

# BINOCULAR MESSIER OBJECTS



## I. THE WINTER GROUP

NGC#	R.A.	Dec	Mag	Typ	Con	Size	Messier
224	0 42.8	41:16	4.5	Gal	And	178'	31
221	0 42.8	40:52	10.0	Gal	And	8'x6'	32
205	0 40.4	41:41	10.0	Gal	And	17'x10'	110
598	1 33.9	30:40	7.0	Gal	Tri	73'x45'	33
7654	23 24.2	61:35	8.0	OCI	Cas	13.0'	52
581	1 33.2	60:42	7.0	OCI	Cas	6.0'	103
1039	2 42.0	42:47	6.0	OCI	Per	35.0'	34
650	1 42.4	51:34	12.0	PIN	Per	163"xl 07"	76
1952	5 34.5	22:01	9.0	PIN	Tau	6 x4'	1
1432	3 47.0	24:07	1.4	OCI	Tau	110.0'	45
1960	5 36.1	34:08	6.5	OCI	Aur	12.0'	36
2099	5 52.4	32:33	6.0	OCI	Aur	24.0'	37
1912	5 28.7	35:50	7.0	OCI	Aur	21.0'	38
1976	5 35.3	-5:23	5.0	DfN	Ori	85'x60'	42
1982	5 35.5	-5:16	7.0	DfN	Ori	20'x15'	43
2068	5 46.8	0:04	8.0	DfN	Ori	8'x6'	78
1904	5 24.5	-24:33	8.5	GCI	Lep	8.7'	79
2168	6 08.9	24:20	5.5	OCI	Gem	28.0'	35
2323	7 03.2	-8:20	7.0	OCI	Mon	16.0'	50
2287	6 47.0	-20:44	5.0	OCI	CMa	38.0'	41
2437	7 41.8	-14:49	6.5	OCI	Pup	27.0'	46
2422	7 36.6	-14:30	4.5	OCI	Pup	30.0'	47
2447	7 44.6	-23:05	6.5	OCI	Pup	22.0'	93

### Legend:

- **C/N** - cluster and nebula
- **Dbl** - double star diffuse nebula
- **Gal** - galaxy
- **GCI** - globular cluster
- **OCI** - open cluster
- **PIN**- planetary nebula

## II. THE EARLY SPRING GROUP

NGC#	R.A.	Dec	Mag	Typ	Con	Size	Messier
2632	8 40.1	19:59	4.0	OCI	Cnc	95.0'	44
2682	8 50.4	11:49	7.5	OCI	Cnc	30.0'	67
2548	8 13.8	-5:48	5.5	OCI	Hya	54.0'	48
3031	9 55.6	69:40	8.5	Gal	UMa	21'x10'	81
3034	9 55.9	69:41	9.5	Gal	UMa	9'x4'	82
3587	11 14.8	55:01	12.0	PIN	UMa	202"xl96"	97
3556	11 11.6	55:41	11.0	Gal	UMa	8'x1'	108
3992	11 57.6	53:23	11.0	Gal	UMa	7'x4'	109
5457	14 03.3	54:22	8.5	Gal	UMa	22.0'	101
WIN4	12 20.0	58:22	9.0	Dbl	UMa	49"	40
3623	11 18.9	13:06	10.5	Gal	Leo	8'x1.5'	65
3627	11 20.2	13:00	10.0	Gal	Leo	8'x2.5'	66
3351	10 43.9	11:42	11.0	Gal	Leo	4.4'x3.3'	95
3368	10 46.7	11:49	10.5	Gal	Leo	6'x4'	96
3379	10 47.8	12:35	11.0	Gal	Leo	2.0'	105
5272	13 42.2	28:23	7.0	GCI	CVn	16.2'	3
5194	13 30.0	47:11	8.0	Gal	CVn	I 1'x7'	51
5055	13 15.8	42:02	8.5	Gal	CVn	10'x6'	63
4736	12 50.9	41:08	9.5	Gal	CVn	7'x3'	94
4258	12 18.9	47:19	9.5	Gal	CVn	19'x8'	106

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### III. THE LATE SPRING GROUP

NGC#	R.A.	Dec	Mag	Typ	Con	Size	Messier
4472	12 29.8	8:01	10.0	Gal	Vir	9'x7.5'	49
4579	12 37.8	11:50	11.0	Gal	Vir	5.5'x4.5'	58
4621	12 42.1	11:39	11.5	Gal	Vir	5'x3.5'	59
4649	12 43.7	11:34	10.5	Gal	Vir	7'x6'	60
4374	12 25.1	12:54	11.0	Gal	Vir	5.0'	84
4406	12 26.3	12:57	11.0	Gal	Vir	7.0'	87
4552	12 35.7	12:34	11.5	Gal	Vir	4.0'	89
4569	12 36.9	13:10	11.0	Gal	Vir	9.5'x4.5'	90
4303	12 22.0	4:29	10.5	Gal	Vir	6'x5.5'	61
4594	12 39.9	-11:37	9.5	Gal	Vir	9'x4'	104
5024	13 12.9	18:10	8.5	GCI	Com	12.6'	53
4826	12 56.7	21:41	9.0	Gal	Com	9.3'x5.4'	64
4382	12 25.5	18:12	10.5	Gal	Com	7.1'x5.2'	85
4501	12 32.1	14:26	11.0	Gal	Com	7'x4'	88
4192	12 13.9	14:55	11.0	Gal	Com	9.5'x3.2'	98
4254	12 18.9	14:26	10.5	Gal	Com	5.4'x4.8'	99
4321	12 23.0	15:50	10.5	Gal	Com	7'x6'	100
4548	12 35.5	14:30	11.5	Gal	Com	5.4'x4.4'	91
4590	12 39.5	-26:45	9.0	GCI	Hya	12.0'	68

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#### IV. THE MID-SUMMER GROUP

NGC#	R.A.	Dec	Mag	Typ	Con	Size	Messier
5236	13 37.1	-29:52	8.5	Gal	Hya	11'x10'	83
5904	15 18.6	2:05	7.0	GCI	Ser	17.4'	5
5866	15 06.5	55:45	10.5	Gal	Dra	5.2'x2.3'	102
6205	16 41.7	36:28	7.0	GCI	Her	16.6'	13
6341	17 17.1	43:08	7.5	GCI	Her	11.2'	92
6333	17 19.2	-18:31	9.0	GCI	Oph	9.3'	9
6254	16 57.1	-4:06	7.5	GCI	Oph	15.1'	10
6218	16 47.2	-1:57	8.0	GCI	Oph	14.5'	12
6402	17 37.6	-3:15	9.5	GCI	Oph	11.7'	14
6273	17 02.6	-26:16	8.5	GCI	Oph	13.5'	19
6266	17 01.2	-30:07	8.0	GCI	Oph	14. 1'	62
6171	16 32.5	-13:03	10.0	GCI	Oph	10.0'	107
6121	16 23.6	-26:32	7.5	GCI	Sco	26.3'	4
6093	16 17.0	-22:59	8.5	GCI	Sco	8.9'	80
6405	17 40.1	-32:13	4.5	OCI	Sco	15.0'	6
6475	17 53.9	-34:49	3.5	OCI	Sco	80.0'	7

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## V. THE LATE SUMMER GROUP

NGC#	R.A.	Dec	Mag	Typ	Con	Size	Messier
6705	18 51.1	-6:16	7.0	OCI	Sct	14.0'	11
6694	18 45.2	-9:24	9.5	OCI	Sct	15.0'	26
6611	18 18.8	-13:47	6.5	C/N	Ser	7.0'	16
6618	18 20.8	-16:11	7.0	CIN	Sgr	11.0'	17
6613	18 19.9	-17:08	8.0	OCI	Sgr	9.0'	18
6603	18 18.4	-18:25	4.0	OCI	Sgr	2 deg.	24
6514	18 02.3	-23:02	5.0	C/N	Sgr	28.0'	20
6531	18 04.6	-22:30	7.0	OCI	Sgr	13.0'	21
6523	18 03.1	-24:23	5.0	C/N	Sgr	60'x 35'	8
6656	18 36.4	-29:54	6.5	GCI	Sgr	24.0'	22
6626	18 24.5	-24:52	8.5	GCI	Sgr	11.2'	28
6494	17 56.8	-19:01	6.0	OCI	Sgr	27.0'	23
4725	18 28.8	-19:17	4.9	OCI	Sgr	40.0'	25
6715	18 55.1	-30:29	8.5	GCI	Sgr	9.1'	54
6809	19 40.0	-30:58	7.0	GCI	Sgr	19.0'	55
6637	18 34.4	-32:21	9.0	GCI	Sgr	7.1'	69
6681	18 43.2	-32:18	9.0	GCI	Sgr	7.8'	70
6864	20 06.1	-21:55	9.5	GCI	gr	6.0'	75

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## VI. THE FALL AND EARLY WINTER GROUP

NGC#	R. A.	Dec	Mag	Typ	Con	Size	Messier
6779	19 16.6	30:11	9.5	GCI	Lyr	7.1'	56
6720	18 53.6	33:02	9.5	PIN	Lyr	85.6"x61.6"	57
6913	20 23.9	38:32	9.0	OCI	Cyg	7.0'	29
7092	21 32.2	48:26	5.5	OCI	Cyg	32.0'	39
6853	19 59.6	22:43	7.5	PIN	Vul	480"x340"	27
6838	19 53.8	18:47	8.5	GCI	Sge	7.2'	71
7099	21 40.4	-23:11	8.5	GCI	Cap	I 1.0'	30
7089	21 33.5	-0:49	7.5	GCI	Aqr	12.9'	2
6981	20 53.5	-12:32	10.0	GCI	Aqr	5.9'	72
6994	20 59.0	-12:38	9.0	OCI	Aqr	2.8'	73
7078	21 30.0	12:10	7.5	GCI	Peg	12.3'	15
628	1 36.6	15:48	10.5	Gal	Psc	10.2'x9.5'	74
1068	2 42.7	-0:02	10.5	Gal	Cet	7'x 6'	77

### Legend:

- **C/N** - cluster and nebula
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- **PIN**- planetary nebula

## THE APPENDICES

For those of you who are uncertain as to which Messier objects to observe, or who need a formal program to follow, we have included *Appendix A* and *Appendix B* for your use.

*Appendix A* is for binoculars between 20MM and 50MM in diameter.

*Appendix B* is for binoculars between 56MM and 80MM in diameter.

Each appendix lists the appropriate Messier objects that can be observed with that size instrument, and is divided into three categories: Easy, Tough, and Challenge objects.

- **Easy objects** are those that appear large and bright in the field of view, and are easily located.
- **Tougher objects** are small and dim in the field of view and require identifying the fields around them with the help of some sort of star chart to verify their location.
- **Challenge objects** are those that are small and faint, sometimes requiring averted vision, and need to be pinpointed exactly on a good star atlas to identify.

You'll notice that in the small binocular category (**Appendix A**), 42 objects are classified as easy.

For larger binoculars (**Appendix B**), all 50 objects needed to receive the certificate can be chosen out of the easy category. The point is that anyone, with any pair of binoculars, no matter what their size, shape, condition, or cost, can do serious astronomy.

**Appendix C** is for reference purposes, (**pages 2 – 7**) listing all 110 of the Messier objects, the times when they are best observed, and in constellation sequence. So, if you are wondering what is the best time of the year to observe a Messier object, refer to *Appendix C*. *Appendix C* tells by season each object's coordinates, their NGC numbers, the constellation they are located in, and their sizes and magnitudes.

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# APPENDIX A

## Messier Objects for 7x35, 7x50, and 10x50 BINOCULARS

### I. EASY MESSIER OBJECTS:

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 52, 55, 67, 92, 93, 103

**TOTAL = 42**

### II. TOUGHER MESSIER OBJECTS:

14, 19, 28, 30, 33, 40, 49, 53, 62, 63, 64, 78, 79, 80, 81, 82, 83, 94

**TOTAL = 18**

### III. CHALLENGE MESSIER OBJECTS:

1, 9, 26, 32, 51, 54, 56, 65, 66, 68, 71, 75, 97, 101, 104, 106

**TOTAL = 16**

**GRAND TOTAL = 76**

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# APPENDIX B

## Messier Objects for 11x80 BINOCULARS

### I. EASY MESSIER OBJECTS:

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 50, 52, 53, 55, 62, 67, 71, 78, 79, 80, 81, 82, 92, 93, 94, 103

**TOTAL = 58**

### II. TOUGHER MESSIER OBJECTS:

1, 9, 33, 49, 51, 54, 56, 60, 61, 63, 64, 65, 66, 68, 75, 77, 83, 87, 97, 101, 102, 104, 106

**TOTAL = 23**

### III. CHALLENGE MESSIER OBJECTS:

20, 58, 59, 69, 70, 72, 84, 85, 86, 88, 89, 90, 95, 96, 99, 100, 105, 107, 108, 109, 110

**TOTAL = 21**

**GRAND TOTAL = 102**

# APPENDIX C

## The Messier List

*Appendix C* is for reference purposes, listing all 110 of the Messier objects, the times when they are best observed, and in constellation sequence. So, if you are wondering what is the best time of the year to observe a Messier object, refer to *Appendix C*. *Appendix C* tells by season each object's coordinates, their NGC numbers, the constellation they are located in, and their sizes and magnitudes.