

2090

2357

2506-A

879 607

11.12 1148 1372 - 29 Jan 79

11.15 1144 1363 - 30 Jan 79

11.13 1146 1367

897 602

511 10.40 +0.511 Jan 79

520 10.42 +0.520 Jan 79

10.41 +0.515

9506-191

Rec

926

11.76	<del>24</del>	1202	✓	12179
11.74	-39	1213	-	29 Jan 79
<del>11.73</del>	-36	1198	-	"
11.74	<del>33</del>	1204		
	684	455		

11.14	10399	1 Jan 79
<u>11.23</u>	<u>11385</u>	5 Jan 79
11.21	10392	

2506 2227 55 00 -10 44  
-151 956

12.00 -57 1141 - 29 Jan 74  
12.00 -48 1100 - 17 Feb 74  
12.00 -52 1936

1669

11.69 70.254 Jan 74  
11.79 70.378 5 Jan 74  
11.59 74.368

2506-25

2428

0%

7120.671

12.10 +377 1441 - 25 Jun 74

12.07 +354 1444 - 30 "

12.08 +366 1442 -

1108 671

11.07 +0.742 1424

11.07 +0.744 1424

11.07 +0.743

2490

74%

62-905

620 254

13.13 - 40 993 - 29 June 74

13.11 - 44 1076 - 30 "

13.12 - 54 1070

625 265

12.65 70.255 1 June 74  
12.69 73.765 5 June 74  
 12.67 74.366

2506-8

2355

7190

588 200

13.11 -177 930 - 29 Jan 74

13.13 -180 927 - 31 "

~~13.12 -178 924~~

537 144

12.64 +0.313 9 Jan 81

12.66 +0.308 4 Jan 79

12.68 +0.320 1 Jan 74

12.70 +0.345 -5 Jan 79

12.69 +0.314 3

2500  
-57 2405 P(90) 95

557 320

13.30 -140 1071 - 29 Jun 79

13.25 -90 1000 - 20 Jun 79

13.30 -134 1070 - 17 Jun 79

13.30 -137 1072 (2)

590 301

327 12.81 +0.327 42179

318 12.83 +0.318 42179

12.99 +0.3525 42179

12.82 +0.322

2506-6 2331 9190

543 782

13.18 -125 1018 24 Jan 74

~~13.13 -96 980 20 Jan 74~~

13.14 -121 1068 18 Jan 74

13.16 -123 1043 (2)

555 309

12.22 70345 5 Jan 74

12.69 70343 1 Jan 74

12.70 70344



2506-1 2365 (A/G) = 91

616 980 493

13.27 -102 1237 -

13.21 -71 1168 -

13.20 -92 1268 - 182679

13.22 -66 1231

~~654~~ 476

311 12.75

+0.311 67279

315 12.77

+0.315 16774

12.92

+0.286 5929

12.76

+313

2506-2430

10.89 70.045 9/21



LTT4519/20

12 03.0

-26 19

0.41 226<sup>0</sup>

10.7 F8

13.7 g

W

12.84 +0.83 +0.52

! 31 Jan 65

midale

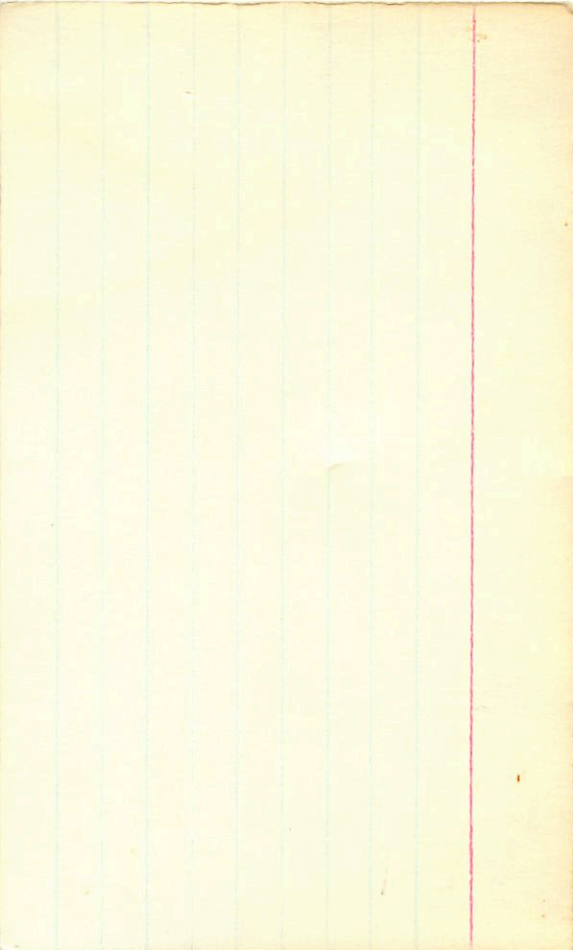
10.34 +0.60 +0.01

31 Jan 65

South

12.54 +0.64 +0.17

31 Jan 65



+1.0

Sept 234

+2.0 → +1.0

↓ V

6-7

M, C,

2.54 + 0.17 + 1.81 + 0.94 = 0.66

C,

6-

V

-520

+090

-032

④

-547

+060

= 0.23

②

-553

+061

-026

③

-521

+047

-18

0

236

-012

-012

236

237

+106

-030

239

-560

+106

-030

239

238

+10

-27

238

238

+10

-27

238

238

+10

-27

238

20 July

238



17 Feb 80

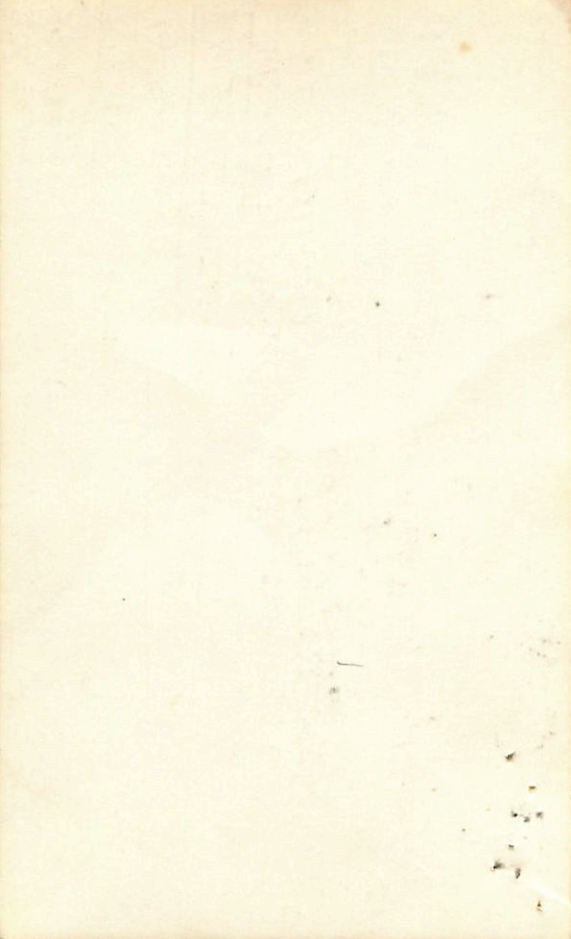
22 Feb 80

+60

V	$\beta$	$\delta - \gamma$	M <sub>1</sub>	C <sub>1</sub>
2.335	+041	-44	+126	-559
2.334	+033	-23	+115	-542
2.339	+025	-32	+104	-534
2.338	+025	-18	+89	-530
2.339	+033	-030	+106	-560
2.332	+039	-020	+054	-570
2.334	000	-016	+043	-459
2.333	+081	-018	+051	-550
2.335	+085	-015	+051	-449

$\beta$	$\delta - \gamma$	M <sub>1</sub>	C <sub>1</sub>	
2.335	+006	-013	+056	-546
2.339	-004	-018	+079	-515
2.337	-026	+049	-464	
2.336	+003	-015	+089	-519
2.334	-035	-012	+070	-513
2.336	-012	-012	+070	-514
2.334	-003	-017	+050	-450
2.335	-007	-015	+051	-449
2.334	-012	-032	+073	-473





~~10:00~~ → 170

v p f-g m, c,

Sig(2) 2.54 + 010 + 026 + 054 - 030

1019

(3) 2.53 + 014 + 021 + 054 - 030

2.54 + 014 + 024 + 054 - 030

8 Jan 81

(AI)

low

-2.35 -0.015

Mar 10 81 -2.32 0.050

-2.31 +0.015

-2.31 +0.003

-2.33 -0.051

-2.32 0.000

-2.32 +0.003

15 Jan

3 Jan

14 Jan 81

11 Jan 81

10 Jan 81

-2.36

+0.005

~~2048 707 35 26 22 184 PIA~~

600 (FD)

$v_1$   $m_1$   $b_1$   $v$   $\rho$

15491 -076 -019 +055 2.21 +039

-078 -020 +058 2.21 +044

-074 -006 +056 2.21

-075 -015 +056 (+055) 2.21 +042 (+048)

4511 -097 -003 +051 2.21 +046

Mar 12 81 -074 -015 +050 2.20 +063

14 April 1 2.31 0.000

2.21 - 0.008

2.22 + 0.013

2.33 - 0.013

2.32 = 0.008

2 April 2.32 - 0.009

10 April 1 2.33 7506 (2)

14 April 2.34 0000

18 April 2.23 + 0.100

19 April 2.33 4005 (2)

2.33 + 0.005 April 19

M2 Venn 11

12.10 -265 +292 +58 09:45 10 Aug 75  
11.76 -423 +795 +255 06:05 29 Aug 75  
11.96 -308 +870 -92 07:30 7 Aug 75  
12.02 -291 857 +196 06:00 9 Aug 75  
12.03 -279 844 +207 06:05 10 "  
12.06 -253 823 +250 05:30 11 "  
12.01 -315 828 +241 01:00 15 Nov 79

M2-69

13.20 + 1.44 + 1.40 (3) 1262 + 0.52 (2)

13.23 + 173 + 1130 - 11 Aug 75

13.24 + 188 + 1169 28 " "

13.18 + 187 1091 6 Aug 75

13.19 + 179 1148 - 8 " "

13.20 + 182 1146 - 9 " "

13.22 + 167 1199

13.21 + 179 + 1149

± 0.2 ± 0.8 ± 0.35

+ 912 + 400

(u.r.p.)

E(4-70) 70%

13.21 + 992 + 400 + 10.52  
13.25 + 900 + 408 + 10.54

13.23 + 946 + 404 + 10.53

.85

+ 415 + 49  
(658)  
[E0/1+] = -1.15

-1.02

255  
552  
82-04 AM1

F.3(1M-0.9AM) to 16

092

= 1.3 ~~X~~ to 16 - 0.52 & [M]

16

104  
54



13.22 + 140 + 140 (2) 12.70 + 254 (3)

M2-79

1156 1108

1319 + 195 + 1152 - 11 July 75

1324 + 142 + 1222 - 29 " "

1323 + 192 + 1031 6 Aug 75

1327 + 150 + 1166 - 8 " "

1326 + 160 + 1209 - 9 " "

1327 + 170 + 1150 - 10 " "

1325 + 168 + 1155

± 03 ± 021 ± 067

0.900 + 408

over

70d

91m4

HD 115 322 13 14 44 +6 41 70 +1.55

90

7.40	+1.57	+1.38	26 Jan 70	+1.445	26 Jan 69	90
7.20	+1.60	+1.53 <sup>11 mm</sup>	5.58	+1.30	15 Oct 69	
7.29	+1.54	+1.52 <sup>3 Apr</sup>		+1.40	3 Apr 69	
7.33	+1.575	+1.49 <sup>4 Apr</sup>	5.42	+1.30	29 Apr 69	
7.45	+1.55	+1.45 <sup>29 Apr</sup>	5.61			
7.28	+1.60	+1.63 <sup>11 mm</sup>	5.49			
7.15	+1.60	+1.63 <sup>28 mm</sup>	5.71	+1.40	27 Jan 70	5.64 +1.355 11 mm
7.13	+1.60	+1.54 <sup>30 mm</sup>	5.80	+1.38	1 Mar 70	5.46 +1.32 27 mm
			5.55	+1.375	4 Apr 70	5.40 +1.36 29 mm
			5.60	+1.38	7 Apr 70	
			5.73	+1.40	12 Apr 70	
			5.84	+1.42	1 mm	

1972

6.92 5.33 1.29 386.14

7.06 + 1.65 11.64 425.07

6.99 5.40 1.29 392.07

7.05 + 1.64 + 1.66 426.03

6.98 5.42 1.29 388.09

7.25 5.58 4.34 441.06

7.05 5.47 1.31 350.03

7.25 5.60 4.34 442.01

443.06 7.12 + 1.57 + 1.59  
444.06 7.18 + 1.62 + 1.59  
445.06 7.23 + 1.59 + 1.59

5.56 4.245 443.72

7.18 + 1.565 + 1.555 249.72

5.67 4.1355 259.72

7.28 + 1.62 11.62 5.9972

5.60 4.1345 269.72

7.31 + 1.55 11.50 21.9972

5.72 4.1385 279.72

7.20 + 1.55 11.545 28.9972

5.72 4.136 289.72

7.15 4.154 4.153 27.9972  
7.09 4.156 4.154 26.9972

5.70 4.1392 299.72  
5.69 4.13923 309.72

3.14

200-211

200-211

1002

2112

200-211

1001

2111

Am @ 5000

1333 + 112

200-211

21304

2112

10-6-9

85 51.

Ortolani S 1940

Barbony B ~~AA~~ 736, 362

Buch E.

Book # 1988 J 2-92, 554  
Barnes & Noble

Sydney

1983. AS 88, 199

✓ 1992 AS 104, 2191

Andersen J 1983 ATASS9, 4071

Widstrom D



Land / 1875 - 1878  
1810 / 1828

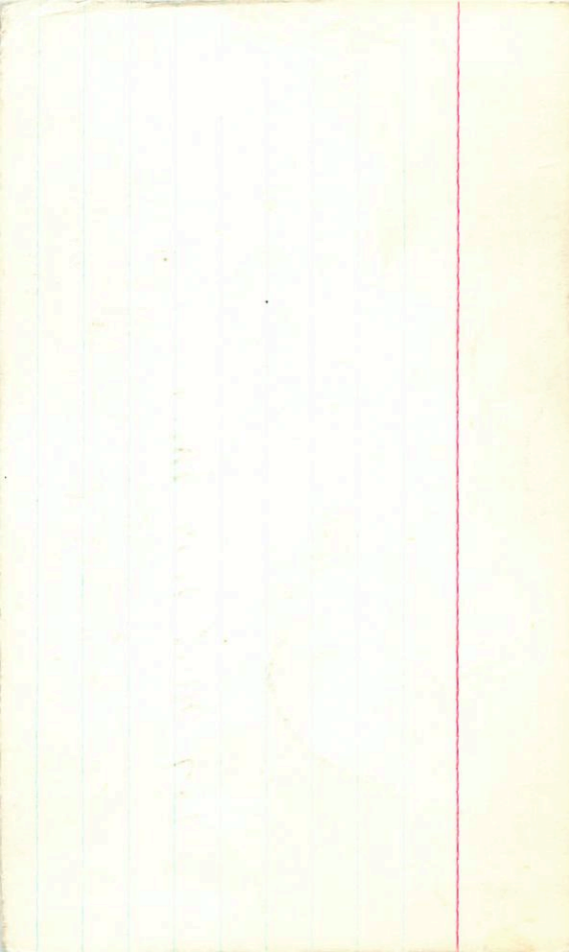
1875 - 1878  
1875 - 1878

1875 - 1878  
1875 - 1878

1875 - 1878

1875 - 1878  
1875 - 1878

1875 - 1878



Wednes

109 5.37 + 1.18 23 May 71

81025 9 21 48 + 7 51 7.25 my

1107 4.84 + 1.64 + 1.75 4/11/71  
4.84 + 1.64 + 1.75 4/11/71

955 6.86 + 1.65 + 1.81 150671 150671 10045.51 + 1.25 01 1477  
5.42 + 1.25 03 Jun 71

1022 6.74 + 1.64 + 1.83 112071 10235.45 + 1.13 12 Mar 71

1025 6.76 + 1.62 + 1.80 147071 10365.48 + 1.15 05 25 Mar 71

1044 6.87 + 1.65 + 1.79 7 Apr 71  
5.40 + 1.12 5  
5.44 + 1.15 5  
5.49 + 1.16 5  
5.50 + 1.15 5  
5.57 + 1.18 5

1057 6.52 + 1.66 + 1.75 15 Apr 71  
5.49 10.50  
5.49 10.50  
5.49 10.50  
5.49 10.50

1083 6.59 + 1.65 + 1.77 11 May 71  
5.50 + 1.15 5  
5.57 + 1.18 5

1086 6.50 + 1.64 + 1.77 14 May 71  
5.50 + 1.15 5  
5.57 + 1.18 5

1094 6.78 + 1.80 + 1.90 24 May 71  
10.50 5.48 + 1.10 14 Apr 71

10  
5/8/9  
An.  
1.10

4265

89 58 00 - 6 18.5

11.8 12.3 8

8566-0612

160

114-25 ✓

2050

(14)

11.25

0.250 (3)

(+)

12.25

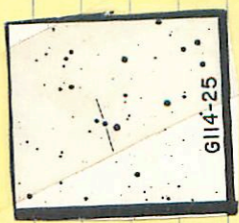
+0.283 42477

0.11

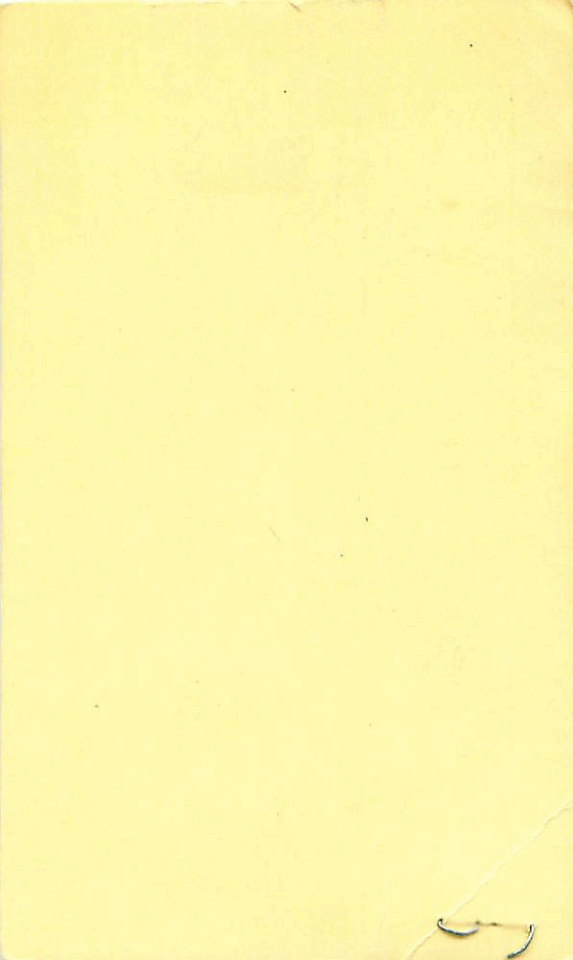
+0.249 20282

AC11

+0.9504



144



433 068 199  
11.58 256

17.5  
17.5

423 1412

1.96 -280 796 -205 (3) 60"  
1.97 -220 747 -200 (3) 70"  
1.96 -277 786 -203 (4)

11.77 +0.225 16.97  
11.80 +0.223 15.997  
11.76 +0.205 21.777  
~~11.62 +0.20 15.26~~  
~~11.75 15.015 (3)~~

11.75 +0.225 (3)



G114-25

Theriotay A. Nutchings J 1965 MN 125/191

Minchner P. 1930 Lick No Bud 18/96 (5)

Buena Vista Farming S 1965 MN 130, 281 (H)

Danforth, W. 1928 Pub Lick also in (L)

Northrop A, Beckman P. and Devernia R <sup>1943</sup> pp 5 137, 824 (S)

Buena Vista Farming P 1969 MN 143, 1 (R)



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Heidelberg No. 32

Prücke W, Schwann, Hans Corbin T. 1951

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Heidelberg No. 313

Andersen J  
Jusscheck M

1954

AA 505, 409

Tjin A Hjin H.R

Thé, P 1989  
AA 505, 1

Andersen J

Nordstun B  
Fiske engellen u  
Jusscheck omnes J

Busscombe W 1960 MN-121, 263  
Morris P.

(F)

Thackery St. 1966 Men RAS 70 30

(B)

Hobbs St. 1970 Men RAS 72, 73

(C)

New Atbara and D. Stn 1964 BAN 20, 204 D

Florida 1987 #J564, 459 B

Madros

Shivella G

Morrell

19001

8 235 -50 48

210 3320  
-644 185

110?

1304 +635 -135 (2)

304  
100  
-20

-3.9

0213

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2250 + 246

2251.0 + 24 34

09 83 089 011

1000	9184	08501
1082	4085	-10963
}		-196

Schubert W and Wisden P

1988

1989

A 415 73, 224

A 4 706, 655

Schubert W, Fennell W

1992

Wind Contrabass ~ Murling 1993

A 215 97 951

Olson E.H. 1983

AAS 8485





Feb 23 17.1-17 22-  
LTF 5/9

2040 021 G  
+036 1042 6y  
0404-01 -52 3y  
+235 +020

TC = 0211

17.04 + 055

+155 10y

11.15

~~9530~~

~~9997~~

2309

114

~~9530~~

~~9910~~

2354

~~2026~~

~~6240~~

6115

~~3081~~

~~6248~~

0190

210

6262

255

→ 420

247

24

0211  
252

369.00 6.85 5.60 +1.20  
 368.04 6.86 5.59 +1.20  
 370.04 6.86 5.63 +1.205  
 81028 (cont)

6.84 +1.635 +1.75 19 Jan 72 1334  
 6.87 +1.61 +1.755 21 Jan 72 1336  
 6.93 +1.62 +1.72 28 Jan 72 1345  
 6.95 +1.64 +1.765 29 Jan 72 1346  
 6.91 +1.665 +1.73 30 Jan 72 1347  
 6.93 +1.665 +1.785 31 Jan 72 1349  
 6.95 +1.63 +1.74 1 Mar 72 1376

6.89 +1.63 +1.80 424.06  
 6.90 +1.63 +1.75 425.96  
 6.89 5.13 +1.19 440.96  
 6.82 5.13 +1.15 444.94

386.01 6.88 5.82 1.10  
 386.98 6.86 5.46 1.11  
 387.99 6.83 5.46 1.09  
 384.99 6.81 5.45 1.10  
 390.97 6.76 5.44 1.10

5.48 +1.16 26 Jan 72  
 5.47 +1.15 27 Jan 72  
 5.57 +1.19 30 Jan 72  
 5.44 +1.17 22 Apr 72

4.26

6.96 +1.61 +1.765 17 Jan 72  
 6.89 +1.58 +1.765 22 Jan 72  
 6.85 +1.60 +1.85  
 6.87 +1.60 +1.80

4453829

2001

14

12

42

-13

40

86

LHS 2092 ✓  
W  
2000) 13 41 43 -18 28 30



66813

1998

8 02 45 - 43 57.5 10.3 (S/N/10/11)

430311

(X) (X)

	*				
964	-476	1436	-447	9 June 84	
964	-483	1450	-443	8 June 84	

6579 III

72994 8 3335 -41 08.5 12.0

40<sup>0</sup>2629

(X) 934-506 1364-458 16 June

66935

8 03 24 -41 20.5 10.4 68 (11)

4102000

(x) (x)

\* 9.97 - 531 1354 - 493 9 Jan 8h

9.97 - 536 1345 - 492 8 "

9.97 533 1350 492



Al Vel

2 - NOV 91

8 30 36  $\frac{56.11}{-47}$  36

8 30 35 -47 36

NOV 91  
A 8 11

Page 2022

8.60 -106 845 -490 8.143 10.236 2.143 03:35 132687

8.68 -111 823 -461 8.207 10.360 2.153 02:15 9 Nov 91

Part 1 →  
1987

54  
11, 12, 13, 14 months

8.04 +0.432 03:20 30 Nov 91

8.08 +0.426 01:40 19 Nov 91

8.04 +0.435 00:50 11 Nov 91

8.09 +0.436 01:45 20 Nov 91

8.07 +0.412 00:45 12 Nov 91

8.07 +0.426 00:55 15 Nov 91

Al Vol

9 30 33 = 47 36 8.6-91

8.07 to 10.45 (25 days) old early in Paris in April  
8.06 to 10.45 at Paris mid mid in April

8.05 Paris (17 days)

8.66 -106 831 -456 05:20 9 Mar 79

8.65 -109 840 -428 21:58 01:05 10 Mar 79

8.63 -106 838 -472 2:15 08:20 25 Mar 79 8.046 10.259

8.84 +21 1093 -470 2:12 07:20 8 Apr 80 8.414 10.538

8.64 -112 839 -467 2:16 06:25 15 Apr 80

8.61 -106 840 -476 2:14 05:00 12 Apr 80

8.62 -117 830 -498 2:15 03:00 18 Apr 80

8.66 -107 855 -319 2:16 05:55 25 Apr 81

ALVW

(0.5)

RI

Feb 2, 1910

6, 7, 8, 9, 10

8.07 10.438 25 Jan 1910 06:10

8.16 10.425 26 Jan 1910

8.08 10.425 4 Feb 1910 06:10

8.05 10.426 15 Dec 1910 04:15

8.14 10.420 19 Jan 1910 04:50

At-Verd

(92)

AP work

8.43 +106 1186-550 8.613 2.122 04:50 5282 (60)

~~1 928~~  
~~5106~~  
~~350~~

8.25  
-450 = .504  
M 1-102

9.95

8.24 to 500 03:05 6282 8.29 to 498 03:05 7282

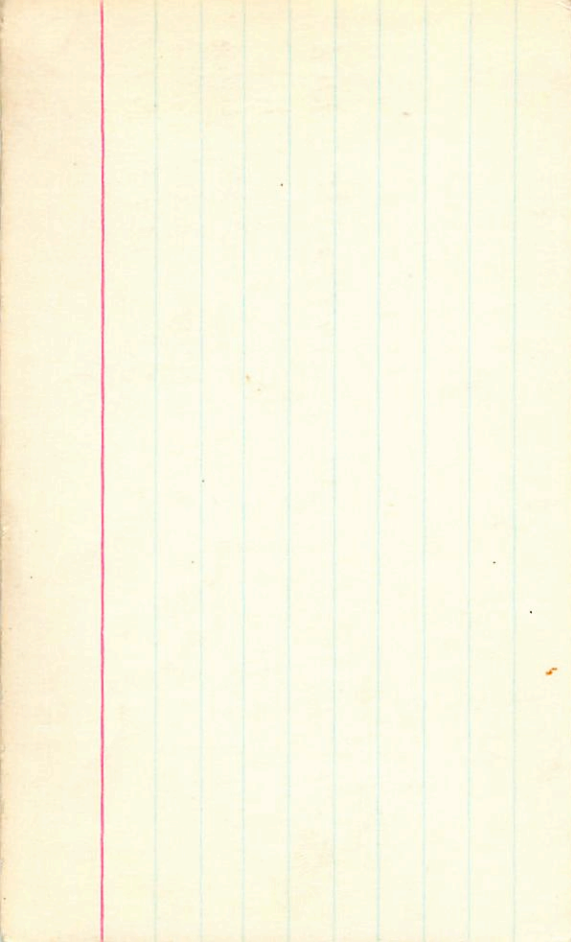
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8.27 to 486 05:40 6282 8.26 to 484 05:45 7282

8.25 to 484 06:15 7282

8.28 to 450 07:10 7282

8.11	+1.245	+0.96	30 May 70	29 May 70	7.47	+0.475
8.16	+1.39	+1.21	24 June	27 June	7.64	+0.56
<del>8.26 +1.39 +1.25 28 June</del>						
8.09	+1.31	+1.09	31 Jun 70	7.58	+0.56	10 Feb 70
8.36	+1.42	+1.42	9 Jul 70	7.57	+0.57	13 Feb 70
8.07	+1.27	+0.945	26 Jul 70	7.33	+0.50	27 Feb 70
8.14	+1.35	+1.09	11 Mar	7.45	+0.49	1 Mar 70
8.44	+1.325	+1.12	3 Apr 70	7.44	+0.52	12 Mar 70
8.37	+1.28	+1.12	6 Apr 70	7.60	+0.535	4 Apr 70
8.20	+1.305	+0.85	11 Apr 70 dk pool	7.56	+0.53	7 Apr 70
8.10	+1.33	+1.11	28 Apr 70	7.42	+0.49	12 Apr 70
8.29	+1.41	+1.30	14 May 70	7.49	+0.49	1 May 70
8.27	+1.345	+1.225	15 " "	7.52	+0.535	11 May 70
8.16	+1.25	+0.96	28 May 70	7.51	+0.49	27 May 70



AL Vel 8 30 33 -47 36

8.78 -28 969 -353 8.364 10.502 2.138 06:00  
116 Jan 81

8.93 +108 1188 -604 8.588 10.707 2.114 06:50 17 Jan 81

9.94 +107 1187 -557 8.555 10.727 (2.132) 06:20 18 Jan 81

8.91 +98 1196 -603 8.576 10.686 2.110 06:00 19 Jan 81

8.95 +110 1193 -597 8.610 10.733 2.123 06:25 21 Jan 81

8.95 +111 1200 -585 8.614 10.731 2.117 06:45 22 Jan 81

8.66 -109 858 -322 2.179 07:25 24 Jan 81

⊕ 8.67 -110 860 -488 8.200 10.369 2.169 04:45 28 Jan 81

8.61 -109 844 -476 8.150 10.302 2.152 04:00 27 Jan 81

8.59 -103 845 -487 8.136 10.306 2.160 06:25 27 Jan 81

2506-3369

NM

12.57 +0.339 5 June 74



2296-78

1333 +103

1332 +0.455 1274035

✓ ✓

(MRV)

(RF) Again

433 068 149  
11.58 + 56

423 149

G-114-25

9 57 47 -06

17.5

-5026785

207D

11.56 -290 296 -205 (3) 410"

11.47 -220 267 -200 (3) 40"

11.45 -276 299 -236 9248

11.96 -277 286 -203 (4)

11.42 -284 294 -6274 102483

~~11.48 -214 1840 -255 112m76~~

11.77 40.225 16476

11.53 -252 +257 -200 102m76

11.80 40.223 198476

~~11.58 -254 +254 646 +7~~

11.76 40.225 217m76

~~12.00 -296 292 -644 22m76~~

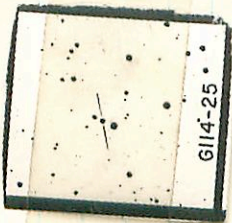
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11.47 -225 +226 -641 (3)

11.74 40.224 (3)

11.78 40.225 (3)

272



6114-25