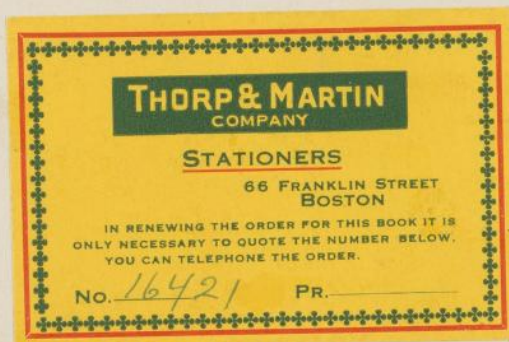


1916phae.proj.25355

David Hoffleit



→
 "They" cut out my name to paste on a memento
 for Hodgie - while I was in Cal!

New stars in Taurus reg?
 For ident, stars see

Margenroth

AN n-5981
 Vol 250 p 75

Important!

also Vishni Vengerod
 Veränderliche Sterne
 Band II Nr. 4
 15 Mai 1933

→
 "They" cut out my name to paste on a memento
 for Hodgie - while I was in Cal!

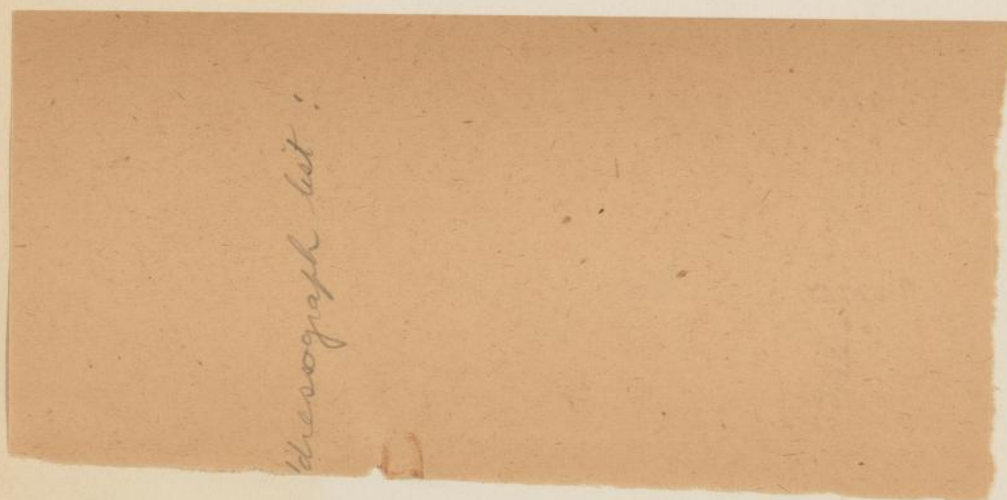
CATALOGUE NUMBER		FOR BOOKS	
VOLUME		BORROWED FROM	
Author		THE LIBRARY	
Brief Title			
Signature			
Address		Date	
Note.—Returned books should be left on librarian's desk, Room D 22 b.		19	

→
"They" cut out my name to paste on a memento
for Hodgie - while I was in Cal!



$$\begin{array}{r}
 593 \\
 13 \overline{) 7704} \\
 \underline{65} \\
 120 \\
 \underline{117} \\
 34 \\
 \underline{453} \\
 17 \overline{) 7704} \\
 \underline{68} \\
 90 \\
 \underline{85} \\
 54 \\
 \underline{51}
 \end{array}$$

$$\begin{array}{l}
 \text{Var 9} - 14924 - ? \text{ again } 144? \\
 \text{Var 80} - 10829 - 14.3 \\
 13697 - 13.9 \\
 13822 - 14.0 \\
 14961 - 13.9!
 \end{array}$$



Index

Page		
4	MWF 15	7 50 + 9.2
25	" 105	5 02 + 29.6
60	" " sequences	
	Adjacent regions 4 in. between p 60-150	
150	MWF 108	5 15 + 25.6
152	" III	5 27 + 21.4
175	Omicron Andromedae	

M.W.F. 15

 $7^h 50 + 9^{\circ} 2$ Galactic $180^{\circ} + 20^{\circ}$ $7^h 34$ to $8^h 01$ $+ 12^{\circ} 2' + 9'$

- MC 22258	1926 Dec. 6	24 856.858	Compared with contact 22405, var no 6
22315	1927 Jan. 7	888.781	
405	Mar. 1	941.652	contact cracked
- 414	4	944.592	compared by Miss Hughes with contact from 22315 - 2 vars.
x 417	8	948.594	Two exposures
iso-x 886	Nov. 4	25189.907	isochromatic
999	Dec 18	233.835	
- 23039	30	245.789	Compared with contact from MC 22405 - vars. 3, 4.
072	1928 Jan 17	263.742	
080	20	266.768	
095	22	268.756	
123	27	273.739	contact DE 29
173	Feb. 11	288.667	
- 186	13	290.651	Compared by Miss Hughes with contact 22315 - no vars.
- 201	21	298.657	Compared with contact 23964 - no variables
- 206	23	300.646	Compared with contact 22405 - var no 7, other doubtful suspects
- 295	Mar. 19	325.621	Compared with contact 23123 - one suspect, var no 5
349	Apr 7	344.538	
- 374	17	354.555	Compared with contact 23964 - two questionable suspects
- 807	Nov 9	25 560.923	Compared with contact 23964 - no variables
missed x 828	17	570.894	broken & miss dist
- 890	Dec. 14	595.845	Compared with contact 23123 - one doubtful suspect, no vars.
- 960	1929 Jan. 4	616.824	Compared by Miss Hughes with contact 22315 - no vars.
964	6	618.775	contact DE 28
977	10	622.753	
982	13	625.759	
24076	Feb 11	654.674	
109	Mar 1	672.632	
- 110	1	656	Compared with contact 23964 - no vars.
170	Apr 2	704.576	

MC 24590	1929 Nov. 4	25920.917	
645	29	945.869	
671	Dec. 25	971.815	
684	31	977.771	
- 688	1930 Jan. 4	981.822	Compared with contact 23964 - no more.
768	Feb. 17	26025.662	
- 783	27	035.648	Compared by Miss Hughes with contact 22315 - no more.
842	Mar. 27	063.580	
853	31	067.564	
856	Apr. 2	069.580	
25236	Nov. 23	26304.727	
294	1931 Jan. 11	353.759	
- 325	24	366.700	Compared with contact MC ²²⁹⁰⁵ 25325 - no variables
- 742	Nov. 7	26653.906	Compared by Miss Hughes with contact 22315 - ^{new} no more ^{4 C4 ft.}
803	Dec. 14	690.845	
- 834	1932 Jan. 4	711.750	Compared with contact 23123 - poor comparison - ^{subject} one suspect
907	Mar. 2	769.628	Best?
925	Mar. 8	775.628	off center

known Variables

MC						
(uucMi)	7	34 48	+7° 14.2	14.2 - 15.4	ineq - in very corner - sometimes off seq.	
uy cMi		39 59	9 54.4	13.8 15.4	eclip $22^{\circ}/n$	
{ Hoffmeister						
292.1928	7	36.9	+7 37	13 - 13.5	eclip	AN 234, 33
Rosa 200		49.6	+10 21	11 - 13	at a.g. 37, 156	

8

Variables marked on MC 23964

MC 23039 with

br

FT

Contact MC 22405

3 22405 23201 23039, 23072

4 22405 22417 23039 22999 *eclip?*

MC 23295 with

Contact MC 23123

5 23295 22999 23123 23201 *small range*

MC 22258 with

Contact MC 22405 5

6 22405 22417 22285 23964

Contact MC 22405

with MC 23206

7 22405 23960 23206 23080 *doubtful variation*

1. Too few plates to get type

2. Only one minimum?

3.

4. Eclp. (or irregular)

5.

6. Eclipsing, + minima $\frac{6.5^{\text{ol}}}{m}$

			c, b nearly equal				
		1	2	3	4	5	6
MC22258	24 856	b1	c1	c2	a2	a1	ns L7
2235	888	a2	d2	b4	a3	b1	a3
405	941	b1	a4	a4	a0	a4	b0
414	944	b4	a3	c2	b2	b3	a1
417	948	± c:	b2:	c2	a4	a4	a1
886	25 189	A4	b1	a1	a4	b1	a1
999	233	off	b1:	b4	c4	a3	± f
23039	245	off	a3	c4	c4	c0	a4:
072	263	off	sensitometer — square	c3	b a4	c3	a2
080	266	off	c:	c2	a3	b4	a3
095	268	A1	a4	c2	a4	c1	a0:
123	273	off	sensitometer square	c2	a3	c1	a3
173	288	—	b2	c1:	a4	b4	e:
186	290	off	b:	c3	a4	c3:	a1
201	298	off	sensitometer ^{sq}	b4	a3	d3	a3
306	300	off	a3	c2	a3	b2	a3
295	325	off	sens. sq	c0	a4	a	a4
349	344	off	b2:	d2	b2	a2	a2
374	354	off	a4	c3	a3	a2	a2
807	25560	off	—	b1 ^{poor} plate	b1	b:	—
828	570	off	a4	c3	a3	a3	a2
890	595	—	a4	c0	a3	a4	a2
960	616	off	b4	b4	b0	b2	a4
964	618	off	a4	c3	a2	a4	e3
977	622	off	b:	e2	a3	b1	a1
982	625	off	b-c:	a4	a4	b1	a-b:
24076	654	—	a3	c	a2	b3	a3
109	672, 632	—	a4	c4	a4	a4	a2
110	.656	—	b2	c3 dim	a4	c2	a1

7

c1;

c1

b3

b4

c1

b4

b4

b3

b3

c2

b4

c1

b4

c1;

c1

c1;

c2

b4

b4

—

b4

b4

b4

b4;

c1

c0

c0

b4

c0

		1	2	3	4	5	6
MC 24170	25704	a2	a4	d1	a2	b4	a2
590	920	—	b3	—	a4	c1	a
645	945	off	a4	a3	a4	def	a3
671	971	Not this region					
684	977	off	a2	a3	a2	c01	a2
698	981	off	a31	A4	a2	c0	a
768	26025		a31	a2	a4	c1	a
783	035		a4	a4	a4	a4	a1
842	063		a3	a3	a4	A4	a3
853	067		a4	c3	a4	A4	a1
886	067		A4	a4	de0	A3	a
25236	26304	Not this region					
294	303	K3	b4	d2	a3	A4	a3
325	366	A0	a4	a2	a3	A4	Ja ^{0.1}
742	26653	b3	a4	d1	a2	a3	a
803	690	b0	b1	b1	a2	c0	a1
834	711	off	a2	a3	a4	b2	a1
907	769	Lost?					
925	775	A2	b2	a1	a3	a2	Ja ^{0.1}

7

c0

b

c0

b3

b4

c0

b2

b4

c0

b4

b4

b4

c

c1

b2

b4

Star Counts for Plate Limit

See Groningen Publications No. 27, p. 62
1917Mc 23295 1^o eq. nearly central

Mar. 1929

Total No. in quadrant A

" " " " D

A		D		Plate Lim	
84	58	54	55	16.0	15.9
53	75	50	62	15.8	
270		221			

These counts repeated 3 times & av. recorded.

Mc 24783

Feb. 1930

C		B		Plate Lim	
70	70	53	52	15.8	15.7
48	62	64	56	15.5	
250		225			
2,950		2,954			

$$\log 2 \times (250 + 225) = \log 950 = 2.978 \quad \text{---} \quad 15.7$$

Star Counts for Sequences Var 4, 3

	Mc 23295 D	log 4m	m	Mc 24783	log 4m	m	mean mag 1922
Var 4 a	11	1.64	11.9	11	1.64	11.9	11.9 + .2 12.1
c	17.18	1.85	12.4	18	1.86	12.5	12.4 + .2 12.6
d							
e	31	2.09	13.1	30	2.08	13.0	13.1 + .3 13.4
3 Var 4 A	32	2.11	13.2	28	2.05	13.0	13.1 + .3 13.4
a	43	2.24	13.6	46	2.26	13.6	13.6 + .3 13.9
c	30 + 15 + 22 + 16	2.52	14.4	26 + 11 + 19 + 17	2.47	14.3	14.35 + .25 14.6
d							
e	64 + 40 + 35 + 32	2.84	15.4	69 + 39 + 56 + 37	2.91	15.6	15.5 + .2 15.7

Sequences

Var 1.	K	12.1
(12.4-13.9)	A	13.4
	a	13.6
	b	(13.7)
	c	13.9

Var 2	A	13.5
	a	13.8
	b	(14.0)
	c	14.2
	d	14.3
	e	14.7

log Var	1	2	3	4	5	6	7
K	6	A	A		A		
A	4	4	a	a	a	a	a
a	3	3	5	4	4	6	2
b	4	b	b	4	b	5	b
c		c	c	c	c	3	c
		d	d	d	d	d	d
			e	e		e	
						f	

Relative intervals for comparison stars

M.W.P. 15.

Var 7	a	13.5
(14.0-14.3)	b	13.7
var.?	c	14.2
	d	14.4

dnls = seq. from star counts

Pencil = "extrapolated" transferred from "log 3"

Parentheses = interpolated

Sequences

Var 1.	K	12.1
(13.4-13.9)	A	13.4
	a	13.6
	b	(13.7)
	c	13.9

Var 2	A	13.5
	a	13.8
	b	(14.0)
	c	14.2
	d	14.3
	e	14.7

K	23x2	$\log M / M_{\odot}$	11.9 + .2
A	60x2	2.08	13.1 + .3
a	69x2	2.14	13.3 + .3
c	88x2	2.25	13.6 + .3

Var 7	a	13.5
(14.0-14.3)	b	13.7
var.?	c	14.2
	d	14.4

dots = seq. from star counts

Pencil = "extrap" transferred from "log 3"

Parentheses = interpolated

Sequences

Var 1. K 12.1
 (12.4-12.9) A 13.4
 a 13.6
 b (13.7)
 c 13.9

Var 2 A 13.5
 a 13.8
 b (14.0)
 c 14.2
 d 14.3
 e 14.7

Var 3 A 13.4
 (14.0-15.3) a 13.9
 b (14.2)
 c 14.6
 d (15.2)
 e 15.7

Var 4 a 12.1
 (12.2-12.9) b (12.3)
 Eclipsing? c 12.6
 d (13.0)
 e 13.4

Var 5 A 13.0
 (13.8-14.6) a 13.9
 b 14.3
 c 14.6
 d 14.7

Var 6 a 14.3
 (14.5-15.7) b 14.9
 Eclipsing c 15.2
 d (15.3)
 e 15.5
 f 15.7

Var 7 a 13.5
 (14.0-14.3) b 13.7
 var? c 14.2
 d 14.4

dnls = seq. from star counts
 Pencil = "extrap" transferred from "seq 3"
 Parentheses = interpolated

M.W.F. 105

 $5^h 02 + 29^{\circ} 6$

Camera $\left\{ \begin{array}{l} 5^h 16 + 35.0 \\ 5^h 16 + 24.0 \\ 4^h 33 + 35.0 \\ 4^h 36 + 24.0 \end{array} \right.$

Index to Magnitudes for MWF 105, 108, 111.									
	Var	th	Var	th	Var	th	Var	th	
1 73	21	45	41	66, 72, 85	61	86	81	92	
2 44, 75, (66, 72)	22	44	42	72	63	86	82	92, 93	
(2) 3 45	23	84	43	53, 66	63	170, 97	83	96	
4 45	24	44	44	85	64	93, 170	84	96	
5 85	25	44, 86	45	86	65	97	85	96	
6 53	26	85, 86	46	53, 66	66	97	86	96	
7 82, 84	27	66, 72	47	73, 86	67	92	87	93	
8 82	28	53	48	85	68	92	88	93	
9 45	29	52	49	73, 84	69	93	89	93, 97	
10 66, 73, 84	30	44	50	85	70	96	90	93	
11 84	31	53	51	85	71	93	91	93	
12 53	32	53, 66	52	53	72	96, 97	92	93, 97	
13 82	33	72, 78	53	86	73	93	93	93, 97	
14 45	34	73, 78	54	84	74	93, 97	94	92	
15 87	35	53, 72, 85	55	85	75	93, 97	95	92	
16 85	36	72	56	66, 73, 78	76	96	96	96	
17 85	37	53	57	92	77	96	97	92, 97	
18 44	38	53	58	96	78	96	98 (93), 93		
19 82, 66	39	73, 84	59	86, 170	79	92	99	92	
20 45	40	73, 84	60	84	80	85	100	92	

$5^h 02^m + 24.6$
 $\lambda 140$
 $\beta -10$ } Van Riefen

MF 8972	1924 Dec 21	24141.578	
9868	1925 Sept 26	420.826	Poor images
10657	1926 Aug 16	744.939	Test - record indicates "plate m.g."
10829	1926 Sept 10	769.880	Double images
10844	" 13	772.878	Broken + mended
10871	" 28	787.885	
10917	Oct. 8	797.882	
- 10939	" 11	800.842	Compared with contact 11240 - Vars 33-48
10962	" 15	804.838	
- 10954	" 13	802.836	Compared with contact 11231 - Vars 10-20
10986	Nov 1	821.755	
- 11081	1927 Oct 3	25157.532	Compared with contact 11240 - Vars. 1-9
11085	" 4	158.535	
- 11137	" 29	183.547	Compared with contact 11240 - Vars. 49-53
11143	Nov. 3	188.551	
11174	Nov 17	202.524	
11180	" 18	203.396	
11207	" 26	211.496	
11228	Dec 15	230.316	
11229		.348	
11230		.381	
11231		.413	Contact 20367
11232		.445	
11240	Dec 19	234.385	Contact D 20365, 20366
11262	30	245.388	
11278	1928 Jan. 18	264.321	
- 11303	" 23	269.304	Compared with contact 16302 - Var 56?
12465	Oct 22	542.586	
12489	Nov 8	559.558	
- 12554	" 16	567.454	Compared with contact 11240 - Vars 29

$5^h 02 + 29.6$

27

MF 12671	Dec 17, 1928	25598.37	25598.379	
12737	1929 Jan 9		621.319	
12859	Feb. 27		670.260	
13544	Sept 26		881.610	
13560	Oct. 1	886.558		1 st off intended center
- 13650	Oct. 10	895.562		Compared with contact 13825 - No new stars. - 30 instead of +30
13670	" 25	910.513		60° off intended center
13697	" 29	914.505		
13729	Nov. 1	917.436		
13821	Dec 6	952.342		
13822		.374		
13823		.406		Test - record says "nothing on plate"
- 13824		.438		Compared with contact 11231 - Var 21
13825		.470		Contact DE 94
13826		.503		
13831	Dec 7	953.356		
- 13834	Dec. 9	955.482		Compared with contact 11240 - Vars 54-55
13845	" 20	966.350		
13848	" 21	967.315		
13853	" 24	970.317		
13864	" 30	976.419		
13867	" 31	977.307		
→ 13962	1930 Feb 27	26 035.270		Test?
- 14079	Mar 31	067.234		Compared with contact 13825 - No new stars.
14075	" 29	065.233		
↖ 13876	Jan 4	25 981.314		
14792	Aug 25	26 214.625		
14813	" 28	217.594		
14821	" 29	218.588		

$$5^h 02 + 29.6$$

MF 14827	1930 Sept. 1	26 221.582	
14830	" 3	223.605	
14853	" 17	237.559	Record says "discarded".
14867	" 19	239.556	
14877	" 20	240.544	
14891	" 22	242.583	
14909	" 24	244.510	
14919	" 25	245.510	
14924	" 29	249.510	
14948	Oct. 14	264.459	
14961	" 15	265.469	
14975	" 20	270.495	- Plate taken at 6 ^h by mistake
15039	Nov. 28	26 309.514	
- 15068	Dec. 17	328.481	compared with contact 11240 - poor - var 30.
15106	1931 Jan. 13	355.283	
15107	" 17	359.269	
15209	Feb. 9	382.264	
15252	" 21	394.283	
15273	Mar. 7	408.281	
15292	" 11	412.213	Plate taken at 6 ^h by mistake
15916	Aug 16	570.636	
16080	Sept. 21	606.601	
- 16180	Nov 12	658.518	compared with contact 16302 - No var.
16256	Dec 7	683.423	
16258	Dec. 7	683.491	
16300	Dec 13	689.305	
<u>16302</u>		.370	Contact
- 16304		.435	compared with Contact 11240 - var 22-28
16306		.490	
16315	Dec. 15	691.479	

$5^h 02 + 29^{\circ} 6$

29

MF 16342 1932 Jan. 6 26713.411

16358 " 8 715.372

16372 " 10 717.407

16416 " 28 735.302

16427 Feb. 1 739.270

-16457 " 28 766.253

16504 Mar 4 771.281

17268 Aug 8 928.641

Compared with Contact 11240 - Vars 31, 32 not very good

$5^h 02 + 29.6$

MF 14827	1930 Sept. 1	26 221.582	
14830	" 3	223.605	
14853	" 17	237.559	Record says "discarded".
14867	" 19	239.556	
14877	" 20	240.544	
14891	" 22	242.583	
14909	" 24	244.510	
14919	" 25	245.510	
14924	" 29	249.510	
14948	Oct. 14	264.459	
14961	" 15	265.469	
14975	" 20	270.495	Plate taken at 6 ^h by mistake
15039	Nov. 28	26 309.517	
- 15068	Dec. 17	328.481	compared with contact 11240 - poor - var 30.
15106	1931 Jan. 13	355.283	
15107	" 17	359.269	
15209	Feb. 9	382.264	
15252	" 21	394.283	
15273	Mar. 7	408.281	
15292	" 11	412.213	Plate taken at 6 ^h by mistake
15916	Aug 16	570.636	
16080	Sept. 21	606.601	
- 16180	Nov 12	658.518	compared with contact 16302 - No var.
16256	Dec 7	683.423	
16258	Dec. 7	683.491	
16300	Dec 13	689.305	
16302		.370	Contact
- 16304		.435	compared with Contact 11240 - Vars 22-28
16306		.490	
16315	Dec. 15	691.479	

$5^h 02 + 29^{\circ} 6$

29

MF16342 1932 Jan. 6 26713.411

16358 " 8 715.372

16372 " 10 717.407

16416 " 28 735.302

16427 Feb. 1 739.270

-16457 " 28 766.253

16504 Mar 4 771.281

17268 Aug 8 928.641

Compared with Contact 11240 - Vars 31, 32 not very good

5^h 00 + 29.6 - MC 21098 1924 Oct 30 24089.828 Contact

24078 1929 Feb 12 25655.517

5^h 02 + 29.6 22671 1927 Sept 5 25129.867

22725 " 29 153.808

22195 1926 Nov 5 24835.829

↗ 22404 1927 Mar 1 941.532

↘ 22300 1926 Dec 27 879.653

23034 1927 Dec 27 25242.680

23184 1928 Feb 13 290.542

23712 Oct 9 529.835

- 23739 Oct 20 540.831: Compared with Contact 21098 - RW, uy Aur, var 10, one very doubtful suspect

↗ 23862 Dec 5 586.719

23805 Nov 9 560.792

24558 1929 Oct 13 898.865

24736 1930 Jan 26 26003.561

24781 Feb 27 035.525

25729 1931 Nov 4 650.809

25869 1932 Feb 13 751.538

spect

Known Variables

Prager 1933

RV Tau	4	38	12 + 25	54.7	\bar{m} 9.4 - \bar{m} 12.4	78^d .60	Ko
TT "	42	26	+ 28	16.4	8.1 - 8.8	166^d .5	N3
UY Aur	42	33	+ 30	32.1	11.6 - 14.0	abreg	g3
AB "	46	31	+ 30	19.5	7.2 - 8.4	RC2B	A0
SU "	46	45	+ 30	19.8	9.2 - 9.7	0^d .47	G2
AM "	47	15	+ 31	58.0	10.0 - 11.5	13^d .62	Eclipsing
UW Tau	48	27	+ 25	23.8	13.8 - 18.5	364.2	
(AQ Aur	56	52	+ 35	11.0)			
RW "	58	34	+ 30	12.3	9.0 - 12.0	abreg	G0
AE "	5	06	44 + 34	9.0	5.3 - 6.2	1	Bop
AR "	08	47	+ 33	36.3	6.4 - 6.9	2^d .07	B9 Eclip
UV "	12	22	+ 32	21.7	7.9 - 10.1	350^d	Se

Mira Cynos's Catalogue:

Rosa 348	4	08 ³					
	4	41	08 + 25	0.6	(1875)	11 - 115	a.g. 39, 140, 1929
110.1931		50.4	+ 29	45.	1855	12.5 - 13.5	{mid. 40 plates, Algol. Hoffmeister AN 242, 135
Rosa 349		52	46 + 26	29.3		11 - 115	
112.1931		52.2	+ 32	21		12.5 - 13.5	Algol Hoffmeister
113.1931		58.4	+ 33	12		13 - 13.5	Short "
323.1930	5	0.2	+ 30	11		14.5 - 116	Mira " AN 240, 197
324.1930		0.3	+ 34	19		13.5 - 14.5	Slow var "
325.1930		1.3	+ 32	00		12 - 116	Mira "
Rosa 155		3.2	+ 31	10	(1875)	12 - 116	A g 37, 91
326.1930		3.7	+ 34	26		12.5 - 13.5	Slow var.
117.1931		7.3	+ 29	40		13 - 116	Mira
118.1931		8.4	+ 33	37		14 - 15	Slow var = DX Aur
30.1907		13	32 + 33	20.1		12 - 114.5	Sillernagel, AN 174, 361
111.1931	4	52.0	35	02		12 - 112.5	Slow var

Rediscovered

MF 10954

MF 16457

MF 13650

MF 11081

MF 10954

MF 11081

MF 13824_{pt}

MF 11081

Contact MF 11240

br

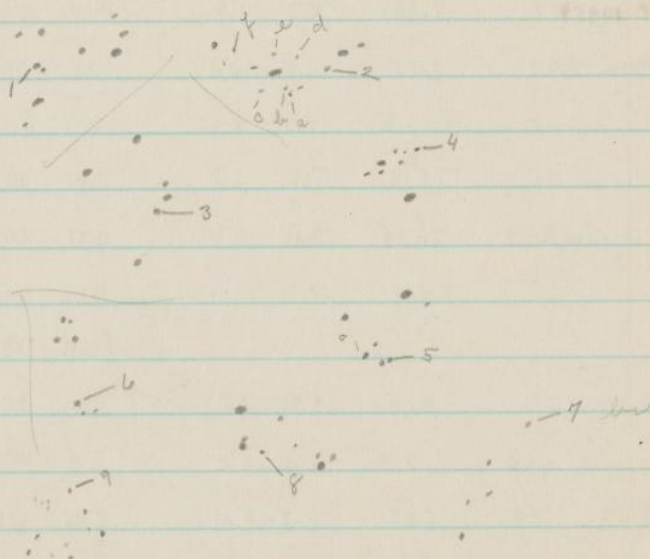
ft

with MF 11081

325.1930

(2), 110.1930, 117.1931

1.	11081, 11085	11240	11232
2.	" "	" "	" "
3	" 11232	" 11085	
4	" "	" "	" "
5	11240 11229	11085 11081	
6	" "	11081 13303	
7	" "	" 11085	
8	11081 11142	11240 11229	
9	11240 11278	11081 11085	



one asteroid

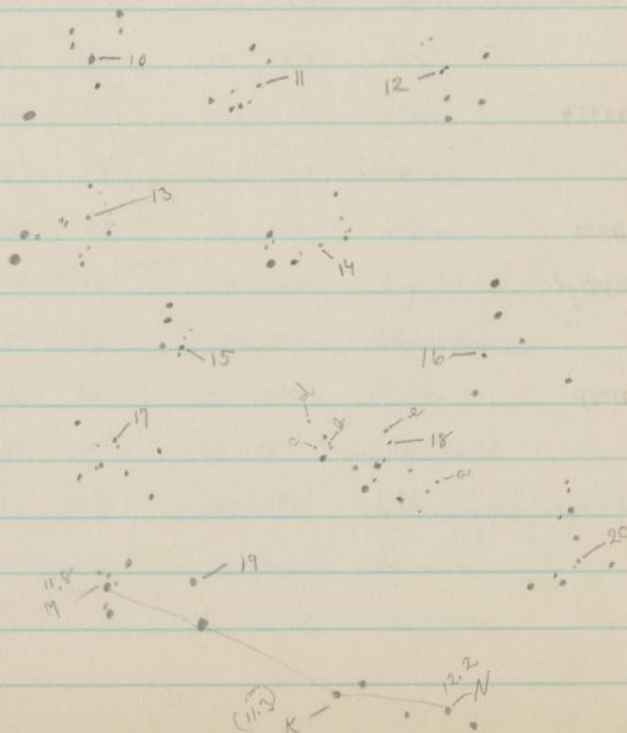
Contact MF 11231

with MF 10954

6, 325

TT Tau, 323, 3, 117.1931

10	10954 10891	11231 11232	
11	11231 11232	10954 10962	
12	" "	" "	
13	10954 10962	11231 11232	
14	" 10939	" 10962	
15	11231 11232	10954 10959	
16	" "	" 10962	
17	" 11229	" 10962	
18	10954 10962	11231 11229	
19	11231 "	10954 16504	
20	" "	" 16302	



three asteroids

5 somewhat doubtful

9 Coluster?

13 small range

19 very bright

20 small range

19	11.6	12.1	Eclif. Per ^d 1.21590
----	------	------	---------------------------------

Contact MF11231

with MF 13824

117, Ross 155

21 13824 13823 11231 11232

-21

Contact MF 11240

with MF 16304

11, 325, 13

7, TT, (2), 9, (117), 4,

22 16304 16302 11240 11262

23 11240 11232 16304 16302

24 " " " 16306

25 " " " 16302

26 " " " "

27 " " " "

28 " " " "

Other doubtful suspects

Contact MF 11240

with MF 12554 (117)

23, TTaur, (2)

(rather poor images)

29 11240 11232 12554 12859

-29

Contact MF 11240

with MF 15068

1, (325)

29, (2), 12

(not very good)

30 11240 11232 15068 15039

-30

23 bright

24 " , eclip. \times

24 12.2 13.7 Eclip. Per 3.48347

25 small range

26 bright + small range

27 faint

28 bright, generally near "b", Min. too far separated to get period.

28 Eclip.

29 - minima J.D.

12544 25567.454 102.806

12859 670.260 211.

13544 881.610 358.934

29 Eclipsing med 14877 26290.544 87.937

15068 328.481 360.889

16302 689.370 28.037

16372 717.407

30 bright + nebulous

Contact MF 11240 hr ft
 with MF 16457 my car 24, 7, TTau (2)

31	11240	11231	16457	16080
32	"	"	16457	14813

Other bright suspects

Contact MF 11240

w' th MF 10939 19, 4, (325) 7, TTau, ABAUV, 17, 15, (2), (117) 12, 9, 27, (113), (323)

33	11240	11232	10939	10917
34	"	"	"	13848
?	35	"	"	13729
36	"	"	"	12465
37	10939	10917	11240	14792
38	"	10954	"	11262
39	"	"	"	11232
40	11240	11262	10939	10917
41	"	11232	"	10954
42	10939	10954	11240	10871
?	43	11240	10917	10939
?	44	"	11193	"
45	"	11081	"	"
✓ 46	"	11081	10947	"
47	10939	11081	11240	10829
?	48	11240	11232	10939

Other suspects

31 Ar

32 br, eclip?

34 small orange

37, image on 11240 seems defective; but star may be good var. see measures p. 55.

44 slight variation

45 small range

46 - all max seem queer images; it may be a var (but I don't think the evidence conclusive)

47 br + am. range

48 br " " , quite doubtful

Contact MF 11240

With MF 11137 1, 19, 11, 3, 42, 44 w y Curv, 5, 17, 9, (2), 46, Ross 155 (117)

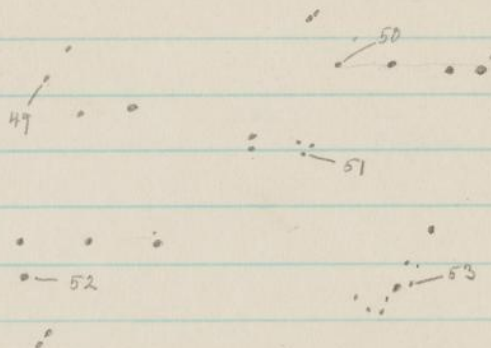
49 11137 9868 11240 11232

(?) 50 11240 11232 11137 11085

51 " " " 11143

52 11137 11143 11240 11232

53 1 " " " 12465



Other suspects.

One br. asteroid

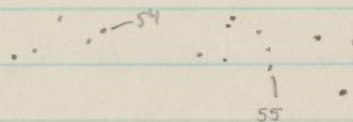
Contact MF 11240 (325)

TT Tau, 40, 6, 49, 7 (2), (117), 33, w y,

with MF 13834

? 54 11240 11232 13834 13544

55 13834 13834 11240 11232



One very br. suspect

Contact MF 13825 52

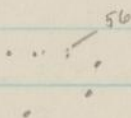
28, R w Curv

with MF 13650

Contact MF 16302 (117), 29, 52, Ross 155 (325), 11

with MF 11303 42, 28

✓ ? 56 16302 11278 11303 16372?



Three objects, prob. asteroids

Contact MF 13825 Ross 155

28

Not very good comparison

with MF 14079

No para

One asteroid

49 hr,

50 hr + small range

52 hr

11.5' 12.5' Cluster Per[?] = 0.45608'

54 Near corner of plate 9 in poor focus. Rather doubtful variation

No other min. on ME, MC22404??

		30	25	24 ^{rev.}	2 ^{see meas.}	18	22
MF 8972 24141.							
9868	420	12.3	13.8	a2	c1 ^{b4}	c3	b3
10657	744						
10829	769	12.2	14.0	a4	c4	c4	b1
10844	772	12.2	13.9	a2	c3	c	b2
<i>pugged</i> 10871	787	12.3	14.0	a2	ns & d	do!	c:
10917	797	12.2	13.8	c0	c1	a1	b2
10939	800	12.1	13.6	a4	c1	a3	b4
⁵⁴ 10952	802	12.1	13.6	a4	c4	a3	b3
10962	804	12.2	13.8	c0	e2	a3	b2
10986	821	12.1	13.7	b1	c2	b2:	b4
11081	25157	12.2	13.9	b1	b1	do	off
11085	158	12.2	13.9	b1	a4	c3	off
11137	183	12.3	13.9	b1	c2	ns & d	b3
11143	188	12.2	13.8	b0	c0	ns & d	b3
11174	202	12.2	13.8	a4	c1	d	b3
11180	203	12.3	13.9	a4	c3:	ns & c	b2
11207	211	11.9	14.0	a3	c2	d3	b3
11228	230.316	11.9	13.8	b1	c4	c1	b1
11229	,348	11.9	13.8	a4	e3	c1	a4
11230	,381	12.2	13.8	a4	d	c2	b3
11231	,413	12.1	13.7	a4	c2 d	c2	b2
11232	,445	11.9	13.7	b0	e1	c2	a4
11240	234,	12.1	<u>13.9</u>	a4	e	c3	b4
11262	245	12.1	13.9	a4	c4:	a3	c
11278	264	12.2	13.8	a4	c2:	a4	b3
11303	269	12.2	13.9	a4	b3	a4	b2
12465	25542	12.3	14.0	a3	b4	c1:	b3
12489	559	12.2	13.8	a4	b4	a1	b4
12554	567	12.2	14.0	a3	c1	a3	b1

14	4	117	9	9	20	20	2	14	20	3	21
15.7	14.9	15.2	14.8	15.0	14.2	14.1	15.3	15.6	15.65	13.7	14.9
15.1	15.7	ns < 16.0	15.3	15.4	13.9	14.7	15.7	15.2	15.2	14.0	ns < 16.2
15.8	15.9	16.3	15.0	14.9	14.0	13.9	15.6	15.8	15.8	14.0	16.3
15.8	15.4	ns < 15.6	15.3	15.4	13.9	13.8	—	—	—	14.2	—
15.3	15.7	16.2	15.1	15.1	14.1	14.4	15.7-6	15.2	15.25	13.9	ns < 16.3
15.0	14.5	16.4	14.8	14.7	14.2	14.2	15.5	14.9	14.95	14.0	ns < 16.3
15.2	14.7	16.4	14.8	14.8	14.9	14.8	15.7	15.3	15.25	14.2	ns < 16.4
15.6	15.9	16.4	15.1	15.2	14.0	14.1	15.8	15.5	15.55	13.3	ns < 16.4
15.4	15.9	16.4	15.0	15.0	13.9	14.0	15.5	15.2	15.3	14.3	ns < 16.3
15.3	13.8	13.8	14.7	14.8	14.5	14.6	14.7	15.2	15.3	13.3	ns < 16.3
14.9	15.2	15.2	15.2	15.0	14.7	14.6	14.5	14.9	14.9	14.0	ns < 16.0
15.6	15.5	15.5	14.8	14.8	14.3	14.0	15.5	15.6	15.6	13.7	≤ 16.5
15.0	15.6	15.4	14.7	15.0	14.4	14.4	15.5	15.2	15.1	14.0	16.4
15.0	15.7	15.7	14.8	14.8	14.9	14.6	15.6	15.2	15.2	13.9	≤ 16.5
15.3	15.7	15.4	15.1	14.8	14.5	14.5	15.8	15.3	15.3	13.3	ns < 15.9
15.8	14.9	15.0	15.1	15.0	14.0	14.1	15.7	15.8	15.8	13.1	ns < 16.3
15.0	14.7	14.6	14.7	14.8	14.5	14.5	15.7	15.0	15.0	14.1	ns < 16.0
15.2	14.6	14.6	14.6	14.7	14.4	14.2	16.2	15.2	15.2	13.6	ns < 16.3
15.8	14.6	14.6	14.6	15.0	14.6	14.4	15.7	15.6	15.7	13.3	ns < 16.0
15.6	14.6	14.6	14.7	14.7	14.5	14.2	15.7	15.6	15.6	13.5	ns
15.3	14.6	14.5	14.8	14.6	14.5	14.3	16.2	15.3	15.3	13.7	ns
14.8	15.0	15.0	14.3	14.3	14.3	14.3	15.9	14.8	14.8	14.0	≤ 16.5
15.2	15.5	15.6	15.0	15.0	14.8	14.6	15.6	15.3	15.2	14.2	—
15.5	15.4	15.2	14.4	14.3	14.4	14.3	15.5	15.5	15.5	13.7	?
15.5	15.5	15.5	14.9	14.5	14.1	14.2	15.3	15.6	15.55	13.7	16.1
14.8	14.3	13.9	15.1	14.9	14.8	14.8	15.2	14.8	14.8	14.1	—
14.8	15.6	13.5	14.5	14.4	14.1	14.3	14.6	14.9	14.85	13.9	16.0
15.4	14.9	13.6	14.6	14.5	14.0	14.4	15.4	15.4	15.4	14.0	15.7

		30	25	24	2	18	22
MF12671	25598	12.1	14.3	a4	e2	a3	b4
12737	621	12.34	13.6	a3	d2:	d: ^s	b2
12859	670	12.4	13.9	a3	b3	ns-b	b2
13544	881	12.3	13.6	a4	≤c	?	b4
560	886	Off center					
650	895	12.3	14.0	b0	c3	b2	b2
670	910	Off center					
697	914	12.3	13.8	b0	c1	b2	b2
729	917	12.2	13.8	a4	b4	b4	b3
821	952, 342	12.3	13.9	a4	a-b	c4: mis	a4
2	.374	12.4	13.8	a3	b3	d: mis	a4
3	.406						
4	.438	12.4	13.8	b1	a2	d	a4
5	.470	12.3	13.9	a4	a4	c2	b2
6	.503	12.1	13.8	a3	b1	c4:	b2
831	953	12.2	13.9	a4	b4	c3:	a4
834	955	12.2	13.9	a4	a1	c3:	a3
845	966	12.2	13.8	a4	b4	d:	b2
848	967	12.3	13.9	a2	b4	d:	b1:
853	970	12.2	13.8	a3	c:	—	b2:
864	976	12.2	13.9	b0	c:	d:	b:
867	977	12.3	13.9	b1	c4	d	b3
876	981	11.9	13.6	b2	c:	—	a3
962	26035	Lat					
14075	065	Lat					
079	067	12.3	14.0	b:	c2	d:?	b1
772	26214	12.2	13.8:	a3	c2:	a-d:	b3
813	217	12.3	13.9	b1	b2:	—	b1:
821	218	12.2	13.8	a4	b2	?	a3

14	4	117	9	9	20	20	2	14	3	21	
15.8	14.7	14.0	14.8	14.7	14.7	14.7	14.1	15.8	15.8	13.7	15.3
15.5	15.4	15.1	15.2	15.4	14.9	15.1	15.9?	15.7?	15.6	14.3	15.1
15.6	15.7	ns < 16.0	14.4	14.8	14.3	14.4	15.3	15.5	15.55	14.2	≤ 15.6?
15.8	ns < 15.4	13.9	14.9	14.8	14.5	14.4	—	—	14.1	—	—
15.1	15.7	14.6	14.8	14.8	14.6	14.7	15.6	15.2	15.15	13.6	15.8
16.1	15.7	15.2	15.0	14.8	14.3	14.8	15.3	16.1	16.1	14.0	15.4
15.1	14.7	ns < 16.0 ^{15.8}	14.5	14.4	14.5	14.7	15.4	15.0	15.05	14.2	?
15.8	15.8	≤ 16.0	15.1	14.6	14.7	14.6	14.3	15.8	15.8	14.2	15.1
15.4	15.7	15.9	14.8	14.7	14.6	14.3	14.9	15.4	15.4	14.2	14.9
15.1	16.0	16.2	14.6	14.6	14.8	14.7	14.8	15.2	15.15	14.2	15.4
15.1	15.8	16.2	14.6	14.7	14.8	14.8	14.8	15.4	15.4	14.0	14.8
15.1	15.6	ns < 16.0	14.6	14.7	14.6	14.7	14.7	15.0	15.05	14.0	15.3
15.6	16	"	15.4	15.0	14.6	14.8	15.3	15.4	15.5	14.2	15.3
14.9	15.5	≤ 16.0	14.7	14.7	14.6	14.7	15.0	15.0	14.95	14.0	15.1
14.9	15.7	≤ 16.0	14.5	14.7	14.7	14.3	15.4	14.9	14.9	14.2	15.5
15.2	15.7	16.1	14.7	14.5	14.6	14.5	15.3	15.3	15.25	13.9	15.6
15.5?	ns < 15.5	ns < 15.5	14.6	14.8	14.8	14.6	15.4?	15.0	?	14.3	—
15.4	14.6	≤ 15.8	14.5	14.3	15.1	14.9	15.3	15.1	15.1	13.6	15.9
15.4	14.6	ns < 16.0	14.0	13.9	14.7	14.6	15.6	15.3	15.35	14.3	15.8
15.4	— def	ns < 15.8	14.8	14.8	14.6	14.6	15.3	15.4	15.4	13.3	15.6
15.7	14.7	≤ 16.1	14.6	14.8	14.6	14.7	15.6	15.5	15.6	14.0	16.1
16.0	15.1	14.6	14.7	14.6	14.6	14.7	16.1 ^{15.6}	16.1	16.05	14.3	ns < 16.0
—	≤ 15.3	14.8	14.8	14.8	14.6	14.8	15.5	ns < 15.3	13.7	15.6	15.6
15.7??	≤ 15.2	14.8	14.6	14.4	13.9	14.2	15.2	15.6	15.6	13.6	15.8

		30	25	27	2	18	22
	MF19827 26221	12.3	13.9	a3	c	—	b3:
	14830 223	12.3	13.9	a4	c:	—	b1?
	853 237	Plate discarded					
	867 239	12.3	13.9	a4	?	nscc	b2
	877 240	12.0:	13.9	b	d	—	b3
	891 242	12.2	13.8	a4	d:	d:	c1:
	909 244	12.1	13.9	a4	—	—	a4
	919 245	12.0	13.8	a2	b:?	—	b2:
	924 249	11.9	14.0	a4	d:	—	a4
	948 264	12.1	13.9	<u>c3</u>	nscc	nscc	a4:
	961 265	12.3	13.9	b1	nscc	—	a4
	975 270	Plate taken at wrong center					
Poor plate	15039 309	12.3	14.0 ^{from}	a4	—	—	b:
	068 328	12.4	13.9	a3	nscc	—	b4
Poor plate	106 355	12.4:	—	a3:	—	—	c b
" "	107 359	?	—	a3	—	—	—
Poor plate	209 382	12.5	—	a3:	—	—	—
	252 394	12.4	13.8	a4	—	—	b2
	273 408	12.6:	13.6	a4	—	—	a4:
	292 412	Plate taken at wrong center					
	15916 570	12.5	13.5	a4	d/4 ns	a2??	b4
	16080 606	12.5	14.0	a4	b2	d	b2
	180 658	12.3	14.0	a3	e2:	nscc	b3
	256 683.423	12.6	14.0	a3	c0	d1	b1
	258 .491	12.4	13.8	a4	c0	d1	b0
	300 689.305	12.5	13.9	a4	b4	d0	a4
	302 .370	12.5	13.9	b1	b4	c3	b0
	304 .435	12.3	<u>14.1</u>	c4	b3	b2:	a4
	306 .490	12.5	13.9	d1	c-b4	c2	b1
	315 691	12.2	13.8	a4	c2	c2	c1

14	4	117	9	20	2	14	3	21
—	—	14.7:	14.2:	13.9	14.7 14.8 < 14.9	—	13.9	—
15.7:	15.1:	15.7:	14.7:	14.8	15.0 15.4:	15.6:	15.6:	14.1
15.4	ns < 15.6	14.9:	14.6	14.6	14.6 14.6 15.3:	15.2:	15.3	14.0
15.9:	15.3:	15.7:	14.7	14.6	14.6 ^{2?} 14.6 15.6?	16.0:	15.95:	13.9
15.0	15.4	15.8	14.9:	14.9:	14.8 14.9:	15.6	15.0	15.0
—	15:	ns < 15.2	14.7:	14.9	14.9:	14.9:	15.9:	—
—	≤ 15	"	14.0	14.0:	13.9:	14.0:	14.1:	—
15.1	15.7:	ns < 15.6	13.9	14.6	13.9	14.0:	15.6:	—
15.0	ns < 15.5	ns	15.0:	15.0	15.0	15.0	ns < 15.4	—
15.5:	15.7	ns	14.6:	14.5:	14.0 ^{14.0} 14.8	15.8	15.5:	14.2
—	—	—	—	14.0:	14.3	—	—	—
14.7	ns < 15.3	ns	14.8:	14.8	13.9	14.0:	ns < 15.4	—
—	—	—	—	—	—	—	—	—
—	ns < 14.9	ns	14.2??	14.5??	—	—	—	—
—	15.0:	—	14.2?	14.7:	14.0:	14.4:	ns < 14.9	—
15.0:	≤ 16.0	16.0:	14.6	14.6	13.9	13.9	15.3	—
15.8	16.0	ns < 16.0	14.6	14.8	14.7	14.8	16.0:	—
15.4	16.0	ns < 16.0	14.2	14.1	14.2	14.6	15.4	—
15.2	15.4	16.2	14.2	14.1	14.4	14.3:	15.5	—
15.5	15.7	ns < 15.7	15.0	15.0	14.0	14.5:	15.3	—
15.3	15.6	16.2	14.8	15.2	14.7	14.5:	15.4	—
15.0	15.7	16.3	14.8	15.0	14.2	14.3	15.2	—
15.3	15.8	16.2	14.7	14.7:	14.7	14.8	15.2	—
15.0	16.0	16.3	14.6	14.8	14.4	14.2	15.6	—
—	—	—	—	—	—	—	—	—
—	15.0:	—	14.2?	14.7:	14.0:	14.4:	ns < 14.9	—
15.0:	≤ 16.0	16.0:	14.6	14.6	13.9	13.9	15.3	—
15.8	16.0	ns < 16.0	14.6	14.8	14.7	14.8	16.0:	—
15.4	16.0	ns < 16.0	14.2	14.1	14.2	14.6	15.4	—
15.2	15.4	16.2	14.2	14.1	14.4	14.3:	15.5	—
15.5	15.7	ns < 15.7	15.0	15.0	14.0	14.5:	15.3	—
15.3	15.6	16.2	14.8	15.2	14.7	14.5:	15.4	—
15.0	15.7	16.3	14.8	15.0	14.2	14.3	15.2	—
15.3	15.8	16.2	14.7	14.7:	14.7	14.8	15.2	—
15.0	16.0	16.3	14.6	14.8	14.4	14.2	15.6	—

		30	25	24	2	18	22
MF16342	26713	12.5	13.9	a4	b4	c2	b4
358	715	12.4	13.8	a4	b4	c3	b2
372	717	12.5	13.9	d2	b2	c-d??	b3
416	735	12. ⁴ ₂	13.6	a4	b4	c1	b2
427	739	12.6	13.9	a4	c:	b-c:?	b2:
457	766	12.4 ⁵	13.9	<u>c4</u>	c-d:	b:	b4
504	771	12.5	14.0	a3	<u>e3</u>	b1	b2
17268	26928	12.5	13.9	a4	b3:	?	b4

14	4	117	9	20	2	14	3	21
15.1: ^{dy}	15.8	16.0	14.7 14.8	14.5 14.6	15.3	14.9: 14.6 14.9	14.2	≤ 16.5
14.9	15.9	15.6	14.8 14.8	14.6 14.5	15.3	15.0 15.5	13.7	ns:
15.4	16.0	16.0:	14.7 14.7	14.0 14.1	15.1	15.6 15.7: 15.6:	14.2	ns:
15.1:	16.0	14.5	14.5: 14.5	14.4 14.4:	15.3	15.2 15.15	14.0	ns < 16.0
15.4	15.6:	14.5	14.4: 14.4:	14.5 14.2:	15.3:	15.2: 15.3	14.0:	—
14.7	15.5:	13.9	14.6 14.8	14.5 14.6	≤ 15.7	14.7 14.7	13.9	ns < 15.5
15.5	15.8	13.9	14.3 14.5	14.3 14.1	15.7	15.5 15.6	14.3	ns < 16.0
—	—	—	15.0: 14.0?	14.5: 15.4:		15.4: 15.3	14.2	?

		8	12	13	29	7 <i>Hydus</i>	19
9868	24420.	14.4	14.8	15.3	13.5	64	K3
10829	24769	14.8	14.4	14.9	13.5	c2	K4
844	772	14.8	14.2	15.0	13.3	c1	K3
871	787	14.5	14.6	15.0 ⁴ 15.6	13.3	c	K4
917	797	14.5	14.5	14.9	13.4	c1	K3
939	800	14.8	14.7	15.0	13.3	c1	K3
954	⁸⁰² 757	14.7	14.5	15.0	13.4	c1	K4
962	804	14.7	14.7	14.9	13.3	c1	K4
986	821	14.6	14.5	15.0	13.3	c2	K3
11081	25157	14.2	14.0	15.0	13.3	62	K3
085	158	14.8	14.2	15.1	13.3	63	K2
137	183	14.8	14.2	15.3	13.3	60	K4
143	188	14.4	14.1	15.3	13.4	62	K3
174	202	14.8	14.5	15.6	13.5	c1	K4
180	203	14.8	14.6	15.6	13.3	c1	K0
207	211	14.8	14.4	15.3	13.3	c	K3
228	230. 316	14.9	14.2	15.5	13.3	62	K3
229	.348	14.8	14.0	15.4	13.3	a3	K4
230	.381	14.9	14.2	15.4	13.3	63	K4
231	.413	14.9	14.2	15.4	13.3	64	K4
232	.445	14.9	14.0	15.4	13.3	61	K4
240	234.	14.5	14.2	15.4	13.3	62	K3
262	245	14.9	14.4	15.3	13.3	c1	K4
278	264	14.9	14.4	15.4	13.4	c2	K3
303	269	14.8	14.5 ⁴	15.3	13.3	c1	K4
12465	542	14.8	14.4	15.2	13.5	64	K3
489	559	14.3	14.5	15.0	13.4	63	K3
554	567	14.1	14.4	14.8	14.0	c	K4
671	598	14.5	14.4	14.8	13.3	c1	K3
737	621	14.8	14.4	15.0	13.3	c2	K4

sig. for (117)

no. at 412

figs

38	37	46	43	35	28	6	32	31	52
13.9	14.4	15.7:	14.6 14.7	b1	a45	K4.5 K4.5:	a3	13.6	12.5
12.5	14.6-7	15.7	14.5 14.6	b3	a45	K4.5 K4	a3	13.9 g2	11.8
12.5	14.4	15.7	14.6 15.0	b2	a3 ⁹	K4.5: a	a3	g1 ⁹	13.2
12.6-7	14.8	15.7: 15.3:	14.8: 14.8	b2	a4	K4.5: a1	a2	g1 ⁹	12.5
12.5	14.6 ^m	15.7 ^m	14.3 ^m 14.6	b1	b	c2 c:	a2	g1 ⁹	12.4
12.6	14.3 ^m	15.7 ^m	14.8 14.7	b2 ^m	a4.5	a4	a1 a3	13.6	12.5
12.5	14.3	15.9 ^m	14.7 14.8	b2	a45	a1: K4.5	a2	g1 ⁹	12.2
12.5	14.7-6	15.7	14.3 14.8	b23	b3:	K4 K4	a2	13.6	12.5
12.5	14.7	15.9	14.6 14.6	b3	b2	K4 a	a3	13.6	12.5
13.6	14.5	15.2 ^m	14.8 15.1	b1	b4	b3 b'1	a3	13.6	12.4
13.6	14.7	15.2:	14.7 14.8	b2	a4	b1 a3	a1	13.6	12.3 ¹
13.7	14.1	15.9:	14.6: 14.7	b2-3	a45	K4.5 K4.5	a3	13.6	11.8 ^m
13.8	14.7	15.9	14.2 14.1:	b1	a4	K4.5 a3	a1 a3	13.4-5	11.8 ^m
13.7:	14.6	15.5	14.5: 14.7	b2	a45	K4 K4.5	b:	13.4	12.5
13.7	14.5	15.7	14.1 14.7:	b2	a4.5	a4: a:	a2	13.4	12.4
12.8 ^v	14.7	15.7	14.6 14.5	b1-0	a45	K4.5 K4.5	a3	13.8	12.3
13.7	14.7	15.7	14.8 14.7	b2	b1	K4.5 a	c1	13.7	12.5
13.5:	14.6	15.7	14.8 14.6	b2-1	b	b1 ⁹ b'1 ⁹	a1	g1 ⁹	12.4
13.6	14.6	15.7	14.6 14.6	b2-1	b-1	b4 b'1 ⁹	b:	13.8:	12.5
13.6	14.6	15.7	14.6 14.7	b3	a3:	d d	a3	13.7 ^m	12.5
13.3 ^v	14.7:	15.7	14.7 14.6	b1 ^m	b	b1 a2	a4	g1	12.5 ^m
13.6	15.4: ^m	14.3 ^m	14.6 ^m 14.8	b1 ^m	a4.5	a4	a1 a4	13.7 ^m	12.5 ^m
13.8	14.6	15.7	14.6 14.6	b2	b1	K4: K3:	a2	13.7	12.5
13.6	14.6	15.7	14.5: 14.7	b1	a4	K4 K4	a3	13.9 g1	11.9
13.9	14.6	15.7	14.4: 14.4	b1	a45	c3 c3	a2	g1 ⁹	11.3
13.9	14.3:	15.6:	14.3 14.3	b3	a4	K3 a	c3	def	12.1
13.8	14.6	15.8	14.6 14.7	b2	f3	a K4	a2	13.7	12.4
13.9	14.6	15.7	14.5 14.7	b23	a3	K4.5 K4	a3	13.7 ⁹	12.7
13.8	14.5	15.9	14.8 14.8	b3	a4.5	a4	a1 a3	g1	12.5
13.9	14.6	15.7	14.3 14.7	b2-3	a4	a4: a1	a2	13.6	12.5

		8	12	13	29	7	19
12859	25670	14.7	14.5	14.8	14.0	C1	K3
13544	881	14.5:	14.5:	15.0:	14.1:	C1	K1:
560	886						
650	895	14.5	14.8	14.9	13.4	L3	K1
670	910						
697	914	14.5:	15.0	14.9	13.3	C1	K4
729	917	14.7	14.8	14.7	13.3	a3:	K4
821	952.342	15.0	14.5	14.9	13.3	a4	K4
822	.374	15.1	14.5	15.7:	13.3	a4	K4
824	.438	15.0	14.5	15.5:	13.3	^{L4} C6:	K4
825	.470	14.8	14.6	15.2	13.3	a4:	K4
826	.503	15.1	14.8	15.3	13.3	L4	K4
831	953	14.8	14.9	15.4:	13.3	L3	K4
834	955	15.1	14.5	15.0:	13.3	L4	M2
845	966	14.9	14.5	15.1	13.3	L2	M3
848	967	15.1	14.5	15.5:	13.3	a1	K3
853	.970	14.6?	14.5	-	13.3	c0	K4
864	976	14.8:	14.5	15.6:	13.3	a1	K4
867	977	14.5	14.4	15.7	13.3	a1	M2
876	981	14.7	14.2	15.6:	13.3	a3:	K4
14079	26067	14.5	14.0	15.6:	13.3	L2	K4.1
792	214	14.3:	14.7	14.8	13.3	c0	K3
813	217	14.2	14.5	15.2	13.4	C1	K4
821	218	14.7	14.1	14.8	13.3	C1	K3
827	221	14.1	14.5	14.8:	13.3	C2	K4
830	223	14.3	14.0	15.3	13.3	C2	K3
867	223						
867	239	14.0	14.0	14.9	13.3	C2	K3
877	240	14.0	14.0	14.8	13.9	L3	K4
891	242	14.4:	13.8	14.8:	13.4:	L3:	K3
909	244	14.2:	14.2	14.8	13.3	L2:	K4

38	37	46	43	35	28	6	32	31	52
13.8	14.6	15.9	14.4: 14.6	b1	<u>c3</u>	b2 b3	a2	13.5:	11.5
13.6:	14.7:	15.7:	15.1: ^{from} plate	b23	a3	c2 c2	a3	13.7	12.5
13.9	14.3	15.7	14.9 14.6	b2	d1	K4.5 K4.5	a2	^{13.9} g1	11.6
13.8	14.7	15.7:	14.6 14.7	b1-2	a4.5	K4.5 a	a2	13.6	12.5
13.9	14.7:	15.7:	15.1: ^{from} images	a4 ^m	a4	b1 a2	a2	13.6	11.7:
13.8	14.8:	15.6	14.9: 14.8	a4	a4	a4.5 K4.5	a2	13.6	12.5
13.8:	14.7:	15.7	14.6 14.6	b	a4.5	K3 K4.5	a2	13.6	12.5
13.8	14.7:	15.7	14.8 14.7	b2	a4.5	K4.5 K4	a3	13.7	12.5
-	-	-	-	-	a4.5	a4: a2	a3	13.6	12.5
13.9	14.5 ^{very old}	15.9	14.7 14.7	b	a4	b: a2	a3	13.6	12.1
13.9	14.7:	15.7	14.9 15.0:	b2:	b'	b: K4	a4	13.4	12.7
13.8	14.6	15.6-5	14.6 14.6	b1	a4	b3 b1:	a3	13.6	12.5
13.9	14.6	15.8	14.6 14.8	b0-1	a3	b: K4	a3	13.7	12.5
13.9	14.5	15.7	14.6 14.6	a4	a3	b1 a?	a3	13.5	12.5
13.9	14.7:	?	^{very poor} 14.7: ^{prob. ff}	b1	^{much brighter & max defn. of b1} b1:	a4	<u>c1</u>	g1	11.8:
14.1	^{size no density} 14.7:	15.8	14.6 14.7	b	<u>a4</u>	b4 c1	a4	g1	12.5
13.9	14.6	15.9	14.5 14.7	a4	b	b2: b2?	a4	13.6	12.5
13.9	14.7	15.7	14.6 14.7	a4	c1	b3: ?	a1	^{from plate} 13.3:	12.3:
13.8	14.6	15.7	14.7 14.8	b1	^(exp) d3:	b2 b1	a2	13.2	12.5
14.1	<u>15.0</u>	15.6:	14.8 14.8	b2	a4.5	a4.5? K4.5	a2	13.2	12.5
14.0	14.6:	15.6	14.8 14.8	b1	a4	a4.5 a2	<u>c2</u>	13.6	12.3
14.0	15.0:	^{dist no} 15.5-6	14.8 14.8:	a4	a4	a4 K4.5	a2	13.0	12.5
13.8	-	-	def 14.8:	b	<u>d4</u>	a4 K4	a4	13.3	12.2
13.9	<u>15.0:</u>	15.7	15.4: 14.8	b1	a4.5	a3 b?	a1 a3	13.2	12.5
13.9	14.6:	15.5:	14.9:	a4:	b	b: K4	a2	13.6	12.4
13.8	14.6:	15.7	14.8 14.8	b1	a3	a4 K4	a2	13.7	12.5
13.8	14.5	15.7	14.8 14.9	b1	b	-	a2	13.6	11.6
14.1	14.6	-	14.6: 14.8	a4	b1	a4 K4	a2	g1	12.2

		8	12	13	29	7	19
14919	26245	14.6:	14.2	14.8	13.3	c1	K4
924	249	13.9	13.8	15.3	13.4	b1	K3
948	264	14.0	14.1	15.2:	13.4	b1	K4
961	265	14.7??	14.2	15.0:	13.3	b2	M2
15039	309	14.7:	-	-	13.3	c1:	K3
068	328	14.7:	14.7	15.0:	14.2	b4	K3
106	355	-	-	-	-	-	K4
107	359	-	-	-	-	-	K4
209	382	-	-	-	13.4	-	M
252	394	14.6:	14.8	14.8:	13.3	c0	K4
273	408	-	-	-	13.3:	-	K2
15916	570	14.5	14.8	15.2	13.5 13.3	b2:	K4
16080	606	15.1	14.1	15.0	13.4	c:	K4
180	658	14.3:	14.4:	14.8	13.3	c2	K4
256	683.423	14.5	14.2	14.8	13.3	c2	K4
258	491	14.3	14.2	14.9	13.3	c1	K4
300	689.305	14.4	14.2	14.8	13.5	a4	K3
302	370	14.4	14.2	15.1	14.1	c1:	K4
304	435	14.2	14.2	14.9	13.3	c1	K4
306	490	14.4	14.2	14.9	13.3	c2	K4
315	691.	14.4	14.1	14.9	13.3	c1	K4
342	713	14.7:	14.4	15.2	13.3	c1	K3
358	715	14.5	14.4	14.8	13.2	c1	M3
372	717	14.7:	14.5	14.8	14.0	c1	K3
416	735	14.7:	14.5	14.9	13.2	c1	K3
427	739	14.5	14.8	14.9:	13.3	c1	K3
457	766	14.1:	15.0	15.0:	13.3	c0	K3
504	771	13.9	15.0	14.8	13.3	b2	M4
17268	26928	14.4:	14.7:	15.0:	13.3	a4	K3

38	37	46	43	35	28	6	32	31	52
14.0	—	—	—	b3;	a3-4	K4.5- K4.5-	a3.	13.7 13.7	12.5
13.9	14.51	15.6	^a b3: 14.7	a4	b2	c1	c a3	g1	12.1
13.8	14.6	—	15.3; 15.1	a4!	b	a1	a2 a4	13.6	12.2
13.9	14.8	15.6;	15.2 15.0!	b1	a4.5	a1	a3 a3	13.6	12.1
14.0	—	—	—	b11	a4	K2	K3 a3	13.1	12.8
14.0	—	15.9	14.1;	b2;	b3;	K4	K4 a1	13.2	12.1
13.81	—	—	—	—	b1	K3	K4 a3	13.7!	12.1
—	—	—	—	—	a3	—	— a3	—	12.5
13.6	—	—	—	—	a4	b1?	b1' a3	13.6	12.7
13.8	—	—	17.2; 14.6;	b2	a4	a1	a2 a2	13.7	12.5
13.9	—	—	—	—	b4	a:	— a2	13.6	12.4;
13.8	14.81	—	14.7;	b2	a4.5	K4.5	K4 a2	13.7	12.3
13.8	14.5	15.9	14.6	b1	a4	a	K4.5 a1	13.9 g2 ^m 13.0	11.8
14.1	14.5	15.6;	14.7	b3	a3	a1	a1 a2	g3 14.0	11.9!
distinct faint comp! 14.0	14.6	16.6;	14.6	b1	a4	a	a a3	g3 13.9	12.4
13.9	14.6	15.7	14.6	b2	a4.5	b's	c1 a2	g2 ⁹ 12.9	12.7
13.9	14.6	≤ 15.6	15.1 15.1	b2	a4	b1	b's a3	g1	12.5
—	—	—	—	—	c2-3	b'2	b'2 a3	g1	12.5
13.9	14.6	15.7	14.5 ^b 14.7	b1	f2	K4	K4 a3	g1	12.5
14.1	14.6	16.0;	14.7	b2	b4	K4	K3 a4	g1	12.5
14.1	14.6	16.0	14.6	b1	a4.5	K4.5	K4 a4	13.7	12.2
13.9	14.5	15.7	14.8	b2	a4	a1	K4.5 a3	13.7	12.4
13.9	14.5	15.8	14.7	b2	a3	a	a a3	13.7	12.5
14.2	14.6	15.7	14.6	b2	b1	a1	a2 a3	g1 ⁹ 14.7	11.5
14.1	14.5	15.6	14.3	b2	b	K4.5	a a3	g1 ⁹ 14.1 ^m	12.4
14.1	14.41	—	14.7	b1	c2	K4.5	a a4	g2 ⁹ 14.1 ^m	11.7!
14.1	14.4	—	14.9;	b3-4	a4.5	K4.5	a c2	b1 ⁹ 14.1	12.1
14.2	14.5 ^m	15.8	14.6	b2	a4.5	K4	K4.5 a4	g1 ⁹ 13.9	12.1
13.8	14.6	—	14.6;	b11	a4.5	a:	K4 a3	g1 ⁹ 13.9	12.1

Comparison Stars

Seq 19KS $5^h 12.4 + 27^\circ 58'$

MC 2331

1922

1	8.51	8.61
2	9.51	9.69
3	11.19	11.43
4	11.77	12.01
5	12.44	12.68
6	12.82	13.07
7	12.87	13.12
8	13.33	(13.59)
9	13.47	13.73
10	13.89	(14.14)
11	13.97	14.22
12	14.38	14.63
13	14.63	(14.88)
14	14.90	15.14
15	15.55	15.77 poor

Seq. SU Aur.

MC 14340

1922

a	8.56	8.67
b	9.66	9.85
b'	9.72	9.91
c	9.93	10.14
c'	10.30	10.52
c ²	10.72	10.95
e	10.97	11.21
e'	10.99	11.23
d	11.83	12.07

Derived Magnitudes

61

								<u>adopt</u>
Var 2.	a	14.5	14.5	14.4	3	4	14.5	14.5
	b	15.3	14.6	14.9	3	6	14.9	14.9
	c		15.8		7	6	15.5	15.4
	d				3	5	15.9	15.8
	e				2	0	16.1	16.0
	f				2	5	16.5	16.4

- var? by 13.867

Var 3.	A	12.9	13.2	13.0	13.0
	B	13.3	13.4	13.4	13.4
	C	13.8	13.8	13.9	13.8
	D	(14.0)	14.1	(13.9)	—
	E	14.2	14.2	14.0	14.1

								<u>adopt</u>
Var 4.	a	13.6-7	13.5	13.5	13.0	4	13.4	13.4
	b	13.9-14.0	13.8	13.7	13.7	3	13.8	13.7
	c	14.1	14.0	14.0	14.0	5	14.0	14.0
	d	14.5	14.2	14.3	14.3	4	14.3	14.4
	e	15.2	15.0	14.8	14.7	3	14.9	14.8

Var 7.	a	13.8	13.8	13.8	13.8-9	13.8	13.8	13.8
	b	14.0	14.0	13.9	13.9-0	13.9	14.1	14.0
	c	14.3	14.2	14.1	14.2	14.3	14.3	14.2
	d	14.6	14.6	14.3	14.5	14.5	14.5	14.5

Var 8	a	14.3	14.3	14.1	13.9	14.2	13.9	14.1
	b	14.6	14.8	14.5	14.5	14.6	14.6	14.6
	c	14.8	14.9	14.5	14.8	14.7	14.7	(14.7)
	d	15.8	15.2	15.0		14.9	15.0	15.0

Comparison Stars

Var 12.	A	13.9-0	13.9	13.9	13.8	13.9
	B	14.2	14.4	14.3	14.3	14.3
	C	14.7	14.5	14.5	14.7	14.6

Var 14	a	14.5	14.5	14.5	14.5	14.5	14.5	adopt
	b	15.3	14.8	14.8	15.1	15.0	15.1	
	c	15.7	15.8	15.8	15.3	15.7	15.7	
	d	16.1	16.0	16.0	15.7	16.0	16.0	

Var 18	a	15.8	15.5	15.9	15.7
	b	3	1	2	16.0
?	c	3	4	4	16.1
	d	0	1-0	1	16.3
	e	16.5	16.3	16.3	16.3

Var 19	K	11.2	11.3	11.3	11.2	11.3
	M	11.6	11.7	12.1: (11.9)	11.9	11.8
	N	12.2	12.0	12.3	12.3	12.2

Var 21	a	15.0	15.1	15.0	15.0
	b	15.2	-	-	-
	c	15.7	15.5	15.6	15.6
	d	15.8	15.8	15.9	15.9
	e	16.1	16.2	16.2	16.2

Var 22	a	13.8	13.4	13.4	13.6	13.5
	b	14.1	14.1	13.9	14.0	14.1
	c	14.8	14.8	14.7	14.4	14.7

Var 24

a	11.6 ⁷	11.7	11.9	11.8	11.8
b	12.4	12.3	12.3	12.5	12.4
c	12.8	12.9	12.9	12.6	12.8
d	13.5	13.7 ^{def}	13.6	13.6	13.6
e	13.8	13.8	13.9	13.8	13.8

Var 117

a	14.1	5	14.0	4	14.1	5	14.0	3	9	14.0	a
b	14.5	5	14.3	5	14.4	5	14.4	6	5	14.4	b
c	?	2	15.0	4	15.1	4	15.0	5	4	14.9	c
d		3		4		3		2	3	15.3	d
e		4		3		1		1	2	15.6	e
f		2		2		2		3	2	15.8	f
g		3		2		3		2	3-2	16.0	g
h										16.2	h

Var 38

a	12.3	3	12.4	3	12.2	4	12.3	3	12.3	3	12.3	a
b	12.8	7	12.6	5	12.5	7	12.6	5	12.6	6	12.6	b
c	13.8	2	13.3	2	13.3	2	13.5	1	13.5	2	13.1	b2
d	13.9	3	13.6	3	13.5	3	13.6	3	13.65	3	13.5	c
e	14.0		13.9		13.9		13.9		14.0		13.7	d
b2	13.7		12.9		12.9		12.9		12.9		14.0	e

Larger interval b-b2 than b2-c

Var 37

a	14.3	14.1	10	14.0	14.1	10	14.1	14.1	10	13.9	14.0	10	14.1	10
b	15.3 ⁹	15.1	4		14.7	5		14.6	5	14.7	3		14.7	4
c		15.4	1		15.2	2		15.1	3	14.8	5		15.1	3
d		15.4	5		15.3	5		15.3	5	15.2	4?		15.3	
e		16.0			15.9			16.1		15.9			15.9	

quite far from comparison

Comparison Stars

Var 32	Star counts	area	N	$\log N$	m
	1°	a	26	1.41	12.1
	$\frac{1}{2} \times \frac{1}{2}^\circ$	b	22x2	1.64	12.9
		c	28x2	1.75	13.2
	2 counts	d	40x2	1.90	13.6

tentatively adopted

$36+33 \rightarrow 1.84 \rightarrow 13.4$
 $31+39 = 70 \rightarrow 1.85 \rightarrow 13.5$
 $39+30 \rightarrow 1.84 \rightarrow 13.4$

fly spans with MF 14830

PKS	mag		
2.9	11.4	a	4.1 \rightarrow 12.6
3.2	12.0	b	4.6 \rightarrow 13.2
4.2	12.7	c	4.7 \rightarrow 13.3
4.4	13.1	d	5.5 \rightarrow 13.7
5.5	13.7		

MF 15252

This shows

how unreliable

it can be to

transfer sequences from near edge to near center

MF 13824	2.3	11.4	a	2.8 \rightarrow 12.1
agood plate	2.6	12.0	b	3.2 \rightarrow 12.4
	3.7	12.7	c	3.6 \rightarrow 12.6
	4.1	13.1	d	4.2 \rightarrow 13.2
	4.7	13.7		

adopt

a 12.0

b 12.5

c 12.8

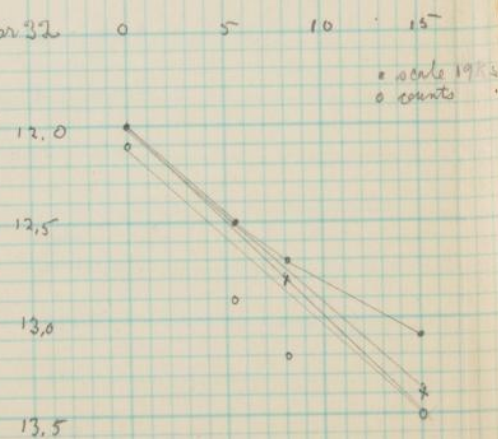
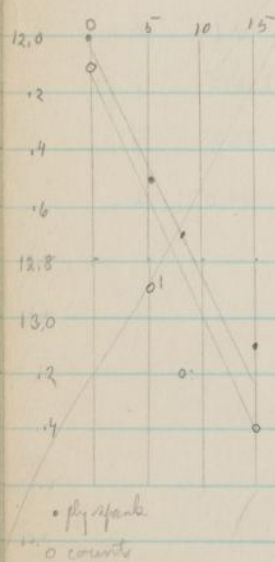
d 13.4

MF 11137

	2.1	11.4	a	2.2 \rightarrow 11.6
	2.8	12.0	b	2.8 \rightarrow 12.2
	4.1	12.7	c	3.0 \rightarrow 12.4
	4.6	13.1	d	4.0 \rightarrow 13.0
	5.1	13.7		

Means of the four "fly spans" estimates

m	
a	12.0
b	12.5
c	12.7
d	13.1



Comparison Stars

Star counts	area	N	$\log N$	m
1°	a 26	1.41	12.1	
$\frac{1}{2} \times 1^\circ$	b 22x2	1.64	12.9	
	c 28x2	1.75	13.2	
2 counts	d 40x2	1.90	13.6	

tentatively adopted

$36+33 \rightarrow 13.4$
 $31+39 = 70 \rightarrow 13.5$
 $39+30 \rightarrow 13.4$

fly-sparker with MF14830

fly-sparker	area	N	$\log N$	m
17 KS	2.9	11.4		a 4.1 \rightarrow 12.6
	3.2	12.0		b 4.6 13.2
	4.2	12.7		c 4.7 13.3
	4.4	13.1		d 4.5 13.7
	5.5	13.7		
MF 15252	4.2	11.4		a 4.3 11.6
This shows	4.5	> 0.6		b 5.0 12.3
how unreliable	5.6	> 0.7		c 5.3 12.5
it can be to	6.5	0.4		d 5.8 12.8

transfer sequences from near edge to near center

MF 13824	2.3	11.4	a 2.8 12.1
agood plate	2.6	12.0	b 3.2 12.4
	3.7	12.7	c 3.6 12.6
	4.1	13.1	d 4.2 13.2
	4.7	13.7	

adopt

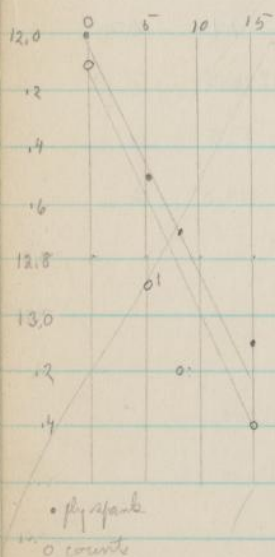
a 12.0
b 12.5
c 12.8
d 13.4

MF 11127

	2.1	11.4	a 2.3 11.6
	2.8	12.0	b 2.9 12.1
	4.1	12.7	c 3.2 12.2
	4.6	13.1	d 4.1 12.7
	5.1	13.7	

Means of the four "fly-sparks" estimates

m	scale
a 12.0	0
b 12.5	5.5
c 12.7	8.1
d 13.1	15.0



Dot.

Will you please
return this plate to me
as soon as possible -

Thanks -

Sept 17/35 -

R.D.H.

N	$m(-10^{\circ})$	$m(-15^{\circ})$	m
8	13.0	13.2	13.1
2	13.1	13.3	13.2
8	13.6	13.8	13.7
5	13.8	14.0	13.9
2	12.5	12.7	12.6

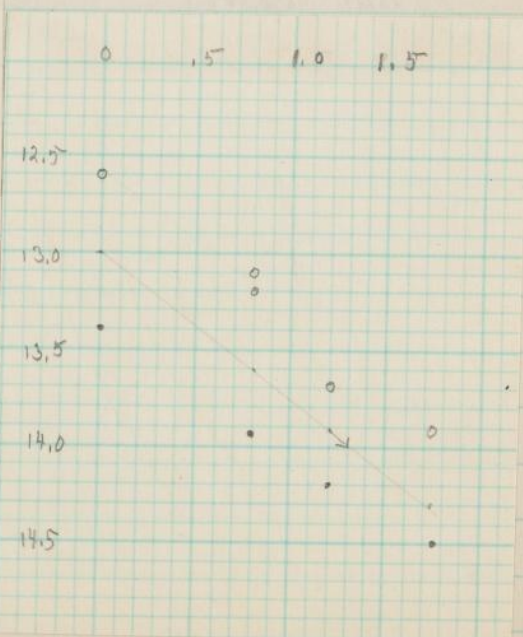
19 KS

13.2	3.9	12.7
14.0	4.1	13.1
13.9	4.6	13.7
14.1	5.5	14.2
14.4	6.3	14.6

16180

13.7	4.1	13.1
14.0	5.2	13.7
14.1	5.6	14.2
14.6	6.9	14.6

a	.8	13.95	13.1	13.5
b	.8	13.95	13.2	13.6
c	1.2	14.2	13.7	14.0
d	1.75	14.5	13.9	14.3



N	λ 179° 13' - 130°	$m(-10^\circ)$	$m(-15^\circ)$	m	
68	13.0	13.2	13.1		0
72	13.1	13.3	13.2		1
88	13.6	13.8	13.7		5
95	13.8	14.0	13.9		2
52	12.5	12.7	12.6		

λ 19 Ks		
13.2	3.9	12.7
14.0	4.1	13.1

12
11
9
7
5
4

49 do sequence in range
59
61 in range
62 in range
64 in range

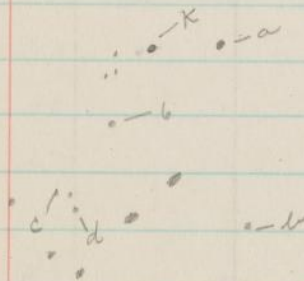
check now first

a	.8	13.95	13.1	13.5
b	.8	13.95	13.2	13.6
c	1.2	14.2	13.7	14.0
d	1.75	14.5	13.9	14.3

12786
13891
13893
17373
17395
~~17395~~
13698
13.8
14.0
14.3
14.5
Min 10739 = 14.4
13842 = 14.3
Max 11210 = 14.0
1432 = 14.1-0

Region of few stars

Var 6	Star counts	1° sq	MF 11081	N	$\Sigma - N$	$\lambda 179^{\circ} 13' - 13^{\circ}$	$m(-10^{\circ})$	$m(-15^{\circ})$	m
a	27 + 24	1.1 2.2		48	1.68	13.0	13.2	13.1	
b	30 $27 + 22$	1.23 1.23		52	1.72	13.1	13.3	13.2	
c	$35, 8, 37 + 39, 38, 38$	1.7 3.8		75	1.88	13.6	13.8	13.7	
d	$46, 44, 44 + 45, 45$	3.8 4.5		89	1.95	13.8	14.0	13.9	
K	33, 33			33	1.52	12.5	12.7	12.6	



Fly spans + 19 KS

MF 13824	K	4.2	13.2	3.9	12.7
	a	5.1	14.0	4.1	13.1
	b	5.0	13.9	4.6	13.7
	c	5.3	14.1	5.5	14.2
	d	5.9	14.4	6.3	14.6

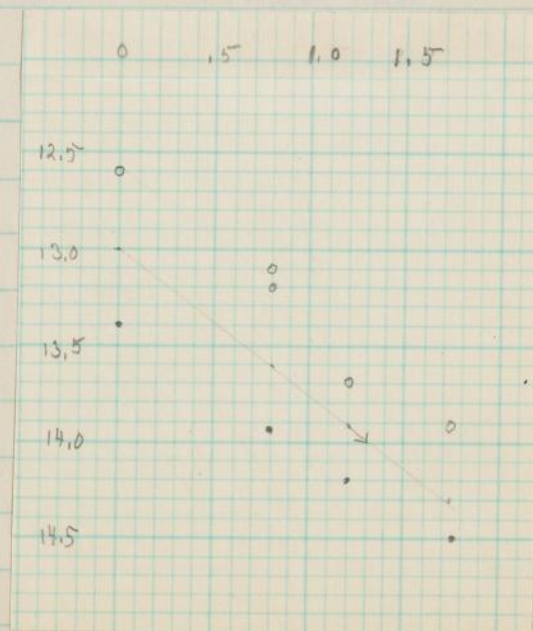
MF 11231

K	3.9	13.6	3.1	13.1
a	4.6	13.9	4.1	13.7
b	4.7	14.0	5.1	14.2
c	5.2	14.3	5.7	14.6
d	5.7	14.6		

MF 16180

K	5.2	13.7	4.1	13.1
a	6.0	14.1	5.2	13.7
b	6.1		5.6	14.2
c	7.0	14.6	6.9	14.6

mean	scale	reg	counts	tentatively
		m	m	adopt
K	.0	13.4	12.6	13.0
a	.8	13.95	13.1	13.5
b	.8	13.95	13.2	13.6
c	1.2	14.2	13.7	14.0
d	1.75	14.5	13.9	14.3



MC Plates

		46	43	19	32	(2)	27	91
MC 13767	24089.87	-	14.8		a2	d3		
20151	23710.844		14.6: ²⁴	LM	a1	e	a1	a4
21098	24089.828	15.1 ³	14.6	K2	a3	e	a0	a4
22195	825.229	15.7 ⁶	14.6	M1	a4	e	c4	b2
22300	879.653	15.7	14.5	K4	a4	e3	K4	a4
22404	941.632	15.5	14.6	K4	c1	e1	a1	b1
22671	25129.867	15.6	14.8	LM	a4	e1	a4	a4
22725	153.808	-	14.8	K4	a4	e1	a4	a4
23034	242.680	-	14.7	K4	a4	e3	K4	a2
23184	290.542	-	14.6	K4	a3	e4	a2	b2
wrong center	23712	529.835	-	-	-	-	-	-
23739	540.831	15.8	14.6	M2	a4	e	a4	b2
23805	560.792							
	586.719	15.9	14.9	K3	a4	f	a3	b3
23862	586.719	15.7	14.8	bv	a4	e-f	a4	b1
24078	655.517	15.91	14.7	K3	a4	e	a4	b1
24558	898.865	15.9	14.6	K4	a3	e	K3	b
24736	26003.561	15.61	14.7	K4?	a4	e	K4	a4
24781	035.525	15.7	-	K2	a2	e3	a2	b2
25729	650.809	-	14.3-4	K3	a4	a4	a4	b3
25868	751.538	-	-	-	a3	e4	-	-

56

10

c3??

b

a4

a4

a4

b2

d3

b

d1

Ld

d3

a4:

d3:

a4

d

b

d1

b2

d3

a4

d4

a4

d4

b3:

d4

a4

d4

a4

d4

b:

e

b2

d4

b

d4

c

c?

Comparison Stars

Var 28

"flycatcher" MF 13824	↓	1945	~	-1.0?
a 1.8 -0.3 11.0	0.0 extrapolated	1.8 11.3	2.0 11.4	
b 2.1 0 11.2	2.4 11.4	2.8 11.9	3.0 12.0	
c 2.7 6 12.0	2.7 12.0	3.1 12.1	4.3 12.7	
d 3.1 1.0 13.5	3.3 12.7	3.8 12.7	5.0 13.1	
e 3.9 1.8 13.0	4.1 13.1	4.2	omit	
f 4.2 2.1 13.4	4.3 13.7	4.3	too far off	
g 4.5 2.4 13.8	5.3 14.2	4.7		
MF 11231	5.1 14.1			
5.6 14.3	6.5 14.6			

MF 11231

MF

a 2.0 12.2 1.5 12.0	a 4.0 11.3 4.1 11.4
b 2.3 12.4 3.1 12.7	b 4.5 12.0 4.5 12.0
c 3.1 12.7 3.5 13.1	c 5.1 12.5 5.3 12.7
d 3.7 13.3 4.1 13.7	d 5.4 12.8 5.8 13.1
e 3.8 13.4 4.9 14.2	e 5.7 13.0 6.2 13.7
f 4.2 13.8	f 6.2 13.7 7.0 14.2
4.5 14.0	g 6.5 13.9
4.8 14.1	

Summary

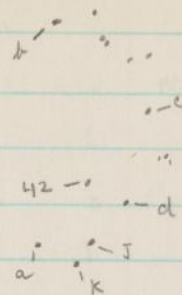
Adopt (tentatively)

a 11.0 - 11.3 11.3	11.2
b (11.2) 12.2 12.0 11.9	12.0
c 12.0 12.4 12.5 12.1	12.3
d 12.5 12.7 12.8 12.4	12.6
e 13.0 13.3 13.0	13.1
f 13.4 13.4 13.7	13.5
g 13.8 13.8 13.9	13.8

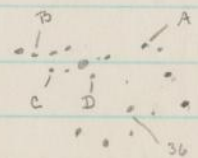
These [12. agree well generally

a 14.1 14.0 (14.4)	14.1
b 14.3 14.1 (14.5)	14.3

		11057	12524	11231	14530	adepth
Var 42.	g	11.7	11.7	11.9	11.8	11.8 ⁵ g
	K	12.1	12.3	12.4	12.6	12.3 ⁶ K
	a	12.8	12.8	12.9	13.0	12.9 ⁷ a
	b	13.4	13.2	13.4	13.3	13.3 ⁸ b
	c	13.6	13.6	13.7	13.7-8	13.7 ⁹ c
	d	13.8	13.7	13.8	13.8	13.8 ¹⁰ d



Var 36	A	13.0	12.9	12.8	13.0	12.9
	B	13.5	13.6	13.4	13.5	13.5
	C	13.8	13.9-8	13.8	13.7	13.8
	D	13.9	14.0	13.9	13.9	13.9



Var 33	a	14.0	13.8	13.9	13.9
	b	14.1 ²	14.0	14.1	14.1
	c	14.5	14.4	14.4	14.4
	d	15.6	15.6	15.5	15.6

Var 36	A	13.0	12.9	13.3
	B	13.8	13.8	
	C	13.9	13.9	
	D	14.0	14.1	

Var 27	K	14.4	14.2	14.3	14.2	14.0	14.2
	a	14.8	14.3	14.8	14.7	14.6	14.6
	b	15.7 ¹	15.4 ²	14.9 ³	14.8	15.3	15.1
	c		15.7	15.7	15.9	15.9	15.8
	d		16.0	15.9	16.0	16.1	16.0
	e		16.5	16.7	16.4	16.4	16.4

		11081	13824	11231	11240	↓
Var 34	a	13.8 ⁻¹	13.8 ⁶	13.8	13.8	13.8
	b	14.0	13.9	13.9	14.0	14.0
	c	14.2	14.2 ³	14.3	14.3	14.3
	d	14.2 ¹ + 1	14.5	14.5	14.4-5	14.5

Var 56	a	14.4	14.7	14.6	14.6	14.6
	b	15.3	15.2	15.3	15.3	15.3
	c	15.6	15.7	15.6	15.7	15.6
	d	15.9	16.2	16.3	16.3	16.2

Var 10	a	12.2	12.7	12.4	12.7 ⁶	12.5
	b	12.4	12.9	12.7	12.7 ⁺	12.7
	c	13.1	13.1	13.0	13.2	13.1
	avg for var 7	13.8 - 14.5				avg for var 7
	e	14.8	14.8	14.6	14.8	14.8
	f	15.3	15.3	15.3	15.4	15.3
	g	15.8	15.9	16.0	15.9	15.9
	h	16.3	16.3	16.4	16.3	16.3

Var 41	a	13.8	14.2	14.1	13.9	14.0
	b	14.1	14.4	14.3	14.1	14.2
	c	14.4-6	14.4	14.5	14.3	14.4
	d	15.2	15.4	15.1	15.0	15.2

		35 ^{re, p. 25}	(2)	42	36	27	41 ^{range from 14.02?}	33
MF 9868	29420	14.2	e2	k2	c1	b1	b4	b1
10829	769	14.01	e2	b4 ^{b2}	e2	a4	b4	b1
844	772	14.1	d4	k4	c1	a4	b4	a4
871	787	14.2	e2	i2	e2	b1	b4	a4
917	797	14.0	e3	b2 ^(concrete)	c1	a4	b4	c0
939	800	14.0	e2	b1 ^(a4?)	c1	e2	b3	c1
959	802	14.1	e1	a3 ^{a1}	c1	a4	b4	b1
962	804	14.2	e	a1	B1	a4	b4.5	a4
986	821	14.2	e3	b2	B1	a4	b4	def
11081	25157	14.0 ^{b2}	e2	a4	c1	a3	b4	a4
085	158	14.0 ^{b2}	e2	k3	B4	b	def	a4
137	183	14.0 ^{b2}	e1	k4	c2	a4	b4.5	b1
143	188	14.0 ^{b2}	e2	i1	c2	a4	b4	a4
174	202	14.0 ^{b2}	f2	k4	B2	a4	b3	a4
180	203	14.0 ^{b2}	e2	i3	c	a	b4.5	a4
207	211	14.0 ^{b2}	e1	b2 ^{a4}	c1	c3	b2	a3
228	230.316	14.0 ^{b2}	e2	k4	b1	a4	b3	b-1
9	.348	14.0 ^{b2}	e0	a4 ^{b2}	b2	a4	b2	a4
30	.381	14.0 ^{b2}	e1	a0	b	a3	b3	a4
1	.413	14.1	e3	k3	a4	a ^M	b4	a4
2	.445	14.0 ^{b2}	e1	a	b1	a2 ^M	b3 ^{M b2}	a4
240	234.385	14.0	a4	b4-c	a4	a4	b4 ^{M b2}	a4
262	245.388	14.2	a4	b1	c3 ^{c2}	a4	b3	a3
278	264.321	14.0 ^{b2}	e2	g4	a4	a4	b4	b
303	269.304	14.0 ^{b2}	e2	k0	a4	a4	b4	a4
12465	25542	14.0 ^{b2}	e3	b4	c3	a	b4	b
489	559	14.0 ^{b2}	e3	k4	c1	a4	b4	a4
554	567	14.0 ^{b2}	e0	b2-1	b1	b0	b3	a4
671	598	14.0 ^{b2}	e3	b2-1	b4	a3	b2	a4
737	621	14.0 ^{b2}	e1	b2	c1	a2	b4	a4

34	76	10	47	39	40	1	49
b3	b1 ^{overlap}	c4	c1	14.2	14.4	ns < 16.0 15.6	a1
13.6 a1	a4	g3	b11 ^m	13.3	14.3	15.7 16.5 off	
crack	b	g3 c2	b1	14.3	14.5	15.7 16.0 off	
b11	a-?	a	a4:	14.1	14.6	15.0; 16.0 a4	
b4	a3	e4	b4	14.2	14.3	15.0 < 16.5 b-c	
14.4 <u>c3</u> ^m	b?	d2	a2 ^M	13.3	14.7	14.7 16.4 d1	
b4	a3	b1	b3	14.0:	14.6	14.7 16.5 c1	
b	b2	d4	b1	14.1	14.6	14.9 16.5 c2	
a3	a4	c4	a4	14.1	14.4	14.7 ^{ns < 16.3} ↑	-
b3	b1	d4	b ^M	14.1	14.1	13.2	c1
13.9 a2	b ^{blur}	b4	b3	14.1	14.1	13.2	d1
13.9 a3	b	g	b1	14.1	14.4	13.3	<u>a2</u>
14.4 c2	a4	a3	a3	14.1	14.6:	off	-
14.4 c2	c1??	g4	a2	14.0	14.4	14.3	-
a4	a4:	c1	b1	14.1	14.4:	14.2	-
a4	a3	c4	a4	14.3	14.6	14.7	-
14.0 a4	b	c4	b2	14.3	14.2	16.1	d1
14.0 a4	a4	c4	b2	14.3	14.4	16.9	c3
13.9 a3	a4	c4	b4	14.3	14.6	15.8	c4
13.9 a3	a4	c4	b1	14.1	14.4	15.8	d
14.1 b1	a3	c4	b1	14.2-3	14.4	15.8	c4
14.0 a4	a4	e4 e1	b4 ^m	14.1	14.4	15.7	c1
b3	a4	c4	a3	14.2	14.1	15.7	a4
a4	a3	d4	b2	13.9:	14.6	ns < 16.2	a4
a3	c4	f4	b1	14.3	14.4	ns < 16.3	c1:
?? a0	blur	e0	a3	14.4	14.3	ns < 15.5	c1
b2	a4	g0	b3	14.3	14.6	ns < 16.0	c0
b4:	b4	c4	b1	14.4	14.7	ns < 16.2	c1
c1	b1	d4	b2	13.9	14.7	14.9	b1
b4	b-c:	d1	a1	14.3	14.3	12.6	c3

				42	36	27	41	33
MF12859	25670	14.0 ^{1/2}	e4	a1-2	b4	a1:	b4	c1
floor plate	13544	881	14.0 [?]	e1 c1	—	—	b4;	a3
650	895	14.0 ^{1/2}	f	K1 g4	c3	a	b3	a2-3
697	914	14.0 ^{1/2}	e4	b4	b4	a2	b3	b
729	917	13.8 ^{may be def?}	e3	c:	a4	a3	b1	a4.5-
821	952.342	13.8-9	e4	K3	a4	a3	b3	a4
2	.374	13.9	f1	K4	a4	a4	b3	a3
4	.438	14.0 ^{1/2}	e4	K4	a4	a4	b3	b
5	.470	14.0 ^{1/2}	e3	K4	a4	a3	b3	b1
6	.503	13.9	e4	a1-2	a4	b	b1:	a4
831	953.356	14.0 ^{1/2}	f	c1	a4	a2	b4	a4
834	955.482	13.9	14.0 e1	b1	b	a4	b3	c1
845	966.350	13.8	e1	b2-4	b	a3	b3	a4
848	967.315	13.9	e4	b1	a3	a3	?	b1
853	970.317	14.0	e3	a4-b	a4;	—	b4	a4
864	976.419	13.9	e4	a3	a3	a3	a3	b
867	977.307	13.9	e	a4	a2	a3	a3	b
876	981.314	13.9:	e3:	b1:	a2	a4	a4:	b
14 079	26067.	13.9	e	b3	a4.5	a4	b4:	b
792	219	13.9-14.0	e3	K4.5	a4.5	b1:	b3	b3
813	217	13.9	e3	a2	a2	a4	b4	b1:
821	218	13.9	e4	a4	a3	c1?	a4:	b1:
827	221	13.9	e2	a1	a3	—	b3:	off
830	223	13.9	e2	b1	a2:	—	b2:	b2:
867	239	13.9	e3	a3	a4	b1: ±	b4	b1
877	240	13.9	e1	c1. b2	b2	b	b3	b4
891	242	14.0 ^{1/2}	e3	K2. K3	a2:	—	K4:	b2
909	244	13.9	d1.5	b1 a1	b2	a4:	b2:	—
919	245	14.0 ^{1/2}	e1	a3 a2	c21	—	def	—
924	249	13.9	e3	b3 b3	a4	a3:	b4	b1

34	56	10	47	39	40	1	49
h	h-c?	d3	h2	14.1	14.7	14.7	a4
a	—	f?	c2	13.7	14.6	13.0	a4;
a4	h0	e4	h1	14.2	14.6	14.6	d2
h1	h3	d4	a4	14.0	14.5	15.8	d1
13.9 a3	h1	e4	h1	13.9	14.7	15.5	a4
14.0 a4	blend	d4	a3	13.9	14.6	ns < 15.5	c3
13.9 a3	a3	d4	h2	13.9	14.7	ns < 15.9	h4 - c
14.2 h3	h1	d2	h3	14.1	14.7	ns < 16.0	c3
14.2 h4	a4;	d4	h3	14.0	14.7	16.3	c3
14.2 h3	h3;	e	h3	14.0	14.7	ns < 16.0	d
a4;	overlap	d0	a2	13.9	14.7	"	d1
h1	h3;	e	a4	14.1	14.5	ns < 15.5	d1
a4	h1	e3	h3	14.1	14.2	ns < 16.0	c3
c1	h1 overlap	d2	h3	14.1	14.6	ns < 16.3	h3
h	a3;	d3	h1?	14.2	14.7	ns < 15.5	h1
a4	h3	g3	a3;	13.9	14.7	< 16.2	a3
h3;	h2	d2	h4	13.8	14.7	ns < 16.3	a4
14H c2	ns < c	d4	h4	13.9	14.7	ns < 15.7	a4
a0	h1	e1	c1	14.2	?	14.3	a4
a4	?	a2	a4	14.3	14.6	ns < 15.5	d1
h1	? h2	a1 + a4?	h1	14.4	14.6	ns < 15.8	h2;
h4	?	h	h2	14.3	14.6	ns < 15.0	c-d?
h4	—	g3 - a	h4	14.4	14.6	ns < 15.5	d2;
13.9 a2	h1	c4	h2	14.4	—	—	—
h3	a4	d4	h2	14.0	14.7	ns < 15.5	d3
c1	a4	f3	a4	14.3	14.7	ns < 16.0	c & d ^{ng 12}
a4	h-c1	c2	h1	14.2	off	—	—
a3	—	d0	h2	14.1	14.6	ns < 16.0	d2
h3;	h2?	d1	h4	14.4	14.6	"	d1
a0	h1;	d2;	h1	14.3	14.3	ns < 16.0	d2

				42	36	27	71	33
MF14948	26264	13.9	e1	b11	a4:	± b?	b2	a1
761	265	13.9-0	e4	K3	b2	a2	b4	b3
15039	309	14.0	e4	K3	b11	—	b4	a4
068	328	14.0	e4	a1	b11	a4:	b4	—
106	355	—	f	a1	b1	—	—	—
107	359	—	eg	—	a21	—	—	—
209	382	—	e4	a2:	b1	—	b4	—
252	394	14.0 ^{1/2}	e3	K	b3	b.	b4	—
273	408	—	e3	a2	b11	—	c1	—
15916	26570	13.9:	e3	K3	b1	a4	b3	—
16080	606	14.0	e4	C1	a4:	b1	b2	b
180	658	14.0	e3	C	a4	a3	b4	b2
256	683, 423	13.9	e3	b2	a4	a	b4	a4
258	.491	14.0 ^{1/2}	e1	b	b	a	b4	b1
300	689, 305	13.9-0	14.1 e4	c2	b	b3 & c	b4	b1
2	.370	14.0 ^{1/2}	.1 f1	b4	b3	d2	b4	—
4	.435	13.9	.2 e4	b2	b3	d3	b3	b1
6	.490	13.9	.1 f	b3	b2	c4	b4	b1
315	691.	14.0	e4	a4	b1	a4	b4	a2:
334				a0	a4	a	b3	a3
342	713	14.0 ^{1/2}	e2	b2:	b1	K4	b3	b2
358	715	13.9-0	e1	b3	b2	a4	b3	a4
372	717	13.9	e2	c2	a4	a4	b2	a4
416	735	13.9	e3	b2	b3	K4 & p?	b4	b2
427	739	13.9	e	K4	b1	b2	b4	—
457	766	14.0 ¹	e3	a2	a4	b1	b4	a4
504	771	14.0 ^{1/2}	e4	a	b2	a3	b4	b3
17268	26728.	13.9	e1	d1	a3	a1	b4	—

34	56	10	47	39	40	1	49
c:	br?	c4	h2	14.21	14.3	ns<16.0	c:
a2	br	c3	h4	14.2	14.3	ns<15.5	a4
-	-	c4	h:	14.2	14.31	12.9	a1
a	-	h2	h4:	14.1	14.4	12.7	a1
-	-	ns<d	a2:	-	-	13.5:	h4:
-	-	ns<a	a?	-	-	-	-
-	-	ns<c	a	14.21	-	ns<14.5	a4:
h4	-	h2:	h4	13.7	14.2:	ns<15.0	K3
- a?	-	c3:	h1	?	14.2-3:	ns<14.5	K4
c:	-	e	h2	13.5	14.4	13.5	d1
a3	a4	e1	h2:	14.2	14.2	15.6	a3
h2	a4	d2	a1	14.1	14.5	ns<16.0	a4
a4	a3	e	a4	13.0	14.3	ns<16.5	a4
a4	a4	d3	h4	13.4	14.3	" (dy)	h2
14.2 h3	h	f1	h4	14.0	14.6	≤ 16.3	a4? dy
14.0 a4	a4	h4	h1	13.9	14.5	ns<16.3	c1
14.1 h2	a0	f1	a2	14.0	14.3	≤ 16.1	c1
14.1 h2	h2	e1	h	14.1	14.6	ns<16.0	h11
a2	h3	f2	h4	14.2	14.3	ns<16.4	d1
a4	h2	h2	a4	13.9	14.4	ns<16.2	d3
h4	a4	c4	h4	13.9	14.4	"	d2
a4	h0	h2	a3	14.1	14.7	"	d3
h4	h1:	d3	h2	13.8	14.6	ns?	d1
a4	a4?	d4	h4	13.6	14.7	16.0	a4
h1	?	d4	h4	14.1	14.4	ns?	h2:
a2	a4	d2	h4	14.0	14.4	14.5	h
h4	a4	d1	h2	14.2	14.4	15.0	h0
h3	-	d3	c	14.0	14.0:	ns<16.0	a2

78

Adjacent Region

5^h 15 + 25.6

		33	34	56				
MF 8973	24141.626							
10910	24791.873	a4	b4	b4				
27	798.864	c1	b3	a4				
49	801.865	b2	a3	b				
59	803.843	a4	a4	a4;				
63	804.873	—	—	—				
93	857.729	—	—	—				
11082	25157.564	b1	a3	a4				
186	158.568	b1	a3	b1;				
138	183.580	b1	b	a3				
175	202.557	a4	b3	a4;				
294	267.285	b1	a4	a4				
5	.317	a4	a4	a4				
6	.348	a4	a4	a4				
7	.380	a4	b4	b2				
8	.413	b1	b3	blues				
327	285.279	b2	a3	b				
330	287.278	b	b3;	a4				
12367	512.618	—	a?	—				
368	514.578	a4	c1	blues				
397	526.530	for images b3??	b1	—				
12500	560.514	double images	—	—				
566	568.547	—	—	—				
585	582.390	b1	b1	c1 overlap				
693	613.348	a4	a4	bv.				
773	644.311	b2	b4	b3				
785	649.304	b2	a4	b				
13526	867.632	a3?	a4	—				
572	887.559	b2	b3	b-c				
698	914.538	b1	b	b1				

		33	34	56
13771	25943.425	b2	b3	bluv
846	966.384	a4;	b3	b-c
854	970.349	a4	a4	a4;
868	977.340	b	a4	b-c
890	983.283	b2? ^{poor}	c?	-
1	314	b1	c1	-
2	346	b	a4;	-
3	378	b1	a4	-
4	410	b2	a2	-
5	442	b2;	3 a	-
14117	26083.218	b1; ^{poor}	a4	-
800	216.573	-	-	-
868	239.589	a4 b	a2	-
15944	572.616	b1	b2	-
16069	598.567	a3	b3	bv
187	659.415	- wrong center		
373	717.440	a3	b2	b1
395	722.416	a4	a4-b	?
429	739.335	b1	a4	
17418	955.616	-	-	-
639	27044.535	b2	b1	-
742	097.290			

Rapid examination of new vars. not previously estimated.

		log Vars 10 ¹⁰	10 [✓]	7 [✓]	39 [✓]	40 [✓]	23 [✓]	49 [✓]	54 [✓]	60 [✓]	11 [✓]	bright 23 [✓]
MF 10939	24800		14.6	14.3	13.4 ^M	14.6 ^m	12.2	14.3	14.1	14.3	15.4	12.5
954	802		12.9 ^M	14.3	14.0 ^M	14.3	14.2	14.2	14.3	15.2 ^m	12.4	
11081	25157		14.6 [#]	14.1 ^m	14.1	14.3	12.5 ^M	14.7 ^{off}	14.1	15.2	12.3	
137	183		14.6	14.1	14.0	14.2	12.2	13.1 ^M	14.1	14.1		
231	230		14.6	14.3	13.6	14.6	14.3	14.1	14.1	14.1		
240	234		14.4 ^m	14.1	14.1	14.2	12.2	14.1	14.1	14.2	14.4 ^M	
				14.0 ^M	14.1 ^m	14.1 ^M	12.2	14.2	14.1	14.6	15.2	12.3
16300	26689,305		15.6	14.2	14.1	14.3	12.9 ^m	14.1	14.1	14.3	14.2	
302	1370		15.2	14.1	14.1	14.4	12.8	14.2	14.3	14.4	14.2	
304	1435		15.3	14.2	14.3	14.3	12.9 ^m	14.3	14.4	14.4	14.0	
306	1490		14.6	14.2	14.1	14.3	12.6	14.3	14.3	14.4	14.3	
13834	25955		14.8	13.9	14.0	14.7	12.5	14.7 ^m	14.3	14.5	14.9	
			11229	11232	11262		1268			16373		
			13.9 ^M	14.2 ^m	14.1 ^M		13.7 ^M			156160		
			11085	11278	10917		11232			16372		
			14.1 ^m	13.7	14.9 ^m		14.4 ^m			156160		
			discarded	12489								
				14.3								
				12554								
				14.3								
				16256								
				12.6								

Log mass
27+42

	41	80	35	51	44	16	55	5	17	26	48	50	51	16
	✓	✓	?	?	?	✓	✓	?	?	?	?	?		
	5 ^m	3	m		13.9 ^m			14.0			m			
✓	14.0	14.0	14.0	13.5	14.0	13.0	13.5	13.6	14.1	11.9	12.8	13.0		
	m				14.1	12.7 ^m			m					
	14.2	14.3	14.1	13.5	14.1	13.1	13.9	13.7	14.1	11.9	12.9	12.8		
	14.0	14.4	14.1	13.7	14.1	13.1	13.9	14.1	14.0	11.8	13.2	13.2		
				✓ m								4 ^m		
	14.1	14.8	14.2	13.8	14.1	12.9	14.0	14.0	14.1	11.7	12.6	13.5		
						12.5 ^M			M					
	14.1	14.6	14.1	14.0	14.0	13.1	13.9	13.9	14.1	12.0	12.9	13.2		
	m		M	13.8 ^M	14.1 ^M		14.0 ^M	14.0 ^M		M	M	M		
	14.1	16.5	14.0	13.8	13.9	13.0	14.0	13.4	13.9	11.7	13.0	13.2		
	14.1	14.4	14.1	13.9	14.1	12.8	14.0	14.0	14.1	11.9	12.5	13.1		
	14.1	14.4	14.1	14.0	14.3	12.4	14.1	14.2	14.1	11.9	12.5	12.9		
	14.1	14.9	14.2	13.5	14.1	12.2	14.1	14.1	14.0	11.7	12.5	13.3		
				13.5										
	14.1	15.4	14.1	14.0	14.1	12.7	14.0	13.9	14.1	11.7	12.5	13.4		
							14.6							
✓	14.3	15.4	14.0	13.5	14.1	13.2	14.6	14.1	14.2	11.7	12.7	13.0		
		11138		11232	112		10844	11229						
		71108		14.0 ^M			14.4	13.9						
		12785		13.6	1143	12232		14.0						
		ns			14.1	12.2								
				11143		10962		11085						
	discard		discard	14.1	discard	12.5		14.2						

reset these by one
with log SU Aur.

		47	59	61 ^{omit}	62 [✓]	26 ^{18.54}	25	59	15 ^{next}	45	53
10939	24800	13.0 M 12.8	13.8	14.8	15.5	12.0	13.8	13.9	13.7	15.0 m	13.8
954	802	13.1	13.8	15.0	15.0	12.1	13.8	13.7	13.7	15.9 m	13.9
11081	25157	13.2 M	13.9	off	off	12.1	13.8	14.1	13.6	14.6 m	14.0
137	183	13.2	14.1	14.9	14.9	12.2	14.0	14.1	13.2	14.8	13.9
231	230	13.2	14.0	15.0	15.0	12.2 M	13.9	13.9	13.6	14.7	14.0
240	234	12.4 m	13.8	14.9	15.4	12.1 M	13.8	14.0	13.6	14.7 M	14.2
16300	26689.305	13.4	14.0	14.8	14.8	12.0	13.9	14.0	13.4	14.7	14.1
302	370	13.4	14.0	15.0	14.9	12.0	13.9	14.0	13.4	14.7	13.8
304	435	13.1	13.9	15.0	14.9	12.0 m	14.1	13.9	13.4	14.7	13.8
306	490	13.1	13.9	14.9	15.0	12.0 m	14.0	14.0	13.3	14.7	14.1
13834	25955	13.0	13.9	15.0	15.1	12.0	14.0	13.9	13.2	14.6	13.9
		10829							10962		13.9
		13.1							13.8		14.0
									11232		14.3
									1143		
									12465		
									13.5		
adjacent reg:											
12785			13.9	14.9	16.0						
13698			13.8 M	14.7 M	14.9 M						
13891			14.0	14.6?	14.2:11						
13893			14.0	14.9	15.0						
16373			14.1	14.8	15.4						
16395			13.7 M	14.8 M	15.0 M						

15 7 5 16 50 51 51
 13.6 $h_{11} = 14.0$ $A_3 = 13.2$ $B_2 = 13.1$ $A_8 = 13.8$ 13.7
 reg. revised
 not used
 list

Omit

twenty-one subjects

Ten

eleven

100

31

69 vars

11-omit

20 * rush

34

69 vars

13.2	B1	13.0	A8	13.8	13.7
12.9	B1	13.0	A9	13.8	13.8
13.1	A1	13.4	B2	13.9	13.9
12.9	B1	13.0	B2	13.9	13.9
13.1	A9	13.0	A8	13.8	13.7
13.0	B1	13.0	A9	13.8	13.8
12.9	B1	13.0	A9	"	13.8
13.0	B0	13.0	A8	"	13.8
12.9	B1	13.0	B3	13.9	13.9
13.1	B1	13.0	A6	13.7	13.6
11232	11055	13.3	13.3	11232	
13.1	B8			B0	13.8 13.8
10962				11143	
13.1				B1	13.8 13.8

*seq, revised
not master
list*

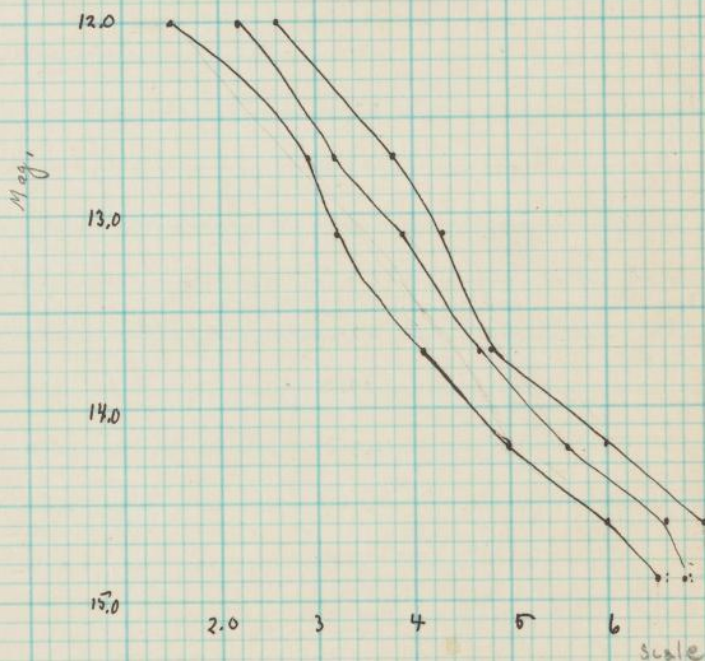
15	7	5	16	50	51	51				
13.6		<u>h1</u> = 14.0	<u>A3</u> = 13.2	<u>B2</u> = 13.1	<u>A8</u> = 13.8	13.7				
^m 13.7	^{seq}	a8 13.9	<u>A5</u> 13.2	B1 13.0	A8 13.8	13.7				
13.4	14.1	<u>h8</u> 14.2	K8 12.9	B1 13.0	A9 13.8	13.8				
13.4	14.0	<u>h0</u> 14.0	A01 13.1	a1 13.4	<u>B2</u> 13.9	13.9				
^M 13.5	14.1	a9 13.9	<u>K8</u> 12.9	B1 13.0	B2 13.9	13.9				
13.5	14.0	<u>a7</u> 13.8	A0 13.1	A9 13.0	<u>A8</u> 13.8	13.7				
13.4		<u>h2</u> 14.0	M9 13.0	B1 13.0	A9 13.8	13.8				
13.5		<u>h5</u> 14.1	K8 12.9	B1 13.0	A9 "	13.8				
13.4		<u>h0</u> 14.0	K9 13.0	B0 13.0	A8 "	13.8				
13.3		<u>h2</u> 14.0	K8 12.9	B1 13.0	B3 13.9	13.9				
13.4		a8 13.9	A2 13.1	B1 13.0	A6 13.7	13.6				
^m 13.7		11085 <u>h5</u> 14.1	11232 13.1	11085 B8	13.3					
^M 13.4		11229 a8 = 13.9	10962 13.1		11232 B0 13.8	13.8				
					11143 B1 13.8	13.8				

Sequence 19KS

fly-spark estimates.

		ME 11231	11107	11138
12.0	4	1.5	2.6	2.2
12.7	5	2.9	3.8	3.2
13.1	7	3.2	4.3	3.9
13.7	9	4.1	4.8	4.7
14.2	11	5.0	6.0	5.6
14.4	12	6.0	7.0	6.6
14.9	13	6.5		6.8
15.8	15			

Lunar 0.16.



Var 51

10954 11081 10939 11137 11231 ar

a	13.5	13.8	13.4	13.5	13.6	13.6
b	13.8	14.0	13.6	13.9	13.8	13.8
c	14.3	14.3	14.0	14.0	14.0	14.1

a	13.0	13.7	13.2	13.4	13.4	13.3
b	13.5	14.0	14.0	13.6	13.9	13.8
c	14.1	14.4	13.9	14.0	14.1	14.1

45,
Sequence transferred to Vars 15, 53 (see previous page)

Var 15	MF	10954	11051	10939	11137	11231	av.	adopt
		13.0						
	A	12.5	13.5	13.0	12.9	13.2	13.1	13.1
	B	13.5	14.1	13.4	13.4	13.8	13.7 ⁶	13.6
	C	12.8	14.3	14.0	13.7	13.8	13.9	13.9

av

Var 45	a	14.7	14.7	14.8	14.4	14.3	14.5
	b	14.9	15.1	14.5	14.6	14.5	14.7
	c	15.1	15.5	14.6	14.9	14.7	14.9
	d	15.3	15.8	15.0	15.0	15.0	15.2

av

Var 53	a	13.7	13.8	13.5	13.6	13.5	13.6
	b	+	14.4	13.9	13.9	13.9	13.9
	c	14.1	14.7	14.4	14.2	14.4	14.4
	d	14.3					

Var 5	a	13.4	13.8	13.2	13.4	13.4	13.4
	b	14.2	14.1	13.9	13.9	13.9	14.0
	c	14.4	14.3	14.0	14.2	14.1	14.2

Var 16	K	12.3	12.3	12.3	12.3	12.6	12.3
	A	13.3	13.2	12.9	12.7	12.4	13.1
	B	13.4	13.5	13.0	13.0	13.5	13.3

Var 50

	B	13.0	12.9	12.9	13.0	13.2	13.0
	C	13.3	13.4	13.2	13.5	13.5	13.4

Sequence transferred to near "near 100"

	MF11295	13698	11327	16373	11082	Cor.	corrected by below
1	13.2	13.0	13.0	13.4	13.2	13.1 ⁶	13.1
2	13.7	13.7	13.8	13.9	13.7	13.7 ⁶	13.8
3	14.4	14.3	14.3	14.4	14.4 ³	14.3 ⁶	14.3
4	14.6	14.4	14.4		14.4	14.4 ¹	14.6
5	14.9	14.9	14.8		14.9	14.9 ⁵	15.0
6	15.0	15.0	15.0		15.0	15.0 ¹	—
7	15.3	15.0	15.0		15.1	15.1 ¹	15.4
8	15.8	15.3	15.8		15.6	15.6 ⁵	15.7
9		15.9			15.9	15.9 ³	16.0
10	16.3	16.3			16.3	16.3 ⁴	16.3

Suspected relative intervals

1	7	5	7	8	7	7
2	5	6	5	5	5	5
3	4	3	3	3	3	3
4	3	4	4	4	4	4
5	3	5	3	3	5	4
6	4	0	0	0	1	(omit)
7	4	3	4	?	3	3.5
8	2	4	3		3	3
9	4	2	?		2	2.5
10					Total	32

range 13.1 - 16.3 = 3.2

Sequence transferred to near Var. 89

	AF 11305	10087	10079	10960	Av	corrected	adopted	
K	11.8	12.1	12.2	11.9	12.0		12.0	
A	12.5	12.5	12.7	12.5	12.5		12.5	
B	(12.9)	(13.0)	(13.0)	(12.9)	12.9		12.9	interp & extrapol
C	13.2	13.4	13.3	13.5	13.4	13.4	13.4	
D	13.7	13.7	14.0	13.9	13.8	13.7	13.7	
a	14.0	13.7	14.2	14.4	14.1	14.2	13.9	14.1
b	14.4	14.4	14.5	14.9	14.5	14.4	14.3	14.6
c	14.8	14.8	15.0	15.0	14.9	14.7	14.5	14.9
d	15.1	15.4	15.2	15.2	15.2	15.1	14.8	15.3
e	15.6	15.6	15.3	15.3	15.45	15.3	15.0	15.5
f	16.2	16.0	15.6	15.9	15.9	15.	15.3	15.9 16.0
g	16.5	16.5	16.3	16.3	16.4		15.7	16.5 4 near

Suspected intervals in steps

A	3	4	3	4	3.5	3
B	5	6	6	6	6	5
C	3	4	3	2	3	2 +
D	6	3	3	4	3	2 +
a	5	5	4	5	5	4
b	2	2	3	2	2	2
c	4	5	1	3	3	2
d	4	3	3	1	3	2
e	4	4	3	6	4	3
f	4	-	5	5	5	4
g						

$$\begin{array}{r}
 3.0 \quad 3.5 \\
 \quad \quad .12 \\
 \text{step} = .08 \\
 3^m \quad 28 \text{ steps} \\
 \text{step} = \text{approx } 0.1
 \end{array}$$

Region 111

		100	67	68	57	95	94	97	79	99	81	82	97
MF 10087	24863	14.9	14.1	11.1	14.8	15.16.0	14.1	13.5	14.5	15.6	15.3	15.2	13.5
10079	562	14.7	15.1	11.2	12.5	"	15.9	13.9	14.8	15.5	15.3	15.2	13.7
10955	802	15.5	15.1	11.6	11.3	15.5	14.1	14.1	15.4	15.2	15.1	15.2	14.0
10960	803	15.4	14.1	11.7	11.6	15.4	14.0	14.1	15.5	15.8	15.2	15.1	13.7
11144	25189	15.2	14.2	11.7	11.6	14.4	14.0	13.6	16.1	16.5	15.1	15.2	13.7
11198	210	15.1	14.4	11.7	12.2	15.1	14.0	13.6	15.3	15.16.0	15.1	15.8	13.6
11304	25273, 283	15.0	14.2	11.4	13.2	16.4	15.1	13.6	15.2	15.7	15.6	15.1	13.7
5	314	15.0	14.8	11.5	12.0	16.5	14.2	13.6	15.7	15.7	15.4	14.8	13.7
6	346	15.0	14.7	11.6	11.8	16.4	14.5	13.2	15.2	15.9	15.8	15.1	13.6
7	378	14.8	14.8	11.6	11.7	15.16.3	15.1	13.3	15.2	15.8	15.6	14.9	13.7
11331	287	15.0	14.5	11.7	11.7	15.16.3	14.5	13.4	15.3	16.3	15.3	15.1	13.6
13628	892	15.2	15.2	11.6	11.2	15.16.0	14.5	13.7	14.7	15.16.7	15.2	15.3	13.7

15.0-15.5

12.621

11.1

12.714

12.4

12.804

11.0

MF 11330

11.294

12.693

11.295

13.869

15.15

15.2

15.3

15.3

11.9

15.1

15.6

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

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15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

15.1

82

Var 29, 99

re-examination

shows 4.9 m

to agree with

magnitudes;

not with

discovery record.

97 need a

closer seq.

64	82	89	87	75	74	73	88	90	78	91	71	92	93	69
14.4	14.2	14.2	15.6	14.2	15.2	14.2	13.4	13.3	12.9	14.9	15.2	15.2	14.8	11.7
14.2	15.2	14.2	15.7	14.7	14.7	14.5	13.3	13.2	12.8	14.8	15.1	15.1	14.8	11.7
14.4	16.2	14.1	16.1	14.3	14.4	13.9	13.3	14.2	12.8	15.1	12.6	15.6	15.3	12.5
14.5	15.0	12.9	16.2	14.4	14.2	13.3	13.3	13.3	12.6	15.3	13.3	15.6	14.8	12.2
14.7	15.1	14.2	15.4	14.6	15.2	14.4	13.3	14.4	12.3	15.1	13.1	15.4	14.5	11.7
14.6	15.7	14.2	15.7	14.7	14.5	14.3	14.3	14.2	12.3	14.5	13.3	15.2	14.6	11.7
14.5	16.3	14.0	14.4	14.3	15.0	14.2	14.8	13.3	12.6	15.7	15.2	15.2	15.3	12.3
14.5	14.8	14.0	14.4	14.3	14.5	13.5	14.7	13.3	12.8	15.7	15.2	15.2	14.5	12.5
14.8	16.2	14.2	14.4	14.4	15.1	13.6	15.0	13.3	12.7	15.6	15.1	15.2	14.5	11.7
14.3	16.3	13.9	14.3	14.3	14.5	13.9	14.8	13.3	12.8	15.7	15.2	15.1	15.1	12.2
14.4	16.3	14.3	13.6	14.6	14.7	13.5	14.5	13.2	12.1	15.6	15.6	15.2	14.6	11.7
14.7	16.3	14.0	15.0	14.3	14.5	13.9	13.9	14.3	12.3	14.6	13.5	15.4	15.1	12.2
		13855							10093					
		14.4							12.9					
									13.0					

MF 11330 16.5

15.1-15.6

Sequence transferred from Var 100 to near Var 85

9F	11331	11144	10960	10087	or	connected
1	13.0	13.3	13.6	13.5	13.3	
2	14.1	14.0	14.1	13.9	14.0	
3	14.5	14.1	14.4	14.1	14.3	
4	14.9	14.9	14.9	14.8	14.9	
5	15.1	15.1	15.0	15.2	15.1	15.2
6	15.8	15.6	15.3	15.3	15.5	
7	15.9	15.6	15.3	15.5	15.6	
8	15.9	15.9	16.1	15.6	15.9	

Relative intervals

1	7	7	8	6	7
2	5	4	3	2	3.5
3	5	3	5	5	5
4	3	4	3	2	3
5	4	3	3	3	3
6	2	1	0	1	1
7	3	3	0	3	3
8					

$$\frac{2.6}{26.5} = 0.1$$

Seq. Var 65

	12698	12785	12771	12395	Av
a	12.5	12.5	12.5	12.3	12.4
b	12.7	12.6	12.8	12.8	12.7
c	12.0	12.9	13.0	13.0	13.0
d	13.2	12.4	13.4	13.2	13.3

Seq Var 66

a	14.4-	14.1	14.3	14.3	14.3-	coll 14.2
b	14.0	14.3	14.3	14.3	14.3+	14.3
c	14.6-	14.5	14.7	14.4	14.6	14.6
d	14.0 14.8	14.7	15.2	14.9	14.9	14.9

Seq Var 68

			12693		
a	10.8 ⁹	10.9	11.1	11.4	11.0
b	11.7	11.7	12.1	12.2	11.8
c	12.2	12.1	12.6	12.9	12.6

	85 [✓]	86 [✓]	88 [✓]	70 [✓]	96 [✓]	83 [✓]	77 [✓]	78 [✓]	76 [✓]	84 [✓]	72 [✓]	78 [✓]
MF 10087	13.5 [✓]	14.6 [✓]	16.1 [✓]	14.7 [✓]	14.7	14.7	14.7	13.9	14.8 ^m	13.9	14.4	13.7
10099	13.7	14.8	16.0	16.1 ^m	14.8	14.3	15.6 ^m	13.8 ^m	14.6 ^m	14.1	14.2 ^m	13.8
10955	13.6	14.5	16.1 [✓]	16.0	14.7	16.1	14.6 ^m	13.6	13.7 ^m	13.9	off	13.5
10960	13.8 ^m	14.6 [✓]	16.0	14.8 ^m	14.8	16.1	14.6 ^m	13.7 ^m	13.9 ^m	14.0	14.5 ^m	13.5
11144	13.7 ^m	14.4 ^m	16.3	15.0 ^m	14.8 ^m	14.4 ^m	off	off	off	13.8 ^m	14.1 ^m	-
11198	13.4 [✓]	15.3 ^m	15.9 [✓]	15.1	14.8	14.2 ^m	14.4	13.8	14.1	13.4 ^m	13.5 ^m	13.7
11304	13.8	14.7	16.3	15.0	15.0	16.1	14.4	13.6	13.8	13.7	13.8	13.4
5	13.7	15.0	16.3	14.8	15.4	16.0	14.6	13.9	14.1	13.8	13.8	13.5
6	13.7	15.3	16.2	15.0	15.3	16.0	14.4	13.7	14.2	13.9	14.5	13.8
7	13.6 ^m	15.3 ^m	15.8 ^m	14.7	15.3 ^m	15.8 ^m	14.6	13.7	14.4	14.0 ^m	14.2	13.8
11331	14.1 ^m	15.3 ^m	14.7	15.0	15.3 ^m	16.4 ^m	15.6 ^m	13.7	14.5	16.4 ^m	14.4	13.8
13628	14.0	15.0	14.7	15.0	14.4	14.5	15.5	13.6	14.6	14.1	14.5	13.7
	12621			10075				10075			10075	10075
	14.0			15.4				14.1			14.6	14.1

13.5-14.0 14.6-15.3 14.7-16.3 14.8-16.0 14.7-15.3 14.3-16.0 14.6-15.6

13.8-14.6 13.9-14.8 13.8-14.5

10093

13.9-14.0

12714

14.0

13.5-14.0

12489 12485 4th new neg 21st (omit neg "a")

89	75	74	92	93	75	75	89	93	97	65	66	63
14.2	14.5 ^m	14.8 ^m	15.1	14.5	14.5 ²	15.0	13.9	14.8	13.5	12.55	14.4	14.0
13.9	14.8 ^m	14.7 ^m	15.2	15.0	14.7	14.8	14.1	15.0	13.7	12.6	14.8	14.2
14.1	14.2 ^M	14.4 ^M	15.6	15.1	14.3	14.3	13.8	14.8	14.0	13.0	—	9
14.2	14.4 ^M	14.3 ^M	15.6	15.1	14.4	14.4	13.9	14.8	13.5	13.0	14.4	13.51
14.1 ^M	14.5	15.2	15.3	15.1 ^M	14.5	15.0	14.1	14.5	13.6	12.7	14.3	14.0
14.1 ^M	14.6	14.8	15.1	14.5 ^M	14.9	15.0	14.1	14.8	13.4	12.5	14.2	14.5
13.9	14.5	14.7	15.2	15.1	14.6	15.1	13.9	15.1	13.4	12.5	14.3	14.0
14.1	14.6	14.7	15.1	14.7	15.0	15.1	14.1	15.1	13.5	12.5	14.2	14.2
14.2	14.5	14.8	15.1	14.5 ^m	14.9	15.3	13.9	14.9	13.5	12.7	14.2	14.3
14.0	14.3	15.0	15.3	15.0	14.8	15.3	13.8	15.1	13.6	12.7	14.3	14.1
14.4 ^m	15.1	14.8	15.1 ^m	14.8 ^m	15.3	15.3	14.4 ^m	14.8	13.6	12.7	14.3	14.0
14.2	14.5 ^m	14.5	15.4	15.1	14.6	14.5	14.0	14.9	14.0	12.7	14.2	14.4
14.4	14.4-14.7				14.4-14.8		13.9-14.3			12.5-13.0		
14.0-14.4		14.4-14.8				14.4-15.3		13.5-14.0		13.5-14.0		
					13.3	14.4-15.0				13.5-14.0		

12689 use an 13.3 14.4-15.0

Var

92 - variations apparently correlated with quality of images and distance from plate edge; better unit.

75 searched all ^{neg} plates; range slightly greater than on the discovery plates; fainter minima; use 14.4-15.0

MWF 108

 $5^h 15 + 25.6$ $\lambda 1475$ $\beta - 5$

MF8773 1924, Dec 21 2414 1.626

10910 1926. Oct. 2 771.873

927 " 9 778.864

949 " 12 801.865

959 " 14 803.843

963 " 15 804.873

993 Dec. 7 857.724

11082 1927 Oct. 3 25157.564

086 " 4

138 " 29

Contact DE 119

175 Nov 17

11294 1928 Jan 21

Contact DE 118

5 "

6 "

7 "

8 "

327 Feb 8

330 " 10

12367 Sept. 22

368 " 24

12397 Oct. 6

12500 Nov 9

566 " 17

585 Dec. 1

693 1929 Jan 1

773 Feb 1

— 785 " 6

Compared with Contact 11135 - one suspect. *Not good comparison*

13526 Sept. 12

572 Oct. 2

— 698 " 29

Compared with contact 16373 - 6 suspects

MF 13771 1929, Nov 27

— 846 Dec 20

854 " 24

868 " 31

890 1930 Jan 6

1 "

2 "

3 "

4 "

5 "

14 117 Apr 16

800 Aug 27

868 Sept 19

15 944 1931, Aug 18

16 069 Sept 13

187 Nov 13

373 1932 Jan 10

375 " 15

429 Feb 1

17418 Sept. 4

639 Dec. 2

742 1933 Jan 24

Compared with Contact 11294 - no new stars.

Contact DE 114

MF 10075	1926 Feb 8	24555.538		
<u>79</u>	" 15	562.529	Contact DE 115	
87	" 16	563.530		
93	" 17	564.529		
10955	Oct. 13	802.869		
- 960	1926 " 14	803.877	Compared with contact 10079	3-17 15 suspects
<u>11144</u>	1927 Nov 4	25189.544	Contact DE 117	
198	Nov 25	210.537		
11304	1928 Jan 27	273.283		
5	"	.314		
6	"	.346		
7	"	.378		
328	Feb. 8	285.309		
- 331	" 10	287.311	Compared with contact 11144	18-33 16 suspects
12369	Sept 24	514.611		
508	Nov 10	561.82		
543	" 14	565.487		
621	Dec 11	592.419		
- 714	1929 Jan 4	616.381	Compared with contact 12804	1-2 2 suspects
<u>804</u>	Feb. 8	651.270	Contact DE 116	
13590	Oct. 3	888.562		
628	" 7	892.526		
684	" 28	913.479		
707	" 30	915.472		
772	Nov. 27	943.457		
855	Dec. 29	970.382		
869	" 31	977.375		
17798	1933 Feb 26	27130.286		

160

Region III

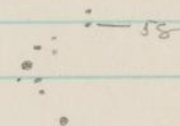
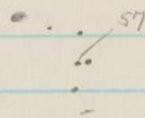
Numbers run consecutively with reg 105 and 108

Contact MF 12804

With MF 12714

Y Tau

1.	57	12804	12621	12714	11306
2.	58	12714	12543	12804	12621



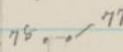
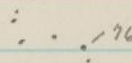
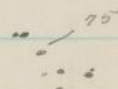
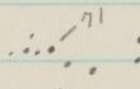
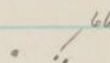
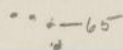
Several doubtful suspects

3 asteroids on 12714, one suspected on contact

Contact MF 10079

with MF 10960 SUTan

3.	65	10079	10087	10960	10955
4.	66	10960	10955	10079	13869
5.	67	"	10087	"	13628
6.	68	10079	"	10960	10955
7.	69	"	"	"	"
8.	70	10960	10087	10079	10075
9.	71	"	10955	"	10087
10.	72	10079	11198	10960	10078
11.	73	10960	10955	10079	10087
12.	74	"	"	"	"
13.	?	75	"	"	"
14.	76	"	"	"	"
15.	77	"	"	"	11331
16.	78	"	"	"	10075
17.	79	"	10087	"	10935 10087



Six more suspects - Try to verify later

8 asteroids: 3 on plate, 5 on contact.

65 bright

68 ls. & sm range

69 " " "

73 Small range

75 very small range

77 Prot. eclipsing

78 sm. range

79 fuzzy

162

Region 108

Contact MF 16373

with MF 12698

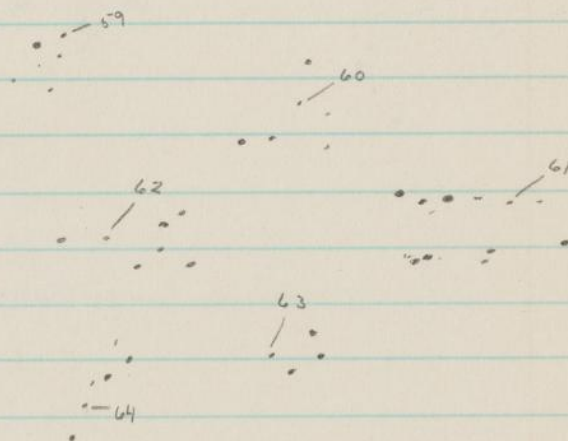
24, 29, SVS331

=ADT on

1	✓ 59	13698	16395	16373	13893?
2	✓ 60	"	"	"	16372, 14500?
3	mit ? ? 61	"	"	"	13891
4	✓ 62	"	"	"	12785
5	✓ 63	"	13771	"	16395
6	? 64	"	12693	"	"

Other suspects

One asteroid?

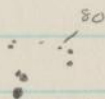


Contact 11138

With 12785

67, SVS331, 3, 11

7	✓ 80	11138	11175	12785	12693
---	------	-------	-------	-------	-------



3 asteroids on plate

1, possibly 3 in contact

Poor comparison

61 Small range

64 Small range

80 Pod. Pelp.

164

Region 108

Contact MF 11294

with 13846

SVS331, VZ?

WX

AL T_{ax} 329, 1930 13864 11298 11294, 10955, 13869

81

No new variables;

2 asteroids on contact

11.5 - 12.5
sun, range, prob eclips. → Hoffmeister found only one min.

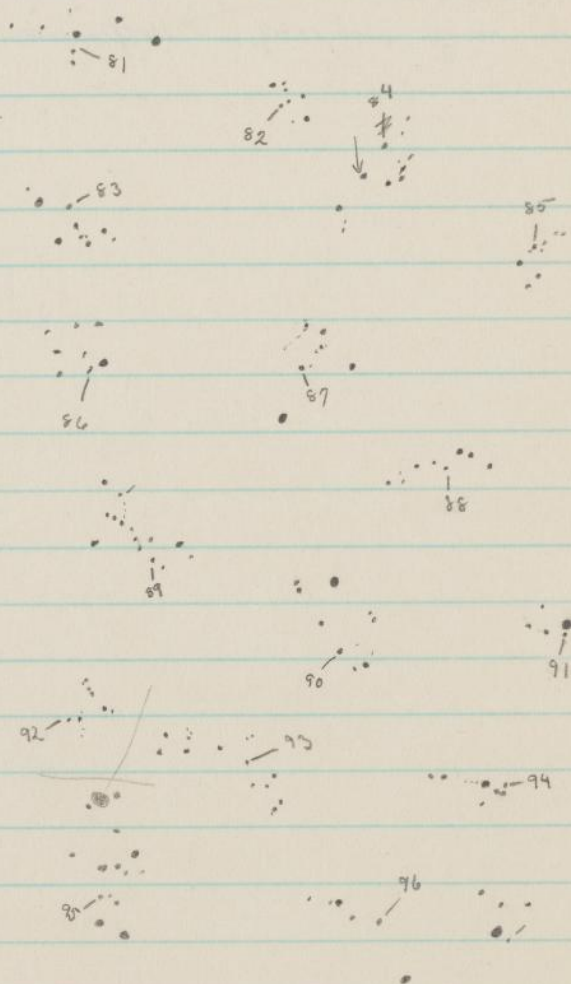
Region III

Contact ME 11144

with 11331

73, 58

18	81	11144	11198	11331	11307
19	82	"	11307	"	11198
20	83	"	11198	"	11307
21	84	"	11307	"	11198
22	85	"	"	"	? 12621
23	86	"	11198	"	11307
24	87	11331	11307	11144	11198
25	?	88	11144	11198	11331
26	?	89	"	"	13855
27	90	11331	11198	11144	13628
28	91	11144	"	11331	11307
29	92	"	"	"	10079
30	93	"	"	"	11306
31	94	"	"	"	11307
32	95	"	"	"	"
33	96	"	"	"	"



3 Asteroids, possibly one in contact

82 small range

92 faint

168

Reg III

Contact MF 11144

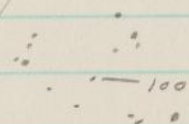
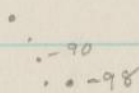
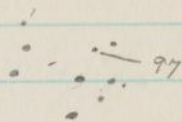
with MF 10955

329.

73, 545331, 67

83, 70, 7 Tan, 95

34	✓	97	11144	10960	10955	13628
35	✓	98	"	"	"	10093
36	✓	99	"	11198	"	10960
37	✓	100	"	"	"	"



This pair plates not completed

97 *Calip*99 *pent*

	63	64	64	59
13693	14.1	14.0 a8 99 14.4	14.5 14.5	13.9
12785	14.1	14.0 b1 a5 14.3	14.2 14.5	13.8
13698	14.0	M a8 a6 14.3	14.5 14.5	13.7
13771	14.1	14.0 b5 b 14.4	14.5 14.5	13.8
13890	14.2	14.1 a2i a 14.2	14.5 14.21	13.7
891	14.1	14.1 a3 b3 14.7	14.7 14.7	13.8
892	14.1	14.2 a3 a8 14.4	14.4 14.5	13.9
893	14.2	b2 b1 14.5	14.0 14.8	14.0
894	14.1	14.1 b1 a5 14.3	14.5 14.4	13.9
895	14.2	a9 a6 14.5	14.8 14.8	13.9
16373	14.5	b3 b1 14.5	14.8 14.8	14.1
395	14.4	14.5 a9 b0 14.4	14.7 14.8	13.8

rectl.

sequence

call "d"

14.7

= mean

of 4 more

not.

without

fly-spark

then

c = 14.4

a = 14.2

b = 14.4

c = 15.5

Marked

MF13698

14.5-8 13.7-17.0

Suggested sequence

		HR	M_V
α	α And	15	2.15
β (β Cep	8238	3.10 B1
	π^2 Cyg		2.74 A5) Variable
ϵ	α Cep	8162	2.74 A5
δ	π^2 Cyg	8335	4.09 B3
(C	η Peg 3.160)		
d	γ And 4.28 B8	8965	4.23 B8
χ	β Cas 2.4 F5	21	2.84 F5
	γ Cas B3		3.55

Found spectroscopic variable on Harvard Plates

" radiometric variable amp = 0.65 by R. Emerson

AI 23^h + 45^m

AI

19438

19456

19681

19687

19750

19765

19771

19860

19873

19879

19943

19953

19965

19975

19987

20008

20098

20115

20136

20171

20186

20381

20414

20755 a9

20779 a9

d And

a d Ceph

h π^a Cyg

d l And

β Cas

ξ Cas

i And

2.2

2.7

4.1

4.2

2.8

3.6

4.2

> 5

> 1.4

> 0.1

> 0.8

> 0.6

Comp 5 Cas, i And
steps brighter i And

4.0 4.0

3.8 4.0 4.0

reject - non uniform fog 3.5!!

3.2 3.3 3.3-4

3.2 3.1

3.21 3.1

3.3 3.3 3.4

3.3 3.1

2.7 2.7

3.5 3.7 reject - uneven illumination

2.9 2.7

3.71 3.5 3.6

2.9 3.0

3.3 3.61 3.11

2.9 2.7

3.2 3.1

2.7 2.7

2.8 2.7

3.21 3.3 3.41

2.71 2.6

2.6 2.7

3.1 4.0 3.9

3.1 4.0 4.0

3.51 3.51 3.5

3.71 3.3 3.3

848.815

855.814

Found spectroscopic variable on Harvard Plates

" radiometric variable amp = 0.65 by R. Emberson

AI 23^h + 45^m

AI			g.D	Comp 5 th 1 st 2 nd steps brighter & 1 st 2 nd		
19438	0 + 45		2364.480	4	4.0	4.0
19456	and 23		366.478	3.8	4.0	4.0
19681			439.859		reject - non uniform fog	3.5
19687			443.842	3.2	3.3	3.3 4
19750			495.818		3.2	3.1
19765			501.816		3.2	3.1
19771			503.815	3.3	3.3	3.4
19860			545.813		3.3	3.1
19873			557.784		2.7	2.7
19879			564.790	3.5	3.7	reject - uneven illumination
19943			599.703		2.9	2.7
19953			601.704	3.7	3.5	3.6
19965			605.712		2.9	3.0
19975			607.704	3.3	3.6	3.1
19987			611.647		2.9	2.7
20008			617.679		3.2	3.1
20098 X1		2.6	661.580		2.7	2.7
20115 X9		2.6	666.599		2.8	2.7
20136 a1	2.7	3.0	674.831	3.2	3.3	3.4
20171 a1	2.7	3.3	683.492	neg	2.7	2.6
20186 X9		2.6	687.461		2.6	2.7
20381 a7	3.6	3.5	723.467	3.8	4.0	3.9
20414 a5	3.4	3.3	733.478	3.9	4.0	4.0
20755 a7	4.0	4.1	848.815	3.5	3.5	3.5
20779 a9	4.0	3.7	855.814	3.7	3.3	3.3

o Andromedae

175

Found spectroscopic variable on Harvard Plates

" radiometric variable amp = 0.65 by R. Emerson

AI 23^h + 45^m

AI			g.D	Comp 5 th and steps brighter and		
19438		11864	364.480	4.0	4.0	
19456		11864	366.478	3.8	4.0	4.0
19681		34	439.857	reject - non uniform	3.5	
19687		-8	443.842	3.2	3.3	3.3 4
19730		35	495.818		3.2	3.1
19765		-1	501.816		3.2	3.1
19771		12	503.815	3.3	3.3	3.4
19860		36	545.813		3.3	3.1
19873		-	557.784		2.7	2.7
19879		8	564.790	3.5	3.7	reject uneven illumination
19943		+4	599.703		2.9	2.7
19953		9	601.704	3.7	3.5	3.6
19965		0	605.712		2.9	3.0
19975		13	607.704	3.3	3.6	3.1
19987		37	611.647		2.9	2.7
20008		-2	619.679		3.2	3.1
20098	11	1.0	661.580		2.7	2.7
20115	X9	2.6	666.599		2.8	2.7
20136	a1	3.0	674.531	3.2	3.3	3.4
20171	a:	3.3	683.492	neg	2.7	2.6
20186	X9	2.6	687.441		2.6	2.7
20381	a7	3.5	723.467	3.8	4.0	3.9
20414	a5	3.3	733.478	3.9	4.0	4.0
20755	a9	4.1	848.815	3.5	3.5	3.5
20779	a9	3.7	855.814	3.7	3.3	3.3

o Andromedae

175

Found spectroscopic variable on Harvard Plates

" radiometric variable amp = 0.65 by R. Emerson

AI 23^h + 45^m

AI	A = g class: reject ↓	g	g.D	Comp. 5100, i and steps brighter i and		
19438	A8h	3.9	3.9	22364.480	4.0	4.0
19456	a5h	3.4	3.4	366.478	4.0	4.0
19681	b3c		4.2	439.859	reject - nonuniform fog 3.5!!	
19687	a6	3.5	3.5	443.842	3.2	3.3 3.3-4
19750	a5-	3.4	3.5	495.818	3.2	3.1
19765	a ³ h	3.1	2.8	501.816	3.2	3.1
19771	a9	4.0	4.0	503.815	3.3	3.4
19860	a:	2.7:	3.0	545.813	3.3	3.1
19873	x8a	2.77?	2.5	557.784	2.7	2.7
19879	a6	3.5	3.5	564.790	3.7	reject, uneven illumination
19943	a:	2.7:	2.6	599.703	2.9	2.7
19953	a9	4.0	3.5	601.704	3.7	3.5 3.6
19965	x9		2.6	605.712	2.9	3.0
19975	a-	2.7:	2.7	607.704	3.3	3.6: 3.1
19987	x9		2.6	611.647	2.9	2.7
20008	a2	3.0	2.8	619.679	3.2	3.1
20098	x9		2.6	661.580	2.7	2.7
20115	x9		2.6	666.599	2.8	2.7
20136	a:	2.7:	3.0	674.531	3.2:	3.3 3.41
20171	a:	2.7:	3.3	683.492	neg	2.7: 2.6
20186	x9		2.6	687.441		2.6 2.7
20381	a7	3.6	3.5	723.467	3.8:	4.0 3.9
20414	a5	3.4	3.3	733.478	3.9	4.0 4.0
20755	a9	4.0	4.1	848.815	3.5:	3.5 3.5
20779	a9	4.0	3.7	855.814	3.7:	3.3 3.3

20884	3.0	22905.750	3.6	3.3	3.3	
20898	2.6	907.754	<u>2.6</u>	2.7		
20907	2.7	910.735	<u>2.8</u>	2.6		
20920	2.6	913.783	<u>2.8</u>	2.6		
20924	2.6	916.804	<u>2.9</u>	2.7		
20938	3.5	918.741	<u>3.5</u>	reject non uniform plate ✓		
20954	3.4	921.746	<u>3.1</u>	2.7	"	" " 2.9
20967	3.4	924.728	3.1	2.7	2.7	
20983	2.9	926.773	<u>2.7</u>	2.9		
20994	2.7	928.734	<u>2.8</u>	2.7	2.7	
21190	2.8	964.656	3.3	3.0		
21161	2.7	968.656	<u>2.7</u>	2.7		
21186	2.6	972.700	<u>2.5</u>	2.6	decidedly brighter than 3.6s	
21176	3.5	975.699	3.0	3.4	reject - poor comp.	
		977.669				
21216	3.5	983.659	<u>3.4</u>	3.0		
21227	3.5	985.623	<u>3.4</u>	3.0	reject " "	
21246	2.7	988.595	<u>2.8</u>	2.7		
21259	2.7	990.615	<u>2.8</u>	2.8		
21282	2.7	992.579	3.2	2.7		
21299	2.6	23029.671	<u>2.6</u>	2.6		
21368	2.6	031.565	3.1	2.7	not good comparison	
21387	2.7	044.534	reject elong. of comp. bright			
21444	2.6	052.491	<u>2.8</u>	2.6		
21465	2.7	054.489	3.0	br	"	2.6 not good comp
21483	2.6	306.680	<u>2.8</u>	reject, poor comp.		
21941	3.6		3.2	3.0	"	"
22177	2.6	401.534	reject poor comp			
22659	2.6	647.793	<u>2.6</u>	2.6		
22836	3.1	720.614	<u>2.7</u>	2.6		
23091	3.1	825.498	<u>3.9</u>	3.8		

23451	2.7	23998.814	3.3	3.1
23481	4.0	24014.770	<u>3.9</u>	3.9
23600	2.7	064.703	<u>3.2</u>	2.8
23734	3.4	109.519	<u>3.4</u>	3.5
23757	3.5	121.516	<u>3.7</u>	3.7
24151	4.2	350.780	<u>3.7</u>	3.61
24188	2.8	375.746	<u>3.2</u>	3.3
24290	4.1	423.591	<u>3.9</u>	3.8
24363	4.1 Presto	455.623	4.0	3.81 badly fogged, better reject
24482	3.5 Presto	509.520	3.8	3.71
24566	3.4 Presto	539.473	4.0	3.8
24840	4.1 Presto	723.794	<u>4.0</u>	3.8
24845	4.2 Presto	731.801	<u>3.7</u>	3.7
24934	dis dust	790.694	—	
24996	4.1 Presto	811.644	<u>3.8</u>	4.01 badly fogged
25111	3.9 "	852.534	<u>3.8</u>	3.7
25205	4.1 "	887.492	<u>4.0</u>	3.8-9
25549	4.2 "	25044.812	rej. nonuniform fog (prob. 3.8)	
25648	4.1 "	103.754	<u>3.7</u>	3.7
25678	3.9 "	122.765	<u>3.8</u>	3.6
25697	4.1 "	132.681	<u>3.9</u>	3.9
25800	3.9 Hi speed	164.654	<u>3.7</u>	3.7
25829	3.9 Speedway	169.604	<u>3.8</u>	3.5
25975	3.9 "	220 475.569	<u>3.7</u>	3.8
26472	4.0 Hi S	413.809	<u>3.9</u>	3.7
26499	4.2 "	436.788	<u>3.9</u>	3.8
26602	3.9 "	488.729	<u>4.0</u>	4.01 poor plate
26615	3.8 "	494.738	<u>3.9</u>	3.9
26670	4.2 Presto	523.676	<u>4.0</u>	3.9
26704	3.7 Hi Speed	537.619	<u>3.9</u>	3.9-4.0

26779	4.2	255 ²⁵⁵⁶⁴ .555	<u>3.9</u>	3.9	
26794	3.9	573.603	<u>4.0</u>	3.9	
26917	4.0	607.542	<u>3.9</u>	3.81	
27008	4.1	633.492	<u>3.8</u>	3.7	
27318	3.5:	791.805	<u>2.9</u>	2.7, 2.9	
27327	3.4	793.794	<u>3.1</u>	3.1	
27424	3.1:	826.731	<u>3.2</u>	3.3	
27462	3.0	843.730	<u>2.9</u>	2.7	
27504	3.1	855.729	<u>2.9</u>	2.91	
27529	3.3	870.734	<u>3.2</u>	3.1	
27616	2.5	898.709	<u>3.3</u>	3.1	
27634	2.8	905.621	<u>3.1</u>	3.2	
27667	3.2	925.582	<u>3.2</u>	2.7	
28240	3.5	26143.788	<u>2.6</u> ⁷	2.7	
28264	3.2	155.792	<u>3.2</u>	2.9	poor comparison
28289	3.4	165.770	<u>2.9</u>	2.9	
28343	3.5	183.805	<u>3.2</u>	3.0	
28392	3.4	201.803	<u>3.5</u>	3.5	
28440	3.5	223.652	<u>3.2</u>	3.1	
28441	3.5	223.692	<u>3.4</u>	3.3	
28479	3.4	231.781	<u>3.4</u>	3.611	plate badly fogged
28485	3.4	235.671	<u>3.4</u>	3.3	
28557	3.5	256.717	<u>3.0</u>	3.3	
28655	3.5	289.682	<u>3.3</u>	3.1	
28672	3.4	291.630	<u>3.1</u>	2.9	
28878	3.7	366.48 ³ ₅	<u>3.2</u>	3.2	
29228	3.9	535.830	<u>3.3</u>	3.3	
29259	3.4	551.75 ³ ₅	<u>3.4</u>	3.2	
29274	3.9	558.82 ⁵ ₇	<u>3.4</u>	3.2	
29307	3.9	583.77 ⁴ ₇			3.8: reject, plate too badly fogged

29338	3.5	26 594.69 ⁴ ₈	3.2	3.1
29392	3.3	615.7 ⁷⁶ ₈₀	3.3	3.1
29585	3.4	673.5 ⁸⁸ ₉₀	<u>3.4</u>	3.1
29627	2.8	684.54 ² ₂	<u>2.9</u>	3.3
29724	3.0:	714.472	3.4	3.3
30191	3.6	908.82 ² ₃	<u>3.5</u>	3.3
30202	3.4	926.819	3.2	3.2
30261	3.4	928.783	<u>3.2</u>	3.2
30319	3.8	944.81 ⁴ ₄	<u>3.9</u>	3.61
30338	4.2	948.698	<u>3.8</u>	3.61
30376	4.2	961.622	<u>3.8</u>	3.8
30409	4.2	975.539	<u>3.9</u>	3.9
30438	4.0:	989.560	<u>3.7</u>	3.81
30439	4.2	989.668	4.0	3.9-4.0
30542	3.9	27027.61 ⁵ ₈	<u>3.7</u>	3.51
30543	3.9	027.65 ³ ₆	<u>4.0</u>	4.0-3.9
30588	4.2	042.50 ³ ₅	<u>4.0</u>	4.0
30648	4.2	078.518	<u>4.0</u>	3.9-4.0
30995	2.7:	282.82 ² ₃	3.1	3.1
31026	2.9:	299.769	<u>2.9</u>	3.2
31115	4.0	346.59 ³ ₇	<u>3.9</u>	3.8
31192	3.9	374.55 ² ₆	<u>3.8</u>	3.7
31193	3.9	" .6 ²⁶ ₃₀	<u>4.1</u>	4.0-3.9
31282	3.9	409.49 ⁴ ₆	<u>3.9</u>	3.8
31706	4.2: <i>overexposed</i>	655.73 ⁹ ₇	<u>4.0</u>	images too large better reject
31756	3.4	680.77 ² ₃	<u>3.6</u>	3.5
31808	3.1:	714.6 ²⁵ ₈₂	3.9:	" " 3.7: " "
32261	3.2:	28041.7 ¹⁷ ₂₀	3.7:	" " 3.8: " "
32266	4.1	044.69 ³ ₆	3.6-4.0	" " " "
32278	4.0:	053.67 ⁵ ₉	<u>4.0</u>	3.8: " " " "

32316	4.0:	28071.62 ³¹	4.0	images large better reject
32376	4.2	096.54 ⁴	4.3	4.2: but one opposed
32447	fg	-	-	
32868	3.6	28446.59 ³	3.6	3.5-6
FA 558	2.8: poor comparison		3.9:	poor comparison, reject
559	2.8: " "		3.5:	better reject this series.
576	3.3: " "		3.6: " "	
33396	3.9	28745.79 ²	3.9	3.5:
1132	3.2:	749.84 ⁸	3.5	3.5: badly fogged
33424	3.7	762.701	3.9	3.9
33433	3.5:1	775.741	4.0	images too large, better reject
1234	2.9:	785.756	3.4	3.2:
1235	2.9:	785.798	3.4	3.2
33462	2.8	787.695	2.9	3.3:
1264	2.9:	791.740	3.2	3.1
1265	2.9:	791.782	3.2	3.1
1302	3.4:	809.692	3.4:	butterfly comparison better reject
1303	3.3:	809.734	3.3	3.4 " " " "
33513	2.8	812.618	3.6:	3.5 " " " "
1347	2.9:	815.674	3.2	" " " "
1348	2.9:	816	3.4:	" " " "
1399	3.7	833.628	3.3	3.4 " " " "
1460	3.5	833.669	3.5	3.5 " " " "
1436	3.2	839.612	3.3	3.4 " " " "
1437	2.9:	839.652	3.2	3.3 " " " "
1477	3.0:	845.592	3.4	" " " "
1478	3.4:	845.634	3.6	3.5 " " " "
34093	3.9	29104.810	3.9	" " " "
2184	3.7	140.784	3.6:	3.7 " " " "
2185	3.4	" 1825	3.9: -8	" " " "

34163	4.0	29148.634	3.81	3.9		
34183	3.4	155.803	3.61	3.4		
34189	2.91	158.655	3.3	3.51		
2212	3.6	168.708	3.71	butterfly comparison		
2213	3.51	.752	3.71	3.7	"	"
2232	3.7	173.694	3.61	"	"	"
2233	3.4	.735	3.91	3.7		
34193	3.7	174.592	3.8	3.8		
34228	3.9	185.626	3.6	3.71		
2305	3.4	197.629	3.981	butterfly comparison		
2306	3.81	197.670	3.91	"	"	"
2438	3.7	243.505	3.9 3.9	3.81	"	"
2439	3.4	.543	3.9 3.9	3.91	"	"
2487	3.5	249.487	3.9	"	"	"
2488	3.5	.527	3.81	3.71	"	"
2490	3.5	255.467	3.9	3.91	"	"
2491	3.7	.509	3.9	3.9	"	"
2511	3.7	261.457	3.9	3.81	"	"
2512	3.8	.491	3.81	3.9	"	"
34791	3.8	447.769	3.3	3.5		
34792	3.7	447.808	3.411	fg		
34821	4.1	457.824	3.8	3.8	butterfly comparison	
34840	3.011	463.813	3.7-8	poor comparison		

Examination of I and B Spectrum Plates

For C Plates see p. 217

Plate	Date	
B 809	Oct 7, 1886 (Large)	4144?, 4026; possibly 4045 and 4005?; K barely suspected
857	Nov 22, 1886	" 4472; possibly 4649?; 4384?; 4026 strong; 4005? suspected
862	Nov 24 ..	" 4026; K merely suspected
903	Dec 3 ..	" 4472; 4026; line to V = 4005? suspected; K?? very ft
944	" 17 ..	" Spectrum too poor
1575	Aug 8, 1887	" Spectrum too poor
1589	" 9 ..	" Spectrum too poor
1609	Aug 13 ..	" " "
1629	Aug 18 ..	" 4472 or 81 (though not distinct) K-line definitely present but fainter than 4026
1895	Nov 18 ..	" Overexposed
2100	Dec 24, 1887	" Overexposed & edge
{ 1685	Sept 10, 1887	^{K line strong} K line about as intense as 4026, probably more so Line also to violet of H η
2798	"	" Too poor definition
3202	"	" Too poor definition
3275	"	" Overexposed
3285	"	"
9667	Oct 14, 1893	" { K prob vis but fainter than 4026 better reject as def not good
9669	"	" Not good quality
10133	Dec 7 ..	" " "
11303	July 30, ¹⁸⁹⁴ 1897	(Small) One image overexp, one under
11320	Aug 6 ..	(Large) Overexp except higher members
11498	Sept 24 ..	(Small) Too poor def.
14861	Apr. 9, 1896	" 4026 present but weak; K uncertain
19359	Oct. 25, 1897 (Large)	Only Hydrogen lines easily distinguishable
24116	Nov. 21, 1899 (Small)	One exposure ^{4026 not K shows} too weak, other too dense

- I 25883 Sept. 26, 1900 uncertain one too dense
 33791 Jan 12, 1906 short, one too dense, other too ft
 36835 Oct 1, 1910 " " " " " " " "
 38177 Dec 4, 1912 Too dense
 38191 Dec 12, 1912 short - suspect K stronger than 4026
 38574 Sept. 2, 1913 Long suspect K, can't tell 4026
 57201 Sept. 5, 1939 short Too dense
 57203 " 5, 1939 Prob. 4026?? no K?

AC Plates centered on variable

AC 67	Oct. 20, 1898	3.9	3.9
103	Dec 7	4.0	4.0
373	July 30, 1899	3.5	3.5
396	Aug 15	3.7:	3.6"
399	" 16	3.5:1	3.6-7
467	Oct 4	3.2:	3.5:
487	" 21	4.0	4.0
570	Dec 6	3.4	3.4
702	June 27, 1900	4.0	3.9
954	Aug 4	3.9	3.9
1052	Dec 11	3.8	3.9
1240	Feb 11, 1901	4.0	4.0
1579	June 28	4.0	4.0
1662	Aug 16	3.7	3.8
1737	Sept. 11	3.9	4.0
1833	Oct 5	3.8	3.9
1892	Oct 21	3.8	3.7
1900	Oct 24	3.85	4.0
1942	Nov. 2	3.7-8	3.9-8
1985	Nov 20	3.7	3.5
2037	Dec 2	3.7:	3.7
2076	" 15	3.6	3.7
2241	Jan 25, 1902	4.0	4.0
2583	May 28	3.5	3.5
2656	June 29	3.8	3.8-9
2692	July 13	3.6:	3.6:
2747	Aug 13	3.5:1	3.6:
2758	" 16	3.7:	3.7
2761	" 16	3.7-8	3.8
2867	Oct 7	3.6	3.5-6

AC 2909	Oct 19, 1902	3.7	3.8
2979	Nov 7	3.7	reject - comp. image too elongated
3043	Dec 5	3.6	3.7
3050	" 6	3.7	3.8
3068	" 9	3.8	3.8
3092	" 23	3.7	3.8
3101	" 24	3.7	3.7
3146	Jan 8, 1903	3.8	3.8
3190	" 19	3.8	3.8
3765	July 11	3.8	3.7
3785	" 26	3.7	3.8
3811	Aug 8	3.9	3.9
3823	" 13	3.6	3.6
4010	Sept 29	3.7	3.7
4016	" 30	3.7	3.7
4069	Oct 20	3.8	3.8
4085	" 22	3.7	3.7
4104	" 26	3.5	3.6; or brighter
4137	" 30	3.7	3.7
4178	Nov 8	3.7	3.7
4204	" 12	3.8	trail only
4276	" 28	3.7-8	3.8
4300	Dec 4	3.8	3.9
4323	" 7	3.7	3.7
4343	" 11	3.7	3.9
4389	" 17	3.8	3.7
4453	" 28	3.8	3.9-4.0
4494	Jan 5, 1904	3.8	3.8
4965	June 13	3.9	3.9-4.0
4982	" 17	3.9-4.0	3.9

AC 5056	July 13, 1904	3.8	3.8
5092	" 21	3.8	3.8
5108	" 29	3.8	3.7
5137	Aug 11	3.8	3.7
5174	" 24	3.8	3.8
5184	" 26	3.7-8	3.9
5259	Sept 17	3.9	3.9
5285	" 26	3.9	3.9
5362	Oct 14	4.0	3.9
5409		-	-
5448	Oct 29	comparison off	
5467	Nov 1	3.7	3.8
5479	" 3	3.8	3.9
5504	" 9	3.8	3.8
5553	" 18	3.7	3.7
5607	" 26	3.7	3.8
5663	Dec 4	3.7	3.9
5676	" 6	3.8	3.7
5721	" 14	3.9	3.9
5744	" 18	3.9	3.9+
5821	Jan 10, 1905	3.9	3.9
5830	" 14	3.8	3.9
6394	May 23	4.0	4.0
6426	June 8	4.0	4.0
6489	July 5	4.0	4.1
6515	" 15	4.1	4.0
6557	" 27	3.9	3.9
6567	Aug 2	4.0	4.0
AC' 26	" 13	3.9	4.0

two plates
which is
which

AL 6642	Aug 30, 1905	3.9	4.0
6709	Sept 22	3.8	4.0
6840	Oct 14	3.7	3.9
6864	" 21	3.8	3.9-8
6903	" 28	3.9	4.0
6922	Nov 1	3.9	3.9
7027	" 21	3.9	3.9
7099	Dec 10	3.9:1	only trails
7105	" 13	3.9	3.9
7114	" 18	3.9-8	3.7-8
7186	Jan 21, 1906	4.0	3.8
7242	Feb 2, 1906	3.9	3.9
	Feb 14		
7285	June 14	4.0	4.0
	June 14		
7615	July 17	3.9:1	3.9:1
	July 17		
7670	Aug 16	4.0	4.0
	17439		
7718	Aug 16	3.9-4.0	3.9
	441		
7752	" 28	4.0	3.9
	459		
7791	Sept. 5	4.0-1	4.0
	471		
7820	" 17	4.0	4.0
	482		
7857	" 28	3.9	3.8
	528		
8006	Nov. 13	3.9-4.0	3.9
	531		
8021	" 16	3.9	3.9
	544		
8065	" 29	3.9	4.0
	546		
8071	Dec 1	3.9	3.9
	600		
8190	Jan 24, 1907	3.9	4.0:
	616		
8229	Feb 9	4.1	4.1
	783		
8632	July 26	3.9	3.9
	800		
8683	Aug 12	4.1	3.9
	803		
8700	" 15	3.7	3.7
	823		
8717	" 25	3.8	3.8

plate badly fogged

		8.0.		
		17834		
Ac 8773	Sept. 15, 1907		4.1	4.0
8799	" 26	17845	3.9	3.8
8821	Oct. 2	857	3.7	3.71
8837	" 7	856	3.9	4.0
8864	" 12	861	3.7	3.7
8877	" 16	865	3.9	3.9
8892	" 18	867	3.9	3.9
8917	" 23	872	4.0	4.0
8938	" 30	879	3.8	3.8
8982	Nov. 11	891	3.7	3.8
9004	" 16	896	3.8	3.9
9009	" 19	899	4.0	4.0
9040	Dec. 2	912	3.8	4.0-
9058	" 11	921	3.7	3.8
9064	" 12	922	4.4	4.4
9075	" 17	927	3.9	4.0
9077	" 19	929	3.8	3.9
9089	" 21	931	3.9	3.8
9547	June 13, 1908		3.9	4.0
9628	July 11		4.0	4.2
9703	Aug 30		4.0	4.0
9765	Sept 30		3.9	3.9
9827	Oct 15		3.8	3.9
9870	Nov 1		3.9	3.9
9938	" 21		3.9	3.9
9989	Dec 3		4.0	4.0-
10029	" 10		3.9	3.8
10098	" 26		4.0	4.0
10132	Jan 1, 1909		4.0	4.0
10458	Apr 24		3.8	3.9

AC10680	Aug 1, 1909	3.8	3.8
10709	" 11	3.8-9	4.0
10718	" 13	3.9	3.8
10738	" 21	3.9	3.8-9
10769	" 28	3.9-8	4.0-
10820	Sept 17	3.8	3.9
10848	" 30	3.8	3.9-
10851	" 30	3.9	3.9
10890	Oct 7	3.9	4.0
10904	" 9	3.9	4.0
10912	" 12	4.0	4.0
10949	" 19	3.9	3.9
11004	Nov 4	3.9	3.8! Trails
11088	" 29	3.9	4.0
11110	Dec 4	4.0	3.9
11163	" 18	3.7	3.8
11210	" 27	4.0	4.0
11231	" 31	4.0	4.0
11243	Jan 4, 1910	3.8	3.8
11252	" 7	3.9	4.0
11274	" 10	3.9	3.9
11290	" 12	3.9	3.9
11350	Feb 5	3.9	3.9
11712	June 4	3.9	3.9.
11811	July 29	3.9	3.9
11820	" 31	3.9	3.9
11830	Aug 2	4.0	3.9
11871	" 20	3.8-9	3.8
11907	Sept 9	3.9	4.0-
11942	" 21	3.9	3.9+

AC 11961	Sept 28, 1910	3.9-4.0	4.0	
11988	Oct. 3	3.9	3.9+	
12038	" 13	3.9	3.9	
12076	" 31	3.9	3.8	
12085	Nov 1	3.8	3.8	
12122	" 16	3.9	3.9	
12178	Dec 7	3.8	Comparison off	
12217	" 16	3.8	"	
12249	" 30	—	Comparison off	
12264	Jan 4, 1911	3.6	"	
12457	July 12	3.5	Comp. on edge	
12466	" 22	3.7	" " "	
12495	Aug 14	3.5	" " "	
12520	" 21	—	" too near edge	
12533	Sept 1	—	" " " "	
12541	" 3	3.6	" " "	
12550	" 10	—	Comp. off	
12673	Oct 26	3.5	Comp. on edge	
12735	Nov 15	3.5	Comp. off	
13303	Oct. 6, 1912	3.8		
13324	" 14	3.9:	3.9-4.0	19690
13335	" 15	4.0:	3.9	19691
13412	" 31	4.0:	4.0	19707
13449	Nov 6	4.1	4.1	19713
13467	" 10	3.9	3.9	19717
13604	Dec 26	3.9	3.9	19763
14049	May 29, 1913		Comparison off	
14211	July 25		" "	
14224	" 29	4.5	4.4	19778
14254	Aug 12		" "	

AC 14268	Aug 19, 1913		comparison off	
14315	" 31	4.01		20011
14382	Sept 24		" "	
14396	" 25		" "	
14402	" 27		" "	
14431	Oct 5		" "	
14433	" 12		" "	
14517	Nov 6	4.21	4.3	20078
14529	" 7	4.21	" "	
14533	" 9		" "	4.01 20081
14620	Dec 5		" "	
14655	" 13		" "	
15221	May 30, 1914		" "	
15270	June 16		" "	
15411	Aug 26		" "	
15431	Sept 4	4.11		4.01 20380
15444	Sept 8		" "	
15499	" 17		" "	
15564	Oct 2	4.11		4.11 20408
15712	Nov 12		" "	
15754	" 21		" "	
15893	Dec 18		" "	
16131	Feb 19, 1915	4.0	4.1	20548
16530	June 12	3.9	3.9	661
16655	Aug 14	3.9	4.0	724
16683	Aug 25	3.9	4.0	735
16830	Oct 11	4.0	3.9	782
16860	" 18	4.0	4.0~	789
17099	Dec 11	3.9	3.9	843
17168	" 30	4.0	3.9+	862

AC17272	Feb 3, 1916	4.0	3.9	20897
17548	Apr 29	3.9+	3.6 3.6	983
17680	June 23	3.7	3.7	21038
17757	Aug 2	3.9	3.9-4.0	078
17790	" 15	3.9	3.6, 3.7	091
17939	Sept 26	3.9	3.9	133
17967	Oct 4	3.9	3.8	141
18065	" 27	3.8	3.9-8	164
18077	" 28	3.7	3.6	165
18244	Dec 1	3.7-8	3.6, 3.7	199
18362	" 29	3.8	3.5-6, 7-8	227
18503	Feb 2, 1917	3.9	3.7	262
18915	June 24	3.8	3.9	404
19045	Aug 20	3.5	3.5	441
19224	Oct 1	3.9	3.6, 3.7	503
19272	" 13	2.9:	2.8:	515
19772	Feb 4, 1918	3.8-9	3.8	629
20097	May 4	too badly fogged		
20202	June 14	3.9:	3.9	759
20355	Aug 6	4.0	4.1	812
20385	" 18	4.0	3.8	824
20576	Oct 7	3.9+	3.9	874
20612	21889	4.0-	4.0-	
20818	21945	4.0	3.9	
20890	21958	4.0	3.9	
21068	21995	4.0-	4.0	
21388	22075	4.0-	3.9	
21396	22076	3.8	3.7	
21563	22138	3.9	3.9	
21696	22181	4.0	4.0	

certainly brighter 3.6

21721	22112	4.1	4.0:
21755	198	3.8	3.9:
21890	240	4.0	4.0
21965	261	3.9	3.7
22070	297	3.9	3.8-9
22081	298	3.91	3.8:
22134	313	4.0	3.9
22380	366	4.0	3.9-4.0
22598	429	3.8	3.8
22691	499	4.0	4.0
22825	560	4.0	3.9
22962	607	3.8	3.8
22993	615	3.91	4.0:
23015	621	4.0	3.9
23114	667	3.8:	3.7
23400	725	3.9	3.7
23637	799	3.9	3.9
23780	849	3.8	3.9
23813	860	3.9	4.0:
23914	907	4.0	3.9
23972	920	3.9	4.0
24010	926	3.9	3.8
24103	949	<i>Comparison off</i>	
24118	952	4.0	4.0:
24188	967	3.8	3.9
24308	989	3.8	3.7
24421	23029	3.7	3.7-6
24506	23045	3.9	3.8

AC 24814	23257	3.8	3.7
24861	310	3.8	3.7
24882	321	3.8	3.8
AX 128	23589	3.7	3.6
AC 25296	601	3.9	3.9
25298	605	3.7	3.8
AX 138	607	3.7	3.8
AC 25305	611	3.8	3.8
25323	638	3.8	3.8
AX 186	644	3.4	3.0
AC 25335	645	3.5	3.6
AX 193	648	3.4	3.5
AC 25350	652	3.8	3.9
25362	664	3.8	3.7
AX 211	667	2.7:	3.0::
AC 25373	673	3.8	3.9
AX 227	677	3.5:	3.3:
262	699	3.8	3.7
25399	718	3.7-8	3.9
25417	724	3.8-7	3.8
25437	727	3.7	3.9
AX 304	733	3.7	3.7
307	734	3.6::	3.7::
25458	741	3.9	4.0
25471	744	3.8	3.9
25504	771	3.9-8	3.9-4
25512	773	3.9	4.0
25533	782	3.7	3.7
AX 409	797	3.8	3.7
AY 127	974	3.8	3.7

Very much overexposed

Too badly overexposed

AY 142	23981	4.0	4.0
AC 25586	984	3.8	3.8
AY 153	985	3.8	3.8
173	993	3.9	4.0
180	999	3.9	3.9
187	24003	3.9	3.9-4.0
198	013	3.9	3.9
222	026	3.9-8	3.9
248	047	3.9-4.0	3.9
256	053	3.8	3.8!!
283	065	4.0	4.0
287	069	3.9:	4.0:
299	073	3.9:	3.9
328	081	3.9:	3.8-9
370	107	4.0	3.9-4.0
AC 25699	109	3.8	3.8
AY 401	124	4.0	3.9
428	142	3.9	3.9
443	160	4.0	4.0
674	320	3.9:	better mit - fogged
688	332	3.9!!	" " fogged plate
AC 25961	335	3.7	3.7
AY 715	365	Comparison too badly fogged	
726	362	3.7	3.7
AC 25994	374	3.9	3.7-8
AY 746	380	4.0	4.0
AC 26004	381	3.9	3.9
AY 752	384	3.9	4.0
AC 26013	387	3.9	3.9
26032	402	3.7	3.8

AC 26036	24412	3.8	3.9
AY 808	419	3.8	3.9
813	420	3.9	3.9
26063	422	3.7	3.7
26082	431	3.4	3.6
26095	444	3.8	3.8
26114	458	3.9	3.9
26122	461	3.9	3.8-9
AY 867	466	3.8-9	3.9
26138	471	3.9	3.7
AY 889	494	4.0	3.9:
909	502	3.9	3.9-4.0
26177	508	3.9	3.7
AY 1092	704	3.9	3.9
26378	708	3.8	3.7
26396	722	4.0	3.9
26406	746	3.67	3.7
26413	758	3.9	3.9
AY 1121	759	3.8	3.8-9
1122	760	3.9+	3.9
26423	766	3.7:	Positive
AY 1145	772	3.9-8	3.8
1151	774	3.8	3.9-4.0
1165	796	4.0-	3.9-4.0
1168	798	3.8	3.9
26479	804	3.8	3.8
26492	810	3.8	4.0
AY 1211	824	3.9	3.9
26528	830	3.9-4	3.7-8
AY 1260	854	3.8	3.9

AC 26589	24866		Plate too badly fogged
26595	868	3.9	3.9:
26609	873	3.7	3.7
AY 1287	879	3.9	3.9
AC 26640	891	3.7	3.9
AY 1532	25087	3.98	3.9
1555	102	3.8	3.8
1578	117	3.7	3.8-7
1600	129	3.7	3.8
1626	139	3.6	3.7
1632	140	3.6	3.6-7
1634	141	3.5	3.6-5
1642	147	4.0	3.9
1667	153	4.0	3.9
1670	154	3.9	3.9
1687	159	3.7	3.5
1748	175	3.9	3.9
1768	179	3.9	3.9
1782	181	4.0	3.9
1808	187	3.5	3.6-7
1821	192	3.9	4.0:
1874	211	3.8	3.9
1903	224	3.8	3.9
1953	239	3.9	3.9
26981	544	3.8	3.9
27026	560	3.7	3.7
27138	605	3.7	3.7:
27184	619	3.7	3.8
27538	789	3.9	3.7
27552	792	3.9	3.9:

repeat next p.

171782	25181	3.9	
1808	187	3.7-6	
1821	192	4.0:	
1874	211	3.9	
1903		3.9	
1953		3.9	
26981		3.9	
27026		3.7	
27138		3.7:	
27184		3.8	
27538		3.7	
27552		3.9:	

27627	25818	4.0	3.9
27640	822	3.8	3.9
27676	840	3.9	3.9
27706	849	3.8	3.9
27708	850	3.8	3.8
27780	889	3.8	3.7
27802	893	3.8	3.7
27818	895	3.9	3.7
27820	895 509	3.8	3.9-
27837	903	3.5-6	3.7-
27847	906	3.9	3.8
27854	910	3.8	3.5
27911	936	3.7-6	3.7
27936	945	3.7::	3.7::
27957	957	3.8	3.6:
28413	26158	3.8	3.8
28417	162	3.8	3.9

AC 28483	26191	3.8-9	3.8
28543	216	3.8	3.8
28550	217	3.7	3.8
28557	219	3.7	3.7
28569	224	3.7	3.8
28641	250	3.9	3.8
28694	261	3.9	3.9-8
28700	263	3.8-9	3.9-8
28721	271	3.8	3.8
28744	281	3.9	3.9
28780	300	3.9	3.9
28856	327	3.9	3.9
30290	26904	3.9	3.8-9
30335	921	3.9	3.9
30371	932	3.9	3.8-9
30416	945	3.9-8	3.8
30471	962	3.9:	
30485	969	3.9	3.9
30490	970	3.8	3.9-8
30526	980	3.9-8	3.8-9
30541	988	3.9	3.9-4.0
30561	993	4.0:	3.8:
30585	27002	3.9-4.0	3.9
30596	003	3.9+	3.9
30610	006	4.0-	3.9-8
30621	013	3.9	3.8
30749	040	3.9	3.9
30770	043	3.9	3.9
30785	045	3.9	3.8
31234	246	3.8-9	3.8

trail only

fogged

Al	31261	27271	3.9	3.8	
	31264	277	3.9	3.9	
	31276	285	?	?	ident. req.
	31286	289	3.9	3.9	
	31308	302	3.9	3.9	
	31341	318	4.0	4.0	
	31394	345	3.9	3.9	
	31404	346	3.9	3.9-4.0	
	31413	348	3.8	3.7:	
	31442	357	3.8	3.9	
	31476	372	3.9-8	3.9-8	
	31610	409	3.7	3.8	
	31616	414	3.8	3.7	
	31642	423	3.9	3.7	
	31682	435	3.7	3.8:	
	32205	634	3.7	3.7	
CA	306	28028	4.0	3.9+	
	32292	27668	3.2	3.1	
	32293	"	3.3	3.2	
	32450	756	3.8	3.8:	
	32475	780	3.9	3.8:	
CA	246	28002	3.9-4.0	4.0	
	253	010	3.9	3.8:	poor comparison
	32734	010	3.9	3.8	
CA	270	016			comparison too poor
	32762	025	3.8:	"	"
CA	314	030	4.0	4.0:	Not good comp.
	355	052	—	"	" "
	366	056	3.7	3.7	
	32813	"	3.9:		Too fogged

AC 32825	28062	4.0	3.9	
32850	076	3.8:	3.9:	overexp
CA 440	078	3.8:	4.0	
456	083	3.7:	3.7	
497	095	3.8:	too poor comparison	
573	128	3.9	"	"
32944	133	too unevenly fogged		
CA 612	143	3.8:	3.7	
33209	345	3.7:	3.8:	overexp
33281	421	3.8:	3.8	
CA 1210	426	3.7:	3.9	
1239	437	3.7	3.7	
1249	440	4.0	4.0	
33313	445	3.9	4.0	
33412	506	3.7:	3.8:	overexp
33709	728	3.9:	3.9	
33772	777	3.8	3.9	
33786	784	3.9	3.9	
33849	818	3.8	3.9	
33917	859	4.0	4.0	
34015	895	3.7	3.9	overexp
34340	29070	3.9	3.9-4.0	
34524	205	4.0	3.9-4.0	
34525	"	3.9:	badly fogged	
34533	207	—	Too	" "

FA
New ~~AE~~ Plates

at 1940

est 1940

		comparison at center				in normal position	
FA	308 ^{10m}	294.78.676	3.7: 3.8	3.8	(not series)	(> 3.8)	
3081	478.685	3.5: 3.5	3.5	3.4		3.61 3.8	
3083	1758	3.5 3.5	3.71 3.7			3.8 3.9	
3089	479.713	3.1: 3.3	non-uniform exposure (mean?) middle exposure missing?				3.1 3.2
3094	481.662	3.6 3.5	3.4 3.5			3.3 3.1	
3096	1708	3.6 3.4	3.5 3.6			3.4 3.3	
3098	1747	3.5 3.5	3.3-4 3.6			3.4 3.3	
3100	1797	3.6 3.6	3.6 3.5			3.4 3.3	
3103	859	3.7 3.7-8	3.7 3.9			3.8 3.9	
3122	485.777	3.3 3.6	3.3 3.4			3.4 3.2	
3124	1825	3.4 3.6	3.6 central comp			3.2 3.248	
3126	1865	3.7 3.6	3.6 3.4 " "			3.7 3.7 mean	
3128	486.609	3.8 3.6	3.9 3.9			3.5 " 3.7	
3130	1649	3.8 3.6	3.8 4.0			3.51 " 3.61	
3132	1691	3.7: 3.4	3.3 3.3 3.4			2.7 2.9 ?? 2.8 3.4	
3134	486.732	3.6 3.5	3.5 3.4			3.1 3.3 3.3	
3136	1773	3.51	3.3 3.2			2.9 3.1 2.8	
3138	814	3.4	3.4 3.4			3.2 3.1 3.2	
3140	1856	3.6	3.7 3.6 3.6			3.2 3.2 3.2	
3154	488.641	3.5	3.5 3.3			3.2 3.2 3.2	
3166	490.678	3.4	3.3 3.5			3.1 3.1 3.0	
3177	491.758	3.5	3.3 3.4 3.4			3.2 3.0 3.2	
3180	491.854	3.8 3.9	4.0 not series plate			(3.8 3.9)	
Start for later	3199	498.783	3.5 3.4			3.2 3.1	
	3206	499.696	3.5 3.4			3.3 3.3	
	3232	508.641	3.4 3.4	3.2		3.2 3.2	
	3234	509.586	3.3	2.5		2.7-8 2.7	

22h+68
exp 40m

FA 3241	29510.706	3.3	3.3	2.7	3.0
43	.758 ²	3.5	3.6	3.0	3.0
45	.789	3.5	3.6	2.8	3.0
47	.831	3.6	3.6	3.1	3.1
49	.873	3.8	3.7	3.4	3.4
3253	511.579	3.2	3.2	3.1	2.9
55	.621	3.3-4	3.5	2.9	3.0
3259	512.583	0.4	3.3	3.1	3.0
62	.666	Too close overlap		0.1:	reject } reject
65	.744	Two images too closely superposed		3.0:-1:	
68	.827	Too close overlap		3.1:	
3271	513.575	3.3-	3.3	3.3	3.2
3277	514.534	3.3	3.3	3.2	3.1
80	.617	3.3-2	3.1	3.2	3.0
83	.700	3.4	3.4	3.3	3.3
86	.782	Too close overlap		3.0:	3.1 i
3290	515.737	2.9 very good overlap		2.9 i	3.0
93	.818	3.4	3.5	3.2-3	3.3
3299	517.696	3.5	3.4	3.3	3.1
3301	.728	3.7	3.7	3.4	3.4
3303	.771	3.5	3.6	3.2	3.4
05	.816	3.7	3.7	3.5	3.4
07	.853	3.7	3.7	3.5	3.2
3310	518.559	3.3	3.3	3.1	3.1
13	.645	3.4	3.2	2.7 i	2.8 i
16	.728	3.5	3.3	3.2	3.2
19	.810	3.3	3.5	3.0 i	3.4
3324	520.596	3.3	3.4	3.2	3.2
3327	.679	3.4 3.5	3.4 i	3.1	3.2 i

Continued on p 210

AI 23^h +60°
 examined i & K and on all these plates

2.5 > 8
 3.6 > 6
 4.2 > 6

AI 1256	16327, 831	3.8	3.7	
2782	16751, 564	3.5	3.5	
9413	18993	3.9-8	3.7	
17392	21821	3.5	3.5:	
32800	28390	3.3	3.51	poor plate
FA259	28393	3.4:	3.4:	
32803	393	overexp	3.7:	
FA609	540	3.9:	3.9	
724	594	4.0	Low alt. effect? 4.0	
1185	762	3.8:	better reject - poor emulsion?	
1218	780	3.9	3.8	
33445	782	3.8:	3.6:	
1244	786	3.8	3.7:	
1272	792	3.8	3.9:	
33527	818	3.4:	large images 3.2:	not very reliable
1530	867	3.8	3.9	
1669	918	3.7:	3.6.7	
2155	29133	3.9	3.9	
2171	138	3.9:	large images ; better reject	
2258	187	4.0	4.0	
2288	193,681	3.9:	large images 3.8:	
2289	193,723	3.9:	" " 3.9:	
2326	203,654	3.9:	" " 3.9:	
2327	203,694	3.9:	" " 3.9:	
2370	219,612	3.8:	3.7:	
2371	" , 654	3.9:	3.8:	
2395	225,597	3.8:	3.7	
2396	" , 637	3.7:	3.8	
2423	231,575	3.8	3.8	
2424	" , 618	3.9	3.9	

FA 2446 29245.536 3.8: images too large 3.7: better reject
 2447 .578 3.9: 3.8
 2576 284.470 3.9 3.9

AI, oh + 45

Examined i & K and on all those
 (Other comp. stars too far off)

AI 19246	22 32 3 ⁵⁶³	3.8	3.61-7	3.5
19271	327.563	3.61	3.71	poor
19291	329.560	3.61	3.61	3.9
19341	339.522	3.71	3.7	13.71 messy
19372	345.536	3.9	3.9	3.9
19386	350.502	3.71	3.61	3.9
19400	353.529	4.0	3.9 ✓	3.9
19802	519.835	3.31	3.1-2	reject - fog
19852	534.828	3.5	3.5	3.5
19892	570.780	3.8	3.6	3.5
19906	575.803	4.0	3.91 ✓	3.9
19913	585.742	3.9	3.8 ✓	3.8-9
19925	589.755	4.0	3.9 ✓	3.8
19938	593.759	3.3	3.71	3.4 3.5 in rig
20020	621.583	3.6	3.71	3.71
20035	630.635	3.7	3.8	3.8
20053	637.738	4.1	3.9 ✓	4.0
20074	642.411	3.8	3.81	3.8
20075	643.697 ⁷⁸¹	3.9	3.8	4.0
20094	658.607	3.8	3.8	3.9
20208	693.505	3.81	4.0 -	4.1
20225	696.576	3.8	3.81	4.0
20287	708.528	3.61	3.71	3.8
20314	714.476	3.8	3.81	4.0
20337	716.475	3.61	3.61	3.9

AI 20359	22718.1552	44	43	✓	4.3
20834	887.834	2.7	2.7	✓	2.8
20846	892.835	3.5	3.2		3.4
20853	894.823	3.4	3.4		3.4
20866	697.794	3.4	3.4		3.4
21030	937.753	3.1	3.6	better reject	3.6
21046	941.707	3.4	3.0	better reject	
21062	946.675	3.3	3.4		
21075	949.670	3.2	3.3	non uniform fog	
21087	952.683	3.5	3.4		
21101	956.676	2.7	2.8	✓	
21121	959.724	2.8	2.8	2.7 poor sample	2.8 & 3.0 nearly alike
21300	999.627	2.9	2.8		" " " "
21336	23004.595	2.7	2.8		
21351	018.722	3.6	3.7		
22709	669.766	3.5		3.6 & 2.8 Too close	
22755	693.741	3.7	3.5		
22803	708	3.3	3.5		
23096	827	3.9	3.7		
23107	831	3.7	3.8		
23337	944.820	3.6	3.3		
24077	24307	3.4	3.4		
24239	393.791	3.5	3.4		
24359	453.621	3.8	3.7		
24829	716.817	3.8		unevenly fogged, better reject	
24852	739.794	3.3	3.2		
25141	864.570	3.7	3.7		
25218	891.538	3.4	3.3		
25644	25102	2.8	3.3	3.2	
25719	139	2.9	3.4	3.2	

AI	25903	25789, 639	3.4	reject - plate " slightly iso "
	25952	203, 475	3.5	3.2
	26543	458	3.4	3.4
	26566	471	2.9	2.9
	26652	516	3.0	3.2
	26695	531	3.3	3.3
	26718	542	3.4	3.2
	26727	545	3.3	3.0
	26742	549	3.2	3.0
	26791	571	3.0	3.3
	26904	605	2.9	2.9
	26990	628.471	2.9	3.0
	27368	808.819	3.3	3.3
	27499	852.811	3.3	3.3
	27562	879.824	3.5	3.4
	27636	905.1697	3.3	3.5
	27689	934.713	3.5	3.7
	27763	957.559	3.8	3.5
	28269	26156.816	2.9	3.0
	28294	166.797	3.1	3.2
	28424	214.802	3.4	3.0
	28450	224.754	3.4	3.3
	28457	228.673	3.7	3.7
	28473	230.825	3.7	3.7
	28526	250.675	3.4	3.5
	28584	261.771	3.7	3.7
	28665	288.705	3.6	3.6
	28680	294.586	3.5	3.5
	28715	309.622	3.7	3.7
	28754	—	3.4	reject - iso

AI 28863	26363.486	3.51	3.6	
29384	26614.797	3.5	3.7	
29405	618.758	3.7	3.7	
29672	699.527	3.5	3.5	
29719	711.529	3.7	3.6	
30168	902.820	3.2	3.5-4	
30292	935.702	3.4	3.3:1	plate badly fogged ; better reject
30370	960	3.0	3.2	
31005	27289.825	3.2	3.5	
31007	290.785	3.4	2.9, 3.2-3	
31145	356.679	3.4		images large, better reject
31188	372.632	3.4	3.5	
31217	380.690	3.5	3.4	
31334	434.523	3.7	3.5, 3.4	
31353	454	3.8	3.8	butterfly comparison ; better reject
31378	462.487	3.5	3.5	
31389	464	3.3	3.4	
31855	735	3.5	3.5	
31862	736	3.5	3.6-7	
31893	756	3.5	3.5-1	poor comparison
32304	28067	3.6		images too large, better reject
32766	364	3.3	3.3	" " "
32869	446.687	3.5	3.4	
32870	446.745	3.7	3.8	
33059	532	3.5	3.4	images too large
33434	776.685	3.4	3.3	" "
33435	776.746	3.5	3.3	" "
34084	29090.	3.3-4	3.4	
34110	120.	3.4	3.5	
34231	187	3.5	3.5-4	
34287	446.	3.5	3.5	

AI 22^h+60

Better reject?

209

New ~~AI~~ plates FA taken specially
continued from p. 203.

FA 3332	29521.801	3.6:	3.71	3.2:	3.21
3337	522.599	3.3	3.1	2.9	2.7
3340	.676	3.5	3.7	3.3	3.4
3343	.766	3.7	3.7	3.4	3.2
3346	.845	3.8	3.7	3.4	3.2
3349	523.549	3.3	3.2: ^{doubt.} _{ident}	3.23	3.2
3352	1641	3.6	3.8	0.7	3.2
3355	.715	3.3	3.6-7	3.3	3.1
3358	.799	3.7	3.9	3.4	3.2
3371	525.590	3.4	3.6	3.2	3.2
3374	.669	3.5	3.7	3.3	3.2
3377	.756	3.7	3.6-7 3.7	3.4, 3.4	3.4
3380	.834	3.6-7	3.6	3.2	3.4
3382	526.550	3.3-4	3.4	3.2-3	3.3
3385	.665	3.4	3.4	3.3	3.4
3390	.831	3.9	3.8	3.4	3.4
3393	528.656	3.5	3.8	2.8-9	3.4
3396	.741	3.5	3.4	3.0-	3.3
3399	.830	3.5 3.7	3.5	3.2	3.3
3402	529.574	3.5	3.4	3.3	3.4
3403	.618	3.3	3.5	3.1	3.3
3404	.667	3.5:	3.6	3.3	3.3
3407	.784	3.7 3.7	3.7	3.2:	3.3
3410	.867	3.9	3.9	3.5	3.4 ⁴ 3.8
3413	530.866	3.9	3.9	3.5-4	3.4
3420	541.589	3.7	3.8	3.2	3.3
3423	.667	3.3	3.4	3.4	3.4
3426	.753	3.8	3.9	2.3	3.5
3427	.844	4.0, 3.9	4.0	3.4	3.5

		comp. at center		normal off center	
FA 3437	29543.787	3.9	3.8	3.3	3.5
3442	544.659	3.5	3.4	3.3	3.2
3445	.739	3.7	3.4	3.3	3.2
3448	.822	3.8, 3.9	3.9	3.5	3.5
3461	548.650	3.6	3.5	3.1	3.4
3470	550.558	3.6	3.6	3.2	3.3
3473	.664	3.6	3.4	3.0	3.2
3476	.725	3.7	3.8	3.2	3.4
3481	551.519	3.7	3.7	3.2	3.2
3484	.600	3.5	3.7	3.0	3.1
3487	.682	3.6	3.6	3.2	3.3
3490	.764	3.7	3.6	3.1	3.2
3508	553.554	3.6	3.7	3.0	3.1
3511	.632	3.5	3.6	3.2	3.4
3514	.718	3.5	3.6	3.3	3.4
3517	.802	3.9	3.7	3.3	3.4
3523	554.713	3.7	3.7	3.3	3.2
3530	555.507	3.6	3.4	3.2	3.4
3533	.673	3.7	3.7	3.5	3.4
3536	.754	3.7	3.7	3.4	3.3
3547	557.663	3.7	3.7	3.3	3.4
3580	570.714	3.9	3.8	3.4	3.5
3594	572.623	3.6	3.7	3.0:	3.4
3610	576.527	3.4	3.6-	3.1	3.3
3613	.611	3.7	3.7	3.4	3.3
3658	583.551	3.6.7	3.7	3.4	3.3
3701	597.554	3.8	3.7	3.1	3.3
3751	610.517	3.7	3.7	3.1	3.3
3754	.600	3.7	3.7, 7	2.7:	2.9
3776	613.509	3.7	3.7	3.2	3.3

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FA Plates for α And. c't'd.

		comp. at center	Normal flashes
FA 3789	29016.584	3.7 3.5	3.3: 3.2



C-Plates on O And
Comparison K and 4026

2481	Same order but very indistinct	4026 a little stronger	R
6074	4026 stronger	K only suspected	2 Prism
5956	4026 much stronger	3X	2 "
2901	<u>K line definitely stronger</u>		
2930	Same order (nearly equal K perhaps fainter) 4026 stronger		
6053	4026 much stronger	2 Prism	3X
2916	4026 a little stronger		
19787	4026 much stronger, K only suspected		
19111	" " "	" " "	2-3X?
19120	" " "	(3X)	K fainter than 4005?
19122	" stronger	(2X)	
19125	" much stronger	73X	
19152	" stronger	poor spectrum	K only suspected
19730	" "		
19105	" "	(2X)	
19719	" strong	K inn	
19110	" "	K weak	(3X)
19052	" "	K weak	3X?





