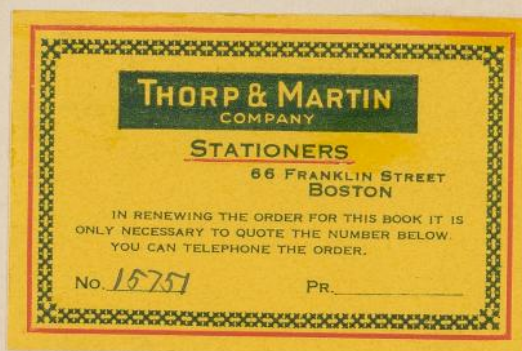


5



MF 187

1924 - 32

11 533

25 355.613

MF 11 662

25 383.596

MF 15 394 26 460 598

MF 8 537 23 911.857

8 673 965 687

705 386 630

424 472 568

8 724 992 633

718 388 622

439 473 597

8 785 24 026 589

743 390 494

453 475 592

8 842 056 503

844 414 495

475 479 607

9 816 411 482

883 418 427

494 481 584

9 828 412 473

899 419 492

511 483 544

9 838 413 477

919 421 461

540 489 575

10 141 626 866

973 487 444

554 501 498

146 627 863

12 285 493 268

589 504 455

240 649 757

13 120 745 609

791 562 342

249 650 761

13 134 749 587

16 075 602 332

271 654 812

287 794 409

767 838 427

279 655 852

327 799 464

931 871 546

284 656 852

398 832 340

17 055 897 496

10 365 681 748

463 851 285

158 717 439

522 711 687

481 854 286

322 944 342

534 712 662

495 855 289

421 956 327

572 727 630

500 861 252

574 728 500

502 862 255

576 565

577 596

578 630

10 579 662

MF 17956 discarded in So. A.

A 13 996 755.588

M W F 187

1930

MF	14	090	26	067 613	MF	14	373	26	125 .455	MF	14	660	26	182. 462
	144		089	.624			385		130 538			688		186 496
	150		090	589			397		131 488			690		187 213
	164		091	666			412		144 363			691		187 249
	175		092	538			419		145 395			692		276
	190		093	549			428		146 501			693		208
	203		095	543			438		147 479		<i>dis carded in</i> SAF	694		340
	228		097	595			460		153 434			695		372
	240		101	554			464		153 565			696		404
	246		102	569			476		154 493			697		435
	250		103	540			488		155 460			721		190 386
	256		104	577			502		156 ⁴⁶² ₂₀ 462			732		202 243
	259		105	577			515		158 471			738		204 322
	277		117	457			527		159 391			749		208 331
	294		118	556			538		160 424			758		210 349
	317		120	393			546		161 483			762		214 290
	318			424			553		162 501			805		217 319
	319			456			570		174 401			858		239 262
	320			489			580		175 456					
	321			520			592		176 402					
	322			552			608		177 460					
	323			584			619		179 369					
	349		123	523			636		180 476					
	363		124	532			645		181 373					

18 00 - 33.5

18 00 - 39.0

A 15 538 26 546 260

A 15 539 26 546 292

548 555 265

549 555 293

554 557 261

555 557 289

560 558 262

561 558 290

566 559 256

567 559 282

591 562 259

592 562 286

595 563 208

596 563 233

597 263

598 286

599 324

600 349

601 385

602 408

605 510

604 476

626 565 323

627 565 376

634 566 262

635 566 287

645 567 320

646 567 350

654 568 267

655 568 296

666 569 331

667 569 354

709 587 277

710 587 304

715 588 273

716 588 297

721 590 291

722 590 316

727 591 271

728 591 297

733 593 274

734 593 298

742 594 283

743 594 309

751 595 282

752 595 306

759 602 292

760 602 296

1930

A1 W F 187

26 15-07	✓	724 15-27	✓
A 14 735	26 123.380	A 14 843	26 182.233
21-07	✓	7-24 21-08	✓
739	123.629	847	.469
15-25	✓	7-25 15-26	✓
743	124.389	852	183.229
5-28 14-50	✓	7-28 16-12	✓
746	125.363	857	186.252
6-2 13-54	✓	7-29 19-48	✓
757	130.309	864	187.399
6-3 14-13	✓	7-30 15-45	✓
757	131.320	868	188.229
21-15	✓	(8-17 19-50	✓
761	131.612	887	1752-32 208.344
6-5 14-01	✓	8-24 18-14	✓
764	133.307	902	213.263
6-17 13-25	248 249	25 18-28	✓
770	145.248	906	214.270
21-25	✓	26 18-38	✓
773	145.581	912	215.274
6-18 14-44	✓	28 18-39	✓
776	146.300	919	217.269
21-35	✓	29 17-21	✓
779	146.578	921	218.214
6-11 13-32	✓	8-21 20-58	✓
782	147.249	891	1753-37 210.385
21-32	✓	7-16 17-05	✓
785	147.582	794	1800-35 174.322
7 21 15-09	✓	7-17 18-00	✓
812	179.228	798	1800-40 175.378
11-31	✓	4-29 12-21	✓
814	.284	706	1820-35 096.588
17-49	✓	15 341	26 468 541
17-27	✓	15 774	606 268
21-00	✓	16 140	
820	.471	237	
22-51	✓	524	
822	.533	17 110	27 267 307
7-22 15-34	✓	126	680 397
825	180.243		
7-22 17-02	✓		
827	.303		
16-31	✓		
7-23 832	181.279		
20-50	✓		
838	.459		

Hurttap Swaps
October 1929

MWF 187

magnitude estimates

New variables M 8-19

78
19
104

116
18
134

53 L P

134
135

53 - Long Periods

7 - Periods of Eclipsing and
Cluster or Cepheids

page estimated magnitudes MWF 187

50 B 16, 17, 18, 19, 82, 125, 127, 171, 172, 173, 209, 210, 244, 413, 451, & 45658 B 20, 21, 22, 83, 211, 212, 213, 266, 287, 294, 295, 315, 366, 366a, 367, & 40966 B 10, 11, 74, 124, 126, ¹⁴⁸161, 236, 264, 265, 292, 329, 338, 346, 353, 404, 448 & 50974 B 23, 128, 129, 130, 205, 216, 217, 218, 219, 293, 310, 328, 330, 339, 340, 347, 348
407, 410, 452 and FU Sgr.82 B_A³⁰ 35, 36, 93, 131, 132, 134, 135, 186, 252, 254, 278, 331, 378, 397, 435, 436, 460, RX, EV, FIS

78-81	}	AM plate	19, 18 & 19 - 45°	AX 17-45
P6-96		B 137	B AM 17-30, 19-30, 17-45; AM & AX 18-30, MF ^{thru} 1132 A	
110-113		AM 18-30	B appl. MF misal	AI 16, 17, 18 - 20

98 ²² Long Periods near an B plate. B11, 16, 17, 82, 124, 125, 126, 127, 209, 211, 212, 264, 266, 292, 294, 295,
329, 338, 366, 367, 409, 413

70

104 AI Sco, CR Sco, B12

106 B 31, 43, 92, 102, 103, 185, 215, 226, 260, 275, 276, 307, 342, 376, 418, 433, 434, 449, 457, 459
and 481114 KZ Sgr, B 81, 91, 123, 153, 170, 184, 208, 242, 263, 274, 414, 414, 415, 416, 475, 476, 514120 18 Long Periods near an B plate, FT, FU, FV Sgr., B 20, 21, 22, 128, 129, 130, 134, 135, 205, 217, 219, 310, 339, 348
407

128 8 Long Periods near an AX plate, FT, FU, FV Sgr., B 20, 21, 310, 348, 407

Page

130 18 Long Periods near on B plates B 31, 81, 91, 123, 131, 132, 149, 215, 260, 263,
274, 275, 276, 342, 376, 378, 416, KZ Sgr.

20 138 B 7, 26, 27, 29, 121, 122, 167, 168, 169, 180, 181, 182, 235, 241, 243, 272, 291,
365, 455, 513

20 146 B 25, 28, 28a, 99, 142, 143, 177, 178, 179, 240, 259, 271, 273, 364, 374,
387, 411, 447, 474, 512

20 154 FX, GG Sgr. B 41, 42, 98, 100, 101, 222, 245, 248, 249, 318, 351, 352, 380, 417,
419, 477, 478, 479.

22 162 WX Gr A, B 40, 62, 63, 111, 112, 145, 146, 152, 194, 246, 247, 288, 289, 319, 358, 388, 421,
422, 423, 424, 480.

22 170 AE, AFC₂ A, B 44, 45, 46, 47, 48, 50, 147, 149a, 150, 250, 251, 285, 321, 389, 426,
427, 428, 432, 464, 483

21 178 AG Gr A, B 49, 66, 67, 68, 114, 151, 196, 283, 309, 323, 332, 375, 429, 430
439, 461, 462, 490, 496, 516

194 C 152, 180

196 S.28, C 179

1929

1929

8

continued from Bk 4

Center of	HA No	Bright	Faint	
A 555 + minor ✓	437	A 13996	A 5555	
A 13996 6998 ✓	438	" 5622	"	
7139 ✓	439	" 5622	"	
✓	440	" 2159	"	
441 Sco ✓	441	5555 5622	13996 1904	
def	def	13996	5555	
✓	442	" 5622	" A 9061	
✓	443	"	" 5622	
✓	444	"	" 5622	
def	def	"	"	
✓	445	" 1904	" 5622	
	446	" 1904	"	

4 proper motions marked on A 13996

Referred 64 old variables

	MF10377, 8673	MF13289, 11973	
SHORT	A 2713, MF10249, 11973	MF10271, 8842, 8673	
SHORT	¹¹⁹¹⁹ A 2713, 9061, MF10522, 10522, 11844	A 2659, MF8842, 10579, 8527	
	A 2713, MF10572	med A 5622 A 9061, A 2310, MF10522, 8673	
LONG	MF10522	MF18287	146.3
442	A 2713, MF8842, 11973, 10240	MF10522, 13287	
	MF10522, 10579	A 9061 A 9061, A 2713, MF11973, 9838	
	MF13287, 10579, A 1904	A 2713, MF10522, 8842, ⁸⁶⁴³	
	MF8842		
	MF10522	A 2713, A 9061, med MF10522	
	A 9061, A 5622, A 2713, A 9061		

Contact of	HH No.	Bright	Faint	
A 5555 + <i>no variation</i>	447	A 5355	A 1904	
A 1904 <i>Susp.</i>	448	" A 13996	"	
567 Sgr ✓	449	"	" 2659	
401 Sco ✓	450	1904 10572	5555	

reformed 14 variable

Contact of 7100 ✓	451	5622	5555	
532 Sgr ✓	452	"	"	
A 5555 + ✓	453	"	"	
382 Sco 190 ✓	454	"	"	
A 5622 <i>Norm</i> ✓	455	"	"	
<i>spun on image</i>	456	5555	5622	
<i>prob. no variation</i>	457	5622	5555	
583 Sgr ✓	458	"	"	
575 " ✓	459	"	"	
<i>no variation</i>	460	"	"	
554 Sgr ✓	461	"	"	
<i>Susp</i> ✓	462	"	"	
E K GaA ✓	463	"	"	
E I " ✓	464	"	"	
<i>defect</i>	465	"	"	
FS GaA ✓	466	"	"	
Asteroid? ✓	467	"	"	
<i>def of 5622?</i>	468	"	"	
✓	469	"	"	

	Bright	Faint	
	MF 1046, 13120	10572 10141	
	10532, 13287, 13120, 10271.	10572	
IRREG	10534	10249, 8842 A 13996	
IRREG	10522 and , 10534	11844, 13120 10146, 11899	
ECLIP	A 13996, A 2659, MF 10572	MF 10249	
CEPHRID	A 2713, MF 10522	A 13996 MF 10249	34.21 ^d
NOVA	on A M 1028, 1043, ^{first seen} in Oct 1901	A 13996 (B 28622 B (28255) and 28204, 28195)	
		A 13996, MF 10522, 10249	
	A 13996, A 2659, MF 10146 8842	MF 8673, 11973	
SEMI REG	A 2659 MF 10522	A 13996 MF 10249	101.6
Cluster	A 2659 MF 13287	"	0.69639
Eclipsing	A 13996, MF 10249	A 2310, A 2712	0.90703
	A 2713, MF 10146	A 13996 MF 10572, 8673	
LOW	A 13996	A 2713	435
IRREG:	MF 10522	^{and} A 13996 MF 13287	
W UMa type			
Eclipsing	A 2310, A 2659		0.2636 380 ^d
		A 13996, A 2310	
	A 2310	A 2659, MF 10522	
	A 2659, A 2713, A 2310, MF 10572	A 9061 MF 10522	
	MF 10572	A 2659, A 2713, A 2310, A 9061	

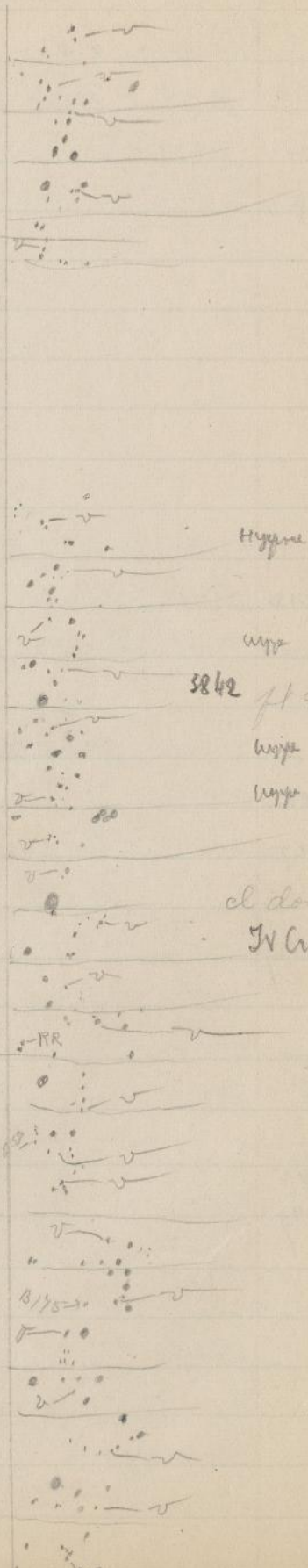
12

cont.

contact of	7444	Bright	Faint
5555 +	✓ 470	A 5622	A 5555
+ 5622	✓ 471	" 13996	"
	✓ 472	"	"
	✓ 473	"	"
def - ?	474	"	"

refound 39 variable

653592	On A 2659	found 65	old variable	
Contast of	✓ 474	A 2659	2310	A 5555
A 5555	7193 ✓	475	" 13996	"
610892		476	"	"
A 2659		477	" 13996	"
(only part of	7289 ✓	478	" 2310	"
658892)	✓	479	"	"
648 "	✓	480	" 2310	"
600A	✓	481	" 13996	"
variation due to	7201 ✓	482	"	"
double images		483	5555	2659
duplexity even separately		484	2659	5555
A 2659		485	5555	2659
FQ 0A	✓	486	2659	5555
FI 0A	✓	487	5555	2659 9061
supp	✓	488	" 13996	"
	✓	489	2659	5555
norm	✓	490	5555	2659
	✓	491	2659	5555
	✓	492	" 2310	"
	✓	493	5555	2659 2310
	✓	494	2659 2310	5555



Bright

Faint

MF 10522, 10249

MF 8673

MF 10522, 13287

MF 10249, 8673

MF 10249

10572 A 13996, MF 10522, 13287, 8673

A 9061, A 2713

and A 13996 MF 8673, 11844, 10572 A 2310

I RREG A 13996, A 5622, A 2310 MF 10522 med MF 13120, 13134

I RREG: A 13276, MF 10146 A 5622 A 2310 MF 10522, 8673

I RREG A 13996, MF 8673 A 2310, MF 13287

CLUST: MF 10249, 10572, 10240 A 5622 MF 10146

Cluster A 13996, MF 8673 MF 10249

0.48350

I RREG A 13996, 10572 A 5622 MF 10522

Cluster MF 10522, 10249 MS A 5622 MF 8673

0.53040

A 2713, MF 10240 MF 10249 A 2310

double
see A 14891

I RREG: A 2310, MF 13287 A 13996, A 5622, MF 10249

MF 10146 A 5622, MF 10249

I RREG A 2713 A 2310 and A 13996 A 9061 MF 10522

485 MF 11844, 10240

MF 10522
A 13996 A 5622 MF 8673

Cluster A 13996 MF 8673 MF 10572 A 5622 A 9061 MF 13287

0.4910

A 2713 MF 10572

A 13996, A 5622 A 9061 MF 10522

A 2713 MF 13287

MF 10522 MF 10572

MF 8842

A 13996 A 2713, MF 13287, 11973

A 5622 MF 13287 MF 11844

A 13996, A 2713, MF 11973 10271

A 5622 MF 10572 MF 10271

MF 13287 MF 11973

A 2713 A 5622, A 9061, 11973

MF 10271

A 5622, MF 8673

A 9061 MF 10572

A 2713 A 5622 MF 10271

A 2310 MF 8673

contact of	HH No	Bright	Faint	
5555	495	A 9061	A 5555	...
A 9061				

(only part
of plate)

in found about 8 old variables

plate poor comparison

poor pair to compare

contact of	HH No	Bright	Faint		
MF 10522	495	10522	10534	11662	11705
FK Ca					
MF 11662	✓ 496	"	"	"	"
387 Sco	497	"	"	"	"
	498	11662	11705	10522	



eclipsing
slight

58 old var.

Bright

Faint

A13996

495 A2310, 11973, 10249

8842, 13287

Eclipsing 11705, 10284, 11973 med 10572 ns 10271

3.2677

Eclipsing 11, 11844, 8673

8785, 10249

1.37494

498 10284, 10534, 11973, 10579 med 10249

Content of	AMS No.	Bright		Faint		
10522	✓ A 499	13287		10522	13327	
MF 13287	✓ 500	"	10534	"	13327	
	501	10522	10534	13287	13327	
AMS No. A50	502	"	"	"	"	
	✓ 503	13287	13327	10522	10534	
	504	"	"	"	"	
	✓ A 505	"	"	"	"	
689 Sqr	✓ B 506	10522	10534	13287	13327	
682 "	507	"	"	"	"	
681 "	✓ 508	"	"	"	"	
598 "	✓ 509	"	"	"	"	
391 Sco	✓ 510	"	"	"	13327	
688 Sqr	✓ 511	13287	13134	10522	10534	
668 "	✓ 512	"	13327	"	"	
novae	✓ 513	"		"		
600 "	✓ 514	10522		13287	13327	
no. var.	515	13287	13134	10522		
516 D2A	✓ 516	13287	13134	10522		
elongation?	517	10522		13287		
447 Sco	✓ 518	"	13287	"	13134	
445 "	✓ 519	"	13134	"	13287	
405 "	✓ 520	13287	13327	10522	10534	
to light source						
Suspected	B 521	10522	10534	13287		
prob. no. var.	C 522	10522		13287		
	✓ 523	"	10534	"	13327	
	✓ 524	"	"	"	"	
	525	"	"	"	"	
	✓ 526	"	"	"	"	

double

507 double

double

ft. double

faint

	Bright	Faint	
	A 10126, ^{MF} 10572	med 10534	11973
	10572, 9838		11973
	10572		
	A 10126, 11973		10572, 9838
		jc 13398	A 10126
505	13134		A 10126
LONG	10572, 8842		11973
LONG	A 2310, 8842		11973, 10249, 9838
IRREG	11973, 8842		8673
Eclipsing	A 13996, ^{MF} 11973		A 10126
LONG	10572, 9838		A 13996, MF 10249, 8842
LONG	A 2310		13327
LONG	8842 med A 2310 10572 med 9838		13134, A 13996 11973
			A 13996, A 2310, 8842 A 2310
Cluster	10146, A 5672		13134, 10534, A 13996, ^{MF} 9838
	10534 8673?		8842
Eclipsing	A 13996, 10249, 10146, 8673		10572?
	11973?		A 13996, 10572, 9828
Cluster	10572		11973, 10146
Eclipsing	10572		MS 10249
LONG	9838	8673 med 11973	13134, A 13996, 10532
	10572, 8673		13134, 13327, 11973
	10572, 11973		
	10284, A 13996	med 10572	11973, 10249
	10284, 10572		11973, 8673
	10572		10146, 8673
	10572		11973, 10249

204

205

2.5741

291

233.3

249.5

d

0.51721

2.6696

0.40987

1.881

201

(continued)

Contact of	HPL No.	Bright	Faint	
MF 10522	✓ 527	13287	13327	10522 10534
MF 13287	✓ 528	10522	10534	13287 13327
	529	"	10534	" 13327
	530	"	"	" 13327
✓	531	"	"	" "

Refound 99 variables

16 published

4 C D B

79 HNS

Bright

8673

10284, 10572

" , 11973, 10572, 10249

11973, 10572, 10249

10572

and A13996

Faint

10572, 10249

8842

13104, 10146, 8842

11 , 10284, 10249

Strip A - of MWF 187

MWF 187a *Aplate* Limits $17^{\text{h}} 40^{\text{m}}$ to $18^{\text{h}} 14^{\text{m}}$ - 30.5° to -36°

J.D	Plate No.	<div> <div>247.6 long</div> <div>267.5</div> <div>144.7</div> <div>close to other stars</div> <div>long P=26.2^d</div> <div>too near star & is blurred</div> </div>					
		B 82	B 209	B 125	B 171	B 17	B 244
23 911	MF 8537	16.5	16.5	15.4	15.8	14.4	15.5
965	8673	14.4	ns	ns	16.5	15.5	14.9
992	8724	15.2	ns	16.0	ns	16.0	blur
24026	8785	15.8	ns	15.7	15.5	15.9	16.3
056	8842	ns	ns	15.7	16.0	15.9	16.4
24411	9816	16.3	13.9	ns	15.5	14.7	ns
12	9828	16.4	14.1	ns	15.5	14.8	15.9
13	9838	15.7	14.0	ns	15.5	14.7	16.4
24626	10141	16.2	ns	15.2	16.3	15.7	16.0
27	10146	16.3	ns	15.1	ns	15.8	16.0
49	10246	14.9	ns	15.9	16.3	15.5	16.2
50	10249	15.3	ns	15.8	15.9	15.7	16.5
54	10271	14.9	ns	15.7	16.4	15.5	16.5
55	10279	14.7	ns	15.6	16.5	15.5	16.5
56	10284	14.3	ns	15.9	16.5	15.5	16.5
81	10365	13.5	15.5	ns	ns	13.8	blur
711	10522	13.6	15.7	16.0	15.6	14.1	16.2
12	10534	14.0	16.3	16.3	15.4	14.2	15.7
27	10572	14.0	16.3	16.3	15.7	14.8	ns
28.	10574	14.8	16.0	ns	15.5	14.9	blur
	10576	14.9	16.3	ns	15.5	14.7	15.7
	10577	14.8	16.4	16.2	15.7	15.0	15.4
	10578	15.1	16.2	blur	15.6	15.3	15.5
	10579	15.0	16.0	blur	15.4	14.9	blur
25383	11662	15.7	15.7	15.7	15.6	15.6	ns
86	11705	15.4	ns	ns	15.6	15.4	15.4
88	11718	—	—	—	—	—	—
90	11743	14.9	ns	16.0	15.8	15.8	ns
25414	11844	13.4	ns	ns	15.7	15.7	15.7

206.7 long	16P.6 long	dark clouds	eclipsing	Bright	Aug 11/12	Wm sun?	diff Aug 11/12	191.7 long	Aug 11/12 long
B 413	B 16	B 456	B 172	B 210	B 18	B 173	B 19	B 127	B 451
15.1	ns	15.1	15.0	12.8	14.7	16.3	14.4	ns	14.0
15.5	14.7	15.0	15.5	12.7	14.1	16.2	15.6	ns	14.1
ns 16.5	15.5	14.7	15.5	12.5	14.9	ns	14.0	14.9	14.9
ns	ns	15.7	15.5	12.9	14.9	16.3	14.3	15.4	14.4
ns	ns	15.0	15.2	12.9	15.0	16.2	13.8	16.1	14.1
ns	ns	14.9	15.1	13.6	15.8	ns	14.1	14.7	13.9
ns	ns	14.9	14.9	13.5	15.5	15.5	14.0	14.7	14.6
ns	14.5	15.0	15.1	13.5	15.3	16.4	13.9	14.8	14.7
ns	14.5	15.5	15.3	13.0	14.6	ns	14.4	15.5	14.7
ns	14.8	14.9	15.4	13.0	14.6	ns	14.5	15.6	14.1
ns	14.0	15.8	15.5	13.0	14.3	16.1	15.0	16.3	14.9
ns	13.9	15.4	15.4	13.0	14.1	ns	14.8	16.5	14.9
ns	15.0	15.4	15.5	13.0	14.2	16.1	14.0	ns	14.9
ns	14.6	15.4	15.1	13.2	14.0	ns	14.0	ns	14.5
16.5	14.9	15.2	14.9	12.7	14.3	16.5 ns	14.0	ns	14.2
ns	16.1	15.1	16.3	12.6	14.5	ns	15.1	ns	14.1
ns	ns	14.9	15.4	12.7	14.9	16.2	15.5	ns	14.8
ns	ns	15.1	15.1	12.7	15.1	16.8	15.4	ns 12.4	14.8
16.0	ns	15.4	16.4	13.2	15.2	16.5	15.3	ns	14.0
16.0	ns	15.6	15.6	12.8	14.8	blu	14.9	ns	14.8
15.7	ns	15.1	15.2	13.2	14.9	16.5	15.2	ns	14.5
15.8	ns	15.1	15.1	13.3	15.3	ns	15.7	16.5	14.9
15.7	ns	15.3	15.2	12.9	15.2	blu	15.4	16.5	14.9
15.5	ns	blu	14.9	12.7	14.8	"	15.4	ns 16.0 blu	14.6
15.4	ns long	14.9	14.8	13.0	14.4	16.5	14.1	15.6	14.7
15.2	ns	14.9	14.7	13.6	14.3	ns	14.0	15.3	14.9
14.6	ns	14.5	—	12.9	14.5	—	14.2	—	—
15.3	16.0	14.7	14.8	12.9	14.3	—	14.8	15.6	14.0
16.0	ns	15.3	16.0	13.1	14.2	—	13.9	16.0	14.0

J.D.	Plate No.	B 82	B 209	B 125	B 171	B 17	B 244
25418	MF 11883	13.2	ns	ns	ns	ns 16.0	15.91
158 19	11899	13.1	ns	ns	ns	15.8	ns
21	11919	13.8	ns	ns	ns ^{very} 15	16.0	ns
16.0 37	11973	13.4	ns	ns	ns	15.8	ns
14.6 93	12285	ns	14.6	ns	blin	?	ns
16.0 745	13120	ns	14.8	ns	blin	14.9	ns
49	13134	ns	14.5	ns	16.2	14.8	ns
94	13287	ns	14.8	15.5	16.0	15.5	15.4
99	13327	ns	15.5	15.5	15.7	15.6	ns blin
16.0 832	13398	ns	16.0	ns	ns	15.8	15.6
16.2 51	13450 ⁶³	16.0	ns	ns	ns	15.8	15.7
54	13481	16.3	ns	ns	16.0	15.9	ns
15.8 55	13495	ns	ns	ns	ns	15.8	ns
61	13500	ns	ns	ns	ns	16.0	15.6
62	13502	ns	ns	ns	ns	15.9	ns

B 413	B 16	B 456	B 172	B 210	B 12	B 173	B 19	B 127	B 451
16.0	ms	15.1	15.0:	13.1	14.3	ms	14.0	ms	14.5
ms	ms	14.9	blu	12.7	14.6	ms	14.2	ms	blu
16.2	ms	15.3	14.9	13.0	14.3	ms	14.0	ms	14.7
ms	ms	15.1	14.8	12.9	14.5	ms	13.8	ms	13.9
ms	ms	blu	blu	12.6	14.2	ms	14.8:	ms	14.3
ms	ms	15.1	14.8:	12.9	14.9	ms	13.9	14.6	14.8
ms	ms	15.1	blu 14.4:	12.8	15.3	ms	14.8	13.9	14.5
14.7:	14.9	14.8	14.9:	12.8	15.2	blu	14.2	16.0	14.5
15.3	14.4	14.4	15.1:	12.9	14.7	16.0:	15.1	ms	14.9
ms	14.0	14.0	15.0:	12.4	14.7	ms	15.4	ms	14.4
ms	15.2	15.6	ms	12.4	13.9	ms	15.6	ms	14.9
16.3:	15.3	15.4	15.1	12.7	14.0	16.0:	14.5	ms	14.2
ms	15.5	15.3	blu	12.7	14.1	ms	14.1	ms	14.7
16.0	15.7	15.2	15.3	12.6	13.9	ms	14.3	ms	14.4
ms	15.6	15.2	15.0	12.7	14.0	ms	14.7	ms	14.4

58

J. D.		Plate No.	$P = 31.3^m$ B 366	$3u$ 16.6 p162 B 366a	$456d$ long B 294	$long$ 285.4 B 266	$3u$ 16.6 p162 B 83	$456p162$ mag B 21
16.5	23911	MF 8537	ms 16.5	15.3	15.4	ms	13.5	14.3
16.5	-965	8673	ms	15.8	15.5	ms	14.1	12.7
16.3	992	8724	ms	16.0	15.9	ms	15.1	12.8
16.5	24026	8785	15.5	15.8	15.5	15.8	14.7	13.2
16.5	056	8842	15.7	16.3	15.8	15.4	15.3	13.7
16.3	411	9816	ms	15.8	16.0	ms	13.8	12.9
16.5	12	9828	ms	15.1	15.5	ms	14.4	12.8
16.5	13	9838	ms	16.3 14.8	15.5	ms	13.6	12.8
16.5	14 626	10141	16.3	15.0 14.7	15.1	15.2	14.8	13.6
16.5	27	10146	ms	ms 14.9	15.4	15.0	13.9	13.3
16.5	49	10240	16.0	16.0 15.3	15.1	15.8	14.0	13.8
16.5	50	10249	16.2	15.7 15.3	15.7	15.9	13.8	13.7
16.5	84	10271	15.8	15.1 15.3	15.5	16.1	14.6	13.9
16.3	55	10279	15.5	16.1 15.0	15.2	15.8	14.2	13.8
16.2	56	10284	15.8	15.9 15.1	14.9	16.1	14.4	14.4
16.5	81	10365	16.1	15.4 15.3	15.3	ms	14.1	13.7
16.5	711	10522	ms	15.6 15.2	15.7	ms	13.4	13.1
16.5	12	10534	ms	16.2 14.8	15.7	ms	13.9	12.7
16.5	27	10572	ms	14.5 15.1	15.6	ms	14.8	12.4
16.5	28	10574	ms	15.8 -	15.5	ms	15.2	12.5
16.5		10576	ms	16.2 -	15.9	ms	14.9	12.5
16.5		10577	16.5	15.8 -	15.5	ms	14.9	12.5
16.2		10578	ms	15.6 -	15.5	ms	14.7	12.7
16.0		10579	ms	15.8 -	15.2	ms	14.8	12.6
15.6	85383	11662	ms	14.9 -	14.8	ms	13.3	13.3
15.8	86	11706	ms	15.4 -	14.9	ms	13.8	13.0
15.4	88	11718	ms	ms -	14.7	ms	14.0	13.7
16.3	90	11743	ms	16.0 -	14.0	ms	13.4	13.3
16.3	414	11844	ms	16.0 -	13.5	ms	13.7	13.2

<i>double</i> 220.5	312 ^d <i>long</i>	B6P162 <i>faint</i>	<i>long</i> 246 ^d	<i>long</i> 296 ^d	<i>close to other stars</i> 24	211 ^d	256 ^d	B6P162 <i>prob has close comp wing</i>	B6P162 <i>red bright</i> 59
B 22	B 211	B 287	B 367	B 295	B 315	B 409	B 212	B 20	B 213
15.6	ns	ns	ns	15.2	14.4	16.5	15.0	14.3	10.2
15.7	ns	ns	ns	16.3	14.3	ns	16.0	16.5	10.2
15.6	16.0	ns	ns	ns	14.7	ns	ns	16.2	10.2
15.4	15.9	ns	15.4	ns	14.2	ns	ns	14.9	10.6
15.2	ns	15.7	15.8	ns	14.3	ns	ns	14.5	10.7
15.8	14.9	ns	ns	ns	14.0	ns	14.3	14.9	10.3
15.9	15.2	ns	ns	ns	14.9	ns	14.0	14.7	10.5
15.8	14.8	ns	ns	—	14.0	16.5	14.2	15.2	10.5
15.8	ns	16.5	ns	16.0	14.3	ns	ns	16.5	10.3
15.8	ns	ns	ns	ns	14.1	ns	ns	16.4	10.5
16.0	16.3	ns	ns	ns	14.0	ns	15.9	15.8	10.5
15.7	14.5	ns	ns	ns	14.5	ns	15.7	15.7	10.4
16.2	ns	ns	ns	ns	14.7	ns	15.7	15.4	10.2
15.8	ns	ns	ns	ns	14.9	ns	15.1	15.1	10.4
15.8	ns	ns	ns	ns	14.4	ns	15.3	15.3	10.3
15.5	ns	ns	ns	ns	14.4	ns	15.4	15.3	10.7
15.1	15.6	ns	ns	ns	14.6	ns	16.2	14.9	10.6
15.1	14.4	16.0	ns	ns	14.2	16.5	15.8	14.7	10.4
14.9	14.8	ns	ns	ns	13.7	ns	ns	15.3	10.5
14.9	14.9	ns	ns	ns	14.2	ns	16.0	15.2	10.5
14.8	14.6	ns	ns	ns	14.5	16.2	ns	14.8	10.7
15.0	14.8	ns	ns	ns	14.0	ns	16.0	14.9	10.6
15.4	15.2	ns	ns	ns	14.3	ns	ns	15.0	10.4
16.2	14.4	ns	ns	ns	blin	ns	ns	15.1	10.3
15.4	14.9	ns	ns	15.4	13.7	15.3	ns	15.2	9.8
15.3	15.0	ns	ns	15.2	14.5	—	ns	15.1	9.9
ns	15.1	ns	ns	14.9	blin	ns	ns	15.1	9.8
15.6	15.4	ns	ns	14.8	14.0	14.9	15.8	15.5	9.9
16.0	15.8	ns	ns	15.4	13.7	16.0	15.0	15.5	9.9

J.D	Plate No.	B 366	B 366 α	B 294	B 266	B 83	B 21
16.0 25418	11F 11823	ms	15.7	13.2	ms	14.9	13.4
15.7 blue 19	11899	ms	15.6	13.3	ms	14.5	13.7
16.2 21	11919	ms	16.2	13.3	ms	14.4	13.5
16.3 37	11973	ms	15.6	12.3	ms	14.8	13.3
14.6 93	12285	ms	ms	13.4	ms	-	13.0
16.0 745	13120	ms	15.8	15.7	16.0	14.0	13.3
16.0 49	13134	ms	15.9	15.6	15.7	14.5	13.5
16.5 94	13287	ms	15.9	15.9	16.0	13.5	13.3
12.0 99	13327	15.7: ms	15.8	ms	14.0	13.3	
15.6 832	13398	ms	15.8	15.7	ms	13.9	12.9
16.5 57	13463	ms	16.1	14.9	ms	15.3	12.6
16.3 54	13481	16.1: ms	15.7	15.0	ms	13.9	12.0 13.5
15.8 55	13495	ms	15.7	14.8	ms	13.5	12.0
15.6 61	13500	ms	15.8	14.0	ms	13.5	12.3
16.2 62	13502	ms	15.0	14.1	ms	13.6	12.5

B 22	B 211	B 287	B 367	B 295	B 315	409	B 212	B 20	B 213	
15.8	15.8	ns	ns	15.4	14.1	15.7	14.9	15.0	10.0	
15.6	15.7	ns	ns	15.5	blue	15.5	14.7	15.0	10.0	red
15.9	16.0	ns	ns	15.3	14.1	15.9	14.8	15.6	9.9	
ns	ns	ns	ns	16.0	14.0	ns	14.2	15.4	10.1	
ns	ns	ns	14.6	ns	-	ns	ns	14.0	10.2	
ns	ns	ns	14.5	16.0	-	ns	ns	14.5	10.1	
ns	ns	ns	14.9	16.0	14.0	ns	15.5	14.9	10.3	
ns	ns	15.8	16.2	ns	14.1	15.7	ns	14.9	10.2	
ns	ns	15.3	16.0	ns	-	15.2	ns	14.8	10.2	
15.7	ns	ns	ns	ns	blue	15.8	ns	14.0	10.0	
15.5	ns	ns	ns	ns	14.5	16.3	ns	15.0	10.2	
15.7	ns	ns	ns	ns	14.3	15.9	ns	15.0	9.9	
15.6	ns	ns	ns	ns	-	ns	ns	14.9	10.0	
15.6	ns	ns	ns	ns	-	ns	ns	15.2	10.0	
16.0	ns	ns	ns	ns	-	ns	ns	15.2	10.1	

66

JD

Plate No	B 161	B 10	509	B 338	B 265	B 11	B 74
MF 8535	15.2	15.4	14.1	15.5	14.5	ns	15.0
8673	14.9	16.0	14.1	ns	14.8	ns	17.5 ^{at}
8724	14.5 ^{But}	15.8	15.1 ^{to}	ns	14.9	ns	15.0 ^{Fr}
8785	15.1	15.7	14.0	15.5	14.7	ns	14.9
8842	14.9	16.0	13.6	15.2	15.3	16.1	14.8
9816	14.7	16.0	13.8	15.7	14.9	ns	15.1
9828	14.9	16.3	14.5	15.6	15.3	ns	14.7
9838	15.2	15.7	13.6	15.5	14.9	ns	15.0
10141	14.3	15.4	13.7	ns	14.9	ns	14.9
10146	14.5	15.2	14.6	ns	14.9	ns	13.6 ^{BT}
10240	14.0 ^{dupl}	15.9	14.0	ns	14.7	15.3	14.2
10249	14.9	15.8	14.4	ns	14.9	15.7	15.3
10271	15.1	15.8	14.3	ns	15.2	15.4	15.5
10279	14.7	15.4	14.0	ns	14.5	15.2	14.0 ^{BT}
10284	15.0	15.9	14.9	ns	15.2	15.3	15.4
10365 ^{FT}	15.3	16.1	14.2	15.6	15.1	15.2	14.2 ^{BT}
10522	15.3	16.3	13.9	15.0	15.3	ns	14.6
10534	14.9	16.4	13.9	14.9	14.9	ns	14.9
10572	14.7	16.5	13.7	14.9	14.9	ns	14.9
10574	14.8	15.7	14.1	14.8	15.1	ns	15.1
10576	14.8	16.0	13.9	14.7	14.8	ns	15.0
10577	14.6	16.1	14.2	14.8	14.9	ns	15.0
10578	15.2	16.0	14.8	15.2	14.8	ns	15.4
10579	14.9	ns	14.5	15.4	14.8	ns	15.1
11662	15.2	15.4	14.2	15.1	14.8	ns	15.2
11705	15.0	15.3	14.0	15.3	14.3	ns	14.7
11718	14.6	ns	13.9	15.2	14.7	ns	14.4
11743	14.7	15.6	14.0	15.1	14.3	ns	14.9
11844	15.2	15.7	14.3	15.1	14.9	ns	14.5

out of focus
want appl.

B6 p178 clump	B6 p178 clump	B6 p178 clump	long 284.5	B6 p178 clump	288.5 long	218.6 long	long 188.9	long 276.5	Brought	417.3 d	67
404	B353	B236	B264 (abund)	B346	B292	B126	B329	B124	448	B149	
15.0	15.3	15.4	ns	ns	15.5	ns	15.8	15.3	13.1	16.5	
15.1	15.2	15.9	15.9	15.5	15.1	14.7	14.7	ns	13.1	ns	
15.1	15.5	15.7	ns	16.0	13.8	14.9	14.9	ns	12.8	ns	
14.9	15.4	ns	16.0	16.0	13.8	16.0	15.7	ns	12.7	ns	
15.2	15.1	15.6	14.7	ns	15.4	ns	ns	ns	13.1	ns	
14.8	15.7	15.7	15.8	ns	15.9	14.7	ns	ns	12.8		
14.7	15.2	15.3	15.9	ns	15.5	14.9	ns	ns	12.8		
14.9	15.2	ns	16.0	ns	15.6	14.9	ns	16.2	12.7	ns	
14.9	15.2	ns	15.1	ns	14.9	14.9	ns	ns	13.1		
14.4	15.7	16.2	15.8	16.1	14.9	14.9	ns	ns	12.4	13.8	
14.8	15.7	14.9	16.0	15.7	15.4	14.8	ns	ns	13.3		
14.9	15.3	?	15.9	15.5	15.5	14.9	ns	ns	13.1	13.8	
14.7	15.2	15.5	15.6	15.4	15.3	15.2	ns	ns	13.0	14.6	
14.9	15.0	15.5	15.3	15.3	15.1	14.9	ns	16.0	13.0	14.7	
14.7	15.5	15.4	15.8	15.7	15.3	15.3	ns	ns	13.1	14.4	
15.1	15.1	15.0	ns	16.2	15.5	16.1	ns	ns	12.9	14.9	
15.3	15.6	15.6	15.2	15.9	15.8	ns	16.3	15.5	12.9	16.0	
14.9	15.1	15.8	ns	15.7	15.7	ns	16.2	15.0	13.2		
15.1	15.2	15.5	ns	16.1	15.3	ns	15.2	15.2	13.1	15.8	
14.9	15.3	15.4	15.7	16.2	15.7	ns	15.1	14.9	12.1		
14.7	14.8	15.1	ns	16.2	16.0	ns	15.6	15.7	13.1		
15.1	15.3	15.8	ns	15.8	15.7	ns	15.5	15.5	13.2		
15.1	15.4	15.4	ns	16.0	15.5	ns	15.3	15.3	12.8		
14.8	14.8	15.0	ns	15.2	15.4	ns	15.0	15.0	13.2	flamed	
14.3	15.2	15.4	ns	15.2	15.6	ns	ns	ns	12.9	ns	
14.3	15.2	16.0	ns	15.3	ns	ns	ns	ns	13.2	ft	
14.7	15.1	15.1	ns	15.1	ns	15.6	ns	ns	13.1	ns	
14.8	15.1	15.3	ns	15.6	14.9	ns	ns	ns	12.8	15.6	

JD	Plate No	B161	B10	509	P338	B265	B11	B74
	MF 11893	14.8	15.8	14.0	15.2	15.0	ms	14.9
	11899	15.0	blu	14.2	14.5	14.8	ms	15.1
	11919	15.1	15.7	13.6	15.0	14.9	ms	15.2
	11973	^{blu} 14.8	15.8	13.6	15.5	14.9	ms	15.2
	12285	14.8	—	14.7	14.6	14.5	ms	—
	13120	14.8	15.8	14.3	14.9	14.5	ms	15.0
	13134	14.9	ms	13.7	15.2	14.7	ms	15.0
	13287	14.7	ms	14.9	15.6	14.6	15.8	14.5
	13327	14.9	ms	14.5	15.5	14.5	15.4	14.9
	13398	14.9	15.6	14.1	ms	14.9	ms	15.0
	13463	15.3	15.6	14.1	ms	15.6	ms	15.1
	13481	15.1	ms	14.0	ms	15.1	ms	14.4
	13495	14.8	ms	14.0	ms	14.8	ms	14.9
	13500	14.7	15.7	14.3	ms	15.2	ms	14.7
	13502	14.7	15.7	13.7	15.7	15.2	20m?	15.5

404	B353	B236	B264	B341	B292	B126	B329	B124	448	B149
14.3	15.6	RT	15.6	15.7	14.5	ns	ns	ns	13.3	
14.4	15.1	"	ns	15.1	14.8	ns	ns	ns	12.9	
14.6	15.5	15.1	15.7	15.3	14.8	ns	ns	ns	13.0	15.6
14.5	14.9	RT	15.0	15.1	13.7	ns	ns	ns	12.9	14.1
14.0	15.1	15.1	ns	ns	13.7	ns	14.1	ns	12.6	—
14.4	14.6	RT	15.2	15.3	14.3	14.9	ns	ns	12.8	
14.3	15.2	RT	15.7	15.6	14.3	15.3	ns	ns	12.8	16.3
14.3	15.7	15.8	15.7	15.6	14.3	16.0	ns	15.0	13.1	16.5
14.5	15.1	RT	15.8	15.8	14.3	ns	ns	14.9	12.9	
14.6	14.9	RT	ns	16.0	15.4	ns	16.0	15.8	12.8	ns
14.4	14.7	15.7	ns	16.3	16.0	ns	14.4	ns	13.0	15.9
14.1	15.1	RT	ns	16.2	15.8	ns	14.0	ns	12.7	
14.5	15.4	RT	ns	15.6	15.6	ns	14.4	ns	13.0	
RT 14.7	15.1	15.1	ns	15.9	16.2	13.9	ns	13.1		
14.9	14.8	RT	ns	15.9	15.7	ns	14.2	ns	12.8	14.9

	B6p162	B6p162	B6p162	B6p162 Paler also	Solar 183.6 348	405 ^d 407	143 ^d B128	196 ^d B205	230.6 ^d Flu Sign
Plate No	328	347	293	310					
MF P539	14.3	13.9	12.8	ns	ns	ns	14.9	ns	ns
8673	14.6	13.8	13.7	mes	15.8	ns	ns	ns	ns
8724	14.7	13.8	13.5	ns	15.2	ns	ns	15.8	ns
8785	14.4 ^{br}	12.9	13.5	ns	14.5	ns	16.1	15.2	14.4
8842	14.2	12.6	13.3	ns	15.2	16.1	14.9	15.8	14.1
9816	13.7	14.0	13.2	ns	ns	ns	ns	14.8	ns
9828	14.4	13.9	13.7	ns	ns	16.3	16.4	15.1	ns
9838	14.2	13.5	13.5	ns	ns	ns	ns	14.9	ns
10141	14.5	13.4	13.6	ns	ns	16.2	15.1	15.5	ns
10146	14.4	13.4	13.3	ns	ns	16.0	15.3	15.7	ns
10240	14.5	13.1	14.0	ns	ns	16.6	15.7	16.6	ns
10249	14.5	13.4	13.8	ns	ns	16.6	15.7	ns	ns
10271	14.6	13.6	13.7	ns	ns	ns	ns	16.6	ns
10279	14.8	13.7	13.7	ns	ns	ns	15.7	ns	ns
10284	14.9	14.1	14.2	ns	ns	16.5	16.3	ns	ns
10365	14.7	13.4	13.6	ns	ns	ns	ns	ns	ns
10522	14.0	13.2	13.2	ns	ns	ns	ns	ns	14.0
10534	14.3	13.5	13.7	ns	ns	ns	16.4	ns	14.2
10572	14.3	13.2	13.5	ns	15.7	ns	ns	ns	13.7
10574	14.5	13.0	13.6	ns	15.6	ns	ns	ns	13.7
10576	14.1	13.0	13.8	ns	ns	ns	ns	ns	—
10577	14.1 13.7	13.0	13.7	ns	15.7	ns	ns	ns	13.7
10578	14.9	13.1	13.9	ns	ns	ns	ns	ns	14.3
10579	14.9	13.0	14.2 14.4	ns	ns	ns	ns	ns	14.4
11662	14.6	14.3	13.8	ns	ns	15.6	16.2	15.3	ns
11705	14.3 ^{br}	14.3	13.9	ns	ns	15.6	ns	14.9	ns
11718	14.4	13.6	13.9	ns	ns	ns	ns	15.1	ns
11743	14.5	13.1	13.8	ns	ns	14.9	ns	15.3	ns

B66p162 ✓	B66p162 dove comp.	B66p162 comp.	274 ^d	B66p162 ✓	145.3	212.5	172 ^d	elou ball	B66p162	B66p162 comp.	Comp group 211 ^d	B66p162
452	340	330	B130	B23	B129	B217	339	B216	B218	B219	410	
14.4	14.3	15.8	ms.	14.2	15.1	ms	15.5	13.8	14.3	ms	14.6	
15.1	14.5	16.0	ms	13.7	ms	15.2	ms	13.8	14.1	15.3	13.4	
13.6	14.2	15.3	ms	13.9	ms	15.8	ms	13.9	14.2	15.7	13.4	
14.3	14.8	16.0	ms	14.0	15.9	ms	15.1	14.0	14.2	16.0	14.3	
14.0	13.9	15.8	ms	13.7	15.6	ms	14.7	13.7	14.0	ms	13.2	
14.7	14.0	14.9	15.7	14.3	ms	15.2	14.9	14.0	14.1	14.9	13.9	
15.2	13.9	14.7	16.1	14.0	ms	15.4	15.0	14.2	14.4	15.3	13.9	
15.0	13.8	14.9	15.7	13.7	ms	15.3	14.7	13.9	13.9	15.0	13.7	
14.6	14.5 ¹²	16.3	15.1	14.0	15.1	15.6	ms	13.8	13.6	15.3	14.3	
14.5	13.9	15.9	15.6	14.4	14.9	15.8	ms	14.2	13.8	15.6	14.5 ^{ft}	
15.2	14.6	16.5	14.8	14.2	15.9	15.8	ms	13.9	13.9	16.3	13.4	
15.1	14.4	16.2	15.1	14.3	15.3	16.2	ms	13.7	13.8	15.7	13.7	
15.3	14.4	16.0	15.2	14.5	15.7	ms	ms	14.8	14.1	16.2	14.3	
15.2	14.4	ms	15.1	14.4	16.3	ms	ms	13.6	14.1	ms	14.4	
15.1	14.7	16.2	15.3	14.3	16.5	ms	ms	14.2	14.0	16.4	14.3	
14.9	14.3	14.7	15.7	14.2	ms	ms	ms	13.7	13.6	16.3	13.5	
14.2	14.2	15.4	ms	13.6	ms	ms	15.4	13.1	13.2	ms	13.4	
14.7	13.9	15.1	ms	13.9	ms	ms	ms	13.6	13.6	16.3	13.6	
14.5	14.4	16.3	ms	13.6	ms	16.5	14.9	13.8	13.5	ms	13.7	
14.7	14.0	16.0	ms	13.6	ms	ms	14.8	13.8	13.7	ms	13.4	
14.2	14.1	16.0	ms	13.9	ms	ms	14.8	13.8	13.3	ms	13.4	
14.2	13.8	16.0	ms	13.7	ms	ms	14.9	13.5	13.7	16.0	13.5	
14.2	14.3	16.6	ms	14.0	ms	ms	14.8	13.9	13.7	ms	13.9	
14.5	14.2	ms	ms	14.5	ms	ms	14.7	14.0	13.9	ms	13.9	
13.9	14.2	16.0	ms	13.9	15.7	ms	ms	14.0	14.4	ms	14.8	
13.6	14.0	15.2	ms	14.0	15.7	ms	ms	13.8	14.2	ms	14.4	
13.9	14.0	ms	ms	14.0	ms	ms	ms	14.0	13.9	ms	13.6	
13.7	14.4	14.9	ms	14.2	ms	ms	ms	14.3	14.4	ms	13.3	

Plate No	B328	B347	B293	B310	B348	407	B128	B205	FU
MF11844	14.0	13.3	13.7	ns [✓]	ns	15.9	16.0	15.8	14.3
11883	14.5	13.1	14.0	ns ^r	ns	ns	ns	15.8	14.4
11899	14.7	13.0	13.9	ns [✓]	ns	ns	ns	ns	14.0
11899									
11919	14.1	13.3 [✓]	14.0	13.7	ns	ns	ns	ns	14.0
11933	14.0	13.7 ^{F+}	13.0	ns	ns	ns	ns	ns	13.7
12285	14.1	14.4	14.0	ns	ns	ns	ns	ns	ns
13120	14.2	14.0	14.0	15.6 ^{ns}	ns	14.0	15.3	ns	ns
13134	14.7	12.7	14.0	15.0 ^{ns}	?	14.4	15.8	15.9	ns
13287	14.2	13.2	13.8	ns	15.6	15.8	15.6	14.7	ns
13327	14.5	14.0	13.9	ns	15.6	15.4	15.7	14.9	ns
13398	14.4	14.0	13.9	ns	14.2	ns	ns	15.7	16.4
13463	14.3 ^{ns}	13.9	13.8	ns ^r	14.6	ns	16.4	ns	ns
13481	14.3 ^{ns}	13.9	13.4	ns	14.4	ns	16.4	ns	15.8 ⁺
13495	14.0	13.3	13.4	ns	14.0 ⁺	ns	ns	ns	15.7
13500	14.4 ^{ns}	12.7	14.0	ns	14.8	ns	ns	16.0	15.3
13502	14.5	12.7	14.0	15.9 ^{ns}	14.9	ns	16.0	ns	15.4

A 4904	—	—	—	—	14.5	ns	14.8	—	—
2713	—	—	—	—	—	—	—	—	—
5555	—	—	—	—	ns	14.6	15.0	—	—
5622	—	—	—	—	ns	15.1	16.2	—	—
24755	13996	14.0	ns	ns	15.9	ns	15.7	ns	13.9

camp.

*red done
in double camp*

452	B340	B330	B130	B23	B129	B217	B339	B216	B218	B219	410
14.4	13.5	15.3	ns	14.2	ns	ns	14.4	14.0	14.2	ns	14.7
14.5	14.3	15.2	ns	13.8	ns	ns	14.7	13.8	14.4	16.0	14.0
14.0	13.9	ns	ns	13.9	ns	15.7	14.6	14.0	14.3	ns	13.9
14.3	14.6	15.7	ns	14.1	ns	16.0	14.5	14.7	14.8	ns	13.2
14.3	13.9	15.7	ns	13.6	ns	14.9	14.7	13.5	14.0	14.8	14.2
14.4	13.3	ns	ns	14.0	14.8	ns	ns	14.0	14.0	ns	14.6
14.5	14.3	15.6	14.8	14.0	15.8	ns	15.8	13.9	14.7	ns	14.0
14.7	14.0	15.2	15.5	14.3	ns	ns	15.7	14.0	14.3	ns	13.8
14.0	14.4	15.8	ns	13.9	15.3	ns	14.7	13.9	14.0	ns	14.0
13.9	14.5	15.8	ns	14.2	15.3	ns	15.1	14.5	14.7	16.0	14.8
14.1	14.2	15.2	ns	14.2	ns	ns	ns	14.3	14.6	16.0	15.1
15.3	14.0	15.3	ns	14.0	ns	15.0	ns	13.9	14.2	15.8	14.6
15.3	14.0	15.3	ns	14.2	ns	15.2	ns	14.1	14.1	15.8 ns	15.0
15.0	13.6	14.9	ns	14.1	ns	15.0	ns	14.2	13.4	15.6	15.2
14.5	14.4	15.3	ns	14.2	16.0	15.1	ns	14.2	14.4	15.4	14.4
14.5	14.5	15.4	ns	14.4	ns	14.9	ns	14.4	14.3	15.5	14.4

14.3	14.0										
14.5	13.9	16.0	ns	14.0	15.7	14.9	ns	13.9	13.9	ns	14.8
14.3	14.0	ns	15.0	14.0	15.0	15.0	ns	14.4	14.4	ns	14.0
14.9	14.2	ns	15.8	14.4	15.0	ns	15.0	14.2	13.9	ns	14.2
13.9	14.0	15.2	16.2	13.9	15.5	15.0	16.0	14.3	13.6	ns	14.5
14.9	13.7	14.9	ns	13.3	14.9	16.6	14.7	13.7	13.6	16.3	14.9

78

continued from
page 89

B137

17 ^h -45	B137	17 ^h -45	B137	17 ^h -45	B137
19 149.804 AM 7394 7.9		19 659.573 AM 8634 7.9		20 327.702 AM 9935 7.8	
157.842 7405 7.9		695.540 8731 7.9		329.639 9942 7.8	
159.858 7411 7.8		888.834 8844 7.7		336.631 9969 7.8	
202.713 7452 7.8		893.897 8870 7.7		339.684 9989 7.8	
205.608 7461 7.9		897.701 8890 7.8		348.587 10020 7.8	
211.682 7469 7.9		914.794 8952 7.8		348.626 10021 7.7	
215.692 7495 7.9		919.785 8984 7.8		352.649 031 7.8	
223.657 7515 7.8		922.749 8998 7.8		366.532 084 7.8	
231.619 7541 8.1		928.645 9038 7.8		367.541 087 7.7	
236.565 7567 7.8		930.792 9061 7.9		373.621 096 7.8	
241.649 7607 7.8		943.702 9098 7.9		384.584 099 8.0	
249.527 7625 7.7		945.687 9115 7.8		393.576 138 7.8	
250.603 7629 7.8		952.750 9162 8.2		401.536 156 1st yel.	
251.588 7638 7.9		957.596 9182 7.8		426.547 213 8.0	
264.557 7675 7.8		972.657 9231 8.0		680.669 736 8.0	
292.520 7743 7.7		973.563 9238 7.8		689.624 769 7.9	
303.538 7819 7.7		982.593 9296 7.8		694.651 812 7.8	
516.769 8112 7.7		20008.514 9375 7.8		700.543 864 1st yel.	
540.804 8189 7.7		012.612 9387 7.7		750.521 1111 7.7	
543.795 8214 7.7		015.519 9465 7.8		754.517 145 7.8	
546.709 8237 7.7		038.520 9505 8.0		755.506 155 7.9	
547.716 8246 7.7		043.571 9533 7.7		758.514 183 1st yel.	
550.703 8263 7.8		047.518 9554 7.9		932.863 557 7.9	
558.763 8282 7.7		282.756 9802 7.9		967.900 640 1st yel.	
560 8294 7.8		286.776 9818 7.8		21006.758 774 7.7	
567.666 8334 7.9		304.711 9883 7.9		007.738 783 7.7	
571.705 8361 7.8		307.743 9894 8.7		009.749 11802 8.6	
588.675 8389 7.7		308.695 9898 7.9		011.715 827 7.8	
600.642 8462 7.8		313.687 9907 7.8		012.723 846 7.7	
604.633 8494 7.9		315.692 9918 8.1-2		046.631 12105 7.7	
652.596 8606 8.1		324.661 9926 7.8		047.674 12117 7.8	

C

Cm

Cm

79

17-45	B137	17 ^h -45	B137	18 ^h -45	B137
21050.636 AM 12142	7.8	23166.859 AM 15704	Bt	20653.910 AM 10624	8.0
135 487	12507 7.8	23172.719	719 7.9	655.760	640 8.1
365 730	13148 7.7	176.825	729 <u>8.5</u>	664 761	684 7.5
388 729	167 7.7	179.701	749 7.8	668 762	710 8.0
372 705	187 7.8	180.818	759 7.9	669 748	717 8.0
421 622	390 7.9	193.774	791 7.8	723.600	924 7.8
424 585	399 7.9	199.777	812 8.3	723 645	925 7.8
427 577	416 7.7	219.625	852 7.9	724.606	993 8.1-2
430.601	433 8.2	221.647	862 7.8	728.587	11023 Bt yel
431 594	438 7.8	233.666	892 7.7	739.536	073 <u>8.7</u>
731 762	986 7.7	237.633	920 7.8	741.565	078 7.8
732 752	994 7.6	267.539	995 7.9	775.509	305 7.8
776 649	14127 8.1	268 575	998 7.8	21018.751	888 7.9
787.620	148 7.8	268.618	999 7.8	021 759	903 8.0
791.575	171 Bt yel	280 535	16027 8.1	025.728	944 7.9
793.576	177 Bt yel	545.768	288 7.6	077.595	12286 7.8
801.545	215 Bt yel	610 620	318 7.8	078.589	291 7.8
802.577	224 Bt yel	640 565	353 7.8	081.588	309 7.8
860.536	425 Bt yel			088.582	12322 Bt yel
866 507	456 7.8	18-45	B137	091.543	332 Bt yel
867 506	461 7.8	16281.805 AM 2037	<u>8.7</u>	151 517	582 8.1
22143.629	828 7.7 yel	17728 711	4806 7.9	154.499	599 7.9
160.592	852 Bt yel	18115 708	5593 7.7	155.513	614 8.0
22161.557	854 7.8	19924.789	9012 7.9	333 871	13067 7.8
161 -	855 7.8	20325.684	9929 7.8	344.853	055 7.9
164 548	864 7.8	356.657	10043 7.8	391.747	255 7.8
204.501	946 Bt? yel	408.530	176 Bt	394 720	277 8.1
511.635	15281 Bt yel	609.805	462 Bt	397.746	295 7.8
514 661	15290 7.9	613.795	497 Bt	447 591	479 8.0
520.630	304 8.0	617.861	519 Bt	449 582	485 7.9
573.505	466 7.7	657.839	605 7.8	452 575	498 7.9
				454 568	507 7.8

80

B 137

18 ^h -45	B137	18 ^h -45	B137	19 ^h -45	B137
21456.540 AM 13576 8.12		22850.893 AM 15601 7.8		16999.817 AM 3579 PR	
516.516 677 7.7		855.764 612 Br yel		17007.741 3616 7.7	
523.500 688 7.9		933.534 655 Br yel		017.808 3641 7.9	
531.487 691 Br yel				051.739 3732 7.8	
749.750 14023 8.0				121.537 3922 7.8	
751.736 038 7.9		19 ^h -45	B137	324.819 4069 7.8	
763.695 097 Br yel		14891.561 AM 107 7.8		345 4235 7.8	
773.709 114 Br yel		15541.828 827 Br		363.829 4274 7.7	
810.592 261 7.8		560.798 882 7.8		377.798 4321 7.9	
812.596 267 7.9		854.805 1201 Br		493.563 4613 7.7	
820.580 293 Br yel		913.729 1345 7.9		792.719 5041 7.9	
821.553 297 Br yel		926.680 1390 Br		793.712 5048 7.8	
825.533 311 Br yel		16226.859 1275 Br		835.582 5148 7.9	
827.539 323 Br yel		283.702 2050 7.8		18041.902 5386 7.8	
829.534 333 Br yel		397.584 2309 8.4 edge		056.831 5409 7.8	
834.539 352 8.1		583.789 2532 Br		070.831 5452 7.7	
885.509 527 Br yel		614.736 2652 Br		099.738 5537 7.6	
888.524 532 Br yel		639.659 2724 7.7		102.733 5553 8.0	
22133.641 791 7.8		682.578 2846 Br		114.675 5586 7.8	
172.621 881 7.8		724.629 2990 PR		118.775 5602 7.7	
176.633 896 Br yel		743.591 3050 Br		145.698 5673 7.8	
192.578 939 7.9		753.578 3082 7.8		265.531 5843 7.8	
200.560 976 Br yel		759.536 3110 7.8		326 5944 7.8	
245.514 15034 Br yel		765.569 3124 7.8		454.596 323 7.8	
483.763 239 8.1-2		766.553 3129 7.8		483.698 364 7.8-9	
502.664 265 Br? yel		933.888 3406 7.8		486.652 367 7.7	
541.624 377 7.8		938.876 3436 7.8		492.417 380 7.8	
557.602 418 7.9		964.832 3488 7.9		516.550 410 7.8	
556.549 438 Br yel		975.817 3507 8.6		582.564 511 7.8	
568.502 461 Br yel		977.725 3524 8.1		18788.794 723 8.4-5	
607.507 15535 7.7		988.836 3552 7.8		19658.564 AM 8629 7.8	
				660.5942 8640 7.9	

19-45 ^h 518			19-45			17-45 ^h		
B137			B137			B137		
19687.	AM 5699	7.8	23226.734	AM 5478	7.8	23900.874	AX 474	7.8
20688.761	10765	7.7	233.711	893	7.8	909.857	504	<u>8.6</u> ^{5F}
689723	10771	7.9	235.733	910	7.7	959.585	608	7.9
694703	10813	7.7	248.642	935	7.8	964.699	640	8.3 ^m
697670	841	7.7	255.716	970	7.8	23974.614	688	7.9
748563	11095	7.7	279.607	16024	7.7	988.632	712	8.2
750564	11112	7.8	317.440	075	7.6	24019.532	762	7.9
754549	11146	7.7	536.749	237	7.6	035.536	805	7.9
755539	11156	7.9	565.855	263	7.7	269	1028	7.9
815.501	11450	7.7	575.816	289	7.8	290.729	1067	7.9
993.862	11690	7.7	610.713	320	7.7	299.654	1098	8.1
21046.719	12107	7.6	664.601	387	7.6	313.651	1137	7.9
050.724	12144	7.8	688.502	420	7.9	325.680	1179	8.3
123.507	12417	7.8	697.532	426	7.9	356.539	1244	8.0
169516	12746	7.8	C 17-45 ^h			374.570	1274	7.9
181.495	12768	7.8	25328.570	AX 2238	8.137	402.515	1307	8.1
389.881	885	7.7	386.413	2422		626.743	1577	<u>8.6</u>
311.869	893	7.8	393.557	72	8.1	646.708	1617	7.9
776769	14128	7.8	412.477	2505	8.0	654.692	1649	8.1
22574.586	15468	7.7	419.344	45	8.1	669.690	1671	7.9
582.562	496	7.7	442.349	612	8.0	678.688	1690	7.9
574.711	291	7.8	449.349	72	8.0	698.695	1727	8.1
224.543	016	7.8	469.291	737	8.23	707.648	1761	7.9
21786.702	14144	7.7	477.248	76	8.0	711.678	1775	<u>8.6</u>
843535	375	7.8	479.248	83	8.3	759.527	1862	7.9
22165.581	868	7.8	25507.241	2933	8.0	739.576	1836	7.9
191 -	934	7.8				767.512	1890	7.9
23176.918	15731	<u>8.6</u>						
194.839	797	7.8						
199.821	813	8.1						
209.806	843	7.8						

(See page 86)

82

JD.

Plate No	K X Sp	269.5 ^d FV Sp	257.3 ^d FT Sp	8293 ^d UF 299 ^d B134	217.8 ^d B135	397	254	B35	B36
MF 8537	15.4	ns	13.2	ns	ns	15.0	14.4	13.4	12.6
8673	14.8	14.2	15.6	ns	ns	14.8	14.5	13.4	12.5
8724	15.1	14.0	ns	ns	ns	14.6	14.7	13.5	12.5
8785	14.9	14.2	ns	15.7	15.9	14.5	13.9	13.4	12.6
8842	15.2	15.8	15.7	16.0	13.8	14.5	13.9	13.3	12.2
9816	14.7	ns	13.2	ns	16.0	14.7	14.5	13.5	12.6
9828	15.0	ns	13.3	ns	ns	15.2	13.3	13.5	12.7
9838	14.6	ns	13.2	ns	15.9	14.5	14.9	13.5	12.4
10141	14.4	ns	12.2	15.2	ns	14.5	14.0	13.9	12.9
10146	14.3	ns	12.0	15.6	ns	14.3	14.6	13.7	12.4
10240	14.2	ns	13.0	15.3	16.1	14.6	14.0	13.2	12.8
10249	14.4	ns	12.6	15.5	ns	14.8	14.5	13.5	12.4
10271	14.5	ns	13.4	15.7	ns	14.5	13.8	13.5	12.4
10279	14.4	ns	13.3	15.6	ns	14.5	14.3	13.8	12.7
10284	14.4	ns	13.7	16.0	ns	14.5	14.3	13.7	12.5
10365	14.5	ns	14.3	ns	ns	14.4	13.6	13.4	12.5
10522	14.2	ns	15.2	ns	15.2	13.7	13.8	12.9	12.6
10534	14.5	ns	15.2	ns	15.3	13.9	13.7	13.1	12.5
10572	14.8	ns	15.5	ns	14.5	14.5	13.6	13.4	12.9
10574	14.8	ns	15.5	ns	14.8	14.9	14.1	13.1	12.8
10576	14.1	1	1	1	1	14.8	14.7	13.3	12.8
10577	1	1	1	1	1	14.5	14.3	13.2	12.6
10578	15.1	1	1	1	1	15.1	14.0	13.2	12.6
10579	14.8	ns	15.5	ns	14.7	14.7	14.5	13.4	12.5
11662	15.2	14.3	13.0	ns	14.5	14.9	14.4	13.6	12.9
11705	14.9	14.1	12.7	ns	14.5	14.7	13.7	13.5	12.8
11718	14.8	14.0	12.7	ns	14.4	14.8	14.1	13.5	12.8
11743	15.1	13.7	13.0	ns	14.8	14.9	14.7	13.8	12.8

278	436	B 93	B 132	B 131	331	B 186	460	378	B 32	435	252
13.6	16.2	13.9	15.8	15.8	16.4	ns	15.0	15.1	13.8	ns	15.3
13.6	ns	13.4	16.2	15.2	15.9	15.3	15.2	ns	13.6	15.7	14.2
14.0	16.1	13.1	ns	16.0	15.9	15.5	14.9	ns	14.1	16.0	14.9
13.9	16.0	13.7	16.0	16.3	15.8	16.3	15.0	14.8	14.1	16.7	15.1
14.7	16.2	14.0	16.0	ns	15.8	ns	15.1	ns	13.4	16.3	15.4
14.0	ns	14.9	15.8	ns	15.7	ns	14.9	ns	13.8	16.0	15.1
14.7	16.0	15.0	16.2	ns	15.5	ns	14.9	16.4	13.7	15.7	15.2
13.6	15.7	15.0	16.2	16.4	15.7	ns	15.1	15.8	13.7	16.4	15.7
14.2	16.2	14.0	15.4	ns	15.7	15.3	15.1	15.2	14.0	15.6	15.4
13.6	15.8	14.2	15.6	ns	16.0	16.0	14.9	15.5	14.1	16.0	16.0
13.9	15.8	13.1	ns	ns	15.8	ns	15.0	ns	14.0	16.0	15.8
13.7	15.7	13.1	ns	ns	16.0	ns	15.4	ns	13.6	16.0	15.2
13.6	ns	14.3	15.9	ns	16.0	ns	15.4	ns	13.6	16.0	15.4
13.6	16.0	14.0	15.6	ns	ns	ns	15.3	ns	13.9	16.0	15.5
14.3	15.8	14.4	15.7	ns	ns	ns	14.9	ns	14.4	ns	15.5
14.2	15.5	13.1	ns	ns	ns	ns	15.2	ns	13.9	ns	15.5
13.6	15.9	13.7	15.9	14.9	ns	15.2	15.2	15.4	13.2	16.0	14.9
14.2	15.5	13.7	ns	15.5	ns	15.3	15.2	15.6	13.4	ns	15.1
13.4	15.6	15.1	ns	14.1	15.1	15.3	14.8	15.4	13.7	15.1	15.7
13.6	15.8	15.1	15.9	14.1	ns	15.1	15.0	15.6	14.0	15.6	15.5
13.7	16.0	14.9	ns	ns	15.2	14.9	15.1	15.4	13.9	15.6	15.5
13.7	15.5	15.3	ns	ns	15.7	15.5	15.3	15.5	13.9	15.6	15.0
13.8	15.2	15.2	ns	ns	15.5	15.4	15.2	15.5	13.9	15.6	15.3
14.3	15.3	14.9	ns	14.2	ns	15.2	15.2	15.5	14.2	15.6	15.5
14.3	ns	15.0	ns	ns	ns	ns	15.5	ns	14.0	ns	15.2
13.9	15.2	14.8	ns	ns	ns	ns	14.9	15.4	14.0	ns	15.0
14.9	ns	14.8	ns	ns	ns	15.0	15.0	ns	14.4	ns	15.0
13.9	15.3	15.2	16.0	ns	16.3	ns	15.3	ns	14.3	ns	15.6

J.D.

Plate No	KXsq	FVsq	FTsq	B134	B135	393	254	B35	B36
MF11844	15.2	15.1	12.9	ns	15.1	15.2	14.9	13.2	12.5
11883	15.1	15.3	13.5	ns	16.0	15.0	14.6	13.6	12.6
11899	15.0	14.7	14.0	ns	ns	15.3	14.7	13.7	12.5
11919	15.0	15.4	13.4	ns	15.5	15.2	14.4	13.2	12.4
11973	14.9	15.6	14.2	ns	ns	14.5	14.1	13.3	12.8
12285	14.5	ns	ns	ns	ns	14.7	14.3	13.2	12.7
13120	14.6	ns	ns	ns	ns	14.9	14.0	13.2	12.8
13134	15.1	ns	ns	ns	ns	14.7	14.0	13.4	12.8
13287	14.7	ns	ns	ns	14.7	14.6	14.2	13.1	12.16
13327	14.5	ns	ns	ns	14.4	14.7	14.0	13.3	12.5
13398	14.7	ns	15.4	ns	14.4	15.0	14.7	14.0	12.8
13463	14.8	ns	14.5	ns	15.2	14.4	14.8	13.8	12.5
13481	14.5	ns	14.4	ns	15.5	14.5	15.1	13.2	12.8
13495	14.5	ns	14.0	ns	15.4	14.6	15.3	13.3	12.4
13500	14.8	15.7	13.6	ns	15.6	14.0	14.4	13.4	12.7
13502	14.9	ns	13.3	ns	15.7	14.8	15.2	14.2	12.7

A1904	15.7	ns	—	ns	ns	14.6	14.0	13.1	12.7
2713	16.1	ns	—	ns	ns	14.7	14.1	13.8	12.8
5555	16.0	ns	—	15.3	15.1	14.9	14.7	14.4	12.9
5622	15.3	ns	—	15.5	15.7	14.9	14.5	13.7	12.8
13996	15.1	ns	16.5	16.6	15.5	14.8	14.0	13.6	12.7

metaboly?

278	436	B93	B32	B31	331	B186	460	978	B32	435	252
13.9	NS	14.9	NS	NS	NS	15.8	15.1	15.5	13.5	NS	<i>common mag</i> 15.7
13.6	<i>look at</i> Rt	14.8	NS	NS	NS	NS	14.8	15.1	13.6	NS	15.6
13.6	NS	14.8	NS	NS	NS	NS	15.0	15.2	14.0	NS	15.6
13.9	NS	14.3	NS	16.1	NS	16.0	15.1	14.9	13.6	15.8	15.7
14.7	15.8	14.1	NS	NS	15.4	NS	15.1	15.9	13.7	15.7	15.3
13.7	NS	14.0	NS	NS	NS	NS	NS	13.7	14.2	NS	15.1
13.8	15.9	14.0	15.4	14.4	16.0	15.6	15.1	NS	14.3	NS	15.4
14.4	15.8	14.3	16.0	15.2	15.3	15.8	15.1	NS	13.9	NS	15.7
13.9	15.8	14.0	NS	15.7	15.5	15.8	14.7	15.7	13.9	NS	15.3
14.3	NS	13.9	NS	NS	NS	<i>NS</i> 14.9	14.9	15.6	14.0	NS	15.2
13.8	NS	14.0	15.4	NS	NS	NS	15.5	15.4	14.3	NS	15.5
14.3	15.5	14.2	15.7	NS	NS	15.9	15.5	NS	14.3	NS	15.4
14.1	NS	13.1	NS	16.0	15.7	15.5	15.4	NS	13.5	NS	15.2
14.0	NS	13.0	NS	16.0	-	-	-	NS	14.6	NS	15.5
13.8	15.8	14.1	NS	NS	15.6	15.3	15.1	NS	14.3	NS	15.1
14.7	15.3	14.3	NS	NS	NS	15.5	15.4	NS	14.0	NS	15.8

13.8	NS	14.3	NS	NS	16.0	NS	14.9	NS	14.1	NS	NS
14.1	NS	14.7	NS	NS	NS	14.9	NS	NS	13.6	NS	NS
14.3	NS	14.5	NS	NS	NS	15.2	NS	NS	13.8	NS	NS
14.4	NS	13.2	NS	NS	16.0	15.9	15.1	NS	13.4	NS	NS
13.9	15.8	14.8	16.6	14.0	16.5	15.1	15.1	NS	13.8	15.9	15.5

meat
thru

86

April 1933

B137

C

C

B137

B137
F

B137

11202.630	B3842	7.9	14191.558	B20502	18.4	18456.129	B40358	8.6
204.646	3861	ut	375.883	21078	8.4	19147.864	42234	7.8
221.588	3960	7.8	573.514	22022	7.9	605.492	43354	8.0
11497.831	5151	7.8	751.829	22510	7.6	634.507	43426	7.9
531.762	5407	7.8	14833.623	23200	8.0	903.752	43692	8.0
641.509	5833	7.8	853.572	23496	8.8	912.786	43712	8.0
642.493	5835	7.8	863.529	23684	8.21	19929.789	43766	8.1
872.746	5967	8.0	15168.776	25424	8.6	19948.601	43766	8.1
12260.799	7876	7.7	15171.775	25506	7.8	20288.786	44538	8.0
260.807	7877	7.8	15172.779	25516	8.1	20330.	44783	8.1
585.905	9281	8.0	15485.793	27108	7.8	20326.633	44840	7.7
592.845	9406	7.9	842.807	29254	7.9	338.665	44861	8.4
603.824	9482	7.8	870.768	29570	7.8	339.664	44876	7.7
623.671	9552	7.8	872.767	29605	8.2	2356.569	44932	7.6
630.	9592	7.8	897.	29853	8.2	362.600	45001	7.6
630.	9593	7.9	15964.640	30511	8.1	369.536	45022	8.3
13080.702	11634	8.4	16222.886	31470	7.6	21013.760	46997	7.7
357.834	13749	8.1	228.807	31523	7.8	21019.731	47076	8.1
384.738	14029	8.3	257.728	31862	8.1	025.705	47262	8.1
710.914	16037	8.1	16281.648	31995	8.1	026.710	47320	8.1
13730.710	16448	8.1	281.822	31995	8.1	039.691	47633	7.5
740.802	16518	8.2	290.664	32049	7.7	064.611	47985	7.6
785.653	17120	7.7	396.530	32650	8.1	19999.621	47104	7.7
805.548	17327	7.8	594.793	33486	7.8	20308.695	47658	8.1
826.546	17444	7.8	615.776	33759	7.8	708.575	45371	7.8
14017.833	18724	7.2	625.735	33836	7.7	20712.592	45416	7.8
037.866	18921	7.8	943.852	35781	7.8	713.565	45431	7.6
057.754	19082	7.6	17080.641	36792	8.4	21390.666	50947	7.8
058.649	19113	7.9	094.572	36868	8.3	390.674	50988	8.0
181.616	20285	7.6	17727.800	37538	8.0	398.644	51089	7.8
188.535	20465	7.8	17803.555	37968	7.9	399.641	51140	7.7
			813.554	38031	7.9	400.664	51159	7.8
			18098.799	38515	7.8	401.681	51183	7.7
			18406.518	39090	8.0	402.692	51199	8.2
			18427.674	40063	7.8	732.774	52893	7.7
				40133	7.9	749.695	948	7.8
						750.704	978	7.7

in hC

87

B137			B137			17 ^L -30			B137
11 527.764	B 5384	7.8	16 730.526	B 34253	7.7	17 719.664	AM 4858	8.0	
529.762	5397	7.8	17 096.508	36911	7.6	18 570.645	AK 480	7.8	
12 592.836	7405	7.8	801.626	37956	BT	19 509.785	AM 8664	7.8	
994.708	11421	8.0	801.650	37957	7.7	19 518.735	8122	7.7	
13 692.763	15 824	7.7	823.567	38121	7.8	19 634	8565	7.8	
834.567	17 534	7.8	18 111.777	39191	7.9	19 643.493	8574	7.9	
958.899	18 492	7.7	18 848.701	41484	7.8	645.563	8578	7.8	
14 071.846	19217	7.7	19 615.589	43396	7.8	946.740	9123	7.9	
084.728	19444	7.6	20 315.665	44711	8.2	20 606.800	10435	8.8	
108.654	19719	7.7	316.560	44720	BT	20 653.865	10623	8.0	
14 190.526	20489	7.8	369.521	45021	8.3	20 654.784	10632	8.8	
457.748	21703	7.8	370.517	45023	BT?	659.718	10656	7.9	
458.774	21709	7.7	370.544	45046	8.0	660.730	10662	8.0	
458.774	21710	BT	386.521	45047	8.1	668.718	10709	7.9	
570.516	21991	7.8	700.586	45326	BT	712.578	10937	8.0	
14 750.822	22475	7.8	709.593	45385	BT	20 716.568	10952	8.7	
822.768	23058	7.9	737.513	45528	BT	720.596	10973	7.9	
891.603	23968	7.7	997.800	46667	BT	776.485	11316	7.8	
15 148.748	25269	7.8	21 038.699	47606	8.0	21 017.531	11875	7.8	
266.614	25918	8.0	050.653	47803	BT	022.720	11915	7.8	
15 530.678	27406	7.7	062.609	47962	BT	023.690	11926	7.7	
15 609.582	28195	7.8	21 392.712	50994	7.8	077.551	12285	7.7	
610.585	28204	7.9	424.602	51431	BT	079.542	12296	7.7	
619.549	28255	8.2	426.614	51468	BT	093.541	12342	7.7	
663.562	28657	7.8				151.493	12521	7.8	
896.783	29818	7.8				153.487	12592	7.8	
939.649	30309	7.7				335.842	13022	7.7	
945.557	30359	7.8				337.830	13040	7.8	
16 242.731	31726	8.0				291.701	13254	7.8	
16 268.670	31919	8.0				394.675	13276	7.9	
347.610	32491	7.8				098.663	13302	8.0	
16 397.537	32695	8.4							
582.890	33299	8.0							
624.723	33807	7.7							
703.576	34633	7.8							

C inh B 137

17^h - 30

B 137

21400.667	AM 13319	7.7
403.673	13337	7.8
447.542	13478	7.8
450.556	13488	7.9
451.533	13492	7.8
452.521	13497	7.8
516.492	13676	7.7
749.706	14022	7.9
751.704	14037	7.8
755.697	14048	7.7
21857.712	14061	<u>8.7</u>
760.680	14083	7.7
762.687	14091	BT
820.537	14292	BT
812.553	14266	7.7
870.507	14480	8.0
92931.612	14782	7.8
173.571	14885	7.8
192.534	14938	7.8
197.537	14958	8.1
136.602	14807	7.7
541.578	15376	7.8
551.541	15417	7.8
854.715	15609	7.7
905.596	15649	7.7
23266	15993	7.7
286	16093	7.7
288	16044	7.9
	AX 1754	8.1
	1781	8.1

C inh

19^h - 30

B 137

17039.607	AM 3720	BT
738.835	4920	BT
20328.705	9938	BT
20352.695	10032	7.7
657.882	10606	BT
655.808	10641	7.8
667.809	10702	7.7
669.795	10718	7.6
712.664	10939	7.8
721.654	10976	7.7
738.525	11064	7.9
21022.754	11956	7.7
21035.717	12032	7.8
039.719	12064	7.9
077.639	12287	7.8
079.630	12298	7.8
092.585	12338	7.9
099.590	12363	7.8
104.542	12386	7.7
154.522	12600	BT
157.513	12637	BT
21757.758	14062	BT
758.766	14070	7.7
817.608	14281	7.7
819.596	14288	8.16
21835.565	14356	7.8
22173.661	14887	7.8
195.578	14950	7.9
542.649	15381	7.7
551.650	15419	7.8
850.740	15602	7.6

C

17-45

B 137

14872.577	AM 67	BT
874.594	73	7.8
898.570	124	BT
942.527	225	7.8
15071.877	366	7.8
117.820	426	7.9
198.666	515	BT
226.529	555	7.8
278.522	656	7.8
560.670	879	7.8
602.603	960	7.8
609.642	988	7.8
619.536	1032	7.8
841.885	1171	7.9
868.778	1213	7.9
870.757	1225	7.8
912.606	1333	7.9
914.683	1351	7.9
918.733	1374	7.9
925.704	1383	7.9
927.674	1397	7.8
974.567	1498	7.9
16034	1606	7.9
1606.516	1640	7.9
177.839	1829	7.9
16208.774	1852	7.9
16222.702	1862	7.8
16233.780	1895	7.8
16268.682	1989	7.9
16279.754	2024	7.9
16284.792	2051	7.9
16286.672	2054	7.9

17-45	B137	17-45	B137	17-45	B137
16296.503 AM 2081	7.8	17353.828 AM 4249	<u>8.9</u>	18436.825 AM 6105	7.9
837.654 2177	7.7	363.783 4273	7.8	440.532 803 AK 310	7.8
339.653 2191	7.8	378.709 4329	7.7	457.671 AM 6190	7.9
344.637 2212	7.7	394.697 4367	7.8	466.731 6198	7.9
396.537 2299	7.8	429.624 4455	8.1	475.729 6239	7.8
582.721 2523	<u>8.4</u>	433.630 4486	7.7	479 AK 359	8.2 ¹²⁴ ₂₇₆
585.750 2541	7.9	476.509 4590	8.0	483.605 AM 6207	7.9
606.670 2615	7.8	493.514 4612	7.8	486.609 ³³³ AK 366	7.9
608.757 2636	7.8	684.797 4773	7.8	493.672 ³⁷² 379	7.7
615.716 2655	7.8	686.871 4772	7.9	501.638 AM 6348	7.8
634.628 2691	7.9	706.821 4820	7.7	503. AK 397	8.5 ¹²⁴ ₂₇₆
648.659 2751	7.7	727.709 4878	8.1	511.597 AM 6392	7.8
652.620 2763	8.0	789.642 5034	7.9	513.520 6410	7.8
669.700 2825	7.9	816.545 5104	<u>8.4</u>	523.607 6432	7.8
671.550 2832	7.9	999.887 5317	7.7	530.617 6448	7.8
691.519 2882	7.9	18034.810 5352	7.8	537.534 6481	7.8
694.673 2897	7.9	18070.743 5450	7.8	553.395 ³⁹⁵ 666 AK 470	7.8
744.561 3058	<u>8.7</u>	098.800 5529	7.9	562.501 AM 6502	7.8
760.512 3112	8.0	111.720 5575	7.8	596.256 ²⁵⁶ 527 AK 529	7.8
933.842 3405	8.8	115 5592	7.7	750.515 ⁵¹⁵ 787 694	7.7
935.790 3420	7.8	119 5607	7.6	766.837 AM 6861	7.8
938.788 3434	7.9	123 5616	7.8	818.786 6927	7.8
976.702 3513	7.9	129.669 5634	7.7	813.903 AK 448	7.7
999.640 3575	7.9	149.593 5628	7.9	824.785 AM 6971	7.8
17006.719 3608	<u>8.7</u>	155.599 5708	7.9	825.732 6975	7.8
007.650 3614	7.9	169.561 5751	7.7	852.680 7069	7.8
037.665 3703	<u>8.9</u>	369.527 ⁵²⁷ 788 AK 155	7.8	883.571 7157	7.8
066.580 3762	7.8	381 198	7.8	885.611 7170	7.8
077.605 3810	7.8	388.850 AM 5986	7.7	898.558 7209	7.9
080.609 3822	7.8	404.868 6024	7.9	911.532 7221	7.8
098.572 3873	7.7	420.754 6055	7.8	939.506 7310	7.8
325.757 4174	7.9				¹²⁴ ₂₇₆

90

Used Seq. Nova Sco No 2.

B137

JD	18-30	B137
22 905.596	AM 15649	7.9
23181.811	15767	8.0
23205.639	15818	7.7
23209.761	15842	8.0
235.683	15909	7.8
248.598	15934	7.6
253.605	15959	8.0
265	15990	7.9
267	15996	7.8
272	16013	7.8
275	16014	7.9
277	16017	7.6
288	16044	7.6
311.523	16068	7.6
346.522	16120	8.3
535.785	16230	7.7
561.723	16262	7.8
576.775	16296	7.8
662.533	16382	8.4
664.555	16386	8.0
23 905.821	AX 478	8.1
719.791	535	7.9
965.699	645	7.6
989.700	664	7.7
993.636	725	7.9
24 020.573	765	7.8
23.729	770	7.8
33.573	793	7.8
225.762	1049	7.6
327.745	1180	8.2
317.710	1146	7.8
654.757	1650	7.7

JD	18-30	B137
24 378.575	AX 1284	8.0
404.515	1316	8.3
432.512	1360	8.0
623.861	1575	7.6
706	1754	8.1
706.708	1757	7.8
712	1781	8.2
731.636	1817	8.1
754.509	1853	8.0
787.553	1919	7.8
794.524	1941	7.9
25 154.249	2015	7.7
355.598	2265	7.8
386.477	2423	8.2
389.604	2449	8.2
410.465	2494	7.6
422.324	2660	8.1
441.346	2605	7.7
448.350	2665	8.1
470.325	2744	7.9
479.319	2784	7.9
498.303	2874	8.4
522.241	2973	
523.246	2974	
526.252	2983	
532.270	3006	
23 940.667	613	7.8
24 270.845	1032	8.1
300.795	1106	7.9
348.683	1220	8.1
648.766	1625	8.1
654.756	1650	7.9
681.743	1699	7.9
703.690	1743	8.5
727.644	1805	8.0

C

JD	18 ^h 2-30	B137
14862.61	AM 15	8.3 [✓]
14867.689	33	8.0 [!]
14904.590	137	7.8
15148.725	461	8.0
224.577	538	7.7 <i>yel.</i>
526.865	798	7.5
532.702	808	7.8
533.692	817	8.4 [✓] ₅
632.573	1028	7.6
634.572	1043	7.6
885.826	1252	7.8
897.698	1278	8.0
933.684	1414	7.8
934.647	1422	8.3 [✓] _{mf}
938. -	1428	8.2 [!]
960.645	1487	7.8
16006.603	1528	7.7
010.568	1542	7.7
241.727	1917	7.7
253.712	1952	7.6
254.822	1960	7.8
308.642	2109	7.9
361.622	2261	7.6
376.621	2280	7.5
606.801	2618	7.6
636.767	2713	8.0
650.715	2756	7.9
663.797	2797	7.7
683.524	2854	8.0
692.671	2916	7.8

C

JD	18 ^h 30	B137
16711.579	AM 2959	7.6
16726.553	3002	7.9
922.886	3392	8.0
943.841	3448	8.0
968.800	3496	7.9
979.774	3537	7.7
17004.649	3597	7.6
009.770	3625	7.7
032.768	3689	7.6
076.668	3802	7.7
105.614	3883	7.5
335.103	4205	7.8
384.722	4337	8.6 ⁵
394.612	4365	7.8
403.721	4388	7.8
447.567	4527	8.0
460.553	4539	8.0
465.565	4562	8.0
495.537	4620	7.8
703.900	4804	7.8
758.723	4954	7.9
774.772	5013	7.8
787.638	5024	7.9
813.547	5090	7.8
820.554	5114	8.0
18027.888	5340	8.0
042.858	5390	7.6
069.857	5444	7.7
111.784	5576	8.0
130.685	5640	7.8

92

B 137

C

C

JD	18-30	B137	JD	18-30	B137
18148.658	AM5683	8.2	19276.560	AM7725	7.9
156.607	5712	7.7	292.564	7744	7.6
209.531	5854	7.9	300.504	7792	7.7
395.845	6011	8.0	311.528	7841	7.6
472.693	6228	7.8	511.823	8081	7.5
499.711	6338	7.6	542.899	8206	7.7
500.720	6343	7.8	545.806	8230	7.8
501.590	6347	8.0	561.722	8301	7.6
505.659	6368	7.8	572.696	8369	7.5
506.682	6374	8.0	588.717	8390	7.9
531.608	6454	7.6	593.710	8423	7.6
565.533	6592	7.8	603.651	8485	7.2
571.517	6613	7.7	604.550	8492	7.4
820.815	6946	7.8	632.576	8557	7.6
821.793	6952	7.6	645.634	8579	7.6
825.774	6976	7.6	650.649	8598	7.2
831.746 770	7018	7.7	657.558	8624	7.5
848.629	7033	7.5	711.529	8748	7.5
855.752	7063	7.3	891.871	8903	8.3-4
857.699	7084	7.7	911.895	8937	7.3
884.683	7163	7.9	922.817	8999	7.6
892.615	7195	7.8	931.658	9068	7.7
919.545	7265	8.7	942.763	9090	7.6
19153.839	7402	7.8	947.715	9131	7.6
204.742 644	7457	8.6	950.714	9146	7.5
215.737	7458	8.6	959.576	9197	7.6
224.646	7496	8.0	961.599	9203	7.3
225.608	7523	8.0	973.513	9287	7.5
253.595	7530	7.8	977.672	9267	7.4
264.598	7651	8.0	20013.561	9392	7.5
	7676	7.8			

out of focus

Cinder

11111

Cinder

93

JD 18-30 B137

20044.665	AM 9541	7.6	
289.687	9825	(7.5)	yellow
297.667	9860	7.6	
306.745	9889	7.4	
328.595	9937	7.4	
329.687	9943	7.6	
338.667	9983	7.8	
366.586	10085	7.5	
367.600	10088	7.5	
440.536	10257	7.5	
681.703	10741	8.0	out of focus
691.626	10788	7.6	
699.632	10857	(7.4)	yellow
707.623	10893	(7.4)	
747.518	11084	8.3	ⁱⁿ
760.497	11202	(7.2)	yellow
769.486	11276	7.6	
20999.720	11443	(7.4)	yellow
009.821	11805	7.7	
027.744	11972	(7.4)	yellow
028.712	11985	(7.7?)	yellow
033.694	12010	?	"
053.677	12158	(7.1)	"
066.668	12185	(7.4)	"
062.631	12208	7.2	
066.636	12235	7.3	
135.510	12508	7.6	
137.517	12535	7.5	
427.622	13417	7.0	
430.646	13434		plate missing

JD 18-30 B137

	AM 14143	plate missing	
21791.618	14172	(7.4)	yellow
799.624	14208	(7.5)	yellow
801.591	14216	(7.4)	"
806.623	14244	7.6	
22159.596	14247	(7.6)	yellow
216.516	14996	(7.6)	"
221.518	15006	(7.8)	"
225.520	15021	7.9	
513.556	15287	(8.4) ⁱⁿ	yellow
516.597	15294	7.6	
528.611	15341	(7.8)	yellow
15234.566	AM 577	7.8	
15264.565	614	7.9	
527.816	802	7.8	
575.673	907	7.8	
872.806	1236	8.1-2	
940.641	1437	7.8	
16023.565	1589	7.8	
297.692	2085	7.8	
311.631	2129	7.8	
319.544	2147	7.6	
359.606	2244	7.9	
593.792	2572	7.8	
608.886	2639	7.7	
646.703	2746	7.7	
17019.772	2655	7.8	
260.735	4269	7.9	
376.673	4311	7.9	
18191.520	5752	8.6	
183.522	5778	7.8	
197.579	5804	7.8	

See page 110

B137 (1931)C d is probably a poor comp.
star or MF plates due to
bright background.S.D. bright background. B137

JD	1752-364	B139
22193	MF 4538	7.5
23911.857	8537	7.6
965	8673	7.7
992	8727	7.6
24026	8785	7.7
24056	8842	7.6
411	9216	8.2-1
412	9228	8.1-7.9
413	9238	8.1-7.9
626.856	10141	8.5
27.863	10146	7.8
49.757	10240	8.1
50.761	10247	8.0
54.812	10271	8.0
55.852	10279	8.0
56.852	10284	8.1-2.0
81.748	10305	8.0
711.687	10523	8.6
12.662	10534	8.0
27.630	10572	7.9
28.500	10574	8.0
5-65	10576	8.0
596	10577	7.9
620	10578	8.0
.662	10579	8.0
25355.613	11532	7.8
25325.596	11662	7.9
86.630	11705	8.1
88.622	11718	7.8
90.494	11743	8.4
414.495	11844	7.5

JD	2541A.427	MF11883	7.7
	19.492	11899	7.7
	21.461	11919	8.3
	37.444	11973	7.6
	93.268	12287	7.8
	745.609	13120	7.8
	49.587	13134	7.8
	94.409	13287	7.3
	99.464	13327	7.6
	82.390	13398	7.2
	57.285	13463	7.6
	54.286	13481	7.2
	55.289	13495	7.2
	61.252	13500	7.5
	62.255	13502	7.5
	22850.748	7587	7.6
	854.738	7611	7.5
	26067.613	MF4090	7.3
	89.624	144	7.2
	90.589	150	7.6
	91.666	164	7.2
	92.538	175	7.5
	93.549	180	7.5
	95.543	203	7.5
	97.595	228	7.2
	101.554	240	7.4
	102.569	246	7.4

C

e

C

95

JD	Plate	B137
26102.540	MF14250	7.3 ⁴
04 577	256	7.5 ⁶
08 577	259	7.5 ⁷
17 457	272	7.4 ⁷
18 556	294	7.1 ⁸
20.393	317	7.7 ²
424	18	7.1 ⁵
456	19	7.5 ⁵
489	20	7.4
520	21	7.3
552	22	7.5
684	23	7.4
23 523	49	7.6
24 532	63	7.6
25 455	73	7.3
30 538	85	7.5
31 488	97	7.0
44 363	412	7.0 ⁶
45 395	19	7.1 ⁹
46 501	28	7.6 ⁷
47 479	38	7.5 ⁸
53.434	60	7.5 ⁸
625	64	7.5 ⁸
54 493	76	8.0 ^{7.9}
55 460	88	7.5
56 462	502	7.0
58 471	515	7.2
59 391	527	7.4
60 434	538	7.5
61 483	46	8.5 ³
62 501	53	7.7

JD	Plate	B137
26174.401	MF1570	7.7
75 456	580	7.5
76 402	592	7.5
77 460	602	8.2 ^m
79.369	619	7.1
80 476	636	7.7
81 373	645	7.7
82 462	660	7.4
86 496	688	7.2 ⁸
87.213	690	7.4
244	1	7.3
276	2	7.3
308	3	7.4
372	5	7.4
404	6	7.5
435	7	7.5
90.386	721	7.3
202 243	32	7.4
04 322	38	7.4
08 331	49	7.4
10 349	58	7.4
14 290	82	7.5
17 319	805	7.5
39.262	858	7.6
460.598	MF15314	7.1
72 568	424	7.3
73 597	39	7.6
75 592	53	7.7
79 607	75	7.6
81 524	94	7.7
83 544	571	7.6

JD	Plate	B137
26489 575	MF15540	7.6
501 498	554	7.7
04 455	589	7.4
62.342	791	7.9
602.332	16.075	7.7
838.427	767	7.5
71 546	931	7.7
97 496	17055	7.7
917.439	158	8.6
26944	B56547	7.9
45	656	7.9

B137

17^h 2-36.4

J.D.	Plate	B137
24755.588	A13996	7.5
26123.380	14735	7.5
629	739	7.4
124 389	743	8.0 ⁺
25 363	746	7.9-5
30 309	751	7.7
31.320	757	7.9
612	761	7.6
83 307	764	7.5
45.248	770	7.6
581	773	8.3 ^m
46.300	76	8.2 ^m
578	79	7.9 ^m
47.219	82	7.6
582	85	7.9
74.322	94	7.9
79.228	812	7.5
284	14	7.5
339	16	7.5
407	18	7.6
471	20	7.5
533	22	7.6
80.243	25	7.5
303	27	7.5
81.279	32	7.5
459	38	7.5
82.233	43	7.5
469	47	7.5
83 229	52	7.7
86 252	57	7.6

J.D.	Plate	B137
26187.399	A14864	7.7
88 229	68	7.7
208.394	87	8.0: eddy
10.385	91	8.1
13 263	902	7.9-8
14 270	906	7.7
15 274	12	8.0:
17 269	19	7.9:
18 214	21	7.7
461.541	15341	7.7
546.260	15538	7.5
555.265	48	7.9
57.261	54	7.7
58.262	60	8
59.256	66	7.7
62.259	91	7.7
63.208	95	7.7
263	97	7.7
324	99	—
385	601	—
510	05	—
66.262	34	7.7
68.267	54	7.7
88.273	715	7.7
606.268	774	7.7

C			C			C		
19 ^h - 40 ^m		$\lambda = 7.2$ 7.6 7.1 7.5 B 137	19 ^h - 45 ^m		B 137	17 ^h - 45 ^m		B 137
23918.067	AX 528	7.8	25383.610	AX 2386	8.2	26245.243	RB 1322	7.8
23960.710	614	7.9	412.540	2506	7.8	454.550	1610	8.1
61.707	622	7.9	419.472	47	8.0	455.543	1616	7.9
67.698	652	8.0	442.485	2614	7.9	504.401	1846	7.9
74.679	689	7.9	449.413	73	8.1	556.373	1962	7.8
91.701	713	7.8	469.356	2738	8.1-2	566.294	2015	7.9
24019.597	763	7.8	477.312	77	8.0		2617	7.9
835.600	806	7.8	508.239	2937	7.8 ^B		2646	7.8
24290.810	1068	8.0	531.256	3000	7.8		2655	7.8
92.773	1072	8.0	17 ^h - 45 ^m			17 ^h - 30 ^m		
300.861	1107	8.0	25710.556	RB 254	8.0 ^B	26433.603	RB 1564	7.9
320.751	1164	8.0	720.636	294	8.0	469.503	1679	7.9
59.631	1250	7.9	739.537	314	7.9	477.470	1717	8.1
74.634	75	7.9	749.526	342	8.1	484.511	55	7.8
383.565	92	7.9	774.469	386	7.7 ^B	490.484	1403	7.9
83.650	93	—	791.346	415	8.6	530.408	98	7.7
387.623	95	8.0	801.447	442	7.9 ^B	546.264	1938	7.7
387.577	96	8.6	825.289	467	8.1		2083	7.8
402.579	1308	8.1	826.294	474	7.8 ^B		2127	7.8
40.514	73	7.9	824.295	499	7.9		2152	7.8
24626.814	1578	8.6	880.258	557	7.9		2187	7.8
51.829	1640	8.1-2	26064.560	878	7.9		2247	7.8
56.827	57	8.0	089.554	917	7.9		2525	7.8
83.744	1706	8.1	096.604	957	7.9	18 ^h - 45 ^m		
700.694	35	8.1	101.571	968	7.9	26469.525	RB 1680	8.1
13.766	92	8.0	123.470	1012	8.0	479.546	1725	8.0
39	1837	8.1	147.330	1048	7.9	486.476	66	8.0
67	91	8.0	156.471	1082	7.8	489.433	80	8.0
814	1969	7.9	159.401	1095	8.0	538.487	1911	7.8
			177.344	1134	8.2	544.377	1928	8.0
			186.351	1176	7.8	546.330	41	8.0
			211.297	1230	8.2		2153	7.9
			237.242	1283	7.9			

Long Periods

			P=247.6 82	267.5 209	P=144.7 125	P=262 17	P=206.7 413	P=168.6 16	P=170 338	P=284 11	284.5 264
15.0	11531	B 5407	14.5	ns	14.4	ns	ns	ns	ns	ns	ns
15.0	12623	672 9556	—	—	—	—	—	—	—	—	—
15.0	15171	761 25506	ns	ns	ns	ns	ns	14.7	ns	ns	ns
15.0	16257	738 31862	14.6	—	15.0	2	—	ns	14.6	4	ns
15.0	16290	664 32049	ns	ns	ns	14.8	ns	ns	ns	ns	ns
15.8	16615	726 33759	15.7	ns	ns	15.6	ns	ns	ns	15.4	15.4
15.6	17803	555 37968	ns	ns	ns	15.4	ns	ns	15.6	ns	ns
14.8	20330	669 44783	ns	ns	ns	ns	ns	ns	ns	ns	ns
15.6	20336	533 44840	ns	ns	ns	15.6	ns	ns	ns	ns	ns
14.4	20328	665 44861	ns	ns	ns	ns	ns	ns	ns	ns	ns
15.7	20339	664 44876	—	ns	ns	ns	ns	ns	ns	ns	—
15.6	20362	600 45001	—	ns	ns	15.6	ns	ns	ns	ns	—
14.5	13826	542 B 17444	ns	ns	ns	ns	ns	ns	ns	15.0	15.0
13.5	14057	754 19082	—	—	—	—	—	—	—	—	—
14.6	14058	649 19113	ns	ns	14.9	15.0	ns	ns	ns	ns	ns
13.8	14181	616 20285	—	—	—	—	—	ns	—	—	—
14.0	14188	535 20465	ns	ns	ns	ns	ns	ns	ns	ns	ns
14.5	14451	1.829 22510	ns	ns	ns	14.6	ns	ns	ns	ns	ns
14.0	15163	776 25424	"	"	"	ns	"	"	"	"	"
14.5	15870	768 29570	ns	ns	ns	15.0	14.0	ns	ns	ns	ns
14.3	15897	767 29853	ns	ns	ns	ns	14.5	ns	ns	ns	ns
14.5	16396	530 32650	ns	ns	ns	15.2	ns	ns	ns	"	"
14.6	16625	735 30836	ns	ns	ns	15.2	ns	ns	ns	15.0	15.0
13.8	17080	641 36792	—	—	—	—	—	—	—	—	—
14.8	17094	572 36868	ns	ns	ns	14.5	15.0	15.0	ns	ns	ns
14.5	17727	800 37538	"	"	"	ns	14.8	14.3	"	"	"
14.3	18406	819 40063	ns	"	"	14.3	ns	14.6	ns	ns	ns

276.5	P=288.5	P=218.6	P=188.9	P=372.2	P=456	285.4	P=312	P=246	P=296	P=211	P=256	P=191.1
124	292	126	329	366	294	266	211	367	295	409	812	127
NS	15.0 14.5	NS	14.4	—	NS	NS	NS	NS	NS	NS	NS	NS
—	—	—	—	—	—	NS	NS	NS	NS	NS	NS	NS
NS	NS	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS
NS	13.5	NS	14.5	—	14.0	NS	NS	NS	NS	NS	14.3	NS
NS	15.0	NS	NS	—	13.8	NS	NS	NS	NS	NS	15.1	NS
15.2	15.7	NS	14.2	NS	NS	14.9	15.2	NS	NS	NS	NS	NS
14.6	15.6	15.6	NS	NS	15.4	NS	NS	NS	NS	15.0	15.6	NS
NS	14.8	NS	NS	—	NS	14.8	NS	14.8	14.6	NS	NS	NS
NS	NS	NS	NS	NS	15.3	14.8	NS	14.8	14.6	NS	14.9	NS
NS	NS	NS	NS	—	NS	NS	NS	14.7	14.8	NS	NS	NS
NS	15.4	NS	15.3	—	NS	15.2	NS	15.1	14.9	NS	15.3	NS
NS	NS	NS	15.7	NS	15.2	NS	15.1	15.6	15.3	NS	15.6	14.2
NS	NS	NS	NS	—	NS	NS	15.0	NS	15.0	NS	NS	NS
—	—	—	—	—	13.4	—	—	—	—	—	—	—
NS	NS	NS	NS	13.0	13.0	10.0	NS	NS	NS	NS	NS	NS
NS	NS	NS	NS	—	14.8	NS	NS	NS	NS	NS	NS	NS
NS	14.2	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS
14.8	NS	14.8	NS	—	NS	NS	NS	14.9	NS	NS	NS	NS
NS	11	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS
NS	15.0	NS	14.0	14.8	—	13.5	NS	NS	NS	NS	NS	NS
NS	14.8	15.1	14.4	14.8	—	14.4	NS	NS	NS	NS	NS	NS
15.0	NS	NS	NS	—	NS	NS	NS	NS	NS	NS	15.0	14.8
15.2	15.3	NS	14.3	—	NS	NS	14.8	NS	NS	NS	NS	NS
NS	14.7	13.8	NS	—	NS	NS	NS	NS	NS	NS	NS	NS
14.7	NS	15.4	14.6	—	NS	NS	NS	NS	NS	NS	NS	NS
NS	NS	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS

100

			P=247.6	P=267.5	P=144.7	P=262	P=206.7	P=168.6	P=170	P=284	284.5
	JD	Plate No	B 82	B 209	B 125	B 17	413	B 16	338	B 11	B 264
15.4	11202.	B 3842	ns	ns	ns	ns	ns	ns	ns	ns	ns
15.0	11204	3861	ns	ns	ns	ns	ns	ns	—	—	ns
14.0	11221	3959	ns	ns	ns	ns	ns	ns	—	—	140'
13.5	11221	3960	"	"	"	"	"	"	ns	ns	ns
Seq. off. 15.0:	11510	5255	ns	ns	ns	ns	ns	ns	ns	—	ns
14.5	11872:	5967	ns	ns	ns	14.6	ns	ns	ns	ns	142'
14.5	12585	9280	14.3'	ns	"	ns	"	ns	ns	ns	ns
16.5	12603	9482	15.5'	ns	14.9	15.5	16.2	ns	15.1	ns	ns
15.0	12630	9592	ns	ns	ns	14.8	—	—	14.9	ns	16.0
14.6	12630	9593	"	"	"	"	—	—	14.5	ns	ns
14.5	12666	9855	"	"	"	"	ns	ns	14.9	ns	15.0'
15.5	13030	11634	12.8	ns	14.8'	ns	ns	ns	ns	ns	15.5'
15.0	13327	13346	14.5	ns	ns	ns	ns	13.5	14.9	ns	ns
14.8	13348	13535	ns	ns	15.0'	ns	ns	14.0	15.3	ns	ns
14.5	13357	13749	"	"	ns	"	"	ns	ns	ns	ns
15.5	13384	14039	"	"	"	"	15.5	"	ns	ns	ns
15.0	13442	14496	ns	ns	ns	14.5	ns	ns	ns	ns	ns
13.8	13738	16496	"	"	ns	ns	"	"	"	"	"
13.5	13742	16576	ns	"	"	"	"	"	"	"	"
14.6	13846	17652	ns	"	"	"	"	14.7	"	"	"
14.3	14057	19085	14.5	"	"	"	ns	ns	15.3	"	"
14.0	14077	19325	ns	"	"	"	"	"	ns	"	"
14.0	14094	19576	ns	"	"	"	"	"	14.6	"	14.7
14.5	14182	20322	"	"	"	"	16.0	14.4	14.8	ns	15.2
14.2	14190	20490	"	"	"	"	ns	14.6	ns	"	ns
14.8	14536	21919	13.7	"	"	"	ns	14.9	15.0	ns	ns
13.5	14750	22478	ns	"	"	"	"	ns	ns	"	14.2
14.2	14822	23059	14.5	"	ns	"	"	"	"	"	ns
15.9	14868.	23750	ns	ns	ns	15.4	15.6	14.5	14.6	ns	15.7

276.5	P=288.5	218.6	double 188.9	P=456	285.4	P=312	P=246	P=296	P=211	P=256	P=191.1	P=312 on 210
0 124	292	B 126	329	294	266	B 211	367	295	409	B 212	B 127	366
ns	ns	ns	15.0	ns	15.0	ns	ns	ns	ns	ns	14.5	
ns	15.0	ns	15.0	ns	ns	ns	ns	ns	ns	ns	14.5	
ns	ns	ns	ns	"	"	"	"	ns	"	"	ns	
"	"	"	"	"	"	"	"	"	"	"	"	
ns	15.0	ns	?	—	—	—	—	—	—	—	—	
ns	12.9	ns	14.5	ns	ns	ns	14.8	ns	ns	ns	ns	
ns	ns	14.6	ns	"	"	"	"	"	"	"	"	
ns	16.0	14.0	ns	15.2	ns	ns	ns	ns	ns	16.0	16.1	ns
ns	15.4	14.7	14.5	15.4	ns	"	"	"	"	"	"	
ns	14.8	14.4	15.2	"	"	"	"	"	"	"	"	
ns	ns	14.2	ns	12.5	"	"	ns	"	"	"	"	
ns	14.2	14.4	ns	ns	"	"	ns	"	"	"	"	ns
ns	14.0	ns	ns	ns	15.2	"	"	"	"	"	14.9	
ns	14.4	ns	"	"	ns	"	"	"	"	"	15.0	
14.5	14.3	"	"	"	"	"	"	"	"	"	14.7	
ns	15.6	ns	"	"	"	"	"	15.5	"	ns	ns	
ns	ns	"	"	"	"	"	"	ns	"	15.0	"	
"	"	"	"	"	"	ns	"	"	"	ns	"	
"	"	"	"	"	"	ns	"	"	"	"	"	
"	15.5	"	"	"	"	"	"	14.3	"	"	"	
"	ns	"	"	12.5	"	"	ns	ns	"	"	"	
"	"	"	"	14.2	"	"	ns	"	"	"	"	
"	"	14.6	"	ns	"	"	ns	"	"	"	ns	
ns	14.3	ns	15.0	"	"	"	ns	"	"	"	ns	
"	13.8	"	ns	"	"	"	"	"	"	"	"	
ns	14.4	ns	14.5	14.5	"	"	"	"	"	"	"	
"	14.0	"	ns	ns	"	"	"	"	"	"	"	
"	14.4	"	"	"	"	"	"	"	"	"	"	
ns	15.6	ns	ns	15.3	15.1	—	—	—	—	—	15.0	ns

JD	Plate No	82	209	125	17	413	16	338	11	264
15.0 14941	B24375	ns	ns	ns	ns	ns	ns	ns	ns	150
13.8 15532	27438	BT	"	"	"	"	BT	"	"	ns
13.5 15869	29524	BT	"	"	"	BT?	BT	BT?	"	"
16.0 15872	29605	ns	15.5 16.0	ns	—	15.0	14.1	14.8	16.0	"
14.0 15897	29857	ns	ns	ns	ns	ns	BT	BT	"	"
13.3 15966	30512	"	"	"	"	"	ns	ns	"	"
14.6 15966	30513	"	"	"	"	"	"	"	"	"
13.5 16016	30644	13.80 ^{deg}	"	"	"	"	14.1	"	"	"
15.0 16288	32032	14.5	ns	"	14.8	15.2	ns	"	"	"
14.8 17698	37313	ns	"	15.4	ns	ns	14.7	"	"	"
15.2 17813	38031	14.3	"	15.5	15.0	"	ns	"	"	"
13.8 18821	41380	14.3	"	ns	ns	"	"	"	"	"
14.0 18848	41487	ns	"	BT	15.0 14.64	"	"	"	"	"
14.0 18868	41653	"	"	ns	ns	"	14.2	"	"	"
14.6 20288	44538	14.3	ns	14.9	ns	ns	ns	14.7	ns	ns
14.8 13710	B16037	ns	ns	ns	14.3	ns	14.8	ns	ns	ns
14.3 13740	16518	"	"	"	ns	"	ns	"	"	"
15.3 14867	23745	15.7	"	"	ns	15.0	14.5	14.6	"	"
16.0 14872	23776	ns	ns	ns	15.8	15.2	14.5	14.5	ns	16.0
15.2 15110	24921	"	ns	"	15.5	ns	ns	15.2	"	"
15.0 15278	26141	14.1	ns	ns	14.4	ns	ns	16.1	ns	ns
15.8 13752	A1904	ns	ns	15.35	16.7	ns	ns	—	—	ns
15.8 14069	2310	14.5	ns	15.5	15.8	"	"	ns	ns	"
15.8 14156	2659	ns	ns	ns	15.9	ns	15.0	15.1	15.0	15.5
14.8 14181	2712	ns	"	"	15.0	"	14.1	ns	ns	ns
16.3 15614	5555	"	16.0	"	15.8	"	ns	ns	ns	"
16.6 15631	5622	16.2	15.8	"	15.8	"	"	"	ns	"
14.5 17393	7789	—	—	—	15.0	—	—	—	—	—
14.4 18114	8883	ns	ns	ns	14.7	ns	ns	BT	ns	ns
14.5 18392	7779	—	—	—	—	—	—	—	—	—
16.8 24755	13996	15.6	ns	16.0	15.5	14.7	16.7	14.3	ns	16.6

double

124	292	126	329	298	266	211	367	295	409	212	127	366
15.3	ms	ms	15.0	12.4	ms	ms	ms	ms	ms	ms	ms	ms
ms	"	"	ms	ms	"	ms	"	"	"	"	"	"
91	"	RT	"	13.5	"	"	"	"	"	"	"	"
15.6	15.7	14.0	14.7	13.2	15.6	"	"	"	"	"	"	ms
"	ms	ms	ms	19.6	ms	"	"	"	"	"	"	"
"	RT?	ms	"	ms	ms	"	"	"	"	"	"	"
"	13.8	"	"	14.8	"	"	"	"	"	"	"	"
"	ms	"	"	ms	"	"	"	"	"	"	"	"
"	15.5	14.7	ms	13.9	"	"	"	"	"	"	"	"
"	14.7	ms	"	ms	"	"	"	"	"	"	"	"
"	15.6	15.0	"	"	ms	"	"	"	"	"	"	"
"	14.0	ms	"	"	ms	RT	"	"	"	"	"	"
"	14.0	"	14.4	ms	ms	14.6	"	"	"	"	14.5	"
"	14.6	"	14.0	"	"	ms	"	"	"	"	ms	"
14.3	14.2	ms	ms	14.7	"	"	"	"	"	"	"	"
ms	ms	ms	14.7	ms	ms	ms	ms	ms	ms	ms	14.6	"
"	"	"	ms	"	"	"	"	ms	"	"	ms	"
"	"	"	"	14.2	"	"	"	ms	"	"	14.5	"
ms	15.5	"	"	15.1	ms	"	"	"	"	"	15.2	ms
"	14.8	"	14.0	ms	ms	15.2	ms	"	"	"	ms	"
ms	15.3	ms	14.9	ms	ms	ms	ms	"	"	"	"	"
ms	ms	ms	ms	15.7	ms	ms	ms	ms	ms	ms	ms	ms
"	15.5	"	"	13.9	-	-	-	-	-	-	14.8	ms
"	14.9	15.2	14.4	15.3	ms	14.9	ms	15.4	ms	ms	ms	ms
"	14.4	ms	15.0	ms	ms	"	"	"	"	"	"	-
"	14.8	"	ms	15.8	"	"	"	14.7	"	"	14.5	16.0
"	14.5	14.8	15.4	15.7	"	"	ms	15.0	"	"	14.6	15.8
ms	ms	ms	ms	15.2	"	"	14.6	14.7	"	"	ms	"
ms	ms	ms	ms	14.2	ms	ms	14.8	15.0	"	"	14.8	"
ms	15.7	ms	15.7	16.1	ms	14.0	15.0	ms	15.0	16.6	10.0	ms

Used Seq. for Nova Sco No 2

Handwritten notes: *Handwritten notes: "long long" and "Miss Robinson" are visible above the column headers.*

	AI	CR	B12
MF 8537	10.0	ns	ns
8633	9.8	16.0	ns
8724	11.7	14.4	ns
8785	10.3	13.8	16.0
8842	11.1	13.3	ns
9816	13.0	15.5	ns
9828	13.3	16.0	ns
9838	13.2	16.0	ns
10141	12.0	14.4	ns
146	12.1	15.0	ns
240	11.1	15.6	15.1
249	10.6	16.0	15.2
271	10.7	16.0	15.4
279	11.3	16.2	15.5
289	11.3	16.2	15.6
365	10.2	16.0	16.5
522	9.8	16.3	ns
584	9.7	16.3	ns
572	10.3	15.7	ns
574	10.5	ns	ns
576	10.4	16.2	ns
577			
578			
579	10.4	16.2	ns
11662	12.6	13.1	ns
11705	12.8	13.3	ns
11718	12.2	13.6	ns
11743	12.2	13.6	ns

	AI	CR	B12
MF 11844	12.2	^{14.3} 73.8	ms
11883	12.2	14.5	ms
11899	12.0	14.4	ms
11919	12.2	14.5	ms
11993	12.4	15.8	ms
12285	11.4	ms	ms
13129	9.7	ms	ms
13134	9.9	ms	ms
13287	10.1	ms	ms
13327	10.6	ms	ms
13398	11.2	ms	ms
13463	9.4	15.5	ms
13481	9.6	15.2	ms
13495	9.6	15.3	ms
13500	9.7	14.9	ms
13502	9.9	14.3	ms
A 13996	9.9	ms	ms

106

J.D.	Plate No	B92	449	260	B31	434	459	B215	376	307
23911	MF 8537	15.8	14.0	15.3	15.8	15.5	14.0	16.0	13.8	13.8
965	8673	15.6	13.8	15.5	15.2	15.5	14.3	ns	ns	13.6
992	8724	16.3	14.5	ns	-	15.8	14.7	ns	ns	13.5
24026	8785	16.0	14.2	ns	ns	15.5	14.8	15.7	ns	13.8
056	8842	15.6	14.3	ns	ns	15.9	14.4	15.8	14.9	13.7
411	9816	16.2	14.0	16.0	16.0	15.0	14.4	15.8	ns	13.9
412	9828	ns	14.7	16.2	ns	15.2	14.6	15.6	ns	13.9
413	9838	15.8	13.9	16.1	16.0	15.3	14.0	15.4	ns	13.6
24626	10141	15.7	14.3	ns	ns	15.6	14.2	15.7	ns	13.5
27	10146	15.7	14.3	ns	ns	15.7	14.2	15.8	ns	13.7
49	10240	15.5	13.9	ns	ns	15.1	14.4	16.0	ns	13.8
50	10249	15.8	14.0	ns	ns	15.5	14.3	16.1	16.2	13.8
54	10271	16.2	14.0	ns	ns	15.6	14.3	16.2	16.2	14.3
55	10279	16.1	14.0	ns	ns	15.5	14.4	ns	ns	14.2
56	10284	15.5	14.0	ns	ns	15.6	14.4	16.4	16.3	13.7
81	10365	14.9	13.9	ns	14.9	15.2	14.0	ns	16.0	13.8
711	10522	15.8	13.7	ns	14.9	15.6	14.0	15.2	15.3	13.7
12	10534	16.1	13.8	ns	15.0	15.5	14.5	15.3	15.3	13.6
27	10572	15.3	14.1	ns	15.0	15.6	14.7	16.3	16.1	13.8
28	10574	16.2	14.1	ns	15.0	15.7	14.7	16.4	15.9	13.9
	10576	15.6	14.0		15.2	15.1	14.1			
	10577	15.5	13.9	ns	15.3	15.2	14.3	16.3	16.0	14.0
	10578	15.3	14.0		15.3	15.5	14.5			
	10579	15.9	14.3	ns	14.8	15.4	14.5	16.0	16.0	14.1
25383	11662	15.7	14.4	15.5	blur	15.2	14.4	ns	ns	14.2
86	11705	ns	14.3	15.4	ns	15.7	14.3	ns	ns	14.2
88	11718	-	-							
90	11743	ns	14.4	14.8	ns	15.5	14.0	ns	ns	14.0
414	11844	16.3	14.2	14.4	ns	15	14.0	ns	ns	14.0

B	185	433	253.5	265.1	230.7	B103	457	B1028226	481	B43	418	close double
			long	long	long							
			ms	ms	ms							
13.9	15.0	15.0	15.0	15.0	15.0	13.9	16.5	16.2	9.9	14.0	14.4	14.0
13.9	15.1	ms	ms	ms	ms	14.3	15.7	ms	9.9	14.2	14.4	14.3
13.8	—	ms	ms	ms	ms	14.7	—	ms	10.1	14.2	14.8	14.6
13.2	15.0	ms	ms	ms	ms	14.3	16.0	10.2	14.4	14.3	14.4	
13.7	?	14.7	ms	14.9	14.2	16.2	15.7	10.6	14.1	14.5	14.5	
13.7	pt	ms	15.0	ms	14.2	ms	ms	10.4	13.9	14.4	14.3	
14.0	14.8	ms	15.1	ms	14.3	ms	ms	10.7	14.0	14.9	14.3	
13.8	14.8	ms	15.1	ms	14.0	15.6	15.0	10.2	13.9	14.2	14.8	
13.8	—	ms	ms	ms	14.1	ms	ms	10.2	14.2	14.6	14.0	
13.8	14.9	ms	ms	?	14.4	16.6	15.2	10.3	14.4	14.7	13.8	
13.9	14.9	ms	ms	ms	14.0	ms	16.3	10.3	13.7	14.5	14.8	
13.8	15.0	ms	ms	ms	14.0	ms	16.3	10.2	14.1	14.4	?	
13.9	—	16.0	ms	ms	14.3	ms	16.4	10.4	14.2	14.5	14.0	
13.9	15.2	16.3	16.4	ms	14.2	ms	15.4	10.3	14.2	14.8	14.2	
14.1	—	ms	ms	ms	14.2	ms	16.2	10.2	14.4	14.2	14.2	
13.7	?	ms	15.2	ms	14.5	16.2	ms	10.2	14.7	14.7	14.5	
13.8		ms	15.4	ms	14.3	15.9	14.6	10.5	14.4	14.5	14.9	1872
13.7		ms	15.5	ms	13.8	ms	15.6	10.3	14.1	14.9	14.8	
14.2		ms	15.7	ms	14.2	16.2	14.8	10.4	14.1	14.4	14.9	
14.0		ms	16.0	ms	14.5	ms	15.8	10.2	13.8	14.3	15.0	
					14.0		14.9		14.0	14.2		
14.0	—	ms	15.8	ms	14.8	16.3	15.7	10.2	14.4	14.3	14.9	
					14.0		15.4		14.4	14.5		
13.9		ms	16.0	ms	14.3	ms	15.8	10.3	14.5	14.6	14.8	
14.2		ms	ms	ms	14.6	ms	ms	10.6	14.5	14.3	14.5	
14.4		ms	ms	ms	14.4	ms	15.6	10.2	14.1	14.6	14.5	
								10.5				
14.1		ms	ms	ms	14.3	15.5	15.6	10.3	14.4	14.7	14.8	
14.1		ms	ms	ms	14.2	ms	14.7	10.3	14.5	14.3	15.3	

double

109

B 185	433	276	342	275	B103	457	B102	B226	481	443	418
13.8		ns	ns	ns	14.1	ns	ns	10.3	14.3	14.3	14.5
14.2		ns	ns	ns	14.3	ns	ns	10.4	14.4	14.9	14.9
14.1		ns	ns	ns	14.4	ns	15.7	10.5	14.3	14.9	14.7
14.4		ns	ns	ns	14.2	ns	ns	10.3	14.3	14.6	14.7
14.3					14.3			10.3			
14.4		15.6	15.7	14.4	14.3	15.0	ns	10.3	14.5	14.3	14.8
14.4		16.0	15.8	14.6	14.4	ns	ns	10.7	14.4	14.6	14.7
14.3		15.8	16.2	ns	14.4	15.6	15.8	10.4	14.1	14.5	14.7
14.1		15.5	ns	ns	14.3	ns	ns	10.4	14.5	14.4	15.0
14.4		15.1	ns	ns	14.5	15.7	ns	10.3	14.5	14.6	14.5
14.0		15.5	ns	ns	14.5	15.7	ns	10.3	14.3	14.7	14.5
14.0		15.7	ns	ns	14.5	15.7	15.6	10.4	14.5	14.4	14.4
14.2		ns	ns	ns	14.5	15.4	15.7	10.2	14.2	14.9	14.4
14.3		ns	ns	ns	14.6	15.7	16.0	10.5	14.7	14.3	14.5

13.8	15.2	ns	ns	14.8	14.2	ns	15.4	10.3	14.5	14.8	14.5
14.1	ns	14.7	ns	13.5	14.3	ns	ns	10.4	14.5	14.8	14.5
14.3	ns	ns	ns	16.5	14.4	16.5	16.5	10.3	14.4	14.7	14.5
14.3	16.3	ns	ns	ns	14.7	15.7	14.9	10.5	14.3	14.5	14.3
13.9	15.5	ns	ns	14.9	14.4	16.6	15.7	10.4	14.2	14.4	14.7

cont. from page 93

C mch

C mch

18-30

B137

B137

18199.555 AM 5820 7.7

398. ⁴⁶¹~~732~~ AK 233 7.8438. ⁵⁴~~844~~ 288 7.7

438.841 AM 6114 7.8

427. ³⁷⁵~~646~~ AK 282 7.8

576.601 AM 6422 7.8

529. ²⁵⁶~~527~~ AK 435 8.0 ^{2 days exp}576. ²⁵⁶~~527~~ 508 7.619233.659 AM ⁷⁵~~75~~ 49 7.8

241.608 7606 7.8

578.823 8124 7.7

532.721 8165 7.8

562.686 8307 7.8

601.641 8469 7.6

617.638 8522 7.7

889.877 8851 7.8

895.863 8883 7.7

912.799 8944 7.8

951.722 9153 7.8

985.521 9304 7.7

20012.572 9386 7.6

013.561 9392 7.7

027.555 9455 7.8

307.563 9891 8.0

337.655 9977 7.6

354.589 10038 7.6

372.614 10093 7.7

384.529 10098 7.9

405.534 10171 8.1 ^{upl}

414.530 10180 7.7

626.816 10570 7.8

20688.718 AM ¹⁰⁷⁶⁴~~10764~~ 7.7

708.591 10902 8.1-2

993.821 11689 7.8

21007. ⁷³⁸~~688~~ 11783 7.7048.688 12127 7.8 _m

063.630 12216 8.3

364.810 13141 7.6

724.629 13400 7.6

937.603 13440 7.8

788.631 14154 8.6

22083.855 14682 7.7

22166.514 14869 8.6

580.557 15486 7.7

934.542 15663 7.7

23167. 15711 8.4

23178.803 15745 7.8

194.748 15795 7.7

206.693 15826 7.9

247.645 15921 7.8

276. 16015 7.6

277.568 16018 7.8

306.502 16059 7.6

639.614 16351 8.7

Spectrum plates			Spectrum plates			Spectrum plates		
B137			B137			B137		
12620.821	B 9546	7.8	23235.677	B53133	BT	22159.621	MF4176	7.6 gel
651.631	9761	—	237.673	147	BT	163.615	4234	7.6 gel?
651.661	9762	7.8	239.670	152	BT	190.568	4465	7.8
664.622	9828	8.7	248.592	160	BT	191.549	4480	7.7
665.542	9836	BT	261.612	220	8.6	.558	4481	off
13072.527	12046	7.6	265.586	230	8.1	193.542	4532	7.9
091.530	195	7.7	266.567	234	8.1	—	4570	off
309.828	13109	7.8	615	235	BT	203.509	4739	7.8 gel
341.745	434	7.8	267.612	238	BT	520.653	6286	7.7
364.617	795	7.7	268.612	242	BT	524.626	6332	7.9
371.665	829	out	269.555	245	8.5	—	6334	off
374.561	850	7.9	275.509	250	7.8	530.539	6457	7.6 gel
420.588	14368	8.3	276.507	251	BT	540.549	6527	7.6 gel
472.511	765	BT	276.551	252	BT	546.568	6648	7.8
14156.608	20123	7.9	277.522	253	m to MF?	—	6649	off
192.509	509	7.9	.564	254	8.1	551.564	6737	7.8
812.781	23015	BT	283.556	268	m?	557.549	6878	7.5 gel
17730.767	37570	BT	—	—	—	850.697	7584	7.8
822.531	38115	7.8	—	—	—	.715	7585	off
823.523	119	BT	—	—	—	.748	7587	7.6
18112.728	39203	7.8	23640.515	MF2086	BT?	854.678	7604	7.7
125.739	298	7.8	641.540	8089	—	.738	7611	7.6
523.	40703	BT	25447.351	12057	BT?	868.693	7642	7.6 gel
851	41534	7.8	475.300	202	8.5	893.634	7739	7.3 gel
917	41863	BT	476.221	208	8.0	—	7744	off
919	871	BT	710.562	986	BT	—	7748	off
923	884	BT	26455.536	15376	—	23172.798	7846	BT
19300.525	42697	BT	583	377	—	—	7887	BT
971.621	43970	—	—	—	—	198.717	7952	—
—	—	—	—	—	—	206.746	7977	BT
—	—	—	—	—	—	576.720	8015	mB

112

Plates
Region 17^h 21-32.516^h 00-20
 7.2
7.6
8.0
8.5
8.8
 B13.7
B13.7
B13.7

23909.815 MF8527 mB B137
 24292.782 9160 7.8
 296.810 9199 Br.
 299.754 9252 Br
 300.791 9271 Br
 301.751 9289 Br. edge
 321.728 9409 Br
 322.725 9411 Br. edge
 324.706 9426 Br. edge
 24700.722 10449 Br
 705.721 10481 Br
 712.628 10533 Br
 732.592 10607 Br
 755.563 10672 Br
 772.493 10831 Br
 26105.542 B54227 Br
 146.495 373 mBr.
 26474.505 55160 Br
 484.529 248 Br
 489.541 273 Br. edge
 504.491 223 Br
 562.240 479 Br
 26802.639 928 Br
 940 Br. edge

23166 AI21747 Br.
 23175 21775 med?
 24640 24706 Br
 24685 24782 mB
 25120 25666 Br
 26148.645 28249 Br
 27161.820 30794 7.7
 27186.754 30835 7.7
 17-20
 23143 AI 21709 7.6
 23197 AI21814 Br 7.8
 23206 21837 Br
 23230 21857 mB?
 23563 22523 7.5
 23581 22542 7.9
 24301 24074 Br
 24318 24098 7.9
 24683 24774 Br
 24770 24898 8.1
 25027 25536 vBr
 25379. 26420 7.6
 26090.1819 28183 7.8
 26155.661 28262 7.8
 26183.596 28340 med.
 26870.696 30113 7.8
 27182.794 30821 7.5
 27209.423 30826 Br

18-20

B137

23168	AI 21752	BT
23202	21827	7.7
23257	21885	7.91
23311	21952	7.8
23314	21957	7.6
23645	22652	7.7
23974	23387	8.3?
24314	24089	BT
24656	24738	7.8
24678	24764	7.7
25033	25527	BT
25062	25577	7.8
25354	26380	7.5
25850.549	27490	BT
26127.758	28201	7.8
26150.703	28254	8.2?
26172.647	28308	med?
26866.718	30102	8.1
26914.632	30213	BT
		R

19-20

25096	AI 25624	BT
20232	21860	BT
231641	22645	7.9
23903	23287	BT
24697	24798	7.9
25408	26458	8.2?
25741.807	27217	7.9
26093.836	28141	BT
26238.532	28489	BT

19-20

B137

26539.697	AI 29234	FT. 0297
26901.644	30162	BT
27185.831	30831	7.8 a finpl.
25790.696	AI 27312	BT 16-20
25796.705	27335	8.0 19
25807.679	27361	7.8 19
27209.798	I 52143	7.8

114

JD	Plate No	256.6 ^d KZ _{sp}	B 153	160 point B 184	236.4 ^d Long 416 ^d	292 ^d Long 274	415	414	514	208
23911	MF 8537	ns	14.6	ns	15.8	ns	14.9	15.2	16.5	13.0
65	8673	ns	15.0	ns	ns	ns	14.7	15.1	ns	12.5
92	8724	ns	15.8	ns	ns	ns	14.9	14.9	ns	13.3
24026	8785	13.4	15.0	ns	ns	14.7	14.8	15.4	16.2	13.6
56	8842	13.6	14.8	ns	ns	15.1	14.8	14.9	16.0	14.0
411	9816	ns	14.3	ns	ns	ns	14.8	15.1	ns	13.1
12	9828	ns	15.3	ns	ns	ns	14.8	15.5	15.8	13.3
13	9838	ns	14.9	ns	ns	ns	15.0	15.2	16.1	13.4
24626	10141	ns on 16.2	15.2	ns on 16.3	15.7	15.2	14.9	14.7	15.1	13.6
27	10146	16.0	16.0	ns	15.9	16.0	14.9	15.7	ns	13.3
49	10240	ns	14.8	16.6	ns	15.8	14.8	15.4	16.4	13.5
50	10249	ns	14.9	16.4	ns	16.1	14.8	14.9	16.2	13.7
54	10271	ns	14.8	16.0	ns	16.5	15.2	15.5	15.3	13.7
55	10279	ns	14.4	15.3	ns	ns	14.8	15.2	14.9	13.8
56	10284	ns	14.6	15.7	ns	ns	15.0	15.1	14.7	13.7
81	10365	ns	14.9	15.7	ns	16.5	14.9	15.1	15.4	14.3
711	10522	ns	14.9	16.3	ns	ns	14.6	14.8	15.1	13.9
12	10534	ns	14.7	ns	ns	ns	14.9	15.4	15.8	14.8
27	10572	ns	14.8	ns	ns	ns	14.7	15.4	16.0	14.8
28	10574	ns	14.9	ns	ns	ns	14.8	16.0	16.2	14.7
	10576									
	10577	ns	14.9	ns	ns	ns	14.9	15.0	scratch	14.9
	10578	ns	14.9	ns	ns	ns	15.2	15.1	ns	14.9
	10579	ns	7	—	—	—	14.8	15.2	—	—
25383	11662	15.3	14.9	ns	ns	ns	15.1	14.8	15.6	14.3
86	11705	15.3	14.9	15.5	ns	ns	14.9	14.8	15.3	14.2
88	11718	—	—	—	—	—	—	15.1	—	—
90	11743	15.5 ns	14.4	ns	ns	ns	15.3	14.9	ns	14.7
414	11844	ns	14.6	ns	ns	ns	14.9	15.0	ns	14.3

O	317 ^d	Eclip.	475	412	reprint	196 ^d	259 ^d	Long??
	Long				O	Long	Long	
476	91	170	475	412	242	123	263	81
13.5	ns	14.4	15.7	13.1	16.5	ns	ns	16.0
13.2	ns	14.4	15.6	13.4	15.1	ns	ns	13.6
13.2	ns	14.3	15.7	13.2	ns	ns	ns	13.9 ^{slur} 14.4
13.3	ns	14.8	15.4	13.6	ns	14.7	14.8	14.8
13.5	ns	14.7	15.2	13.6	ns	15.0	14.8	15.0
13.6	14.4	14.7	14.7	13.7	ns	15.0	ns	15.4
13.9	14.5	15.2	15.0	14.0	ns	14.8	ns	14.9
13.7	13.9	14.3	15.1	13.9	ns	15.2	ns	15.4
13.3	ns	14.7	15.3	13.3	ns	14.9	ns	15.3
13.4	ns	14.3	def.	13.4	ns	15.0	ns	15.3
13.6	16.2	14.8	15.4	13.5	ns	15.7	ns	16.3
13.5	ns	14.9	15.5	13.5	ns	15.8	ns	15.9
13.6	ns	14.6	15.5	13.7	ns	16.0	ns	15.7
13.6	ns	14.7	15.6	13.3	ns	15.6	ns	15.3
13.6	ns	14.9	15.6	13.5	ns	15.7	ns	15.1
13.7	ns	14.5	15.2	13.8	ns	ns	ns	15.0
13.6	16.0	<u>15.8</u>	15.9	13.6	ns	ns	ns	15.5
13.7	15.6	14.3	15.7	13.6	ns	ns	ns	15.3
13.5	14.9	<u>16.3</u>	15.8	13.6	ns	ns	ns	15.4
13.3	15.2	14.7	15.5	14.0	ns	ns	ns	15.1
13.4	14.9	14.8	15.7	13.4	ns	ns	ns	15.5
13.3	14.9	14.8	15.5	13.6	ns	ns	ns	15.4
—	—	—	—	13.6	—	—	—	15.4
13.7	14.4	<u>15.5</u>	15.2	14.3	ns	14.5	ns	14.3
13.8	14.1	14.8	15.4	14.2	ns	14.6	ns	14.2
—	—	BT	—	—	—	—	—	—
13.4	14.2	14.8	15.4	14.3	ns	14.3	ns	14.3
13.7	14.6	14.5	15.5	14.4	ns	15.3	ns	14.0

JD	Plate No.	K2Sqr	B153	B184	416	274	415	414	514	B208
25418	MP 11883	ms	14.5	ms	ms	ms	14.6	15.2	ms	14.3
19	11899	ms	14.8	ms	ms	ms	15.1	15.0	ms	14.2
21	11919	ms	14.8	ms	ms	ms	14.7	14.9	15.7	14.1
37	11973	ms	14.8	ms	ms	ms	14.7	15.7	15.6	14.3
93	12286	ms								
745	13120	ms	14.9	ms	15.4	15.7	14.7	14.9	15.2	13.8
49	13134	ms	14.7	ms	15.5	15.4	14.6	15.3	ms	13.8
94	13287	ms	15.2	ms	15.1	15.0	14.9	15.1	16.0	13.9
99	13327	ms	15.1	ms	15.1	15.1	14.8	14.9	ms	13.7
832	13398	14.4	15.3	ms	ms	15.6	15.2	15.6	ms	14.0
51	13463	14.3	15.3	ms	ms	ms	14.8	15.7	ms	14.2
54	13481	14.5	15.1	ms	"	"	15.2	15.3	15.5	14.4
55	13496	14.6	15.4	ms	ms	ms	14.8	15.2	15.7	14.1
61	13500	14.5	15.3	ms	"	"	14.9	15.2	ms	14.3
62	13502	14.8	15.4	"	"	"	15.1	15.3	15.8	14.1

A 1904	ms	15.6	ms	15.7	ms	15.2	15.8	ms	14.0
2713	ms	15.0	ms	ms	ms	14.8	14.8	ms	14.8
5555	14.3	15.6	ms	14.9	15.2	15.8	15.8	16.0	13.9
5622	14.5	15.0	ms	15.7	15.3	14.7	15.3	15.0	14.0
13996	16.5	14.8	15.9	ms	ms	14.9	14.9	15.3	14.4

476	B91	B170	475	412	242	B123	263	B81
13.4	14.8	14.8	15.7	13.9	ns	15.2	ns	13.9
13.7	14.9	14.8	—	14.0	ns	14.7	ns	14.0
13.5	14.9	14.6	15.4	14.4	16.0	15.0	ns	14.3
13.4	15.2	14.8	15.2 ^{plus}	14.0	15.5	15.3	ns	13.8
		BT	—	BT				
13.8	15.3	14.6	14.9	14.0	15.1 ^{plus}	14.9	ns	15.3
13.8	15.7	14.7	15.1	13.9	15.7	15.0	ns	15.1
13.8	ns	14.6	15.5	13.9	ns	14.8	15.7	15.2
14.0	ns	14.9	15.7	14.1	ns	14.9	ns	15.4
13.9	ns	14.8	15.3	14.2	ns	ns	14.1	14.6
13.9	ns	14.9	15.0	13.9	ns	ns	14.1	14.6
14.0	ns	16.0	15.1 ^{plus}	14.1	ns	ns	14.7	15.0
13.8	ns	14.8	15.0	14.9	ns	ns	14.7	14.9
14.1	ns	14.8	15.3	14.3	"	"	14.9	15.2
13.3	ns	ns	15.5	14.2	ns	ns	14.9	15.1

13.9:	ns	BT	ns	13.8:	ns	ns	ns	ns
14.0	ns	BT	ns	14.3	ns	ns	ns	ns
13.7	15.7	14.7	15.2	13.9	ns	14.4	ns	ns
13.6	15.8	14.7	14.7	14.2	ns	15.0	ns	14.7
13.5	14.5	14.8	14.5	13.9	ns	15.7	ns	13.7

B 184 confirm

476

242

475

412

120

Long Periods

July 16, 1936

			269.5 ^d	SSCymic Type	230.6 ^d	251.8 ³	183.6 ^d	405 ^d	143.1 ^d	196 ^d
	JD	Plate No	FVSqr	310	FUSqr	FT.Sqr	348	407	B128	B205
5.0	11202	B 3842	ns	ns	ns	ns	14.8 ¹	14.5	ns	ns
14.6	11204	3861	"	—	—	—	ns	14.4	—	—
13.5	11221	3960	"	?	"	"	"	ns	"	"
13.8	11497	5151	"	ns	"	"	"	"	"	"
15.2	11531	5407	"	"	"	13.8	14.7	"	"	"
13.5	11641	5833	"	"	"	ns	"	"	"	"
13.5	11642	5835	ns	"	"	"	"	"	"	"
14.8	11872	5967	"	"	"	"	15.4 ¹	"	"	"
14.6	12585	9280	BT	"	"	12.9	ns	ns	14.8	"
16.5	12603	9482	ns	"	"	13.1	ns	15.2	15.2	ns
15.5	12623	9556	—	—	—	—	—	ns	"	"
15.5	12630	9592	15.5	ns	ns	14.5	ns	ns	14.8	"
15.0	12630	9593	ns	"	"	14.6	"	"	"	"
13.8	12666	9855	"	"	"	ns	"	"	"	"
15.0	13030	11634	14.9	"	"	14.0	"	"	"	"
15.2	13327	13346	ns	"	15.2	12.7	"	"	"	"
14.5	13348	13535	"	"	ns	13.4	"	"	BT	"
14.6	13357	13749	"	"	"	13.9	"	"	ns	"
15.5	13384	14039	"	"	"	ns	15.8	15.8	"	"
15.4	13442	14496	"	"	14.4	"	14.8 ¹	ns	"	BT
15.5	13710	16037	"	"	15.2	ns	ns	"	"	ns
14.0	13716	16156	"	"	ns	"	BT	"	"	"
14.2	13738	16496	"	"	"	"	BT	"	"	"
14.4	13740	16518	"	"	"	"	BT	"	"	"
15.0	13826	17444	ns	"	"	12.8	ns	15.2	"	BT
15.0	13846	17652	BT	"	"	12.8	"	ns	"	ns
14.0	14057	19082	BT?	"	"	BT	—	—	—	—
14.0	14057	19085	13.7	"	"	13.2	"	"	"	"
15.0	14058	19113	13.7	"	"	12.8	"	"	15.0	13.0
14.2	14077	19325	14.2	ns	ns	12.2	ns	ns	ns	ns

	close. companion								
220.5		274.5	145.3	212.5	172.7	211 ^d	B-298 ^d MF 299 ^d	217.8	
B 21	B22	B20	B130	B129	B217	339	B219	B134	B135
14.7	ns	14.8	ns	15.1 ^{ns}	14.3	ns	ns	15.1	ns
14.6	"	ns.	"	"	ns	"	"	ns.	"
ns	ns	ns	—	"	"	"	"	"	"
14.0	"	"	—	"	"	Rt.	"	"	"
13.9	Rt.	14.4	14.8	15.0	ns	ns	15.7 ^{ns}	"	"
13.7	ns	ns	ns	ns	"	Rt.	ns	"	"
13.5	"	"	"	"	"	ns	"	"	"
13.2	"	14.2	"	"	"	"	14.9 ^{ns}	"	"
13.4	"	ns	"	"	"	"	ns	"	"
13.7	15.4 ^{ns}	14.3	16.2	ns	ns	ns	15.7 ^{3.}	"	"
Rt	ns	Rt	ns	"	"	"	ns	"	"
13.4	"	14.2	"	15.1 ^{ns}	ns	"	"	11.4 ^{ns}	15.0
13.2	"	14.0	"	ns	"	"	—	—	—
12.7	"	ns	"	"	—	—	—	—	—
14.4	"	14.7	"	"	ns	ns	15.0 ^{ns}	14.8	ns
14.0	"	14.4	"	"	"	"	ns	"	"
13.7	"	14.6	"	"	"	"	"	"	—
13.4	"	ns	"	"	"	"	14.8 ^{ns}	"	"
12.4	"	15.0	14.8	"	"	"	ns	"	14.8
13.0	15.0	14.0	ns	14.8	"	"	ns	15.0	15.0
13.5	ns	15.0	15.2	15.2	"	15.0	"	"	"
14.4	ns	15.0	—	—	—	—	—	—	—
13.7	ns	ns	—	—	—	—	—	—	—
14.1	14.6	14.8	ns	ns	15.0	ns	ns	ns	ns
13.5	ns	14.6	15.0	ns	ns	"	"	14.8	Rt
13.4	"	ns	ns	Rt	"	"	"	ns	—
ns	—	—	—	ns	"	"	"	"	Rt
14.3	"	14.5	ns	"	—	—	—	—	—
13.9	15.0	14.2	15.0	ns	ns	ns	ns	ns	14.8
13.7	ns	14.2	ns	Rt	—	—	—	—	—

Limit	J.D.	Plate No	FVSqr	310	FUSqr	FTSqr	348	407	B128	B206
14.0	14084	B 19448	14.2	ns	14.5	12.0	ns	ns	ns	ns
14.5	14094	19576	14.4	ns	14.7	12.3	ns 15.0	"	"	"
14.8	14181	20285	ns	ns	ns	ns	ns	ns	14.8	15.0
15.0	14182	20322	"	"	"	"	11.0	"	15.0	ns
14.2	14188	20465	"	"	"	"	"	"	ns	"
13.8	14393	21225	"	Bt	"	13.8	"	Bt	"	"
14.7	14536	21919	"	ns	"	14.8	"	ns	"	"
13.2	14573	22022	"	"	"	12.0	"	"	"	"
13.8	14750	22478	"	"	"	ns	"	"	"	Bt?
14.7	14751	22510	"	13.9	"	"	"	14.7	"	ns
14.0	14822	23059	"	ns	"	12.5	"	ns	"	"
14.5	14833	23200	—	—	—	Bt	—	—	—	—
14.5	14853	23496	14.0	ns	ns	12.3	ns	ns	ns	ns
15.8	14863	23684	—	—	—	Bt	—	—	—	ns
14.0	14863	23696	14.0	ns	ns	12.8	ns	ns	ns	ns
15.5	14867	23745	14.2	"	blue	12.9	"	15.5 blue	blue	"
16.0	14868	23750	14.5	"	ns	13.0	15.0	edge ns	—	—
16.3	14872	23776	14.7	ns	16.0	13.2	15.2	16.0	15.8	ns
15.0	14941	24376	ns	"	ns	ns	15.5 Bt	"	ns	"
15.2	15110	24921	15.3	"	15.4	12.8	ns	"	"	"
14.4	15163	25424	ns	"	ns	ns	"	"	"	"
15.4	15171	25506	15.5	"	"	"	"	14.8	15.5	15.0
15.0	15278	26141	ns	ns	14.3	"	15.0	ns	ns	ns
14.0	15332	27438	"	"	ns	"	15.5 Bt	"	"	"
13.8	15869	29524	"	"	"	12.4	ns	"	"	"
15.2	15870	29570	"	"	"	12.9	"	"	"	"
16.3	15872	29605	16.0	"	"	12.2	ns	16.0	ns	ns
15.2	15897	29853	ns	"	"	13.8	"	ns	15.2	ns
15.8	15966	30511	—	—	—	—	—	—	—	—
15.0	15966	30513	15.3	ns	14.8	ns	ns	ns	ns	ns

B21	B22	B20	B130	B129	B217	339	B219	B134	B135
13.7	ns	ns	—	ns	—	—	—	—	—
12.8	15.0 ns	14.5	Bt	11	Bt?	—	—	—	—
14.4	ns	ns	15.2	15.0	Bt?	ns	^{ms or non fault} 15.1	²¹⁵² ns	ns
13.8	11	11	ins	Bt	ns	11	ns	—	—
14.0	15.0 ns	11	11	ns	11	11	Bt?	ns	ns
12.8	ns	14.0	—	—	—	—	—	—	—
12.9	11	14.0	11	11	Bt	11	11	11	—
13.5	11	ns	—	—	—	—	—	—	—
13.8	11	Bt	—	—	—	—	—	—	—
14.7	11	14.8	ns	14.7	ns	ns	ns	ns	Bt?
13.0	11	ns	—	ns	—	—	—	—	—
Bt	—	ns	—	—	ns	ns	ns	ns	ns
13.2	ns	14.7	ns	ns	11	11	11	11	11
med	ns	med	ns	ns	ns	ns	ns	ns	ns
14.0	ns	14.2	—	—	—	—	—	—	—
14.2	11	14.4	ns	15.2	ns	—	²¹⁵⁵ 14.4	ns	—
+	—	14.5	—	—	—	—	—	—	—
14.0	11	14.2	ns	15.5	15.6	—	ns	ns	—
12.5	11	14.9	11	ns	—	—	—	—	—
13.2	11	15.2	11	11	ns	—	—	—	—
14.5	11	14.5	11	11	11	ns	ns	ns	14.4
14.5	11	14.8	ns	15.2	ns	ns	^{8v} 15.5	11	14.6
13.9	11	15.3	ns	ns	11	ns	—	—	—
13.0	11	14.2	11	11	—	—	—	—	—
13.3	11	14.4	11	11	—	—	—	—	—
12.8	14.9	14.0	14.5	11	15.5	ns	ns	ns	ns
13.1	15.4	14.5	14.3	15.8	15.7	11	11	11	11
12.9	15.5	ns	15.2	14.9	15.5	15.0	11	14.9	ns
—	—	—	—	ns	ns	blue	11	ns	11
13.2	ns	14.8	ns	ns	ns	—	—	—	—

L _h mit	J.D.	Plate No	FVSq _T	310	FUSq _T	FTSq _T	348	407	B128	B205
15.2	16222	B 31470	14.0	ms	14.2	ms	ms	ms	ms	ms
15.2	16257	31862	ms	ms	15.8	ms	—	"	"	15.0
15.2	16288	32032	"	"	ms	"	13.9	"	"	ms
15.5	16290	32049	"	"	15.7	"	13.8	"	"	"
15.0	16396	32650	"	"	ms	13.0	ms	14.6	ms	js
13.8	16594	33486	"	"	"	13.5	"	ms	"	ms
16.2	16615	33759	15.8	"	15.7	12.9	ms 14.0	ms	15.5	ms
15.0	16625	33836	15.0	"	ms	13.0	ms	"	14.9	"
14.5	16943	35781	ms	"	"	ms	"	"	ms	15.1
15.0	17090	36868	"	"	"	12.7	"	"	ms 15.4	ms
14.3	17698	37313	"	"	"	ms	"	BT	ms	"
15.0	17727	37583 ³⁸	"	"	"	ms	"	ms	"	14.8
16.2	17803	37968	14.3	"	15.0	15.2	16.0	16.0	15.2	ms
15.6	17813	38031	13.7	"	14.1	14.5	ms	ms	ms	"
14.3	18098	39090	ms	"	ms	13.5 14.2	BT	BT	"	"
14.4	18406	40063	"	"	"	13.8	14.6	ms	"	"
14.2	18821	41380	"	"	"	ms	ms	"	"	"
14.2	18848	41487	"	"	"	13.6	"	"	"	"
14.0	18868	41653	"	"	"	12.5	14.2	"	"	"
13.8	19605	43354	"	"	"	13.3	ms	"	"	"
15.2	20288	44538	"	"	15.2	ms	ms	"	"	"
15.5	20330	44783	"	"	ms	14.4	14.7	"	15.3	15.8
16.1	20336	44840	"	"	15.8	14.5	14.8	"	14.9	15.8
15.0	20338	44861	"	"	ms	14.0	14.8	"	14.9	ms
16.0	20339	44876	ms	14.1	ms	14.3	14.8	ms	14.6	15.8
15.8	20362	45001	ms	16.0	ms	14.3	13.0	15.0	"	14.7
13.8	21064	47985	ms	ms	ms	ms	ms	"	ms	"

B21	B22	B20	B130	B129	B217	339	B219	B134	B135
13.01	ns	ns	ns	ns	ns	ns	ns	ns	BT1
13.31	"	15.3	?	"	—	—	"	"	15.2
13.8	"	15.1	ns	"	—	—	—	—	—
14.0	ns 15.6	15.2	ns	ns 15.6	15.3	Rt	ns	ns	ns
12.6	ns	15.5	"	ns	ns	ns	15.5	"	"
14.0	ns 14.1	ns	"	"	"	"	ns	Rt	"
13.5	ns	15.0	ns	14.6	ns	Rt	15.1	ns	ns
12.4	ns	14.9	"	15.1	"	14.7	15.2	"	"
12.3	"	14.3	"	ns	"	ns	"	"	"
12.4	"	14.8	"	14.9	"	"	"	"	14.8 } <i>that is in corner place?</i>
12.9	ns	14.3	"	ns	—	—	—	—	—
13.5	"	14.7	"	"	ns	ns	ns	ns	ns
13.7	"	14.3	15.6	15.5	14.9	15.1	"	"	15.4
13.4	ns 14.6	14.6	15.3	15.3	15.4	14.7	"	"	15.3
12.8	"	14.3	ns	ns	ns	ns	"	"	ns
14.0	ns 14.6	14.7	"	"	14.8	"	"	"	Rt def
12.9	ns	14.5	ns	ns	—	—	—	—	—
13.7	"	14.8	"	"	—	—	—	—	ns 14.4 Rt 0 41424 1848
14.3	"	14.0	"	"	14.6	—	—	—	—
14.2	"	ns	"	"	ns	"	"	"	ns
13.0	14.9	13.8	15.2	"	"	"	"	"	"
13.1	ns	14.4	ns	15.3	15.2	"	"	"	"
13.0	ns	14.7	"	ns	14.7	ns	16.3	ns	ns
13.2	ns	14.7	"	"	14.7	"	ns	"	"
13.5	ns	14.7	"	"	14.9	"	16.3	"	"
14.4	"	14.8	ns	ns	15.0	ns	15.4	"	scratched
13.5	"	ns	—	"	ns	ns	ns	"	"

1329pae.proj.25635

L	Lat	J.D.	Plate No	FVSqr	310	FUSqr	FTSqr	348	407	B128	B205
13.0		13752	A 1904	ms	—	—	ms	14.5	ms	15.0	ms
—		14069	2310	13.9	—	—	—	—	—	—	—
16.5		14140	2606	ms	ms	15.4	15.0	ms	16.0	16.8	ms
15.5		14156	2659	"	"	ms	FT	"	"	ms	—
15.5		14160	2661	"	"	"	ms	"	"	—	—
14.6		14181	2713	"	—	—	—	"	"	ms	—
16.3		15614	5655	"	ms	ms	13.0	"	14.8	15.0	RT
16.5		15631	5622	"	"	"	12.6	"	15.0	15.5	ms RT
16.6		15966	6050	15.2 med	ms	RT	16.8	15.2	15.6	ms	med RT
14.4		17392	7779	ms	ms	ms	RT	ms	ms	ms	ms
14.4		18114	8883	"	"	"	13.2	RT	14.8	ms	ms
15.0		18828	10112	"	"	"	14.4	FT	ms	"	"
16.8		24755	13996	ms	16.6	"	14.5	16.6	15.4	16.0	15.6

B 21	B 22	B 20	B 130	B 129	B 217	339	B 219	B 134	B 135
14.3	ms	14.2	ms	15.5	14.9	ms	ms	ms	ms
—	—	—	—	—	—	—	—	—	—
RT	15.0?	—	—	—	—	—	—	—	—
msd	ms	15.1	ms	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
14.2	ms	ms	15.0	ms	15.0	15.01	ms	ms	ms
13.8	ms	16.0	15.6	15.2	ms	14.9	ms	15.0	14.8
14.0	11	16.0	16.0	15.4	14.9	16.1	11	15.4	15.5
RT	11	14.9	ms	15.9	ms	—	—	—	—
12.4	ms	14.4	ms	ms	15.2	ms	ms	ms	ms
13.4	ms	14.7	11	11	—	—	—	—	—
RT	11	—	—	ms	ms	—	—	—	—
12.7	15.9	16.0 15.6	ms 15.4	14.8 15.7	ms	14.4	16.6	ms	15.4

July 17 1930
 provided
 15 periods
 July 26, '30

in seq No 19 too faint

			FVSqr	210	FUSqr	FTSqr	348	407	B21	B20
2	23905	AX	488	ns	ns	13.0	ns	ns	14.4	14.5
14.2	919		535	"	Bt?	14.0	"	"	14.3	ns
13.8	960		613	"	ns	"	"	"	13.6	"
14.0	965		645	"	"	"	"	"	12.5	"
13.9	993		725	"	"	14.4	Bt?	"	12.8	"
14.2	988		664	"	"	14.3	ns	"	12.8	"
14.6	24003		770	Bt?	"	14.8	Bt	"	12.8	14.8
14.0	033		793	ns	"	?	ns	"	14.0	14.2
13.8	285		1049	def	"	ns	"	"	13.7	ns
14.2	317		1146	ns	"	14.6	"	"	12.7	"
13.8	325		1180	"	"	ns	"	"	12.9	12.3
14.0	378		1284	Bt	"	Bt	ns	"	14	Bt
14.1	404		1316	ns	"	13.0	"	"	12.6	Bt?
13.6	432		1360	"	"	med Bt	"	"	Bt	?
14.0	623		1576	"	seen?	"	12.8	Bt?	med Bt	ns
14.4	654		1660	"	ns	"	ns	ns	14.2	14.6
14.4	731		1817	"	"	14.4	"	"	12.3	14.6
14.5	754		1853	"	"	14.8	"	"	12.7	ns
14.2	787		1919	"	"	ns	"	Bt?	13.6	"
14.2	794		1941	Bt	"	"	ns	"	14.5	"
12.8	25154		2015	ns	"	14.4	"	"	14.5	"
14.2	355		2265	14.8	"	13.3	"	"	13.4	"
14.2	386		2423	Bt	"	Bt	Bt	"	med Bt	"
	389		2449				Bt			
214	410		2494				ns			

130

1929plate.proj.2.2

130

Unit	J.D.	Plate No	259. ^d 6	Has it comp? near shut?	196. ^d	317. ^d	close to at par 292. ^d	236. ^d 4	Rt comp 230. ^d 7	P=265. ^d
			263	B 81	B/23	B 91	274	416	275	342
4.8	11202	B 3842	ms	15.0. ms	ms	ms	ms	ms	19.0	14.9!
15.0	11204	3861	"	Bt?	"	"	"	15.0	14.0	ms
15.0	11510	5255	"	15.2i	"	15.2?	"	ms	25 Bt	—
14.5	11331	5407	"	ms	"	ms	"	"	ms	ms
14.5	11872	5967	"	"	"	"	"	"	Bt?	"
16.5	12603	9482	14.9	15.2	11.5	"	15.1?	"	15.0	ms
15.5	12623	9556	—	—	—	—	—	—	—	—
15.5	12630	9592	15.4	14.5	14.0	—	—	—	—	—
14.0	12666	9855	ms	ms	ms	Bt	ms	ms	22.5 Bt	—
15.2	13030	11634	"	"	"	15.3i	ms	15.3i	14.0	15.0
15.0	13327	13346	15.5 ms	15.0	15.5 ms	ms	"	ms	ms	ms
14.5	348	13535	"	15.0	15.5 ms	15.0	"	"	"	"
14.6	357	13749	15.0	ms	"	14.6	"	"	"	"
15.8	384	14089	15.2	"	"	15.0?	"	"	"	"
15.4	442	14496	ms	15.0	15.1	ms	"	"	"	"
15.2	710	16037	"	Bt!	ms	"	"	Bt?	14.4i	"
14.4	738	16496	"	14.5	"	"	"	—	—	—
15.0	740	16518	"	14.8	"	"	"	ms	14.5	"
14.6	826	17444	"	15.0?	15.0	ms	—	—	—	—
15.0	846	17652	"	14.8i	14.6	"	"	"	ms	15.0
14.5	18057	19085	"	15.0	"	"	"	"	—	—
15.2	058	19113	"	14.0i	"	"	"	"	"	15.0
14.6	094	19576	"	14.0	ms	"	"	"	—	—
14.6	181	20285	—	—	—	—	—	—	—	—
14.7	182	20322	14.5	14.7	ms	"	"	Bt?	Bt	—
14.4	190	20490	ms	ms	"	"	14.8 ⁺	ms	13.7	ms
15.0	536	21919	ms	14.9	"	"	ms!	"	ms	"
14.5	751	22510	"	ms	"	"	ms	"	"	"
14.2	822	23059	"	"	14.9	"	ms!	"	"	"
14.4	853	23496	"	"	ms	"	"	del 14.8	14.6	"

417.3 ^d	253.5 ^d	212 ^d	255.5 ^d	211.1 ^d	258.8 ^d	187.7 ^d	100.5 ^d	196.2 ^d	131 ^d	132 ^d
B 149	276	B76	KZSq	260	B31	B215	378	B131	B132	
ns	1510 ⁱ	ns	ns ⁱ	ns	1510?	ns ⁱ	ns	14.3	ns	
"	ns	"	ns	ns	ns	ns	ns	14.5	"	
—	—	—	—	—	—	—	—	—	—	
7	ns	ns	ns	ns	Blur Rt?	ns	15.0	ns	ns	
ns	Rt	ns	1511	"	ns	"	Rt?	"	"	
ns	ns	1512	15.2	ns	ns ⁱ 1516	Bl. 16.31	ns	15.6	15.5	another star + near sun before
—	—	Rt	—	ns	?	16.0 in s	ns	ns	—	
—	—	—	—	—	—	—	—	—	—	
ns	ns	1510 ⁱ	15.4 ⁱ	ns	Rt ns ⁱ	ns	ns	ns ⁱ	ns	
"	"	ns	14.2	"	"	"	"	14.4	"	
"	—	14.1	14.8	"	"	"	"	Rt.	"	
14.3	ns	ns	ns	ns	Blur	ns	"	Rt.	"	
14.0	14.4	"	"	14.5	ns	"	16.8	15.2	"	
15.4	ns	Bl. [?]	ns ⁱ 15.4	ns	ns ⁱ 15.4	"	15.0	ns	ns	
ns	"	ns	ns	"	ns	Bl. [?] 15.10	ns	"	"	
—	—	—	—	—	—	—	—	Rt.	—	
"	"	"	"	"	scratched	—	—	14.3	ns	
—	—	—	ns	—	—	ns	ns	ns	ns	
15.2	ns	ns ⁱ	"	14.9	14.6	"	14.6	15.0	Rt?	
—	—	—	ns	—	—	—	—	—	—	
ns	"	"	14.7	ns	Bl. 15.4	ns	ns	ns	Bl. [?] ns ⁱ	
—	—	—	ns	—	—	—	—	—	—	
Rt	—	—	ns	ns	Blur Rt	Bl. [?]	ns	ns	ns	
and Rt	—	—	15.1	—	—	—	—	—	—	
13.8	ns	—	ns	—	—	—	—	—	—	
ns	"	Bl. [?]	ns	ns	Blur ns ⁱ	ns	ns	Rt	ns	
ns	"	ns	11	"	ns	ns	Rt ⁱ	ns	ns	
ns	"	"	14.9?	"	"	"	ns	"	"	
ns	ns	"	14.0	14.8	ns	"	"	"	"	

limit	J.D.	Plate No	263	B81	B123	B91	274	416	275	342
15.5	14863	B 23684	—	—	—	—	—	—	—	—
14.0	863	23696	ns	14.4	ns	ns	ns	ns	—	—
15.8	867	23745	ns	14.5	"	"	blu	blu	Bt.	ns
15.8	868	23750	15.8	14.8	ns	ns	ns	ns	?	ns
16.5	872	23776	16.3	14.3	ns	16.0	ns	ns	14.8	15.3
15.8	875	23786	ns	ns	ns	ns	ns	ns	Bt	15.3
15.0	941	24375	14.8	15.0	ns	14.8	ns	ns	ns	ns
15.3	15110	24921	ns	14.5	"	ns	"	14.8	Bt	15.3
14.2	15162	25387	Bt?	14.3	ns	ns	—	—	ns	—
14.3	15163	25424	ns	Bt?	ns	"	ns	ns	ns	ns
15.0	171	25506	15.1	14.5	ns	ns	blu	blu	ns	ns
13.5	276	26117	ns	ns	"	"	ns	ns	ns	ns
15.5	278	26141	ns	14.8	ns	14.0	14.7	ns	ns	ns
14.3	869	29524	ns	14.0	ns	ns	—	—	—	—
15.5	870	29530	ns	14.8	ns	14.3	ns	ns	ns	ns
16.5	892	29605	ns	14.4	ns	14.2	14.8	ns	ns	16.0
15.8	897	29853	ns	14.8	ns	14.0	ns	ns	ns	ns
14.4	897	29857	"	14.8	"	Bt	—	—	—	—
15.0	966	30513	15.3	14.2	14.8	ns	—	ns	—	—
14.8	16288	32032	15.0	14.4	ns	ns	ns	ns	ns	ns
15.2	290	32049	ns	14.8	ns	ns	Bt?	blu	?	—
15.2	396	32650	"	ns	14.8	ns	ns	ns	ns	ns
15.7	615	33759	ns	14.7	ns	ns	blu	"	ns	ns
15.4	625	33836	ns	14.6	ns	"	ns	"	ns	ns
14.0	17080	36792	"	ns	"	"	"	"	"	"
15.0	17090	36868	"	14.8	"	"	Bt?	"	"	"
16.2	698	37313	"	15.0	"	"	ns	"	"	"
15.0	727	37538	"	14.8	14.6	"	"	"	"	"
15.5	803	37968	14.4	14.8	ns	14.6	"	"	"	"
16.4	813	38031	14.2	14.6	ns	14.9	"	"	"	"

B 149	276	376	K2Sgr	B 260	B 31	B 215	378	B 131	B 132
—	—	—	—	—	—	^{LI} ms	14.5	ms	ms
—	—	—	Rt	—	—	—	—	—	—
blu	blu	ms	14.7	Rt?	blu	^{blu} 15.5	14.8	ms	ms
?	ms	—	15.3	15.5	blu	—	—	—	—
ms	ms	ms	14.7	15.1	^{blu} 15.0	^{blu} 16.2	14.7	ms	15.6
ms	ms	ms	Rt	Rt	ms	^{blu} 15.8	Rt	11	Rt
ms	ms	Rt?	11	ms	^{blu} Rt?	ms	15.3	11	ms
ms	11	ms	14.3	11	ms	11	ms	Rt?	11
ms	—	—	ms	—	—	—	—	—	—
ms	ms	ms	ms	ms	ms	ms	ms	ms	ms
blu	blu	ms	ms	ms	blu	ms	15.0	ms	ms
Rt	ms	ms	ms	11	—	—	—	—	—
ms	ms	ms	ms	14.9	blu	ms	15.2	Rt?	ms
—	—	—	—	—	—	—	—	—	—
14.2	ms	ms	14.5	ms	ms	ms	14.8	15.3	ms
14.1	ms	ms	14.6	14.9	^{ms} 14.3	^{ms} 14.2	14.8	15.0	ms
14.5	ms	11	14.8	14.8	15.6	^{ms} 15.8	ms	14.2	ms
—	—	—	—	—	—	—	—	—	—
—	—	—	ms	—	—	—	—	—	—
ms	ms	ms	ms	—	—	—	Rt?	Rt	ms
—	—	ms	ms	—	ms	ms	15.5	14.3	15.5?
ms	ms	ms	14.0	ms	ms	ms	ms	ms	ms
blu	11	11	15.5	11	11	11	11	11	15.5
ms	11	ms	ms	ms	11	11	11	11	ms
14.0	11	11	11	11	11	11	11	14.4	11
14.3	11	^{15.0} Rt?	11	11	^{ms} 14.7	11	11	14.3	11
ms	Rt	Rt?	^{14.8} 15.4	11	ms	11	11	15.0	11
11	14.7	ms	15.0	11	11	11	11	ms	11
11	ms	11	^{ms} 15.6	15.0	^{ms} 15.3	ms	16.0	11	^{15.5} 11
11	11	11	ms	Rt	11	ms	ms	11	11

1929plateproj.256335

134

Plate	Limit	J.D.	Plate No.	263	B81	B123	B91	274	416	275	342
14.2	18098	B 39090	ms	ms	ms	ms	ms	ms	ms	13.8	ms
14.4	406	40063	"	"	"	13.7	"	"	"	ms	"
14.6	821	41380	14.3	14.8	"	ms	BT?	"	"	"	"
14.6	848	41487	14.4	14.5	"	"	"	"	"	"	"
14.6	868	41653	ms	14.8	BT?	"	"	"	"	"	—
14.2	19605	43354	"	ms	ms	"	"	"	"	2.5 BT 19412	ms
15.6	20288	44538	"	14.9	14.4	14.9	"	"	"	ms	ms
15.4	330	44783	—	—	—	14.5	BT	ms	ms	ms	ms
16.0	336	44840	TS	14.8	ms	15.2	ms	ms	ms	ms	ms
15.0	338	44861	—	—	ms	14.8	ms	ms	ms	ms	"
16.0	339	44876	—	—	—	—	ms	ms	"	"	"
16.0	362	45001	—	—	—	15.4	"	11.4	"	"	"

15.8	13752	A 1904	ms	14.9	ms	ms	16.0	15.8	14.8	ms	
16.5	14069	2310	16.3	14.9	16.0	"	14.9	ms	ms	15.4	
16.5	156	2659	13.7	14.5	ms	"	16.5	"	13.8	ms	
14.8	181	2713	14.8	ms	"	"	ms 14.0	"	14.0	"	
16.5	15614	5555	ms	14.8	14.6	15.8	15.3	15.0	16.5	"	
16.5	631	5622	"	14.6	15.2	16.5	15.6	15.7	ms	"	
16.8	966	6050	med ft	med	BT	—	—	—	—	—	
15.0	392	7779	—	—	—	—	—	—	BT	ms	
14.8	393	7784	—	—	—	—	—	—	BT	"	
14.8	18114	8883	ms	ms	BT	14.3	ms	ms	14.7	"	
15.5	18828	10112	BT	med	ms	—	—	—	—	—	
16.8	24356	13996	16.5	15.0	16.0	14.0	"	ms	14.3	"	

138

J.D.	Plot No.	still doubt		Long		Long		sort choke pair	
		B167	B235	291	B7	B121	B168	573	272
	MF 8537	12.9	16.01	15.61	16.5	ns	14.5	16.01	13.9
	8673	12.6	15.2	15.0	ns	14.0	14.8	16.21	15.2 ³
	8724	12.6	16.0	15.81	ns	15.3	14.8	15.01	14.7
	8785	12.3 ⁷	16.21	16.51	15.2	ns	14.7	16.31	14.3
	8842	12.9	15.0	15.8	13.8	ns	14.7	15.6	15.3
	9816	13.0	15.9	15.7	15.8	14.5	14.8	15.8	14.5
	9828	13.2	15.6	15.4	15.3	15.2	14.9	15.4	14.8
	9838	12.9	15.0	15.9	15.7	14.8	14.7	15.3	14.8
24626	10141	12.9	15.9	15.4	15.1	14.6	14.8	15.81	15.2
27	10146	12.8	16.21	15.5	15.0	14.9	14.9	ns	15.4
49	10240	13.1	15.0	16.01	14.3	15.7	14.8	ns	15.3
50	10249	12.8	15.4	15.7	14.3	15.9	14.9	15.81	15.4
54	10271	12.8	15.7	15.5	14.5	15.8	14.9	15.5	15.3
55	10279	13.0	15.01	15.5	14.5	peratch	15.0	15.1	15.2
56	10284	13.2	15.6	15.8?	14.6	ns	15.2	15.2	15.1
81	10365	12.7	16.01	15.2	15.2	ns	15.0	15.9	14.6
771	10522	12.8	15.7	15.4	16.5	ns	14.9	15.7	14.9
12	10534	12.9	15.6	15.0	ns	ns	14.9	15.9	15.1
27	10572	12.9	16.2	15.7	ns	ns	14.8	15.8	15.4
28	10574	12.8	15.01	14.9	"	"	14.9	15.0?	15.3
	10576	12.8	15.5	15.1	—	—	14.8	15.4	15.1
	10577	12.9	15.7	15.4	"	"	14.7	15.3	15.4
	10578	13.1	15.3	15.5	—	—	14.8	15.4	15.4
	10579	12.8 13.21	15.4	15.7	"	"	15.0	15.51	15.3
15.8 25383	11662	13.2	ns	15.4	ns	ns	15.1	ns	14.7
15.8 86	11705	12.8	ns	15.7	"	"	15.1	nt	13.1
15.3 88	11718	13.1	"	ns	"	"	15.1	ns	—
16.2 90	11743	12.9	14.9	15.5	16.01	"	14.8	15.8	15.0
24755	A 13996	—	nt	nt	ns	ns	—	nt	Br

not same as edge
as at center

Long			close ft	Long	V			No Variation	No Variation	Long		
B122	B169	365	B26	B27	241	B180	458	B182	B181	243	B29	
ms	16.5	15.3	16.0	15.7	16.2	14.2	13.8	14.0	14.0	14.4	16.3	14.9
	14.7	14.6	15.1	15.4	12.8	14.1	14.0	14.1	13.9	14.3	15.0	14.4
	14.8	15.6	16.3	13.9	12.9	14.7	14.0	14.0	13.4	14.3	14.9	16.4
	16.4	14.5	14.8	14.4	14.8	14.3	14.3	14.3	14.8	14.5	ms	14.9
ms	16.5	15.0	15.5	15.7	16.3	14.3	14.1	14.3	13.7	14.0	15.8	14.3
ms	14.8	16.0	ms	ms	14.6	14.0	13.9	14.0	14.7	15.8	14.4	
ms	14.6	15.7	ms	ms	14.7	14.3	14.4	14.3	14.7	15.5	14.5	
ms	14.9	15.7	ms	ms	14.2	13.8	14.4	14.3	14.7	15.6	14.9	
ms	14.4	14.8	15.7	15.9	14.0	13.9	14.3	14.0	14.3	ms	14.7	
ms	16.3	14.4	15.8	ms	ms	14.2	14.0	14.3	14.3	14.3	ms	14.7
ms	16.7	15.8	15.2	15.4	ms	14.2	14.2	14.5	14.5	14.5	15.2	16.1
ms	15.7	15.3	15.8	15.7	14.3	14.4	14.6	14.5	14.7	15.5	ms	14.7
ms	15.8	15.2	15.8	15.9	14.4	14.3	14.7	14.4	14.7	15.2	ms	
ms	15.4	15.0	15.5	ms	14.3	14.4	14.6	14.3	14.6	15.1	ms	
ms	15.8	15.0	15.6	16.3	14.5	14.3	14.7	14.3	14.6	15.3	ms	
15.0	14.8	15.8	15.6	14.3	14.7	14.0	14.6	14.5	14.7	14.8	15.5	
14.6	15.1	15.5	13.8	13.7	13.8	13.8	14.3	14.0	14.6	15.8	14.6	
14.9	15.1	15.7	13.8	14.0	14.3	13.7	14.4	14.1	14.7	15.4	14.3	
14.9	15.3	15.2	14.2	14.2	14.2	13.7	14.2	14.1	14.7	ms	14.3	
15.0	15.2	15.1	14.0	14.8	14.2	14.2	14.7	14.5	14.7	ms	14.7	
—	14.9	15.5	—	—	14.2	14.3	14.4	14.0	14.7	ms	14.3	
15.1	14.9	15.2	14.3	14.5	14.5	14.0	14.3	14.0	14.7	ms	14.5	
—	15.1	15.4	—	—	14.4	14.0	14.2	14.2	14.9	ms	14.6	
15.0	15.0	15.1	14.3	14.5	14.5	14.3	diff.	14.8	14.8	ms	14.6	
15.2	15.1	?	ms	15.1	14.3	14.2	14.4	14.0	14.7	15.0	14.9	
14.4	15.0	ms	"	14.7	14.3	14.4	14.4	14.5	14.6	14.9	14.7	
—	—	"	"	14.8	14.4	14.2	14.8	14.7	14.8	15.1	15.0	
14.9	15.1	16.7	ms	14.8	14.4	14.5	14.5	14.6	14.8	15.1	14.7	
ft	Bt	Bt	kl	ms	—	—	14.5	—	—	Bt	ms	

J.D.	Plate No	B167	B235	291	B 7	B121	B168	513	272
16.5 25414	MF 11844	12.8	^{slur} 15.2	15.7	15.2	ns	14.8	15.6	15.3
16.0 418	11883	13.1	16.0	15.7	14.9	"	14.8	14.9	15.2
15.6 419	11899	13.1	ns	15.4	14.8	"	14.7	^{BT} 15.2	^{slur} 15.3
16.5 421	11919	12.8	16.0	<u>14.8</u>	14.9	"	14.7	<u>14.9</u>	15.0
16.3 437	11973	12.8	16.0	14.8	14.0	14.6	14.6	15.6	14.6
14.6 493	12285	12.8	ns	ns	ns	ns	15.0	—	—
16.0 25345	13120	12.7	15.3	15.8	"	ns	14.5	RT ^{elongated/double}	BT
16.3 549	13134	12.7	15.7	15.9	"	ns	14.7	15.0	14.5
16.5 594	13287	12.7	15.6	15.8	^{75.5} 11.1	"	14.7	<u>14.9</u>	15.2
16.0 599	13327	12.9	ns	15.7	^{15.4} 11.1	"	14.9	14.8	15.3
16.2 832	13398	12.9	15.5	15.4	14.8	ns	14.7	15.2	14.7
16.5 51	13463	12.8	ns	15.1	14.5	"	14.6	ns	15.0
16.5 54	13481	12.9	15.9	15.4	14.9	15.7	14.8	15.8	14.8
15.5 55	13495	12.7	ns	ns	14.8	—	14.8	ns	14.6
16.2 61	13500	13.1	ns	16.1	14.8	14.9	15.0	?	BT
16.3 62	13502	12.8	ns	15.8	14.6	15.0	14.6	15.6	14.4

B122	B169	365	B26	B27	241	B180	455	B182	B181	243	B29
14.4	15.1	15.8	15.5	13.6	14.5	14.1	14.5	14.2	14.7	16.2	16.3
14.6	14.7	def	15.3	14.0	14.2	14.2	14.4	14.4	14.7	ns	ns
—	14.7	15.6	15.2	13.9	14.7	14.1	14.3	14.7	14.8	"	"
14.9	14.3	15.5	15.0	13.7	14.5	14.0	14.3	14.2	14.6	ns	16.3
14.4	14.6	15.1	13.8	13.8	14.3	14.3	14.4	13.9	14.5	ns	15.4
ns	14.4	—	15.0	ns	14.4	14.3	14.3	—	—	—	—
ns	14.7	15.8	14.9	ns	14.4	13.9	14.2	14.3	14.3	15.4	ns
ns	15.2	ns	15.3	ns	14.5	14.0	14.0	14.0	14.6	15.7	ns
"	14.9	15.1	16.3	ns	14.5	13.5	14.4	14.0	14.5	ns	14.0
15.5	15.0	15.3	ns	ns	14.7	13.6	14.0	14.2	14.7	"	14.0
ns	15.1	15.8	ns	ns	14.4	14.3	14.3	14.6	14.8	15.4	15.4
ns	14.4	15.4	16.0	15.5	14.3	14.0	14.3	14.3	14.6	15.2	16.4
ns	14.5	15.5	ns	ns	14.9	14.3	14.5	14.6	14.7	15.4	ns
ns	14.8	15.0	ns	?	14.7	14.5	14.7	—	14.9	15.3	ns
15.3?	14.7	15.1	15.7	15.1	14.3	14.4	14.6	—	14.9	15.5	ns
15.3	14.5	15.5	ns	15.2	14.3	14.0	14.2	14.3	14.7	15.7	15.7

146

SD

Plate No

Long

Long
following
upwhen faint
see close
comp.
sub 1000Wood
Pulnear hit
after
Longdone
comp.
Long

nebular

572

271

387

474

364

240

411

B177

23911

MF P537

ms

ms

12.7

13.5

ms

15.9

14.8

13.4

965

8673

ms

ms

12.4

13.1

15.9

14.6

ms

12.2

992

8724

ms

ms

12.7

13.2

14.8

16.2

16.4

12.4

24026

8785

15.6

14.4

12.7

13.2

14.6

15.8

ms

13.1

056.

8842

15.8

14.7

12.9

13.6

15.7

15.9

15.6

13.6

24411

9816

ms

ms

12.9

13.4

ms

15.4

ms

12.8

12

9828

"

"

12.8

13.5

"

15.5

15.8

13.1

13

9838

"

ms

12.9

13.4

"

15.5

15.7

12.8

24626

10141

ms

14.8

13.0

14.4

ms

16.1

15.3

13.3

627

10146

"

14.8

12.8

13.9

ms

16.1

15.6

12.7

649

10240

"

14.8

12.8

13.7

"

15.4

16.0

13.1

650

10249

"

14.8

13.1

13.6

"

15.5

16.5

13.3

654

10271

"

15.1

13.0

13.6

"

16.2

16.3

14.0

655

10279

"

14.5

12.8

13.6

"

16.0

ms

14.5

656

10284

"

14.9

13.0

13.7

"

15.8

11.5

14.5

681

10365

"

14.9

13.2

13.6

"

15.4

15.9

11.5

711

10522

"

15.5

13.0

13.4

ms

15.9

15.8

13.7

712

10534

"

15.5

12.8

13.4

"

15.8

15.8

13.2

727

10572

"

15.6

13.1

13.4

"

16.0

15.8

13.8

728.

10578

ms

15.8

12.8

13.9

ms

15.9

ms

14.7

10576

—

16.8

13.1

13.6

—

16.0

—

14.0

10577

—

15.7

13.2

13.7

—

15.8

—

14.0

10578

—

15.4

12.9

13.7

—

15.7

—

14.2

10579

ms

15.3

13.3

14.0

ms

15.9

ms

11.5

15.8 25383

11662

ms

ms

13.0

13.9

ms

15.4

ms

14.3

15.8 386

11705

ms

15.6

12.9

13.6

ms

15.3

"

13.9

15.3 388

11718

ms

ms

14.0

14.7

"

ms

"

14.0

16.2 390

11743

"

"

14.3

13.4

"

15.8

"

13.9

24755

A 13996

ms

ms

12.5

ms

ms

12.5

ms

12.5

	close long	close comp. long	close double long	Long	✓ 2	Long	quar	0	close but star long	147	
B 99	B25	B179	B142	B178	447	B28	374	B28a	269	B143	273
15.2	ns	15.3	ns	16.2	12.5	15.3	15.6	14.4	ns	ns	15.18
15.3	14.8	14.7	ns	15.6	12.4	13.8	14.7	13.6	14.9	15.7	16.1
15.8	14.3	14.9	ns	16.2	12.2	14.4	14.7	13.6	ns	?	ns
15.8	14.7	14.7	14.1	16.3	12.5	15.4	14.7	14.3	ns	14.9	ns
15.7	15.6	15.0	14.3	15.7	12.6	15.7	13.7	ns	14.7	15.7	15.7
ns	14.9	14.9	ns	ns	12.6	15.6	15.0	13.0	ns	ns	15.9
15.4	15.3	14.8	ns	ns	12.6	15.8	15.4	13.0	"	"	16.0
15.7	15.2	14.9	ns	nan?	12.7	15.4	15.5	12.9	ns	15.3	16.2
15.6	15.7	14.9	14.8	15.8	12.7	ns	14.9	12.8	ns	14.7	ns
15.9	15.7	15.3	14.6	—	12.0	ns	14.3	12.9	ns	14.3	16.2
16.1	15.6	14.9	14.7	ns	12.6	ns	15.3	13.1	"	15.2	15.6
15.8	15.7	15.3	15.1	16.3	12.8	ns	15.4	12.9	"	15.1	15.4
15.1	15.4	15.3	15.2	ns	12.7	ns	14.0	12.8	ns	ns	16.0
15.5	15.3	14.9	ns	ns	12.9	ns	15.7	12.8	—	ns	16.4
15.6	15.3	15.0	15.5	16.0	12.9	"	15.7	12.5	ns	ns	16.0
15.6	15.2	15.4	16.5	15.4	12.6	15.5	15.8	12.6	"	"	16.3
14.9	14.6	14.9	ns	15.9	12.5	15.0	15.9	13.3	"	"	16.3
15.5	14.9	15.1	"	15.7	12.9	15.0	15.9	12.9	"	"	16.2
15.7	14.7	14.9	"	15.9	13.0	13.7	15.1	13.1	"	"	15.8
15.8	14.9	15.0	ns	15.1	12.5	14.0	14.9	13.3	ns	ns	15.6
16.1	—	14.8	—	15.5	12.6	—	—	13.4	ns	—	15.7
16.0	14.7	15.0	—	15.7	12.6	—	15.0	13.3	"	"	15.8
15.8	14.7	15.1	—	15.5	12.5	—	14.9	13.2	ns	—	16.0
15.2	14.5	14.7	ns	15.7	12.9	14.0	14.8	13.7	ns	ns	16.0
15.2	ns	ns	ns	15.9	12.9	ns	15.6	13.2	ns	14.6	ns
ns	"	"	ns	15.6	12.4	ns	ns	13.4	"	14.6	ns
—	—	—	"	"	13.1	"	"	13.5	"	—	"
16.2	15.8	14.9	—	"	12.9	"	"	13.1	"	14.6	"
15	15	ns	ns	16.5	—	15	14.0	13.8	ns	ns	16.2

J.D.

Plate No

512

271

⁸⁷
~~374~~

474

364

240

411

B 177

16.5	25414	UF 11844	ns	ns	13.2	13.8	ns	16.0	ns	14.3; ^{very} neb
16.0	418	11883	"	"	14.0	13.9	"	16.0	"	very sub
15.6	419	11899	"	"	14.0	13.8	"	ns	"	13.6
16.5	421	11919	"	"	13.2	13.8	"	16.2	"	13.3 ^{met}
16.3	437	11973	"	"	^{12.4} 11.9	13.2	ns	14.9	"	13.8 ^{nebular}
14.6	493	12285	"	"	13.5	med	ns	ns	15.0	blu
16.0	745	13120	"	"	13.5	14.0	^{14.7?} ns	ns	12.5	14.0 ^{neb}
16.3	749	13134	"	"	13.7	14.0	ns	15.6	12.9	13.9 ^{sharp}
16.5	794	13287	15.1	15.7	13.9	13.7	ns	16.2	14.7	13.6 ^{sharp}
16.5	799	13227	15.5	ns	12.6	13.8	"	15.9	15.3	13.3 ^{sub}
16.2	832	13393	15.9	15.5	12.8	13.9	14.9	15.3	ns	13.3 ^{sharp}
16.5	851	13463	ns	15.0	14.0	13.9	14.7	15.7	ns	14.0 ^{sharp}
16.5	854	13481	"	14.7	14.2	14.0	14.8	15.1	"	13.9 "
15.5	855	13495	"	14.8	13.9	14.0	14.6	-	ns	14.0
16.2	861	13500	"	15.2	13.0	14.1	14.8	15.7	"	13.7
16.3	862	13502	"	15.0	13.1	13.9	15.1	15.7	"	13.3

B99	B25	B179	B142	B178	447	B28	374	B28a	259	B143	273
15.9	14.9	15.0 ²	ns	16.0 ¹	12.5	ns	16.4	13.1	ns	blu ns	15.4
blu	14.7	blu	"	15.3	12.5	ns	ns	13.1	"	15.2	16.5
blu	14.4	14.8	ns	15.0 ¹	12.4 ⁵	"	15.8 ¹	13.0	"	blu	ns
15.3	14.2	14.8	ns	16.2 ¹	12.8	ns	16.0 ¹	12.9	"	ns	15.7
15.2	14.5	blu	ns	15.8 ¹	12.5	ns	ns	12.9	ns	ns	16.2 ¹
ns	?	—	ns	—	12.5	14.2	—	13.3	—	—	—
blu	blu	blu	"?	15.8	12.3	13.9	ns ¹	ns	ns	14.3	15.3
blu	14.6 ¹	"	"?	15.7	12.8	14.0	15.8	15.7	"	14.6 ¹	15.8
15.4 ¹	15.3	15.0	16.2	ns	12.7	14.1	15.1	15.18	"	ns	ns
Br	ft	blu	ns	ns	12.8	14.8	15.4	16.0	"	"	15.5 ¹
Blu	14.9	blu	"	15.5	12.5	15.3	15.5 ¹	15.0	"	"	ns
15.1	14.0	14.9	ns	ns	12.9	ns	16.0	13.9	"	"	"
15.3	14.0	15.0	"	"	12.7	15.9	16.2	13.7	ns	"	16.1
st	st	—	"	"	12.5	ns	13.5	13.5	ns	"	—
15.0 ¹	14.0	—	ns	15.9 ¹	12.7	"	11 ¹	13.7	"	"	15.8 ¹
15.1	13.9	—	ns	15.7	12.6	ns	15.6 ¹	13.9	ns	"	15.8

Unit	JD	Plate No	387	411	177	447	28a
14.2	23905	AX 488	12.6 med	ms	12.0	12.5	ms
14.2	919	535	12.8	"	13.4	12.6	ms
13.8	960	613	12.4 B	"	11.9 Bt	12.5	"
14.0	965	645	12.4 Bt	"	11.9 Bt	12.5	"
14.2	988	664	12.6 Bt	"	12.3	12.5	ms
13.9	993	725	12.6 med Bt	ms	12.2	12.6	ms
	24020	765	B	ms	12.6	12.5	—
14.6	24023	770	12.8 med Bt	"	12.4	12.5	14.4
14.0	033	793	12.6 Bt	"	12.7	12.5	14.4
13.8	285	1049	12.6 Bt	"	12.8	12.7	ms
14.2	317	1146	12.6 Bt	"	12.3	12.6	13.5
13.8	325	1180	12.6 Bt	"	12.4	12.5	ms
14.0	378	1284	13.0 Bt	"	12.7	12.5	"
14.4	404	1316	13.4 Bt med	"	12.6	12.5	ms
13.6	432	1360	13.1 Bt	"	12.0	12.4	ms
14.0	623	1575	12.6 Bt	"	12.7	12.1	?
14.1	654	1650	12.8 Bt	ms	12.7	12.2	14.1
	706	1754	12.6 Bt	"	12.7	12.6	12.7
	706	1757	12.5 med	"	12.5	12.5	13.8
14.4	731	1817	13.0 med	"	12.7	12.5	13.8
14.5	754	1853	13.9 med F	ms	12.5	12.6	14.2
14.2	787	1919	12.9 med F	"	12.7	12.8	13.7
14.2	794	1941	13.1 Bt	"	13.0	12.4	13.8
13.8	25154	2015	13.1 Bt	ms	12.7	12.0	13.9
14.2	355	2265	12.5 Bt	ms	12.3	12.4	13.6
14.2	386	2423	12.7 med	"	12.0	12.3	13.8
	389	2449	13.2 Bt	"	12.6	12.4	14.1
14	410	2494	13.2 Bt	"	12.5	12.7	13.9
14.2	25479	2784	12.7 med	ms	12.8	12.8	13.7
	24270	1032	12.6	"	12.0		
	300	1106	12.4	"	12.3		
	313	1137	Bt	"	12.6		
	325	1179	Bt	"			
	348	1220	Bt	"			

No 17 of
seq. has
been < 18
on AX plate
except AX 1853
+ there but
15 + 14

No 17 very ft

		387	B177
14356	AX 1244	Br	-
24648	1625	N Br	12.8
24681	1699	Br	12.8
703	1743	Br	12.6
707	1761	Br	12.4
737	1805	Br	13.0
25422	2560	Br?	
25441	2605	Br	12.3
448	2665	13.3	
498	2874	med	
23900	AX 474	-	-
959	608	Br	-
988	712	Br	Br
24019	762	Br	-
290	1067	Br	Br
299	1098	Br:	Br
402	1307	med Br	Br
626	1577	Br	-
646	1618	Br	-
654	1649	Br	-
669	1671	med Br	Br
678	1698	med	"
711	1735	Br	
739	1836	Br	-
759	1862	Br	
767	1890	Br	
25412	2508	med	
419	2545	Br	
442	2612	Br	
449	2670	Br	
469	2757	med	
477	2776	Br	
479	2783	N Br	

387 387
 26²³² BB 1274 vBr

A AX 1727 12.2

154

				No of ft per Long	Long					
Unit	J.D.	Plate No.	G & Sqr.	B98	351	477	352	478	B222	479
	23911	MF 8537	14.8	16.1	ms	15.2	15.3	16.0	ms	14.7
	65	8673	15.3	15.5	ms	15.1	15.1	15.1	15.0	14.7
	92	8724	15.7	15.5	"	15.2	15.7	ms?	15.7	15.4
	24026	8785	16.1	16.3	"	15.4	15.9	ms?	16.0	14.8
	56	8842	16.5	15.9	ms	15.0	15.4	15.7	ms	15.2
	411	107816	14.5	15.9	ms	14.7	15.9	15.5	14.9	14.5
	412	9828	14.3	15.7	ms	15.4	15.4	15.6	14.8	14.6
	413	9838	14.2	15.7	"	15.4	15.6	15.4	15.3	14.7
	626	10141	ms	16.1	"	15.0	14.9	15.4	ms	15.5
	27	10146	"	16.0	"	15.6	16.0	15.6	"	15.7
	49	10248	"	15.2	"	15.0 ^{BT}	15.7	16.0	"	15.4
	50	10249	"	15.8	"	15.2	15.1	15.8	"	15.5
	54	10291	"	15.3	"	15.0	15.3	15.5	"	15.3
	55	10299	ms	def	ms	15.1	15.5	15.9	ms	15.0
	56	10284	"	14.9	"	15.4	15.1	15.5	"	14.9
	81	10365	14.9	16.3	"	15.7	15.4	15.2	"	15.0
	711	10522	13.7	16.0	"	15.1	15.0	15.4	"	14.9
	12	10534	13.5	15.8	"	15.1	15.4	15.7	"	15.1
	27	10572	14.0	15.5	"	14.9	15.0	15.9	"	14.7
	28.	10574	—	15.9	"	15.3	15.4	15.8	—	overlapped
	.	10576	—	14.9	"	14.9	14.8	15.6	—	14.7
	.	10577	13.9	15.3	ms	15.3 ^{BT}	15.4	16.0	ms	14.9
	.	10578	—	15.2	"	15.2	15.4	15.7	—	15.0
	.	10579	—	15.3	"	15.3	15.6	15.1	—	15.1
15.8	25383	11662	ms	15.8	"	15.4	15.6	15.8	ms	15.5
15.8	86	11705	ms	ms	ms	15.3	15.5	15.8	ms	15.8
15.1	88	11718	"	"	"	ms	ms	15.7	"	ms
16.2	90	11743	"	15.5	"	15.4	15.0	15.7	ms	15.5
16.4	24755	A 13996	14.3	—	ms	ms	ms	ms	ms	BT

0	Long		Long	Long	Long	0	Long	Long	155		
B100	248	417	B101	FXSgr.	246	B41	318	380	B42	249	419
15.2	ms	14.1	ms	15.2	ms	14.5	14.4	15.9	15.5	ms	14.8
14.8	15.0	13.3	15.0	15.8	15.3	15.5	14.0	15.2	15.7	14.6	14.7
15.4	15.9	14.0	16.1	14.7	16.1	14.7	14.6	14.9	ms	14.4	14.7
14.7	ms	14.3	ms	12.4	ms	15.5	14.5	16.1	16.3	15.1	14.8
15.1	ms	13.8	"	13.3	"	15.1	14.4	15.7	15.3	ms	15.5
15.1	"	14.4	"	13.4	"	15.1	14.6	14.9	16.0	"	14.7
15.1	"	14.5	"	13.6	"	15.5	14.4	15.5	15.8	"	14.8
15.5	"	14.0	"	13.5	"	15.3	14.6	15.4	15.4	"	15.4
15.1	"	14.3	"	15.4	"	15.4	14.1	14.7	14.4	"	14.4
15.4	"	14.4	"	15.5	"	15.9	14.8	16.0	14.4	"	15.1
15.2	"	14.3	"	15.8	"	15.4	14.5	16.0	14.9	"	15.5
15.5	"	14.2	"	15.8	"	15.4	14.6	15.7	14.9	"	15.6
15.1	"	14.1	"	16.1	"	15.6	14.9	15.5	15.6	15.1	15.2
15.1	ms	14.3	ms	16.0	ms	15.6	14.4	14.8	15.2	ms	15.2
scratch	"	14.4	"	16.0	"	15.5	14.1	14.9	15.0	"	15.4
15.3	"	14.5	"	15.6	"	15.1	14.3	14.9	15.7	"	14.9
15.1	"	14.0	"	13.9	"	14.0	14.5	15.1	15.8	"	15.2
15.3	"	13.9	"	13.9	"	15.7	14.4	15.4	15.8	"	15.3
14.9	"	14.0	15.1	13.3	"	15.3	14.4	15.0	15.8	"	14.6
14.9	—	14.4	15.1	13.2	—	15.7	14.5	15.2	15.9	—	15.6
15.1	—	14.0	—	—	—	15.4	14.3	15.6	—	—	14.9
15.5	ms	14.3	15.7	13.6	ms	15.6	14.5	15.3	15.9	ms	14.8
15.3	—	14.1	—	—	—	15.6	14.6	15.5	—	—	14.6
15.2	—	14.6	—	—	—	16.0	14.6	15.7	—	—	14.6
15.4	15.5	14.7	ms	16.0	15.5	14.6	14.5	ms	14.8	14.9	15.3
15.0	ms	14.9	ms	5.3	15.3	15.7	14.3	15.7	14.7	14.9	15.0
3.3	ms	14.5	ms	ms	ms	ms	14.4	ms	14.7	ms	ms
15.3	?	14.8	"	15.6	14.9	15.7	14.1	15.9	14.8	14.9	14.9
15	ms	13.7	14.7	ms	14.7	—	—	14.7	ms	ms	ms

Limit	J.D.	Plate No	GG Sqr	B98	351	477	352	478	B222	479
16.5	25414	MF 11844	ms	15.8	ms	15.0 ^{or}	15.3	15.8 ^{or} 15.5	ms	14.8
16.0	18	11883	ms	15.7	"	15.3	15.9	—	ms	15.3
15.6	19	11899	"	15.7	"	15.3	15.6	—	ms	15.6
16.5	21	11819	"	15.6	"	14.8 ^{or}	14.9	15.6	"	15.0
16.3	37	11933	"	16.0	14.3	15.3	15.1	15.1	"	15.1
14.5	93	12285	"	ms	ms	—	—	—	ms	—
16.0	25745	13120	"	"	"	15.4	14.9	15.6	ms	14.9
16.3	749	13134	"	15.3	"	15.5	16.3	?	"	15.3
16.5	94	13287	"	15.9	"	15.7	15.3	15.6	15.6	14.9
16.5	99	13327	ms	16.2	"	15.4	15.8	15.6	15.6	15.0
16.2	882	13398	14.9	15.5	"	15.4	15.3	ms	ms	14.7
16.5	51	13463	14.8	15.2	"	15.8 ^{or}	15.2	ms	ms	14.7
16.5	54	13481	14.8	15.8	"	16.0	15.7	15.2	"	15.3
15.5	55	13495	ms	ms	15.0	15.8	15.4	—	"	15.0
16.2	61	13500	14.8	16.2	15.2	15.1	15.7	ms	"	15.0
16.3	62	13502	14.9	15.2	15.2	15.4	15.2	"	"	14.9

double?

157

B100	248	417	B101	FXSgr	245	B41	318	380	B42	249	419
14.6	ns	14.1	ns	14.2	15.0	15.6	14.3	15.4	14.0	15.0	15.1
15.1	"	14.0	"	14.9	14.8	14.9	13.9	15.6	14.0	14.9	14.5
15.3	"	14.8	"	14.7	def	15.2	14.4	15.4	14.6	15.3	14.8
15.1	"	14.2	"	14.3	14.9	15.3	14.6	14.9	14.6	15.0	15.1
15.1	"	14.1	"	13.2	15.8	15.7	14.3	14.8	14.9	ns	15.1
—	—	—	—	14.9	ns	—	—	—	ns	—	15.1?
15.3	ns	14.4	ns	15.6	"	14.4	14.0	14.8	ns	ns	15.2
15.1	"	14.2	"	15.3	"	15.8	14.3	15.9	ns	ns	14.4
15.2	"	14.0	16.0	13.4	"	15.7	14.4	16.2	15.8	ns	15.7
15.1	"	14.3	15.1	13.2	"	def	14.3	16.2	ns	"	15.6
15.3	JS	14.6	14.7	13.4	"	14.8	14.6	16.2	"	"	15.4
15.1	ns	14.4	15.1	14.4	"	15.4	14.5	ns	ns	"	15.7
15.6	"	14.6	15.7	15.1	"	15.1	14.5	15.8	"	"	15.2
—	ns	14.2	—	—	ns	14.8	14.4	15.8	"	"	15.0
14.8	"	14.2	15.3	15.5	"	15.4	14.3	15.3	"	"	15.3
15.0	"	13.8	15.8	15.4	"	14.7	14.4	15.3	"	"	15.4

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

Long	cluster P: 0.47233	Long	Long	Long	Long	Long	Long	Long	Long	Long	Long	Long	Long
B62	B146	B63	B112	B152	358	480	319	B145	289	B194	B111	424	
ms	15.2 ^{ft}	ms	13.7	14.8	15.3	15.2	14.3	ms	ms	15.3	14.0		
12.9	15.3	12.5	ms	14.9	15.7	ms	ms	14.9	15.2	ms	14.5	14.7	
12.0	15.7	13.1	15.0	15.5	16.5	16.0	ms	ms	ms	ms	13.6	14.8	
13.3	15.0	15.6	14.4	15.1	15.7	ms	ms	ms	16.0	14.6	15.0	14.3	
14.9	15.7	ms	ms	15.9	15.7	16.0	ms	ms	15.0	15.1	15.6	14.7	
13.0	ms	ms	14.0	14.9	16.0	15.8	"	15.5	15.9	ms	14.7	14.9	
12.8	ms	16.4	14.0	15.0	15.7	14.8	"	11	14.8	"	15.0	14.8	
13.2	ms	ms	14.0	15.6	15.3	15.0	"	11	15.2	ms	14.3	14.8	
13.2	14.3	12.8	15.0	16.5	16.4	15.1	ms	15.7	15.4	ms	16.5	14.7	
13.0	14.3	12.6	15.5	15.3	16.2	15.0	"	14.8	16.0	"	16.1	15.1	
13.8	ms	13.8	16.4	16.0	15.6	15.6	"	15.7	16.0	15.1	14.7	14.7	
12.5	ms	13.8	16.0	15.9	15.7	15.7	"	15.8	15.2	15.1	14.9	14.8	
12.8	15.0	14.5	16.3	15.2	15.5	15.7	"	15.2	15.4	15.1	14.7	14.9	
13.0	15.2	14.4	15.6	15.5	15.4	15.7	"	14.8	15.3	14.7	14.8	14.2	
12.7	15.2	14.7	16.2	15.9	15.7	15.8	"	14.9	14.9	14.8	14.9	14.9	
13.7	15.1	15.8	14.7	14.9	15.2	15.3	"	ms	15.2	14.8	14.3	14.8	
15.5	15.7	15.3	14.7	15.6	15.5	14.9	"	11	15.5	15.6	14.7	14.4	
15.6	15.4	15.1	14.8	16.1	15.3	15.4	"	11	15.1	15.9	14.9	14.4	
16.5	14.7	13.7	15.1	15.7	15.1	14.9	"	11	15.7	16.3	15.7	14.4	
16.5	15.5	13.8	15.5	14.9	16.0	15.2	"	11	15.7	16.5	15.6	14.9	
—	14.8	—	16.0	15.4	15.7	15.5	—	—	15.5	—	15.7	14.7	
—	14.6	—	15.9	15.7	15.8	14.8	—	11	15.9	—	15.8	14.8	
—	15.1	—	15.8	15.8	15.8	15.2	—	ms	15.6	—	15.8	14.9	
—	15.4	—	15.9	15.9	15.7	14.9	—	ms	11	—	15.8	15.0	
ms	ms	13.9	14.3	14.4	ms	ms	14.4	11	15.5	ms	14.7	15.2	
"	?	13.8	14.3	ms	15.4	ms	14.8	11	ms	ms	14.9	14.9	
11	—	—	14.0	"	ms	—	—	11	—	ms	—	14.8	
ms	ms	13.4	14.3	"	15.7	ms	14.8	ms	ms	ms	15.4	14.7	
ms	14.5	12.0	15.6	15.3	15.9	15.7	ms	14.6	15.7	ms	13.9	14.7	

Limit	J.D.	Plate No	B40	246	388	421	247	422	423	WXAA	288
15.5	25414	MF 11844	^{16.1} ms	14.5	^{def} ms	^{fr} 13.3	15.2	15.4	15.7	12.2	16.0
16.0	18	11883	14.8	15.1	14.9	14.2	14.9	15.7	15.7	12.1	15.8
15.6	19	11899	15.6	15.3	14.7	14.3	14.9	fr	ms	12.4	ms
16.5	21	11919	15.8	15.4	15.0	14.2	15.0	15.4	15.3	12.4	15.5
16.3	37	11973	ms	16.3	15.3	13.9	14.9	15.4	14.8	12.4	ms
14.5	93	12285	—	ms	B4?	14.5	—	—	B4?	12.2	—
16.0	745	13120	15.3	11	15.2	13.8	14.6	15.1	ms	12.4	ms
16.3	49	13134	ms	11	15.7	13.7	14.9	15.0	11	12.1	ms
16.5	94	13287	11	11	15.7	13.7	^{8r} 14.1	15.5	15.7	11.9	16.0
16.5	99	13327	11	11	14.9	14.0	14.6	15.5	B4	11.9	ms
16.2	832	13392	11	11	15.6	14.3	14.8	11	13.8	12.2	ms
16.5	51	13463	16.1	11	15.8	14.0	15.1	15.7	13.9	12.2	15.9
16.5	54	13485	15.1	11	15.8	14.4	15.4	15.8	13.9	12.2	15.8
15.5	55	13495	15.6	11	15.6	14.3	—	—	14.0	12.2	ms
16.2	61	13500	ms	11	15.3	^{fr} 14.7	15.2	15.8	13.7	12.3	ms
16.5	62	13502	11	11	15.2	14.3	15.1	15.4	13.7	11.9	11

B62	B146	B63	B112	B152	358	480	319	B145	289	B194	B111	424
ns	RT 14.9	13.8	14.7	16.4	15.4	15.0	15.3	RT 14.8?	ns	ns	15.8	14.7
"	RT 14.9	14.0	15.1	ns	15.6	15.7	15.2	RT 15.5	"	ns	15.3	
"	RT 14.0	15.3	15.0	ns	15.2	15.0	15.1	RT 15.0	"	"	14.9	
ns	RT 15.0?	14.3	15.0	15.5	15.3	15.0	14.9	RT 15.5	"	15.7	14.7	
ns	RT 14.5	16.3	15.0	14.9	15.7	16.2	16.2	RT 14.9	16.0	15.1	14.4	
14.3	—	ns	14.3	—	—	—	—	ns	—	14.7	14.7	—
12.8	RT 14.0	15.6	15.6	ns	15.7	15.3	15.3	RT 15.2	14.8	14.8	14.6	
12.5	RT 14.0	ns	15.9	16.0	15.7	15.3	15.3	RT 15.7	14.8	14.9	14.9	
14.3	RT 14.2	14.4	ns	15.5	15.5	15.5	15.5	RT 15.5	ns	14.7	14.9	
14.5	RT 13.1	14.7	"	15.7	15.7	15.7	15.7	RT 15.7	15.7	15.7	15.0	
ns	RT 15.1	15.4	15.7	ns	15.7	15.7	15.7	RT 15.7	15.7	15.7	15.1	
ns	ns	15.7	15.6	15.7	15.7	15.7	15.7	ns	15.6	15.6	14.9	
ns	RT 15.0	15.5	15.5	15.9	15.9	15.9	15.9	RT 15.7	15.7	15.7	14.9	
"	"	15.5	15.6	15.5	15.5	15.5	15.5	"	15.5	15.5	15.5	
ns	ns	16.0	15.5	15.5	16.0	16.0	16.0	15.3	15.7	15.7	15.0	14.9
"	RT 16.0	15.3	15.3	16.0	16.0	16.0	16.0	—	15.4	15.4	15.3	14.5

A 13996

14735	16.4	15.35	16.0	16.3
39	16.0-	15.6-	16.3	15.4
43	—	—	—	—
46	<16	15.6-	16.3	15.16
51	16.1	16.0	15.3	16.2
57	16.0	15.5	15.3	16.0
61	16.0	15.7	16.0	16.3
64	16.1	16.0	15.6	15.0
70	15.7	15.3	<16	15.5
73	<16.2	15.0	15.8	16.0
76	16.0	15.2	16.0	15.2
79	15.1	15.5	16.0	16.2
82	15.9	15.5	16.1	16.3
85	15.4+	15.4	16.2	15.9
94	16.0	15.7-	15.7	15.0
98	—	—	16.0	15.3
812	16.1	15.9	16.1	15.4+
14	16.0	15.7	16.1	15.5
16	16.2	15.8	16.2	15.8
18	16.0	15.1	15.5	16.0
20	16.2	14.9	15.2	16.2
22	15.3	15.1-	15.6-	16.2
25	16.1	15.3	15.9	15.0
27	16.2	15.6	16.1	15.3
32	16.0	14.7	15.8	15.6
38	15.4	15.1-	15.9	15.5

	40	388	152	427
A14843	16.0	15.9	16.0	16.3
47	15.8	14.8	16.1	15.4
52	16.1	15.7	15.3	16.2
57	16.0	15.5	16.0	15.3
64	16.0	15.0	16.2	15.6
68	16.1	15.8	16.0	16.2
87	—	—	—	—
91	16.2	15.1	16.2	16.1
902	16.1	15.1	16.2	15.6
906	16.0	15.8	16.0	15.0
912	16.0	15.4	16.0	16.0
919	15.5	15.8	15.4	16.0
921	15.8	15.5	15.6	16.1
15341	15.6	15.2	15.9	15.6
539	15.4	15.5	16.1	16.0
49	16.0	15.5	16.2	15.2
55	16.1	15.8	15.3	16.3
61	16.2	15.3	15.3	16.0
67	16.2	15.9	15.5	15.7
92	15.5	16.1	16.2	16.1
96	15.6	15.6	16.2	16.3
98	15.9	15.4	16.3	16.2
15500	16.1	15.9	16.3	16.2
02	16.1	15.9	15.6	15.1
04	16.1	16.0	15.4	15.3-
27	16.2	15.8	15.2	16.1
35	16.1	15.7	15.2	15.7
46	16.2	15.0	15.6-	15.5-

	B40	388	B152	427
A 15655	16.1	15.7	15.9	15.3
667	15.5	15.6	16.1	14.9
710	15.9	15.4	16.0	15.7
76	16.0	15.9	16.0	15.4
22	16.0	15.4	16.1	16.2
28	16.1	16.0	15.4	16.3
34	14.9	15.2	15.6	16.0
43	15.5-	15.7	15.8	15.6-
52	16.0	15.7+	15.9	15.3
60	15.7	15.0	15.8	15.2
74	<15.9	15.9	<15.8	15.8

mit	J.D.	Plate No	389	B44	250	B45	464	483	B147	432	B48
		MF 8537	15.8	15.2	14.5	14.7	14.3	14.4	ms	ms	13.9
		8673	13.9	15.3	14.5	ms	14.8	14.7	15.1	ms	14.0
		8724	14.0	ms	14.7	ms	14.9	14.9	15.0	ms	14.8
		8785	14.0	ms	14.6	ms	15.3	14.8	15.4	15.7	15.3
		8842	14.4	15.9	14.7	14.9	15.1	14.9	16.0	15.7	14.4
		9816	13.9	ms	14.3	13.5	14.5	14.8	ms	ms	14.4
		9828	14.3	ms	14.5	13.6	14.8	14.8	"	"	14.8
		9838	13.9	ms	14.1	13.7	14.5	14.8	ms	ms	14.8
		10144	14.5	"	14.8	14.6	14.8	14.9	ms	"	13.9
		10146	14.4	15.8	14.6	14.2	14.5	14.9	"	"	13.8
		10240	14.3	ft	14.6	13.7	14.7	15.1	"	"	13.8
		10249	13.7	ms	14.4	13.9	14.9	15.2	"	"	13.7
		10271	14.0	"	14.7	13.6	15.5	15.2	"	"	13.9
		10279	14.4	ms	14.7	13.7	14.8	14.8	ms	16.4	14.3
		10284	14.3	"	14.9	14.0	14.7	15.2	"	ms	14.4
		10365	14.0	15.5	14.4	14.0	15.1	15.2	15.0	16.0	14.5
		10522	14.3	15.3	14.0	ms	14.3	14.9	14.9	ms?	15.3
		10524	13.9	14.9	14.5	15.5	15.1	15.1	14.8	ms	14.9
		10572	14.2	15.2	14.7	14.5	14.6	14.8	14.9	13.7	15.2
		10574	14.2	14.9	14.7	14.7	15.4	15.1	15.2	13.7	15.3
		10576	14.0	15.1	14.7	14.9	14.8	14.8	14.9	"	15.0
		10578	13.9	14.9	14.9	14.5	14.8	15.0	"	"	14.9
		10578	14.3	"	14.7	14.5	15.3	15.2	"	"	15.3
		10579	14.4	"	14.7	"	15.1	15.2	"	"	15.2
15.8		11553									
		11662	14.2	ms	14.5	14.5	14.9	15.0	ms	15.2	15.2
15.8		11705	14.4	"	14.8	14.7	14.8	14.9	"	"	14.8
15.1		11718	14.5	"	14.5	"	"	"	"	"	"
16.2		11943	14.6	ms	14.7	13.8	15.1	15.1	ms?	ms	15.0
		A 13996	13.7	15.2	14.7	14.6	14.8	15.7	15.8	14.8	14.8

Long	Long	cluter P.O. 53965	Long?	Long	Long	Long	Long	double?	Long	Long	Long	171
B 150	426	427	251	B50	285	AEC-A	321	428	B47	AFC-A	B46	B149a
ms	ms	15.8	15.5	15.4	ms	ms	15.4	14.5	14.8	ms	14.5	14.3
15.4	ms	15.7	14.7	14.0	ms	ms	15.2	14.9	15.6	16.1	ms	erated
15.0	ms	15.8	15.3	14.9	ms	erated	15.7	14.9	ms	ms	ms	14.5
15.6	ms	15.5	15.8	ms	15.1	13.6	15.5	14.7	11	ms	ms	13.9
ms	ms	15.7	15.8	ms	14.8	14.0	14.5	14.8	15.7	14.9	ms	14.5
14.9	11	ms	ms	16.0	15.5	ms	15.8	14.8	15.3	ms	14.7	14.6
14.9	11	11	11	15.7	15.3	11	14.7	14.9	15.5	ms	15.1	14.4
14.9	ms	15.7	11	15.4	15.3	11	15.7	14.7	15.0	11	15.0	14.3
15.4	11	15.6	15.4	ms	16.0	11	15.1	14.5	14.9	13.2	15.6	14.3
15.7	11	16.0	15.7	11	11	11	15.8	14.9	14.6	13.1	15.8	14.3
15.4	ms	14.4	15.5	ms	14.8	11	15.0	14.9	15.0	14.0	15.4	14.7
15.0	ms	15.7	15.4	ms	ms	14.7	11	15.4	14.9	15.0	13.7	15.3
15.3	ms	ms	15.9	ms	15.0	11	15.2	14.9	15.0	14.3	15.1	14.3
15.5	ms	15.7	15.8	ms	14.2	ms	15.3	14.7	14.7	14.2	15.5	14.5
15.7	ms	14.9	16.0	ms	14.7	ms	14.4	14.5	14.9	14.0	15.5	14.4
16.0	ms	15.5	ms	14.9	14.9	ms	15.1	14.7	15.2	14.7	15.0	14.5
ms	ms	15.8	15.9	14.7	15.4	ms	15.2	14.6	15.8	15.2	ms	13.7
ms	ms	16.0	15.7	15.0	15.7	ms	14.3	14.8	ms	15.0	ms	14.0
ms	ms	15.9	ms	14.7	ms	ms	15.6	14.4	ms	15.9	ms	14.0
11	11	15.7	15.7	14.8	ms	ms	14.9	14.7	ms	15.3	11	14.5
11	11	14.7	15.8	14.7	11	11	14.9	14.9	11	11	11	14.3
11	ms	15.1	11	11	11	11	15.1	14.7	11	11	11	14.4
11	11	15.0	11	11	11	11	15.2	14.9	11	11	11	14.4
11	11	15.4	11	11	11	11	15.2	14.9	11	11	11	14.6
ms	ms	15.5	ms	ms	ms	ms	15.2	14.9	14.7	ms	15.6	14.3
11	11	ms	11	11	11	11	14.9	14.9	14.8	11	ms	14.4
11	11	15.2	11	11	11	11	14.8	14.7	11	11	11	14.5
ms	ms	15.1	16.1	ms	ms	ms	14.8	14.8	14.8	ms	15.6	14.1
14.8	15.1	15.8	15.5	ms	15.7	ms	15.7	15.7	15.7	15.7	15.7	15.7

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System

B 150	426	427	251	B50	285	AECaA	321	428	B47	AFCaA	B46	B149a
ms	15.2	15.0	15.8	15.3	ms	ms	15.4	14.9	15.7	ft	15.1	14.1
ms	15.4	15.5	16.0	15.1	"	"	15.3	14.7	15.5	ms	15.3	14.4
ms	-	ft	ms	14.9	"	"	14.9	14.8	ms	"	14.5	14.7
ms	15.5	14.9	"	14.8	"	"	14.7	14.7	ms	"	15.0	14.7
15.0	15.5	15.7	15.8	14.5	15.4	ms	15.7	14.7	ms	"	16.0	14.2
-	-	ms	-	ms	ms	ms	-	-	ms	ms	ms	-
15.3	ms	ms	ms	15.3	15.7	14.9	15.7	14.8	14.7	ms	ms	14.3
?	ms	14.8	ms	15.8	?	15.0	15.8	14.7	14.7	"	"	14.3
ms	ms	15.0	15.8	ms	ms	15.4	15.7	14.9	15.5	"	"	14.4
ms	ms	ms	15.6	ms	ms	15.1	15.3	14.4	ft	ms	"	14.3
"	"	"	14.5	"	"	ms	15.7	14.9	ft	"	"	14.8
"	"	"	14.4	"	15.0	"	15.7	14.9	ms	"	"	14.3
"	"	15.0	14.7	"	15.7	"	15.0	15.0	ms	"	"	14.7
-	-	-	-	-	-	-	-	-	-	-	-	-
"	"	15.6	14.6	"	15.4	"	15.6	14.9	"	"	"	14.6
"	"	ms	14.8	"	15.5	"	15.2	14.9	"	"	"	14.6

178

Dec 17, 1930

78

Dec 17, 1930

		Long	0.40266 north of 15.6 comp cluster	Eclipsing d 3.2677	Long	Long on quint	su B46 p8	done camp	Long	
	Plate No	283	B49	496	439	309	AGCA	490	B196	B67
23911	MF 8537	15.2	15.1	13.5	14.3	ms	25	14.5	14.1	15.7
65	8673	16.0	15.2	13.8	13.8	ms	11	13.3	13.6	14.9
92	8724	ms	15.0	14.1	14.9	ms	11	13.1	14.6	14.2
24026	8715	ms	15.0	14.5	14.6	ms	11	13.2	14.5	14.9
56	8842	ms	15.0	13.8	14.7	ms	11	13.0	14.3	16.2
411	9816	ms	14.8	14.6	14.4	ms	11	13.9	14.7	14.9
412	9828	ms	14.3	15.1	14.5	ms	ms	13.8	14.2	15.0
413	9839	ms	15.2	14.0	14.7	ms	11	12.9	14.4	15.2
24626	10141	ms	15.4	13.5	14.6	ms	ms	13.2	14.7	14.2
27	10146	11	14.8	14.4	14.6	11	11	13.3	13.9	14.2
49	10240	11	15.2	14.4	14.5	16.2	11	13.3	14.5	14.1
50	10249	11	14.7	14.3	14.5	ms	ms	13.3	14.7	14.5
54	10271	11	14.7	16.0	14.7	16.4	11	13.3	14.5	14.5
55	10279	11	15.4	14.0	14.5	ms	11	13.2	14.3	14.7
66	10284	11	14.9	13.8	14.3	ms	11	13.2	14.8	15.2
81	10365	16.5	15.3	13.8	14.8	11	11	13.4	14.6	15.6
711	10522	15.2	15.3	14.1	14.6	ms	11	13.4	14.2	16.2
12	10534	15.2	14.7	13.7	14.4	ms	11	13.2	13.9	16.4
27	10572	14.7	15.2	14.2	14.8	11	11	13.6	14.9	15.7
28	10574	14.7	15.3	14.0	14.7	11	11	12.8	14.5	15.3
	10576	14.3	15.1	14.0	14.7	11	11	13.0	14.2	—
	10577	—	15.1	14.4	14.5	16.2	11	13.5	14.7	15.4
	10578	—	15.3	14.3	14.9	ms	11	13.3	14.8	—
	10579	—	14.8	14.0	14.8	11	11	13.4	14.7	—
25383	11333	ms	15.3	15.5	14.3	11	ms	15.5	13.9	15.1
86	11662	ms	—	14.1	14.6	—	15.5	13.3	14.2	14.8
88	11718	11	—	14.0	14.5	—	—	14.0	14.5	def
90	11743	11	—	14.1	14.6	ms	15.4	13.4	14.4	14.9

100 8
27 10
78 13
12
12

A 13996

Long	Lat	NO	Long	Lat	cluster	no.	Long	Lat	all	Fol/psing	Long	Lat
	1.07				0.44016				Bk6	2.6696		
									P8	Bk6 P8		
B 68	1.07	375	B66	430	B114	332	429	323	516	462	461	B151
ms	15.1		ms	12.2	ms	16.2	15.2	14.0	12.6	15.3	16.4	13.9
ms	15.5	14.9	12.1	ms	15.8	15.4	13.5	12.6	15.1	16.2	13.9	F
ms	B	14.6	11.9	15.3	16.0	14.0	12.6	15.6	15.6	ms	14.6	
ms	15.6	15.7	12.0	15.9	15.8	ms	14.2	13.1	14.9	ms	14.4	
ms	15.2	ms	12.2	15.5	15.8	ms	13.8	12.3	15.3	ms	13.7	
15.5	15.3	ms	12.6	ms	15.8	ms	13.9	13.2	15.1	ms	14.0	
15.4	15.3	ms	12.3	ms	15.5	ms	14.0	13.1	15.1	16.2	14.2	
15.6	15.3	16.5	12.0	ms	15.8	ms	14.1	12.8	15.1	16.1	14.3	
14.4	15.3	ms	12.3	15.8	16.0	ms	14.3	13.2	15.1	ms	14.2	
14.4	15.5	ms	12.4	16.0	15.8	1	12.6	12.9	15.1	ms	14.4	
14.4	15.4	15.8	12.2	15.3	15.8	16.0	14.3	12.6	15.5	ms	14.0	
14.7	15.7	16.8	11.9	15.9	15.8	ms	13.2	12.8	15.2	ms	14.2	
14.5	15.5	15.9	12.3	ms	16.0	ms	14.1	12.8	15.2	ms	14.8	
14.6	14.8	15.5	11.9	ms	15.8	1	13.8	12.9	15.2	1	13.9	
14.6	15.2	15.2	12.5	15.4	16.0	?	14.2	13.1	15.1	1	13.9	
15.1	15.1	14.9	11.9	ms	16.2	11	13.7	12.9	15.8	1	14.6	
16.0	15.7	14.0	10.9	16.3	15.6	15.2	13.4	13.5	15.2	1	13.9	
16.2	15.1	13.5	11.8	ms	15.8	15.1	13.9	13.1	15.3	1	14.0	
ms	15.5	14.8	12.4	11	16.0	15.0	14.0	13.7	14.9	16.0	14.7	
11	15.5	14.8	11.9	11	15.4	15.2	14.0	13.0	15.1	15.8	14.5	
15.1	15.4	11.7	14.9	16.0	14.9	14.9	13.9	12.9	14.8	1	14.8	
15.5	15.5	11.9	15.2	15.8	15.0	15.0	13.9	12.9	14.9	15.8	14.6	
15.5	15.5	12.3	15.5	15.7	15.2	14.0	13.2	15.0	15.7	14.5		
15.2	15.2	11.9	15.5	15.5	14.9	14.1	12.9	15.0	15.8	1	14.3	
ms	15.4	12.2	15.4	15.4	15.4	15.4	14.3	13.4	15.4	ms	14.3	
ms	15.3	12.3	15.1	15.1	15.1	15.1	14.4	13.3	14.9	ms	14.0	
ms	11.9	11.9	11.9	11.9	11.9	11.9	14.4	12.7	15.1	ms	14.2	
1	15.5	14.5	ms	15.1	15.1	15.1	14.5	13.1	15.1	1	14.4	

	Plate No	283	B49	496	439	309	A00A	490	196	B67
25414	MF 11844	ns	15.2 ¹	14.2	14.1	15.4	15.2	13.0	14.4	14.0
418	11883	ns	14.9 ¹	14.2	14.7	15.2	15.1	13.2 ^B	14.3	14.5
19	11899	ns	ns	ns	14.6 ¹	15.3	15.2	13.2	14.7	14.7
21	11919	"	15.5 ^F	14.4 ^B	14.5 ¹	15.3	15.4	13.2	14.9	14.9
37	11973	ns	15.7 ²	14.0	13.9 ^{14.5}	15.1	15.7	13.5	14.7	15.1
93	12286	—	—	—	—	—	—	—	—	—
25745	13120	ns	B ¹	14.3 ¹	14.3	ns	ns	12.5 ^B	14.7	ns
49	13134	ns	—	15.6 ^B	14.3 ^B	15.9	"	13.1	14.5	ns
94	13287	15.1	14.7 ^B	14.4	14.4	16.3	"	13.0	14.2	13.9
99	13327	15.3	—	14.0	14.7	ns	"	12.5	14.8	14.6
832	13398	ns	14.9	14.4	14.8	ns	"	13.6	14.7	ns
51	13463	ns	15.3 ^D	14.4	14.1 ¹	ns	"	13.6	14.7	14.4
54	13481	"	15.3 ^F	14.4	14.9 ^{15.0}	ns	"	13.9	14.8	ns
55	13495	ns	—	14.4	—	—	—	—	—	"
61	13500	ns	15.2 ²	14.3	14.8 ^{15.2}	"	"	12.9	14.3	16.0
62	13502	"	15.3 ²	14.5	14.3 ^{14.6}	"	ns	13.7	14.7	15.8
26067	14090	14.5	15.2 ^F	14.0	14.1 ^B	14.4	15.7	13.3	14.6	14.9
089	144	15.4	14.7 ^B	14.4	14.8 ⁸	ns	ns	13.4	14.9	15.5
90	150	15.5	— ^B	14.3	14.8 ¹	ns	"	13.4	14.8	15.7 ¹
91	164	15.4	14.3 ^B	14.4	14.2 ⁴	"	"	13.0	14.2	ns
15.8	92	15.2	B ¹	ns	14.7 ¹	15.6 ¹	"	13.2	14.4	ns
16.1	93	15.6	F ¹	14.3	14.7 ⁷	ns	ns	13.2	14.3	16.0 ^{16.0}
16.0	95	15.7	F ^B	14.5 ¹	14.6 ¹	ns	"	13.2	14.5	ns
15.9	97	15.6	14.8 ^F	14.0	14.7 ⁹	"	"	12.4	14.3	15.9
16.0	101	15.7	14.8 ^F	14.3	14.7 ⁹	"	16.5	13.0	14.8	ns
16.1	102	ns	14.6 ^{14.6}	B ¹	14.4 ^{14.4}	"	"	12.8	15.2	"
15.7	103	ns	—	B ¹	14.9 ^B	"	"	12.9	15.0	"
16.5	104	15.8	14.3 ^F	14.2	14.2 ^{15.1}	"	"	12.9	14.7	"
16.5	105	15.6	15.2 ^F	15.8	14.3 ^{14.3}	"	ns	12.6	14.3	"
16.0	117	ns	—	B ¹	14.1 ^B	"	"	12.9	13.9	"

B68	375	866	430	0114	382	429	323	516	462	461	B151	437
ms	-	14.3	12.2	ms	-	ms	14.3 ^m	13.2	15.5	ms	13.9 ^{10.9}	14.0
ms	-	14.3	12.3	ms	-	ms	14.4 ^F	13.1	15.5	ms	14.0	
"	-	14.9	12.2	ms	-	-	14.5 ^m	13.2	15.5	"	14.3	
"	15.3	14.6	12.2	15.5 ^F	ms	ms	14.2 ^m	13.2	15.5 ⁴	"	14.3	
"	-	15.0	12.5	ms	15.8	"	14.5 ^F	13.3	15.1	"	14.5	
Bt?	-	ms	-	-	-	-	-	B	-	-	-	-
?	-	ms	11.9	-	-	ms	14.2 ^F	12.5	14.8 ^B	ms	13.9	
?	-	ms	11.9	ms	B	ms	14.1 ^m	12.9	14.7 ^B	ms	14.3	
14.9	15.2	"	12.1	ms	15.8 ^B	14.8	14.0 ^F	12.8	15.5 ⁴	ms	14.2	
15.3	-	ms	12.1	15.3	-	B	14.3 ^F	12.7	15.2 ^F	"	14.2	
ms	-	15.6 ^{ms}	12.2	?	B	14.0	13.9 ^B	12.6	15.2 ^m	"	14.4	
ms	-	ms	11.9	ms	16.0	14.5	14.3 ^F	13.0	15.2 ^m	"	14.1	
ms	-	"	11.9	"	15.7 ^F	14.7	14.3 ^F	13.9 ^F	15.3 ²	"	14.5	
"	-	"	12.1	15.5	-	14.8	14.7 ^B	13.4	15.2 ^B	"	14.3	
"	15.7	"	11.9 ^B	ms	-	14.9	14.3 ^B	13.2	15.2 ^B	"	14.4	
"	-	16.0	12.5 ^B	ms	-	14.8	14.4 ^F	13.9 ^F	15.3 ^{14.8}	"	14.5	
14.9	15.1	ms	12.5 ^m	15.5	16.2 ^F	15.6	14.5 ^F	13.7 ^B	15.2 ^F	14.8	14.3	
15.3	15.5	15.7	12.8 ^B	15.5	ms	15.4	14.0 ^F	13.3	14.8 ^B	15.1	14.0	
15.4	-	ms	12.4	ms	-	15.4	14.2 ^m	13.4	15.4 ^B	15.0	14.6	
15.2	15.5	"	12.3	ms	15.4 ^B	15.5	13.6 ^F	13.2	15.3 ^B	15.4	14.2	
15.6	-	"	11.9	ms	-	15.4	13.8 ^F	12.9	15.0 ^F	15.4	-	
15.9	-	"	12.4 ^B	15.8	15.9 ^B	15.7	14.3 ^m	13.5	14.8 ^F	15.0	14.3	
15.5	-	"	12.3	ms	-	15.3	14.4 ^m	13.2 ^B	15.2 ^F	15.4	14.4	
15.7	-	"	11.9	ms	-	15.3	14.0 ^F	13.3	15.1 ²	15.1	14.5	
ms	-	"	11.9	ms	-	15.3	14.2	13.1	15.3 ²	14.8	-	
"	-	"	11.9	"	-	15.3	14.0 ^F	13.5 ^F	15.4 ²	-	-	
"	-	"	12.1	"	-	15.3	14.0 ^B	12.9	15.4 ⁰	15.4	-	
16.0	-	"	12.5 ^B	15.5	15.5 ^B	15.2	13.7 ^F	12.9	15.5 ⁴	15.1	14.2	
ms	-	"	11.7	ms	15.9	15.0	13.5 ^F	13.3	15.3 ⁰	15.5	13.9	
"	-	"	12.1	"	-	14.8	14.1 ^F	13.0	15.2 ¹	15.7	14.3	

1929phae.proj.22

182

			L	cl.	E	double A plate	long	wt	close comp	L	
			283	B 49	496	439	309	460A	490	196	B 67
16.0	26118	MF 14 294	ms	B 14.31	15.2	15.1	ms	12.7	15.0	ms	
16.2	120.393	317	11	F	14.4	14.7	ms	ms	12.8	14.8	ms
15.7	424	318	—	F	14.8	14.8	—	—	13.2	15.1	—
15.6	456	319	—	—	14.8	—	—	—	12.6	—	—
16.0	489	320	—	F 15.1	14.7	14.9	—	—	12.5	15.1	—
16.0	520	321	—	—	14.5	14.7	—	—	13.1	14.5 ^B	—
15.6	552	322	—	B	B	—	—	—	12.8	14.3	—
15.7	584	323	—	B	B	—	—	—	12.9	14.8	—
16.0	123	349	ms	F 15.2	14.9	14.8	ms	13.5	14.9	16.2	
15.8	124	363	ms	—	B	15.0	—	—	12.9	14.6	ms
16.2	125	373	ms	B 14.4	14.9	14.9	ms	ms	13.4	14.3	11
16.3	130	385	ms	F 15.2	14.8	15.2	ms	16.5	13.5	14.2	15.5
15.8	131	397	11	m 14.5	14.3	14.6	11	14	13.2	14.0	15.5
16.0	144	412	11	B 14.5	14.5	14.7	11	ms	13.0	14.5	14.7
75.8	145	419	11	F 15.5	14.5	14.7	11	14	13.2	14.7	14.9
	146	428		F		14.8					
16.0	147	438	ms	✓ F	14.8	14.8	ms	ms	13.6	15.0	15.1
16.0	153.434	460	ms	✓ F	14.8	15.1	11	11	12.9	14.9	15.1
15.8	565	464	ms	✓ F	14.8	15.2	11	11	12.9	14.6	14.9
16.1	154	476	ms	D 15.0	14.8	14.8	11	11	13.1	14.8	14.8
16.2	155	488	ms	✓ F	14.6	14.6	11	11	12.3	14.5	14.7
	156	502	—	m		15.0					
16.0	158	515	ms	B 14.8	14.6	14.8	11	11	13.0	14.5 ^B	14.5
16.0	159	527	11	F 15.0	14.8	14.8	11	11	13.0	14.7	14.7
15.6	160	538	—	—	14.5	14.7	—	11	13.0	14.6	14.6
16.0	161	546	—	m F	14.8	14.6	—	11	13.3	14.8	14.8
15.6	162	553	ms	F 14.9	14.9	15.1	ms	11	12.9	14.7	14.7
15.3	174	570	ms	—	15.0	14.7	ms	11	12.7	—	14.0
15.6	175	580	—	✓ F	14.5	14.8	—	11	12.8	14.7	13.7
16.2	176	592	ms	F B	14.5	14.4	ms	ms	12.9	14.3	13.7

L		L	E?	d	✓	L?	✓	E?		L	vary?
B68	375	B66	430	B114	332	429	323	316	462	461	B151
ms	—	ms	11.9	—	—	14.7	14.3 ^B	14.0 ^F	14.9 ^F	—	—
ms	15.6	11	11.7	15.3	15.4	14.9	13.5 ^m	12.9	14.9	15.7	14.7
—	—	—	11.9	ms	—	—	14.2	13.2	15.2 ⁰	—	—
—	—	—	11.9	ms	—	15.0	13.6 ^{msB}	12.8	—	—	—
—	—	15.6	12.1	ms	15.7	—	13.7 ^{msB}	13.0	14.6	—	14.0
—	—	—	12.1	ms	—	14.7	14.3 ^{msB}	13.0	15.5 ⁰	—	—
—	—	—	11.9	11	—	—	13.6 ^F	12.8	15.2	—	—
—	—	—	11.9	11	3	14.8	13.7 ^B	13.0	15.2	—	—
ms	15.5	15.7	12.2	ms	15.9	14.3	14.2 ^{msB}	12.5 ³	15.0 ^v	15.2	14.1
11	—	15.8	11.9	11	—	14.8	14.6 ^B	13.2	15.4	—	—
11	B	15.8	12.1	11	—	14.5	14.0 ^{msB}	13.4	15.3	15.7	—
11	—	15.4	11.9	B	F	14.9	14.0 ^F	12.9	15.7	15.5	14.2
11	—	15.1	11.9	ms	—	14.5	14.2 ^F	12.9	15.2	15.6	14.9
11	15.1	14.7	12.3	ms	—	14.4	14.3 ^F	13.0	15.1 ⁰	16.0	13.7
11	—	14.7	12.4 ^F	ms	15.7	14.7	14.2 ^{msB}	13.2	15.5 ²	ms def	—
			12.0						14.6		
ms	F?	15.1	12.2	ms	15.6	14.6	14.0	13.0	14.7	ms	14.5
11	—	15.4	12.3	ms	—	15.0	14.1	12.8	15.3	11	14.3
11	B	14.8	12.3 ³	ms	F	15.0	13.9	13.0	15.5 ²	11	14.2
11	—	14.8	12.4	11	15.7	15.0	14.5 ⁰	13.2	15.2	11	14.0
11	—	14.9	12.2	11	15.7	15.1	14.9	13.2	15.1 ⁰	11	14.5
			12.4 ^{msF}						15.5		
11	—	15.0	12.1	11	—	15.0	14.3	13.3	15.4 ⁰	11	14.3
11	—	14.9	12.0	11	—	15.1	14.2	13.3	15.6 ⁰	11	14.2
—	—	15.0	11.9	15.4	—	15.2	14.1	12.7	15.5 ⁸	—	14.4
—	—	14.8	11.9	ms	F	14.9	14.2	13.3	15.8 ²	—	14.1
ms	—	15.2	12.0	ms	—	15.1	14.1	13.1	15.2	ms	14.4
ms	—	15.5	12.1	—	—	F	14.1	13.1	15.2	ms	14.0
—	—	15.4	11.9	?	—	—	14.1	12.9	15.2 ^F	—	14.2
ms	—	15.3	12.0	16.0	16.1	15.4	14.2	13.2	15.2 ⁴	ms	14.7

			283	B49	496	439	309	490	196	367	B68
16.6	26177. ^{blended}	UF14608	ms	—	15.6	—	—	13.3 _i	—	14.0	ms
16.5	179	619	"	B	14.7	15.4	ms	13.4	—	13.9	ms
15.6	180	636	—	F	14.7	14.8	—	13.4	—	14.3	"
16.0	181	645	—	B ^{ms}	14.9	14.6	—	13.3	F	14.0	"
15.9	182	660	—	F	14.9	14.8 ₁	—	13.2	— ^B	13.8	"
16.0	186	688	ms	F	14.5	14.5 ^{15.0}	ms	13.5	B	14.3	"
15.8	187.213	690	—	F	15.5	14.9	—	13.1	B	14.0	—
15.7	.244	691	—	F ^a	15.8 ₁	15.2 ₂	+	13.6	D	—	—
15.8	.276	692	—	?	ms	15.2	—	13.1	B?	—	—
16.0	.308	693	—	F	15.7	15.2 ^{4F}	—	13.4	B	—	—
	.340	694	discarded in So. Africa								
15.6	.372	685	—	B	ms	14.8	—	12.9	B _i	—	—
15.6	.404	696	—	B ^b	15.7	14.8 _B	—	13.6	B	—	—
15.8	.435	697	—	B ^B	15.4	14.8 ₂	—	13.3	B	—	—
15.5	190	721	—	—	B	14.8	—	13.3	B	14.3	—
16.0	202	732	ms	F [✓]	14.9	14.3 _B	ms	13.2	B	15.0	ms
15.4	.204	738	—	B ₁	15.0	14.8	—	13.3 ^F	B	15.2	—
16.1	208	749	—	F ^{ms}	14.9	14.8 _B	—	12.5	B	15.5	—
16.0	210	758	ms	F	15.1	14.9 [✓]	ms	12.8	B	15.6	ms
16.0	214	782	ms	F [?]	14.5 _B	14.8 ₂	ms	12.8	B	15.4	ms
16.0	217	805	ms	—	15.0 _{14.8}	15.1 ^F	ms	13.5	B	15.7	ms
	239	858	—	—	—	B	—	—	—	—	—
		2659	—	B	—	15.3	—	—	—	—	—
		2713	—	—	—	—	—	—	—	—	—
		5555	—	F	—	15.3 ⁸	—	—	—	—	—
		5622	—	15.5 _B	—	14.9 _B	—	—	—	—	—

375	B66	430	B114	322	429	323	516	462	461	B151	ABGA
15.5	15.5 ³	11.8	ns	—	ns	14.5	13.2	15.2 ^{14.7}	ns	—	ns
—	15.6	11.9	15.5	—	15.8	14.5	13.4	15.0 ^{14.9}	ns	14.2	"
—	15.3	11.8	ns	ns	ns	14.7	13.3	15.4 ^{14.9}	"	—	"
—	15.7	12.3	ns	B1	15.8	14.4 ⁸	13.0	15.0 ^{14.9}	"	14.2	"
B	15.6	12.4	15.5	ns	16.0	14.0	13.2	15.2	"	14.2	"
→	15.9	11.9	15.9	15.8	ns	14.3	13.3	15.2 ^{14.9}	"	14.4	"
—	—	11.8	ns	—	ns	14.3	13.1	14.9 ^{14.8}	"	14.5	"
—	—	12.4	15.5 ⁸	—	—	14.1	13.2	15.3	—	—	—
—	—	11.9	15.8 ^{16.0}	—	—	14.0	13.5	15.2 ⁰	—	14.3	—
?	—	12.0	15.7 ¹⁷	—	—	14.9	13.3	15.5 ¹⁵	—	14.3	—

B1	—	11.8	ns	—	—	14.4	13.0	15.1 ⁰	—	—	—
—	—	12.1	—	—	—	14.3	13.3	15.2 ^{14.9}	—	—	—
—	15.8	11.8	15.7 ⁸	15.7	—	14.0	13.3 ³	15.1 ^{14.8}	—	14.5	ns
—	ns	12.1	?	B1	ns	14.0	13.2	15.7 ^F	—	14.4	ns
B	ns	11.8	15.9	15.7	ns	14.4	13.3	15.0 ¹	ns	14.4	ns
—	ns	12.0	ns	—	ns	14.1	13.3	15.2 ¹	—	14.1	ns
—	ns	11.8 ^B	ns	—	ns	14.7	13.2	15.5 ^{14.9}	—	14.7	ns
⊙	ns	12.4 ^F	16.0	⊙	ns	14.6	13.4	15.4 ^{Fb}	ns	14.0	ns
—	ns	12.1	ns	—	ns	14.8	13.5	15.4 ⁰	ns	14.1	ns
B	ns	12.0	ns	—	ns	14.1	13.7 ^{Fv}	15.6 ⁰	ns	14.2	ns
		12.3m						14.7			

15.6
15.6

14.6^B

15.6
14.9

15.0
14.0^{ns}
16.0
16.0

437

ulipauy
d
3.2677

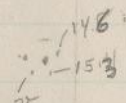
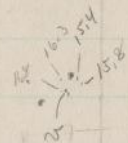
15.8

		283	B49	496	439	309	AFGH	490	196	867
24755	A 13996	14.8	15.6 ^B	14.2 ^B	15.1 ^B	16.5 ^{on 23}	ns	13.9	14.5	14.0
26123.380	14735	ns	14.6 ^F	B	15.6 ^F	ns	ns	13.6	14.1	16.6
123.629	739	11	14.6 ^F	B	15.2	11	11	13.0	14.7	15
124.389	742	11	—	B	5	—	—	12.9	14.9	ns
125.363	746	ns	15.8 ^{ns}	15.7	14.7	11	11	13.5	15.4	16.7
130.309	751	11	15.8 ^{ns}	B	14.2	11	ns	12.8 ^B	14.8	16.0
131.320	757	—	15.8 ^{ns}	14.6	15.3	—	—	13.7	15.0	—
131.612	761	11	15.8 ^{ns}	14.5	15.8	11	—	13.6	14.7	15.7
133.307	764	11	15.8 ^{ns}	B	15.3	11	—	13.8	14.5	15.0 ^{def}
145.248	770	11	16.5	14.7	15.6 ^F	11	—	13.4 ^F	14.8	14.6
145.581	773	11	15.3 ^B	B	15.0	11	—	13.6	14.6	14.4
146.300	776	11	15.3 ^B	B	14.7	11	—	12.8 ^F	14.8	14.4
146.578	779	11	15.3 ^B	B	14.9 ^F	11	—	13.6	14.3	14.4
147.249	782	11	16.0	B	15.6 ^F	11	—	13.5	13.8	B
147.582	785	11	15.6	14.5	15.0 ^B	11	—	13.6	14.3	14.5
179.228	812	11	16.5	14.3	15.4	11	ns	13.5	14.5	13.8
284	814	—	16.7	14.5	15.4	—	—	13.5	14.7	—
339	816	—	16.9	14.8	15.6	—	—	13.5	15.0	—
407	818	—	15.6	14.4	15.4	—	—	13.6	14.6	—
471	820	—	15.7	14.3	15.5	—	—	13.6	14.2	—
179.533	822	—	15.9	14.3	15.6	—	—	13.5	14.3	—
180.243	825	ns	15.9	14.3	15.4 ^F	ns	ns	12.8	14.6	13.6
303	827	—	16.2	14.8	15.2	—	—	13.5	14.0	—
181.279	832	ns	16.7	14.7	15.2	ns	11	13.9	14.8	13.7
469	838	—	15.9	14.4	15.0	—	11	13.0	14.7	—
182.253	843	ns	15.8	14.4	15.6 ^F	ns	11	12.8	14.7	13.9
469	847	—	15.8	14.6	15.5	—	ns	13.6	14.9	—
183.229	852	—	17.0	14.6	15.2 ^B	—	11	13.6	14.8	—
186.252	857	—	15.8	14.3	15.0 ^B	—	11	12.7	14.2	—
187.399	864	—	16.3	16.0	15.2	—	ns	13.2	14.8	—
194.302	794	—	16.5	16.0	14.8	—	15.2	13.2	14.8	—
195.328	798	—	15.6	16.0	15.5	—	—	13.2	14.8	—

	no variation		cluster d 0.44016									
B 68	375	B 66	430	B 114	332	429	323	516	462	461	B 151	437
MS	15.7 ^A	15.5	12.5 ^B	16.5	15.4	14.9	14.0 ^B	13.2 ^B	14.9 ^B	14.4 ^B	14.2 ^B	15.3 ^B
16.7	15.6 ^B	16.0	11.9 ^B	16.8	15.7 ^B	14.8	13.7 ^B	13.4 ^B	15.0 ^B	15.2 ^B	14.0 ^B	16.0 ^B
43	15.5	15.8	11.9 ^B	16.7	15.6 ^B	14.7	14.2 ^B	14.0 ^B	15.4 ^B	16.2 ^B	14.5 ^B	16.2 ^B
MS	—	15.8	11.9 ^B	—	—	14.5	14.7	13.4 ^B	15.1 ^B	—	14.5	—
11	15.7	15.7	11.9	16.6	15.8 ^B	14.5	13.7 ^B	13.7 ^B	14.8 ^B	15.8	14.0	15.3 ^B
11	15.8 ^B	15.8	11.9	16.8	15.1 ^B	14.3	13.5 ^B	13.5 ^B	14.8 ^B	15.7 ^B	14.8	15.8 ^B
—	15.8 ^B	—	12.0 ^B	16.6	15.4 ^B	14.0	14.0 ^B	13.5 ^B	14.9 ^B	15.0 ^B	14.7 ^B	16.0 ^B
11	15.5 ^B	15.5	12.0	MS	15.4 ^B	14.0	14.0 ^B	13.7 ^B	14.8 ^B	15.1 ^B	14.6	16.0 ^B
11	15.8 ^B	15.7	12.0	16.8	15.2 ^B	14.5	14.0 ^B	13.7 ^B	14.9 ^B	15.8 ^B	14.7	16.0 ^B
11	15.7 ^B	15.0	12.0	16.8	15.1 ^B	14.1	14.0 ^B	14.1 ^B	14.9 ^B	16.2	14.0	15.3
11	15.7	14.7	12.0	16.4	15.1 ^B	14.0	14.0 ^B	13.6 ^B	14.8 ^B	16.3	14.0	15.7
11	15.7	14.6	11.9	15.5 ^B	15.9 ^B	14.6	13.7 ^B	13.4 ^B	14.9 ^B	MS	13.9 ^B	15.3 ^B
11	15.5	14.5	12.0	16.5	15.5 ^B	13.9	13.8 ^B	13.5 ^B	14.6 ^B	MS	14.0 ^B	15.4 ^B
11	15.4	11	12.0	16.3	15.4 ^B	14.1	13.9 ^B	13.5 ^B	14.6 ^B	11	14.5 ^B	15.2
11	15.5	14.8	12.0	16.9	15.4 ^B	14.5	14.1 ^B	13.5 ^B	14.5 ^B	11	14.5 ^B	15.5
11	15.7	15.7	11.8	16.1	15.5 ^B	15.8	14.0	13.6 ^B	14.8 ^B	11	14.6	15.6
—	15.3	—	11.8	16.5	15.5 ^B	—	13.7 ^B	13.9 ^B	14.7 ^B	—	14.7	15.4
—	15.7	—	11.9	16.0	15.5 ^B	—	13.9 ^B	13.7 ^B	14.9 ^B	—	14.5	15.8 ^B
—	15.4	—	12.0	16.0	15.4 ^B	—	14.0 ^B	13.7 ^B	14.8 ^B	—	14.0	15.5
—	15.5	—	11.8	16.3	15.3 ^B	—	13.9 ^B	13.7 ^B	14.8 ^B	—	14.3	15.6 ^B
—	15.5	—	11.8	16.6	15.7 ^B	—	14.0 ^B	13.7 ^B	14.8 ^B	—	14.7	15.5 ^B
MS	14.9 ^B	15.7	11.7 ^B	16.0 ^B	15.8 ^B	15.9	13.9	13.3 ^B	14.9 ^B	MS	13.9	15.2 ^B
—	15.8	—	11.8	16.4	15.9 ^B	—	13.9 ^B	13.4 ^B	15.2 ^B	—	14.1	15.2 ^B
MS	15.8	15.6	12.0	17.0	15.8 ^B	15.8	13.8	13.5 ^B	15.7 ^B	MS	14.1	15.2 ^B
—	15.2 ^B	—	12.2	16.6	15.8 ^B	—	13.8 ^B	13.3 ^B	14.8 ^B	—	14.0	15.8
MS	15.2 ^B	15.8	11.9	17.0	15.8 ^B	15.9	14.0	13.5 ^B	14.9 ^B	MS	14.2	15.8
—	16.0 ^B	—	11.8	15.8	15.5 ^B	—	13.8 ^B	13.5 ^B	14.9 ^B	—	14.1	15.5 ^B
—	15.8	—	11.8	17.0	15.5 ^B	—	13.6 ^B	13.0 ^B	15.1 ^B	—	14.1	15.7 ^B
—	15.8	—	11.8	16.6	15.3 ^B	—	13.6 ^B	13.2 ^B	15.0 ^B	—	14.0	15.8 ^B
—	14.9	—	12.2	16.1	15.6 ^B	—	13.6 ^B	13.6 ^B	14.9 ^B	—	14.0	15.7 ^B
					15.7 ^B				15.0 ^B		14.2	15.2 ^B
					15.4 ^B				15.0 ^B			16.0 ^B

cluster

		283	B49	496	439	309	AGCA	490	196	B67
26188.229	A 14868	ms	15.7 ^{6.0}	14.5	14.7 ^{15.2A}	ms	ms	13.0	14.8	13.7
210.385	891	"	15.8 ^{5.3}	15.4 ^{5.0}	15.5 ^{6.5}	ms	ms	13.5	14.8	15.8
213.263	902	—	15.9 [✓]	14.6	14.6 ^{15.6F}	—	ms	13.2	14.6	15.6
214.270	906	—	16.4 [✓]	14.3	14.9 ^B	—	"	13.3	14.6 ^B	—
16.4 215.274	912	—	15.8 ^{15.6B}	14.4	14.7 ^{15.7F}	—	"	12.9	14.5	—
217.269	919	—	15.7 ^{5.6}	14.5	14.5 ^{5.5F}	—	ms	13.1	14.3	—
218.214	921	ms	16.8 [✓]	14.7	14.6 ^{15.4}	ms	ms	13.0	15.0	15.8



		B49	439	AGCA	487	487a
26460.598	MF 15394	m:	15.0	ms	14.0	B ^{13.5}
472.568	424	B:	15.6 ^F	ms	"	"
73.597	439	F:	15.0 ^m	16.5	"	"
75.592	453	F	14.7 ^{mB}	ms	"	"
79.607	475	?	14.5	ms	"	"
81.574	494	B	15.3	ms	13.7	"
83.544	511	?	15.0	ms	13.9	"
89.575	540	F	14.7	ms	13.8	"
501.498	554	B	14.4	ms	13.9	"
04.455	589	"	14.8	ms	"	"
62.342	791	B	14.9	ms	14.0	"
602.332	16075	—	B	ms	B	F
838.427	767	—	mF	ms:	13.6 ^B	13.6
71.546	931	B	14.4	ms	14.5	"
97.496	17055	B	14.5	ms	"	"
917.439	158	B	15.0	ms	"	"

double

pairs

pairs

pairs
189

B68	375	B66	430	0114	332	429	323	516	462	461	B151	437
ms	double	15.7	11.8	15.8	15.6	16.0	13.8	13.3	15.5	ms	14.0	15.8
K	"	16.6	12.9	16.7	15.6	16.8	14.1	14.1	14.9	ms	14.1	15.8
—	"	17.0	11.9	15.8	15.7	ms	14.1	13.5	14.8	—	14.0	16.0
—	—	—	11.8	16.6	15.8	—	13.7	13.3	14.8	—	14.0	15.5
—	—	—	12.0	ms	15.4	ms	13.9	13.6	14.9	—	14.2	16.2
—	—	—	12.3	15.9	15.7	—	13.0	13.4	14.8	—	14.4	15.4
ms	—	ms	11.8	16.8	15.4	ms	13.8	13.3	15.2	ms	13.9	16.0

15.2
15.3
15.4
15.5
15.6
15.7
15.8
15.9
16.0
16.1
16.2
16.3
16.4
16.5
16.6
16.7
16.8
16.9
17.0

15.7
15.8
15.9
16.0
16.1
16.2
16.3
16.4
16.5
16.6
16.7
16.8
16.9
17.0

15.7
15.8
15.9
16.0
16.1
16.2
16.3
16.4
16.5
16.6
16.7
16.8
16.9
17.0

332

15.8

—

15.3

ms

F

ms

F

15.8

—

ms

15.8

>16.0

>16.0

>16.0

—

—

K

F

ms

462

15.9

15.6

16.0

15.7

15.4

15.7

15.5

15.4

15.0

15.4

15.6

—

15.3

15.8

15.7

15.7

15.7

15.7

B151

D

Billory

>a

>a

>a

>a

>a

=a

>a

>a

>a

>a

—

>a

>a

>a

>a

>a

see Bk II p 20
for 1931 Aplate
meas -

194

15.8
C/52
15.0
C/00
15.3

C/52 C/00

23911	MF837	ns	ns	25414	MF11844	16.2	ns
65	8673	15.0	15.6	18	883	15.8	"
92	8724	ns	14.8	19	899	15.7	"
24026	8785	ns	15.8	21	919	15.5	"
56	8842	ns	ns	37	973	15.5	"
411	9816	ns	15.8 ⁴	745	13120	14.9	F?
12	28	ns	15.3 ⁴	49	134	14.9	ns
13	38	ns	15.1 ²	94	287	ns	ns
626	10141	ns	15.1 ⁴	99	327	"	"
27	146	ns	15.1 ⁴	32	398	ns	ns
49	240	ns	15.1 ⁴	51	463	ns	ns
50	249	ns	15.1 ³	54	481	ns	ns
54	271	ns	15.2	55	495	—	—
55	279	ns	15.0	61	500	—	—
56	284	"	14.9	62	502	ns	ns
81	365	ns	15.81	26067	14090	15.0	ns
711	522	ns	ns	89	144	15.5	ns
12	534	"	"	90	150	ns	ns
27	572	ns	ns	91	164	15.81	ns
28	574			92	175	—	—
	576			93	190	15.6	ns
	577			95	203	15.6	"
	578			97	228	16.01	"
28	579	ns	ns	101	240	ns	ns
25383	11662	ns	ns	102	246	ns	ns
86	705	"	"		750		
88	718	—	—		276		
90	743	16.51	ns	105	259	16.3	ns

		C152	C100			C152	C100
26 117	MF 14277	ns	ns	26 208	MF 14779	ns	ns
118	294			210	758	ns	ns
120	317			14	782	ns	ns
	323			17	805	ns	ns
123	349	ns	16.2	39	858	ns	ns
124	363	—	ns	26 460	15394	ns	ns
125	273	ns	15.5	72	424	ns	ns
130	385	ns	15.3	73	439	ns	ns
131	397	ns	15.3	75	453	ns	ns
144	412	11	15.2	79	475	ns	ns
145	419	ns	15.0	81	494	ns	ns
146	428	ns	15.1	83	511	ns	ns
147	438	ns	15.1	89	540	ns	ns
153	460	11	15.0	507	554	ns	ns
	464	11	14.9	64	589	ns	ns
154	476	ns	14.9	62	791	ns	15.5
155	488	ns	14.9	—	16075	—	—
56	502	ns	14.9	26 546	A 15539	ns	—
58	515	ns	14.9	55	549	ns	—
59	527	11	14.9	62	592	ns	—
60	538	ns	15.0	69	667	ns	—
61	546	ns	14.8	87	710	ns	—
62	553	—	—	60.2	15760	ns	—
74	570	ns	15.3				
75	580	—	15.3				
76	592	ns	15.3				
79	619	ns	15.4				
81	645	ns	15.7				
87	693	ns	15.8				
202	732	ns	ns				

15760 ns —

196



	MF 8537	14.5	ns	25419	MF 1899	15.8	16.0
23911	8673	16.3	16.5	21	919	15.4	15.9
65	8724	ns	ns	87	973	15.4	ns
92	8785	14.6	ns	15745	13120	ns	ns
24026	8842	14.6	ns	49	134	16.5	ns
56	9816	15.2	ns	94	287	16.4	15.0
24411	9828	15.3	ns	99	327	15.8	15.0
12	9838	15.3	ns	832	398	ns	-
13	10141	14.5	16.6	51	463	ns	ns
24626	146	14.6	ns	54	481	16.2	ns
27	240	14.7	ns	56	495	-	-
49	249	15.0	ns	61	500	15.1	ns
50	271	15.1	ns	62	502	15.4	ns
54	279	15.0	ns	26067	14090	15.3	ns
55	284	14.6	ns	89	144	15.4	ns
56	365	15.0	-	90	150	15.5	ns
81	522	14.7	ns	91	164	15.5	ns
711	534	14.7	ns	92	175	-	ns
12	572	14.7	ns	93	190	15.2	ns
27	574	14.6	ns	95	203	15.4	ns
28.	576	14.9	-	97	228	15.6	ns
	577	14.7	ns	1041	240	15.4	ns
	578	15.1	ns	102	246	ns	ns
	579	15.0	ns	3	250	15.6	ns
25393	11662	15.2	15.0	4	256	15.7	ns
86	705	15.0	14.8	105	259	15.6	ns
88	718	15.2	14.8	117	277	15.6	ns
90	740	14.7	14.7	118	294	F	ns
414	844	16.0	16.0	120.	317	15.4	ns
418	883	16.0	16.0		318	ns	ns

		528	0179
26120.	MF14319	—	ms
	20	16.0	ms
	21	F	ms
	22	—	—
	23	MF	ms
123	49	15.7	ms
24	363	—	—
25	73	15.7	ms
130	85	15.8	ms
31	97	15.8	ms
44	412	—	—
45	19	16.0	ms
46	28	ms	ms
47	38	15.7	ms
53	60	15.6	ms
	64	15.8	ms
54	76	15.8	ms
55	88	15.9	ms
56	502	15.4	ms
58	15	15.4	ms
59	27	15.6	ms
60	38	—	ms
61	76	15.4	ms
62	53	—	ms
74	70	—	—
75	80	15.5	ms
76	92	14.9	seen?
77	608	—	—
79	19	15.5	ms
80	36	15.0	?
81	45	15.0	—

		528	0179
26182	MF14660	15.2	ms
86	88	ms	ms
87.	90	14.9	seen?
	91	?	seen?
	92	15.0	15.0
	93	15.6	15.4
	95	F	—
	96	F	seen?
	99	15.4	15.0
90	721	—	—
202	38	15.4	15.2
04	38	—	—
08	49	15.6	14.6
10	58	15.4	14.6
14	82	—	14.6
17	805	ms	14.6
39	858	15.0	15.0
26460	15394	15.5	16.6
72	424	15.6	ms
73	439	15.6	ms
75	453	16.0	ms
79	475	15.9	ms
81	494	15.9	ms
83	511	15.8	ms
89	540	16.0	ms
501	554	16.3	ms
04	589	15.8	ms
562	791	16.0	ms
602	16075	—	—

85
16
136 0

16
60
96 0

