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KG
11366
v.85

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1962ApJ...136..906.

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6943 T Sagittae

g-h 4
h-k' 6
k'-k 4
k-k 5
l-m 6

743° Miss Wells's Var.

h-k 6.5 6
k-l 3 2
l-m 5 5
m-n 4.5 7
n-o 3 5
o-p 6 5
p-q 4 5
q-d 4 4
d-β 3 2

7261 R Draconis

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k

6512 T Herculis

a-b 4 7
b-c 0 0
c-d 6.5 4
d-e 2
e-f 6
f-g 3.5 4
g-h 4 3

8512 R Aquarii

a-b' 2
b'-b 7
b-c 3
c-d 7
d-e 6
e-f 5
f-g 5
g-h 5
h-k 6
k-l 5
l-m 4
m-n 3
n-o 6
o-p 6
p-q 4

Comp. Stars (variable)

S Cephei

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k
k-l
l-m
m-n β
n-o 3
o-p 5
p-q 5

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k
k-l
l-m
m-n
n-o
o-p 2
p-q 3
q-R 3
R-S 3
S-t 6
t-u 3
u-w 4

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6943 T Sagittae

g-h 4
h-k' 6
k'-k 4
k-kk 5
l-m 6

+43° Miss Wells's Var.

k-k 6.5 6
k-l 3 2
l-m 5 5
m-n 4.5 7
n-o 3 5
o-p 6 5
p-q 4 5
q-d 4 4
d-β 3 2

7261 R Draconis

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k
k-l
l-m
m-n 4
n-o 3
o-p 5
p-d' 2
d'-d 1
d-β 5

6512 T Herculis

a-b 4 7
b-c 0 0
c-d 6.5 4
d-e 2
e-f 6
f-g 3.5 4
g-h 4 3
h-k 1 3
k-l 7 3
l-m 3 2
m-d 6
d-β 2
β-f 3
f-t 5
t-I 6

c-e 3
e-d 2
d-f 5
f-e 3.5

8512 R Aquarii

a-b' 2
b'-b 7
b-c 3
c-d 7
d-e 6
e-f 5
f-g 5
g-h 5
h-k 6
k-l 5
l-m 4
m-n 3
n-o 6
o-p 6
p-q 4

S Cephei

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k
k-l
l-m
m-n β
n-o 3
o-p 5
p-q 5

R Cygni

a-b
b-c
c-d
d-e
e-f
f-g
g-h
h-k
k-l
l-m
m-n
n-o
o-p 2
p-q 3
q-R 3
R-S 3
S-t 6
t-u 3
u-w 4

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58 Variables.

112	4521	6733
114	4596	6905
513	4816	7045
782	4826	7120
806	4847	7257
845	4948	7261
893	5237	7299
1577	5494	7428
2100	5501	7468
2528	5504	7560
2684	5667	8230
2946	5675	8290
2976	5677	8373
3170	5770	8512
3184	5826	
3477	5887	
3493	5889	
4300	5950	
4315	6044	7259 R.S Cygni
4377	6083	
4407	6132	
4492	6512	

109 Circum Polar.
5675 Small Range.
5687 Nova
6083 Nova
7994 Two Far South to.
7257
~~7259~~ is Small Range.

54

7257 Range Small
7994 South
6083 Nova
5687 Nova
109 Circum Polar.
~~5830~~ Oltoh S.

60

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112. K. Androm. α, β, γ, δ, ξ, η, θ. ✓
513. K. Piscium. α, β, γ, δ. ✓
782. K. Arietis. α, β, γ, δ, ξ, η. ✓
845. K. Ceti. α, β, γ. ✓
893. U. Ceti. α, β. ✓
2528. K. Gem. α, γ, δ, ξ, η.
2684. S. Can. Min. α, β, γ, δ, ξ, η. ✓
2946. K. Cancri. π, ο, ρ, β, γ.
3184. T. Hydrae. ω, α, β. ✓
3477. K. Leo. Min. α, β. ✓
4300. X. Virginis. α, β, γ. ✓
4315. K. Comae. φ, α, β, δ.
4377. T. Virginis. ω, α, β, γ. ✓
4521. K. Virginis. m, n, ρ, α, γ.
4626. K. Hydrae. α, β, γ, δ, η.
4847. S. Virginis. α, β, γ, δ. ✓
4948. K. Can. Ven. K, m, n, ο, α, β, γ, δ. ✓
5237. K. Bootis. g, h, k, m, n, ο, ρ, q, α. ✓
5494. S. Librae. l, m, n, α, β, γ. ✓
5501. S. Serpentis. d, f, l, α, β, γ, δ. ✓
5667. K. Coronae. α, β, δ, η.
5770. K. Herculis. f, h, l, m, n, q, α.

K. S. T. Scorpii. h, m, ο, α, β, γ, δ, ξ, η, θ, ι, κ. ✓
5889. U. Herculis. K, δ, ρ, α, β. ✓
5950. N. Herculis. c, d, h, α, β, γ, δ, ξ. ✓
6044. S. Herculis. h, k, ο, ρ, α. ✓
6512. T. Herculis. b, d, l, m, t, α, β. ✓
6905. K. Sagittarii. K, h, k, l, ρ, φ. ✓
7045. K. Cygni. α, β, γ, δ, θ.
7259. K. S. Cygni. α, β, γ, δ, ξ. ✓
7261. K. Delphini. l, m, n, α, γ.
7299. U. Cygni. α, ξ.
7428. V. Cygni. α, β, γ, δ. ✓
7468. T. Aquarii. α, β, γ, δ, ξ, η, θ, λ, μ. ✓
7560. K. Vulpec. α, β, γ, δ, ξ, η. ✓
8290. K. Pegasi. α, β, γ, δ, ξ, η. ✓
8373. S. Pegasi. k, m, n, ο, α, β, γ. ✓

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The following stars belong to the "60 Variables" and are those for which I have lists of comparison stars.

3170 S Hydrae.
2946 R Cancri.
2976 V Cancri.
2100 U Orionis.
3184 T Hydrae.
2624 S Can. Ven.
3493 R Leonis.
4377 T Virginis.
3477 R Leo Min.
4300 X Virginis.
4317 R Comae.
4407 R Corvi.
4492 Y Virginis.
4496 U Virginis.
4521 R Virginis.
4516 V Virginis.
4547 S Virginis.
4526 R Hydrae.
4624 R Can. Ven.
5237 R Bootis.
5701 S Serpentis.
5770 R Herculis.
5849 U Herculis.
5867 R Coronae.
5926 T Scorpii.
7026 R Cygni.
7261 R Delphini.
7424 V Cygni.
7299 U Cygni.
5494 S Librae.
5970 Z Herculis.
6512 T Herculis.
6733 R Scuti.
7464 T Aquarii.
4290 R Pegasi.
4230 S Aquarii.
114 S Ceti.
4372 S Pegasi.
4512 R Aquarii.
112 R Andromed.
513 R Piscium.
7402 R Aretis.
424 R Ceti.
493 U Ceti.
5577 R Tauri.
406 o Ceti.
5524 R Gemini.
7120 X Cygni.
6132 R Ophiuchi.
5704 S Coronae.
6905 R Sagittarii.
6044 S Herculis.
5760 R Vulpec.
7259 R S Cygni.

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Nov. Club. Conch

1st meeting Nov 5. (Monday) +14

until 1st Monday in May.

Nov		Dec			Jan		Feb		March		April		May	
5	19	3	17	31	14	28	11	25	11	25	8	22	6	20

107 T Cassiop. Circumpolar.
6083 — Ophiuchi (Nova)
T Scorpii — (")
S Scorpii Too near R Scorpii
7994 R Piscen Australis.
V Ophiuchi (Short range)

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Publications and others. Such elaborate publications must necessarily occur at long intervals. So that half a century may elapse before all the observations of a given decade are published. If the study of the periods had been dependent upon such material our present ephemerides would have had little value. I do not wish to impair in the least the importance of publications of the original observations in the manner here-to-fore followed. But I think the character of the light curve should receive the same amount of attention in preliminary publications as has been given to the period. In this article I should have given the co-ordinates of numerous points on the light-curves, if the final publication of the origin observations in the annals of the Observatory had not been planned for the near future.

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√ = Checks O.K. Amerging

obs'd by Mr R

x = obs'd by O.C.W.

Dates of Observations on Comparison Stars.

= Sent to Cambridge

(1900)

√102	T Cassiopeiae	x	0h 17.8m	+55° 14′	0/0 0/0	0/0 0/0		
√112	R Andromedae	x	18.8	+38 1	P 9/2 1/8	92 11/11 ✓		#
√114	S Ceti	x	19.0	−9 53	'91 7/2	'91 12/1		
√563	R Piscium	x	25.5	+2 22	'92 1/7	'92 11/20 ✓		#
√782	R Arietis	x	2 10.4	+24 35	'91 8/8 2	92 11/20 ✓		
√806	O Ceti	x	14.3	−3 26	'91 2/4	92 2/9 ✓		
√845	R Ceti	x	20.9	−0 38	92 10/29	12/2 ✓		
√893	U Ceti	x	28.9	−13 35	92 10/28 2/1	11/22 ✓		
√1577	R Tauri	x	4 22.8	+9 56	91 1/11	11/30 ✓	92 10/28-30	
√2100	U Orionis	x	5 49.9	+20 10	'91 2/4	12/1 ✓½		#
√2528	R Geminorum	x	7 1.3	+22 52	'91 2/13	'92 1/5 ✓		
√2684	S Canis Minoris	x	27.3	+8 32	91 3/10	'92 1/5 ✓		#
√2946	R Cancri	x	8 11.0	+12 2	'91 3/10	3/11 '92 1/5 ✓		#
√2976	V Cancri	x	16.0	+17 36	92 1/7	92 1/8 ✓		
√3170	S Hydrae	x	48.3	+3 27	92 1/7	'92 11/16 ✓		#
√3184	T Hydrae	x	50.8	−8 45	'91 2/11	92 3/30 ✓		
√3477	R Leonis Minoris	x	9 39.6	+34 58	91 2/19	92 12/2 ✓		#
√3493	R Leonis	x	42.2	+11 54	92 3/28	92 3/30 ✓		#
√4300	X Virginis	x	11 56.7	+9 38	92 1/21	3/20 ✓	5/17	6/1
√4315	R Comae	x	59.1	+19 21	91 2/14	4/19 ✓	5/17	#
√4377	T Virginis	x	12 9.5	−5 28	0/0 0/0	3/20 ✓		
√4407	R Corvi	x	14.5	−18 42	92 1/21	3/21 ✓		
√4492	γ Virginis	x	28.7	−3 52	91 5/28	4/23 ✓		
√4521	R Virginis	x	33.4	+7 33	92 4/24	4/25 ✓	6/1	
√4596	U Virginis	x	46.0	+6 6	91 7/10	3/21 ✓?		
14816	V Virginis	x	13 22.6	−2 39	4/25	4/25 ✓		
√4826	R Hydrae	x	24.2	−22 46	91 2/14	5/4 ✓	5/17	5/18
√4847	S Virginis	x	27.8	−6 41	91 6/10	4/26 ✓		
√4948	R Canis Venatici	x	44.6	+40 2	91 7/10	9/10	5/18	
√5237	R Bootis	x	14 32.8	+27 10	92 4/20	4/20 ✓		

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Observations of the Variable

The underscored indicate P. of Variable cross them in variable
Prismatic Comparison
observed on:—

Reference to Record Book Vol / Page

	92 11/11 5/8			3/71 4/165 4/201 4/211 5/8
				2/18 2/156 3/34 5/18
	92 11/20			3/69 4/177 4/178 4/202 4/42 5/18 5/22
	92 11/20	5/19		2/68 4/180 5/19 5/143
		5/20		1/118 3/96 5/12 5/14
				4/150 4/193 4/200 4/209 5/139
1900 8/14	92 11/20			4/148 4/179 4/197 4/209 4/213
	92 5/9			1/123 3/33 4/148 4/152 5/4 5/9 5/20
1901 2/4	92 11/22			1/119 3/34 4/187 4/194 4/204 5/9 5/53
1901 2/13				1/126 3/66 5/17 5/23 5/54
1901 3/10				1/142 3/67 4/201 4/209
1901 3/11	92 5/9 5/9 5/3			1/142 3/69 5/4 5/9 5/13 5/20 6/3
				3/69 3/73 2/210 5/5 5/16 5/57
	92 11/16 5/6			3/69 4/175 4/214 5/6 5/10
	92 5/9			1/124 3/35 3/181 3/182 3/172 3/196 4/215 5/9
				1/133 3/215 4/15 4/194 5/23 5/60 5/62 5/63
				3/187 3/177 5/11 5/29
	5/17	6/1		1/143 3/79 3/169 4/104 4/124
	5/17			3/182 3/199 4/57 4/106 5/12 5/32 5/54
				1/130 3/180 4/195 5/59
				3/79 3/172
1901 5/2	92 4/24	4/24		1/195 4/70 5/63 5/64
	92 4/26	4/24	4/25	4/73 4/80 4/82 4/125
				2/14 3/172 5/64
	92 4/20	4/20		1/177 4/84
		5/17		1/131 4/91 4/92 4/103 4/104 4/111
	92 4/20	4/26	4/20	1/202 1/203 4/87
1901 9/10		5/18		1/203 2/14 2/117 4/116
	92 4/20	4/20		2/103 4/55 4/59 4/61

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Observations of Comparison Stars

= Obsd by M.P.

x = Obsd by o.c.w.

√5494	S Librae	x	15h	15.6m	−20° 2′	'92 4/26	4/26	5/28 ✓	
√5501	S Serpentis	x		17.0	+14 40	'92 4/20	6/10		
√5504	S Coronae			17.3	+31 44	'92 6/12½			
√5667	R Coronae	x		44.4	+28 28	'91 8/13	6/10 ✓		
	5675	V Coronae			46.0	+39 52			Omit 7/19/93
√5677	R Serpentis			46.1	+15 26	'92 6/16			
√5770	R Herculis	x	16	1.7	+18 38	'91 7/9	9/8 ✓		#
√5826	T Scutii	x		11.1	−22 44		4/2		
5887	V Ophiuchi			21.2	−12 12				Omit 7/19/93
√5889	U Herculis	x		21.4	+19 7	'91 7/9	9/9 ✓		
√5950	W Herculis	x		31.7	+37 32	'91 9/29	9/9 ✓		#
√6044	S Herculis			47.3	+15 6	'91 6/15			
6083	Ophiuchi			53.9	−12 45				Nova Omit
√6132	R Ophiuchi		17h	2.0m	−15 58	'91 7/12			#
√6512	T Herculis	x	18	5.3	+31 0	'91 6/15 8/2	9/27 ✓	W 9/23	
√6733	R Scuti	x		42.1	−5 49	'91 8/22-25	9/8 ✓		
√6905	R Sagittarii		19	10.8	−19 29	'91 8/19	'92 11/7 ✓		
√7045	R Cygni	x		34.1	+49 58	'90 11/14 8/2	9/8 ✓	W 9/23 '92 10/30	#
√7120	X Cygni			46.7	+32 40	'91 9/11 8/3 8/4	8/4 ✓	W	
√7259	R S Cygni					'90 11/14	9/8 ✓	W ?	#
√7261	R Delphini	x	20	10.5	+8 47	'91 6/12	9/8 ✓		
√7299	U Cygni	x		16.5	+47 35	'90 11/19	'91 9/8 ✓	'92 11/16	#
√7428	V Cygni	x		38.1	+47 47	'90 11/19	'91 9/8 ✓	'92 11/16	
√7468	T Aquarii	x		44.7	−5 31	'91 6/12	9/9 ✓		
√7560	R Vulpeculae			59.9	+23 25	'92 9/24	10/26 ✓	11/6	#
7994	R Piscis Austrini		22	12.3	−30 6				
√8230	S Aquarii	x		51.7	−20 53	'91 8/0	9/10 ✓	W 9/23	
√8290	R Pegasi	x	23	1.6	+10 0	'91 7/9	9/10 ✓	'92 11/6	
√8373	S Pegasi	x		15.5	+8 22	'91 7/27	'92 10/26 ✓	10/29 11/6	#
√8512	R Aquarii	x		38.6	−15 50	['91 8/19 x	9/10 W 9/23]	'92 11/11 ✓	#

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Observations of the Variables

The underscored dates indicate that the variable was then invisible

Prismatic Companion

Observed on:—

Reference to Record Book, Vol / Page

7.6 — 13	4/26	5/28	4/89 4/119 4/68 5/90
7.6 — 12½ ?			4/62 4/129 4/130 5/69
6.4 — 12.5			4/126 4/133 4/133 5/84 5/101 5/108 5/120
5.8 — 13.0			2/63 4/130 4/132 5/84 5/130 5/132 5/144
7.2 — 12.0r			5/66
5.6 — 13.0			
8.0 — {13			2/12 2/103 5/90
9.4 — {13			4/129 4/132 4/134 4/135
~~6.6 — 12.7~~			
6.6 — 12.7			2/12 2/109 5/132
8.0 — 14.0			2/99 2/110 5/85 5/106 5/121
5.9 — 13			1/210 5/106 5/109 5/132
~~7.0 — {12~~			
7.0 — {12			2/18 5/66 5/68 5/84
6.9 — 12.7	9 2 11/13		1/210 2/100 5/79 5/103 5/109 5/121 5/130 5/132
4.7 — 9.0	X		2/104 4/156 5/105
7 — 12.5	9 2 11/7 1		2/69 4/158 5/104
'90 11/14 5.9 — {14	9 2 ~~10/30~~ 11/7 11/13 5/1		1/82 2/100 4/151 5/1 5/122
4.0 — 13.5	9 2 11/7		1/66 2/77 2/43 2/44 4/205 5/123 5/130 5/123 5/137
'90 11/14 6.8 — 10	9 2 5/2	5/2	1/81 2/105 2/2 5/93 5/131
7.6 — 12.8	9 2 11/11		1/205 2/106 4/199 5/117 5/133 5/151 5/159
'90 11/19 7.0 — 11.6	9 2 11/11 11/13 11/16 5/3		1/86 2/106 4/171 5/3 5/127 5/133 5/152
90 11/19 ~~9/16~~ 6.8 — 13.5	9 2 11/11 11/13 11/16	5/3	1/85 1/86 2/107 4/172 5/2 5/134 5/152
'91 2/6 6.7 — 13.0	9 2 11/11		1/205 2/111 4/~~165~~ 186 4/192 4/199
7.5 — 13.6	10/26		3/15 4/140 4/142 4/155 5/128
190 8/14			
7.7 — 12.5	9 2 11/11		2/15 2/119 4/190 4/~~194~~ 4/~~196~~ 4/203
6.9 — {13	9 2 11/11		1/109 2/13 2/115 4/154 4/155 4/199 5/144
7.3 — {13	10/29 11/6		2/37 4/143 4/149 4/156
5.8 — 13 ?			2/69 2/120 1/164 4/193 4/199 4/214

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Variables to be Observed with the Spectroscope.

	(1900)			July	
S Cati	0h 19.0m	−9° 53′	To		S
R Piscium	1 25.5	+2 22	To		S
R Cati	2 20.9	−0 38	To		
R Geminorum	7 1.3	+22 52	To		
R Canis Minoris	7 3.2	+10 11	L.		
V Geminorum	7 17.6	+13 17	L.		
S Canis Minoris	7 27.3	+8 32	To		
T Geminorum	7 43.3	+23 59	L.		
U Puppis	7 56.1	−12 34	L		
V Cancri	8 16.0	+17 36	To		
T Hydrae	8 50.8	−8 45	To		
V Leonis	9 54.5	+21 45	L.		
V Coronae	15 46.0	+39 52	To		
S Ophiuchi	16 28.5	−16 57	L.	9	
R Ursae Minoris	16 31.3	+72 29	17	6	
S Herculis	16 47.3	+15 6	To	9	
X Ophiuchi	18 33.6	+8 45	S	6	
S Aquilae	20 7.0	+15 19	L.	6	
R Sagittae	20 9.5	+16 25	L.	6	
T Aquarii	20 44.7	−5 31	To	6	
R Lacertae	22 38.8	+41 51	S	6	

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Comp. Stars

S Cygni $\frac{5}{139}$

S Aquilae $\frac{5}{161}$

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New Variables

Dates of observations

No	May	June	July	Sept	Oct.
1.				24	16
2.		23		24	9
3.					
4.		23	6 ·	24	16
5.					
6.	28	9			
7.					
8.	28	9 15 23	9 27	24	
9.	28	9 15 23	9	24	16
10.		15	9 27	2 24	16
11.	28	9 15 23	9 27	2	
12.	28	9 15 23	9	2	
13		23	9 27	2	16
14			17 27	24	

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Circumpolar Variables

Dates of Estimates of Comparison Stars

T Cassiopeiae	'90 8/15 8/20 9/20 10/5 10/11	'91 3/14 7/21 8/7 8/25 9/25
S Cassiopeiae		'91 1/26 1/30 3/14 3/17 4/30 8/7
T Persei	9/20	'91 2/19 3/14 7/13 8/7
S Persei	'90 9/20	'91 2/19 3/14 7/13 8/7
R Aurigae		'91 3/14 3/16 4/24 8/6
R Lyncis		'91 3/14 4/9 4/21 4/24 4/30 7/13
R Ursae Majoris		'91 3/17 8/8 8/13 9/25
S Ursae Majoris	'90 10/12	'91 3/17 3/26 4/9 4/13
S Bootis	'90 9/18 4/24	'91 2/2 4/24 4/29
R Camelopardi	'90 10/11 10/13	'91 4/9 4/21 4/24 8/2
R Ursae Minoris	'90 9/20 10/11	'91 2/2 4/21 4/24 5/2 8/2
R Draconis		'91 3/26 4/9 4/21 4/24
S Cygni		'91 3/14 4/9 4/24 4/29
T Cephei	'90 12/19	'91 1/20 4/25 7/21 8/2 8/8 9/9
S Cephei	'90 8/16	'91 4/25 8/2 8/8 8/13
R Cassiopeiae		'91 1/26 7/13 7/17 8/8 9/26
T Ursae Majoris		'91 3/5 3/26 4/13 8

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and prismatic comparisons

'91 7/13 8/10 9/25
'91 4/30 7/13 8/10 9/25
'91 8/13 8/10
'91 8/13 8/10
'91 4/28
'91 7/13
'91 8/13
'91 4/29
'91 4/29
'91 8/10 9/25
'91 5/2 8/10 9/25
'91 4/27 5/2 8/13

'91 8/8 9/25
'91 8/8 8/13
'91 7/13 8/8 9/26

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Circumpolar Variables

Dates of Observations

		May	June July	Aug.	
T Cassiopeiae	'91 3/25 3/30 4/8 4/13 4/21	X	15 28	6 13 17 27	10 11 24 25	20
S Cassiopeiae	'91 3/25 3/30 4/8 4/13 4/21 4/29 4/30 5/8	7 25 27	10 15 23	6 13 17 27	7 10	2
T Persei	'91 3/25 3/30 4/8 4/13 4/21 4/29		23	6 13 27	7 10	20
S Persei	'91 3/25 3/30 4/8 4/13 4/21 4/29		23	6 13 27	4 7 8 10	20
R Aurigae	'91 3/25 3/30 4/8 4/21 4/24	13	18	10 27	6	29
R Lyncis	'91 3/25 3/30 4/8 4/9 4/13 4/21 4/24 4/29 5/30	25 27	15 23	6 13 17	7	9
R Ursae Majoris	'91 3/25 3/30 4/8 4/21 4/21 4/24 4/29	19 25 27	9 15 23	6 17 23	10 13	9
S Ursae Majoris	'91 3/25 3/30 4/8 4/13 4/21 4/29	25 27	9 15 23	6 17 23 27		29
S Bootis	'91 3/25 3/30 4/8 4/13 4/21 4/24 4/29	19	9 15 23	6 17 23 27		29
R Camelopardi	'91 3/25 3/30 4/8 4/9 4/13 4/21 4/24 4/29	27	15 23	6 31	2	9
R Ursae Minoris	'91 3/25 3/30 4/8 4/13 4/21 4/24 4/29	27	9 15 23	6 17 25 27	2 10	29
R Draconis	'91 3/25 3/30 4/8 4/13 4/21 4/24 4/29	19 27	9 15 23	6 13 25 27	13	2
S Cygni	'91 3/25 3/30 4/8 4/13 4/24 4/29	27	9 15 23	6		
T Cephei	'91 3/25 3/30 4/21 4/25 4/29	27	9 15 23	6 13 27	2 6 7 8	29
S Cephei	'91 3/25 4/13 4/25 4/29	27	9 23	6 13		29
R Cassiopeiae	'91 3/26		10 23	6 13 27	8	29
T Ursae Majoris	'91 3/25 3/30 4/8 4/13 4/29	25 29	9 15 23	6		9

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Sept. October Nov. Dec.

Data Uncovered In clouds that the Variable was Invisible.

29_{23}		$2\,18^{24}$	3/10
2_{23}	16	$2\,18^{24}$	3/10
$29_{12}20_{23}$	5 8 9/16	$2\,18^{24}$	3/10
$29_{12}20_{23}$	5 8 9/16	18^{24}	3/10
29_{23}	8 9/16	$2\,18^{24}$	10
9	8	2^{24}	7/8
9_{23}		18	
29_{24}	9	18	10
29_{24}		2 18	
9_{24}	9/16	2 18	10
29_{24}	9/16	2 18	10
2_{24}		18	
		2 18	
29_{25}	9/16	$2\,18^{24}$	3
29_{23}	9	$2\,18^{24}$	
29_{23}	8/16	$2\,18^{24}$	10
9_{24}	9/16		10

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Telescopic Variables

	July	Aug.	Sept.
R Hydrae	9		
χ Cygni	23 6	3 10 11	2 10
R Coronae		13	

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Measurements of Prismatic Conjunction by Standard Stars.

Dates of observations.

Bright Stars	No. 1	'91	11/3	11/7
" "	2	'91	11/3	11/7
" "	3	'91	11/3	11/7
" "	4	'91	11/3	
" "	5	'91	11/3	
" "	6	'91	11/3	
" "	7	'91	11/3	
" "	8	'91	10/21	
" "	9	'91	10/21	
" "	10	'91	10/21	
" "	11	'91	10/21	

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		Jan	Feb.	March	apr.	May
107	T Cassiop	8, 29,		13, 31,		
114	S Ceti	16,				
209	α Cassiopeiae					
243	U Cassiopeiae					
432	S Cassiop	8,		13, 31,		
782	R Arietis	16,		1,		
	New Variable No 1					
793	T Persei	8,		13, 31,		
	New Variable No 2					
806	O Ceti			1,		
814	S Persei	8, 16, 27,		13, 20, 31,		
893	U Ceti					
1222	R Persei			1, 29,		
	New Variable No 3					
	New Variable No 4					
1574	W Tauri					
1577	R Tauri		15,	1, 29,		
1582	S Tauri					
1855	R Aurigae	11, 27		13, 31,		10,
1944	S Orionis					
1986	T Orionis					
	New Variable No 5					
2100	U Orionis		15,	1, 13, 20, 29,		
2266	V Monocerotis		15,	1, 13, 20, 29,		
2478	R Lyncis	11,		13, 31,		18, 10, 22.
2946	R Canceri	7, 16,	15	1, 13, 20, 29,		
2525	R Geminorum		15,	1, 29,	25	
2976	V Canceri		15	1, 13, 20,		
2684	S Canis Min.		15	1, 13, 20, 29,		
3176	S Hydrae		15	1, 13, 20,		

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			Jan	Feb	Mar	Apr	May	June
3184	T Hydrae	'92 3/30			15		11	
3407	S Cancri				15			
3477	R Canis Minoris	'92 4/9		19/8	8,	13		20, 29
3493	R Leonis	'92 3/30			8, 24,	13		
3825	R Ursae Majoris			11, 29/1		16	18,	10,
4300	X Virginis				24	13		
4315	R Comae			1/6	24		11,	
4377	T Virginis					13		10
4407	R Corvi	'92 3/21				13		
4492	Y Virginis							
4511	T Ursae Majoris			11,		16		
4521	R Virginis	'92 4/1 4/24						
4557	S Ursae Maj.			11,		16	18,	
4596	U Virginis							6
4805	W Virginis							
4816	V Virginis							
4826	R Hydrae	'92 4/1 4/20 4/27						
4847	S Virginis	'92 4/1 4/30						
4948	R Canum Venatici	92 4/11						

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							Jan	Feb	Mar	Apr.
5157	S Bootis						11, 29,		16	10,
5196	R Canum Ven.						11,		18	10,
5237	R Bootis	'92	4/1	4/11	4/20	5/2				
5484	U Coronae									
5494	S Libræ			4/26						
5501	S Serpentis			4/20	5/17					
5504	S Coronæ	'92	4/11							
	U Coronæ	'92	4/11							
5667	R Coronæ	'92	4/11							
5677	R Serpentis	'92	4/11							
5770	R Herculis			4/13						
5826	T Serpii									
5830	R Serpii									
5831	S Serpii	'92								
5950	W Herculis									
5948	R Ursæ Min.						29,		18,	10,
5955	R Draconis									
6044	S Herculis	'92	4/13							
6083	Ophiuchi									
6132	R Ophiuchi									
5889										
6202	U Herculis	'92	4/11	4/13						

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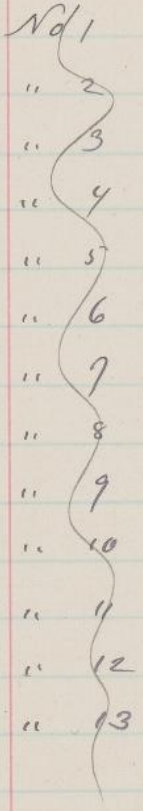
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		Jan	Feb	March	apr.
6512	T Herculis '92 $\frac{4}{13}$				
6849	R Aquilae '92 $\frac{8}{14}$				
7045	R Cygni				
7120	X Cygni 3/25 – $\frac{4}{16}$ $\frac{7}{15}$ $\frac{8}{15}$				
7220	S Cygni	11,	13		8
7299	U Cygni				
7428	V Cygni				
7456	RR Cygni				
7609	T Cephei	8,25,	18,		8
7907	U Aquarii				
7979	S Cephei	8,	18, 20, 21, 29, 31,	11,	8,
7994	R Pisces Austr.				
8290	R Pegasi				
8597	V Cati				
8600	R Cassiop.	8,27,			
D M+62.596	Persei				
	RS Cygni				

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	1893 Feb.
No 1	8
" 2	
" 3	
" 4	
" 5	
" 6	
" 7	
" 8	
" 9	
" 10	
" 11	
" 12	8½
" 13	

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30

112

112

R Cnchom.

a	0.0
b	3.7
c	9.4
d	13.7
e	17.0
f	20.3
g	24.3
h	26.3
k	30.3
l	34.3
m	39.6
n	41.9
o	44.9
p	49.2
q	52.5
r	55.8
s	60.1
t	65.1
u	
v	
w	

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100 T Car

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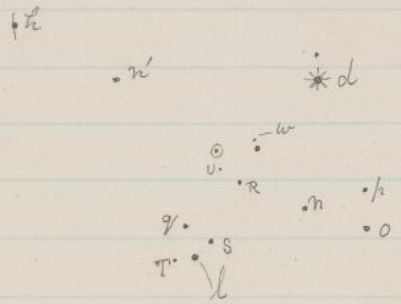
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112 R Andromedae.

(1855.0)

f	0	15	54	+37	40
g	0	16	43	+37	37
R	0	16	8	+37	43
S	0	16	30	+37	25
T	0	16	19	+37	33
u	0	16	21	+37	45
w	0	15	53	+37	48

Chart Notation (old.)



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114 S Cati

	1855.0				Dr. Magn	Dm No
	h	m	s	° ′		
a	0	11	14.8	−8 57.2	6.5	38
b	0	23	38.3	−10 52.7	7.2	89
c	0	19	45.5	−10 40.8	7.2	76
d	0	19	58.1	−9 27.3	8.0	74
e	0	15	19.7	−10 25.5	8.0	57
f	0	21	17.1	−10 12.6	8.3	8.2
g	0	15	25.8	−10 5.0	8.5	60
h	0	14	34.5	−10 42.7	8.6	56
k	0	13	47.2	−10 2.3	8.7	55
l	0	16	25.5	−10 16.1	9.4	62
m	0	16	6.0	−9 45.3	9.5	61
n	0	17	3.6	−9 58.6	10	66
o						

Sequence used so no fainter

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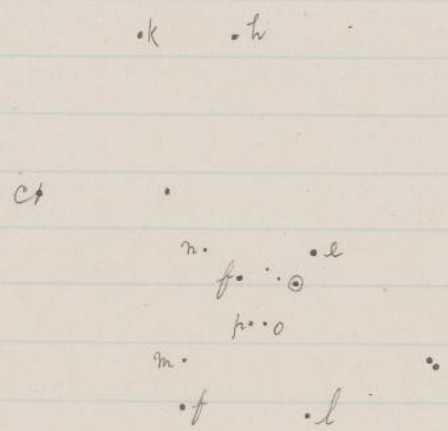
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513 R Piscium

			h	m	s	°	′
1	α	m	1	24	10	+ 1	59
1	β	n	1	23	56	+ 2	12
1	γ	o	1	23	24	+ 2	3
1	δ	p	1	23	34	+ 2	3

Chart Notation (old)



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2100 μ Orionis.

Final

a	5	45	48.0	+20	14.8	3	2	3	2	3	2	
b	5	55	18.7	+20	8.4	3	4	4	4	3	4	
c	5	54	52.5	+19	41.3	5	3	3	5	6	4	
d	5	46	22.0	+19	43.6	0	3	2	2			
e'	5	43	48.7	+19	49.4	7	5	5	5			
e	5	44	42.3	+20	15.8	3.5	3	3	5	4	4	
f	5	43	18.7	+19	28.6	6	4	5	6	5	5	
g	5	43	56.2	+19	42.1	4	3	3	3	3	3	
h	5	46	25.0	+19	34.1	3	2	4	3	5	3	3
k	5	46	34.8	+19	39.1	5	6	3	7	5	5	6
l	5	47	15.3	+20	5.2	5	4	6	6	6	6	5
m²	5	47	57.6	+20	3.2	2.5	3	4				
n'	5	48	41.0	+20	14.1	2	3	3				
q	5	47	44	+20	9	6	6	5				
θ	5	47	19	+20	8	2	2	3				
χ	5	47	vf	+20	3							
~~m²~~							3					
~~α~~						3	2					
~~χ~~						5	8					
~~χ~~						2	2					
~~θ~~												

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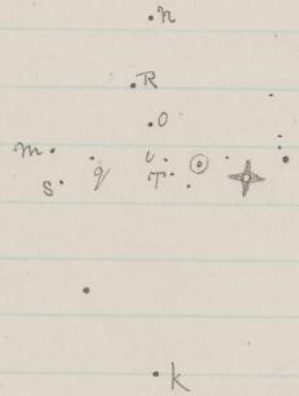
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782 R Arietis

(1855.0)* Mapm.

	h	m	s	°	′	
	2	6	24	+ 24	25	
	2	6	24	+ 24	27	
	2	6	29	+ 24	33	
α	2	6	44	+ 24	22	6.0
	2	6	47	+ 24	24	9
	2	6	48	+ 24	24	
Ven.	2	6	55	+ 24	23	
	2	6	57	+ 24	21	
3 T	2	7	5	+ 24	22	
η U	2	7	8	+ 24	24	
β q	2	7	46	+ 24	26	
δ S	2	8	6	+ 24	22	
h m	2	8	10	+ 24	27	
g R	2	7	20	+ 24	36	
h O	2	7	11	+ 24	30	
α p						

Chart Notation (altd)



h

k

* Each position in R.A. is = $2^h 4^m + \frac{4\alpha \cdot 3\alpha}{3\alpha \cdot 34}$ where α = true value of RA in excess of $2^h 4^m$. ∴ Multiply the amount in excess of $2^h 4^m$ by 4/3 & add the result to $2^h 4^m$ in order to get true RA of star for (1855.0).

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806 O Cati

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845 R Ceti

(1855.0)

		h	m	s	°	′
α	k	2	18	43.0	−0	29
β	h	2	19	43.	−0	30
γ	l	2	19	87	−0	41

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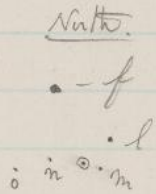
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1577 R Tauri

		(1855.0)			Dm Magn	Dm No
a	4	19 28.3	+10	52.6	6.4	577
b	4	22 4.4	+9	55.9	7.0	590
c	4	21 45.9	+10	11.7	7.0	583
d	4	24 11.5	+10	26.9	8.1	592
e	4	20 6.4	+9	44.5	7.8	584
f	4	25 49.7	+10	13.0	8.2	595
g	4	19 54.7	+9	40.6	8.3	583
h	4	17 47.8	+9	24.3	9.0	575
k	4	20 28.7	+10	42.4	9.4	578
l	4	18 49.0	+10	32.6	9.5	576
m	4	20 33.4	+10	53.7	9.5	580
n	4	18 10.9	+9	12.8	9.5	576
o	4	21 52.0	+9	37.5	9.5	589
p	4	21 0	+9	41		
*	4	20 57	+9	42	9	

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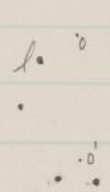
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2100 μ Orionis

	h	m	s	DN1 (1855)		DN1 magn.	DN1 No	M.P. magn. H.P.	
a	5	45	48.0	+20°	14'.8	5.0	1162	4.6	4.6
b	5	5~~4~~	~~52.5~~ 18.7	~~+19~~ 20	~~41.3~~ 8.4	5.1	~~1186~~ 1233	5.9	4.8
c	5	54	52.5	+19	41.3	5.6	1186		5.0
d	5	46	22.0	+19	43.6	6.3	1126		5.8
e	5	43	48.7	+19	49.4	6.0	1110		
f	5	44	42.3	+20	15.8	7.2	1136	6.6	
g	5	43	18.7	+19	28.6	6.8	1106	7.2	
h	5	43	56.2	+19	42.1	7.5	1113	7.7	
k	5	46	25.0	+19	34.1	8.6	1128		
l	5	46	34.8	+19	39.1	8.5	1131		
m	5	47	15.3	+20	5.2	9.2	1172		
n	5	48	17.5	+20	5.0	9.4	1185		
o	5	48	41.0	+20	14.1	9.5	1188		

North



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2100 U Orionis

			(1855.0)			Dm Magn	Dm No
a	5	45	48.0	+20	14.8	5.0	1162
b	5	55	18.7	+20	8.4	5.1	1233
c	5	54	52.5	+19	41.3	5.6	1186
d	5	46	22.0	+19	43.6	6.3	1126
e	5	43	48.7	+19	49.4	6.0	1110
f	5	44	42.3	+20	15.8	7.2	1156
g	5	43	18.7	+19	28.6	6.8	1106
h	5	43	56.2	+19	42.1	7.5	1113
k	5	46	25.0	+19	34.1	8.6	1128
l	5	46	34.8	+19	39.1	8.5	1131
m	5	47	15.3	+20	5.2	9.2	1172
n	5	48	17.5	+20	5.0	9.4	1185
o	5	48	41.0	+20	14.1	9.5	1188

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2528 R Geminarum

		(1855.0)			Δm mag	Δm No	Σ	No	Σ/No	M.P.	H.P.	H.P.²	Ø-M
a	6 53	34.0	+24	25.0	5.8	1502	3433	13	4	3.2	8.50	8.61	8.65	010
b	6 56	35.7	+22	52.2	7.1	1566	3433	13	4	3.2				
c	6 58	27.2	+24	23.2	7.1	1531								
d	6 49	2.1	+23	4.9	8.0	1554	3433	45	22	6	3.7	1011	01	
e	6 57	33.2	+22	54.3	8.5	1567								
f	6 58	34.0	+22	44.0	8.4	1576								
g	6 58	33.4	+22	36.7	8.8	1575								
h	6 58	42.0	+23	2.4	9.0	1604								
k	6 59	2.8	+22	58.4	9.1	1581								
l	6 59	43.3	+23	5.4	9.5	1609								

Red from chart.

γ × m	6	59	17	+22 36
δ × n	6	59	5	+22 47
ε × o	6	59	18	+22 44
η × p	6	58	32	+22 50
×	6	58	50	+22 46

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M.P.		H.P.		H.P.^{2}		Mean H.P.	Mean Resid	V.O.	Mean Resid
3.65	1	3.66	0	3.60	01	3.62	1	3.80	0.

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2684 S Canis Minoris

DM. (1855.0)

		h	m	s	°	′	DM magn.	DM. No	MP magn
a		7	27	36.4	+7	52.3	7.3	1773	6.6
b		7	23	3.2	+8	51.2	7.8	1791	7.1
c		7	21	~~45.2~~ 45	+8	8.2	8.0	1785 —	7.7
d		7	22	37.7	+8	0.8	8.0	1789	7.7
e		7	24	53.4	+8	57.8	8.5 —	1801	8.1
f		7	25 —	21.2	+8	16.7	8.8	1807	8.5 —
g		7	26	~~59.4~~ 59.9	+8	32.8	9.0	1811	9.0
h		7	26	4.1	+8	13.4	9.0	1810	
k		7	25 —	10.2	+8	42.2	9.5 —	1805 —	
l		7	Red 24	25.7	+8	40.9	9.3	1799	

from clouds.

α m
β n
γ o
δ p
ε q
ζ R



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2684 S Canis Minoris

		(1855.0)			DM Mayer	DM BD
a	7 27	36.4	+7	52.3	7.3	1173
b	7 23	3.2	+8	51.2	7.8	1781
c	7 21	45.2	+8	8.2	8.0	1785
d	7 22	37.7	+8	0.8	8.0	1789
e	7 24	53.4	+8	57.8	8.5	1801
f	7 25	21.2	+8	16.7	8.8	1807
g	7 26	5.9	+8	32.8	9.0	1811
h	7 26	4.1	+8	13.4	9.0	1810
k	7 25	10.2	+8	42.2	9.5	1805
l	7 24	25.7	+8	40.9	9.3	1791

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2946 DM (1855.0) R Cancri

		h	m	s			DM magn.	DM N3	MP. magn.
a		7	57	0.0	+13	32.2	5.8	1831	5.1
b		7	48	46.0	+16	9.9	6.0	1890	
c		8	15	59.	+11	6.3	6.5	1830	6.3
d		8	9	40.5	+9	18.7	7.5	1921	
e		8	12	37.1	+9	57.5	7.9	1934	
f		8	8	35.0	+11	29.5	7.8	1800	7.5
g		8	9	8.8	+11	47.5	8.2	1806	7.9
h		8	10	10.3	+12	6.2	8.5	1812	8.0
k		8	1	7.5	+10	55.5	8.2	1738	
l		8	8	57.8	+10	58.7	8.7	1764	
m		8	9	6.1	+12	27.8	9.2	1806	
n		8	6	9.7	+12	23.8	9.4	1797	
o		8	7	49.5	+12	34.8	9.5	1801	
p		8	6	46.5	+12	29.3	9.5	1799	

Red pm chart (old notation)

α	faint. mag.	8	9	23	+12	11
β	m	8	~~58~~ 8	38	+12	5
γ	o	8	9	30	+12	5

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2976 V Cancri.

		(PM 1855.0) h	m	s	°	′	DM magn	PM No	MP magn
a		8	17	37.7	+17	32.1	6.2	1842	6.1
b		8	4	45.0	+16	56.6	6.6	1662	
c		8	14	19.6	+16	37.3	6.8	1704	
d		8	16	30.3	+17	39.7	7.0	1836	7.0
e		8	14	44.0	+18	7.9	8.3	1927	8.0
f		8	12	33.3	+17	24.5	9.0	1823	8.8
g		8	14	31.8	+18	5.4	8.4	1926	8.2
h		8	12	47.8	+18	19.1	8.7	1917	8.6
k		8	15	53.3	+17	40.6	9.0	1833	
l		8	13	10.4	+18	7.3	9.1	1921	
m		8	13	38.6	+17	59.7	9.2	1826	
n		8	14	47.3	+18	1.4	9.4	1928	
o		8	13	52.3	+18	13.9	9.5	1924	
p		8	13	28.3	+18	7.0	9.5	1922	

Red from chart.

α	(m)	8	13	48	+17	46
β	(x)	8	13	38	+17	45

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3170 S Hydrae

		PM (1855→) h	m	s	°	′	DM Magn.	DM No	MP magn.
a		8	50	40.0	+2	6.0	7.5	2112	
b		8	49	41.2	+3	5.0	7.3	2099	
c		8	46	21.0	+2	22.3	7.8	2088	7.2
d		8	47	38.4	+3	11.2	8.1	2093	7.8
e		8	46	46.8	+3	39.9	8.7	2088	8.5
f		8	46	19.5	+3	3.1	8.6	2087	8.5
g		8	45	17.8	+3	34.0	9.0	2081	8.9
h		8	45	26.6	+3	55.1	9.3	2083	
k		8	44	40.3	+3	17.0	9.5	2077	
l		8	44	50.8	+3	29.1	9.5	2079	
α		8	47	10	+3	14.			
β		8	46	59	+3	36			
γ		8	46	7	+3	38			

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3184 T Hydrae

	t	SD		DM magn	DM No	MP magn.
		m s				
a	8	42 36.6	−8° 6.2	6.8	25-00	
b	8	47 10.7	−8 12.8	7.0	25-18	7.4
c	8	44 16.9	−8 35.2	7.5-	25-04	7.8
d	8	53 16.2	−8 33.4	7.5-	2549	
e	8	48 26.9	−9 22.5-	7.5-	2693	8.3
f	8	50 22.9	−8 51.5	8.5	25-36	
g	8	47 19.9	−8 40.0	8.3	25-20	8.9
h	8	50 35.7	−8 12.8	8.6	2538	
k	8	49 42.8	−8 30.7	8.8	25-32	
l	8	48 51.8	−8 51.0	9.1	25-28	
m	8	49 14.5-	−8 48.9	9.6	25-49	
n	8	48 42.6	−8 32.7	10	25-27	

chart Rotation

α (k)	8	48	15	−8 30
β (l)	8	47	4	−8 35
γ (m′)	8	47	36	−8 37
δ (m)	8	47	42	−8 36
η (n)	8	47	34	−8 35

old rotation (chart)

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3487 R Leonis Minoris

Chr. Astab

α (l) 9 37 6 +35 12

β (m) 9 36 58 +35 20

k m el

l

f

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3493 R Lewis

(1855)

	h	m	s	°	′	DM. magn.	DM. No	NP magn.
a	10	0	12.3	+10	43.4	5.0	2112	4.6
b	9	52	32.9	+ 8	44.3	5.0	2301	4.7
c	9	24	8.0	+11	53.7	5.3	2053	5.2
d	9	50	26.9	+13	7.2	5.5	2183	
e	9	35	49.6	+14	40.5	6.0	2136	
f	9	38	34.3	+12	29.2	6.2	2090	
g	9	27	57.7	+15	1.4	6.8	2077	6.1
h	9	39	38.9	+12	15.0	7.0	2095	6.3
k	9	43	1.9	+12	30.7	6.8	2105	6.8
l	9	35	48.2	+11	11.0	8.0	2087	
m	9	42	4.7	+11	46.5	7.8	2108	7.4
n	9	39	42.1	+11	30.5	7.8	2102	7.8
o	9	39	55.8	+11	3.1	8.0	2104	
p	9	43	10.4	+11	34.0	8.2	2112	8.0
q	9	41	12.1	+12	46.6	8.5	2099	8.3
R	9	41	1.8	+13	11.3	8.8	2160	8.7
S	9	37	13.2	+11	27.6	8.7	2094	
T	9	41	48.9	+12	46.7	9.0	2101	
u	9	39	27.0	+12	5.6	9.4	2093	
w	9	41	3.9	+11	13.8	9.0	2107	
x	9	40	33.5	+11	58.6	9.3	2105	
y	9	39	32.9	+12	2.9	9.5	2094	
Z	9	38	9.9	+12	9.8	9.5	2089	
α	9	38	41.7	+11	58.9	9.5	2098	
β (y)	9	38	42	+11	59			
γ (z)	9	39	46	+11	40			

Old Notation

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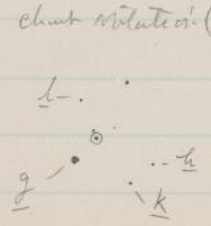
4300 X Virginis

α h

β k

γ l

chart Möllter's (added)



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4315 R Comae

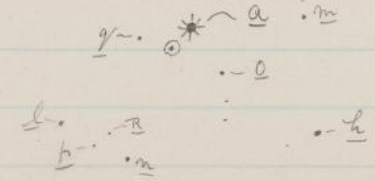
α o

β p

γ ~~χ~~ q

δ R

Chart Notation (old)



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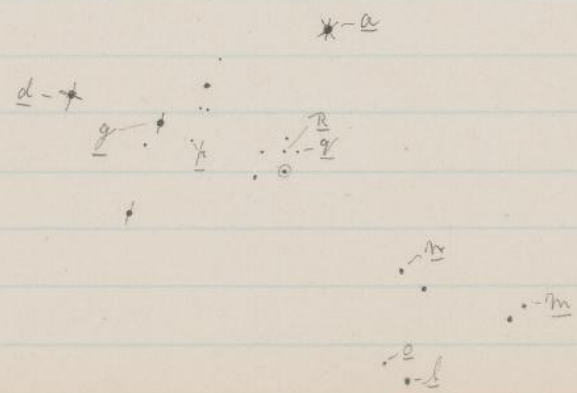
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4377 T Virginis

α | p
β β q
γ R
δ S

chart Mutatorii (vlol)



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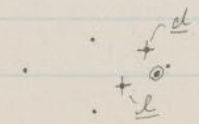
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1900phae.proj.1862.

4407 R Corvi

chart Notation (old)



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1900phae.proj.1862.

4492 γ Virginis

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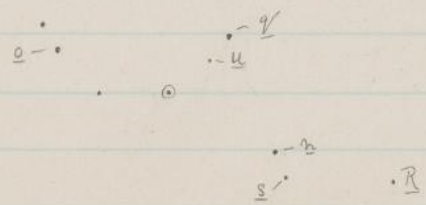
4521 R Virginis

α s

β t

γ u

chart Notation (old)



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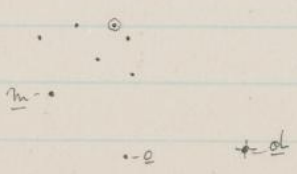
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1900phae.proj.1862.

4596 α Virginis

Chart Notation (added)



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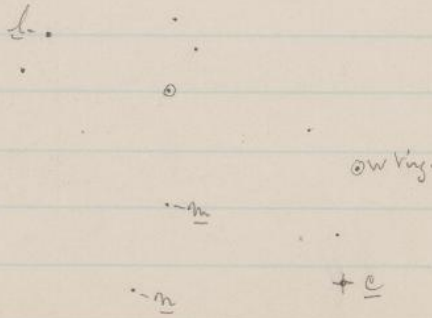
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1900phae.proj.1862.

4816 V Virginis

chart Natalia (old)



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1900phae.proj.1862.

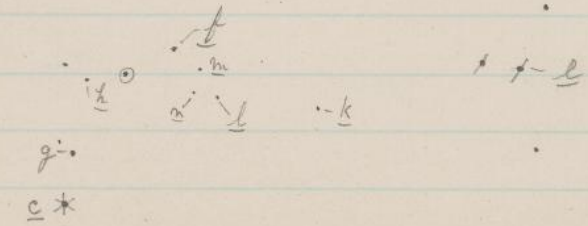
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1900phae.proj.1062.

4826 R Hydrae

h
k
l
m
n

Chart Notation (old)



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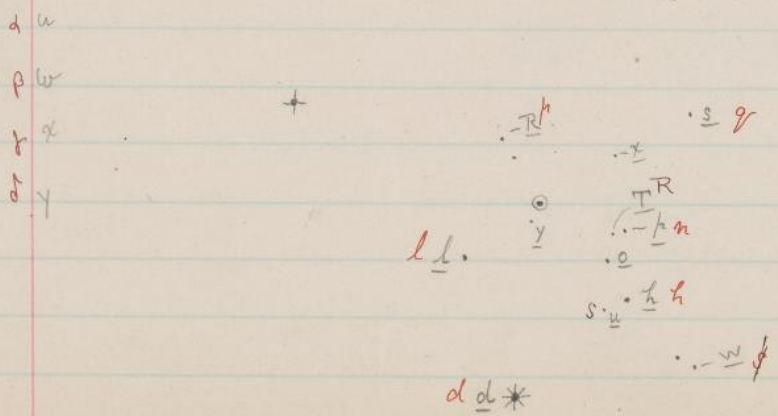
1900phae.proj.1862.

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1900phae.proj.1862.

4847 S Virginis

chart Notation (old)



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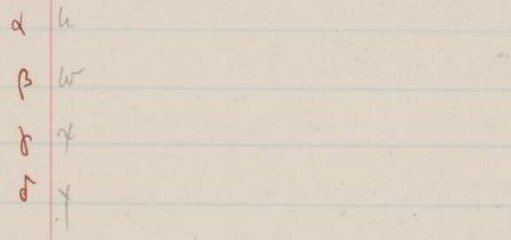
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1900phae.proj.1862.

4948 R Canis Venatici

Chart Notation (old)



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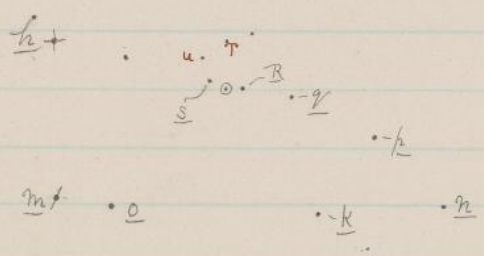
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1900phae.proj.1862.

5237 R Boötis

β	S	14h	31m	0s	+27° 23′
γ	T	14	30	54	+27 31
δ	u	14	31	11	+27 37

Chart Notation (old)



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1900phae.proj.1862.

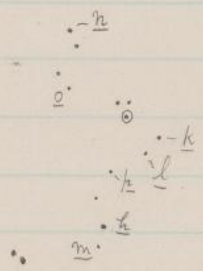
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1900phae.proj.1862.

5494 S Lihae

chart Notation [old]

α n
β o
γ k
δ q
η R



l

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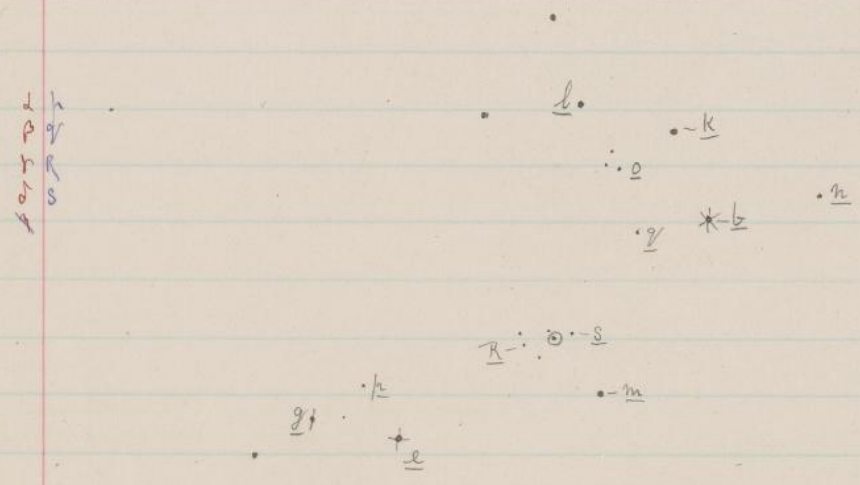
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1900phae.proj.1862.

5501 S Serpentis

Chart Notation (old)



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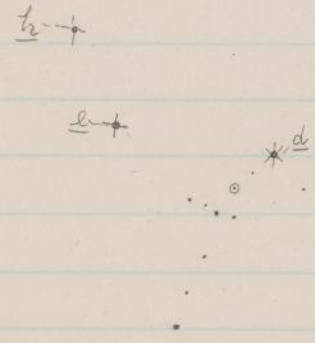
1900phae.proj.1862.

5504 S Carinae

1855 Chron.

α (γ) $15^{h}\ 15^{m}\ 39^{s}$ $+31^{\circ}\ 5'$

Chart Valentiner (old)



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1900phae.proj.1862.

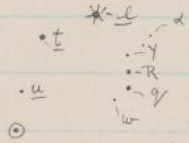
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1900phae.proj.1862.

5667 R Coronae

α w
β v
γ x
δ y
ε z
ζ d

Chart Notation (old)



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1900phae.proj.1862.

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5675 V Coronae

1900phae.proj.1862.

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1900phae.proj.1862.

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1900phae.proj.1862.

5677 R Serpentis

Chart Notation (old)



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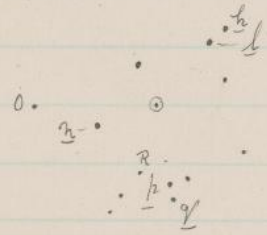
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1900phae.proj.1862.

5770 R Herculis

Chart Notation (old)



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1900phae.proj.1862.

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1900phae.proj.1862.

5826 T Scorpii

α h m s 16 9 25 − ° 22 ′ 35

Chart Notation (Abel)



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1900phae.proj.1862.

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1900phae.proj.1862.

5887 V Ophiuchi .

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1900phae.proj.1862.

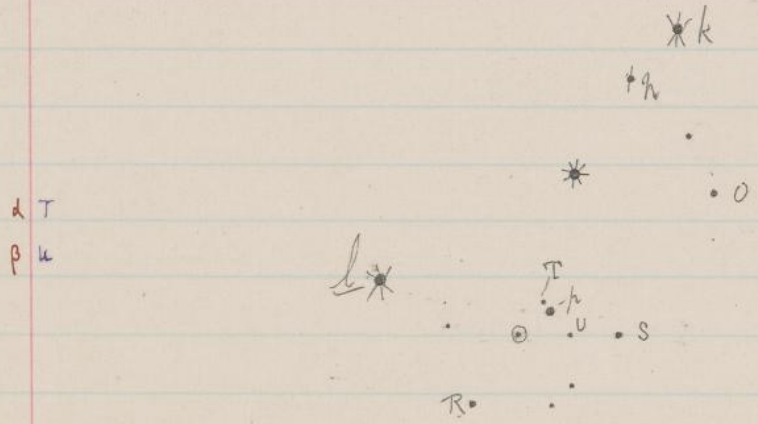
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1900phae.proj.1002.

150

5889 U Herculis

Chart Valentiner (old)



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1900phae.proj.1862.

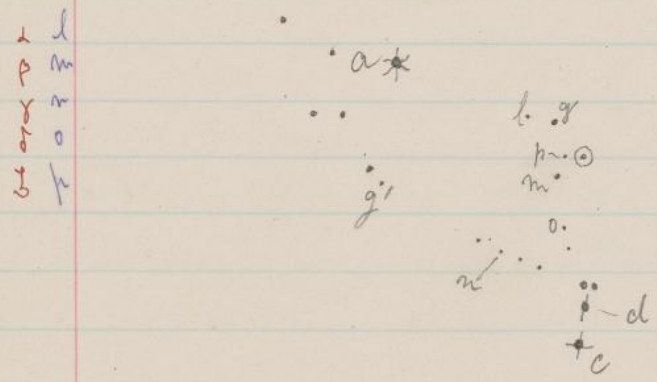
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1900phae.proj.1962.

52

5950 W Herculis

Chart Notation (old)



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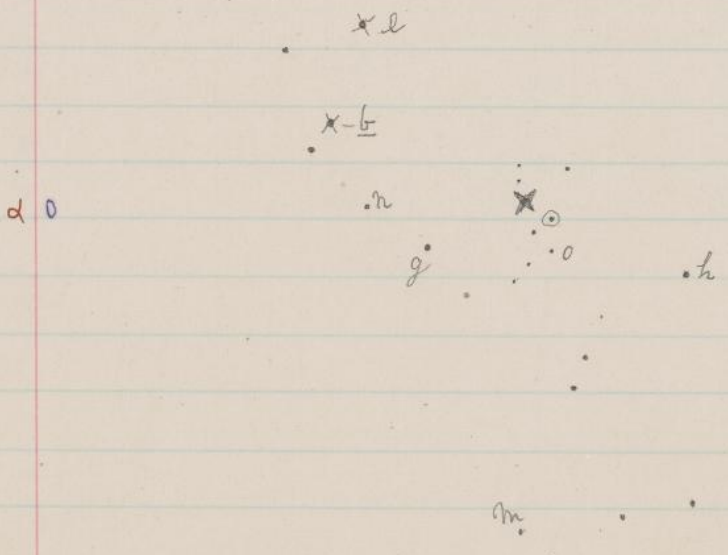
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1900phae.proj.1962.

6044 S Herculis

Chart Notation (a1d)



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1900phae.proj.1862.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

6083 Ophiuchi

1900phae.proj.1862.

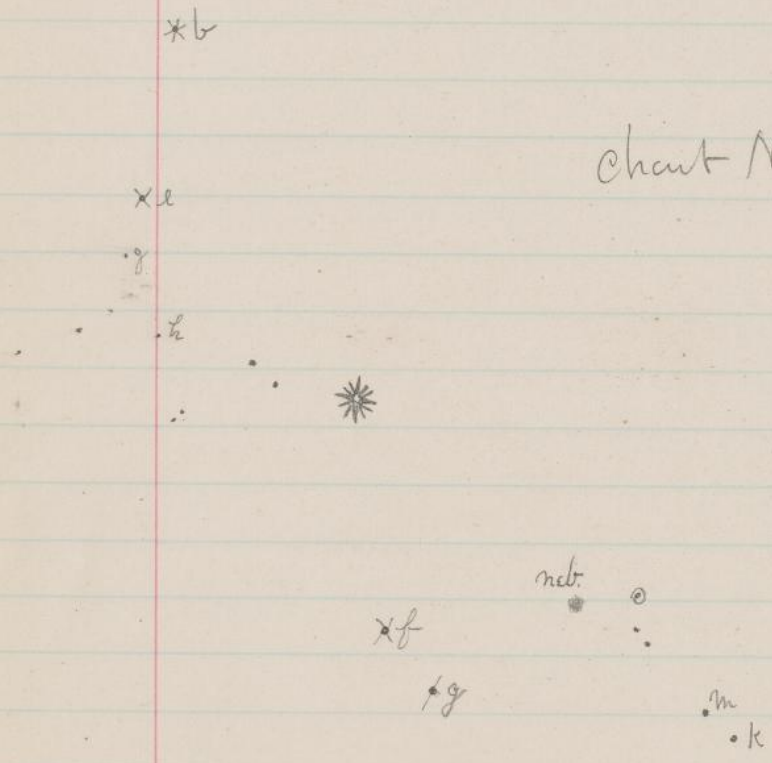
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1900phae.proj.1862.

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics - Provided by the NASA Astrophysics Data System

1900phae.proj.1962.

6132 R Ophiuchi



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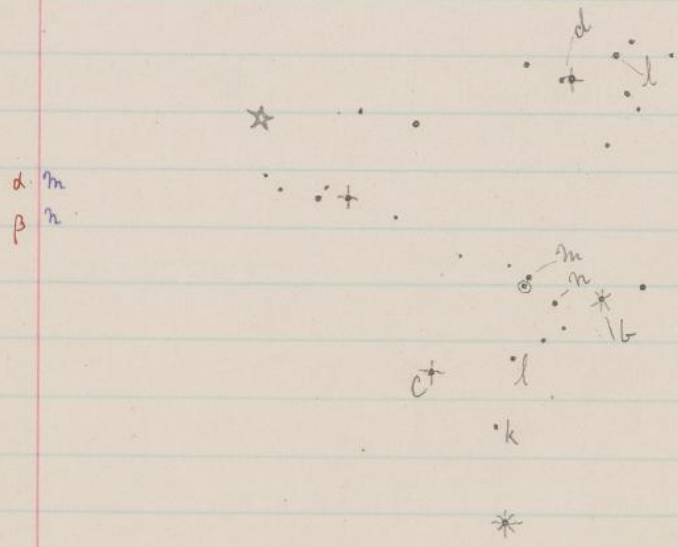
1900phae.proj.1862.

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6512 T Herculis

1900phae.proj.1862.

Chart Notation (old)



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6733 R Scuti

1900phae.proj.1862.

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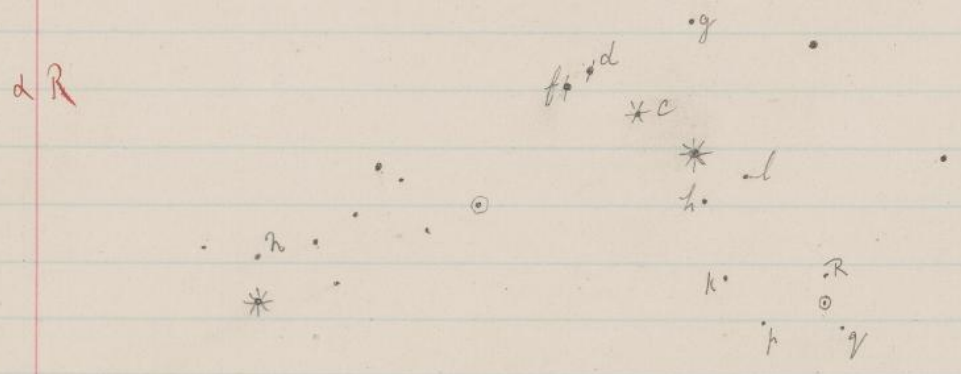
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1900phae.proj.1862.

6905 R Sagittae

Chart Notation (old)



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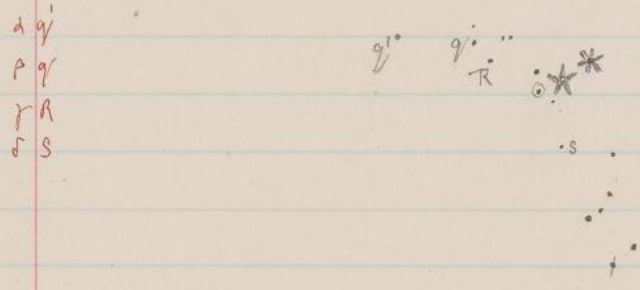
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7045 R Cygni

chart Notation (old)



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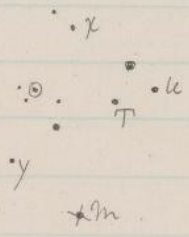
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1900phae.proj.1862.

7120 χ Cygni

chart Notation (old)



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1900phae.proj.1862:

170

7259 RS Cygni

	R.A.	δ
a	40.7	19.4
b	39.2	19.1
c	40.~~8~~ 7	19.3
d	33.1	20.9
e	37.5	29.5
f	34.7	30.8
S	31.1	42.1
k	36.3	35.0
*	36.2	32.8
vm	35.3	22.8
R	35.0	25.0
h	33.4	21.9
d	33.1	20.8
*	36.0	15.0
*	35.0	14.1
*	~~35.1~~ 35.1	~~15.1~~ 15.1
*	34.9	15.3
n	34.4	8.9
l	38.4	8.9
*	43.5	21.2
*	41.4	21.7

The above ordinates are imperical. Those headed δ correspond to N declination those under R.A. to R.A. The relation of the two systems can be found from T, S, etc. (known stars)
The above figures will serve to reproduce the eye sketch of the faint stars.

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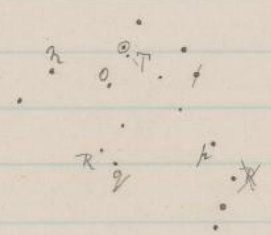
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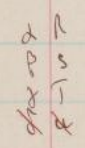
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172

7256 R Delphini

chart Nutation (old)





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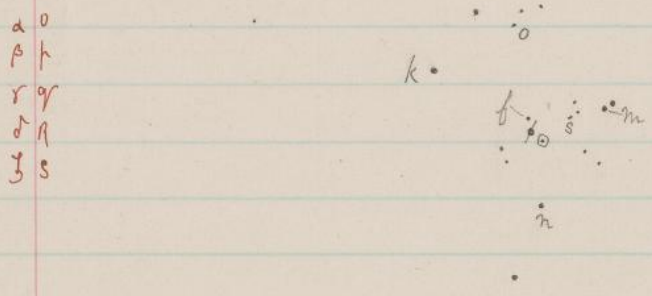
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1900phae.proj.1862

7299 11 Cygni

chart Rotation (old)



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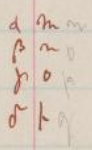
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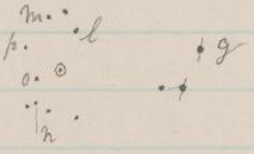
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1900phae.proj.1862.

7428 V Cygni

chart Notation (alcl)





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1900phae.proj.1862.

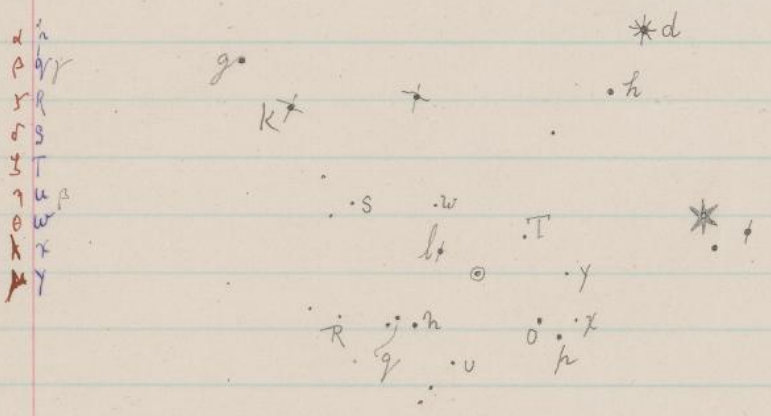
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1900phae.proj.1862

178

7468 T Aquarii

chart Notation (old)



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1900phae.proj.1862.

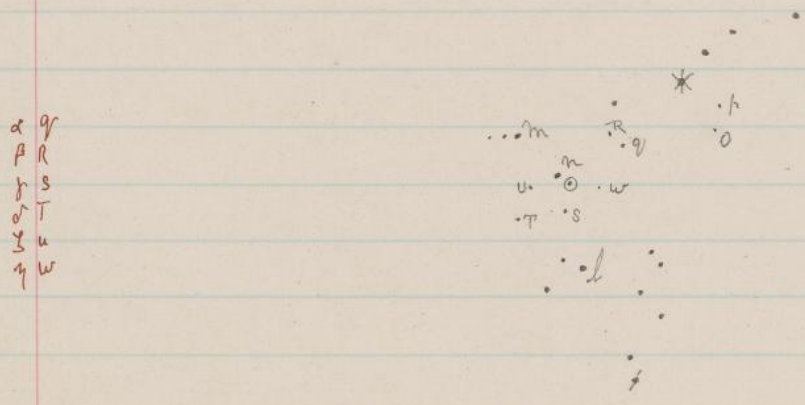
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180

7560 R Vulpeculae

chart Notation (old)



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7994 R Piscium Australium

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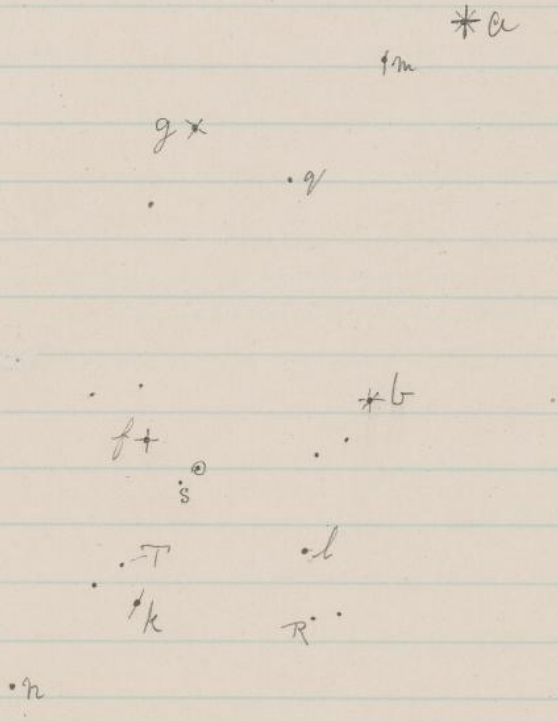
1900phae.proj.1862.

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1900phae.proj.1862

8230 S Aquarii

Chart Notation (old)



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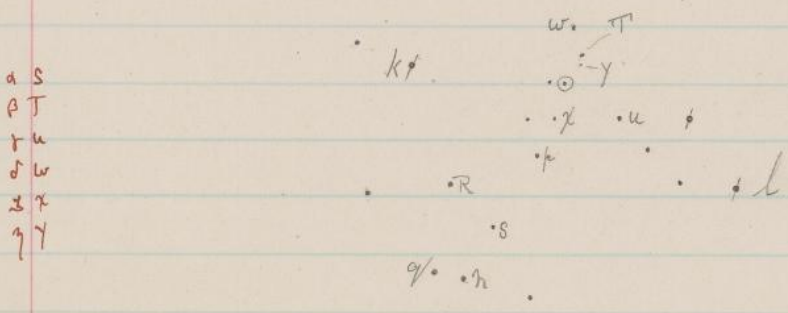
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1900phae.proj.1862.

8290 R Pegasi

chart Notation (old)



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1900phae.proj.1862.

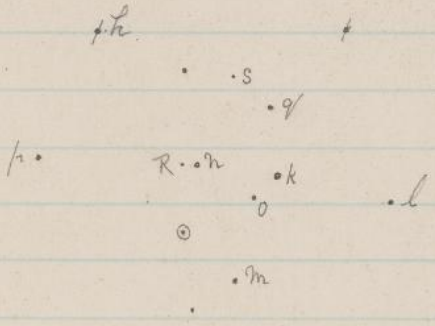
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1900phae.proj.1862.

8373 S Pegasi

chart Notation. (old)

α q
β R
γ S



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1900phae.proj.1862.

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1900phae.proj.1862.

8512 R Aquarii

chart Notation (old)

l. h. ⊙
o' m. h

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1900phae.proj.1862.

107	112	114	513
T Cassiop	R And.	S Ceti	R Piscium
		a-b xxx	a²-á xxx
		b-c xxx	á-a xxx
		c-d xxx	a-b xxx
		d-e xxx	b-c xxx
		e-f xxx	c-d' xxx
		f-g xxx	d'-e' xxx
		g-h xxx	e'-e, xxx
		h-k xxx	e-f' xxx
		k-l xxx	f'-f xxx
		l-m xxx	f-g xxx
		m-n'	g-h xxx
		n'-o	h-k xxx
			k-l xxx
			l-m xxx
			m-n xxx
			n-o xx
			o-p. x

amplitude

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1900phae.proj.1862.

782
R Arietis

α-β x
β-γ x
γ-g xx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-n xxx
n-o xxx
o-p xxx
p-q xxx
q-R xxx
R-s xxx
s-T x

e-f x
f-g x

806
O Ceti

845
R Ceti

7893
V Ceti

a^3-a^2 x
a^2-a' x
a'-b x
b-c' xxxx
c'-c xxxx
c-f xx
f-f' x
f'-g x
g-h' x
h'-h x
h-k xx
k-l x
l-m x
m-n x

1577
R Tauri

a-b xxx
b-c xxx
c-d' xx
d'-d xx
d-e'
e'-e x
e-f xxx
f-g^2
g^2-g
g-h xxx
h-k xx
k-l'
l'-l

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1900phae.proj.1862.

2100
V Orionis

a-b xxxxxx
b-c xxxxxx
c-d xxxxxx
d-e' xxx
e'-e xxx
e-f xxxxxx
f-g xxxxxx
g-h xxxxxx
h-k xxxxxx
k-l xxxxxx
l-m² xxx
m²n' xxx
n'-n x
n-o' x
o'-o x

2528
R Geminorum

a-b' x
b'-b x
b-e' x
e'-e x
e-d' x
d'-d x
d-e xx
e-f xx
f-g xx
g-h xx
h-k xx
k-l xx
l-m x
m-n x
n-o x
o-p x

2684
F Canis Min

a-b xxx
b-c xxx
c-d xxx
d-e xxx
e-f xxx
f-g xxx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-n xxx
n-o xxx
o-p xxx
p-q xx
q-R xx

2946
R Cancri

α-β xxx
β-γ xxx
γ-a xxx
a-b xxx
b-e xxxx
e-d xxxx
d-e xxx
e-f' xxxx
f'-f xxxx
f-g xxxx
g-h xxxx
h-k xxxx
k-l xxxx
l-m xxxx
m-n xxxx
n-o xxxx

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2976
V Cancri

α-β ××
β-a ××
a-b ××
b-e ××
c-d ××
d-e ××
e-f ××
f-g' ××
g-g, ××
g-h ××
h-k ××
k-l ××××
l-m ×××
m-n ××××

3170
S Hydrae

a' —
a —
b —
c —
d —
e —
f —
g —
g' —
h' —
h —
k' —
l² —
l' —

3184
T Hydrae

a'-a ××××
a-b ××××
b-c' ××××
e'-e ××××
c-d ××××××
d-e ××××
e-f' ××××
f'-f ××××
f-g ××××××
g-K² ××
K²-K'
k'-K ×
k-l ××××
l-m' ××
m'-m ××
m-n ××

(1855)
K²: 8h 4m 14.5s −8° 48' 9.6"

3477
R Leonis Minn

α'-α
α-β ×××
β-a ×××
a-b ×××
b-c' ×××
c'-d ×××
d-e ×××
e-f' ×××
f'-f° ×
f°-f ×
f-g' ×
g'-g ××
g-h ×××
h-k ××
k-l ×××
l-m ××
m-

3493
R Leonis

a-b ××
b-c ××
c-d ××
d-e ××
e-f ××
f-g ××
g-h ××
h-k ×××
K-l ×××
l-m ×××
m-n ×××
n-o ×××
o-p ××××
p-q ××××
q-R ××××
R-S ×
S'-S ×
S-T ×××
T-u ×
u'-u ×
u-w ××
w-X ××
X-Y ×××
Y-z ××××
Z

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4300
χ Virginis

a'-a
a-b ××××
b-c ××××
c-d ××××
d-e ××××
e-f ××××
f-g'
g'-g
g-h ××××
h-k ××××
k-l ×××

4315
R Comae

a'-a ×××
a-b ××××
b-c ××××
c-d² ××
d²-d ××
d-f ×××
f-h ×××
h-k ××××
k-l ×××
l-m ×××
m-n ×××
n-o ××
o-p ××
p-q ××
q-R ××

4377
T Virginis

c-d ××
d-e ××
e-g'
g'-g
g-h'
h'-h
h-k ××
k-l ××
l-m ××
m-n ××
n-o ×
o-p ×
p-q ×
q-R ×
R-S ×

4407
R Corvi.

a'-a
a-b ××
b-c ××
c-d ××
d-e ××
e-f ××
f-g ××
g-h ××
h-k
k-l

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4492	4521	4596	4816	4826
V Virginis	R Virginis	U Virginis	V Virginis	R Hydrae

a-b' x
b'-b x
b-e' x
c'-d x
d-e xx
e-f x
f-g xx
g-h'
h'-k'
k'-m'

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4847 S Virginis

4948 R Canis Ven.

5237 R Bootis

5494 S Librae

β-a'
a-a
a-e x
c-b xx — —
b-d x
d-e xx
e-f xx
f-g xx
g-h xx
h-k xx
k-l xx
l-m' x
m'-n x
n-o xx
o-p xx
p-q xx
q-R xx

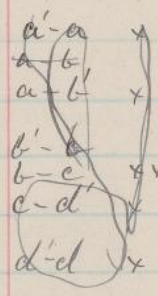
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5501 S Serpentis

a-b xxx
b-d xxxx
d-e xxx
e-f xxx
f-g xxx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-o xxx
o-p
p-q x
q-R x
R-S x

5504 S Coronae



a'-a x
a-b' x
b'-b x
b-e xx
c-d' x
d'-d x
b-c xx

h-k x
k-l x
l-m x

a-b x
b-e xxxx
e-d² xx
d²-d xx
d-e' x
e'-h x
h-k xxx
k-l xxx
l-m xx
m-n x
n-o xx
o-p xx
p-q xx

5667 R Coronae

a-b x xx
b-c x xx
c-d xxxx
d-e'
e'-e
e-b xxx
b-q xxx
q-k xx x
k-l xxx
l-m xx x
m-n xx x
n-o xx x
o-q xx
q-R xx
R-T xx
T-u xx
u-w x
w-x x
x-y x
y-z x
z-d x

ζ-β x x
β-γ x x
γ-d ζ x

5675 V Coronae

5677 R Serpentis

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1900phae.proj.1862.

5830
R Serpii

5770
R Herculis

a-b x x x
b-c x x x
c-d x x x
d-e x x x
e-h x x x
h-k x x x
k-l x x x
l-m x x x
m-n x x x
n-o x x x
o-p x x x
p-q x x x
q-R x x

~~5826~~
~~T Scorpii~~

a^2-a' x
a'-a x
a-b' x
b'-é x
é'-b
b-c x
e-d^2 x
d^2-é' x
é'-f^2
f^2-g'
g'-f
f-e
e-h' x
h'-g x

5889
U Herculis

a-b x x x
b-c x x
c-d x x
d-e x x
e-f x x x
f-g x x x
g-h x x x
h-k x x x
k-l x x x
l-m x x x
m-n x x x
n-o x x x
o-p x x x
p-q x
q-R x
R-S x
S-T x
T-u x
u-w x
w

5950
W Herculis

a-b x x x
b-c x x x
c-d x x x
d-e x x x
e-f x x x
f-g x x x
g-q x x x
g-h x x x
h-k x x x
k-l x x x
l-m x x x
m-n x x
n-o x x
o-p x x x

m-n' x
n'-o x

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	Chur		Sid	
5th	17	4.5	19	30
	18	4.5	20	30

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6044
S Herculis

d-a x
a-b xx
b-c xx
c-d xx
d-e xx
e-f xx
f-g xx
g-h xx
h-k x
k-l xx
l-m x
m-n x
n-o x
n-o x

6132
R Ophiuchi

α-β xx
β-a xx
a-e xxx
c-d xxx
d-e xxx
e-f xxx
f-g xxx
g-h' xxx
h'-k xxx
k-l m xxx
m-n xxx
n-o xxx

6512
T Herculis

a-b xxx
b-e' x
c-e
c-d' x
d'-e
e-f xxx
f-g xxx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-n x
n-o
o-p

6733
R Scuti

a-e
e-d xx
d-e xx
e-g
g-h xx
h-k xxxx
k-l xxxx
l-m' x
m'-n x
n-n xxxx
n-o xxxx
o-p

6905
R Sagittarii

a-b xxx
b-e xxx
c-d xxx
d-e' xx
e'-f xx
f-g xxx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-n xxx
n-o xxx
o-p xx
p-q xx

*
a-b' xxx
b'-b xxx
b-β xxx
β-e xxx
e-d xxx
d-e xxx
e-f xxx

b'-c'
c'-b

Note

*This sequence was approved by Mr. A.C.W.

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7045 R Cygni

b-e xxx
e-d xxx
d-a xxx
a-1 xxx
1-g xxx
g-h xxx
h-k xxx
k-l xxx
l-m xxx
m-n xxx
n-o xxx
o-p xxx
p-q xxx
q-g xxx
g-R xxx
R-S xxx

χ Cygni 7920

á-b' yy
b'-é' yy
é-d' xy
d'-é yy
é-a yy
a-b xxx
b-e xxy
e-d xxy
d-c xxy
c-1 xxy
1-g xxy
g-h xxy
h-k xxy
k-l xxy
l-m xxy
m-n xxy
n-o xxy
o-p xxy
p-q xxy
q-R xxy
R-S xxy
S-T xxy

T-w xy
w-x xx
x-y x
x-z x

T-x' x
x'-x x
x-y xy

c'-β x
β-d' x

n-p yx
n-o xy

7259 RS Cygni

T-S xxx
S-R xxx
R-p xxx
p-o xxx
o-n xxx
n-m' xxx
m'-l xxx
l-k xxx
k-h xxy
h-g xxx
g-f xxx
f-e xxy
e-d
d-e
c-b
b-a

2261 η Delphini

b-e xxx
c-d xxy
d-c xxy
e-f' xyx
f'-g xyx
g-d
d-m xx
m-n xxy
n-o xxy
o-p xxy
p-q xxy
q-R xxy
R-S xxy
S-T x
T-u y

g-k yxy
k-k xxy
k-l' xxy
l'-m yyx

l'-m' xy
m'-n x

1900phae.proj.1862.

7299
V Cygni

b-c ××
c-d —
d-e —
e-f —
f-g —
g-h —
h-k —
k-l —
l-m ××
n-o —
o-p —
p-q —
q-R ××
R-S ×

7428
V Cygni

a-b ××
b-c ××
c-d ××
d-e ××
e-f ××
f-g ××
g-h ××
h-k ××
k-b' ××
b'-l ×
l-m ××
m-n ×××
n-o ×××
o-p ××
p-q ×
q-R
R-S

7468
T Aquarii

a'-a ××
a-b ×××
b-c ××
c-d ××
d-e' ××
e'-f' ×××
f'-g' ×××
g-h ×××
h-k ×××
k-l ×××
l-m ×××
m-n ×××
n-p ××
p-q ×××
q-R ×××
R-S ×××
S-T ×××
T-u ××
u-w ×
w-x ×
x-y ×

7560
R Pulcherrae

a-a ×××
a-b ××
b-c ××
c-d ×××
d-e' ×××
e'-f ××
f-g' ××
g'-e ×××
e-l ××
l-n ×××
n-q ××
q-R ×

8230
S. Aquarii.

c-d ××××
d-e ××××
e-f ×××
f-g ××
g-h ××××
h-k ×××
k-l ×××
l-m ×××
m-n ×××
n-o ×××
o-p ×××
p-q ××
q-s ×
s-T ××
T-u ×
u-w ×

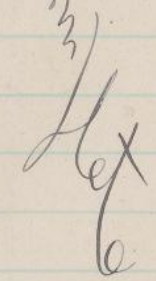
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8290
R Pegasi

a-b xxxx
b-c xxx
c-d x
d-f xx
f-g xxx
g-h xxx
h-k xxx
k-l xx
l-m xx
m-n xx
n-o xx
o-q
q-R x
R-S xx
S-T xx
T-u xx
u-w x
w-x x
x-y x
Y

8393
S Pegasi



8512
R Aquarii

a-b' xxx
b'-b xxx
b-c xxx
c-d —
d-e —
e-f —
f-g —
g-h —
h-k —
k-l —
l-m xxx
m-n xxx
n-o xx
o-p xx
~~p-q~~

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T Cassiop	b_e	c_e	d_e		
S "	b_e	c_e			
S Persei	a_e	b_e			
R Aurigae	a_e	b_e			
R Lyncis	a_e				
R Ursae Majoris	a_e	g_e	γ_e		
T " "	a_e	α_e	β_e		
S " "	a_e	b_e	d_e		
S Bootis	a_e	b_e	c_e		
R Ursae Min.					
R Camelop.	a_e	β_e			
R Draconis	a_e	b_e	c_e	d_e	f_e
S Cygni	d_e	β_e			
T Cephei	d_e	ϵ_e	ζ_e		
S Cephei	a_e	b_e	c_e		
R Cassiop.	f_e	g_e	ζ_e	k_e	l_e

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Civil Time
Thurs. Dec 8 92
+ 11:30 – 2:10
at American Soy Wednesday.

No 28	~~5h~~	~~Augm~~	~~Ab~~	Augm.	No.	
α =	5h	31m	27.0s	-2 4.0	41.0'	4.0	1326
a =	5h	32	30.0	-2	45.7	9.1	1332
b =							
No 28							
α =	5h	28 ~~29~~	52.5 ~~8.3~~	-1	17.6	2.0	969
c =	5	26	11.0	-1	15.0	7.4	943
d =	5	26	42.4	-1	7.8	7.7	949
No. 22							
α =	5	24	36.7	-0	24.6	2.0	983
e =	5	27	5.0	-0	6.8	7.7	1000

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Civil Time
Thurs. Dec 8 92
+ 11:30 – 2:10
+ 4 previous day to Saturday.

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