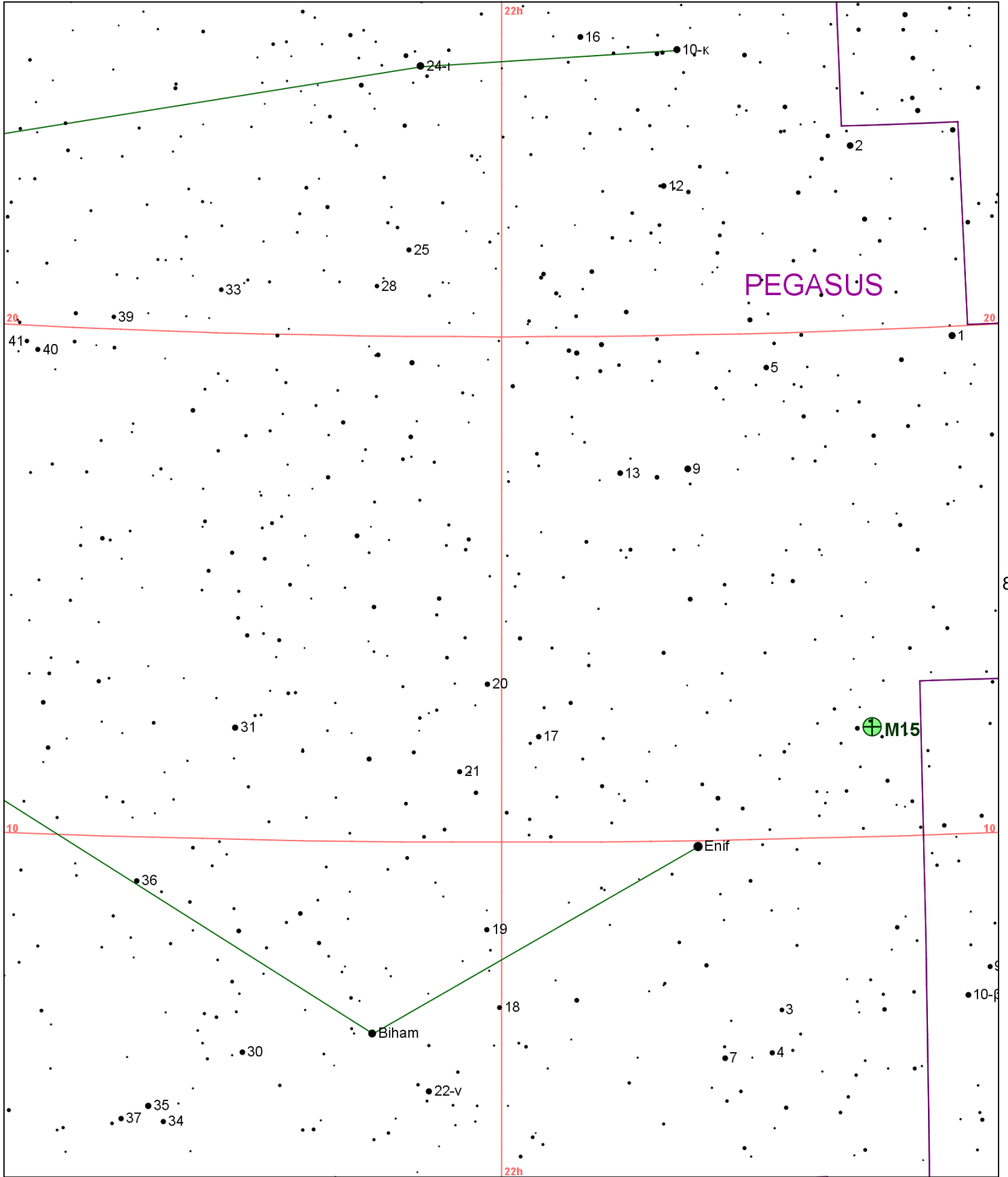


55

56



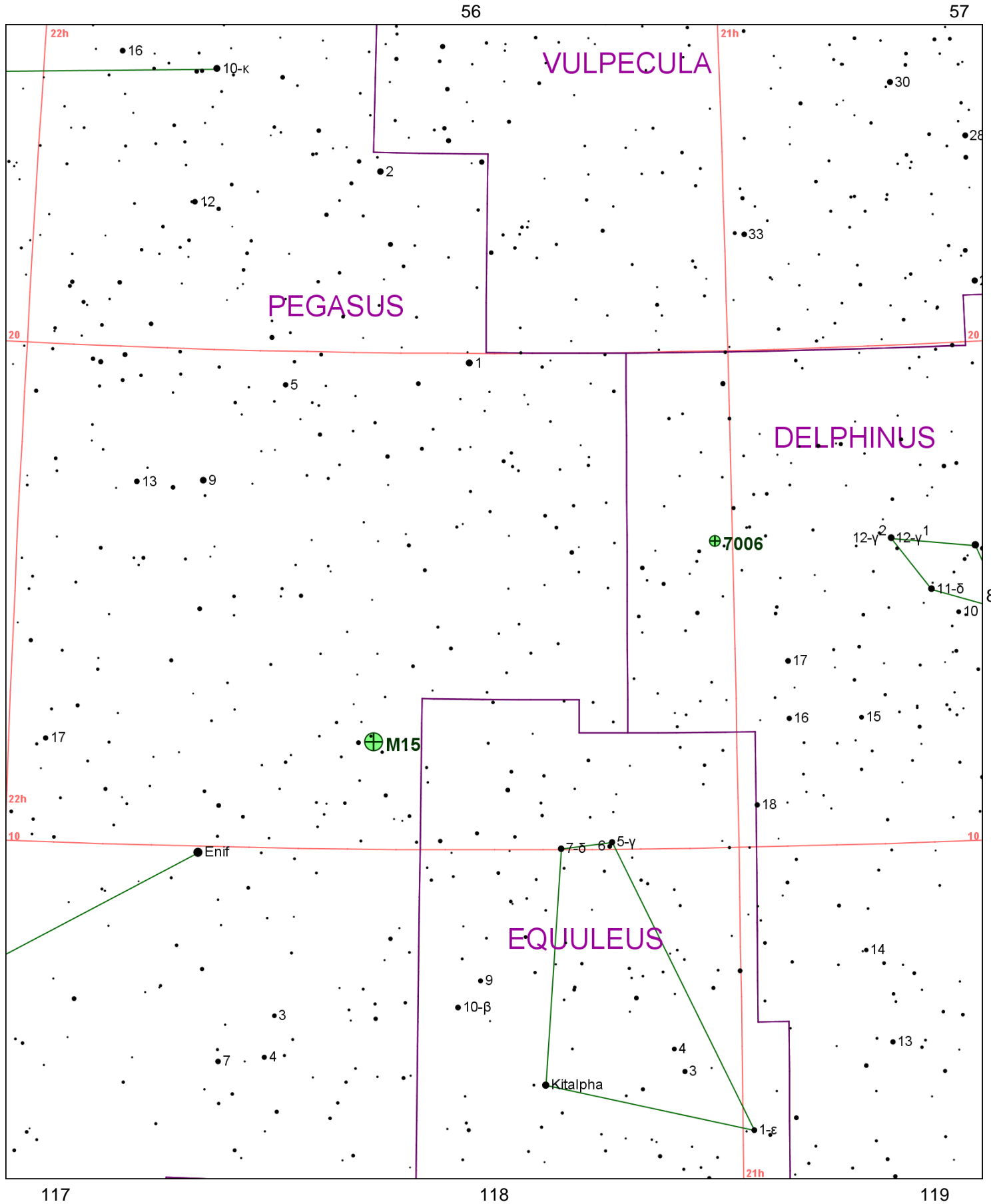
80

82

116

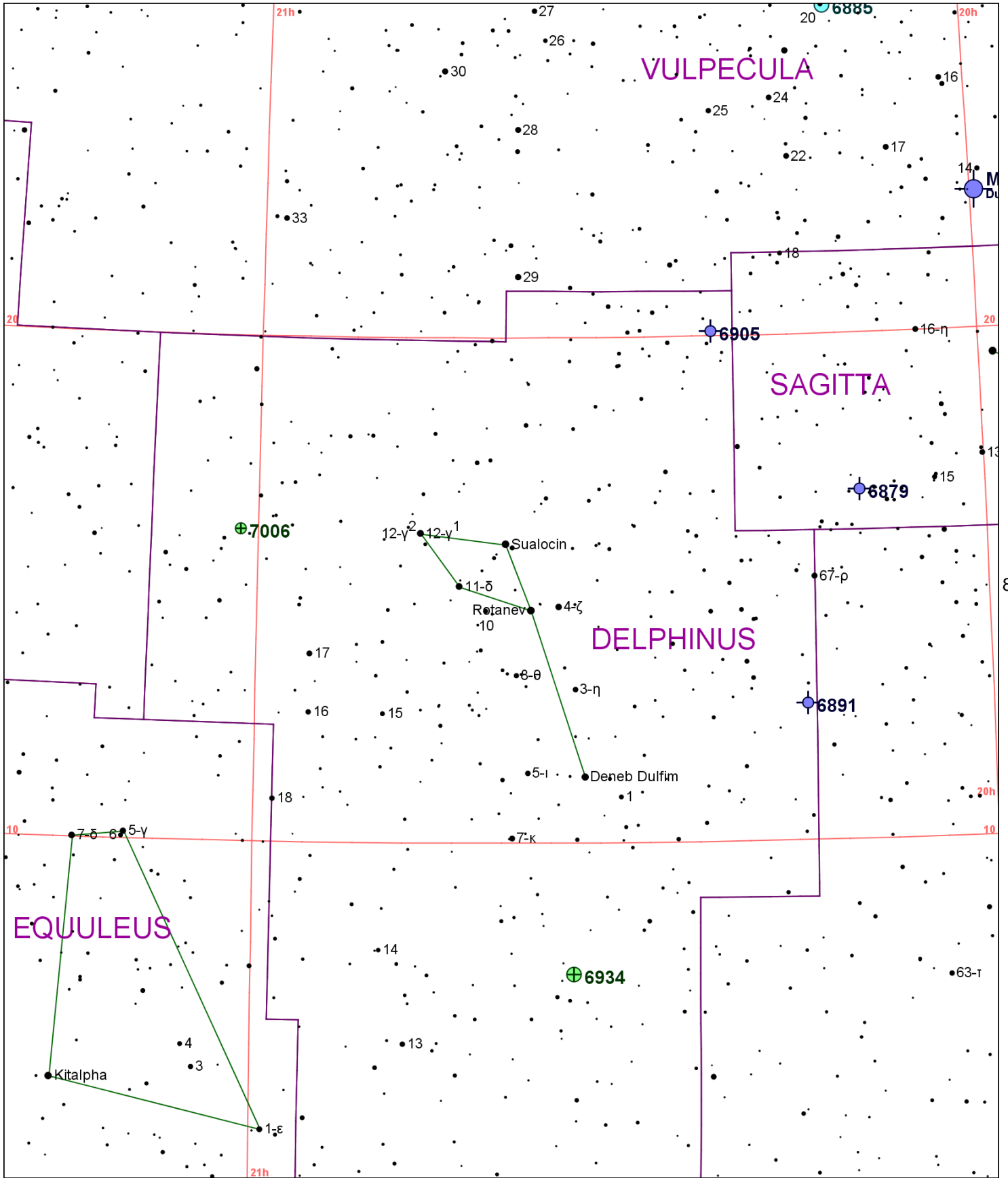
117

| Chart 81      |     |        |      |      |   |           |           |   |   |   |   |         |   |
|---------------|-----|--------|------|------|---|-----------|-----------|---|---|---|---|---------|---|
| Name          | M   | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C | R | S | O | # Stars | B |
| <b>Common</b> |     |        |      |      | <b>Notes</b>                                  |           |           |   |   |   |   |         |   |
| NGC 7078      | M15 | PEG    | 6.4  | GC   | 12.3m   | 21h 30.0m | 12° 10.0' |   |   |   | O |         | B |
|               |     |        |      |      | !,vB,vL,iR,vsmbM,rrr,st vS - Stars mags 13... |           |           |   |   |   |   |         |   |



| Chart 82      |     |        |      |      |   |           |           |     |   |   |   |         |   |
|---------------|-----|--------|------|------|---|-----------|-----------|-----|---|---|---|---------|---|
| Name          | M   | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C   | R | S | O | # Stars | B |
| <b>Common</b> |     |        |      |      | <b>Notes</b>                                      |           |           |     |   |   |   |         |   |
| NGC 7006      |     | DEL    | 10.6 | GC   | 2.8m  | 21h 01.5m | 16° 11.0' | C42 |   |   |   |         |   |
|               |     |        |      |      | B,pL,R,gbM - H I 52;Stars eF;very remote globular |           |           |     |   |   |   |         |   |
| NGC 7078      | M15 | PEG    | 6.4  | GC   | 12.3m   | 21h 30.0m | 12° 10.0' |     |   |   | O |         | B |
|               |     |        |      |      | !,vB,vL,iR,vsmbM,rrr,st vS - Stars mags 13...     |           |           |     |   |   |   |         |   |

57



82

84

EQUULEUS

VULPECULA

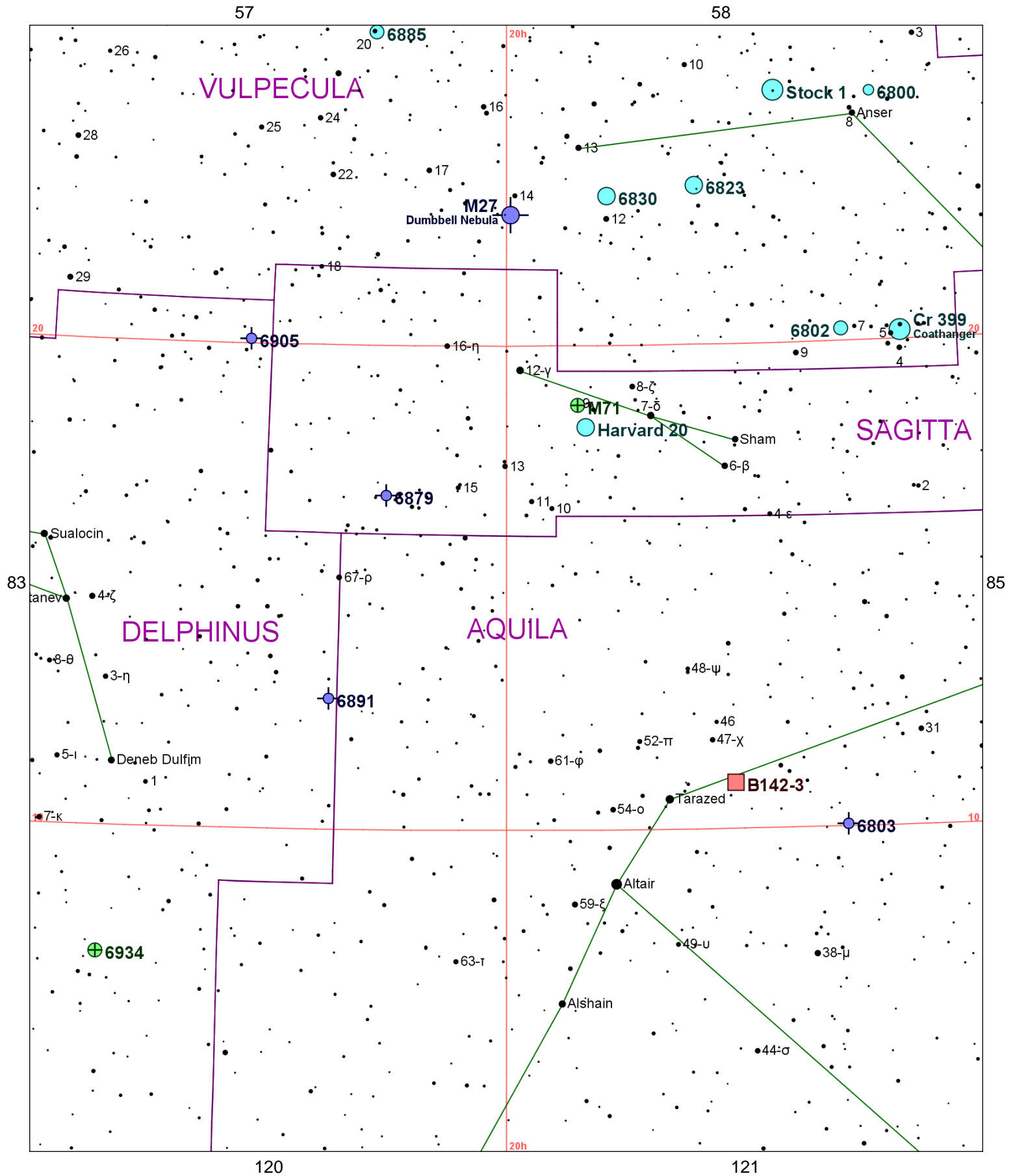
SAGITTA

DELPHINUS

119

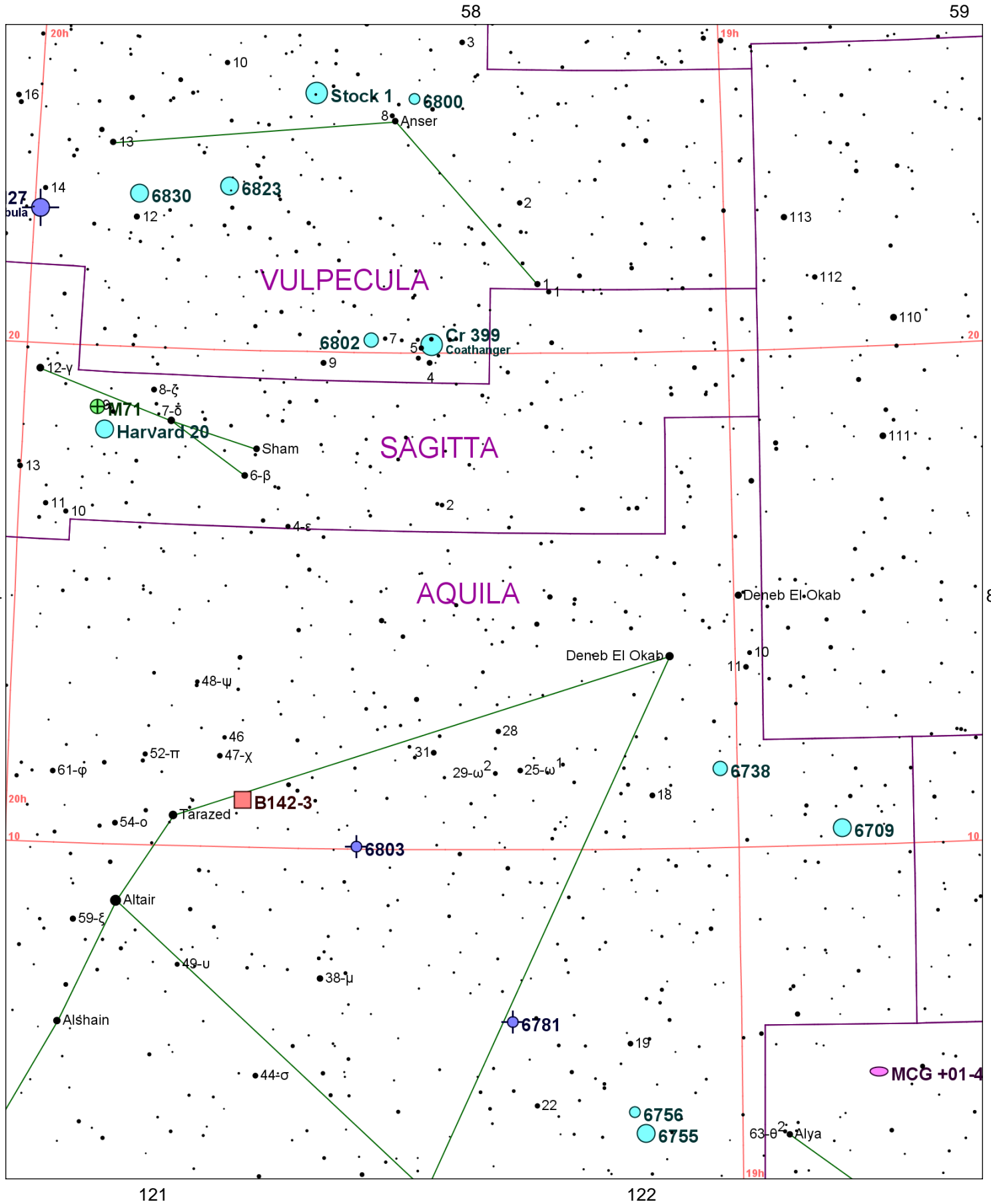
120

| Chart 83        |     |        |      |      |   |           |           |     |   |   |   |         |   |
|-----------------|-----|--------|------|------|---|-----------|-----------|-----|---|---|---|---------|---|
| Name            | M   | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C   | R | S | O | # Stars | B |
| <b>Common</b>   |     |        |      |      | <b>Notes</b>  |           |           |     |   |   |   |         |   |
| NGC 6853        | M27 | VUL    | 7.3  | PN   | 480s x 340s   | 19h 59.6m | 22° 43.0' |     |   |   | O |         | B |
| Dumbbell Nebula |     |        |      |      | !!vB,vL,bi-N,IE - PK60-3.1;Lord Rosse drew 18* invl |           |           |     |   |   |   |         |   |
| NGC 6879        |     | SGE    | 11.0 | PN   | 4.7s x 4.1s   | 20h 10.4m | 16° 55.0' |     |   |   |   |         |   |
|                 |     |        |      |      | stellar=10m   |           |           |     |   |   |   |         |   |
| NGC 6885        |     | VUL    | 8.1  | OC   | 7.0m  | 20h 11.9m | 26° 29.0' | C37 |   |   |   | 30      |   |
|                 |     |        |      |      | Cl,vB,vL,Ri,IC,*6..11 - H VIII 20;With 20 Vul       |           |           |     |   |   |   |         |   |
| NGC 6891        |     | DEL    | 10.5 | PN   | 15.5s x 7s  | 20h 15.1m | 12° 42.0' |     |   |   | O |         |   |
|                 |     |        |      |      | stellar=9.5m  |           |           |     |   |   |   |         |   |
| NGC 6905        |     | DEL    | 12.0 | PN   | 44s x 38s   | 20h 22.4m | 20° 06.0' |     |   |   | O |         |   |
|                 |     |        |      |      | B,pS,R,4S* nr - Blue Flash Nebula                   |           |           |     |   |   |   |         |   |
| NGC 6934        |     | DEL    | 8.9  | GC   | 2m  | 20h 34.2m | 7° 24.0'  | C47 |   |   | O |         | B |
|                 |     |        |      |      | B,L,R,rrr,*16... - H I 103;*10m 2' west             |           |           |     |   |   |   |         |   |
| NGC 7006        |     | DEL    | 10.6 | GC   | 2.8m  | 21h 01.5m | 16° 11.0' | C42 |   |   |   |         |   |
|                 |     |        |      |      | B,pL,R,gbM - H I 52;Stars eF;very remote globular   |           |           |     |   |   |   |         |   |



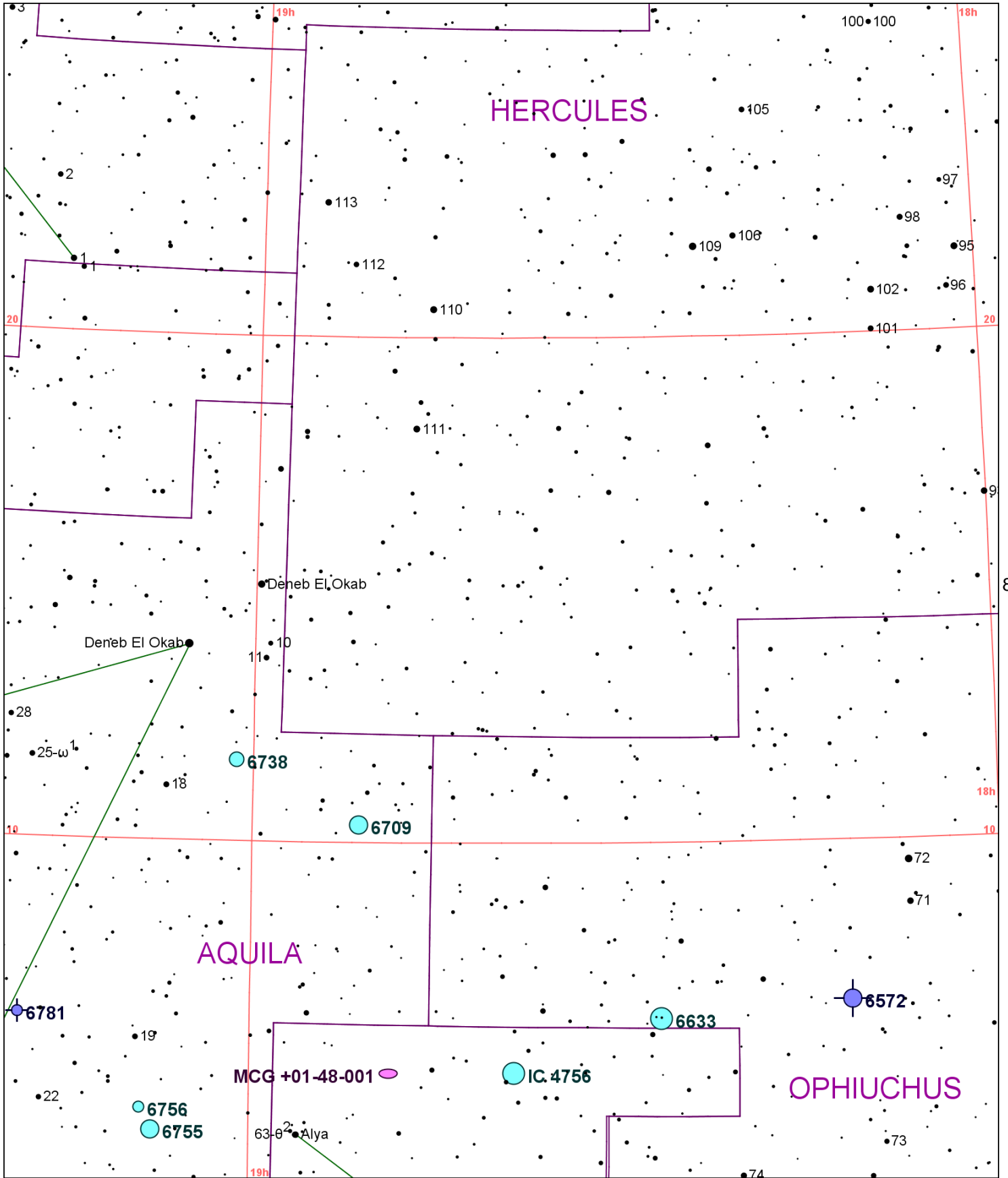
| Chart 84  |     |        |      |      |   |           |           |     |      |   |   |         |   |
|---|-----|--------|------|------|---|-----------|-----------|-----|------|---|---|---------|---|
| Name  | M   | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C   | R    | S | O | # Stars | B |
| <b>Common</b>   |     |        |      |      | <b>Notes</b>  |           |           |     |      |   |   |         |   |
| B142-3  |     | AQL    |      | DN   | 80m x 50m   | 19h 40.7m | 10° 57.0' |     |      |   | O |         |   |
| ! L,Irr,2 extensions W - Narrow lanes 3 deg north preceding Altair          |     |        |      |      |   |           |           |     |      |   |   |         |   |
| Cr 399  |     | VUL    | 3.6  | OC   | 140m x 50m  | 19h 25.4m | 20° 11.0' |     |      |   | O | 40      | B |
| Coathanger  |     |        |      |      | vL,B incl 4,5,7 Vulp - Brocchi's cluster;easy naked eye |           |           |     |      |   |   |         |   |
| Harvard 20  |     | SGE    | 7.7  | OC   | 7.0m  | 19h 53.1m | 18° 20.0' |     |      |   |   | 15      |   |
| pL,IC,* 11... - 40 faint * in 12';has two centers                           |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6800  |     | VUL    |      | OC   | 5m  | 19h 27.1m | 25° 08.0' |     |      |   | O | 20      |   |
| Cl,vL,pRi,vIC,st10.. - H VIII 21;30' NW from Alpha Vul                      |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6802  |     | VUL    | 8.8  | OC   | 3.2m  | 19h 30.6m | 20° 16.0' |     | R105 |   |   | 50      |   |
| Cl,L,vC,E0,st14...18 - H VI 14;Bar shaped along N-S                         |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6803  |     | AQL    | 11.0 | PN   | 4s  | 19h 31.3m | 10° 03.0' |     |      |   |   |         |   |
| stellar   |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6823  |     | VUL    | 7.1  | OC   | 12.0m   | 19h 43.2m | 23° 18.0' |     |      |   | O | 30      | B |
| Cl,cRi,E,st11...12 - H VII 18;In Vul OB1 w nebula NGC 6820;30 * mags 11..12 |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6830  |     | VUL    | 7.9  | OC   | 12.0m   | 19h 51.0m | 23° 06.0' |     |      |   |   | 20      |   |
| Cl,L,pRi,pC,*11...12 - H VII 9  |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6838  | M71 | SGE    | 8.3  | GC   | 6.1m  | 19h 53.8m | 18° 47.0' |     |      |   | O |         | B |
| Cl,vL,vRi,pmC,*11...16 - Arrowhead shape, stars have few metals             |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6853  | M27 | VUL    | 7.3  | PN   | 480s x 340s   | 19h 59.6m | 22° 43.0' |     |      |   | O |         | B |
| Dumbbell Nebula   |     |        |      |      | !!vB,vL,bi-N,IE - PK60-3.1;Lord Rosse drew 18* invl     |           |           |     |      |   |   |         |   |
| NGC 6879  |     | SGE    | 11.0 | PN   | 4.7s x 4.1s   | 20h 10.4m | 16° 55.0' |     |      |   |   |         |   |
| stellar=10m   |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6885  |     | VUL    | 8.1  | OC   | 7.0m  | 20h 11.9m | 26° 29.0' | C37 |      |   |   | 30      |   |
| Cl,vB,vL,Ri,IC,*6..11 - H VIII 20;With 20 Vul                               |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6891  |     | DEL    | 10.5 | PN   | 15.5s x 7s  | 20h 15.1m | 12° 42.0' |     |      |   | O |         |   |
| stellar=9.5m  |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6905  |     | DEL    | 12.0 | PN   | 44s x 38s   | 20h 22.4m | 20° 06.0' |     |      |   | O |         |   |
| B,pS,R,4S* nr - Blue Flash Nebula   |     |        |      |      |   |           |           |     |      |   |   |         |   |
| NGC 6934  |     | DEL    | 8.9  | GC   | 2m  | 20h 34.2m | 7° 24.0'  | C47 |      |   | O |         | B |
| B,L,R,rrr,*16... - H I 103;*10m 2' west                                     |     |        |      |      |   |           |           |     |      |   |   |         |   |
| Stock 1   |     | VUL    | 5.3  | OC   | 60.0m   | 19h 35.8m | 25° 13.0' |     |      |   |   | 40      |   |
| 13"-B,vL,nC at 60X; 28* - 47 * in 40' field                                 |     |        |      |      |   |           |           |     |      |   |   |         |   |





| Chart 85        |     |        |      |      |   |           |           |   |      |    |   |         |   |
|-----------------|-----|--------|------|------|---|-----------|-----------|---|------|----|---|---------|---|
| Name            | M   | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C | R    | S  | O | # Stars | B |
| <b>Common</b>   |     |        |      |      | <b>Notes</b>  |           |           |   |      |    |   |         |   |
| B142-3          |     | AQL    |      | DN   | 80m x 50m   | 19h 40.7m | 10° 57.0' |   |      |    | O |         |   |
|                 |     |        |      |      | ! L,Irr,2 extensions W - Narrow lanes 3 deg north preceding Altair          |           |           |   |      |    |   |         |   |
| Cr 399          |     | VUL    | 3.6  | OC   | 140m x 50m  | 19h 25.4m | 20° 11.0' |   |      |    | O | 40      | B |
| Coathanger      |     |        |      |      | vL,B incl 4,5,7 Vulp - Brocchi's cluster;easy naked eye                     |           |           |   |      |    |   |         |   |
| Harvard 20      |     | SGE    | 7.7  | OC   | 7.0m  | 19h 53.1m | 18° 20.0' |   |      |    |   | 15      |   |
|                 |     |        |      |      | pL,IC,* 11... - 40 faint * in 12';has two centers                           |           |           |   |      |    |   |         |   |
| MCG +01-48-001  |     | SER    | 11.0 | GAL  | 0.7m x 0.5m   | 18h 49.0m | 5° 26.0'  |   |      |    |   |         |   |
|                 |     |        |      |      | Inner Regions Completely Black--MCG - Mostly Edge On                        |           |           |   |      |    |   |         |   |
| NGC 6709        |     | AQL    | 6.7  | OC   | 13.0m   | 18h 51.5m | 10° 21.0' |   |      |    |   | 40      | B |
|                 |     |        |      |      | Cl,pRi,IC,iF  |           |           |   |      |    |   |         |   |
| NGC 6738        |     | AQL    | 8.3  | OC   | 15.0m   | 19h 01.4m | 11° 36.0' |   |      |    |   |         |   |
|                 |     |        |      |      | Cl,P,IC   |           |           |   |      |    |   |         |   |
| NGC 6755        |     | AQL    | 7.5  | OC   | 15.0m   | 19h 07.8m | 4° 16.0'  |   |      |    |   | 100     |   |
|                 |     |        |      |      | Cl,vL,vRi,pC,*12...14 - H VII 19  |           |           |   |      |    |   |         |   |
| NGC 6756        |     | AQL    | 10.6 | OC   | 4.0m  | 19h 08.7m | 4° 42.0'  |   |      |    |   | 40      |   |
|                 |     |        |      |      | Cl,S,Ri,IC,*11...12 - H VII 62  |           |           |   |      |    |   |         |   |
| NGC 6781        |     | AQL    | 11.8 | PN   | 111s x 109s   | 19h 18.5m | 6° 32.0'  |   | R95  | S3 | O |         |   |
|                 |     |        |      |      | F,L,R,vsbM disc - H III 743;PK41-2.1;opposite dark lane from Altair         |           |           |   |      |    |   |         |   |
| NGC 6800        |     | VUL    |      | OC   | 5m  | 19h 27.1m | 25° 08.0' |   |      |    | O | 20      |   |
|                 |     |        |      |      | Cl,vL,pRi,vIC,st10.. - H VIII 21;30' NW from Alpha Vul                      |           |           |   |      |    |   |         |   |
| NGC 6802        |     | VUL    | 8.8  | OC   | 3.2m  | 19h 30.6m | 20° 16.0' |   | R105 |    |   | 50      |   |
|                 |     |        |      |      | Cl,L,vC,E0,st14...18 - H VI 14;Bar shaped along N-S                         |           |           |   |      |    |   |         |   |
| NGC 6803        |     | AQL    | 11.0 | PN   | 4s  | 19h 31.3m | 10° 03.0' |   |      |    |   |         |   |
|                 |     |        |      |      | stellar   |           |           |   |      |    |   |         |   |
| NGC 6823        |     | VUL    | 7.1  | OC   | 12.0m   | 19h 43.2m | 23° 18.0' |   |      |    | O | 30      | B |
|                 |     |        |      |      | Cl,cRi,E,st11...12 - H VII 18;In Vul OB1 w nebula NGC 6820;30 * mags 11..12 |           |           |   |      |    |   |         |   |
| NGC 6830        |     | VUL    | 7.9  | OC   | 12.0m   | 19h 51.0m | 23° 06.0' |   |      |    |   | 20      |   |
|                 |     |        |      |      | Cl,L,pRi,pC,*11...12 - H VII 9  |           |           |   |      |    |   |         |   |
| NGC 6838        | M71 | SGE    | 8.3  | GC   | 6.1m  | 19h 53.8m | 18° 47.0' |   |      |    | O |         | B |
|                 |     |        |      |      | Cl,vL,vRi,pmC,*11...16 - Arrowhead shape, stars have few metals             |           |           |   |      |    |   |         |   |
| NGC 6853        | M27 | VUL    | 7.3  | PN   | 480s x 340s   | 19h 59.6m | 22° 43.0' |   |      |    | O |         | B |
| Dumbbell Nebula |     |        |      |      | !!vB,vL,bi-N,IE - PK60-3.1;Lord Rosse drew 18* invl                         |           |           |   |      |    |   |         |   |
| Stock 1         |     | VUL    | 5.3  | OC   | 60.0m   | 19h 35.8m | 25° 13.0' |   |      |    |   | 40      |   |
|                 |     |        |      |      | 13"-B,vL,nC at 60X; 28* - 47 * in 40' field                                 |           |           |   |      |    |   |         |   |

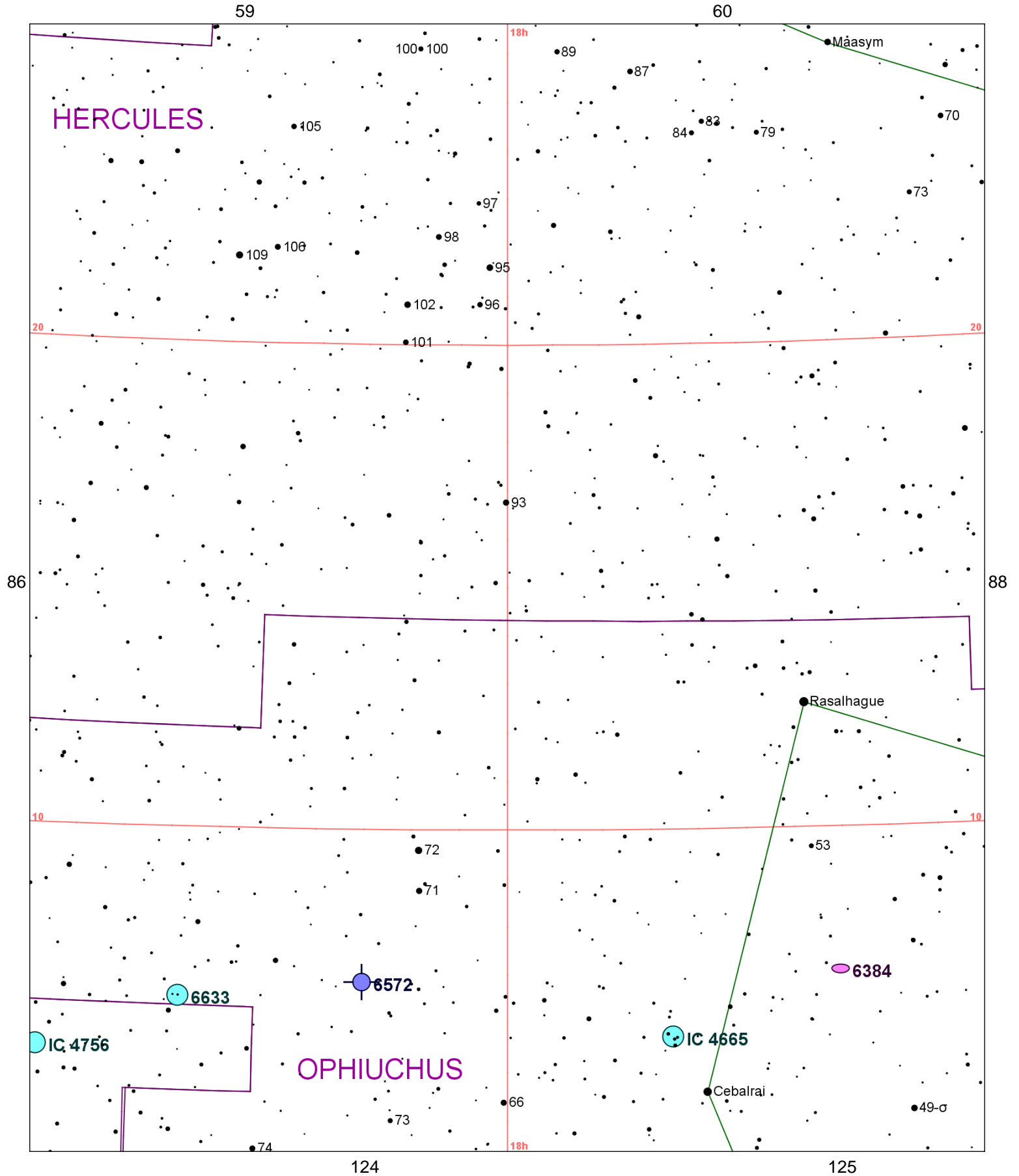
59



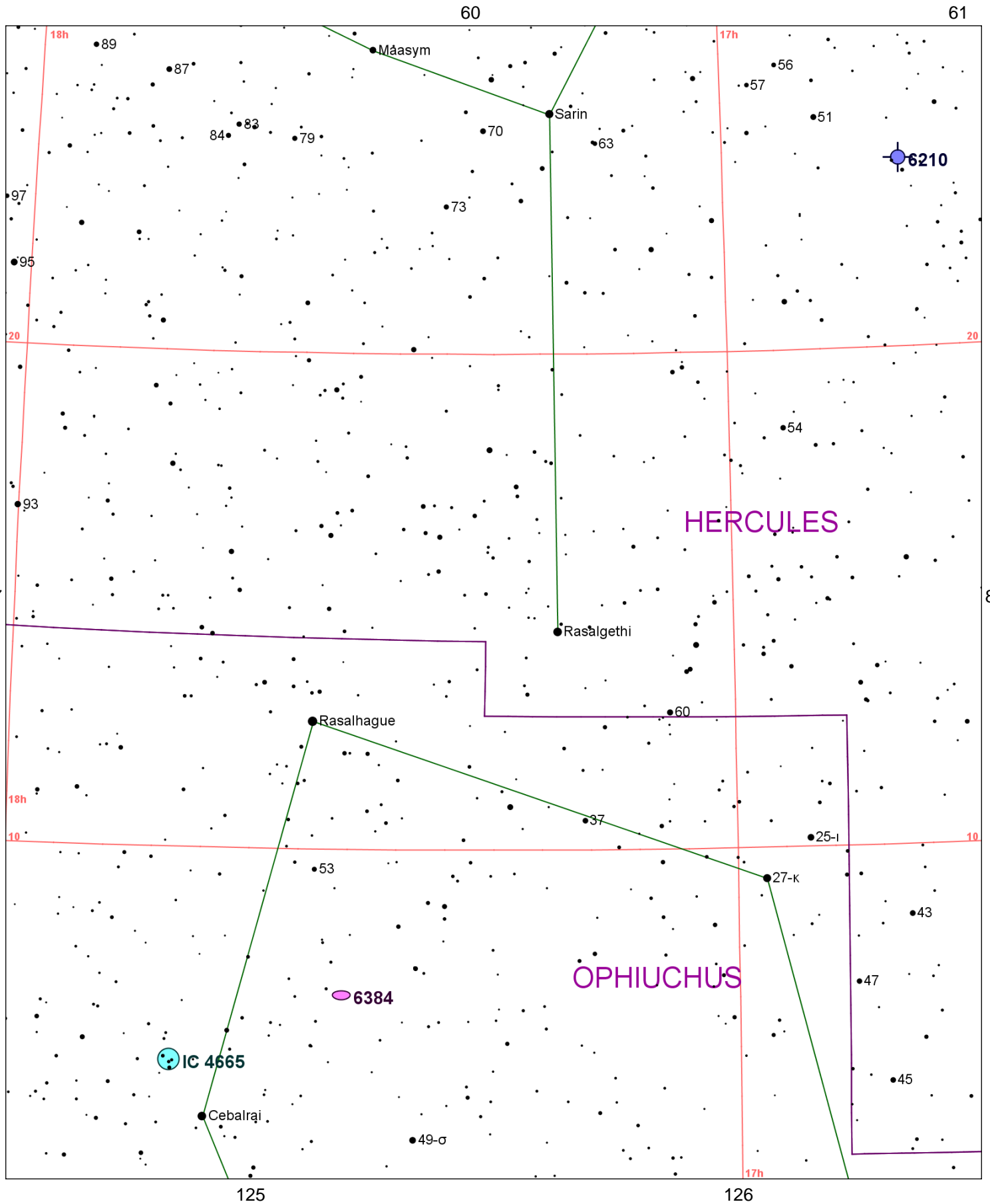
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| Chart 86  |   |        |      |      |              |           |           |   |     |     |   |         |   |
|---|---|--------|------|------|--------------|-----------|-----------|---|-----|-----|---|---------|---|
| Name  | M | Const. | Mag. | Type | Size         | R.A.      | Decl.     | C | R   | S   | O | # Stars | B |
| <b>Common</b>   |   |        |      |      | <b>Notes</b> |           |           |   |     |     |   |         |   |
| IC 4756   |   | SER    | 4.6  | OC   | 39m          | 18h 39.0m | 5° 27.0'  |   |     |     | O | 80      | B |
| vvL,scattered group of 80 * mags 7.... - Naked eye from dark site   |   |        |      |      |              |           |           |   |     |     |   |         |   |
| MCG +01-48-001  |   | SER    | 11.0 | GAL  | 0.7m x 0.5m  | 18h 49.0m | 5° 26.0'  |   |     |     |   |         |   |
| Inner Regions Completely Black--MCG - Mostly Edge On                |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6572  |   | OPH    | 8.0  | PN   | 15s x 12s    | 18h 12.1m | 6° 51.0'  |   | R92 | S71 | O |         |   |
| vB,vS,R,I hazy  |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6633  |   | OPH    | 4.6  | OC   | 27.0m        | 18h 27.3m | 6° 31.0'  |   | R93 | S72 | O | 30      | B |
| Cl,IC,st L - H VIII 72  |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6709  |   | AQL    | 6.7  | OC   | 13.0m        | 18h 51.5m | 10° 21.0' |   |     |     |   | 40      | B |
| Cl,pRi,IC,iF  |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6738  |   | AQL    | 8.3  | OC   | 15.0m        | 19h 01.4m | 11° 36.0' |   |     |     |   |         |   |
| Cl,P,IC   |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6755  |   | AQL    | 7.5  | OC   | 15.0m        | 19h 07.8m | 4° 16.0'  |   |     |     |   | 100     |   |
| Cl,vL,vRi,pC,*12...14 - H VII 19                                    |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6756  |   | AQL    | 10.6 | OC   | 4.0m         | 19h 08.7m | 4° 42.0'  |   |     |     |   | 40      |   |
| Cl,S,Ri,IC,*11...12 - H VII 62                                      |   |        |      |      |              |           |           |   |     |     |   |         |   |
| NGC 6781  |   | AQL    | 11.8 | PN   | 111s x 109s  | 19h 18.5m | 6° 32.0'  |   | R95 | S3  | O |         |   |
| F,L,R,vsbM disc - H III 743;PK41-2.1;opposite dark lane from Altair |   |        |      |      |              |           |           |   |     |     |   |         |   |



| Chart 87   |   |        |      |      |              |           |          |   |     |     |   |         |   |
|--|---|--------|------|------|--------------|-----------|----------|---|-----|-----|---|---------|---|
| Name   | M | Const. | Mag. | Type | Size         | R.A.      | Decl.    | C | R   | S   | O | # Stars | B |
| <b>Common</b>  |   |        |      |      | <b>Notes</b> |           |          |   |     |     |   |         |   |
| IC 4665  |   | OPH    | 4.2  | OC   | 41.0m        | 17h 46.3m | 5° 43.0' |   |     |     | O | 30      | B |
| vvL sparse group,about 20 * mags 7.... - Incl Struve 2212 8.5+9.0;3.1"sep;340 deg PA |   |        |      |      |              |           |          |   |     |     |   |         |   |
| IC 4756  |   | SER    | 4.6  | OC   | 39m          | 18h 39.0m | 5° 27.0' |   |     |     | O | 80      | B |
| vvL,scattered group of 80 * mags 7.... - Naked eye from dark site                    |   |        |      |      |              |           |          |   |     |     |   |         |   |
| NGC 6384   |   | OPH    | 10.4 | GAL  | 5.8m x 3.8m  | 17h 32.4m | 7° 04.0' |   |     |     |   |         |   |
| pB,S,vIE - sBN in faint bar  |   |        |      |      |              |           |          |   |     |     |   |         |   |
| NGC 6572   |   | OPH    | 8.0  | PN   | 15s x 12s    | 18h 12.1m | 6° 51.0' |   | R92 | S71 | O |         |   |
| vB,vS,R,I hazy   |   |        |      |      |              |           |          |   |     |     |   |         |   |
| NGC 6633   |   | OPH    | 4.6  | OC   | 27.0m        | 18h 27.3m | 6° 31.0' |   | R93 | S72 | O | 30      | B |
| Cl,IC,st L - H VIII 72   |   |        |      |      |              |           |          |   |     |     |   |         |   |



| Chart 88      |   |        |      |      |   |           |           |   |     |     |   |         |   |
|---------------|---|--------|------|------|---|-----------|-----------|---|-----|-----|---|---------|---|
| Name          | M | Const. | Mag. | Type | Size  | R.A.      | Decl.     | C | R   | S   | O | # Stars | B |
| <b>Common</b> |   |        |      |      | <b>Notes</b>  |           |           |   |     |     |   |         |   |
| IC 4665       |   | OPH    | 4.2  | OC   | 41.0m   | 17h 46.3m | 5° 43.0'  |   |     |     | O | 30      | B |
|               |   |        |      |      | vvL sparse group, about 20 * mags 7.... - Incl Struve 2212 8.5+9.0;3.1"sep;340 deg PA |           |           |   |     |     |   |         |   |
| NGC 6210      |   | HER    | 9.7  | PN   | 20s x 13s   | 16h 44.5m | 23° 48.0' |   | R90 | S56 | O |         |   |
|               |   |        |      |      | vB,vS,R,disc  |           |           |   |     |     |   |         |   |
| NGC 6384      |   | OPH    | 10.4 | GAL  | 5.8m x 3.8m   | 17h 32.4m | 7° 04.0'  |   |     |     |   |         |   |
|               |   |        |      |      | pB,S,vIE - sBN in faint bar   |           |           |   |     |     |   |         |   |