154495 1 9 316 +3305 GOI

+32.3474 664 347071 .472 1668

382 .47

6.64 385 144 315 2.576

144

C_0 251

-0373 +225

+378

54

4

4.3

-469 225

-560

225

230

+66.8

R.A.	19.500
DEC.	33.100
M. R.A.	-560.000
M. DEC.	225.000
ISTANCE	2.300
MODULUS	29
D. VEL.	-166.800

q1 (U)	0.396
q2 (U)	0.831
q3 (U)	-0.390
dU	6.398
U	65.226

q1 (V)	0.283
q2 (V)	0.294
q3 (V)	0.913
dV	-315.941
V	-161.421

q1 (W)	-0.874
q2 (W)	0.472
q3 (W)	0.119
dW	2445.842
W	50.693

184598 19 33.6 -42 55 G0(V) wF6/7

-439036

P [illegible] -040

G band yields G0/3; probably weak lined but might be composite.

+0104 -033 Y +C

+114

+113-035

+154

-35

425

R.A.	:	19.550
DEC.	:	-42.900
PM. R.A.	:	154.000
PM. DEC.	:	-35.000
DISTANCE	:	4.250
MODULUS	:	71
AD. VEL.	:	0.000
q1 (U)	:	0.406
q2 (U)	:	-0.174
q3 (U)	:	-0.897
dU	:	245.942
U	:	17.411
q1 (V)	:	0.275
q2 (V)	:	0.960
q3 (V)	:	-0.061
dV	:	-12.160
V	:	-0.861
q1 (W)	:	-0.872
q2 (W)	:	0.222
q3 (W)	:	-0.437
dW	:	-502.815
W	:	-35.597

184911 797 1.378 19 338 -39 57 G5W +/p

-40,13389 138

Quite extreme weak-lined star; ~~[illegible]~~ Ca H+K yields F0/2; lines seem somewhat shallow as if washed out especially Hβ; spectrum similar to HD 22169.

96500 2.77

-0022 -0534

7981.33

-025

-026 -055

1016 (2)
1017 (1)
12327 (1)

9.65 094

184672 10.57 112 151 1.132 2.885 +0.56

-34 -36,13607 9.05 084 112 886 2.836 .75 +.05 +0.4

-55 184190 5.77 214 142 709 2.741

6.05

104.0

1.42 51.12

3.15 1.16

R.A.	:	19.550
DEC.	:	-39.850
M. R.A.	:	-34.000
M. DEC.	:	-55.000
ISTANCE	:	6.050
MODULUS	:	162
D. VEL.	:	101.000
q1 (U)	:	0.406
q2 (U)	:	-0.126
q3 (U)	:	-0.905
dU	:	-17.481
U	:	-94.257 -104.4
q1 (V)	:	0.275
q2 (V)	:	0.961
q3 (V)	:	-0.010
dV	:	-284.657
V	:	-47.190 -212.0
q1 (W)	:	-0.872
q2 (W)	:	0.245
q3 (W)	:	-0.425
dW	:	44.019 -103
W	:	-35.780

8.05 934 147 848 (427) K' ~~x' Hg~~ NO 19.55

-3885

-34

184711 557 19 33.8 -39 5/ Ad F -55

10.0

+119

7.4

808 934 147 848 F M (15) 8.00 +1.36 +0.88 (2)

(Fe 12.6) 0035 5570 (124) 7.23 +0.60 (2)

+119.06 10.40 → W

-0.44 -052 -0022 -053 Y+12 FEY

Fe 806 147

0.2 -025

437 -026 -055

E(ly) +15 -20

~~184741~~ E(bay) x-Mn 1 b

184741 .0 -26 101

184741 +115 645 +20 -260 6.9 49

656

575

184711.000*

19.000*
33.800*
-39.000*
-51.000*
-0.026*
-0.055*
10.400*
1202.264
119.000

-0.018
-0.904

-129.051

-0.284
-0.009

-343.068

0.044
-0.427

2.090

184711.000*

19.000*
33.800*
-39.000*
-51.000*
-0.044*
-0.052*
9.000*
630.957
119.000

-0.055
-0.904

-141.975

-0.294
-0.009

-186.632

0.122
-0.427

25.998

184711.000*

19.000*
33.000*
-39.000*
-51.000*
0.000*
-0.052*
9.000*
630.957
119.000

0.031
-0.905

-88.172

-0.237
-0.010

-150.722

-0.060
-0.425

-88.632

R.A.	:	19.550
DEC.	:	-39.850
PM. R.A.	:	1.420
PM. DEC.	:	-51.120
DISTANCE	:	10.400
MODULUS	:	1202
RAD. VEL.	:	101.600
q1 (U)	:	0.406
q2 (U)	:	-0.126
q3 (U)	:	-0.905
dU	:	32.547
U	:	-52.835
q1 (V)	:	0.275
q2 (V)	:	0.961
q3 (V)	:	-0.010
dV	:	-231.537
V	:	-279.398
q1 (W)	:	-0.872
q2 (W)	:	0.245
q3 (W)	:	-0.425
dW	:	-63.811
W	:	-119.891

1 64774   19   3 44   -44 01   A3/5 (IIp)

-44.9613

Probably early weak-lined rather than luminous (narrow H lines)

8.45

✓

+0028-015 Y+C

+030
+028-017

+34
77
7.1

R.A. :	19.600
DEC. :	-44.000
M. R.A. :	39.000
M. DEC. :	-17.000
ISTANCE :	7.100
MODULUS :	263
D. VEL. :	0.000

q1 (U) :	0.416
q2 (U) :	-0.187
q3 (U) :	-0.890
dU :	70.419
U :	18.522

q1 (V) :	0.267
q2 (V) :	0.961
q3 (V) :	-0.077
dV :	-41.907
V :	-11.023

q1 (W) :	-0.869
q2 (W) :	0.205
q3 (W) :	-0.450
dW :	-132.141
W :	-34.757

+16°3924 19 36.0 +16 6/2 K3 II p

232075 B-V V-I -387 km/sec

8.48 +1.80 +1.99 .06

$M_V \sim -2.4$

+023 -037

-6 +5

+017 -032

1510 RS

+0010 -029 .0011

+0012

+0008 -034

+413	+685	-600	+0282	-0942	-0660	+0010	
+270	+537	+798	+0184	-0738	-0554		
-870	+492	-37	-0594	-0677	-1271	0	+4 → N2U

-99.7 +232.2 = +132.5

-83.5 -308.8 -352.3

-191.9 +14.3 -177.6

C142-44 19 366 +16 19 -280.9

264 2260 11.15 0.66-01

-191 185

-199
185
540
-2809

N0

```
  R.A.  :    19.600
  DEC.  :    16.200
. R.A.  : -199.000
. DEC.  : -185.000
STANCE  :     5.400
ODULUS  :   120
. VEL.  : -280.900

q1 (U)  :     0.416
q2 (U)  :     0.679
q3 (U)  :    -0.605
     dU : -972.553
      U :    52.900

q1 (V)  :     0.267
q2 (V)  :     0.544
q3 (V)  :     0.795
     dV : -719.142
      V : -309.848

q1 (W)  :    -0.869
q2 (W)  :     0.492
q3 (W)  :    -0.045
     dW :  355.583
      W :    55.453
```

474

+83

-332

+44

35.9 +16 42 -387 km/s

+16° 3924 19 36 52 +16 45 9.48 +1.80

B✓ R✓

960 +2.01 +2.085 (1)

+023 -037 ±6 Y
-6 +6
+017 -031

Suspect ✓

+020 -023

+023 -029

Var?

10.0

+014 -029

```
     0.000*

    19.000*
    35.900*
    16.000*
    42.000*
     0.023*
    -0.029*
    10.000*
1000.000
-387.000

    -0.049
    -0.599

   182.983

    -0.045
     0.800

  -354.287

    -0.162
    -0.041

  -146.791
```

E32078 19 36.0 +16 412 123 II p

+1603924

861 +2.02 +2.09 (2)

7.38 +0.865 (2)

7.00 108
11.5 5
5.85
5.

-387.07

+0014 -038 Yol → FKY4

+0010 -030 mem... 10.85 mud.

+0002 -026 FKY AGR

+0009 -028 FKY mem...

+013

+016 -030 +lon

184768 19 33.4 -60 01 dbq

>57 +0.67 ±0.15 ②

4.50

-55 -116 -62

-89 -136 -81

-14.1

-.006 -.386

462
342
10
9168
3

45-48 42-45 41-42
1.159 844 206
Cu = 228

Φ Uyg 47376

16 37.4 +30 02 68 III ~~46~~

~~4744~~
7478
145734

545
4.70 +0.98 +0.79 35
434 d
~~8B~~ ?

4.36 +0.325 35
25p. equal cp
4.27 +0.325 2A
4.31 +0.325

4.0
+20 16
506 477 4.25 4
±20

+0.00010 +0.0409 f ku4 +5.7a
-18

36
+0013
+605 +039

7478.000*

19.000*
37.400*
30.000*
2.000*
0.005*
0.039*
5.000*

4.0
63 70.8 100.000
5.000

0.158
-0.422

+7 +9 13.429

0.069
0.904

+9 +10 12.016

0.070
0.069

+5 +5 7.424

GC 27364 = 17 Cyg   Bu 51 1.42 1.47

12889   19 41.8 +33 22 1900

				S	R	R-I	M_v(R-B)	M_v(R-I)
17 Cyg A	5.01	+0.45	0.00	0				
B	8.55	+1.04	+0.9	+02	7.95	+0.38	+7.0	+7.0 6.5
12889 AB	7.69	+0.58	+0.78	+02	7.14	+0.37	+6.85	+6.90 6.05

~~m~~ π_{pt} (17 Cyg B) = 0.049   Bu 51 +4.7a +0012 −.440

π 12889 = 0.0485

		P	a		a^3/P^2
12889	17 Cyg	243.55	2.150	Baize (1955)	1.6754×10^{-4}
36 S (12)	43 A (28)	224.68	2.048	Rabe (1948)	1.7017×10^{-4}
42 A (20)	50 M (10)				
37 M (9)	56 Yk (12)				
34 Yk (11)	51 B (20)				
039 (50)	50 (70)				

π^3

π_{pt} 0485 π_3 1.14084×10^{-4}

$b_{02} = -.13$ $m_1 + m_2 = 0.74$ 1.48   mass { 1.47 Baize; 1.49 Rabe

.0485 u v w

-36 -7 -23

789
34
753
51
702
14
57
×5

8 ⟌37 4
32
50

-0.7 35t

186402 19 43.0 -48 39 F8 V-VI

S = +14
10.22 +0.59 -0.02 25t

+0.038 -0.335 CA .274 172° BPM

205156 21 31.5

186471 — 14 482 -74 30 — F5W A8/F0

→ 74.1848

Probably weak lines; Ca II H+K (yields A8/F0) also weak (narrow) as in Pm & Hδ; G band yields F0/2

P (Teff)

-0.70

9746 — A 1.23

-006

-004 -063

34
-43
7.05

-0023 -061
-7 -061
-0015 -061

-0014 -06.0
-13 -4
-0027 -064
-0007 -0615

R.A.	:	19.800
DEC.	:	-74.500
PM. R.A.	:	-34.000
PM. DEC.	:	-63.000
DISTANCE	:	7.050
MODULUS	:	257
RAD. VEL.	:	0.000
q1 (U)	:	0.456
q2 (U)	:	-0.591
q3 (U)	:	-0.666
dU	:	156.797
U	:	40.303
q1 (V)	:	0.235
q2 (V)	:	0.801
q3 (V)	:	-0.550
dV	:	-249.358
V	:	-64.095
q1 (W)	:	-0.859
q2 (W)	:	-0.095
q3 (W)	:	-0.504
dW	:	65.29[illegible]
W	:	16.78[illegible]

7.7

+543

-8.5

+216

~~160559~~ 19 48.7 -42 03 GOVWPS

187579

~~-428928~~

-.008 +.015 C

-11

+15

P Fe/H 5.4

.40

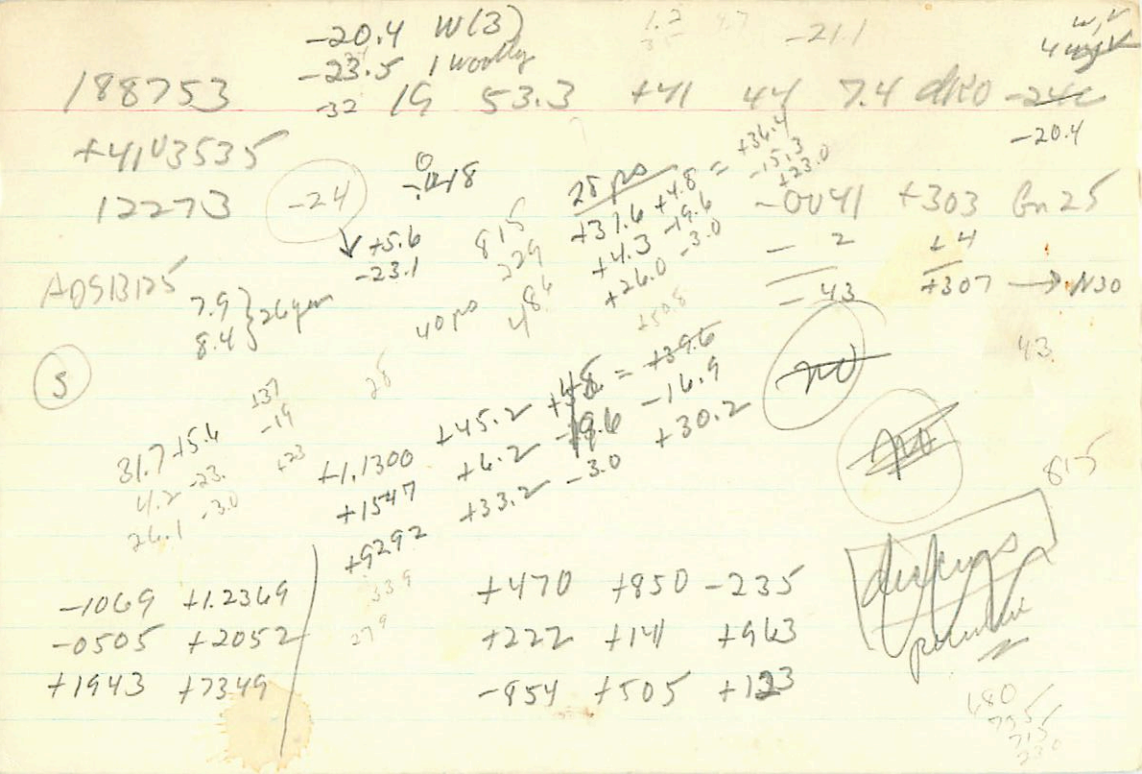
R.A.	:	19.800
DEC.	:	-42.050
. R.A.	:	-11.000
. DEC.	:	15.000
STANCE	:	5.400
IODULUS	:	120
). VEL.	:	0.000
q1 (U)	:	0.456
q2 (U)	:	-0.141
q3 (U)	:	-0.879
dU	:	-27.706
U	:	-3.331
q1 (V)	:	0.235
q2 (V)	:	0.971
q3 (V)	:	-0.035
dV	:	59.990
V	:	7.212
q1 (W)	:	-0.859
q2 (W)	:	0.190
q3 (W)	:	-0.476
dW	:	46.774
W	:	5.623

M 71   14   5 h 1   + 18 39

~002.3 005.1

~2.4
~5.1
12.78
~12.1

R.A.	:	19.850
DEC.	:	18.650
PM. R.A.	:	-2.400
PM. DEC.	:	-5.100
DISTANCE	:	12.780
MODULUS	:	3597
RAD. VEL.	:	-22.100
q1 (U)	:	0.466
q2 (U)	:	0.695
q3 (U)	:	-0.548
dU	:	-21.824
U	:	-66.410
q1 (V)	:	0.22
q2 (V)	:	0.50
q3 (V)	:	0.83
dV	:	-14.64
V	:	-71.07
q1 (W)	:	-0.85
q2 (W)	:	0.51
q3 (W)	:	-0.07
dW	:	-3.15
W	:	-9.62



28 passes

-21.0

+470	+450	-235	+.1092	+1.2369	1.1277	+36	+4.9	+37.5
+222	+141	+963	-0815	.2052	1547	+4.5	-20.9	-16.5
-854	+505	+123	+1584	.7349	9333	+26.9	-2.6	+24.3

185510
+10.4091
G143-17

14 526 +10 36

G-5 I w

6.53 54

-152-8 (19)

8.53 416 100 143 2.55-3 (1)

8.43 417 113 128 (2)

.77 416 106 185 2.553
167

404 110 143

#1 4.86
3/19
5

+U10

-1025 292

-037 292

38

292

2.79

~~15.98~~

-152.8

R.A.	:	19.900
DEC.	:	10.600
. R.A.	:	-38.000
. DEC.	:	292.000
STANCE	:	2.790
ÖDULUS	:	36
. VEL.	:	-192.800
q1 (U)	:	0.475
q2 (U)	:	0.610
q3 (U)	:	-0.634
dU	:	760.826
U	:	149.644
q1 (V)	:	0.218
q2 (V)	:	0.616
q3 (V)	:	0.757
dV	:	813.742
V	:	-116.555
q1 (W)	:	-0.852
q2 (W)	:	0.498
q3 (W)	:	-0.160
dW	:	840.241
W	:	61.126

ADS 13125   19   53.3   +41   44   Hyades Group

51.6   36

P	T	e	A	B	F	G	a	L
25.71	1936.74	0.46	+0.019	-0.233	+0.232	+0.043	0.247	25.6
.02	.04	.00	.001	.001	.003	.003	.005	2.0

~~Major improvement over orbit given in~~

also Argue

745

240 +0.80 +0.42 2 20

$\pi_v = 012.5(28)$

+5.80
8.12

m-M = 2.32 $\pi_{pt} = 03\,3\,5$

$P = 25.71$ $P^2 = 6.610 \times 10^2$

$a = 0.247$ $a^3 = 15.069 \times 10^{-3}$

$\pi = .0335$ $\pi^3 = 3759 \times 10^{-6}$

1914.49	23.0	0.20	2 A	+1.4	-0.01
18.64	6.10	0.24	2A	-1.6	-0.02
19.98	68.0	0.33	2A	-3.4	0.00
20.53	78.0	0.35	3 VB	+3.2	+0.01
21.56	77.0	0.34	2A	-3.4	0.00
21.65	88.0	0.31	6 VB	+6.4	-0.03
23.52	92.0	0.38	4 VB	-0.2	+0.04
24.60	96.0	0.31	3 VB	-2.5	-0.03
25.42	101.0	0.33	2 VB	-2.5	0.00
27.65	118.0	0.34	3 VB	0.0	+0.03
31.60	154.0	0.24	3 VB	+0.4	0.00
35.74	232.0	0.18	2 VB	-2.2	+0.04
36.53	270.0	0.16	1 VB	+6.6	+0.03
39.58	7.0	0.14	1 VB	-3.8	0.00

188985 15 56 3 -4507 ~~F8/Goo~~ F8/G(II) w (p)

-401115

Sr strong, CaH+K weak for type

A Fe I/H
x0.14

-0058 +019 ? +c

-057

754 +017

-90
+17
5.5:

R.A.	:	19.950
DEC.	:	-49.100
M. R.A.	:	-90.000
M. DEC.	:	17.000
ISTANCE	:	5.500
MODULUS	:	126
D. VEL.	:	0.000
q1 (U)	:	0.485
q2 (U)	:	-0.234
q3 (U)	:	-0.843
dU	:	-154.312
U	:	-19.427
q1 (V)	:	0.210
q2 (V)	:	0.966
q3 (V)	:	-0.148
dV	:	19.263
V	:	2.425
q1 (W)	:	-0.849
q2 (W)	:	0.105
q3 (W)	:	-0.518
dW	:	245.613
W	:	30.921

HD 194403   19 58.2   -42 33   AEW A2/3

-42.8975

Probably weak lined rather
than high luminosity; metals absent.

-.0001 -.002 ± .6

-.001   -3

-.002 -.004   -4

6.7

R.A.	:	20.000
DEC.	:	-42.550
PM. R.A.	:	-3.000
PM. DEC.	:	-4.000
DISTANCE	:	6.700
MODULUS	:	219
RAD. VEL.	:	0.000
q1 (U)	:	0.494
q2 (U)	:	-0.132
q3 (U)	:	-0.859
dU	:	-2.672
U	:	-0.584
q1 (V)	:	0.202
q2 (V)	:	0.979
q3 (V)	:	-0.035
dV	:	-20.671
V	:	-4.522
q1 (W)	:	-0.846
q2 (W)	:	0.156
q3 (W)	:	-0.511
dW	:	5.900
W	:	1.291

7.25
-0.7
-5.8
+1.7

ADS13344 +10 17 +0019 ± 5.7 +0024 +018 ± 5.6 +020 -3.2 SB?

190658 20 03.1 +15 21 6.6 gM2 -111.6 B

27872

124553 8.428 1896.6 +15 21 22.72 1895.6 100 555

-101 +00215 +019 -98 477 112

.327 14 21.74 365

+00224 +0225 -22

8.406 22.36 1933.5 (28)

2 +0338 14

408 27 22.50

0365

(40.0)

8.437 22.46 1939.7

0 17

422 22.63 13.2

+036 +020 22.56 36.6

+09.5 + .82 (41.0)

24

+25 +14

+0026 +0015

+034

+041 +015

190658.000*

20.000*
3.100*
15.000*
21.000*
0.036*
0.020*
7.800*
282 363.078
-111.600

0.148
-0.562

+102 116.528

0.085
0.813

-59.925

-0.094
-0.150

-17.549

733

190658.000*

20.000*
3.100*
15.000*
21.000*
0.041*
0.015*
7.400*
301.995
-111.600

0.145
-0.562

106.392

0.077
0.813

-67.662

-0.127
-0.150

-21.513

+43.3607 2Q 073 +7.2 43 786.4 pc

G125-44 10.11 0.51

G186-24 20 23 +24 57 -3214

1082 040 0.23

0.240 160°

NW

082-226

50

-226

570

-3214

R.A.	:	20.400
DEC.	:	24.900
PM. R.A.	:	90.000
PM. DEC.	:	-226.000
DISTANCE	:	5.700
MODULUS	:	138
RAD. VEL.	:	-321.400
q1 (U)	:	0.567
q2 (U)	:	0.719
q3 (U)	:	-0.401
dU	:	-551.069
U	:	52.858
q1 (V)	:	0.134
q2 (V)	:	0.400
q3 (V)	:	0.907
dV	:	-376.716
V	:	-343.403
q1 (W)	:	-0.813
q2 (W)	:	0.568
q3 (W)	:	-0.131
dW	:	-922.872
W	:	-85.429

+41°3735 20 22.8 +41 20

TT15972

-162.5 (60.5) 2 h

8.8 60

.120 227°

+41° 37' 35" 20 22.8 +41 20

9.10 +0.605 +0.105 (2)

702
19472 20 25.7 55 17 F5WPO

-55.4397

p [Fe/H] -37

2674 overlapped; looks somewhat weak lines

-0021 +073 Sepulv
-0015 +074
-0018 +0735

-0154 -30
-017 +071 +71
5.5

-0023 +072
+2 -2
+6 +4
-0015 +074

R.A.	:	20.400
DEC.	:	-55.300
PM. R.A.	:	-30.000
PM. DEC.	:	71.000
DISTANCE	:	5.500
MODULUS	:	126
RAD. VEL.	:	0.000

q1 (U)	:	0.567
q2 (U)	:	-0.273
q3 (U)	:	-0.777
dU	:	-137.742
U	:	-17.341

q1 (V)	:	0.134
q2 (V)	:	0.962
q3 (V)	:	-0.240
dV	:	312.749
V	:	39.373

q1 (W)	:	-0.813
q2 (W)	:	-0.032
q3 (W)	:	-0.582
dW	:	55.020
W	:	6.927

RS Vul 20 24.2 +16 06 60

-007

+036 -001 LB

-105

+037 -001

b=-130 + 3 -003

p.L +037 -003

+05 487

211
1685

5.45

507 0 487
217.96

493 483 137
134

+437 475
175

2.7
48

7.5

+039 -003

5.49 169 212

509
218
291 844

```
     0.000*

    20.000*
    26.200*
    16.000*
     6.000*
     0.037*
    -0.003*
     0.650*
   537.032
  -105.000

     0.091
    -0.501

   101.699

     0.015
     0.036

   -79.033

    -0.150
    -0.229

   -56.904
```

20 25 08 +27 41 51 25 89 +24 4000

+2303773 20 28.7 +27 47 8.8 1N2TT

8.04+1.14+1.06 (1)

7.65+0.40 (1)

7 27

6 71

(8.7)

+053 +038 ABN2

+045 +061 Y →

+047 +059 E Rusty →

+048 +053

+052+050

+045 +061 Y ±6

+042+058

+042 +054 ±6 Rusty

+2 +2

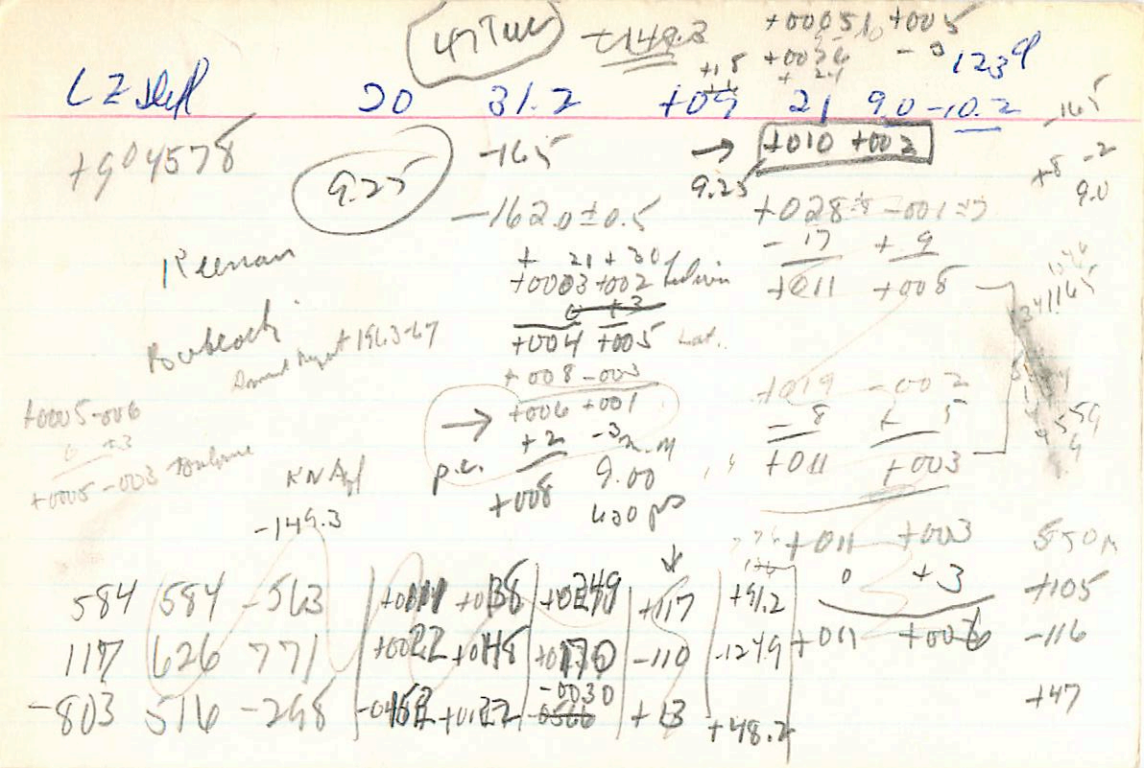
+44 +56

+043 +057 ±4.5

+046 +060

+050 +058

20.450	0.000*
27.800	
59.000	20.000*
50.000	28.700*
8.000	27.000*
398	47.000*
-17.400	0.050*
	0.058*
0.576	7.700*
0.735	346.737
-0.358	-17.400
316.698	
132.302	0.339
	-0.354
0.125	
0.353	123.764
0.927	
114.639	0.126
29.504	0.928
	27.377
-0.808	
0.579	-0.031
-0.111	-0.117
-62.681	
-23.022	-8.699



CZ Hel 20 81.2 +9 21

6.47 118

6.39 1155 Vid Babcock (Keenan) Annual Report Mt. Wilson and Palomar Observatories, 1963-1964.

6.4 4.5 B=+08

+1.17

6.24 1.11

(8.9)

→ -16.5

CZ Hel 7.95 +1.65 +1.85 -3.3 +105 -116 +47 +4 -1620 120 E+108

+90 45 78 6.4 +1.17 8.7 +2 +2 0 +5 m5 -18°

C 7 53.9-17-6

196917.000*	0.000*
20.000*	20.000*
38.300*	31.200*
-31.000*	9.000*
-47.000*	21.000*
0.106*	0.010*
-0.056*	0.002*
6.950*	9.250*
245.471	707.946
-97.300	-165.000
0.284	0.033
-0.790	-0.561
146.677	116.264
-0.214	0.011
0.170	0.770
-68.985	-114.045
-0.443	-9.032
-0.589	-0.033
-51.492	26.590

1964 99 20 36.8 40 38 GSWGOP

40.7420 Strong CH

P Felt Tom

198491 20 49.0 −49 41 A8/F2 w

p fd/k ,30

overlapped; probably weak-lined;

Ca+H+K yield A8; H lines yield F2/3; metals yield about A7 IV.

−0013 +0037 FL

−013 −22

−014 0

2.4

R.A.	:	20.800
DEC.	:	-49.700
M. R.A.	:	-22.000
M. DEC.	:	0.000
DISTANCE	:	6.400
MODULUS	:	191
D. VEL.	:	0.000
q1 (U)	:	0.634
q2 (U)	:	-0.148
q3 (U)	:	-0.759
dU	:	-42.746
U	:	-8.145
q1 (V)	:	0.065
q2 (V)	:	0.988
q3 (V)	:	-0.138
dV	:	-4.373
V	:	-0.833
q1 (W)	:	-0.771
q2 (W)	:	-0.038
q3 (W)	:	-0.636
dW	:	51.989
W	:	9.906

21 014 +11 49 1550 84 F8

+110 4463 20 59.0 +11 38 8.7

5.33 275M. P=-27

+055 +074

-8 +4

+067 +074 AG123

+063 +078

0 +3

+063 +081

64	587	-462	+1983	+2254	+4237	+126	+10.1
030	597	802	+0090	+2292	+2382	+50	-17.6
-747	547	-376	-2231	+2100	-0131	+5	+8.3

Obs

$+4^{0}4551$ 20 43.8 +4 50 9.0 F5

9.72 572 ρ=-118 +023 +087Y

440pc. -03 +86

-8 +7

626	535	-568	+0474	+2434	+2508	~~44~~095	124 +67.0	+015	+094
074	684	726	+0056	+3112	+3168	-54	139.3 -85.6	+1	+2
-776	446	-359	-0588	+2257	+1669	+119	+45.9 73.4 1 9	+016	+056

4 58 24.5 114 6-0 5C

200703 21 03.3 -46 28 G2V-VI -73.9±1

FD1267 8.80 +60 (1.67)

δ=+07

+029 -0.240 CR

+0013 -232 ±+C FA4

+013Y -73.9

+013 -235

3.5

```
200703.000*

    21.000*
     3.300*
   -46.000*
   -28.000*
     0.013*
    -0.235*
     3.500*
    50.119
   -73.900

     0.123
    -0.736

    60.572

    -1.109
    -0.080

   -49.643

    -0.002
    -0.672

    49.538
```

2.14 20. Wolf
2.15 208 (2)

Wolf ~~418~~ 1104 B   21   06.7   +59   32

C231-27

-260 (5W) 1 var 40 minor

-940 -1925 Wolf
-1010 -1900 Giclas (2)

1891

H5

w
13296 21 06.8 +59 33 [illegible] −260 w (5)

5B (46)

CC 1243 Apr 13.0 [illegible]

W918 −940 −1.52 cc

39 w (10)

35±10 w

-686 728 862 508 -54 -1.52 -260 -1.655 -224 -4.62

-645 -1.135 -684 -1.205 2.653 -8.618 -132.1 -96 +91 .04

-30 -124 -340

-271 -214 -113

W13294 21 06.8 +59 33 sd M1 −260 c

−54 −1.92 lin

W 35(10)

W

+54° 24′ /
20 59.3

+55 06

Ao slit blurs
Borgmann
is wrong!

-707 707 862 507 -94 -192 -260 -1.660 -225 -4.600

-662 -1.170 -662 -1.170 2.400 -8.500 -93 +93

04

-33 -125 -340

-272 -215 -110

-3 -110 454
-16 56 -255
24 20 -154

05

-45 -81 -317

-223 -225 -96

-4 -71 -146
-22 34 -239
39 13 -141

254-11-94 21 21.2 +06 09

+010.8 -1037

108
-3.7
-24 10.52
.74

R.A.	:	21.400
DEC.	:	6.150
R.A.	:	10.800
DEC.	:	-5.700
TANCE	:	10.220
DULUS	:	1107
VEL.	:	-74.000
1 (U)	:	0.720
2 (U)	:	0.534
3 (U)	:	-0.443
dU	:	22.239
U	:	57.357
1 (V)	:	-0.040
2 (V)	:	0.669
3 (V)	:	0.742
dV	:	-20.103
V	:	-77.175
1 (W)	:	-0.692
2 (W)	:	0.517
3 (W)	:	-0.503
dW	:	-49.212
W	:	-17.222

5(6)

202560 21 14.3 -39 04 +19.4±0.7

G-C29741 6.68 +1.42 MO V +23.0 W(3)

W13369 +20.7 3 Str

75117 5.78+69 str 63 1

-39°14192 21

-3.269 -1.154 Gu

-3.283 -1.146 Can mean

-58 -20 +28 :25 8w

257 (8)

250 (17)

255±8

-2807 ±7.5 -1154 ±7.5
-2794 -1143

553 823 -631 774 -3.253 -1.146 +20.0 723 -134.212

1.815 -400 -2735 602 5.747 -1.485 +15.5 +13 +86

19.934 18963 -39 3 42.57 1893.4

15.074
35.008
50.806
34.550
25.756
1.00
.656
.14
.642

43808
21.904
13.104

46.9

18.175
.9
.164

68.32
37.25

34.65 1930.10
13.45
21.00
1.13
9.87
.18
.69
.69
19.

48.51 1954.38
.13
48.64

68.35
34.66

49.8

34.16
56.91
48.33
24.16
46.91

8244 6.85 -052 15 658 2.7 13

202759 27 16.0 -34 08 AO (III) w

888 -1.25 (7.7)

-34.14977

No metals; humen horizontal

branch stars

3.5

vr

+0081 -060 4.4

+101 -063

+122
-63
8.45

R.A.	:	21.250
DEC.	:	-34.100
PM. R.A.	:	122.000
PM. DEC.	:	-63.000
DISTANCE	:	8.450
MODULUS	:	490
RAD. VEL.	:	0.000
q1 (U)	:	0.700
q2 (U)	:	0.106
q3 (U)	:	-0.706
dU	:	303.702
U	:	148.747
q1 (V)	:	-0.014
q2 (V)	:	0.991
q3 (V)	:	0.135
dV	:	-302.413
V	:	-148.115
q1 (W)	:	-0.714
q2 (W)	:	0.085
q3 (W)	:	-0.695
dW	:	-367.131
W	:	-179.813

8152 -2 -174 W88 540 +28 543

203010 21 17.8 -50 09 K3 III +22.5 5 C

FD1273 6.41 +1.33 (3) +1.56 6.37 +1.32 — 365 -1.82 174 -3 -166

GC24858 -214 5.0

-0027 ±10.6 -149 ±8.3 +22.5

-0002 -166 Yale Hope 51.275 1900.5 -0043 55.44 1896.5

137 7.93

-509 -0035 -178 47.51

-003 -169

-20

Not had

8.478 12.65 1927.76 Stop

+04.45 43.158 6 18.40

5.87 51.636 8 57.25 -0008 -167

628 PPM 5420 -0003 -163

9445 0830 1572 -000 -158 -8 -0026

3286 -4966 0161 -003 -158 758 -0002 -166

H.30

+22.5

```
    R.A.  :    21.300
    DEC.  :   -50.150
. . R.A.  :    -5.000
 . DEC.   : -158.000
 STANCE   :     4.300
 IODULUS  :    72
). VEL.   :    22.500

q1 (U)    :     0.707
q2 (U)    :    -0.086
q3 (U)    :    -0.702
     dU   :    53.822
      U   :   -11.891

q1 (V)    :    -0.022
q2 (V)    :     0.989
q3 (V)    :    -0.144
     dV   :  -740.569
      V   :   -56.893

q1 (W)    :    -0.707
q2 (W)    :    -0.118
q3 (W)    :    -0.698
     dW   :    70.000
      W   :    -8.535
```

12483 8.67 +1.12 +0.96 K IV -31.9

204079 -159±6 -159±5 Rich

+26°4156

-152 -159 Rutz → -.143 -.164

-.003 -.003

-.146 -.167

-149 -167 Y → -.001 +.003

-.147 -.164

Wat W630

-146 -159 Abast

-149 -161

-31.9

-146 -164

2.25

21h23m 17.485 +26°59 49.94 1928.69

-.002 -.11

17.483 49.83

21h23 17.470 +26°59' 49.80 1929.7

-.011 -.21

.459 .59

```
204079.000*

    21.000*
    23.300*
    26.000*
    59.000*
    -0.146*
    -0.164*
0.58  2.250*
1291 28.184
   -31.900

    -1.009
    -0.226

-4 -21.229

    -0.255
     0.932

-33 -36.896

    -0.034
    -0.285

+9   8.126
```

+75°03'578 b − y = 400 [m₁] +28 +0Z [c₁] = +21

20ʰ46ᵐ13 21 26.2 +57 07 −117 the mean 1 pd

Jenl Cohn M 47²2 olton

·543

Sel monochrome paper 8.24 +0.01 +0.06 Ap. J. 259,747 (−877)

+0248 −106

−1 +2

+0247 −104

−4 +2

+0243 −102

+.158

Ivy Bond Ap. J. 160, 1129

100 P 200 P

+40

−97

−108

100 P = 5.00 η Cep Group

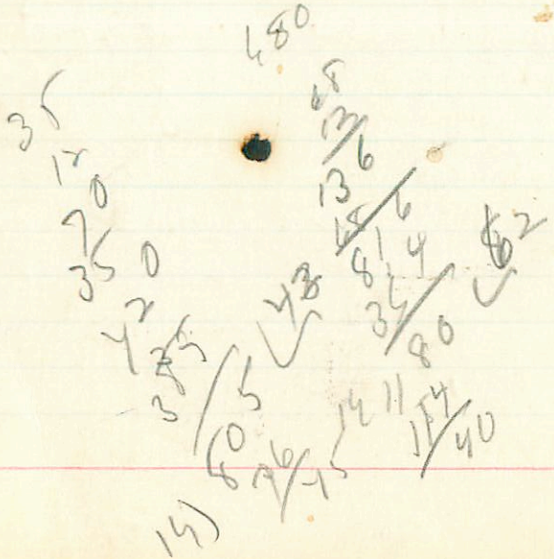
−15.2

~~−87.0~~

−110.5

−9.1

	6520			
+723 +678 +184	~~8785~~ −3278	+3542	+20	
−043 −153 +987	−0404 +0740	+0336	−97	
−640 +719 +082	−1506 −3474	−5552	−108	



+11 0457 1   21 26.7   +11 58   12.5 dM0 -247 c 3w

13502   G 176-202   0.48 164°

58 W (7)

1.086   2.4

.230 = μ_δ² + tan² μ_δ

.212

.018

525 -247

726	577	-378	.6882	-1.3060	-6178	-32.4 +43.3
-48	550	806	-0455	-1.3424	-1.3879	-70.2 -199.1
-656	567	-456	-6503	-1.2500	-1.9403	-101.9 +112.6

+61 -270 +11

.46 155 (2)
.48 164 BPM

+11 0 4571 · 21 26.7 +11 58

G126-2

2

(WD)

-2472

10.65 +0.475 (3)
1027
97
57
2.4 26.7 =

+155 -415 G [illegible] (2)
+135 -460 [illegible]

+165 -180

11.15 1.100 475

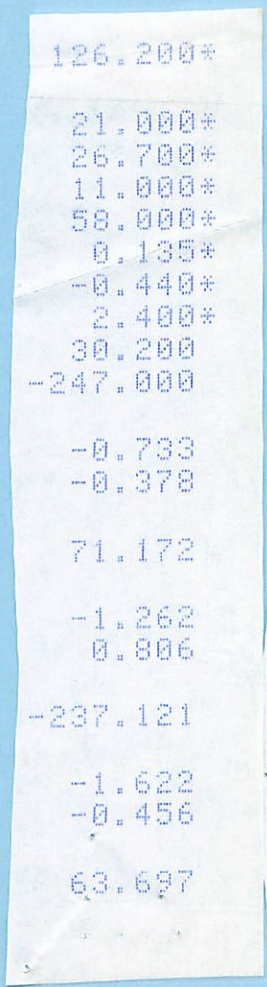
+135 -445

(3.1)

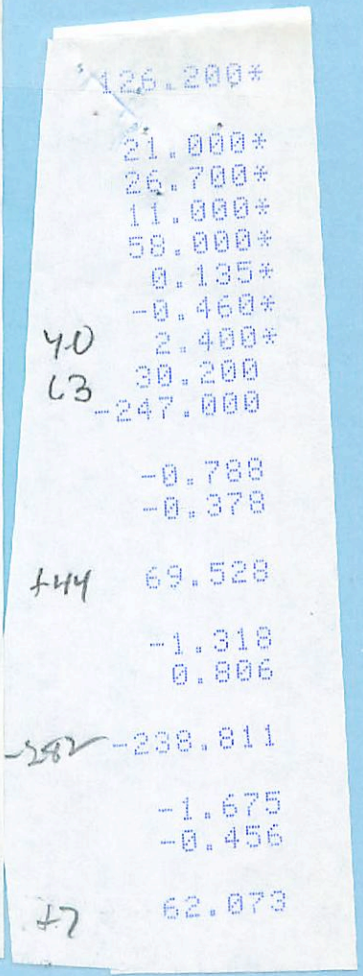
11.12 668 418 264
3.8.8 (3)

```
  21.450
  11.950
 138.000
-445.000
   3.100
      42
-247.000

   0.727
   0.574
  -0.377
-745.767
  62.036

  -0.049
   0.591
   0.805
-1276.866
-252.187

  -0.685
   0.567
  -0.457
-1634.623
  44.783
```

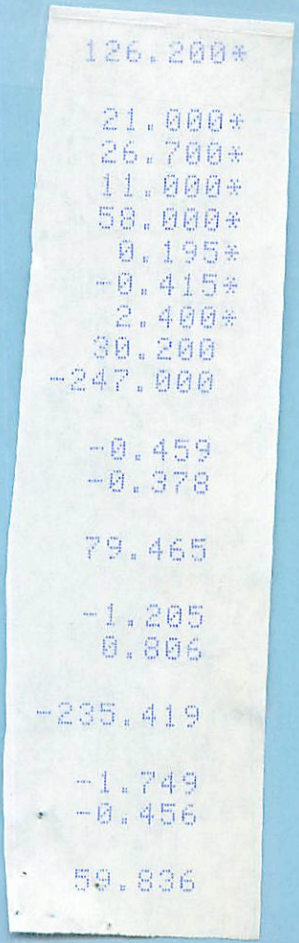
```
 126.200*

  21.000*
  26.700*
  11.000*
  58.000*
   0.165*
  -0.430*
   3.000*
  39.811
-247.000

  -0.603
  -0.378

  69.321

  -1.241
   0.806

-248.405

  -1.692
  -0.456

  45.299
```

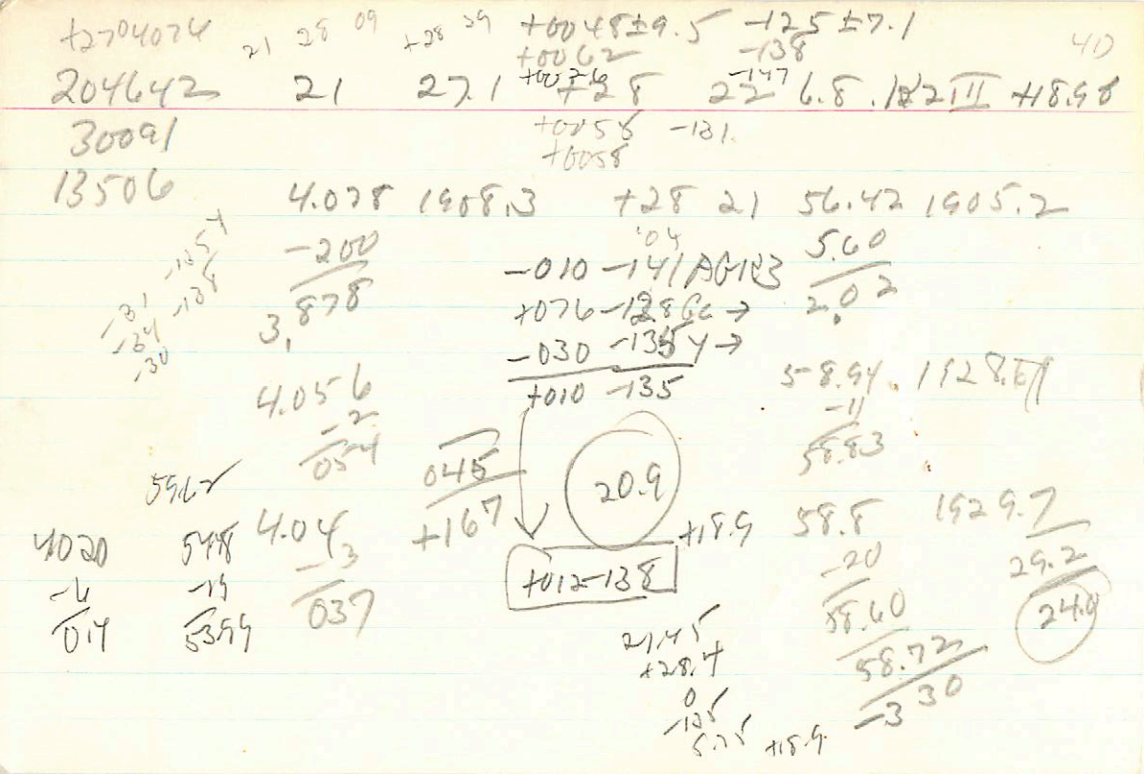


126.200*
21.000*
26.700*
11.000*
58.000*
0.135*
-0.440*
2.400*
30.200
-247.000
-0.733
-0.378
71.172
-1.262
0.806
-237.121
-1.622
-0.456
63.697



126.200*
21.000*
26.700*
11.000*
58.000*
0.135*
-0.460*
40 2.400*
63 30.200
-247.000
-0.788
-0.378
+44 69.528
-1.318
0.806
-582 -238.811
-1.675
-0.456
+7 62.073


126.200*
21.000*
26.700*
11.000*
58.000*
0.195*
-0.415*
2.400*
30.200
-247.000
-0.459
-0.378
79.465
-1.205
0.806
-235.419
-1.749
-0.456
59.836


20.9

```
  21.450
  28.400
   0.000
-135.000
   5.750
     141
  18.900

   0.727
   0.657
  -0.199
-420.615
 -63.175

  -0.049
   0.338
   0.940
-216.497
 -12.819

  -0.685
   0.673
  -0.278
-430.913
 -66.120
```

W 1351.0 5720 0780 21 27.3 +17 25 10.4 dM4

CC1285 3125 0047 +0.7 0326 1.012 388 +1 C 6wmd

94,271 105,36

Ross 775

10927 17 (9.57)

6563 8410 10604 5.7 +1.010 +390 S(R)
-7548 5410 -0218 5.2 2.8 +1.012 +358
1010 -707 8 101.1 389
390 2.

mtw

(OR) 7784 9143 10819 +5
8.45 1.17 1277 8060 -0538 +7
8.15 +1.76 -6 (Argh)

0.1448 (+7 ±6 -7 ±6) 3

9.75 (-286) -0.804 3
8.60
(9.60) →

M 15 21 226 8/1 57

-143 -3.0
-146 -4.2
1453
-1094

R.A. :	21.450
DEC. :	11.950
PM. R.A. :	-3.000
PM. DEC. :	-4.200
DISTANCE :	14.930
MODULUS :	9683
RAD. VEL. :	-107.400

q1 (U) :	0.727
q2 (U) :	0.574
q3 (U) :	-0.377
dU :	-21.540
U :	-168.076

q1 (V) :	-0.049
q2 (V) :	0.591
q3 (V) :	0.805
dV :	-11.081
V :	-193.810

q1 (W) :	-0.685
q2 (W) :	0.567
q3 (W) :	-0.457
dW :	-1.760
W :	32.056

+063 +004 8.6 -23.0

204923 ~~21~~ 21 28.9 +25 50 K3 II

8.04 +1.355 +1.41 (2)

7.38 +0.53 (2)

~~8.04~~

-23.0

~~+063 +004 Yale~~ 7.00

~~- 3 - 3~~ 6.3

~~+066 +001 GC~~

~~+ 4~~

+070 +004 F1.4

+073 +001 +600

7.00

7.0

6.3

2.2

8.5

+044 -002 Ab 3

+070 +004 Y

+057 +001

+060 -002

B?

8.8

204923 +76 -18

-2.5

E(hy) = +0.02

204923 +60 +84

+0.53 -2 -29

5.80 -23.0 -70

-0.5

-0.6

Yale

204923.000*

204923.000*

21.000*
28.900*
25.000*
50.000*
0.060*
-0.002*
8.800*
575.440
-23.000

0.202
-0.223

121.219

-0.019
0.923

-32.169

-0.200
-0.313

-107.764

21.000*
28.900*
25.000*
50.000*
0.073*
0.001*
8.500*
501.187
-23.000

0.256
-0.223

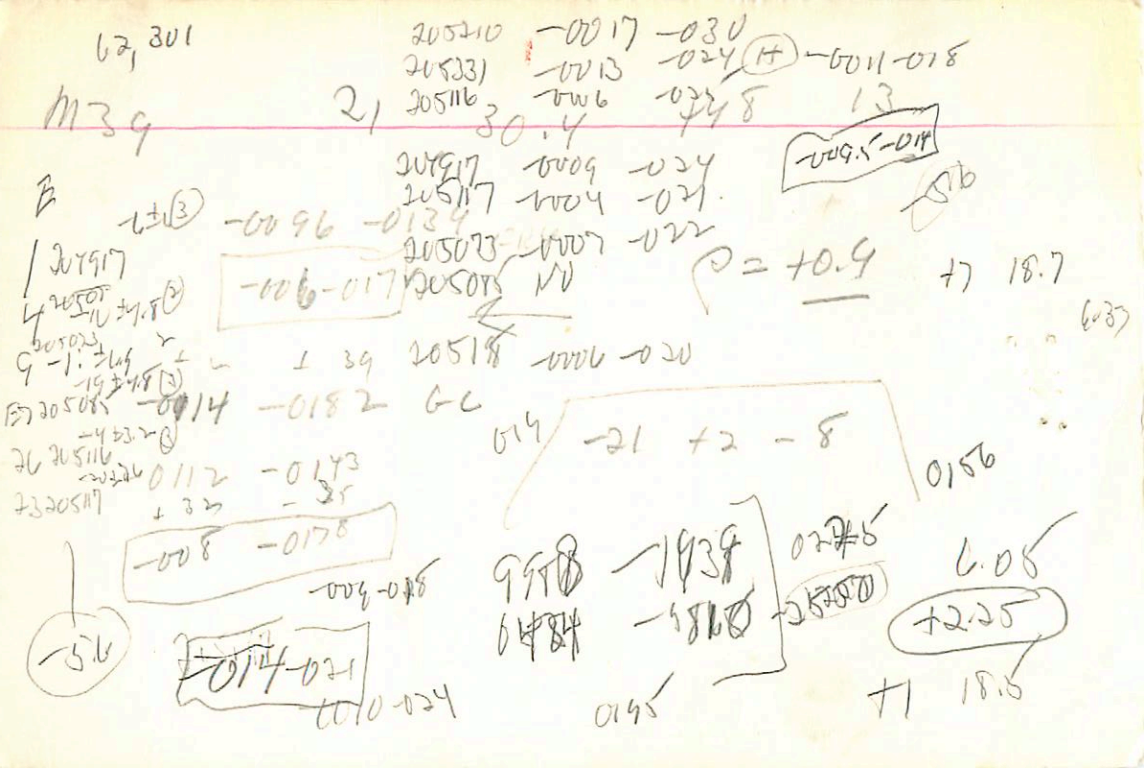
133.408

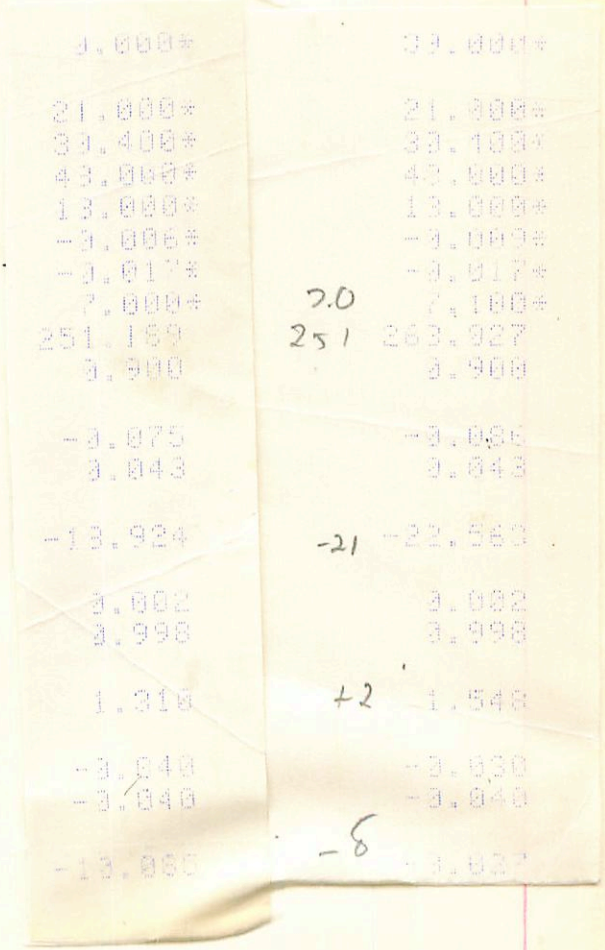
-0.017
0.923

-29.720

-0.232
-0.313

-109.219




9.000*
21.000*
33.400*
43.000*
13.000*
-9.006*
-9.017*
7.000*
251.169
9.900
-9.075
9.043
-13.924
9.002
9.998
1.310
-9.040
-9.040
-13.080
39.000*
21.900*
33.100*
43.000*
13.000*
-9.009*
-9.017*
7.100*
7.0
251
263.927
9.900
-9.095
9.043
-21
-22.563
9.002
9.998
+2
1.548
-9.030
-9.040
-6
-13.037

+0055±3.7 +124±2.7
+52 +114

206078 21 35.8 +62 05 7.7 gbb −74.9 sw

30286 7.11 +97 +48 G8III R

13559

+41.7154 50.552 1891.5 +62 4 37.84 1879.1 3 A

−320 −8.79
232 +00535 +119 Gcl 29.07 6.74+385

N6730 +0052 +121 657

50.41 35.00 1929.9

24 +0365 −749 −17

434 +040 +118 4 34.83

44.1 115.36

6.41 0.55 6

0560 +115 Cavalry 90
115

0942 115 ?
−749

```
206078.000*

    21.000*
    35.800*
    62.000*
     5.000*
     0.040*
     0.118*
     4.000*
    63.096
   -74.900

     0.495
     0.212

    15.339

    -0.147
     0.969

   -81.815

     0.287
     0.130

     8.344
```

R.A.	:	21.600
DEC.	:	62.100
R.A.	:	44.000
DEC.	:	115.000
TANCE	:	6.000
DULUS	:	158
VEL.	:	-74.900
1 (U)	:	0.745
2 (U)	:	0.632
3 (U)	:	0.213
dU	:	417.108
U	:	50.180
1 (V)	:	-0.075
2 (V)	:	-0.238
3 (V)	:	0.968
dV	:	-136.923
V	:	-94.237
1 (W)	:	-0.662
2 (W)	:	0.738
3 (W)	:	0.130
dW	:	337.535
W	:	43.753

R.A.	:	21.600
DEC.	:	62.100
. R.A.	:	90.000
. DEC.	:	115.000
STANCE	:	7.000
ODULUS	:	251
. VEL.	:	-74.900
q1 (U)	:	0.745
q2 (U)	:	0.632
q3 (U)	:	0.213
dU	:	493.165
U	:	107.950
q1 (V)	:	-0.075
q2 (V)	:	-0.238
q3 (V)	:	0.968
dV	:	-144.546
V	:	-108.844
q1 (W)	:	-0.662
q2 (W)	:	0.738
q3 (W)	:	0.130
dW	:	269.955
W	:	58.067

2059 ~~14~~ 914 21 36.6 -49 10 F3164

-49.11465

Somewhat overlapped; probably wrack-lined; b band yields F 5th;

Cont+IR yields F0

P full
-57

+0056 +017 T+C

+055 +82

+054 +019 +14

5.8

```
   R.A. :    21.600
   DEC. :   -49.150
|. R.A. :    82.000
|. DEC. :    14.000
 STANCE :     5.800
IODULUS :   145
). VEL. :     0.000

q1 (U) :     0.745
q2 (U) :    -0.031
q3 (U) :    -0.666
     dU :   187.473
      U :    27.098

q1 (V) :    -0.075
q2 (V) :     0.989
q3 (V) :    -0.129
     dV :    46.621
      V :     6.739

q1 (W) :    -0.662
q2 (W) :    -0.146
q3 (W) :    -0.735
     dW : -178.092
      W :   -25.742
```

G-2 IV

206301 21 38.8 -14 16 dG1

Y 5229 SB 13[d]

29M(7)
36Y(8)
20C(7)

29

5.18 +0.65 +0.20 (1)
4.84 +0.24 (2)
4.40

Ag

$\Delta(B-V)$ +4
$\Delta(U-B)$ +5

HB
~~HO~~

m - M = 2.10

Wolf 630

MtF 038

U	V	W
-24.8	-33.1	-0.9
-9	-12	-1

207134 21 44.1 +25 20 g K2 -44.98 W(4)

BC30487 6.5

W13685 6.28 +1.21 +1.25 K3 III R

Y5260 w(+0.7)

+24°4473

+163 +044 cc

+149 -.4 +058 -.4 Y

+156 +050

+80 -38 -13 .010

+57 -40 -3 .015

E clus

2±.2 w(7)

+0120±30 +044±2.7
+0114 +054

207134 21 44.1 +25 20 6.5 GN2 -44.98

30487 +117 +0120 +057
13685 7.209 1903.2 +25 19 51.51 1898.3

-562 -227
6.647 49.24

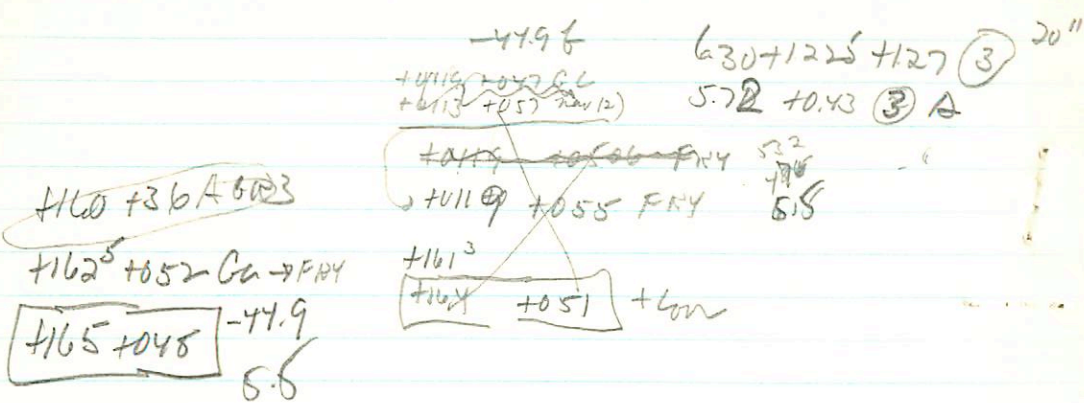
7.098 51.39 1941.89
-9 9
089 51.48

4024 31.9
7.012
+365

6.934 50.98 1928.29
-3 -3
935 50.95

51.21 7018
+1.97 35.1
36.8

20713Y 21 44.1 +25 20 103 III



207134.000*	207134.000*
21.000*	21.000*
44.100*	44.100*
25.000*	25.000*
20.000*	20.000*
0.165*	0.164*
0.048*	0.051*
5.500*	6.150*
125.893	169.824
-44.900	-44.900
0.737	0.742
-0.184	-0.184
101.012	134.272
0.012	0.018
0.915	0.915
-39.576	-38.022
-0.347	-0.334
-0.358	-0.358
-27.593	-40.680

2016 9 58 21 443 -35 53 Gowe[illegible]

56.8736 378

-400

[illegible]

+0030 -158 +034
+0059 -157 +033 182
+00x10 -178

+0051 -156 +59

+2 -2 182

+6 +4 3.6

+0059 -157 -40.6

```
   R.A. :    21.750
   DEC. :   -55.900
1. R.A. :    59.000
1. DEC. :  -182.000
:STANCE :     3.600
10DULUS :    52
). VEL. :   -90.000

q1 (U) :      0.763
q2 (U) :     -0.084
q3 (U) :     -0.641
     dU :   192.332
      U :    67.785

q1 (V) :     -0.101
q2 (V) :      0.964
q3 (V) :     -0.247
     dV :  -847.301
      V :   -22.272

q1 (W) :     -0.639
q2 (W) :     -0.253
q3 (W) :     -0.727
     dW :   117.849
      W :    71.600
```

207178 21 45.4 -53 15 F8W GO III

-53.10158

weak lined; G band strong
yields G5; la H+K possibly
weak for F8 type.

p Fe/H
~~+0.0~~
-0.47

+0006 000 3 p day -004

-0016 -023

-0005 -012

005 -015

-0024 -024

+2 -3

-0027 -027

+6 +7

-8

75

725

R.A.	:	21.750
DEC.	:	-53.250
M. R.A.	:	-8.000
M. DEC.	:	-15.000
DISTANCE	:	7.750
MODULUS	:	355
AD. VEL.	:	0.000
q1 (U)	:	0.763
q2 (U)	:	-0.055
q3 (U)	:	-0.644
dU	:	-13.429
U	:	-4.765
q1 (V)	:	-0.101
q2 (V)	:	0.974
q3 (V)	:	-0.202
dV	:	-66.984
V	:	-23.767
q1 (W)	:	-0.639
q2 (W)	:	-0.219
q3 (W)	:	-0.738
dW	:	30.047
W	:	10.661

63

2.4

-12.2

25.5

H 4

W13775 21 53.1 +32 24 dGm −177.96m(3)

CC1321 10.8

+71 +18 ai

+760 +131 Harding

+756 +122 MLZ

−10 +14 →GC

+746 +136

−25 M±2

-526 851 536 844 +71 +18 -172.9 096 -95 715

323 050 604 082 1.379 3055 -150.1 -128 +79 01

+10 +389 -23

+332 -186 -83

0.32

550

.72 79 ①

W 64/1143 21 53.1 +32 24 20'

G-188-30 11.09 +0.67 -0.06 ④

-177.9

+760 +130 G'

+75-5 +120 MC (III)

+760 +125

```
 21.862
 28.100
-186.000
-114.000
  6.000
    158
 -7.000

  0.775
  0.618
 -0.131
-936.815
-147.558

 -0.120
  0.348
  0.930
-94.508
-21.488

 -0.620
  0.705
 -0.344
101.442
 18.482
```

208174 21 51.7 +28 06 6.7 dA5 -7.0 b

-0123 ± 10.6 -110 ± 9.0
-0124 -118

30661

13759 40.409 1906.2 +28 6 24.96 1905.2

539
.948

4.93
29.89

22.8

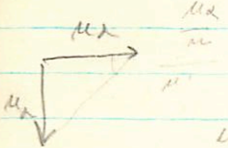
40.477 27.37 1928.29
-1 -10
474 27.27
666 180
282 25.0

40.66 27.1 1929.7 23.8
-5 -14
655 26.9
418
27.09
2.80

SD sdF6 2md

Ross 662 21 53.7 +55 54 −67c

11.7



$\frac{\mu_t^2}{\mu_s^2} = \frac{\mu^2 - \mu_s^2}{\mu_s^2} = \tan^2\theta = 2.039$ 0.32 55°

$.1024 - \mu_s^2 = 2.039\mu_s^2$

$0337 = \mu_s^2$ .184

0687 μ_λ^2 1262

.2764 ①

Ross 662 21 53.7 +55 57

G232-40

60"

11.56 +0.565 -0.175 ②

-67c

+268 +185 Ross

+240 +120 Pretty(1)

-0022 ± 113 -022 ~~± 9.5~~
-0002 -025

209977 22 04.6 +11 31 7.3 GM1-65.5 1

30929 -0014 -026 ± Latvia

13997 35.370 1503.7 +11 31 25.17 1899.8

102 1.10

6.80 + 1.64 + 1.97 (3) 472 -0012 -022 26.27

5.64 + 0.855 (2) 35.457 -015 ~~-022~~ 25.45 19344

5.30 1.10 14 15

420 471 -029 -035 A6122 25.60

080

7.70 35.440 -017 -026 → 25.05 1939.52

20 -023 -030 5

460 -021 -033 33.4 1422

-7 +3 466 25.10 37.1

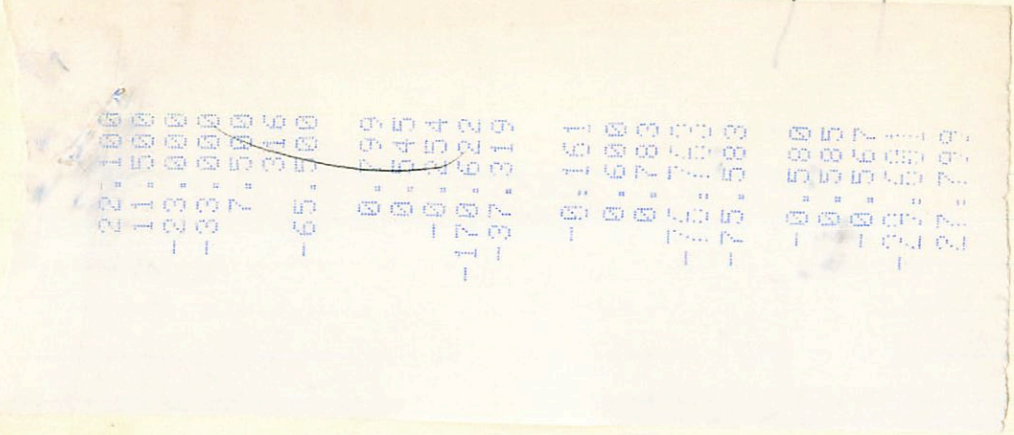
-006 25.35 37.3

559 82 -92

477 4244 773

7.70 = 350 M.

797	543	-262	-0566	-0566	-1132	-39.5	-22.2	+17.2
-158	607	779	+0112	-0633	-0521	-18.3	-69.3	-51.0
-582	580	-570	+0413	-0608	-0192	-6.7	+30.6	+37.3



211144 22 12.9 -35 10 G8W F5/18(III)

-35.15222

-0019 +011 G+4

-023+007

-28
+7
8.4

P Fe/H
~~-37~~ -.37

R.A.	:	22.200
DEC.	:	-35.150
PM. R.A.	:	-28.000
PM. DEC.	:	7.000
DISTANCE	:	8.400
MODULUS	:	479
RAD. VEL.	:	0.000
q1 (U)	:	0.808
q2 (U)	:	0.202
q3 (U)	:	-0.554
dU	:	-80.998
U	:	-38.768
q1 (V)	:	-0.178
q2 (V)	:	0.979
q3 (V)	:	0.097
dV	:	51.761
V	:	24.774
q1 (W)	:	-0.562
q2 (W)	:	-0.020
q3 (W)	:	-0.827
dW	:	60.31(
W	:	28.86(

213657   22 30.8 − 42 19 Self

Y 54 53   Condon   9.64 + 0.43 − 0.24 (2) 74"

−0061 −253   +46.4 b

−068 −253

−0077 −250 Y T C F E Y

−0068 −236 C (H)   1 C (?)

−92   −085

−253   −085 −254   +46.4

600   5.5

+46.4

X5453 213657 4 Heem
-42° 15968 22 30.9 -42 19 10.7 F5 +47.2
II 2.5

9.64 +0.40 -0.24 2 74"
+45.1 4C
9.64 +0.43 (1.48) F5 VI Cape
+46.8 35 P

-0059 -250 CP
-0068 -075±4

-236 CR

91
46.4

254
1819
7

94
14
64
54
914
10
17

62
4
17
94

```
R.A.  :    22.500
DEC.  :   -42.300
R.A.  :   -92.000
EC.   :  -253.000
NCE   :     6.000
LUS   :   158
EL.   :    46.400

(U)   :     0.832
(U)   :     0.175
 U)   :    -0.527
 dU   :  -477.620
  U   :  -100.136

J)    :    -0.227
J)    :     0.973
J)    :    -0.037
V     : %-1093.558
V     :  -175.032

)     :    -0.506
)     :    -0.151
)     :    -0.849
W     :   343.780
W     :    15.080
```

9/10
-150
-289
+51

213(30) 22 308 -50 13 G8/K0(III)w

-50 11 13

Metals look very weak;

pFe/H CH is strong.

-31

-004 -009 c

-005 -013

-8

13

6.5

R.A.	:	22.500
DEC.	:	-50.200
PM. R.A.	:	-8.000
PM. DEC.	:	-13.000
DISTANCE	:	6.950
MODULUS	:	245
RAD. VEL.	:	0.000
q1 (U)	:	0.832
q2 (U)	:	0.100
q3 (U)	:	-0.546
dU	:	-26.385
U	:	-6.477
q1 (V)	:	-0.227
q2 (V)	:	0.959
q3 (V)	:	-0.170
dV	:	-53.557
V	:	-13.147
q1 (W)	:	-0.506
q2 (W)	:	-0.266
q3 (W)	:	-0.821
dW	:	28.666
W	:	7.037