84261 9 40.0 −65 5 G7 III−IV +2.0±0.5 $C_3(4)$

13355

59.022 1500.2 −65 51 9.35 1897.9

11.06

1525.24

1437.8

1447.4

+56° 1400

W Uma 83950

40.2 +56 11 58.7 -422

36.7 +56 24 -46

May 7.90 +0.63 -423 Obit π = 015

MN 163, 341 1973

-33 -16 -29

W 015 W013 S

+0033 -031 ±1 Y

+020 -030 AGK2

+025 -028 Y → 1Ky +0032 -030

+0285 -028

+021 -024

+0030 -028

-422

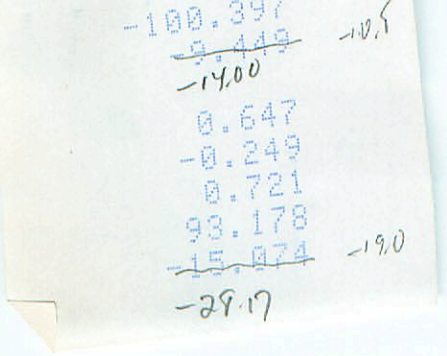
-43

573-820 831 556 +033-031 -46-026-38-051

-019 015-027 021 -190-057 -25.6 +21-15 018

+10-18-42

-35-19-26


-100.397
-5.449
-14.00
-10.5
0.647
-0.249
0.721
93.178
-15.074
-19.0
-29.17

15 Leo

84107 9 40.6 +30 12 5.7 ±2 +15.66

13406

6257

39

−0009 −105 N30

−0016 ± 2.6 −111 ± 2.2 cc → N30

-0017 ± 7.5 -102 ± 6.5

-0018 -077 wh hi

84123 9 41.0 +42 17 6.5 dRop +16.36

13413

6261 59.109 1911.5 +42 16 53.75 1910.6

065 4.02

,174 57.77

2789 47.3 1925.8

34.380 -49.75

59.270 57.552

-116 -97

,154 56.555

,159 56.40

145 165

-029

559

28.0

17.4

59.103 56.3 1930.1

,132 -6

56.24 56.42

-1.35

77

-0004 ± 5.9 -060 ± 5.4
-0003 -059

84252 9 41.7 +19 06 6.6 KO -0.6 6

13422

6264 43.340 1902.9 +19 S- 39.79 1903.0

19
359

282
42.61

43.352
15
367

40.90 1933.2
23
41.13

27.5

30.4
27.4

19.873 357
23.482
43.355 - 004
45
31
25
335

82.28 1927.60
50.90
41.38
53
40.53
30
40.93

40.98
- 1.63

3875 9 42.0 −53 40 AOV

8446

13426 5.55 −04 (−08) C

47717

5 56 −07 145 1037 2.56

6758 32.7

919 044

8781 −945 0767

4785 +3966 0055

15

R.A. : 9.700
DEC. : -45.500
PM. R.A. : -656.00
PM. DEC. : -600.00

DISTANCE : 0.00

DULUS : 10
VEL. : 60.000

q1 (U) : -0.757
q2 (U) : 0.652
q3 (U) : -0.037
dU : -204.362
U : -4.269

q1 (V) : 0.092
q2 (V) : 0.050
q3 (V) : -0.994
dV : -343.749
V : -63.106

q1 (W) : 0.647
q2 (W) : 0.756
q3 (W) : 0.098
W : %-3560.668

VX Hyper 9 43.4 -11 47 -10 -8 -7, -4

9.8

+1 +9 Clubs -15?

-7 -4

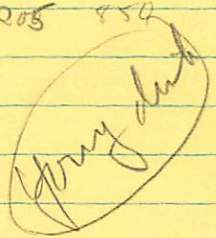
-3 +2

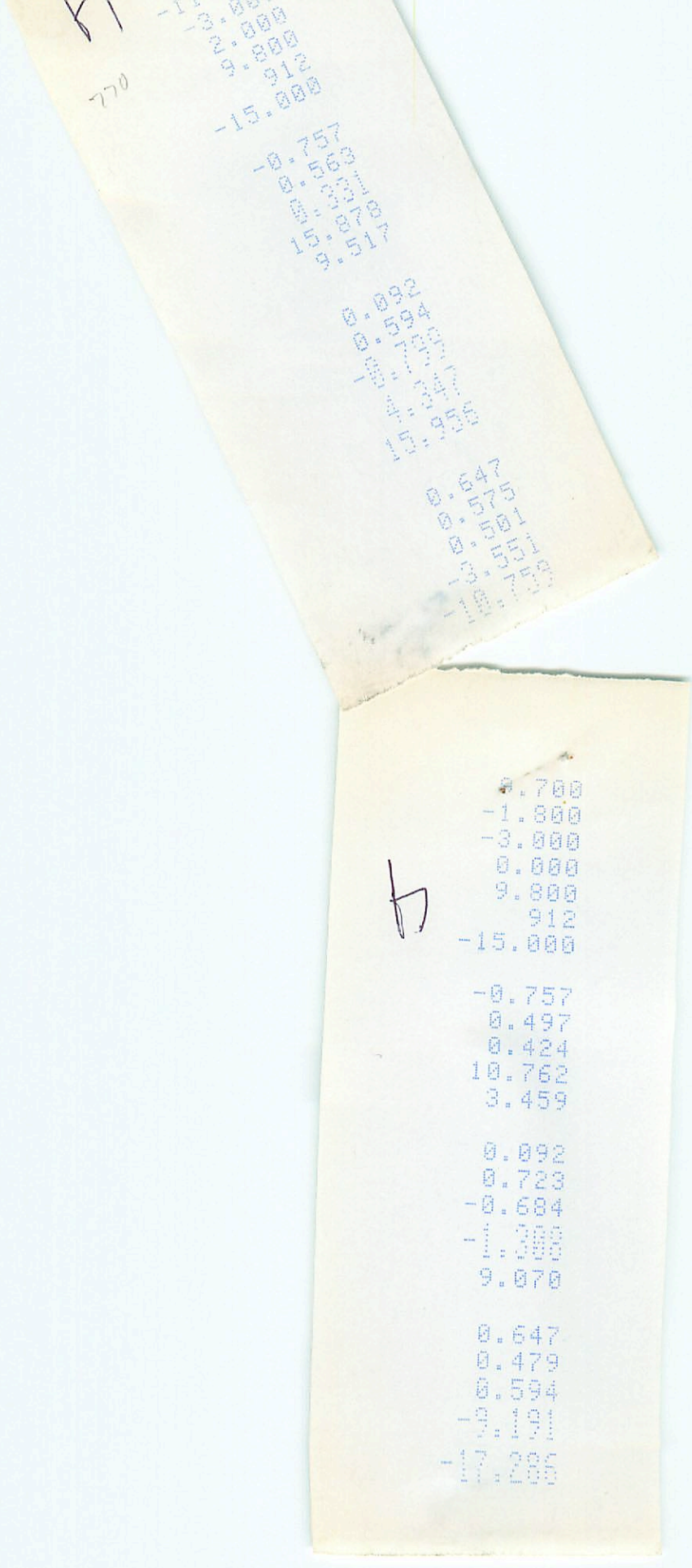
10.7 0.205 850

10.62 205 170 880 2800

10.77 260 170 740 2775

10.85 270 170 715 2750




770
-15.000
-0.757
0.563
15.878
9.517
0.092
0.594
-15.000
-0.757
0.497
0.424
10.762
3.459
0.092
0.723
9.070
0.647
0.479
0.594
-17.286

~~-0045~~ +024

84610 9 434 -37 30

39°6041 +28.9 ①

24.35
-006
344.
24.204 36.3 9.9
-02
9.92
56.020 10.59

-0071 ~~8~~8965 - 8427 0557

4430 5383 +0054

-0046 +018

-00

-0045 +013 +6.9

∓ 1.3 1.2 - 2 -0547 0065

-052+022 594

24.191 70.22 9.49

+20.7

of +289

33.0686

2-49

Plan

9 43.9 -62 17 +1.4

-00234 +0.0033 FK4

-0.0010 -0003 N30

-0163

-013 +007

8.0

N30

| | | |
|---|---|---|
| -761 +608 -227 | +0252 -0086 | +0166 42.6 +4 -0.3 |
| +098 -238 -96 | -0032 +0034 | +0002 0.0 -1 -1.4 |
| +642 +757 -122 | -0212 -0107 | -0319 -12.8 -13 -0.2 |

400

FK4

| | | |
|---|---|---|
| +0589 +0095 | +0684 +27.3 | +27 |
| -0076 -0037 | -0113 -4.5 | -6 |
| -0457 +0118 | -0379 -15.2 | -15 |

9.7
-62.3
-28
+7
8.0
+1.4

−0174 ± 3.1  −143 ± 3.3
−0170  −138

Q4406  9 43.7 +63 29 AgNO +298 w(3)

GC13457  6.9

W6279

43.954 1995.8  +63 28  52.77 1999.8
1.170  8.41
45124  1.38

−116 ± 3  −143 ± 3 GC

49.705
5-4.475
44.7 25
.324 1
.40 10
417 541
44.270

(50.3)

44.104
10
124
−.854

1999.9 1927.2
52.78
57.12
1.45
55.67 15
55.92
55.1
5-4.27 10
54.17

999

55.00
1945.00
6.38

22
36.1
(46.3)

560 -826 895 446 -116 -143 +7.9 -128 +7 -303

065 072 096 189 -588 756 +3.5 -3 +2

-48 +63 -16 013

+44 -63 +25

84607 9 43.8 +2 1 dFU

HR3879
GL1345

5.64 +35 +09 C
5.64 +34 +14 2Σ gg
5.64 +345 +115 (6)

545 208 192 794
.215 .178 .800 (2) SPC 2.738
210 185 797 2.734 (3) C+

2.780

[my] 2160
[c] 757

410

Mp +14.5 26.3 -12.9 S -0039
+09 -209 -280 -050 +15 C

HR 3887 9 44.4 −58 34 $C_{\Delta}(4)$ +5.5±0.8

HD 84450 84850 6.22 +0.44 F6 IV-V +47 ①

1347

−124 +050 GC

−120 +055

1245

1925.35

$\mu^{\circ}$ −.034 +0.52

Copy

-458 ± 7.1 +050 ± 4.5
-0140 +061

556 -830 -854 521 -120 +055 +5.9 -047 -5.0 137

067 026 100 039 133 5-57 +3.1 -2.6 +1.7 025

~~000~~ 23.505 1400.0 -58 33 48.38 1890.6 +2.7 +25.7 +0.5

23.0 -5.8 -6.3

790

24.295

37.545

463237

23.86

15

882

4

886

37.4

1542

771

-524

-2.97

56.36

53.44 1528.53

55.00

48.49

-45

4

48.9

-10

49.04 + 2.

1701

48.50

85

7483

37.4

46.8

23.64

14

1656

47.3

-67

47.9

19 46.3

−1302948 3w

CllCl 9 44.0 −14 18 9.2 dG4 −4.28

628.4
723.4
15 C

−.25 +.20 Cin

−271±5 +190±5 CR

19b0 -0037 ± 2.4 000 ± 2.2

84722 9 44.7 -0033 +11 48 -008 6.4 A3m -3.78

13485

6297 44.767 1699.8 +11 48 1.26 1895.6

186 0

1.26

84 74

-00358 +0016 44.553 0.84 1934.1

44.816 11

-00351 +00130 22 0.95 0.97

+00140 .838 - 0.24

12.3

-0018 24.095 56.18 1928.57

-050 +008 20.775 04.70

44.873 1.48

-31 0.68

.842 +39

23 0.94

.867 8411 (34.3) 10227

-.112 34.1

(38.5)

-9997 0.97 1939.60

0280 +2

0.94

44.901

17 018

84739 9 44.9 +20 50 7.8 dF2 -15.46

13492

6290 +0053" -011 N30

+0054 ±2.7 -008 ±2.2 6c → N30

-64.8

3890 9 45.9 5T -64° 50' 3.15 Fo

ν Cani

13506

6293

4.6

+13.6 a

+13 (5)

-11

-0017 +0002

One of binary, 5", cpm

| | | | | | |
|---|---|---|---|---|---|
| +0400 +0056 | +0456 | -3.5 | -0.765 | 0.591 | -0.256 |
| -0053 -0027 | -0080 | -13.0 | 0.104 | -0.280 | -0.955 |
| -0332 +0071 | -0261 | -2.0 | 0.636 | 0.752 | -0.152 |

C453 9 442 +13 59

84437

+448 (35)

833 303056 354 (11)

534 301 074 354 (5)

534 306 053 357 (6)

3025 071

305 058 353

-1224

B) 350

+3.1b

1100

+4110

-2.0#

Am Sec

+0.2534

9 46.6 +55 19

10 59.6 710 70

+58.1351

-304 (2)

+010 -041 X GHz

+034 -033 Y

032 -033

030 -031

two

~~Horiz~~ -037

028 -027

+018 -032

9.75 9.8

+58.2 +55.3

37 32

-27 -30

2.75 2.5

-42.5

HR 3898 9 48.0 −45 30 +12 C

5h

−0.0029 +0.001

−0.029 +0.001 (400 pa.)

−0.030 BC →

−0.030 0.000 BC →

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| −767 | 638 | −048 | +1091 | +43.6 | −0.6 | +40 | +43 | +16 |
| 108 | 050 | −993 | −0154 | −6.2 | −11.9 | −18 | −18 | −13 |
| 632 | 767 | 108 | −0939 | −36.0 | +1.3 | −37 | −35 | −12 |

| | | | | | |
|---|---|---|---|---|---|
| +1054 | +0030 | +1084 | +43.3 | −0.6 | +43 |
| −0146 | +0002 | −0146 | −5.8 | −11.9 | −17 |
| −0869 | +0036 | −0833 | −33.3 | +1.3 | −32 |

400 pa.

GL1354?

48 0.468 1909.7

+ 120

.588

0.495

- 001

0.496

092

-0030 ± .80

-0031

-00305

+ 24

-00281

↓

-0.030 000

-002 ± 3.4

-002

55.68 1901.6

+10

55.67 -002

55.56

-17

55.73

- 06

1939.48

Stuy 1955.67

-0.003 | -0.004

+2 +3

-0.0025

85198 ♀ 48.0 +17 5F dF6 +24 C.

+17°2236 -066 -049 Gm.1850

545 -834 309 551 -066 -049 +24 -015 +7 -223

036 008 055 013 109 298 +22.8 -19 +12

-8 +42 -15 01

+685 (1) N
+57

W Sup ℄ 48.4 - 1 48 +59.0 f

LB

-16 c +2 c

+1 0

-15 +2

450p.

850p.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| -767 | 458 | 404 | +0545 | +0047 | +0592 | +50.3 | +238= |
| 107 | 721 | -684 | -0076 | +0068 | -0008 | -07 | +10.4 |
| 632 | 481 | 607 | -0449 | +0046 | -0403 | -34.2 | +35.8 |

+74 +24.5

-41 +40.0

+2 -70.0

SR95d  −0012 ± 10.0  −004 ± 9.0
+0018  000

85405  9  48.8  −22  47  6.97  +3.08

135-60

6313  45.020  1897.6  −22  46  56.96  1896.7
63  +21
.083  56.75

35.907  147
9200  +064
45.107  210
+044  .127
45.151  +13
160  134

45.149  191
11  4
160

(36.4)

1846.72  1934.83  798
−54.80  34.0
56.92  87.5
−46
57.18  56.72
+17  00
57.01

56.67  1933.15
+17
56.49

133

4.50 99
412
129
293

432
136
294
298
71

+044 -006 +3.0

270

| | | | | | | |
|---|---|---|---|---|---|---|
| -051 | 600 | 175 | -1628 -0170 | 519 | -1798 | -5.4 +0.5 |
| 129 | 420 | -854 | +0263 -0122 | | +0147 | +2.1 -2.7 |
| 611 | 675 | 413 | +1274 -0160 | | +1084 | +1.2 |

300M

270
-46
+2
+30

AOS 7545 85235 −0004 ± 1.5 +014 ± 1.4 15 Oct 18

Puma 13559 9 48.7 +54 18 −11.9 a

631 2 −004 +014 a c

5.1

AP 3 Sept 13.064 1894.2 +54 17 56.46 1891.9 −004 +013 (Rdn)

022 −81

.051 55.65

0.83 −5.63 19270

42.418 59.10

43.248 57.20

−196 −1.00

.0529 56.20 56.20 7178

061 7 +35 35.9

56.27 44.0

41.7 066 −025

43.029 56.45 1944.78

−9 −81

070 56.14

542

542 -840 812 584 -004 +013 -11.9 011 -9.7 $0\overline{38}$

002 -006 002 -009 $0\overline{52}$ $-0\overline{19}$ -6.9 +5.8 -3.7

02

+8.4 -43.7 -7.8

$\boxed{-7.0 +0.3 -10.1}$

01

+11.0 -4.6 -7.9

$\boxed{-6.7 +1.5 -12.4}$

+0092±5.9 −183±3.1

8544 | 9 49.6 +27 13 8.1 dRO −12.16

13579

6321 33.862 1903.3 +27 13 9.88 1856.4

−480

.382

9.51

19.69

AD57551

8.5-90

Δm = 1.0 mm

2.5"

phys

3812 9 49.7 -46 19

-00 25 -010

-00 226 -0068

-0234

$\boxed{-020\ -003}$

6442 -71.53 2548 7254 -9884 | 0144
6446 71.76 2547 $V_{amp}$ 6884 -0347 | 0023
644 +18.1 ⑪ +2.15 0051
6444

```
R.A.      :  5.800
DEC.      :  -45.300
R.A.      :  0.000
DEC.      :  0.000
STANCE    :  0.000
ODULUS    :  10
VEL.      :  0.000

q1 (U)    :  -0.768
q2 (U)    :  0.637
q3 (U)    :  -0.060
dU        :  0.000
U         :  0.000

q1 (V)    :  0.189
q2 (V)    :  0.038
q3 (V)    :  -0.983
dV        :  0.000
V         :  0.000

q1 (W)    :  0.631
q2 (W)    :  0.770
q3 (W)    :  0.090
dW        :  0.000
W         :  0.000
```

| | | |
|---|---|---|
| R.A. | : | 9.800 |
| DEC. | : | -46.300 |
| 1. R.A. | : | 0.000 |
| 1. DEC. | : | 0.000 |
| ISTANCE | : | 0.000 |
| 10DULUS | : | 10 |
| ). VEL. | : | 0.000 |
| | | |
| q1 (U) | : | -0.768 |
| q2 (U) | : | 0.637 |
| q3 (U) | : | -0.060 |
| dU | : | 0.000 |
| U | : | 0.000 |
| | | |
| q1 (V) | : | 0.109 |
| q2 (V) | : | 0.038 |
| q3 (V) | : | -0.993 |
| dV | : | 0.000 |
| V | : | 0.000 |
| | | |
| q1 (W) | : | 0.631 |
| q2 (W) | : | 0.770 |
| q3 (W) | : | 0.099 |
| dW | : | 0.000 |
| W | : | 0.000 |

3401 $\beta$ 48.4 -0.5 57 185

$5350

$R_0$ 373

360 187 411 2621

(43) 368 174 418 (37)

358 189 (415)

3906 9 4q.6 +2 41 AIP

85504
13582
-17 137/1040 2806
(17) 1043

6.02 -05 -08 C

| | | | | |
|---|---|---|---|---|
| -014 | 136 | 1040 | 2.817 | etal |
| -017 | 137 | 1.051 | 2.837 | SG |
| -015 | 137 | 1045 | 2.823 | |

134
268
1054
1.322
1.251

-080

Dual 51 +97.1

-0122 +088 ±1.5

-1828

-181 +092 ✓

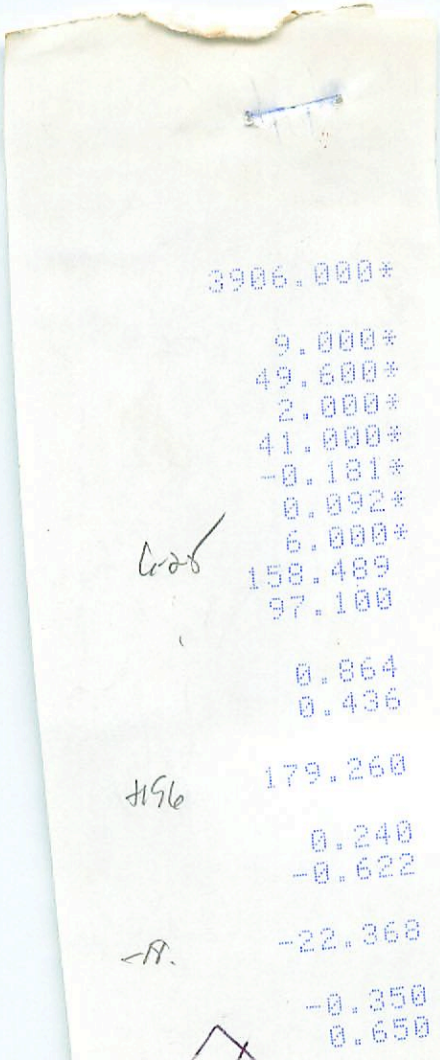
6.0

00

132 1043
264
1307

7

37.150 19.45 69.32


3906.000*
9.000*
49.600*
2.000*
41.000*
-0.181*
0.092*
6.000*
158.489
97.100
0.864
0.436
179.260
0.240
-0.622
-22.368
-0.350
0.650

7Sep

85504

GC13582

W6322

+2337

+302280

9 49.6 +02 41 A1 +97.1 b

6.02 -0.04 -0.09

6.02 -04 +1.45 2(24")

6.05 -005 -05 1(18")

6.02 -0.05 -0.08 Cape

+95.8 w(4)

+98.7 V(2)

-183 +089

+128 -37 +32 .010

+138 -34 +27 .009

56±2(5)

6 A(16)

7 M(8)

-10 Y(10)

9±5

603-024 139 1043 2.965

Rp. J Syst Vol 1/ mar 1983

-0122 ±2.1
-0123
+2 41

+089 ±1.8
+087
17.26 1886.4
-5.62
11.67

37.449 1894.0
683
39.132

37.527
545

42.7

37.642
667
1.42
606
-.526

16.20 1940.25
+20
16.40 1202

15.48 1433.1
14
15.62

16.01
+4.34

38.35
36.7
49.8

3606 9 446 +2 42 +970

7 Sep

85504 −017 137 1040 2836

601

1309

+238 +0.01

− 0129 091

−193 91

−193
91
574
+97

```
  R.A.  :      9.800
  DEC.  :      2.700
. R.A.  :   -193.000
. DEC.  :     91.000
STANCE  :      5.400
ODULUS  :    120
. VEL.  :     97.000

q1 (U)  :     -0.768
q2 (U)  :      0.463
q3 (U)  :      0.441
     dU :    902.029
      U :    151.270

q1 (V)  :      0.109
q2 (V)  :      0.775
q3 (V)  :     -0.623
     dV :    234.292
      V :    -32.234

q1 (W)  :      0.631
q2 (W)  :      0.430
q3 (W)  :      0.646
     dW :   -390.588
      W :     15.705
```

8

8

77.55 0.383 004 199 1029 1031 2.902 +12.3 (4)

AOS 7555 9 50.0 E=+0.18 52 1.384 +12 c

115

-0035 -0482

-00345 -048

-0541 0726

-0570 -0450

-0039 -043 BC
-0039 -051 new M30

-0039 -048
-056

687 0.0118
497

-058 -043 ac

100 P
9.0 +4.0
-17.8 -9.1
-24.6 +6.7

+13
-27
-23

90 P
+8.1 +4 = +12
-16.0 -25
-26.6 -24.

+0403
-1785
-2955

9.85
-7.9

-57.5
-450
5.0
+12

+2122 -1249
-0316 -1866
-1718 -1109
-1237

-772 +536 +341
+115 +644 -755
+625 +544 +560

GC13593

-0034±3.0 -043± 2.6
-0039 -051
-0037 -046
-0037 -050

1.847 1888.9 52 2.35 1893.2
235 2 + 2.44
2.135 4.91

1.811 (64.17) 8.62 1.939 (42.9)
21 -7
832 8.69 1938.50
50 1.939 7.40
6 +31
945 47.2 7.29

216
36.6

45 47.597 1.953 45 5.30 1933.26
1 14.355 7 1.22
50 1.852 10 -182 52 4.52 -044
1.942 7.23 9.11
3 8.93 220

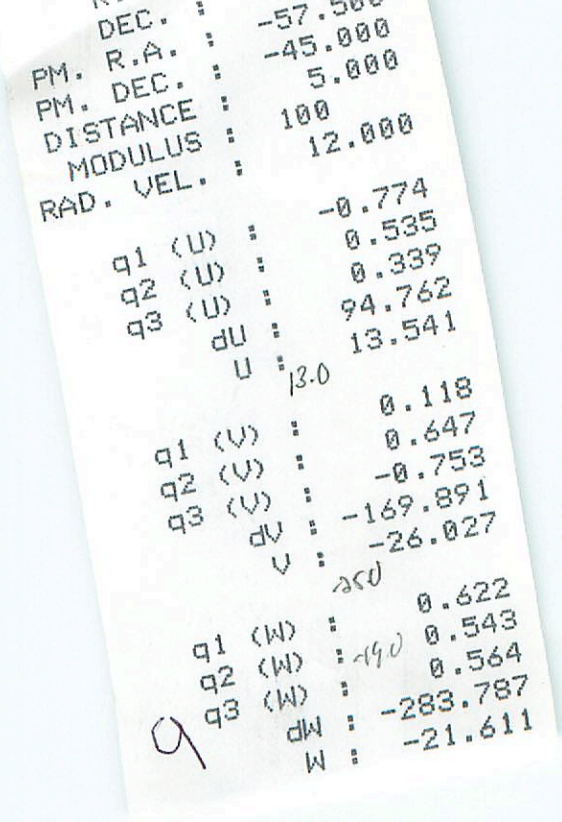
1.822 67.27 8.43
21 14
842 8.57

```
                    M :   -15.115
                   qM :  -583.587
                dp (M) :   787.452
                dq (M) :   402.0
                dr (M) :     0.243
                           552.0

                    V :
                   qV :  -52.652
                dp (V) :  -191.881
                dq (V) :  -523.0
                dr (V) :   748.0
                           811.0

                    U :
                   qU :   18.241
                dp (U) :   525.49
                dq (U) :   936.0
                dr (U) :     0.232
                          -477.0

MAG. VEL. :
MODULUS :    15.000
DISTANCE :      100
PW. DEC. :    2.000
R.A. :      -42.000
DEC. :      -25.000
```


DEC. : -57.500
PM. R.A. : -45.000
PM. DEC. : 5.000
DISTANCE : 100
MODULUS : 12.000
RAD. VEL. :
q1 (U) : -0.774
q2 (U) : 0.535
q3 (U) : 0.339
dU : 94.762
U : 13.541
13.0
q1 (V) : 0.118
q2 (V) : 0.647
q3 (V) : -0.753
dV : -169.891
V : -26.027
acv
q1 (W) : 0.622
q2 (W) : 0.543
q3 (W) : 0.564
dW : -283.787
W : -21.611
9

8574/ 9 50.2 -60 21 10 III-IV +15.9 4

FD 1168 7.2 ± 0.95 (2.01)

GL 185-95

B5728 9 507 -2706

396

629 391 206 422 (1)

+650743 -0152±8.0 -163±12.2
85515 ~~85515~~ -0163 -168
13607 Q 51.0 +65 29 9.1 dBS -7228 4W
6330

-0134 -163 (calculating) -063 -163

5-9.121 1907.7 +65-29 19.54 1911.1
643 6.34
.764 25.88

59.34 22.8 1930.0
50 -10
3 99 22.70

-0152 -163 Gc
-0163 -168 nw

8141 -2390 1781 -0114 -071±1 -149±5 GR
-5778 -8710 -0131 -071 -142 GP
3378

9 Eu4 −0020±2.2 −0019 +012±1.9 +004

85762 9 51.5 7 5 11 7.0 9 M0 +27.28

13617

6333 29.931 1896.6 +5 10 54.57 1889.5

+02248 107 038 −0020 +004 −0020 +004 5 FIRY −73 53.84

30.

29.941 39.1 54.28 1938.22

5.77 +0665 (5) +20 961 93 −0224 +14

−0271 +022 5-4.42

53.4 965 −0306 53.78 1933.2

29.946 23 969 −073 −029 +012 +Con 53.84 11 4

4.5 3.0 +34 +15 35.7

(2.5) −00178 +0176 −00144 +0151 −00120 +0194 5-4.62 46.2

+.18

10

85762.000*

9.000*
51.500*
5.000*
11.000*
-0.029*
0.012*
7.500*
316.228
27.200

0.132
0.449

53.901

0.029
-0.587

-6.745

10

-0.063
0.674

-1.456

3 11 mm

-0006 ± 2.6 +016 ± 1.8
-0004

85795 9 52.5 +50 03 +014 5.3 A2 -5.98

13643
6334

22804 1892.7 +50 3 24.98 1893.6
034 -50
838 23.98

49.77
38.222
27.952
-161
831
834

822
-016
422

27.819
-12
807

29.0 1925.2
-3.00
25.50
-50
24.50
+5
24.55

69.76
349
41.3

24.77 1944.56
-22
24.55
24.55
+0.57

HR3855 9 40.7 +65 13 -28

-049 +011 →

G3A

| | | | | | |
|---|---|---|---|---|---|
| -753 | -201 | 627 | +1749 | -0104 | +1645 +10.4 -17.6 |
| 096 | 915 | 355 | -0200 | +0477 | +0277 +1.7 -11.0 |
| 652 | -352 | 672 | -1514 | -0184 | -1648 -10.7 -18.8 |

-7.2
-9.3
-29.5

644-23 9 41.1 +27 1r

R 93 57 254

-553 -134

-546 -054 b

-644 -050 G