ASSA Deepsky 100 Observing List
Evening of 2010 Mar 13 at Bloemfontein, South Africa

Sunset 18:41, Twilight ends 19:54, Twilight begins 04:55, Sunrise 06:09, Moon rise 04:46, Moon set 17:14
Completely dark from 19:54 to 04:46. New Moon. All times local (GMT+2).

Listing All Classes visible above the perfect horizon and in complete darkness.

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Begin	Optimum	End	HA	Difficulty	Optimum EP
Gal	NGC 1291	MCG -7-7-8	Eri	49.32750	-41.1080	9.1'x 6.6'	9.5	18:43	18:56	19:08	+118.3246	detectable	Ultima 42mm MD
Gal	Fornax A radio s	NGC 1316	For	50.67285	-37.2076	12.6'x 7.9'	9.4	18:45	18:56	19:08	+116.9793	difficult	Celestron Plössl 32mm MD
Gal	NGC 1365	MCG -6-8-26	For	53.40180	-36.1406	10.5'x 6.2'	10.4	18:48	18:57	19:07	+114.2503	challenging	Ultima 42mm MD
Glob	47 Tucanae	NGC 104	Tuc	6.02083	-72.0817	50.0'	4.0	18:41	18:59	19:07	+161.6313	detectable	Plössl 6mm MD
Glob	NGC 362		Tuc	15.80833	-70.8483	14.0'	6.8	18:43	18:59	19:07	+151.8438	detectable	Celestron Plössl 32mm MD
Gal	Small Magellanic	NGC 292	Tuc	13.15830	-72.8002	5.3°x 3.4°	2.8	18:42	19:00	19:07	+154.4938	detectable	Ultima 42mm MD
Gal	M 77	NGC 1068	Cet	40.66995	-0.0133	6.6'x 5.8'	9.7	19:00	19:07	19:11	+126.9822	challenging	Ultima 42mm MD
PNe	Cleopatra's Eye	NGC 1535	Eri	63.56567	-12.7395	20"	9.4	19:26	19:53	21:15	+42.2510	obvious	Celestron Plössl 15mm 2.0x MD
Glob	NGC 1261		Hor	48.06667	-55.2167	6.8'	8.3	19:35	19:55	21:17	+58.1911	detectable	Ultima 42mm MD
Glob	NGC 1851		Col	78.52500	-40.0467	12.0'	7.1	19:33	19:57	22:56	+28.1273	easy	Celestron Plössl 32mm MD
Glob	M 79	NGC 1904	Lep	81.04583	-24.5250	9.6'	7.7	19:33	19:57	22:35	+25.6065	easy	Ultima 42mm MD
Gal	Large Magellanic	ESO 56 115	Dor	80.89410	-69.7561	10.8°x 9.2°	0.8	19:33	20:00	23:40	+26.5938	easy	Ultima 42mm MD
Neb	Tarantula Nebula	NGC 2070	Dor	84.65000	-69.1000	5.0'	8.3	19:32	20:01	23:54	+23.0004	obvious	Ultima 42mm MD
Open	M 41	NGC 2287	CMa	101.50417	-20.7567	39.0'	5.0	19:31	20:02	00:01	+6.3864	easy	Celestron Plössl 9mm MD
Open	NGC 2362	Collinder 136	CMa	109.67083	-24.9550	5.0'	3.8	19:23	20:12	00:41	+0.9257	obvious	Ultima 42mm MD
Open	M 47	NGC 2422	Pup	14.14583	-14.4833	25.0'	4.3	19:28	20:27	00:39	+0.1813	obvious	Celestron Plössl 15mm MD
Open	M 46	NGC 2437	Pup	15.44167	-14.8100	20.0'	6.6	19:32	20:32	00:35	+0.1881	easy	Celestron Plössl 15mm MD
Open	M 93	NGC 2447	Pup	16.12500	-23.8567	10.0'	6.5	19:28	20:35	01:06	+0.0472	obvious	Ultima 42mm MD
Open	NGC 2451	Collinder 161	Pup	16.34589	-37.9559	45.0'	3.7	19:29	20:36	01:27	+0.1228	obvious	Celestron Plössl 9mm MD
Open	NGC 2477	Collinder 165	Pup	18.04167	-38.5300	15.0'	5.7	19:28	20:42	01:34	+0.0820	obvious	Celestron Plössl 32mm MD
Open	NGC 2516	Collinder 172	Car	19.51667	-60.7533	30.0'	3.3	19:28	20:48	02:06	+0.0180	obvious	Celestron Plössl 9mm MD
Open	NGC 2547	Collinder 177	Vel	22.53750	-49.2150	25.0'	5.0	19:29	21:00	02:07	+0.0788	obvious	Celestron Plössl 15mm MD
Open	M 48	NGC 2548	Hya	23.42917	-5.7500	30.0'	5.5	19:31	21:04	00:58	+0.1304	easy	Celestron Plössl 9mm MD

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Begin	Optimum	End	HA	Difficulty	Optimum EP
Open	IC 2391	Collinder 191	Vel	30.13333	-53.0333	60.0'	2.6	19:30	21:31	02:41	+0.0787	obvious	Plössl 6mm MD
Glob	NGC 2808		Car	38.01250	-64.8633	14.0'	6.2	19:33	22:02	03:24	+0.1146	easy	Celestron Plössl 32mm MD
PNe	NGC 2818	He 2-23	Pyx	39.00690	-36.6274	36"	11.9	19:32	22:06	02:41	+0.1320	detectable	Celestron Plössl 9mm MD
Open	IC 2488	OCL 789	Vel	41.90833	-57.0000	18.0'	7.4	19:35	22:18	03:07	+0.0951	detectable	Celestron Plössl 32mm MD
Open	NGC 3114	Collinder 215	Car	50.65000	-60.1200	35.0'	4.5	19:33	22:52	04:10	+0.0114	obvious	Celestron Plössl 9mm MD
Gal	Spindle Galaxy	NGC 3115	Sex	51.30815	-7.7185	7.6'x 3.5'	10.0	19:40	22:56	02:38	+0.2248	detectable	Celestron Plössl 32mm MD
PNe	Eight Burst	NGC 3132	Vel	51.75738	-40.4364	1.4'	8.2	19:28	22:57	03:52	+0.1398	obvious	Celestron Plössl 15mm MD
Glob	NGC 3201		Vel	54.40417	-46.4117	20.0'	6.9	19:38	23:08	03:29	+0.0906	detectable	Celestron Plössl 15mm MD
PNe	Ghost of Jupiter	NGC 3242	Hya	56.19224	-18.6423	40"	8.6	19:27	23:15	03:35	+0.2567	obvious	Celestron Plössl 15mm MD
Open	IC 2581	Collinder 222	Car	56.87084	-57.6167	5.0'	5.3	19:26	23:18	04:32	+0.2167	obvious	Ultima 42mm MD
Open	NGC 3293	Collinder 224	Car	58.96250	-58.2300	6.0'	6.2	19:29	23:26	04:42	+0.1720	obvious	Ultima 42mm MD
Open	NGC 3324	Collinder 225	Car	59.33333	-58.6417	12.0'	6.7	19:34	23:27	04:43	+0.0761	easy	Ultima 42mm MD
Open	IC 2602	Collinder 229	Car	60.74167	-64.4000	100.0'	1.6	19:32	23:33	04:55	+0.2256	obvious	Plössl 4mm MD
Neb	Eta Carinae Nebu	NGC 3372	Car	61.27500	-59.8667	120.0'	3.0	19:32	23:35	04:53	+0.1333	obvious	Ultima 42mm MD
Open	NGC 3532	Collinder 238	Car	66.41250	-58.7533	50.0'	3.4	19:34	23:56	05:12	+0.1506	obvious	Plössl 6mm MD
Open	NGC 3766	Collinder 248	Cen	74.05833	-61.6083	9.3'	4.6	19:30	00:26	05:19	+0.0002	obvious	Ultima 42mm MD
PNe	Blue Planetary	NGC 3918	Cen	77.57387	-57.1825	12"	8.4	19:26	00:40	05:26	+0.1132	obvious	Celestron Plössl 9mm 2.0x MD
PNe	NGC 4361	PN G294.1+43.6	Crv	86.12814	-18.7849	1.3'	10.9	21:13	01:14	05:06	+0.1711	detectable	Celestron Plössl 15mm MD
Dark	Dark Doodad	DC 301.0-008.6C	Mus	86.87950	-71.4200	42.4'	6.0	19:50	01:17	05:18	+0.1543	detectable	Plössl 6mm MD
Dark	Coalsack	DC 300.7-001.0	Cru	87.82917	-63.7433	16.0'	6.0	20:44	01:21	05:09	+0.1331	difficult	Celestron Plössl 15mm MD
Gal	Sombrero Galaxy	M 104	Vir	89.99705	-11.6229	9.1'x 5.6'	9.1	21:27	01:30	05:10	+0.1459	easy	Ultima 42mm MD
Open	Jewel Box	NGC 4755	Cru	93.41250	-60.3617	10.0'	5.2	20:26	01:43	05:20	+0.1437	obvious	Ultima 42mm MD
Glob	NGC 4833		Mus	94.89167	-70.8750	12.7'	8.4	21:12	01:49	05:09	+0.0573	detectable	Celestron Plössl 32mm MD
Gal	NGC 4945	ESO 219 24	Cen	96.35900	-49.4709	20.4'x 4.3'	9.3	21:32	01:55	05:11	+0.1954	detectable	Celestron Plössl 15mm MD
Dark	B 228		Lup	35.75542	-34.1533	4.0°	6.0	22:23	02:14	05:30	-68.1033	not visible	Ultima 42mm MD
Gal	Centaurus A	NGC 5128	Cen	01.36555	-43.0187	27.5'x 18.2'	7.8	21:50	02:16	05:13	+0.2865	detectable	Celestron Plössl 15mm MD
Glob	Omega Centauri	NGC 5139	Cen	01.69167	-47.4767	55.0'	3.9	21:12	02:17	05:16	+0.2535	easy	Plössl 4mm MD
PNe	NGC 5189	IC 4274	Mus	03.38739	-65.9741	2.3'	10.3	21:07	02:23	05:13	+0.1962	detectable	Ultima 42mm 2.0x MD
Gal	M 83	NGC 5236	Hya	04.25335	-29.8655	14.1'x 13.2'	7.8	21:50	02:27	05:16	+0.1795	easy	Celestron Plössl 32mm MD

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Begin	Optimum	End	HA	Difficulty	Optimum EP
Open	NGC 5281	Melotte 120	Cen	06.64583	-62.9167	7.0'	8.2	21:15	02:37	05:17	+0.2803	easy	Ultima 42mm MD
Open	NGC 5460	Collinder 280	Cen	11.86250	-48.3433	35.0'	6.1	22:19	02:57	05:15	+0.2033	easy	Celestron Plössl 9mm MD
Open	NGC 5662	Collinder 284	Cen	18.90416	-56.6183	29.0'	7.7	23:39	03:25	05:11	+0.1454	detectable	Plössl 4mm MD
Open	NGC 5823	Melotte 131	Cir	26.37500	-55.6033	12.0'	8.6	23:33	03:55	05:14	+0.1258	detectable	Ultima 42mm MD
Open	NGC 5822	Collinder 289	Lup	26.08750	-54.3967	35.0'	6.5	23:21	03:54	05:16	+0.2331	detectable	Celestron Plössl 9mm MD
Open	NGC 6025	Collinder 296	TrA	40.82083	-60.4317	14.0'	6.0	23:35	04:40	05:18	-2.9770	obvious	Celestron Plössl 32mm MD
Open	NGC 6087	Collinder 300	Nor	44.70833	-57.9350	14.0'	6.0	23:52	04:44	05:19	-5.8727	obvious	Celestron Plössl 32mm MD
Open	NGC 6067	Collinder 298	Nor	43.29585	-54.2183	14.0'	6.5	23:51	04:43	05:20	-4.7084	easy	Celestron Plössl 32mm MD
Open	NGC 6124	Collinder 301	Sco	46.33334	-40.6533	39.0'	6.3	01:02	04:46	05:15	-6.9087	detectable	Celestron Plössl 9mm MD
Open	NGC 6193	Collinder 310	Ara	50.33335	-48.7633	14.0'	5.4	00:26	04:47	05:20	-10.6106	obvious	Celestron Plössl 32mm MD
Glob	M 4	NGC 6121	Sco	45.90000	-26.5250	36.0'	5.4	01:01	04:47	05:18	-6.2507	easy	Celestron Plössl 9mm MD
Open	NGC 6231	Collinder 315	Sco	53.54168	-41.8250	14.0'	3.4	00:47	04:49	05:24	-13.3433	obvious	Celestron Plössl 32mm MD
Glob	NGC 6397		Ara	65.17500	-53.6733	31.0'	5.3	01:20	04:50	05:16	-24.7059	easy	Celestron Plössl 9mm MD
Open	NGC 6281	Collinder 324	Sco	56.17083	-37.9850	8.0'	8.4	01:18	04:51	05:18	-15.6852	easy	Ultima 42mm MD
Glob	M 12	NGC 6218	Oph	51.80833	-1.9467	16.0'	6.1	01:51	04:50	05:19	-11.5236	easy	Celestron Plössl 15mm MD
Open	Collinder 411	Melotte 227	Oct	04.32916	-79.0333	70.0'	5.3	03:39	04:51	05:13	-63.7232	detectable	Plössl 4mm MD
Glob	NGC 6541		CrA	72.00833	-43.7150	15.0'	6.3	01:58	04:52	05:17	-31.1879	easy	Celestron Plössl 15mm MD
Glob	M 62	NGC 6266	Oph	55.30417	-30.1133	15.0'	6.4	01:14	04:51	05:18	-14.7170	easy	Celestron Plössl 15mm MD
Glob	M 19	NGC 6273	Oph	55.65833	-26.2683	17.0'	6.8	01:39	04:51	05:18	-15.0323	easy	Celestron Plössl 15mm MD
Gal	NGC 6744	ESO 104 42	Pav	87.44125	-63.8577	17.0'x 10.7'	9.1	02:38	04:52	05:14	-46.5335	detectable	Celestron Plössl 32mm MD
Glob	Pavo Globular	NGC 6752	Pav	87.71667	-59.9817	29.0'	5.3	02:42	04:52	05:16	-46.8089	easy	Celestron Plössl 9mm MD
Glob	NGC 6584		Tel	74.65833	-52.2150	6.6'	7.9	01:59	04:52	05:17	-33.7627	easy	Ultima 42mm MD
Glob	M 10	NGC 6254	Oph	54.28750	-4.1000	20.0'	6.6	02:07	04:51	05:17	-13.5661	detectable	Celestron Plössl 15mm MD
Glob	NGC 6723		Sgr	84.88750	-36.6317	13.0'	6.8	02:58	04:53	05:17	-43.7547	easy	Celestron Plössl 32mm MD
Open	M 7	NGC 6475	Sco	68.46250	-34.7933	80.0'	3.3	01:55	04:52	05:18	-27.5043	obvious	Plössl 4mm MD
Open	Butterfly Cluste	M 6	Sco	65.08333	-32.2533	20.0'	4.6	01:46	04:53	05:22	-24.0511	obvious	Celestron Plössl 15mm MD
Dark	Pipe Nebula	B 59	Oph	57.77500	-27.4000	60.0'	5.0	01:24	04:53	05:26	-16.7277	detectable	Plössl 4mm MD
Neb	Lagoon Nebula	M 8	Sgr	71.00833	-24.3872	17.0'x 15.0'	5.0	02:22	04:53	05:19	-29.8156	obvious	Celestron Plössl 15mm MD
Glob	M 22	NGC 6656	Sgr	79.10000	-23.9033	32.0'	5.2	02:54	04:53	05:17	-37.9137	easy	Celestron Plössl 9mm MD
Open	M 20	NGC 6514	Sgr	70.67499	-22.9717	28.0'	5.2	02:23	04:53	05:17	-29.4596	easy	Plössl 4mm MD

Cls	Primary ID	Alternate ID	Con	RA 2000	Dec 2000	Size	Mag	Begin	Optimum	End	HA	Difficulty	Optimum EP
Open	M 21	NGC 6531	Sgr	71.05417	-22.4900	14.0'	7.2	02:26	04:53	05:17	-29.8661	easy	Celestron Plössl 32mm MD
Open	M 25	IC 4725	Sgr	77.94583	-19.1167	29.0'	6.2	03:00	04:53	05:15	-36.7595	easy	Plössl 4mm MD
Open	M 23	NGC 6494	Sgr	69.26666	-18.9850	29.0'	5.9	02:28	04:53	05:17	-28.0420	easy	Plössl 4mm MD
Open	M 24	NGC 6603	Sgr	74.60833	-18.4067	6.0'	11.1	04:02	04:53	05:09	-33.4220	challenging	Ultima 42mm MD
Open	M 17	NGC 6618	Sgr	75.19583	-16.1717	25.0'	7.3	03:13	04:53	05:13	-34.0095	detectable	Celestron Plössl 15mm MD
Open	Wild Duck Cluste	M 11	Sct	82.77084	-6.2700	32.0'	6.1	03:45	04:53	05:15	-41.5845	detectable	Celestron Plössl 9mm MD
Neb	Bernes 157		CrA	85.39667	-37.0153	1.5'		00:47	05:07	05:40	-117.7446	unknown	Celestron Plössl 32mm 2.0x MD
Glob	M 55	NGC 6809	Sgr	95.00000	-30.9617	19.0'	6.3	01:45	05:11	05:38	-127.3479	easy	Celestron Plössl 15mm MD
Glob	M 2	NGC 7089	Aqr	23.36250	-0.8233	16.0'	6.6	04:22	05:16	05:35	-155.7104	easy	Celestron Plössl 15mm MD
Glob	M 30	NGC 7099	Cap	25.09167	-23.1783	12.0'	6.9	03:20	05:29	05:50	-157.4396	detectable	Celestron Plössl 32mm MD
PNe	Helix	NGC 7293	Aqr	37.41045	-20.8371	16.0'	6.3	03:50	05:30	05:50	-169.7583	detectable	Celestron Plössl 15mm MD
Gal	NGC 55	MCG -7-1-13	Scl	3.78510	-39.2203	30.2'x 3.4'	8.5	05:01	05:32	05:46	+163.8670	difficult	Plössl 6mm MD
Glob	NGC 288		Scl	13.18750	-26.5833	13.0'	8.1	04:39	05:35	05:53	+154.4646	very challenging	Celestron Plössl 32mm MD
Gal	Sculptor Galaxy	NGC 253	Scl	11.88810	-25.2888	28.2'x 5.5'	7.9	05:02	05:34	05:48	+155.7640	difficult	Celestron Plössl 9mm MD
Gal	NGC 247	MCG -4-3-5	Cet	11.78595	-20.7604	20.0'x 5.0'	9.7	04:43	05:35	05:53	+155.8662	very challenging	Celestron Plössl 15mm MD
PNe	NGC 246	PN G118.8-74.7	Cet	11.76395	-11.8720	4.0'	10.4	04:53	05:36	05:53	+155.8882	not visible	Ultima 42mm MD
Open	NGC 1976	OCL 528	Ori	83.81667	-5.3900	47.0'		-	-	-	+83.8354	unknown	Celestron Plössl 9mm MD
Open	NGC 1977	OCL 525.1	Ori	83.81667	-4.8200	20.0'		-	-	-	+83.8354	unknown	Celestron Plössl 15mm MD

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