160283 20 02.0 −21 27 G6III −19.5 4C

FD1257. 7.10 +1.04 +1.92 −20C 3W

+0037 −027 ZC →

+0034 −034 N30
+0036 −032 GC
+0035 −033

1W537 +3 35.7 -301

2V 022 +31 06

682 +012 +014

+0V31 +015

040 +014

46
14
-301

R.A. :	20.050
DEC. :	31.100
PM. R.A. :	46.000
PM. DEC. :	19.000
DISTANCE :	5.000
MODULUS :	100
RAD. VEL. :	-30.100

q1 (U) :	0.504
q2 (U) :	0.784
q3 (U) :	-0.363
dU :	164.648
U :	27.396

q1 (V) :	0.193
q2 (V) :	0.308
q3 (V) :	0.93
dV :	63.76
V :	-21.66

q1 (W) :	-0.84
q2 (W) :	0.54
q3 (W) :	-0.00
dW :	-108.5
W :	-10.7

150350 20 02.3 −11 45 SFY

HR7671

GC27850

6.42 +0.55 +0.30 1Ess −

Blend .424 .285 1.033 2.611 (3) 19,3,31,5

[24] 36.1 −.91

[43] 94.8 +.681

.7

=> −.40

4.50 +8.5 −9.9 +1.6

−15 −53 −35

445gr

-0005 ±2.4 -012 ±2.4

0 -017

190390 20 62.3 -11 45 6.5 gF4 -12.10

-015

27850

12439

20.04 -0003

-0075 -0123

-0022

-001-017.5

7671 M 19.783 1845.2 -11 44 32.32 1842.3

027

.810

.64

31,63

20.05

-11.75

-1

-14.5

8.0

348 -12.1

36.7

44.0

56.495

22.955

19.795

19.795

32.40

-1

32.64

46.06 1933.99

12.35

33.71

1.30

32.41

+39

32.02

32.34 1939.49

+10

32.26

32.14/-51

19.795

-5

794

808

-012

41.5

+0012±63 −019±5.4
+0010 −014

190306 20 02.3 −33 09 6.6 B8 −

27851
12440

6.8-8.6
0.6

20.940 1895.4 −33 8 35.78 1893.4
−065 ±1.08
,875 34.70

45.239 (46.0) 48.98 1928.45 8330
35728 11.98 41.6
20.967 37.00 (48.2)
−60 1.50
.507 1.50
.17 35.25 35.34
−.50 +.25 −.69
.920 35.25 1954.85
.846
20.949 +046 35.45
±1 −8
950 25.53

190940 20 02.6 +67 44 4.7 gIR2 −9.2a

27956
12443

+0020 41 +052 V2 N30
+0016 ±1.5 +051 ±1.2 GC → N30

−9.0@

190309 20 02.7 -44 29 C_2 -57.0 ±0.4 (6)
27841 7.86 +1.13 K1 III Cayrel

+63 -32 +12 005
+68 -41 +7 .004
+73 -56 -1 003

+017 -043 Cayrel

+0018 ± 13.0
+0006
+0016

−0854 ± 13.0
−039
−043 CP

41.223 1903.6
−084
.139

−44 29 7.37 1903.4
3.91
3.46

41.151
−15
.136

5.40 1955.50
−6
5.48

160333 20 62.8 -43 21

Bi 9.4 : 11 1.7

GC27865

9.20 +0.66 Cusp

B-V

B2V +58.2±1.0 (5)

-34

204

B2V

923 927 207 797 (7)

922 920 203

925 201 (297)

+46

29

994

-036±10 -250±10 Cusp

174

-041 ±007 ±7

S +0033

-0080±15.0

-0058

+ 7

-0051

129

-232±2 CR

-250 CP

-247±.5

-343

+ 6

-237

-44 -64 -31 .020

-50 -79 -30 .015

X Sye 20 02.9 +20 30 +26 d

380 m.

502	704	-502	-0357	+0100	+0457	-28	-13.0
195	473	858	-0138	-0067	-0205	+16	+22.3
-842	580	-102	+0599	-0075	+0524	+14	-2.6

-0286	-0100	-0386
-0110	-0067	-0177
+0479	-0075	+0424

11 -15 -3 48
+3
-12 -3

6.50 1.03
6.12
18
7.7

X Sc 5.9.7 -5.9

5-5.4 -8 150224 5.67 -10 -48 +07 6.20

12449 20 02.9 +54 20 M10 −9.08

+54°22'41

140°48'

+00070 −122 Y

−5 +1

+0065 −121

+3

7.72 +0.935 +0.65

7.72

+1.00

2 20"

+0065 −118

14m

190781 20 03.0 +48 05 6.0 A0 -13.68

27869

12452

+0004[16] +003[19] N30 +20.

+0003±3.5 +004±2.46 → N30 +7

-22

5 Tel		−00K ±4.1 −0014		+002±3.6 +007				SB?
19042-1	20	03.6	−53	02	4.9	M2	+3608	

27879
12456

33.829 1909.7

064
.893

33.889
−43
.846

840
053

−53 / 33.56 1907.3
−09
33.65

33.50 1939.05
−9
33.59

9533
477
380

33.38
+0.27

9574
47.4
40.1

33.880
−47
.833

1956.25

33.13 1956.69
−3
33.16

7687 20 03.6 -4 15 120

-21 (B)

+0032 -040 N30

0418 +2

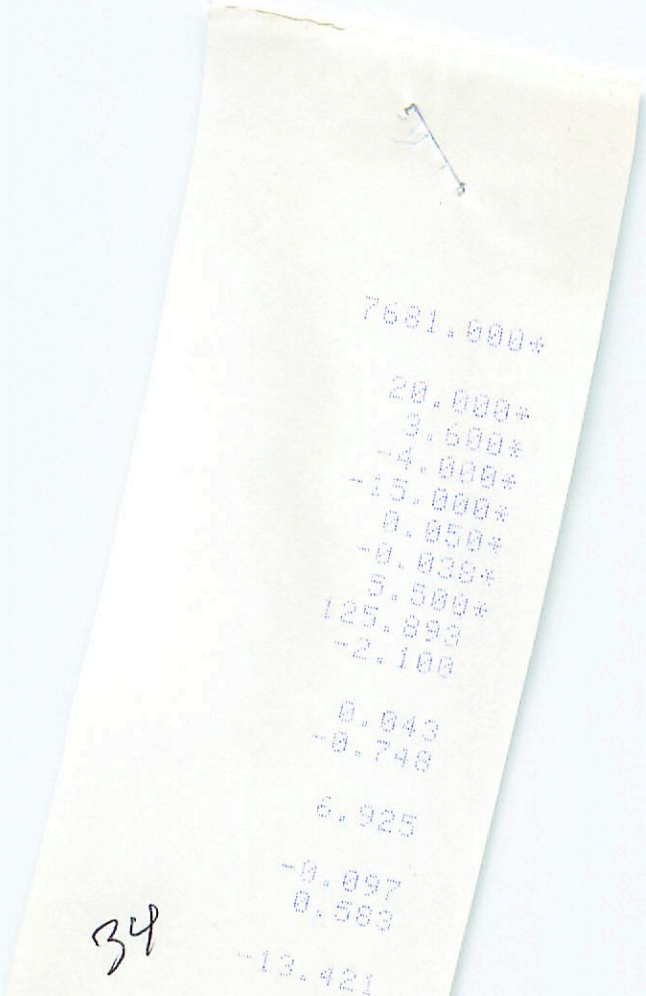
P.C. +2

+050 -038

6.46 +1.16 +1.02 Cyl

(5.5)

-2 Shuffin


7631.000*
20.000*
3.500*
-4.000*
-15.000*
0.050*
-0.038*
3.500*
125.893
-2.100
0.043
-0.748
6.925
-0.097
0.583
-13.421

34

-450

3 Tel 20 03.6 -53 02 gM2 +36.0 a

1+R7673 4.95 +1.66 Cmpl -013 +001 FK3.
-014 +002 FC
~~-004 +005 N30~~
-008 +004

+10 3,77

1S1096 18 +2720 4.2 +54 12 g/=4

HR7692 -00045 +07390 ±2.5 Gr

GL27899 6W 27 +052 27 6.21 +43 +3 1 595 3,72 3,02
-31 +0022 +010
-001 +090 -11.9 6

.278 .155 .5350 SBL 2.67 1

[N] 205 +16 284 3 G+

[C] 479 +7 5/+4

+27 420 +220 -14.9 +11.3

3.50 +320 -48 +203

-0008 ±3.1 +0078 ±2.6
-000 +080

191096 20 04.2 +56 12 6.2 g F4 -11.96

27899

12470 13.317 1891.1 +56 11 45.97 1887.2

764 ✓

047 -4.90

,364 41,07

39.25 24.3 1927.2

34.128 17.45

13.378 43,75

-18 -52

360 27 7216

5 999 36.1

365 44,2 +9 45,00 48.9

359 44.36 +3.93

(45.0) 1926.7

-005

13.347 45.93 1941.96

6 -30

353 45.63

Media

191277 20 04.8 +61 51 5.6 g IR3 +5.58

27911

12480 +0162[21] +074[23] N30

+0164±1.5 +076±1.1 GC → N30

1154 >5

243

>5

6.0

6.5

R.A. :
DEC. : 20.100
PM. R.A. : 61.850
PM. DEC. : 243.000
DISTANCE : 75.000
MODULUS : 6.000
RAD. VEL. : 158
5.500

q1 (U) :
q2 (U) : 0.313
q3 (U) : 0.853
Ub : 0.092
U : 582.222
92.781

q1 (V) :
q2 (V) :
q3 (V) :

```
          R.A. :      20.100
         DEC. :      61.850
  PM. R.A. :     243.000
  PM. DEC. :      75.000
  DISTANCE :       6.000
   MODULUS :   158
RAD. VEL. :        5.500

    q1 (U) :        0.513
    q2 (U) :        0.853
    q3 (U) :        0.092
        dU :      582.222
         U :       92.781

    q1 (V) :
    q2 (V) :
    q3 (V) :        0.185
```

+0238 ±2.4 +257 ±2.1
+0232 +257

191195 20 04.9 +53 01 5.7 dF4 -40.76

27912 200 156 4861 (2)

12482 54.839 1893.5 +53 1 1.79 1895.5

1697

1.345
53.494

-14.01
47.78

15.34
38.922
54.262
253
257

1926.4
46.74 3 14
36.6
43.1

36.8
18.58 1927.4
55.38
55.98 11695
55.98
56.06

H14
37.1
41.6

54.731
989
494
732
+1,000

1.19 1946.74
-30
0.89
58.48 + 0.70

+0053 ±12.2 −096 ±9.5
+0067 −086
+0062 −089

HD190779 20 05.1 −46 27 GP −43.0±0.8 $C_2(5)$

27917
8 2 9.2 63"

8.23 +0.42 F5 V

+061 −051 Cape

4.201 1902.5 −46 26 47.44 1899.2
−252 4.88
549 43.11

3. +33
−42
4.234 +40 −43.0 47.93 1554.95
−044 −7
+24 −0053 48.02
−53 −6
−44
+45 +17

-855 519 -725 688 +061 -091 -43.0 066 431 -258

052 056 032 034 085 417 -29.6 -15 +25 17

-10 +50 +13

A0513401

+0299±7.8 +176±10.6
+0297 +174

191633 20 05.7 +72 51 8.1 d60 -35.78 3w

27926

12486 16.796 1906.2 +72 50 59.65 1408.9

13m2" −1.310 −9.23

15,486 52.42

59.21 1945.21

16.556 58 052 (31.6) −15 1490 757

.614 426 59.06 37.8

068 (28.9)

16.20 30 +940 56.1 1930.15

(H) 238 −26 57.41

+026 +173 55.84 503

+129 +173

437

173 7.7 mg 5.7

9764 +4136 211

−2154 0905 0454

6.75

73 73 73

7575

76 76

6.85

77 77 77

6.95

R.A.	:	20.100
DEC.	:	72.850
PM. R.A.	:	437.000
PM. DEC.	:	173.000
DISTANCE	:	4.700
MODULUS	:	87
RAD. VEL.	:	-35.700
q1 (U)	:	0.513
q2 (U)	:	0.820
q3 (U)	:	0.253
dU	:	986.001
U	:	76.847
q1 (V)	:	0.185
q2 (V)	:	-0.393
q3 (V)	:	0.901
dV	:	-209.666
V	:	-50.413
q1 (W)	:	-0.838
q2 (W)	:	0.415
q3 (W)	:	0.353
dW	:	-171.332
W	:	-27.540

37

-854 520 301 954 +078-016 -95 -005 -29 -011

067-004 041-003 332 175 -906 -47 +77
47 25

0 +102 -39 007

+72 -75 -35

WZ Sge 20 05.3 +17 32 (111)

(-30) Krupt

15.2 +0.09 -0.71
5.8
9.4

-20

+078 -016

+16.0
-25.0
-4.1

θ_c = 12[illegible]
θ_o = 102
θ_{c-o} = -94

+510 +674 -533	+1054 -0511	+1343
+158 +518 +834	+0696 -0343	+0303
-839 +526 -137	-3102 -0349	-3502

100p.
+29.4
-22.0
-39.0

+0020 ±3.6 -075 ±3.1
+0018 -071

191250 20 06.6 -20 44 7.3 dF2 -6.8 6

27960

12505 38.244 1905.1 -20 44 25.10 1902.5

-090 +3.56

.154 21.57

+0016 -076

10.586

27.670 +014 076 Courtesy 45.30 1928.23

38.256 20.30

-35 25.00

1 135

.22 65 755 6713

-13 23.30 33.6

.208 +30 31.1

206 23.35

38.218 +052 +020-076

-14 24.34 1938.40

204 +14

24.20 23.75

-2.21

21

-26

-48

2042 1910 2762 4584 4584

190579 20 05.5 -47 13 -52.0 50.8 G(4)

6.44 +1.75 +1.78 ② / 6.45 +1.50 IR5 III

5.35 +0.57 ②

+050-054

+00 42 -055 Stay 1960

+ 34

+00454 + 40 -0540

+052-056

+046 +045-053

+038-077 CP

5.30

5.35 7.50 = 313 pc

4.55

+105 -54

+104 -53 -46

565 535

5 12 19 4

-854 521 -734 674 +038 -077 -52.0057 +42 -246

032 049 020 030 -38.7 -20 +33

004 327

-15 +92 -3 0055

+78 -52 0

-77 +142 -40 003

+103 -102 -27

24

190879.000*

20.000*
5.500*
-47.000*
-13.000*
0.045*
-0.053*
8.000*
398.107
-57.000

0.150
-0.837

191180 20 07.1 -46 53 C_2 -50.6±0.3 (4)

2FHG7 6.81 +1.16 K1 IV

6.9:11.5 7"

+050 -072 Cape

+69 -35 -3 .007

+61 -22 +7 .010

-729.685

+0034 ± 7.3
+0044

-055 ± 5.5
-051

4840 1909.8 -46 5-2 58.66 1906.7
-137
4.703

+2.38
56.28

79.69 1929.65
+20.52

17.541
47.385
4.929
-1.07
.822

57.17
+1.46
57.51

32.9

85.45
42.7
36.0

16.98
8.49
+.146

1955.80

4.896
-020
.876

58.61
-5
58.66
.617

58.03
-1.85

191190 Card II
HH90

-166

-850 526 -729 685 +043 -051 -50.6 +037 +36.9

037 031 023 019 085 256 -18.3 29.5

018

-13.6 43.7 +27.7

51.4 -5.4 +17.6

-1.2 38.5 12.9
-6.6 -19.6 20.8
11.8 -7.1 12.9

-14.1 +42.3 +28.6

02

-1.3 33.4 14.7
-7.5 -17.0 23.6
13.5 -6.2 14.7

-15.5 39.0 31.4

03

46.8 -0.9 +22.0

Θ 17 Sgr AD 93442 Δm = 2.36 +0035 ± 2.0 +0040 +0996 ± 1.8 +0992

191570 20 07.7 +20 46 6.3 dFI −40.00

27987 12'' 8.4 dG-5 −43.01

12520 44.147 1896.0 +20 45 55.05 1890.4

189

33±2 43,958

44.094

0

44.155 236

−13

142

118

+160

40.4

−5.90

49.15

53.05 1933.4

50.18

53.75 1939.46

2

53.77 256

53.47 36.4

47.0

+4.32

191615 20 07.8 +25 23 120 III −54.0±0.70 (4)

+2504124 7.80 +0.94 +0.83 B-III R

+54 −73 +17 .015
+59 −72 +22 .01

+002 −3 +034 −3
+005±9 +037±64

+0012±63 -019±5.4
+0010 -014

190306 20 02.3 -33 09 6.6 B8 -18.38

27851
12440

6.8-8.6
0.6

20.940 1895 -33 8 35.78 1893.4
-065 +1.08
,875 34.70

45.239 46.0 48.98 1928.45 8330
35728 11.98 41.6
20.967 37.00 48.2
-60 1 50
.907 50
-17 35.25
.890 920 +25
+046 35.34
20.949 -.69
±1 35.45 1954.85
950 -8
35.53