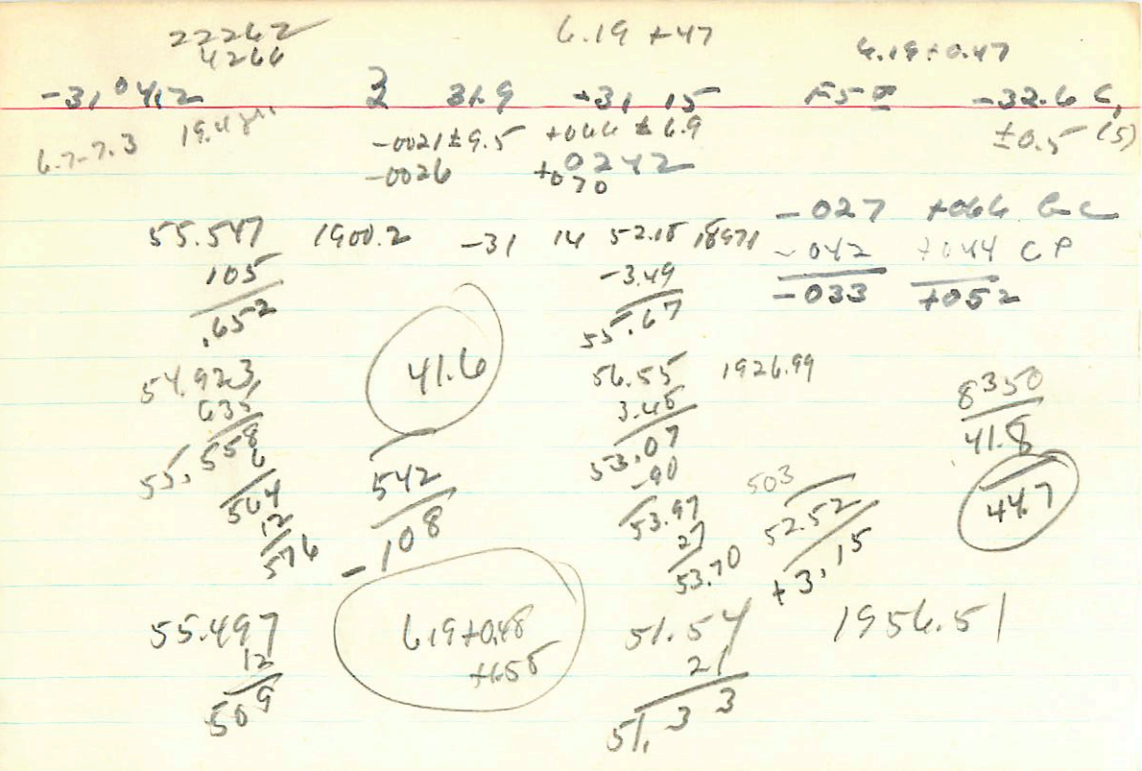

6.19 +47
6.19+0.47
-31 0412
-31 15
-32.6 C,
±0.5 (5)
6.7-7.3
-0021±9.5
-0026
+0242
-027 +064 C-C
-042 +044 CP
-033 +052
55.547
1900.2
-31 14 5-2.15 18971
-3.49
55.67
56.55
1926.99
3.46
53.07
-90
53.97
27
53.70
52.52
+3,15
503
8350
41.6
542
-108
41.6
44.7
55.497
12
50 9
6.19+0.88
+058
51.54
21
51.33
1956.51

797 604 -519 954 -033 +052 -32.6 -027 +17 20$\bar{8}$

036 022 -020 -016 19$\bar{8}$ 00$\bar{9}$ -27.8 -17 -22 0242

-9 -22 +26

-8 +26 +24

22225 3 22.4 +18 44 gm2

E = +05 coulsby

+0005-047

007-047

+0.002 -0.044 FIR4 + Corr

7.47 +03 +2.08 (2)

6.24 +095 (3)

6.19 -425

5.91

5.91

5.73

114

43

37405

22225.000*

3.000*
22.400*
18.000*
44.000*
0.002*
-0.044*
8.05 8.550*
407.5 512.861
-8.500

-0.043
0.834

-25 -29.002

-0.156
0.206

-67 -81.624

-0.132
28 -0.512

-50 -63.508

22225.000*

3.000*
22.400*
18.000*
44.000*
0.006*
-0.040*
8.550*
512.861
-8.500

-0.029
0.834

-21.904

-0.155
0.206

-81.140

-0.109
-0.512

-51.739

22225 3 32.4 +18 44 7.9 gm2 −8.5†

1977 −11
4276

+0002 22 −031 N30
+0009 ±4.6 −056 ±4.6 GL cont N30
+0005 −040
+006 −040

(2) R 6.40 RI +0.935

5.81

475 mm

+470	+216	+455	+0133	−0410	−0277
−664	+725	+181	−0189	−1375	−2564
+581	+654	−485	+0165	+1240	−1075

−20.4	−73	
−124.0	−1.5	
−46.0	+4.1	

−6 +2
+0002 −043 test

+0002 −044

630 90
540
315

21910 3 32.6 +74 36 Kg G4 -104 +04C L(2)

+74°161 7.46 +1.03 +0.75 K0III R

W1982 S=.15

G8III+KK

2+510 sl. Sta.

4172

.005 +020 GAZ

00033

+10 +19

3 1/6 ps

+470 -592 +663	+0089 -0524	-0435 -13.7 -69.0 = -82.7
-664 +261 +700	-0126 +0285	+0109 + 3.4 -72.8 -69.4
+590 +770 +264	+0110 +0693	+0803 +25.4 -27.5 -2.1

AOS2630

3 (w)

HD 22193 3 32.8 +42 11 +53.78

241°714

W1923

15m=0.8

s Heliu

8.34 +0.68 +0.16 (3) +0135 −.146 →

+.154

100M 110.16

470 −134 872	+3431 +0927	+4358	+43.6		+76.8
−664 596 450	−4847 −4125	−8472	−84.7		+24.2
581 741 −191	+424 −5474	−1283	−12.3		−10.2

80M

+83
−47
−20

86.7 21

+85 +90.4 +97
−53 −45.2 −80
−21 −22.5 −24

V. 87

780
75
85 5
423
432
34
98
3

22269 3 33.0 +27 26 8.1 M, II

+270529 +14.86

+065 +011 4

3

068 −1

010

+49 +11 316 ms

+468 +87 +879	+1448 +0045	+1493 +47.2 +13.0 = +60.2
−664 +691 +285	−2054 +0360	−1694 −53.5 + 4.2 −49.3
+592 +717 −382	+1800 +0374	+2174 +68.7 −5.6 +63.1

−47°1087 3 33.1 −47 26 G8 V-VI +16.6 35h.

S=+16

10.26 +0.57 −0.06 +0.232 +0.089 CA

M_3 +137 } Lowers $C = +36.0$
M_4 −135 }

22413 3 33.3 −28 80

−2801205

Struggle in Autumn grove 8.81 +0.305 +0.01 (6) Egg

184 159 622 2.726 2 Egg
.196 .145 .635 2.707 (2) 5,0,12,1

$[m_1]$ .180 $\Delta[m_1]$ +35

$[C_1]$ 596 $\Delta[C_1]$ +65

Egg Δm_V 1.21

$[m_1]$ 192 $m_V = +1.4$

$[C_1]$ 585 $\Delta[m_1] = +24$

$\Delta[C_1] = 0$

Vin

22413.000*

3.000*
33.300*
-28.000*
-30.000*
0.137*
5.45 -0.134*
6.500*
122.3 199.526
36.000

-0.191
0.420

-8 -22.917

-0.827
-0.414

-114 -179.844

0.325
-0.808

+11 35.720

209 3 33.4 +24 43 +21.7

+29.580 +78.2 (2)

√48 ~~47~~

3.58
+24.7
170
-57
4.
+21.7

RAD. VEL. :

0.459	: (U)	p1
0.054	: (U)	p2
0.082	: (U)	p3
313.432	:	dU
44.032	:	U
-0.664	: (V)	p1
0.679	: (V)	p2
0.312	: (V)	p3
-648.522	:	dV
-44.759	:	V
0.582	: (W)	p1
0.732	: (W)	p2

RAD. VEL. : 21.700

q1 (U) :	0.469
q2 (U) :	0.054
q3 (U) :	0.882
dU :	313.432
U :	44.032

q1 (V) :	-0.664
q2 (V) :	0.679
q3 (V) :	0.312
dV :	-648.522
V :	-44.753

31

q1 (W) :	0.582
q2 (W) :	0.732

Hyades

22328 3 33.5 +19 54 dFS +3465

W1989 7.6

+0066 -048 Cent Mag

+0066 -050 (PH)

+0066 -046 Cat

+0065 -044

+0931

+093 -047 40

99

+091 -042 Cat

+099 -047 CCF

+095 -043

385

6443 9786

7346 3054

2754

$$\frac{-15}{-0.24} \quad \frac{-12+0.78-0.78+0.78-0.78+0.78-0.78+0.78}{0.11 \quad 0.05-0.05+0.05-0.05+0.05-0.05+0.05} \quad 0.03 \; 5 \; 6 \; 7$$

$$\frac{20}{0} \quad \frac{+4+1+3}{-} \quad \frac{2+15+25+22.5+3.75+3.75+3.75+3.75}{-}$$

$$\frac{-1.5}{0.1} \quad \frac{-2+4+7}{-} \quad \frac{-1+4+4+4+4+4+4+4}{-}$$

$$\frac{0.7}{0.1} \quad \frac{1+4+4+1}{-} \quad \frac{-1+2-1+4+4+4+4+4}{-}$$

$$\boxed{\frac{3}{4} \quad \frac{-8-4+3+1}{-}}$$

$$\frac{1.5}{0} \quad \frac{-1+4+5}{-} \quad \frac{2-2+4+4+4+4+4+4}{-}$$

22328.000*

3.000*
33.500*
19.000*
54.000*
0.093*
-0.047*
3.850*
58.884
34.600

0.161
0.861

39.244

-0.454
0.190

-20.150

0.110
-0.472

-9.844

+0065 ±3.4 −042 ±3.7
+0067 −057

22328 3 33.5 +19 5-4 7.6 dF5 +34.68

−042
−050

1984

4295 30.674 1907.6 +19 54 13.42 1909.0

276 1.72
.398 15.14

+0066 −0448
+0647

30.580 13.92 1934.60
14 1149
.594 14.06

17.36 (26.9)

4.025 13.43 1928.51
26.439 1.48
30.453 14.91
50 −1.27 13.83
503 13.64 −1.31
+17 +20
520 13.84

579

+.181

10351
345
(25.5)

0006
0007 −0428

60.06
30763 13.93

30.606 6018 9807 0988
+16
622 784 −1954 −0275

13.34 1910.1
+1
13.59

ND22374 3 340 +23 03 -6.5 (3) -0.2 Bobcat

GC 4307

+22.518

-0.0018 -0.020 GC ⇒ Avg
-0.0014 -0.016 N30
-0012 -0.018

"-016

					115	
462	155	873	-0350	-0132	-0.482	-5.6
-664	714	225	+0504	-0609	-0.105	-11
588	683	-432	-0446	-0583	-1029	-10.8

H4

SSTau 3 34.1 +5 12 -50 d

+032 +026 33

2246 8 10/4 3 342 00 26 dbg -23 C w(7)

dRG -14.48 w(4)

-12.4 (about)

P= γ=

-28

764

205

-025 -160 GC

ADS264W

Δm=2.9

-017 -160

-028 764

-0017 ±1.8 -160 ±1.4 6.23
-0016 -757 163

13.189 1900.8 +0 25 33.17 1897.3 -24

084 -0017 8.43 -62
.273 41.60

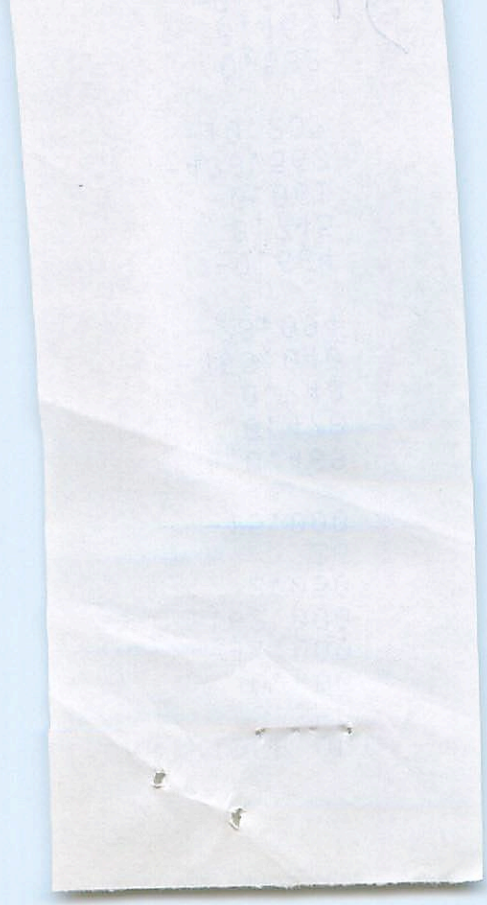
13.188 35.65
26 20
.214 35.85 1934.2
13.66

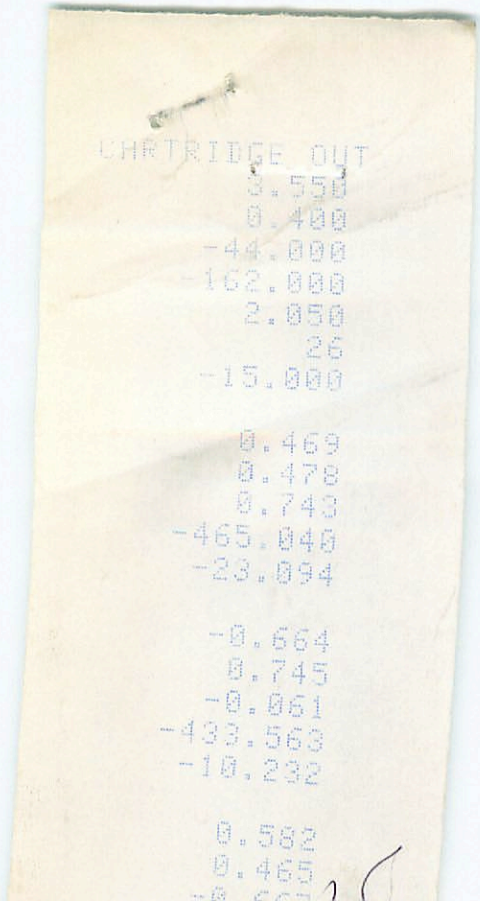
35.5

13.197 209 -031 34.78 1939.46
+7 -064 -029 -162 425 36.3
.204 35.06 39.0

35.46
-6.14

13.148 (15.91) 30.43
13.159 30.43




CARTRIDGE OUT
3.550
0.400
-44.000
-162.000
2.050
26
-15.000
0.469
0.478
0.743
-465.040
-23.094
-0.664
0.745
-0.061
-433.563
-10.232
0.582
0.465

```
R.A.      : 03.5
DEC.      : 0.4
PM. R.A.  : -28.0
PM. DEC.  : -154.0
DISTANCE  : 2?.0
MODULUS   : 2.6
RAD. VEL. : -15.0

d1 (U) : 0.4
d2 (U) : 0.4
d3 (U) : 0.7
Ub     : -484.0
U      : -22.2

d1 (V) : -0.6
d2 (V) : 0.71
d3 (V) : -0.0
Vb     : -491.00
V      : -11.7

d1 (M) : 0.58
d2 (M) : 0.4
d3 (M)
```

R.A.	:	3.55
DEC.	:	0.40
PM. R.A.	:	-28.00
PM. DEC.	:	-164.00
DISTANCE	:	2.05
MODULUS	:	26
RAD. VEL.	:	-15.00
q1 (U)	:	0.46
q2 (U)	:	0.47
q3 (U)	:	0.74
dU	:	-434.04
U	:	-22.29
q1 (V)	:	-0.664
q2 (V)	:	0.745
q3 (V)	:	-0.061
dV	:	-491.001
V	:	-11.708
q1 (W)	:	0.582
q2 (W)	:	0.465

+47.8 (2) 4W

+18°514 3 34.5 +18 26 8.6 dF7 +42.31

2002

+141 ± 5 +003 ± 6
+6
+009

+1000

-15

+18°514 m ⊙ 34.5 − +18 26 8.6 dE7 +4238 m

W2002

8.74
+0.515
−0.005 S = +0.05

8L.3

$^{S}_{N}$ +0.100 −0.15 Bsl

+464	+224	+857	+3130	+25.4 +36.2	+61.6
−664	+729	+169	−1179	−36.4 +2.1	−25.3
+587	+647	−486	+3359	+32.2 −20.6	+11.6


R.A. : 3.600
DEC. : 63.700
R.A. : -20.000
DEC. : -37.000
STANCE : 2.500
ODULUS : 32
VEL. : 16.000
q1 (U) : 0.459
q2 (U) : -0.454
q3 (U) : 0.764
dU : 60.360
U : 14.129
q1 (V) : -0.663
q2 (V) : 0.397
q3 (V) : 0.634
dV : -41.744
V : 8.831
q1 (W) : 0.591
q2 (W) : 0.798
q3 (W) : 0.119
dW : -164.732
W : -3.00
34

2057

22869 3 35.6 +63 43

+63043

+0202 64.5 -157 ±6.4

33657 6.3 +0205 37.63 5.3

-883 134 7.02

32.774 44.45

38.544 44.8 35.43

+7 -24 -24

551 43.4 38.69

+0006 ± 4.5 −026 ± 5.1 −9.2 (8)
−0006 −032

22615 3 36.1 +20 45 6.4 A0 −5.48

2015 6.42 +15 +19 A4 III

4341 5.699 1900.7 +20 45 15.15− 1901.3
−030 1.27
5.669 16.42

5.673 15.43 1934.30
10 23
683 15.68

38.593 19.55 1929.0
26.978 56.95
5.571 50
51 16.50
.622 −1.30
15.20

5.624 15.64 1928.0
+14 15.60
650

55 6.52 15.49
−.017 −.93

29.7

9.13
30.4
29.1

+19 011

22728 3 36.2 −31 28 7.25 +157 2.57 N5 III +9.9

GC4343

9.299 1848.9 −0002 0000 +28 +021 ±8.0 +024

45.02 1848.2
1.08
46.10

−0001 +025
+ ?

8.496
.272
9.268
+8
9.276
+12
288

Stg

190.70 1926.70
56.05
44.65
−90
−55
45.+27
8
−3
45.

−0003 +026
+ .5 −.5
−.26

−0031
+35

000 +023

prev +com

27
22789
4351

4056

+0014 ± 2.7
+0027

+028 ± 2.7
+032

54.17

3 36.7 −28 ·6 40 +39.06

+00175 +030
+00184 +029

42.775 ≈ 1907.5 −28 6 19.28 1906.4

−060
,715

+0243 +029 −1.22
20.50

+0275

30.17

+028 +026

14.22 1933.17 11392
+5.12 376

31.7
6.54

19.10
−93
20.03
31
19.72

46 246
36.2

35.2

40.412
2350
42,762
8

770
+11
781

779
+064

17.839
24944
42783
+1
−3
779

42.768
1
769

2317
799

16.93
5760
1
9.22
−13
19.25

19.73
22
19.51

1935.69

19.50
+180

1540.46

-0040±15.0 -117±13.0

2294.6 3 37.6 -42 55 8.22 +5

43.74 F8 V +

33.804 1401.8 -42 55 20.85

193 5.72

.997 15-.13

1105 AR 3 37.5 +63 03

+63.597

-25.4

-0236 +0280

-0224 +0274

-0154

-018 +025

3.6

+63

-40

+25

6.0

-22.3

P.A. :
DEC. : 3.600
EM. REF. : 63.000
DISTANCE : -10.000
MODULUS : -25.000
RAD. VEL. : 6.000
: 158
: -22.300

dl (U) :
d2 (U) : 0.450
d3 (U) : -0.445
dU : 0.759
U : -92.187
: -31.765

dl (U) :
d2 (U) : -0.653
d3 (U) : 8.485
dU : 0.638
U : 105.893
: 2.510

dl (W) :
d2 (W) : 0.291
d3 (W) : 0.799

```
R.A.  :      3.600
DEC.  :     63.000
PM. R.A. :  -40.000
PM. DEC. :   25.000
DISTANCE :    6.000
MODULUS  :  158
RAD. VEL. :  -22.300

q1 (U) :      0.459
q2 (U) :     -0.445
q3 (U) :      0.769
dU :        -92.187
U :         -31.765

q1 (V) :     -0.663
q2 (V) :      0.405
q3 (V) :      0.630
dV :        105.043
V :           2.610

q1 (W) :      0.591
q2 (W) :      0.799
q3 (W) :
dW :
```

2385F 3 38.5 -7 4 59

-75°24' -0074 ±2.5 -008 ±2.1

GC 4407 26.961 924 3.85 951

55.014

- 25.425

29584

·370

26.954

+11

965

26.963

52.40

46.38

352

+36

3.76

±3

38

26.964 55.45 2.75

+26060 3 39.5 +24 25 gyro +32.5 8

23007

7.8

3.

+074 -026 Y
+3 -1
+077 -027

?

818 525 445896 +024 -026 +32.5 -012 +14 -105

-061 010 043 -007 -256 251 +29.1 +17 +24

013

-2 +43 +6

+41 -16 -2

23065 G160 17 3 29.5 −10 51

CC252 PPm
w 2041 0206 −259
−11°714 306 759
ϒ 770 8.24 +0.72 +0.22 Σgg(2) 18" S(n=3) = .07

dGY +1.96 w(3)

+0209 −254 Gluttons morgan
+0194 −239±11 → ϒ → Gc

Cm +.32 −.25
ϒ +256±10 −239±11

+5 −60 +8 .030
+5 −69 +19 .025
−2 −86 +21 .020

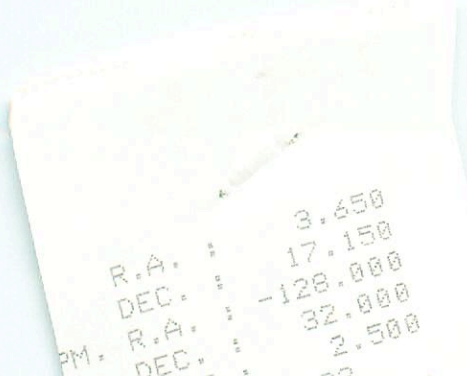
027 Y(10)
043 Q(11)
021 C(6)
26±7

2005 3 38 +17 08 -25 Var

0085 +032

-122 +32

-128
32
25
-25


R.A. : 3.650
DEC. : 17.150
R.A. : -128.000
32.000
2.500

23214 3 40.2 #34 35 1.2 # -2.04C

FD845

8.94 +1.18 (2.24)

-023 +060 CP

-015 +018 Mean +025 -008

+4 0

-019 +060 →

23650
GC4442
W2046
+769
+420812

3 40.4 +42 27 dA0 +31-7 Bw13)

7.47 +0.59 +0.03 B2U R

δ=.09

+0331 -257

+367-257

+366 ±5 -244 ±4 Ac

+59 -48 +2 .030

+75 -79 +5 .020

497
-257
240
431.7

29±8 A(16)

R.A.	:	3.650
DEC.	:	42.450
PM. R.A.	:	497.000
PM. DEC.	:	-257.000
DISTANCE	:	2.700
MODULUS	:	35
AD. VEL.	:	31.700

q1 (U)	:	0.449
q2 (U)	:	-0.150
q3 (U)	:	0.881
dU	:	963.649
U	:	61.334

q1 (V)	:	-0.662
q2 (V)	:	0.606
q3 (V)	:	0.441
dV	:	%-1889.077
V	:	-51.521

q1 (W)	:	0.600
q2 (W)	:	0.781
q3 (W)	:	-0.172
dW	:	90.751
W	:	-2.318

36

23139 3 41.2 +45 57 6.1 g AL +8.66

2061

4459

2P

-0002 -020 N30

-0003 ±4.6 -036 ±3.7 BL Low E N30

-002 -028

184 pp.

435	-209	878	-0041	+0277	+0236	+4.4	+7.5	+11.9
-640	584	670	+0063	-0775	-0712	-13.2	+4.0	-9.2
610	784	-117	-0058	-1040	-1098	-18.7	-1.0	-19.7

+2555 3 413 +25 03 +104

~~+0033 - 049 (87)~~

+0036 - 049 Cowley

~~+046 - 049~~

~~4777~~

~~5455 - 4777~~ 5455 +4562

~~3314 - 8763~~ 3362-8734