

4328

90700

327 276

11 055 -29 574

11.2

554400  
309

1390 -101 Candy

429 630 457

507-101

288 120

657 389 176 819  
657 398 163 325

1427

585

82

131

460

145

11.2

11

321

125

97343 11 09.6 -25 52- 60 +57.1 354

GC15342 (320)

705458300313 (1)

705 40296324 2.510 (5)

456 33.412 1895.4

-1.104

5=00  
7.06 +0.76 +0.38 3 BS

+0204±7.3 -053±7.3

-062 48.7018945

ACT

R.A. : 10.150  
DEC. : -25.900  
R.A. : 303.000  
DEC. : -69.000  
TANCE : 1.750  
DULUS : 22  
VEL. : 57.100

1 (U) : -0.804  
2 (U) : 0.587  
3 (U) : 0.101  
dU : % -1230.034  
U : -21.769

11 (V) : 0.169  
12 (V) : 0.388  
13 (V) : -0.906  
dV : 91.686  
V : -49.687

11 (W) : 0.571  
12 (W) : 0.711  
13 (W) : 0.411  
dW : 504.744  
W : 34.755

126

97320

-64.636

11 0 3 5 - 6 5 0 5

F3I(LW)

+34.02

5.02

8.17

~~336~~ 338 079 300

21617 (3) ~~Blum~~

~~336~~ 051 800

can

1.261

250M 102

~~816~~ 4.04 67

816 272768 -500

MSM

H.H. 67

808

175 -220

416

1111

67

1.27

50.08

13.79  
5.17  
4.16

acc

3.17

+540

22

R.A. : 11.150  
DEC. : -65.150  
R.A. : 416.000  
DEC. : -220.000  
DISTANCE : 3.170  
MODULUS : 43  
VEL. : 54.000

1 (U) : -0.866  
2 (U) : 0.319  
3 (U) : -0.385  
dU : % -1049.974  
U : -66.009

1 (V) : 0.330  
2 (V) : -0.213  
3 (V) : -0.919  
dV : 496.356  
V : -28.277

1 (W) : 0.375  
2 (W) : 0.924  
3 (W) : -0.079  
dW : -652.134  
W : -32.366

127

98220

11 15.2 -33 16

+16.7 ± 0.75 (5)

G-615529

6.85 +0.45 G010 -E

6.85 328 158 382 2635 (3)

72624

6.85 327 160 382 (1)

-3207996

~~3283~~ 055 445 2642

+083 -327 (9)

1098

G<sub>0</sub> 386 +4.16  
x 14  
4.27

+082 -341 (9)

+082 -332

Landmark

0064 -330

-54 -33 -17 .020

080 -336

96

-336

2.58

+16.9

16 ± 12 (17)



194-981 -549 836 +882-332 -46.7 182-9-1.317 ✓  
-016-035-080-179 772 -545 +110-14 +3 61

+24 -24 -75

020

-54 -33 -17

+0066+6.4 -322±5.2  
+0057 -348

(25)

98220 11 15.2 -33 16 60TB-D +16.7±0.7

6.85 +48 60TB-D +18.148±

6.85 +51 -01985

13.521 19083 -33 16 8.36 1805.3

-275  
246  
246  
2763  
53.74

34.1

50.61 1928.55

-11.08

84.77

13.69  
13.29  
0.64

14.93  
12.90

37.1

183 + 12.90

1954.22

11.21

-22  
11.46

8883

13.442

196

368

15.524  
515

128



48281 11 15.8 -04 47 265 +10.18 W/S

GC15546 7.32 +0.73 +0.27 685 R

W6923 7.24 +0.75 +0.30 385 S = .03

72627 7.27 45.9 254 288 (1)

-403049 436 260

448 255

-87 11 +31 .041

1.45

9531 15387

308 228

111

447 326 417 201

844

12 41

996-148

1.014

+791 -149 GC  
+78359 -16659 Y  
+790 =150

44M(6)  
62Y(7)  
38C(17)  
4F34

+0529 ± 3.3  
 +0532  
 -149 ± 3.0  
 -152

62

46.667 1901.7 -4 27 29.99 1897.6

$$\frac{-2.555}{44.112}$$

$$\frac{+7.81}{22.18}$$

$$\frac{46.137}{116}$$

36.6

$$\frac{28.79}{+24} 1939.89$$

$$29.503$$

$$\frac{46.060}{+1.948}$$

$$28.505 1933.60$$

$$\frac{38.13}{40.7}$$

$$\frac{16.282}{5}$$

$$+1.948$$

$$\frac{27.79}{-23}$$

$$\frac{45.785}{794}$$

$$\frac{28.02}{-115}$$

$$\frac{28.38}{-6.20}$$

$$15.728$$

$$\frac{29.49}{11.95}$$

$$191.59$$

$$\frac{20.516}{4}$$

$$\frac{16.63}{16.63}$$

$$\frac{46.389}{243}$$

$$\frac{26.54}{11.73}$$

$$28.76$$

$$\frac{46.1}{236}$$

$$\frac{26.13}{+3}$$

$$28.76$$

W

11. 256  
 14. 888  
 793. 888  
 - 158. 888  
 1. 458  
 19  
 11. 888

1500

2290

- 8. 869  
 8. 491  
 8. 864  
 - 3683. 993  
 - 69. 571

82

8. 346  
 8. 694  
 - 8. 631  
 888. 774  
 8. 668

411

8. 354  
 8. 527  
 8. 773  
 951. 539  
 27. 854

-0228 ± 1.5  
-0225

-196 ± 1.4  
-199

8860  
100180 11 29.2 +14 39 6.2 d17 -4.28

15811  
7016 10.109 1898.0 +14 38 35.30 1892.0 27.2

4487  
4185196 1.186  
11,295

32 ± 5  
10.493  
505  
868  
434  
-961  
38.2

38.37 1933.4  
38.33

11.5  
4965

10.354  
303

37.29 1938.66

-337  
-192

0226 -1978  
328

236  
36.2  
44.2

1571  
37.96

1.8  
-7.2

0225 -190

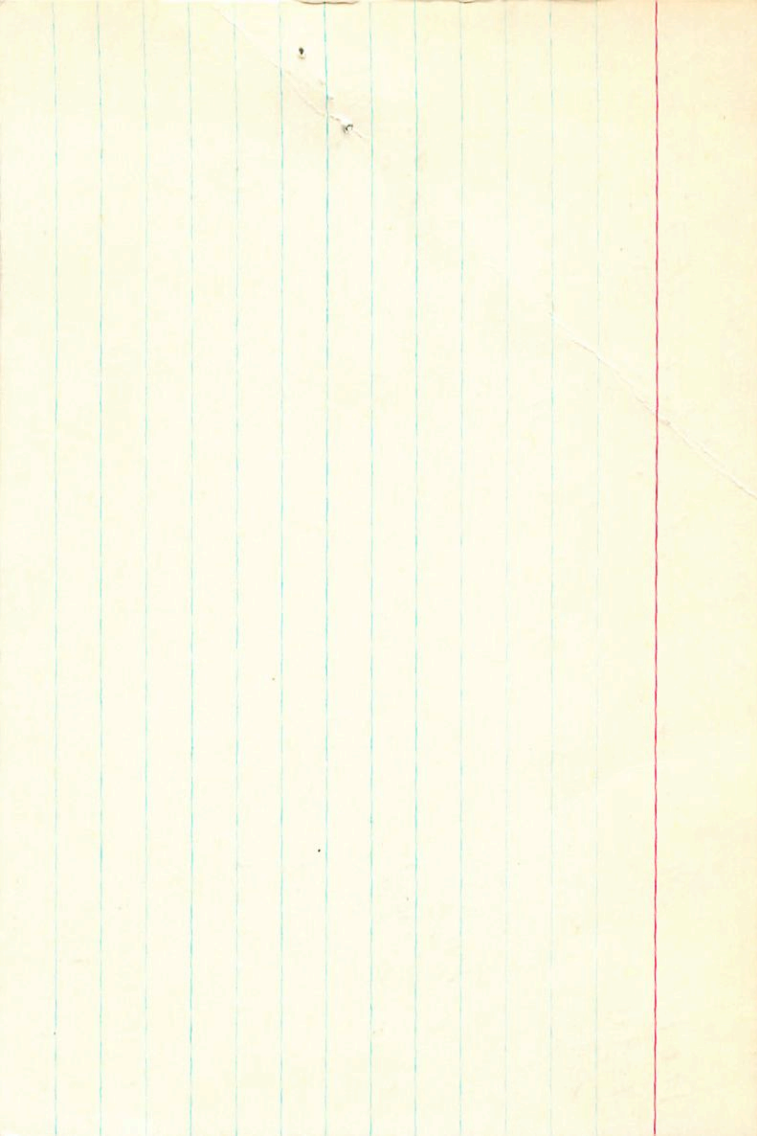
-196

0227 -190

-328

0226 -192





100180 11 25.2 +14 39 dF7

HR4437  
GC15811  
88 Jw

6.34 +57 +7 299  
368 152 ~~44200~~  
6.27 373 174 3536

367 181 1332 2506-2.559  
367 181 352 576+

[21] 254 +13  
[21] 259-21

15" 9.22 1.14 1.03 299

120  
335  
90 4429  
16  
49

2.30 +25.9 -37.0 -26.4 -0.27 -7.2  
+938 -1371 -682 -195

130



1. 1000  
2. 1000  
3. 1000  
4. 1000  
5. 1000  
6. 1000  
7. 1000  
8. 1000  
9. 1000  
10. 1000



11.258  
R.A. 1.580  
DEC 1901.800  
M. R. 1.428.000  
DEC 1.048  
DISTANCE  
MILES 19.38  
C. VEC  
-0.202  
0.101  
0.604  
0.161  
0.107  
U  
0.246  
0.193  
-0.131  
0.88.412  
0.128

R.A. : 11.250  
DEC. : -4.800  
M. R.A. : 801.000  
M. DEC. : -148.000  
DISTANCE : 1.960  
MODULUS : 25  
D. VEL. : 10.100

q1 (U) : -0.869  
q2 (U) : 0.491  
q3 (U) : 0.064  
dU : % -3632.181  
U : -88.927

q1 (V) : 0.346  
q2 (V) : 0.694  
q3 (V) : -0.631  
dV : 820.412  
V : 12.854

160446

15854

7032

-0071 ± 7.1  
-0083  
-146 ± 9.5  
-227

11 31.3 465 31

7.2 dFS -30.98

16.451 1904.8

465 31 19.56 1809.0

$\frac{321}{772}$

420247 138 306 14074 8.23

$\frac{27.79}{}$

318  
6216

16.4128

$\frac{10.04}{50.2}$   
 $\frac{50}{70}$

19.47 1944.75  
-12  
19.35

7495  
37.5

4424  
 $\frac{450}{6}$

16.53  
 $\frac{54}{84}$

32.7

22.9 1930.2

$\frac{22.50}{}$

29.5

322.2

$\frac{42.15}{}$

21.08  
6.71

1080 - 212  
1050 - 212

120  
242  
244  
-30.9



131

.A. : 11.500  
EC. : 65.500  
.A. : -120.000  
EC. : -212.000  
NCE : 2.640  
LUS : 34  
EL. : -30.900

(U) : -0.874  
(U) : 0.157  
(U) : 0.460  
dU : 48.102  
U : -12.582

(V) : 0.382  
(V) : 0.807  
(V) : 0.451  
dV : -900.878  
V : -44.309

(W) : 0.300  
(W) : -0.570  
(W) : 0.765  
dW : 501.524  
W : -6.731

131

100563 11 318 +3 20 DFS

(43) 44

HR4455

PC15867

89 Jan

5.76 +47 -1 C

297 172 433 267 (43)

503

60426

+395

387

1302 .169 .419 @SAC 2.661

[m] 223 +5 +10

[k] 359 -3

25pa +13.2 20.0 -93

+520 -741 -477

" -183

" -108

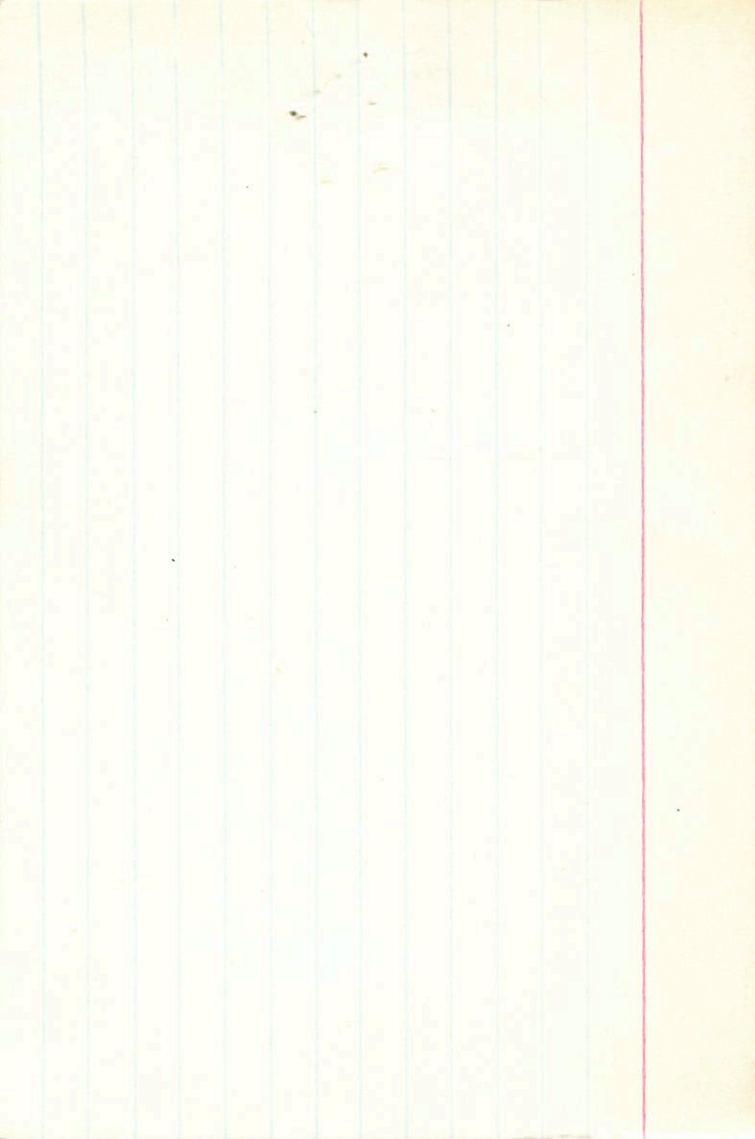
0120 -104

(150 -104)

(5) C+

Confident

-180  
-1079  
1.87  
29.0



14R

4455

11 378 +0320

+32

-183 -108

25P.

-0124 -113 N30

-0122 -108 GG →

-0123 -110

+1156

222

-874 440 077

382 976 -500

200 408 863

2559

13

+7706 -2503

-3368 -4046

-2645 -2127

5203 +130 +0.2

-7414 -18.5 -1.5

-4772 -11.9 +26

+13.2

-20.0

-9.3

132



R.A. : 11.500  
DEC. : 3.350  
PM. R.A. : -180.000  
PM. DEC. : -104.000  
DISTANCE : 1.890  
MODULUS : 24  
RAD. VEL. : 7.300

q1 (U) : -0.874  
q2 (U) : 0.480  
q3 (U) : 0.076  
dU : 507.864  
U : 12.679



922 11 31.6 -48 32 +194(4)65

100555

6-615864 60304

8.16 +73 (1.81) 6.54

42677

575 +78 8.17 450 251 253

317 32

30 C(6)

-0246±170 -150±17.0

323207 15049

29.02 19049

-0

121-121

141

141

141

141

-1236 -142 CR

121-121

133

11.500  
-48.528  
-411.888  
121.888  
2.920  
19.400

-8.870  
8.330  
-61.531  
823.128  
26.88

8.383  
8.883  
-0.828  
876.278  
321.321

8.388  
8.388

R.A. : 11.500  
DEC. : -48.550  
R.A. : -411.000  
DEC. : -121.000  
ANCE : 2.920  
ULUS : 38  
VEL. : 19.400

(U) : -0.874  
(U) : 0.356  
(U) : -0.331  
dU : 928.158  
U : 29.001

1 (V) : 0.382  
2 (V) : 0.083  
3 (V) : -0.920  
dV : -540.270  
V : -38.586

1 (W) : 0.300  
2 (W) : 0.931  
3 (W) : 0.931

2678

old

100623 11 321 -32 34 100Z

12678

$\pi(N)$

5.97 70.90 +0.325 (2)

$m(\pm)$   
+5.44  
5.66  
+40

5.34 +0.35 (4)

120  
-282

~~100623~~

$\Delta(B-v)$  +0.17

$C_0$  233

10530 +827

$\Delta(N-O)$  +0.455

+5.81

100623

-798  
827

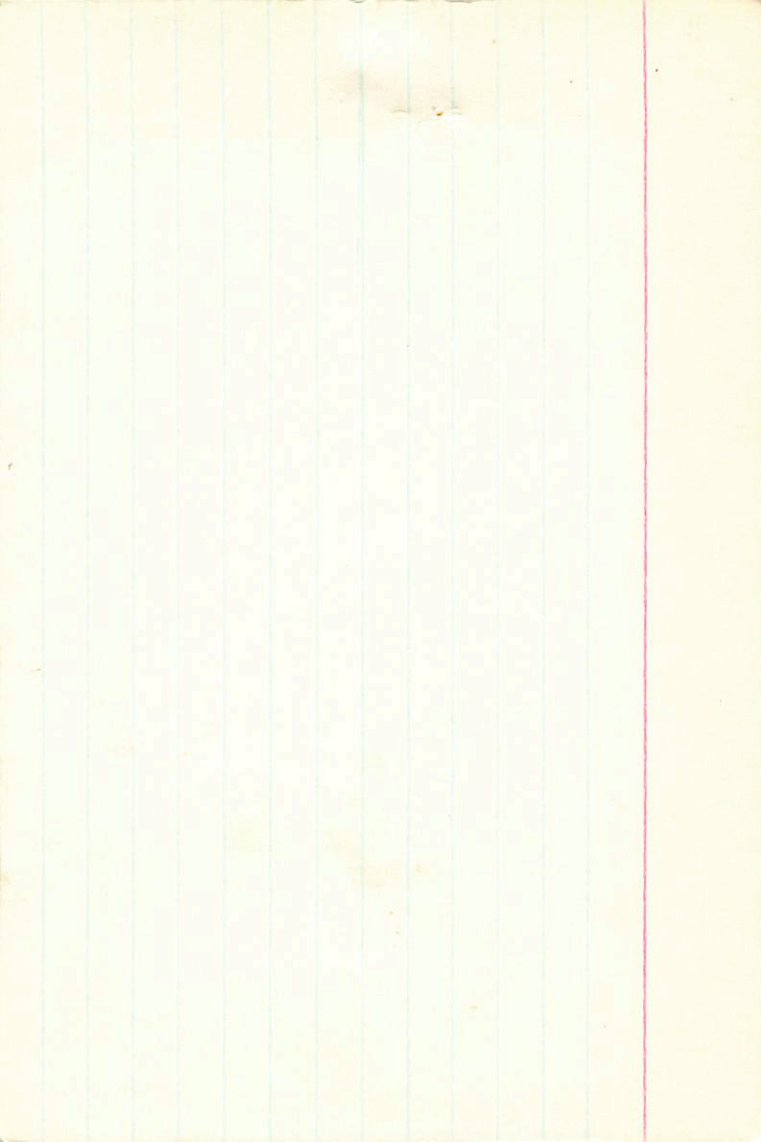
$\frac{741}{6.22}$

$\mu$   $\nu$   $w$

+12.4 +20.2 +8.9

+45 0 +23

2678  
-0.679 +0.819



292  
97  
94

4458

100623 11 32.1 -32 34 6.1 d/c2 -23.30

15873 5.97+0.80(1.59) NOV -21.8 to .49(10)

7038 -0535'' +819 N30 -204 411 814

15 15 -0536 ±3.8 +819 ±3.46c → N30 370 330 234 8.0km

15 15 -0537 +819 N30+ 4820

15 15 -22.5 #6786 #450+820 22.5 5.58 476 280 295 234 234 241 241 238

15 15 -0535 +822 Sky 0535 0535

15 15 -0535 +824 0535 0535

15 15 -6745 -6745 +824

ME 55h 10S

0.94 (11) 1990



134



Basis v =

A05825010  
101177  
15476  
7079

11 36.1 745 23 6.5 del -17.5a  
-0504 ± 3.2 + 018 ± 2.5  
-0554 + 011

7.352 1893.8 T 45 23 6.79 18503  
3.170  
10.522  
48.23  
20.552  
8.782  
-1.0  
6.681  
8.106  
182.8  
8.51

16.619  
8 (max) speed  
10.522  
48.23  
20.552  
8.782  
-1.0  
6.681  
8.106  
182.8  
8.51

7.352 1893.8 T 45 23 6.79 18503  
3.170  
10.522  
48.23  
20.552  
8.782  
-1.0  
6.681  
8.106  
182.8  
8.51

16.619  
8 (max) speed  
10.522  
48.23  
20.552  
8.782  
-1.0  
6.681  
8.106  
182.8  
8.51

20.551  
8.1  
5.92

1530.2  
8.1  
5.92

1530.2  
8.1  
5.92

1530.2  
8.1  
5.92

1530.2  
8.1  
5.92

L<sub>0</sub> 344 210

-059676.1 -01275.0  
-0541  
1137  
565  
10

6.1521897.5

+45 23 3.50 1894.2

3.129

67

5

9.321

4.17

7.53

4.1 1430.2

21

351

18

1.790

3.92

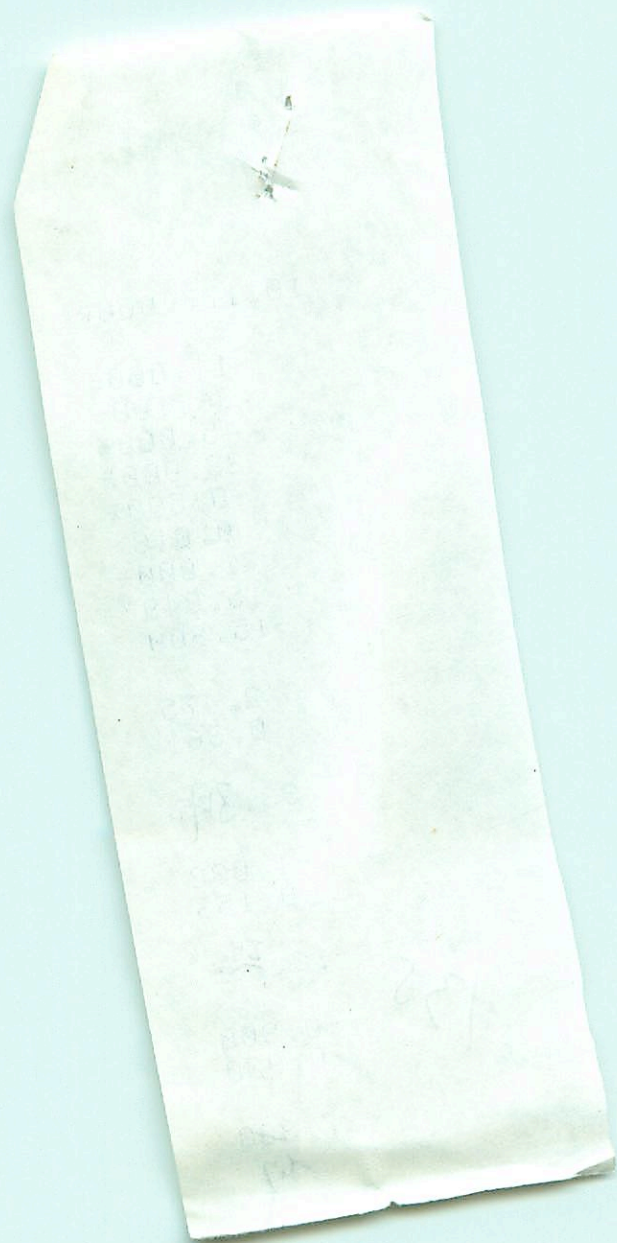
L<sub>0</sub> 17 371 182 310 ①

8.123

543

495

255 ①



101177.000\*

11.000\*

36.100\*

45.000\*

23.000\*

-0.590\*

0.018\*

1.000\*

15.849

-15.900

2.475

0.361

33.345

-1.032

0.153

-18.845

-0.800

0.920

-27.308

135

67

611276  
101501

11 38.4 +34 29 5.5 166 -5.4a-

16035

-000759 -389 N30

330 497

7092

-0010±1.5 -687±1.366 → N30

4496

PKS

-5.1 1912.  
-5.9  
-5.5

~~000759~~

5.51

3810  
-00093

10252

15.46  
10.6  
5.5

182-210

444 270

41

182  
-032  
-5.5

~~000759~~

539 444 544 195  
452 544 270 195

252

136

11. 200  
34. 200  
14. 000  
281. 000  
1. 000  
1. 000  
1. 000

PM. DEC.  
PM. DEC.  
DISTANCE  
11. 200

11.650  
134.500  
-14.000  
-381.320  
-9.500

.....  
R.A.  
REC.  
R.A.  
DEN  
M.  
M.  
D



(.90)

330272 4498 6.34 + 66 (1.72) Cape

101563 11 38.7 -28 ~~55~~ 602 -16.3 252

-124 Cape 4

16044 -0244 + 212 (Camber) +206 ± 4.5  
+210

321 272 39.110 1908.3 -0244 19.18 19067

20 (120) 1.642 40.152 40.152 8.92  
100 (10) 40.152 -0247 +208 20.16  
2 442 40.152 + 1 0 2.810

(-0246 + 208)

442 39.374 2.14 1940.26 278 325  
-2 39.374 + 9 60 + 4.67

2401 372 -323 2.14 1940.26 278 325  
372 3.54 2.19 2.91 2.60  
-321 + 215 406 400 489 360

(-320 + 212)

(342)

406 406 489 360  
406 406 489 360

11

137

11,000  
38,000  
340,000  
212,000  
1,880  
24  
1,000

D. NET  
MODULUS  
STANCE  
DEC.  
P. A.  
DEC.

0.075  
0.030  
0.020  
0.010  
0.010

(U) 10  
(U) 20  
(U) 30  
UB  
U

0.480  
0.200  
0.020  
0.010  
0.010

(U) 10  
(U) 20  
(U) 30  
UB  
U

0.010  
0.010  
0.010  
0.010

01  
02  
03

01  
02  
03

R.A. : 11.650  
DEC. : -28.900  
M. R.A. : -366.000  
M. DEC. : 212.000  
DISTANCE : 1.880  
MODULUS : 24  
AD. VEL. : -14.200

q1 (U) : -0.875  
q2 (U) : 0.430  
q3 (U) : -0.222  
dU : 1761.063  
U : 45.013

q1 (V) : 0.403  
q2 (V) : 0.395  
q3 (V) : -0.825  
dV : -215.882  
V : 6.591

q1 (W) : 0.267  
q2 (W) : 0.812  
q3 (W) : 0.519  
dW : 410.576  
W : 2.391

137

102865  
RC16149  
W7133  
Y2725

383 321 266

4.91 +0.64 - cage 363 309  
652 726

44.1 -40 14 464  
405 560

+15.00  
+15.12(14)  
+16.12(3)  
+13.62(3)  
+14.740.64(14)

-3407301  
404 23 271  
414 259 281  
419 211 279  
484 278 278  
+65 -39 +6  
491 405 -34 255 291  
+61 416 95 +6  
+72 416 95 +6

348 289  
489 408 281  
485 483 281  
488 483 281  
+298  
-102  
-105  
-092

4.90 +0.64 +1.70 2 24  
405 209 281  
489 408 281  
485 483 281  
488 483 281  
+298

15.8  
412 208  
Cape Au -1.538  
-1.538  
-1.532 +398

+18.1 356  
-1.538 7393  
-1.532 +398

+76 -40 +6  
+77 -40 +6  
80 277 495  
186 277 495

-1.540 +400  
-1341 402  
-1340 +393  
-1334  
-1.5324 -402

4150  
Cape Au -1.538  
+0.393

9885 -98073  
6554  
15804  
10549  
210 1449

957(10)  
88C(7)  
2008 9215  
702  
703  
703 +15

495  
495

495  
495

495  
495

495  
495

495  
495

$$\begin{array}{r} 2644 \quad 1909.4 \\ \underline{3122} \\ 13.070 \end{array}$$

$$\begin{array}{r} -1343 \text{ 54.1} \\ -1350 \\ +392 \end{array}$$

-40

B 41.39

1508.8

$$\begin{array}{r} -16.19 \\ \underline{57.58} \end{array}$$

B

$$\begin{array}{r} 9.002 \\ -5 \\ \hline 8997 \end{array}$$

$$\begin{array}{r} 45.30 \\ -10 \\ \hline 45.40 \end{array}$$

$$\begin{array}{r} 96.00 \\ \underline{48.00} \\ 34.2 \end{array}$$

$$\begin{array}{r} 15767 \\ \underline{7894} \\ 15767 \end{array}$$

$$\begin{array}{r} 8444 \\ \underline{42.22} \\ +1536 \end{array}$$

$$\begin{array}{r} 48.00 \\ \underline{34.2} \end{array}$$

$$\begin{array}{r} 15767 \\ \underline{7894} \\ 15767 \end{array}$$

$$\begin{array}{r} 42.22 \\ +1536 \end{array}$$

$$\begin{array}{r} 48.00 \\ \underline{34.2} \end{array}$$

$$\begin{array}{r} 6.770 - 5.186 \\ \hline 1.584 \end{array}$$

$$\begin{array}{r} 38.71 \\ -33 \\ \hline 1956.43 \end{array}$$

38.4

$$\begin{array}{r} 45.40 \\ \underline{45.40} \end{array}$$

$$\begin{array}{r} 96.00 \\ \underline{48.00} \\ 34.2 \end{array}$$

$$\begin{array}{r} 8444 \\ \underline{42.22} \\ +1536 \end{array}$$

$$\begin{array}{r} 48.00 \\ \underline{34.2} \end{array}$$

$$\begin{array}{r} 42.22 \\ +1536 \end{array}$$

$$\begin{array}{r} 48.00 \\ \underline{34.2} \end{array}$$

$$\begin{array}{r} 42.22 \\ +1536 \end{array}$$

$$\begin{array}{r} 48.00 \\ \underline{34.2} \end{array}$$

$$\begin{array}{r} 38.71 \\ -33 \\ \hline 1956.43 \end{array}$$

$$\begin{array}{r} 38.71 \\ -33 \\ \hline 1956.43 \end{array}$$

$$\begin{array}{r} 38.71 \\ -33 \\ \hline 1956.43 \end{array}$$

R.A. 11.758  
DEC. 48.528  
R.A. 2008.888  
DEC. 405.088  
TANCE 4.928  
DULIS 4.928  
VEL. 4.928

1 (U) 4.928  
2 (U) 4.928  
3 (U) 4.928  
4 (U) 4.928  
5 (U) 4.928

6 (U) 4.928  
7 (U) 4.928  
8 (U) 4.928  
9 (U) 4.928  
10 (U) 4.928

11 (U) 4.928  
12 (U) 4.928  
13 (U) 4.928  
14 (U) 4.928  
15 (U) 4.928

R.A. : 11.750  
DEC. : -40.250  
R.A. : % -2008.000  
DEC. : 402.000  
TANCE : -0.320  
DULUS : 9  
VEL. : 15.000

1 (U) : -0.875  
2 (U) : 0.363  
3 (U) : -0.320  
DU : 7049.521  
U : 56.038

1 (V) : 0.417  
2 (V) : 0.232  
3 (V) : -0.879  
DV : % -2589.061  
V : -35.526

q1 (W) : 0.245  
q2 (W) : 0.903  
q3 (W) : 0.354  
DW : -57.754  
W : 4.812

138



R.H. : 11.100  
DEC. : -20.200

DEB. : -330.000  
STANICE : -101.000  
MODULO : 1.350  
VEL. : 32

11.500  
D1 (U) : -4.004  
D2 (U) : 8.488  
D3 (U) : -0.151

1574.308  
D1 (U) : 45.585  
D2 (U) : 8.858  
D3 (U) : 8.004

8.858  
D1 (U) : 24.308  
D2 (U) : 8.858

D1  
D2

R.A. : 11.100  
DEC. : -29.900  
R.A. : -585.000  
DEC. : -131.000  
STANCE : 1.950  
MODULUS : 25  
VEL. : 11.200

q1 (U) : -0.864  
q2 (U) : 0.488  
q3 (U) : -0.121  
dU : 1774.395  
U : 42.202

q1 (V) : 0.323  
q2 (V) : 0.354  
q3 (V) : -0.878  
dV : -996.088  
V : -34.281

q1 (W) :  
q2 (W) :

125

97343 11 09.6 -25 52 60 +57.1 354

GC15392 (320)

2.05458300313 (1)

705 460 296 324 2.513 (5)

456 33.412 1895.4

-1.104  
32.308

19.810

13.220

33.031

031  
+  
839

f66(7)

26 200

02026 069

273 64

1.71  
+57.1

5=00

7.06 +0.76 +0.38 3 BS

+0204±7.3 -053±7.3

1895.4 +0190

+0197 -058

4.265 34.57 1434.31

8.42

48.39

-40

+16

48.21

48.70 1894.5

2.54  
45.76

21