The Sky Atlas

Deep Sky objects atlas

Covers sky from 90° north to 58° south . 80 charts . Each chart covers ~32°

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may2007,v2.5, Michael Vlasov

Objects plotted:

Stars:	up to 9.5m	Hip, Tycho and Guide star catalogs
Double Stars	up to 8.5m	WDS catalog
Galaxies:	up to 13m	NGC, IC, PGC catalogs
Star Clusters:	up to 12.5m	NGC, IC catalogs
Nebulae:	up to 13m	NGC, IC catalogs
Planetary Neb.	up to 13.5m	NGC, IC, PLN catalogs
DSO Labels:	up to 12.5m	M, NGC, IC, PGC, PLN and other.
Star Labels	up to 4-5m	Common names, Bayer designations
Doubles labels	selected	Separation, from SAC "Best doubles" list

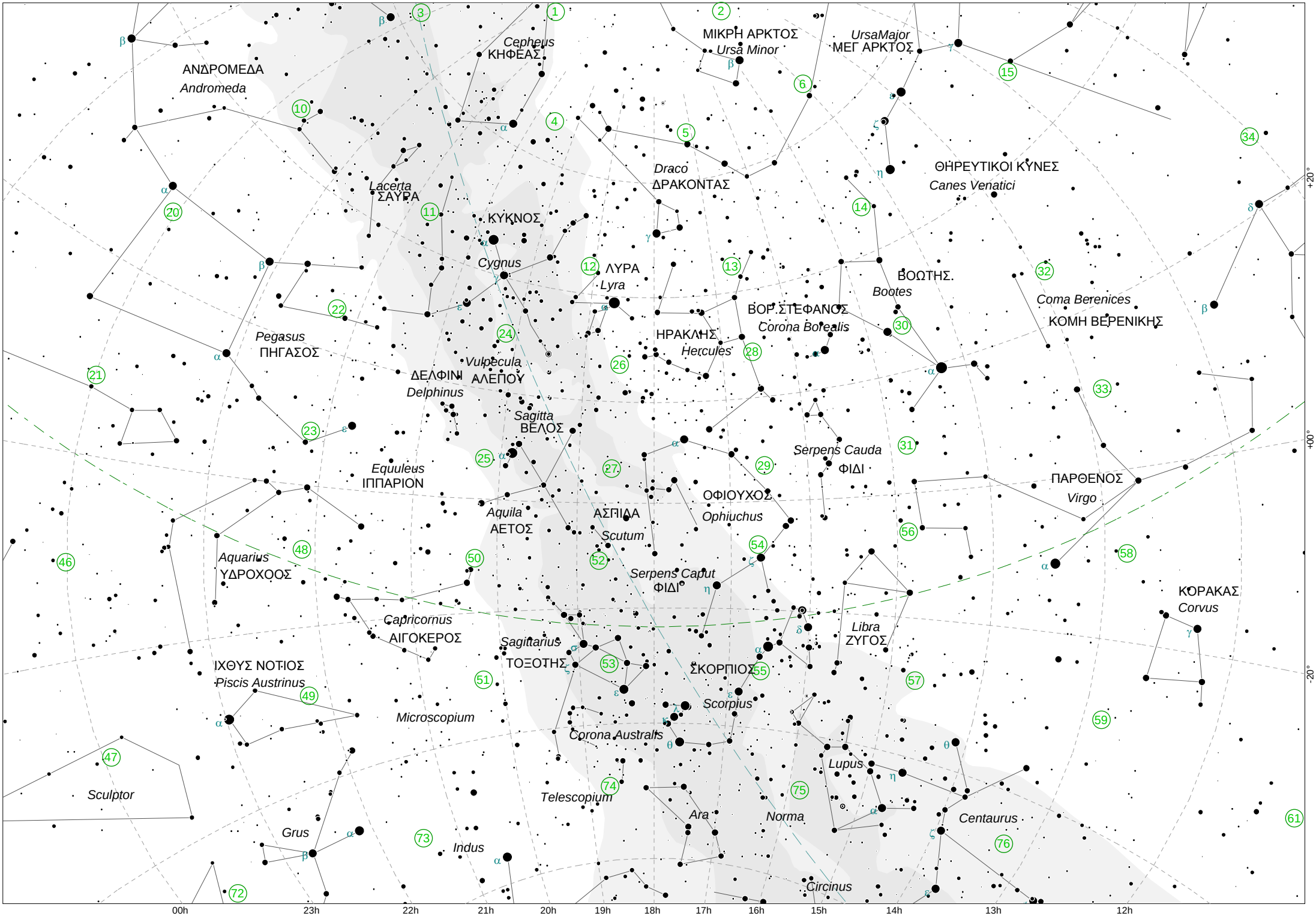
Constellations index

Constellation	Chart number	Constellation	Chart number	Constellation	Chart number
Andromeda OK	**10**,19,20	Cygnus OK	**11**,12,24	Pavo ++++++++++	-
Antlia ++++++++++	61,**63**,77	Delphinus OK	**25**	Pegasus OK	20,21,**22**,23
Apus ++++++++++	-	Dorado ++++++++++	79	Perseus OK	18,**19**,42
Aquarius OK	23,46,**48**,49,50,	Draco OK	4,**5**,6,13	Phoenix +++++++++	**72**,80
Aquila OK	25,**27**,50,52	Equuelus OK	23,**25**	Pictor ++++++++++	**79**
Ara ++++++++++	74,**75**	Eridanus+++++++++	66,**68**	Pisces OK	21,**44**,45
Aries OK	42,**44**	Fornax ++++++++++	**69**,71	Piscis Austrinus OK	**49**
Auriga OK	17,**18**,40	Gemini OK	**38**,39	Puppis OK	64,**65**,78
Bootes OK	14,**30**,31	Grus ++++++++++	72,**73**	Pyxis ++++++++++	**63**
Caelum ++++++++++	67,**79**	Hercules OK	13,26,**28**	Reticulum ++++++++	**79**
Camelopardalis OK	8,**9**	Horologium +++++++	**80**	Sagitta OK	**24**
Cancer OK	**36**,37	Hydra OK	37,57,59,61,**62**	Sagittarius ++++++++	51,52,**53**
Canes Venatici OK	14,**15**,32	Hydrus ++++++++++	-	Scorpius OK	53,**55**,75
Canis Major OK	64,**65**	Indus ++++++++++	**73**	Sculptor +++++++++	**47**,71
Canis Minor ++++++	**39**	Lacerta OK	**11**	Scutum OK	**52**
Capricornus OK	48,49,**50**,51	Leo OK	34,**35**,36,37	Serpens Caput OK	**52**
Carnia ++++++++++	77	Leo Minor ++++++++	16,**34**	Sextans +++++++++	35,37,60,62
Cassiopea OK	**3**,9,10	Lepus OK	**66**,67	Taurus OK	40,42,**43**
Centaurus++++++++	57,59,**76**	Libra OK	**56**,57	Telescopium++++++	**74**
Cepheus OK	1,3,**4**	Lupis ++++++++++	55,57,**75**	Triangulum Aust++++	-
Cetus OK	43,45,46,**70**,71	Lynx OK	16,**17**	Tucana ++++++++++	-
Chameleon +++++++	-	Lyra OK	**12**,26	Ursa Major OK	6,**7**,15,16
Circinus +++++++++	75	Mensa ++++++++++	-	Ursa Minor OK	**2**
Columbia+++++++++	**67**,79	Microscopium++++++	**51**,73	Vela +++++++++++	77,**78**
Coma Berenices OK	**32**,33	Monoceros OK	39,**64**	Virgo OK	31,**33**,56,58
Corona Australis+++	**74**	Musca ++++++++++	-	Volans ++++++++++	-
Corona Borealis OK	**28**	Norma ++++++++++	**75**	Vulpecula OK	**24**
Corvus OK	**58**,59	Octans ++++++++++	-		
Crater OK	**60**,61	Ophiuchus OK	27,**29**,52,54		
Crux ++++++++++	-	Orion OK	**41**,66		

Legend:

galaxy
large galaxy
nebula
large nebula
globular cluster
large globular cluster
open cluster
large open cluster
planetary nebula
double star
double star in SAC list with sep. label
cluster with nebula
6352 ic4651 M33 ET Cluster — DSO label
γ Sulafat — star label
23 — next chart number

Index 1


ΑΝΔΡΟΜΕΔΑ
Andromeda
Cepheus
ΚΗΦΕΑΣ
ΜΙΚΡΗ ΑΡΚΤΟΣ
Ursa Minor
UrsaMajor
ΜΕΓ ΑΡΚΤΟΣ
Draco
ΔΡΑΚΟΝΤΑΣ
ΘΗΡΕΥΤΙΚΟΙ ΚΥΝΕΣ
Canes Venatici
Lacerta
ΣΑΥΡΑ
ΚΥΚΝΟΣ
Cygnus
ΛΥΡΑ
Lyra
ΒΟΩΤΗΣ.
Bootes
Coma Berenices
ΚΟΜΗ ΒΕΡΕΝΙΚΗΣ
ΒΟΡ.ΣΤΕΦΑΝΟΣ
Corona Borealis
ΗΡΑΚΛΗΣ
Hercules
Pegasus
ΠΗΓΑΣΟΣ
Vulpecula
ΑΛΕΠΟΥ
ΔΕΛΦΙΝΙ
Delphinus
Sagitta
ΒΕΛΟΣ
Serpens Cauda
ΦΙΔΙ
Equuleus
ΙΠΠΑΡΙΟΝ
ΠΑΡΘΕΝΟΣ
Virgo
ΟΦΙΟΥΧΟΣ
Ophiuchus
Aquila
ΑΕΤΟΣ
ΑΣΠΙΔΑ
Scutum
Aquarius
ΥΔΡΟΧΟΟΣ
Serpens Caput
ΦΙΔΙ
ΚΟΡΑΚΑΣ
Corvus
Capricornus
ΑΙΓΟΚΕΡΟΣ
Libra
ΖΥΓΟΣ
Sagittarius
ΤΟΞΟΤΗΣ
ΙΧΘΥΣ ΝΟΤΙΟΣ
Piscis Austrinus
ΣΚΟΡΠΙΟΣ
Scorpius
Microscopium
Corona Australis
Lupus
Sculptor
Telescopium
Ara
Norma
Centaurus
Grus
Indus
Circinus
+20°
+00°
-20°
00h
23h
22h
21h
20h
19h
18h
17h
16h
15h
14h
13h
12h

Index 2

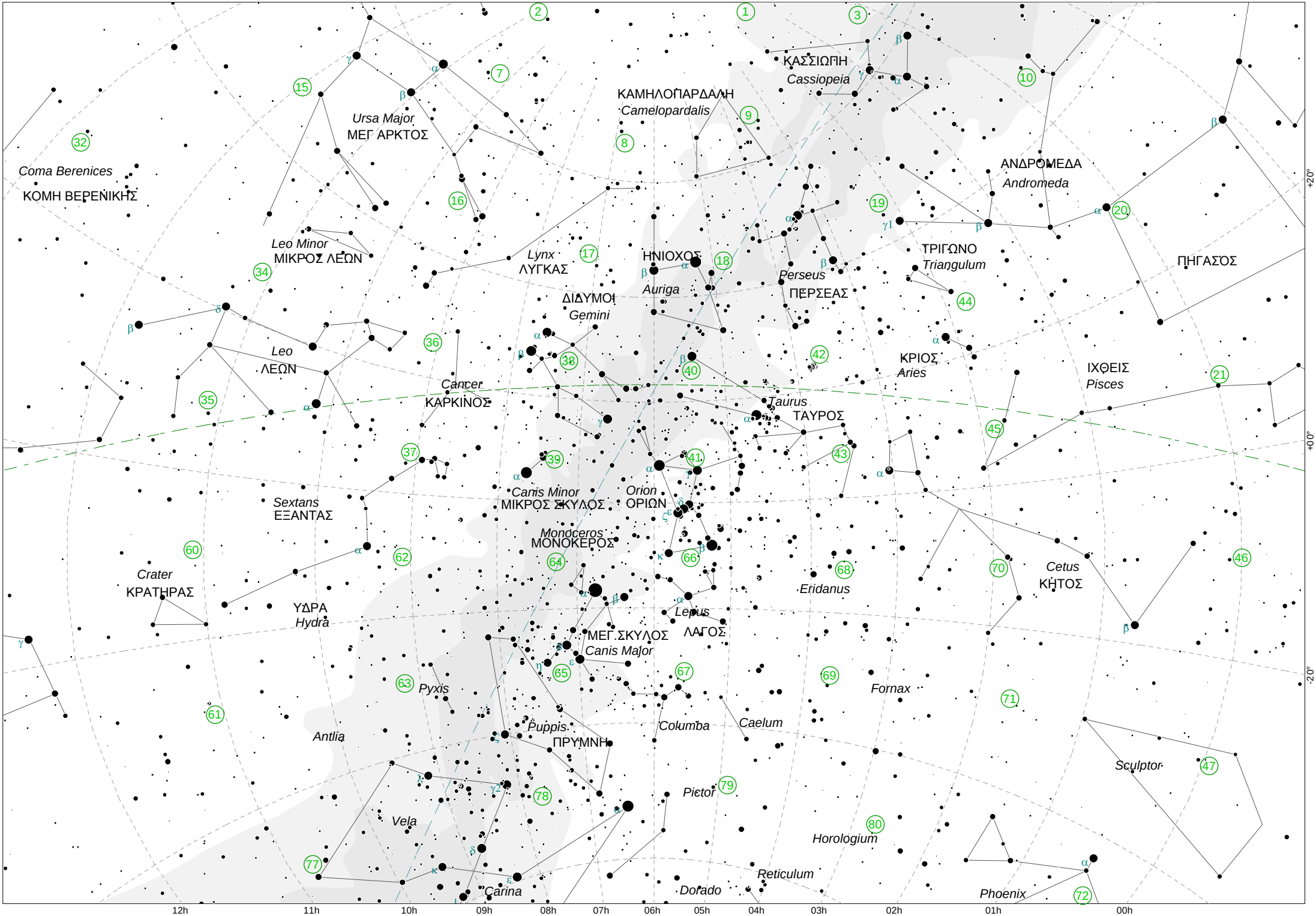

ΚΑΣΣΙΩΠΗ
Cassiopeia
ΚΑΜΗΛΟΠΑΡΔΑΛΗ
Camelopardalis
Ursa Major
ΜΕΓ ΑΡΚΤΟΣ
Coma Berenices
ΚΟΜΗ ΒΕΡΕΝΙΚΗΣ
ΑΝΔΡΟΜΕΔΑ
Andromeda
Leo Minor
ΜΙΚΡΟΣ ΛΕΩΝ
Lynx
ΛΥΓΚΑΣ
ΗΝΙΟΧΟΣ
Auriga
Perseus
ΠΕΡΣΕΑΣ
ΤΡΙΓΩΝΟ
Triangulum
ΠΗΓΑΣΟΣ
ΔΙΔΥΜΟΙ
Gemini
Leo
ΛΕΩΝ
Cancer
ΚΑΡΚΙΝΟΣ
ΚΡΙΟΣ
Aries
ΙΧΘΕΙΣ
Pisces
Taurus
ΤΑΥΡΟΣ
Canis Minor
ΜΙΚΡΟΣ ΣΚΥΛΟΣ
Orion
ΟΡΙΩΝ
Sextans
ΕΞΑΝΤΑΣ
Monoceros
ΜΟΝΟΚΕΡΩΣ
Crater
ΚΡΑΤΗΡΑΣ
ΥΔΡΑ
Hydra
Eridanus
Cetus
ΚΗΤΟΣ
Lepus
ΛΑΓΟΣ
ΜΕΓ.ΣΚΥΛΟΣ
Canis Major
Pyxis
Fornax
Antlia
Puppis
ΠΡΥΜΝΗ
Columba
Caelum
Sculptor
Pictor
Vela
Horologium
Reticulum
Carina
Dorado
Phoenix
+20°
+0°
-20°
12h
11h
10h
09h
08h
07h
06h
05h
04h
03h
02h
01h
00h

Chart 1 george

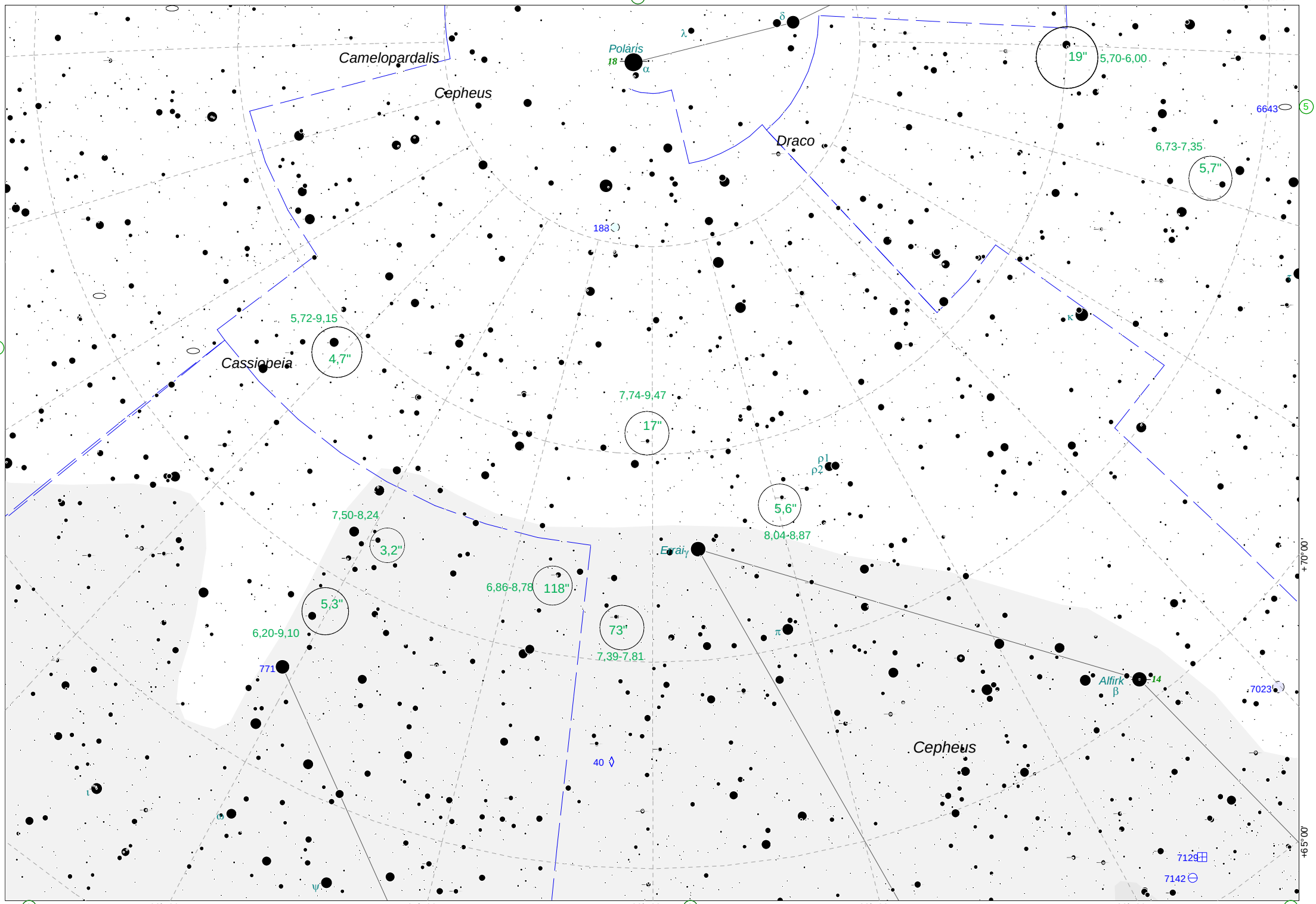


Chart 2 george

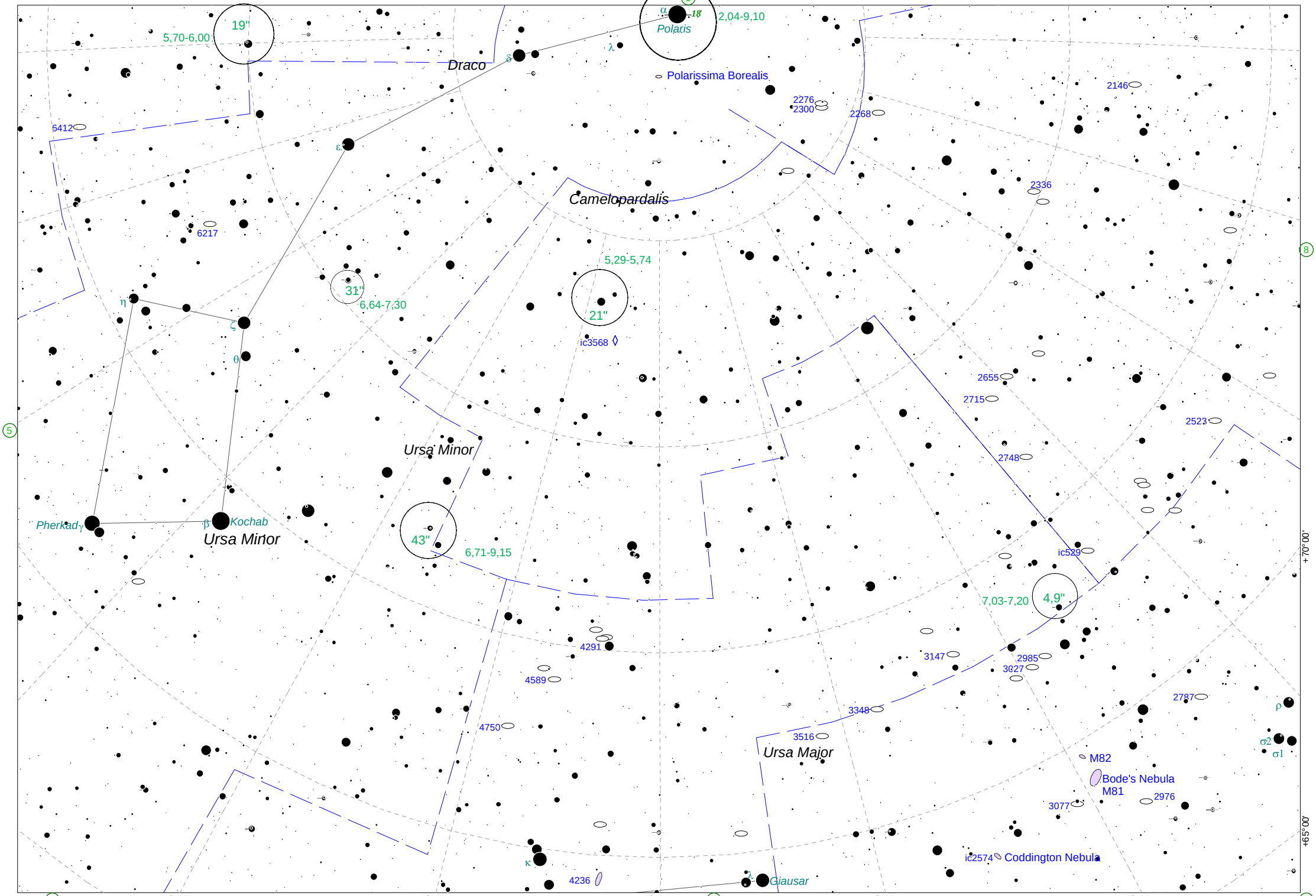


Chart 3

george

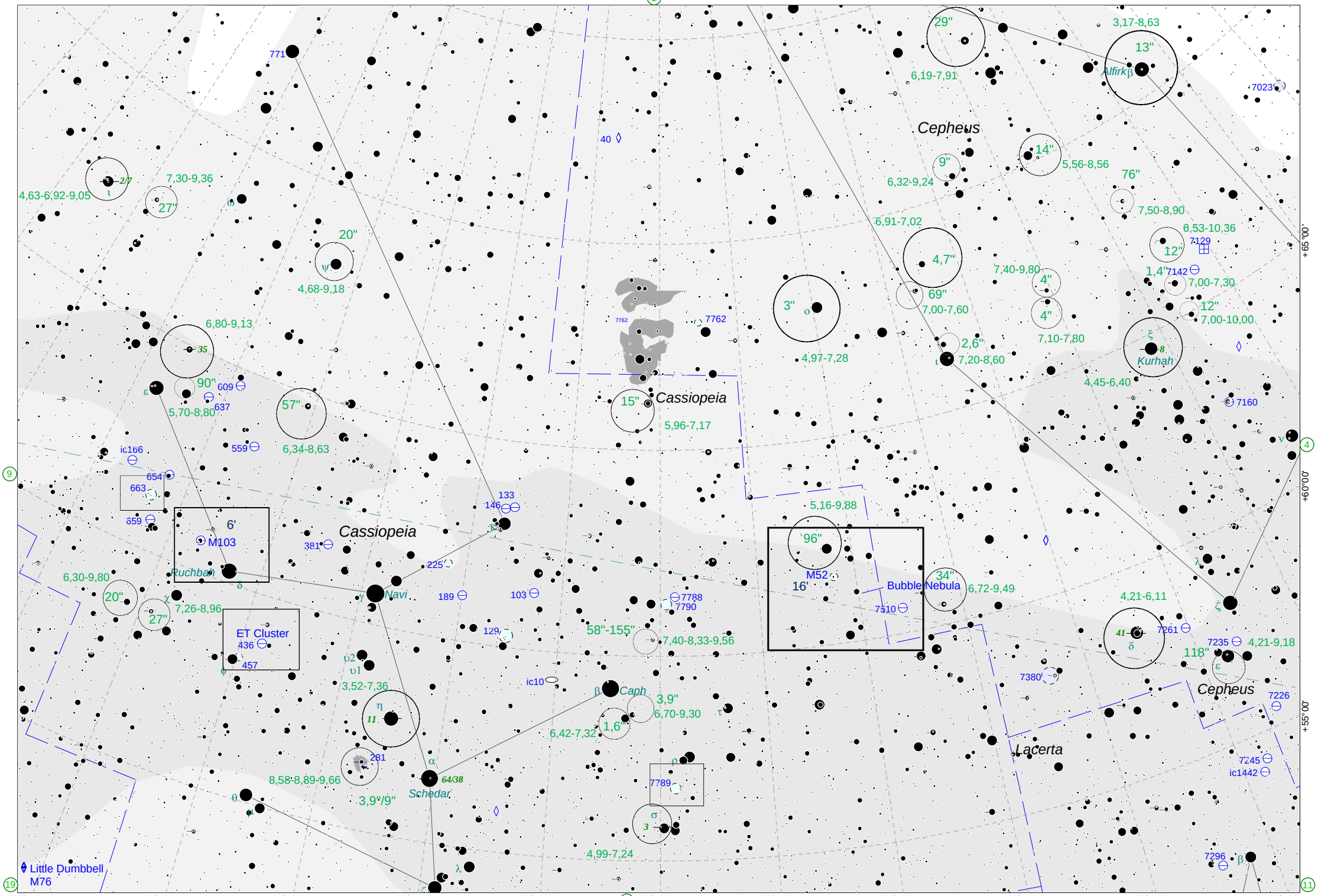


Chart 4 george

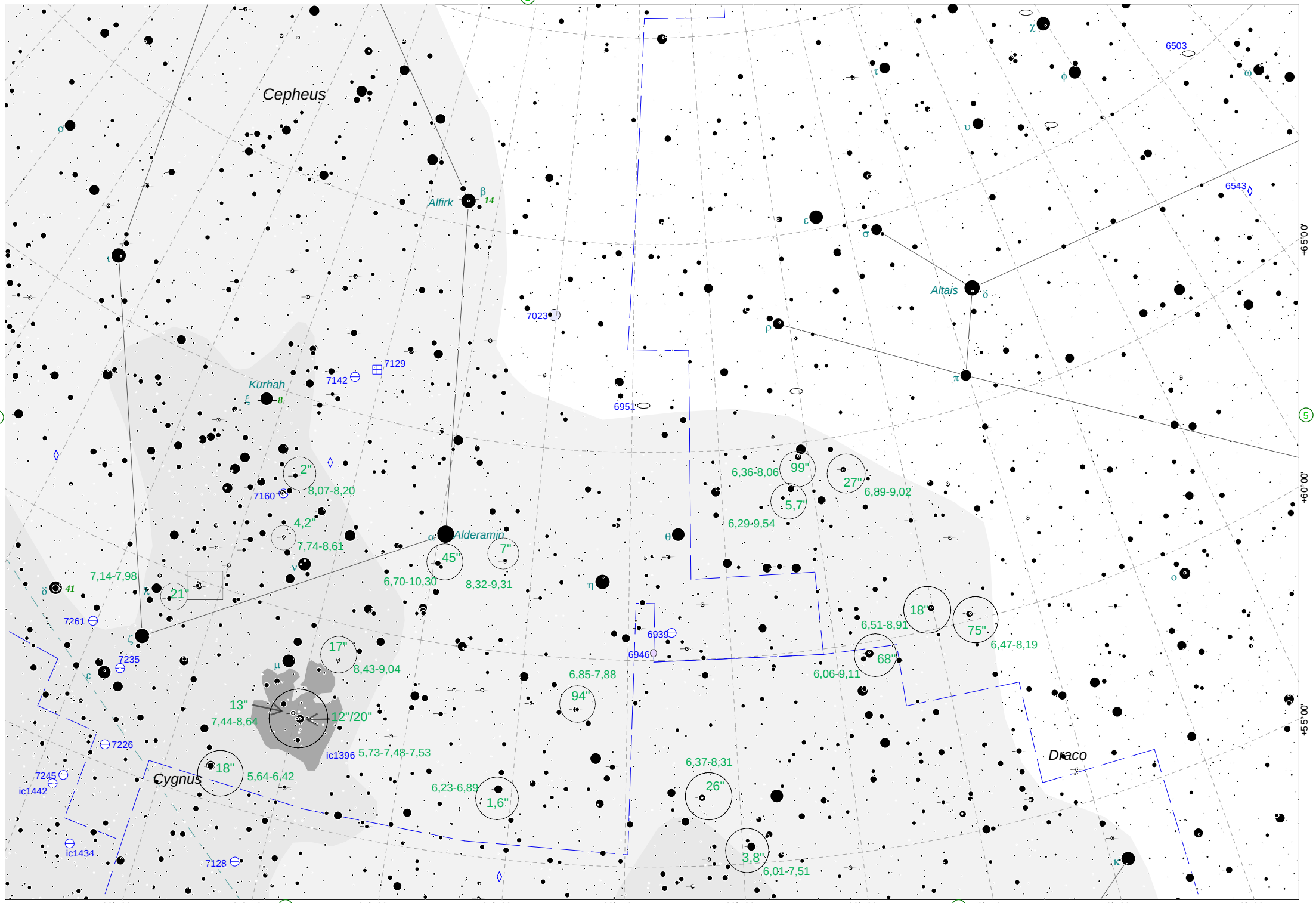


Chart 5

george

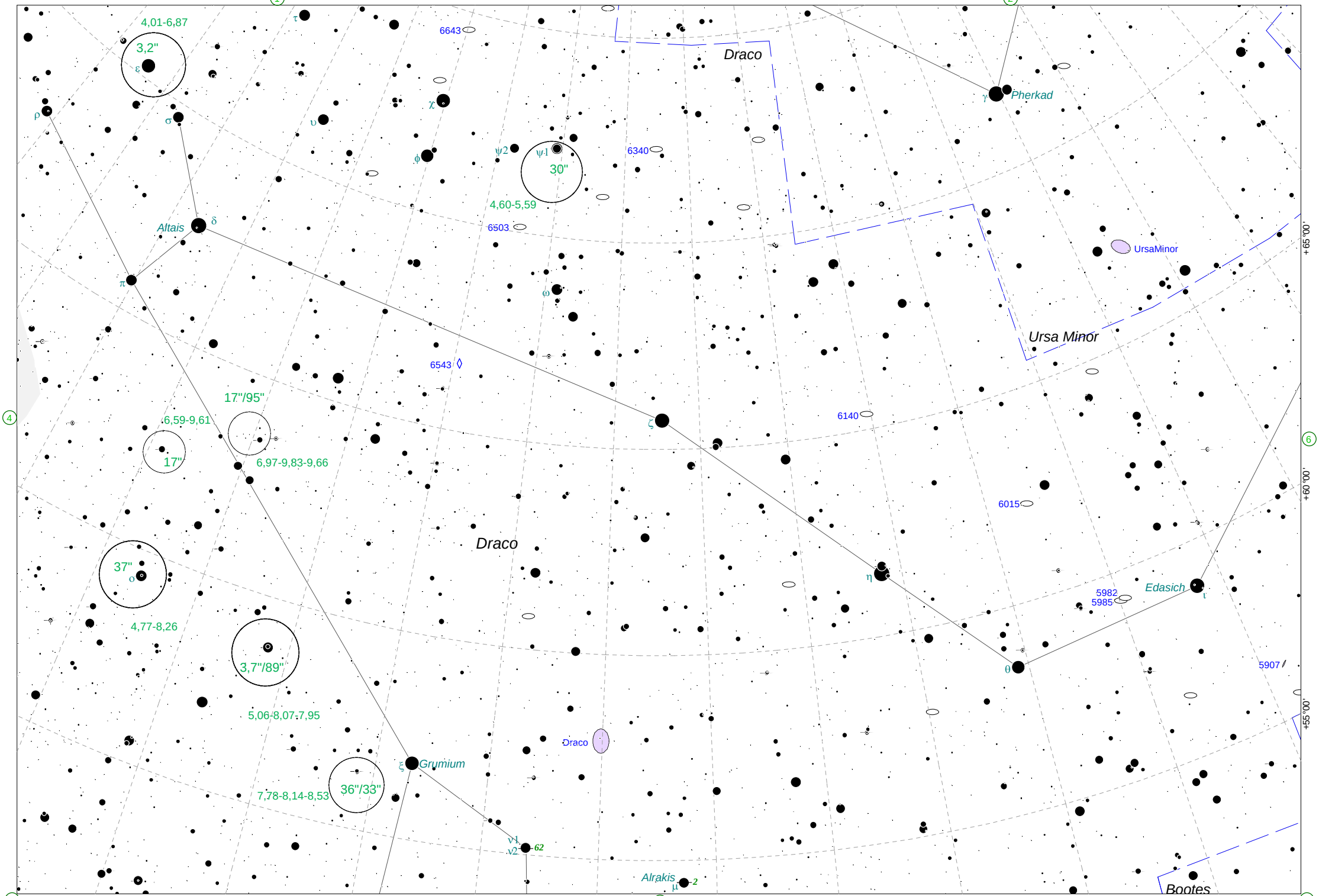


Chart 6 george

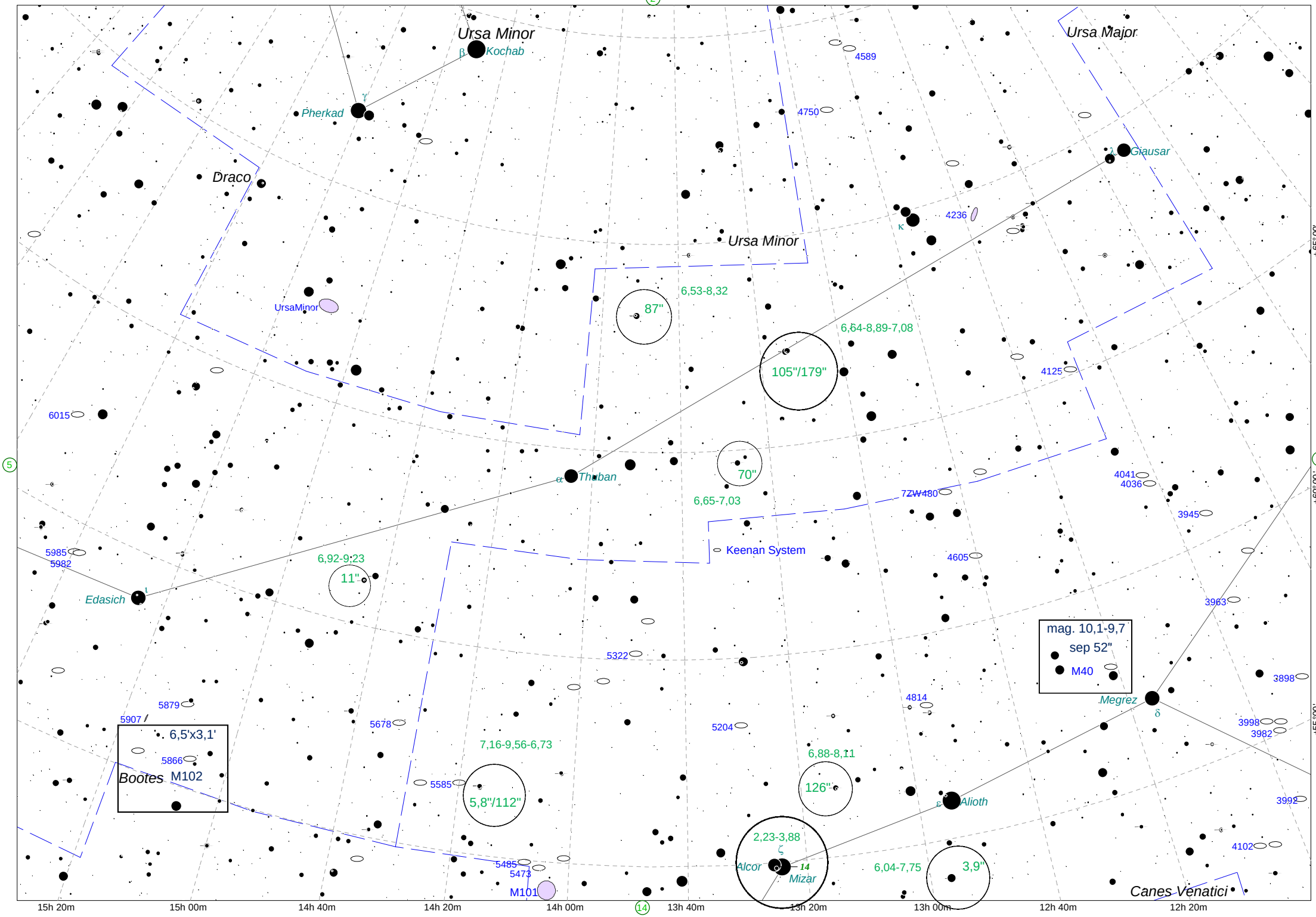


Chart 7

george

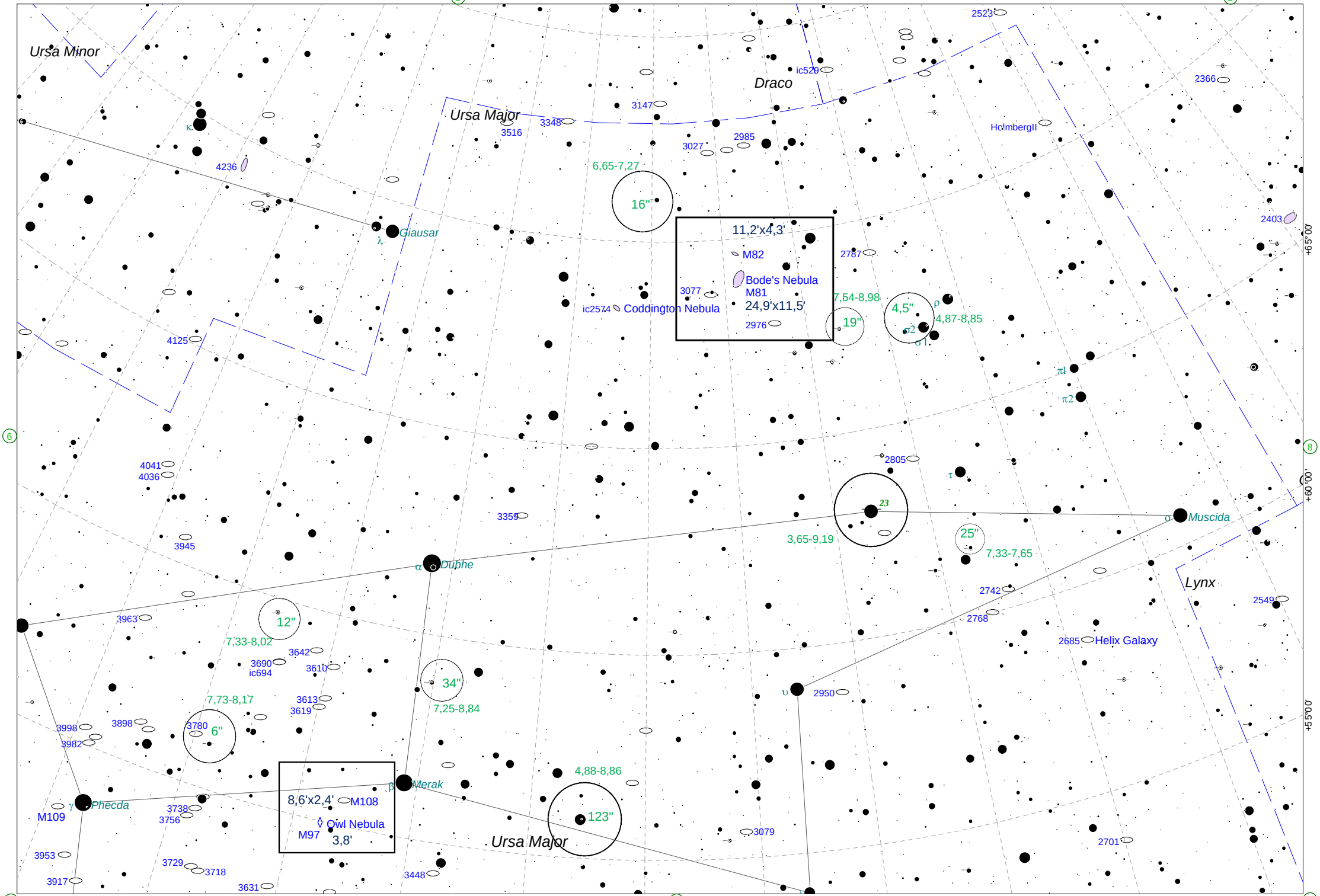


Chart 8 george

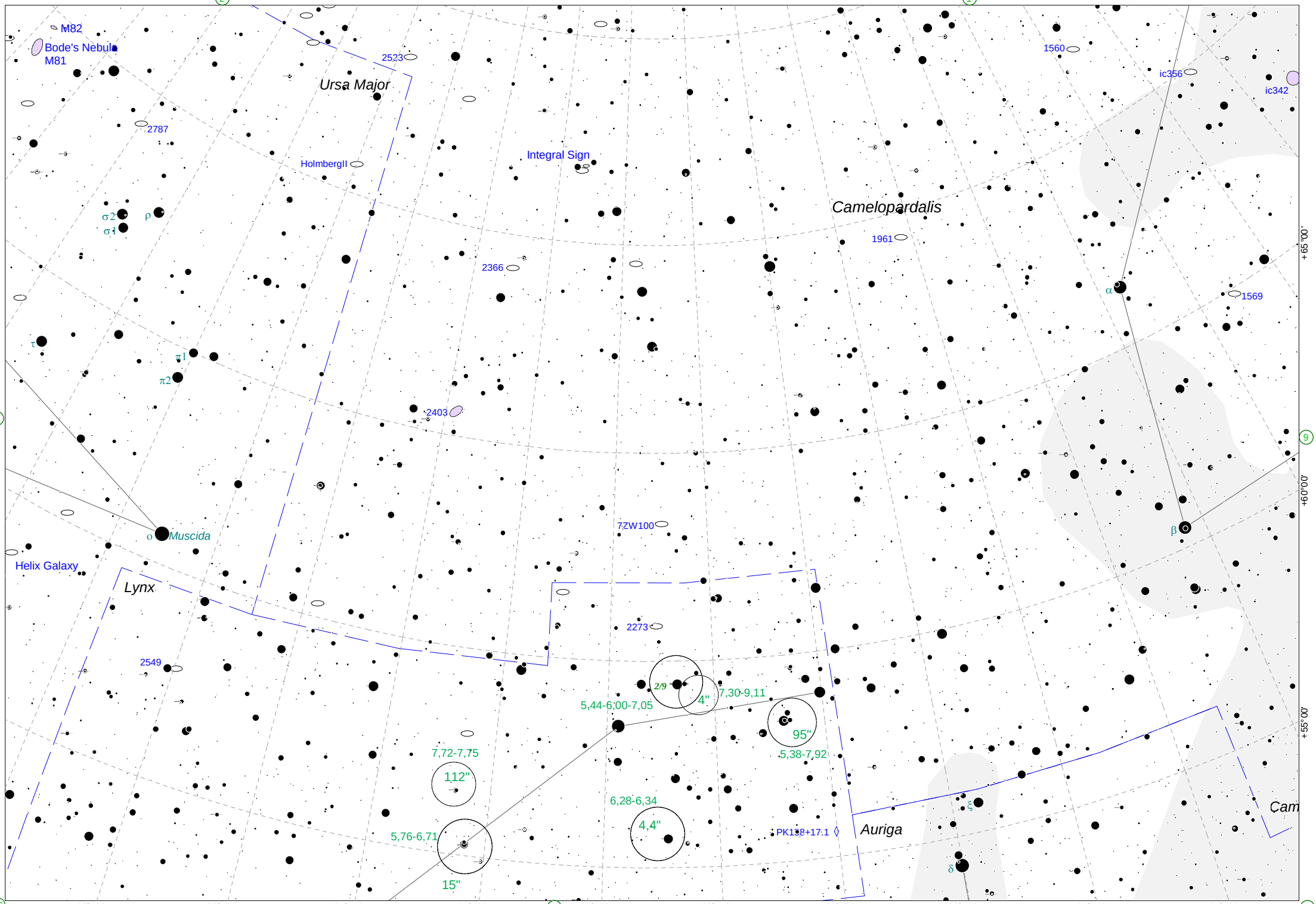


Chart 9 george

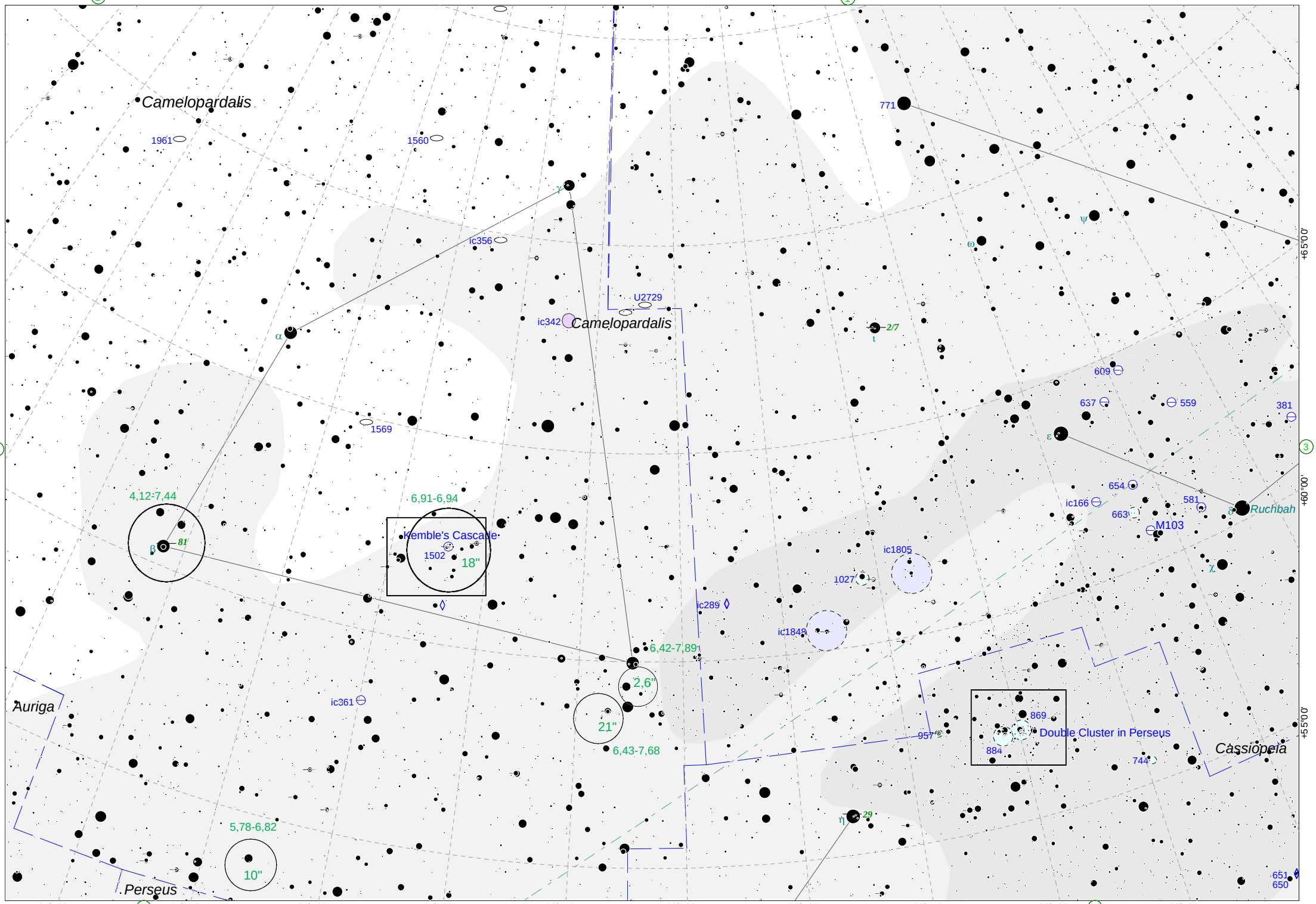


Chart 10

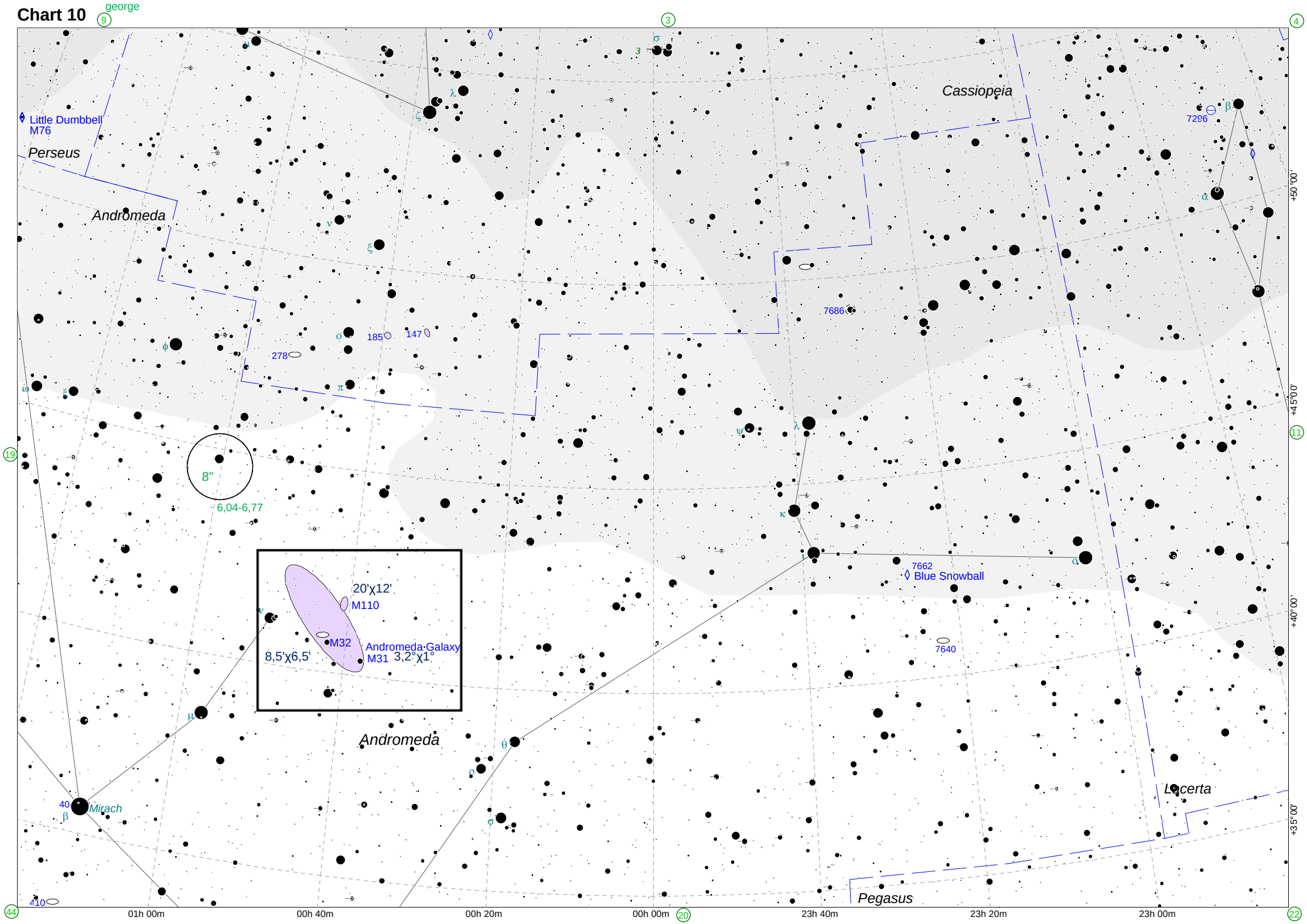

george
Little Dumbbell
M76
Perseus
Andromeda
Cassiopeia
7296
7686
185
147
278
8"
6,04-6,77
20'x12'
M110
M32
Andromeda Galaxy
M31
8,5'x6,5'
3,2°x1°
7662
Blue Snowball
7640
Andromeda
Mirach
40
410
Lacerta
Pegasus
+50°00'
+45°00'
+40°00'
+35°00'
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m

Chart 11 george

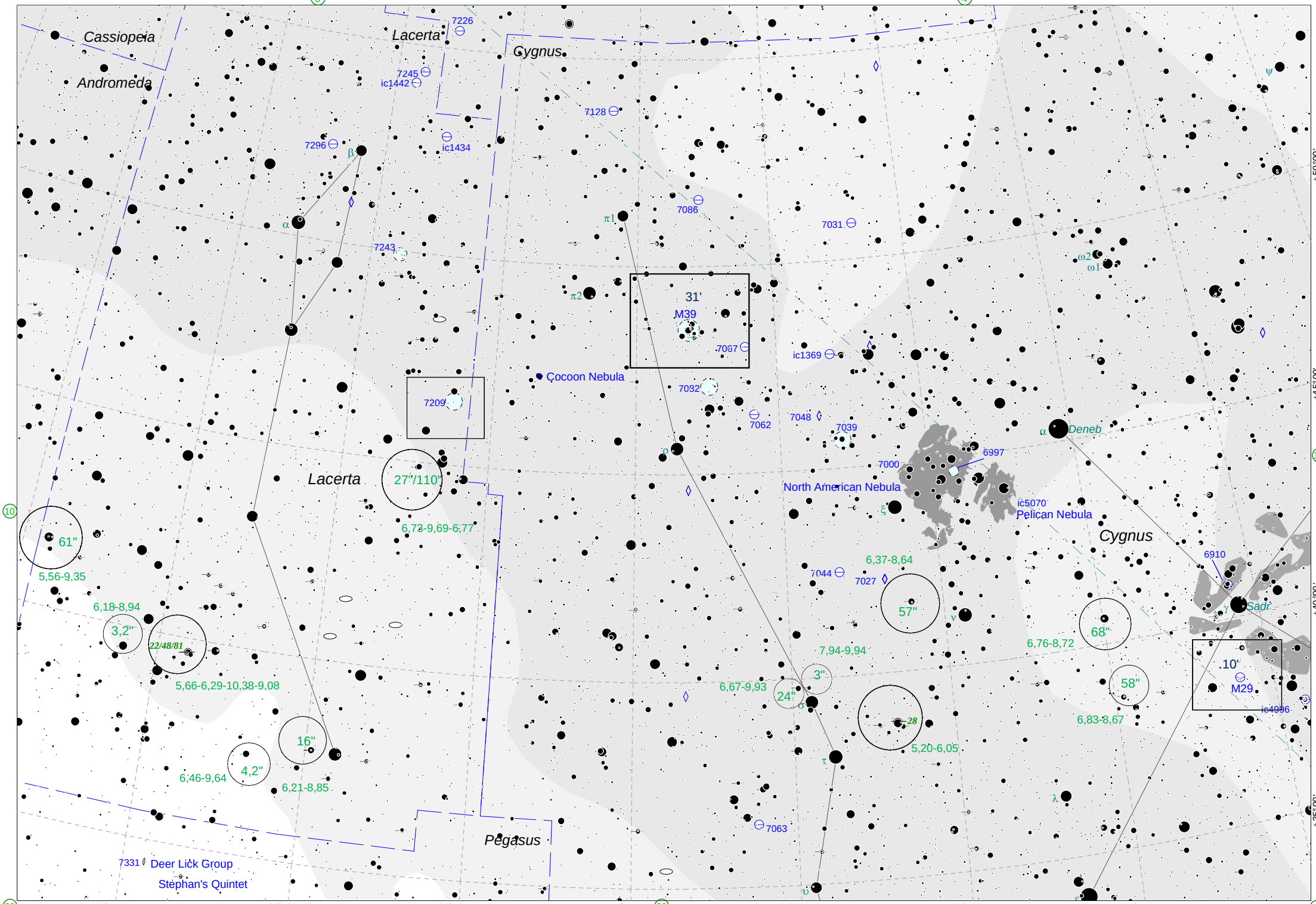


Chart 12 george

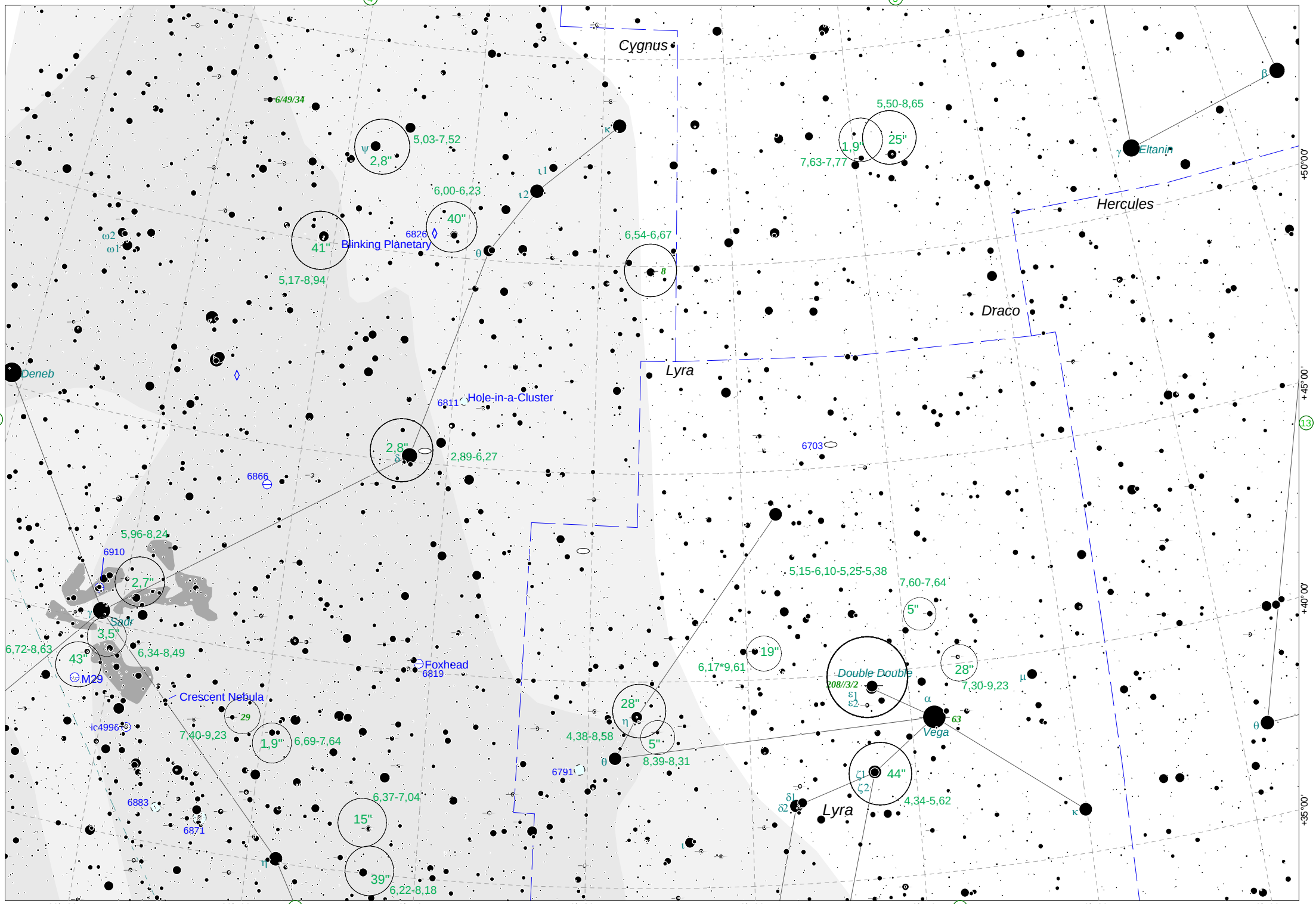


Chart 13

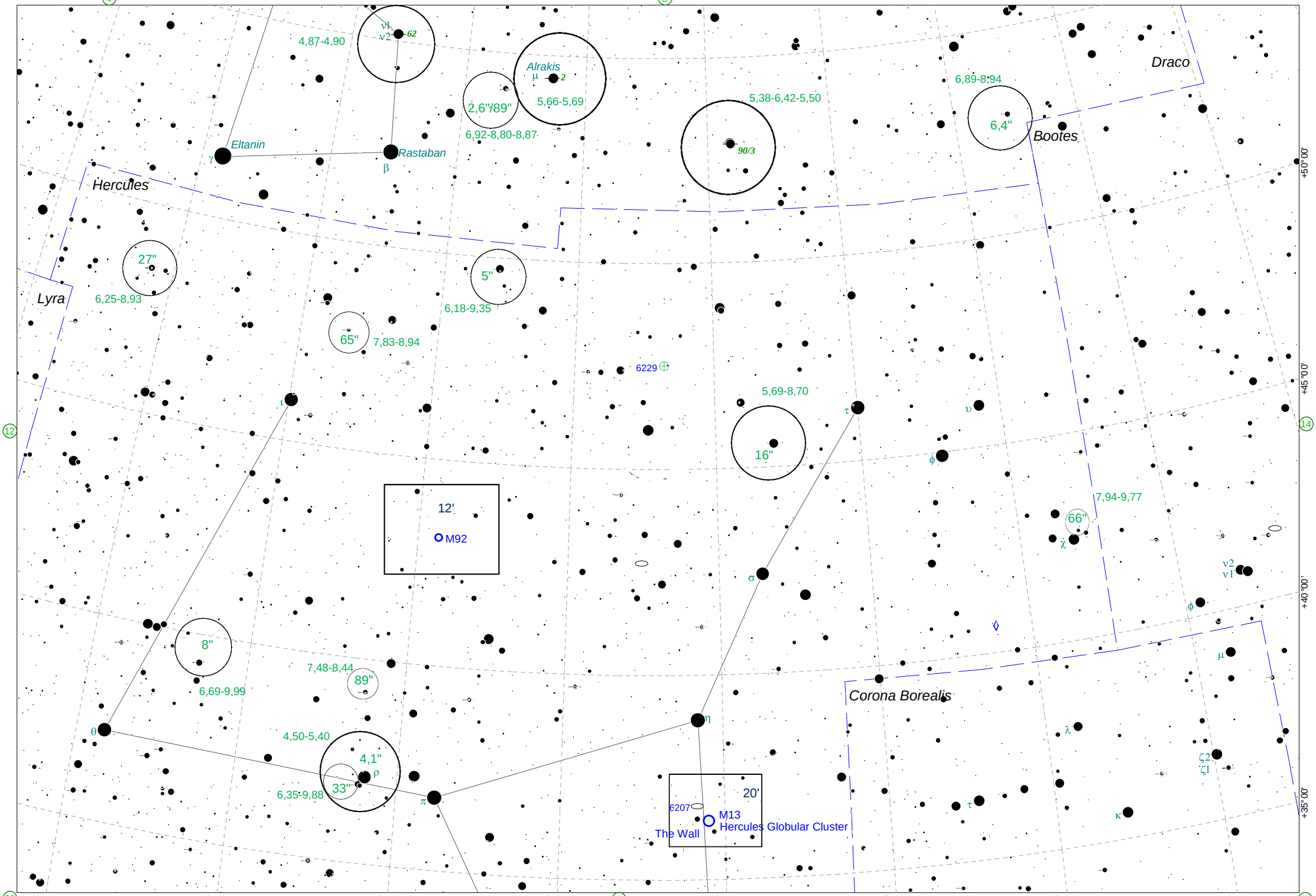

4
5
12
14
26
28
30
18h 00m
17h 40m
17h 20m
17h 00m
16h 40m
16h 20m
16h 00m
15h 40m
+50°00'
+45°00'
+40°00'
+35°00'
4,87-4,90
ν1
ν2
62
Alrakis
μ
2
5,66-5,69
2,6"/89"
6,92-8,80-8,87
5,38-6,42-5,50
90/3
6,89-8,94
6,4"
Draco
Boötes
Eltanin
γ
Rastaban
β
Hercules
27"
6,25-8,93
Lyra
5"
6,18-9,35
65"
7,83-8,94
6229
5,69-8,70
16"
τ
υ
φ
12'
M92
7,94-9,77
66"
χ
ν2
ν1
σ
φ
ι
8"
6,69-9,99
7,48-8,44
89"
Corona Borealis
θ
η
4,50-5,40
4,1"
ρ
33"
6,35-9,88
π
λ
ζ2
ζ1
τ
κ
20'
6207
M13
Hercules Globular Cluster
The Wall

Chart 14 george

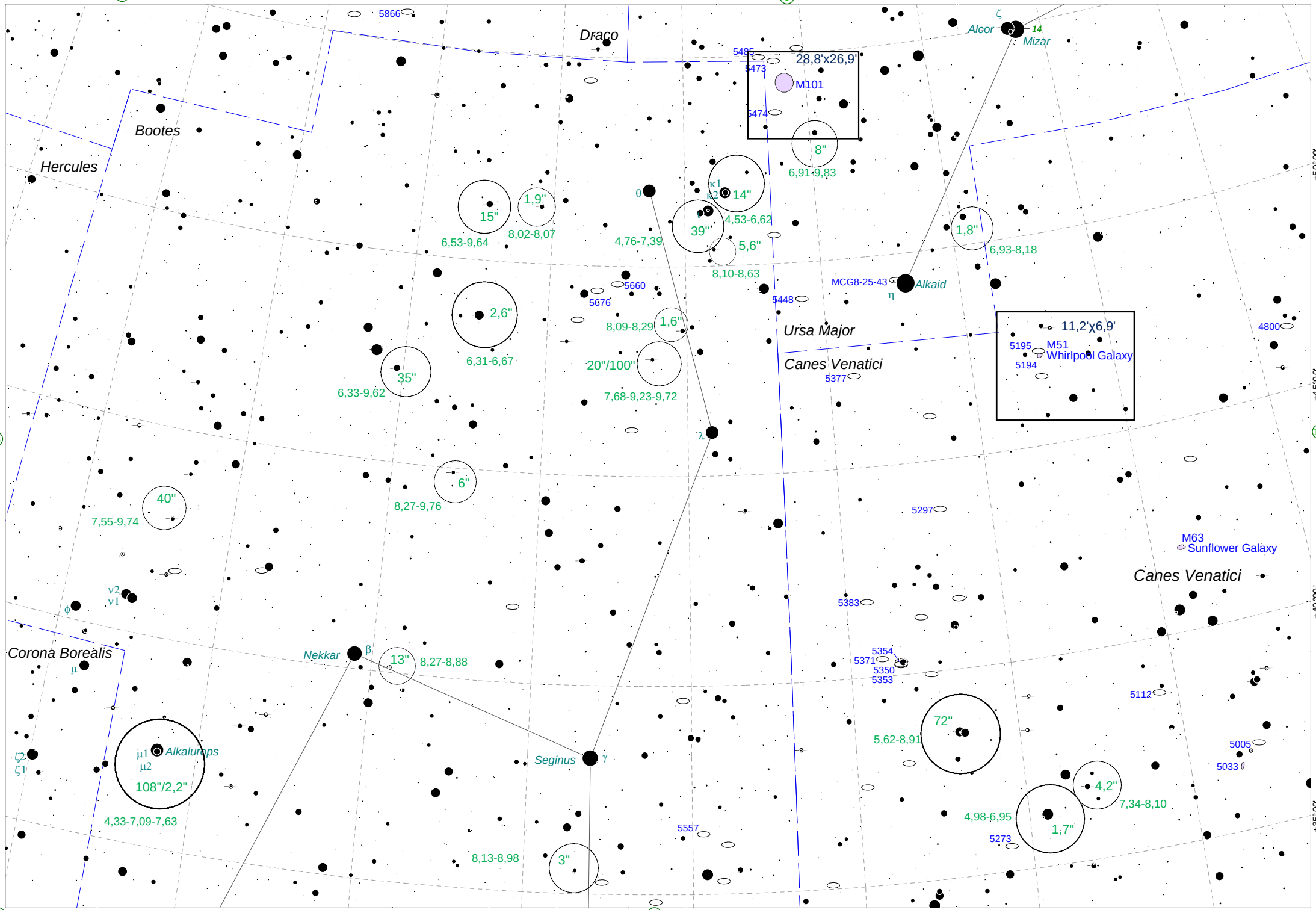


Chart 15 george

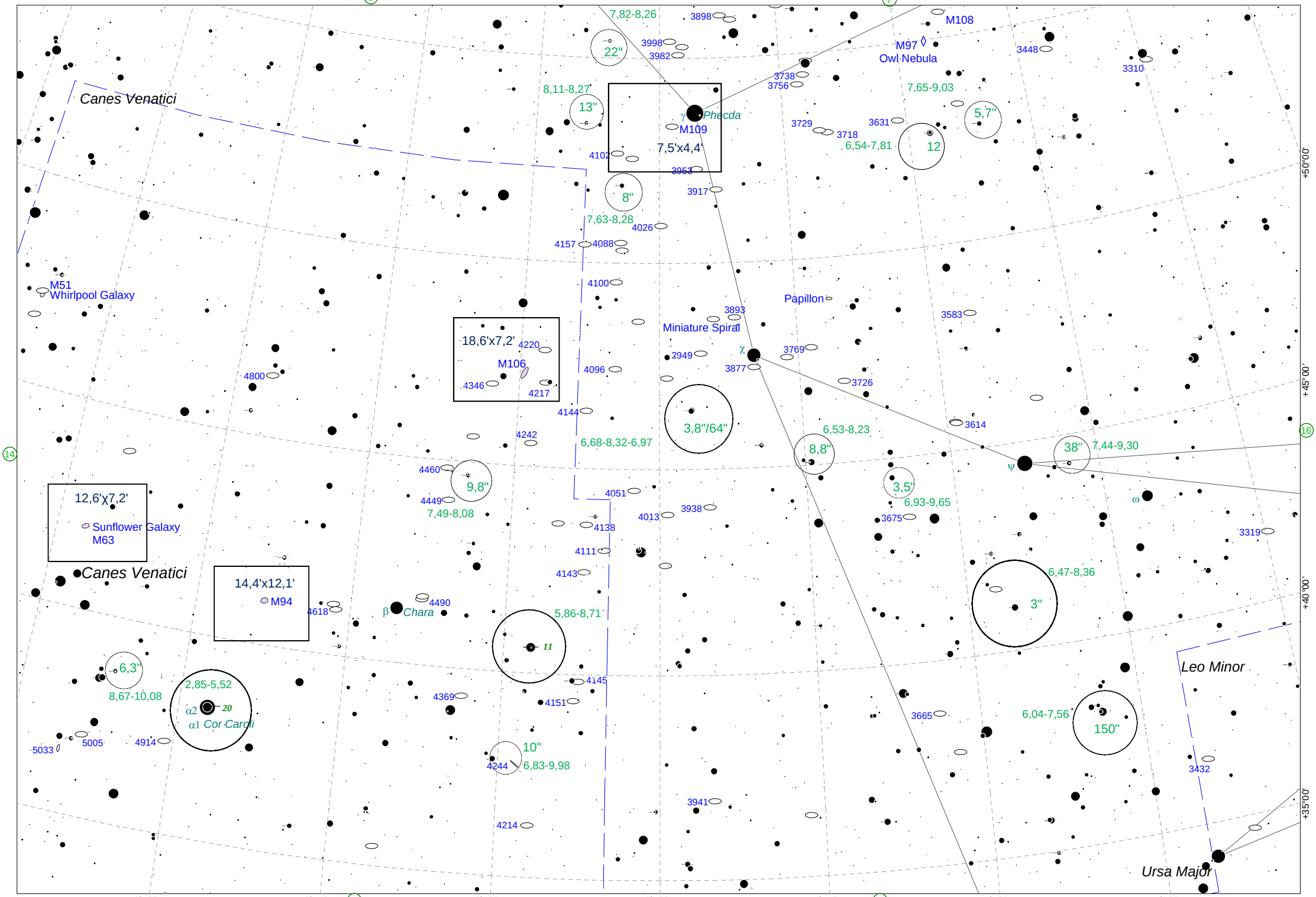


Chart 16 george

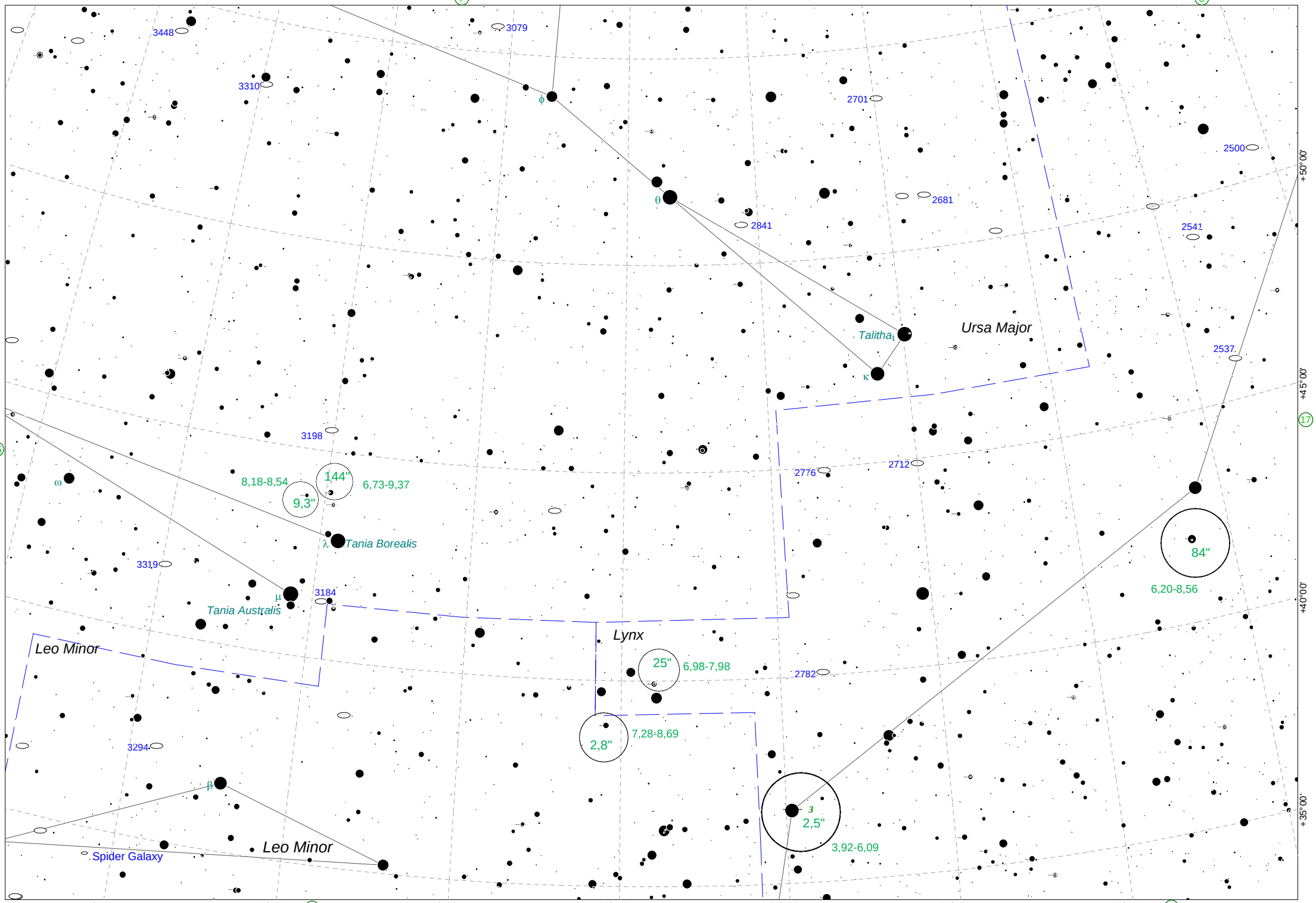


Chart 17 george

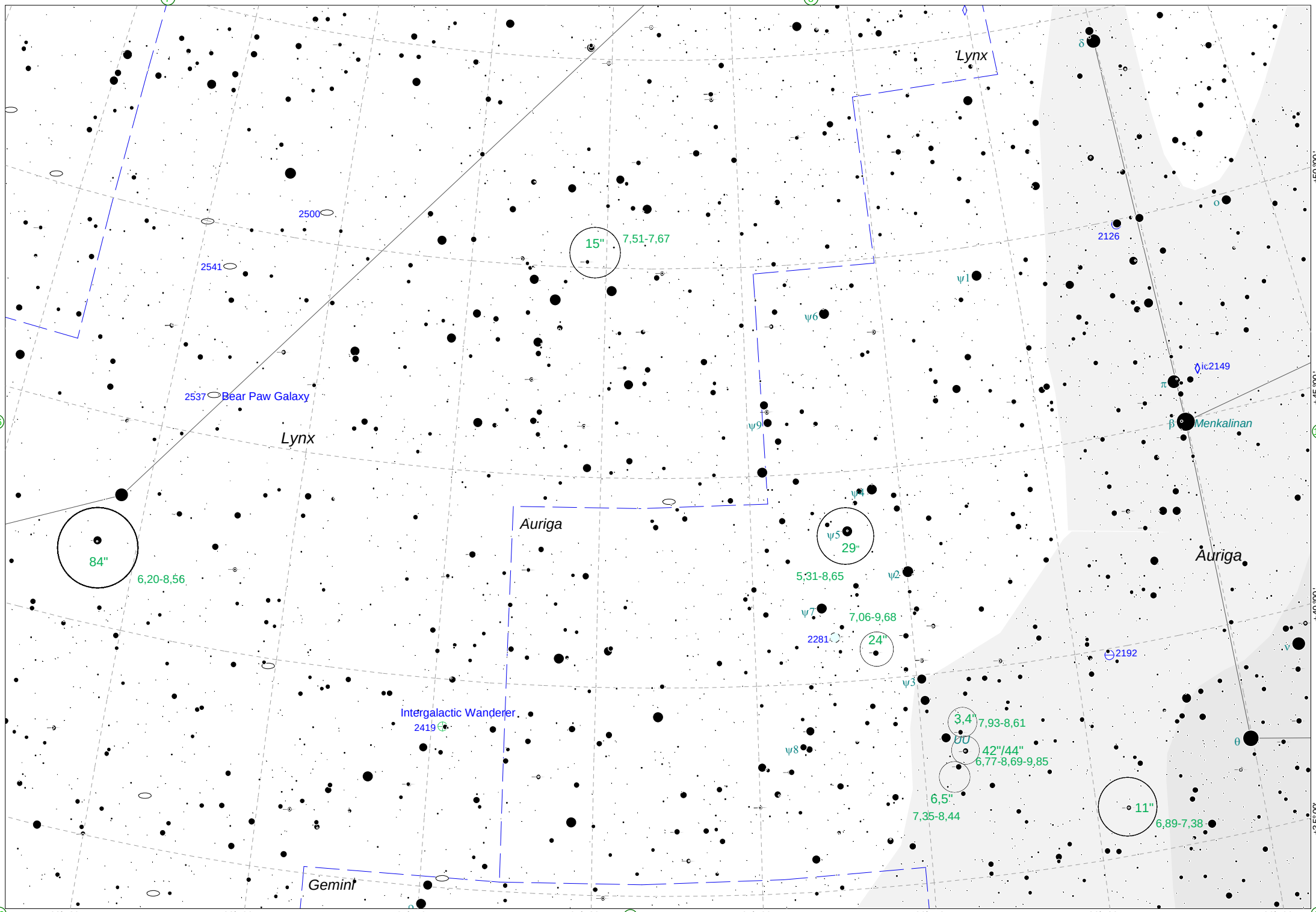


Chart 18 george

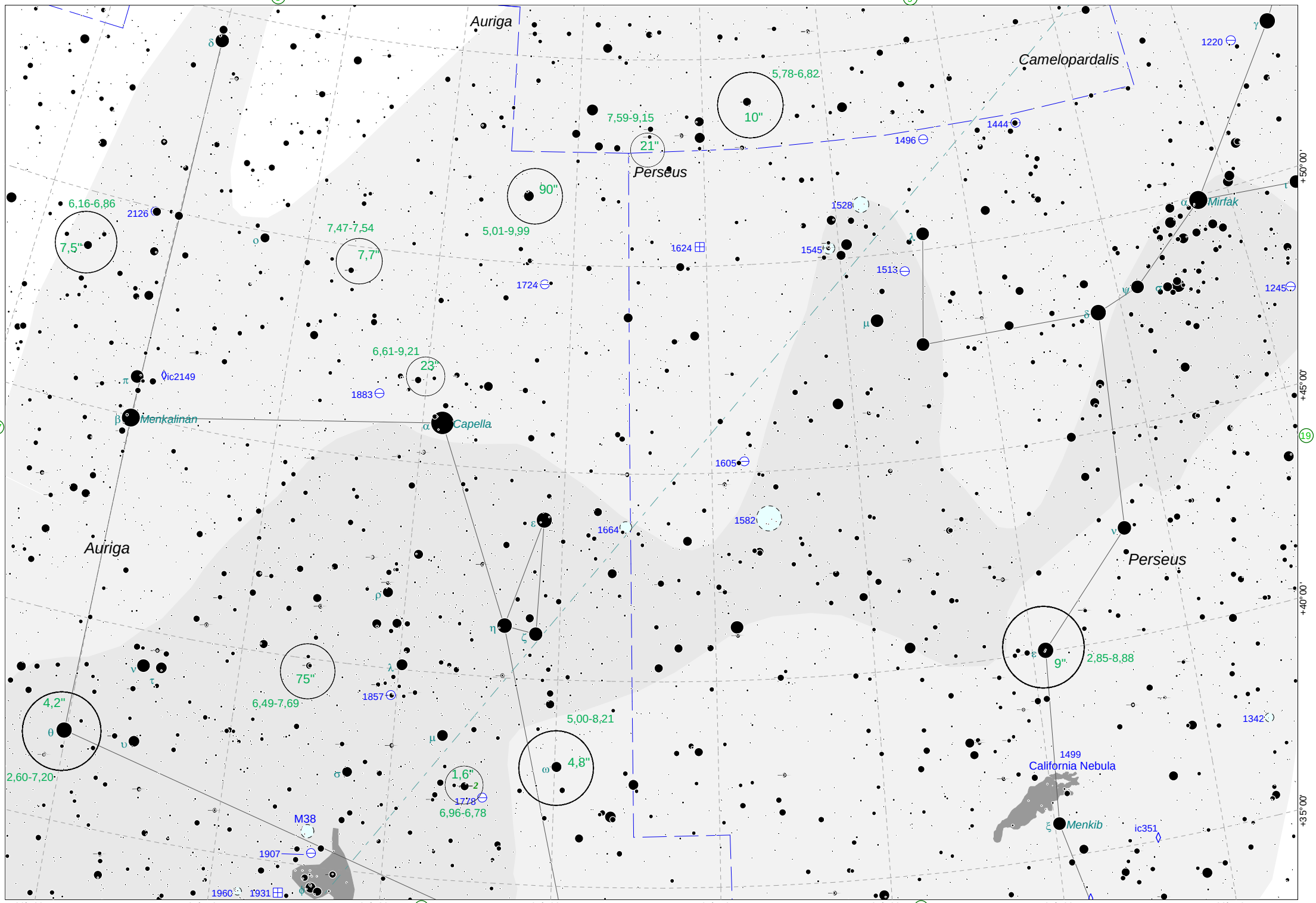
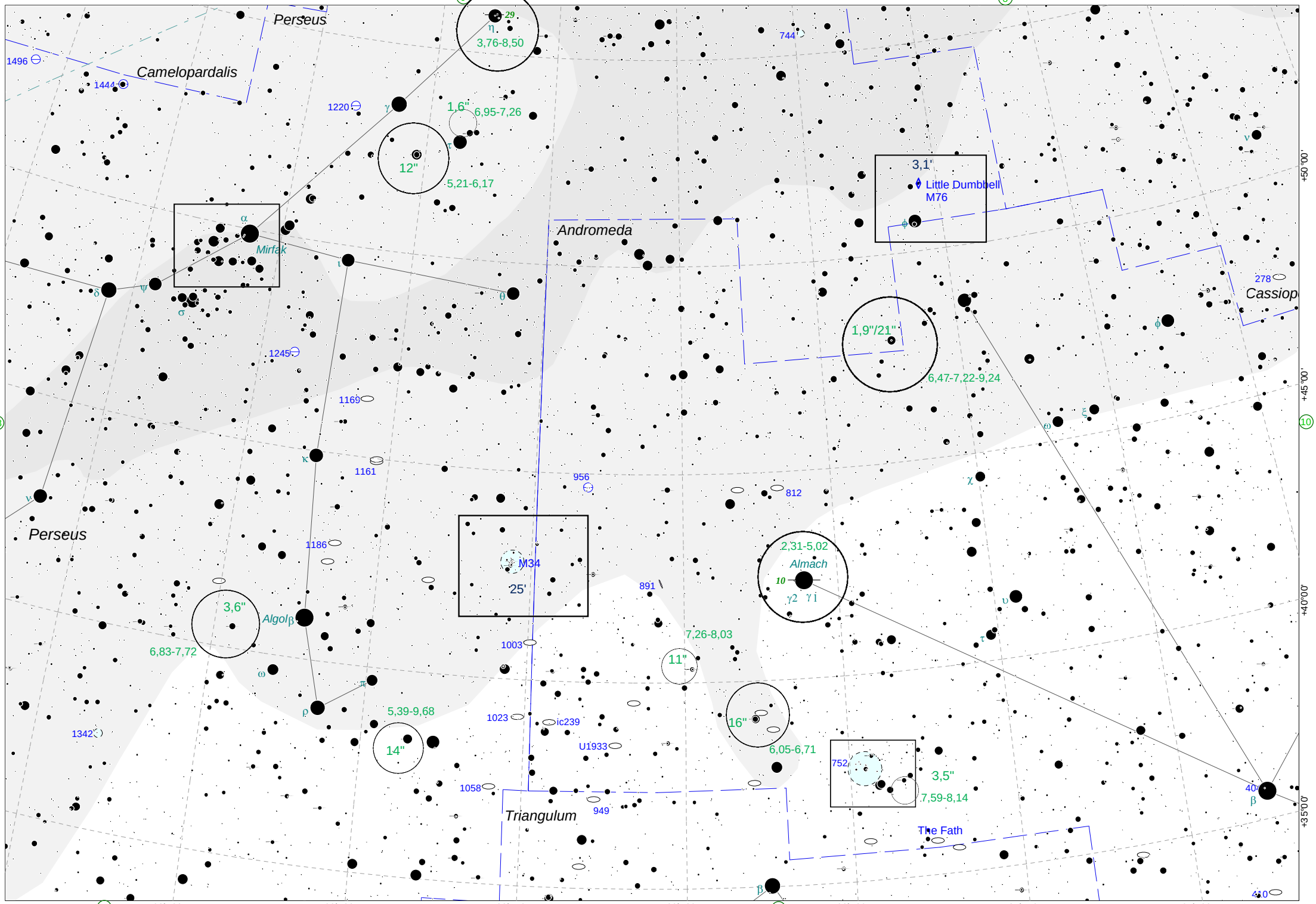


Chart 19 george



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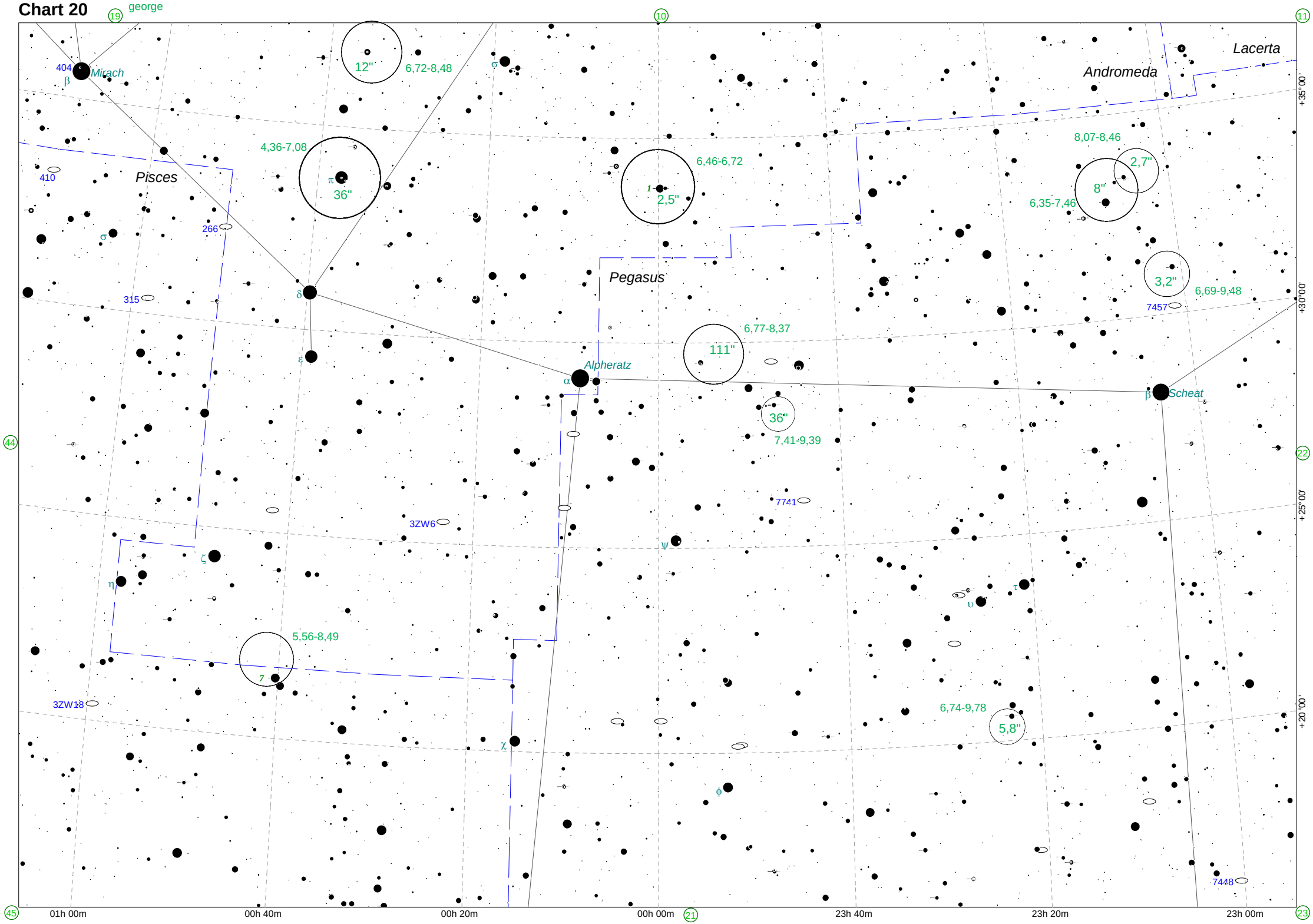

george
19
10
11
44
22
45
21
23
Lacerta
Andromeda
Pisces
Pegasus
Mirach
Alpheratz
Scheat
404
β
410
266
σ
315
δ
ε
π
ι
α
β
ζ
η
ψ
τ
υ
χ
φ
12"
6,72-8,48
4,36-7,08
36"
6,46-6,72
2,5"
8,07-8,46
2,7"
8"
6,35-7,46
3,2"
6,69-9,48
7457
6,77-8,37
111"
36"
7,41-9,39
7741
3ZW6
5,56-8,49
7
3ZW18
6,74-9,78
5,8"
7448
+35°00'
+30°00'
+25°00'
+20°00'
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m

Chart 21

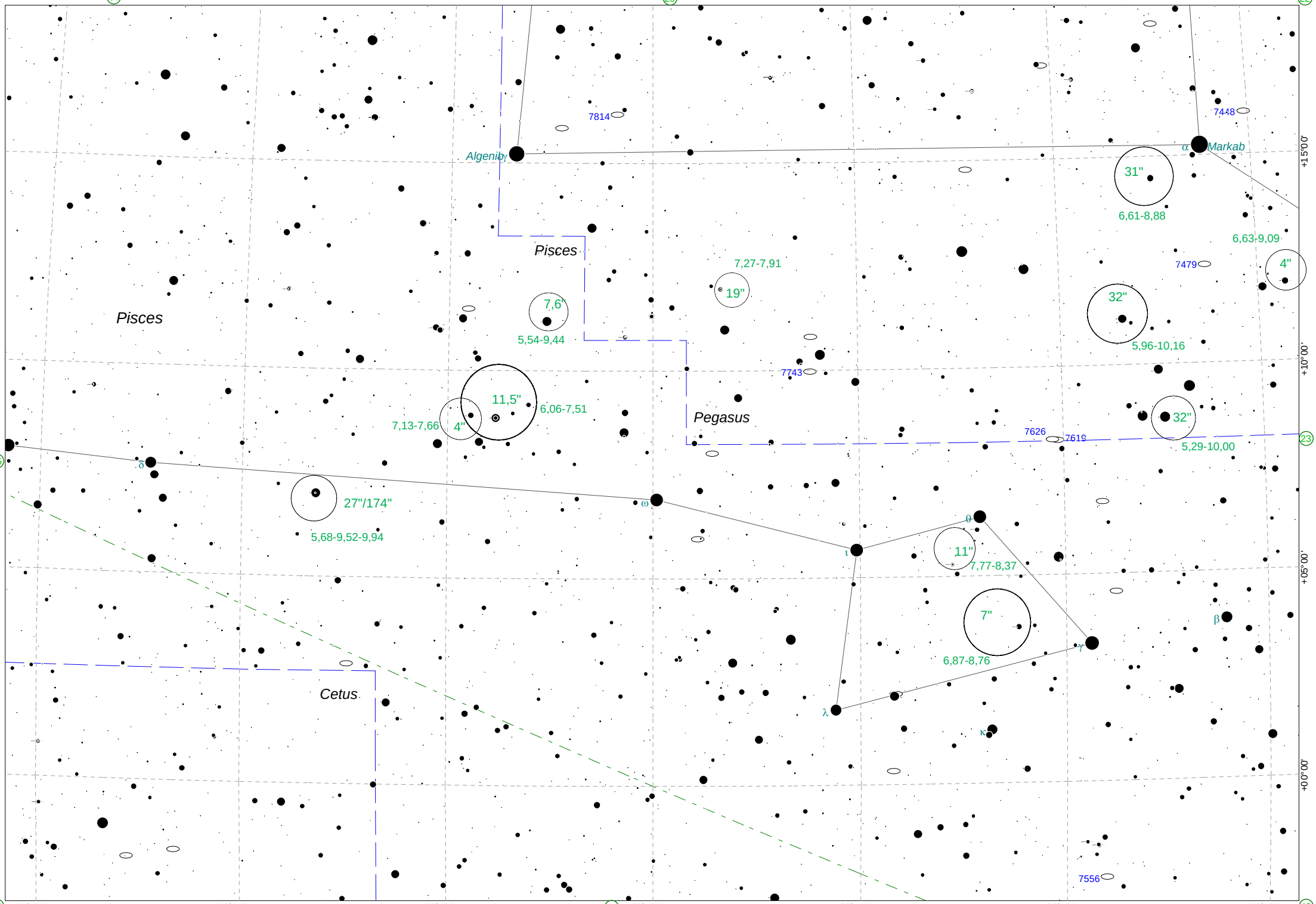

44
20
22
45
23
70
46
48
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m
+15°00'
+10°00'
+05°00'
+00°00'
Algenib
Markab
α
7814
7448
31"
6,61-8,88
6,63-9,09
4"
7479
Pisces
Pisces
7,27-7,91
19"
7,6"
5,54-9,44
32"
5,96-10,16
7743
11,5"
6,06-7,51
7,13-7,66
4"
Pegasus
32"
5,29-10,00
7626
7619
δ
27"/174"
5,68-9,52-9,94
ω
ι
θ
11"
7,77-8,37
7"
6,87-8,76
β
γ
λ
κ
Cetus
7556

Chart 22

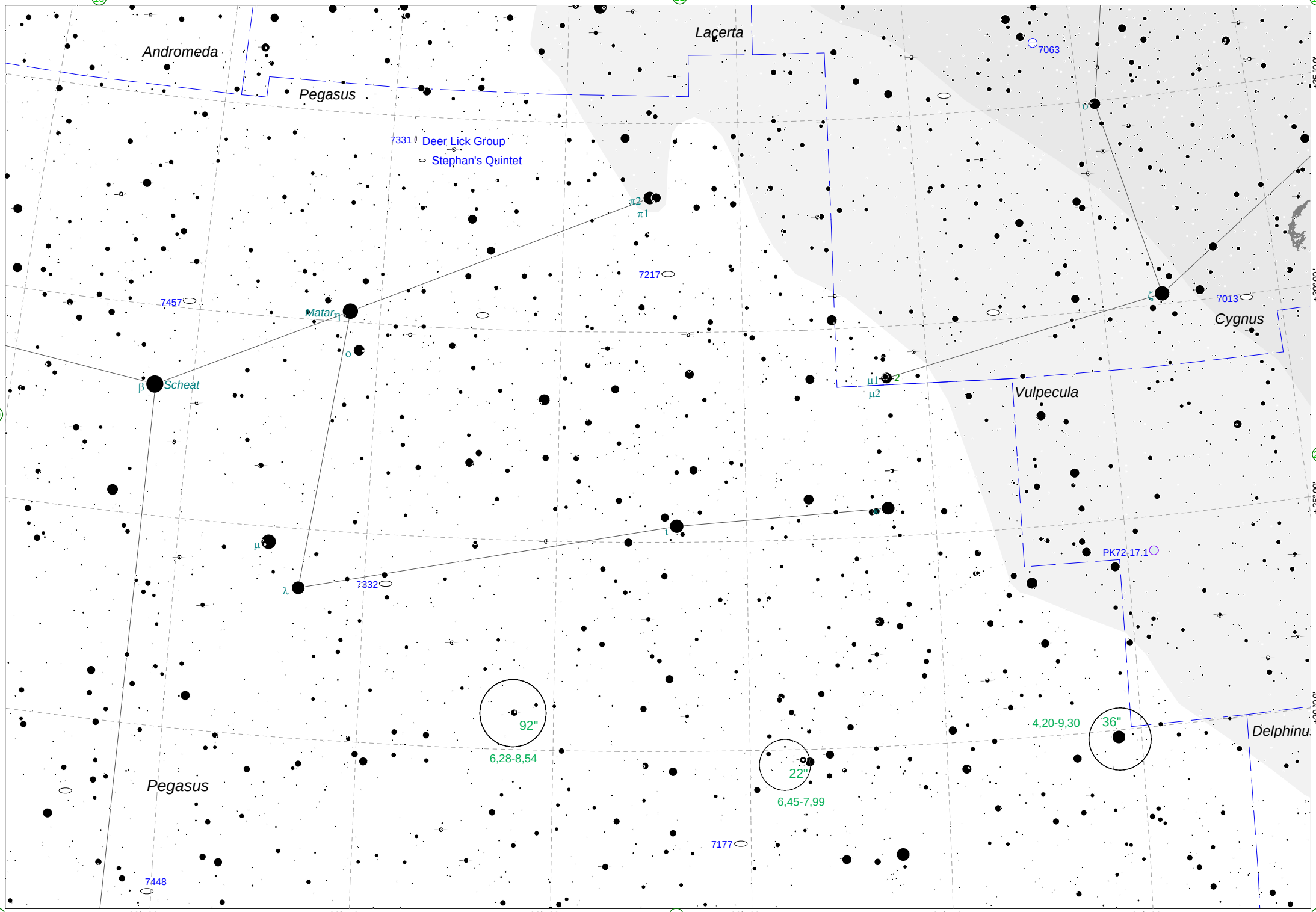

george
Andromeda
Pegasus
Lacerta
7063
7331
Deer Lick Group
Stephan's Quintet
π2
π1
7217
7457
Matar
η
o
β
Scheat
Cygnus
ζ
7013
μ1
2
μ2
Vulpecula
PK72-17.1
μ
λ
7332
ι
92"
6,28-8,54
22"
6,45-7,99
4,20-9,30
36"
Delphinu
Pegasus
7177
7448
+35°00'
+30°00'
+25°00'
+20°00'
23h 00m
22h 40m
22h 20m
22h 00m
21h 40m
21h 20m
10
11
12
20
24
21
23
25

Chart 23 george

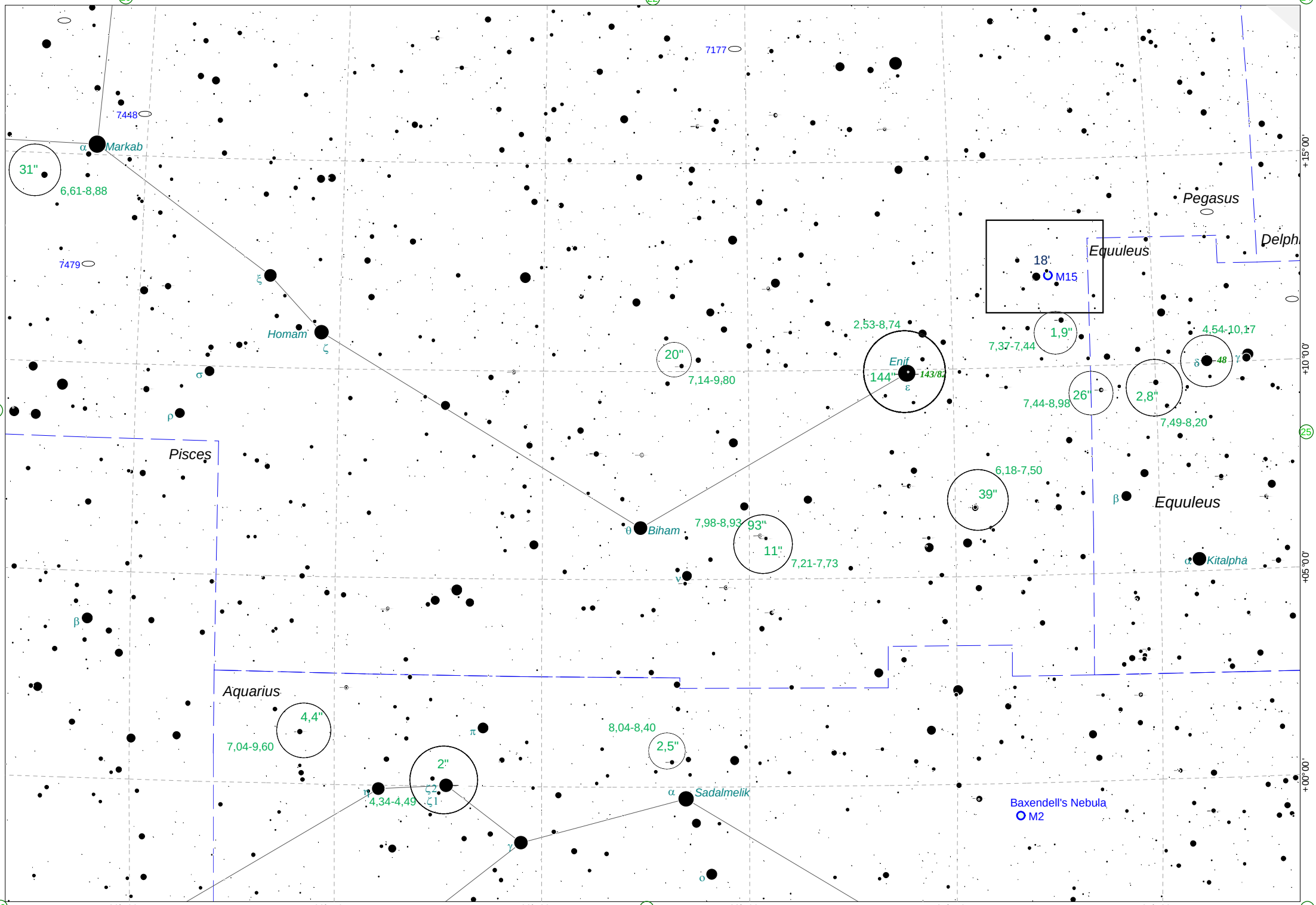


Chart 24 george

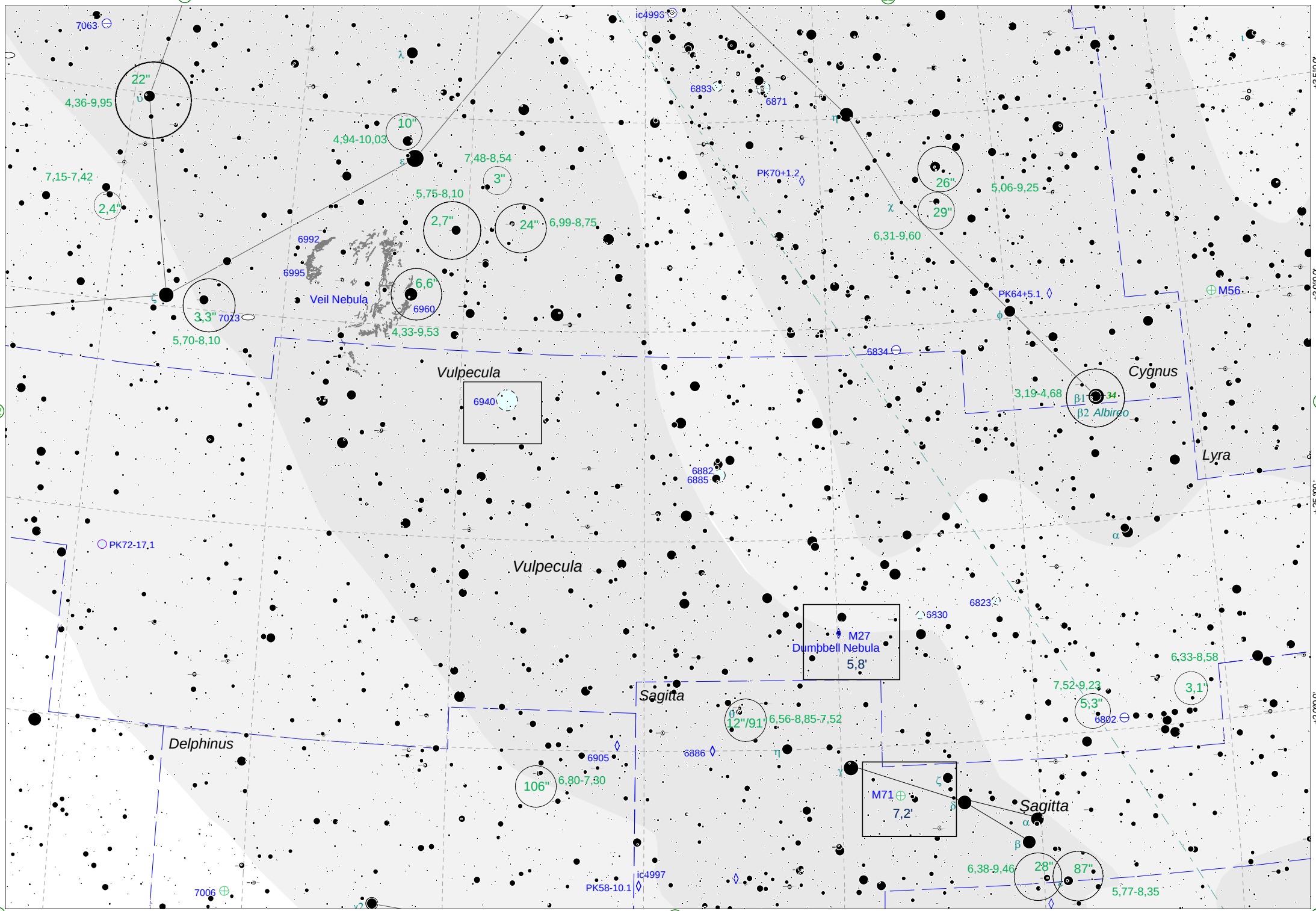


Chart 25

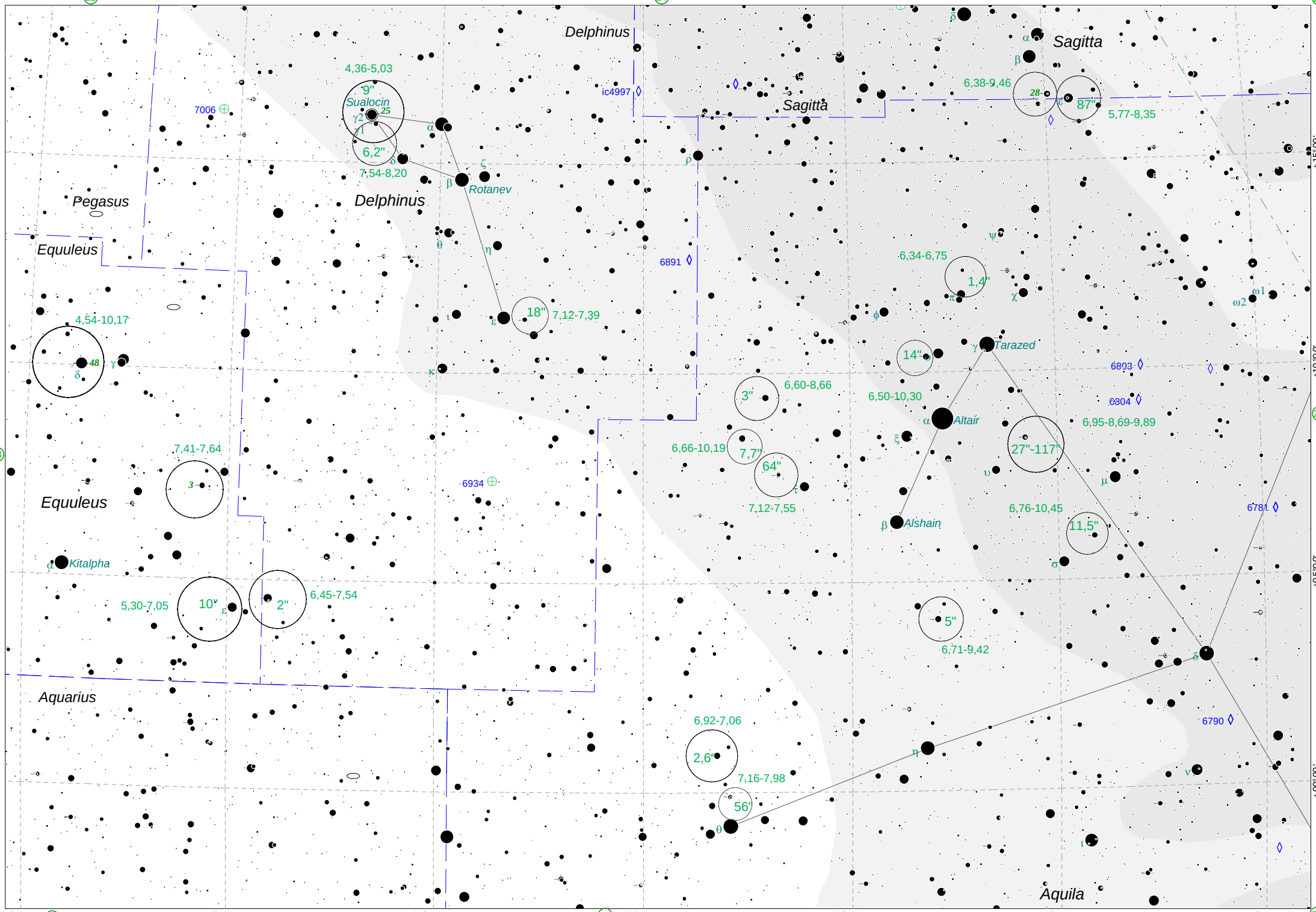

22
24
26
23
27
48
50
52
+15°00'
+10°00'
+05°00'
+00°00'
21h 20m
21h 00m
20h 40m
20h 20m
20h 00m
19h 40m
19h 20m
Delphinus
Sagitta
Pegasus
Equuleus
Aquarius
Aquila
Rotanev
Sualocin
Tarazed
Altair
Alshain
Kitalpha
7006
6891
6934
6803
6804
6781
6790
4,36-5,03
9"
6,2"
7,54-8,20
18"
7,12-7,39
6,38-9,46
87"
5,77-8,35
6,34-6,75
1,4"
14"
6,60-8,66
3"
6,50-10,30
6,95-8,69-9,89
27"-117"
6,66-10,19
7,7"
64"
7,12-7,55
6,76-10,45
11,5"
5"
6,71-9,42
4,54-10,17
7,41-7,64
5,30-7,05
10"
2"
6,45-7,54
6,92-7,06
2,6"
7,16-7,98
56"

Chart 26 george

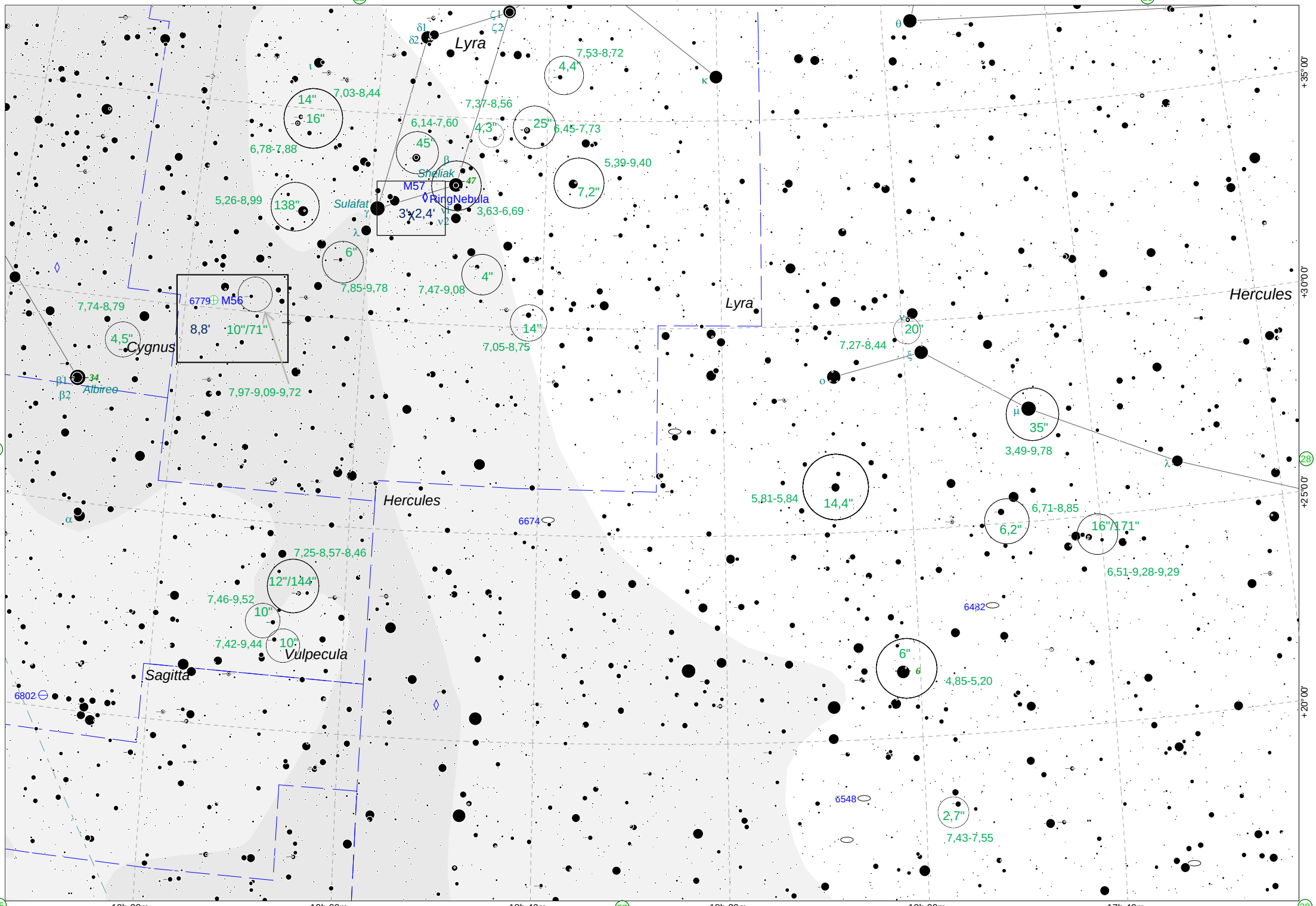


Chart 27

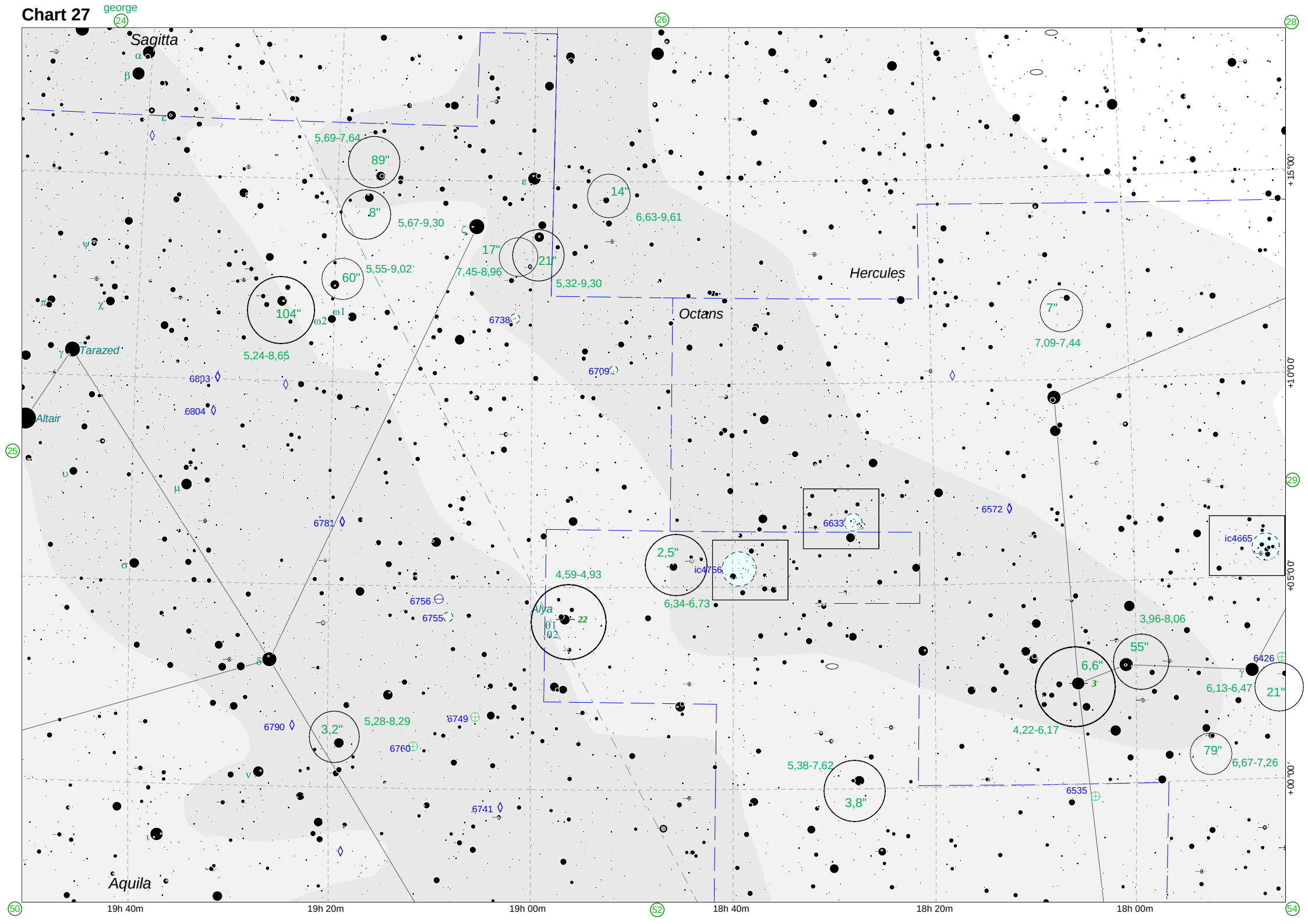

george
Sagitta
Hercules
Octans
Tarazed
Altair
Aquila
Alya
5,69-7,64
89"
8"
5,67-9,30
14"
6,63-9,61
17"
21"
7,45-8,96
5,32-9,30
60"
5,55-9,02
104"
5,24-8,65
7"
7,09-7,44
2,5"
6,34-6,73
4,59-4,93
3,96-8,06
55"
6,6"
6,13-6,47
21"
4,22-6,17
79"
6,67-7,26
5,38-7,62
3,8"
3,2"
5,28-8,29
6738
6709
6803
6804
6781
6633
6572
ic4665
ic4756
6756
6755
6790
6749
6760
6741
6535
6426
19h 40m
19h 20m
19h 00m
18h 40m
18h 20m
18h 00m
+15°00'
+10°00'
+05°00'
+00°00'

Chart 28

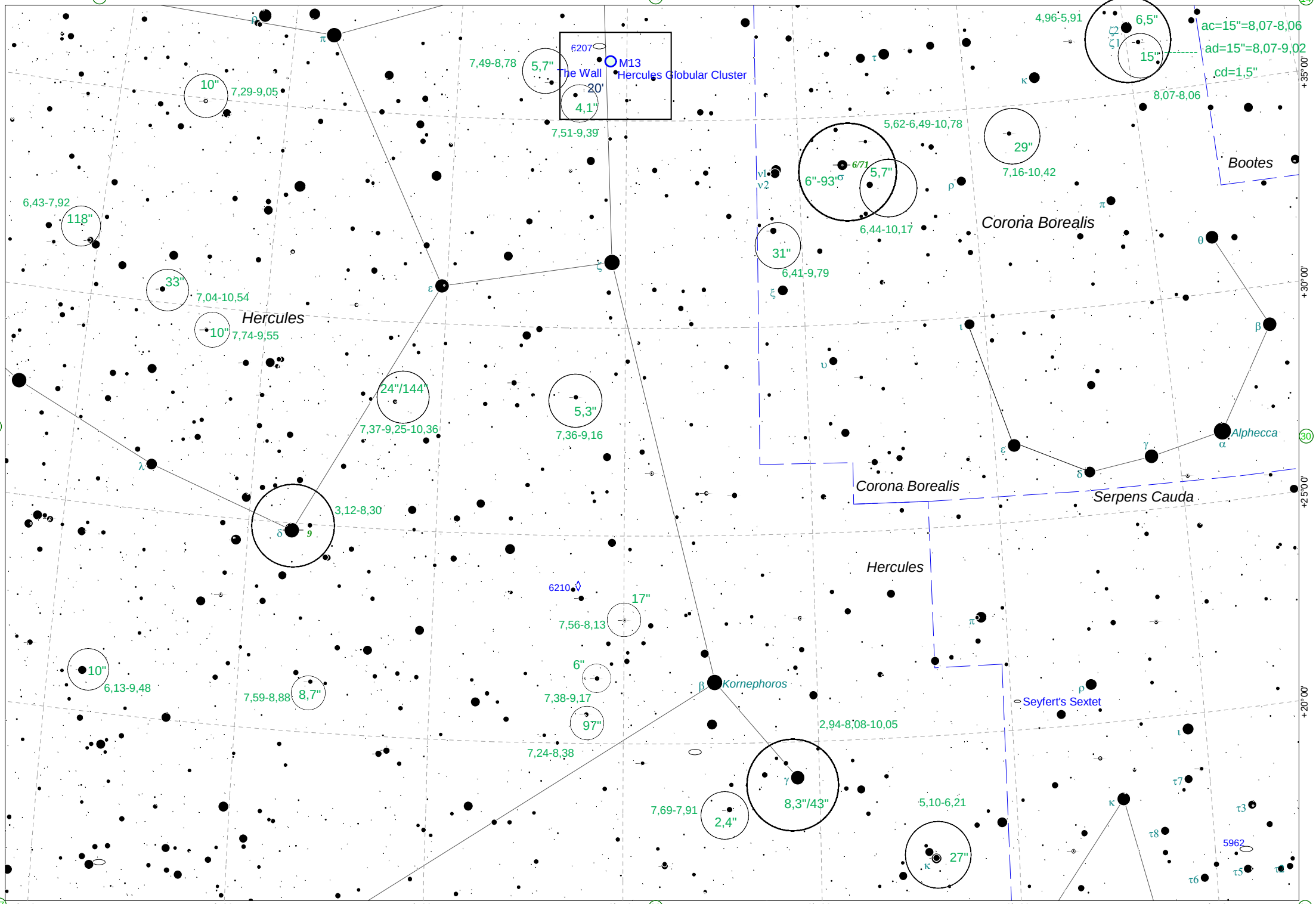

ac=15"=8,07-8,06
ad=15"=8,07-9,02
cd=1,5"
6,5"
15"
4,96-5,91
8,07-8,06
Bootes
29"
7,16-10,42
5,62-6,49-10,78
6"-93'
5,7"
6,44-10,17
Corona Borealis
31"
6,41-9,79
M13
Hercules Globular Cluster
The Wall
20'
6207
5,7"
7,49-8,78
4,1"
7,51-9,39
10"
7,29-9,05
118"
6,43-7,92
33"
7,04-10,54
Hercules
10"
7,74-9,55
24"/144'
7,37-9,25-10,36
5,3"
7,36-9,16
3,12-8,30
Alphecca
Corona Borealis
Serpens Cauda
Hercules
6210
17"
7,56-8,13
6"
7,38-9,17
97"
7,24-8,38
10"
6,13-9,48
7,59-8,88
8,7"
Kornephoros
Seyfert's Sextet
2,94-8,08-10,05
8,3"/43"
7,69-7,91
2,4"
5,10-6,21
27"
5962
+35°00'
+30°00'
+25°00'
+20°00'
17h 40m
17h 20m
17h 00m
16h 40m
16h 20m
16h 00m
15h 40m

Chart 29 george

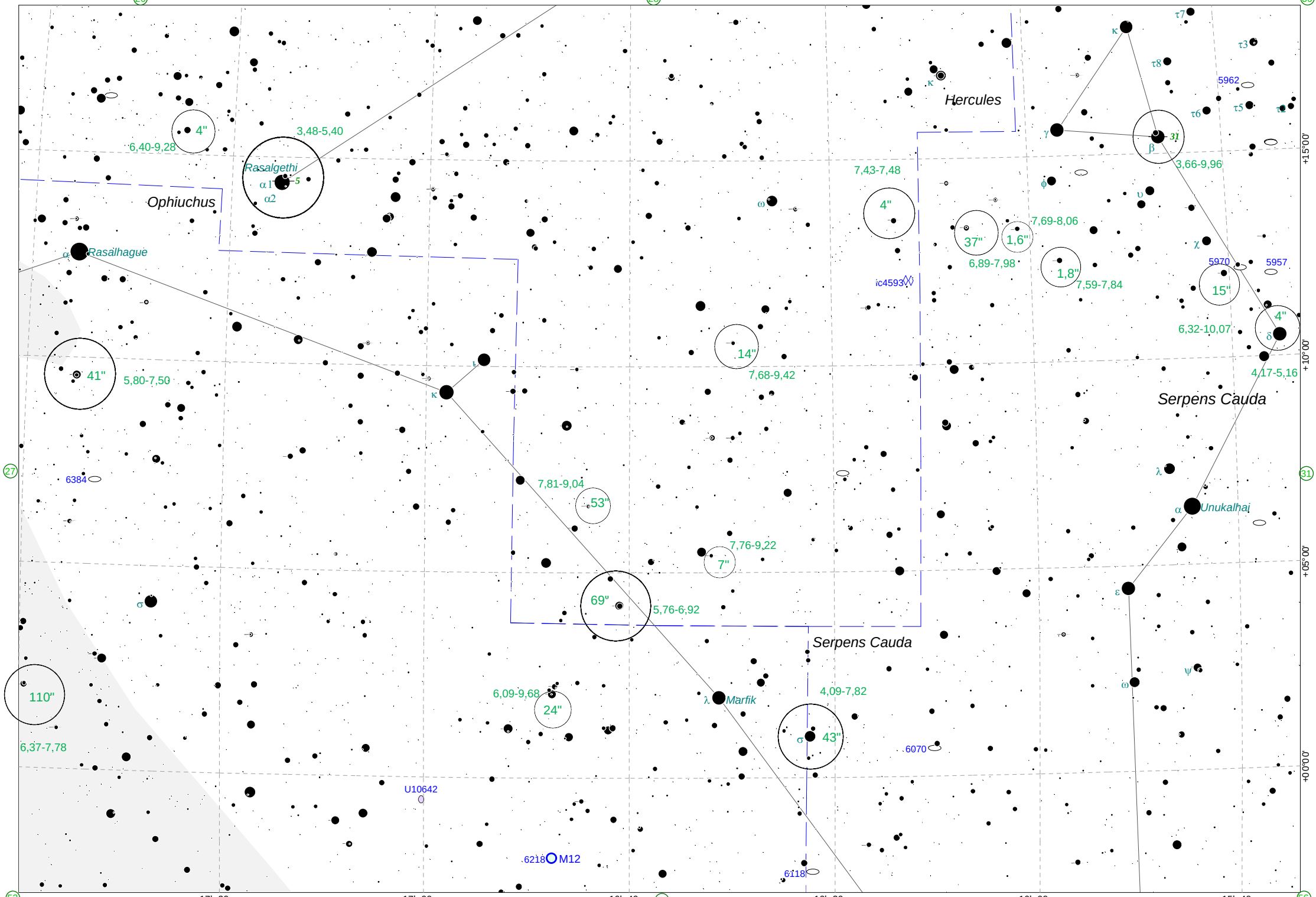


Chart 30

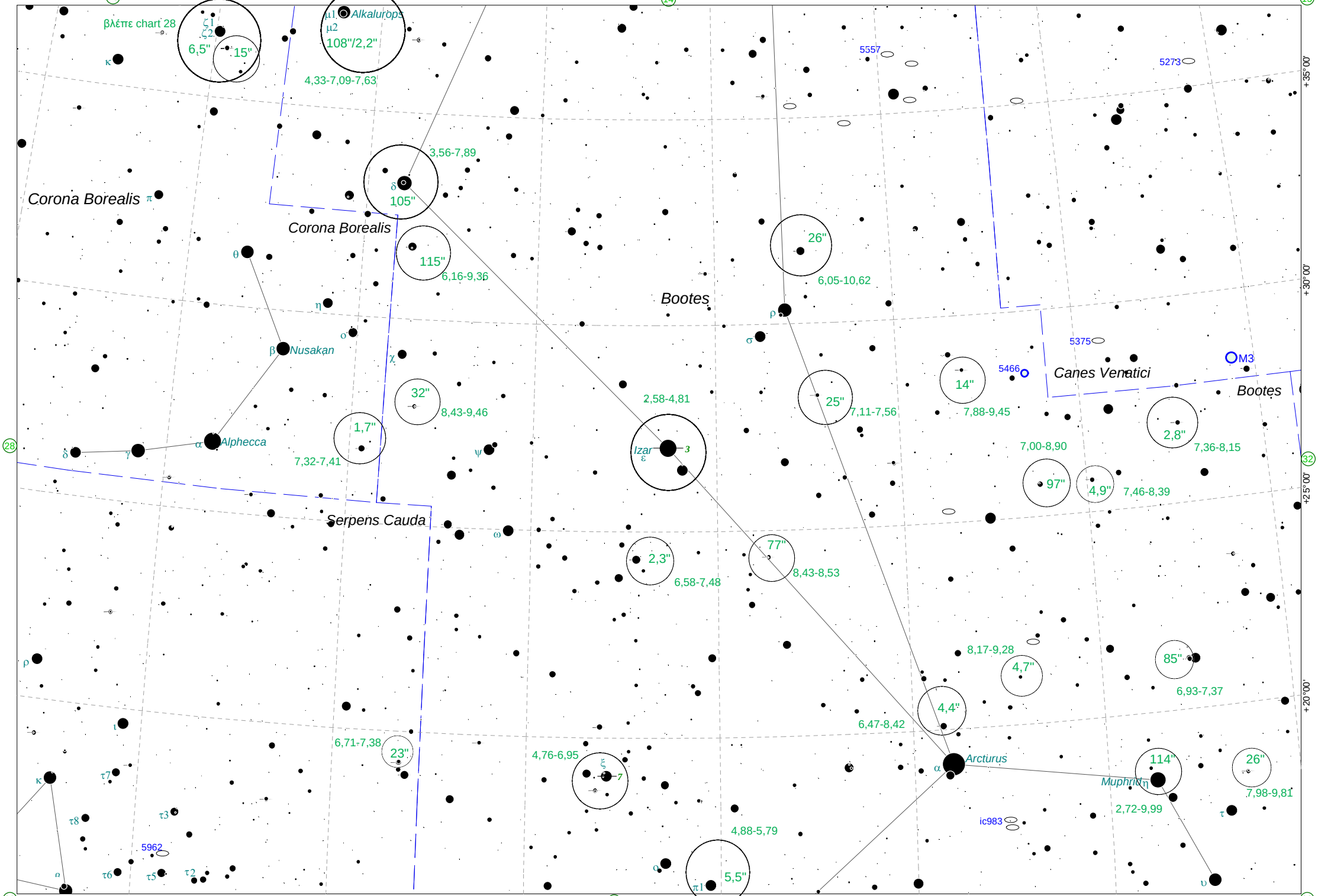

george
βλέπε chart 28
ζ1
ζ2
6,5"
15"
κ
μ1
μ2
Alkalurops
108"/2,2"
4,33-7,09-7,63
3,56-7,89
δ
105"
Corona Borealis
π
Corona Borealis
θ
115"
6,16-9,36
η
ο
β
Nusakan
χ
32"
8,43-9,46
1,7"
7,32-7,41
δ
γ
α
Alphecca
ψ
Serpens Cauda
ω
2,58-4,81
Izar
ε
3
Bootes
26"
6,05-10,62
ρ
σ
25"
7,11-7,56
14"
7,88-9,45
5557
5273
5375
5466
Canes Venatici
M3
Bootes
2,8"
7,36-8,15
7,00-8,90
97"
4,9"
7,46-8,39
2,3"
6,58-7,48
77"
8,43-8,53
8,17-9,28
4,7"
85"
6,93-7,37
4,4"
6,47-8,42
Arcturus
α
Muphrid
η
114"
26"
7,98-9,81
τ
υ
ic983
2,72-9,99
ρ
ι
6,71-7,38
23"
4,76-6,95
ξ
7
κ
τ7
τ8
τ3
5962
τ6
τ5
τ2
ο
4,88-5,79
α
π1
5,5"
13
14
15
28
29
31
32
33
+35°00'
+30°00'
+25°00'
+20°00'
15h 40m
15h 20m
15h 00m
14h 40m
14h 20m
14h 00m

Chart 31 george

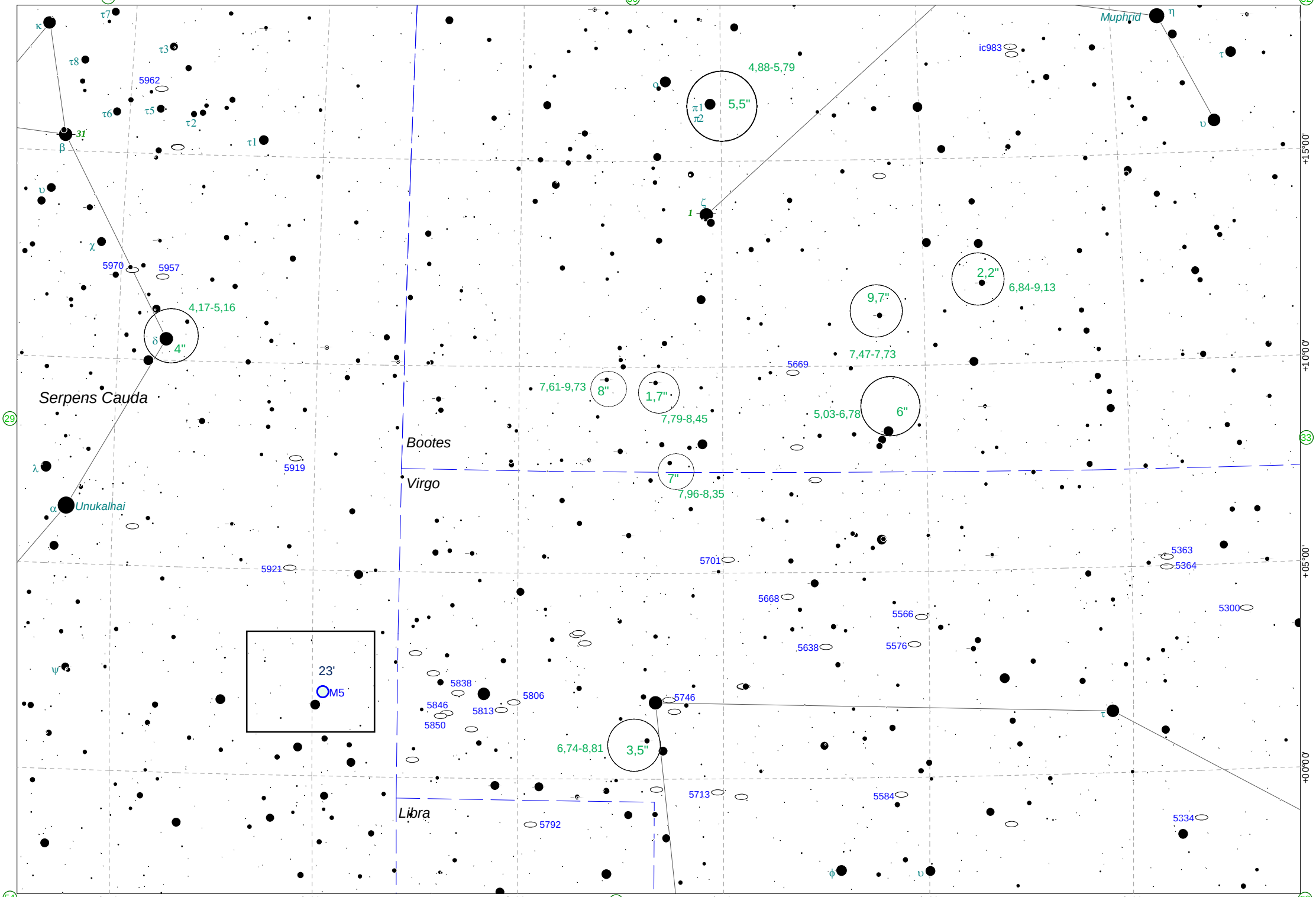


Chart 32 george

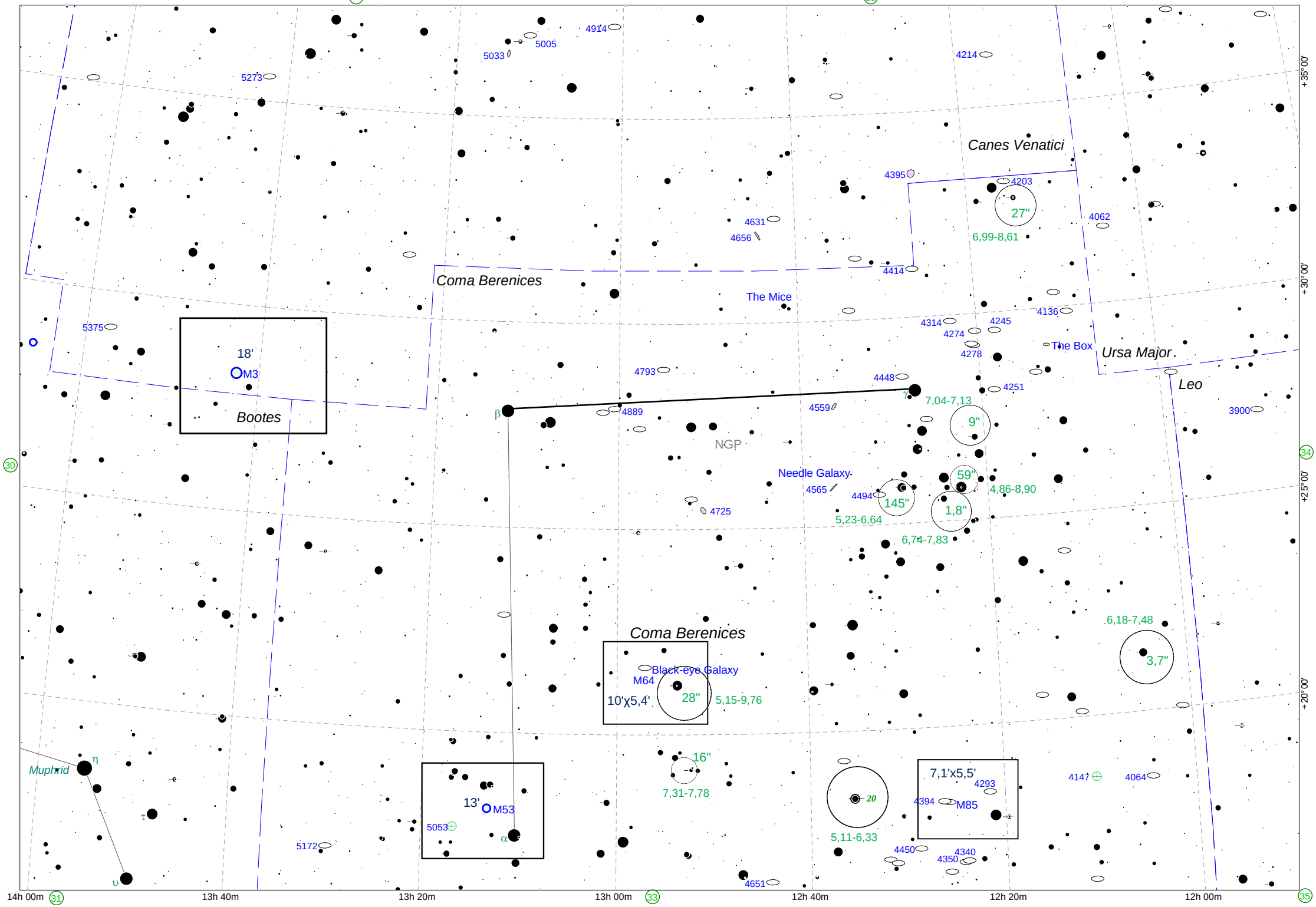


Chart 33

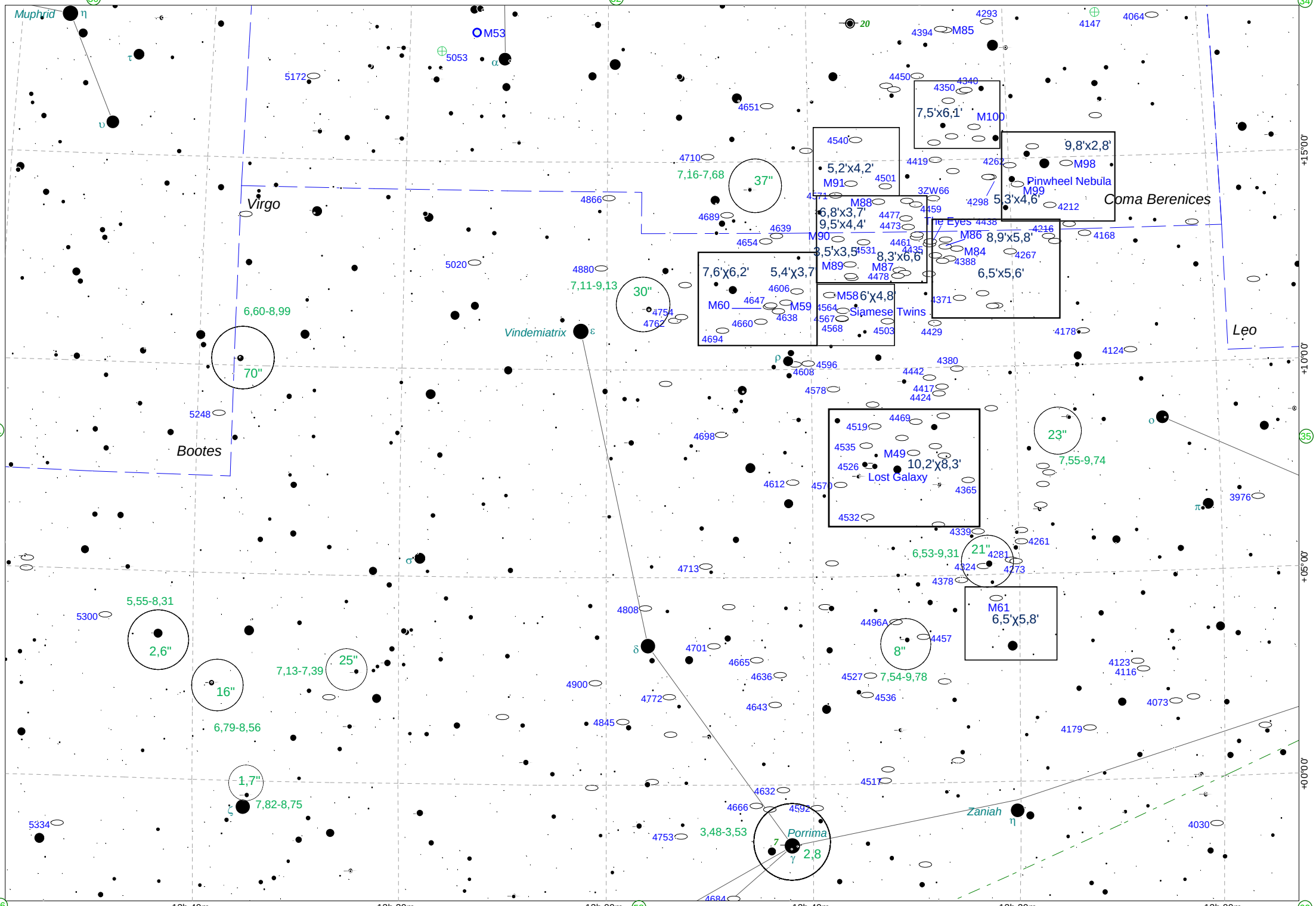

Muphrid
η
τ
υ
M53
α
5053
5172
Virgo
4866
4689
4639
4654
5020
4880
7,11-9,13
30"
4754
4762
6,60-8,99
70"
5248
Bootes
Vindemiatrix
ε
ρ
4596
4608
4578
4698
4612
4570
σ
4713
5,55-8,31
5300
2,6"
16"
6,79-8,56
7,13-7,39
25"
4808
δ
4701
4665
4636
4900
4772
4643
4845
1,7"
ζ
7,82-8,75
5334
4753
3,48-3,53
4666
4632
4592
Porrima
γ
2,8
4684
Zaniah
η
4517
4030
4179
4073
4123
4116
4527
7,54-9,78
4536
4496A
4457
8"
M61
6,5'x5,8'
6,53-9,31
21"
4339
4261
4281
4324
4273
4378
4532
4519
4469
4535
M49
4526
10,2'x8,3'
Lost Galaxy
4365
23"
7,55-9,74
3976
π
o
4380
4442
4417
4424
4178
4124
Leo
4429
4503
4564
4567
4568
M58
6'x4,8'
Siamese Twins
4371
M60
4647
M59
4638
4660
4694
4606
7,6'x6,2'
5,4'x3,7
M89
M87
4478
M90
3,5'x3,5'
4531
8,3'x6,6'
4461
4435
M88
6,8'x3,7'
9,5'x4,4'
4477
4473
4459
The Eyes
4438
M86
8,9'x5,8'
M84
4388
6,5'x5,6'
4267
4216
4168
4540
5,2'x4,2'
M91
4501
4571
4710
7,16-7,68
37"
4651
4450
4350
4340
7,5'x6,1'
M100
4419
4262
3ZW66
4298
5,3'x4,6'
9,8'x2,8'
M98
Pinwheel Nebula
M99
4212
Coma Berenices
4394
M85
4293
20
4147
4064
+15°00'
+10°00'
+05°00'
+00°00'
13h 40m
13h 20m
13h 00m
12h 40m
12h 20m
12h 00m
56
58
60
30
31
32
34
35

Chart 34

george

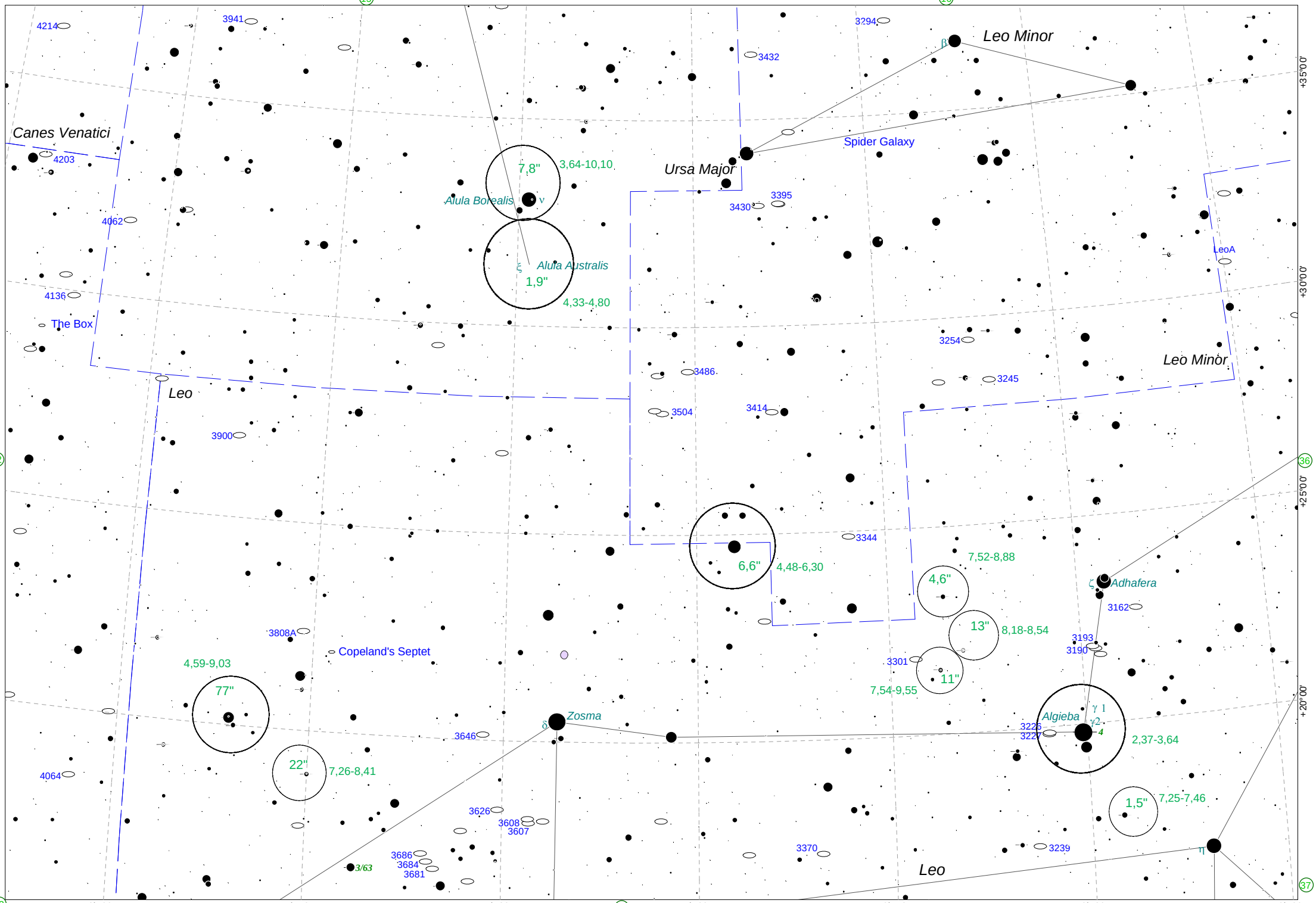


Chart 35

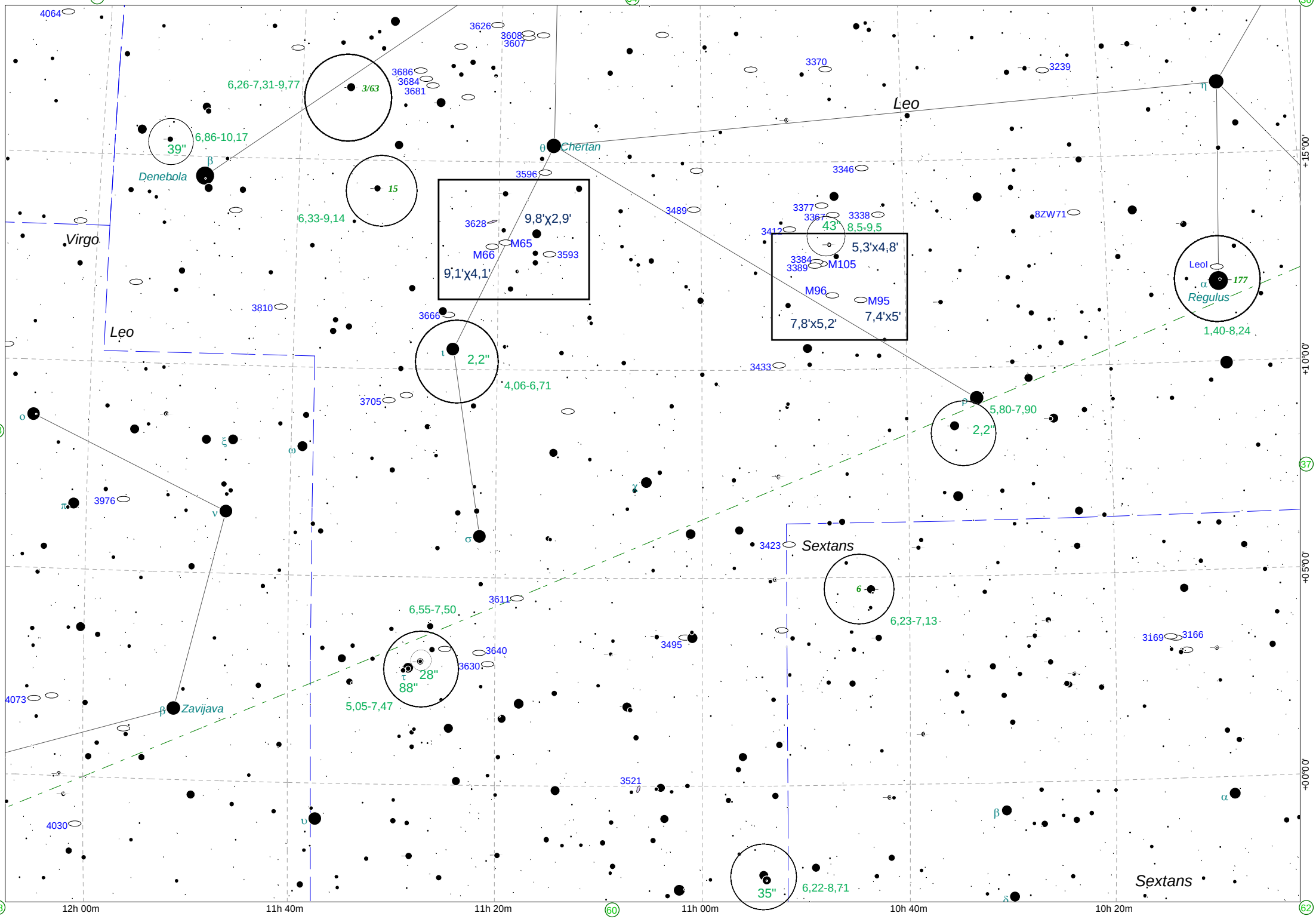

george
Leo
Virgo
Sextans
Denebola
Chertan
Regulus
Zavijava
6,26-7,31-9,77
3/63
6,86-10,17
39"
6,33-9,14
15
9,8'x2,9'
9,1'x4,1'
M65
M66
43"
8,5-9,5
5,3'x4,8'
M105
M96
M95
7,8'x5,2'
7,4'x5'
2,2"
4,06-6,71
5,80-7,90
2,2"
6,55-7,50
28"
88"
5,05-7,47
6
6,23-7,13
35"
6,22-8,71
1,40-8,24
177
12h 00m
11h 40m
11h 20m
11h 00m
10h 40m
10h 20m
+15°00'
+10°00'
+05°00'
+00°00'

Chart 36 george

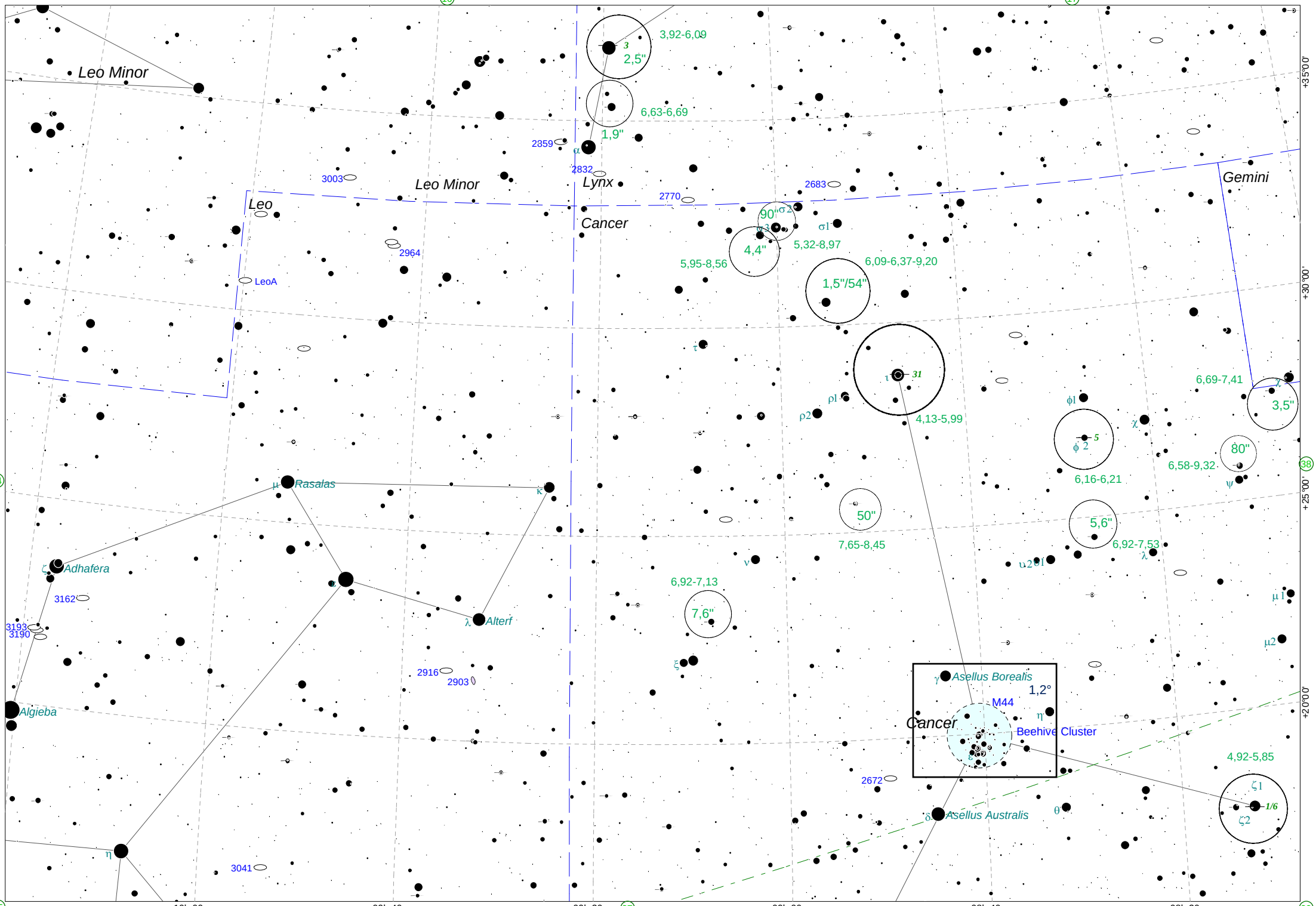


Chart 37 george

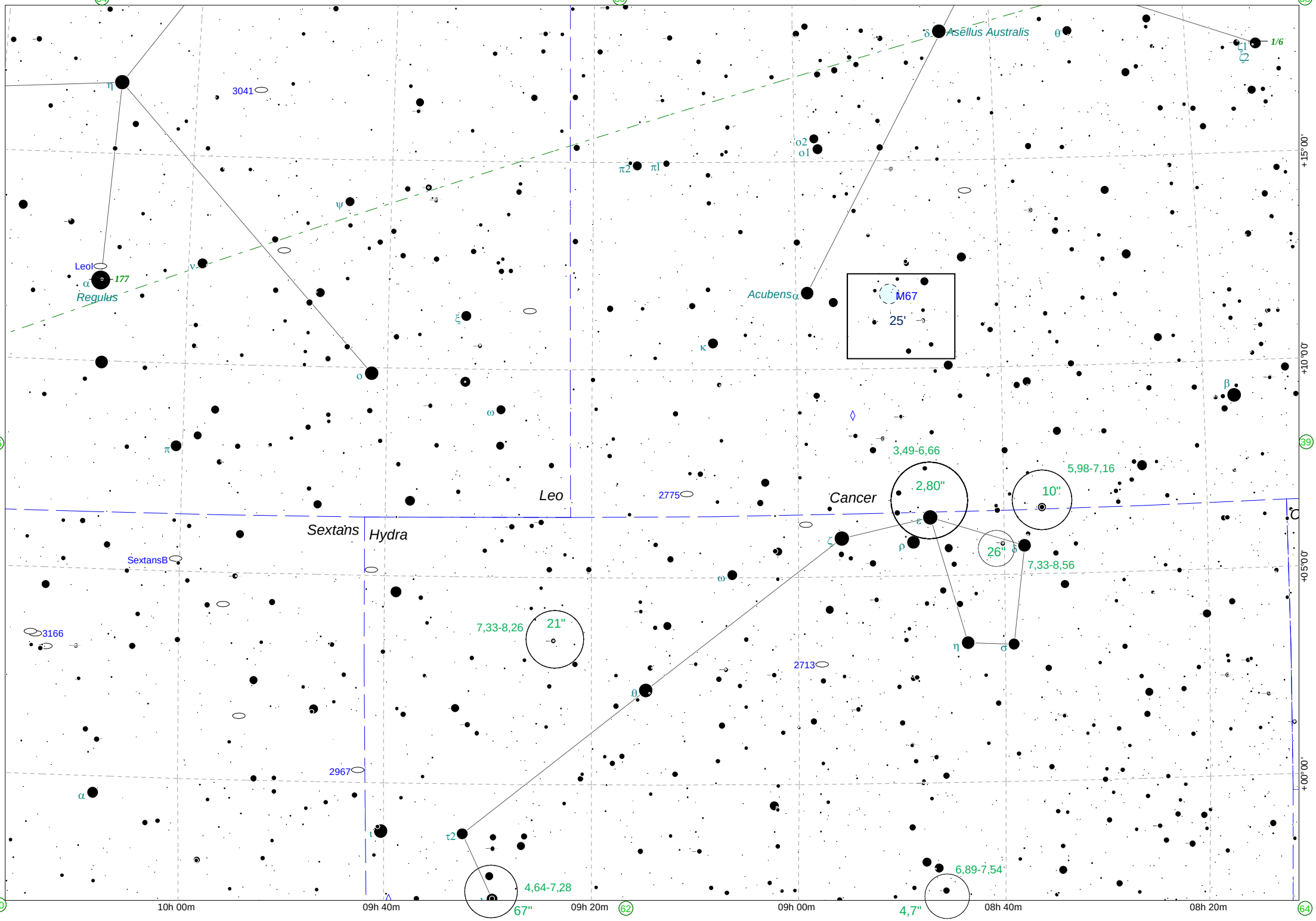


Chart 38

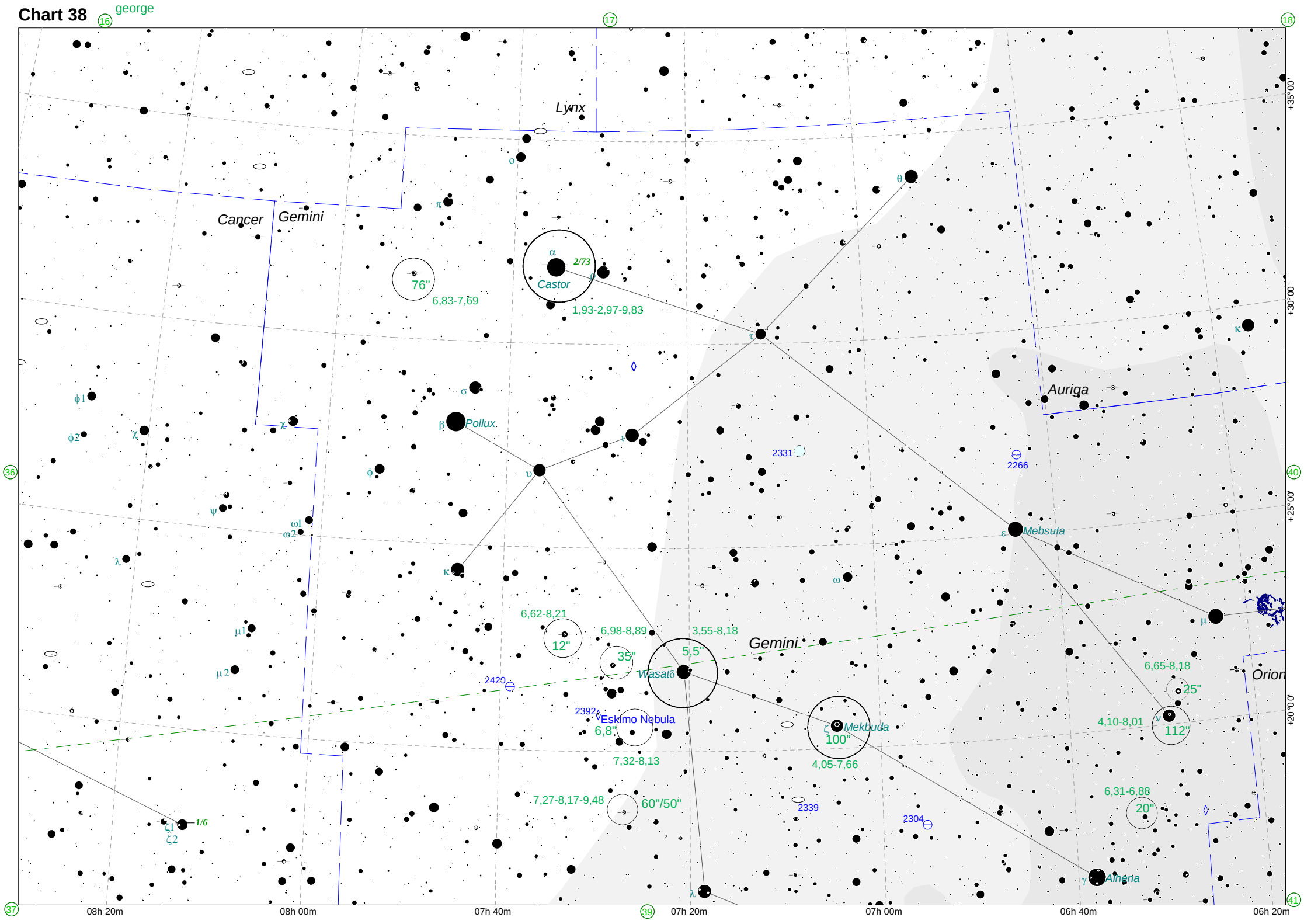

george
Lynx
Cancer
Gemini
Auriga
Orion
Castor
Pollux
Wasat
Mekbuda
Mebsuta
Eskimo Nebula
Alhena
76"
6,83-7,69
2/73
1,93-2,97-9,83
6,62-8,21
12"
6,98-8,89
35"
3,55-8,18
5,5"
2420
2392
6,8"
7,32-8,13
100"
4,05-7,66
7,27-8,17-9,48
60"/50"
2339
2304
2331
2266
6,65-8,18
25"
4,10-8,01
112"
6,31-6,88
20"
1/6
+35°00'
+30°00'
+25°00'
+20°00'
08h 20m
08h 00m
07h 40m
07h 20m
07h 00m
06h 40m
06h 20m

Chart 39

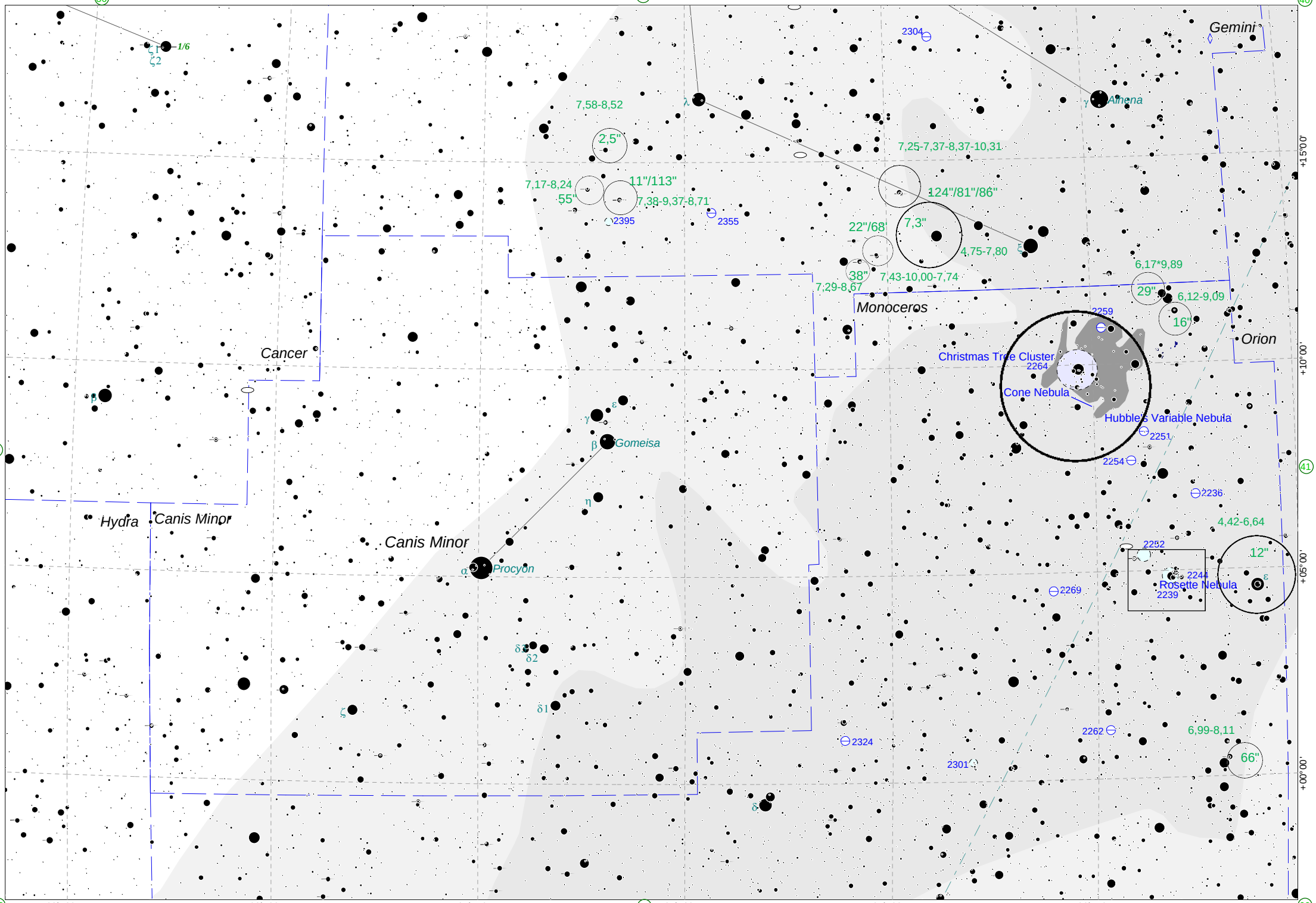

george
36
38
40
37
41
62
64
66
08h 20m
08h 00m
07h 40m
07h 20m
07h 00m
06h 40m
+15°00'
+10°00'
+05°00'
+00°00'
Gemini
Alhena
Cancer
Monoceros
Orion
Hydra
Canis Minor
Canis Minor
Procyon
Gomeisa
Christmas Tree Cluster
Cone Nebula
Hubble's Variable Nebula
Rosette Nebula
7,58-8,52
2,5"
7,25-7,37-8,37-10,31
7,17-8,24
55"
11"/113"
7,38-9,37-8,71
124"/81"/86"
22"/68"
7,3"
4,75-7,80
38"
7,43-10,00-7,74
7,29-8,67
6,17*9,89
29"
6,12-9,09
16"
4,42-6,64
12"
6,99-8,11
66"
2304
2395
2355
2259
2264
2251
2254
2236
2252
2244
2239
2269
2262
2324
2301

Chart 40 george

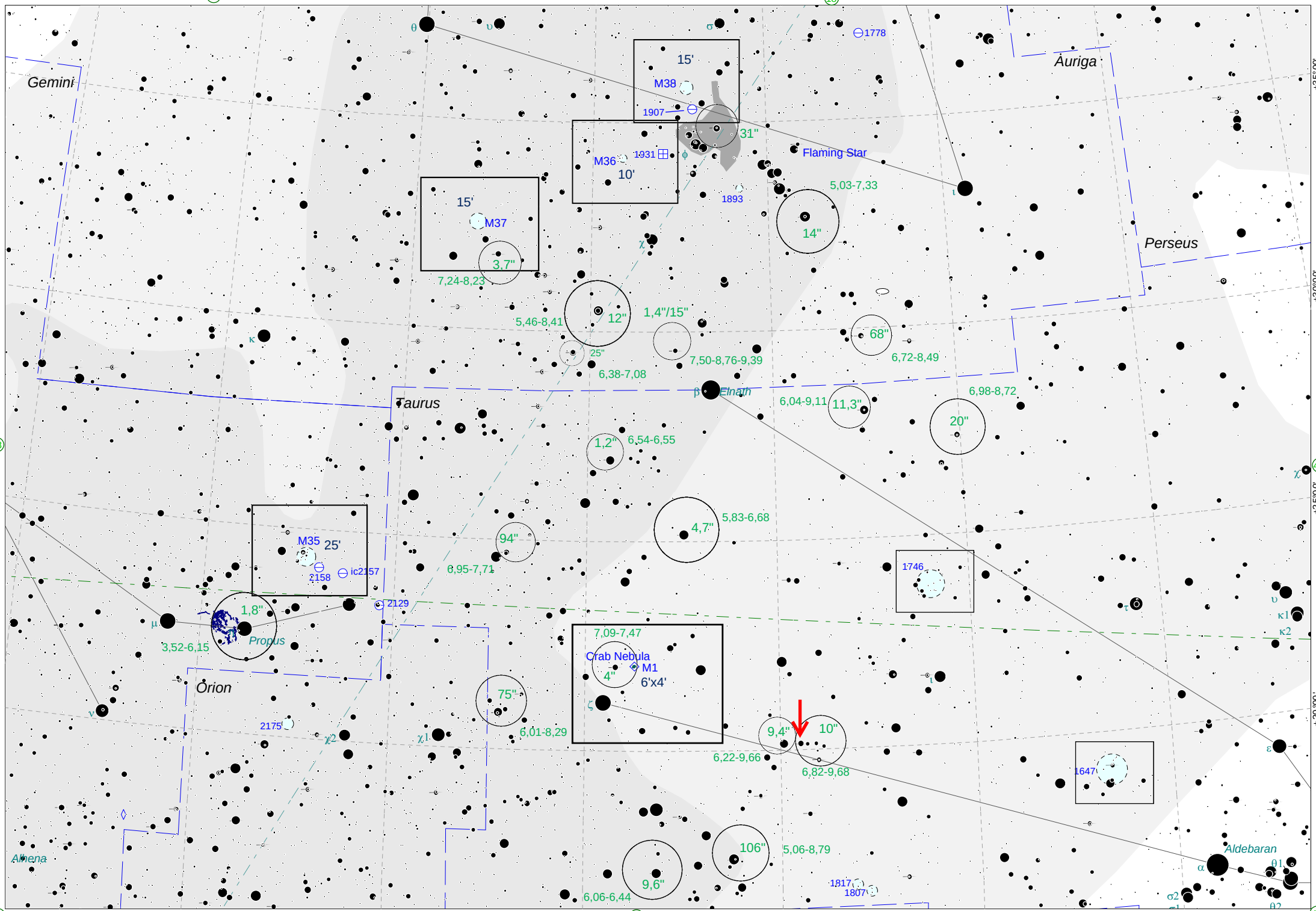


Chart 41

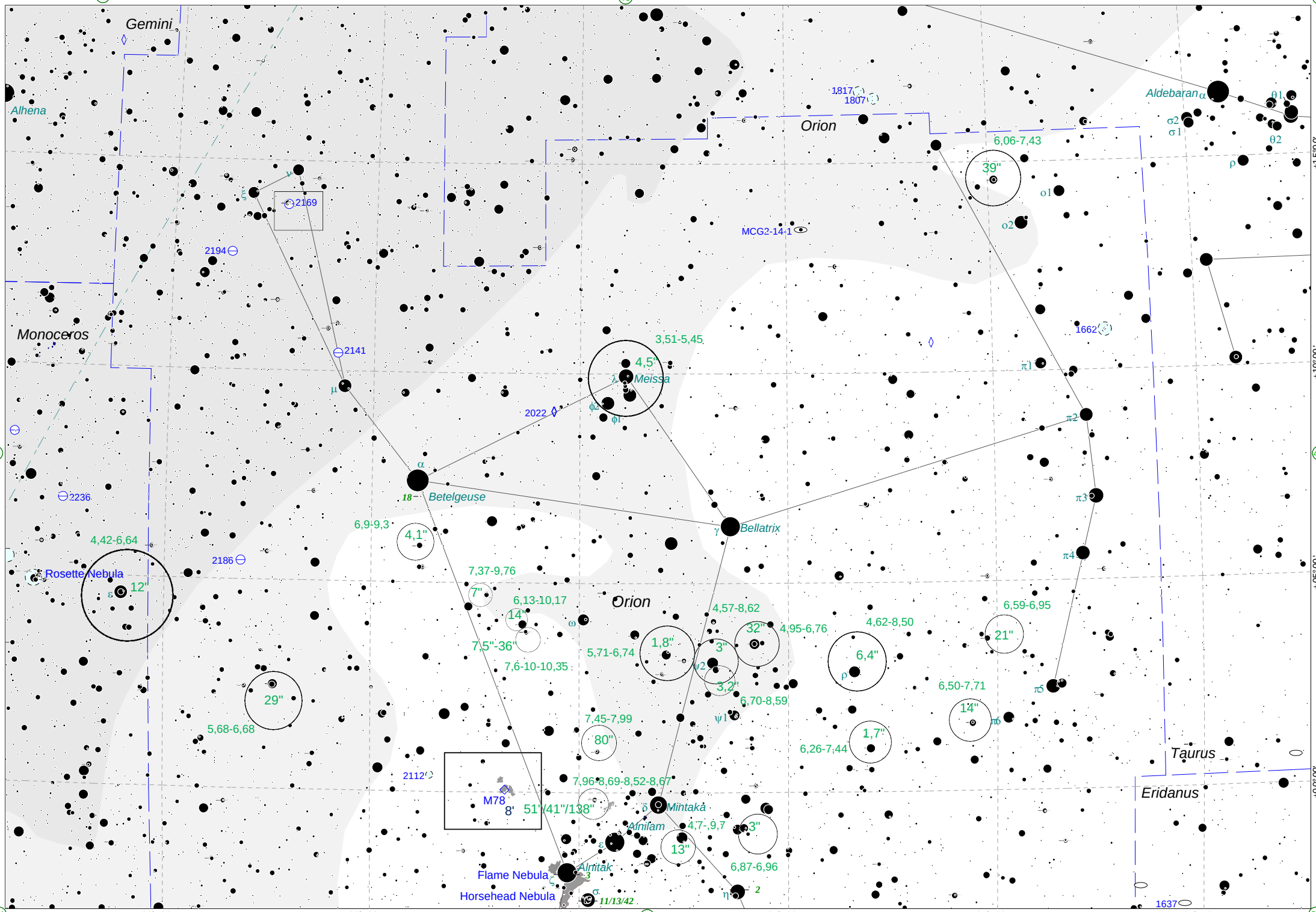

Gemini
Alhena
Orion
Aldebaran
Monoceros
Meissa
Betelgeuse
Bellatrix
Rosette Nebula
Orion
Mintaka
Alnilam
Alnitak
Flame Nebula
Horsehead Nebula
M78
Taurus
Eridanus
MCG2-14-1
39"
4,5"
4,1"
12"
29"
7"
14"
7,5"-36"
1,8"
3"
32"
6,4"
21"
3,2"
1,7"
80"
13"
3"
6,06-7,43
3,51-5,45
4,42-6,64
6,9-9,3
7,37-9,76
6,13-10,17
7,6-10-10,35
5,71-6,74
4,57-8,62
4,95-6,76
4,62-8,50
6,59-6,95
6,50-7,71
6,70-8,59
7,45-7,99
6,26-7,44
5,68-6,68
7,96-8,69-8,52-8,67
4,7-,9,7
6,87-6,96
8'
51"/41"/138"
11/13/42
06h 20m
06h 00m
05h 40m
05h 20m
05h 00m
04h 40m
+15°0'
+10°00'
+05°00'
+0°00'

Chart 42

george

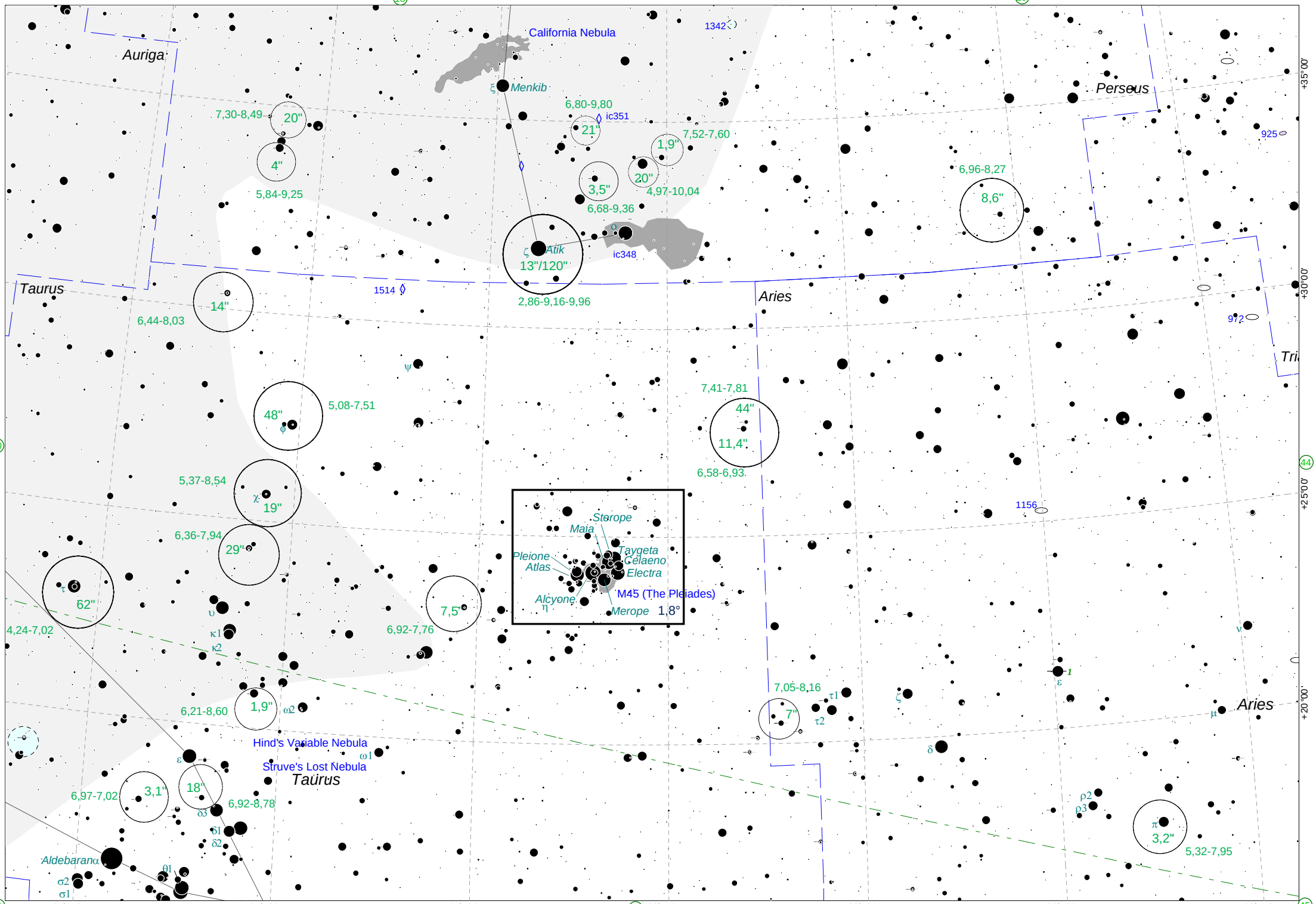


Chart 43

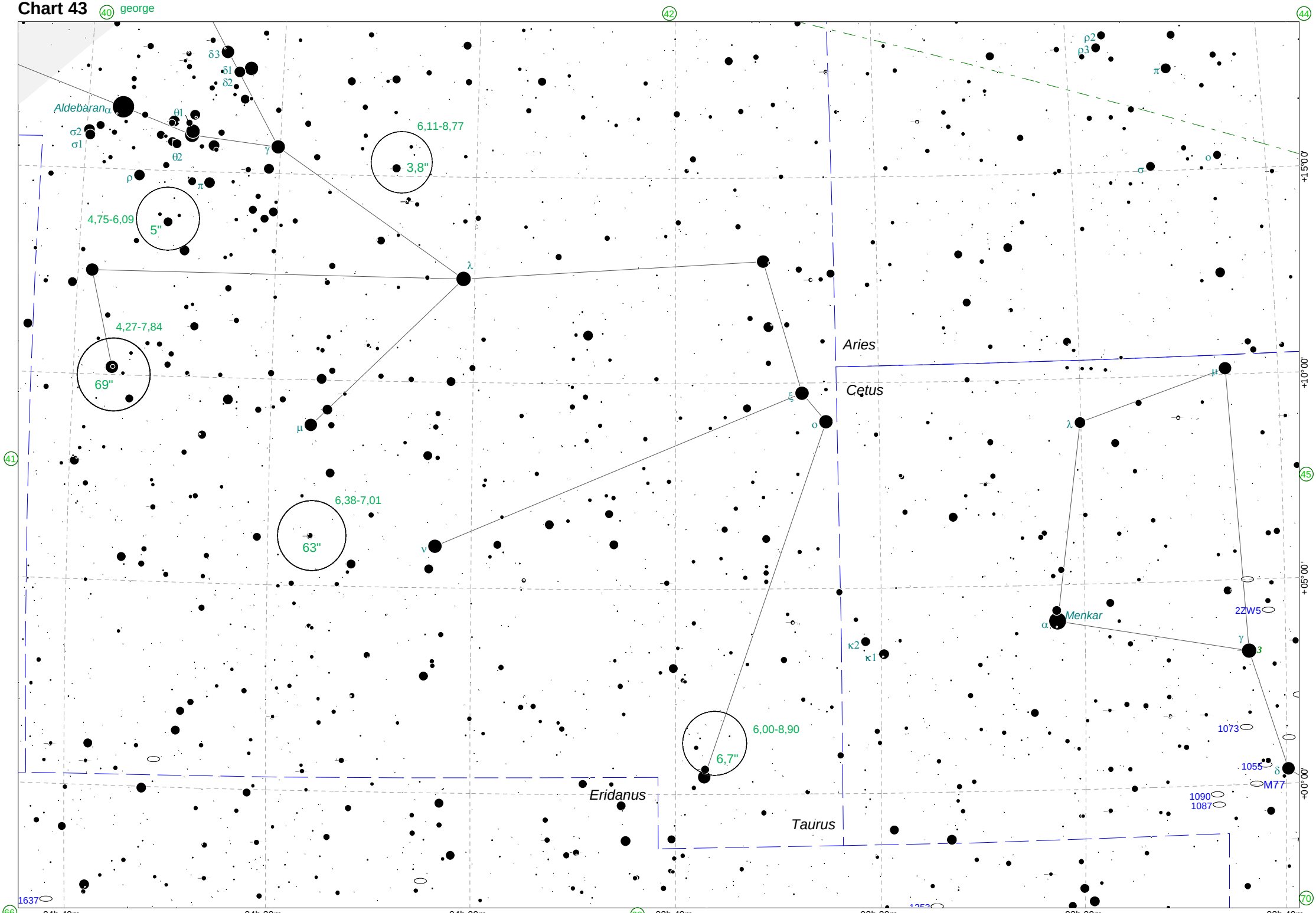

40
george
42
44
41
45
66
68
70
Aldebaran α
δ3
δ1
δ2
θ1
θ2
σ2
σ1
γ
ρ
π
6,11-8,77
3,8"
4,75-6,09
5"
λ
4,27-7,84
69"
μ
ξ
ο
6,38-7,01
63"
ν
Aries
Cetus
ρ2
ρ3
π
σ
ο
μ
λ
Menkar
α
γ
3
22W5
κ2
κ1
6,00-8,90
6,7"
1073
1055
δ
M77
1090
1087
Eridanus
Taurus
1637
+15°00'
+10°00'
+05°00'
+00°00'
04h 40m
04h 20m
04h 00m
03h 40m
03h 20m
03h 00m
02h 40m

Chart 44

george

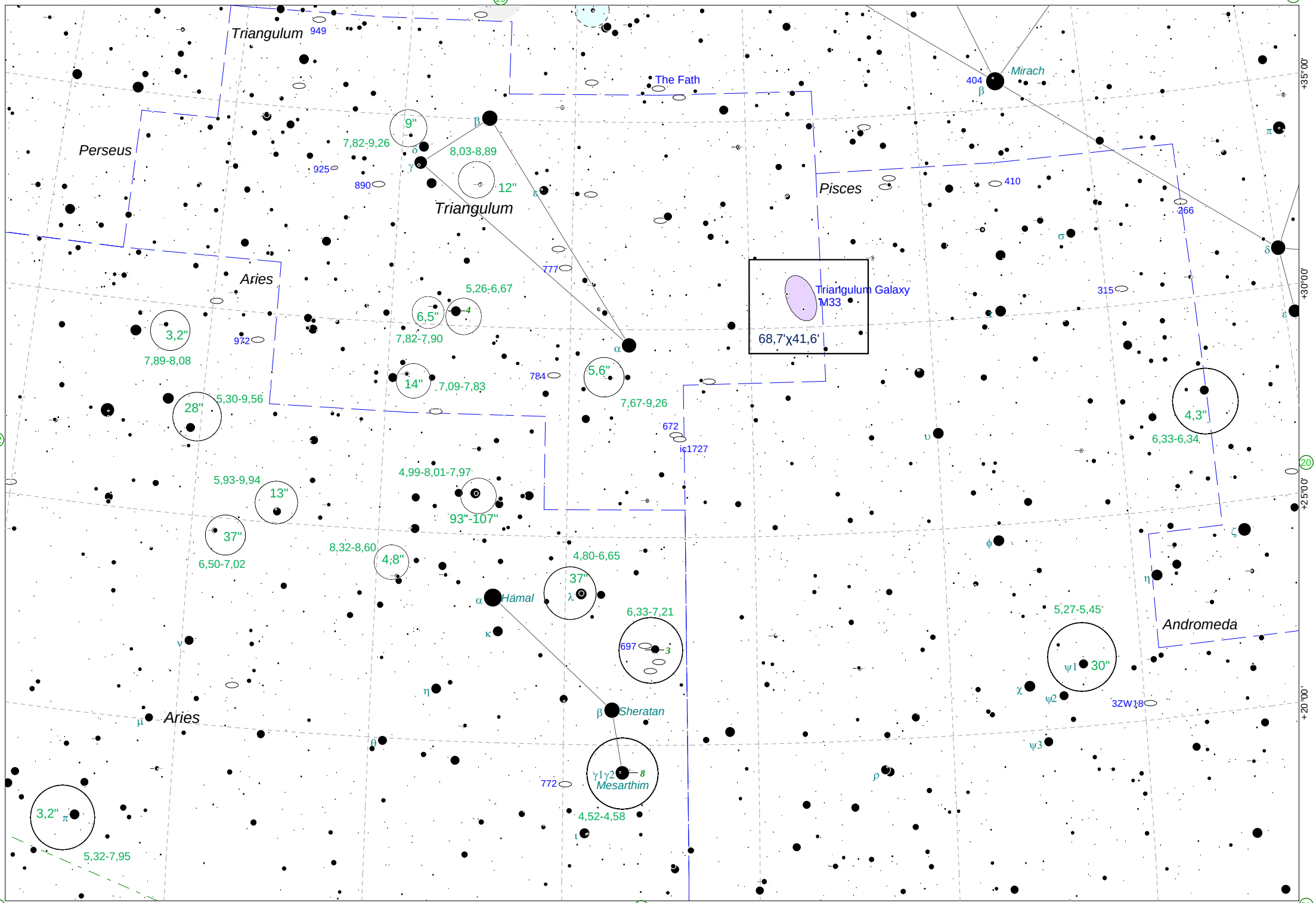


Chart 45

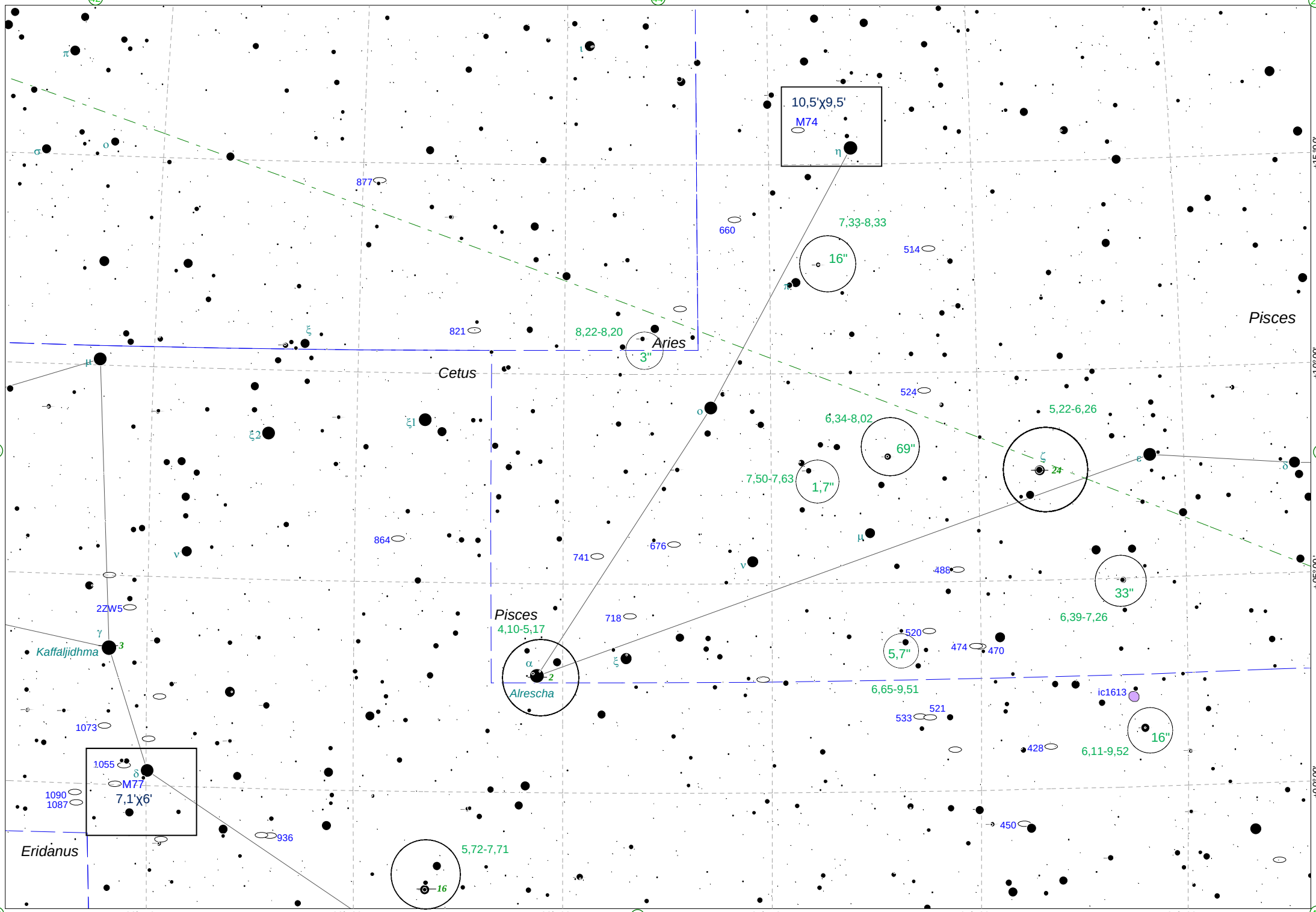

42
george
44
20
10,5'x9,5'
M74
η
877
660
7,33-8,33
16"
514
821
8,22-8,20
Aries
3"
Pisces
Cetus
524
6,34-8,02
69"
5,22-6,26
ξ1
ξ2
7,50-7,63
1,7"
ζ
24
43
21
864
741
676
488
33"
6,39-7,26
2ZW5
718
Pisces
4,10-5,17
520
5,7"
474
470
Kaffaljidhma
3
α
2
Alrescha
6,65-9,51
ic1613
521
533
1073
16"
428
6,11-9,52
1055
δ
M77
7,1'x6'
1090
1087
936
450
Eridanus
5,72-7,71
16
+15°00'
+10°00'
+05°00'
+00°00'
68
02h 40m
02h 20m
02h 00m
70
01h 40m
01h 20m
01h 00m
46

Chart 46

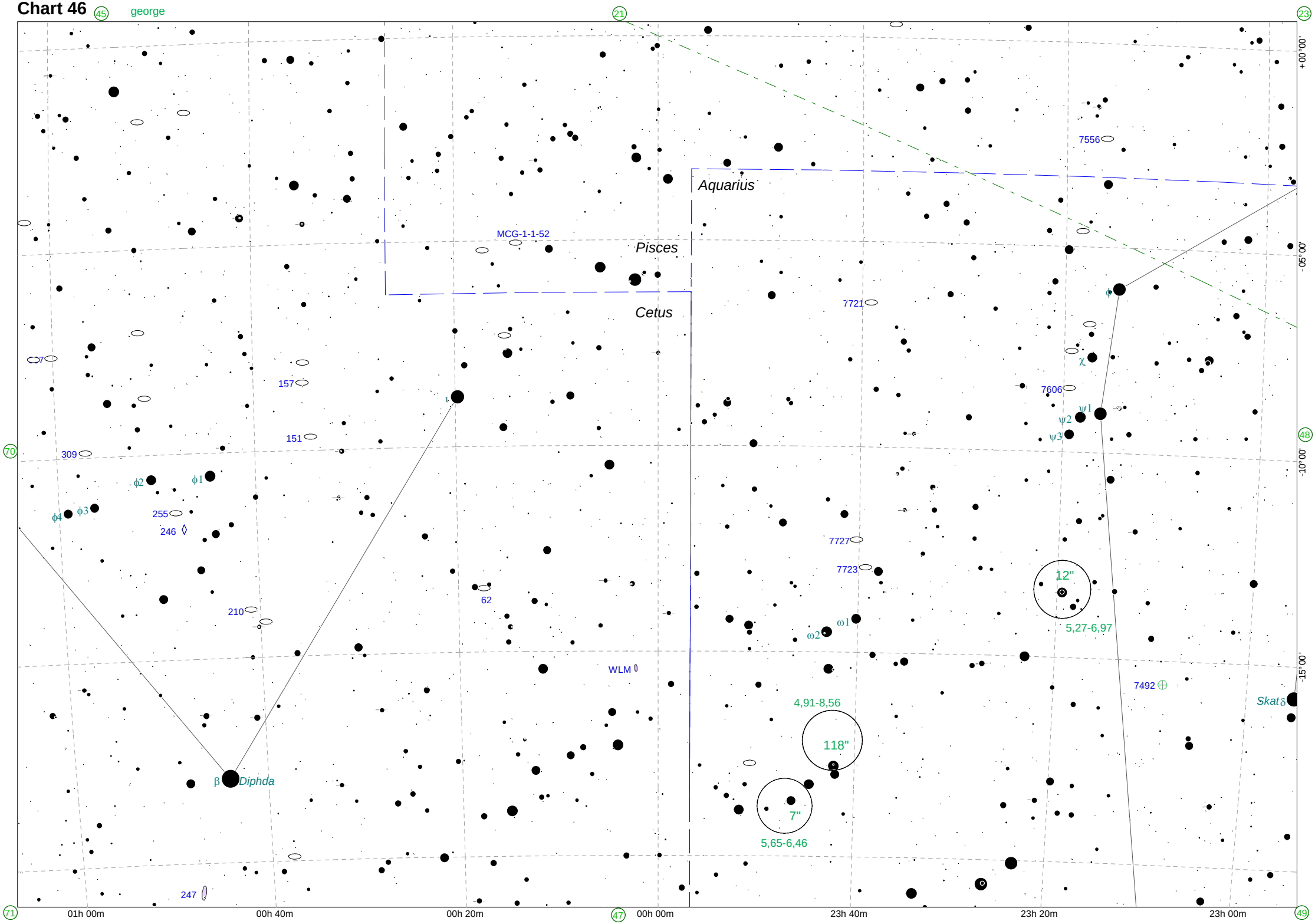

45
george
21
23
+00°00'
-05°00'
-10°00'
-15°00'
48
70
71
47
49
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m
Aquarius
Pisces
Cetus
MCG-1-1-52
7556
7721
7606
7727
7723
7492
157
151
309
255
246
210
62
247
WLM
φ2
φ1
φ4
φ3
ι
χ
ψ1
ψ2
ψ3
ω1
ω2
β Diphda
Skat δ
12"
5,27-6,97
4,91-8,56
118"
7"
5,65-6,46

Chart 47

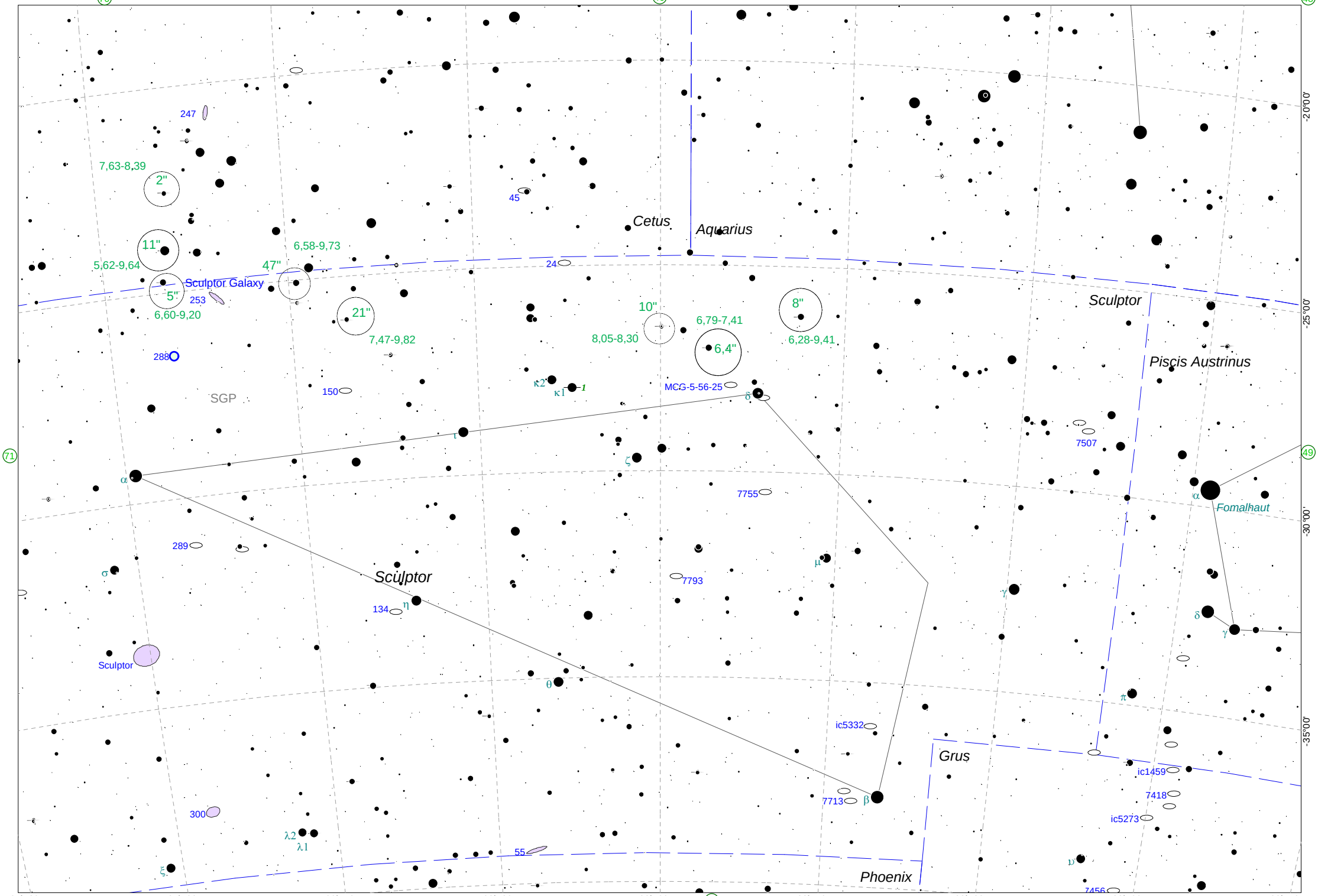

70
46
48
71
49
72
-20°00'
-25°00'
-30°00'
-35°00'
01h 20m
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m
22h 40m
Cetus
Aquarius
Sculptor
Piscis Austrinus
Grus
Phoenix
Fomalhaut
Sculptor Galaxy
SGP
247
7,63-8,39
2"
45
11"
5,62-9,64
6,58-9,73
47"
24
5"
253
6,60-9,20
21"
7,47-9,82
10"
8,05-8,30
6,79-7,41
6,4"
8"
6,28-9,41
288
150
κ2
κ1
MCG-5-56-25
δ
ι
ζ
α
7755
7507
289
σ
7793
μ
γ
134
η
θ
ic5332
7713
β
ic1459
7418
ic5273
300
λ2
λ1
55
ξ
υ
π
7456

Chart 48

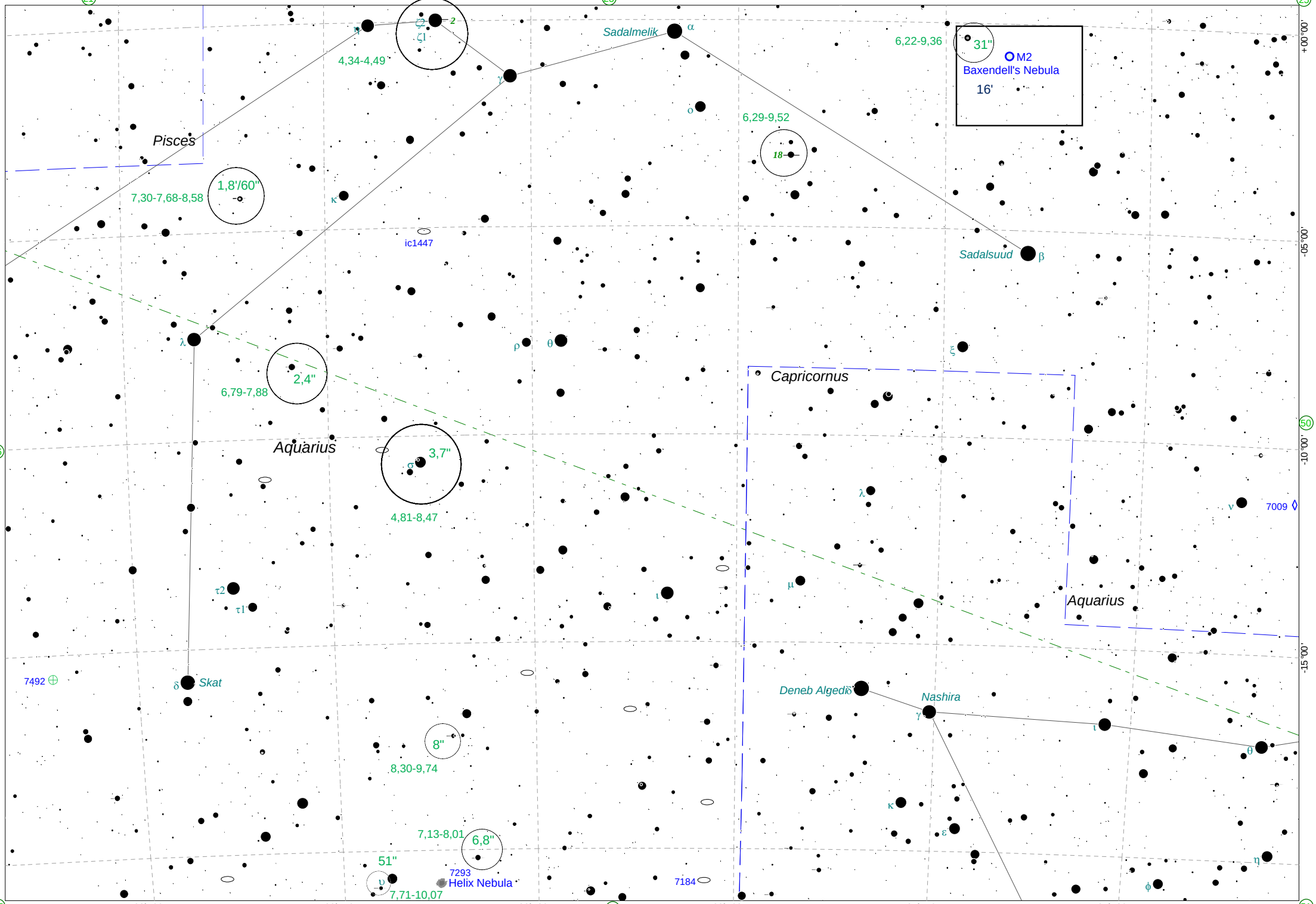

george
Sadalmelik
α
4,34-4,49
ζ2
ζ1
γ
6,22-9,36
31"
M2
Baxendell's Nebula
16'
6,29-9,52
18
Pisces
1,8'/60"
7,30-7,68-8,58
κ
ic1447
Sadalsuud
β
λ
ρ
θ
ξ
2,4"
6,79-7,88
Capricornus
Aquarius
3,7"
σ
4,81-8,47
λ
ν
7009
τ2
τ1
ι
μ
Aquarius
7492
δ
Skat
Deneb Algedi
Nashira
γ
ι
θ
8"
8,30-9,74
κ
ε
7,13-8,01
6,8"
51"
υ
7293
Helix Nebula
7,71-10,07
7184
η
φ
+00°00'
-05°00'
-10°00'
-15°00'
23h 00m
22h 40m
22h 20m
22h 00m
21h 40m
21h 20m
21
23
25
46
47
49
50
51

Chart 49

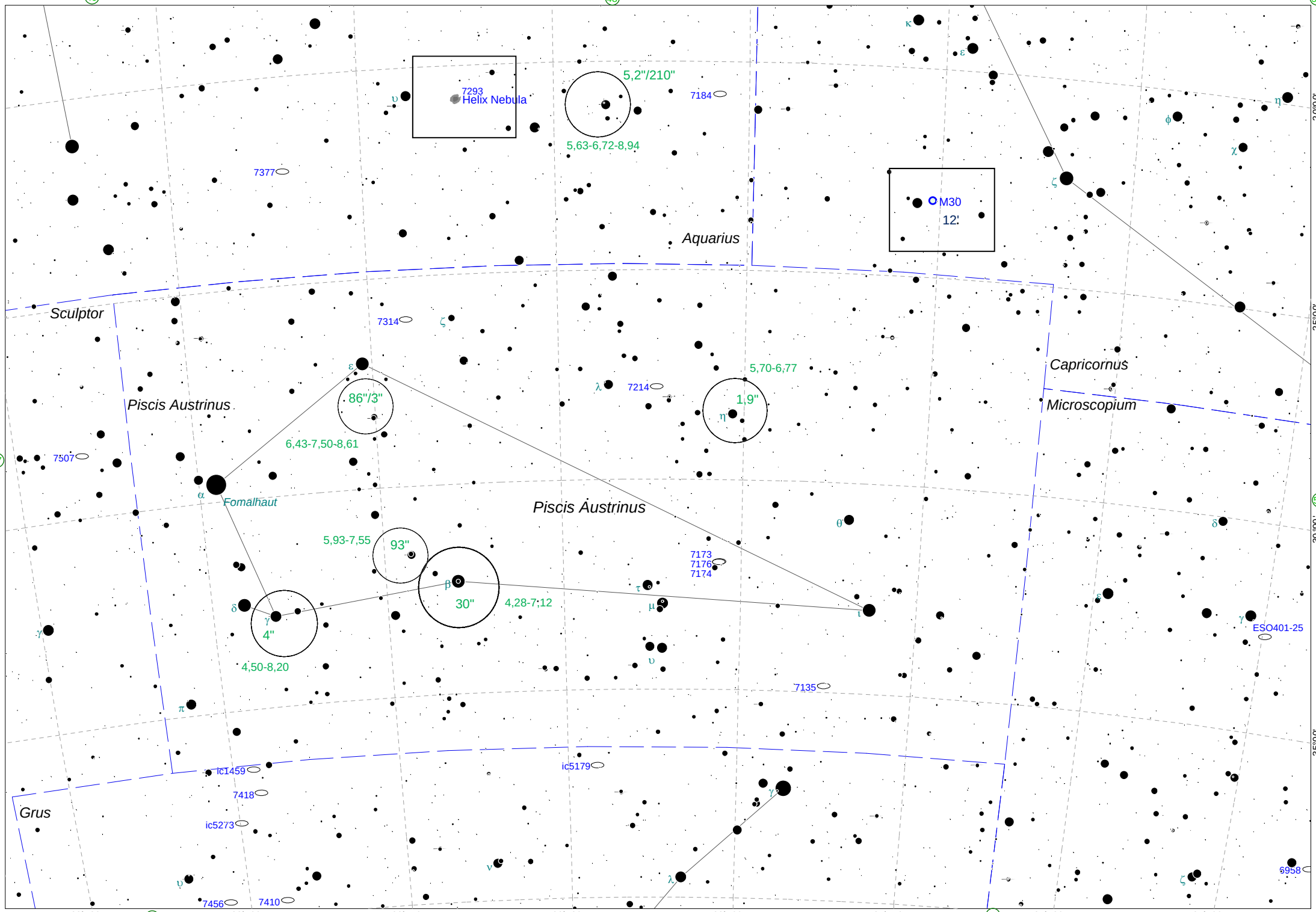

46
48
50
47
51
72
73
-20°00'
-25°00'
-30°00'
-35°00'
23h 20m
23h 00m
22h 40m
22h 20m
22h 00m
21h 40m
21h 20m
21h 00m
7293
Helix Nebula
5,2"/210"
5,63-6,72-8,94
7184
7377
M30
12'
Aquarius
Sculptor
7314
Capricornus
Microscopium
Piscis Austrinus
86"/3"
6,43-7,50-8,61
5,70-6,77
1,9"
7214
7507
Fomalhaut
Piscis Austrinus
5,93-7,55
93"
30"
4,28-7,12
4"
4,50-8,20
7173
7176
7174
ESO401-25
7135
ic1459
7418
ic5179
Grus
ic5273
7456
7410
6958

Chart 50

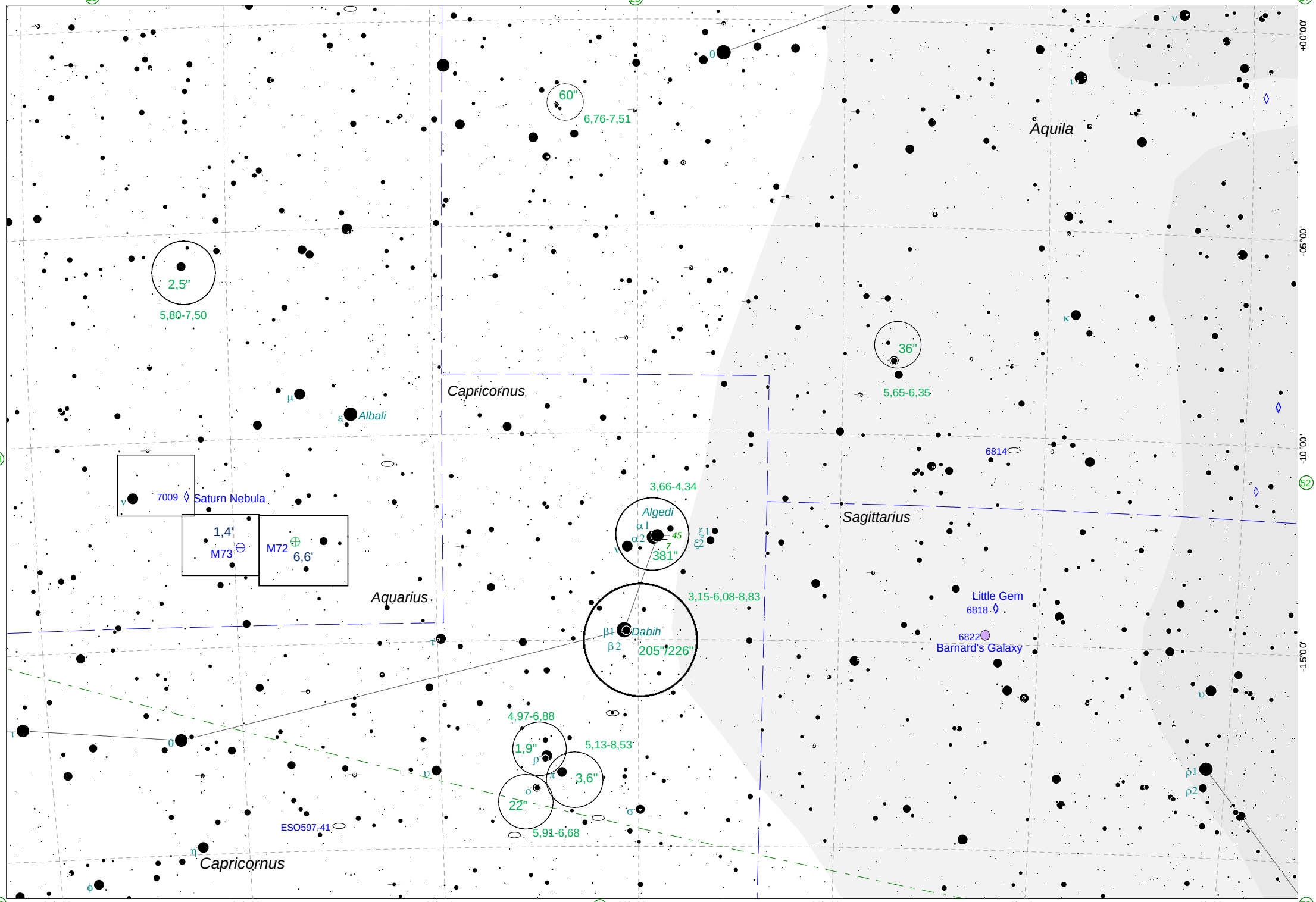

23
25
27
48
52
49
51
53
+00°00'
-05°00'
-10°00'
-15°00'
21h 20m
21h 00m
20h 40m
20h 20m
20h 00m
19h 40m
19h 20m
Aquila
Capricornus
Sagittarius
Aquarius
Albali
Algedi
Dabih
Saturn Nebula
Little Gem
Barnard's Galaxy
M72
M73
ESO597-41
60"
6,76-7,51
2,5"
5,80-7,50
36"
5,65-6,35
6814
7009
1,4'
6,6'
3,66-4,34
381"
3,15-6,08-8,83
205"
226"
4,97-6,88
1,9"
5,13-8,53
3,6"
22"
5,91-6,68
6818
6822

Chart 51

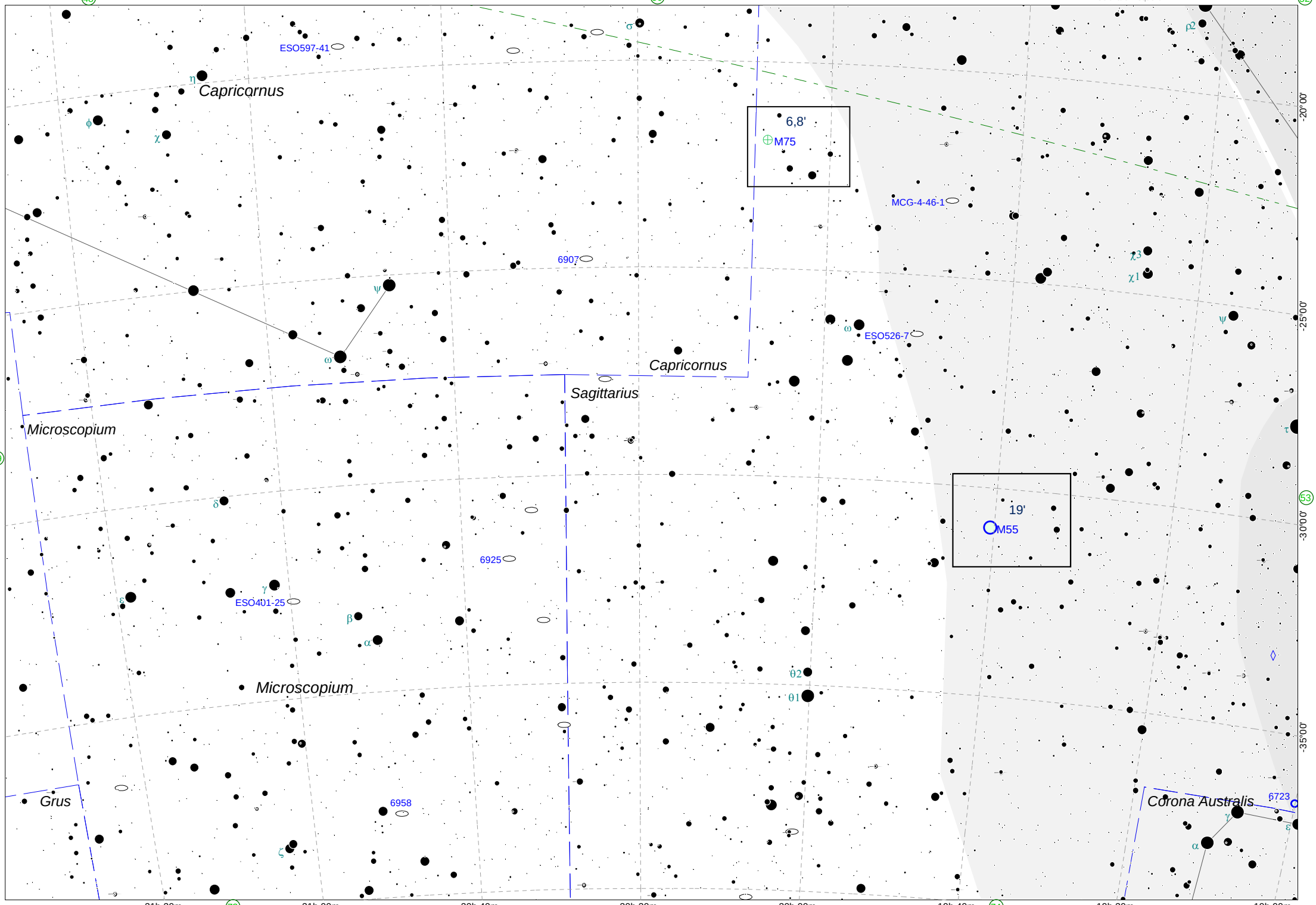

48
george
50
Software Bisque ®
52
ESO597-41
η
Capricornus
φ
χ
σ
6,8'
M75
MCG-4-46-1
ρ2
χ3
χ1
6907
ψ
ω
ESO526-7
Capricornus
Sagittarius
Microscopium
49
δ
19'
M55
53
6925
γ
ESO401-25
ε
β
α
θ2
θ1
Microscopium
Grus
6958
ζ
Corona Australis
6723
γ
ε
α
τ
-20°00'
-25°00'
-30°00'
-35°00'
21h 20m
73
21h 00m
20h 40m
20h 20m
20h 00m
19h 40m
74
19h 20m
19h 00m

Chart 52

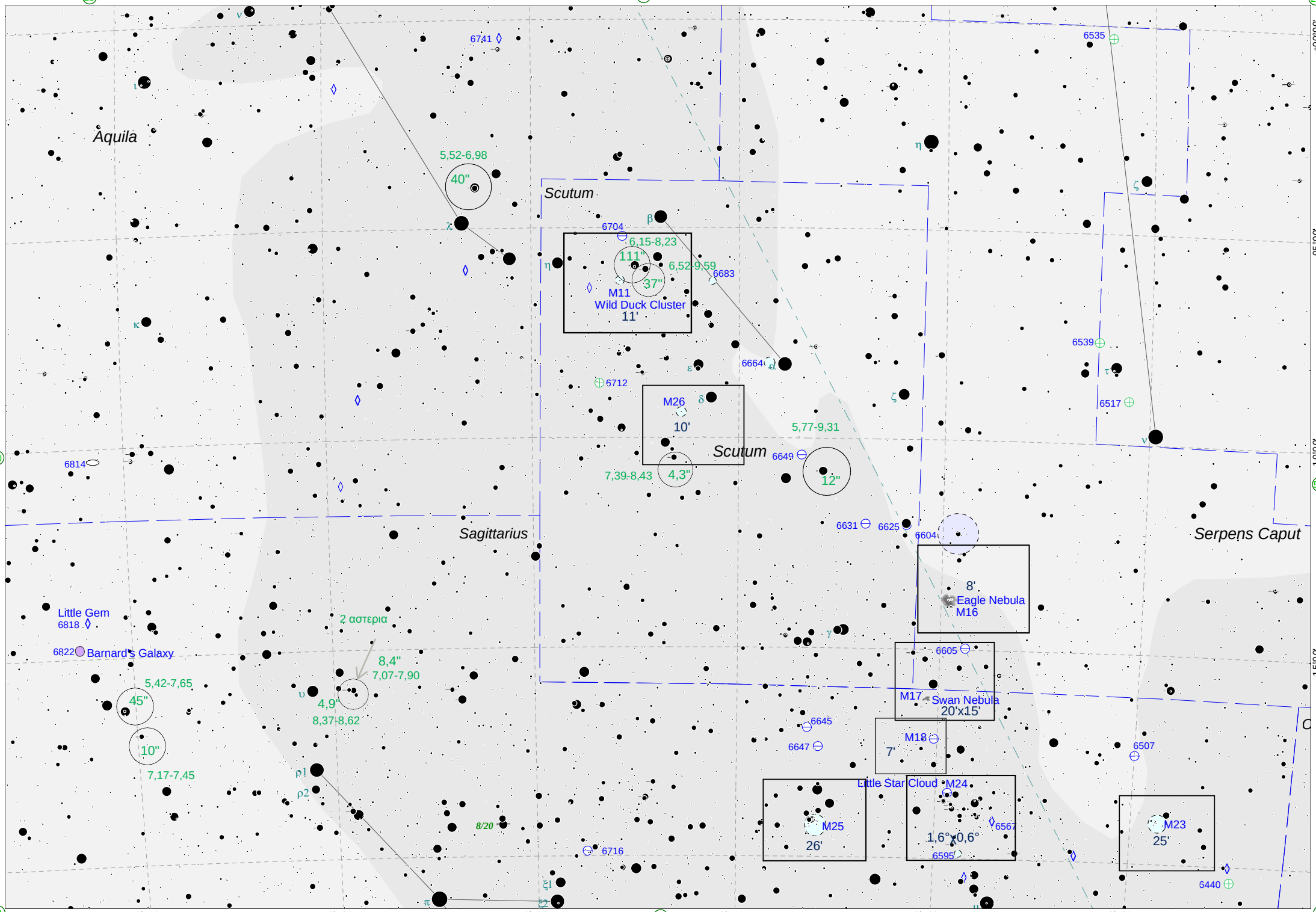

25
27
29
50
54
51
53
55
+00°00'
-05°00'
-10°00'
-15°00'
19h 40m
19h 20m
19h 00m
18h 40m
18h 20m
18h 00m
Aquila
Scutum
Sagittarius
Serpens Caput
6741
6535
5,52-6,98
40"
6704
6,15-8,23
111"
6,52-9,59
6683
37"
M11
Wild Duck Cluster
11'
6664
6712
M26
10'
5,77-9,31
6649
12"
7,39-8,43
4,3"
6539
6517
6814
6631
6625
6604
8'
Eagle Nebula
M16
Little Gem
6818
2 αστερια
6822
Barnard's Galaxy
8,4"
7,07-7,90
5,42-7,65
45"
4,9"
8,37-8,62
10"
7,17-7,45
6605
M17
Swan Nebula
20'x15'
6645
6647
M18
7'
6507
Little Star Cloud
M24
1,6°x0,6°
6567
6595
M25
26'
M23
25'
6716
6440

Chart 53

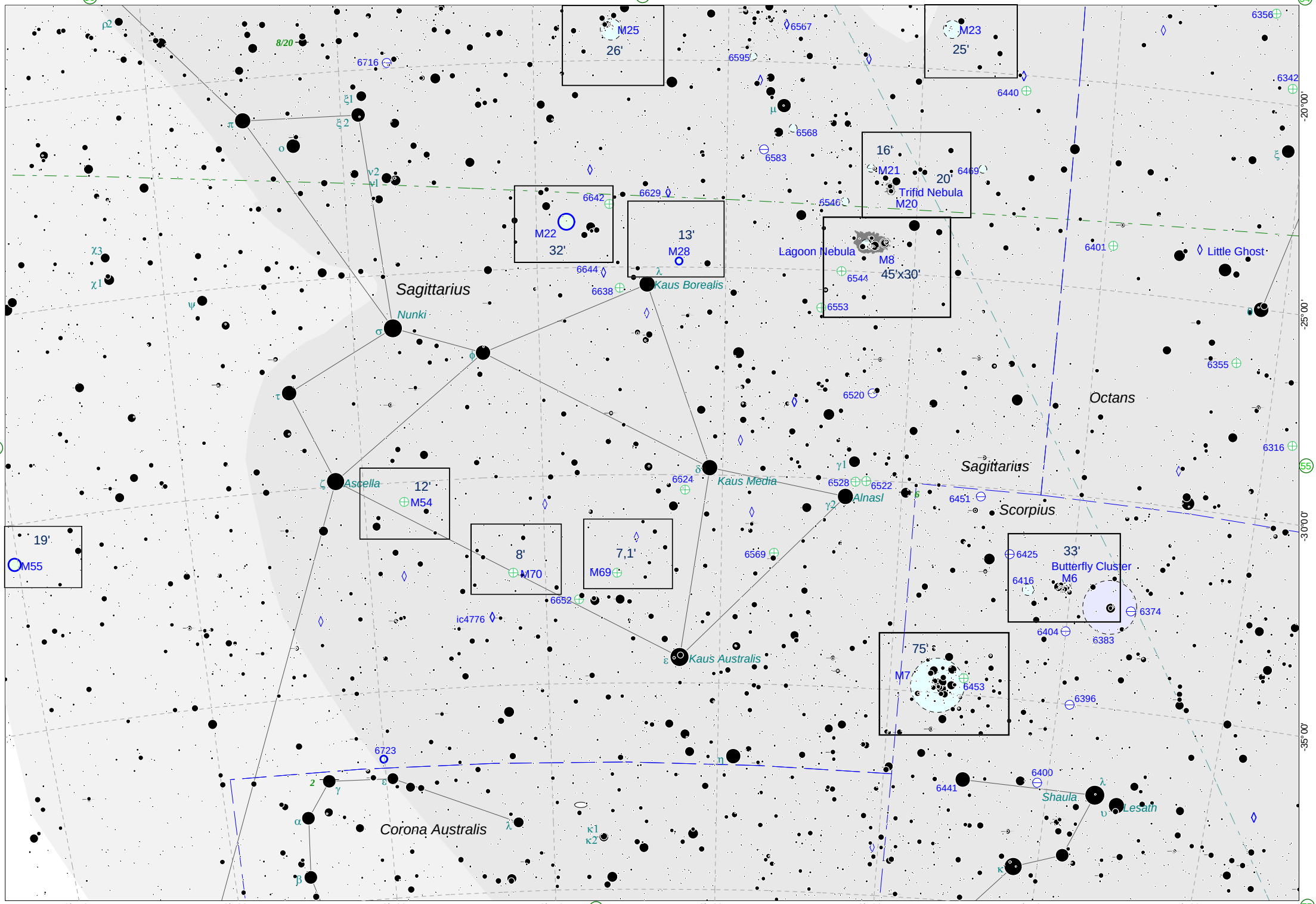

Sagittarius
Nunki
Kaus Borealis
Kaus Media
Kaus Australis
Ascella
Alnasl
Lagoon Nebula
M8
45'x30'
Trifid Nebula
M20
M21
20'
16'
M22
32'
M28
13'
M25
26'
M23
25'
M54
12'
M55
19'
M70
8'
M69
7,1'
Butterfly Cluster
M6
33'
M7
75'
Little Ghost
Octans
Scorpius
Shaula
Lesath
Corona Australis
ic4776
19h 40m
19h 20m
19h 00m
18h 40m
18h 20m
18h 00m
17h 40m
17h 20m
-20°00'
-25°00'
-30°00'
-35°00'

Chart 54

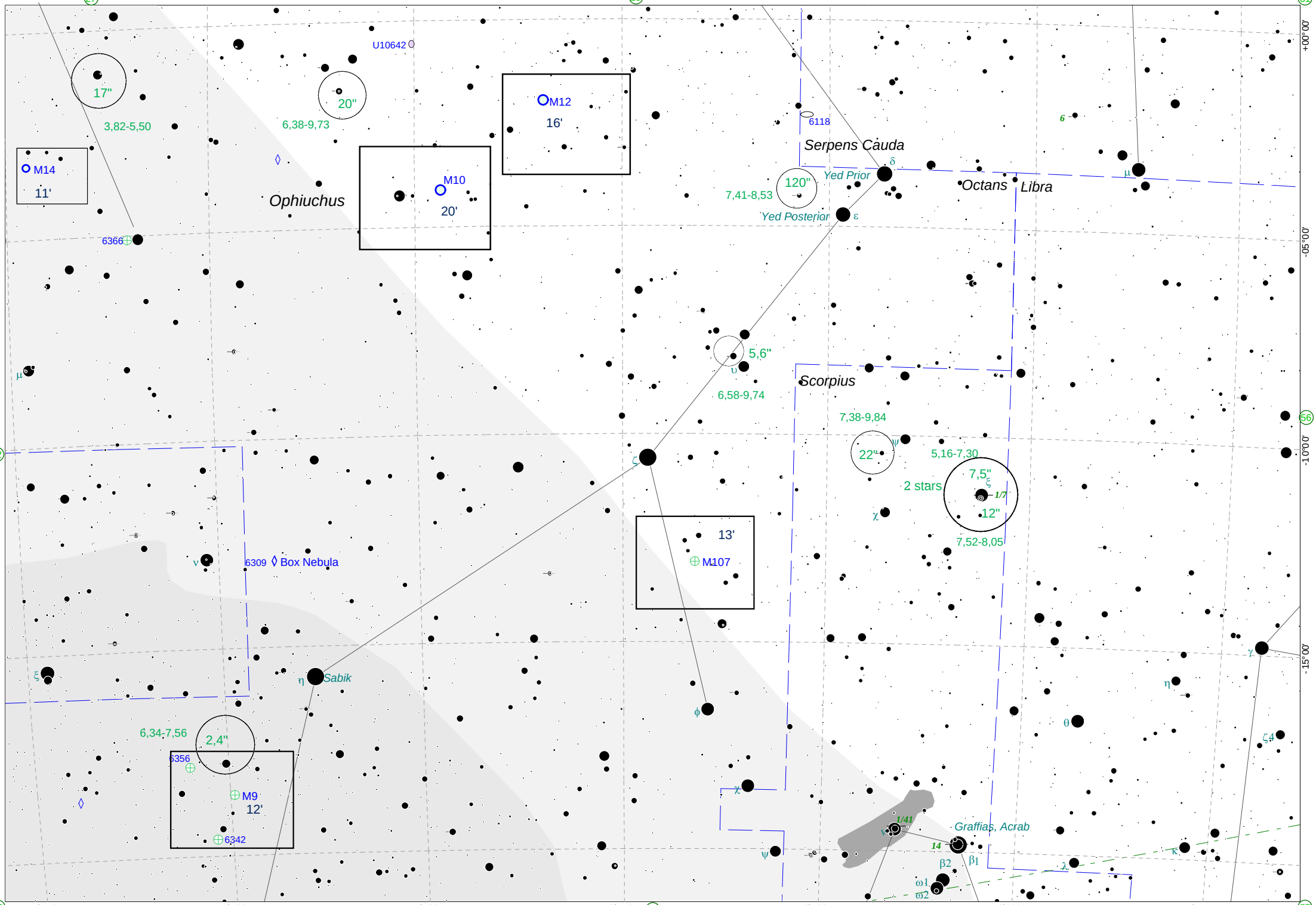

27
29
31
56
52
53
55
57
+00°00'
-05°00'
-10°00'
-15°00'
17h 40m
17h 20m
17h 00m
16h 40m
16h 20m
16h 00m
15h 40m
U10642
17"
3,82-5,50
20"
6,38-9,73
M12
16'
6118
Serpens Cauda
M14
11'
M10
20'
Ophiuchus
120"
7,41-8,53
Yed Prior
Yed Posterior
Octans
Libra
6366
5,6"
6,58-9,74
Scorpius
7,38-9,84
22"
5,16-7,30
7,5"
2 stars
12"
7,52-8,05
13'
M107
6309
Box Nebula
Sabik
6,34-7,56
2,4"
6356
M9
12'
6342
Graffias, Acrab

Chart 55

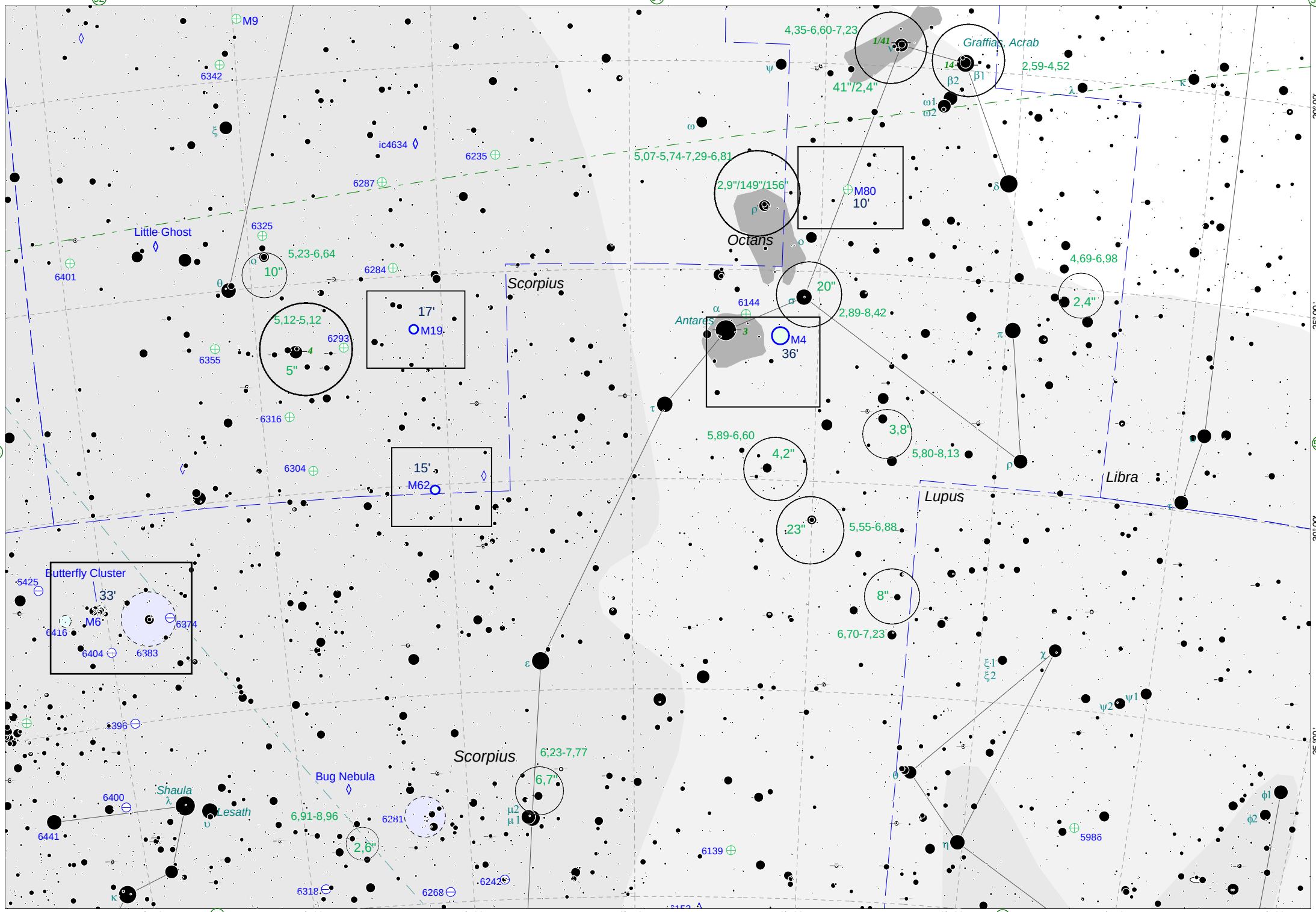

george
M9
6342
ic4634
6235
6287
Little Ghost
6325
6401
5,23-6,64
10"
6284
Scorpius
5,12-5,12
5"
6293
6355
17'
M19
6316
6304
15'
M62
Butterfly Cluster
33'
M6
6425
6416
6374
6404
6383
6396
Bug Nebula
Shaula
Lesath
6400
6441
6,91-8,96
6281
2,6"
6318
6268
6242
Scorpius
6,23-7,77
6,7'
6139
5,07-5,74-7,29-6,81
2,9"/149"/156"
Octans
M80
10'
4,35-6,60-7,23
41"/2,4"
Graffias, Acrab
2,59-4,52
4,69-6,98
2,4"
20"
2,89-8,42
6144
Antares
M4
36'
5,89-6,60
4,2"
3,8"
5,80-8,13
Lupus
Libra
23"
5,55-6,88
8"
6,70-7,23
5986
17h 40m
17h 20m
17h 00m
16h 40m
16h 20m
16h 00m
15h 40m
15h 20m
-20° 00'
-25° 00'
-30° 00'
-35° 00'
52
54
56
53
57
74
75

Chart 56

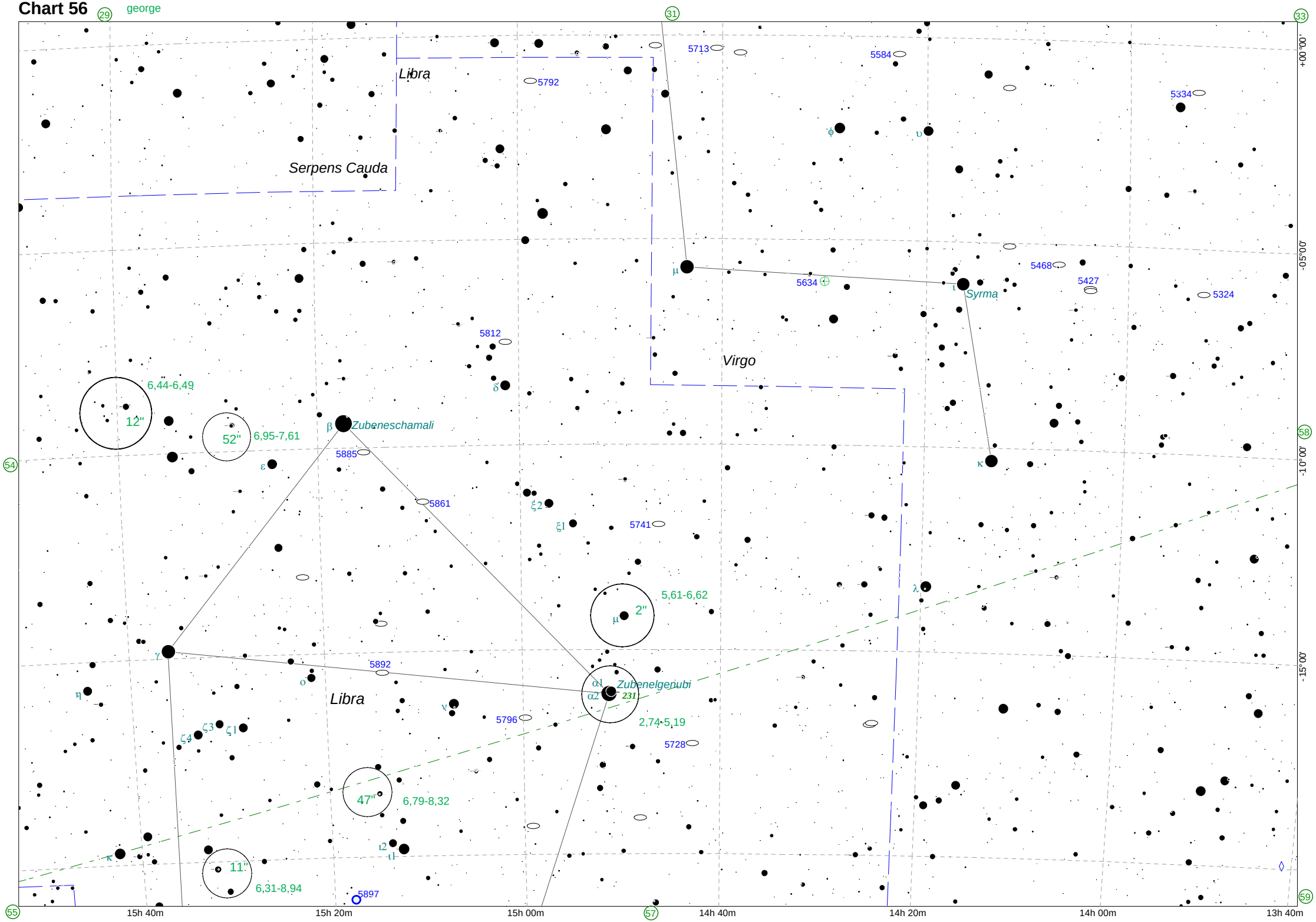

29
george
31
33
Libra
5792
5713
5584
5334
Serpens Cauda
φ
υ
μ
5634
Syrma
5468
5427
5324
5812
Virgo
δ
6,44-6,49
12"
52"
6,95-7,61
β
Zubeneschamali
5885
ε
5861
ξ2
ξ1
5741
κ
λ
5,61-6,62
μ
2"
γ
5892
o
α1
α2
Zubenelgenubi
231
Libra
η
ν
5796
2,74-5,19
ζ3
ζ4
ζ1
5728
47"
6,79-8,32
ι2
ι1
κ
11"
6,31-8,94
5897
54
58
59
55
57
+00°00'
-05°00'
-10°00'
-15°00'
15h 40m
15h 20m
15h 00m
14h 40m
14h 20m
14h 00m
13h 40m

Chart 57

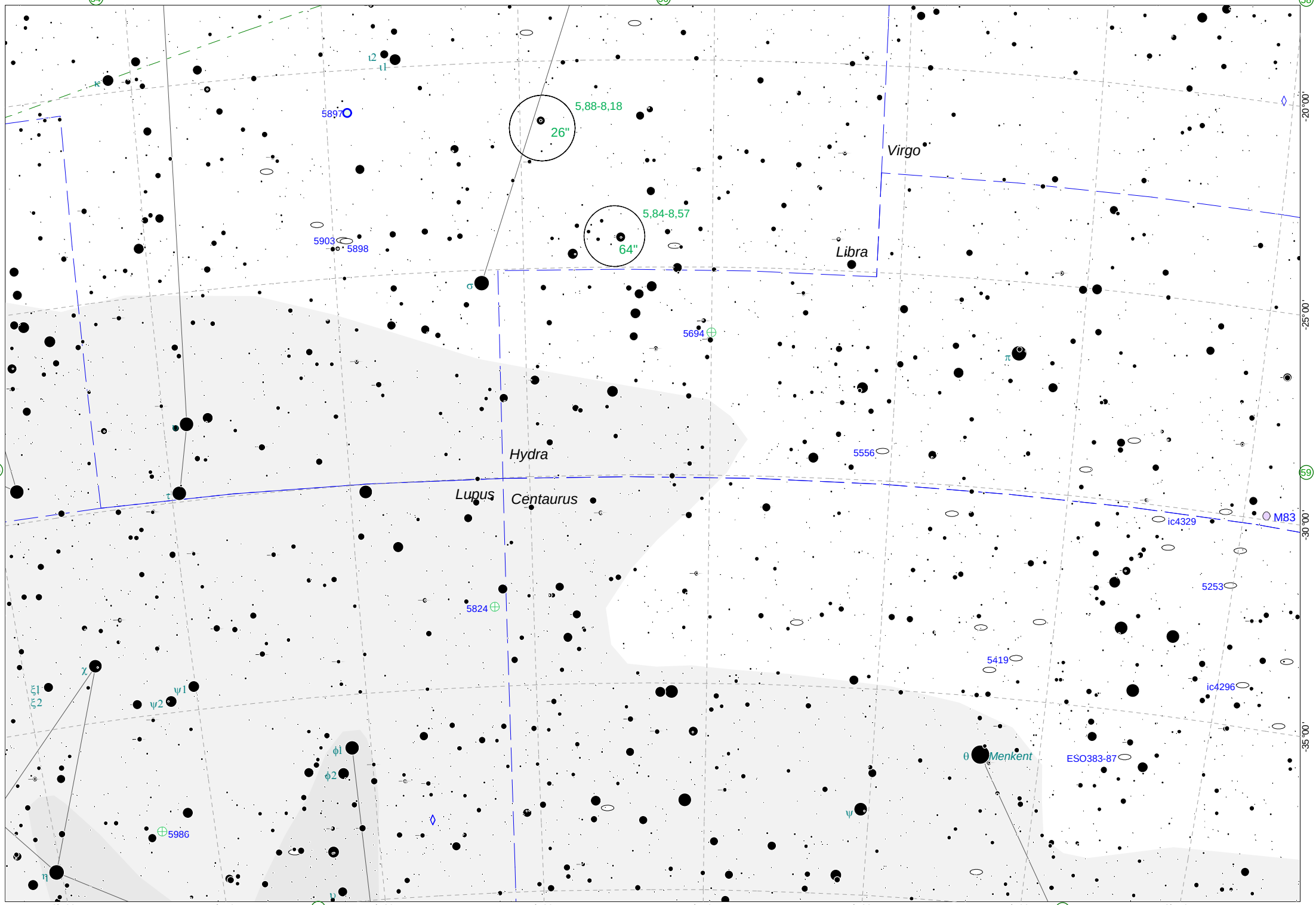

54
george
56
58
55
59
75
76
16h 00m
15h 40m
15h 20m
15h 00m
14h 40m
14h 20m
14h 00m
13h 40m
-20°00'
-25°00'
-30°00'
-35°00'
5,88-8,18
26"
5,84-8,57
64"
5897
5903
5898
5694
5556
5824
5986
5419
5253
ic4329
ic4296
ESO383-87
M83
Virgo
Libra
Hydra
Lupus
Centaurus
Menkent
ι2
ι1
κ
σ
π
τ
χ
ξ1
ξ2
ψ1
ψ2
φ1
φ2
θ
ψ
η

Chart 58

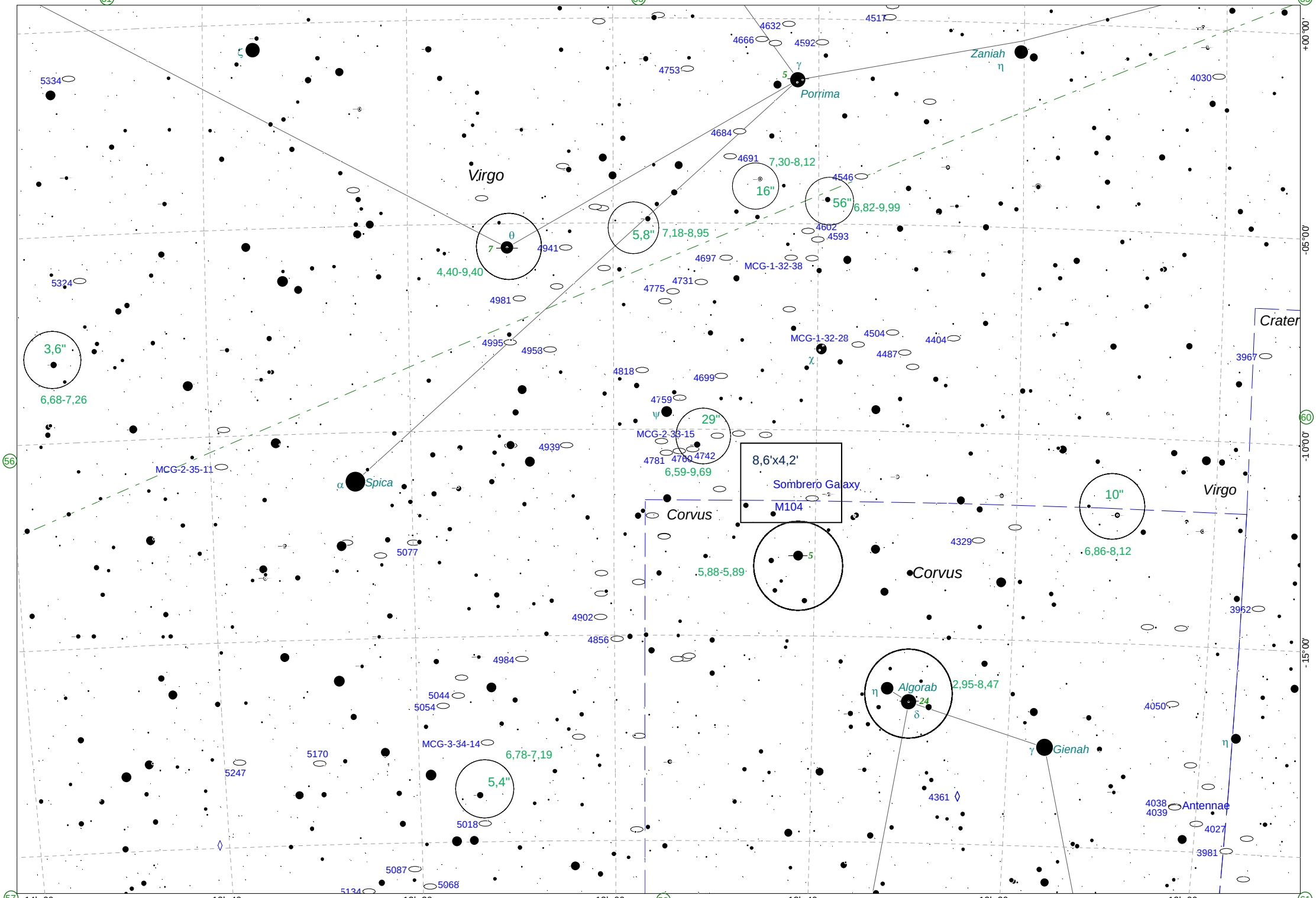

31
33
35
56
57
59
60
61
+00°00'
-05°00'
-10°00'
-15°00'
14h 00m
13h 40m
13h 20m
13h 00m
12h 40m
12h 20m
12h 00m
Virgo
Porrima
Zaniah
Spica
Corvus
Crater
Algorab
Gienah
Antennae
Sombrero Galaxy
M104
8,6'x4,2'
7,30-8,12
16"
6,82-9,99
56"
7,18-8,95
5,8"
4,40-9,40
3,6"
6,68-7,26
29"
6,59-9,69
10"
6,86-8,12
5,88-5,89
2,95-8,47
6,78-7,19
5,4"
MCG-1-32-38
MCG-1-32-28
MCG-2-33-15
MCG-2-35-11
MCG-3-34-14

Chart 59

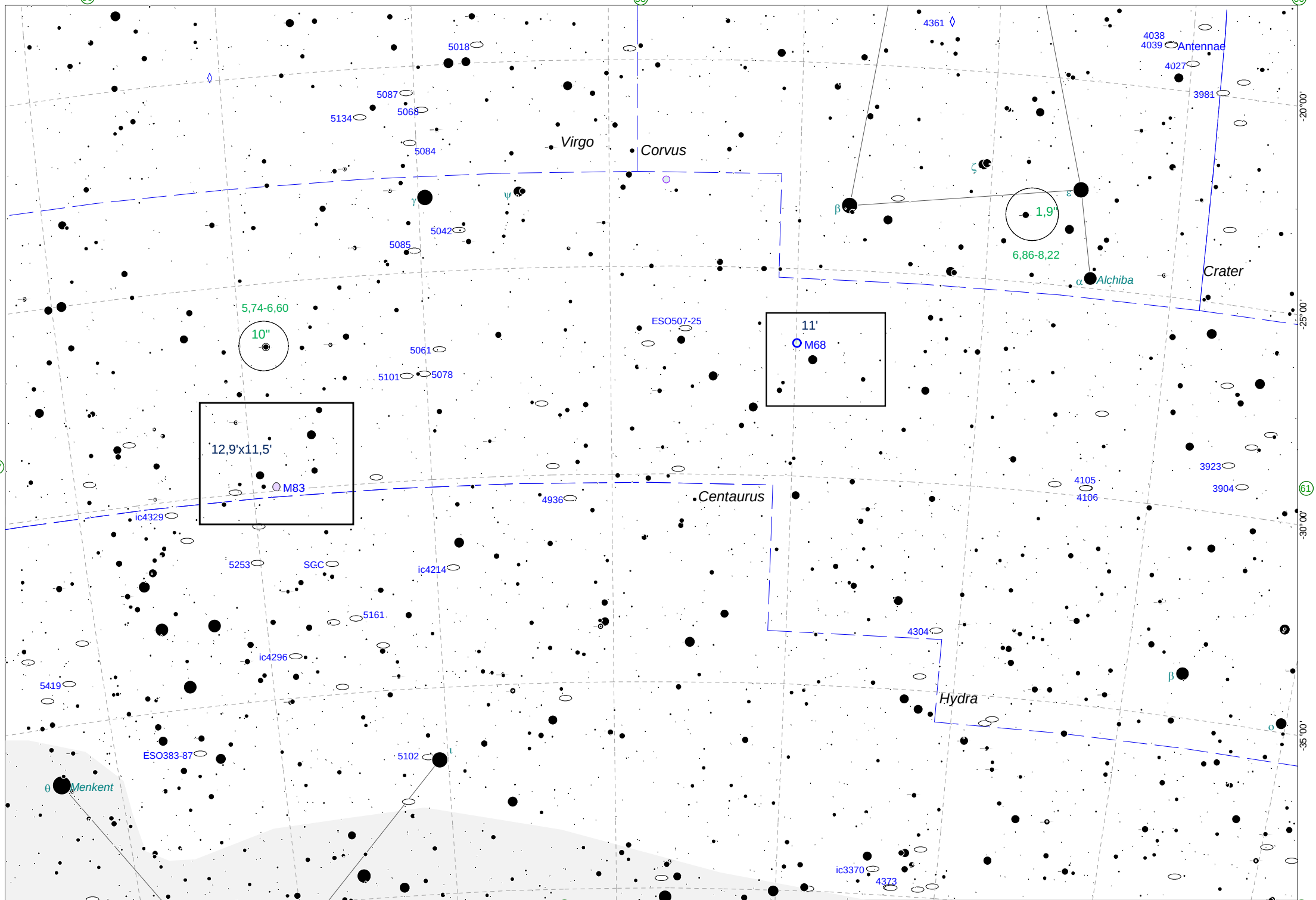

56
58
60
57
61
76
77
-20°00'
-25°00'
-30°00'
-35°00'
14h 00m
13h 40m
13h 20m
13h 00m
12h 40m
12h 20m
12h 00m
11h 40m
Virgo
Corvus
Centaurus
Hydra
Crater
Antennae
Alchiba
Menkent
M68
M83
11'
12,9'x11,5'
10"
1,9"
5,74-6,60
6,86-8,22
5018
5087
5068
5134
5084
5042
5085
5061
5101
5078
ESO507-25
4361
4038
4039
4027
3981
3923
3904
4105
4106
4936
ic4329
5253
SGC
ic4214
5161
4304
ic4296
5419
ESO383-87
5102
ic3370
4373

Chart 60

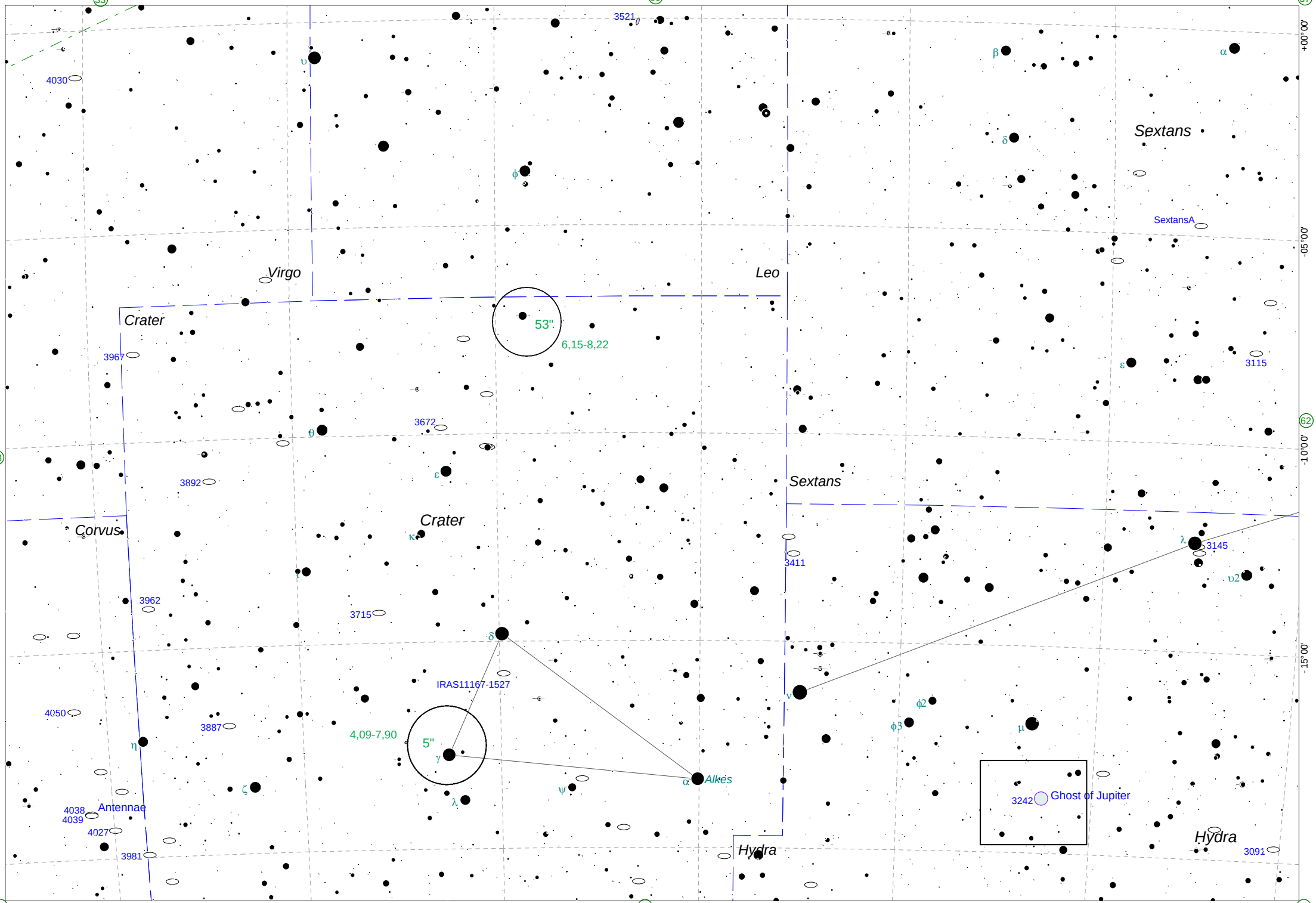

george
33
35
37
58
59
61
62
63
12h 00m
11h 40m
11h 20m
11h 00m
10h 40m
10h 20m
10h 00m
+00°00'
-05°00'
-10°00'
-15°00'
3521
4030
Sextans
SextansA
Virgo
Leo
Crater
53"
6,15-8,22
3967
3115
3672
3892
Sextans
Crater
Corvus
3411
3145
3962
3715
IRAS11167-1527
4,09-7,90
5"
4050
3887
Alkes
3242
Ghost of Jupiter
Antennae
4038
4039
4027
3981
Hydra
Hydra
3091

Chart 61

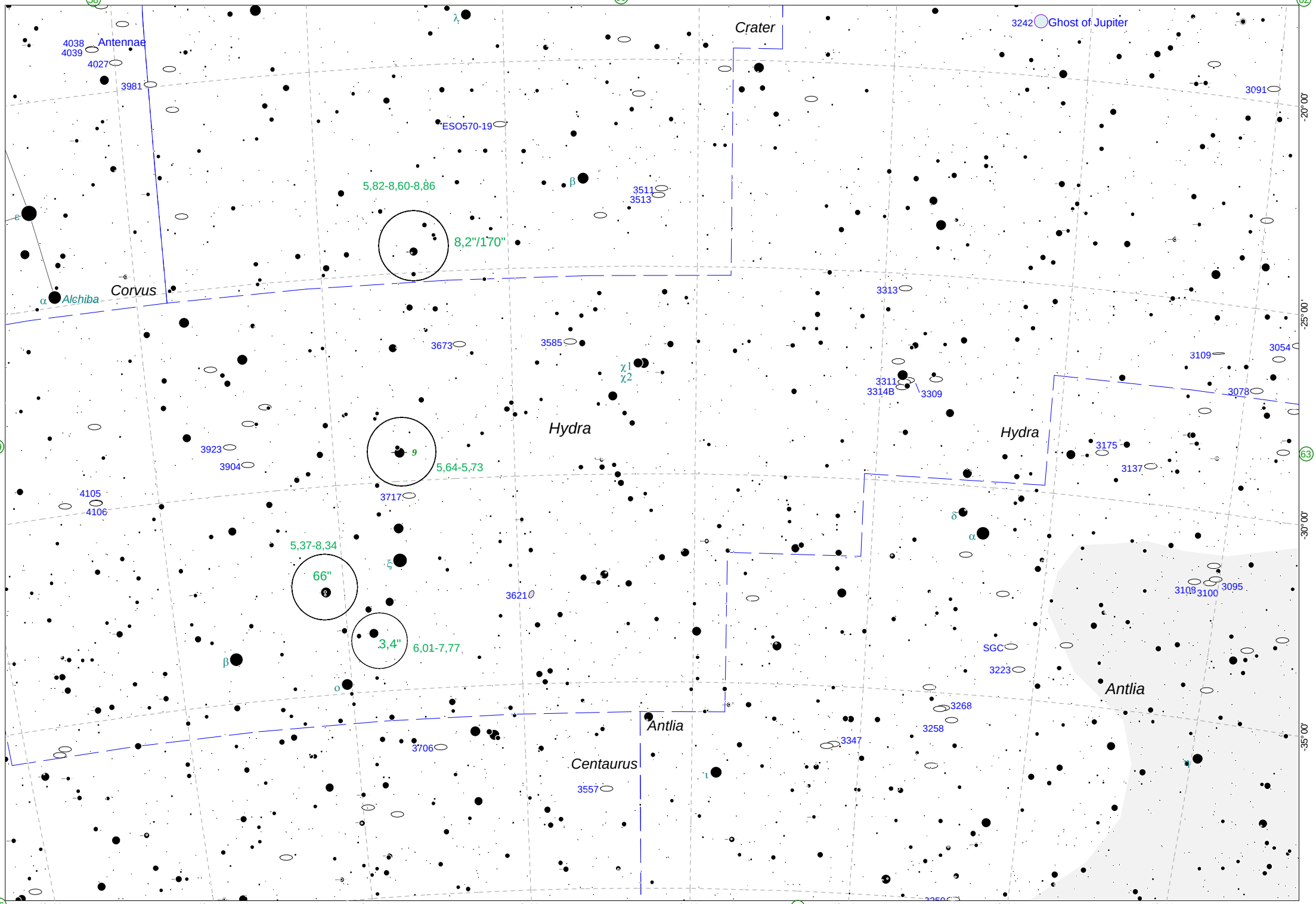

george
Crater
Ghost of Jupiter
Antennae
Corvus
Alchiba
Hydra
Centaurus
Antlia
ESO570-19
5,82-8,60-8,86
8,2"/170"
5,64-5,73
5,37-8,34
66"
3,4"
6,01-7,77
12h 20m
12h 00m
11h 40m
11h 20m
11h 00m
10h 40m
10h 20m
10h 00m
-20° 00'
-25° 00'
-30° 00'
-35° 00'

Chart 62

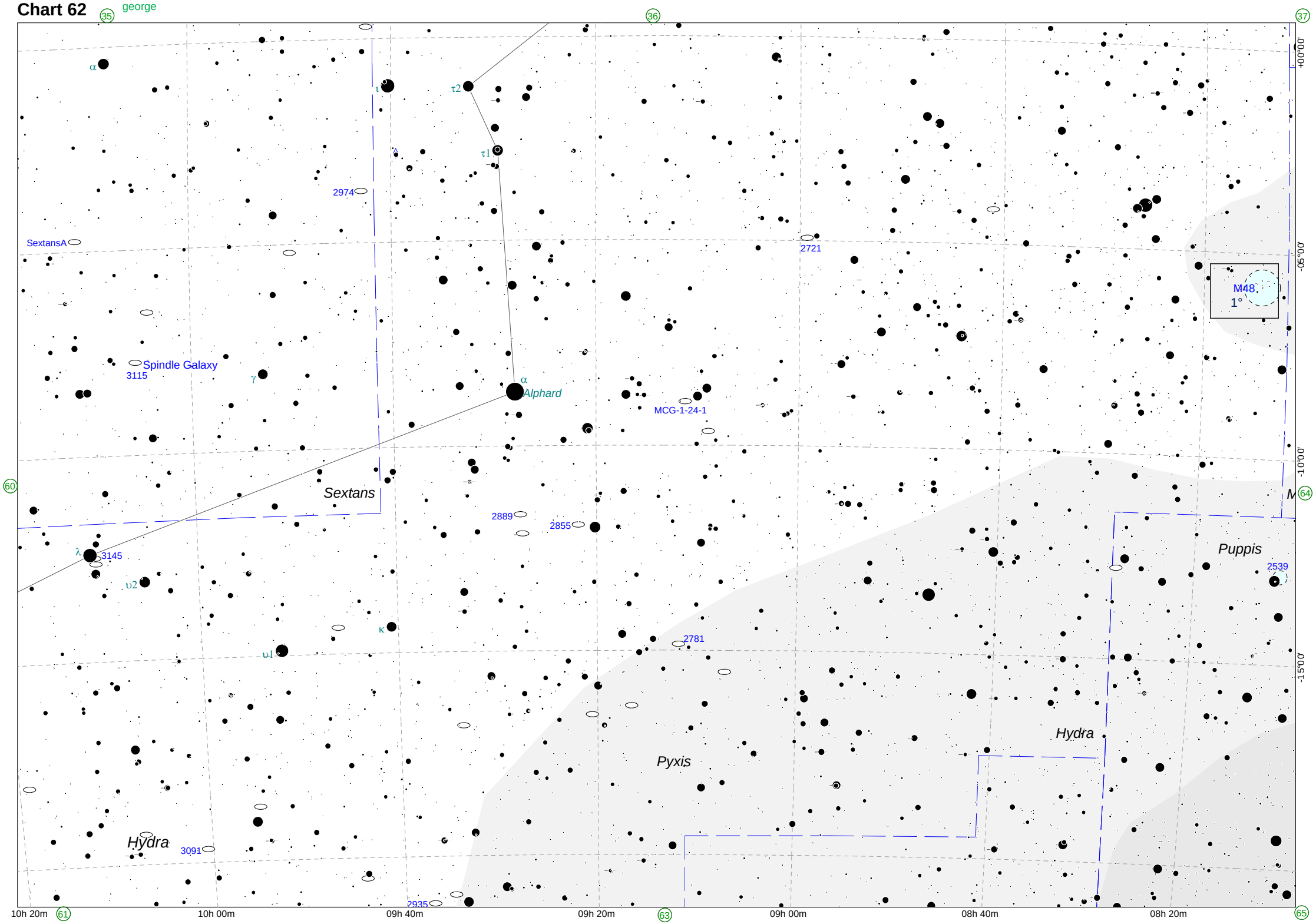

35
george
36
37
60
61
63
64
65
+00°0'
-05°0'
-10°0'
-15°0'
10h 20m
10h 00m
09h 40m
09h 20m
09h 00m
08h 40m
08h 20m
α
ι
τ2
τ1
λ
2974
SextansA
2721
M48
1°
Spindle Galaxy
3115
γ
α
Alphard
MCG-1-24-1
Sextans
2889
2855
λ
3145
υ2
κ
υ1
2781
Puppis
2539
Hydra
Pyxis
Hydra
3091
2935

Chart 63

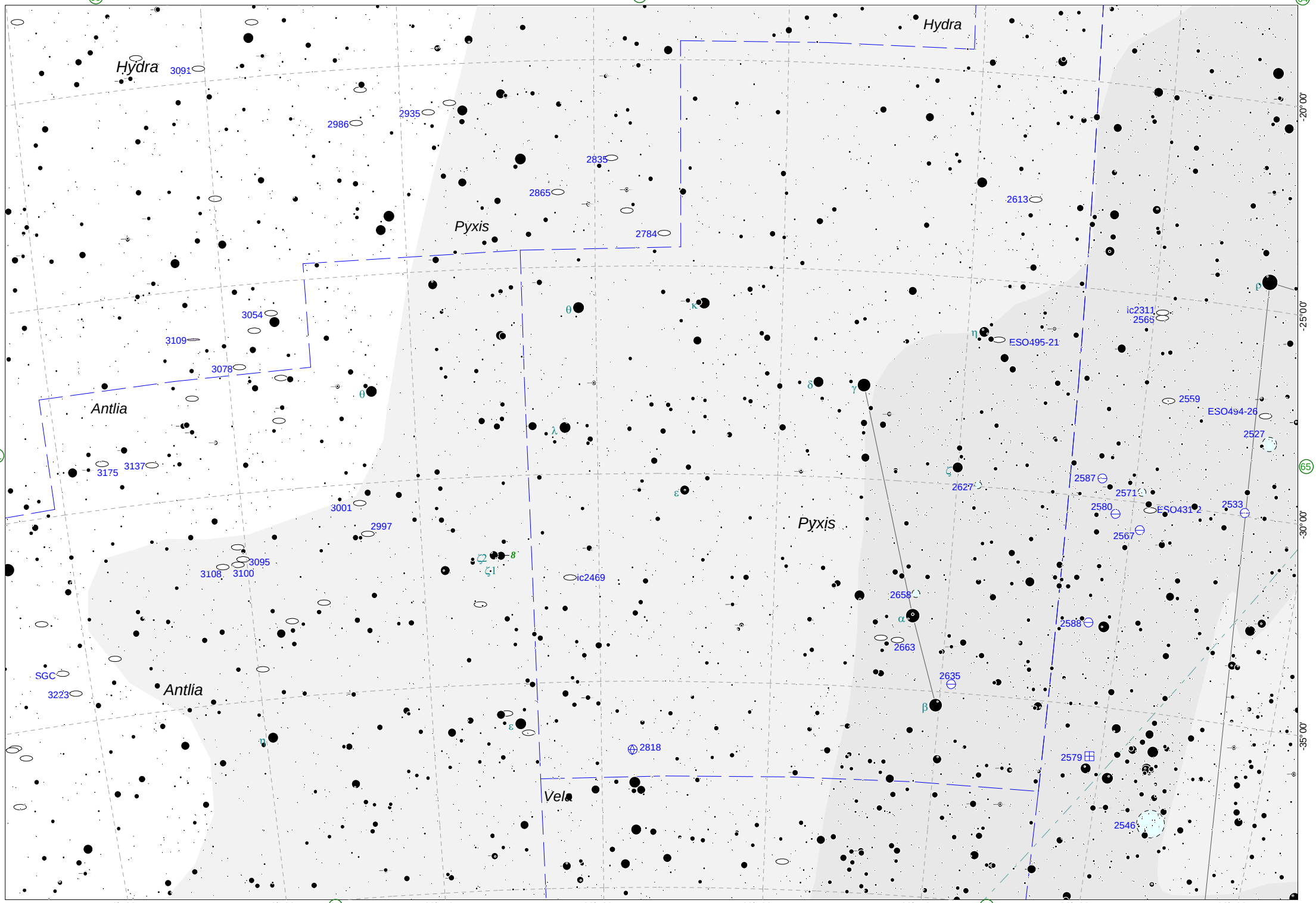

60
george
62
64
Hydra
Hydra
3091
2935
2986
2835
2865
2784
Pyxis
2613
3054
3109
3078
Antlia
3175
3137
3001
2997
3095
3108
3100
ic2469
2818
Vela
Pyxis
ESO495-21
ic2311
2565
2559
ESO494-26
2527
2587
2571
2627
2580
ESO431-2
2533
2567
2658
2588
2663
2635
2579
2546
SGC
3223
Antlia
61
65
77
78
-20° 00'
-25° 00'
-30° 00'
-35° 00'
10h 20m
10h 00m
09h 40m
09h 20m
09h 00m
08h 40m
08h 20m
08h 00m

Chart 64

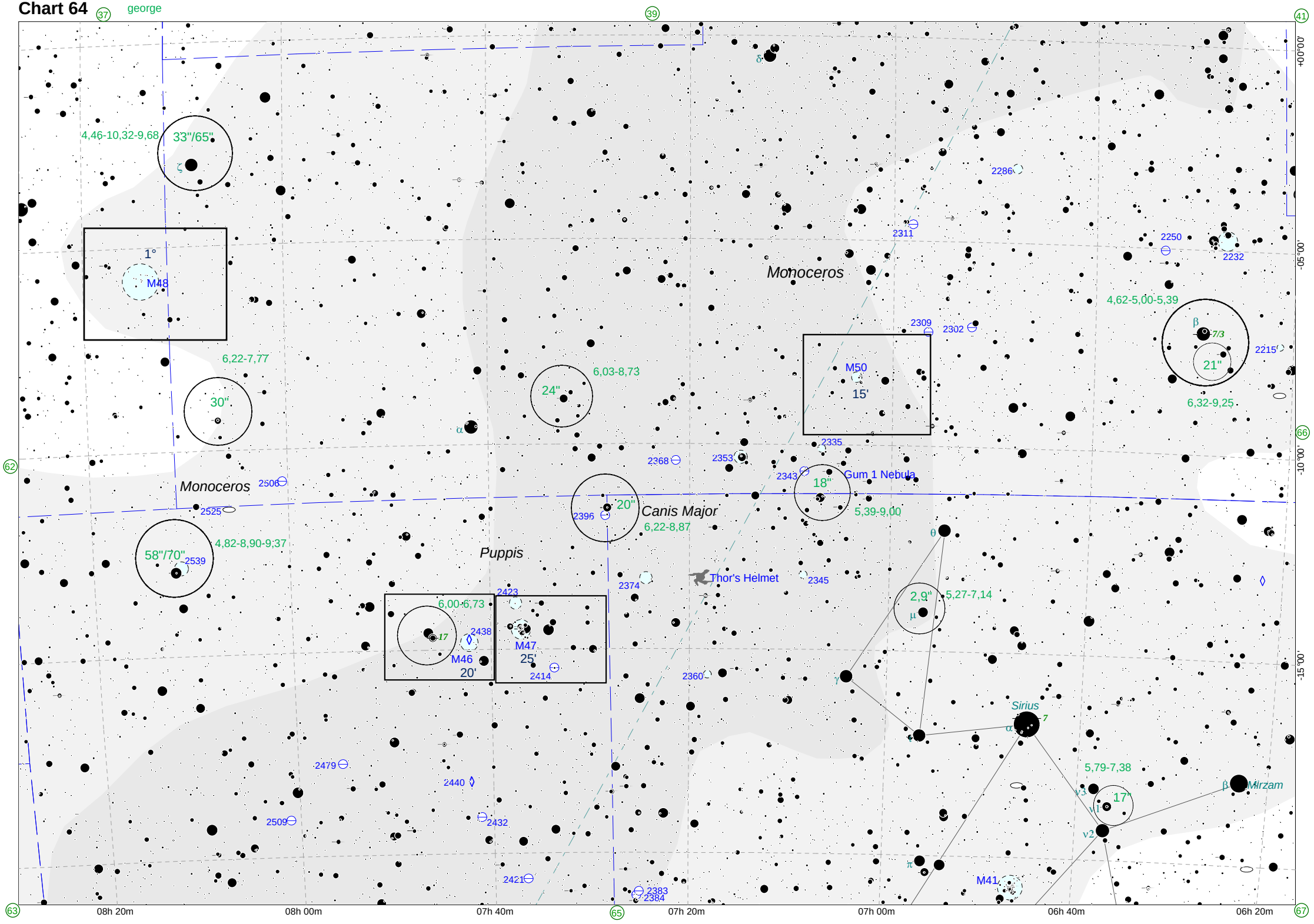

37
george
39
41
+00°00'
-05°00'
-10°00'
-15°00'
62
66
63
65
67
08h 20m
08h 00m
07h 40m
07h 20m
07h 00m
06h 40m
06h 20m
4,46-10,32-9,68
33"/65"
ζ
1°
M48
6,22-7,77
30"
Monoceros
2506
2525
58"/70"
2539
4,82-8,90-9,37
24"
6,03-8,73
α
2368
2353
2396
20"
Canis Major
6,22-8,87
Puppis
2374
Thor's Helmet
2345
2423
6,00-6,73
17
2438
M46
20'
M47
25'
2414
2360
2479
2440
2509
2432
2421
2383
2384
2286
2311
2250
2232
Monoceros
2309
2302
M50
15'
2335
2343
18"
Gum 1 Nebula
5,39-9,00
θ
2,9"
5,27-7,14
μ
γ
ε
Sirius
7
α
4,62-5,00-5,39
β
7/3
21"
2215
6,32-9,25
5,79-7,38
ν3
17"
ν1
ν2
β
Mirzam
π
M41

Chart 65

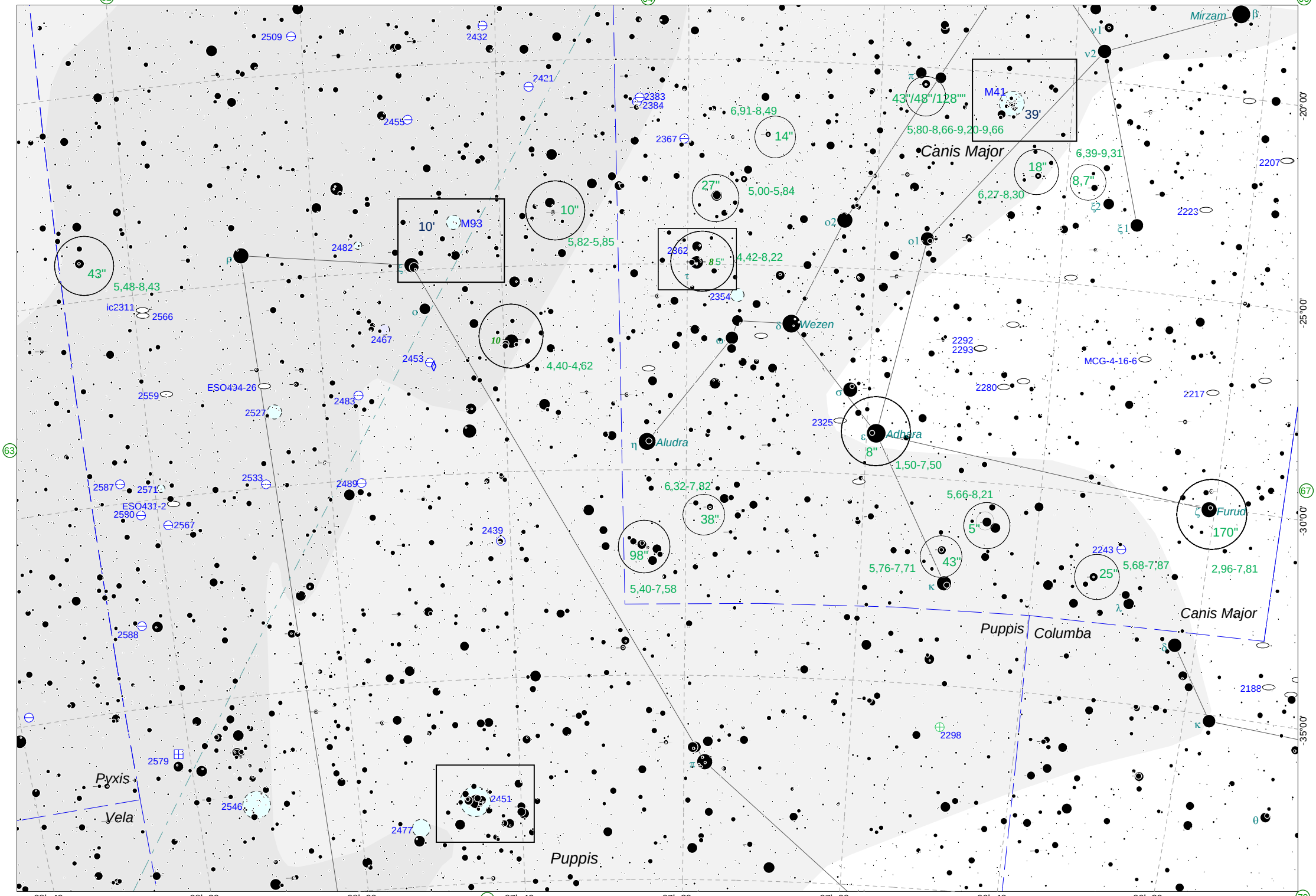

62
george
64
66
63
67
78
79
Mirzam
β
ν1
ν2
π
43"/48"/128""
M41
39'
5,80-8,66-9,20-9,66
Canis Major
6,39-9,31
18"
8,7"
ξ2
ξ1
2207
2223
6,27-8,30
2509
2432
2421
2383
2384
2455
6,91-8,49
14"
2367
27"
5,00-5,84
10"
5,82-5,85
10'
M93
2482
43"
5,48-8,43
ic2311
2566
2362
8,5"
4,42-8,22
2354
o2
o1
Wezen
δ
2467
2453
4,40-4,62
2292
2293
MCG-4-16-6
2280
2217
ESO494-26
2559
2527
2483
σ
2325
Adhara
ε
8"
1,50-7,50
Aludra
η
2587
2571
2533
2489
ESO431-2
2580
2567
6,32-7,82
38"
5,66-8,21
5"
Furud
ζ
170"
2439
98"
5,40-7,58
43"
κ
5,76-7,71
2243
25"
5,68-7,87
2,96-7,81
λ
Canis Major
Puppis
Columba
2588
δ
2188
2298
κ
2579
Pyxis
2546
Vela
2451
2477
Puppis
θ
08h 40m
08h 20m
08h 00m
07h 40m
07h 20m
07h 00m
06h 40m
06h 20m
-20°00'
-25°00'
-30°00'
-35°00'

Chart 66

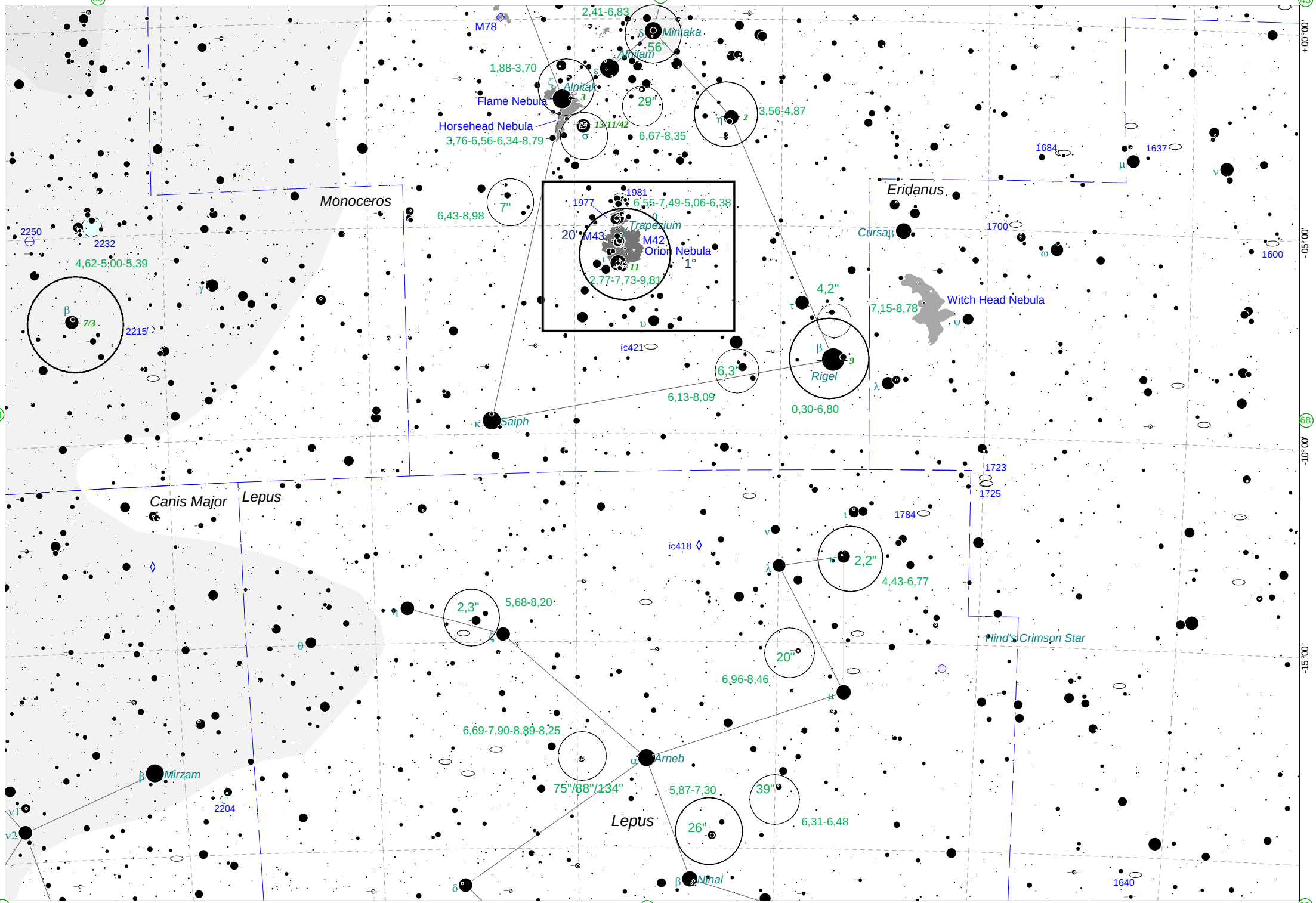

M78
2,41-6,83
Mintaka
56"
Alnilam
1,88-3,70
Alnitak
Flame Nebula
29"
3,56-4,87
Horsehead Nebula
13/11/42
3,76-6,56-6,34-8,79
6,67-8,35
Monoceros
7"
6,43-8,98
1981
1977
6,55-7,49-5,06-6,38
Trapezium
20"
M43
M42
Orion Nebula
1°
2,77-7,73-9,81
Eridanus
1684
1637
1700
1600
Cursa
2250
2232
4,62-5,00-5,39
7/3
2215
4,2"
7,15-8,78
Witch Head Nebula
ic421
6,3"
Rigel
6,13-8,09
0,30-6,80
Saiph
1723
1725
1784
Canis Major
Lepus
ic418
2,2"
4,43-6,77
2,3"
5,68-8,20
Hind's Crimson Star
20"
6,96-8,46
6,69-7,90-8,89-8,25
Arneb
Mirzam
2204
75"/88"/134"
5,87-7,30
39"
Lepus
26"
6,31-6,48
Nihal
1640
39
41
43
64
68
65
67
69
+00°00'
-05°00'
-10°00'
-15°00'
06h 20m
06h 00m
05h 40m
05h 20m
05h 00m
04h 40m

Chart 67 (64) george

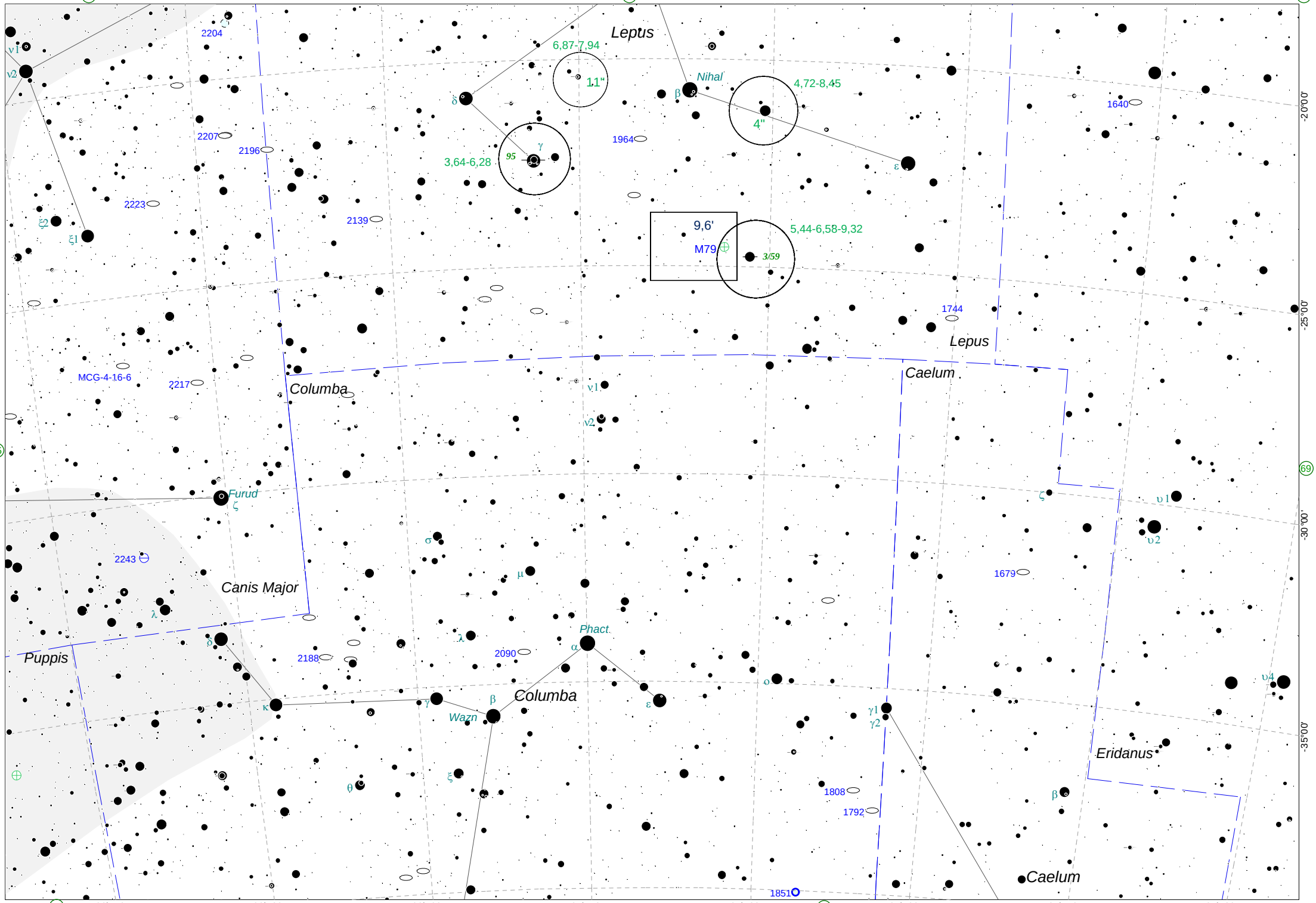


Chart 68

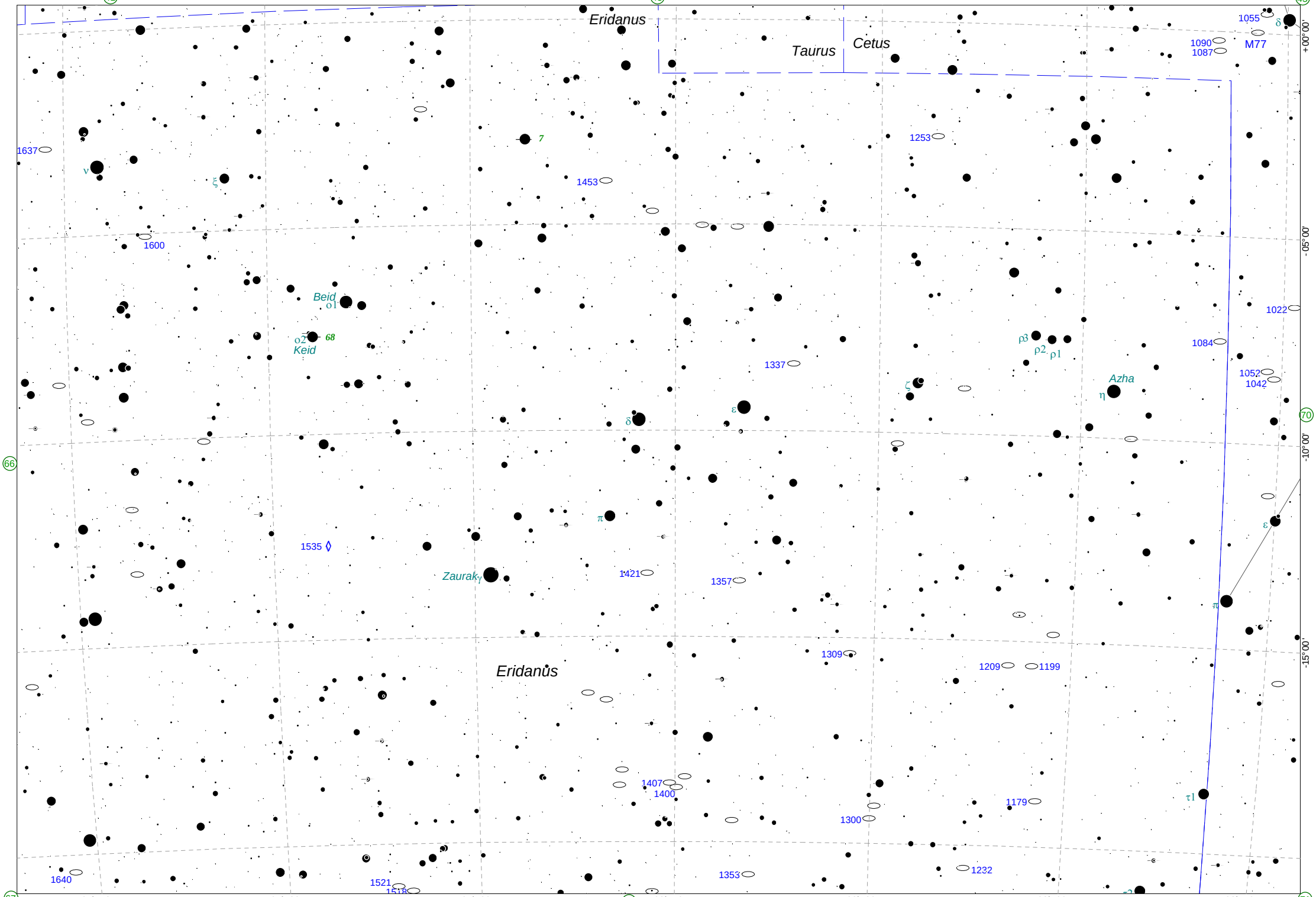

41
george
43
45
Eridanus
Taurus
Cetus
1055
δ
1090
1087
M77
+00°00'
1637
ν
ξ
7
1253
1453
1600
-05°00'
Beid
o1
o2
68
Keid
1022
ρ3
ρ2
ρ1
1084
1337
Azha
η
ζ
1052
1042
ε
δ
70
66
-10°00'
π
ε
1535
Zaurak
γ
1421
1357
π
-15°00'
1309
Eridanus
1209
1199
1407
1400
1179
τ1
1300
1640
1521
1518
1353
1232
67
69
71
04h 40m
04h 20m
04h 00m
03h 40m
03h 20m
03h 00m
02h 40m

Chart 69

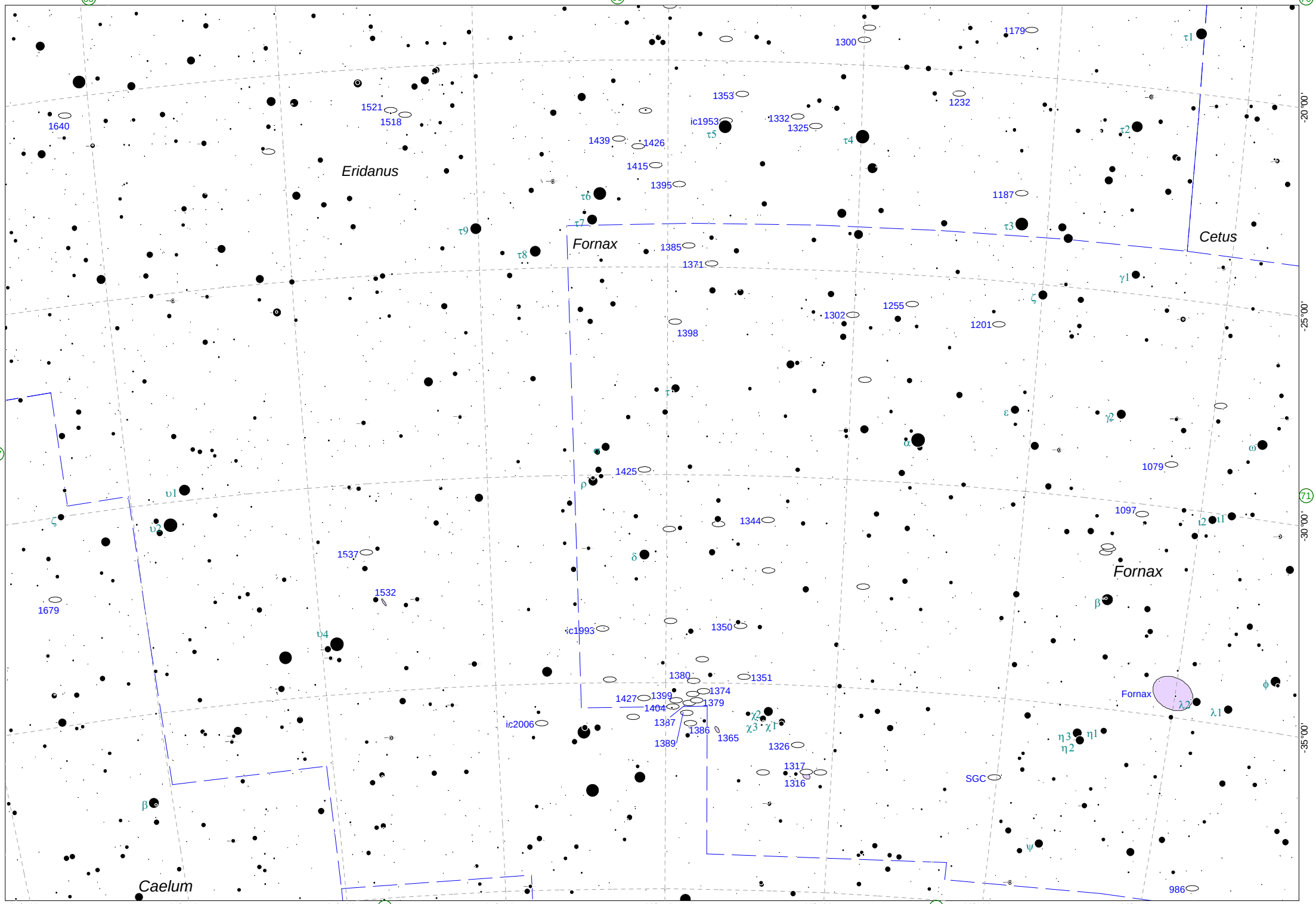

66
68
70
67
71
79
80
-20°00'
-25°00'
-30°00'
-35°00'
05h 00m
04h 40m
04h 20m
04h 00m
03h 40m
03h 20m
03h 00m
02h 40m
Eridanus
Fornax
Cetus
Caelum
Fornax
1640
1521
1518
1439
1426
1415
1395
1353
ic1953
1332
1325
1300
1179
1232
1187
1385
1371
1398
1302
1255
1201
1425
1344
1079
1097
1537
1532
1679
ic1993
1350
1380
1351
1374
1399
1427
1404
1379
1387
1386
1365
1389
ic2006
1326
1317
1316
SGC
986
τ1
τ2
τ3
τ4
τ5
τ6
τ7
τ8
τ9
γ1
γ2
ζ
ε
α
ω
ρ
δ
β
υ1
υ2
υ4
ζ
β
ι1
ι2
φ
λ1
λ2
η1
η2
η3
χ1
χ2
χ3
ψ
Fornax

Chart 70

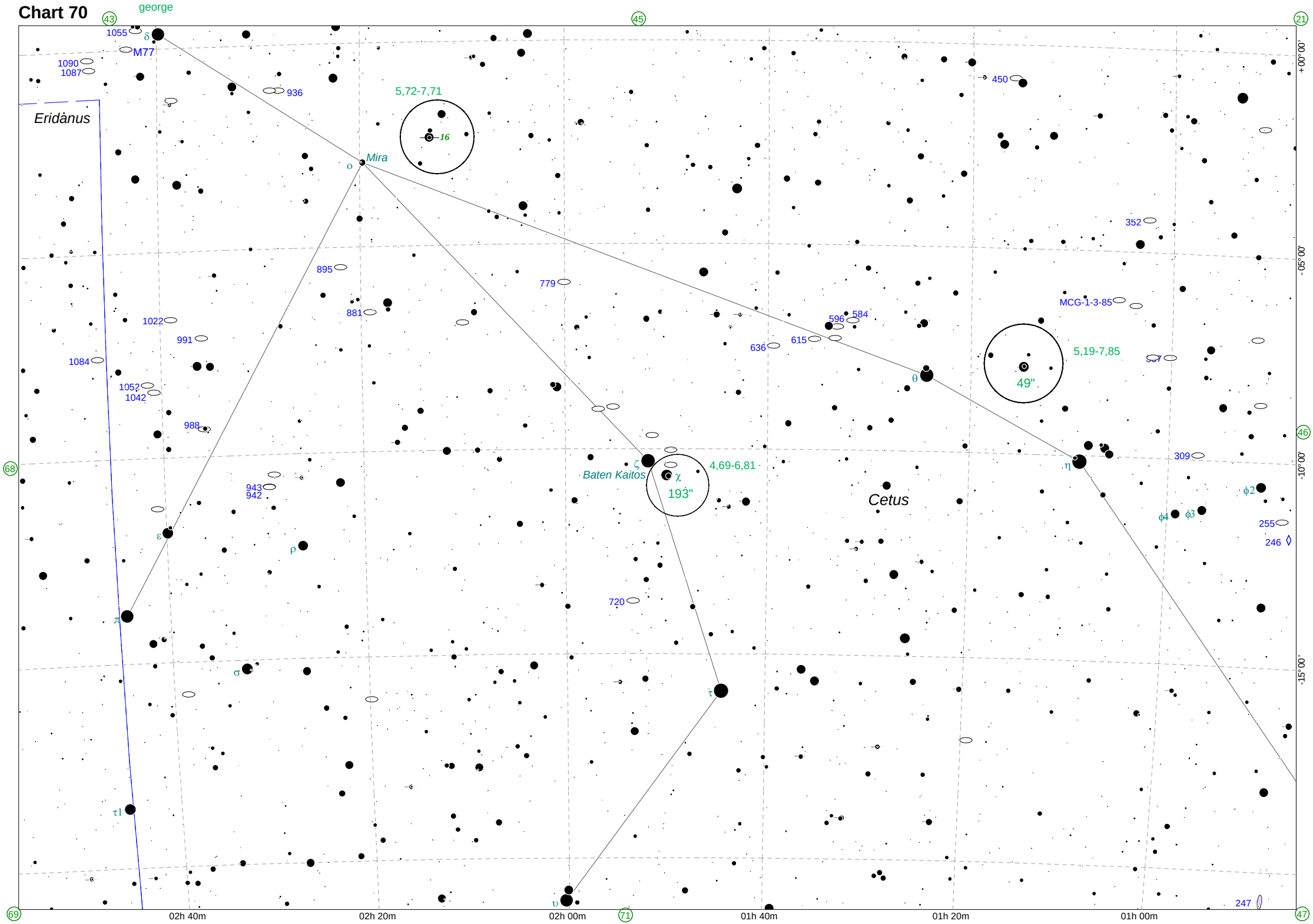

george
43
45
21
46
68
69
71
47
+00°00'
-05°00'
-10°00'
-15°00'
02h 40m
02h 20m
02h 00m
01h 40m
01h 20m
01h 00m
Eridanus
Cetus
Mira
Baten Kaitos
M77
5,72-7,71
16
5,19-7,85
49"
4,69-6,81
193"
1055
δ
1090
1087
936
895
881
779
1022
991
1084
1052
1042
988
943
942
720
450
352
596
584
636
615
MCG-1-3-85
309
255
246
247
ε
ρ
π
σ
τ1
τ
υ
θ
η
χ
ζ
φ2
φ3
φ4

Chart 71

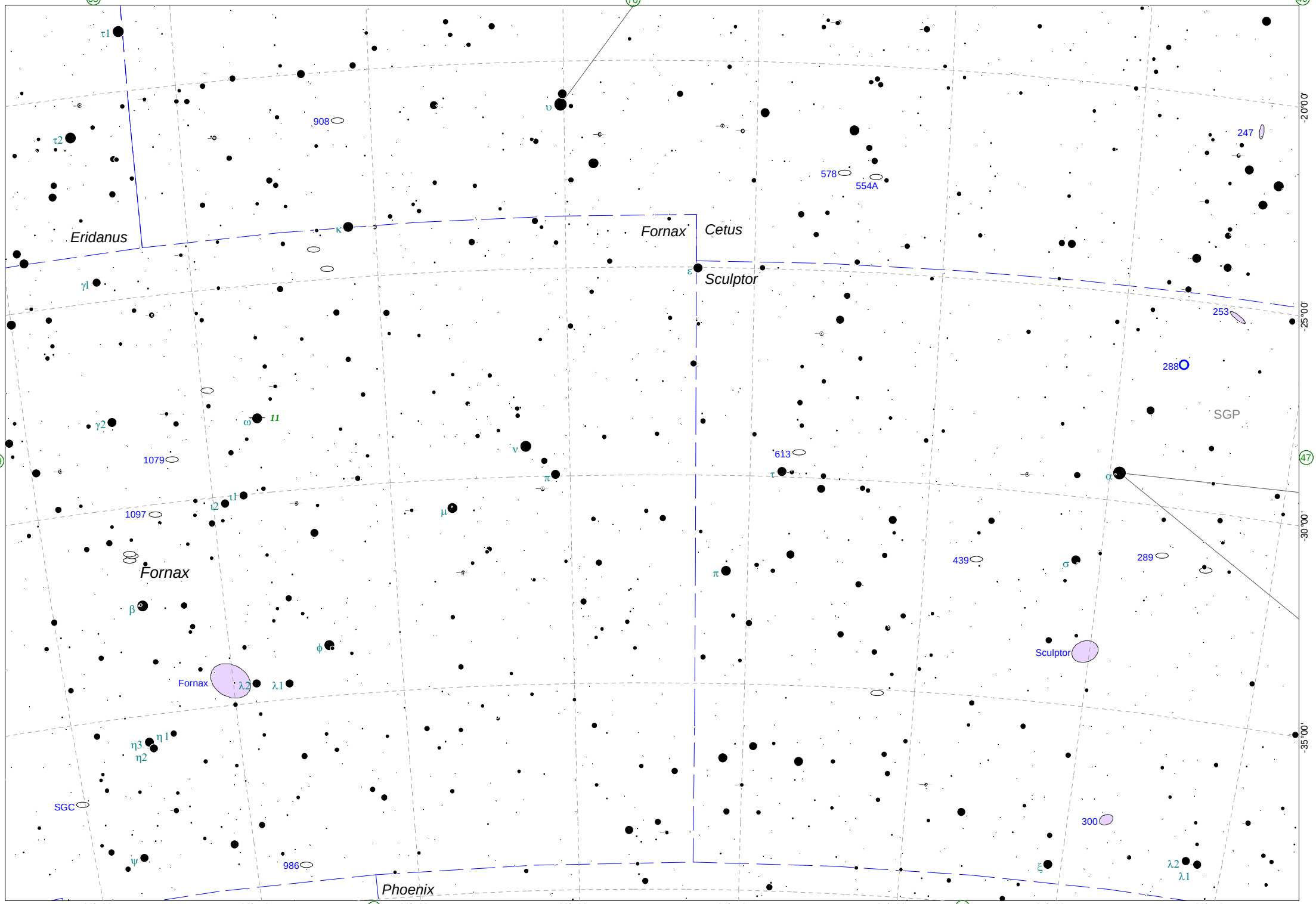

68
70
46
69
47
80
72
-20°00'
-25°00'
-30°00'
-35°00'
03h 00m
02h 40m
02h 20m
02h 00m
01h 40m
01h 20m
01h 00m
00h 40m
Eridanus
Fornax
Cetus
Sculptor
Phoenix
SGP
908
578
554A
247
253
288
613
1079
1097
439
289
986
300
Fornax
Sculptor
SGC
11

Chart 72

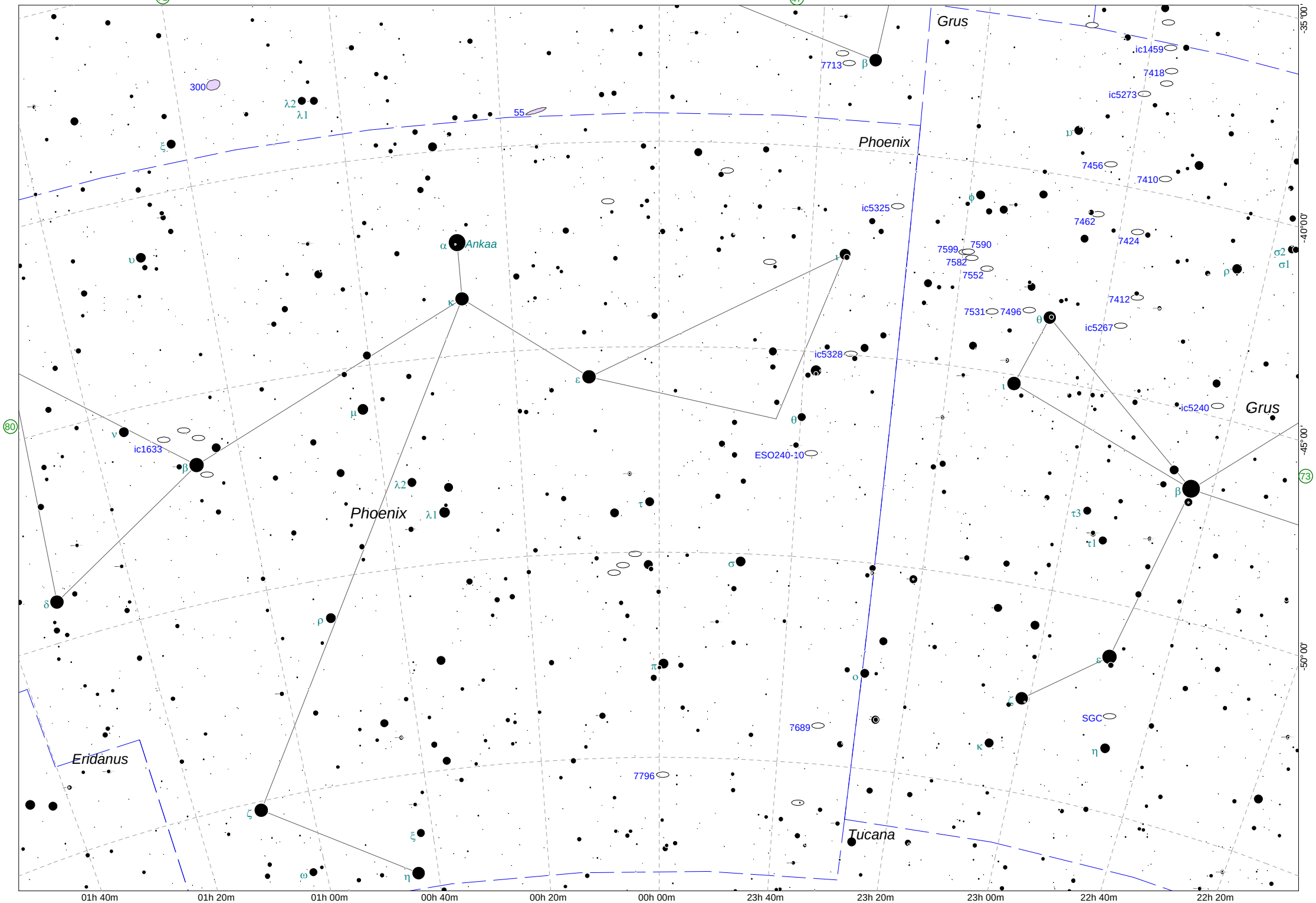

george
71
47
80
73
Grus
Phoenix
Eridanus
Tucana
Ankaa
300
55
7713
ic1459
7418
ic5273
7456
7410
ic5325
7462
7424
7599
7590
7582
7552
7412
7531
7496
ic5267
ic5328
ic5240
ESO240-10
ic1633
7689
7796
SGC
-35°00'
-40°00'
-45°00'
-50°00'
01h 40m
01h 20m
01h 00m
00h 40m
00h 20m
00h 00m
23h 40m
23h 20m
23h 00m
22h 40m
22h 20m

Chart 73 george

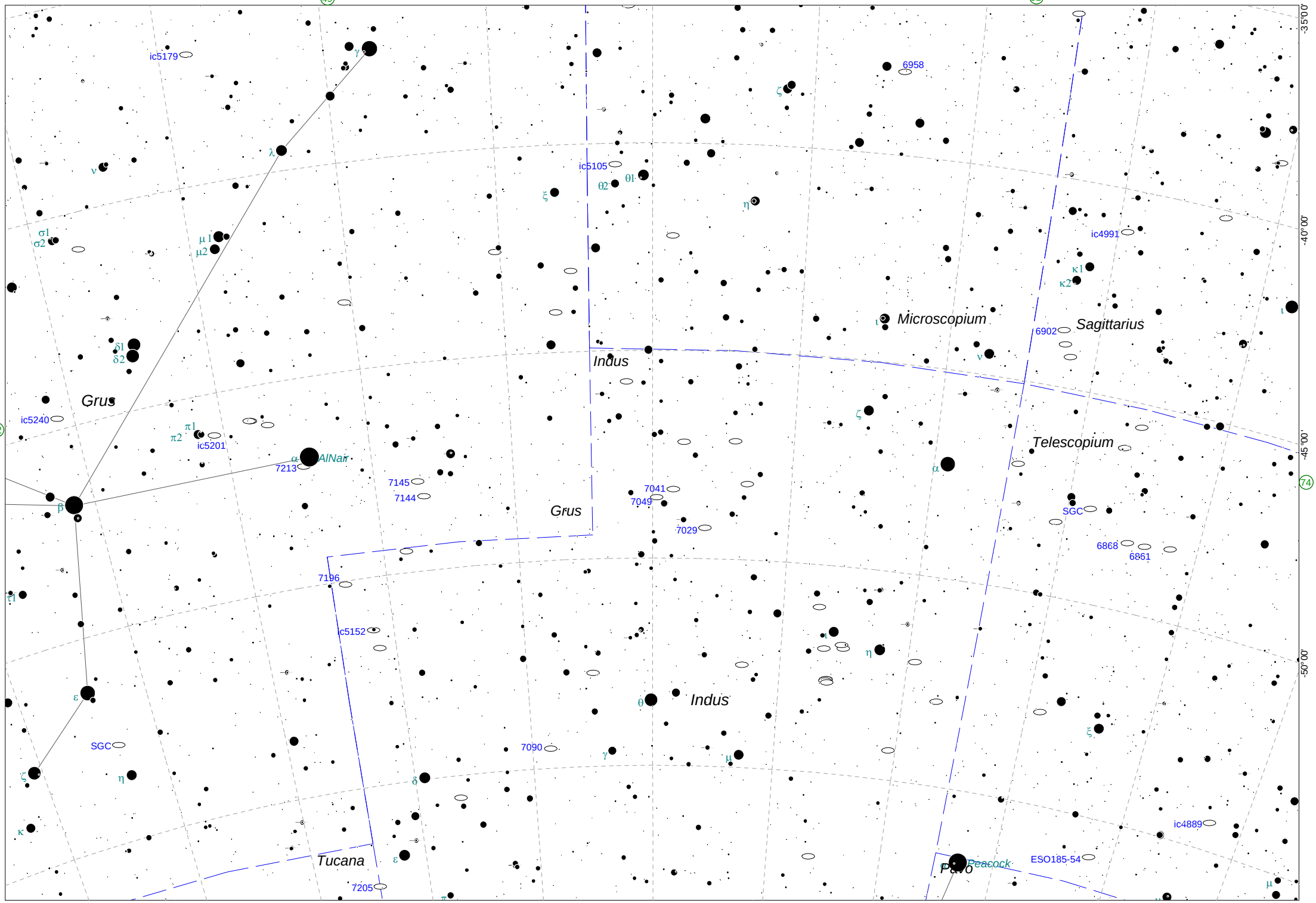


Chart 74

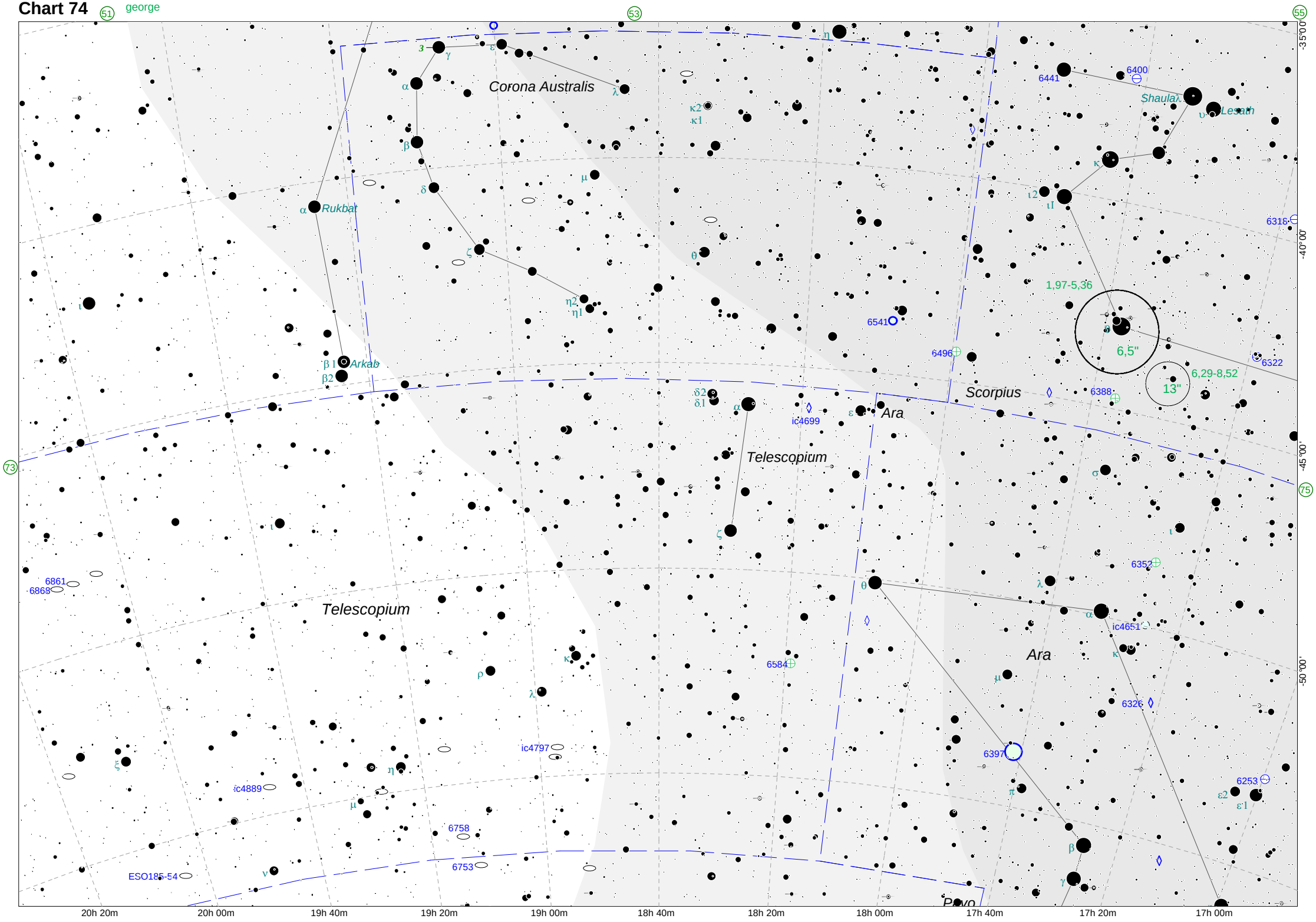

51
george
53
55
73
75
-35°00'
-40°00'
-45°00'
-50°00'
Corona Australis
Rukbat
Arkab
Shaula
Lesath
Scorpius
Ara
Telescopium
Pavo
1,97-5,36
6,5"
13"
6,29-8,52
6441
6400
6316
6541
6496
6322
6388
ic4699
6352
ic4651
6584
6326
6397
6253
6861
6868
ic4797
ic4889
6758
6753
ESO185-54
20h 20m
20h 00m
19h 40m
19h 20m
19h 00m
18h 40m
18h 20m
18h 00m
17h 40m
17h 20m
17h 00m

Chart 75

george

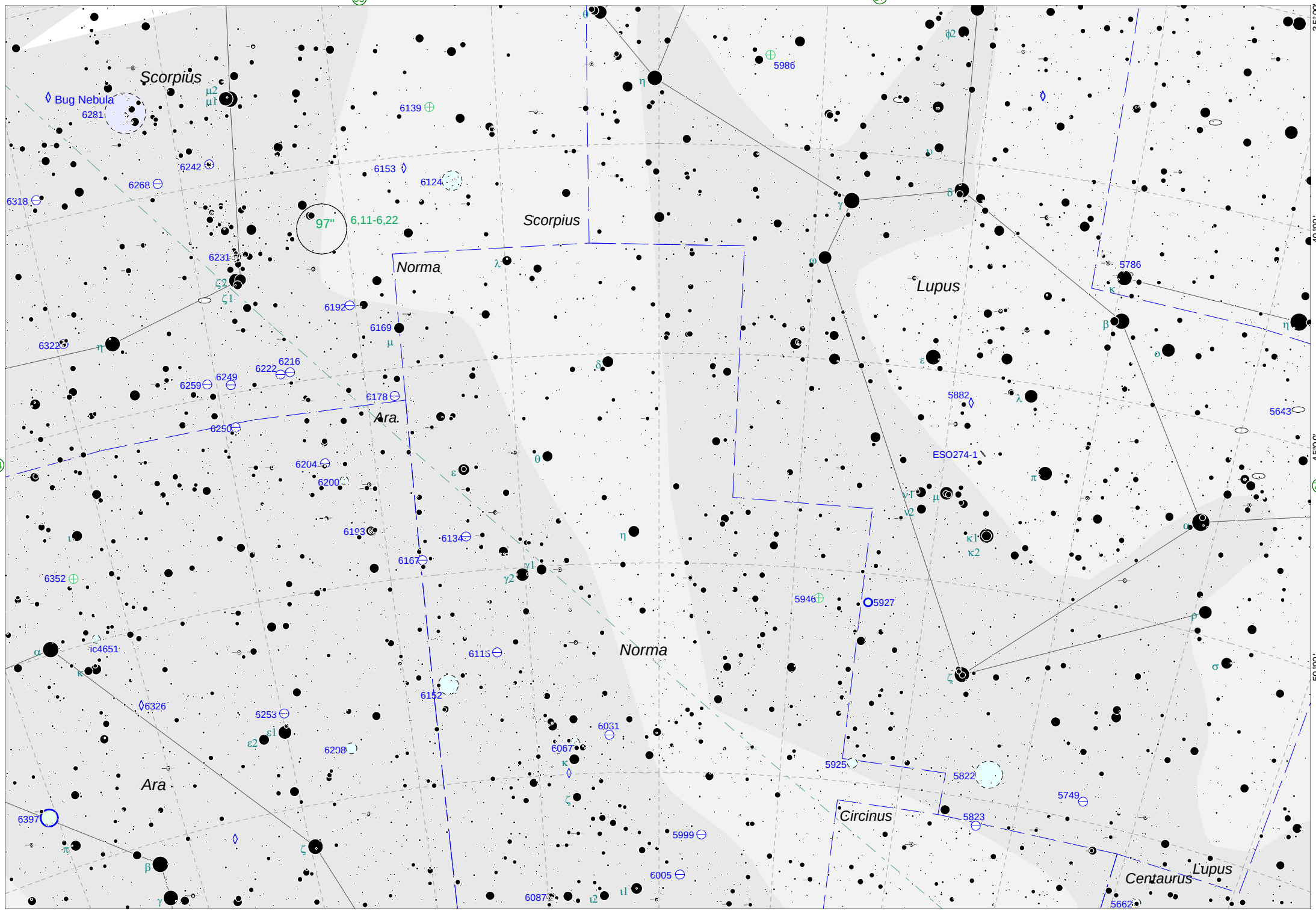


Chart 76

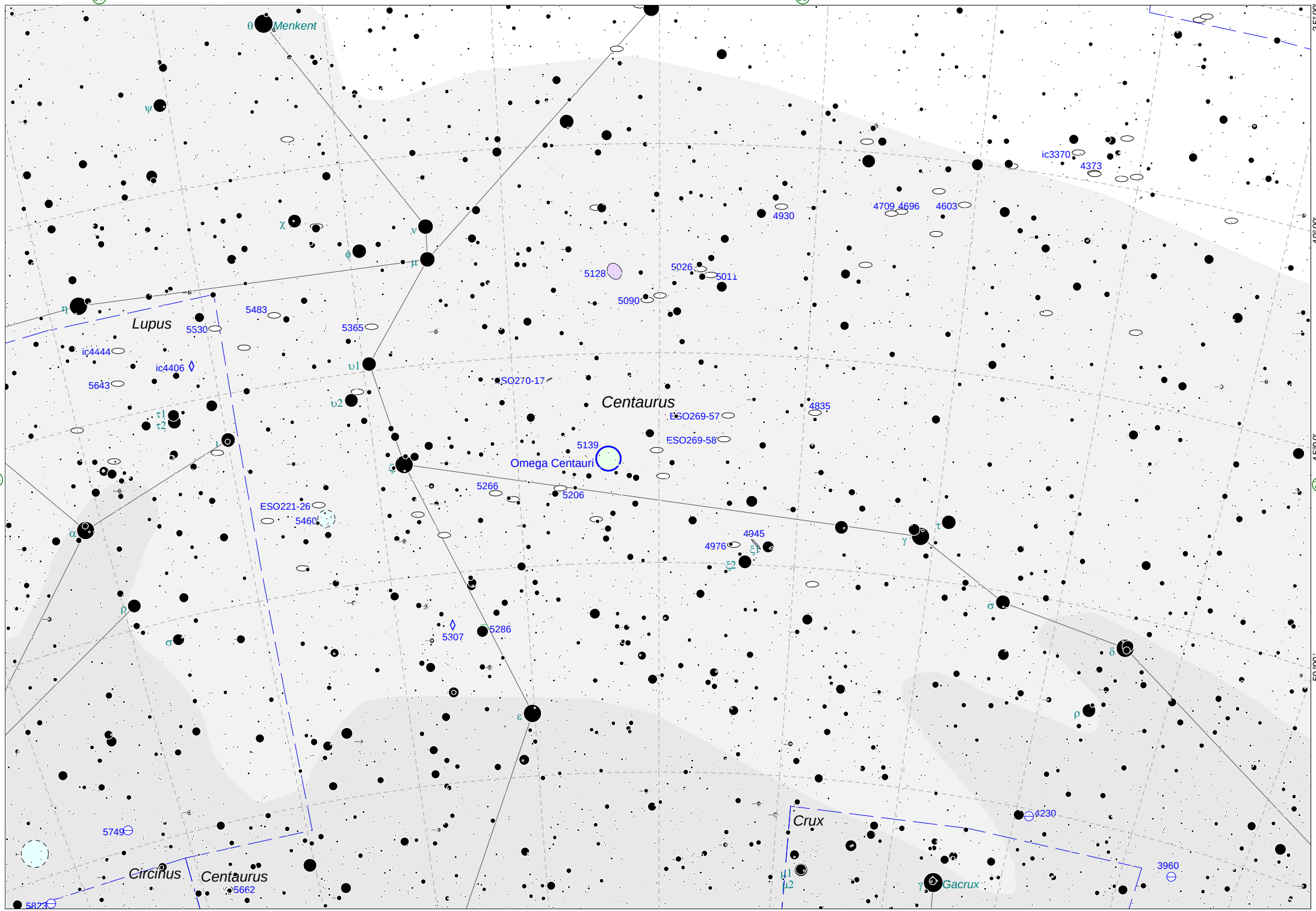

57
george
59
75
77
θ
Menkent
ψ
χ
ν
φ
μ
η
Lupus
5530
5483
5365
ic4444
ic4406
5643
υ1
υ2
τ1
τ2
ι
ESO270-17
Centaurus
ESO269-57
ESO269-58
5139
Omega Centauri
ζ
5266
5206
ESO221-26
5460
α
4945
4976
ξ1
ξ2
γ
τ
σ
δ
ρ
5307
5286
ε
5749
Circinus
Centaurus
5662
5823
Crux
μ1
μ2
γ
Gacrux
4230
3960
ic3370
4373
4930
4709
4696
4603
5128
5026
5011
5090
4835
-35°00'
-40°00'
-45°00'
-50°00'
15h 00m
14h 40m
14h 20m
14h 00m
13h 40m
13h 20m
13h 00m
12h 40m
12h 20m
12h 00m
11h 40m

Chart 77

george

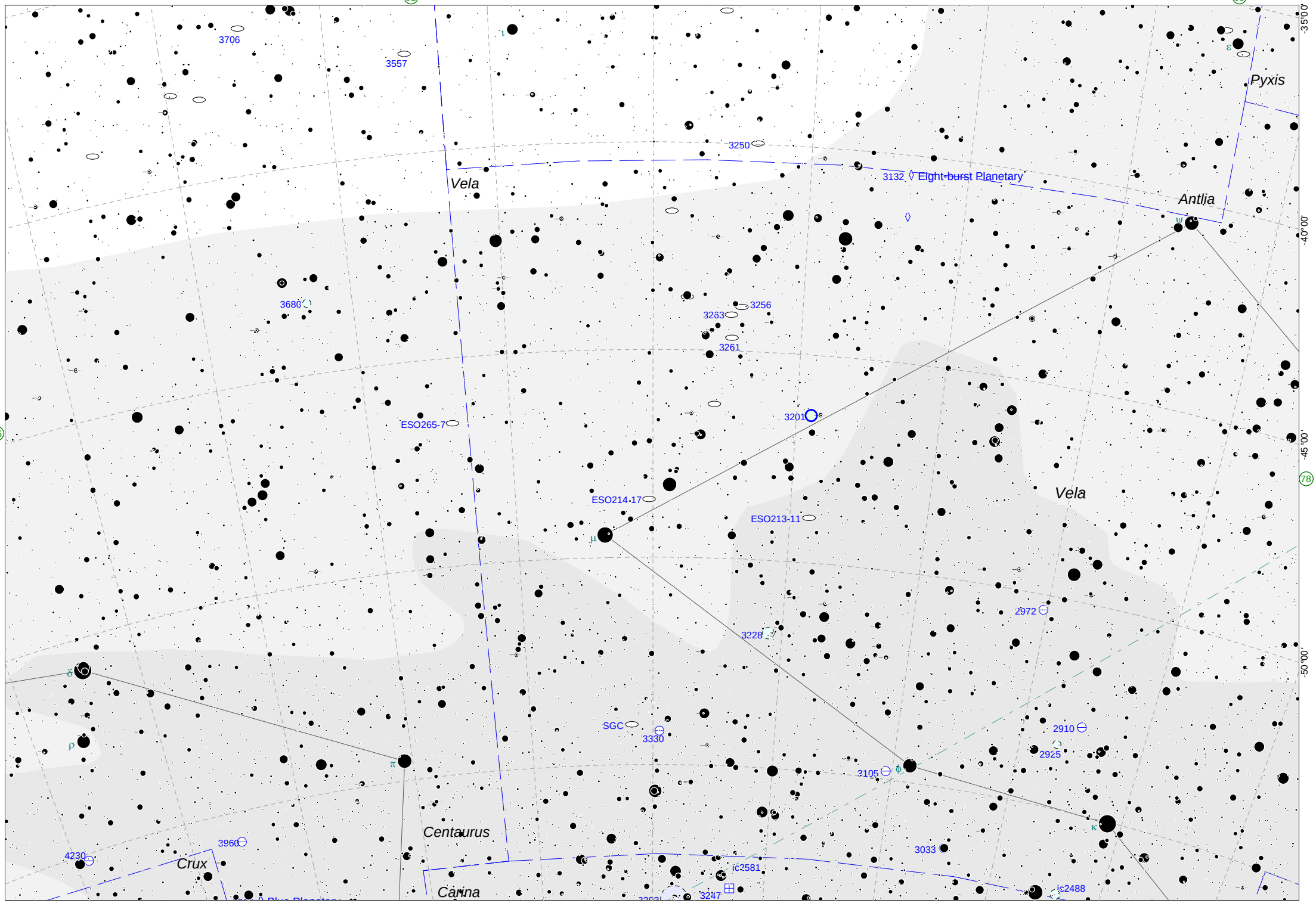


Chart 78

george

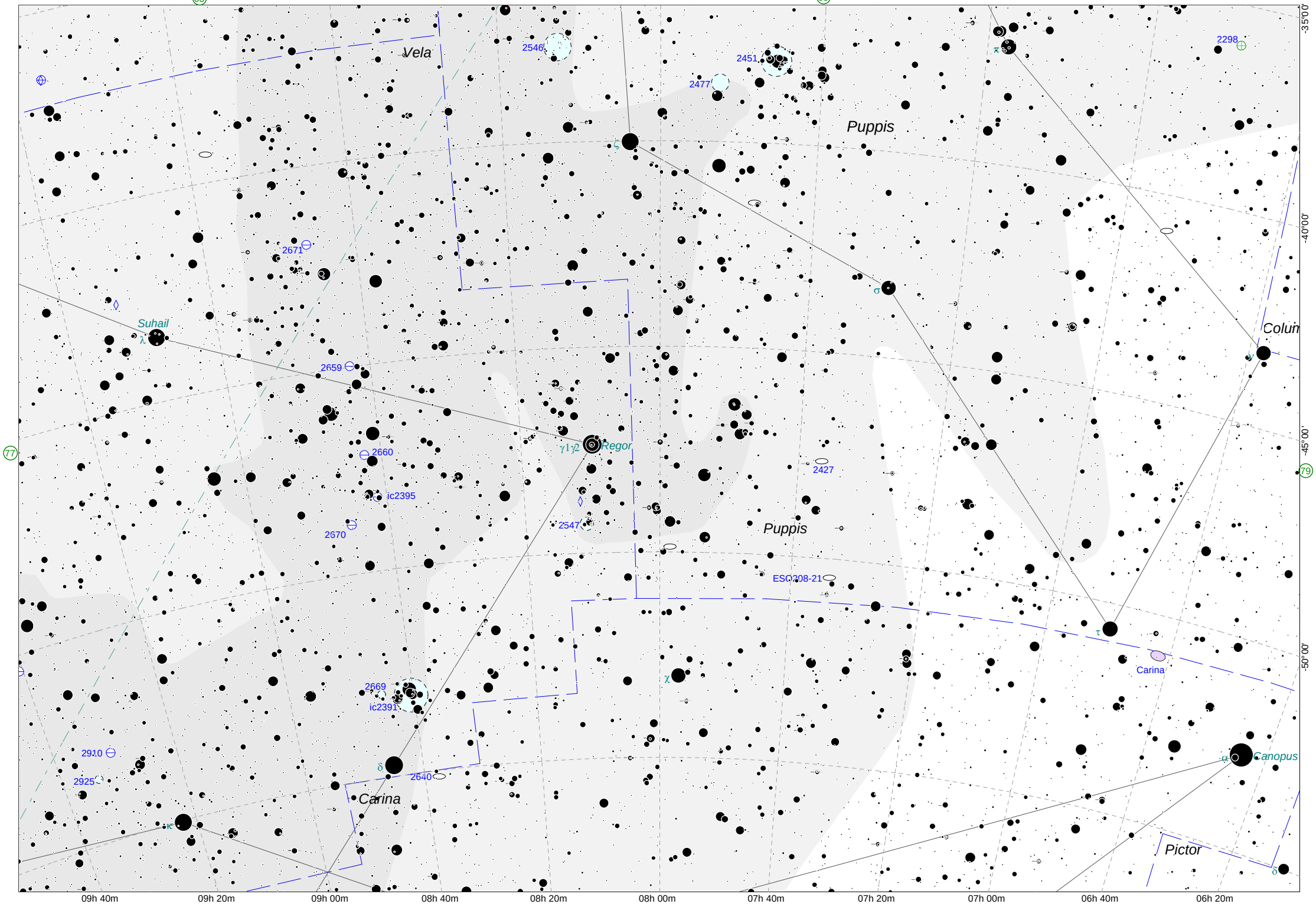


Chart 79

george

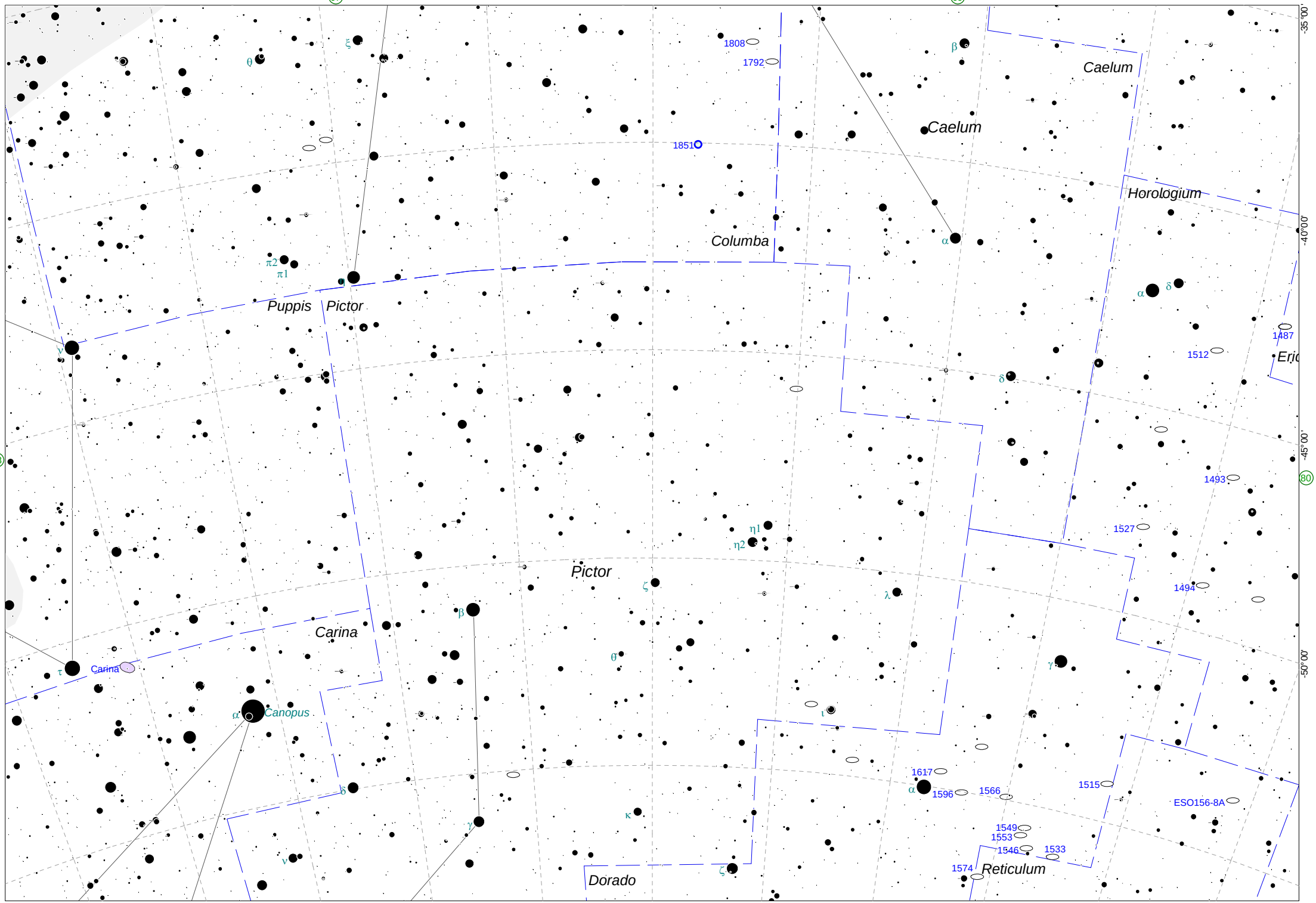
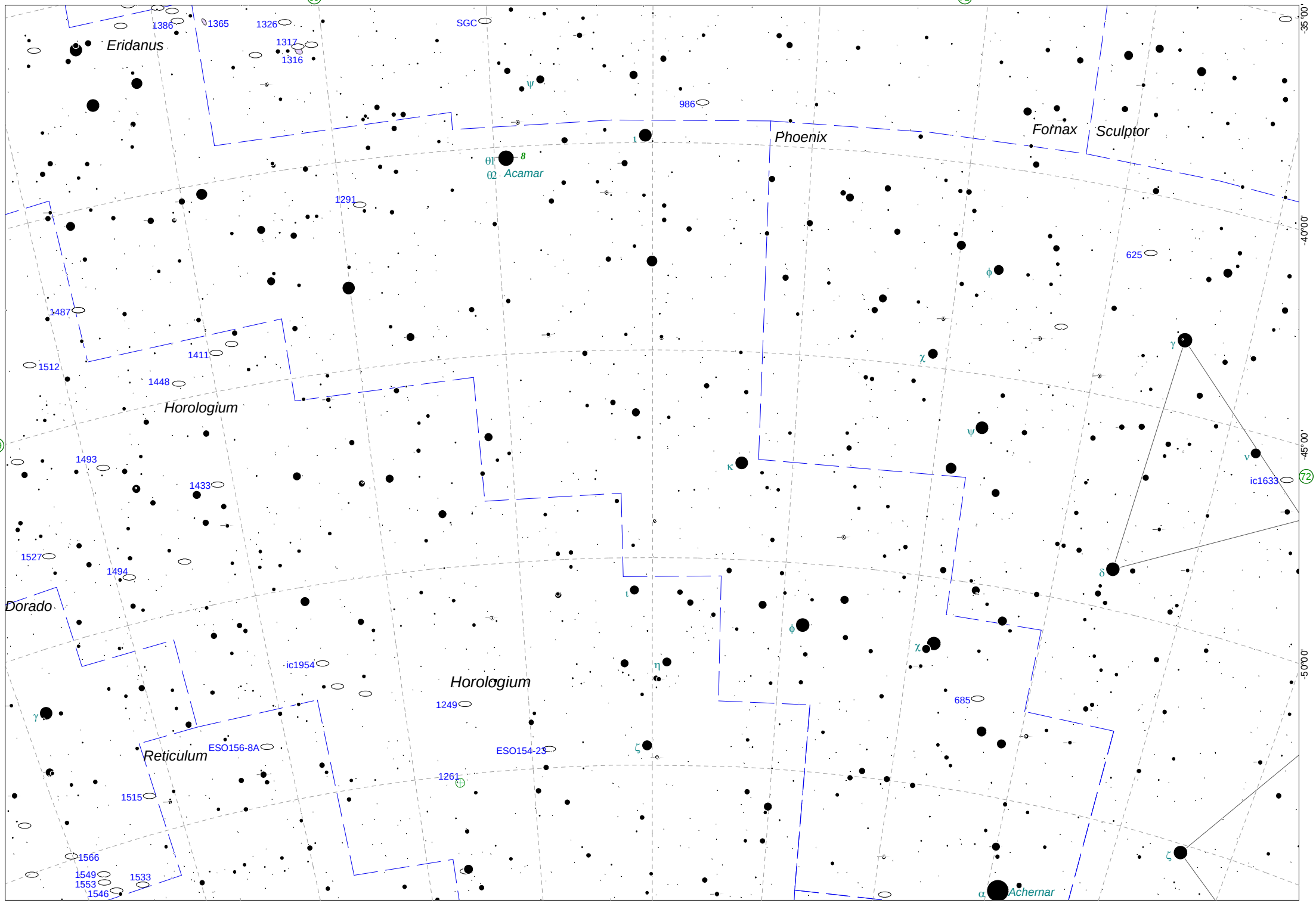


Chart 80

george