185117 19 361 -46 15 -165 (3)

(2)

503 550 453 31 (4)

905 537 452 250 (1)

545 452 300

-23

-095

427

+5.90

+601

(25) 17

1037 -243

37, -243

52

-243

3.04

-165

```
R.A.  :    19.600
DEC.  :   -48.300
R.A.  :    56.000
DEC.  :  -243.000
ANCE  :     3.040
ULUS  :    41
VEL.  :   -16.500

(U)   :     0.416
(U)   :    -0.253
(U)   :    -0.873
 dU   :   365.233
  U   :    29.220

(V)   :     0.267
(V)   :     0.952
(V)   :    -0.149
 dV   : %-1049.543
  V   :   -40.102

(W)   :    -0.869
(W)   :     0.171
(W)   :    -0.464
 dW   :  -350.623
  W   :    -6.564
```

50

58

Sp. B. r = 29.6

185912 19 32.6 +54 51 5.9 dF4 -14.6a

27206

12049 +0041 23 +166 25 N30 -16.5 @ 87

A(2δ +0034 ± 2.2 470 ± 1.9 Rc > N30

36 ± 6

7347 5902
-6784 8021

294 165 451

Catalyst

+0041 +164

C0 432

035 164

41
164
3.06
-165

185912 Bmon LS 37.4 FS IV +54 51 -16.5 dF4

HR7484
GC27206 sB 7.6 d 5.86 +45 -01 3 Eggleton

2 Sp .054 .145 .451 ② SBC 2.663
.054

[m] 218 +6

[c] 392 +13

③ Gut

+225 -14.3 +0.8

+793 -10 +172

16 Cygg 7503/4 −0162 ±1.6 −155 ±1.5 34
18 6408 T9 40.5 +50 24 6.3 dG3 −25.6 0
−0154 −153

Ab S12841 388 627 5.96 +0.44 +0.19 G2E 6.4 dG2 −22.8 0
27284/60 354 576 6.20 +0.66 +0.20 G5E +0.205 Cu +21 Cu 26.7 a
27284
12083 29.120 1887.4 410 274 335 2555 1890.5
1014 590 411 210 349 60 372 11.51 4
34±3 30.134 −145 −0145 −158 −134 −158 Cu 329 322 29.4
49 Dt 4/16 226 354 2518 48.9
−0144 −156 L63 418 222 351 6
29.5 53 6 −218 −148 1.684 −27.
526 4 331 31.71
580 −801 −7.50
−142 −156 −224 −156 −227 Cu 2.87 33.4 33.50 546
29.226 5 233 −281 −27.4 31.02 −25 7 1946.74
−27.4 29.226 5 230 −27.4 30.7 31.5 −25 6.87

182378 19 41 +24 24 PSV

+243814 (2) -93 (3)

688 373 182341 (1) -88 4

-5.0

n/6

C_0 300 +348

R.A.	:	19.700
DEC.	:	24.500
R.A.	:	98.000
DEC.	:	-269.000
ANCE	:	2.510
JLUS	:	32
VEL.	:	-9.000
(U)	:	0.436
(U)	:	0.755
(U)	:	-0.490
dU	:	-777.927
U	:	-20.303
(V)	:	0.251
(V)	:	0.421
(V)	:	0.872
dV	:	-430.791
V	:	-21.531
(W)	:	-0.864
(W)	:	0.503
(W)	:	0.006
dW	:	%-1006.828
W	:	-32.037

53

187823 7564 1g 48.7 +11 30 60 -16.7 65(4)

GC27560

W12215

Y4678

+11 04019

5.75 +0.53 +021 G2 V R

-0252 -826 Gt S = -.15

-341 -16.7

-338 -328 1.8

-57 -64 +37 .025

-74 -77 +33 .02

B-53123 8 A

5G3

3 424 190 333 2550

6116 415 182 342 (2)

406 192

No 310

1-7390 n1 = 170

2-7564 G1 453

2-7564

2-7564

2-7564

0S7 24-7 A(12)

1234 64 008 MF

-0232 ± 4.6
-0233

-320 ± 4.2
-333

42.956 1895.0
1.276
44.232

43.344
4
348

43.177
11
188

268
-964

+11 80 13.02 1891.7
18.66
31.68

17.51 1932.9
11
17.92

15.70 1939.71
4
15.74

16.83
-14.85

536

41.3

7261
366 36.3

44.6

hs

187923.000*

19.000*
49.700*
11.000*
30.000*
-0.338*
-0.328*
1.800*
22.909 4167
-16.700

-1.707
-0.632

-28.532 -61

-1.309
0.763

-42.711 -18

0.600
-0.136

16.008 +27

+3°41'91

188427 19 52.6 +03 56 9.5 dN3 +50 G

C2597

12260 GC27581 9.40567 495 230 (3) +52.2

G23-17

34 M (10) −270±7 −251±4 Y

−5 +5

−278 −246 → Gc

G0253 −0.0280 −244 31.7 pc. −285 carbon

−0158 −250 MCR

−281 −250

+471	+533	−703	−4251	−6215	+13466	−39.5 −35.2 −74.7
+222	+700	+674	−2946	−8162	+1.1108	−35.2 +34.0 −1.2
−854	+676	−211	+1.1334	−5550	+5784	+18.3 −10.5 +7.8

−281
−250
2.73
+51.3

0.8704
19,850
3,950

+100 4091

1885X0 19 52.8 +10 36 2dG7

G143-7

-1528 (5)

883+0.58 -0.11 5 analyses (5)

-31 267

883 416 100 163 (5)

883 417 113 128 (2)

-200.6 6

(145)

-038 +278 4 cle → A30

+55 +315 6 redun (1)

-31 +289 ABK3

-035 +290

-032 +288 3.1

Equilibrium

-0024 242

-037 292

38

292

2.85

7528

-1.5

G0138

+4.98

1.00

$-458 + 946 - 1254 + 4635 + 7649 + 5434 + 3649$

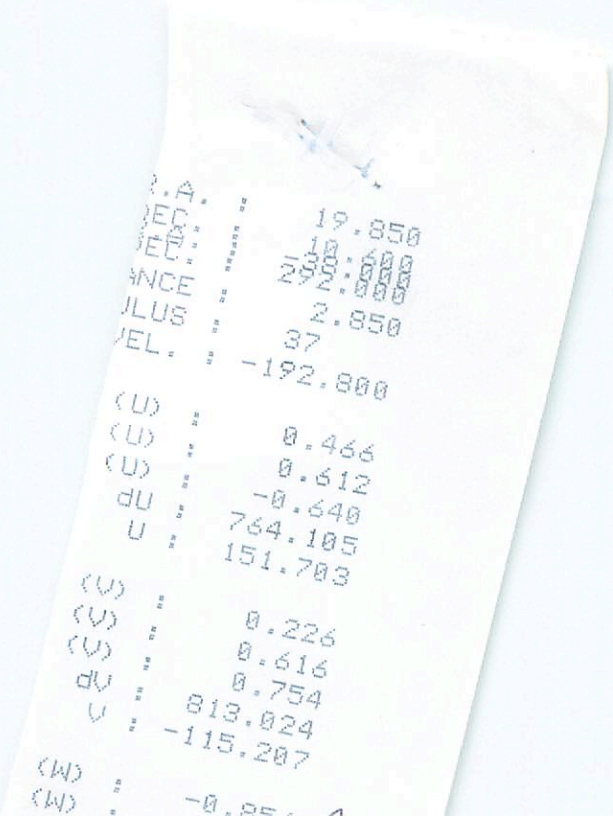
$+2272 + 8174 + 5257 - 1254 + 4635 + 7649 + 5434 + 3649$

$+4744 + 0107 - 2257 + 0000 - 0832 + 9864 + 5718 + 4257 + 2182 + 3649$

$+ 1.00$

$+ 1.00$

$+ 1.00


19.850
10.600
292.000
2.850
37
-192.800
0.466
0.612
-0.640
764.105
151.703
0.226
0.616
0.754
813.024
-115.207

+4722

189087 19 55.2 +29 41 8.2 dG7 -29.76

C2605

12304

-3065

+105

+090 +247 Y

-3 -3

087 244

47±5

50 A(25)

24 M(8)

773.2 7.89 483 319 295 ⓘ +033 MCR

+083 A.R

C_0 289 +5.73

9

8.84

+0075 +242 calibr

98 242

113

242

207

-302

R.A. : 19.900
DEC. : 29.700
R.A. : 113.000
DEC. : 242.000
2.070
TANCE : 26
DULUS : -30.200

189340 763? 45 19 57.1 -10 05 dec 8 +23.1 8 w(4) +21.7

GC27659 318 264 -424 636 +21.7 (31)

W12331 5.87 +0.58 +0.05 80 ⊻ R

Y4733 S=.06

-10°52'08 Δm 2 mm Eq A

-0.188 -399

-278 -399 Cancelled

-50 -36 +1 .040

-55 -43 +1 .035

0.188 -399

-278 -399

±4 ±3

-278 -398 GC

-267 ±10 -400 ±10 Y

-275 -398

Weak

+215

37 A(16)

36 Y(10)

39 (17)

37 ± 5

-1905 -398 GC+

-1963 -3975

-271 +23.1

-270 -397 2.15

-0188 ± 3.5 -398 ± 3.1

-0793 -348

872489 -175 585 -275 -358 +23.1 070834 -1.857

-240061 -134034 -1.258 -346 +22.8 +11 -20

-11 -26 -35 06

4.239 1900.2 -10 85 25.19 18954 -40 +9 -2

936

5.175

42.467 94

22058 47

4.525

-20

505

-84

501

37.3

484

-721

4.412

-5

407

+21.23

3.46

22.84 1934.22

240

20.76

1.30

4039

19.16

+34

18.7

21.77

+10

21.42

#93

37.5

42.1

1940.71

20.20

-16.74

189340.000*

19.000*
57.100*
-10.000*
-5.000*
-0.280*
-0.398*
2.150*
26.915
23.100
317
-1.301
-0.802
-53.554

-1.870
0.494
-28.942

0.358
-0.336
-1.856

189340 +84 15 57.1 −10 05 G0 V

HR7637

BC27689 +4.58 +4.70 52

5.88 +58 +4 2Eqs —

+89 375 1L1 356

.137 .154 .328 2.612

3&9 180

(3) 2,2,1,3

[m1] 262 +13

[C1] 251 −23

Co 363 30

2.20 −54.1 −40.1 +1.4

−1292 −871 +335

199567 20 00.6 -67 27 265 → Gc -11.25 0.6 C(4)
GC27743 -412 564 -44 L(2)
-12
W12345 325 27½ 244 6.08 +0.63 - G2V Cage -11.5 25+
7644
C0297 +4.91
Y4738 190 295 37 +146 -5888 Gc+
397 202 2962552 4786 -6845 +839 -684 Gc
604 399 196 256 (2)
608 406 165 297 (2)
610 396
470 -30 80 -45 .058 +447 -12.0
+74 -30 -46 .056 +845-687 1.65
+100 -45 -69 .040
1477 -670
2216
-670
0.96
-12.0
44 Y(2)
51 C(9)
475
Δ10-670

1984.0

23830

-7345

26482

3981

27072

-21053

30.019

-4.69

1984.0

-12 27 14.12

38.47

-22.9

-4745.87

+4745.87

0.000

1923

8.57

0.00

1.04

2.32

5.32

5330

23.95

1895-17 20 09.6 -67 27 G2V

HR 6744

6.09 +0.06 +0.06 (3)
5.88 +0.20 (2)

-12.06

+1458 -684 GC
+1466 -692 new

} GCSpth

6.93 +0.00 +0.14 3 BS

6 SA

189931 20 00.7 -38 01 BL -37.9

BL27748

+070 -375 cp → cv

43.693 1898.9 +0076 +0044 (-434)

+0066 = 8.3 -350 ± 6.5

-337 -373

43.356 46.00 1895.4

+0071 -381 +0081 +21.24

+5 +6 +5 +5

+0076 -375 24.71

1535.7

4.114 48.27 1528.50

34.542 8.80 0

+0.90 39.47 395

43.656 08 UV

-052 39.39 BA 395

-18 +30

634 40.0 34.09

-25 107

34.75 395

1189 37.5

436 1/2

634

.A. :
EC. : 20.000
.A. : -38.000
EC. : 107.000
NCE : -395.000
LUS : 1.870
EL. : 24
-37.900
(U) :
(U) : 0.494
(U) : -0.064
dU : -0.867
U : 316.821
40.351
(U) :
(U) :
(U) : 0.202
dU : 0.979
0.043
U : %-1751.5

G186-11

1G0 40Y 20 01.8 +23 13 dK3 -2.6 WV(4) -2.9 (5)

GC27525 7.29 +0.82 +0.40 K1 IV -1.6 (2) P

Y4762 δ = 07 -2.4

+22°3405

7.28 484 325 243 (3) -1.016 -915 GC

-1.010 -908 Y

41A(20) 264

76M(7) 6243

6.40 +32 1A

+305 Lindy (4)

6.40 +31

6.57

6.1

-1.016 -918

-1.013 -915 GC →

-1.004 -897 Y →

-1026 -890 AG123

-1015 -904

-1.012 -896

-2.6

1.6

-1040

-914

-1.46

-2.1

-866 500 3949 19 9 -1.010 -910 -2.4 -358 -1-3.945

-870 -310 -505 -179 -3.275 -3.855 -2.0 -1 +2 079

-4 -41 -24
-21 21 -38
3 8 -24

-5 -52 -30
-26 27 -47
46 10 30

-43 -47 -51
-64 -38 +21
-53 -59 -63 063
-87 -46 +26

40

```
R.A.  :    20.000
DEC.  :    23.200
M. R.A.  : %-1090.000
M. DEC.  :  -914.000
ISTANCE  :     1.460
MODULUS  :    20
         :    -2.100
AD. VEL. :
         :     0.494
         :     0.729
```

15 Sgr

+5.8 F

190406 20 01.9 +16 56 dG1 +42.8

+2.7 W(3)
+4.7 V(2)
(+15 S(1))

GC27835
W12424
Y4760
+16°4121

5.80 +0.61 +0.09 S+N
5.77 +0.59 +0.66 Mich
S=.05

-0278 -415
-02755 -4115 -402 -415 GC

-41 -21 +9 .059 -3954 +4.2
-37 -18 +7 .067 -393 -414 1.2

32A (1)
30M(2)
625(5-)

60±6

-0280 ±1.8 -415 ±1.6
-0276 -415

59

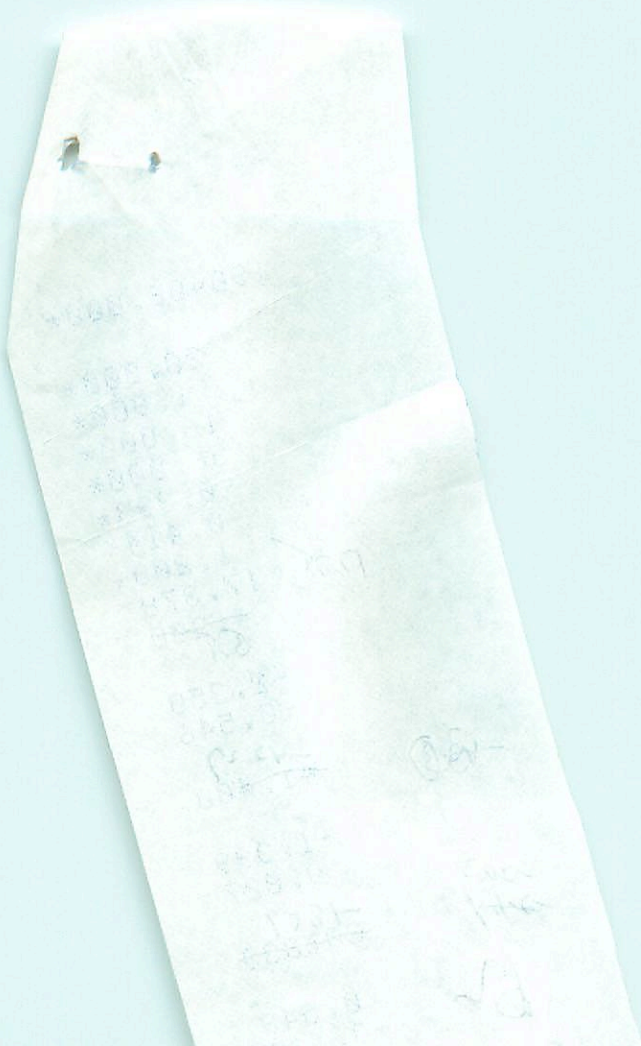
51.335 1888.8 +16 56 0.25 1889.2
1.714
53.049 50.996 54.34

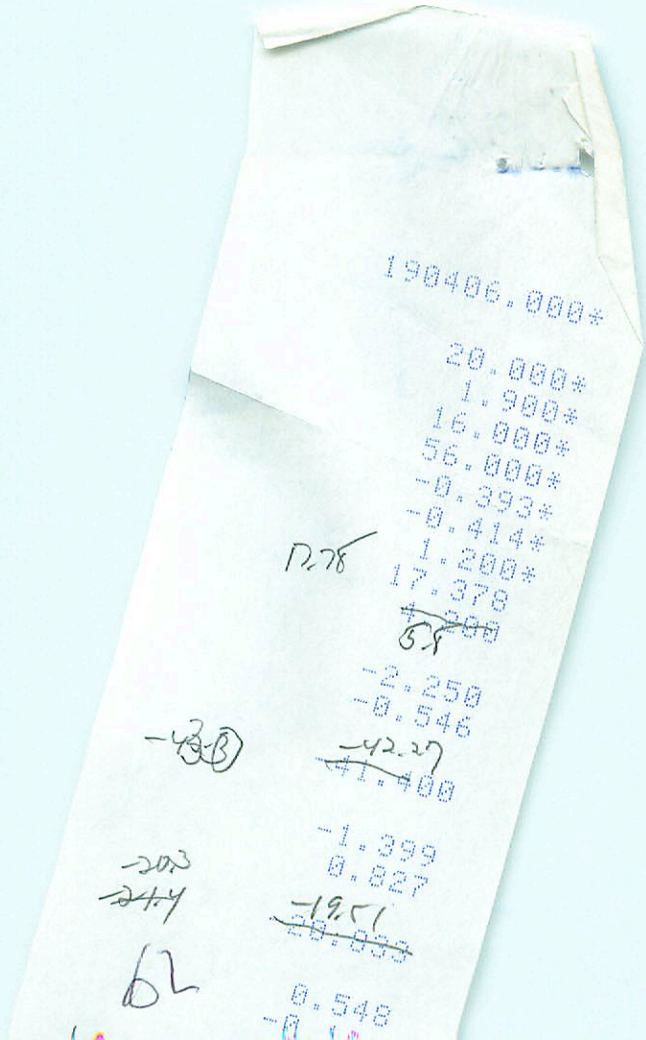
25.23
25.48

51.392 (41.40)
2
794 1420 48.6

51.637
-11
626
710
-1.339

6.135 1934.3
14
6.49 1099 41.83
4.150 1940.50 37.4
0 48.2
5.50
-19.98




190406.000*
20.000*
1.900*
16.000*
56.000*
-0.393*
-0.414*
1.200*
17.378
-2.250
-0.546
-1.399
0.827
0.548

150406 20 1.9 +16 56 dG1

HR7672

GC27835

5.80 +60 +8 25 55 —

185 Sge ✓ 378 193 337

.384 .187 .321 (2) SPC 2.615

580 387 187 347 (3) (4) Cr+

[M] 267 580 337 170 344 (384) R_0 343

[C] 243 100 -39.7 -19.7 +8.7

-2254 -1400 +558

AOS 13348

+0217±7.5 +106±5.8 -22.1 (1)
+0201 +100 -23.2 (1)

19077 27874 20 03.3 +38 20 60 -24.2 b

HR 7693 617 413 222 336 (3) -22.0
357 223 +255 +106 Cu
+256 +112 Cu (2)

98921 20.284 1910.2 +38 19 5.936
-864 76335 11.57 -4.70 1905.7
19.420 0.55 54.66

Co 33

25.61 (12.1) 40.5 1925.7 57.7
54.1 15.1 -22.0
19.754 55.63
19.556 82

Cu 1771
0221 114 +6.86

260 114

32 19.78 1771 6346 5479 2824
114 11 +351 5302 0450
137 1791 -7726
236

-859 512 620 785 +256 +110 -24.2 068 -15 407

220 058 131 035 977 885 -19.0 -10 +16 .035


R.A. :
DEC. :
R.A. : 19.650
DEC. : 50.400
STANCE : -218.000
ODULUS : -158.000
VEL. : 1.680
22
-27.000
91 (U) :
92 (U) :
93 (U) : 0.426
dU : 0.80
(V) :
(V) : 339.745
dV : -16.344
V :
-0.842
1 (W) : 0.536
2 (W) : 0.065
3 (W) : -749.600
dW : -15.612
W :
3

182378 19 41 +24 24 PSV

+243414 (3) -93 (3)
-88 1
-9.0

688 373 152341 (4)

26

C0 300 +346
26
+437

+0065 -264 Cambria

089 -264 98
-264
251
-9.0

(31) 28