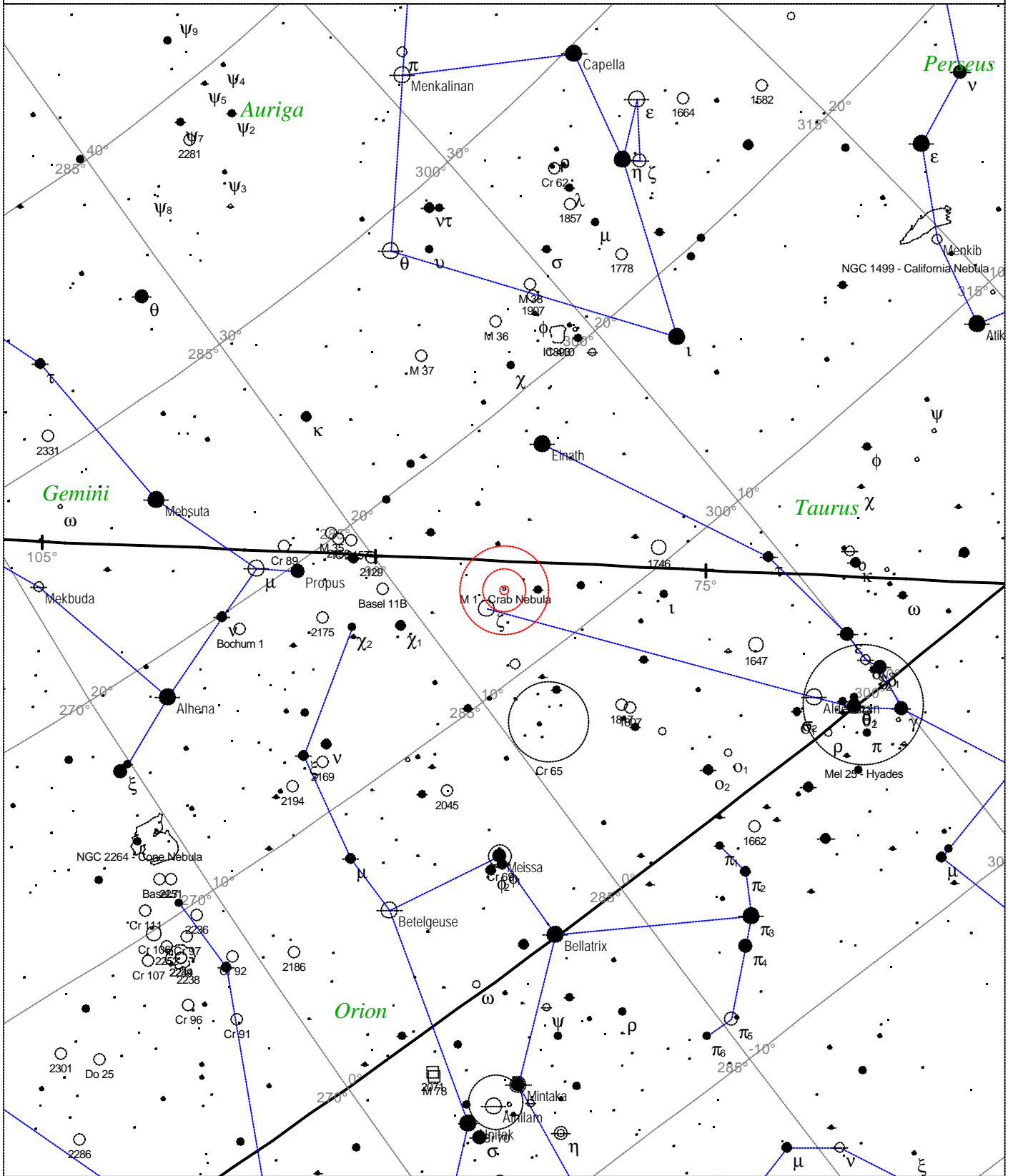


Messier 1 - Crab Nebula



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- >6.5

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- ☐ Galaxy
- ☐ Bright nebula
- ☐ Dark nebula
- ⊕ Globular cluster
- Open cluster
- ⊕ Planetary nebula
- ☒ Quasar
- △ Radio source
- × X-ray source
- Other object

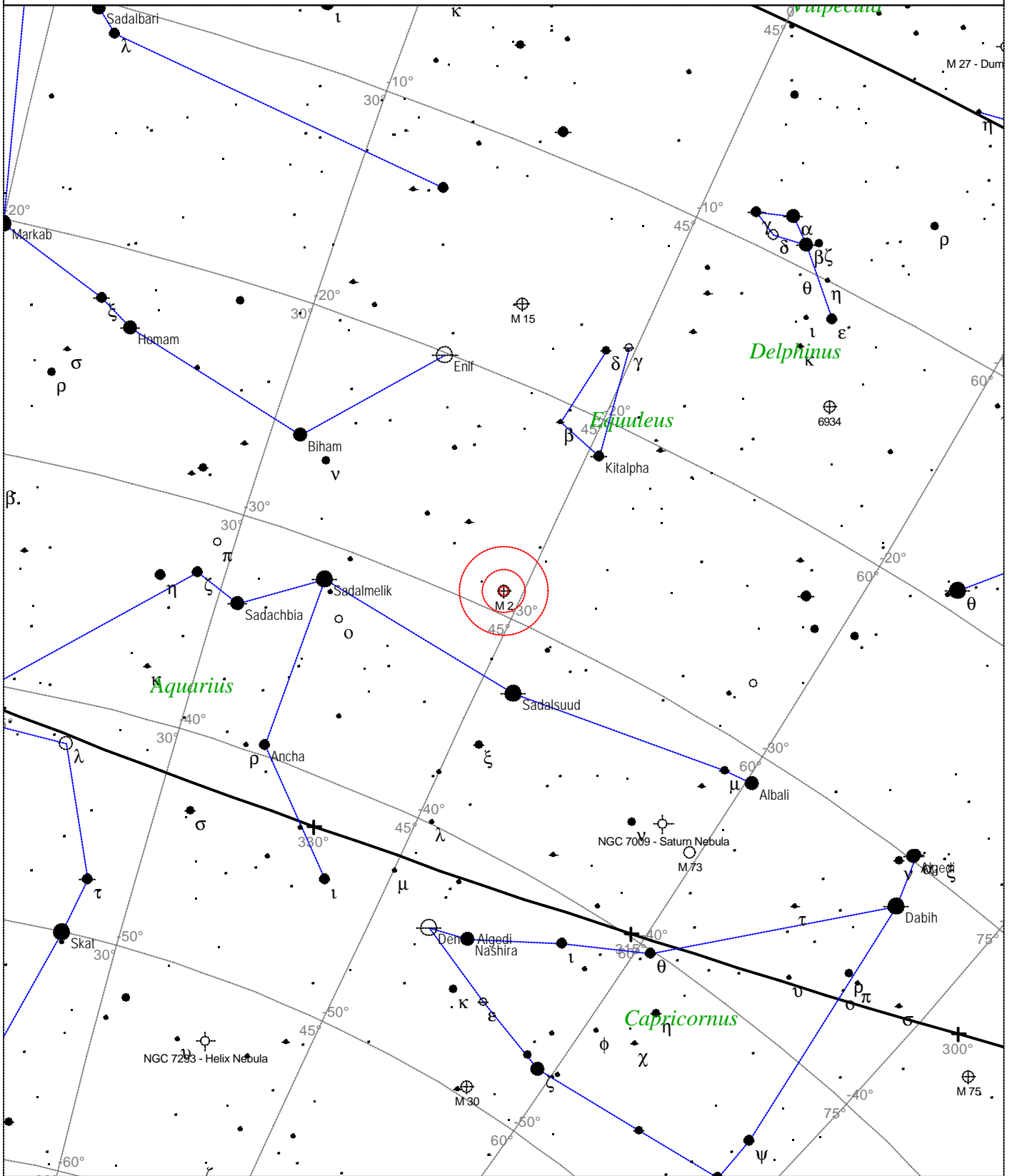
Messier 1 - Crab Nebula
 Type of object: Supernova remnant
 Magnitude: 8.4
 Size: 8.0'x4.0'
 Right ascension: 5h 34m 40s
 Declination: +22° 1' 1"
 Constellation: Taurus

Local Time: 12:48:02 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 12:48:02 12-Sep-2002
 RA: 5h34m43s Dec: +22° 00' Field: 45.0°

Sidereal Time: 12:03:22
 Julian Day: 2452530.0334

Messier 2 - Globular Cluster



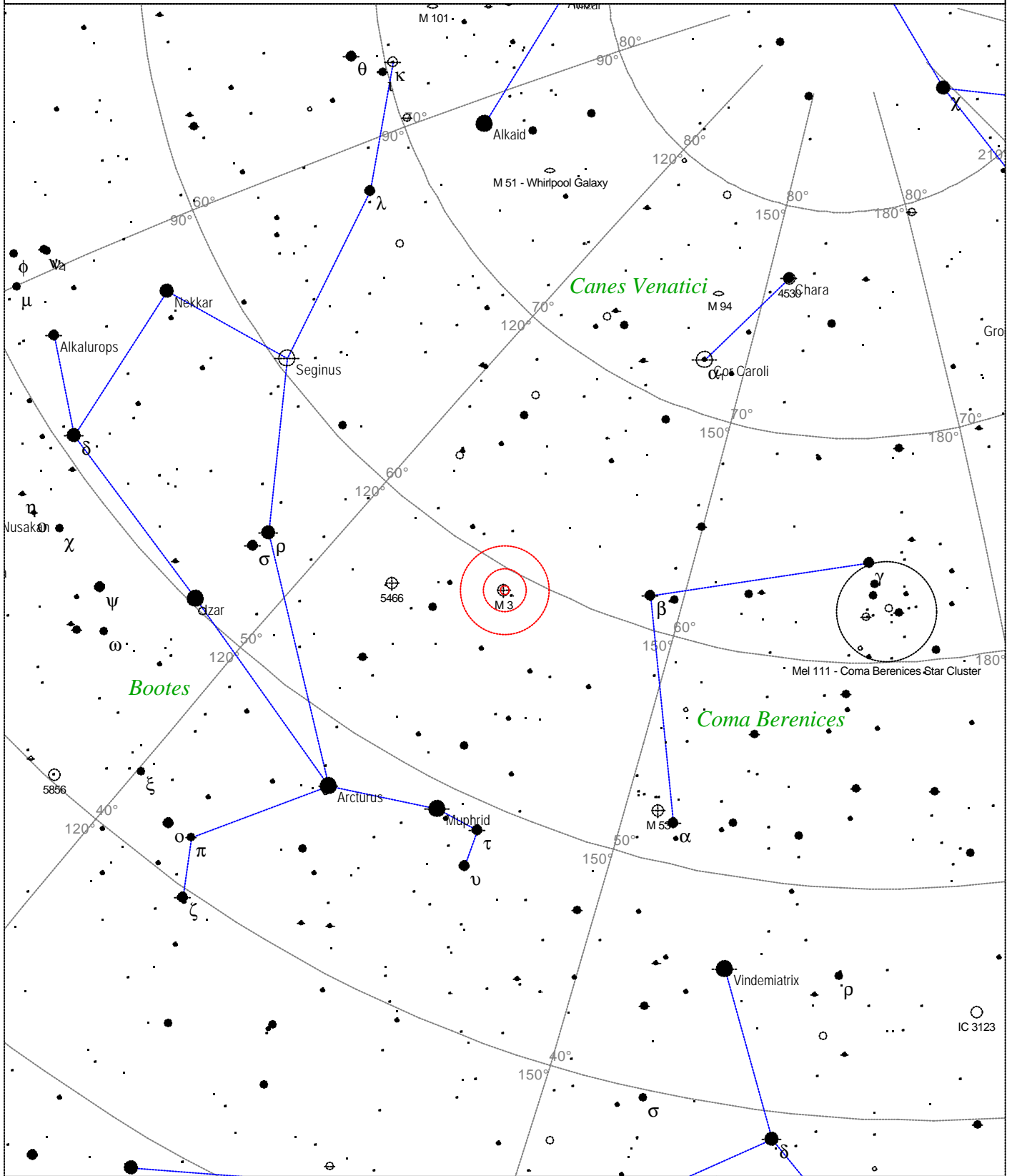
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☾ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 	<p>Messier 2 - Globular cluster Magnitude: 6.5 Size: 11.7' Right ascension: 21h 33m 36s Declination: -0° 48' 40" Constellation: Aquarius</p>
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Local Time: 12:48:02 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 12:48:02 12-Sep-2002
 RA: 21h33m36s Dec: -0° 48' Field: 45.0°

Sidereal Time: 12:03:22
 Julian Day: 2452530.0334

Messier 3 - Globular Cluster

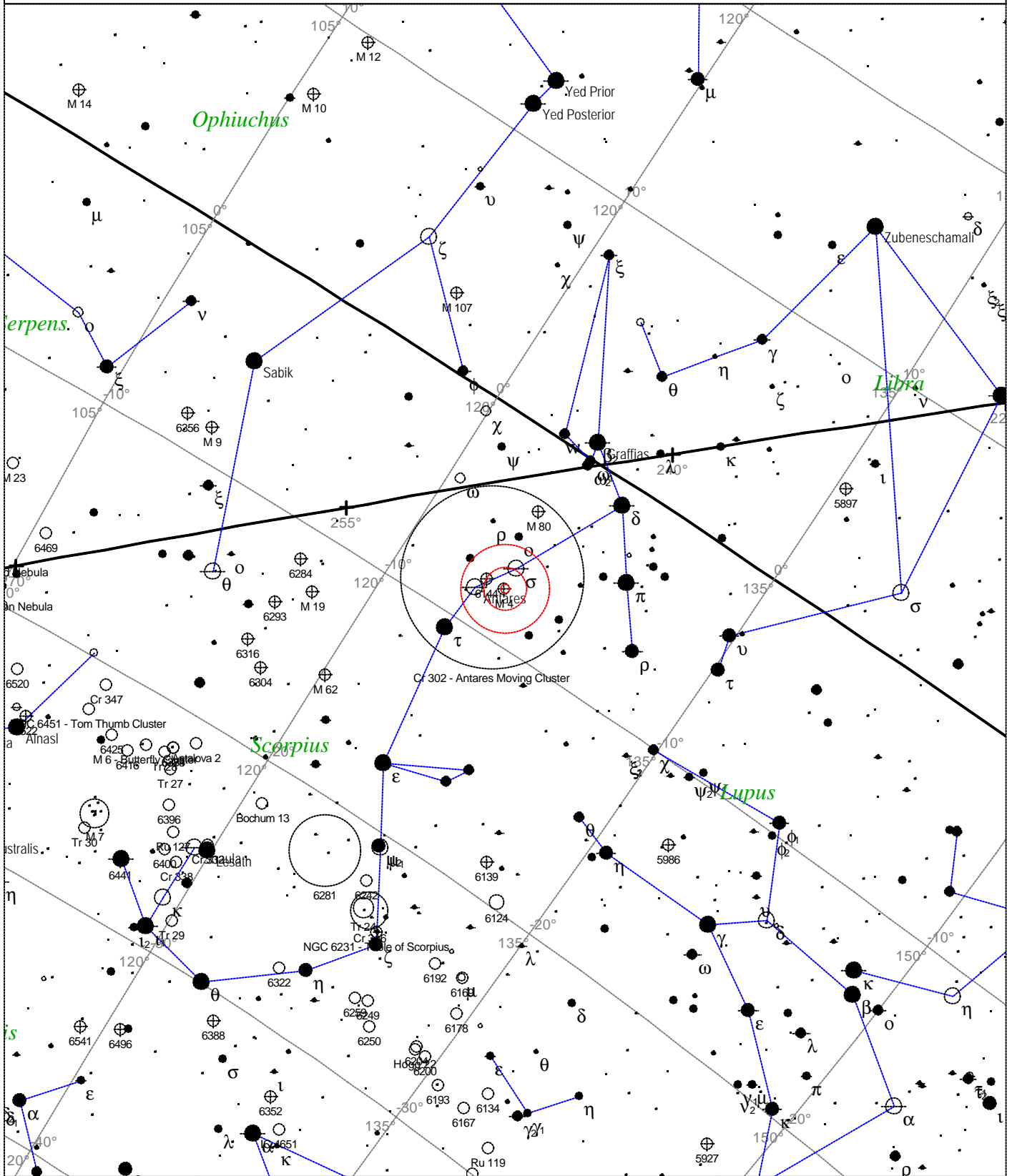


STARS		SYMBOLS		
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	✕ X-ray source
● 4	· >7	☄ Comet	○ Open cluster	○ Other object
● 4.5		☄ Galaxy	⊕ Planetary nebula	
● 5		◻ Bright nebula	☄ Quasar	
● 5.5				

M 3 - Globular cluster
 Magnitude: 6.2
 Size: 18.6'
 Right ascension: 13h 42m 17s
 Declination: +28° 22' 0"
 Constellation: Canes Venatici

Local Time: 12:48:02 12-Sep-2002 UTC: 12:48:02 12-Sep-2002 Sidereal Time: 12:03:22
 Location: 53° 27' 0" N 2° 31' 0" W RA: 13h42m17s Dec: +28° 22' Field: 45.0° Julian Day: 2452530.0334

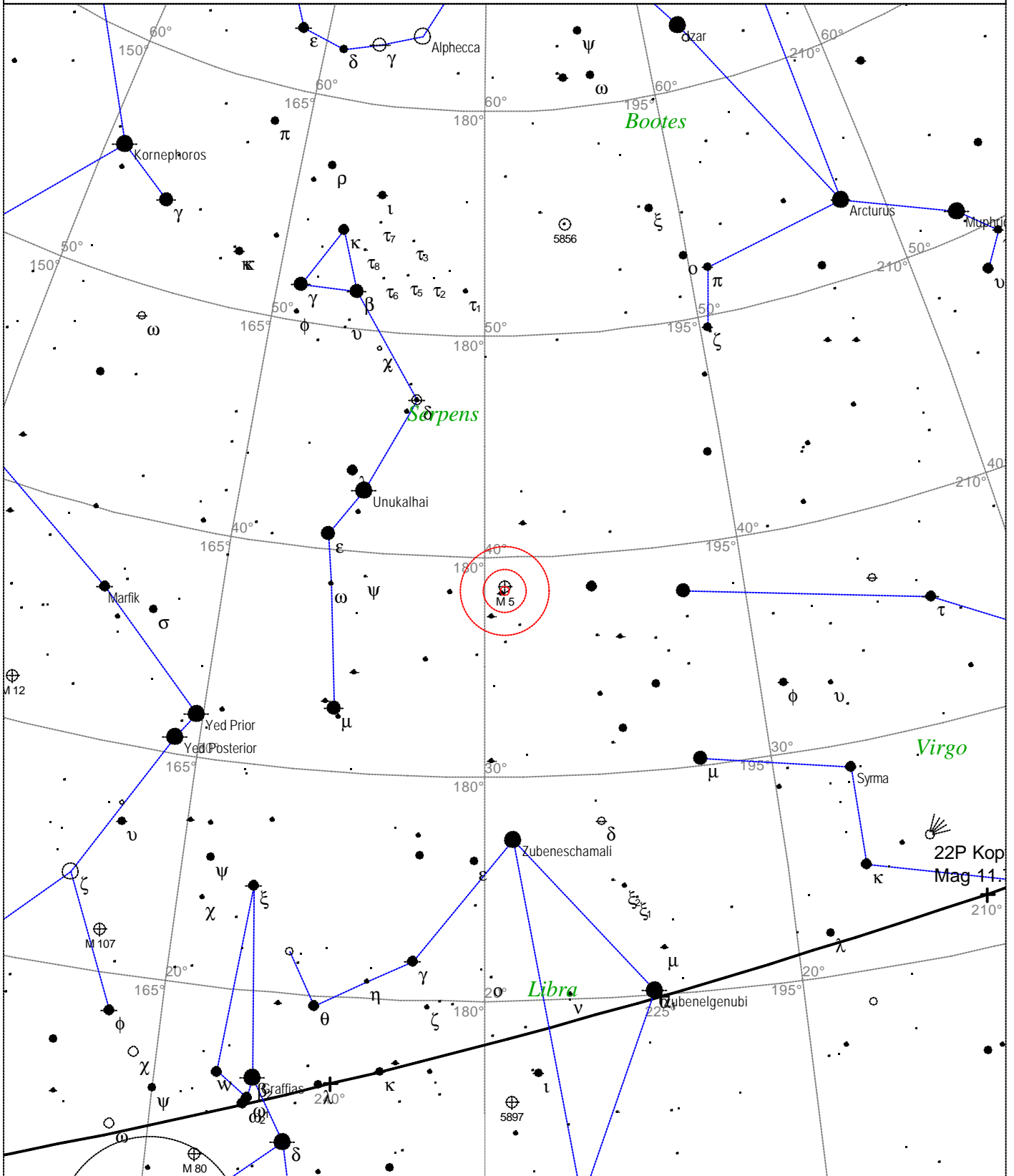
Messier 4 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 4 - Globular cluster Magnitude: 5.6 Size: 22.8' Right ascension: 16h 23m 44s Declination: -26° 31' 54" Constellation: Scorpius</p>
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Local Time: 12:48:02 12-Sep-2002 UTC: 12:48:02 12-Sep-2002 Sidereal Time: 12:03:22
 Location: 53° 27' 0" N 2° 31' 0" W RA: 16h23m44s Dec: -26° 31' 54" Field: 45.0° Julian Day: 2452530.0334

Messier 5 - Globular cluster



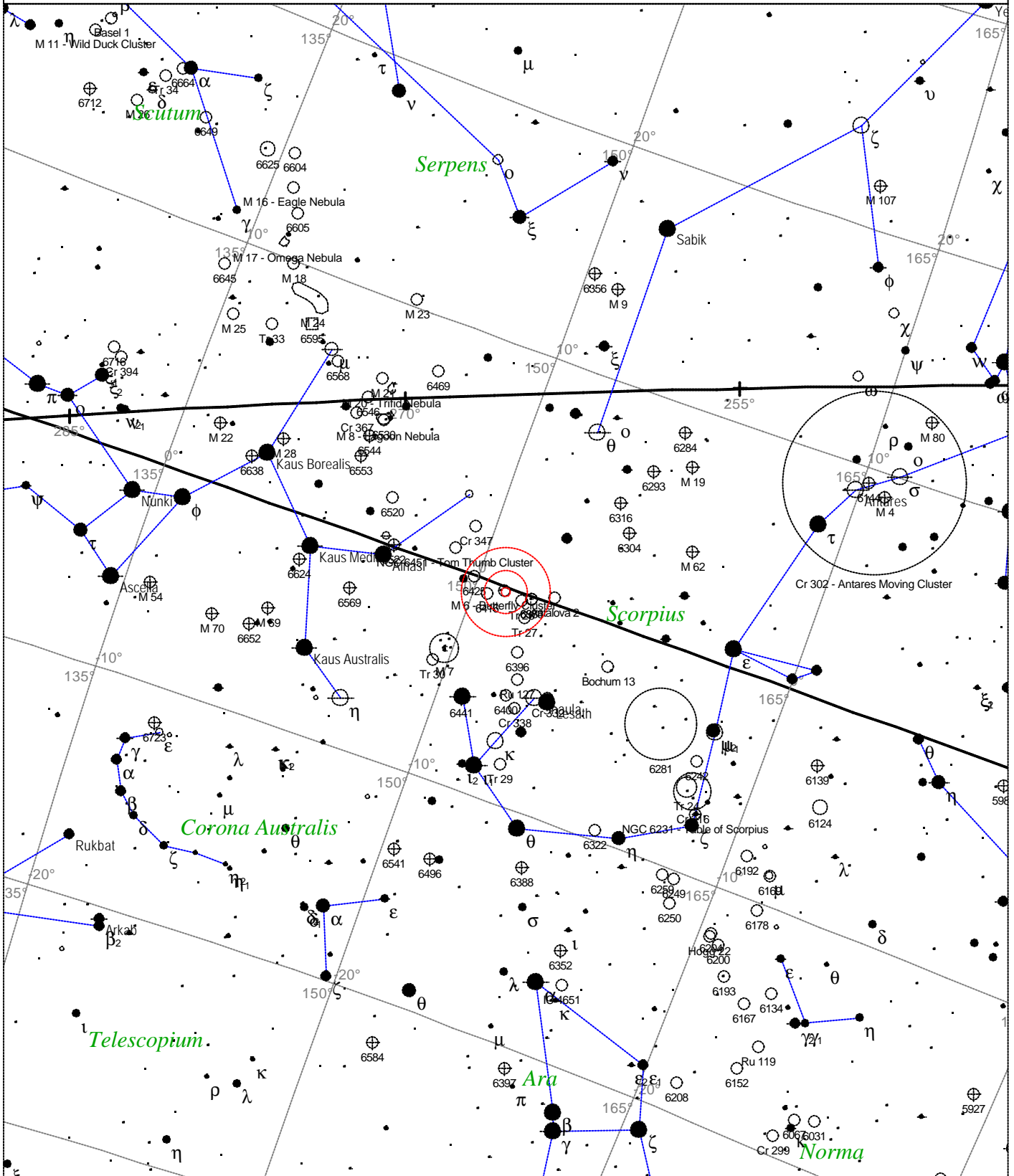
STARS		SYMBOLS			Messier 5 - Globular cluster Magnitude: 5.7 Size: 19.9' Right ascension: 15h 18m 40s Declination: +2° 4' 33" Constellation: Serpens
<ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula 	<ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar 	<ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 		

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 15h18m57s Dec: +1° 56' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

Messier 6 - Butterfly Cluster



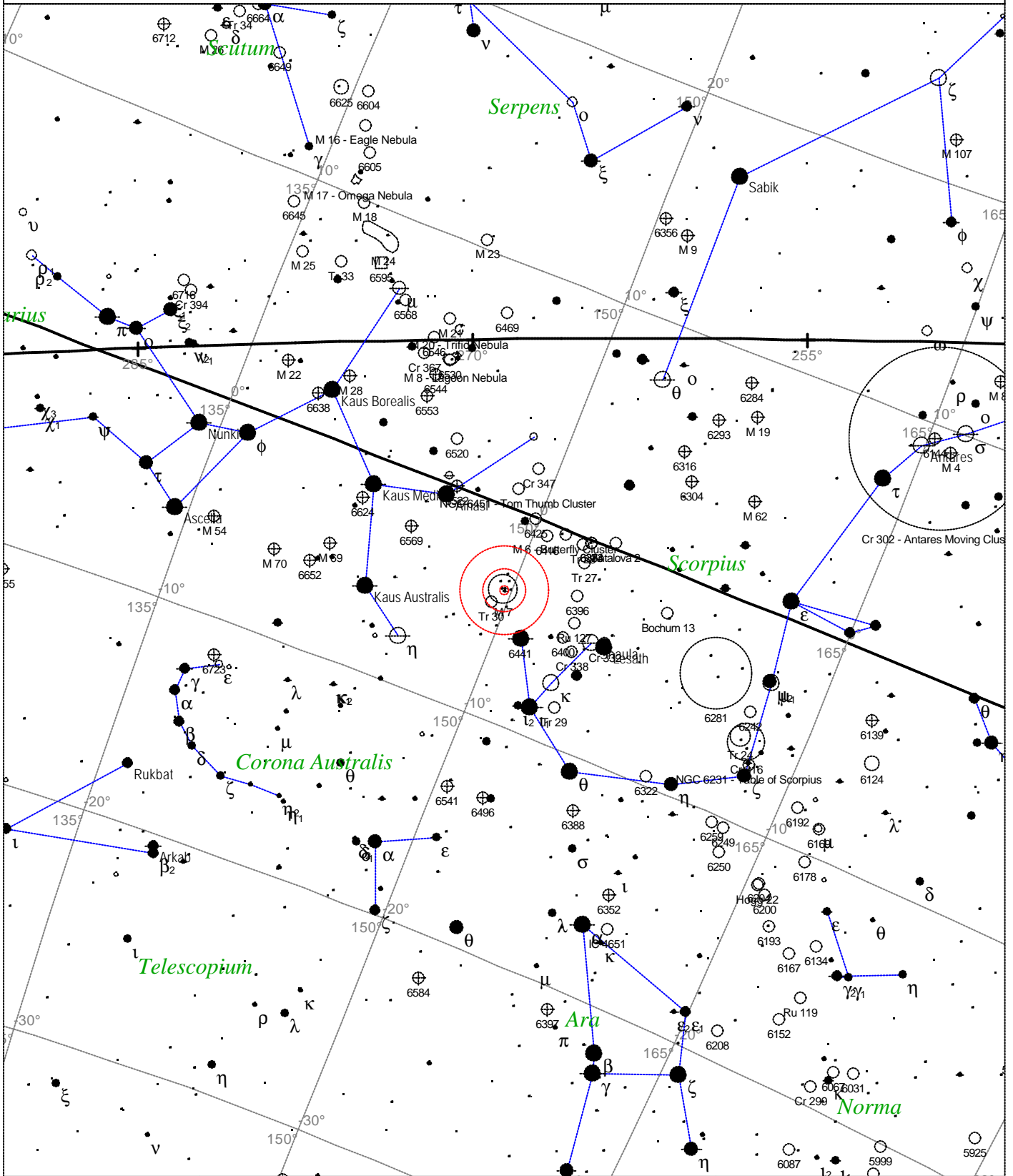
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 6 - Butterfly Cluster Type of object: Open cluster Magnitude: 4.0 Size: 20.0' Right ascension: 17h 40m 30s Declination: -32° 15' 26" Constellation: Scorpius</p>
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Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 17h40m30s Dec: -32° 15' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

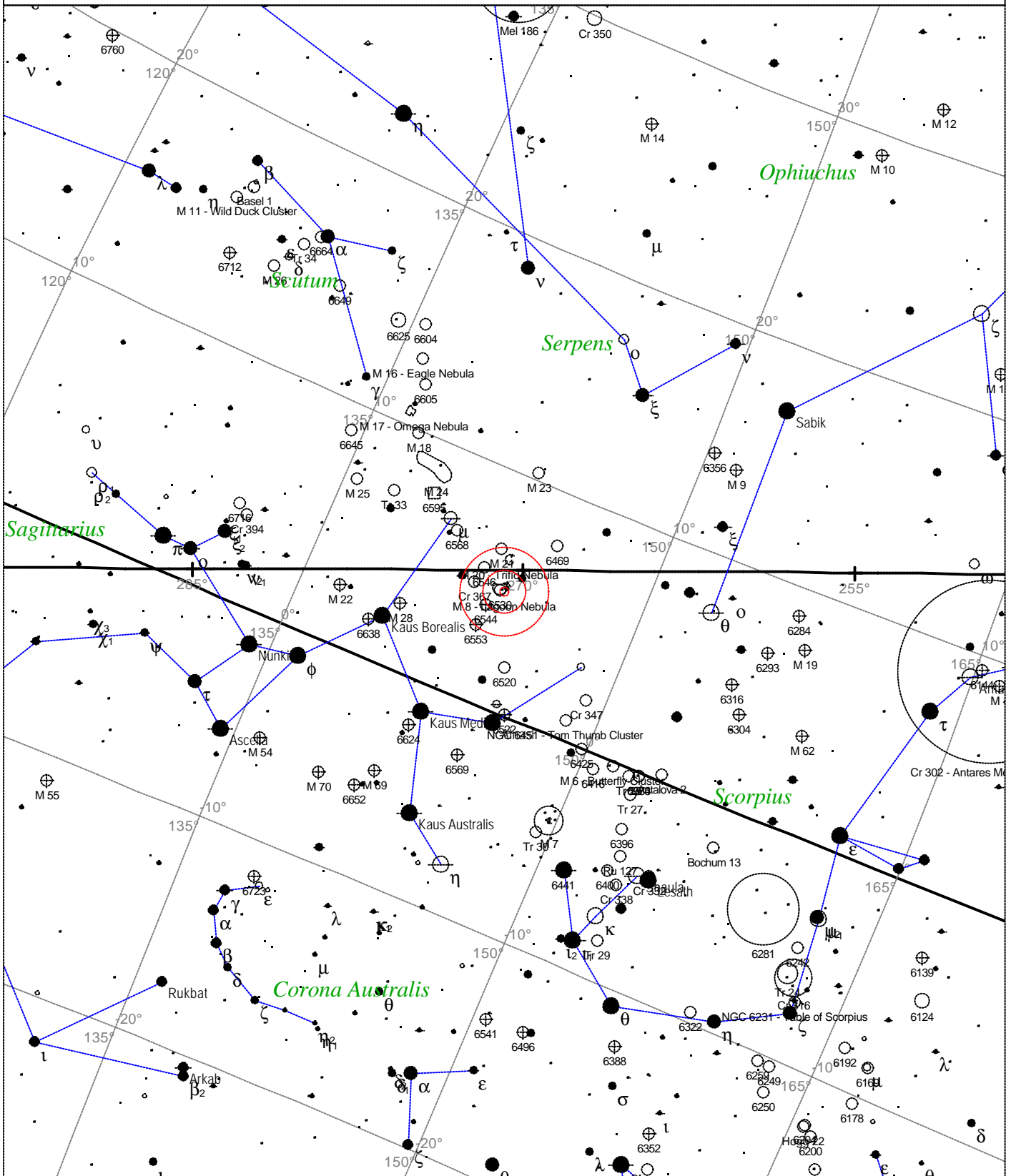
Messier 7 - Open cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☐ Galaxy ☐ Bright nebula ☐ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ☒ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 7 - Open cluster Magnitude: 3.0 Size: 80.0' Right ascension: 17h 54m 1s Declination: -34° 47' 43" Constellation: Scorpius</p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 17h54m01s Dec: -34° 47' Field: 45.0° Julian Day: 2452530.1713

Messier 8 - Lagoon Nebula



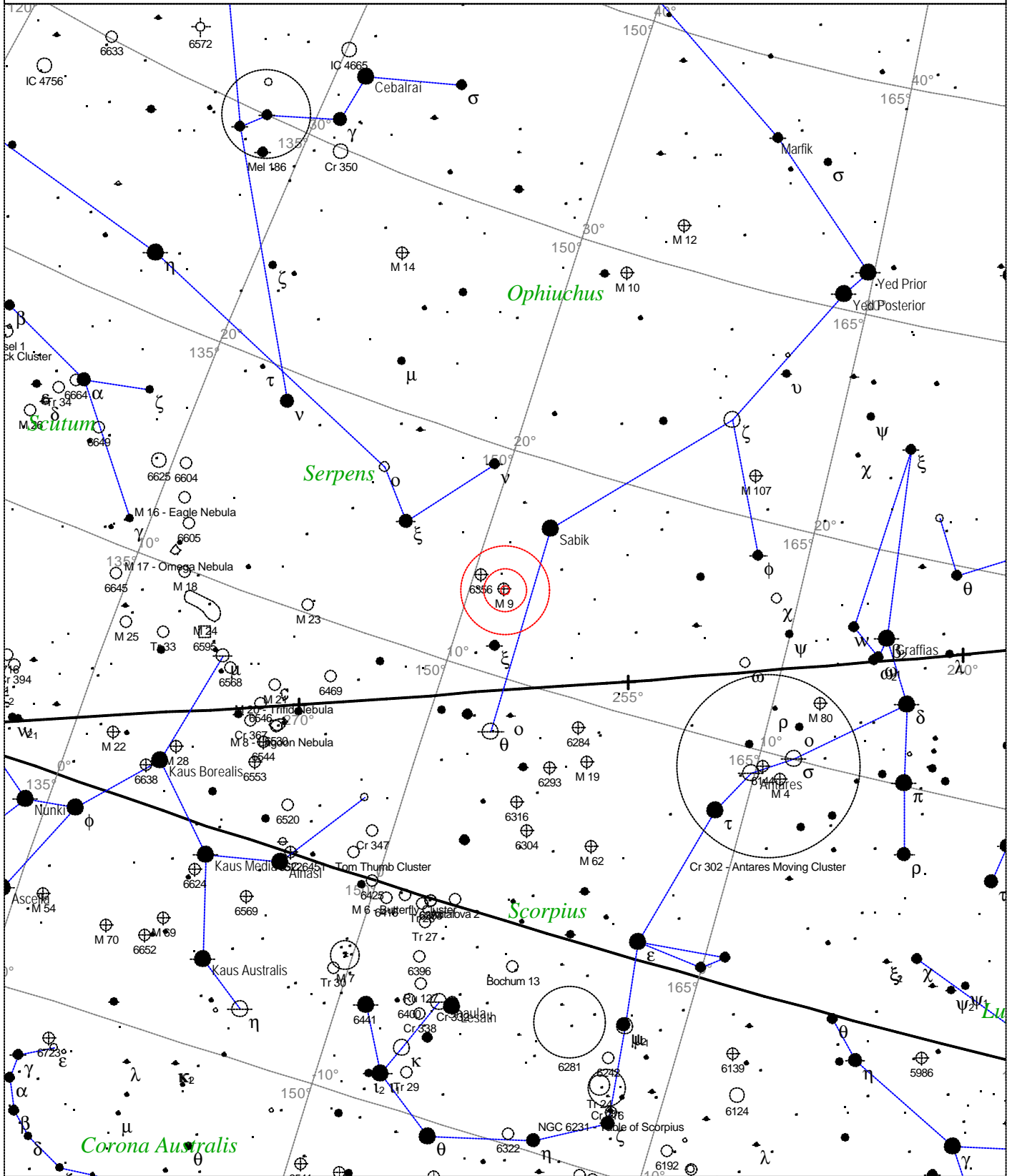
STARS	SYMBOLS			Messier 8 - Lagoon Nebula
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Type of object: Bright nebula
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Magnitude: 5.0
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 45.0'x30.0'
● 4.5	☄ Galaxy	♁ Planetary nebula		Right ascension: 18h 3m 50s
● 5	◻ Bright nebula	☄ Quasar		Declination: -24° 22' 52"
● 5.5				Constellation: Sagittarius

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h03m50s Dec: -24° 22' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

Messier 9 - Globular Cluster



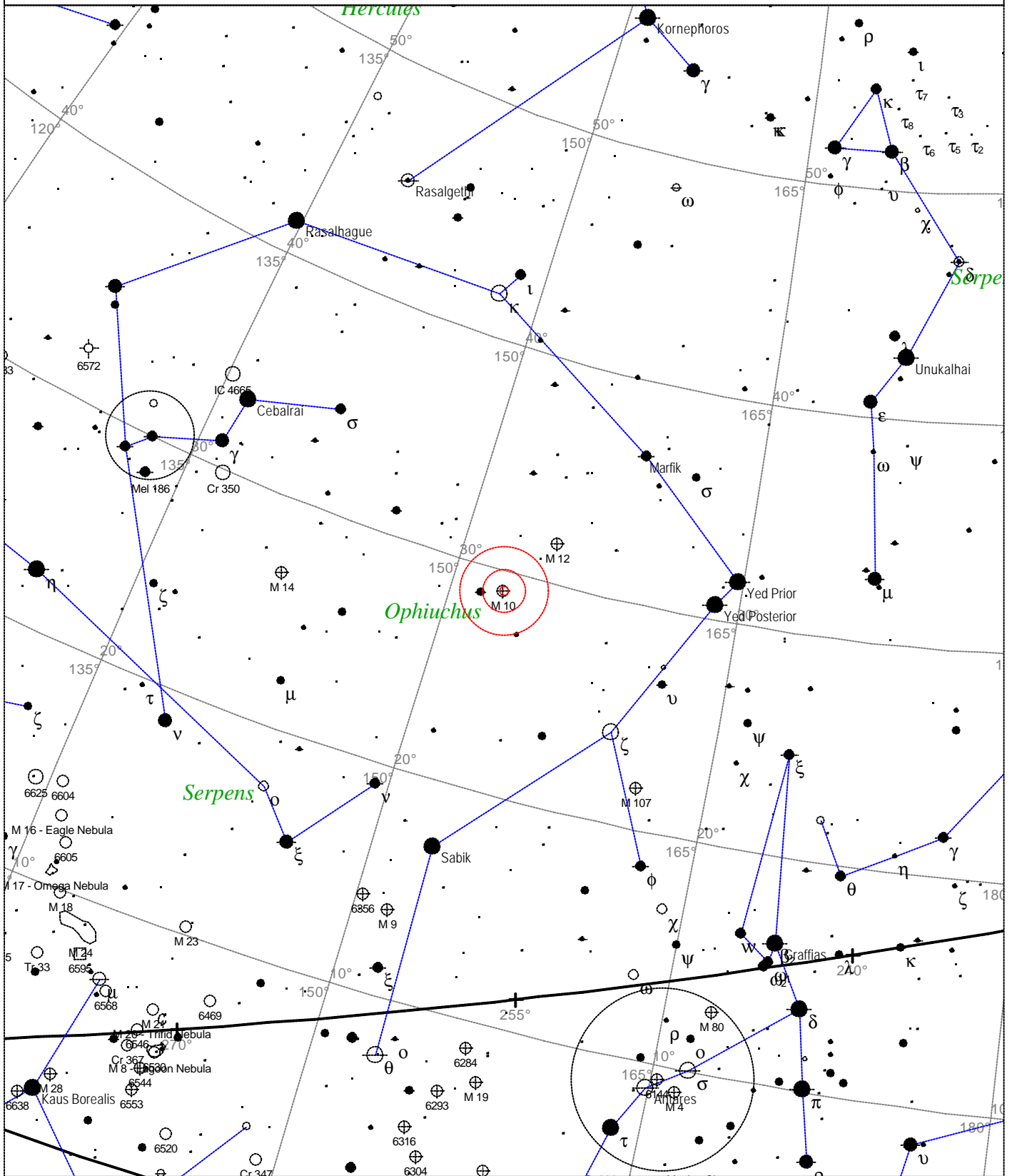
STARS		SYMBOLS			Messier 9 - Globular cluster Magnitude: 7.7 Size: 5.5' Right ascension: 17h 19m 20s Declination: -18° 31' 9" Constellation: Ophiuchus
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· >6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4		☄ Comet	○ Open cluster	○ Other object	
● 4.5		☄ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 17h19m20s Dec: -18° 31' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

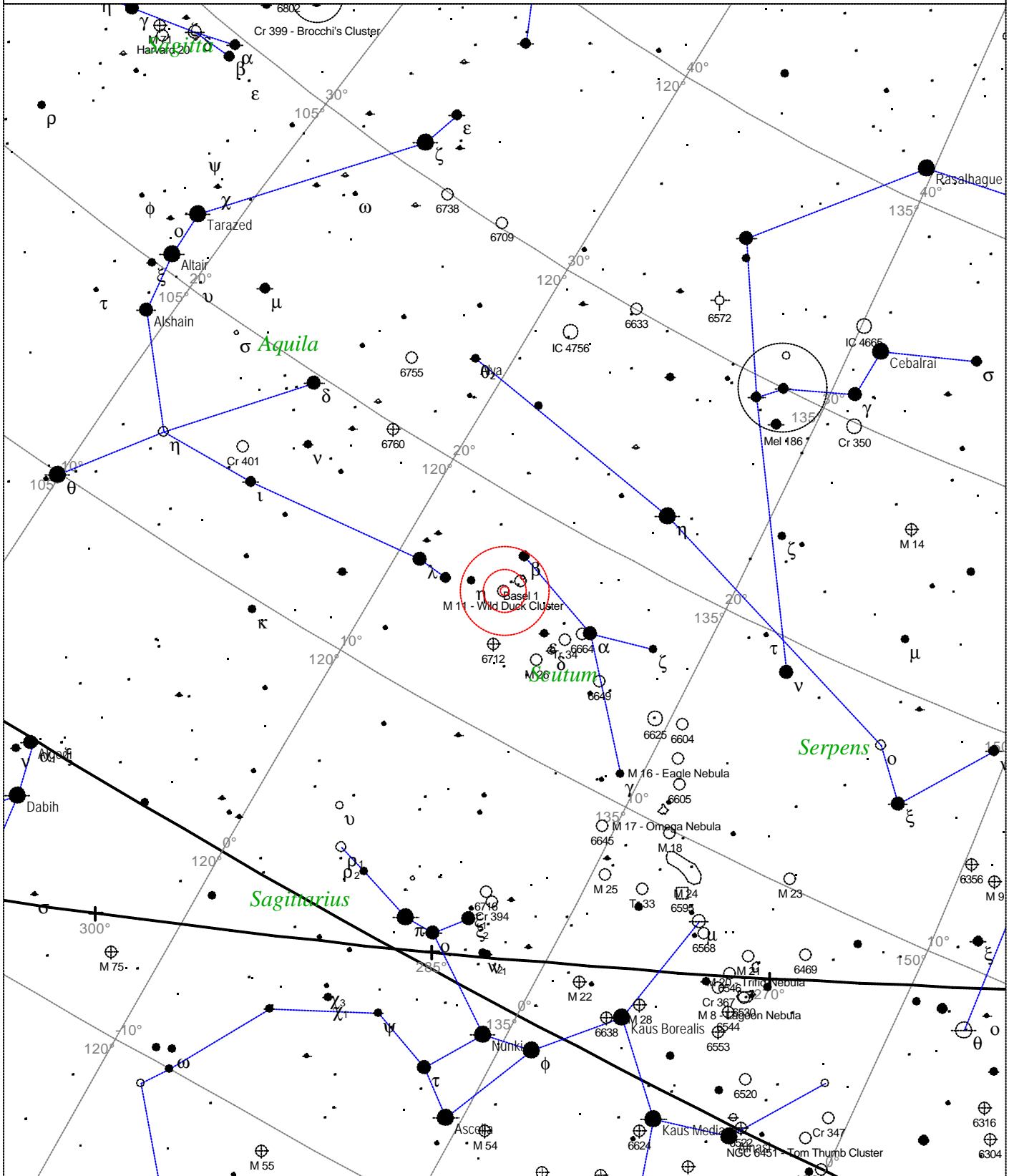
Messier 10 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 10 - Globular cluster Magnitude: 6.6 Size: 12.2' Right ascension: 16h 57m 16s Declination: -4° 6' 7" Constellation: Ophiuchus</p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 16h57m16s Dec: -4° 06' Field: 45.0° Julian Day: 2452530.1713

Messier 11 - Wild Duck Cluster



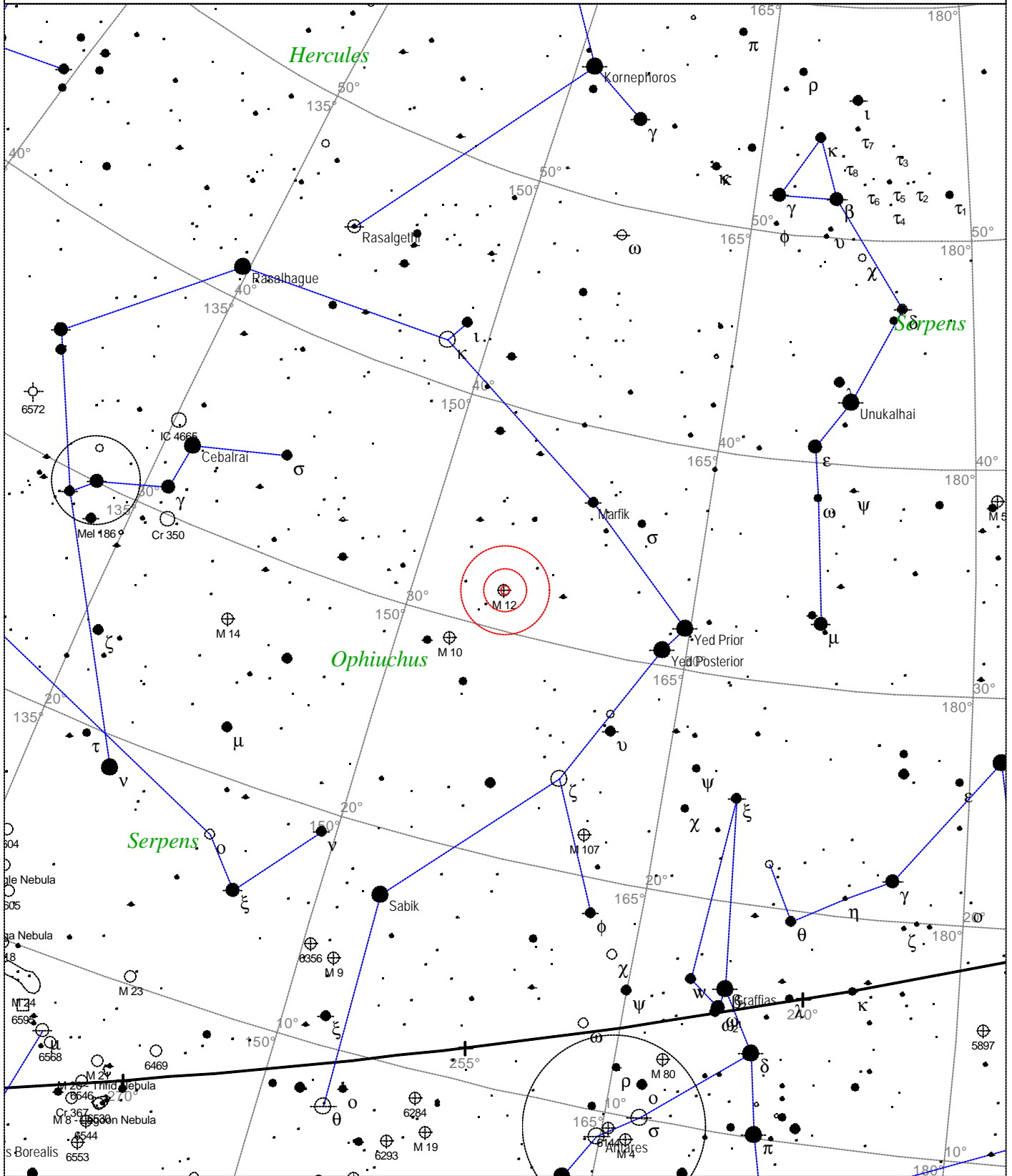
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 11 - Wild Duck Cluster</i> <i>Type of object: Open cluster</i> <i>Magnitude: 5.8</i> <i>Size: 14.0'</i> <i>Right ascension: 18h 51m 14s</i> <i>Declination: -6° 15' 47"</i> <i>Constellation: Scutum</i></p>
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Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h51m14s Dec: -6° 15' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

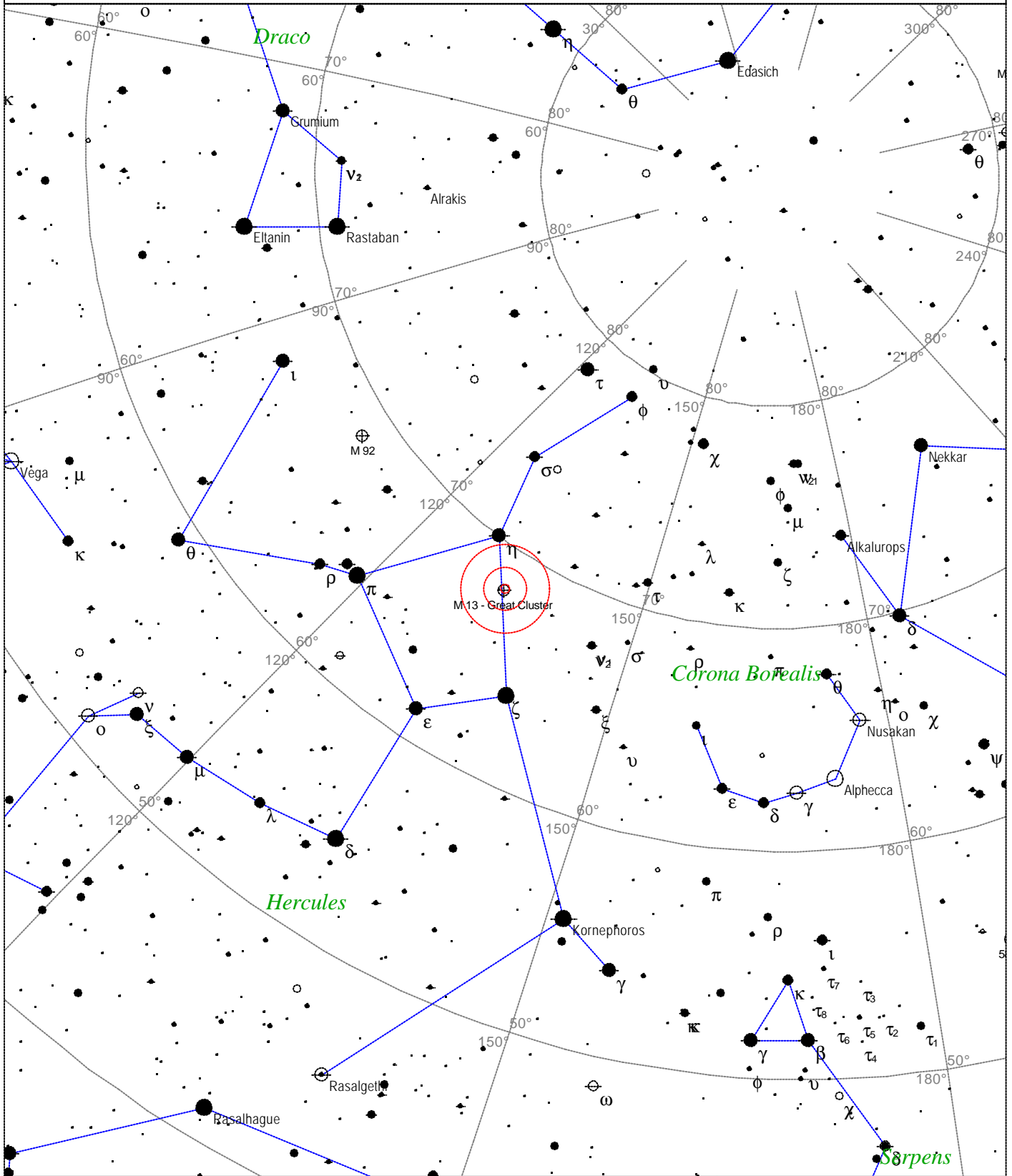
Messier 12 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 12 - Globular cluster Magnitude: 6.7 Size: 12.2' Right ascension: 16h 47m 22s Declination: -1° 57' 3" Constellation: Ophiuchus</p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 16h47m22s Dec: -1° 57' Field: 45.0° Julian Day: 2452530.1713

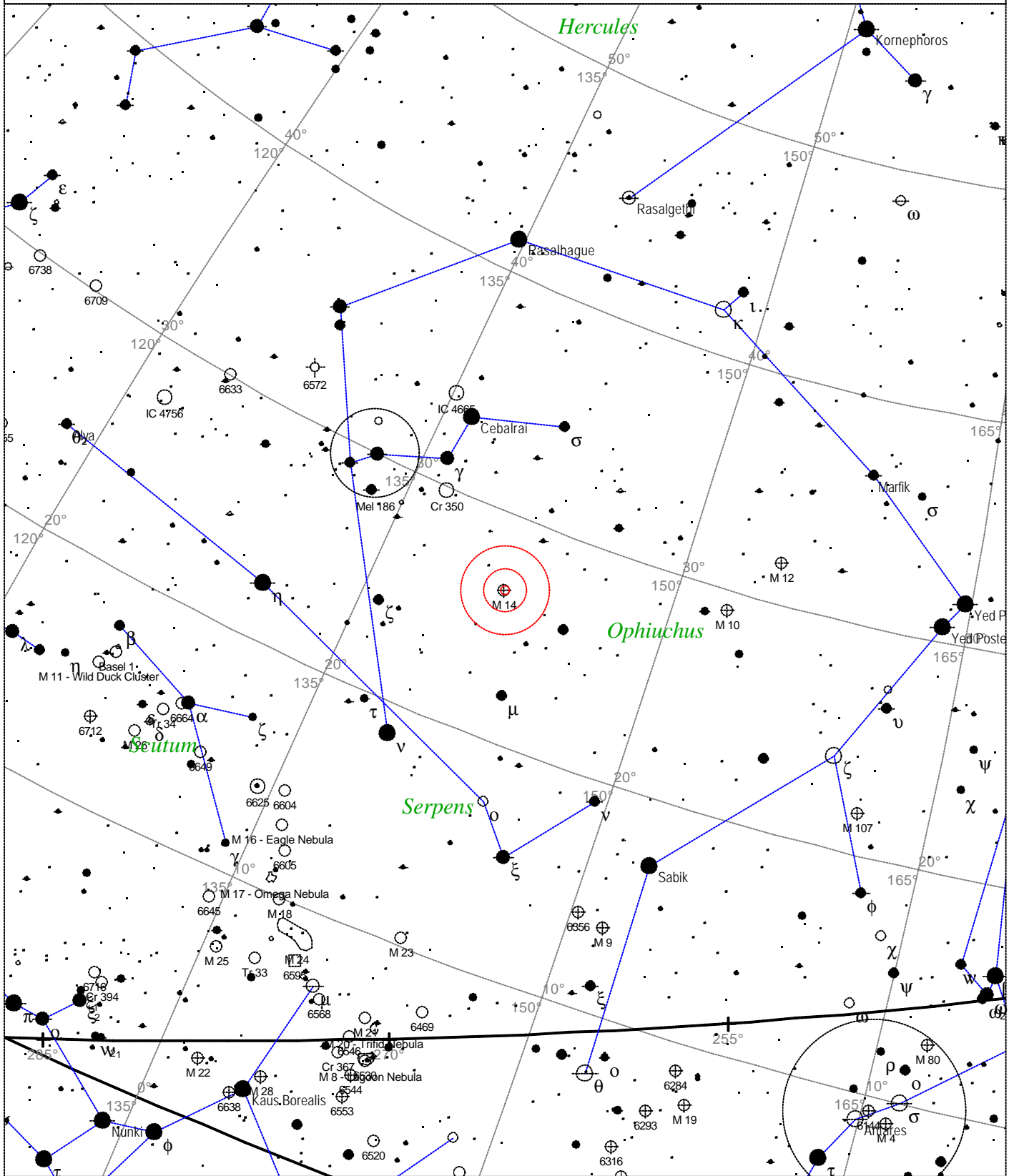
Messier 13 - Great Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊠ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 13 - Great Cluster</i> <i>Type of object: Globular cluster</i> <i>Magnitude: 5.8</i> <i>Size: 23.2'</i> <i>Right ascension: 16h 41m 46s</i> <i>Declination: +36° 27' 35"</i> <i>Constellation: Hercules</i></p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 16h41m46s Dec: +36° 27' Field: 45.0° Julian Day: 2452530.1713

Messier 14 - Globular Cluster



STARS	SYMBOLS		
● <3	● Multiple star	◻ Dark nebula	△ Radio source
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source
● 4	☄ Comet	○ Open cluster	○ Other object
● 4.5	☄ Galaxy	♁ Planetary nebula	
● 5	◻ Bright nebula	☄ Quasar	
● 5.5			

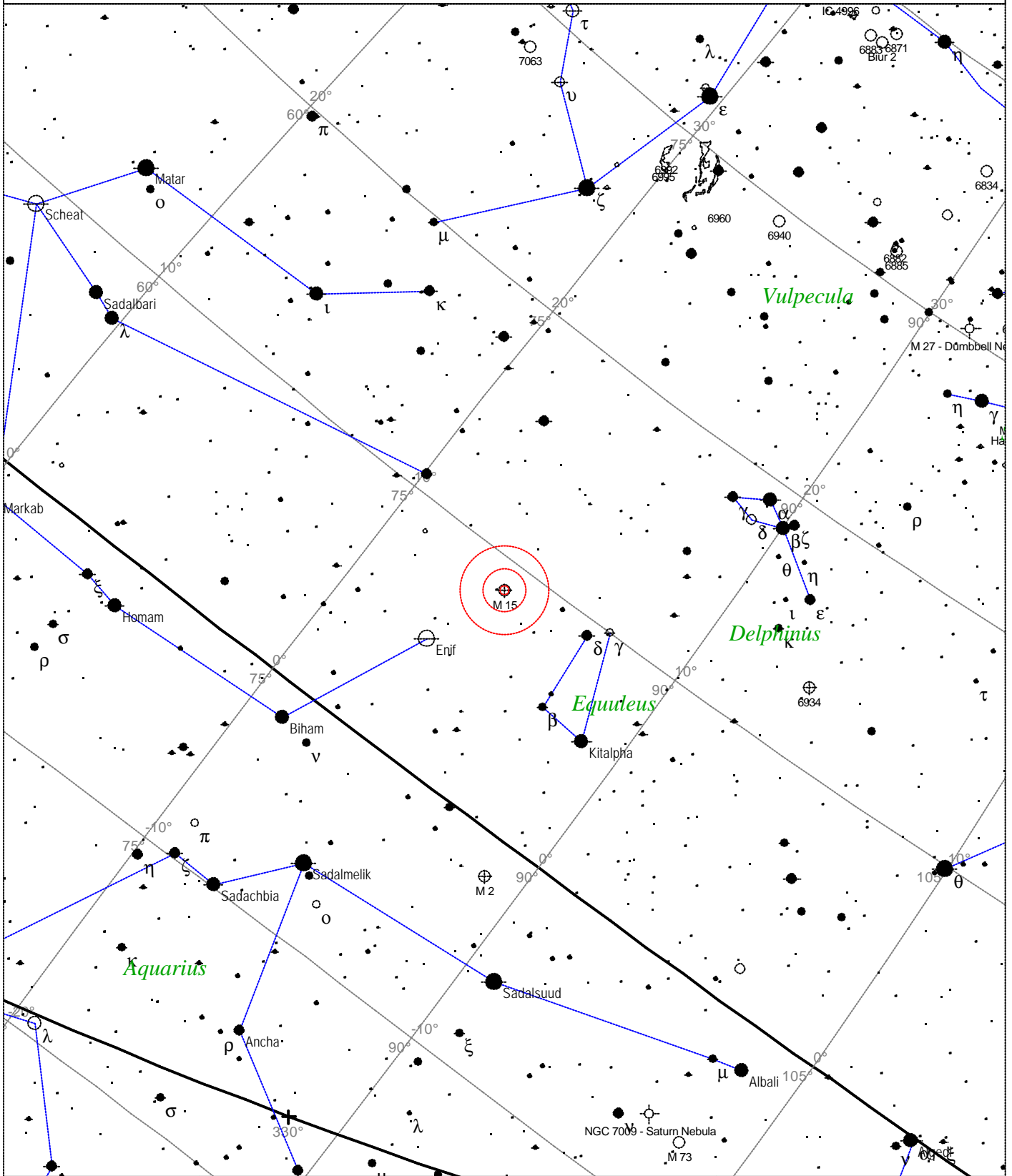
Messier 14 - Globular cluster
 Magnitude: 7.6
 Size: 6.7'
 Right ascension: 17h 37m 44s
 Declination: -3° 14' 46"
 Constellation: Ophiuchus

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 17h37m44s Dec: -3° 14' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

Messier 15 - Globular Cluster



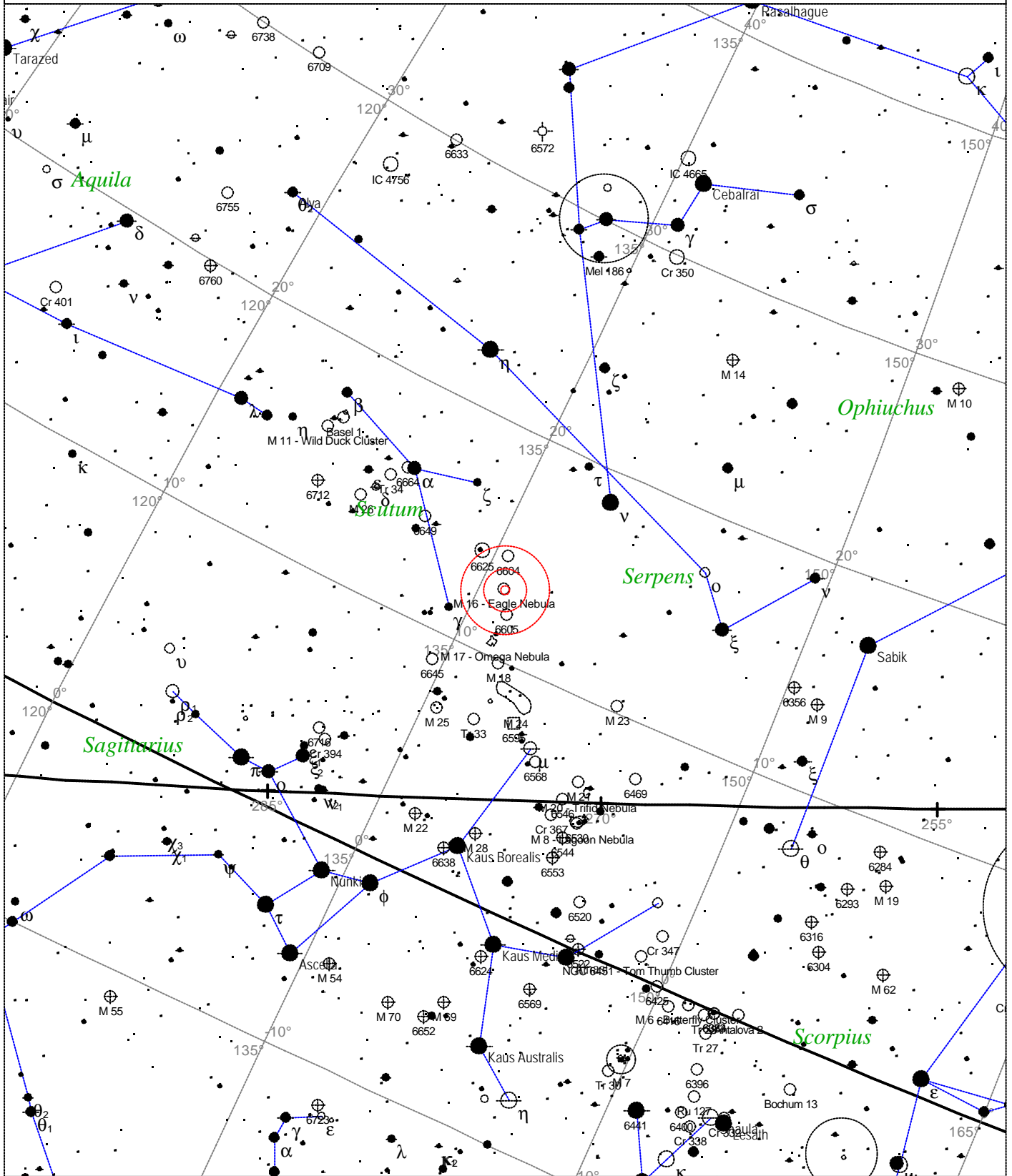
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☾ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 15 - Globular cluster</i> <i>Magnitude: 6.2</i> <i>Size: 12.3'</i> <i>Right ascension: 21h 30m 6s</i> <i>Declination: +12° 10' 46"</i> <i>Constellation: Pegasus</i></p>
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Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 21h30m06s Dec: +12° 10' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

Messier 16 - Eagle Nebula



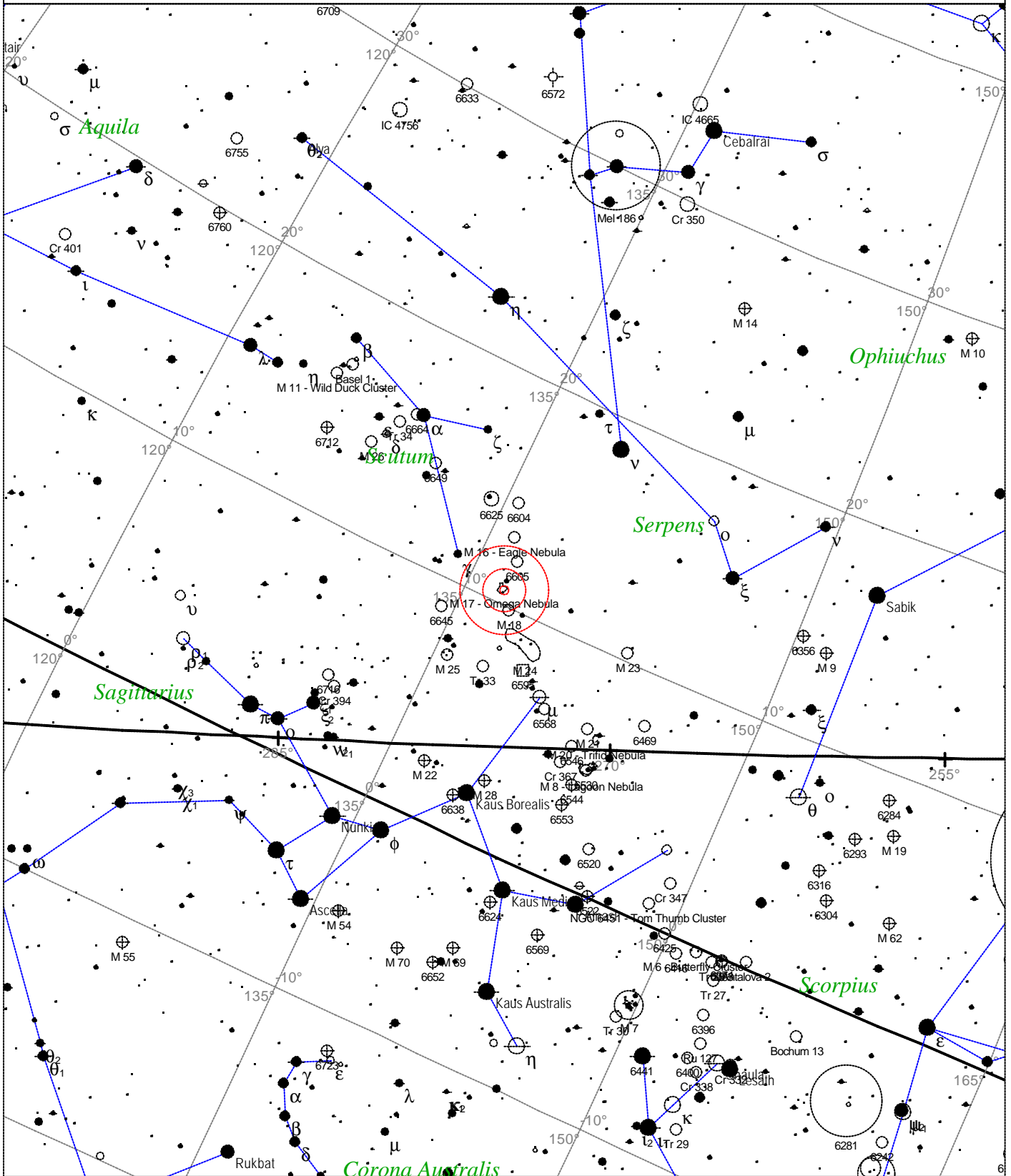
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ☄ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 16 - Eagle Nebula Type of object: Open cluster Magnitude: 6.0 Size: 7.0' Right ascension: 18h 18m 56s Declination: -13° 46' 56" Constellation: Serpens</p>
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Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h18m56s Dec: -13° 46' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

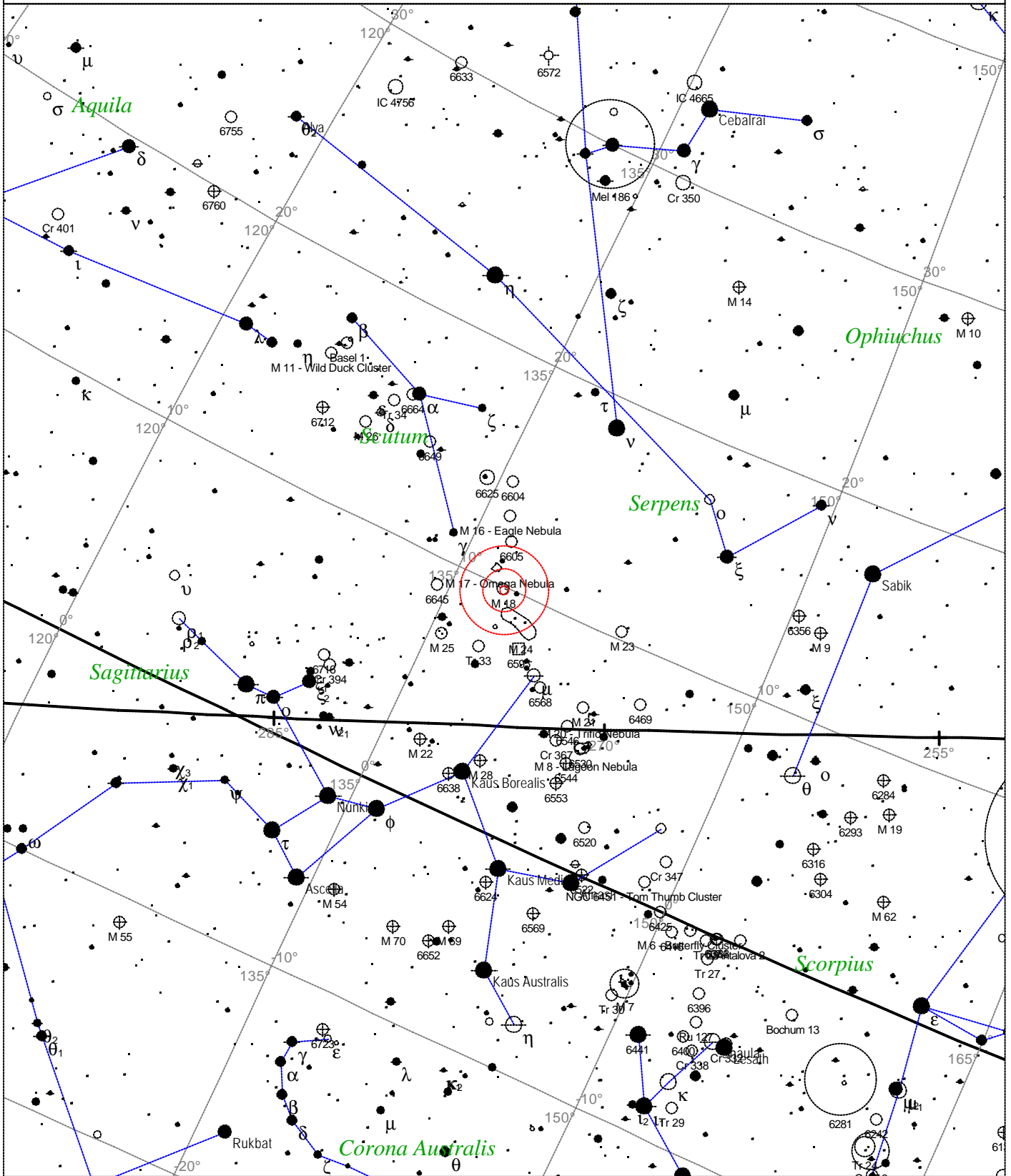
Messier 17 - Omega Nebula



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p><i>Messier 17 - Omega Nebula</i> <i>Type of object: Bright nebula</i> <i>Magnitude: 6.0</i> <i>Size: 11.0'</i> <i>Right ascension: 18h 20m 57s</i> <i>Declination: -16° 10' 56"</i> <i>Constellation: Sagittarius</i></p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 18h20m57s Dec: -16° 10' Field: 45.0° Julian Day: 2452530.1713

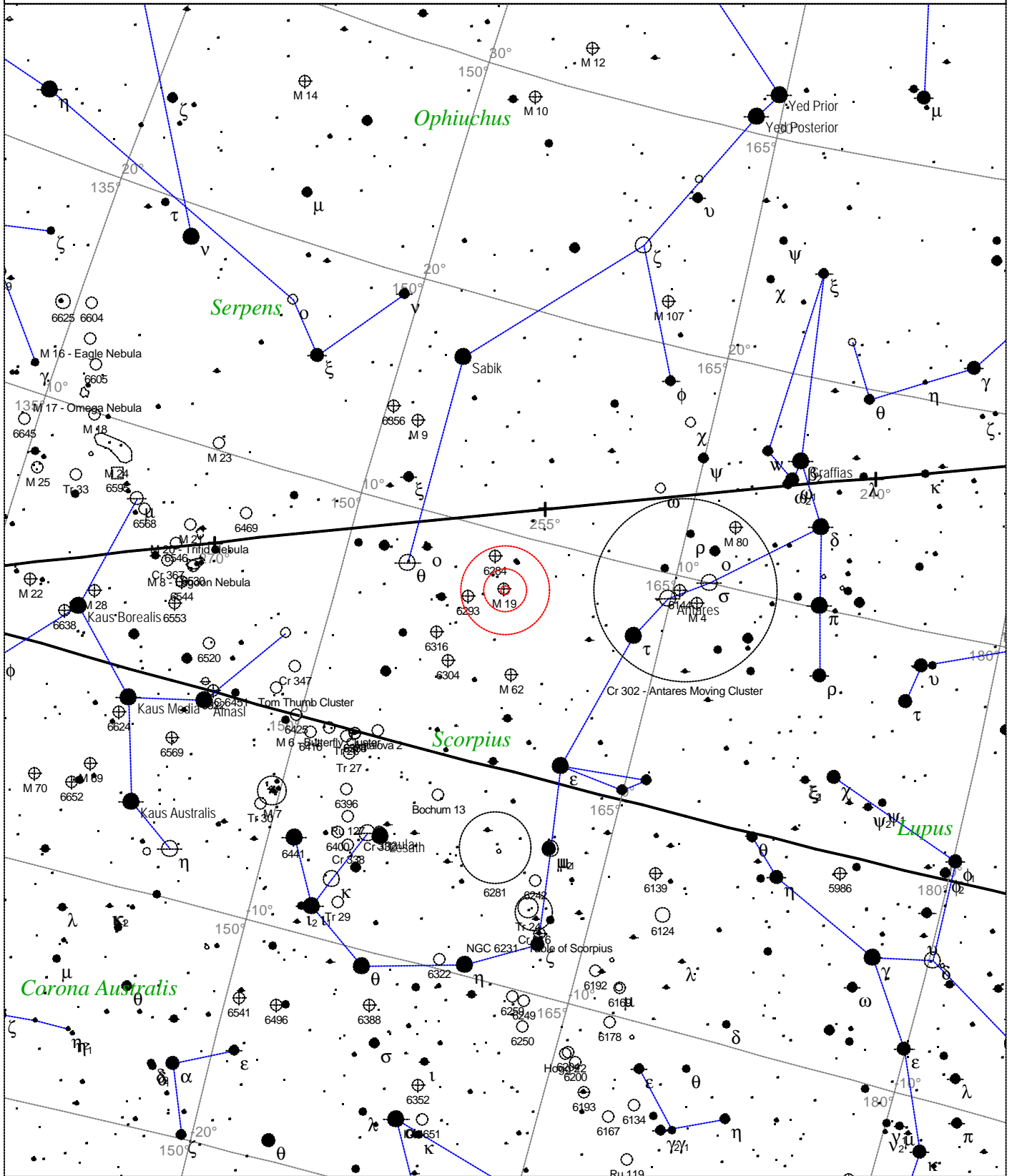
Messier 18 - Open Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 · 6 · 6.5 · >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 18 - Open cluster Magnitude: 6.9 Size: 9.0' Right ascension: 18h 20m 3s Declination: -17° 07' 57" Constellation: Sagittarius</p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 18h20m03s Dec: -17° 07' Field: 45.0° Julian Day: 2452530.1713

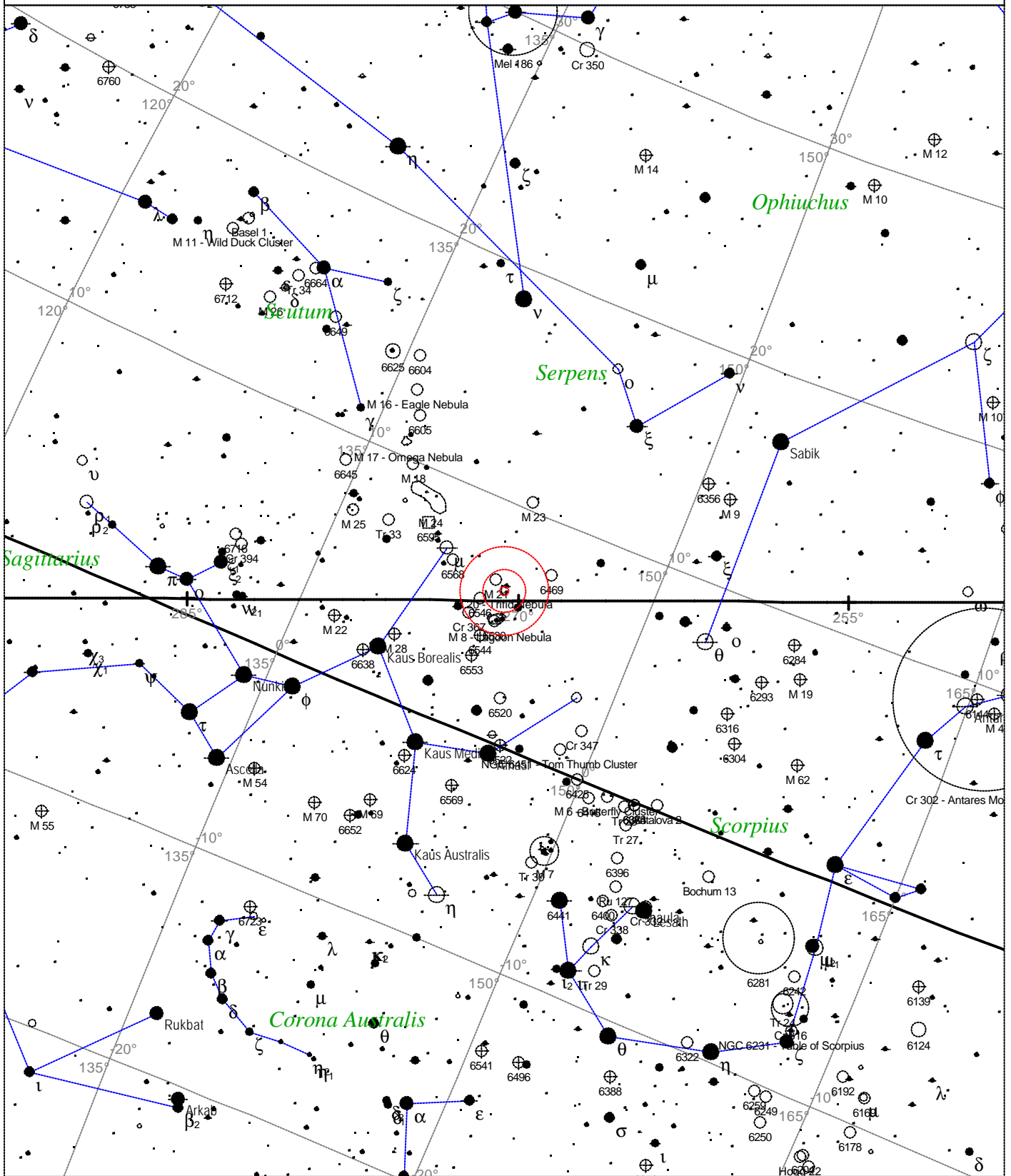
Messier 19 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 19 - Globular cluster Magnitude: 6.8 Size: 5.3' Right ascension: 17h 2m 46s Declination: -26° 16' 21" Constellation: Ophiuchus</p>
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Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 17h02m46s Dec: -26° 16' Field: 45.0° Julian Day: 2452530.1713

Messier 20 - Trifid Nebula



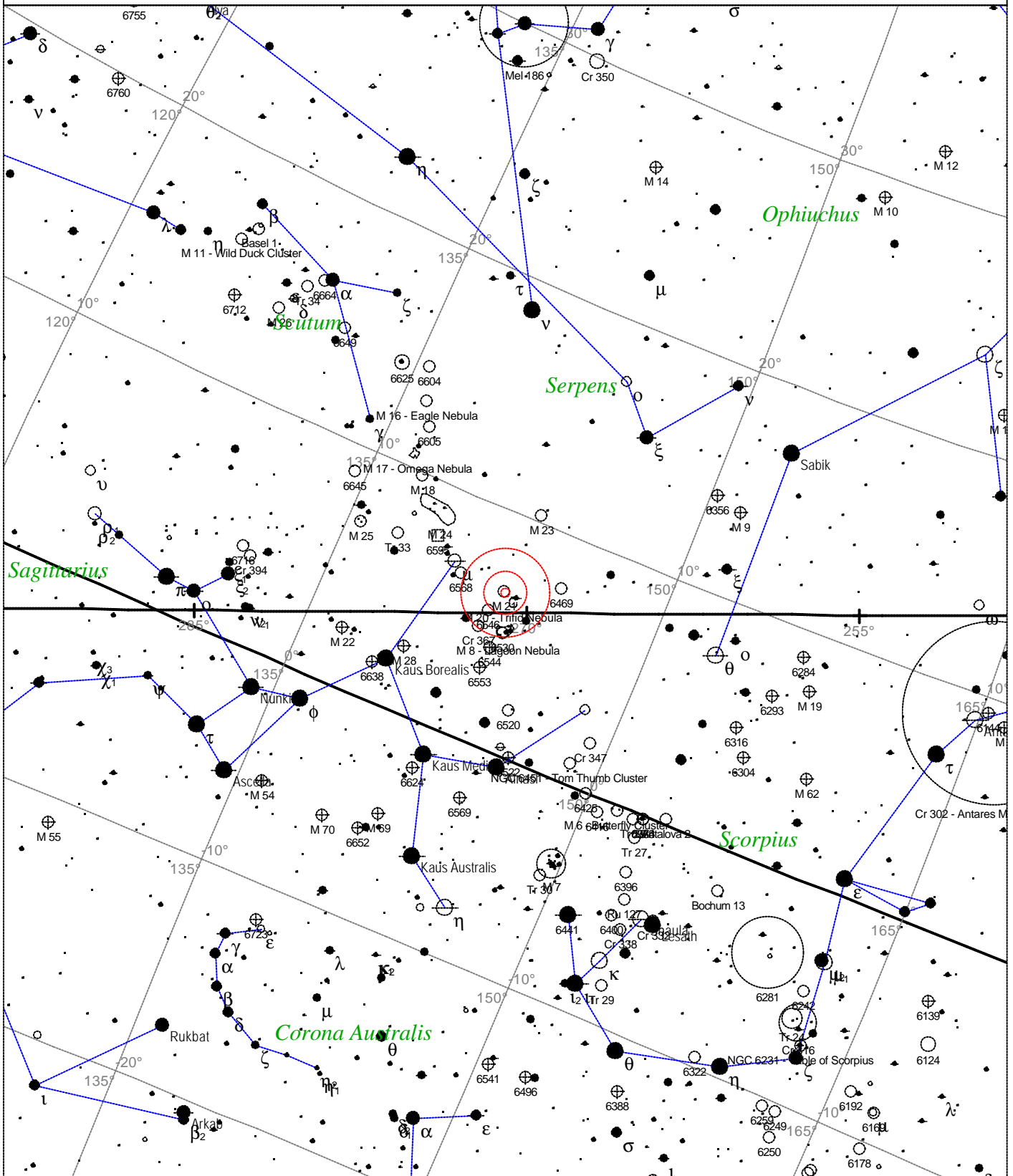
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☾ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 20 - Trifid Nebula Type of object: Bright nebula Magnitude: 6.3 Size: 28.0' Right ascension: 18h 2m 51s Declination: -22° 58' 22" Constellation: Sagittarius</p>
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Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h02m51s Dec: -22° 58' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

Messier 21 - Open Cluster



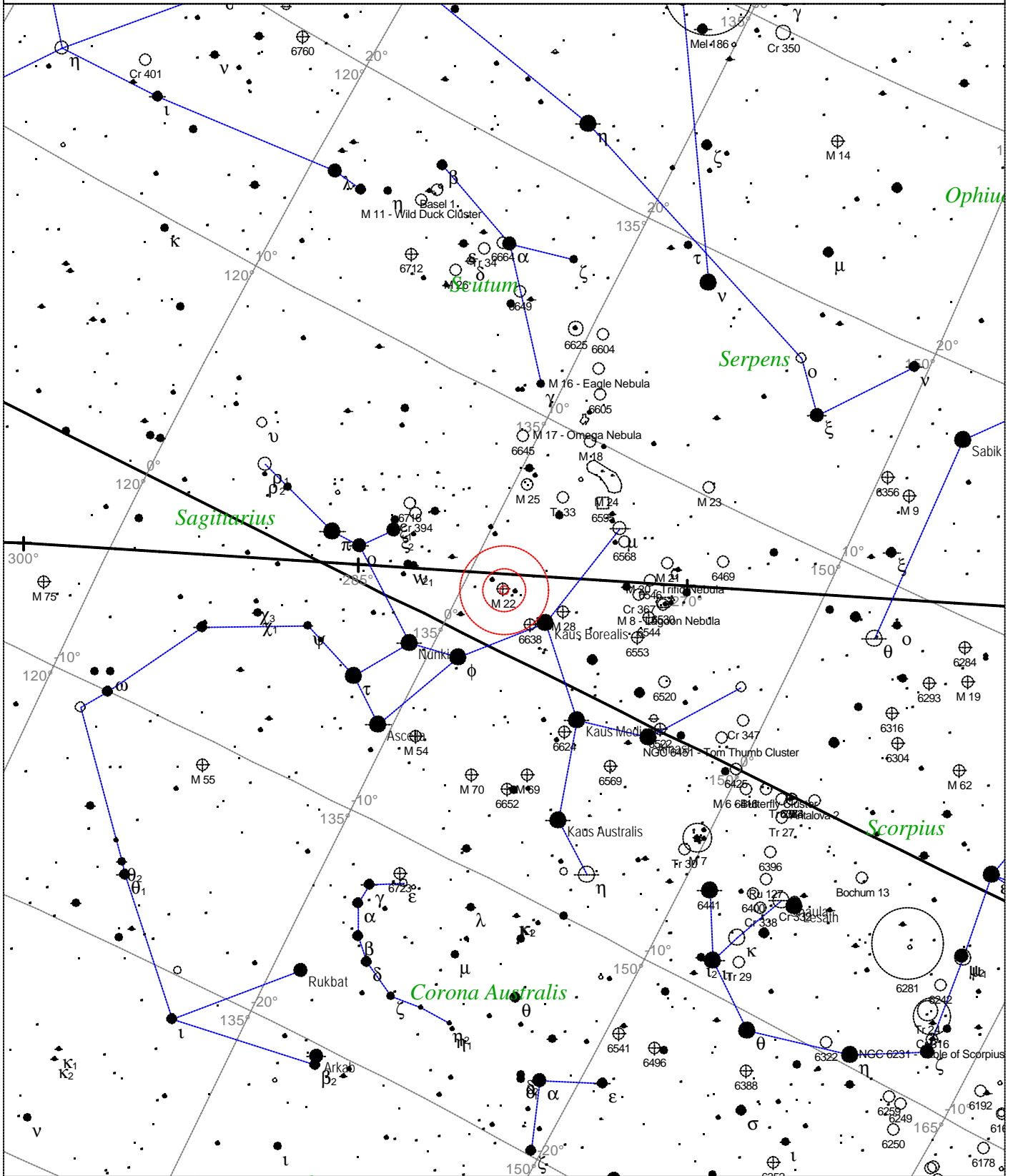
STARS	SYMBOLS			Messier 21 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 5.9
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 13.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 18h 4m 22s
● 4.5	☄ Galaxy	♁ Planetary nebula		Declination: -22° 29' 26"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Sagittarius
● 5.5				

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h04m22s Dec: -22° 29' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

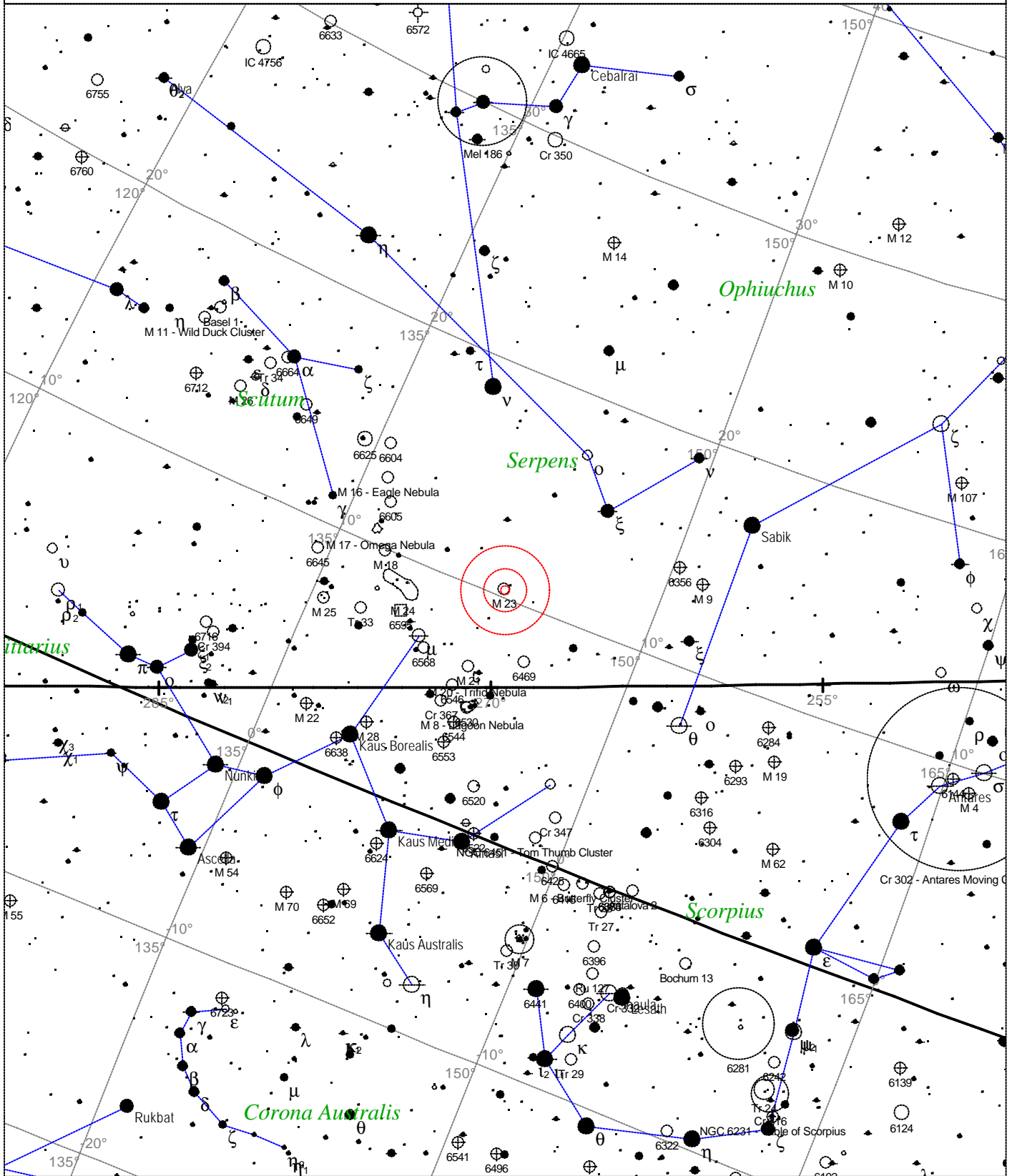
Messier 22 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☾ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 22 - Globular cluster Magnitude: 5.1 Size: 17.0' Right ascension: 18h 36m 33s Declination: -23° 54' 8" Constellation: Sagittarius</p>
---	---	---

Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 18h36m33s Dec: -23° 54' Field: 45.0° Julian Day: 2452530.1713

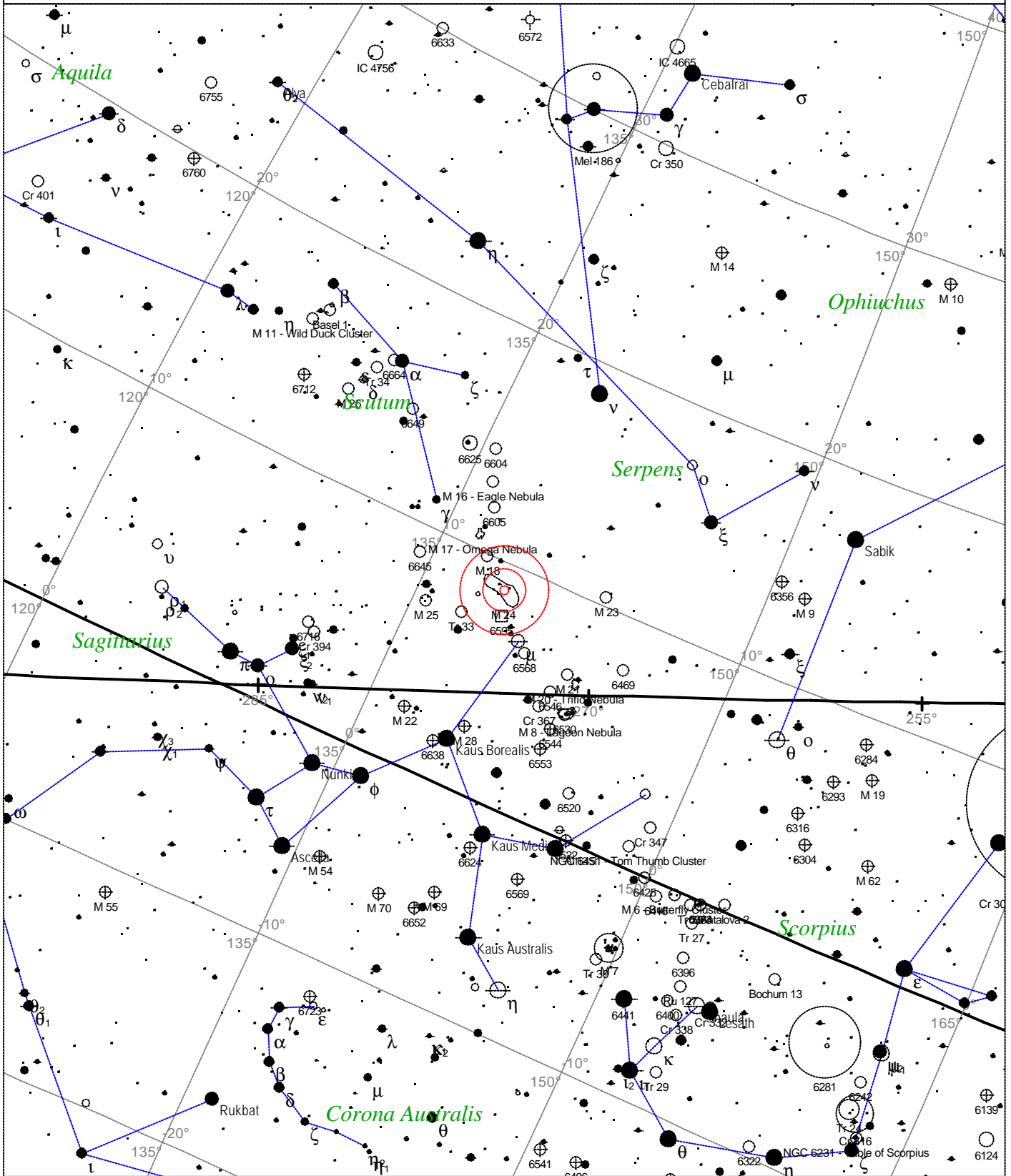
Messier 23 - Open Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 23 - Open cluster Magnitude: 5.5 Size: 27.0' Right ascension: 17h 57m 13s Declination: -18° 59' 9" Constellation: Sagittarius</p>
---	---	---

Local Time: 16:06:39 12-Sep-2002 UTC: 16:06:39 12-Sep-2002 Sidereal Time: 15:22:32
 Location: 53° 27' 0" N 2° 31' 0" W RA: 17h57m13s Dec: -18° 59' Field: 45.0° Julian Day: 2452530.1713

Messier 24 - Open Cluster



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- 6.5
- >7

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- ☾ Galaxy
- Bright nebula
- Dark nebula
- ⊕ Globular cluster
- Open cluster
- ♁ Planetary nebula
- ⊠ Quasar
- △ Radio source
- × X-ray source
- Other object

Messier 24 - Open cluster

Magnitude: 3.1

Size: 95.0'x35.0'

Right ascension: 18h 16m 51s

Declination: -18° 39' 58"

Constellation: Sagittarius

Local Time: 16:06:39 12-Sep-2002

UTC: 16:06:39 12-Sep-2002

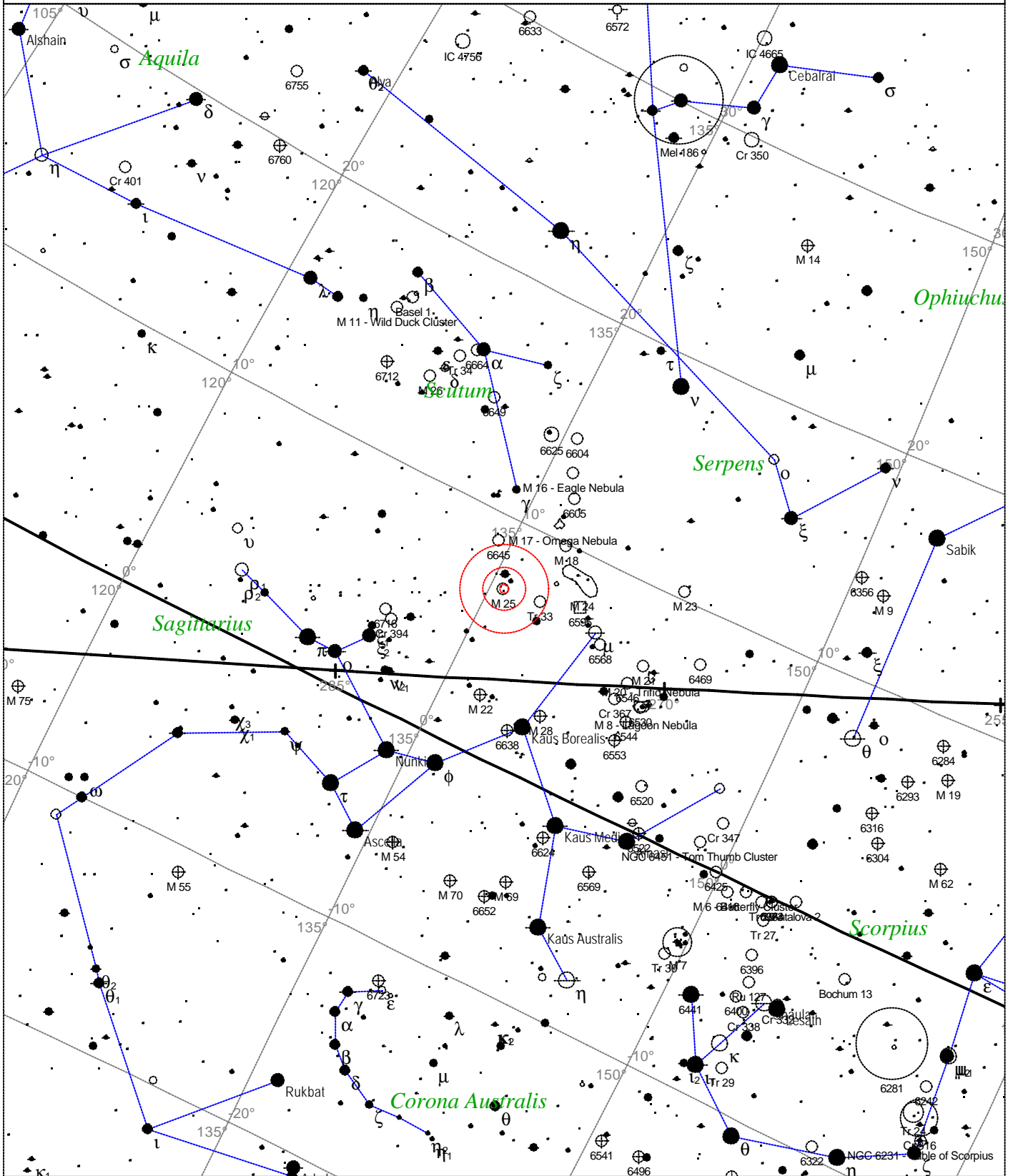
Sidereal Time: 15:22:32

Location: 53° 27' 0" N 2° 31' 0" W

RA: 18h16m51s Dec: -18° 39' Field: 45.0°

Julian Day: 2452530.1713

Messier 25 - Open Cluster



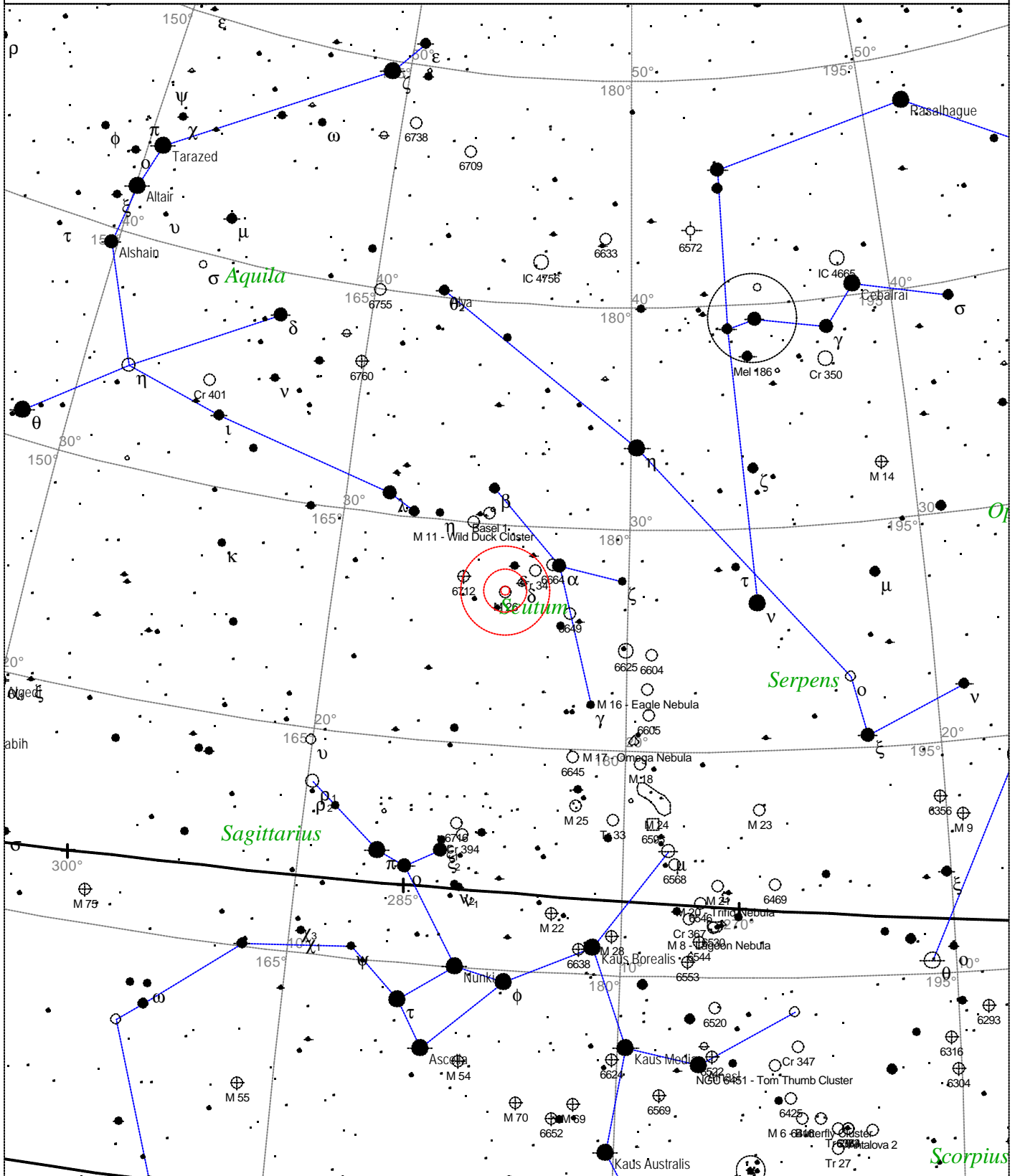
STARS	SYMBOLS			Messier 25 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 4.6
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 29.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 18h 31m 56s
● 4.5	☾ Galaxy	♁ Planetary nebula		Declination: -19° 6' 49"
● 5	◻ Bright nebula	☉ Quasar		Constellation: Sagittarius
● 5.5				

Local Time: 16:06:39 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 16:06:39 12-Sep-2002
 RA: 18h31m56s Dec: -19° 06' Field: 45.0°

Sidereal Time: 15:22:32
 Julian Day: 2452530.1713

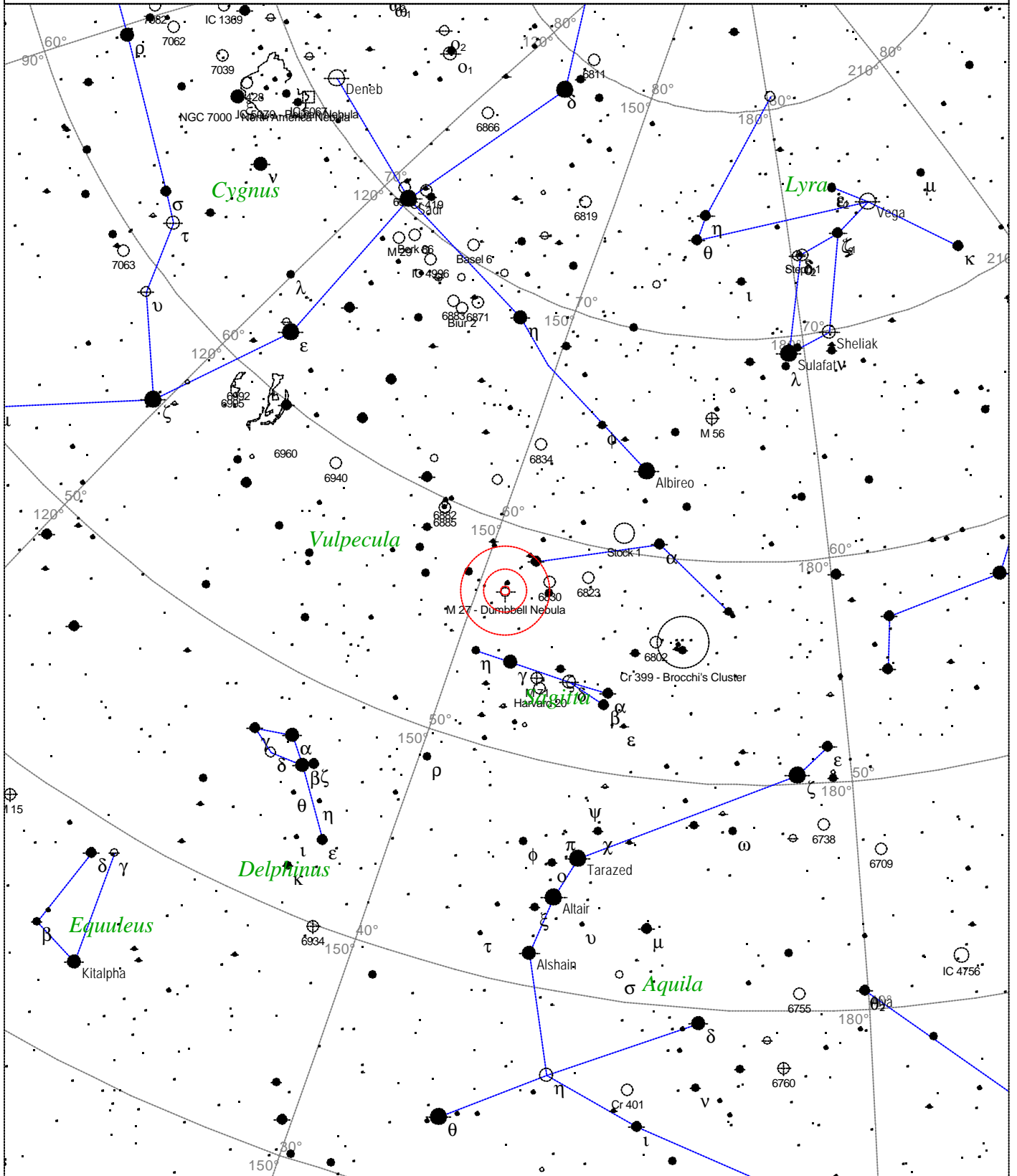
Messier 26 - Open Cluster



STARS	SYMBOLS			Messier 26 - Open cluster
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 8.0
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 15.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 18h 45m 20s
● 4.5	☄ Galaxy	♁ Planetary nebula		Declination: -9° 23' 49"
● 5	□ Bright nebula	☄ Quasar		Constellation: Scutum
● 5.5				

Local Time: 19:06:24 12-Sep-2002 UTC: 19:06:24 12-Sep-2002 Sidereal Time: 18:22:46
 Location: 53° 27' 0" N 2° 31' 0" W RA: 18h45m20s Dec: -9° 23' Field: 45.0° Julian Day: 2452530.2961

Messier 27 - Dumbbell Nebula



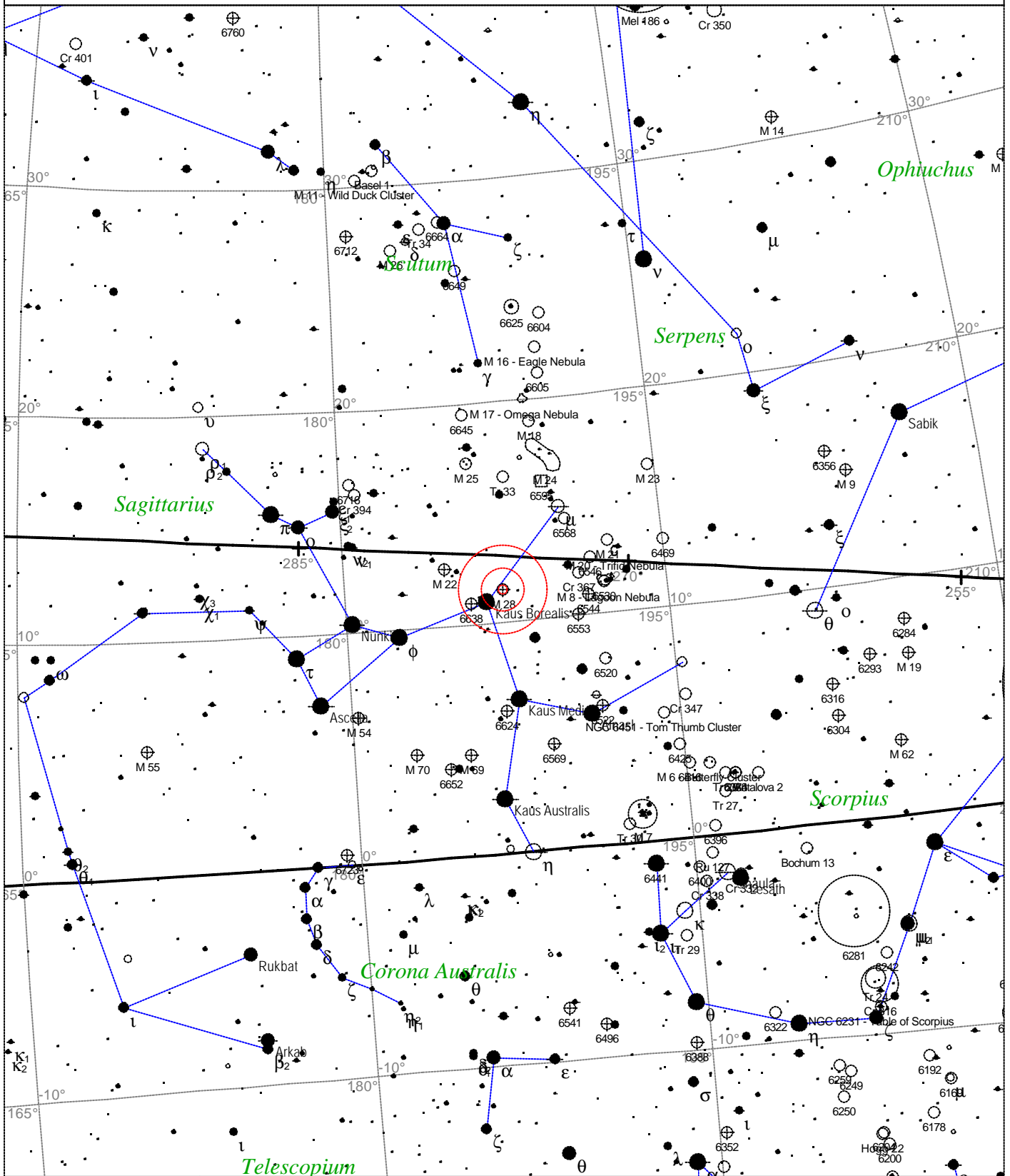
STARS	SYMBOLS			Messier 27 - Dumbbell Nebula
● <3	● Multiple star	□ Dark nebula	△ Radio source	Type of object: Planetary nebula
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Magnitude: 7.6
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 5.8'
● 4.5	☄ Galaxy	⊕ Planetary nebula		Right ascension: 19h 59m 43s
● 5	□ Bright nebula	☄ Quasar		Declination: +22° 43' 50"
● 5.5				Constellation: Vulpecula

Local Time: 19:39:25 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:39:25 12-Sep-2002
 RA: 19h59m43s Dec: +22° 43' Field: 45.0°

Sidereal Time: 18:55:53
 Julian Day: 2452530.3190

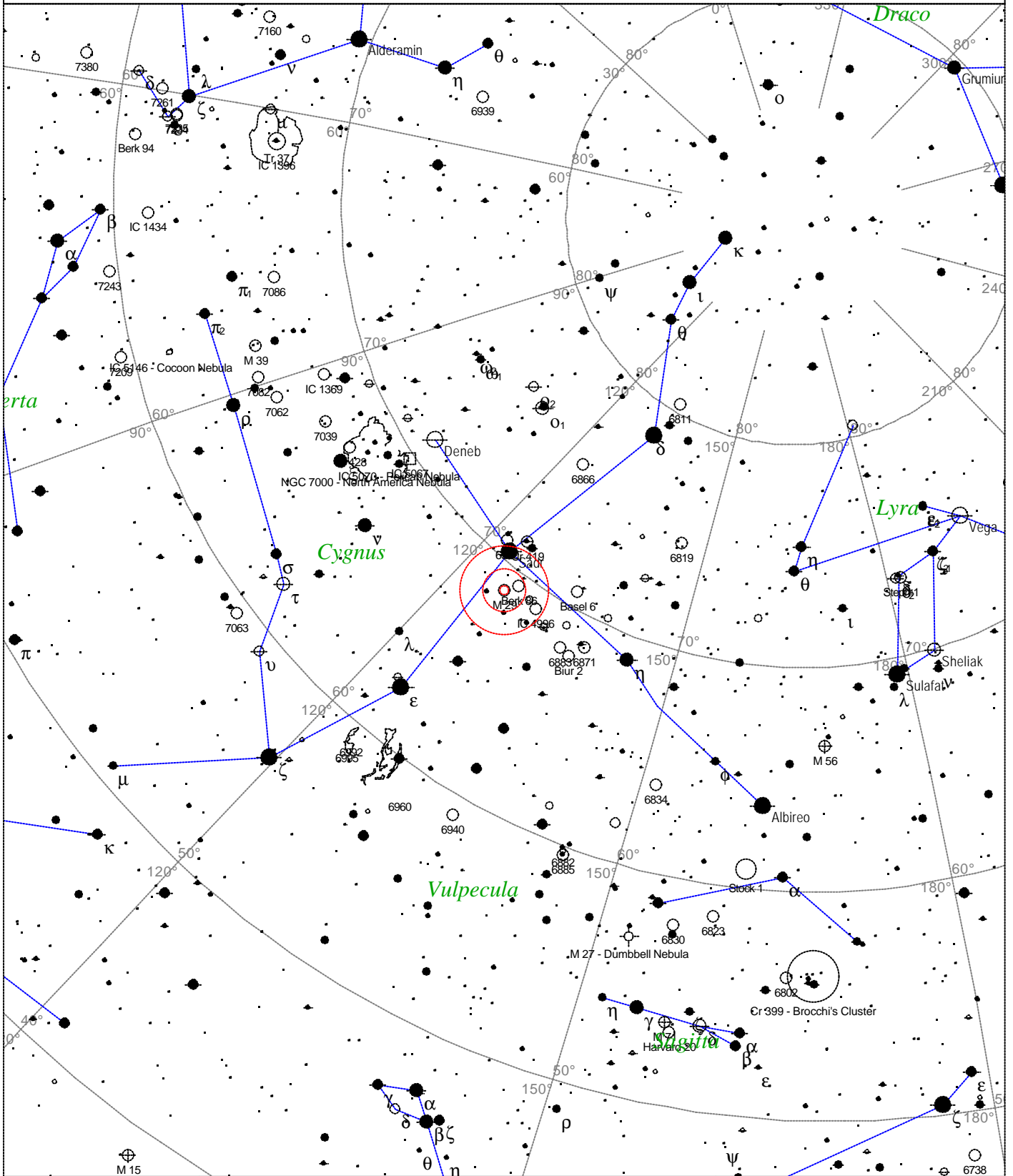
Messier 28 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 28 - Globular cluster Magnitude: 6.8 Size: 15.0' Right ascension: 18h 24m 42s Declination: -24° 52' 10" Constellation: Sagittarius</p>
---	---	--

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 18h24m42s Dec: -24° 52' Field: 45.0° Julian Day: 2452530.3196

Messier 29 - Open cluster



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- 6.5
- >7

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- ☾ Galaxy
- Bright nebula
- Dark nebula
- ⊕ Globular cluster
- Open cluster
- ⊕ Planetary nebula
- ⊗ Quasar
- △ Radio source
- × X-ray source
- Other object

Messier 29 - Open cluster

Magnitude: 6.6

Size: 7.0'

Right ascension: 20h 24m 0s

Declination: +38° 32' 40"

Constellation: Cygnus

Local Time: 19:40:11 12-Sep-2002

UTC: 19:40:11 12-Sep-2002

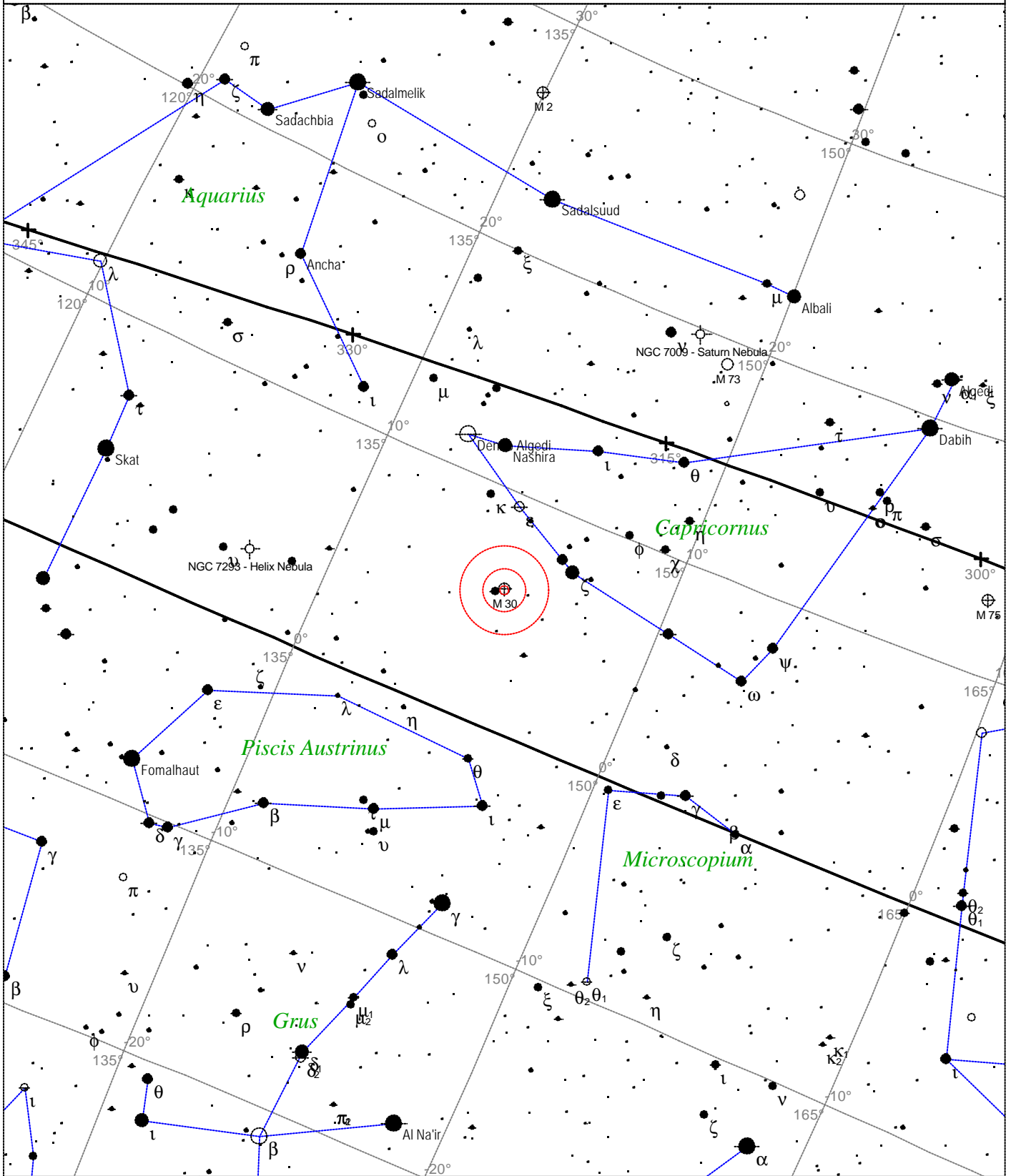
Sidereal Time: 18:56:39

Location: 53° 27' 0" N 2° 31' 0" W

RA: 20h24m00s Dec: +38° 32' Field: 45.0°

Julian Day: 2452530.3196

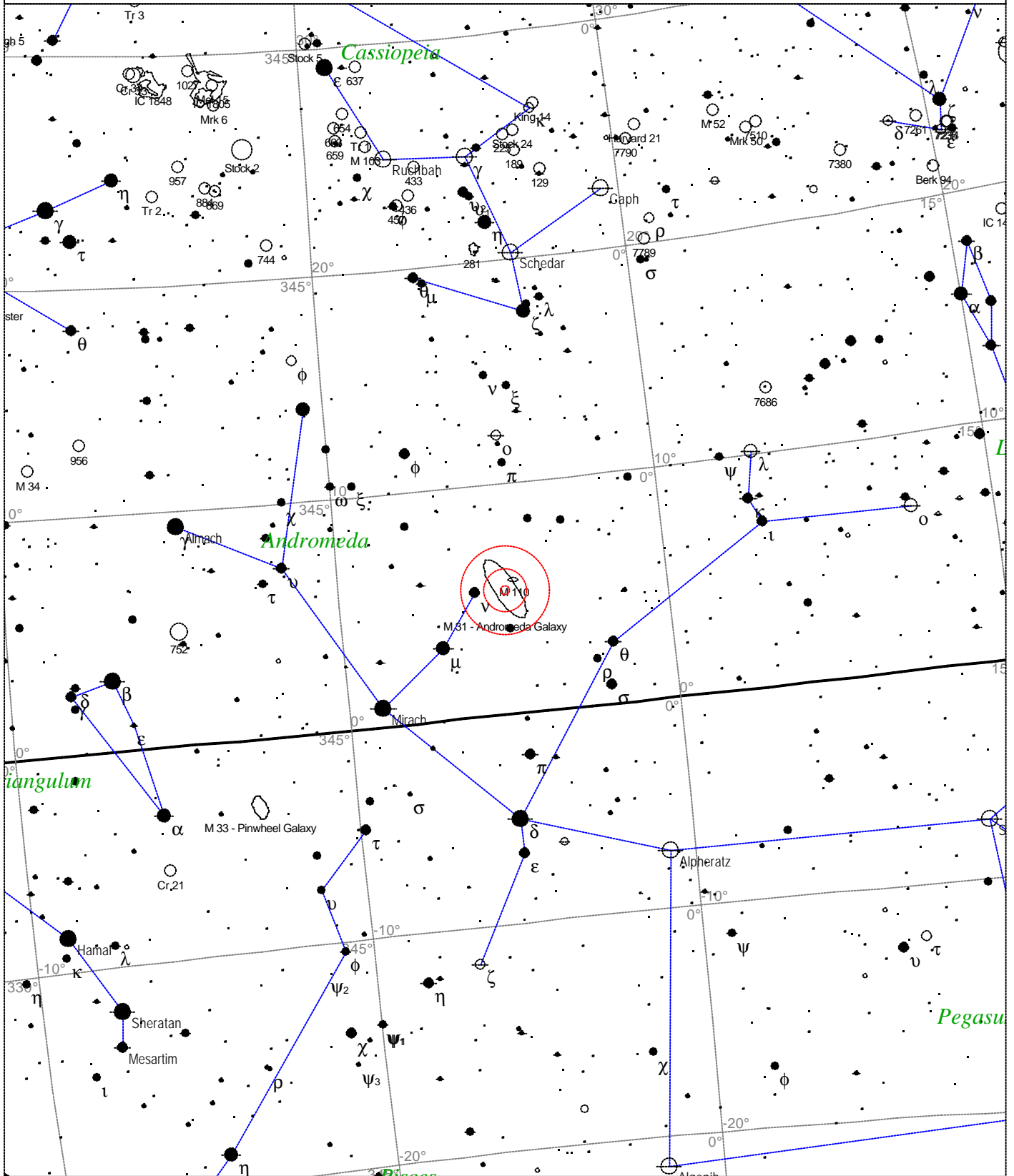
Messier 30 - Globular Cluster



STARS		SYMBOLS			Messier 30 - Globular cluster Magnitude: 7.2 Size: 8.9' Right ascension: 21h 40m 31s Declination: -23° 10' 4" Constellation: Capricornus
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 21h40m31s Dec: -23° 10' Field: 45.0° Julian Day: 2452530.3196

Messier 31 - Andromeda Galaxy



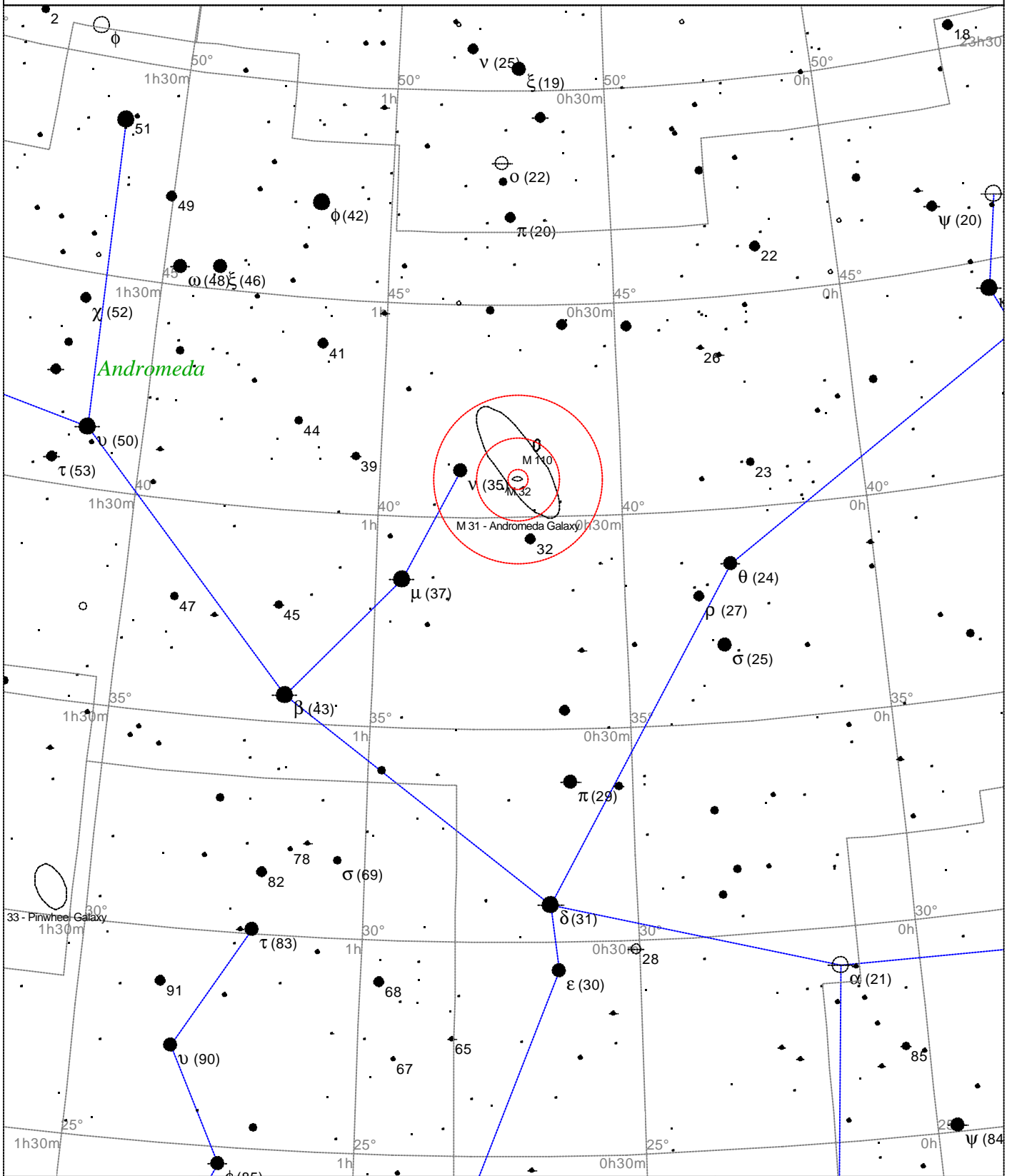
STARS		SYMBOLS			<i>Messier 31 - Andromeda Galaxy</i> Type of object: Galaxy Magnitude: 4.3 Surface brightness: 12.6 mag/sq arcmin Size: 189.1'x61.7' Position angle: 35° Right ascension: 0h 42m 53s Declination: +41° 16' 55"
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 12:48:02 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 12:48:02 12-Sep-2002
 RA: 0h42m53s Dec: +41° 16' Field: 45.0°

Sidereal Time: 12:03:22
 Julian Day: 2452530.0334

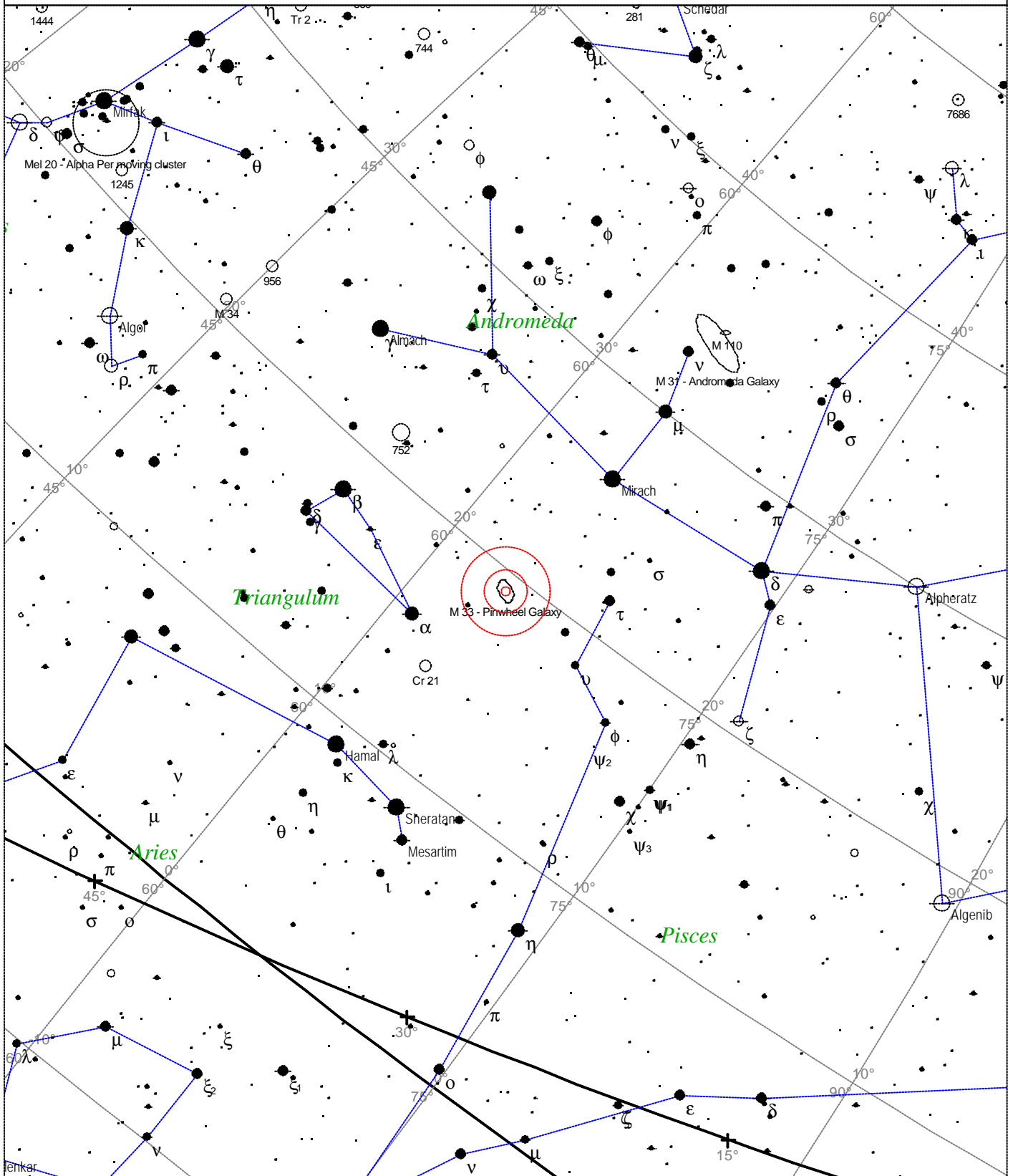
Messier 32 - Galaxy



STARS		SYMBOLS			<i>Messier 32 - Galaxy</i> Magnitude: 9.1 Surface brightness: 10.6 mag/sq arcmin Size: 8.5'x6.5' Position angle: 170° Right ascension: 0h 42m 51s Declination: +40° 52' 44" Constellation: Andromeda
● <4	· 7	● Multiple star	◻ Dark nebula	△ Radio source	
● 4.5	· >7.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 5		☄ Comet	○ Open cluster	○ Other object	
● 5.5		☉ Galaxy	♁ Planetary nebula		
● 6		◻ Bright nebula	☉ Quasar		
● 6.5					

Local Time: 19:47:47 12-Sep-2002 UTC: 19:47:47 12-Sep-2002 Sidereal Time: 19:04:16
 Location: 53° 27' 0" N 2° 31' 0" W RA: 0h44m42s Dec: +38° 17' Field: 23.5° Julian Day: 2452530.3248

Messier 33 - Pinwheel Galaxy



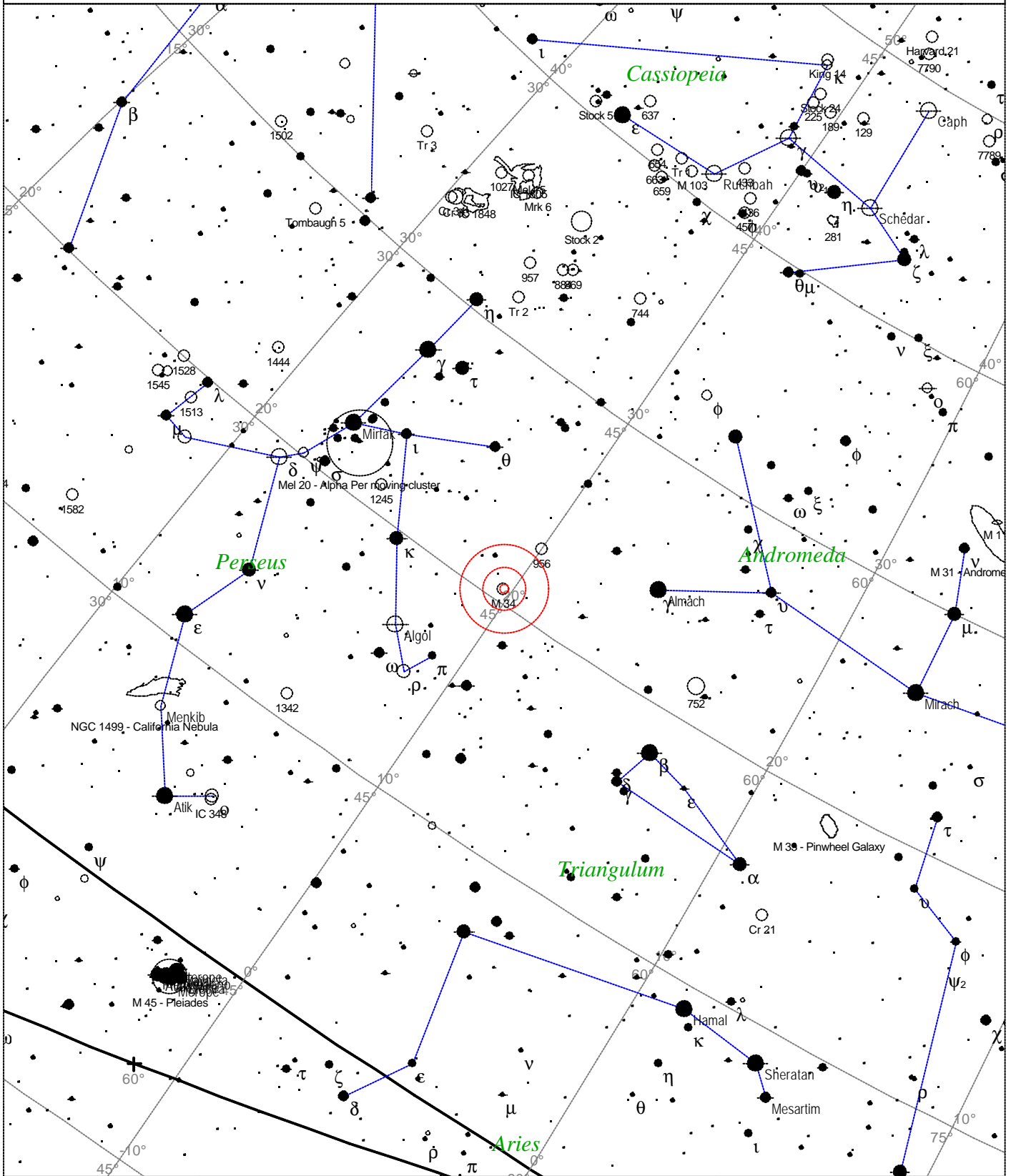
STARS	SYMBOLS			Messier 33 - Pinwheel Galaxy
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 6.2
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Surface brightness: 13.8 mag/sq arcmin
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 68.7'x41.6'
● 4.5	☾ Galaxy	⊕ Planetary nebula		Position angle: 23°
● 5	□ Bright nebula	☄ Quasar		Right ascension: 1h 34m 1s
● 5.5				Declination: +30° 40' 14"
				Constellation: Triangulum

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 1h34m01s Dec: +30° 40' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 34 - Open Cluster



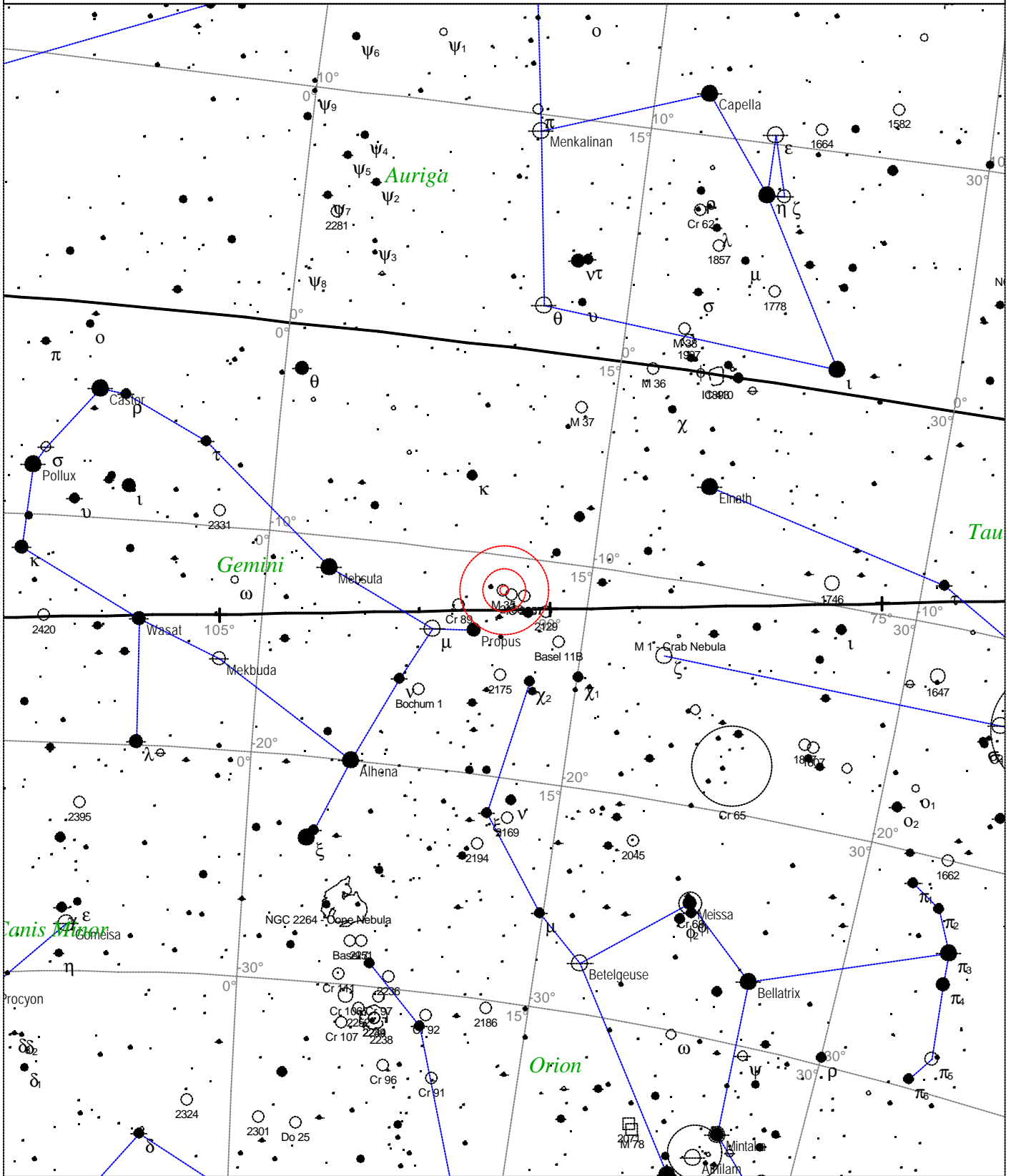
STARS	SYMBOLS			Messier 34 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 5.2
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 35.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 2h 42m 15s
● 4.5	☾ Galaxy	⊕ Planetary nebula		Declination: +42° 46' 16"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Perseus
● 5.5				

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 2h42m15s Dec: +42° 46' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 35 - Open Cluster



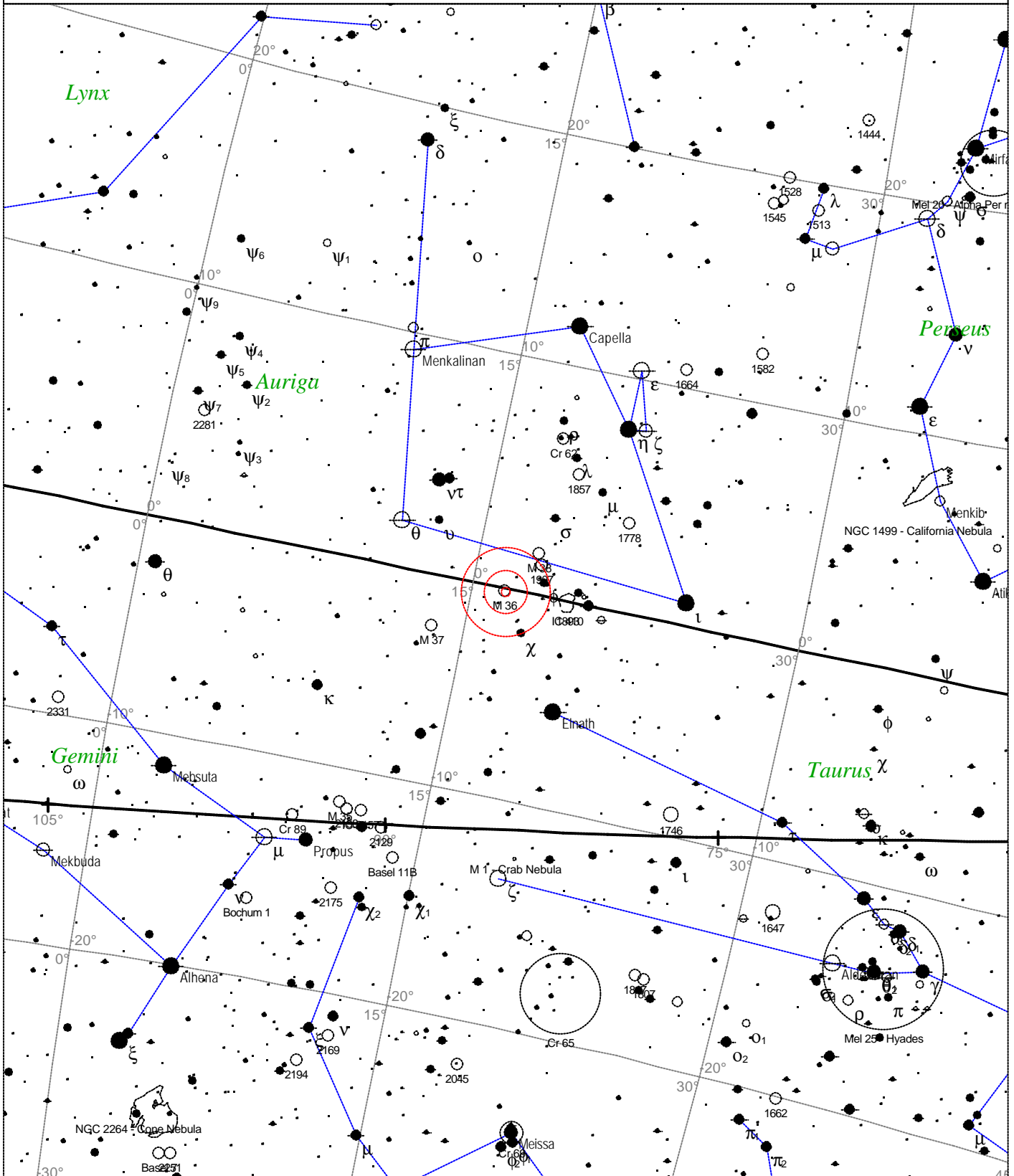
STARS	SYMBOLS			Messier 35 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 5.1
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 28.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 6h 9m 8s
● 4.5	☾ Galaxy	⊕ Planetary nebula		Declination: +24° 21' 1"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Gemini
● 5.5				

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 6h09m08s Dec: +24° 21' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

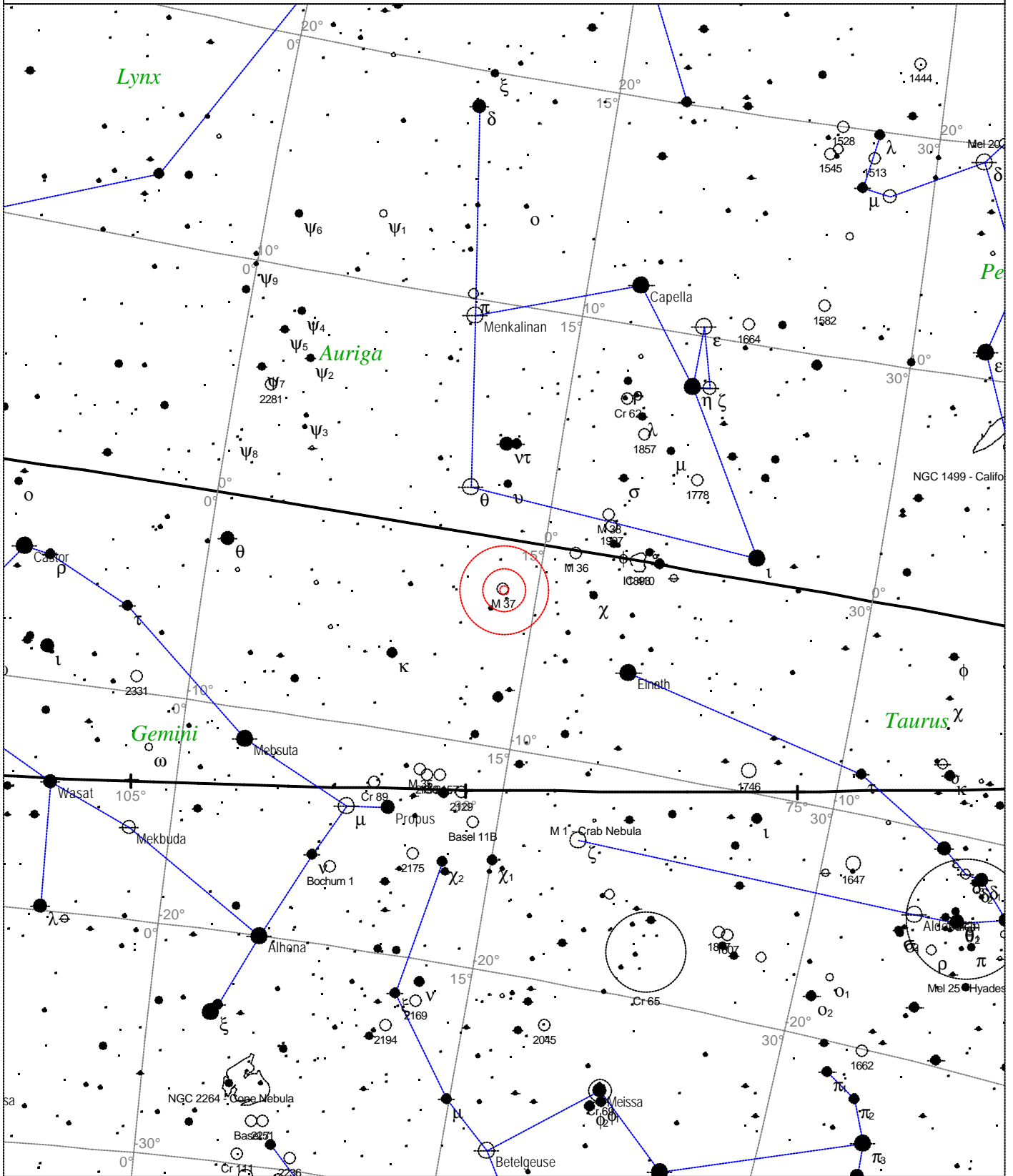
Messier 36 - Open Cluster



STARS	SYMBOLS			Messier 36 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 6.0
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 12.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 5h 36m 27s
● 4.5	☄ Galaxy	⊕ Planetary nebula		Declination: +34° 8' 31"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Auriga
● 5.5				

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 5h36m27s Dec: +34° 08' Field: 45.0° Julian Day: 2452530.3196

Messier 37 - Open Cluster



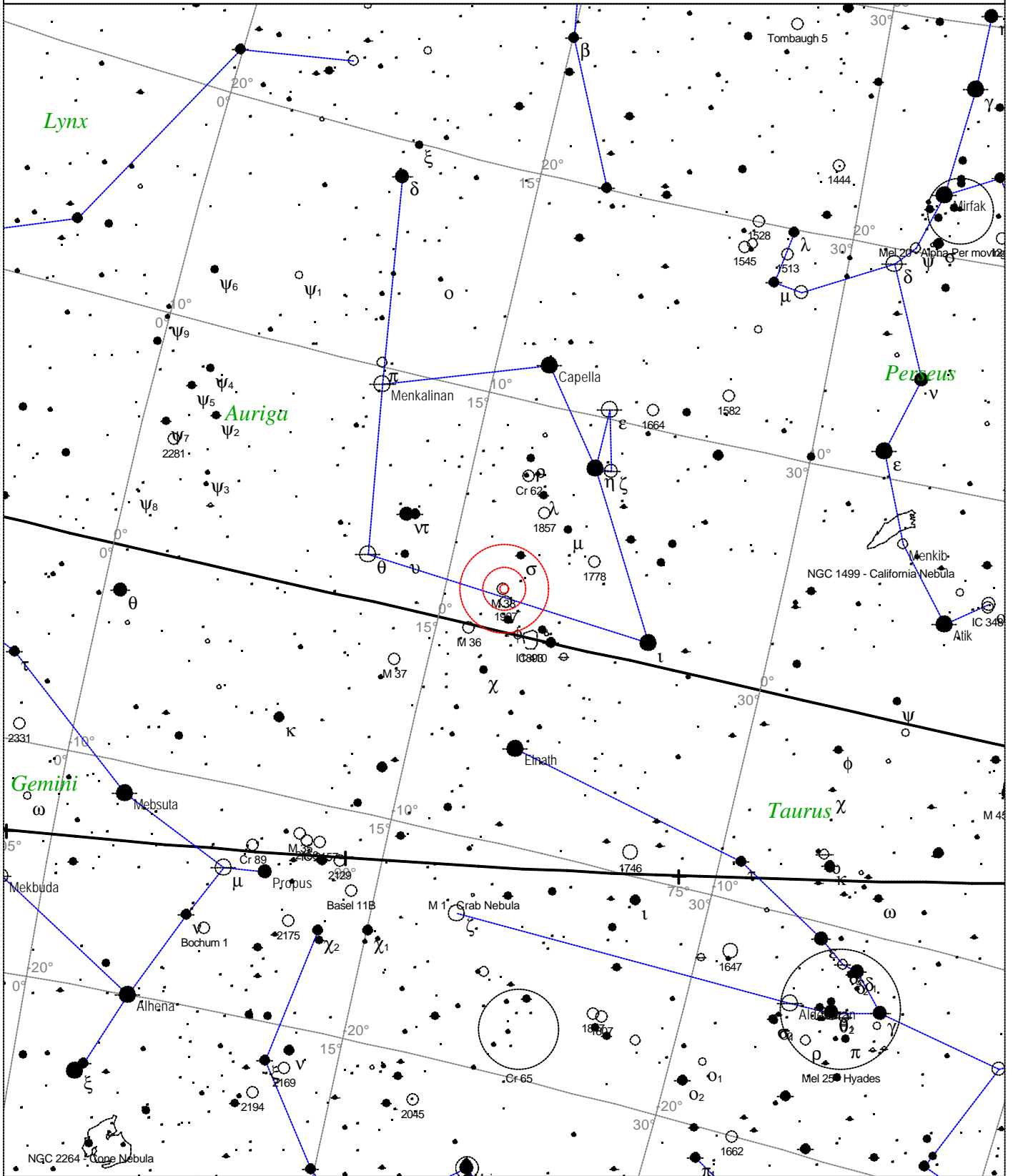
STARS		SYMBOLS			Messier 37 - Open cluster Magnitude: 5.6 Size: 24.0' Right ascension: 5h 52m 27s Declination: +32° 33' 13" Constellation: Auriga
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	⊕ Planetary nebula		
● 5		◻ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 5h52m27s Dec: +32° 33' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 38 - Open Cluster



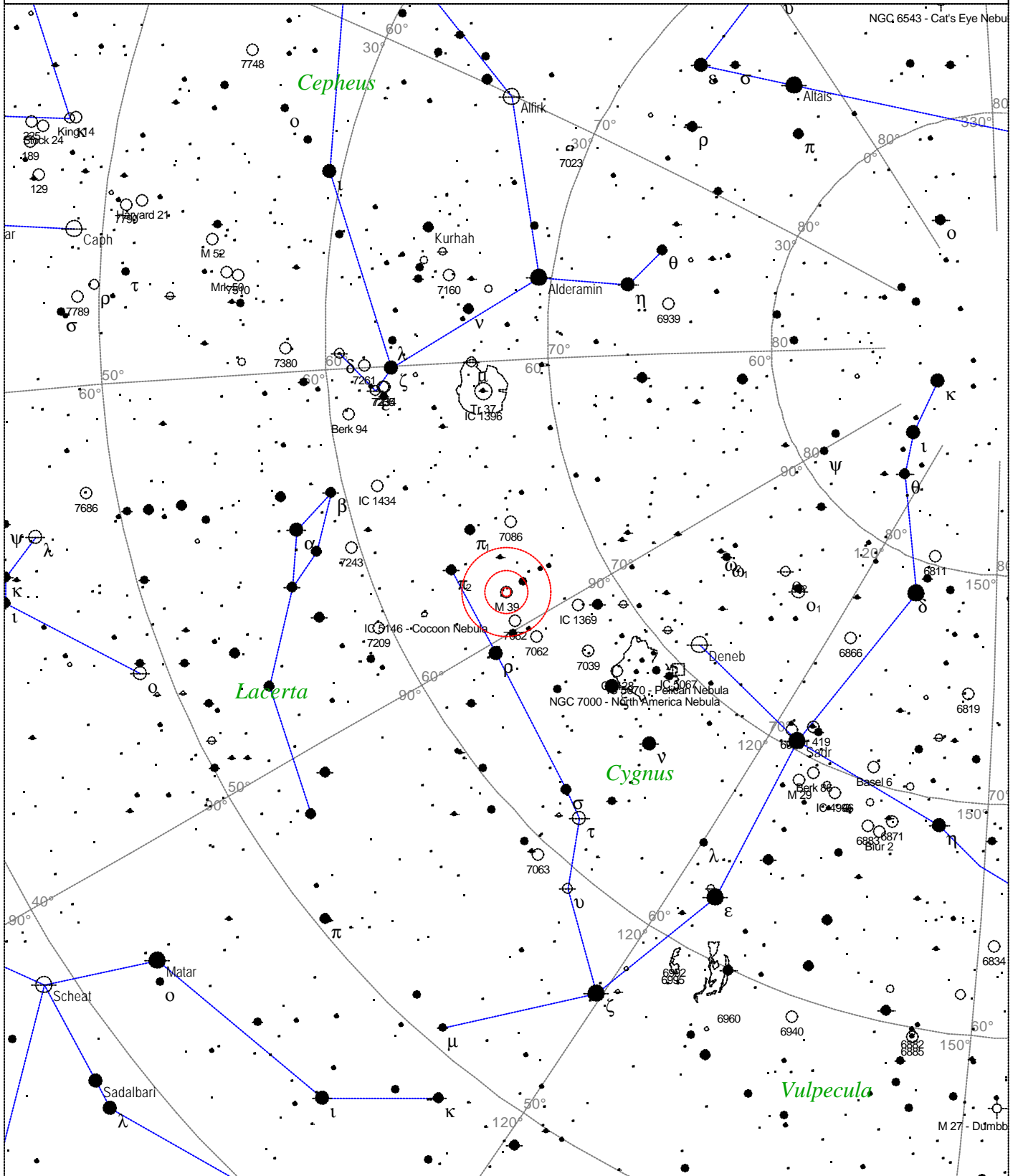
STARS		SYMBOLS			Messier 38 - Open cluster Magnitude: 6.4 Size: 21.0' Right ascension: 5h 28m 52s Declination: +35° 51' 23" Constellation: Auriga
● <3	● 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	● 6.5	○ Variable star	⊕ Globular cluster	✕ X-ray source	
● 4	● >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	⊕ Planetary nebula		
● 5		◻ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 5h28m52s Dec: +35° 51' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 39 - Open Cluster

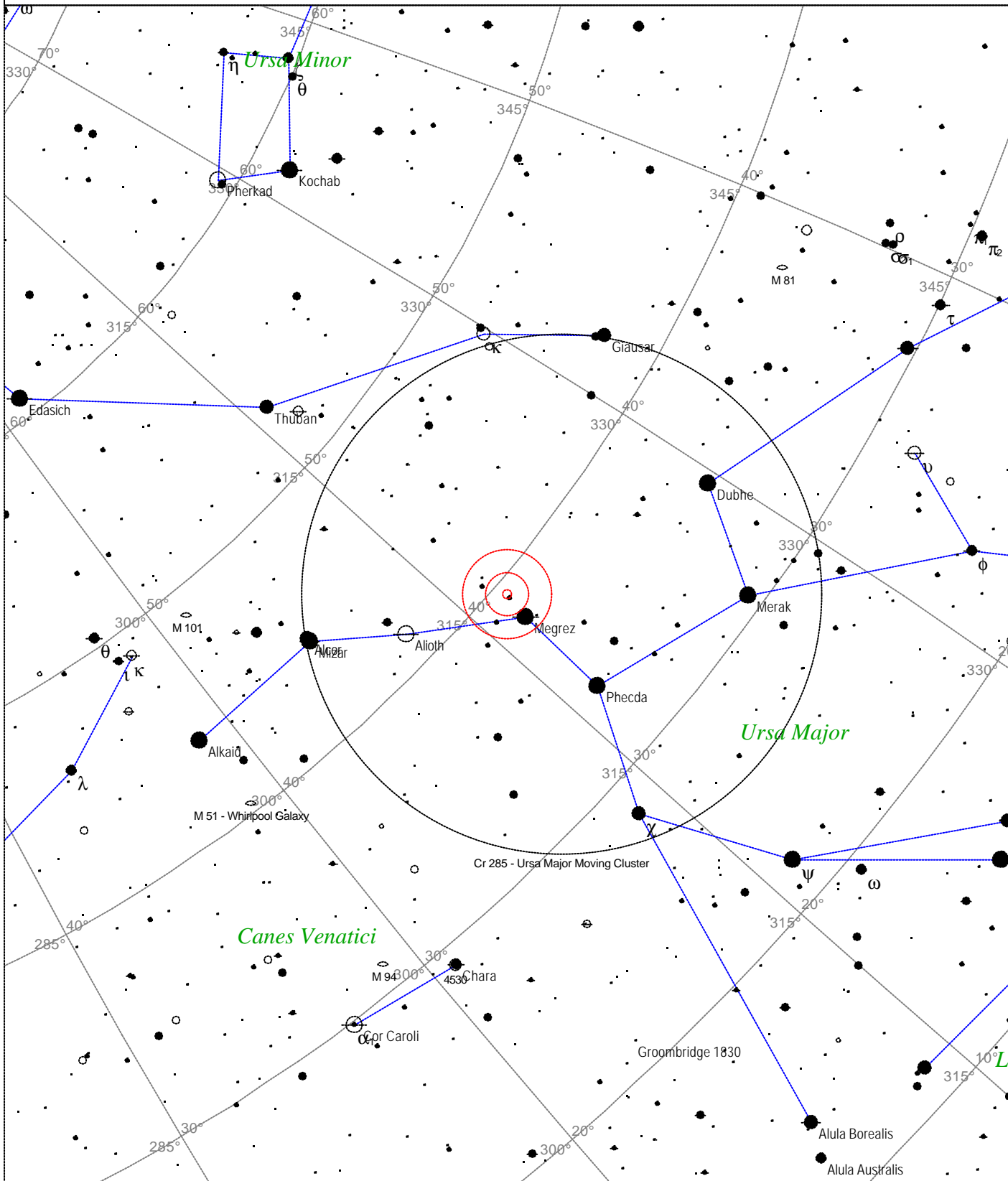


STARS		SYMBOLS		
● <3	· 6	◆ Multiple star	◻ Dark nebula	△ Radio source
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	✕ X-ray source
● 4	· >7	☄ Comet	○ Open cluster	○ Other object
● 4.5		☾ Galaxy	⊕ Planetary nebula	
● 5		◻ Bright nebula	☄ Quasar	
● 5.5				

Messier 39 - Open cluster
 Magnitude: 4.6
 Size: 32.0'
 Right ascension: 21h 31m 49s
 Declination: +48° 26' 48"
 Constellation: Cygnus

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 21h31m49s Dec: +48° 26' Field: 45.0° Julian Day: 2452530.3196

Messier 40



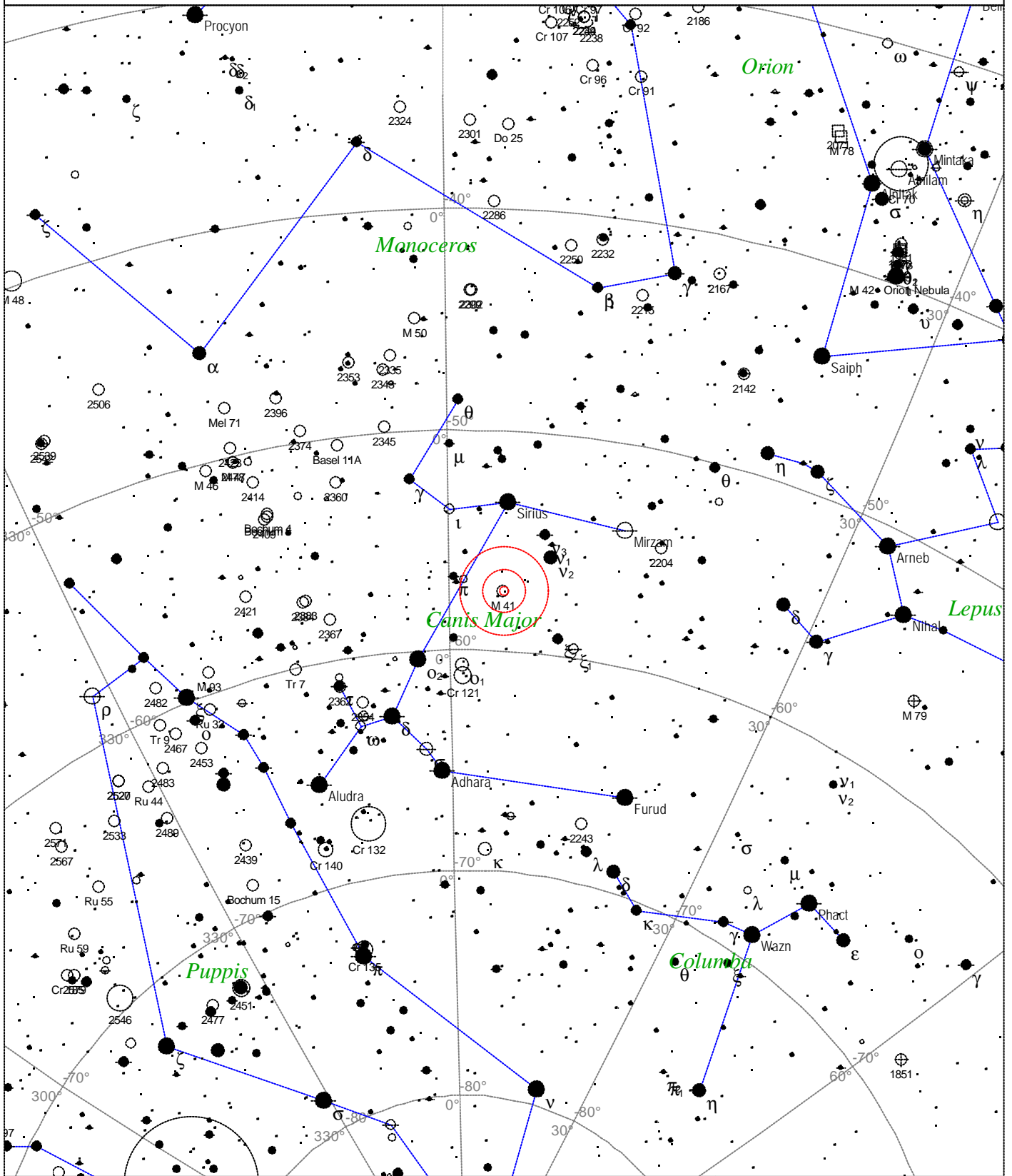
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 	<p><i>Messier 40 - Star</i> <i>Magnitude: 9.0</i> <i>Right ascension: 12h 21m 59s</i> <i>Declination: +58° 5' 21"</i> <i>Constellation: Ursa Major</i></p>
--	--	---	--	--

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h21m59s Dec: +58° 05' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 41 - Open Cluster



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- 6.5
- >7

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- ☐ Galaxy
- ☐ Bright nebula
- ☐ Dark nebula
- ⊕ Globular cluster
- Open cluster
- ⊕ Planetary nebula
- ☒ Quasar
- △ Radio source
- × X-ray source
- Other object

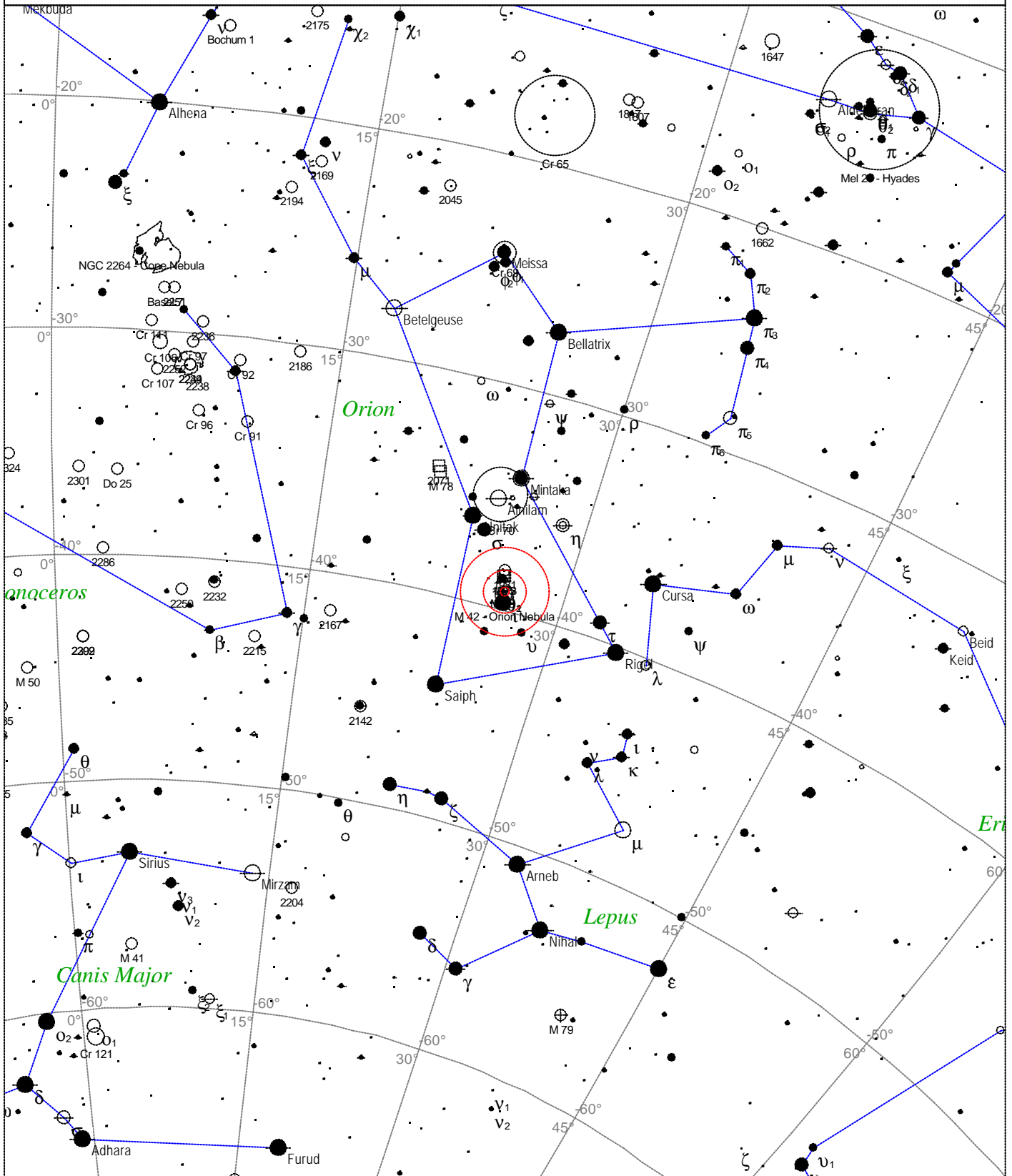
Messier 41 - Open cluster
 Magnitude: 4.5
 Size: 38.0'
 Right ascension: 6h 46m 6s
 Declination: -20° 45' 8"
 Constellation: Canis Major

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 6h46m06s Dec: -20° 45' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 42 - Orion Nebula



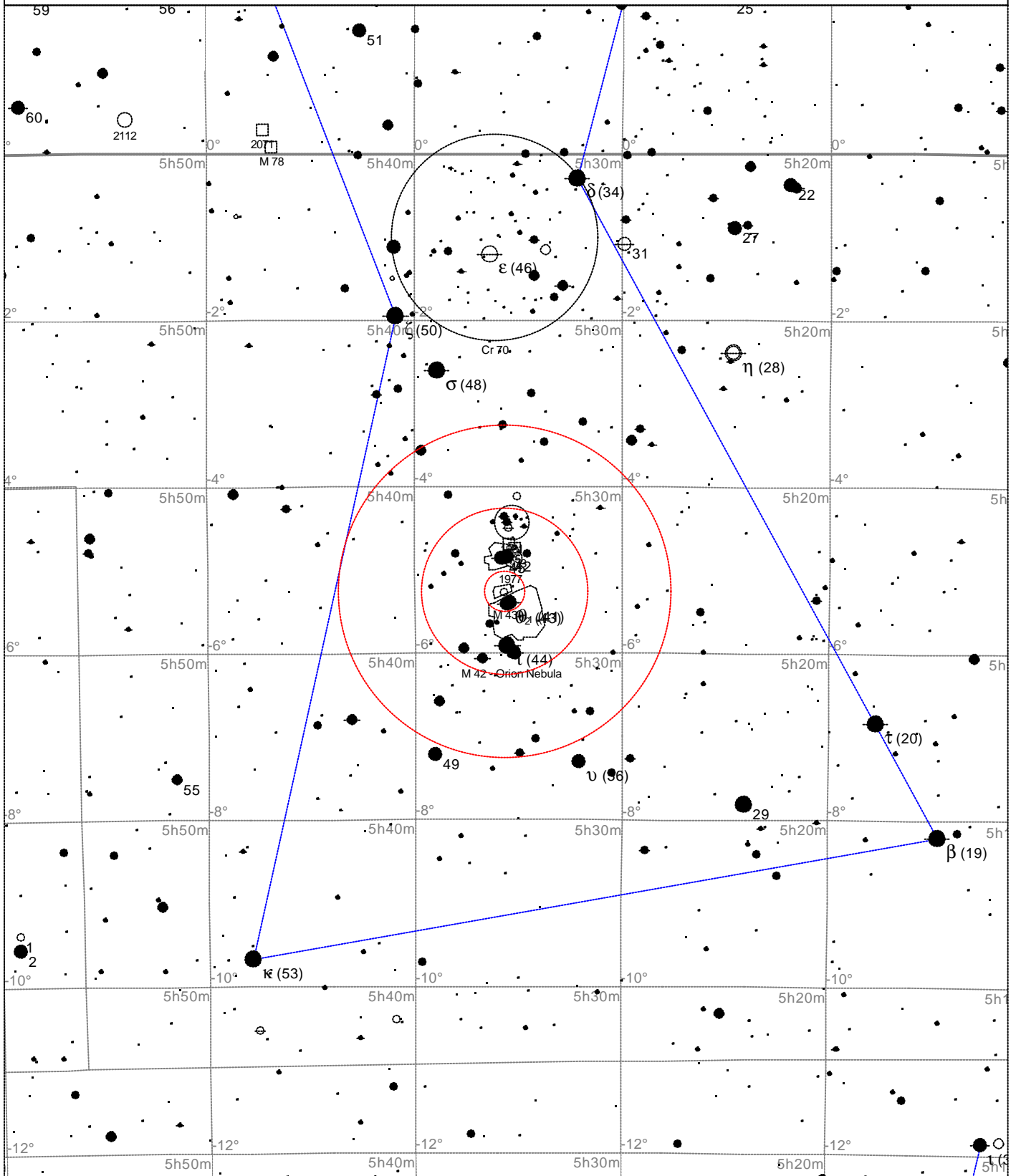
STARS ● <3 · 6 ● 3.5 · >6.5 ● 4 ● 4.5 ● 5 ● 5.5		SYMBOLS ● Multiple star □ Dark nebula △ Radio source ○ Variable star ⊕ Globular cluster × X-ray source ☄ Comet ○ Open cluster ○ Other object ☾ Galaxy ⊕ Planetary nebula □ Bright nebula ☄ Quasar		Messier 42 - Orion Nebula Type of object: Bright nebula Magnitude: 4.0 Size: 90.0'x60.0' Right ascension: 5h 35m 22s Declination: -5° 23' 7" Constellation: Orion
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 5h35m22s Dec: -5° 23' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 43 - Bright nebula



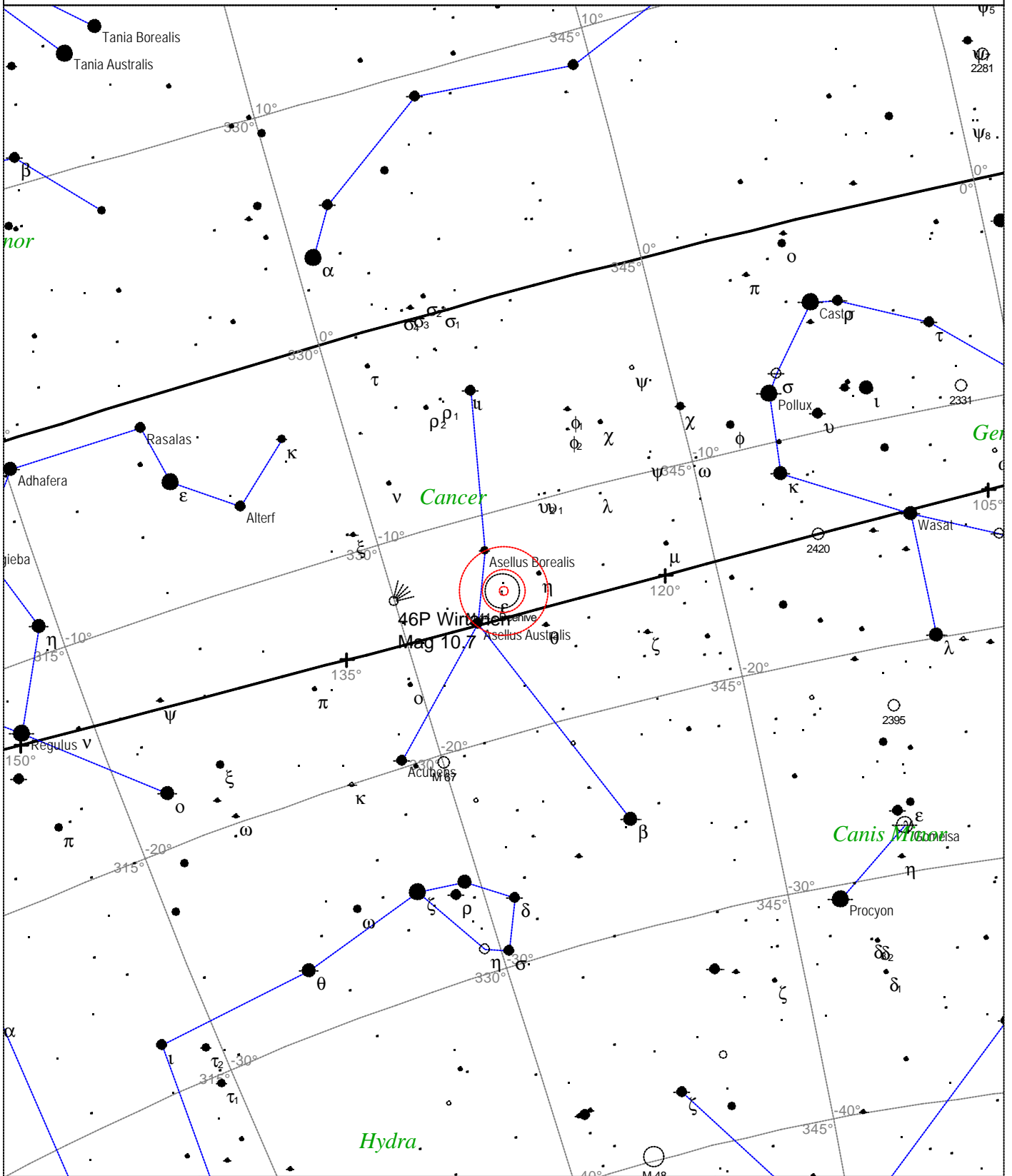
STARS ● <4 ● 5 ● 6 ● 7 ● 8 ● >9	SYMBOLS ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object	Messier 43 - Bright nebula Magnitude: 9.0 Size: 20.0' Right ascension: 5h 35m 38s Declination: -5° 15' 45" Constellation: Orion
--	---	---

Local Time: 20:14:14 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 20:14:14 12-Sep-2002
 RA: 5h35m38s Dec: -5° 15' Field: 12.0°

Sidereal Time: 19:30:47
 Julian Day: 2452530.3432

Messier 44 - Beehive Cluster



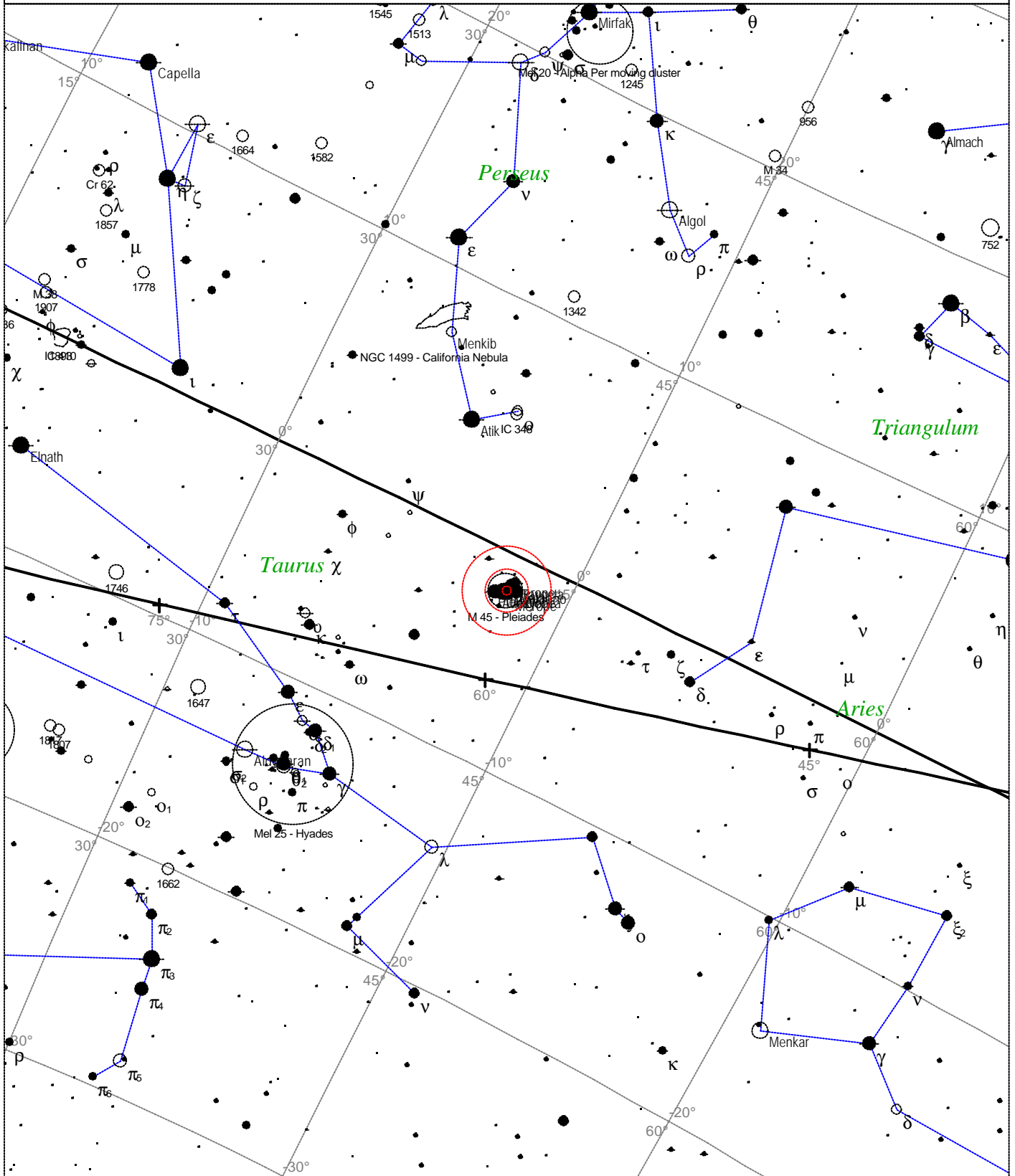
STARS		SYMBOLS			Messier 44 - Beehive Cluster Magnitude: 3.1 Size: 95.0' Right ascension: 8h 40m 4s Declination: +19° 39' 56" Constellation: Cancer
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· >6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4		☄ Comet	○ Open cluster	○ Other object	
● 4.5		☄ Galaxy	♁ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 8h40m04s Dec: +19° 39' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

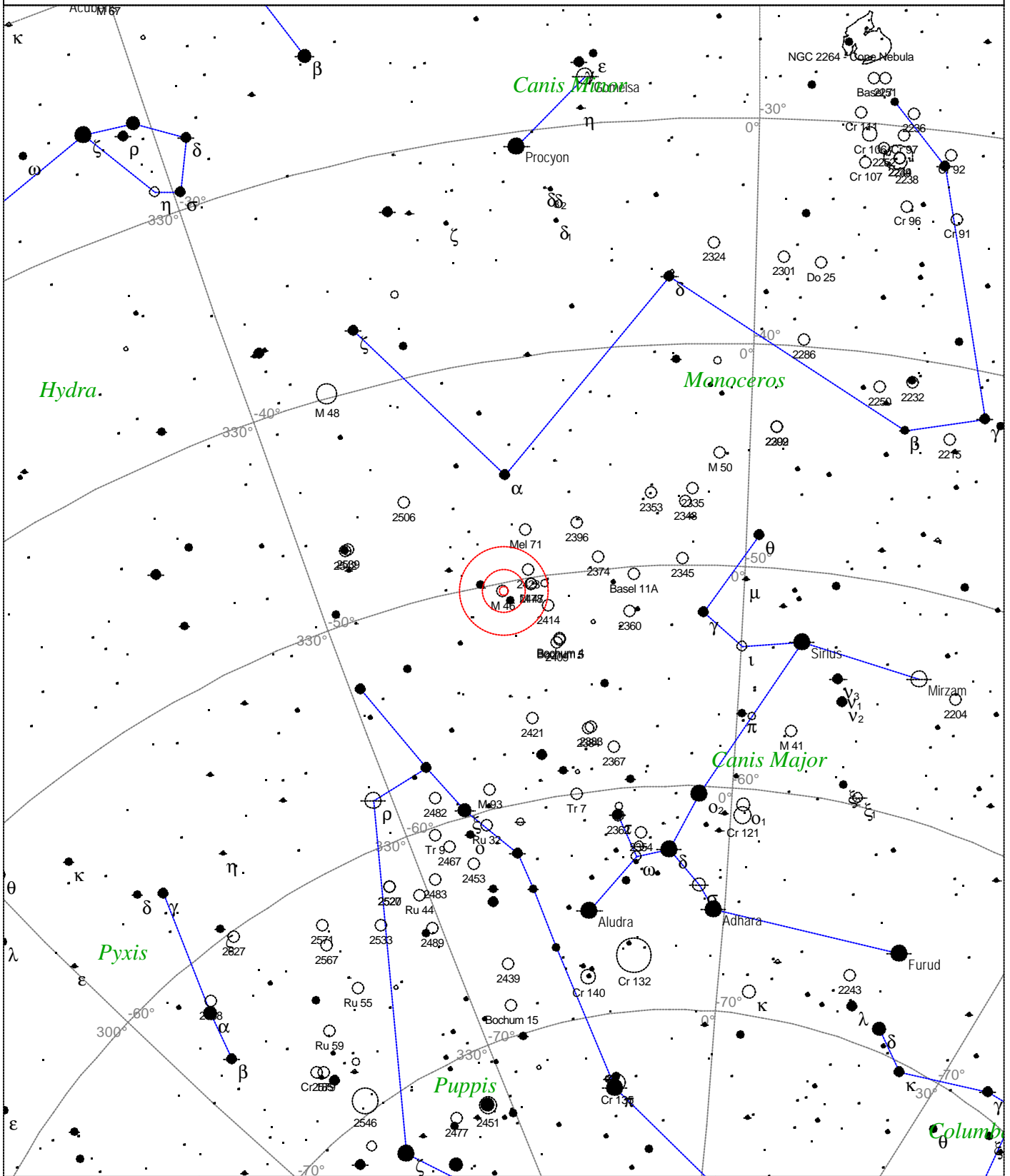
Messier 45 - Pleiades



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 45 - Pleiades</i> <i>Type of object: Bright nebula</i> <i>Magnitude: 1.2</i> <i>Size: 100.0'</i> <i>Right ascension: 3h 47m 9s</i> <i>Declination: +24° 7' 29"</i> <i>Constellation: Taurus</i></p>
--	---	---

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 3h47m09s Dec: +24° 07' Field: 45.0° Julian Day: 2452530.3196

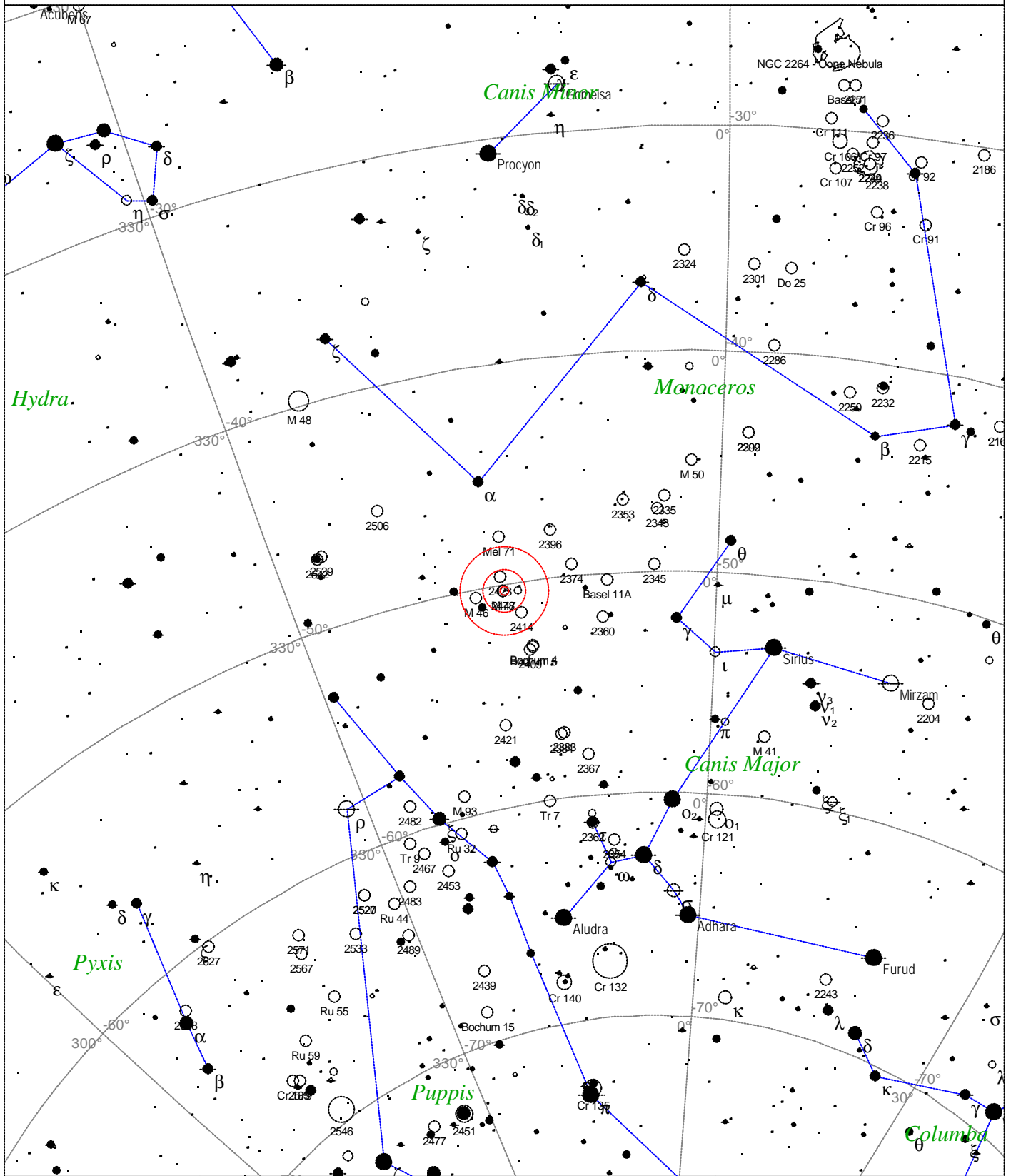
Messier 46 - Open cluster



STARS ● <3 · 6 ● 3.5 · >6.5 ● 4 ● 4.5 ● 5 ● 5.5		SYMBOLS ● Multiple star □ Dark nebula △ Radio source ○ Variable star ⊕ Globular cluster × X-ray source ☄ Comet ○ Open cluster ○ Other object ☾ Galaxy ☽ Planetary nebula □ Bright nebula ☉ Quasar			Messier 46 - Open cluster Magnitude: 6.1 Size: 27.0' Right ascension: 7h 41m 53s Declination: -14° 48' 42" Constellation: Puppis
--	--	---	--	--	---

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 7h41m53s Dec: -14° 48' Field: 45.0° Julian Day: 2452530.3196

Messier 47



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- >6.5

SYMBOLS

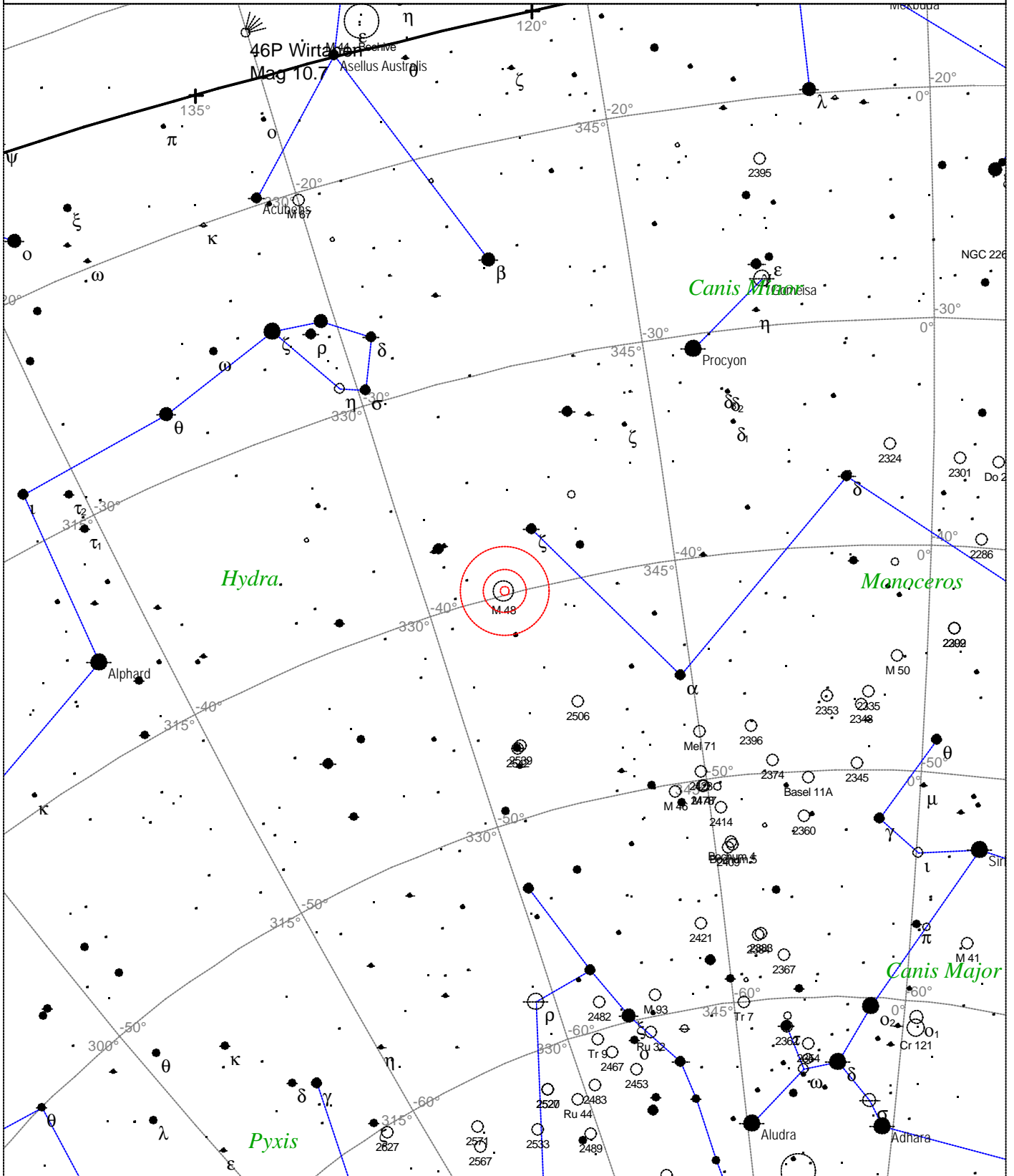
- Multiple star
- Variable star
- ☄ Comet
- ☉ Galaxy
- Bright nebula
- Dark nebula
- ⊕ Globular cluster
- Open cluster
- ⊕ Planetary nebula
- ⊗ Quasar
- △ Radio source
- × X-ray source
- Other object

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 7h36m41s Dec: -14° 29' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 48 - Open cluster



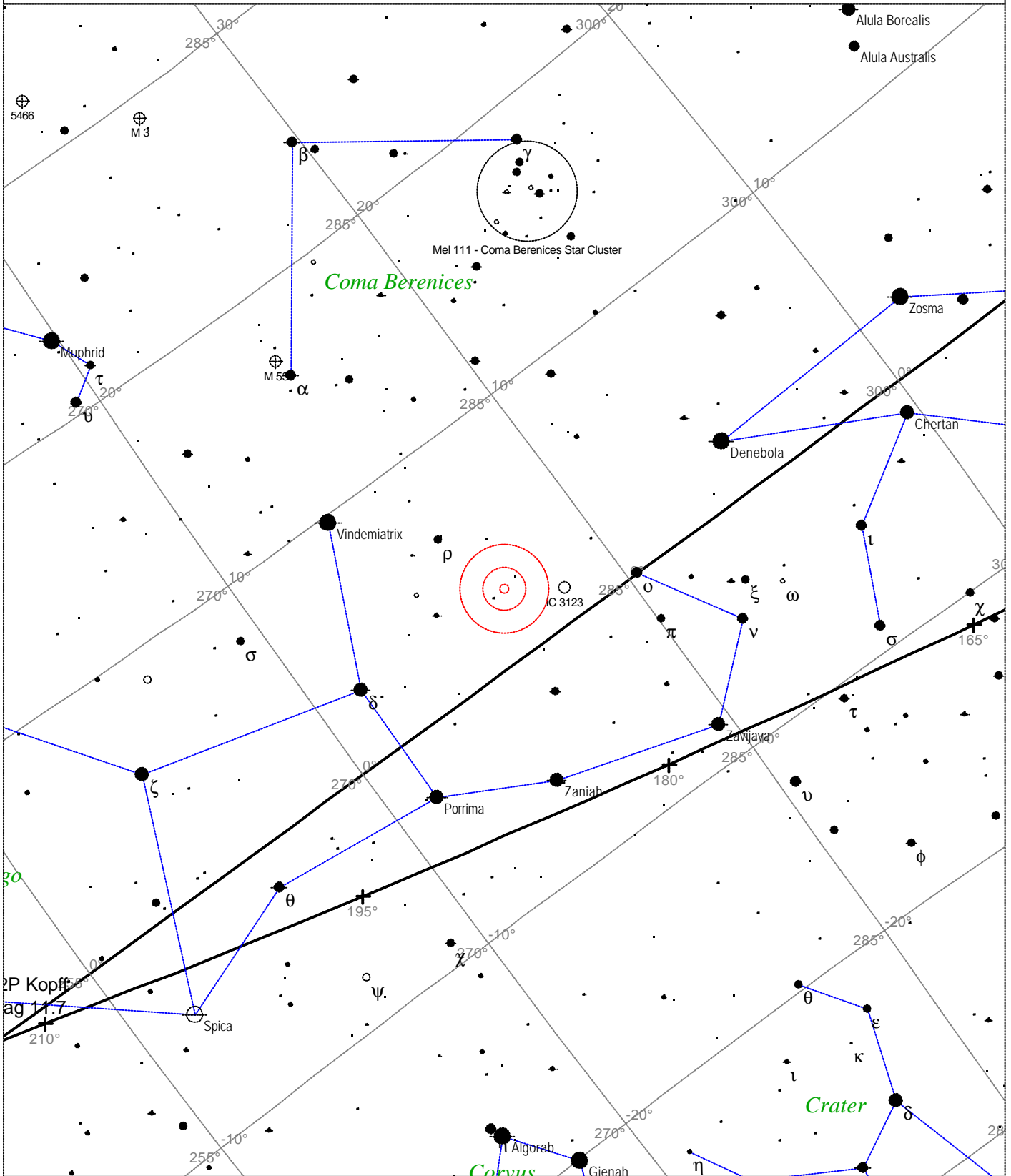
STARS		SYMBOLS			Messier 48 - Open cluster Magnitude: 5.8 Size: 54.0' Right ascension: 8h 13m 49s Declination: -5° 45' 16" Constellation: Hydra
<ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy ☐ Bright nebula 	<ul style="list-style-type: none"> ☐ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar 	<ul style="list-style-type: none"> △ Radio source ✕ X-ray source ○ Other object 		

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 8h13m49s Dec: -5° 45' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 49 - Galaxy



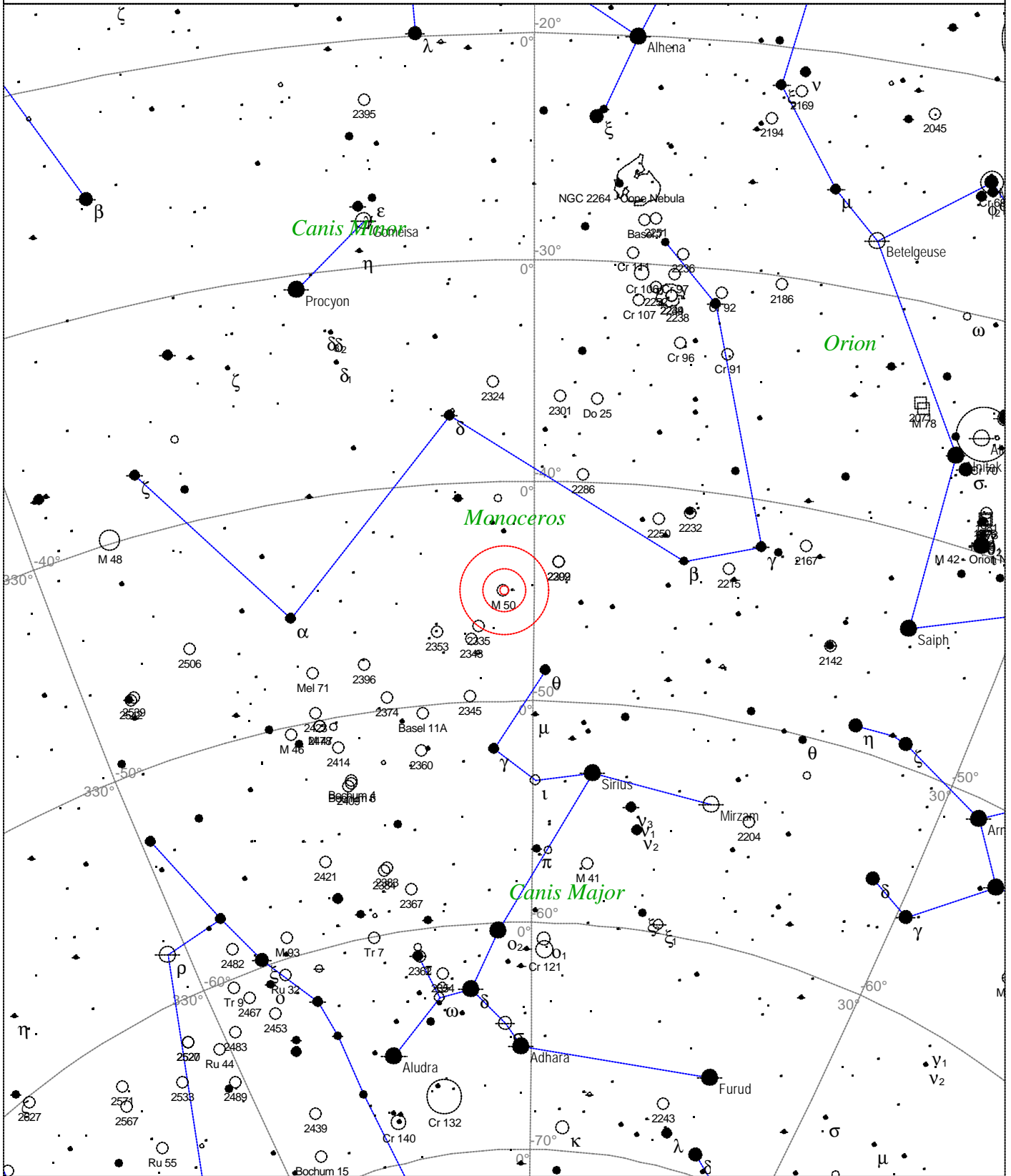
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 	<p><i>Messier 49 - Galaxy</i> Magnitude: 9.3 Surface brightness: 12.7 mag/sq arcmin Size: 9.8'x8.2' Position angle: 155° Right ascension: 12h 29m 53s Declination: +7° 59' 19" Constellation: Virgo</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h29m53s Dec: +7° 59' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

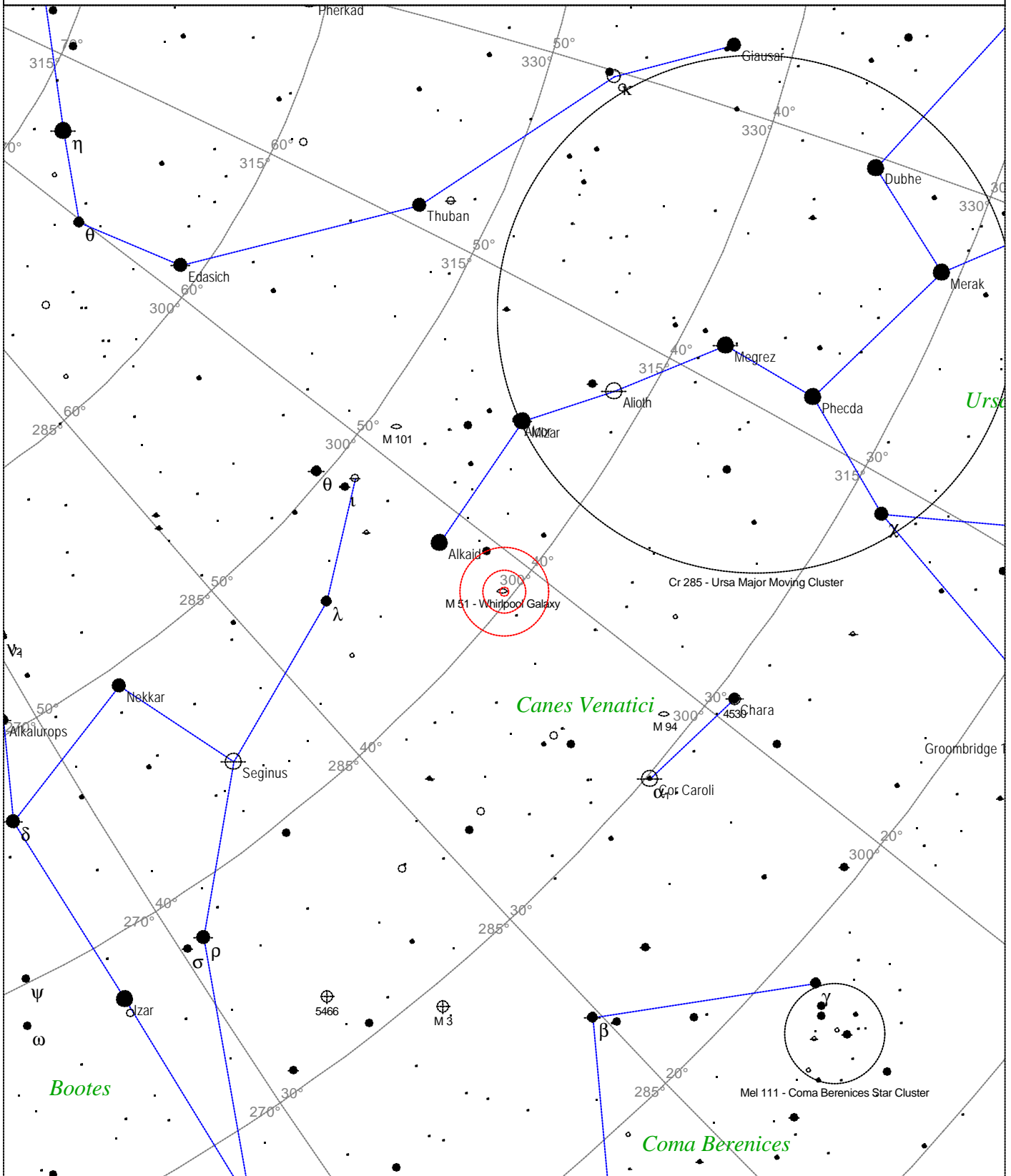
Messier 50 - Open Cluster



STARS	SYMBOLS			Messier 50 - Open cluster
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 5.9
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 16.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 7h 2m 13s
● 4.5	☄ Galaxy	⊕ Planetary nebula		Declination: -8° 22' 59"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Monoceros
● 5.5				

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 7h02m13s Dec: -8° 22' Field: 45.0° Julian Day: 2452530.3196

Messier 51 - Whirlpool Galaxy



STARS		SYMBOLS		
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source
● 3.5	· >6.5	○ Variable star	⊕ Globular cluster	× X-ray source
● 4		☄ Comet	○ Open cluster	○ Other object
● 4.5		☾ Galaxy	⊕ Planetary nebula	
● 5		□ Bright nebula	☄ Quasar	
● 5.5				

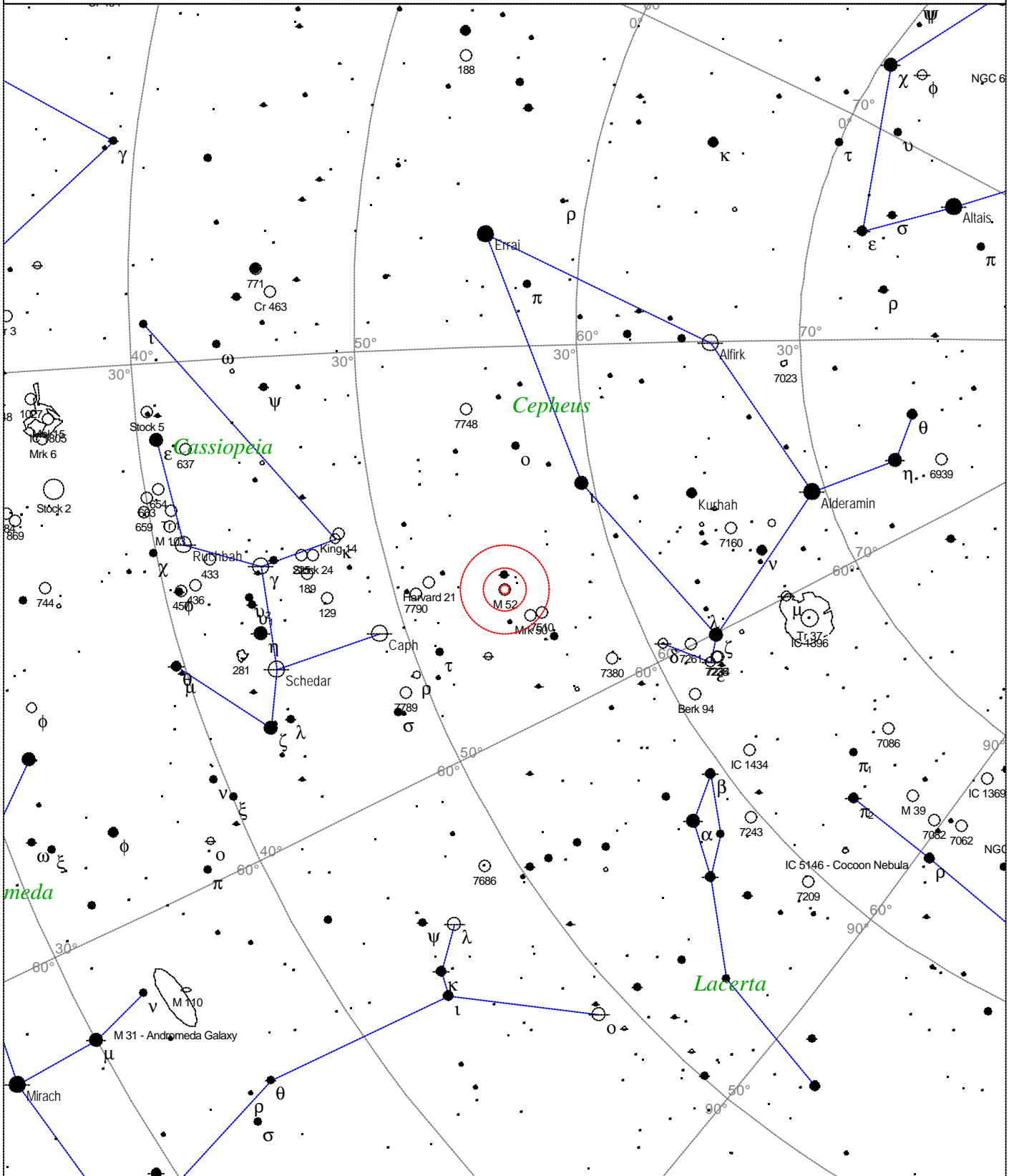
Messier 51 - Whirlpool Galaxy
 Type of object: Galaxy
 Magnitude: 8.9
 Surface brightness: 12.5 mag/sq arcmin
 Size: 10.8'x6.6'
 Position angle: 163°
 Right ascension: 13h 29m 57s
 Declination: +47° 11' 10"

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 13h29m57s Dec: +47° 11' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 52 - Open Cluster



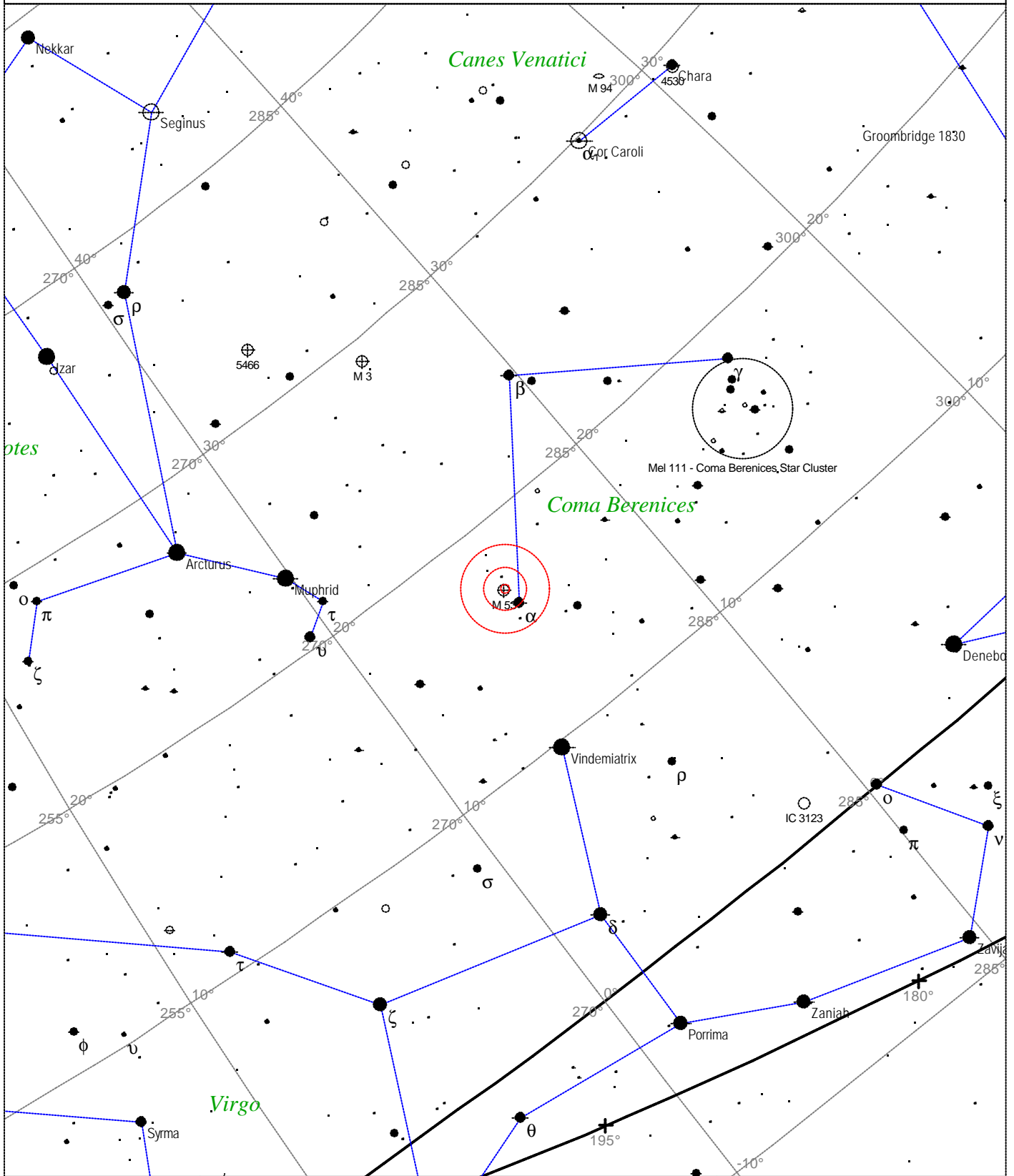
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 52 - Open cluster</i> <i>Magnitude: 6.9</i> <i>Size: 13.0'</i> <i>Right ascension: 23h 24m 59s</i> <i>Declination: +61° 37' 13"</i> <i>Constellation: Cassiopeia</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 23h24m59s Dec: +61° 37' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 53 - Globular Cluster



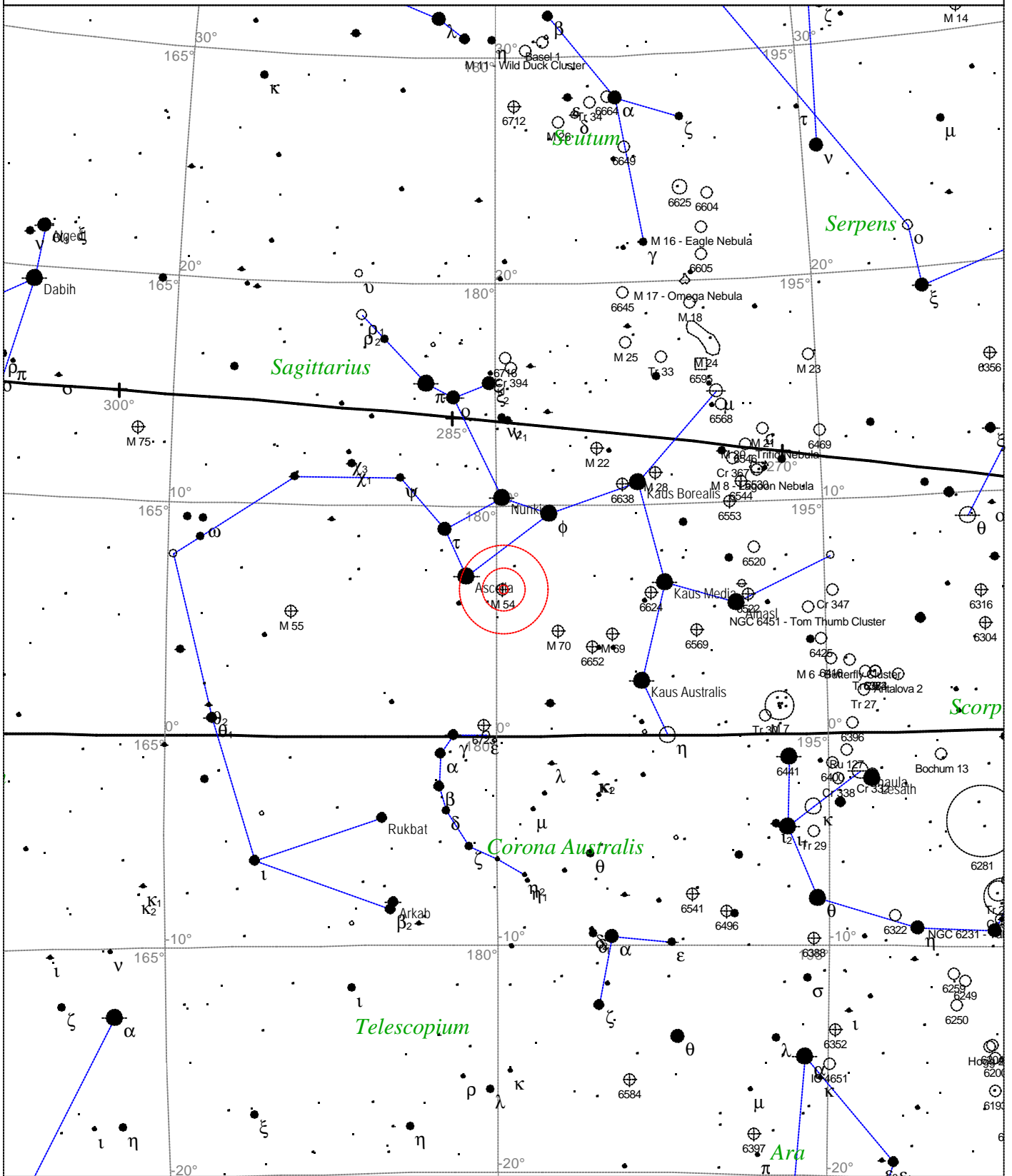
STARS		SYMBOLS			<i>Messier 53 - Globular cluster</i> Magnitude: 7.6 Size: 14.4' Right ascension: 13h 13m 1s Declination: +18° 9' 33" Constellation: Coma Berenices
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· >6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4		☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 13h13m01s Dec: +18° 09' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 54 - Globular Cluster



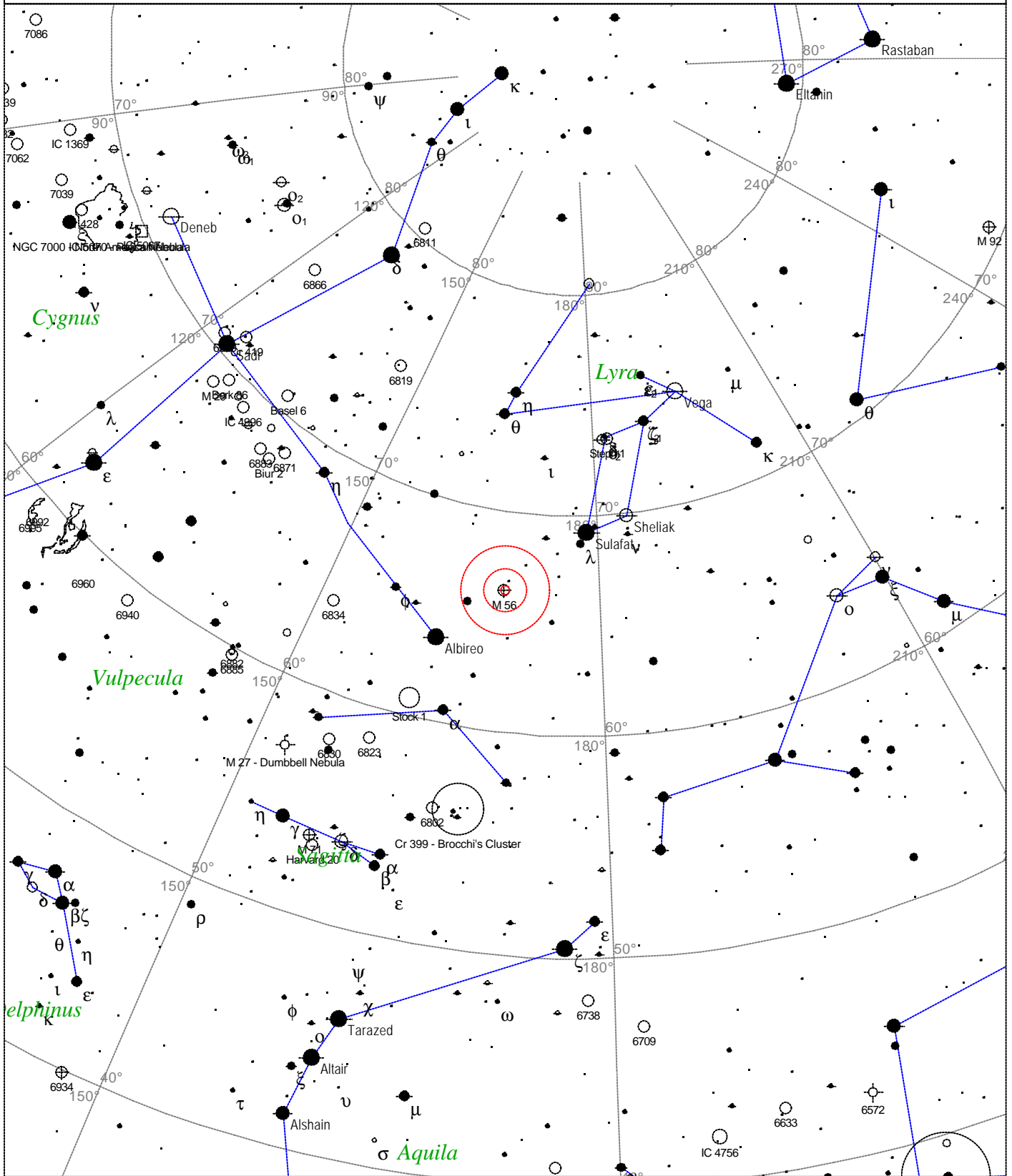
STARS		SYMBOLS			Messier 54 - Globular cluster Magnitude: 7.6 Size: 9.1' Right ascension: 18h 55m 13s Declination: -30° 28' 36" Constellation: Sagittarius
<ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 · 6 · >6.5 	<ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula 	<ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊗ Quasar 	<ul style="list-style-type: none"> △ Radio source ✕ X-ray source ○ Other object 		

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 18h55m13s Dec: -30° 28' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

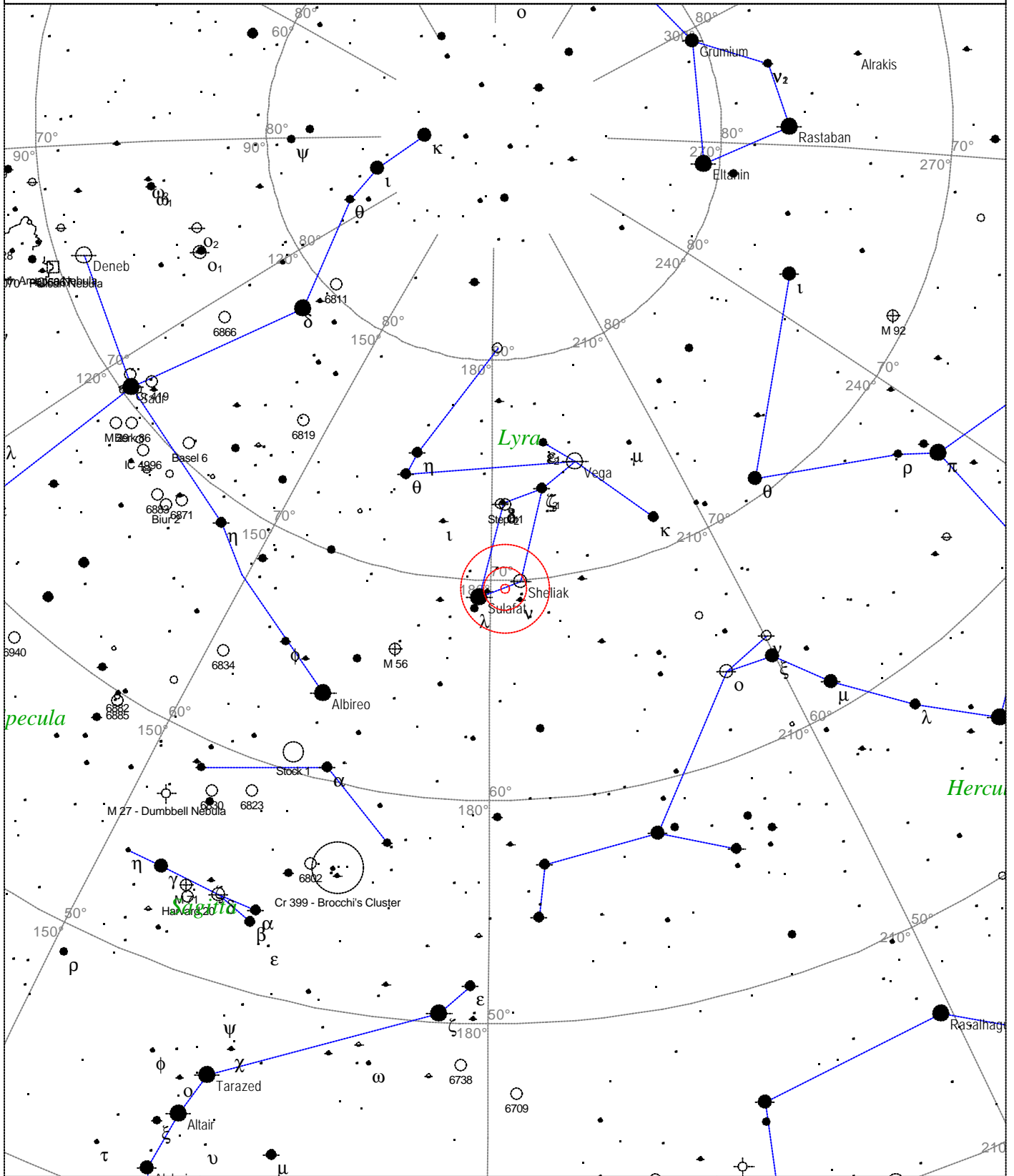
Messier 56 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 56 - Globular cluster Magnitude: 8.3 Size: 5.0' Right ascension: 19h 16m 42s Declination: +30° 11' 33" Constellation: Lyra</p>
--	---	--

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 19h16m42s Dec: +30° 11' Field: 45.0° Julian Day: 2452530.3196

Messier 57 - Ring Nebula



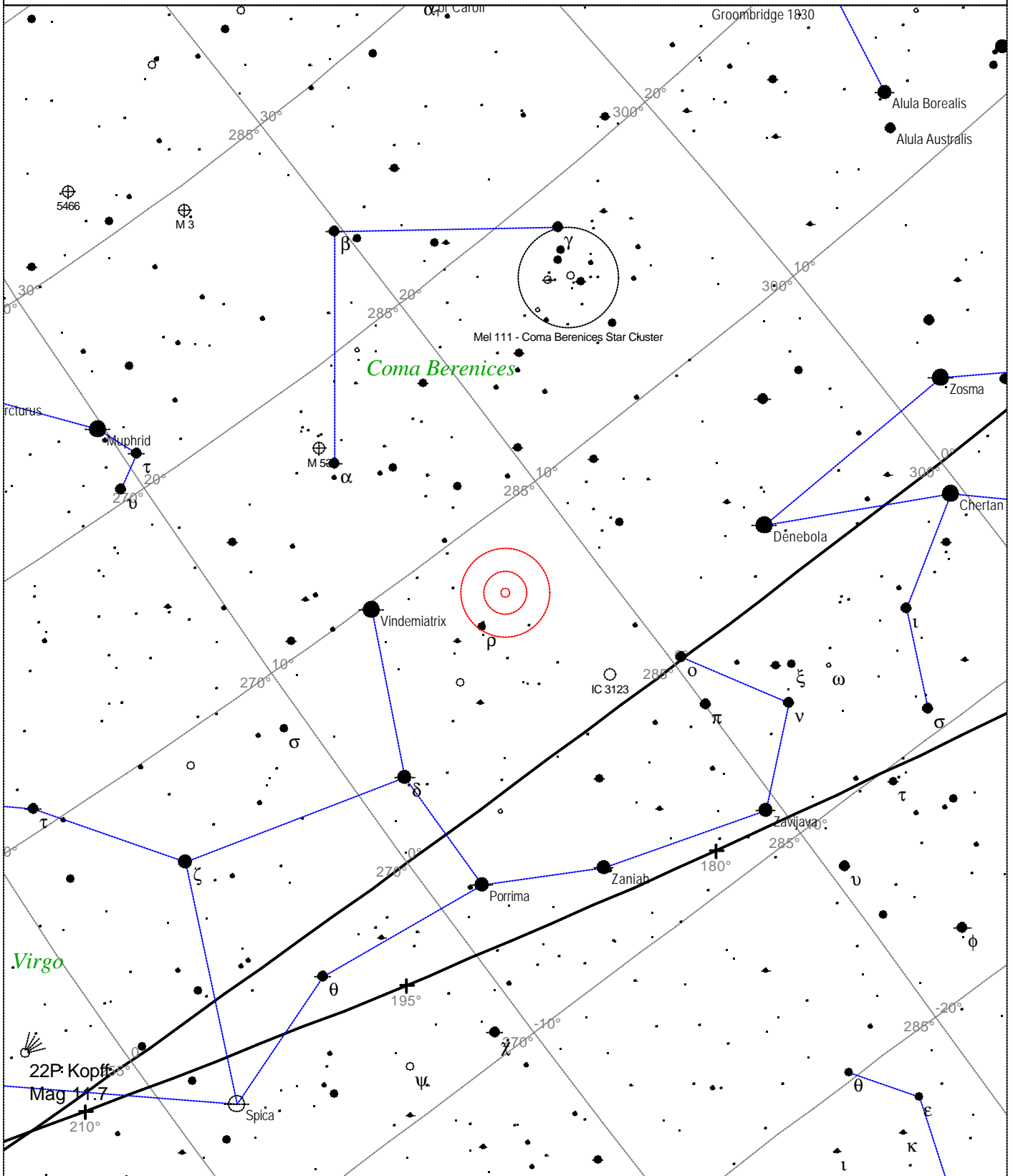
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● >6.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy ◻ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 57 - Ring Nebula</i> Type of object: Planetary nebula Magnitude: 9.7 Size: 1.2' Right ascension: 18h 53m 41s Declination: +33° 2' 9" Constellation: Lyra</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 18h53m41s Dec: +33° 02' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 58 - Galaxy



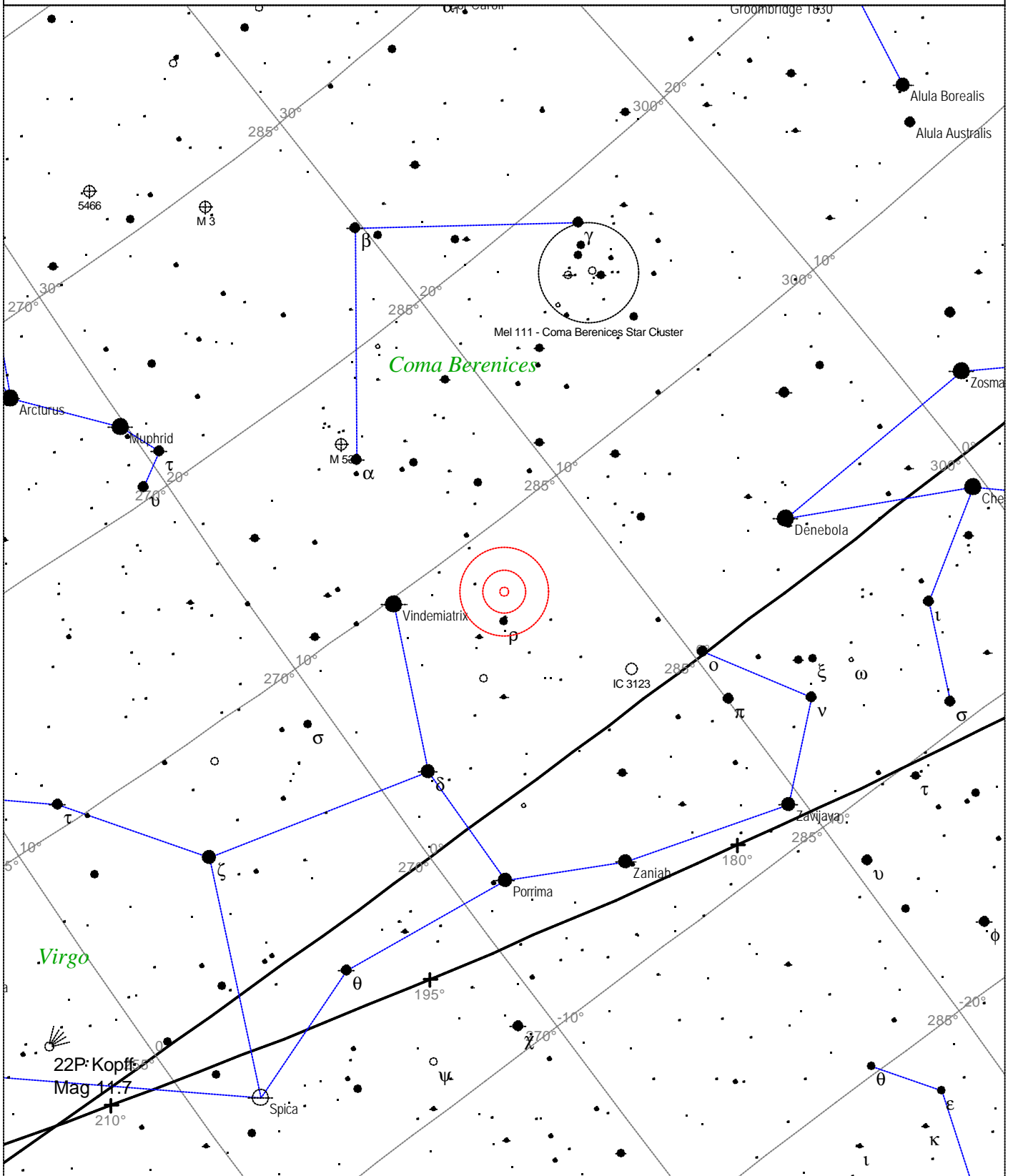
STARS		SYMBOLS			<i>Messier 58 - Galaxy</i> Magnitude: 10.4 Surface brightness: 12.4 mag/sq arcmin Size: 6.0'x4.8' Position angle: 95° Right ascension: 12h 37m 50s Declination: +11° 48' 26" Constellation: Virgo
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	♁ Planetary nebula		
● 5		□ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h37m50s Dec: +11° 48' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 59 - Galaxy



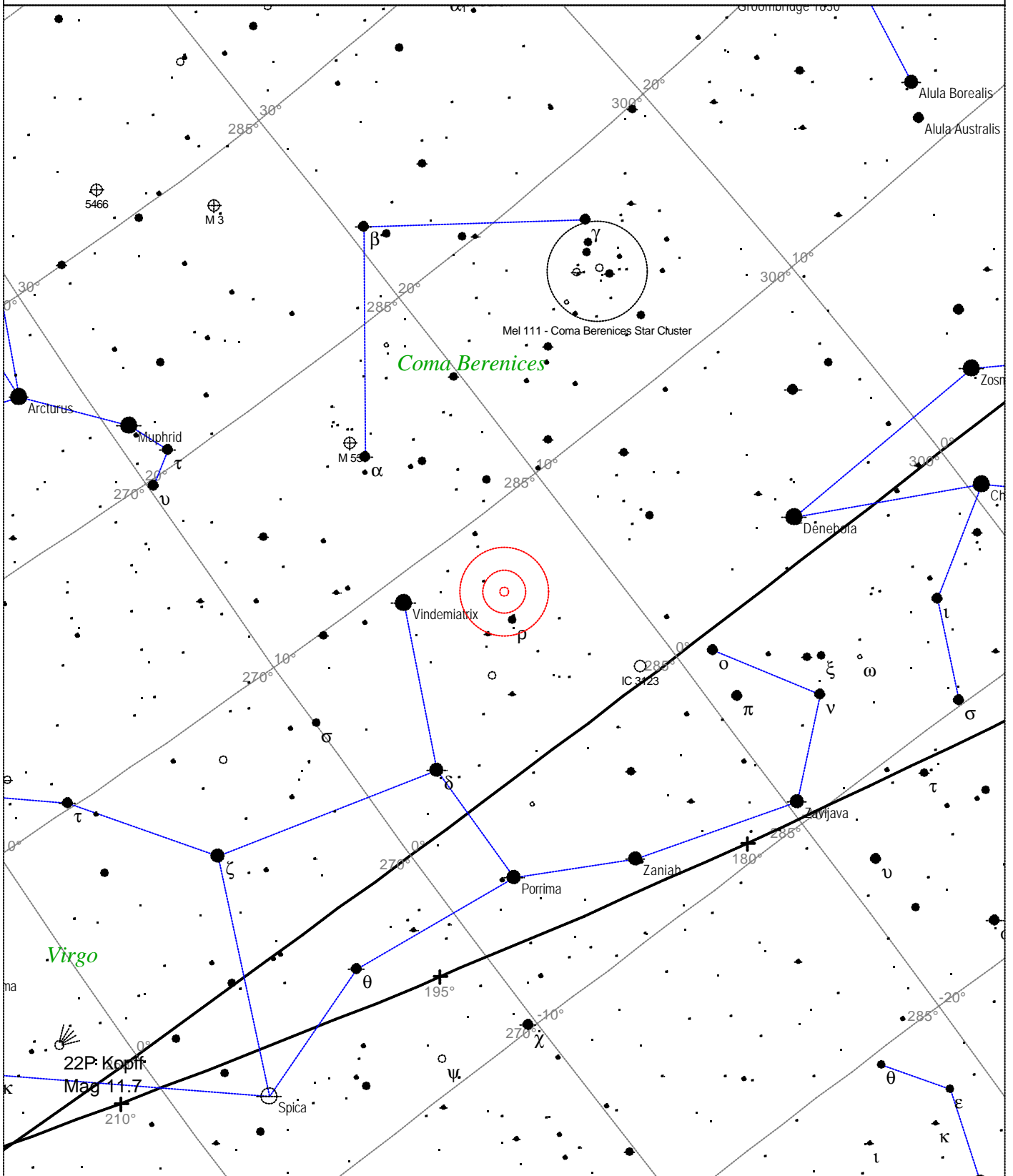
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊠ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 59 - Galaxy</i> Magnitude: 10.7 Surface brightness: 11.8 mag/sq arcmin Size: 5.3'x4.0' Position angle: 165° Right ascension: 12h 42m 8s Declination: +11° 38' 10" Constellation: Virgo</p>
--	---	---

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h42m08s Dec: +11° 38' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 60 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source ✕ X-ray source ○ Other object 	<p><i>Messier 60 - Galaxy</i> <i>Magnitude: 9.8</i> <i>Surface brightness: 12.0 mag/sq arcmin</i> <i>Size: 7.6'x6.2'</i> <i>Position angle: 105°</i> <i>Right ascension: 12h 43m 46s</i> <i>Declination: +11° 32' 31"</i> <i>Constellation: Virgo</i></p>
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Local Time: 19:40:11 12-Sep-2002

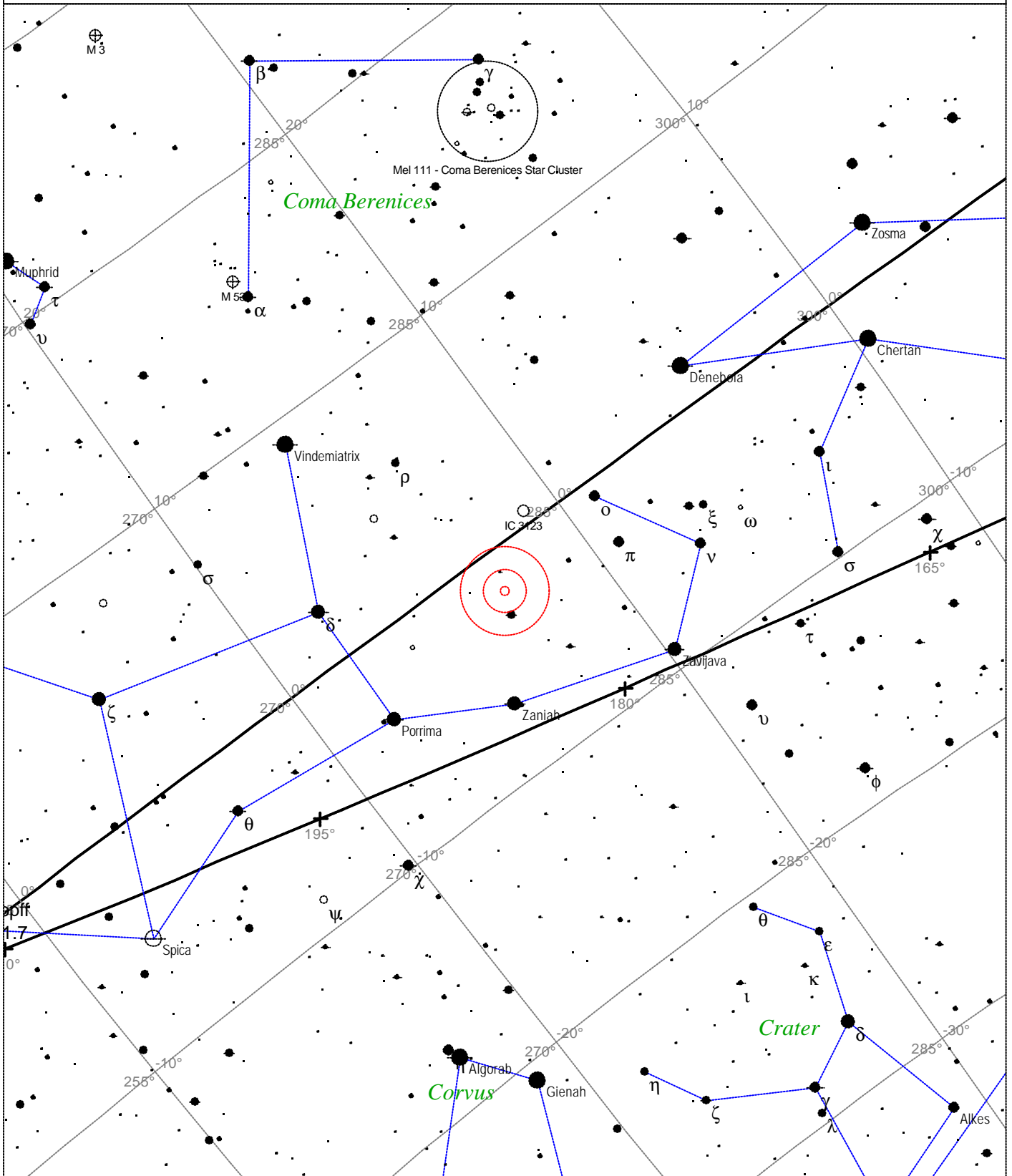
UTC: 19:40:11 12-Sep-2002

Sidereal Time: 19:01:49

Location: 53° 6' 50" N 1° 13' 20" W RA: 12h43m46s Dec: +11° 32' 31" Field: 45.0°

Julian Day: 2452530.3196

Messier 61 - Galaxy



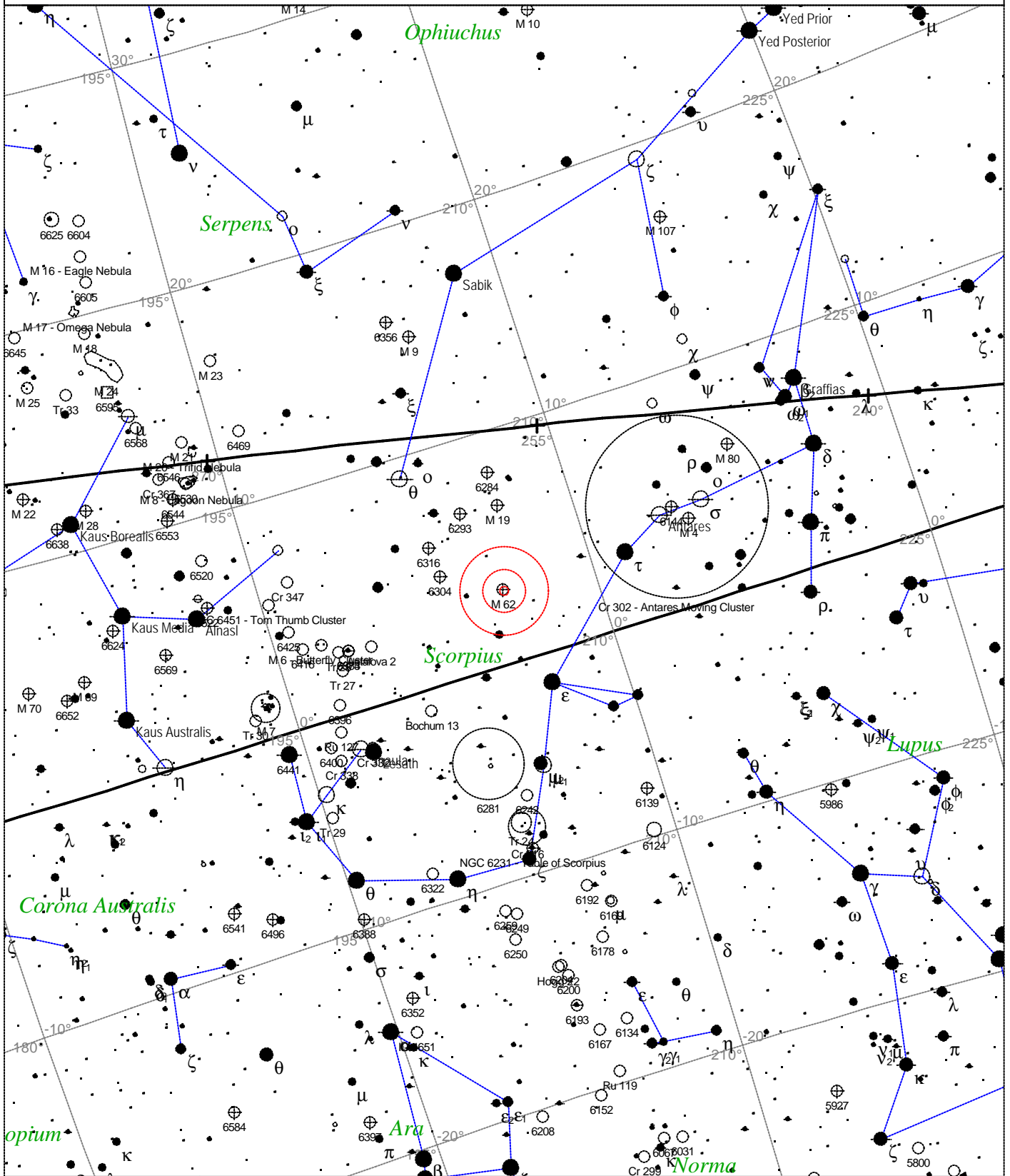
STARS	SYMBOLS			Messier 61 - Galaxy
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 10.1
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Surface brightness: 12.8 mag/sq arcmin
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 6.5'x5.9'
● 4.5	☾ Galaxy	♁ Planetary nebula		Right ascension: 12h 22m 1s
● 5	□ Bright nebula	☉ Quasar		Declination: +4° 27' 41"
● 5.5				Constellation: Virgo

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 6' 50" N 1° 13' 20" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h22m01s Dec: +4° 27' Field: 45.0°

Sidereal Time: 19:01:49
 Julian Day: 2452530.3196

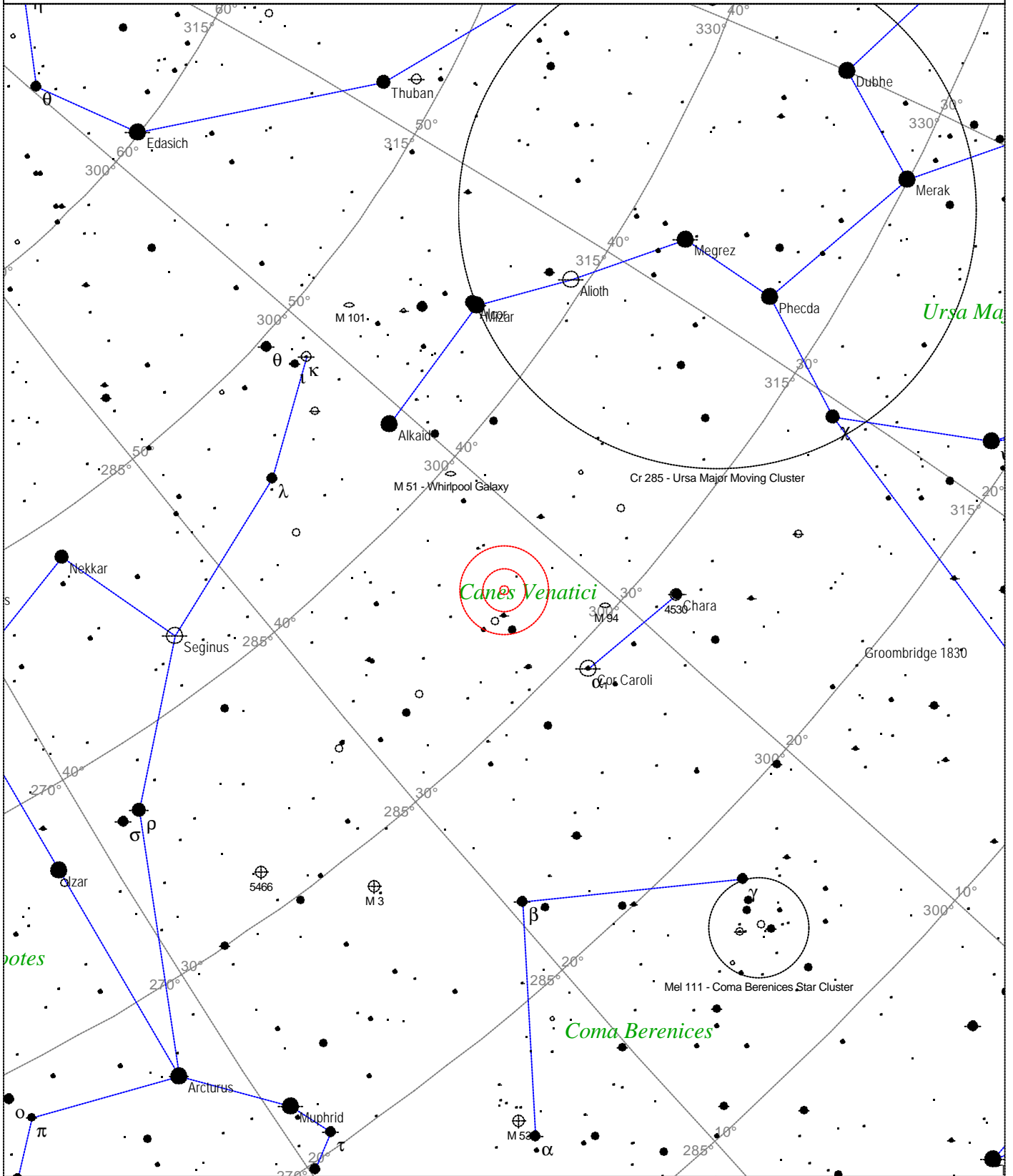
Messier 62 - Globular Cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☐ Galaxy ☐ Bright nebula ☐ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ☒ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 62 - Globular Cluster Magnitude: 6.5 Size: 14.1' Right ascension: 17h 1m 22s Declination: -30° 07' 2" Constellation: Ophiuchus</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 19:01:49
 Location: 53° 6' 50" N 1° 13' 20" W RA: 17h01m22s Dec: -30° 07' Field: 45.0° Julian Day: 2452530.3196

Messier 63 - Galaxy



STARS	SYMBOLS			Messier 63 - Galaxy
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 9.3
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Surface brightness: 12.4 mag/sq arcmin
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 12.6'x7.5'
● 4.5	☾ Galaxy	♁ Planetary nebula		Position angle: 105°
● 5	□ Bright nebula	♁ Quasar		Right ascension: 13h 15m 54s
● 5.5				Declination: +42° 1' 23"
				Constellation: Canes Venatici

Local Time: 19:40:11 12-Sep-2002

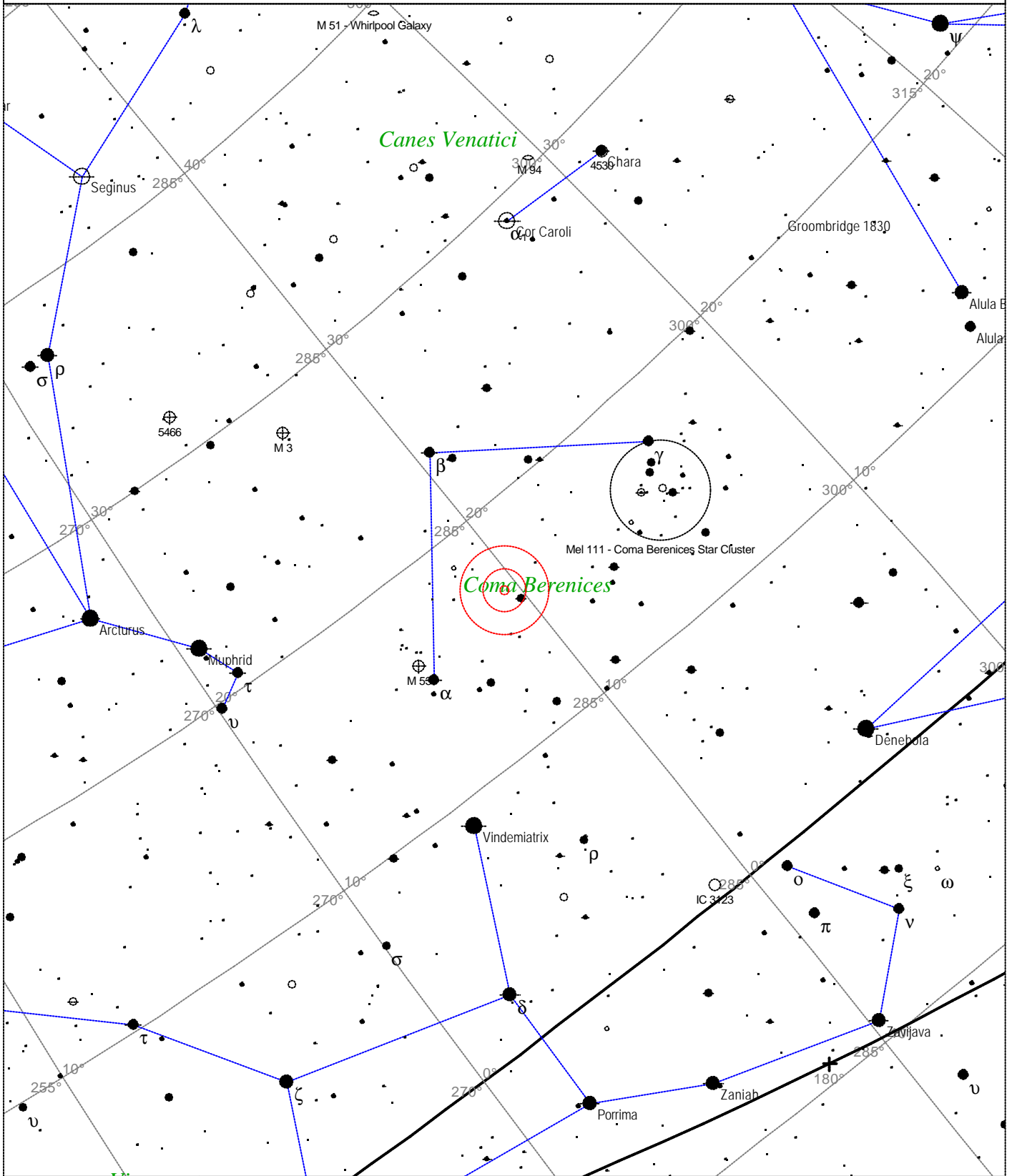
UTC: 19:40:11 12-Sep-2002

Sidereal Time: 19:01:49

Location: 53° 6' 50" N 1° 13' 20" W RA: 13h15m54s Dec: +42° 01' Field: 45.0°

Julian Day: 2452530.3196

Messier 64 - Blackeye Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 64 - Blackeye Galaxy Type of object: Galaxy Magnitude: 9.3 Surface brightness: 11.7 mag/sq arcmin Size: 10.3'x5.0' Position angle: 115° Right ascension: 12h 56m 50s Declination: +21° 40' 20"</p>
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Local Time: 19:40:11 12-Sep-2002

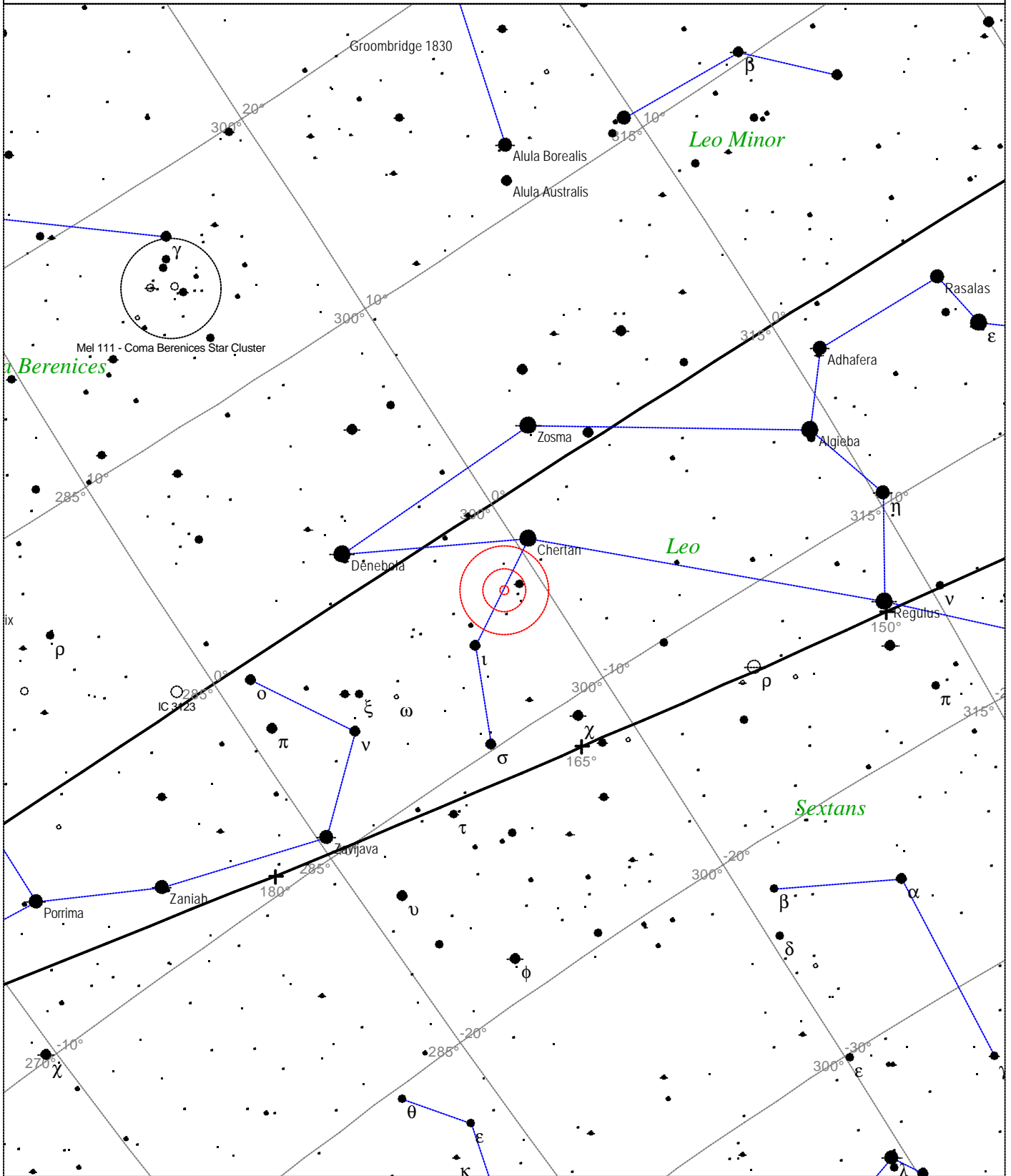
UTC: 19:40:11 12-Sep-2002

Sidereal Time: 19:01:49

Location: 53° 6' 50" N 1° 13' 20" W RA: 12h56m50s Dec: +21° 40' Field: 45.0°

Julian Day: 2452530.3196

Messier 65 - Galaxy



STARS		SYMBOLS			<i>Messier 65 - Galaxy</i> Magnitude: 10.1 Surface brightness: 12.3 mag/sq arcmin Size: 9.0'x2.3' Position angle: 174° Right ascension: 11h 19m 2s Declination: +13° 4' 46" Constellation: Leo
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002

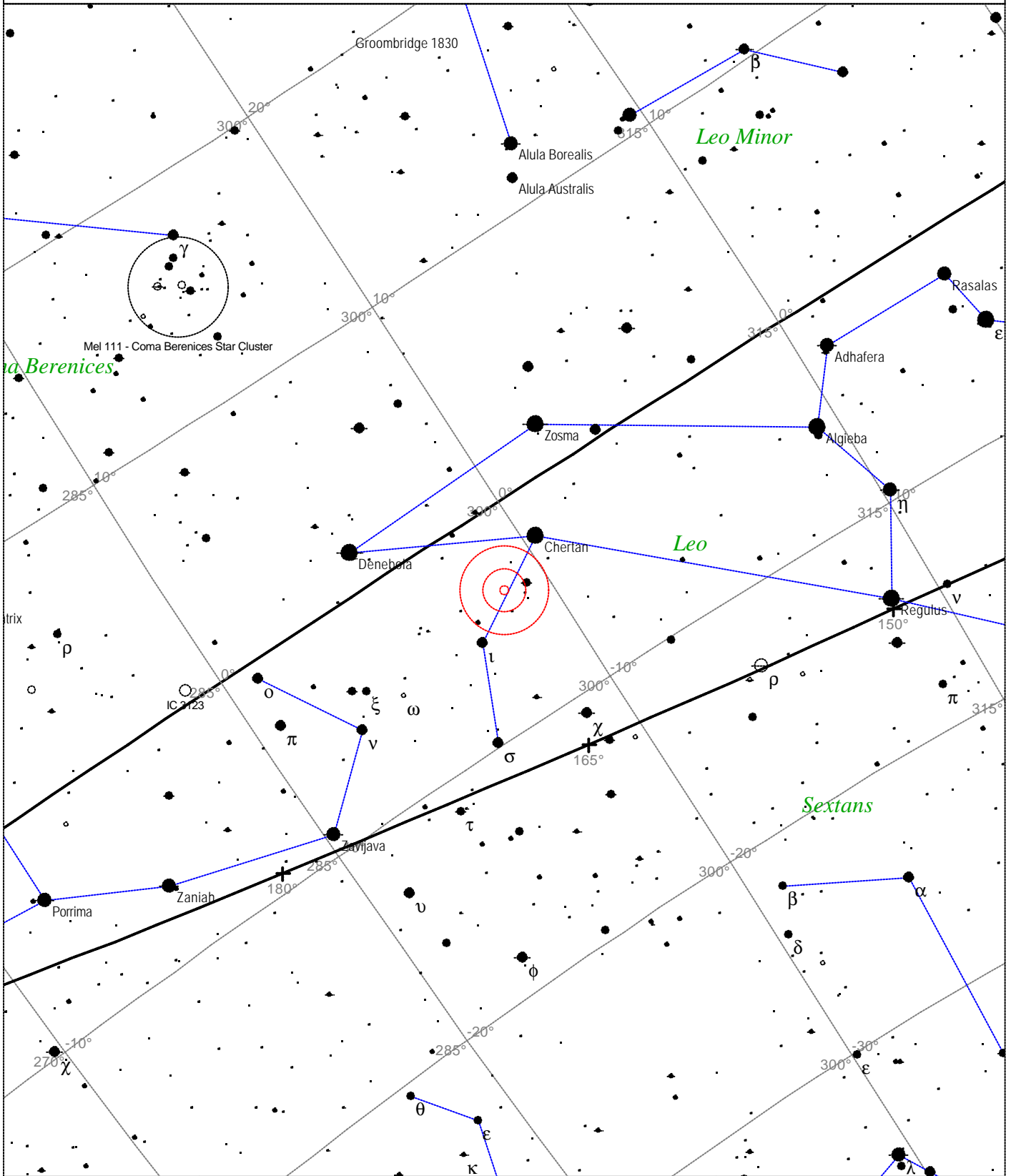
UTC: 19:40:11 12-Sep-2002

Sidereal Time: 19:01:49

Location: 53° 6' 50" N 1° 13' 20" W RA: 11h19m02s Dec: +13° 04' Field: 45.0°

Julian Day: 2452530.3196

Messier 66 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source ✕ X-ray source ○ Other object 	<p><i>Messier 66 - Galaxy</i> <i>Magnitude: 9.7</i> <i>Surface brightness: 11.8 mag/sq arcmin</i> <i>Size: 9.1'x4.1'</i> <i>Position angle: 173°</i> <i>Right ascension: 11h 20m 21s</i> <i>Declination: +12° 58' 43"</i> <i>Constellation: Leo</i></p>
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Local Time: 19:40:11 12-Sep-2002

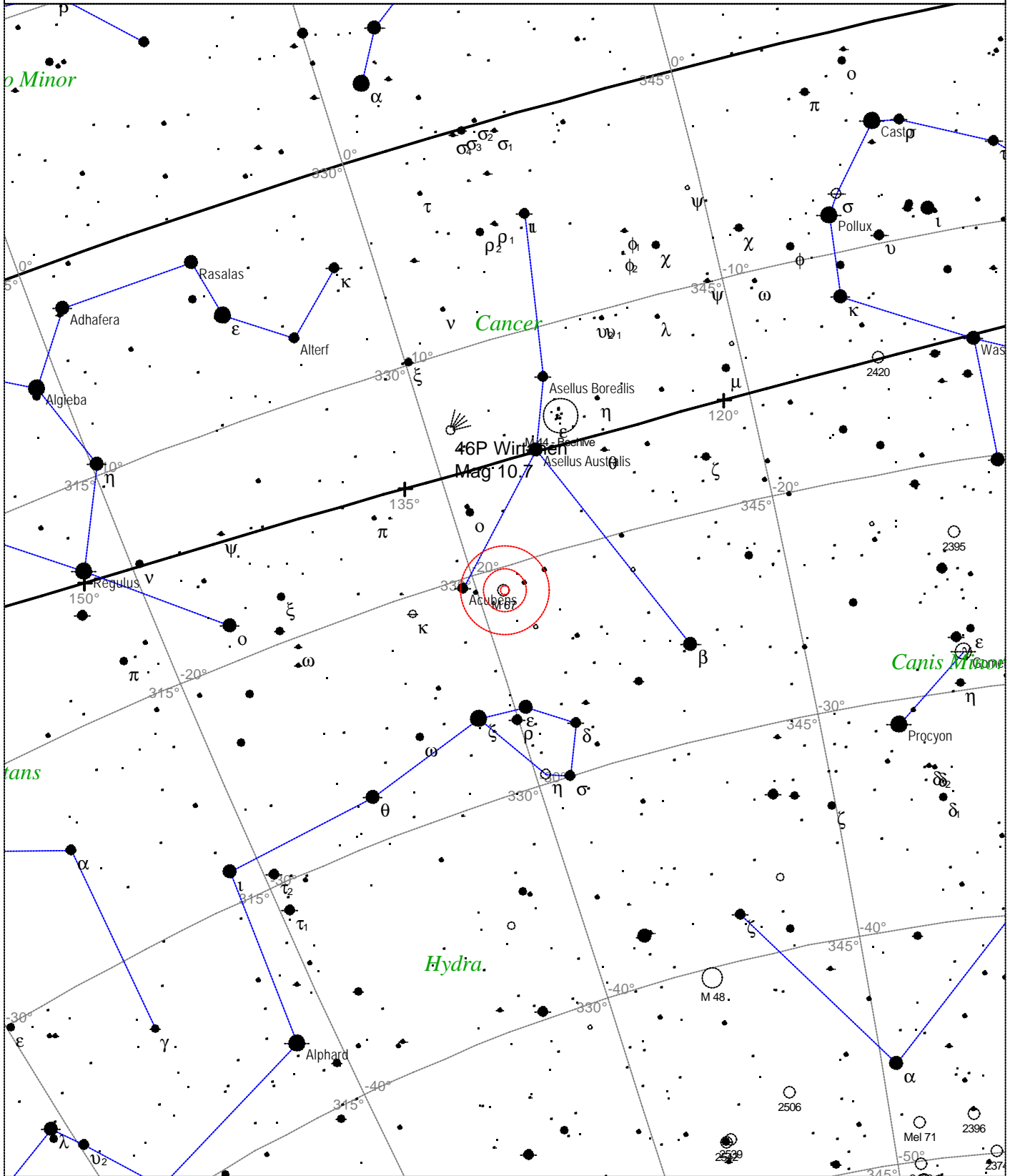
UTC: 19:40:11 12-Sep-2002

Sidereal Time: 19:01:49

Location: 53° 6' 50" N 1° 13' 20" W RA: 11h20m21s Dec: +12° 58' 45"

Julian Day: 2452530.3196

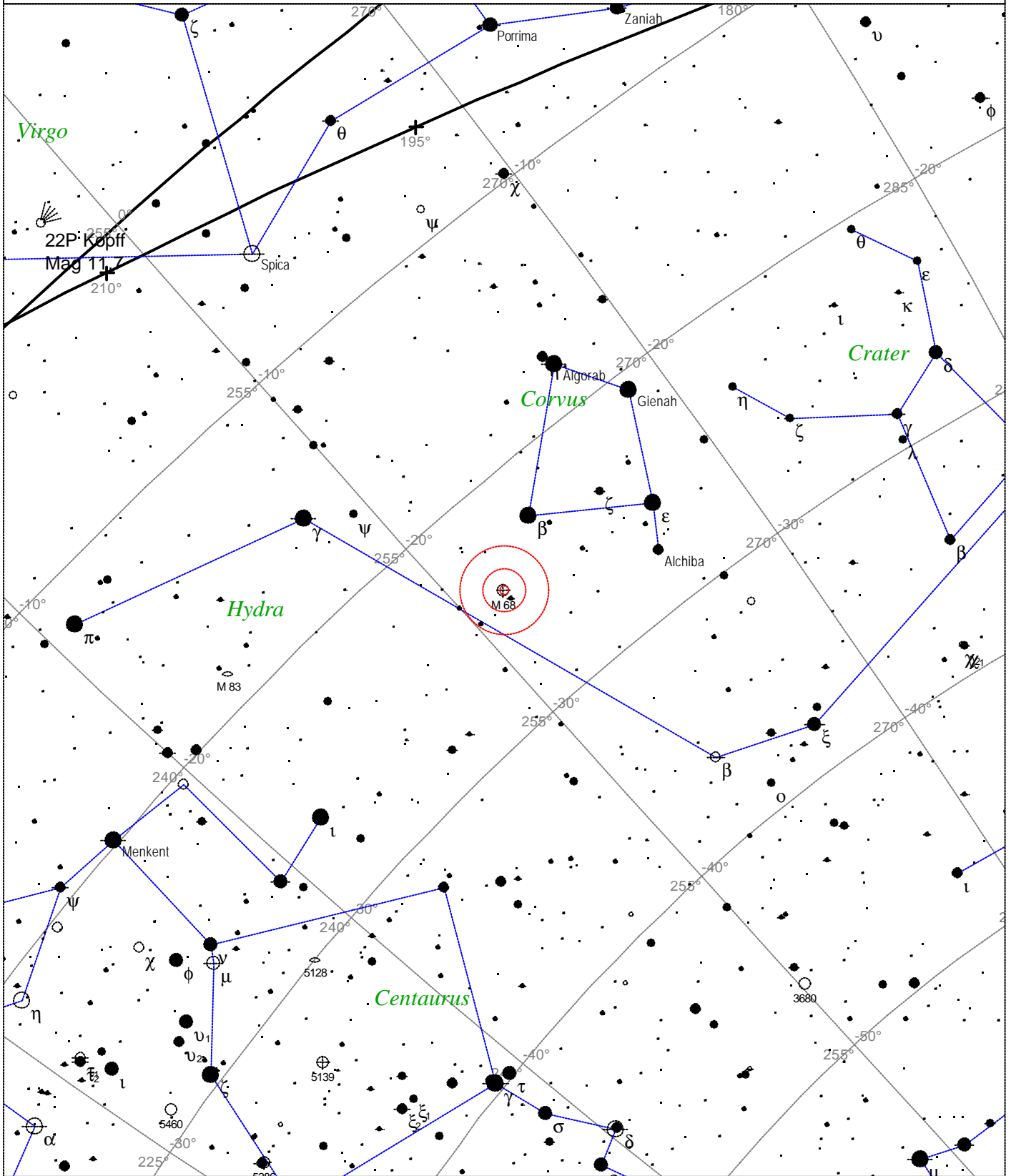
Messier 67 - Open Cluster



STARS		SYMBOLS			Messier 67 - Open Cluster Magnitude: 6.9 Size: 30.0' Right ascension: 8h 50m 57s Declination: +11° 48' 21" Constellation: Cancer
● <3	● 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	● 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	● >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☄ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 19:01:49
 Location: 53° 6' 50" N 1° 13' 20" W RA: 8h50m57s Dec: +11° 48' Field: 45.0° Julian Day: 2452530.3196

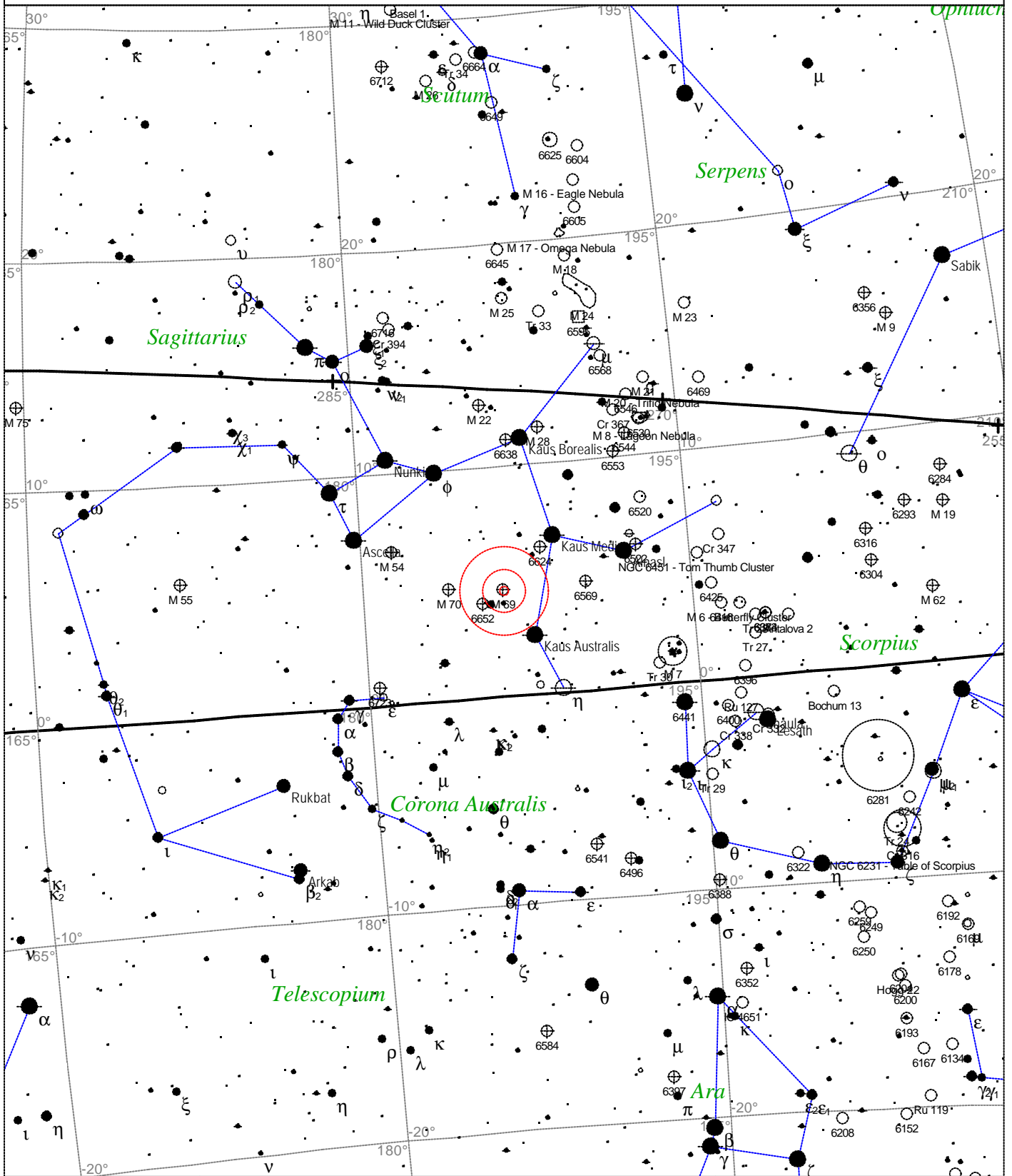
Messier 68 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 68 - Globular cluster Magnitude: 7.8 Size: 9.8' Right ascension: 12h 39m 34s Declination: -26° 45' 17" Constellation: Hydra</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 19:01:49
 Location: 53° 6' 50" N 1° 13' 20" W RA: 12h39m34s Dec: -26° 45' Field: 45.0° Julian Day: 2452530.3196

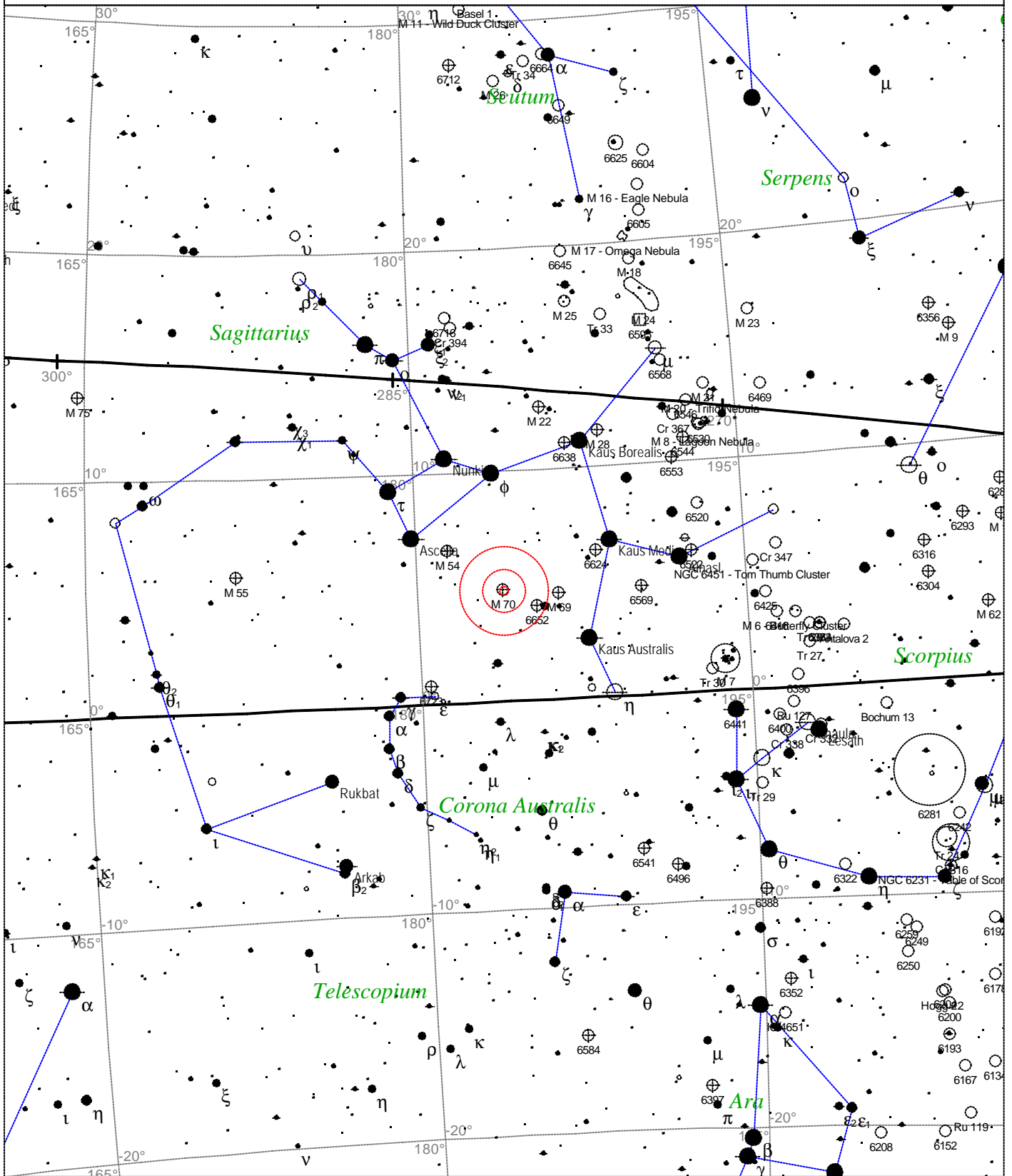
Messier 69 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 · 6 · 6.5 · >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊠ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 69 - Globular cluster Magnitude: 7.6 Size: 7.1' Right ascension: 18h 31m 33s Declination: -32° 20' 52" Constellation: Sagittarius</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 19:01:49
 Location: 53° 6' 50" N 1° 13' 20" W RA: 18h31m33s Dec: -32° 20' Field: 45.0° Julian Day: 2452530.3196

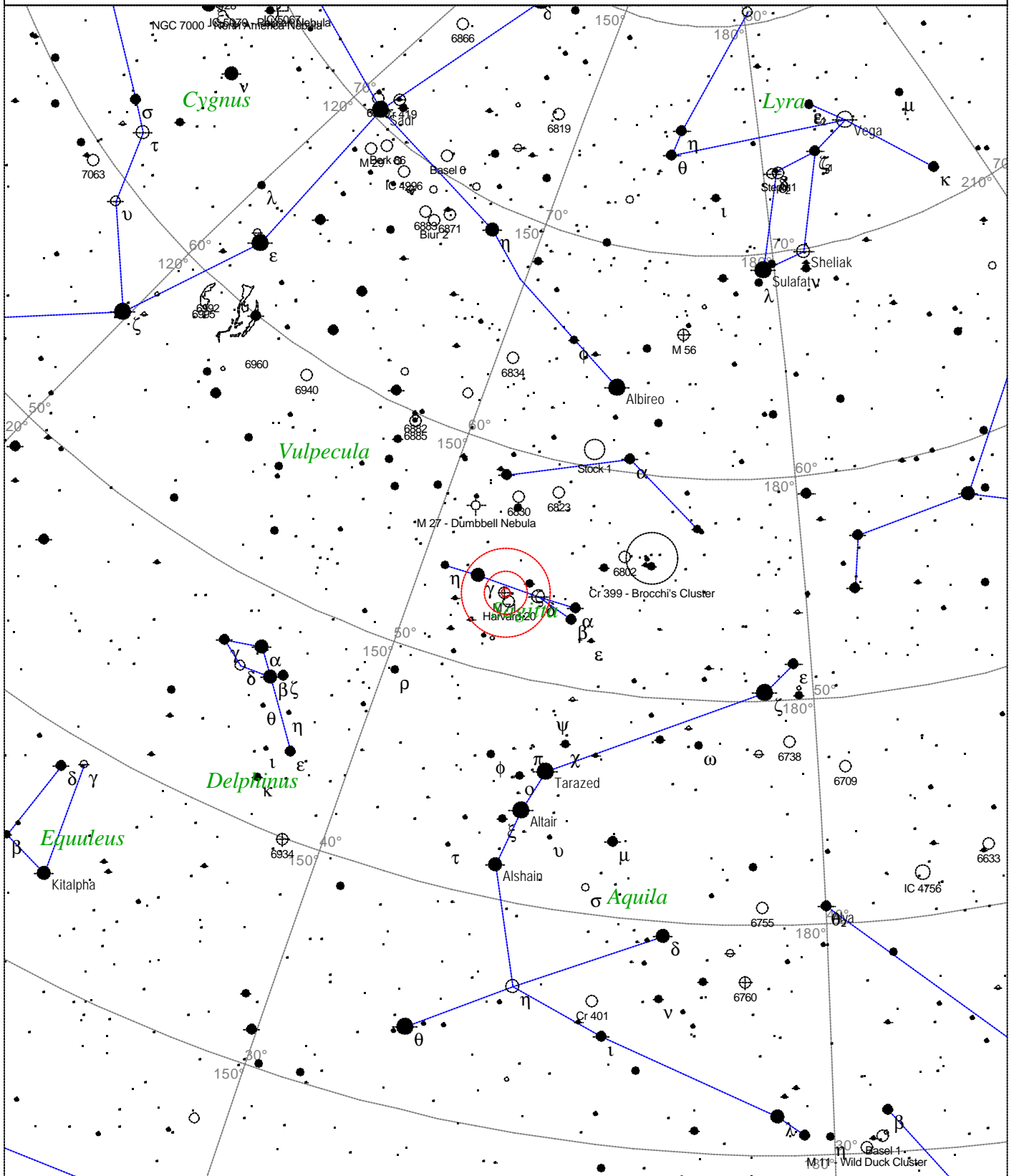
Messier 70 - Globular cluster



STARS		SYMBOLS			Messier 70 - Globular cluster Magnitude: 7.9 Size: 7.8' Right ascension: 18h 43m 23s Declination: -32° 17' 28" Constellation: Sagittarius
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 19:01:49
 Location: 53° 6' 50" N 1° 13' 20" W RA: 18h43m23s Dec: -32° 17' Field: 45.0° Julian Day: 2452530.3196

Messier 71 - Globular Cluster



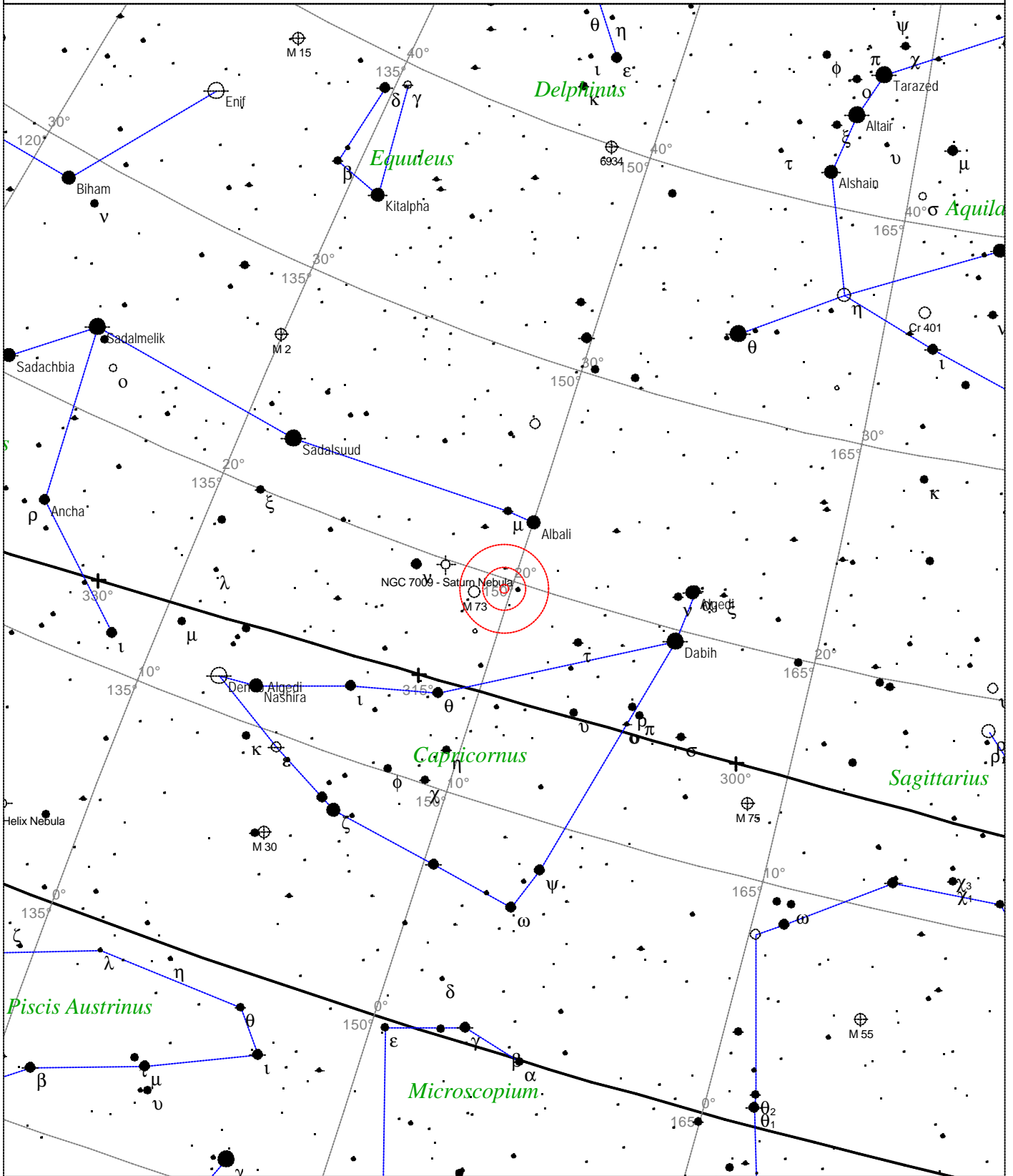
STARS	SYMBOLS			Messier 71 - Globular Cluster
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 8.2
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 6.1'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 19h 53m 53s
● 4.5	☾ Galaxy	♁ Planetary nebula		Declination: +18° 47' 14"
● 5	□ Bright nebula	☉ Quasar		Constellation: Sagitta
● 5.5				

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 19h53m53s Dec: +18° 47' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 72 - Globular Cluster



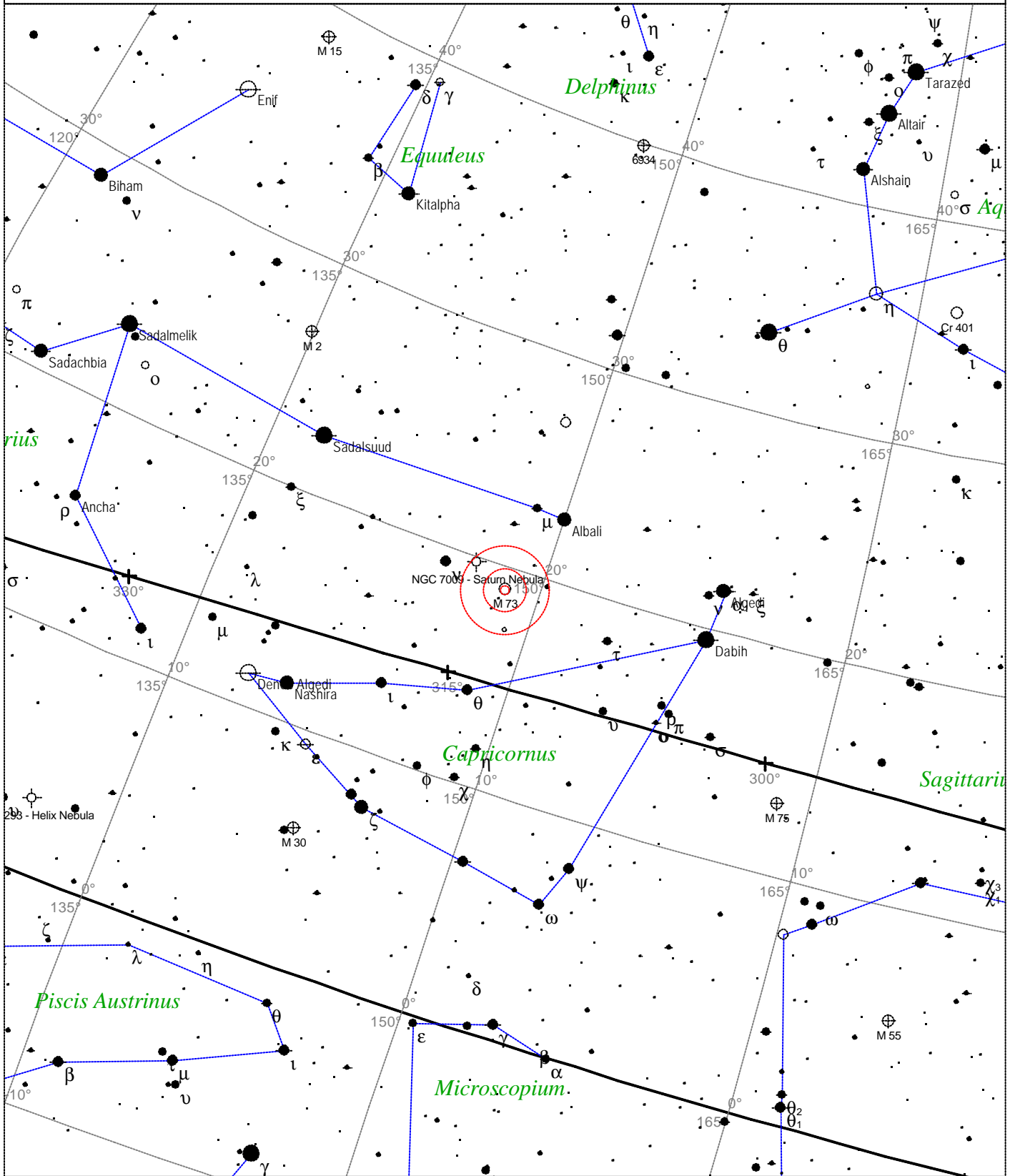
STARS		SYMBOLS			Messier 72 - Globular Cluster Magnitude: 9.3 Size: 5.1' Right ascension: 20h 53m 37s Declination: -12° 31' 37" Constellation: Aquarius
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 20h53m37s Dec: -12° 31' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 73 - Open cluster



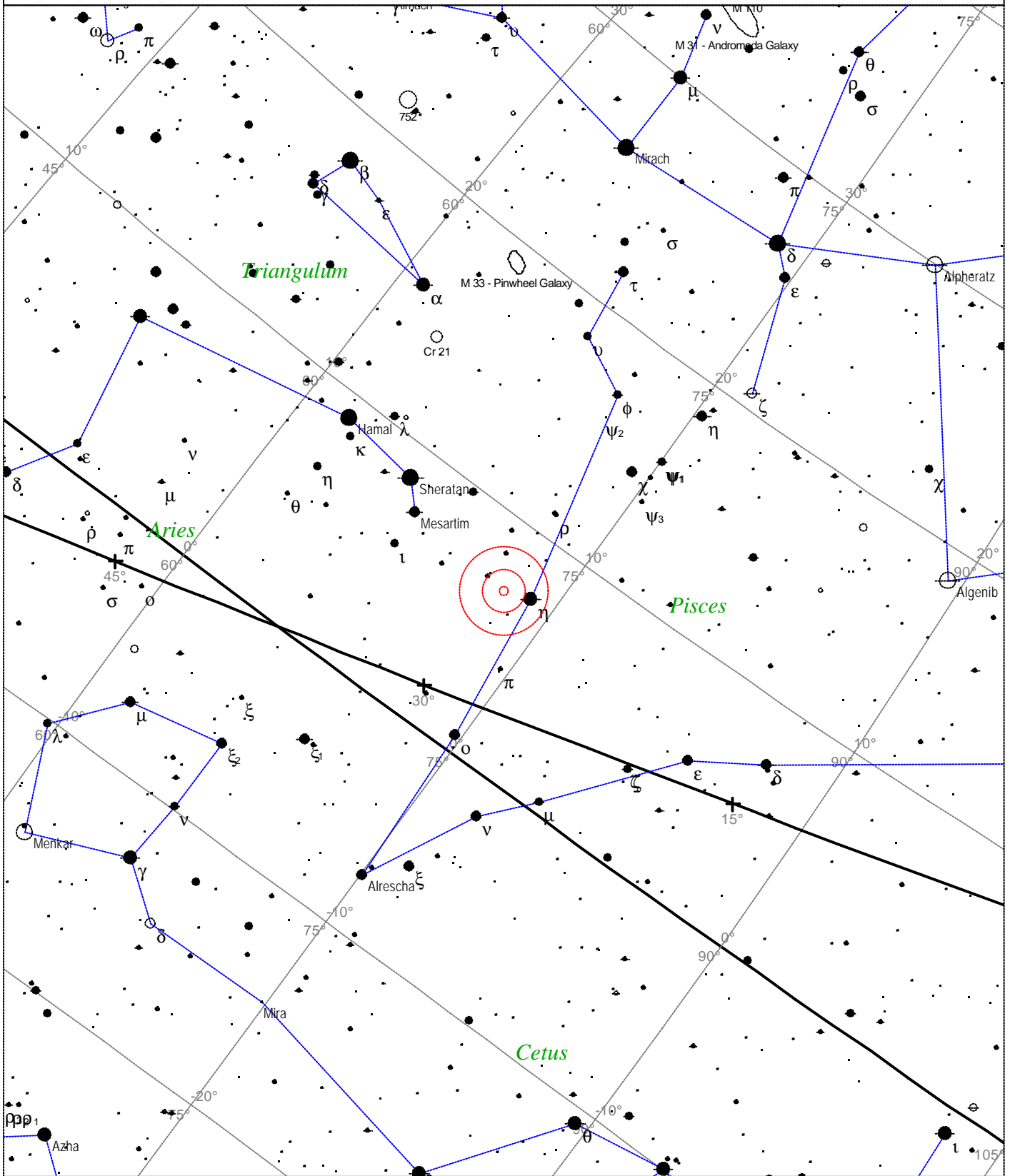
STARS	SYMBOLS			Messier 73 - Open cluster
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 8.9
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 2.8'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 20h 59m 5s
● 4.5	☾ Galaxy	♁ Planetary nebula		Declination: -12° 37' 30"
● 5	□ Bright nebula	☄ Quasar		Constellation: Aquarius
● 5.5				

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 20h59m05s Dec: -12° 37' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 74 - Galaxy



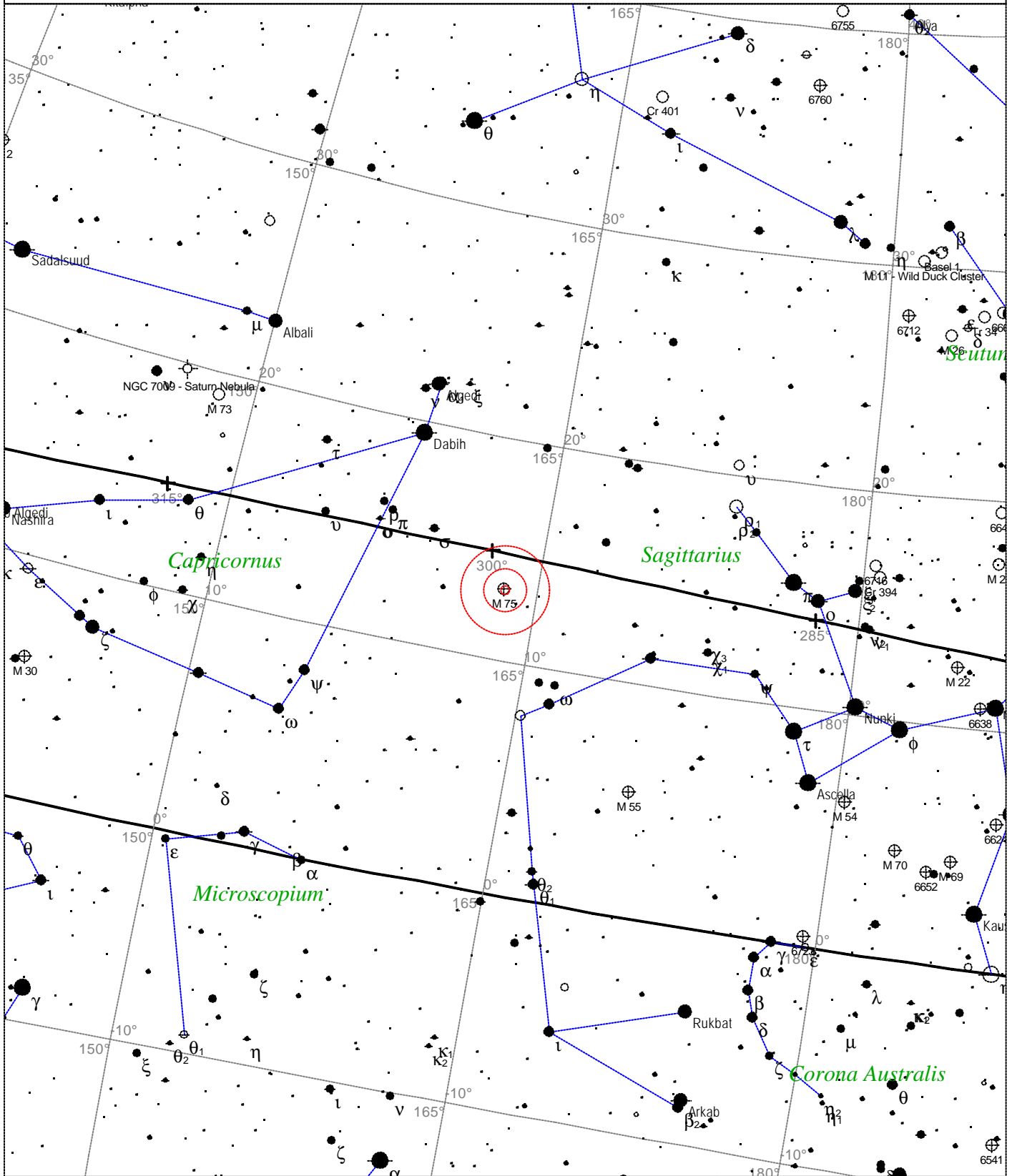
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 74 - Galaxy</i> <i>Magnitude: 9.8</i> <i>Surface brightness: 12.3 mag/sq arcmin</i> <i>Size: 10.0'x9.4'</i> <i>Position angle: 25°</i> <i>Right ascension: 1h 36m 50s</i> <i>Declination: +15° 47' 48"</i> <i>Constellation: Pisces</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 1h36m50s Dec: +15° 47' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 75 - Globular cluster



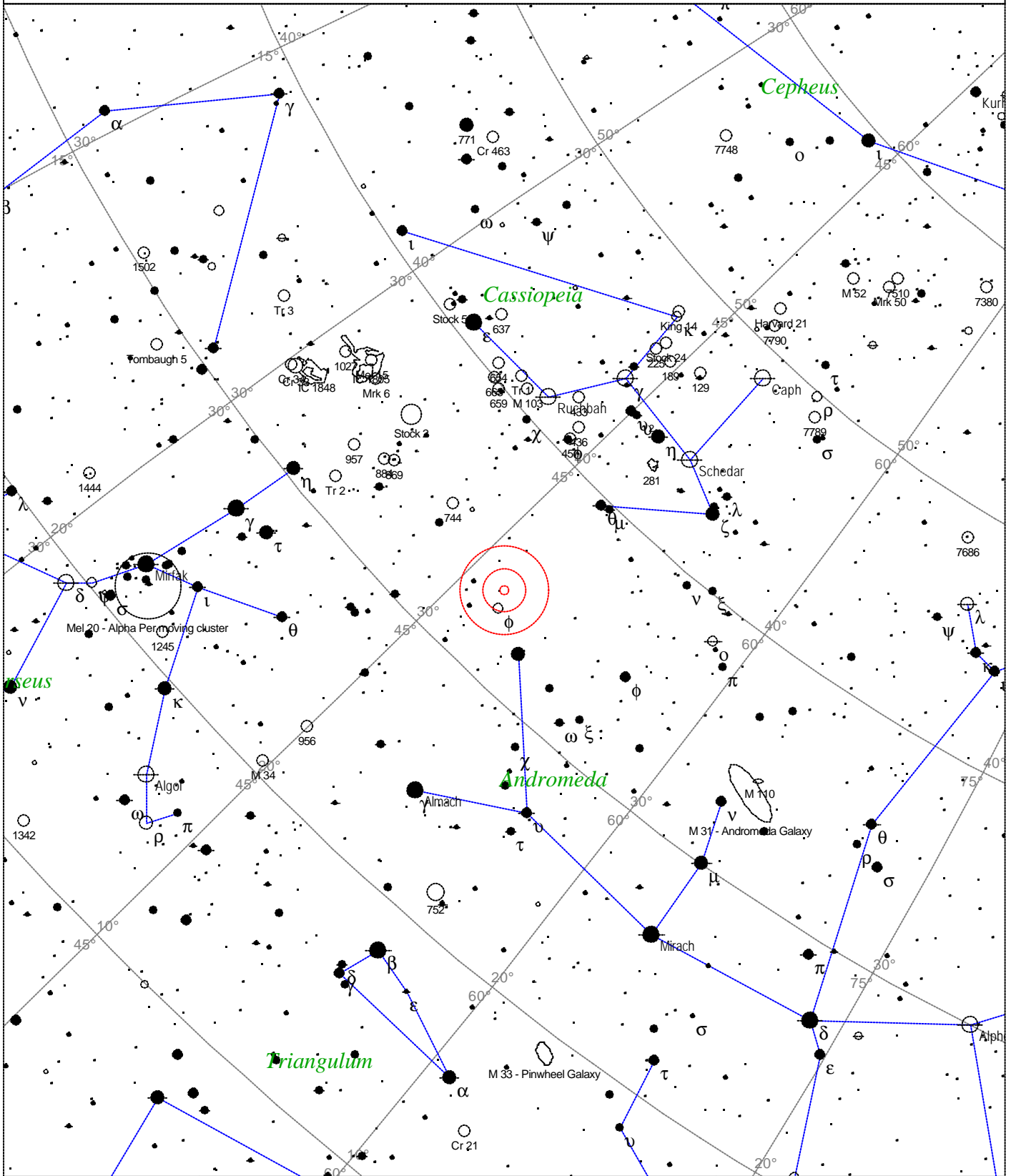
STARS		SYMBOLS			Messier 75 - Globular cluster Magnitude: 8.5 Size: 4.6' Right ascension: 20h 6m 14s Declination: -21° 54' 53" Constellation: Sagittarius
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	⊕ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 20h06m14s Dec: -21° 54' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

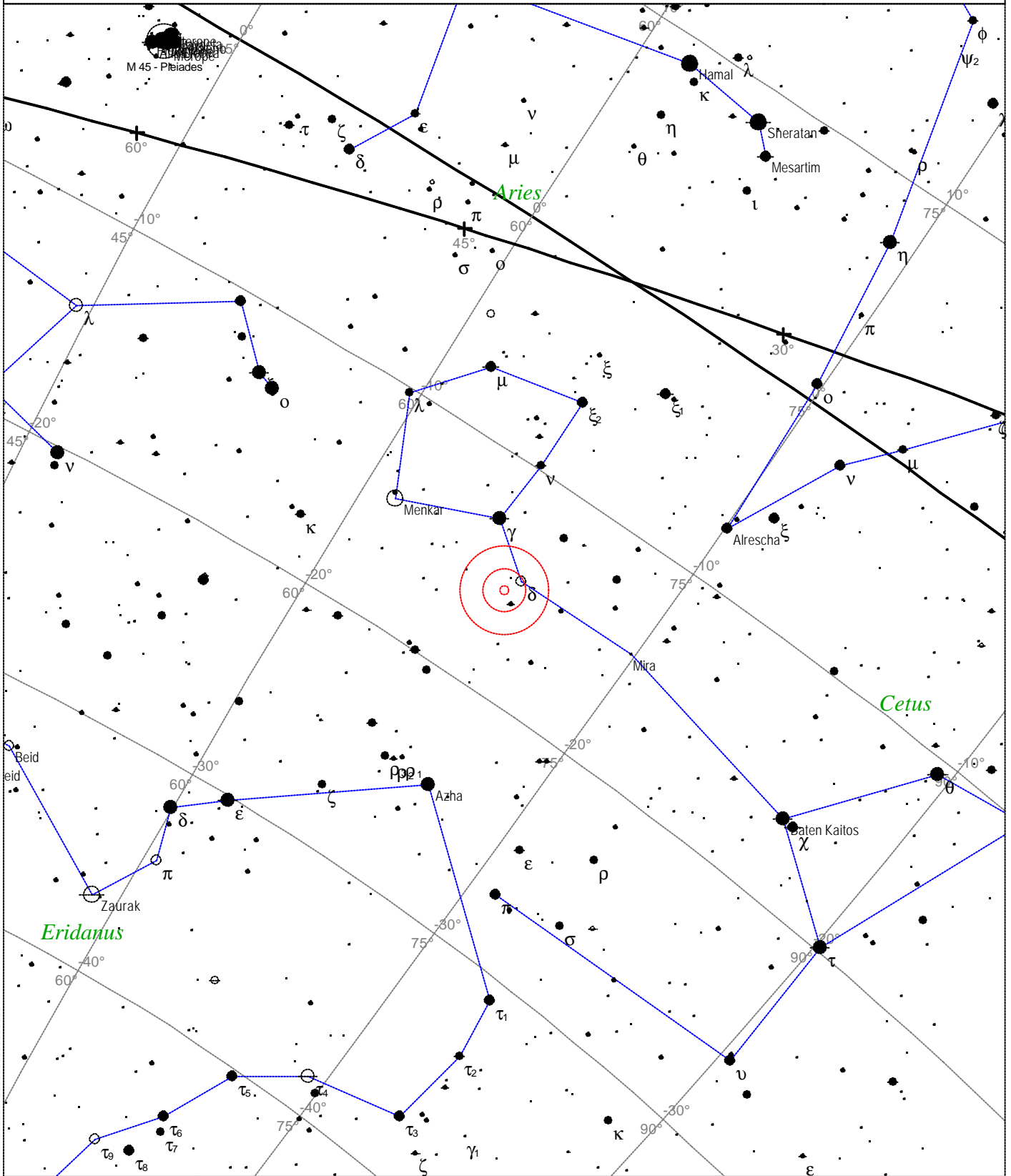
Messier 76 - Planetary nebula



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 76 - Planetary nebula Magnitude: 11.0 Size: 2.7'x1.8' Right ascension: 1h 42m 28s Declination: +51° 35' 41" Constellation: Perseus</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 1h42m29s Dec: +51° 34' Field: 45.0° Julian Day: 2452530.3196

Messier 77 - Galaxy



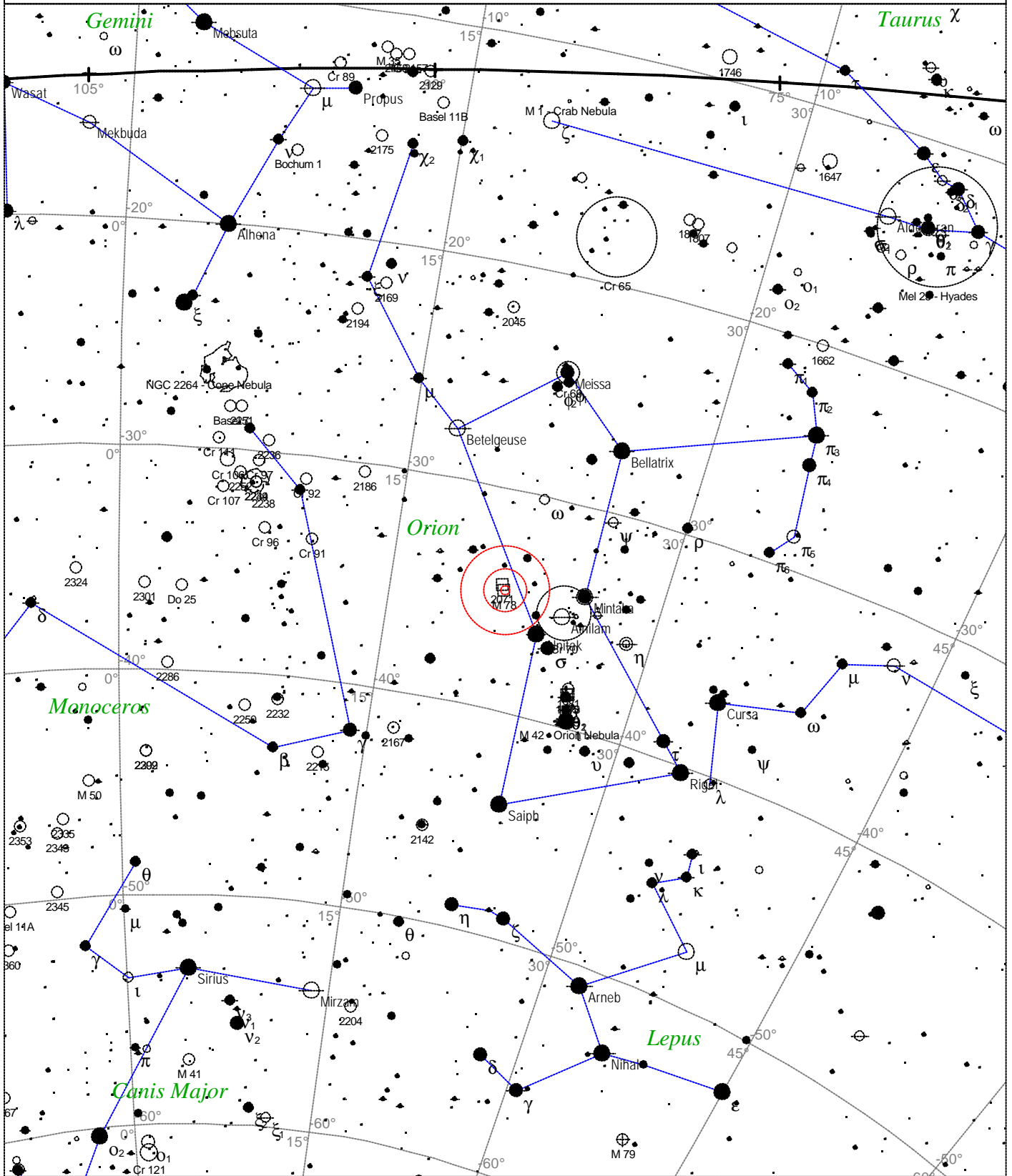
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 77 - Galaxy</i> <i>Magnitude: 9.7</i> <i>Surface brightness: 10.6 mag/sq arcmin</i> <i>Size: 7.3'x6.3'</i> <i>Position angle: 70°</i> <i>Right ascension: 2h 42m 49s</i> <i>Declination: -0° 0' 2"</i> <i>Constellation: Cetus</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 2h42m49s Dec: -0° 00' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 78 - Bright nebula



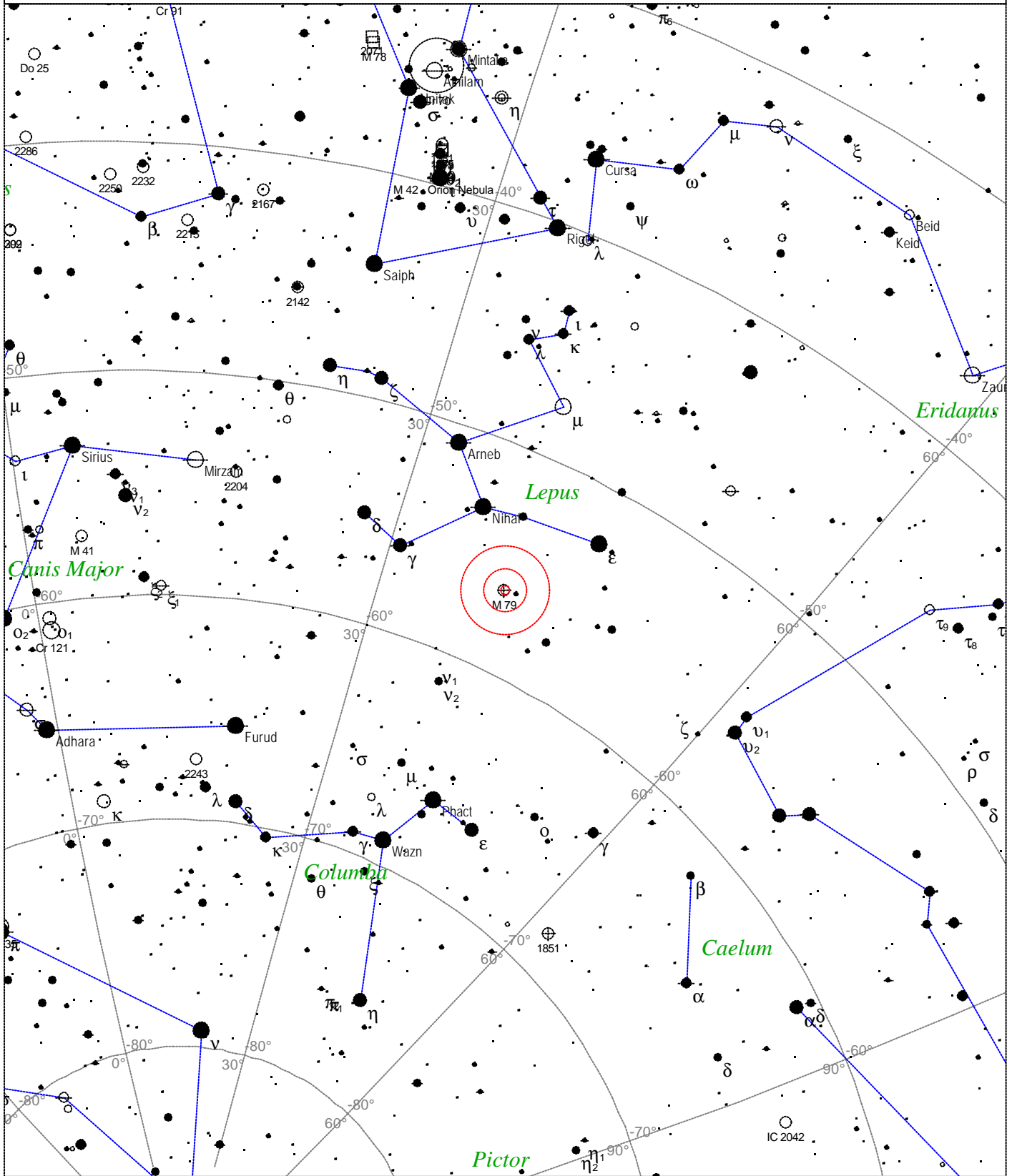
STARS	SYMBOLS			Messier 78 - Bright nebula
● <3	● Multiple star	◻ Dark nebula	△ Radio source	Magnitude: 8.0
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Size: 8.0'
● 4	☄ Comet	○ Open cluster	○ Other object	Right ascension: 5h 46m 53s
● 4.5	☉ Galaxy	♁ Planetary nebula		Declination: +0° 4' 59"
● 5	◻ Bright nebula	☄ Quasar		Constellation: Orion
● 5.5				

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 5h46m53s Dec: +0° 04' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

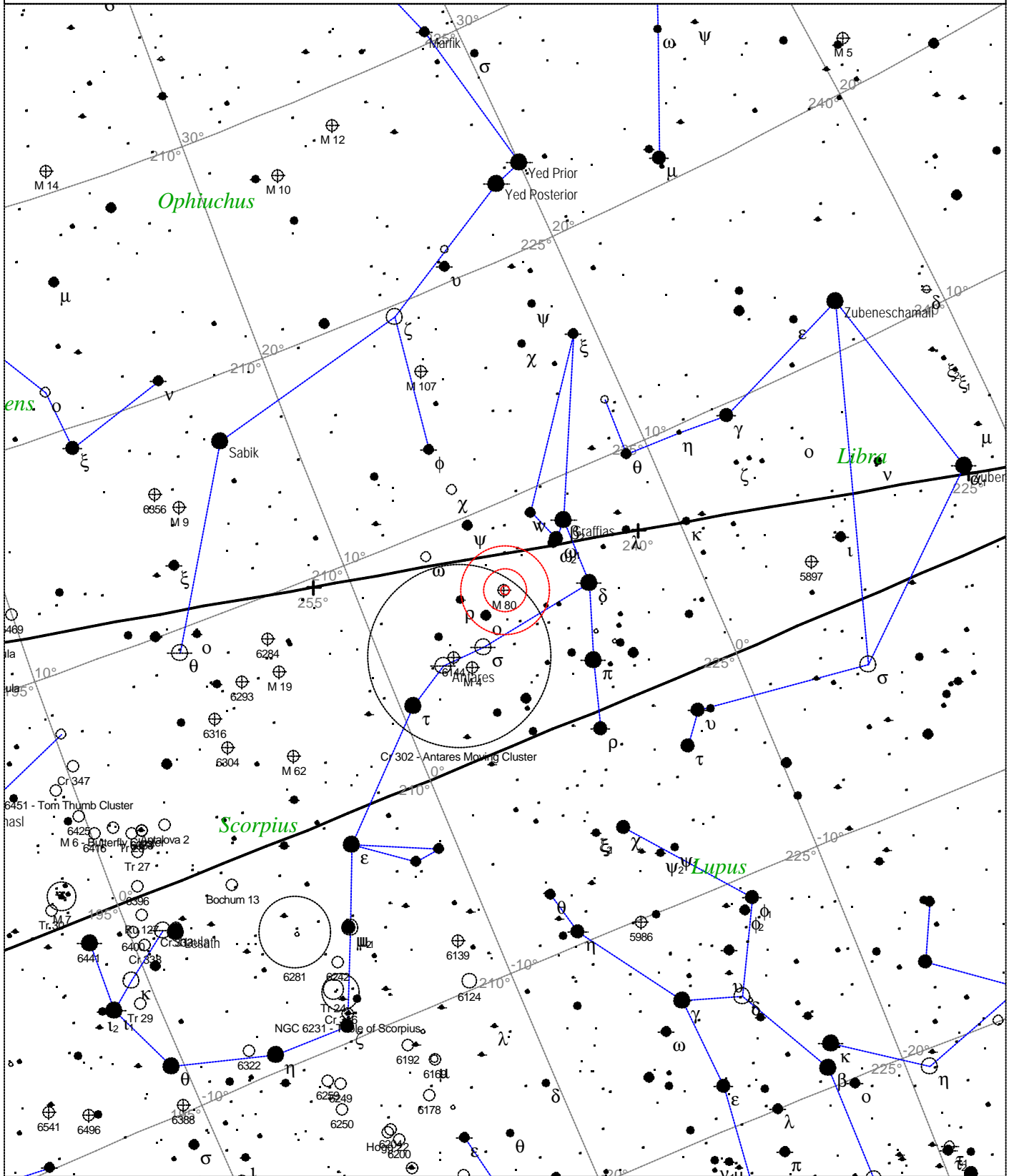
Messier 79 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 79 - Globular cluster Magnitude: 7.7 Size: 7.8' Right ascension: 5h 24m 16s Declination: -24° 31' 1" Constellation: Lepus</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 5h24m16s Dec: -24° 31' Field: 45.0° Julian Day: 2452530.3196

Messier 80 - Globular cluster



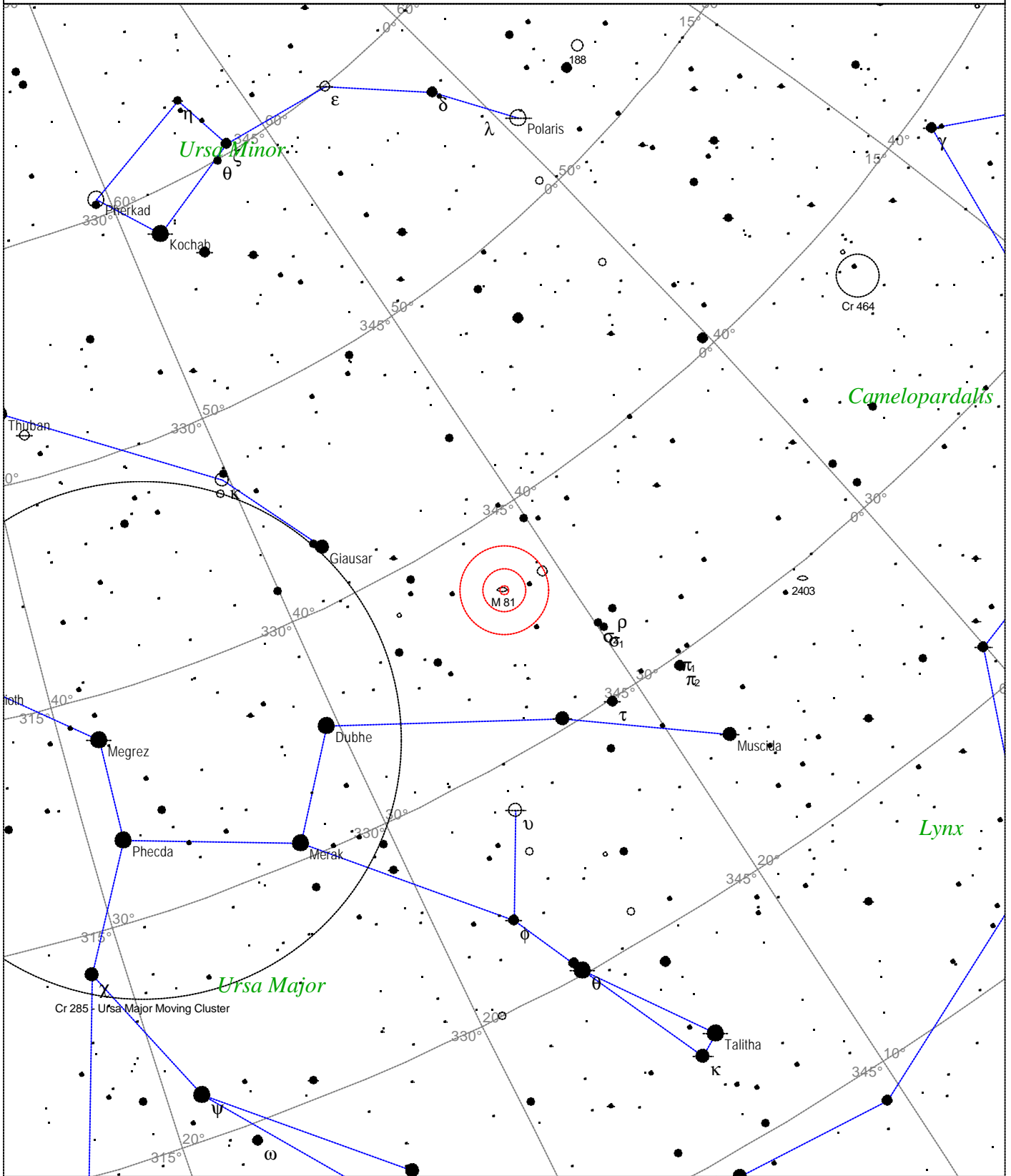
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☐ Galaxy ☐ Bright nebula ☐ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 80 - Globular cluster Magnitude: 7.3 Size: 5.1' Right ascension: 16h 17m 11s Declination: -22° 58' 53" Constellation: Scorpius</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 16h17m11s Dec: -22° 58' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 81 - Galaxy



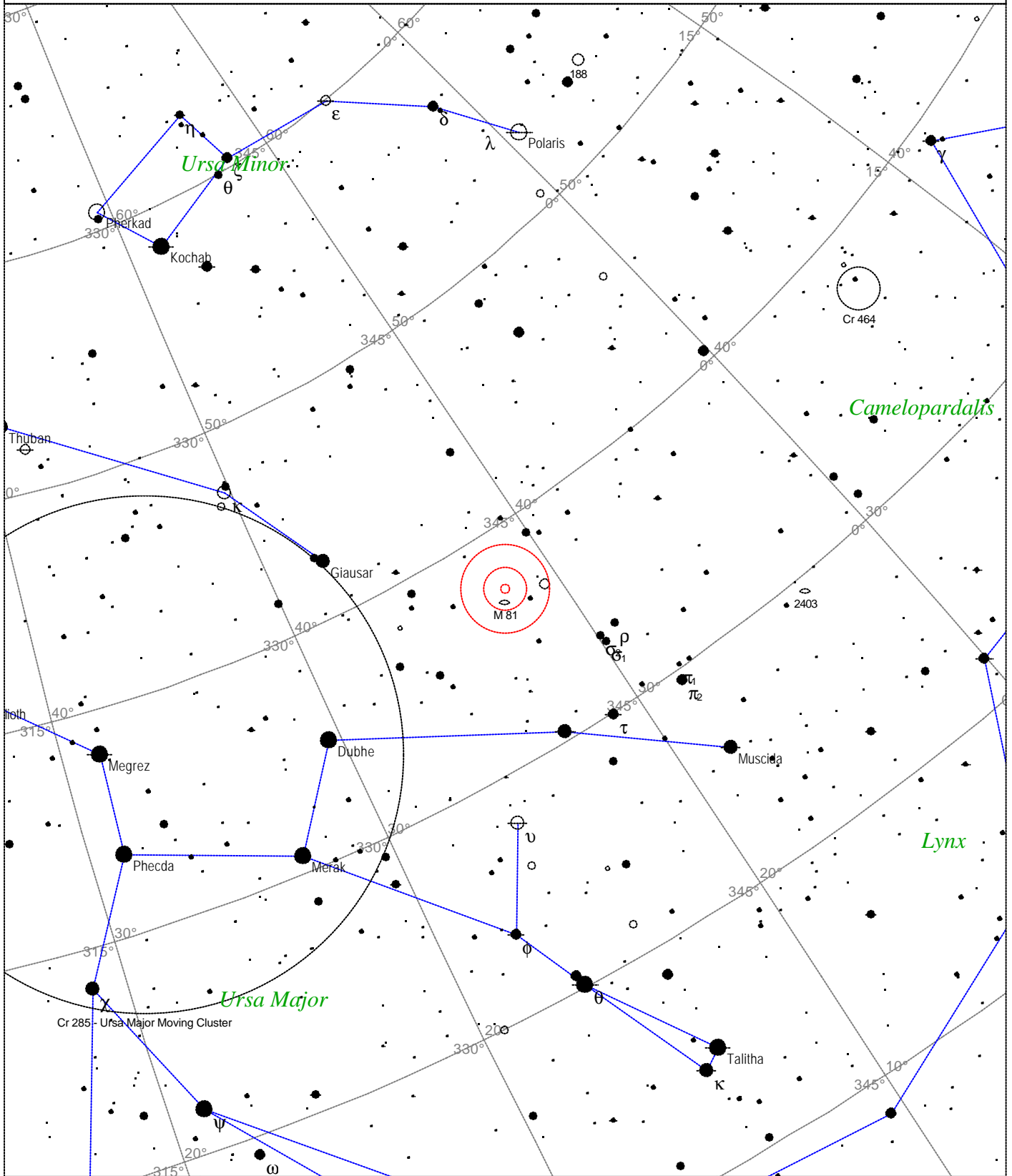
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 	<p><i>Messier 81 - Galaxy</i> <i>Magnitude: 7.8</i> <i>Surface brightness: 12.3 mag/sq arcmin</i> <i>Size: 24.9'x11.5'</i> <i>Position angle: 157°</i> <i>Right ascension: 9h 55m 42s</i> <i>Declination: +69° 3' 17"</i> <i>Constellation: Ursa Major</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 9h55m42s Dec: +69° 03' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

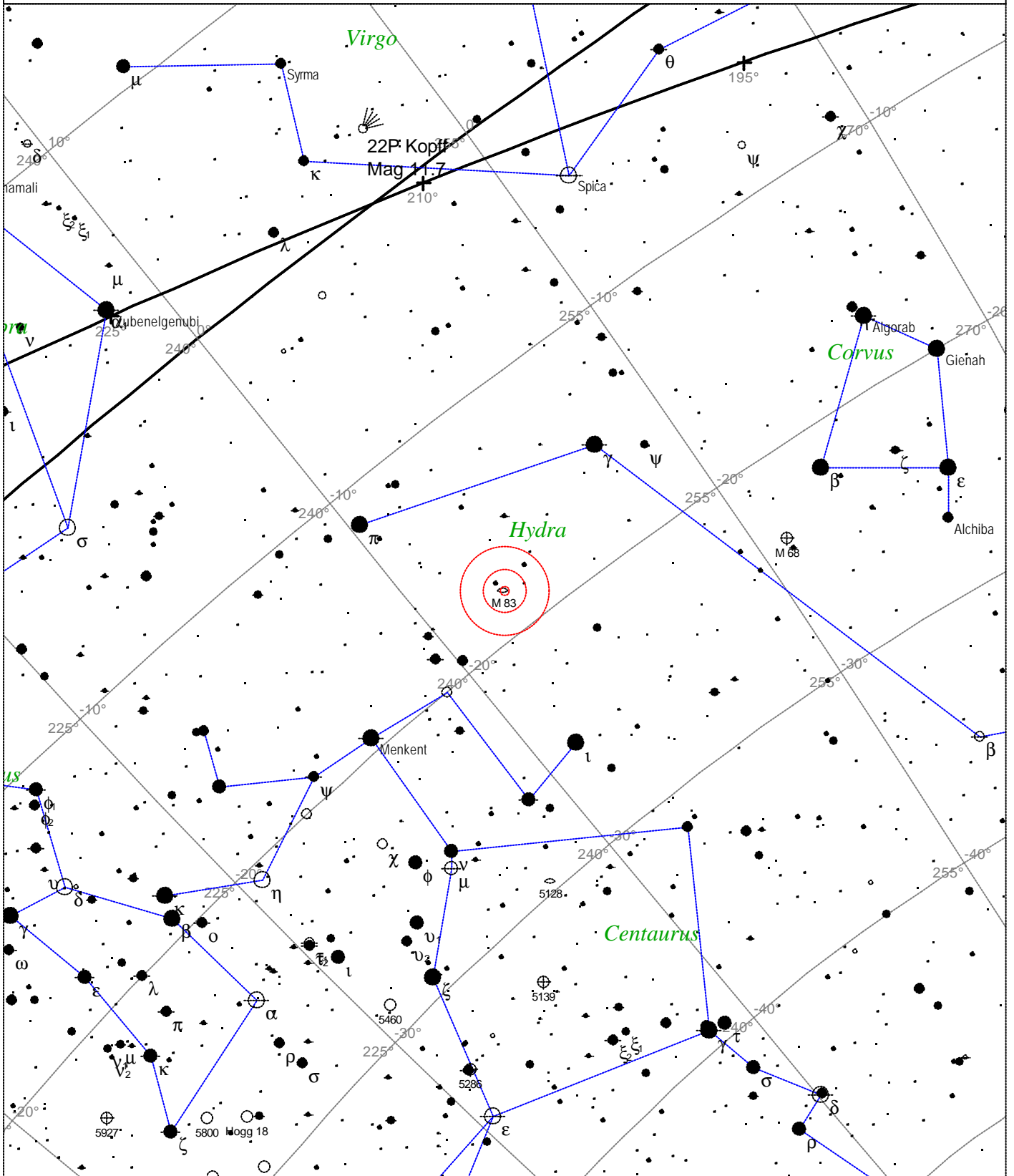
Messier 82 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 · 6 · 6.5 · >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 82 - Galaxy</i> <i>Magnitude: 9.2</i> <i>Surface brightness: 11.8 mag/sq arcmin</i> <i>Size: 10.5'x5.1'</i> <i>Position angle: 65°</i> <i>Right ascension: 9h 56m 3s</i> <i>Declination: +69° 40' 14"</i> <i>Constellation: Ursa Major</i></p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 9h56m03s Dec: +69° 40' Field: 45.0° Julian Day: 2452530.3196

Messier 83 - Galaxy



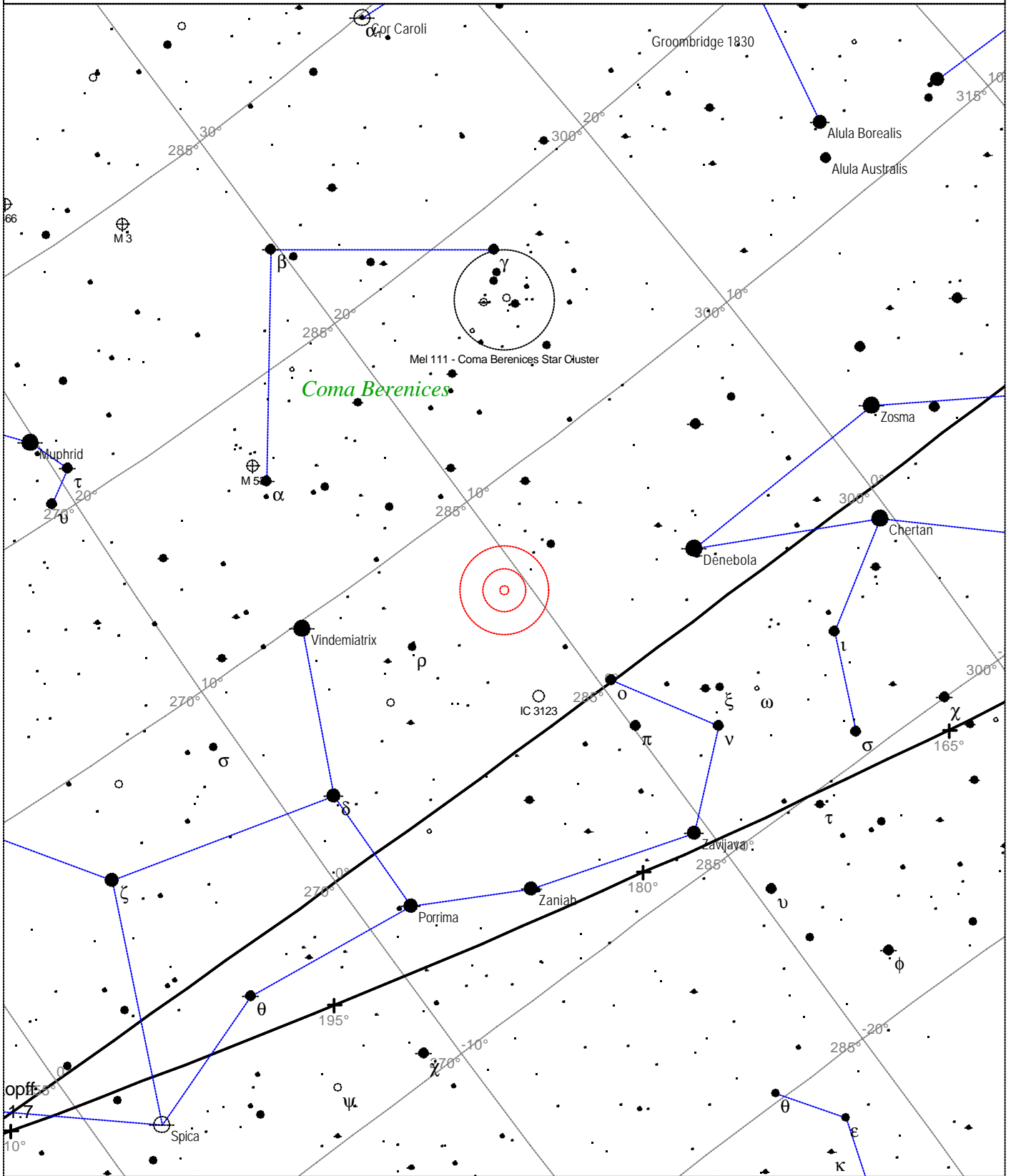
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source × X-ray source ○ Other object 	<p><i>Messier 83 - Galaxy</i> <i>Magnitude: 8.0</i> <i>Surface brightness: 12.6 mag/sq arcmin</i> <i>Size: 13.1'x12.2'</i> <i>Right ascension: 13h 37m 7s</i> <i>Declination: -29° 52' 47"</i> <i>Constellation: Hydra</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 13h37m07s Dec: -29° 52' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 84 - Galaxy



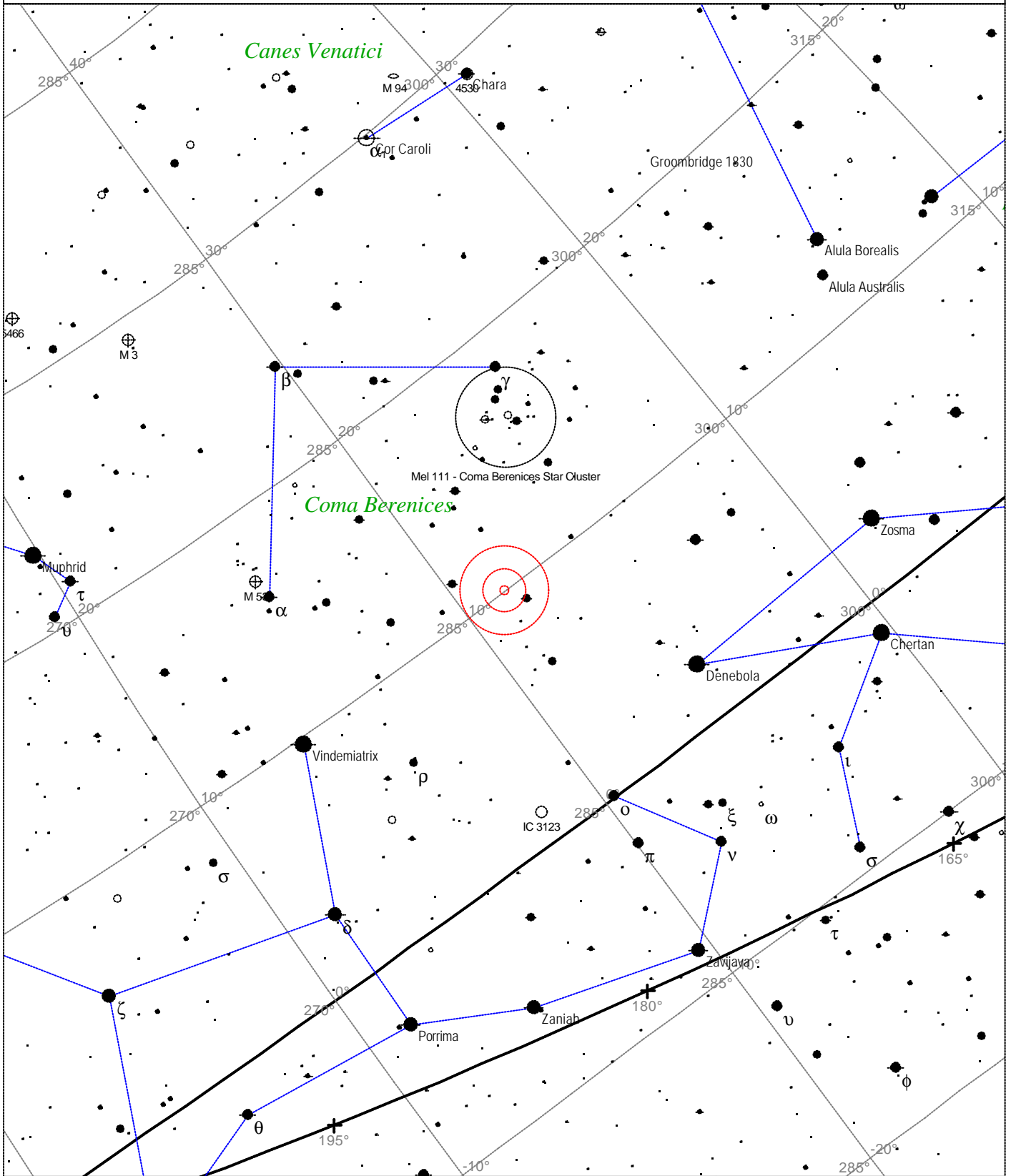
STARS		SYMBOLS			Messier 84 - Galaxy Magnitude: 10.2 Surface brightness: 11.8 mag/sq arcmin Size: 6.7'x6.0' Position angle: 135° Right ascension: 12h 25m 10s Declination: +12° 52' 32" Constellation: Virgo
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h25m10s Dec: +12° 52' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

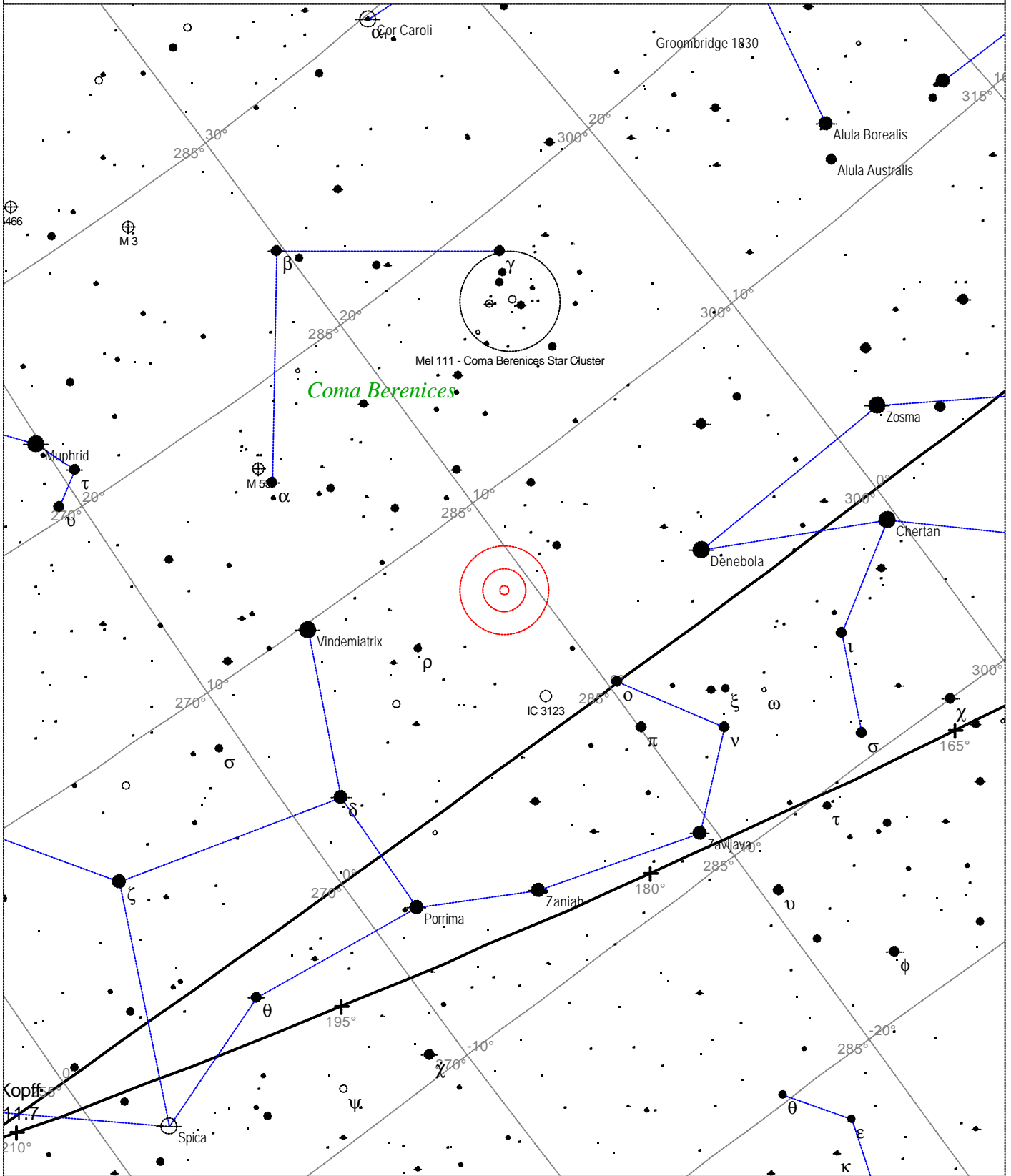
Messier 85 - Galaxy



STARS	SYMBOLS			Messier 85 - Galaxy
● <3	● Multiple star	□ Dark nebula	△ Radio source	Magnitude: 10.0
● 3.5	○ Variable star	⊕ Globular cluster	× X-ray source	Surface brightness: 11.8 mag/sq arcmin
● 4	☄ Comet	○ Open cluster	○ Other object	Size: 7.4'x5.9'
● 4.5	☉ Galaxy	♁ Planetary nebula		Position angle: 5°
● 5	□ Bright nebula	♁ Quasar		Right ascension: 12h 25m 30s
● 5.5				Declination: +18° 10' 47"
				Constellation: Coma Berenices

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h25m30s Dec: +18° 10' Field: 45.0° Julian Day: 2452530.3196

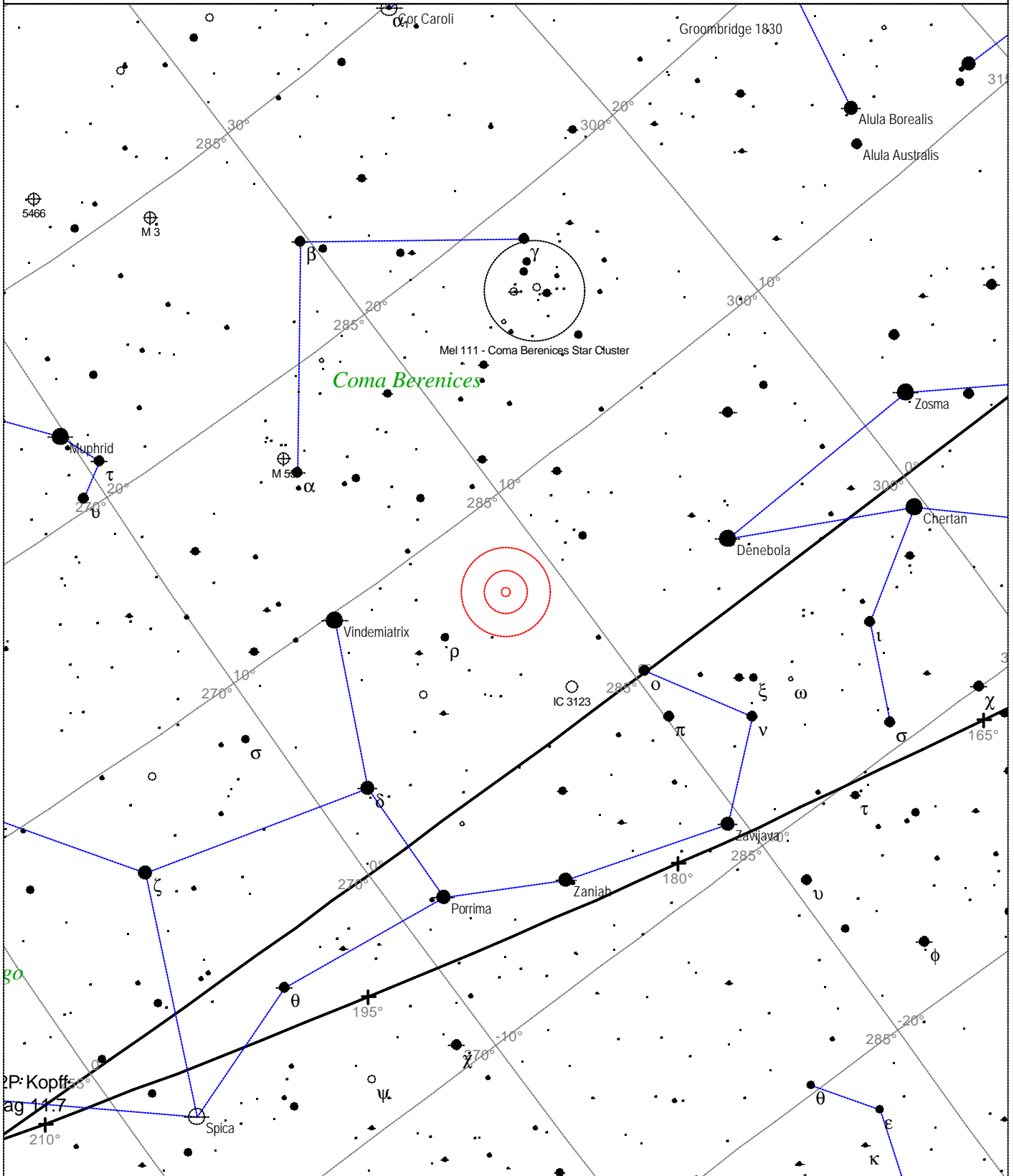
Messier 86 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 86 - Galaxy</i> <i>Magnitude: 9.9</i> <i>Surface brightness: 12.6 mag/sq arcmin</i> <i>Size: 9.8'x6.3'</i> <i>Position angle: 130°</i> <i>Right ascension: 12h 26m 18s</i> <i>Declination: +12° 56' 6"</i> <i>Constellation: Virgo</i></p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h26m18s Dec: +12° 56' Field: 45.0° Julian Day: 2452530.3196

Messier 87 - Galaxy



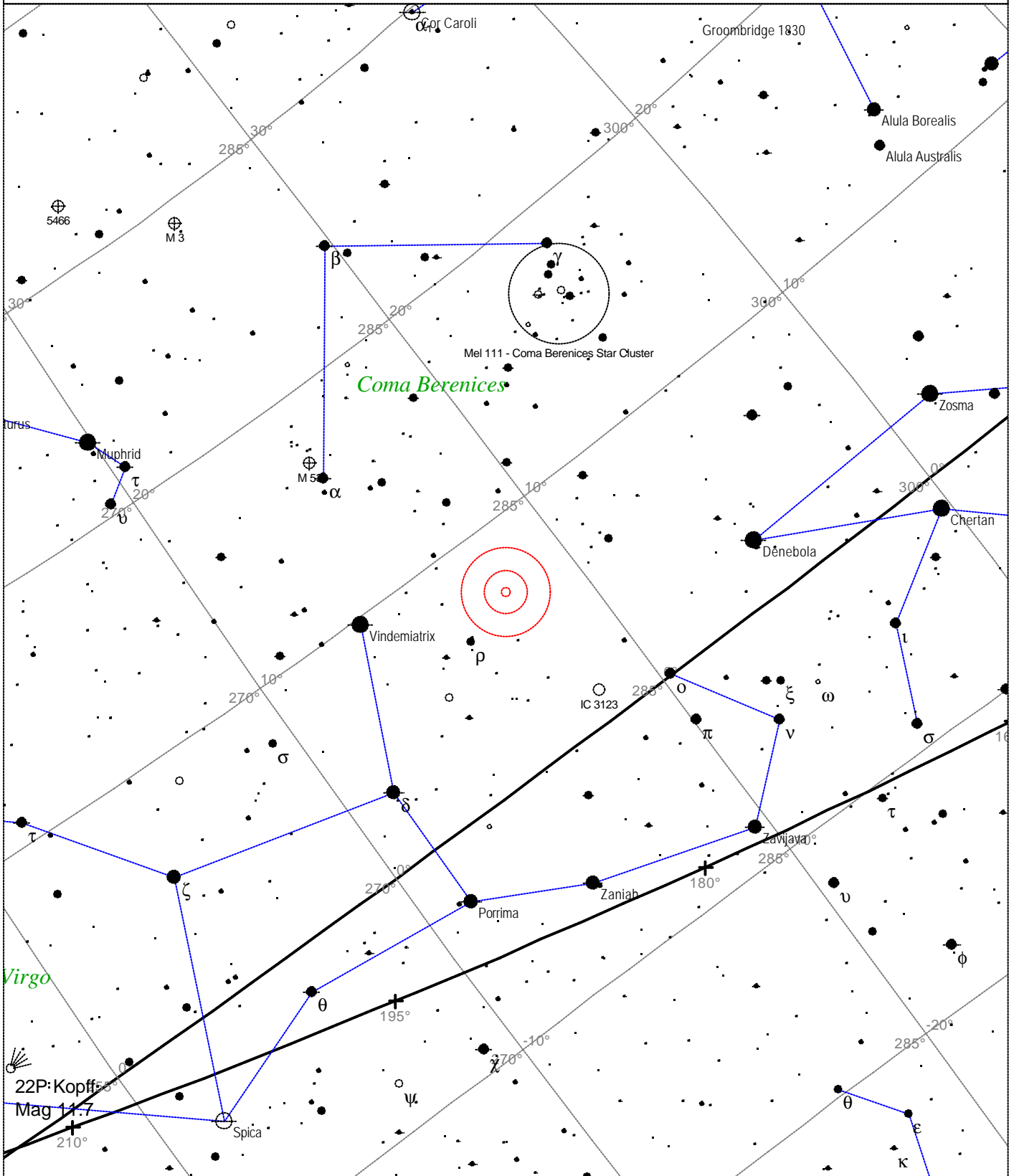
STARS		SYMBOLS			<i>Messier 87 - Galaxy</i> Magnitude: 9.6 Surface brightness: 12.4 mag/sq arcmin Size: 8.7'x6.6' Position angle: 170° Right ascension: 12h 30m 55s Declination: +12° 22' 45" Constellation: Virgo
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h30m55s Dec: +12° 22' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 89 - Galaxy



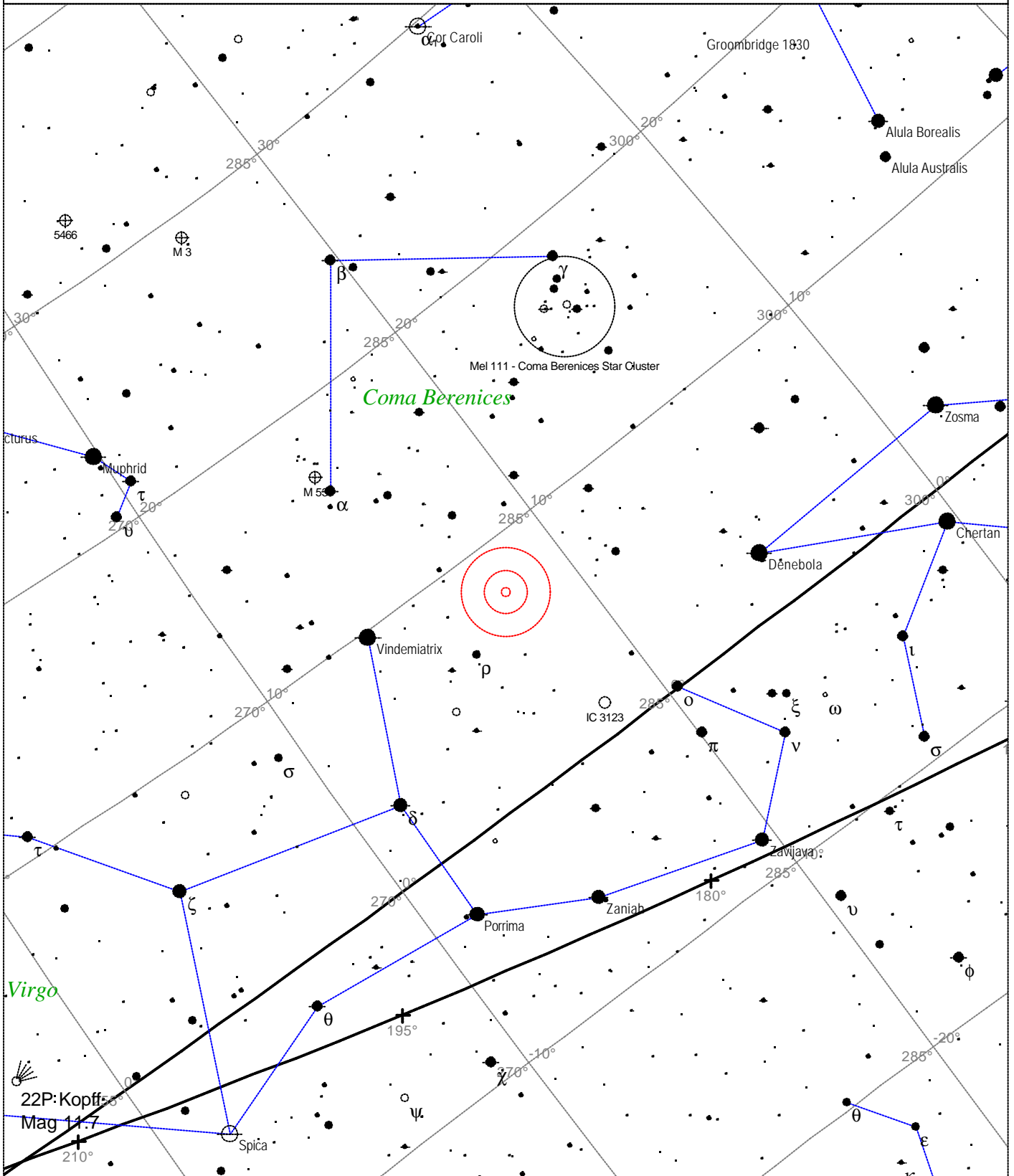
STARS		SYMBOLS			<i>Messier 89 - Galaxy</i> Magnitude: 10.9 Surface brightness: 11.4 mag/sq arcmin Size: 5.3'x4.8' Right ascension: 12h 35m 46s Declination: +12° 32' 42" Constellation: Virgo
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h35m46s Dec: +12° 32' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 90 - Galaxy



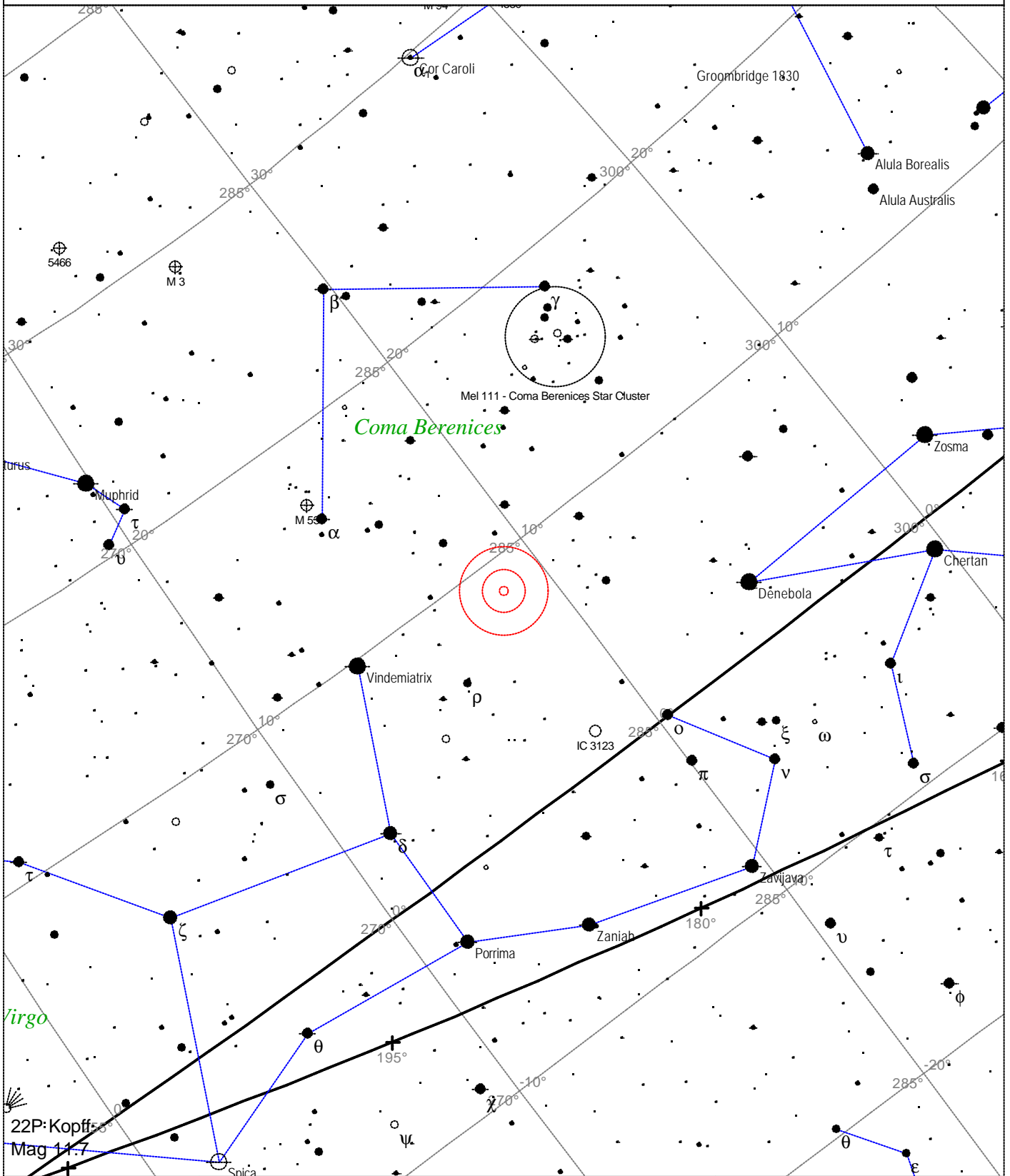
STARS		SYMBOLS			<i>Messier 90 - Galaxy</i> Magnitude: 10.2 Surface brightness: 13.1 mag/sq arcmin Size: 9.9'x4.4' Position angle: 23° Right ascension: 12h 36m 56s Declination: +13° 9' 10" Constellation: Virgo
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h36m56s Dec: +13° 09' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

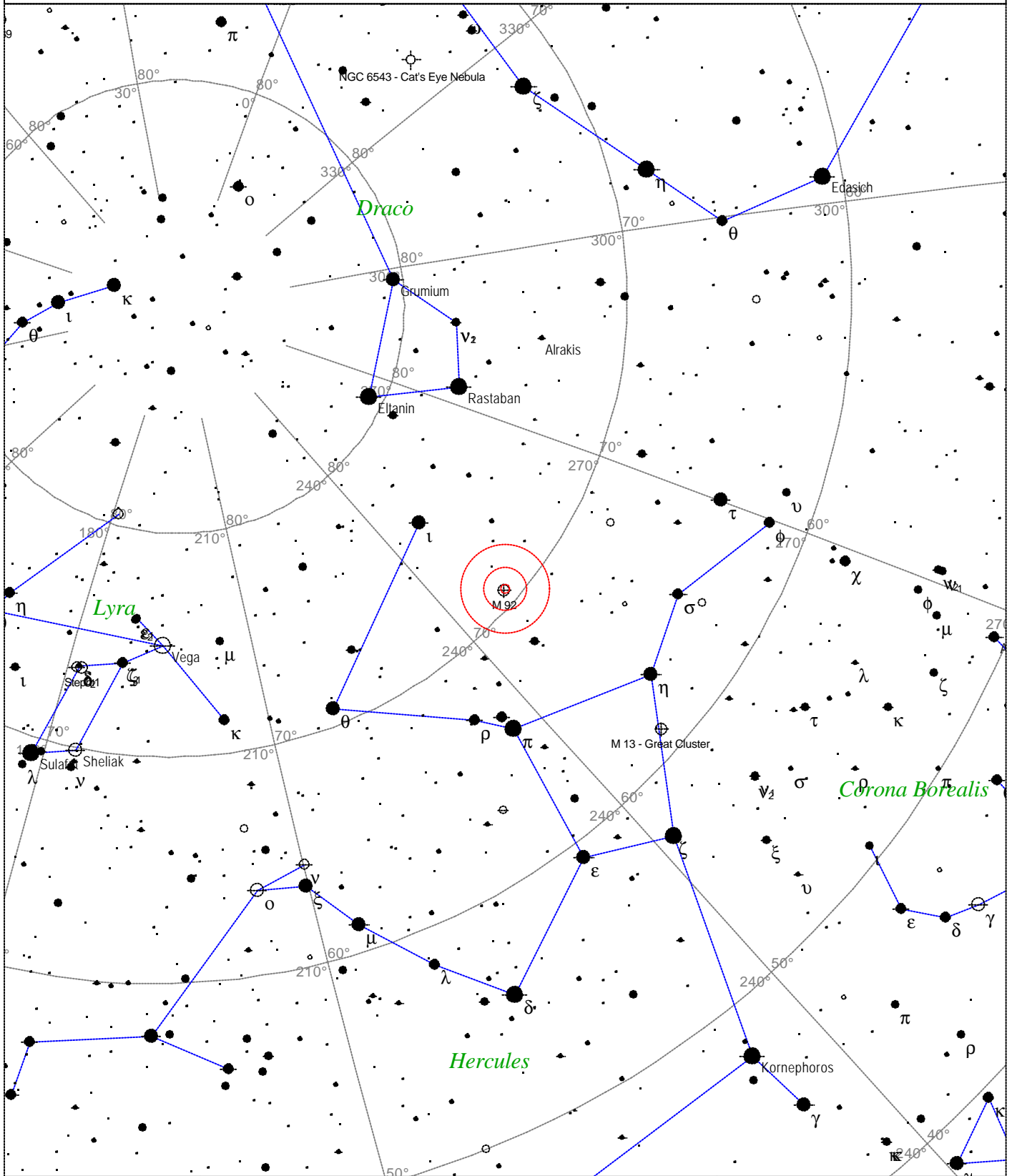
Messier 91 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p><i>Messier 91 - Galaxy</i> Magnitude: 10.9 Surface brightness: 13.4 mag/sq arcmin Size: 5.2'x4.2' Position angle: 150° Right ascension: 12h 35m 32s Declination: +14° 29' 7" Constellation: Coma Berenices*</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h35m32s Dec: +14° 29' Field: 45.0° Julian Day: 2452530.3196

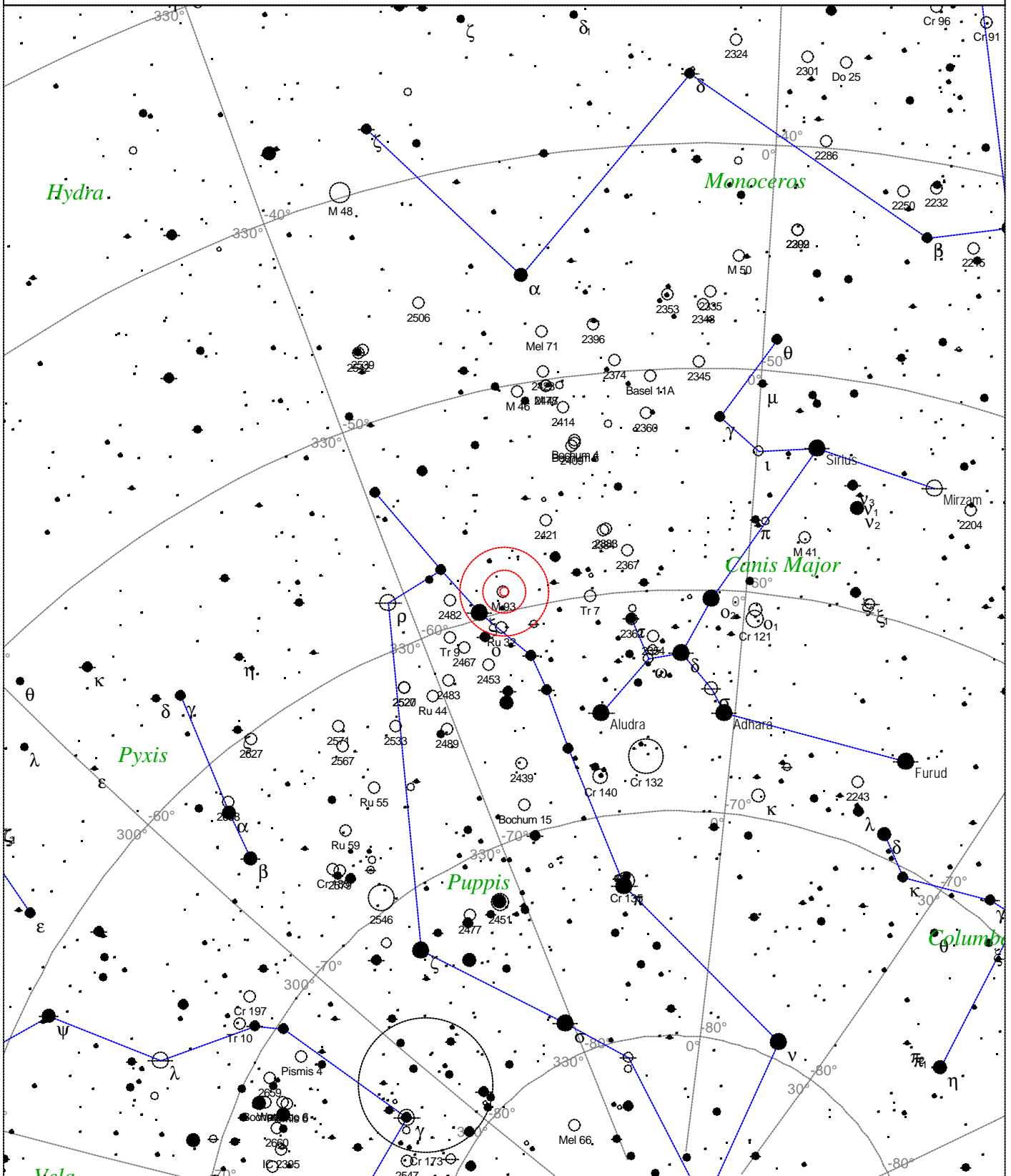
Messier 92 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar 	<p>SYMBOLS</p> <ul style="list-style-type: none"> △ Radio source ✕ X-ray source ○ Other object 	<p>Messier 92 - Globular cluster Magnitude: 6.4 Size: 12.2' Right ascension: 17h 17m 12s Declination: +43° 08' 18" Constellation: Hercules</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 17h17m12s Dec: +43° 08' 18" Field: 45.0° Julian Day: 2452530.3196

Messier 93 - Open cluster



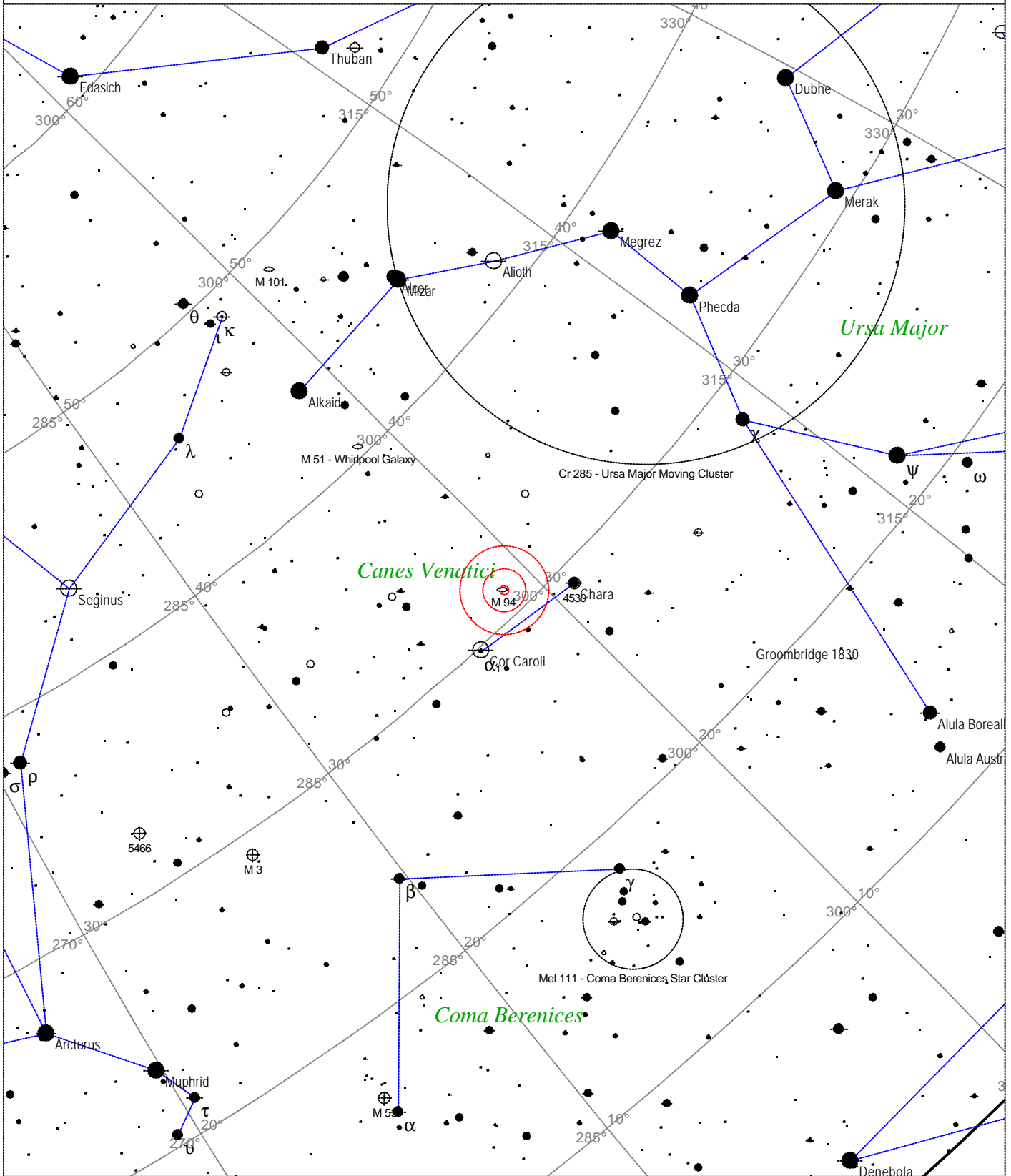
STARS		SYMBOLS			Messier 93 - Open cluster Magnitude: 6.2 Size: 22.0' Right ascension: 7h 44m 34s Declination: -23° 51' 16" Constellation: Puppis
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 7h44m34s Dec: -23° 51' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

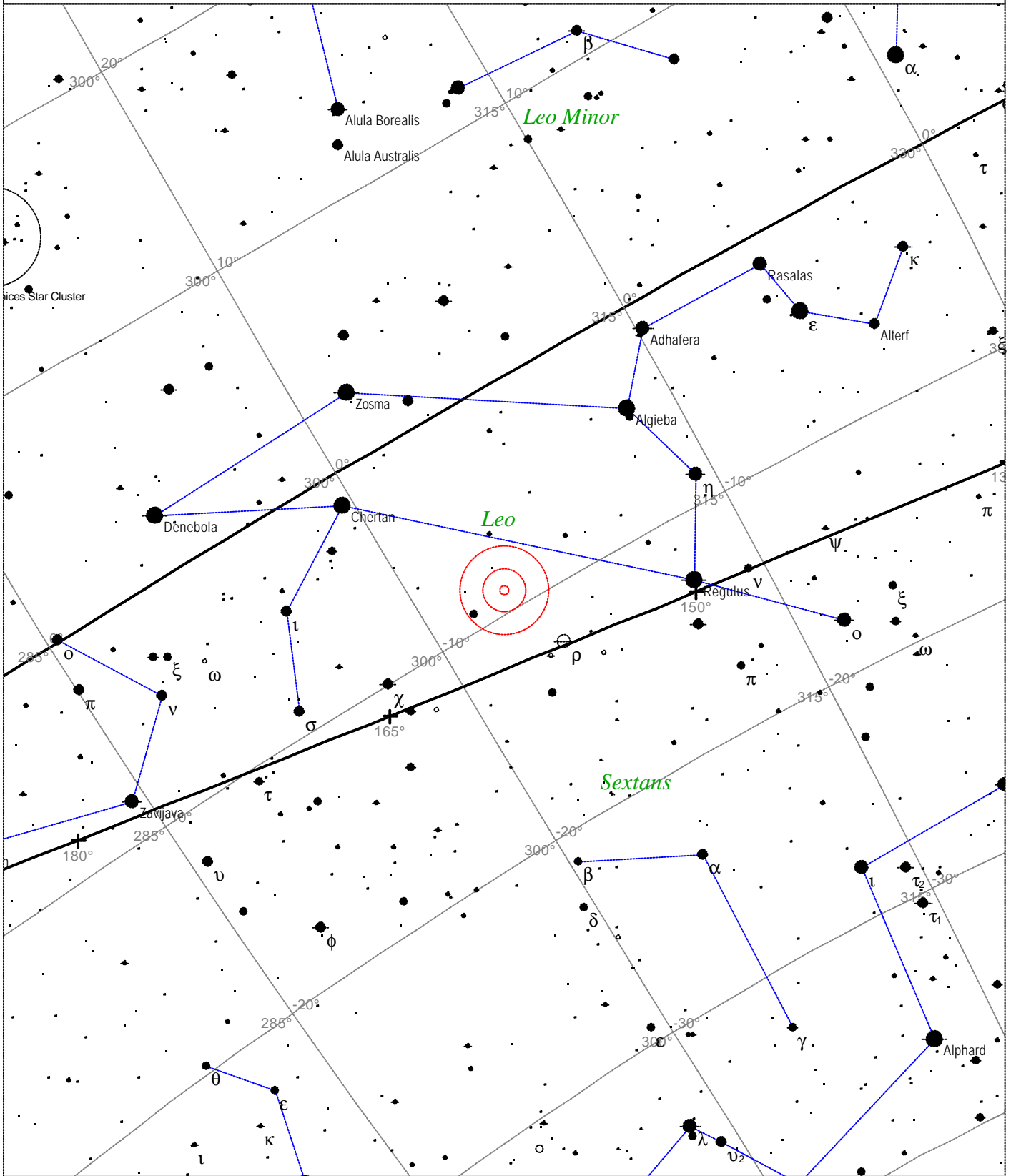
Messier 94 - Galaxy



STARS		SYMBOLS			<i>Messier 94 - Galaxy</i> Magnitude: 8.9 Surface brightness: 10.0 mag/sq arcmin Size: 12.3'x10.8' Position angle: 105° Right ascension: 12h 50m 58s Declination: +41° 6' 39" Constellation: Canes Venatici
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h50m58s Dec: +41° 06' Field: 45.0° Julian Day: 2452530.3196

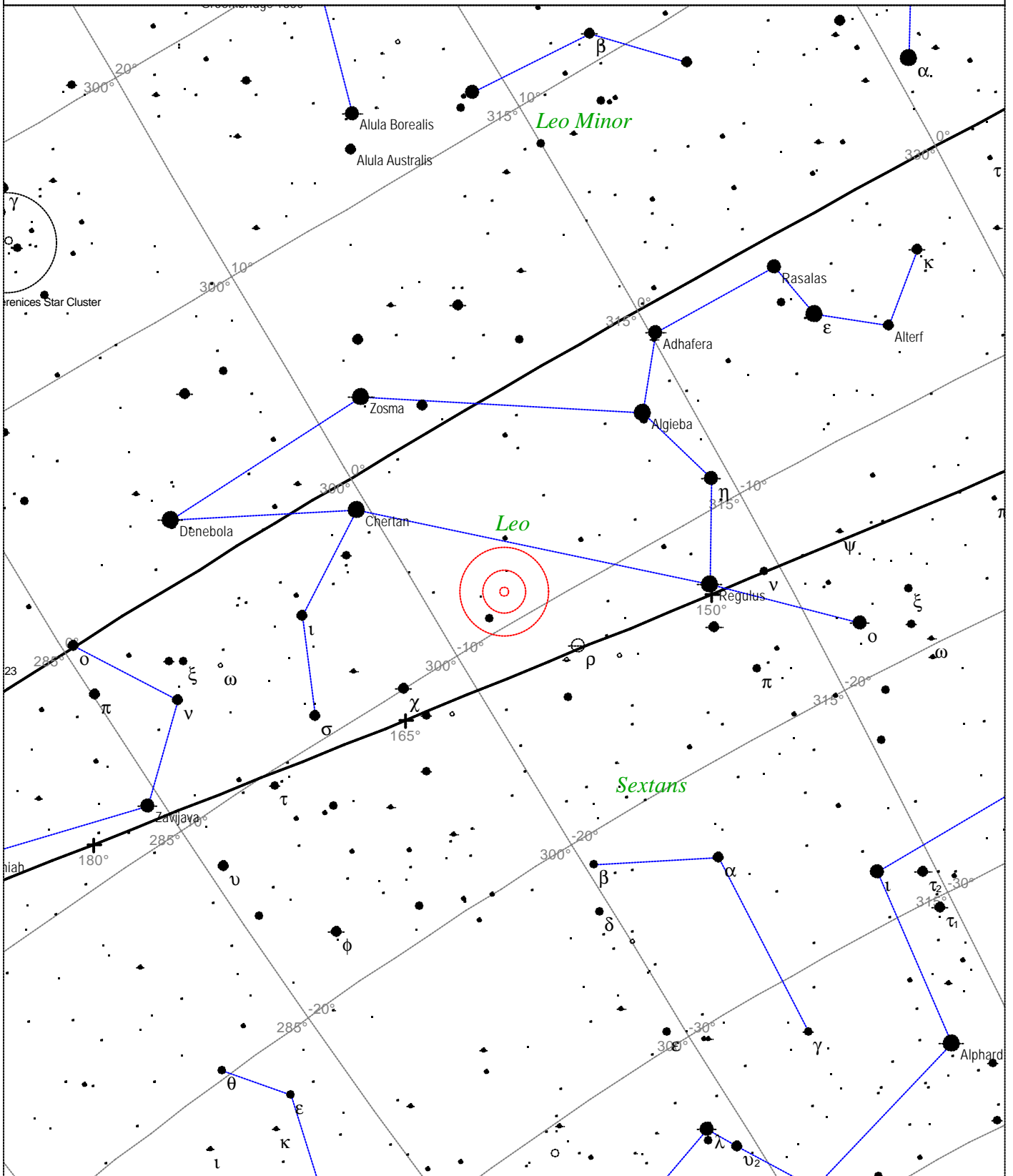
Messier 95 - Galaxy



STARS		SYMBOLS			<i>Messier 95 - Galaxy</i> Magnitude: 10.6 Surface brightness: 12.6 mag/sq arcmin Size: 7.3'x4.4' Position angle: 13° Right ascension: 10h 44m 4s Declination: +11° 41' 33" Constellation: Leo
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☄ Galaxy	⊕ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 10h44m04s Dec: +11° 41' Field: 45.0° Julian Day: 2452530.3196

Messier 96 - Galaxy



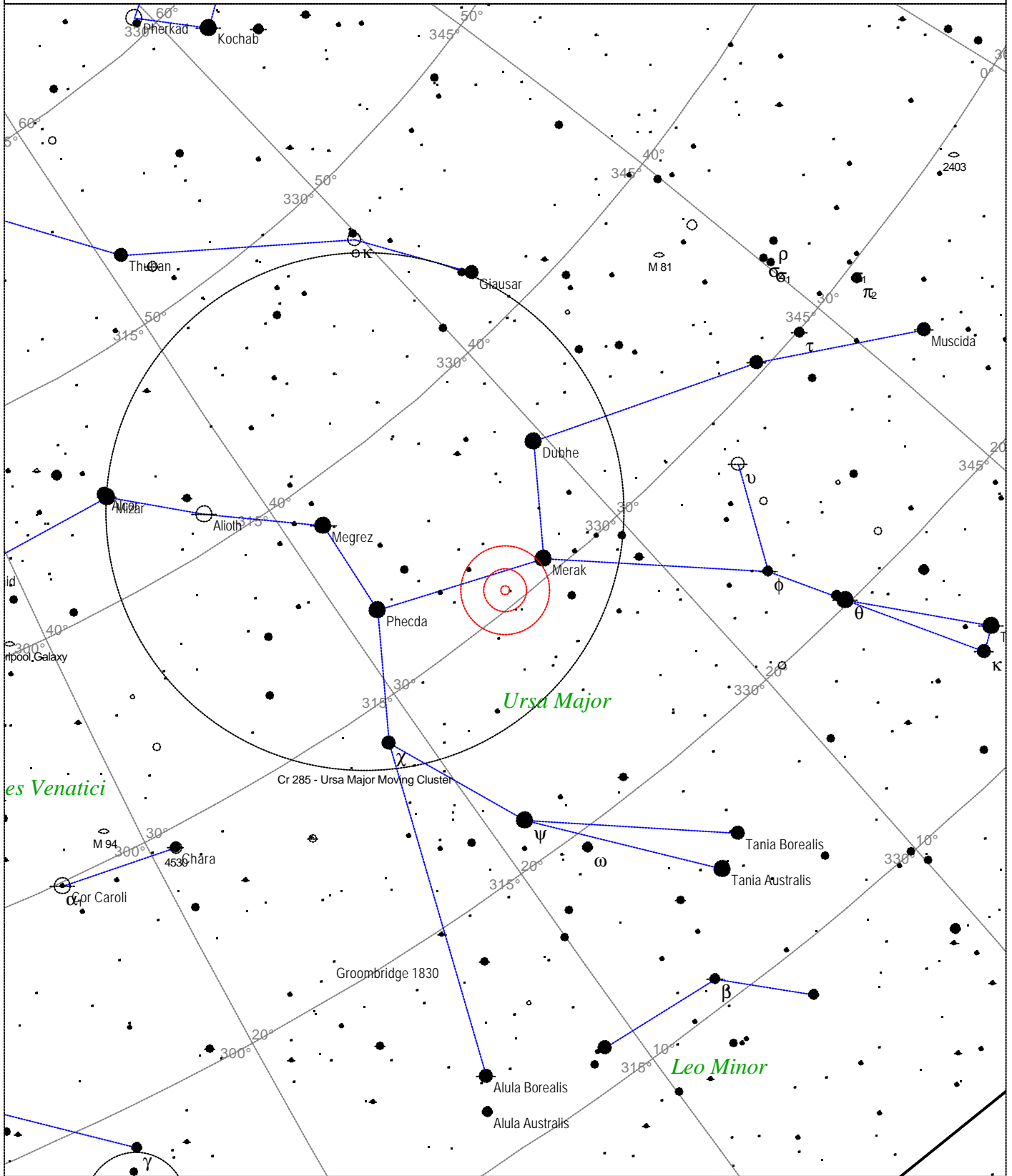
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☐ Galaxy ☐ Bright nebula ☐ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 96 - Galaxy</i> Magnitude: 10.1 Surface brightness: 12.4 mag/sq arcmin Size: 7.8'x5.2' Position angle: 5° Right ascension: 10h 46m 52s Declination: +11° 48' 33" Constellation: Leo</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 10h46m52s Dec: +11° 48' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 97 - Owl Nebula



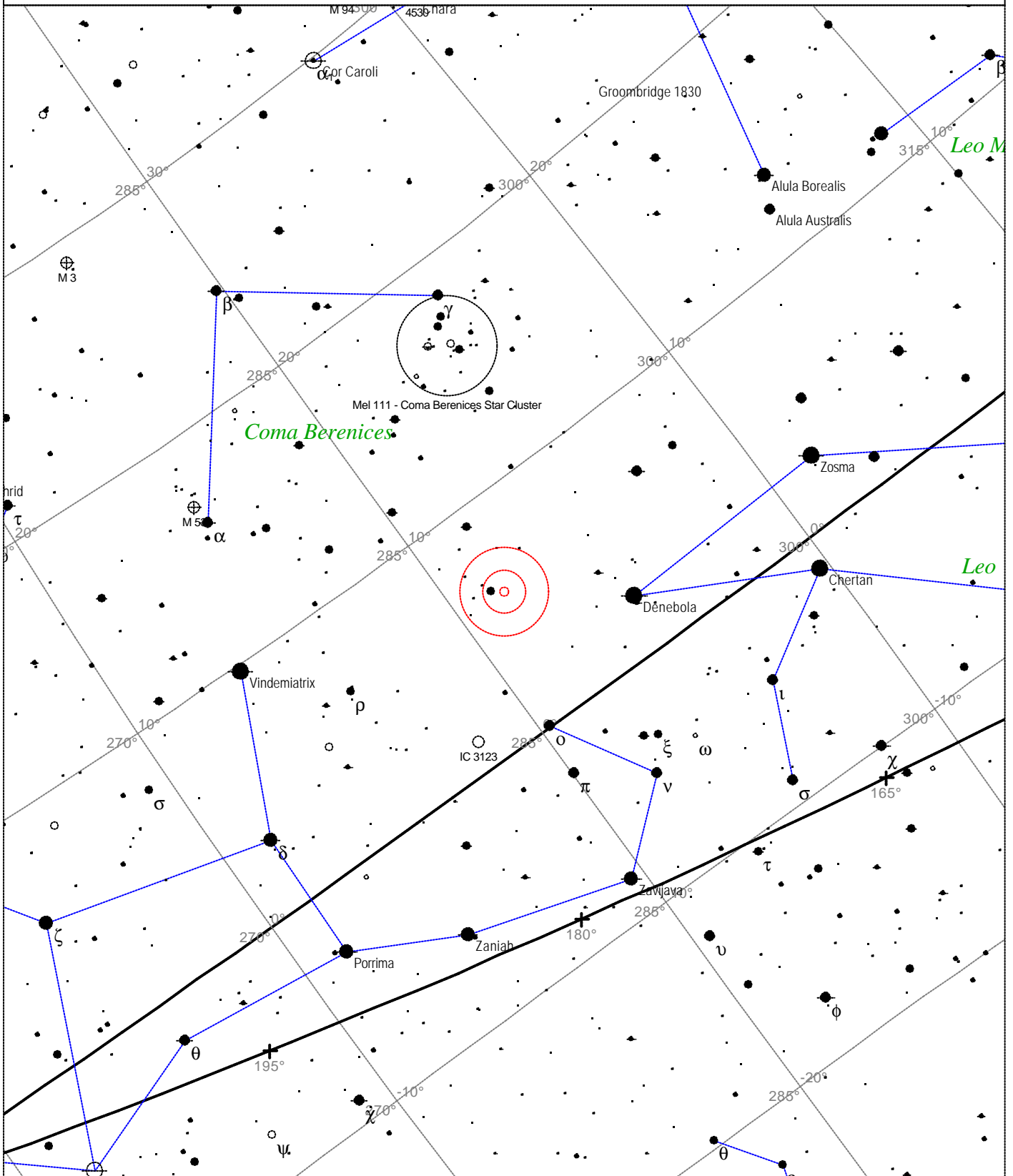
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula 	<p>SYMBOLS</p> <ul style="list-style-type: none"> □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 97 - Owl Nebula</i> Type of object: Planetary nebula Magnitude: 12.0 Size: 3.2' Right ascension: 11h 14m 54s Declination: +55° 0' 26" Constellation: Ursa Major</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 11h14m54s Dec: +55° 00' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 98 - Galaxy



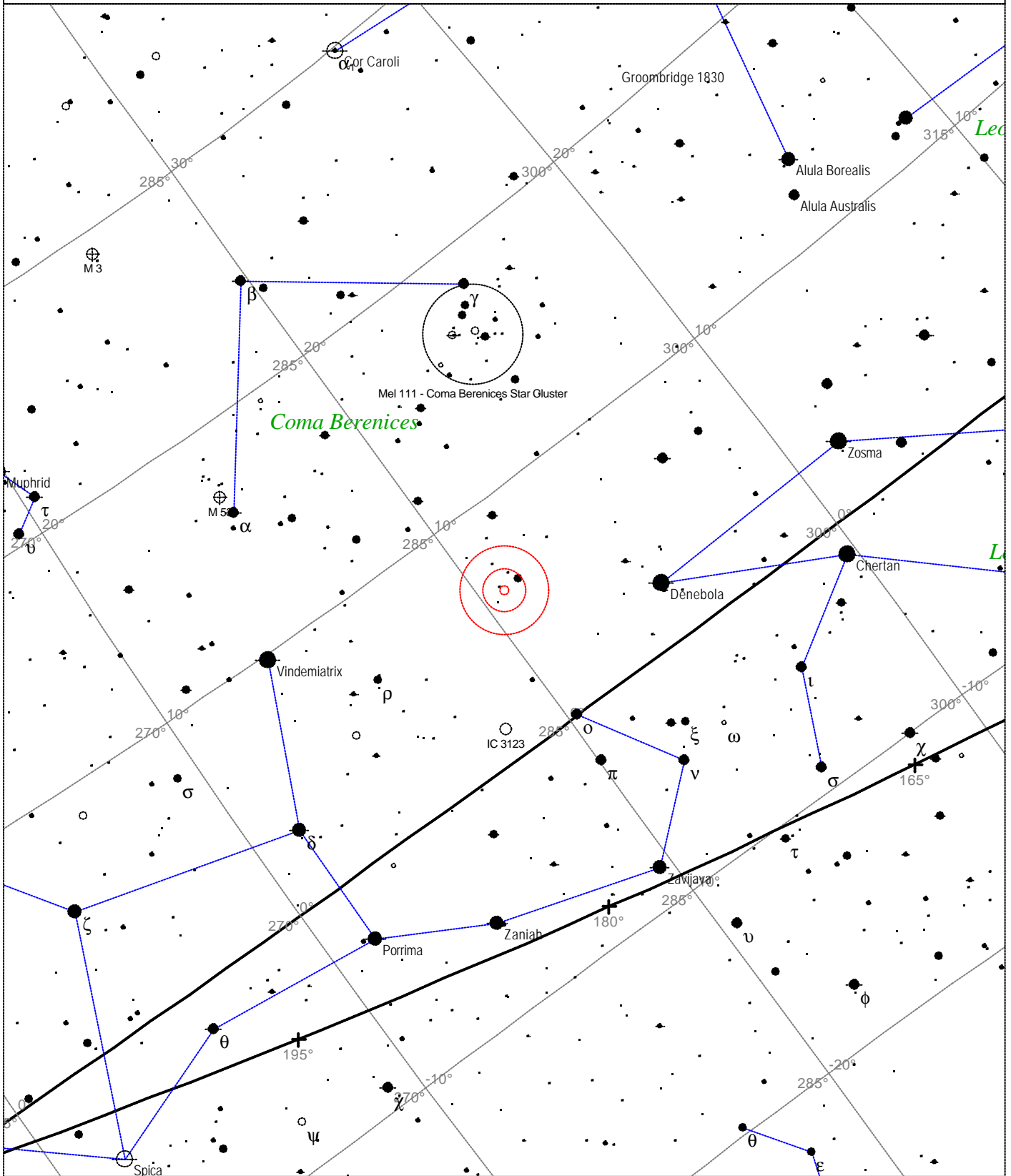
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 · 6 · 6.5 · >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 98 - Galaxy</i> <i>Magnitude: 10.9</i> <i>Surface brightness: 13.3 mag/sq arcmin</i> <i>Size: 9.4'x2.3'</i> <i>Position angle: 155°</i> <i>Right ascension: 12h 13m 54s</i> <i>Declination: +14° 53' 17"</i> <i>Constellation: Coma Berenices</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h13m54s Dec: +14° 53' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

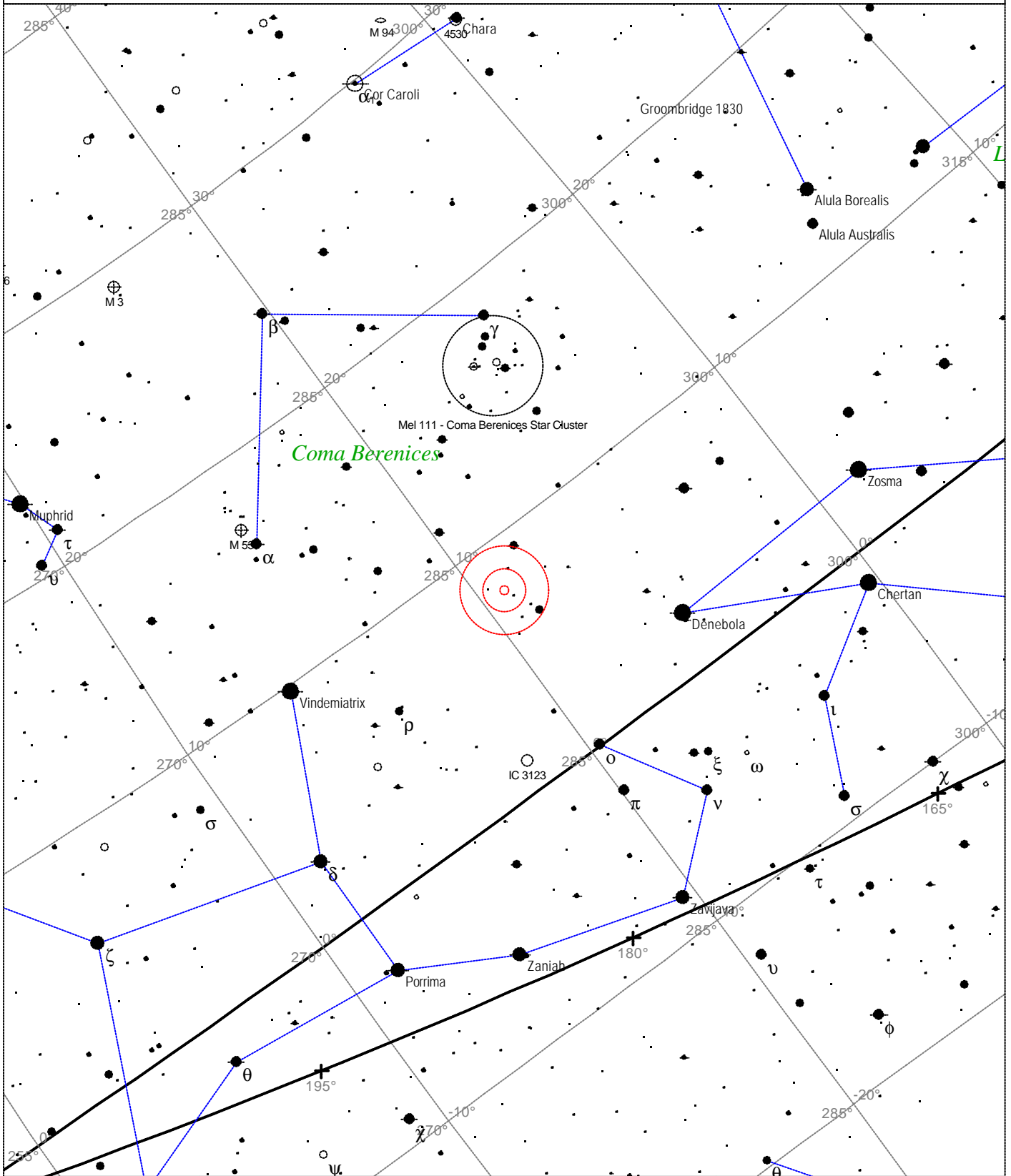
Messier 99 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source ✕ X-ray source ○ Other object 	<p><i>Messier 99 - Galaxy</i> <i>Magnitude: 10.4</i> <i>Surface brightness: 12.3 mag/sq arcmin</i> <i>Size: 5.3'x4.6'</i> <i>Position angle: 40°</i> <i>Right ascension: 12h 18m 55s</i> <i>Declination: +14° 24' 22"</i> <i>Constellation: Coma Berenices</i></p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h18m55s Dec: +14° 24' Field: 45.0° Julian Day: 2452530.3196

Messier 100 - Galaxy



STARS

- <3
- 3.5
- 4
- 4.5
- 5
- 5.5
- 6
- 6.5
- >7

SYMBOLS

- Multiple star
- Variable star
- ☄ Comet
- ☾ Galaxy
- Bright nebula
- Dark nebula
- ⊕ Globular cluster
- Open cluster
- ♁ Planetary nebula
- ⊞ Quasar
- △ Radio source
- × X-ray source
- Other object

Messier 100 - Galaxy
 Magnitude: 10.1
 Surface brightness: 13.2 mag/sq arcmin
 Size: 7.5'x6.1'
 Position angle: 30°
 Right ascension: 12h 23m 1s
 Declination: +15° 48' 41"
 Constellation: Coma Berenices

Local Time: 19:40:11 12-Sep-2002

UTC: 19:40:11 12-Sep-2002

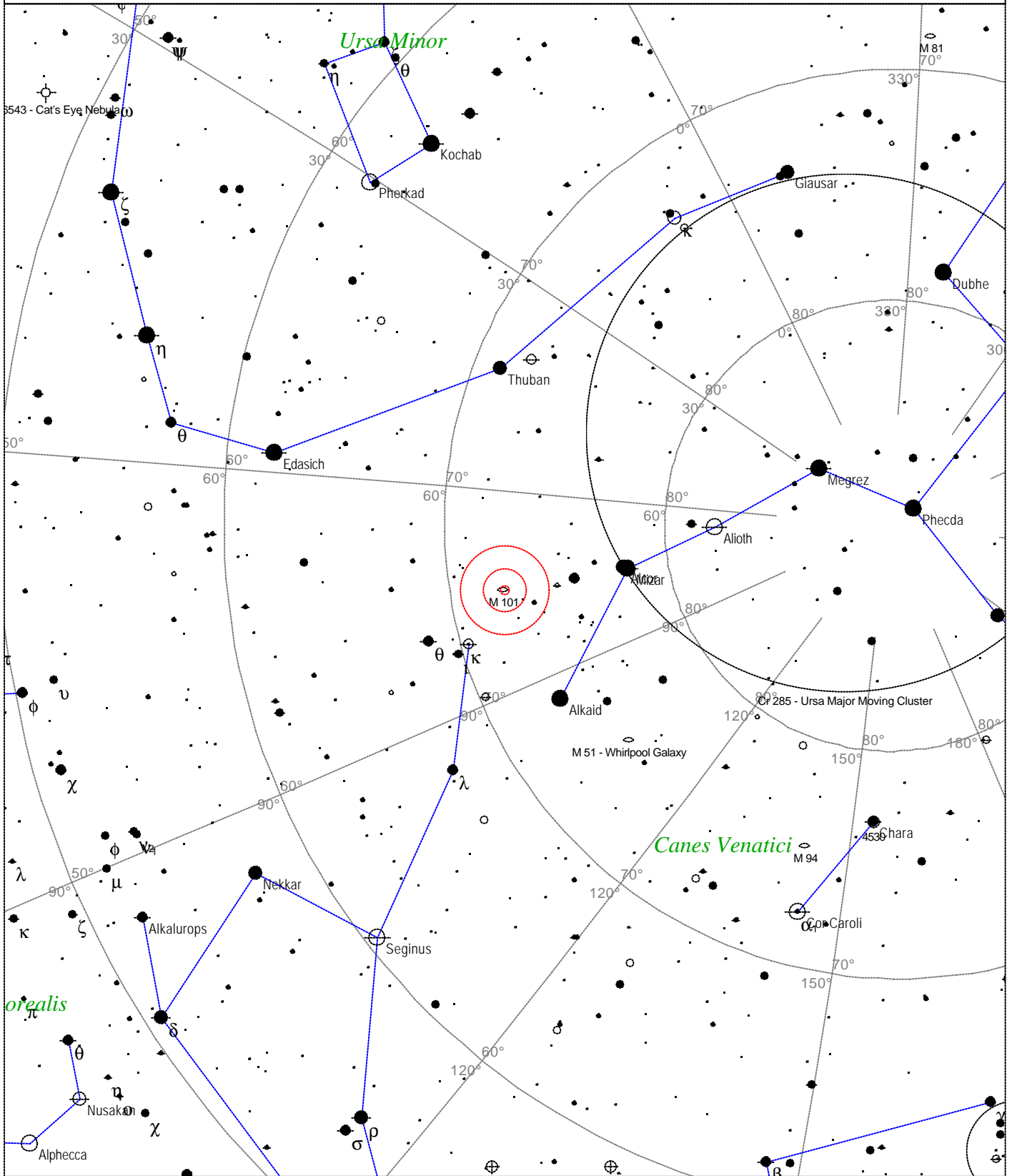
Sidereal Time: 18:56:39

Location: 53° 27' 0" N 2° 31' 0" W

RA: 12h23m01s Dec: +15° 48' Field: 45.0°

Julian Day: 2452530.3196

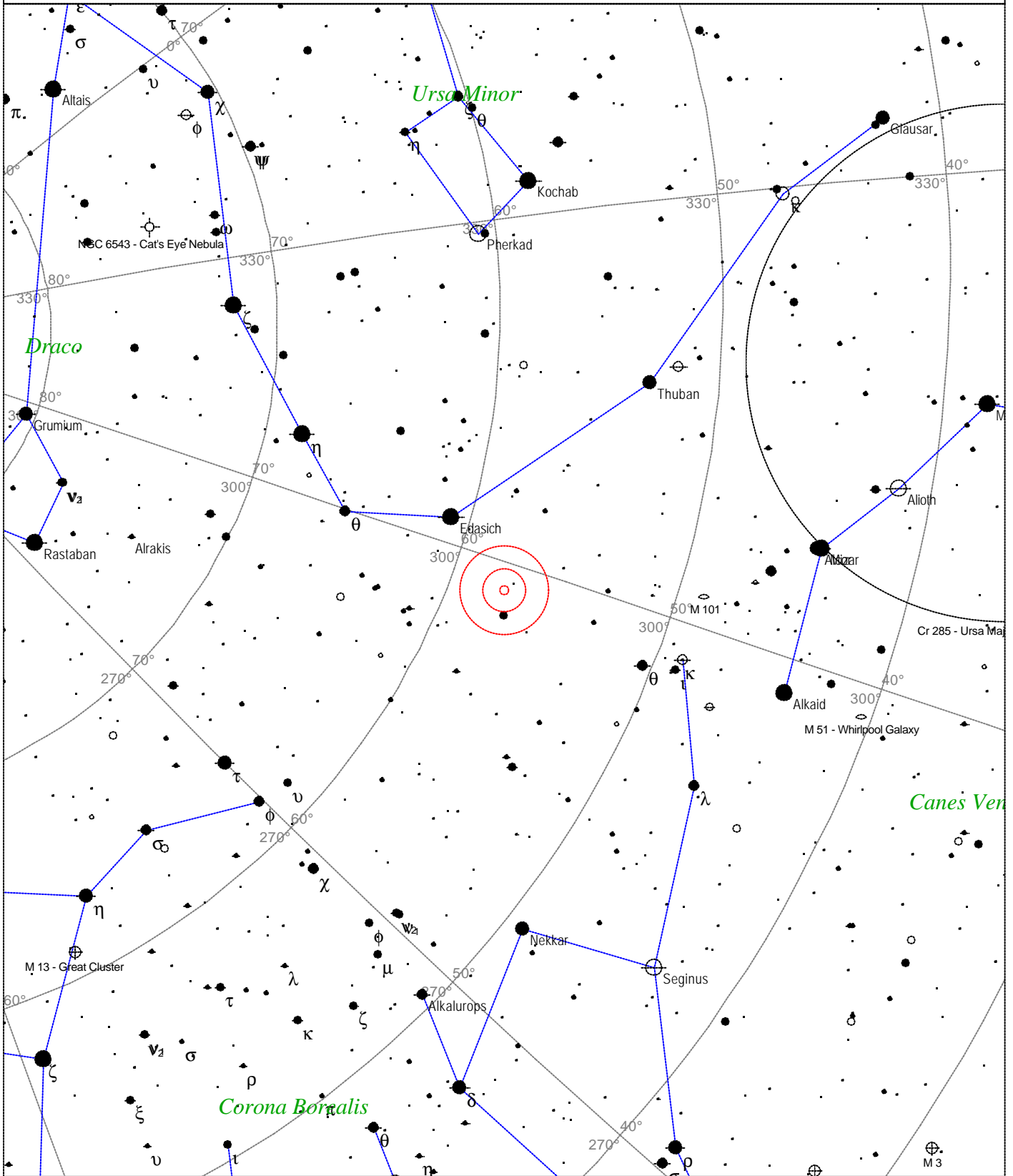
Messier 101



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 		<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 		<p><i>Messier 101 - Galaxy</i> Magnitude: 8.2 Surface brightness: 14.0 mag/sq arcmin Size: 28.5'x28.3' Right ascension: 14h 3m 16s Declination: +54° 20' 28" Constellation: Ursa Major</p>
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Local Time: 12:48:02 12-Sep-2002 UTC: 12:48:02 12-Sep-2002 Sidereal Time: 12:03:22
 Location: 53° 27' 0" N 2° 31' 0" W RA: 14h03m16s Dec: +54° 20' Field: 45.0° Julian Day: 2452530.0334

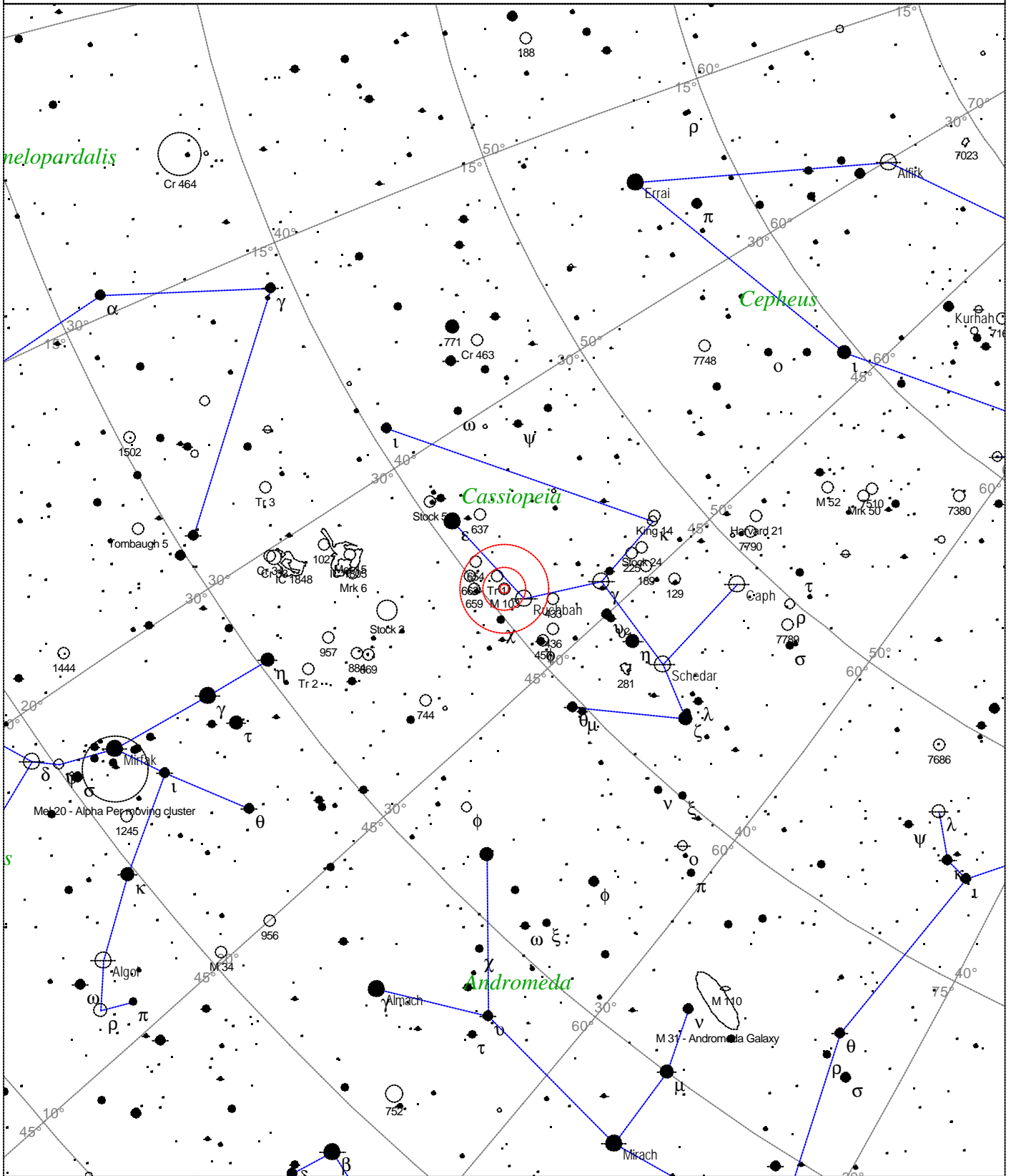
Messier 102 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☉ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 102 - Galaxy</i> Magnitude: 10.8 Surface brightness: 11.8 mag/sq arcmin Size: 6.5'x3.1' Position angle: 128° Right ascension: 15h 6m 32s Declination: +55° 45' 29" Constellation: Draco</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 15h06m32s Dec: +55° 45' Field: 45.0° Julian Day: 2452530.3196

Messier 103 - Open cluster



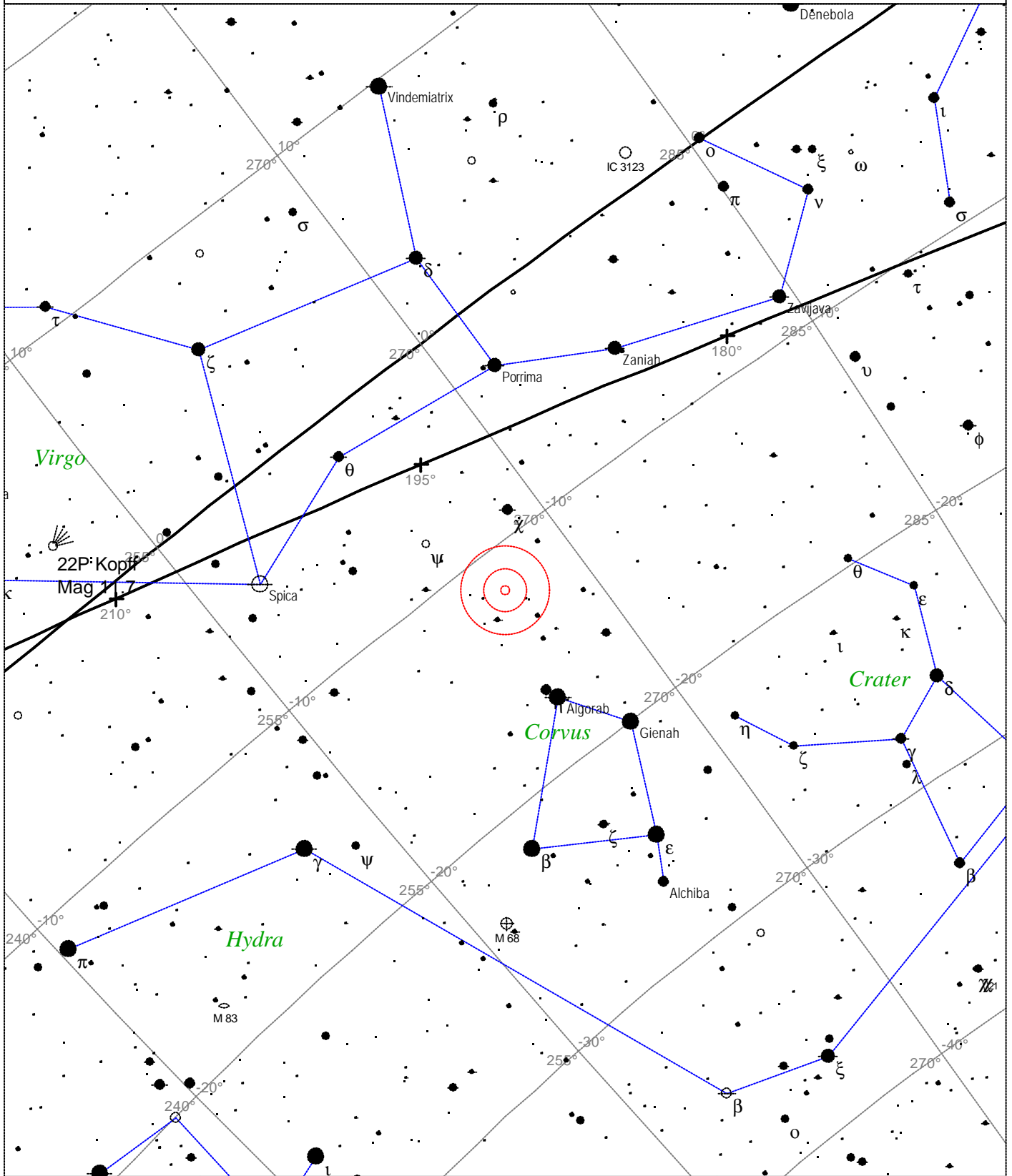
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 103 - Open cluster Magnitude: 7.4 Size: 6.0' Right ascension: 1h 33m 33s Declination: +60° 40' 9" Constellation: Cassiopeia</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 1h33m33s Dec: +60° 40' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

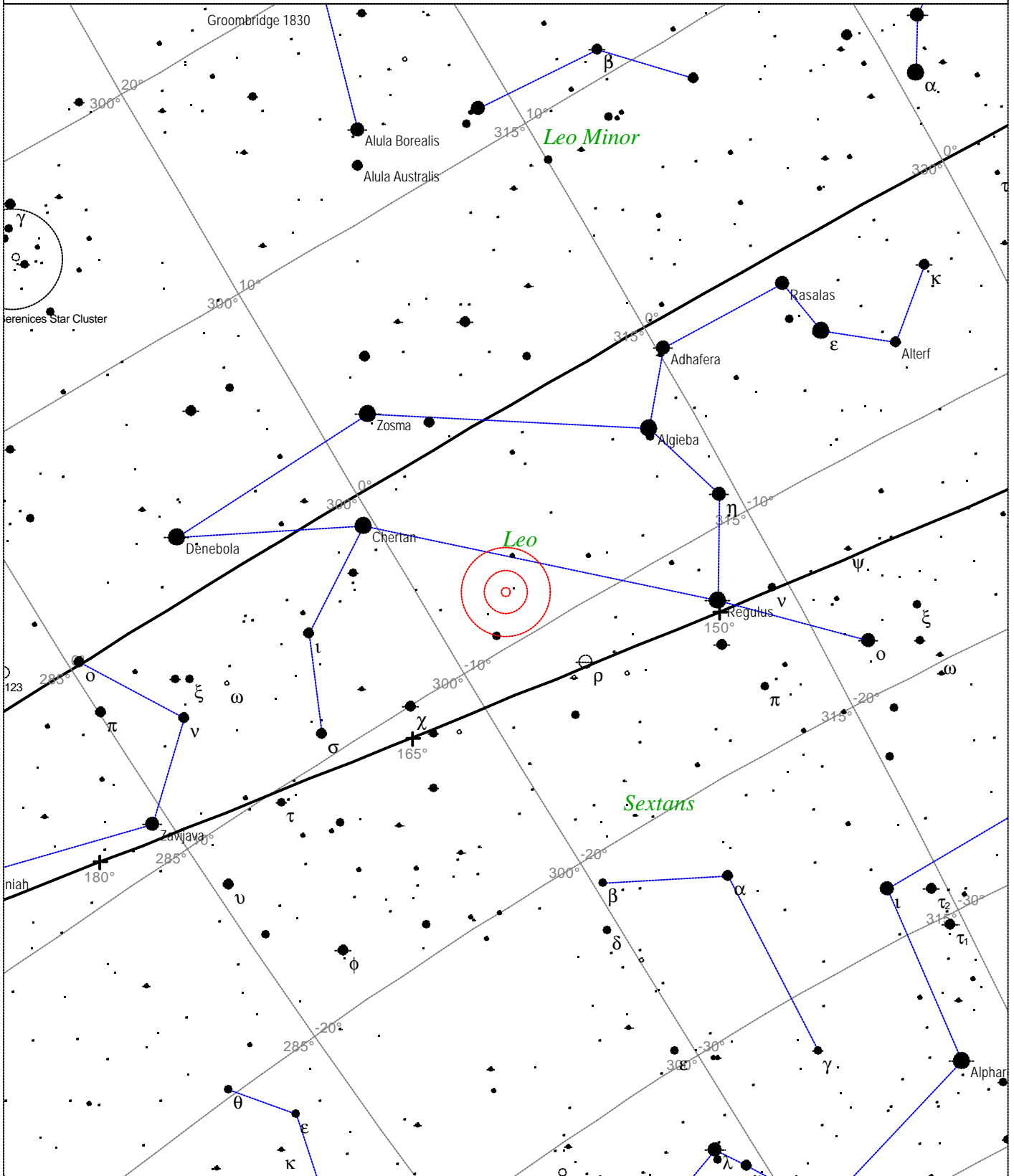
Messier 104 - Sombrero Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 		<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☉ Quasar △ Radio source ✕ X-ray source ○ Other object 		<p><i>Messier 104 - Sombrero Galaxy</i> Type of object: Galaxy Magnitude: 9.2 Surface brightness: 11.5 mag/sq arcmin Size: 8.6"x4.2" Position angle: 89° Right ascension: 12h 40m 5s Declination: -11° 38' 4"</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 12h40m05s Dec: -11° 38' Field: 45.0° Julian Day: 2452530.3196

Messier 105 - Galaxy



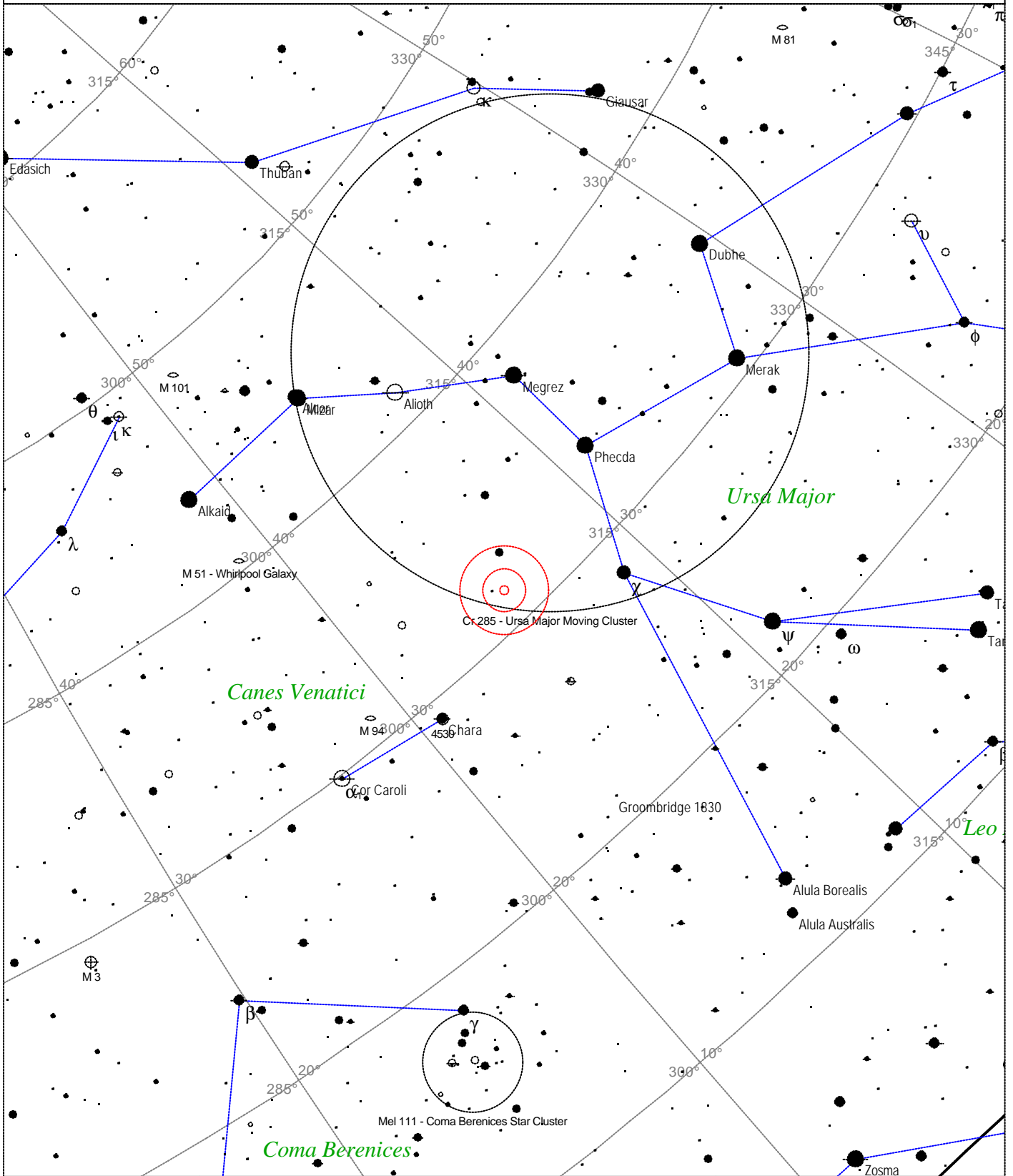
STARS ● <3 · 6 ● 3.5 · 6.5 ● 4 · >7 ● 4.5 ● 5 ● 5.5		SYMBOLS ● Multiple star □ Dark nebula △ Radio source ○ Variable star ⊕ Globular cluster × X-ray source ☄ Comet ○ Open cluster ○ Other object ☾ Galaxy ⊕ Planetary nebula □ Bright nebula ✕ Quasar			<i>Messier 105 - Galaxy</i> Magnitude: 10.5 Surface brightness: 11.8 mag/sq arcmin Size: 5.3'x4.8' Position angle: 60° Right ascension: 10h 47m 56s Declination: +12° 34' 13" Constellation: Leo
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 10h47m56s Dec: +12° 34' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 106 - Galaxy



Ursa Major

Canes Venatici

Leo

Coma Berenices

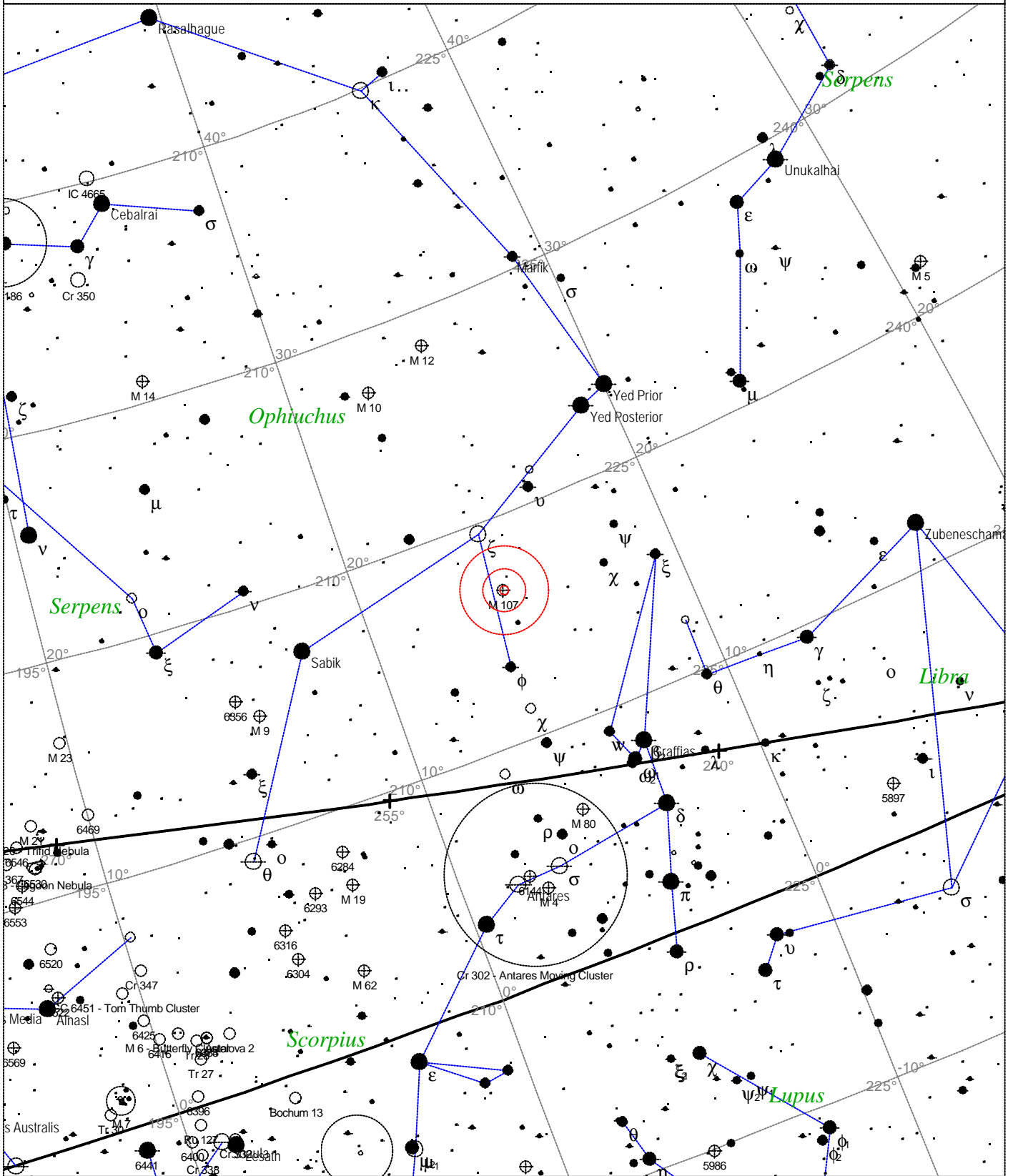
<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ☄ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 106 - Galaxy</i> Magnitude: 9.1 Surface brightness: 12.4 mag/sq arcmin Size: 17.4'x6.6' Position angle: 150° Right ascension: 12h 19m 3s Declination: +47° 17' 44" Constellation: Canes Venatici</p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 12h19m03s Dec: +47° 17' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

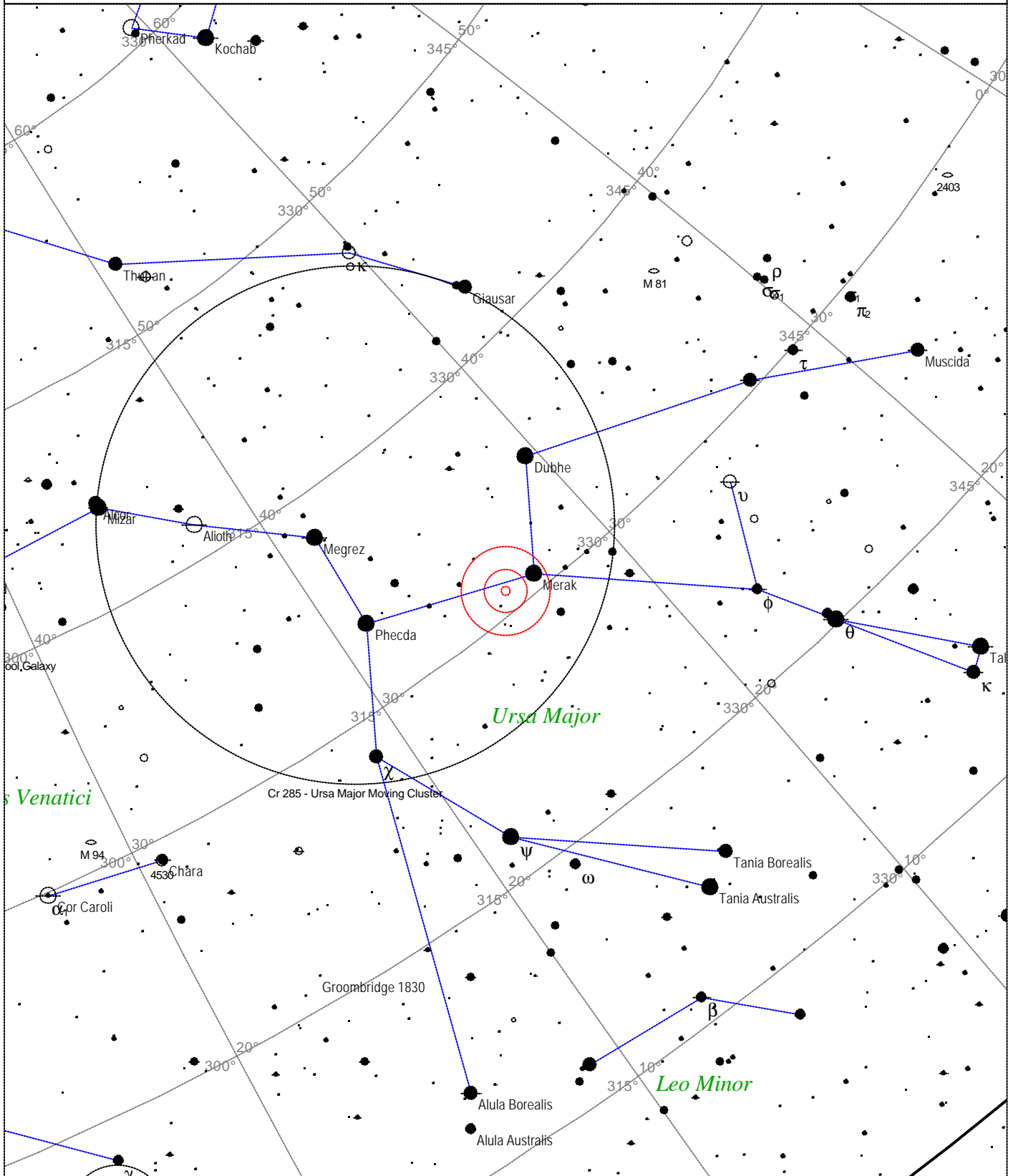
Messier 107 - Globular cluster



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula ◻ Dark nebula ⊕ Globular cluster ○ Open cluster ⊕ Planetary nebula ⊞ Quasar △ Radio source × X-ray source ○ Other object 	<p>Messier 107 - Globular cluster Magnitude: 7.9 Size: 3.3' Right ascension: 16h 32m 40s Declination: -13° 3' 30" Constellation: Ophiuchus</p>
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Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 16h32m40s Dec: -13° 03' Field: 45.0° Julian Day: 2452530.3196

Messier 108 - Galaxy



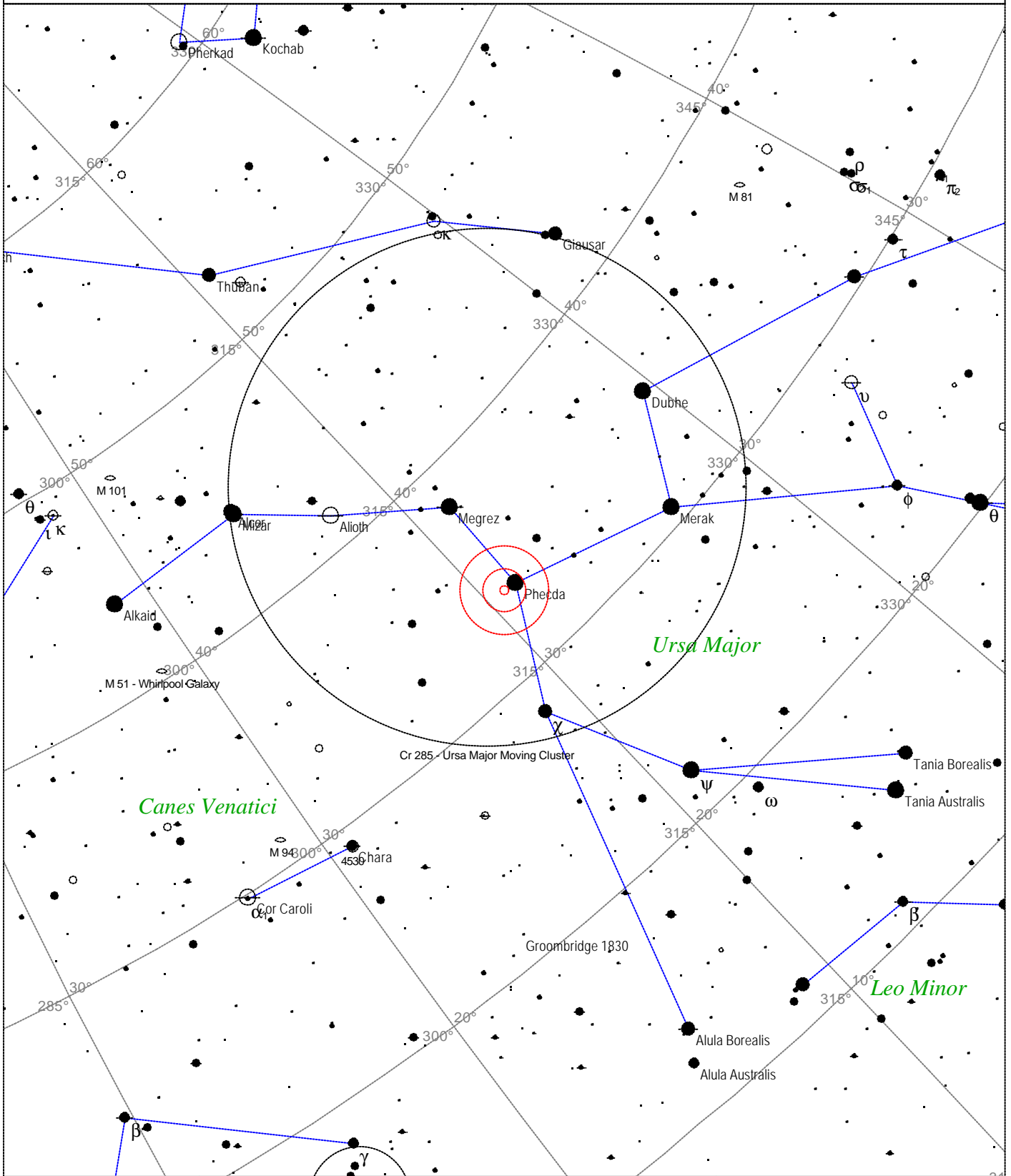
STARS		SYMBOLS			<i>Messier 108 - Galaxy</i> Magnitude: 10.6 Surface brightness: 13.3 mag/sq arcmin Size: 8.6'x2.4' Position angle: 80° Right ascension: 11h 11m 36s Declination: +55° 39' 38" Constellation: Ursa Major
● <3	· 6	● Multiple star	◻ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☉ Galaxy	♁ Planetary nebula		
● 5		◻ Bright nebula	☉ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 11h11m36s Dec: +55° 39' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196

Messier 109 - Galaxy



Ursa Major

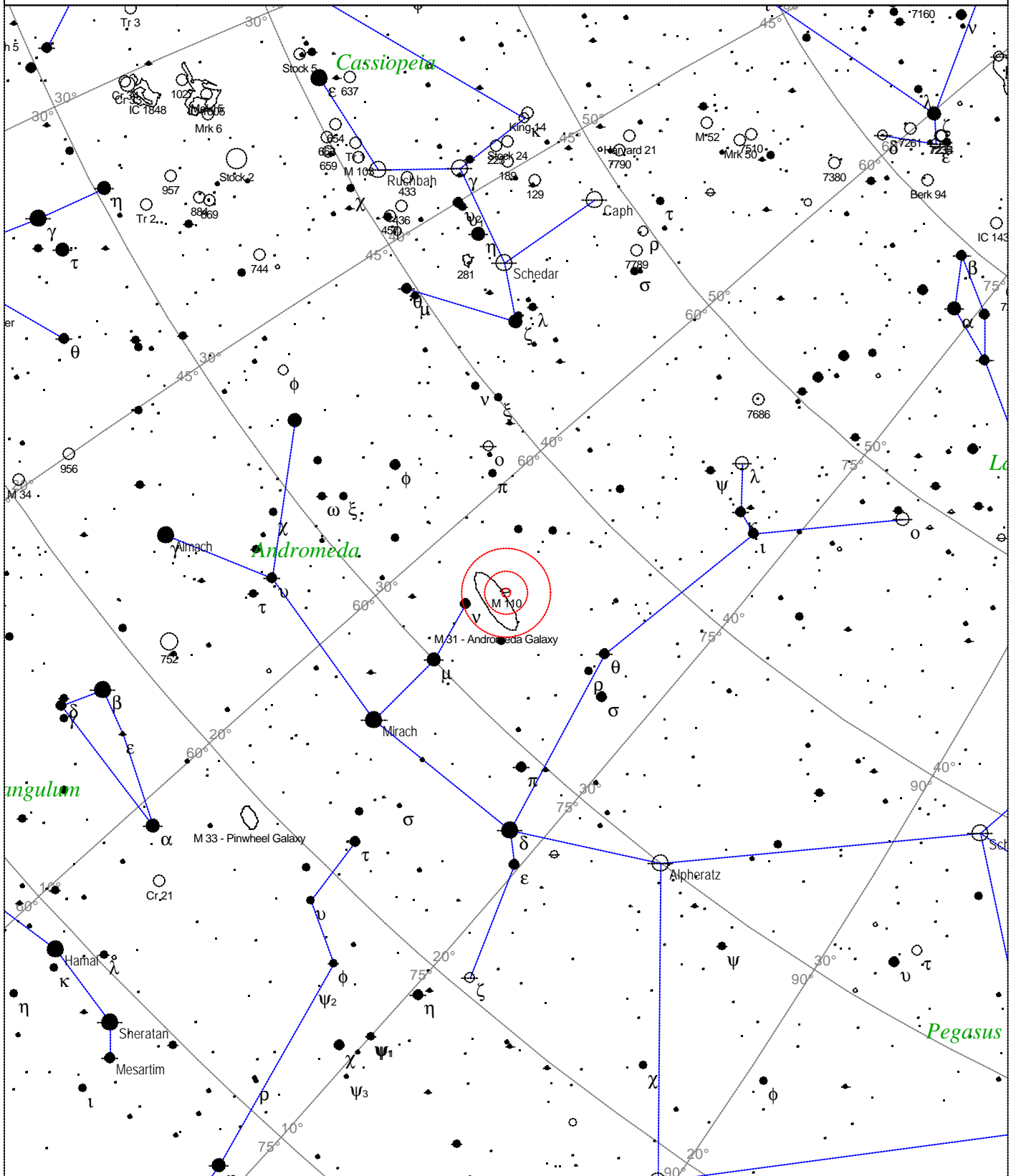
Canes Venatici

Leo Minor

STARS		SYMBOLS			<i>Messier 109 - Galaxy</i> Magnitude: 10.6 Surface brightness: 13.5 mag/sq arcmin Size: 7.5'x4.4' Position angle: 68° Right ascension: 11h 57m 41s Declination: +53° 21' 43" Constellation: Ursa Major
● <3	· 6	● Multiple star	□ Dark nebula	△ Radio source	
● 3.5	· 6.5	○ Variable star	⊕ Globular cluster	× X-ray source	
● 4	· >7	☄ Comet	○ Open cluster	○ Other object	
● 4.5		☾ Galaxy	♁ Planetary nebula		
● 5		□ Bright nebula	☄ Quasar		
● 5.5					

Local Time: 19:40:11 12-Sep-2002 UTC: 19:40:11 12-Sep-2002 Sidereal Time: 18:56:39
 Location: 53° 27' 0" N 2° 31' 0" W RA: 11h57m41s Dec: +53° 21' Field: 45.0° Julian Day: 2452530.3196

Messier 110 - Galaxy



<p>STARS</p> <ul style="list-style-type: none"> ● <3 ● 3.5 ● 4 ● 4.5 ● 5 ● 5.5 ● 6 ● 6.5 ● >7 	<p>SYMBOLS</p> <ul style="list-style-type: none"> ● Multiple star ○ Variable star ☄ Comet ☾ Galaxy □ Bright nebula □ Dark nebula ⊕ Globular cluster ○ Open cluster ♁ Planetary nebula ⊗ Quasar △ Radio source × X-ray source ○ Other object 	<p><i>Messier 110 - Galaxy</i> <i>Magnitude: 8.9</i> <i>Surface brightness: 13.8 mag/sq arcmin</i> <i>Size: 19.5'x11.5'</i> <i>Position angle: 170°</i> <i>Right ascension: 0h 40m 31s</i> <i>Declination: +41° 41' 54"</i> <i>Constellation: Andromeda</i></p>
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Local Time: 19:40:11 12-Sep-2002
 Location: 53° 27' 0" N 2° 31' 0" W

UTC: 19:40:11 12-Sep-2002
 RA: 0h40m31s Dec: +41° 41' Field: 45.0°

Sidereal Time: 18:56:39
 Julian Day: 2452530.3196