

# ASSA Deepsky 100 Observing List

## Evening of 2014 Jun 27 at VS Star Party - Gansvlei

Sunset 17:33, Twilight ends 18:51, Twilight begins 05:43, Sunrise 07:01, Moon rise 07:32, Moon set 17:55  
 Completely dark from 18:51 to 05:43. New Moon. All times local (GMT+2).

Listing All Deep Sky Objects visible above the perfect horizon and in complete darkness after 18:51 and before 05:43.

Cls	Primary ID	Alternate ID	Con	Mag	Size	RA 2000	Dec 2000	Distance	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty
Open	NGC 2287	M 41	CMa	5.0	39.0'	06h46m01.0s	-20°45'24"	2300 ly	18:34	18:42	18:53	19	154	27	detectable
Open	NGC 2362	Collinder 136	CMa	3.8	5.0'	07h18m41.0s	-24°57'18"	4500 ly	18:24	18:48	19:34	19	154	27	obvious
Open	NGC 2437	M 46	Pup	6.6	20.0'	07h41m46.0s	-14°48'36"	4500 ly	18:37	18:49	19:10	12	135	26	detectable
Open	NGC 2422	M 47	Pup	4.3	25.0'	07h36m35.0s	-14°29'00"	1600 ly	18:33	18:49	19:16	12	135	26	easy
Open	NGC 2447	M 93	Pup	6.5	10.0'	07h44m30.0s	-23°51'24"	3400 ly	18:34	18:50	19:32	19	153	26	easy
Open	NGC 2548	M 48	Hya	5.5	30.0'	08h13m43.0s	-05°45'00"	2500 ly	18:37	18:51	19:19	12	134	26	detectable
Open	NGC 2477	Collinder 165	Pup	5.7	15.0'	07h52m10.0s	-38°31'48"	4000 ly	18:33	18:52	20:01	19	171	28	easy
Open	NGC 2451	Collinder 161	Pup	3.7	45.0'	07h45m23.0s	-37°57'21"	720 ly	18:34	18:52	19:55	19	171	28	easy
Open	NGC 2547	Collinder 177	Vel	5.0	25.0'	08h10m09.0s	-49°12'54"	1500 ly	18:35	18:54	19:08	20	187	28	easy
Open	NGC 2516	Collinder 172	Car	3.3	30.0'	07h58m04.0s	-60°45'12"	1300 ly	18:32	18:56	19:08	24	200	30	obvious
Open	IC 2391	Collinder 191	Vel	2.6	60.0'	08h40m32.0s	-53°02'00"	570 ly	18:32	18:56	19:43	25	200	28	obvious
PNe	NGC 2818	He 2-23	Pyx	11.9	36"	09h16m01.7s	-36°37'39"	6000 ly	18:36	18:56	19:58	20	170	39	detectable
Open	IC 2488	OCL 789	Vel	7.4	18.0'	09h27m38.0s	-57°00'00"	3700 ly	18:37	18:57	20:33	25	199	39	detectable
PNe	NGC 3132	Eight Burst	Vel	8.2	1.4'	10h07m01.8s	-40°26'11"	3600 ly	18:31	18:57	20:54	20	169	39	obvious
PNe	NGC 3242	Ghost of Jupiter	Hya	8.6	40"	10h24m46.1s	-18°38'32"	2800 ly	18:29	18:57	20:39	20	151	37	obvious
Gal	NGC 3115	Spindle Galaxy	Sex	10.0	7.6'x 3.5'	10h05m14.0s	-07°43'07"		18:37	18:57	19:58	13	133	37	detectable
Glob	NGC 2808		Car	6.2	14.0'	09h12m03.0s	-64°51'48"	26000 ly	18:34	18:57	20:25	25	210	40	easy
Glob	NGC 3201		Vel	6.9	20.0'	10h17m37.0s	-46°24'42"	13000 ly	18:38	18:58	20:59	20	186	39	detectable
Open	NGC 3114	Collinder 215	Car	4.5	35.0'	10h02m36.0s	-60°07'12"	3000 ly	18:34	18:59	21:11	25	199	40	obvious
Open	NGC 3324	Collinder 225	Car	6.7	12.0'	10h37m20.0s	-58°38'30"	7600 ly	18:34	18:59	21:45	25	199	38	easy
Open	NGC 3293	Collinder 224	Car	6.2	6.0'	10h35m51.0s	-58°13'48"	7600 ly	18:30	18:59	21:43	25	199	38	obvious
Open	IC 2581	Collinder 222	Car	5.3	5.0'	10h27m29.0s	-57°37'00"	8000 ly	18:28	18:59	21:34	25	199	39	obvious
Open	IC 2602	Collinder 229	Car	1.6	100.0'	10h42m58.0s	-64°24'00"	520 ly	18:31	19:00	21:55	25	210	40	obvious
Neb	NGC 3372	Eta Carinae Nebula	Car	3.0	120.0'	10h45m06.0s	-59°52'00"		18:37	19:00	21:38	25	199	38	detectable

Cls	Primary ID	Alternate ID	Con	Mag	Size	RA 2000	Dec 2000	Distance	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty
Open	NGC 3532	Collinder 238	Car	3.4	50.0'	11h05m39.0s	-58°45'12"	1600 ly	18:31	19:00	22:14	25	198	38	obvious
PNe	NGC 3918	Blue Planetary	Cen	8.4	12"	11h50m17.7s	-57°10'57"	4600 ly	18:22	19:01	22:56	25	198	38	obvious
Open	NGC 3766	Collinder 248	Cen	4.6	9.3'	11h36m14.0s	-61°36'30"	7200 ly	18:28	19:02	22:46	25	198	40	obvious
PNe	NGC 4361	PN G294.1+43.6	Crv	10.9	1.3'	12h24m30.8s	-18°47'06"	3100 ly	18:33	19:02	22:24	21	150	47	detectable
Dark	Coalsack	DC 300.7-001.0	Cru	6.0	16.0'	12h31m19.0s	-63°44'36"		18:29	19:04	23:44	25	209	50	detectable
Gal	NGC 4594	M 104	Vir	9.1	9.1'x 5.6'	12h39m59.3s	-11°37'22"	60.0 Mly	18:33	19:04	22:39	14	130	47	easy
Dark	Dark Doodad	DC 301.0-008.6C	Mus	6.0	42.4'	12h27m31.1s	-71°25'12"		18:35	19:06	23:44	25	209	50	difficult
Open	NGC 4755	Jewel Box	Cru	5.2	10.0'	12h53m39.0s	-60°21'42"	6400 ly	18:29	19:09	00:02	25	198	50	obvious
Gal	NGC 4945	ESO 219 24	Cen	9.3	20.4'x 4.3'	13h05m26.2s	-49°28'15"	15.0 Mly	18:35	19:10	23:24	21	184	49	detectable
Glob	NGC 4833		Mus	8.4	12.7'	12h59m34.0s	-70°52'30"	16000 ly	18:38	19:11	23:32	25	209	50	detectable
Gal	NGC 5128	Centaurus A	Cen	7.8	27.5'x 18.2'	13h25m27.7s	-43°01'07"	12.0 Mly	18:35	19:19	23:46	21	184	49	detectable
Glob	NGC 5139	Omega Centauri	Cen	3.9	55.0'	13h26m46.0s	-47°28'36"	16000 ly	18:32	19:20	00:23	21	184	49	easy
PNe	NGC 5189	IC 4274	Mus	10.3	2.3'	13h33m33.0s	-65°58'27"	2000 ly	18:35	19:27	00:44	25	208	50	detectable
Gal	NGC 5236	M 83	Hya	7.8	14.1'x 13.2'	13h37m00.8s	-29°51'56"	15.0 Mly	18:33	19:30	00:09	21	167	46	easy
Open	NGC 5281	Melotte 120	Cen	8.2	7.0'	13h46m35.0s	-62°55'00"	3600 ly	18:32	19:39	00:59	25	208	50	easy
Open	NGC 5460	Collinder 280	Cen	6.1	35.0'	14h07m27.0s	-48°20'36"	2200 ly	18:35	20:00	00:37	21	183	48	easy
Open	NGC 5662	Collinder 284	Cen	7.7	29.0'	14h35m37.0s	-56°37'06"	2200 ly	18:40	20:28	00:15	25	197	48	detectable
Open	NGC 5822	Collinder 289	Lup	6.5	35.0'	15h04m21.0s	-54°23'48"	3000 ly	18:37	20:57	01:26	25	196	59	detectable
Open	NGC 5823	Melotte 131	Cir	8.6	12.0'	15h05m30.0s	-55°36'12"	3900 ly	18:38	20:58	01:25	25	196	59	detectable
Dark	B 228		Lup	6.0	4.0°	15h43m01.3s	-34°09'12"		18:39	21:35	01:32	21	165	59	very challenging
Open	NGC 6025	Collinder 296	TrA	6.0	14.0'	16h03m17.0s	-60°25'54"	2500 ly	18:32	21:56	03:11	26	196	60	obvious
Open	NGC 6067	Collinder 298	Nor	6.5	14.0'	16h13m11.0s	-54°13'06"	4600 ly	18:34	22:05	03:16	26	196	59	easy
Open	NGC 6087	Collinder 300	Nor	6.0	14.0'	16h18m50.0s	-57°56'06"	2900 ly	18:34	22:11	03:25	26	196	59	obvious
Glob	NGC 6121	M 4	Sco	5.4	36.0'	16h23m36.0s	-26°31'30"	9800 ly	18:40	22:15	02:29	22	147	57	easy
Open	NGC 6124	Collinder 301	Sco	6.3	39.0'	16h25m20.0s	-40°39'12"	1700 ly	18:42	22:17	02:26	22	182	59	detectable
Open	NGC 6193	Collinder 310	Ara	5.4	14.0'	16h41m20.0s	-48°45'48"	3800 ly	18:32	22:33	03:38	22	182	58	obvious
Glob	NGC 6218	M 12	Oph	6.1	16.0'	16h47m14.0s	-01°56'48"	23000 ly	18:53	22:39	02:25	15	107	56	easy
Open	NGC 6231	Collinder 315	Sco	3.4	14.0'	16h54m10.0s	-41°49'30"	4100 ly	18:30	22:46	03:43	22	181	58	obvious
Glob	NGC 6254	M 10	Oph	6.6	20.0'	16h57m09.0s	-04°06'00"	23000 ly	19:16	22:48	02:21	15	107	56	easy
Glob	NGC 6266	M 62	Oph	6.4	15.0'	17h01m13.0s	-30°06'48"	26000 ly	18:42	22:52	03:29	22	164	58	easy
Glob	NGC 6273	M 19	Oph	6.8	17.0'	17h02m38.0s	-26°16'06"	23000 ly	18:48	22:54	03:07	22	146	56	easy
Open	NGC 6281	Collinder 324	Sco	8.4	8.0'	17h04m41.0s	-37°59'06"	1600 ly	18:42	22:56	03:32	22	164	58	easy
Dark	B 59	Pipe Nebula	Oph	5.0	60.0'	17h11m06.0s	-27°24'00"		19:34	23:03	02:32	22	146	56	difficult
Open	NGC 6405	Butterfly Cluster	Sco	4.6	20.0'	17h40m20.0s	-32°15'12"	1600 ly	18:48	23:32	04:16	22	164	58	obvious

Cls	Primary ID	Alternate ID	Con	Mag	Size	RA 2000	Dec 2000	Distance	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty
Glob	NGC 6397		Ara	5.3	31.0'	17h40m42.0s	-53°40'24"	6500 ly	18:43	23:33	04:43	26	195	58	easy
Open	NGC 6475	M 7	Sco	3.3	80.0'	17h53m51.0s	-34°47'36"	980 ly	18:57	23:45	04:33	22	164	58	obvious
Open	NGC 6494	M 23	Sgr	5.9	29.0'	17h57m04.0s	-18°59'06"	2000 ly	19:38	23:49	03:57	22	146	56	easy
Open	NGC 6514	M 20	Sgr	5.2	28.0'	18h02m42.0s	-22°58'18"	2700 ly	19:25	23:54	04:23	22	145	67	easy
Open	NGC 6531	M 21	Sgr	7.2	14.0'	18h04m13.0s	-22°29'24"	3900 ly	19:36	23:55	04:15	22	145	67	easy
Neb	NGC 6523	NGC 6526	Sgr	5.0	17.0'x 15.0'	18h04m02.0s	-24°23'14"		19:25	23:56	04:27	22	145	67	easy
Glob	NGC 6541		CrA	6.3	15.0'	18h08m02.0s	-43°42'54"	13000 ly	19:01	00:00	04:59	22	181	69	easy
Open	NGC 6603	M 24	Sgr	11.1	6.0'	18h18m26.0s	-18°24'24"	12000 ly	21:44	00:09	02:37	15	145	67	challenging
Glob	NGC 6584		Tel	7.9	6.6'	18h18m38.0s	-52°12'54"	42000 ly	19:02	00:10	05:19	26	195	69	easy
Open	NGC 6618	M 17	Sgr	7.3	25.0'	18h20m47.0s	-16°10'18"	4200 ly	20:35	00:12	03:47	15	126	67	detectable
Open	M 25	IC 4725	Sgr	6.2	29.0'	18h31m47.0s	-19°07'00"	2000 ly	20:20	00:23	04:26	22	145	67	easy
Glob	NGC 6656	M 22	Sgr	5.2	32.0'	18h36m24.0s	-23°54'12"	9800 ly	20:06	00:28	04:49	22	145	67	easy
Open	NGC 6705	Wild Duck Cluster	Sct	6.1	32.0'	18h51m05.0s	-06°16'12"	6100 ly	21:02	00:42	04:22	16	125	67	easy
Glob	NGC 6723		Sgr	6.8	13.0'	18h59m33.0s	-36°37'54"	33000 ly	20:10	00:50	05:31	22	163	69	easy
Neb	Bernes 157		CrA		1.5'	19h01m35.2s	-37°00'55"		20:03	00:53	05:41	22	163	69	unknown
Gal	NGC 6744	ESO 104 42	Pav	9.1	17.0'x 10.7'	19h09m45.9s	-63°51'28"		20:12	01:01	05:44	26	206	70	detectable
Glob	NGC 6752	Pavo Globular	Pav	5.3	29.0'	19h10m52.0s	-59°58'54"	20000 ly	19:46	01:02	05:52	26	194	69	easy
Glob	NGC 6809	M 55	Sgr	6.3	19.0'	19h40m00.0s	-30°57'42"	20000 ly	21:06	01:31	05:47	22	162	68	easy
Open	Collinder 411	Melotte 227	Oct	5.3	70.0'	20h17m19.0s	-79°02'00"	390 ly	20:45	02:10	05:56	26	215	70	detectable
Glob	NGC 7089	M 2	Aqr	6.6	16.0'	21h33m27.0s	-00°49'24"	49000 ly	23:41	03:24	05:56	17	103	77	easy
Glob	NGC 7099	M 30	Cap	6.9	12.0'	21h40m22.0s	-23°10'42"	39000 ly	23:08	03:32	06:01	23	143	77	easy
PNe	NGC 7293	Helix	Aqr	6.3	16.0'	22h29m38.5s	-20°50'14"	530 ly	23:59	04:20	06:01	23	142	77	easy
Glob	NGC 104	47 Tucanae	Tuc	4.0	50.0'	00h24m05.0s	-72°04'54"	20000 ly	00:49	05:28	06:00	24	204	10	easy
Gal	NGC 292	Small Magellanic Cloud	Tuc	2.8	5.3°x 3.4°	00h52m38.0s	-72°48'01"	200000 ly	01:16	05:30	05:59	24	204	10	easy
Gal	NGC 55	MCG -7-1-13	Scl	8.5	30.2'x 3.4'	00h15m08.4s	-39°13'13"	4.9 Mly	01:35	05:30	06:01	18	159	9	detectable
Glob	NGC 362		Tuc	6.8	14.0'	01h03m14.0s	-70°50'54"	39000 ly	01:28	05:31	06:00	24	204	10	easy
Gal	NGC 253	Sculptor Galaxy	Scl	7.9	28.2'x 5.5'	00h47m33.1s	-25°17'20"	13.0 Mly	02:08	05:33	06:02	18	158	7	easy
Gal	NGC 247	MCG -4-3-5	Cet	9.7	20.0'x 5.0'	00h47m08.6s	-20°45'38"	8.1 Mly	02:58	05:33	05:58	18	158	7	detectable
Glob	NGC 288		Scl	8.1	13.0'	00h52m45.0s	-26°35'00"	39000 ly	02:53	05:34	05:59	18	158	7	detectable
PNe	NGC 246	PN G118.8-74.7	Cet	10.4	4.0'	00h47m03.3s	-11°52'19"	1600 ly	03:17	05:33	05:57	10	140	7	detectable
Glob	NGC 1261		Hor	8.3	6.8'	03h12m16.0s	-55°13'00"	95000 ly	03:49	05:37	05:58	24	202	19	detectable
Gal	NGC 1291	MCG -7-7-8	Eri	9.5	9.1'x 6.6'	03h17m18.6s	-41°06'29"		04:11	05:38	05:58	18	190	19	detectable
Gal	NGC 1316	Fornax A radio source	For	9.4	12.6'x 7.9'	03h22m41.5s	-37°12'27"		04:22	05:38	05:56	18	174	19	detectable
Gal	NGC 1068	M 77	Cet	9.7	6.6'x 5.8'	02h42m40.8s	-00°00'48"	70.0 Mly	04:52	05:38	05:58	10	119	6	detectable
Gal	Large Magellanic Cloud	ESO 56 115	Dor	0.8	10.8°x 9.2°	05h23m34.6s	-69°45'22"	200000 ly	03:10	05:39	05:59	24	212	20	easy

Cls	Primary ID	Alternate ID	Con	Mag	Size	RA 2000	Dec 2000	Distance	Begin	Optimum	End	S.A.	Ur. 2	PSA	Difficulty
Gal	NGC 1365	MCG -6-8-26	For	10.4	10.5'x 6.2'	03h33m36.4s	-36°08'26"		04:36	05:39 ■	05:55	18	174	19	difficult
Neb	NGC 2070	Tarantula Nebula	Dor	8.3	5.0'	05h38m36.0s	-69°06'00"		02:20	05:40 ■	06:05	24	212	20	obvious
Glob	NGC 1851		Col	7.1	12.0'	05h14m06.0s	-40°02'48"	55000 ly	04:56	05:42 ■	05:58	19	173	18	detectable
PNe	NGC 1535	Cleopatra's Eye	Eri	9.4	20"	04h14m15.8s	-12°44'22"	5800 ly	04:30	05:42 ■	06:04	11	137	17	obvious
Glob	NGC 1904	M 79	Lep	7.7	9.6'	05h24m11.0s	-24°31'30"	49000 ly	05:22	05:46 ■	05:58	19	155	16	detectable
Neb	NGC 1977		Ori	7.0	20.0'	05h35m18.0s	-04°51'00"		05:40	05:52 ■	06:03	11	116	16	not visible
Neb	NGC 1976	Great Orion Nebula	Ori	4.0	40.0'x 20.0'	05h35m18.0s	-05°23'00"		05:45	05:53 ■	06:00	11	116	16	difficult

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