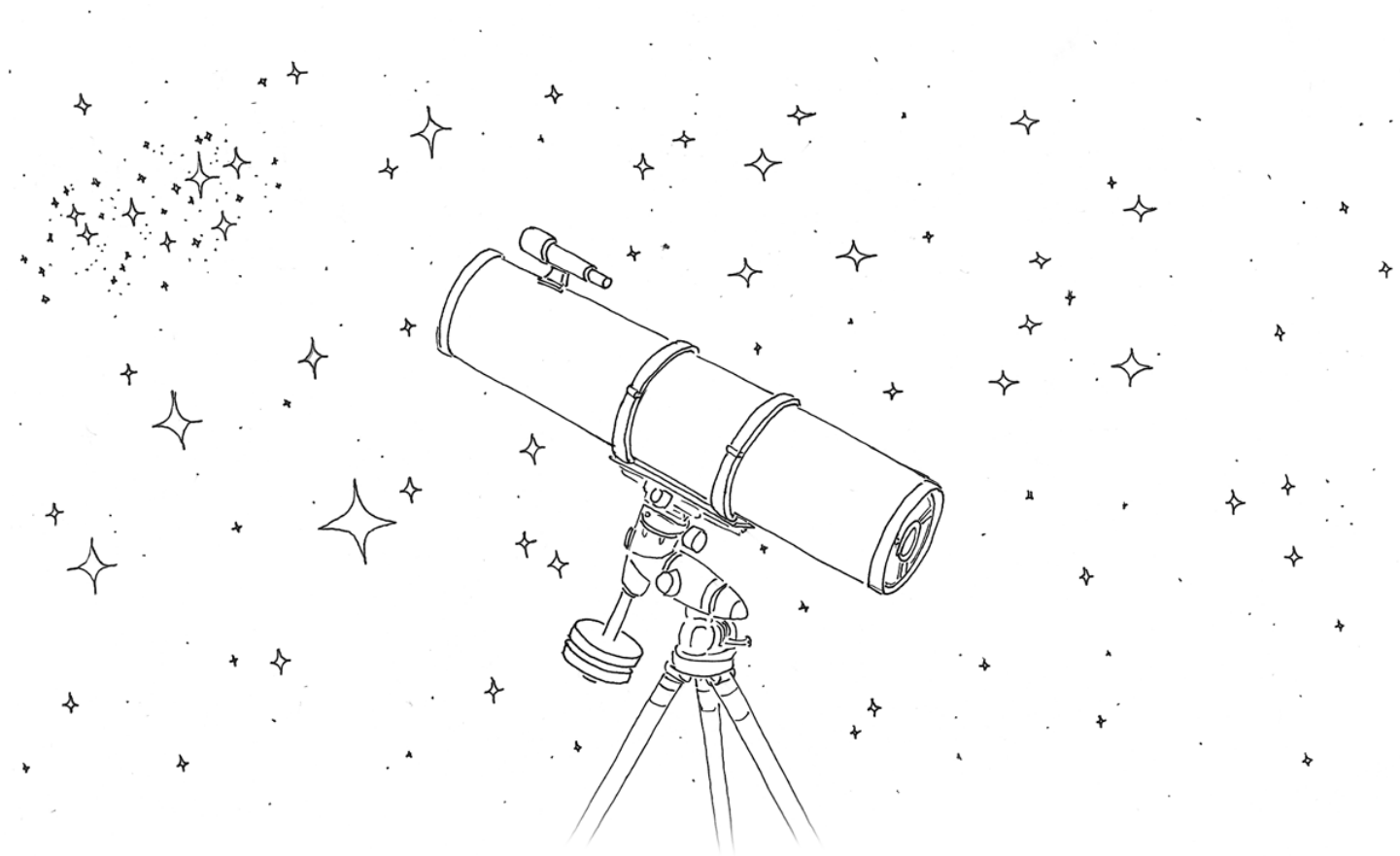


DEEP SKY HUNTER

STAR ATLAS



MICHAEL VLASOV - WWW.DEEPSKYWATCH.COM - 2013

Printable atlas of deep sky objects. 2nd release. Latest update: april 14th 2013

Plotted objects: DSO down to magnitude 14.0 and stars down to magnitude 10.2. Comprehensive manual post-editing

Select galaxy clusters and dense regions plotted in 21 separate "zoom" charts (with stars down to to 12-13m)

Indications of over 500 best deep sky objects (Messier, Caldwell, Herschel 400, SAC's best), bright & dark nebulae outlines, common names

Entire sky covered by 101 charts, 2 Index maps and 8 pages with detailed "zoom" charts. List of plotted deep sky objects available

Each chart covers 20x30° (40x30° double page spreads). Designed for A3 portrait B/W printing at 600 dpi

Source chart data was generated by "Sky Map Pro 10" software, C A Mariott © all rights reserved

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Please contact me with any questions, or if you find an inaccuracy - vlasov.michael@gmail.com

MAP KEY

● ● ● ● ● ● ● ● ● ●
< 0 1 2 3 4 5 6 7 8 9 10

⊞ Quasar
● Multiple star
☁ Dark nebula
○ Galaxy
◻ Bright nebula

○ Galaxy cluster / other
⊕ Globular cluster
⊙ Open cluster
⊕ Planetary nebula
4984 NGC catalog number

IC 3799 Other catalog number
* Best DSO indication - object belongs to:
Messier / Caldwell / Herschel 400 / SAC's best
46 Next neighbour page reference
chart A17 Detailed "zoom" chart reference

Index 2

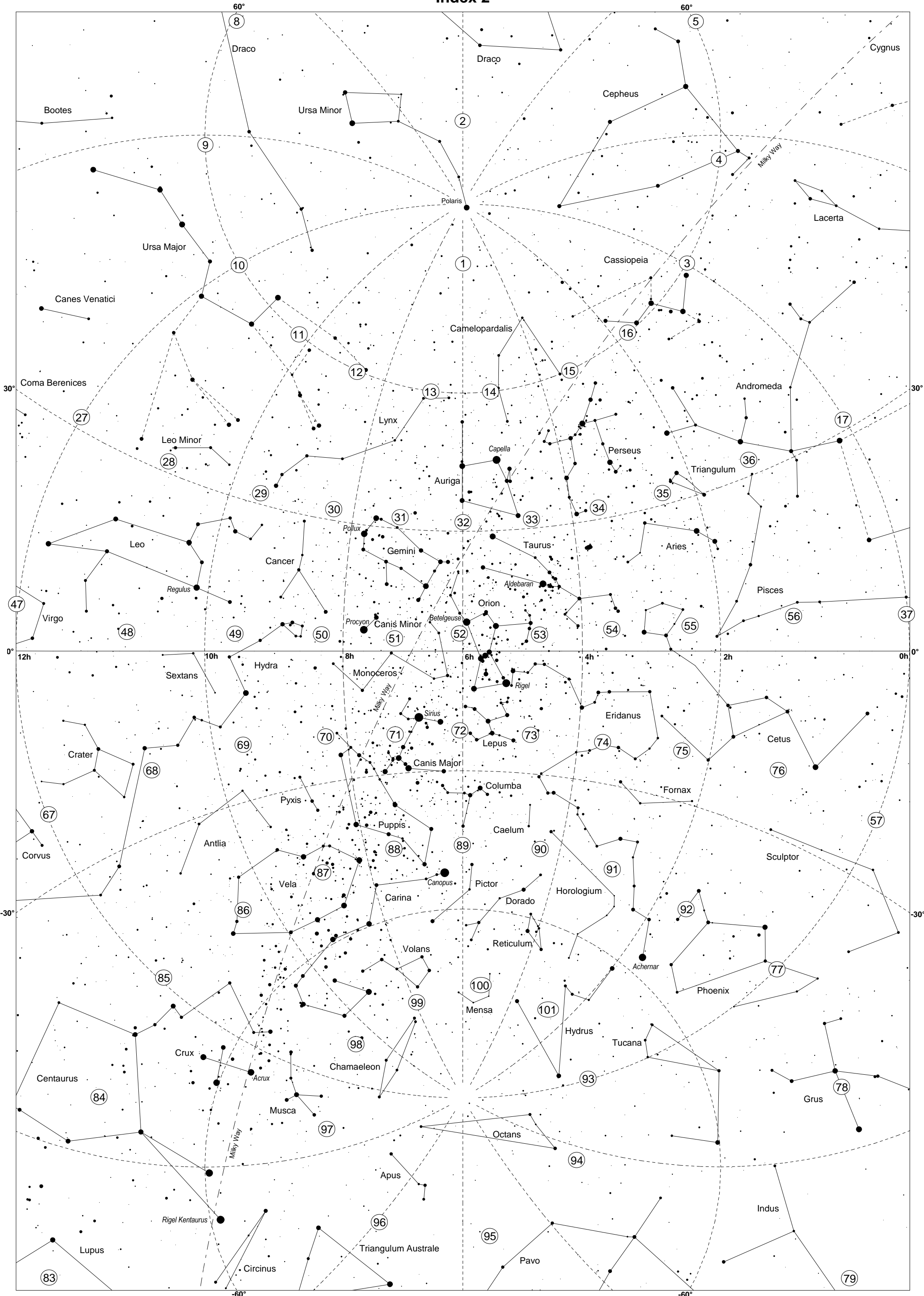


Chart 2

10

12h

9

14h

8

70°

75°

75°

Draco

Ursa Minor

Cam

80°

16h

85°

70°

18h

85°

6

80°

20h

75°

3

0h

4

22h

70°

5

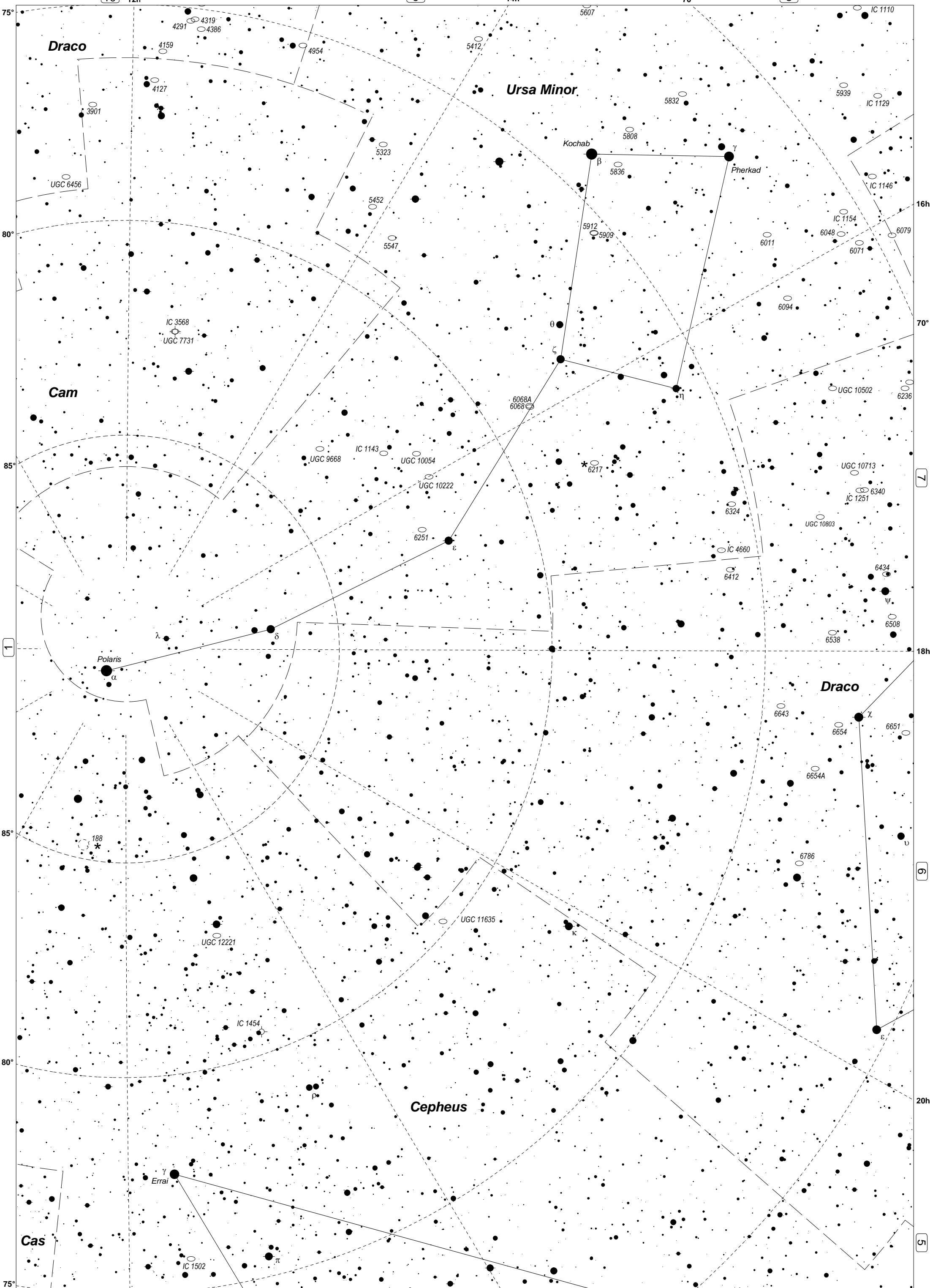
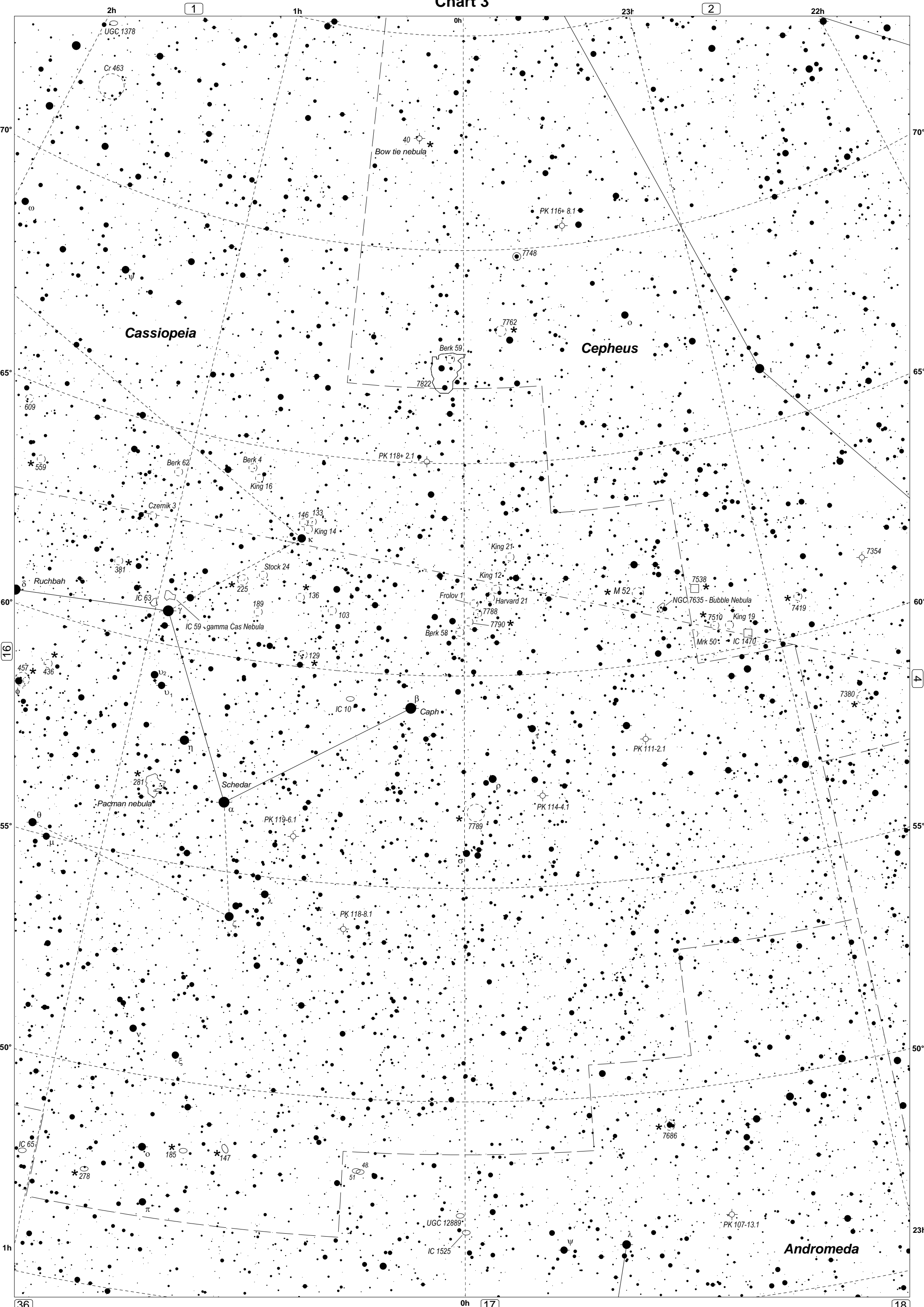


Chart 3



Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

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Cepheus

Andromeda

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Pacman nebula

NGC 7635 - Bubble Nebula

Schedar

IC 59 - gamma Cas Nebula

Caph

M 52

Ruchbah

Cassiopeia

Cepheus

Andromeda

Bow tie nebula

Chart 4

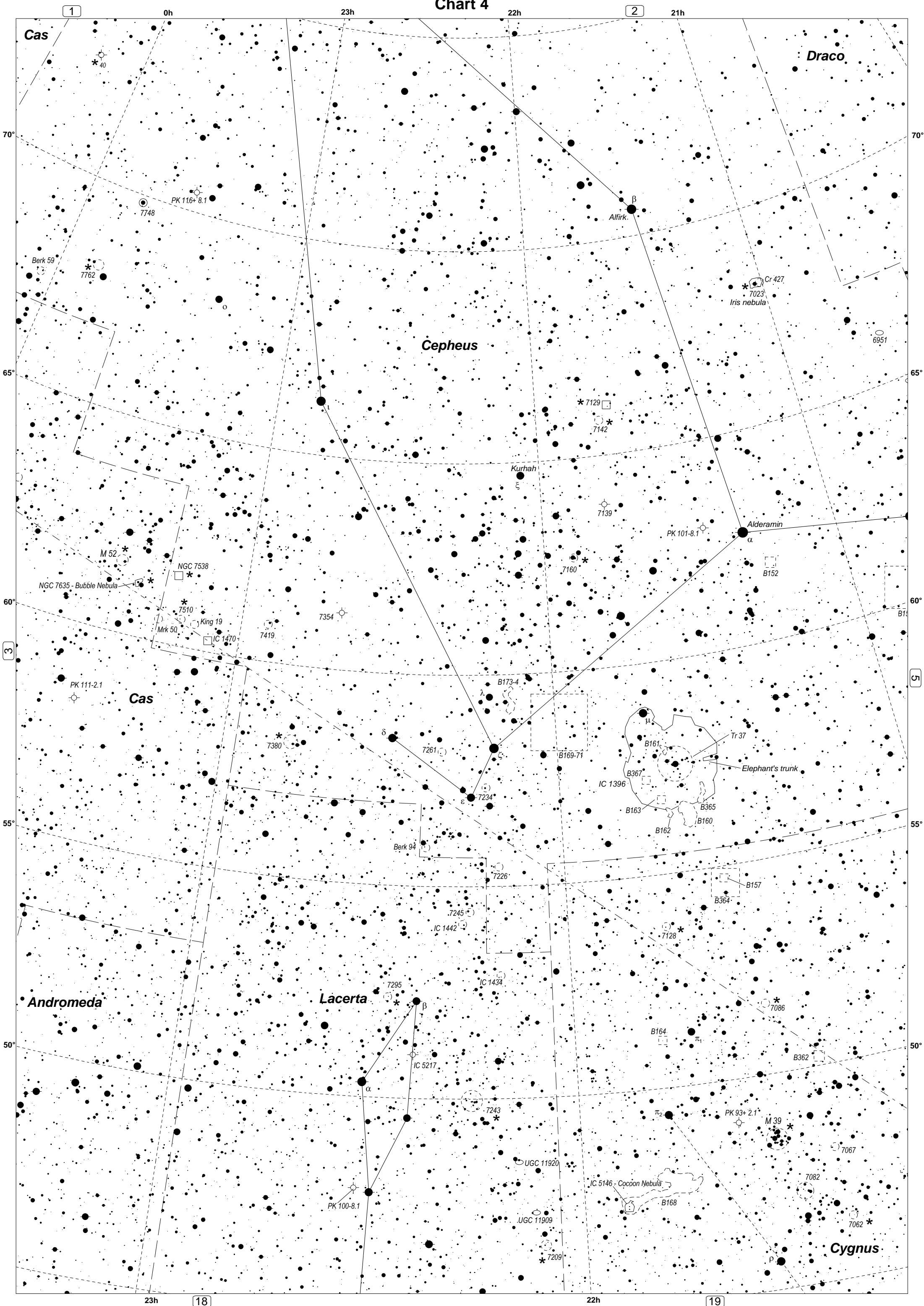


Chart 5



Cepheus

Draco

Cygnus

β Alfirk

ϵ

Cr 427
7023
Iris nebula

δ Altair

Kurahah

7129
7142

7139

7160

PK 101-8.1

α
Alderamin

B152

η

6939

UGC 11557

6831

6946
Fireworks galaxy

IC 1396
B161
Tr 37
Elephant's trunk
B367
B163
B162
B365
B160

Elephant's trunk

7008
Fetus nebula

NGC 6826 - Blinking Planetary

UGC 11465

7128

7086

B362

7031

M 39

7067

IC 1369

7026

7062

7048

7039

B350

6884

6811

UGC 11466

21h North America nebula

20

20h

21

1

22h

21h

20h

2

19h

70°

70°

65°

65°

60°

60°

55°

55°

50°

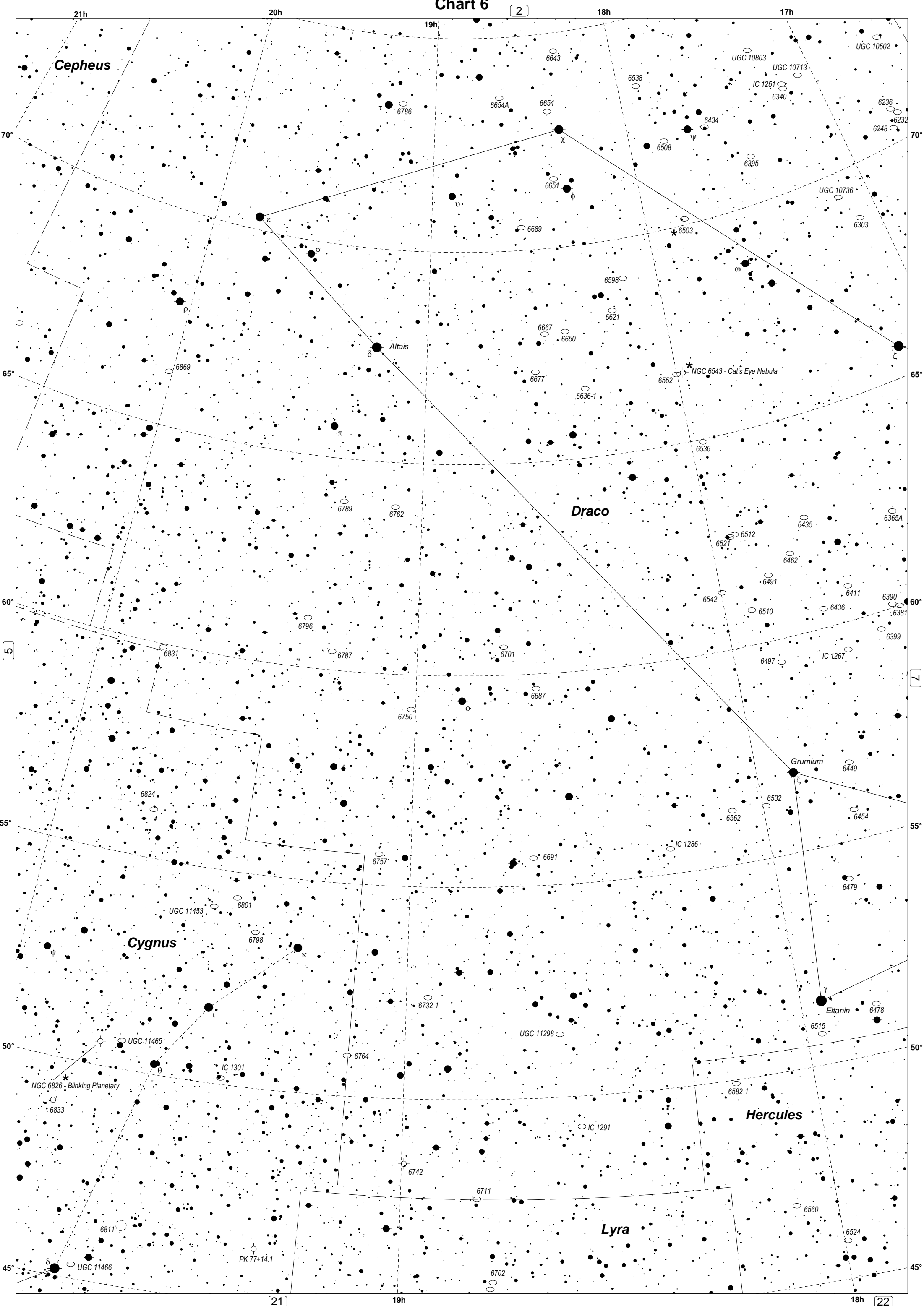
50°

19

21

4

9



Cepheus

Draco

Cygnus

Hercules

Lyra

Altair

Grumium

Eltanin

τ 6786

6643

6538

UGC 10803

UGC 10713

IC 1251

UGC 10502

6236

6232

6248

UGC 10736

6303

6503

6598

6621

6667

6650

6677

6636-1

NGC 6543 - Cat's Eye Nebula

6552

6536

6789

6762

6435

6365A

6521

6512

6462

6491

6411

6390

6381

6399

IC 1267

6542

6510

6436

6449

6454

5

7

6831

6787

6701

6497

6449

6824

6796

6750

6687

6562

6532

6454

UGC 11453

6801

6798

6757

6691

IC 1286

6479

Cygnus

6732-1

UGC 11298

6515

6478

NGC 6826 - Blinking Planetary

6833

UGC 11465

IC 1301

6764

IC 1291

6582-1

6811

PK 77+14.1

6742

6711

6560

6524

45°

45°

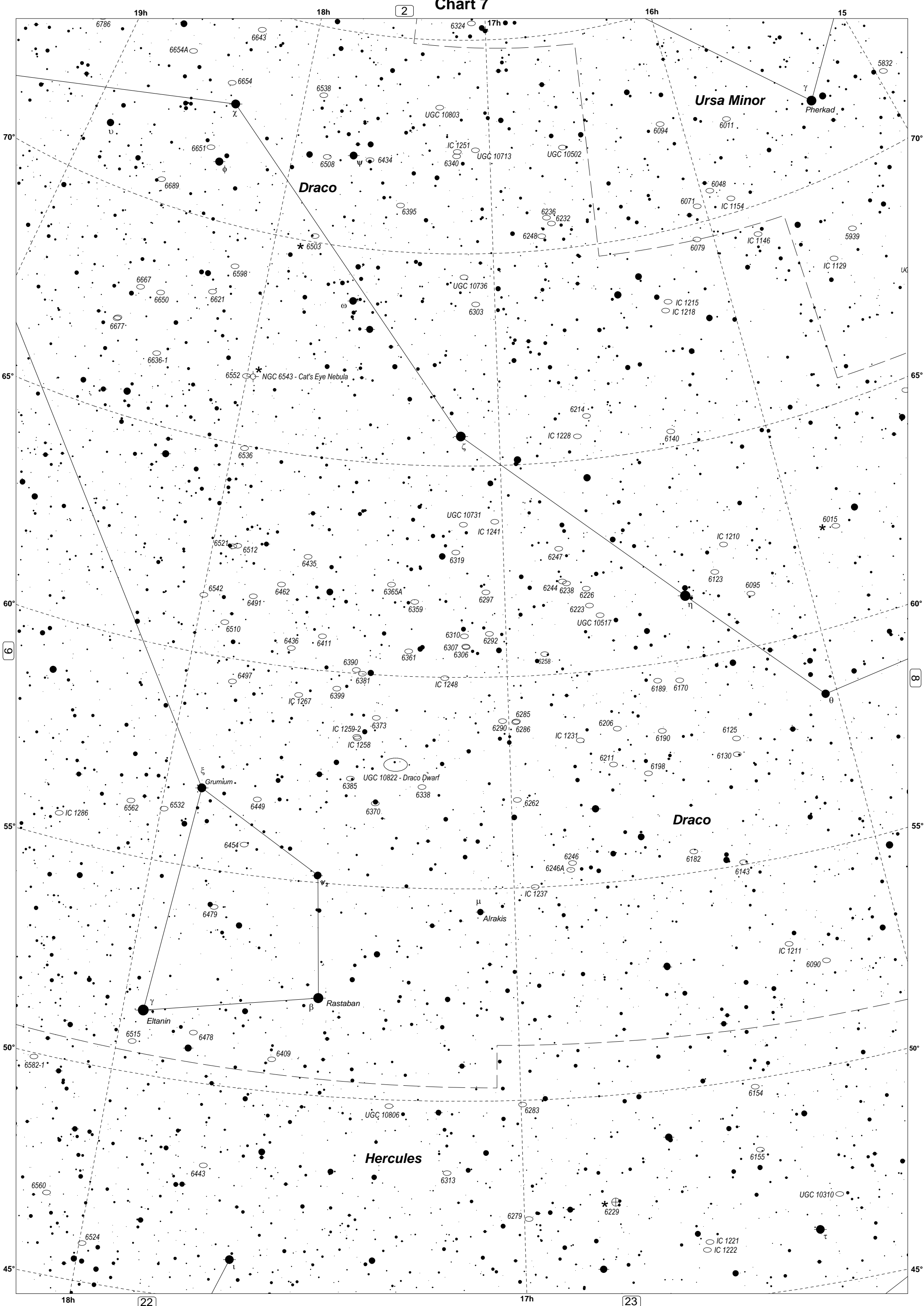
21

19h

22

18h

Chart 7



19h

18h

2

16h

15

70°

70°

65°

65°

60°

60°

55°

55°

50°

50°

45°

45°

6

8

18h

22

17h

23

Ursa Minor

Draco

Draco

Hercules

Pherkad

Grumium

Alrakis

Eltanin

Rastaban

UGC 10310

NGC 6543 - Cat's Eye Nebula

UGC 10822 - Draco Dwarf

6786

6654A

6643

6654

6538

6324

17h

5832

UGC 10803

IC 1251

UGC 10713

UGC 10502

6094

6011

6651

6508

6434

6340

6689

6503

6395

6236

6232

6071

IC 1154

6667

6650

6621

6598

UGC 10736

6303

IC 1215

IC 1218

6677

6636-1

6552

6536

6214

IC 1228

6140

UGC 10731

IC 1241

IC 1210

6015

6521

6512

6435

6319

6247

6123

6095

6542

6491

6462

6365A

6359

6297

6244

6238

6226

6223

UGC 10517

6510

6436

6411

6310

6307

6306

6292

6258

6497

IC 1267

6399

IC 1248

6189

6170

IC 1259-2

6373

6290

6285

6286

IC 1231

6206

6190

6125

6532

IC 1258

6385

UGC 10822 - Draco Dwarf

6370

6338

6262

6211

6198

6130

IC 1286

6562

6532

6449

6385

6370

6262

6246

6246A

6182

6143

6454

6479

Alrakis

IC 1211

6090

6515

6478

6409

UGC 10806

6283

6154

6560

6443

6313

6155

6229

IC 1221

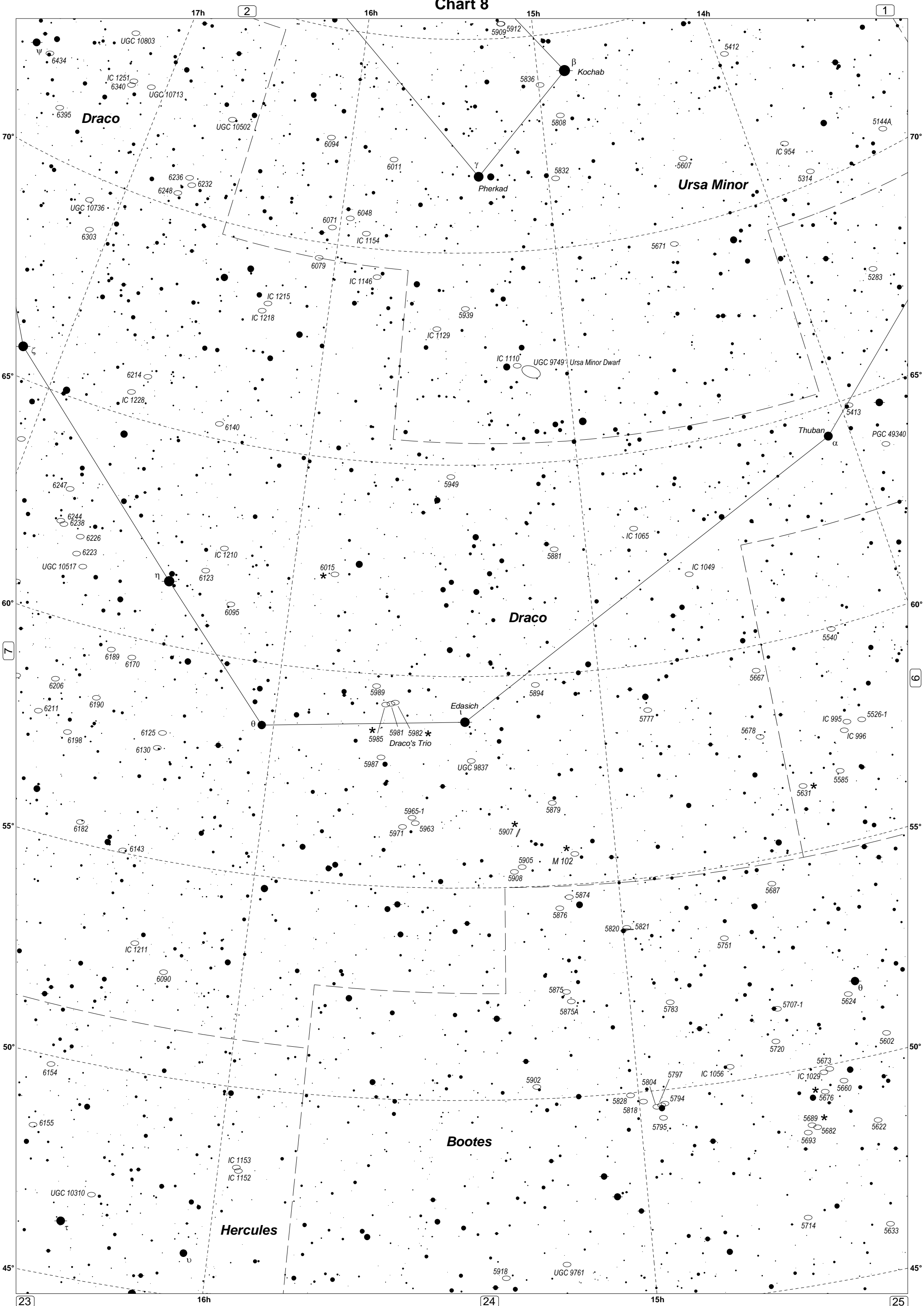
IC 1222

6524

UGC 10310

τ

Chart 8



Draco

Ursa Minor

Draco

Bootes

Hercules

Kochab

Pherkad

Thuban

Edasich

Draco's Trio

M 102

UGC 10803

IC 1251

6340

UGC 10713

UGC 10502

6094

6011

5836

5808

5832

5412

IC 954

5314

5144A

UGC 10736

6303

6236

6232

6071

6048

IC 1154

6079

IC 1146

IC 1215

IC 1218

5939

IC 1129

IC 1110

UGC 9749

Ursa Minor Dwarf

5671

5283

6214

IC 1228

6140

5949

5881

IC 1065

IC 1049

6247

6244

6238

6226

6223

UGC 10517

IC 1210

6123

6015

6095

6189

6170

6206

6190

6211

6198

6125

6130

5989

5985

5987

Edasich

5894

5777

5667

5678

IC 995

5526-1

IC 996

5631

5585

6182

6143

5965-1

5971

5963

5907

5905

5908

5874

5876

5820

5821

5887

5751

IC 1211

6090

5875

5875A

5783

5707-1

5624

6154

IC 1153

IC 1152

5902

5828

5818

5797

IC 1056

IC 1029

5660

5676

5689

5682

5693

5622

UGC 10310

IC 1153

IC 1152

5918

UGC 9761

5714

5633

23

16h

24

15h

25

70°

70°

65°

65°

60°

60°

55°

55°

50°

50°

45°

45°

2

1

7

8

Chart 10

Ursa Minor

Draco

Ursa Major

Canes Venatici

Ursa Major

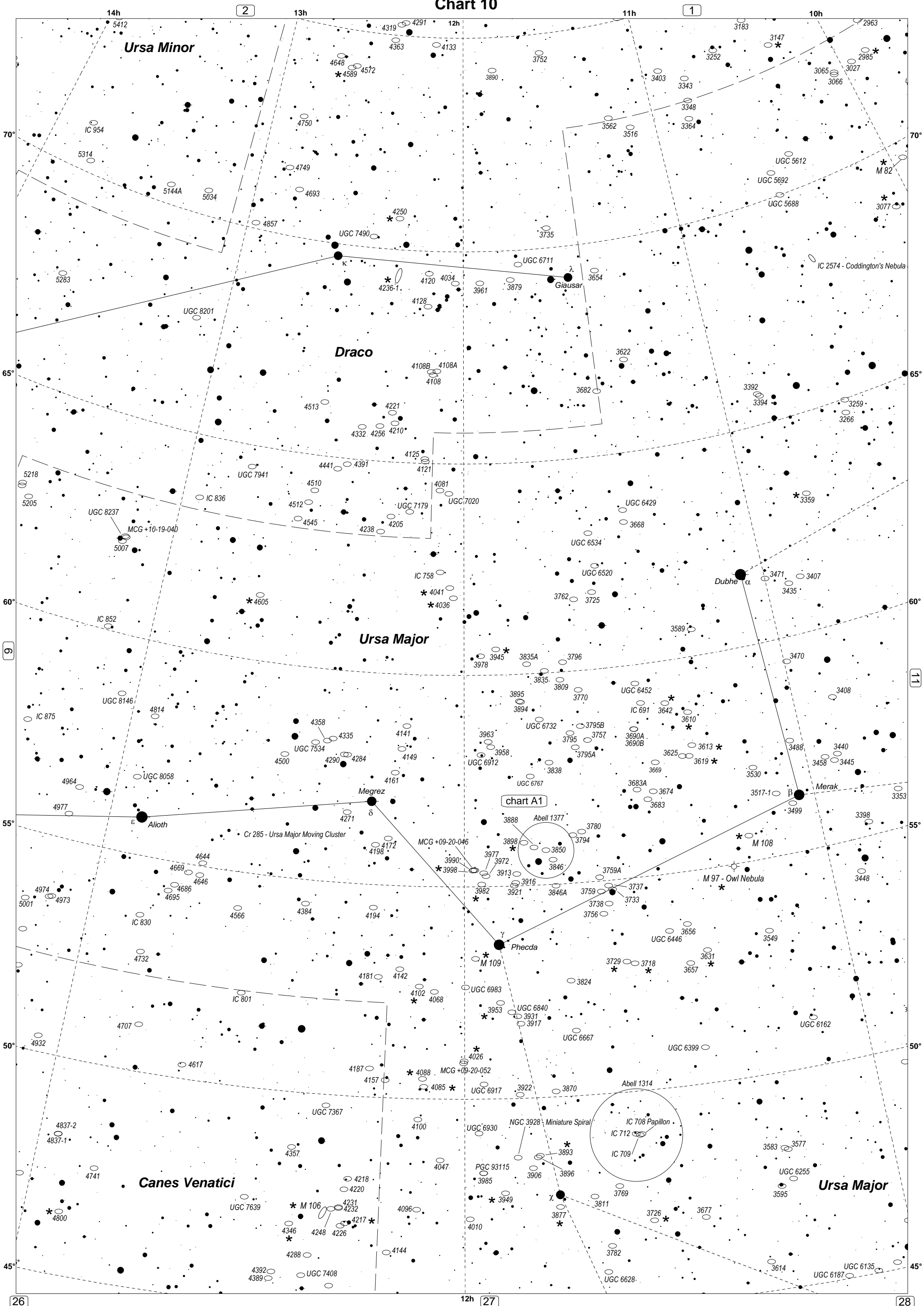


chart A1

Abell 1377
 3888
 3898
 3850
 3846
 3780
 3794
 3795A
 3759A
 3737
 3733
 3738
 3756

Abell 1314
 IC 708 Papillon
 IC 712
 IC 709

NGC 3928 - Miniature Spiral
 PGC 93115
 3985
 3906
 3896
 3949
 4010

MCG +09-20-052
 4088
 4085

M 106
 4231
 4232
 4217
 4346
 4248
 4226
 4288

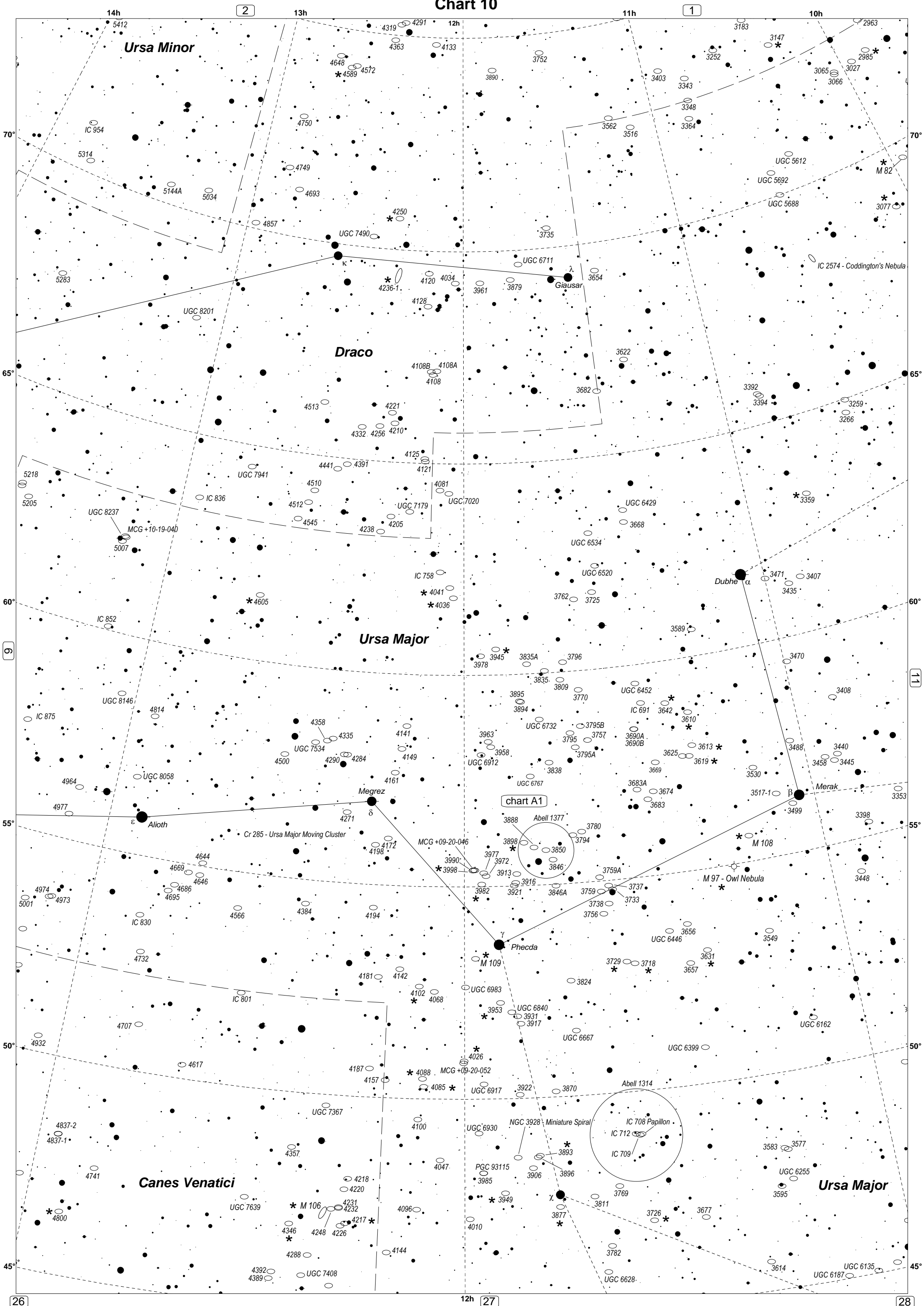


Chart 13

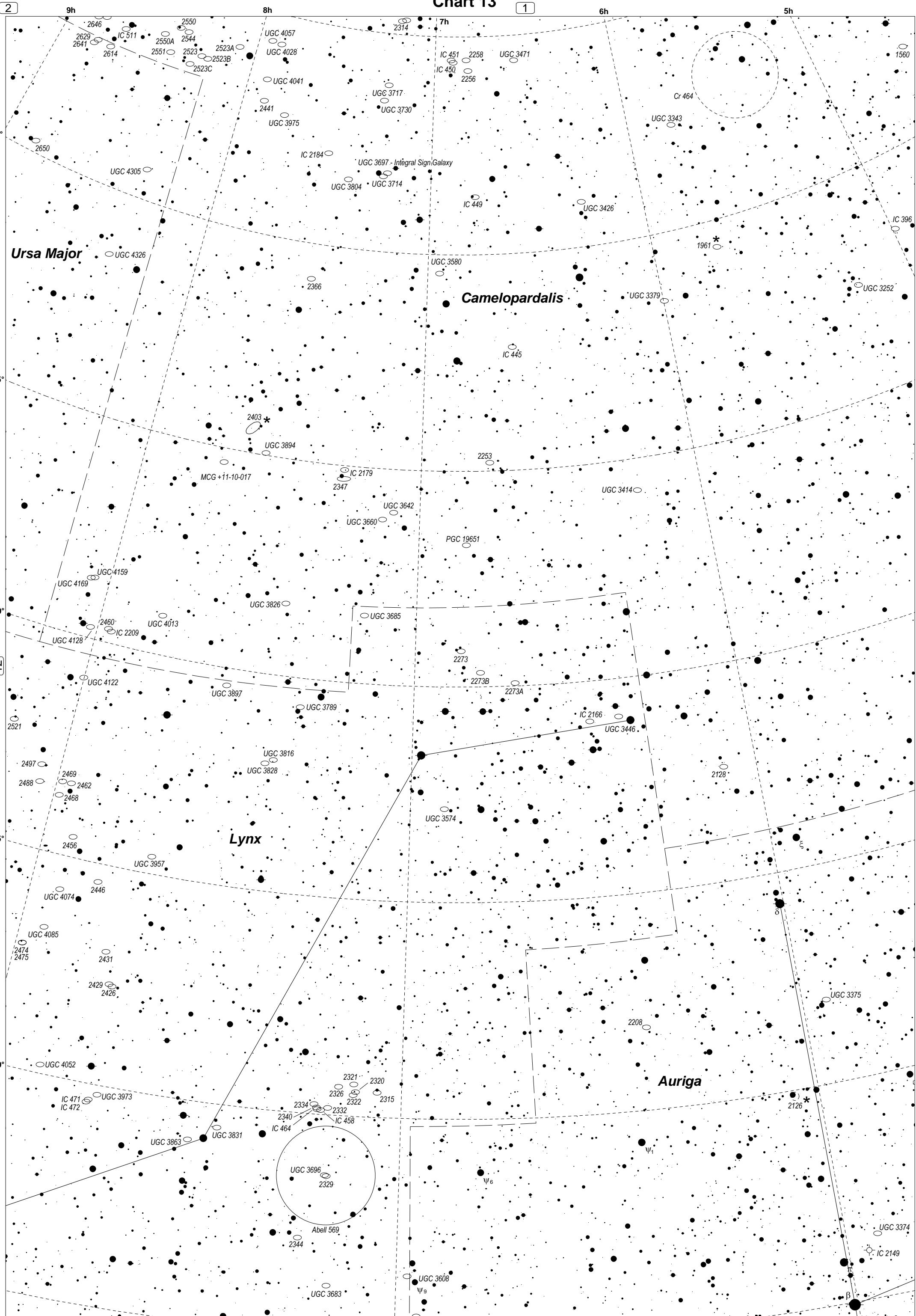
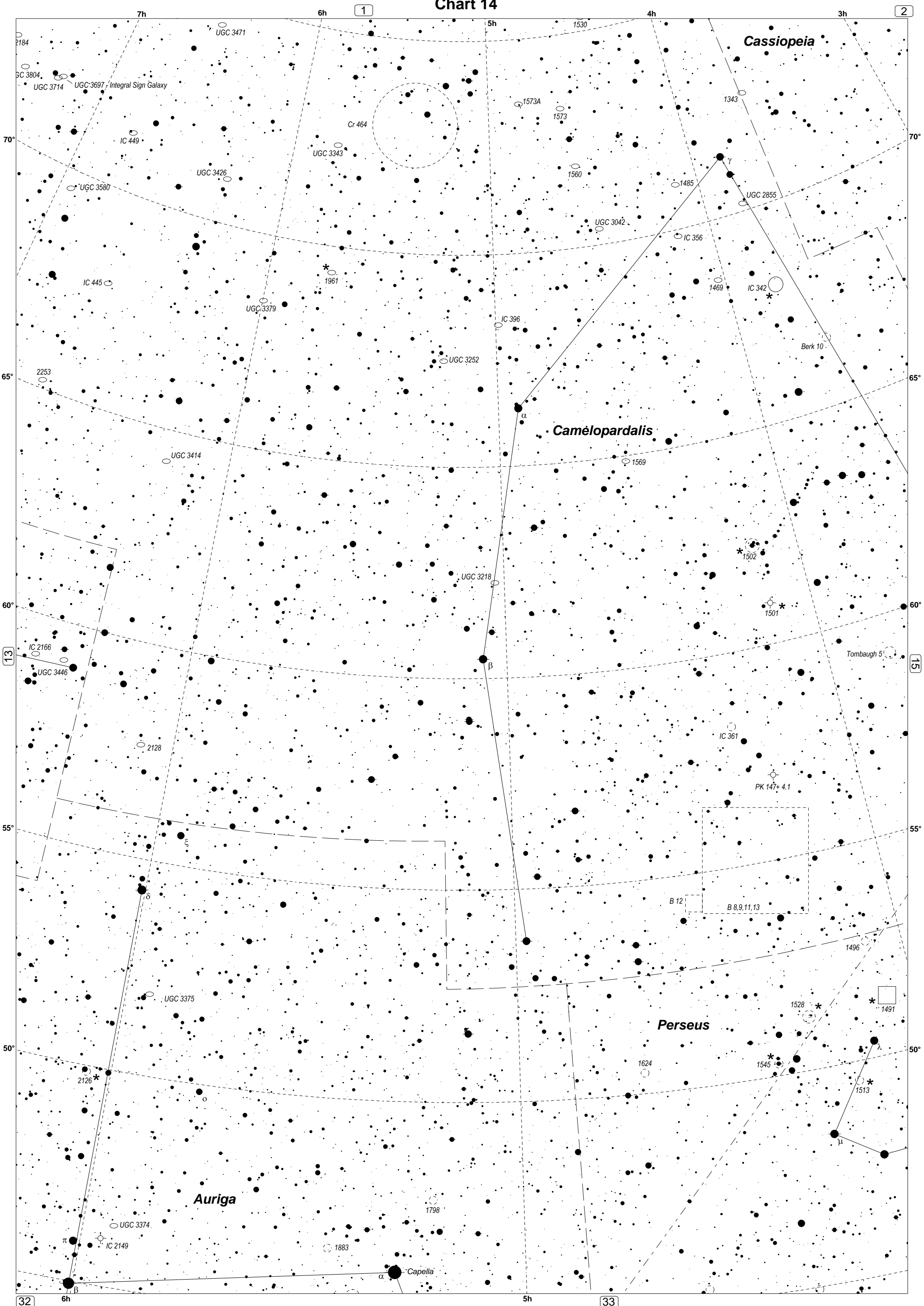


Chart 14



Cassiopeia

Camelopardalis

Perseus

Auriga

Capella

Integral Sign Galaxy

Cr 464

UGC 3471

2184

GC 3804

UGC 3714

UGC 3697

IC 449

UGC 3426

UGC 3343

1573A

1573

1560

UGC 3042

1343

UGC 2855

1485

IC 356

1469

IC 342

Berk 10

1961

UGC 3379

IC 396

UGC 3252

IC 445

UGC 3414

1569

UGC 3218

1502

1501

Tombaugh 5

IC 2166

UGC 3446

2128

IC 361

PK 147+ 4.1

B 12

B 8,9,11,13

1496

1528

1491

1624

1545

1513

2126

UGC 3375

UGC 3374

IC 2149

1883

1798

32

33

7h

6h

1

5h

4h

3h

2

70°

70°

65°

65°

60°

60°

55°

55°

50°

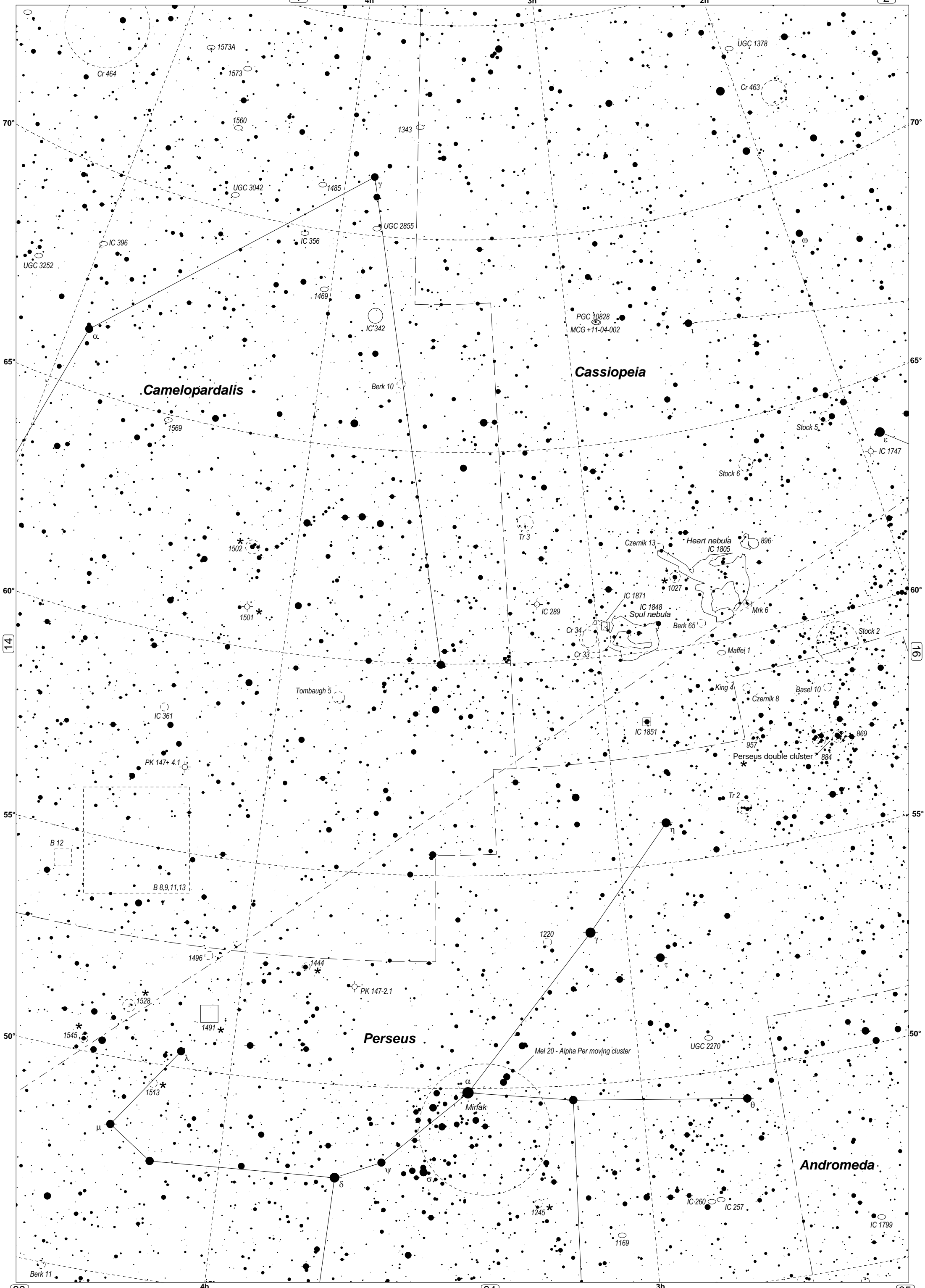
50°

6h

5h

5h

15



Camelopardalis

Cassiopeia

Perseus

Andromeda

Mirak

Heart nebula
IC 1805

Soul nebula
IC 1848

Perseus double cluster

PGC 10828
MCG +11-04-002

70°

70°

65°

65°

60°

60°

55°

55°

50°

50°

4h

3h

2h

4h

3h

3h

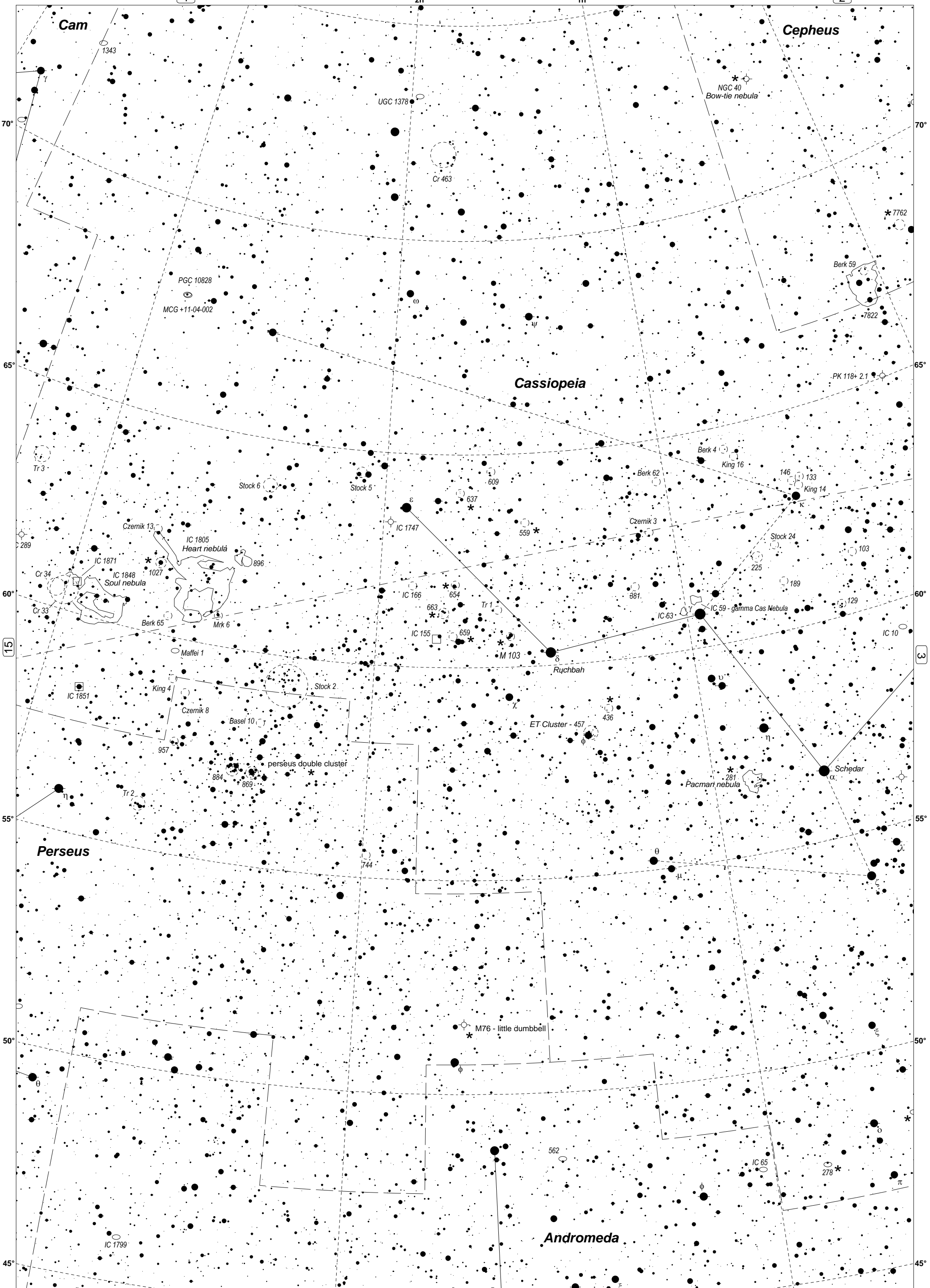
33

34

35

14

16



Cam

Cepheus

Cassiopeia

Perseus

Andromeda

1343

UGC 1378

NGC 40
Bow-tie nebula

Cr 463

PGC 10828
MCG +11-04-002

Berk 59
7822

PK 118+ 2.1

Tr 3

Stock 6

Stock 5

Berk 62

Berk 4

King 16

146

133

King 14

Czemik 13

IC 1805
Heart nebula

IC 1747

637

559

Czemik 3

Stock 24

103

Cr 34

IC 1871

IC 1848
Soul nebula

1027

896

Cr 33

Berk 65

Mrk 6

IC 166

663

654

Tr 1

IC 155

659

M 103

881

IC 63

IC 59 - gamma Cas Nebula

225

189

129

IC 10

Maffei 1

IC 1851

King 4

Stock 2

Czemik 8

Basel 10

Ruchbah

ET Cluster - 457

436

957

perseus double cluster

884

869

Pacman nebula

281

Schedar
 α

744

M76 - little dumbbell

562

IC 65

278

IC 1799

70°

70°

65°

65°

60°

60°

55°

55°

50°

50°

45°

45°

2h

1h

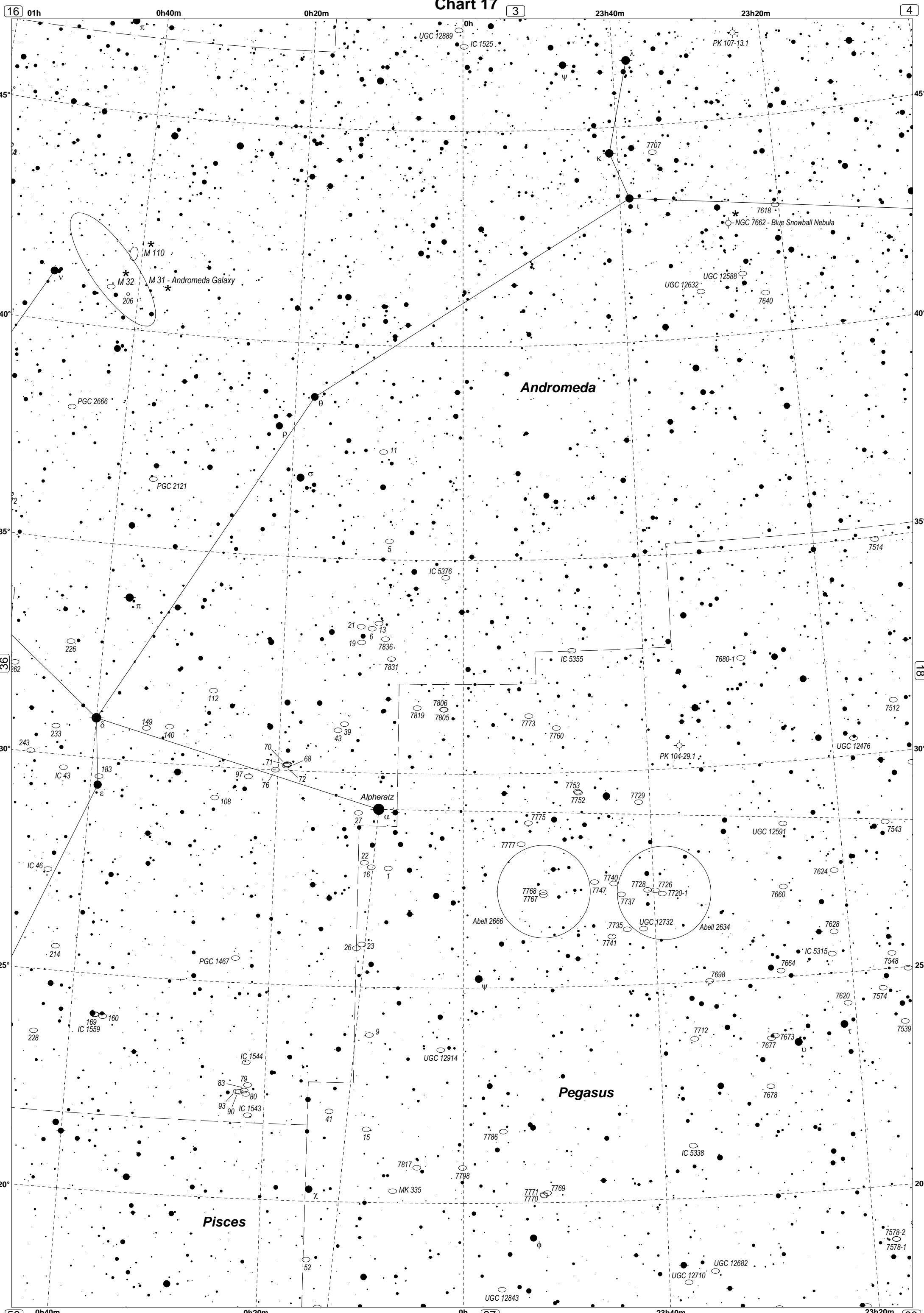
2h

1h

3

15

Chart 17



Andromeda

Pegasus

Pisces

M 110
M 32
M 31 - Andromeda Galaxy
206

Alpheratz
alpha

NGC 7662 - Blue Snowball Nebula

Abell 2666
7768
7767
7740
7747
7728
7726
7720-1
7737
7735
7741
Abell 2634
UGC 12732

IC 1544
83
79
80
93
90
IC 1543

MK 335

UGC 12710
UGC 12682

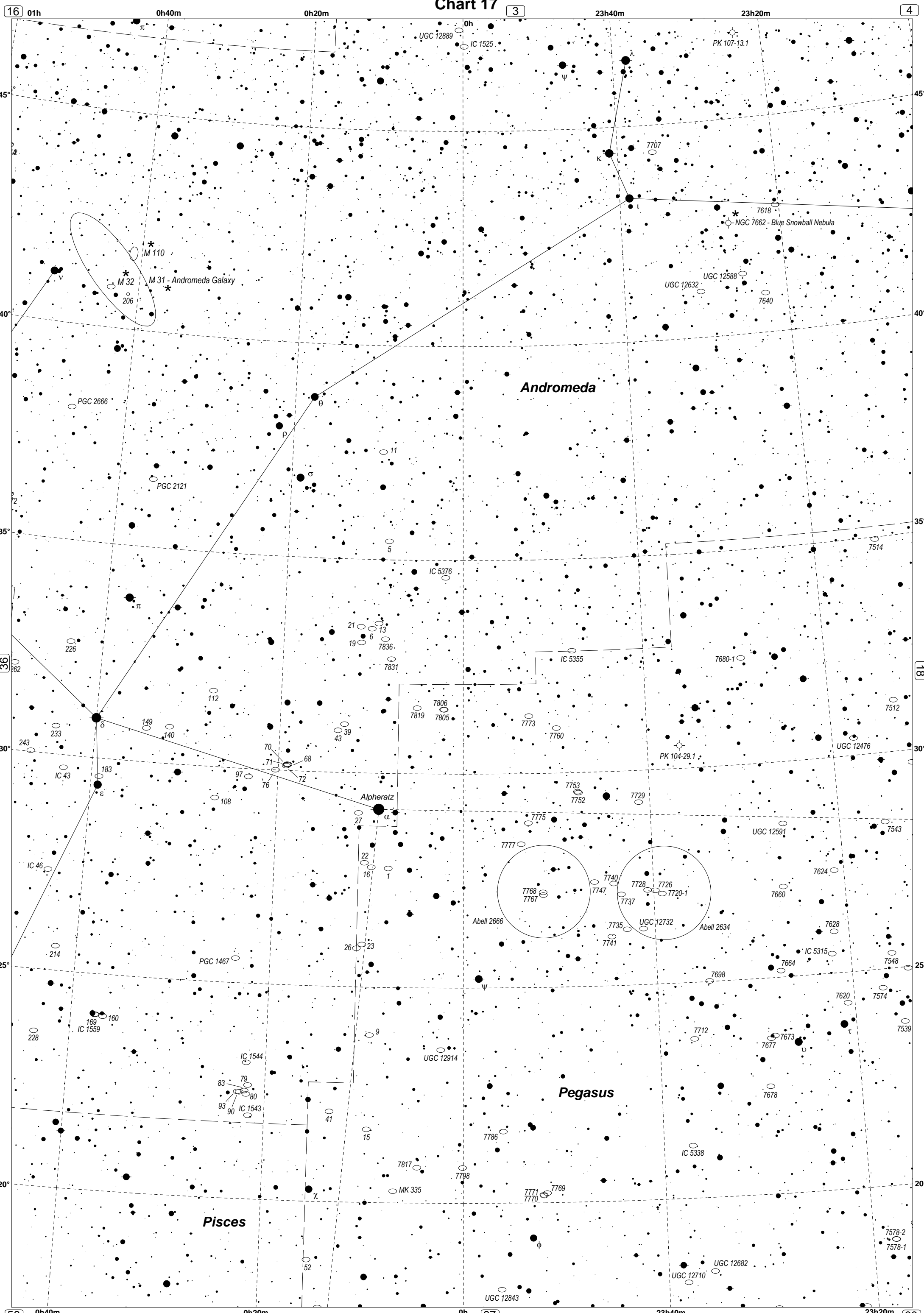
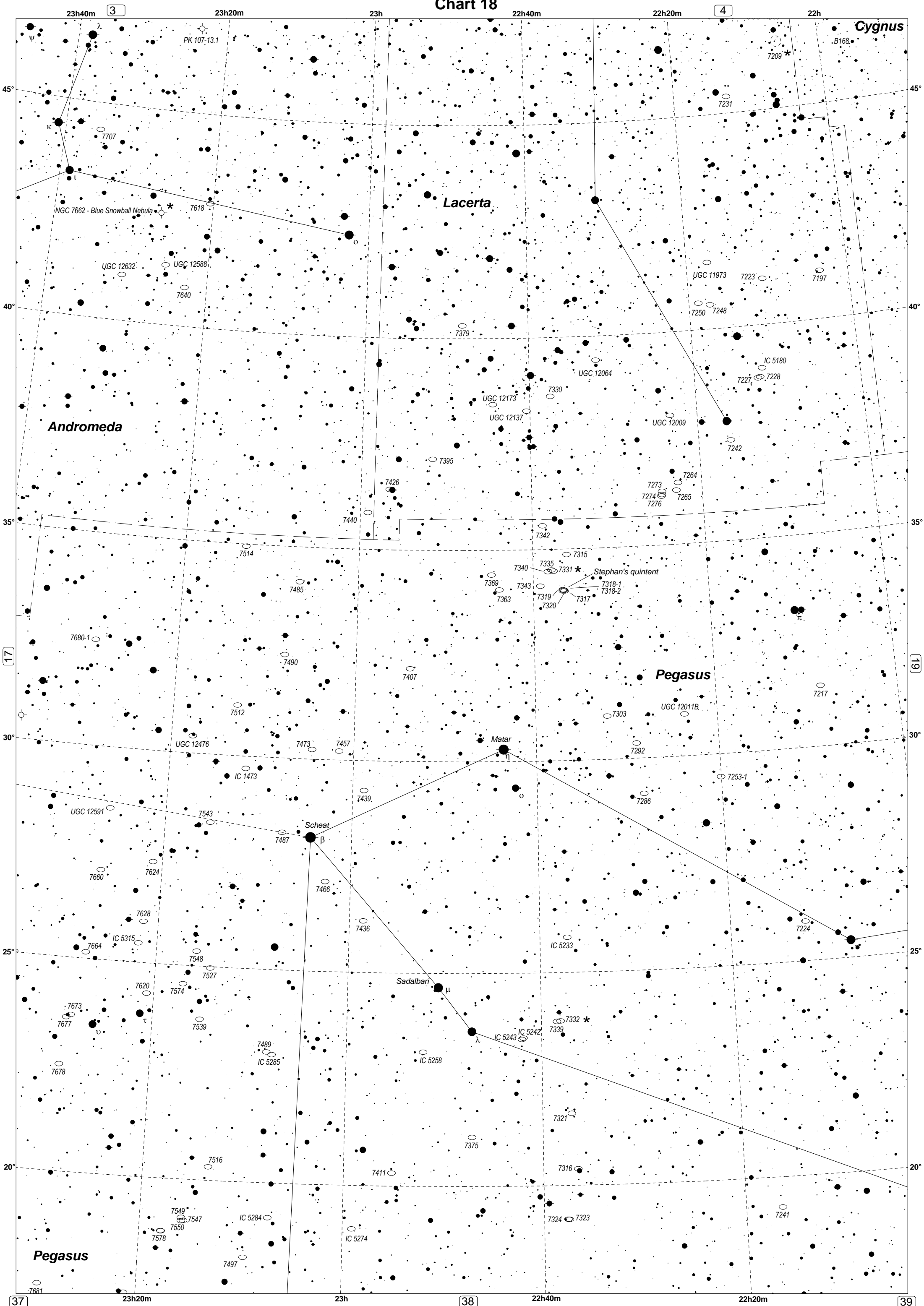


Chart 18



23h40m 3

23h20m

23h

22h40m

22h20m 4

22h

Cygnus

Lacerta

Andromeda

Pegasus

Pegasus

17

19

37

38

39

45°

45°

40°

40°

35°

35°

30°

30°

25°

25°

20°

20°

23h20m

23h

22h40m

22h20m

22h

PK 107-13.1

NGC 7662 - Blue Snowball Nebula

Stephan's quintet

Scheat

Matar

Sadalbari

UGC 12632

UGC 12588

UGC 11973

UGC 12009

UGC 12173

UGC 12137

UGC 12064

UGC 12011B

7680-1

7512

UGC 12591

7624

7628

7664

7620

7673

7677

7678

7574

7539

7489

IC 5285

7549

7547

7550

7578

IC 5284

7497

IC 5274

IC 5258

IC 5243

IC 5242

7332

7339

7321

7316

7324

7323

IC 5180

7227

7228

7242

7273

7274

7276

7315

7340

7335

7331

7319

7320

7317

7318-1

7318-2

7292

7286

7253-1

7224

7217

7241

7231

7223

7197

B168

7209

7707

7618

7640

7379

7395

7426

7440

7514

7485

7490

7407

UGC 12476

7473

7457

IC 1473

7439

7487

7466

7436

IC 5233

7224

7411

7321

7316

7324

7323

7241

7223

7197

Chart 19

22h20m

4

22h

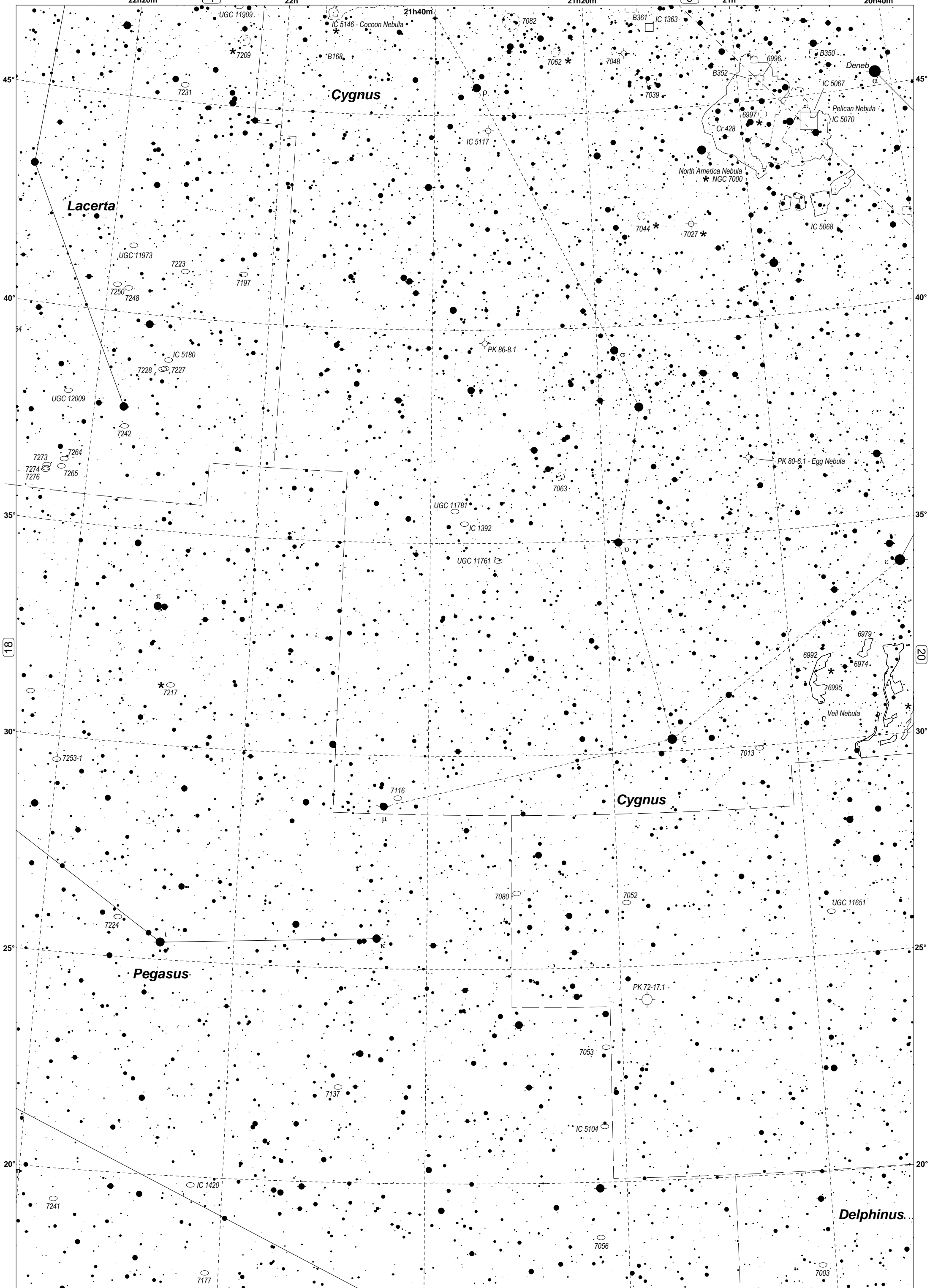
21h40m

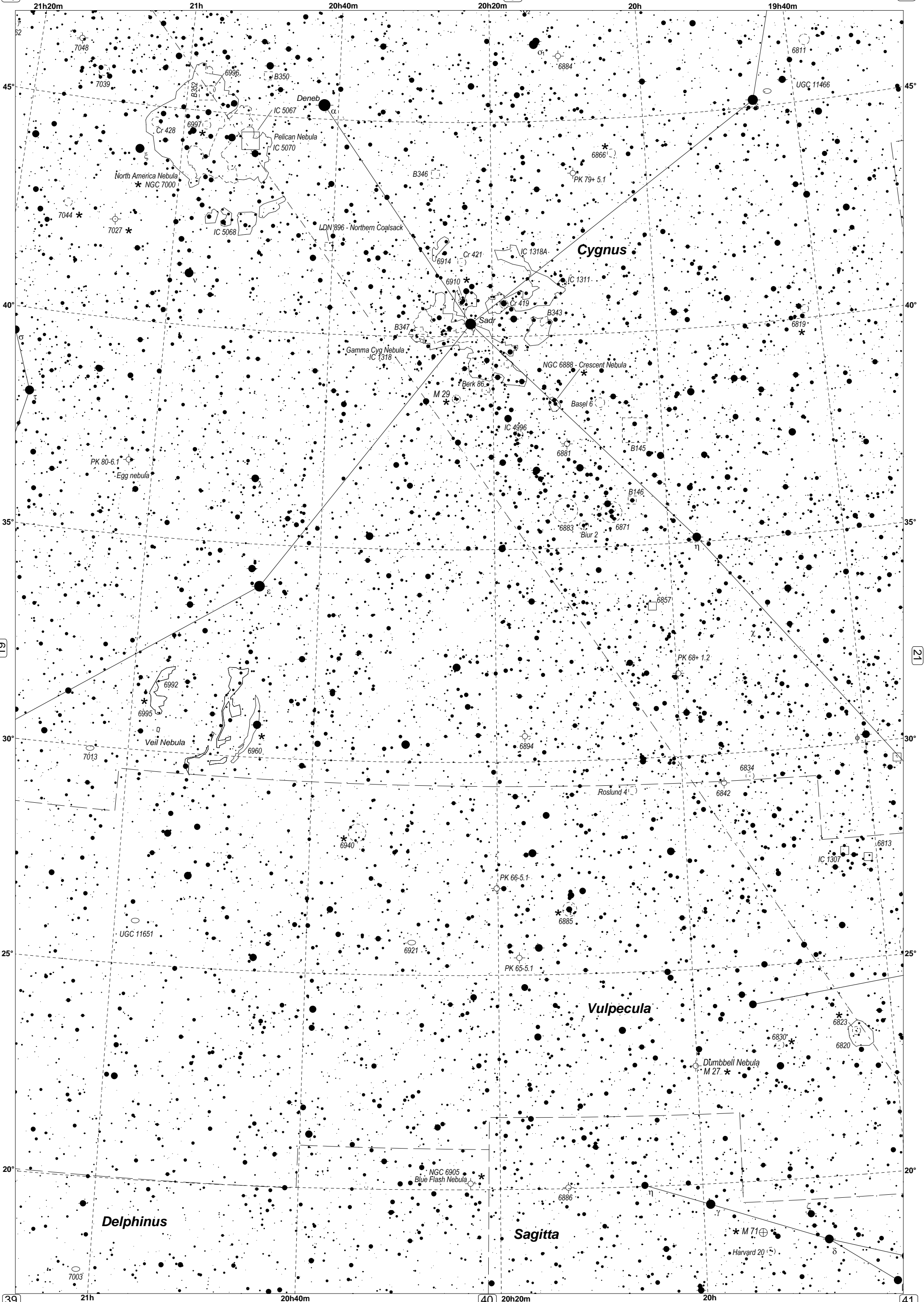
21h20m

5

21h

20h40m





North America Nebula
★ NGC 7000

Pelican Nebula
IC 5070

Cygnus

Veil Nebula

Vulpecula

Delphinus

Sagitta

Deneb
α

Sadir

Dumbbell Nebula
★ M 27

Blue Flash Nebula
★ NGC 6905

★ M 71

★ Harvard 20

LDN 896 - Northern Coalsack

NGC 6888 - Crescent Nebula

★ 6992

★ 6995

★ 6960

★ 6885

★ 6823

★ 6820

★ 6940

★ 6886

★ 6830

7048

7039

6996

B350

IC 5067

Cr 428

★ 6997

B332

IC 5068

★ 7044

★ 7027

6884

PK 79+ 5.1

★ 6866

6811

UGC 11466

★ 6819

PK 80-6.1

Egg nebula

Gamma Cyg Nebula
IC 1318

★ M 29

★ Berk 86

★ Basel 6

IC 4996

6881

B145

B146

★ 6883

★ Biur 2

6871

★ 6857

PK 68+ 1.2

7013

★ 6992

★ 6995

★ 6960

UGC 11651

6921

PK 66-5.1

★ 6885

PK 65-5.1

Roslund 4

6834

6842

IC 1307

6813

PK 66-5.1

★ 6885

PK 65-5.1

Roslund 4

6834

6842

IC 1307

6813

7003

★ NGC 6905

★ Blue Flash Nebula

6886

★ M 71

★ Harvard 20

Chart 21

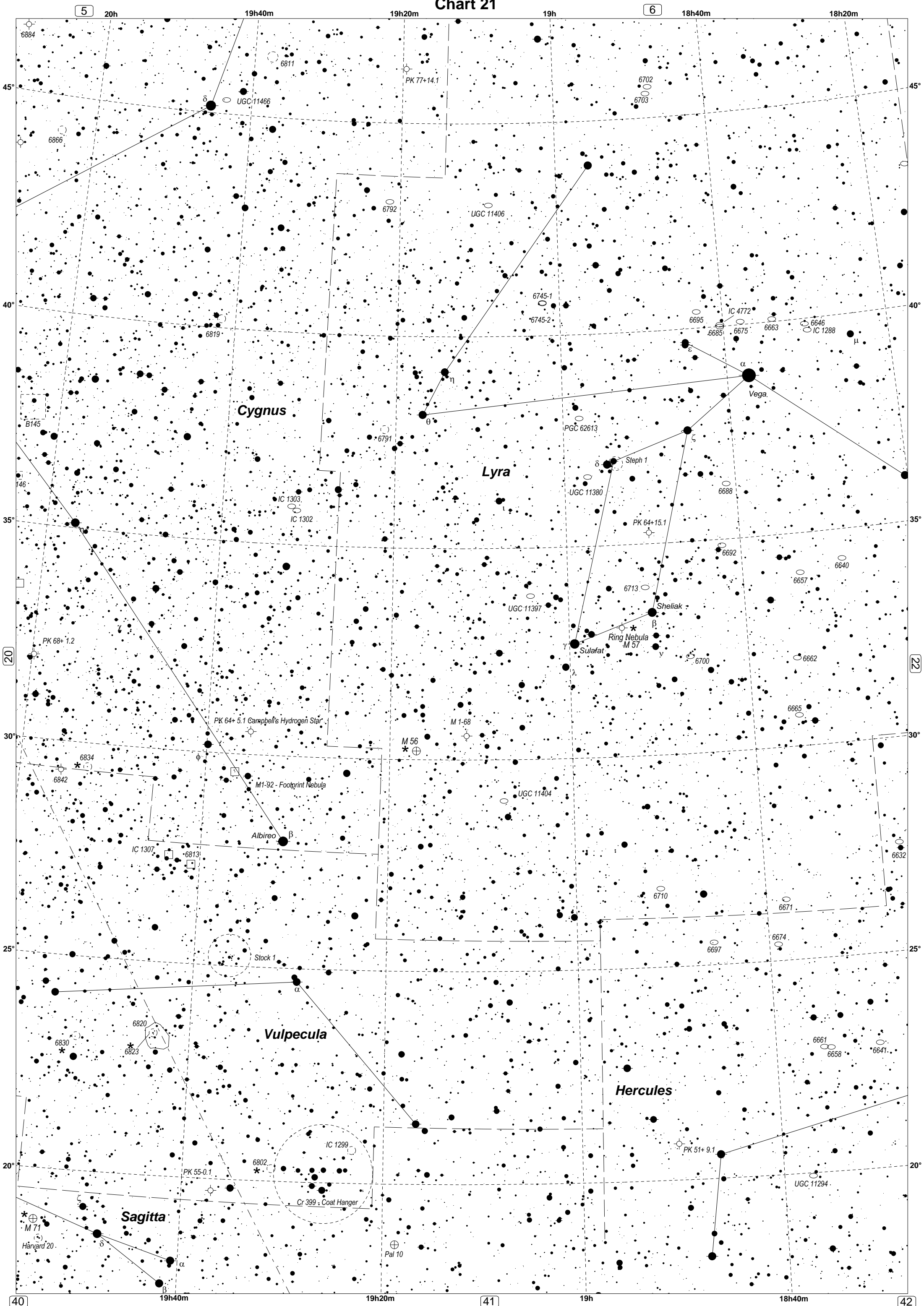


Chart 22

18h40m

6

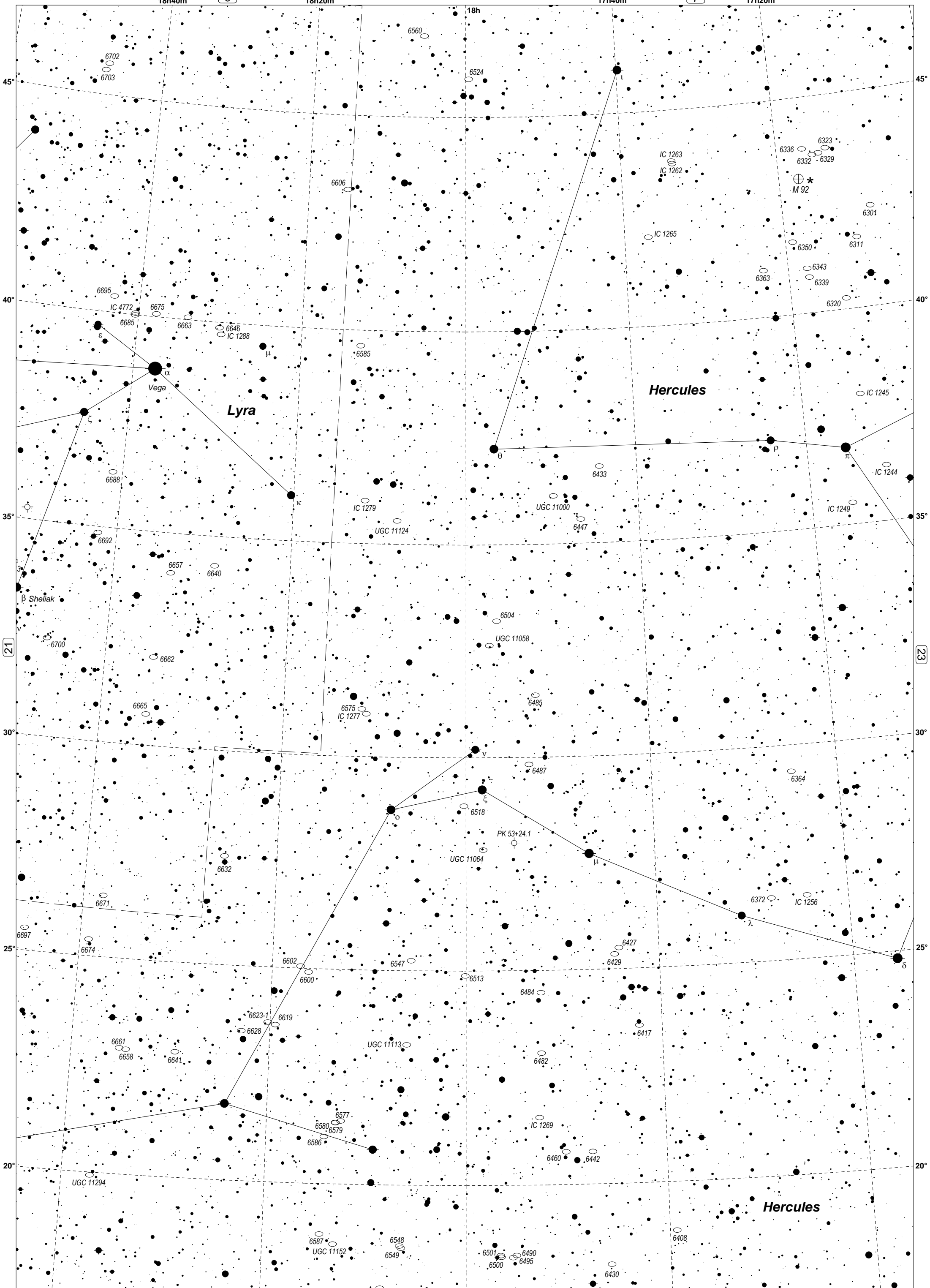
18h20m

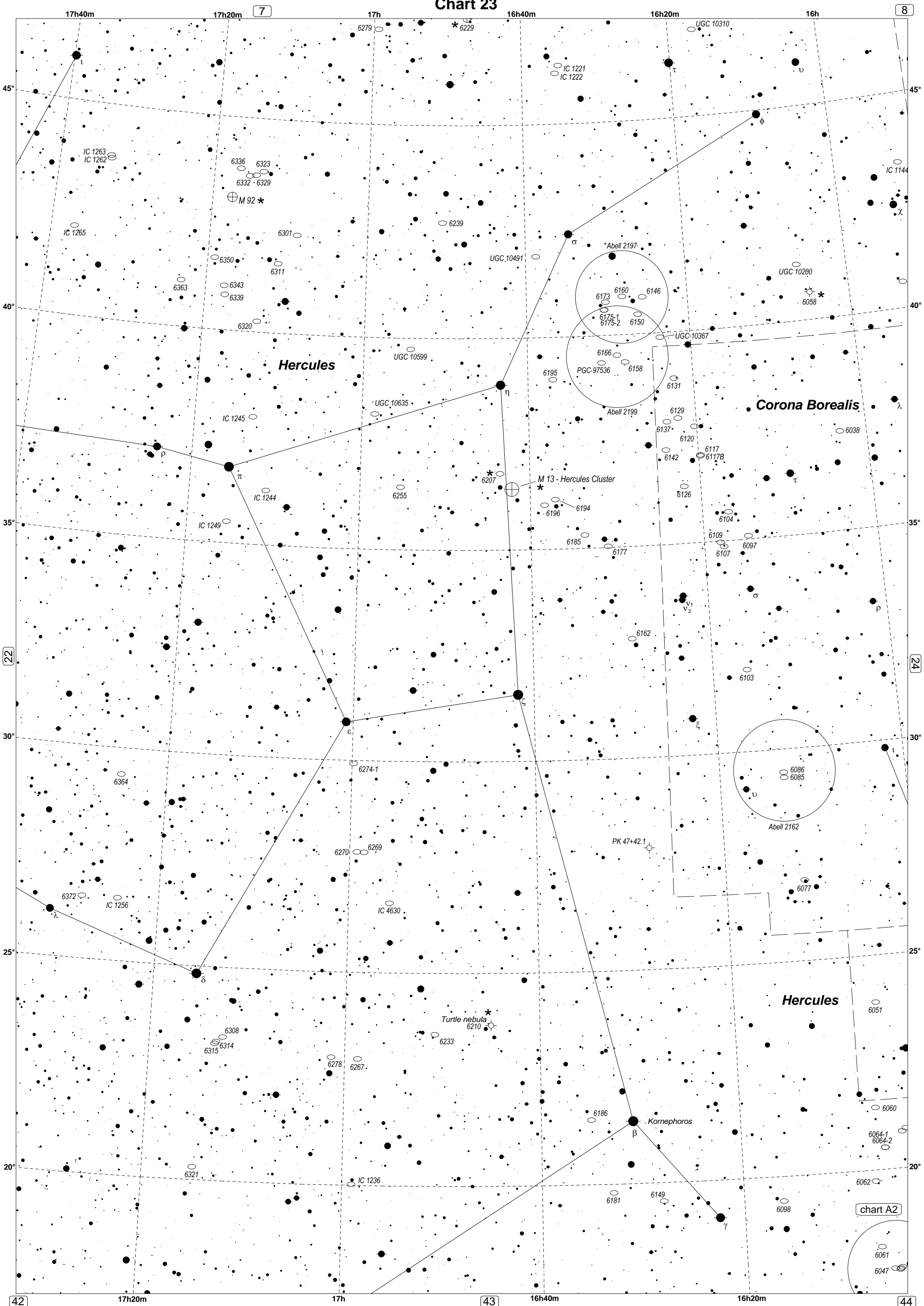
18h

17h40m

7

17h20m





Hercules

Corona Borealis

Hercules

Kornephoros

Turtle nebula
6210

M 13 - Hercules Cluster

PK 47+42.1

Abell 2162

Abell 2197

PGC-97536

UGC 10280

IC 1263
IC 1262

6336 6323
6332 - 6329

M 92 *

IC 1245

IC 1249

IC 1244

6364

IC 1256

6308
6314
6315

6233

6278 6267

IC 1236

6186

6181

6149

6098

chart A2

6061
6047

6064-1
6064-2

6062

6051

6077

6086
6085

6103

6109
6107

6117
6117B

6126

6137
6120

6142

6173
6175-1
6175-2

6166
6158

6195

6196
6194

6185

6177

6162

6150

6146

6160

6173

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6146

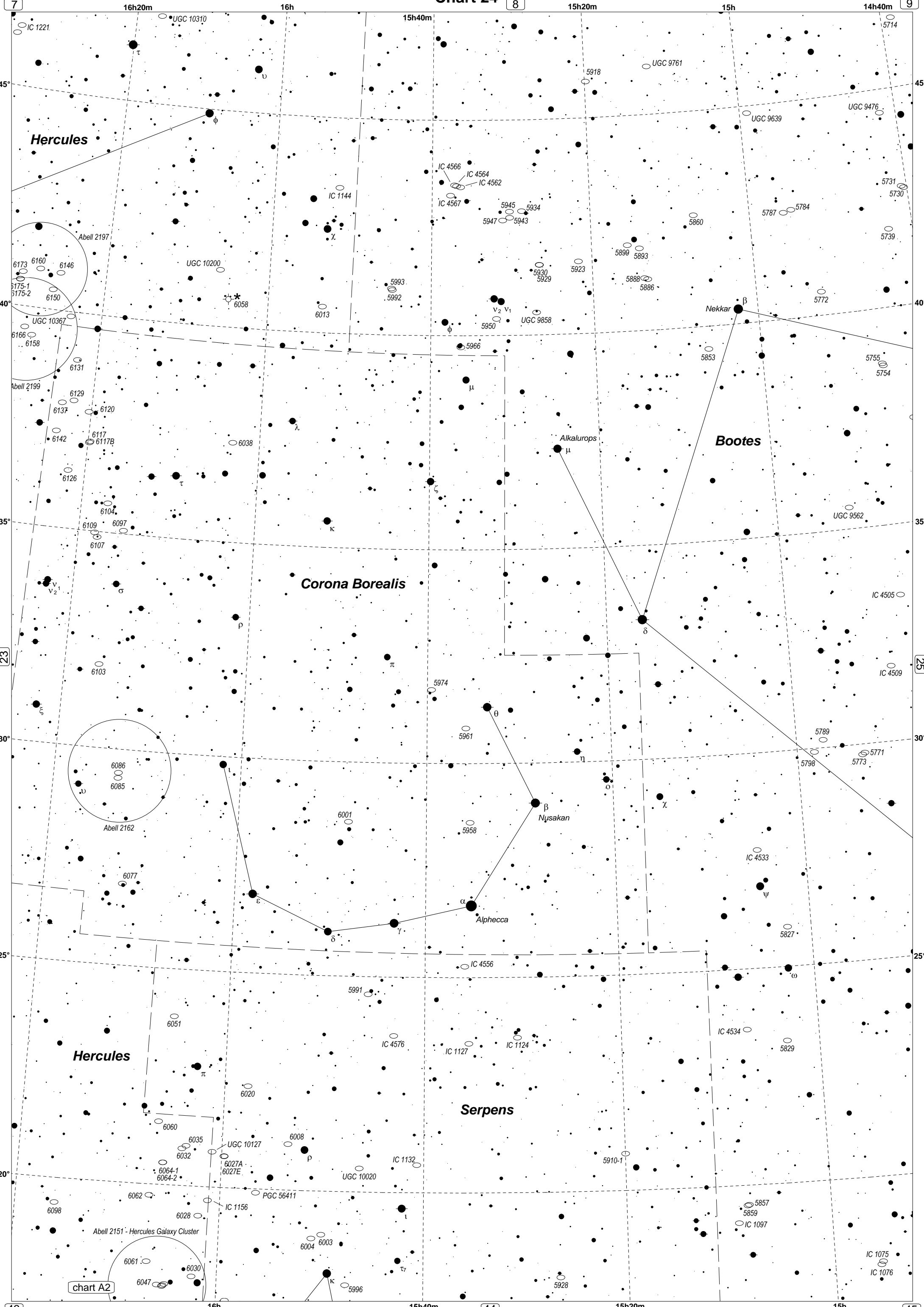
6160

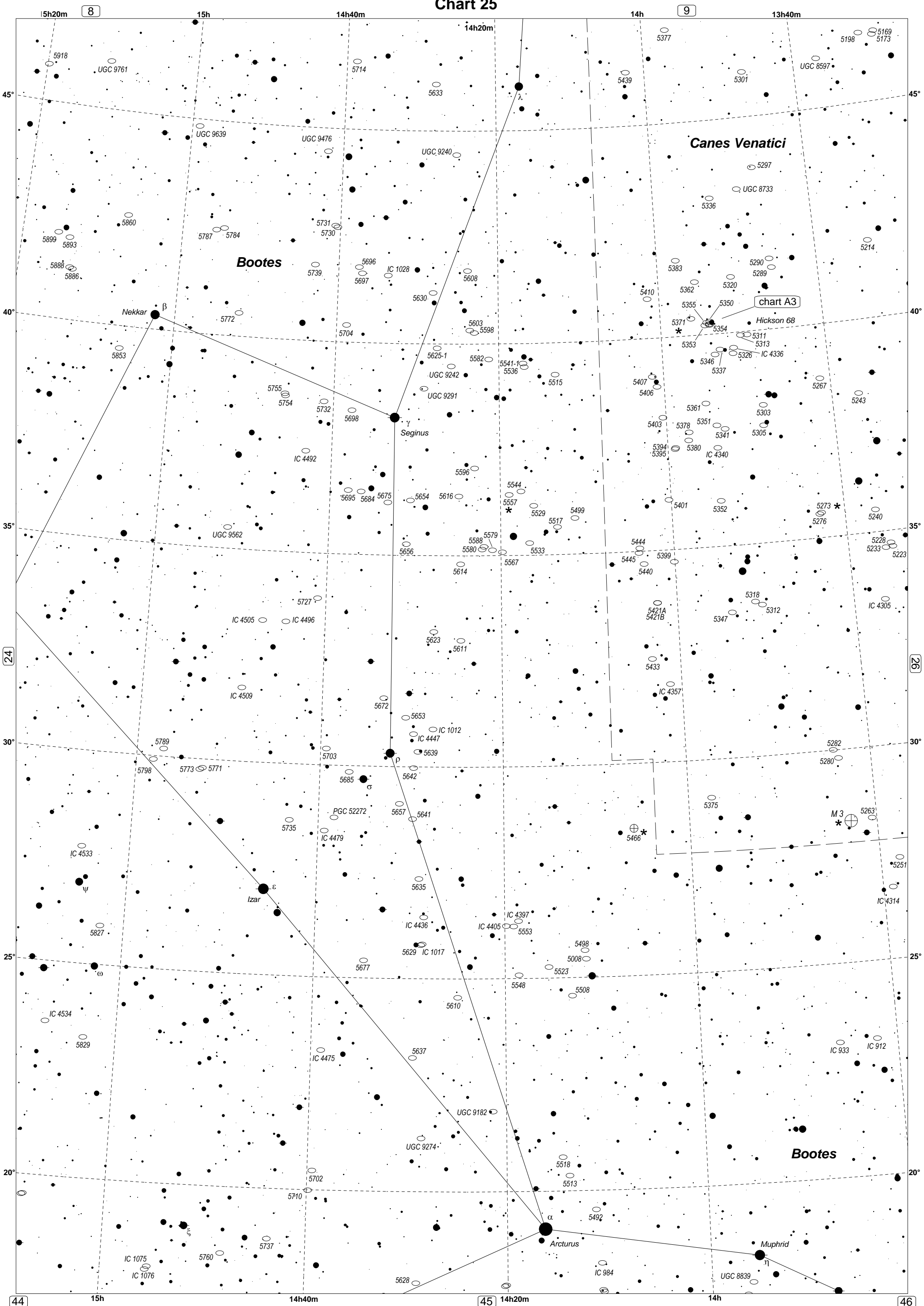
6173

6150

6146

6160





Canes Venatici

Bootes

chart A3

Hickson 68

γ
Seginus

β
Nekkar

ϵ
Izar

α
Arcturus

η
Muphrid

Bootes

M 3

8

9

24

26

44

45

46

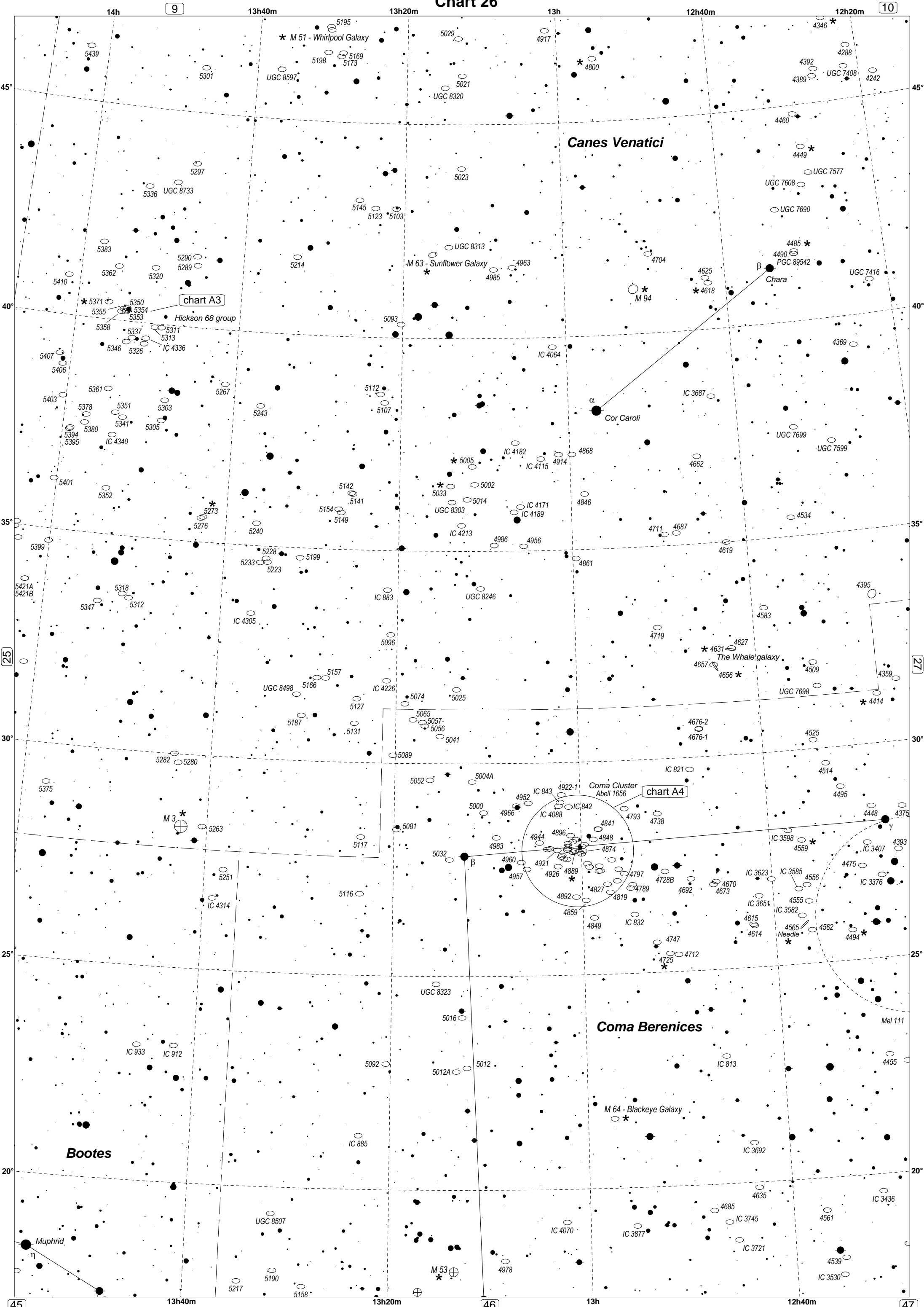


Chart 30

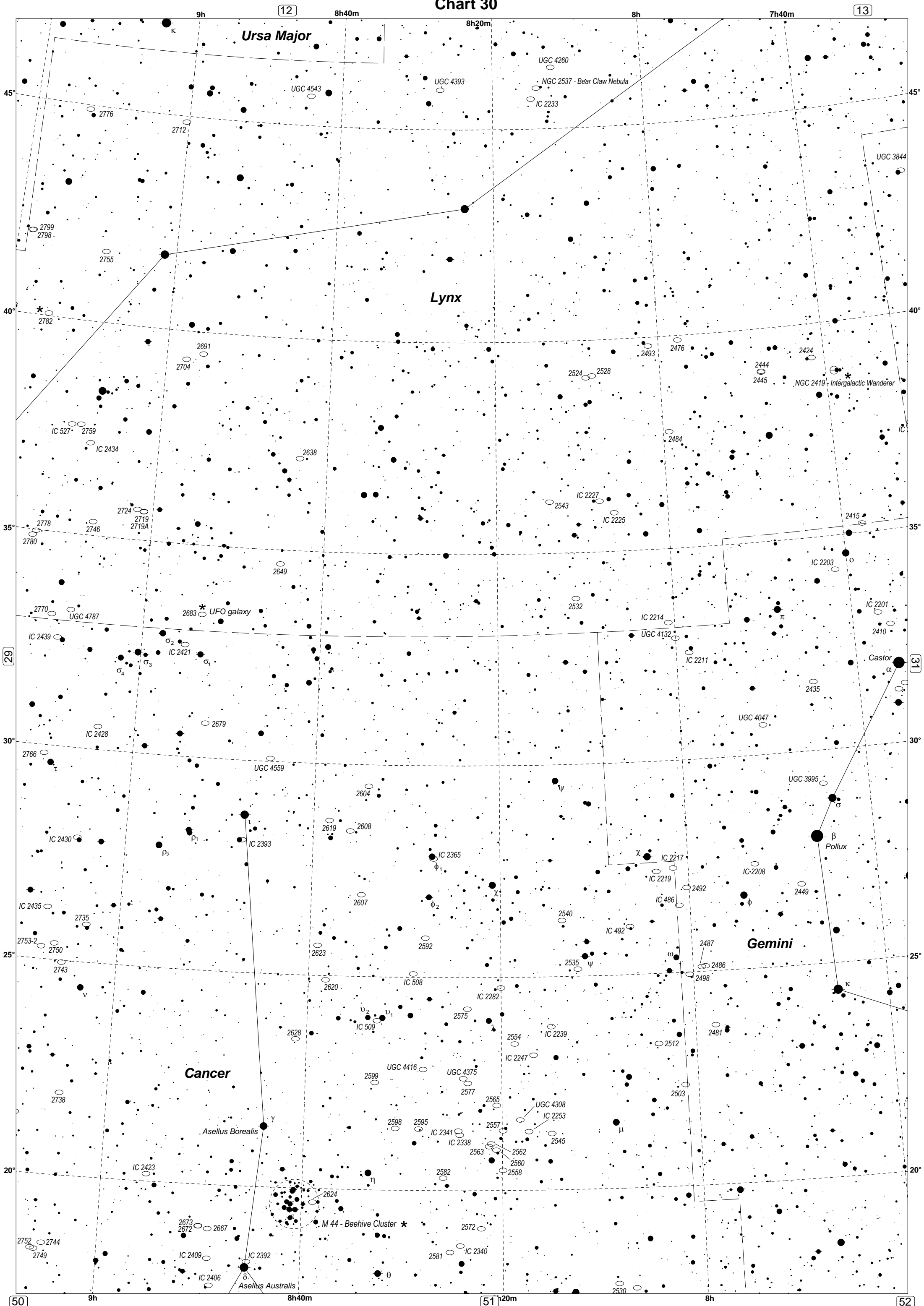
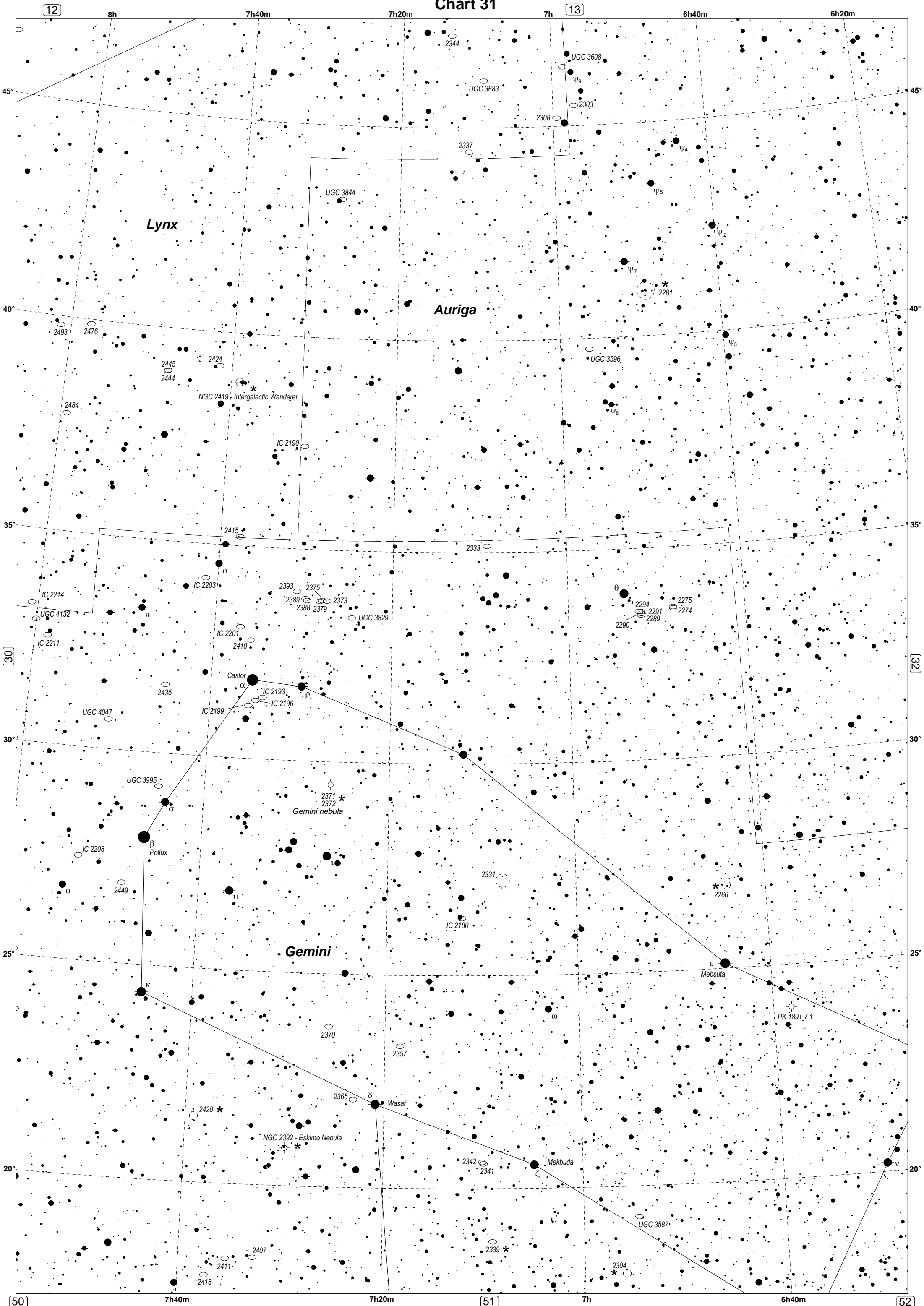


Chart 31



12

8h

7h40m

7h20m

7h

13

6h40m

6h20m

Lynx

Auriga

Gemini

45°

45°

40°

40°

35°

35°

30

32

30°

30°

25°

25°

20°

20°

50

7h40m

7h20m

51

7h

6h40m

52

2344

UGC 3683

UGC 3608

ψ₉

2303

2308

2337

UGC 3844

ψ₄

ψ₅

ψ₂

ψ₇

* 2281

ψ₃

UGC 3596

ψ₆

2445

2444

2424

NGC 2419

Intergalactic Wanderer

IC 2190

2415

2333

2393

2375

2389

2373

2388

2379

UGC 3829

θ

2294

2291

2289

2290

2275

2274

IC 2214

UGC 4132

IC 2211

IC 2201

2410

IC 2199

Castor α

IC 2193

IC 2196

π

2435

UGC 3995

σ

Gemini nebula

2371 *

2372 *

β Pollux

IC 2208

φ

2449

υ

2331

IC 2180

* 2266

ε Meebuda

PK 189+7.1

2370

2357

2365

δ Wasat

2420 *

NGC 2392 - Eskimo Nebula

2342

2341

ζ Mekbuda

UGC 3587

2407

2411

2418

2339 *

2304 *

Chart 32

6h40m

13

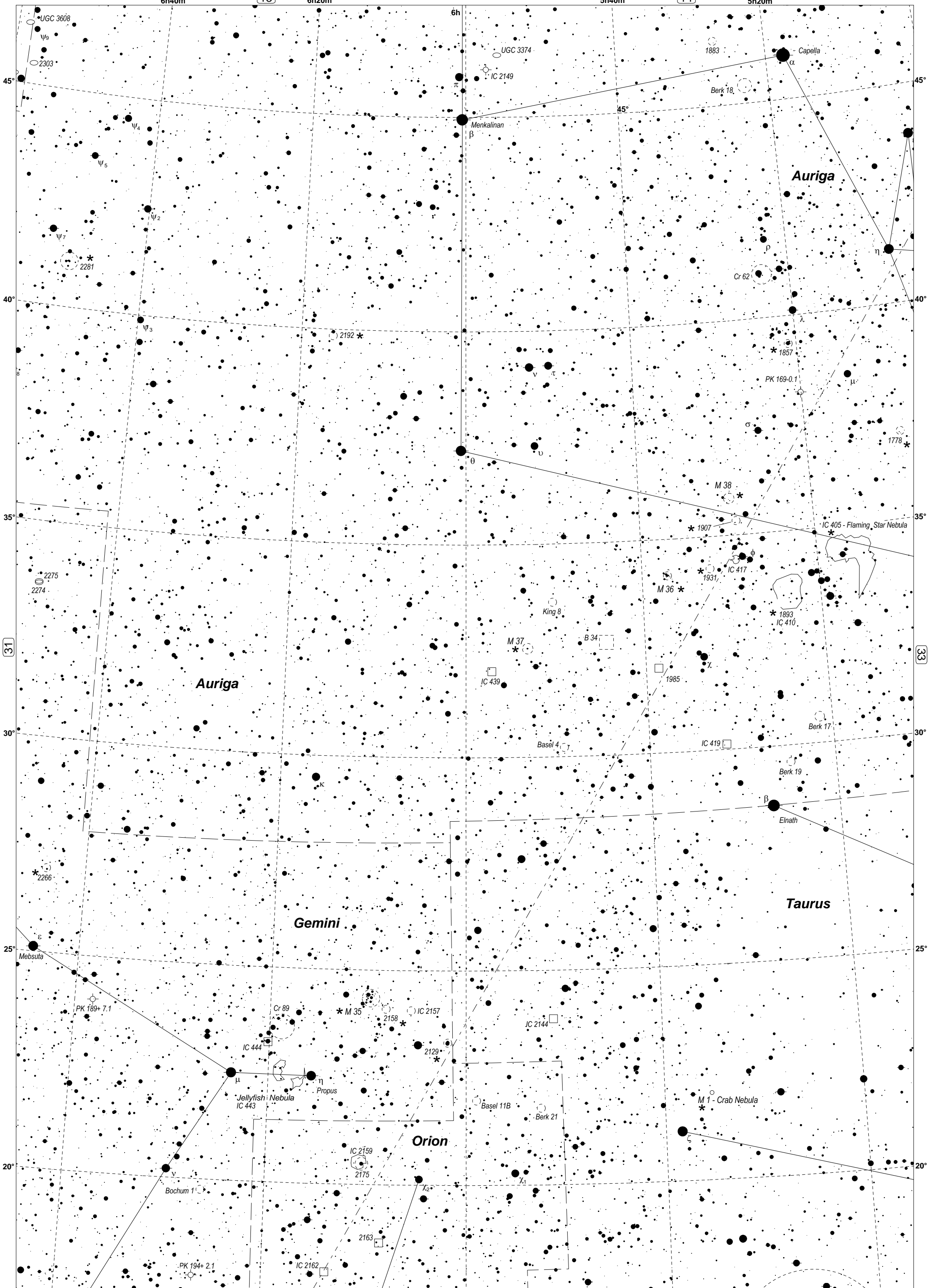
6h20m

6h

5h40m

14

5h20m



Auriga

Auriga

Gemini

Taurus

Orion

31

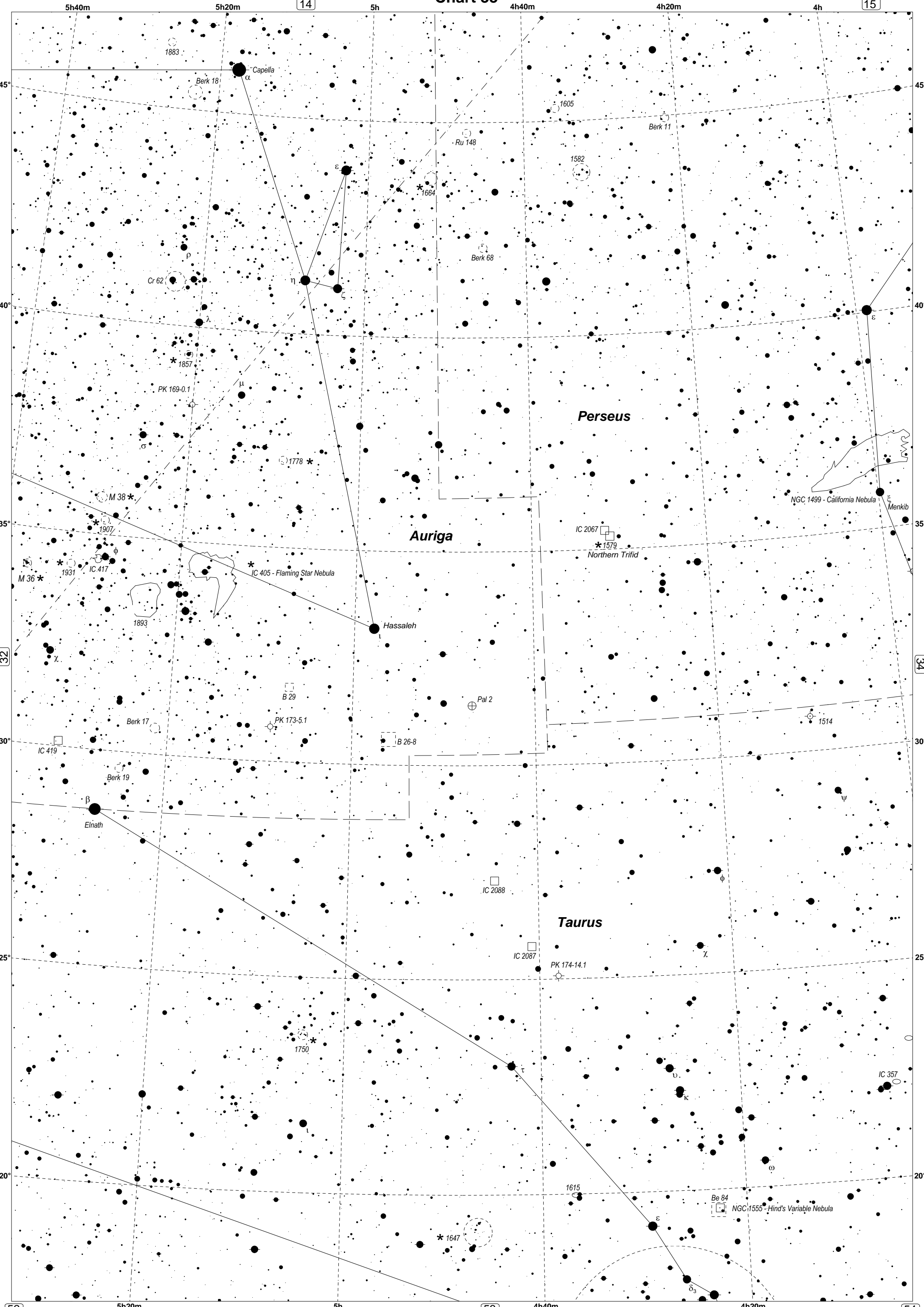
33

51

52

53

Chart 33



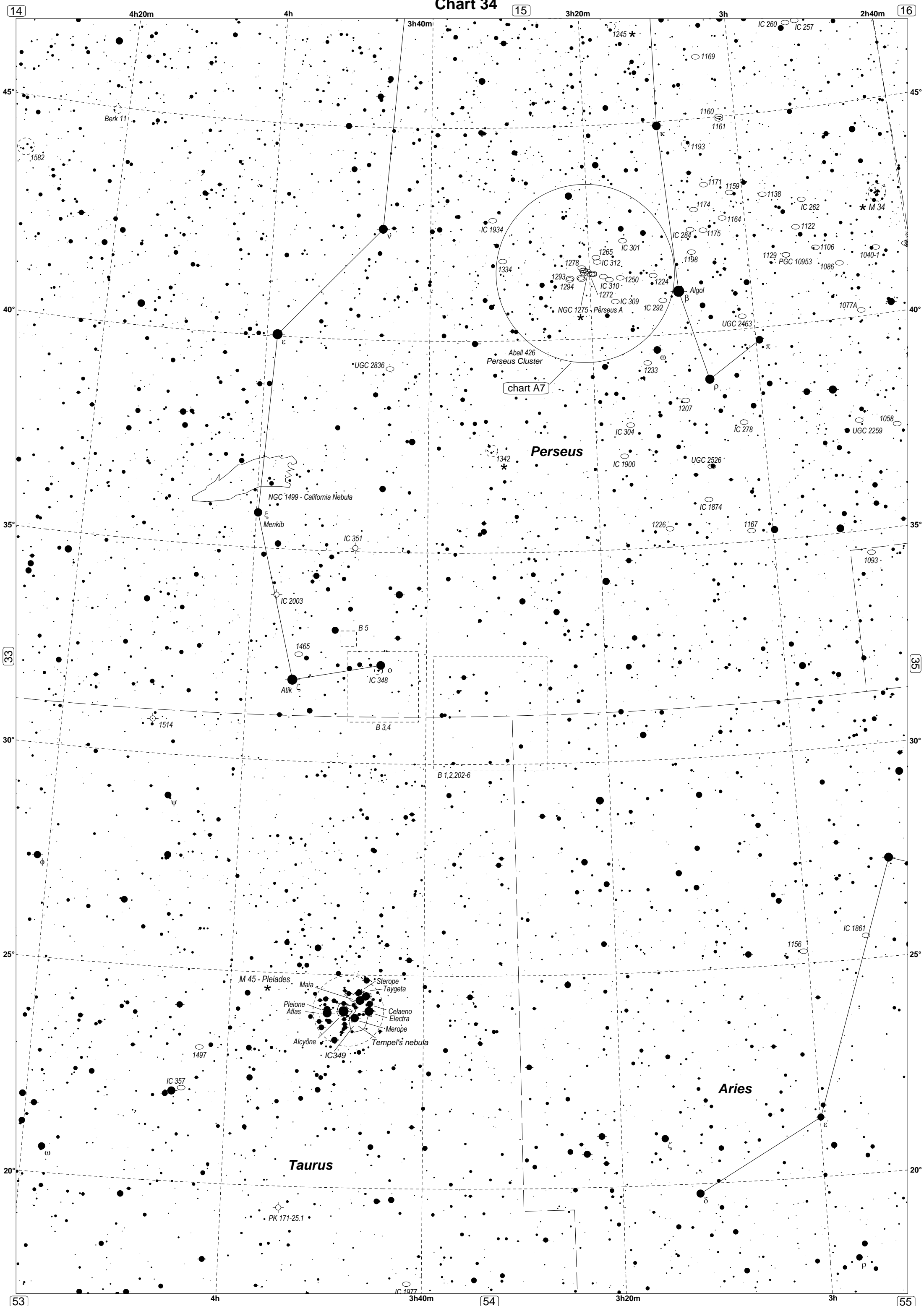


Chart 34

14

15

16

45°

45°

40°

40°

35°

35°

30°

30°

25°

25°

20°

20°

53

54

55

4h20m

4h

3h40m

3h20m

3h

2h40m

4h

3h40m

3h20m

3h

Berk 11

1582

IC 260 IC 257

1169

1160

1161

1193

1171

1159

1138

IC 262

1122

1106

1040-1

M 34

IC 1934

1334

1278

1265

IC 301

IC 312

1250

1224

1293

1294

IC 310

IC 309

IC 292

NGC 1275

Perseus A

IC 284

1198

1233

1207

IC 304

IC 1900

1226

1167

1174

1167

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UGC 2836

Abell 426
Perseus Cluster

chart A7

Perseus

NGC 1499 - California Nebula

Menkib

IC 351

IC 2003

B 5

1465

Atik

IC 348

B 3.4

B 1,2,202-6

1093

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1093

M 45 - Pleiades

Maia

Pleione

Atlas

Alcyone

IC 349

Sterope

Taygeta

Celaeno

Electra

Merope

Tempel's nebula

PK 171-25.1

IC 1977

1156

1156

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IC 1861

IC 1861

IC 1861

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IC 1861

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IC 1861

IC 1861

IC 1861

IC 1861

IC 1861

IC 1861

IC 1861

IC 1861

IC 1861

Aries

Taurus

Chart 35

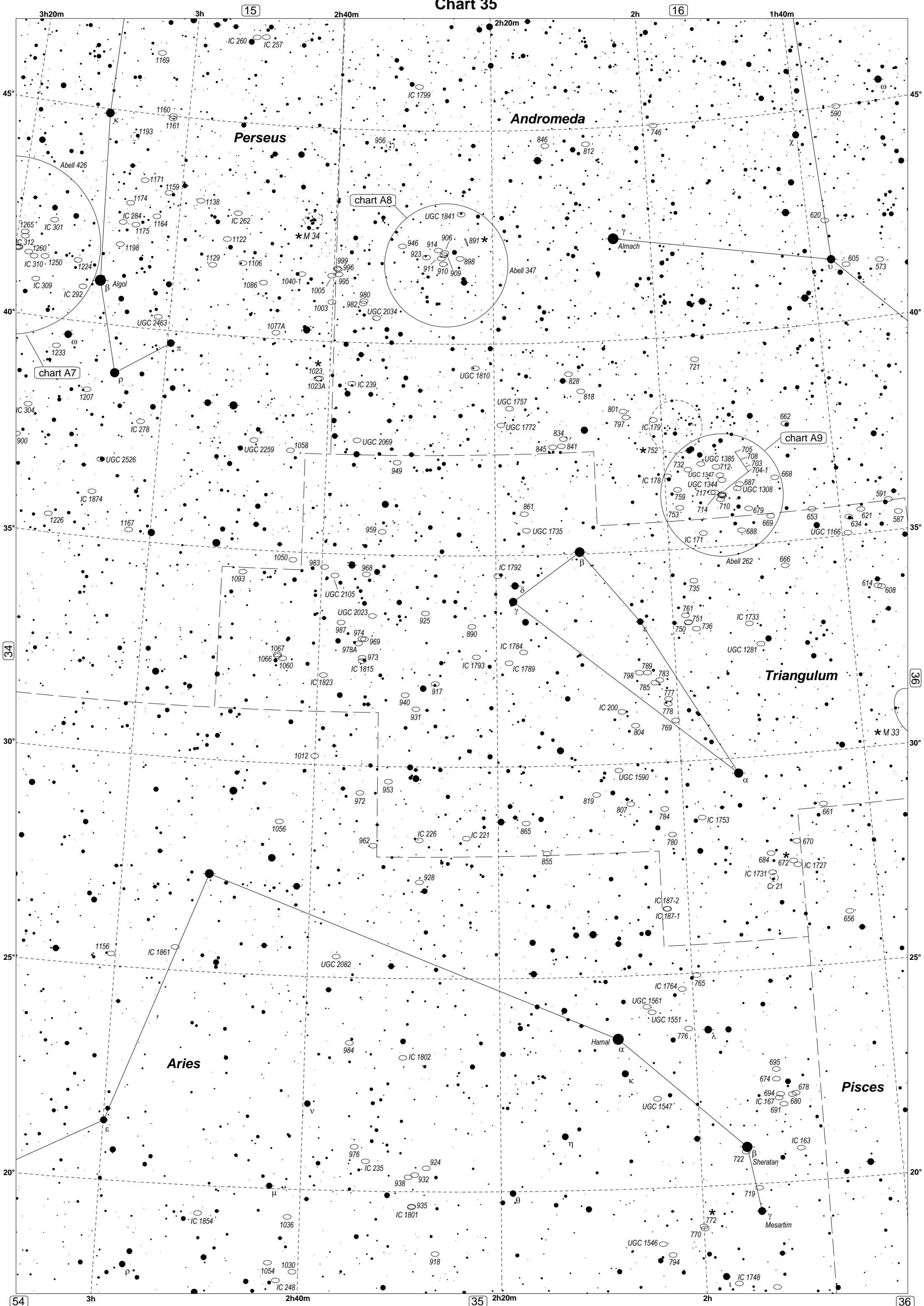


Chart 36

2h

1h40m

16

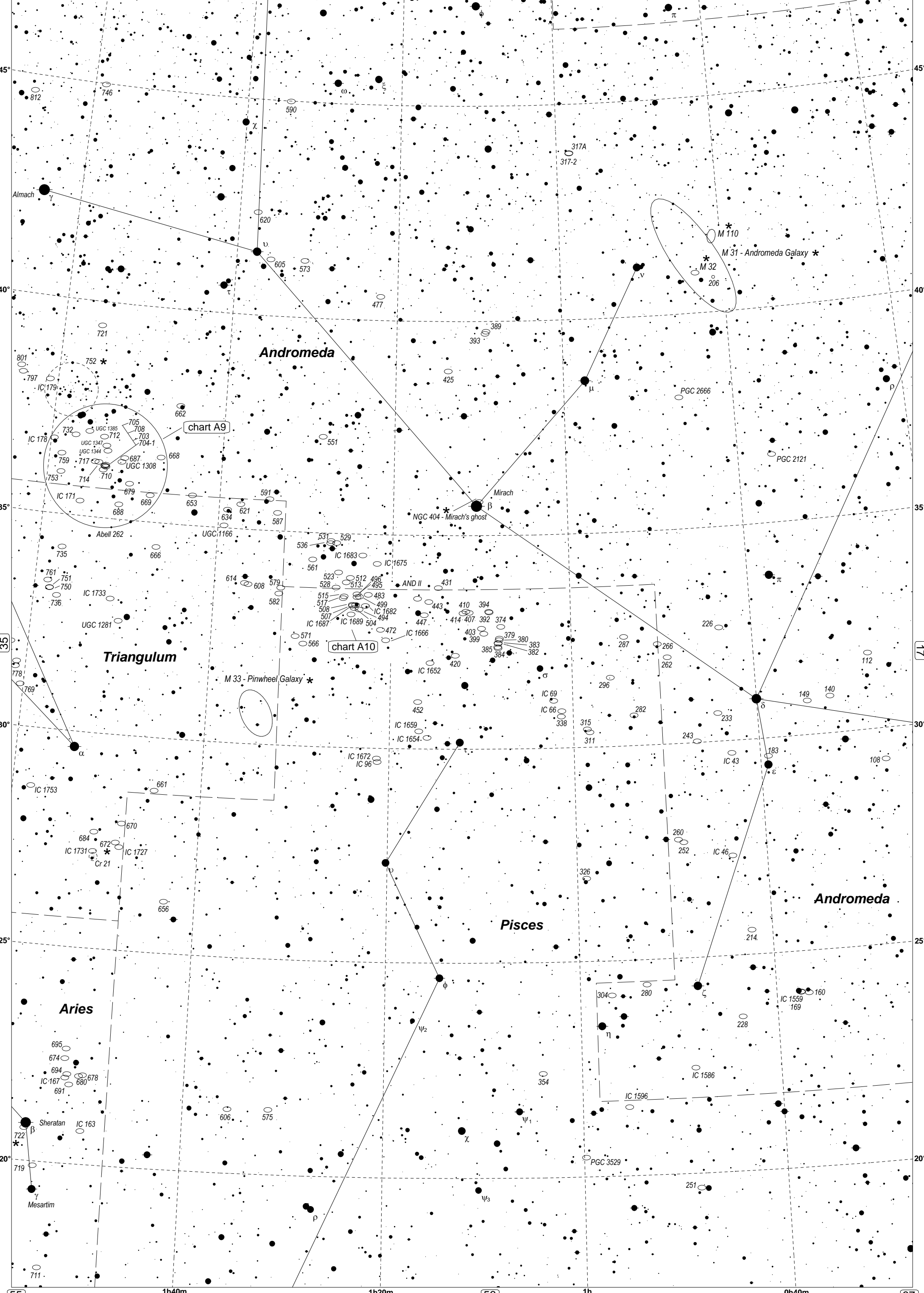
1h20m

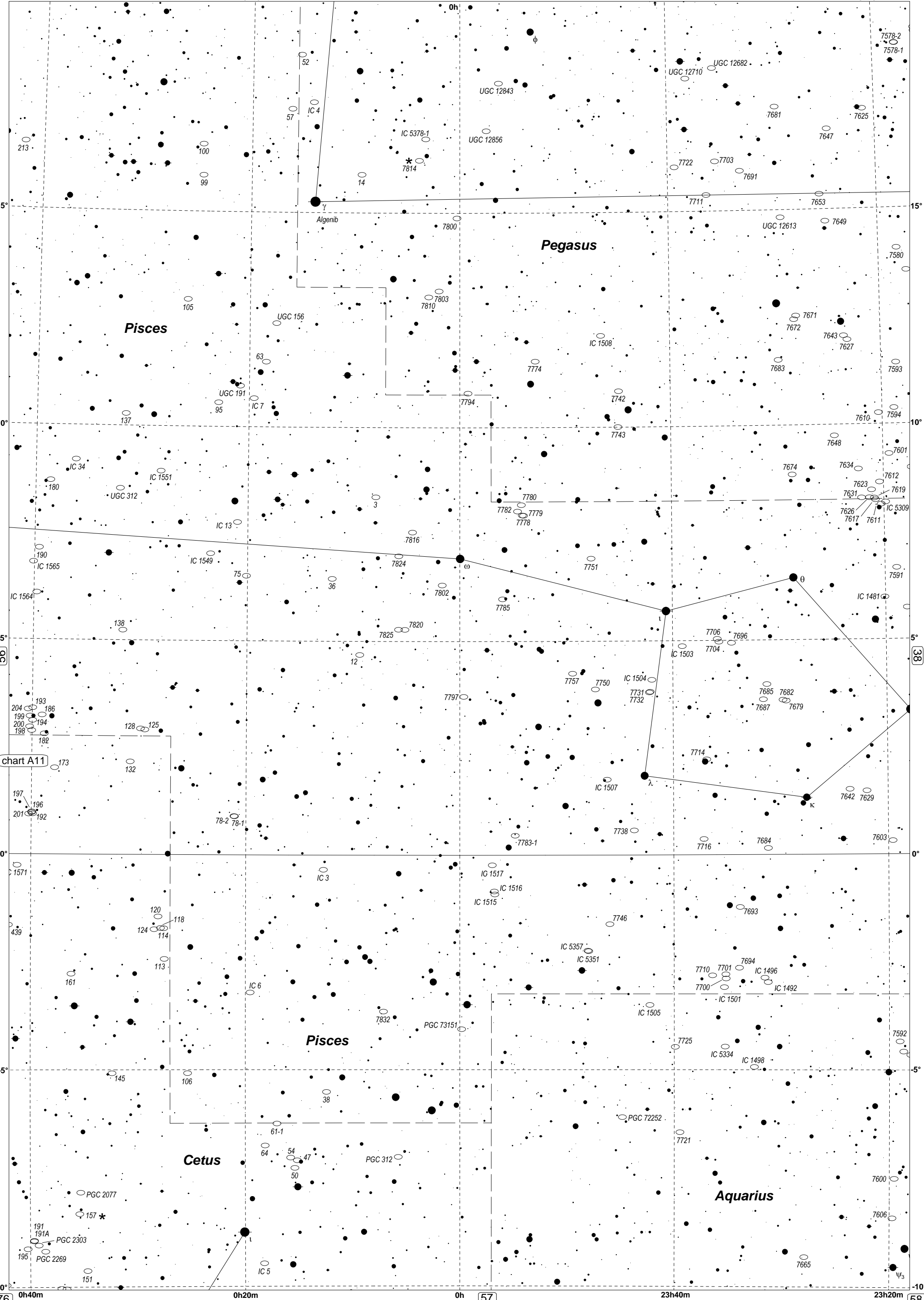
1h

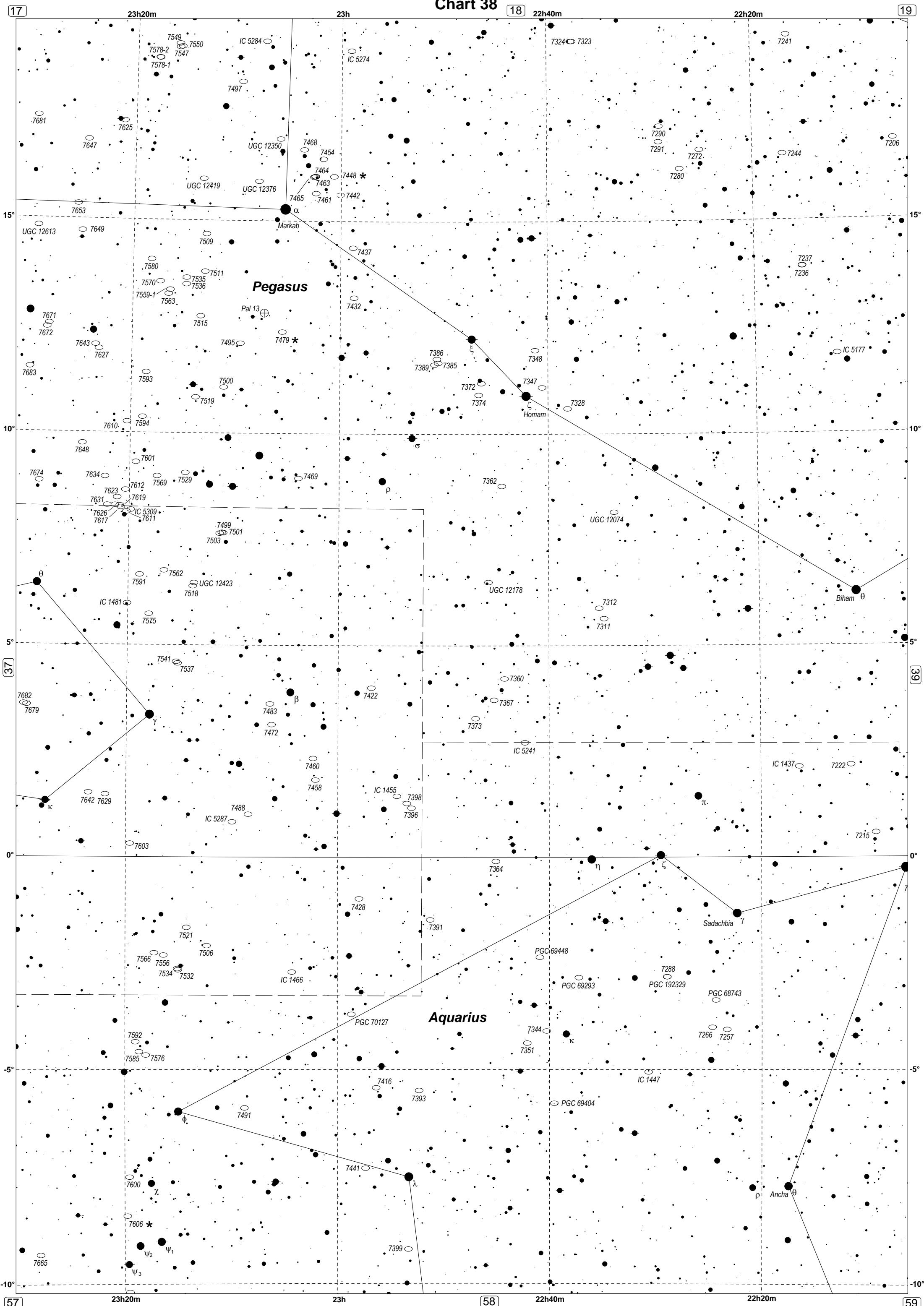
0h40m

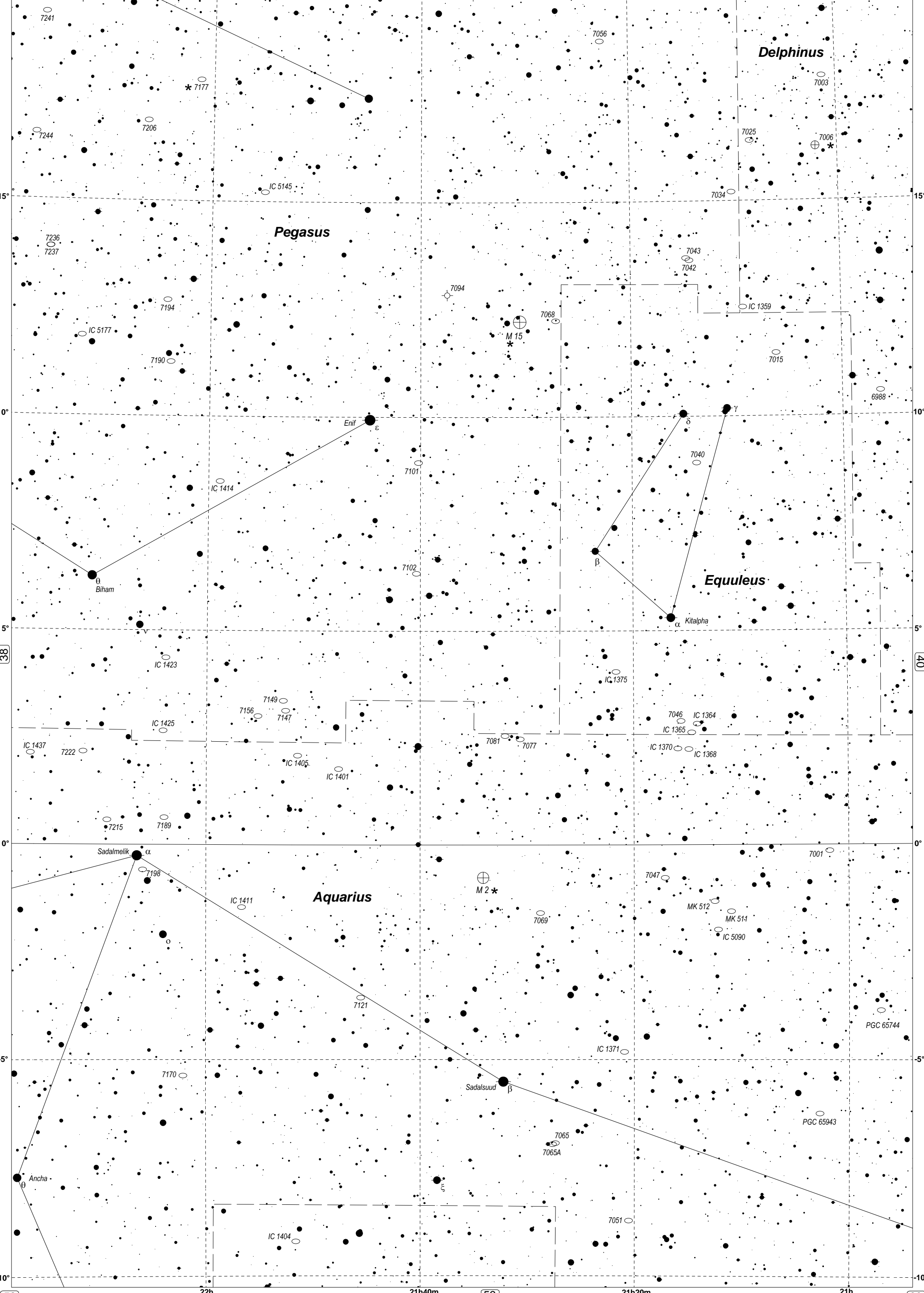
0h20m

3









Delphinus

Pegasus

Equuleus

Aquarius

7241

7056

7003

7244

7206

7025

7006

7236

7237

7194

7043

7042

IC 1359

7015

6988

IC 5177

7190

M 15

7068

7094

Enif

IC 1414

7101

7040

15°

15°

10°

10°

5°

5°

38

40

IC 1423

7149

7156

7147

IC 1375

7046

IC 1364

IC 1365

IC 1368

IC 1437

7222

IC 1405

IC 1401

7081

7077

IC 1370

IC 1368

0°

0°

Sadalmelik

7198

IC 1411

M 2

7069

7047

7001

MK 512

MK 511

IC 5090

PGC 65744

-5°

-5°

7170

Sadalsuud

PGC 65943

-10°

-10°

Ancha

7065

7065A

7051

IC 1404

58

22h

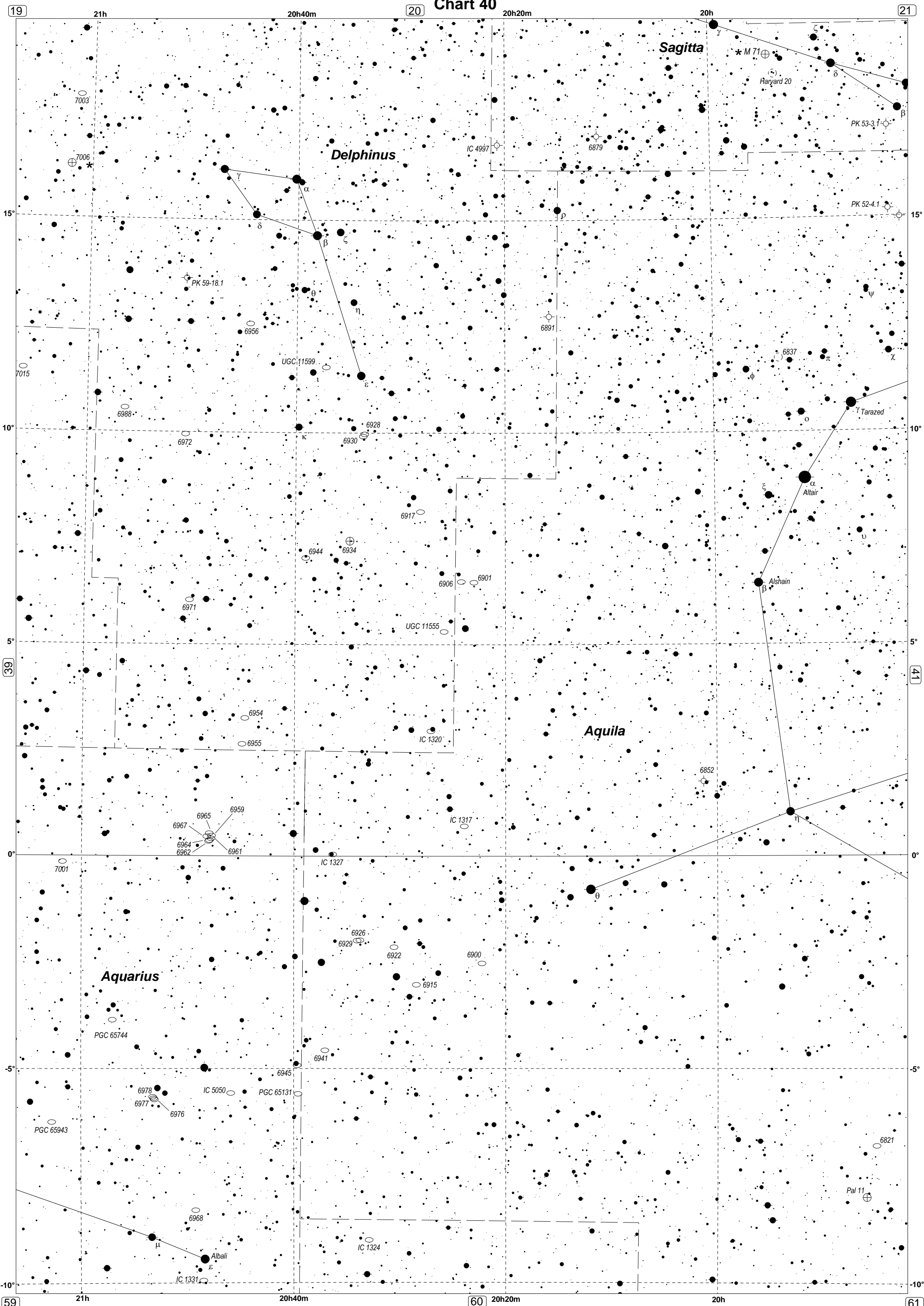
21h40m

59

21h20m

21h

60



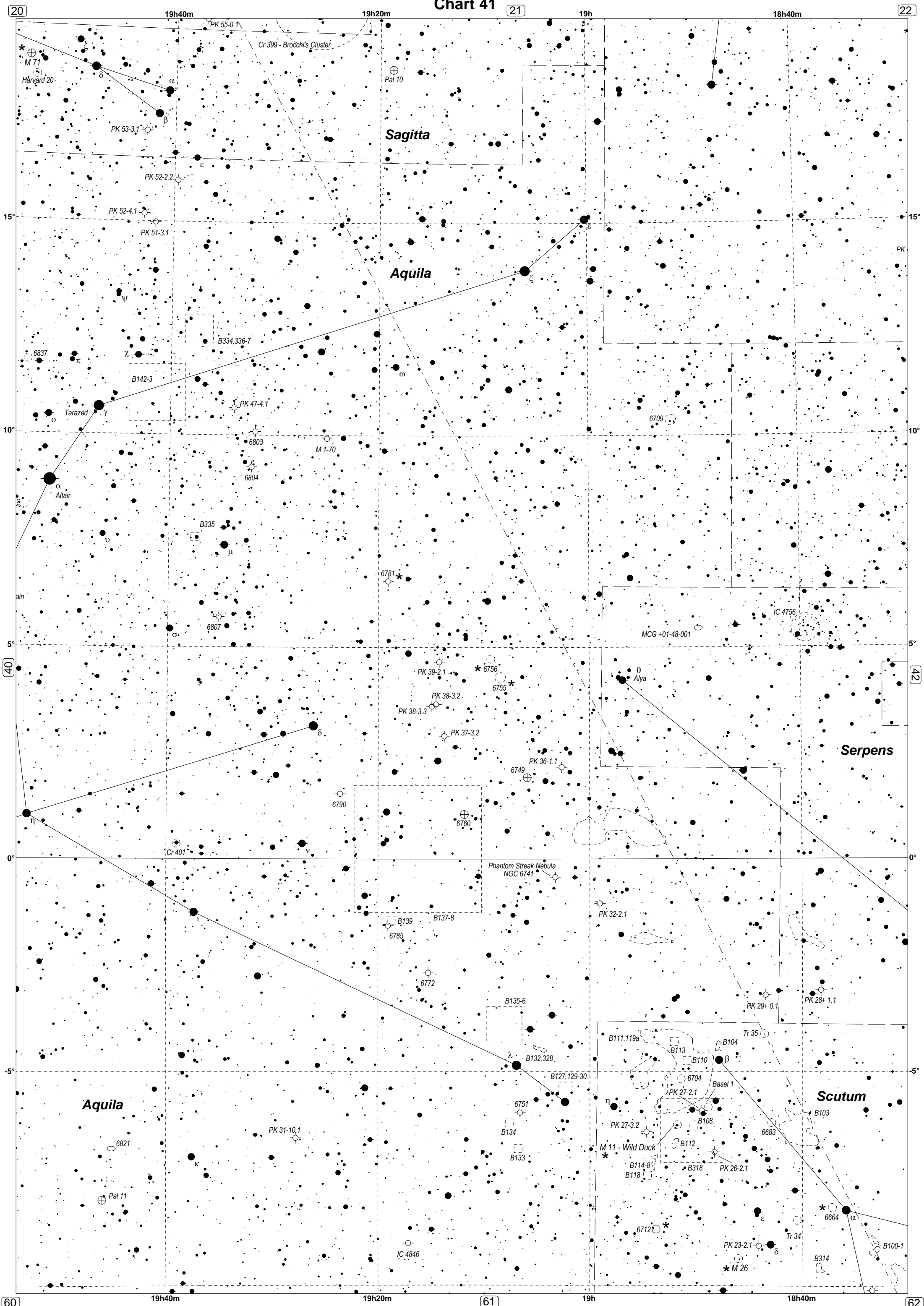


Chart 41

20

21

22

15°

15°

10°

10°

5°

5°

0°

0°

-5°

-5°

60

61

62

19h40m

19h20m

19h

18h40m

19h40m

19h20m

19h

18h40m

Sagitta

Aquila

Serpens

Aquila

Scutum

Cr 399 - Broccchi's Cluster

Phantom Streak Nebula
NGC 6741

M 11 - Wild Duck

M 71
Harvard 20

Pal 10

PK 53-3.1

PK 52-2.2

PK 52-4.1

PK 51-3.1

B334,336-7

B142-3

PK 47-4.1

6803

6804

M 1-70

B335

6807

6781

PK 39-2.1

PK 38-3.2

PK 38-3.3

PK 37-3.2

PK 36-1.1

6790

6760

Cr 401

B139

B137-8

6785

6772

B135-6

B132,328

B127,129-30

B111,119a

B113

B110

6704

Basel 1

PK 27-3.2

B108

B112

B114-8

B118

B318

PK 26-2.1

6712

PK 23-2.1

M 26

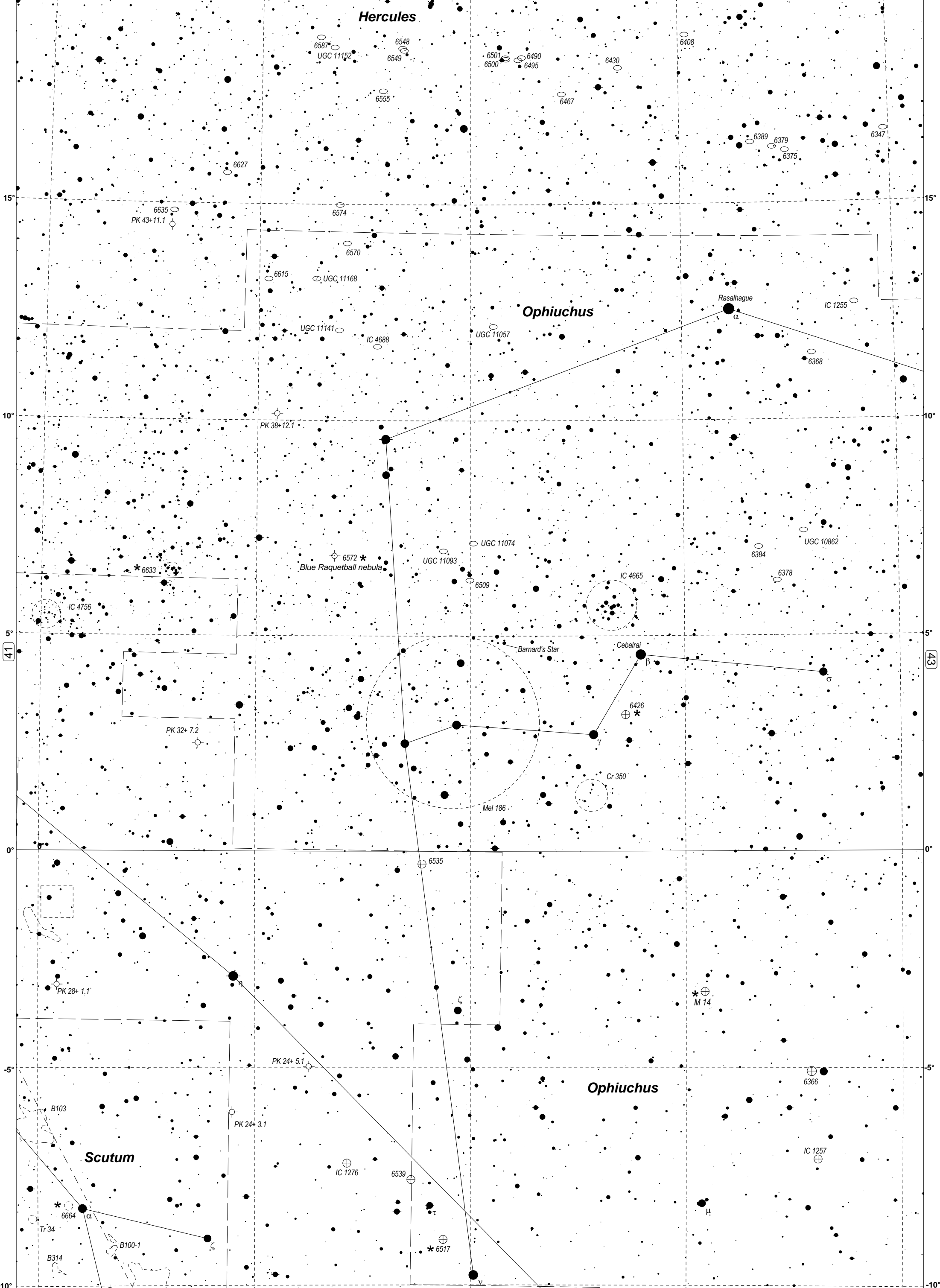
6664

Tr 34

Tr 35

B100-1

B314



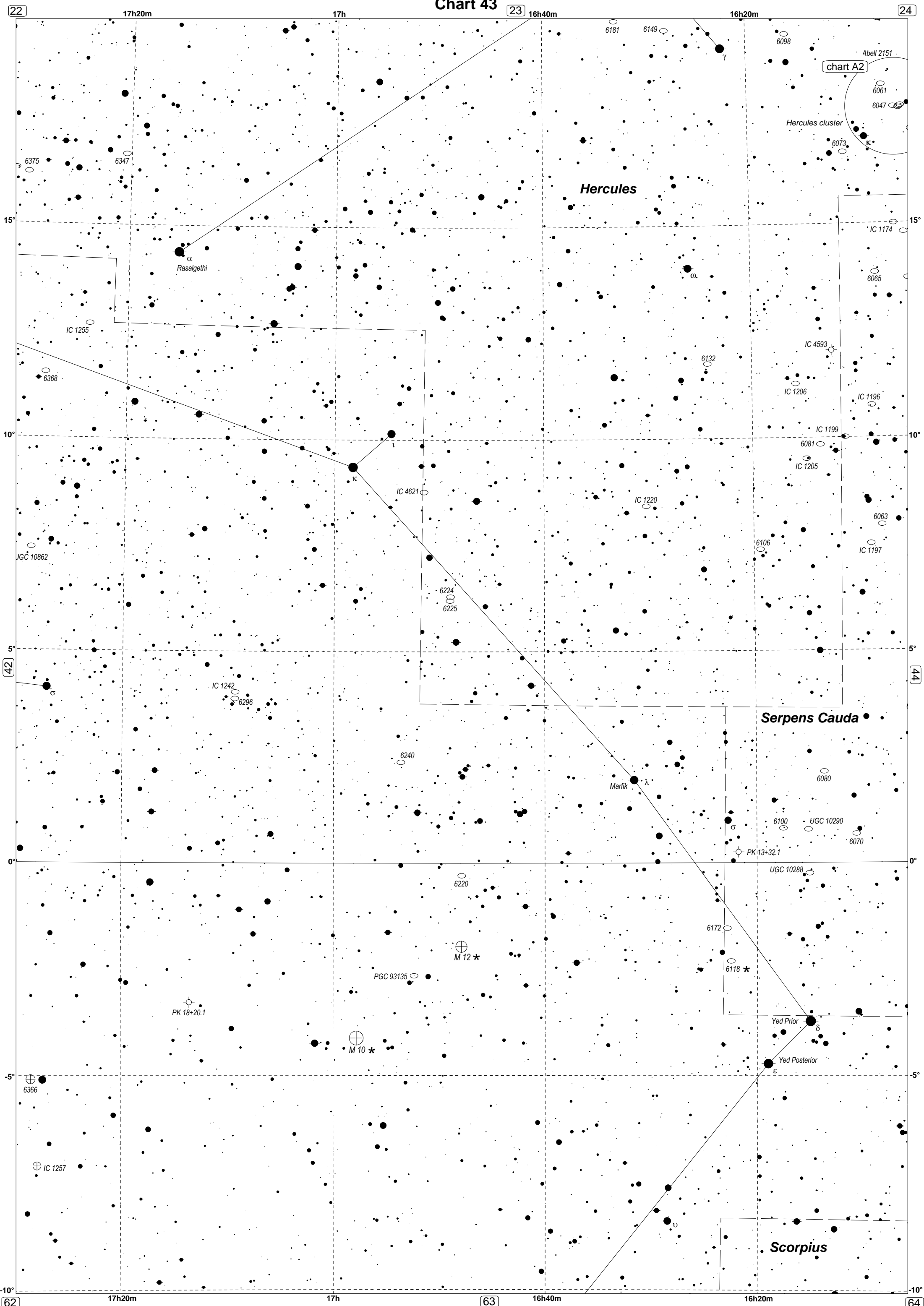


Chart 43

17h20m

17h

16h40m

16h20m

17h20m

17h

16h40m

16h20m

22

23

24

42

44

62

63

64

Hercules

Serpens Cauda

Scorpius

α
Rasalgethi

κ

λ
Marfik

\oplus
M 12 \star

\oplus
M 10 \star

δ
Yed Prior

ϵ
Yed Posterior

chart A2

Abell 2151

Hercules cluster

IC 1255

IC 4621

IC 1220

IC 4593

IC 1206

IC 1196

IC 1199

IC 1205

IC 1197

JGC 10862

6224

6225

6106

6063

IC 1242

6296

6240

6220

PGC 93135

6172

6118 \star

UGC 10288

6100

UGC 10290

6070

PK 13+32.1

6080

PK 18+20.1

6366

IC 1257

δ

ϵ

6061

6047

6073

6098

6181

6149

γ

IC 1174

6065

6368

6132

6081

IC 1174

6065

IC 1196

IC 1197

6063

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

IC 1197

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IC 1197

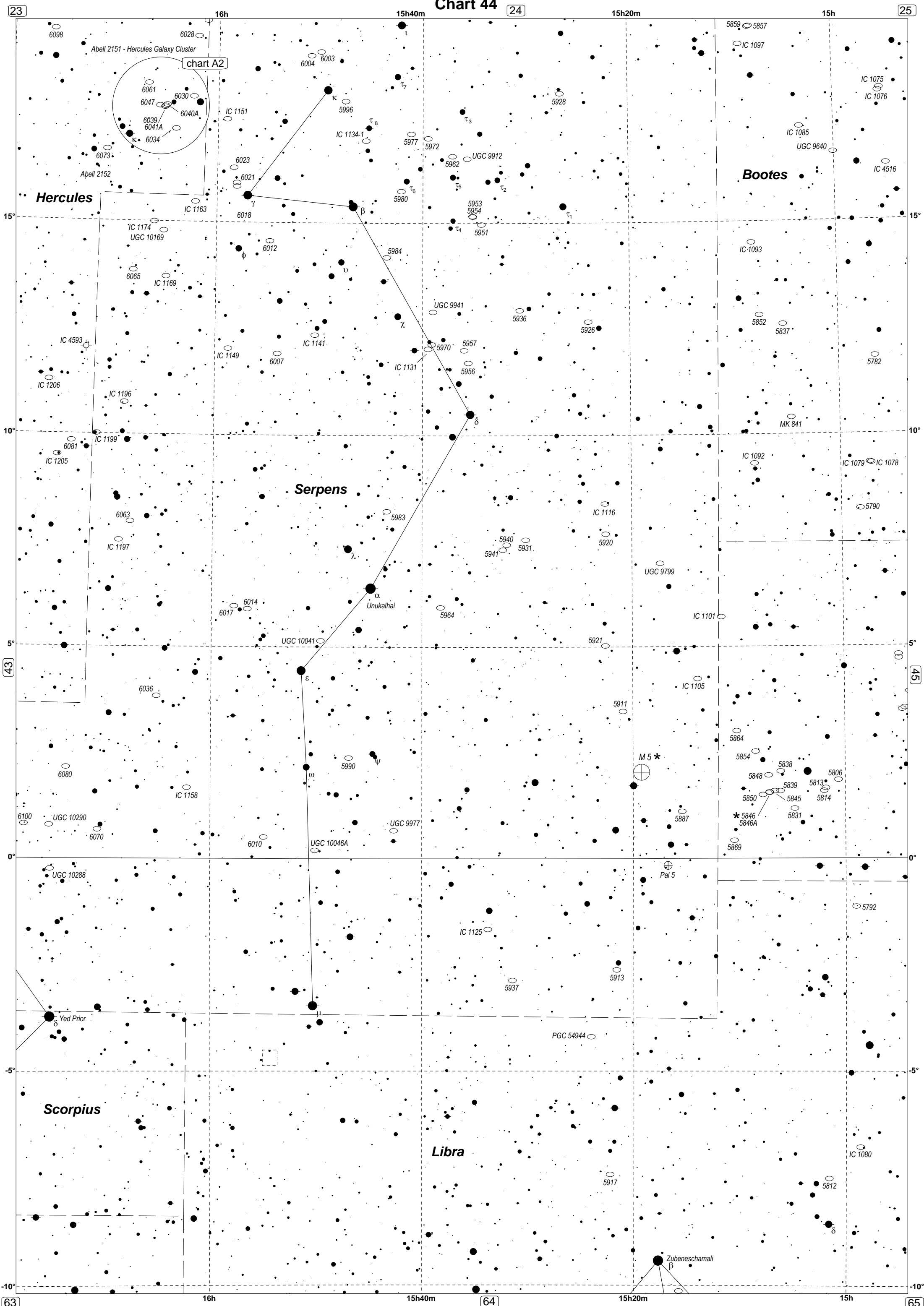
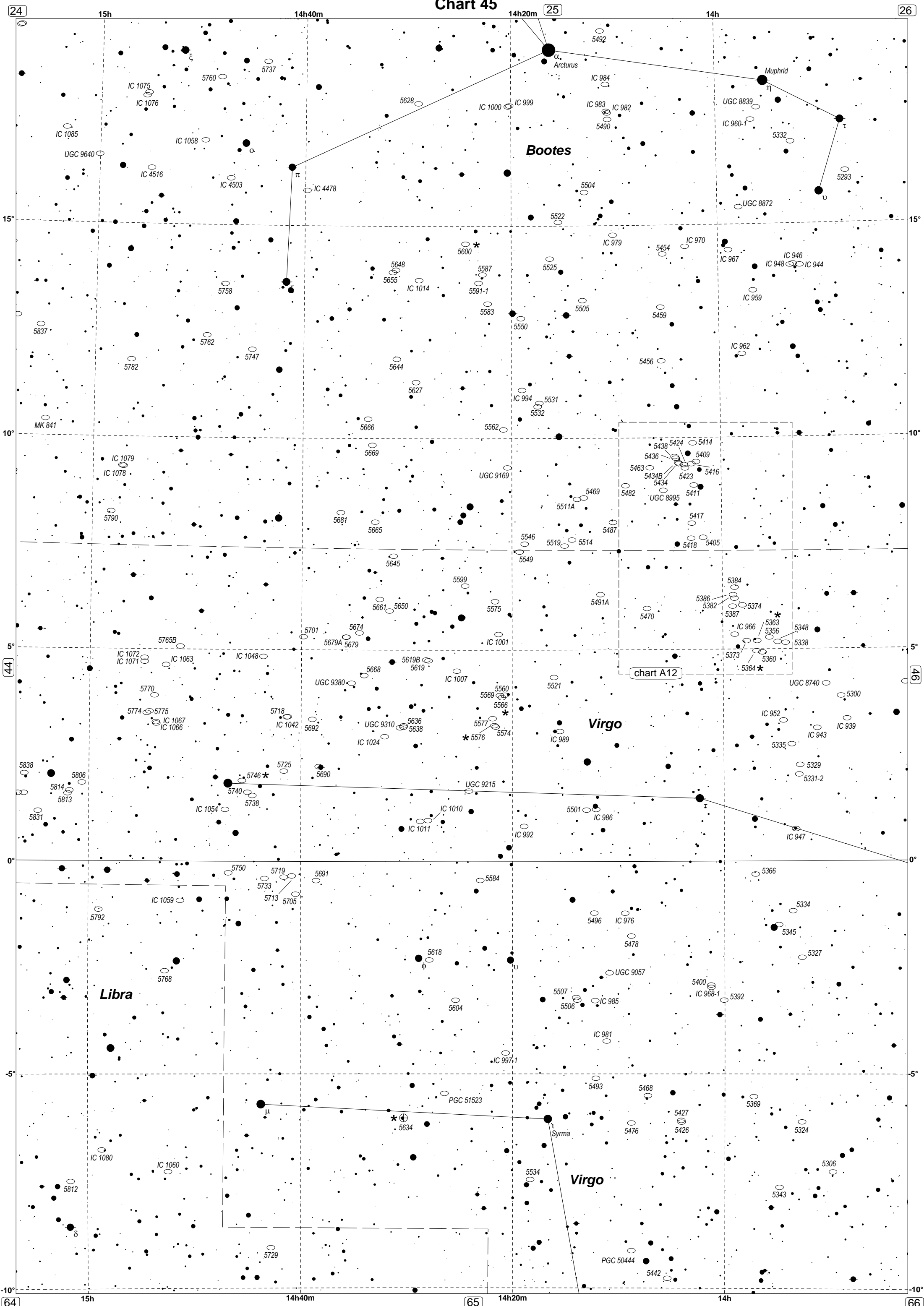


Chart 45



Bootes

Virgo

Libra

Virgo

chart A12

α
Arcturus

Muphrid
 η

π

τ

δ
Syra

ϵ

ϕ

ψ

24

25

26

44

46

64

65

66

15h

14h40m

14h20m

14h

15h

14h40m

14h20m

14h

15°

15°

10°

10°

5°

5°

0°

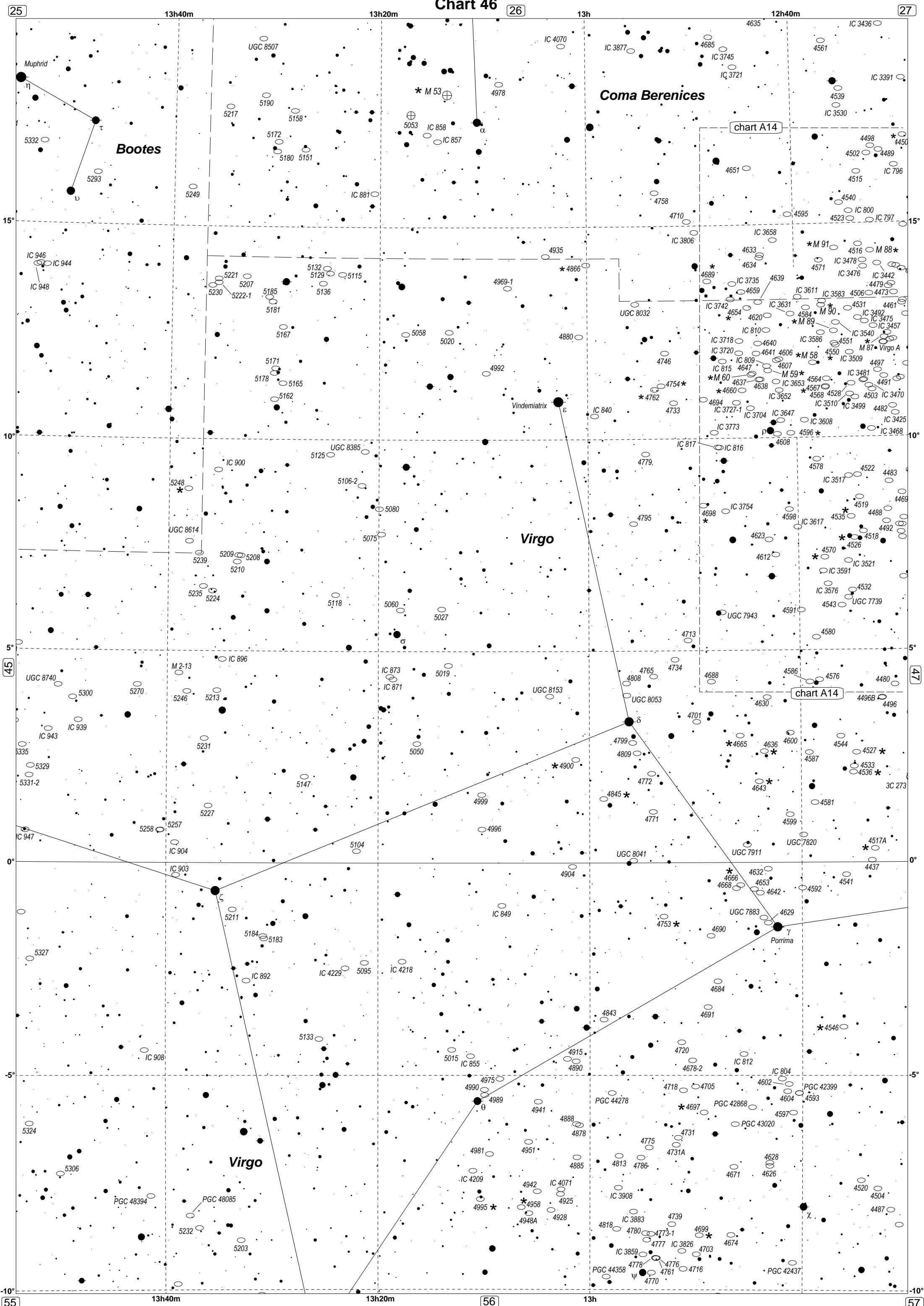
0°

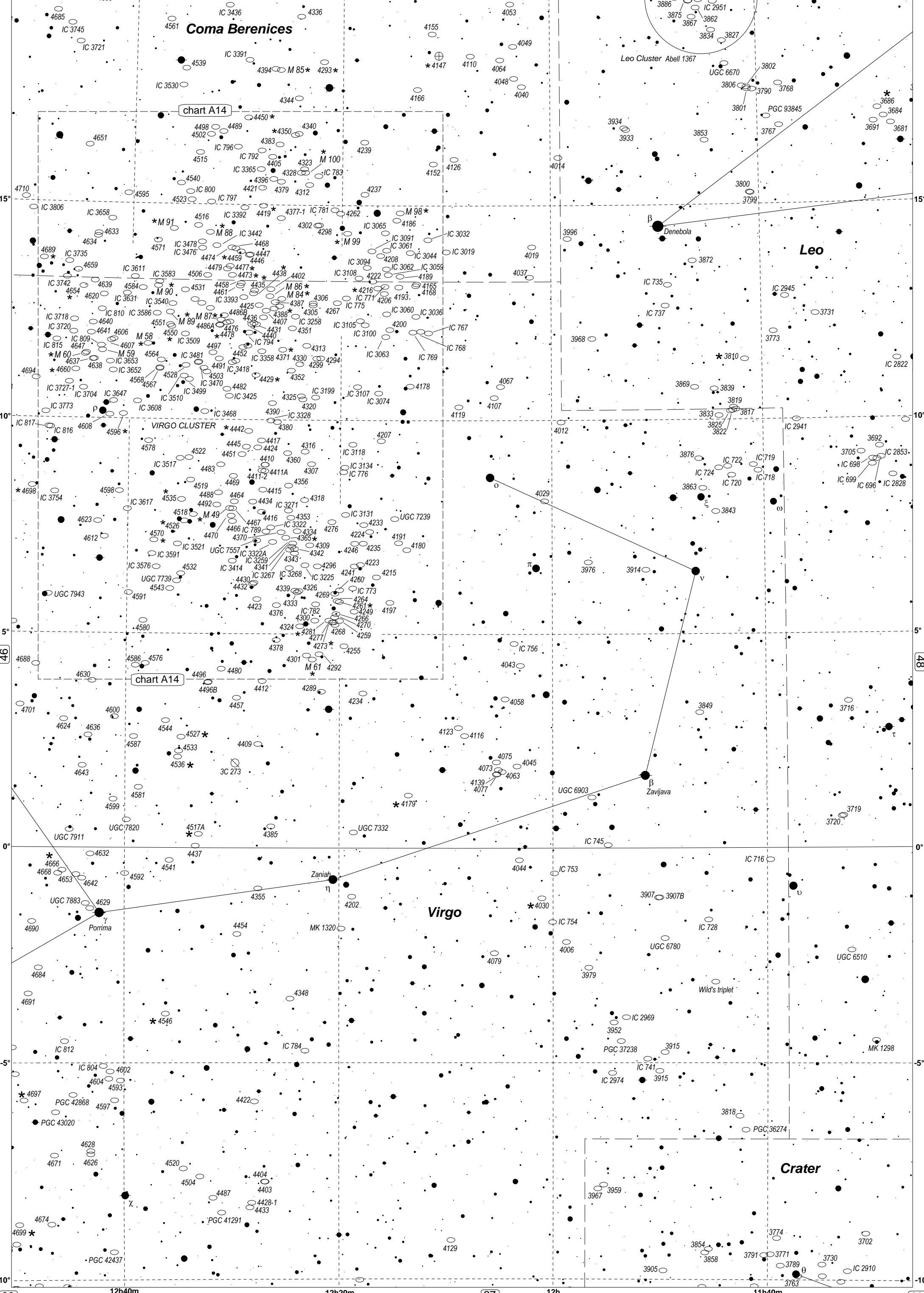
-5°

-5°

-10°

-10°





Coma Berenices

Leo Cluster Abell 1367

Leo

Virgo

Crater

chart A14

chart A14

27

28

29

46

48

66

67

68

15°

15°

10°

10°

5°

5°

0°

0°

-5°

-5°

-10°

-10°

12h40m

12h20m

12h

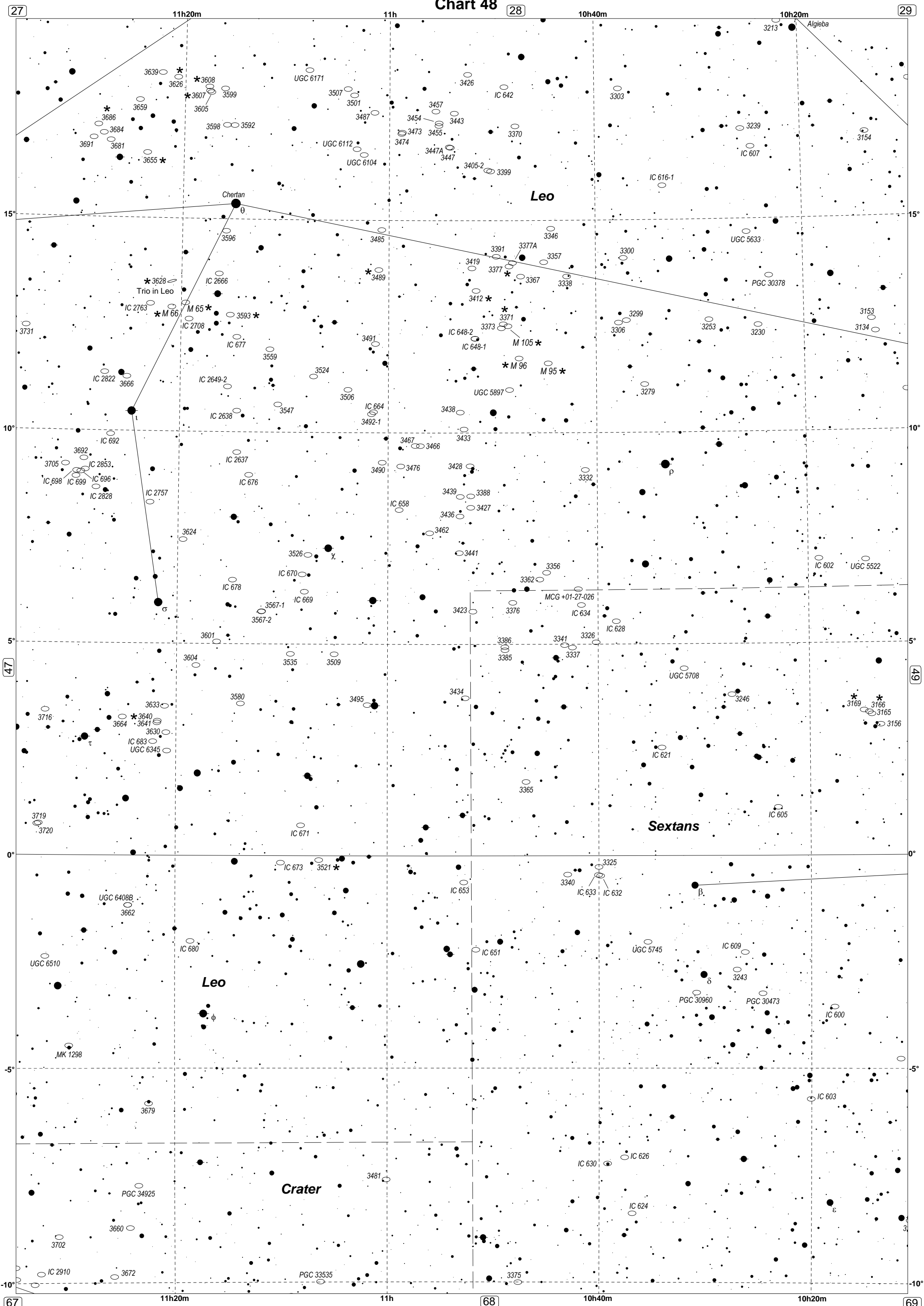
11h40m

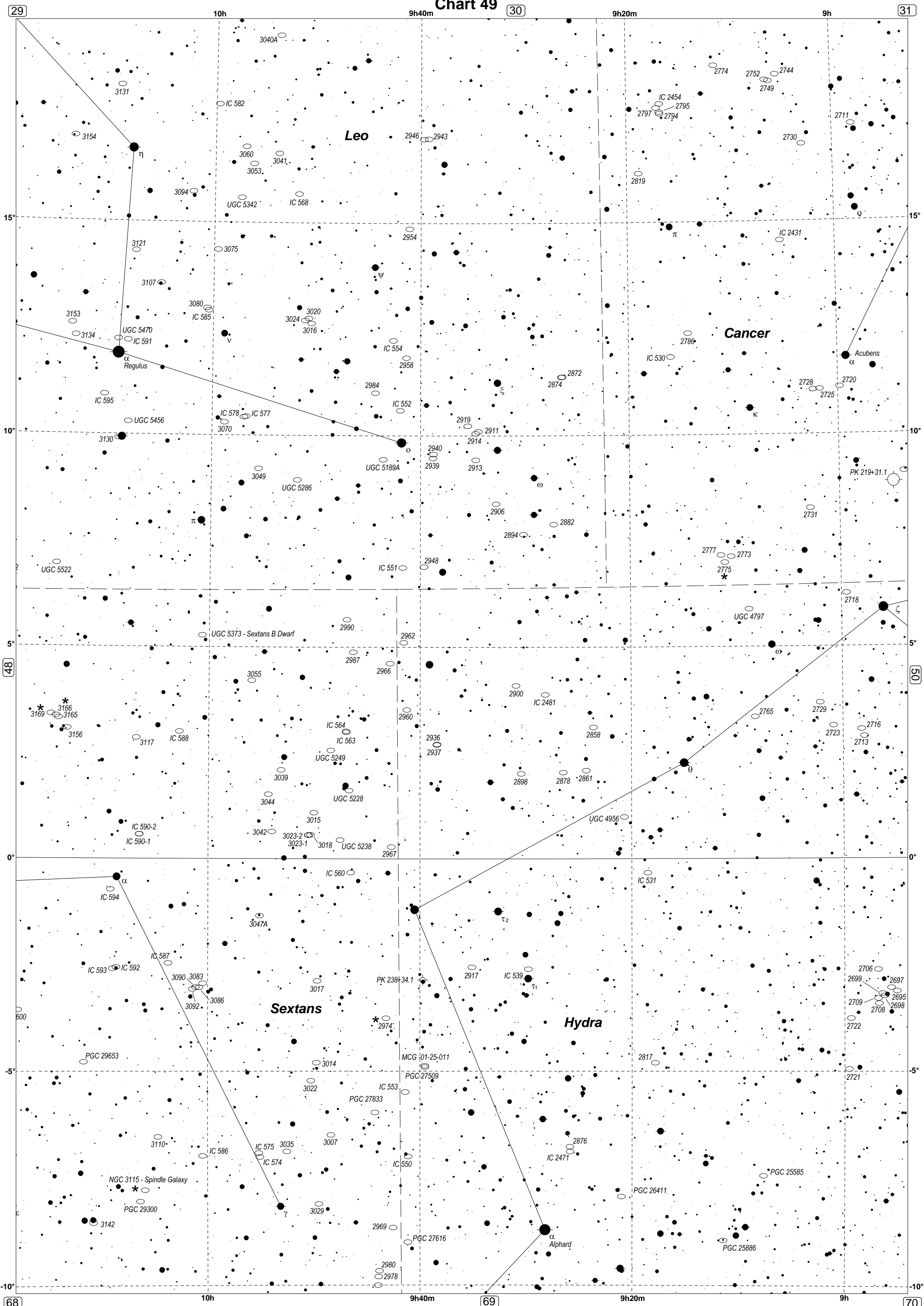
12h40m

12h20m

12h

11h40m





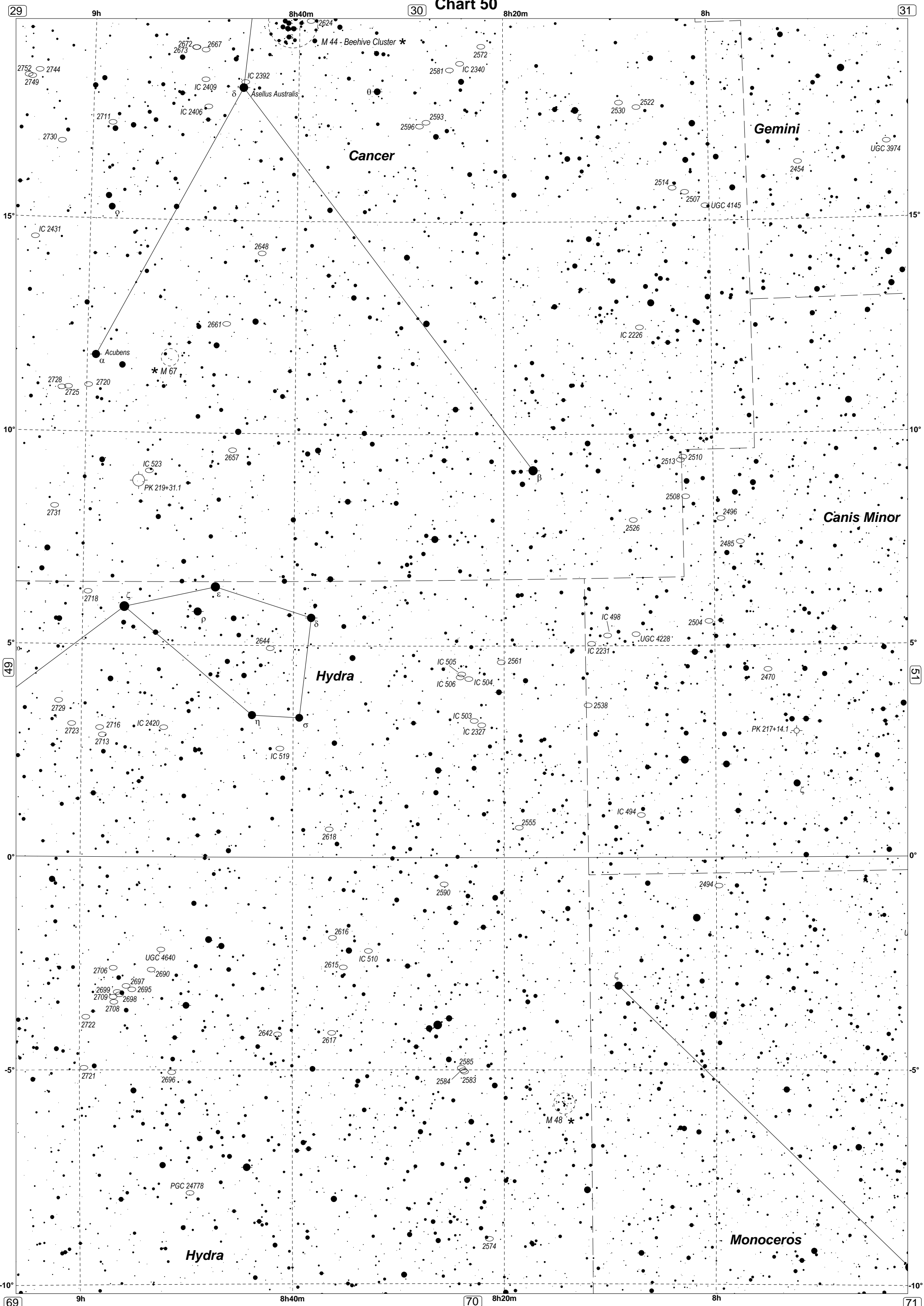


Chart 50

Cancer

Gemini

Canis Minor

Hydra

Monoceros

M 44 - Beehive Cluster *

M 48 *

M 67 *

29

30

31

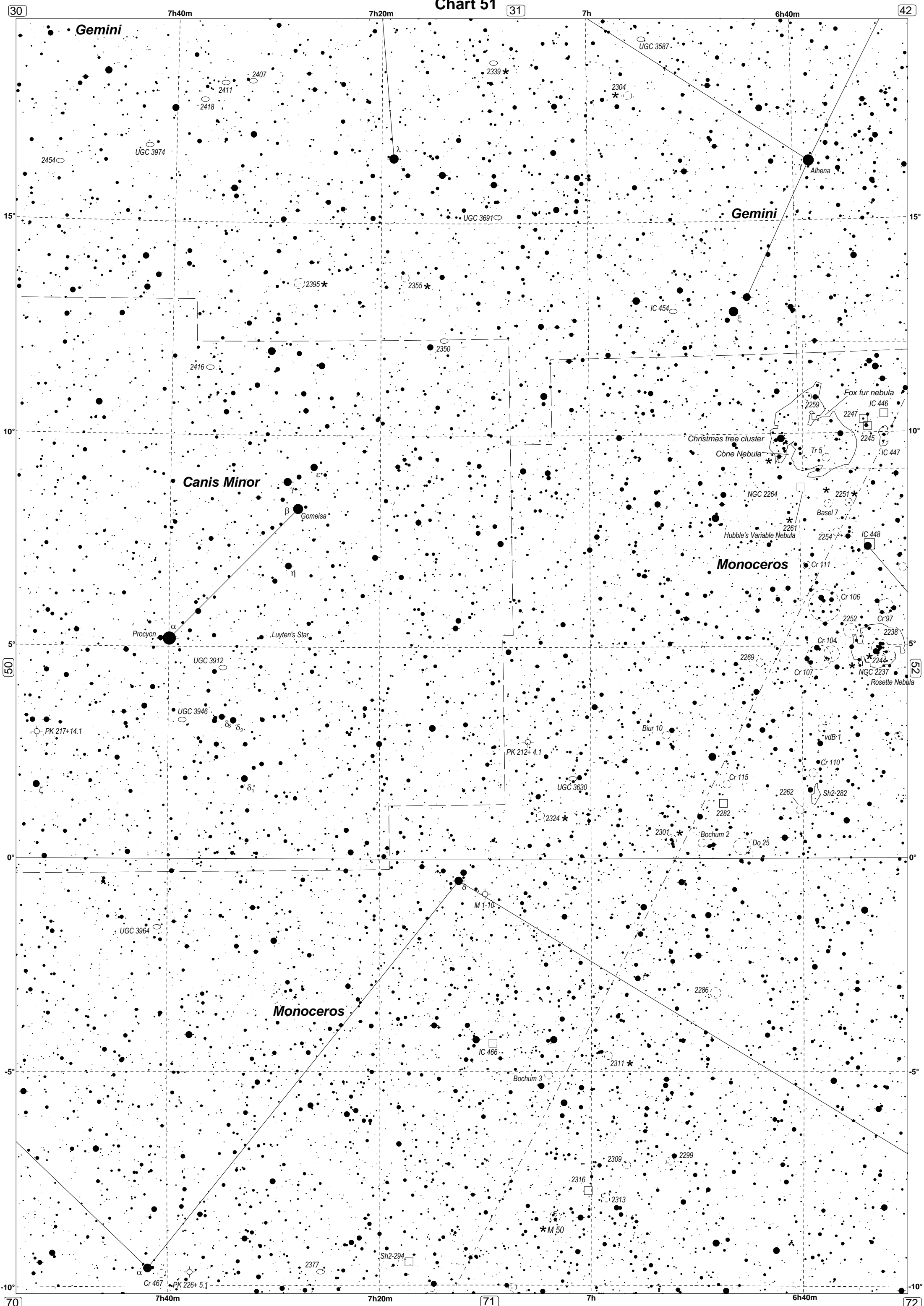
49

51

69

70

71



Gemini

Gemini

Canis Minor

Monoceros

Monoceros

30

31

42

50

52

70

71

72

7h40m

7h20m

7h

6h40m

7h40m

7h20m

7h

6h40m

Gemini

Gemini

Canis Minor

Monoceros

Monoceros

UGC 3974

UGC 3912

UGC 3946

UGC 3964

2339 *

UGC 3691

2350

PK 212+ 4.1

UGC 3630

M 1-10

IC 466

Bochum 3

*M 50

UGC 3587

2304 *

IC 454

Blur 10

Bochum 2

2286

2309

2316

2313

Alhena

Fox fur nebula

IC 446

IC 447

NGC 2264

Hubble's Variable Nebula

2254

IC 448

Cr 111

Cr 106

2252

Cr 97

2238

NGC 2237

Rosette Nebula

vdB 1

Cr 110

Sh2-282

2262

Do 25

2282

2282

2262

2282

2282

2282

2282

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2282

2282

Procyon

Gomeisa

Luyten's Star

PK 217+14.1

δ₈

δ₂

δ₁

Cr 467

PK 226+ 5.1

2377

Sh2-294

2309

2316

2313

2259

2247

2245

2261

Basel 7

2251 *

2254

Cr 107

Cr 104

2244

NGC 2237

2244

2238

2244

2244

2244

2244

2244

2244

2244

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2244

2244

2244

2244

2244

2244

2244

2244

2244

2244

2244

2244

2244

2244

15°

15°

10°

10°

5°

5°

0°

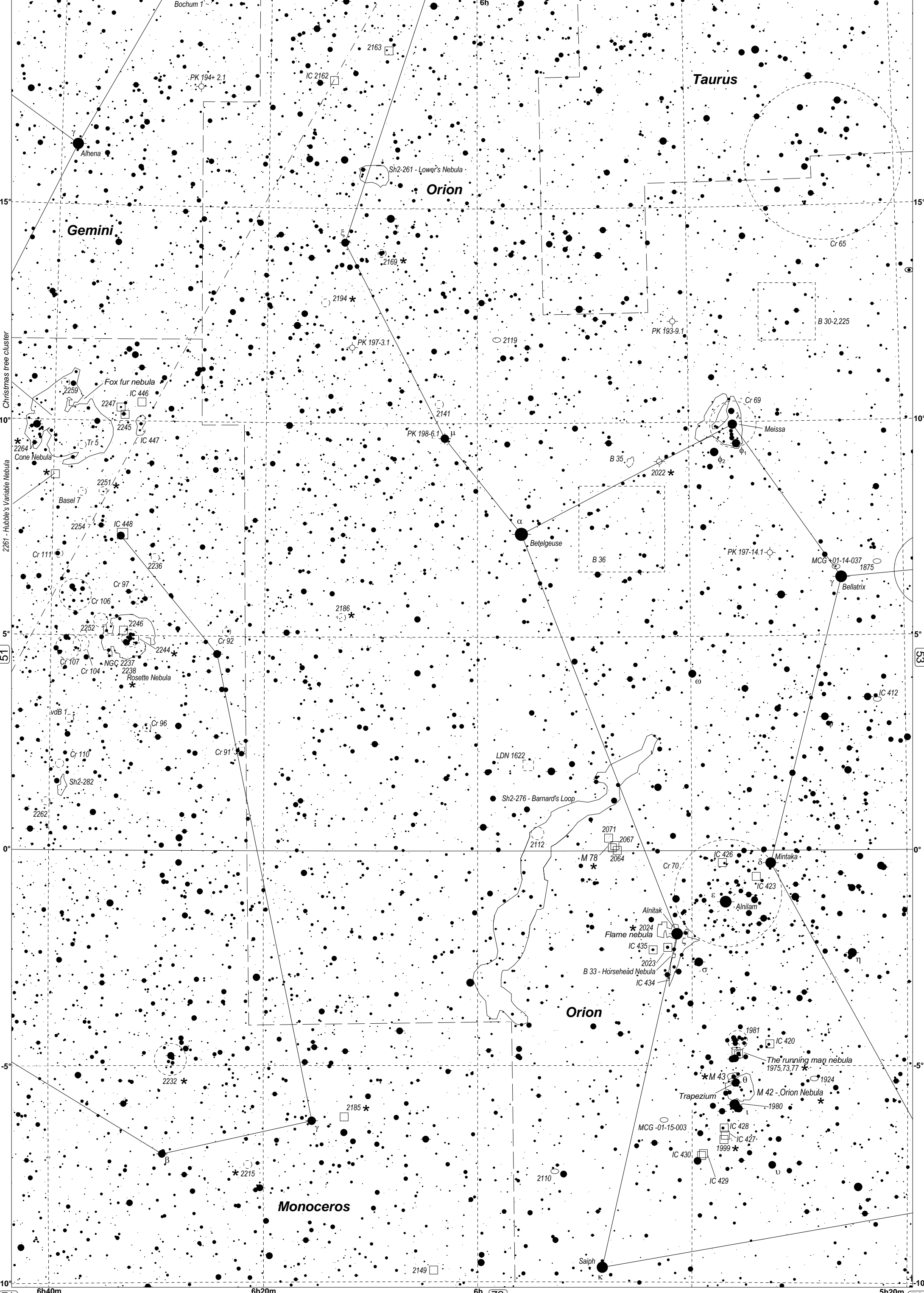
0°

-5°

-5°

-10°

-10°



Christmas tree cluster
2261 - Hubble's Variable Nebula

Gemini

Orion

Taurus

Monoceros

Orion

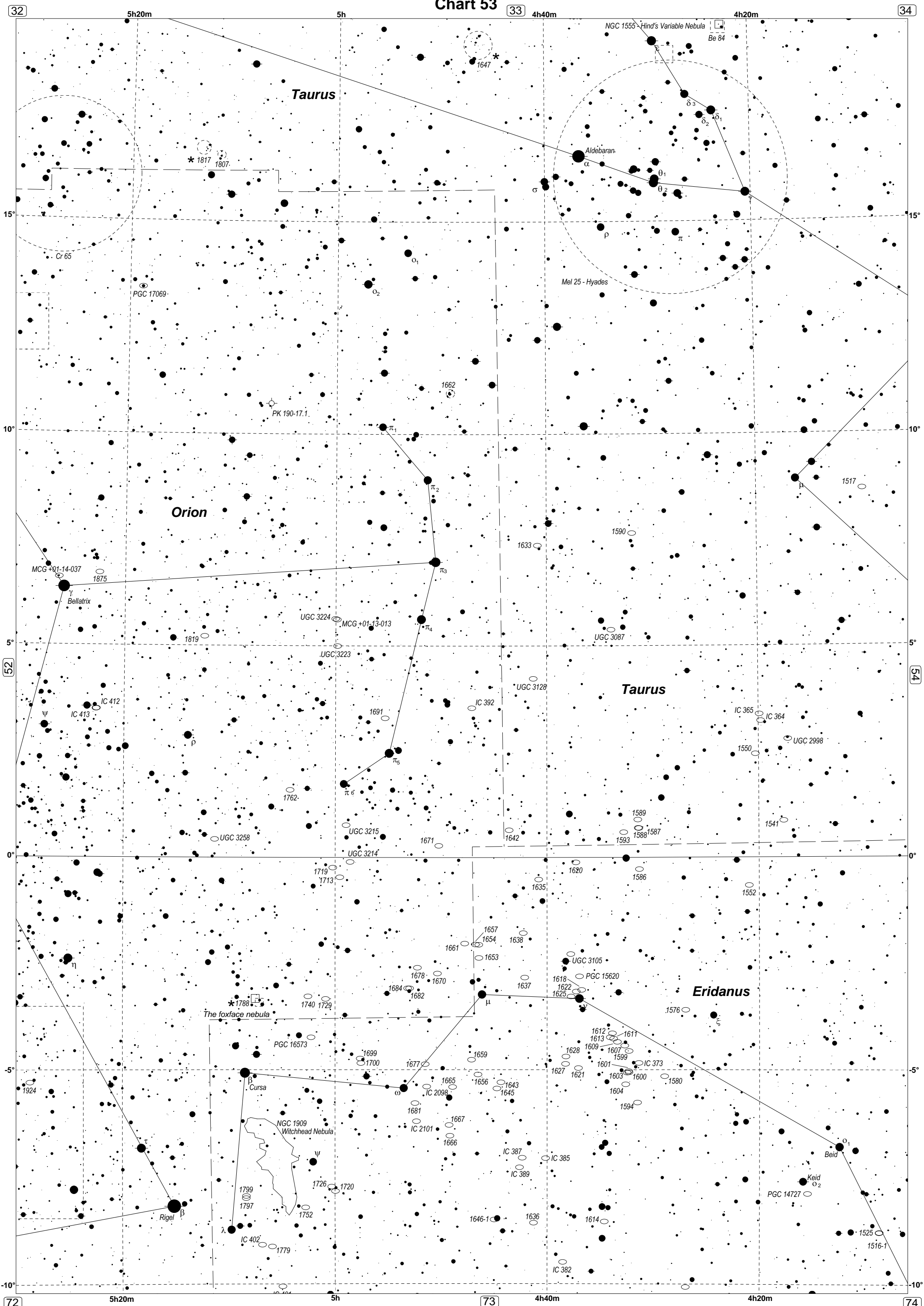


Chart 53

32

33

34

52

54

72

73

74

Taurus

Orion

Taurus

Eridanus

NGC 1555 - Hind's Variable Nebula

Be 84

Aldebaran

Mel 25 - Hyades

PGC 17069

PK 190-17.1

MCG +01-14-037

UGC 3224 MCG +01-13-013

UGC 3087

IC 413 IC 412

UGC 3223

UGC 3128

1819

1691

IC 392

Taurus

IC 365 IC 364 UGC 2998

UGC 3258

UGC 3215

1642

1589 1588 1587

1541

1719 1713

1657 1654 1638

UGC 3105 PGC 15620

1552

The foxface nebula

1740 1729

1684 1682

1637

1612 1613 1611

1576

1924

PGC 16573

1699 1700

1659

1628 1609 1607 1599

Bursa

1677

1665 1656

1643 1645

1601 1603 1600 1580

NGC 1909 Witchhead Nebula

1726 1720

1681 IC 2098

1667

IC 373

Rigel

1799 1797

1752

1666

IC 387 IC 385 IC 389

1594

IC 402 1779

1646-1 1636

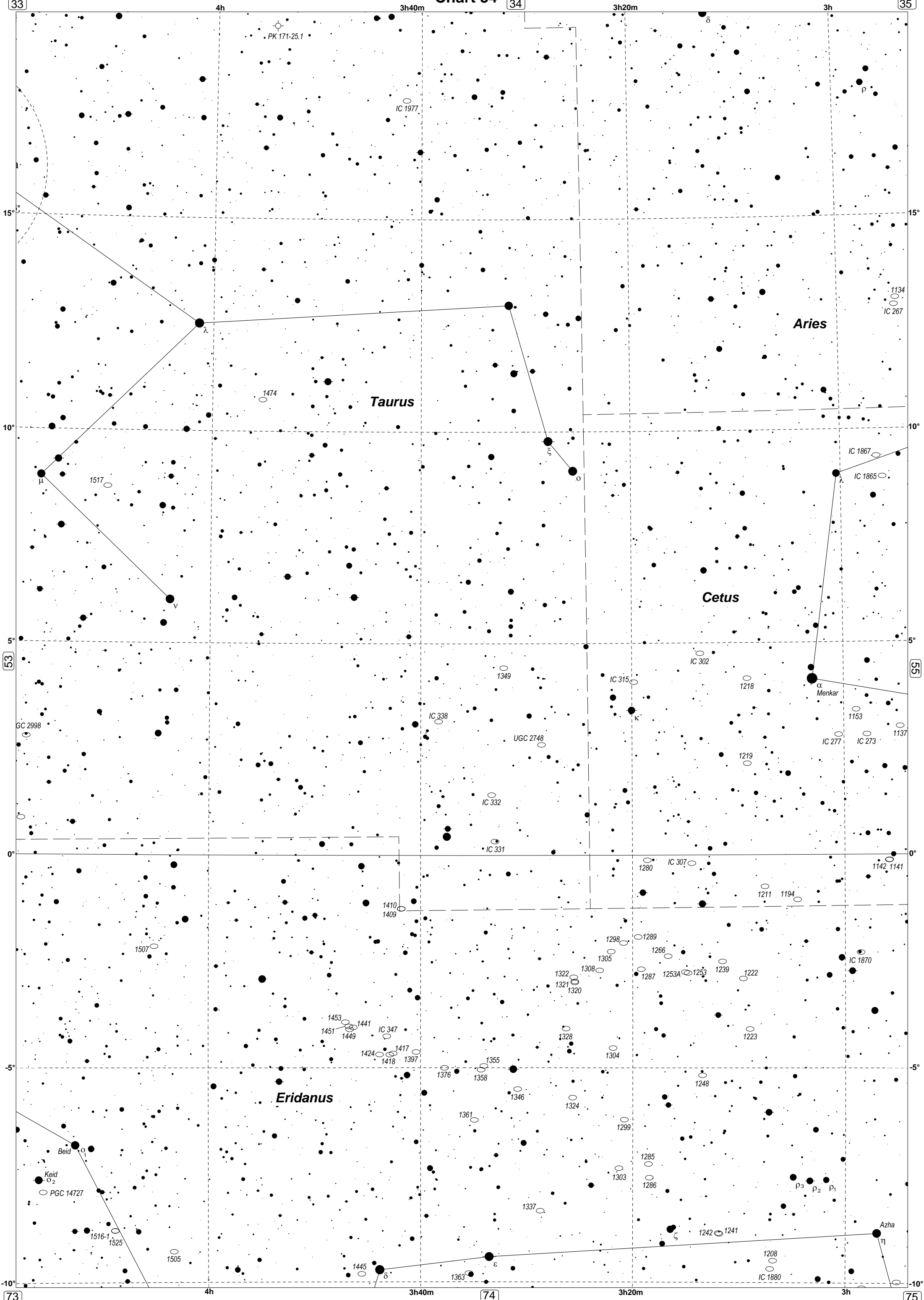
1614

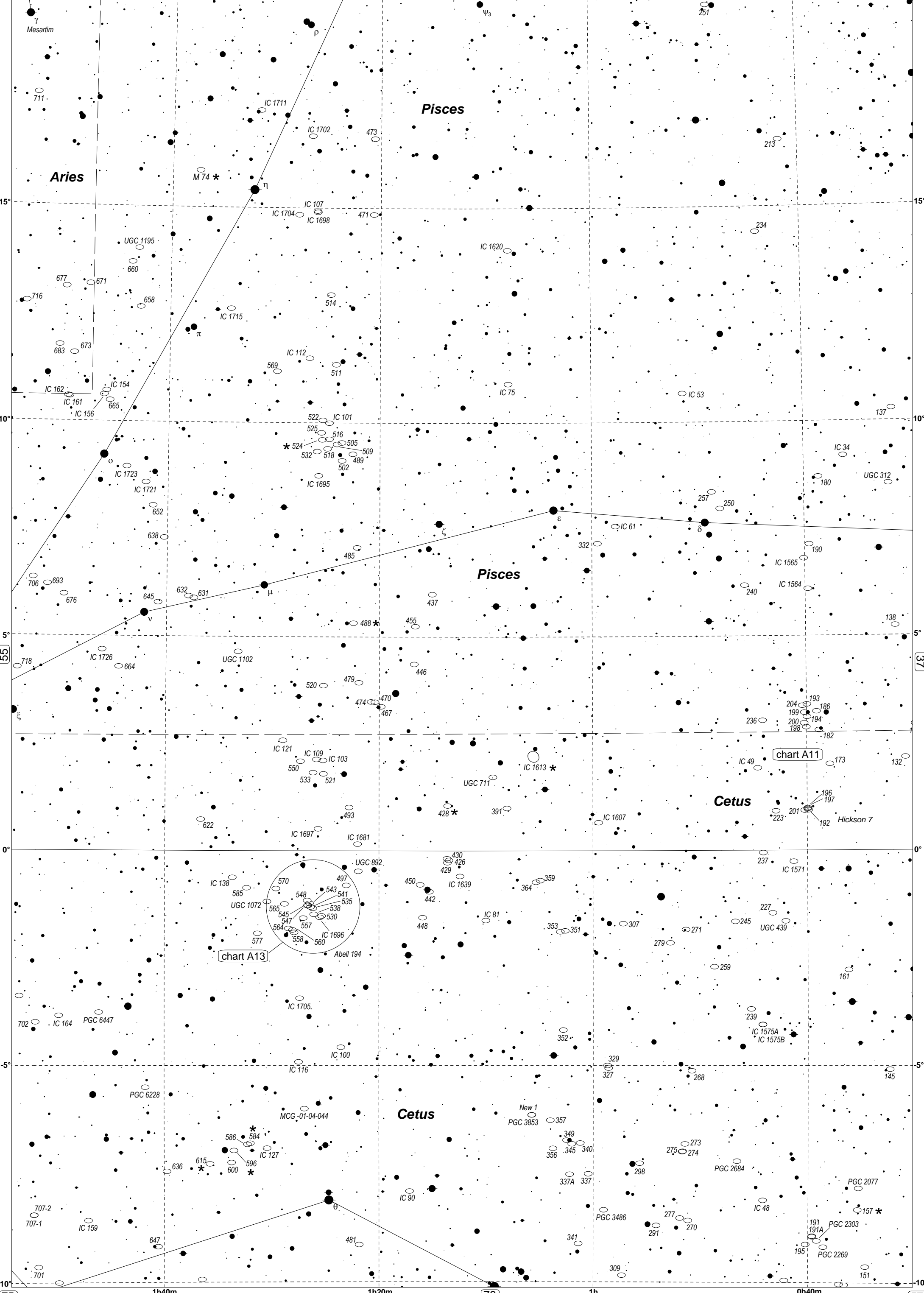
IC 382

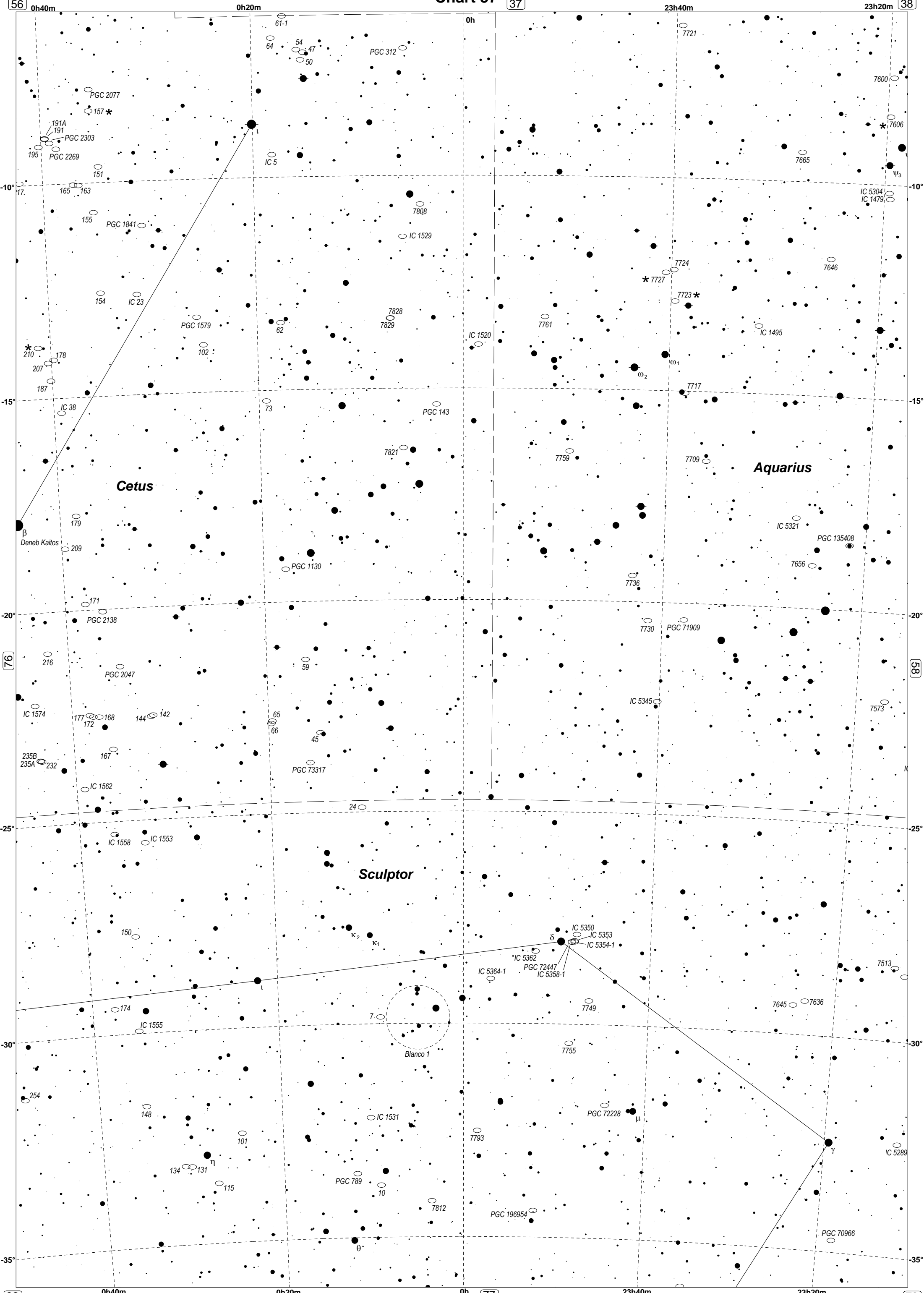
1614

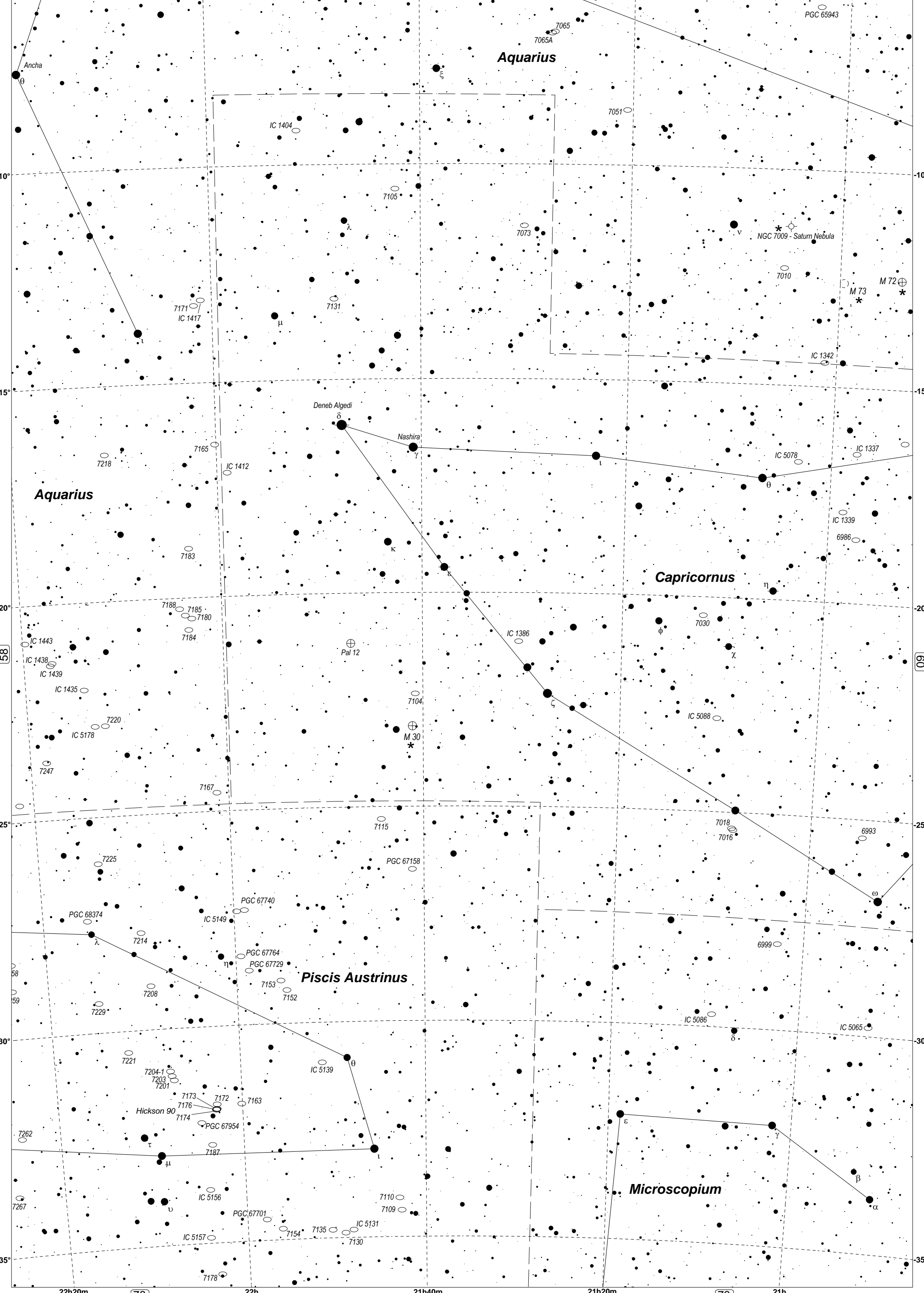
PGC 14727

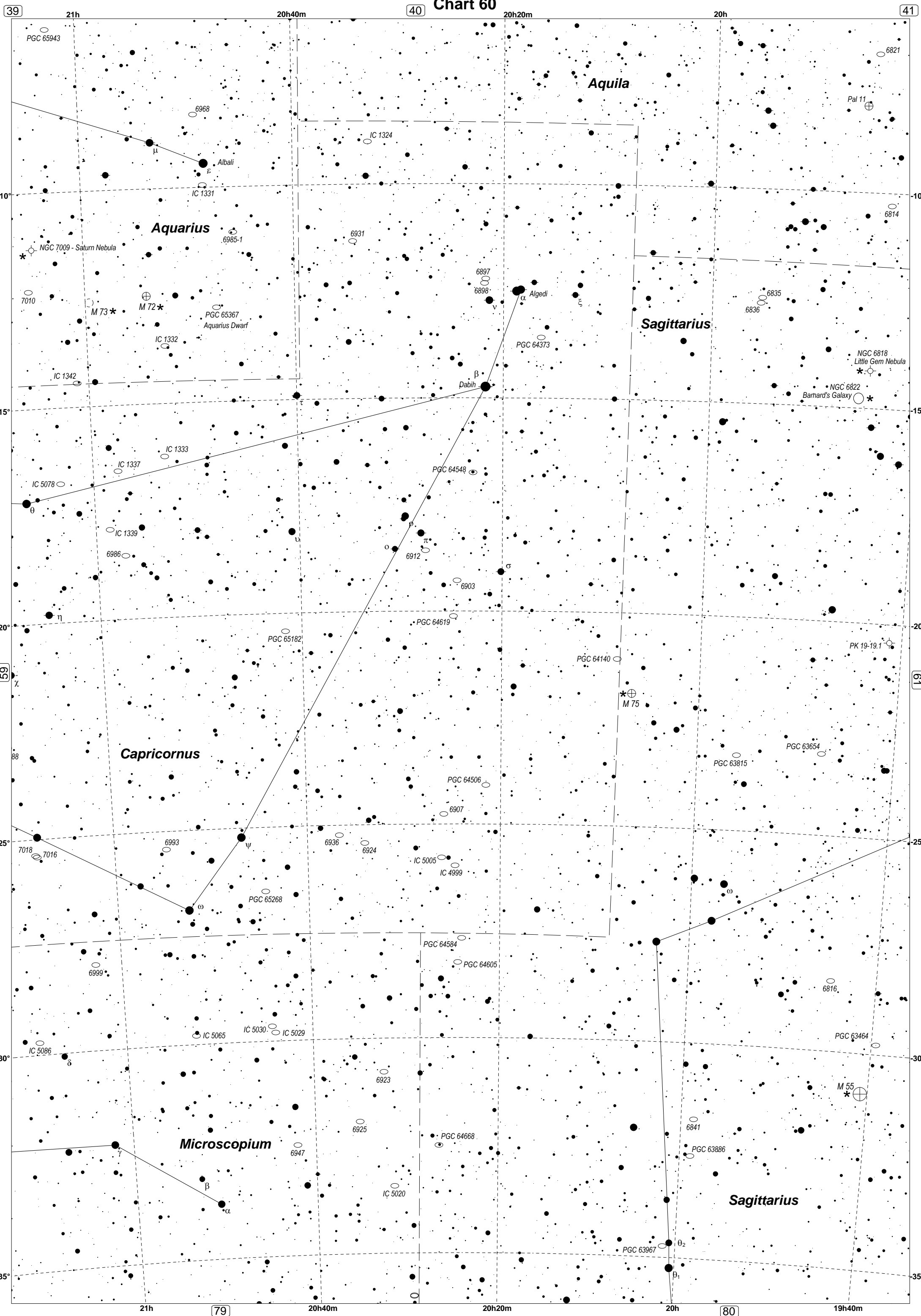
1525 1516-1

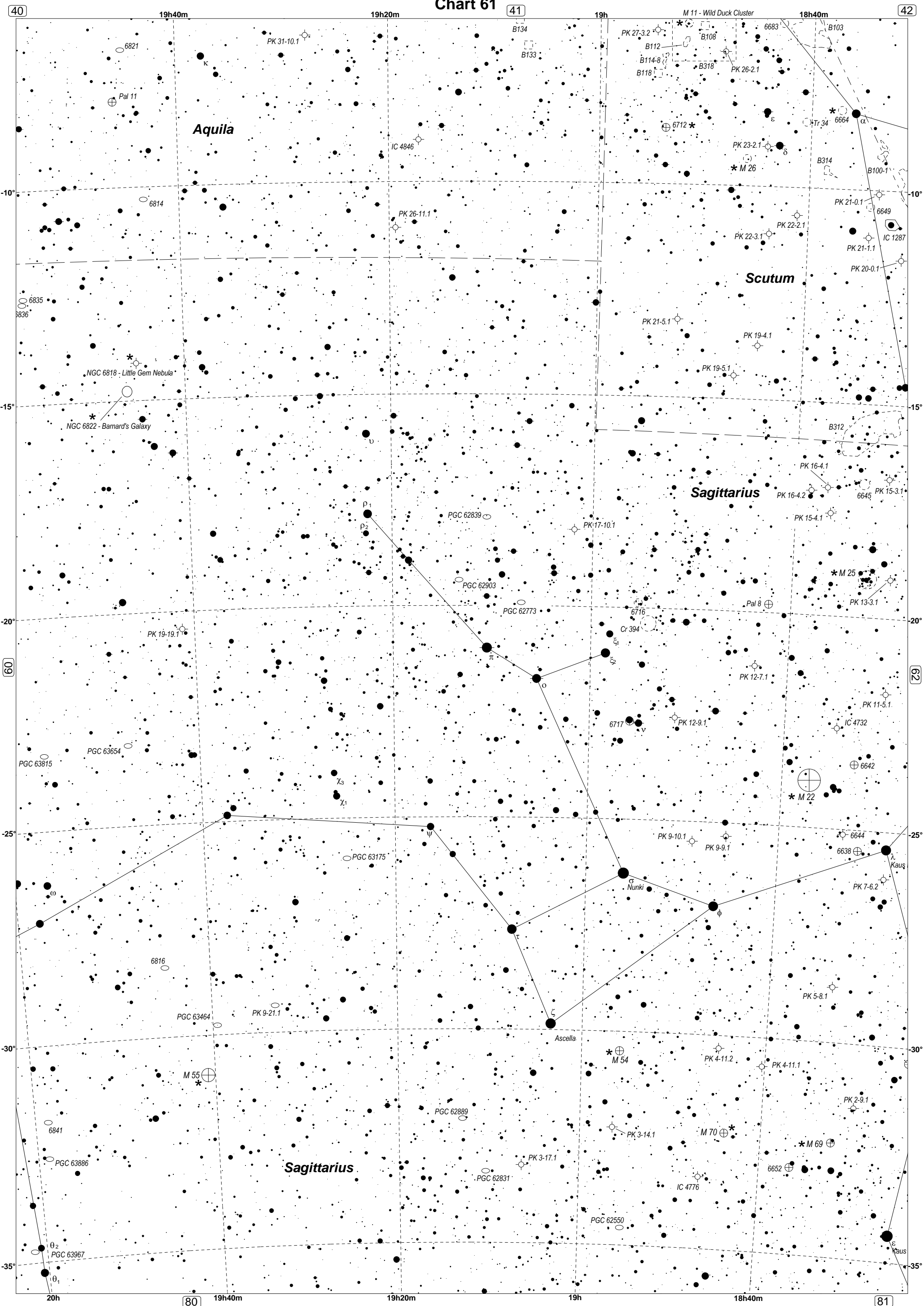


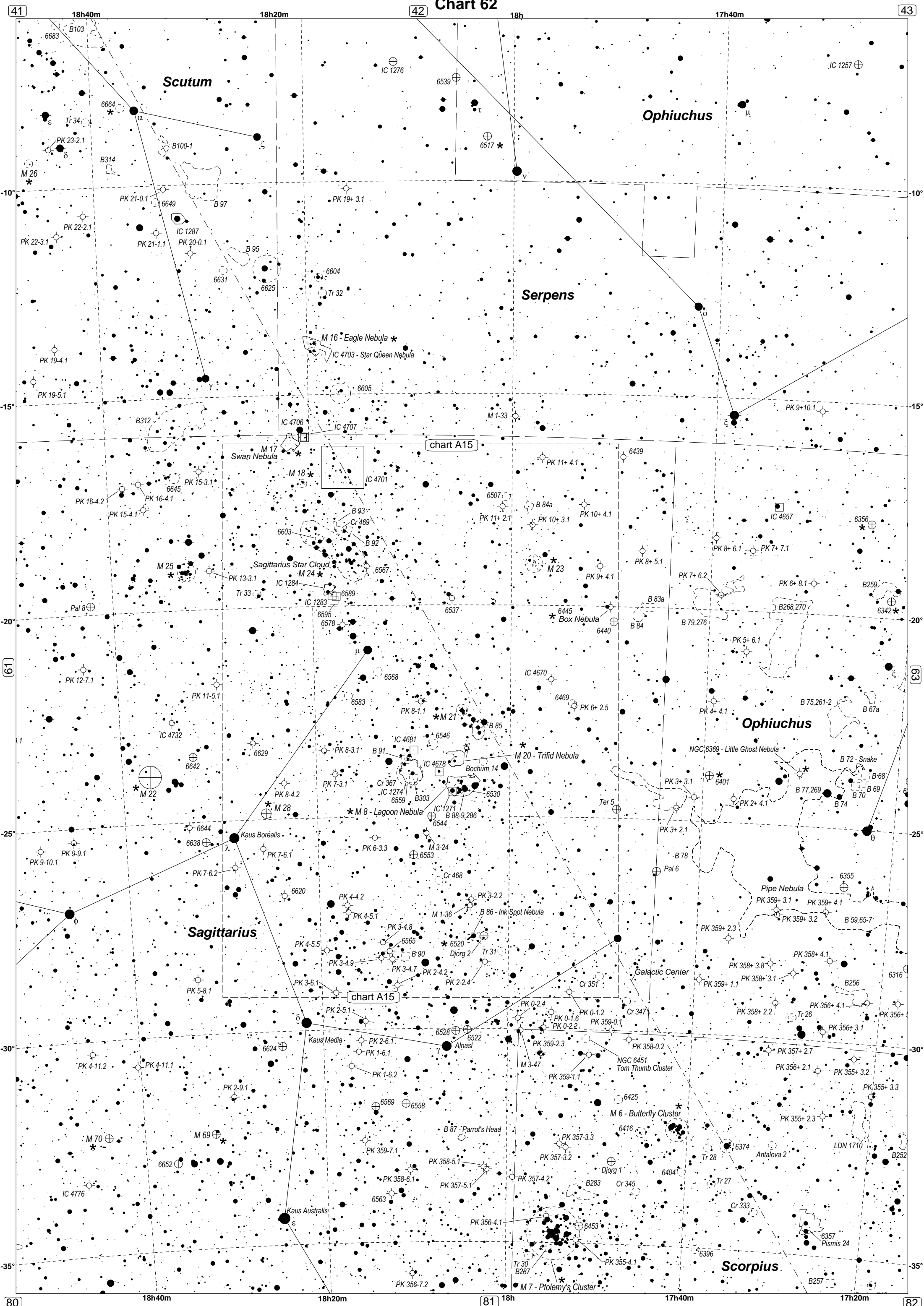


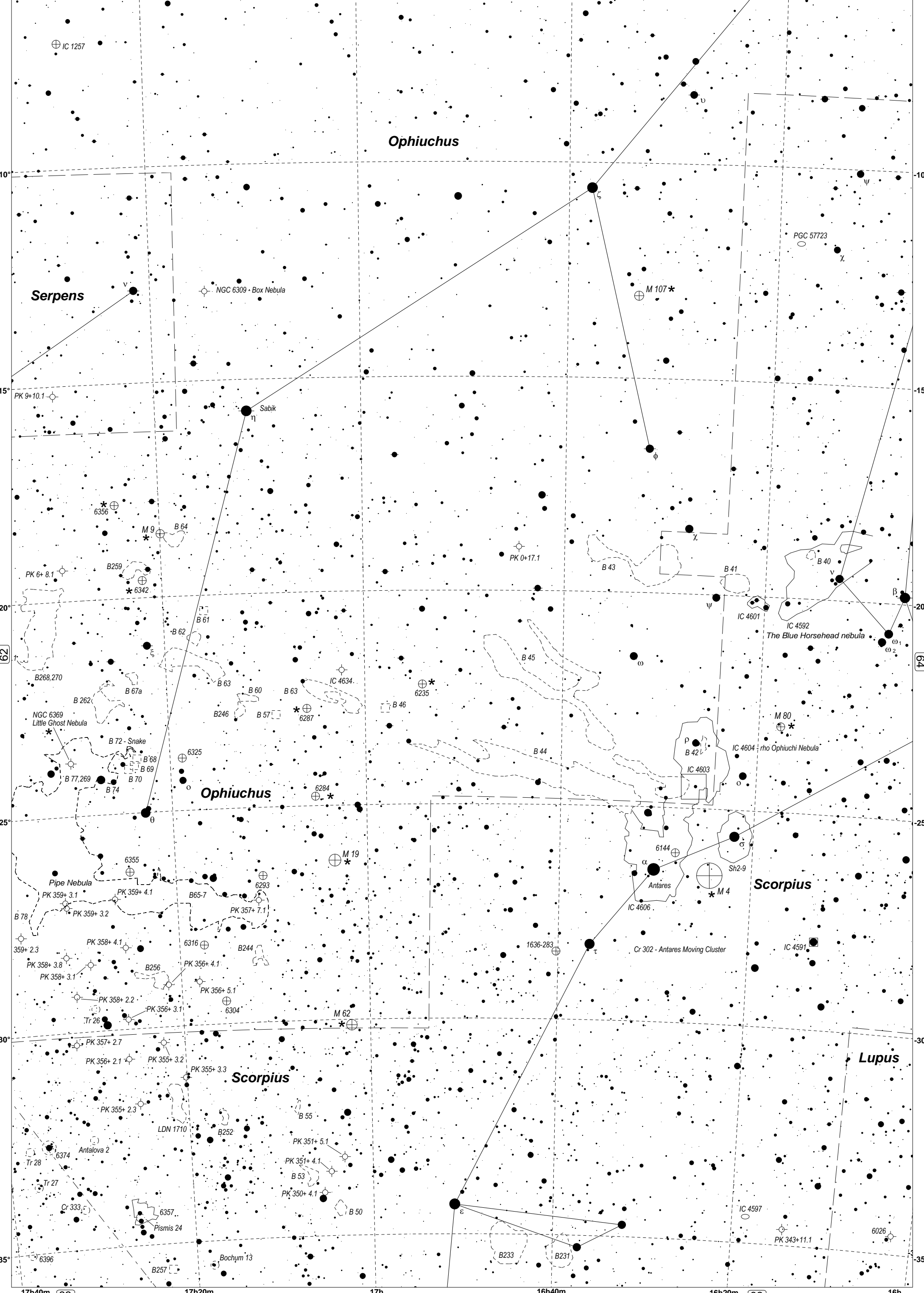












Ophiuchus

Serpens

Ophiuchus

Scorpius

Scorpius

Lupus

NGC 6309 - Box Nebula

NGC 6369 Little Ghost Nebula

The Blue Horsehead nebula

M 107

Sabik

Antares

rho Ophiuchi Nebula

Pipe Nebula

Cr 302 - Antares Moving Cluster

IC 4591

Antalova 2

Pismis 24

Bochum 13

PK 343+11.1

6026

42

43

44

62

64

17h40m

83

17h20m

17h

16h40m

82

16h

35°

35°

30°

25°

20°

15°

10°

35°

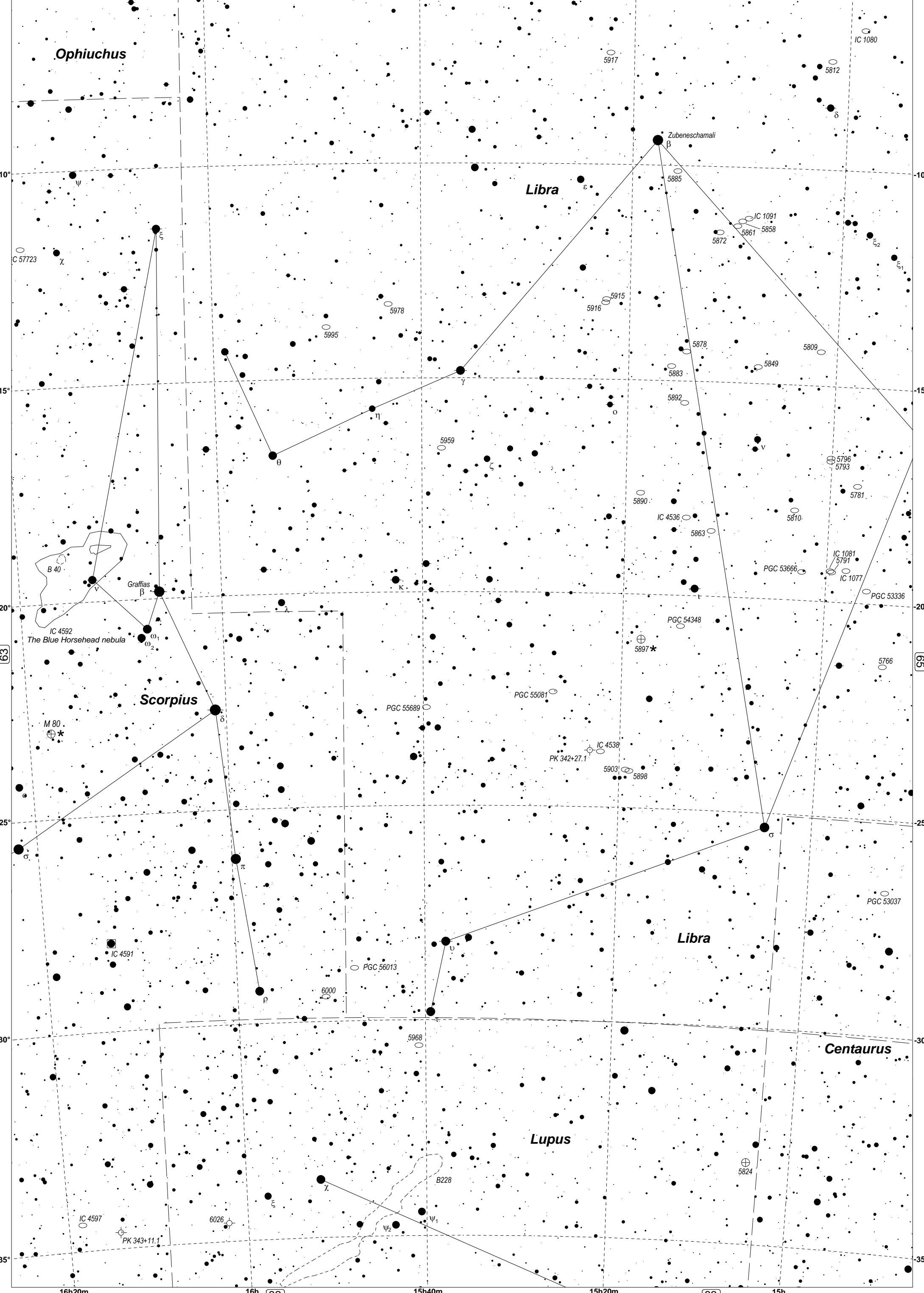
30°

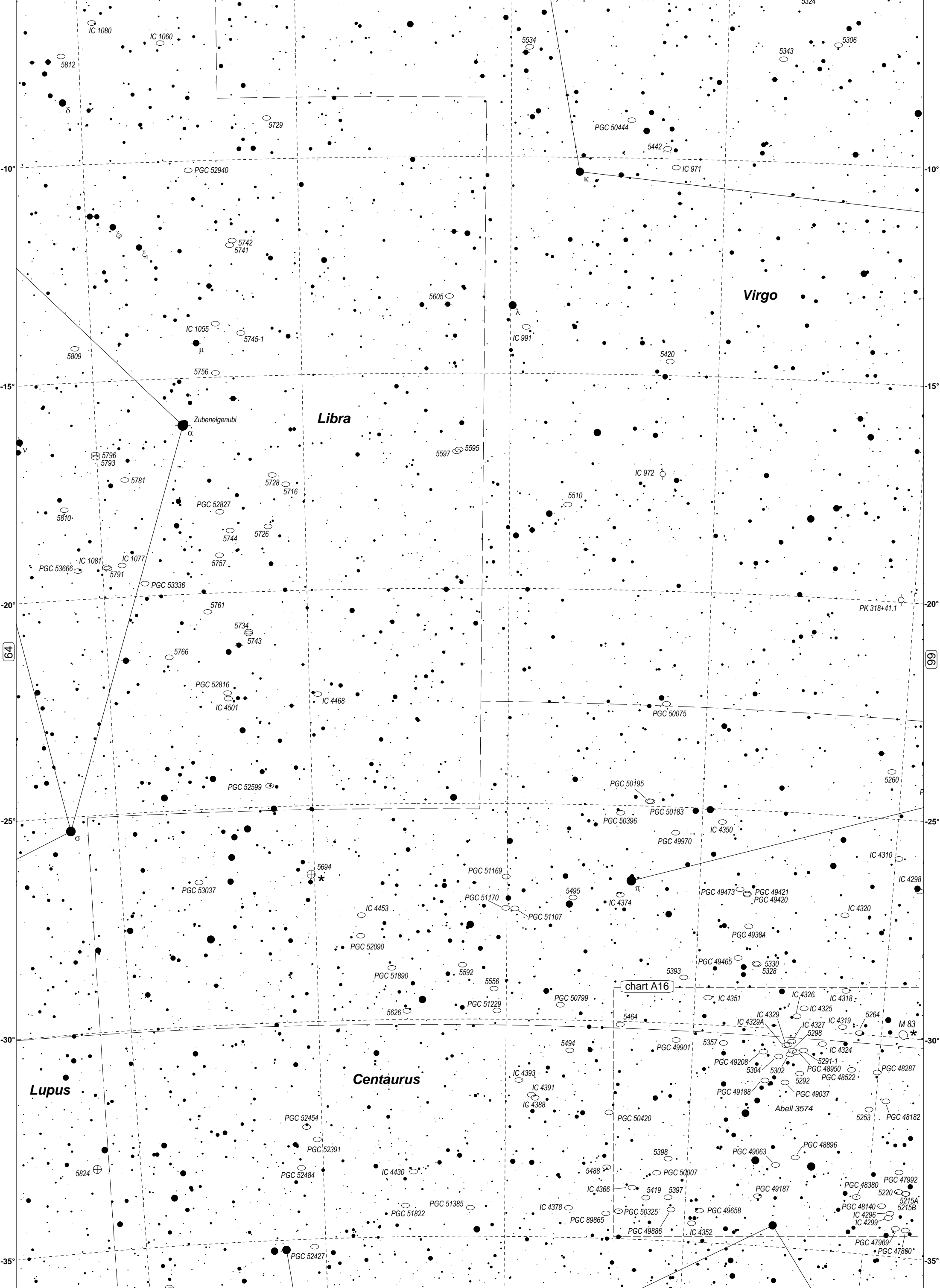
25°

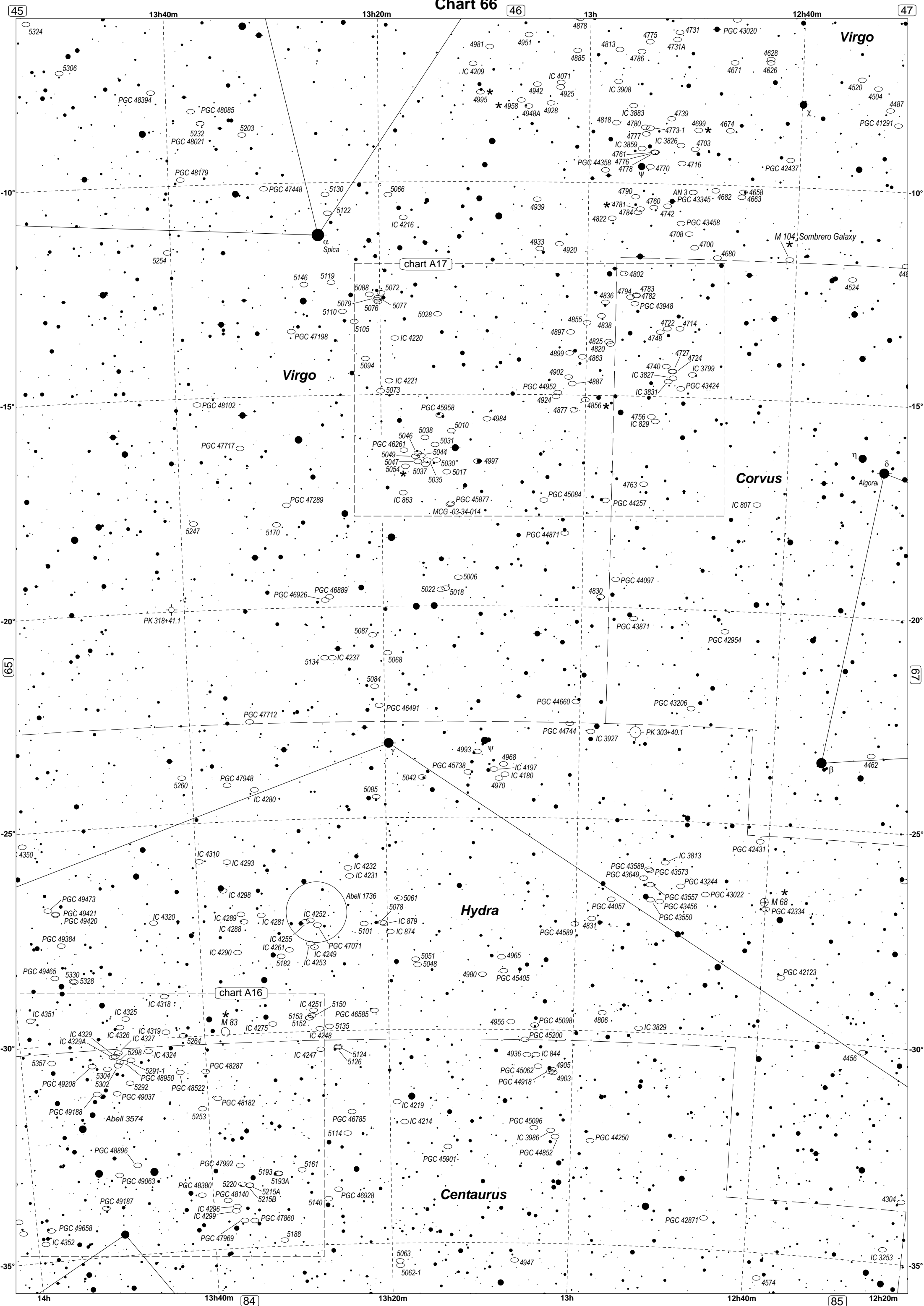
20°

15°

10°







45

Chart 66

46

47

Virgo

Virgo

Corvus

Hydra

Centaurus

M 104 Sombrero Galaxy

Argol

Abell 1736

M 68

chart A16

chart A17

-10°

-10°

-15°

-15°

-20°

-20°

-25°

-25°

-30°

-30°

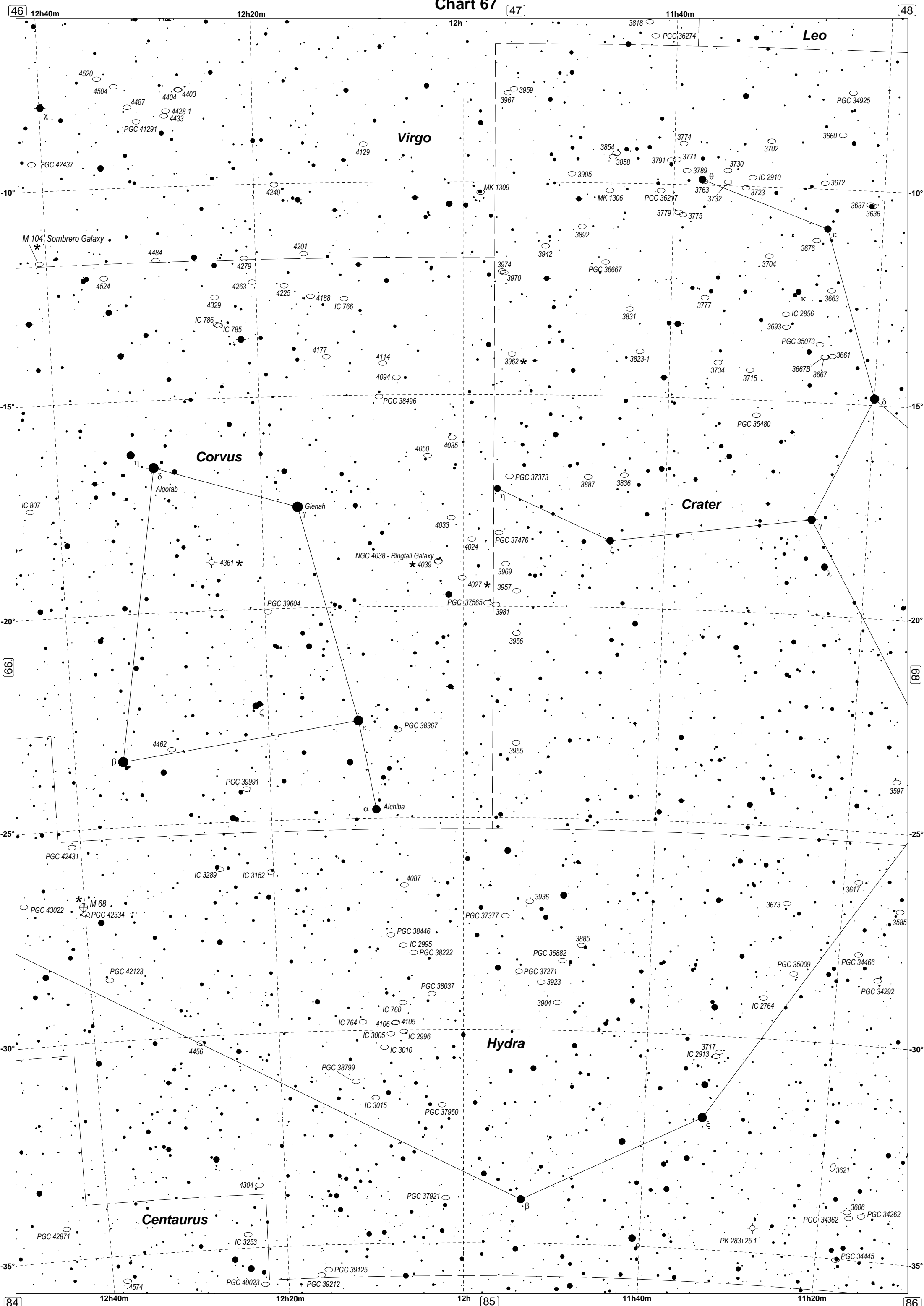
-35°

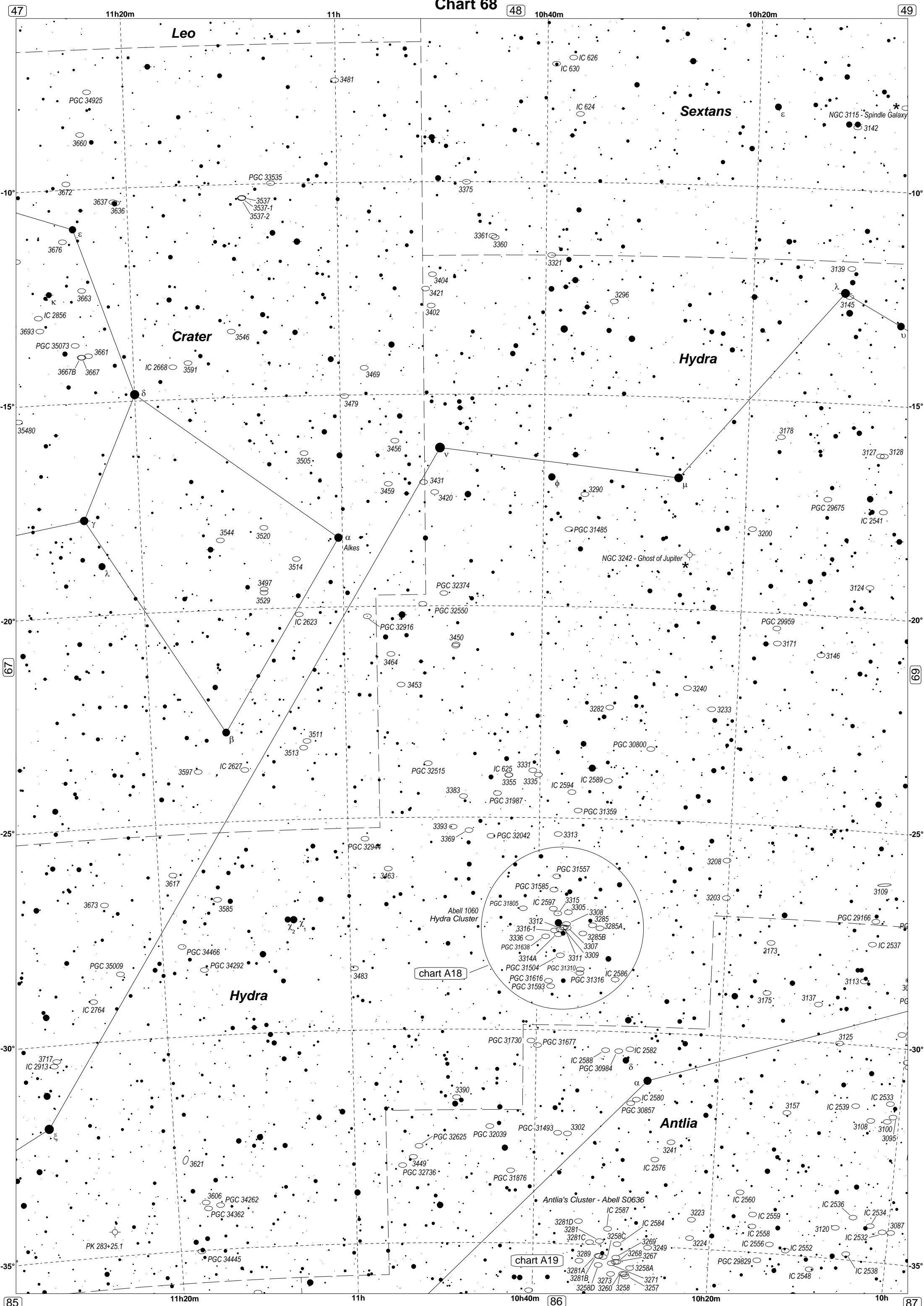
-35°

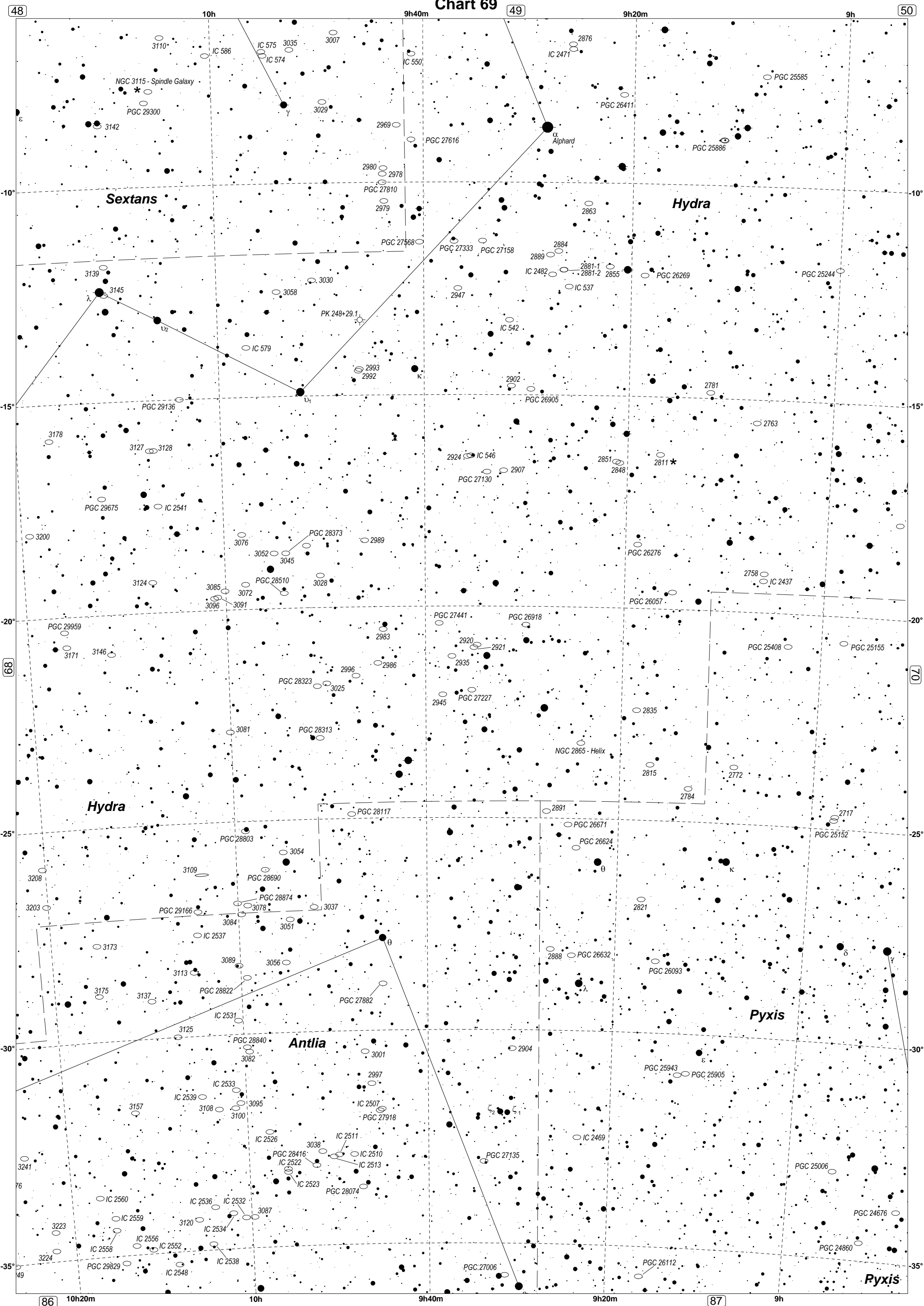
14h 13h40m 84

13h20m 13h 85

12h40m 12h20m







Sextans

Hydra

Hydra

Antlia

Pyxis

Pyxis

NGC 3115 - Spindle Galaxy

PGC 29300

IC 575
IC 574

IC 550

IC 2471

PGC 25585

PGC 26411

PGC 25886

PGC 27616

α Alphard

2980

2978

PGC 27810

2979

PGC 27568

PGC 27333

PGC 27158

2889

2863

2884

IC 2482

2881-1

2881-2

2855

IC 537

PGC 26269

PGC 25244

IC 579

PK 248+29.1

2993

2992

K

2902

PGC 26905

2781

3127

3128

2924

IC 546

PGC 27130

2907

2851

2848

2811

*

PGC 29675

IC 2541

3076

3052

3045

2989

PGC 28373

3085

3072

3096

3091

3081

3081

PGC 28323

3025

PGC 28313

2983

2986

PGC 27441

PGC 26918

2920

2921

2935

2945

PGC 27227

PGC 26276

PGC 26057

2758

IC 2437

PGC 25408

PGC 25155

Hydra

NGC 2865 - Helix

PGC 28117

2891

PGC 26671

PGC 26624

2821

K

3208

3203

PGC 28803

3109

PGC 28690

PGC 28874

3078

3084

IC 2537

3089

3056

3173

3175

3137

3125

3157

IC 2539

3108

3100

3241

IC 2560

IC 2559

IC 2556

IC 2552

PGC 29829

IC 2548

PGC 28840

3082

IC 2533

3095

3100

IC 2526

PGC 28416

IC 2522

IC 2523

IC 2536

IC 2532

3087

IC 2534

IC 2538

Antlia

3001

2997

IC 2507

PGC 27918

IC 2511

PGC 28074

IC 2510

IC 2513

3038

IC 2523

3087

IC 2534

IC 2538

PGC 27135

2888

PGC 26632

PGC 26093

2821

2888

PGC 26632

PGC 26093

2821

PGC 26093

PGC 25943

PGC 25905

PGC 25905

PGC 25905

PGC 25905

PGC 25905

PGC 25905

PGC 25905

PGC 25905

Pyxis

PGC 25152

2717

2717

2717

2717

2717

2717

2717

2717

2717

2717

Pyxis

PGC 25006

PGC 24676

PGC 24860

PGC 24860

PGC 24860

PGC 24860

PGC 24860

PGC 24860

PGC 24860

PGC 24860

PGC 24860

48

49

50

89

70

76

49

86

87

10h20m

10h

9h40m

9h20m

9h

35°

-25°

-20°

-15°

-10°

5

-25°

-20°

-15°

-10°

5

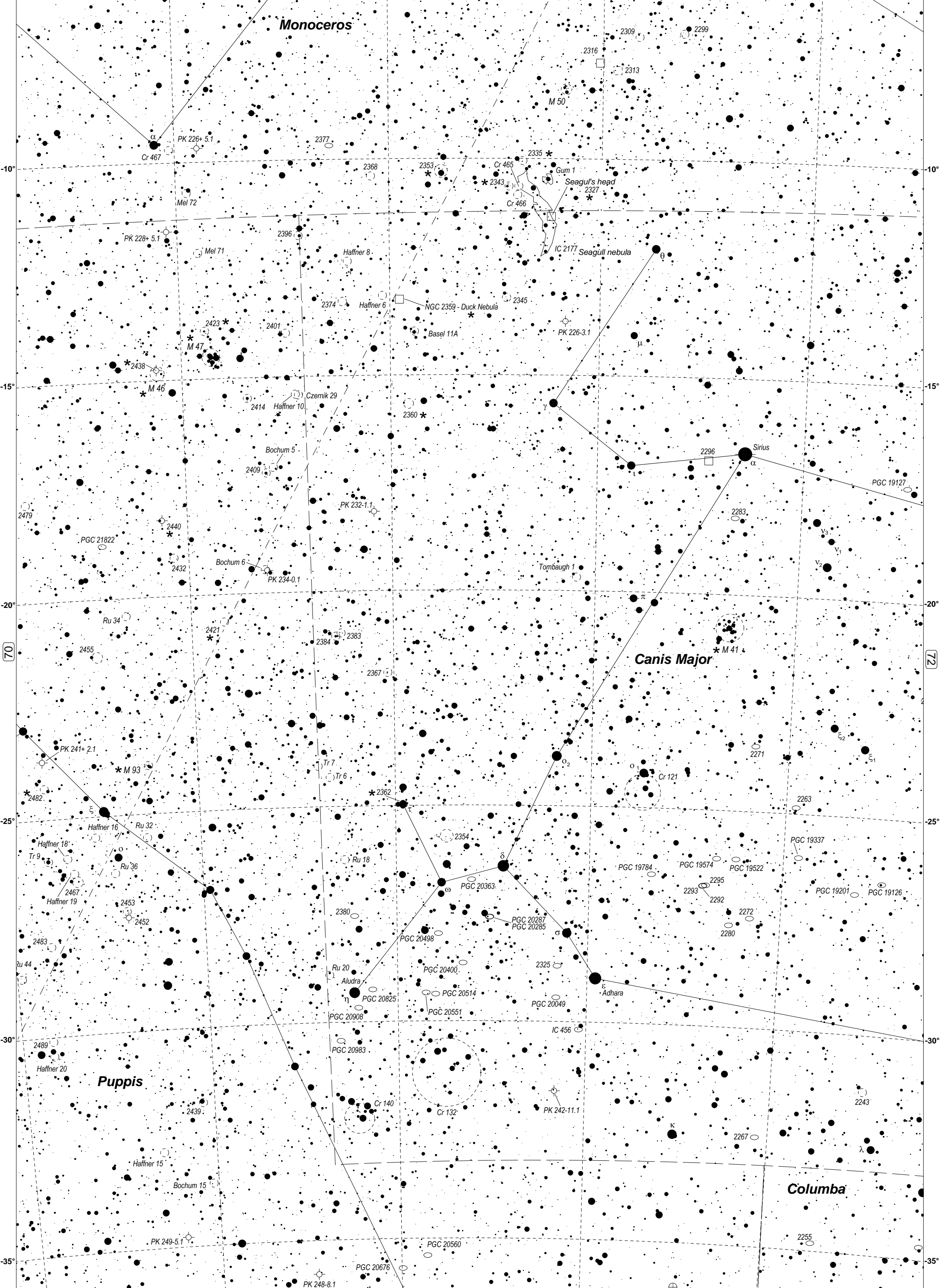
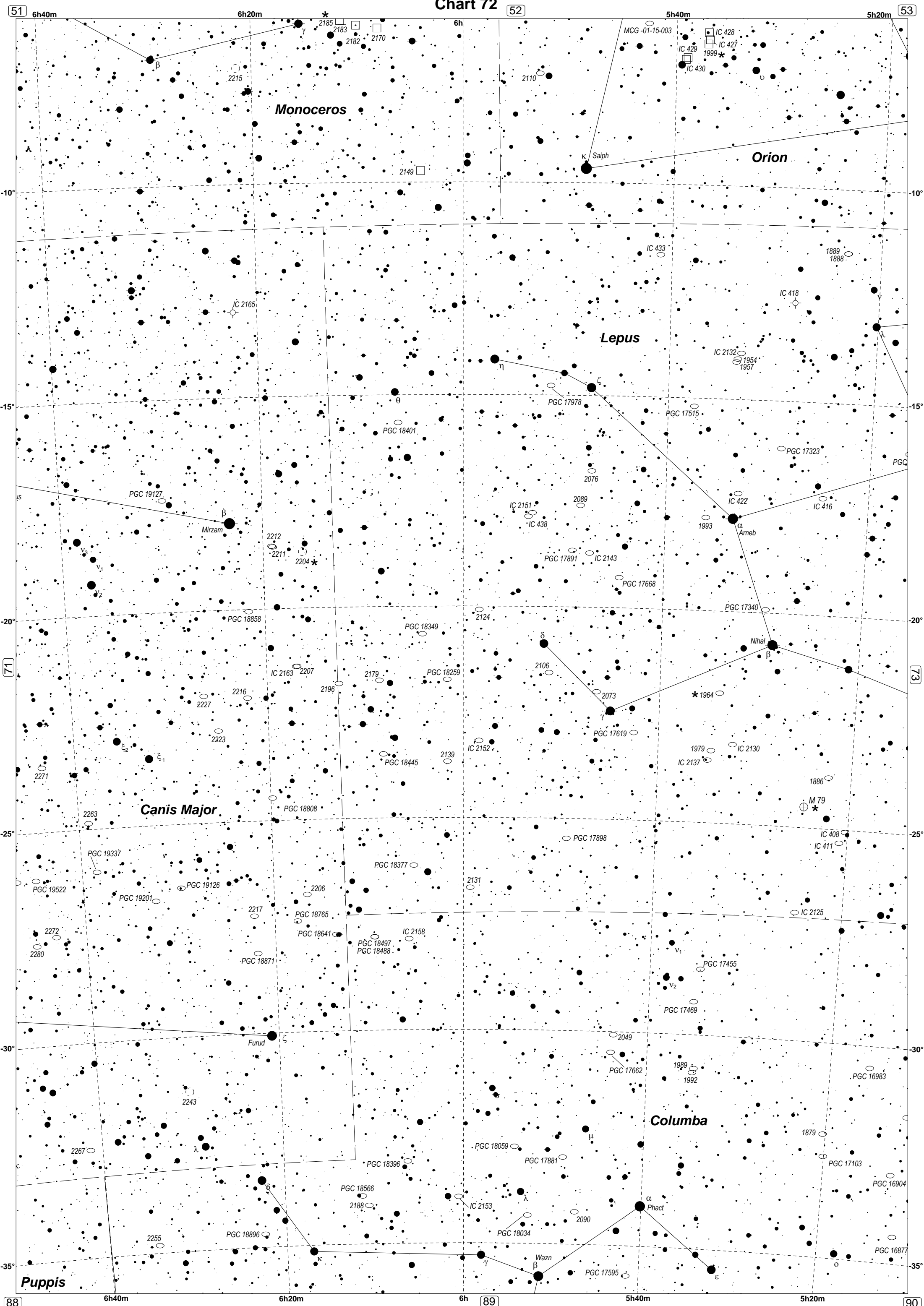
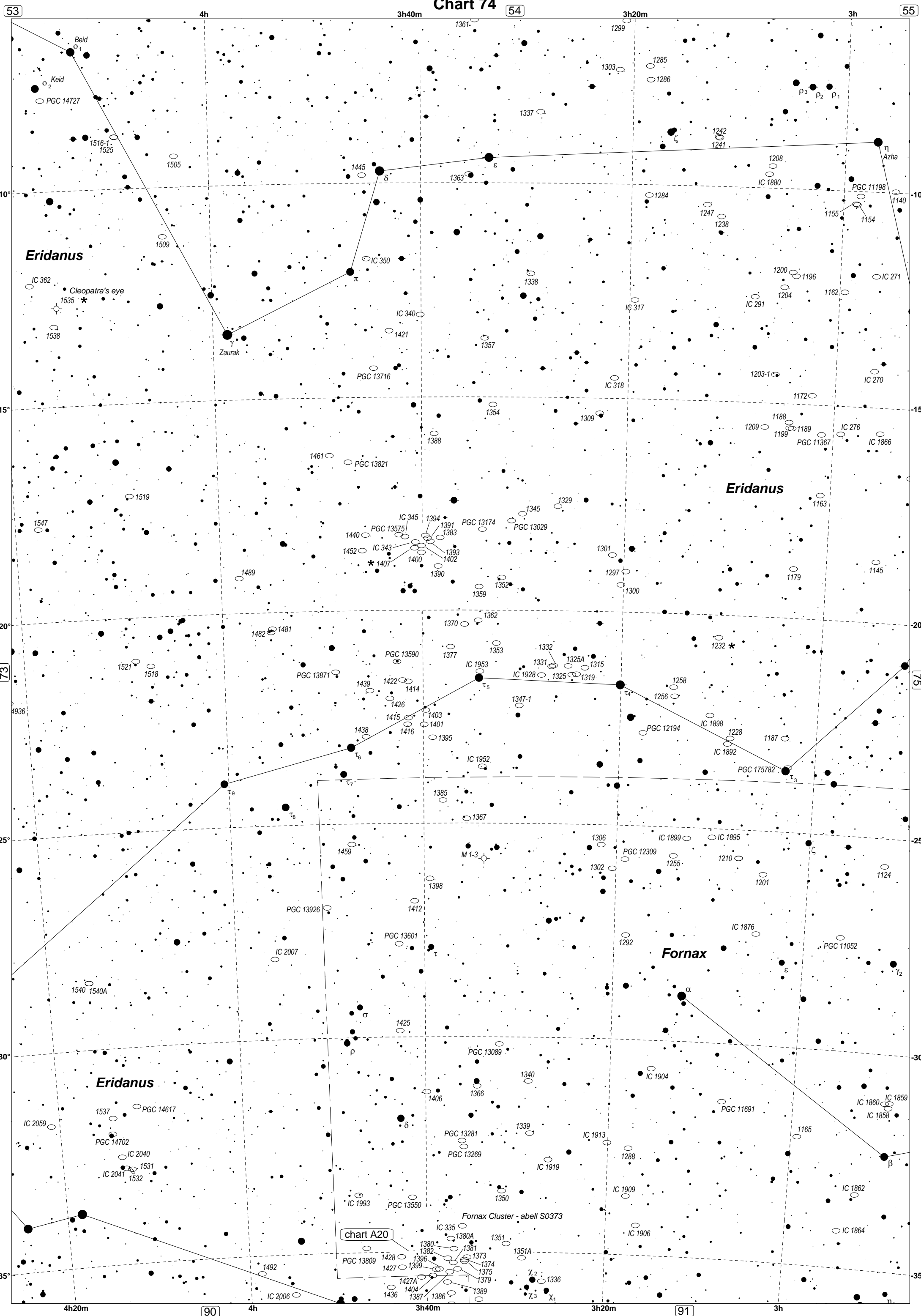


Chart 72





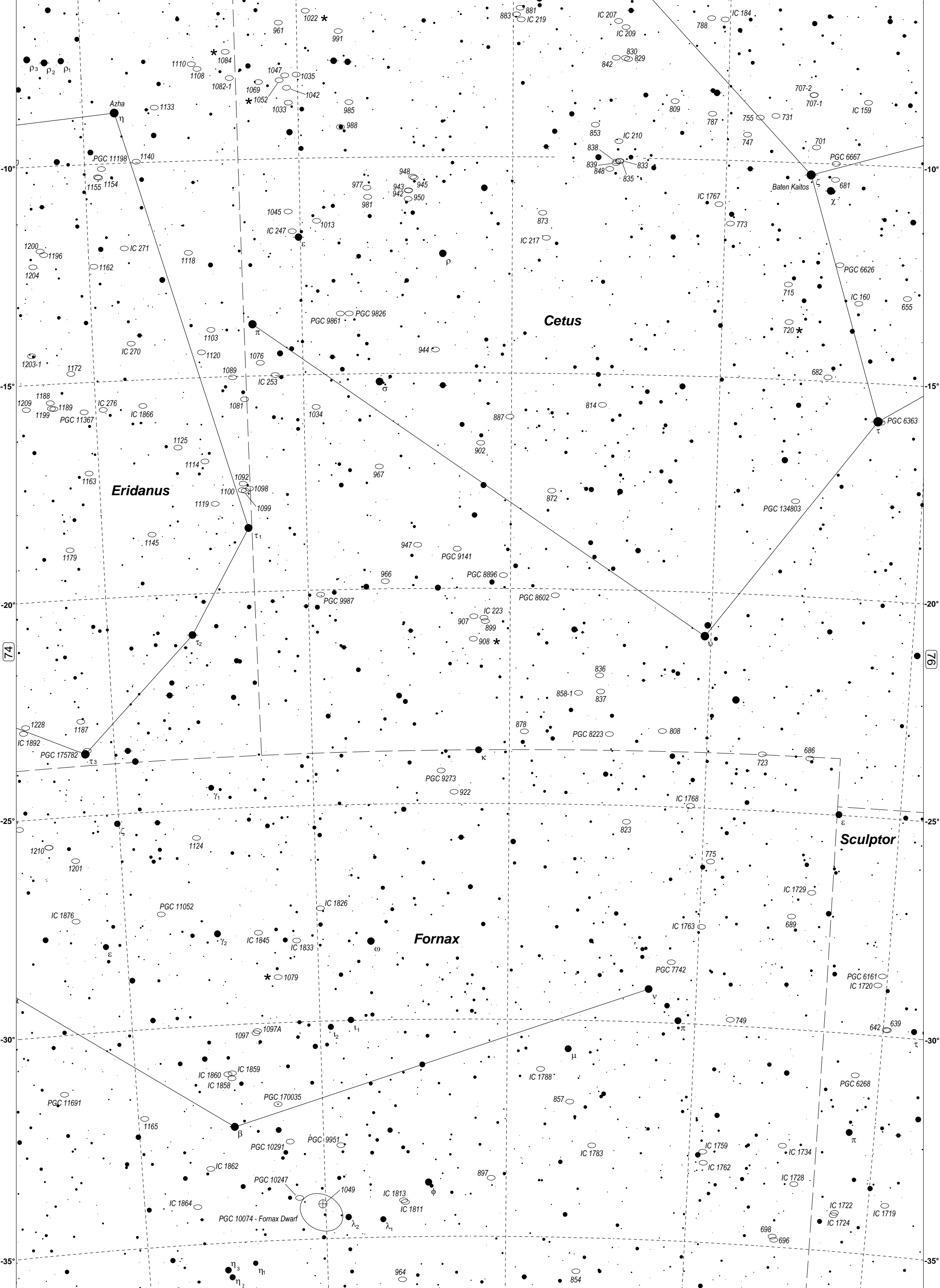
Eridanus

Eridanus

Fornax

chart A20

Fornax Cluster - abell S0373



Eridanus

Cetus

Fornax

Sculptor

Chart 76

55

56

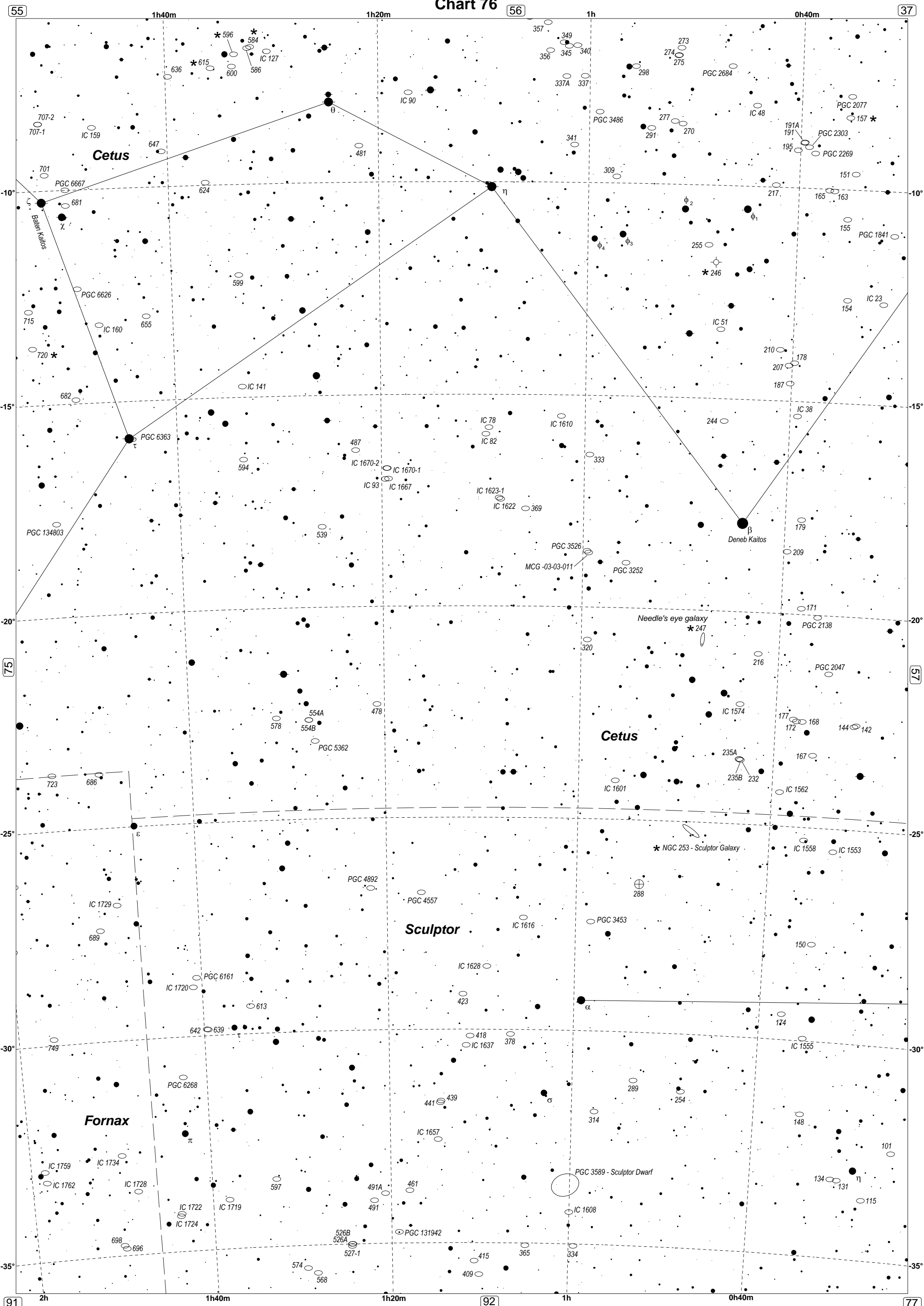
37

1h40m

1h20m

1h

0h40m



Cetus

Cetus

Sculptor

Fornax

Deneb Kaitos

Needle's eye galaxy

PGC 3453

PGC 3589 - Sculptor Dwarf

Babel's Kelpies

91

92

77

2h

1h40m

1h20m

1h

0h40m

-10°

-15°

-20°

-25°

-30°

-35°

-10°

-15°

-20°

-25°

-30°

-35°

707-2

707-1

701

715

720

723

729

749

754

758

768

774

784

794

804

814

824

834

844

854

864

874

884

894

904

914

924

934

944

954

964

974

984

994

1004

1014

1024

596

584

615

600

636

647

681

682

686

698

696

707

715

720

723

729

749

754

758

768

774

784

794

804

814

824

834

844

854

864

874

884

894

904

914

924

934

IC 159

IC 160

IC 141

IC 160

IC 141

IC 160

IC 141

IC 160

IC 141

IC 160

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IC 160

IC 141

IC 160

IC 141

IC 160

IC 141

IC 160

PGC 6667

PGC 6626

PGC 6363

PGC 134803

PGC 6626

PGC 6363

PGC 134803

PGC 6626

PGC 6363

PGC 134803

PGC 6626

PGC 6363

PGC 134803

PGC 6626

PGC 6363

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PGC 6363

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PGC 6363

PGC 134803

PGC 6626

PGC 6363

IC 90

IC 90

IC 90

IC 90

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IC 78

IC 78

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

IC 1670-1

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IC 1670-1

IC 1670-1

IC 1670-1

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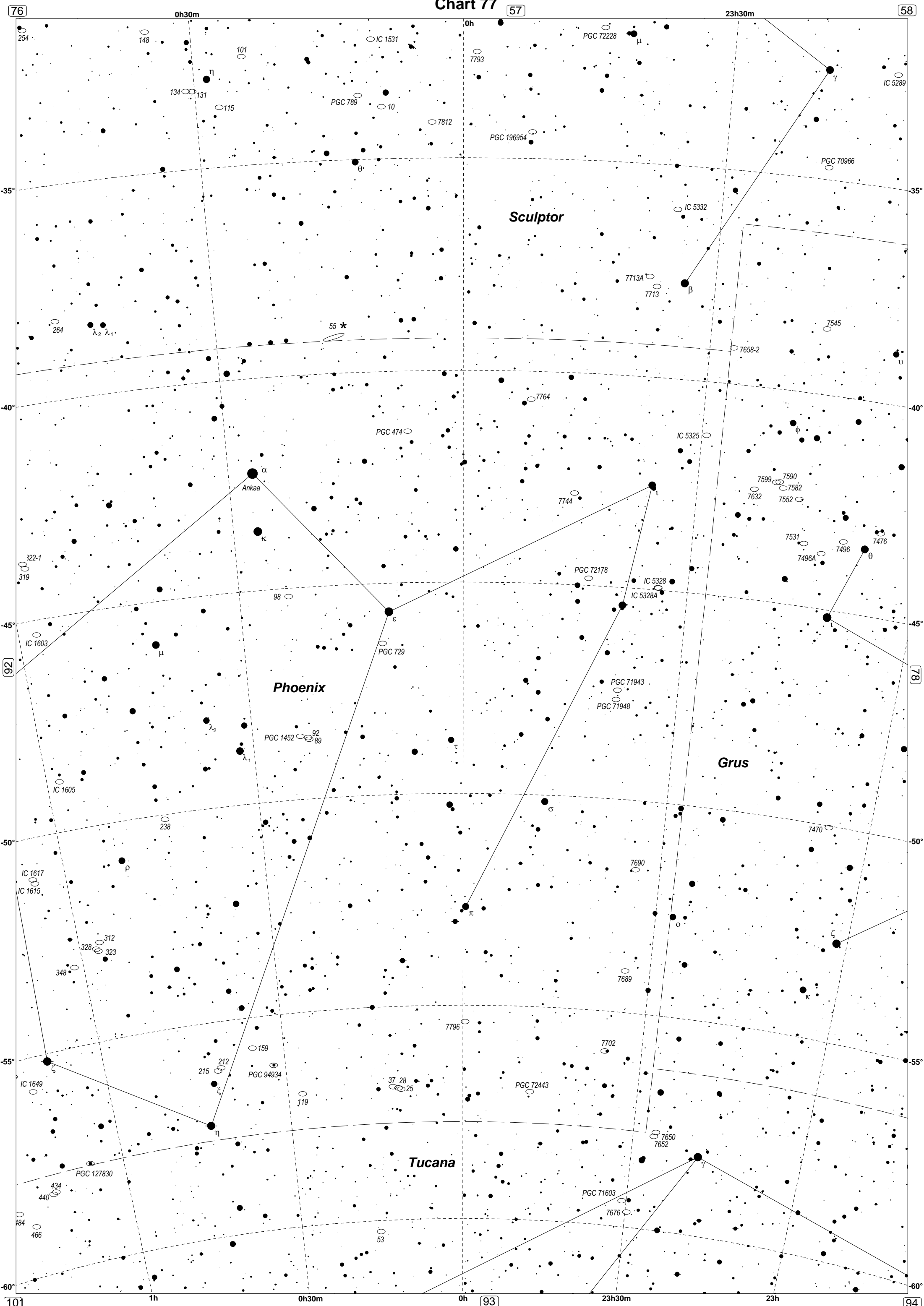


Chart 77

0h30m

0h

23h30m

76

57

58

Sculptor

Phoenix

Tucana

Grus

Ankaa

beta

lambda 1

theta

epsilon

gamma

55 *

7658-2

PGC 474

IC 5325

98

PGC 72178

IC 5328

IC 5328A

PGC 1452

PGC 71943

PGC 71948

IC 1605

7470

IC 1617

IC 1615

7690

328

348

7689

IC 1649

215

212

PGC 94934

37 28

25

PGC 72443

7650

7652

434

440

PGC 71603

7676

484

466

PGC 127830

53

101

1h

0h30m

0h

93

23h30m

23h

94

Piscis Austrinus

Microscopium

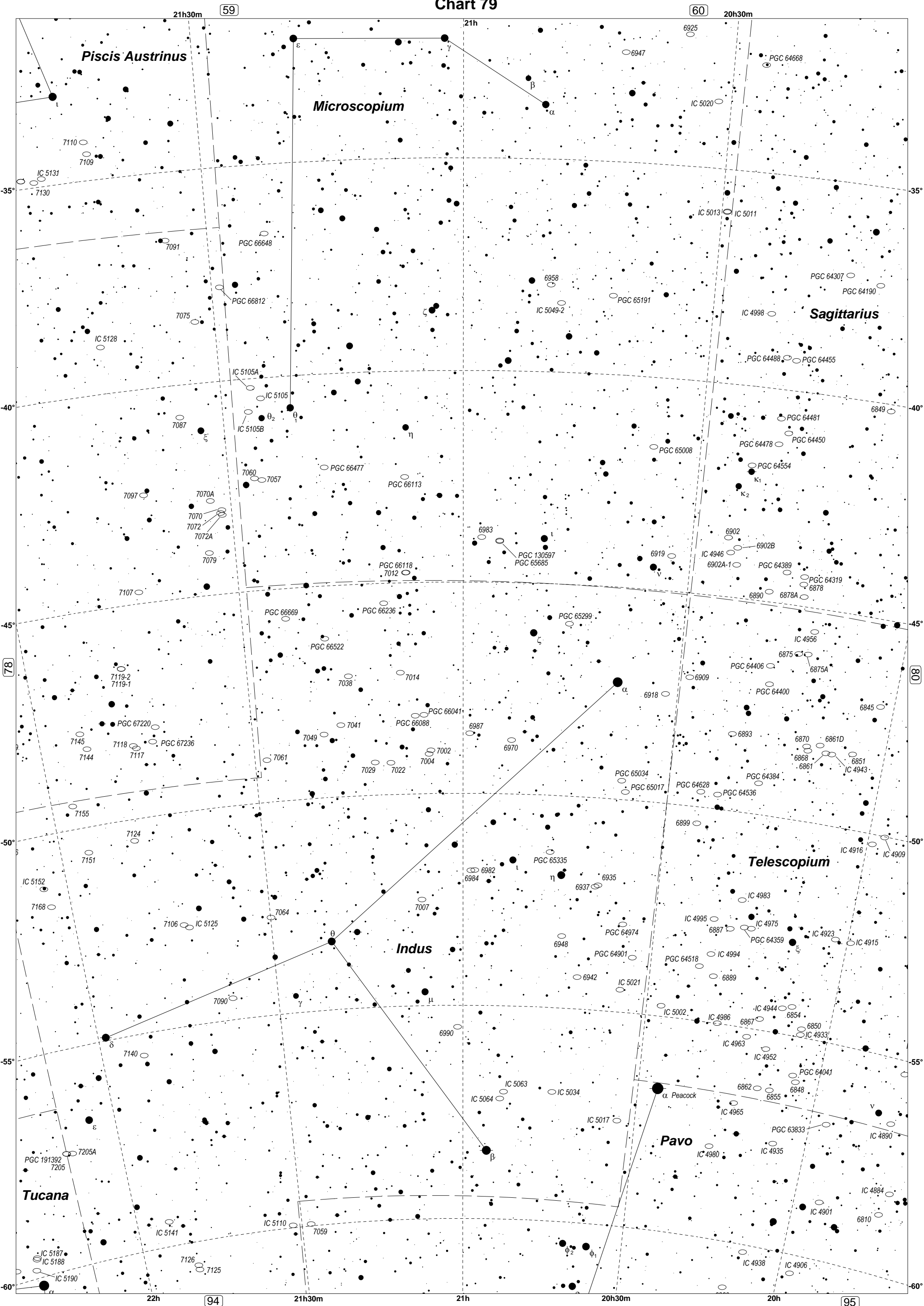
Sagittarius

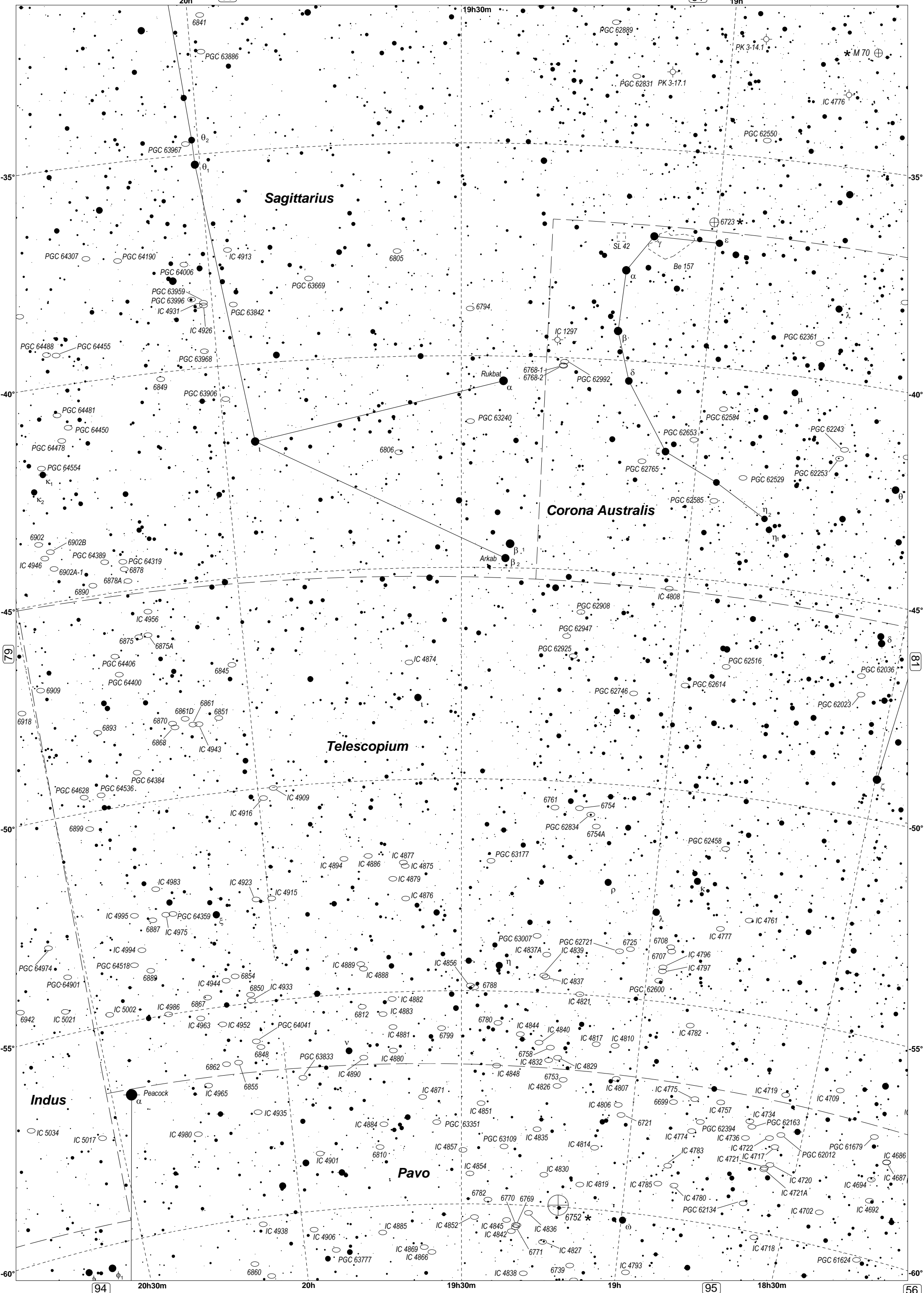
Indus

Telescopium

Tucana

Pavo





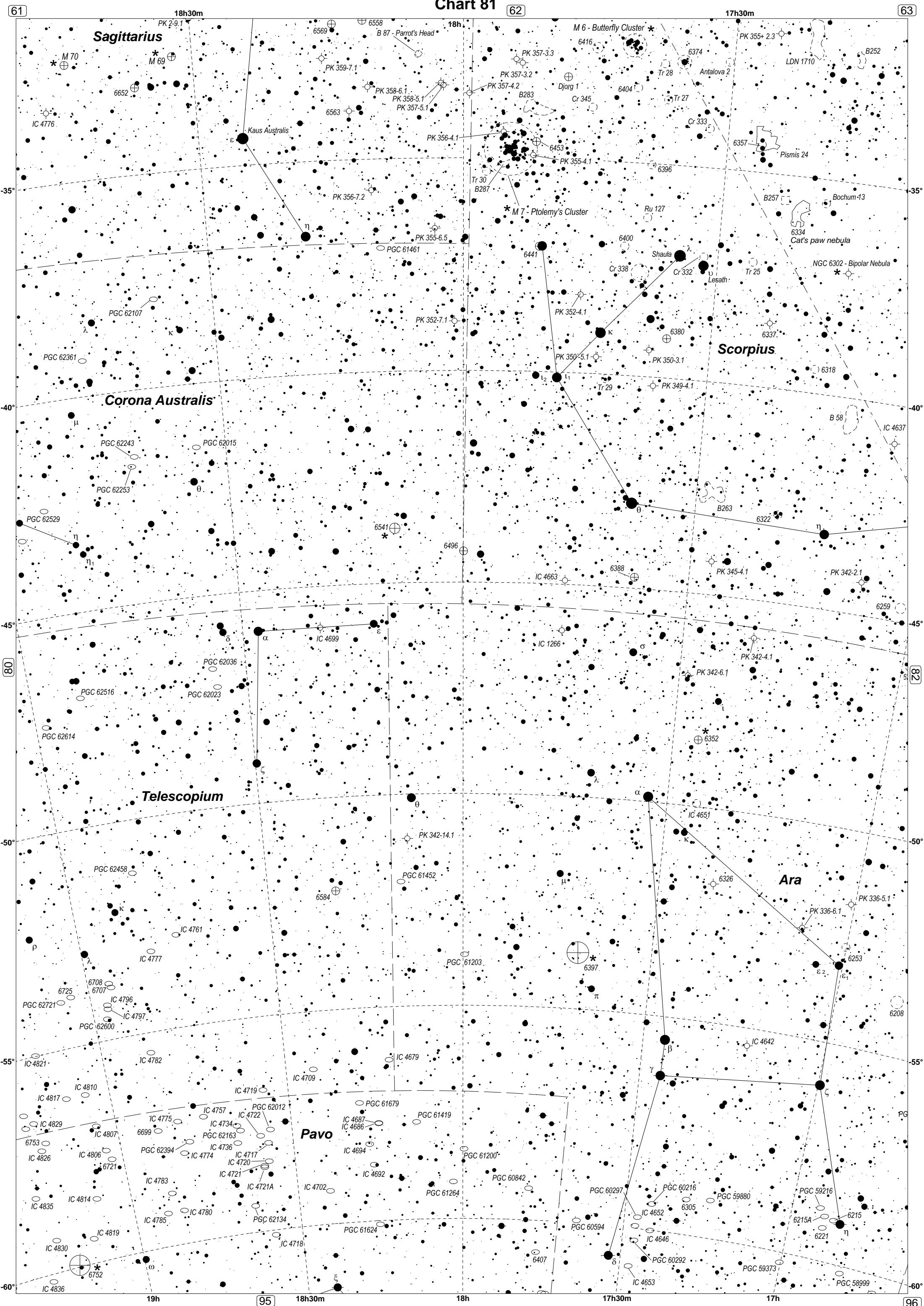
Sagittarius

Corona Australis

Telescopium

Indus

Pavo



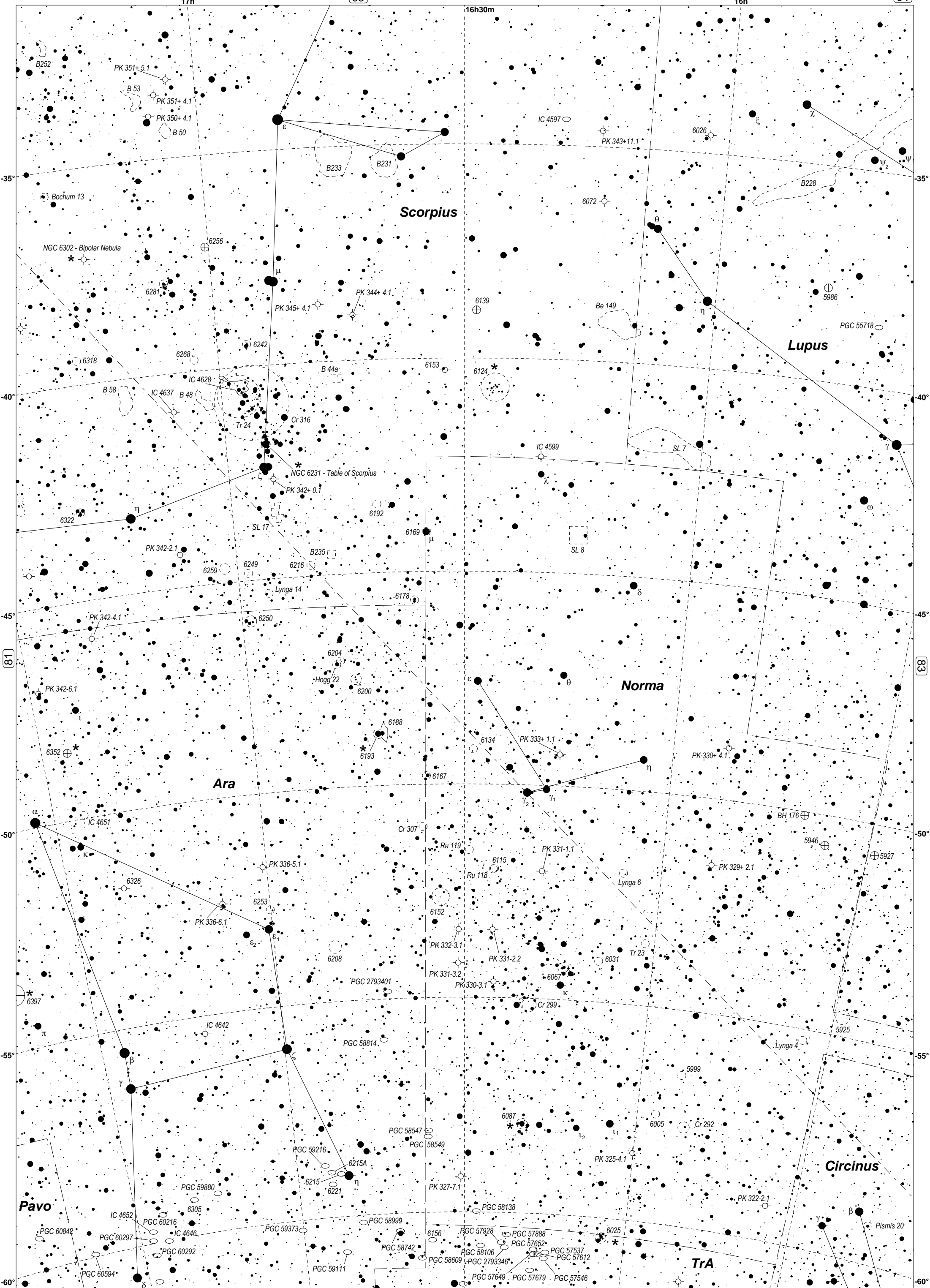


Chart 84

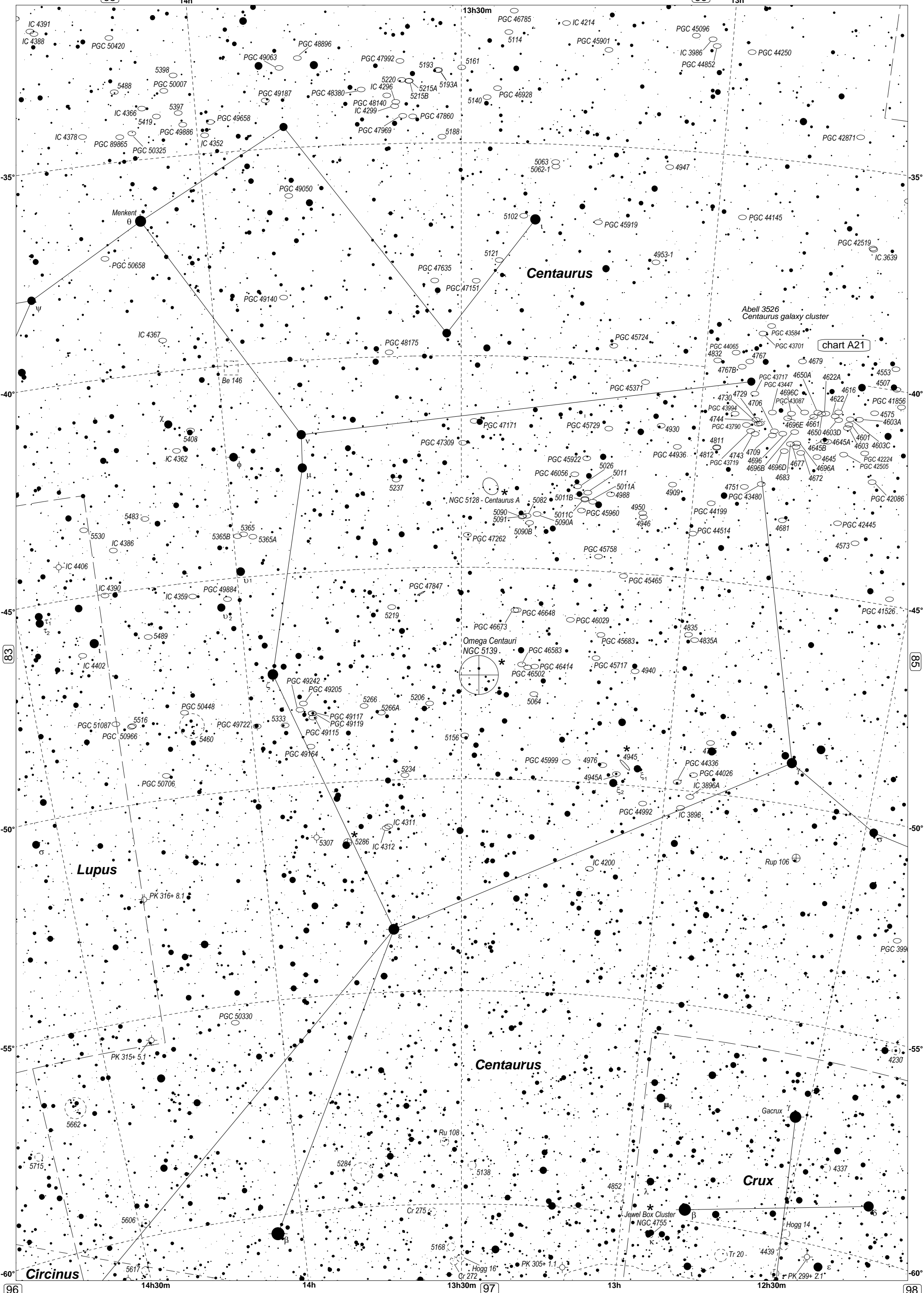
65

66

14h

13h30m

13h



-35

-35

-40

-40

-45

-45

-50

-50

-55

-55

-60

-60

96

97

98

Centaurus

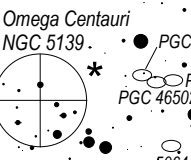
Lupus

Centaurus

Crux

Circinus

chart A21



Abell 3526
Centaurus galaxy cluster

Jewel Box Cluster
NGC 4755

Menkent
θ

Omega Centauri
NGC 5139

Gacrux
γ

PK 316+ 8.1

PK 315+ 5.1

Hogg 16

Hogg 14

14h30m

13h30m

12h30m

14h

14h

13h

13h

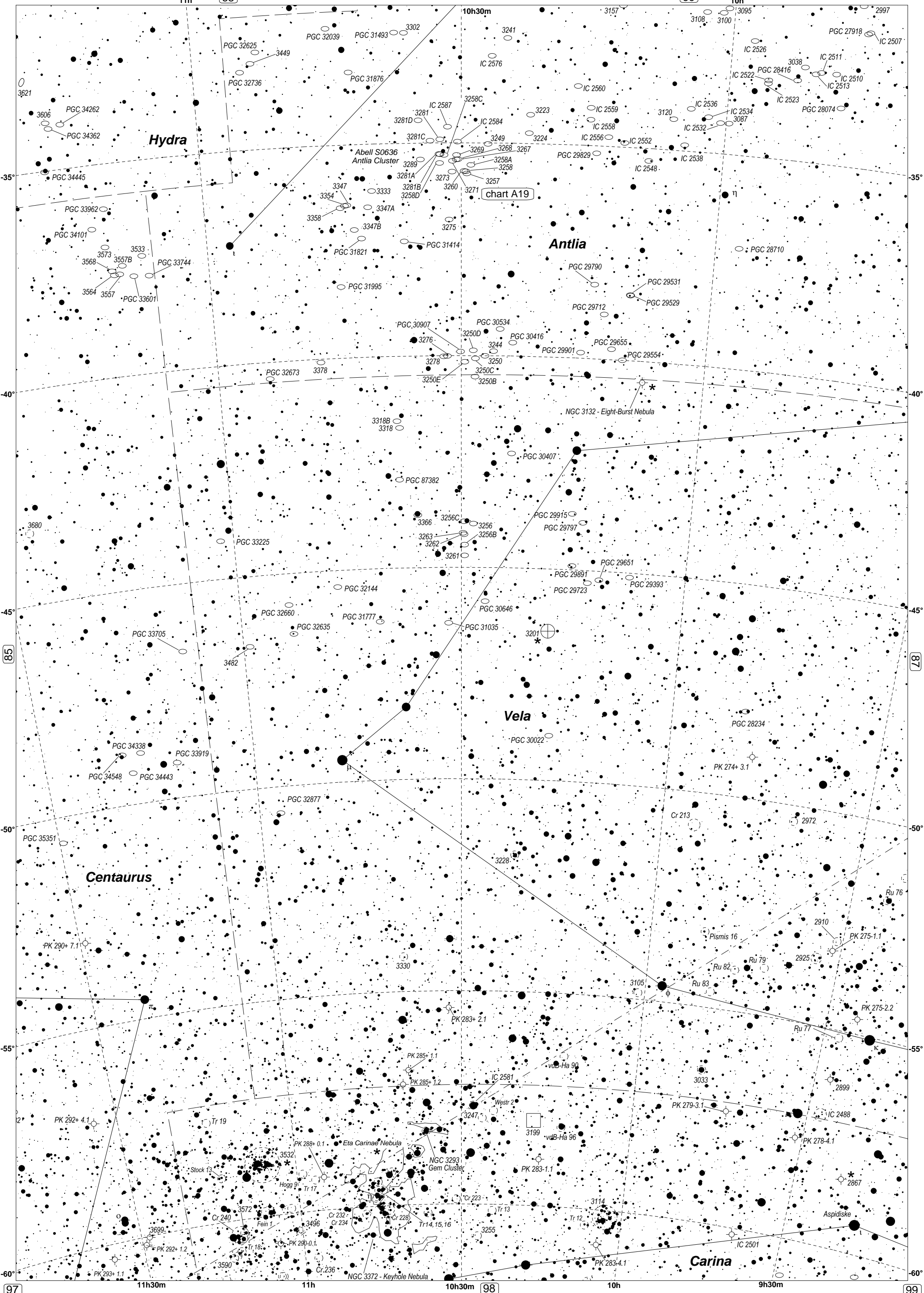


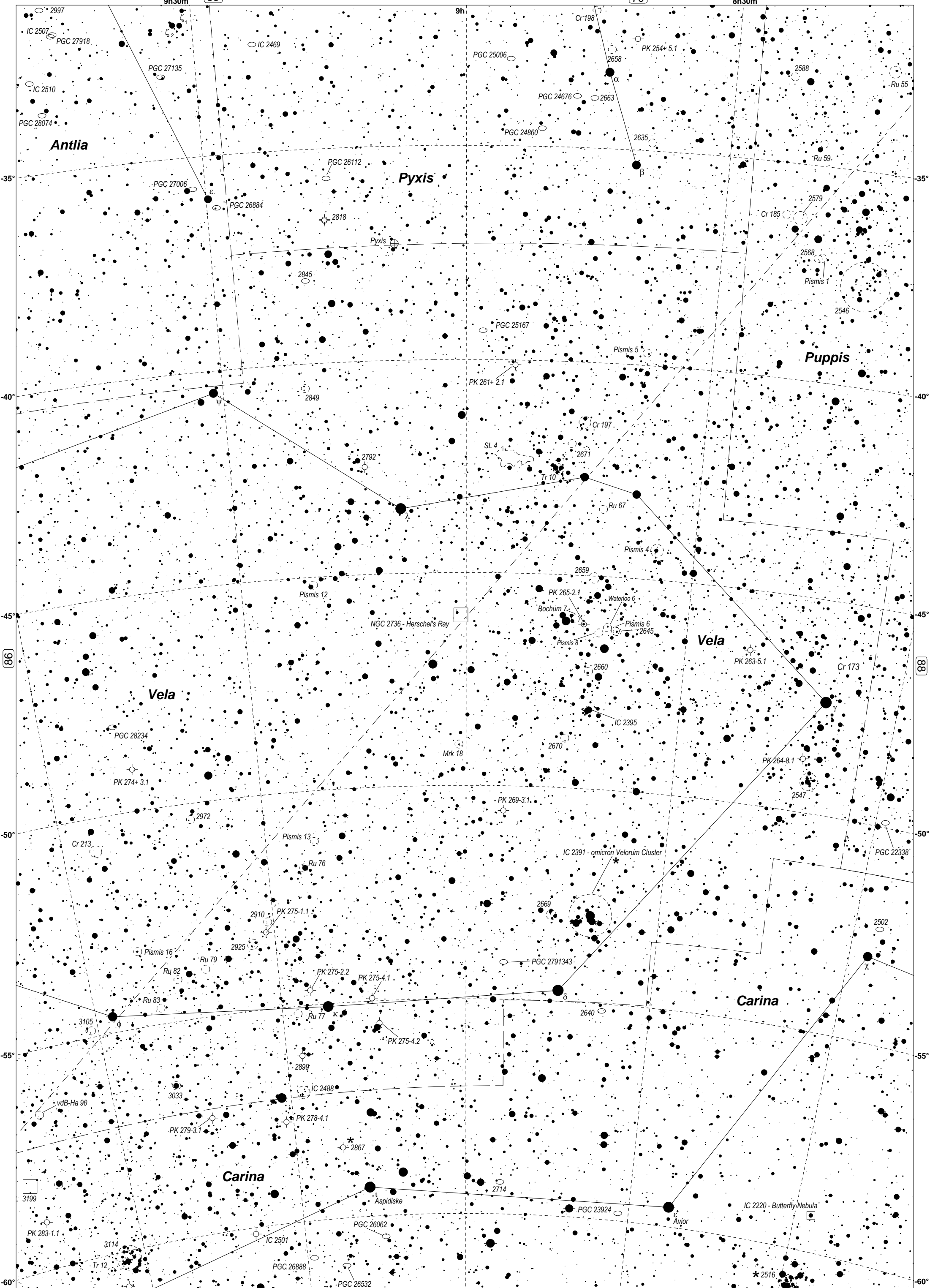
Chart 87

9h30m

69

70

8h30m



Antlia

Pyxis

Puppis

Vela

Vela

Carina

Carina

88

86

60°

60°

50°

50°

45°

45°

40°

40°

35°

35°

10h

9h30m

9h

8h30m

8h

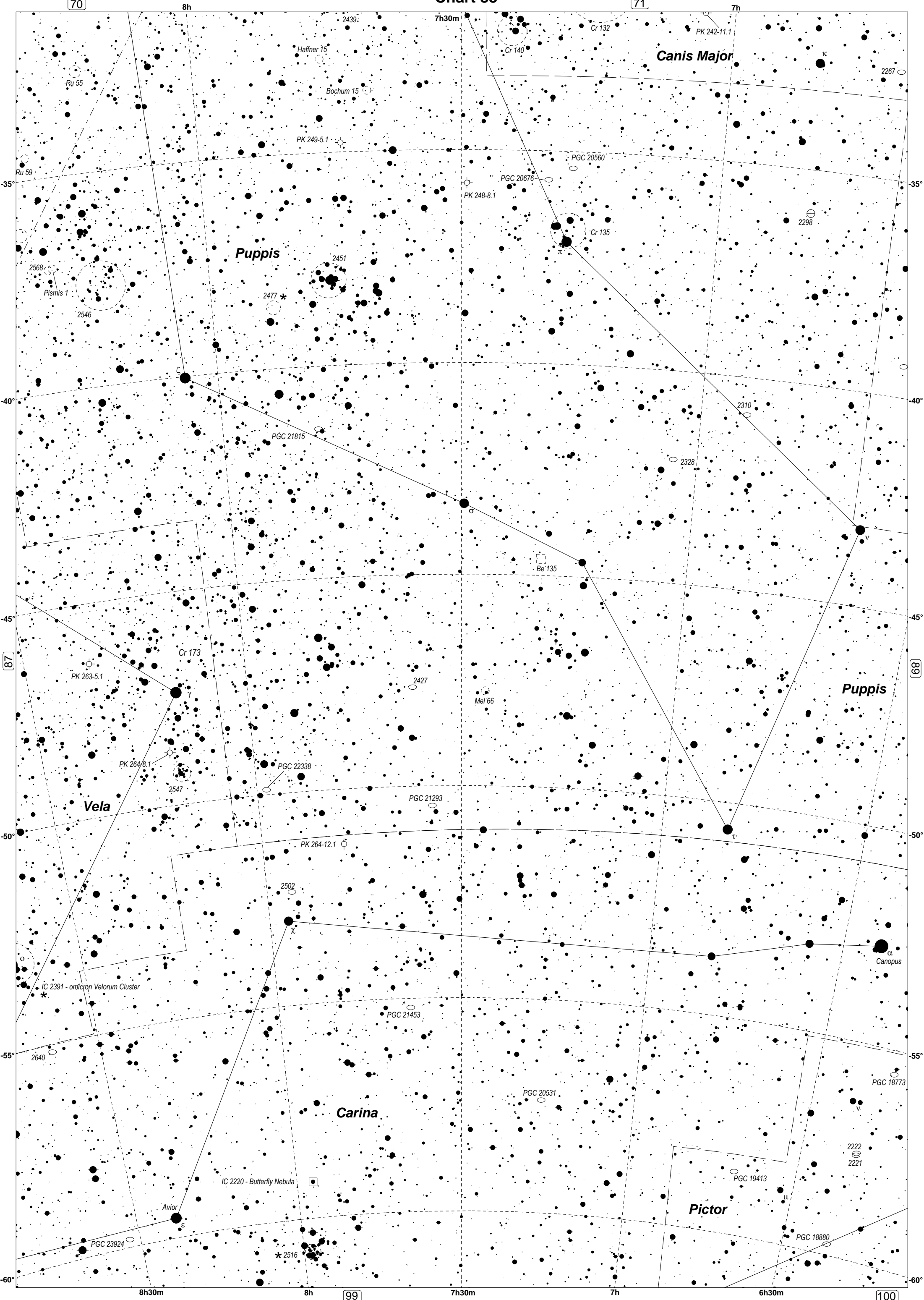
98

99

Chart 88

70

71



-35°

-40°

-45°

-50°

-55°

-60°

-35°

-40°

-45°

-50°

-55°

-60°

87

89

8h

7h30m

7h

8h30m

8h

7h30m

7h

6h30m

99

100

Canis Major

Puppis

Puppis

Vela

Carina

Pictor

Ru 55

Haflner 15

Bochum 15

PK 249-5.1

Cr 140

Cr 132

PK 242-11.1

2267

Ru 59

Pismis 1

2546

2477

2451

Cr 135

2298

PGC 20560

PGC 20676

PK 248-8.1

PGC 21815

2310

2328

Be 135

PK 263-5.1

Cr 173

2427

Mel 66

PK 264/8.1

2547

PGC 22338

PGC 21293

PK 264-12.1

2502

IC 2391 - omicron Velorum Cluster

2640

Avior

PGC 23924

2516

IC 2220 - Butterfly Nebula

PGC 21453

PGC 20531

PGC 18773

2222

2221

PGC 19413

PGC 18880

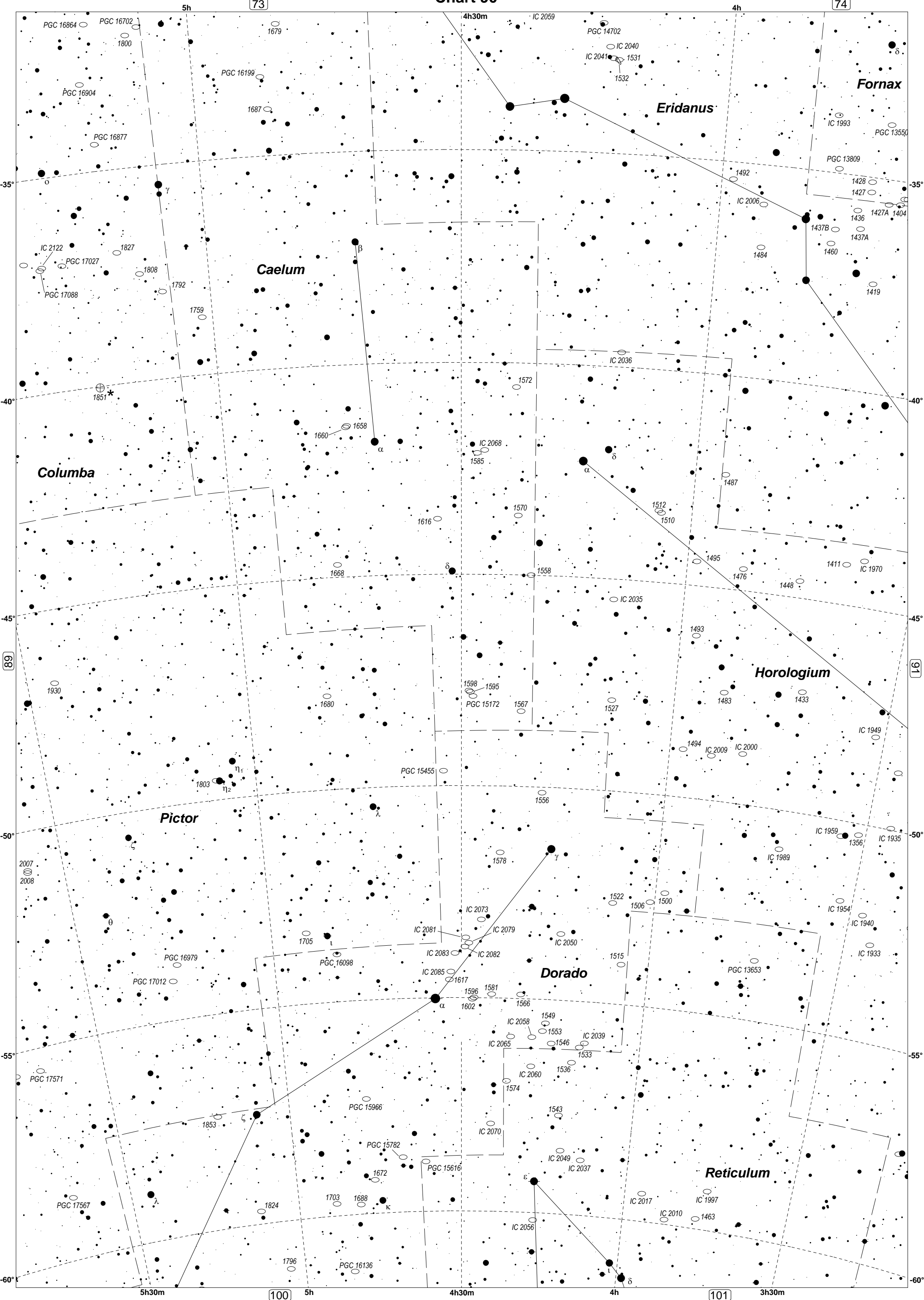
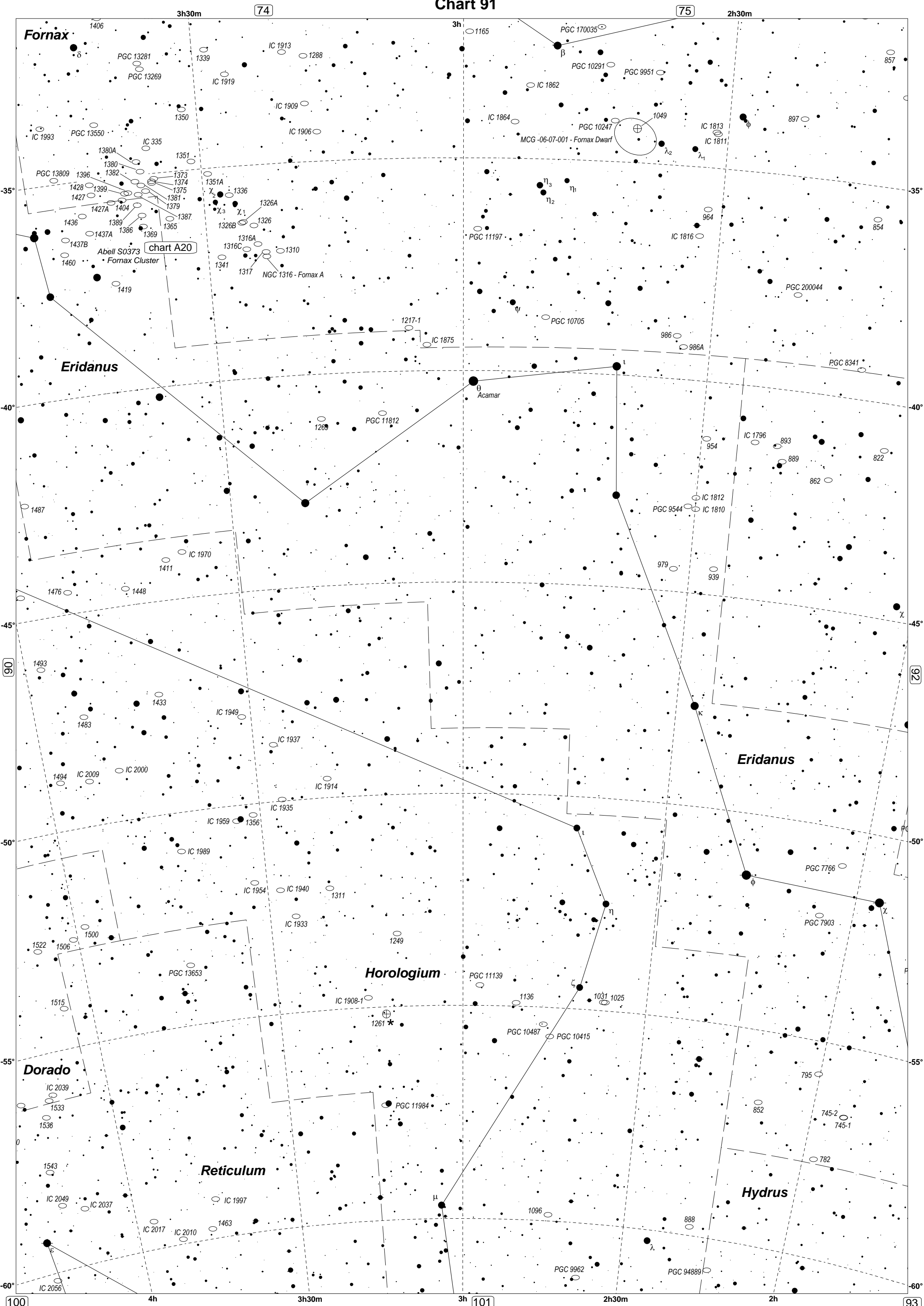


Chart 91



Fornax

Eridanus

Horologium

Dorado

Reticulum

Hydrus

chart A20

Abell S0373

Fornax Cluster

NGC 1316 - Fornax A

MCG -06-07-001 - Fornax Dwarf

-35°

-40°

-45°

-50°

-55°

-60°

3h30m

74

3h

75

2h30m

100

4h

3h30m

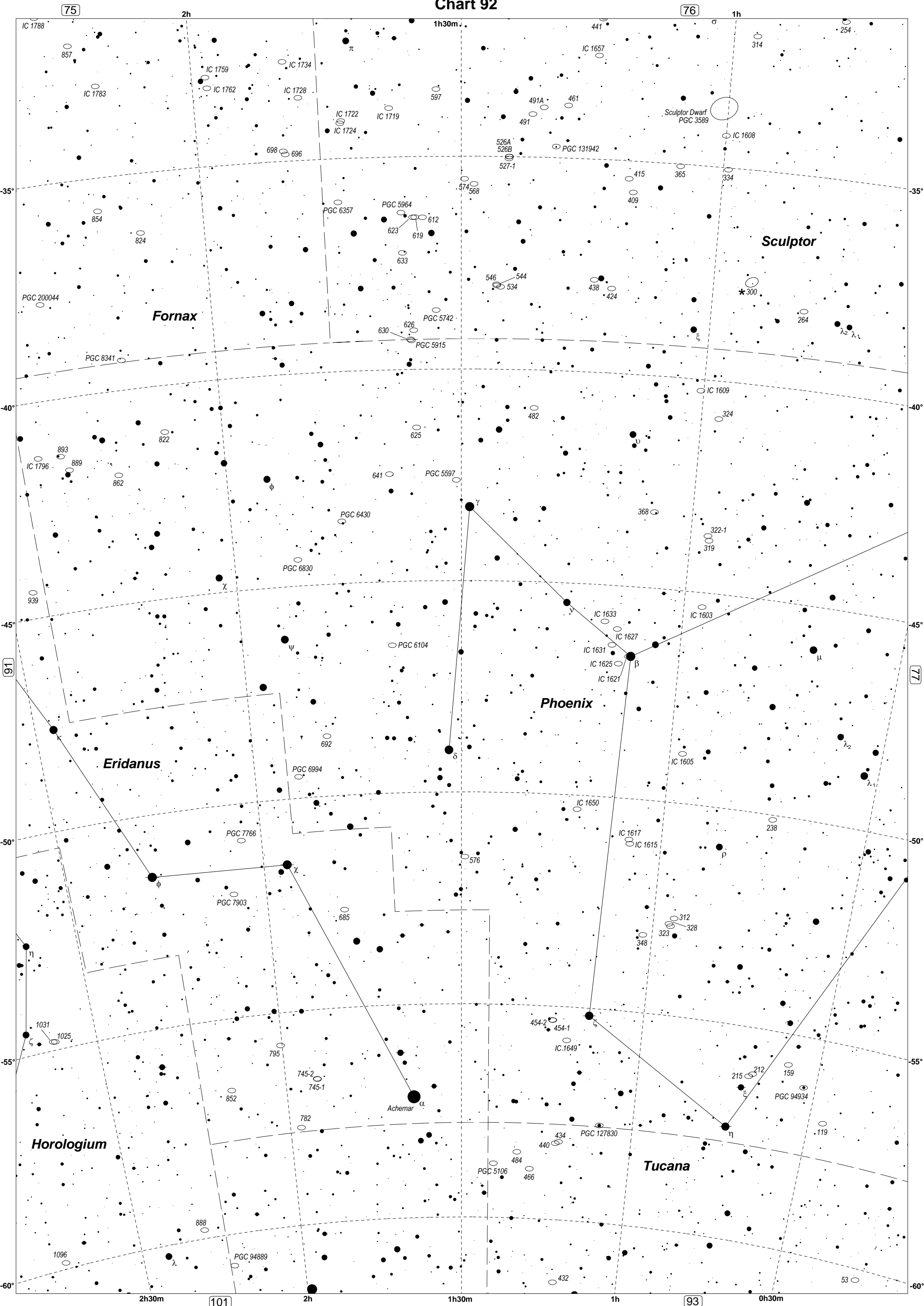
3h

101

2h30m

2h

93



Fornax

Sculptor

Phoenix

Eridanus

Tucana

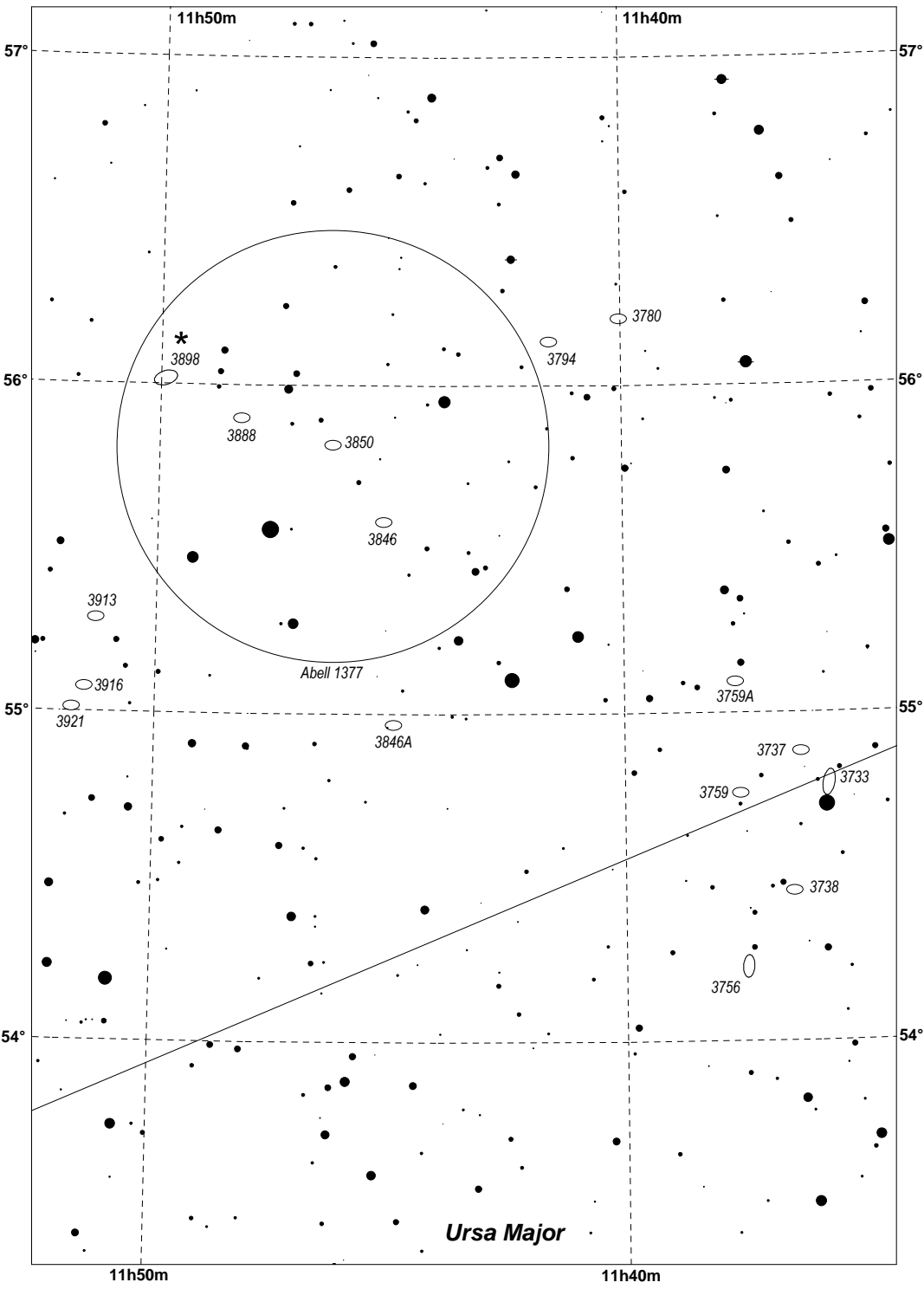
Horologium

Sculptor Dwarf
PGC 3589

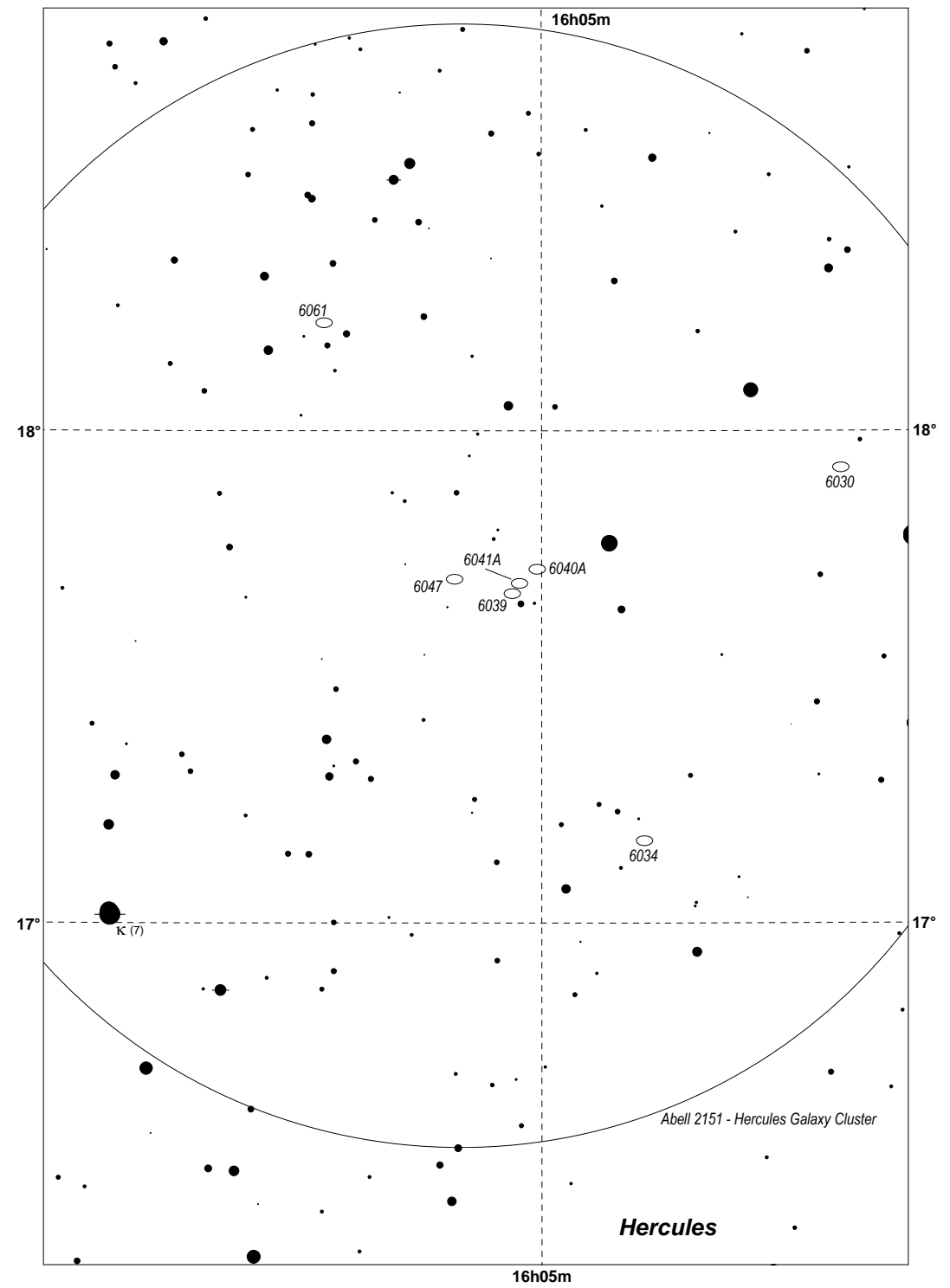
Achernar α

IC 1788, 857, IC 1783, IC 1759, IC 1762, IC 1728, IC 1722, IC 1719, IC 1724, 698, 696, 597, 441, IC 1657, 314, 254, 491A, 461, 491, 526A, 526B, PGC 131942, 527-1, 415, 365, IC 1608, 334, PGC 6357, PGC 5964, 623, 612, 619, 633, 574, 568, 409, 824, 854, PGC 200044, PGC 8341, PGC 5742, PGC 5915, 630, 626, 546, 544, 534, 438, 424, 300, 264, λ_2 , λ_1 , 893, 889, 862, 822, 641, PGC 5597, 482, IC 1609, 324, 322-1, 319, 368, PGC 6430, PGC 6830, PGC 6104, IC 1633, IC 1627, IC 1631, IC 1625, IC 1621, IC 1603, 324, 319, 322-1, 319, μ , 939, PGC 6994, 692, IC 1650, IC 1605, 238, PGC 7766, PGC 7903, 685, 576, IC 1617, IC 1615, 312, 328, 348, 323, ρ , 1031, 1025, 795, 745-2, 745-1, 852, 782, Achernar α , 454-2, 454-1, IC 1649, 215, 212, 159, PGC 94934, 119, η , 434, PGC 127830, 440, 484, 466, 888, PGC 94889, 1096, 888, PGC 94889, 432, 53, 119, 53

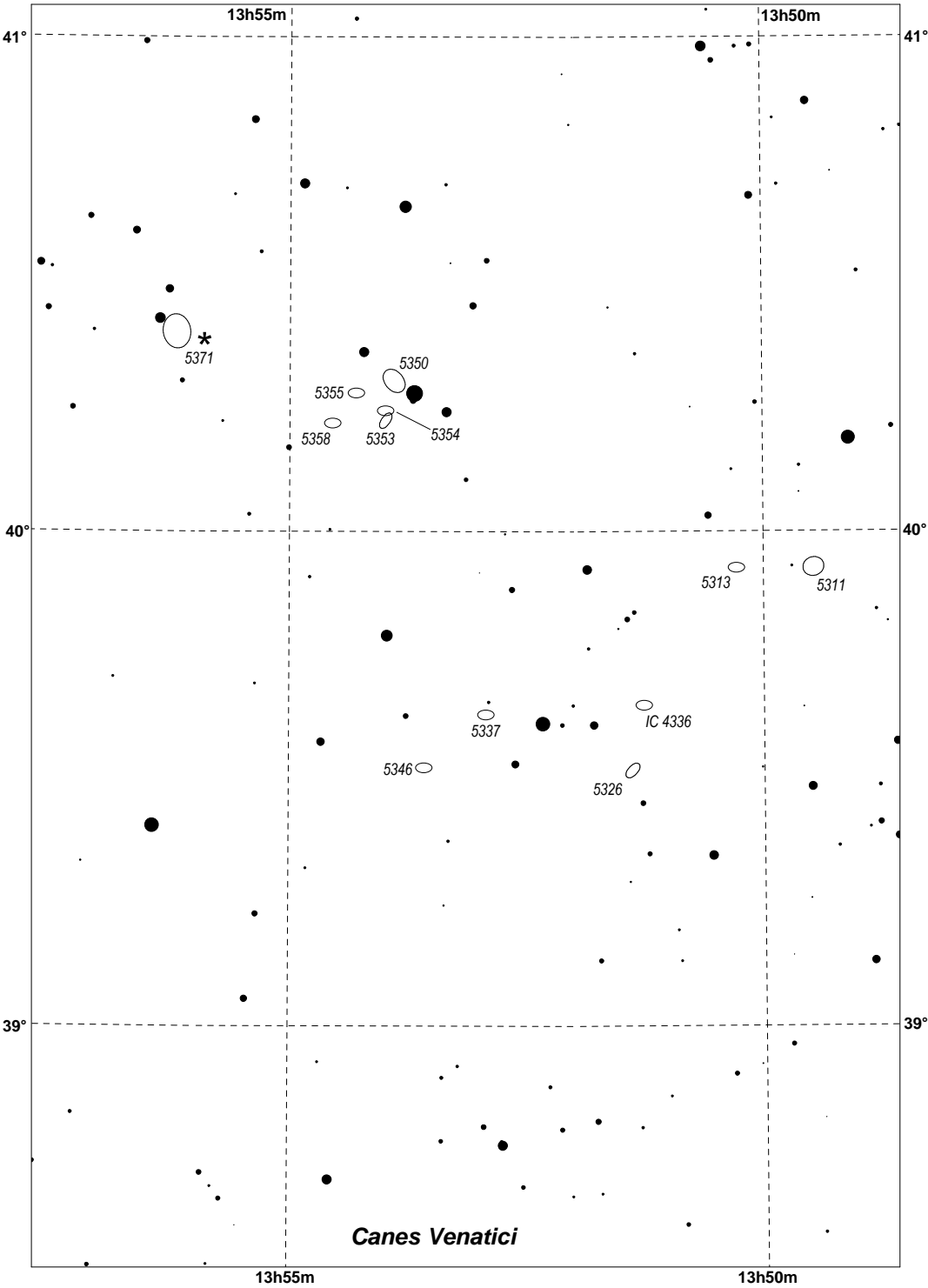
A1 - Abell 1377



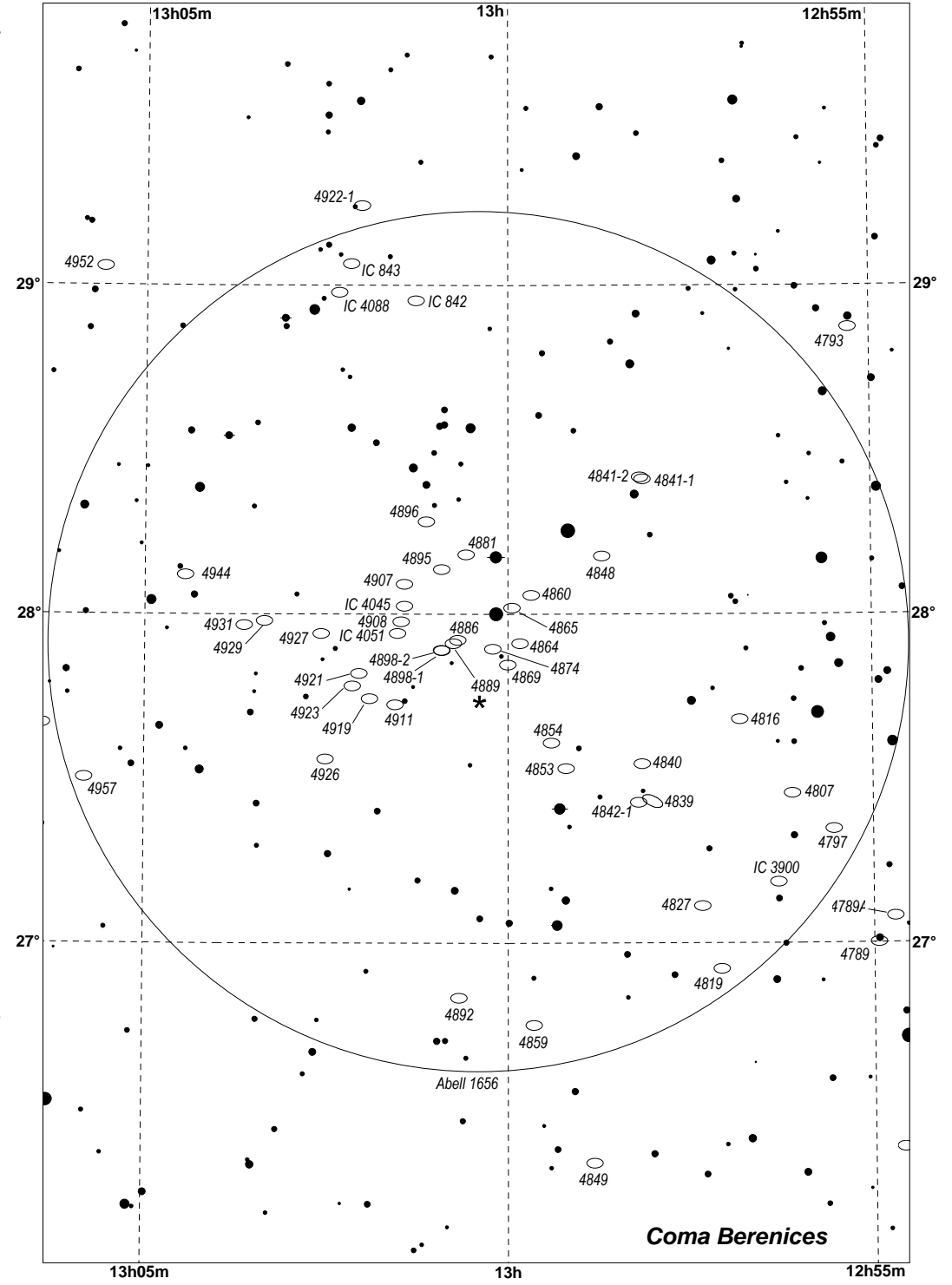
A2 - Hercules cluster Abell 2151



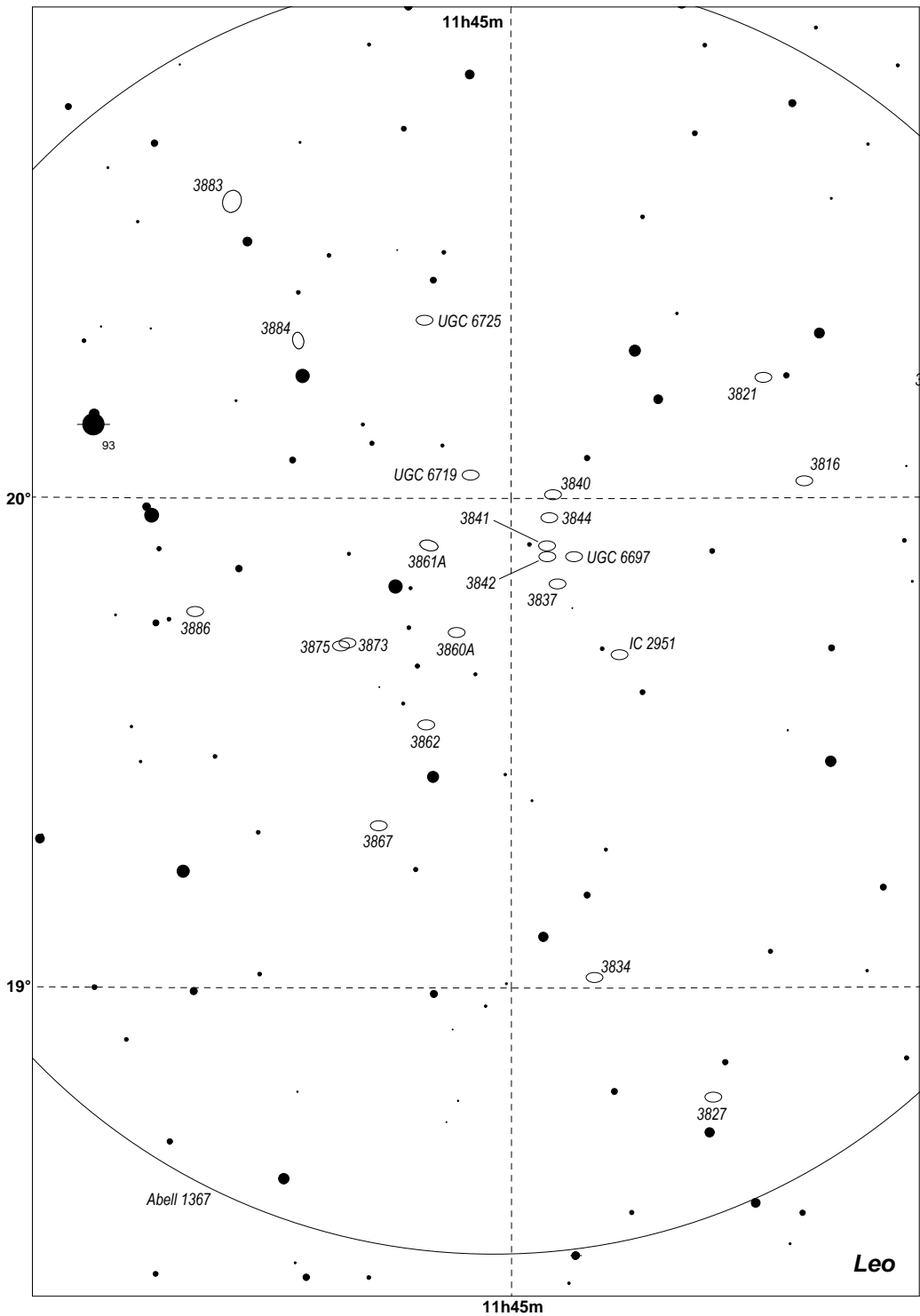
A3 - Hickson 68



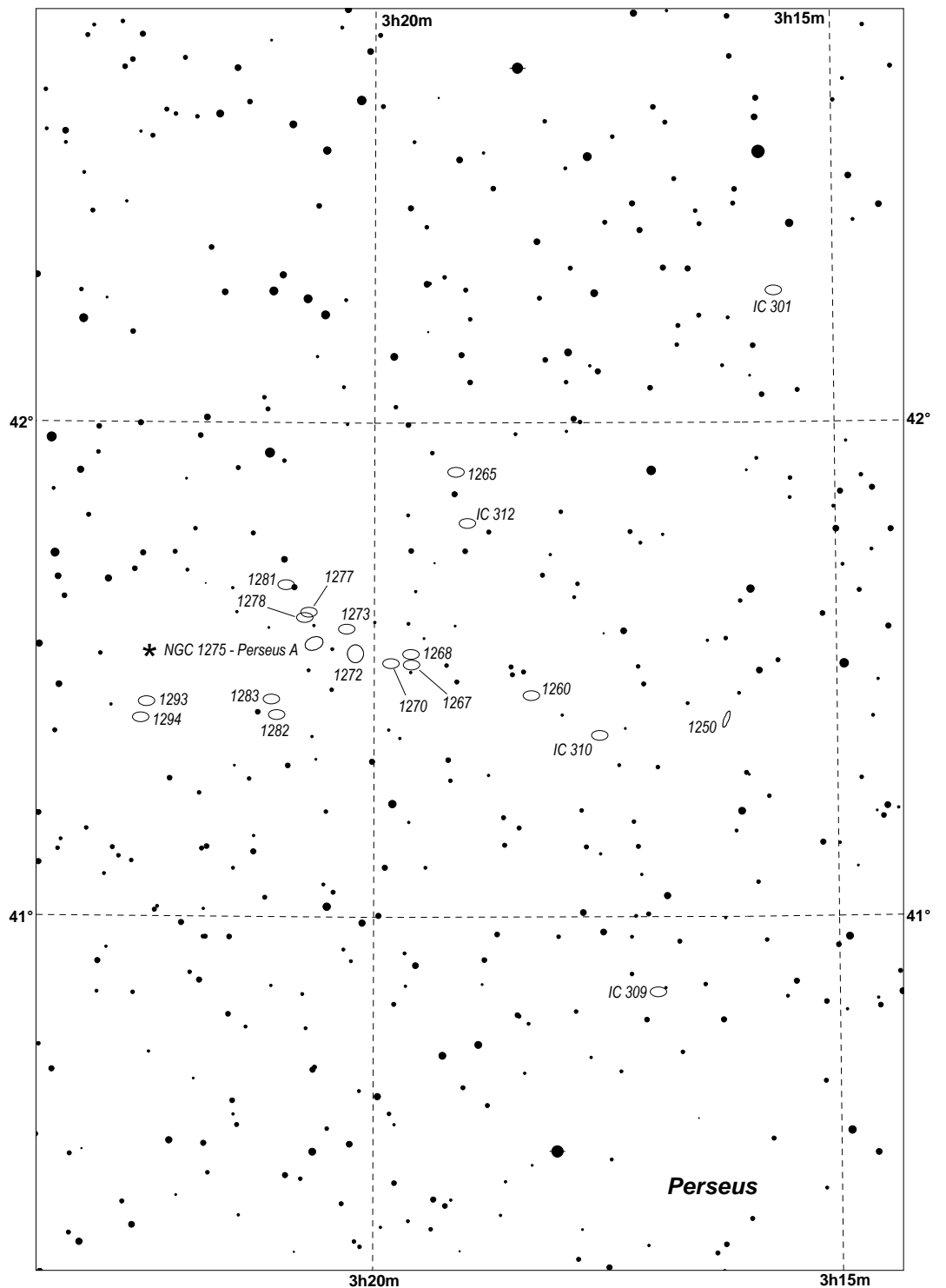
A4 - Coma cluster Abell 1656



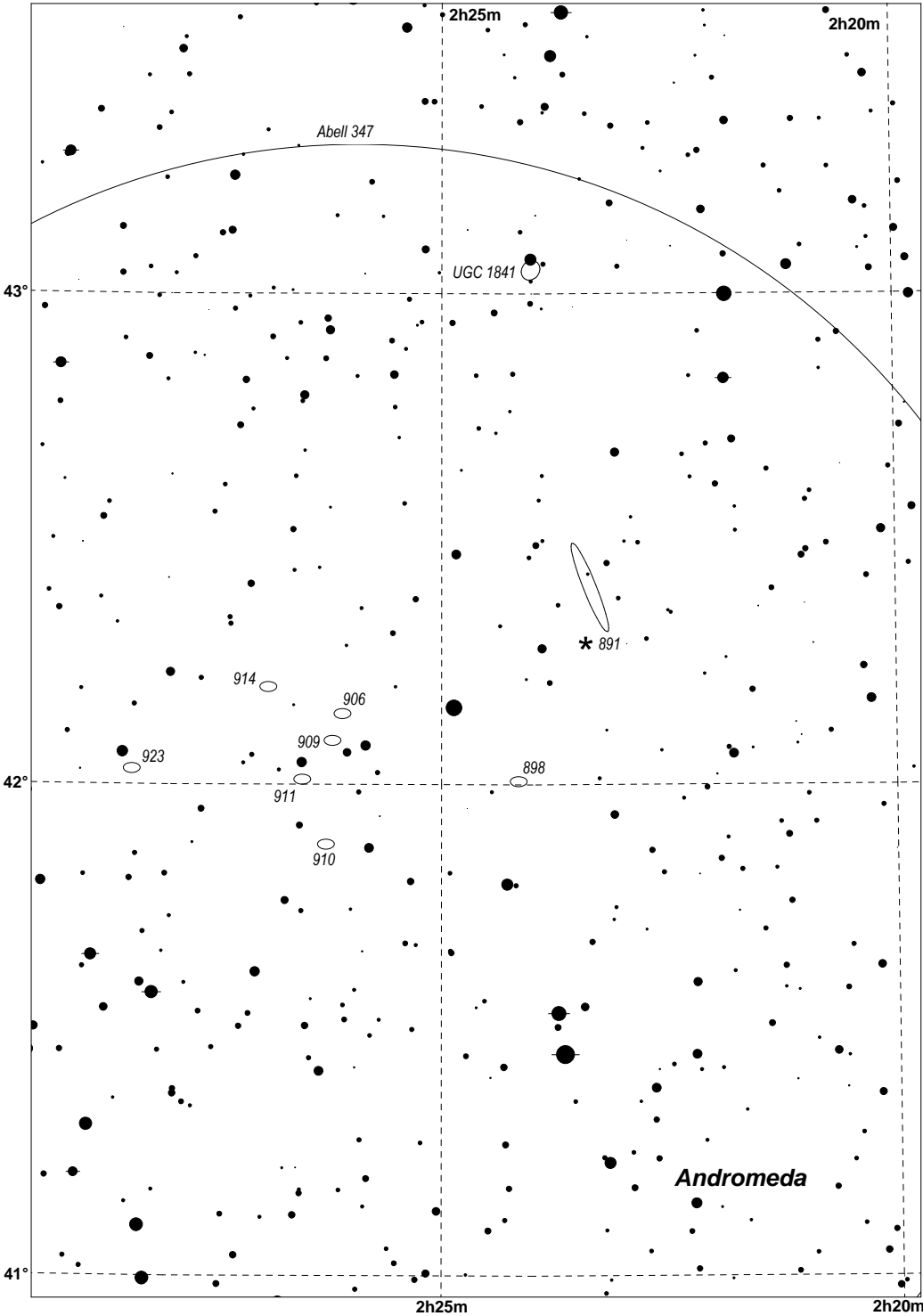
A6 - Leo cluster Abell 1367



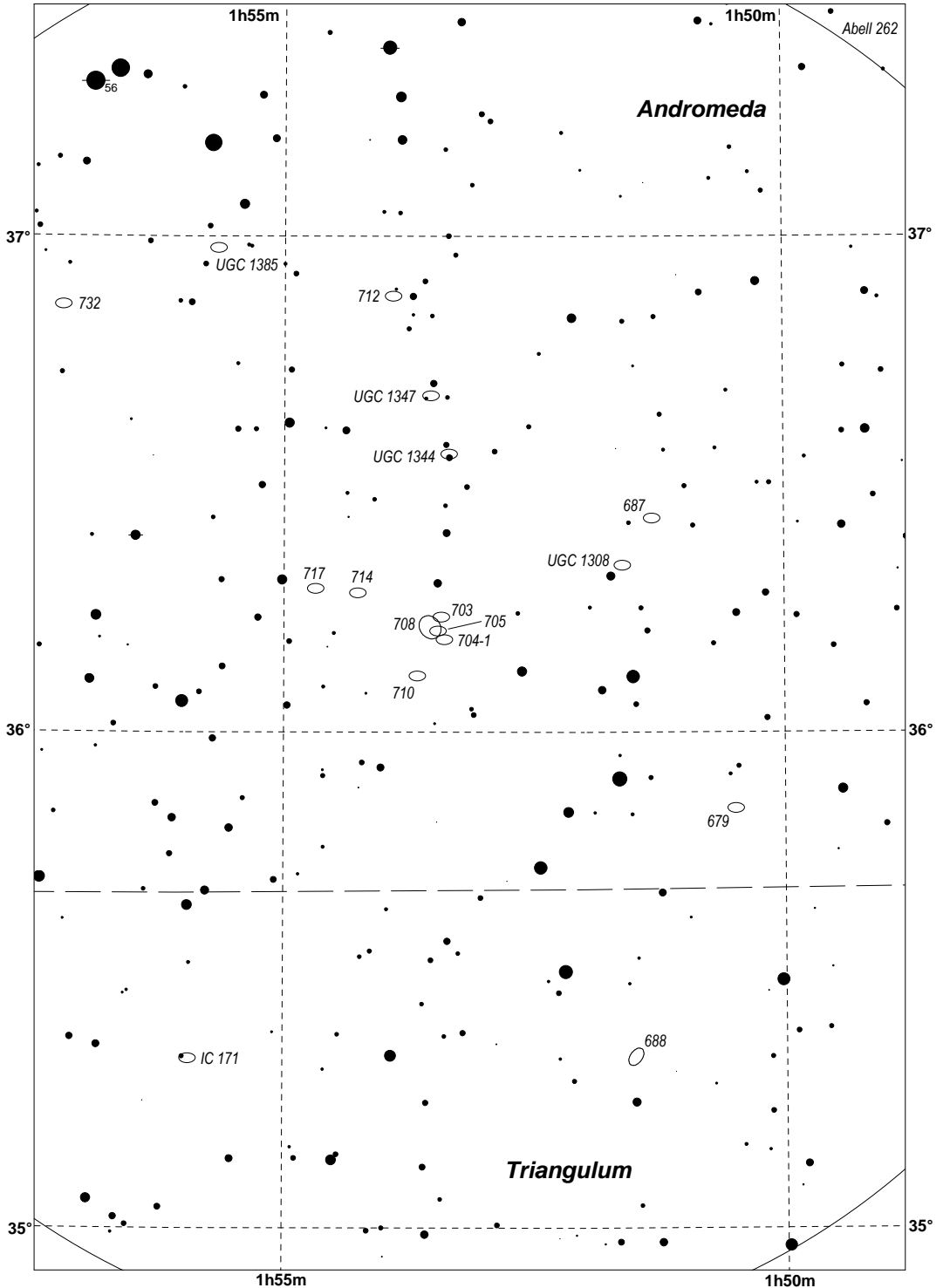
A7 - Perseus cluster Abell 426



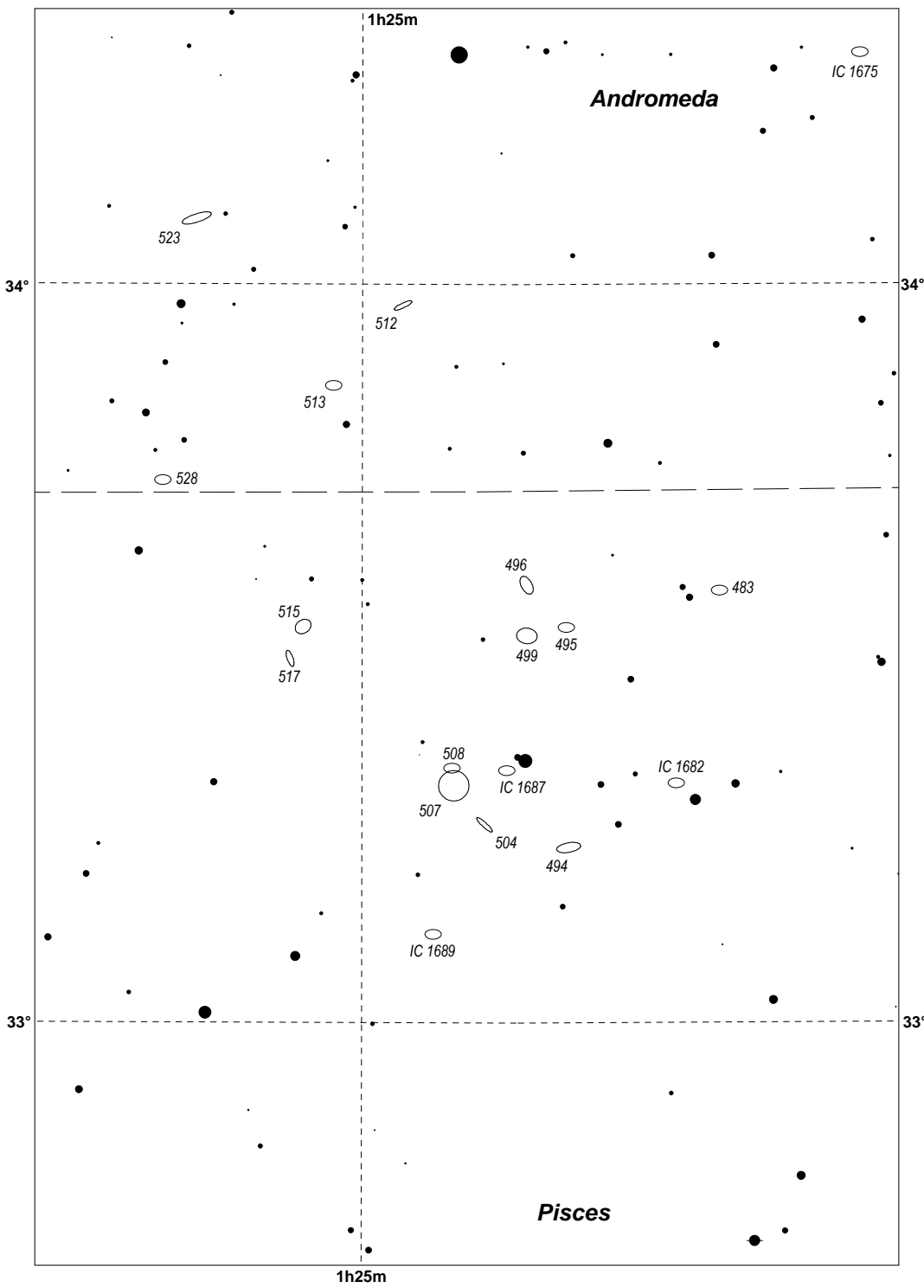
A8 - Abell 347



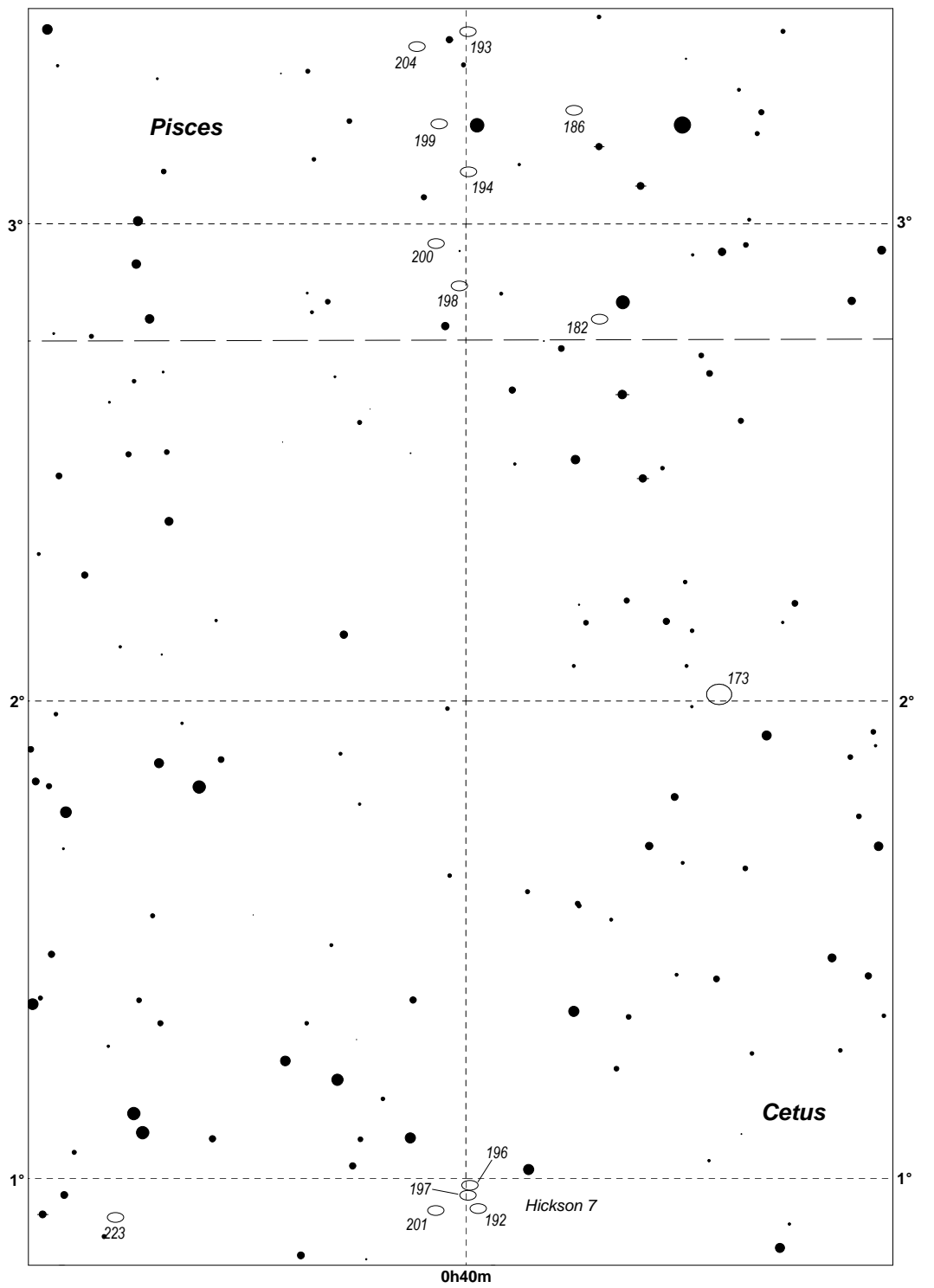
A9 - Abell 262



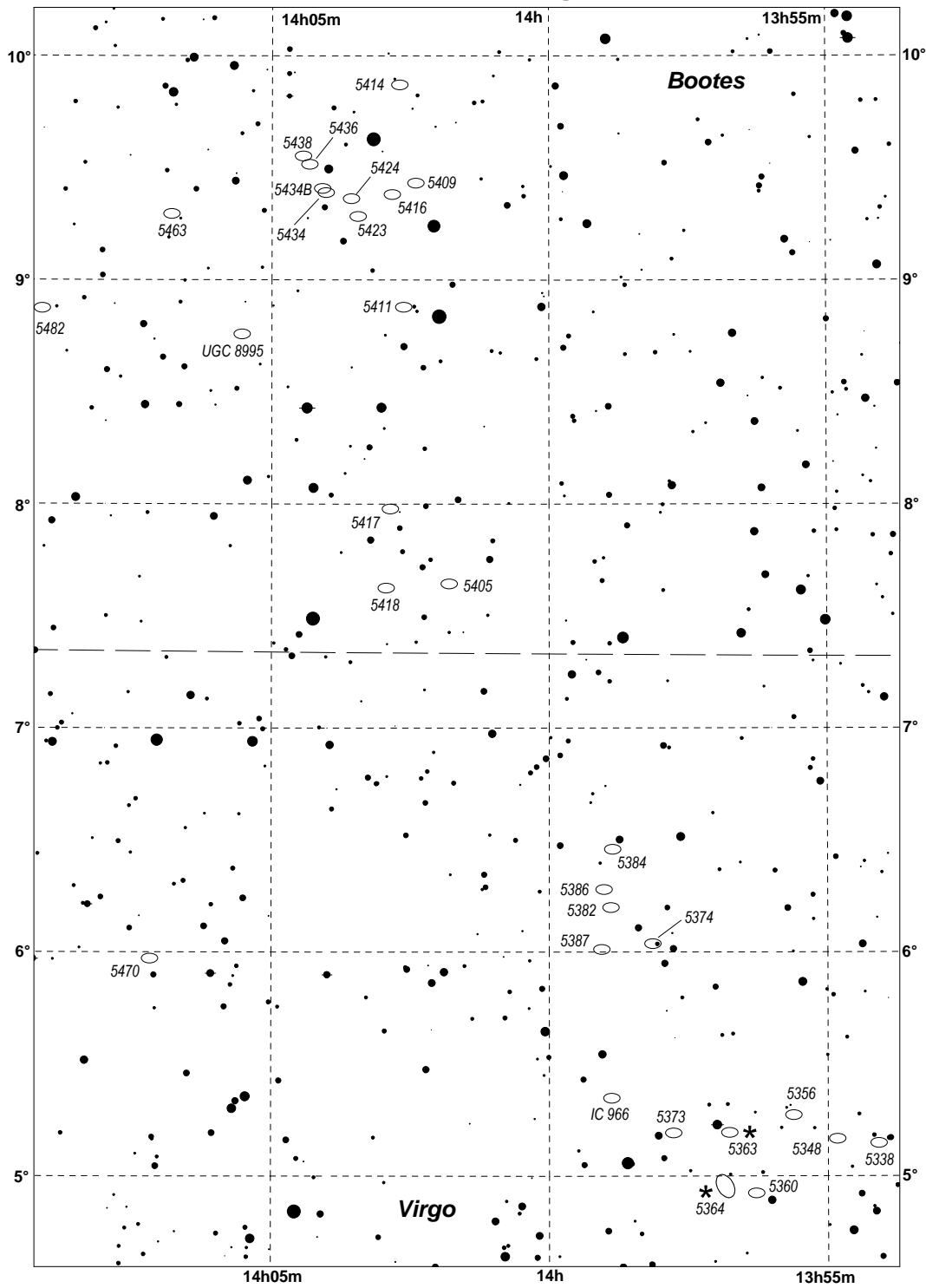
A10 - NGC 507 group



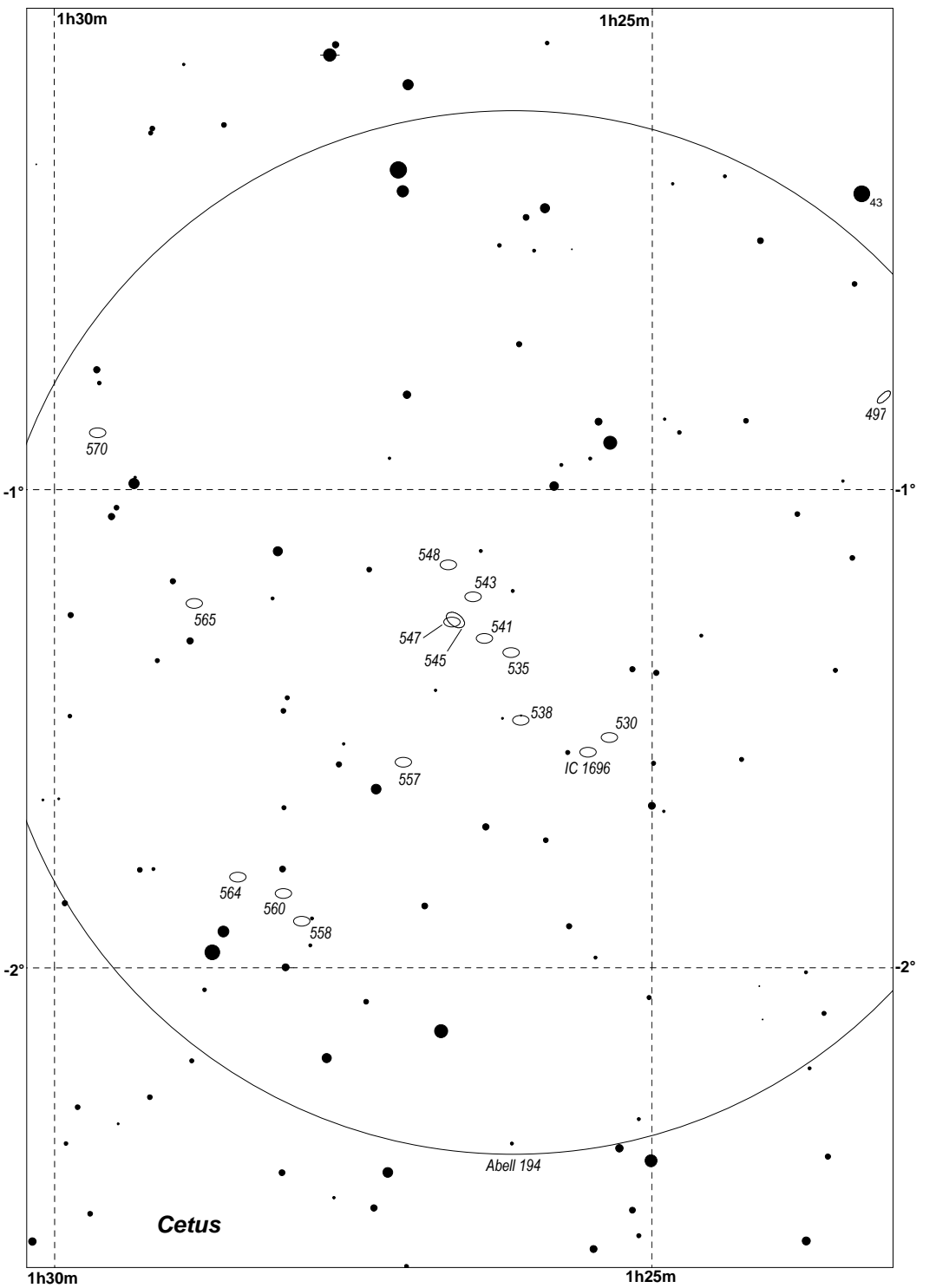
A11 - Hickson 7 and NGC 194 region



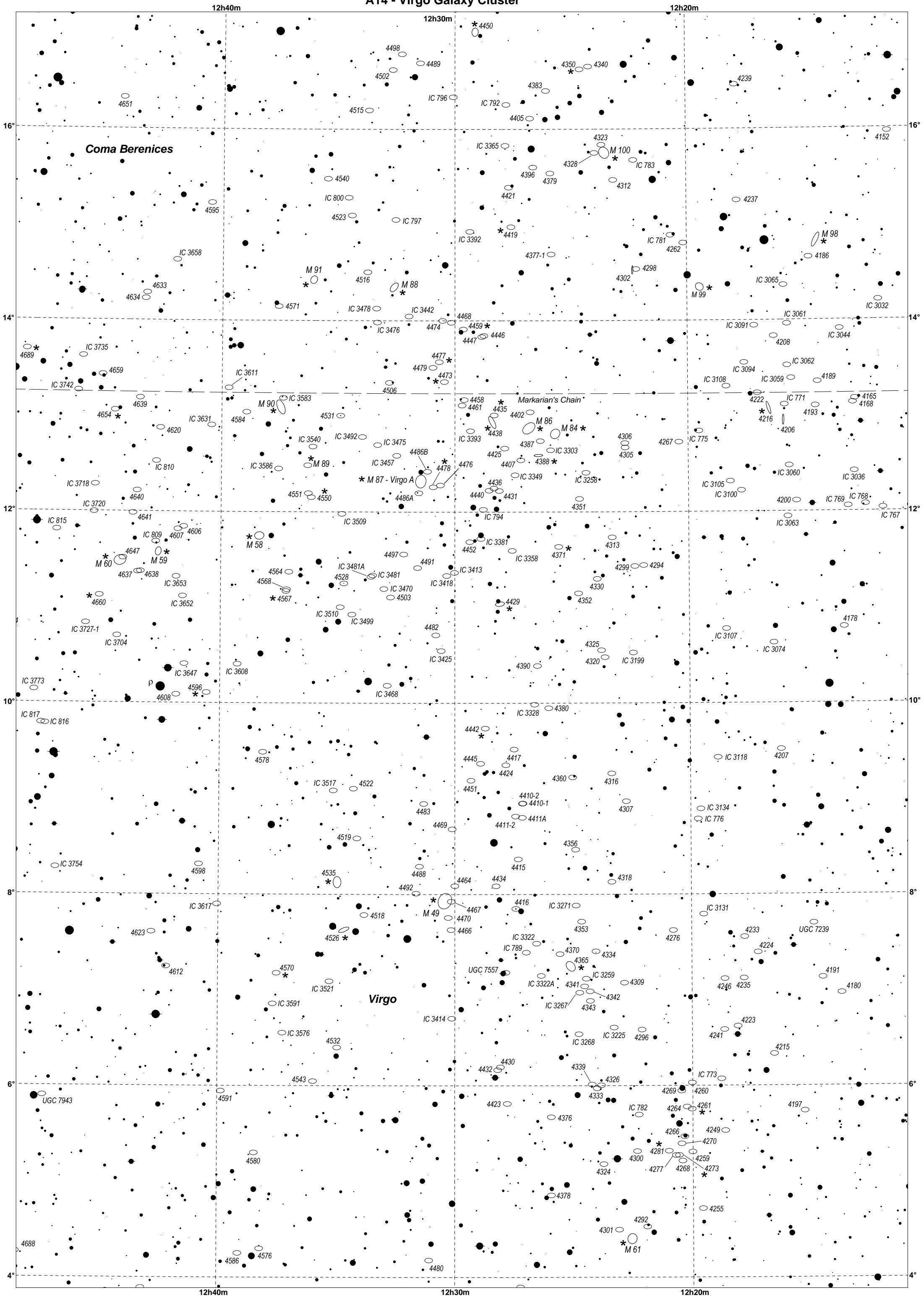
A12 - NGC 5364 region



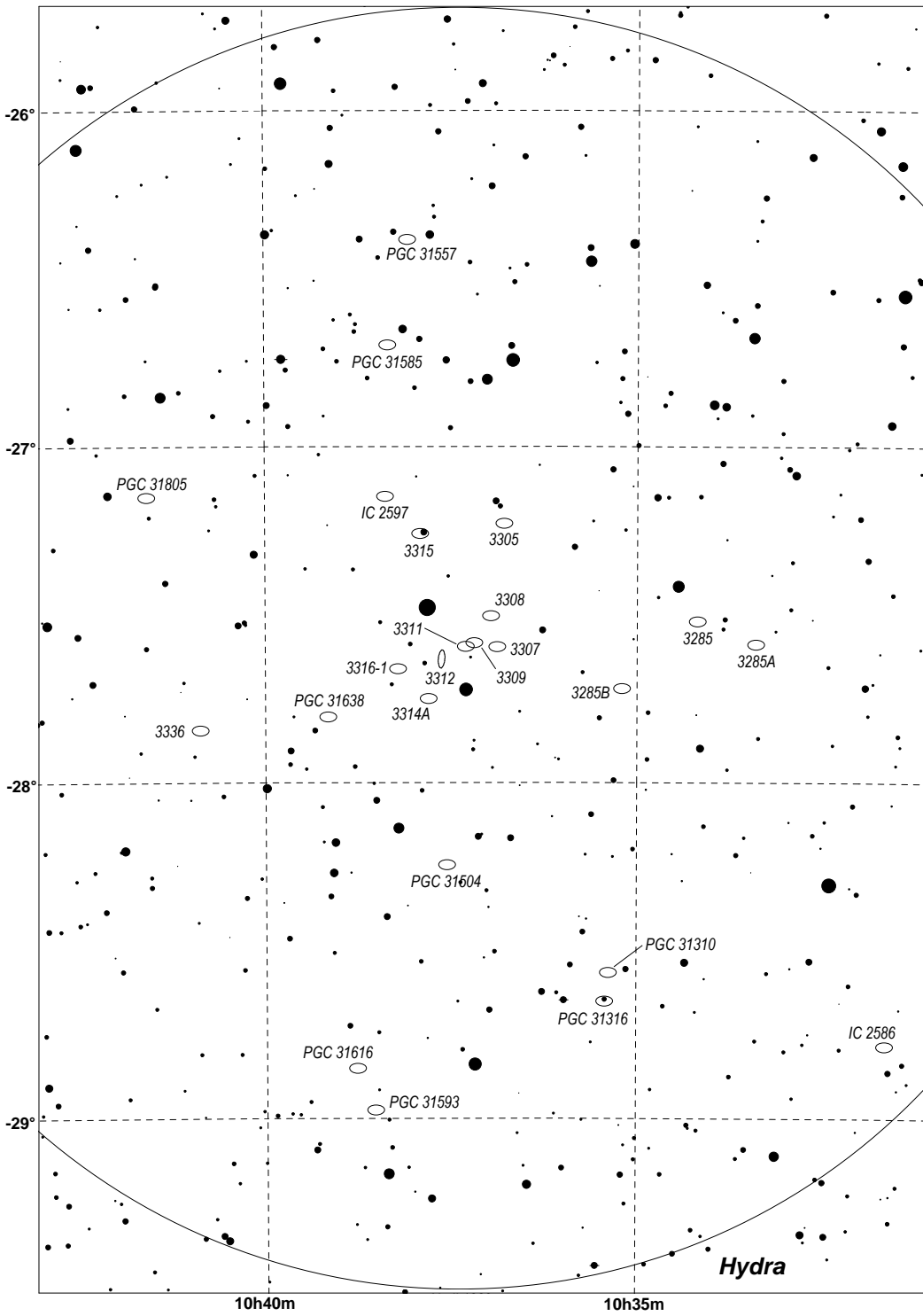
A13 - Abell 194



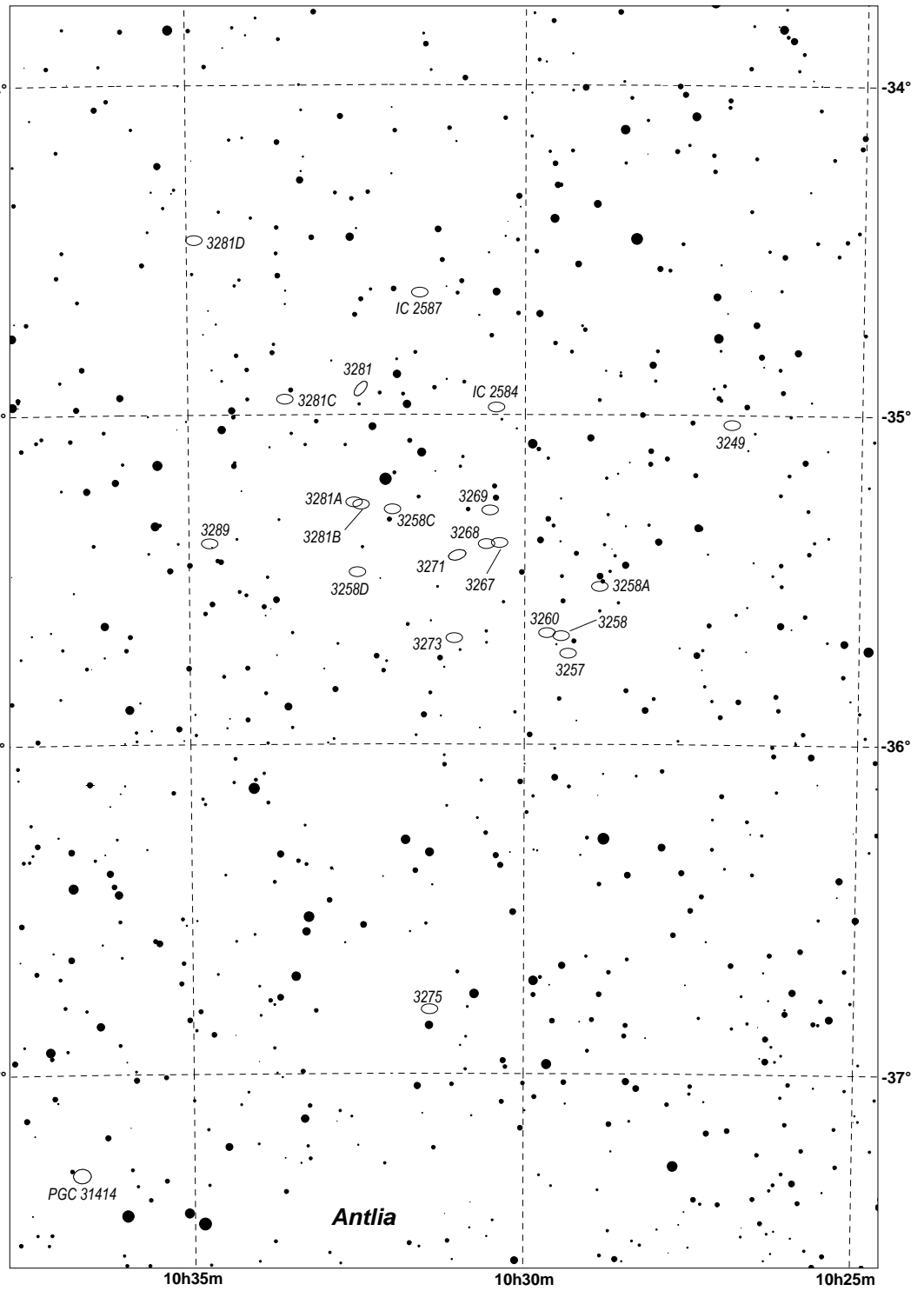
A14 - Virgo Galaxy Cluster



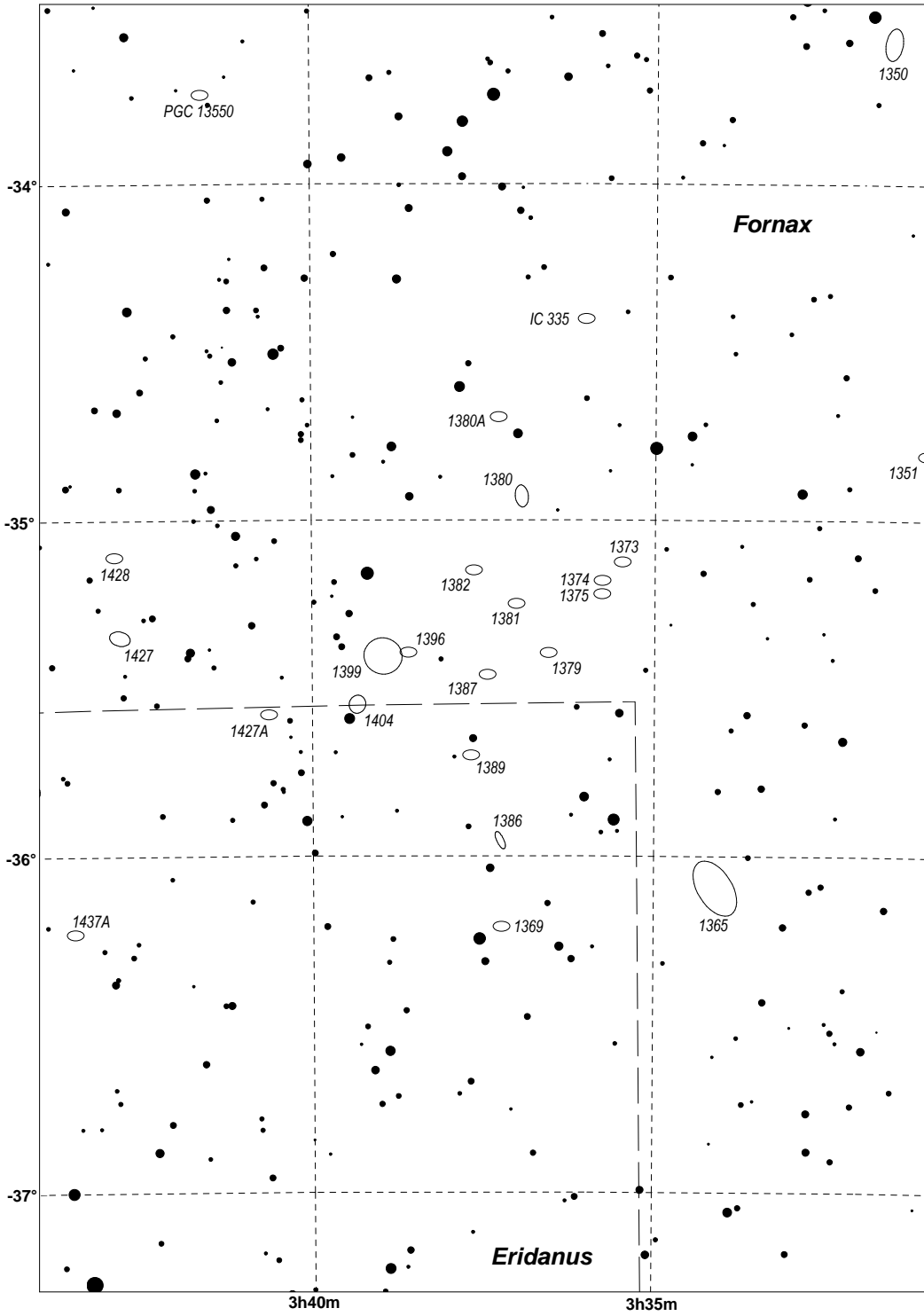
A18 - Hydra cluster Abell 1060



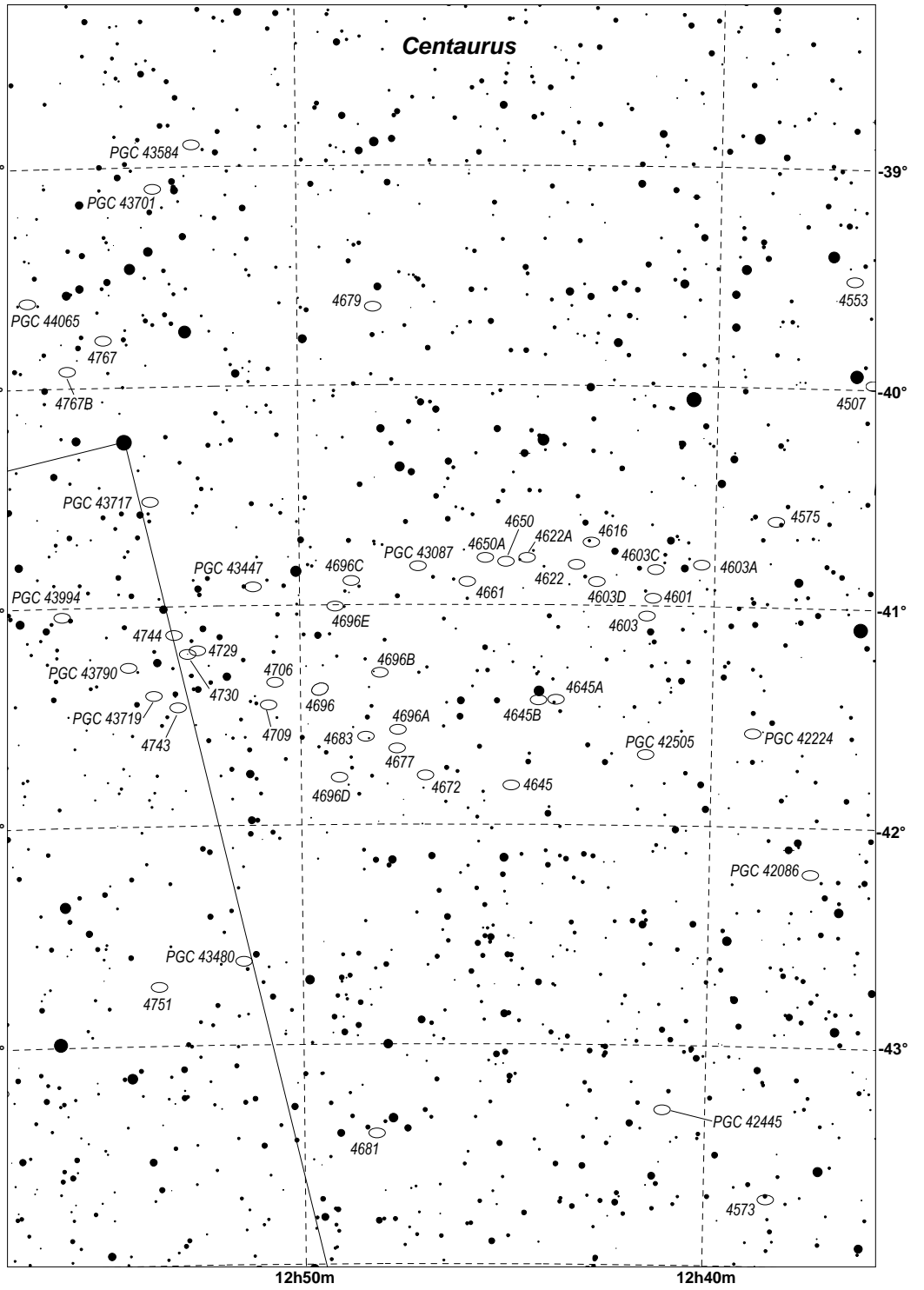
A19 - Antlia's cluster Abell S0636



A20 - Fornax cluster Abell S0373



A21 - Centaurus cluster Abell 3526



NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
M 1	SN Rem	TAU	8.4	11	8'				Crab Nebula; filaments;pulsar 16m;3C144	M 99	Galaxy	COM	9.9	13.2	5.3'	Sc			SN 1967h;Norton-diff for small scope
M 2	Glob CL	AQR	6.5	11	11.7'	II			Lord Rosse-Dark area near core;* mags 13...	M 100	Galaxy	COM	9.4	13.4	7.5'	SBbc			SN 1901-14-59;NGC 4322 @ 5.2';NGC 4328 @ 6.1
M 3	Glob CL	CVN	6.3	11	18.6'	VI			Lord Rosse-sev dark marks within 5' of center	M 101	Galaxy	UMA	7.9	14.9	28.5'	SBc			P w NGC 5474;SN 1909;spir galax w one heavy arm
M 4	Glob CL	SCO	5.4	12	26.3'	IX			Look for central bar structure	M 102	Galaxy	DRA	9.9	12.2	6.5'	Sa			vBN w dk lane and ansae;NGC 5867 small E neb;
M 5	Glob CL	SER	5.7	11	19.9'	V			st mags 11...;superb cluster	M 103	Opn CL	CAS	7.4	11	6'	III 2 p	40	10.6	in Cas OB8;incl Struve 131 6-9m 14"
M 6	Opn CL	SCO	4.2	10	20'	III 2 p	80	6.2	Butterfly cluster;51 members to 10.5 mag incl var	M 104	Galaxy	VIR	8	11.6	8.6'	Sab			Sombrero Galaxy; H I 43;dark equatorial lane;
M 7	Opn CL	SCO	3.3	12	80'	II 2 r	80	5.6	80 members to 10th mag; Ptolemy's cluster	M 105	Galaxy	LEO	9.3	12.8	5.3'	E1			P w NGC 3384 @ 7.2';NGC 3389 @ 10';Leo Group
M 8	Opn CL	SGR	4.6	-	15'	II 2 m n		6.9	In Lagoon nebula M8;25* mags 7...	M 106	Galaxy	CVN	8.4	13.6	17.4'	SBbc			H V 43
M 8	CL+Neb	SGR	5	13	45'	E			Lagoon Nebula;CI NGC 6530 invl;dark lane cross	M 107	Glob CL	OPH	7.8	12	3.3'	X			H VI 40
M 9	Glob CL	OPH	7.9	11	5.5'	VIII			Dark neb B64 prominent to west	M 108	Galaxy	UMA	10	13.1	8.6'	SBc			H V 46; M 97 is 48' SE;nearly edge-on
M 10	Glob CL	OPH	6.6	12	12.2'	VII			Lord Rosse reported dark lane in cluster	M 109	Galaxy	UMA	9.8	13.6	7.5'	SBbc			H V 61;theta struc barred sp;Gamma UMa 40' NW
M 11	Opn CL	SCT	5.8	9	14'	I 2 r	500	8	500 stars to 14th mag;Wild duck cluster	M 110	Galaxy	AND	8.1	14	19.5'	SA0			M31 Companion;UGC 426; Member Local Group
M 12	Glob CL	OPH	6.1	12	14.5'	IX			Somewhat loose structure	NGC 1	Galaxy	PEG	12.9	13.5	1.7'	Sb			
M 13	Glob CL	HER	5.8	12	23.2'	V			Hercules cluster;Messier said nebula, no stars	NGC 3	Galaxy	PSC	13.3	12.8	1.1'	SO			comp @ 4.8';PA 24;0.6'x0.2'
M 14	Glob CL	OPH	7.6	12	6.7'	VIII			Many vF stars 14...	NGC 5	Galaxy	AND	13.3	13.2	1.2'	Elliptical			compact
M 15	Glob CL	PEG	6.4	11	12.3'	IV			Stars mags 13...	NGC 6	Galaxy	AND	13	-	-	E-SO			
M 16	CL+Neb	SER	6	12	7'	III 3 m n;	60	11	Star Queen or Eagle Nebula;stars mags 8...	NGC 7	Galaxy	SCL	13.9	14	2.2'	SBc			
M 17	CL+Neb	SGR	6	13	11'	III 3 m n;	40	9.3	Omega nebula;Swan Nebula;many F outer loops;	NGC 9	Galaxy	PEG	13.6	13.3	1.1'	Sbp			Peculiar;disturbed;B main body 0.45x0.25
M 18	Opn CL	SGR	6.9	12	9'	II 3 p n	20	8.6	12* mag 9-10; 1 deg S of M17	NGC 10	Galaxy	SCL	12.5	13.5	2.4'	SBbc			
M 19	Glob CL	OPH	6.8	11	5.3'	VIII			One of the most oblate globulars	NGC 11	Galaxy	AND	13.7	12.5	1.5'	Sa			
M 20	CL+Neb	SGR	6.3	13	28'	E+	67	6	Trifid nebula;sev dark lanes;H IV 41 & V 10;D* HN	NGC 12	Galaxy	PSC	13.1	14	1.6'	SBbc			H III 868;UGC 74
M 21	Opn CL	SGR	5.9	11	13'	I 3 m	70	7.3	In Sgr OB1;36 members to 12th mag	NGC 13	Galaxy	AND	13.2	13.5	2.3'	Sab			H III 866;UGC 77
M 22	Glob CL	SGR	5.2	11	24'	VII			Stars mags 11...;one of finest globs	NGC 14	Galaxy	PEG	12.1	13.9	2.8'	Irp+			H II 591;UGC 75;Arp 235
M 23	Opn CL	SGR	5.5	13	27'	III 1 m	150	9.2	100 members to 13th mag	NGC 15	Galaxy	PEG	13.8	13.1	1'	Sa			
M 24	Opn CL	SGR	3.1	4.3	95'				Small Sagittarius Star Cloud; dark neb , 6603 invl	NGC 16	Galaxy	PEG	12	12.4	1.8'	E3			H IV 15;comp @ 3.3';PA 347;0.4x0.3;vF interacting p
M 25	Opn CL	SGR	4.6	12	29'	I 2 p	30	6.7	Contains U Sqr;Stars mags 6...10	NGC 17	Galaxy	CET	13.8	-	2.1'	S			
M 26	Opn CL	SCT	8	12	15'	I 1 m	30	10.3	Finderscope will show why Messier included it:70 *;	NGC 20	Galaxy	AND	13	13.8	1.7'	E-SO			comp @ 3.8' PA122 0.5x0.2;B * 0.3' n
M 27	Pln Neb	VUL	7.3	11.2	480"	3(2)		14.1	dumbbell neb. PK60-3.1;Lord Rosse drew 18* invl	NGC 21	Galaxy	AND	12.7	12.6	1.5'	SBbc			
M 28	Glob CL	SGR	6.9	11	15'	IV			45' NW from Lambda Sgr;* mags 14...	NGC 22	Galaxy	PEG	13.6	14.3	1.7'	Sb			comp @ 3.3' PA 347 0.4X0.25
M 29	Opn CL	CYG	6.6	11	7'	III 3 p n	50	8.6	About 20 stars mags 8...	NGC 23	Galaxy	PEG	12	13	2.5'	SBA			H III 147;UGC 89
M 30	Glob CL	CAP	6.9	11	8.9'	V			Wm. Herschel saw very elliptical shape	NGC 24	Galaxy	SCL	11.6	13.7	6.1'	Sc			H III 461;A2;Nearly edge-on
M 31	Galaxy	AND	3.4	13.5	189'	Sb			Andromeda Galaxy;Local Group;nearest spiral	NGC 25	Galaxy	PHE	13	13	1.4'	E-SO Ba			
M 32	Galaxy	AND	8.1	12.4	8.5'	E2			Companion to M31; Member of Local Group	NGC 26	Galaxy	PEG	12.7	13.6	2.1'	Sab Ring			
M 33	Galaxy	TRI	5.7	14.2	68.7'	Sc			Pinwheel Galaxy;Local Group;H V 17	NGC 27	Galaxy	AND	13.4	12.8	1.2'	Sb			
M 34	Opn CL	PER	5.2	-	35'	II 3 m	100	7.3	At least 80 true members;sev D* incl h1123 & O SN	NGC 28	Galaxy	PHE	13.6	13.1	0.6'	Pec			
M 35	Opn CL	GEM	5.1	12	28'	III 2 m	200	8.2	Lord Rosse counted 300*;Orange * invl;NGC 2158	NGC 29	Galaxy	AND	12.7	12.9	1.5'	SBbc			H II 853;UGC 100
M 36	Opn CL	AUR	6	12	12'	II 3 m	60	8.9	in Aur OB1;incl Struve 737 10.7"sep	NGC 34	Galaxy	CET	13.8	-	2.1'	S			
M 37	Opn CL	AUR	5.6	11	24'	II 1 r	150	9.2	Total population 500*;dark area near center	NGC 35	Galaxy	CET	14	-	0.7'	Sb			
M 38	Opn CL	AUR	6.4	12	21'	III 2 m	100	9.5	in Aur OB1;Burnham-shaped like Greek letter Pi	NGC 36	Galaxy	PSC	13.1	14.2	2.2'	SBb			H III 456;p of 2;interaction;bridge? to comp 1' PA 8
M 39	Opn CL	CYG	4.6	11	32'	III 2 p	30	6.8	Large but loose cluster	NGC 37	Galaxy	PHE	13.7	13.2	1.1'	SBO			
M 40	2 Stars	UMA	9	-	-				D* 9 & 9.3 mag 50" sep; No nebulae	NGC 38	Galaxy	PSC	13.5	-	1.4'	Sa			
M 41	Opn CL	CMA	4.5	12	38'	II 3 m	80	6.9	150 members to 13 mag;orange * near center	NGC 39	Galaxy	AND	13.5	13.6	1.1'	Sc			H III 861
M 42	CL+Neb	ORI	4	11	90'	E+R			Orion neb Trapezium* 6.7-7.7m;>50 var* invl	NGC 40	Pln Neb	CEP	10.7	7.3	60"	3b(3)	11.5		H IV 58;PK120+9.1;Lord Rosse saw spiral structure
M 43	Brn Neb	ORI	7	13	20'	E			H III 1 ?;detached part of Orion Nebula	NGC 41	Galaxy	PEG	13.6	12.6	0.8'	Sc			
M 44	Opn CL	CNC	3.1	13	95'	II 2 m	50	6.3	Beehive Cluster;200 memb to 14 mag	NGC 42	Galaxy	PEG	13.8	13.1	1.1'	E-SO			p of 2;P w comp at 1';PA 77;0.9x0.8;dwarf
M 45	CL+Neb	TAU	1.2	11	100'	I 3 r n	100	2.9	Pleiades;nebys NGC 1432 and 1435 involved	NGC 43	Galaxy	AND	12.6	13.4	1.6'	SBO			
M 46	Opn CL	PUP	6.1	13	27'	III 2 m	100	8.7	PLNNG NGC 2438 on N edge;150 * 10-13 mag	NGC 45	Galaxy	CET	10.6	14.7	7.6'	SBd			Loose struct;Spiral pattern dim
M 47	Opn CL	PUP	4.4	11	30'	III 2 m	30	5.7	H VIII 38;Messier gave poor posion;Stv 1121,1120	NGC 47	Galaxy	CET	13.8	-	2.3'	SBbc			
M 48	Opn CL	HYA	5.8	13	54'	I 2 m	80	8.2	Messier wrong position by 4 deg in dec;50* 9-13mag	NGC 48	Galaxy	AND	13.6	13.7	1.6'	SBbc			
M 49	Galaxy	VIR	8.4	13.2	9.8'	E4			NGC 4467 @ 4.2';NGC 4470 @ 10.5';NGC 4465 @	NGC 49	Galaxy	AND	13.7	13.7	1.1'	SO			NGC 51 group;in group of 6;NGC 51 the brightest
M 50	Opn CL	MON	5.9	12	16'	II 3 m	80	7.8	About 100 stars mags 9...14	NGC 50	Galaxy	CET	12.4	-	2.4'	E-SO			
M 51	Galaxy	CVN	8.4	12.9	10.8'	Sbc			Whirlpool Gal;interacting pair;classic spiral	NGC 51	Galaxy	AND	13.1	13.2	1.7'	S0 Pec			brightest in group of 6 including NGC 49 and NGC 4
M 51	Galaxy	CVN	9.6	12.9	5.9'	SBO-a			H I 186;interacting P w M 51;peculiar	NGC 52	Galaxy	PEG	13.3	13.1	2.2'	Sc			H III 183;nf of 2;disturbed;UGC 122 superimp 0.9' st
M 52	Opn CL	CAS	6.9	12	13'	I 2 r	200	8.2	Messier saw neby there is none	NGC 55	Galaxy	SCL	7.9	13.4	31.2'	SBp			Sculptor Galaxy Group
M 53	Glob CL	COM	7.7	12	14.4'	V			1 deg NE of Alpha Comae Berenices	NGC 57	Galaxy	PSC	11.6	13.2	2.2'	Elliptical			H II 241=H II 243
M 54	Glob CL	SGR	7.7	11	9.1'	III			* mags 15...	NGC 58	Galaxy	CET	13.8	-	2.3'	SBbc			
M 55	Glob CL	SGR	6.3	13	19'	XI			* mags 15...	NGC 59	Galaxy	CET	12.4	13.6	2.6'	E-SO			
M 56	Glob CL	LYR	8.3	12	5'	X			Stars 11...	NGC 63	Galaxy	PSC	11.6	12.2	1.7'	S pec			
M 57	Pln Neb	LYR	9.4	9.3	86"	4(3)		15.8	Ring Nebula;central* var 14 to 16 mag;PK63+13.1	NGC 64	Galaxy	CET	14	-	1.6'	SBbc			
M 58	Galaxy	VIR	9.7	13.1	6'	SBb			fine compact spiral	NGC 66	Galaxy	CET	13.4	13	1.2'	SB Ring			
M 59	Galaxy	VIR	9.6	12.9	5.3'	E3			B diff N;smooth arms	NGC 68	Galaxy	AND	12.9	14.2	1.2'	E-SO			H V 16;In compact group
M 60	Galaxy	VIR	8.8	12.9	7.6'	E1			NGC 4647 @ 2.5'	NGC 70	Galaxy	AND	13.5	13.9	1.6'	Sbc			In compact group w NGC 68 and 71
M 61	Galaxy	VIR	9.6	13.4	6.5'	SBbc Ri			SN 1926;1961;1964;NGC 4301 @ 10';H I 139;L fa	NGC 71	Galaxy	AND	13.2	13.4	1.5'	S0 Pec			In compact group
M 62	Glob CL	OPH	6.4	11	14.1'	IV			Asymmetrical	NGC 72	Galaxy	AND	13.5	13.3	1.1'	SBab			In compact group
M 63	Galaxy	CVN	8.6	13.3	12.6'	Sbc			Sunflower, vsvB stell. N in B inner lens;many filam	NGC 73	Galaxy	CET	13.6	-	1.7'	Sbc			
M 64	Galaxy	COM	8.5	12.7	10.3'	Sab			Blackeye Galaxy;dark marking near center	NGC 75	Galaxy	PSC	13.2	13.9	1.5'	SO			
M 65	Galaxy	LEO	9.3	12.8	9'	SBA			M66 subgroup, Leo's Triplet	NGC 76	Galaxy	AND	13	12.7	1'	Compac			compact;complex nucl region
M 66	Galaxy	LEO	8.9	12.7	9.1'	SBb			Leo's triplet ;M 65 & NGC 3628 in field	NGC 78A	Galaxy	PSC	13.7	13.3	1.1'	SBO-a			compact
M 67	Opn CL	CNC	6.9	13	30'	II 2 m	200	9.7	500 memb to 16 mag;Mallas-dark spot near center	NGC 78B	Galaxy	PSC	13.5	12.3	0.7'	SO			Compact
M 68	Glob CL	HYA	7.3	13	9.8'	X				NGC 80	Galaxy	AND	12.1	13.2	2.2'	E-SO			Brightest in group
M 69	Glob CL	SGR	7.7	11	7.1'	V				NGC 82	Star	AND	14	-	-				
M 70	Glob CL	SGR	7.8	11	7.8'	V			Curved arc of stars to NE;* mags 14...	NGC 83	Galaxy	AND	12.5	13.4	1.3'	E0			NGC 80 group
M 71	Glob CL	SGE	8.3	12	6.1'				Arrowhead shape; stars have few metals	NGC 89	Galaxy	PHE	13.5	13	1.2'	SBO-a			
M 72	Glob CL	AQR	9.2	12	5.9'	IX			3 deg WSW of NGC 7009	NGC 91	Star	AND	13.7	14	-				Distorted;NGC 80 group
M 73	Opn CL	AQR	9.7	-	2.8'	IV 1 p	14	10	4 or 5 10th mag stars; Messier saw neb but there is	NGC 92	Galaxy	PHE	13.1	13.6	1.9'	Sa			
M 74	Galaxy	PSC	9.4	14.2	10'	Sc			Fine face on spiral	NGC 93	Galaxy	AND	13.3						

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 132	Galaxy	CET	12.6	13.6	1.9'	SBbc			H II 855;UGC 301	NGC 275	Galaxy	CET	12.5	12.9	1.5'	Sbp			
NGC 133	Opn CL	CAS	9.4	-	7'	IV 1 p	5			NGC 277	Galaxy	CET	13.4	-	1.4'	E-SO			
NGC 134	Galaxy	SCL	10.4	13.3	8.4'	SBbc			Nearly edge-on	NGC 278	Galaxy	CAS	10.8	12.2	2.4'	SBb			Lg B nucl;sev knotty massive arms;B part sharp edg
NGC 136	Opn CL	CAS	11.5	-	1.2'	II 2 p	20	13	H VI 35;30 F*	NGC 279	Galaxy	CET	12.7	13.3	1.6'	Sa			H III 439;UGC 532;Mrk 558
NGC 137	Galaxy	PSC	12.8	13.2	1.3'	SO			H II 471	NGC 280	Galaxy	AND	13.2	13.8	1.7'	SB Ring			H III 477;distorted;asym ecc nucl region;UGC 534
NGC 138	Galaxy	PSC	13.6	13.1	1.3'	Sa			brightest in sub-group	NGC 281	CL+Neb	CAS	7.4	-	4'	E+		9	
NGC 140	Galaxy	AND	13.2	13.8	1.5'	SBc Ring				NGC 288	Glob CL	SCL	8.1	-	13.8'	X			H VI 20;loose structured globular
NGC 142	Galaxy	CET	13.8	13.1	1.1'	SBb				NGC 289	Galaxy	SCL	11	14	5.4'	SBbc			
NGC 144	Galaxy	CET	13.7	13	0.8'	Sc				NGC 295	Galaxy	PSC	12.6	13.2	2.2'	SBb			
NGC 145	Galaxy	CET	12.7	13.5	1.8'	SBd				NGC 298	Galaxy	CET	13.5	-	1.7'	Sc			
NGC 146	Opn CL	CAS	9.1	-	7'	IV 3 p	20	11.6		NGC 300	Galaxy	SCL	8.1	14.3	19.3'	Scd			Large S-shaped;loose structured spiral
NGC 147	Galaxy	CAS	9.5	14.5	13.5'	dE4			Dwarf E!;P w NGC 185 at 58';low surface br; Local cl	NGC 304	Galaxy	AND	13	12.6	1.1'	S pec			eruptive ?;sf of 2
NGC 148	Galaxy	SCL	12.2	12.6	2'	Sa			Spindle shape	NGC 307	Galaxy	CET	12.8	12.8	1.6'	SO			
NGC 149	Galaxy	AND	13.7	13.5	1.2'	SO			Compact	NGC 308	Star	CET	14	-					
NGC 150	Galaxy	SCL	11.4	13.4	3.9'	SBb				NGC 309	Galaxy	CET	11.9	14	3'	SBc Ring			Fine spiral
NGC 151	Galaxy	CET	11.6	13.4	3.8'	SBbc			H II 478	NGC 311	Galaxy	PSC	13	13.1	1.5'	SO			
NGC 153	Galaxy	CET	11.6	-	3.8'	SBbc				NGC 312	Galaxy	PHE	13.4	-	1.4'	E			
NGC 154	Galaxy	CET	14	-	1.1'	Elliptical			H III 467	NGC 314	Galaxy	SCL	13.2	12.7	0.9'	SBO-a R			
NGC 155	Galaxy	CET	13.5	-	1.7'	SO				NGC 315	Galaxy	PSC	11.2	13.2	3'	E-SO			H II 210;UGC 597
NGC 157	Galaxy	CET	10.4	12.9	4.1'	SBbc			H II 3	NGC 317B	Galaxy	AND	13.9	-	1.1'	SBbc			
NGC 159	Galaxy	PHE	13.8	13.1	1.4'	SBO-a				NGC 319	Galaxy	PHE	13.3	13	1'	SB Ring			
NGC 160	Galaxy	AND	12.6	14.3	2.9'	Sa Ring			H III 476;UGC 356	NGC 320	Galaxy	CET	13.5	12.4	0.8'	SBO-a R			
NGC 163	Galaxy	CET	12.7	13.4	1.6'	E0			H III 954	NGC 322	Galaxy	PHE	13.3	12.7	1.1'	SO			Galaxy w interacting comp@ 0.2'
NGC 165	Galaxy	CET	13.1	13.7	1.6'	SBbc				NGC 323	Galaxy	PHE	13.6	-	1'	E			
NGC 167	Galaxy	CET	13.6	13.1	1'	SBc				NGC 324	Galaxy	PHE	12.9	12.3	1.4'	Sa			
NGC 168	Galaxy	CET	13.8	12.3	1.2'	Sa				NGC 326	Galaxy	PSC	13.2	14	1.5'	E4p			
NGC 169	Galaxy	AND	13.2	-	1.8'	Sb			Contact P w IC 1559	NGC 327	Galaxy	CET	13.4	13.3	1.5'	Sbc			
NGC 171	Galaxy	CET	12.9	-	2.1'	SBab			H III 223?	NGC 329	Galaxy	CET	13.3	13.1	1.5'	Sb			
NGC 172	Galaxy	CET	13.4	12.9	2'	SBbc				NGC 334	Galaxy	SCL	13.8	13.3	1.2'	SBb			
NGC 173	Galaxy	CET	13	15.1	3.2'	Sc			H III 871;UGC 369	NGC 336	Galaxy	CET	12	-	0.7'	S pec			
NGC 174	Galaxy	SCL	12.8	12.4	1.4'	SBO-a				NGC 337	Galaxy	CET	11.6	13.3	3'	SBcd			H II 433;Coarse spiral pattern
NGC 175	Galaxy	CET	12.2	13.5	2.1'	SBab			Theta structure	NGC 337A	Galaxy	CET	12.2	15.6	6.1'	SBd			
NGC 177	Galaxy	CET	13.2	13.2	2.2'	Sab Ring				NGC 338	Galaxy	PSC	12.8	12.8	1.8'	Sab			
NGC 178	Galaxy	CET	12.6	13.2	2.1'	SB/P				NGC 340	Galaxy	CET	14	-	0.9'	Sb			
NGC 179	Galaxy	CET	13.3	12.8	0.9'	E-SO				NGC 341	Galaxy	CET	13.7	-	1.2'	SB Ring			
NGC 180	Galaxy	PSC	12.9	14.4	2.4'	SBbc			H III 876.2 thin inner arms;mult arms in outer disk	NGC 341A	Galaxy	CET	13	-	1.2'	SB Ring			
NGC 182	Galaxy	PSC	12.4	13.6	1.9'	SBa			H III 870;Brightest in group;UGC 382	NGC 343	Star	CET	14	-					
NGC 183	Galaxy	AND	12.7	14.1	2.1'	Elliptical				NGC 345	Galaxy	CET	13.5	-	1.2'	Sa			
NGC 185	Galaxy	CAS	9.2	14.3	12.5'	dE0			H II 707;Dwarf elliptical; Member Local Group	NGC 349	Galaxy	CET	13.5	-	1.2'	E-SO			
NGC 186	Galaxy	PSC	13.4	13.4	1.4'	SBO-a			In NGC 182 group	NGC 351	Galaxy	CET	13.2	13.1	1.5'	SBO-a			
NGC 187	Galaxy	CET	13.3	-	1.3'	Sc				NGC 352	Galaxy	CET	12.6	13.3	2.4'	SBbc			H III 191
NGC 188	Opn CL	CEP	8.1	-	14'	II 2 r	20	12.1		NGC 353	Galaxy	CET	13.6	12.9	1.3'	SBab			
NGC 189	Opn CL	CAS	8.8	-	3.7'	III 2 p	15	10.9		NGC 354	Galaxy	PSC	13.4	12.1	0.8'	SB/P			Peculiar
NGC 192	Galaxy	CET	12.6	13.1	1.9'	SBa			H III 872;Brightest of 4;UGC 401	NGC 356	Galaxy	CET	13.5	-	1.5'	Sbc			
NGC 193	Galaxy	PSC	12.2	12.7	1.4'	S(B)0			H III 595;Compact;In NGC 182 group;UGC 408	NGC 357	Galaxy	CET	12	13.4	2.5'	SBO-a			H II 434
NGC 194	Galaxy	PSC	12.2	13	1.6'	E1			H II 856;Compact;In NGC 182 group;UGC 407	NGC 359	Galaxy	CET	13.3	13.6	1.5'	E-SO			
NGC 196	Galaxy	CET	14	-	1.3'	SBO			H II 860;NGC 192 group;contact P w NGC 197	NGC 364	Galaxy	CET	13.1	13.6	1.4'	SO			
NGC 198	Galaxy	PSC	13.1	13.4	1.1'	Sc			H II 857;NGC 182 group;Several tightly wound arms	NGC 365	Galaxy	SCL	13.5	12.8	1'	SBbc			
NGC 199	Galaxy	PSC	13.6	13.4	1.2'	SO			In NGC 182 group	NGC 366	Opn CL	CAS	12	-	3'	II 3 p	30	10	
NGC 200	Galaxy	PSC	12.6	13.1	1.7'	SBbc			H II 858;In NGC 182 group;UGC 420	NGC 368	Galaxy	PHE	13.6	12.7	0.7'	SBO-a			
NGC 201	Galaxy	CET	12.9	13.8	1.8'	SBc			H III 873;NGC 192 group;UGC 419	NGC 369	Galaxy	CET	13.8	13.3	1'	SBb			
NGC 203	Galaxy	PSC	14	12.3	0.9'	SO				NGC 374	Galaxy	PSC	13.4	12.5	1.1'	Sa			
NGC 204	Galaxy	PSC	12.9	13.1	1.2'	SO			Compact;In NGC 182 group	NGC 378	Galaxy	SCL	13.1	13.5	1.5'	SB Ring			
NGC 206	C+N+G	AND	12.8	-	1.8'	Pec			A star cloud in the south end of Andromeda Galaxy	NGC 379	Galaxy	PSC	12.9	12.8	1.4'	SO			H II 215;UGC 683;Arp 331
NGC 209	Galaxy	CET	12.9	13.3	1.3'	E-SO				NGC 380	Galaxy	PSC	12.5	13.1	1.3'	E2			H II 216;NGC 383 group;UGC 682;Arp 331
NGC 210	Galaxy	CET	10.9	13.8	4.6'	SBb			H II 452;F outer arms form encircling ring	NGC 381	Opn CL	CAS	9.3	-	6'	III 2 p	50	10	H VIII 64;In Cas OB1?
NGC 212	Galaxy	PHE	13.4	13.6	1.3'	E-SO				NGC 382	Galaxy	PSC	13.2	12.3	0.9'	E0			
NGC 213	Galaxy	PSC	13.3	14.1	1.7'	SBa			H III 200;UGC 436	NGC 383	Galaxy	PSC	12.4	13.1	2'	SO			Brightest in group;8 galaxies in chain
NGC 214	Galaxy	AND	12.3	13.1	1.9'	SBc			H II 209;UGC 438	NGC 384	Galaxy	PSC	13.1	13.1	1.1'	E3			In NGC 383 group
NGC 215	Galaxy	PHE	13.1	12.9	1.1'	E-SO				NGC 385	Galaxy	PSC	13	12.9	1.1'	E-SO			In NGC 383 group
NGC 216	Galaxy	CET	13.2	13.5	2'	SO			H III 244	NGC 389	Galaxy	AND	13.8	13	1.3'	Sa			
NGC 217	Galaxy	CET	13.5	-	2.7'	Sa			H II 480	NGC 391	Galaxy	CET	13.4	12.8	0.9'	Elliptical			
NGC 218	Galaxy	AND	14	14.1	1.1'	S pec				NGC 392	Galaxy	PSC	12.7	12.7	1.2'	E-SO			H II 218;Brightest of 3;UGC 700
NGC 223	Galaxy	CET	13.2	13.1	1.3'	SOa/Pec			Peculiar	NGC 393	Galaxy	AND	12.5	13.4	1.7'	E-SO			H I 54
NGC 225	Opn CL	CAS	7	-	12'	III 1 p n	15	9.3	H VIII 78;W shaped	NGC 399	Galaxy	PSC	13.6	12.9	0.9'	SBa			
NGC 226	Galaxy	AND	13.3	13	0.9'	Pec				NGC 403	Galaxy	PSC	12.5	12.6	1.8'	Sa			
NGC 227	Galaxy	CET	12.1	12.8	1.5'	E2			H II 444;UGC 456	NGC 404	Galaxy	AND	10.3	12.8	4.3'	E0			Mirach's ghost H II 224;UGC 718;Beta AND sf 6'
NGC 228	Galaxy	AND	13.7	13.8	1.2'	SBab Ring			2nd of 3	NGC 407	Galaxy	PSC	13.4	12.9	1.8'	Sa			H II 219;UGC 730
NGC 232	Galaxy	CET	13.5	13	0.9'	SBa				NGC 409	Galaxy	SCL	13	13.3	1.3'	Elliptical			
NGC 233	Galaxy	AND	12.4	13.4	1.7'	Elliptical			H III 149	NGC 410	Galaxy	PSC	11.5	12.7	2.3'	SBO			H II 220;UGC 735
NGC 234	Galaxy	PSC	12.5	13.4	1.6'	SBc			H II 245	NGC 415	Galaxy	SCL	13.5	13.5	1.5'	SBb			
NGC 235A	Galaxy	CET	14	-	1.3'	SO				NGC 418	Galaxy	SCL	12.6	13.8	2'	SBc			
NGC 236	Galaxy	PSC	13.5	13.5	1.2'	Sc			brightest of 3	NGC 420	Galaxy	PSC	12.1	13.5	2'	SO			H III 154
NGC 237	Galaxy	CET	13	13.3	1.6'	SBc				NGC 423	Galaxy	SCL	13.4	12.1	1'	Sa			
NGC 238	Galaxy	PHE	13.2	-	2'	SB Ring				NGC 424	Galaxy	SCL	12.8	13.1	1.8'	SBO-a R			
NGC 240	Galaxy	PSC	13.5	13.3	1'	Sa Ring			eF outer disk	NGC 425	Galaxy	AND	12.6	12.4	1'	S pec			
NGC 243	Galaxy	AND	13.6	12.5	0.9'	S pec				NGC 426	Galaxy	CET	12.9	13.2	1.4'	Elliptical			H III 592;NGC 430 group
NGC 244	Galaxy	CET	13.7	-	1.2'	SO Pec			H III 485;A10	NGC 428	Galaxy	CET	11.5	14.1	4'	Scp			H II 622;patchy central region;UGC 763
NGC 245	Galaxy	CET	12.2	12.6	1.3'	Sb			H II 445;Peculiar;UGC 476;Mrk 555	NGC 429	Galaxy	CET	13.4	12.3	1.4'	SO			H III 593;NGC 430 group
NGC 246	Pln Neb	CET	10.4	13.5	240''	3b		11.9	H V 25;PK118-74.1;Galaxy NGC 255 15' NNE	NGC 430	Galaxy	CET	12.5	12.9	1.3'	Elliptical			H II 447;Brightest of 3
NGC 247	Galaxy	CET	9.1	14.4	21'	SBcd			H V 20	NGC 431	Galaxy	AND	12.9	12.9	1				

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 466	Galaxy	TUC	13.6	-	1.7'	Sa				NGC 593	Galaxy	CET	14	-	1.2'	SO			
NGC 467	Galaxy	PSC	11.9	12.9	2'	SO			H I 108;NGC 470 group;1st of 3;UGC 848	NGC 594	Galaxy	CET	14	-	1.4'	Sbc			
NGC 470	Galaxy	PSC	11.8	13.4	2.9'	Sb Ring			H III 250;Brightest of 3;UGC 858	NGC 595	Neb+Gx	TRI	-	-	0.5'	E+			Part of NGC 598 = M33
NGC 471	Galaxy	PSC	13.3	12.8	1'	SO			Brightest in multiple system	NGC 596	Galaxy	CET	10.9	13	2.8'	E2			H II 4
NGC 472	Galaxy	PSC	14	-	1.3'	Sa			very compact	NGC 597	Galaxy	SCL	13.1	13.6	1.4'	SBbc			
NGC 473	Galaxy	PSC	12.5	13.1	1.9'	SBO-a				NGC 599	Galaxy	CET	13	-	1.4'	E-SO			H II 473
NGC 474	Galaxy	PSC	11.5	15.5	6.1'	SO Ring			H III 251;NGC 470 group;disturbed;UGC 864;Arp 2	NGC 600	Galaxy	CET	12.4	14.6	3.7'	SBcd Ring			H III 432
NGC 477	Galaxy	AND	13	13.9	2.2'	SBC			H III 577;2 main arms split into several secondary ar	NGC 604	Neb+Gx	TRI	-	-	2'	E+			Emission neb in arm of M33 ;largest H II reg. know
NGC 479	Galaxy	PSC	13.9	13.7	1.1'	Sbc Ring				NGC 605	Galaxy	AND	12.9	13.8	2.2'	SO			
NGC 481	Galaxy	CET	14	-	1.7'	E-SO				NGC 606	Galaxy	PSC	13.4	13.9	1.4'	SBC			angular
NGC 482	Galaxy	PHE	13.7	13.7	2.2'	Sab			Edge-on w 3 companions	NGC 608	Galaxy	TRI	13.2	12.2	0.8'	Sab			
NGC 483	Galaxy	PSC	13.1	12.3	0.7'	S				NGC 609	Opn CL	CAS	11	-	3'	II 3 r	77	14.4	
NGC 484	Galaxy	TUC	12.2	-	1.9'	E-SO				NGC 612	Galaxy	SCL	12.9	13.1	1.5'	Sa			
NGC 485	Galaxy	PSC	13	12.9	1.8'	S pec				NGC 613	Galaxy	SCL	10.1	13.3	5.2'	SBbc			H I 281
NGC 487	Galaxy	CET	14	-	1.1'	Sa				NGC 614	Galaxy	TRI	12.7	13.3	1.4'	SO			H III 174;UGC 1140
NGC 488	Galaxy	PSC	10.3	13.4	5.4'	Sb Ring			delicate spiral pattern	NGC 615	Galaxy	CET	11.6	13.3	3.4'	Sb			H II 282
NGC 489	Galaxy	PSC	12.6	11.9	1.7'	S pec				NGC 619	Galaxy	SCL	13.5	13.8	1.5'	SBb			
NGC 491	Galaxy	SCL	12.5	12.8	1.4'	SBb				NGC 620	Galaxy	AND	14	-	1'	Compac			peculiar
NGC 491A	Galaxy	SCL	13.8	14.3	1.9'	SBd				NGC 621	Galaxy	TRI	12.7	13.9	1.9'	SBO			
NGC 493	Galaxy	CET	12.5	13.7	3.4'	SBC			H III 594;SN 1971;v patchy chaotic spir pattern	NGC 622	Galaxy	CET	12.9	13.7	1.8'	SBbc			H III 454;UGC 1143
NGC 494	Galaxy	PSC	12.9	13.2	2'	Sab				NGC 623	Galaxy	SCL	12.5	13.6	2'	Elliptical			
NGC 495	Galaxy	PSC	12.9	12.9	1.2'	SBO-a			H III 156;in triple sub-group;UGC 920	NGC 624	Galaxy	CET	14	-	1.5'	Sb			H III 471
NGC 496	Galaxy	PSC	13.3	13.5	1.6'	Sbc			H III 157	NGC 625	Galaxy	PHE	11.1	13.6	6.4'	Sa/S			
NGC 497	Galaxy	CET	13	13.5	2.1'	SBbc			split arms	NGC 626	Galaxy	SCL	12.7	13.9	1.9'	SBC			
NGC 499	Galaxy	PSC	12.1	12.8	1.7'	E-SO			H III 158;IC 1686; UGC 926	NGC 627	Galaxy	TRI	13.7	-	1.4'	SO			
NGC 502	Galaxy	PSC	12.8	12.9	1.1'	SO				NGC 630	Galaxy	SCL	12.5	13.3	1.6'	E-SO			Wide triple
NGC 504	Galaxy	PSC	13	12.6	1.7'	SO			in very dense part of the cluster	NGC 631	Galaxy	PSC	13.3	14.3	1.7'	Elliptical			
NGC 505	Galaxy	PSC	13.8	13.1	0.9'	SO				NGC 632	Galaxy	PSC	12.3	12.8	1.5'	SO			
NGC 507	Galaxy	PSC	11.2	13.5	4'	E-SO			H III 159;UGC 938	NGC 633	Galaxy	SCL	12.7	12.9	1.4'	SBb			
NGC 508	Galaxy	PSC	13.1	13.6	1.3'	EO			H III 160	NGC 634	Galaxy	TRI	13	13.1	2.1'	Sa			
NGC 509	Galaxy	PSC	13.4	13.2	1.3'	SBO-a				NGC 636	Galaxy	CET	11.5	13.4	2.8'	E1			H II 283
NGC 511	Galaxy	PSC	13.7	14.1	1.2'	Elliptical				NGC 637	Opn CL	CAS	8.2	-	3.5'	I 3 p	20	10	H VII 49
NGC 512	Galaxy	AND	13.2	12.4	1.6'	Sab				NGC 638	Galaxy	PSC	13.8	12.7	0.8'	Sb			
NGC 513	Galaxy	AND	12.9	11.1	0.7'	Sc			H III 169;UGC 953	NGC 641	Galaxy	PHE	12.1	12.7	1.4'	E-SO			
NGC 514	Galaxy	PSC	11.6	13.9	3.7'	SBC			H II 252	NGC 642	Galaxy	SCL	12.9	13.6	2'	SBC			
NGC 515	Galaxy	PSC	13	13.4	1.4'	SO			H III 167	NGC 644	Galaxy	PHE	14	13.6	1.3'	SBC			
NGC 516	Galaxy	PSC	13.1	12.7	1.4'	SBO-a				NGC 645	Galaxy	PSC	12.6	13.7	2.6'	SBb			2 massive smooth arms;rare
NGC 517	Galaxy	PSC	12.4	13	2'	SO			H III 168;UGC 960	NGC 647	Galaxy	CET	14	-	1.5'	SO			
NGC 518	Galaxy	PSC	13.3	13.1	1.6'	Sab				NGC 648	Galaxy	CET	14	-	1.1'	E-SO			
NGC 520	Galaxy	PSC	11.4	13.6	3.7'	Sa			H III 253;Strongly Peculiar; M82 type galaxy;UGC 96	NGC 651	Pln Neb	PER	10.1	10.4	163"	3(6)		17.6	Little Dumbbell or Cork Nebula;faintest M obj
NGC 521	Galaxy	CET	11.7	14	3.3'	SBbc			H II 461;UGC 962;delicate multiple arms	NGC 652	Galaxy	PSC	13.6	12.8	1'	S pec			
NGC 522	Galaxy	PSC	12.9	13	2.8'	Sbc				NGC 653	Galaxy	AND	13.4	12.1	1.5'	Sab			
NGC 523	Galaxy	AND	12.7	13.2	2.5'	Sbc			H III 170?;Peculiar;UGC 979	NGC 654	Opn CL	CAS	6.5	-	5'	II 3 m	60	7.4	H VII 46;In Cas OB8?;50* mags 11..14
NGC 524	Galaxy	PSC	10.3	12.3	3.2'	Sa			H I 151	NGC 655	Galaxy	CET	14	-	1.4'	SO			
NGC 525	Galaxy	PSC	13.2	13.1	1.5'	SO				NGC 656	Galaxy	PSC	13.4	12.2	1.5'	SBO			
NGC 526B	Galaxy	SCL	14	-	0.8'	SO				NGC 657	Opn CL	CAS	-	-	7'			40	7.1
NGC 527	Galaxy	SCL	13	12.6	1.6'	SBO-a				NGC 658	Galaxy	PSC	12.5	14	3'	Sb			
NGC 528	Galaxy	AND	12.5	13.1	1.7'	SO				NGC 659	Opn CL	CAS	7.9	-	5'	III 1 p	40	10.4	H VIII 65;30* mags 12...
NGC 529	Galaxy	AND	12.1	13.8	2.4'	E-SO				NGC 660	Galaxy	PSC	11.2	14.6	8'	SBap			H II 253;UGC 1201
NGC 530	Galaxy	CET	13	12.3	1.5'	Sa				NGC 661	Galaxy	TRI	12.2	13.2	1.6'	SO			H II 610
NGC 531	Galaxy	AND	13.8	13.6	1.8'	SBO-a				NGC 662	Galaxy	AND	12.9	11.8	0.8'	Sc			Peculiar
NGC 532	Galaxy	PSC	12.9	13.5	2.3'	Sab			H III 556;UGC 982	NGC 663	Opn CL	CAS	7.1	-	16'	III 2 m	80	8.4	H VI 31;In Cas OB8;incl Struve 151 152 & 153
NGC 533	Galaxy	CET	11.4	13.8	3.9'	E2			H II 462;many S galaxies near;10 w in 5 ' ;UGC 992	NGC 664	Galaxy	PSC	12.8	13.4	1.5'	Sb			Brightest of 3
NGC 534	Galaxy	SCL	13.4	13.3	1'	SBO				NGC 665	Galaxy	PSC	12.1	13.5	2.4'	SO			H II 588;Brightest in group;UGC 1223
NGC 535	Galaxy	CET	13.8	12.4	1'	Sa			In dense part of cluster	NGC 666	Galaxy	TRI	13.4	12.2	0.7'	S pec			
NGC 536	Galaxy	AND	12.4	13.4	3'	SBb			H III 171;UGC 1013	NGC 668	Galaxy	AND	13.1	13.8	1.8'	Sb			
NGC 537	Galaxy	AND	13.5	-	2.5'	Sbc			H III 170	NGC 669	Galaxy	TRI	12.3	12.8	3.1'	Sab			
NGC 538	Galaxy	CET	13.7	12.8	1'	Sab			in dense part of cluster	NGC 670	Galaxy	TRI	12.7	13.3	2.1'	SO			H II 611
NGC 539	Galaxy	CET	13.5	14.1	1.6'	SBC				NGC 671	Galaxy	ARI	13.2	12.7	1.5'	S pec			
NGC 541	Galaxy	CET	12.1	13.2	1.8'	SO				NGC 672	Galaxy	TRI	10.9	13.9	7.5'	SBC			H I 157;Brightest in group;coarse spiral . P w IC172
NGC 543	Galaxy	CET	13.1	10.9	0.6'	E6				NGC 673	Galaxy	ARI	12.6	13.8	2.1'	Sc			H II 589;2 B Main arms;UGC 1259
NGC 544	Galaxy	SCL	13.4	13.3	1.2'	E-SO Be				NGC 674	Galaxy	ARI	12.8	-	4.4'	SBbc			
NGC 545	Galaxy	CET	12.2	13.5	2.6'	SO			H II 448;double system in common halo;3C40;	NGC 676	Galaxy	PSC	10.5	-	4.2'	Sa			H IV 42;Brightest in chain including NGC 693;NGC 7
NGC 546	Galaxy	SCL	13.6	13.2	1.4'	SBb				NGC 677	Galaxy	ARI	12.2	13.7	2'	Elliptical			comp @ 2.9' PA324 0.7'x0.5'
NGC 547	Galaxy	CET	12.2	12.7	1.9'	Elliptical			H II 449;double system (NGC 545) in common halo	NGC 678	Galaxy	ARI	12.2	13.4	4.1'	SBb			H II 228;In NGC 697 group;UGC 1280
NGC 548	Galaxy	CET	13.7	13.2	0.9'	Elliptical				NGC 679	Galaxy	AND	12.3	13.8	2.1'	SO			H III 175
NGC 549	Galaxy	SCL	13.5	13.3	0.5'	Compac				NGC 680	Galaxy	ARI	11.9	13.1	1.8'	SOp			H II 229;UGC 1286
NGC 550	Galaxy	CET	12.7	12.5	1.4'	Sa			H II 463;UGC 1021	NGC 681	Galaxy	CET	12	13.4	2.7'	SBab			H II 481;Thin equat dust lane;resembles M 104
NGC 551	Galaxy	AND	12.7	12.9	1.8'	SBbc			H III 560	NGC 682	Galaxy	CET	13	-	1.4'	E-SO			H II 501
NGC 557	Galaxy	CET	13.5	13.5	1.4'	SBO-a				NGC 683	Galaxy	ARI	13.5	13.3	1'	S pec			spp of 2
NGC 559	Opn CL	CAS	9.5	-	4.4'	II 2 m	60	10.6	H VII 48	NGC 684	Galaxy	TRI	12.4	12.9	3.4'	Sb			NGC 672 group
NGC 560	Galaxy	CET	13	12.9	1.9'	SO			H III 441;UGC 1036	NGC 685	Galaxy	ERI	11	13.6	3.6'	SBc			
NGC 561	Galaxy	AND	12.9	13.7	1.6'	SBa				NGC 686	Galaxy	FOR	12.4	13.2	1.7'	E-SO			H III 459
NGC 562	Galaxy	AND	13.3	13.4	1.3'	Sc				NGC 687	Galaxy	AND	12.3	12.9	1.4'	SO			H III 561
NGC 563	Galaxy	CET	13.3	13.1	1.6'	SBC				NGC 688	Galaxy	TRI	12.7	13.9	2.4'	SBb			
NGC 564	Galaxy	CET	12.5	13.1	1.3'	E2			H III 442	NGC 689	Galaxy	FOR	13.6	13	1'	Sab			
NGC 565	Galaxy	CET	13.5	12.6	1.3'	Sa				NGC 691	Galaxy	ARI	11.4	13.7	3.4'	Sbc			H II 617;NGC 697 group;rare;smoother than usual S
NGC 566	Galaxy	PSC	13.5	12.9	1.6'	SO				NGC 692	Galaxy	PHE	13.1	-	2.1'	SBbc			
NGC 567	Galaxy	CET	14	-	1'	SO				NGC 693	Galaxy	PSC	12.4	13.1	2.2'	Sa			H II 859;NGC 676 group
NGC 568	Galaxy	SCL	12.6	13.7	2.2'	E-SO				NGC 694	Galaxy	ARI	13.7	16	0				

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 719	Galaxy	ARI	13.2	13.6	1.4'	SO				NGC 851	Galaxy	CET	13.5	12.9	1'	Sa			
NGC 720	Galaxy	CET	10.2	12.8	4.4'	E4			H I 105	NGC 852	Galaxy	ERI	13.4	13.6	1.3'	SBbc			
NGC 721	Galaxy	AND	13.5	13.9	1.7'	SBbc				NGC 853	Galaxy	CET	13	-	1.6'	Sm			H II 486
NGC 722	Galaxy	ARI	13.4	13.1	1.7'	Sbc				NGC 854	Galaxy	FOR	13.1	13.1	1.8'	SBc			
NGC 723	Galaxy	CET	12.4	13	1.5'	Sbc				NGC 855	Galaxy	TRI	12.6	13.6	2.6'	Elliptical			H II 613;UGC 1718
NGC 724	Galaxy	FOR	13.3	-	1.5'	Sbc				NGC 856	Galaxy	CET	13.2	13.3	1.3'	Sa			
NGC 725	Galaxy	CET	14	-	0.8'	Sc				NGC 857	Galaxy	FOR	12.4	13	1.5'	SO			
NGC 726	Galaxy	CET	14	-	1.2'	Sd				NGC 858	Galaxy	CET	13.7	13.9	1.3'	SBc			
NGC 731	Galaxy	CET	12.1	13.1	1.7'	EO			H III 266	NGC 861	Galaxy	TRI	13.8	13.4	1.5'	Sb			
NGC 732	Galaxy	AND	13.5	13.8	1.4'	SO				NGC 862	Galaxy	PHE	12.8	12.4	0.9'	Elliptical			
NGC 735	Galaxy	TRI	13.3	13.6	1.8'	Sb			H III 176	NGC 863	Galaxy	CET	12.9	12.9	1.1'	Sa			H III 260
NGC 736	Galaxy	TRI	12.1	13	1.7'	SO			H II 221?;P w NGC 740	NGC 864	Galaxy	CET	10.9	13.8	4.7'	SBc			H III 457;* 12m sf nucl 35"
NGC 739	Galaxy	TRI	13.9	12.3	0.5'	Sa				NGC 865	Galaxy	TRI	13.1	12.4	1.5'	S pec			
NGC 740	Galaxy	TRI	14	13.3	1.4'	SBb			H II 221?;P w NGC 736	NGC 866	Galaxy	CET	13.9	-	1.1'	Sa			
NGC 741	Galaxy	PSC	11.1	13.5	3'	E1			H II 271;Brightest in group;UGC 1413	NGC 867	Galaxy	CET	14	-	1.2'	Sa			H III 2
NGC 743	Opn CL	CAS	9.5	-	5'	II 1 p	12	10		NGC 868	Galaxy	CET	13.9	14.1	1.3'	E-SO			
NGC 744	Opn CL	PER	7.9	-	11'	IV 2 p	20	10.4		NGC 869	Opn CL	PER	5.3	-	30'	I 3 r	200	6.6	H Per; H VI 33;Double Cluster w NGC 884
NGC 745	Galaxy	ERI	13.3	-	1.3'	Sa				NGC 871	Galaxy	ARI	13.6	12.8	1.1'	SBc			NGC 877 group;P w NGC 870
NGC 746	Galaxy	AND	13	13.9	1.9'	Ir				NGC 872	Galaxy	CET	13.8	13.8	1.5'	Sc			
NGC 748	Galaxy	CET	12.6	13.5	2.3'	Sb Ring			H III 193	NGC 873	Galaxy	CET	13	-	1.6'	Sc			H II 474
NGC 749	Galaxy	FOR	12.5	13.5	1.9'	SBO-a				NGC 875	Galaxy	CET	12.9	13	1.2'	Sa			P w IC 218
NGC 750	Galaxy	TRI	11.9	12.7	1.6'	E1			H II 222;Contact P w NGC 751;compact cores;bridge	NGC 877	Galaxy	ARI	11.9	13.4	2.4'	SBbc			H II 246;Brightest in group of NGC 870;871;876;877
NGC 751	Galaxy	TRI	14	-	1.8'	EO				NGC 878	Galaxy	CET	13.7	12.4	0.8'	Sa			
NGC 752	Opn CL	AND	5.7	-	50'	III 1 m	60	9	H VII 32;Best in RFT or binocs;Ir scattered cl 70* m	NGC 881	Galaxy	CET	12.4	13.6	2.3'	Sc Ring			H II 436
NGC 753	Galaxy	AND	12.3	13.9	2.5'	SBbc			P w NGC 759	NGC 882	Galaxy	ARI	13.6	13.1	1.2'	SO			
NGC 755	Galaxy	CET	12.6	13.9	3.3'	SBb			H III 265	NGC 883	Galaxy	CET	13	-	1.7'	E-SO			H II 437
NGC 757	Galaxy	CET	13	-	1.7'	Elliptical				NGC 884	Opn CL	PER	6.1	-	30'	I 3 r	150	8.1	H VI 34;chi Per; Double Cluster w NGC 869
NGC 759	Galaxy	AND	12.7	13.6	1.8'	EO			P w NGC 753	NGC 885	Galaxy	CET	13.9	-	1.1'	Sa			
NGC 761	Galaxy	TRI	13.5	13.1	1.4'	SBab				NGC 886	Opn CL	CAS	-	-	8'	II 2p	20	11	
NGC 762	Galaxy	CET	13.5	-	1.4'	SBa			H III 464	NGC 887	Galaxy	CET	13	-	2'	SB Ring			H III 486
NGC 763	Galaxy	CET	13.1	-	3.3'	SBb				NGC 889	Galaxy	PHE	13.3	13.2	1'	Elliptical			
NGC 765	Galaxy	ARI	12.8	14.9	2.7'	SBbc Rlt			low surface br outside of 2.3'	NGC 890	Galaxy	TRI	11.2	12.7	2.9'	E4			H II 225;UGC 1823
NGC 766	Galaxy	PSC	12.7	14.2	2'	Elliptical			Brightest of 4	NGC 891	Galaxy	AND	9.9	13.6	13.1'	Sb			NGC 1023 group;Lord Rosse drawing shows dark l
NGC 767	Galaxy	CET	14	-	1.1'	Sb				NGC 893	Galaxy	PHE	12.9	13.1	1.4'	Sc			
NGC 768	Galaxy	CET	13.2	13.4	1.7'	Sbc			sp of 2;disturbed	NGC 894	Galaxy	CET	-	-		E+			
NGC 769	Galaxy	TRI	12.8	11.6	0.8'	Sc			n of 2	NGC 895	Galaxy	CET	11.7	14	3.6'	Sc			H II 438;NGC 894 is part of NGC 895
NGC 770	Galaxy	ARI	12.9	12.9	1.1'	E3				NGC 896	Brn Neb	CAS	-	-	27'	E			H III 695
NGC 771	Star	CAS	4	-						NGC 897	Galaxy	FOR	11.8	12.8	2.1'	Sa			
NGC 772	Galaxy	ARI	10.3	13.9	7.5'	Sb			H I 112;Several tightly coiled arms br on NW side	NGC 898	Galaxy	AND	12.9	12.7	1.8'	Sab			H III 570
NGC 773	Galaxy	CET	14	-	1.4'	Sa			H III 468	NGC 899	Galaxy	CET	12.6	13.4	1.8'	Ir			
NGC 774	Galaxy	ARI	13	13.5	1.5'	SO			H III 214	NGC 900	Galaxy	ARI	13.7	13.4	1.1'	SO			
NGC 775	Galaxy	FOR	12.7	13.3	1.7'	SB Ring				NGC 902	Galaxy	CET	14	-	0.6'	SBbc			
NGC 776	Galaxy	ARI	12.4	13.4	1.7'	SBb				NGC 904	Galaxy	ARI	13.6	13.6	1.2'	Elliptical			sf of 2
NGC 777	Galaxy	TRI	11.4	13.2	2.8'	E1/E2			H II 223;P w NGC 778	NGC 906	Galaxy	AND	12.9	13.9	1.8'	SBab			
NGC 778	Galaxy	TRI	13.2	12.5	1.1'	SO			P w NGC 777	NGC 907	Galaxy	CET	12.6	12.6	1.9'	SBd			H III 224
NGC 779	Galaxy	CET	11.2	12.7	4.1'	SBb			H I 101;nearly edge-on spiral	NGC 908	Galaxy	CET	10.2	13	6.1'	SBc			H I 153
NGC 781	Galaxy	ARI	13	12.2	1.5'	Sb			H III 215	NGC 909	Galaxy	AND	13.3	13	0.9'	Elliptical			
NGC 782	Galaxy	ERI	11.9	13.4	2.4'	SBb				NGC 910	Galaxy	AND	12.2	13.7	2'	SO			H III 571
NGC 783	Galaxy	TRI	12.1	12.9	1.6'	Sc				NGC 911	Galaxy	AND	12.7	13.2	1.7'	Elliptical			
NGC 784	Galaxy	TRI	11.7	14.1	6.6'	SBd				NGC 914	Galaxy	AND	13	13.7	1.8'	Sc			
NGC 785	Galaxy	TRI	14	-	1.5'	E-SO				NGC 918	Galaxy	ARI	12.2	14.2	3.5'	SBc			
NGC 786	Galaxy	ARI	13.3	12.2	0.7'	S pec				NGC 920	Galaxy	AND	13.9	14.3	1.5'	SBab			IC 1799 group
NGC 787	Galaxy	CET	13	-	2.5'	Sb				NGC 921	Galaxy	CET	14	-	1.4'	Sc			
NGC 788	Galaxy	CET	12.1	13	2.2'	Sa			H II 435	NGC 922	Galaxy	FOR	12.1	13.2	2'	SBc Ring			H III 239
NGC 789	Galaxy	TRI	13.4	11.7	0.6'	Sd			Peculiar	NGC 923	Galaxy	AND	13.7	12.6	0.8'	Sb			2nd of 3
NGC 790	Galaxy	CET	13.5	-	1.4'	SO			H III 433	NGC 924	Galaxy	ARI	12.4	13.4	2.3'	SO			H III 474;sp of 2;NGC 932 group
NGC 791	Galaxy	PSC	13.1	14.1	1.6'	Elliptical			Brightest of 3	NGC 925	Galaxy	TRI	10.1	14.4	10.9'	SBcd			H III 177;NGC 1023 group;coarse spiral
NGC 792	Galaxy	ARI	13.1	13.6	1.7'	SO				NGC 926	Galaxy	CET	13.3	13.7	1.8'	SBbc			
NGC 794	Galaxy	ARI	12.7	13	1.3'	E-SO			UGC 1528	NGC 927	Galaxy	ARI	13.4	13.7	1.2'	SBc			f of 2;3 B arms
NGC 797	Galaxy	AND	12.6	13.3	1.6'	SBa			H III 566;double nebula	NGC 928	Galaxy	ARI	13.9	12.2	0.7'	S			
NGC 798	Galaxy	TRI	13.5	13	1.2'	Elliptical				NGC 931	Galaxy	TRI	12.8	13.9	3.9'	Sbc			
NGC 799	Galaxy	CET	13	14.2	2'	SBa				NGC 932	Galaxy	ARI	13.4	-	1.9'	Sa Ring			H II 489
NGC 800	Galaxy	CET	13.7	13.4	1'	Sc				NGC 933	Galaxy	AND	13.8	13.8	1.3'	S			IC 1799 group
NGC 801	Galaxy	AND	13.1	13.8	3.1'	Sc			P w NGC 797	NGC 934	Galaxy	CET	13.1	13.2	1.3'	E-SO			
NGC 803	Galaxy	ARI	12.6	13.9	3'	Sc			H III 208;UGC 1554	NGC 935	Galaxy	ARI	12.9	13.4	1.7'	Sc			P w IC 1801;contact
NGC 805	Galaxy	TRI	13.5	13.2	1.1'	SBO				NGC 936	Galaxy	CET	10.1	13.2	4.3'	SBO-a			H IV 23;Thick central bar;P w NGC 941 12' foll
NGC 806	Galaxy	CET	14	-	1.2'	Sc				NGC 938	Galaxy	ARI	12.4	13.1	1.6'	Elliptical			NGC 932 group
NGC 807	Galaxy	TRI	12.5	13.4	1.8'	Elliptical			H III 151	NGC 939	Galaxy	ERI	13	13.2	1.2'	Elliptical			
NGC 808	Galaxy	CET	13.5	13	1.2'	SBbc Rlt				NGC 940	Galaxy	TRI	12.4	12.4	1.2'	SO			
NGC 809	Galaxy	CET	14	-	1.5'	SO				NGC 941	Galaxy	CET	12.4	14	2.7'	SBc			H III 261;P w NGC 936
NGC 811	Galaxy	CET	14	-	1.1'	Scd				NGC 942	Galaxy	CET	14	-	2.8'	Sa			Northern most of a P w NGC 942;RC2 indents switc
NGC 812	Galaxy	AND	11.2	12.8	3'	Sbc			Peculiar	NGC 943	Galaxy	CET	14	-	2.8'	SOp			P w NGC 943
NGC 817	Galaxy	ARI	13.2	11.5	0.7'	Pec			very high surface br	NGC 944	Galaxy	CET	14	-	1.1'	Sa			
NGC 818	Galaxy	AND	12.5	13.8	2.9'	SBbc			H II 604	NGC 945	Galaxy	CET	12.1	13.6	2.3'	SBc			H II 487
NGC 819	Galaxy	TRI	13.4	11.7	0.6'	S pec			Peculiar	NGC 946	Galaxy	AND	13.2	13.5	1.5'	SO			Compact
NGC 820	Galaxy	ARI	12.8	12.7	1.4'	Sb				NGC 947	Galaxy	CET	12.6	13.3	2.1'	SBc			
NGC 821	Galaxy	ARI	10.7	12.2	2.4'	E2			H I 152;UGC 1631	NGC 948	Galaxy	CET	14	-	1.4'	SBc			
NGC 822	Galaxy	PHE	13.1	12.8	1.1'	Elliptical				NGC 949	Galaxy	TRI	11.8	12.9	2.7'	Sb			H I 154;UGC 1983
NGC 823	Galaxy	FOR	12.6	13.4	1.7'	E-SO				NGC 950	Galaxy	CET	14	-	1.3'	Sb			
NGC 824	Galaxy	FOR	13.3	13.8	1.4'	SBbc Rlt				NGC 953	Galaxy	TRI	13.5	-	1.5'	Elliptical			
NGC 825	Galaxy	CET	13.2	13.7	2.2'	Sa				NGC 954	Galaxy	ERI	12.8	13	1.6'	SBc			
NGC 827	Galaxy	CET	12.7	13.2	2.3'	Sbc			H III 227	NGC 955	Galaxy	CET	12	12.6	2.9'	Sab			H II 278;Poss edge-on S0 lens shape
NGC 828	Galaxy																		

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 978A	Galaxy	TRI	14	-	2'	E-SO			np of 2;contact	NGC 1106	Galaxy	PER	12.3	13.4	1.8'	SO			comps@ 1.7';PA349;3.7';PA29
NGC 979	Galaxy	ERI	12.8	12.8	1.2'	SBO-Ring				NGC 1107	Galaxy	CET	12.2	13.2	1.8'	SO			dbl syst;comp at 3.7';PA137;early spiral
NGC 980	Galaxy	AND	13	13.4	1.7'	SO			H III 572	NGC 1109	Galaxy	ARI	13.8	13.8	1.1'	Elliptical			CGCG lists IC1852 Mg 14.9 nearby
NGC 981	Galaxy	CET	14	-	1'	Sc				NGC 1110	Galaxy	ERI	14	-	2.9'	Sm			
NGC 982	Galaxy	AND	12.5	12.2	1.5'	Sa			H III 573	NGC 1114	Galaxy	ERI	13	-	1.8'	Sc			H III 449
NGC 983	Galaxy	TRI	14	-	1.2'	SBb				NGC 1118	Galaxy	ERI	14	-	2.2'	SO			
NGC 984	Galaxy	ARI	12.8	14.6	3'	Sa				NGC 1120	Galaxy	ERI	14	-	1.3'	E-SO			
NGC 985	Galaxy	CET	13.4	13.1	1'	Ring				NGC 1121	Galaxy	ERI	12.9	11.5	0.9'	SO			
NGC 986	Galaxy	FOR	10.9	13.4	4'	SBab				NGC 1122	Galaxy	PER	12.1	12.9	1.8'	SBb			
NGC 986A	Galaxy	FOR	14	14.1	1.8'	Ir Bar				NGC 1123	Galaxy	PER	13	-	1.8'	SBb			H II 601
NGC 987	Galaxy	TRI	12.4	12.7	1.3'	SBO-a			H III 161	NGC 1124	Galaxy	FOR	13.8	13.4	1'	Sa Ring			
NGC 988	Galaxy	CET	11	13.4	4.6'	SBc				NGC 1125	Galaxy	ERI	12.6	13	1.8'	SBO-a			H III 450
NGC 990	Galaxy	ARI	12.4	13.5	1.8'	Elliptical			H III 557	NGC 1129	Galaxy	PER	12.5	15.2	4'	Elliptical			H II 602;v ext env;large # of objects in vicinity
NGC 991	Galaxy	CET	11.7	13.5	3'	SB Ring			H III 434	NGC 1130	Galaxy	PER	13	-	0.4'	Compac			compact
NGC 992	Galaxy	ARI	12.6	11.9	0.9'	Sc				NGC 1132	Galaxy	ERI	12.3	13.6	2.5'	Elliptical			dbl system
NGC 993	Galaxy	CET	13.6	13.1	0.9'	E-SO				NGC 1134	Galaxy	ARI	12.1	12.8	2.5'	Sb			material eject from nucl;splash appearance on w side
NGC 995	Galaxy	AND	13.4	14	1.7'	SO				NGC 1136	Galaxy	HOR	13	13.4	1.4'	SBa			
NGC 996	Galaxy	AND	13	13.8	1.4'	Elliptical				NGC 1137	Galaxy	CET	12.4	13.4	2.2'	Sb			
NGC 999	Galaxy	AND	13.5	13.1	0.9'	SBa				NGC 1138	Galaxy	PER	12.8	12.6	1.1'	SBO			H III 580
NGC 1002	Galaxy	TRI	13.1	13.1	1.2'	SBb			comps@ 2.2';PA247;.3X0.3;2.5';PA279;.8X0.5	NGC 1140	Galaxy	ERI	12.5	12.8	1.8'	Sm			H II 470
NGC 1003	Galaxy	PER	11.4	13.8	5.7'	Sc			main body 4'x1.4' patchy;ill-def'd arms SBc UGC213	NGC 1142	Galaxy	CET	13.8	-	0.9'	Elliptical			
NGC 1004	Galaxy	CET	12.7	13.2	1.4'	Elliptical			Dense part of clstr;comp 3.9';PA83;.5X0.12;4.9';PA	NGC 1143	Galaxy	CET	14	-	0.9'	Elliptical			
NGC 1006	Galaxy	CET	13.6	-	0.9'	Sc				NGC 1144	Galaxy	CET	12.9	12.5	0.9'	Ring			
NGC 1008	Galaxy	CET	13.6	12.8	0.8'	Elliptical			In dense part of cluster	NGC 1145	Galaxy	ERI	12.5	12.9	3.2'	Sc			
NGC 1010	Galaxy	CET	14	-	0.9'	Sc				NGC 1149	Galaxy	CET	14	12.4	0.6'	E-SO			
NGC 1012	Galaxy	ARI	12	12.9	2.5'	Sa			high surf brtns;fragmts of spiral arms;lge nucleus	NGC 1153	Galaxy	CET	12.4	12.7	1.3'	Sa			prob v early spiral;* super at 0.25 sp ctr;UGC 2446
NGC 1013	Galaxy	CET	14	-	0.8'	Sa				NGC 1154	Galaxy	ERI	14	-	1'	Sc			
NGC 1015	Galaxy	CET	12.1	14	2.6'	SBa				NGC 1155	Galaxy	ERI	14	-	1'	SO			
NGC 1016	Galaxy	CET	11.6	13.5	2.3'	EO			in dense part of cluster	NGC 1156	Galaxy	ARI	11.7	13.9	3.3'	Ir+			H II 619;rrr dwarf w traces of spiral struct;bar-like co
NGC 1017	Galaxy	CET	14	-	0.7'	Ir				NGC 1159	Galaxy	PER	14	-	0.5'	SO			
NGC 1019	Galaxy	CET	13.5	13.3	1'	SBbc			in dense part of cluster	NGC 1160	Galaxy	PER	12.8	13.3	1.9'	SBc Ring			H III 199;several short patchy arms;P w NGC 1161
NGC 1022	Galaxy	CET	11.3	12.9	2.6'	SBa			H I 102	NGC 1161	Galaxy	PER	11	12.8	2.8'	SO			H II 239;P w NGC1160 at 3.5';PA357
NGC 1023	Galaxy	PER	9.4	12.8	8.1'	E7p			brtst in grp;more neb 10' E;Jens shp F tuft on E tip	NGC 1162	Galaxy	ERI	13	-	1.4'	Elliptical			H III 469
NGC 1023A	Galaxy	PER	13.8	-	1.3'	Ir B				NGC 1163	Galaxy	ERI	13.8	13.3	2.2'	SBbc			
NGC 1024	Galaxy	ARI	12.1	13.8	3.9'	Sab			brtst in grp;thin circ arms;* se superimp on wisp	NGC 1164	Galaxy	PER	13.1	13.3	1.3'	SBab Ring			comp 3.8';PA332;.4X0.3;peculiar
NGC 1025	Galaxy	HOR	13.9	-	0.9'	SBb				NGC 1165	Galaxy	FOR	12.7	13.5	2.5'	SBa			
NGC 1026	Galaxy	CET	12.6	13.8	2'	SO			comp in the env at .45';PA160;.15X0.15	NGC 1166	Galaxy	ARI	14	14.1	1.2'	Sab			P w NGC 1168
NGC 1027	Opn CL	CAS	6.7	-	20'	III 2 p n	40	9.3	H VIII 66;Scattered group 12'	NGC 1167	Galaxy	PER	12.4	14.3	2.8'	SO			H III 178
NGC 1029	Galaxy	ARI	13.1	12.3	1.4'	Sa			In NGC 1024 group	NGC 1169	Galaxy	PER	11.3	13.8	4.6'	SBab			H II 620
NGC 1030	Galaxy	ARI	13.2	13.1	1.6'	Sbc			H III 581;wedge-shaped;possible edge-on spiral	NGC 1171	Galaxy	PER	12.3	13.4	2.7'	Sc			comp 3.8';PA21;3.8';PA344
NGC 1031	Galaxy	HOR	13.4	-	1.9'	SBa				NGC 1172	Galaxy	ERI	11.9	13.3	2.3'	E1			H II 502
NGC 1032	Galaxy	CET	11.6	12.9	3.4'	Sa			H II 5;late Sa;comp 4.3';PA313;.6X0.3	NGC 1174	Galaxy	PER	12.5	-	3.2'	SBbc			
NGC 1033	Galaxy	CET	14	-	1.2'	Sc				NGC 1175	Galaxy	PER	12.9	12.9	1.9'	Sa			H II 607;sp of 2;BN in center;Saturn-like
NGC 1034	Galaxy	CET	14	-	0.9'	Ir				NGC 1179	Galaxy	ERI	12	15	4.7'	Sp			
NGC 1035	Galaxy	CET	12.2	12.6	2.2'	Sc			H II 284;Nearly edge-on spiral	NGC 1184	Galaxy	CEP	12.4	12.9	2.8'	Sa			H II 704
NGC 1036	Galaxy	ARI	13.2	13.5	1.5'	Pec			H III 475;asymmetric;B prob complex center region	NGC 1186	Galaxy	PER	11.4	12.7	3.2'	SBbc			H IV 43
NGC 1038	Galaxy	CET	13.4	12.4	1.2'	Sa				NGC 1187	Galaxy	ERI	10.8	14	5.6'	SBc			H III 245;Multi arm spiral
NGC 1040	Galaxy	PER	13.9	-	1.7'	SO				NGC 1189	Galaxy	ERI	13.9	14.8	1.7'	SBcd			
NGC 1041	Galaxy	CET	14	-	1.7'	E-SO				NGC 1193	Opn CL	PER	12.6	-	1.5'	II 3 m	40	14	H II 608
NGC 1042	Galaxy	CET	11	13.9	4.9'	SBc			Spiral arms well defined	NGC 1194	Galaxy	CET	12.9	13.3	1.8'	Sa			strong abs p side;dif streamer (vis in red) to comp
NGC 1044	Galaxy	CET	13.2	11.8	0.5'	SOp			H III 228;dbl system	NGC 1195	Galaxy	ERI	14	-	0.5'	E-SO			
NGC 1045	Galaxy	CET	13	-	2.3'	E-SO			H II 488	NGC 1196	Galaxy	ERI	14	-	1.4'	SO			
NGC 1046	Galaxy	CET	13.8	-	0.4'	E-SO			H III 229	NGC 1198	Galaxy	PER	12.5	13.2	1.9'	E-SO			
NGC 1048B	Galaxy	CET	14	-	1'	SBO-a				NGC 1199	Galaxy	ERI	11.4	13	2.3'	E2			H II 503;Brightest in small group
NGC 1049	Glo+Gx	FOR	12.6	-	1.2'				Invl in Fornax System	NGC 1200	Galaxy	ERI	13	-	2.9'	E-SO			H II 475
NGC 1050	Galaxy	PER	12.6	12.9	1.4'	SBa				NGC 1201	Galaxy	FOR	10.7	12.8	3.3'	Sa			H I 109
NGC 1051	Galaxy	CET	13	-	2.1'	Sm				NGC 1207	Galaxy	PER	12.6	13.9	2.3'	Sb Ring			H III 578
NGC 1052	Galaxy	CET	10.5	12.5	2.8'	Elliptical			H I 63	NGC 1208	Galaxy	ERI	14	-	1.9'	Sa			H II 285
NGC 1053	Galaxy	PER	12.9	13	1.7'	SO			brtst in grp;comp .8';PA354;UGC2194 @ 6.2';PA15	NGC 1209	Galaxy	ERI	11.4	12.5	2.2'	E5			H II 504
NGC 1054	Galaxy	ARI	13.6	12.4	0.9'	Sbc				NGC 1210	Galaxy	FOR	12.6	13.9	1.9'	SBO			
NGC 1055	Galaxy	CET	10.6	13.7	7.6'	SBb			H I = II 6;Nearly edge-on spiral w equatorial dust	NGC 1211	Galaxy	CET	12.3	13.6	2.1'	SBO-a			v smooth transp disc;no spiral pattern
NGC 1056	Galaxy	ARI	12.4	13.3	2.4'	Sa			H III 584;v lge nucl bulge;strong abs along edge	NGC 1214	Galaxy	ERI	14	12.8	1.3'	Sa			
NGC 1058	Galaxy	PER	11.2	13.4	3.2'	Sc			NGC1023 grp;patchy main body;mult arm pattern	NGC 1217	Galaxy	FOR	12.4	13.2	1.8'	Sa			
NGC 1060	Galaxy	TRI	11.8	13.2	2.3'	E-SO			Lies in position given as NGC 1062;very diffuse	NGC 1218	Galaxy	CET	12.7	12.9	1.3'	Sa			
NGC 1061	Galaxy	TRI	14	13.2	0.9'	Sd			Peculiar?	NGC 1219	Galaxy	CET	13	13.2	1.2'	Sc			
NGC 1063	Galaxy	CET	14	-	1.4'	SBbc				NGC 1220	Opn CL	PER	11.8	-	1.6'	II 2 p	15	13	
NGC 1064	Galaxy	CET	14	-	1.1'	Sc Ring				NGC 1222	Galaxy	ERI	12.5	12.3	0.8'	E-SO			
NGC 1065	Galaxy	CET	14	-	0.8'	E-SO				NGC 1224	Galaxy	PER	13.7	14.1	1.4'	SO			comp 1.5';PA0
NGC 1066	Galaxy	TRI	13.3	14.3	1.7'	Elliptical			H III 163;Compact;UGC 2201 @ 2.2';NGC 1067 @	NGC 1226	Galaxy	PER	12.9	14.3	2.1'	Elliptical			brtst in subgroup
NGC 1067	Galaxy	TRI	13.7	13.6	1.1'	Sc			S-shaped;well def arms;UGC2201 at 1.6';comp 2.3'	NGC 1228	Galaxy	ERI	13.2	13.3	1.6'	SBO-a			
NGC 1070	Galaxy	CET	11.9	13.4	2.3'	Sb			H II 273;UGC 2200	NGC 1229	Galaxy	ERI	14	14.1	1.4'	SB/P			
NGC 1072	Galaxy	CET	13.4	12.9	1.5'	SBab Ring				NGC 1232	Galaxy	ERI	9.9	13.9	7.1'	Sc			H II 258;Excellent face-on spiral
NGC 1073	Galaxy	CET	11	14.2	4.9'	SBc			H III 455;NGC 1068 group	NGC 1233	Galaxy	PER	13.2	13.2	1.8'	Sb			B center region;e dif outside
NGC 1074	Galaxy	CET	14	-	2'	Sab				NGC 1235	Galaxy	PER	13.2	-	1.8'	Sb			
NGC 1076	Galaxy	CET	13	-	2'	Sa				NGC 1238	Galaxy	ERI	14	-	1.6'	Elliptical			
NGC 1077B	Galaxy	PER	14	-	0.5'	SBb				NGC 1241	Galaxy	ERI	12	13.5	3.2'	SBb			H II 286
NGC 1079	Galaxy	FOR	11.5	13.5	3.4'	SBO-a F				NGC 1242	Galaxy	ERI	13.7	13.3	1.2'	SBc			H III 591
NGC 1080	Galaxy	CET	13.5	13.3	1.1'	SBc				NGC 1245	Opn CL	PER	8.4	-	10'	III 1 r	200	11.2	H VI 25
NGC 1081	Galaxy	ERI	13	-	1.6'	Sb				NGC 1247	Galaxy	ERI	12.5	12.9	3.4'	Sbc			H II 900
NGC 1083	Galaxy	ERI	14	-	1.6'	Sb				NGC 1248	Gal								

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 1281	Galaxy	PER	13.3	12.9	0.4'	E5				NGC 1400	Galaxy	ERI	11	12.5	2.5'	E1			H II 593;P w NGC 1407 nf
NGC 1282	Galaxy	PER	12.9	13.4	1.4'	E1			P w N1283;Perseus Cl;2 smlr gal are comp to this	NGC 1401	Galaxy	ERI	12.3	12.6	2.4'	SBO			H III 247
NGC 1283	Galaxy	PER	13.6	12.6	0.7'	E1			compact	NGC 1402	Galaxy	ERI	13.6	12.6	0.8'	SBO			
NGC 1284	Galaxy	ERI	14	-	1.7'	SO			H III 956	NGC 1403	Galaxy	ERI	12.7	13	1.3'	E-SO Ba			
NGC 1285	Galaxy	ERI	14	-	1.5'	SB Ring				NGC 1404	Galaxy	FOR	10	12.5	3.9'	E1			Fornax Galaxy Cluster member
NGC 1288	Galaxy	FOR	12.1	13.6	2.3'	SBc				NGC 1406	Galaxy	FOR	11.8	12.8	3.9'	SBbc			
NGC 1289	Galaxy	ERI	12.6	13.2	1.8'	SO				NGC 1407	Galaxy	ERI	9.7	12.9	4.9'	EO			H I 107
NGC 1291	Galaxy	ERI	8.5	13.1	9.7'	SBO-a R			comp 2.2';PA138;UGC 2666	NGC 1409	Galaxy	TAU	14	-	1'	SBO			DbI sys;distorted;post-eruptive pair: red;patchy;halo
NGC 1292	Galaxy	FOR	12.1	13.5	3'	Sc				NGC 1410	Galaxy	TAU	14	-	0.8'	E1p			blue ellipse;mp=15.4
NGC 1293	Galaxy	PER	13.4	13.5	0.9'	E0			H III 574	NGC 1411	Galaxy	HOR	11.3	12.6	2.2'	SO			
NGC 1294	Galaxy	PER	13.2	13.5	1.5'	SO			H III 575;ssf of 2	NGC 1412	Galaxy	FOR	12.5	12.8	1.8'	SBO			
NGC 1296	Galaxy	ERI	14	-	1.1'	Sab				NGC 1414	Galaxy	ERI	13.8	12.8	1.5'	SBbc			
NGC 1297	Galaxy	ERI	11.8	13.2	2.3'	E2				NGC 1415	Galaxy	ERI	11.9	13.7	3.6'	Sa			H II 267;IC 1983
NGC 1298	Galaxy	ERI	14	14.7	1.5'	E1			UGC 2687,2.7';UGC 2460 at .9';PA10; sev sF obj in	NGC 1416	Galaxy	ERI	12.9	13.5	1.4'	E1			
NGC 1299	Galaxy	ERI	14	-	1.2'	Sb			H II 287	NGC 1417	Galaxy	ERI	12.1	13.6	2.7'	SBb			H II 455;Bar;comp w NGC 1418;B arms w knots
NGC 1300	Galaxy	ERI	10.4	13.8	5.9'	SBbc				NGC 1418	Galaxy	ERI	13.6	13.6	1'	SBb			H II 456;P w NGC 1417 main arms;v poor resolved
NGC 1301	Galaxy	ERI	13.4	13.2	2.2'	SBbc				NGC 1419	Galaxy	ERI	12.6	12.8	1.1'	Elliptical			
NGC 1302	Galaxy	FOR	10.7	13.5	4.1'	SBO-a R				NGC 1421	Galaxy	ERI	11.4	12.5	3.4'	SBbc			H II 291;Nearly edge-on
NGC 1305	Galaxy	ERI	13.3	13.5	1.5'	E2				NGC 1422	Galaxy	ERI	13.2	13.2	2.3'	SBab			
NGC 1306	Galaxy	FOR	12.8	12.6	1.1'	Sb				NGC 1424	Galaxy	ERI	13.8	13.7	1.6'	SBb			3 main arms;some knots
NGC 1309	Galaxy	ERI	11.5	13	2.3'	Sbc			H I 106	NGC 1425	Galaxy	FOR	10.6	13.4	5.8'	Sb			H II 852
NGC 1310	Galaxy	FOR	12.1	13.1	1.9'	SBc				NGC 1426	Galaxy	ERI	11.4	13	2.6'	E2			H III 248
NGC 1311	Galaxy	HOR	13	13.8	3'	SBp				NGC 1427	Galaxy	FOR	10.9	13.2	3.8'	E3			Fornax Galaxy Cluster member
NGC 1315	Galaxy	ERI	12.4	13.2	1.6'	SBO-a				NGC 1427A	Galaxy	ERI	12.9	14.1	2.3'	Ir Bar			
NGC 1316	Galaxy	FOR	8.5	13.4	11.2'	SBO			Fornax Galaxy Cluster member	NGC 1428	Galaxy	FOR	12.7	12.9	1.6'	SO			
NGC 1316C	Galaxy	FOR	13.3	13.1	1.3'	SO				NGC 1431	Galaxy	TAU	14	13.6	1'	SO			comp 3.2' PA338
NGC 1317	Galaxy	FOR	11	12.9	2.8'	SBa			Fornax Galaxy Cluster member	NGC 1432	Brn Neb	TAU	-	-	60'	R			
NGC 1318	Galaxy	FOR	12	-	2.8'	SBa				NGC 1433	Galaxy	HOR	9.9	13.7	6.1'	SBa			
NGC 1319	Galaxy	ERI	12.9	12.6	1.3'	SO				NGC 1435	Brn Neb	TAU	-	-	30'	R		4.2	Tempel's nebula; fan-shaped
NGC 1320	Galaxy	ERI	12.4	12.5	1.9'	Sa			H III 197	NGC 1436	Galaxy	ERI	11.8	-	3.1'	SBab			
NGC 1321	Galaxy	ERI	14	-	0.9'	Sa			H III 196	NGC 1437	Galaxy	ERI	11.7	13.4	3.1'	SBab			Fornax Galaxy Cluster member
NGC 1324	Galaxy	ERI	14	-	2.1'	Sb			H III 445	NGC 1437A	Galaxy	ERI	14	-	1.8'	SBd			
NGC 1325	Galaxy	ERI	11.5	13.6	4.8'	SBbc			H IV 77	NGC 1437B	Galaxy	ERI	13.8	-	2.6'	Sc			
NGC 1325A	Galaxy	ERI	13.5	-	2.1'	SBb				NGC 1438	Galaxy	ERI	12.4	12.9	2'	SBO-a			
NGC 1326	Galaxy	FOR	10.5	13	4.3'	SBO-a R			Fornax Galaxy Cluster member	NGC 1439	Galaxy	ERI	11.4	13.3	2.4'	E1			H III 249
NGC 1326A	Galaxy	FOR	13.3	14.4	1.9'	SBp				NGC 1440	Galaxy	ERI	11.5	12.8	2.2'	SBO			H II 458
NGC 1326B	Galaxy	FOR	13.3	14.6	3.6'	SBd				NGC 1441	Galaxy	ERI	12.9	12.8	1.7'	SBb			poorly resolved;in NGC 1441-53 grp;P w NGC 1449
NGC 1329	Galaxy	ERI	12.6	13	1.4'	Sa				NGC 1442	Galaxy	ERI	12.6	-	2.2'	SBO			H II 594
NGC 1331	Galaxy	ERI	13.4	13.2	0.9'	E2			H III 959;IC 324	NGC 1444	Opn CL	PER	6.6	-	4'	IV 1 p	37	6.8	H VIII 80;In Cam OB1?
NGC 1332	Galaxy	ERI	10.3	12.2	4'	E7			H I 60	NGC 1448	Galaxy	HOR	10.7	13.3	7.5'	Sc			Nearly edge-on
NGC 1333	Brn Neb	PER	-	-	9'	R		9.5	Bright neb with many dark neb in area incl B205	NGC 1449	Galaxy	ERI	13.5	12.2	0.8'	SO			
NGC 1334	Galaxy	PER	13.1	13.1	1.5'	SBc			disrupted spiral;red main body;spir arc f side	NGC 1451	Galaxy	ERI	13.3	11.9	0.8'	SO			
NGC 1335	Galaxy	PER	13.8	13.2	1.1'	E-SO				NGC 1452	Galaxy	ERI	11.8	12.9	2.3'	SBO-a R			H II 459;= NGC 1455
NGC 1336	Galaxy	FOR	12.3	13.4	2.1'	E-SO				NGC 1453	Galaxy	ERI	11.5	13.2	2.3'	E2			H I 155
NGC 1337	Galaxy	ERI	11.9	14.1	5.7'	SBc			Nearly edge-on	NGC 1455	Galaxy	ERI	12.8	-	2.3'	SBO-a R			
NGC 1338	Galaxy	ERI	13	-	1.4'	Sb				NGC 1457	Galaxy	HOR	11.4	-	7.5'	Sc			
NGC 1339	Galaxy	FOR	11.6	12.6	1.8'	E2				NGC 1458	Galaxy	ERI	12.6	-	3.3'	Sb			
NGC 1340	Galaxy	FOR	11.4	-	6.1'	Elliptical				NGC 1459	Galaxy	FOR	12.8	13.4	1.7'	SBbc			
NGC 1341	Galaxy	FOR	12.3	12.9	1.6'	SBab			Fornax Galaxy Cluster member	NGC 1460	Galaxy	ERI	12.5	13.3	1.7'	SBO			
NGC 1342	Opn CL	PER	6.7	-	14'	III 3 p	40	8.8	H VIII 88	NGC 1461	Galaxy	ERI	11.8	12.8	3'	SO			H II 460;Lens-shaped
NGC 1343	Galaxy	CAS	12.7	14.1	2.6'	SB/P			heavy ringshaped nucleus;B blue neutral ring core	NGC 1463	Galaxy	RET	13.5	13.9	1.3'	Sa Ring			
NGC 1344	Galaxy	FOR	10.4	13.7	6.1'	E3			H I 257	NGC 1465	Galaxy	PER	13.7	13.3	1.7'	Sa			brightest of 3
NGC 1345	Galaxy	ERI	13.8	14.2	1.5'	SBc				NGC 1469	Galaxy	CAM	12.7	13.1	1.9'	SO			
NGC 1347	Galaxy	ERI	13	13.6	1.5'	SBc				NGC 1474	Galaxy	TAU	14	-	1.1'	SBa			
NGC 1348	Opn CL	PER	-	-	5'	II 2 p	30	8.5	H VIII 84	NGC 1476	Galaxy	HOR	13.1	12.6	1.4'	Sa			
NGC 1349	Galaxy	TAU	13	12.2	0.7'	SO				NGC 1481	Galaxy	ERI	13.4	12.9	1'	E-SO			
NGC 1350	Galaxy	FOR	10.3	13.1	5.4'	SBab			Fornax Galaxy Cluster member	NGC 1482	Galaxy	ERI	12.1	13.3	2.4'	Sa			H III 962
NGC 1351	Galaxy	FOR	11.6	13.1	3.4'	SO			Fornax Galaxy Cluster member	NGC 1483	Galaxy	HOR	12.7	13.4	1.6'	SBbc			
NGC 1351A	Galaxy	FOR	13.4	13.6	2.6'	SBbc				NGC 1484	Galaxy	ERI	12.9	13.1	2.5'	Sb			
NGC 1352	Galaxy	ERI	13.3	12.9	1'	SBO				NGC 1485	Galaxy	CAM	12.6	12.9	2.1'	Sb			
NGC 1353	Galaxy	ERI	11.4	13	3.4'	SBb			H III 246	NGC 1487	Galaxy	ERI	11.9	13.9	3.3'	Sm			Double galaxy or collision system
NGC 1354	Galaxy	ERI	14	-	2.3'	Sa			H III 487	NGC 1489	Galaxy	ERI	13.8	13.4	1.4'	SBb			
NGC 1355	Galaxy	ERI	13.3	12.5	1.5'	SO			poss edgewise S;P w NGC 1358 at 6'8	NGC 1491	Brn Neb	PER	-	-	6'	E			H I 258
NGC 1356	Galaxy	HOR	13	13.3	1.4'	SBbc				NGC 1492	Galaxy	ERI	13.4	12.8	0.9'	Sa			
NGC 1357	Galaxy	ERI	11.5	13.2	3.1'	Sab Ring			H II 290	NGC 1493	Galaxy	HOR	11.3	13.7	3.6'	SBc			
NGC 1358	Galaxy	ERI	12.1	13.8	2.5'	SBO-a			H III 446	NGC 1494	Galaxy	HOR	11.7	13.5	3.3'	SBcd			
NGC 1359	Galaxy	ERI	12.2	13.6	2.5'	SB/P				NGC 1495	Galaxy	HOR	12.6	13	3'	Sc			
NGC 1360	Pln Neb	FOR	9.4	13.7	360"	3		11.3		NGC 1496	Opn CL	PER	9.6	-	6'	II 1 p	10	12	
NGC 1362	Galaxy	ERI	12.5	12.7	1.2'	SO			H III 960	NGC 1497	Galaxy	TAU	13.1	13.8	1.8'	SO			brightest of 4
NGC 1363	Galaxy	ERI	13.9	-	0.9'	Sbc				NGC 1499	Brn Neb	PER	5	-	160'	E			California Nebula;0.6 deg from Xi Per
NGC 1365	Galaxy	FOR	9.6	14.1	11'	SBb			Best example of barred spiral;Fornax Gal Cl memb	NGC 1500	Galaxy	DOR	13.8	13					

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	
NGC 1546	Galaxy	DOR	10.9	12.5	3.2'	Sa				NGC 1703	Galaxy	DOR	11.3	13.4	2.9'	SBb				
NGC 1547	Galaxy	ERI	13.6	13.1	1.3'	SBbc				NGC 1705	Galaxy	PIC	12.4	13.3	1.9'	SOp				
NGC 1549	Galaxy	DOR	9.8	13	4.4'	EO			P w NGC 1553	NGC 1708	Opn CL	CAM	-	-	20'		10	10		
NGC 1550	Galaxy	TAU	12	13.5	2.2'	Elliptical			nnp of 2;one of which is IC 366 at 3.2';PA162	NGC 1710	Galaxy	LEP	14	-	1.3'	E-SO				
NGC 1551	Galaxy	TAU	13.1	-	2.2'	E			H II 464	NGC 1713	Galaxy	ORI	12.7	13.3	1.4'	Elliptical			H II 516	
NGC 1552	Galaxy	ERI	12.9	13.7	1.8'	Sa			H III 490;comp 5.4';PA129;spiral	NGC 1716	Galaxy	LEP	13.2	13.6	1.4'	SBbc				
NGC 1553	Galaxy	DOR	9.4	12	5'	SO				NGC 1719	Galaxy	ORI	13.6	12.3	1.1'	Sa				
NGC 1555	Brn Neb	TAU	-	-	0.5'	R			Hind's Variable Neb ;associated with star T Tauri	NGC 1720	Galaxy	ERI	13	-	1.7'	SBab				
NGC 1556	Galaxy	DOR	13.1	12.8	1.7'	Sab			Apparently misplotted	NGC 1721	Galaxy	ERI	13	-	2.2'	SO				
NGC 1558	Galaxy	HOR	12.5	13.3	2.5'	SBbc				NGC 1723	Galaxy	ERI	12	-	3.3'	SB Ring				
NGC 1560	Galaxy	CAM	11.4	14.3	9.8'	Scd			BM;no def N;F part resolved arms;low surf brtness	NGC 1724	Opn CL	AUR	10	-						
NGC 1566	Galaxy	DOR	9.7	13.9	8.2'	SBbc				NGC 1725	Galaxy	ERI	13	-	1.9'	E-SO				
NGC 1567	Galaxy	CAE	12.5	-	1.4'	E				NGC 1726	Galaxy	ERI	11.7	12.1	2.1'	SO				
NGC 1569	Galaxy	CAM	11	12.9	3.7'	lrrp			H II 768;dk markings;well rrr;l trace of spiral structure	NGC 1728	Galaxy	ERI	13	-	2'	Sa				
NGC 1570	Galaxy	CAE	13.2	-	2'	E				NGC 1729	Galaxy	ORI	13	-	1.7'	Sc			H III 503	
NGC 1571	Galaxy	CAE	12.3	13.5	2'	Elliptical				NGC 1730	Galaxy	LEP	13	-	2.3'	SB Ring				
NGC 1572	Galaxy	CAE	12.4	13.5	2.4'	SBa				NGC 1738	Galaxy	LEP	12.9	12.6	1.3'	SBbc				
NGC 1573	Galaxy	CAM	11.7	12.7	1.9'	E3		15.5	brtst of 4;spiral	NGC 1739	Galaxy	LEP	13.5	13.3	1.4'	Sbc				
NGC 1574	Galaxy	RET	10.4	12.9	4'	SO				NGC 1744	Galaxy	LEP	11.1	14.9	9.3'	SBcd				
NGC 1575	Galaxy	ERI	13	-	1.5'	SB/P				NGC 1746	Opn CL	TAU	6.1	-	42'	III 1 p	20	8		
NGC 1577	Galaxy	ERI	13.5	-	1.5'	SB/P				NGC 1750	Opn CL	TAU	-	-				8	H VIII 43;Part of NGC 1746	
NGC 1578	Galaxy	DOR	13.1	13.3	1.2'	Sa				NGC 1752	Galaxy	ERI	12.4	13.1	2.6'	SBc				
NGC 1579	Brn Neb	PER	-	-	3'	R			H I 217;Dark lane invl	NGC 1758	Opn CL	TAU	-	-	39'	IV 1 p			H VII 21	
NGC 1581	Galaxy	DOR	12.9	13	1.8'	E-SO Rir				NGC 1759	Galaxy	CAE	13.1	13.6	1.4'	Elliptical				
NGC 1582	Opn CL	PER	7	-	37'	IV 2 p	20	9	H VIII 70	NGC 1762	Galaxy	ORI	12.6	13.1	1.7'	Sc			H III 453	
NGC 1584	Galaxy	ERI	13.8	13.1	0.8'	E-SO				NGC 1778	Opn CL	AUR	7.7	-	7'	III 2 p	25	10.1	H VIII 61	
NGC 1585	Galaxy	CAE	13.5	13.1	1.2'	Sc				NGC 1779	Galaxy	ERI	12.1	13.1	2.5'	SBO-a			H III 500	
NGC 1586	Galaxy	ERI	13.2	13.5	1.7'	Sbc			ssp of 2;comp 1.2';PA20;spiral	NGC 1780	Galaxy	LEP	13.7	12.8	0.9'	SBO				
NGC 1587	Galaxy	TAU	11.7	12.7	1.7'	E1p			H II 8	NGC 1781	Galaxy	LEP	13.7	-	1.3'	SBO			H III 268	
NGC 1588	Galaxy	TAU	12.9	12.9	1.4'	E1p			H II 9;compact;disturbed;P w N1587 at 1';PA257	NGC 1784	Galaxy	LEP	11.7	14	4.1'	SBc				
NGC 1589	Galaxy	TAU	11.8	12.9	3.2'	Sab			P w NGC 1587-8 @ 12.2';P w UGC 3072 @ 6';PA	NGC 1788	Brn Neb	ORI	-	-	5'	R			H V 32; possible reflection nebula close to ngc 1808	
NGC 1590	Galaxy	TAU	13.7	13	0.9'	S pec			twisted blue post-eruptive gal w several knots & jets	NGC 1792	Galaxy	COL	10.2	12.9	5.6'	SBbc				
NGC 1591	Galaxy	ERI	12.8	12.6	1.2'	SBab				NGC 1794	Galaxy	LEP	12.7	12.9	1.3'	SBO				
NGC 1592	Galaxy	ERI	13.7	13.4	1.4'	S				NGC 1798	Opn CL	AUR	10	-	5'	I 1 m :b		13		
NGC 1594	Galaxy	ERI	14	-	1.8'	SBbc				NGC 1800	Galaxy	COL	12.6	13.3	2'	E6				
NGC 1595	Galaxy	CAE	13.7	-	1.3'	E				NGC 1802	Opn CL	TAU	-	-	20'		25	9.2	H VIII 41	
NGC 1596	Galaxy	DOR	11.2	12.4	3.7'	SO				NGC 1803	Galaxy	PIC	13.4	-	1.3'	SBbc				
NGC 1598	Galaxy	CAE	13.8	-	1.4'	SBc				NGC 1807	Opn CL	TAU	7	-	17'	II 2 p	20	8.6	15 * mag 8-9	
NGC 1599	Galaxy	ERI	13.7	13.1	0.9'	Sc				NGC 1808	Galaxy	COL	9.9	13.3	6.3'	SBa			F outer arms , close to ngc1792	
NGC 1600	Galaxy	ERI	10.9	12.4	3.1'	E2			RC1;brtst in grp;P w NGC 1601 at 1';NGC 1603 at	NGC 1811	Galaxy	COL	13.5	13	1.7'	Sa				
NGC 1601	Galaxy	ERI	13.8	11.9	0.6'	SO				NGC 1812	Galaxy	COL	12.7	12.7	1.2'	Sa				
NGC 1602	Galaxy	DOR	13	13.6	1.9'	Ir Bar				NGC 1817	Opn CL	TAU	7.7	-	16'	III 1 m	60	11.2	H VII 4;50 * mags 10 to 14	
NGC 1603	Galaxy	ERI	13.8	12.7	0.8'	E-SO				NGC 1819	Galaxy	ORI	12.4	13	1.7'	SBO				
NGC 1605	Opn CL	PER	10.7	-	5'	III 1 m	40	12.5	H VI 26	NGC 1821	Galaxy	LEP	14	-	1.2'	Ir				
NGC 1608	Galaxy	TAU	13.4	13.3	1.6'	SO				NGC 1824	Galaxy	DOR	12.6	13.5	3.2'	SBp				
NGC 1614	Galaxy	ERI	12.9	13.2	1.3'	SB/P				NGC 1827	Galaxy	COL	12.5	13.1	3'	SBc				
NGC 1615	Galaxy	TAU	13.6	13.3	1.2'	SO				NGC 1832	Galaxy	LEP	11.3	12.8	2.3'	SBbc Rir				H II 292
NGC 1616	Galaxy	CAE	12.6	13	1.8'	Sbc				NGC 1843	Galaxy	ORI	13	-	2.1'	Sc				
NGC 1617	Galaxy	DOR	10.4	12.7	4.8'	SBa				NGC 1851	Glob CL	COL	7.1	-	11'	II			X-ray source;vRi w F*	
NGC 1618	Galaxy	ERI	12.7	13.3	2.4'	SBb			H II 524;In NGC 1618-1625 grp;P w NGC 1622 at 7	NGC 1853	Galaxy	DOR	13.6	-	2'	SBcd				
NGC 1620	Galaxy	ERI	12.3	13.3	2.9'	Sc			H II 514	NGC 1857	Opn CL	AUR	7	-	6'	II 2 m	40	7.4	H VII 33	
NGC 1622	Galaxy	ERI	12.5	13.4	3.7'	SBab			Near NGC 1618;NGC 1625	NGC 1875	Galaxy	ORI	13.6	13.1	1.5'	SO				
NGC 1624	CL+Neb	PER	11.8	-	1.9'	II 1 p n:b	12	11.8	H V 49	NGC 1879	Galaxy	COL	12.8	14.2	2.5'	SBp				
NGC 1625	Galaxy	ERI	12.3	12.2	2.1'	SBb			Two other dim edge-on galaxies in field of Nu Eri	NGC 1883	Opn CL	AUR	12	-	2.5'	II 1 p	30	14	H VII 34	
NGC 1626	Galaxy	ERI	14	-	1.4'	E				NGC 1886	Galaxy	LEP	12.8	13	3.1'	Sbc				
NGC 1627	Galaxy	ERI	13	-	1.6'	Sc				NGC 1888	Galaxy	LEP	11.9	12.7	3.2'	SB/P				H II 289
NGC 1628	Galaxy	ERI	14	-	1.9'	Sb				NGC 1889	Galaxy	LEP	14	-	0.6'	EO				
NGC 1631	Galaxy	ERI	13.4	13.5	1.5'	SBO-a				NGC 1893	Opn CL	AUR	7.5	-	11'	II 2 m n	60	9.3	In Aur OB2;20* mags 9...12;neby IC 410 invl (see ic	
NGC 1632	Galaxy	ERI	13	-	1'	Sa				NGC 1906	Galaxy	LEP	14	-	0.9'	Scd				
NGC 1633	Galaxy	TAU	13.5	13.1	1'	SBab			H III 952;P w N1634	NGC 1907	Opn CL	AUR	8.2	-	7'	II 1 m n	30	11.3	H VII 39	
NGC 1635	Galaxy	ERI	12.4	12.9	1.4'	SBO-a F			H II 515	NGC 1909	Brn Neb	ERI	-	-	180'	R			Witchhead nebula ; Rigel may be illuminator	
NGC 1636	Galaxy	ERI	14	-	1.2'	Sab			H II 522	NGC 1924	Galaxy	ORI	12.5	13.1	1.6'	SBbc Rir			H III 447	
NGC 1637	Galaxy	ERI	10.8	13.4	3.9'	SBc			H I 122;Strong asym vF but rrr outer arms	NGC 1930	Galaxy	PIC	12.4	13.1	1.9'	SBO				
NGC 1638	Galaxy	ERI	12	13.1	2.3'	SBO			H II 525;comp 2.6';PA50	NGC 1931	CL+Neb	AUR	10.1	-	3'	I 3 p n:b		11.5	H I 261;Contains triple ADS 4112	
NGC 1640	Galaxy	ERI	11.7	13.3	2.7'	SBab				NGC 1954	Galaxy	LEP	11.8	14.1	4.2'	Sbc				H III 590
NGC 1642	Galaxy	TAU	12.6	13.6	1.8'	Sc			UGC 3141 at 8.4';PA24;superimposed comp;bridge	NGC 1961	Galaxy	CAM	11	13.7	4.5'	SBbc				H III 747;hexagonal;2 branch arms w some knots
NGC 1643	Galaxy	ERI	14	-	1.2'	Sbc			H III 588	NGC 1963	Opn CL	COL	-	-	120'					
NGC 1645	Galaxy	ERI	14	-	2.4'	Sa Ring				NGC 1964	Galaxy	LEP	10.8	13.4	5.5'	SBb				H IV 21
NGC 1647	Opn CL	TAU	6.4	-	45'	II 2 m	200	8.6	H VIII 8	NGC 1973	Brn Neb	ORI	7	-	5'	E				
NGC 1650	Galaxy	ERI	14	-	2.3'	Elliptical				NGC 1975	Brn Neb	ORI	7	-	10'	E				
NGC 1653	Galaxy	ERI	12	12.8	1.5'	EO			H II 526	NGC 1977	CL+Neb	ORI	7	-	20'	E+R			H V 30	
NGC 1654	Galaxy	ERI	13.4	12.6	0.8'	Sa				NGC 1979	Galaxy	LEP	11.8	13.2	2.2'	E-SO				H III 240;IC 2137
NGC 1656	Galaxy	ERI	14	-	1.5'	Sa				NGC 1980	CL+Neb	ORI	2.5	-	14'	III 3 m n			H V 31	
NGC 1657	Galaxy	ERI	13.8	13.6	1.2'	SBbc				NGC 1981	Opn CL	ORI	4.2	-	25'	III 2 p n	20	6.3	In Ori OB1;incl D* Struve 750	
NGC 1658	Galaxy	CAE	13.5	13	1.5'	Sbc				NGC 1985	Brn Neb	AUR	12.5	-	0.7'	R		13.5	H III 865;incorrect ID as PK176+0.1	
NGC 1659	Galaxy	ERI	12.5	13	1.5'	Sbc			H III 589;Knotty filamentary arms;strong asym vF	NGC 1989	Galaxy	COL	13.1	13.5	1.4'	E-SO				
NGC 1660	Galaxy	CAE	13.9	13.1	1'	Sa				NGC 1990	Brn Neb	ORI	-	-	50'	E+R				H V 34
NGC 1661	Galaxy	ORI	13.2	13.3	1.4'	Sbc				NGC 1992	Galaxy	COL	13.6	13.1	1.1'	Sa				
NGC 1662	Opn CL	ORI	6.4	-	20'	I 2 p	35	8.3	H VII 1	NGC 1993	Galaxy	LEP	12.4	13.1	1.5'	E-SO				H III 269
NGC 1663	Opn CL	ORI	-	-		IV 2 p	30		H VIII 7	NGC 1999</										

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 2112	Opn CL	ORI	9.1	-	11'	III 3 m n	50	10	H VII 24	NGC 2296	Br Neb	CMA	13	-	0.6'	R			Near Sirius; probably a nebula
NGC 2124	Galaxy	LEP	12.6	13.4	2.7'	Sb			H III 225	NGC 2298	Glob CL	PUP	9.4	-	6.8'	VI			Stars eF
NGC 2126	Opn CL	AUR	10.2	-	6'	III 1 p	40	13	H VIII 68;Scattered 20 * mags 11..14	NGC 2299	Opn CL	MON	8.9	-	2.5'				
NGC 2128	Galaxy	CAM	12.6	13.1	1.5'	E-SO				NGC 2300	Galaxy	CEP	11	12.8	3.5'	E1			Pair with NGC 2276 at 6' and IC 1455 at 10'; vsBN
NGC 2129	Opn CL	GEM	6.7	-	7'	III 3 p	40	7.4	H VIII 26	NGC 2301	Opn CL	MON	6	-	12'	I 3 m	80	8	H VI 27;60 * 8...;blue&gold D* near center
NGC 2139	Galaxy	LEP	11.6	13.3	2.9'	SBc			H II 264;IC 2154	NGC 2302	Opn CL	MON	8.9	-	2.5'	II 2 p	30	10.2	H VIII 39
NGC 2141	Opn CL	ORI	9.4	-	10'	III 3 r	10	13.3		NGC 2303	Galaxy	AUR	12.6	13.5	1.5'	Elliptical			
NGC 2142	Star	MON	5	-						NGC 2304	Opn CL	GEM	10	-	5'	II 1 p	30		H VI 2
NGC 2143	Opn CL	ORI	-	-	11'			12	10	NGC 2306	Opn CL	MON	-	-					H VIII 51
NGC 2146	Galaxy	CAM	10.6	13.7	5.7'	SBab/P			broad spiral arms;2 main smooth arms;1 w dark lan	NGC 2308	Galaxy	LYN	13.2	13.9	1.8'	Sab			
NGC 2146A	Galaxy	CAM	12.9	14.1	3'	SBc				NGC 2309	Opn CL	MON	10.5	-	3'	II 2 m	40	13	H VI 18
NGC 2148	Galaxy	PIC	13.8	13.5	1.1'	Sb				NGC 2310	Galaxy	PUP	11.8	13	4.3'	SO			lenticular
NGC 2149	Br Neb	MON	-	-	2'	R				NGC 2311	Opn CL	MON	9.6	-	7'	III 2 p	50	12	H VIII 60
NGC 2158	Opn CL	GEM	8.6	-	5'	III 3 r		12.4	H VI 17;150 F* on edge of M 35	NGC 2313	Br Neb	MON	-	-		E			diffuse nebula
NGC 2163	Br Neb	ORI	-	-	3'	R			Two symmetrical fans extending N-S	NGC 2314	Galaxy	CAM	12.2	13.2	1.7'	E1p			
NGC 2165	Opn CL	AUR	-	-	6'					NGC 2315	Galaxy	LYN	13.6	12.6	1.3'	Sa			double system
NGC 2167	Star	MON	6.6	-					H IV 44	NGC 2316	Br Neb	MON	-	-	4'	R			H II 304
NGC 2169	Opn CL	ORI	5.9	-	7'	I 3 p n	30	6.9	H VIII 24;In nebula Ced 78	NGC 2317	Br Neb	MON	-	-	4'	R			
NGC 2170	Br Neb	MON	-	-	2'	R			H IV 19	NGC 2320	Galaxy	LYN	11.9	12.1	1.4'	Elliptical			H II 861
NGC 2174	Br Neb	ORI	-	-	40'	E			w IC 2159 sf; contains cluster	NGC 2321	Galaxy	LYN	13.6	13.9	1.4'	SBa			
NGC 2175	CL+Neb	ORI	6.8	-	18'	IV 3 p n	60	7.6	In Gem OB1?	NGC 2322	Galaxy	LYN	13.8	12.8	1.1'	SBa			H III 874
NGC 2175S	Opn CL	ORI	-	-	21'			20		NGC 2324	Opn CL	MON	8.4	-	8'	II 2 r	70	10.4	H VII 38
NGC 2179	Galaxy	LEP	12.3	12.9	2'	SBO-a				NGC 2325	Galaxy	CMA	11.4	13.4	3.5'	E4			
NGC 2180	Opn CL	ORI	-	-					H VIII 6	NGC 2326	Galaxy	LYN	13.1	14.3	1.8'	SBb			H II 734
NGC 2182	Br Neb	MON	-	-	3'	R			H IV 38	NGC 2327	Br Neb	CMA	-	-	20'	E			H IV 25
NGC 2183	Br Neb	MON	-	-	2'	R				NGC 2328	Galaxy	PUP	12.8	13.4	1.6'	E-SO Ba			
NGC 2185	Br Neb	MON	-	-	2'	R			H IV 20	NGC 2329	Galaxy	LYN	12.4	12.7	1.3'	SO			H II 735= III 875
NGC 2186	Opn CL	ORI	8.7	-	4'	II 2 p	30	9.8	H VII 25	NGC 2330	Galaxy	LYN	14	-	0.4'	Elliptical			
NGC 2188	Galaxy	COL	11.7	13.2	4.7'	SBp				NGC 2331	Opn CL	GEM	8.5	-	18'	IV 1 p	30	9	H VIII 40
NGC 2191	Galaxy	CAR	12.4	-	1.7'	SBO				NGC 2332	Galaxy	LYN	12.8	13.2	1.5'	SO			H II 862
NGC 2192	Opn CL	AUR	10.9	-	6'	III 1 p	45	14	H VII 57;25* mags 12...	NGC 2333	Galaxy	GEM	13.3	12.7	1'	Sa			H III 899
NGC 2194	Opn CL	ORI	8.5	-	10'	III 1 r	80	12.1	H VI 5;faint;rich;look for 2169 nearby	NGC 2335	Opn CL	MON	7.2	-	12'	III 3 m n	35	9.5	H VIII 32;In Cma OB1
NGC 2196	Galaxy	LEP	11	12.8	2.8'	Sa			H II 265	NGC 2336	Galaxy	CAM	10.4	13.9	6.8'	SBbc Rir			weak bar;many weak filam arms w knots; P w IC 46
NGC 2201	Galaxy	PUP	13.4	13.6	1.4'	SBb				NGC 2336A	Galaxy	CAM	14	-	1.7'	Sc			diffuse arms;chain of bright patches in one
NGC 2202	Opn CL	ORI	-	-						NGC 2337	Galaxy	LYN	12.4	13.7	2.3'	Ir			
NGC 2204	Opn CL	CMA	8.6	-	13'	III 3 m	80	12.2	H VII 13;About 20 F *	NGC 2339	Galaxy	GEM	11.8	13.5	2.7'	SBbc Rir			B nucleus in weak compl bar w dk lanes;F knotty ar
NGC 2206	Galaxy	CMA	12.2	13.3	2.4'	SBbc				NGC 2340	Galaxy	LYN	11.7	12.6	1.8'	Elliptical			H II 736
NGC 2207	Galaxy	CMA	10.8	13.4	4.2'	SBbc Rir			Double galaxy or interacting pair	NGC 2341	Galaxy	GEM	13.2	12.6	0.8'	Sc			peculiar
NGC 2208	Galaxy	AUR	12.8	13.3	1.6'	SO				NGC 2342	Galaxy	GEM	12.6	13	1.4'	Sc			distorted
NGC 2211	Galaxy	CMA	12.7	12.5	1.4'	SBO				NGC 2343	Opn CL	MON	6.7	-	7'	III 3 p n	20	8.4	H VIII 33
NGC 2212	Galaxy	CMA	13.4	13.5	1.5'	SBO-a				NGC 2344	Galaxy	LYN	12	13	1.7'	SBbc			
NGC 2215	Opn CL	MON	8.4	-	11'	II 2 p	40	10.5	H VII 20	NGC 2345	Opn CL	CMA	7.7	-	12'	I 3 m	70	9.9	H IV 65;PK215+3.1; cent* V651 Mon a variable star
NGC 2216	Galaxy	CMA	12.8	13.1	1.4'	SBab				NGC 2346	Pln Neb	MON	12.5	11.5	60"	3b(6)		11.3	H III 746;traces faint roundness
NGC 2217	Galaxy	CMA	10.7	13.8	4.7'	SBO-a R				NGC 2347	Galaxy	CAM	12.4	13.2	1.8'	Sb			H III 746;traces faint roundness
NGC 2219	Opn CL	MON	-	-	8'					NGC 2349	Opn CL	MON	-	-					H VII 27
NGC 2221	Galaxy	PIC	13.9	-	2'	Sa				NGC 2350	Galaxy	CMI	12.3	12.1	1.4'	Sa			
NGC 2223	Galaxy	CMA	11.6	13.8	3'	SBab				NGC 2353	Opn CL	MON	7.1	-	20'	II 2 p	30	9.2	H VIII 34;In Cma OB1
NGC 2225	Opn CL	MON	14	-	1.5'	I		14	small scattered cluster;compressed core;40 stars	NGC 2354	Opn CL	CMA	6.5	-	20'	III 2 m	100	9.1	H VII 16
NGC 2226	Opn CL	MON	14	-	1.5'	I			compressed core of NGC 2225	NGC 2355	Opn CL	GEM	9.7	-	9'	II 2 p	40	13	H VI 6
NGC 2227	Galaxy	CMA	12.5	13.3	2.1'	SBc				NGC 2356	Opn CL	GEM	9.7	-	9'				H VII 6
NGC 2232	Opn CL	MON	3.9	-	30'	IV 3 p	20	5	H VIII 25	NGC 2357	Galaxy	GEM	13.3	13.7	3.6'	Sc			smaller companion
NGC 2236	Opn CL	MON	8.5	-	7'	III 2 p	50	11	H VII 5	NGC 2358	Opn CL	CMA	-	-	8'				H VIII 45
NGC 2237	CL+Neb	MON	5.5	-	80'	E			Rosette nebula	NGC 2359	Br Neb	CMA	-	-	10'	E		11	Duck Neb; curved filam;cent* Wolf Rayet;UHC help
NGC 2238	Br Neb	MON	6	-	80'	E			Rosette nebula	NGC 2360	Opn CL	CMA	7.2	-	13'	II 2 m	80	10.4	H VII 12
NGC 2239	Opn CL	MON	4.8	-	24'	III 3 p n	40			NGC 2361	Br Neb	CMA	-	-		E			knot in 2359
NGC 2240	Opn CL	AUR	-	-					H VIII 49	NGC 2362	Opn CL	CMA	4.1	-	8'	I 3 p n	60	4.4	H VII 17;40 * to 13 mag surround Tau Cma;sev pair
NGC 2243	Opn CL	CMA	9.4	-	5'	I 2 r	100	11.8		NGC 2364	Opn CL	MON	-	-					
NGC 2244	CL+Neb	MON	4.8	-	24'	III 3 r n b	100	5.8	H VII 2;In Rosette nebula	NGC 2365	Galaxy	GEM	12.4	13.4	2.4'	SBa			hmf of 2
NGC 2245	Br Neb	MON	-	-	2'	R			H IV 3	NGC 2366	Galaxy	CAM	11.1	14.6	7.8'	Ir			H III 748;P w NGC 2363
NGC 2246	Br Neb	MON	-	-	80'	E			Rosette nebula	NGC 2367	Opn CL	CMA	7.9	-	3.5'	IV 3 p	30	9.4	H VIII 28
NGC 2247	Br Neb	MON	-	-	2'	R				NGC 2368	Opn CL	MON	11.8	-	5'	IV 2 p	15		
NGC 2250	Opn CL	MON	8.9	-	8'	IV 2 p	10	12		NGC 2370	Galaxy	GEM	13.6	12.5	0.8'	SBc			
NGC 2251	Opn CL	MON	7.3	-	10'	IV 2 p	30	9.1	H VIII 3	NGC 2371	Pln Neb	GEM	11.2	10.5	74"	3a+6		14.9	faint double-lobed planetary;use filter;PK189+19.1
NGC 2252	Opn CL	MON	7.7	-	20'	IV 2 p n	30	9	H VIII 50	NGC 2372	Pln Neb	GEM	11.2	10.5	74"	3a(4)		14.8	faint double-lobed planetary;use filter;PK189+19.1
NGC 2253	Opn CL	CAM	13.1	-	1.4'	I			H VII 54;Mis-identified as galaxy in CGCG	NGC 2373	Galaxy	GEM	13.7	12.2	0.6'	Sbc			
NGC 2254	Opn CL	MON	9.1	-	4'	I 2 p	50	11.9	H VII 22	NGC 2374	Opn CL	CMA	8	-	19'	II 3 p	25	10.7	H VIII 35
NGC 2255	Galaxy	COL	13.4	13.4	1.5'	SBc				NGC 2375	Galaxy	GEM	13.6	13.8	1.3'	SBb			NGC 2389 group
NGC 2256	Galaxy	CAM	12.5	14	2.3'	SBO				NGC 2377	Galaxy	MON	12.7	13.4	1.7'	Sc			
NGC 2258	Galaxy	CAM	11.9	13.1	2.3'	SO				NGC 2379	Galaxy	GEM	13.5	12.8	0.8'	SO			very compact;NGC 2389 group
NGC 2259	Opn CL	MON	10.8																

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 2429A	Galaxy	LYN	14	-	1.5'	Sbc			distorted early spiral interacting w comp at 0.8	NGC 2559	Galaxy	PUP	10.9	12.8	3.7'	SBbc			
NGC 2431	Galaxy	LYN	13.4	13	0.9'	SBa			H III 829	NGC 2560	Galaxy	CNC	13.3	12.4	1.4'	Sa			dense part of cl
NGC 2432	Opn CL	PUP	10.2	-	8'	III 1 p	50		H VI 36	NGC 2561	Galaxy	HYA	13.1	12.5	1.1'	SBc			brightest in group;short massive arms;thick bar
NGC 2435	Galaxy	GEM	12.8	12.8	2.2'	Sa			H II 616	NGC 2562	Galaxy	CNC	12.9	12.3	1'	Sa			H III 607;dense part of cl
NGC 2438	Pln Neb	PUP	11	11.7	65"	4(2)		17.5	H IV 39;PK231+4.2 , inside M46	NGC 2563	Galaxy	CNC	12.2	13.3	2'	SO			H II 634;dense part of cl
NGC 2439	Opn CL	PUP	6.9	-	10'	III 3 m	80	8.9		NGC 2564	Galaxy	PUP	13.5	-	1.2'	E-SO			
NGC 2440	Pln Neb	PUP	11.5	6.4	54"	5(3)		17.5	almost starlike;irregular at high power;PK234+2.1	NGC 2565	Galaxy	CNC	12.6	13	1.9'	SBbc			sf of 2
NGC 2441	Galaxy	CAM	12.2	13.4	2'	SBb Rin				NGC 2566	Galaxy	PUP	11	13.1	3.4'	SBab			
NGC 2444	Galaxy	LYN	13.2	13	1.2'	SO			double;elong. w distorted envelope;knotty plume	NGC 2567	Opn CL	PUP	7.4	-	10'	III 2 m	40	10.1	H VII 64
NGC 2445	Galaxy	LYN	13.3	13.6	1.4'	Ring			double system;see NGC 2444	NGC 2568	Opn CL	PUP	10	-	2.0'				
NGC 2446	Galaxy	LYN	12.9	13.5	1.9'	Sb				NGC 2571	Opn CL	PUP	7	-	13'	IV 1 p	30	8.8	H VI 39
NGC 2448	Opn CL	PUP	-	-	5'					NGC 2572	Galaxy	CNC	13.8	13.1	1.3'	Sa			
NGC 2449	Galaxy	GEM	13.4	13.1	1.3'	Sab				NGC 2574	Galaxy	HYA	14	-	2.3'	Sab			
NGC 2451	Opn CL	PUP	2.8	-	50'	II 2 p	40	3.6	includes naked eye red star c Pup; not a true cluste	NGC 2575	Galaxy	CNC	12.7	14.2	2.3'	Sc			
NGC 2452	Pln Neb	PUP	12.6	9.4	22"	4(3)		17.5		NGC 2577	Galaxy	CNC	12.4	13	1.8'	SO			H II 259
NGC 2453	Opn CL	PUP	8.3	-	5'	I 2 p	30	9.5		NGC 2578	Galaxy	PUP	12.6	13.4	2.2'	SBO-a			H III 902
NGC 2455	Opn CL	PUP	10.2	-	8'	III 2 p	50	12		NGC 2579	CL+Neb	PUP	7.5	-	10'	IV 2 p	20	9.5	
NGC 2456	Galaxy	LYN	13.1	13	1.1'	Elliptical				NGC 2580	Opn CL	PUP	9.7	-	8'	II 2 m	50		
NGC 2459	Opn CL	CMI	-	-	1.5'				H III 479	NGC 2581	Galaxy	CNC	13.3	13	1.1'	SB Ring			
NGC 2460	Galaxy	CAM	11.8	13.3	2.2'	Sab			vBN;spir struct in lens;vF smooth arms surrounding	NGC 2582	Galaxy	CNC	13	13.3	1.2'	SBab			H III 753;s-shaped;almost circular arms IC 2359
NGC 2462	Galaxy	LYN	14	-	0.4'	S				NGC 2583	Galaxy	HYA	13.4	12.9	0.8'	E1			
NGC 2467	CL+Neb	PUP	7.1	-	15'	I 3 m	50		Scattered stars 8..12 w vF haze of neb;in PUP OB1	NGC 2587	Opn CL	PUP	9.2	-	9'	II 1 p	40		
NGC 2469	Galaxy	LYN	12.7	12.4	1'	SB/P			H III 836	NGC 2588	Opn CL	PUP	11.8	-	2'	II 1 p	20		
NGC 2470	Galaxy	CMI	12.7	12.7	2'	Sab				NGC 2590	Galaxy	HYA	13.1	13.4	2.2'	Sbc			
NGC 2474	Galaxy	LYN	13.5	-	0.6'	EO			H III 830;double system w 2475;contact	NGC 2591	Galaxy	CAM	12.3	12.8	3'	Sc			patchy;probably late Sc
NGC 2475	Galaxy	LYN	13.1	12.5	0.8'	E1			double system w 2474;contact	NGC 2592	Galaxy	CNC	12.3	13.2	1.7'	Elliptical			brightest of 3;in triple group w 2594 and NGC 2481
NGC 2476	Galaxy	LYN	12.6	12.8	1.4'	Elliptical				NGC 2593	Galaxy	CNC	13.9	12.9	0.9'	Sa			
NGC 2477	Opn CL	PUP	5.8	-	27'	I 2 r	200	12	300 * to 12 mag;Shapley--richest of OPNCL	NGC 2595	Galaxy	CNC	12.3	14.3	3.1'	SBc			slightly asym spiral pattern;barred w prominent nucl
NGC 2478	Opn CL	PUP	4.4	-	30'				Equals 2422 (M 47)	NGC 2596	Galaxy	CNC	13.5	13.1	1.5'	Sb			
NGC 2479	Opn CL	PUP	9.6	-	7'	III 1 m	45		H VII 58	NGC 2598	Galaxy	CNC	13.6	12.7	1'	SBa			
NGC 2480	Galaxy	GEM	13.7	13.4	1.3'	SBcd			distorted	NGC 2599	Galaxy	CNC	12.2	13.3	1.9'	Sa			H III 234
NGC 2481	Galaxy	GEM	12.9	12.4	1.4'	Sa			H II 302;distorted	NGC 2604A	Galaxy	CNC	13.5	-	2.1'	SBc			H III 292;irregular;sev vF objects near
NGC 2482	Opn CL	PUP	7.3	-	12'	III 1 m	40	10	H VII 10	NGC 2607	Galaxy	CNC	13.6	13.2	0.9'	Sc			bright core in R diff disc;extreme diff outer disc
NGC 2483	Opn CL	PUP	7.6	-	10'		30	9.3		NGC 2608	Galaxy	CNC	12.3	13.4	2.2'	SBb Rin			2 asym arms vhigh surf brightn;2* superimposed on
NGC 2484	Galaxy	LYN	13.1	12.6	0.9'	SO				NGC 2610	Pln Neb	HYA	13	12.1	50"	4(2)		15.9	H IV 35;PK239+13.1
NGC 2485	Galaxy	CMI	12.2	13	1.6'	Sa			double	NGC 2612	Galaxy	HYA	13	-	2.8'	E-SO			
NGC 2486	Galaxy	GEM	13.3	13.6	1.7'	Sa			P w NGC 2487	NGC 2613	Galaxy	PYX	10.3	12.9	7.1'	Sb			1.2 deg W from D* Burnham 208;Nearly edge-on
NGC 2487	Galaxy	GEM	12.5	14.2	2.7'	SBb			P w NGC 2486	NGC 2614	Galaxy	UMA	12.9	14.5	2.4'	Sc			
NGC 2488	Galaxy	LYN	12.4	12.4	1.4'	E-SO			H III 837	NGC 2615	Galaxy	HYA	12.5	13.1	1.9'	SBb			
NGC 2489	Opn CL	PUP	7.9	-	8'	II 2 m	45	11.1	H VII 23	NGC 2616	Galaxy	HYA	12.5	13.2	1.5'	SO			compact;brightest of 3
NGC 2492	Galaxy	GEM	12.7	12.6	1'	E-SO			compact	NGC 2618	Galaxy	HYA	12.1	13.6	2.5'	Sab			H III 257;very diffuse outside
NGC 2493	Galaxy	LYN	12	13.3	1.9'	SBO			H III 750	NGC 2619	Galaxy	CNC	12.4	13.5	2.3'	SBbc			H II 319;many very thin arms
NGC 2494	Galaxy	MON	13.1	12.4	0.9'	SBO-a				NGC 2620	Galaxy	CNC	13.4	13.3	2'	S pec			very diffuse dwarf;NGC 2621 at 3.8 nf (m=15.5)
NGC 2496	Galaxy	CMI	12.9	13.5	1.4'	Elliptical				NGC 2622	Galaxy	CNC	14	12.7	0.8'	Sb			
NGC 2497	Galaxy	LYN	13.1	13.6	1.4'	E-SO			H III 838;compact	NGC 2623	Galaxy	CNC	13.4	13.8	2.4'	Sb			triple; contact;2 long curved streamers (or arms)
NGC 2498	Galaxy	GEM	13.4	13.1	1.1'	SBa			very bright bar;singular loop westw	NGC 2626	Br Neb	VEL	-	-	5'	E+R			
NGC 2500	Galaxy	LYN	11.6	13.7	2.9'	SBcd			bright nucleus in bar;many well resolved clumpy arm	NGC 2627	Opn CL	PYX	8.4	-	11'	III 2 m	60	11	H VII 63
NGC 2501	Galaxy	PUP	14	-	1.4'	SO				NGC 2628	Galaxy	CNC	13.3	13.4	1.1'	Sc Ring			H III 235
NGC 2502	Galaxy	CAR	13.2	-	2.1'	SBO				NGC 2629	Galaxy	UMA	12.3	13.2	2.3'	SO			H III 982
NGC 2503	Galaxy	CNC	13.7	13.6	1.1'	SBbc Rin				NGC 2633	Galaxy	CAM	12.2	13.5	2.3'	SBb/P			bright bar w dk lanes;2 main arms; Br in grp w N 263
NGC 2504	Galaxy	CMI	13.9	11.9	0.5'	Pec			peculiar	NGC 2634	Galaxy	CAM	12	13.1	2'	E1			disturbed; Pw NGC 2634A at 1.9' sf
NGC 2505	Galaxy	LYN	13.2	12.6	1.2'	SBa			H III 839	NGC 2634A	Galaxy	CAM	13.6	13	1.8'	SBbc			disturbed;poor resolution;dimmer for bright part only
NGC 2506	Opn CL	MON	7.6	-	7'	I 2 r	150	10.8	H VI 37	NGC 2635	Opn CL	PYX	11.2	-	3'	I 3 p	15	12.4	
NGC 2507	Galaxy	CNC	12.2	13.7	2.5'	Sa			H II 554;peculiar;brightest in group;faint outer whirls	NGC 2636	Galaxy	CAM	13.8	12.8	0.3'	EO			compact;disc w v high surf br
NGC 2508	Galaxy	CMI	12.7	13.2	1.4'	Elliptical			H III 7	NGC 2638	Galaxy	LYN	12.8	12.6	1.7'	Sa			
NGC 2509	Opn CL	PUP	9.3	-	8'	II 1 p	70		H VIII 1	NGC 2639	Galaxy	UMA	11.6	12.3	1.8'	Sa			H I 204;v faint thin spiral arm;partly obscure on one
NGC 2510	Galaxy	CMI	13.4	12.9	1'	SO			NGC 2513	NGC 2640	Galaxy	CAR	12.7	-	2.2'	E-SO B			
NGC 2512	Galaxy	CNC	13.1	13.2	1.4'	SBb			H III 605	NGC 2641	Galaxy	UMA	13.6	13.9	1.3'	SO			H III 983;compact
NGC 2513	Galaxy	CNC	11.6	13.4	2.5'	Elliptical			H III 512;brightest in group	NGC 2642	Galaxy	HYA	12.6	13.9	2'	SBbc Rin			B nucleus in weak bar;4 or 5 knotty filam arms;
NGC 2514	Galaxy	CNC	13.4	13.8	1.3'	SBbc			NGC 2507 group	NGC 2644	Galaxy	HYA	12.3	12.8	2.1'	Sc			strongly asym.;spiral arcs north;filaments south
NGC 2517	Galaxy	PUP	11.8	12.1	1.4'	SBO				NGC 2645	Opn CL	VEL	7.1	-	1.5'	II 2 p	15	8.9	
NGC 2518	Galaxy	LYN	13	13.1	1.2'	E-SO			spiral	NGC 2646	Galaxy	CAM	12.1	12.5	1.5'	SBO			bright nucleus on faint bar; also identified as IC 520
NGC 2520	Opn CL	PUP	6.5	-	22'					NGC 2648	Galaxy	CNC	11.8	13.1	3.2'	Sa			spiral;abs lanes in comp;diff arms extend beyond cc
NGC 2521	Galaxy	LYN	12.8	12.6	1.2'	SOp			disturbed	NGC 2649	Galaxy	LYN	12.3	13.1	1.5'	SBbc			H II 727
NGC 2522	Galaxy	CNC	13.8	12.4	1'	Sa			brightest in group;1st in chain of 5 galaxies	NGC 2650	Galaxy	UMA	13.3	13.8	1.6'	SBb			H II 908
NGC 2523	Galaxy	CAM	11.9	13.6	2.9'	SBab			bright diff Nuc on bar;several filam arms w knots	NGC 2652	Galaxy	SEX	11.9	-	3.4'	E 4			see 2974
NGC 2523A	Galaxy	CAM	13.8	13.3	1'	SBc			disturbed?	NGC 2654	Galaxy	UMA	11.8	12.9	4.2'	SBab			
NGC 2523B	Galaxy	CAM	13.9	13.4	2'	Sb			exact minor replica of NGC 5746	NGC 2655	Galaxy	CAM	10.1	13.2	4.9'	SBO-a			large nucleus w asym dk matter;faint outer whirls
NGC 2523C	Galaxy	CAM	12.9	13.1	1.5'	E5				NGC 2656	Galaxy	UMA	13.8	14.2	1.3'	SOp			double system in halo
NGC 2524	Galaxy	LYN	12.7	12.9	1.4'	Sa				NGC 2657	Galaxy	CNC	13	13.5	1.3'	Scd Rin			
NGC 2525	Galaxy	PUP	11.6	13.3	3'	SBc/P			H III 877	NGC 2658	Opn CL	PYX	9.2	-	10'	I 2 r	80	12	
NGC 2526	Galaxy	CNC	13.7	12.6	0.9'	Sab				NGC 2659	Opn CL	VEL	8.6	-	14'	III 3 m	80	9.7	In Vel OB1
NGC 2527	Opn CL	PUP	6.5	-	22'	III 1 p	40	8.6	H VIII 30	NGC 2660	Opn CL	VEL	8.8	-	4'	I 3 m	70	11.7	
NGC 2528	Galaxy	LYN	12.6	13.4	1.5'	Sb Ring				NGC 2661	Galaxy	CNC	12.8	13.4	1.4'	Sc			patchy;asym broken arms;no disturbing obj visible
NGC 2530	Galaxy	CNC	13.6	13.8	1.4'	SBcd			H III 752	NGC 2663	Galaxy	PYX	10.9	13.1	3.5'	Elliptical			
NGC 2532	Galaxy	LYN	12.4	13.8	2.1'	SBc			H II 726;sev br knotty arms;high surf br	NGC 2664	Opn CL	CNC	-	-	5'				
NGC 2533	Opn CL	PUP	7.6	-	3.5'	III 1 p	60	9		NGC 2665	Galaxy	HYA	12.2	13.3	2'	SBa			
NGC 2534	Galaxy	LYN	12.9																

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 2708	Galaxy	HYA	12	13.2	2.7'	Sb			H II 281	NGC 2848	Galaxy	HYA	11.8	13.3	2.5'	Sbc			H III 488;NGC 2851 is 5' ENE
NGC 2709	Galaxy	HYA	13.6	12.8	0.8'	SO				NGC 2849	Opn CL	VEL	12.5	-	3'	I 1 m	40		
NGC 2710	Galaxy	UMA	12.9	13.4	2'	SBb			H III 841	NGC 2852	Galaxy	LYN	13.2	12.6	1.4'	SBa			H III 629;compact;NGC 2844 group
NGC 2711	Galaxy	CNC	13.6	12.9	0.9'	SBbc				NGC 2853	Galaxy	LYN	13.3	13.6	1.8'	SBO-a			H III 630;NGC 2844 group
NGC 2712	Galaxy	LYN	12.1	13.6	2.8'	SBb			bright nucl;smooth narrow bar;sev knotty branch arm	NGC 2854	Galaxy	UMA	13	12.9	1.6'	SBb			H III 714;Arp class=double galaxy;brightest of 3
NGC 2713	Galaxy	HYA	11.8	13.4	3.3'	SBab			B N in strng bar w dk lanes;2 main fil arms w knots	NGC 2855	Galaxy	HYA	11.6	13.3	2.4'	Sa			H I 132
NGC 2714	Galaxy	CAR	14	-	0.9'	E				NGC 2856	Galaxy	UMA	13.1	12.3	1.1'	Sbc			narrow tail leads away from nucleus;2854 group
NGC 2715	Galaxy	CAM	11.2	13.4	4.8'	SBc			several filamentary knotty arms;sharp outline	NGC 2857	Galaxy	UMA	12.3	13.7	2.2'	Sc			Arp's spiral w low surf brightness;2 very long thin arm
NGC 2716	Galaxy	HYA	11.8	12	1.6'	SBO-a			close to cluster of faint galaxies	NGC 2858	Galaxy	HYA	12.6	12.9	1.7'	Sa			
NGC 2717	Galaxy	PYX	12.3	13.5	2.1'	E-SO Bar				NGC 2859	Galaxy	LMI	10.9	13.8	4'	SBO-a R			H I 137;bright nucleus in diff. bar w diff. blobs
NGC 2718	Galaxy	HYA	11.8	13.3	2.1'	SBab			H II 557	NGC 2860	Galaxy	LYN	13.7	13.4	1.5'	SBa			
NGC 2719	Galaxy	LYN	13.5	-	1.1'	Irp			high surf brightn;core+loop;diffuse bridge to comp	NGC 2861	Galaxy	HYA	12.7	13.4	1.5'	SBbc			hnp of 2;interaction?
NGC 2719A	Galaxy	LYN	13.5	-	0.4'	Irp				NGC 2862	Galaxy	LEO	12.8	13	2.5'	SBbc			
NGC 2720	Galaxy	CNC	12.8	13	1.2'	Sc				NGC 2863	Galaxy	HYA	13	-	1'	Sm			H III 520
NGC 2721	Galaxy	HYA	12.5	-	2.4'	Sbc Ring			H II 529	NGC 2865	Galaxy	HYA	11.7	13.3	2.5'	E4			
NGC 2722	Galaxy	HYA	13.4	-	2.1'	Sbc			H III 264	NGC 2866	Opn CL	VEL	10	-	1.5'				
NGC 2723	Galaxy	HYA	13.2	12.9	0.9'	SO				NGC 2867	Pln Neb	CAR	9.7	6.5	12"	4		16	
NGC 2724	Galaxy	LYN	13.6	14.6	1.8'	SBc				NGC 2869	Galaxy	HYA	13.5	-	1'	Sm			
NGC 2725	Galaxy	CNC	13.4	12.3	0.7'	Pec			peculiar	NGC 2870	Galaxy	UMA	13	13.4	2.5'	SBbc			H III 846
NGC 2726	Galaxy	UMA	12.5	12.2	1.6'	Sa			H II 834	NGC 2872	Galaxy	LEO	11.9	13.3	1.8'	E2			H II 57=II 546
NGC 2727	Galaxy	HYA	12.8	-	2.7'	Sb				NGC 2874	Galaxy	LEO	12.5	13	2.2'	SBbc			disturbed;possibly not interacting;largest of triplet
NGC 2728	Galaxy	CNC	13.6	13.4	1.1'	Sb				NGC 2875	Neb+Gx	LEO	-	-	0.5'	E+*			An HII region within the GALXY 2874 on the NE side
NGC 2729	Galaxy	HYA	13.4	12.3	0.8'	SO				NGC 2880	Galaxy	UMA	11.5	12.4	2.4'	E3			very compact;bright nucleus in bar near minor axis
NGC 2730	Galaxy	CNC	13	13.6	1.7'	Sbc Irr			disturbed;chaotic patchy spirals ;S blue cond p part	NGC 2881	Galaxy	HYA	14	-	1.1'	S			
NGC 2731	Galaxy	CNC	13.5	12.4	0.8'	Sc			several filamentary knotty arms;sharp outline	NGC 2882	Galaxy	LEO	12.6	12.6	1.5'	S pec			
NGC 2732	Galaxy	CAM	11.9	12.4	2.1'	SO			peculiar;disturbed?	NGC 2884	Galaxy	HYA	13	-	2.1'	Sa			
NGC 2733	Galaxy	HYA	13.4	-	2.1'	Sbc				NGC 2888	Galaxy	PYX	12.6	13	1.5'	E2			
NGC 2735	Galaxy	CNC	13.3	12.4	1.2'	SBb/P			bright core;bridge;disturbed by companion (N2375A)	NGC 2889	Galaxy	HYA	11.7	13.1	2.3'	Sbc Ring			H II 555
NGC 2736	Brn Neb	VEL	-	-	30'	E			luminous filamentary nebula	NGC 2891	Galaxy	PYX	12.6	13.3	1.5'	E-SO			
NGC 2738	Galaxy	CNC	13	12.7	1.4'	Sc			brightest in group;spiral	NGC 2892	Galaxy	UMA	13.1	13.7	1.4'	SOp			brightest in group;compact? (*) superimposed at 0
NGC 2740	Galaxy	UMA	13.9	13.3	1'	Sab Ring				NGC 2893	Galaxy	LEO	13.2	13.2	1.1'	SBO-a R			H III 297;brightest in group
NGC 2742	Galaxy	UMA	11.4	13	3'	Sc			H I 249;bright nucleus;several filamentary knotty arm	NGC 2894	Galaxy	LEO	12.4	12.9	1.9'	Sa			H III 8;diffuse
NGC 2742A	Galaxy	UMA	13.2	13.1	1.6'	SBb/P				NGC 2898	Galaxy	HYA	13.4	13.1	1'	Sa			
NGC 2743	Galaxy	CNC	13.7	13.5	1.1'	Sd			H III 608	NGC 2899	Pln Neb	VEL	12.2	13.1	2'			15.9	
NGC 2744	Galaxy	CNC	13.5	13.9	1.6'	SBb/P			double;bright complex center;2 main smooth arms	NGC 2900	Galaxy	HYA	13	13.8	1.7'	Sbc			filaments from the bar;appears too red to be SBc
NGC 2746	Galaxy	LYN	13.1	13.9	1.6'	SBa			medium compact;several faint objects in vicinity	NGC 2902	Galaxy	HYA	12.2	12.6	1.6'	SO			H III 276;IC 543
NGC 2748	Galaxy	CAM	11.7	12.9	3.1'	Sbc			vB center w sN;sev knotty arms w dk lanes	NGC 2903	Galaxy	LEO	9	13.6	12'	SBbc			H I 56;short B nucleus bar;fine multi arm spiral
NGC 2749	Galaxy	CNC	11.8	12.8	1.8'	E2			brightest in group	NGC 2904	Galaxy	ANT	12.4	12.6	1.5'	E-SO Bar			
NGC 2750	Galaxy	CNC	11.9	13.3	2.2'	Sc			slightly asym;distorted arm at p side bright outw	NGC 2905	Neb+Gx	LEO	-	-	13.3"	E+*			H I 57; NE arm of NGC 2903
NGC 2752	Galaxy	CNC	13.7	13.4	1.8'	SBb			triple grp w NGC 2749 @ 5.4';PA252;and NGC 274	NGC 2906	Galaxy	LEO	12.7	12.8	1.4'	Sc			H II 495
NGC 2755	Galaxy	LYN	13.1	13	1.2'	Sb			H III 626;compact	NGC 2907	Galaxy	HYA	11.6	12.3	2'	Sab			H II 506;Equatorial dust band;Nearly edge-on
NGC 2756	Galaxy	UMA	12.4	13	1.7'	Sb			H II 828	NGC 2908	Galaxy	DRA	14	-	0.8'	S pec			H III 977
NGC 2758	Galaxy	HYA	13.2	12.8	1.9'	Sc				NGC 2909	2 Stars	UMA	14	-					
NGC 2759	Galaxy	LYN	13	12.6	1'	E-SO			H III 647;brightest in group	NGC 2910	Opn CL	VEL	7.2	-	5'	I 2 p	30	9.3	
NGC 2760	Galaxy	CAM	14	-	0.5'					NGC 2911	Galaxy	LEO	11.5	14.2	4'	SO			brightest in group;diffuse nebula w dk lane on one s
NGC 2763	Galaxy	HYA	12	13.5	2.3'	Sbc			H III 275	NGC 2913	Galaxy	LEO	13.1	12.7	1.1'	Sc			
NGC 2764	Galaxy	CNC	12.9	13.1	1.5'	SO			H III 236	NGC 2914	Galaxy	LEO	13.1	12.6	0.9'	SBab			NGC 2911 group;2 main reg arms;poor resolution
NGC 2765	Galaxy	HYA	12.1	12.9	2.1'	SO			H II 520	NGC 2916	Galaxy	LEO	12.1	13.4	2.5'	Sb			asym;radial filaments n;term on patchy arc;spir cent
NGC 2766	Galaxy	CNC	13.6	13.1	1.4'	SBab Ring				NGC 2917	Galaxy	HYA	13.6	12.6	1.3'	Sa			
NGC 2767	Galaxy	UMA	13.8	11.6	0.4'	S			NGC 2769 group	NGC 2918	Galaxy	LEO	12.6	12.9	1.4'	Elliptical			H III 298
NGC 2768	Galaxy	UMA	9.9	13.7	8.2'	E5			vsvB center; smooth neb in lens and external envel	NGC 2919	Galaxy	LEO	12.9	12.8	1.6'	SBbc			NGC 2911 group;bright nucleus in weak bar
NGC 2769	Galaxy	UMA	13	12.5	1.8'	Sa			brightest in NGC 2769 group	NGC 2920	Galaxy	HYA	13	12.1	0.9'	Sa			
NGC 2770A	Galaxy	LYN	12.2	13.7	3.7'	Sc			H II 490;2 nuclei in common envelope	NGC 2921	Galaxy	HYA	12	13	2.9'	SB Ring			H III 597
NGC 2771	Galaxy	UMA	12.7	14.1	2.3'	SBab			P w NGC 2769;2769 group	NGC 2924	Galaxy	HYA	12	12.6	1.3'	E0			
NGC 2772	Galaxy	PYX	13.4	13.6	1.5'	Sb				NGC 2925	Opn CL	VEL	8.3	-	12'	III 1 p	40		
NGC 2773	Galaxy	CNC	14	12.3	0.7'	S pec				NGC 2926	Galaxy	LEO	13.4	12.8	0.8'	SBb			peculiar
NGC 2775	Galaxy	CNC	10.1	12.9	4.5'	Sab			N in B smooth lens;many knotty arms form dk lane	NGC 2927	Galaxy	LEO	12.9	13.6	1.9'	SBb			small blue cond in spiral arm sp center
NGC 2776	Galaxy	LYN	11.6	13.8	2.8'	SBc			bright nucleus;2 main knotty arms;similar to M101	NGC 2929	Galaxy	LEO	13.7	12.6	1.2'	Sc			brightest in group w N2930 (m=14.5) N2931(m=15)
NGC 2777	Galaxy	CNC	13.3	12.4	0.7'	Sab				NGC 2935	Galaxy	HYA	11.4	13.8	3.7'	SBab			H II 556
NGC 2778	Galaxy	LYN	12.4	12.8	1.4'	E			H II 564;brightest in group	NGC 2936	Galaxy	HYA	13.1	13.3	1.3'	Ring			multiple system;strongly distorted
NGC 2780	Galaxy	LYN	13.3	12.6	0.9'	SB/P			massive very tightly wound arms;NGC 2778 group	NGC 2937	Galaxy	HYA	13.7	14.1	2'	Ring			
NGC 2781	Galaxy	HYA	11.6	13.1	3.1'	SBO-a R			H I 66	NGC 2938	Galaxy	DRA	13.5	14	1.8'	SBc			H III 963?
NGC 2782	Galaxy	LYN	11.6	13.9	3.7'	SBa			broad bar w strong dk. lane;asym smooth arms dk l	NGC 2939	Galaxy	LEO	12.4	13.1	2.5'	Sbc			H III 4;brightest of 3
NGC 2783A	Galaxy	CNC	14	-	2.2'	Elliptical			H III 295;NGC 2778 group	NGC 2940	Galaxy	LEO	13.5	12.9	0.9'	SO			
NGC 2784	Galaxy	HYA	10.2	12.8	5.7'	SO			H I 59	NGC 2942	Galaxy	LMI	12.6	13.9	2.3'	Sc			bright nucl.;2 main branch arms;faint;poor resolution
NGC 2786	Galaxy	CNC	13.7	-	0.9'	Sa Ring				NGC 2943	Galaxy	LEO	12.4	13.5	2.2'	Elliptical			brightest in group;several comps
NGC 2787	Galaxy	UMA	10.8	12.6	3.1'	SBO-a			H I 216;B nucl in B inner lens;strong narrow bar w b	NGC 2944	Galaxy	LEO	14	13	1'	Sc			double ;blue w 2 compact knots;contact;disrupted
NGC 2789	Galaxy	CNC	12.2	13.5	2'	SBO-a			brightest in group	NGC 2945	Galaxy	HYA	12.2	12.8	1.6'	E-SO			
NGC 2792	Pln Neb	VEL	13.5	8.5	13"	4		16.9		NGC 2946	Galaxy	LEO	13.9	12.9	1.2'	SB/P			
NGC 2793	Galaxy	LYN	13.1	13.3	1.2'	SBp			bright knotty bar;blue patchy spiral arc on n edge	NGC 2947	Galaxy	HYA	13.2	-	1.5'	Sbc Ring			
NGC 2794	Galaxy	CNC	13.1	13.4	1.2'	SB/P			amorphous v diff outside;bridge to comp?;brightest	NGC 2948	Galaxy	LEO	12.9	13	1.4'	SBbc			H III 519
NGC 2795	Galaxy	CNC	12.8	13.2	1.4'	Elliptical			a large nr of small galaxies in vicinity; NGC 2749 gr	NGC 2950	Galaxy	UMA	10.9	12.5	2.7'	SBO Ring			H IV 68
NGC 2798	Galaxy	LYN	12.3	13.2	2.8'	SBap			bright bar;2 smooth faint arms;knots;Nearly edge-on	NGC 2954	Galaxy	LEO	12.4	13.1	1.7'	Elliptical			
NGC 2799	Galaxy	LYN	13.8	13.6	1.9'	SBp			bright center and bar;2 main smooth arms edgewise	NGC 2955	Galaxy	LMI	12.9	13.2	1.5'	Sb			H III 541;many filam. knotty arms in bright part
NGC 2800	Galaxy	UMA	12.8	13.1	1.4'	Elliptical			H III 832	NGC 2958	Galaxy	LEO	13.2	12.8	1'	SBbc			
NGC 2801	Galaxy	CNC	14	14	1.1'	Sc			several companions;NGC 2809 group	NGC 2959	Galaxy	UMA	12.8	13.2	1.3'	SBb/P			P w NGC 2961
NGC 2804	Galaxy	CNC	12.9	14.4	2.2'	SO			NGC 2809 group	NGC 2960	Galaxy	HYA	12.4	13.1	1.8'	Sa			
NGC																			

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 2987	Galaxy	SEX	12.9	12.9	1.5'	Sab				NGC 3125	Galaxy	ANT	13	12.8	1.1'	E5			
NGC 2989	Galaxy	HYA	13	13.4	1.7'	Sbc				NGC 3126	Galaxy	LMI	12.8	13.1	2.8'	Sb			
NGC 2990	Galaxy	SEX	12.7	12.4	1.1'	Sc			H II 624;bright nucleus;2 main arms;poor resolution	NGC 3127	Galaxy	HYA	14	-	1.2'	Sb			
NGC 2991	Galaxy	LEO	12.6	13	1.4'	SO			Contact P w NGC 2988;sev alm stel objects in vicin	NGC 3128	Galaxy	HYA	14	-	1.6'	Sb			
NGC 2992	Galaxy	HYA	12.2	13.5	3.7'	Sa			H III 277;Long streamer extends 2' N	NGC 3130	Galaxy	LEO	13.4	12.6	1'	Sa			nearby GC 13911 at 4.6';mag 4.58
NGC 2993	Galaxy	HYA	12.6	12.7	1.8'	Sa			H III 278	NGC 3131	Galaxy	LEO	13	13.4	2.4'	SBb			comp 1.5';PA152;0.25'X0.5'
NGC 2994	Galaxy	LEO	13.1	13.2	1.3'	SO			P w NGC 2988;2891	NGC 3132	Pln Neb	VEL	8.2	8.2	84"	4(2)	15.8		Eight-Burst Nebula ; actual central star is 15.8 mag
NGC 2996	Galaxy	HYA	12.5	13.2	1.5'	Sa				NGC 3135	Galaxy	UMA	13.4	12.5	0.9'	Sbc			
NGC 2997	Galaxy	ANT	9.4	13.7	9.2'	SBc			H V 50	NGC 3137	Galaxy	ANT	11.5	14.2	6.2'	SBc			
NGC 2998	Galaxy	UMA	12.5	13.9	2.7'	SBc			br in NGC 2998-3010 group;many filam knotty arms	NGC 3140	Galaxy	HYA	14	13	0.9'	Sc			
NGC 2999	Opn CL	VEL	9	-	5'					NGC 3142	Galaxy	SEX	14	-	1'	SO			
NGC 3001	Galaxy	ANT	11.9	13.7	2.9'	SBbc Rir				NGC 3144	Galaxy	DRA	13.4	13.1	1.2'	SBap			H III 964
NGC 3003	Galaxy	LMI	11.9	14	5.7'	SBbc			H V 26;BM;no def N;dk mark & knots;filam arms	NGC 3145	Galaxy	HYA	11.7	13.3	3'	SBbc			H III 518
NGC 3009	Galaxy	UMA	13.5	12.7	0.8'	Sc			NGC 2998 at 20 sp	NGC 3146	Galaxy	HYA	13.1	12.8	1'	SBb			
NGC 3011	Galaxy	LEO	13.3	12.8	0.9'	SO Ring				NGC 3147	Galaxy	DRA	10.6	13.3	4.3'	Sbc			H I 79;vBN;many filam. narrow arms in lens
NGC 3012	Galaxy	LMI	13.5	13.6	1.1'	Elliptical			compact	NGC 3151	Galaxy	LMI	13.8	13.5	0.8'	SO			
NGC 3014	Galaxy	SEX	14	-	1'	Sbc				NGC 3153	Galaxy	LEO	12.6	13.3	2.1'	Sc			H III 53;comp at 5.3';PA96;0.9'X0.5';mag 15.5
NGC 3015	Galaxy	SEX	13.9	12	0.5'	SO			brightest of 3	NGC 3155	Galaxy	DRA	12.9	13.1	1.4'	S pec			H III 965
NGC 3016	Galaxy	LEO	12.9	12.9	1.2'	Sb			NGC 3020 group	NGC 3156	Galaxy	SEX	12.3	13	1.9'	SO			H III 255;NGC 3166 group
NGC 3017	Galaxy	SEX	13.1	13	1'	Elliptical				NGC 3157	Galaxy	ANT	13.2	13.3	2.5'	SBc			
NGC 3018	Galaxy	SEX	13.3	12.9	1.2'	Sb			distorted;bridge?	NGC 3158	Galaxy	LMI	11.9	13.3	2.3'	E2			H II 639;brightest in group;sev galaxies in vic;UGC 5
NGC 3020	Galaxy	LEO	11.9	13.5	3'	SBc			H III 51;brightest in group	NGC 3159	Galaxy	LMI	13.6	15.2	1'	E2p			
NGC 3021	Galaxy	LMI	12.1	12.3	1.5'	Sbc			svsBN;many filam B knotty arms;NGC 3003 at 30 sp	NGC 3161	Galaxy	LMI	13.5	14.8	0.4'	Elliptical			
NGC 3022	Galaxy	SEX	14	-	1.6'	SO				NGC 3162	Galaxy	LEO	11.6	13.7	3.1'	SBbc Rir			H II 43;svBN: 0.5'X0.3';2 main knotty arms
NGC 3023	Galaxy	SEX	13.5	-	3'	SBc/P			distorted;bridge?	NGC 3163	Galaxy	LMI	13.3	14	1'	SO			H II 640;NGC 3158 group;UGC 5517
NGC 3024	Galaxy	LEO	13.1	12.9	2'	Sc			H III 52;NGC 3020 group	NGC 3164	Galaxy	UMA	13.6	12.8	0.9'	S pec			comp at 4.3';PA176;0.6'X0.3'
NGC 3025	Galaxy	HYA	12.9	13.4	1.5'	SO				NGC 3165	Galaxy	SEX	13.9	14	1.3'	Sdm			irr;NGC 3166 group;NGC 3166 at 4.6' PA50
NGC 3026	Galaxy	LEO	13	13.7	2.7'	Ir				NGC 3166	Galaxy	SEX	10.4	12.9	4.8'	SBO-a			H I 3;brightest in group
NGC 3027	Galaxy	UMA	11.8	13.9	4.2'	SBcd			H V 23;P w NGC 2985 @ 2.7' PA296;UGC 5316	NGC 3168	Galaxy	UMA	13.4	13.3	1'	Elliptical			compact;brightest in triple group
NGC 3028	Galaxy	HYA	12.7	12.8	1.3'	Sb				NGC 3169	Galaxy	SEX	10.2	12.8	4.2'	Sa			H I 4;eF corona vis to approx 8X6;P w NGC 3166
NGC 3029	Galaxy	SEX	14	14.2	1.5'	Sc				NGC 3171	Galaxy	HYA	12.8	13.3	1.6'	E-SO			
NGC 3032	Galaxy	LEO	12.5	13.8	2.4'	SBO Rir			svBN in sh stubby bar	NGC 3173	Galaxy	ANT	12.8	14.1	2.1'	Sc			
NGC 3033	Opn CL	VEL	8.8	-	12'	II 3 p	50	10.6		NGC 3175	Galaxy	ANT	11.2	13.2	5.1'	SBab			
NGC 3035	Galaxy	SEX	13.5	-	1.7'	SBbc Rir				NGC 3177	Galaxy	LEO	12.4	12.8	1.5'	Sbc			H III 25;NGC 3189-90 group
NGC 3037	Galaxy	HYA	13.1	13.3	1.3'	SBp				NGC 3178	Galaxy	HYA	13	-	1.4'	Sc			
NGC 3038	Galaxy	ANT	11.6	12.7	2.5'	Sb				NGC 3179	Galaxy	UMA	13.1	13	1.8'	SO			
NGC 3039	Galaxy	SEX	13.4	13	1.2'	SBbc			comp 2 'PA323;0.3'X0.15'	NGC 3180	Neb+Gx	UMA	-	-	-	E*			An HII region within the GALXY NGC 3184 on the N
NGC 3041	Galaxy	LEO	11.5	13.8	3.7'	Sbc			H II 98;svBN;sev F knotty arms;poor res	NGC 3181	Neb+Gx	UMA	-	-	-	E*			An HII region within the GALXY NGC 3184 on the W
NGC 3042	Galaxy	SEX	12.9	12.6	1.2'	SO			comp 1.4';PA2;0.3'X0.2'	NGC 3182	Galaxy	UMA	12.1	13.1	2.1'	Sa			H I 265
NGC 3043	Galaxy	UMA	12.6	12.5	1.7'	Sb			H II 835	NGC 3183	Galaxy	DRA	11.9	13	2.3'	SBbc			H I 283
NGC 3044	Galaxy	SEX	11.9	13.1	4.7'	Sbc			H III 254;Nearly edge-on	NGC 3184	Galaxy	UMA	9.8	13.9	7.6'	Sbc			svBN;smooth lens w spiral pattern of dark markings
NGC 3045	Galaxy	HYA	14	-	1.4'	Sb				NGC 3185	Galaxy	LEO	12.2	13.4	2.1'	SBbc			NGC 3189-90 group
NGC 3049	Galaxy	LEO	12.1	13.2	2.2'	SBab Rir				NGC 3187	Galaxy	LEO	13.4	14.7	2.9'	SBc/P			NGC 3189-90 group;distorted
NGC 3050	Galaxy	SEX	13.6	-	1.5'	Sa				NGC 3188	Galaxy	UMA	13.7	13.3	0.9'	SBab			H III 910;nff of 2;comp 0.7';PA246;0.45'X0.3'
NGC 3051	Galaxy	ANT	11.8	13.2	2.1'	E-SO Ba				NGC 3189	Neb+Gx	LEO	-	-	-	E*			HII region within the 3190 on the W edge of the Nu
NGC 3052	Galaxy	HYA	12.2	13.1	2.1'	SBc Rir			H III 272	NGC 3190	Galaxy	LEO	11.1	13.1	4'	Sa			H II 44;bright in grp;disturbed edge-on spiral;P w 3f
NGC 3053	Galaxy	LEO	12.7	13.1	1.8'	SBa			H III 600;UGC 5332 at 3.8';PA108;mag17;1.2'X0.3'	NGC 3191	Galaxy	UMA	13.3	12.4	0.8'	SBbc/P			massive;v tightly wound arms;comp at 1.3';PA268
NGC 3054	Galaxy	HYA	11.8	14	3.8'	SBb				NGC 3193	Galaxy	LEO	10.9	13.1	2.9'	E0			H II 45;NGC 3189-90 group;vB center in smooth ne
NGC 3055	Galaxy	SEX	12.1	13	2.1'	SBc			svsBN in sh narrow bar;2 main knotty arms w m bra	NGC 3194	Galaxy	DRA	13.8	-	1.4'	S pec			
NGC 3056	Galaxy	ANT	11.7	12.3	2.1'	SBO-a				NGC 3197	Galaxy	DRA	13.5	13.6	1.3'	Sbc			H III 966
NGC 3057	Galaxy	DRA	13	14	2.2'	SBd			H III 978	NGC 3198	Galaxy	UMA	10.3	13.8	8.1'	SBc Ring			H I 199;svBN in bar partly obscured on one side
NGC 3060	Galaxy	LEO	13	13.1	2.2'	Sb			H III 601;P w UGC 5343 at 6.4';PA101;mag 15.5;1.2	NGC 3199	Brn Neb	CAR	-	-	22'	E			partial ring
NGC 3061	Galaxy	DRA	12.8	13.6	1.7'	SBc			H II 903?	NGC 3200	Galaxy	HYA	12	13.7	4.2'	SBbc			Nearly edge-on
NGC 3065	Galaxy	UMA	12.5	13.5	1.8'	SO			P w 3066 2.9' SSE;svBN w inner B center;huge hal	NGC 3201	Glob CL	VEL	6.8	-	18.2'	X			* mags 13...; loose structured globular
NGC 3066	Galaxy	UMA	12.9	12.9	1.1'	SBb/P			P w NGC 3065;disturbed;asym main body 0.8'X0.6'	NGC 3202	Galaxy	UMA	13.2	13.1	1.2'	SBa			tri grp w NGC3205 @ 4.4';PA132;NGC3207;PA112
NGC 3067	Galaxy	LEO	12.1	12.8	2.4'	SBab			H II 492;B complx bar or lens w B knots & dk lanes	NGC 3203	Galaxy	HYA	12.1	12.6	2.8'	Sa			Lens shaped
NGC 3070	Galaxy	LEO	12.3	13.1	1.5'	Elliptical			H II 59;comp 4.2';PA88;0.6'X0.3';IC 580 at 5.1';PA3	NGC 3204	Galaxy	LEO	13.5	13.6	1.3'	SBb			comps @ 2.8';PA122;0.3'X0.2';4.2';PA161;0.35'X0.1
NGC 3072	Galaxy	HYA	12.7	12.7	1.9'	Sa			H III 273	NGC 3205	Galaxy	UMA	13.2	13.5	1.4'	Pec			H II 721;peculiar;NGC 3202 group
NGC 3073	Galaxy	UMA	13.4	13.7	1.2'	SBO			H III 853;NGC 3079 group	NGC 3206	Galaxy	UMA	11.9	13.6	2.9'	SBc			H I 266;disturbed;UGC 5589
NGC 3074	Galaxy	LMI	12.7	14.2	2.3'	Sc			H III 542;SN 1965n;comp 4.7';PA122;0.5'X0.2'	NGC 3207	Galaxy	UMA	13.2	13.1	1.3'	Pec			H II 722;peculiar;NGC 3202 group
NGC 3075	Galaxy	LEO	13.6	13.4	1.2'	Sc			comp 3.5';PA242;0.3'X0.1';v dif	NGC 3208	Galaxy	HYA	12.7	13.7	1.8'	SBc			
NGC 3076	Galaxy	HYA	13.1	12.8	1'	Sab				NGC 3209	Galaxy	LEO	12.7	13.1	1.3'	Elliptical			brightest in group
NGC 3077	Galaxy	UMA	9.9	13.1	5.2'	Sd			m81 group;dust streamers tending to radial direction	NGC 3212	Galaxy	DRA	13.1	13.5	1.5'	SBb			H III 980;P w NGC 3215;distorted
NGC 3078	Galaxy	HYA	11.1	12.9	2.7'	E3			H II 268	NGC 3213	Galaxy	LEO	13.5	13.3	1'	Sbc			
NGC 3079	Galaxy	UMA	10.9	13.4	8.1'	SBc			H V 47;brightest of 3;comp 6.5 nff;0.9'X0.4';mag 14.4	NGC 3214	Galaxy	UMA	13.9	13.9	0.7'	Sa			
NGC 3080	Galaxy	LEO	13.4	12.9	0.9'	Sa			H III 934;P w IC 585 mag 14.8;1' X1'	NGC 3215	Galaxy	DRA	13	13	1.1'	Sbc			H III 981;P w NGC 3212;distorted
NGC 3081	Galaxy	HYA	12	13.1	2.2'	SBO-a F				NGC 3216	Galaxy	LEO	13.4	13.6	1.3'	Elliptical			H III 330;brightest in group;UGC 5593
NGC 3082	Galaxy	ANT	12.5	12.5	1.8'	E-SO				NGC 3218	Galaxy	DRA	12.6	-	2.3'	SBbc			
NGC 3083	Galaxy	SEX	13.7	12.4	1.1'	Sa				NGC 3220	Galaxy	UMA	13	12.9	1.3'	Sb			H III 911
NGC 3084	Galaxy	ANT	12.3	12.9	1.7'	SBab Rir				NGC 3221	Galaxy	LEO	13.1	13.8	3.1'	SBc			SN 1961 I
NGC 3085	Galaxy	HYA	13	11.9	1.2'	SO				NGC 3222	Galaxy	LEO	12.8	13	1.2'	SBO			quadruple group;indiv mag approx 16.5
NGC 3086	Galaxy	SEX	13.9	12.8	1.2'	Sb				NGC 3223	Galaxy	ANT	11	13.3	4.1'	Sb			
NGC 3087	Galaxy	ANT	11.6	13.3	2.5'	E0				NGC 3224	Galaxy	ANT	12	13.2	1.9'	Elliptical			
NGC 3089	Galaxy	ANT	12.4	12.9	1.8'	SBb Rir				NGC 3225	Galaxy	UMA	12.6	13.3	2'	Sc			H II 882
NGC 3090	Galaxy	SEX	12.6	13.5	1.7'	Elliptical				NGC 3226	Galaxy	LEO	11.4	13.8	2.5'	Elliptical			H II 28;P w NGC 3

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 3251	Galaxy	LEO	13.3	12.9	2'	SBc			comp @ 2.1';PA140;0.55'X0.15'	NGC 3361	Galaxy	SEX	12.8	13.6	2.1'	SBc			
NGC 3252	Galaxy	DRA	13.5	13.6	1.9'	Scp			H III 316;comps 4';PA266;0.2'X0.15';5' ;PA285;0.6'	NGC 3362	Galaxy	LEO	12.8	13.1	1.4'	Sc			P w NGC 3356
NGC 3253	Galaxy	LEO	13.6	13.8	1.2'	SBbc			comp 2.1';PA 229;0.6'X0.1'	NGC 3363	Galaxy	LEO	13.3	13.3	1.3'	Sc			comp @ 2.4';PA230;0.8'X0.7';v dif
NGC 3254	Galaxy	LMI	11.7	13.8	4.8'	Sbc			H I 72	NGC 3364	Galaxy	UMA	12.8	13.5	1.5'	SBbc			H III 318
NGC 3256	Galaxy	VEL	11.5	13.6	4.5'	Sb				NGC 3365	Galaxy	SEX	12.6	13.8	4.5'	Sc			
NGC 3256B	Galaxy	VEL	13.1	12.9	1.9'	SBbc				NGC 3366	Galaxy	VEL	11.3	12.1	2.2'	SBb			
NGC 3256C	Galaxy	VEL	12.7	13.2	1.7'	SBcd				NGC 3367	Galaxy	LEO	11.5	13.2	2.5'	SBc			H II 78
NGC 3257	Galaxy	ANT	13.1	12.9	1'	E-SO Ba				NGC 3369	Galaxy	HYA	13.6	13.6	1.4'	E-SO			
NGC 3258	Galaxy	ANT	11.5	13.6	3.3'	Elliptical				NGC 3370	Galaxy	LEO	11.6	13.3	2.9'	Sc			H II 81
NGC 3258A	Galaxy	ANT	13.2	12.4	1.1'	SBO-a				NGC 3371	Galaxy	LEO	10.9	-	5.4'	E-SO Ba			near M 105
NGC 3258C	Galaxy	ANT	13.7	13.6	1.1'	SB Ring				NGC 3372	Brn Neb	CAR	3	-	120'	E			Keyhole Nebula & nova-like var Eta Car; drk lanes
NGC 3258D	Galaxy	ANT	13.2	13.4	1.6'	SBb				NGC 3373	Galaxy	LEO	11.8	-	2.9'	Sc			near M 105
NGC 3259	Galaxy	UMA	12.1	13	2.2'	SBbc			H II 870;comp 1.2';PA198;0.3'X0.15';UGC 5717	NGC 3374	Galaxy	UMA	13.7	13.7	1.3'	SBc			nnf of 2;comp at 2.3';PA197;0.35'x 0.18';mag 15.6
NGC 3260	Galaxy	ANT	12.6	12.8	1.2'	Elliptical				NGC 3375	Galaxy	SEX	12.6	13.1	1.6'	SO			
NGC 3261	Galaxy	VEL	11.2	13.6	3.5'	SBbc				NGC 3376	Galaxy	SEX	13.8	12.4	0.8'	S pec			
NGC 3262	Galaxy	VEL	13.2	13.1	1.2'	SBO				NGC 3377	Galaxy	LEO	10.4	13.4	4.3'	Elliptical			H II 99;Leo group
NGC 3263	Galaxy	VEL	11.9	13.9	6.2'	SBc				NGC 3377A	Galaxy	LEO	13.6	15.2	2'	SB			dwarf spiral
NGC 3264	Galaxy	UMA	12	13.2	2.9'	SB				NGC 3378	Galaxy	ANT	12.8	13.4	1.5'	SBbc			
NGC 3265	Galaxy	LMI	12.9	13.1	0.9'	Elliptical			H III 349;UGC 5705	NGC 3380	Galaxy	LMI	12.5	13.2	1.6'	SBa			H II 360;massive spiral arms;UGC 5906
NGC 3266	Galaxy	UMA	12.4	13.1	1.4'	SBO			H II 871	NGC 3381	Galaxy	LMI	11.7	13	2'	SB/P			H II 565
NGC 3267	Galaxy	ANT	12.5	13.1	1.7'	SBO				NGC 3383	Galaxy	HYA	12.7	13.1	1.4'	SBbc			
NGC 3268	Galaxy	ANT	11.4	13.8	4'	Elliptical				NGC 3384	Galaxy	LEO	9.9	12.6	5.4'	E7			Leo group;near M105 w NGC 3379 and NGC 3389
NGC 3269	Galaxy	ANT	12.2	13.2	2.4'	SBO-a R				NGC 3385	Galaxy	SEX	12.6	12.8	1.5'	SO			P w NGC 3386 at 4.3';PA0;0.8'X0.7'
NGC 3270	Galaxy	LEO	13.1	13.9	3.1'	SB Ring			H III 331;comp 2.6';PA121;0.25'X0.12'	NGC 3389	Galaxy	LEO	11.9	13.2	2.9'	Sc			H II 41;Leo group;SN 1967c
NGC 3271	Galaxy	ANT	11.8	13.5	2.8'	SBO				NGC 3390	Galaxy	HYA	11.9	12.5	3.5'	Sb			Nearly edge-on
NGC 3273	Galaxy	ANT	12.5	12.6	1.6'	SBO				NGC 3391	Galaxy	LEO	12.9	12.3	1'	Sc			
NGC 3274	Galaxy	LEO	12.8	13.5	2'	SBcd			H II 358;comp 1.5';PA305;0.3'X0.2'	NGC 3392	Galaxy	UMA	13.7	12.8	0.8'	Elliptical			H III 881
NGC 3275	Galaxy	ANT	11.8	13.6	2.8'	SBab				NGC 3393	Galaxy	HYA	12.2	13.6	2.2'	SBa			
NGC 3276	Galaxy	ANT	13.4	12.7	1'	SO				NGC 3394	Galaxy	UMA	12.4	13.3	1.9'	Sc Ring			H II 872;sp of 2
NGC 3277	Galaxy	LMI	11.7	12.9	2.1'	Sab			H II 359	NGC 3395	Galaxy	LMI	12.1	12.9	1.7'	SBc			H I 116;P w NGC 3396;contact disrupted;brightest c
NGC 3278	Galaxy	ANT	12.3	12.4	1.3'	Sc				NGC 3396	Galaxy	LMI	12.1	13.4	2.9'	SB			H I 117;P w NGC 3395
NGC 3279	Galaxy	LEO	13.4	13.2	2.9'	Scd				NGC 3397	Galaxy	DRA	13	-	1.9'	Sb			H I 284
NGC 3281	Galaxy	ANT	11.7	13.4	3.2'	Sab Ring				NGC 3399	Galaxy	LEO	12.8	13.8	1.7'	SO			
NGC 3281C	Galaxy	ANT	13.3	12.2	1.4'	SO				NGC 3400	Galaxy	LMI	13.2	13.2	1.1'	SBa			H II 361
NGC 3281D	Galaxy	ANT	14	13.7	2'	SBcd				NGC 3402	Galaxy	HYA	11.9	-	2.1'	Elliptical			
NGC 3282	Galaxy	HYA	13	13	1.9'	SBO Ring				NGC 3403	Galaxy	DRA	12.2	13.4	3'	Sbc			H II 335
NGC 3285	Galaxy	HYA	12	13.4	2.7'	SBa				NGC 3404	Galaxy	HYA	14	-	2.1'	SBab			
NGC 3285A	Galaxy	HYA	13.9	13.7	1.2'	SBc				NGC 3406	Galaxy	UMA	13.7	-	0.9'	E-SO			double system
NGC 3285B	Galaxy	HYA	13.1	13.5	1.5'	SBb				NGC 3407	Galaxy	UMA	13.6	13.5	1.4'	E-SO			H III 919
NGC 3286	Galaxy	UMA	13.6	12.5	1.4'	Elliptical			H III 917	NGC 3408	Galaxy	UMA	13.4	13.1	0.8'	Sc			H III 913
NGC 3287	Galaxy	LEO	12.3	12.9	2'	SBcd			P w NGC 3301	NGC 3411	Galaxy	HYA	11.9	13.5	2.1'	Elliptical			H III 522
NGC 3288	Galaxy	UMA	14	13.8	0.9'	SBbc			H III 918;P w NGC 3286;UGC 5752	NGC 3412	Galaxy	LEO	10.5	12.6	3.7'	SBO			H I 27;Leo group
NGC 3289	Galaxy	ANT	12.5	12.6	2.2'	SBO-a				NGC 3413	Galaxy	LMI	12.1	12.7	1.8'	SO			H II 493;NGC 3395 group
NGC 3290	Galaxy	HYA	14	-	1'	SBbc/P				NGC 3414	Galaxy	LMI	11	13.3	3.6'	SBO			H II 362;P w NGC 3418 at 8.2';UGC 5959
NGC 3293	Opn CL	CAR	4.7	-	40'	I 3 r n	6.5		In Car OB1	NGC 3415	Galaxy	UMA	12.6	13.6	2.1'	Sa			H II 718
NGC 3294	Galaxy	LMI	11.8	13.7	3.4'	Sc			H I 164	NGC 3418	Galaxy	LMI	13.2	13.5	1.1'	SBO-a			H II 363
NGC 3299	Galaxy	LEO	12.8	14.1	1.9'	SBd			H III 54;NGC 3306 group;UGC 5761	NGC 3419	Galaxy	LEO	12.5	12.6	0.8'	SBO-a			NGC 3419A at 4.7';PA6
NGC 3300	Galaxy	LEO	12.1	12.7	1.7'	SBO			H III 55	NGC 3420	Galaxy	HYA	14	-	1.3'	SBa			
NGC 3301	Galaxy	LEO	11.4	12.7	3.3'	SBO-a			H II 46;P w NGC 3287 at 33' PA245;Nearly edge-on	NGC 3421	Galaxy	HYA	14	-	1.8'	Sa Ring			
NGC 3302	Galaxy	ANT	12.5	13.1	1.6'	SO				NGC 3423	Galaxy	SEX	11.1	13.7	3.9'	Sc			H IV 6= II 131;fine face on spiral
NGC 3304	Galaxy	LMI	13.4	13.2	1.4'	SBa			H III 615	NGC 3424	Galaxy	LMI	12.4	13.1	2.7'	SBb			H II 494;NGC 3395 group
NGC 3305	Galaxy	HYA	12.8	13	1.1'	Elliptical				NGC 3425	Galaxy	LEO	13.1	13	1'	SO			H III 108;nnf of 2
NGC 3306	Galaxy	LEO	13.5	12.9	1.4'	SB			brightest in group	NGC 3426	Galaxy	LEO	13.1	12.8	1.1'	S			
NGC 3308	Galaxy	HYA	11.9	12.6	1.7'	E-SO Ba				NGC 3427	Galaxy	LEO	13.2	12.5	1.1'	Sa			
NGC 3309	Galaxy	HYA	11.6	12.8	2.4'	Elliptical				NGC 3428	Galaxy	LEO	13.1	13.1	1.5'	SBb			
NGC 3310	Galaxy	UMA	10.8	12.8	2.8'	SBbc/P			H IV 60;UGC 5786	NGC 3429	Galaxy	LEO	13.2	-	1.5'	SBb			
NGC 3311	Galaxy	HYA	11.6	14.1	3.7'	E2				NGC 3430	Galaxy	LMI	11.6	13.8	4.1'	SBc			NGC 3395 group;H I 118
NGC 3312	Galaxy	HYA	11.9	13.3	3.3'	Sb Ring				NGC 3431	Galaxy	CRT	14	-	1.3'	Sb			
NGC 3313	Galaxy	HYA	11.4	14	3.9'	SBab Ri				NGC 3432	Galaxy	LMI	11.3	13.6	6.6'	SB			H I 172;P w UGC 5983;mag 17;1.2'X1'
NGC 3314	Galaxy	HYA	14	-	1.5'	SBap				NGC 3433	Galaxy	LEO	11.6	14.1	3.7'	Sc			H III 20;UGC 5981
NGC 3315	Galaxy	HYA	13.4	13.3	1.1'	E-SO				NGC 3434	Galaxy	LEO	12.1	13.4	2.1'	Sb			H III 497
NGC 3316	Galaxy	HYA	12.6	12.8	1.4'	SBO				NGC 3435	Galaxy	UMA	13.2	13.9	1.8'	Sb			H II 887;B main body;F disc;alm dissolved arms
NGC 3318	Galaxy	VEL	11.6	12.6	2.3'	SBbc				NGC 3437	Galaxy	LEO	12.1	12.7	2.6'	SBc			H II 47
NGC 3318B	Galaxy	VEL	13.2	13.6	1.5'	SBc				NGC 3438	Galaxy	LEO	13.3	12.7	0.8'	S pec			n of 2
NGC 3319	Galaxy	UMA	11.1	14.2	6.1'	SBc			flattened central region elong NE-SW coarse spiral	NGC 3440	Galaxy	UMA	13.2	13.1	2.1'	SBb			H III 914;NGC 3445 group
NGC 3320	Galaxy	UMA	12.3	13	2.2'	SBc			H II 745;UGC 5794	NGC 3441	Galaxy	LEO	13.5	12	0.7'	Sc			
NGC 3321	Galaxy	HYA	14	-	2.5'	Sc				NGC 3442	Galaxy	LMI	13.4	11.9	0.6'	Sa			peculiar
NGC 3323	Galaxy	LMI	13.3	12.9	1.3'	SB/P			peculiar	NGC 3443	Galaxy	LEO	13.1	14.4	2.8'	Scd			
NGC 3324	CL+Neb	CAR	6.7	-	16'	I 3 r n	8.2			NGC 3445	Galaxy	UMA	12.6	13.4	1.6'	Sc			H I 267;Brightest in group;NGC 3458 14' NE
NGC 3325	Galaxy	SEX	12.7	13	1.2'	Elliptical			brightest of 3	NGC 3446	Opn CL	VEL	-	-	7'				small cluster of 10 to 15 stars
NGC 3326	Galaxy	SEX	13.7	12.4	0.6'	Sa				NGC 3447	Galaxy	LEO	12.6	14.7	3.8'	SBdp			P w UGC 6007 at 1.7';PA65;comp 1.7';PA150;0.3'X
NGC 3327	Galaxy	LMI	13.4	13.1	1.1'	Sb Ring			H II 348	NGC 3448	Galaxy	UMA	12.1	14.4	5.6'	Sa			P w UGC 6016;bridge;UGC 6024;Arp 205; near 44
NGC 3329	Galaxy	DRA	12.2	12.6	1.9'	Sb			brightest in a subgroup of 12 or more galaxies	NGC 3449	Galaxy	ANT	12.2	13.3	3.3'	SBab			
NGC 3330	Opn CL	VEL	7.4	-	7'	II 2 p	30	8.8		NGC 3450	Galaxy	HYA	11.9	13.6	2.6'	SBb			
NGC 3331	Galaxy	HYA	13.2	13.2	1.2'	SBc				NGC 3451	Galaxy	LMI	13	13.2	1.7'	SBcd			H II 364
NGC 3332	Galaxy	LEO	12.3	13	1.4'	E-SO			H I 272?	NGC 3453	Galaxy	HYA	13	12.4	1.1'	SBb			
NGC 3333	Galaxy	ANT	13.2	12.7	2.1'	SBbc				NGC 3454	Galaxy	LEO	13.5	13.2	1.8'	SBc			P w NGC 3455 at

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 3482	Galaxy	VEL	13.5	-	1.9'	SBa				NGC 3624	Galaxy	LEO	13.9	12.9	0.9'	SBb			
NGC 3483	Galaxy	HYA	12.1	12.8	1.8'	Sa				NGC 3625	Galaxy	UMA	13.1	13.2	2'	SBb			H II 885;UGC 6348
NGC 3485	Galaxy	LEO	11.8	13.3	2.4'	SBbc			H II 100;UGC 6077	NGC 3626	Galaxy	LEO	11	12.6	3.2'	Sa			Indense part of clust;nearest comp 2' PA73 .5'X0.4'
NGC 3486	Galaxy	LMI	10.5	14.3	6.8'	SBc			H I 87	NGC 3628	Galaxy	LEO	9.5	13.4	13.1'	Sb			H V 8;Leo group;disturbed
NGC 3488	Galaxy	UMA	12.9	13.6	1.8'	SBc			H I 269;Lord Rosse says cB in 72 inch	NGC 3629	Galaxy	LEO	12.1	13.4	2'	SBc			H II 338
NGC 3489	Galaxy	LEO	10.3	12.3	3.6'	SBO-a			H II 101;Leo group	NGC 3630	Galaxy	LEO	11.9	14.6	2'	Sa			NGC 3640 group;comp 2.6';PA135;0.3'X0.15'
NGC 3490	Galaxy	LEO	13.8	-	0.5'	Elliptical				NGC 3631	Galaxy	UMA	10.4	13.7	5'	Sc			H I 226;SN 1964a;UGC 6360;Arp 27
NGC 3491	Galaxy	LEO	13.2	13	0.9'	E-SO			H III 21	NGC 3632	Galaxy	LEO	11.8	-	3.2'	Sa			see 3626
NGC 3492	Galaxy	LEO	13.1	12.8	1.1'	Elliptical			double system;brightest in group	NGC 3633	Galaxy	LEO	13.6	12.6	1.1'	Sab			NGC 3640 group
NGC 3495	Galaxy	LEO	11.8	13.6	4.9'	Scd			H III 498;Nearly edge-on	NGC 3636	Galaxy	CRT	12.4	13	1.7'	Elliptical			H II 550
NGC 3497	Galaxy	CRT	12.6	-	2.6'	SO			H III 824	NGC 3637	Galaxy	CRT	12.7	13.6	1.8'	SBO Ring			H II 551
NGC 3499	Galaxy	UMA	13.6	12.9	0.7'	Sa			H III 793	NGC 3639	Galaxy	LEO	13.6	12.3	0.6'	S pec			
NGC 3501	Galaxy	LEO	12.9	13.5	3.9'	Sc			P w NGC 3507 at 12.7';PA45	NGC 3640	Galaxy	LEO	10.4	13.2	4.5'	Elliptical			H II 33;P w NGC 3641 at 2.5';PA170
NGC 3502	Galaxy	CRT	14	-	1.8'	SBbc				NGC 3641	Galaxy	LEO	13.2	13.3	0.8'	Elliptical			
NGC 3503	Brn Neb	CAR	-	-	3'	E+				NGC 3642	Galaxy	UMA	11.2	14.5	5.5'	Sbc			H I 245
NGC 3504	Galaxy	LMI	11	12.8	2.7'	SBab Ring			P w NGC 3512 at 12' ;PA72;comp 4' ;PA55;0.4'X0.1'	NGC 3644	Galaxy	LEO	13.7	13.6	1.5'	Sa			
NGC 3505	Galaxy	CRT	14	-	1.1'	Sb				NGC 3646	Galaxy	LEO	11.1	13.3	3.9'	Sc			H III 15;P w NGC 3649
NGC 3506	Galaxy	LEO	12.5	12.6	1.1'	Sc			H III 22;P w UGC 6122 at 5.3';PA 62	NGC 3648	Galaxy	UMA	12.6	12.5	1.3'	SO			
NGC 3507	Galaxy	LEO	10.9	13.3	3.4'	SBb			H IV 7;P w NGC 3501	NGC 3649	Galaxy	LEO	13.7	13.1	1.4'	SBa			H III 16;P w NGC 3646
NGC 3508	Galaxy	CRT	14	-	1.1'	Sb			H II 507	NGC 3650	Galaxy	LEO	13.9	13	1.6'	Sb			comps 1.9';PA137;0.4'X0.2';3.8';PA52;0.9'X0.1'
NGC 3509	Galaxy	LEO	12.7	13.4	1.4'	SBbc			H II 598;large luminous system;strongly peculiar	NGC 3651	Galaxy	LEO	13.2	13.4	1.1'	Elliptical			brightest in group;comp 0.4'X0.2' superimp s center
NGC 3510	Galaxy	LMI	12.2	13.3	4.1'	SB			H II 365	NGC 3652	Galaxy	UMA	12.2	12.4	2'	SBc/P			H II 775
NGC 3511	Galaxy	CRT	11	13.5	6'	SBc			H V 39	NGC 3653	Galaxy	LEO	13.6	12.8	0.9'	E-SO			H III 336
NGC 3512	Galaxy	LMI	12.3	13.1	1.5'	SBc			H II 366;P w NGC 3504	NGC 3654	Galaxy	UMA	12.7	12.3	1.2'	S pec			H II 880
NGC 3513	Galaxy	CRT	11.5	13.4	2.9'	SBb			H V 40;S shaped spiral	NGC 3655	Galaxy	LEO	11.6	12	1.5'	Sc			H I 5
NGC 3514	Galaxy	CRT	13	-	1.1'	SBc				NGC 3656	Galaxy	UMA	12.5	13.4	1.5'	Elliptical			H II 782;B main body 0.6'X0.5'
NGC 3515	Galaxy	LMI	13.9	13.4	0.9'	Sbc				NGC 3657	Galaxy	UMA	12.4	13.1	1.7'	SBc/P			H III 768
NGC 3516	Galaxy	UMA	11.7	12.5	1.9'	SBO Ring			H II 336;Seyfert	NGC 3658	Galaxy	UMA	12.2	13	1.8'	SO			H IV 59;P w NGC 3665
NGC 3517	Galaxy	UMA	13.8	-	0.7'	Sab			H II 884;s of 2;contact	NGC 3659	Galaxy	LEO	12.3	13	2.3'	SB			H II 53
NGC 3518	Galaxy	LEO	13.5	-	1.6'	Sb				NGC 3660	Galaxy	CRT	12.5	-	2.8'	SBbc			H II 635
NGC 3521	Galaxy	LEO	9	13.2	11.2'	SBbc			H I 13	NGC 3661	Galaxy	CRT	14	-	1.6'	Sa			H III 530
NGC 3522	Galaxy	LEO	13.1	13	1.2'	Elliptical			comp 2.1';PA255;0.4'X0.1'	NGC 3662	Galaxy	LEO	12.9	13	1.3'	SBb/P			H IV 4;triple system
NGC 3523	Galaxy	DRA	12.9	13.6	1.5'	Sbc			H II 904;brightest of 3	NGC 3663	Galaxy	CRT	13	-	2'	Sbc			
NGC 3524	Galaxy	LEO	12.8	12.4	1.6'	Sa			H III 23;sf of 2	NGC 3664	Galaxy	LEO	12.8	14.1	2'	SB/P			strongly asym
NGC 3525	Galaxy	CRT	12.6	-	2.6'	SO				NGC 3665	Galaxy	UMA	10.8	12.4	3.5'	SO			H I 219;P w NGC 3658
NGC 3526	Galaxy	LEO	13.2	12.8	1.9'	Sc				NGC 3666	Galaxy	LEO	12	13.6	4.6'	SBc			H I 20;UGC 6420;Nearly edge-on
NGC 3527	Galaxy	UMA	13.7	13.5	1'	SBa			H III 350;P w UGC 6166	NGC 3667A	Galaxy	CRT	13	-	1.5'	Sab Ring			H III 531
NGC 3528	Galaxy	CRT	13	-	2.6'	SO			NGC 3528 = NGC 3525 = NGC 3497 = IC 2624	NGC 3668	Galaxy	UMA	12.3	13.1	1.7'	Sbc			H II 845
NGC 3529	Galaxy	CRT	14	-	1'	SBb				NGC 3669	Galaxy	UMA	12.4	12.5	2'	SBcd			H II 829
NGC 3530	Galaxy	UMA	13.8	11.7	0.7'	S			H III 915	NGC 3670	Galaxy	LEO	13.5	13	1.1'	SBO-a			H III 337
NGC 3531	Galaxy	LEO	13.8	-	1.9'	Sc				NGC 3672	Galaxy	CRT	11.4	13.5	4'	Sc			H I 131;Multi arm spiral
NGC 3532	Opn CL	CAR	3	-	50'	II 1 m	150	7.1	Fine object	NGC 3673	Galaxy	HYA	11.5	13.7	3.7'	SBb			
NGC 3533	Galaxy	CEN	12.9	13.4	2.8'	Sab				NGC 3674	Galaxy	UMA	12.2	12.4	1.7'	SO			H II 886
NGC 3535	Galaxy	LEO	13.5	12.6	1.1'	Sa			H III 111	NGC 3675	Galaxy	UMA	10.2	13.2	6.2'	Sb			H I 194;in field of 56 UMA
NGC 3536	Galaxy	UMA	13.7	13.5	1.1'	SBO-a Ring				NGC 3677	Galaxy	UMA	12.3	13.4	1.6'	Sa			sp of 2
NGC 3537	Galaxy	CRT	14	-	1.2'	Sab				NGC 3678	Galaxy	LEO	13.6	12.9	0.8'	Sbc			
NGC 3540	Galaxy	UMA	13.3	13.7	1.4'	SBO				NGC 3680	Opn CL	CEN	7.6	-	6'	I 2 p	30	10.1	
NGC 3544	Galaxy	CRT	13.1	-	3'	SBa				NGC 3681	Galaxy	LEO	11.2	12.8	3'	SBbc			H II 159;NGC 3684 at 14;44
NGC 3546	Galaxy	CRT	14	-	1.3'	E-SO				NGC 3682	Galaxy	DRA	12.5	13	1.7'	Sa			H I 262
NGC 3547	Galaxy	LEO	12.8	13.3	2'	Sb			H II 42	NGC 3683	Galaxy	UMA	12.4	12.6	1.8'	SBc			H I 246
NGC 3549	Galaxy	UMA	12.1	13.4	3.1'	Sc			H I 220;nearly edge on flattened oval	NGC 3683A	Galaxy	UMA	11.9	13.3	2.4'	SBc			P w NGC 3683 at 20'
NGC 3550	Galaxy	UMA	13.3	13.2	1'	E-SO			H III 351;peculiar;double nucleus	NGC 3684	Galaxy	LEO	11.4	13.3	3.4'	Sbc			NGC 3686 at 14';PA 33
NGC 3555	Galaxy	LEO	12.8	14	0.4'	SO				NGC 3686	Galaxy	LEO	11.3	13.4	3.1'	SBbc			H II 160=H III 28
NGC 3557	Galaxy	CEN	10.4	13.1	4'	Elliptical				NGC 3687	Galaxy	UMA	12	13.3	1.9'	SBbc Ring			comp superimp on the disc at 0.8';PA93;0.1'X0.1'
NGC 3557A	Galaxy	CEN	13.8	-	2.8'	Sab				NGC 3689	Galaxy	LEO	12.3	12.9	1.7'	SBc			H II 339;comp at 4.7';PA347;0.4'X0.1'
NGC 3557B	Galaxy	CEN	12.6	12.8	2'	Elliptical				NGC 3690	Galaxy	UMA	11.5	12.6	2'	Sp?			H I 247;double system;collision w IC 694
NGC 3558	Galaxy	UMA	13.6	13.1	0.9'	Elliptical			compact	NGC 3691	Galaxy	LEO	11.8	12	1.4'	SB/P			H II 54;NGC 3681 at 19.2';PA352
NGC 3559	Galaxy	LEO	12.7	12.7	1.3'	S pec			H III 79;spiral-type obj w complex str	NGC 3692	Galaxy	LEO	12.1	12.9	3.1'	Sb			H II 152
NGC 3560	Galaxy	LEO	13.7	-	1.3'	Spec				NGC 3693	Galaxy	CRT	13	-	3.4'	Sb			H III 532
NGC 3562	Galaxy	DRA	12.2	-	1.7'	Elliptical			H II 337;comp at 4.9';PA67;0.7'X0.15'	NGC 3694	Galaxy	UMA	12.9	11.8	0.7'	Elliptical			comp 4.8';PA56;0.3'X0.1'
NGC 3564	Galaxy	CEN	12.1	12.3	1.7'	SO				NGC 3699	Pln Neb	CEN	14	10.4	67''				S neby w few F*
NGC 3567	Galaxy	LEO	13.3	12.8	0.9'	SO			H III 89;np of 2;contact	NGC 3700	Galaxy	UMA	14	13.6	1'	SBab			comp 1.5';PA70;0.35'X0.12'
NGC 3568	Galaxy	CEN	12.3	12.9	2.5'	SBc				NGC 3701	Galaxy	LEO	12.9	13.4	1.9'	Sbc			H II 349
NGC 3569	Galaxy	UMA	13.3	13.3	1.1'	SO			comp 1.9';PA248;0.25'X0.15';B lens	NGC 3704	Galaxy	CRT	14	-	1.6'	Elliptical			
NGC 3570	Galaxy	LEO	13.5	13.4	1'	SO				NGC 3705	Galaxy	LEO	11.1	13.4	4.6'	SBab			H II 13
NGC 3571	Galaxy	CRT	12.1	13.2	3'	SBa			H II 819	NGC 3706	Galaxy	CEN	11.3	13.1	3.1'	E-SO			
NGC 3573	Galaxy	CEN	12.3	13.5	3.6'	Sa				NGC 3710	Galaxy	LEO	13.1	12.8	1'	Elliptical			H II 350
NGC 3575	Galaxy	LEO	12.2	-	3.1'	SBbc Ring				NGC 3712	Galaxy	UMA	13.9	13.8	1.7'	SB/P			
NGC 3577	Galaxy	UMA	13.4	14	1.4'	SBa			P w NGC 3583 at 5.1';PA57;comp 2.8';PA322;0.6'X0.3'	NGC 3713	Galaxy	LEO	13.2	13.1	1.2'	E-SO			H II 367
NGC 3580	Galaxy	LEO	14	12.4	0.9'	SO				NGC 3715	Galaxy	CRT	13	-	1.4'	Sbc			H II 562
NGC 3583	Galaxy	UMA	11.1	12.7	2.5'	SBb			H II 728;P w NGC 3577	NGC 3716	Galaxy	LEO	13.5	12.6	0.7'	SO			
NGC 3585	Galaxy	HYA	9.9	12.6	5.2'	Elliptical			H II 269	NGC 3717	Galaxy	HYA	11.2	13.1	6.2'	Sb			Nearly edge-on
NGC 3589	Galaxy	UMA	13.8	13.8	1.5'	SBcd Ring			H III 921	NGC 3718	Galaxy	UMA	10.8	14.4	8.2'	SBap			P w NGC 3729 at 11.5'ENE;cent dust lane sprl arms
NGC 3591	Galaxy	CRT	14	-	1.3'	Sa			H III 529	NGC 3719	Galaxy	LEO	13	13.8	1.7'	Sbc Ring			P w NGC 3720 at 2.2';PA115
NGC 3592	Galaxy	LEO	13.7	13.6	1.8'	Sc			P w NGC 3598 at 10.4';PA 90	NGC 3720	Galaxy	LEO	12.9	12.6	1'	Sa			P w NGC 3719
NGC 3593	Galaxy	LEO	10.9	13.3	4.9'	Sa			H I 29;in NGC 3607 group;BN w L bulge and dk lan	NGC 3723	Galaxy	CRT	14	-	1'	E-SO			
NGC 3594	Galaxy	UMA	13.7	14.1	1.3'	SBO													

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 3762	Galaxy	UMA	12.6	12.4	1.8'	Sa			H II 837	NGC 3895	Galaxy	UMA	13.1	13.2	1.1'	SBa			H II 832;P w NGC 3894 at 2'
NGC 3763	Galaxy	CRT	13	-	1.2'	SB Ring				NGC 3896	Galaxy	UMA	12.9	13.1	1.5'	SBO-a			H II 739
NGC 3765	Galaxy	LEO	14	13.1	0.8'	Sc				NGC 3897	Galaxy	UMA	12.9	14.2	1.9'	SBbc			H II 408;comp 1.8';PA34;0.2'X0.15';UGC 6784
NGC 3767	Galaxy	LEO	13.4	13.1	1'	SBO			comp 1.3';PA178;0.5'X0.1'	NGC 3898	Galaxy	UMA	10.7	13.2	3.8'	Sab			H I 228;comp 5';PA60;0.7'X0.12';NGC 3888 15' so
NGC 3768	Galaxy	LEO	12.4	13.1	1.8'	SO			H III 29	NGC 3899	Galaxy	LEO	13.4	-	1.5'	SBb			see 3912
NGC 3769	Galaxy	UMA	11.8	12.8	2.9'	SBb			H II 731;np of 2;P w NGC 3769A;nearly edge on	NGC 3900	Galaxy	LEO	11.4	13	3.5'	Sa Ring			H I 82
NGC 3770	Galaxy	UMA	12.9	12.4	1'	SBa			H II 838	NGC 3901	Galaxy	CAM	13.7	13.9	1.8'	Sc			H III 970
NGC 3771	Galaxy	CRT	12.6	13.2	1.4'	Elliptical				NGC 3902	Galaxy	LEO	12.8	13.5	1.6'	SBbc			H III 321
NGC 3772	Galaxy	LEO	13.5	13	1.1'	SBa			H II 352	NGC 3903	Galaxy	CEN	12.8	12.7	1.1'	Sbc			
NGC 3773	Galaxy	LEO	12	12.1	1.2'	SO			H III 81	NGC 3904	Galaxy	HYA	10.9	12.6	2.7'	Elliptical			H II 864
NGC 3777	Galaxy	CRT	14	-	1.1'	Sab				NGC 3905	Galaxy	CRT	12.8	13.7	1.9'	SBbc			
NGC 3779	Galaxy	CRT	14	-	1.9'	Scd				NGC 3906	Galaxy	UMA	12.9	14	1.8'	SBcd			H III 715
NGC 3780	Galaxy	UMA	11.5	13.5	3'	Sc			H I 227;P w NGC 3804 at 13.2';PA108	NGC 3909	Opn CL	CEN	-	-	20'				Coarse cluster of 10-14 *
NGC 3781	Galaxy	LEO	13.7	-	0.5'	SO				NGC 3910	Galaxy	LEO	12.8	13.4	1.6'	E-SO			comps 1.8';PA181;0.35'X0.2';5.1';PA96;0.5'X0.5'
NGC 3782	Galaxy	UMA	12.4	12.9	1.6'	SBcd			H II 732;asymmetric spiral	NGC 3911	Galaxy	LEO	13.8	13.6	1'	SBbc			H III 341;P w NGC 3920 at 9.9';PA97
NGC 3783	Galaxy	CEN	11.7	12.9	1.9'	SBa				NGC 3912	Galaxy	LEO	12.4	12.6	1.5'	Sb			H II 342
NGC 3786	Galaxy	UMA	12.3	13.3	2.1'	SBap			P w NGC 3788 at 1.5'	NGC 3913	Galaxy	UMA	12.6	14.5	2.5'	Scd Ring			H II 786
NGC 3788	Galaxy	UMA	12.6	12.8	1.8'	SBab/P			P w NGC 3786	NGC 3914	Galaxy	VIR	13.2	12.6	1.1'	Sb			H III 90
NGC 3790	Galaxy	LEO	13.9	12.6	1.1'	Sa			H III 109;NGC 3801 group	NGC 3916	Galaxy	UMA	13.9	13.3	1.5'	Sb			H II 787;P w NGC 3921 at 4.5';PA151
NGC 3795	Galaxy	UMA	13.1	13.1	2.1'	Sbc			H III 844	NGC 3917	Galaxy	UMA	11.8	13.7	5'	Sc			comp 4.9';PA204;0.3'X0.3';nearly edge on streak
NGC 3795B	Galaxy	UMA	14	-	1'	E-SO				NGC 3918	Pln Neb	CEN	8.4	5.7	12"	2b		15.5	Blue Planetary
NGC 3796	Galaxy	UMA	12.5	12.6	1.3'	S pec				NGC 3919	Galaxy	LEO	13.3	13.1	0.9'	Elliptical			
NGC 3798	Galaxy	LEO	12.1	13.6	2.5'	SBO			tri grp w NGC 3812 at 14.2';PA58;NGC 3815 at 20.3'	NGC 3920	Galaxy	LEO	13.1	12.9	1'	SBbc			P w NGC 3911
NGC 3799	Galaxy	LEO	13.9	12.8	0.7'	SBb/P			P w NGC 3800 at 1.4' nf	NGC 3921	Galaxy	UMA	12.4	13.4	2.1'	Sa			H II 788;vB core 0.45'X0.35';UGC 6823
NGC 3800	Galaxy	LEO	12.7	12.8	2'	SBb/P			H II 103;P w NGC 3799	NGC 3922	Galaxy	UMA	12.8	12.9	1.7'	Sa			H III 716;comp 4.7';PA60;0.4'X0.2'
NGC 3801	Galaxy	LEO	12	14.1	2.8'	SO			H II 161	NGC 3923	Galaxy	HYA	9.8	13.2	6.6'	Elliptical			H I 259
NGC 3802	Galaxy	LEO	13.3	11.9	1.1'	Sc			H III 30	NGC 3928	Galaxy	UMA	12.6	13.3	1.4'	Elliptical			H II 740;NGC 3932 sf 5'5 is a star
NGC 3804	Galaxy	UMA	12.9	14	2.2'	Sbc			P w NGC 3780 at 13.5';H II 830	NGC 3929	Galaxy	LEO	14	12.2	0.6'	Elliptical			
NGC 3805	Galaxy	LEO	12.6	13	1.4'	E-SO			H III 375	NGC 3930	Galaxy	UMA	12.4	14.4	3'	Sbc			H III 616;comp 3.3';PA75;0.6'X0.4'
NGC 3806	Galaxy	LEO	13.6	14.1	1.4'	SBb			NGC 3801 at 8.1';PA240	NGC 3931	Galaxy	UMA	13.4	13.3	1.1'	E-SO			H III 769;comp 3.8';PA140;0.45'X0.35'
NGC 3808	Galaxy	LEO	13.4	13.7	1.6'	SBc/P			H III 338;double system;distorted;twisted bridge	NGC 3933	Galaxy	LEO	13.6	13	1.1'	S pec			brightest in group
NGC 3809	Galaxy	UMA	12.7	12.4	1'	SO				NGC 3934	Galaxy	LEO	13.5	13.4	1.1'	Sb			NGC 3933 at 3.5';PA224;comp 1.7';PA356;0.4'X0.4'
NGC 3810	Galaxy	LEO	10.8	13.4	4.1'	Sc			H I 21	NGC 3935	Galaxy	UMA	13.2	12.4	1.1'	Sb			
NGC 3811	Galaxy	UMA	12.3	13.5	2.2'	SBc/P			H II 737;SN 1969c	NGC 3936	Galaxy	HYA	12	12.8	3.9'	SBbc			Nearly edge-on
NGC 3812	Galaxy	LEO	12.4	13.4	1.7'	Elliptical			H III 320;NGC 3815 at 6.7';PA100	NGC 3937	Galaxy	LEO	12.5	13.5	1.8'	E-SO			H III 389;IC 2958 at 2.8';PA262;0.9'X0.45'
NGC 3813	Galaxy	UMA	11.6	12.5	2'	Sb			H I 94	NGC 3938	Galaxy	UMA	10.4	13.8	5.1'	Sc			H I 203;Fine face on spiral
NGC 3815	Galaxy	LEO	13	13.3	1.7'	Sab			H III 339	NGC 3940	Galaxy	LEO	12.8	13.9	1.7'	Elliptical			H III 380
NGC 3816	Galaxy	LEO	12.5	13.2	1.9'	SO				NGC 3941	Galaxy	UMA	10.3	12.5	3.5'	SBO			H I 173
NGC 3817	Galaxy	LEO	13.3	13.1	1'	SBO-a			comp superimp at 0.35';PA252;0.1'X0.1'	NGC 3942	Galaxy	CRT	14	-	1.5'	Sc			
NGC 3818	Galaxy	VIR	11.7	12.7	2'	Elliptical			H III 284	NGC 3943	Galaxy	LEO	13.3	13.3	1.1'	S			
NGC 3819	Galaxy	LEO	13.8	13	0.8'	Elliptical				NGC 3944	Galaxy	LEO	12.9	13.3	1.4'	E-SO			H III 322
NGC 3821	Galaxy	LEO	12.9	13.4	1.4'	SBO-a F			H III 376;comp 3.1';PA275;0.8'X0.7'	NGC 3945	Galaxy	UMA	10.9	13.9	6.4'	SBO-a F			H I 251
NGC 3822	Galaxy	VIR	13.1	13.1	1.4'	SO			H II 153;NGC 3825 at 3.2;105	NGC 3947	Galaxy	LEO	13.1	13.6	1.4'	SBb			comp 1.6';PA232;0.35'X0.15';comp 3';PA250;0.7'X0.3'
NGC 3823	Galaxy	CRT	14	-	1.5'	Elliptical				NGC 3949	Galaxy	UMA	11.1	12.6	2.9'	Sbc			H I 202;comp 4.4';PA273;0.3'X0.1'
NGC 3824	Galaxy	UMA	13.6	13.3	1.3'	Sa			H III 774;P w NGC 3829	NGC 3951	Galaxy	LEO	13.6	12.9	1.1'	S pec			H III 342;brightest in group
NGC 3825	Galaxy	VIR	13	13.2	1.3'	SBa			H II 154	NGC 3952	Galaxy	VIR	13.1	13.1	1.6'	Sm			H III 612
NGC 3826	Galaxy	LEO	13.4	12.9	0.9'	Elliptical			H II 341	NGC 3953	Galaxy	UMA	10.1	13.4	6.9'	SBbc			H V 45;comps 3.9';PA190;0.3'X0.1';4.6';PA156;0.4'
NGC 3827	Galaxy	LEO	13.3	12.7	0.9'	Sm				NGC 3954	Galaxy	LEO	13.6	12.5	0.7'	Compact			H III 381;red;compact
NGC 3829	Galaxy	UMA	14	13.5	1'	SBb			H III 775;P w NGC 3824 at 7.6';PA304	NGC 3955	Galaxy	CRT	11.9	12.9	3.1'	Sa			H II 623
NGC 3831	Galaxy	CRT	14	-	2.7'	Sa Ring				NGC 3956	Galaxy	CRT	12.1	13.3	3.3'	SBc			H III 290;Nearly edge-on spiral
NGC 3832	Galaxy	LEO	13	14.1	1.9'	Sbc			H III 340;the ring is open on f side	NGC 3957	Galaxy	CRT	11.8	12.5	2.9'	Sa			H II 294;edge-on lenticular
NGC 3833	Galaxy	VIR	13.5	13.4	1.4'	Sc			H III 102	NGC 3958	Galaxy	UMA	13	12.8	1.3'	SBa			P w NGC 3963 @ 8.3';PA3;comp 0.4';PA95;0.1'X0.1'
NGC 3834	Galaxy	LEO	13.4	13.6	1.4'	S				NGC 3959	Galaxy	CRT	14	-	1.1'	SBa			
NGC 3835	Galaxy	UMA	12.4	12.7	1.8'	Sab				NGC 3960	Opn CL	CEN	8.3	-	7'	I 2 m		45	11.5
NGC 3835A	Galaxy	UMA	14	-	1'	Sb				NGC 3961	Galaxy	DRA	13.5	13.9	1.3'	SBa			H III 905
NGC 3836	Galaxy	CRT	13	-	1.4'	Sb				NGC 3962	Galaxy	CRT	10.7	12.6	3.4'	Elliptical			H I 67
NGC 3837	Galaxy	LEO	13.3	12.2	0.6'	Elliptical			NGC 3842 at 3.6;21	NGC 3963	Galaxy	UMA	11.9	13.9	2.7'	SBbc Ring			H IV 67;beautiful obj w 2 sym arms;in field w Z UMa
NGC 3838	Galaxy	UMA	12.3	12.2	1.4'	Sa			H II 831	NGC 3964	Galaxy	LEO	13.9	13.2	0.9'	SO			
NGC 3839	Galaxy	LEO	13.6	12.7	1'	Sd				NGC 3968	Galaxy	LEO	11.8	13.4	2.7'	SBbc			H II 162;NGC 3973 at 2.6';PA48;0.4'X0.2'
NGC 3840	Galaxy	LEO	13.8	13.5	1.1'	Sa				NGC 3969	Galaxy	CRT	13	13	1.4'	SBO-a F			
NGC 3841	Galaxy	LEO	13.6	12.6	0.7'	S				NGC 3970	Galaxy	CRT	14	-	1.2'	SO			
NGC 3842	Galaxy	LEO	11.8	12.2	1.4'	Elliptical			H III 377;brightest in cluster Abell 1367	NGC 3971	Galaxy	UMA	12.7	13.1	1.4'	SO			H II 724;P w UGC 6905
NGC 3843	Galaxy	VIR	13.5	12.2	0.9'	Sa				NGC 3972	Galaxy	UMA	12.3	13.7	3.7'	SBbc			H II 789;NGC 3977 at 5.3';PA37
NGC 3844	Galaxy	LEO	13.9	12.4	1.2'	Sa				NGC 3974	Galaxy	CRT	14	-	1.2'	SBO-a F			
NGC 3845	Galaxy	LEO	14	12.5	0.8'	Sb				NGC 3976	Galaxy	VIR	11.5	13	3.4'	SBb			H II 132;P w F anon at 4.8';nearly edge on spiral
NGC 3846	Galaxy	UMA	13.9	13.5	1'	Sbc				NGC 3977	Galaxy	UMA	13.4	14.3	1.5'	Sab			H II 790
NGC 3846A	Galaxy	UMA	13.3	14.3	1.9'	Ir Bar				NGC 3978	Galaxy	UMA	12.7	13.5	1.7'	SBbc			comp 2';PA292;0.6'x0.25';comp 3.8';PA22;0.5'X0.1'
NGC 3847	Galaxy	UMA	13.3	13.5	1.1'	Elliptical				NGC 3981	Galaxy	CRT	11.3	13.9	5.3'	SBbc			H III 274;Nearly edge-on spiral
NGC 3850	Galaxy	UMA	13.3	14.1	2.1'	Sbc			H III 776	NGC 3982	Galaxy	UMA	11	12.5	2.3'	SBb			H IV 62
NGC 3852	Galaxy	VIR	13.7	-	1.3'	SBa			H III 36	NGC 3983	Galaxy	LEO	14	12.8	1.1'	Sa			H III 343;comp 4.7';PA122;0.8'X0.15'
NGC 3853	Galaxy	LEO	12.4	13	1.6'	Elliptical			nff of 2;comp 1.3';PA252;0.4'X0.3'	NGC 3984	Galaxy	UMA	13.5	13.7	1.4'	SO			
NGC 3854	Galaxy	CRT	13	-	2.1'	SBb				NGC 3985	Galaxy	UMA	12.6	12.6	1'	SB			H III 707
NGC 3858	Galaxy	CRT	14	-	1.4'	Sa				NGC 3986	Galaxy	UMA	12.6	13.3	2.8'	Sa			P w IC 2978 at 4.8';NGC 3995 group
NGC 3861A	Galaxy	LEO	14	-	2.3'	Sb Ring			npp of 2;contact	NGC 3987	Galaxy	LEO	12.9	12.7	2.2'	Sb			NGC 3993 at 4.6';PA55;NGC 3989 at 2.6';PA30
NGC 3862</																			

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 4023	Galaxy	COM	13.6	12.9	0.9'	S pec			NGC 4005 group	NGC 4150	Galaxy	COM	11.6	13	2.3'	SO			H I 73
NGC 4024	Galaxy	CRV	11.7	12.7	1.9'	E-SO Ba			H II 295	NGC 4151	Galaxy	CVN	10.8	14.2	6.8'	SBab Rir			P w NGC 4145;NGC 4156 @ 5.2';Ho 345c @ 8.8'
NGC 4025	Galaxy	UMA	13.6	15	2.8'	SBc			H III 617	NGC 4152	Galaxy	COM	12.2	13.5	2.3'	SBc			H II 83
NGC 4026	Galaxy	UMA	10.8	12.7	4.7'	SO			H I 223;edge on lens shape	NGC 4153	Glob CL	COM	10.3	-	4.1'	VI			H I 11;equals NGC 4147; best possible ID
NGC 4027	Galaxy	CRV	11.1	13.2	3.3'	SBd			H II 296	NGC 4155	Galaxy	COM	13.3	13.4	1.1'	Elliptical			Brightest in group
NGC 4028	Galaxy	COM	13.3	-	2.2'	Sa			H III 3	NGC 4156	Galaxy	CVN	13.2	13.5	1.3'	SBb			H II 642;P w NGC 4151 @ 5.2';Ho 345c @ 7'
NGC 4029	Galaxy	VIR	13.5	13.2	1.2'	SBb			comp @ 0.9'	NGC 4157	Galaxy	UMA	11.4	13.6	6.7'	SBb			H I 208;SN 1937a;1955a;edge on narrow streak
NGC 4030	Galaxy	VIR	10.6	13.2	4.2'	Sbc			H I 121;fine nearly face on spiral	NGC 4158	Galaxy	COM	12.1	13.2	2'	Sb			H II 405
NGC 4032	Galaxy	COM	12.3	13.4	1.9'	Ir			H II 404	NGC 4159	Galaxy	DRA	13.4	12.8	1.3'	Sbc			H III 941
NGC 4033	Galaxy	CRV	11.7	12.8	2.4'	Elliptical			H II 508	NGC 4161	Galaxy	UMA	12.9	12.5	1.1'	Sc			H II 803
NGC 4034	Galaxy	DRA	13.5	14.1	1.7'	Sc			H III 903	NGC 4162	Galaxy	COM	12.2	13.4	2.3'	Sbc			H II 353
NGC 4035	Galaxy	CRV	14	-	1.1'	SBbc			H III 279	NGC 4163	Galaxy	CVN	14	15.1	1.9'	Ir			H III 399
NGC 4036	Galaxy	UMA	10.7	12.7	4'	E6			H I 253;NGC 4041 @ 15';spindle shape	NGC 4165	Galaxy	VIR	13.5	13.5	1.2'	SBab Rir			
NGC 4037	Galaxy	COM	11.9	13.5	2.4'	SBb			H III 77	NGC 4166	Galaxy	COM	13.1	13.2	1.2'	SBO			
NGC 4038	Galaxy	CRV	10.3	13.1	3.4'	Sp			Antennae H IV 28;Ringtail Galaxy;two filaments	NGC 4167	Galaxy	CVN	14	-	1.9'	Ir			
NGC 4039	Galaxy	CRV	10.6	12.1	3.3'	SB			Antennae H II 282	NGC 4168	Galaxy	VIR	11.2	13.2	2.8'	Elliptical			H II 105
NGC 4040	Galaxy	COM	13.3	14.3	1.9'	Elliptical				NGC 4169	Galaxy	COM	12.2	12.6	1.8'	SO			H III 358;Brightest in group
NGC 4041	Galaxy	UMA	11.3	13.2	2.7'	Sbc			H I 252	NGC 4170	Star	COM	13.7	-					NGC 4169 group
NGC 4043	Galaxy	VIR	13.6	12.2	0.6'	SO				NGC 4172	Galaxy	UMA	13.2	13.5	1.3'	S pec			H II 792
NGC 4044	Galaxy	VIR	13	13.2	1.2'	Elliptical			H III 491	NGC 4173	Galaxy	COM	13	14.2	5'	Scd			H II 372; UGC 7204
NGC 4045	Galaxy	VIR	12	13.6	3.1'	Sba Rir			H II 276;Ho 320b @ 1.6';UGC 7021;faint outer arms	NGC 4174	Galaxy	COM	13.3	11.7	0.8'	Sa			H III 359;NGC 4169 group
NGC 4046	Galaxy	VIR	12.8	-	3.1'	Sba Rir				NGC 4175	Galaxy	COM	13.2	12.6	1.8'	Sbc			H III 360;NGC 4169 group
NGC 4047	Galaxy	UMA	12.2	12.8	1.2'	Sbc			H II 741	NGC 4177	Galaxy	CRV	13	-	1.7'	Sc			H III 534
NGC 4048	Galaxy	COM	13.6	12.1	0.6'	S pec			Brightest in quadruple system	NGC 4178	Galaxy	VIR	11.4	13.7	5'	SBcd			SN 1963i;nearly edge on
NGC 4049	Galaxy	COM	13.3	12.5	0.9'	Sd			H III 390	NGC 4179	Galaxy	VIR	11	12.5	4.2'	SO			H I 9;edge on spindle shape
NGC 4050	Galaxy	CRV	12.2	14.1	3'	SBab			H II 509	NGC 4180	Galaxy	VIR	12.6	12.4	1.5'	Sab			H II 133
NGC 4051	Galaxy	UMA	10.2	13.3	5.3'	SBbc			H IV 56;thick spiral arms	NGC 4182	Galaxy	VIR	13.5	-	1.5'	Sab			
NGC 4057	Galaxy	COM	13.7	-	1.1'	Elliptical				NGC 4183	Galaxy	CVN	12.3	13.7	5.3'	Sc			H III 697;SN 1968u
NGC 4058	Galaxy	VIR	13.1	12.6	1.2'	Sa				NGC 4185	Galaxy	COM	12.1	13.7	2.6'	SBbc Rir			H II 373
NGC 4061	Galaxy	COM	13.1	13.2	1.2'	Elliptical			H III 394;Compact;p w NGC 4065 @ 1'	NGC 4186	Galaxy	COM	13.8	13.5	1'	Sab			
NGC 4062	Galaxy	UMA	11.1	13.1	4'	Sbc			H I 174	NGC 4187B	Galaxy	CVN	13.5	-	0.3'	Compact			
NGC 4064	Galaxy	COM	11.4	13.5	4.6'	Sba				NGC 4188	Galaxy	CRV	14	-	0.7'	Sb			
NGC 4065	Galaxy	COM	12.6	12.7	1.1'	Elliptical			H III 395;Brightest in cluster;Very compact	NGC 4189	Galaxy	COM	11.7	13.1	2.5'	SBc			H II 106
NGC 4066	Galaxy	COM	12.9	13.3	1.2'	Elliptical			NGC 4060 @ 2';NGC 4065 @ 6.9';NGC 4070 @ 3'	NGC 4190	Galaxy	CVN	13.3	14.2	1.7'	Ir			H II 409
NGC 4067	Galaxy	VIR	12.5	12.8	1.3'	Sb			H III 37	NGC 4191	Galaxy	VIR	12.8	12.6	1.2'	SO			
NGC 4068	Galaxy	UMA	12.5	14.3	3.2'	Ir			H II 781	NGC 4193	Galaxy	VIR	12.3	13	2.2'	SBbc			H II 163
NGC 4070	Galaxy	COM	13.1	13.1	1'	Elliptical			H III 391	NGC 4194	Galaxy	UMA	12.5	13.1	1.8'	Ir Bar			H II 867
NGC 4073	Galaxy	VIR	11.4	13.4	3.2'	E1			comp superimposed;field of 6 small galaxys 5' south	NGC 4196	Galaxy	COM	12.8	12.8	1.2'	SO			H II 374
NGC 4075	Galaxy	VIR	13.5	12.9	1.2'	Sa				NGC 4197	Galaxy	VIR	12.8	13.4	3.4'	Sc			H II 134
NGC 4076	Galaxy	COM	13.4	12.9	0.9'	Sab			H III 396;NGC 4065 @ 6.5'	NGC 4198	Galaxy	UMA	13.6	12.9	1'	Sa			H II 793
NGC 4077	Galaxy	VIR	13.1	13.1	1.2'	SO			H III 258	NGC 4200	Galaxy	VIR	13	13.2	1.5'	SO			H II 164
NGC 4078	Galaxy	VIR	13.2	12.4	1.3'	SO			NGC 4082 @ 6.6';NGC 4082 @ 7.4';IC 2991 @ 6.7'	NGC 4201	Galaxy	VIR	14	-	0.9'	SO			
NGC 4079	Galaxy	VIR	12.4	13.6	2.3'	Sbc				NGC 4202	Galaxy	VIR	13.6	13.2	1.2'	Sbc			
NGC 4080	Galaxy	COM	13.8	13.1	1.2'	Ir			H III 355	NGC 4203	Galaxy	COM	10.9	13.3	3.5'	E-SO Ba			H I 175
NGC 4081	Galaxy	UMA	12.9	12.6	1.5'	Sa				NGC 4204	Galaxy	COM	12.4	14.8	3.6'	SBd			H III 397
NGC 4085	Galaxy	UMA	12.4	13.1	2.5'	Sbc			H I 224;P w NGC 4088;UGC 7075;Ho 326b	NGC 4205	Galaxy	DRA	12.9	12.7	1.7'	S pec			
NGC 4086	Galaxy	COM	13.6	13.4	1'	SO			NGC 4090 @ 3.8'	NGC 4206	Galaxy	VIR	12.1	14.1	6.4'	Sbc			H II 165;Member Virgo Group
NGC 4087	Galaxy	HYA	12.1	13.4	2.1'	E-SO			H III 754	NGC 4207	Galaxy	VIR	12.5	12.6	1.6'	Scd			
NGC 4088	Galaxy	UMA	10.6	13.2	5.6'	SBbc			P w 4085 11' to south;distorted spirl arms;UGC 708	NGC 4208	Galaxy	COM	11.8	-	3.2'	Sc			H II 107
NGC 4089	Galaxy	COM	13.6	13	0.5'	Elliptical				NGC 4210	Galaxy	DRA	12.5	13.6	2'	SBb			H III 850;NGC 4221 @ 15.6'
NGC 4090	Galaxy	COM	13.9	13.2	1.2'	Sab				NGC 4212	Galaxy	COM	11.2	13	3.2'	Sc			H II 108
NGC 4092	Galaxy	COM	13.2	13.1	1'	Sab			NGC 4093 @ 2.6'	NGC 4213	Galaxy	COM	12.5	13.7	1.7'	Elliptical			H II 354;Brightest in cluster
NGC 4094	Galaxy	CRV	11.8	13.7	4.1'	Sbc				NGC 4214	Galaxy	CVN	9.8	14	8.4'	Ir			H I 95
NGC 4095	Galaxy	COM	13.5	-	0.5'	Elliptical			H III 382	NGC 4215	Galaxy	VIR	12.1	12.2	1.8'	Sa			H II 135;edge on lens shape
NGC 4096	Galaxy	UMA	10.9	13.4	6.5'	Sbc			H I 207;nearly edge on	NGC 4216	Galaxy	VIR	10	12.8	7.8'	SBb			H I 35;UGC 7284;edge on streak;two other in field
NGC 4097	Galaxy	UMA	13.4	13.1	1.2'	SO			H III 400	NGC 4217	Galaxy	CVN	11.2	13.3	4.8'	Sb			H II 748
NGC 4100	Galaxy	UMA	11.2	13.5	5.4'	Sbc			H III 717;nearly edge on spiral	NGC 4218	Galaxy	CVN	12.5	12.1	0.9'	Sa			H III 718
NGC 4101	Galaxy	COM	13.5	13.1	1'	Sa			H III 326	NGC 4219	Galaxy	CEN	11.9	13.5	4.2'	Sbc			
NGC 4102	Galaxy	UMA	11.2	12.8	3.1'	SBb Rir			H I 225	NGC 4219A	Galaxy	CEN	13.7	13.2	1.3'	SBc			
NGC 4104	Galaxy	COM	12.1	13.4	2.6'	SBO			H II 370	NGC 4220	Galaxy	CVN	11.4	13.1	3.9'	Sa			H I 209;p w NGC 4218 @ 15'
NGC 4105	Galaxy	HYA	10.6	12.5	2.8'	Elliptical			H II 865;Interacting P w NGC 4106	NGC 4221	Galaxy	DRA	12.3	13.7	2'	SBO-a			
NGC 4106	Galaxy	HYA	11.4	12.1	2.3'	SBO-a			H II 866	NGC 4222	Galaxy	COM	13.3	13.6	3.1'	Scd			H II 109
NGC 4108	Galaxy	DRA	12.3	13.1	1.7'	Sc			w NGC 4108A;B	NGC 4223	Galaxy	VIR	13	-	2.5'	Sa			H II 137
NGC 4108A	Galaxy	DRA	13.8	13.4	1.4'	SBbc			w NGC 4108;4108B	NGC 4224	Galaxy	VIR	11.8	12.7	2.5'	Sa			edge on w equitorial dust lane; 4233 & 4235 nearby
NGC 4108B	Galaxy	DRA	13.7	14	1.3'	SBd pec			w NGC 4108;4108A	NGC 4225	Galaxy	CRV	14	-	0.7'	Sa			
NGC 4109	Galaxy	CVN	13.9	13.7	0.7'	Sa			near 4111	NGC 4226	Galaxy	CVN	13.5	13	1'	Sap			Disturbed?;NGC 4226 @ 7.3'
NGC 4110	Galaxy	COM	13.7	13.5	1.3'	SBb				NGC 4227	Galaxy	CVN	12.7	12.9	1.5'	SBO-a			H II 518;P w NGC 4229
NGC 4111	Galaxy	CVN	10.7	12.2	4.6'	Sa			H I 195;NGC 4109 @ 4.8';UGC 7103;Ho 333a	NGC 4228	Galaxy	CVN	10.2	-	8.4'	Ir			
NGC 4112	Galaxy	CEN	12	12.3	1.6'	SBb				NGC 4229	Galaxy	CVN	13.2	13	1.1'	Sa			H II 519;P w NGC 4227
NGC 4114	Galaxy	CRV	13	-	1.8'	Sba			H III 533	NGC 4230	Opn CL	CEN	9.4	-	6'	IV 2 p 15			
NGC 4116	Galaxy	VIR	12	14.1	3.8'	Sbc			NGC 4123 @ 14';flattened bar shape	NGC 4231	Galaxy	CVN	13.3	13.4	1.2'	Sa			H III 719;P w NGC 4232
NGC 4117	Galaxy	CVN	13	13.4	2.5'	SO			H III 708	NGC 4232	Galaxy	CVN	13.6	13.5	1.3'	SBbc/P			H III 720;P w NGC 4231 @ 1.1';disturbed
NGC 4119	Galaxy	VIR	12.2	-	3.9'	Sa			H II 14	NGC 4233	Galaxy	VIR	11.9	12.8	2.4'	SBO			H II 496;faint extensions N-S
NGC 4120	Galaxy	DRA	13.5	13.1	1.7'	Scp			H III 904	NGC 4234	Galaxy	VIR	12.7	13.1	1.2'	Ir			Ho 358b @ 1.9' is a *
NGC 4121	Galaxy	DRA	13.5	13.3	0.4'	Elliptical				NGC 4235	Galaxy	VIR	11.6	13	3.9'	Sa			H II 17;nearly edge on
NGC 4123	Galaxy	VIR	11.4	14.1	4.3'	SBb			H V 4;NGC 4116 @ 14'	NGC 4236	Galaxy	DRA	9.6	15	22.6'	SBd			H V 51;

NAME	TYPE	CON	MAG	S.B.	SIZE	Class ns bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class ns bs	SAC NOTES
NGC 4264	Galaxy	VIR	12.8	12.4	0.9'	SBO-a	H II 140;NGC 4261 @ 3.4'	NGC 4387	Galaxy	VIR	12.1	12.8	1.7'	Elliptical	H II 167;NGC 4374 @ 10.5'
NGC 4265	Galaxy	CRV	12.6	-	1.2'	Sb		NGC 4388	Galaxy	VIR	11	13	5.6'	Sb	H II 168;edge on lens shape;16' SE from M 84
NGC 4266	Galaxy	VIR	13.7	13.3	1.8'	SBa		NGC 4389	Galaxy	CVN	11.7	12.9	2.6'	SB/P	H II 749;Peculiar
NGC 4267	Galaxy	VIR	10.9	13.3	3'	E-SO Ba	H II 166	NGC 4390	Galaxy	VIR	12.6	13.3	1.6'	SBbc	H III 39
NGC 4268	Galaxy	VIR	12.8	12.6	1.4'	SBO-a	near 4273	NGC 4391	Galaxy	DRA	12.7	12.9	1.1'	E-SO	H III 852
NGC 4269	Galaxy	VIR	12.9	12.7	1.3'	Sa		NGC 4393	Galaxy	COM	12.1	14.4	3.2'	SBcd	H III 361
NGC 4270	Galaxy	VIR	12.2	12.7	2'	SO	H II 568;in group w NGC 4273 & 4281	NGC 4394	Galaxy	COM	10.9	13.4	3.4'	SBab	H II 55;P w NGC 4382 @ 7.8'
NGC 4271	Galaxy	UMA	12.6	13.1	1.5'	E-SO	H II 804	NGC 4395	Galaxy	CVN	10.2	15.4	12.3'	SB Ring	H V 29 , several NGC nebulae inside
NGC 4272	Galaxy	COM	13.1	13	1'	Elliptical	H III 299	NGC 4396	Galaxy	COM	12.6	13.7	3.3'	Scd	Ho 400b @ 6.2' is a dble *
NGC 4273	Galaxy	VIR	11.9	13.1	2.3'	SBc	H II 569;SN 1936a;NGC 4277 @ 2'	NGC 4399	Neb+Gx	CVN	-	-	-	E+	An HII region within the GALXY NGC 4395 on the S
NGC 4274	Galaxy	COM	10.4	13.3	6.8'	SBab Ri	H I 75;Saturn-like inner ring w F outer halo	NGC 4400	Neb+Gx	CVN	-	-	-	E+	An HII region within the GALXY NGC 4395 on the S
NGC 4275	Galaxy	COM	13.1	12.3	0.8'	Sb	H II 376	NGC 4401	Neb+Gx	CVN	-	-	-	E+	An HII region within the GALXY NGC 4395 on the S
NGC 4276	Galaxy	VIR	12.4	13.2	1.6'	SBc		NGC 4402	Galaxy	VIR	11.8	13.2	3.6'	Sb	NGC 4406 @ 10' ;edge on w dust lane;10 N from M
NGC 4277	Galaxy	VIR	13.4	13.1	1.1'	SBO-a	H II 571 , near 4273	NGC 4403	Galaxy	VIR	14	-	1.9'	Sab	H III 755
NGC 4278	Galaxy	COM	10.2	13.1	4'	Elliptical	Triple chain w NGC 4283 @ 3.6';NGC 4286 @ 8.8'	NGC 4404	Galaxy	VIR	14	-	1.2'	E-SO	H III 756
NGC 4279	Galaxy	VIR	14	-	1.1'	Sa		NGC 4405	Galaxy	COM	12	12.6	1.6'	Sa	H II 88
NGC 4281	Galaxy	VIR	11.3	12.8	3'	Sa	H II 573	NGC 4407	Galaxy	VIR	12.7	-	2.3'	SBab Ri	
NGC 4282	Galaxy	VIR	13.9	12.7	0.8'	Sa		NGC 4408	Galaxy	COM	13.8	-	0.4'	Elliptical	
NGC 4283	Galaxy	COM	12.1	12.9	1.4'	Elliptical	Triple chain w NGC 4278 @ 3.6';NGC 4286 @ 5.2'	NGC 4409	Galaxy	VIR	12.8	-	2'	SBbc	H III 17
NGC 4284	Galaxy	UMA	13.5	14.5	2.5'	Sbc	H III 798;P w NGC 4290	NGC 4410A	Galaxy	VIR	12.8	12.7	0.5'	Sab pec	Double system w NGC 4410B @ 0.3';contact
NGC 4285	Galaxy	VIR	14	-	0.9'	Sa		NGC 4410B	Galaxy	VIR	13.9	12.2	0.5'	Sbc	Double system w NGC 4410A @ 0.3';contact
NGC 4286	Galaxy	COM	13.1	13.4	1.5'	Sa	3 Chain w NGC 4278 @ 8.8';NGC 4283 @ 5.2';H III	NGC 4411A	Galaxy	VIR	12.7	14.1	2'	SBd	NGC 4411B @ 4.3
NGC 4288	Galaxy	CVN	12.9	14.1	2.2'	SBcd	H III 726;P w Ho 371b @ 2.2'	NGC 4411B	Galaxy	VIR	12.3	14.2	2.5'	SBd	NGC 4411A @ 4.3'
NGC 4289	Galaxy	VIR	13.9	14.1	3.9'	Sc		NGC 4412	Galaxy	VIR	12.4	12.8	1.4'	SB/P	H II 34
NGC 4290	Galaxy	UMA	11.8	13.1	2.2'	SBab Ri	H II 805;in field of 70 UMA	NGC 4413	Galaxy	VIR	12.3	13.5	2.3'	SBab Ri	H II 169;12' ESE from NGC 4388
NGC 4291	Galaxy	DRA	11.5	12.7	2'	Elliptical	H I 275;P w NGC 4319	NGC 4414	Galaxy	COM	10.1	12.1	3.6'	Sc	H I 77
NGC 4292	Galaxy	VIR	12.2	12.8	1.6'	SBO	comp (Ho 375b;?NGC 4292A?) @ 2.2'	NGC 4415	Galaxy	VIR	12.1	12.5	1.4'	Sa	H III 482
NGC 4293	Galaxy	COM	10.4	13.1	5.5'	SBO-a	H V 5;Spiral pattern dim;heavy dust lanes	NGC 4416	Galaxy	VIR	12.4	13.3	1.7'	SBc	
NGC 4294	Galaxy	VIR	12.1	13.4	3.2'	SBc	H II 61;NGC 4299 6' east	NGC 4417	Galaxy	VIR	11.1	12.6	3.3'	SBO	comp @ 2.8';H II 155;edge on lens shape
NGC 4295	Galaxy	COM	13.6	-	0.6'	SO		NGC 4418	Galaxy	VIR	13.1	13	1.5'	Sa	H III 492
NGC 4296	Galaxy	VIR	12.7	12.7	1.4'	SBO	H III 92	NGC 4419	Galaxy	COM	11.2	12.4	3.3'	SBa	H II 113
NGC 4298	Galaxy	COM	11.3	13.1	3.2'	Sc	H II 111	NGC 4420	Galaxy	VIR	12.1	12.7	2'	SBbc	H II 23
NGC 4299	Galaxy	VIR	12.5	13.5	1.7'	SBd	H II 62	NGC 4421	Galaxy	COM	11.6	13.3	2.7'	SBO-a	H II 89
NGC 4300	Galaxy	VIR	12.9	12.7	1.5'	Sa Ring	H II 572	NGC 4423	Galaxy	VIR	13.5	13.2	2.3'	Sd	H III 145
NGC 4301	Galaxy	VIR	13.6	13.2	1.6'	SBc	NGC 4303 @ 10'	NGC 4424	Galaxy	VIR	11.7	13.6	3.5'	SBa	SN 1895a;comp @ 0.6';NGC 4417 11' NW
NGC 4302	Galaxy	COM	11.6	13.3	5.3'	Sc	H II 112;Nearly edge-on spiral w equatorial dust lane	NGC 4425	Galaxy	VIR	11.8	12.9	2.8'	SBO-a	H II 170;lens shaped;19' SE from M86
NGC 4303A	Galaxy	VIR	13	13.6	1.6'	SBc		NGC 4428	Galaxy	VIR	12.6	13	1.7'	SBc	Compact spiral;P w NGC 4433 @ 7'
NGC 4304	Galaxy	HYA	11.6	13.5	2.6'	SBbc		NGC 4429	Galaxy	VIR	10	12.8	5.8'	Sa	H II 65;oval w large outer ring
NGC 4305	Galaxy	VIR	12.6	13.5	2.2'	Sa		NGC 4430	Galaxy	VIR	12	13.5	2.3'	SBb/P	H II 146;NGC 4432 @ 2.4'
NGC 4306	Galaxy	VIR	12.6	13.3	1.6'	SBO		NGC 4431	Galaxy	VIR	12.9	13.5	1.7'	SO	NGC 4440 group;NGC 4436 @ 3.8';NGC 4440 @ 6
NGC 4307	Galaxy	VIR	12	12.9	3.5'	Sb	spindle shaped edge on	NGC 4432	Galaxy	VIR	14	13.4	0.9'	SBbc	P w NGC 4430
NGC 4308	Galaxy	COM	13.4	12.8	0.8'	Elliptical		NGC 4433	Galaxy	VIR	12.7	13.4	2.2'	SBbc	
NGC 4309	Galaxy	VIR	12.7	13.3	1.8'	SBO-a		NGC 4434	Galaxy	VIR	12.1	12.9	1.4'	Elliptical	H II 497
NGC 4310	Galaxy	COM	12.2	13.2	2.4'	SBO-a F	H II 378	NGC 4435	Galaxy	VIR	10.8	12.5	3'	SBO	Markarian's chain;NGC 4438 @ 4.3' SSE
NGC 4312	Galaxy	COM	11.7	13.3	4.6'	Sab	H II 628	NGC 4436	Galaxy	VIR	13	13	1.5'	SO	H II 172;NGC 4440 @ 3.3';NGC 4431 @ 3.5'
NGC 4313	Galaxy	VIR	11.6	13	3.8'	Sab	H II 63;spindle shaped edge on	NGC 4437	Galaxy	VIR	11.2	-	10.2'	Sc	NGC Copying error , see 4517
NGC 4314	Galaxy	COM	10.6	13.4	3.9'	SBa	H I 76	NGC 4438	Galaxy	VIR	10.2	13.6	8.5'	Sa	Markarian's chain;NGC 4435 @ 4.4';long filaments
NGC 4316	Galaxy	VIR	12.9	13	2.5'	Sc		NGC 4440	Galaxy	VIR	11.7	12.7	1.8'	SBa	H II 173;Brightest of 3;NGC 4436 @ 3.6';NGC 4431
NGC 4318	Galaxy	VIR	13.3	12.1	0.7'	Elliptical		NGC 4441	Galaxy	DRA	12.7	14.8	3.2'	SBO-a	H II 848
NGC 4319	Galaxy	DRA	11.9	13.8	2.8'	SBab	H I 276;NGC 4291 @ 7.4'	NGC 4442	Galaxy	VIR	10.4	12.6	4.5'	SBO	H II 156
NGC 4320	Galaxy	VIR	13.8	13.1	1'	Sb	NGC 4325 @ 4.9'	NGC 4444	Galaxy	CEN	12.3	14	2.5'	SBbc Ri	
NGC 4322	Star	COM	13.9	13.6	-	-	NGC 4321 @ 5.2' , near M100	NGC 4445	Galaxy	VIR	12.8	12.9	2.6'	Sab	
NGC 4324	Galaxy	VIR	11.6	12.8	2.9'	Sa Ring	Ho 388b @ 1.1' is a *	NGC 4446	Galaxy	COM	13.9	13.7	1.1'	Sc	NGC 4447 @ 1.6';one arm bridges to NGC 4447
NGC 4325	Galaxy	VIR	13.3	12.6	1'	Elliptical		NGC 4447	Galaxy	COM	13.9	13.2	0.9'	SBO Ri	NGC 4446 @ 1.6';one arm bridges to NGC 4446
NGC 4326	Galaxy	VIR	13.3	13.7	1.4'	SBab	H II 141;NGC 4339 group;NGC 4339 @ 5.7'	NGC 4448	Galaxy	COM	11.1	12.8	3.6'	SBab Ri	H I 91
NGC 4328	Galaxy	COM	13	13.5	1.4'	E-SO	H II 84	NGC 4449	Galaxy	CVN	9.6	13	6.2'	Ir	H I 213
NGC 4329	Galaxy	CRV	14	-	1.1'	Elliptical		NGC 4450	Galaxy	COM	10.1	13.2	5.4'	Sab	H II 56
NGC 4330	Galaxy	VIR	12.4	13.7	4.5'	Sc		NGC 4451	Galaxy	VIR	12.5	12.7	1.5'	Sb	
NGC 4332	Galaxy	DRA	12.2	13.3	2.1'	SBa	H II 847	NGC 4452	Galaxy	VIR	12	12.4	2.7'	SO	H I 23;cigar shaped edge on
NGC 4333	Galaxy	VIR	13.6	12.9	0.8'	SBab	H II 142	NGC 4454	Galaxy	VIR	11.9	13	1.9'	SBO-a F	H II 180;comp @ 2'
NGC 4334	Galaxy	VIR	13	13.8	2.2'	SBab		NGC 4455	Galaxy	COM	12.3	13	2.6'	SBcd	H II 355;Nearly edge-on spiral
NGC 4335	Galaxy	UMA	12.4	13.5	1.9'	Elliptical	H II 806;SN 1955e	NGC 4456	Galaxy	HYA	13.3	12.8	1.2'	Sbc	
NGC 4336	Galaxy	COM	12.5	13	2'	SBO-a	H II 406	NGC 4457	Galaxy	VIR	10.9	12.7	2.6'	SBO-a F	H II 35
NGC 4337	Opn CL	CRU	8.9	-	3.5'	II 3 p	10.5	NGC 4458	Galaxy	VIR	12.1	13.2	1.6'	Elliptical	Markarian's chain;NGC 4461 @ 3.7' , near M84
NGC 4339	Galaxy	VIR	11.4	13.2	2.3'	Elliptical	Brightest of 3;NGC 4333 @ 4' ;NGC 4326 @ 5.7'	NGC 4459	Galaxy	COM	10.4	12.7	4'	Sa	H I 161;comp @ 2.2';NGC 4468 @ 8.5';NGC 4474 @
NGC 4340	Galaxy	COM	11.2	13.5	3.1'	SBO-a F	H II 85;Theta struct;NGC 4350 @ 5.7';comp @ 2.3'	NGC 4460	Galaxy	CVN	11.3	12.8	4.2'	SBO-a	H I 212
NGC 4341	Galaxy	VIR	13.2	13	1.7'	SBO	based on UGC and Zwicky;H III 95	NGC 4461	Galaxy	VIR	11.2	12.8	3.4'	SBO-a	Markarian's chain;NGC 4458 @ 3.7' , near m84
NGC 4342	Galaxy	VIR	12.5	12.1	1.2'	SO	H III 96;edge on lenticular;4 F galaxies north	NGC 4462	Galaxy	CRV	11.9	13.2	3.1'	SBab Ri	H III 764
NGC 4343	Galaxy	VIR	12.1	12.6	2.3'	Sb	H III 94;based on UGC and Zwicky	NGC 4464	Galaxy	VIR	12.5	12.2	0.9'	Sab	H III 483
NGC 4344	Galaxy	COM	12.3	13.3	1.4'	SBO	H III 31;Ho 390b @ 1.7' is a *	NGC 4466	Galaxy	VIR	13.5	12.8	1.1'	Sab	Ho 412b @ 2.1' is a *
NGC 4346	Galaxy	CVN	11.1	12.6	3.2'	SBO	H I 210	NGC 4467	Galaxy	VIR	13.8	13.9	0.4'	Elliptical	NGC 4472 @ 4.2'
NGC 4348	Galaxy	VIR	12.5	13.3	3.2'	Sbc	H II 625;Spindle shaped edge on	NGC 4468	Galaxy	COM	12.8	13.1	1.4'	E-SO	H II 630;NGC 4474 @ 5.6'
NGC 4350	Galaxy	COM	11	12.5	2.9'	SO	H II 86;NGC 4340 @ 5.6';lenticular	NGC 4469	Galaxy	VIR	11.2	12.8	3.4'	SBO-a	H II 157;edge on w box shaped central section
NGC 4351	Galaxy	VIR	12.6	13.6	2'	SBab/P		NGC 4470	Galaxy	VIR	12.1	12.2	1.3'	Sa	H II 18
NGC 4352	Galaxy	VIR	12.6	13.2	2'	SO	H II 64	NGC 4473	Galaxy	COM	10.2	12.8	4.2'	Elliptical	Markarian's chain
NGC 4353	Galaxy	VIR	13.6	13.2	0.9'	Ir Bar		NGC 4474	Galaxy	COM	11.5	12.7	2.4'	SO	H II 117;spindle shaped
NGC 4354	Galaxy	VIR	13	-	2'	SBab/P		NGC 4475	Galaxy	COM	13.6	14	1.7'	SBbc Ri	H III 362
NGC 4356	Galaxy	VIR	13.3	13.6	2.8'	Sc	H III 481	NGC 4476	Galaxy	VIR	12.2	12.8	1.8'	E4	H II 123;NGC 4478 @ 4.5'
NGC 4357	Galaxy	CVN	12.4	13.9	3.7'	Sbc		NGC 4477	Galaxy	COM	10.4	13.1	3.7'	SBO	Markarian's chain;NGC 4479 @5.3'
NGC 4359	Galaxy	COM	12.7	13.7	3.5'	SBc	H III 648	NGC 4478	Galaxy	VIR	11.4	12.7	1.8'	E1	H II 124;NGC 4476 @ 4.5';NGC 4486 @ 8.6'
NGC 4360A	Galaxy	VIR	13.9	-	1.5'	Elliptical		NGC 4479	Galaxy	COM	12.4	13.1	1.6'	SBO	H II 116
NGC 4361	Pln Neb	CRV	10.9	11.1	80"	3a(2)	13.3	NGC 4480	Galaxy	VIR	12.4	13.4	2.2'	SBc	
NGC 4363	Galaxy	DRA	13.5	14.1	1.5'	Sb	H III 938	NGC 4482	Galaxy	VIR	12				

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 4499	Galaxy	CEN	13.2	14	1.8'	SBbc				NGC 4624	Galaxy	VIR	11.2	-	3.5'	SBO-a			see 4665
NGC 4500	Galaxy	UMA	12.5	12.9	1.6'	SBa			H I 234	NGC 4625	Galaxy	CVN	12.4	13.8	2.3'	SB pec			P w NGC 4618 @ 8.3';H II 660
NGC 4502	Galaxy	COM	13.9	13.2	1.1'	SBc			H II 92	NGC 4626	Galaxy	VIR	14	-	1.4'	Sbc			H II 772
NGC 4503	Galaxy	VIR	11.1	12.9	3.5'	SBO			H II 66	NGC 4627	Galaxy	CVN	12.4	14.1	2.2'	Elliptical			H II 659;P w NGC 4631 @ 2.5'
NGC 4504	Galaxy	VIR	11.2	13.7	4.3'	SBc			H II 771	NGC 4628	Galaxy	VIR	14	-	1.7'	Sb			H II 773
NGC 4505	Galaxy	VIR	11.9	-	3.9'	SBc				NGC 4629	Galaxy	VIR	14	-	1.4'	S			
NGC 4506	Galaxy	COM	12.7	13.2	1.6'	SBa			H II 631	NGC 4630	Galaxy	VIR	12.6	13.4	1.7'	Ir			H II 532
NGC 4507	Galaxy	CEN	12.1	12.8	1.6'	SBab Rir				NGC 4631	Galaxy	CVN	9.2	13.1	15.2'	SBcd			H V 42;P w NGC 4627 @ 2.5'
NGC 4509	Galaxy	CVN	13.5	12.7	0.8'	Sab pec			sf of 2	NGC 4632	Galaxy	VIR	11.7	12.9	3'	Sc			H I 14
NGC 4510	Galaxy	DRA	13	13.3	1.5'	Elliptical				NGC 4633	Galaxy	COM	13.1	13.6	2'	SBd			NGC 4634 @ 3.5'
NGC 4512	Galaxy	DRA	13.8	14.8	2.5'	Sa			P w NGC 4521 @ 4.1' nf	NGC 4634	Galaxy	COM	12.4	12.8	2.5'	SBc			H III 603;NGC 4633 @ 3.5'
NGC 4513	Galaxy	DRA	13	13.1	1.4'	SO				NGC 4635	Galaxy	COM	12.6	13.6	1.9'	SBcd			
NGC 4514	Galaxy	COM	13.2	13.3	1.2'	Sbc			H III 302	NGC 4636	Galaxy	VIR	9.5	13.1	5.9'	Elliptical			H II 38
NGC 4515	Galaxy	COM	12.3	12.6	1.4'	E-SO			H II 93	NGC 4638	Galaxy	VIR	11.2	12.3	2.4'	E5			H II 70;NGC 4637 @ 1.5' sf;stubby lens shape
NGC 4516	Galaxy	COM	12.8	13.1	1.8'	SBab			H III 78	NGC 4639	Galaxy	VIR	11.5	13.2	2.9'	SBbc Rir			H II 125;comp 2.9';NGC 4654 @ 17.5'
NGC 4517	Galaxy	VIR	10.4	13.3	10.2'	Sc			4517A @ 17 ' ;long narrow streak w dust patches	NGC 4641	Galaxy	VIR	13.2	13.3	1.2'	SO			
NGC 4517A	Galaxy	VIR	12.5	14.9	4'	SBd			NGC 4517 @ 17 ' ; given as R 80 in Burnham's	NGC 4642	Galaxy	VIR	12.9	12.9	1.9'	Sbc			H III 494;NGC 4653 @ 9.6'
NGC 4519	Galaxy	VIR	11.8	13.9	2.9'	SBcd Rir			H II 158	NGC 4643	Galaxy	VIR	10.8	12.7	3.1'	SBO-a			H I 10;Saturn-like central mass w projecting ansae
NGC 4520	Galaxy	VIR	13.9	-	1.4'	E-SO			H II 757	NGC 4644	Galaxy	UMA	13.9	13.5	1.6'	SBb/P			H II 794;NGC 4686 group
NGC 4521	Galaxy	DRA	12.2	12.4	2.5'	Sa			H II 849;P w NGC 4512	NGC 4645	Galaxy	CEN	11.8	12.9	2.2'	Elliptical			
NGC 4522	Galaxy	VIR	12.3	13.6	3.6'	SBc			edge on spiral	NGC 4645A	Galaxy	CEN	12.2	13	2.8'	SBO			
NGC 4524	Galaxy	CRV	14	-	1.3'	Sbc				NGC 4645B	Galaxy	CEN	12.1	12.3	1.9'	SBO			
NGC 4525	Galaxy	COM	12.2	13.4	2.6'	SBc			H II 325	NGC 4646	Galaxy	UMA	13.4	11.4	0.6'	SO			NGC 4686 group
NGC 4526	Galaxy	VIR	9.7	12.7	7'	SBO			H I 31;lenticular;between two 7th mag stars	NGC 4647	Galaxy	VIR	11.3	13.2	2.9'	SBc Rir			H III 144;NGC 4649 @ 2.5'
NGC 4527	Galaxy	VIR	10.5	13.1	5.9'	SBbc			H II 37;SN 1915a;NGC 4536 @ 29	NGC 4648	Galaxy	DRA	12	13.4	1.8'	Ellip Rir			H I 274;P w NGC 4589 @ 22'
NGC 4528	Galaxy	VIR	12.1	12.5	1.6'	SBO			H II 67	NGC 4650	Galaxy	CEN	11.6	13.9	3.2'	SBO-a			
NGC 4530	Star	CVN	4.3	-						NGC 4650A	Galaxy	CEN	12.9	13	1.6'	Sa			
NGC 4531	Galaxy	VIR	11.4	13.3	3.1'	SBO-a			H II 175	NGC 4651	Galaxy	COM	10.8	13.2	4'	Scp			H II 12
NGC 4532	Galaxy	VIR	11.9	13	2.7'	Ir?			H II 147;tadpole shaped br portion to north	NGC 4653	Galaxy	VIR	12.2	14.4	3.4'	SBc			H III 662;NGC 4642 @ 9.6';NGC 4666 @ 20 ' "
NGC 4533	Galaxy	VIR	13.8	13.5	2.1'	Scd			NGC 4536 @ 8.2'	NGC 4654	Galaxy	VIR	10.5	13.2	5'	SBc Rir			H II 126
NGC 4534	Galaxy	CVN	12.3	14	2.6'	Sd			H II 410	NGC 4656	Galaxy	CVN	10.5	14.5	15.3'	SB			H I 176;NGC 4657 superimposed
NGC 4535	Galaxy	VIR	10	13.7	6.9'	SBc			H II 500;Ho 420b @ 5 ' ;S-shaped spiral	NGC 4657	Galaxy	CVN	10.6	-	1.1'	Ir			H I 177;superimposed on NGC 4656
NGC 4536	Galaxy	VIR	10.6	13.9	7.1'	SBbc			NGC 4533 @ 8.2';high tilt spiral w long curvd arms	NGC 4658	Galaxy	VIR	12.5	13	2.1'	SBbc			H II 558
NGC 4539	Galaxy	COM	12	13.5	3.3'	SBa				NGC 4659	Galaxy	COM	12.1	12.8	1.8'	Sa			H II 127
NGC 4540	Galaxy	COM	11.7	12.8	2.1'	SBc			H II 94;IC 3528 (Ho 421b) @ 1.5' nf;comp @ 4.3'	NGC 4660	Galaxy	VIR	11.2	12.6	2.1'	E5			H II 71;comp 5.5';25' SSE from M60
NGC 4541	Galaxy	VIR	13	13	1.6'	SBbc			H III 493	NGC 4661	Galaxy	CEN	13.5	12.7	1.2'	E-SO			
NGC 4544	Galaxy	VIR	13	13.1	2'	SBO-a				NGC 4662	Galaxy	CVN	12.7	13.8	1.9'	SBbc			H II 643
NGC 4545	Galaxy	DRA	12.3	13.6	2.5'	SBc			H II 850	NGC 4663	Galaxy	VIR	14	-	1.1'	SBO			
NGC 4546	Galaxy	VIR	10.3	11.9	3.3'	E-SO Ba			H I 160	NGC 4664	Galaxy	VIR	11.2	-	3.5'	SBO-a			H II 39 , see 4665
NGC 4550	Galaxy	VIR	11.7	12.8	3.3'	SBO			H I 36;NGC 4551 @ 3 ' "	NGC 4665	Galaxy	VIR	10.5	13.1	3.5'	SBO-a			H I 142 , same as 4624, 4664
NGC 4551	Galaxy	VIR	12	13.1	1.8'	Elliptical			H I 37;NGC 4550 @ 3 ' "	NGC 4666	Galaxy	VIR	10.7	12.5	4.5'	SBc			H I 15;NGC 4668 @ 7.3';NGC 4653 @ 20 ' ;edge on
NGC 4553	Galaxy	CEN	12.2	12.9	2.4'	SBO-a R				NGC 4667	Galaxy	VIR	12.1	-	2.4'	E-SO			
NGC 4555	Galaxy	COM	12.1	13.3	1.4'	Elliptical			H II 343	NGC 4668	Galaxy	VIR	13.1	13.1	1.4'	SBcd			H III 663;NGC 4666 @ 7.3'
NGC 4556	Galaxy	COM	13.1	13.3	1.2'	Elliptical			H II 380	NGC 4669	Galaxy	UMA	13.2	12.3	1.5'	Sb			NGC 4686 group
NGC 4559	Galaxy	COM	10	14	11'	SBc			H I 92;SN 1941a;multi arm spiral	NGC 4670	Galaxy	COM	12.7	13	1.4'	SBO-a			H III 328;P w NGC 4673 @ 5.6'
NGC 4560	Galaxy	VIR	10.6	-	7'	SBO			H I 119 , see 4526	NGC 4672	Galaxy	CEN	13.2	13.2	2.2'	Sa			
NGC 4561	Galaxy	COM	12.5	13	1.5'	SBcd			H II 407	NGC 4673	Galaxy	COM	12.9	12.7	1'	Elliptical			H III 329;P w NGC 4670 @ 5.6'
NGC 4562	Galaxy	COM	13.5	14.1	2.4'	SBcd				NGC 4677	Galaxy	CEN	12.8	12.9	1.6'	SBO-a			
NGC 4564	Galaxy	VIR	11.1	12.9	3.2'	E6			H II 68;11' N from NGC 4567-8	NGC 4679	Galaxy	CEN	12.4	13.2	1.6'	SBc			
NGC 4565	Galaxy	COM	9.6	13.3	14.9'	Sb			Needle ;NGC 4562 @ 13.4';classic edge-on galaxy	NGC 4680	Galaxy	VIR	13	-	1.5'	S			
NGC 4566	Galaxy	UMA	13.1	13	1.3'	Sbc			H III 880	NGC 4681	Galaxy	CEN	12.6	13	1.4'	Sab			
NGC 4567	Galaxy	VIR	11.3	13.1	3.1'	Sbc			Siamese Twins H IV 8;NGC 4568 @ 1.2	NGC 4682	Galaxy	VIR	12.1	13.3	2.5'	SBc			H III 523
NGC 4568	Galaxy	VIR	10.8	13.1	4.6'	Sbc			Siamese Twins;NGC 4567 @ 1.2';overlaps 4567;	NGC 4683	Galaxy	CEN	12.7	12.8	1.3'	E-SO Ba			
NGC 4570	Galaxy	VIR	10.9	12.4	3.7'	SO			H I 32;lens shaped;in field of R VIR	NGC 4684	Galaxy	VIR	11.4	12.4	2.8'	SBO-a			H II 181;vB elongated foreshortened nucleus
NGC 4571	Galaxy	COM	11.3	13.8	3.7'	Sc			comp @ 4.6';NGC 4548 @ 27 ' ;H III 602	NGC 4685	Galaxy	COM	12.6	12.9	1.6'	E-SO			H III 398
NGC 4573	Galaxy	CEN	13	14.6	2.5'	SBO-a R				NGC 4686	Galaxy	UMA	12.6	12.6	2'	Sa			H II 795;Brightest in group
NGC 4574	Galaxy	CEN	13	13.6	1.8'	SBc				NGC 4687	Galaxy	CVN	13.2	12.9	0.7'	Elliptical			
NGC 4575	Galaxy	CEN	12.6	13.4	2'	SBbc				NGC 4688	Galaxy	VIR	11.9	14.1	3.5'	SBc			H III 543;Ho 462a @ 6.8'
NGC 4576	Galaxy	VIR	13.5	13.2	1.2'	SBbc				NGC 4689	Galaxy	COM	10.9	13.7	4.7'	Sbc			H II 128
NGC 4577	Galaxy	VIR	13	-	1.8'				H III 13	NGC 4690	Galaxy	VIR	12.9	12.7	1.2'	E-SO			H III 664
NGC 4578	Galaxy	VIR	11.5	13.7	3.1'	SO			H II 15;Ho 429b @ 3.5'	NGC 4691	Galaxy	VIR	11.1	12.9	2.7'	SBO-a			H II 182
NGC 4580	Galaxy	VIR	11.8	13	2.1'	SBab Rir			H I 124	NGC 4692	Galaxy	COM	12.6	13.1	1.1'	Ellip Rir			H II 381
NGC 4581	Galaxy	VIR	12.5	13.3	1.9'	Elliptical				NGC 4693	Galaxy	DRA	13.4	13.4	2.4'	Scd			H III 906
NGC 4584	Galaxy	VIR	12.9	13.1	1.4'	SBa				NGC 4694	Galaxy	VIR	11.4	13	3.3'	SBO			H II 72
NGC 4585	Galaxy	COM	14	12.5	0.7'	SBb				NGC 4695	Galaxy	UMA	13.4	12.9	1.1'	SBbc			H II 796;NGC 4686 group
NGC 4586	Galaxy	VIR	11.7	13.3	3.8'	Sa Ring			H I 125	NGC 4696	Galaxy	CEN	10.4	13.3	4.7'	Elliptical			
NGC 4587	Galaxy	VIR	13.5	12.7	1.1'	SO				NGC 4696A	Galaxy	CEN	13.7	13.2	1.3'	SBb			
NGC 4589	Galaxy	DRA	10.7	13	3.4'	Elliptical			H I 273;P w NGC 4572 @ 7.5';NGC 4648 @ 22'	NGC 4696B	Galaxy	CEN	12.7	12.5	1.2'	E-SO			
NGC 4591	Galaxy	VIR	13	13.1	1.6'	Sab			H III 504	NGC 4696C	Galaxy	CEN	13.8	13.2	1.8'	Sb			
NGC 4592	Galaxy	VIR	11.7	13.9	6.8'	Sd			H II 31	NGC 4696D	Galaxy	CEN	13	12.2	1.6'	SBO			
NGC 4593	Galaxy	VIR	10.9	13.4	3.7'	SBab			Extended central mass w extensive outer arms;460	NGC 4696E	Galaxy	CEN	13.5	13.7	1.5'	SBO			
NGC 4595	Galaxy	COM	12.1	12.7	1.7'	SBb			H II 632	NGC 4697	Galaxy	VIR	9.2	13.1	6.2'	Elliptical			H I 39
NGC 4596	Galaxy	VIR	10.4	13	4'	SBO-a			H I 24;NGC 4608 @ 19 ' ;disc w projecting ansae	NGC 4698	Galaxy	VIR	10.6	12.9	4'	Sab			H I 8
NGC 4597	Galaxy	VIR	12.1	14.1	3.8'	SBc			H II 636;Reversed Z structure	NGC 4699	Galaxy	VIR	9.5	11.9	3.8'	SBb			H I 129
NGC 4598	Galaxy	VIR	12.7	13.1	1.4'	SBO			H III 105	NGC 4700	Galaxy	VIR	11.9	12.4	3'	SBc			H III 524;edge on spiral
NGC 4599	Galaxy	VIR	12.6	12.8	1.7'	Sa			H III 509	NGC 4701	Galaxy	VIR	12.4	14.2	3.1'	Sc			H II 578
NGC 4600	Gal																		

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 4738	Galaxy	COM	13.4	12.8	2.1'	Sc				NGC 4891	Star	VIR	12.6	-	-				Star 2' np NGC 4897
NGC 4739	Galaxy	VIR	14	-	1.4'	Elliptical			H III 515	NGC 4892	Galaxy	COM	13.9	12.7	1.3'	SO			H II 390
NGC 4741	Galaxy	CVN	13.7	13.5	1.4'	Sc			H III 721	NGC 4895	Galaxy	COM	13.2	13.2	1.8'	SO			
NGC 4742	Galaxy	VIR	11.3	12.8	2.3'	E3			H I 133;Group w NGC 4760 & 4781	NGC 4896	Galaxy	COM	13.9	13.2	1'	SO Pec			
NGC 4743	Galaxy	CEN	13	12.4	1.4'	SO				NGC 4897	Galaxy	VIR	11.8	13.6	2.7'	SBbc			
NGC 4744	Galaxy	CEN	12.6	13.3	2.1'	SBO-a				NGC 4898	Galaxy	COM	13.5	-	0.4'	Ep			near 4889
NGC 4746	Galaxy	VIR	12.6	14	4'	Sb				NGC 4899	Galaxy	VIR	11.9	13.2	2.3'	SBc			H II 300
NGC 4747	Galaxy	COM	12.4	13.7	3.3'	SBcd			H II 344;P w NGC 4725 @ 24 'filam to NE	NGC 4900	Galaxy	VIR	11.4	12.9	2.2'	SBc			H I 143
NGC 4749	Galaxy	DRA	13.5	12.9	1.7'	Sb			H III 907	NGC 4902	Galaxy	VIR	10.9	13.1	2.9'	SBb			H I 69;Theta shaped center;triskelion arm pattern
NGC 4750	Galaxy	DRA	11.2	12.5	2.1'	Sap			H IV 78;Dark ring surrounds nucl	NGC 4903	Galaxy	CEN	13	13.6	1.6'	SBc			
NGC 4751	Galaxy	CEN	11.8	13	3'	E-SO				NGC 4904	Galaxy	VIR	12	13.1	2.2'	SBc			H II 517
NGC 4753	Galaxy	VIR	9.9	12.9	5.1'	SO			H I 16;SN 1965i	NGC 4905	Galaxy	CEN	13.2	13.8	1.4'	SBO-a			
NGC 4754	Galaxy	VIR	10.6	13.1	4.4'	SBO			H I 25;P w NGC 4762 11' to NW	NGC 4907	Galaxy	COM	13.6	13.5	1.1'	SBb			
NGC 4756	Galaxy	CRV	12.4	13.1	1.7'	E-SO			H III 281	NGC 4908	Galaxy	COM	13.6	13.6	0.9'	Elliptical			
NGC 4758	Galaxy	COM	13.1	13.8	3'	SB/P			H III 70	NGC 4909	Galaxy	CEN	12.6	13.8	1.9'	Sa Ring			
NGC 4760	Galaxy	VIR	11.4	12.8	2'	Elliptical				NGC 4910	Galaxy	VIR	12.1	-	5'	Sb			H V 3 , see 4845
NGC 4761	Galaxy	VIR	13.8	11.6	0.8'	Elliptical				NGC 4911	Galaxy	COM	12.8	13.3	1.5'	SBbc			H II 392
NGC 4762	Galaxy	VIR	10.3	13	8.6'	SBO			H II 75;NGC 4754 @ 10.5';thick streak w tufts at en	NGC 4914	Galaxy	CVN	11.6	13.6	3.5'	Elliptical			H II 645;P w NGC 4868
NGC 4763	Galaxy	CRV	12.6	12.9	1.6'	SBa			H III 489	NGC 4915	Galaxy	VIR	12.1	12.9	1.6'	Elliptical			H IV 47;NGC 4918 @ 6.3'
NGC 4765	Galaxy	VIR	13	12.8	1.1'	Sa			H III 544	NGC 4917	Galaxy	CVN	13.8	14.1	1.5'	SBb			
NGC 4767	Galaxy	CEN	11.5	12.7	2.6'	Elliptical				NGC 4920	Galaxy	VIR	14	-	1'	Ir Bar			
NGC 4767B	Galaxy	CEN	13.1	13.3	1.3'	SBc				NGC 4921	Galaxy	COM	12.2	13.9	2.4'	SBab			H II 393;SN 1959b
NGC 4770	Galaxy	VIR	14	-	1.5'	Sa			H III 525	NGC 4923	Galaxy	COM	13.7	13.1	0.8'	E-SO Ba			H II 394
NGC 4771	Galaxy	VIR	12.3	13.4	3.8'	Scd			H II 535;edge on	NGC 4924	Galaxy	VIR	14	-	1.3'	SBO-a			
NGC 4772	Galaxy	VIR	11	12.8	3.1'	Sa			H II 24	NGC 4925	Galaxy	VIR	14	-	1'	SO			H II 779
NGC 4775	Galaxy	VIR	11.1	12.5	2.2'	Scd			H II 186;Compact face on spiral	NGC 4926	Galaxy	COM	13	13.1	1.1'	E-SO			NGC 4926A is 3.4' nf
NGC 4776	Galaxy	VIR	13	-	1.9'	SO				NGC 4927	Galaxy	COM	13.7	-	0.6'	E-SO Ba			H III 364
NGC 4778	Galaxy	VIR	12.5	-	1.7'	Sa				NGC 4928	Galaxy	VIR	12.5	12.6	1.1'	Sbc			H II 190
NGC 4779	Galaxy	VIR	12.4	13.7	2.1'	SBbc			H III 106	NGC 4929	Galaxy	COM	13.4	13.5	1'	Elliptical			
NGC 4780	Galaxy	VIR	14	-	1.8'	SBc				NGC 4930	Galaxy	CEN	11.1	14	4.4'	SBbc Rir			
NGC 4781	Galaxy	VIR	11.1	12.8	3.4'	SBcd			H I 134;Coarse spiral	NGC 4931	Galaxy	COM	13.5	13.4	1.6'	SO			
NGC 4782	Galaxy	CRV	11.7	12.9	2.3'	EO			H I 135;Contact P w NGC 4783	NGC 4932	Galaxy	CVN	13.6	14.2	1.5'	Sc			H III 818
NGC 4783	Galaxy	CRV	11.5	12.8	2.3'	EO			P w NGC 4782 @ 0.7'	NGC 4933A	Galaxy	VIR	11.7	12.3	2'	Sa			H II 191
NGC 4785	Galaxy	CEN	12.4	12.9	2'	Sb				NGC 4935	Galaxy	COM	13	13.1	1.2'	SBb			Similar to NGC 210
NGC 4786	Galaxy	VIR	11.7	12.4	1.6'	E2			H II 187;NGC 4775 18' to SE	NGC 4936	Galaxy	CEN	10.8	12.8	3.2'	Elliptical			
NGC 4789	Galaxy	COM	12.1	13.1	1.9'	SO			H II 345;P w NGC 4789A @ 5 'NGC 4787 @ 3 '	NGC 4939	Galaxy	VIR	11.3	14.1	5.1'	Sbc			H II 561;Well defined spiral
NGC 4789A	Galaxy	COM	13.6	15.5	3.1'	Ir Bar			P w NGC 4789 @ 5 '	NGC 4940	Galaxy	CEN	13.1	13.2	1.2'	Sa			
NGC 4790	Galaxy	VIR	12.1	12.6	1.5'	SBc				NGC 4941	Galaxy	VIR	11.1	13	3.5'	SBab			H I 40
NGC 4793	Galaxy	COM	11.6	13	2.9'	SBc			H I 93	NGC 4942	Galaxy	VIR	14	-	1.7'	SBcd			H III 761
NGC 4794	Galaxy	CRV	14	-	1.7'	SBa			H II 538	NGC 4944	Galaxy	COM	12.9	12.7	1.5'	Sab			H II 395;comp. @ 1.1'
NGC 4795	Galaxy	VIR	12.1	13.1	1.6'	SBO-a			H II 21;NGC 4796 superimposed;NGC 4791 @ 4.8	NGC 4945	Galaxy	CEN	8.6	13.1	19.8'	SBc			Nearly edge-on
NGC 4796	Galaxy	VIR	13.5	-	0.4'	Compact			NGC 4791 @ 4.8'	NGC 4945A	Galaxy	CEN	12.5	13.7	2.5'	SB			
NGC 4798	Galaxy	COM	13.2	13.1	1'	E-SO Rir			H II 382	NGC 4946	Galaxy	CEN	12.4	13.1	1.6'	Elliptical			
NGC 4799	Galaxy	VIR	13.3	12.9	1.3'	Sc			H III 548	NGC 4947	Galaxy	CEN	11.8	12.9	2.4'	SBab			
NGC 4800	Galaxy	CVN	11.5	12	1.6'	Sb			H I 211	NGC 4948	Galaxy	VIR	14	-	2'	SBd			
NGC 4802	Galaxy	CRV	12	-	2.4'	SO				NGC 4948A	Galaxy	VIR	13.4	13.9	1.5'	SBd			
NGC 4804	Galaxy	CRV	12.6	-	2.4'	SO			H IV 40	NGC 4950	Galaxy	CEN	13.9	13.3	0.8'	SBO			
NGC 4806	Galaxy	HYA	12.7	12.7	1.2'	SB Ring				NGC 4951	Galaxy	VIR	11.9	13.2	3.3'	SBc			H II 188;Nearly edge on
NGC 4808	Galaxy	VIR	11.7	12.8	2.4'	Sc			H I 141	NGC 4952	Galaxy	COM	12.4	13.1	1.3'	Elliptical			H II 396
NGC 4809	Galaxy	VIR	13.7	14.1	1.7'	Ir			north comp NGC 4810 @ 0.8'	NGC 4953	Galaxy	CEN	13.1	12.9	1.2'	Sa			
NGC 4810	Galaxy	VIR	13.7	14	1.4'	Ir			south comp. NGC 4809 @ 0.8'	NGC 4955	Galaxy	HYA	12.2	13.1	1.9'	Elliptical			
NGC 4811	Galaxy	CEN	13	13.1	1.3'	SBO-a				NGC 4956	Galaxy	CVN	12.4	13.1	1.5'	SO			H II 413
NGC 4812	Galaxy	CEN	13.1	12.1	1.2'	SO				NGC 4957	Galaxy	COM	13	13.2	1.2'	Elliptical			H II 397;P w NGC 4961 @ 12.5'
NGC 4814	Galaxy	UMA	12	14	3.3'	SB/P			H I 243	NGC 4958	Galaxy	VIR	10.7	12.3	3.9'	SBO			H I 130;Lenticular
NGC 4816	Galaxy	COM	12.8	13.1	1.3'	E-SO				NGC 4960	Galaxy	COM	13.8	-	1.6'	SBc			
NGC 4818	Galaxy	VIR	11.1	13	3.4'	SBab			H II 549	NGC 4961	Galaxy	COM	13.6	14.1	1.6'	SBc			H II 398;P w NGC 4957 @ 12.5'
NGC 4819	Galaxy	COM	13.2	13.1	0.9'	SBa			H II 346;P w NGC 4821 @ 1.8'	NGC 4962	Galaxy	COM	13.6	-	1.3'	Elliptical			H III 303
NGC 4822	Galaxy	VIR	14	-	1.2'	E-SO				NGC 4963	Galaxy	CVN	13.2	12.7	0.8'	S			H II 663
NGC 4825	Galaxy	VIR	11.7	12.5	2'	E-SO			H II 563	NGC 4964	Galaxy	UMA	13.2	12.5	1.1'	SO			H III 779
NGC 4827	Galaxy	COM	12.9	13.4	1.4'	E-SO Ba			H II 384	NGC 4965	Galaxy	HYA	12.1	13.8	2.4'	SBcd			
NGC 4830	Galaxy	VIR	12.1	12.8	1.8'	E-SO Ba				NGC 4966	Galaxy	COM	13.3	12.4	1'	SBab Rir			H III 304
NGC 4831	Galaxy	HYA	12.4	12.6	1.7'	E-SO Ba				NGC 4968	Galaxy	HYA	12.8	13.1	1.9'	SBO			
NGC 4832	Galaxy	CEN	12.2	13	1.8'	SO				NGC 4970	Galaxy	HYA	12.2	12.8	1.8'	SO			H III 765
NGC 4835	Galaxy	CEN	11.6	12.8	4.3'	SBbc				NGC 4971	Galaxy	COM	13.4	13.4	1'	SBO Rir			
NGC 4835A	Galaxy	CEN	13.3	13.2	2.5'	Sc				NGC 4973	Galaxy	UMA	13.3	-	0.5'	Elliptical			H III 781
NGC 4836	Galaxy	VIR	13	-	1.4'	Scd				NGC 4976	Galaxy	CEN	10	13.1	5.1'	Elliptical			
NGC 4838	Galaxy	VIR	13	-	1.7'	SB Ring				NGC 4977	Galaxy	UMA	13.3	14.1	1.5'	Sb			H III 780
NGC 4839	Galaxy	COM	12.1	14.3	4'	Elliptical			H II 386;NGC 4842 @ 2.6';comp. superimposed @	NGC 4978	Galaxy	COM	13.1	13.2	1.5'	Sa			
NGC 4840	Galaxy	COM	13.7	12.9	0.7'	Elliptical			H II 385	NGC 4979	Galaxy	COM	13.8	13.4	1'	SB/P			P w 4202 @ 13 'H III 346
NGC 4841A	Galaxy	COM	12.8	13.8	1.7'	Elliptical			H II 387;separation from NGC 4841B is 0.7'	NGC 4980	Galaxy	HYA	12.6	12.7	1.6'	SBa			
NGC 4841B	Galaxy	COM	12.6	13.9	1.3'	E pec			separation from NGC 4841A is 0.7'	NGC 4981	Galaxy	VIR	11.3	13	2.8'	SBbc Rir			H II 189
NGC 4843	Galaxy	VIR	13	12.8	2.1'	Sa			H III 613	NGC 4983	Galaxy	COM	13.9	13.5	1.1'	SBO-a			H III 365
NGC 4845	Galaxy	VIR	11.2	13.1	4.9'	Sab			H II 536;edge on w dust lane	NGC 4984	Galaxy	VIR	11.3	13.1	3'	SBO-a			H II 301
NGC 4846	Galaxy	CVN	13.5	13	1.3'	SBbc				NGC 4985	Galaxy	CVN	13.7	14	1.3'	SO			H III 654
NGC 4848	Galaxy	COM	13.7	13.3	1.6'	SBc				NGC 4986	Galaxy	CVN	13.2	13.6	1.7'	SBb			H III 401
NGC 4849	Galaxy	COM	12.9	13.6	1.9'	SO			P w IC 838 (=Ho 495b) @ 1.9'	NGC 4987	Galaxy	CVN	13.4	13.2	1.2'	Elliptical			H II 815
NGC 4852	Opn CL	CEN	8.9	-	11'	II 2 p	60			NGC 4988	Galaxy	CEN	12.8	12.5	1.7'	Sa			
NGC 4853	Galaxy	COM	13.6	13	0.8'	E-SO Rir				NGC 4989	Galaxy	VIR	14	-	1.6'	SO			H II 185
NGC 4854	Galaxy	COM	13.9	-	1.2'	SBO				NGC 4992	Galaxy	VIR	13.4	13.1					

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	
NGC 5019	Galaxy	VIR	13.5	12.7	0.8'	SB/P			H III 545;Many blue patches along the arms	NGC 5150	Galaxy	HYA	12.6	12.7	1.3'	SBbc				
NGC 5020	Galaxy	VIR	11.7	13.9	3.1'	SBbc R			H II 129	NGC 5152	Galaxy	HYA	12.5	12.6	2.1'	SBb				
NGC 5021	Galaxy	CVN	13.4	13.4	1.5'	SBb				NGC 5153	Galaxy	HYA	11.8	13	2'	Elliptical				
NGC 5022	Galaxy	VIR	12.9	12.6	2.5'	Sb				NGC 5154	Galaxy	CVN	13.8	14.2	1.3'	Sc			H III 405	
NGC 5023	Galaxy	CVN	12.3	13.9	5.8'	Sc			H II 664	NGC 5156	Galaxy	CEN	11.7	13.2	2.5'	SBab				
NGC 5025	Galaxy	CVN	13.4	13.5	2'	Sb			H III 649	NGC 5157	Galaxy	CVN	13.3	13.3	1.3'	SBa			H III 651;hints of eF outer disc	
NGC 5026	Galaxy	CEN	11.5	13.4	3.3'	SBa				NGC 5158	Galaxy	COM	12.8	13.1	1.3'	SBab				
NGC 5027	Galaxy	VIR	13.4	13.6	1.2'	SBb				NGC 5161	Galaxy	CEN	11.2	13.8	5.6'	Sc				
NGC 5028	Galaxy	VIR	14	-	1.6'	E6				NGC 5163	Galaxy	UMA	13.6	13.4	1.1'	Elliptical			H III 821	
NGC 5029	Galaxy	CVN	13.1	13.8	1.7'	Elliptical				NGC 5164	Galaxy	UMA	13.7	13.4	1'	SBb			H III 784;comp at 4' PA 281	
NGC 5030	Galaxy	VIR	14	-	1.7'	SBO-a				NGC 5169	Galaxy	CVN	13.5	14.2	2.1'	SBbc			P w NGC 5173 at 5'	
NGC 5031	Galaxy	VIR	14	-	1.7'	Sa				NGC 5170	Galaxy	VIR	11.1	13.3	8.2'	Sc			H V 22;Edge on spiral w some dark lanes	
NGC 5032A	Galaxy	COM	13.6	-	2.1'	SBb			H III 367	NGC 5171	Galaxy	VIR	12.8	12.5	1.1'	E-SO			in a dense part of the cl	
NGC 5033	Galaxy	CVN	10.2	14.4	9.8'	Sc			P w NGC 5005;svBN in B bulge w spir patt of dk lan	NGC 5172	Galaxy	COM	11.9	13.7	3.4'	SBbc			spir;svBN;main knotty arms;poor res	
NGC 5034	Galaxy	UMI	13.2	12.6	0.9'	Sc			H III 909	NGC 5173	Galaxy	CVN	12.1	13.3	1'	E0			H III 672;P w NGC 5173 at 5'5	
NGC 5035	Galaxy	VIR	12.8	13.2	1.4'	SBO-a R				NGC 5174	Galaxy	VIR	13.7	-	3.2'	Sc			H III 45;CGCG 'dbl nebula' is incorrect;* superimp	
NGC 5037	Galaxy	VIR	12.2	12.6	2'	Sa			H II 510;Nearly edge on;13' SSW of NGC 5044	NGC 5175	Star	VIR	13.7	-	-					
NGC 5038	Galaxy	VIR	14	-	1.5'	SO				NGC 5178	Galaxy	VIR	13.8	12.9	0.9'	Sa Ring				
NGC 5041	Galaxy	COM	13.4	14.2	1.7'	Sc				NGC 5180	Galaxy	COM	13	13.2	1.4'	SO			H III 71;vB core in F ext halo;double system	
NGC 5042	Galaxy	HYA	11.8	14.1	4.2'	SBc				NGC 5182	Galaxy	HYA	12.4	13.2	1.9'	SBbc				
NGC 5044	Galaxy	VIR	10.8	13.2	2.6'	E0			H II 511;NGC 5037 and two other F galaxies in field	NGC 5183	Galaxy	VIR	12.7	13	1.9'	Sb			H II 679;P w NGC 5184 at 3.7'	
NGC 5047	Galaxy	VIR	13	-	2.7'	SO			H III 670	NGC 5184	Galaxy	VIR	12.6	13.3	2'	Sbc Ring			H II 680;P w NGC 5183	
NGC 5048	Galaxy	HYA	12.7	12.8	1.5'	E-SO				NGC 5185	Galaxy	VIR	13.3	13.4	1.8'	Sb			H III 642;P w NGC 5181 at 8.4'PA 216	
NGC 5049	Galaxy	VIR	13	13	1.8'	SO			H II 512	NGC 5187	Galaxy	CVN	13.4	13.2	1.3'	Sb Ring			H III 652	
NGC 5050	Galaxy	VIR	13.7	12.7	1.1'	Sa				NGC 5188	Galaxy	CEN	12.1	13.3	3'	SBbc/P				
NGC 5051	Galaxy	HYA	13.2	12.9	1.4'	SBbc				NGC 5190	Galaxy	COM	13.2	12.8	1'	SBb				
NGC 5052	Galaxy	COM	13.2	13.3	1.3'	SBO-a R				NGC 5193	Galaxy	CEN	11.6	12.8	1.9'	E2				
NGC 5053	Glob CL	COM	9.8	-	8.9'	XI			H VI 7;Low surf brightness;1 deg sf M 53	NGC 5193A	Galaxy	CEN	14	-	1.3'	SO				
NGC 5054	Galaxy	VIR	10.9	13.7	5.1'	Sbc			H II 513;Three branch spiral	NGC 5196	Galaxy	VIR	14	13.1	0.8'	E-SO				
NGC 5056	Galaxy	COM	13.1	13.6	1.8'	Sc			H III 306;Brightest in cluster;NGC 5057 @ 6' :PA35	NGC 5198	Galaxy	CVN	11.8	13.2	2'	E2			H II 689;red E w compact core;vB vS diff N;in lens	
NGC 5057	Galaxy	COM	13	13.5	1.3'	SO Ring			H III 307	NGC 5201	Galaxy	UMA	13.1	13.5	1.7'	S Ring			complex spir pattern in centr req;2 asym outer arms	
NGC 5060	Galaxy	VIR	13.3	13.1	1.1'	SBb				NGC 5203	Galaxy	VIR	14	-	1.8'	E-SO			H III 507	
NGC 5061	Galaxy	HYA	10.4	12.9	3.5'	E2			H I 138	NGC 5204	Galaxy	UMA	11.3	14.1	5'	Sm			H IV 63; M 101 group;no def N;BM;highly res irreg an	
NGC 5062	Galaxy	CEN	12.2	12.6	2.3'	SO				NGC 5205	Galaxy	UMA	12.2	13.9	3.1'	Sb			NGC 5218 group	
NGC 5063	Galaxy	CEN	12.4	13.8	2.3'	Sa Ring				NGC 5206	Galaxy	CEN	10.6	13.2	3.8'	E-SO Ba				
NGC 5064	Galaxy	CEN	12.1	13.1	2.4'	Sb				NGC 5207	Galaxy	VIR	13.2	13.6	1.7'	Sb			H III 643	
NGC 5065	Galaxy	COM	13.6	13.4	1.3'	SBcd			H III 308	NGC 5208	Galaxy	VIR	13.1	12.9	1.7'	SO			H III 9;early spir;NGC 5209 at 3.7'	
NGC 5066	Galaxy	VIR	14	-	0.7'	Sa				NGC 5209	Galaxy	VIR	13	13.3	1.2'	Elliptical			H III 10;compact;NGC 5210 at 9.7'	
NGC 5068	Galaxy	VIR	10	14	7.3'	SBc			H II 312;Coarse spiral;NGC 5087 in field	NGC 5210	Galaxy	VIR	12.9	13.3	1.3'	Sa			H III 99;sharp edge	
NGC 5072	Galaxy	VIR	14	-	1'	E-SO				NGC 5211	Galaxy	VIR	12.3	13.4	2.1'	SBab			similar to NGC 210	
NGC 5073	Galaxy	VIR	13	-	3.4'	SBc			H III 282	NGC 5213	Galaxy	VIR	13.7	13.2	0.9'	SBb			streamer or disturbed arm southeastw from n part	
NGC 5074	Galaxy	CVN	14	13.4	0.7'	Sb			H III 309	NGC 5214	Galaxy	CVN	13.6	13.5	0.8'	Sc			H III 656;nf of 2	
NGC 5076	Galaxy	VIR	13	-	1.3'	Sa			H III 117	NGC 5215	Galaxy	CEN	12.9	12.8	1.2'	SO			Double galaxy with 5215A; 0.7' 14.2 mag 30 "to we	
NGC 5077	Galaxy	VIR	11.4	12.5	1.9'	E3			H II 193;NGC 5088 and two other F galaxies in field	NGC 5216	Galaxy	UMA	12.6	14	1'	E0p			Arch plume ; bridge to N 5218; Keenan's system	
NGC 5078	Galaxy	HYA	11	13	19.5'	Sa			H II 566;Dust lane;Nearly edge-on	NGC 5216A	Galaxy	UMA	14	-	1.2'	S				
NGC 5079	Galaxy	VIR	12	-	1.5'	SBbc/P			H III 118	NGC 5217	Galaxy	COM	12.6	13.4	1.5'	Elliptical			brightest in group w at least 6 galaxies	
NGC 5081	Galaxy	COM	13	13.5	2.2'	SBb			Comp superimp at 0.9'	NGC 5218	Galaxy	UMA	12.3	13.1	1.8'	SBb/P			H II 842;Long bridge;plume Seyfert;P w NGC 5216	
NGC 5082	Galaxy	CEN	12.8	13.2	1.5'	SBO R				NGC 5219	Galaxy	CEN	13.3	-	1.7'	Sb			2m30s;3' Error in NGC position	
NGC 5084	Galaxy	VIR	10.5	13.4	10.6'	SO			H II 313	NGC 5220	Galaxy	CEN	12.2	12.6	2.4'	Sa				
NGC 5085	Galaxy	HYA	11.3	13.6	3.5'	Sc			H II 780	NGC 5221	Galaxy	VIR	13	13.6	2.4'	Sb Ring			broad streamers from s side;prob distort by 5222.5	
NGC 5087	Galaxy	VIR	11.4	12.8	2.5'	E4			H III 724	NGC 5223	Galaxy	CVN	13	13.7	1.5'	E1			Brightest in subgroup in CGCG;NGC 5228 at 5.7'	
NGC 5088	Galaxy	VIR	12.4	13	2.7'	Sbc			13' ENE from NGC 5077	NGC 5225	Galaxy	CVN	13.5	12.4	0.7'	S			H III 822	
NGC 5089	Galaxy	COM	13	13.3	1.7'	SBc			H II 327;Peculiar;dif irr outer disc;prob twisted plane	NGC 5227	Galaxy	VIR	13.1	14	1.8'	SBb			H III 928	
NGC 5090	Galaxy	CEN	11.6	13.7	2.7'	E2				NGC 5228	Galaxy	CVN	13.3	13.1	1'	E-SO			H III 408;NGC 5223 Group	
NGC 5090A	Galaxy	CEN	13	12.9	1.7'	SO				NGC 5229	Galaxy	CVN	13.7	14.2	3.3'	SBcd				
NGC 5090B	Galaxy	CEN	13.2	13.6	1.9'	SBb				NGC 5230	Galaxy	VIR	12.1	13.5	2.1'	SBc			brst in group;disturbed by 5222 @ 9.5';well def spir	
NGC 5091	Galaxy	CEN	13.1	12.7	1.8'	Sb				NGC 5231	Galaxy	VIR	13.4	13.3	1.1'	SBa			alm stell	
NGC 5092	Galaxy	COM	13.3	13.3	1'	Elliptical				NGC 5232	Galaxy	VIR	13	-	1.5'	Sa				
NGC 5093	Galaxy	CVN	13.7	13.5	1.4'	Sa			H III 633	NGC 5233	Galaxy	CVN	13.9	13	1.1'	Sab			H III 425;NGC 5223 Group	
NGC 5094	Galaxy	VIR	14	-	1.1'	S			H III 539	NGC 5234	Galaxy	CEN	13	12.9	1.3'	SBO-a R				
NGC 5095	Galaxy	VIR	13.7	12.8	1.2'	Sa				NGC 5237	Galaxy	CEN	12.5	13.6	2'	Elliptical				
NGC 5101	Galaxy	HYA	10.6	13.9	5.7'	SBO-a R			H II 567	NGC 5238	Galaxy	CVN	13.4	14.2	1.5'	Sd			pair of blue post-eruptive Sc's w compact nuclei	
NGC 5102	Galaxy	CEN	9.6	13	8.6'	E-SO			17' nf Iota CEN	NGC 5239	Galaxy	BOO	12.8	13.9	1.8'	SBbc			H III 101;dif irr annex n;disrupted spir arm?	
NGC 5103	Galaxy	CVN	12.6	12.8	1.4'	Pec			acicular? main body w arc-shaped filaments;poss ri	NGC 5240	Galaxy	CVN	13.1	14.1	1.9'	SBc			H III 409	
NGC 5104	Galaxy	VIR	13.7	12.7	1.2'	Sa				NGC 5243	Galaxy	CVN	13.1	12.5	1.5'	Sbc			H III 620	
NGC 5105	Galaxy	VIR	11.8	12.8	2'	SBc				NGC 5244	Galaxy	CEN	12.5	12.3	1.7'	Sb				
NGC 5107	Galaxy	CVN	13.2	12.9	1.7'	SBcd			H III 619;P w NGC 5112 at 13'	NGC 5246	Galaxy	VIR	13.6	13.3	1'	SBb				
NGC 5109	Galaxy	UMA	12.8	12.4	1.7'	Sbc			H II 826;NGC 5113 at 5' nf	NGC 5247	Galaxy	VIR								

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 5297	Galaxy	CVN	11.8	13.8	5.7'	SBc			H I 180;P w NGC 5296 at 1'6";vBN;B lens w knotty	NGC 5416	Galaxy	BOO	13.3	13.3	1.4'	Sc			H III 56;chaotic spir pattern
NGC 5298	Galaxy	CEN	13.1	12.9	1.4'	SBb				NGC 5417	Galaxy	BOO	13	12.7	1.5'	Sa			H III 11
NGC 5300	Galaxy	VIR	11.4	13.8	3.8'	SBc Ring			H II 533;face on spiral	NGC 5418	Galaxy	BOO	13.4	12.7	1.1'	SBbc			only bar vis on PA prints
NGC 5301	Galaxy	CVN	12.7	13.9	4'	SBc			B bulge part obs by dk lane;vSN or no def N; 2 arm	NGC 5419	Galaxy	CEN	10.9	13.7	4.1'	E4			
NGC 5302	Galaxy	CEN	12.1	12.6	1.7'	SBO-a				NGC 5420	Galaxy	VIR	13	-	1.4'	Sb			
NGC 5303A	Galaxy	CVN	12.9	-	0.9'	Sc			H III 681;hints of 2 short jets or streamers on sf side	NGC 5422	Galaxy	UMA	11.8	12.8	3.5'	Sa			H I 230;svBN w B lens;listed as N 5423 prob misprint
NGC 5304	Galaxy	CEN	12.6	13	1.5'	E4				NGC 5423	Galaxy	BOO	12.8	13.1	1.5'	E-SO			NGC 5431 at 4.8' PA 75;sev comps <15mag near
NGC 5305	Galaxy	CVN	13.6	14	1.5'	SBb			H III 621;P w UGC 8724	NGC 5424	Galaxy	BOO	13.1	13.7	1.6'	SO			
NGC 5306	Galaxy	VIR	12.1	12.4	1.4'	SO			H II 306	NGC 5425	Galaxy	UMA	13.6	13.5	1.9'	Scd			
NGC 5307	Pln Neb	CEN	12.1	7.8	15"	3		14.7		NGC 5426	Galaxy	VIR	12.1	13.6	3'	Sc			H II 309;P w NGC 5427
NGC 5308	Galaxy	UMA	11.4	12.3	3.7'	SO			H I 255;slightly asym;vBN;diamond-shaped	NGC 5427	Galaxy	VIR	11.4	13.3	2.9'	SBc			H II 310;Face on spiral;P w NGC 5426 @ 2.8' south
NGC 5311	Galaxy	CVN	12.3	14.1	2.6'	Sa			H II 710	NGC 5430	Galaxy	UMA	11.9	12.8	2.3'	SBb			H II 827;svBN in B lens w B rim;"superp 22" from N
NGC 5313	Galaxy	CVN	12	12.7	1.7'	Sb			H II 711	NGC 5431	Galaxy	BOO	13.8	12.7	0.8'	S pec			
NGC 5314	Galaxy	UMI	13.7	-	1'	S				NGC 5433	Galaxy	CVN	13.6	12.9	1.6'	Sd			H III 653;3rd of 3
NGC 5317	Galaxy	VIR	11.2	-	6.1'	SBc/P			see 5364	NGC 5436	Galaxy	BOO	13.9	12.9	1.1'	Sa			NGC 5437 at 3.4' PA 154
NGC 5318	Galaxy	CVN	13.5	-	1.5'	SBO			H III 423;NGC 5321 4.7' sf;Brightest in group	NGC 5440	Galaxy	CVN	12.3	13.6	3.1'	Sa			H II 416;NGC 5444 Group;Comp 5' PA 154
NGC 5320	Galaxy	CVN	12.1	13.9	3.6'	SBc			H II 669	NGC 5443	Galaxy	UMA	12.3	13.2	2.7'	SBb			H II 799
NGC 5322	Galaxy	UMA	10.2	13.6	6'	E2			H I 256;B diff. N;smooth neb	NGC 5444	Galaxy	CVN	11.9	13.6	2.5'	E1			H II 417;P w NGC 5445 at 6.6';Brightest in group
NGC 5323	Galaxy	UMI	13.5	12.8	1.4'	Sab			H II 899;compact; sev F galaxies nearby	NGC 5445	Galaxy	CVN	13	12.9	1.5'	SO			H III 413;NGC 5444 Group
NGC 5324	Galaxy	VIR	11.7	13.3	2.3'	Sc			H II 307	NGC 5447	Neb+Gx	UMA	-	-		E+			H III 787;knot on the arm of NGC 5457 = M 101
NGC 5326	Galaxy	CVN	11.9	12.7	2.2'	Sab			H II 712	NGC 5448	Galaxy	UMA	11	13	3.8'	SBa			H II 691;vBN w F bar
NGC 5327	Galaxy	VIR	12.6	13.6	1.9'	SBb			H II 685;Brightest in group;both comps are 15 mag	NGC 5449	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5328	Galaxy	HYA	11.6	12.5	1.8'	E2			H III 923	NGC 5450	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5329	Galaxy	VIR	12.4	13	1.3'	Elliptical			H III 549;vB core;several vF comps within 10'	NGC 5451	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5330	Galaxy	HYA	13.8	11.6	0.5'	Elliptical				NGC 5452	Galaxy	UMI	13.3	14.3	2'	SBcd			H III 947
NGC 5332	Galaxy	BOO	12.9	12.6	0.9'	E-SO				NGC 5453	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5333	Galaxy	CEN	11.9	-	1.9'	SBO				NGC 5454	Galaxy	BOO	12.7	13.6	1.8'	SO			P w UGC 8996 15.5mag 1.7"x0.2'
NGC 5334	Galaxy	VIR	11.3	13.9	4.1'	SBc			Low surf bright;H III 665	NGC 5455	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5335	Galaxy	VIR	12.8	13.9	2.1'	SBb				NGC 5456	Galaxy	BOO	12.9	12.9	1.2'	SO			
NGC 5336	Galaxy	CVN	12.8	13.3	1.4'	Sc			H II 670	NGC 5458	Neb+Gx	UMA	-	-		E+			knot on the arm of NGC 5457 = M 101
NGC 5337	Galaxy	CVN	12.5	12.7	1.7'	S pec			H III 698	NGC 5459	Galaxy	BOO	13.1	13.1	1.1'	SO			
NGC 5338	Galaxy	VIR	12.4	13.6	2.5'	SBO			v lq grp of S F galaxies nr mbrs of CGCG cl	NGC 5460	Opn CL	CEN	5.6	-	25'	II 3 m	40	8	
NGC 5339	Galaxy	VIR	12	-	1.9'	SBa				NGC 5461	Neb+Gx	UMA	-	-		E+			H III 788;knot on the arm of NGC 5457 = M 101
NGC 5341	Galaxy	CVN	13.2	12.6	1.3'	SBd				NGC 5462	Neb+Gx	UMA	-	-		E+			H III 789;knot on the arm of NGC 5457 = M 101
NGC 5342	Galaxy	UMA	13.5	12.5	1.1'	SO			H III 849	NGC 5463A	Galaxy	BOO	14	-	1.2'	S pec			
NGC 5343	Galaxy	VIR	14	-	1.5'	E-SO			H II 308	NGC 5464	Galaxy	HYA	13	12.9	1.3'	Ir+			
NGC 5345	Galaxy	VIR	12.4	13.2	1.6'	Sa			H II 686	NGC 5466	Glob CL	BOO	9.1	-	9.2'	XII			H VI 9
NGC 5346	Galaxy	CVN	13.8	14.2	2'	Sc				NGC 5468	Galaxy	VIR	12.5	14.4	2.4'	SBc			H III 286;svB elong N or bar;* nr = NGC 5467
NGC 5347	Galaxy	CVN	12.6	13.4	1.6'	SBbc			H II 424	NGC 5470	Galaxy	VIR	13.4	13.2	2.5'	Sb			
NGC 5348	Galaxy	VIR	13.1	13.6	3.5'	SBbc				NGC 5473	Galaxy	UMA	11.4	12.8	2.2'	E2			H I 231;svBN;sh. bar;F lens;in field of M 101
NGC 5350	Galaxy	CVN	11.3	13.3	3.2'	SBbc			H II 713;NGC 5353 at 5';vsvBN in B bar;2 knotty arm	NGC 5474	Galaxy	UMA	10.8	13.9	5'	Sc			low surf. bright;smooth part res cent w vsFN;asym
NGC 5351	Galaxy	CVN	12.1	13.6	2.9'	SBb Ring			H II 697;P w NGC 5349;SBN w knotty arms	NGC 5475	Galaxy	UMA	12.6	12.5	1.9'	Sa			H II 800
NGC 5352	Galaxy	CVN	13	13.1	1.2'	E-SO			H II 415	NGC 5476	Galaxy	VIR	14	-	1.5'	Sd			H III 287
NGC 5353	Galaxy	CVN	11	11.8	2.8'	SO			P w NGC 5354 at 1.3' n;vBN;lens: diamond shape	NGC 5477	Galaxy	UMA	14	14.7	1.6'	Sm			H III 790
NGC 5354	Galaxy	CVN	11.4	11.9	2.2'	SO			H II 715;similar to N 1316;P w NGC 5353 contact	NGC 5478	Galaxy	VIR	13.6	13.2	1.1'	SBbc			H III 762
NGC 5355	Galaxy	CVN	13.1	12.8	1.2'	SO			H III 699 near 5654	NGC 5480	Galaxy	UMA	12.1	12.7	1.6'	Sc			P w NGC 5481 at 3.2;svBN;sev filam branch;arms p
NGC 5356	Galaxy	VIR	12.6	13.5	2.9'	SBbc			H III 506	NGC 5481	Galaxy	UMA	12.3	13.3	1.4'	E-SO			H II 693;P w NGC 5480
NGC 5357	Galaxy	CEN	12	12.8	1.6'	E0				NGC 5482	Galaxy	BOO	12.9	12.9	1.2'	SO			H III 59
NGC 5358	Galaxy	CVN	13.6	12.3	1.1'	Sa				NGC 5483	Galaxy	CEN	11.2	13.8	3.9'	SBc			
NGC 5360	Galaxy	VIR	13.3	13.8	1.6'	SBO-a			P w NGC 5364 at 8'	NGC 5485	Galaxy	UMA	11.4	12.9	2.8'	SO			P w NGC 5484 at 3'9;NGC 5486 at 6';sBN in B lens
NGC 5361	Galaxy	CVN	13.8	12.6	0.8'	S pec			H III 682	NGC 5486	Galaxy	UMA	13.3	14	1.5'	Sm			H II 801;P w NGC 5485 at 6'
NGC 5362	Galaxy	CVN	12.3	13.1	2.2'	Sb			H II 671;short streamer s or superimp comp?	NGC 5488	Galaxy	CEN	11.9	13.1	3.4'	SBbc			
NGC 5363	Galaxy	VIR	10.1	12.5	4.6'	Sa			H I 6;P w NGC 5364 at 14.5' 2 B dif N in contact	NGC 5489	Galaxy	CEN	12.2	12.5	1.5'	Sa			
NGC 5364	Galaxy	VIR	10.5	14.1	6.1'	SBc/P			H II 534;sBN in smooth cent w dk matter	NGC 5490	Galaxy	BOO	12.1	13.8	2.5'	E2			H III 32;Brightest in group;sev 15m comps within 10
NGC 5365	Galaxy	CEN	11.4	13.1	3'	SBO Ring				NGC 5490A	Galaxy	BOO	13	-	2.5'	Elliptical			
NGC 5365A	Galaxy	CEN	12.8	12.9	2.6'	SBb				NGC 5490C	Galaxy	BOO	13.9	13.6	1.1'	Sbc			At 5' nf NGC 5490;7' s of IC 983
NGC 5365B	Galaxy	CEN	13.2	12.4	1.6'	Sab				NGC 5491A	Galaxy	VIR	13.9	-	1.4'	Sb			H II 890;s of 2;contact pr;UGC 9072
NGC 5366	Galaxy	VIR	13.7	12.6	0.7'	Sa				NGC 5492	Galaxy	BOO	12.8	13.2	2.4'	SB/P			H II 876;asym spindle;spir
NGC 5367	Brn Neb	CEN	-	-	4'	R			Double neb incl IC 4347	NGC 5493	Galaxy	VIR	11.4	12.1	1.7'	SO			vB diff N in B diamond-shaped lens;F nearly circular
NGC 5368	Galaxy	UMA	13	12.4	0.9'	SBab			H III 786	NGC 5494	Galaxy	CEN	11.9	13.3	2.3'	Sc			
NGC 5370	Galaxy	UMA	13.1	13.3	1.1'	SBO Ring			H II 843	NGC 5495	Galaxy	HYA	12.8	13.2	1.5'	SBc			
NGC 5371	Galaxy	CVN	10.6	13.4	4.2'	SBbc			vsB diff N;weak bar;sev knotty filam reg arms	NGC 5496	Galaxy	VIR	12.1	13.5	4.7'	SBcd			edge on w streaky dust lanes
NGC 5372	Galaxy	UMA	13.2	11.5	0.6'	Pec			H III 809;Peculiar	NGC 5498	Galaxy	BOO	13.6	13.3	1'	E-SO			
NGC 5374	Galaxy	VIR	12.5	13.3	1.6'	SBbc			H II 889	NGC 5499	Galaxy	BOO	13.5	12.7	0.9'	Sa			
NGC 5375	Galaxy	CVN	11.5	13.7	3.3'	SBab				NGC 5500	Galaxy	BOO	13.3	13.1	1'	Elliptical			H III 674
NGC 5376	Galaxy	UMA	12.1	13.1	2.1'	SBab			H I 238;sBN;weak bar	NGC 5501	Galaxy	VIR	13.5	13.2	1.1'	Sa			
NGC 5377	Galaxy	CVN	11.3	13.4	3.5'	SBa			H I 187	NGC 5504A	Galaxy	BOO	13.9	-	1.3'	SBbc			Brightest in group
NGC 5378	Galaxy	CVN	12.5	14.2	2.7'	SBa			P w NGC 5380 at 11'	NGC 5505	Galaxy	BOO	13.2	12.8	1'	SBa			
NGC 5379	Galaxy	UMA	12.9	13.5	2.1'	SBO-a			H I 239;P w NGC 5389 at 4.1' f vsBN	NGC 5506	Galaxy	VIR	11.9	12.7	2.7'	Sap			H II 687;P w NGC 5507 at 4'
NGC 5380	Galaxy	CVN	12.3	13.3	1.9'	Sa			H II 698;P w NGC 5378 at 11'	NGC 5507	Galaxy	VIR	12.5	12.8	1.6'	SBO			H IV 49;P w NGC 5506 at 4'
NGC 5381	Opn CL	CEN	12	-	14'	II 2 p	50			NGC 5508	Galaxy	BOO	13.1	14.1	2'	SO			H I 255
NGC 5382	Galaxy	VIR	12.6	13	1.5'	SO			H III 546;P w NGC 5386 at 5.2';sev comps nr	NGC 5510	Galaxy	VIR	14	-	1.4'	Ir Bar			
NGC 5383	Galaxy	CVN	11.4	13.6	2.6'	SBb			eBN w complex str;weak bar & lens w dk lanes;2 arm	NGC 5513	Galaxy	BOO	12.6	13.3	1.9'	SO			H II 877
NGC 5384	Galaxy	VIR	13.1	13.1	1.5'	SO				NGC 5514	Galaxy	BOO	12.7	13.6	1.4'	Sab			Double contact system is distorted w plumes
NG																			

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 5562	Galaxy	BOO	13.5	12.6	0.7'	S				NGC 5704	Galaxy	BOO	13.9	-	1.6'	Sd			H II 649
NGC 5566	Galaxy	VIR	10.6	13.3	6.6'	SBab R			H I 144;double galaxy	NGC 5705	Galaxy	VIR	12.7	14.3	3'	SBcd			NGC 5713 at 26.5' PA 12
NGC 5569	Galaxy	VIR	13.2	14	1.7'	SBc			vsN in B sh bar;F poor;res. arms. Near 5566	NGC 5707	Galaxy	BOO	12.5	12.6	2.5'	Sab			comp 1.5' PA 26
NGC 5574	Galaxy	VIR	12.4	12.7	1.5'	SB0			H I 145;svBN;diff lens w less flatten envel , near 557	NGC 5708	Galaxy	BOO	13.4	13.2	1.6'	Sd			B patches;prob. v late spir
NGC 5575	Galaxy	VIR	13.3	12.9	0.9'	SO				NGC 5709	Galaxy	BOO	13.6	13.1	1.6'	SBa			NGC 5706 at 2.1' PA 311 0.4X0.3' m=15.7;* superi
NGC 5576	Galaxy	VIR	11	13.2	3'	E2			triple group w NGC 5574 at 2.9' and NGC 5577 at 1	NGC 5710	Galaxy	BOO	13	13.3	1.2'	Elliptical			H III 895;P w NGC 5711 at 3.5' PA 155
NGC 5577	Galaxy	VIR	12.3	13.4	3.2'	Sbc Ring			sBN;v fine arms;NGC 5576 group	NGC 5711	Galaxy	BOO	13.9	13.1	1'	SBa			P w NGC 5710
NGC 5579	Galaxy	BOO	13.6	14.5	1.9'	Sc			Arp 69;asym 3-armed spir;one arm broken;	NGC 5713	Galaxy	VIR	11.2	13.1	2.9'	SBbc			H I 182;NGC 5713 group;NGC 5719 at 11.5' interac
NGC 5582	Galaxy	BOO	11.6	13.3	2.8'	Elliptical			H II 754	NGC 5714	Galaxy	BOO	13.4	13.5	3.2'	Sc			H III 675;NGC 5717 at 4.8' nf 0.9'X0.5' m=15.4
NGC 5583	Galaxy	BOO	13.4	12.4	0.8'	S			vB main body	NGC 5715	Opn CL	CIR	9.8	-	6'	II 2 m	30	11	
NGC 5584	Galaxy	VIR	11.4	13.5	3.4'	SBc			sh. B bar in lens;sev. part. res. branch filam arms	NGC 5716	Galaxy	LIB	13	-	1.9'	SBc			H III 671
NGC 5585	Galaxy	UMA	10.7	13.9	5.8'	SBcd			H I 235;M 101 group	NGC 5718	Galaxy	VIR	12.9	13.3	1.5'	E-SO			H III 550;P w IC 1042 contact pair
NGC 5587	Galaxy	BOO	12.5	13.2	2.6'	Sa			H III 110	NGC 5719	Galaxy	VIR	12.2	13.5	3.2'	SBab/P			vBN in bar strong dk lanes on lens and on near side
NGC 5589	Galaxy	BOO	13.3	13.3	1.1'	SBa			H III 416;P w NGC 5590 at 4.8'	NGC 5720	Galaxy	BOO	13.4	14.4	2.1'	Sb			
NGC 5590	Galaxy	BOO	12.3	13.5	1.8'	SO			H III 417;P w NGC 5589	NGC 5725	Galaxy	VIR	13.6	13.3	1.2'	SBcd			
NGC 5592	Galaxy	HYA	12.8	12.8	1.5'	SBbc			H III 924	NGC 5726	Galaxy	LIB	12.8	13.1	1.3'	SO pec			
NGC 5593	Opn CL	LUP	-	-	8'	III 1 p	15	7.8		NGC 5727	Galaxy	BOO	13.7	14.6	2.3'	Sd			
NGC 5595	Galaxy	LIB	12	13	2.4'	SBc			H III 121	NGC 5728	Galaxy	LIB	11.4	13.1	3.2'	SBab			H I 184
NGC 5596	Galaxy	BOO	13.4	13.1	1.1'	SO			H III 418	NGC 5729	Galaxy	LIB	13	-	2.6'	Sb			H III 508
NGC 5597	Galaxy	LIB	12	13.2	2.1'	Sbc Ring			H III 122	NGC 5731	Galaxy	BOO	13.1	12.4	1.6'	Sbc			H III 658
NGC 5598	Galaxy	BOO	13	13.4	1.6'	SO			H III 733;5603 group	NGC 5732	Galaxy	BOO	13.5	13.3	1.4'	Sbc			H III 686
NGC 5599	Galaxy	VIR	13.6	13.1	1.4'	Sb			H III 927	NGC 5733	Galaxy	VIR	14	13	1'	Sc			
NGC 5600	Galaxy	BOO	12.1	12.7	1.5'	Sc			H II 177;vB core or N;asym outer arms	NGC 5734	Galaxy	LIB	12.7	13	1.5'	SO			
NGC 5602	Galaxy	BOO	12.7	12.6	1.5'	Sa			H II 694	NGC 5735	Galaxy	BOO	12.3	13.8	2.4'	SBbc R			H III 133
NGC 5603A	Galaxy	BOO	14	-	1.1'	SO			H III 734;Brightest in group;P w UGC 9216	NGC 5737	Galaxy	BOO	13.5	13.4	1.3'	SBb			H III 896
NGC 5604	Galaxy	VIR	12.8	13.3	1.9'	Sa			H III 668	NGC 5738	Galaxy	VIR	13.9	12.4	1'	SO			
NGC 5605	Galaxy	LIB	12.3	13	1.5'	SBc			H III 120	NGC 5739	Galaxy	BOO	12.1	13.6	1.9'	SBO-a			H I 171;slightly asym;main body 1.5'X1.4'
NGC 5606	Opn CL	CEN	7.7	-	3'	I 1 p	15	7.9		NGC 5740	Galaxy	VIR	11.9	13.3	2.8'	Sbb Ring			H II 538;P w NGC 5746 at 18.4' PA 26;vBN;weak ba
NGC 5607	Galaxy	UMI	13.4	12.9	0.9'	S pec			H II 331;Peculiar	NGC 5742	Galaxy	LIB	14	-	1.3'	SO			
NGC 5608	Galaxy	BOO	13.4	14.6	2.6'	lrp+			H II 673;hints of spir pattern?;ecc nucl	NGC 5743	Galaxy	LIB	13	12.4	1.4'	Sb			
NGC 5610	Galaxy	BOO	13.2	13.4	2'	SBab			H III 136	NGC 5745	Galaxy	LIB	14	-	1.7'	Sa			
NGC 5611	Galaxy	BOO	12.6	12.3	1.3'	SO			comp at 3' pa 10	NGC 5746	Galaxy	VIR	10.3	12.6	6.9'	SBb			H I 126;vsBN in B cent.bulge;NGC 5740 at 18';edge
NGC 5614	Galaxy	BOO	11.7	13.3	2.4'	Sab			NGC 5614 superimp;P w NGC 5613 at 2' PA 351;di	NGC 5749	Opn CL	LUP	8.8	-	10'	IV 1 p	30		
NGC 5616	Galaxy	BOO	13.8	13.6	2.1'	SBbc			H III 419;2 or 3 conds in n part;asym	NGC 5750	Galaxy	VIR	11.6	13.2	3.2'	SBO-a R			H I 183;seBN in diff inner lens;broad diff bar w dk la
NGC 5618	Galaxy	VIR	13.4	13.9	1.6'	SBc			H III 763	NGC 5751	Galaxy	BOO	13.2	13.2	1.5'	Sc			H II 809
NGC 5619A	Galaxy	VIR	14	-	2.2'	Sb				NGC 5756	Galaxy	LIB	12.3	12.9	2.3'	SBbc			
NGC 5622	Galaxy	BOO	13.2	13.6	1.7'	Sb			H III 677	NGC 5757	Galaxy	LIB	11.9	13	2.1'	SBb			H III 690
NGC 5623	Galaxy	BOO	12.5	13.1	1.6'	Elliptical			H II 329	NGC 5758	Galaxy	BOO	13.5	13.1	1.1'	E-SO			comp 15mag;npp of 2
NGC 5624	Galaxy	BOO	13.1	12.8	1.1'	S pec			Peculiar?	NGC 5760	Galaxy	BOO	13.3	13.2	1.5'	Sa			H III 885;IC 4507 at 2.8' PA 183 0.8'X0.4' m=15.7
NGC 5626	Galaxy	HYA	13	12.9	1.2'	Sa				NGC 5761	Galaxy	LIB	12.4	12.5	1.3'	SO			GALXY @ 14 48.4 -20 10 fits descr but 14 47.7 -20
NGC 5627	Galaxy	BOO	12.9	13.4	1.7'	SO			brightest in subgroup	NGC 5762	Galaxy	BOO	12.7	13.3	1.5'	S pec			B main body;comp 3.2';RA in UGC disagrees w CC
NGC 5628	Galaxy	BOO	13.3	13.1	1.1'	Elliptical				NGC 5764	Opn CL	LUP	12.6	-	2'	II 2 p	12		
NGC 5629	Galaxy	BOO	12.1	13.2	1.8'	SO			Brightest in group, incl IC 1018 and IC 1019 both 15	NGC 5766	Galaxy	LIB	13.4	12.9	1.1'	SBbc			
NGC 5630	Galaxy	BOO	13.1	13.4	2.2'	Sd			H II 674	NGC 5768	Galaxy	LIB	12.5	13.4	1.8'	Scp			H III 373;SBN;sev knotty branch arms;poor res
NGC 5631	Galaxy	UMA	11.5	12.5	2'	SO			vB diff N w F dk crescent on one side;	NGC 5770	Galaxy	VIR	12.3	12.9	1.7'	SBO			H II 576;comp 2 ;PA178;0.9'X0.5' v dif;dwarf
NGC 5633	Galaxy	BOO	12.4	13.3	2.1'	Sb			H I 185;neutral Sb	NGC 5771	Galaxy	BOO	13.6	12.8	0.8'	Elliptical			H III 129
NGC 5634	Glob CL	VIR	9.5	-	4.9'	IV			H I 70;11 mag star on E edge	NGC 5772	Galaxy	BOO	12.8	13.8	2.1'	Sb			vBN 0.5'X0.35';poor res
NGC 5635	Galaxy	BOO	12.5	13.4	2.3'	Sb			H III 132	NGC 5773	Galaxy	BOO	13.5	13	0.8'	Sa			H III 130;Main body 0.4'X0.4';P w NGC 5771
NGC 5636	Galaxy	VIR	12.7	13.7	1.6'	SBO-a F			H II 580;NGC 5638 group;vsBN;F bar	NGC 5774	Galaxy	VIR	12.1	14.2	3'	SBcd			P w NGC 5775 at 4.5' PA 123
NGC 5637	Galaxy	BOO	13.8	12.7	0.9'	Scd			H II 357;slightly asym;high surf brightn	NGC 5775	Galaxy	VIR	11.4	12.8	4'	SBc			IC1070 @ 4';0.7X0.25;m=15.4;strong dk lane;edge
NGC 5638	Galaxy	VIR	11.2	13.2	2.3'	E1			UGC 9308;P w NGC 5636 at 2';Brightest in cluster	NGC 5777	Galaxy	DRA	13.3	13.5	3.1'	Sb			H III 806;P w UGC 9570 at 2.8' PA 125
NGC 5641	Galaxy	BOO	12.2	13.3	2.4'	SBab				NGC 5778	Galaxy	BOO	13.8	13.8	1.2'	Elliptical			
NGC 5642	Galaxy	BOO	12.6	13.6	1.8'	Elliptical			H III 126;f of 2	NGC 5780	Galaxy	BOO	14	12.7	0.9'	Sab			
NGC 5643	Galaxy	LUP	10	13	4.7'	SBc				NGC 5781	Galaxy	LIB	14	-	1.4'	SBb			
NGC 5644	Galaxy	BOO	12.5	13.2	1.5'	SO			P w NGC 5647 at 4.1';Brightest in cluster	NGC 5783	Galaxy	BOO	12.8	14.4	2.9'	SBc			
NGC 5645	Galaxy	VIR	12.5	13.8	2.6'	SBcd			H II 150;B bar: sev. knotty arms w some branch.;as	NGC 5784	Galaxy	BOO	12.4	13.6	1.9'	SO			UGC 9585 at 4.4';PA274 -- UGC 9585 m=16 : 1.1'X
NGC 5648	Galaxy	BOO	13.1	12.7	1.1'	Sbc			P w NGC 5649 at 5.5'	NGC 5785	Galaxy	BOO	13.6	-	2.9'	SBc			
NGC 5649	Galaxy	BOO	13.2	13.1	1.1'	Sbc			H III 645	NGC 5786	Galaxy	CEN	12	-	2.3'	SBbc			
NGC 5650	Galaxy	VIR	13.5	-	2'	SBc				NGC 5787	Galaxy	BOO	13.1	12.8	0.9'	Compac			sharply delineated neutral ellip. disc compact;ellip.ha
NGC 5652	Galaxy	VIR	12.5	13.4	2'	Sbc			H II 891	NGC 5789	Galaxy	BOO	13.7	13.1	0.9'	Sbd			v patchy spir;B cond on sf edge; 5798 at 21' PA139
NGC 5653	Galaxy	BOO	12.2	12.9	1.7'	Sb Ring			H II 330;vBN;B knotty arms	NGC 5790	Galaxy	BOO	13.6	13.2	0.9'	Sa Ring			
NGC 5654	Galaxy	BOO	12.9	13.3	1.5'	SBO-a			H III 420;Peculiar double nucleus	NGC 5791	Galaxy	LIB	11.7	13	2.5'	Sa			H III 691
NGC 5655	Galaxy	BOO	14	-	1.1'	Sc				NGC 5792	Galaxy	LIB	11.3	13.8	6.8'	SBb			H II 683;vsBN in broad diff bar w strong dk lane
NGC 5656	Galaxy	BOO	11.8	12.8	1.9'	Sab			H II 421	NGC 5793	Galaxy	LIB	13.2	13	1.7'	Sb			
NGC 5657	Galaxy	BOO	13.3	13.5	1.8'	SBb				NGC 5794	Galaxy	BOO	13.4	13.2	1'	S			B core in vF halo;no S0;comp 4.8';PA185;5797 at 5
NGC 5659	Galaxy	BOO	13.9	13.4	1.6'	Sb				NGC 5795	Galaxy	BOO	13.8	12.7	1.6'	Sc			
NGC 5660	Galaxy	BOO	11.9	13.9	2.7'	SBc			H II 695;lrr;P w NGC 5676 at 30.5'	NGC 5796	Galaxy	LIB	11.6	13.2	2.8'	E0			
NGC 5661	Galaxy	VIR	13.3	13	1.5'	SBb			H II 892;nf of 2;UGC 9345 at 6.5' 15.4 mag	NGC 5797	Galaxy	BOO	12.8	12.3	1.1'	Sa			H III 678
NGC 5662	Opn CL	CEN	5.5	-	29'	II 3 m	70	7		NGC 5798	Galaxy	BOO	13.1	13.3	1.4'	lr Bar			H III 131;P w NGC 5789
NGC 5665	Galaxy	BOO	12	12.8	2.1'	SBc			H II 27;Arp 49;peculiar br cond in arms	NGC 5800	Opn CL	LUP	-	-	-				
NGC 5666	Galaxy	BOO	12.8	12.4	0.9'	Compac				NGC 5804	Galaxy	BOO	13.1	13.3	1.2'	SBb			NGC 5797 at 7.1';sev small faint comps w in 10'
NGC 5667	Galaxy	DRA	12.5	13	1.7'	SBc			H II 807	NGC 5806	Galaxy	VIR	11.7	13.3	3.2'	SBb			h NGC 5846 group;eBN in B lens;NGC 5813 21' SE
NGC 5668	Galaxy	VIR	11.5	13.9	3.2'	Scd Ring			vs not vB N;BM										

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 5852	Galaxy	BOO	13.5	12.9	1.1'	S			H III 887	NGC 5999	Opn CL	NOR	9	-	3'	I 3 m	40	12	
NGC 5854	Galaxy	VIR	11.9	12.6	2.7'	SBO-a			H II 544;in NGC 5846 group	NGC 6000	Galaxy	SCO	12.2	13.3	1.9'	SBbc			
NGC 5856	Star	BOO	6	-					H IV 71	NGC 6003	Galaxy	SER	13.4	13	0.9'	SO			
NGC 5857	Galaxy	BOO	13.1	12.6	1.2'	SBb			P w NGC 5859;many S galxys near;vsvBN in B lens	NGC 6004	Galaxy	SER	12.3	13.4	1.8'	SBc			sev F gals near
NGC 5858	Galaxy	LIB	14	-	2'	E6				NGC 6005	Opn CL	NOR	10.7	-	3'	I 2 p	35	11.8	
NGC 5859	Galaxy	BOO	12.4	13.4	3'	SBbc			H II 752;P w NGC 5857 at 2'	NGC 6007	Galaxy	SER	13.2	13.8	1.7'	Sc Ring			P w NGC 6006 at 6'
NGC 5861	Galaxy	LIB	11.6	13.2	3'	SBc Ring			H II 192	NGC 6008	Galaxy	SER	13	13.6	1.4'	SBb			Disturbed ?;np of 2
NGC 5863	Galaxy	LIB	12.8	13.3	1.4'	SB Ring				NGC 6008A	Galaxy	SER	14	-	1.4'	SBb			np of 2
NGC 5864	Galaxy	VIR	11.8	12.6	2.5'	SBO			H II 585;in NGC 5846 group sB diff N in B lens;w blk	NGC 6010	Galaxy	SER	12.6	12.4	2'	Sa			H II 583
NGC 5865	Galaxy	VIR	13.5	-	1.1'	E-SO			H II 684;P w NGC 5868 at 3.6' PA 0	NGC 6011	Galaxy	UMI	13.5	13.8	2'	Sb			H III 313
NGC 5868	Galaxy	VIR	13.4	13.4	1.1'	E-SO				NGC 6012	Galaxy	SER	12	13.1	2.1'	SBab			H II 657
NGC 5869	Galaxy	VIR	11.9	13.2	2.3'	SO			H II 545	NGC 6013	Galaxy	HER	13.6	13.5	1.4'	SBb			
NGC 5870	Galaxy	DRA	13.9	13.9	1.2'	SO				NGC 6014	Galaxy	SER	12.2	13.2	1.7'	SO			
NGC 5872	Galaxy	LIB	14	-	1.5'	SO				NGC 6015	Galaxy	DRA	11.1	13.6	5.4'	Sc			H III 739;Was descr= vF;pL;R;vgbM until update 2;5
NGC 5873	Pln Neb	LUP	12	6.5	3"	2		15.5		NGC 6017	Galaxy	SER	13.1	12.3	0.8'	S			
NGC 5874	Galaxy	BOO	12.4	13.7	2.3'	SBbc				NGC 6018	Galaxy	SER	13.4	13.3	1.4'	Sa			H III 646;P w NGC 6021;UGC 10101
NGC 5875	Galaxy	BOO	12.4	13.5	2.3'	Sb			H II 755;comp 3.1';PA190;0.3'X0.2';F;dif	NGC 6020	Galaxy	SER	12.7	13.1	1.4'	E3			
NGC 5875A	Galaxy	BOO	14	-	0.6'	S pec				NGC 6021	Galaxy	SER	13.1	13.1	1.4'	E5			H III 73;P w NGC 6018
NGC 5876	Galaxy	BOO	12.7	13.7	2.4'	SBab				NGC 6023	Galaxy	SER	13.1	13.4	1.4'	E3			Brightest in group
NGC 5878	Galaxy	LIB	11.5	13.1	3.2'	Sb			H III 736	NGC 6026	Pln Neb	LUP	12.5	12.3	54"	4		13.3	Ring shape
NGC 5879	Galaxy	DRA	11.6	13.3	3.9'	Sbc			H II 757;vsBN;many filam knotty arms;poor res	NGC 6027A	Galaxy	SER	13.9	12.5	0.7'	Sa			
NGC 5882	Pln Neb	LUP	10.5	6.3	7"			13.4		NGC 6027E	Galaxy	SER	13.4	12.1	0.8'	SO			
NGC 5885	Galaxy	LIB	11.8	14.2	3.9'	SB Ring			H III 116	NGC 6028	Galaxy	HER	13.5	13.8	1.3'	Sa Ring			
NGC 5887	Galaxy	SER	13.4	13.4	1.2'	Sa			UGC 9782 at 3.8' PA 50;comp 5' PA 239 0.5X0.1	NGC 6030	Galaxy	HER	12.8	12.5	1.2'	SO			sev comps w in 10'
NGC 5888	Galaxy	BOO	13.4	13.3	1.3'	SBbc			H III 659;NGC 5886 at 4.6' sp m=15.1	NGC 6031	Opn CL	NOR	8.5	-	2'	I 2 p	20	10.9	In Nor OB1?
NGC 5890	Galaxy	LIB	14	-	1.6'	Sa				NGC 6032	Galaxy	HER	13.5	13.4	1.6'	SBb			P w NGC 6035 6' PA 127
NGC 5891	Galaxy	LIB	14	-	0.8'	Sbc				NGC 6033	Galaxy	SER	13.7	13.6	1.1'	Sbc			
NGC 5892	Galaxy	LIB	11.7	14	3.6'	SBcd			Same position as Fath 703 in Burnham's F;S;R;Bm	NGC 6034	Galaxy	HER	13.5	13.4	1'	Elliptical			
NGC 5893	Galaxy	BOO	13.1	13.4	1.2'	SBb			H II 678;NGC 5895-6 at 4'3.vF bridge;total m=15.5	NGC 6035	Galaxy	HER	13.5	13.1	0.9'	SBc			
NGC 5894	Galaxy	DRA	12.9	13	3'	SBm			H II 763	NGC 6036	Galaxy	SER	13.4	12.3	1.1'	Sa			P w NGC 6037 at 3' PA 183
NGC 5897	Glob CL	LIB	8.4	-	8.7'	XI			H VI 19	NGC 6037	Galaxy	SER	14	12.9	0.7'	Sab			
NGC 5898	Galaxy	LIB	11.4	13	2.6'	E1p			H III 138	NGC 6038	Galaxy	CRB	13.5	13.6	1.1'	Sc			H III 622
NGC 5899	Galaxy	BOO	11.7	13	3.3'	SBc			H II 650;vsBN;sev knotty branch arms;strong asym	NGC 6041	Galaxy	HER	13.7	-	1.3'	SBO			IC 1170 superimposed
NGC 5900	Galaxy	BOO	14	13.7	1.4'	Sb			ngc 5899 at 9' NGC 5901(=Ho 702b) at 1' may be	NGC 6042	Galaxy	HER	13.9	13.3	0.8'	E-SO			
NGC 5903	Galaxy	LIB	11.2	13.1	3.2'	E1			H III 139	NGC 6045	Galaxy	HER	13.9	12.8	1.3'	SBc			P w NGC 6047 at 2' PA 173
NGC 5905	Galaxy	DRA	11.7	14.1	3.8'	SBb			H II 758;P w NGC 5908 at 13'	NGC 6047	Galaxy	HER	13.5	13.4	1.1'	EO			
NGC 5906	Galaxy	DRA	-	-	-	E+			Part of NGC 5907	NGC 6048	Galaxy	UMI	12.3	13.7	2.2'	E2			H II 873;np of 2;UGC 10124
NGC 5907	Galaxy	DRA	10.3	13.3	11.8'	Sc			vs bulge nearly hidden by strong dk lane; SN 1940a	NGC 6051	Galaxy	SER	13.1	13.2	1.3'	E4			sev comps
NGC 5908	Galaxy	DRA	11.8	13.2	3.3'	Sb			vsBN in B bulge;strong dk lane;P w NGC 5905	NGC 6052	Galaxy	HER	13	12.4	0.8'	Pec			H III 140;Double system
NGC 5909	Galaxy	UMI	13.7	12.9	1.1'	Sbc			H III 943;Error in CGCG 5909=5912;* superimp	NGC 6055	Galaxy	HER	13.7	13	1'	SBO-a R			P w NGC 6057 at 2' PA 82
NGC 5910	Galaxy	SER	13.6	13.1	0.6'	E-SO			H II 400;Triple system	NGC 6056	Galaxy	HER	13.9	12.9	0.9'	SBO-a			
NGC 5912	Galaxy	UMI	13.7	-	1.2'	E-SO			H III 944;Error in CGCG; MCG +13-11-011	NGC 6058	Pln Neb	HER	13	10.8	25"	3(2)		13.9	H III 637;PK64+48.1
NGC 5913	Galaxy	SER	13.2	13.3	1.6'	SB Ring			broad complex bar;smooth disc outside;no spir arm	NGC 6060	Galaxy	HER	13.1	13.8	2'	SBbc			
NGC 5915	Galaxy	LIB	12.3	13	1.6'	SBab				NGC 6061	Galaxy	HER	13.6	13.3	1'	SO			
NGC 5916	Galaxy	LIB	14	-	2.3'	SBap				NGC 6062	Galaxy	HER	13.6	13.5	1.2'	SBbc			nf of 2
NGC 5918	Galaxy	BOO	13.2	13.5	1.9'	Sc			3 patches in disc may be superimp **	NGC 6063	Galaxy	SER	13.1	13.3	1.7'	Sc			
NGC 5920	Galaxy	SER	13.6	13.4	1.1'	SO				NGC 6067	Opn CL	NOR	5.6	-	13'	I 2 r	100	8.3	Fine field
NGC 5921	Galaxy	SER	10.8	13.9	4.8'	SBbc			H I 148;eBN in B bar	NGC 6068	Galaxy	UMI	12.8	12.4	1'	SBbc			H III 973;np of 2;distorted;UGC 10126
NGC 5923	Galaxy	BOO	13.1	14.2	1.8'	SBbc				NGC 6068A	Galaxy	UMI	14	11.8	0.9'	SO			p @ 2'
NGC 5925	Opn CL	NOR	8.4	-	20'	III 1 m	120			NGC 6070	Galaxy	SER	11.8	13.7	3.6'	Sc			H III 553;vF background of 6 galxys
NGC 5926	Galaxy	SER	13.5	13	0.9'	S pec				NGC 6071	Galaxy	UMI	14	13.6	0.8'	E-SO			H III 883
NGC 5927	Glob CL	LUP	8	-	12'	VIII				NGC 6072	Pln Neb	SCO	14	11.7	50"	3a		17.5	
NGC 5928	Galaxy	SER	12.2	13.5	2.2'	SO			H II 874;P w UGC 9841	NGC 6073	Galaxy	HER	13.5	13.2	1.3'	Sc			H III 74
NGC 5929	Galaxy	BOO	13	-	0.9'	Sab pec			conn. P w NGC 5930 @ 0.5'. Faint I syst. at 5'5 nf	NGC 6077	Galaxy	CRB	13.3	13.5	1.2'	Elliptical			
NGC 5930	Galaxy	BOO	13	-	1.8'	SBb/P			H II 651;conn w NGC 5929	NGC 6079	Galaxy	DRA	12.7	13.1	1.4'	Elliptical			H III 884;P w IC 1201 at 7' PA 126
NGC 5934	Galaxy	BOO	13.8	11.9	0.7'	S pec			interact;comp @ 4.7';PA 354;m=15.7	NGC 6080	Galaxy	SER	14	-	1.2'	Sab			
NGC 5936	Galaxy	SER	12.5	13	1.3'	SBb Ring			H II 130;Bright bar w star superimp	NGC 6081	Galaxy	HER	13.1	13	1.8'	SO			
NGC 5937	Galaxy	SER	12.3	12.9	1.9'	Sb			H II 401	NGC 6084	Galaxy	HER	13.9	13.1	1'	Sab			
NGC 5939	Galaxy	UMI	13	11.9	0.9'	Sbc			comp at 8.2' PA 225 0.5X0.3 m=15.5	NGC 6085	Galaxy	CRB	13	13.6	1.5'	Sa			P w NGC 6086
NGC 5940	Galaxy	SER	13.4	12.8	0.8'	SBab				NGC 6086	Galaxy	CRB	12.8	13.5	1.7'	E2			P w NGC 6085
NGC 5943	Galaxy	BOO	13.2	13.7	1.3'	SO				NGC 6087	Opn CL	NOR	5.4	-	12'	I 2 p	40	7.9	Var* S Nor invl
NGC 5945	Galaxy	BOO	12.8	14.2	2.1'	SBab				NGC 6088A	Galaxy	DRA	14	-	0.4'	Sbc			H III 812;Double system
NGC 5946	Glob CL	NOR	8.4	-	7.1'	IX				NGC 6090	Galaxy	DRA	14	-	0.6'	Sab			In chain of galaxies
NGC 5947	Galaxy	BOO	13.7	13.9	1.2'	SBbc			prob member of clust	NGC 6092	2 Stars	CRB	13.2	-					
NGC 5949	Galaxy	DRA	12	12.8	2.2'	Sbc			H II 906;vsBN;many B knotty arms	NGC 6094	Galaxy	UMI	13.2	14.1	1.8'	SO			H III 314
NGC 5950	Galaxy	BOO	13.7	13.8	1.5'	Sb				NGC 6095	Galaxy	DRA	12.6	13.6	1.8'	E-SO			
NGC 5951	Galaxy	SER	12.7	13.7	3.6'	SBc			H II 654;=Ho 713a. (Ho 713b at 1'5 ia a*)	NGC 6100	Galaxy	SER	13	13.7	1.8'	Sa			
NGC 5953	Galaxy	SER	13.3	-	2'	Sa			H II 178;P w NGC 5954 at 8';distorted contact pair	NGC 6102	Galaxy	CRB	13.8	13.6	1.2'	Sc			
NGC 5954	Galaxy	SER	13.7	-	1.1'	SBc/P			H II 179;P w NGC 5953;F extenson from comp	NGC 6103	Galaxy	CRB	13.8	12.5	0.7'	Sbc			H III 888
NGC 5956	Galaxy	SER	12.3	13.2	1.6'	Sc				NGC 6104	Galaxy	CRB	13.2	12.5	0.8'	Sba Ring			H III 688;Peculiar ring shape;p of 2;UGC 10309
NGC 5957	Galaxy	SER	11.7	13.7	3.1'	SBb			Weak	NGC 6106	Galaxy	HER	12.2	13.4	2.4'	Sc			H II 151;UGC 10328
NGC 5958	Galaxy	CRB	12.6	12.5	1'	Sc			H II 399;Peculiar?	NGC 6107	Galaxy	CRB	13.8	13.2	0.9'	Elliptical			P w NGC 6105 at 3' PA 238;sev other galaxies near
NGC 5959	Galaxy	LIB	14	-	2'	Elliptical				NGC 6109	Galaxy	CRB	12.7	12.7	1'	SO			
NGC 5962	Galaxy	SER	11.3	13.2	3'	Sc			H II 96;vsBN w B arcs;knotty B;many filam	NGC 6111	Galaxy	DRA	14	-	0.7'	Elliptical			
NGC 5963	Galaxy	DRA	12.5	14.7	3.3'	Sc			H II 761;vB main body 0.7X0.45;NGC 5965 at 9.1'	NGC 6112	Galaxy	CRB	13.9	12.4	0.5'	Elliptical			
NGC 5964	Galaxy	SER	12	14.7	4.1'	SBcd			narrow bar w low surf brightness arms	NGC 6115	Opn CL	NOR	11	-	3'	I 2 p	20	10.9	
NGC 5965	Galaxy	DRA	11.7	13	4.7'	Sb			H II 762;P w NGC 5963	NGC 6118	Galaxy	SER	11						

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 6155	Galaxy	HER	12.2	12.3	1.3'	Sc			H II 690	NGC 6314	Galaxy	HER	12.9	12.8	1.6'	Sa			Brightest of 3
NGC 6158	Galaxy	HER	13.7	-	1.1'	E-SO			H II 647	NGC 6315	Galaxy	HER	13.2	12.9	1'	SBc			
NGC 6160	Galaxy	HER	13.2	14.3	1.8'	E2			H II 652	NGC 6316	Glob CL	OPH	8.1	-	4.9'	III			H I 45
NGC 6162	Galaxy	HER	13.6	13	0.9'	SO			Brightest of 3	NGC 6318	Opn CL	SCO	11.8	-	4'	III 2 p	12		
NGC 6164	Brn Neb	NOR	-	-	60"	3b		6.8	np condensation in PK 336-0.1 an emission nebula	NGC 6320	Galaxy	HER	13.9	13.8	1.2'	Sbc			
NGC 6165	Brn Neb	NOR	-	-	60"	3b		6.8	sf condensation in PK 336-0.1 an emission nebula	NGC 6321	Galaxy	HER	13.4	13.4	1.1'	SBbc			
NGC 6166	Galaxy	HER	11.8	12.9	2.2'	E2p			H II 875;Center of cluster;many vF galaxies near	NGC 6322	Opn CL	SCO	6	-	10'	I 2 p	30	7.5	
NGC 6167	Opn CL	NOR	6.7	-	8'	II 3 m		7.4		NGC 6323	Galaxy	HER	13.9	12.8	1.1'	Sab			
NGC 6169	Opn CL	NOR	6.6	-	12'		40		Mu Nor cluster. In Ara OB1	NGC 6324	Galaxy	UMI	12.8	11.9	1'	Sbc			Bright main body w one arm on p side;UGC 10725
NGC 6172	Galaxy	OPH	12.8	12.8	1'	Elliptical				NGC 6325	Glob CL	OPH	10.2	-	1.6'	IV			
NGC 6173	Galaxy	HER	12.1	13.2	1.9'	E3			H III 640	NGC 6326	Pln Neb	ARA	12	7.7	15"	3b		13.5	
NGC 6174	Galaxy	HER	-	-	0.4'					NGC 6329	Galaxy	HER	12.8	14.1	1.8'	Elliptical			Sev galaxies near
NGC 6177	Galaxy	HER	13.6	14.2	1.7'	SBb			H III 890;P w NGC 6179 at 3' PA 31	NGC 6330	Galaxy	HER	14	13.6	1.5'	SBb			
NGC 6178	Opn CL	SCO	7.2	-	4'	I 3 p	12	8.4		NGC 6332	Galaxy	HER	13.6	13.3	1.2'	Sa			
NGC 6181	Galaxy	HER	11.9	12.8	2.5'	SBc			H II 753;UGC 10439	NGC 6334	Brn Neb	SCO	-	-	120'	E			Bear's Claw nebula
NGC 6182	Galaxy	DRA	13.5	13.4	1.7'	Sa			H III 813	NGC 6336	Galaxy	HER	13.6	12.9	0.9'	SBa			
NGC 6185	Galaxy	HER	13.3	13.3	1.2'	Sa				NGC 6337	Pln Neb	SCO	12.3	11.6	38"	4		14.8	
NGC 6186	Galaxy	HER	12.9	13.4	1.5'	SBa				NGC 6338	Galaxy	DRA	12.3	12.7	1.5'	SO			H II 812;Brightest in group;UGC 10784
NGC 6188	Brn Neb	ARA	-	-	20'	E+R			NGC 6193 and triple* h 4876 invl	NGC 6339	Galaxy	HER	12.7	14.3	2.9'	SBcd			
NGC 6189	Galaxy	DRA	12.7	13.1	1.9'	SBc				NGC 6340	Galaxy	DRA	11	13.3	3'	Sa			H II 767;Brightest of 3;IC 1254 at 7' PA 320;UGC 10
NGC 6190	Galaxy	DRA	12.6	13.1	1.4'	Sc				NGC 6342	Glob CL	OPH	9.5	-	3'	IV			H I 149
NGC 6191	Galaxy	DRA	13.3	-	1.9'	SBc				NGC 6347	Galaxy	HER	13.7	13.3	1.2'	SBb			
NGC 6192	Opn CL	SCO	8.5	-	9'	I 2 p	60	11		NGC 6350	Galaxy	HER	13.2	13	1'	SO			P w NGC 6348 at 5' sp
NGC 6193	Opn CL	ARA	5.2	-	15'	II 3 p n	14	5.7	In Ara OB1;30' mags 6...	NGC 6352	Glob CL	ARA	7.8	-	7.1'	XI		12	globular ESO 228-SC003
NGC 6195	Galaxy	HER	13	13.4	1.5'	Sb			H III 893	NGC 6355	Glob CL	OPH	8.6	-	6.1'				H I 46
NGC 6196	Galaxy	HER	12.9	13.7	1.3'	E-SO			In a group	NGC 6356	Glob CL	OPH	8.2	-	3.5'	II			H I 48
NGC 6198	Galaxy	DRA	13.6	13.2	1'	Elliptical				NGC 6357	Brn Neb	SCO	-	-	50'	E+			
NGC 6200	Opn CL	ARA	7.4	-	12'	III 2 m	40	9.2	In Ara OB2	NGC 6359	Galaxy	DRA	12.6	12.6	1.3'	E-SO			
NGC 6204	Opn CL	ARA	8.2	-	5'	I 2 p	45	9.8	In Ara OB2	NGC 6361	Galaxy	DRA	13.1	13.3	2.2'	Sb			nf of 2
NGC 6206	Galaxy	DRA	13.6	12.7	0.7'	SO				NGC 6363	Galaxy	HER	13.3	13.2	1.1'	Elliptical			
NGC 6207	Galaxy	HER	11.6	12.9	3'	Sc			H II 701;No def nucl;B* nr center;30' NE from M 13	NGC 6364	Galaxy	HER	12.9	13.4	1.5'	SO			
NGC 6208	Opn CL	ARA	7.2	-	18'	II 1 m	60	10		NGC 6366	Glob CL	OPH	9.5	-	5.8'	XI			
NGC 6210	Pln Neb	HER	9.7	5.9	20"	2(3b)		12.5		NGC 6368	Galaxy	OPH	12.3	13.6	3.8'	Sb			
NGC 6211	Galaxy	DRA	12.6	13.3	1.6'	SBO			Brightest in chain of 4 incl NGC 6213 at 2' nf	NGC 6369	Pln Neb	OPH	11	10.5	30"	4(2)		15.1	Little Ghost Nebula
NGC 6215	Galaxy	ARA	11.5	12.8	2.2'	Sc				NGC 6370	Galaxy	DRA	12.9	13.6	1.4'	Elliptical			
NGC 6215A	Galaxy	ARA	13.4	13	1.5'	Sb				NGC 6372	Galaxy	HER	12.9	13.5	1.7'	Sc			H III 137;sf of 2;UGC 10861
NGC 6216	Opn CL	SCO	10.1	-	4'	II 2 p	40	12		NGC 6373	Galaxy	DRA	13.6	13.8	1.3'	SBc			
NGC 6217	Galaxy	UMI	11.2	13.2	3.3'	SBbc R			H I 280;Narrow filaments;Arp 185;UGC 10470	NGC 6374	Opn CL	SCO	9	-	20'	IV 1 p		10.2	
NGC 6220	Galaxy	OPH	13.7	13.9	1.7'	Sab				NGC 6376	Galaxy	DRA	14	-	0.5'	Sc			Multiple system diff to determine sep
NGC 6221	Galaxy	ARA	9.9	12.1	3.9'	SBc				NGC 6377	Galaxy	DRA	14	-	0.7'	Sbc			In group of 3
NGC 6222	Opn CL	SCO	10	-	4'					NGC 6378	Galaxy	OPH	13.4	13.4	1.3'	Sbc			
NGC 6223	Galaxy	DRA	11.9	14.1	3.5'	E-SO				NGC 6379	Galaxy	HER	12.9	12.9	1.1'	Sc			In NGC 6375 Group
NGC 6224	Galaxy	HER	13.5	13.1	0.9'	E-SO			P w NGC 6225 at 5' PA 173	NGC 6380	Glob CL	SCO	11.5	-	3.9'				Brightest * 16m;8.5m * on South edge;much absorp
NGC 6225	Galaxy	HER	13.8	12.9	0.9'	E-SO			P w NGC 6224;several vF galaxies in field	NGC 6381	Galaxy	DRA	12.9	13.1	1.3'	Sc			sev comps
NGC 6226	Galaxy	DRA	14	-	0.8'	S pec				NGC 6383	Opn CL	SCO	5.5	-	20'	IV 3 p n	40	10.2	
NGC 6227	Opn CL	SCO	5	-	18'				Includes a 5th mag star	NGC 6384	Galaxy	OPH	10.4	13.8	5.8'	SBbc			sBN in faint bar
NGC 6228	Galaxy	HER	13.9	13.3	1.1'	Sb Ring			Peculiar disturbed by comp nf	NGC 6385	Galaxy	DRA	13.1	13.5	1.3'	SBa			P w NGC 6387 3' nf
NGC 6229	Glob CL	HER	9.4	-	3.8'	IV			H IV 50;Wm.	NGC 6388	Glob CL	SCO	6.8	-	8.7'	III			
NGC 6231	Opn CL	SCO	2.6	-	15'	I 3 r n	93	4.7	Table of Scorpius	NGC 6389	Galaxy	HER	12.1	13.7	2.8'	Sbc			H II 901;UGC 10893
NGC 6232	Galaxy	DRA	12.5	13.4	1.6'	SBa				NGC 6390	Galaxy	DRA	13.8	12.9	1.6'	Sbc			Sev faint galaxies within 10'
NGC 6233	Galaxy	HER	13.3	13.5	1.4'	SO				NGC 6395	Galaxy	DRA	12.3	12.8	2.4'	Scp			
NGC 6235	Glob CL	OPH	8.9	-	1.9'	X			H II 584	NGC 6396	Opn CL	SCO	8.5	-	3'	II 3 p	30	9.8	
NGC 6236	Galaxy	DRA	11.9	13.5	2.9'	SBc				NGC 6397	Glob CL	ARA	5.3	-	25.7'	IX		10	Poss nearest glob
NGC 6239	Galaxy	HER	12.4	13.5	2.4'	SBb			H III 727;bright bar;UGC 10577	NGC 6399	Galaxy	DRA	13.7	13.1	1.1'	Sa			
NGC 6240	Galaxy	OPH	12.9	13.7	2.1'	Irp			Strongly peculiar w loop and plume	NGC 6400	Opn CL	SCO	8.8	-	12'	II 2 m	60	9	
NGC 6242	Opn CL	SCO	6.4	-	9'	I 3 m		7.3		NGC 6401	Glob CL	OPH	7.4	-	1'	IX			H I 44
NGC 6244	Galaxy	DRA	13.5	12.7	1.6'	SBa			NGC 6238 at 6'	NGC 6404	Opn CL	SCO	10.6	-	5'	III 3 m	50		
NGC 6246	Galaxy	DRA	13.6	13.4	1.5'	SBb				NGC 6408	Galaxy	HER	12.7	13.4	1.6'	SBa			
NGC 6246A	Galaxy	DRA	13.4	14.9	2.2'	SBc/P				NGC 6411	Galaxy	DRA	11.9	13.4	2.3'	Elliptical			
NGC 6247	Galaxy	DRA	13.5	-	1'	Pec				NGC 6412	Galaxy	DRA	11.8	13.4	2.5'	SBc			H VI 41;Arp 38;UGC 10897
NGC 6248	Galaxy	DRA	13.1	14.4	3.1'	SBcd				NGC 6415	Opn CL	SCO	12	-					
NGC 6249	Opn CL	SCO	8.2	-	6'	II 1 p	30	9.8		NGC 6416	Opn CL	SCO	5.7	-	14'	IV 1 p	40	8.4	
NGC 6250	Opn CL	ARA	5.9	-	10'	IV 3 p	60	7.6		NGC 6417	Galaxy	HER	13.1	13.6	1.4'	SBb			Distorted arm in sf part
NGC 6251	Galaxy	UMI	12.6	13.7	1.8'	Elliptical			H III 974;P w NGC 6252 at 2.4' PA 10	NGC 6421	Opn CL	SCO	14	-	1'				
NGC 6253	Opn CL	ARA	10.2	-	4'	I 3 m	30	13		NGC 6425	Opn CL	SCO	7.2	-	10'	I 1 p	35	10.1	
NGC 6255	Galaxy	HER	12.7	14.4	3.6'	SBc			H III 689;UGC 10606	NGC 6426	Glob CL	OPH	10.9	-	3.2'	IX			H II 587
NGC 6256	Glob CL	SCO	11.3	-	2.5'					NGC 6427	Galaxy	HER	13.3	13.2	1.6'	E-SO			P w NGC 6429 at 10' PA 325
NGC 6258	Galaxy	DRA	13.4	12.9	0.9'	Elliptical				NGC 6429	Galaxy	HER	13.1	13.3	1.8'	SBa			
NGC 6259	Opn CL	SCO	8	-	10'	III 2 m	120	11.6		NGC 6433	Galaxy	HER	13.3	13.2	2'	Sb			15 mag comp at 4' following
NGC 6261	Galaxy	HER	14	13.1	1.2'	Sa				NGC 6434	Galaxy	DRA	12.4	13.2	2.3'	SBbc			H III 741
NGC 6263	Galaxy	HER	13.7	13.4	0.9'	Elliptical			vF comp at 0.7' PA 343 0.2'X0.15'	NGC 6436	Galaxy	DRA	14	13.9	1.4'	Sc			
NGC 6267	Galaxy	HER	13.1	13.2	1.3'	SBc			H III 123	NGC 6437	Opn CL	SCO	12	-					Type is Milky Way Star Cloud in HNGC
NGC 6268	Opn CL	SCO	9.5	-	6'	II 2 p				NGC 6439	Pln Neb	SGR	13	7.3	6.1"	2a		18	
NGC 6269	Galaxy	HER	12.2	13.4	2'	Elliptical			a large number of vF;vS galaxies in vicinity	NGC 6440	Glob CL	SGR	9.3	-	1.7'	V			H I 150;* eF
NGC 6271	Galaxy	HER	14	13.5	0.8'	S			Very compact	NGC 6441	Glob CL	SCO	7.4	-	7.8'	III			
NGC 6278	Galaxy	HER	12.4	13.3	2.1'	SO			H III 124;P w NGC 6276 & 6277;UGC 10656	NGC 6442	Galaxy	HER	12.6	13.8	1.8'	Elliptical			P w UGC 10979 at 7' PA 33 15mag 1'X1'
NGC 6279	Galaxy	HER	13.6	13.6	1.1'	SBO				NGC 6443	Galaxy	HER	13.8	13.2	1.2'	Sab			
NGC 6281	Opn CL	SCO	5.4	-	200'	II 2 p n		7.9		NGC 6444	Opn CL	SCO	-	-	12'	IV 1 p		11	
NGC 6283	Galaxy	HER	13.5	-	1.1'	S Ring			H III 72										

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 6496	Glob CL	SCO	8.6	-	6.9'	XII				NGC 6654	Galaxy	DRA	12	13.7	2.6'	SBO-a R			
NGC 6497	Galaxy	DRA	13.5	13.3	1.4'	SBb				NGC 6654A	Galaxy	DRA	12.9	13.5	2.7'	SBd pec			
NGC 6500	Galaxy	HER	12.1	13.4	2.2'	Sab			H III 957;P w NGC 6501 at 3' PA 26	NGC 6657	Galaxy	LYR	14	-	0.7'	SBc			
NGC 6501	Galaxy	HER	12	13.3	1.8'	Sa			H III 958	NGC 6658	Galaxy	HER	12.9	12.4	1.6'	Sa			P w NGC 6661 at 9'
NGC 6503	Galaxy	DRA	10.2	13.1	7'	Sc				NGC 6660	Galaxy	HER	13.2	-	1.8'	Sa			
NGC 6504	Galaxy	HER	12.5	12.4	2.2'	S pec				NGC 6661	Galaxy	HER	12.1	12.6	1.8'	Sa			P w NGC 6658 at 9'
NGC 6506	Opn CL	SGR	-	-	4'	IV 1 p				NGC 6662	Galaxy	LYR	13.7	13.3	1.6'	SBab			
NGC 6507	Opn CL	SGR	9.6	-	7'	IV 2 p	35	12	H VIII 53	NGC 6663	Galaxy	LYR	13.9	13.7	1'	Sc			
NGC 6508	Galaxy	DRA	12.8	13.3	1.3'	Elliptical				NGC 6664	Opn CL	SCT	7.8	-	16'	III 2 m	50	10.1	H VIII 12;Contains Cepheid variable EV Sct
NGC 6509	Galaxy	OPH	12.5	13	1.6'	SBcd				NGC 6667	Galaxy	DRA	12.6	13.5	2.4'	SBab/P			
NGC 6512	Galaxy	DRA	13.9	-	0.5'	E-SO				NGC 6668	Galaxy	DRA	13.8	-	2.4'	SBab/P			
NGC 6513	Galaxy	HER	13.3	13.3	1.2'	SBO				NGC 6671	Galaxy	LYR	14	-	1.5'	S pec			
NGC 6515	Galaxy	DRA	13	13.5	1.6'	Elliptical				NGC 6674	Galaxy	HER	12.2	14.4	4.2'	SBb			
NGC 6517	Glob CL	OPH	10.3	-	1'	IV			H II 199	NGC 6675	Galaxy	LYR	12.4	13.1	1.8'	Sbc			
NGC 6520	Opn CL	SGR	7.6	-	6'	I 2 m n	60	9	H VII 7;Dark neb B86 on W edge	NGC 6677	Galaxy	DRA	13.5	-	0.9'	Sbc			Double system w NGC 6679
NGC 6521	Galaxy	DRA	12.9	13.7	1.6'	Elliptical			Brightest in dense part of cluster;4 gals in 8'	NGC 6678	Galaxy	DRA	13.8	-	2.4'	SBab/P			H VI 15
NGC 6522	Glob CL	SGR	9.9	-	5.6'	VI			H I 49	NGC 6679	Galaxy	DRA	13.5	-	0.2'	Sc			
NGC 6524	Galaxy	HER	12.8	13	1.4'	E-SO				NGC 6682	Opn CL	SCT	-	-	18'				
NGC 6525	Opn CL	OPH	-	-	10'					NGC 6683	Opn CL	SCT	9.4	-	11'	I 2 p n	20	11.7	Rich Milky Way field prob not true cluster
NGC 6526	Brn Neb	SGR	-	-	40'	E+			H V 9	NGC 6685	Galaxy	LYR	13.4	13.3	1.1'	E-SO			
NGC 6527	Galaxy	HER	13.4	13.7	1.4'	Sa				NGC 6687	Galaxy	DRA	14	14.4	1.3'	Scd			
NGC 6528	Glob CL	SGR	9.5	-	3.7'	V			H II 200;* mags 16...;Gamma Sgr in field	NGC 6688	Galaxy	LYR	12.6	13.6	1.7'	Sa			Brightest in group
NGC 6532	Galaxy	DRA	13.9	14.2	1.8'	Sc				NGC 6689	Galaxy	DRA	13	-	4'	SBcd			
NGC 6533	CL+Neb	SGR	-	-	90'	E+				NGC 6690	Galaxy	DRA	12.5	14	4'	SBcd			
NGC 6535	Glob CL	SER	9.3	-	1.3'	XI				NGC 6691	Galaxy	DRA	12.9	13.7	1.6'	SBbc			
NGC 6536	Galaxy	DRA	13.4	13.5	1.2'	SBb				NGC 6695	Galaxy	LYR	13.5	13.1	1.1'	SBb			
NGC 6537	Pln Neb	SGR	12	8	5"	2a(6)		19.5		NGC 6697	Galaxy	HER	12.7	12.9	1.2'	Elliptical			
NGC 6538	Galaxy	DRA	14	-	1'	S pec				NGC 6699	Galaxy	PAV	12	12.7	1.5'	SBbc			
NGC 6539	Glob CL	SER	8.9	-	2.5'	X			In heavily obscured area	NGC 6700	Galaxy	LYR	13.1	13.4	1.4'	SBc			
NGC 6541	Glob CL	CRA	6.3	-	13.1'	III			Stars mags 13...	NGC 6701	Galaxy	DRA	12.1	12.7	1.5'	SBa			
NGC 6542	Galaxy	DRA	13.3	12.3	1.3'	Sa				NGC 6702	Galaxy	LYR	12.2	13.1	1.9'	E3			P w NGC 6703 at 10' PA 159
NGC 6543	Pln Neb	DRA	8.3	5	22"	3a(2)		11.3	Cat's Eye Nebula :H IV 37;PK96+29.1	NGC 6703	Galaxy	LYR	11.3	13.1	2.7'	SO			
NGC 6544	Glob CL	SGR	7.5	-	8.4'	IX			H II 197	NGC 6704	Opn CL	SCT	9.2	-	6'	I 3 m	30	12.2	
NGC 6546	Opn CL	SGR	8	-	13'	III 2 m	150	10.6		NGC 6707	Galaxy	TEL	12.6	13.2	2.1'	SBc			
NGC 6547	Galaxy	HER	13.6	12.6	1.3'	Sa				NGC 6708	Galaxy	TEL	12.7	12.5	1.2'	Sb			
NGC 6548	Galaxy	HER	11.7	13.9	2.9'	SBO			H III 555;P w NGC 6549	NGC 6709	Opn CL	AQL	6.7	-	13'	III 2 m	40	9.1	
NGC 6549	Galaxy	HER	13.7	13	1.4'	Sbc			P w NGC 6548 at 4' PA 38	NGC 6710	Galaxy	LYR	13.1	13.6	1.7'	Sa			
NGC 6550	Galaxy	HER	12.7	-	2.9'	SBO				NGC 6711	Galaxy	DRA	12.9	13.4	1.3'	SBbc/P			
NGC 6552	Galaxy	DRA	13.6	13.1	1'	SBbc R				NGC 6712	Glob CL	SCT	8.2	-	4.3'	IX			H I 47
NGC 6553	Glob CL	SGR	8.3	-	3.2'	XI			H IV 12;* mags 20...	NGC 6713	Galaxy	LYR	14	-	0.4'	SO			
NGC 6554	Opn CL	SGR	12	-	20'					NGC 6716	Opn CL	SGR	7.5	-	7'	IV 1 p	20	8.3	
NGC 6555	Galaxy	HER	12.4	13.5	2.1'	SBc			H II 902	NGC 6717	Glob CL	SGR	8.4	-	3.9'	VIII			H III 143
NGC 6558	Glob CL	SGR	8.6	-	3.7'					NGC 6721	Galaxy	PAV	12	12.9	1.6'	E0			
NGC 6559	Brn Neb	SGR	-	-	5'	E			connected w IC 4681	NGC 6723	Glob CL	SGR	6.8	-	11'	VII			
NGC 6560	Galaxy	HER	13.6	13.4	1.2'	SBbc				NGC 6724	Opn CL	AQL	12	-	6.2'				
NGC 6563	Pln Neb	SGR	13	10.3	54"	3a		18		NGC 6725	Galaxy	TEL	12.2	12.1	2.2'	SO			
NGC 6565	Pln Neb	SGR	13	8.1	10"	4		19.5		NGC 6726	Brn Neb	CRA	-	-	2'	E			Complex neb region w var* TY & R CrA invl
NGC 6567	Pln Neb	SGR	11.5	6.4	11"	2a(3)		15		NGC 6727	Brn Neb	CRA	-	-	80'	R			P w NGC 6726-9
NGC 6568	Opn CL	SGR	8.6	-	13'	III 1 m	50		H VII 30	NGC 6729	Brn Neb	CRA	-	-	25'	E+R			P w NGC 6726-7
NGC 6569	Glob CL	SGR	8.4	-	5.8'	VIII			H II 201;D* Burnham 1353 in field	NGC 6738	Opn CL	AQL	8.3	-	15'	IV 2 p			
NGC 6570	Galaxy	OPH	12.7	13.3	1.9'	SBm				NGC 6741	Pln Neb	AQL	12	7	9"	4		14.7	Phantom Streak Nebula
NGC 6572	Pln Neb	OPH	8	4.3	15"	2a		12		NGC 6742	Pln Neb	DRA	13.4	-	31"			19.4	H III 742
NGC 6574	Galaxy	HER	12	12.3	1.5'	SBbc				NGC 6745	Galaxy	LYR	13.5	-	1.3'	S pec			Triple system disrupted w bridges
NGC 6575	Galaxy	HER	12.7	13.6	1.8'	Elliptical			P w IC 1277	NGC 6749	Glob CL	AQL	12.4	-	6.3'				Globular absorbed by 7 mags;
NGC 6577	Galaxy	HER	12.6	13.4	1.5'	Elliptical			Several galaxies within 15'	NGC 6750	Galaxy	DRA	13.5	-	1'	Sc			
NGC 6578	Pln Neb	SGR	13.1	8.4	8.5"	2a		15.7		NGC 6751	Pln Neb	AQL	12	9.2	20"	3		13	Annular
NGC 6579	Galaxy	HER	14	-	0.4'	S			Triple system	NGC 6752	Glob CL	PAV	5.4	-	20.4'	VI			Fine cluster
NGC 6580	Galaxy	HER	14	-	1.3'	Elliptical				NGC 6753	Galaxy	PAV	11.1	12.8	2.4'	Sb			
NGC 6583	Opn CL	SGR	10	-	2.8'	II 1 m	35		H VII 31	NGC 6754	Galaxy	TEL	12.1	12.6	1.8'	SBb			
NGC 6584	Glob CL	TEL	7.9	-	7.9'	VIII				NGC 6755	Opn CL	AQL	7.5	-	15'	IV 2 m	100	10.2	H VII 19
NGC 6585	Galaxy	HER	12.8	12.4	1.9'	SBc				NGC 6756	Opn CL	AQL	10.6	-	4'	I 2 m	40	13	H VII 62
NGC 6587	Galaxy	HER	12.9	13.2	2'	E-SO				NGC 6757	Galaxy	DRA	12.9	13.1	1.4'	SBO-a R			
NGC 6589	Brn Neb	SGR	-	-	15'	E				NGC 6758	Galaxy	TEL	11.6	13.1	2.3'	E1			
NGC 6590	Brn Neb	SGR	-	-	4'	R				NGC 6760	Glob CL	AQL	9.1	-	2.4'	IX			
NGC 6595	Opn CL	SGR	7	-	11'			30		NGC 6761	Galaxy	TEL	13.4	14	1.6'	SBab			
NGC 6596	Opn CL	SGR	-	-	10'	III 2 m n	30		H VIII 55	NGC 6762	Galaxy	DRA	13.4	12.5	1.5'	Sa			
NGC 6598	Galaxy	DRA	14	-	1.5'	S				NGC 6764	Galaxy	CYG	11.9	12.9	2.2'	SBbc			
NGC 6599	Galaxy	HER	12.6	13	1.3'	SO				NGC 6765	Pln Neb	LYR	12.9	12.2	38"	5		16	
NGC 6600	Galaxy	HER	13.8	-	1.3'	SO				NGC 6766	Pln Neb	CYG	12.6	-	5.6"	2b			
NGC 6603	Opn CL	SGR	11.1	-	5'	I 1 r n	100	14	Within star cloud Messier 24	NGC 6768	Galaxy	CRA	13.2	-	1.7'	Elliptical			
NGC 6604	Opn CL	SER	6.5	-	2'	I 3 p n	30	7.5	H VIII 15;In Ser OB2?	NGC 6772	Pln Neb	AQL	14	-	75"	3b(2)		18.1	H IV 14;PK33-6.1
NGC 6605	Opn CL	SER	6	-					H VIII 47;No cluster	NGC 6774	Opn CL	SGR	-	-	25'	III 2 m	20	9	
NGC 6610	Galaxy	HER	12.8	-	1.5'	SBbc				NGC 6778	Pln Neb	AQL	13.3	9.1	19"	3(3)		14.8	
NGC 6615	Galaxy	OPH	13.1	12.7	0.9'	SBO-a				NGC 6780	Galaxy	TEL	12.6	13.7	1.9'	SBc			
NGC 6616	Galaxy	HER	13.8	13.5	1.4'	Sab				NGC 6781	Pln Neb	AQL	11.8	12.8	111"	3b(3)		16.9	H III 743;PK41-2.1;opposite dark lane from Altair
NGC 6619	Galaxy	HER	13	13.3	1.2'	Elliptical				NGC 6782	Galaxy	PAV	11.8	12.9	2.2'	Sba Ring			
NGC 6620	Pln Neb	SGR	14	8.3	5.3"	2b		16		NGC 6785	Pln Neb	AQL	13.3	-	25"	3(3)			
NGC 6621	Galaxy	DRA	13.5	-	1.3'	SB/P			Double system w loop and bridge	NGC 6786	Galaxy	DRA	12.8	12.6	1.1'	SBbc			P w UGC 11415 at 1.2' PA 42
NGC 6622	Galaxy	DRA	13.5	-	0.9'	SBc			P w NGC 6621	NGC 6787	Galaxy	DRA	13.9	13.9	1.2'	SBb			
NGC 6624	Glob CL	SGR	7.6	-	5.9'	VI			H I 50	NGC 6788	Galaxy	TEL	12.9	-	2.9'	Sab			
NGC 6625	Opn CL	SCT	9	-	39'			30		NGC 6789	Galaxy	DRA	13.3	13.3	1.3'	Ir			
NGC 6627	Galaxy	HER	13.3	13.5	1.3'	SBb				NGC 6790	Pln Neb	AQL	11.4	5.9	2"	2		16.1	Nearly stellar

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 6813	Brn Neb	VUL	-	-	3'	E				NGC 6948	Galaxy	IND	13.8	-	2.2'	Sa			
NGC 6814	Galaxy	AQL	11.2	13.4	3.5'	SBbc Rin			H III 744	NGC 6949	Galaxy	CEP	13.5	13.9	1.4'	S Ring			
NGC 6816	Galaxy	SGR	13.4	14.1	1.7'	E-SO				NGC 6951	Galaxy	CEP	10.6	13.3	3.9'	SBbc			
NGC 6818	Pln Neb	SGR	10	7	22"	4		15	Little Gem Nebula;PK25-17.1	NGC 6952	Galaxy	CEP	11.8	-	3.9'	SBbc			
NGC 6819	Opn CL	CYG	7.3	-	5'	I 1 r		11.5	150 stars mags 11-16	NGC 6954	Galaxy	DEL	13.2	12.6	1'	Sa			
NGC 6821	Galaxy	AQL	13.1	13.1	1.3'	SBcd				NGC 6955	Galaxy	DEL	13.6	14.1	1.4'	Sbc			
NGC 6822	Galaxy	SGR	8.8	14.5	15.4'	Ir+			Barnard's Galaxy;IC 1308 =HII reg; in Local Group	NGC 6956	Galaxy	DEL	12.3	13.6	2'	SBb			H III 219;Brightest of 3;UGC 11619
NGC 6823	Opn CL	VUL	7.1	-	12'	I 3 p n	30	8.8	H VII 18;In Vul OB1 w nebula NGC 6820;30 * mags	NGC 6958	Galaxy	MIC	11.4	12.7	2.1'	E1			
NGC 6824	Galaxy	CYG	12.2	12.8	1.9'	Sab			H II 878	NGC 6959	Galaxy	AQR	13.7	11.8	0.6'	SO			
NGC 6826	Pln Neb	CYG	8.8	6.9	27"	3a(2)		10.7	Blinking Planetary;H IV 73;PK83+12.1	NGC 6960	SN Rem	CYG	7	-	210'				Veil Nebula western part;* 52 CYG invl
NGC 6827	Opn CL	VUL	-	-	2'					NGC 6961	Galaxy	AQR	13.7	12.3	0.6'	Elliptical			
NGC 6830	Opn CL	VUL	7.9	-	12'	II 2 p	20	9.9	H VII 9	NGC 6962	Galaxy	AQR	12.1	14	2.9'	SBab			H II 426;P w NGC 6964 at 2' PA 135;brst in group
NGC 6831	Galaxy	DRA	13.3	14	1.5'	SO			Brightest in group of 4	NGC 6964	Galaxy	AQR	13	13.8	1.7'	E4p			H II 427
NGC 6833	Pln Neb	CYG	13.8	4.7	2"	2		15.1		NGC 6965	Galaxy	AQR	14	13	0.7'	SO			P w NGC 6963 at 5.5' PA 323
NGC 6834	Opn CL	CYG	7.8	-	5'	II 2 m	50	9.6	H VIII 16	NGC 6967	Galaxy	AQR	13.1	12.6	0.9'	Sa			
NGC 6835	Galaxy	SGR	12.5	12.6	2.4'	SBa				NGC 6968	Galaxy	AQR	14	-	1.5'	E-SO			
NGC 6836	Galaxy	SGR	12.9	13.5	1.7'	SBm				NGC 6969	Galaxy	DEL	14	12.8	1.1'	Sa			
NGC 6837	Opn CL	AQL	12	-	6'	IV 1 p :b			H VIII 18	NGC 6970	Galaxy	IND	12.6	12.6	1.4'	SBa			
NGC 6841	Galaxy	SGR	12.6	13.4	1.5'	Elliptical				NGC 6971	Galaxy	DEL	13.7	13.5	1.1'	Sb			
NGC 6842	Pln Neb	VUL	13.1	13.4	52.8"	3b		14.5		NGC 6972	Galaxy	DEL	13.3	12.4	1.1'	Sa			
NGC 6845	Galaxy	TEL	13.8	-	2.3'	SBb				NGC 6974	SN Rem	CYG	-	-					part of Veil
NGC 6845A	Galaxy	TEL	13.8	-	2.3'	SBb				NGC 6976	Galaxy	AQR	14	14.2	1.3'	Sbc			
NGC 6847	CL+Neb	CYG	-	-					H II 202; maybe Sh2-97	NGC 6977	Galaxy	AQR	13.2	13.2	1.3'	SBb			
NGC 6848	Galaxy	TEL	12.5	-	2.4'	Sa				NGC 6978	Galaxy	AQR	13.3	13.1	1.5'	Sb			
NGC 6849	Galaxy	SGR	12.1	12.8	1.9'	E-SO Ba				NGC 6979	Brn Neb	CYG	-	-	3'	E			H II 206;Portion of Veil Neb between two arcs
NGC 6850	Galaxy	TEL	12.5	13.3	2.1'	SBO-a				NGC 6982	Galaxy	IND	13.7	13.1	1'	SBa			
NGC 6851	Galaxy	TEL	11.8	13	2'	E4				NGC 6983	Galaxy	MIC	13.3	12.4	0.8'	Sab			
NGC 6851B	Galaxy	TEL	14	13.5	1.1'	SBcd				NGC 6984	Galaxy	IND	12.7	13.4	1.8'	SBc			
NGC 6852	Pln Neb	AQL	11.4	11.2	28"	4		17.9		NGC 6986	Galaxy	CAP	13.6	12.9	1'	E-SO			
NGC 6854	Galaxy	TEL	12.2	13.2	2'	E2				NGC 6987	Galaxy	IND	12.4	13	1.4'	Elliptical			
NGC 6855	Galaxy	TEL	12.8	13.3	1.5'	SBO-a				NGC 6990	Galaxy	IND	14	-	1.2'	Sa			
NGC 6857	Brn Neb	CYG	11.4	-	0.8'	E		14.3	oval; not planetary; Sharpless 2-100 is brightcore	NGC 6991	Opn CL	CYG	-	-	5'	III 3 p n			H VIII 76
NGC 6861	Galaxy	TEL	11.1	12.8	3'	E-SO Ba				NGC 6992	SN Rem	CYG	7	-	60'	R			Veil Nebula eastern part
NGC 6861C	Galaxy	TEL	14	13.4	1.2'	SO				NGC 6993	Galaxy	CAP	13.8	-	1.2'	Sc			
NGC 6861D	Galaxy	TEL	12.4	12.9	2.1'	E-SO				NGC 6995	SN Rem	CYG	7	-	12'	R			part of veil
NGC 6862	Galaxy	TEL	13.5	-	1.6'	SBbc				NGC 6996	Opn CL	CYG	10	-	7'	III 2 p n	40		
NGC 6866	Opn CL	CYG	7.6	-	7'	II 2 m	80	10.7	H VII 59;50* mags 10...	NGC 6997	Opn CL	CYG	10	-	7'				Scattered CI in west part of North America Neb
NGC 6867	Galaxy	TEL	13.1	13.3	2'	SBbc				NGC 6999	Galaxy	MIC	14	13.4	0.9'	SO			
NGC 6868	Galaxy	TEL	10.6	13.1	3.6'	E2				NGC 7000	Brn Neb	CYG	4	-	120'	E			North America nebula;CI NGC 6997 invl
NGC 6869	Galaxy	DRA	12	12.7	1.6'	SO				NGC 7001	Galaxy	AQR	12.9	13.3	1.4'	Sab			
NGC 6870	Galaxy	TEL	12.3	13.4	2.6'	Sab				NGC 7002	Galaxy	IND	12.4	13	1.5'	Elliptical			
NGC 6871	Opn CL	CYG	5.2	-	20'	IV 3 p n	15	6.8	In Cyg OB3?	NGC 7003	Galaxy	DEL	13	12.7	1.1'	Sbc			
NGC 6875	Galaxy	TEL	12.1	13.1	2.4'	E6				NGC 7004	Galaxy	IND	13.8	13.4	1.3'	SBO-a			
NGC 6875A	Galaxy	TEL	13.1	13.2	2.7'	SBbc				NGC 7006	Glob CL	DEL	10.6	-	2.8'	I			H I 52;Stars eF;very remote globular
NGC 6878	Galaxy	SGR	12.7	13.3	1.6'	SBb				NGC 7007	Galaxy	IND	12	12.7	2'	E-SO			
NGC 6878A	Galaxy	SGR	13.2	13.5	1.8'	SBb				NGC 7008	Pln Neb	CYG	12	11.8	86"	3		13.9	H I 192
NGC 6879	Pln Neb	SGE	11	7.3	4.7"	2a		15		NGC 7009	Pln Neb	AQR	8.3	6.2	28"	4(6)		12.9	Saturn Nebula;H IV 1;bright blue-green disk
NGC 6882	Aster	VUL	8.1	-	18'	II 2 p		9.9	H VIII 22;Near cluster NGC 6885	NGC 7010	Galaxy	AQR	14	-	1.9'	Elliptical			
NGC 6883	Opn CL	CYG	8	-	15'	I 3 p n	30			NGC 7012	Galaxy	MIC	13.7	-	2.4'	Elliptical			
NGC 6884	Pln Neb	CYG	12.6	6	5.6"	2b		16.7		NGC 7013	Galaxy	CYG	11.3	13.1	4.5'	Sa			H II 203
NGC 6885	Opn CL	VUL	8.1	-	7'	III 2 p	30	6	H VIII 20;With 20 Vul	NGC 7014	Galaxy	IND	12.4	13.4	1.7'	Elliptical			
NGC 6886	Pln Neb	SGE	12.5	6.2	4"	2(3)		16.5		NGC 7015	Galaxy	EQU	12.5	13.6	1.8'	Sbc			
NGC 6887	Galaxy	TEL	12.1	13.5	3.2'	Sbc				NGC 7018	Galaxy	CAP	14	-	1.3'	Elliptical			
NGC 6888	Brn Neb	CYG	10	-	20'	E			Crescent Neb;Wolf-Rayet * invl	NGC 7022	Galaxy	IND	13	13.4	1.5'	SBO			
NGC 6889	Galaxy	TEL	13.7	-	1.7'	SBbc				NGC 7023	CL+Neb	CEP	7.1	-	5'	E+			H IV 74;Complex structure w Br and dark filaments
NGC 6890	Galaxy	SGR	12.3	12.8	1.6'	SBb				NGC 7025	Galaxy	DEL	12.8	13.6	1.9'	Sa			
NGC 6891	Pln Neb	DEL	10.5	7.4	15.5"	2a(2b)		12.3		NGC 7026	Pln Neb	CYG	12	8.5	25"	3a		14	double at high power
NGC 6893	Galaxy	TEL	11.8	13.3	2.6'	SBO Rin				NGC 7027	Pln Neb	CYG	9.6	-	18"	3a		16.5	bizarre spectrum
NGC 6895	Opn CL	CYG	12	-	20'				H VIII 83	NGC 7029	Galaxy	IND	11.5	12.9	2.5'	Elliptical			
NGC 6898	Galaxy	CAP	14	-	1.2'	Sa				NGC 7030	Galaxy	CAP	13.7	13.1	0.9'	SBab			
NGC 6899	Galaxy	TEL	13.4	-	1.7'	SBbc				NGC 7031	Opn CL	CYG	9.1	-	5'	IV 1 p	50	11.3	H VIII 74
NGC 6900	Galaxy	AQL	14	-	1'	Sb				NGC 7034	Galaxy	PEG	13.8	13.5	1'	Elliptical			
NGC 6901	Galaxy	AQL	13.7	13.4	1.1'	SBab			IC5000=IC1316	NGC 7036	Opn CL	PEG	12	-	8'				
NGC 6902	Galaxy	SGR	10.9	14.1	6.1'	SBa				NGC 7038	Galaxy	IND	11.9	13.5	3.1'	SBc			
NGC 6902A	Galaxy	SGR	13.9	14.1	1.3'	SBm				NGC 7039	Opn CL	CYG	7.6	-	25'	III 2 p	50	11.3	
NGC 6902B	Galaxy	SGR	13.6	14.2	1.5'	SB Ring				NGC 7041	Galaxy	IND	11.2	12.9	3.6'	E-SO			
NGC 6903	Galaxy	CAP	11.9	13.8	2.6'	E-SO Ba				NGC 7042	Galaxy	PEG	12	13.2	2'	Sb			H III 209;UGC 11702
NGC 6905	Pln Neb	DEL	12	10	44"	3(3)		14	Blue Flash Nebula	NGC 7043	Galaxy	PEG	13.7	13.4	1'	SBa			
NGC 6906	Galaxy	AQL	12.3	12.4	1.6'	SBbc				NGC 7044	Opn CL	CYG	12	-	6'	II 2 R		15	H VI 24
NGC 6907	Galaxy	CAP	11.2	13.4	3.4'	SBbc			H III 141;S shaped spiral	NGC 7046	Galaxy	EQU	13.1	13.9	1.9'	SBc			H III 858
NGC 6909	Galaxy	TEL	11.7	12.6	2.2'	E6				NGC 7047	Galaxy	AQR	13.4	12.9	1.2'	Sb Ring			
NGC 6910	Opn CL	CYG	7.4	-	8'	I 2 p n	50	9.6	H VIII 56;In Gamma Cyg nebula and Cyg OB9	NGC 7048	Pln Neb	CYG	11	12.2	60"	3b		18	
NGC 6912	Galaxy	CAP	13.1	13.5	1.4'	SBc				NGC 7049	Galaxy	IND	10.7	13.3	4.5'	SO			
NGC 6914	Brn Neb	CYG	-	-	3'	R				NGC 7051	Galaxy	AQR	14	-	1.4'	Sa			
NGC 6915	Galaxy	AQL	13.1	-	1.5'	Sab				NGC 7052	Galaxy	VUL	12.4	13.8	2.5'	Elliptical			H III 145
NGC 6916	Galaxy	CYG	13.5	14.1	1.8'	SBbc				NGC 7053	Galaxy	PEG	13	13.5	1.4'	Compac			II Zw 124
NGC 6918	Galaxy	IND	13.5	13	0.9'	SBO-a				NGC 7056	Galaxy	PEG	12.9	12.7	1'	SBbc			
NGC 6919	Galaxy	MIC	13	13.6	1.6'	SBc				NGC 7057	Galaxy	MIC	12.6	12.8	1.4'	E-SO			
NGC 6921	Galaxy	VUL	13.4	11.4	0.9'	Sa			sp of 2	NGC 7060	Galaxy	MIC	12.9	13.2	1.7'	SBa			
NGC 6922	Galaxy	AQL	13.5	13.7	1.3'	Sc				NGC 7062	Opn CL	CYG	8.3	-	7'	III 1 p	30	10.1	H VII 51
NGC 6923	Galaxy	MIC	11.9	13.1	2.6'	SBb Rin				NGC 7063	Opn CL	CYG	7	-	8'	III 2 p	12	8.9	
NGC 6924	Galaxy	CAP																	

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 7090	Galaxy	IND	10.7	13	7.3'	SBc				NGC 7241	Galaxy	PEG	12.6	13.8	3.4'	SBbc/P			II Zw 174;edge-on spiral
NGC 7091	Galaxy	GRU	12.9	14.1	2.1'	SBd				NGC 7243	Opn CL	LAC	6.4	-	21'	IV 2 p	40	8.5	H VIII 75;Incl Struve 2890 D*
NGC 7094	Pln Neb	PEG	13.4	14.7	99"	4		13.6		NGC 7244	Galaxy	PEG	13.8	12	0.7'	Sc			
NGC 7097	Galaxy	GRU	11.7	12.7	1.8'	Elliptical				NGC 7245	Opn CL	LAC	9.2	-	5'	II 1 p		12.8	H VI 29;50 vF stars
NGC 7106	Galaxy	IND	13.9	-	1.7'	SBc				NGC 7247	Galaxy	AQR	12.6	12.7	1.4'	SBb			
NGC 7107	Galaxy	GRU	12.8	13.8	2.1'	SBd				NGC 7248	Galaxy	LAC	12.4	12.7	1.8'	SO			H III 863;UGC 11972;sev smaller galaxies near
NGC 7108	Galaxy	AQR	13.8	-	1.4'	Elliptical				NGC 7249	Galaxy	GRU	13.4	13.1	1.1'	SO			
NGC 7109	Galaxy	PSA	13.4	12.9	0.8'	Elliptical				NGC 7250	Galaxy	LAC	12.6	12.8	1.7'	Sd			H III 864;Disturbed?:UGC 11980
NGC 7110	Galaxy	PSA	13.4	13	1.3'	SBb				NGC 7251	Galaxy	AQR	13	-	1.9'	Sa			H III 933
NGC 7115	Galaxy	PSA	14	-	1.7'	Sb				NGC 7252	Galaxy	AQR	12.1	13.2	2.1'	SBO			H III 458;F extension on west side
NGC 7116	Galaxy	CYG	13.3	12.4	1.1'	Sbc				NGC 7254	Galaxy	AQR	13.9	-	1.3'	SBb			
NGC 7117	Galaxy	GRU	12.8	12.9	1.4'	E-SO				NGC 7256	Galaxy	AQR	13.1	12.8	1.3'	SBb			
NGC 7118	Galaxy	GRU	12.6	13	1.4'	E-SO				NGC 7257	Galaxy	AQR	13.7	-	1.9'	SBbc			
NGC 7119A	Galaxy	GRU	12.9	12.6	1.2'	SBbc				NGC 7258	Galaxy	PSA	13.1	12.9	1.4'	Sb			
NGC 7119B	Galaxy	GRU	13	10.9	1.1'	Sc				NGC 7259	Galaxy	PSA	13.1	13	1.1'	Sb			
NGC 7121	Galaxy	AQR	14	-	1.1'	Sbc				NGC 7260	Galaxy	AQR	14	-	1.9'	SBbc			
NGC 7124	Galaxy	IND	12.3	13.6	2.8'	SBbc				NGC 7261	Opn CL	CEP	8.4	-	6'	III 1 p	30	9.6	
NGC 7127	Opn CL	CYG	-	-	2.8'	IV 2 p	12			NGC 7262	Galaxy	PSA	13.8	12.9	0.7'	SO			
NGC 7128	Opn CL	CYG	9.7	-	3.1'	II 3 m	35	11.5	H VII 40	NGC 7264	Galaxy	LAC	13.8	13.3	2.2'	Sb			Core .15'X0.15' mag=15.7
NGC 7129	CL+Neb	CEP	11.5	-	2.7'	IV 2 p n:	10	11.5	H IV 75;Sev F * invl	NGC 7265	Galaxy	LAC	12.2	13.7	2.4'	E-SO			
NGC 7130	Galaxy	PSA	12.1	12.7	1.6'	Sa				NGC 7267	Galaxy	PSA	12.2	12.9	1.6'	SBa			
NGC 7131	Galaxy	CAP	14	-	1.7'	SO				NGC 7269	Galaxy	AQR	14	-	1'	Sb			
NGC 7135	Galaxy	PSA	11.7	13.5	2.9'	E-SO				NGC 7270	Galaxy	PEG	13.9	13.1	0.9'	Sc			1 of 2 brightest in group of 6 or more galaxies
NGC 7137	Galaxy	PEG	12.4	13.1	1.6'	SBc			H II 261	NGC 7274	Galaxy	LAC	12.8	13.7	1.5'	Elliptical			brightest of 3
NGC 7139	Pln Neb	CEP	13.5	13.9	86"	3b		18.1	H III 696	NGC 7277	Galaxy	PSA	13.3	13.1	1.5'	Sb Ring			
NGC 7140	Galaxy	IND	12.5	-	4.1'	SBbc			N2 reports DEC one degree north	NGC 7279	Galaxy	PSA	13.8	13.5	1.2'	SBc			
NGC 7141	Galaxy	IND	11.5	14.1	4.1'	SBbc				NGC 7280	Galaxy	PEG	12.1	13.3	2.1'	SBO-a			H II 248;spp of 2;UGC 12035
NGC 7142	Opn CL	CEP	9.3	-	4.3'	II 2 r	100	12.1	H VII 66	NGC 7281	Opn CL	CEP	-	-	12'	IV 2 p	20		Small scattered group w 3 *10m in short row
NGC 7144	Galaxy	GRU	10.8	13.6	3.7'	Elliptical				NGC 7282	Galaxy	LAC	13.7	14.6	2.5'	SBb Ring			
NGC 7145	Galaxy	GRU	11.1	13.1	2.5'	Elliptical				NGC 7284	Galaxy	AQR	11.9	13.1	2.3'	SBO			H II 469
NGC 7147	Galaxy	PEG	13.5	13.2	1'	SBO-a				NGC 7285	Galaxy	AQR	11.9	13.1	2.4'	SBa			
NGC 7149	Galaxy	PEG	13.1	13.4	1.3'	Elliptical				NGC 7286	Galaxy	PEG	12.5	12.5	1.6'	Sa			
NGC 7151	Galaxy	IND	12.8	14	2.9'	SBc				NGC 7289	Galaxy	PSA	13.2	13.5	1.3'	SO			
NGC 7152	Galaxy	PSA	13.6	13.1	1.2'	SBb				NGC 7290	Galaxy	PEG	13.3	13.6	1.6'	Sbc			
NGC 7153	Galaxy	PSA	13.4	12.7	1.9'	Sb				NGC 7291	Galaxy	PEG	13.1	14.2	1.8'	SO			
NGC 7154	Galaxy	PSA	12.4	13.6	2.2'	SB				NGC 7292	Galaxy	PEG	12.5	13.8	2.1'	Ir Bar			irregular
NGC 7155	Galaxy	IND	12.2	13.5	2.3'	SBO				NGC 7293	Pln Neb	AQR	6.3	13.6	960"	4(3)	13.5		Helix Nebula;low surf brightness
NGC 7156	Galaxy	PEG	12.5	13.3	1.7'	SBc			H III 452	NGC 7294	Galaxy	PSA	12.5	13.3	2'	SBO			
NGC 7160	Opn CL	CEP	6.1	-	7'	II 3 p	12	7	H VIII 67;In Cep OB2	NGC 7296	Opn CL	LAC	9.7	-	4'	III 2 p	20	10	H VII 41
NGC 7162	Galaxy	GRU	12.7	13.7	2.8'	Sc				NGC 7297	Galaxy	GRU	13.7	12.8	0.9'	Sbc			
NGC 7162A	Galaxy	GRU	12.6	14.4	2.6'	SB				NGC 7298	Galaxy	AQR	13.7	14	1.3'	Sc			
NGC 7163	Galaxy	PSA	13.4	14	1.9'	SBab				NGC 7299	Galaxy	GRU	14	13	0.7'	SBc			
NGC 7165	Galaxy	AQR	14	-	0.9'	Sab Ring			H III 930	NGC 7300	Galaxy	AQR	12.9	13.5	2.1'	SBb			
NGC 7166	Galaxy	GRU	11.9	12.6	2.4'	E-SO				NGC 7301	Galaxy	AQR	13.2	12.4	1'	SBab			
NGC 7167	Galaxy	AQR	12.5	13.2	1.7'	SBc				NGC 7302	Galaxy	AQR	12.3	12.9	2.1'	E-SO			H IV 31
NGC 7168	Galaxy	IND	11.9	13.1	1.9'	Elliptical				NGC 7303	Galaxy	PEG	12.6	13.1	1.5'	Sbc			Strongly asym barred spiral
NGC 7171	Galaxy	AQR	12.2	13.6	2.3'	SBb			H III 692	NGC 7306	Galaxy	PSA	12.7	12.7	1.7'	Sb Ring			
NGC 7172	Galaxy	PSA	11.9	13.1	2.4'	Sa			Equatorial dust band;Nearly edge-on	NGC 7307	Galaxy	GRU	12.6	13.7	3.4'	SBc/P			
NGC 7173	Galaxy	PSA	12	12.1	1.9'	Elliptical				NGC 7308	Galaxy	AQR	14	-	1.2'	E-SO			
NGC 7174	Galaxy	PSA	13.3	14.3	2.6'	Sab				NGC 7309	Galaxy	AQR	12.5	13.7	2'	SBc			H II 476;3 arm spiral
NGC 7176	Galaxy	PSA	11.3	11.1	2.1'	Elliptical				NGC 7310	Galaxy	AQR	13.9	13.3	0.9'	SBbc Ring			
NGC 7177	Galaxy	PEG	11.2	13	3.2'	SBb			H II 247	NGC 7311	Galaxy	PEG	12.5	12.6	1.6'	Sab			H II 428;UGC 12080
NGC 7178	Galaxy	PSA	14	13.2	1.1'	SBb				NGC 7312	Galaxy	PEG	13.4	13.4	1.5'	SBb			
NGC 7180	Galaxy	AQR	12.6	12.7	1.5'	SO			H III 693	NGC 7314	Galaxy	PSA	11	13.3	4.6'	SBbc			
NGC 7181	Galaxy	AQR	14	13.4	1'	SO				NGC 7315	Galaxy	PEG	12.5	13.4	1.6'	SO			
NGC 7183	Galaxy	AQR	11.9	13.4	3.8'	Sa			H II 595	NGC 7316	Galaxy	PEG	13	12.8	1.1'	Sc			H III 180
NGC 7184	Galaxy	AQR	10.9	13.1	5.9'	SBc Ring			H II 1;With Saturn-like inner ring	NGC 7317	Galaxy	PEG	13.6	13.8	0.7'	Elliptical			Stephan's quintet
NGC 7185	Galaxy	AQR	12.6	13.8	2.3'	E-SO Bar				NGC 7318A	Galaxy	PEG	13.4	13	1.2'	Elliptical			Stephan's Quintet;A projects onto arm of B
NGC 7187	Galaxy	PSA	12.5	13	1.3'	Sa Ring				NGC 7318B	Galaxy	PEG	13.1	13.9	1.6'	SBbc			Stephan's Quintet;B is distorted colliding w A
NGC 7188	Galaxy	AQR	13.2	13.3	1.6'	SBbc				NGC 7319	Galaxy	PEG	13.1	13.8	1.4'	SBbc			Stephan's Quintet;distorted
NGC 7189	Galaxy	AQR	13.5	12.9	1'	SBb				NGC 7320	Galaxy	PEG	12.6	13.5	2.3'	Scd			Brightest in Stephan's Quintet
NGC 7190	Galaxy	PEG	13.8	12.8	0.9'	Sa				NGC 7321	Galaxy	PEG	12.9	13.4	1.6'	SBb			H III 237;UGC 12103
NGC 7194	Galaxy	PEG	13.1	13.1	1.1'	Elliptical			Brightest in group	NGC 7322	Galaxy	GRU	13.5	12.6	0.9'	Sa			
NGC 7196	Galaxy	IND	11.5	13.1	2.5'	Elliptical				NGC 7323	Galaxy	PEG	12.9	13.3	1.4'	Sb Ring			p of 2;disturbed
NGC 7197	Galaxy	LAC	12.8	12.9	1.6'	Sa			H II 599	NGC 7328	Galaxy	PEG	13.1	13.4	2'	Sab			
NGC 7198	Galaxy	AQR	13.3	13.6	1.5'	SO				NGC 7330	Galaxy	LAC	12.2	13.4	1.8'	Elliptical			
NGC 7200	Galaxy	IND	12.9	13.5	1.6'	Elliptical				NGC 7331	Galaxy	PEG	9.5	13.3	10.2'	SBc			Brightest in group of F obj;sev dark lanes
NGC 7201	Galaxy	PSA	12.8	12.4	1.6'	Sab				NGC 7332	Galaxy	PEG	11.1	12.6	3.8'	SO			H II 233;UGC 12115;vB cent. bulge .7'X0.4';lenticular
NGC 7203	Galaxy	PSA	12.6	12.8	1.6'	SBO-a				NGC 7335	Galaxy	PEG	13.4	12.9	1.3'	Sa			H III 166;Brightest of 4;UGC 12116; near 7331
NGC 7204	Galaxy	PSA	13.5	12.7	1.3'	Sa				NGC 7339	Galaxy	PEG	12.2	13	2.8'	SBbc			H II 234;B cent. bulge w knots .7'X0.25'
NGC 7205	Galaxy	IND	10.9	13.1	4'	Sbc				NGC 7340	Galaxy	PEG	13.7	12.9	0.9'	Elliptical			
NGC 7205A	Galaxy	IND	14	13.9	1.2'	SBcd				NGC 7341	Galaxy	AQR	12.4	13.1	2.4'	SBab Ring			
NGC 7206	Galaxy	PEG	13.3	13.7	1.3'	SO			Compact;Brightest of 3	NGC 7342	Galaxy	PEG	13.9	14.4	1.4'	SBa			UGC 12127 group
NGC 7208	Galaxy	PSA	12.8	11.9	0.9'	SBO				NGC 7343	Galaxy	PEG	13.5	13.3	1'	SBbc			
NGC 7209	Opn CL	LAC	7.7	-	25'	III 1 p	25	9	H VII 53	NGC 7344	Galaxy	AQR	14	-	1.5'	Sab			
NGC 7212	Galaxy	PEG	13.8	13.3	1.2'	Sb			Companion superimposed;distorted	NGC 7347	Galaxy	PEG	13.6	12.7	1.5'	Sc			
NGC 7213	Galaxy	GRU	10.1	12.3	3.7'	Sa			16' SE from Alpha Gru	NGC 7348	Galaxy	PEG	13.8	13.4	1.1'	SBc			
NGC 7214	Galaxy	PSA	12.7	13.8	2.7'	SBc/P				NGC 7351	Galaxy	AQR	13	-	1.7'	SO			
NGC 7215	Galaxy	AQR	13.9	12.7	1.1'	SO				NGC 7352	Opn CL	CEP	12	-					
NGC 7217	Galaxy	PEG	10.1	12.7	4'	Sb			H II 207;vB diff Nuc .35'X0.27'many knotty arms	NGC 7354	Pln Neb	CEP	12.9	10.1	22"	4(3b)	16.5		H II 705
NGC 7218	Galaxy	AQR																	

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 7385	Galaxy	PEG	12	12.8	1.3'	Elliptical			H III 216;Brightest in cluster;UGC 12207	NGC 7562	Galaxy	PSC	11.6	12.9	2.2'	Elliptical			H II 467;UGC 12464
NGC 7386	Galaxy	PEG	12.3	12.8	1.8'	SO			H III 217	NGC 7563	Galaxy	PEG	12.8	13.3	1.9'	SBa			H III 222;UGC 12465
NGC 7387	Galaxy	PEG	14	12.5	0.7'	SO				NGC 7568	Galaxy	PEG	13.5	12.6	0.9'	S pec			
NGC 7389	Galaxy	PEG	13.8	13.6	1.1'	S pec				NGC 7570	Galaxy	PEG	13.2	13.4	1.6'	SBa			H III 238;UGC 12473
NGC 7391	Galaxy	AQR	12	13	1.7'	Elliptical			H II 443	NGC 7573	Galaxy	AQR	14	-	1.3'	SBc			
NGC 7392	Galaxy	AQR	11.9	12.8	2.2'	SBbc			H II 702	NGC 7576	Galaxy	AQR	12.9	12.9	1.3'	Sa			H II 454
NGC 7393	Galaxy	AQR	14	-	2'	SBc/P			H II 453	NGC 7578A	Galaxy	PEG	13.3	14	1.5'	SO			H III 182;double system
NGC 7395	Galaxy	LAC	13.8	14	1.2'	SO			Double nucleus?	NGC 7578B	Galaxy	PEG	14	14.1	0.8'	Elliptical			Double system
NGC 7396	Galaxy	PSC	12.9	13.5	1.9'	Sa			Brightest in group	NGC 7579	Galaxy	PEG	14	-	0.5'	Compac			compact
NGC 7398	Galaxy	PSC	13.6	13.5	1.2'	Sa				NGC 7580	Galaxy	PEG	13.7	12.8	0.8'	S pec			
NGC 7399	Galaxy	AQR	14	-	0.9'	Sa				NGC 7581	Galaxy	PSC	12.4	-	3.5'	Sc			B narrow bar .55'X0.5'
NGC 7400	Galaxy	GRU	13.6	-	2.7'	Sbc				NGC 7582	Galaxy	GRU	10.6	13	5'	SBab			Group w NGC 7590 & 7599
NGC 7404	Galaxy	GRU	12.8	12.9	1.5'	E-SO Ba				NGC 7583	Galaxy	PSC	13.7	12.6	0.7'	S			
NGC 7407	Galaxy	PEG	13.1	13.7	2'	Sc			Inner spiral structure	NGC 7585	Galaxy	AQR	11.4	13	3.1'	Sa			H II 236
NGC 7410	Galaxy	GRU	10.3	12.5	5.5'	SBa			Nearly edge-on	NGC 7587	Galaxy	PEG	13.9	12.7	1.2'	SBab			n of 2
NGC 7411	Galaxy	PEG	13.4	13.2	1'	Elliptical			Compact;4th in chain of 6	NGC 7590	Galaxy	GRU	11.5	12.5	2.6'	Sbc			near 7582
NGC 7412	Galaxy	GRU	11.4	13.8	3.8'	SBb				NGC 7591	Galaxy	PSC	13	13.3	1.9'	SBbc			
NGC 7412A	Galaxy	GRU	13.9	14.3	3.8'	SBd				NGC 7592	Galaxy	AQR	14	-	1.1'	Sa			H III 186;colliding pair
NGC 7416	Galaxy	AQR	12.4	13.3	3.2'	SBb				NGC 7593	Galaxy	PEG	13.6	12.9	1'	Sbc			Peculiar
NGC 7418	Galaxy	GRU	10.9	13.2	3.8'	SBc				NGC 7594	Galaxy	PEG	13	11	1.4'	Sb			
NGC 7418A	Galaxy	GRU	13.2	15.1	3.5'	Scd				NGC 7597	Galaxy	PEG	13.9	13.5	0.9'	SO			compact
NGC 7419	Opn CL	CEP	13	-	2'	II 3 r	40	10	H VII 43	NGC 7599	Galaxy	GRU	11.5	13.3	4.4'	SBc			near 7582
NGC 7420	Galaxy	PEG	13.9	12.9	0.8'	Sc				NGC 7600	Galaxy	AQR	11.9	12.9	3.1'	E-SO			H II 431
NGC 7421	Galaxy	GRU	11.9	13.2	2'	SBab				NGC 7601	Galaxy	PEG	14	13.9	1.1'	SBbc			
NGC 7422	Galaxy	PSC	13.4	12.9	1'	Sb			Complex;disturbed	NGC 7603	Galaxy	PSC	13.2	13.6	1.6'	SB/P			Seyfert;np of 2;bridge
NGC 7424	Galaxy	GRU	10.5	15.1	10'	SBc			face on	NGC 7606	Galaxy	AQR	10.8	13.3	4.2'	Sbc			H I 104
NGC 7426	Galaxy	LAC	12.3	13.3	1.7'	Elliptical			H III 576;UGC 12256	NGC 7610	Galaxy	PEG	13	14.5	2.5'	SBc Ring			Disturbed?
NGC 7428	Galaxy	PSC	12.5	13.6	2.4'	SBa				NGC 7611	Galaxy	PSC	12.5	12.3	1.5'	SBO-a			
NGC 7429	Opn CL	CEP	-	-	14'	III 2 p	15	11		NGC 7612	Galaxy	PEG	12.8	12.9	1.6'	SO			
NGC 7432	Galaxy	PEG	13.4	14.1	1.6'	Elliptical			H III 465;Companion superimposed?;UGC 12268	NGC 7617	Galaxy	PSC	13.8	13.2	0.9'	SO			
NGC 7433	Galaxy	PEG	14	-	0.7'	S pec			Double system w NGC 7436A;B	NGC 7618	Galaxy	AND	13	13.2	1.2'	Elliptical			
NGC 7436A	Galaxy	PEG	14	-	2'	Elliptical			H III 243	NGC 7619	Galaxy	PEG	11.1	12.9	2.8'	Elliptical			H II 439;UGC 12523
NGC 7437	Galaxy	PEG	13.3	14.4	1.8'	Scd				NGC 7620	Galaxy	PEG	13.1	13.2	1.2'	Sc			
NGC 7439	Galaxy	PEG	14	13.2	1'	SBO				NGC 7623	Galaxy	PEG	12.9	12.8	1.3'	SO			H III 435;UGC 12526
NGC 7440	Galaxy	AND	13.5	13.9	1.4'	SBa				NGC 7624	Galaxy	PEG	13.1	12.6	1'	SBc			S-shaped arms w high surface brightnes
NGC 7442	Galaxy	PEG	13.3	13.4	1'	Sc				NGC 7625	Galaxy	PEG	12.1	12.8	1.6'	Sa			H II 250;UGC 12529;V V 280;Arp 212;III Zw 102
NGC 7443	Galaxy	AQR	12.6	12.2	1.4'	Sa			H II 450	NGC 7626	Galaxy	PEG	11.1	13.1	3'	E2			H II 440;P w NGC 7619;Br members of small group
NGC 7444	Galaxy	AQR	12.8	12.8	1.7'	SO			H II 451	NGC 7628	Galaxy	PEG	12.7	12.7	1.1'	Elliptical			
NGC 7448	Galaxy	PEG	11.7	12.9	2.6'	Sbc			H II 251;Brightest in group;UGC 12294;Arp 13	NGC 7629	Galaxy	PSC	13.8	13.4	1'	SO			
NGC 7449	Galaxy	AND	14	13.7	1'	Elliptical			UGC 12292;Core mag=15.7	NGC 7631	Galaxy	PEG	13.1	13.2	1.7'	Sb			
NGC 7450	Galaxy	AQR	13	-	1.8'	Sa				NGC 7632	Galaxy	GRU	12.1	12.9	2.4'	SBO Ring			
NGC 7451	Galaxy	PEG	14	13.1	1'	SBbc				NGC 7634	Galaxy	PEG	12.6	12.5	1.2'	SBO			H II 441;Brightest of 3
NGC 7454	Galaxy	PEG	11.8	13.2	2.2'	Elliptical			H II 249;NGC 7448 group;UGC 12305	NGC 7635	Br Neb	CAS	11	-	15'	E			Bubble Nebula;H IV 52;L neb ring
NGC 7456	Galaxy	GRU	11.8	14.1	5.1'	Sc				NGC 7636	Galaxy	SCL	13.7	12.8	0.9'	SO			
NGC 7457	Galaxy	PEG	11.2	13.6	4'	E-SO			H II 212	NGC 7640	Galaxy	AND	11.3	14.5	10'	SBbc			H II 600;nearly edge on spiral
NGC 7458	Galaxy	PSC	12.5	13.1	1.4'	Elliptical			H II 590;p of 2;UGC 12309	NGC 7641	Galaxy	PEG	13.9	13.6	1.7'	Sa			NGC 7643 group
NGC 7460	Galaxy	PSC	13	13.3	1.5'	SB/P			Companion superimposed;disturbed;3-armed gal	NGC 7642	Galaxy	PSC	13.7	12.1	0.6'	Sa			np of 2
NGC 7461	Galaxy	PEG	13.3	12.7	0.9'	SBO				NGC 7643	Galaxy	PEG	13.2	13.1	1.4'	S pec			brightest of 3
NGC 7462	Galaxy	GRU	11.7	12.8	4.3'	SBbc				NGC 7645	Galaxy	SCL	13.1	13.6	1.5'	SBc			
NGC 7463	Galaxy	PEG	13.2	13.8	3'	SBb/P			H III 210;Distorted;NGC 7448 group;UGC 12316	NGC 7647	Galaxy	PEG	13.6	14	1.4'	Elliptical			H III 473;UGC 12576
NGC 7464	Galaxy	PEG	13.3	12.7	0.5'	Elliptical			NGC 7448 group	NGC 7648	Galaxy	PEG	13	13.4	1.6'	SO			H III 218;UGC 12575
NGC 7465	Galaxy	PEG	12.6	12.4	1.2'	SBO			H III 211;NGC 7448 group;UGC 12317	NGC 7649	Galaxy	PEG	14	14.1	1.3'	Elliptical			
NGC 7466	Galaxy	PEG	13.6	13.1	1.5'	Sb				NGC 7650	Galaxy	TUC	12.7	13	1.4'	SBc			
NGC 7468	Galaxy	PEG	13.7	13	0.9'	Elliptical			H III 202;Peculiar;two jets;UGC 12329	NGC 7652	Galaxy	TUC	13.6	13.2	1.2'	Sa			
NGC 7469	Galaxy	PEG	12.3	12.7	1.4'	SBa			H III 230;Seyfert;UGC 12332	NGC 7653	Galaxy	PEG	12.7	13.5	1.6'	Sb			UGC 12586
NGC 7473	Galaxy	PEG	13.7	12.9	1.1'	SBO				NGC 7656	Galaxy	AQR	13.3	13.5	1.2'	SO			
NGC 7476	Galaxy	GRU	12.6	12.8	1.4'	SBab				NGC 7659	Galaxy	PEG	14	12.5	0.8'	Sa			H III 212
NGC 7479	Galaxy	PEG	10.9	13.4	4'	SBbc			H I 55;excellent barred spiral	NGC 7660	Galaxy	PEG	12.7	13.1	1.4'	Elliptical			
NGC 7482	Galaxy	PSC	13.6	12.1	0.6'	Elliptical				NGC 7662	Pln Neb	AND	8.6	5.6	17''	4(3)	14		Blue Snowball Nebula;H IV 18;Barnard-cent * vari
NGC 7483	Galaxy	PSC	13	13.5	1.6'	SBa				NGC 7664	Galaxy	PEG	12.7	14	2.6'	Sc			
NGC 7484	Galaxy	SCL	11.8	12.9	1.8'	Elliptical				NGC 7665	Galaxy	AQR	13	-	0.8'	Sm			H III 438
NGC 7485	Galaxy	PEG	13.1	12.7	1.2'	SO				NGC 7667	Galaxy	PSC	14	14.5	1.6'	Sm			
NGC 7488	Galaxy	PSC	13.8	12.3	0.6'	E-SO			compact	NGC 7671	Galaxy	PEG	12.8	12.8	1.4'	SO			H III 226;UGC 12602
NGC 7489	Galaxy	PEG	13.4	14.1	2.1'	Scd				NGC 7672	Galaxy	PEG	13.9	13.9	0.8'	Sb			
NGC 7490	Galaxy	PEG	12.3	14.3	2.7'	Sbc				NGC 7673	Galaxy	PEG	12.8	13.1	1.3'	Scp			compact
NGC 7492	Glob CL	AQR	11.2	-	4.3'	XII			H III 558	NGC 7674	Galaxy	PEG	13.2	13.2	1.1'	SBbc			
NGC 7495	Galaxy	PEG	13.1	14.1	1.8'	Sc				NGC 7676	Galaxy	TUC	12.5	12.8	1.6'	E-SO			
NGC 7496	Galaxy	GRU	11.1	13.5	3.3'	SBb				NGC 7677	Galaxy	PEG	13.2	13.6	1.6'	SBbc			
NGC 7497	Galaxy	PEG	12.2	14	4.4'	SBc				NGC 7678	Galaxy	PEG	11.8	13.1	2.5'	SBc			H II 226;UGC 12614;Arp 28;slightly asym;1big arm
NGC 7499	Galaxy	PSC	12.8	12.4	1.2'	SO				NGC 7679	Galaxy	PSC	12.9	13	1.2'	SBO			disturbed
NGC 7500	Galaxy	PEG	13.3	14.1	2.1'	SO				NGC 7680	Galaxy	PEG	12.6	13.8	1.8'	E-SO			H III 860;UGC 12616
NGC 7501	Galaxy	PSC	13.4	13.4	0.5'	Elliptical				NGC 7681	Galaxy	PEG	13.7	12.9	1.8'	SO			H II 242
NGC 7503	Galaxy	PSC	13.2	13.4	0.8'	Elliptical				NGC 7682	Galaxy	PSC	13.1	13.3	1.2'	SBab			disturbed
NGC 7506	Galaxy	PSC	12.9	13.5	1.7'	Sa			H III 184	NGC 7683	Galaxy	PSC	12.5	13.1	1.9'	SO			
NGC 7507	Galaxy	SCL	10.4	12.5	2.8'	Elliptical			H II 2	NGC 7684	Galaxy	PSC	13.6	12.9	1.5'	Sa			
NGC 7510	Opn CL	CEP	7.9	-	4'	II 2 m n	60	9.7	H VII 44;L region of F neby to SE	NGC 7685	Galaxy	PSC	13.2	14.1	1.9'	SBc			H III 426
NGC 7511	Galaxy	PEG	13.8	13.1	1.1'	S pec				NGC 7686	Opn CL	AND	5.6	-	15''	IV 1 p	20	6.2	H VIII 69;12' mags 8...13
NGC 7512	Galaxy	PEG	12.6	13.7	1.8'	Elliptical			spp of 2	NGC 7687	Galaxy	PSC	13.4	13.6	1.3'	SO			compact
NGC 7513	Galaxy	SCL	11.4	13.3	3.2'	SBb/P				NGC 7689	Galaxy	PHE	11.5	13.2	2.8'	SBc			
NGC 7514	Galaxy	PEG	12.5	12.6	1.4'	Sbc													

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
NGC 7721	Galaxy	AQR	11.6	13.2	3.1'	Sc			H II 432	IC 417	Brn Neb	AUR	-	-	13'	E+			
NGC 7722	Galaxy	PEG	12.4	13.2	2.1'	Sa				IC 418	Pln Neb	LEP	10.7	5.8	14"	4		10.2	11 mag star in nebulous disk
NGC 7723	Galaxy	AQR	11.2	13.3	3.5'	SBb			H I 110	IC 423	Brn Neb	ORI	-	-	2'	E			
NGC 7724	Galaxy	AQR	13	-	1.5'	Sb				IC 426	Brn Neb	ORI	-	-	10'	E			
NGC 7727	Galaxy	AQR	10.6	13.5	4.7'	SBap			H I 111;Faint outer arms ext to 5'	IC 430	Brn Neb	ORI	-	-	11'	E			
NGC 7728	Galaxy	PEG	13.1	12.9	1'	Elliptical				IC 431	Brn Neb	ORI	-	-	8'	E			
NGC 7729	Galaxy	PEG	13.5	13.5	1.8'	SBa				IC 432	Brn Neb	ORI	-	-	10'	E			
NGC 7731	Galaxy	PSC	13.5	13.9	1.4'	SBa				IC 434	Brn Neb	ORI	11	-	90'	E			Contains Horsehead neb (B33)
NGC 7732	Galaxy	PSC	13.8	13.8	2'	Scd			disturbed	IC 435	Brn Neb	ORI	-	-	5'	R			
NGC 7735	Galaxy	PEG	13.6	13.7	1.3'	Elliptical				IC 443	SN Rem	GEM	12	-	50'				vF,vL;arc 25'x5';filamentary structure
NGC 7736	Galaxy	AQR	12.9	13.8	1.6'	SO				IC 444	Brn Neb	GEM	-	-	8'	E			7th mag star (12 GEM) w faint neby;diam 4'
NGC 7737	Galaxy	PEG	13.8	12.7	0.9'	Sa				IC 446	Brn Neb	MON	-	-	25'	R+			
NGC 7741	Galaxy	PEG	11.3	13.9	4.5'	SBc			UGC 12754;B narrow bar .8'X0.2';S shape w thick b	IC 448	Brn Neb	MON	-	-	15'	R			
NGC 7742	Galaxy	PEG	11.6	12.7	1.8'	Sb			H II 255;P w NGC 7743	IC 466	Brn Neb	MON	-	-	1'	E			
NGC 7743	Galaxy	PEG	11.5	13.6	2.8'	SBO-a			H II 256;P w NGC 7742	IC 691	Galaxy	UMA	13.9	12.4	0.6'	Pec			compact w jet
NGC 7744	Galaxy	PHE	11.9	13.2	2.2'	E-SO Ba				IC 719	Galaxy	VIR	13.1	12.2	1.3'	SO			
NGC 7746	Galaxy	PSC	13.1	13.4	1.4'	SO				IC 719	Galaxy	VIR	13.1	12.2	1.3'	SO			
NGC 7747	Galaxy	PEG	13.6	13.2	1.5'	SBb				IC 749	Galaxy	UMA	12.4	13.8	2.3'	SBc Ring			P w IC 750;3.3' distant
NGC 7748	Star	CEP	7.1	-	-					IC 749	Galaxy	UMA	12.4	13.8	2.3'	SBc Ring			P w IC 750;3.3' distant
NGC 7749	Galaxy	SCL	12.8	13.3	1.6'	SO				IC 750	Galaxy	UMA	11.9	13	2.6'	Sab			P w IC 749;very red obj
NGC 7750	Galaxy	PSC	12.9	13	1.6'	SBc/P			H III 427	IC 750	Galaxy	UMA	11.9	13	2.6'	Sab			P w IC 749;very red obj
NGC 7751	Galaxy	PSC	12.8	12.6	1'	S			H III 437;UGC 12778;core .45'X0.40'	IC 758	Galaxy	UMA	13.3	14.6	1.9'	SBc			
NGC 7753	Galaxy	PEG	12	14	2.9'	SBbc			H II 213;connected w NGC 7752	IC 764	Galaxy	HYA	12.2	14.1	4.8'	SBc			
NGC 7755	Galaxy	SCL	11.9	14.3	3.8'	SBc				IC 769	Galaxy	VIR	12.6	14.1	2.5'	SBbc Ring			Member of Virgo group of galaxies
NGC 7756	Galaxy	PSC	14	-	0.5'	S				IC 775	Galaxy	VIR	13.3	13.2	1.2'	SB0 pec			
NGC 7757	Galaxy	PSC	12.7	14.2	2.4'	Sc				IC 776	Galaxy	VIR	13.8	14.4	1.8'	SBd			Virgo grp memb;P w IC 3134 vF;vS;E
NGC 7759	Galaxy	AQR	14	-	1.3'	SBO				IC 783	Galaxy	COM	13.6	13.9	1.3'	SBO-a			
NGC 7760	Galaxy	PEG	13.4	13.3	1'	Elliptical			H III 854;Red plate size 1.5'x1.5';very compact	IC 875	Galaxy	UMA	12.8	13	1.2'	SO			
NGC 7761	Galaxy	AQR	14	-	1.2'	SO				IC 1014	Galaxy	BOO	12.5	14.2	2.7'	SBd			
NGC 7762	Opn CL	CEP	10	-	11'	II 2 p	40	11	H VII 55	IC 1048	Galaxy	VIR	12.6	13	2.2'	S pec			
NGC 7764	Galaxy	PHE	12.2	13.1	2'	SB				IC 1065	Galaxy	DRA	13.6	13.2	1'	SBO			
NGC 7767	Galaxy	PEG	13.5	11.6	1'	Sa			UGC 12805	IC 1158	Galaxy	SER	12.6	14	2.5'	SBc			
NGC 7768	Galaxy	PEG	12.3	13.1	1.6'	Elliptical				IC 1257	Glob CL	OPH	12.5	-	1'	V			Identified as distant globular cluster in 1996
NGC 7769	Galaxy	PEG	12	12.9	1.6'	Sb			H II 230;Size 2.5'x2.1' in red light;UGC 12808	IC 1266	Pln Neb	ARA	12.3	-	13"	4		11.1	Also Thackeray 1
NGC 7770	Galaxy	PEG	13.8	13.1	0.8'	Sa			disturbed;NGC 7769 group	IC 1274	Brn Neb	SGR	-	-	20'	E+			
NGC 7771	Galaxy	PEG	12.3	13.1	2.4'	SBa			H II 231;disturbed;NGC 7769 group;UGC 12815	IC 1275	Brn Neb	SGR	-	-	20'	E+			
NGC 7772	Opn CL	PEG	-	-	2'	III 1 p				IC 1276	Glob CL	SER	10.3	-	7.1'	XII			
NGC 7773	Galaxy	PEG	13.4	13.7	1.2'	SBbc			H II 851	IC 1284	Brn Neb	SGR	-	-	17'	E+			
NGC 7774	Galaxy	PEG	13.1	13.6	1.3'	Elliptical				IC 1287	Brn Neb	SCT	-	-	20'	E		6	Dbl * Struve 2325 illum neby--Hartung
NGC 7775	Galaxy	PEG	13.3	12.8	0.9'	SBc			disturbed?;chaotic spiral	IC 1291	Galaxy	DRA	13	13.9	1.8'	SBdm pec			Br of 3;S-shaped;very patchy
NGC 7777	Galaxy	PEG	13.3	13.1	1.2'	SO				IC 1295	Pln Neb	SCT	12.7	13.4	102"	3b(2)		15	Often mislabeled IC 1298
NGC 7778	Galaxy	PSC	12.7	12.7	1'	Elliptical			H III 231;NGC 7782 group	IC 1297	Pln Neb	CRA	11.5	5.9	8"			12.9	Ring shape
NGC 7779	Galaxy	PSC	12.7	13.1	1.4'	Sa			H III 232;NGC 7782 group	IC 1310	CL+Neb	CYG	-	-	15'	II 1 p n	12	14	Brian Skiff ID of Be 50=IC 1310
NGC 7780	Galaxy	PSC	13.9	13	0.9'	SBab			sf of 2	IC 1311	CL+Neb	CYG	13.1	-	5'	II 3 r n	60	17	Neb Descr=60'x20' emission neb in sev parts
NGC 7781	Galaxy	PSC	13.9	11.9	0.8'	S				IC 1340	SN Rem	CYG	-	-	25'	E			Veil nebula , see 6960
NGC 7782	Galaxy	PSC	12.2	13.3	2.2'	Sb			H III 233;Brightest of 3	IC 1369	Opn CL	CYG	8.8	-	4'	I 1 m	40	12.1	Barnard saw nebulosity-there is none
NGC 7785	Galaxy	PSC	11.6	12.9	2'	Elliptical			H II 468	IC 1396	CL+Neb	CEP	3.5	-	89"	II 3 m n	50	3.8	In Cep OB2;Neby is 165'X135';cluster is Tr 37
NGC 7786	Galaxy	PEG	13.1	11.6	0.6'	S				IC 1434	Opn CL	LAC	9	-	8'	II 1 p ?	40	12	
NGC 7788	Opn CL	CAS	9.4	-	9'	I 2 p	20		in Cas OB5?	IC 1442	Opn CL	LAC	9.1	-	5'	II 2 m	20	11.4	
NGC 7789	Opn CL	CAS	6.7	-	16'	II 1 r	300	10.7	H VI 30;1000 members from 11 to 18 mag	IC 1459	Galaxy	GRU	10	13.2	5.1'	E3			
NGC 7790	Opn CL	CAS	8.5	-	17'	III 2 p	40	10.9	H VII 56;Contains CE Cas	IC 1470	Brn Neb	CEP	-	-	15'	E			12 mag star w 70" X 45" neby
NGC 7793	Galaxy	SCL	9.1	13.4	9.6'	Scd				IC 1558	Galaxy	SCL	12.2	14.4	3.3'	SB			
NGC 7794	Galaxy	PEG	12.5	13.1	1.5'	Sbc			H III 466;Peculiar;UGC 12872	IC 1613	Galaxy	CET	9.2	15	16.6'	Ir			Member of Local Group
NGC 7795	Opn CL	CAS	12	-	10'					IC 1727	Galaxy	TRI	11.5	14.7	7.1'	SBm			P w NGC 672;Low surf br;distorted by NGC 672
NGC 7796	Galaxy	PHE	11.5	12.9	2.2'	Elliptical				IC 1747	Pln Neb	CAS	12	8.7	13"	3b		15.8	
NGC 7797	Galaxy	PSC	13.7	13.4	1'	Sbc			H III 867;UGC 12877	IC 1795	Brn Neb	CAS	-	-	12'	E			Brightest portion of IC 1805;vast neby incl Mel 15
NGC 7798	Galaxy	PEG	12.4	12.8	1.4'	Sc			H II 232	IC 1805	CL+Neb	CAS	6.5	-	60"	III 3 p n	40	7.9	Cluster is Mel 15 & Cr 26;neby eF;Irr loop 90' diam
NGC 7800	Galaxy	PEG	12.6	13.9	2.3'	Ir			H II 10;UGC 12885	IC 1848	CL+Neb	CAS	6.5	-	40"	IV 3 p n	10	7.1	Neby descr: eL;vF;90' X 45'
NGC 7802	Galaxy	PSC	13.5	12.9	1.1'	SO				IC 1871	Brn Neb	CAS	-	-	4.0'	E			
NGC 7803	Galaxy	PEG	13.1	12.4	1'	Sa			Brightest in chain of 6	IC 1933	Galaxy	HOR	12.5	13.4	2.2'	SBc			
NGC 7805	Galaxy	PEG	13.3	13.2	1.2'	SBO			H III 855;contact w NGC 7806	IC 1954	Galaxy	HOR	11.6	13.2	3'	SBb			
NGC 7806	Galaxy	PEG	13.5	13.2	1.1'	SB/P			H III 856;disturbed PA20;contact w NGC 7805	IC 1995	Brn Neb	TAU	-	-	2'	E			
NGC 7808	Galaxy	CET	13.5	13.9	1.3'	SO				IC 2000	Galaxy	HOR	11.9	13	4.1'	SBc			
NGC 7810	Galaxy	PEG	13	13	1.2'	SO			H III 984;UGC 12919	IC 2003	Pln Neb	PER	12.6	7.4	10.8"	2		15.3	
NGC 7812	Galaxy	SCL	13.1	12.7	1.1'	Sb				IC 2035	Galaxy	HOR	11.8	11.7	1.2'	SBO			
NGC 7814	Galaxy	PEG	10.6	13.2	4.7'	Sab			H II 240;Equatorial dust lane;Nearly edge-on	IC 2087	Brn Neb	TAU	-	-	4'	E			In dark neb B22
NGC 7816	Galaxy	PSC	12.8	13.7	1.7'	Sbc			H III 436	IC 2149	Pln Neb	AUR	10.6	-	12"	3b(2)		11.3	
NGC 7817	Galaxy	PEG	11.8	12.9	3.5'	Sbc			H II 227	IC 2157	Opn CL	GEM	8.4	-	7'	III 2 p	20	11.1	
NGC 7818	Galaxy	PSC	14	13.9	1'	Sc				IC 2158	Galaxy	COL	12	12.7	1.7'	SBab			
NGC 7819	Galaxy	PEG	13.5	14	1.5'	SBb				IC 2162	Brn Neb	ORI	-	-	4'	E			With E-W extensions
NGC 7820	Galaxy	PSC	12.9	12.4	1.3'	Sa			Brightest in group	IC 2165	Pln Neb	CMA	10.6	6.5	9"	3b		15.1	Nearly stellar
NGC 7821	Galaxy	CET	14	-	1.4'	Sc				IC 2166	Galaxy	LYN	12.4	14.3	3'	SBbc			
NGC 7822	Brn Neb	CEP	-	-	20'	E			Portion of 2 deg arc;whole area nebulous	IC 2169	Brn Neb	MON	-	-	25'	R			
NGC 7824	Galaxy	PSC	13.2	13.7	1.6'	Sab				IC 2177	Brn Neb	MON	-	-	20'	E			Streamer incl bright patches 2337 & Gum 1;Eagle r
NGC 7827	Galaxy	PSC	13.9	13.9	1.2'	SBO			interaction?	IC 2179	Galaxy	CAM	12.4	12.6	1.7'	E1			P w NGC 2347 at 13' south foll
NGC 7828	Galaxy	CET	13.9	12.7	1'	Sc Ring				IC 2233	Galaxy	LYN	12.6	13.3	4.6'	SBcd			
NGC 7829	Galaxy	CET	13.9	12.9	0.7'	Sa Ring				IC 2391	Opn CL	VEL	2.5	-	60"	II 3 p	30	3.6	Scattered group of 10 * incl Omicron Velorum
NGC 7831	Galaxy	AND	12.8	12.3	1.5'	Sb				IC 2395	Opn CL	VEL	4.6	-	17"	II 3 p	40	5.5	Cluster NGC 2670 in field 30' south
NGC 7832	Galaxy	PSC	13.3	-	1.9'	Elliptical			H III 190;IC 5386	IC 2488	Opn CL	VEL	7.4	-	15"	II 2 m	70	10	
NGC 7836	Galaxy	AND	13.7	12.7	0.9'	Ir				IC 2511	Galaxy	ANT	12.1	12.5	2.9'	SBab			
IC 10	Galaxy	CAS	13.3	14	6.4'	Ir+			Mem. of Local Group										

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
IC 3687	Galaxy	CVN	13.4	15.8	3.4"	Ir+			Dwarf irr;bright cond. on south side of nuc 0.6'	B 30	Drk Neb	ORI	--	--	67'	5 Ir			Large dark area with few stars
IC 3881	Galaxy	COM	13	14.1	0.2'	SBc				B 31-2	Drk Neb	ORI	--	--	80'	5 Ir			3 deg north preceding Lamba Ori
IC 4051	Galaxy	COM	13.2	13	1'	E0			Member of Coma group of galaxies	B 33	Drk Neb	ORI	--	--	6'	4 Ir			Horsehead nebula ;part of dark following cloud
IC 4182	Galaxy	CVN	12.5	16.1	6'	Sm			Dwarf spiral	B 34	Drk Neb	AUR	--	--	20'	4 C G			2 deg preceding cluster M 37
IC 4213	Galaxy	CVN	13.3	13.3	2.5'	Sc				B 35	Drk Neb	ORI	--	--	20'	5 E			Near FU ORI and bright nebula Ced 59
IC 4351	Galaxy	HYA	11.7	13.4	5.9'	Sb				B 36	Drk Neb	ORI	--	--	120'	4 Ir			Narrow south preceding-north following lane
IC 4406	Pln Neb	LUP	11	9.1	46"	4(3)	17.4		Annular;N2-- Stellar ?;pB diffused disk 20"--Hartung	B 37-9	Drk Neb	MON	--	--	180'	5 Ir			Near bright nebulae NGC 2245;47
IC 4444	Galaxy	LUP	11.4	12.2	1.7'	SBbc				B 40	Drk Neb	SCO	--	--	15'	3 E			Diffused dark spot; small star in it;
IC 4562	Galaxy	BOO	12.6	13	1.2'	Elliptical				B 41	Drk Neb	SCO	--	--	40'	3 E			Diffused dark spot near Psi SCO.
IC 4592	Brk Neb	SCO	-	-	60'	E+				B 42	Drk Neb	OPH	--	--	20'	6 Ir			Great Nebula of Rho OPH
IC 4593	Pln Neb	HER	11	7.4	12.5"	2(2)	11.1		Central star is variable mags 10.2 to 11.1	B 43	Drk Neb	OPH	--	--	120'	4 Ir			Large dark region; bulbous with two lobes
IC 4599	Pln Neb	SCO	12.3	-	16"		16.3			B 44	Drk Neb	OPH	--	--	280'	5 Ir			Dark lane E from Rho OPH region
IC 4601	Brk Neb	SCO	-	-	20'	E+				B 44a	Drk Neb	SCO	--	--	5'	5 Ir			2.4 degrees preceding bright nebula IC 4628
IC 4603	Brk Neb	OPH	-	-	20'	E+				B 45	Drk Neb	OPH	--	--	120'	5 Ir			Rather definite; 2 degrees long
IC 4604	Brk Neb	OPH	-	-	60'	E+			Photographically 140' X 70'	B 46	Drk Neb	OPH	--	--	12'	6 Ir G			30' north of 24 Oph; String of small stars in middle
IC 4605	Brk Neb	SCO	-	-	30'	E+			Surrounds 22 Sco;irregular shape	B 47	Drk Neb	OPH	--	--	15'	5 Ir			Connected with B51 by two sharp lanes
IC 4628	Brk Neb	SCO	-	-	90'	E				B 48	Drk Neb	SCO	--	--	40'	5 Ir			1 deg south following bright nebula IC 4628
IC 4634	Pln Neb	OPH	12	6.6	20"	2a(3)	17		Pale blue disk 10" across--Hartung	B 50	Drk Neb	SCO	--	--	15'	6 Ir			30' south preceding star CoD -33 degrees 11706
IC 4637	Pln Neb	SCO	13.5	9.2	21"	3	12.7			B 51	Drk Neb	OPH	--	--	20'	6 Ir			Definite
IC 4642	Pln Neb	ARA	12.4	9.6	15"	4	13.6			B 53	Drk Neb	SCO	--	--	30'	4 Ir			Curved
IC 4651	Opn CL	ARA	6.9	-	10'	II 3 m	80	8.9	Not much condensation--Hartung;70 * mags 10..14	B 55	Drk Neb	SCO	--	--	16'	5 Ir			Irregular
IC 4663	Pln Neb	SCO	13	8.8	14"	4	14			B 56	Drk Neb	SCO	--	--	3'	5 IR			Small
IC 4665	Opn CL	OPH	4.2	-	41"	III 2 p	30	6.9	Incl Struve 2212 8.5+9 ;3.1"sep;340 deg PA	B 57	Drk Neb	OPH	--	--	5'	6 E G			In patchy region following B44
IC 4673	Pln Neb	SGR	13	9.9	18"	4	14.6			B 58	Drk Neb	SCO	--	--	30'	6 Ir			2.7 deg following bright nebula IC 4628; darker core
IC 4684	Brk Neb	SGR	-	-	3'	E+				B 59	Drk Neb	OPH	--	--	60'	5 Ir			Sink hole; broken lane from B 78
IC 4685	Brk Neb	SGR	-	-	10'	E+				B 60;246	Drk Neb	OPH	--	--	30'	3 Ir			In patchy region following B44
IC 4699	Pln Neb	TEL	12	7.2	13"	2	15.1			B 61	Drk Neb	OPH	--	--	10'	6 Ir			1 deg south preceding B63
IC 4701	Brk Neb	SGR	-	-	60'	E				B 62	Drk Neb	OPH	--	--	19'	6 Ir			30' south preceding B63
IC 4721	Galaxy	PAV	11.6	13.7	5.6'	SBc			Interacting with IC 4720?	B 63	Drk Neb	OPH	--	--	100'	3 Ir G			3 deg north-north foll Theta Oph;w a globule at end
IC 4732	Pln Neb	SGR	13.3	6.2	3.6"	1	16.6			B 64	Drk Neb	OPH	--	--	20'	6 Co			Cometary; 30' preceding globular cluster M9
IC 4756	Opn CL	SER	4.6	-	39'	III 2 m	80	8.7	Naked eye from dark site	B 65-67	Drk Neb	OPH	--	--	12'	6 Ir			Pipe nebula (stem); 2 deg south of Theta Oph;
IC 4776	Pln Neb	SGR	12.5	6.4	8"	2a	16			B 67a	Drk Neb	OPH	--	--	13'	6 Ir G			3 deg north of Theta Oph
IC 4812	Brk Neb	CRA	-	-	20'	E+				B 68	Drk Neb	OPH	--	--	4'	6 K G			20' southwest preceding B72
IC 4846	Pln Neb	AQL	12	4.5	2"	2	13.7			B 69	Drk Neb	OPH	--	--	4'	6 Ir			15' south following B68
IC 4889	Galaxy	TEL	11.1	12.8	2.7'	E5				B 70	Drk Neb	OPH	--	--	4'	4 C?			20' south following B68
IC 4946	Galaxy	SGR	12.6	12.4	2.4'	SAB				B 72	Drk Neb	OPH	--	--	4'	6 S G			The Snake;1.5 deg nrf Theta Oph
IC 4954	Brk Neb	VUL	-	-	10'	E			3 Bright components;Roslund 4 open cluster invl	B 74	Drk Neb	OPH	--	--	15'	5 Ir			15' preceding 44 Oph
IC 4996	Opn CL	CYG	7.3	-	6'	I 3 p n	15	8.5		B 75;261-2	Drk Neb	OPH	--	--	110'	5 Ir			Two arcs 1 deg north following B72
IC 4997	Pln Neb	SGE	11.3	2.9	2"	1	13.7		Small;bright PLNNB--Hartung	B 77;269	Drk Neb	OPH	--	--	100'	3 Ir			Faint extension of bowl of Pipe nebula
IC 5006	Star	AQL	12	-	-					B 78	Drk Neb	OPH	--	--	200'	5 Ir			2.5 deg south ;Bowl of Pipe nebula
IC 5063	Galaxy	IND	11.9	12.9	2.4'	SA0				B 79;276	Drk Neb	OPH	--	--	50'	6 Ir			B79 is narrow;straight north preceding extension
IC 5067	Brk Neb	CYG	8	-	60'	E			Pelican Nebula ;w IC 5067;56 Cyg invl	B 83a	Drk Neb	SGR	--	--	4'	6 E? G			On star cloud 1.7 deg north and 30'
IC 5068	Brk Neb	CYG	-	-	40'	E				B 84	Drk Neb	SGR	--	--	30'	6 Ir			Looped figure; 1.5 deg north;40' following 58 Oph
IC 5076	Brk Neb	CYG	-	-	7'	E			surr *6m	B 84a	Drk Neb	SGR	--	--	16'	5 C			Round; 1.5 deg north of cluster M23 ;w faint ext to S
IC 5117	Pln Neb	CYG	13.3	3	2"	2	16.7			B 85	Drk Neb	SGR	--	--	-	-			Dark regions in Trifid nebula ; M 20
IC 5146	CL+Neb	CYG	10	-	20'	IV 2 p n	20	9.6	Cocoon neb ;at end of dark streamer B168	B 86	Drk Neb	SGR	--	--	4'	5 Ir G			Ink Spot Neb ;On Sqr star cloud preceding 6520;
IC 5148	Pln Neb	GRU	11	14.4	120"	4	16.2		Also IC 5149 and IC 5150;called IC 5150 in Hartung	B 87	Drk Neb	SGR	--	--	12'	4 C G			Parrot's Head ;4.5 deg south of cluster NGC 6520
IC 5152	Galaxy	IND	10.6	13.5	5.5'	Ir			Member of Local Group	B 88-9;286	Drk Neb	SGR	--	--	2'				Dark regions in Lagoon nebula
IC 5181	Galaxy	GRU	11.5	12.2	2.5'	SA0			Brightest in group with NGC 7232;A; B and 7233	B 90	Drk Neb	SGR	--	--	3'	5 Ir G			1.5 deg following;20' south of cluster NGC 6520
IC 5186	Galaxy	GRU	11.9	12.6	1.8'	SBb				B 91	Drk Neb	SGR	--	--	5'	5 K			Adjacent to bright nebulae IC 1274-5
IC 5201	Galaxy	GRU	10.6	14.3	7.8'	SBc				B 92	Drk Neb	SGR	--	--	15'	6 E G			Black spot ; On edge of Small Sag Star Cloud
IC 5217	Pln Neb	LAC	12.6	6.6	7.5"	2	14.6			B 93	Drk Neb	SGR	--	--	12'	4 Co G			Cometary; 30' following B92
IC 5240	Galaxy	GRU	11.9	13.6	2.8'	SBa				B 95	Drk Neb	SCT	--	--	30'	5 C G			2.6 deg north following bright nebula M16
IC 5267	Galaxy	GRU	10.5	13.7	5.4'	Sa(s)			Brightest in group	B 97	Drk Neb	SCT	--	--	50'	4 Ir			1 deg north preceding cluster NGC 6649
IC 5269	Galaxy	PSA	12.2	12.5	1.7'	SBO			np of 2	B100-1	Drk Neb	SCT	--	--	40'	5 Ir g			1.4 deg north of cluster NGC 6649 and curved
IC 5271	Galaxy	PSA	11.6	12.3	2.6'	Sb				B103	Drk Neb	SCT	--	--	4'	6 Ir			On north preceding side of Scutum star cloud
IC 5273	Galaxy	GRU	11.4	13	2.6'	SBc			Asymmetrical	B104	Drk Neb	SCT	--	--	16'	5 Co			Carot shaped; 20' north of Beta Sct;L-shaped
IC 5332	Galaxy	SCL	10.5	14.5	8.4'	SBcd				B108	Drk Neb	SCT	--	--	3'	3 Ir			Not black; very small; 0.5 deg preceding cluster M11
IC 5332	Galaxy	SCL	10.5	14.5	8.4'	SBcd				B110	Drk Neb	SCT	--	--	9'	6 Ir G			Part of B111
3C 273	Quasar	VIR	13	-	-				Brightest quasar ; ~2 billion light years, variable	B111;119a	Drk Neb	SCT	--	--	120'	3 Ir			Two crescent-shaped areas north of M11
Abell 194	Gal CL	PSC	13.9	-	56'	0 1 II			Includes 541 and Minkowski's object ; 37 galaxies	B112	Drk Neb	SCT	--	--	20'	4 Ir			Lies south of M11
Abell 262	Gal CL	AND	13	-	100.8'	0 1 III			Includes 708, 753;rather loose and irregular; 40 galaxies	B113	Drk Neb	SCT	--	--	11'	5 Ir G			Part of B111
Abell 347	Gal CL	AND	13	-	56'	0 1 II-III			0.5 degrees south preceding NGC 891; 32 galaxies	B114-7	Drk Neb	SCT	--	--	50'	6 Ir			LDN 514;518;512;509; Chain of dark neb near m11
Abell 400	Gal CL	CET	13.9	-	56'	1 II-III			17 Gal/Deg; 58 galaxies	B118	Drk Neb	SCT	--	--	2'	6 C G			Blacker than B 117; Definite; Member of group
Abell 426	Gal CL	PER	13	-	190.4'	2 0 II-III			Centered on 1275; 88 galaxies	B127;129-30	Drk Neb	AQL	--	--	20'	5 Ir			LDN 544;549;542; Curved;lying north of 12 Aql
Abell 548	Gal CL	LEP	13.7	-	56'	1 1 III			14 Gal/Deg; 79 galaxies	B132;328	Drk Neb	AQL	--	--	16'	6 Ir			40' north preceding Lamba Aql
Abell 569	Gal CL	LYN	13.8	-	25.8'	0 1 II			9 Gal/Deg; brightest is NGC 2329; 36 galaxies	B133	Drk Neb	AQL	--	--	10'	6 Co G			Cometary; On Scutum star cloud
Abell 779	Gal CL	LYN	13.8	-	50.4'	0 1 I-II			9 Gal/Deg; NGC 2832 group; 32 galaxies	B134	Drk Neb	AQL	--	--	6'	6 C G			1.4 deg south of Lamba Aql
Abell 1060	Gal CL	HYA	12.7	-	168'	1 0 II			5 Gal/Deg; 50 galaxies	B135-6	Drk Neb	AQL	--	--	50'	6 Ir			Dusty spots; 1 deg north following Lamba Aql
Abell 1185	Gal CL	UMA	14	-	28'	1 2 II			Incl 3550 and Ambartsumian's Knot ; 52 galaxies	B137-8	Drk Neb	AQL	--	--	180'	3 Ir			Long;curved lane on Sc

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
B257	Drk Neb	SCO	--	--	10'	5 lr			Faint reflection nebula at edge	Berk 77	Opn CL	MON	-	-	6'	I 2m .b	30	13	
B259	Drk Neb	OPH	--	--	30'	4 lr			50' south following globular cluster M9	Berk 78	Opn CL	CMI	-	-	7'	II 1p .b	12	16	
B263	Drk Neb	SCO	--	--	30'	5 lr			Very slightly elongated	Berk 79	Opn CL	AQL	-	-	10'	II 1r .b	60	15	
B268;270	Drk Neb	OPH	--	--	120'	5 lr			Irregular dark shape; round in NE part of B268	Berk 80	Opn CL	AQL	-	-	4'	II 1p .b	20	15	
B283	Drk Neb	SCO	--	--	90'	5 lr			1 deg north-north preceding cluster M7	Berk 81	Opn CL	AQL	-	-	7'	II 2r .b	80	15	
B287	Drk Neb	SCO	--	--	25'	5 lr			30' south-south following cluster M7	Berk 82	Opn CL	AQL	-	-	4'	III 1p .b	20	14	
B303	Drk Neb	SGR	--	--	1'	5 S			In bright nebula IC 4685	Berk 83	Opn CL	VUL	-	-	4'	II 1p .b	20	17	
B312	Drk Neb	SCT	--	--	100'	4 E			following Omega nebula w sharp n boundary	Berk 84	Opn CL	CYG	-	-	4'	II 1pn .b	20	16	
B314	Drk Neb	SCT	--	--	35'	5 lr			1 degree north following cluster NGC 6649	Berk 85	Opn CL	CYG	-	-	7'	III 1m .b	40	15	
B318	Drk Neb	SCT	--	--	90'	2 lr			Narrow preceding-following lane just south of M11	Berk 86	Opn CL	CYG	7.9	-	8'	I 3 p n	30	9.5	
B334;336-7	Drk Neb	AQL	--	--	40'	4 lr			2 deg north preceding B142-3	Berk 87	Opn CL	CYG	-	-	12'	IV 2 p	30	13	
B335	Drk Neb	AQL	--	--	4'	6 E G			3.5 deg preceding and 1.2 deg south of Altair	Berk 88	Opn CL	CYG	-	-	3'	IV 1p .b	12	15	
B343	Drk Neb	CYG	--	--	10'	5 lr G			1.7 deg preceding Gamma Cyg	Berk 89	Opn CL	CYG	-	-	5'	III 1p .b	15	15	
B346	Drk Neb	CYG	--	--	10'	6 K			In patchy area 2.8 deg preced and 1.5 deg S of Der	Berk 90	Opn CL	CYG	-	-	5'	II 1pn .b	20	14	
B347	Drk Neb	CYG	--	--	10'	5 lr			Narrow streak 1.2 deg foll and 20' south of Gam Cyg	Berk 91	Opn CL	CYG	-	-	5'	II 1p .b	20	16	
B348	Drk Neb	CYG	--	--	240'	3 lr			Northern Coalsack; dark nebula north of Deneb	Berk 92	Opn CL	CEP	-	-	4'	III 1p .b	15	15	
B350	Drk Neb	CYG	--	--	3'	6 C			14' south of Cyg	Berk 93	Opn CL	CEP	-	-	4'	IV 1p .b	120	16	
B352	Drk Neb	CYG	--	--	20'	5 lr			Lies north of North America nebula	Berk 94	Opn CL	CEP	8.7	-	4'	I 1 p n	10	9.6	
B361	Drk Neb	CYG	--	--	17'	4 C G			Has faint preceding extension	Berk 95	Opn CL	CEP	-	-	5'	II 2p .b	15	15	
B362	Drk Neb	CYG	--	--	15'	5 E G			Adjacent to 9th mag star	Berk 96	Opn CL	LAC	-	-	2'	I 2p .b	15	13	
B364	Drk Neb	CYG	--	--	40'	5 lr			Narrow lanes of B157	Berk 97	Opn CL	CEP	-	-	6'	III 1 p	12	11	
B365	Drk Neb	CEP	--	--	22'	4 S			Lies south preceding bright nebula IC 1396	Berk 98	Opn CL	LAC	-	-	6'	III 2m .b	50	15	
B367	Drk Neb	CEP	--	--	3'	5 lr G			In preceding part of bright nebula IC 1396	Berk 99	Opn CL	CEP	-	-	6'	III 2r .b	60	14	
Bark 1	Opn CL	CYG	-	-	20'	III 2 m	12			Berk 100	Opn CL	CEP	-	-	4'	IV 2p .b	100	16	
Bark 2	Opn CL	CYG	-	-	5'	III 1p .b	21	10		Berk 101	Opn CL	CEP	-	-	4'	III 2p .b	10	16	
Basel 1	Opn CL	SCT	8.9	-	9'	I 2 m	15	12.6		Berk 102	Opn CL	CAS	-	-	5'	II 1p .a		18	
Basel 4	Opn CL	AUR	9.1	-	8'	II 1 p	15	12.2		Berk 103	Opn CL	CAS	-	-	4'	II 1p .b	20	15	
Basel 5	Opn CL	SGR	-	-	9.0'	III 2mn .b	30			Berk 104	Opn CL	CAS	-	-	4'	II 1p .b	15	16	
Basel 6	Opn CL	CYG	7.7	-	14.0'		40	10.2		Biur 1	Opn CL	CYG	-	-	15'	IV 3 p n	15		
Basel 7	Opn CL	MON	8.5	-	5'	IV 1p	15	10.4		Biur 2	Opn CL	CYG	6.3	-	13'	III 2 p	10	7.9	
Basel 8	Opn CL	MON	-	-	30'	IV 3mn .b	50			Biur 7	Opn CL	MON	-	-	5'	II 1m .b	30	14	
Basel 10	Opn CL	PER	9.9	-	2'	II 1 p	12	10.2		Biur 8	Opn CL	MON	-	-	6'	II 2 r	70	14	
Basel 11A	Opn CL	CMA	8.2	-	9.0'	II 3 m	30	8.2		Biur 9	Opn CL	MON	-	-	4'	II 2m .b	30	15	
Basel 11B	Opn CL	ORI	8.9	-	9.0'	II 2 m	12	8.9		Biur 10	Opn CL	MON	10.4	-	4'	I 3 p	20	10.7	
Basel 12	Opn CL	CYG	-	-	7'	III 2p .b	20			Biur 11	Opn CL	MON	-	-	3'	III 1p .b	25	15	
Basel 13	Opn CL	CYG	-	-	10'					Biur 12	Opn CL	MON	-	-	4'	III 1m .b	30	17	
Basel 14	Opn CL	CYG	-	-	12.0'	II 3pn .b	15			Biur 13	Opn CL	MON	-	-	5'	IV 1p .b	20	17	
Basel 15	Opn CL	CYG	-	-	6'					Blanco 1	Opn CL	SCL	4.5	-	89.0'	IV 3 m	30	8	Zeta Sculptoris cluster
Be 84	Drk Neb	TAU	--	--	20'	4 lr			Associated w nebula NGC 1554-5	Bochum 1	Opn CL	GEM	7.9	-	26.0'		8	8.4	
Be 135	Drk Neb	PUP	--	--	13'	6 E			Contains small reflection nebula	Bochum 2	Opn CL	MON	9.7	-	1.5'	I 1 p	10	10.9	
Be 146	Drk Neb	CEN	--	--	20'	5 lr			Adjacent to bright nebula NGC 5367	Bochum 3	Opn CL	MON	9.9	-	4'	IV 1 p	25	11.2	
Be 149	Drk Neb	SCO	--	--	60'	6 lr			Contains faint reflection nebula	Bochum 4	Opn CL	PUP	7.3	-	23'		30	8	
Be 157	Drk Neb	CRA	--	--	110'	6 lr			Lies south following bright nebulae NGC 6726-7	Bochum 5	Opn CL	PUP	7	-	11.0'	I 2pn	12	7.8	
Berk 1	Opn CL	CAS	-	-	5'	III 1p .b	10			Bochum 6	Opn CL	PUP	9.9	-	10'	I 3 mn	40	10.6	
Berk 2	Opn CL	CAS	-	-	4'	I 1m .b	30	15		Bochum 7	Opn CL	VEL	6.8	-	20'	IV 3 p	9	7.6	
Berk 4	Opn CL	CAS	10.6	-	5'	I 2 p	25	12.6		Bochum 10	Opn CL	CAR	6.2	-	20'	II 3 mn	40	8.6	
Berk 5	Opn CL	CAS	-	-	3'	IV 1p .b	15	17		Bochum 13	Opn CL	SCO	7.2	-	15'	III 3 m	35	8	
Berk 6	Opn CL	CAS	-	-	5'	II 2p .b	20	14		Bochum 14	Opn CL	SGR	9.3	-	2'	III 1 pn	11	10.3	
Berk 7	Opn CL	CAS	-	-	4'	II 2p .b	18	14		Bochum 15	Opn CL	PUP	6.3	-	3'	IV 2 pn	12	7.7	
Berk 8	Opn CL	CAS	-	-	7'	II 2m .b	40	14		Ced 19c	Brn Neb	TAU	-	-	16'	R			
Berk 9	Opn CL	PER	-	-	5'	II 1p .b	20	15		Ced 19e	Brn Neb	TAU	-	-	21'	R			
Berk 10	Opn CL	CAM	12	-	12'	II 3 p	50	14		Ced 19h	Brn Neb	TAU	-	-	15'	R			
Berk 11	Opn CL	PER	10.4	-	6'	II 3 m	35	11.8		Ced 19o	Brn Neb	TAU	-	-	11'	R			
Berk 12	Opn CL	PER	-	-	6'	II 1m .b	30	16		Ced 19p	Brn Neb	TAU	-	-	10'	R			Neb excited by companion to Mira variable R Aqr
Berk 13	Opn CL	CAM	-	-	7'	III 1p .b		15		Ced 33	Brn Neb	TAU	-	-	5'	R			
Berk 14	Opn CL	AUR	-	-	9'	III 1m .b	30	16		Ced 34	Brn Neb	TAU	-	-	12.5'	R			
Berk 15	Opn CL	AUR	-	-	5'	I 2m .b	35	15		Ced 59	Brn Neb	ORI	-	-	3'	E+R			In dark neb B35
Berk 17	Opn CL	AUR	14	-	14'	III 1 r	100	16		Ced 62	Brn Neb	ORI	-	-	2.0'	bipolar		13	Two symmetrical fans extending N-S
Berk 18	Opn CL	AUR	14	-	12'	II 1 r	300	16		Ced 90	Brn Neb	CMA	-	-	10'	E+R			
Berk 19	Opn CL	AUR	11.4	-	7'	IV 2 p	40	14.7		Ced 174	Brn Neb	CYG	-	-	15'	E			
Berk 20	Opn CL	ORI	-	-	3'	II 2p .b	20	15		Ced 211	Brn Neb	AQR	-	-	2'	E			
Berk 21	Opn CL	ORI	11.1	-	3.5'	II 3 m	40	14.8		Ced 214	Brn Neb	CEP	-	-	50'	E+R			
Berk 22	Opn CL	ORI	-	-	2'	I 2p .b	20	15		Cr 21	Opn CL	TRI	8.2	-	6'	III 3 p	20		group of 15 *
Berk 23	Opn CL	GEM	-	-	4'	III 1m .b	25	15		Cr 33	Opn CL	CAS	5.9	-	40.0'		25		
Berk 24	Opn CL	MON	-	-	6'	III 1p .b	25	17		Cr 34	Opn CL	CAS	6.8	-	25'	I 3 p		7.9	
Berk 25	Opn CL	CMA	-	-	6'	I 2m .b	40	16		Cr 62	Opn CL	AUR	4.2	-	28'	IV 3 p			
Berk 29	Opn CL	GEM	-	-	4'	I 1p .b	20	15		Cr 65	Opn CL	ORI	3	-	220'	II 3 p		14.7	Centered on 113 Tau; large group
Berk 35	Opn CL	CMI	-	-	7'	IV 1p .b	20	16		Cr 69	Opn CL	ORI	2.8	-	65'	II 3 p n	20		Lambda Ori cluster
Berk 36	Opn CL	CMA	-	-	5'	III 1m .b	40	17		Cr 70	Opn CL	ORI	0.4	-	150'	II 3 m n	100	1.7	Orion's belt stars
Berk 37	Opn CL	MON	-	-	7'	III 1p .b	25	15		Cr 89	Opn CL	GEM	5.7	-	35'	IV 2 p n	15		
Berk 39	Opn CL	MON	-	-	12'	II 3 r	120	16		Cr 91	Opn CL	MON	6.4	-	17'	IV 2 p	20		
Berk 43	Opn CL	AQL	-	-	5'	II 1m .b	40	15		Cr 92	Opn CL	MON	8.5	-	11'				
Berk 44	Opn CL	SGE	-	-	2'	III 1m .b	30	16		Cr 95	Opn CL	MON	-	-	19'	IV 2 p n	10		
Berk 45	Opn CL	AQL	-	-	4'	II 1p .b	20	15		Cr 96	Opn CL	MON	7.3	-	8'	IV 2 p	15	8.8	
Berk 47	Opn CL	SGE	-	-	5'	II 2p .b	20	16		Cr 97	Opn CL	MON	5.4	-	21'	IV 3 p	15		
Berk 49	Opn CL	CYG	-	-	4'	I 1p .b	20	16		Cr 104	Opn CL	MON	9.6	-	22'	IV 1 p n	15		Archinal: a 20 min long 'integral sign' chain of stars
Berk 51	Opn CL	CYG	-	-	4'	I 1pn .b	20	15		Cr 106	Opn CL	MON	4.6	-	45'	III 3 p	20		
Berk 52	Opn CL	VUL	-	-	4'	I 1m .b	40	18		Cr 107	Opn CL	MON	5.1	-	35'	IV 3 p	15	7.1	
Berk 53	Opn CL	CYG	-	-	12'	II 3 p	40	16		Cr 110	Opn CL	MON	10.5	-	12.0'	IV 1 r	70	11	
Berk 54	Opn CL	CYG	-	-	5'	I 2m .b	30	17		Cr 111	Opn CL	MON	7	-	3.2'				
Berk 55	Opn CL	CYG	-	-	5'	III 1m .b	30	14		Cr 115	Opn CL	MON	9.1	-	7'	III 2 p	50		
Berk 56	Opn CL	CYG	-	-	7'	II 1m .b	40	16		Cr 121	Opn CL	CMA	2.6	-	50'	III 3 p	20	3.8	
Berk 58	Opn CL	CAS	9.7	-	8'	IV 2 p	30	15		Cr 132	Opn CL	CMA	3.6	-	80'	III 3 p	25	5.3	
Berk 59	Opn CL	CEP	11	-	10'	III 2 p n	40	11		Cr 135	Opn CL	PUP	2.1	-	50'	IV 2 p	77	2.7	
Berk 60	Opn CL	CAS	-	-	4'	III 1p .b	20	14		Cr 140	Opn CL	CMA	3.5	-	60'	III 3 p	76	5.4	The Tuft in the tail of the dog; visible naked eye
Berk 61	Opn CL	CAS	-	-	4'	II 1p .b	15	14		Cr 173	Opn CL	PUP	0.6	-	370'	IV 2 p		13	

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
Cr 332	Opn CL	SCO	8.9	-	2'	IV 1 p	12			DoDz 1	Opn CL	ARI	-	-	12'	III 2 p	8	11.5	
Cr 333	Opn CL	SCO	9.8	-	8'	III 2 p	30			DoDz 2	Opn CL	ORI	-	-	12'	III 2p	12		
Cr 338	Opn CL	SCO	8	-	25.0'	III 2 p	40			DoDz 3	Opn CL	TAU	-	-	15'	IV 2 p	10		
Cr 345	Opn CL	SCO	10.9	-	6'		30	9.4		DoDz 4	Opn CL	TAU	-	-	28'	IV 1 p	15		
Cr 347	Opn CL	SGR	8.8	-	10'	III 2 p n	40	10.6	In nebula Sh2-16	DoDz 5	Opn CL	HER	-	-	27'	III 1 p			
Cr 350	Opn CL	OPH	6.1	-	45'	IV 2 p	20			DoDz 6	Opn CL	HER	-	-	17'	IV 2 p	5	8.8	
Cr 351	Opn CL	SGR	9.3	-	9'	IV 2 p	30			DoDz 7	Opn CL	HER	-	-	20'	III 1 p	6		
Cr 367	Opn CL	SGR	6.4	-	37'	IV 3 p n	30			DoDz 8	Opn CL	HER	6.8	-	13'	IV 2 p	6	8.2	
Cr 394	Opn CL	SGR	6.3	-	22'	IV 2 m	50	6.9		DoDz 9	Opn CL	HER	-	-	34'	III 2 p	15		
Cr 399	Opn CL	VUL	3.6	-	60'	III 3 m	40	5.2	Brocchi's cluster;The Coathanger Cl;	DoDz 10	Opn CL	CYG	-	-	20'	IV 1 p n	12	7.1	
Cr 401	Opn CL	AQL	7	-	1'	IV 2 m				DoDz 11	Opn CL	CYG	-	-	13'	IV 1 p	12		
Cr 419	Opn CL	CYG	5.4	-	4.5'	IV 2 p			Compact but not rich;N of Struve 2666;14 * to 13 m	ESO 287-13	Galaxy	IND	13.1	13.4	3.7'	SAbc			
Cr 421	Opn CL	CYG	10.1	-	6'	III 1 p n	22			ESO 373-G00	Galaxy	ANT	12	13.6	5.8'	Sc			
Cr 427	Opn CL	CEP	13.8	-	4'	IV 1pn;b	6			ESO 456-SC3	Glob CL	SGR	9.9	14.9	9.9'				Near B86 and NGC 6520
Cr 428	Opn CL	CYG	8.7	-	14'	III 2 p n	20			Fein 1	Opn CL	CAR	4.7	-		IV 2 p	40	6.6	
Cr 463	Opn CL	CAS	5.7	-	36'	III 2 p	40	8.5		Frolov 1	Opn CL	CAS	9.2	-			26	10.6	
Cr 464	Opn CL	CAM	4.2	-	120'	IV 3 p	50			Gum 1	Br Neb	MON	-	-	19'	E+R			
Cr 465	Opn CL	MON	10.1	-	9'	IV 2 p				Gum 12	SN Rem	VEL	-	-	264'	E			Vela Supernova Remnant; pulsar PSR 0833 -45
Cr 466	Opn CL	MON	11.1	-	4'	III 2 p n	25	11	Difficult to locate;nebulous haze w 7 * < 11 mag	Gum 15	Br Neb	VEL	-	-	20'	E			Brighter knot in Gum nebula (Vela SNR)
Cr 468	Opn CL	SGR	13.4	-	1.5'	IV 1 p ;b	8	11.1		Gum 23	Br Neb	VEL	-	-	20'	E			Part of Gum neb (Vela SNR)
Cr 469	Opn CL	SGR	9.1	-	5'	IV 1 p	51	11.2		Gum 32	Br Neb	CAR	-	-	7.3'	E			Crescent shape; several * invl
Cr 471	Opn CL	CEP	-	-	130'	III 2 p				Gum 35	Br Neb	VEL	-	-	7'	E			
Czernik 1	Opn CL	CAS	-	-	9'	I 2p ;b	12			Haffner 3	Opn CL	MON	-	-	2.7'	III 2p ;b	20	14	
Czernik 2	Opn CL	CAS	-	-	10'	IV 2m ;b	30			Haffner 4	Opn CL	CMA	-	-	2.4'	III 1m ;b	30	14	
Czernik 3	Opn CL	CAS	9.9	-	3'	III 2p ;b	8			Haffner 6	Opn CL	CMA	9.2	-	4'	IV 3 p n	60	11.1	
Czernik 4	Opn CL	CAS	-	-	3'	IV 2p ;b	10			Haffner 7	Opn CL	CMA	-	-	2.9'	I 2m ;b	40	14	
Czernik 5	Opn CL	CAS	-	-	7'	III 1p ;b	10			Haffner 8	Opn CL	CMA	9.1	-	4.2'	IV 3 m	30	11.1	
Czernik 6	Opn CL	CAS	-	-	3'	II 2p ;b	12			Haffner 9	Opn CL	CMA	-	-	2.1'	I 1m ;b	35	14	
Czernik 7	Opn CL	CAS	-	-	5'	II 1p ;b	20			Haffner 10	Opn CL	PUP	11.5	-	1.6'	III 2 p	40	12.7	
Czernik 8	Opn CL	PER	9.7	-	7'	II 3 m	10	9.9		Haffner 11	Opn CL	PUP	-	-	4.4'	II 2m ;b	35	16	
Czernik 9	Opn CL	CAS	-	-	5'	III 2p ;b	12			Haffner 13	Opn CL	PUP	-	-	15'	II 3 p	15	8	
Czernik 10	Opn CL	CAS	-	-	3'	IV 1p ;b	15			Haffner 14	Opn CL	PUP	-	-	3.8'	III 1m ;b	14		
Czernik 11	Opn CL	CAS	-	-	7'	I 2pn ;b	20		Superimposed on faint galaxy Maffei 1	Haffner 15	Opn CL	PUP	9.4	-	3.5'	II 3 p	35	12	
Czernik 12	Opn CL	PER	-	-	3'	III 1p ;b	15			Haffner 16	Opn CL	PUP	10	-	1.1'	I 1 p	30	11.6	
Czernik 13	Opn CL	CAS	10.4	-	6'	II 2 p	10	12.8		Haffner 17	Opn CL	PUP	-	-	1.6'	I 2p ;b	20	15	
Czernik 14	Opn CL	CAM	-	-	6'	III 1p ;b	15			Haffner 18	Opn CL	PUP	9.3	-	1'	I 2pn ;b	25	11	
Czernik 15	Opn CL	PER	-	-	3'	IV 2p ;b	10			Haffner 19	Opn CL	PUP	9.4	-	1.8'	I 3 p n	30	10.8	
Czernik 16	Opn CL	PER	-	-	9'	IV 2p ;b	12			Haffner 20	Opn CL	PUP	11	-	1.8'	II 3 p	20	13.1	
Czernik 17	Opn CL	CAM	-	-	5'	IV 1p ;b	15			Haffner 21	Opn CL	PUP	10.3	-	1.1'	II 1 p	20	12.1	Most of cluster 15 mag and less
Czernik 18	Opn CL	TAU	-	-	10'	IV 1p ;b	15			Haffner 22	Opn CL	PUP	-	-	4.8'	II 1m ;b	30	15	
Czernik 19	Opn CL	AUR	-	-	18'	III 2 m	50			Haffner 23	Opn CL	CMA	-	-	11'	III 2 m	40	13	
Czernik 20	Opn CL	AUR	-	-	36'	II 2 r	30			Haffner 25	Opn CL	PUP	-	-	1'	III 1p ;b	20	14	
Czernik 21	Opn CL	AUR	-	-	9'	IV 1 m ;	40			Haffner 26	Opn CL	PUP	-	-	6'	III 2p ;b	20	14	
Czernik 23	Opn CL	AUR	-	-	5'	III 1p ;a				Harvard 9	Opn CL	NOR	-	-	3'	IV 2p ;a			
Czernik 24	Opn CL	ORI	-	-	5'	III 1m ;b	35			Harvard 13	Opn CL	ARA	-	-	14'	IV 1 p	15	13	
Czernik 25	Opn CL	ORI	-	-	6'	III 1p ;b	20			Harvard 16	Opn CL	SCO	-	-	15'	IV 2 p	70	8.5	20 * mags 10...;In field of Lambda Sco
Czernik 26	Opn CL	MON	-	-	5'	III 1m ;b	35			Harvard 20	Opn CL	SGE	7.7	-	7'	III 2 p	28	8.9	40 faint * in 12';has two centers
Czernik 27	Opn CL	MON	-	-	5'	III 1p ;b	15			Harvard 21	Opn CL	CAS	9	-	4'	IV 2 p	6		20 F*
Czernik 29	Opn CL	PUP	10.3	-	8'	IV 2 p	40	12.2		Hav-Moffat 1	Opn CL	SCO	-	-	6'	III 2p ;b	20		
Czernik 30	Opn CL	MON	-	-	3'	III 1p ;b	20			Hogg 2	Opn CL	VEL	-	-	5'	IV 2p ;b	20		Difficult on POSS plate
Czernik 31	Opn CL	PUP	-	-	9'	III 2m ;b	40			Hogg 3	Opn CL	VEL	-	-	4'	IV 2p ;b	10		
Czernik 32	Opn CL	PUP	-	-	3'	II 1m ;b	30			Hogg 4	Opn CL	VEL	-	-	4'				
Czernik 37	Opn CL	SGR	-	-	3'	II 1m ;b	35			Hogg 9	Opn CL	CAR	10.6	-	1.5'	II 1 p	10	11.5	
Czernik 38	Opn CL	SER	-	-	14'	II 3 r	80			Hogg 14	Opn CL	CRU	9.5	-	3'	II 3 p	11	10.5	
Czernik 39	Opn CL	AQL	-	-	6'	III 2m ;b				Hogg 18	Opn CL	LUP	8	-	3'	III 2 p	15	8.8	
Czernik 41	Opn CL	VUL	-	-	9'	III 2m ;b	30			Hogg 19	Opn CL	NOR	-	-	4'	IV 2p ;a			
Czernik 42	Opn CL	CEP	-	-	3'	III 1p ;b	15			Hogg 20	Opn CL	ARA	-	-	4'	III 1p ;a			
Czernik 43	Opn CL	CAS	-	-	14'	III 1 r	15			Hogg 21	Opn CL	ARA	-	-	4'		12		
Czernik 44	Opn CL	CAS	-	-	5'	II 2p ;b	20			Hogg 22	Opn CL	ARA	6.7	-	1.5'	IV3p	8	7.3	
Czernik 45	Opn CL	CAS	-	-	3'	II 2p ;b	8			HP 1	Glob CL	OPH	12.5	-	1.2'				
Do 2	Opn CL	CYG	-	-	10'	IV 1pn ;b	15			Kemble 1	Aster	CAM	5	-	180'		20	5	Kemble's Cascade; 3 deg chain of stars
Do 3	Opn CL	CYG	-	-	15'	III 2 p n	40			Kemble 2	Aster	DRA	7	-	30'		17	7	Fr. Lucian Kemble's "Mini-Cassiopeia" asterism
Do 4	Opn CL	CYG	-	-	6'	IV 1pn ;b	20			King 1	Opn CL	CAS	-	-	7'	II 2r ;b	100	13	
Do 5	Opn CL	CYG	-	-	6'	III 3mn ;b	30			King 2	Opn CL	CAS	-	-	5'	II 2m ;b	40	17	
Do 6	Opn CL	CYG	-	-	10'	IV 2pn ;b	12			King 4	Opn CL	CAS	10.5	-	3'	III 1 p	20	12.9	
Do 8	Opn CL	CYG	-	-	5'	I 2pn ;b	20			King 5	Opn CL	PER	-	-	7'	I 2m ;b	40	13	
Do 9	Opn CL	CYG	-	-	7'	IV 2pn ;b	8			King 6	Opn CL	CAM	-	-	7'	IV 2 p	35	10	
Do 11	Opn CL	CYG	-	-	7'	IV 3pn ;b	15			King 7	Opn CL	PER	-	-	5'	I 2r ;b	80	16	
Do 12	Opn CL	CAS	-	-	18'					King 8	Opn CL	AUR	11.2	-	8'	I 3 m	30	13.5	
Do 13	Opn CL	CAS	-	-	12'	III 1 p	30			King 9	Opn CL	LAC	-	-	2.5'	I 1m ;b	40	18	
Do 14	Opn CL	TAU	-	-	12'	IV 2 p	18			King 10	Opn CL	CEP	-	-	3'	II 3 m	40	11	
Do 15	Opn CL	AUR	-	-	18'	IV 1 p				King 11	Opn CL	CEP	-	-	3.5'	I 2m ;b	50	17	
Do 16	Opn CL	AUR	-	-	12'	III 2 p n	10			King 12	Opn CL	CAS	10	-	2'	I 2 p	15	10	27 stars from 10...16 mag
Do 17	Opn CL	ORI	-	-	12'	IV 2 p			Only 5 pB *	King 13	Opn CL	CAS	-	-	7'	II 2m ;b	30	12	
Do 18	Opn CL	AUR	-	-	12'	IV 2 p n	15			King 14	Opn CL	CAS	8.5	-	7'	III 2 p	20	11.3	Rich cl in rich field;29 * in 10' X 6'
Do 19	Opn CL	ORI	-	-	24'	IV 1 p				King 15	Opn CL	CAS	-	-	1.5'	IV 2p ;b	12	18	
Do 20	Opn CL	AUR	-	-	5'	IV 1 p	10			King 16	Opn CL	CAS	10.3	-	3'	II 3 p	35	12.5	compact and small
Do 21	Opn CL	ORI	-	-	12'	IV 2 p			Skiff: not seen in 0.2 degree field	King 17	Opn CL	AUR	-	-	1.5'	II 2m ;b	25	14	
Do 22	Opn CL	MON	-	-	8'	IV 1 p	10			King 18	Opn CL	CEP	-	-	4'	II 2p ;b	20	12	
Do 23	Opn CL	MON	-	-	12'	IV 2 p	20			King 19	Opn CL	CEP	9.2	-	7'	II 2 m	25	10.4	
Do 24	Opn CL	MON	-	-	18'	IV 2 m	40			King 20	Opn CL	CAS	-	-	4'	II 2p ;b	20	13	
Do 25	Opn CL	MON	7.6	-	24'	IV 2 m n	50	8.9		King 21	Opn CL	CAS	9.8	-	2.5'	III 3 m	20	10	
Do 26	Opn CL	CMI	-	-	24'	IV 1 p				King 22	Opn CL	AUR	-	-	14'	III 3 r	300	15	
Do 27	Opn CL	OPH	-	-	24'	IV 2 p n	15			King 23	Opn CL	CMI	-	-	4'	III 2p ;b	20		Skiff: sparse cluster
Do 28	Opn CL	SCT	-	-	12'	IV 2 p	20		Involved in nebula Sh2-50	King 25	Opn CL	AQL	-	-	5'	III 2m ;b	40		
Do 29	Opn CL	SCT	-	-	18'					King 26	Opn CL	AQL	-	-	1'	II 1p ;b	15		
Do 30																			

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	
LDN 1641	Drk Neb	ORI	--	--	300'	5 Ir			Orion nebula region	PK 4- 5.1	Pln Neb	SGR	13.8	9.6	9.0"	4		17.2		
LDN 1710	Drk Neb	SCO	--	--	60'	5 Ir			1 degree following B252	PK 4+ 4.1	Pln Neb	OPH	14	-	4.7"	2		17.9		
Le Gentil 3	Drk Neb	CYG	--	--	720'				Funnel Cloud nebula ; Very large	PK 4-11.1	Pln Neb	SGR	13.1	8.8	8.4"	2		15.5		
Lynqa 3	Opn CL	CIR	-	-	5'	III 1p :a		16		PK 6- 3.3	Pln Neb	SGR	13.2	-	5"	1				
Lynqa 4	Opn CL	NOR	11.4	-	3'	IV 2 p	30	12.5		PK 6- 4.1	Pln Neb	SGR	13.4	8.7	6.9"				17.3	
Lynqa 5	Opn CL	NOR	-	-	5'	III 1p :b		20		PK 6+ 2.5	Pln Neb	SGR	13.6	-	7.0"	1			19	
Lynqa 6	Opn CL	NOR	9.5	-	5'			60	10.7	PK 6+ 8.1	Pln Neb	OPH	13.4	-	7.0"	1			17.1	
Lynqa 7	Opn CL	NOR	-	-	2.2'	II 2p :a		16		PK 7- 6.2	Pln Neb	SGR	13.1	8.2	7"	1			16.6	
Lynqa 8	Opn CL	NOR	-	-	1'	III 2m :a				PK 7+ 1.1	Pln Neb	SGR	13.1	7.7	6.6"	2			14.7	
Lynqa 9	Opn CL	NOR	-	-	5'	III 1m :a				PK 7+ 7.1	Pln Neb	OPH	13.3	-	9.3"	4			21	
Lynqa 11	Opn CL	ARA	-	-	4'	III 2p :b		15		PK 8- 4.2	Pln Neb	SGR	14	-	4.7"	2			18.2	
Lynqa 12	Opn CL	ARA	-	-	5'	III 2m :b		35		PK 8+ 6.1	Pln Neb	OPH	11	-	10"				14.2	
Lynqa 13	Opn CL	SCO	-	-	7'	III 1m :b		30		PK 9- 4.1	Pln Neb	SGR	14	-	6.3"	2				
Lynqa 14	Opn CL	SCO	9.7	-	2'			15	11.2	PK 9- 9.1	Pln Neb	SGR	13.6	-	6.6"	2			17.1	
M1-92	Brn Neb	CYG	11.7	-	20.0"	R			Footprint Neb ; looks like Dbl*; 30" East of * of eq.m	PK 9-10.1	Pln Neb	SGR	14	8.1	5.9"	2			15.9	
Maffei 1	Galaxy	CAS	11.4	10	5'				Very obscured infrared source	PK 9-21.1	Galaxy	SGR	13.5	-	0.2'	3(6)				Not a PLNNB; has spectrum of galaxy
Markarian 38	Opn CL	SGR	-	-	2'	I 1p :a				PK 10+18.2	Pln Neb	OPH	13.2	-	50"	?(6)			15.6	Butterfly Nebula
MCG +02-32-	Galaxy	VIR	11.2	-					Face On	PK 11- 5.1	Pln Neb	SGR	13.1	-	4.8"	2			15.3	
MCG +08-01-	Galaxy	AND	12	-	1.0'				Face On	PK 12- 7.1	Pln Neb	SGR	12	-	10"					
MCG +08-01-	Galaxy	AND	12	-	0.4'				Mostly Face On	PK 12- 9.1	Pln Neb	SGR	13.2	-	3.7"	2			17.4	
MCG +09-20-	Galaxy	UMA	11.8	-	1.5'				Face On	PK 13- 7.1	Pln Neb	SGR	13.9	10.7	14.9"	?(3)			18.4	
MCG +09-20-	Galaxy	UMA	11.7	-	2.5'				Edge On	PK 13+ 4.1	Pln Neb	SER	13.7	-	5"	2			18.6	
MCG +10-13-	Galaxy	UMA	12.1	-	1.3'				Appr. 50/50 Face & Edge On	PK 13+32.1	Pln Neb	SER	12.8	-	6.0"				14.7	Stellar
MCG +10-19-	Galaxy	UMA	12	-	0.5'				Mostly Face On	PK 14- 4.1	Pln Neb	SGR	13	-	5.8"	2				
MCG +13-07-	Galaxy	CAM	12	-	0.9'				Appr. 50/50 Face & Edge On	PK 15- 4.1	Pln Neb	SGR	13.9	-	6.6"	2			14.3	
MCG -01-24-	Galaxy	HYA	11.3	12.7	4.3'				Mostly Edge On	PK 16- 4.1	Pln Neb	SGR	12.5	-	13.0"	3				
MCG -01-25-	Galaxy	HYA	11	-	2'				Mostly Edge On	PK 16- 4.2	Pln Neb	SGR	13.5	9.5	10"	1			16.2	
MCG -02-24-	Galaxy	HYA	12.9	12.1	0.7'	SA0			3C218	PK 18+20.1	Pln Neb	OPH	13.4	-	5.0"				16.6	Stellar
MCG -02-53-	Galaxy	AQR	13.9	14.8	2.2'	IBm			Member of Local Group , aquarius dwarf	PK 19- 5.1	Pln Neb	SCT	12.5	-	2.0"	1			17.1	
MCG -03-01-	Galaxy	CET	10.6	14.6	11'				Appr. 50/50 Face & Edge On; Local Group; Low Su	PK 19-19.1	Pln Neb	SGR	13.1	-	2.3'	3b			19.3	
MCG -03-03-	Galaxy	CET	12.5	13.9	3'				Mostly Face On	PK 20- 0.1	Pln Neb	SCT	12.9	-	4.8'	3b			21.1	
MCG -03-28-	Galaxy	HYA	12	-	0.3'				Face On	PK 22- 2.1	Pln Neb	SCT	13.5	9.3	9.3"	2			16.3	
MCG -03-34-	Galaxy	VIR	12	-	2.5'	Sc pec			Appr. 50/50 Face & Edge On	PK 22- 3.1	Pln Neb	SCT	13.9	9.1	7"	2				13"-vF; S; R; nBM; difficult
MCG -05-18-	Galaxy	CMA	-	-	0.1'				Not a PLNNB; Seyfert GALXY	PK 23- 2.1	Pln Neb	SCT	13.3	7.7	4.8"	2				Virtually Stellar
MCG -06-03-	Galaxy	SCL	10.5	17.1	40'	E			ESO 351-G030; sculptor dwarf ; large and dim	PK 26- 2.1	Pln Neb	SCT	14	9.7	7.8"	2b			15.5	
mcq06-07-00	Galaxy	FOR	8.9	13.9	17'	E4			Invl GLOCL NGC 1049; Local Grp; Fornax Dwarf	PK 26+ 0.1	Brn Neb	SCT	-	-	120"	3				Not a PLNNB; H II region; part of Sh2-61
Mel 15	Opn CL	CAS	6.6	-	21.0'	III 3 p n	40		19" in scattered oval w compress center;	PK 26-11.1	Pln Neb	AQL	13.3	-	16.0"				14	
Mel 20	Opn CL	PER	1.2	-	185'	III 3 m	50	2.9	Alpha Per moving cluster (Mag w/o Alpha Per)	PK 27- 3.2	Pln Neb	SCT	13.4	-	15.0"	1			15.6	
Mel 25	Opn CL	TAU	0.5	-	330'	III 3 m	40	3.4	Taurus moving cluster ; Aldebaran not a member	PK 31-10.1	Pln Neb	AQL	12.4	-	6"	2			16.3	
Mel 31	Opn CL	AUR	-	-	135'		35	4.5	Center star 16 Aur; some nebulosity involved	PK 32- 2.1	Pln Neb	AQL	13	9.4	10.0"	1				
Mel 66	Opn CL	PUP	7.8	-	10'	II 2 m	200	11.4		PK 36- 1.1	Pln Neb	AQL	12.2	-	2.6'	3b(3)			13.8	
Mel 71	Opn CL	PUP	7.1	-	9'	II 1 m	80	10.2	Very compressed w central condensation	PK 38- 3.2	Pln Neb	AQL	14	-	5"	1				
Mel 72	Opn CL	MON	10.1	-	9'	III 1 m	40	10	Rich w many faint *	PK 38- 3.3	Pln Neb	AQL	13.6	-	13"	3b			19.4	
Mel 111	Opn CL	COM	1.8	-	275'	II 3 p	80	4.3	Coma Berenices star cluster	PK 38+12.1	Pln Neb	OPH	12.4	7.9	7"	2			12.5	Doubtful PLNNB
Mel 186	Opn CL	OPH	3	-	240'	IV 3 m			Bull of Poniatowski; at end of 'offramp' of Milky Way	PK 43+11.1	Pln Neb	HER	13.9	-	1.0"	1			15.5	
Moffat 1	Opn CL	NOR	-	-	8'	IV 2p :b	20			PK 45- 2.1	Pln Neb	AQL	12.7	9.6	14.0"	1			14.6	
Mrk 6	Opn CL	CAS	7.1	-	4.5'	IV 2 p	6	8.4	About 12 *	PK 47+42.1	Pln Neb	HER	13.7	-	2.9'	2c			15.7	
Mrk 18	Opn CL	VEL	7.8	-	2.0'		30	9.3		PK 51- 3.1	Pln Neb	AQL	13.7	8.5	5.4"	2			14.5	
Mrk 50	Opn CL	CEP	8.5	-	5.0'	I 2 p n	5	9.8	With binary HD 219460; very compressed 13 * in 3'	PK 51+ 9.1	Pln Neb	HER	11.6	4.6	3"				13.3	Stellar
Mrk 408	Galaxy	LEO	13.9	-					Very compact	PK 52- 2.2	Pln Neb	AQL	12.6	7.7	8.0"	4			14.1	Stellar
New 1	Galaxy	CET	11.8	14.4	4.5'	S				PK 52- 4.1	Pln Neb	AQL	12.9	-	9"	1				Very difficult
New 3	Galaxy	VIR	11.6	14.2	2.5'	Sc?			Marked; but not labeled; on Uranometria 2000	PK 52+ 7.1	Pln Neb	HER	13.6	-	30.0"					Stellar
Pal 1	Opn CL	CEP	13.6	-	2.8'			16.3	Palomar 1 is open cluster-Ortolani&Rosino 1985	PK 53+24.1	Pln Neb	HER	12	6.7	5.2"	2			17.6	
Pal 2	Glob CL	AUR	13	-	2.2'	IX				PK 55- 0.1	Pln Neb	VUL	13.9	-	4.7"					
Pal 3	Glob CL	SEX	13.9	-	1.6'	XII				PK 64+ 5.1	Pln Neb	CYG	9.6	6.9	35.0"	4			12.5	Campbell's hydrogen star ;
Pal 5	Glob CL	SER	11.8	-	8.0'	XII				PK 64+15.1	Pln Neb	LYR	13.3	-	24.0"	4				13"-F; S; IE; cent* seen occasionally at 220X
Pal 6	Glob CL	OPH	11.6	-	1.2'	XI				PK 66- 5.1	Pln Neb	VUL	13.6	-	5"					
Pal 8	Glob CL	SGR	10.9	-	5.2'	X				PK 70+ 1.1	Brn Neb	CYG	-	-						Not a PLNNB; compact H II region in Sh 2-100
Pal 10	Glob CL	SGE	13.2	-	4.0'	XII				PK 72-17.1	Pln Neb	VUL	12.2	-	13.8'	2			17.1	
Pal 11	Glob CL	AQL	9.8	-	10'	XI				PK 80- 6.1	Pln Neb	CYG	13.5	-	1.0'				12.3	Egg Nebula ; protoplanetary?; bipolar; light polarized
Pal 12	Glob CL	CAP	11.7	-	2.9'	XII				PK 86- 8.1	Pln Neb	CYG	12.7	-	32.0"	2			17.3	Egg timer shape in 100" scope
Pal 13	Glob CL	PEG	13.8	-	0.7'	XII				PK 93+ 2.1	Pln Neb	CYG	13.2	-	38"	4			14.4	
Pismis 1	Opn CL	PUP	10.7	-	4.6'	I 3 p	30	12.8		PK 100- 8.1	Pln Neb	LAC	11.9	6.1	5.0"	1			16.1	Stellar
Pismis 2	Opn CL	PUP	-	-	4.3'	II 1r :b	100	15		PK 101- 8.1	Pln Neb	CEP	13.2	-	67"	3b			17.2	
Pismis 3	Opn CL	VEL	-	-	6'	III 1m :b	20	13		PK 103+ 0.1	Pln Neb	CEP	13.5	-	72.0"	2(3)			20.4	
Pismis 4	Opn CL	VEL	5.9	-	18'	IV 1 p n	45	7.3		PK 103+ 0.2	Pln Neb	CEP	14	10.9	13"	3				
Pismis 5	Opn CL	VEL	9.9	-	2'	III 2 p n	10	10.4		PK 107-13.1	Pln Neb	AND	13.9	7.8	4.6"	2			14.7	
Pismis 7	Opn CL	VEL	-	-	2.5'	III 1m :b	35	13		PK 111- 2.1	Pln Neb	CAS	14	2.9	1.0"				13.8	11 mag * 75" north following
Pismis 8	Opn CL	VEL	9.5	-	2'	II 3 p	25	10.5		PK 118- 8.1	Pln Neb	CAS	12.5	-	5"				14.1	
Pismis 10	Opn CL	VEL	-	-	2.5'			10		PK 118+ 2.1	Brn Neb	CAM	12.9	-	120"					Typical spectrum of HII region
Pismis 11	Opn CL	VEL	-	-	2'	I 2p :b	20	12		PK 119- 6.1	Pln Neb	CAS	13.3	6.9	5"	2			19.1	
Pismis 12	Opn CL	VEL	9.7	-	4.5'	III 2 p	20	11.6		PK 121- 2.1	Brn Neb	CAS	-	-	39"	2b			18	Not a PLNNB; reflection nebula
Pismis 13	Opn CL	VEL	10.2	-	2'	II 2 p	30	12.1	Included in NGC 2866	PK 147- 2.1	Pln Neb	PER	13.6	7.7	4"				16.7	
Pismis 14	Opn CL	VEL	-	-	1.5'	II 2p :b	12	14		PK 147+ 4.1	Pln Neb	CAM	13.7	9	6.0"	3				
Pismis 15	Opn CL	VEL	-	-	4.5'	II 1m :b	35	14		PK 149- 1.1	Brn Neb	PER	-	-	84"	2			17.8	Not a PLNNB; reflection nebula
Pismis 16	Opn CL	VEL	8	-	1.5'	I 3 p	12	8.7		PK 151+ 2.1	Brn Neb	CAM	-	-	4.0'	E			13.9	Not a PLNNB; H II region Sh 2-207
Pismis 17	Opn CL	CAR	9.4	-	0.6'	III 2 p		10.4		PK 164+31.1	Pln Neb	LYN	14	-	6.3'	4			16.8	confused with NGC 2474; see Sky+Tel Apr 81 pg. 3
Pismis 20	Opn CL	CIR	7.8	-	4.5'	I 3 p	12	8.2		PK 169-0.1	Pln Neb	AUR	12	-	60.0"				16.2	
Pismis 21	Opn CL	CIR	-	-	2															

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
PK 234- 0.1	Pln Neb	PUP	14	-	1"				Stellar	Ru 15	Opn CL	CMA	-	-	1.7'	II 1p:b	20	12	
PK 235- 1.1	Pln Neb	CMA	13.4	-	13"			14.1		Ru 16	Opn CL	CMA	-	-	11'	IV 2p	15	13	
PK 238+34.1	Pln Neb	HYA	13.4	-	4.5'	2b		15.5		Ru 17	Opn CL	CMA	-	-	5'	II 1p:b	15	12	
PK 241+ 2.1	Pln Neb	PUP	11.8	8.7	20.0"	4		15.7		Ru 18	Opn CL	CMA	9.4	-	4'	III 2p	40	11	
PK 242-11.1	Pln Neb	CMA	12.2	8.3	30.0"	?(6)		15.5		Ru 19	Opn CL	CMA	-	-	8'	IV 1p:b	20	13	
PK 248- 8.1	Pln Neb	PUP	13	8	8"	2		17		Ru 20	Opn CL	CMA	9.5	-	10'	III 2m	30	11.6	
PK 248+ 8.1	Galaxy	ANT	-	-	0.2'				Not a PLNNB:dwarf GALXY w emission lines	Ru 22	Opn CL	PUP	-	-	2.8'	IV 1p:b	15	12	
PK 249- 5.1	Pln Neb	PUP	13.1	-	54"					Ru 23	Opn CL	PUP	-	-	3'	III 1p:b	20	13	
PK 254+ 5.1	Pln Neb	PYX	11	6.5	19.0"	2a		13.9		Ru 24	Opn CL	PUP	-	-	2'	III 1p	15	11	
PK 259+ 0.1	Pln Neb	VEL	13.8	-	75.0"			18.9	Diffuse neb?	Ru 25	Opn CL	PUP	-	-	0.7'	III 1p:b	10	14	
PK 263- 5.1	Pln Neb	VEL	13.6	6.7	3.0"					Ru 26	Opn CL	PUP	-	-	10'	III 1p:b	20	12	
PK 264- 8.1	Pln Neb	VEL	12.4	11.2	45.0"	2		16.9		Ru 27	Opn CL	PUP	-	-	18'	II 2m	30	12	
PK 264-12.1	Pln Neb	CAR	12.3	5.8	3.0"			14.7		Ru 28	Opn CL	PUP	-	-	4'	IV 1p:b	20	14	
PK 269- 3.1	Pln Neb	VEL	13.6	8.8	7"			13.6	Bipolar	Ru 30	Opn CL	PUP	-	-	6.5'	II 2p	30	11	
PK 274+ 2.2	Pln Neb	VEL	13.7	-	5"			16.2		Ru 31	Opn CL	PUP	-	-	2'	I 3p	15	11	
PK 274+ 3.1	Pln Neb	VEL	14	-	23.0"					Ru 32	Opn CL	PUP	8.4	-	6'	III 2p:n	30	9.6	
PK 275- 2.2	Pln Neb	VEL	13.3	-	14.0"					Ru 33	Opn CL	PUP	-	-	6'	IV 1p:b	20	13	
PK 275- 4.1	Pln Neb	VEL	12.9	8.9	14"			16.1		Ru 34	Opn CL	PUP	9.5	-	4'	III 2p	35	11.2	
PK 275- 4.2	Pln Neb	VEL	13.5	6.5	2.0"					Ru 35	Opn CL	PUP	-	-	0.8'	II 1p:b	10	14	
PK 278- 6.1	Pln Neb	CAR	11.9	-	10"			16.7		Ru 36	Opn CL	PUP	9.6	-	4'	IV 1m	30	10.3	
PK 278+ 5.1	Pln Neb	VEL	13.9	-	15"			17.6		Ru 37	Opn CL	PUP	-	-	0.8'	II 2m:b	30	14	
PK 279- 3.1	Pln Neb	CAR	13.3	11.2	25"			11.5		Ru 38	Opn CL	PUP	-	-	6'	III 2p:b	15	13	
PK 283+ 2.1	Pln Neb	VEL	12.7	8.2	8"			17.2		Ru 39	Opn CL	PUP	-	-	1.5'	III 1p:b	15	14	
PK 283+25.1	Pln Neb	HYA	12.1	-	3.0'			17.4		Ru 40	Opn CL	PUP	-	-	3.5'	IV 1p:b	10	13	
PK 285+ 1.1	Pln Neb	VEL	14	7.5	3.0"					Ru 41	Opn CL	PUP	-	-	1.1'	IV 1p:b	20	14	
PK 286+ 2.1	Pln Neb	VEL	12.7	-	18"					Ru 42	Opn CL	PUP	-	-	1.5'	III 2p:b	20	14	
PK 288+ 0.1	Pln Neb	CAR	12.4	-	30"	4			Ring shape	Ru 44	Opn CL	PUP	7.2	-	5'	III 1p	40	9.4	About 100 O or B * of 12 mag and less
PK 290+ 7.1	Pln Neb	CEN	11.4	8.7	30"	3(4)				Ru 45	Opn CL	PUP	-	-	11'	IV 2p	35	13	
PK 292+ 4.1	Pln Neb	CEN	12.8	7.6	5"			13.6		Ru 46	Opn CL	PUP	9.1	-	2'	II 3p	15	9.4	
PK 303+40.1	Pln Neb	HYA	12	18.9	12.8'	3a		9.6	cent* variable LW Hya	Ru 47	Opn CL	PUP	9.6	-	5'	I 1p	20	10.9	
PK 311+ 2.1	Pln Neb	CEN	13.5	-	9"			17.2		Ru 48	Opn CL	PUP	-	-	2'	III 1p:b	20	12	
PK 316+ 8.1	Pln Neb	CEN	13.7	10.1	12"			12.7		Ru 49	Opn CL	PUP	9.6	-	2.5'	II 3p	10	10.1	
PK 318+41.1	Pln Neb	VIR	13	15.7	6.0'	3b(3a)		11.5		Ru 50	Opn CL	PUP	-	-	3.5'	II 2m:b	30	12	
PK 319+ 6.1	Pln Neb	LUP	13.2	10.2	15.0"			18.1		Ru 51	Opn CL	PUP	-	-	4.5'	IV 1m:b	30	14	
PK 322- 2.1	Pln Neb	NOR	12.5	10.2	50"	4(6)				Ru 52	Opn CL	PUP	-	-	2.5'	III 1p:b	15	13	
PK 325- 4.1	Pln Neb	NOR	12.4	10.3	16"			13.6		Ru 53	Opn CL	PUP	-	-	18'	IV 2p	40	10	
PK 326- 6.1	Pln Neb	NOR	12.2	-	3"			13		Ru 54	Opn CL	PUP	-	-	2.5'	III 2p:b	20	15	
PK 327- 7.1	Pln Neb	NOR	13.9	-	22"					Ru 55	Opn CL	PUP	7.8	-	17'	IV 2p	12	8.6	
PK 327+13.1	Pln Neb	LUP	12.7	7.3	5"			18.7		Ru 56	Opn CL	PUP	-	-	42'	IV 2p	40	9	
PK 329- 2.2	Pln Neb	NOR	11.9	9.9	25"	4(3)		18.3	Easy grey round lies in dense field--Hartung	Ru 57	Opn CL	PUP	-	-	5'	IV 2m:b	30	12	
PK 329+ 2.1	Pln Neb	NOR	13.6	-	76"	4		13.9	Fine annular shape	Ru 58	Opn CL	PUP	-	-	10'	IV 1m:b	30	12	
PK 330- 3.1	Pln Neb	NOR	13.9	-	16"					Ru 59	Opn CL	PUP	9	-	5'	III 1p	20	10.2	
PK 330+ 4.1	Pln Neb	NOR	12.9	-	1.0"	1		11.1		Ru 60	Opn CL	VEL	-	-	6'	II 1m:b	30	13	
PK 331- 1.1	Pln Neb	NOR	13.8	-	25.0"	6		17.6		Ru 61	Opn CL	PUP	-	-	2.5'	II 1p:b	25	14	
PK 331- 3.2	Pln Neb	NOR	13.7	-	54"					Ru 62	Opn CL	PYX	-	-	7'	IV 2p	20	11	
PK 331- 5.1	Pln Neb	NOR	11.9	-	5"			12.6		Ru 63	Opn CL	VEL	-	-	5'	II 1p:b	20	13	
PK 332- 3.1	Pln Neb	NOR	13.7	-	16"					Ru 64	Opn CL	VEL	-	-	67'	II 3p	80	9	
PK 332- 4.1	Pln Neb	NOR	13.5	-	5"			16.4		Ru 65	Opn CL	VEL	-	-	11'	IV 1p	20	13	
PK 333+ 1.1	Pln Neb	NOR	13.7	-	13"					Ru 66	Opn CL	PYX	-	-	2'	II 1p:b	20	15	
PK 336- 5.1	Pln Neb	ARA	13.3	-	3"			16.6		Ru 67	Opn CL	VEL	9.1	-	6'	IV 3p	35	10.7	
PK 336- 6.1	Pln Neb	ARA	12.6	-	8"			16.5		Ru 68	Opn CL	PYX	-	-	10'	III 1r:b	80	14	
PK 342- 2.1	Pln Neb	SCO	13	-	25"	4				Ru 69	Opn CL	VEL	-	-	2.2'	IV 1pn:b	10	14	
PK 342- 4.1	Pln Neb	SCO	12	13.4	40"					Ru 70	Opn CL	VEL	-	-	5'	IV 2p:a	13		
PK 342- 6.1	Pln Neb	ARA	12.9	8.5	10"			16.2		Ru 71	Opn CL	VEL	-	-	7'	III 2p	30	11	
PK 342+27.1	Pln Neb	LIB	11.6	6.7	16"	2		18.4	same as PK342+17.1	Ru 72	Opn CL	PYX	-	-	1.4'	IV 1p:b	10	13	
PK 342-14.1	Pln Neb	ARA	11.9	12.4	36"			13.2		Ru 73	Opn CL	VEL	-	-	3.6'	IV 1p:b	25	14	
PK 343+11.1	Pln Neb	SCO	14	-	2.5"	2		17.3		Ru 74	Opn CL	PYX	-	-	2.2'	III 1p:b	20	13	
PK 345- 0.1	Brn Neb	SCO	-	-	-				Not a PLNNB:compact H II region RCW 117	Ru 75	Opn CL	VEL	-	-	4'	II 1p:b	20	12	
PK 345- 1.1	Pln Neb	SCO	13.4	-	8.5"	2				Ru 76	Opn CL	VEL	10.8	-	6'	III 2p	20	12.5	
PK 345- 4.1	Pln Neb	SCO	11.9	6.5	5"	1		14.3		Ru 77	Opn CL	VEL	10.4	-	2'	II 3p	35	12.5	
PK 346- 6.1	Pln Neb	SCO	12.6	-	5"					Ru 78	Opn CL	VEL	-	-	3'	II 2m:b	30	15	
PK 347+ 5.1	Pln Neb	SCO	13	-	1"					Ru 79	Opn CL	VEL	9.2	-	11'	III 3p	20	11.5	
PK 348- 0.1	Brn Neb	SCO	-	-	-				Not a PLNNB:compact H II region RCW 121	Ru 80	Opn CL	VEL	-	-	12'	III 1p	13		
PK 349- 4.1	Pln Neb	SCO	13	-	83"			16.8		Ru 81	Opn CL	VEL	-	-	5'	IV 3p:a	12		
PK 349+ 4.1	Pln Neb	SCO	13.4	-	5"	1		17		Ru 82	Opn CL	VEL	8.1	-	3.6'	II 3p	20	10.8	
PK 350- 3.1	Pln Neb	SCO	14	-	23"	4				Ru 83	Opn CL	VEL	9.8	-	3.4'	I 3p	30	11.3	
PK 350+ 4.1	Pln Neb	SCO	14	-	5.6"	2		12.9		Ru 85	Opn CL	VEL	-	-	1.7'	III 1m:b	40	15	
PK 351- 6.1	Pln Neb	SCO	13.8	-	9.9"	2				Ru 86	Opn CL	CAR	-	-	12'	III 2m	12		
PK 351+ 4.1	Pln Neb	SCO	13.2	9.8	10"	1		16.9	Stellar	Ru 87	Opn CL	VEL	-	-	2.2'	II 3p	20	11	
PK 352- 7.1	Pln Neb	CRA	11.4	4.3	2"	1		14.3	Stellar point in rich field foundw prism--Hartung	Ru 90	Opn CL	CAR	-	-	9'	IV 2p	15	12	
PK 353- 4.1	Pln Neb	SCO	12	-	10"			16.8		Ru 91	Opn CL	CAR	-	-	1.7'	II 2p	15	10	
PK 353+ 6.2	Pln Neb	SCO	13.7	9.4	8"	1		16.4		Ru 106	Glob CL	CEN	10.9	-	2'			14.8	Skiff: Nice globular cluster!
PK 355- 3.3	Pln Neb	SCO	12.7	-	2"			15.4		Ru 108	Opn CL	CEN	7.5	-	12'	III 2p	15	8.5	
PK 355- 4.1	Pln Neb	SCO	14	-	11"	3				Ru 111	Opn CL	CEN	-	-	8'	III 1m:b	40	13	
PK 355- 6.5	Pln Neb	SGR	11.7	6.3	5"			13.5		Ru 113	Opn CL	NOR	-	-	45'	III 1m	20	9	
PK 356- 4.1	Pln Neb	SCO	13.9	-	3"			14	On north side of M7 star cluster	Ru 114	Opn CL	NOR	-	-	8'	IV 1m:b	50	12	
PK 356- 4.2	Pln Neb	SCO	13	-	10"	2		16.2		Ru 115	Opn CL	NOR	-	-	5'	III 1p:a	13		
PK 357- 3.2	Pln Neb	SCO	14	-	6.2"	2				Ru 116	Opn CL	NOR	-	-	5'	II 2p	9		
PK 357- 4.3	Pln Neb	SCO	8.5	-	2"	1		15.4	magnitude value is infrared region	Ru 117	Opn CL	NOR	-	-	1.7'	III 1p:a	12		
PK 358- 0.2	Pln Neb	SCO	13.8	7.9	9.0"	2		12.1		Ru 119	Opn CL	NOR	8.8	-	8'	II 1p	13	10.9	
PK 358- 6.1	Pln Neb	SGR	12	-	10"					Ru 120	Opn CL	ARA	-	-	3.4'	II 3p:a	11	12	
PK 358+ 3.1	Pln Neb	OPH	13.6	-	3.5"	2			same as PK358+ 3.3	Ru 121	Opn CL	ARA	-	-	8'	IV 1m:b	35	13	
PK 358+ 4.1	Pln Neb	OPH	14	-	5.6"	2				Ru 123	Opn CL	SCO	-	-	9'	II 3p	50	10	About 40 * maqs 15...
PK 358+ 5.2	Pln Neb	OPH	13.1	-	3"			17.2		Ru									

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
Ru 145	Opn CL	SGR	-	-	35'	III 1 m		10		Tr 26	Opn CL	OPH	9.5	-	7'	III 2 p	40		
Ru 148	Opn CL	PER	9.5	-	3'	IV 2 p	15	9.9		Tr 27	Opn CL	SCO	6.7	-	7'	II 2 p	35	8.4	Extinction varies from 3 to 8 mags across face of cl
Ru 150	Opn CL	CMA	-	-	2.5'	II 2 p :b	12	13		Tr 28	Opn CL	SCO	7.7	-	8'	II 2 p n	30	9.8	
Ru 151	Opn CL	PUP	-	-	15'	IV 3 m	30	12		Tr 29	Opn CL	SCO	7.5	-	9'	II 3 p	30		
Ru 152	Opn CL	PUP	-	-	1.7'	II 1 m:b	35	16		Tr 30	Opn CL	SCO	8.8	-	10'	III 2 p	20		In field of M 7
Ru 153	Opn CL	PUP	-	-	2.8'	IV 2 p:e:a		14		Tr 31	Opn CL	SGR	9.8	-	8'	III 1 p	25		
Ru 154	Opn CL	PUP	-	-	0.6'	III 2 p :b	20	13		Tr 32	Opn CL	SER	12.2	-	4'	I 2 m :b	50	11.8	
Ru 155	Opn CL	PUP	-	-	2'	IV 1 p :b	10	13		Tr 33	Opn CL	SGR	7.8	-	7'	II 3 p	20	9.7	
Ru 157	Opn CL	PYX	-	-	17'	IV 2 p	30	11		Tr 34	Opn CL	SCT	8.6	-	8'	II 2 m	40	11.2	
Ru 158	Opn CL	PYX	-	-	2.5'	III 2 p :b	10	12		Tr 35	Opn CL	SCT	9.2	-	9'	II 2 p	35	11.4	
Ru 160	Opn CL	VEL	-	-	1.7'	I 3 p :a		14		Tr 37	Opn CL	CEP	5.1	-	50'	II 3 m	30	7.8	In IC 1396 nebula
Ru 165	Opn CL	CRU	-	-	22'	IV 1 p	35	7		UGC 191	Galaxy	PSC	13.4	14	3'	S			
Ru 167	Opn CL	CEN	-	-	14'	IV 2 p	40	11		UGC 439	Galaxy	CET	13.2	13.2	1.1'	Sa			
Ru 168	Opn CL	SGR	-	-	3.4'	IV 1 p :b	20	12		UGC 711	Galaxy	CET	14	-	3.9'	Sc			
Ru 170	Opn CL	SCT	-	-	2.5'	IV 1 m:b		13		UGC 1072	Galaxy	CET	14	-	1.2'	SO			vF companion on west side
Ru 171	Opn CL	SCT	-	-	6'	III 1 r :b	15	14		UGC 1102	Galaxy	PSC	13.9	-	1.4'	Pec			dbl sys w UGC 1105 in south part of disk; Symbiotic
Ru 172	Opn CL	CYD	-	-	4'	III 2 p n:b	20	12		UGC 1195	Galaxy	PSC	13.2	-	3'	Irp+			distorted
Ru 173	Opn CL	CYD	-	-	50'	III 3 p	20	8	Large loose cl; 34 * in 20'	UGC 1281	Galaxy	TRI	12.6	-	4.5'	Sdm			
Ru 174	Opn CL	CYD	-	-	5'	IV 1 p :b	10	14		UGC 1385	Galaxy	AND	13.4	12.3	0.8'	SBa			brightest of 3
Ru 175	Opn CL	CYD	-	-	9'	III 2 p	30	11	Not rich; 27 * at 120X in 10" scope	UGC 1546	Galaxy	ARI	13.7	13.8	1.1'	Sc			
Ru 176	Opn CL	NOR	-	-					Stellar arc or broken ring--Archinal	UGC 1547	Galaxy	ARI	13.9	15.5	2'	Irp+			
Sh2- 1	Brn Neb	SCO	-	-	150'	E+R			Neb brightest south of Pi Sco	UGC 1551	Galaxy	ARI	13.5	14.4	2.8'	SBdm			faint comp 3.1' PA 155
Sh2- 3	Brn Neb	SCO	-	-	7.3'	E				UGC 1561	Galaxy	ARI	14	13.8	1.4'	Irp+			very mottled
Sh2- 5	Brn Neb	SCO	-	-	32'	E				UGC 2023	Galaxy	TRI	13.9	15.2	2.0'	Im			
Sh2- 9	Brn Neb	SCO	-	-	35'	E+R				UGC 2034	Galaxy	AND	13.1	15.1	3.1'	Irp+			
Sh2- 13	Brn Neb	SCO	-	-	40'	E				UGC 2082	Galaxy	ARI	12.9	14.5	6.2'	Sc			
Sh2- 16	Brn Neb	SGR	-	-	14'	E				UGC 2105	Galaxy	TRI	13.5	13.2	1.5'	SBa			Supernova 1938A here
Sh2- 46	Brn Neb	SER	-	-	30'	E				UGC 2119	Galaxy	CET	13.5	13.7	2'	SBb			
Sh2- 53	Brn Neb	SCT	-	-	15'	E				UGC 2259	Galaxy	PER	13.4	14.9	2.8'	SBdm			south of 2
Sh2- 55	Brn Neb	SCT	-	-	5'	E				UGC 2275	Galaxy	CET	13.4	16.6	5.8'	Sm			
Sh2- 64	Brn Neb	SER	-	-	20'	E				UGC 2302	Galaxy	CET	13.2	16.6	4.8'	(R)SB(rs)			
Sh2- 72	Brn Neb	AQL	-	-	25'	E				UGC 2463	Galaxy	PER	13.9	15.1	2.3'	SABm			
Sh2- 82	Brn Neb	SGE	-	-	7'	E+R			Large and irregularly round	UGC 2855	Galaxy	CAM	12.9	15	4.4'	S(B)c			P w UGC 2866 at 10' south foll
Sh2- 84	Brn Neb	SGE	-	-	15'	E			V shaped neby; rich field of stars	UGC 3504	Galaxy	LYN	12.3	14.1	3.1'	S(B)c			
Sh2- 88	Brn Neb	VUL	-	-	18'	E			Has two small brighter knots w in large faint neby	UGC 3574	Galaxy	LYN	12.6	15.3	4.2'	Sc			P w UGC 3569 6' preced
Sh2- 90	Brn Neb	VUL	-	-	5'	E				UGC 3580	Galaxy	CAM	11.8	13.6	3.4'	Sa			
Sh2- 91	SN Rem	CYD	-	-	120'				Long; thin filament	UGC 3587	Galaxy	GEM	13.8	13.4	2.8'	S			
Sh2-101	Brn Neb	CYD	-	-	16'	E			Near dark neb B144; appears as bright edge to dark	UGC 3685	Galaxy	LYN	12	14.3	3.3'	SBb			
Sh2-104	Brn Neb	CYD	-	-	7'	E				UGC 3691	Galaxy	GEM	11.9	12.7	2.2'	Sc			several blue patches along edge
Sh2-112	Brn Neb	CYD	-	-	15'	E				UGC 3697	Galaxy	CAM	13.5	12.2	3.5'	Sbp			Integral sign galaxy; disturbed
Sh2-115	Brn Neb	CYD	-	-	30'	E				UGC 3730	Galaxy	CAM	12.5	14.4	2.7'	Ring			Chaotic; UGC 3705 at 9' 14.4mag 1.5'X1.4'
Sh2-132	Brn Neb	CEP	-	-	40'	E			NE section has highest surface brightness	UGC 3826	Galaxy	CAM	13.5	15.9	3.5'	S(B)d			
Sh2-155	Brn Neb	CEP	-	-	15'	E			Cave nebula; crescent shaped with northern bright	UGC 3912	Galaxy	CMI	12.8	13.4	1.8'	Irp+			
Sh2-157	Brn Neb	CAS	-	-	60'	E			Incl brighter area Sh2-157a	UGC 3946	Galaxy	CMI	13.1	12.9	1.3'	Irp+			vF companion north preced
Sh2-188	Brn Neb	CAS	-	-	10'	E			Crescent shaped with SE side brighter	UGC 3964	Galaxy	MON	13.1	13.6	1.7'	S(B)dm			
Sh2-205	Brn Neb	CAM	-	-	80'	E				UGC 3973	Galaxy	LYN	13.9	11	1.4'	SBb			Seyfert
Sh2-223	SN Rem	AUR	-	-	70'					UGC 3974	Galaxy	GEM	13.1	16.4	3.1'	Irp			
Sh2-224	SN Rem	AUR	-	-	31'	E				UGC 3975	Galaxy	CAM	13.6	14.1	1.4'	SBdm			
Sh2-231	Brn Neb	AUR	-	-	10'	E				UGC 4013	Galaxy	CAM	13.3	13.8	2'	Sb			Seyfert; vF companion on east side
Sh2-232	Brn Neb	AUR	-	-	37'	E			PLNNB PK 175+0.1 involved	UGC 4238	Galaxy	CAM	12.7	13.9	2.4'	SBd			
Sh2-235	Brn Neb	AUR	-	-	7.8'	E				UGC 4260	Galaxy	LYN	13.5	14.3	1.7'	Irp			
Sh2-240	SN Rem	TAU	-	-	200'	E			Huge oval cloud w filaments; prob supernova remna	UGC 4305	Galaxy	UMA	11.1	14.8	7.6'	Irp+			dwarf irregular
Sh2-241	Brn Neb	AUR	-	-	2'	E+R				UGC 4393	Galaxy	LYN	12.4	13.6	2.5'	SB			
Sh2-247	Brn Neb	GEM	-	-	10'	E				UGC 4499	Galaxy	UMA	13	14.6	2.6'	S(B)dm			Mrk 94 superimposed 0.7' south foll
Sh2-261	Brn Neb	ORI	-	-	30'	E			Lower's nebula	UGC 4543	Galaxy	LYN	13.8	15.6	3.6'	Sdm			
Sh2-263	Brn Neb	ORI	-	-	20'	E+R	5.7		Brightst part of Lambda Ori neb	UGC 4559	Galaxy	CNC	13.2	13.5	3'	Sb+			
Sh2-264	Brn Neb	ORI	5	-	70'	E			Seems to apply to entire Lambda Ori neb	UGC 4687	Galaxy	UMA	13.7	12.4	0.8'	Pec			vF companion south
Sh2-276	Brn Neb	ORI	7	12	600'	E			Part of Barnard's Loop; faint	UGC 4749	Galaxy	UMA	13.5	12.6	0.9'	S			
Sh2-282	Brn Neb	MON	-	-	40'	E				UGC 4787	Galaxy	LYN	13.7	13.6	2.3'	Sdm			
Sh2-294	Brn Neb	MON	-	-	8'	E				UGC 4797	Galaxy	HYA	13.9	15.1	2.5'	S			
Sh2-301	Brn Neb	CMA	-	-	8'	E				UGC 4841	Galaxy	CAM	12.4	14.3	2.8'	S(B)d			Ho III
Sh2-302	Brn Neb	PUP	-	-	20'	E			Cluster Bochum 5 invl	UGC 4922	Galaxy	UMA	13.4	14.9	3.9'	Sm			
Sh2-307	Brn Neb	PUP	-	-	4'	E				UGC 5028	Galaxy	UMA	13.8	12.4	0.7'	SBdm pe			P w UGC 5029 sep 70" E-W
Sh2-311	Brn Neb	PUP	-	-	16'	E			Involved in cluster NGC 2467; dark lane near middle	UGC 5139	Galaxy	UMA	12.5	14.9	3.5'	Irp+			Dwarf in M81 group
Sh2-312	Brn Neb	PYX	-	-	720'	E				UGC 5238	Galaxy	SEX	13.7	14.2	2.5'	S(B)d			
Steph 1	Opn CL	LYR	3.8	-	20.0'	IV 3 p	15	4.3	Delta Lyrae cluster	UGC 5249	Galaxy	SEX	13.2	13.7	2.4'	SBc			
Stock 1	Opn CL	VUL	5.3	-	60'	III 2 m	40	7	47 * in 40' field	UGC 5349	Galaxy	LMI	13.7	14.4	2.5'	Sm			
Stock 2	Opn CL	CAS	4.4	-	60'	III 1 m	166	8.2	2 deg north of Double Cluster; easy in binocs	UGC 5364	Galaxy	LEO	12.6	15.4	4.9'	Irp+			Local Group dwarf irregular
Stock 3	Opn CL	CAS	-	-	2'	IV 1 p	8	11		UGC 5373	Galaxy	SEX	11.3	14.3	5.1'	Irp+			dwarf irregular , sextans B dwarf
Stock 4	Opn CL	PER	-	-	20'	III 1 p	15	11		UGC 5393	Galaxy	LMI	14	14.7	2.3'	SBm			
Stock 5	Opn CL	CAS	7	-	15'	IV 2 p	25	7	53 Cas is star on west side	UGC 5425	Galaxy	LEO	13.4	12.4	0.7'	Sbc			
Stock 8	Opn CL	AUR	-	-	5'	I 2 p n	40	9	In nebula IC 417	UGC 5459	Galaxy	UMA	12.6	13.8	4.2'	Sc			
Stock 10	Opn CL	AUR	-	-	25'	IV 3 p	15			UGC 5460	Galaxy	UMA	12.9	14.5	2.5'	SBd			vF companion 6' east
Stock 11	Opn CL	CAS	-	-	10'	IV 2 p		8		UGC 5470	Galaxy	LEO	10.2	14.8	10.7'	dE3			dwarf elliptical in Local Group; 0.3' N of Regulus
Stock 12	Opn CL	CAS	-	-	20'	IV 2 p	9	8		UGC 5522	Galaxy	LEO	12.6	14.3	3'	Sc			
Stock 13	Opn CL	CAR	7	-	3'	I 2 p n	15	8.5	In Carina OB3	UGC 5588	Galaxy	LEO	14	12	0.4'	Pec			In NGC 3209 group; high surface brightness
Stock 15	Opn CL	CRU	-	-	12'	IV 1 p		10		UGC 5612	Galaxy	UMA	12.1	14.2	3.4'	SB+			vF comp west
Stock 17	Opn CL	CAS	-	-	1'	I 3 p :a		8.5		UGC 5688	Galaxy	UMA	13.2	15.3	3.6'	S(B)+			Part of chain of faint gals w knots
Stock 18	Opn CL	CAS	-	-	5'	IV 2 p :a				UGC 5707	Galaxy	UMA	13.4	14.8	2.5'	S(B)c			
Stock 19	Opn CL	CAS	-	-	3'	II 2 p	6	8		UGC 5708	Galaxy	SEX	13.2	13.9	3.4'	S(B)d			
Stock 20	Opn CL	CAS	-	-	1'	II 2 p :a		13		UGC 5829	Galaxy	LMI	13.5	15.4	4.6'	Irp+			
Stock 21	Opn CL	CAS	-	-	5'	IV 2 p :b	10	12		UGC 5953	Galaxy	UMA	13	11.1	0.6'	Pec			
Stock 23	Opn CL	CAM	-	-	15'	III 3 p n	25	7.6		UGC 5998	Galaxy	UMA	13.9	12.5	0.9'	Pec			Disrupted pair?
Stock 24	Opn CL	CAS	8.8	-	4'	IV 2 P	20	11.1	Superb at high power in 10" scope	UGC 6029	Galaxy	UMA	13.2	12.9	0.9'	Pec			UGC 6013 group
Tr 1	Opn CL	CAS	8.1	-	4.5'	I 3 p	20	9.6	2 10 mag * and haze of unresolved stars	UGC									

NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES	NAME	TYPE	CON	MAG	S.B.	SIZE	Class	ns	bs	SAC NOTES
UGC 6667	Galaxy	UMA	13.5	13.8	3.4'	Sc				UGC 8614	Galaxy	BOO	12.7	14.5	3.4'	Ir+			
UGC 6670	Galaxy	LEO	12.9	13.8	4.2'	Ir+			compact core	UGC 8658	Galaxy	UMA	13.1	14.8	2.8'	SAB(rs)c			
UGC 6697	Galaxy	LEO	13.6	12.9	1.9'	Sm				UGC 8733	Galaxy	CVN	13.4	14.6	2.5'	SBcd			disturbed?
UGC 6711	Galaxy	DRA	13.2	11.9	0.7'	Pec				UGC 8837	Galaxy	UMA	13.4	15.1	4'	Ir+			in M101 group;MCG +09-23-017
UGC 6719	Galaxy	LEO	13.6	13.4	1.3'	Sc				UGC 8839	Galaxy	BOO	13.1	15.5	4.0'	Ir-			
UGC 6725	Galaxy	LEO	12.9	13.5	1.8'	S0				UGC 8995	Galaxy	BOO	13.4	14.2	2.3'	S(B)dm			
UGC 6780	Galaxy	VIR	13	14.1	3.4'	Sd pec				UGC 9057	Galaxy	VIR	13.5	14	3'	SBdm			
UGC 6817	Galaxy	UMA	13.1	14.9	4.1'	Ir+				UGC 9169	Galaxy	BOO	13	14.3	3.9'	Ir+			
UGC 6840	Galaxy	UMA	13.9	13.8	2.3'	SB(rs)m				UGC 9240	Galaxy	BOO	12.9	14.1	1.8'	Ir+			
UGC 6903	Galaxy	VIR	12.3	14.1	2.5'	S(B)c				UGC 9242	Galaxy	BOO	13.5	13.8	5'	Sc			many knots
UGC 6917	Galaxy	UMA	12.6	14.6	3.5'	SBm				UGC 9291	Galaxy	BOO	13	14.3	2.8'	Sd			
UGC 6930	Galaxy	UMA	12.1	14.6	4.4'	S(B)d				UGC 9310	Galaxy	VIR	14	14	2.3'	SBdm			
UGC 6955	Galaxy	UMA	13.3	15.9	5.3'	Ir+				UGC 9380	Galaxy	VIR	13.7	14.3	1.9'	Ir+			
UGC 6983	Galaxy	UMA	12.4	14.6	3.4'	SB(rs)cd				UGC 9749	Galaxy	UMI	10.9	17.8	27.3'	dE6			Member Local Group, Ursa minor dwarf
UGC 7020	Galaxy	UMA	13.2	14.6	2.1'	SA				UGC 9799	Galaxy	SER	14	13.5	2.1'	E5			Brightest in cluster
UGC 7089	Galaxy	UMA	13.9	14.6	3.4'	Sm				UGC 9837	Galaxy	DRA	13.3	14.4	2'	S(B)c			
UGC 7125	Galaxy	CVN	13.7	14.9	4.7'	Sm				UGC 9858	Galaxy	BOO	12.8	14	4.4'	S(B)b+			
UGC 7239	Galaxy	VIR	13.3	14.6	2.2'	Ir+				UGC 9912	Galaxy	SER	13.5	14.5	1.7'	SBdm			
UGC 7257	Galaxy	CVN	13.6	13.7	1.7'	Sm			south following of 2 w 0.6' sep	UGC 9941	Galaxy	SER	13.8	14.6	1.3'	Ir+			
UGC 7321	Galaxy	COM	13.4	14.8	5.3'	Sd				UGC 9977	Galaxy	SER	13.2	13.7	3.9'	Sc			
UGC 7332	Galaxy	VIR	13.5	14.6	2.3'	Ir+				UGC 10020	Galaxy	SER	13.5	14.4	2.3'	Sd			Faint * near nucleus
UGC 7408	Galaxy	CVN	13.1	14.2	2.3'	Ir+				UGC 10041	Galaxy	SER	13	14.6	3.0'	S(B)dm			
UGC 7490	Galaxy	DRA	12.7	15.1	3.3'	SAm				UGC 10054	Galaxy	UMI	13.7	14.7	2.5'	SBdm			south foll of 2;may be disturbed by vF companion
UGC 7557	Galaxy	VIR	12.9	15.1	3.1'	Sm			Member of Virgo group of galaxies	UGC 10200	Galaxy	HER	13.6	-	0.7'	Pec			North of 2;disturbed?;very diffuse
UGC 7577	Galaxy	CVN	12.3	14.7	3.9'	Ir+			P w UGC 7608	UGC 10290	Galaxy	SER	13.3	14.4	1.8'	Sm			
UGC 7599	Galaxy	CVN	12.3	14.7	1.8'	Sm				UGC 10736	Galaxy	DRA	13.9	14.9	3.1'	S(B)dm			
UGC 7608	Galaxy	CVN	13.3	15.8	3.5'	Ir+				UGC 10806	Galaxy	HER	13.2	13.8	2.5'	SB(s)dm			
UGC 7639	Galaxy	CVN	13.8	15.1	3.2'	Ir+				UGC 10822	Galaxy	DRA	9.9	17.2	33.5'	dE3			Member of Local Group;dwarf elliptical
UGC 7690	Galaxy	CVN	12.6	13.6	2'	Ir+				UGC 10862	Galaxy	OPH	12.7	14.7	2.7'	SB(rs)c			
UGC 7698	Galaxy	CVN	12.6	16.1	6.5'	Ir+			Low Surface Brightness	UGC 11074	Galaxy	OPH	13.3	14.2	2.3'	Sd			
UGC 7699	Galaxy	CVN	12.5	13.8	3.8'	SBc				UGC 11093	Galaxy	OPH	13.7	13.4	3.1'	Scd			
UGC 7739	Galaxy	VIR	14	14.3	1.3'	Ir-				UGC 11124	Galaxy	HER	12.7	14.5	2.7'	SBc			
UGC 7911	Galaxy	VIR	12.9	14.4	2.4'	SBm				UGC 11141	Galaxy	OPH	13.2	14.4	2.8'	Sdm			
UGC 7941	Galaxy	DRA	13.9	-	2.9'	Sd				UGC 11152	Galaxy	HER	13.6	14.4	2.5'	SBdm			south preced of 2
UGC 7943	Galaxy	VIR	13.1	14.5	2.5'	Scd				UGC 11465	Galaxy	CYG	13.8	13	1.3'	S(B)0			
UGC 8041	Galaxy	VIR	12	13.8	3.2'	SBd				UGC 11557	Galaxy	CEP	13.2	14.5	2.1'	S(B)dm			
UGC 8053	Galaxy	VIR	13.7	14.2	1.7'	S(B)dm				UGC 11651	Galaxy	VUL	13.9	14.8	3.4'	Sdm			
UGC 8058	Galaxy	UMA	13.6	13.7	1.7'	Sc pec			Compact core fine streamers	UGC 11909	Galaxy	LAC	12.3	12.9	3'	S pec			
UGC 8146	Galaxy	UMA	13.8	13.9	3.7'	Sc				UGC 12074	Galaxy	PEG	13.4	11.7	0.6'	Pec			compact w loops
UGC 8153	Galaxy	VIR	13.5	14.4	1.6'	Sd				UGC 12178	Galaxy	PEG	13.1	14.7	3.4'	S(B)dm			
UGC 8201	Galaxy	DRA	12.5	15.1	3.4'	Ir+				UGC 12221	Galaxy	CEP	14	14.4	2.3'	Sd			
UGC 8246	Galaxy	CVN	13.9	14.6	3.3'	SBc				UGC 12350	Galaxy	PEG	14	14.6	2.6'	Sm			pair in contact total size 3'X2'
UGC 8290	Galaxy	COM	13.7	14.1	1.5'	Sm pec			P w NGC 5012	UGC 12588	Galaxy	AND	13.2	14.2	1.9'	Sdm			
UGC 8303	Galaxy	CVN	13.1	14.6	2.5'	Ir+			MCG +06-29-061	UGC 12613	Galaxy	PEG	12	-	4.6'	Ir+			dwarf Member Local Group , pegasus dwarf
UGC 8313	Galaxy	CVN	14	13.6	2.4'	SB(s)c				UGC 12632	Galaxy	AND	12.1	15.1	4.9'	Sm			
UGC 8320	Galaxy	CVN	12.4	14	3.8'	Ir+				UGC 12682	Galaxy	PEG	14	14.3	1.4'	Ir+			
UGC 8323	Galaxy	CVN	13.8	13.3	1'	Ir+				UGC 12710	Galaxy	PEG	13.9	13.9	1.3'	Ir+			very chaotic
UGC 8385	Galaxy	VIR	13.6	14.6	2.5'	S(B)+				UGC 12732	Galaxy	PEG	13.3	15.5	3'	Sm			
UGC 8507	Galaxy	COM	13.9	-	1.4'	Pec			cigar-shaped w faint envl	UGC 12843	Galaxy	PEG	13.3	14.5	3'	S(B)dm			* superimposed 0.4' north foll center
UGC 8508	Galaxy	UMA	13.9	14.3	1.4'	Ir+				UGC 12856	Galaxy	PEG	13.9	-	1.6'	Ir+			disturbed w many knots
UGC 8597	Galaxy	CVN	13.8	14.3	1.9'	SB+				UGCA 205	Galaxy	SEX	11.5	15	5.9'	Ir			MCG -01-26-030

List description:

This list plots deep sky objects from SAC database down to magnitude 14, which are roughly the same objects which appear in this atlas
Objects listed are down to magnitude 14.0, including ones which lack listed magnitude (i.e. Barnard dark nebulae)
Important note: Objects with Declination lower than -60° (most southern objects) aren't listed - this list covers the "north" atlas version only
Objects are sorted by catalog type first (Messier, NGC, IC, others) and then by name
SAC 7.7 database was used. Data courtesy of the Saguaro Astronomy Club (www.saguaroastro.org)
Objects which belong to "best 700 list" (including Messier, Caldwell, SAC's best, Herchel 400 and others) are marked in bold
This list was designed for A3 page size. For A4 versions - visit <http://www.deepskywatch.com/deepsky-guide.html>

Columns abbreviations:

NAME: object common name **SIZE:** object maximum angular size
TYPE: object type **Class:** object class (see explanations)
CON: constellation **ns:** number of stars in open cluster
MAG: object magnitude **bs:** magnitude of a brightest star in cluster, or central star in planetary nebula
SB: object surface brightness **NOTES:** notes and description of object (mostly from SAC database)

Object class abbreviations

open clusters classes:
I: Detached, strong concentration toward the center 1: Small range p: Poor (<50 stars)
II: Detached, weak concentration toward the center 2: Moderate range m: Moderately rich (50-100 stars)
III: Detached, no concentration toward the center 3: Large range r: Rich (>100 stars)
IV: Not well detached from surrounding star field n: nebulecity in center

globular clusters classes:
1: least concentrated ... 12: most concentrated

planetary nebulae classes
1: Stellar
2: Smooth disk (a, brighter center; b, uniform brightness; c, traces of ring structure)
3: Irregular disk (a, very irregular brightness distribution; b, traces of ring structure)
4: Ring structure
5: Irregular form similar to diffuse nebula
6: Anomalous form, no regular structure

galaxy classes
E: elliptical (E0 is roundest to E7 is flattest) ('d'is dwarf, 'c'is supergiant, 'D' has diffuse halo)
S: Spiral ('a' has tightly wound arms, 'b' has moderately wound arms and 'c' has loosely wound arms)
SB: Spiral with central bar
Ir: Irregular