

115/24 13 38.4 +50 46 dF-9

405145

618492

01319 +0547 14350

11322 +11531

1228

1255
76 [122+55]

228 +24

265 -21

422

6356

754
+55

(-116)
1-1

2.02

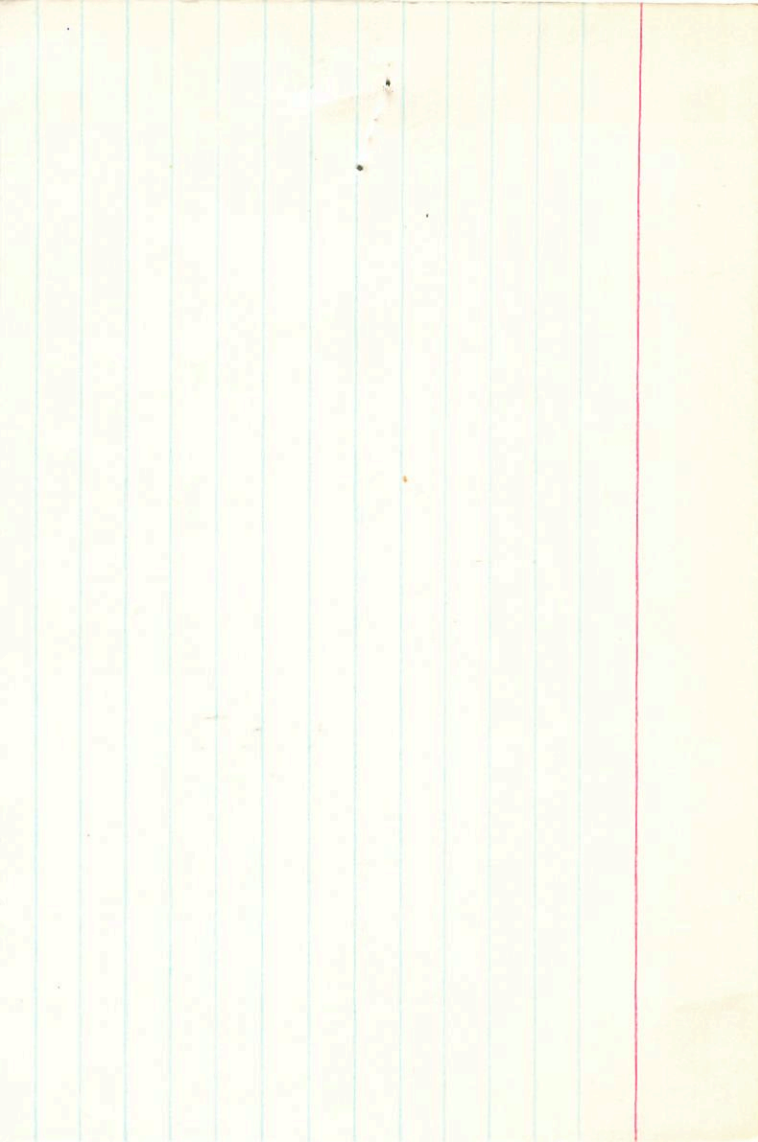
(364)
433

(234) (350) 2.618(B)

.346 .166
340 159

+15.7 -8.8 -8.5 -0143 -10.0

+670 -157 +6 +60



A058992

-0138 25.7
-0145

13 38.4 +50

+052 24.0
+062

46 6.3 drg -10.00

-133 30

119124

18492

→ -01319 +0547 W₃₀

8088

24.355 19063 +50

46 15.66 1401.6 +0538

10⁻¹⁶
+112

.603
958

-2.52

01321

9934 -9471 1351
-1144 3210

13.14

-1284

50±9

24.85
59.870
24.737
684 1739

51.1

1928.4

1351
123658-0154

HR 515

36.528

(5.2)

-5.15
0142

687 513 30.0
1739

1404

1534

+2.20

15.05

1445.08

424

24.438
446

14.1

15.61

110.66

369

24.402
404

15.46

1447.2

35.3

15.50

1447.2

35.3

88

HR5183

13 44.5 + 4 36

6.35

40.61 + 0.16

10.05

+ 1.20 + 1.20

2 20

2 20

NS 485

2 20 dG2

8-0.023

+ 4.8

+ 8.5

3 per

M	:	-10.350	:	PM	:	7.313
d3 (M)	:	0.202	:	d3 (U)	:	0.105
d2 (M)	:	-0.380	:	d2 (U)	:	0.432
d1 (M)	:	-0.192	:	d1 (U)	:	0.413
Q	:	-0.244	:	Qb	:	-123.323
U	:	13.442	:	U	:	0.413
d3 (U)	:	0.105	:	d3 (U)	:	0.413
d2 (U)	:	0.432	:	d2 (U)	:	0.413
d1 (U)	:	0.413	:	d1 (U)	:	0.413
RAD. VEL.	:	-11.400	:	MODULUS	:	24
DISTANCE	:	1.900	:	PM. DEC.	:	28.000
PM. DEC.	:	28.000	:	PM. R.A.	:	-124.000
DEC.	:	28.750	:	DEC.	:	28.750
R.A.	:	13.420	:	R.A.	:	13.420

Handwritten blue ink markings, possibly a signature or initials, on a small white paper fragment at the top left.

Handwritten blue ink markings, including a stylized signature and some illegible characters, on a small white paper fragment on the left side.

Handwritten blue ink markings, possibly a signature or initials, at the bottom center of the yellow paper.

13.750
6.600
-495.000
-111.000
2.150
27
-27.500

-0.753
0.532
2950 -0.388
1475.648
50.375

0.522

Handwritten notes on a piece of paper, possibly a receipt or ledger entry. The text is faint and mostly illegible due to fading and bleed-through. Visible fragments include:

- Top left: A small mark resembling a checkmark or the number '1'.
- Center: A large, faint number '100'.
- Bottom right: A signature or initials, possibly 'J.P.'.

13.750
6.600
-500.000
-109.000
2.300
-30.500
29

-0.750
-0.532
1526.300
55.780
55.550
704

0.622
-0.750
-1883.156
-49.950
70

86

-0.215
0.358
320.909
-14.700

3.68
2.80

-0344533
-114±2.8
-118

HR 5183

563 812

120066

13
44.1

+06
36

6.3
d62

-31.18

15025

47.2440

280
-394 687

-30.11

8133

28.448

+6 36

4.07

1890.7

10.55

1.820

2.67

+6.76

+50

9.9 1

30268

341

10.83

6.35

4864

28.987

350

19339

10.56

4864

29.070

1770

1.5

824

4864

28.752

341-118

4.67

1941.31

4864

28.752

1.383

+13
4.80

75.21

2552

740

-341-118

37.0

1325

2552

740

-31.1

10.57

-508

2552

740

-31.1

5.28

-109

Handwritten notes and calculations on lined paper, including various numbers, symbols, and circled/boxed values.

1

2

+2.4 25th

5154

+2.1801 C₂(W)
+6.384(3)

120 237 13 46.0 -3.5 27
18652 w(+4.0) 84
w 8146 4.2
43146 6.53 +0.55 +1.66 slay
-3509019 6.52 +0.55 Cape G312-R

-522 -178 GC
-529 ± 5 -19355 Cape

9.3 12"

-0.432 -1.85 Gaudin
-0.948 2.185

~~+40 -53 -1.040~~
~~+54 -68 -3.030~~
+83 -108 -2.020
+61 -60 +3.030
+40 -53 -2.040
+31 -44 0.050
+36 -49 -1.045

-528 -1.85
-2.795

484(12)
26(7)
3057

-042757.1
-0431

-17846.3
-199

1.901 1501.1

-35 2711.49 1500.5

$\frac{2.088}{989}$

$\frac{48.81}{2168}$

3

$\frac{35.442}{27.253}$
 $\frac{27.253}{02.189}$

$\frac{38.87}{29.82}$
 $\frac{29.82}{8.05}$
 $\frac{8.05}{7.12}$
 $\frac{7.12}{7.45}$

443

40.9

543

$\frac{786}{786}$

$\frac{7.45}{7.45}$

$\frac{2109}{10.54}$
 $\frac{10.54}{7.88}$

$\frac{841}{42.0}$
 $\frac{42.0}{11.5}$

01.611

$\frac{606}{606}$

$\frac{2.226}{1.763}$

$\frac{12.86}{-28}$
 $\frac{-28}{13.14}$

1956.28

88



120237.000*

13.000*

46.000*

25.000*

(XX)

5189

120237

18562

13 46.0 -35 27

6322

6.55 -0.56 +0.04 2

6.20 + 20

4.02 40

5.72 57

5.85

10.15 +1.23 +1.20 2

9.45 +0.52 2 1/2

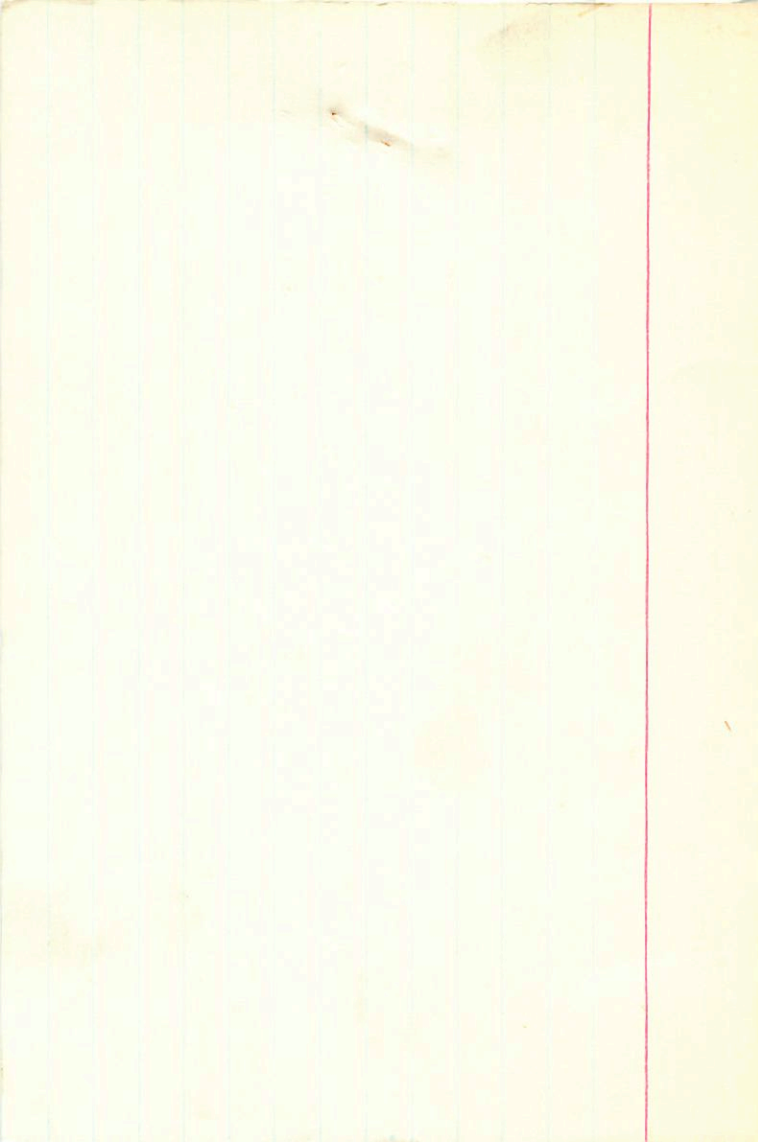
17.80

1.65

9.07

8.35

5.75



-036 -229 CP

121384 13 53.2 -54 27 69E +4.6 4C

F01206

GC18828

13^m

33" N5

600 +0.78 (1.81)

$\begin{array}{r} -0051 \\ -0045 \pm 7.3 \\ \hline -224 \pm 5.4 \\ -231 \end{array}$

$\begin{array}{r} 14.260 \\ 254 \\ \hline 1574 \end{array}$
1899.9
-0048 -0238
 $\begin{array}{r} 26.37 \\ 12.66 \\ \hline 39.03 \end{array}$
1893.5
 $\begin{array}{r} -0035 \\ -0227 \\ \hline \end{array}$

35.609 -030 59.46 1926.76

$\begin{array}{r} 38.600 \\ 17 \\ \hline 1436.5 \end{array}$
22.88

(22.7)

$\begin{array}{r} 23.8 \\ -31 \\ \hline 24.11 \end{array}$
22.31
-0048 -227.64
-0045 -221

14.316

$\begin{array}{r} 14.316 \\ 512 \\ \hline 14.316 \end{array}$

$\begin{array}{r} 24.11 \\ 17 \\ \hline 22.48 \end{array}$
-139 +4.6

$\begin{array}{r} -040 \\ -217 \\ \hline \end{array}$ 2.3



89

5-182207

5322

43231

-503837

48329

1/15 -33.17w(3)

6.37 +0.58 +0.12 2,181

-28.9 25A

6.37 +0.59 +0.16 305

277 188 +89 2624 377

+56 ... -0.107 +0.5A

+79

+99

-0207 ± 2.0 +082 ± 2.0
-0206 +050
+083

44827 1894.8 0209 L 5 42 518.05 1890.7

-0207 +083 -486

02.91

BB

1.143
45,970

26,539

18,585

45,132
150

211

419

69.57

44388

06.57

+13

401

106
-864

59.55

89.02

1839.12
460

59.59

13.34
86.7

2.12
0.379

1434.22

58.50

59.22
+ 3.69



174
1000.0000
000.0000
000.0000
000.0000
000.0000

5850

14 15.0 -07 16 .

74

68521

(38)

4080-231

652 852

2168-231

1.46 10.8 359 652 9130

205 514-276 646.9

2070

231

2117

2410

91

.A. : 14.250
EC. : -7.300
.A. : 270.000
EC. : -231.000
ANCE : 2.170
LUS : 27
DEL. : -14.000

(U) : -0.688
(U) : 0.411
(U) : -0.598
DU : %-1323.890
U : -27.596

(V) : 0.648
(V) : 0.718
(V) : -0.253
DV : 36.347
V : 4.527

(W) : -0.325
(W) : 0.561
(W) : 0.761
DW : %-1027.779
W : -38.571

91

48 ✓ 7/4

-40°5'45"

14 36.2 -60 38

-22.22

2 cam

34 283

.7816

-3.606 + 705 66

794

-3.601

+ 705 483

49376 + 7154

-3.603 + 706

36304 + 7154

-240

444

222

92

14.800
-88.250
-7487.000
15.000
-4.400
1
-23.500
EL. :
US :
ACE :
ED. :
A. :
EC. :
A. :

-8.930
-8.287
-8.217
800

.A. : 14.600
EC. : -60.650
.A. : % -7407.000
EC. : 715.000
NCE : -4.490
LUS : 1
EL. : -22.200

U) : -0.636
U) : -0.287
U) : -0.716
U) : 0073.333

47.6
+12.5
-21.5

128582 14 35.9 -46 22 F8 TR -2

C.10.1
4.15

32 48
-0198 -226
-0194 -222

25 22 -9
-2016 -202 -215

HR5457
GC19728

6.06 + 51 + 02 <

3.05
-12.0

.326 .175 .469 2.620(3) 9145.1
328

[207] 234 +5

[67] 404 + 180
+85

2.20 + 28.7 - 22.0 - 163

+30.5

+706 -1064 -497
356
1016

3.16 +39 -35 -24

2222
67
69

86
99

2627

2627

17531

1916

20

93



5452.800*

14.000*

33.900*

-45.000*

-22.000*

-3.202*

-0.218*

3.050*

3.0
39.0

43.736

-12.000

3.714

-3.765

33.265

-1.088

-0.608

-0181#5.6 -217±3.7
-207 -220

128582 14 35.9 -46 22 6.2 dff

-11.8 3 ~~rest~~
-12.9±0.5 C, (4)
-10 d m.c.
-12.0

6.08 +0.48 F8.7E-D
6.08 +0.52 0.00 U BS

53.469 1406.5 -46 21 58.18 1898.8

11.11
47.07

34.5

787

256

54. 15.113

38.580

53.493

1.8312

10.82

541

715

22.94

-81.82

541.74

53.63

53.449

9.27

1426.23

41.

42

136.4

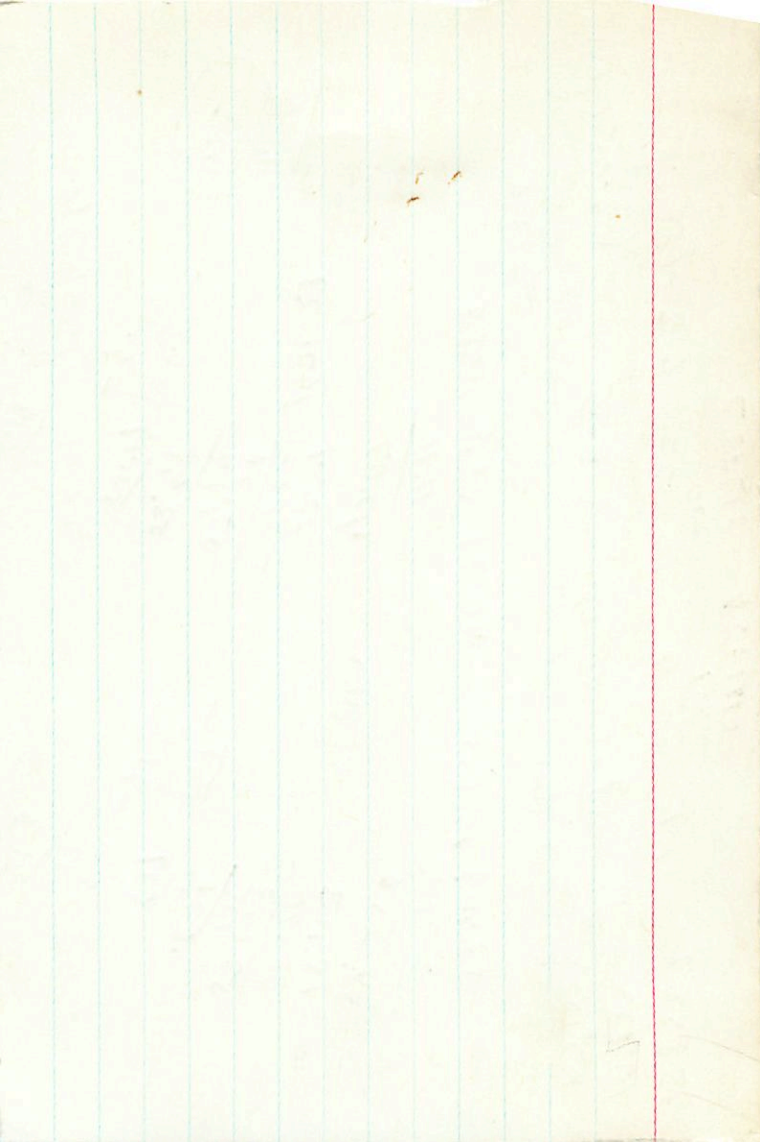
56.34

9.27

59.90 1955.36

-20.18

53.280
263



340 283

128620/1

14 36.2 -60 38

day -24.6a

19728

498 414

dns -20.7a

8579

~~-4886 +716~~

PR

PR

49354 +7154

+7120 F104

36304 +7154

48611

22.2

36618 +7154

1.35

-7407

715

415

22.2

94

565.
611.-
188'5

1260



Faint, illegible text or markings on the paper, possibly bleed-through from the reverse side. The text is arranged in several lines and is difficult to decipher due to its low contrast and the texture of the paper.

~~128620.000*~~

14.000*

36.200*

-60.000*

-38.000*

-3.612*

0.715*

-4.350*

1.349

1.333

-22.200

9.908

7.717

R.A. : 14.800
 DEC. : -60.650
 R.A. : % -7407.000
 DEC. : 715.000
 ANCE : -4.500
 ULUS : 1
 VEL. : -22.200

(U) : -0.636
 (U) : -0.287
 (U) : -0.716
 DU : 9973.333
 U : 20.455

1 (V) : 0.660
 2 (V) : 0.278
 3 (V) : -0.690
 DU : % -10415.050
 U : 2.378

1 (M) : -0.400
 2 (M) : 0.917
 3 (M) : -0.013
 DU : 9982.984
 M : 12.84

04

962

14 33.5 -67 43

-30.0(4) 65-

128020

+04

46 112
40 0 67
40 4 57

6.03 +50 (1.60) F8U

14.55

6419678

43246

448
1.55 +555

-67.7

-0638 ± 6.4 -277 41.49 1888.1

-277

4323

32.450 1892.7

~~0623~~

-277

-273

3.656

0625 -23

17.70

1.855

3610

-19 +9

23.79

-30.0

26.853

0616 -274

1.05 1924.5

6.568

35.62

-0620 -283

42

-350

-0685 -277

33.133 -2.2

36.69

144-3518

654

31.225 47.00

351

4417

49 (10.34) -27

4727

-354 -273

076

98



14.550
-67.700
-933.000
-273.000
1.850
23
-30.000

-0.644
-0.365
-0.672
1553.020
56.577

0.659
0.182
-0.730
-1341.510
-9.550

JB

-0.989
0.910

006-
770
078+
468-
121
1455

078+ 468-

14 343 12 06

HP 5/5

96

Handwritten notes on a piece of paper, including the number 157 and the number 130.

157

130

18x

42.880
2665.830
0.884
0.017
-0.389

18-

-33.606
-1525.634
-0.262
-0.700

Q309

H0129980

$$\beta \quad \delta - \gamma \quad [m_1] \quad [c_1]$$

$$2.612 \quad +378 \quad +286 \quad +337$$

Hydro

$$\frac{+268}{-0.13} \quad \Delta 1$$

$$\frac{269}{+0.65} \times 16.3 = 1.30 = 3.50 \quad M_V$$

$$\rho_{\text{Earth}} = 6.25 \times 10^{-2}$$

$$\rho_{\text{C}} = 30.4 \times 10^{-2}$$

$$\rho_{\text{P}} = 49.5 \times 10^{-5}$$

$$\pi^2 =$$

$$\left[\begin{array}{r} 9561 \quad 6474 \quad 1222 \\ 1951 \\ -2931 \quad -7622 \\ 0545 \end{array} \right]$$

143546 307.0 0.24 84

5935 2720 0.22 2B

143647 314.2 0.24 4B

7832 160.1 0.241

143240 321.6 0.30 4B

8048 145.2 0.175

143844 328.6 0.28 4B

143444 332.5 0.24 3B

144041 354.3 0.23 3B

~~144543 378 0.22~~

144447 355.8 0.34 2B

145147 151.2 0.312 24 dust

145242 165.2 0.260 54 "

145347 175.8 0.204 4B "

131922/6

14 545

21 120

8958

~~19557~~
1544

23''

405431 - 1.7340

01110

1.0392 - 1.7340

11114

1734

1.00

158



97

97

R.A. : 11 57

ST
00

q1
q2
q3

q1
q2
q3

q1 (W
q2 (W
q3 (W
dl
W

98



550 3. 00 00 *

000 *

132375 14 56.3 -04 47

dfc-25

HRS 583 132375
201587
ADS 9457 9687
813-9" n

6.0

-0241±3.6
-0237 -112

-360-10360

-354-0414

-358-100

16.225

1.058

17.283

1906.1 -4 47

20.05

+4271908.5

15.78

18.03 1934.74

2.05

20.08

1.01

19.07

27
14.00

18.47

14

18.33

9A128)

100.15)

5-7.870

18.715

16.532

6.174

6.14

16.627

0

280

41

620

-663

814

34.1

25.6

1733

18.66

-2.88

1933.4

9700A
10/15

~~23 374 405 418 424~~

5723

15 220 10 05

1370520

10045-157

2 bit

1006-117

8501-6019 7/103
1058
15267 → 990 6380

13.25 : R.A.
 58.75 : DEC.
 -194.88 : PM. R.A.
 58.88 : PM. DEC.
 1.98 : DISTANCE
 24 : MODULUS
 -11.80 : RAD. VEL.

-0.78 : p1 (U)
 0.83 : p2 (U)
 0.18 : p3 (U)
 0.19.87 : qb
 13.84 : U

0.81 : p1 (V)
 0.73 : p2 (V)
 0.41 : p3 (V)
 -178.33 : qb
 -8.84 : V

-8.12 : p1 (W)
 -0.38 : p2 (W)
 0.88 : p3 (W)
 7.31 : qb
 -18.85 : W

R.A. : 13.650
DEC. : 50.750
PM. R.A. : -194.000
PM. DEC. : 58.000
DISTANCE : 1.900
MODULUS : 24
RAD. VEL. : -11.600

q1 (U) : -0.765
q2 (U) : 0.636
q3 (U) : 0.105
dU : 619.671
U : 13.649

q1 (V) : 0.615
q2 (V) : 0.672
q3 (V) : 0.413
dV : -173.323
V : -8.946

85
q1 (W) : -0.192
q2 (W) : -0.380
q3 (W) : 0.905
dW : 7.313
W : -10.320

13 44.5 + 6 34

HR5183

6.35

+0.61

2

20

dgz

~~[-0.022]~~ (+4.8)

10.05

+1.20

2

20

NS

485

+8.5

3 per

40

121384.000*

13.000*

53.200*

-54.000*

-27.000*

-0.040*

-0.217*

2.300*

28.840

4.600

0.246

-0.668

4 0

4.024

-0.380

-0.734

-18 -8

-14.346

89

-0.943

0.122

-36 -11

-26.628

124553

14 11.7 -05 43

1/F-33.1W(3)

6C19209

6.37 +0.58 +0.12 2,181

43231

-28.9 25A

-503837

6.37 +0.59 +0.16 305

48329

277 188 +29 2624 377

+54 -12 +4 -0.25

-0207 +080 +082

-309 +082 66

+79 -24 +9 .020

-309

+99 -35 +21 .015

[309 +086]

14.2

-5.7

-309

+86

2.7

33.1

(17 11 4 (8))

-0207 + 2.0
 +082 ± 2.0
 -0206
 +080
 +083
 1894.8 - 0209 L 5 42 578.05 1890.7

44827
1.143
 45,970

211

-0207 + 083

-486
02.91

58.27 1434.22

B

26.539
 18.585
45.124

156
 156

13.34

59.59
 59.59

36.7

59.02 1434.12

460

45.047
 1055
106
 -864

44388

69.57

86.57

+ 13

401

73

58.90
 59.22
+ 3.69

97

R.A. : 14.900
DEC. : -21.200
R.A. : 1.114
DEC. : -1.734
DISTANCE : -1.000
MODULUS : 6
VEL. : 29.100

q1 (U) : -0.587
q2 (U) : 0.216
q3 (U) : -0.780
dU : -4.665
U : -22.735

q1 (V) : 0.666
q2 (V) : 0.677
q3 (V) : -0.313
dV : -2.287
V : -9.137

q1 (W) : -0.461
q2 (W) : 0.704
q3 (W) : 0.541
dW : -8.050
W : 15.699

1025

132375 14 56.3 -4 47 dF6

HR5583 4.88 +51 +03
6.09 +50 +04 3492

GC20158 1336 .170 .428 ② 500 2.646 ④
341 $\frac{-5}{0} 66 + 0 a +$

-02390 -1075 $\frac{+32}{425}$
11585 -1080
3585 -1080
-356-105 -28.8

[m] 231 +13

[4] 361 +58
464
2.50 +44.3 -43.7 -3.6

+769 -1476 +534

13.14



98