00	02:44	20	186	39	detectable	Ultima 42mm 2.0x
Glob	NGC 3201		Vel	6.9	20.0'	13000 ly	10h17m37.0s	-46°24'42"	19:34	22:37	03:00	20	186	39	detectable	Ultima 42mm
Open	NGC 2671	Collinder 201	Vel	11.6	6.0'	5400 ly	08h46m12.0s	-41°52'42"	19:29	21:06	02:01	20	187	28	very challenging	Ultima 42mm
PNe	NGC 3132	Eight Burst	Vel	8.2	1.4'	3600 ly	10h07m01.8s	-40°26'11"	19:26	22:27	03:26	20	169	39	obvious	Celestron Plössl 15mm
Gal	NGC 5068	MCG -3-34-46	Vir	10.7	7.1'x 6.3'		13h18m55.2s	-21°02'21"	22:12	01:38	05:03	21	149	47	detectable	Ultima 42mm
Gal	NGC 4594	M 104	Vir	9.1	9.1'x 5.6'	60.0 Mly	12h39m59.3s	-11°37'22"	20:57	00:59	05:02	14	130	47	easy	Ultima 42mm
Gal	NGC 4699	MCG -1-33-13	Vir	10.4	4.0'x 3.0'		12h49m02.2s	-08°39'52"	21:17	01:08	05:00	14	130	47	easy	Plössl 25mm
Glob	NGC 5634		Vir	9.5	5.5'	75000 ly	14h29m37.0s	-05°58'36"	23:34	02:48	05:27	14	129	46	detectable	Ultima 42mm
Gal	NGC 4753	MCG 0-33-16	Vir	10.9	5.9'x 2.8'		12h52m22.1s	-01°11'59"	22:01	01:11	04:23	14	110	47	detectable	Ultima 42mm 2.0x

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