January 16, 1907

Continuation of Bk. 15 – Examination of spectrum plates (C and X)

✓ C16058 DC2231 = H.P. 642.
B5 A. fairly well defined

✓ C16245 DC10486 = H.P. 4252

Too dense. A, B9 A?

✓Repeat.

✓ C16410 ✓ DC4064 = H.P. 1361

✓ (1) mb

✓ (2) DC4014 = H.P. 1347
K

✓ C16450 ✓ DC 4930 = H.P. 1675
A5 F

✓ C16472 DC5269 = H.P. 1792
A5 F

Jan. 16, 1907

✓ C16474 DC 4145
Focus very poor
Probably B8A.

Repeat.

other spectra too poor.

✓ C16478 DC5479 = H.P.1886
A
very dense

✓ C16479 DC5890
Qual. 1. Nothing on plate
Already classed from
C15523

✓ C16481 DC4209 = H.P.1406
(1) K
✓ (2) DC4199 = H.P. 1413
B8A
✓ (3) DC4180 = H.P. 1397
G5K

Jan. 16, 1907

✓ C16482 DC4774 = H.P.1631
(1) A3F
✓ (2) DC4799 = H.P. 1640
G5K
✓ (3) DC 4730 = H.P.1619
A3F

✓ C16495 DC4774 = H.P.1631
A5F
✓ (2) DC4799 = H.P.1640
G5K

✓ C16496 DC5976 = H.P.2052
B3A

✓ C16501 DC7002 = H.P.2561
F
The faint spectrum of + 37° 2637 is
seen on the following side of DC7002.
It is probably K.

Jan. 16, 1907.

✓ C16503 DC3633 = H.P. 1200

(1) A5F

✓ (2) B3A = D.C. 3626, H.P. 1199

✓ C16508 DC4245 = H.P. 1421

A2F

✓ C16514 DC3665, H.P. 1216

B5A

✓ (2) DC3658 = +20°1428

A

✓ C16515 DC3660 = H.P. 1211

G

Very faint

✓ C16516 DC6172 = H.P. 2136

A

✓ (2) DC6174

K

Jan. 16, 1907.

✓ C16519 DC6164 = ~~+~~18°3418

A3F

✓ C16528 DC7117

Dual. 1

Already classified as A in C. 16544

~~C16579~~

✓ C16610 DC8500 = H.P. 3231

K

✓ (2) DC8490

A3F.

Probably peculiar.

The G calc. line of shorter λ than Hδ is quite strong

✓ C16613 DC8193 = H.P. 3124

A

✓ (2) −18°4994

Continuous. Examine in better light

✓ (3) DC8177 = H.P. 3121 = K

Jan. 16, 1907

√ C16616 DC7292 = H.P. 2748

K

√ C16620 DC8683 v Sag.

Partly off plate.

Faint phase of the hyd. lines.
Hβ not seen
Hγ much fainter than 4387

√ C16629 DC7479 = H.P. 2859

A3F

√ C16640 DC7424 = H.P. 2832

B8A.

√ C16643 DC8149

Quality 1.
√Repeat.

Jan. 16, 1907

√ C16644 = DC9489

Ma

√ C16645 DC $\frac{669}{670}$ H.P. $\frac{199}{200}$

Probably F.
only one spectrum seen
Narrow & fine lines not clearly seen.

√ (2) K DC679 = H.P. 204

√ C16649 DC9193 = H.P. 3608

K!?
nearly all burned out.

C16660
& Herc.
nothing on plate.

√ C16665 DC $\frac{1011}{1033}$

Too poor Quality 2

Repeat

Jan. 1~~6~~7, 1907

√ C 16670 DC 8488 = H.P. 3226.

B5A

√ C16633 DC9383

Qual. 1

Nothing on plate

✓Repeat.

√ C16637 DC9642 = H.P. 3911

B3A.

√ · C16647 DC9515 = H.P. 3844

(1) Ma

√(2) K DC9507 = H.P. 3838

√ C 16659 α Cygni H.P. 3631

Very poor of fine lines.

Jan. 17, 1907

√ C16661 DC 798 = H.P. 228

F

√ C16683 DC1331 = H.P. 373

A2F

√ C16692 DC ~~[illegible]~~ 3711 = H.P. 1239

A?

Too poor.

✓Repeat.

√ C16674 DC8231 = H.P. 3134

K

√ C16676 DC1248 = H.P. 352

(1) G5K

√(2) G DC 1224 = H.P. 343

√ C16677 DC 1994 = H.P. 563

A

Jan. 17, 1907.

C16679 DC1383
Nothing on plate.
Already classified

✓ C16684 DC1157 = H.P. 428

A

✓ C16685 DC 1628 = H.P. 444

B5-A

✓ (2) DC1617 = H.P. 441

K

✓ C16613 DC8193

-18° 4994 appears on plate
Marked by W. P. F.
"Faint bright hydrogen lines"
I do not see any decided brightness.

It would be well to have this photographed
in the centre of a plate.

Jan. 17, 1907

✓ C16688 DC2784
Qual. 1.
Nothing on plate.

Already Classified

✓ C16689 DC1509 +15° 461

K

✓ +15° 458
K
very poor

✓ C16690 DC 2003 = H.P. 571

Too poor
Lines burned out.
A or B

Repeat.

C16691 DC2586

Too poor. Nothing on plate.
Already classified

Jan. 17, 1907.

✓ C 16708 o Ceti

$H\beta$ faintly bright.

$H\gamma$, $H\delta$, $H\epsilon$ also bright.

A strong bright band in the violet.
Is this $H\zeta$?

✓ C 16560 ζ Urs. Maj.

A

✓ C16530 DC7589

B5A

Cover marked, "Lines hazy, Probably Double" W.P.F.

✓ C16543 DC7045 = H.P. 2588

B5A. (very dense)

✓ (2) +31° 2742

A2F

Jan. 17, 1907

✓ C 16552 DC 7195 = H.P. 2686

A

✓ C16573 DC 8454 = H.P. 3209

G5K

✓ C16576 DC 7458 = H.P. 2847

A2F – (good)

✓ C16592 DC 8223 = H.P. 3132

B8A

✓ (2) DC8229

B3A, Lines hazy, W.P.F.

✓ C16608 DC7196 = H.P. 2687

A3F

✓ C16609 DC8454 = H.P. 3209

G

Jan. 17, 1907.

✓ C16646 DC7545 = H.P. 2902

A2F

✓ (2) DC7546 = H.P. 2904

A

✓ C16648 DC8579 = H.P. 3272

B3A

✓ C16650 DC136

F or F5G

✓ C16652 DC8454

G5K

✓ C16658 α Lyrae H.P. 3147

A

✓ C16662 DC935 = H.P. 264

Too poor.

A or B.

Jan. 17, 1907

✓ C16667 DC8579

Too poor

Lines burned out

✓ C16668 DC8580 = H.P. 3271

F

✓ C16607 DC8763

Quality 1.

✓ Repeat.

✓ C16361 DC5085 = H.P. 1717

K

✓ (2) DC5102 = H.P. 1722

K

✓ C16562 DC7102 = H.P. 2620

G Pec.

Line 4077 is nearly as intense as K

Jan. 17, 1907

✓ C16586 DC8231

K

✓ C16634 R Cor DC7132 = H.P. 2639

Pec

A special study should be made of them

Friday, January 18, 1917

✓ C16206 DC1044 = H.P. 290

B8A.

✓ C16213 DC2468

Too poor. Not identified

✓ Repeat.

✓ C16247 DC1350 = H.P. 377

Too poor.

A5F.

Already classified F

✓ C16280 DC 1011 / 1033

(1) DC1011 = H.P. 282

F

✓ (2) DC1033 = H.P. 286

K

✓ C16319 DC3740, 3751

Not identified

✓ Repeat.

Jan. 18, 1907.

√ C16366 DC3124

Not ident.

✓ Repeat.

√ C16390 DC4178 = H.P. 1398

B8A

√ C16656 DC921 = H.P. 257

A8 Pec.

4128-31 is the strongest line except the hydrogen. K very faint.

√ C16681 DC1558

K

√ (2) DC1572

K

Jan. 23, 1907

✓ C16246 DC803

F

C16362

Nothing on plate.

✓ C16485 DC673 ✓

G5K

✓ C16513 DC 6996 ✓ H.P. 2559
6997 2560

G ✓

✓ (2) DC6976 = H.P. 2549

K.

C16615 DC8691
Too poor. First type.
Quality – 2.

✓ C16627 DC9505, 9506 = H.P. 3840
3841
F5G!

Jan. 23, 1907

✓ C16630 DC 8763 $19^h 25^m$

A2F

✓ C16669 DC 8668 = H.P. 3312

A3 or 5 F.

Narrow.

✓ C16695 DC 9782

A2F

✓ C16717 o Ceti (Dec. 1, 1906)

$H\beta$, $H\gamma$, $H\delta$, $H\gamma$ brighter

4227 is not ~~so~~ very strong.

January 25, 1907

✓ C16215 DC 3795

B3A

C16275 ✓

✓ (1) DC 2132 = H.P. 607

A

✓ (2) DC 2121 = H.P. 598 ✓

A

C16308 DC 2837 = H.P. 890

(1) Not enough on plate

(2) +74° 238

A2F

(3) +75° 209

A

(4) +74° 229 = $\underset{K}{D}$C 2734

✓ C16314 DC 3813

B5A.

✓ January 25, 1907.

C16419 DC6280 = H.P.2197

F

✓ (2) DC6301

K

(3) DC6240
A3 or 5 F

✓ C16420 DC6469

A

✓ C16425 DC6469
A

C16426 DC6654

Not identified
Already classified.

✓ C16442 DC 6085 = H.P.2084

A

✓ (2) DC6024
F5G } very narrow.

January 25, 1907

✓ C16461, DC6418 = H.P.2253

A

C16463

✓ DC6280
Too narrow. F or F5G

✓ DC6317 = H.P.2206
K

C16469

Not identified.

✓ C16497, DC6409 = H.P.2248

Too dense
Already classified.

✓ C16505 DC 7101 = H.P.2621
A2F

✓ (2) DC7104
A3F

Jan. 25, 1907

✓ C16664 DC885, H.P. 248

G? very narrow

(2) DC919 = H.P. 259

B8 or 9 A

✓ No lines clearly seen except the hydrogen.

C15687 DC6528

Not identified

January 26, 1907

✓ C16699 DC343, H.P. 111

A5 F

✓ (2) DC376, H.P. 112

B9 A or A, poor focus

✓ (3) DC356, H.P. 115

K

✓ C16700 DC9489, H.P. 3826

DC9489, H.P. 3826

Ma

✓ (2) +5°4857

A3 F

✓ (3) +4° 4722

A2 F

January 26, 1907

✓ C16701 DC570, 571

Two spectra superposed.

✓ (1) DC570 Preceding & northern star ~~G~~ has stronger K line fainter! Spectrum A2F

(2) ✓ DC571 Following star is A.

✓ (3) DC ~~606~~ 603, H.P. ~~196~~ 178

A2F.

✓ C16704 DC4033 = H.P. 1353

Probably Orion type

Too poor. Repeat

B3A?

✓ C16705 DC136, H.P. 49

F? very poor

Jan. 26, 1907

✓ C16715

DC 136

✓ F5G

(2) + 37° 42

G

(3) ✓ +37° 48

K

✓ (4) Ma R Andromedae taken Nov. 25, 1906.

No bright lines.

✓ C16719 DC9779

A

Lines very hazy

C16675 DC571, 571

Sp. F
pre. northern
star = A2F
Sp. f s.f.
star =
A

Contrary to C16701, the K line of the preceding, northern star is fainter than of the southern star. I am not sure whether this is real or photographic. K of fainter ~~component~~ star barely seen. K of stronger ~~component~~ star is quite strong

January 28, 1907

X 11252 S.M.P. 5979, A.G.C. 23392

✓ K

(2) A.G.C. 23416

Type V

On edge of plate

Class Od. The broad bright band 4633 is very conspicuous.

Hγ bright, also 4471 and Hγ'

(3) ✓ A.G.C. 23486

Hβ off the plate.

Hγ double as in bright line stars

Sp. B3A?

Doubling may be due to spectrum being so near edge.

Repeat.

January 31, 1907

Repeat. C 16195 DC 9692

Too poor.

✓ B9A?

✓ C 16224 DC 9482

B2A

✓ C 16231 DC 9872 = H.P. 4009

A2F

✓ (1) C 16271 DC 2121 H.P. 598

A2F

✓ (2) DC 2132, H.P. 607

A2F

✓ C 16285 DC 9872

A

very thin and faint

Jan. 31, 1907.

√ C16286 DC1706, H.P.47$\overset{5}{1}$

Too faint

2nd type?

√ (2) H.P.469, A.G.C.3185 —

A5 F.

√ C16337 DC3760 = H.D. 1357

6 35.5 −23.6

Too faint.

√ (2) DC3727, H.P.1242

A.

√ C16355 DC879, H.P.246

K

√ C16381 DC2998, H.P.961

A

√ (2) DC2946, H.P.94[illegible]

B8 or 9 A

Jan. 31, 1907

√ C16422 DC4273

B8A?

Focus poor. 4026 seen.

C16448 DC7061

Too poor.

√ C16512 DC6962, H.P.2545

G

(2) √ DC ~~6962~~ 6945 +68°823

A3F

√ C16529 DC7237, H.P.2717

B9A?

√ (2) DC7268, H.P.2735 —

K

~~C1556~~

C16546 DC7595 —

Not identified

Jan. 31, 1907.

✓ C16550 DC7677, H.P. 2964

(1) F5G

✓ (2) K DC7648, H.P. 2951

✓ C16561 DC7061

B9A or A. 15 32 -26°

Too poor.

✓ C16563 DC7344, H.P. 2792

A5F

✓ C16574 DC8619

Not identified

Too poor.

✓ C16578 DC7061

Too poor.

Jan. 31, 1907

✓ C16580 DC7441

A5F?

Too poor.

✓ C16585 DC7874

Too poor.

✓ C16588 DC7175

Too poor.

B9A?

✓ C16591 DC7817, H.P. 3006

A

✓ (2) DC7848, H.P. 3011

B

✓ C16594 DC8834

Not identified

Jan. 31, 1907

✓ C 16596 DC 7274

B 8 A

✓(2) DC 7301, H.P. 2759

F

✓ C16579 DC 7240, H.P. 2711

B 3 A

very poor.

✓ C16600 DC 7258 16 – 25

1st type

too poor.

C16602 DC 8619, H.P. 3287

1st type

too poor.

✓ C16612 DC 7157, H.P. 2656

A2 F

✓(2) DC 7176, H.P. 2671

B 3 A? Too poor

Jan. 31, 1907

✓ C16621 DC 8709, H.P. 3331

A5 F

✓ C16628 DC 7595 = H.P. 2928

A2 F

Lines broad, perhaps double.

✓ C16631, DC 8834

A?

Too poor.

✓ C16635 DC 8619, H.P. 3287

F5 G

✓ C16636 DC 8511

K

✓ C16639 DC 9872, H.P. 4009

A

✓ C 16641 DC 7441, H.P. 2843

F5 G

Jan. 31, 1907

✓ C16642 DC7344, H.P. 2792

A3F

✓ C16651 DC7237, H.P. 2717

A

✓ C16655 DC8263, H.P. 3144

B9A or A

Only the hydrogen lines are seen

~~✓~~ C16671 DC8650

Not identified

✓ C16686 DC1706, A.G.C. 3208

K

✓ (2) H.P. 469, A.G.C. 3185

A5F

✓ C16694 DC9872, H.P. 4009

A2F

Jan. 31, 1907

✓ C16698 DC8650, H.P. 3323

F

✓ (2) +76° 734

N

In Cat. Var. Stars.

✓ (3) DC8567

F

Friday, February 8, 1907

✓ Examination of X spectrum plates

X 11256 S.M.P. 5681, A.G.C. 22390

✓ (1) B
Excellent of this rare type of stellar spectra

✓ (2) B3A, A.G.C. 22476

✓ (3) B3A? Pec.
Partly on plate, A.G.C. 22441, S.M.P. 5697
Hγ seen
Hβ missing
Have this star photographed in centre of plate!

✓ X11257 S.M.P. 5972, A.G.C. 23362

(1) B8A

✓ (2) G, A.G.C. 23323

✓ (3) Faint A.G.C. 23369
Probably K.

✓ (4) K, A.G.C. 23137

February 8, 1907

X11258 S.M.P. 6684, A.G.C. 26026

✓ (1) K5M

✓ (2) F? , A.G.C. 26095
Too faint unless there are other plates.

✓ X11259 S.M.P. 6938, A.G.C. 27144
(Two spectra partly superposed,

(1) K

✓ (2) A5F? , A.G.C. 27145, S.M.P. 6939

✓ X11260, S.M.P. 7362, A.G.C. 29552
A2F

✓ X11261 S.M.P. 5989, A.G.C. 23360
Mb

February 8, 1907

✓ X 11262, S.M.P. 6953 ~~6592~~, A.G.C. 27219.

(1) A3F

✓ (2) A2F, S.m.P. 6955, A.G.C. 27224

✓ X11263, A.G.C. 28900, S.M.P. 7240

(1) K

✓ (2) A2F?, A.G.C. 28946
Too poor.

✓ X11266, A.G.C. 20444, S.M.P. 5124

(1) K

✓ (2) Mb, A.G.C. 20429

✓ (3) Probably B3A, A.G.C. 20390

✓ (4) A Pec., A.G.C. 20509., S.M.P. 5141
+ 128-31 is very strong

February 8, 1907

✓ X11265, S.M.P. 4651, A.G.C. 18718

(1) A

✓ (2) G, A.G.C. 18761

✓ (3) G, A.G.C. 18826

✓ (4) F, A.G.C. 18758

✓ X11267, A.G.C. 22082, S.M.P. 5591

(1) A3F

✓ (2) K, A.G.C. 21991, S.M.P. 5567.

✓ X11344 S.M.P. 7762, A.G.C. 31580

(1) F5G

✓ (2) K, A.G.C. 31558

✓ (3) K, A.G.C. 31523

✓ (4) A5F?, A.G.C. 31611.

February 8, 1907

✓ X11345, S.M.P. 30 = A.G.C. 167.
K

X11348 S.M.P. 6668

✓ (1) K, A.G.C. 26091, S.M.P. 6703
✓ (2) A2F, A.G.C. 26034
✓ (3) G, A.G.C. 25923, S.M.P. 6668

✓ X11349 S.M.P. 6955, A.G.C. 27224
(1) A2F, A.G.C. ~~27224~~ 27219, S.M.P. 6953
(2) A

✓ X11350 S.M.P. 7325, A.G.C. 29358
(1) K
✓ (2) G5K, A.G.C. 29450
✓ (3) G, A.G.C. 29448

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✓ X11350 (cont.)
(4) A2F, A.G.C. 29304.
Marked by W.P.F. Lines double?

~~X11351 S.M.P. 7561~~

✓ X11351 S.M.P. 7561, A.G.C. 30641
(1) K
✓ (2) A5F, Peculiar, A.G.C. 30570, S.M.P. 7544
4077 & 4215 are the only strong lines except K and the hydrogen
~~A5F~~

✓ X11352 S.M.P. 7833, A.G.C. 32003.
K

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✓ X11353 S.M.P. 68, A.G.C. 390

(1) Ma

✓ (2) K, A.G.C. 424

(3) Too poor, A.G.C. 482
Omit A F

✓ (4) F, A.G.C. 425

✓ (5) K, A.G.C. 410

✓ (6) K, A.G.C. 354

✓ (7) K, A.G.C. 337

✓ X11354 S.M.P. 6398, A.G.C. 24483

(1) K5 M

✓ (2) A?, A.G.C. 24558

✓ (3) K, A.G.C. 24135

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X11358
S.M.P. 7124, A.G.C. 28171

✓ (1) ~~G5 K~~ K second exam.
Band of shorter λ than the G band, is stronger than in ordinary G5 K class.

✓ (2) F, A.G.C. 28162, S.M.P. 7123

✓ X11359 S.M.P. 7540, A.G.C. 30520
✓ G

✓ X11360 S.M.P. 7820, A.G.C. 32307

(1) A2 F poor.

✓ (2) K, A.G.C. 32324

✓ (3) A5 F1, A.G.C. 32284

✓ (4) K, A.G.C. 32172

✓ X11361 S.M.P. 209, A.G.C. 1133
A5 F

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✓ X11362 S.M.P. 7123, A.G.C. 28162

(1) F

✓ (2) K, A.G.C. 28171

✓ X11363 S.M.P. 7342, A.G.C. 29482

K

✓ X11364 S.M.P. 7660, A.G.C. 31099

(1) K.

✓ (2) F5G, A.G.C. 31035

✓ X11365 S.M.P. 21, A.G.C. 95

F5G

February 8, 1907

✓ X11367 S.M.P. ~~72~~ 7215, A.G.C. 28735

(1) F5G

✓ (2) G5K, A.G.C. 28641

✓ (3) K, A.G.C. 28839

✓ X11368 S.M.P. 7470, A.G.C. 30176

(1) K

✓ (2) K, A.G.C. 30213

✓ X11369 S.M.P. 7748, A.G.C. 31580

(1) A5F

✓ (2) A5F, A.G.C. 31611

✓ (3) K, A.G.C. 31558

✓ (4) K, A.G.C. 31523

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✓ X11370 S.M.P. 5, A.G.C. 32446

(1) G

✓ (2) K, A.G.C. 32365, S.M.P. 7908

✓ X11371 S.M.P. 268, A.G.C. 1493

K

✓ X11342, A.G.C. 27224, S.M.P. 6955

✓ (1) $A^{3}_{+}F$, A.G.C. 27219, S.M.P. 6953

(2) A_2F

X11372 S.M.P. 6322

Too poor

Repeat.

X11373 S.M.P. 6706

Too poor

Repeat

February 8, 1907

✓ X11374 S.M.P. 7098, A.G.C. 27956

✓ (1) K, ~~A.G.C.~~ S.M.P. 7071, A.G.C. 27836.

✓ (2) K

✓ X11375 S.M.P. 7387, A.G.C. 29580

(1) A_5F

✓ (2) K, A.G.C. 29625

✓ X11376 S.M.P. 7596, A.G.C. 30855

(1) A

✓ (2) A_3F, A.G.C. 30836, S.M.P. 7594

✓ X11377 S.M.P. 7833, A.G.C. 32003

(1) K

✓ (2) G_5K, A.G.C. 32011

✓ (3) K, A.G.C. 31989

✓ (4) K, A.G.C. 31944

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✓ X11378 S.M.P.86, A.G.C.476.
K

✓ X11380 S.M.P.7602, A.G.C 30875
(1) K
absorption very great.
✓ (2) A5F, A.G.C.30779

X11381 π Scorpii

Lines double, fainter component towards red,

X11382 μ^2 Scorpii

Lines double
Fainter component towards violet.

X11383 ν Sag.
Excellent. Lines remarkably sharp.
Faint phase of the hydrogen lines
Peculiar

February 8, 1907

X11384 π Scorpii

Lines hazy.

X11386 μ^1 Scorpii
Lines double
Fainter component towards red.

X11387 ν Sag.
Pec.
Faint phase of hydrogen lines

X11389 π Scorpii

Lines wide & hazy.

X11390 μ^1 Scorpii

Lines wide probably double
but separation not well marked

February 8, 1907

✓ X11391 S.M.P. 7691, a.G.C. 31247

~~S.M.P. 7691~~

(1) a a.G.C. 31213, S.M.P. 7684
too dense

✓ (2) a5 F, a.G.C. 312~~13~~47, S.M.P. 76~~84~~91

✓ (3) K, a.G.C. 31288

✓ X11392 S.M.P. 21, a.G.C. 95

(1) F5 G

✓ (2) K, a.G.C. 149

✓ (3) K, a.G.C. ~~8~~82

✓ X11393 S.M.P. 239, a.G.C. 1323

(1) Ma

✓ (2) G5K, a.G.C. 1334

✓ (3) K too poor a.G.C. 1379

February 8, 1907

✓ X11394 S.M.P. 559, a.G.C. 3039

(1) K

✓ (2) K, a.G.C. 3030, S.M.P. 556.

✓ (3) K, a.G.C. 2989

~~(4) K~~ Probably another exposure

X11399 S.M.P. 7265, a.G.C. 29058.

Too poor.

Repeat.

✓ X 11400 S.M.P. 7536, a.G.C. 30500

✓ G

✓ X11401 S.M.P. 7780, a.G.C. 31697

(1) K5M

✓ (2) F a.G.C. 31737

February 8, 1907

√ X11402 S.M.P. 89, A.G.C. 501
F5 G

√ X11403 S.M.P. 299, A.G.C. 1681

~~(1) F~~

(2) ~~(1)~~ A. G

(1) √ ~~(2)~~ a ~~G~~ A.G.C. 1737, S.M.P. 311

√ (3) F5 G, A.G.C. 1606

√ X11404 S.M.P. 537, A.G.C. 2935

(1) A2 F

√ (2) ~~F~~ A5 F, A.G.C. 2840

√ (3) A5 F, A.G.C. 2802, S.M.P. 500. √

February 8, 1907

√ X11412 S.M.P. 1505, A.G.C. 30358
mb.

√ X11413 S.M.P. 7755, A.G.C. 31549

(1) K

√ (2) K very poor J.C. 23h 293

√ (3) K very poor, A.G.C. 31473

√ X11415 S.M.P. 243, A.G.C. 1345
K

√ X11416 S.M.P. 500, A.G.C. 2802

(1) A5 F

√ (2) A5 F, A.G.C. ~~2844~~ 2840

√ (3) A2 F, A.G.C. 2935, S.M.P. 537

February 8, 1907

√ X11417 S.M.P. 783 √, A.G.C. 4346

B5A

√ X11419, A.G.C. 28851, S.M.P. 7236

(1) G

√ (2) K, A.G.C. 28915

√ X11421, A.G.C. 2174, S.M.P. 406

(1) K

√ (2) K, A.G.C. 2193

√ X11422 A.G.C. 29490, S.M.P. 7343

(1) A2F

√ (2) G, A.G.C. 29539, S.M.P. 7359

February 8, 1907

√ X11423, ~~A.G.C.~~ S.M.P. 7702, A.G.C. 31327

F

√ X11195 S.M.P. 4300

B2A Pec.

Spectrum peculiar

Marked by W. P. F.

Hβ probably a very faint bright line superposed upon a very faint dark line,

Helium lines very faint.

Class B2A

February 11, 1907

✓ C×16598 DC 7298
7299
very poor.
Probably B5A
Only one spectrum seen

✓ C 16604 DC 7319

✓ B3A.

✓ (2) DC 7316 H.P. 276×
Composite
very peculiar.
Known. δ Scorpii. K line nearly cut out.

February 13, 1907

Examination of several C plates taken some time ago but only received by me on February 11, 1907.

✓ C 15333 DC 1765
A2F
K wide & hazy.

✓ (2) +74° 131
$B\overset{9}{8}A$.
near edge of plate.

✓ (3) A5F

✓ (4) G

✓ (5) Ma?

✓ (6) K

✓ (7) A
All after (2) are quite faint.

Feb, 13, 1907

✓ C15877 DC9038

Lines hazy & indistinct.
$H\beta$ not clearly seen.

✓ C15899 DC9524

Appears the like α Cygni

✓ (2) DC9529

Ma

✓ (3) +60° 2310

Omit K?
Too faint

✓ C16052 DC2338

$H\beta$ bright = 4

Spectrum probably B3A

February 13, 1907.

✓ C16079 DC2538

Lines very wide & hazy. $H\beta$ dark,
4649 present also 4116

Spectrum probably B.A.

More photographs should be taken

✓ C16130 DC3037

$H\beta$ strongly bright.
$H\gamma$ very faint, as a dark line, certainly
less intense than 4471.

B3A

✓ (2) DC 3133
B3A

✓ C1650 DC9748
$H\beta$ bright = 2
B3A

$H\gamma$ very wide, perhaps slightly bright

Feb 13, 1907

✓ C16182 DC2097

(1) Probably B8A
Focus poor

✓

(2) K

✓ C16638 DC9646
Too poor
Quality 2

✓ C16697 DC9692
B9A?
Very poor

✓ C16702 DC9692
Probably B8A.
4026 quite strong.

February 15, 1907

✓ X11191 S.M.P. 5886
F

✓(2) A.G.C. 23073
Marked by W.P.F. as having spectrum similar to that of ζ Puppis.

This spectrum is nearer like ζ Puppis than the spectrum of λ Cephei is, for in λ Cephei there are more lines between Hβ and Hγ. Here as in ζ Puppis only the two bright bands and Hγ are clearly seen, with a suspicion of 4471.
Hβ not clearly seen, probably due to faintness of the star.

✓(3) A.G.C. 22962
A3F

✓(4) A2F
A.G.C. 23126

(5) Like ε Orionis between Hβ & Hγ
Too faint elsewhere
B

Z.C. 16h 3761 = C.D.M. −38° 11431. Not in A.G.C.

Feb. 15, 1907

✓ X 11205 S. M. P. 5423, A. G. C. 21499

A3 F

Probably resembling δ Normae in strong lines

✓ (2) A. G. C. 21188

Hβ bright - marked by W. P. F.

On edge of plate
Lines indistinct

B3A ?

✓ (3) A. G. C. 21509

A

✓ (4) A. G. C. 21487

B8A

✓ (5) A. G. C. 21353

F

Feb. 15, 1907

✓ X 11221 S. M. P. 5428

A or A2 F

✓ (2) A. G. C. 21688

B3A

Hβ bright. Hγ perhaps faintly bright.
Another star must be superposed as two strong dark lines correspond to Hγ + Hδ.
This star is probably C.P.D. −60° 6349, which is in same R. A. and ~~which~~ south 0'.8
Too faint to classify. Make remark about this faint star.

✓ (3) A. G. C 21499

A3 F

✓ (5) A. G. C. 21353

~~A~~ F

Feb. 15, 1907

✓ X11001 S.M.P. 5968, A.G.C. 23377
F5G

✓ (2) A.G.C. 23337

Hβ bright = 2
Spectrum ~~faint~~ indistinct, on edge of plate
Too indistinct to be sure of class.
4471 & 4387 faintly seen

(3) Too near edge

✓ (4) A.G.C. 23285

B3A.

(5) Too faint.

Feb. 15, 1907

✓ X11007 S.M.P. 5951, A.G.C. 23337
Hβ faintly bright
other lines very indistinct

(2) Too faint

✓ (3) A.G.C. 23377
F5G

✓ X11235 S.M.P. 6008

Hβ & Hγ bright

Hβ = 6

B3A

✓ (2) A.G.C. 23611
Hβ bright = 3

B3A

✓ (3) A.G.C. 23593
B3A

✓ (4) K, A.G.C. 23397,

Feb. 15, 1907

✓ X 11195 S.M.P. 4300

Hβ bright = L

Hβ very indistinct & looks very much like Hβ in η Centauri

Sp. B1A

Make remark about Hβ.

✓ (2) K ~~to H5M~~ A.G.C. 17450.

✓ X 11379 A.G.C. 29232, S.M.P. 7297

M

~~(2)~~

March 4, 1907

✓ X 11232 S.M.P. 4557, A.G.C. 18332

A2F

✓(2) A3F, A.G.C. 18260

✓(3) A2F, A.G.C. 18248

✓(4) K A.G.C. 18229

✓(5) A2F A.G.C. 18234

✓(6) A2F A.G.C. 18169

✓ X 11233 S.M.P. 5023

(1) G5K

~~(2) G5K~~ Same star. See A 4508, B 11716.

~~may be same star~~

✓ X 11234, A.G.C. 21951, S.M.P. 5559.

A3F

Mch. 4, 1907

X11236 S.M.P. 6312, A.G.C. 25262

✓ (1) K

✓ (2) B3A, A.G.C. 25234

✓ (3) G, A.G.C. 25192

✓ (4) K, A.G.C. 25166

✓ X11237 S.M.P. 6856, A.G.C. 26776

(1) A2F

✓ (2) G, A.G.C. 26622

✓ X11238 S.M.P. 7147, A.G.C. 28337

Mb

✓ X11239 S.M.P. 5060, A.G.C. 20174

(1) B3A

✓ (2) B3A, A.G.C. 20172

Mch. 4, 1907

X11239 (cont.)

(3) Composite, A.G.C. 20087
G except that K is too weak
on edge of plate. Should be
taken in the centre.

✓ X11240 S.M.P. 5422, A.G.C. 21419

✓ A2F

✓ X11241 S.M.P. 7331, A.G.C. 29368

A5F?
Probably like θ Muscae.

✓ X11242 S.M.P. 4543, A.G.C. 18290

K

✓ X11243 S.M.P. 4822, A.G.C. 19280

(1) B2A

✓ (2) K A.G.C. 19290 ✓

✓ (3) B5A A.G.C. 19239 ✓

✓ (4) B3A, A.G.C. 19243 ✓

✓ (5) A, A.G.C. 19403 ✓

✓ (6) A3F, A.G.C. 19452 ✓

✓ (7) A2F, A.G.C. 19491 ✓

March 4, 1907

✓ X 11244 S.M.P. ~~5040~~ 5379, A.G.C. 21319

(1) ~~A5F~~ F

✓ (2) F, A.G.C. 21428, S.M.P. 5406

✓ (3) B5A, A.G.C. 21552, S.M.P. 5446

✓ 1. X 11245 S.M.P. 5961, A.G.C. 23358

(1) F5G

✓ (2) K5M, A.G.C. 23422, S.M.P. 5985

✓ X 11246 S.M.P. 6468, A.G.C. 25040

(1) B3A

✓ (2) A3F, A.G.C. 24968

Like δ Normae

✓ (3) K A.G.C. 25166

✓ (4) F5G, A.G.C. 25192

March 4, 1907

✓ X 11424 S.M.P. 7908, A.G.C. 32365

(1) K

✓ (2) G, A.G.C. 32446

✓ X 11425, A.G.C. 902, S.M.P. 163

B5A,

✓ X 11427 S.M.P. 429, A.G.C. 2274

(1) K

✓ (2) F5G, A.G.C. 2185

✓ (3) Ma, A.G.C. 2295

✓ X 11428 S.M.P. 658, A.G.C. 3634

(1) G5K,

✓ (2) G5K, A.G.C. 3626, S.M.P. 655

March 4, 1907

✓ x11429 S.M.P. 898, A.G.C. 4962

(1) K,

✓ (2) B9A or A, A.G.C. 4880
very poor focus

✓ x11430 S.M.P. 1162, A.G.C. 6387
K

✓ x11431 S.M.P. 1526, A.G.C. 8007
K

✓ x11432 S.M.P. 2021, A.G.C. 9925

(1) B3A

✓ (2) B5A? Focus poor, S.M.P. 2023, A.G.C. 9934

✓ (3) B3A S.M.P. 2025, A.G.C. 9935

✓ (4) B5A, A.G.C. 9940

✓ (5) B3A, A.G.C. 9978

✓ (6) B8A?, A.G.C. 9999

March 4, 1907

x11432 (cont.)

~~(7) Too poor~~

✓ (8) K, A.G.C. 9894

✓ (9) K or K5M, A.G.C. 9867.

✓ x11433 S.M.P. 1607, A.G.C. 8351

(1) B3A. Hβ bright

✓ (2) B5 or 8 A, A.G.C. 8363

✓ (3) B3A, A.G.C. 8382, S.M.P. 1614

✓ (4) G. A.G.C. 8379

✓ x11434 S.M.P. 2054, A.G.C. 10042
K

March 4, 1907

✓ X11435 S.M.P. 2652, A.G.C. 11988

(1) K

✓ (2) K, A.G.C. 11936.

✓ (3) K, A.G.C. 12062

April 9, 1907

X11337 π Scorpii (Aug. 9, 1906)

Lines double faint comp. to red

X11333 π Scorpii (Aug. 8, 1906)

Lines double. Faint comp. to violet

These plates would be good for measurement

X11331 π Scorpii (Aug. 7, 1906)

Lines wide + hazy, but not double

✓ X11264 S.M.P. 7539, A.G.C. 30534

(1) F

✓ (2) M A.G.C. 30526

✓ (3) A2F A.G.C. 30542

April 10, 1907

X11382 μ' Scorpii

Lines double, fainter component towards violet.

✓ X11091 A. G.C. 20263

B3A. lines single

X11383 { Sept, 11, 1906
X11387 { " 12 "
X11410 { " 21 " ν Sag.
X11411 { " 22 "

These are excellent plates and show the faint phase of the hydrogen lines. No change seen on these four plates.

✓ X11090 A. G.C. 18897

B3A?
Lines burned out.

May 9, 1907

C Spectrum plates

✓ C16781 H.P. 924 = DC5577

Ma

✓ C16768 H.P. 1795, DC5275
Too poor
2nd types

✓ ~~C11~~ C16767 H.P. 1504 = DC4427

K poor

✓ C16742 H.P. 1251, DC3740
K

✓ C16743 DC4255

K? Too poor.

✓ C16752 DC3563 = H.P. 1177

1st type. Too poor.

✓ Burned out
Repeat

C16753 DC4131
F? Too poor
Repeat

May 9, 1907

✓ C 16754
(1) DC 3205 ✓
B3A

✓ (2) DC 3209 = H.P. 1041
A3F

~~(3) DC 3178~~

✓ C 16755 DC 3472 = H.P. 1136
A2F

✓ (2) DC 3494 = H.P. 1143
A

✓ (3) DC 3500
F5G

✓ (4) DC 3477 = H.P. 1141
Mb

✓ C 16757 DC 3598 = H.P. 1168
B3A

✓ (2) DC 3593
A? only hyd. lines seen

✓ (3) DC 3601
A5F

May 9, 1907

✓ C 16760 DC 3429 = H.P. 1117

B9A or A. only hyd. lines seen

✓ C 16761 DC 3545 = H.P. 1165

Too poor.
B8A or A.

(2) ✓ DC 3555 = H.P. 1173
A2 or 3F

✓ C 16769 DC 3472 = H.P. 1138
A? Too poor.

✓ C 16770 H.P. 1253 = DC 3757
K?
Too poor

✓ C 16774 DC 4108 = H.P. 1345

(1) B3A? lines burned out in some regions.

✓ (2) DC 4002 = −10° 1862

B5A?
Faint

May 10, 1907

✓ C 16773 DC 3567 = H.P. 1179

B$\overset{5}{3}$A?

Certainly Orion type, but too poor to be sure of class

✓ (2) DC 3580 = -16°426

K

C 16283

Not identified

✓ C 16728 DC 1303, H.P. 365

B9A or A.

Too poor.

✓ C 16736 DC 3026 = H.P. 970

G

✓ (2) DC 3055 = H.P. 986

B3A

✓ (3) DC 3018

A2F

✓ (4) DC 3043

B3A

May 10, 1907

✓ C 16736 (cont.)

(5) +17°931

Ma

~~(6) +17°923~~

✓ C 16737 DC 3549 = H.P. 1169

B9A

✓ (2) DC 3559 = H.P. 1174

F5G

✓ C 16749 DC 2445 = H.P. 737

G? Burned out.

✓ (2.) DC 2456

F

✓ (3) DC 2467 +14°687

F

✓ (4) DC 2480 +14°690

G

May 10, 1907

✓ C16759 DC2527, H.P.773
G?
Lines all burned out.

✓ C16766 ~~H.~~ DC 4420, H.P. 1883
K

C16507, C16626
not ident.

C16746, DC 7171
Too poor.
Repeat.

✓ C16751 DC2804, H.P.888
A5 F
✓ (2) K

C16762
not identified

✓ C 16764 DC 2856 = H.P.904
B3 ~~A~~ ?

May 10, 1907

✓ C16771~~1~~ DC4032, H.P.1349
K

✓ C16775 DC2824, H.P.891
F. excellent.

✓ C16777 DC6173, H.P. 2137
Double star.
Brighter sp. ~~(1)~~ K

~~(2)~~ ~~Preceding~~, in same dec. as (1)
Fainter = A5 F
See Potsdam Cat.

✓ C16782 DC6341 = H.P.2218
K or Ma.
Lines burned out. λ4227 very strong.
✓ (2) DC 6343
K

✓ C 16786 DC5444 = H.P.1872
G ~~K~~

May 10, 1907

✓ C16787 DC5444 = H.P. 1872

G. excellent plate

✓ C16788 DC6133, H.P. 2110

K

✓ (2) DC6131, H.P. 2109

A5 F.

Hβ not on plate

✓ C16790

Not identified

✓ C16792 DC4225, H.P. 1413

K

✓ (2) +11° 1598

K

✓ (3) +12° 1548

K

(4) Too faint

| (5) +11° 1592

K

May 10, 1907

C16793, C16794

Nothing to identify.

✓ C16795 DC5577, H.P. 1924

Ma. Very poor.

✓ C16796 DC6098, H.P. 2094

K

✓ (2) DC6107

A. (slightly peculiar)

K ~~4028-31~~ and ζ Cap. line of shorter λ than Hδ and of about same intensity. 4028-31 is fainter than these two lines.

✓ C16797 DC6118, H.P. 2102

K

C16800

not identified

May 10, 1907

✓ C16803 DC6188, H.P. 2150

K

Narrow image

✓ C16804 DC4500, H.P. 1522

F5 G?

Focus very poor

✓ (2) DC4514

A5 F

C16805 DC5577, H.P. 1924

Too poor.

Repeat

✓ C16806 DC5577, H.P. 1924

Ma.

✓ C16807 DC6264, H.P. 2186

Mb

May 10, 1907

✓ C16809 DC6501, H.P. 2297

F

✓ (2) ~~H~~ DC6489

K

✓ C16810 DC4179

Too faint to classify.

✓ C16811 DC4676, H.P. 1596

K

✓ C16812 DC6482, H.P. 2283

Mb

✓ (2) DC6472, H.P. 2280

F

✓ (3) DC6502, H.P. 2296

K

May 10, 1907

√ C16813 DC6702, H.P. 2413
K

June 1, 1907

C16619 ν Sag.
Pec
Faint phase of hydrogen lines

√ C16709 DC8650, H.P. 3313
(1) F

√ (2) +76° 734
N

√ (3) +76° 731
F

C16758 H.P. 1732
not ident.

√ C16765 DC2956, H.P. 944
G5K

√ (2) DC2951
K? very poor

C16798
not ident.

June 1, 1907

C16801 H.P. 1732
Not ident

√ C16814 H.P. 2466, 14 40 +17.4
K

√ C16815 H.P. 2707 = +17°2964
+17°2965

K

√ (2) +17°2967
a

√ (3) H.P. 2718, +17°2982
a

C16816 DC4184 7^h 21 -13.6
Too poor

√ C16818 H.P. 2352

(1) Mb? Too poor

√ (2) Mb? Too poor
(3) A2 F1? " "

June 1, 1907

C16819 H.P. 1596
Too poor,

√ C16821, H.P. 2269
K.

√ C16825, H.P. 2409, 14^h, 40 +38
K

√ (2) +37°2519
a

√ C16826, H.P. 2459
Ma

√ (2) H.P. ~~[illegible]~~ 2467 ε Bootis
K, too dense

/ C16827 H.P. 2513 w Bootis
K5M

June 1, 1907.

√ C16828 H.P.2520 ψ Bootis

K.

√ C16829 H.P.2643

K

√ C16832 H.P.1795

K.

√ C16833 H.P.2618 15 36 −19

Ma

√ (2) H.P.2603

K

√ C16834 H.P.2842 $16^h 56$ −4,7

K.

√ C16836 H.P.1653

G5K

√ (2) F +38° 1999

√ (3) Mb +39° 2193

June 1, 1907

√ C.16837, H.P.1710

K5M.

√ C16838 H.P.2652. $15^h 47$ +36

K.

√ C16840 DC5752, H.P.1978

K

√ (2) Too faint

(3) DC5746. H.P.1976

K

√ (4) A3 F.

√ C16841 H.P.2710

K

Aug. 3, 1907

✓ C15487 H.P. 2309

A3 F

August 6, 1907

✓ C16817 H.P. 1719

K. poor plate.

✓ C16820 H.P. 2315

not ident

✓ C16822 H.P. 2315

Ma.

✓ C16756 DC 4041 7 06-251

B3A? very narrow & poor.

Certainly Orion type.

(2) not all on

✓(3) DC 4065 B8A.

✓ C16750 DC 2394

B8A

~~(2) not all on~~

~~(3) DC 4065 B8A~~

August 6, 1907.

✓ C 16763 DC 2842, H.P. 897
A2F

✓ C 16822 H.P. 2315 ✓
Ma

✓ C 16823 H.P. 2396 ✓
K

✓ C 16830 H.P. 2652
K

✓ C 16831 H.P. 1768
K

✓ C 16835 H.P. 793
G

✓ C 16839 H.P. 1693
Second type.
Too poor.
G?

August 6, 1907

✓ C 16842 H.P. 2750
Not ident.
K. (but may be wrong plate)

✓ C 16843 H.P. 2780
K5M? Too poor.
4227 very strong.

✓ C 16844 H.P. 1539
K5M.

✓ C 16846 H.P. 2813
K

✓ C 16847 H.P. 3126
K

✓ (2) +65° 1276
A3F.

August 6, 1907

✓ C16849 H.P. 2110
K

✓ (2) H.P. 2109
F.

✓ C16850 H.P. 2247
G5K

✓ C16851 H.P. 1732
K

✓ C16852, 16853, 16854 α Lyrae
A

✓ C16867 H.P. 2968
Too poor

✓ C16868 H.P. 3176 R Scuti
G? Too poor

✓ (2) H.P. 3174 ~~G5~~ G5K

August 6, 1907

✓ C16869 H.P. 7286
F

✓ C16870 H.P. 3309
Too poor

✓ (2) H.P. 3306
K

C16871 H.P. 2842
Not ident.

✓ C16872 H.P. 3091
Ma or Mb.
Very narrow.

✓ C16873 H.P. 3214
K

✓ C16874 H.P. 3304
Not ident. Fogged

C16875 H.P. 3368
Not ident

August 6, 1907

✓ C16878 H.P. 3721

Too poor. 2nd lighter ✓

✓ C16876 H.P. 3397

K

C16882 R Hydrae

Too poor.

C16883 α Bootis

C16884 α Bootis
C16885 "

C16887 R Hydrae

Not ident.

✓ C16888 DC 7155

G

✓ (2) DC 7171

B8A? unidentif

✓ (3) ma Identif.

August 6, 1907

C16889 R Hydrae

N

C16894 R Hydrae

Not ident.

✓ C16895 DC 7407

A2F

C16896 DC 7589

Not ident.

✓ C16897 DC ~~7187~~ 7176 = H.P. 2671

B3A. on edge

C16900 DC 7239
C16901 " 7241
C16902 " 7322
} not ident.

August 6, 1907

✓ C16903 H.P. 3723

K

✓ C16904 H.P. 3980

K5M

✓ C16905 H.P. 3888

K

August 9, 1907

✓ C16877 H.P. 3506

K

✓ C16879 H.P. 3018

K5-M.

Slight breaks as in Ma stars.

✓ C16880 H.P. 3444 ξ Aquilae.

K

C16898 DC 7175

Not ident. Fogged.

C16899 DC 7361

Fogged. Too poor.

✓ C16907 DC 7243

A2F

✓ C16908 H.P. 2750

K

August 9, 1907

C16909 DC8500

✓ very narrow & poor.

K

C16910 DC8612

✓ B9A.

C16911 DC9489

Too poor.

C16916 H.P.3506.

✓ K

August 10, 1907

✓ C16890 DC7269 ✓ = H.P.2732 ✓

A

✓ C16906 DC7240 ✓

B3A

August 26, 1907

✓ C16855 H.P. 2466
K

✓ C16856 H.P. 2520
K

✓ C16857 H.P. 2882
K

✓ C16858 H.P. 2921
K

✓ C16859 H.P. 2643
G5K

✓ C16860 H.P. 2933
K

/ (2) +26° 3038
A5F

August 26, 1907

✓ C16861 H.P. 3004
K

✓ C16862 H.P. 3018
K

✓ C16863 H.P. 3089 = +3° 3680
G5K

✓ C16864 H.P. 3004
K

✓ C16865 H.P. 3093
K

✓ C16912 DC 7292
Probably K,
very poor

✓ C16915 H.P. 3444
K

✓ (2) +7° 4252
B3A

August 26, 1907

✓ C16919 H.P. 3534

K

✓ (2) H.P. 3525

A3F

C16922 v Sag.
Too narrow & poor.

✓ C16925 H.P. 3569

K or K5M.
very poor focus
Repeat

✓ C16927 H.P. 3643

K?
very poor focus
Repeat

C16929 H.P. 3847

Too poor
Repeat

August 26, 1907

C16931 v Sag.

Too dense
Helium lines at red end appear bright edged

C16933 H.P. 3925

Not evident.
Repeat

✓ C16936 v Sag.
Pec.
Good.
Faint phase of hyd. lines.
Hβ double & faintly bright

✓ C16938 H.P. 3721

K5M

✓ C16939 H.P. 3304

K

Friday, Oct. 4, 1907

✓ C16870 H.P. 3309
Too poor.

✓ (2) H.P. 3306
K.

✓ C16918 H.P. 2710
K.

✓ C16928 H.P. 3662
B2A, sharp lines.

C16934 H.P. 3898
Wrong R.A. taken.
Too poor.

✓ C16937 H.P. 3368
K.

✓ C16948 H.P. 3569
K.

✓ C16957 H.P. 3898
K

Oct. 4, 1907.

✓ C16958 H.P. 3662
B3A.

✓ (2) +46°3267
B3A

✓ (3) +45°3270
A2F

✓ (4) +45°3258
A

✓ C16960 H.P. 2921
K

October 9, 1907

C16073 DC2537
Not ident.

C16278 DC4453
Not ident.

C16452 DC6495
Not ident.

C16940 H.P.3599
Not ident.

C16926 H.P.3599
Not ident.

C16941 DM+30°4199
Too poor.

✓ C16942 v Sag.
Faint phase of hydrogen

✓ C16943 H.P.3349
H good.

✓ C16944 H.P.3093
K (good)

October 9, 1907

C16965 H.P.3935
Not identified.

✓ C16969 H.P.3944
K

✓ C16973 H.P.3965
K

✓(2) H.P.3964
G

✓(3) H.P.3976
F5G.

C16974 H.P.3668
Not ident.

✓ C16975 H.P.3643
K

✓ C16979 H.P.2750
K

October 9, 1907

✓ C 16983 H.P. 4194
K

✓ C 16985 H.P. 4084
Ma

✓ (2) H.P. 4097
B8A

✓ (3) H.P. 4095
Mb

✓ C 16988 H.P. 4233
Mb

✓ C 16989 H.P. 4151
K.

✓ C 16991 H.P. 28
Ma

C 16992 H.P. 138
not ident.

Oct. 9, 1907.

✓ C 16993 H.P. 138
K

✓. C 16994 H.P. 265
K

✓ C 16995 H.P. 529
G5-K

✓ C 16998 H.P. 197
K

✓ (2) +29° 195
K

✓ (4) +28° 204
K

✓ C 16999 H.P. 198
K

Oct. 9, 1907

✓ C17002 H.P. 241

K

✓ C17003 H.P. 334

A2 F.

✓ C17004 H.P. 198

K

✓ C17005 H.P. 583

K

✓ C17006 H.P. 3599

K

✓ C17008 H.P. 381

K5 M

✓ (2) H.P. 378

K

✓ (3) A Pec H.P. 369

4128-31 is the strongest line except the hydrogen lines. 4026 & K also seen.

✓ (4) +49° 666

F

Oct. 9, 1907.

✓ C170~~09~~26 H.P. 467

K? Slightly peculiar.

✓ (2) H.P. 457

K

✓ C17012 H.P. 524

K.

✓ C17013 H.P. 875

K

✓ C17014 H.P. 3304

K

✓ (2) H.P. 3320

A

C17015 H.P. 439

Wrong plate taken.

✓ C17016 H.P. 768

K very narrow.

✓ (2) H.P. 765

A5 F. very narrow

October 9, 1907

✓ C17020 H.P.28

Ma Good

✓ C17025 H.P.381

K

✓(2) H.P.378

G5-K

✓(3) A ~~+44°666~~ H.P.369

4128-31 and K are the only lines distinctly seen except the hydrogen.

✓ C170$\overset{09}{\cancel{2}}$6 H.P.467

Peculiar. May be composite.

✓ C16978 H.P.4011

K very narrow & poor

October 9, 1907

✓ C16984 H.P.4079

K

✓(2) F H.P.4091

✓(3) B3A. +48° 3950

(4) +49° 4045

Omit. Too faint to classify. Sp. appears to resemble α Cygni

✓ C16986 H.P.4085

K

✓ C17011 H.P.707

G5K

✓ C17017 H.P.3721

K

C17027 H.P.707 not ident.

October 9, 1907.

C16971 H.P. 2960

✓ F5G.

C16976 H.P. 2842

✓ K

~~H.P~~ C. 16967 H.P. 2771

✓ K

C16987 H.P. 4106

✓ Ma good

✓ C16990 H.P. 4018

K5M

October 10, 1907

C16938 H.P. 2813
not ident.

C16952 H.P. 3662
not ident.

C16233 H.P. 3844 = DC9575.
Too faint.

✓ (2) DC 9507 = H.P. 3838
K

C16964 H.P. 3925
not ident.

✓ C16981 H.P. 4145
K

✓ C16982 H.P. 4871
K

C17001 H.P. 218

✓ K very narrow.

October 10, 1907.

C17007 H.P.4259

✓ K

✓ (2) H.P.4247

Mb

C17024 H.P.218

✓ K

October 18, 1907

✓ C16997 H.P.139

K

(2) H.P.143

✓ K

✓ C16963 H.P.4127

G5-K

✓ C16953 H.P.3847

K

October 21, 1907

C 17063 δ Cephei, Oct. 12, 1907
C 17066 " 15, "

This spectrum is being photographed to show changes, if any, in the spectrum. This was suggested to me by Mr. J. A. Parkhurst at the Yerkes Obs. in September.

The above plates show that the spectrum certainly changes

On 17063 hydrogen lines Hβ, Hγ (noticeably) and Hδ are stronger than on 17066. Also Hε, which has almost disappeared on 17066. K is wider on 17066.

Nov. 1, 1907

✓ C 17131 H.P. 449
K5M

✓ C 17010 H.P. 552
B5A good.

✓ (2) H.P. 541 = α Persei
Too dense
F5G or G

✓ (3) +49° 944
B3 or 5 A.
Lines not very distinct

✓ (4) H.P. 549
~~B3 or~~ B 5 A

✓ (5) H.P. 537
B3A
6, 7, 8 too faint

✓ (9) ~~B5~~ H.P. 555
B5A

Nov. 1, 1907.

✓ C17833 H.P. 712
G5 K

✓ (2) H.P. 716
B3 or 5 H

✓ (3) H.P. 713
B8 or 9 A,
Lines not clear

✓ C17040 H.P. 109 ✓
K

✓ C17047 H.P. 4106
Ma good.

C17048 H.P. 3898
Too poor.
second type

Nov. 1, 1907

C17052 taken for δ Cephei
but region was wrong.

+57° 2676 (brightest on plate)
22 57.3 +57 47.2 (1855)
(K very poor
omit)

✓ C17056 H.P. 4151
K. faint.

✓ C17059 H.P. 334
A2 F

✓ C17065 H.P. 439
K good

✓ C17068 H.P. 162
K

Nov. 1, 1907

✓ C17069 H.P. 263

F or F5 G.
G band seen but hydrogen very strong and focus not very good.

✓ C17081 H.P. 3668 ✓

G5 K.

November 11, 1907

C17034 H.P. 553

K line very sharp. 4026 & 4128-31 seen.

Probably like α Cygni or η Leonis.

✓ A close comparison shows it to be like η Leonis on C1771

Class A Pec.

✓ (2) +58° 608
A2 F

✓ (3) +58 618 8.2^m
619 7.0^m
A2 F

✓ (4) F5 G
= +57° 730

November 11, 1907

√ C17035 H.P.596

Composite.
Very peculiar. K line gone.
Otherwise Class F5G or G.
Repeat with spectrum in centre of plate.

√ (2) +62°612

A3F.

√ C17046 H.P.3643

K

√ C17049 H.P.3599

Too faint.
K or K5M.

√ C17050 H.P.3935
K, slightly approaching
K5M. Perhaps really
K2M.

November 11, 1907

√ C17053 H.P.3668

G5K

√ C17054 H.P. 3721 21 3 +47

K5M good.

√ (2) +47°3322 $7^{m}.0$
+47°3321 $7^{m}.8$

B5A.

√ (3) A3F.

√ C17055 H.P.4233

Mb

√ C17058 H.P.3534

K5M.

√ (2) +27°3668
A
Slightly peculiar 4128-31 nearly as strong as K

November 11, 1907.

√ C17061 H.P.3643

K

√ C17062 H.P.4011

K.

√ C17064 H.P.241

K

√ C17067 H.P.487

K?

Too narrow & poor.

√

C17072 H.P.3599

K5M?

Faint at violet end, but K

certainly seems fainter than H.

I would like a plate taken

with longer exposure.

√

(2) +34°4081

B8A

November 11, 1907

√ C17073 H.P.4011

K

√ C17075 H.P.3925

~~K~~ G5K

√(2) +71°1112

A? very poor

√ C17076 H.P.139

K

√ H.P.143

K

√ C17077 H.P.553

Too poor.

√ C17078 H.P.596 Quality-1.

Too poor.

November 18, 1907

✓ X 11467 A.G.C. 14114

K faint.

✓ (2) A.G.C. 14102

A2 F faint.

✓ (3) A.G.C. 14269 faint.

A5 F - Possibly A3 F.

✓ X 11491 A.G.C. 19746

K

✓ (2) A.G.C. {19773 6.3^m
{19774 8^m K

✓ (3) A.G.C. 19802

K

✓ (4) 1st type. A.G.C. 19842

Too dense.

November 18, 1907

✓ X 11491 cont.

(5) A.G.C. 19823

F5 G or G.

✓ X 11499 A.G.C. 17608

1st type.
Too dense

✓ X 11511 A.G.C. 15043

1st type.
No lines seen except the hydrogen.

✓ X 11515 A.G.C. 13618, S.M.P. 3157

A5 F

✓ X 11523 A.G.C. 16534
F5 G Comp.?
K seems too faint for class F5 G.

✓ (2) A A.G.C. 16508

November 18, 1907.

✓ X11524 A.G.C. 18321

Too dense.

✓ X11525 A.G.C. 19197, S.M.P. 4806

1st type.
Too dense.

✓ X11529 A.G.C. 23356, S.M.P. 5958

A

✓ (2) A.G.C. 23390
G5K. faint.

✓ X11535 A.G.C. 15279, S.M.P. 3186

A2F

✓ (2) A.G.C. 15214
F?

✓ (3) A.G.C. 15330
Ma

November 18, 1907

✓ X11536 A.G.C. 16512, S.M.P. 4077

1st type.
No lines seen except hydrogen

✓ X11537 A.G.C. 18321

A2F?
Too poor.

✓ X11539 A.G.C. {14372 / 14373 S.M.P. 3397 / 3398

Too poor.
1st type.

✓ X11549 A.G.C. 17844
Too dense
1st type.
No lines seen except hydrogen

✓ X11557 A.G.C. 18498

K
very narrow & poor.

November 18, 1907.

✓ X11558 A.G.C. 15937
Clearly composite.
Sp. G. with K lines gone
or very faint.

✓ (2) A.G.C. 16104
1st type.
No lines seen except hydrogen.

✓ (3) A.G.C. 16200
B 3 or 5 A.

✓ X11561 A.G.C. 20672
Composite?
Sp. F5 G or G with K too faint
for the class.

✓ X11568 A.G.C. 15189
1st type.
Too poor.

✓ X 11573 A.G.C. 18498
K

✓ (2) A.G.C. 18526 ✓
K

November 18, 1907.

✓ X11573 (cont.)
3 & 4 too poor.

(5) Mb, A.G.C. 18548

✓ X11576 A.G.C. 18498

K2 M

✓ (2) A.G.C. 18526
K

✓ (3) A.G. 18670
1st type.
Too poor.

✓ (4) A.G.C. 18619
K

✓ X11578 A.G.C. 22540

Peculiar. ~~May be Oe 5 B.~~
Better photograph wanted.
This appears blue like κ Scorpii.

✓ (2) A.G.C. 22533
22534
1st type
Too dense

November 18, 1907.

√ X11580 A.G.C. 26462

1st type.
Too dense

√ (2) A.G.C. 26468
F5 G

√ (3) A.G.C. 26484
K

√ (4) A.G.C. 26593
K2 M,

√ X11582 A.G.C. 15983

A good.

√ X11587 A.G.C. 23811, S.M.P. 6091

1st type.
Too poor.

√ X11589 A.G.C. 27053, S.M.P. 6919
Probably B8A.
~~1st type~~
Too poor.

November 18, 1907.

√ X11595 A.G.C. 27974
K

√ X11596 A.G.C. 17844
1st type.
Too poor.

√ X11597 A.G.C. 18554

F

√ (2) A.G.C. 18546
A5 F or F

√ X11599 A.G.C. 21176

Not identified

√ X11600 A.G.C. {23354
23355

K

√ (2) A.G.C. 23370
K or K2 M

(3) Too poor.

November 18, 1907

✓ X11600 (cont.)

✓ (4) A.G.C. 23483
K

✓ (5) A.G.C. 23324
F

✓ X11604 A.G.C. ~~16788~~ 16688
B3A.

✓ (2) A.G.C. 16787
K faint.

✓ X11605 A.G.C. 18423
A

✓ (2) A.G.C. 18420
F or F5G

✓ X11606 A.G.C. 20080
K

November 18, 1907

✓ X11607 A.G.C. 21529
1st type.
Too dense

✓(2) A.G.C. 21530
Orion types
B3A? very dense.

✓(3) A.G.C. 21521
B3A?
Too dense

✓(4) ~~1st~~ A.G.C. 21586
1st type.
Too poor.

✓(5) A.G.C. 21632
B8A?
Too dense

✓ X11675 A.G.C. 18321
A2F.

✓ X11670 A.G.C. 25600
B8A

November 18, 1907.

√ x11660 A.G.C. 19005

F5 G

√ (2) A.G.C. 18981

B8A

√ x11659 A.G.C. 17039

K5M or Ma

Compare closely.

√ x11656 A.G.C. 24438

A

√ (2) A.G.C. 24449

K

√ (3) A.G.C. 24526

F

√ (4) A.G.C. 24558

Oe5 B

Hydrogen lines, 4685(?) $H\gamma_5^{17}$, $H\delta'$, 4026 seen.

November 18 1907

X ~~x~~ 11656 (cont.)

(5) Partly on plate.

A.G.C. 24587 Hδ' faintly seen.
Ask for a photograph of this.

√

(6) Partly on plate.

A.G.C. 24509 Hδ seen.

√ x 11655 A.G.C. 16887

K

√ (2) A.G.C. 16876

K

√ x11657 A.G.C. 23004

Ma

√ (2) A.G.C. 23009

F or F5 G

(3) Too poor.

√ (4) A.G.C. 23106

A5 F or F.

November 18, 1907.

✓ x 11650 A.G.C. 21913

K.

✓ x 11649 A.G.C. 19366

F5 G or G.
Probably G.

✓ x 11648 A.G.C. {18511
{18512

A2 F.
Fainter component has lines towards the red, and is south of the brighter component. H γ best seen. K of fainter invisible.

✓ x 11647 A.G.C. 17216. S.M.P. 4286

K

✓ x 11640 A.G.C. 19046

K

November 18, 1907

✓ x 11639 A.G.C. 17343

K

✓(2) A.G.C. 17373
A2 F.

✓(3) A.G.C. 17267
Ma

~~(4)~~ ✓ x 11633 A.G.C. 22078

A

✓ x 11632 A.G.C. 20257

K or M.

✓ x 11631 A.G.C. 18554
F1

✓ x 11630 A.G.C. 17185
F1

x 11629 A.G.C. {15769
{15760

Two spectra seen
Both G?

Repeat.

November 18, 1907.

✓ X11628 A.G.C.27794

K

✓ X11627 A.G.C. 26474

A3F

✓ X11625 A.G.C. 23419 ~~2314~~ 23420

K

✓(2) A.G.C 23423

G5K

✓(3) A.G.C. 23490

K very faint

✓ (4) A.G.C. 23500

Too dense

B3A?

✓ X11623 A.G.C. 20700

K

November 18, 1907

✓ X11622 A.G.C. 18981

B8A?

✓(2) A.G.C. 19005

F5G

X11621 A.G.C. 17436

Not enough on plate.

✓(2) A.G.C. 17494

~~A2F~~

A

✓ X11620 A.G.C. 16252

K

✓(2) A.G.C. 16360

A

✓(3) A.G.C. 16272

K very faint.

November 18, 1907.

√ X11616 A.G.C. 23530

K2M.

√ X11615 A.G.C. 22078

A

√ (2) A.G.C. 22077

A

√ X11613 A.G.C. 18698

A

√ (2) A.G.C. 18675

K very faint.

√ X11608 A.G.C. 23530

K

√ X11676 A.G.C. 17889

K

√ (2) A.G.C. 17881

K

Nov. 22, 1907

C17044 H.P. 500.

Too poor

1st type.

✓ C16955 H.P. 2780.

K5M

✓ C17082 H.P. 666

Too poor.

✓ C17041 H.P. 528

K5M

✓ C17170 H.P. 503

K

✓ C16995 H.P. 529

G5K

Nov. 29, 1907

✓ X11440 A.G.C. 2681 λ¹ Forn

K

✓ (2) A.G.C. 2775 λ² Forn

K

✓ ~~X+~~ X11438 A.G.C. 3778

K

✓ (2) A2F = A.G.C. 3744

✓ (3) A.G.C. 3793

A

✓ X11446 A.G.C. 7606

K

✓ (2) A.G.C. 7609

A2F

Nov. 29, 1907

✓ X11447 A.G.C. 9341

A or A2F

(2) Too faint

✓ (3) A.G.C. 9270

B3A

✓ X11449 A.G.C. 11402

F

✓ (2) A.G.C. 11371

A

✓ (3) A.G.C. 11385

F or F5G

✓ (4) A.G.C. 11522

Composite

G with K band very faint

✓ (5) A.G.C. 11579.

B5A

Nov. 29, 1907.

✓ X 11452
A.G.C. 5971
Mb

✓ X 11462 A.G.C. 17844

B9A

✓ (2) A.G.C. 17913

A Pec? Faint but probably
like α Doradus. λ 4128-131
is the strongest line except hydrogen

✓ X 11464 A.G.C. 20672

F5G

(2) Too faint

✓ (3) A.G.C. 20731
B8A

✓ (4) A.G.C. 20779
B3A

Nov. 29, 1907

✓ X 11465 A.G.C. 11402

A5F

✓ X 11474 A.G.C. 16992

K2M

✓ (2) A.G.C. 17014

Ma

✓ (3) A.G.C. 17048 γ Crucis

Mb

✓ X 11484 A.G.C. 23257

A

✓ (2) A.G.C. 23261

K

X 11490 A.G.C. 18227

✓ 1st type
Too dense

(2) A.G.C. 18498

K

Nov. 29, 1907

√ X11497 A.G.C.14943

1st type. Lines in poor focus

√ (2) A.G.C. 15243

B3A.

A.G.C.15242 is partly superposed

√ X11505 A.G.C.15153

A5F?

√ (2) A.G.C.15188

A

√ X11507 A.G.C.17925

F5G

(2) K

(3.) K

Nov. 29, 1907

√ X11527 A.G.C.22540

B3A? Very dense

√(2) A.G.C.{22534
{22533

Orion type?

Too dense

Repeat.

√ X11533 A.G.C.18227

1st type

~~Too dense~~

(2.) Too poor.

√(3) A.G.C.18498

K or K2M

√ X11546 A.G.C.26355

K

√ (2) A.G.C.26311

K.

Nov. 29, 1907.

✓ X11552 A.G.C. 22658

K

✓ (2) A.G.C. 22663
1st type
Too poor.

✓ (3) A.G.C. 22618
K

✓ X11566 A.G.C. 18227

A? Probably peculiar
K not seen, but faint solar lines are rather numerous, 4278.3 is probably the strongest.

(2) Too poor.

✓ (3) A.G.C. 18498

K_2M.

Dec. 2, 1907

✓ X11579 A.G.C. 24147 = S.M.P. 6199

B_3 or 5 A

✓ (2) A.G.C. 24170

A or B9A
Focus poor.

✓ X11588 A.G.C. 25691 = S.M.P. 6612

A or B9A
Focus too poor.

✓ (2) A_2F
A.G.C. 25666

✓ X11592 A.G.C. 22854

1st type
Too poor.

✓ (2) A.G.C. 22923
1st type
Too poor.

December 2, 1907

✓ X11593 A.G.C. 25095 = S.M.P. 6482

K

✓ X11594 A.G.C. 26355

K

✓ (2) A.G.C. 26311

K

✓ (3) M

✓ X11628 A.G.C. 27794

K

✓ X11732 A.G.C. 21530

B3A

✓ (2) A.G.C. 21529

B5 or 8 A

✓ (3) A.G.C. 21546

B8A?

Hβ ?? plate

Dec. 2, 1907

X11732 (cont.)

✓ (4) A.G.C. 21632

B8A

✓ (5) A.G.C. 21622

1st. type

B9A?

Too poor.

✓ X11783 A.G.C. {22258
{22251

B3A lines wide

✓ (2) A.G.C. 22239

B3A.

✓ X11454 A.G.C. 14337 = S.M.P. 3385

K5M

✓ (2) A.G.C. 14324

Hβ appears than bright edge to red

Spectrum B3A? Ask for a better photo.

Dec. 2, 1907

√ X11470 A.G.C. 12101

F5G.

√ X11471 A.G.C. 13466

K – very faint

√ X11472 A.G.C. 14216 l Carinae

B9A

√ (2) A.G.C. 14363

B5A.

√ X11521 A.G.C. 21552

B8A

√ (2) A.G.C. 21428

A3F

Dec. 2, 1907

√ X11547 A.G.C. 14943

B5A

√ (2) A.G.C. {14731 A3F
{14735 A3F

~~A3F~~

Why is this image wider?

Two stars in ~~same~~ declination but slightly diff. R.A. with same spectrum cause the widening.

√ (3) A.G.C. {~~15242 7.5~~
{15243 6.1

B3A but numerous fainter lines are seen.

There seems to be a line near position of Hδ'. Is this Orion or solar?

December 7, 1907

√ X11648 A.G.C. 18511
18512 superposed.
Sp. of A.G.C. 18512 is A3F.
The lines Hβ, Hγ and Hδ of
18511 are seen to the violet of
same lines of 18512. All lines
hazy.

√ X11488 A.G.C. 15753, S.M.P. 3838 ✓
A5F

√ X11762 A.G.C. 31288
K2M

√ (2) A5F
A.G.C. 31247

√ X11757 A.G.C. 30670
F or F5G.
Too dense.

Dec. 7, 1907

√ X11685 A.G.C. 26724
A2F1

(2) A.G.C. 26754
A5F?
Too poor.

√(3) A.G.C. 26822
G

√ X11485 A.G.C. 25095, S.M.P. 6482
G5-K

√(2) A.G.C. 25140
K

√(3) A.G.C. 25209
G?
very poor.

Dec. 7, 1907

✓ X11480 A.G.C. 13157, S.M.P. 3132

A2F

✓ (2) A.G.C. 13171

A pec?

412831 clearly seen. K not seen

Poor image

✓ (3) A.G.C. 13205

B3A. Hβ not on plate

✓ (4) A.G.C. 13282

A

✓ (5) A.G.C. 13149

K

✓ X11486 A.G.C. 13945, S.M.P. 3258

A2F

✓ (2) A.G.C. 13942

A3F

✓ (3) A.G.C. 14039

Mb

Dec. 7, 1907

✓ X11487 A.G.C. 13572, S.M.P. 3139

B3A?

Too dense

✓ (2) A.G.C. 13585

B3A?

✓ X11456 A.G.C. 11402

F

✓ (2) A.G.C. 11522

F or G Comp?

K seems weak, but spectrum is very faint on this plate. Look up on B plates.

December 9, 1907

C 17032 H.P. 466

K.

Band ~~Line~~ K looks rather hazy. This is probably due to faintness of spectrum in this region.

C plates of o Ceti.

Nov. 27, 1886 C 245 very thin. $H\gamma$ & $H\delta$ bright. 2 pcs.
$H\gamma = 3$ ~~10~~ $H\delta = 10$ ~~8~~
$H\beta$ not seen, region probably too faint.
K & $H\zeta$ not seen.

Epoch 27

~~10238~~

max, 10251 Plate taken 13 days before max.

Dec. 9, 1886 C 269 3 pcs.
Too thin! $H\gamma = 3$ $H\delta = 10$

Dec. 9. 1886 C 270
Too poor.

Dec. 14, 1886 C 280 1 pc.
$H\delta = 10$, $H\gamma = 3$, $H\zeta$ 2, $H\eta = 2$, $H\theta = 1$
$H_2 = 2$
$H\theta$ is faintest.
Region of $H\beta$ not photographed.

Dec. 9, 1907

o Ceti (cont.)

Dec. 17, 1886 C 288 1 pc
just the same as C 280

Oct. 15, 1887 C 701
Only a small portion seen
$H\delta = 10$ $H\gamma = 2$

Epoch 23

10926

Nov. 2, 1887 C 742
$H\delta = 10$, $H\gamma = \overset{3}{2}$, $H\zeta = 2$ $H\eta$ faintest trace
No trace of bright $H\beta$

Nov. 7, 1887 ↑ C 765 too poor.

Sept. 13, 1888 C 1419 1 pc
$H\delta = 10$, $H\gamma = 5$ or 6, $H\zeta = 3$, $H\eta = 2$,
$H_1 = 2$, $H\theta$, 1, $H\beta = 1/2$ Bright

Epoch 24

Sept. 13, 1888 C 1420 dense plate
H is a very faint bright line not more than 1/8 as intense as H on C 16723,
4227 much stronger than on C 16723
$H\zeta$, $H\eta$, $H\theta$ & $H\alpha$ seen bright & other bright spaces & lines in violet but not clearly mark

Dec. 9, 1907.

o Ceti cont.

Sept. 26, 1888 C1431
Too poor.

Sept. 26, 1888 C1437
Apparently like C1420

Sept. 28, 1888 C1441
just like C1420

Oct. 17, 1888 C1474 Too narrow.

Oct. 21, 1888 C1480
Nearly like 1420,
Good of ultraviolet hydrogen lines H_ζ is the best one seen and is much brighter than H_γ and also brighter than H_ϵ and H_η. Too dense to show whether hyd lines are double.

Nov. 12, 1888 C1522 H_γ and H_δ bright are clearly double with fine dark lines in centre. Spectrum quite fluted & 4227 strong.
H_β not bright.

Dec. 10, 1907

o Ceti (cont.)

Dec. 12, 1888 C1572
H_γ and H_δ are double.
4227 very wide.
H_β not bright.

Dec. 22, 1888 C1614
4227 very wide, and intensity of whole sp. decreasing.

Dec. 24, 1888 C1622
very faint. H_δ + H_γ bright.
H_γ double? 4227 very broad.

Sept. 19, 1889 C2121 Too poor.

Sept. 22, 1889 C2123
Epoch 25
H_δ very bright. H_γ looks fainter in proportion to H_δ than on former plates. Plate thin.

July 22, 1890 C2839
Epoch 26
H_γ + H_δ bright,
Thin image, apparently like previous ones.

Dec. 10, 1907.

o Ceti (cont.)

July 23, 1890 C2843
Too thin. No change seen.

Aug. 1, 1890 C2852
No change.

Aug. 6, 1890 C2867
$H\beta$ not bright.
$H\gamma$ certainly more intense than on C16723 where $H\beta$ is bright.

Aug. 20, 1890 C2891
Cont. sp. fainter so that bright lines stand out strongly.

Sept. 18, 1890 C2936 Too poor.

Feb. 23, 1894 C6606 two prs.
Epoch 30
Too faint.
Sp. apparently normal.
$H\delta$ & $H\gamma$ bright.

12883

Dec. 10, 1907.

Jan. 24, 1895 C7463
3218
Epoch 31
$H\delta$ bright but not very intense.
$H\gamma$ not seen.

Jan. 25, 1895 C7467
3219
Too poor.

Feb. 21, 1895 C7565
Too poor.

Feb. 22, 1895 C7566
3247
$H\gamma$ and $H\delta$ bright as on C1420. $H\beta$ not seen.

Feb 23, 1895 C7577
3248
Useless.

Jan. 4, 1896 C8722
Useless

Jan. 6, 1896
Epoch 32
C 8730 2 prs.
Hδ & Hγ bright
Too poor to study detail

Jan. 8, 1896
C 8735
Useless

Jan. 16, 1896
C 8762
Useless

Jan. 16, 1896
C 8763
Useless

Jan. 16, 1896
C 8764
Useless

Jan. 18, 1896
C 8769 2 prs.
Too thin

Jan. 18, 1896
C 8770 2 prs.
Hδ & Hγ bright.
Poor

Jan 30, 1896
C 8788 2 prs.
Hγ & Hδ bright

Feb. 8, 1896
C 8813
Useless

Feb. 10, 1896
C 8816
Best plate
Hδ & Hγ bright
Sp. normal

Nov. 10, 1896 — C 9655

Epoch 33

Nov. 11, 1896 — C 9657

Very narrow. Only $H\delta$ bright.

Nov. 11, 1896 — C 9658

Like 9655

Nov. 12, 1896 — C 9664

Wrong star.

Nov. 14, 1896 — C 9668

Very narrow. No change.

Nov. 14, 1896 — C 9669

$H\delta$ bright

$H\gamma$ very faintly bright.

Nov. 16, 1896 — C 9678

Quality - 2. Very poor.

Nov. 16, 1896 — C 9679

Qual. 2. Very poor.

Nov. 20, 1896 — C 9683

Qual. 2. Very poor.

Nov. 20, 1896 — C 9684

$H\delta$ bright. $H\gamma$ certainly bright

Nov. 20, 1896	C9685 Hγ bright. Hζ very faint
Nov. 22, 1896	C9705 Like 9684
Nov. 22, 1896	C9706 Hζ & Hδ both seem brighter than in 9684.
~~Nov. 23, 1896~~	~~C9710~~ T Ms. Maj. ~~Too poor.~~
Nov. 24, 1896	C9712 Like 9706.

Nov. 24, 1896	C9713 Narrow. Hζ brighter.
Nov. 27, 1896	C9716 Very narrow. No change.
Nov. 30, 1896	C9717 Def. poor. No change
Dec. 1, 1896	C9724 Hγ bright towards red,
Dec. 3, 1896	C9734 Good. Hγ bright & dark, bright to red. Bright line up in 'violet Hε'?

Dec. 5, 1896 C 9744
No change.

Dec. 6, 1896 C 9747
Very narrow. No change

Dec. 7, 1896 C 9748 Good.
Ultra violet bright line is almost as strong as $H\gamma$. Almost exactly like C15380. Compare magnitudes on these dates.

Dec. 9, 1896 C 9758
No change.

Dec. 11, 1896 C 9760
Good.

Dec. 12, 1896 C 9776 3^{i}
Poor.

Dec. 12, 1896 C 9778
Very narrow.

Dec. 14, 1896 C 9785
Fair.

Dec. 14, 1896 C 9786

Dec. 17, 1896 C 9799
Apparently just like 9748.

Dec. 19, 1896	C9803		
Dec. 19, 1896	C9804		
Dec. 20, 1896	C9806		
Dec. 20, 1896	C9807		
Dec. 20, 1896	C9808		

Dec. 24, 1896	C9819		
Dec. 24, 1896	C9821		
Dec. 25, 1896	C9822		
Dec. 26, 1896	C9824	Inal. 5	
	Probably about time of max.		
Dec. 27, 1896	C9826		

Dec. 27, 1896	b9827
Dec. 28, 1896	b9832
Dec. 28, 1896	b9833
Dec. 29, 1896	b9841
Dec. 30, 1896	b9846

Dec. 31, 1896	b9858
Dec. 31, 1896	b9859
Jan. 1, 1897	b9872
Jan. 2, 1897	b9882
Jan. 6, 1897	b9889

Jan. 7, 1897	b9898
Jan. 18, 1897	b9930
Jan. 19, 1897	b9942
Jan. 23, 1897	b9955
Jan. 30, 1897	b9976

Feb 1, 1897	b9984
Feb. 11, 1897	b10021
Feb. 13, 1897	b10026
Feb. 27, 1897	b10064
Oct. 4, 1897 Epoch 34	b10584

Oct. 5, 1897	b10590
Oct. 9, 1897	b10606
Oct. 13, 1897	b10621
Oct. 15, 1897	b10629
Oct. 17, 1897	b10636

Oct. 18, 1897	b10645
Oct. 19, 1897	b10649
Oct. 23, 1897	b10652
Oct. 25, 1897	b10657
Oct. 29, 1897.	b10666

Oct. 30, 1897	C10674
Nov. 3, 1897	C10681
Nov. 4, 1897	C10686
Nov. 6, 1897	C10695
Nov. 7, 1897	C10702

Nov. 10, 1897	C10707
Nov. 14, 1897	C10723
Nov. 17, 1897	C10726
Nov. 23, 1897	C10736
Nov. 24, 1897	C10741

Nov. 29, 1897	C 10755
Nov. 30, 1897	C 10761
Dec. 11, 1897	C 10777
Dec. 16, 1897	C 10791
Dec. 24, 1897	C 10817

Dec. 28, 1897	C 10840
Dec. 30, 1897	C 10845
Jan 1, 1898	C 10850
Jan 3, 1898	C 10859
Jan. 5, 1898	C 10867

Jan. 8, 1898	b10883
Jan. 10, 1898	b10893
Jan. 11, 1898	b10894
Jan. 13, 1898	b10897
Jan. 17, 1898	b10907

Jan. 18, 1898	b10914
Jan. 19, 1898	b10921
Jan. 24, 1898	b10924
Feb. 3, 1898	b10964
Feb. 4, 1898	b10967

Feb. 6, 1898	b10971
March 8, 1898	b11062
March 11, 1898	b11084
Oct. 6, 1898 Epoch 35	b11447
Oct. 6, 1898	b11448

Oct. 6, 1898	b11449
Oct. 8, 1898	b11455
Oct. 8, 1898	b11456
Oct. 9, 1898	b11460
Oct. 10, 1898	b11466

Oct. 10, 1898	b11467
Oct. 10, 1898	b11468
Oct. 12, 1898	b11473
Oct. 12, 1898	b11474
Oct. 12, 1898	b11475

Oct. 13, 1898	b11480
Oct. 13, 1898	b11481
Oct. 13, 1898	b11482
Oct. 13, 1898	b11483
Oct. 15, 1898	b11485

Oct. 16, 1898	b 11488
Oct. 16, 1898	b 11489
Oct. 17, 1898	b 11492
Oct. 23, 1898	b 11496
Oct. 24, 1898	b 11498

Oct. 27, 1898	b 11513
Oct. 28, 1898	b 11515
Oct. 28, 1898	b 11516
Oct. 30, 1898	b 11517
Oct. 31, 1898	b 11525

Nov. 1, 1898		b 11529		
Nov. 2, 1898		b 11533		
Nov. 3, 1898		b 11538		
Nov. 4, 1898		b 11544		
Nov. 11, 1898		b 11558		

Nov. 11, 1898		b 11559		
Nov. 12, 1898		b 11563		
Nov. 12, 1898		b 11564		
Nov. 15, 1898		b 11574		
Nov. 15, 1898		b 11575		

Nov. 16, 1898	C 11577
Nov. 16, 1898	C 11578
Nov. 20, 1898	C 11579
Nov. 21, 1898	C 11585
Nov. 23, 1898	C 11590

Nov. 25, 1898	C 11596
Nov. 28, 1898	C 11599
Dec. 1, 1898	C 11610
Dec. 6, 1898	C 11624
Dec. 8, 1898	C 11632

Dec. 8, 1898	C 11633
Dec. 13, 1898	C 11644
Dec. 16, 1898	C 11654
Dec. 23, 1898	C 11661
Jan. 11, 1899	C 11714

Jan. 19, 1899	C 11726
Jan. 27, 1899	C 11743
Feb. 9, 1899	C 11760
Aug. 7, 1899 Epoch 36	C 12072
Aug. 8, 1899	C 12076

Aug. 16, 1899	C 12089
Aug. 17, 1899	C 12097
Aug. 26, 1899	C 12108
Sept. 4, 1899	C 12118
Sept. 5, 1899	C 12122

Sept. 6, 1899	C 12126
Sept. 12, 1899	C 12134
Sept. 13, 1899	C 12138
Sept. 15, 1899	C 12145
Sept. 16, 1899	C 12149

Sept. 17, 1899	C 12151
Sept. 20, 1899	C 12157
Sept. 22, 1899	C 12164
Sept. 23, 1899	C 12168
Sept. 24, 1899	C 12169

Sept. 26, 1899	C 12170
Sept. 27, 1899	C 12173
Sept. 28, 1899	C 12178
Oct. 1, 1899	C 12186
Oct. 2, 1899	C 12189

Oct. 3, 1899	b12195
Oct. 4, 1899	b12199
Oct. 6. 1899	b12202
Oct. 7, 1899	b12205
Oct. 12, 1899	b12214

Oct. 16, 1899	b12224
Oct. 18, 1899	b12226
Oct. 20, 1899	b12234
Oct. 21, 1899	b12240
Nov. 4, 1899	b12251

Nov. 6, 1899	C12256
Nov. 9, 1899	C12264
Nov. 10, 1899	C12266
Nov. 17, 1899	C12282
Nov. 25, 1899	C12292

Aug. 1, 1900 Epoch 37	C12779
Aug. 9, 1900	C12785
Aug. 17, 1900	C12795
July 18, 1901 Epoch 38	C13392
July 22, 1901	C13401

Jan. 26, 1905 C 15376
J.D. 2416872
mg. 3.95
Hδ strongest, Hγ bright
Rather ill-defined. Not seen well beyond ~~H~~ K.
Epoch 4^2

Jan. 28, 1905 C 15380
2416874
mg. 3.85
Good sp. Hγ dark narrow with faint brightness to red. Hε divided into 2 lines

Feb. 2, 1905 C 15403
~~2416874~~
2416879
mg. 3.75
No decided change since Jan. 28

Feb. 7, 1905 C 15433
2416984
mg. ~~3.65~~ 3.65

Feb. 11, 1905 C 15453
2416988
mg. 3.62

Feb. 14, 1905 C 15467
2416891
mg. 3.61

Feb. 16, 1905 C 15469
2416893
mg. 3.61

Feb. 18, 1905 C 15473
2416895
mg. 3.60

Feb. 25, 1905 C 154~~79~~ 97
Hδ is the strongest bright line.
2416902
mg. 3.62

Feb. 27, 1905 C 15504
2416904
mg. 3.64
not evident

March 1, 1905 J.D. 16906 mf. 3.65	C 15518
Nov. 16, 1906 17531 mf 3.30 Epoch 4^3	C 16708
Nov. 23, ~~1896~~ 1906 17538 ~~3.10~~ 2.50	C 16710
J Dec. 1, 1906 17546 2.0	C 16717
J Dec. 2, 1906 17~~5~~47 2.00	C 16718
Dec. 7, 1906 7552 1.97	C 16720
Dec. 18, 1906 7563 1.9~~7~~5	C 16721
Dec. 18, 1906. 7563 1.9~~7~~5	C 16722
Dec. 19, 1906. 7564 1.97	C 16723
Dec. 19, 1906 7564 1.97	C 16724
Jan. 5, 1907 17581 2.61	C 16725 This is a reversal.