π Dra A2IV

182564 19 20.4 +65 37 4.6 A2 -28.7B

26735

11826 $+0010^{31}$ $+044^{34}$ N30

$+0015 \pm 1.2$ $+044 \pm 1.0$ GC → N30

17371

1455

+0013 +0413 (π)

+0008 +0443

5417 5288

-8406 +9471

Sa. 20 Min

λ Sgr	1	20.4	−40	43	0 C
HR 7348	3.96	−0.10	B9 III		
W 1825					

+030 −120 C
+036 −113 N
+030 −118 F
+032 −117

−939 343 −652 7 58 +032 −117 0 076 0 ~~−08~~ −422

030 0 011 0 142 052 0 0 0 01

+14.2 +5.2 −42.2

+7.1 +2.6 −21.1 02

−7.0 −13.6 −16.3

+9.5 +3.5 −29.0 015

−9.6 −18.8 −22.3

182040 19 20.4 -10 48

+0004 ±4.8 +006 ±3.5

24375 12.4 1.11 1047 19.38

+0014 -10.8

+0175 -011

24344 -0013 -0098 202 346 18

-11

8

013

24363 -0014 -04 1.54 41.19

-00126

23394 68.57 1.73

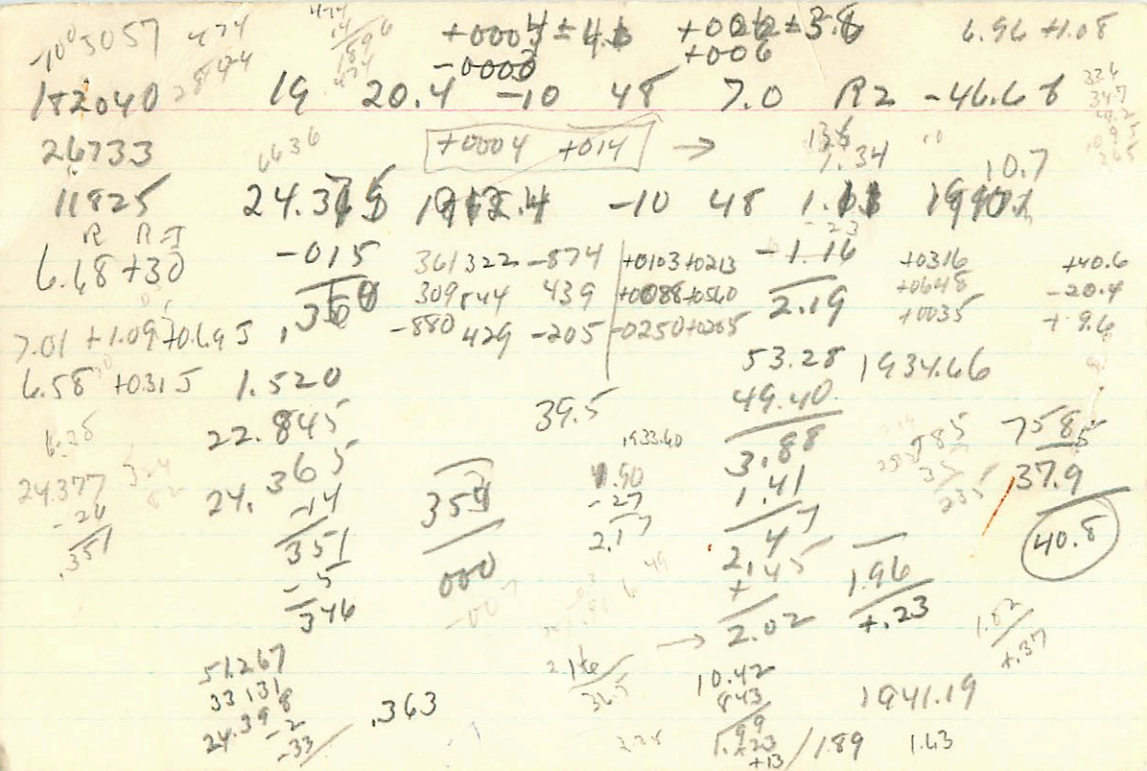
-4

1.77

-0186

-018 -010

R.A.	:	19.350
DEC.	:	-10.800
PM. R.A.	:	-18.000
PM. DEC.	:	-11.000
DISTANCE	:	7.000
MODULUS	:	251
RAD. VEL.	:	-46.000
q1 (U)	:	0.365
q2 (U)	:	0.326
q3 (U)	:	-0.872
dU	:	-47.576
U	:	28.168
q1 (V)	:	0.306
q2 (V)	:	0.843
q3 (V)	:	0.443
dV	:	-69.609
V	:	-37.864
q1 (W)	:	-0.879
q2 (W)	:	0.429
q3 (W)	:	-0.208
dW	:	51.320
W	:	22.441



3 56

3.5 659 DG

33

6

62

42

4

5.8

35

3

2

+0004 +006
+0004 -004

2375 12.4 1.11 1910.7
-15 -24
360 1.35

+0004-002

.346 2.02 34.46

+00053-001

+0075 44.4 $m_I = -0.6$

394 +0004 -003

1.23 48.5
-13 -05
381 1.18

.2494 9604 0095 -045 7.00 $\rho = -441$
-9684 2296 -0004 0040

-10⁰ 5057 +0004 ±4.1 +006 ±3.8

-0002

152040 19 20.4 -10 45

26723

11825

24.375 1912.4 1.11 1910.7

-15 -27

.360 1.33

+0002 +010

+0001 006

+ 15 +15

+3 +10

-014±10 }4
+012±11 }

+0005 +010

1.520

22.845

24.365

24.015

.35

3

+00025 +0075

+0035 +0075

+004 +006

354

-006

53.28 1934.66

10.6

8.8

1.41

2.47

+45

2.02

1.83 37.92

-48

.29

30

51.267

33.131

24.308

-2

24.396

-33

.363

10.42 1941.69

8.43

1.99

1.22

1.77

+113

1.89

1.90 1923.60

-27

2.19

24.377

-226

.351

+0002 +105
+00035 +1083

0052
008 +107

7357 19 20.4 +9 49 +103 -19.56

+0002 +105
+0006 ±6.9 +094±6.1
+0002
+108

44.48

25.453 1900.5
-030
423

51.70 18473
495
46.75

25.437 5448
70.00
0
5.44 5424
25.428
-4
424
+001

+0004 +101
+0004 +104
+.006

5201 1539.71
+31
51.32
4.57

25.433 5431
-4 -39
429 52
88

19.35
+9.8
+8
+107
2.45
19.5

362 615 -701	+0103 +3031	+3134 +14.0 +13.7	+27.7
309 630 723	+0088 +3106	+3194 +14.2 -13.8	+0.4
-880 474 -038	-0250 +2337	+2087 +9.3 +0.7	+10.0

182101 19 20.4 +9 49 F6 V

HR7354 6.34 +45 -5 C

GC26736

.320 .125 .425 ② SAC 2.646

③ Cr+

[m] 182

[C] 361

44 up. +27.7 +0.4 +10.0 +0064 = +0056

+313 +319 +209 +104 -19.5

R.A.	:	19.350
DEC.	:	9.800
PM. R.A.	:	8.000
PM. DEC.	:	107.000
DISTANCE	:	2.950
MODULUS	:	39
RAD. VEL.	:	-19.500

q1 (U)	:	0.365
q2 (U)	:	0.612
q3 (U)	:	-0.702
dU	:	323.984
U	:	26.288

q1 (V)	:	0.306
q2 (V)	:	0.633
q3 (V)	:	0.711
dV	:	332.384
V	:	-0.936

q1 (W)	:	-0.879
q2 (W)	:	0.475
q3 (W)	:	-0.043
dW	:	207.813
W	:	8.932

+6.68

7365 19 20.5 +57 40 6.50 N2

+018 +040 GC
-2 +4
+016 +044

7365.000*

19.000*
20.500*
57.000*
40.000*
0.016*
0.044*
6.000*
150.489
6.600

0.222
-0.017

1183 ✓

182712 19 20.7 +69 49 dK1 -35.96

+690,043 9.3 +020 +212 GAZ

+0031 +067 ±1 +223 ±1 GR

+ 2 + 3

+069 +226

− 4

+222

9.48 +945 +535

1 G (8)

-939 345‾ 938 345‾ +070 +212 -35.9 199 -34 346

066 187 024 069 -$\overline{014}$ 0.000 -12 +34 03

-12 +67 -24

735 8 19 208 +26 10 -2440 (8) Van

+05

5.18 -12 -53 DG III

5.19 -12 -49

5.18 -12 -51

503 (5.9)

2.786

690

-12.2

-0004-007

-005-007

7358.000*

19.000*
20.000*
26.000*
10.000*
-0.005*
-0.007*
5.900*
151.356
-12.200

-0.035
-0.501 -75

0.865

-0.021
0.860 +129

-13.641

37

0.005
0.093 +13

-0.323

6Cw
-0016±2.8 -019±2.6
-0012 -020
107815 19 20.7 -24 34 5.8 gK1 -2.31

16887 5.67 +1.16

7434

44.939 1901.5 -24 33 47.53 1900.1

078 +0.95

45.017 46.58

1934.15

26.812 28.27
18.105 19.31

44.917 47.58 47.32 47.81
53 +15
970 47.43 -0.74 37.4
+2 +35
972 - .044 973 47.08
(359) 1940.66 (37.3)

44.960 47.80
14 +24
974 47.56

+0089 −148±4 CP +0071± 3.8 −141±7.1 C(8)
+0086 −155

181773 19 21.2 −62 17 F5 IV −329±1.1
26754
10.83"

7.59 +46

10.578 1907.7 −62 17 1.25 1905.0
−300 6.34
.278 54.91
+51
−25
−12
10.43 00.9 1945.7
−26 −32
.604 1.32

Rejects?

2 Sgl

HR7369 182490 -0006 ± 2.4 -014 ± 2.1 Sp.B. P = 9.4

-0004 -021

267?8 19 22.1 +36 50 +12.0 a

W11850 11850

6.03 A2 III -009 -014 G-G

-008 -020 1A

7.271 1897.4 +16 50 20.24 1891.8 -

031 81

,302 21,05

7.305 19.84 1933.9

0 10

572

7.271 19.94 356

-4

267 20.35 1939.66 36.3

38.7 -7

286 20.28 44.5

-016 20.11

-94

-937 350 289 857 -008 -020 +12.0 -006 +3.5 -09.0
-007 -006 -003 -002 -024 -043 +11.4 +4.0 -10.7

-0.8 -18.3 -145 005
-23.9 -2.7 -3.0

-2.0 -21.5 -19.0 004
-28.0 -5.7 -3.7

0 -17.9 -12.5 006
-21.6 -1.4 -2.9

+0005±3.8 +074±3.3 +0.5 DD
+0007 +073 40
182635 19 22.3 +36 21 6.4 K1 III -32.98
26792
11854 18.307 1898.4 +38 21 7.45 1891.9

W3 50 -026 -4.30
+00049 +0750 .281 3.15

+0736 24.50 10.8 19 27.5
53.810 54.25 574
18.310 5.08 28.7
+00059 +4 50
+010 +072 314 302 30.3 5.98 585 36.8
4 4 +2.70
310 +021 5.96
7057 3466 → 0710
7085 9388 18.28 0156 6.0 1929.9
15 7.07 0105 -27
295 44 5.73

HR7382 19 22.4 +43 17 g65 -0.18

W11855 5.9 +011 -025 GC

+013 -031

+012 -030

0.9 (19)

-936352 686 725 +012 -030 -0.1 -021 0 -10.4

011 -020 004 -007 [illegible] 045 -026 0 0 0 008

~~+6.5~~

+10.6 -9.5 -13

-13.6 -0.4 -13.8

0075

49 Sgr

-0012 ± 2.3 -007 ± 2.5
-0015 -002

182416 19 22.5 -24 04 5.6 g1K4 +39.5 8

26801 5.42 +1.43 +1.68 10B5 K + 1II +39.7 256

11858 28.157 1899.9 -24 3 43.43 1898.7

060
.217

+36
43.07

57.363
30.848
28.211
-28
183
.14
-14
169
16

36.9

38.34 1928.54
53.60
44.74
154
20
43.28
92
42.9

189
163
054

945
43.17
08

11.023
36.8
38.1

51.868
34324
28.194
-4
24

28.170 -054
-16
.154
.166

53.54
10.08
43.46
+25
43.25
4

43.39 1940.60
+11
43.28

1941.09

182477 19 22.5 -14 00 5.8 g113 -3426
26805
11860

+0039^{32} +057^{32}N30

+0052±45 +052±4.2 GC 9N30

182572 19 22.6 +11 50 68 IV

-100.8 (11)
-101.9 (8)
-44.2 (10)
-100.3 (9)

5.15 +0.78 +0.41 0.059 1.15 +1 23 -20 -23
4.90 +0.22 +2.20 38 +4.15 +32 +29 -16

4.61
32
29
4.25
1.15
3.14

505 gi
182629 19 23.3 −21 53 5.6 gK3 −20.18

26823

11867 $+0027^{35} -004^{33}$ N30

$+0026 \pm 2.4 -001 \pm 2.5$ Gc → N30

+2603549 19 23.4 +26 14 8.2 g NO -6386

11871

+006 +025 Y

−3 −3

003 +022

+007 ±8 +030 ±6 Ref I

1 +-

+008 +032

+0006 +0004 ± 4.2 +059 ± 3.2 064
+0004 +0006 +058 054

182900 19 24.1 +12 55 5.8 dF3 -33.86

26840 -3.79 ①

11876 4.619 1903.9 +12 55 15.18 1904.5

7384 -018 (68.55) 2.68 19.4

.601 4638 19.89 15.50 +129

4.608 -24 / 19.65 17.01 1933.4 .12

31±4 4 4644 (17.35) 19.86 +11 .61

612 -14 / 628 -41 17.12 3.45

4.644 (33.4) 18.95 -33.5

-13 17.71 1941.13

631 -1 +53

622 +0008 +0588 17.70 37.3

+021 +0006 062.3 17.41 (32.8)

+0099.5 012 061 +1.91

1kg +17.5
+9

182900 19 241 +12 55 F6 III

HR7349

GC26840 5.77 +0.45 +0.035 35 ly

.302 .169 .541 ② SPC 2.659
304

③ G+

[m,) 223 +5

3.29 +32 −16.8 +5
[c,] 481 120 +2 +2 +1
125

~~+29.6 −18.8 +4.2~~

+2.45 (3.30)

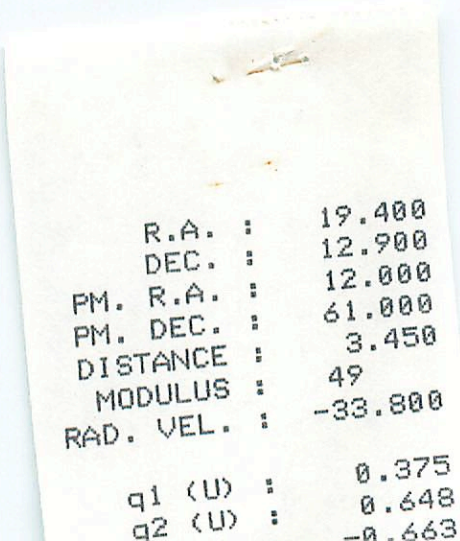
±3.5
+3.5 G4
+00050 +0585
+00070 +0620
+0101

+013 +060

−33.8

R.A. : 19.400
DEC. : 12.900
PM. R.A. : 12.000
PM. DEC. : 61.000
DISTANCE : 3.450
MODULUS : 49
RAD. VEL. : -33.800

q1 (U) : 0.375
q2 (U) : 0.548
-0.663


R.A. : 19.400
DEC. : 12.900
PM. R.A. : 12.000
PM. DEC. : 61.000
DISTANCE : 3.450
MODULUS : 49
RAD. VEL. : -33.800
q1 (U) : 0.375
q2 (U) : 0.648
-0.663

+0074615.0 −014±10.6
+0054 +007 3 S
182901 19 24.2 +11 45 +010 6.8 F5 −43 A

+0056

26842 −40.8 2
11877 +76 + 13 +0055 +012 woolley
+0056 +0185

+11.8440 10.911 1905.7 +11 44 55.98 1901.5 fum
−328 158 857 68
.583 6.91 299 160 487 1 obser 56.66

10.734 56.73 1933.5
738 14 96 11
3999 6420 749 56.84
−9166 7658 10.752 +166 +085 +020 57.20 1939.71 37
8 2 36.6
760 30.9 57.22 35.1
56.92
+26

18.874 5743 57.89
+23
57.64

+0080±5.1 +075±3.2
+0072 + 90
7.8 dF9

ADS12447 19 2*5 +27 13 -10.6 b

183032 2685
26851 8
11861

+107 +075 Gc

31.665 1899.0 +27 13 11.04 1887.4
-408 -470
.257 6.34

3554m

-306 31.47 10.4 1629.7
329 09 -26
479 10.14
+4.52
444
26

744 369 149 319 (V)

184102 19 24.7 +79 30 6.0 A2m -3.18
26857
11883

+0004 79 -029 68 N30

+0001 ± 3.6 −020 ± 3.3
+0001 −026
182926 19 24.8 −18 27 7.3 dF4 +0.18
26859
11884 45.603 1903.3 −18 27 9.76 1898.8

−005
5.98 +1.02
8.74
18.352
27.270 9.65 1934.17
45.622 58.18 33.7
22 1.47
600 1.50
−5 .97 21
595 1800 9.45 9.74
600 + −1.00 416
+002 9.5 1939.46 37.0
45.628 10.08
−16 +30
612 9.7 35.2
10.726 22.30
34.897 11.98 1937.53
45.624 10.32
−24 / 593 +24 / 9.91

+0006 ± 2.8 − 001 ± 3.0
0000 −001

182998 19 25.2 −18 28 6.9 g 145 −32.18

26870
11888

10.793 1900.5 −18 27 42.91 18996

−030
.763

+05
42.86

43.43 1928.32

43.533
27.268
10.801
.22
.779
.14
.765

59.02
44.41
1.50
42.91
+28
42.63

33.3

764
+001

10.780
.16
.764

43.30 1939.35
+30
43.00
42.82
.04

4767
33.8
34.2

R3

BN Vul 19 25.8 +24 15 -235 dw(1)

11.4 med vis -767 (?)

-046 ±8 -039 ±8 Pearce

-045 -039 Harling

0030

-931 366

~~366~~ 411 911 -046 -039 -235 -016 -97 -17.1

-17

-043 -015 -017 -006 -175 -15,2 -214.1 -78 +199 00085

-284 +20 -298

-146 -371 +105

-253 +47 -268 001

-106 -344 +88

-298 +9 -311 0008

-22 41 -128

-122 -21 -201

220 -8 -125

G 23-1   19   25.9   +13   54   +3.6

+130 4024

8.44 +79 +26   +15

+20 (58) -10 (6)
+47 (4)
+238 +26
-6 +1
+232 +027
0 +4

2.60

+.232 +031

-39.5 b

7413 19 25.9 + 62 27 6.31 105

+016 +050

~~7404 19 26.7 +0 8 635 102~~

+003-009

39

7413.000*

19.000*
52.900*
62.000*
27.000*
0.016*
0.056*
5.500*
125.693
-39.900

0.240

1 $-44c^{34}$
18347^3 19 263 f42 39 8.6 dB3
$+42^0 33 5^1$
11906 +0062 +173 5^{12} bn

+0010±6.7 -263±5.4
+0002 -253
183216 19 26.5 -30 54 G2V -42.8±0.6 C, (5)
24.901
~~183216~~

+40
-67
+10

7.12 +0.59

29.797 18923 -30 53 55.14 1894.2
-53
.744
14.68
40.46

43.9

54.320
35.492
29.828
.774
.749
1457
758
+009

52.21 4927.43
1.42
50.79
1.61
49.18
48.9

8244
41.2
10471
52.36
-11.90

47.0

29.765
-7
758

55.82 1955.01
+7
55.75

+45 3w

183536 19 26.8 +34 30 8.2 dF8 -49.9B

C2537

11914 A -05 +22 C

+J403566 5A (28)

ZC +0020 −036 →

193225 19 26.8 −27 05 −31.4 ± 0.5 C_3(N)

26401 +0023 ± 2.3 −045 ± 2.3 R3 III −31.8 (3)

~~8.8~~ 7.8 +0020 −036

+031 −045 GC

5.45 +1.12 2.18

30 42

46.721 1903.0 −27 5 23.36 1502.4 +030 −039 Z

−108 (31.2) 2.12

.613 21.24

13.937 13.922 .676 21 1926.70 34.2

32773 32775 +063 25.80 (31.3)

46.7134 46.697 2.10 25.35 1929.02

.664 .663 23.57 2.10 22.26

21. 23.28 −1.4

1939.84 21.37

46.467 9.452 37094 22.54 22.60 1941.1 34.39 1259 22.64

-929 370 -456 880 +030 -039 -31.4 019 +14.3 -166

029 079 011 009 104 193 -27.9 -10.3 +25.9 015
162 .20

-3.3 +34.9 +33

-2.6 +37.0 -0.3 013

+0.6 39.2 -2.3 01

+2.7 42.1 -6.5 005

+0028 ± 3.6 −0.29 ± 2.8
+0032 −027
183492 19 27.1 +14 30 5.7 g140 −40.26
26919
11918 4.254 1904.7 +14 29 30.08 19043

−127 +1.32
.127 31.40
4.218 4107 30.46 1933.0 11:309
153 37.7
222 +11
232 33.0 30.57
4.249 +105 30.86 1940.38
−13 338
236 30.85 37.7
4.241 30.51 33.4
± −89
249
30.23 1939.71
±2
30.25

182101 15 20.4 +9 49 F6 V

HR7354

6.34 +45 -5 C

GC26736

.320 .125 .425 ② SPC 2.646

[m] 182 ③ Cr+

[c] 361

44 up. +27.7 +0.4 +10.0 +0064 = +006

+313 +319 +209 +104 -19.5

8 3
17 6
14 6
83 9
9

35

R.A.	:	19.350
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q2 (W)	:	0.475
q3 (W)	:	-0.043
dW	:	207.813
W	:	8.932

35