

Double Stars for Binoculars

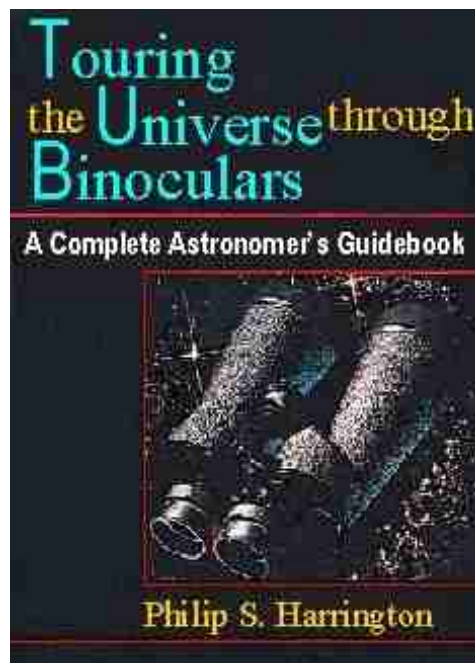
AN OBSERVING PROGRAM

by

The Spirit of 33

(An International Network of Double Stars Observers)

based on the list of celestial objects by Philip S. Harrington



2000-1 Edition



PHIL HARRINGTON'S BINOCULARS DOUBLE STARS LIST

for Declination over -30°

Object	Con	R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes	Pg	Chk
56	And	01 56.2	+37 15	5.7 6.0	190"	300 (1928)	1534		7	
15	Aql	19 05.0	-04 02	5.5 7.2	38"	209 (1959)	12007		8	
OSS 178	Aql	19 15.3	+15 05	5.7 7.8	90"	268 (1925)			9	
Lambda	Ari	01 57.9	+23 36	4.9 7.7	37"	46 (1933)	1563	9 Ari	10	
30	Ari	02 37.0	+24 39	6.6 7.4	39"	274 (1937)	1982	colorful	11	
S 656	Boo	13 50.4	+21 17	6.8 7.3	86"	208 (1923)			12	
Iota	Boo	14 16.2	+51 22	4.9 7.5	39"	33 (1942)	9198		13	
Delta	Boo	15 15.5	+33 19	3.5 8.7	105"	79 (1976)	9559		14	
Mu	Boo	15 24.5	+37 23	4.3 6.5	108"	171 (1956)	9626		15	
OSS 36	Cam	03 40.0	+63 52	6.8 8.6	46"	69 (1923)	2650		16	
S 436	Cam	03 49.3	+57 07	6.5 7.3	58"	75 (1975)			17	
11	Cam	05 06.1	+58 58	5.4 6.5	180"	8 (1924)			18	
Struve 1051	Cam	07 26.6	+73 05	7.1 7.8	31"	82 (1935)	6028		19	
OSS 90	Cam	08 02.5	+63 05	6.0 8.4	49"	82 (1924)			20	
Burnham58 4	Cnc	08 39.9	+19 33	6.9 7.2	45" 93"	156 241 (1952)	6915	M44	21	
Iota	Cnc	08 46.7	+28 46	4.2 6.6	31"	307 (1968)	6988		22	
17	CVn	13 10.1	+38 30	6.0 6.2	84"	297 (1922)	8805		23	
Alpha1+2	Cap	20 18.1	-12 33	3.6 4.2	378"	291 (1924)	13645	optical	24	
Beta1+2	Cap	20 21.0	-14 47	3.4 6.2	205"	267 (1922)			25	
OSS 26	Cas	02 19.7	+60 02	6.9 7.4	63"	200 (1925)			26	
OSS 1	Cep	00 14.0	+76 02	7.6 7.9	76"	103 (1923)		optical	27	

37	Cet	01 14.4	-07 55	5.2 8.7	50"	331 (1931)	1003		28	
17	Com	12 28.9	+25 55	5.3 6.6	145"	251 (1928)	8568	in Mel 111	29	
32+33	Com	12 52.2	+17 04	6.3 6.7	95"	49 (1922)			30	
H V 38	CrB	16 22.9	+32 20	6.3 8.8	34.7"	19 (1914)	10031		31	
OSS 182	Cyg	19 26.8	+50 09	7.3 8.5	73"	300 (1956)	12470		32	
Beta	Cyg	19 30.7	+27 58	3.1 5.1	34"	54 (1967)	12540	Albireo	33	
Omicron1	Cyg	20 13.6	+46 44	4 7 5	107" 338"	173 338 (1926)	13554		34	
OSS 207	Cyg	20 22.9	+42 59	6.6 8.5	93"	63 (1920)	13786		35	
61	Cyg	21 06.9	+38 45	5.2 6.0	321"	195 (1976)	14636	large p.m.	36	
S 752	Del	20 30.2	+19 25	6.6 7.0	106"	288 (1915)	13921		37	
Struve1516	Dra	11 15.4	+73 28	7.6 8.1	36.2"	102 (1940)	8100		38	
OSS 123	Dra	13 27.1	+64 44	6.7 7.0	69"	147 (1924)			39	
16 + 17	Dra	16 36.2	+52 55	5.4 5.5	90"	194 (1956)	10129		40	
Nu	Dra	17 32.2	+55 11	4.9 4.9	62"	312 (1955)	10628		41	
Psi	Dra	17 41.9	+72 09	4.9 6.1	30"	15 (1958)	10759		42	
Struve2278	Dra	18 02.9	+56 26	7 8 9 10	37" 34" 201"	26 35 191 (1949)	11035		43	
39	Dra	18 23.9	+58 48	5.0 7.4	89"	21 (1956)	11336		44	
Omicron	Dra	18 51.2	+59 23	4.8 7.8	34"	326 (1949)	11779		45	
Gamma	Equ	21 10.3	+10 08	4.7 5.9	353"	153 (1922)	14702		46	
Burnham10 42	Eri	03 58.6	-02 39	7.5 8.5	56"	93 (1913)	2909		47	
Omicron2	Eri	04 15.2	-07 39	4.4 9.5	83"	104 (1970)	3093		48	
62	Eri	04 56.4	-05 10	5.5 9.1	67"	75 (1913)			49	
Nu	Gem	06 29.0	+20 13	4.2 8.7	113"	329 (1924)	5103		50	
Zeta	Gem	07 04.1	+20 34	3.8 8.0	96"	350 (1925)	5742	A=var(3.6-4.2)	51	
Struve1090	Gem	07 26.5	+18 31	7.3 8.2	61"	97 (1921)	6073		52	
Alpha	Gem	07 34.6	+31 53	1.9 8.8	73"	164 (1955)	6175	Castor	53	

37	Her	16 40.6	+04 13	5.8 7.0	70"	230 (1932)	10149		54	
h 99	Hya	08 37.8	-06 48	6.8 9.1	61"	202 (1918)	6900		55	
27	Hya	09 20.5	-09 33	5.0 6.9	229"	211 (1923)	7311		56	
7	Leo	09 35.9	+14 23	6.2 10.0	41"	80 (1946)	7448		57	
Alpha	Leo	10 08.4	+11 58	1.4 7.7	177"	307 (1924)	7654	Regulus	58	
Tau	Leo	11 27.9	+02 51	5.1 8.0	91.1"	176 (1932)			59	
Burnham314	Lep	04 59.0	-16 23	5.9 8.2	53"	34 (1914)	3588		60	
S 476	Lep	05 19.3	-18 31	6.2 6.4	39"	18 (1952)	3910		61	
h 3780	Lep	05 39.3	-17 51	6 9 8 8	89" 76" 129"	136 7 299 (1916)	4254		62	
Gamma	Lep	05 44.5	-22 27	3.7 6.3	96"	350 (1957)	4334		63	
SHJ 179	Lib	14 25.5	-19 58	6.4 7.6	35"	296 (1955)	9258		64	
Alpha1+2	Lib	14 50.9	-16 02	2.8 5.2	231"	314 (1913)			65	
Iota	Lib	15 12.2	-19 47	5.1 9.4	58"	111 (1919)	9532		66	
SHJ 195	Lib	15 14.5	-18 26	7.1 8.1	47"	140 (1916)			67	
5	Lyn	06 26.8	+58 25	5.3 7.9	96"	272 (1924)	5036		68	
Epsilon1+2	Lyr	18 44.3	+39 40	5.0 5.2	208"	173 (1955)	11635	Double-double	69	
Zeta	Lyr	18 44.8	+37 36	4.3 5.9	44"	150 (1955)	11639		70	
Beta	Lyr	18 50.1	+33 22	3.3v 8.6	46"	149 (1955)	11745	A=mag 3.3-4.3	71	
Delta1+2	Lyr	18 54.5	+36 54	5.6 4.5	630"			Optical	72	
OS 525	Lyr	18 54.9	+33 58	6.0 7.7	45"	350 (1935)	11834		73	
OSS 181	Lyr	19 20.1	+26 39	7.6 7.4	58"	3 (1923)			74	
Zeta	Mon	08 08.6	-02 59	4.3 7.8	67"	245 (1936)	6617		75	
Rho	Oph	16 25.6	-23 27	5 8 7	151" 156"	0 253 (1925)	10049		76	
36	Oph	17 15.3	-26 36	5 6 8	732" 208"	280 315 (1905)	10417		77	
53	Oph	17 34.6	+09 35	5.8 8.5	41"	191			78	

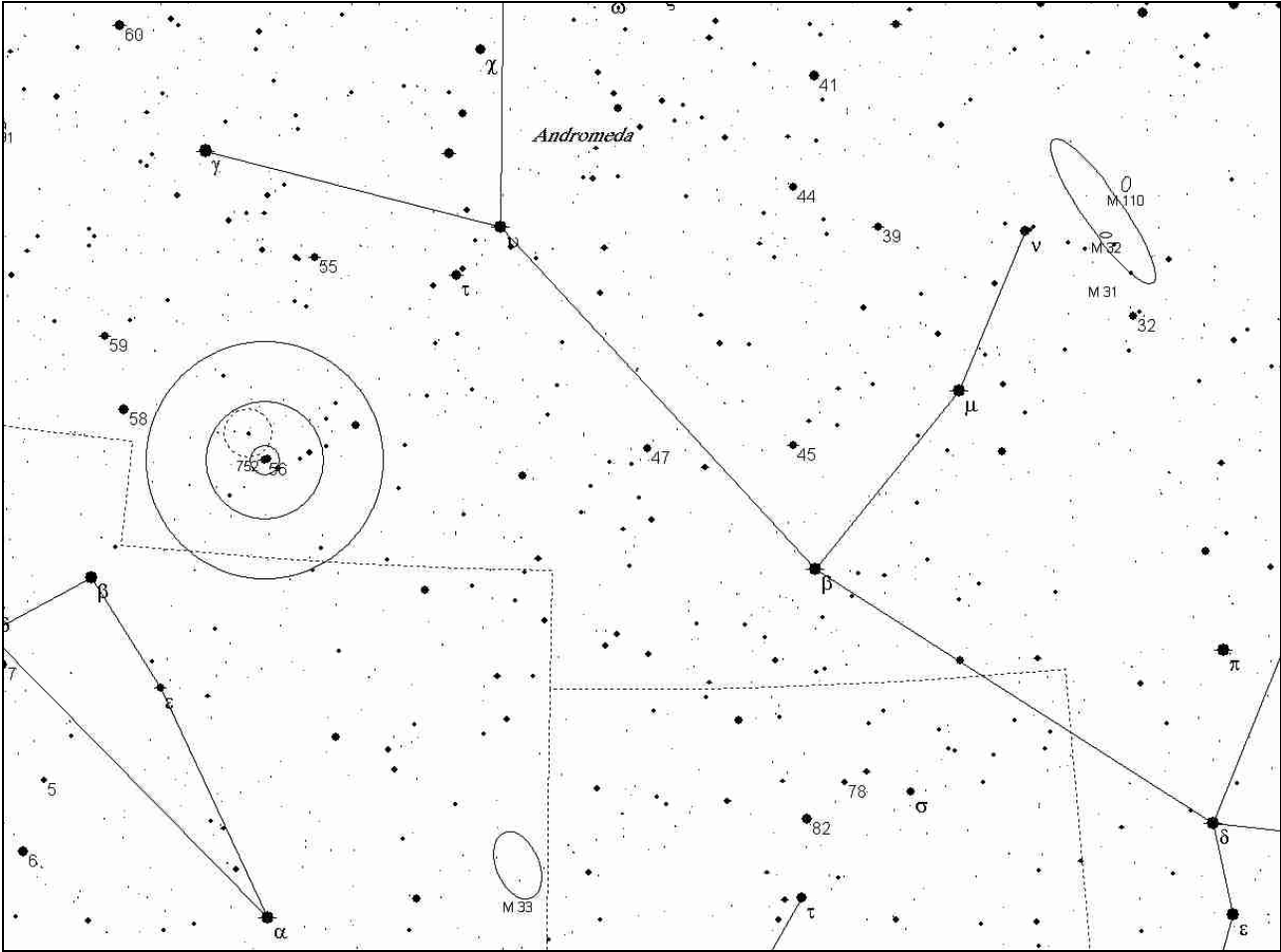
S 694	Oph	17 52.1	+01 07	6.9 7.1	82"	237			79	
23	Ori	05 22.8	+03 33	5.0 7.1	32"	28	3962		80	
Delta	Ori	05 32.0	-00 18	2.2 6.3	53"	359	4134		81	
Struve 747	Ori	05 35.0	-06 00	4.8 5.7	36"	223	4182		82	
42 + 45	Ori	05 35.4	-04 50	4.7 5.3	6'				83	
Theta1+2	Ori	05 35.4	-05 25	4.9 5.0	135"	314	4188	Theta1=Trapezium	84	
Theta2	Ori	05 35.4	-05 25	5.2 6.5	52"	92 (1937)	4188		85	
75	Ori	06 17.1	+09 57	5.4 8.5	117"	159	4890		86	
85	Peg	00 02.2	+27 05	5.8 8.6	76"	330 (1932)	17175		87	
3	Peg	21 37.7	+06 37	6.0 8.3	39"	349 (1934)	15147		88	
Epsilon	Peg	21 44.2	+09 52	2.4 8.4	143"	320 (1913)	15268	Enif	89	
Struve 3007	Peg	23 22.8	+20 34	6.6 8.9	88"	311 (1956)	16713		90	
57	Per	04 33.4	+43 04	6.1 6.8	116"	198 (1913)			91	
Psi1	Psc	01 05.6	+21 28	5.6 5.8	30"	159 (1832)	899		92	
77	Psc	01 05.8	+04 55	6.8 7.6	33"	83 (1833)	903		93	
H VI 119	PsA	22 39.7	-28 20	6.3 7.3	87"	160 (1951)	16149		94	
Alpha	PsA	22 57.6	-29 37	1.2 6.5	7200"			Fomalhaut	95	
Epsilon	Sge	19 37.3	+16 28	5.7 8.0	89"	81 (1949)	12693		96	
Theta	Sge	20 09.9	+20 55	6.5 7.4	84"	223 (1949)	13442	Optical	97	
54	Sgr	19 40.7	-16 18	5.4 8.9	46"	42 (1932)	12767		98	
Nu	Sco	16 12.0	-19 28	4.3 6.4	41"	337 (1955)	9951		99	
Theta	Ser	18 56.2	+04 12	4 5 8	22" 414"	104 (1973) 56 (1927)	11853		100	
21 + 22	Tau	03 46.1	+24 32	5.6 6.4	168"			Asterope; in M45	101	
Eta	Tau	03 47.5	+24 06	3 8 8 8	117" 181" 191"	289 312 295 (1903)		Alcyone	102	
27 + BU	Tau	03 49.2	+24 03	3.7 5.0	300"	180		Atlas & Pleione; in M45	103	

H VI 98	Tau	04 15.5	+06 11	6.3 7.0	66"	315 (1937)	3085		104	
Phi	Tau	04 20.4	+27 21	5.0 8.4	52"	250 (1925)	3137		105	
Kappa	Tau	04 25.4	+22 18	4.4 5.4	340"	173 (1923)			106	
Theta1+2	Tau	04 28.7	+15 52	3.8 3.4	337"	346 (1921)			107	
88	Tau	04 35.7	+10 10	4.3 8.4	70"	299 (1920)	3317		108	
OSS 67	Tau	05 48.4	+20 52	6.1 8.6	76"	161 (1933)	4392		109	
S 598	UMa	09 28.7	+45 36	5.5 8 10	77" 84"	162 (1924)			110	
65	UMa	11 55.1	+46 29	6.7 6.5	63"	114 (1969)	8347		111	
Wnc 4	UMa	12 22.4	+58 05	9.0 9.3	50"			M40	112	
Zeta	UMa	13 23.9	+54 56	2.3 4.0	709"	71 (1966)	8891	Alcor/Mizar	113	
Struve1831	UMa	14 16.2	+56 43	7.1 6.6	108"	222 (1956)	9197	Optical	114	
Pi1	UMi	15 29.2	+80 27	6.6 7.3	31"	80 (1959)	9696		115	

56 And

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
01 56.2	+37 15	5.7 6.0	190"	300 (1928)	1534

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

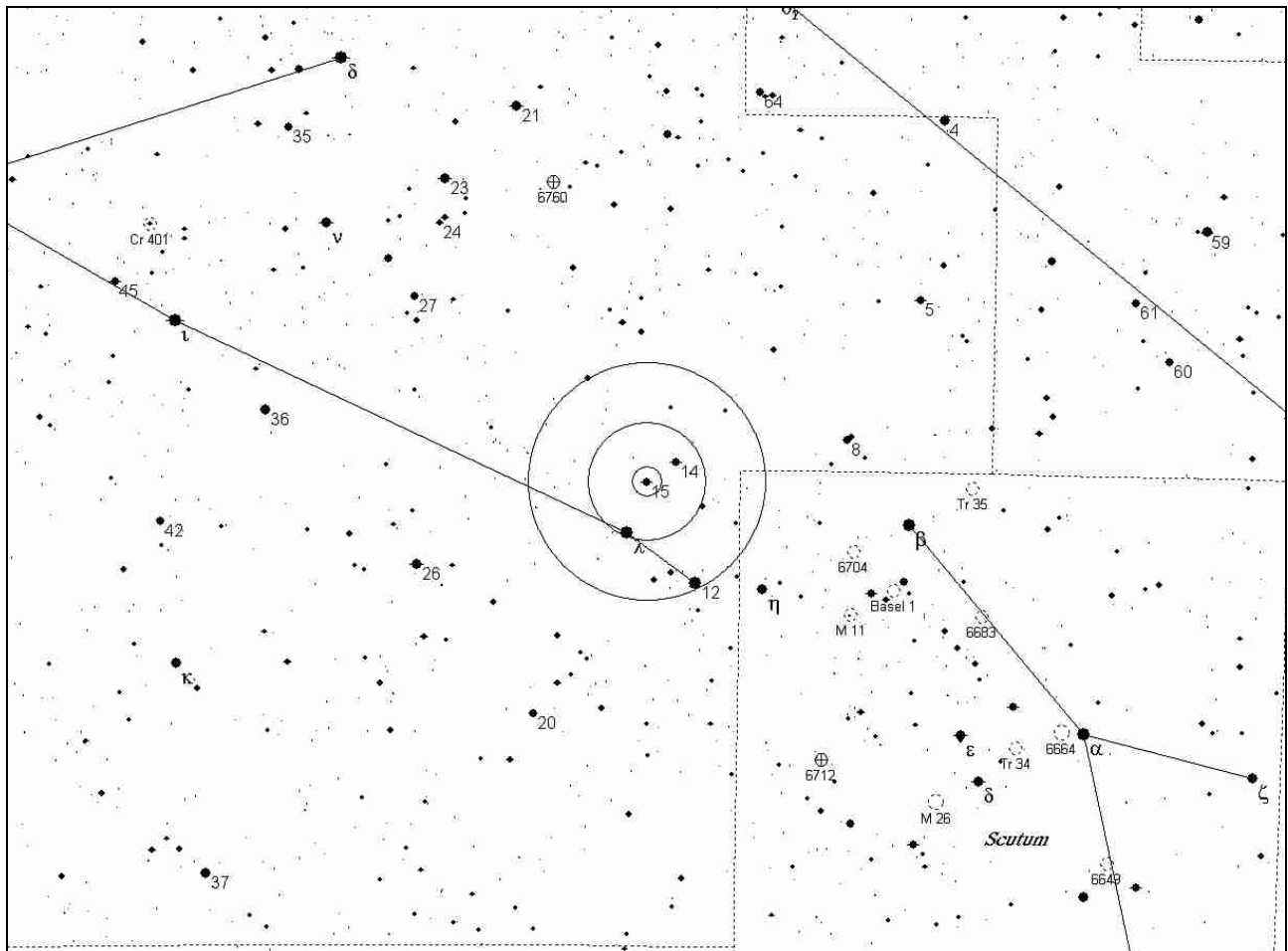


Notes:

15 Aql

R.A.(2000)	Dec (2000)	Mag	Sep	PA	ADS #
19 05.0	-04 02	5.5 7.2	38"	209 (1959)	12007

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

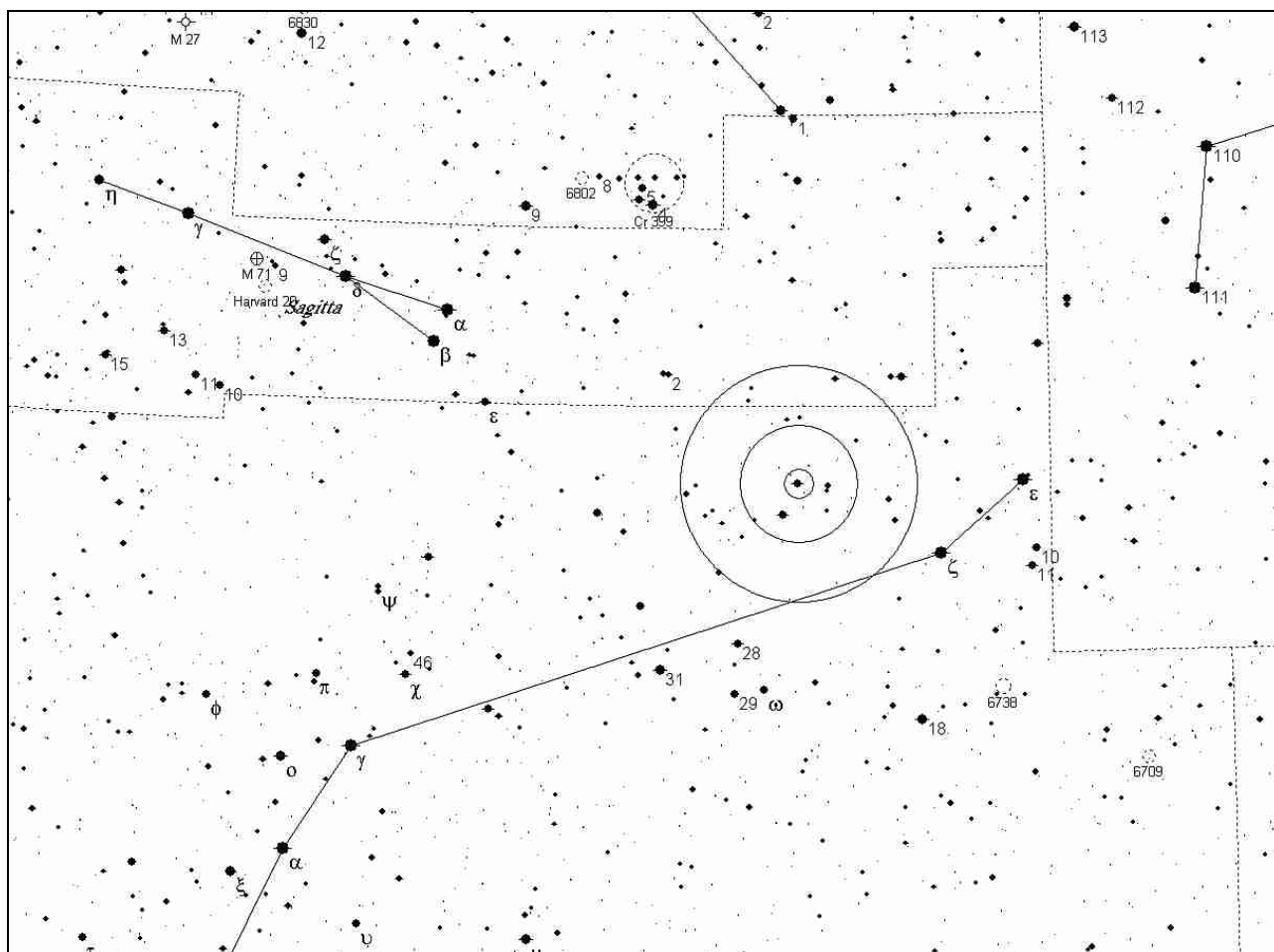


Notes:

OSS 178 (Aql)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
19 15.3	+15 05	5.7 7.8	90"	268 (1925)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

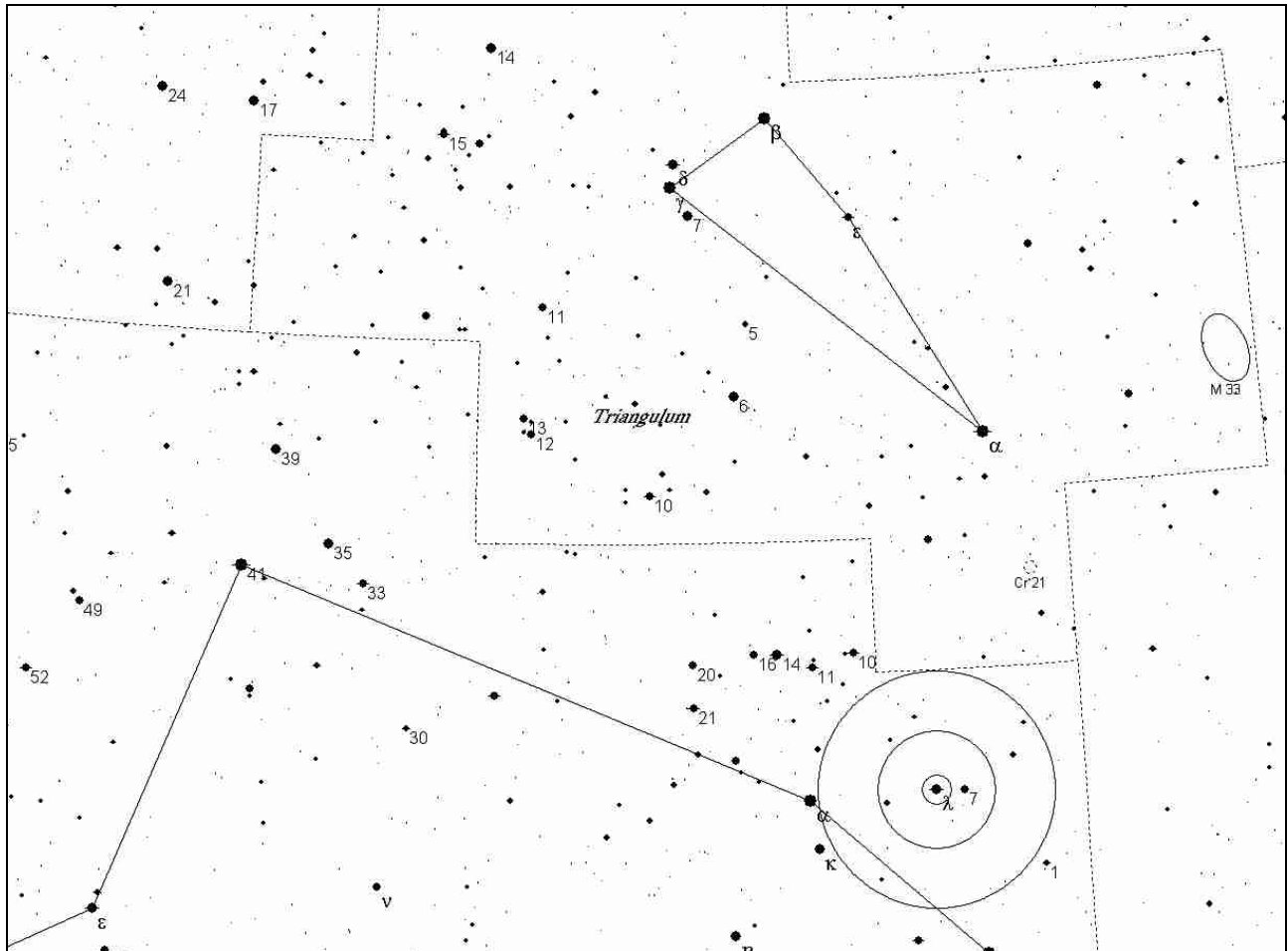


Notes:

Lambda Ari

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
01 57.9	+23 36	4.9 7.7	37"	46 (1933)	1563	9 Ari

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

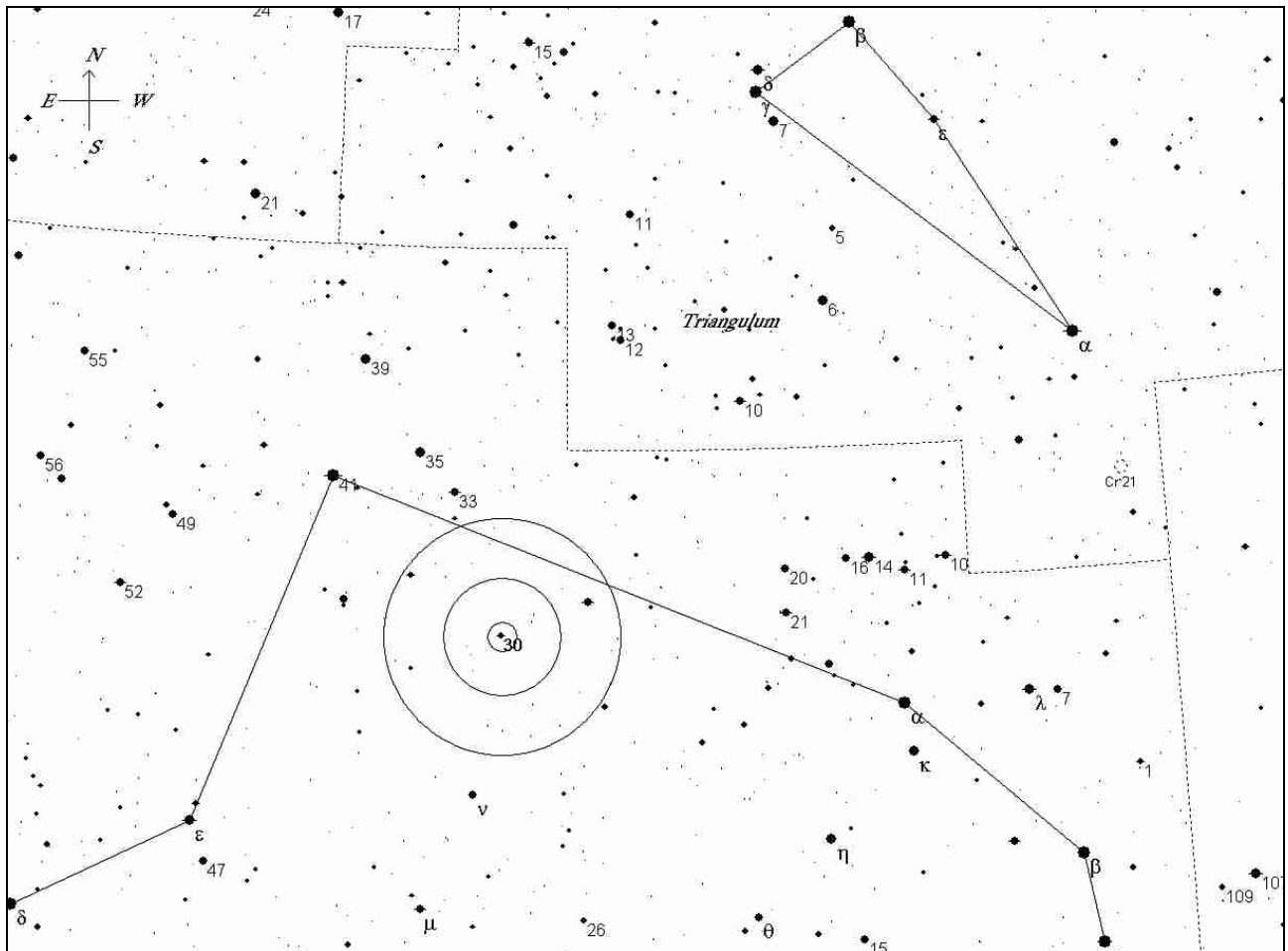


Notes:

30 Ari

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
02 37.0	+24 39	6.6 7.4	39"	274 (1937)	1982	colorful

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

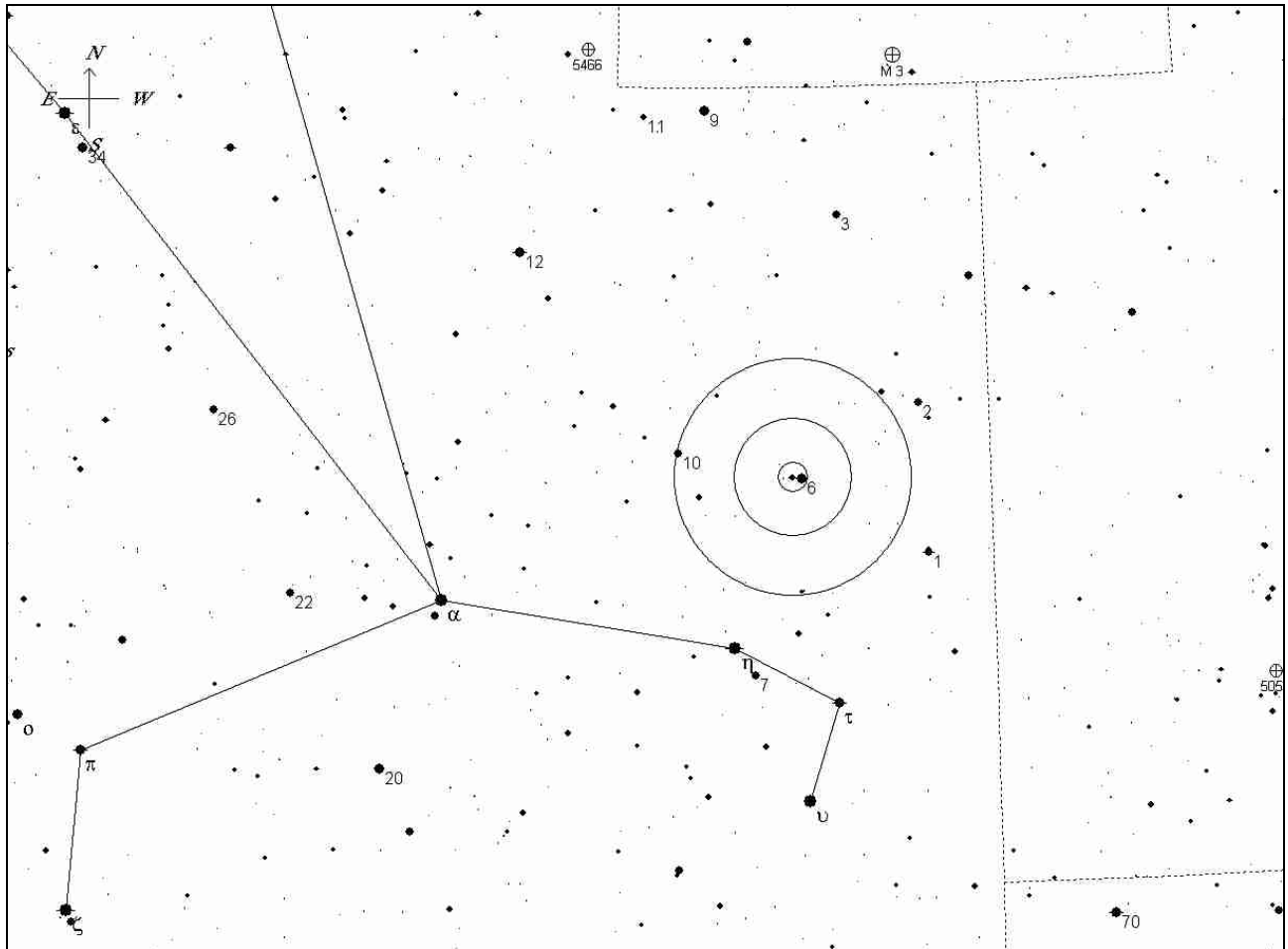


Notes:

S 656 (Boo)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
13 50.4	+21 17	6.8 7.3	86"	208 (1923)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

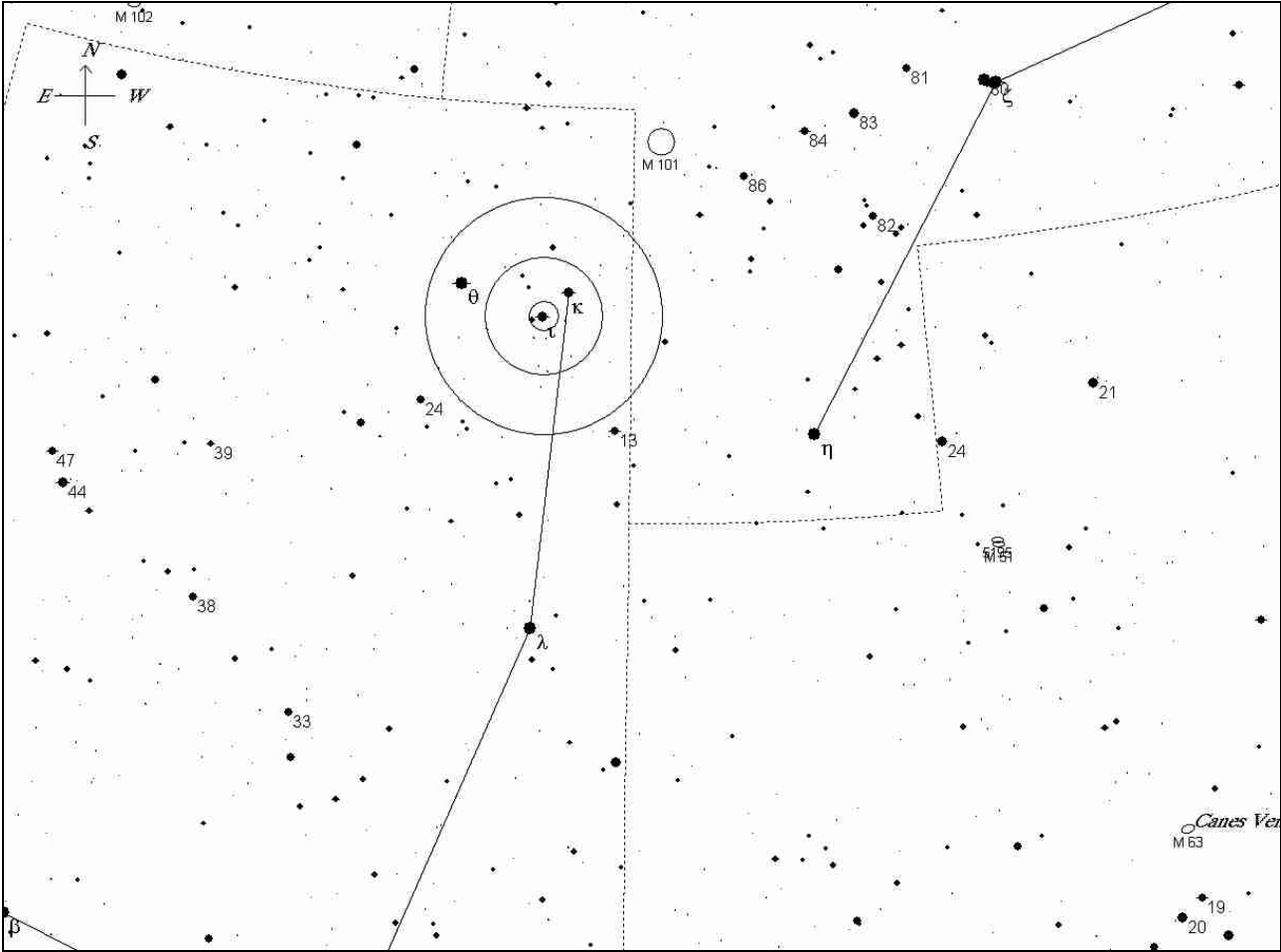


Notes:

Iota Boo

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
14 16.2	+51 22	4.9 7.5	39"	33 (1942)	9198

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

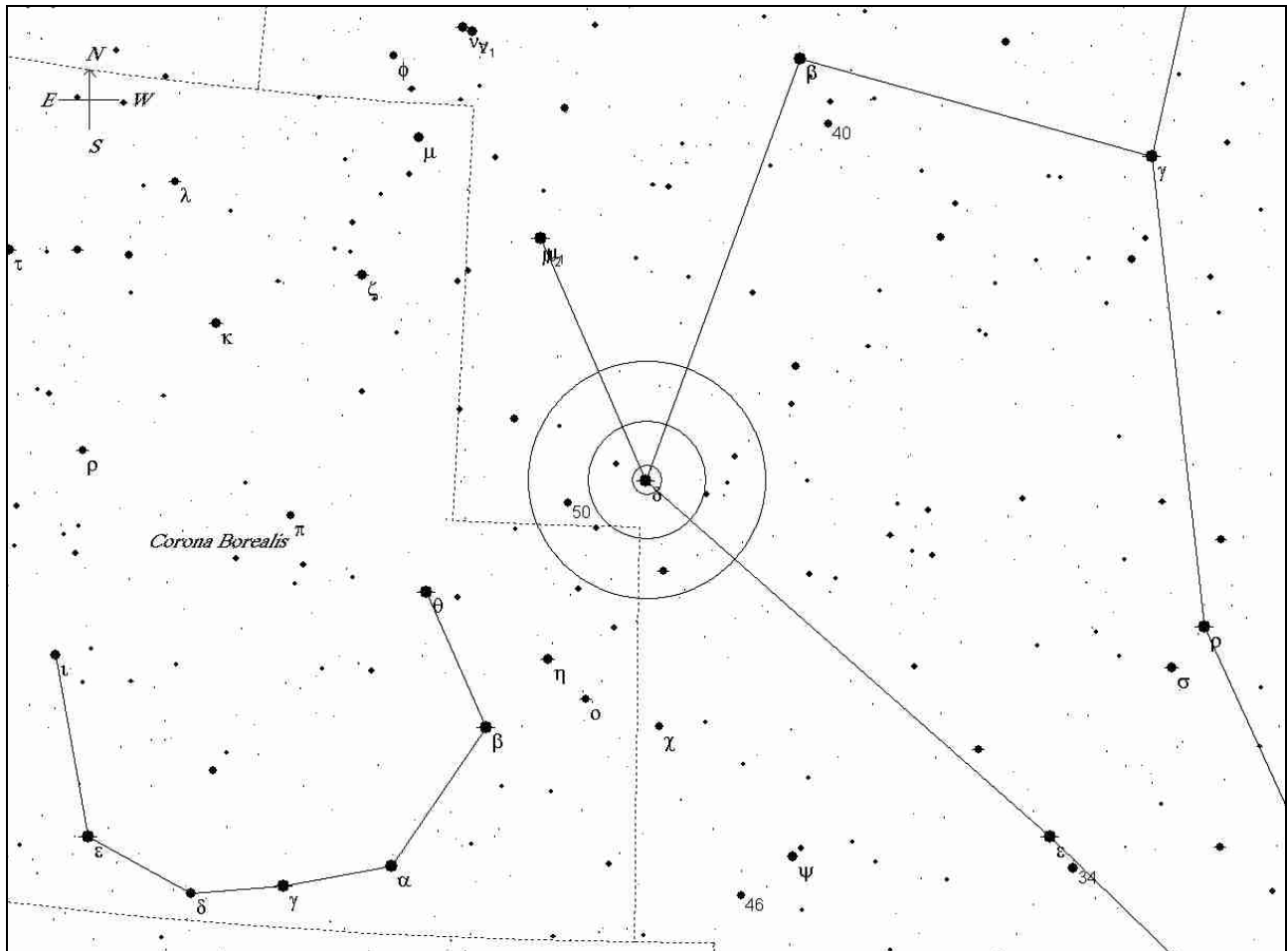


Notes:

Delta Boo

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
15 15.5	+33 19	3.5 8.7	105"	79 (1976)	9559

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

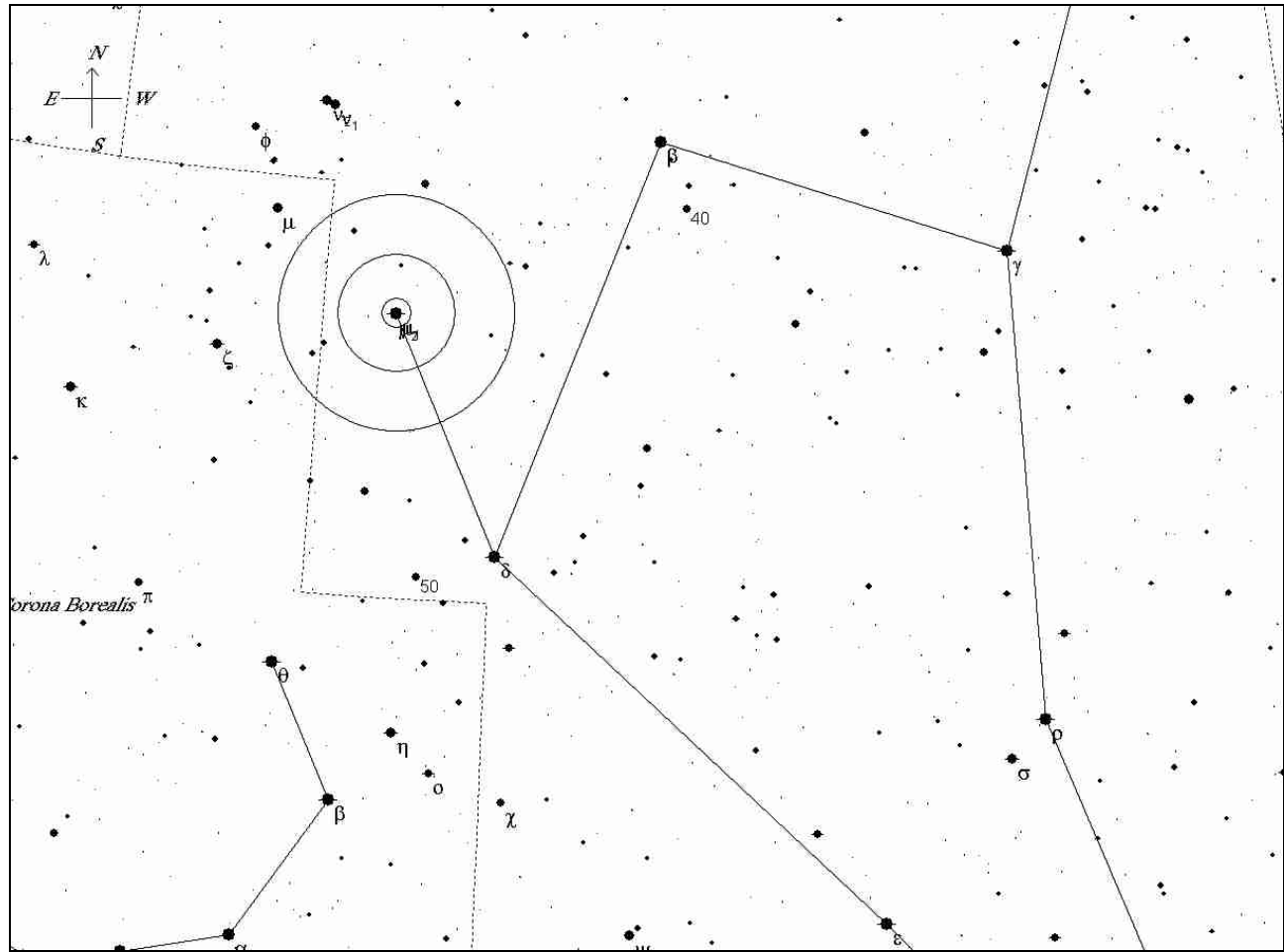


Notes:

Mu Boo

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
15 24.5	+37 23	4.3 6.5	108"	171 (1956)	9626

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

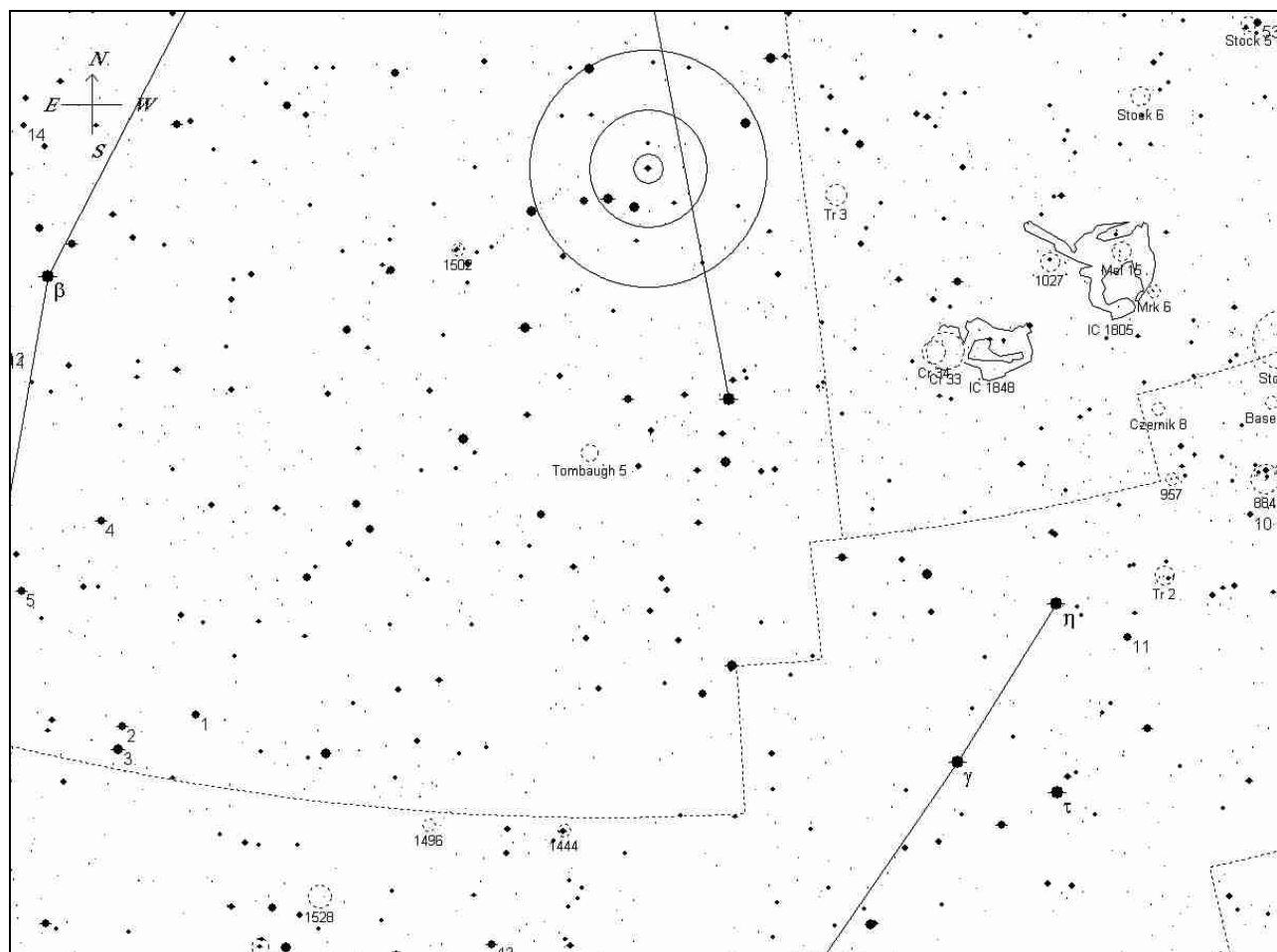


Notes:

OSS 36 (Cam)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
03 40.0	+63 52	6.8 8.6	46"	69 (1923)	2650

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

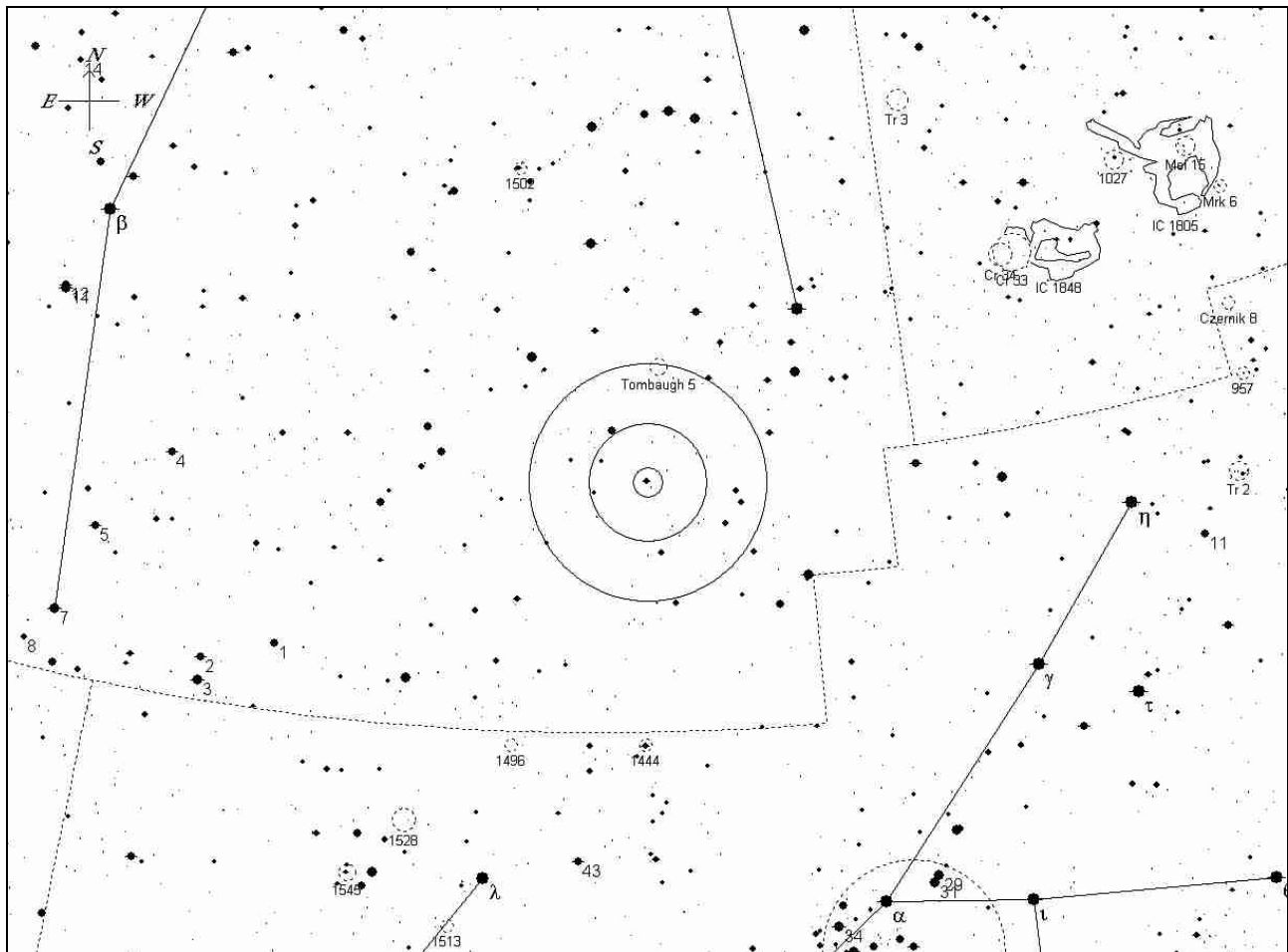


Notes:

S 436 (Cam)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
03 49.3	+57 07	6.5 7.3	58"	75 (1975)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

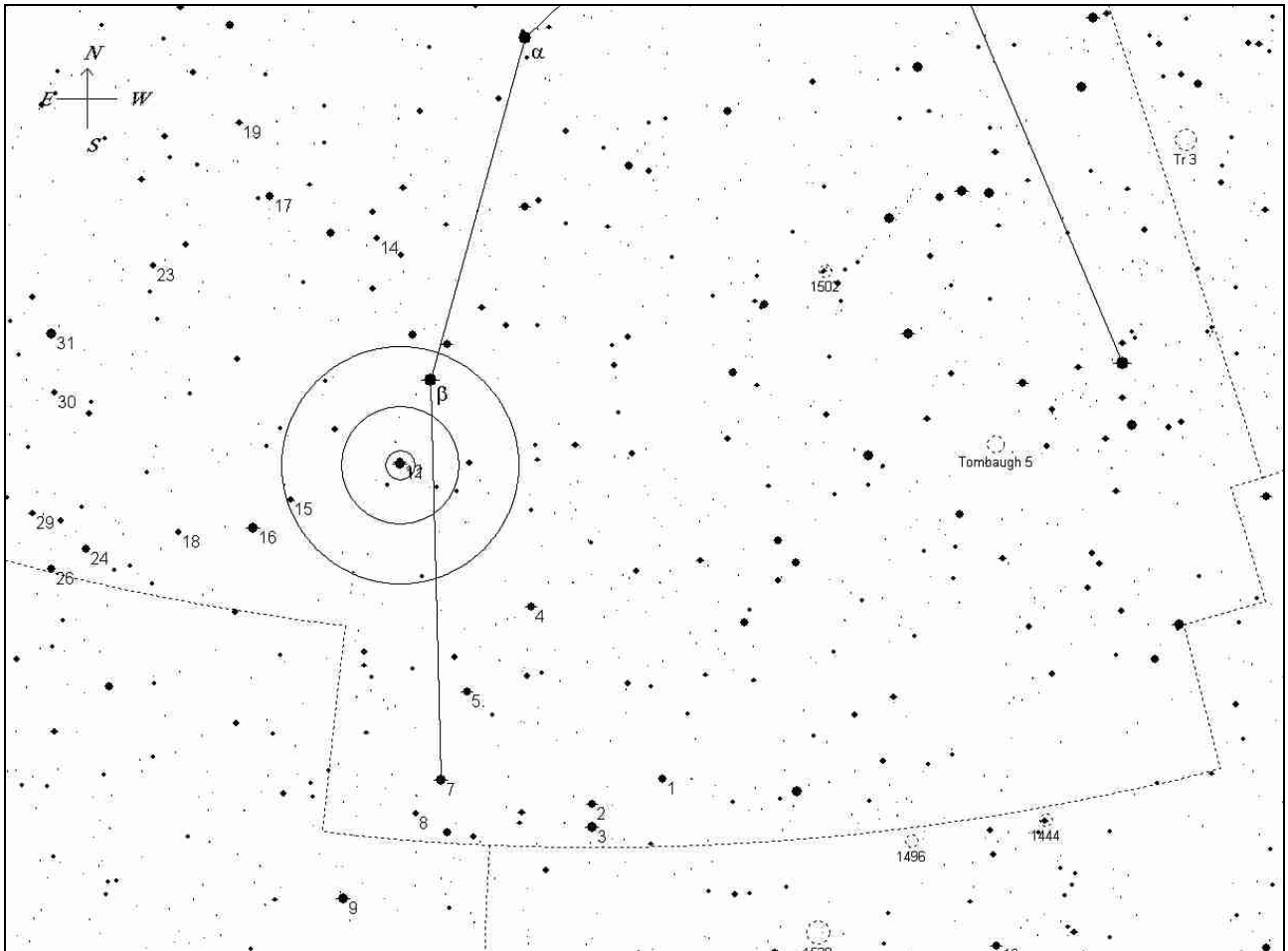


Notes:

11 Cam

R.A. (2000)	Dec (2000)	Mag	Sep	PA
05 06.1	+58 58	5.4 6.5	180"	8 (1924)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

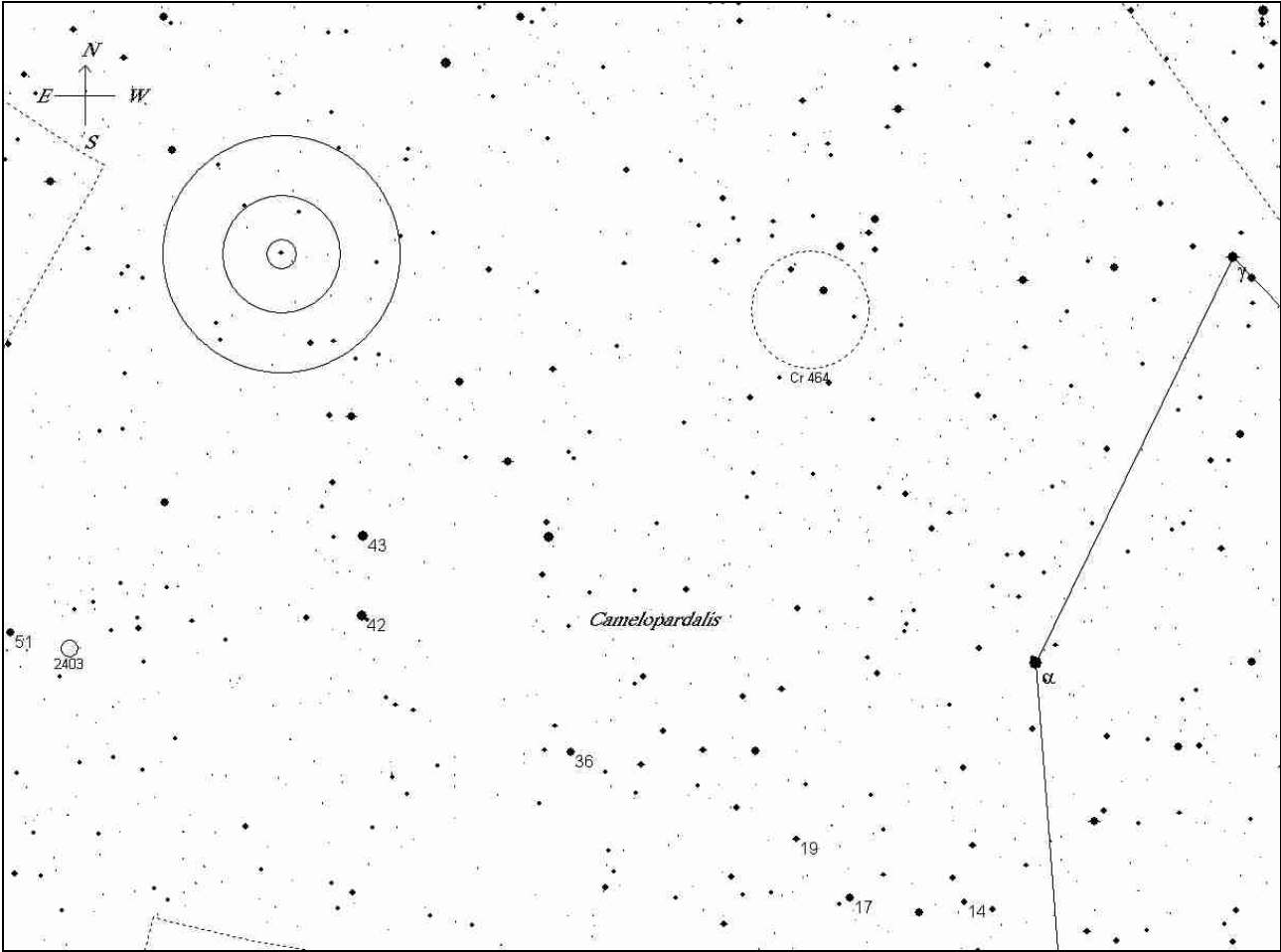


Notes:

Struve 1051 (Cam)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
07 26.6	+73 05	7.1 7.8	31"	82 (1935)	6028

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

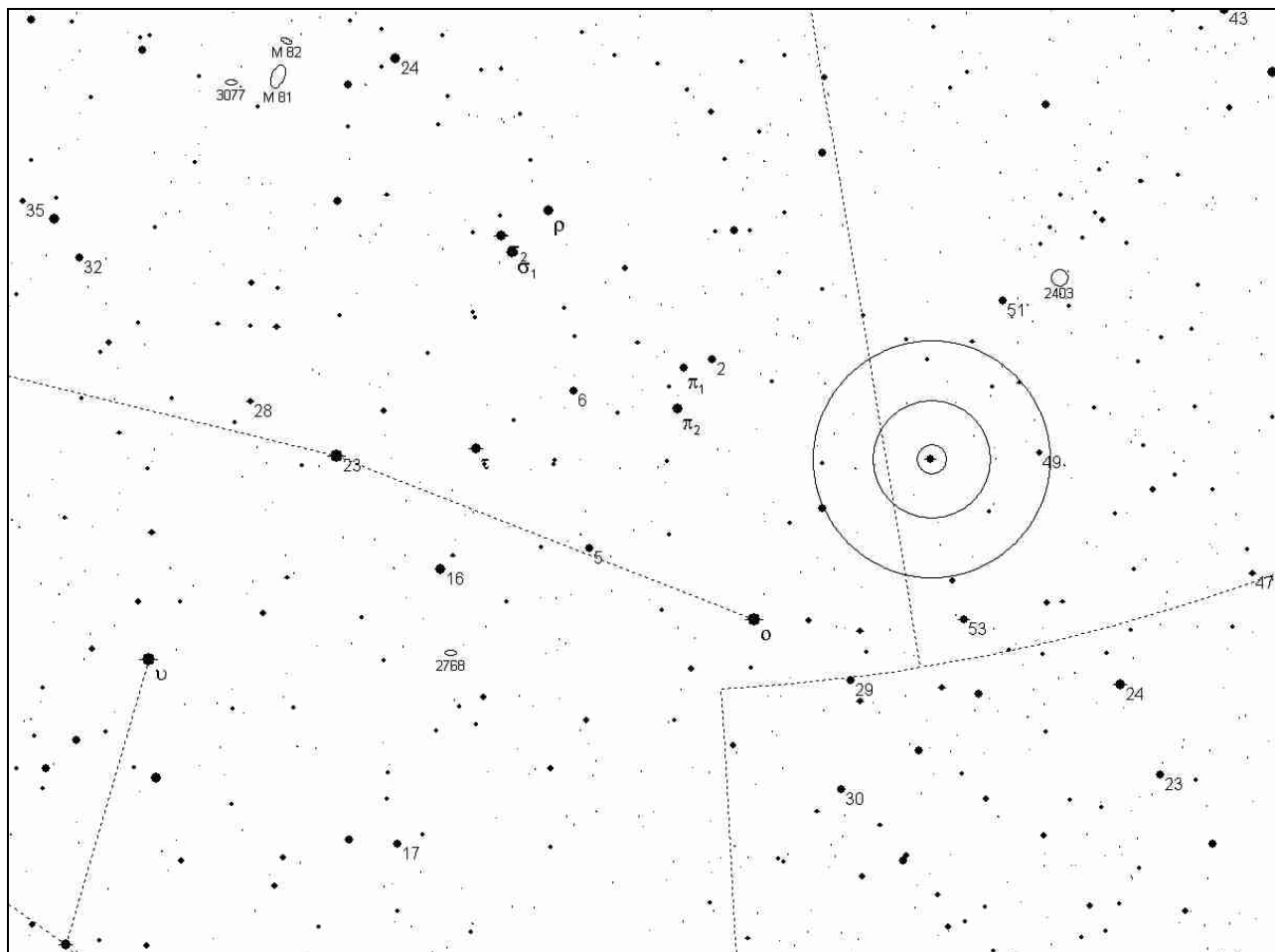


Notes:

OSS 90 (Cam)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
08 02.5	+63 05	6.0 8.4	49"	82 (1924)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

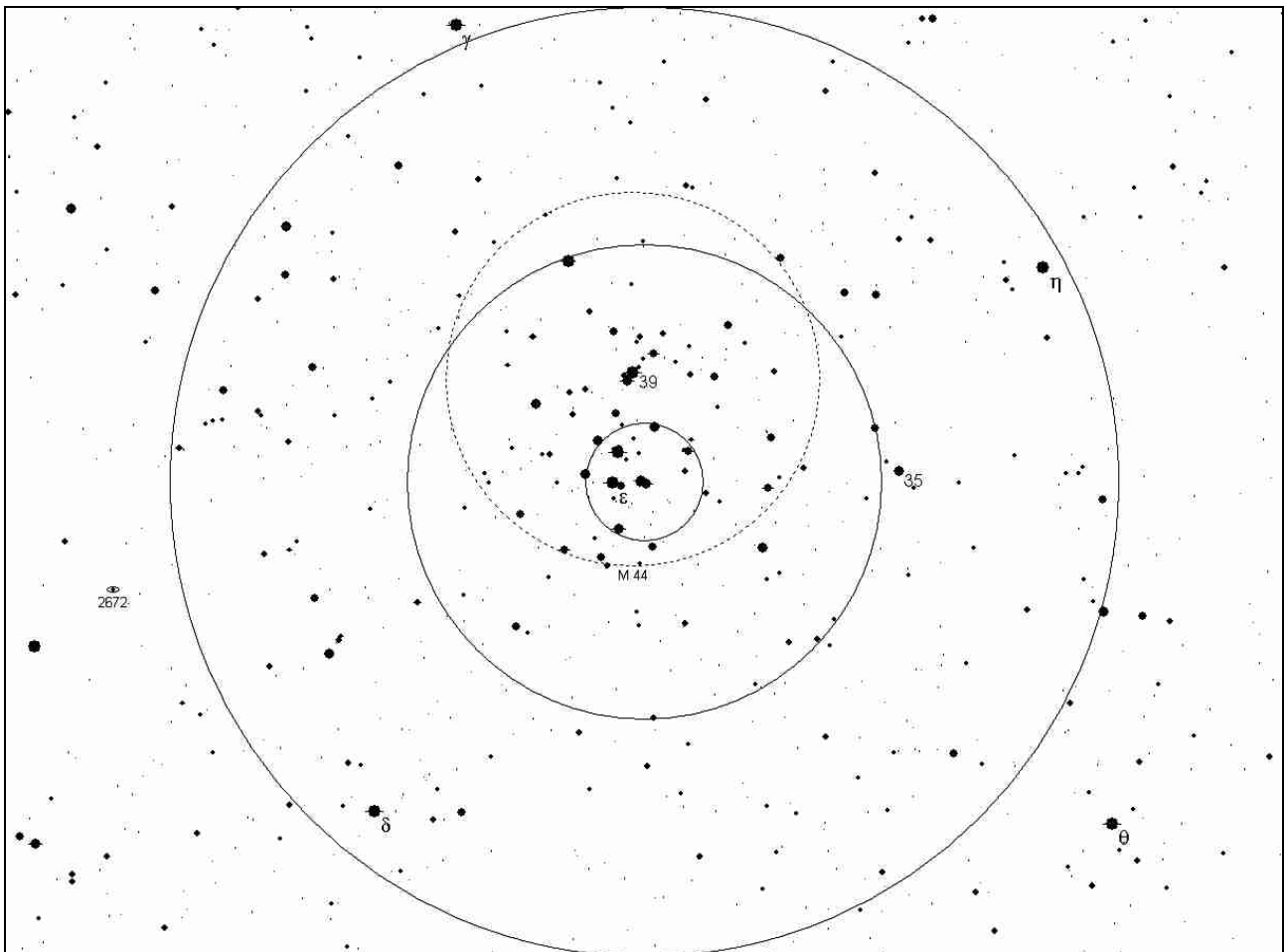


Notes:

Burnham 584 (Cnc)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
08 39.9	+19 33	6.9 7.2	45" 93"	156 241 (1952)	6915	M44

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

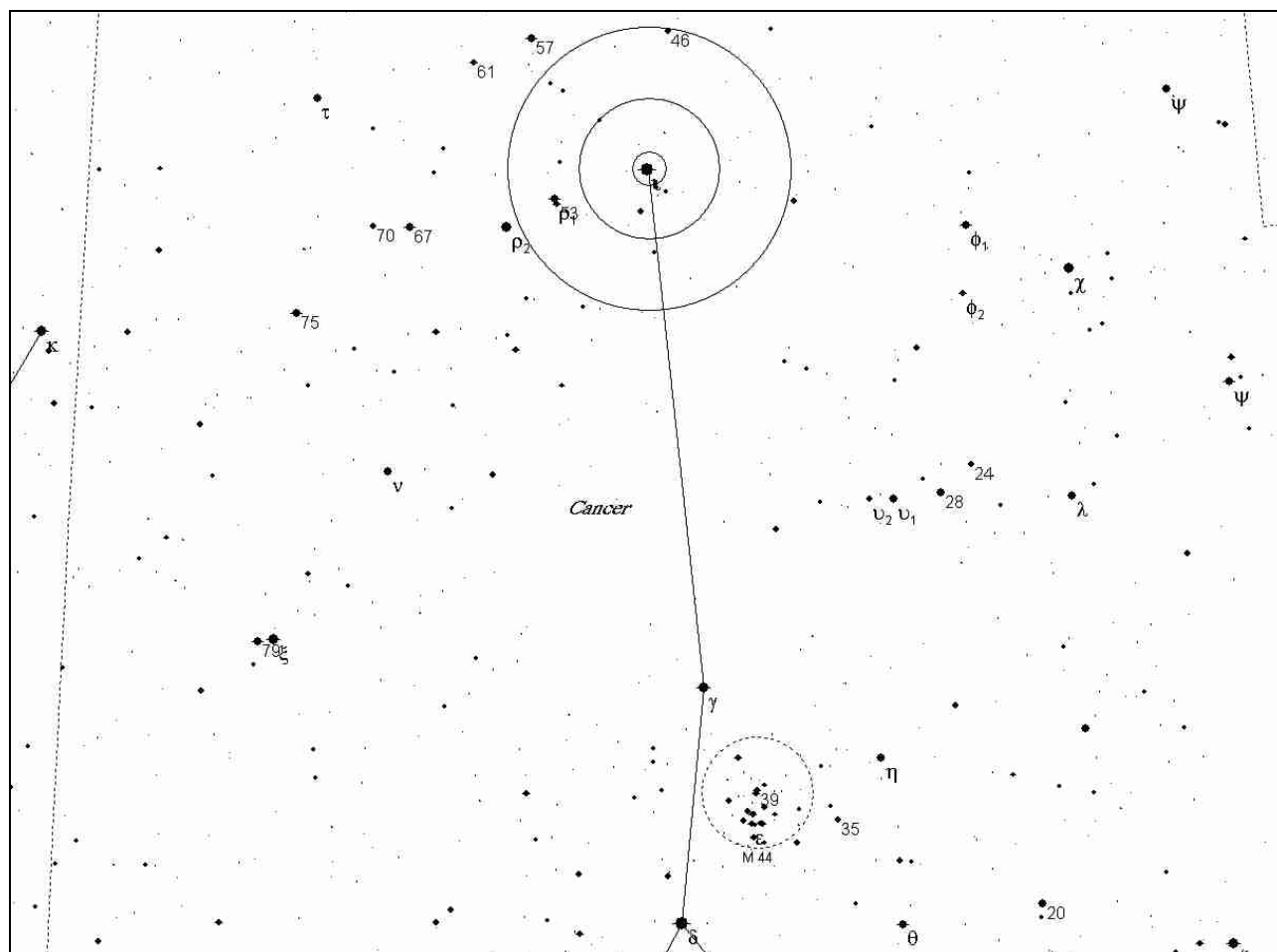


Notes:

Iota Cnc

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
08 46.7	+28 46	4.2 6.6	31"	307 (1968)	6988

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

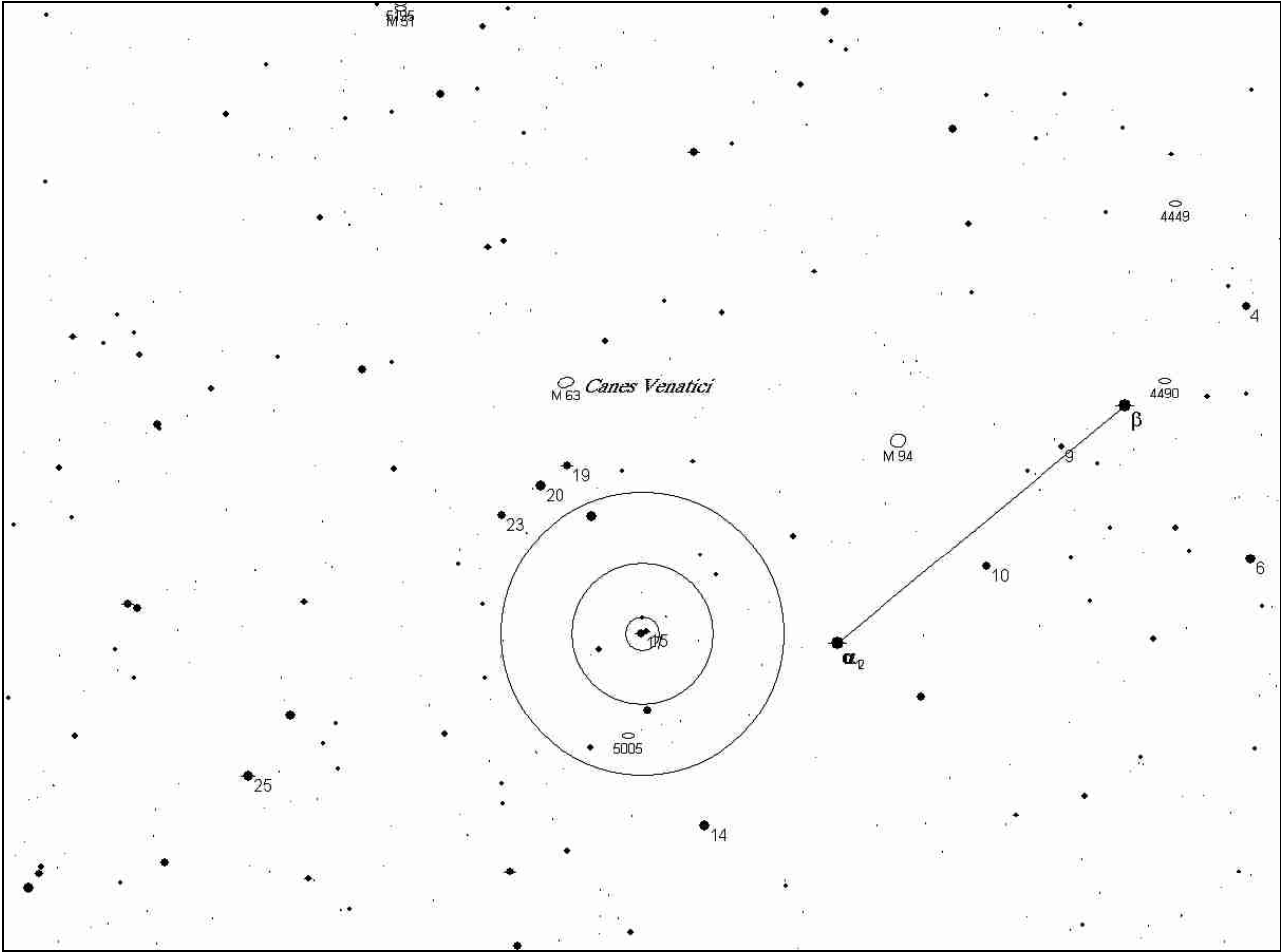


Notes:

17 CVn

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
13 10.1	+38 30	6.0 6.2	84"	297 (1922)	8805

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

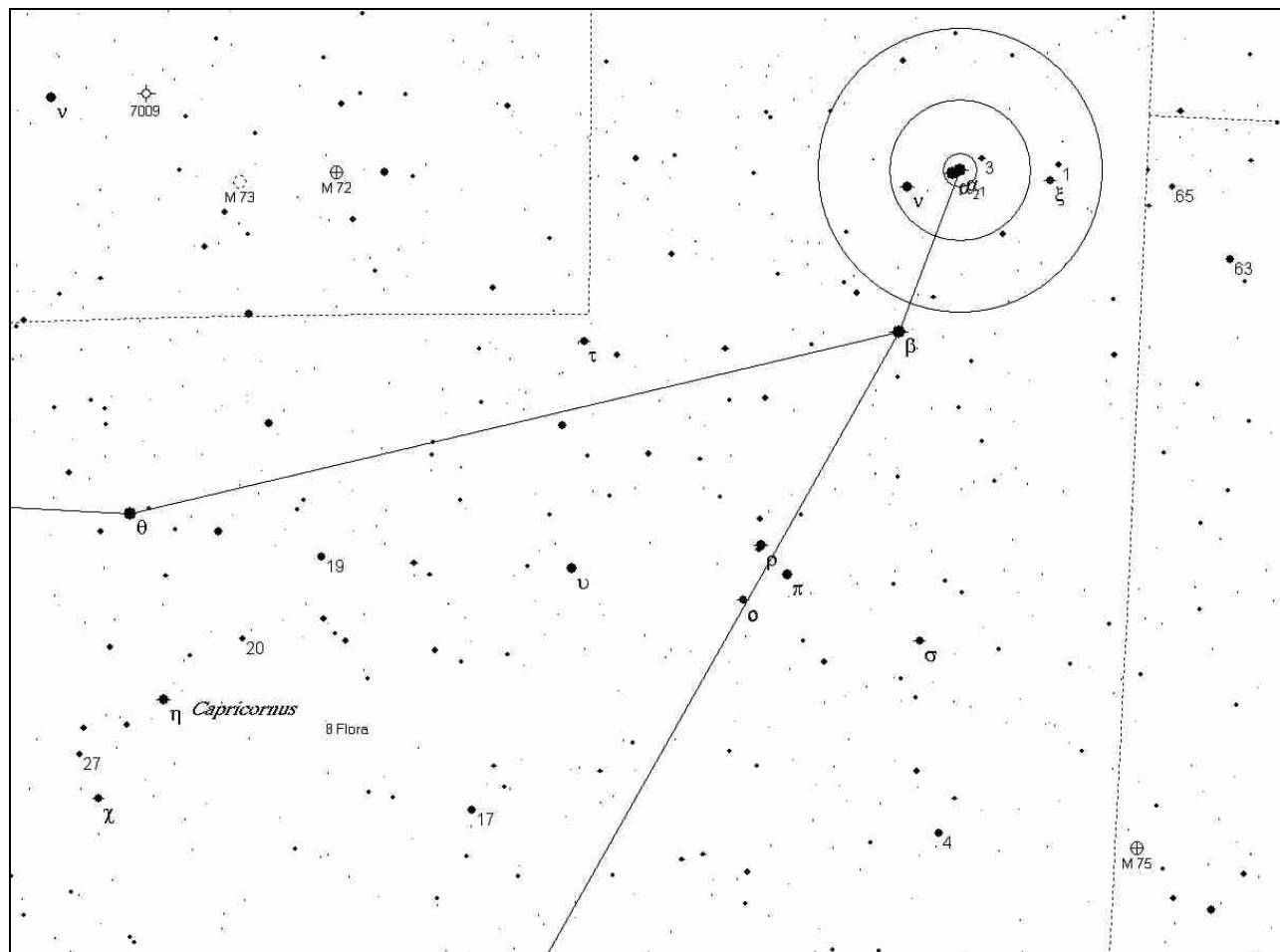


Notes:

Alpha1+2 Cap

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
20 18.1	-12 33	3.6 4.2	378"	291 (1924)	13645	optical

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

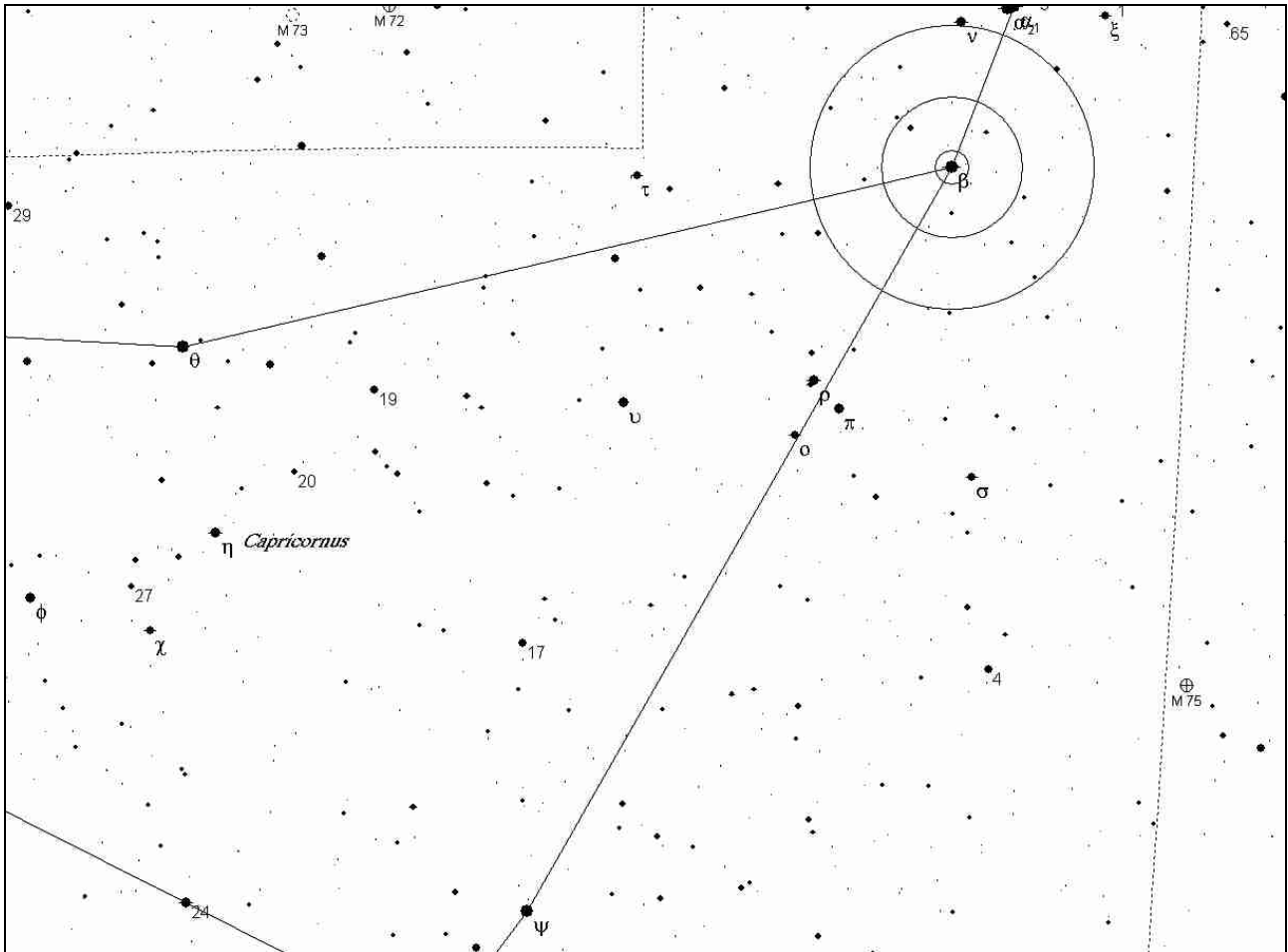


Notes:

Beta1+2 Cap

R.A. (2000)	Dec (2000)	Mag	Sep	PA
20 21.0	-14 47	3.4 6.2	205"	267 (1922)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

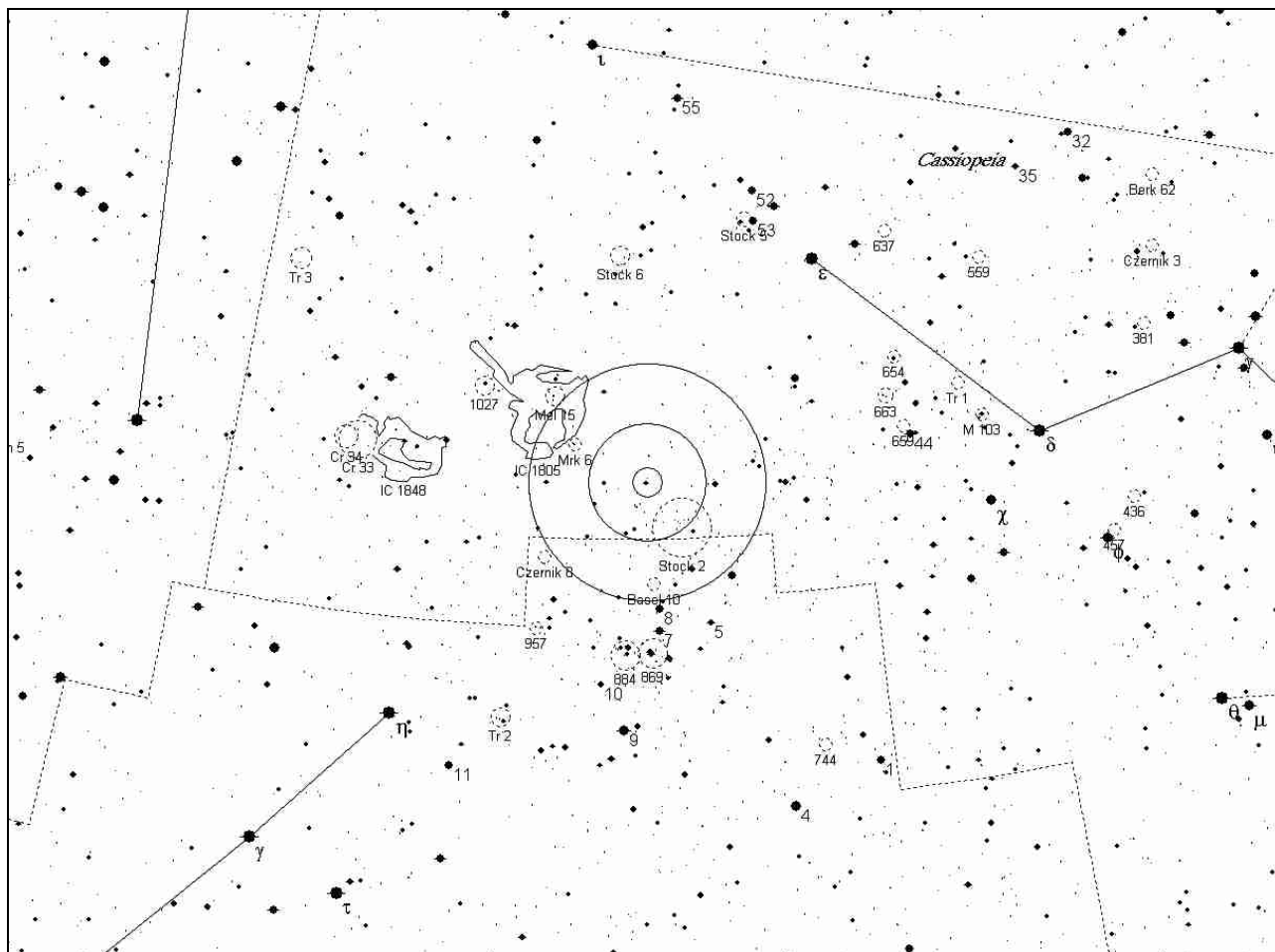


Notes:

OSS 26 (Cas)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
02 19.7	+60 02	6.9 7.4	63"	200 (1925)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

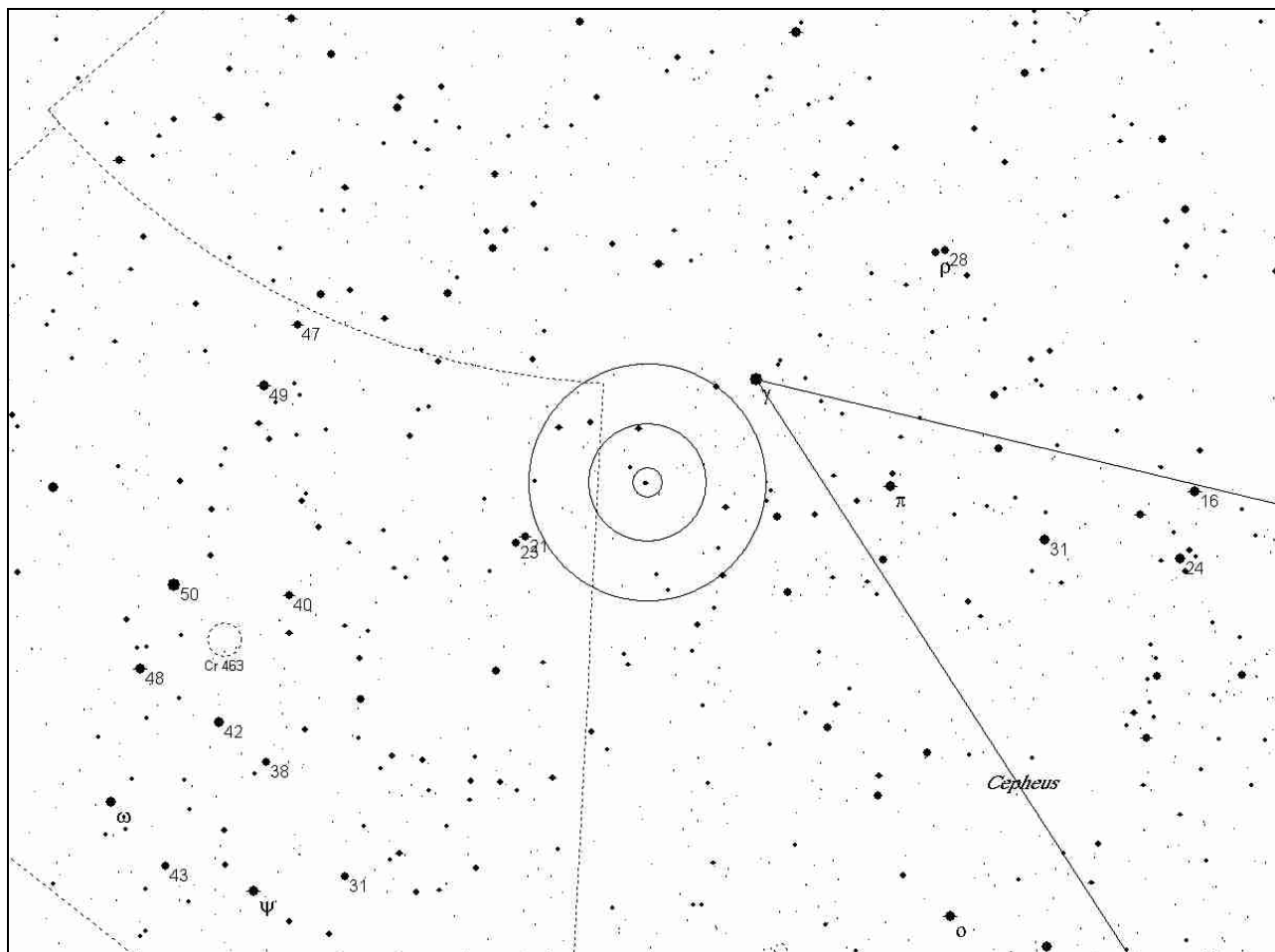


Notes:

OSS 1 (Cep)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	Notes
00 14.0	+76 02	7.6 7.9	76"	103 (1923)	optical

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

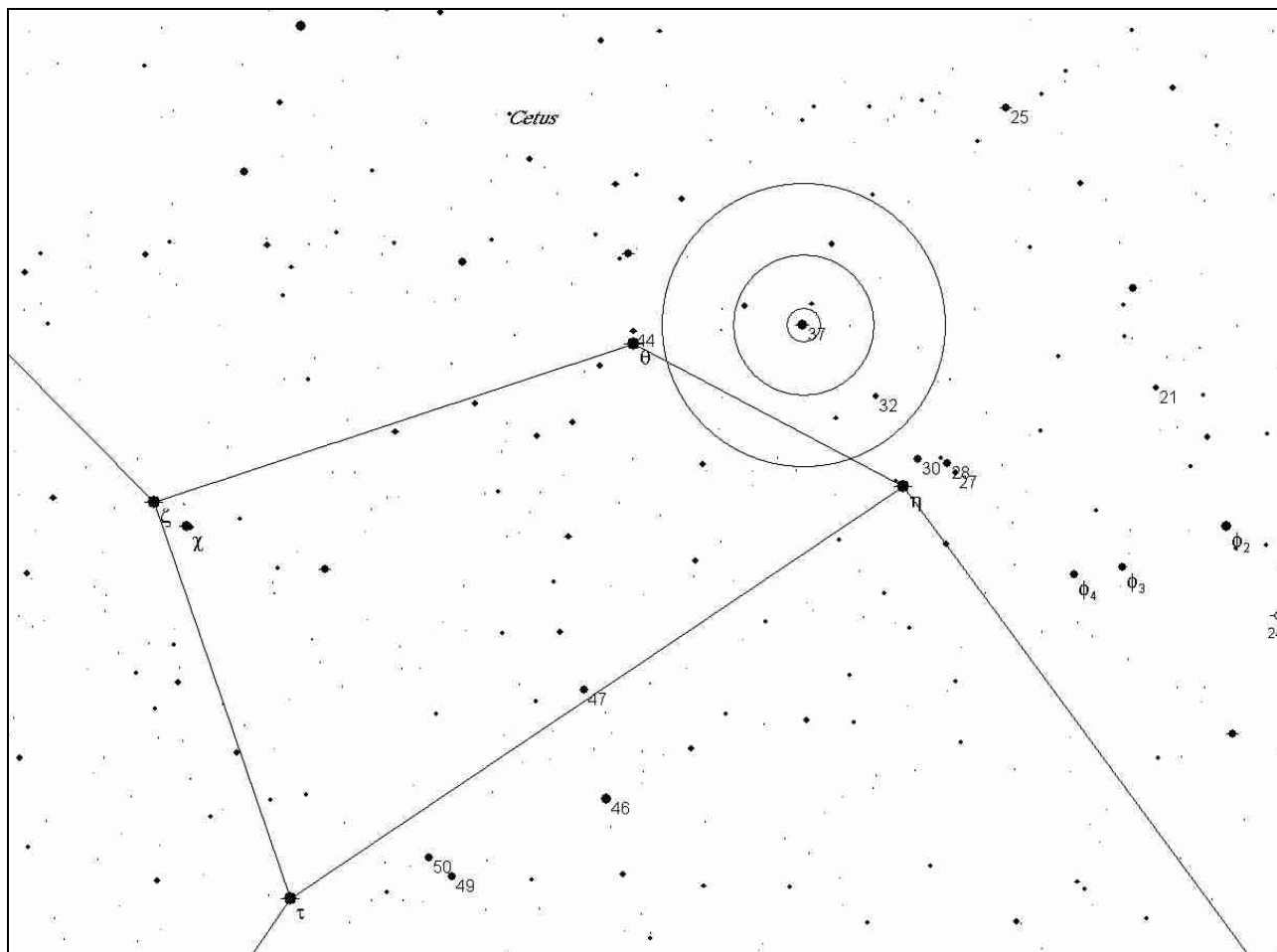


Notes:

37 Cet

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
01 14.4	-07 55	5.2 8.7	50"	331 (1931)	1003

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

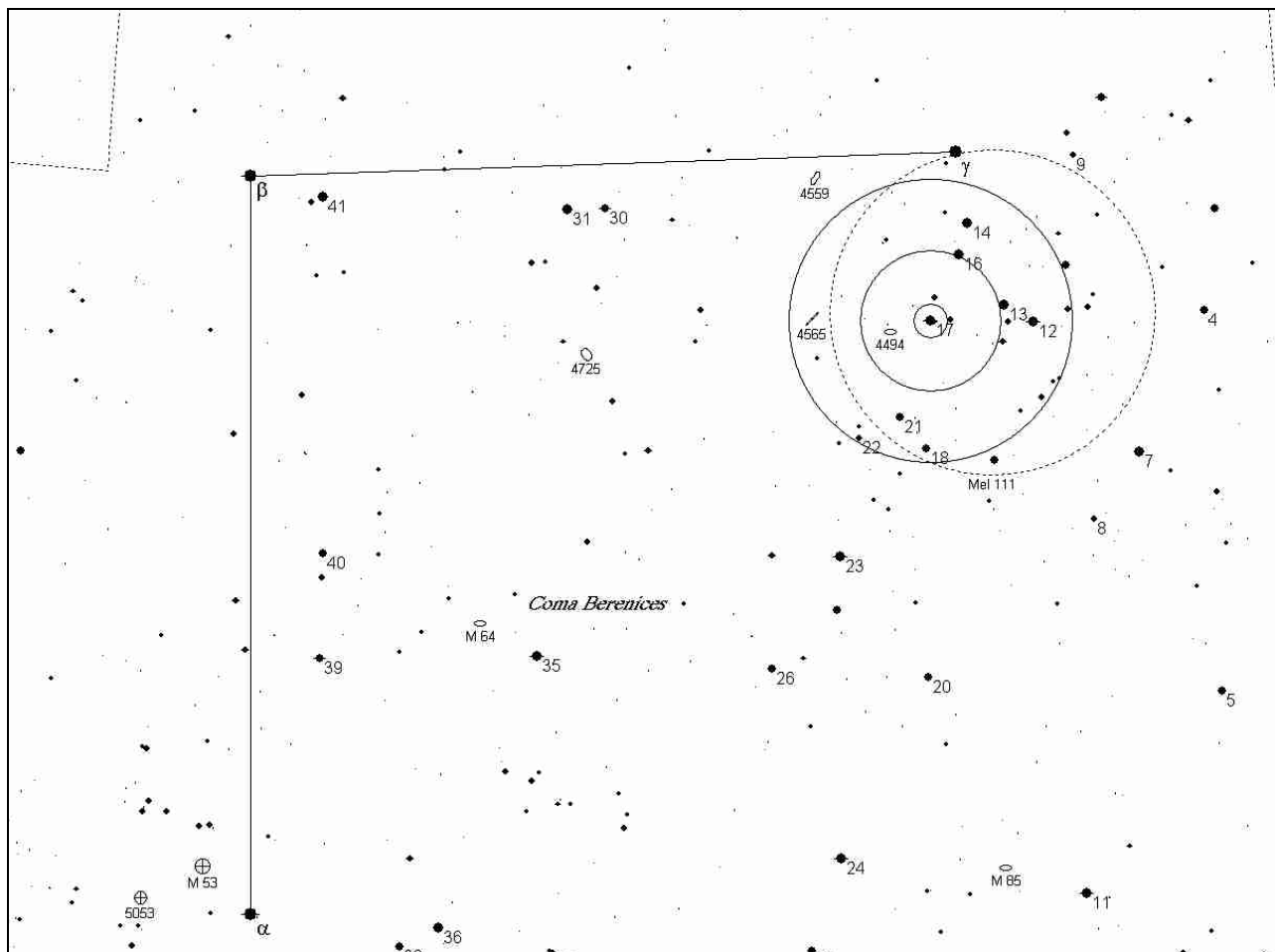


Notes:

17 Com

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
12 28.9	+25 55	5.3 6.6	145"	251 (1928)	8568	in Mel 111

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

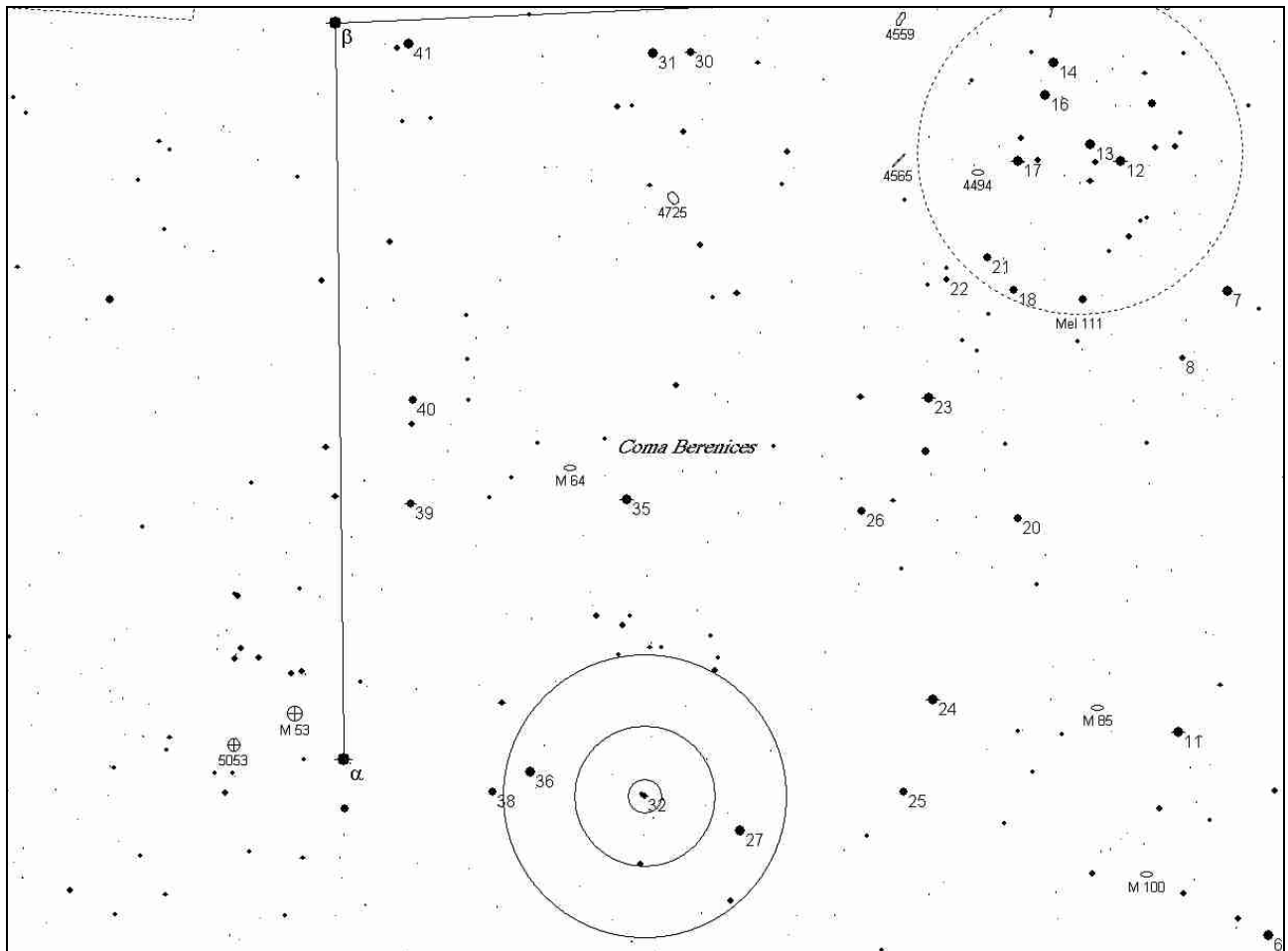


Notes:

32+33 Com

R.A. (2000)	Dec (2000)	Mag	Sep	PA
12 52.2	+17 04	6.3 6.7	95"	49 (1922)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

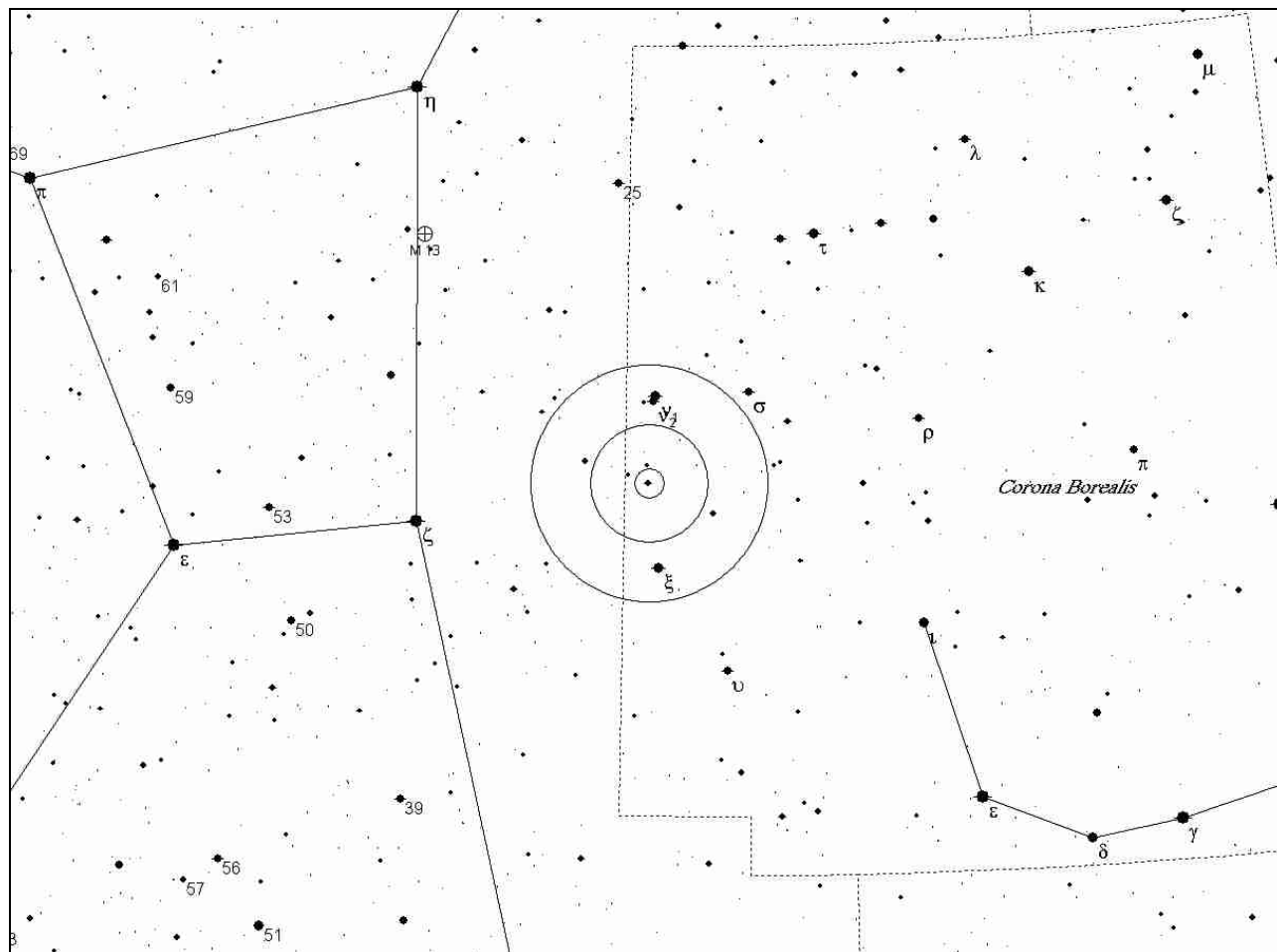


Notes:

H V 38 (CrB)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
16 22.9	+32 20	6.3 8.8	34.7"	19 (1914)	10031

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

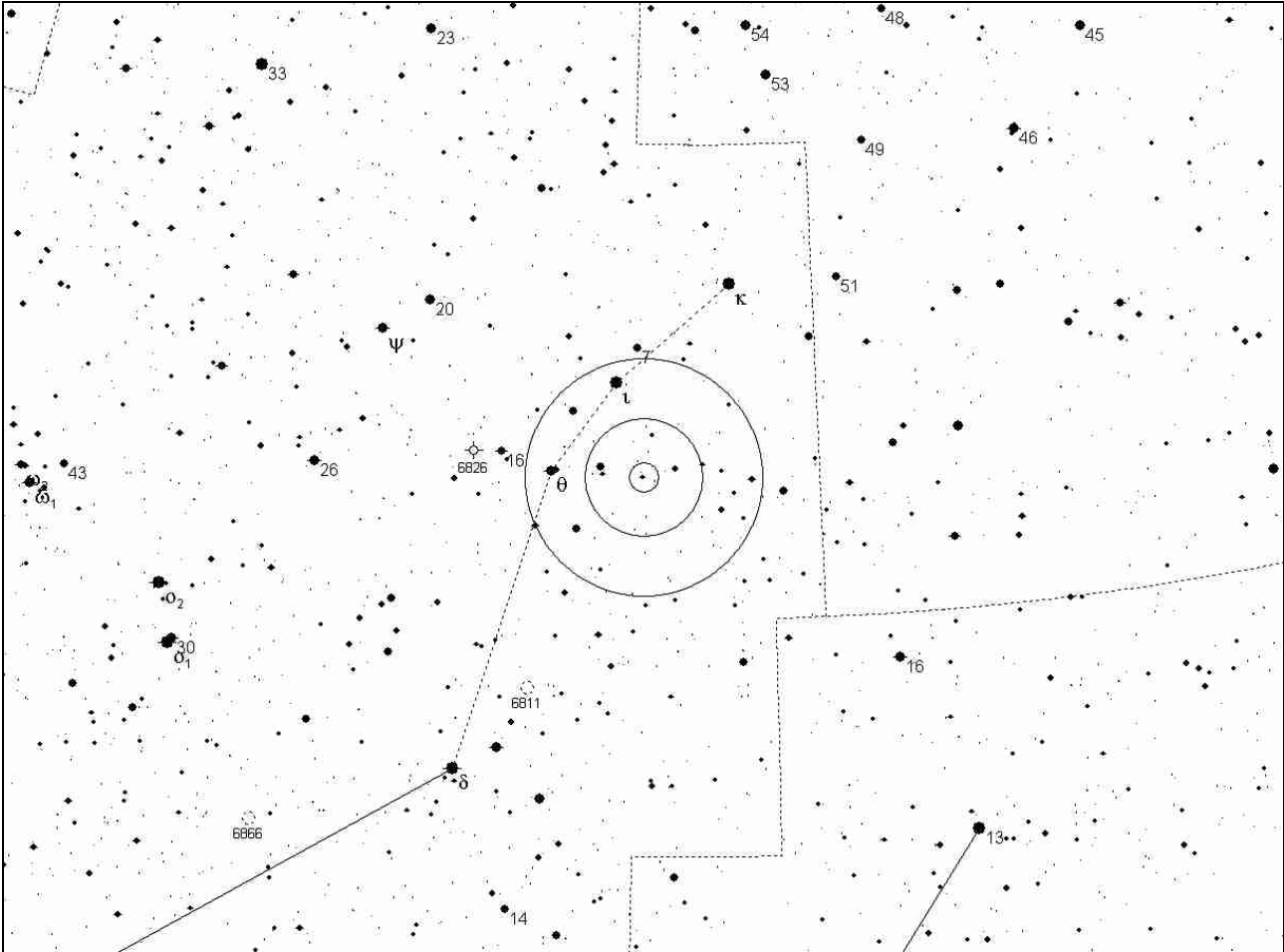


Notes:

OSS 182 (Cyg)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
19 26.8	+50 09	7.3 8.5	73"	300 (1956)	12470

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

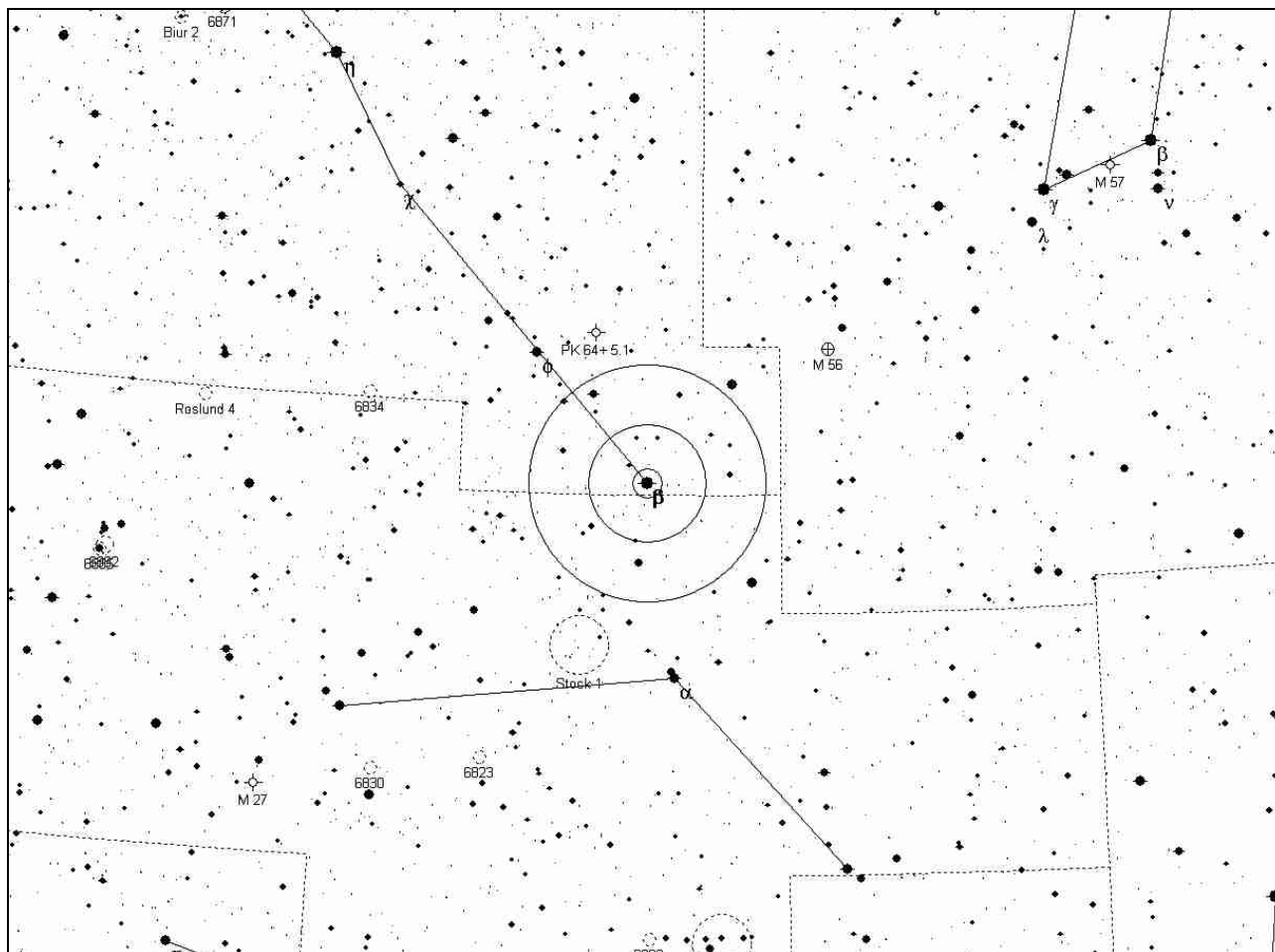


Notes:

Beta Cyg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
19 30.7	+27 58	3.1 5.1	34"	54 (1967)	12540	Albireo

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

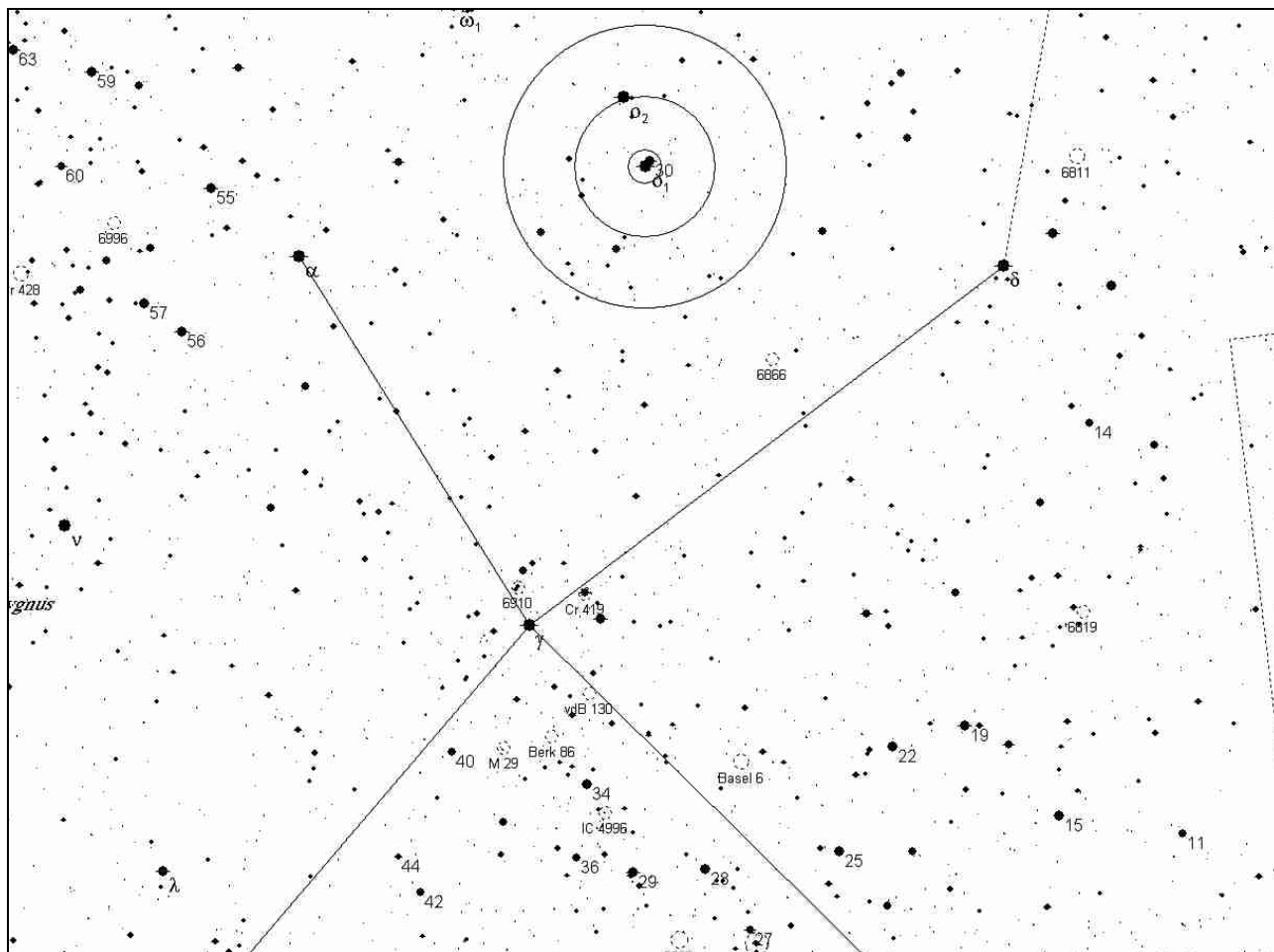


Notes:

Omicron1 Cyg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
20 13.6	+46 44	4 7 5	107" 338"	173 338 (1926)	13554

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

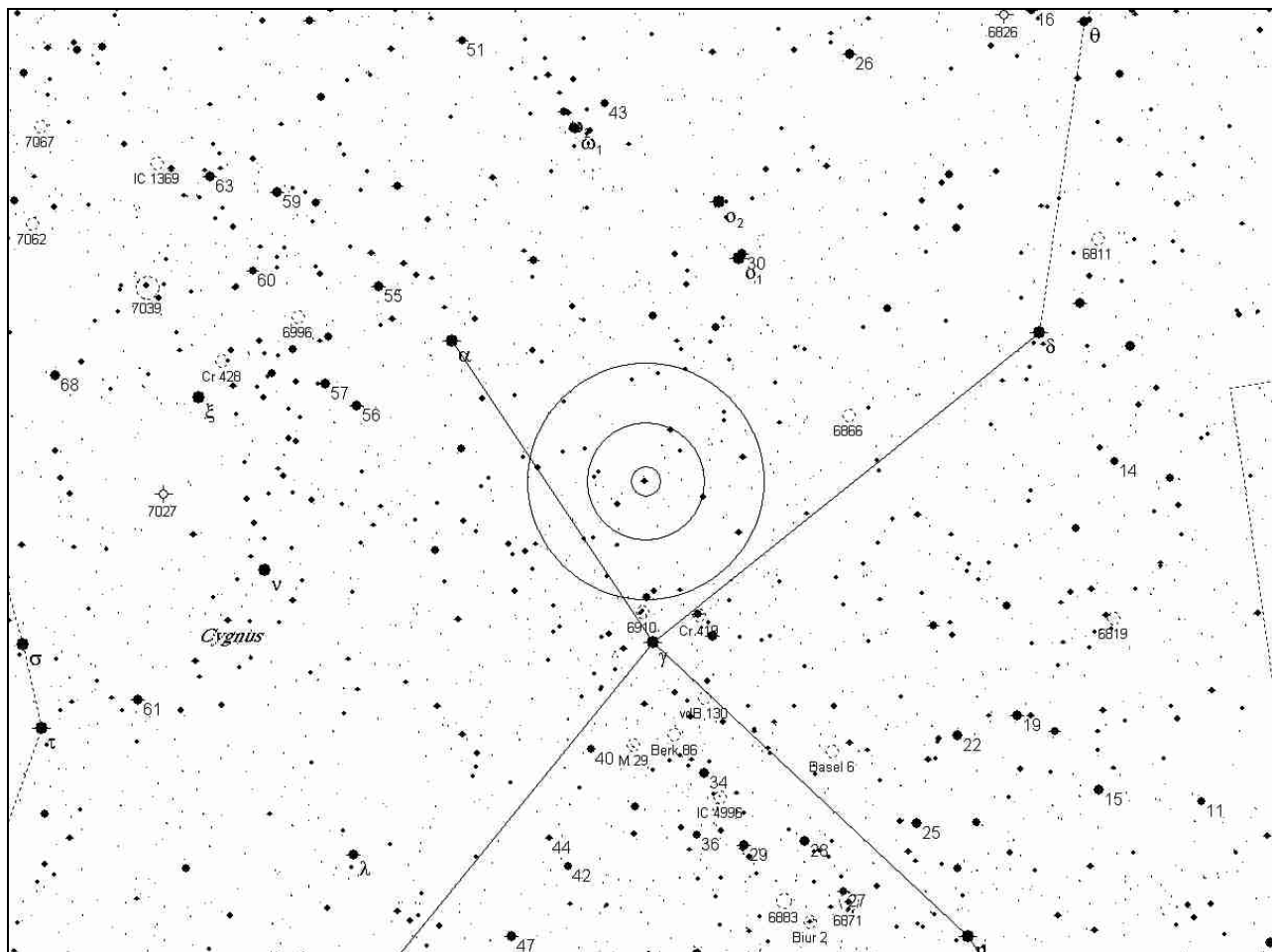


Notes:

OSS 207 (Cyg)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
20 22.9	+42 59	6.6 8.5	93"	63 (1920)	13786

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

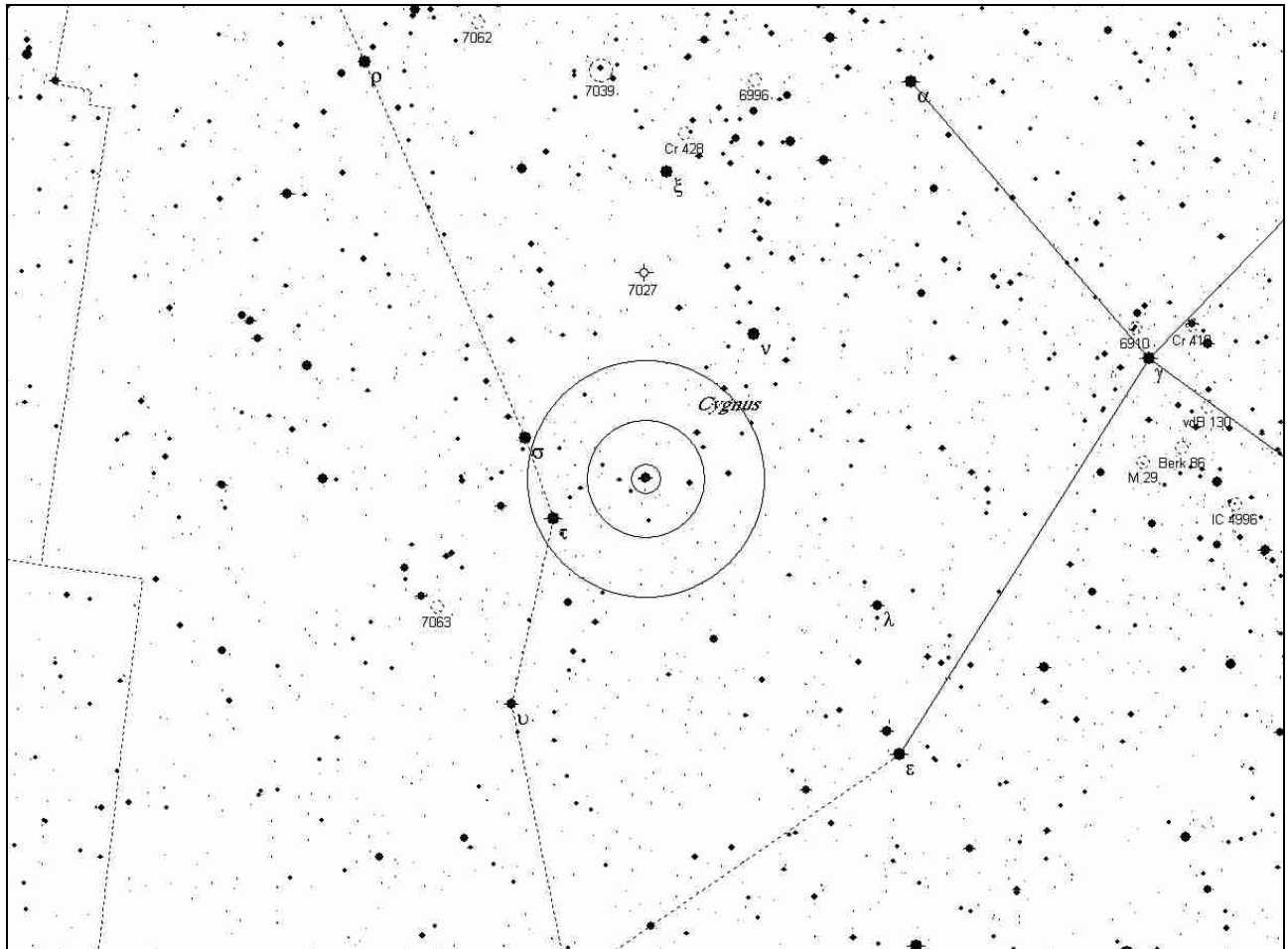


Notes:

61 Cyg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
21 06.9	+38 45	5.2 6.0	321"	195 (1976)	14636	large p.m.

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

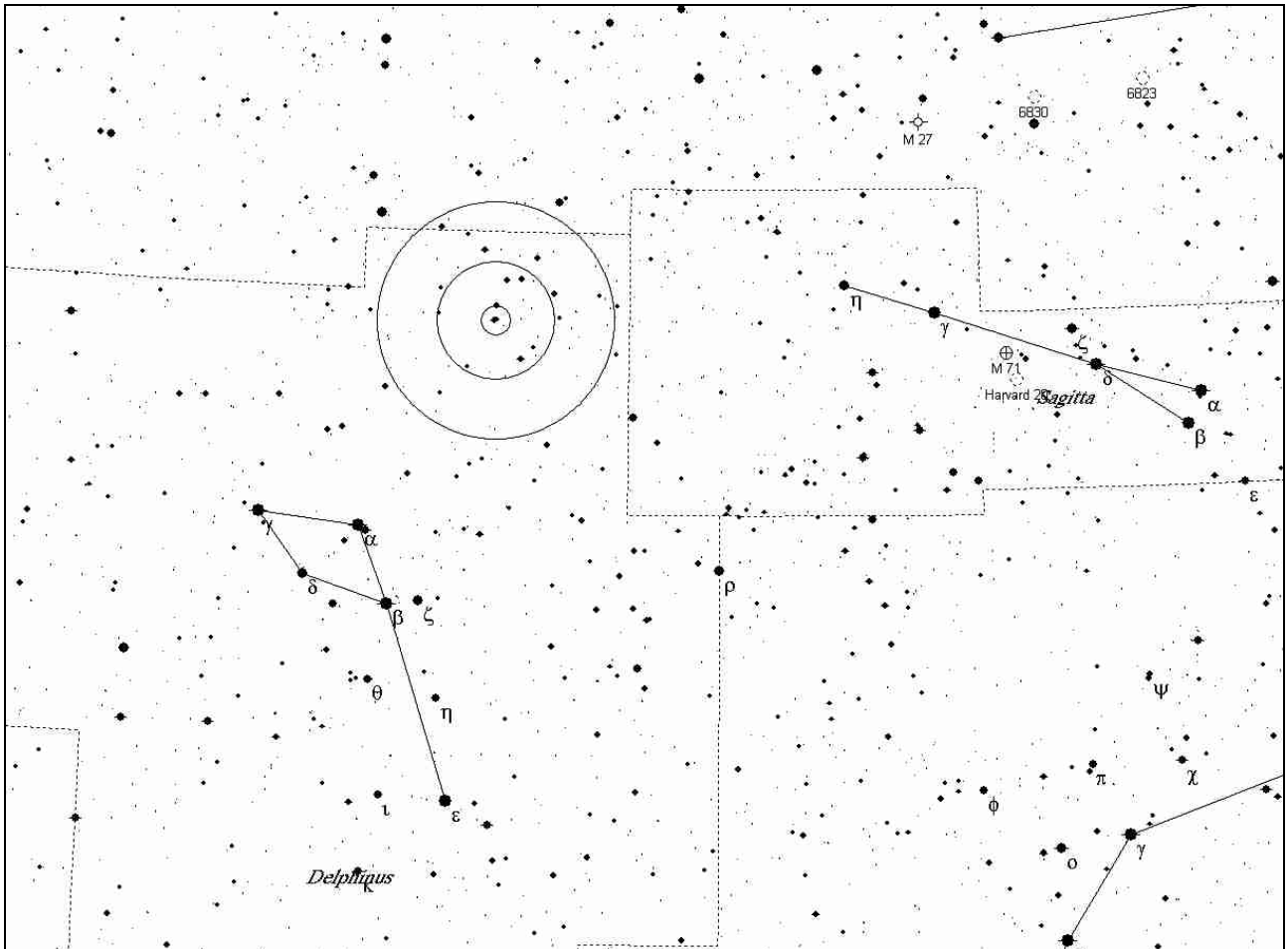


Notes:

S 752 (Del)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
20 30.2	+19 25	6.6 7.0	106"	288 (1915)	13921

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

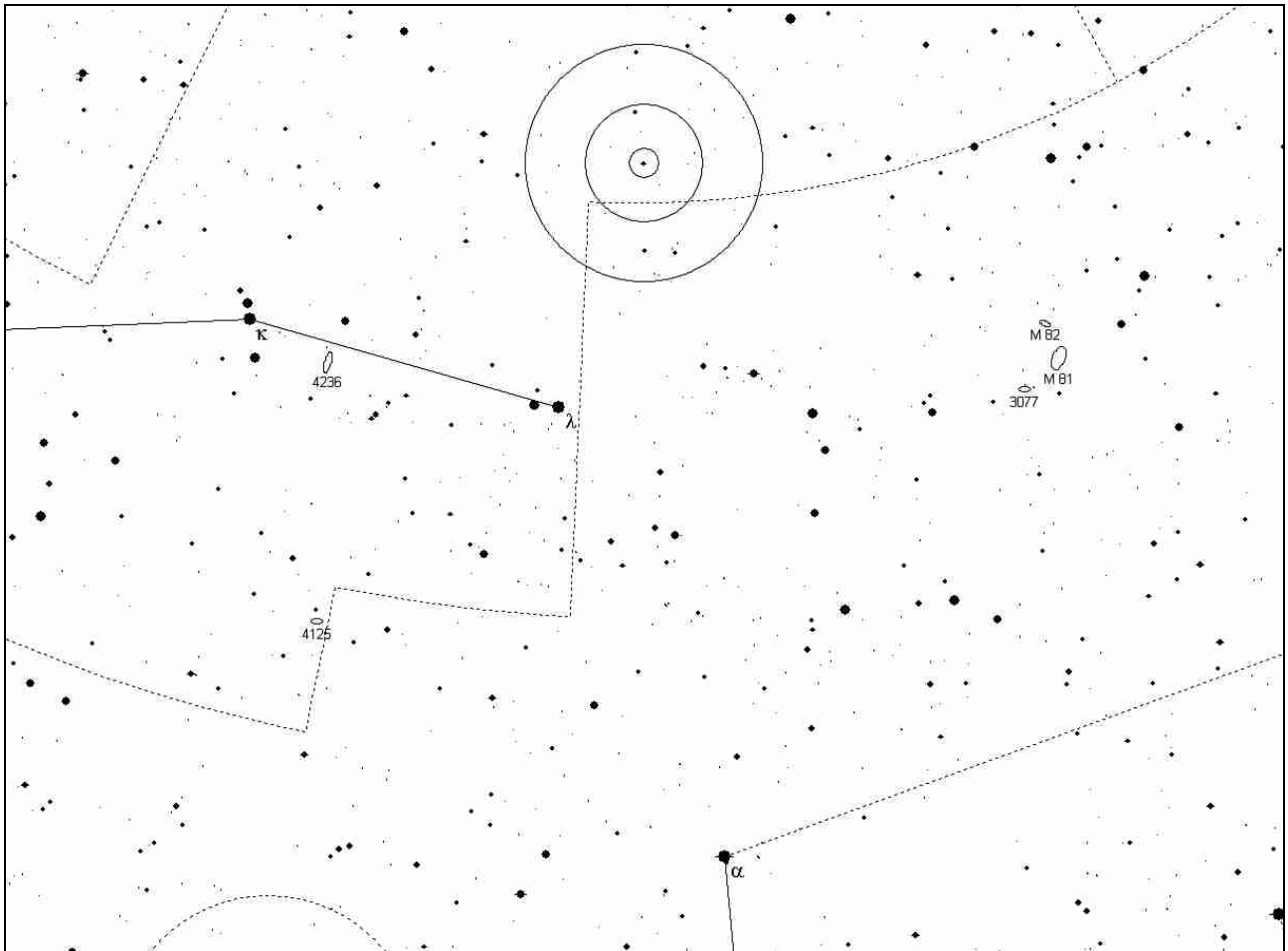


Notes:

Struve1516 (Dra)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
11 15.4	+73 28	7.6 8.1	36.2"	102 (1940)	8100

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

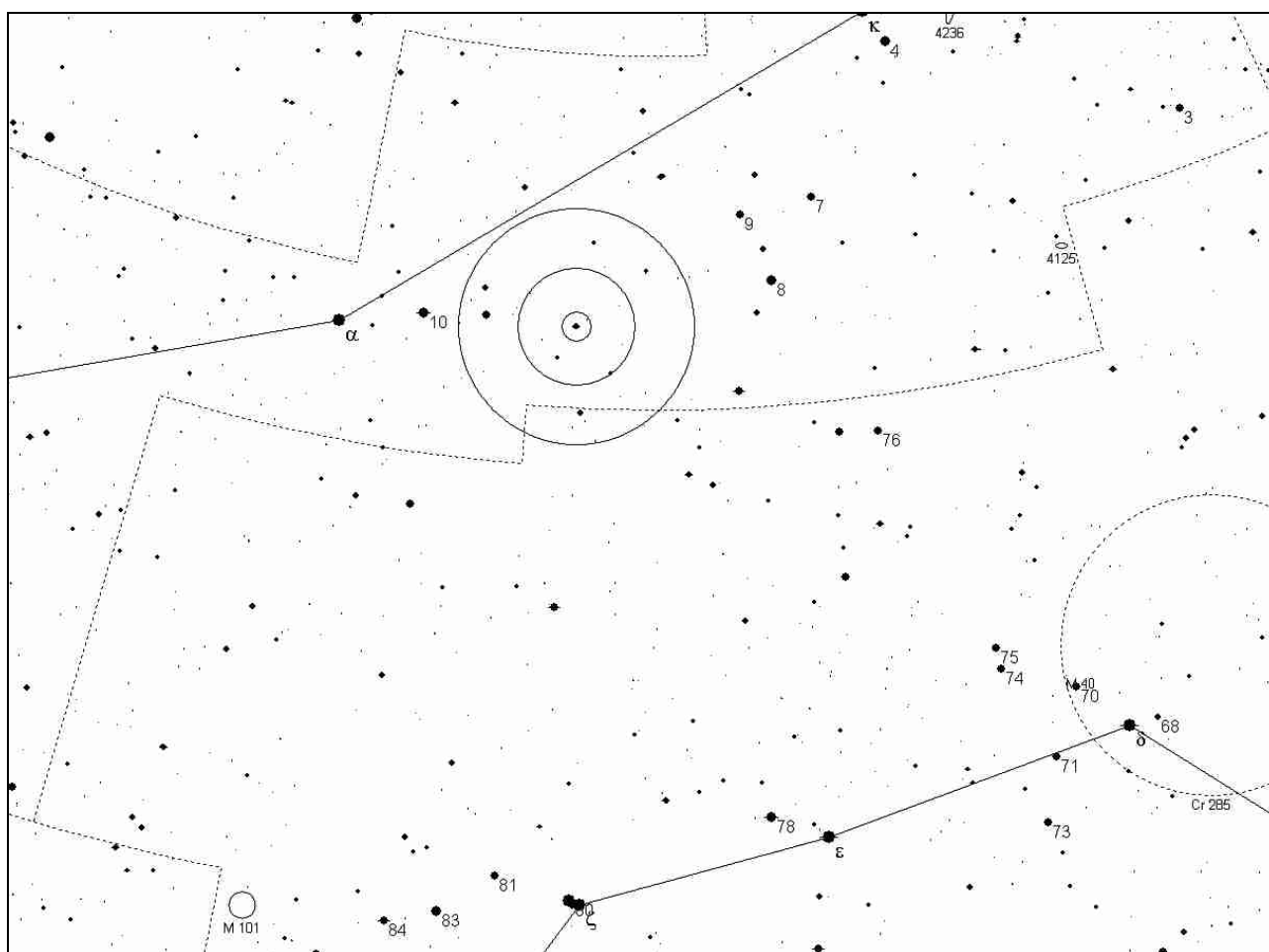


Notes:

OSS 123 (Dra)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
13 27.1	+64 44	6.7 7.0	69"	147 (1924)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

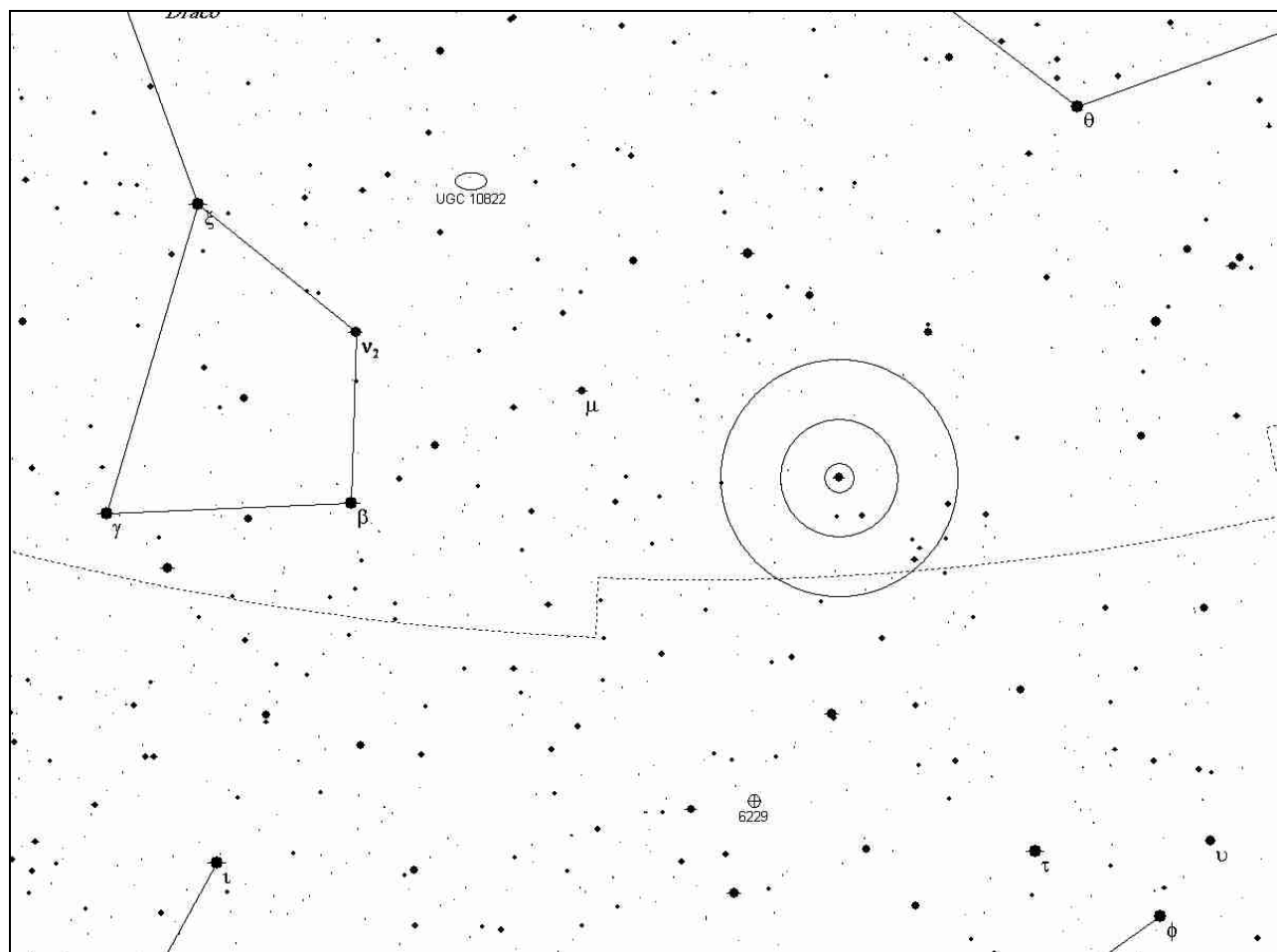


Notes:

16+17 Dra

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
16 36.2	+52 55	5.4 5.5	90"	194 (1956)	10129

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

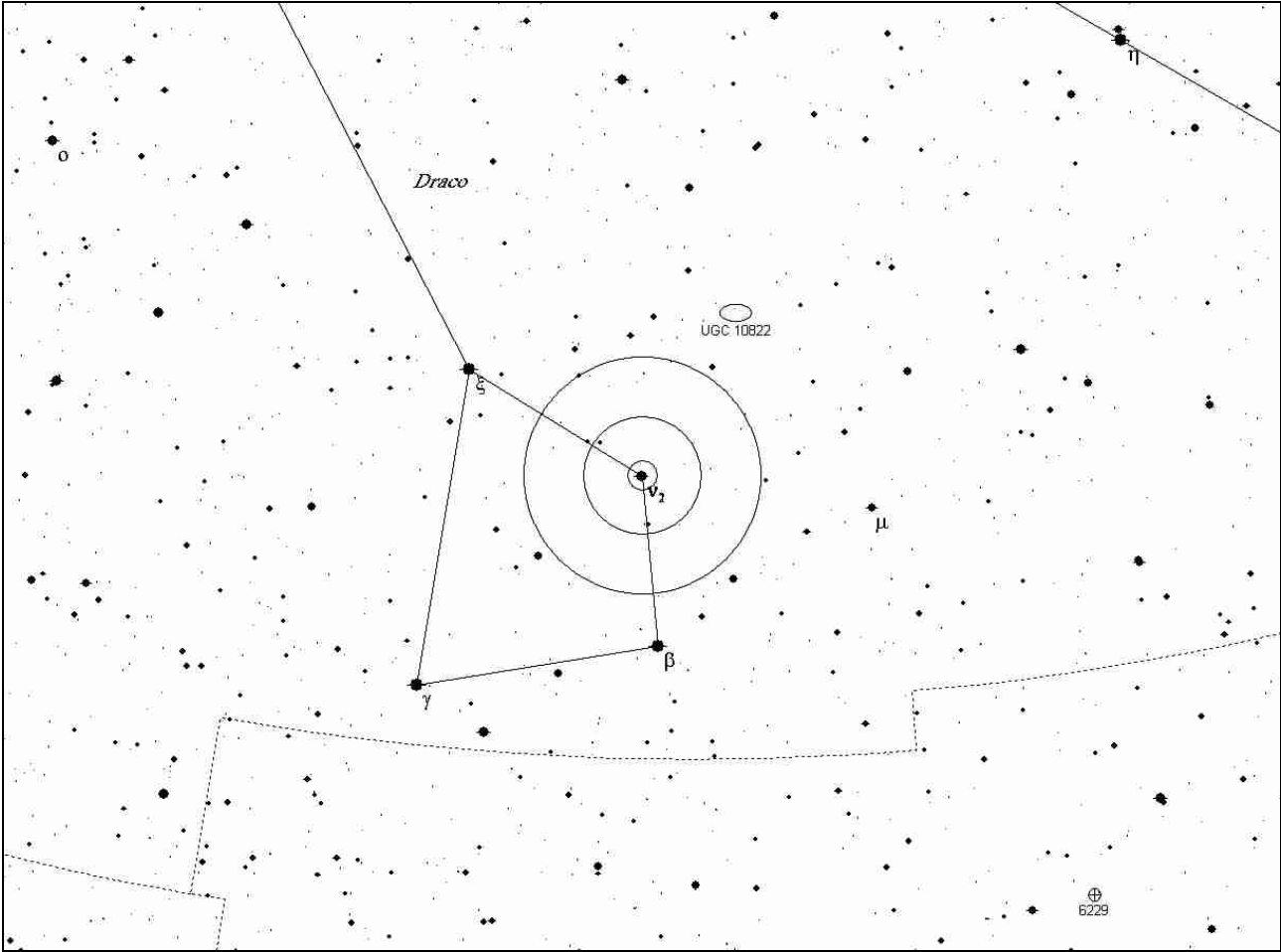


Notes:

Nu Dra

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
17 32.2	+55 11	4.9 4.9	62"	312 (1955)	10628

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

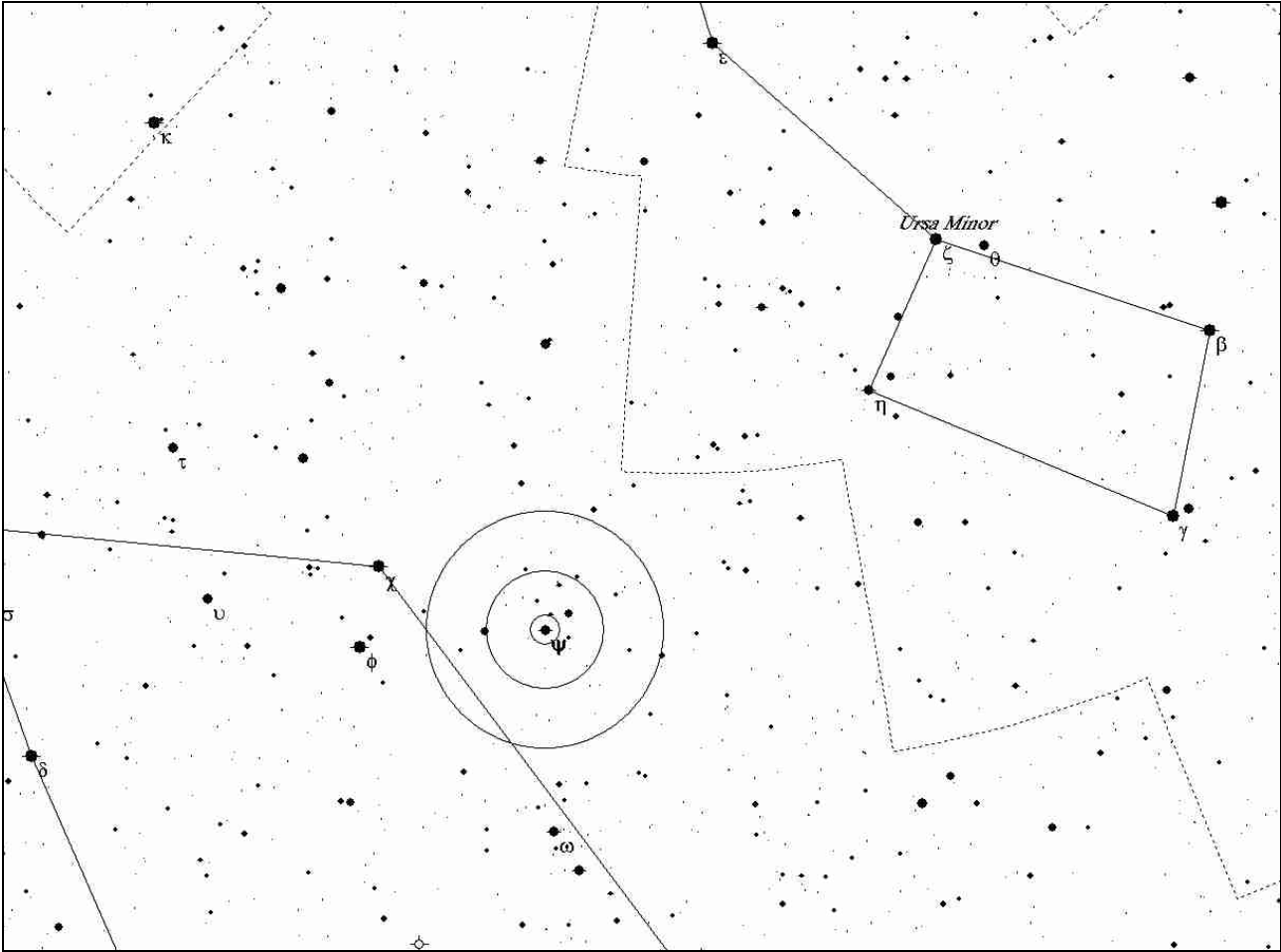


Notes:

Psi Dra

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
17 41.9	+72 09	4.9 6.1	30"	15 (1958)	10759

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

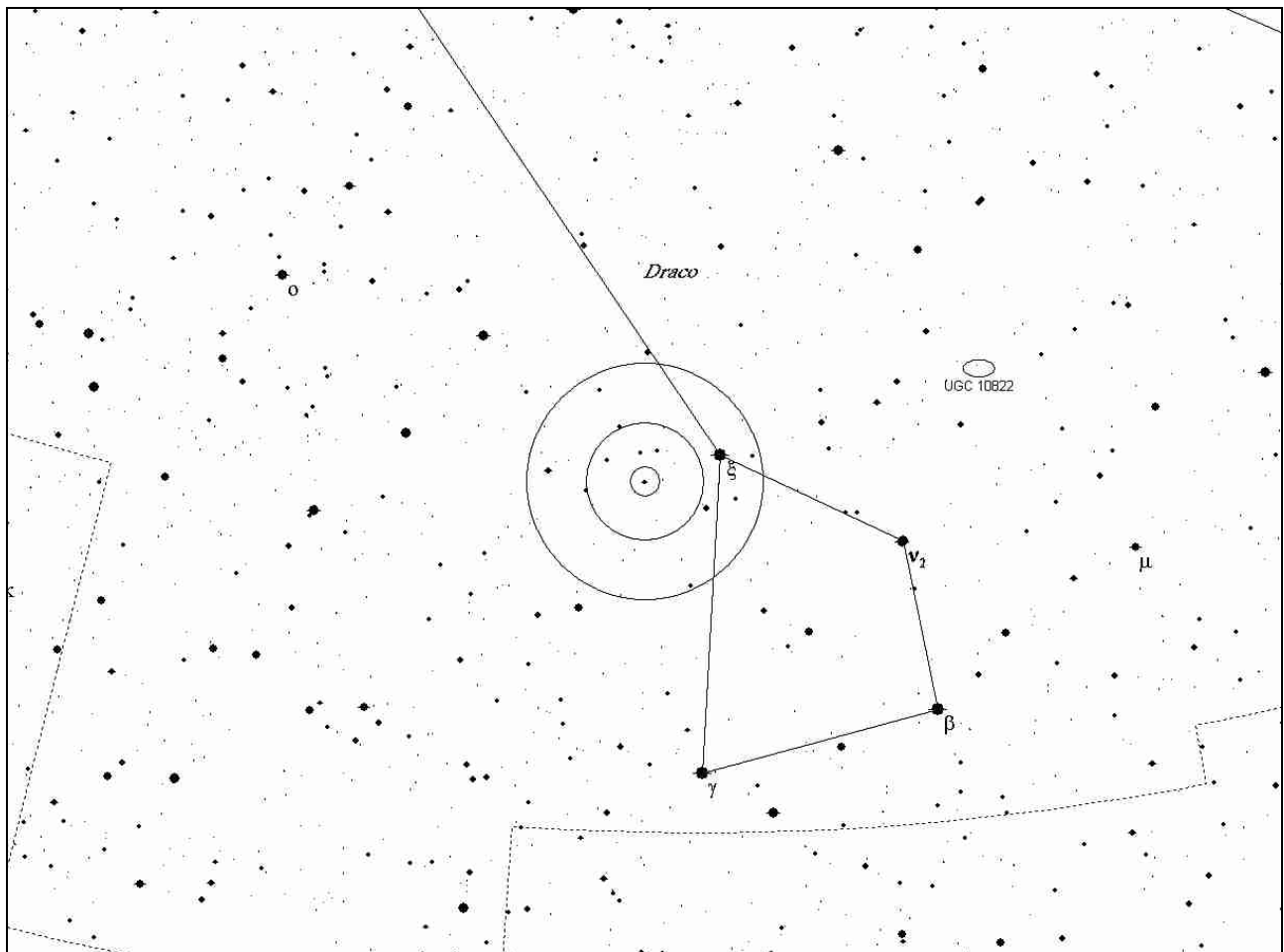


Notes:

Struve2278 (Dra)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 02.9	+56 26	7 8 9 10	37" 34" 201"	26 35 191 (1949)	11035

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

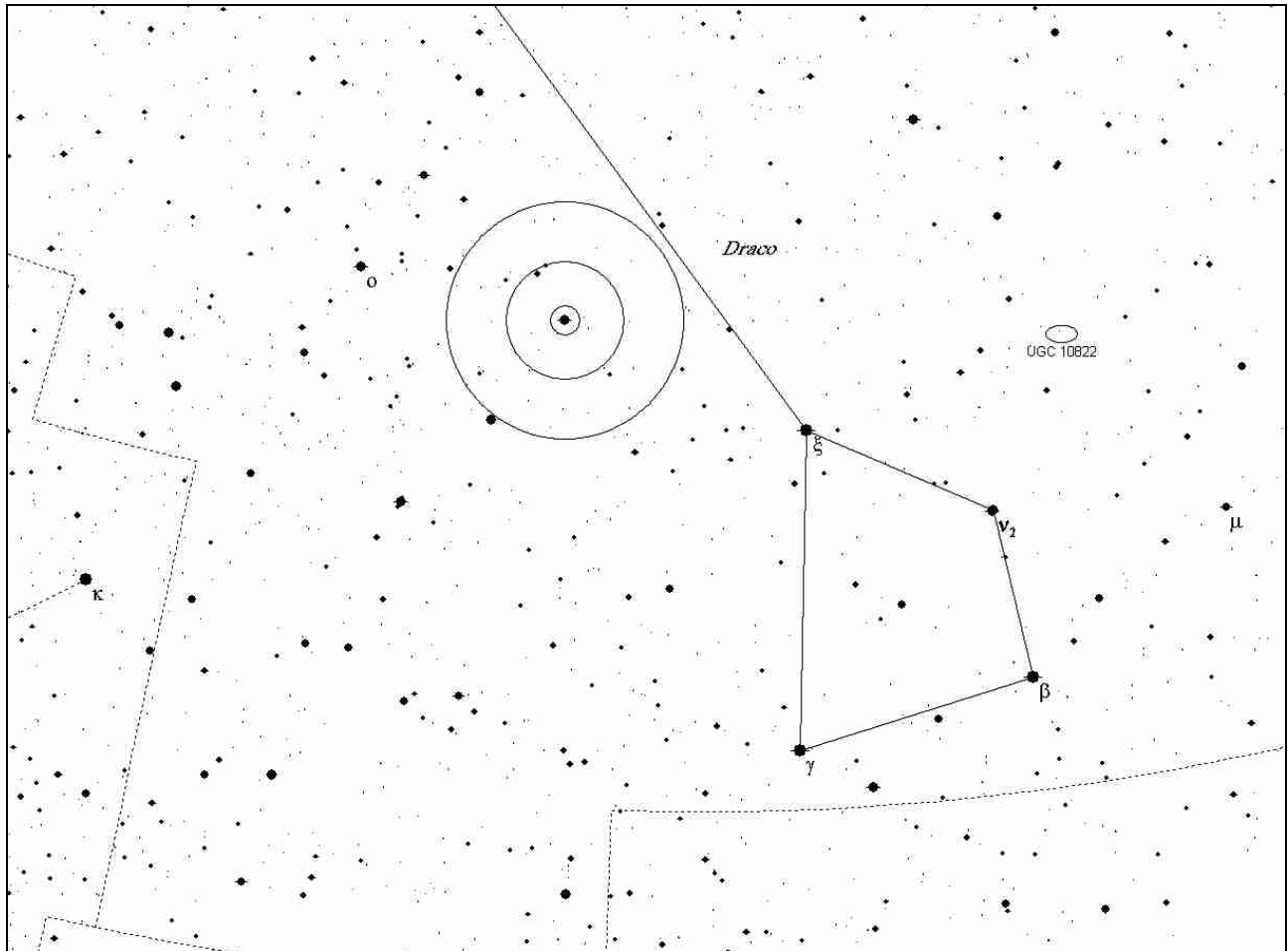


Notes:

39 Dra

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 23.9	+58 48	5.0 7.4	89"	21 (1956)	11336

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

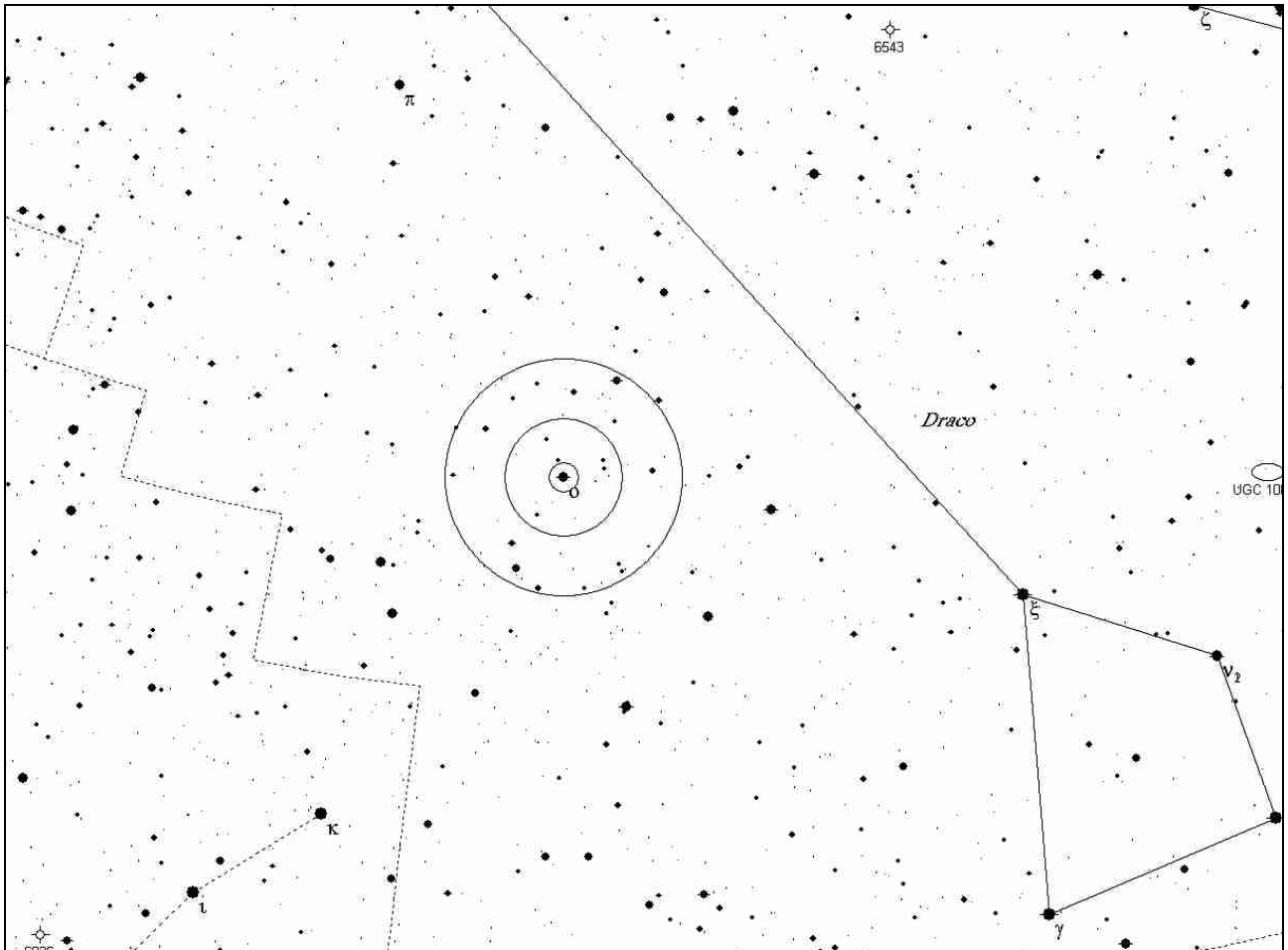


Notes:

Omicron Dra

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 51.2	+59 23	4.8 7.8	34"	326 (1949)	11779

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

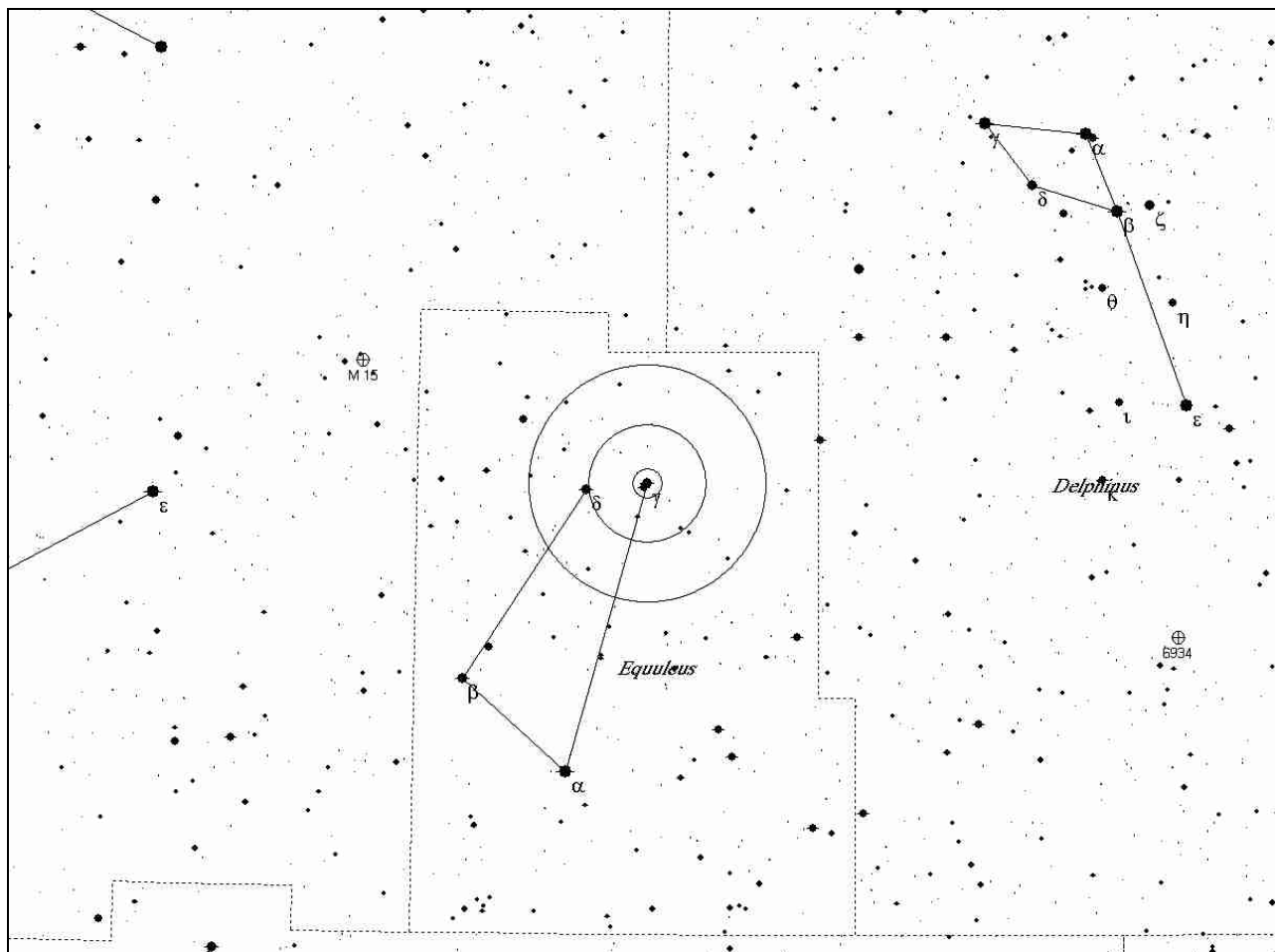


Notes:

Gamma Equ

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
21 10.3	+10 08	4.7 5.9	353"	153 (1922)	14702

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

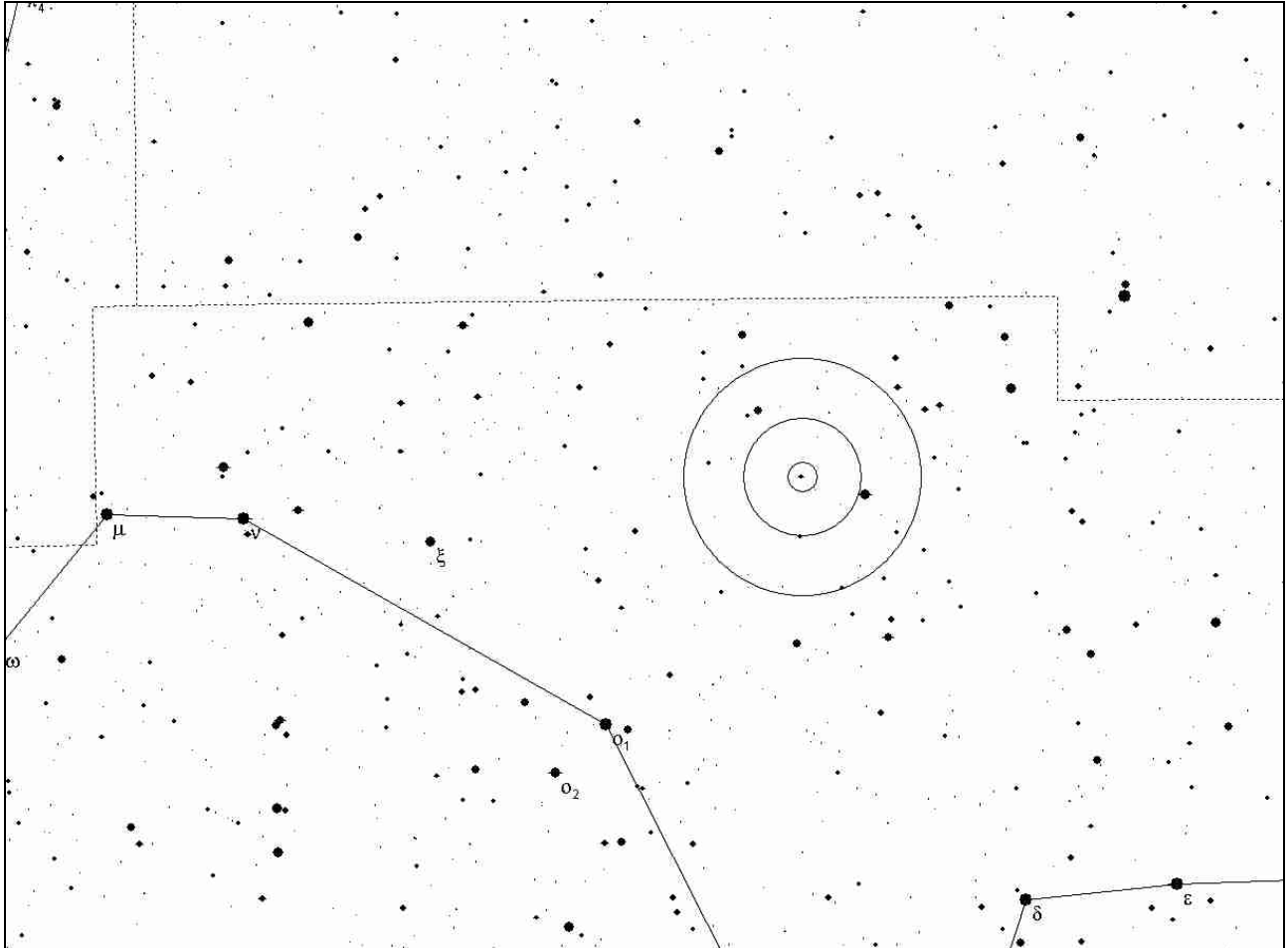


Notes:

Burnham1042 (Eri)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
03 58.6	-02 39	7.5 8.5	56"	93 (1913)	2909

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

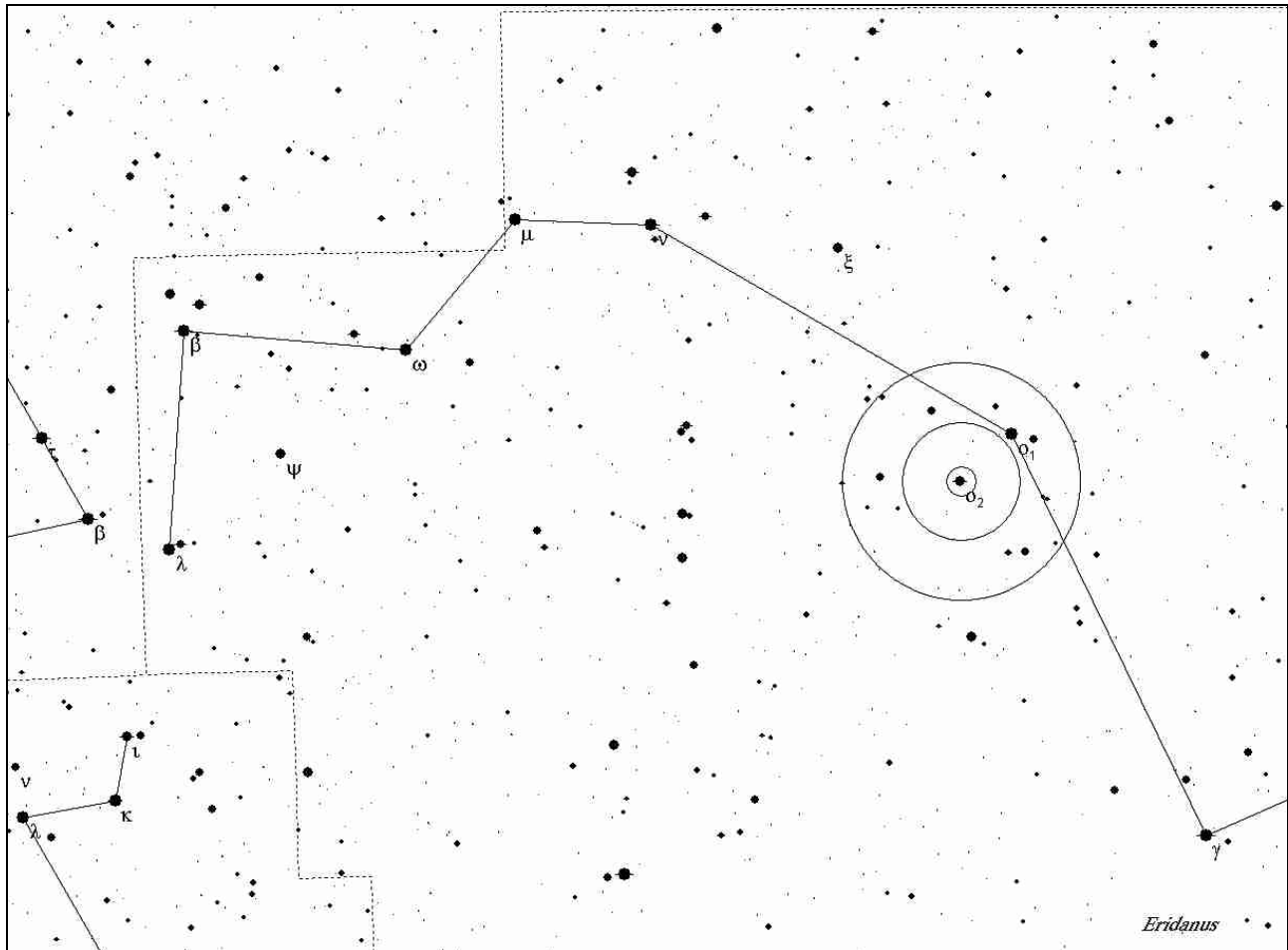


Notes:

Omicron2 Eri

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
04 15.2	-07 39	4.4 9.5	83"	104 (1970)	3093

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

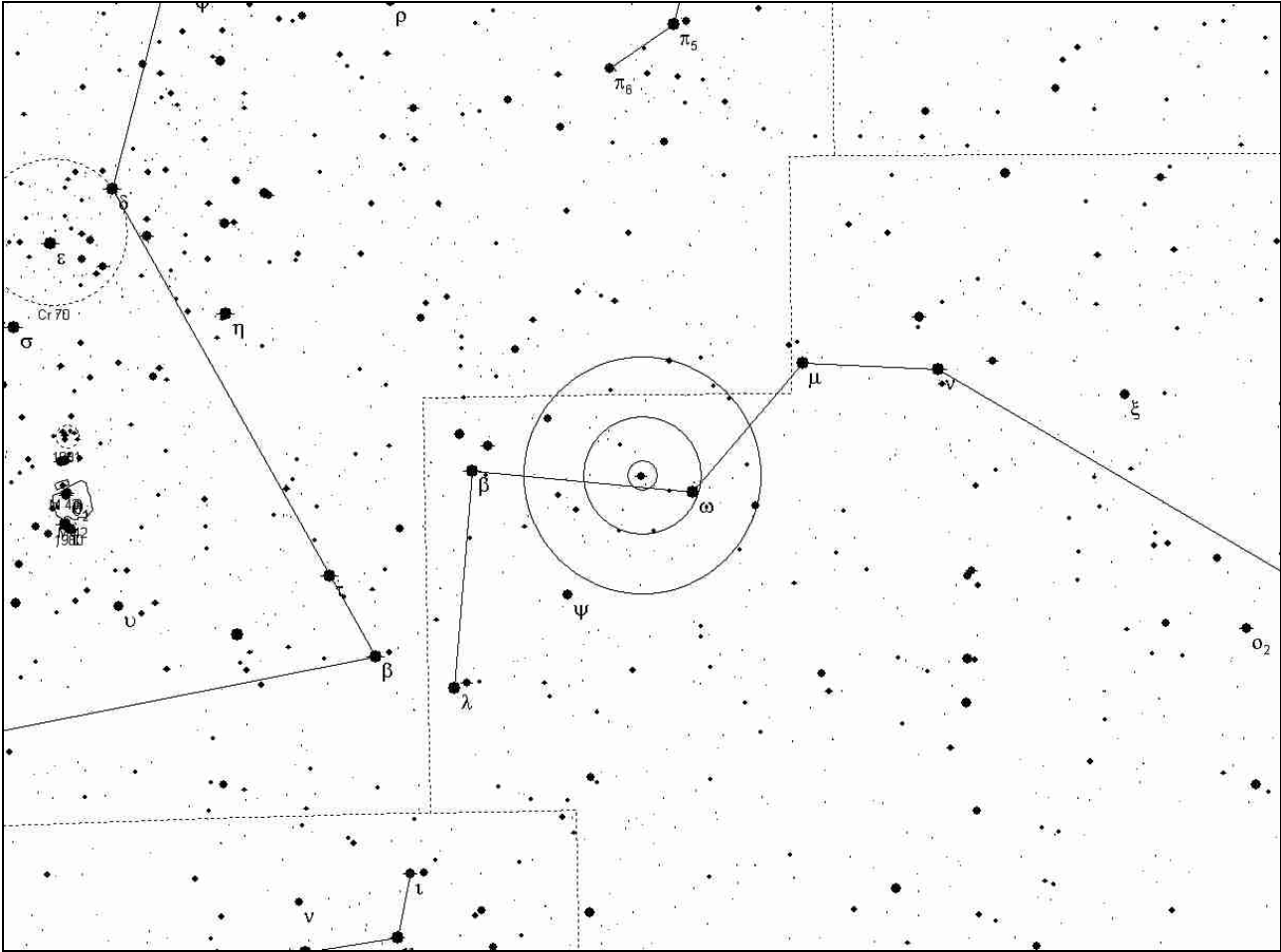


Notes:

62 Eri

R.A. (2000)	Dec (2000)	Mag	Sep	PA
04 56.4	-05 10	5.5 9.1	67"	75 (1913)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

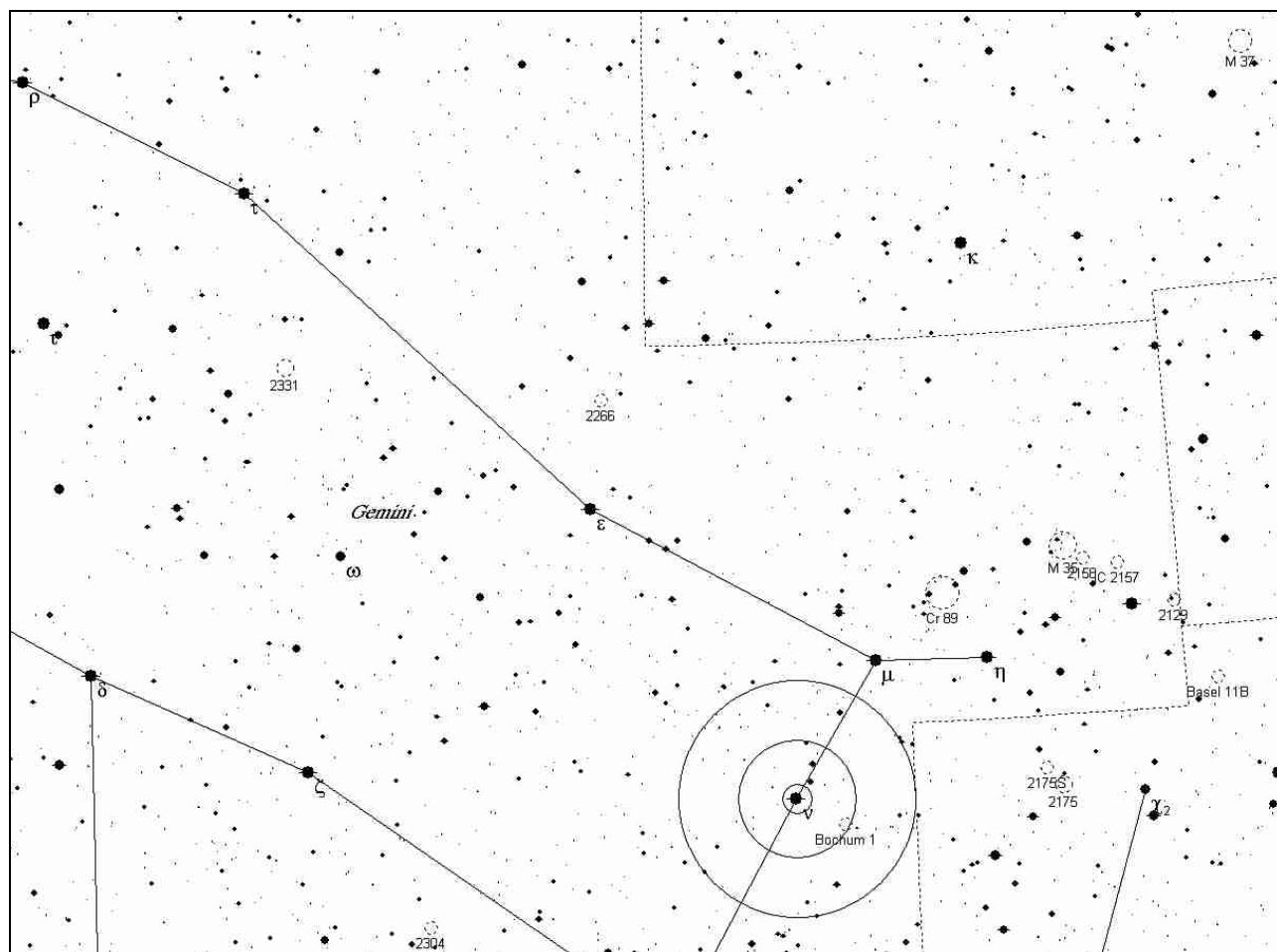


Notes:

Nu Gem

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
06 29.0	+20 13	4.2 8.7	113"	329 (1924)	5103

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

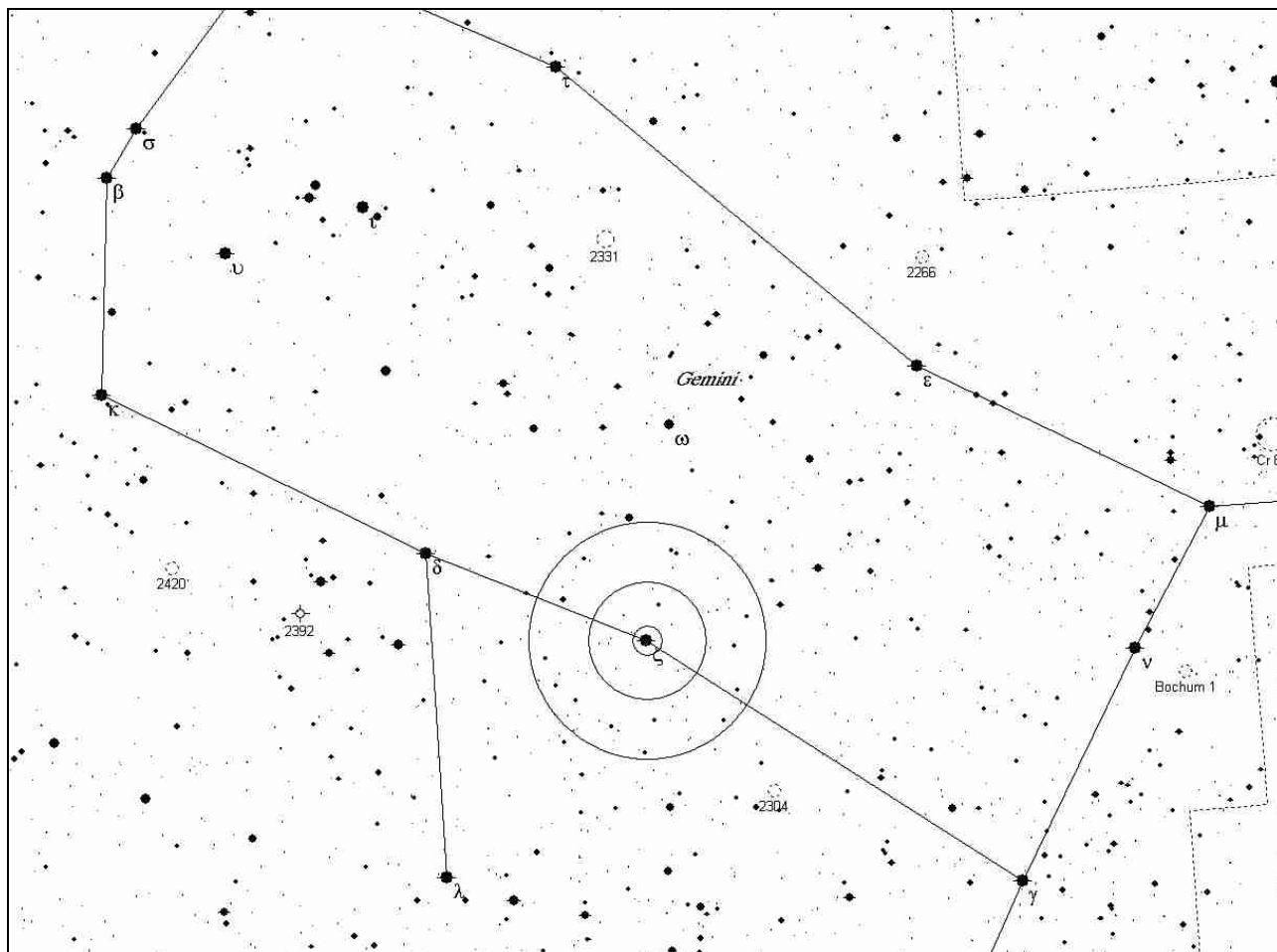


Notes:

Zeta Gem

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
07 04.1	+20 34	3.8 8.0	96"	350 (1925)	5742	A=var(3.6-4.2)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

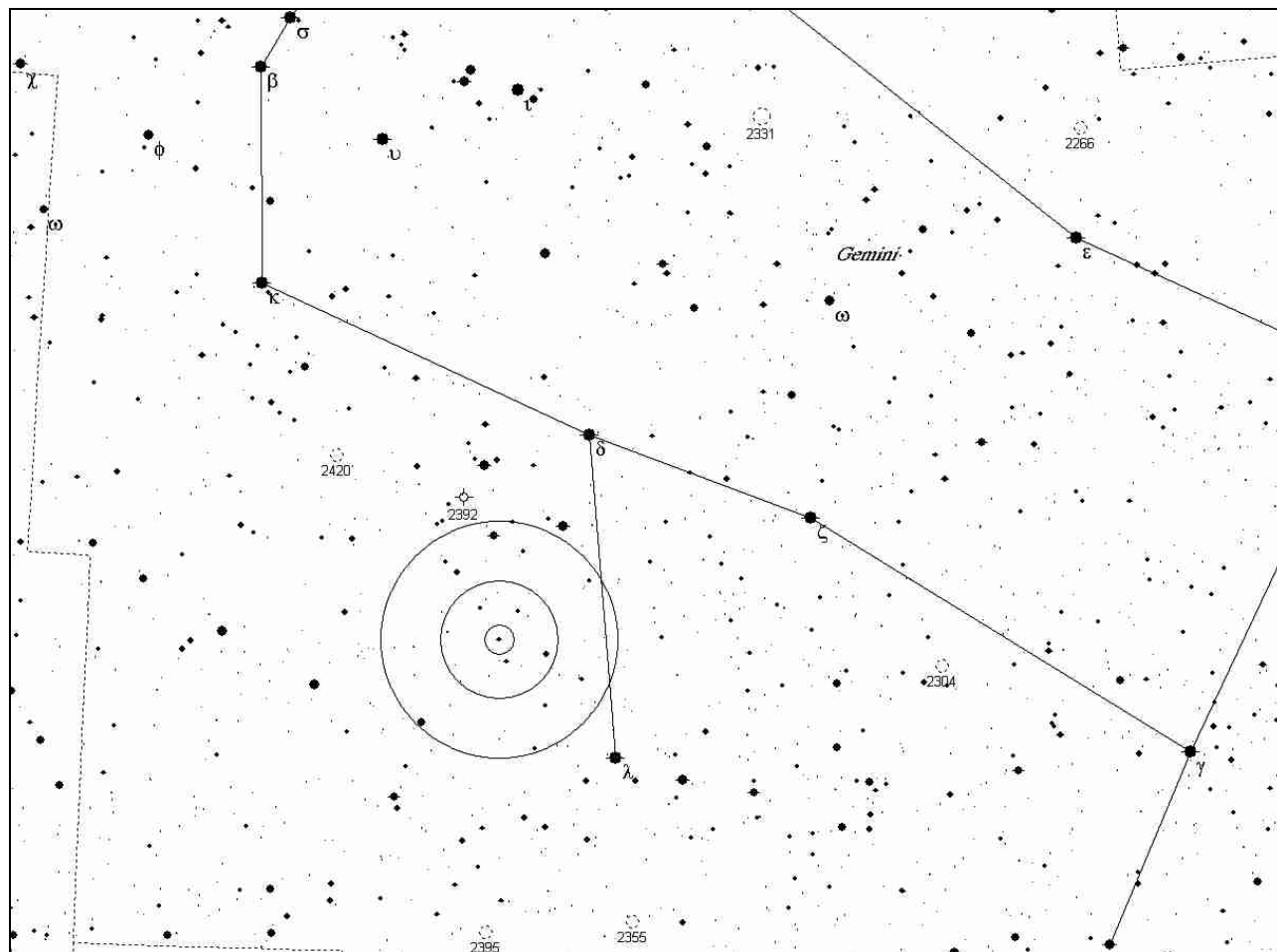


Notes:

Struve1090 (Gem)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
07 26.5	+18 31	7.3 8.2	61"	97 (1921)	6073

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

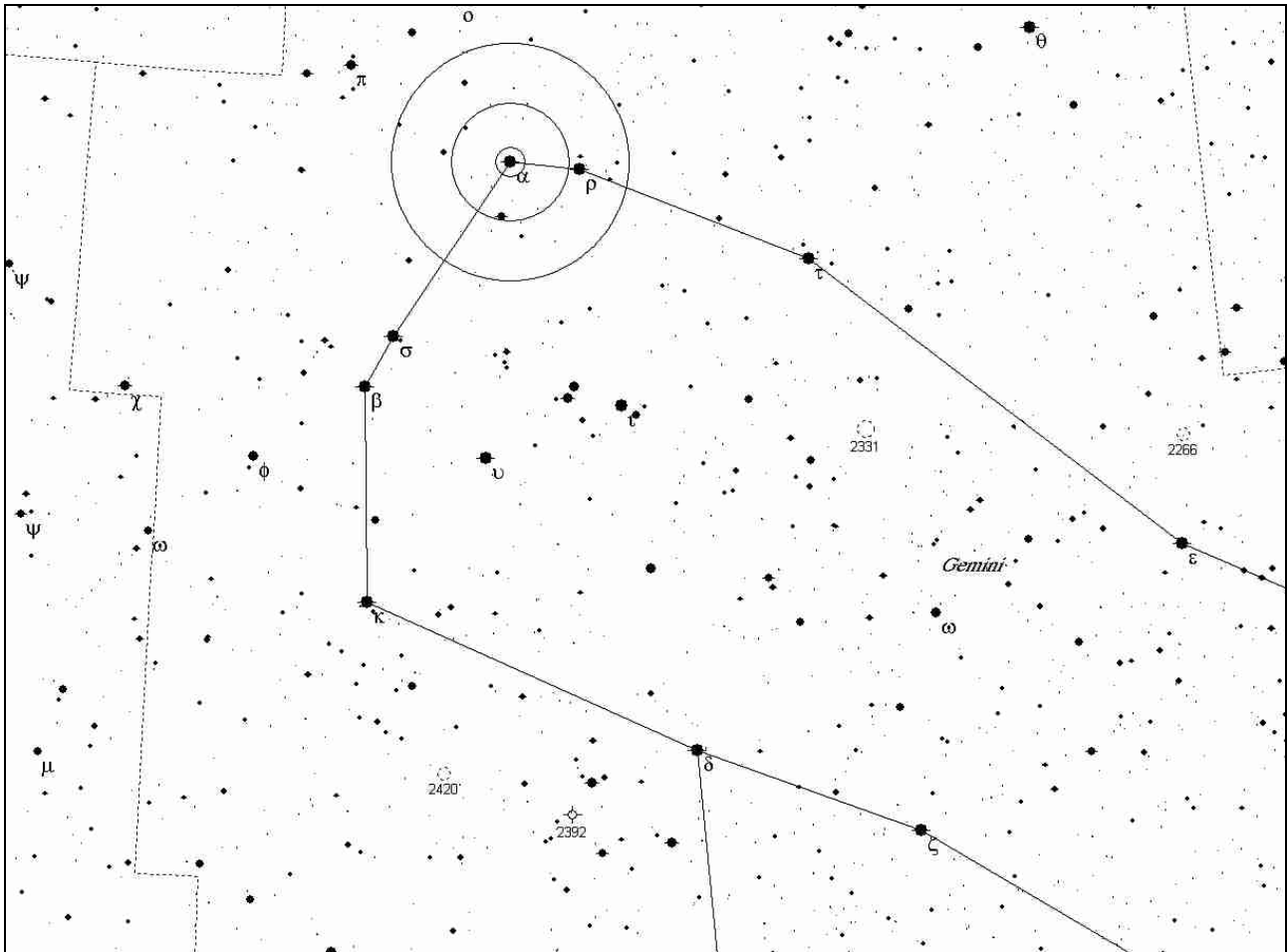


Notes:

Alpha Gem

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
07 34.6	+31 53	1.9 8.8	73"	164 (1955)	6175	Castor

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

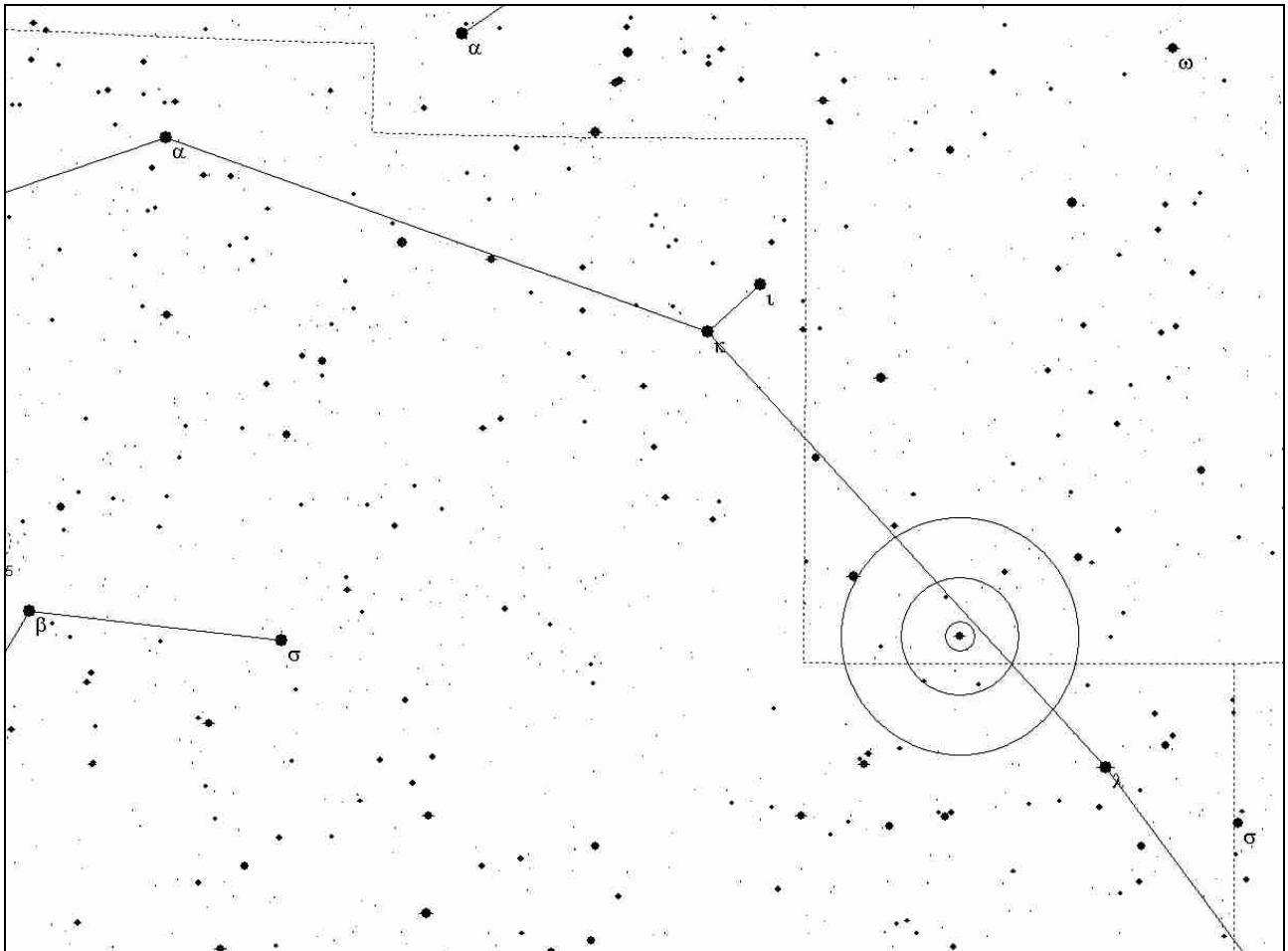


Notes:

37 Her

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
16 40.6	+04 13	5.8 7.0	70"	230 (1932)	10149

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

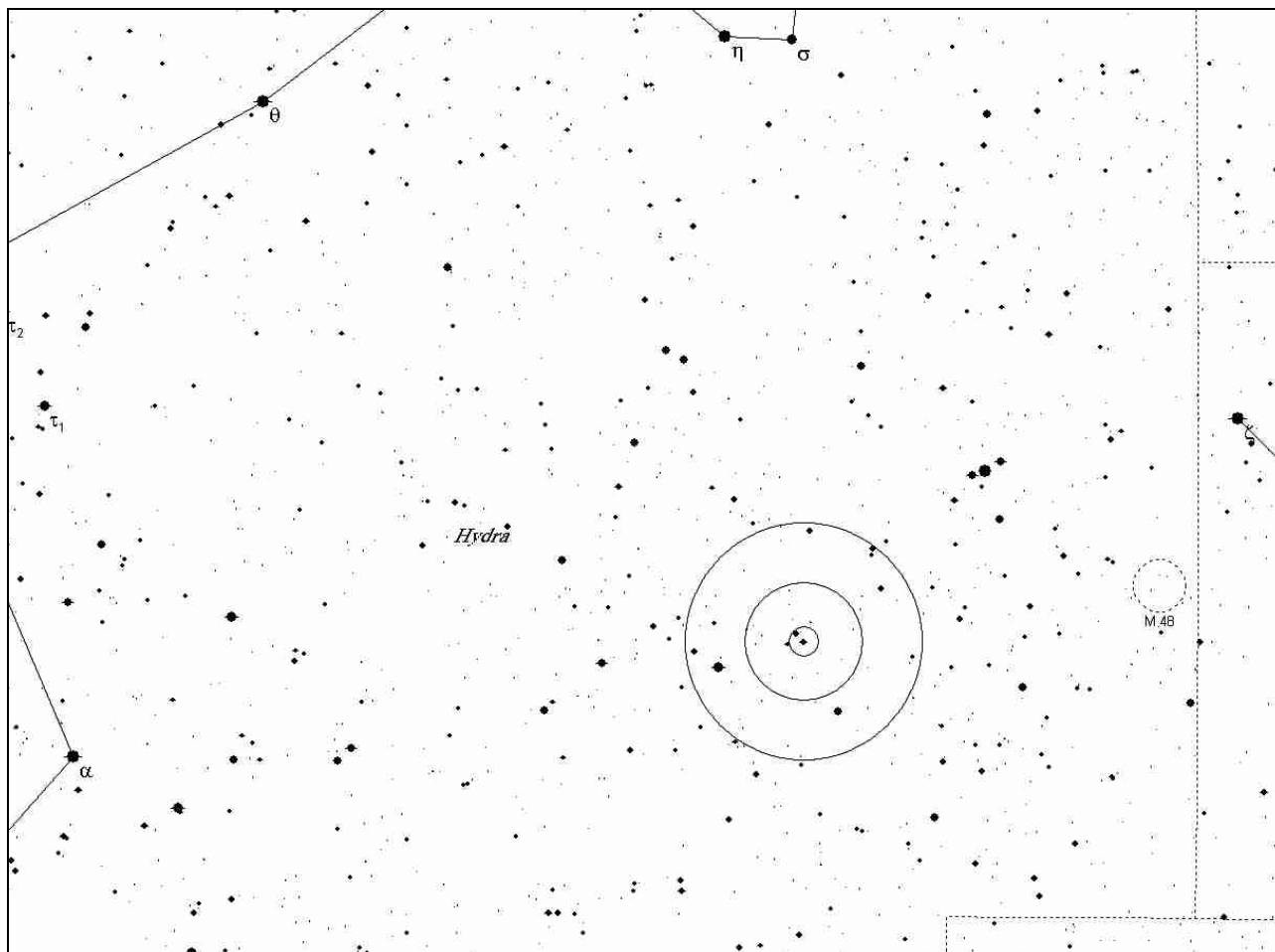


Notes:

h 99 (Hya)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
08 37.8	-06 48	6.8 9.1	61"	202 (1918)	6900

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

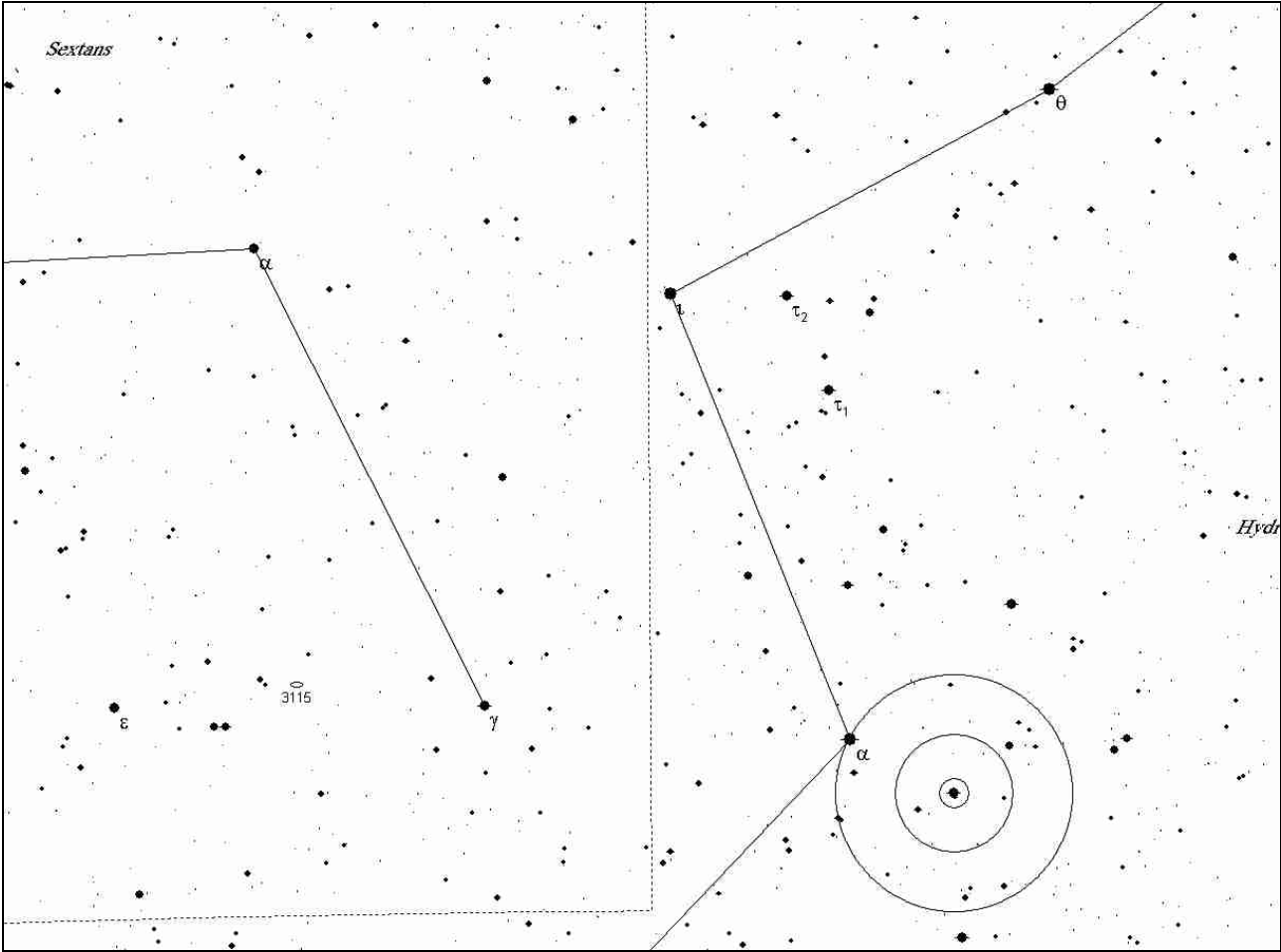


Notes:

27 Hya

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
09 20.5	-09 33	5.0 6.9	229"	211 (1923)	7311

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

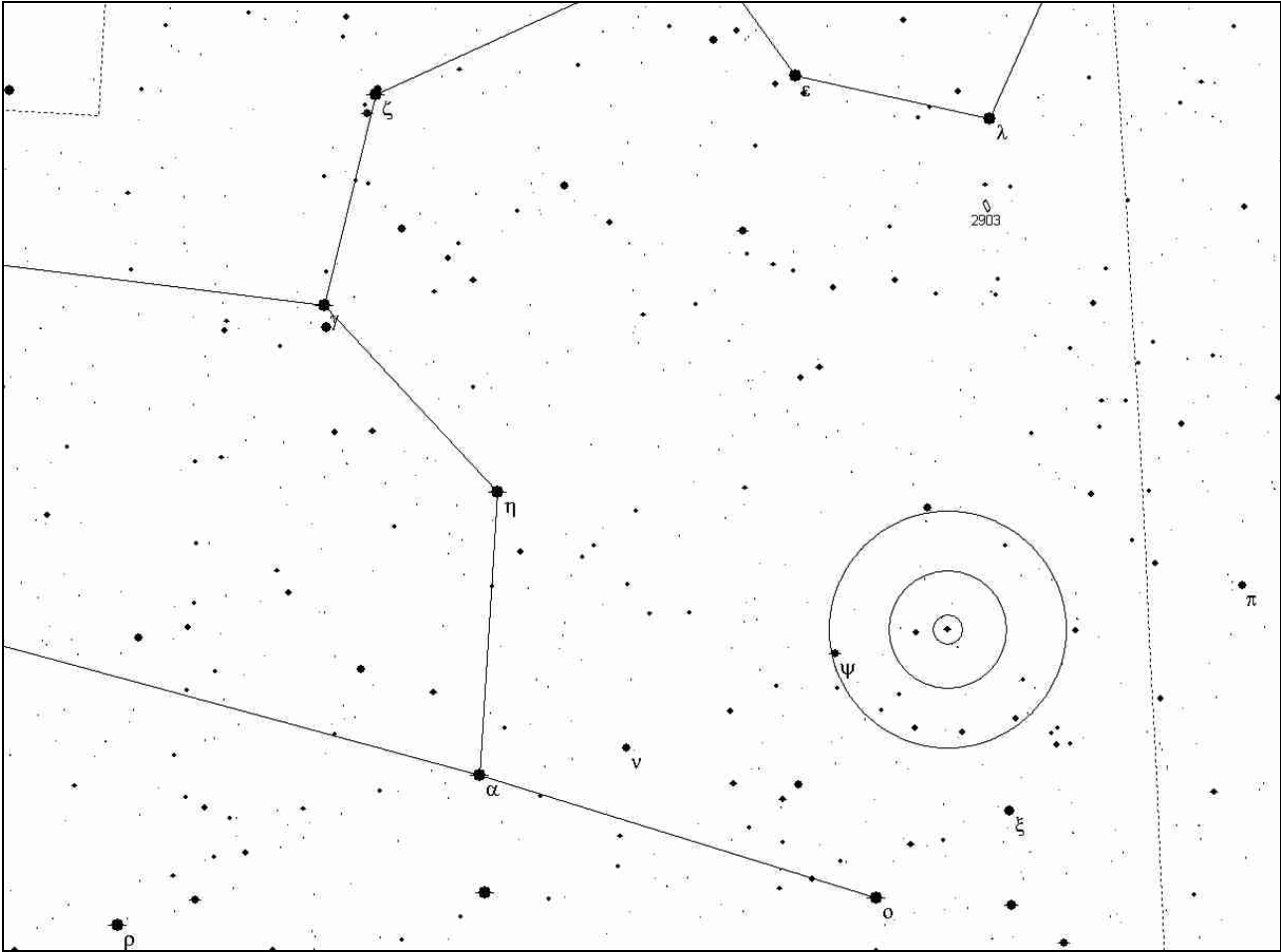


Notes:

7 Leo

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
09 35.9	+14 23	6.2 10.0	41"	80 (1946)	7448

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

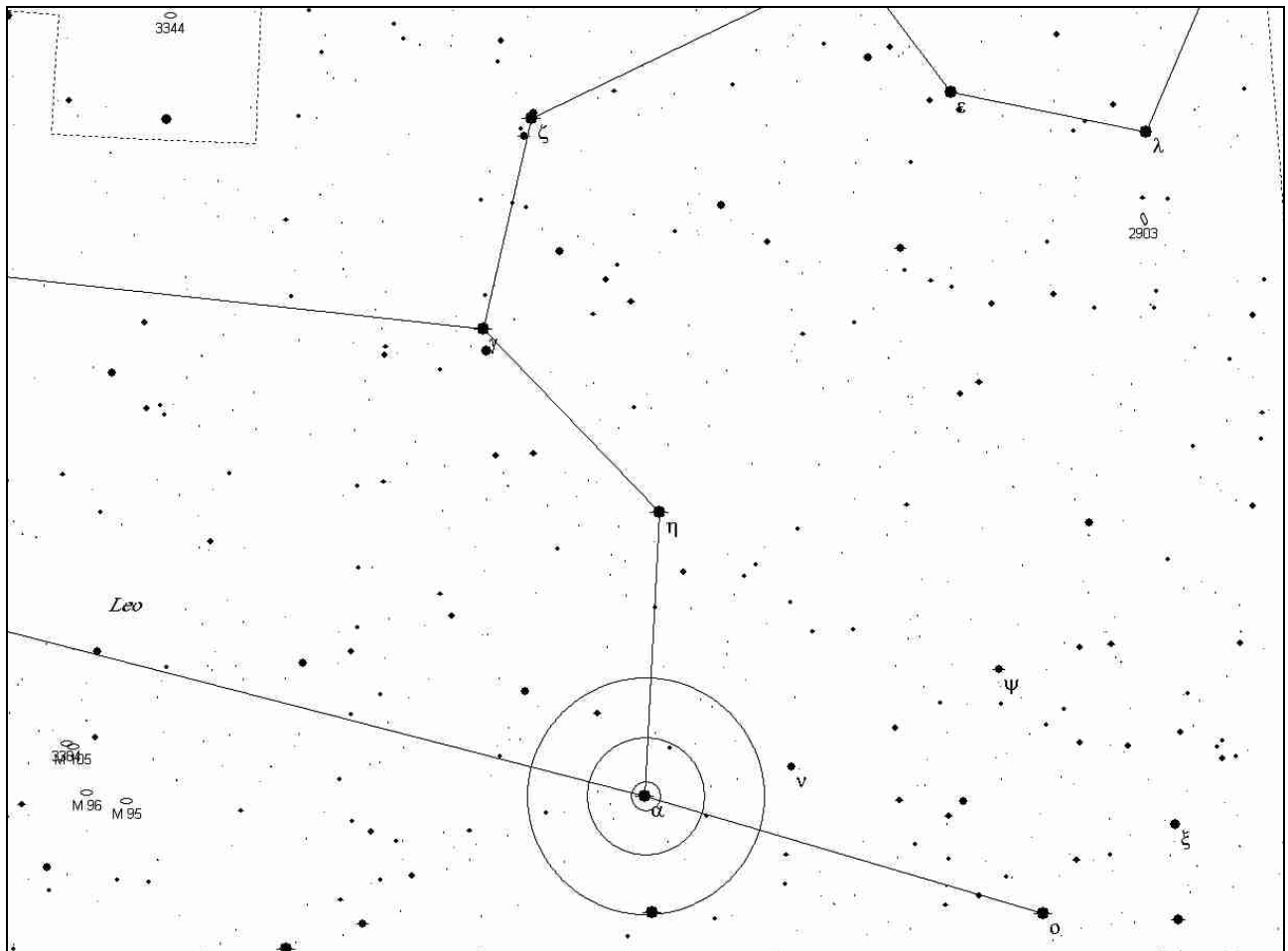


Notes:

Alpha Leo

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
10 08.4	+11 58	1.4 7.7	177"	307 (1924)	7654	Regulus

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

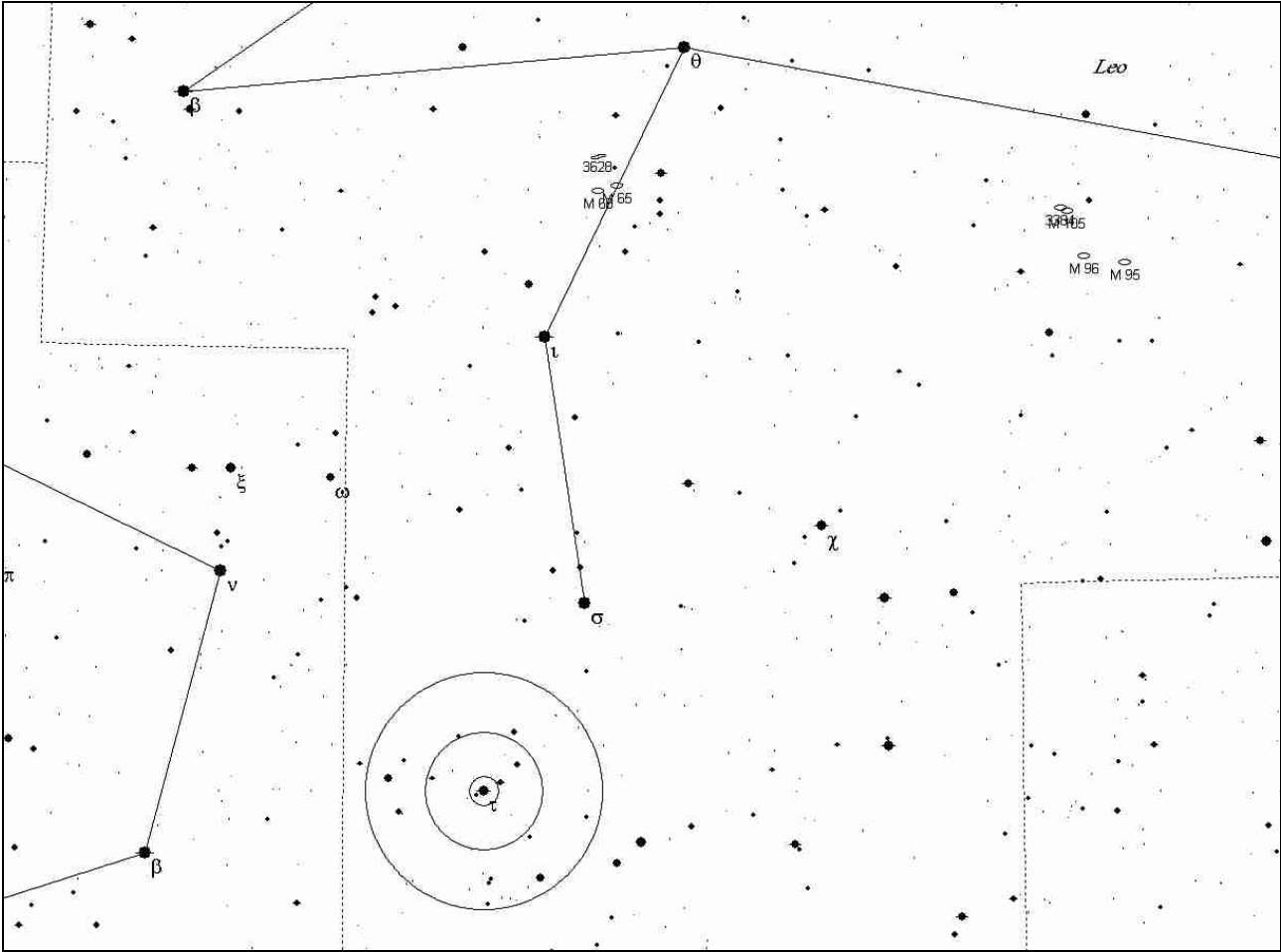


Notes:

Tau Leo

R.A. (2000)	Dec (2000)	Mag	Sep	PA
11 27.9	+02 51	5.1 8.0	91.1"	176 (1932)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

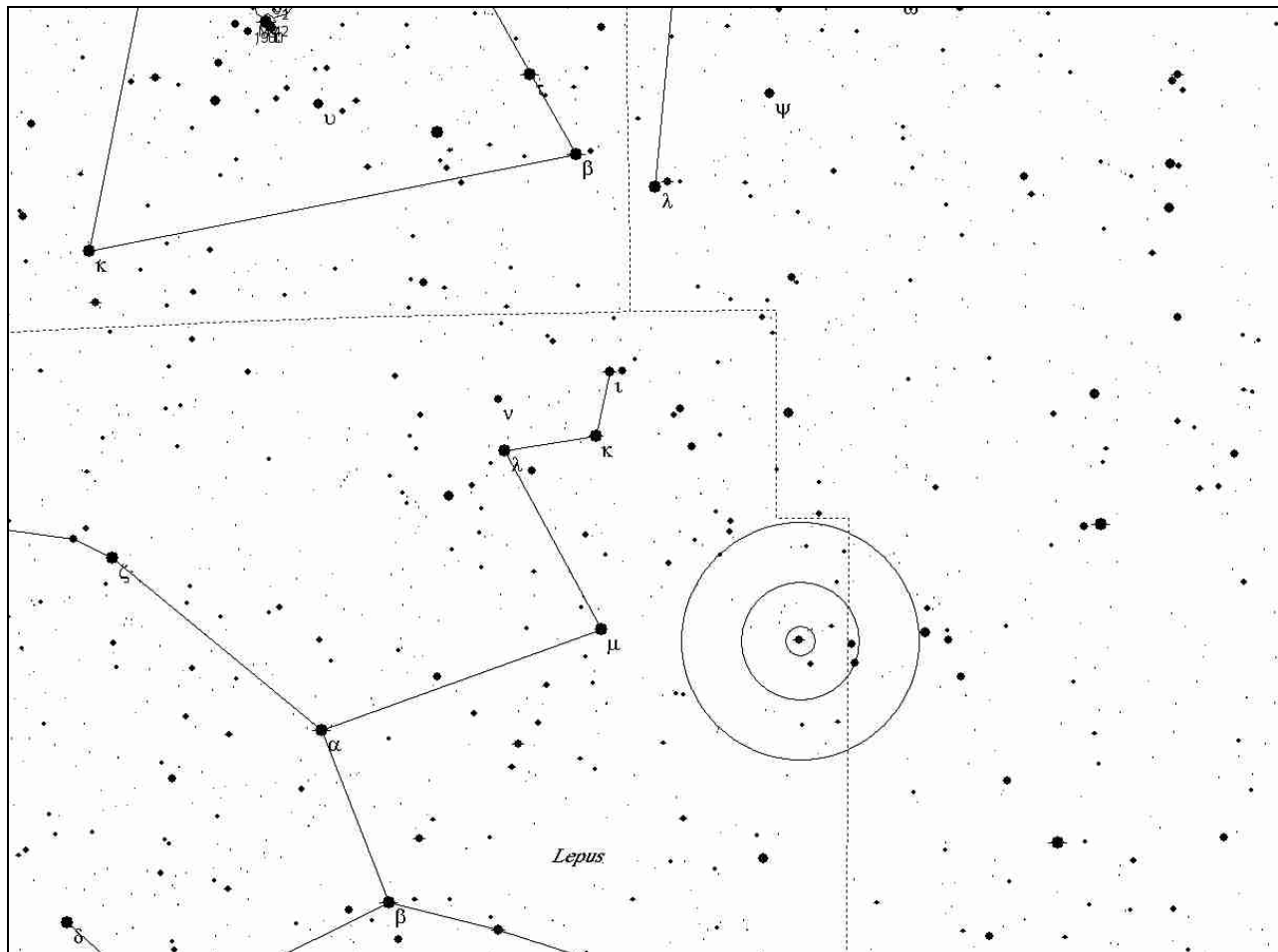


Notes:

Burnham314 (Lep)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
04 59.0	-16 23	5.9 8.2	53"	34 (1914)	3588

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

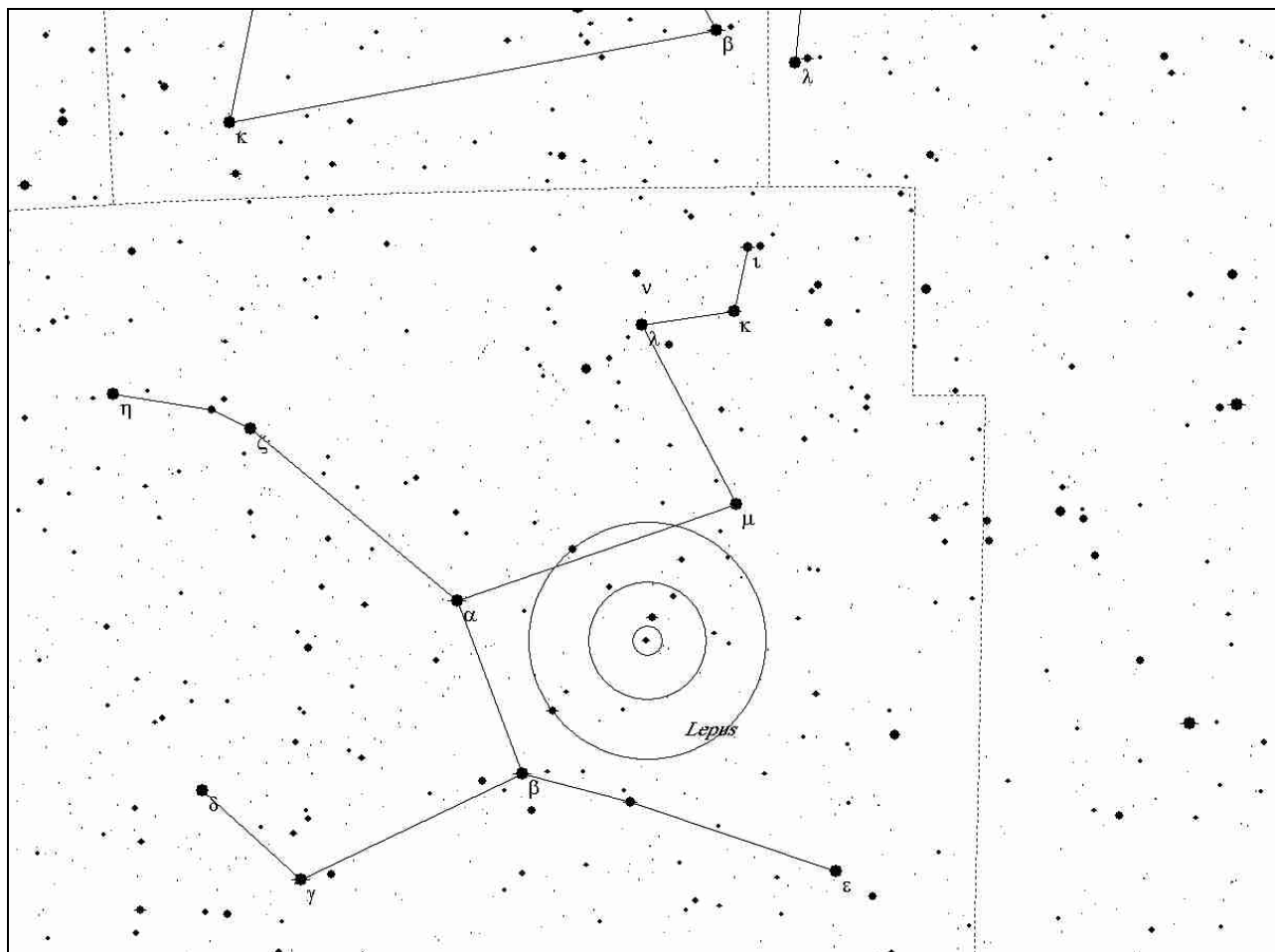


Notes:

S 476 (Lep)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 19.3	-18 31	6.2 6.4	39"	18 (1952)	3910

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

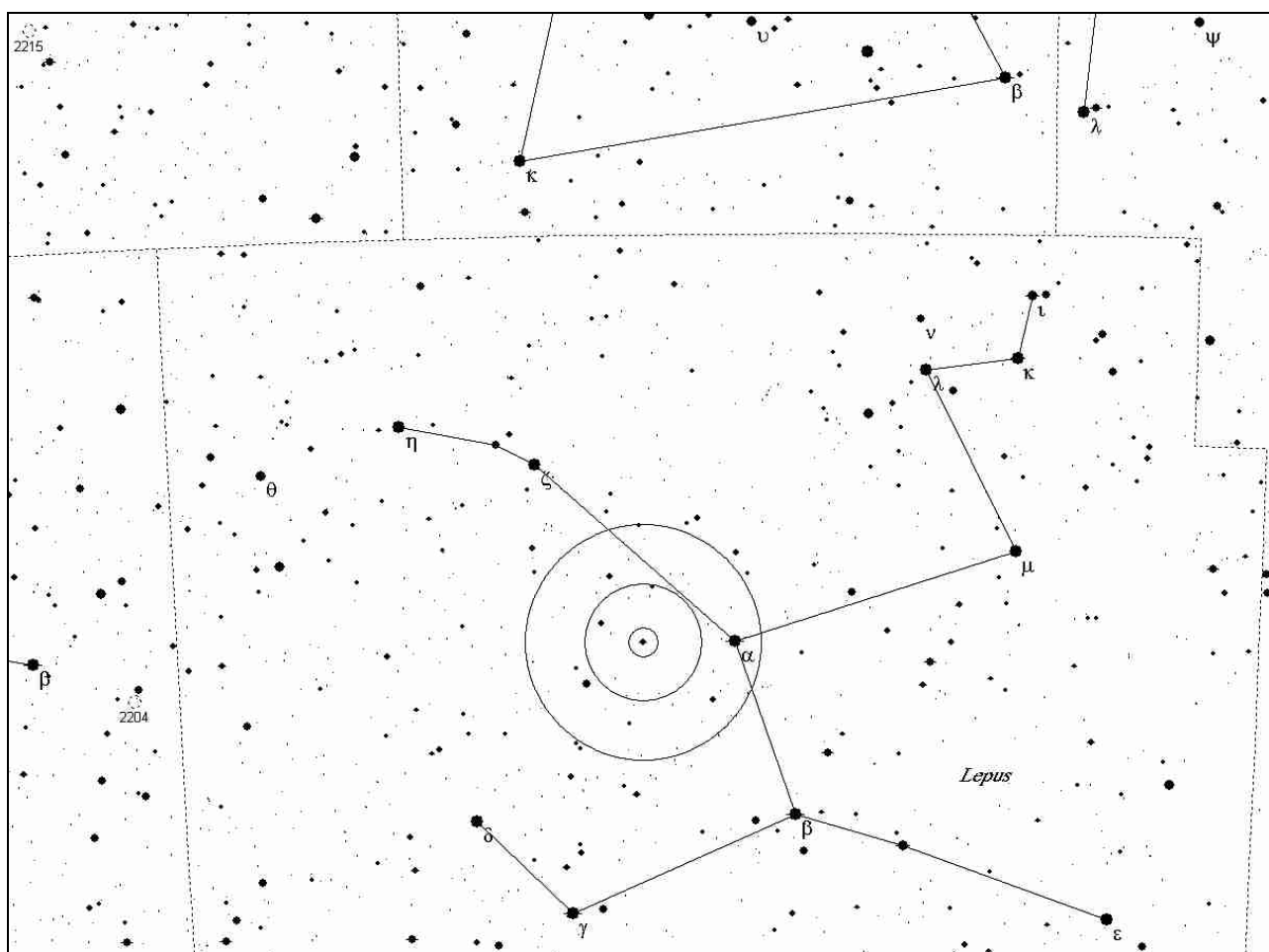


Notes:

h 3780 (Lep)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 39.3	-17 51	6 9 8 8	89" 76" 129"	136 7 299 (1916)	4254

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

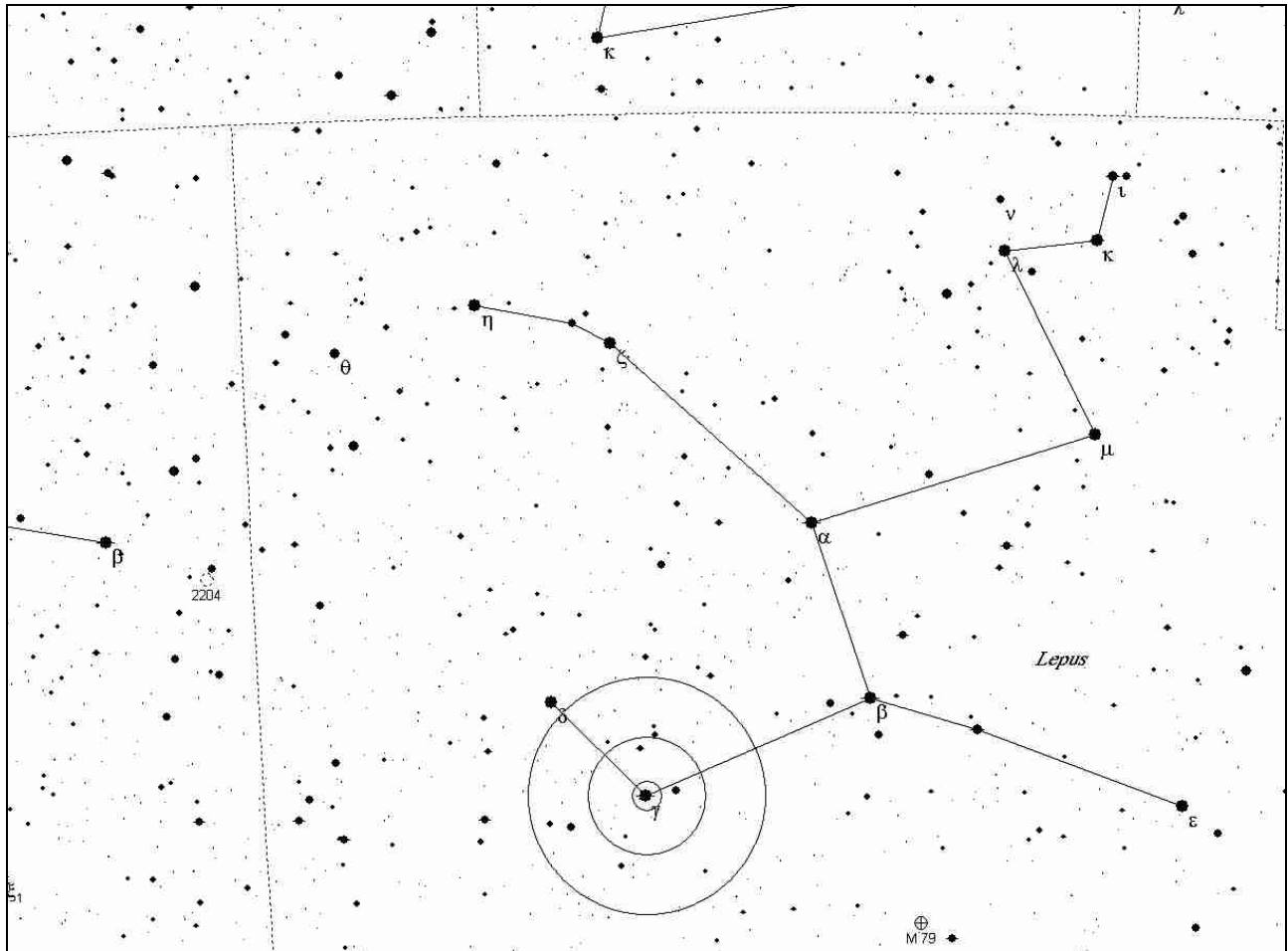


Notes:

Gamma Lep

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 44.5	-22 27	3.7 6.3	96"	350 (1957)	4334

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

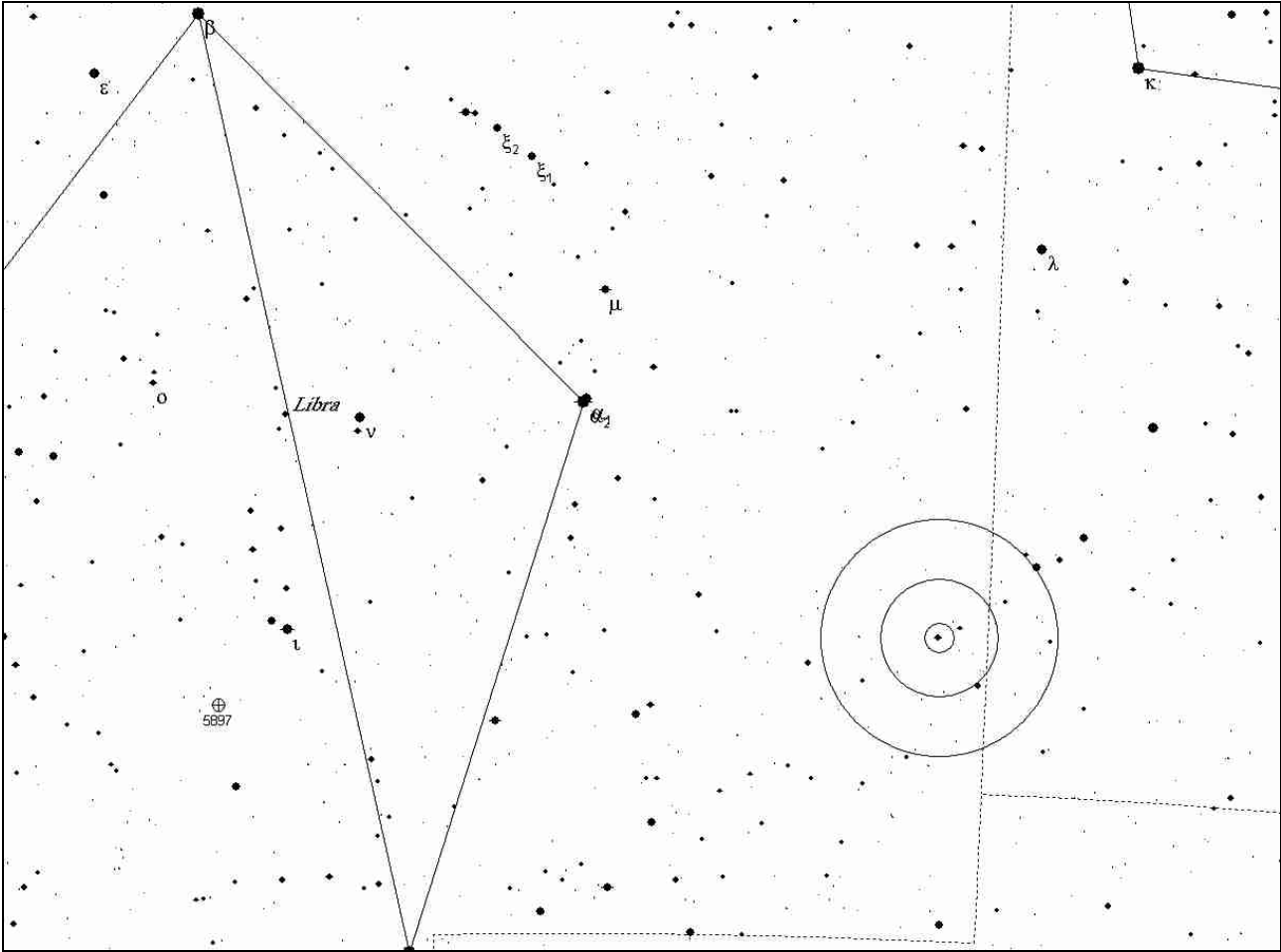


Notes:

SHJ 179 (Lib)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
14 25.5	-19 58	6.4 7.6	35"	296 (1955)	9258

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

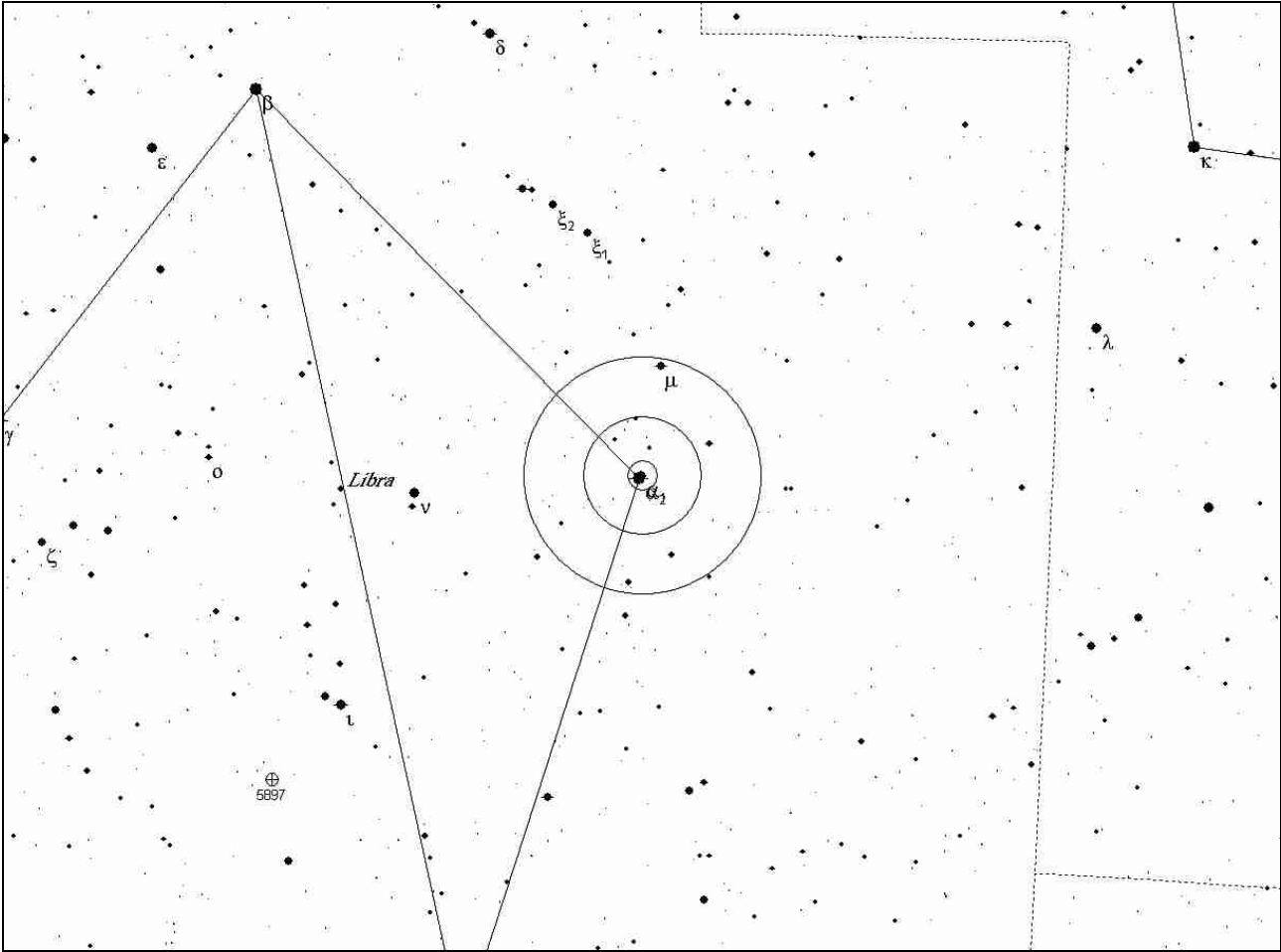


Notes:

Alpha1+2 Lib

R.A. (2000)	Dec (2000)	Mag	Sep	PA
14 50.9	-16 02	2.8 5.2	231"	314 (1913)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

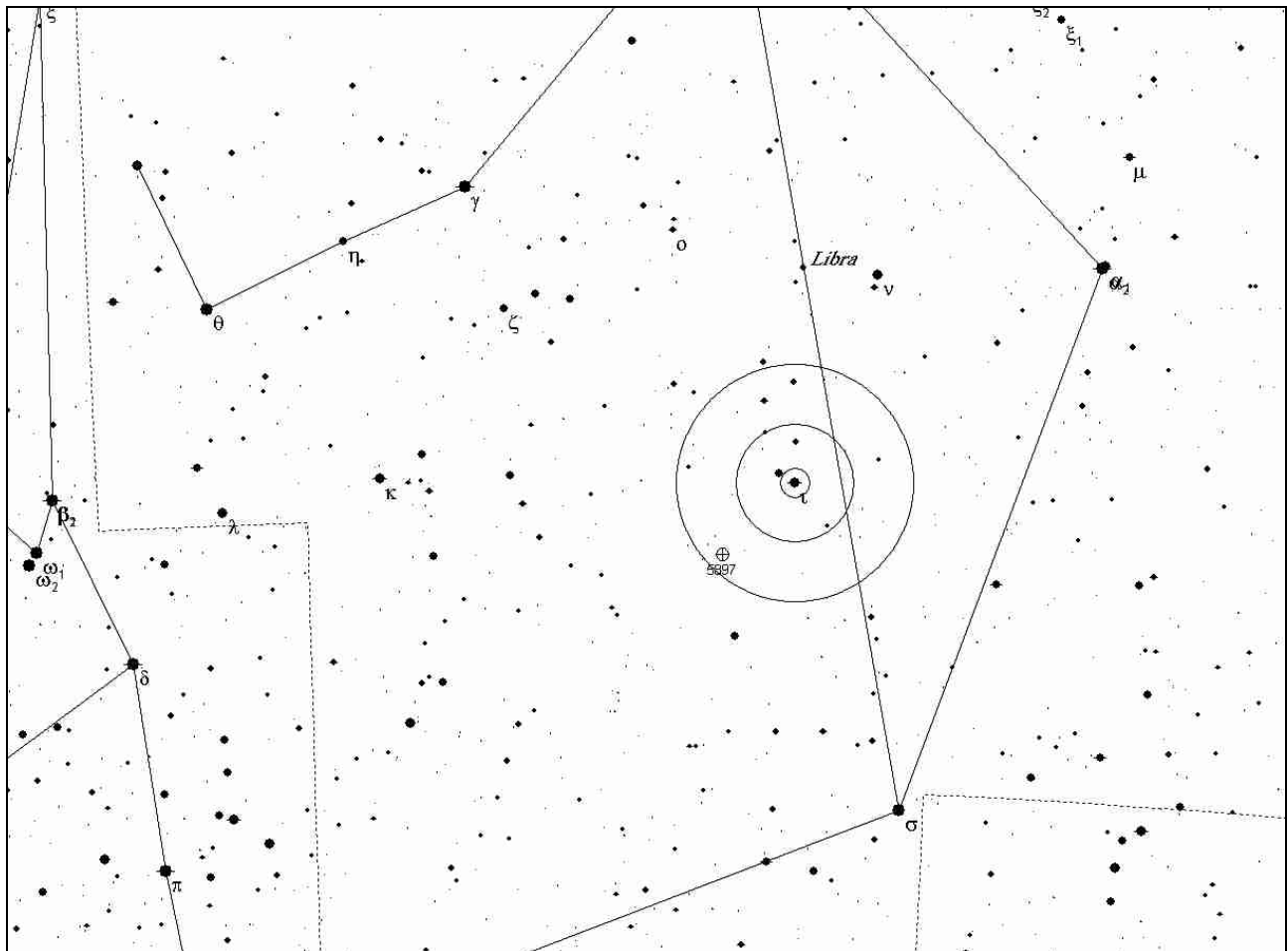


Notes:

Iota Lib

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
15 12.2	-19 47	5.1 9.4	58"	111 (1919)	9532

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

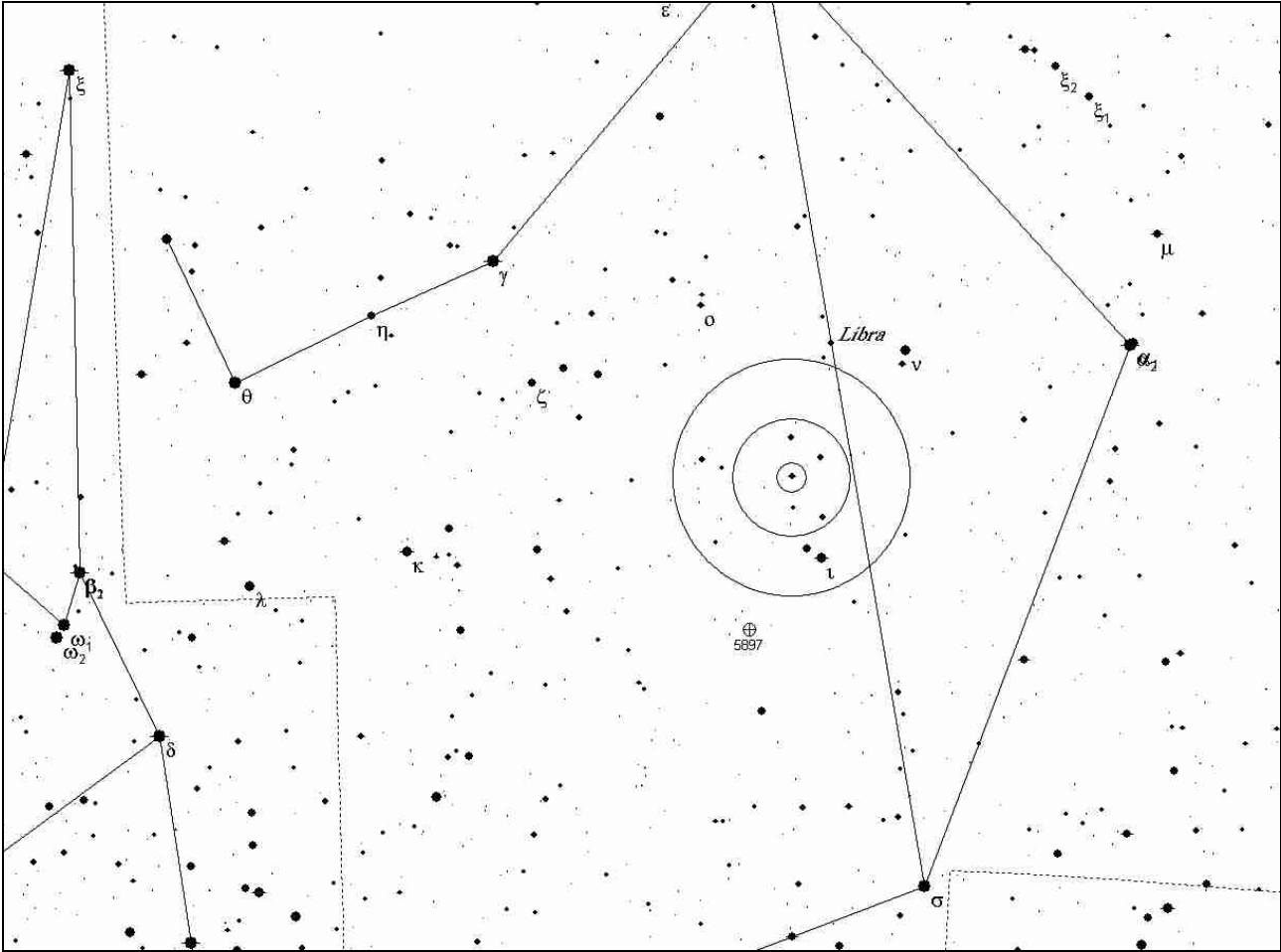


Notes:

SHJ 195 (Lib)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
15 14.5	-18 26	7.1 8.1	47"	140 (1916)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

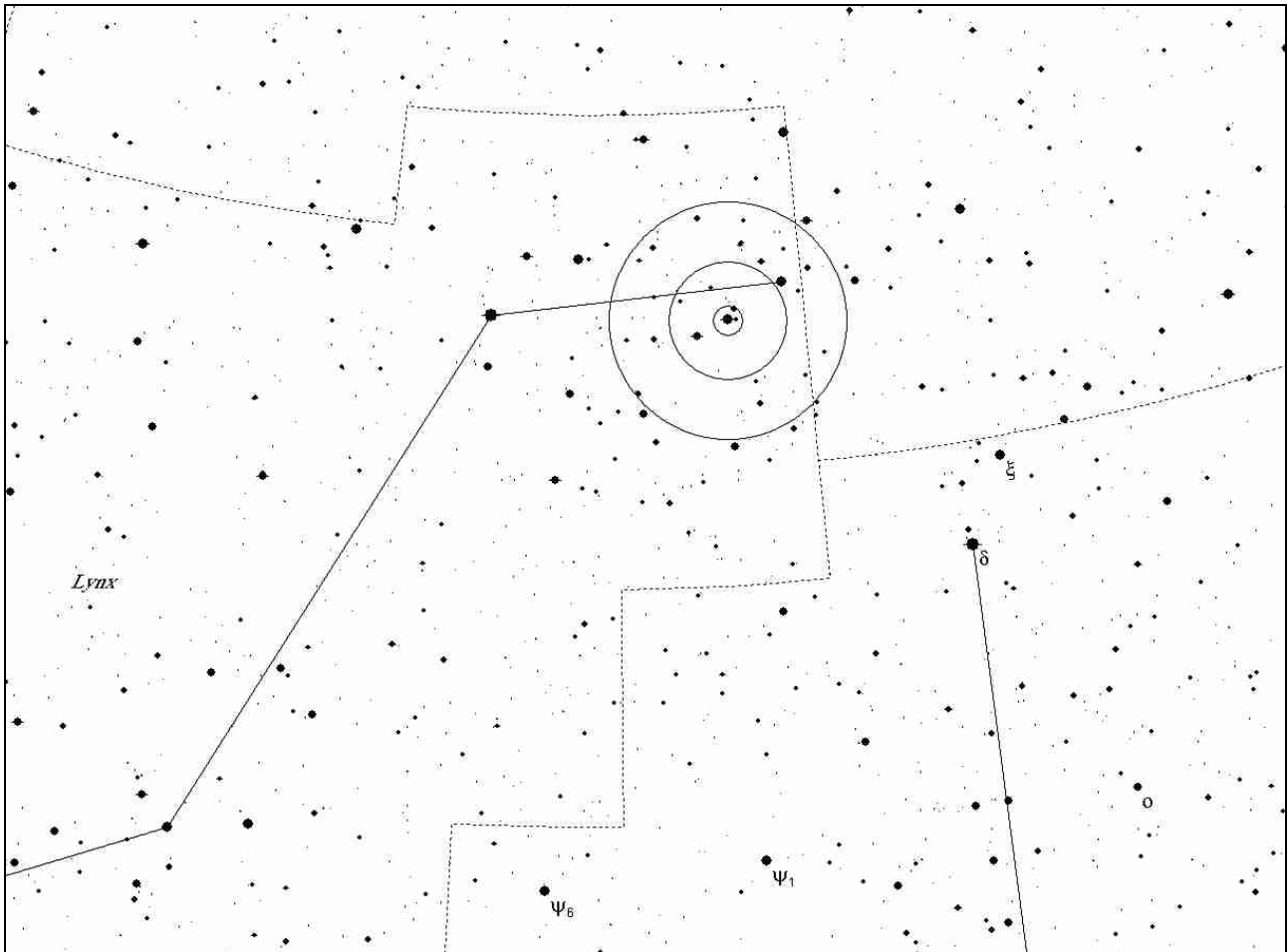


Notes:

5 Lyn

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
06 26.8	+58 25	5.3 7.9	96"	272 (1924)	5036

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

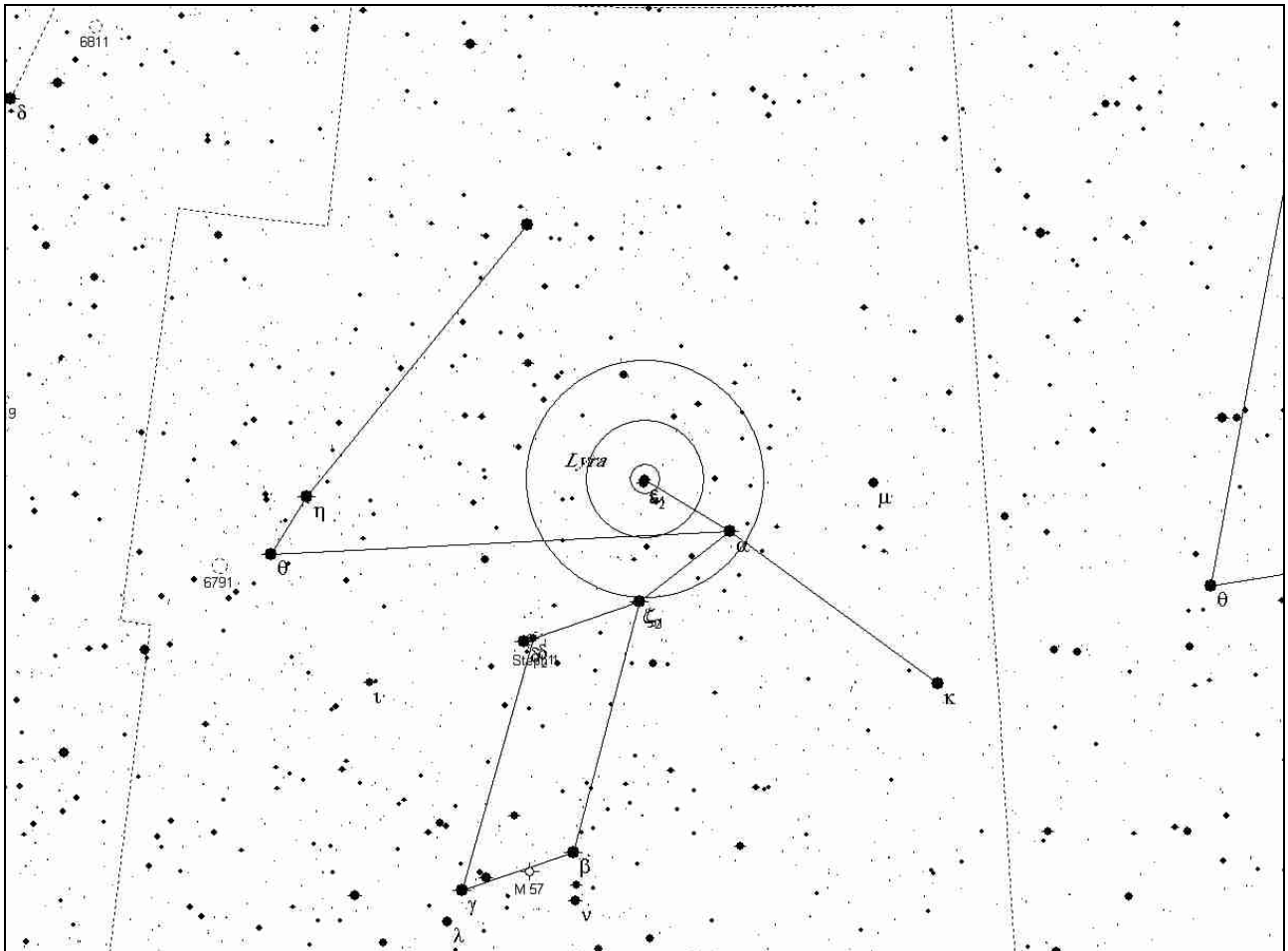


Notes:

Epsilon1+2 Lyr

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
18 44.3	+39 40	5.0 5.2	208"	173 (1955)	11635	Double-double

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

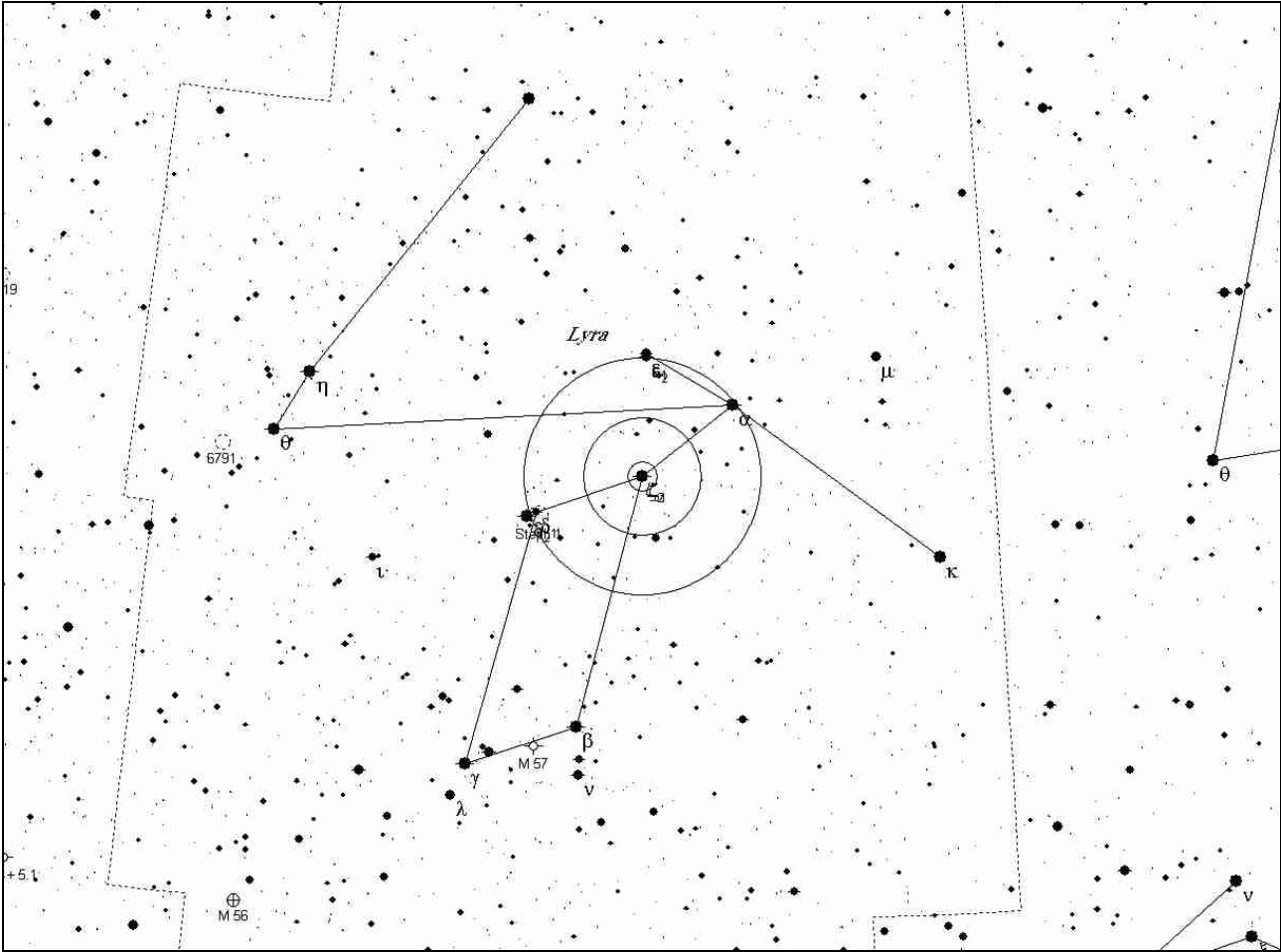


Notes:

Zeta Lyr

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 44.8	+37 36	4.3 5.9	44"	150 (1955)	11639

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

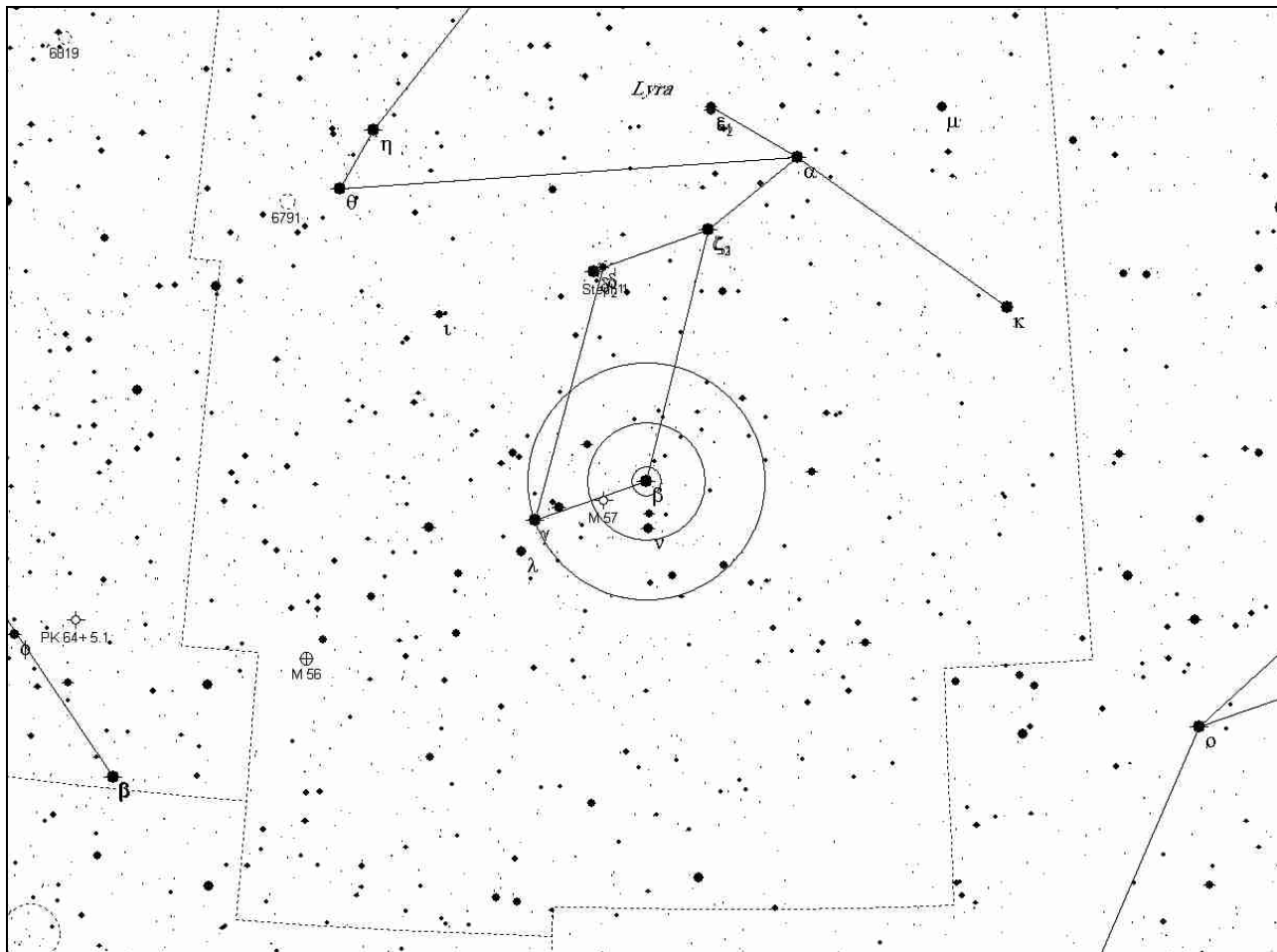


Notes:

Beta Lyr

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
18 50.1	+33 22	3.3v 8.6	46"	149 (1955)	11745	A=mag 3.3-4.3

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

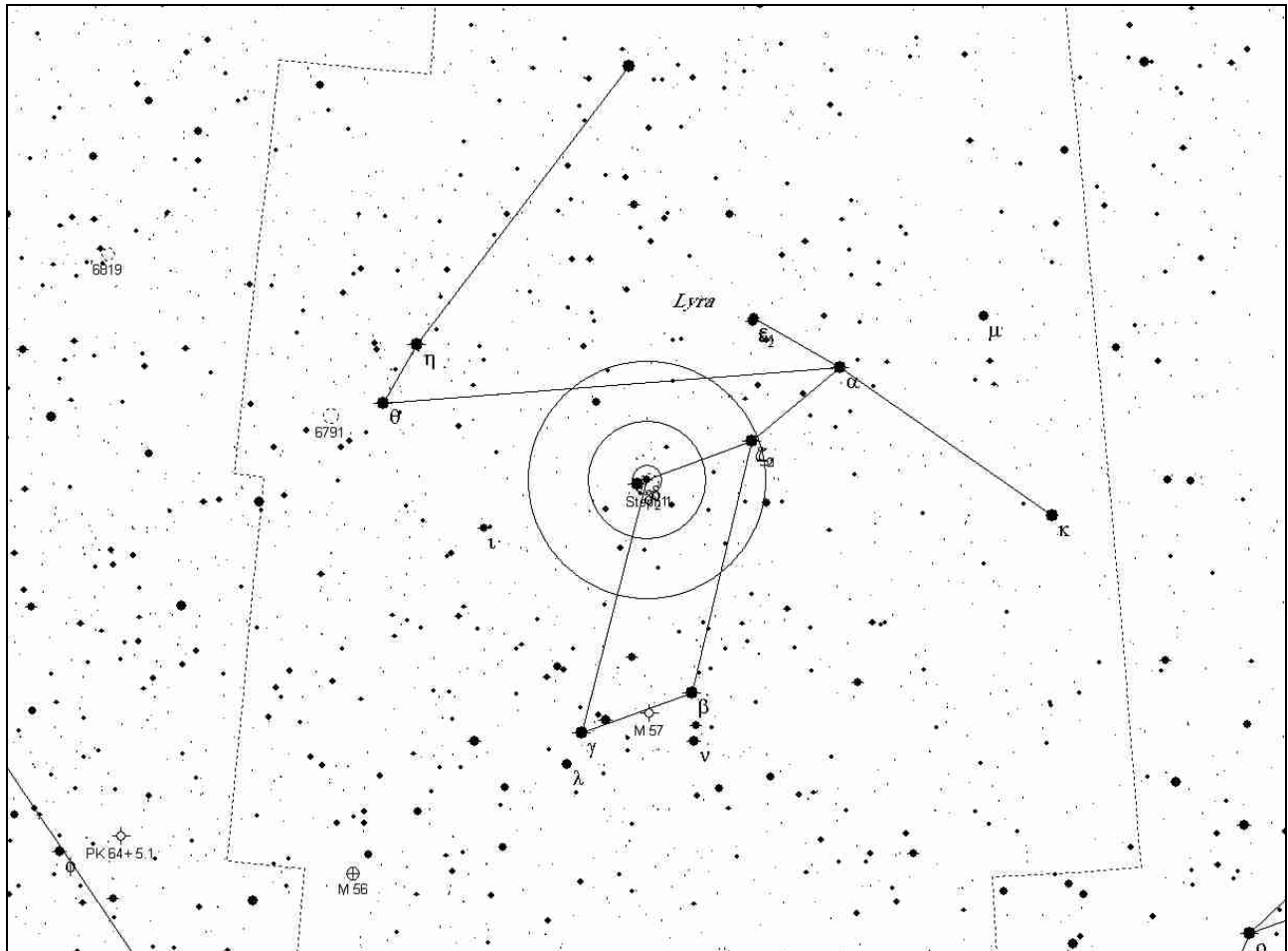


Notes:

Delta1+2 Lyr

R.A. (2000)	Dec (2000)	Mag	Sep	Notes
18 54.5	+36 54	5.6 4.5	630"	Optical

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

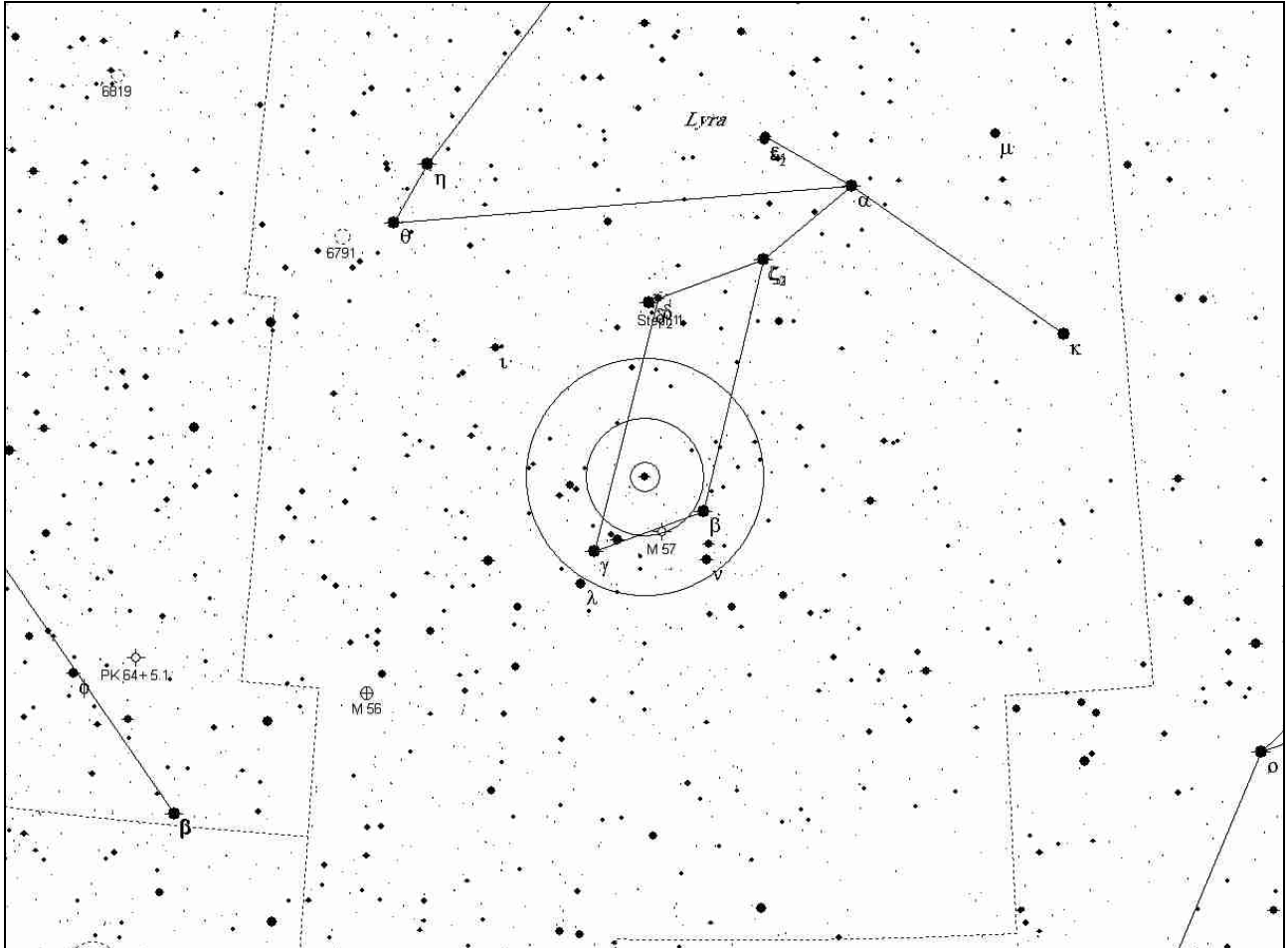


Notes:

OS 525 (Lyr)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 54.9	+33 58	6.0 7.7	45"	350 (1935)	11834

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

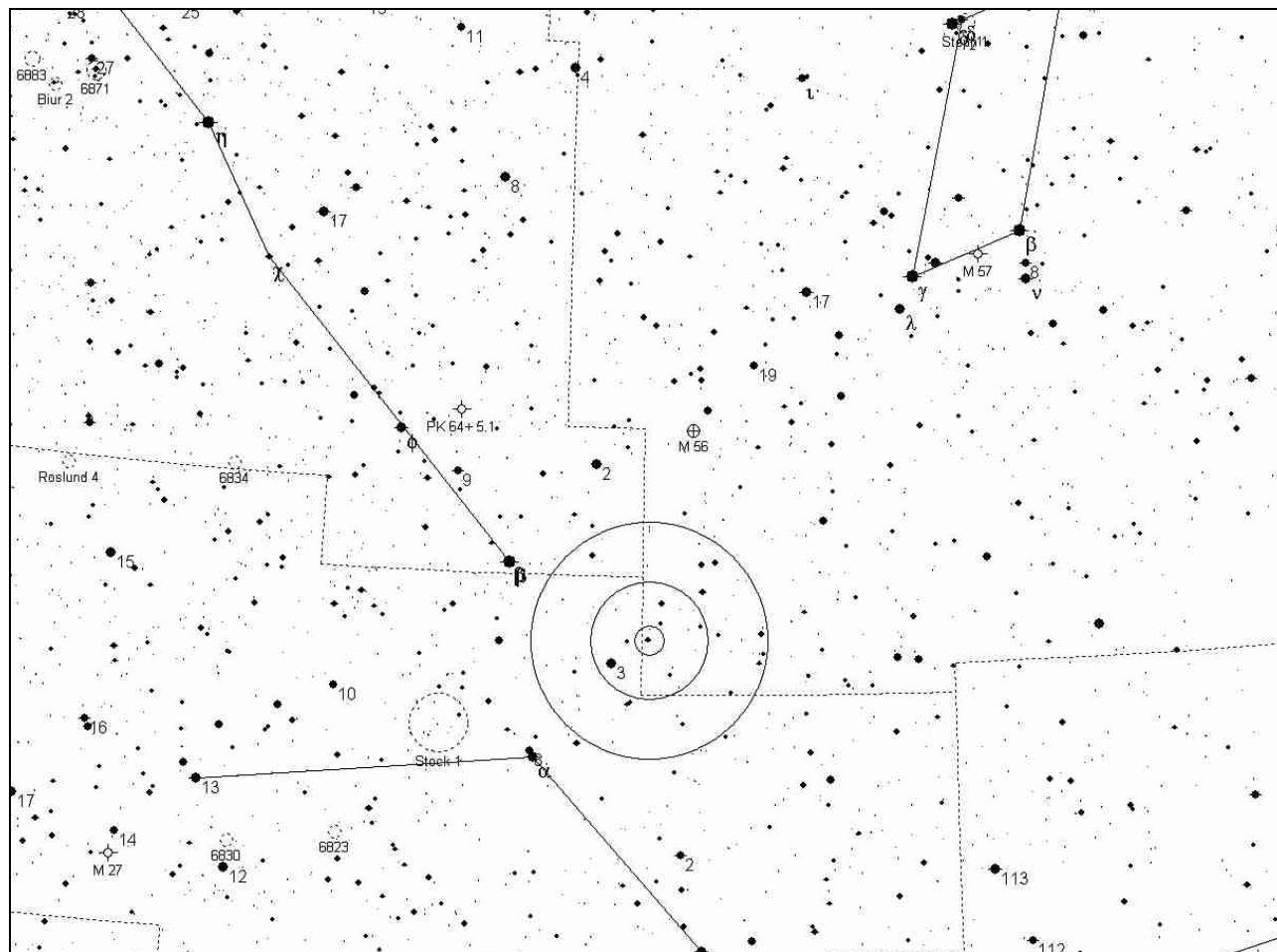


Notes:

OSS 181 (Lyr)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
19 20.1	+26 39	7.6 7.4	58"	3 (1923)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

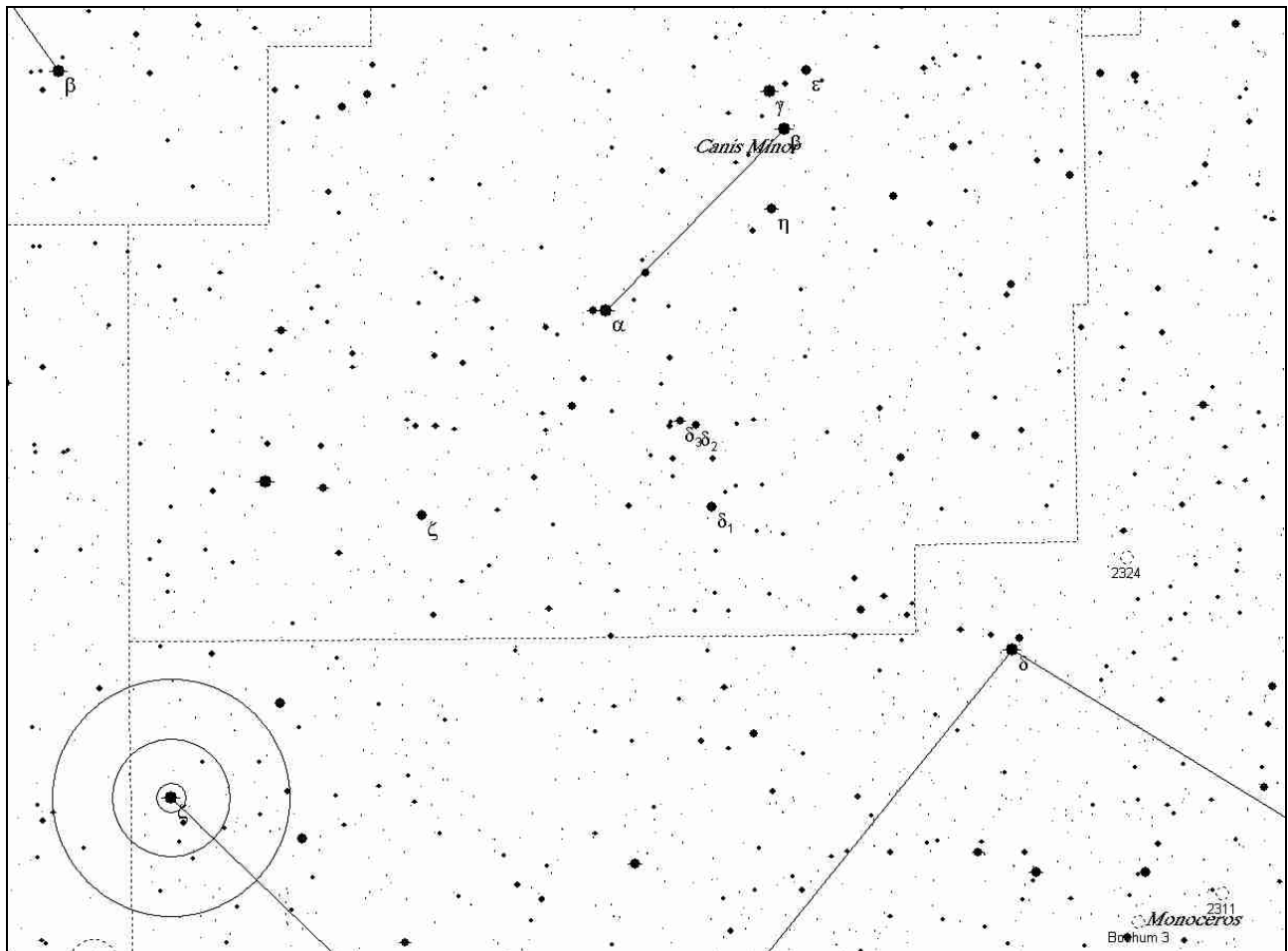


Notes:

Zeta Mon

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
08 08.6	-02 59	4.3 7.8	67"	245 (1936)	6617

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

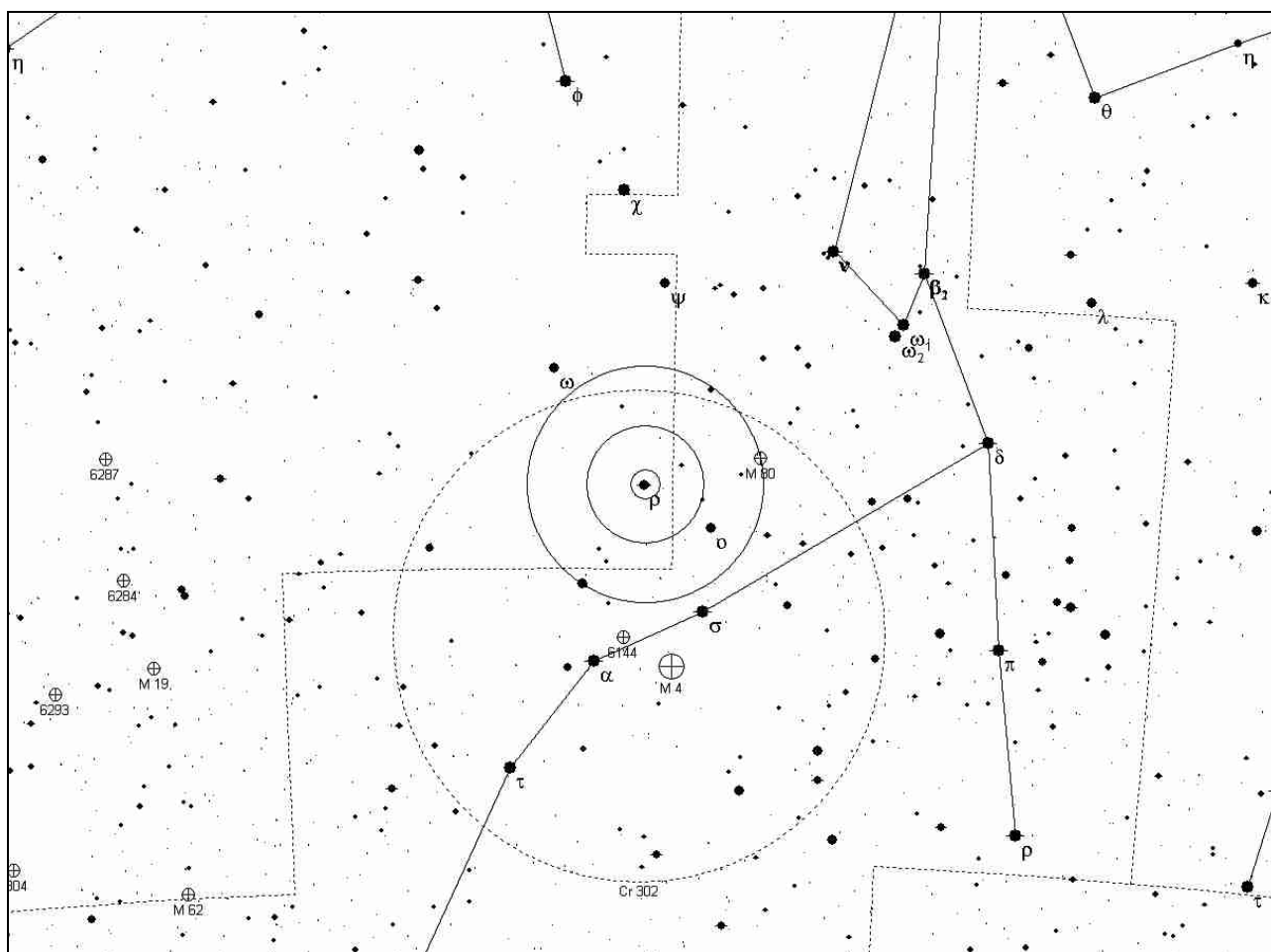


Notes:

Rho Oph

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
16 25.6	-23 27	5 8 7	151" 156"	0 253 (1925)	10049

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

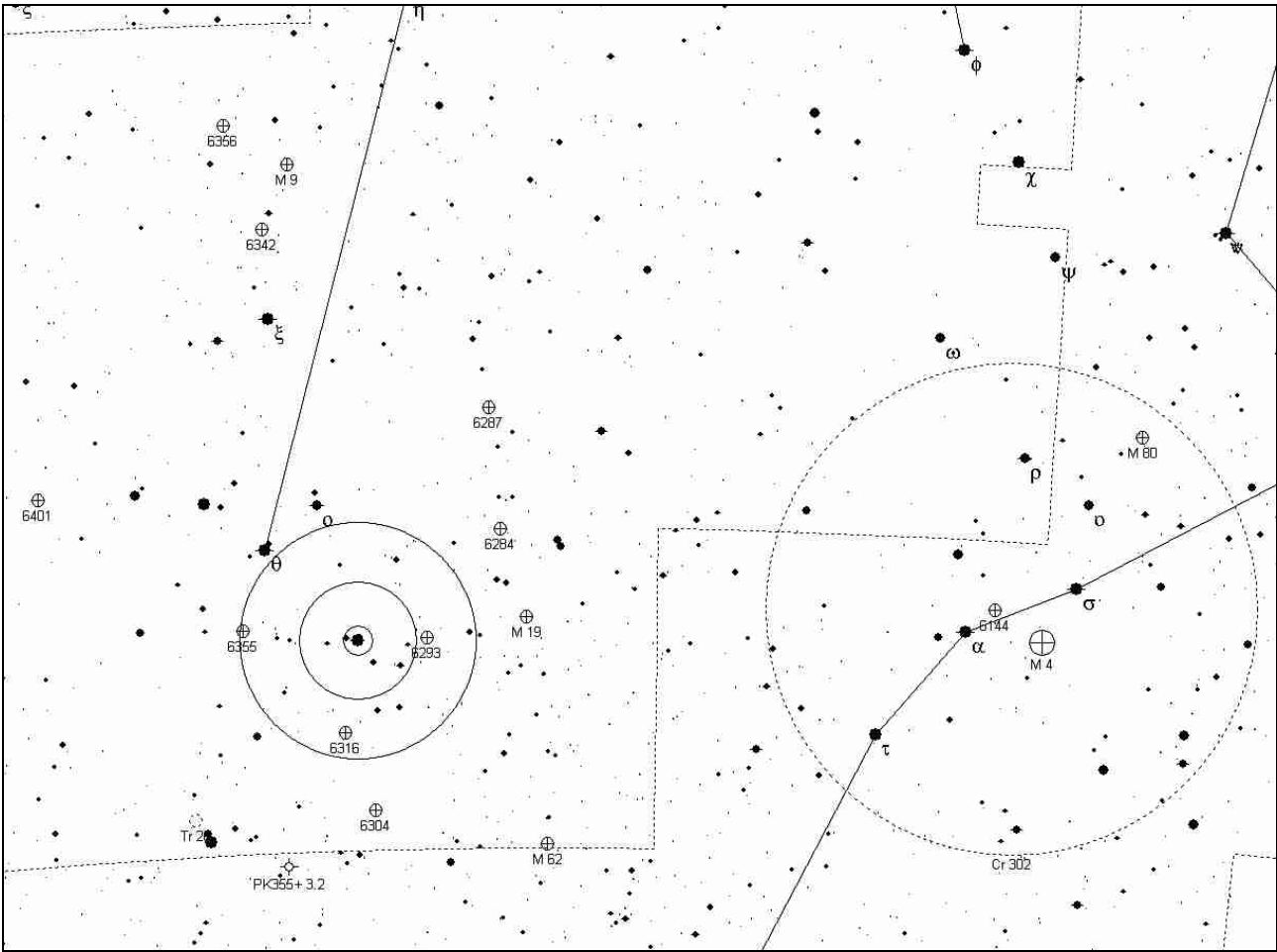


Notes:

36 Oph

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
17 15.3	-26 36	5 6 8	732" 208"	280 315 (1905)	10417

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

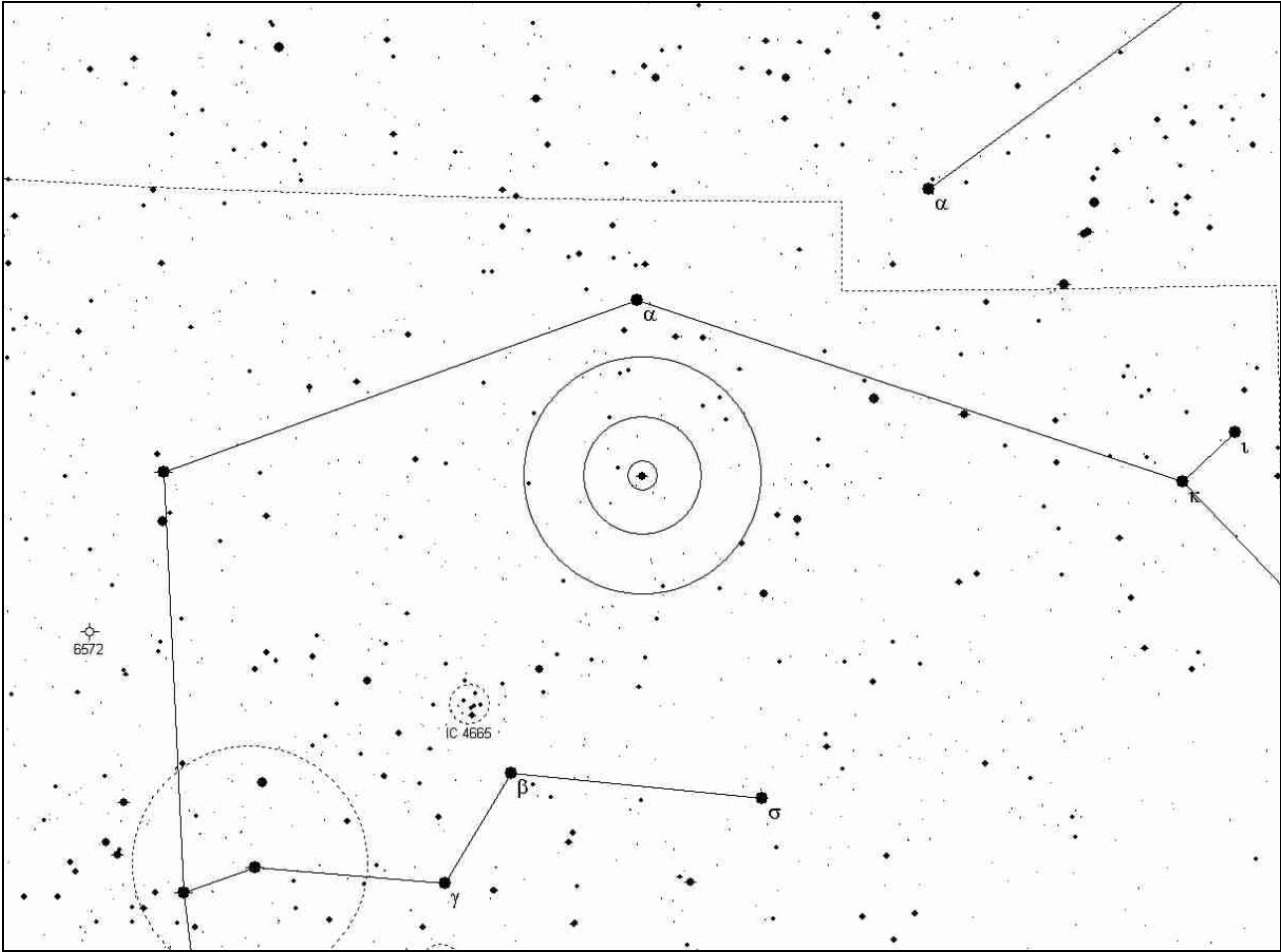


Notes:

53 Oph

R.A. (2000)	Dec (2000)	Mag	Sep	PA
17 34.6	+09 35	5.8 8.5	41"	191

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

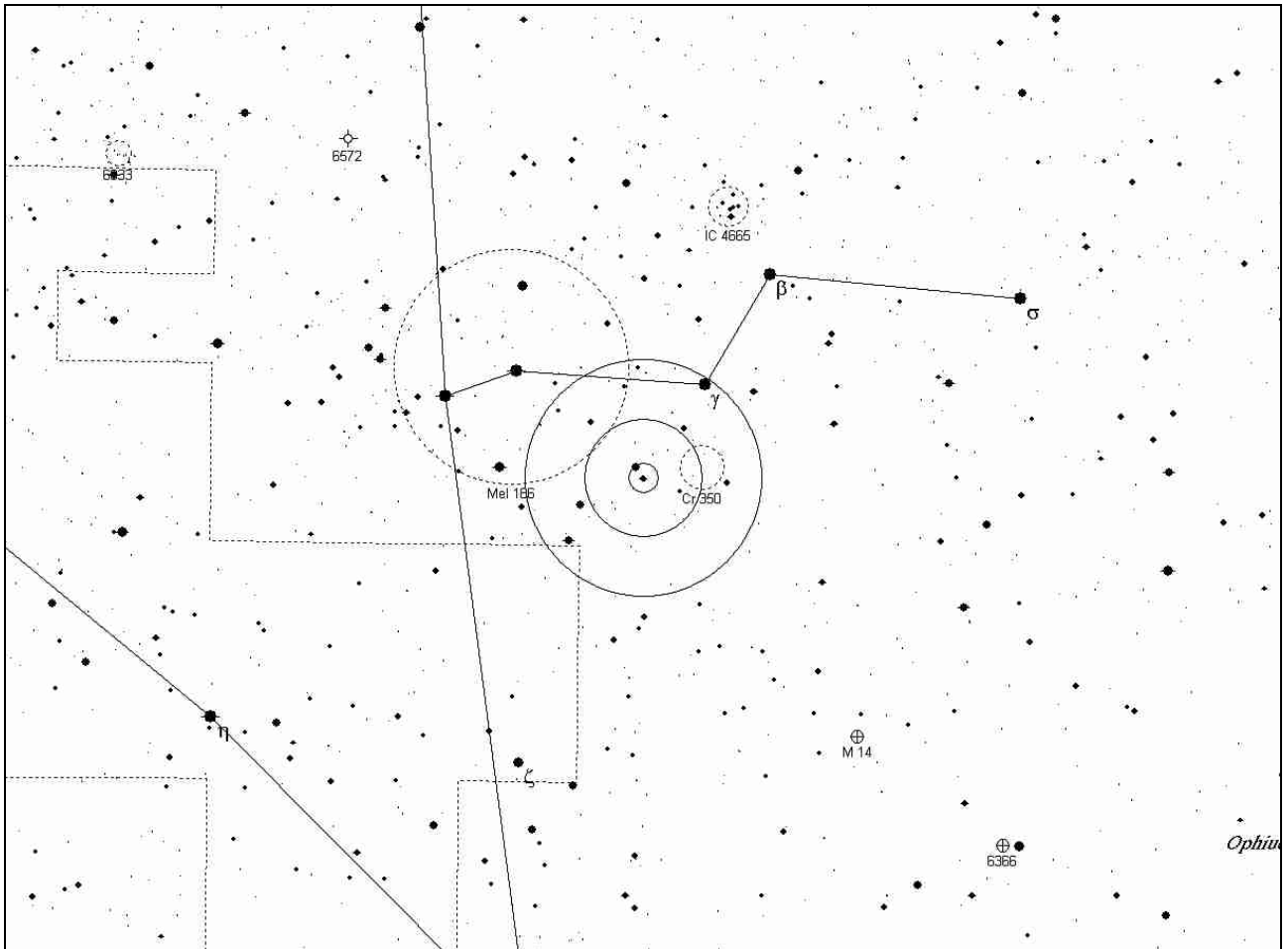


Notes:

S 694 (Oph)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
17 52.1	+01 07	6.9 7.1	82"	237

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

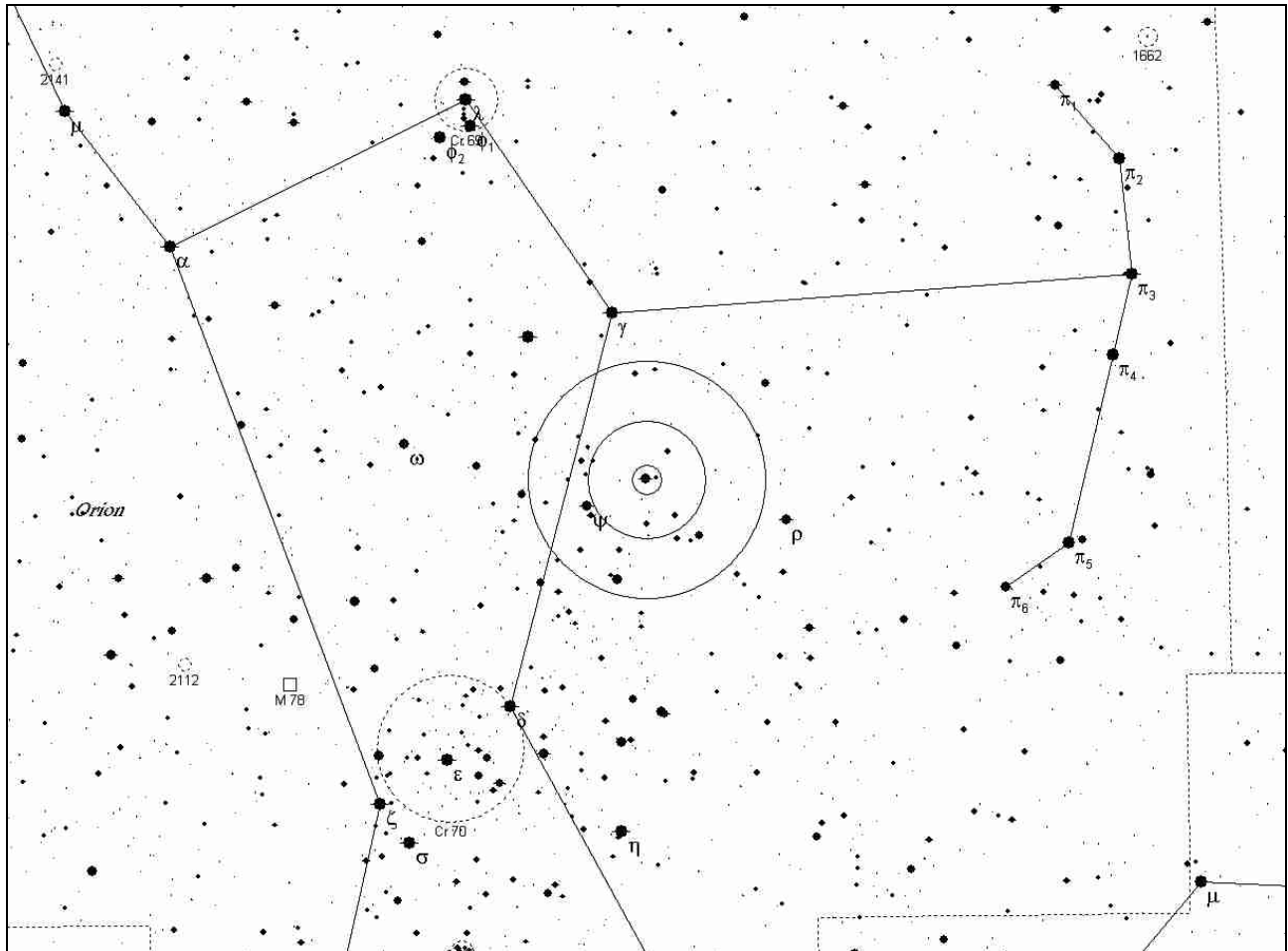


Notes:

23 Ori

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 22.8	+03 33	5.0 7.1	32"	28	3962

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			



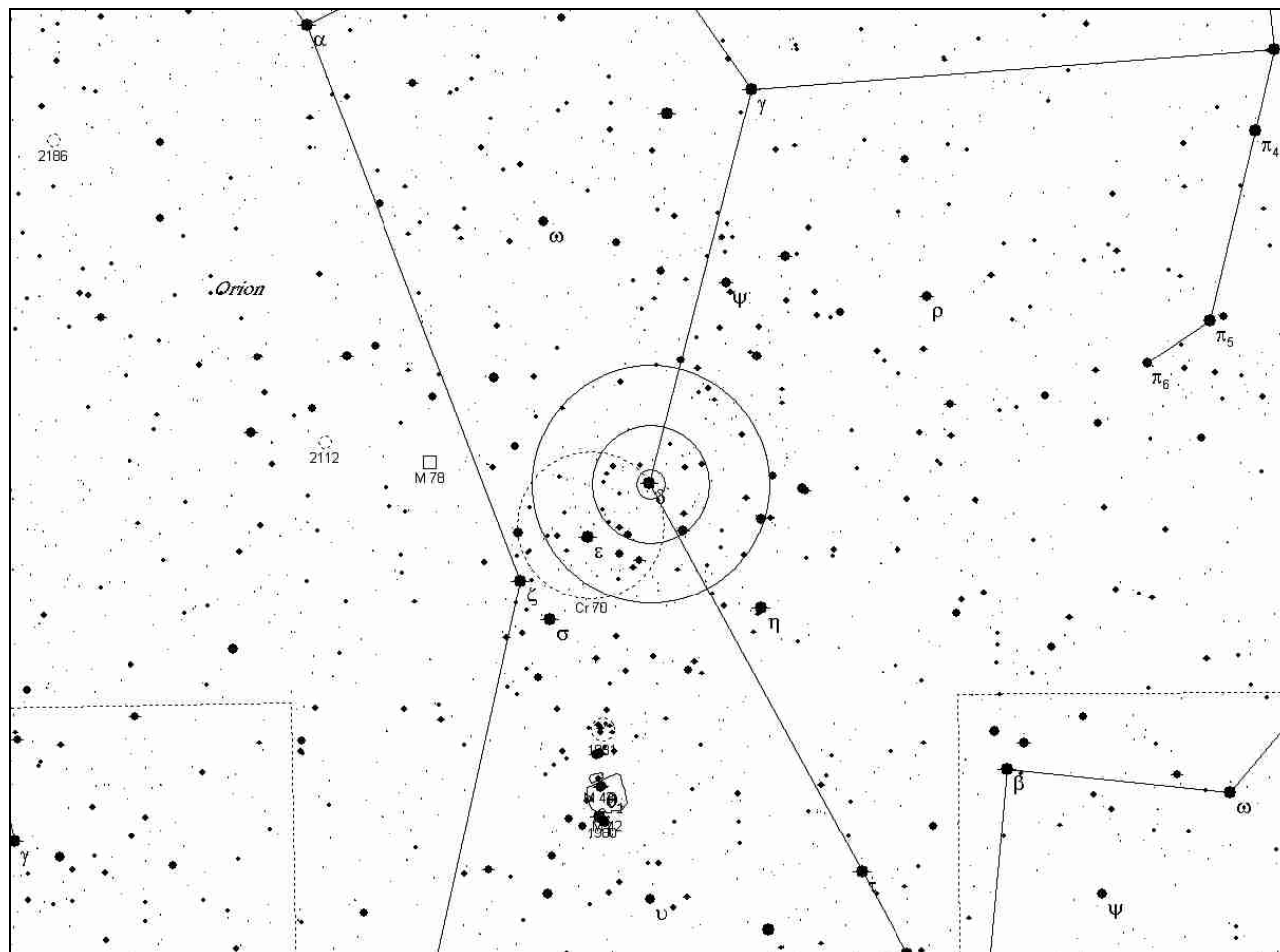
Notes:

[illegible]

Delta Ori

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 32.0	-00 18	2.2 6.3	53"	359	4134

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

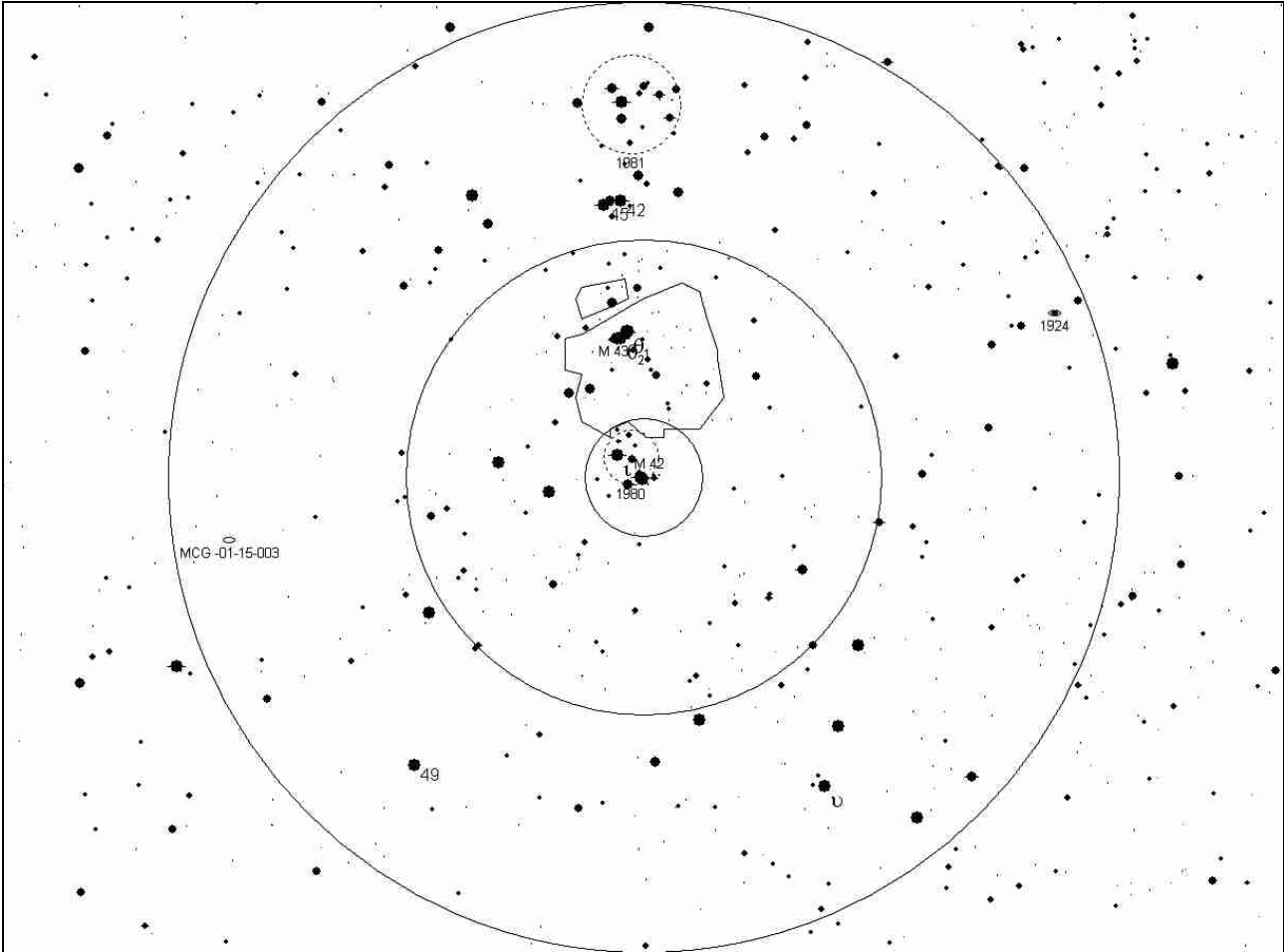


Notes:

Struve 747 (Ori)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 35.0	-06 00	4.8 5.7	36"	223	4182

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

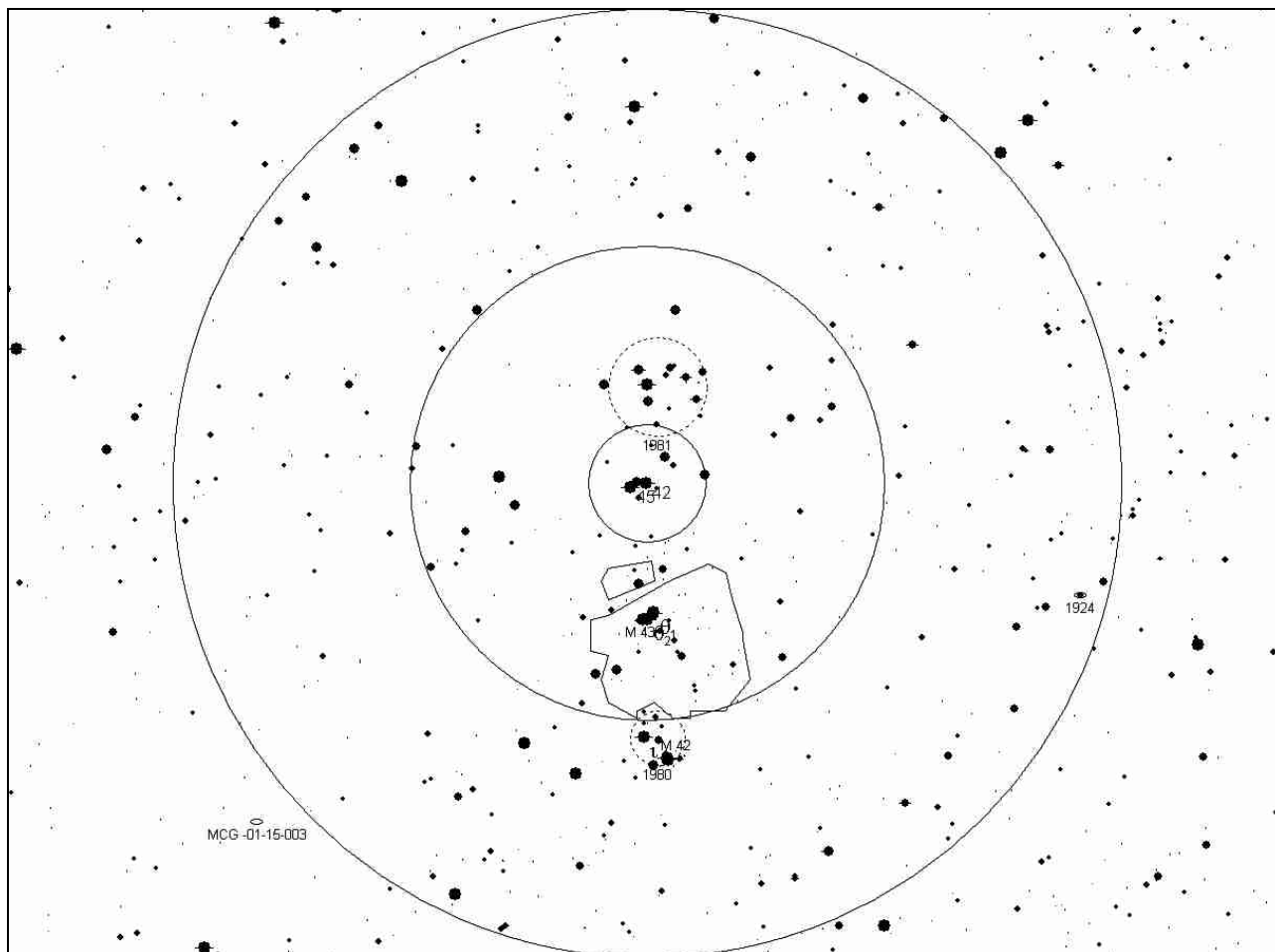


Notes:

42+45 Ori

R.A. (2000)	Dec (2000)	Mag	Sep
05 35.4	-04 50	4.7 5.3	6'

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

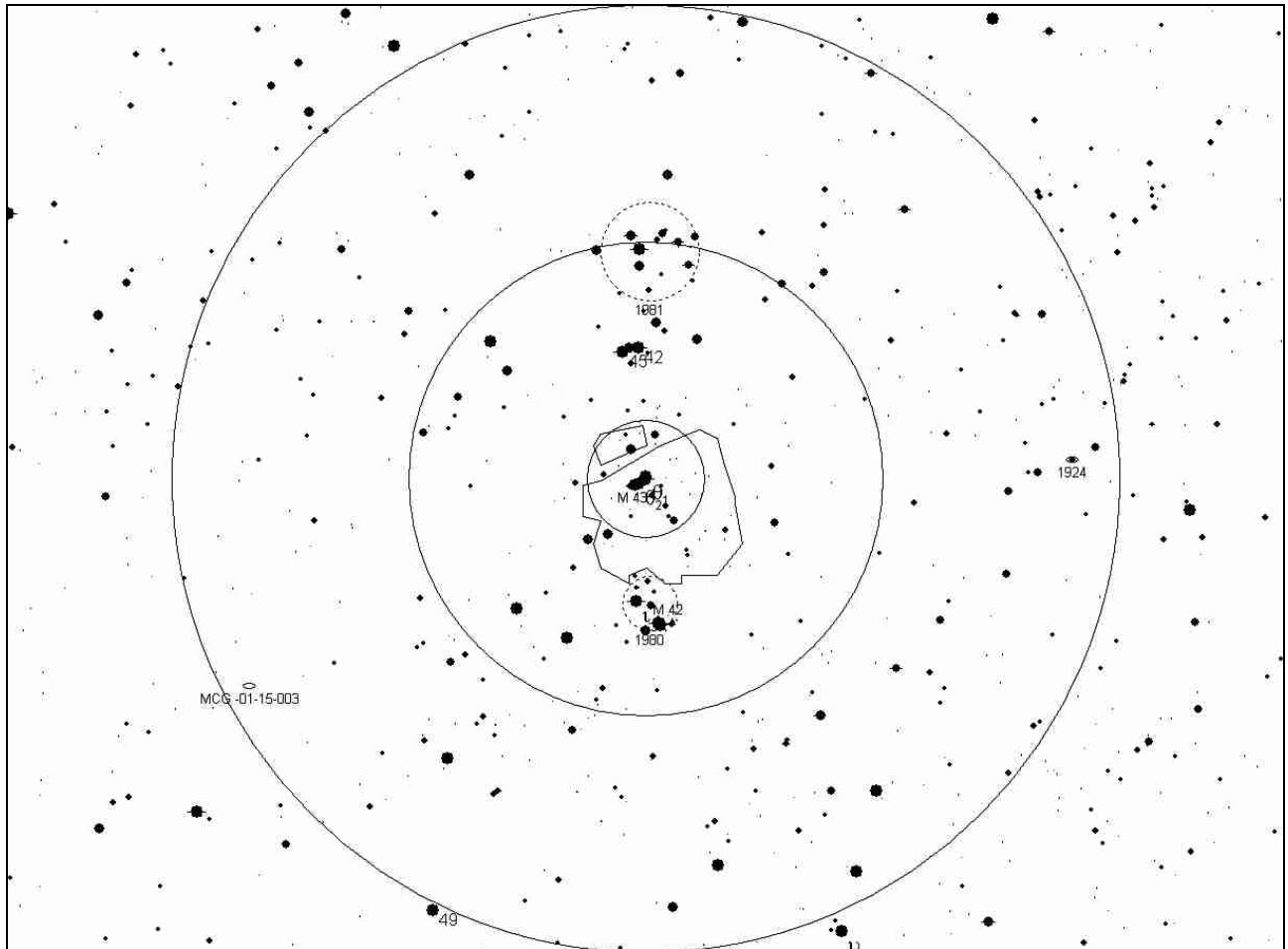


Notes:

Theta1+2 Ori

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
05 35.4	-05 25	4.9 5.0	135"	314	4188	Theta1=Trapezium

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

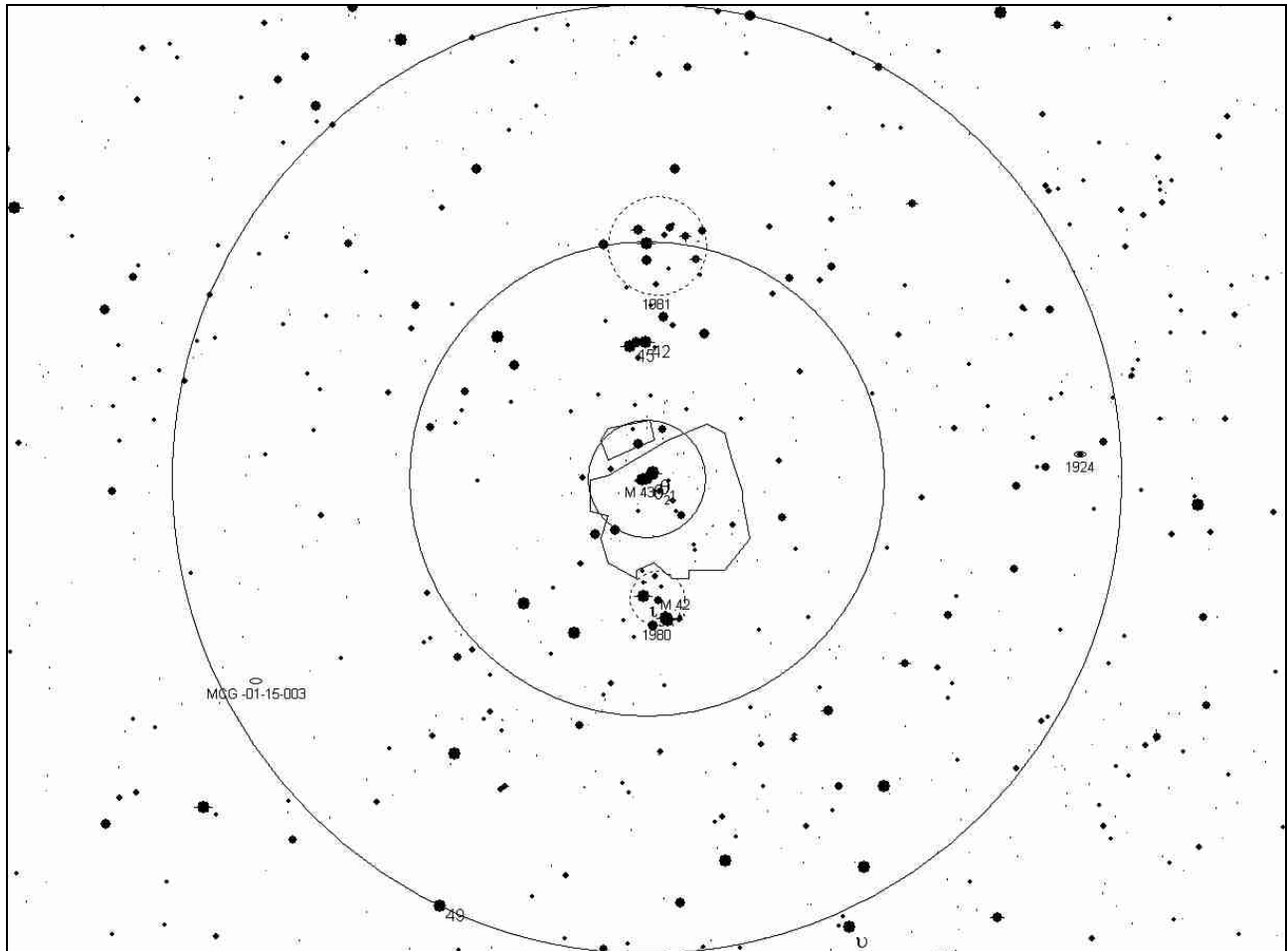


Notes:

Theta2 Ori

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 35.4	-05 25	5.2 6.5	52"	92 (1937)	4188

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

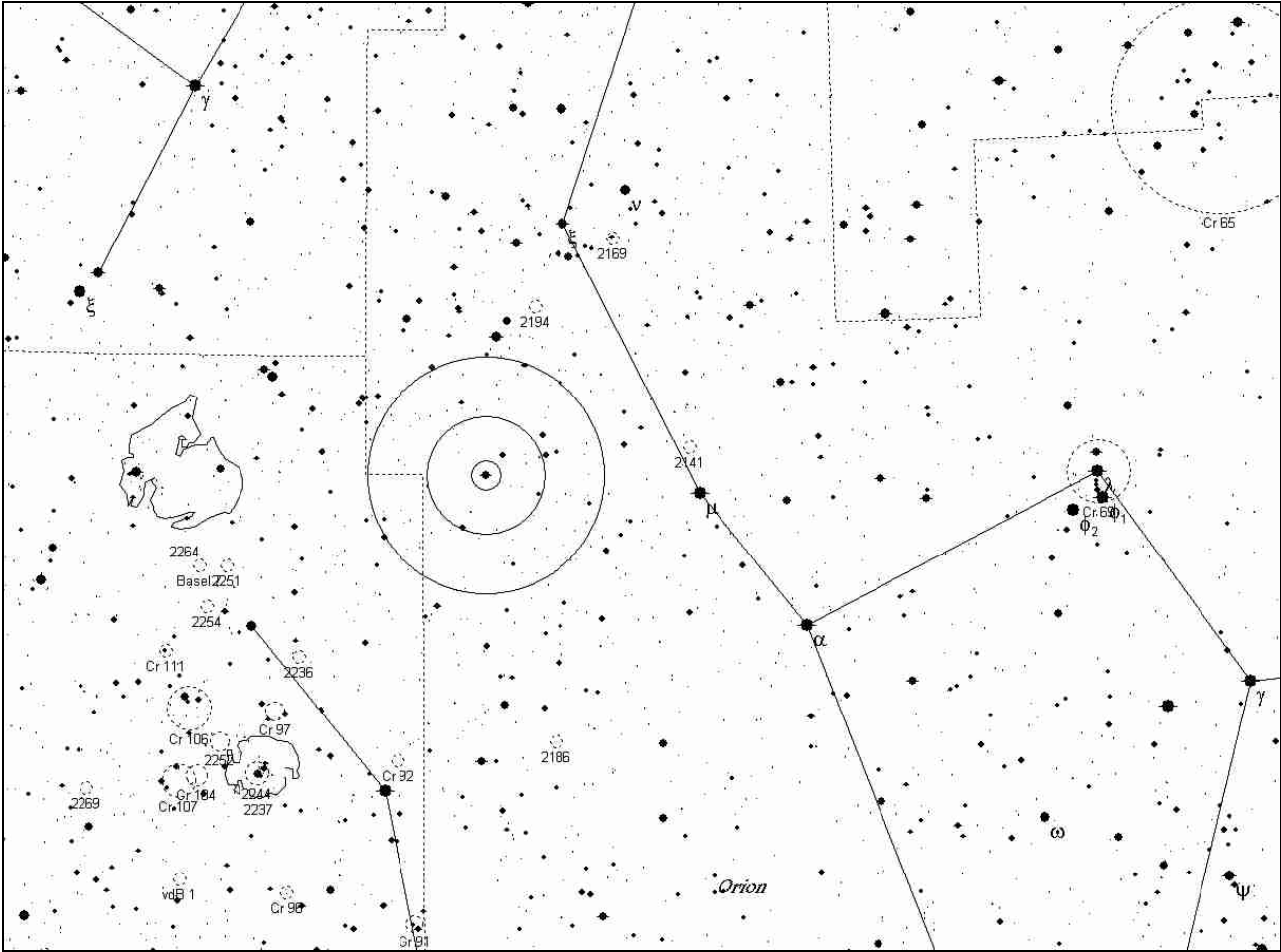


Notes:

75 Ori

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
06 17.1	+09 57	5.4 8.5	117"	159	4890

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

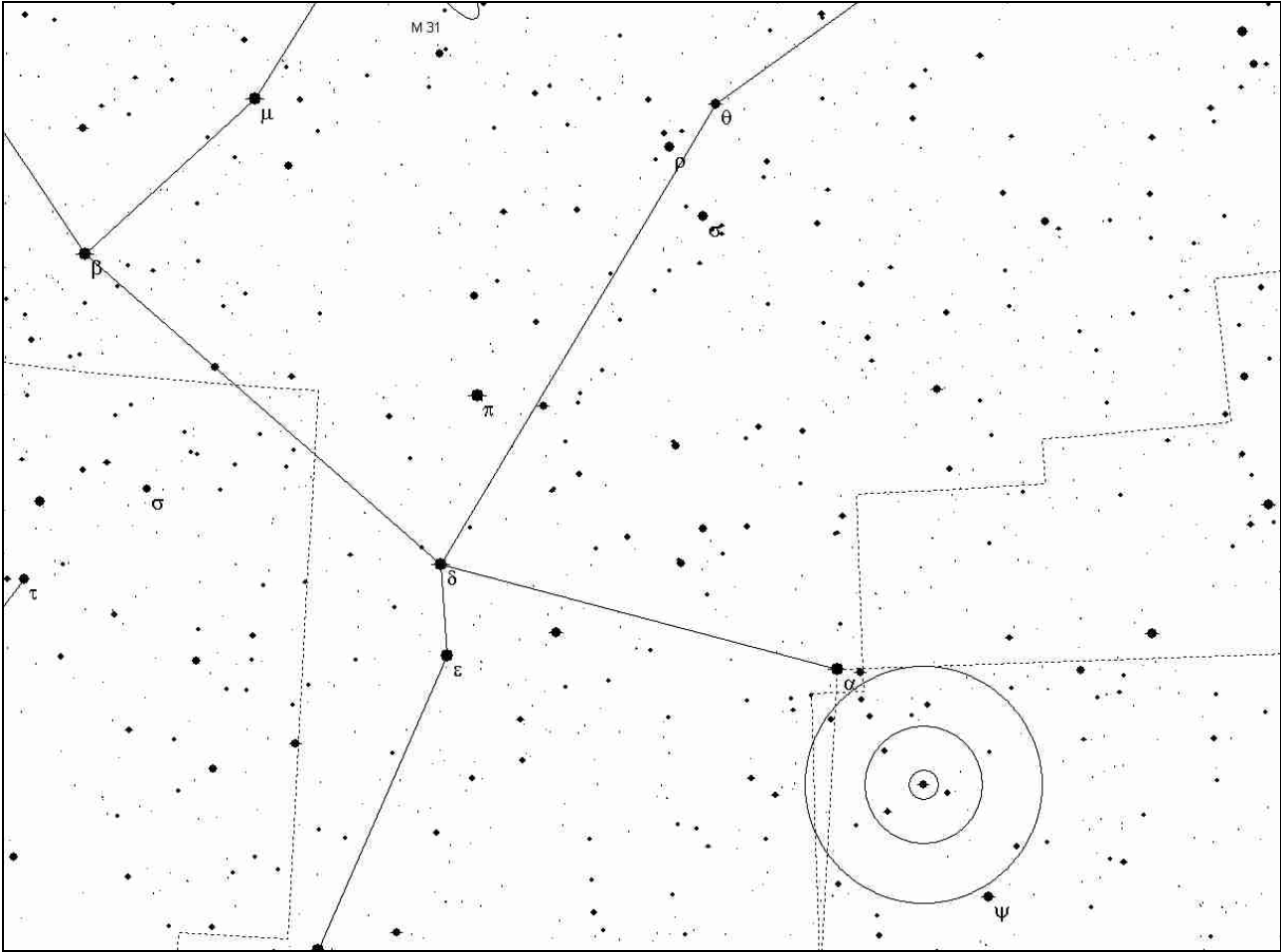


Notes:

85 Peg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
00 02.2	+27 05	5.8 8.6	76"	330 (1932)	17175

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

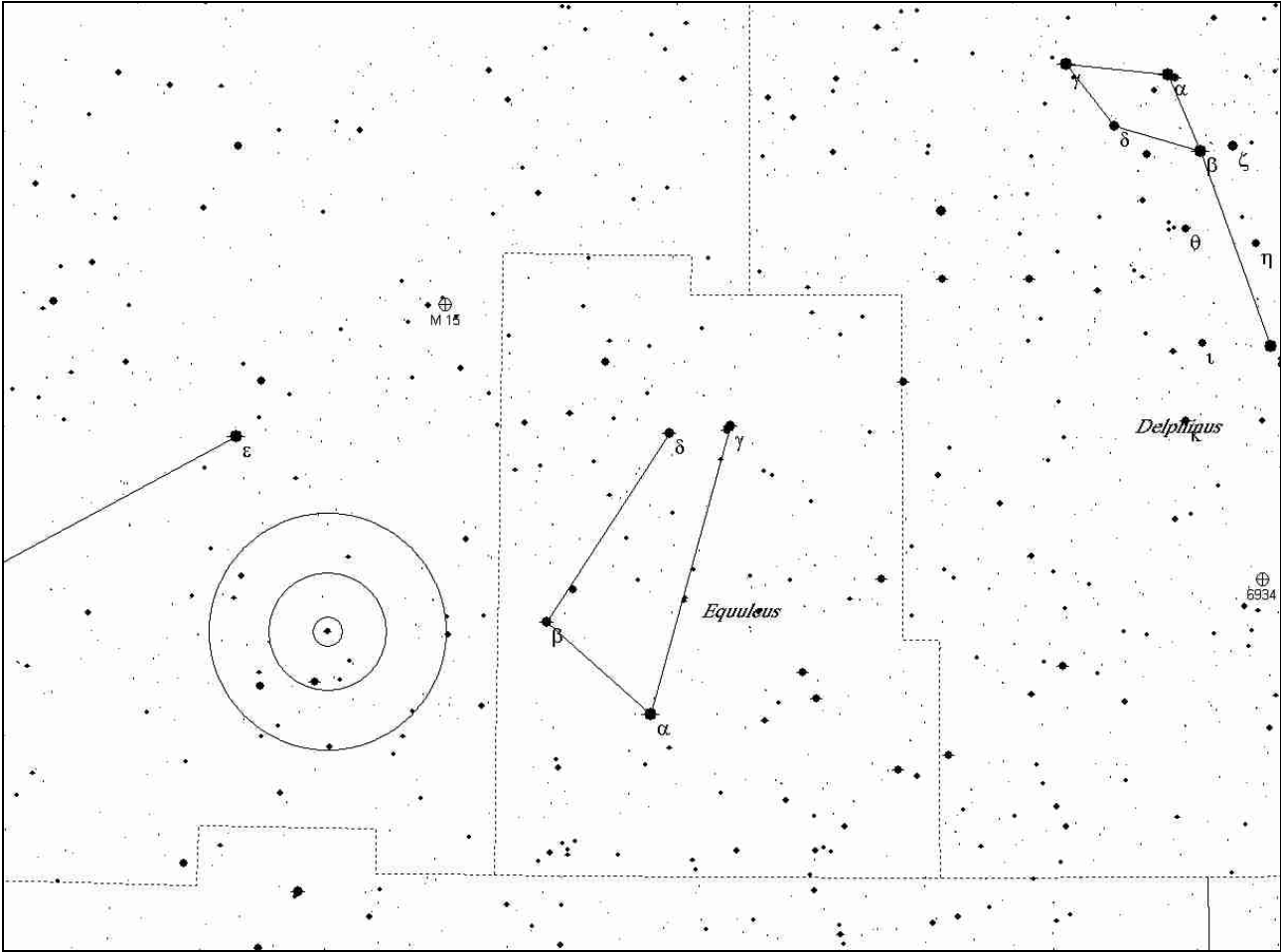


Notes:

3 Peg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
21 37.7	+06 37	6.0 8.3	39"	349 (1934)	15147

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

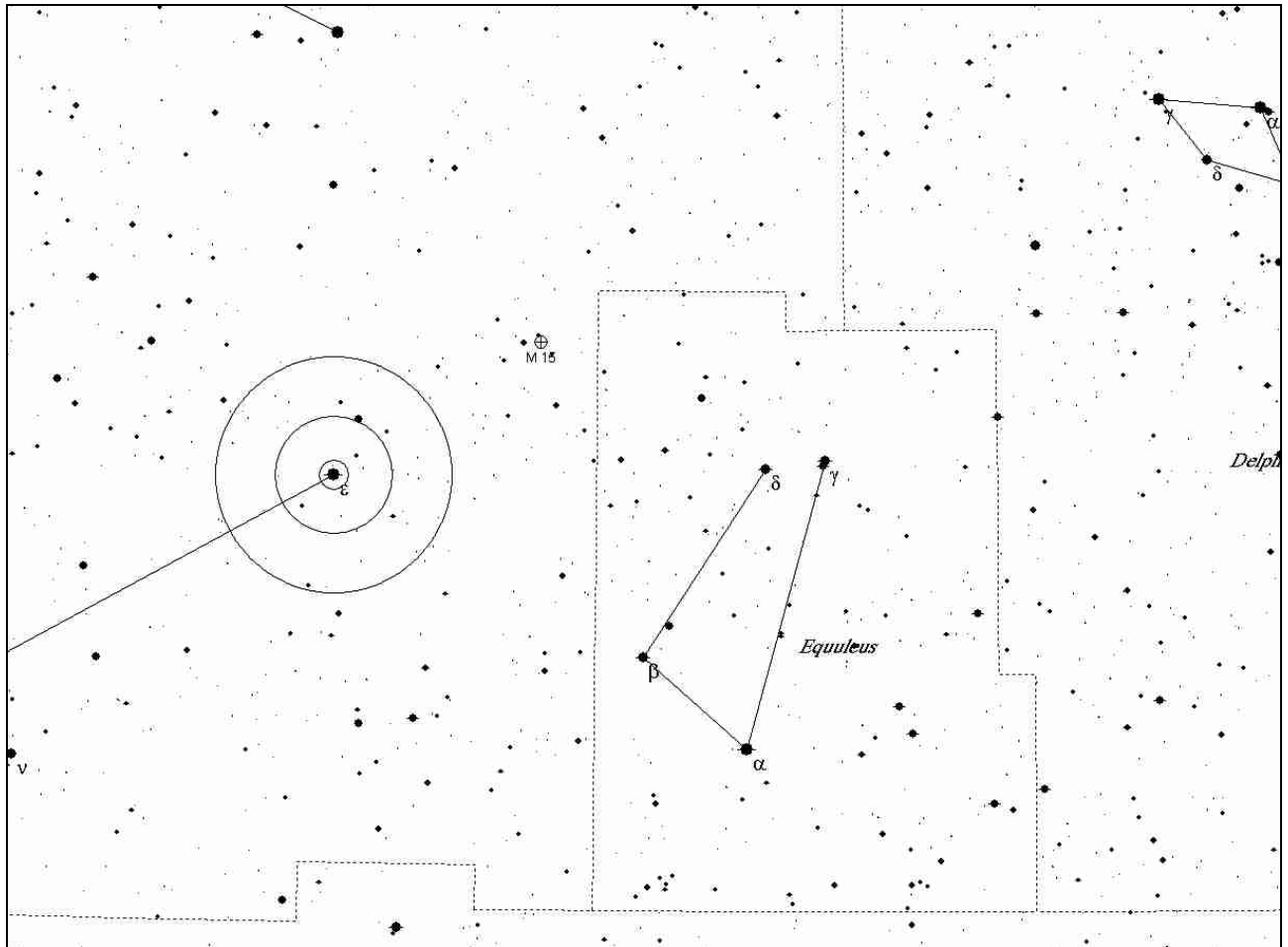


Notes:

Epsilon Peg

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
21 44.2	+09 52	2.4 8.4	143"	320 (1913)	15268	Enif

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

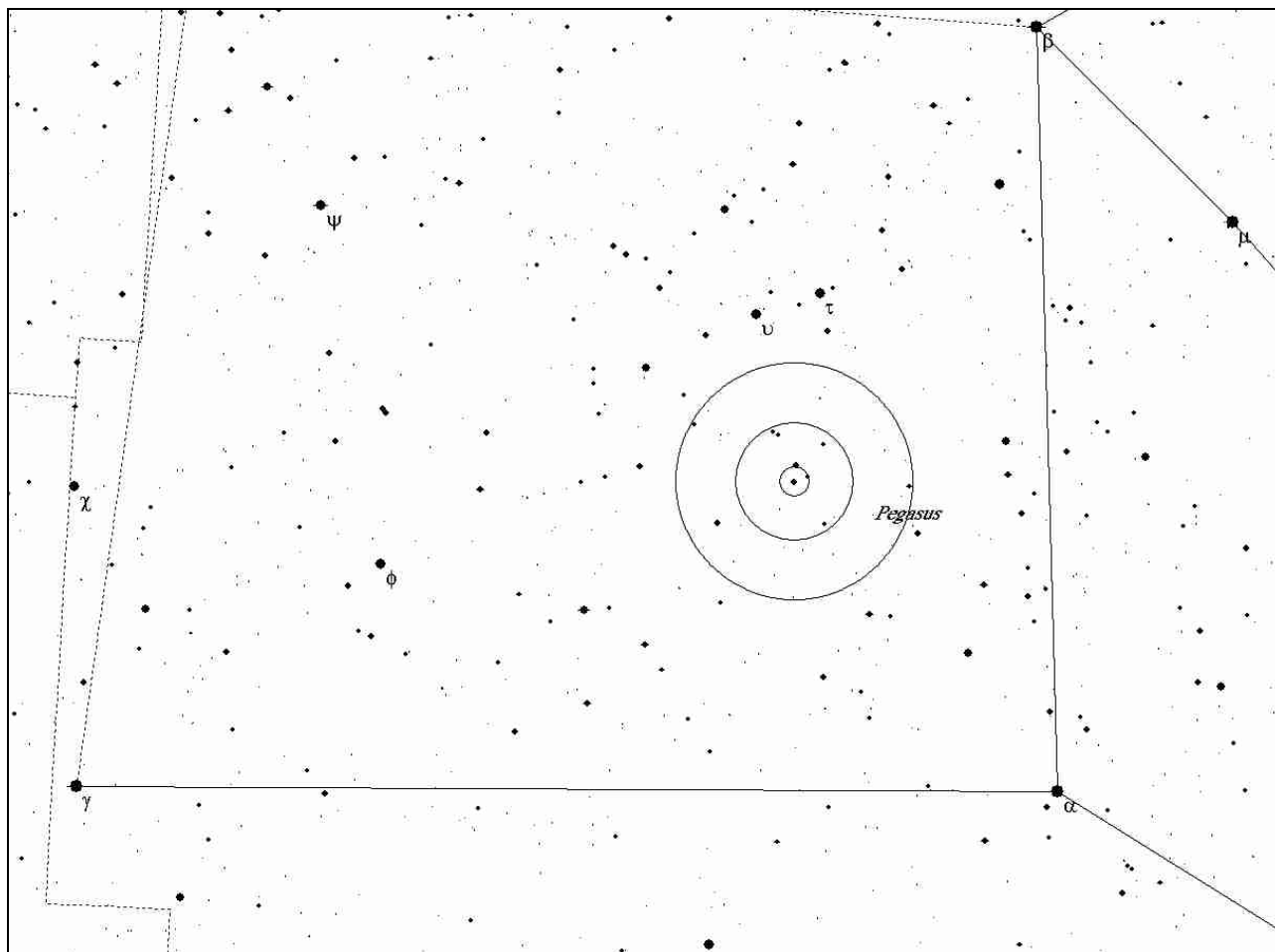


Notes:

Struve 3007 (Peg)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
23 22.8	+20 34	6.6 8.9	88"	311 (1956)	16713

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

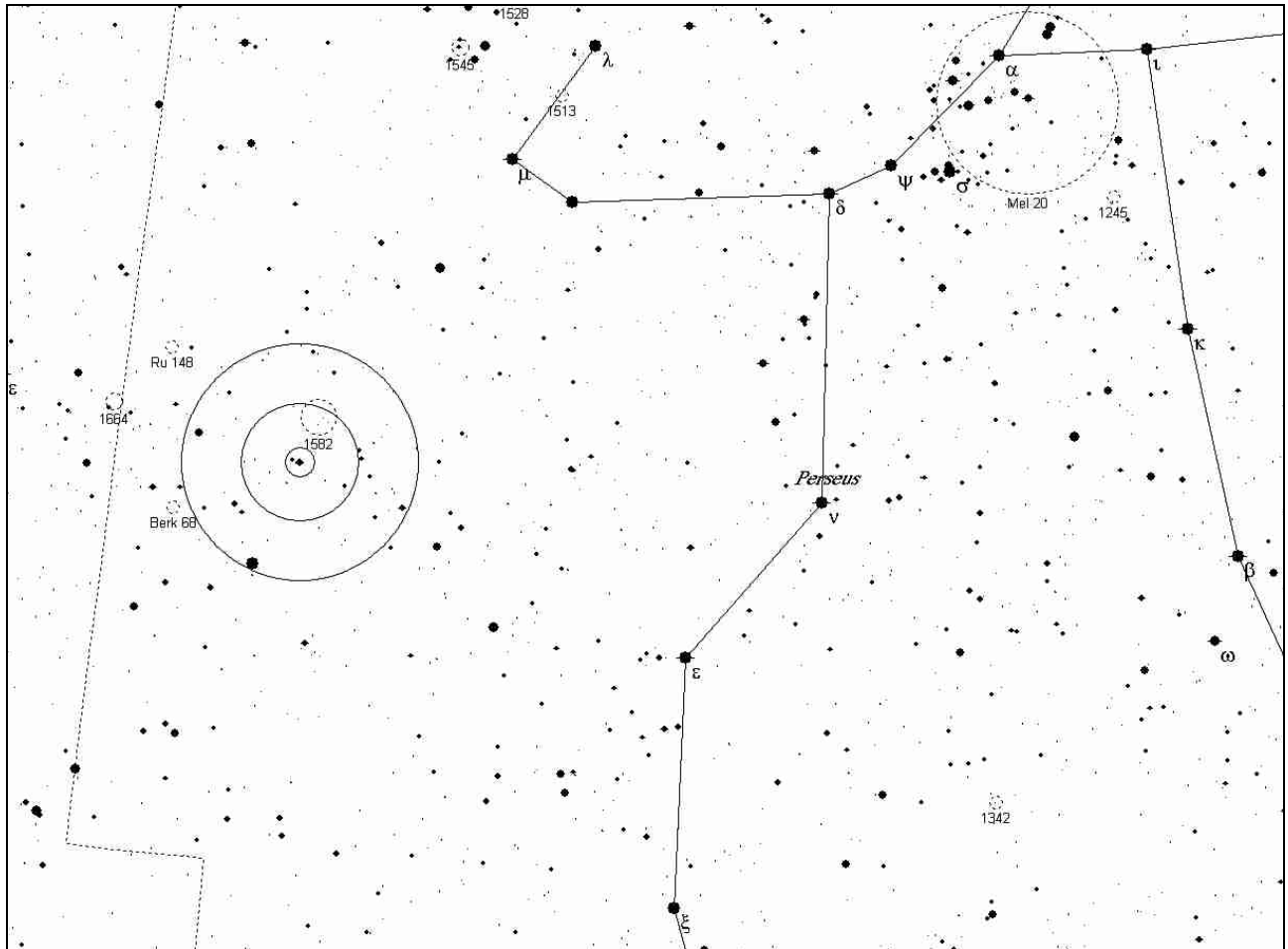


Notes:

57 Per

R.A. (2000)	Dec (2000)	Mag	Sep	PA
04 33.4	+43 04	6.1 6.8	116"	198 (1913)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

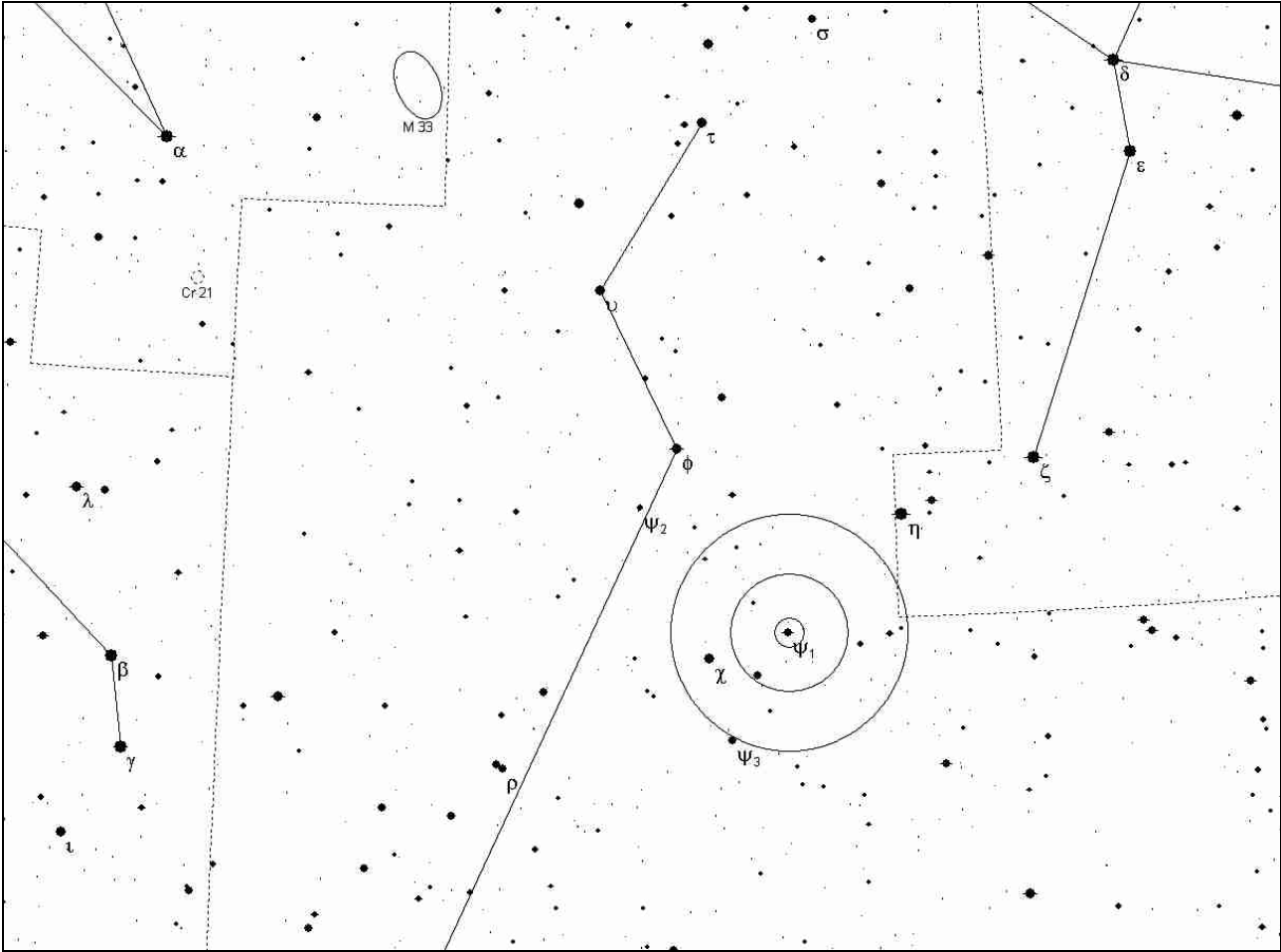


Notes:

Psi1 Psc

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
01 05.6	+21 28	5.6 5.8	30"	159 (1832)	899

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

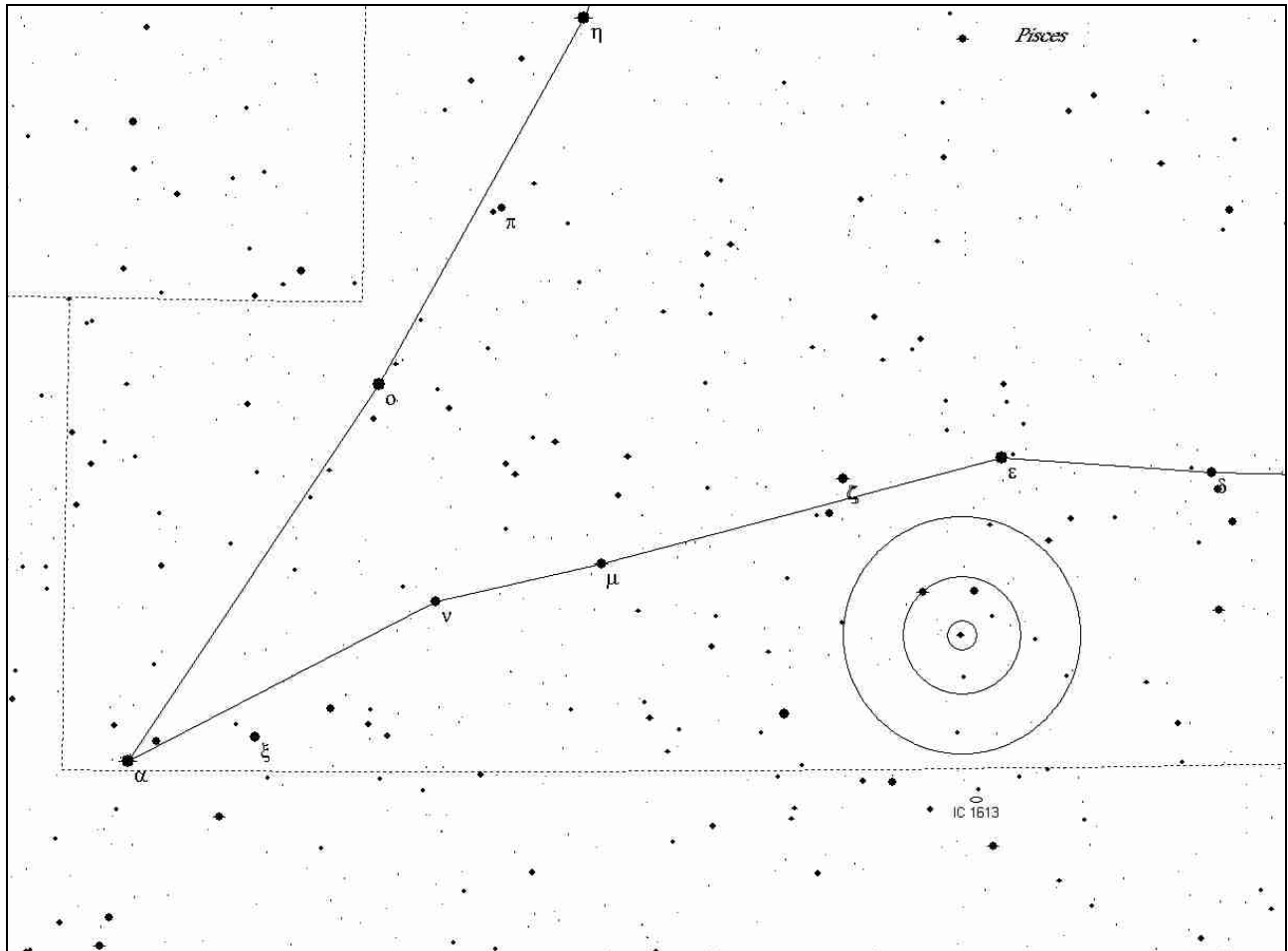


Notes:

77 Psc

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
01 05.8	+04 55	6.8 7.6	33"	83 (1833)	903

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

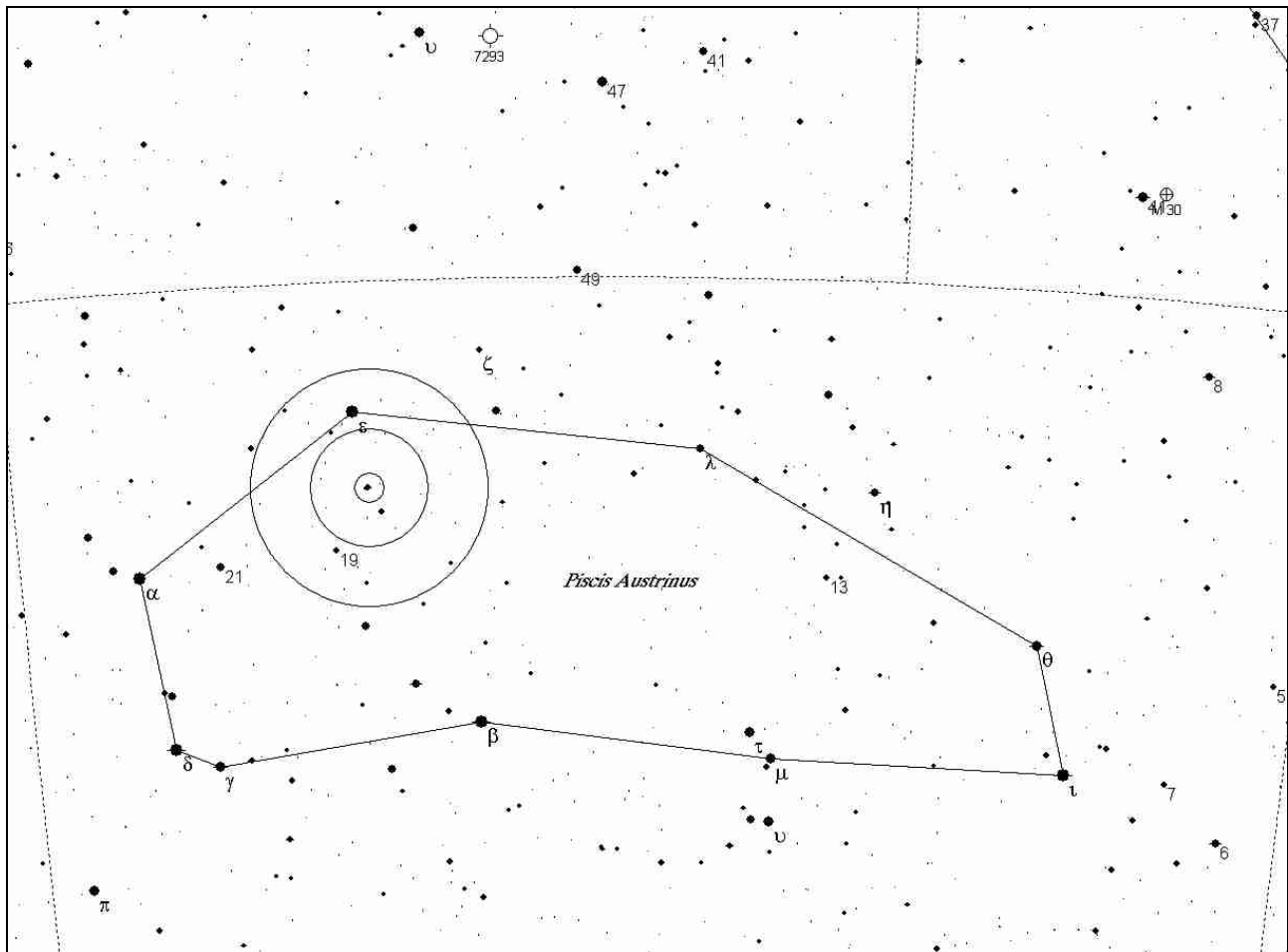


Notes:

H VI 119 (PsA)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
22 39.7	-28 20	6.3 7.3	87"	160 (1951)	16149

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

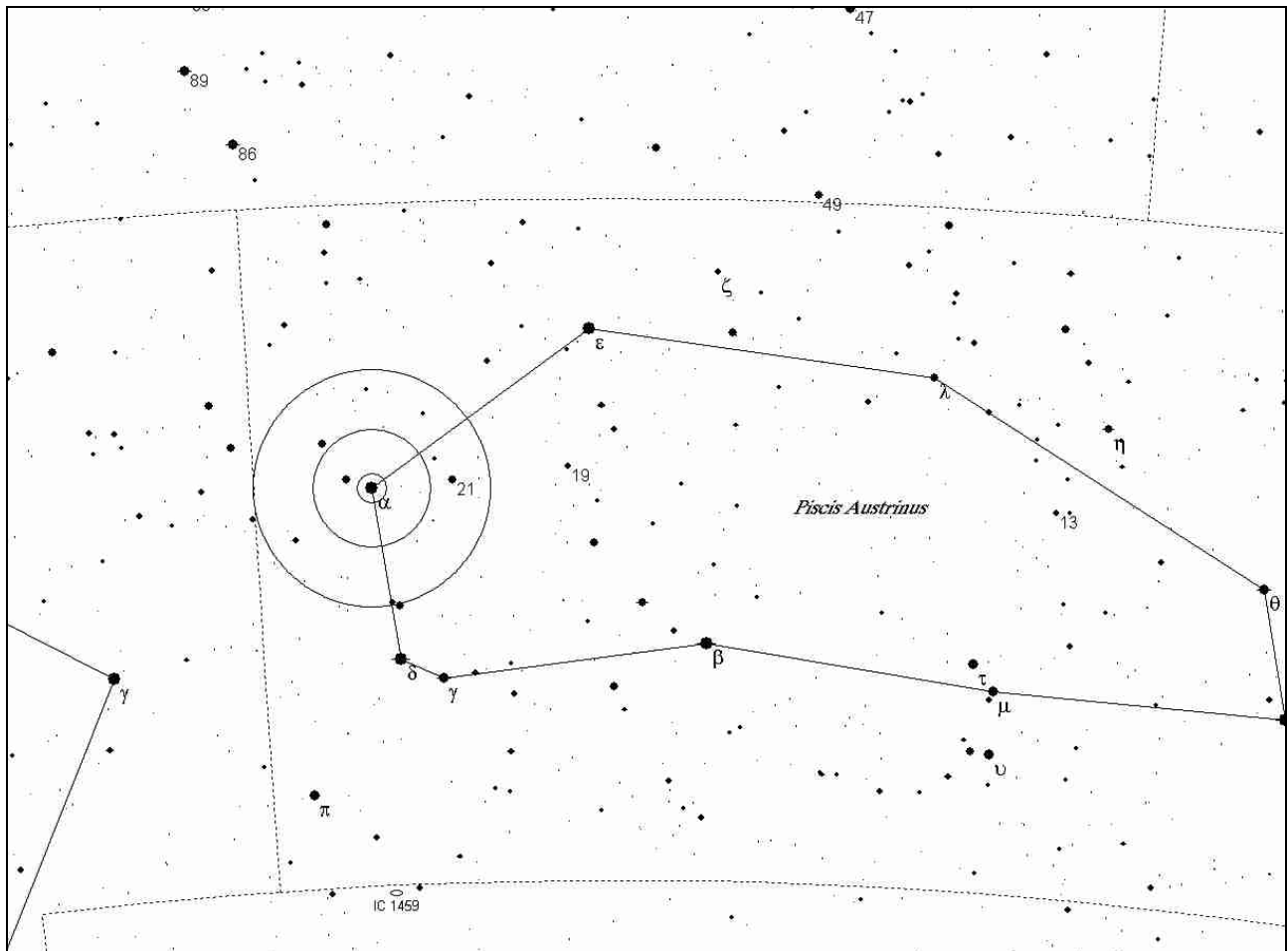


Notes:

Alpha PsA

R.A. (2000)	Dec (2000)	Mag	Sep	Notes
22 57.6	-29 37	1.2 6.5	7200"	Fomalhaut

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

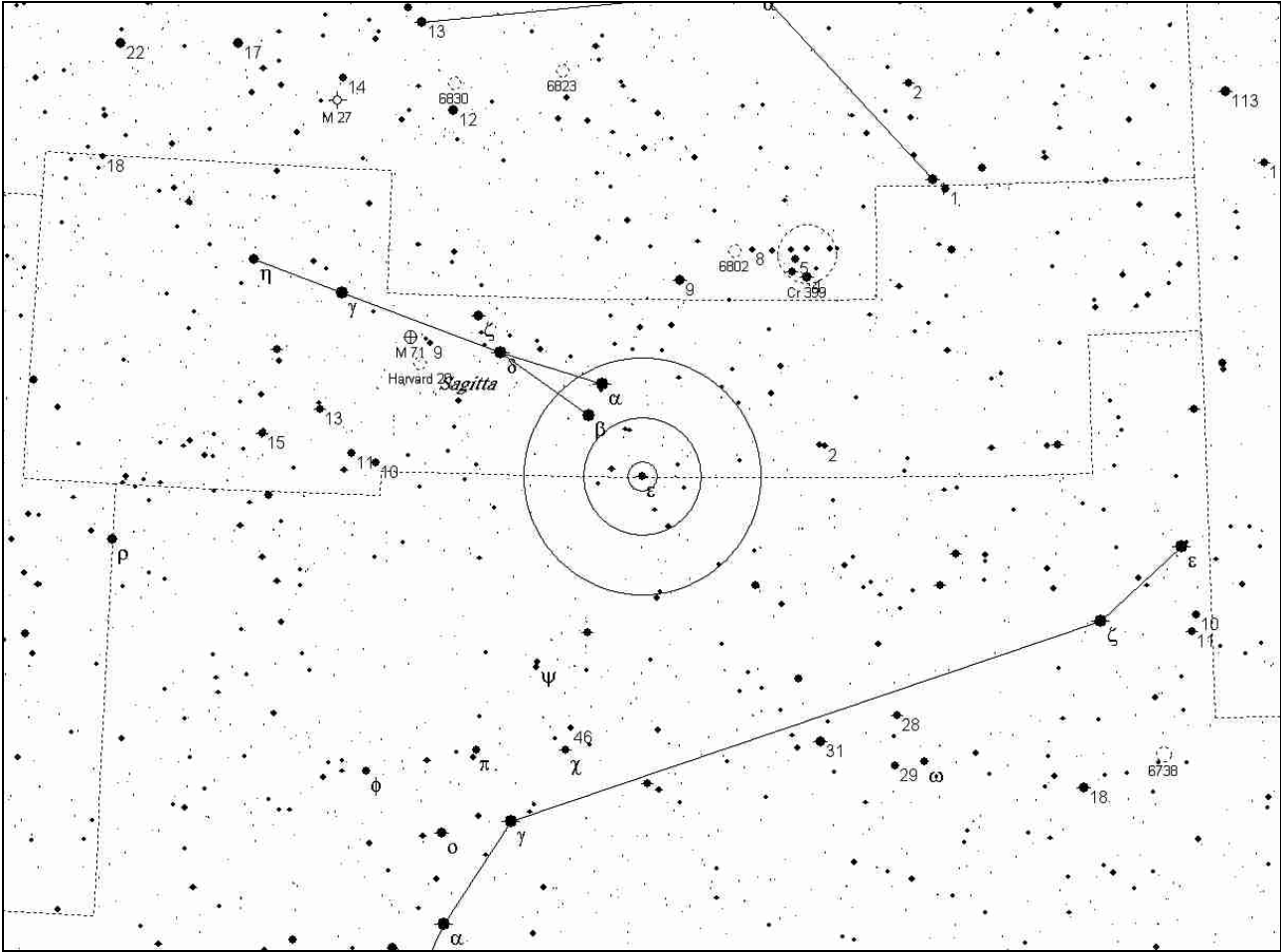


Notes:

Epsilon Sge

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
19 37.3	+16 28	5.7 8.0	89"	81 (1949)	12693

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

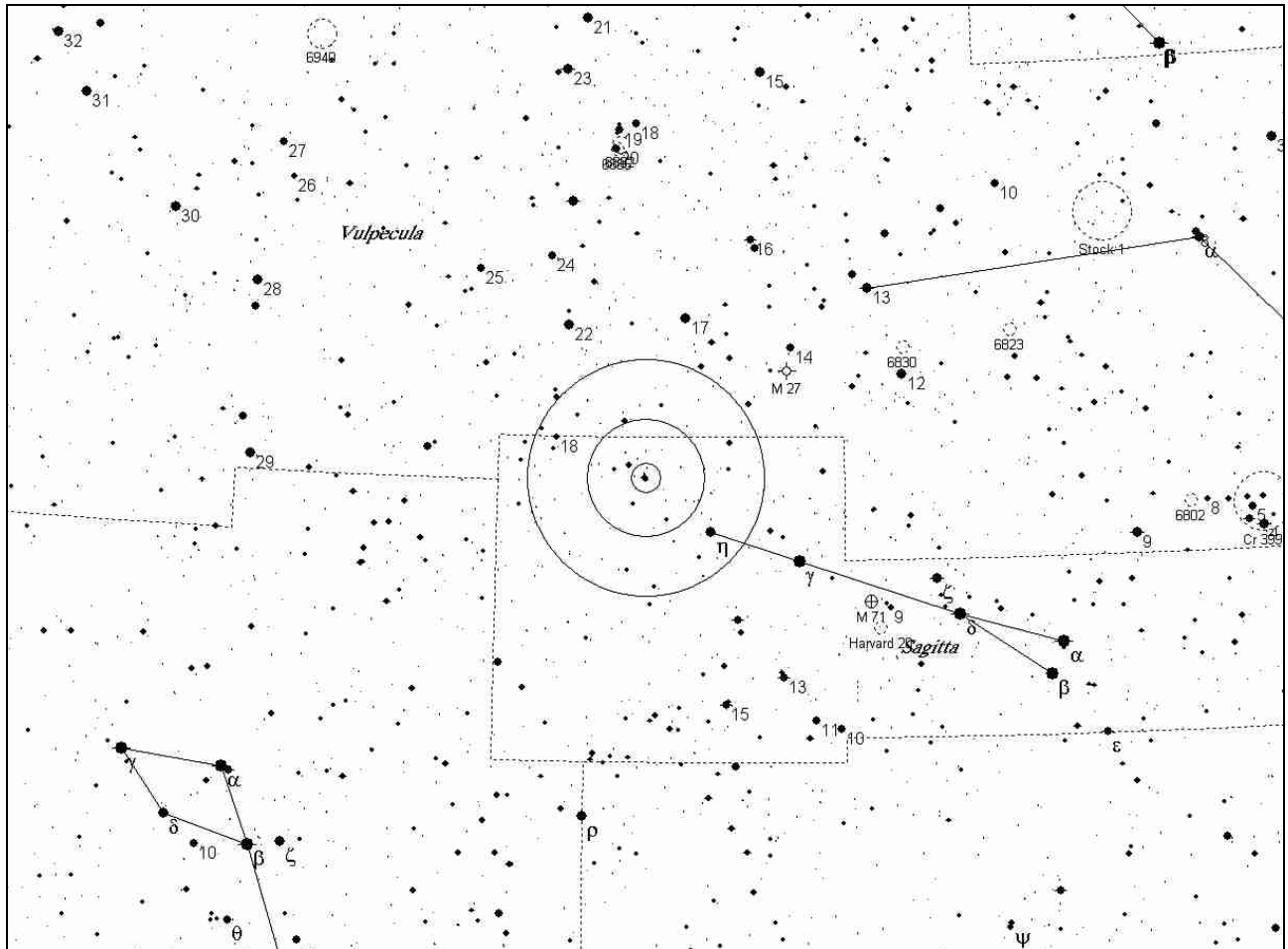


Notes:

Theta Sge

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
20 09.9	+20 55	6.5 7.4	84"	223 (1949)	13442	Optical

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

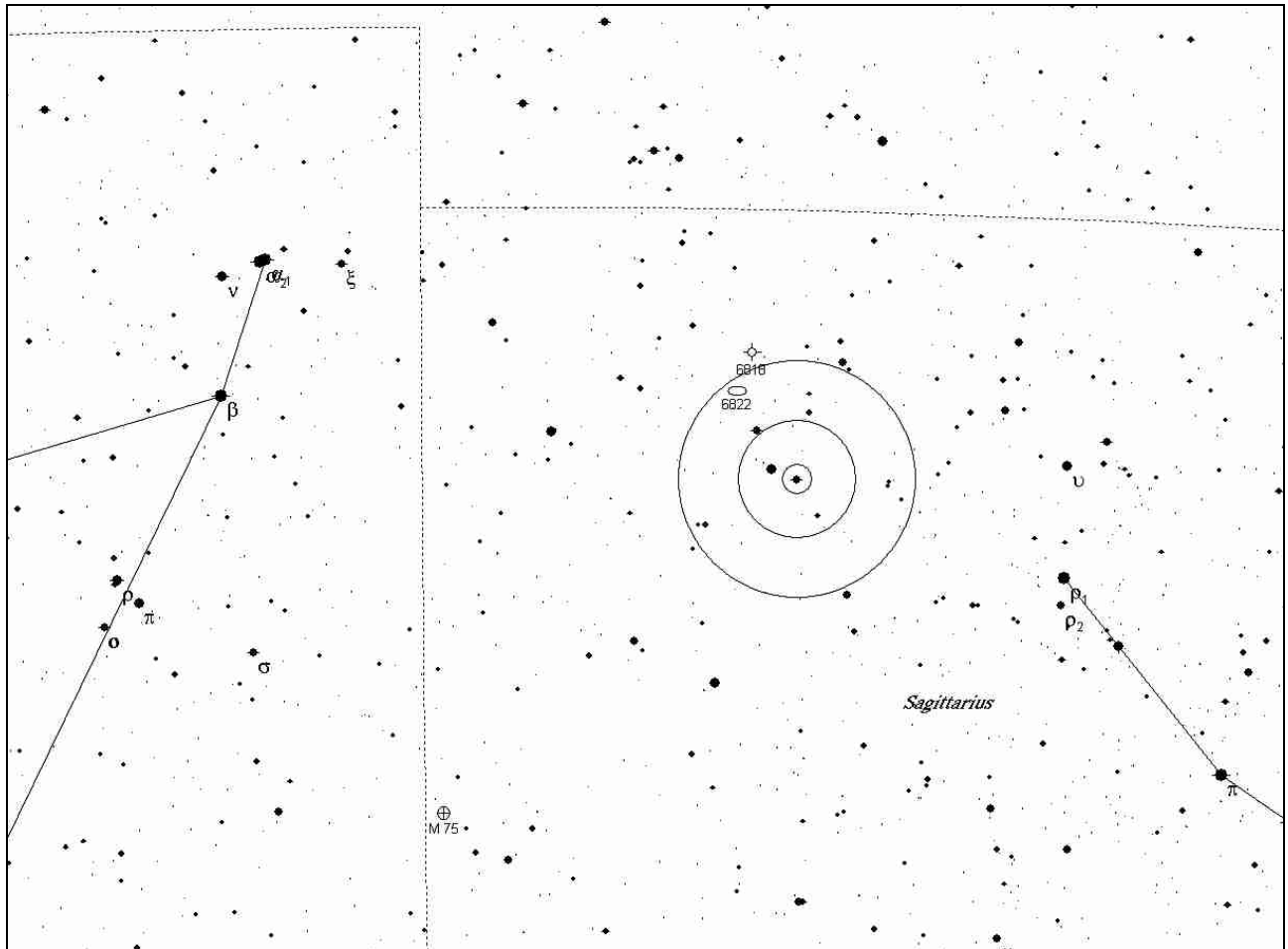


Notes:

54 Sgr

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
19 40.7	-16 18	5.4 8.9	46"	42 (1932)	12767

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

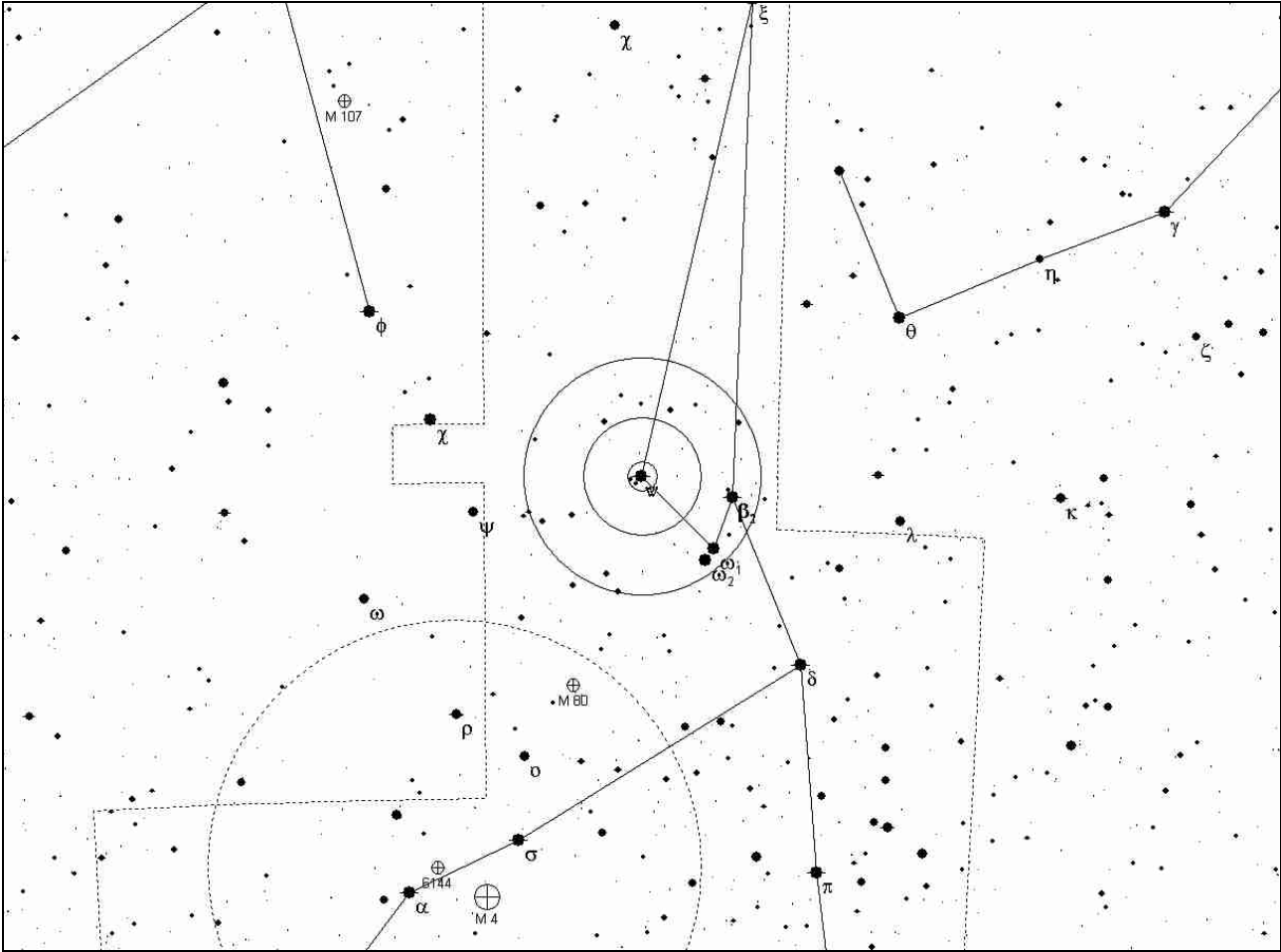


Notes:

Nu Sco

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
16 12.0	-19 28	4.3 6.4	41"	337 (1955)	9951

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

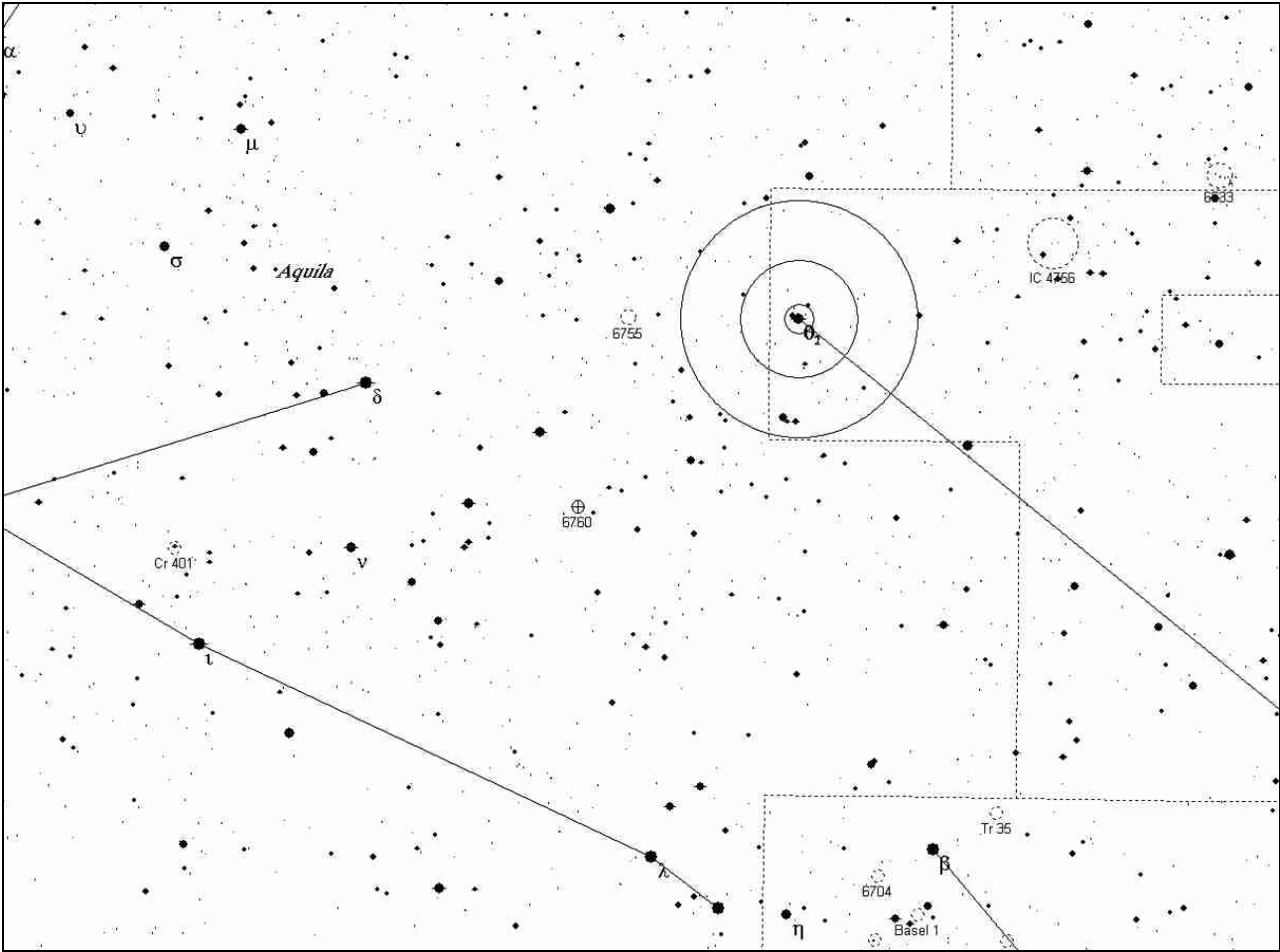


Notes:

Theta Ser

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
18 56.2	+04 12	4 5 8	22" 414"	104 (1973) 56 (1927)	11853

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

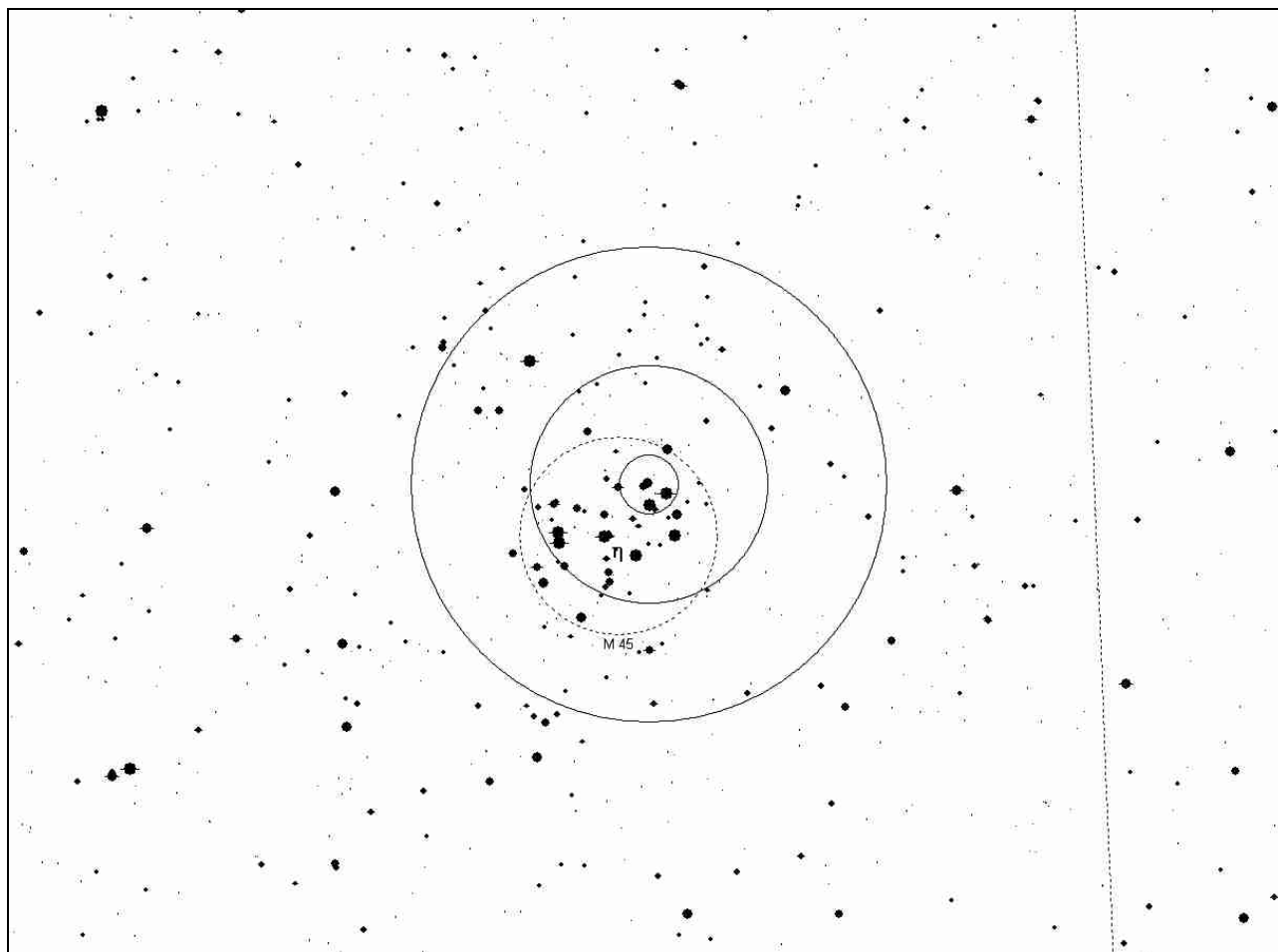


Notes:

21+ 22 Tau

R.A. (2000)	Dec (2000)	Mag	Sep	Notes
03 46.1	+24 32	5.6 6.4	168"	Asterope; in M45

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

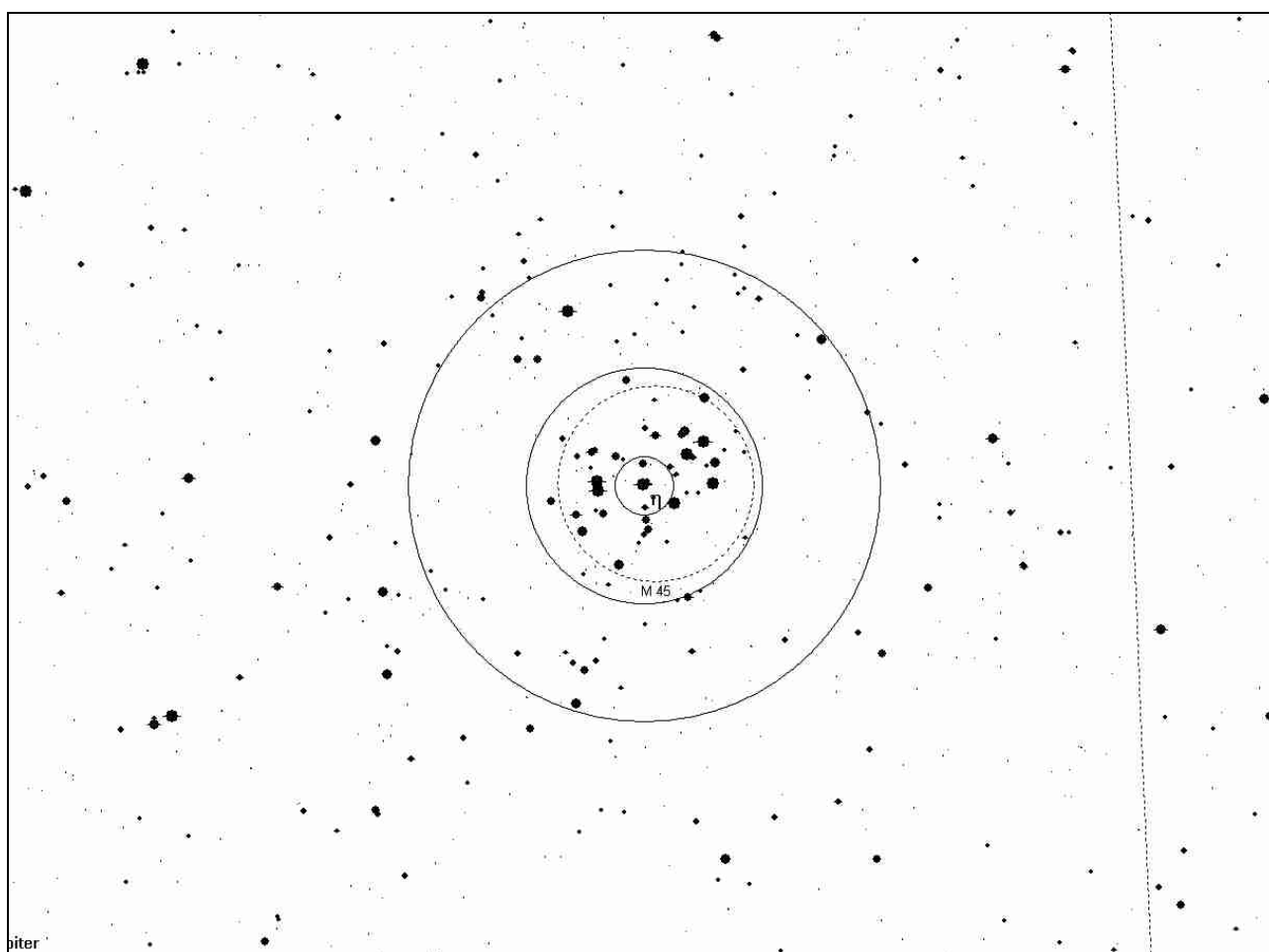


Notes:

Eta Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA	Notes
03 47.5	+24 06	3 8 8 8	117" 181" 191"	289 312 295 (1903)	Alcyone

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

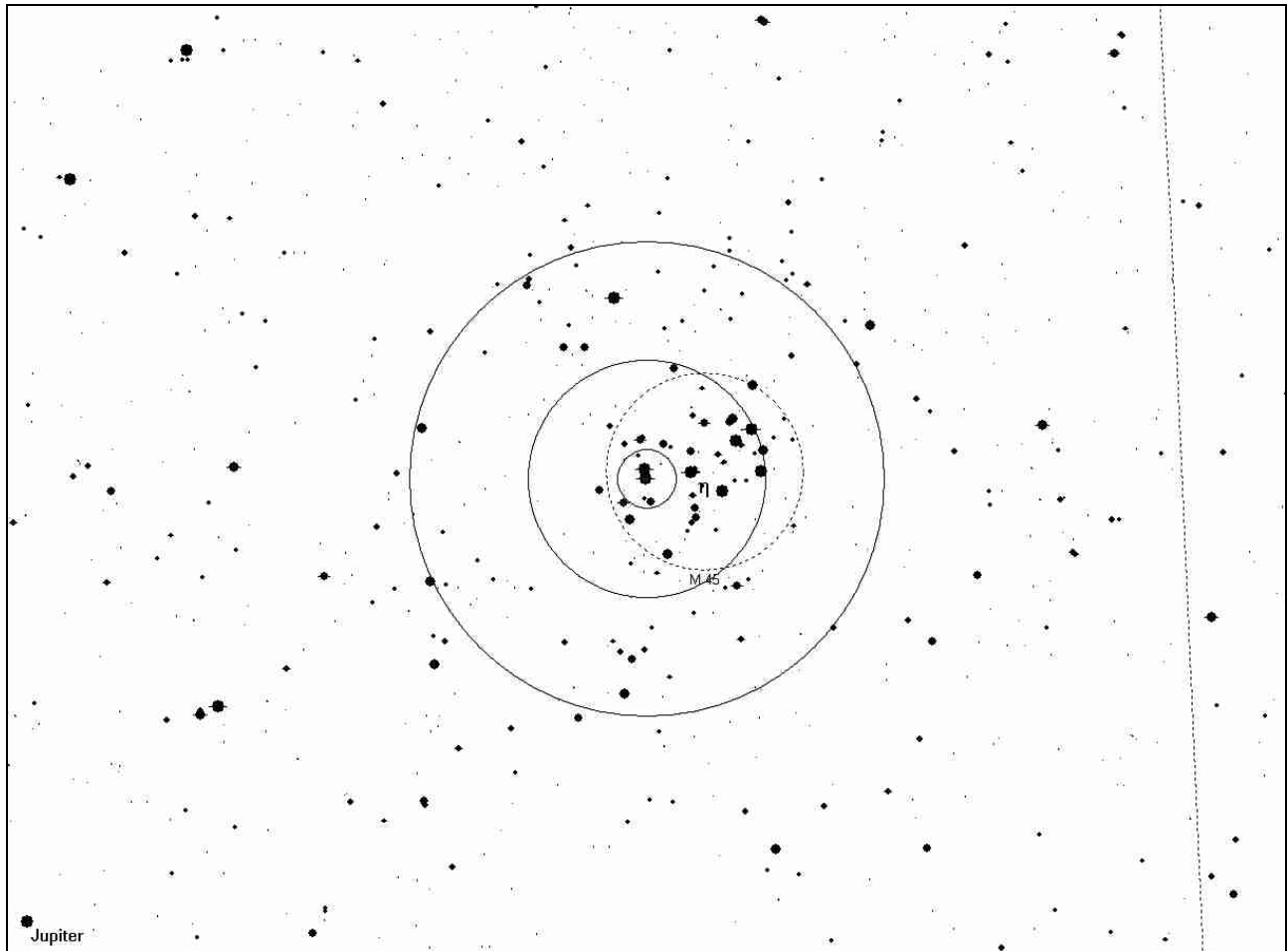


Notes:

27+ BU Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA	Notes
03 49.2	+24 03	3.7 5.0	300"	180	Atlas & Pleione; in M45

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

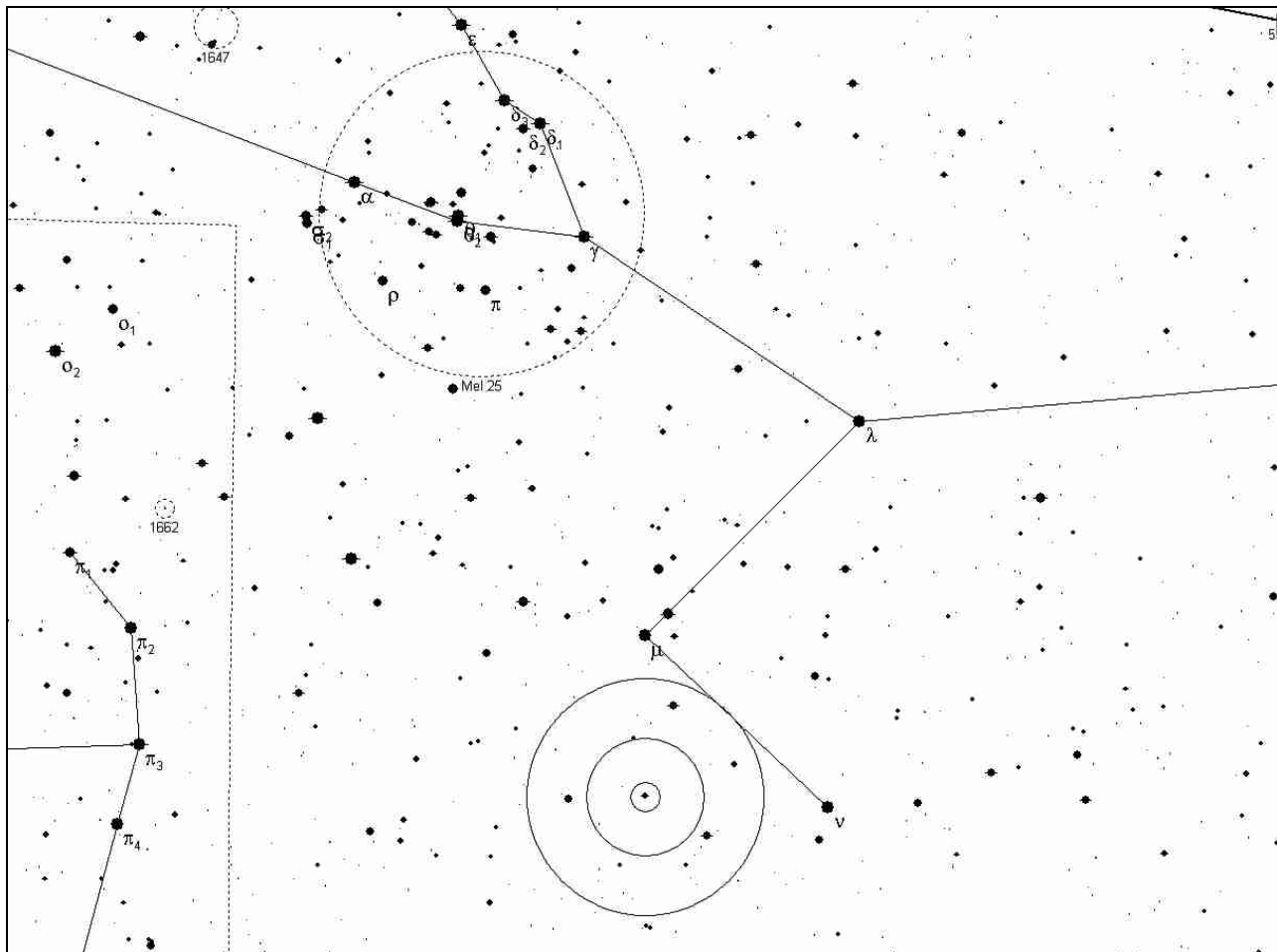


Notes:

H VI 98 Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
04 15.5	+06 11	6.3 7.0	66"	315 (1937)	3085

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

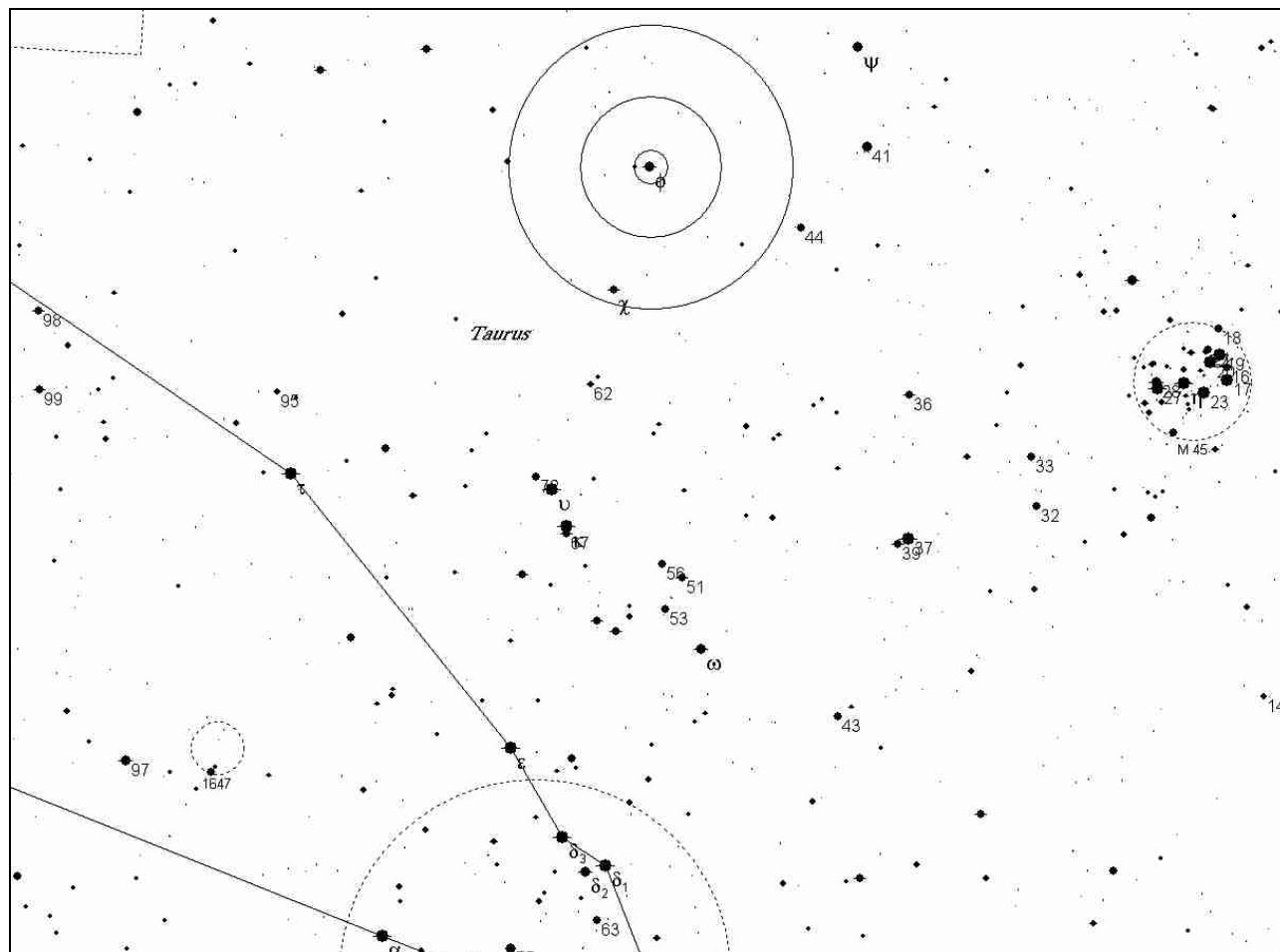


Notes:

Phi Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
04 20.4	+27 21	5.0 8.4	52"	250 (1925)	3137

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

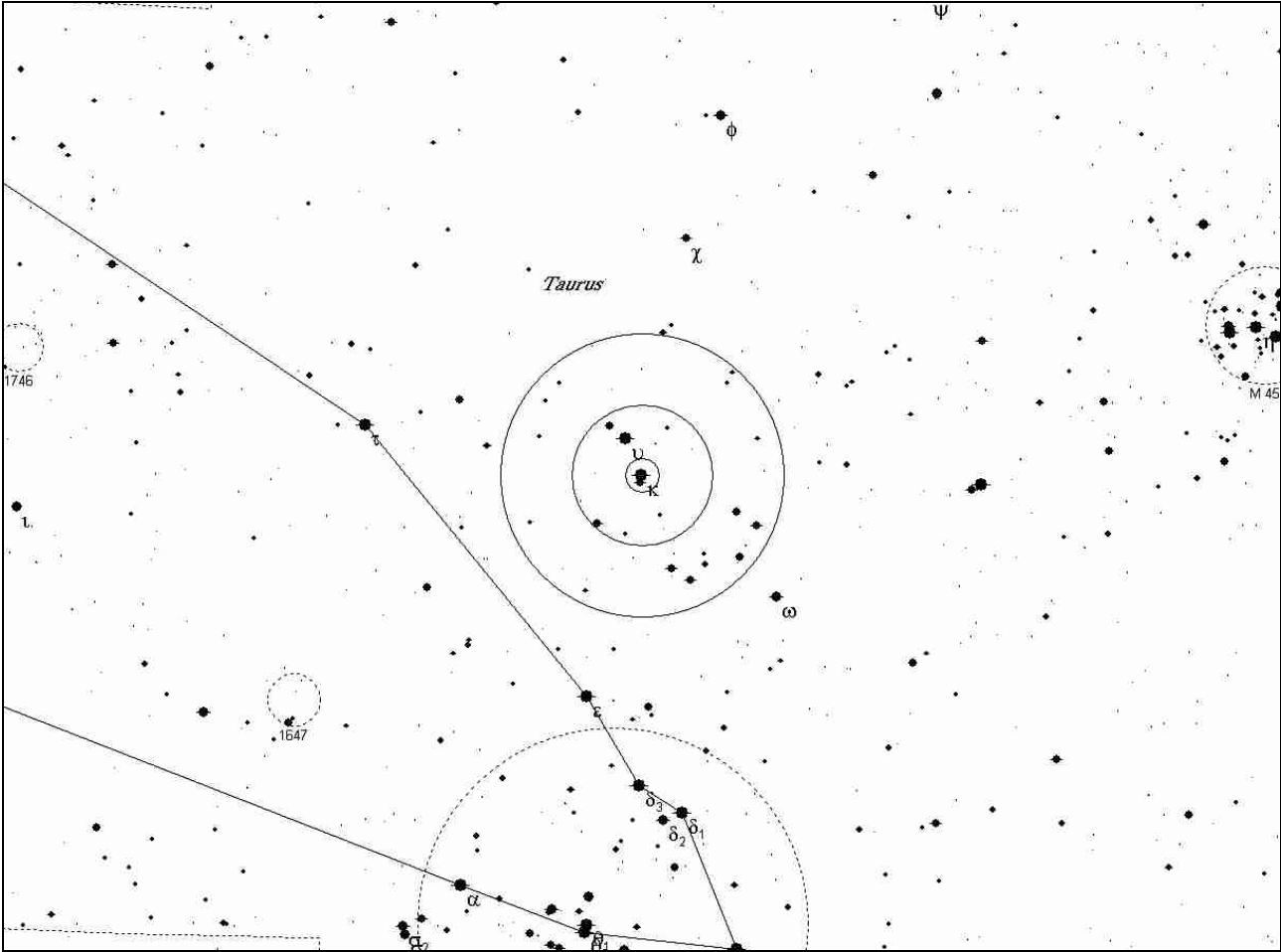


Notes:

Kappa Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA
04 25.4	+22 18	4.4 5.4	340"	173 (1923)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

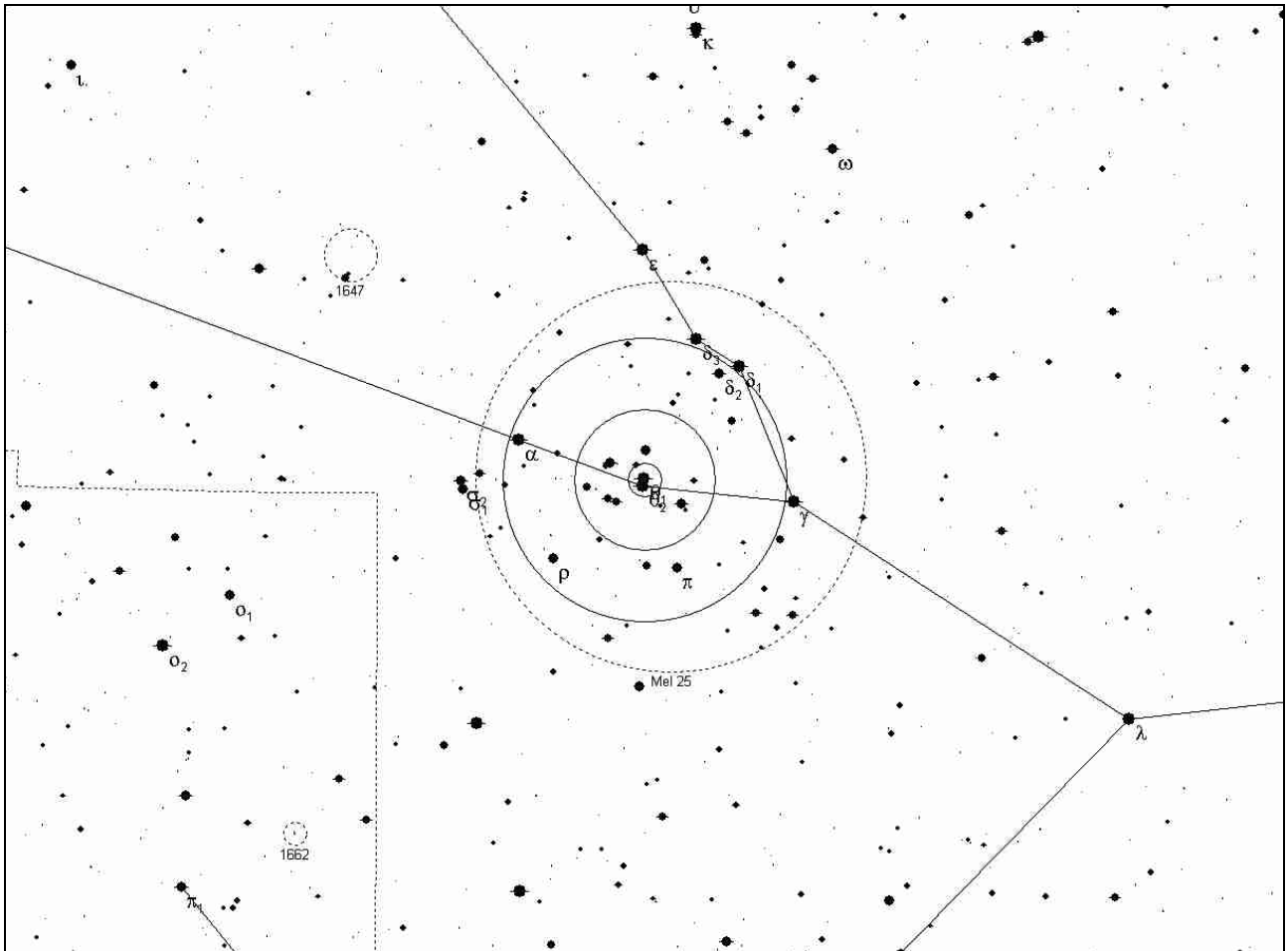


Notes:

Theta1+2 Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA
04 28.7	+15 52	3.8 3.4	337"	346 (1921)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

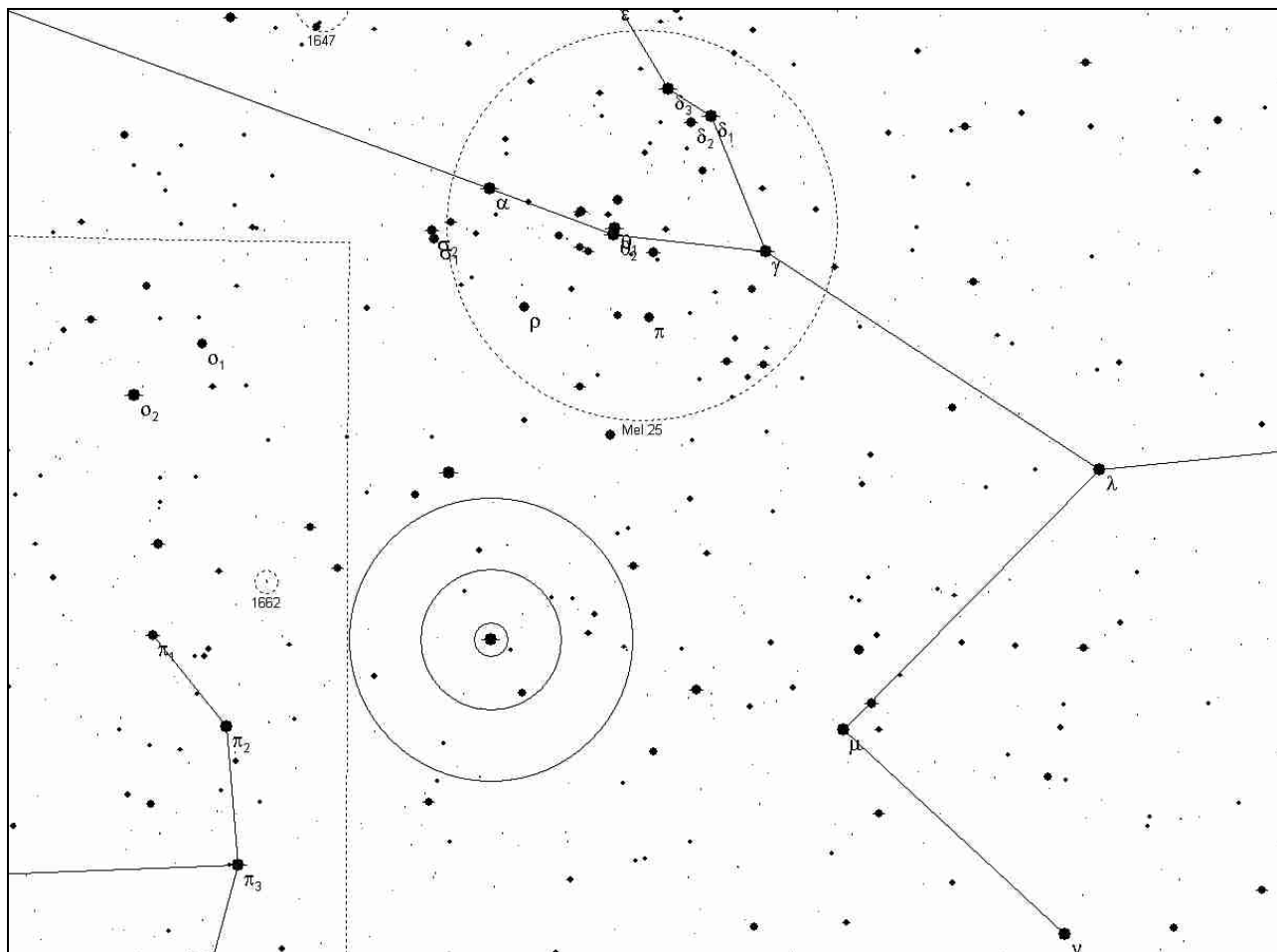


Notes:

88 Tau

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
04 35.7	+10 10	4.3 8.4	70"	299 (1920)	3317

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

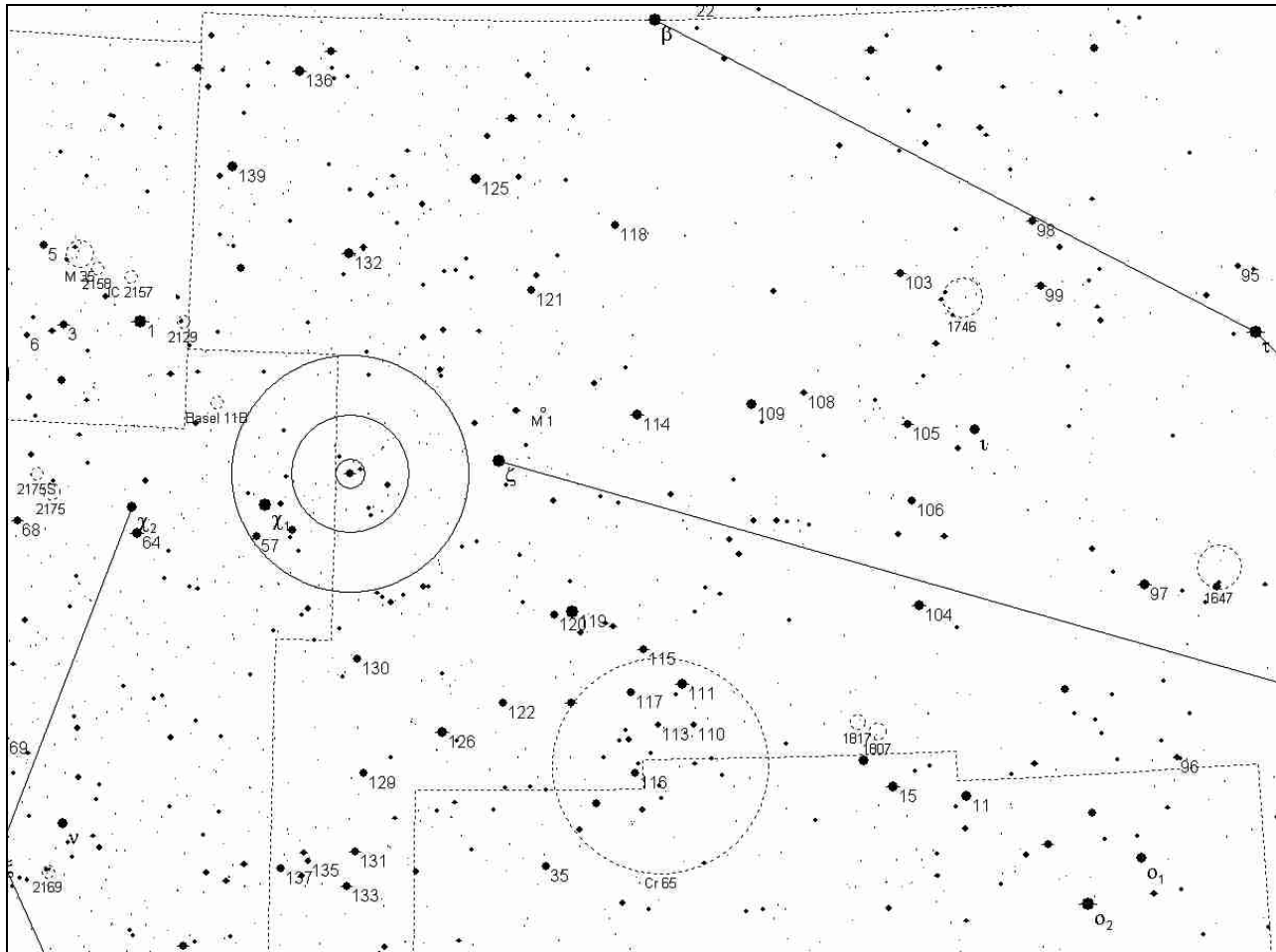


Notes:

OSS 67 (Tau)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
05 48.4	+20 52	6.1 8.6	76"	161 (1933)	4392

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

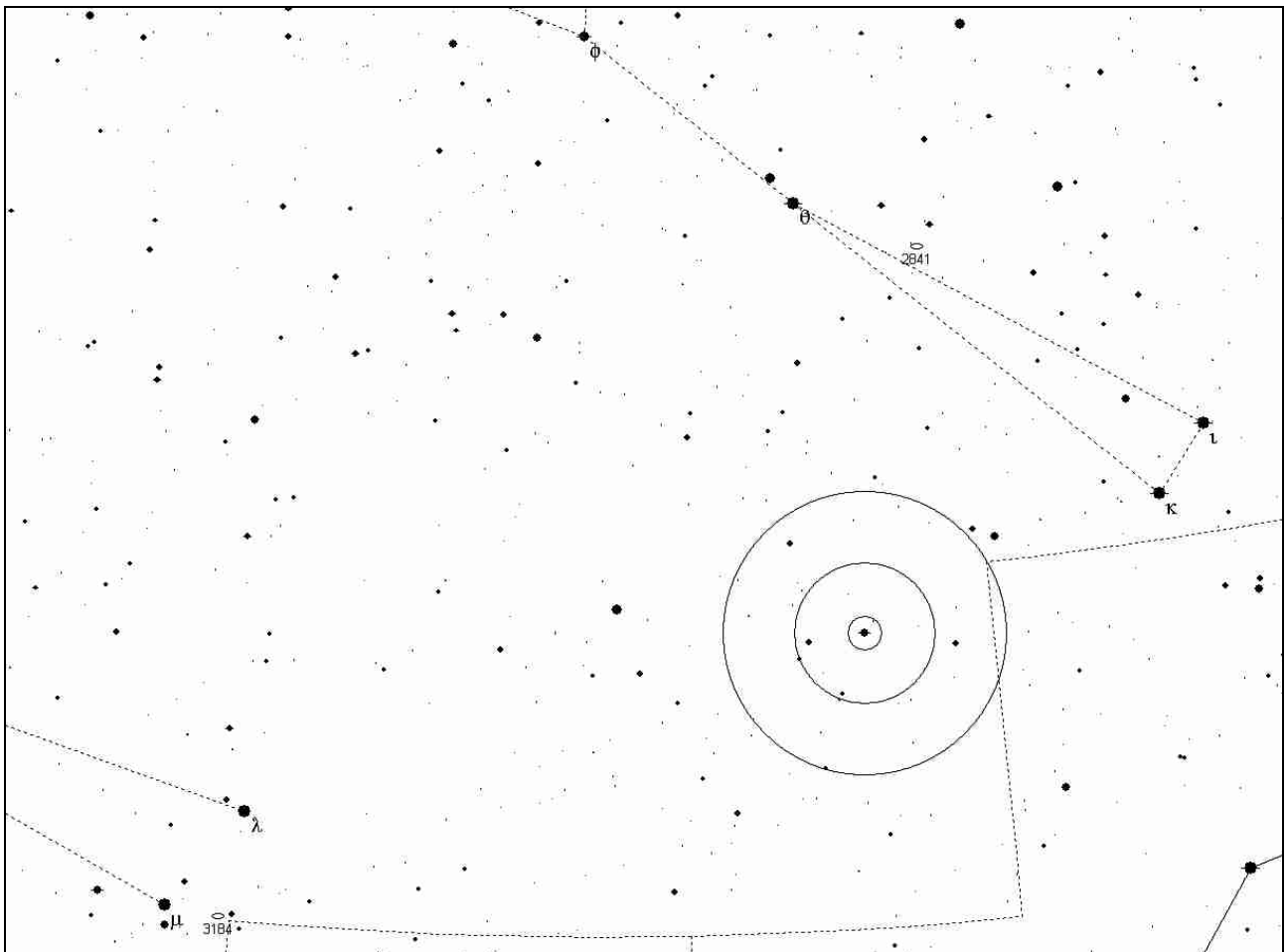


Notes:

S 598 (UMa)

R.A. (2000)	Dec (2000)	Mag	Sep	PA
09 28.7	+45 36	5.5 8 10	77" 84"	162 (1924)

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

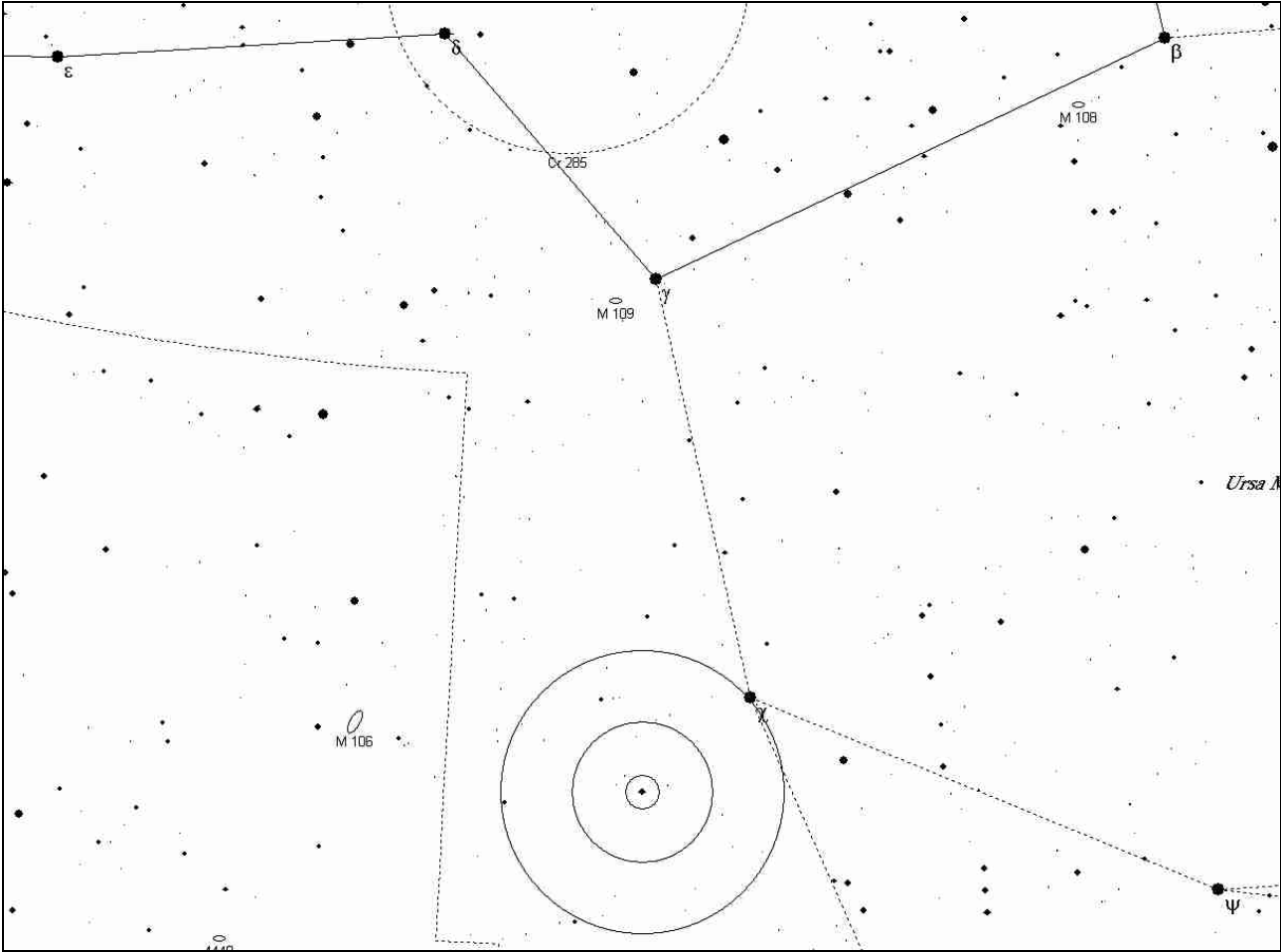


Notes:

65 UMa

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
11 55.1	+46 29	6.7 6.5	63"	114 (1969)	8347

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

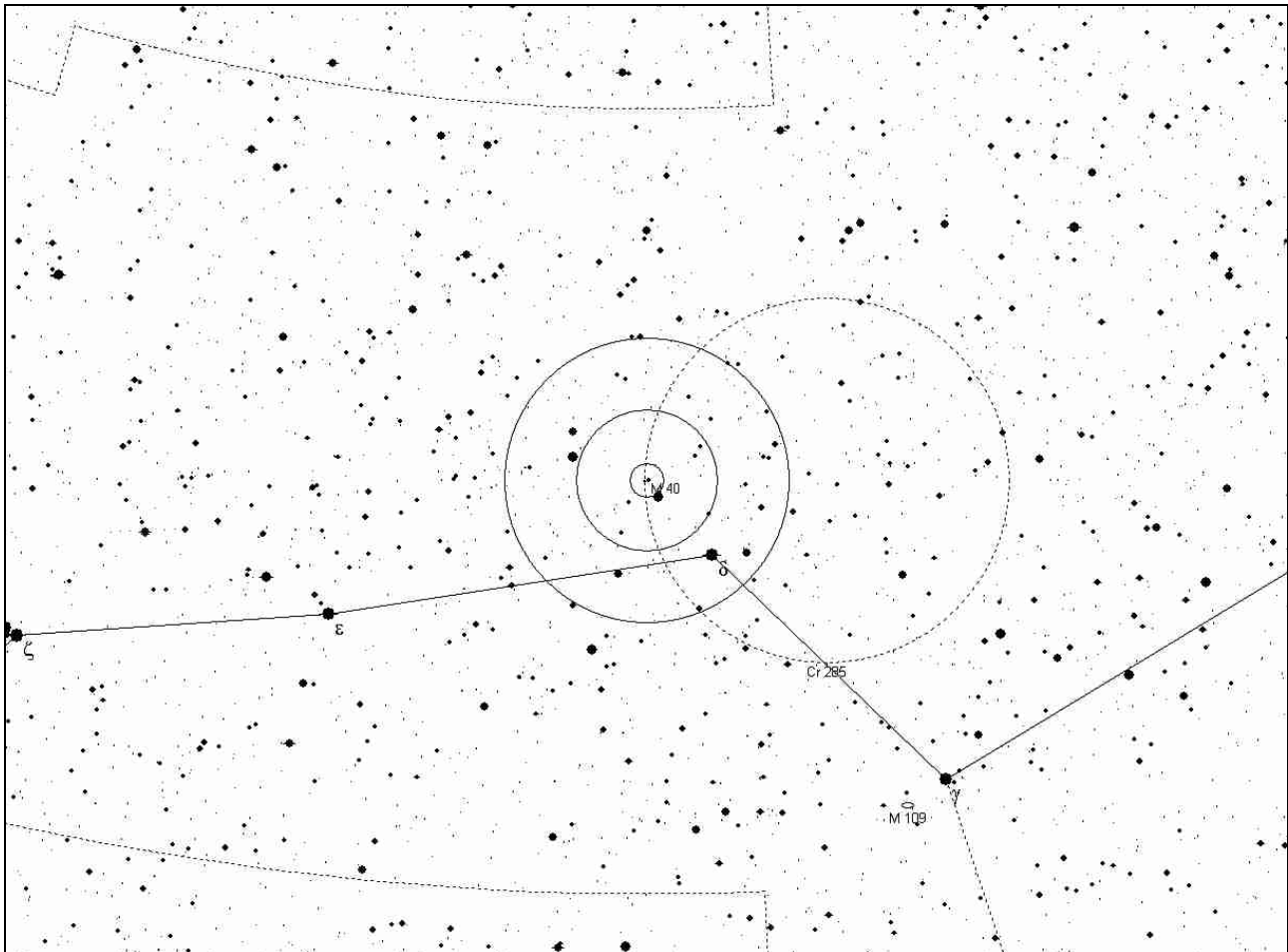


Notes:

Wnc 4 (UMa)

R.A. (2000)	Dec (2000)	Mag	Sep	Notes
12 22.4	+58 05	9.0 9.3	50"	M40

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

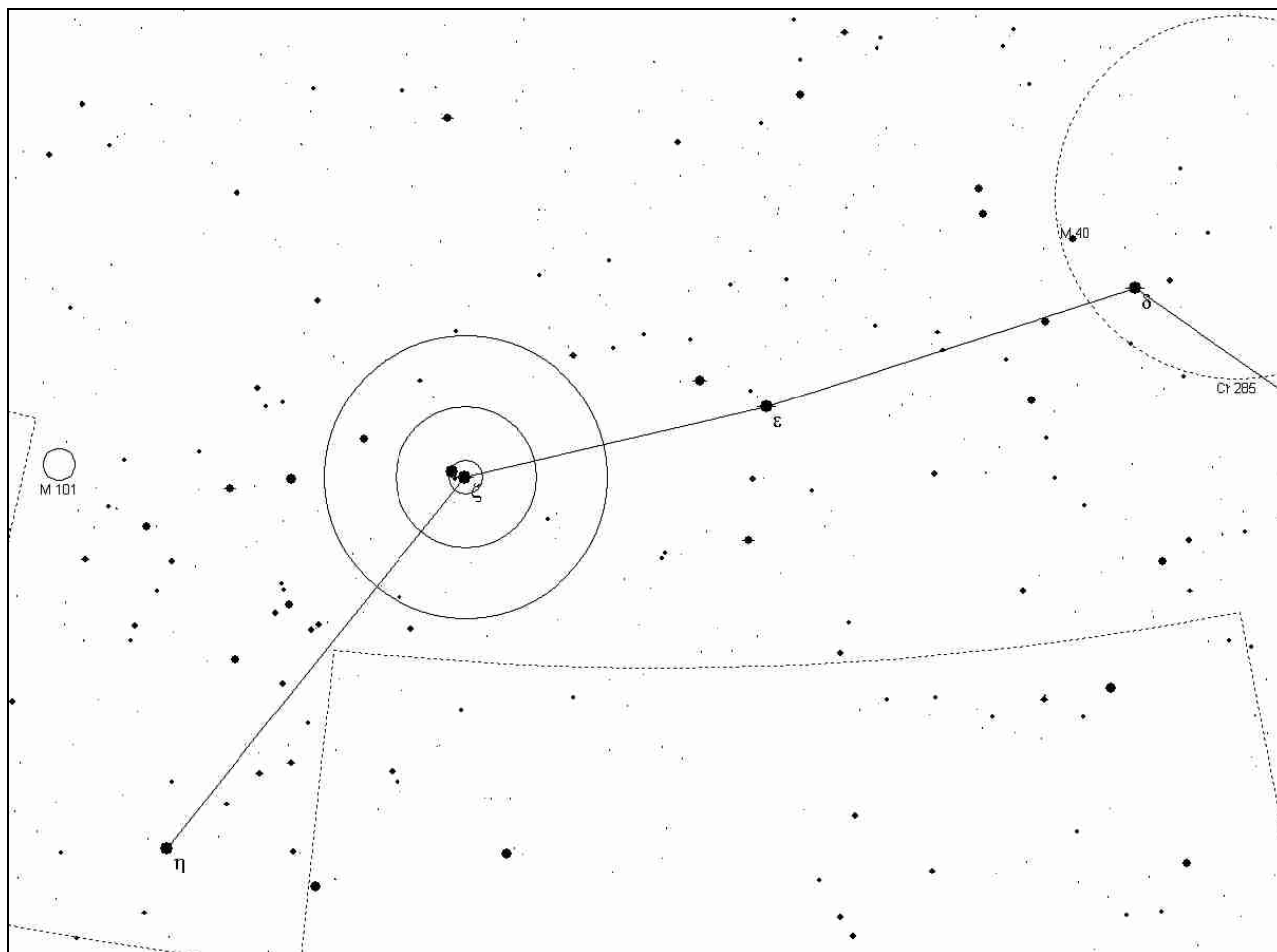


Notes:

Zeta UMa

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
13 23.9	+54 56	2.3 4.0	709"	71 (1966)	8891	Alcor/Mizar

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

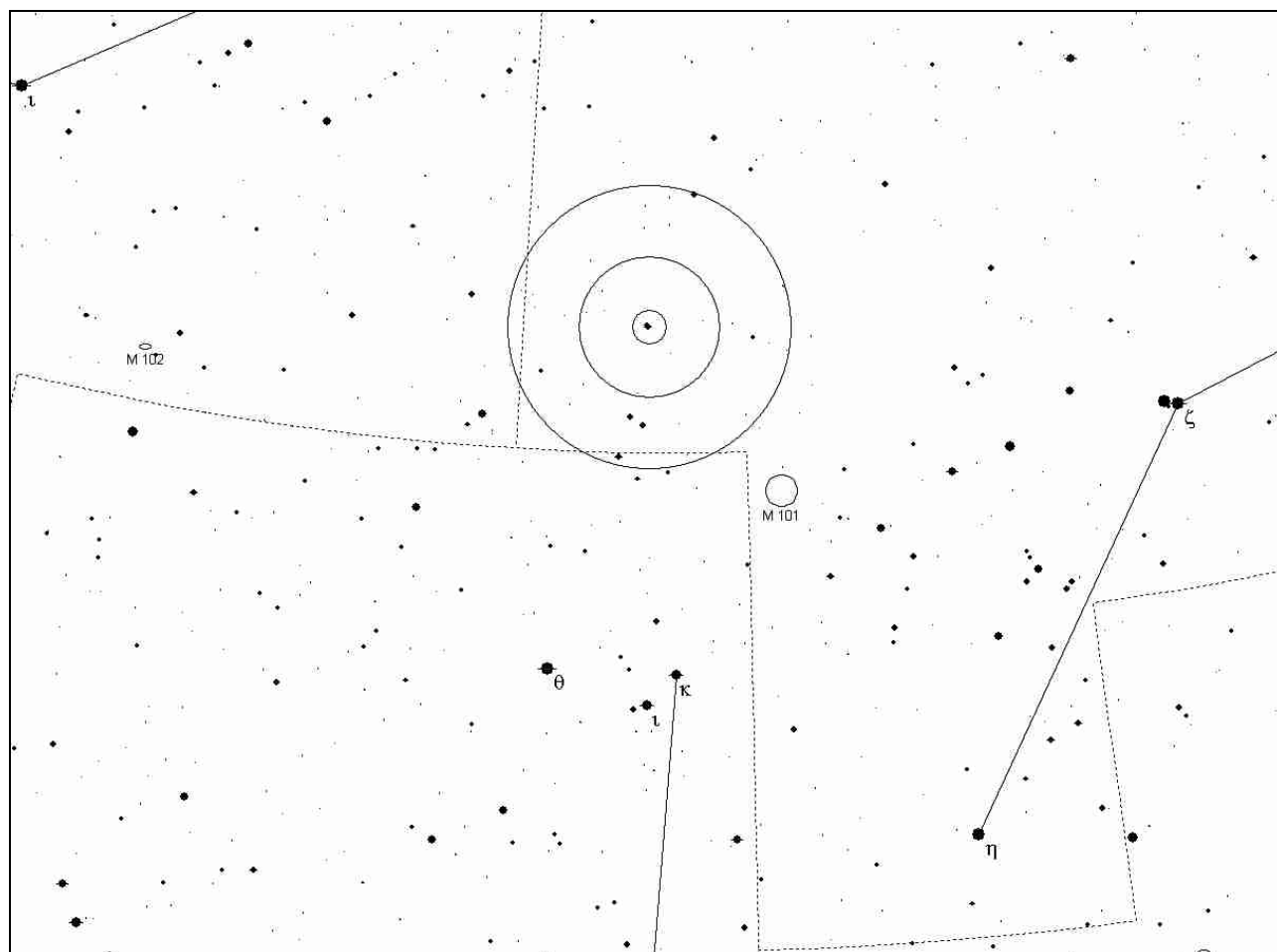


Notes:

Struve1831 (UMa)

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #	Notes
14 16.2	+56 43	7.1 6.6	108"	222 (1956)	9197	Optical

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			

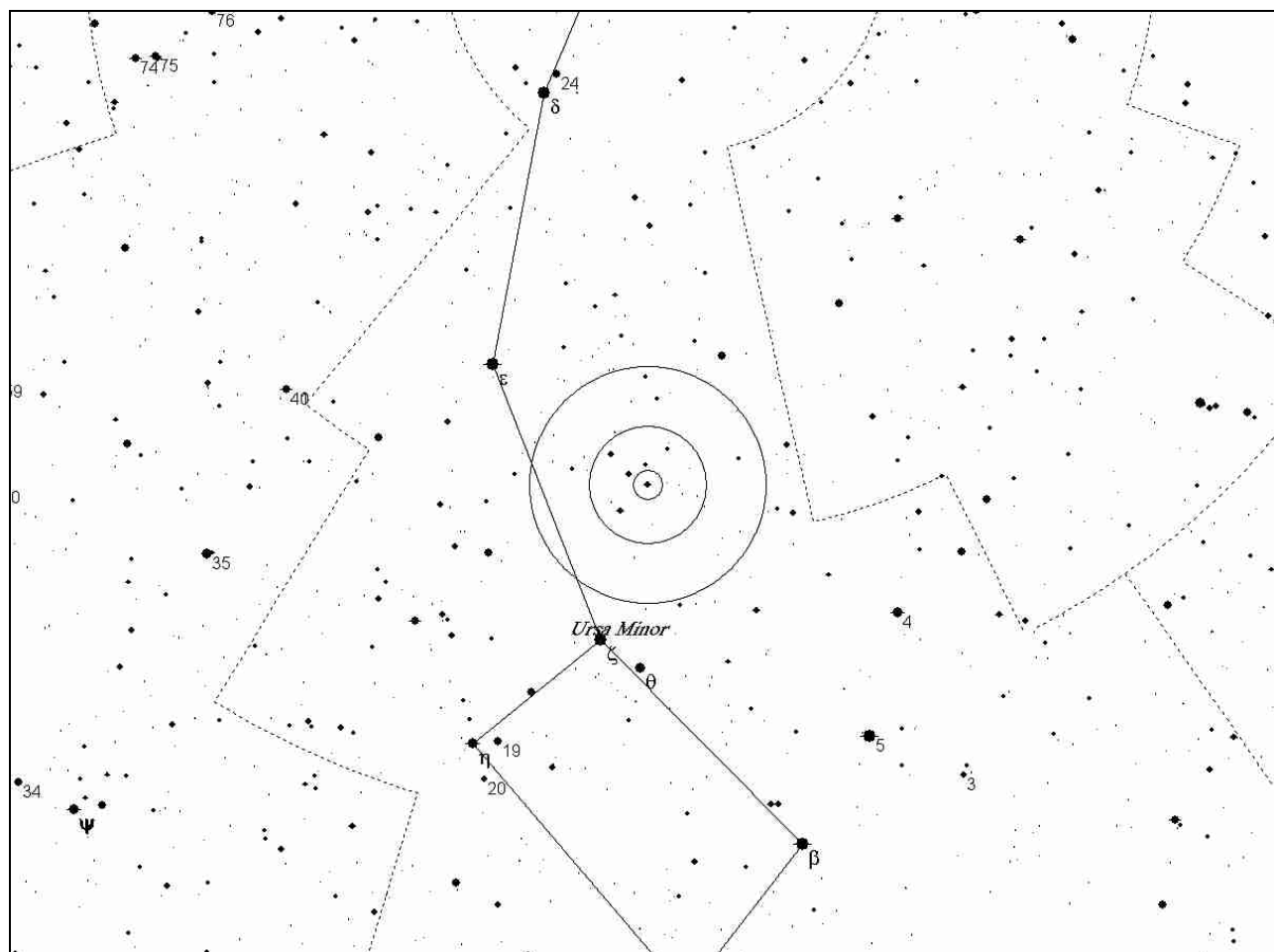


Notes:

Pi1 UMi

R.A. (2000)	Dec (2000)	Mag	Sep	PA	ADS #
15 29.2	+80 27	6.6 7.3	31"	80 (1959)	9696

Date		Observer	
Time		Observing site	
Seeing (lim m)		Binoculars	
Temperature			



Notes:
