The Insider's Guide to the Galaxy Presents...

Messier Minutes

a guide to completing RASC's Messier Observing Certificate

Part 3 -

February 15th – March 1st, 2022

The following pages include a list of objects discussed in the February 15th, 2022, episode of Messier Minutes. Including finder charts and log pages.

List of Targets Discussed:

Early Evening Targets (7 – 8 pm)

February 15th is a full moon week! Open clusters tolerate the moon!

Messier #	Constellation	Magnitude	Type	Other Designation	Name
45	Tau	1.2	OC	Mel 42	Pleiades
35	Gem	5.1	OC	NGC 2168	Shoe-Buckle Cluster plus NGC 2158
38	Aur	6.4	OC	NGC 1912	Starfish Cluster plus NGC 1907
36	Aur	6.0	OC	NGC 1960	Pinwheel Cluster
37	Aur	5.6	OC	NGC 2099	January Salt-and-Pepper Cluster

Notes:

M38:

South of centre in Auriga's ring, midway between Mahasim and Hasseleh, binoculars and telescopes, watch for patterns in the stars, how many stars do you see? All stars the same? Highest of the 3 Auriga OCs!

M36:

Peak of a squat triangle inside Auriga formed with Mahasim and Elnath, above M37 and below M38 on Feb evenings, does it remind you of an animal? Are all the stars the same?

M37:

Peak of a squat triangle outside Auriga formed with Mahasim and Elnath, lowest and brightest of 3 Auriga OCs. Look for the "pepper"!

M45:

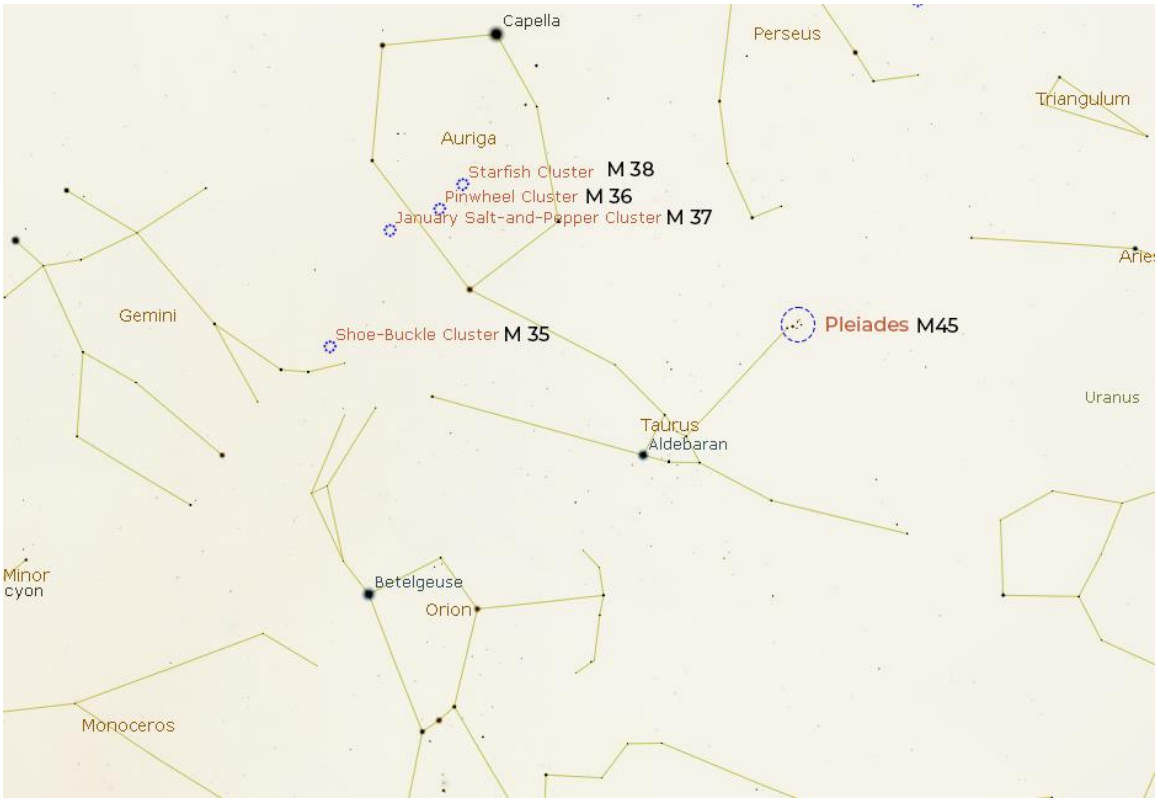
Naked eye, without bright moon, or binoculars and low power scope. How many stars do you see? Can you see the nebulosity around Maia and Merope?

M35:

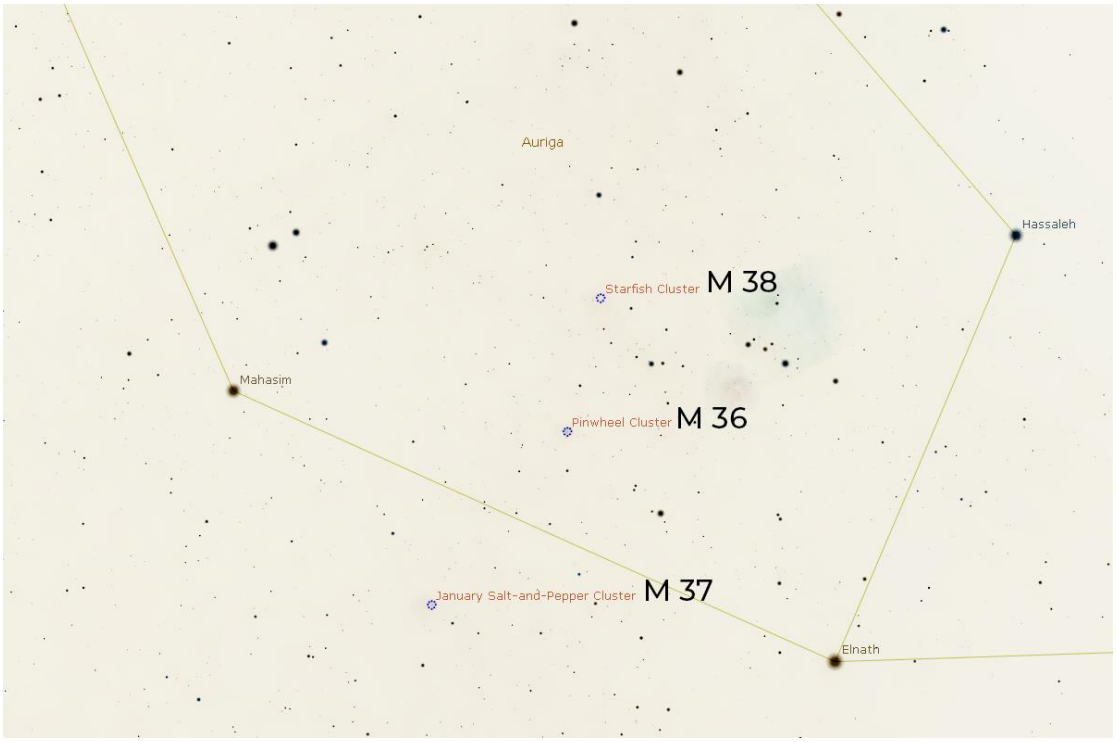
Two finger-widths above (NW of) Gemini toe stars Propus and Tejat (Mu and Eta Gem) Binoculars and telescopes to see

Early Evening Targets Finder Charts:

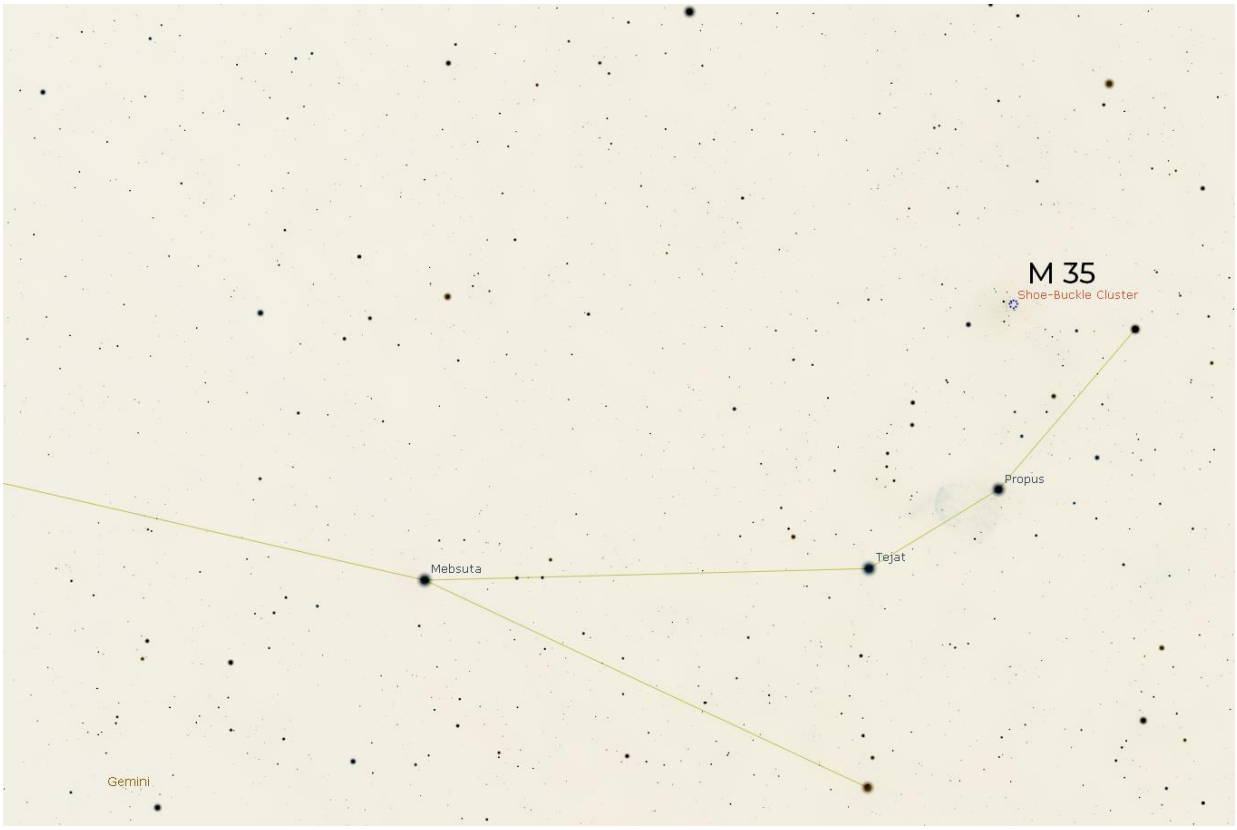
Overview of Targets –



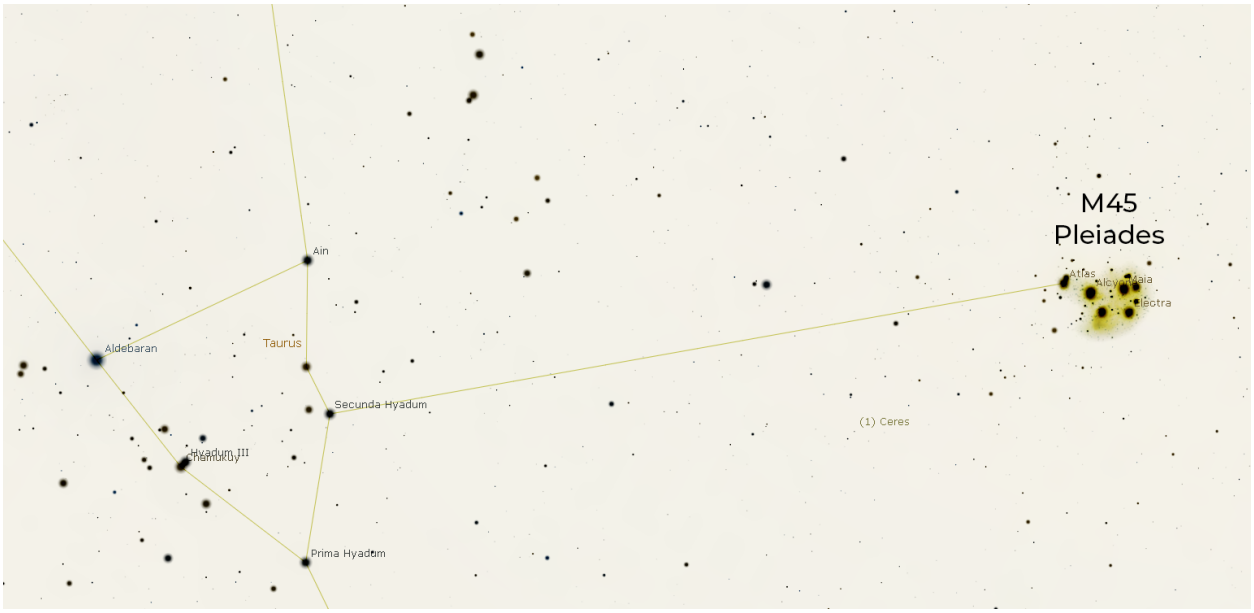
M38, M36, M37 Closer View



M35 Closer View

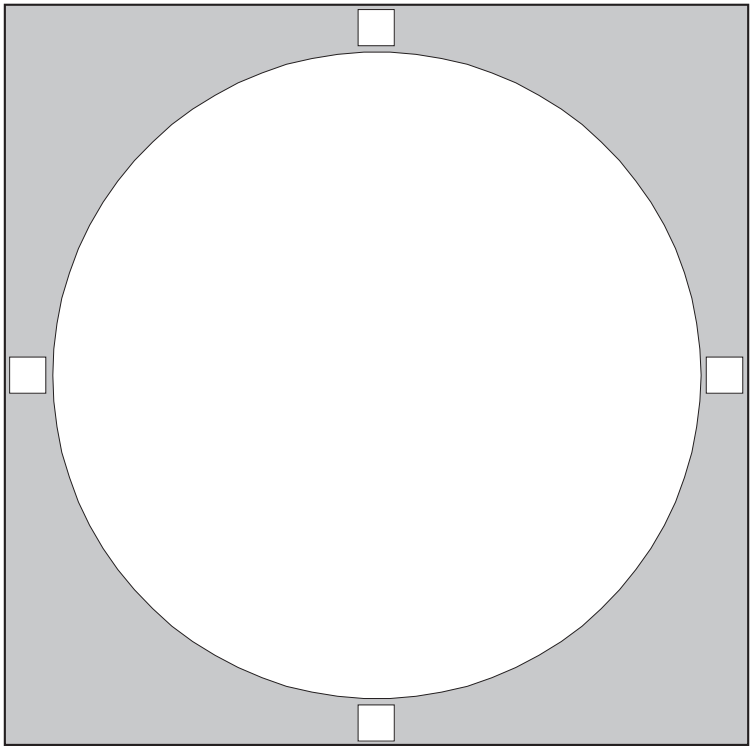


M45 Closer View



RASC Messier Objects - M36

Messier Object	**M36**		
NGC	**1960**		
Constellation	**Auriga**		
Type	**Open Cluster**		
Magnitude	**6.0**		
Distance (Kilo light-years)	**4.1**		
RA	**05 36.1**		
Dec	**+34:08**		
Size	**12'**		
UM I	UM II	**97,98**	**59**
SA	**5**		
Remarks	**Bright but scattered group;use low power**		
Time (hh:mm)			
Seeing	1 2 3 4 5		
Transparency	1 2 3 4 5		
Observing Location			
Telescope			
Date (dd:mm:yyyy)			

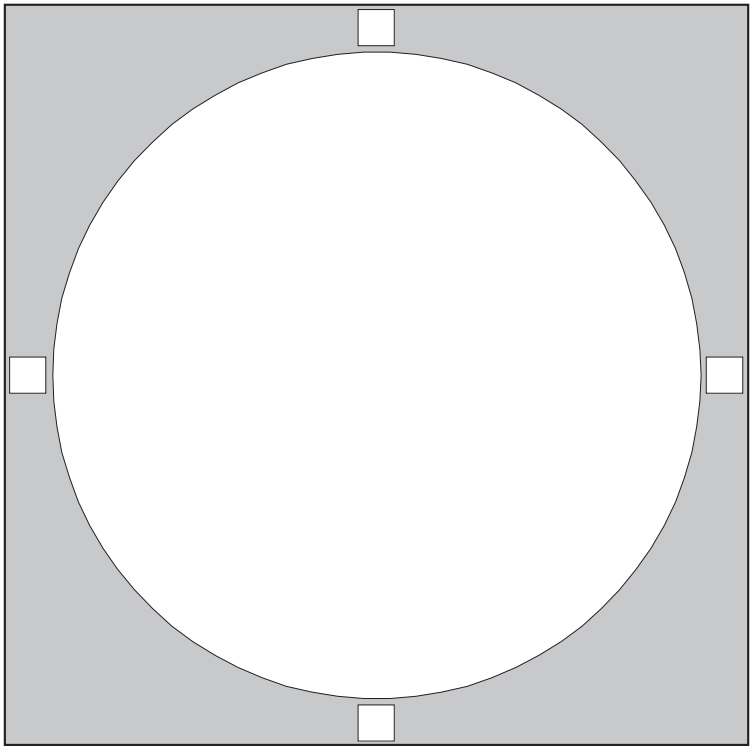


Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca

RASC Messier Objects - M37

Messier Object	**M37**		
NGC	**2099**		
Constellation	**Auriga**		
Type	**Open Cluster**		
Magnitude	**5.6**		
Distance (Kilo light-years)	**4.4**		
RA	**05 52.4**		
Dec	**+32:33**		
Size	**20'**		
UM I	UM II	**98**	**59**
SA	**5**		
Remarks	**!! finest of three Auriga clusters; very rich**		
Time (hh:mm)			
Seeing	1 2 3 4 5		
Transparency	1 2 3 4 5		
Observing Location			
Telescope			
Date (dd:mm:yyyy)			

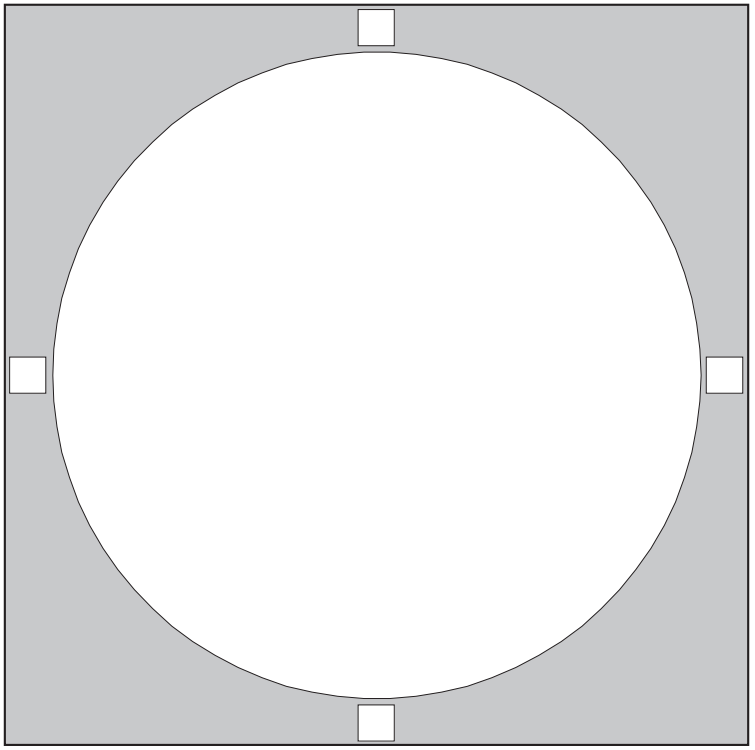


Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca

RASC Messier Objects - M38

Messier Object	**M38**		
NGC	**1912**		
Constellation	**Auriga**		
Type	**Open Cluster**		
Magnitude	**6.4**		
Distance (Kilo light-years)	**4.2**		
RA	**05 28.7**		
Dec	**+35:50**		
Size	**21'**		
UM I	UM II	**97**	**59**
SA	**5**		
Remarks	**look for small cluster NGC1907 1/2 degree south**		
Time (hh:mm)			
Seeing	1 2 3 4 5		
Transparency	1 2 3 4 5		
Observing Location			
Telescope			
Date (dd:mm:yyyy)			

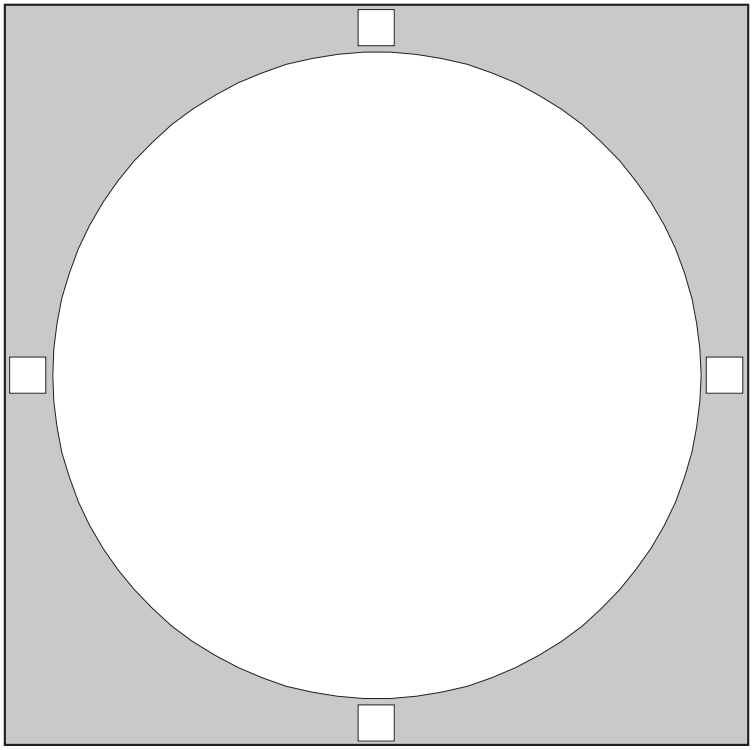


Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca

RASC Messier Objects - M35

Messier Object	**M35**		
NGC	**2168**		
Constellation	**Gemini**		
Type	**Open Cluster**		
Magnitude	**5.1**		
Distance (Kilo light-years)	**2.8**		
RA	**06 08.9**		
Dec	**+24:20**		
Size	**28'**		
UM I	UM II	**136,137**	**76**
SA	**5**		
Remarks	**!! look for small cluster NGC 2158 1/4 degree south**		
Time (hh:mm)			
Seeing	1 2 3 4 5		
Transparency	1 2 3 4 5		
Observing Location			
Telescope			
Date (dd:mm:yyyy)			



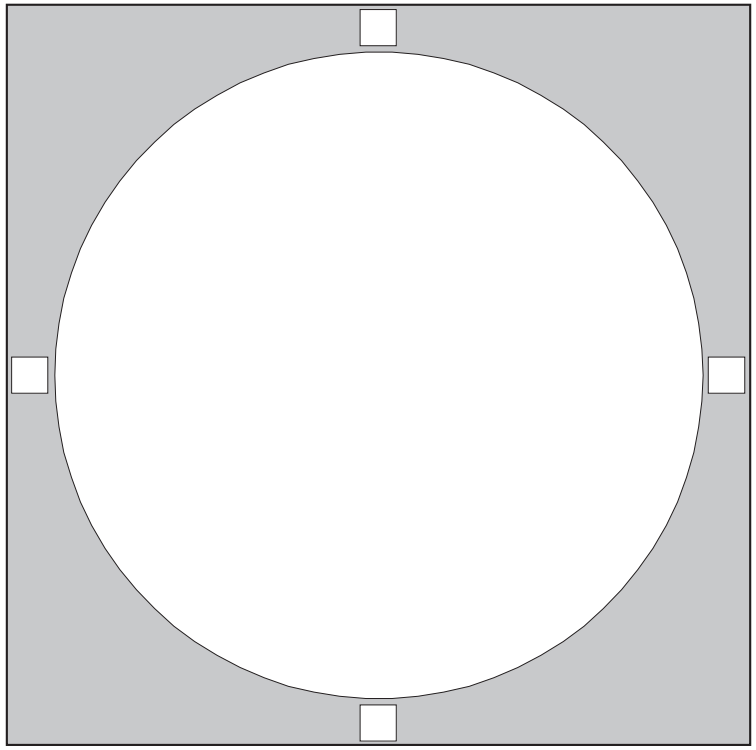
Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca

RASC Messier Objects - M45

Pleiades

Messier Object	**M45**		
NGC	**-**		
Constellation	**Taurus**		
Type	**Open Cluster**		
Magnitude	**1.2**		
Distance (Kilo light-years)	**0.38**		
RA	**03 47.0**		
Dec	**+24:07**		
Size	**110'**		
UM I / UM II	**132**	**78,A12**	
SA	**4, A2**		
Remarks	**!! Pleiades; look for subtle nebulosity**		
Time (hh:mm)			
Seeing	1 2 3 4 5		
Transparency	1 2 3 4 5		
Observing Location			
Telescope			
Date (dd:mm:yyyy)			



Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca