

## Autumn

No.	NGC	Con	Type	R.A.	Dec	m_v	Size	Remarks
1	7009	Aqr	PN	21:04.2	-11:02	8.3	25"	!! Saturn Nebula; small bright oval
2	7293	Aqr	PN	22:29.6	-20:48	6.5	12'50"	!! Helix Nebula; large, diffuse; use filter
3	7331	Peg	G-Sb	22:37.1	+34:25	9.5	10.7x4.0	!! large, bright spiral galaxy
4	7635	Cas	EN	23:20.7	+61:12	-	15x8	Bubble Neb.; very faint; 1/2° SW of M52
5	7789	Cas	OC	23:57.0	+56:44	6.7	16	!! 300*; faint but very rich cluster
6	185	Cas	G-E0	00:39.0	+48:20	11.7	2x2	companion to M31; small and faint; with NGC 147
7	281	Cas	EN	00:52.8	+56:36	-	35x30	!! large faint nebulosity near eta Cas
8	457	Cas	OC	01:19.1	+58:20	6.4	13	80*; rich; one of the best Cas. clusters
9	663	Cas	OC	01:46.0	+61:15	7.1	16	80*; look for NGCs 654 and 659 nearby
10	I 289	Cas	PN	03:10.3	+61:19	12.3	34"	dim oval smudge; use nebula filter!
11	7662	And	PN	23:25.9	+42:33	9.2	20"	!! Blue Snowball; annular at high power
12	891	And	G-Sb	02:22.6	+42:21	10	13.5x2.8	!! faint, classic edge-on with dust lane
13	253	Scl	G-Scp	00:47.6	-25:17	7.1	25.1x7.4	!! very large and bright but at low altitude
14	772	Ari	G-Sb	01:59.3	+19:01	10.3	7.1x4.5	diffuse spiral galaxy
15	246	Cet	PN	00:47.0	-11:53	8.0	3'45"	large and faint with mottled structure
16	936	Cet	G-SBa	02:27.6	-01:09	10.1	5.2x4.4	near M77; NGC 941 in the same field
17	869/84	Per	OC	02:20.0	+57:08	~4.4	30/30	!! Double Cluster; 315*; use low power
18	1023	Per	G-E7p	02:40.4	+39:04	9.5	8.7x4.3	bright lens-shaped galaxy near M34
19	1491	Per	EN	04:03.4	+51:19	-	3.0x3.0	visually small and faint emission nebula
20	1501	Cam	PN	04:07.0	+60:55	12.0	52"	faint; dark center; look for NGC 1502
21	1232	Eri	G-Sc	03:09.8	-20:35	9.9	7.8x6.9	face-on spiral; look for NGC 1300 nearby
22	1535	Eri	PN	04:14.2	-12:44	10.4	18"	bright planetary with blue-grey disk

## Winter

No.	NGC	Con	Type	R.A.	Dec	m_v	Size	Remarks
23	1514	Tau	PN	04:09.2	+30:47	10.8	1'54"	faint glow around 9.4 mag central star
24	1931	Aur	E/RN	05:31.4	+34:15		3.0x3.0	haze surrounding 4 close stars
25	1788	Ori	RN	05:06.9	-03:21		8.0x5.0	fairly bright but diffuse reflection nebula
26	1973+	Ori	E/RN	05:35.1	-04:44		40x25	NGC 1973-5-7 near M42 and M43; often neglected
27	2022	Ori	PN	05:42.1	+09:05	12.4	18"	small, faint & distinct with annular form
28	2024	Ori	EN	05:40.7	-02:27		30x30	bright but masked by glow from Zeta Ori
29	2194	Ori	OC	06:13.8	+12:48	8.5	10	80*, fairly rich; look for 2169 nearby
30	2371/2	Gem	PN	07:25.6	+29:29	13.0	55"	faint double-lobed planetary; use filter

31	2392	Gem	PN	07:29.2	+20:55	8.3	13"	!! Clown Face or Eskimo Nebula
32	2237+	Mon	EN	06:32.3	+05:03		80x60	!! Rosette Neb.; very large; use neb. filter
33	2261	Mon	E/RN	06:39.2	+08:44	var	2x1	Hubble's Variable Nebula; comet-shaped
34	2359	CMa	EN	07:18.6	-13:12		8.0x6.0	bright; look for NGC 2360 & 2362 nearby
35	2440	Pup	PN	07:41.9	-18:13	10.3	14"	almost starlike; irregular at high power
36	2539	Pup	OC	08:10.7	-12:50	6.5	22	50*; rich cluster; near M46 and M47
37	2403	Cam	G-Sc	07:36.9	+65:36	8.4	17.8x11.0	!! very large & bright; visible in binocs.
38	2655	Cam	G-Sa	08:55.6	+78:13	10.1	5.1x4.4	bright ellipse with starlike nucleus

### Spring

No.	NGC	Con	Type	R.A.	Dec	m_v	Size	Remarks
39	2683	Lyn	G-Sb	08:52.7	+33:25	9.7	9.3x2.5	nearly edge-on spiral; very bright
40	2841	UMa	G-Sb	09:22.0	+50:58	9.3	8.1x3.8	!! classic elongated spiral; very bright
41	3079	UMa	G-Sb	10:02.2	+55:41	10.6	7.6x1.7	edge-on spiral; NGC 2950 nearby
42	3184	UMa	G-Sc	10:18.3	+41:25	9.7	6.9x6.8	large, diffuse face-on spiral
43	3877	UMa	G-Sb	11:46.1	+47:30	10.9	5.4x1.5	edge-on; same field as chi UMa
44	3941	UMa	G-E3	11:52.9	+36:59	9.8	3.8x2.5	small bright and elliptical
45	4026	UMa	G-S0	11:59.4	+50:58	10.7	5.1x1.4	lense-shaped edge-on near gamma UMa
46	4088	UMa	G-Sc	12:05.6	+50:33	10.5	5.8x2.5	nearly edge-on; NGC 4085 in same field
47	4157	UMa	G-Sb	12:11.1	+50:29	11.9	6.9x1.7	a thin sliver; NGC 4026 & 4088 nearby
48	4605	UMa	G-SBcp	12:40.0	+61:37	9.6	5.5x2.3	bright, distinct edge-on spiral
49	3115	Sex	G-E6	10:05.2	-07:43	9.2	8.3x3.2	Spindle Galaxy; bright and elongated
50	3242	Hya	PN	10:24.8	-18:38	8.6	16"	!! Ghost of Jupiter; small but bright
51	3003	LMi	G-Sc	09:48.6	+33:25	11.7	5.9x1.7	faint elongated streak
52	3344	LMi	G-Sc	10:43.5	+24:55	9.9	6.9x6.5	diffuse face-on barred spiral
53	3432	LMi	G-SBm	10:52.5	+36:37	11.3	6.2x1.5	nearly edge-on; faint flat streak
54	2903	Leo	G-Sb	09:32.2	+21:30	8.9	12.6x6.6	!! very large, bright elongated spiral
55	3384	Leo	G-E7	10:48.3	+12:38	9.9	5.9x2.6	same field as M105 and NGC 3389
56	3521	Leo	G-Sb	11:05.8	-00:02	8.7	9.5x5.0	very large, bright spiral
57	3607	Leo	G-E1	11:16.9	+18:03	10.0	3.7x3.2	NGCs 3605 & 3608 in same field
58	3628	Leo	G-Sb	11:20.3	+13:36	9.5	14.8x3.6	large edge-on; same field as M65 and M66
59	4111	CVn	G-S0	12:07.1	+43:04	10.8	4.8x1.1	bright lens-shaped edge-on spiral
60	4214	CVn	G-Irr	12:15.6	+36:20	9.7	7.9x6.3	large irregular galaxy
61	4244	CVn	G-S	12:17.5	+37:49	10.2	16.2x2.5	!! large distinct edge-on spiral
62	4449	CVn	G-Irr	12:28.2	+44:06	9.4	5.1x3.7	bright with odd rectangular shape
63	4490	CVn	G-Sc	12:30.6	+41:38	9.8	5.9x3.1	Cocoon Gal.; bright spiral; 4485 in field
64	4631	CVn	G-Sc	12:42.1	+32:32	9.3	15.1x3.3	!! large edge-on; look for companion 4627

65	4656/7	CVn	G-Sc	12:44.0	+32:10	10.4	13.8x3.3	!! in field with 4631; NE end curves up
66	5005	CVn	G-Sb	13:10.9	+37:03	9.8	5.4x2.7	bright elongated spiral near alpha CVn
67	5033	CVn	G-Sb	13:13.4	+36:36	10.1	10.5x5.6	large bright spiral near NGC 5005
68	4274	Com	G-Sb	12:19.8	+29:37	10.4	6.9x2.8	NGCs 4278/83/86 in same field
69	4414	Com	G-Sc	12:26.4	+31:13	10.2	3.6x2.2	bright spiral with starlike nucleus
70	4494	Com	G-E1	12:31.4	+25:47	9.8	4.8x3.8	small bright elliptical
71	4559	Com	G-Sc	12:36.0	+27:58	9.8	10.5x4.9	large spiral with coarse structure
72	4565	Com	G-Sb	12:36.3	+25:59	9.6	16.2x2.8	!! superb edge-on spiral with dust lane
73	4725	Com	G-Sb	12:50.4	+25:30	9.2	11.0x7.9	very bright, large spiral
74	4038/9	Crv	G-Sc	12:01.9	-18:52	10.7	~3x2	`Antennae' or `Rattail' interacting galaxies
75	4361	Crv	PN	12:24.5	-18:48	10.3	45"	small and bright; with 13-mag central star
76	4216	Vir	G-Sb	12:15.9	+13:09	9.9	8.3x2.2	nearly edge-on; with NGC 4206 and 4222
77	4388	Vir	G-Sb	12:25.8	+12:40	11.0	5.1x1.4	with M84 and M86 in Markarian's Chain
78	4438	Vir	G-Sap	12:27.8	+13:01	10.1	9.3x3.9	paired with NGC 4435 to form the "Eyes"
79	4517	Vir	G-Sc	12:32.8	+00:07	10.5	10.2x1.9	faint edge-on spiral
80	4526	Vir	G-E7	12:34.0	+07:42	9.6	7.6x2.3	between two 7-mag stars; the "Lost Galaxy"
81	4535	Vir	G-Sc	12:34.3	+08:12	9.8	6.8x5.0	near M49 and 3/4° N of NGC 4526
82	4567/8	Vir	G-Sc	12:36.5	+11:15	~11	4.6x2.1	"Siamese Twins" interacting galaxies
83	4699	Vir	G-Sa	12:49.0	-08:40	9.6	3.5x2.7	small & bright; look for NGC 4697 3° N
84	4762	Vir	G-SB0	12:52.9	+11:14	10.2	8.7x1.6	flattest galaxy known; 4754 in same field
85	5746	Vir	G-Sb	14:44.9	+01:57	10.6	7.9x1.7	fine edge-on near 109 Virginis
86	5466	Boo	GC	14:05.5	+28:32	9.1	11.0	loose class XII; like rich open cl.; faint
87	5907	Dra	G-Sb	15:15.9	+56:19	10.4	12.3x1.8	!! fine edge-on with dust lane; near 5866
88	6503	Dra	G-Sb	17:49.4	+70:09	10.2	6.2x2.3	bright elongated spiral
89	6543	Dra	PN	17:58.6	+66:38	8.8	18"	Cat's Eye Nebula; with 11 mag central star

#### Summer

No.	NGC	Con	Type	R.A.	Dec	m_v	Size	Remarks
90	6210	Her	PN	16:44.5	+23:49	9.3	14"	very starlike blue planetary
91	6369	Oph	PN	17:29.3	-23:46	10.4	30"	Little Ghost; look for NGC 6309 nearby
92	6572	Oph	PN	18:12.1	+06:51	9.0	8"	tiny bright blue oval
93	6633	Oph	OC	18:27.7	+06:34	4.6	27	sparse wide field cluster; IC 4756 nearby
94	6712	Sct	GC	18:53.1	-08:42	8.2	7.2	small globular; look for IC 1295 in field
95	6781	Aql	PN	19:18.4	+06:33	11.8	1'49"	pale version of the Owl Nebula, M97
96	6819	Cyg	OC	19:41.3	+40:11	7.3	5	150*; faint but rich cluster in Milky Way
97	6826	Cyg	PN	19:44.8	+50:31	9.8	30"	!! Blinking Planetary; 10.6-mag central star
98	6888	Cyg	SNR?	20:12.0	+38:21		20x10	Crescent Nebula; faint; use nebula filter

99a	6960	Cyg	SNR	20:45.7	+30:43		70x6	!! Veil Nebula: west half; use filter !
99b	6992/5	Cyg	SNR	20:56.4	+31:43		78x8	!! Veil Nebula: east half; use filter !
100	7000	Cyg	EN	20:58.8	+44:20		120x100	!! North America N; use filter & low power
101	7027	Cyg	PN?	21:07.1	+42:14	10.4	15"	unusual protoplanetary nebula
102	6445	Sgr	PN	17:49.2	-20:01	11.8	34"	small, bright and annular; near M23
103	6520	Sgr	OC	18:03.4	-27:54	8.1	6	60*; small; dark nebula B86 in same field
104	6818	Sgr	PN	19:44.0	-14:09	9.9	17"	Little Gem; annular; NGC 6822 0.75° S
105	6802	Vul	OC	19:30.6	+20:16	8.8	3.2	50*; at east end of Brocchi's cluster Cr 399
106	6940	Vul	OC	20:34.6	+28:18	6.3	31	60*; fairly rich cluster in Milky Way
107	6939	Cep	OC	20:31.4	+60:38	7.8	8	80*; very rich; NGC 6946 in same field
108	6946	Cep	G-Sc	20:34.8	+60:09	8.9	11.0x9.8	faint, diffuse face-on spiral near 6939
109	7129	Cep	RN	21:44.4	+66:10		8x7	faint reflection neb. around sparse cluster
110	40	Cep	PN	00:13.0	+72:32	10.2	37"	unusual red planetary; 11.6 mag central star

Object type:

PN: Planetary Nebula

SNR: Supernova Remnant

EN: (diffuse) Emission Nebula

RN: (diffuse) Reflection Nebula

E/RN: Diffuse emission and reflection Nebula

OC: Open Cluster

GC: Globular Cluster

G-: Galaxy, with Hubble type given