

12/14

13 51.6 - 47 53

- 16.0

get by 10

(2.2.15)

222 224 219 217 214 211 208 205 202 199 196 193 190 187 184 181 178 175 172 169 166 163 160 157 154 151 148 145 142 139 136 133 130 127 124 121 118 115 112 109 106 103 100 97 94 91 88 85 82 79 76 73 70 67 64 61 58 55 52 49 46 43 40 37 34 31 28 25 22 19 16 13 10 7 4 1

-0113 -028 8th

1039 8108

Pygmy

-0109 -022

-1096 41

4. [570-011-]

more

13.1.15 19/1/15 20/1/15

12.1

11/4 4/11

12/1

12.1 3.6.15

98

121141

13 51.6 -47 53

-10

18784 -0113 -026 sty 66  
+11 +10  
-0102 = 016

2.18 +0.34 F2E

-1

Hydrolin

33.349 1400.3

-47 53 2.184 1845.7

537  
886

2.12

9779  
2090

412

412

19.72  
56.79 1928.45  
24.50

33.622  
33910.2

437  
3308

8507  
41.5

33.432  
33.585  
33.515  
33.1570

817  
408  
416

21.29  
82  
20.47  
185  
20.40  
-1.20

41.5  
45.8

0113-026 604 1/5 +10  
-0108 -0255 252 +10  
-1044 33.260

1115  
WFF

20.01  
20.91 1986.62  
-33  
19.58

-110 -022

-465-554 - 742 670 -108-035 -16 026 12 -050

-051 012 095-023 -133 507 -10.7 +9 +5 012

-2 +47 +4

+43-18 -4

014

-1 +41 +6

+34 -14 -3

013

+41-14-4

99

1880  
1881  
1882  
1883  
1884  
1885  
1886  
1887  
1888  
1889  
1890  
1891  
1892  
1893  
1894  
1895  
1896  
1897  
1898  
1899  
1900

121141.000\*

13.000\*

51.600\*

-47.000\*

-53.000\*

-0.110\*

-0.022\*

4.650\*

85.114 70.34

-16.000

0.388

-0.672

41 43.795

-0.345

445  
27.4

495  
100

561  
15

515  
-3

4 mt. in. h

-34  
-2  
-5  
-8

1232551  
P2522  
C619041

Pho 41 - 9 05

Ag 148

Quip

PPAT 1000

135005

545 1036 1004 C  
216 177 750 272  
181 918 743 272

196  
480  
W26

220 - 4  
700 121  
1211  
NO6

76 8  
216 8  
918 3

350

9510  
24

9836  
6050  
4894  
88

1400  
1000 1100  
1445 1025

484  
10710

884  
888

104/1011  
-1455  
15511

6004 1007  
1500  
1000  
88

18081 - 18081

817

272

1477

86.34

.987

-362 001

987

10 339

-0096 +009  
+004 +001  
+000 +000

-00972 +00202

113816 9

+0096 +009  
+004 +001  
+000 +000

-14  
00986  
+0051  
+0024

1373 9

2.013 9  
514  
3314

+0099  
+007.5

14566

4.128 9

89.910 33.15

+0097

4.008  
+24  
605

33.04 +6  
33.04 -0099 +0011  
0 +0031

3.705

70.12

33.07

7487

9174 -5588 1422

4.12

46.08

32.45

-1103

0442

0000 00  
0165

3.715

954

33.11

-142-1007

3.41



8491  
BP del

129723

~~15~~ 014  
~~17~~ 38 ~87 57

-15291-0475 1215

182 211 276 2784

098-008

238

84/-81

9408  
-1354

-7743  
-6266 } 1190  
-1084

1201

0074



+2.79

18 3.5 441 56 F0

HR6767

Ge2456

-6E-44 (4)

PA01/13

OSM

+6979 1850

-00209 60200

-00200

-184.170.250 (2) 50

0223  
F015

North  
- 2005/351

22087  
0

~~1~~ 23.66 1552.42

23.24  
- 42

6267  
165ms

18 03.4 +41 56 → 20.0

6.34

184 170 550 2258

1000 + 095

-16

-12.095

9✓

427

20.0

102



R.A.  
DEC.

"  
"  
"

18.050  
41.050  
-18.000  
23.050



90304

000 - 04K  
603-099

17 80.5 + 9.144  
18 20.5 - 63 0.3 A7E - 2.1 ± 1.4

FD 1241

6.14 + 0.20 (1.53)

1.57  
107

GL 25097

-0010 ± 6.9 - 103 ± 4.9

1871

47.066 1900.2 70016 53.35 1894.0

048  
114

+0003 -106  
40018 -102

5.77  
47.58

70004 102

70003 102

+0.012  
1945.7

33.83 192764

24.922  
22.342

52.0  
-32

40.22

47.07  
36  
141

47.264  
263  
5  
258

-4.24

52.0  
53.22

53.61  
10  
53.51

8339 - 6156

5519 - 9999

0.57 70167  
+1.95 14.02 / 1.46  
3890

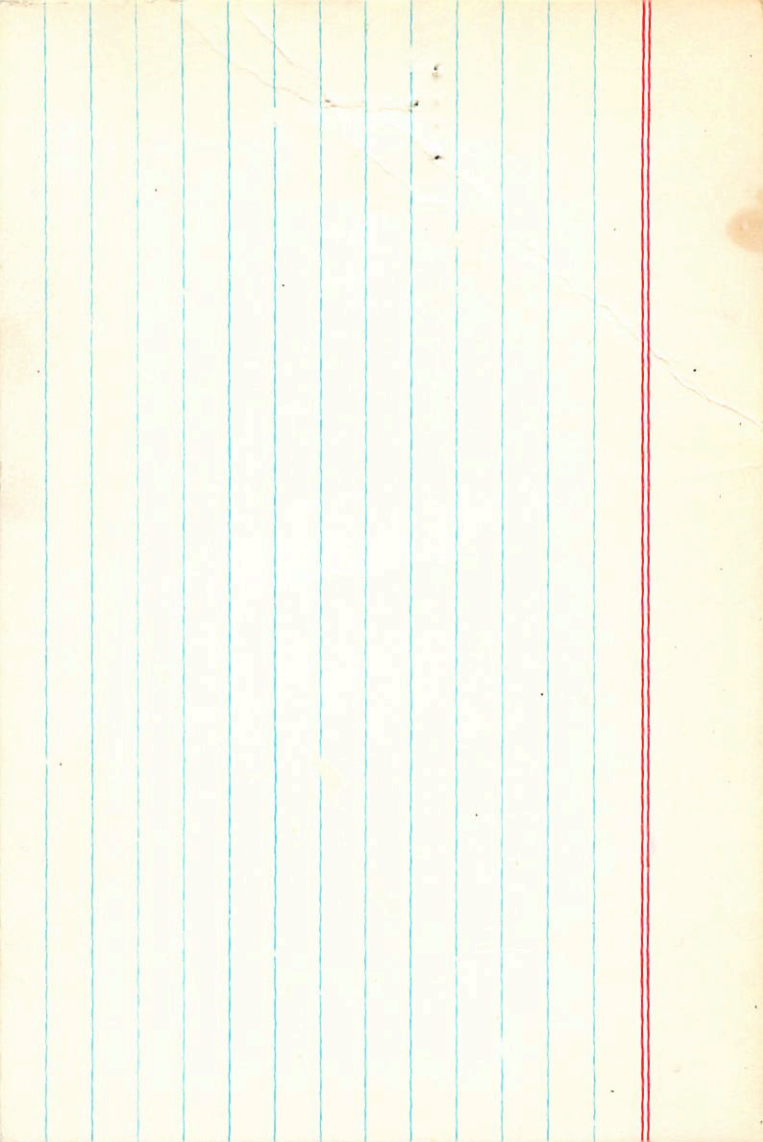
-58 4890

600 - 102

53.21

1820  
2016

0.122  
4.57



16871

18 20.8 -63.03 A2

16870

6.14 + 20 (+0.5) 6

25097

~~138~~ 133 89 / 2.808 3,26,23

136 136 887.22255

612 026 1.224

+13.2

0  
-0.2

474

-2.1

1.57  
1.46

1.62  
1.46

6820

168733

25067

18

19.5

-36

42

AP

5.34

153

R.A. : 18.350  
DEC. : -63.050  
R.A. : 0.000  
DEC. : -102.000  
DISTANCE : 4.740  
MODULUS : 89  
VELOCITY : -21.100

q1 (U) : 0.147  
q2 (U) : -0.550  
q3 (U) : -0.822  
dU : 265.965  
U : 40.942

q1 (V) : 0.449  
q2 (V) : 0.777  
q3 (V) : -0.440  
dV : -375.856  
V : -24.059

q1 (W) : -0.881  
q2 (W) : 0.305  
q3 (W) : -0.361  
dW : -147.472  
W : -5.462

103

-33.18  
-31.07  
-24.28  
-29.6

154-PS  
A98

-23.3  
-23.05  
27.15  
27.15

$\Sigma$  hyp 18 42.7 +39 37

154-PS  
A98  
154-PS  
A98

4.67 +16  $\Delta m = 1.20$

+0.2 +0.56

7.60 +19 = 0.26

-0.02 +0.56  
+0.02 +0.61

102 3" } 25"  
20 2" }

*Example*

$\Delta m$  AB 1.10  
CD 0.24

1009 1000  $G_{n(2)}$   
1009 1000  $G_{n(2)}$

-2426 0710  
2216 0716  
2216 0716

+100 +0.58

50002 7.28  
4801.9

1070 + 0.170  
9190 + 0.170

1078 1078  
1078 1078

7052 450L  
52

522 423 515  
515

10050 + 0.25000  
2190 + 0.170

0607 0607  
0607 0607  
0607 0607

7052 450L  
52

522 423 515  
515

10050 + 0.25000  
2190 + 0.170

0607 0607  
0607 0607  
0607 0607

-953 185 637 771 +010 +056 -22 213  
-29 037 -15 213

010036 002 007 014 150 -22.4 -4 +22 01  
-246 -3 +40 +3

$\boxed{+36 -16 -4}$

009

-2 +43 +8  
 $\boxed{+40 -17 -3}$

0085

-2 +42 +6  
 $\boxed{+40 -15 -2}$

01

-3 +45 +7 0085  
+43-17

-4 +42 +1  
+37-19-4

-4 +44 +4  
 $\boxed{+41 -15 -2}$

009

173592

18 42.7 +39 37

256678

11194

2564

<sup>19</sup>  
-0001 +057<sup>23</sup> N30

+0008 ±1.3 +061 ±1.1  
0000 ±1.3 +066 ±1.3 60 → N30

6.0 A4m -33.17

5.1 A2m -31.07

5.1 A3m -24.28

5.4 A5 -29.5

-29.5

-0.3

-0.5

<sup>19</sup>  
Σ1 +00098 +06100

Σ2 +00002 +0626

+00050 +0618

+00058 +0617

<sup>19 19</sup>  
+00058

+00002

+010 +0605

N30

12  
Applied

Pc = -31.0

7815 1064  
-6816 9943

0618

-0035

-119

0057  
5.30



109

49 25P

7124 15 48.0 + 75 22 H

412-449  
32.2-44.5  
32.2-44.5

175241  
basse  
Part

80528705+04 @ 443

580 2200  
885

PM

019 973 973 - 56

10382 + 114  
-0144 W  
10382 + 114

192  
394  
969  
1363

K28P  
Ca. mark

1010-073.5

18.8  
+73.4  
-23.5  
+73.5

Banks

990 7049  
-1395 9945

085-0746  
0087 0065  
0752  
40524  
65504

10146 + 073.5  
Part

7.5

32 44.95  
085.0  
402 +

105



10/10

10/10

10/10

10/10

10/10

10/10

18.800

75.400

-39.500

73.500

5.000

100

-7.800

75.80

4.5  
7443  
257

0.247

0.935

0.256

313.924

29.394

+22

+23

0.388

-0.338

0.357

-135.987

-20.286

-17

17

-0.888

0.112

0.446

01.006

4.619

43

43

105

677 275 168 513 +00572.9 +049 ± 2.7  
4 274 264 +00588 +049

197039 263 20<sup>1000</sup> 38.3 +15 28 d F 6 -32.58

(67574) 197039 +082 -049 Cct  
15511 28807 +00575 +049  
12 954 +00800 +0525

676 293 177 489 1000 → 587  
15.462 1910.2 +15 27 50.92 1906.1-730 527 10788

-227 10065 +049 8<sup>26 P</sup> 0867  
15.345 10067 +048 (H) 48.77 2.15

15.345 347 770 92 390 0.012 1932.7  
15.448 26.0 14

15.448 6428 9589 1378 50.26 1939.63  
423 385 50.20 36.2

423 385 50.25 30.1  
+150 50.25 +1.48

676 293 177 489 1000 → 587  
15.462 1910.2 +15 27 50.92 1906.1-730 527 10788

-227 10065 +049 8<sup>26 P</sup> 0867  
15.345 10067 +048 (H) 48.77 2.15

15.345 347 770 92 390 0.012 1932.7  
15.448 26.0 14

15.448 6428 9589 1378 50.26 1939.63  
423 385 50.25 30.1  
+150 50.25 +1.48

-771637 267 964 1052+049 -325 013 -9 223  
063 010 052 008 261 254 -31.3 -20+24 016

-4 +42 +5

+39 -17 -2

015

-3 +44 +6

+42 -16 +2

201

+0038±6.7 +03465.6  
+04943

198624 20 48.5 +00400 43 GF2 -25.6  
29671

6.8 +00400 +034 GF2 -25.6  
10.2 +00400 +034 GF2 -25.6

ADS 10355

W 12081

198624  
29671  
12081

31.435 1903.1 +30 43 2288 1899.4

-178  
260  
-172  
26.16

W 12081

+040 +040

31.36 00400 +046

27.7 1929.7

2345 362 0555

-23

+059 +043

27.47

+0037 +042

6.80 +265 +125

078 0074  
600 800  
-0109 4.8

-29 4178

10.5 1000 5.04

198624  
29671  
12081

W 12081



-742671 511 860 4044 +034 -28.6 017-15 137  
036 013 033 011 115 215 -24.6 -16 +15 008

-1445+2

+41-18-5

-3442 0

+37-19-5

004

25

CO (M) 7.000  
CS (M) 7.000  
CT (M) 7.000

CS (M) 7.000  
CT (M) 7.000  
DT (M) 7.000

DT (M) 7.000  
ET (M) 7.000  
FT (M) 7.000

NET 7.000  
TOTAL 7.000

D. VEL. :

10  
0.000

0.000

q1 (U)

q2 (U)

q3 (U)

DU

U

0.634  
0.724  
-0.272  
0.000  
0.000

q1 (V)

q2 (V)

q3 (V)

DV

V

0.065  
0.301  
0.751  
0.000  
0.000

q1 (M)

q2 (M)

q3 (M)

DM

M

-0.771  
0.521  
-0.144  
0.000  
0.000

0974 ~~10/11~~  
19891

20 47.7 + 7

007153 1077 28755876  
41 631186  
AI II

10309188

631186  
-302

+0021 +012 Country

P=10.88 d

~~P=45000~~  
Info 10/11

+031+012

6240

9358

0786 /  
0015  
0332  
0003

~~286~~ 34.7

-841 89.7 5.99

-7814

3524

007 153 1077 2878

Civ.  
Pulkova A/B. Bnt 10.7

32016  
V0 625  
+0.20

-97 39.15  
~~98 39.15~~

J. Shaym 1933

Shaym Si 1933

00516

108



7. 1.

10. 10. 10

10. 10. 10

10. 10. 10

10. 10. 10

-435  
-43  
434  
433

+0117 4183  
124-1133  
44m

7584

1766-1121  
2745

20 483 +43 52  
504 -010 1252  
5.06 +195 +125

158639

29066

113  
+13

108 209 897 128CP 2844

21 125  
+1335

+01172 +1440

1171  
+202

511  
+01121 +1347

2110 +11112  
11443

~~1171~~

165  
+1212

+1275

1171

108-1228 875 2844

112-5412

1171  
+184

m +2.3

176  
130  
380

1556  
1757  
2010

8684  
1588

1171  
1043

2.75

0232-3.15

-240

1/2 1/2  
+160  
0314



1212001  
3362  
1881  
126  
1871

R.A.	:	15.000
DEC.	:	-87.950
PM. R.A.	:	0.000
PM. DEC.	:	0.000
DISTANCE	:	0.000
MODULUS	:	10
RAD. VEL.	:	0.000

q1 (U)	:	-0.570
q2 (U)	:	-0.647
q3 (U)	:	-0.507
du	:	0.000
u	:	0.000

q1 (V)	:	0.667
q2 (V)	:	-0.003
q3 (V)	:	-0.745
dv	:	0.000
v	:	0.000

q1 (W)	:	-0.480
q2 (W)	:	0.763
q3 (W)	:	-0.433
dW	:	0.000
W	:	0.000

101

+2.29

18 3.8 441 56 FO

165045

HR6767

Gearty

-62-44 (4)

PA01/163

SM 50

+6978 WS

-10209  
-10200

+0581  
+0580

.184 .170 .250 (2) 507

-10200

$\frac{1}{19} \sqrt{2}$

0.258 (3) out

0223  
-018-498

14  
164 2

7811 -1210  
9266  
0994  
0060  
+205

7811  
-0602

0138  
430

-209 50/35<sup>20</sup>

22087  
0

~~11~~

23.66

1552.42

-42

23.24