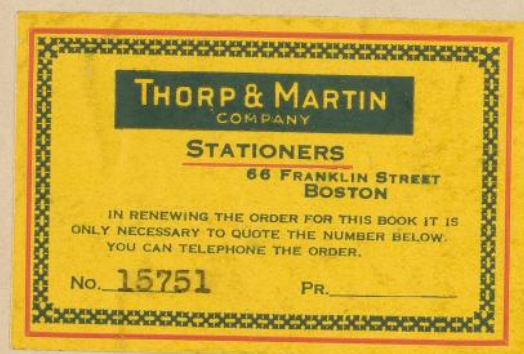


2



Constance D. Boyd

Positions of Variables

17:32 -42°8

a

Van	H.V.	Max.	Min.	Period	Page(s)	Sheet
(W1)	13 L	Sc		known period		
✓ W2	H.H.S.					
✓ W3	H.H.S.					
✗ W4	H.H.S.					
6565 W5	13.5	16.7		$p = 194.5^d$ { 77 epochs slightly shorter period would fit late do 141 obs. better fit new out and new, but enough good early obs. to justify separate periods	III 24-31 folder	J.D. 26460 + 194.5 ^d Feb. '32
X W6				I think vari. is color difference, no var. whatever on A plate, only MFs when is red	III 31-38 Feb. '32	
✓ W7	13.2	15.2		slight, no period out on most recent plates, 10 obs. all recent series	I 166-169 II 215-220 start 5.5 folder	Oct. '31
✗ W10 6668	12.0	16.4		$p = 2563$ days, 56 epochs, 12 obs	I 166-169 folder	J.D. 24730
✗ W11 6684	13.4	16.5		$p = 218$ days 128 obs. 65 epochs	I 162-165 folder	J.D. 24355
✗ W12 6543	12.9	15.5		$p = 337.2$ { 62 epochs 122 obs	I 119-128, 198-203 F folder	J.D. 26125 + 237.2 ep. 16 Jan '32 III 18
W13	defect on MF	97.5				
W14	H.4.5					
✓ 104.5 ^v W15	10.8	15.4		Eclipsing $p = 12.974, 172.4$ 113 obs. J.D. 243765.76 + 12.974 (min)	I 115-119 II 179-183 folder	
✗ W16 66145	13.6	16.0		$p = 222.7$ days, 64 epochs, 11 obs no. of close pairs	I 176-180 folder	J.D. 24700
✓ W17	13.9	15.6		probably short irregular 184 obs	(note III 51-58) I 190-193, 197-200	J.D. 25415 bands '33
✗ W18 6672	13.0	16.5		$p = 200$ days 128 obs. 61 epochs	I 162-165 folder	J.D. 25415
✗ W19 6632	11.8	15.0		$p = 360$ days, 94 epochs, 161 obs	I 158-161 II 210-214 folder	J.D. 23910 + 360.8 Sep '34
W20				Double if it exists. C.D.B.		
✗ W21 6676	13.3	16.4		$p = 182$ days 78 epochs 128 obs	I 162-165 folder	J.D. 25495
W22	13.0	16.3		$p = 213$ days 67 epochs 92 obs	I 165-169 folder	
SK W23	12.5	16.4		$p = 210.5$ 68 epochs 92 obs	I 166-169 folder	
W24	defective west on central, see I.E.			W. Bk. 38, C.D.B. Bk. I p. 176		
✗ W25 6677	12.7	14.3		$p = 360$ days irregular, see card and note	38 epochs 46 obs folder	April '32 long
✓ 6500 W26	14.6	15.4		cluster $p = 379.771$ 7774 obs 122 obs. III 115-119	I 176-177 II 115-119 start 6.4 folder	J.D. 26183.364 + 0.379771 Oct '35
6630 W27	13.0	16.5		$p = 196$ days 73 epochs 104 obs	I 176-179 folder	J.D. 25480
6629 W28	12.9	16.4		$p = 339.7$ 344 days + 339.7 days 56 epochs 33 obs	I 176-179 II 215-217 folder	J.D. 25720 + 339.7 Oct '31
✗ F X Sc	11.5	16.3		$p = 264$ days 50 epochs 121 obs	II 160-164 folder	J.D. 24020

Variables marked with ~~red~~ ^{marked} in list of long periods completed June 1933
 " " ^{marked} ~~Planting line~~ ^{complete}

1

Index

Vari.	M.F.	Ch. Page (Bk. I)	Ans.	Pos. (Bk. II)
✓ W 1	8761		1876	98 17:17:05.6 -38°46'7 ✓
✓ W 2	8761	8536 12	1876	97 17:43:50.3 -38°36'3 ✓
W 3	9596		5555	100 17:52:07.0 -39°29'1 H.H.S.
W 4	8761		5555, 1904, 5622	119 17:53:07.1 -39°37'5 H.H.S.
W 5	8761	1111 12	13568	83 17:28:01 -42°21'5 ✓
W 6	8761	9792 12	13568	84 17:27:59.4 -42°20'7 ✓ wrong *
W 7	8761		2667	158 17:26:37.2 -42°38'3 ✓
W 8	8761	8536 10	5657	93 17:54:37.1 -42°35'7 ✓
W 9	defect			17:18:08.5 -43°44'4 W 8 S.W. Ser period known
W 10	8761	8536 10	2667	61 17:47:32.4 -44°08'4 ✓
W 11	9596	9792 10	2667	61 17:51:16.5 -44°49'3 ✓
W 12	8761		5650	54 17:21:20.2 -46°52'3 ✓ 17:21:05 -46°53'2
W 13	8761	8536 12	7285	101 17:09:05.8 -39°14'1 ✓
W 14	8761		5622 (n.g. -)	99 17:49:38.9 -39°57'4 W 14 H.V. 4468 ✓ no period known
✓ W 15	8761		5650	CPD -46°85'66 -17:15:01.8 -46°53'2 ✓
W 16	8761		13568	67 17:38:42.4 -43°03'8 ✓
W 17	8761	9792 8	13568	80 17:34:20.1 -42°02'2 ✓
W 18	8761	9792 10	2667	17:45:08 47:45'8 -45°06'1 ✓
W 19	8761	8536 12	13568	661 17:47:42.5 -45°00'9 ✓
W 20	8761	8536 10 never	13568	70 17:40:52.2 -44°13'9 ✓
W 21	8761	9792 10	2667	103 17:31:38.8 -44°15'9 ✓
W 22	8536		2667	74 17:31:47.3 -44°15'2 ✓ (wrong star)
W 23	8536		2667	661 17:49:01.2 -45°14'5 ✓
W 24	8536		2667	659 17:54:18.9 -43°40'5 ✓ W 24
W 25	8761	8536 8	2677	659 17:54:24.6 -43°43'4 W 25 SX Cr A kind known
W 26	8761		2677	95 17:48:52.1 -45°54'4 ✓
W 27	9596		2677	95 17:51:29.7 -46°46'6 ✓
W 28	8761		2677	96 17:41:32.7 -46°34'1 ✓
W 29	8761	9792 12 D	1876	96 17:40:50.4 -47°17'9 ✓
				96 17:40:21.9 -47°16'7 ✓
				H.V. 4424 (11.16.6) 17:35:39 -39°11'6 ✓ no period known

2

V.

dy?

6576

* W31 13.8 16.4 SS Cygni type 175 obs. III 33-39, 75-76

Jan. '33
Feb. '33

no var?

see B.k. I p. 114, see later

* W33 11.4 16.3 $p = 429$ days 33 epochs, 169 obs. Bk I p 166-171

J.D. 24710
(see folder and Bk I p. 170)

N. 34 H.H.S.

3. Kind of irregular variability (III 27-28)

6625

* 10 13.8 16.6 $p = 286.8$ days 51 epochs, 110 obs. Book I p 146-149 see folder

J.D. 25830 + 286.8
J.D. 24280 (J. '31)

✓ 12 12.5 13.7 probably irregular 186 obs. III 62-69 folder
12.8 14.0 should, too few plate for type (I 114 sheet 13)

Jan. '33

6637

* 15 14.3 16.5 $p = 315^d$ 47 epochs, 103 obs. J.D. 24405 + 315^d
long, ~~not enough data for period of 315 days~~ see later III 4-8

I 176-180 see folder Nov '31

6687

* 17 14.3 16.7 $p = 260$ days 51 epochs, 86 obs

II 154-157

see folder

19 no var.

I 190-193

10451

✓ 22 13.7 14.5 eclipsing $p = 2^d.590012$ 124 obs. 14 minima J.D. 26118.523 + 2^d.590012 (min). May '33
III 24-28, 32 folder

Var.	MF no.	Page (Blk I)	Ans.	Poo. (Blk. 2)
W 30	8761	9792 12	1876	98 17:26:45.6 -39:46'9 ✓
W 31	8761		9063	655 17:30:40.5 -47:07'0 ✓
W 32	8761		5657	650 17:10:11.3 -44:34'8 ✓
W 33	9649	8536 10	2667	658 17:51:37.0 -42:23'1 ✓
W 34	8761	(minis) 12	5555	4V. 4429 (MEB. (2) 17:51:55.4 -38:41'5

C.S.B. 1

2

✓ 3 9792 6 5650 51 17:09:41.4 -44:15'1 ✓

4

5

6

7

8

9

✓ 10 9792 6 13568 70 17:39:52.7 -44:07'0 a-1 ✓

11

✓ 12 9792 6 13568 649 17:19:46.2 -43:27'8 ✓

13

14

✓ 15 9792 6 13568 66 17:42:00.0 -43:09'3 ✓

✓ 16

✓ 17 9792 8 5636 57 17:53:20 -41:07'6 ✓

✓ 18 9792 8 13568 102 17:37:11.2 -41:50'1 ✓

✓ 19 9792 8 13568 101 17:41:27.1 -41:29'6 ✓

20

(21 9792 8 13568) same as 262

✓ 22 7588 18 2664 101 17:11:50.1 -38:38'1 ✓

23 9792 12 5657

4

H.V.

#

10455 ✓ 26 13.3 16.0 Eclipsing $p = 2^d.13817$ 1213 epochs 123 obs. J.D. 25423.514 + $2^d.15817$ (min) III 18-22 folder Jan '32
 10457 ✓ 27 13.8 15.4 Eclipsing $p = 4^d.9363$ 525 epochs, 124 obs. J.D. 26093.583 + $4^d.9363$ (min) III 18-22 folder Jan '32

10477 ✓ 29 13.8 16.4 eclipsing $P = 7^d.5128$ 310 epochs, 137 obs. J.D. 26180.443 + $7^d.5128$ (min)
 not for plates for per Aug 30 $\left\{ \begin{array}{l} \text{II } 160-161 \\ \text{III } 190-191, 200-212 \end{array} \right.$ folder 38

6651 ✗ 31 13.8 16.3 $p = 217$ 9 epochs, 52 obs. J.D. 25355 early obs unusually poor & scattered II 154-157; see folder
 6686 ✗ 32 14.7 16.5 $p = 148.6$ 81 epochs 67 obs. J.D. 25750 148.6 best for all obs 148.8 fits new plates better Bk I 166-169 folder
 ✓ 33 13.2 13.7 dark, prob. chitter, small but real var Bk I 176-180 sheet 61

6688 ✗ 37 14.8 16.8 $p = 208$ days 14 epochs, 66 obs, but from late obs. J.D. 25470 $\left\{ \begin{array}{l} \text{I } 166-169 \\ \text{II } 215-217 \end{array} \right.$ folder
 10479 ✓ 38 11.8 13.5 $p = 5^d.6192$ 504 epochs, 171 obs. J.D. 25750 504 epochs, 171 obs. $\left\{ \begin{array}{l} \text{I } 166-169 \\ \text{II } 215-217 \end{array} \right.$ folder
 Bk I 142-143, II 215-219 J.D. 26176.368 + $5^d.6192$ sheet 56 hor. 31

6650 ✗ 42 14.1 16.5 $p = 260$ days 45 epochs 76 obs. Bk I p. 162-165 see folder J.D. 25720
 6639 ✗ 43 11.8 13.8 $p = 81.4$ 186 epochs 171 obs. peculiar double lumped maxima see folder J.D. 26120 + 81.4 / May 31
 Bk I p. 158-161 II 215-218

[no var. Oct. '33 45 (13.8 14.5 short too few obs. II 111, 117-118 H. comp. for which influence Oct. 33 sheet 31
 6551 ✗ 46 max 12.8 min 15-8 irregular! 55 Cygnus type? ~~but~~ ~~arrow~~ max, ~~fact~~ ~~arrow~~ full, more so even ~~to~~ ~~same~~ ~~as~~ ~~115~~
 6531 ✗ 47 13.3 16.4 $p = 262.3$ days 55 epochs 116 obs. J.D. 26180 + 262.3 days ~~of~~ ~~10.20340~~ ~~192005~~ ~~115~~ ~~43-6~~ ~~132~~
 444 days 444 days $p = \left\{ \begin{array}{l} 30.5 \text{ J.D. } 4500-22,800 \\ 30.4 \text{ J.D. } 23000 - \end{array} \right.$ C.D.B. II 154-158 folder

6584 ✗ 51 13.9 17.0 long only 87 obs. around 400: May 32 II 206-208
 1 max & 1 other obs. July 1931 I 130-133 folder

6525 ✗ 53 13.2 16.7 long $p = 293^d.3$ 47 epochs 103 obs J.D. 26080 + 293^d.3 III 24-31 folder Jan '32

Var.	MF ms	Page (Bk 1)	Ans.	Pos. (Bk 2)
24	9792	12	5657	What happened? see later.
25				Feb 32
✓ 26	9792	12	1876	98 17:16:14.8 -39° 05' 7 ✓
27	9792	12	1876	99 17:18:52.6 -39° 07' 0 ✓
W1 28				
✓ 29	9792	12	13568	77 17:32:58.1 -40° 25' 6 ✓
30	8536	12	1876	
✓ 31	9588	16	5636	160 17:44:38.7 -40° 12' 0 ✓
✓ 32	9588 (9792)	16	(very bad), 5636	p. 58 17:52:25.3 -42° 57' 8 44' 8 ✓
✓ 33	9588	18	13568	p. 58 17:40:06 -42° 56' 3 17:51:37 -42° 23' 4
W15 { 34	9588	18	1876	
W16 { 35	9588	18	fl. 13568	
STGA ✓ 36	9588 (9792)	16	fl. 5636	p. 59 17:52:34.9 -43° 26' 0
✓ 37	9588 (9792)		6313	59 17:54:06.8 -44° 01' 8 ✓
✓ 38	9588 (9792)		brl 13568	75 17:34:02.0 -44° 16' 2 ✓
39	9588 (9792)	fl.	13568	p. 17 17:19:50.8 -43° 23' 4
(W18) 40				
(W18) 41	9588	16	2677	44:21 -45° 44' 9
✓ 42	9588	16	brl. 1907	106 17:44:12.3 -45° 44' 5 ✓ Feb 32
✓ 43	9588	16	brl. 2677	96 17:41:17.4 -46° 12' 7 ✓
44	9588	16	2677	96 17:39:46.9 -46° 17' 3
✓ 45	9588	16	5650	105 17:29:29.6 -46° 07' 0 ✓
✓ 46	9588 (9792)	18	fl. 5656	p. 52 17:23:09.2 -46° 01' 1 ✓
✓ 47	9588	18	very fl (middle) 5650	p. 52 17:17:30.7 -45° 43' 6 ✓
(W25) 48				
* ✓ 49	9588 (9792)	18	2677	This is H.V. 4118 H. B. 354, Proper CQ graph for period published
50	9588	18	2664	p. 57 17:42:54.9 -40° 17' 8 104 17:41:44.9
✓ 51	9588	18	brl. 4411	104 17:32:23.3 -47° 24' 3 ✓
52	9588	18	5650	
✓ 53	9588	18	brl 2277	104 17:12:41.9 -47° 16' 0 ✓

H.V.	Var	Max	Min	Period	Page No.	Sheet
✓ 56		H. H. S.				
✓ 58		H. H. S.				
10497	✓	60	13.9	16.2	p = 4 ^d . 7947 475 apochs, 150 obs. I 130 186-190, 212-214 2-183	through night, this star obs. in col. of (875)
	✓	61	14.0	15.8	some kind of long period b = 193 ^d 8 57 apochs, 117 obs. p = 194 day. 910 apochs, 586 obs.	Nov. '31 J.D. 26090 + 193 ^d 10.23960
6683	✗	62	13.8	16.7	154-157 215-217 11-14 16-169	folder
6683	✓	63	14.0	16.5	p = 260 days 55 apochs, 82 obs. I 166-169	folder
6528	✗	65	13.8	16.8	p = 187.5 73 apochs, 104 obs. I 114, 186-191	folder
6662	✗	68	14.0	16.4	p = 291.5 482 apochs, 110 obs. I 158-161	folder
6697	✗	68	13.7	16.6	p = 176.3 81 apochs, 113 obs. I 146-149	folder
10484	✓	69	14.9	16.2	p = 24.1 day 548 apochs, 66 obs. I 160-163	folder
H.V. 6561	✗	72	13.7	16.0 or 16.0	p = 358 day { 37 apochs J.D. 25410 142 obs. 4358 I 116-119	ft. com of, variable difficult to observe at minimum
6657	✗	76	14.6	16.5	p = 366 ^d 34 apochs, 32 obs. half of them impossible long, hard to observe p = 241 ^d 57 apochs, 32 obs. J.D. 26180 + 255	Aug. '31 J.D. 24430 + 366 ^d
6541	✗	77	15.4	16.6	long p = 241 ^d 57 apochs, 32 obs. J.D. 26180 + 255	only 8 early obs., perhaps only late should be used
6597	✗	78	15.8	16.8	long = 255; 9 apochs, 91 obs. I 178-183	folder
6623	✗	79	14.7	16.6	p = 278.5 days 51 apochs, 89 obs. I 190-193	folder
6617	✗	80	14.3	16.5	p = 281 day 71 apochs, 92 obs. I 190-193	folder
10495	✓	81	13.5	15.4	usual epoch p = 15 ^d 234 6-30 phot. all again when variable to com. (I 190-191)	folder
6671	✗	82	13.0	16.4	p = 153.9 97 apochs, 120 obs. I 1007, 113-110	folder

Vol.	NF no.	Page (Bk 1)	Ans.	Pos. Bk 2
W1 54	8652	22	5192	
dy 55	8652	22	2664	
✓ 56	8652	20	5622	99 17:46:20.9 -39°27' HHS
dy 57	8652	20	13568	
58 ✓ 58	8652	20	5622	100 17:52:34.6 -39°34'3 HHS
no 12 59	8652	22	2667	
✓ 60	8652	20	2667	17:40:44.5 -42°14'5 ✓
✓ 61	8652	20	2667	17:52:33.8 -41°59'8 ✓
✓ 62	8652	20	1876	17:51:13.6 -42°32'1 ✓
✓ 63	8652	20	1876	17:53:39.9 -43°56'4 ✓
64	8652	22	5192	
✓ 65	8652 (9792)	20	13568	17:14:50.0 -43°53'9 ✓
✓ 66	8652 (9792)	22		17:46:01.2 -45°13'1 ✓
67	8652 def	22	2667	
✓ 68	8652	22	2667	17:36:57.6 -45°06'3 ✓
✓ 69	8652	22	1876	17:35:47.1 -39°38'3 ✓
70 def				
no 49 71	8652	22	2667	
✓ 72	8652	22	4411	17:26:55.5 -46°40'0 ✓
72	8652 def	22	2667	
W2 74				
W1 75				
✓ 76	9792	24	A 2679	17:45:19.7 -40°10'0 ✓
✓ 77	9792	24		17:20:51.7 -40°54'7 ✓
✓ 78	9792	24	A 6456	17:31:00.6 -41°23'0 ✓
✓ 79	9792	24	13866	17:39:19.7 -41°28'8 ✓
✓ 80	9792	24	A 13866	17:38:34.4 -41°22'4 ✓
✓ 81	9792	24	13866	17:40:32.7 -41°31'6 ✓
✓ 82	9792	24	2679	17:47:43.7 -41°58'7 ✓
83	W5			

8

#	V.	Var.	Max	Min	Period	Page (obs)	Sheet (obs)	Notes
6647		84	14.8	116.8	$p=363^d$ 344 epochs, 103 obs. 1815 344 epochs, 103 obs. 344 epochs, 103 obs.	III 4-8 I 172-174	folder	J.D. 24405 + 363 ^d Jan '31
		86	13.0	14.2	semiregular? short long period? prob. short	III 104-110 Bk 26146-147	folder 45	173 ment. obs. see again Sept '33
6554		90	14.4	116.3	57 epochs, 110 obs. 248 days (i.o.b.) time 31	200-202, II 115-120 Bk I	see folder	J.D. 24835 + 248
10961		91	13.7	13.0	clearly eclipsing b = 118.1549 195 obs.	III 51-61 I 115 Bk I	folder	J.D. 26555.236 + 118.1549 a thin band of diamond of stars, (10) within band.
6559		92	13.6	116.6	74 epochs, 120 obs. b = 196.6	II 117-119, I 191, 200-204	folder	J.D. 26105 + 196.6
		98	13.9	15.3	circulating eclipsed? prob. a binary	III 89-93 I 160-161	photo	March '33 n.b. of brighter star
		99		H. H. S.				
10564		103	15.0	16.4	cluster $p=0.491279$ short, 181 obs. 5476 epochs	III 55-58, 63-66 I 184-187	see '32 folder	J.D. 26561.202 + 0.491279
6612		105	14.8	116.7	68 epochs, 117 obs. b = 219.9 65 epochs, 110 obs.	III 4-8 I 150-152	of a double see folder	J.D. 26145 + 219.9 Dec '31
10453		106	13.6	14.5	462 epochs eclipsing b = 5.626 164 obs.	III 18-23	folder	J.D. 26214.208 (min) Jan. 1932
10508		109	13.4	14.5	cluster $p=0.688919$ 542 epochs, 113 obs.	III 104-107-8 I 172-173	59 folder	J.D. 26179.440 + 0.688919 Sept. '33
6620		110	15.1	116.6	b = 332.2 42 epochs, 113 obs.	I 176-180	folder	J.D. 26170 + 332 ^d space. A var. of star
10488		112	13.4	15.3	dwarfed eclipsed $p=24.693$ 611 epochs short spot for 280 obs.	III 52-61 I 158-159	folder	J.D. 26214.208 + 24.693 Oct. '32

Var	MF no.	Page (Bk.1)	A no	P. Bk. 2
✓ 84	9792	24	A 2679 ^{minty}	17:43:23 -43°:22'5" ✓ 17:43:22.0 -43°:22'5"
85	65			
✓ 86	9792	26	2679	71 17:38:34.3 -44°:54'8" ✓
✓ 87	9792	26	5639	
88	defining plate			
89	42			
✓ 90	9792 (9596)	26	but A 4411	b.53 17:24:01.4 -45°:40'0" ✓
✓ 91	9792 (9596)	26	cor A 4411	b.54 17:20:40.9 -46°:33'1" ✓
✓ 92	8652	(26) 23	2667	b.53 17:25:32.6 -46°:09'9" ✓
93				
94	low comp plate			H H S
95				
96				
97				
✓ 98	MF 9768 (9596)	30	A 1876	97 17:33:57.2 -38°:55'1" ✓
✓ 99	MF 9768	30	A 1876	97 17:41:01.7 -39°:11'9" ✓ H H S
✓ 100	MF 9768 (9596)	30	1876	99 17:17:58.7 -39°:29'7" ✓
101				
102				
✓ 103	9768	30	13866, 2679	65 17:43:30.6 -42°:19'4" ✓
104				
✓ 105	9768	30	2679	79 17:37:50.9 -42°:21'7" ✓
✓ 106	9768	30	2679	86 17:15:11.9 -40°:56'8" ✓
80				
107				
82				
108				
✓ 109	9768	30	2679, 2679	67 17:44:18.6 -43°:00'7" ✓
✓ 110	9768	32	13866 (2679)	68 17:39:12.9 -42°:58'5" ✓
111				
✓ 112	9596 (9768)	32	(b.52) 12995	72 17:36:48.1 -43°:22'5" ✓
113				

10

H.V.

6538

✓ 114 13.0 15.0 short irregular 189 obs. III 62-69
 cluster period 4-5 days (See book I p 126-127) See folder Jan '33
 ✗ 115 14.8 17.3 182.6 of 103 obs. II 210-12 J.D. 26240 + 182.6
 p = 18.5 days See Book I p 126-128 See folder Sept. '31

6604

✗ 117 13.7 16.6 p = 421 days 34 epochs 92 obs. See Bk I p 146-149 folder

6529 122

max. 13.5 min 16.4 p = 259.8 56 epochs, 110 obs. J.D. 25430 + 259.8 observed May '31
 also ~~no period obtained, prob. not a short period, probably over 100 days~~ III 153-4, 156-171

(no. var. Oct. '33) 125 (13.0 min 13.8 short, prob. cluster, too few plates Bl I 134-135, sheet 34) III 111, 117-118
 ✓ 126. max. 13.8 min 15.8 short period (obs in folder)
 var. Oct. '33 127 12.9 13.9 + " " (see later) Bk I 118 sheet 13 III 104-6

10506

✓ (154) 14.7 16.3 cluster p = 435.365 J.D. 2619450 + III 808, 85-7 folder Feb. '33
 15.0 16.2 short 6164 epochs, 160 obs. 0.435365 I 172-173 sheet 60 sp. close double

✓ (157) 13.9 14.1 eclipsing 3 min on all plates, new eq. of on var. MF plates only 42 obs. Oct. '33
 prob. short ~~no. var. Thompson~~ See Bk I p 162-163 no graphs

✓ 140 H.H.S.

✓ 141 H.H.S.

Var.	M.F. no.	Page (Bk I)	A. no.	Pos. (Bk. 2)
✓ 114	9768	32	12995	92 17:18:24.1 -42°55'2 ✓
✓ 115	9768	32	2679	92 17:19:42.8 -42°55'0 ✓
116	65			
✓ 117	9768	32	4411	106 17:36:35.7 -45°27'1 ✓
118				
119				
120				
121				
2 122	9768	32	2658	102 17:14:54.4 -45°29'2 ✓
123				
124				
✓ 125	9649 (9792)	34	4411	105 17:30:10.3 -45°58'1 ✓)
✓ 126	9649	34	4411	103 17:47.3 17:16:47.4 -46°10'8 ✓
✓ 127	9649 (9792)	34	2679	89 17:27:15.9 -44°27'7 ✓
128				
129				
130				
131				
132				
133				
✓ 134	9649	36	2679	102 17:43:59.3 -43°11'9 ✓
135				
136				
✓ 137	9649	36	2677	106 17:55:44.2 -46°07'2 ✓
138				
139				
✓ 140	9649	36	1904	100 17:51:20.7 -38°46'8 H.H.S.
✓ 141	9649 (9792)	36	1904	100 17:51:12.1 -38°58'3 H.H.S.
142				
143				

12

H.V.

10485 ✓ 145 14.8 16.2 $p=15.526$ day 849 epochs, 84 obs.

II 160-163 see folder

10465 / 147 13.3 14.4 cluster $p=0.60005$ 4328 epochs, 125 obs.

J.D. 26183.264 + 0.60005 III 18-22 folder Jan. '32

✓ 151 143 15.1 small bulbous var. ^{prob. irregular} fold. short I 172-173 ^{8, 80-1, 85, 7} Sept. 53 136 obs. Feb. '3310489 ✓ 154 13.6 14.9 $p=0.44103$ 6088 epochs 183 obs. J.D. 26179.197 + 0.44103 III 33-39 Nov. '32H.V. 6527 * 155 ~~13.4~~ 13.4 long period Bk I $p=118$ ~~173 long + 171 day~~ ^{see folder} II 176-181 $p=172.5$ (72 epochs J.D. 25830 + 171.5) obs. May '316556 * 156 14.0 15.0 prob. short see folder III 126-110 prob. short Sept. '33
157 ~~14.2~~ 14.2 $p=183$ day ~~epochs 73000~~ ^{there is an abrupt change of period between J.D. 26160 and J.D. 26161 (epoch 60000)}
~~14.2~~ 14.2 long See Bk I $p=115-125$ ^{about 60 days} ~~153 epochs~~ ^{153 epochs} ~~see folder~~ ^{see folder} J.D. 26160 + 153 ^{June 1931} see 19316614 * 159 14.7 16.5 $p=140.5$ day 102 epochs 90 obs. free * of 3 Bk I 176-180 see folder
13.8 15.5 R.V. Tami?
160 14.8 15.8 short cf. 149 obs. (I pp. 182-193) Jan. '33 sheet 69

(w) 162 no var. I 184-186 sheet 65 15 comp networks. peculiarities on MF's, A's show no var.

6644 ✓ 165 14.4 16.4 $p=267.5$ 52 epochs, 119 obs. J.D. 26750 + 267.5 III 4-8, 46
 $p=211$ day for late obs. 9 epochs 50 obs. Bk I $p=170-173$ see folder Nov. '316646 * 166 14.6 16.5 $p=160$ day 84 epochs, 106 obs. up of double J.D. 26190 + 160
~~160~~ 160 ~~2 epochs 50 obs~~ Bk I $p=172-174$ " " Nov. '316631 * 167 14.8 16.8 $p=232$ day 62 epochs 97 obs. Bk I $p=176-180$ " "6575 * 168 13.9 16.7 $p=230.6$ 64 epochs 122 obs. ^{hard to observe on MF's because of limitations of measuring int. &} III 29-31, 33-88 Folder J.D. 26125 + 230.6 Feb. '326549 * 169 15.0 16.8 $p=56$ day for late plates early obs. too scattered 41 epochs, 120 obs. J.D. 26180 + 56 (prob. slightly irregular) Sept. '31
170 14.6 15.9 $p=79.9$ 15 + 170 34 obs. 16 epochs Bk I 134-136 see folder
171 14.6 17.4 $p=79.9$ 138 obs. (0.724-6, 3032) II 196-191 206-8
172 13.7 16.5 $p=321.5$ 45 epochs, 110 obs. ^{long period} Bk I $p=118$ ^{sheet 4} J.D. 25720 + 321.5

Var.	MF no.	Page (Bk I)	A no.	Pos. (Bk 2)
no 31 ✓ 144	9649	38	6456	56: 17:44:36.5 -40°:14'5" <i>same as 31</i> ✓
✓ 145			"	102 17:35:57.3 -40°:14'9" ✓
146	9649 (9792)	38	2679	
✓ 147	9649	38	1876	98 17:22:47.0 +39°:34'1" ✓
148				
149				
150				
✓ 151	8652	23	2667	660 17:45:05.1 -42°:44'3" ^{47'6"} ✓
def 152	8652	23	2667	
def. 153				
✓ 154	8652	23	13866	72 17:36:55.9 -43°:30'3" ^{41'3"} ✓
✓ 155	8652	23	5659	651 17:14:14.5 -44°:53'5" ✓
✓ 156	8652	23	2658	652 17:15:36.5 -45°:35'8" ✓
✓ 157	8652	23	2667	653 17:24:39.6 -45°:56'8" ✓
158 13866 <i>no var</i>		46	13866	
✓ 159	13943	46	13943	67 17:38:36.1 -43°:01'1" ✓
✓ 160	13943	46	13943	68 17:38:35.6 -43°:15'3" ✓
161 13866 ^{def}		46	13866	
✓ 162	13866	46	13866	71 17:36:21.6 -42°:46'7" ✓)
163 13866 <i>no var</i>		46	13866	
164 13866 <i>no var</i>		46	13866	
✓ 165	13866	46	13866	66 17:43:12.7 -42°:59'1" ^{59'2"} ✓ <i>remeasured Feb. '32</i>
✓ 166	13943	46	13943	66 17:43:17.8 -43°:06'0" ✓
✓ 167	13943	46	13943	68 17:40:51.5 -43°:05'6" ✓
✓ 168	13943	46	13943	87 17:50:14.8 -43°:03'9" ✓
✓ 169	13943	46	13943	91 17:23:33.0 -43°:22'1" ✓
✓ 170	13943	46	13943	64 17:40:19.7 -41°:51'6" ^{41°:51'6"} ✓
✓ 171	13943	48	13943	87 17:50:16.9 -43°:34'8" ✓
✓ 172	13943	48	13943	90 17:22:47.8 -43°:53'4" ✓
173 13943 <i>Red Scorpion</i>		48	13943	73

N.Y.

N.V. 6608

✗

174

13.6 < 16.6

penultimate long 190 secondary max 100/10 days after primary max.

14 epochs, 112 obs. J.D. 26215 + 190¹

III 40-45 April '32

6640

✗

176

13.6 < 16.6

p = 393^d 34 epochs, 141 obs.

Bk I 210-214

see folder

J.D. 25830 + 393

Oct '31

10456

✓

177

13.7 15.2-3

p = 112.821 almost ceph

Bk I 158-161

see folder

J.D. 26090 + 112.821

early obs. for and scattering not enough to say changed period

Sept '32

6598

✗

178

14.3 < 16.8

p = 326^d 41 epochs, 120 obs.

Bk I 210-214

see folder

J.D. 24700 + 326

Sept '31

6602

✗

179

14.8 < 16.8

p = 180^d 12 epochs, 120 obs.

Bk I 146-149

see folder

J.D. 26180 + 180^d

Sept '31

10486

✓

180

14.9 16.4

p = 0.467488

Bk I 146-149

see folder

J.D. 26217.213 + 0.467488

Feb. '33

6564

✗

182

13.6 < 16.8

p = 262 days 52 epochs, 137 obs. J.D. 24700 + 262^d

II 178-183

folder

10474

✓

183

14.0 15.2

p = 183 days 52 epochs, 137 obs. J.D. 24700 + 183^d

III 9-96

folder

April '33

6611

✗

185

12.5 16.0

p = 196.5 73 epochs, 109 obs.

I 190-193

see folder

6627

✗

186

14.2 < 16.5

p = 263 days

I 190-193

54 epochs, 94 obs. see folder

np. of pr.

6643

✗

188

13.7 < 16.4

p = 202.5 days 71 epochs, 101 obs. I 186-189

see folder

6641

✗

189

13.8 < 16.5

p = 173.5 76 epochs, 100 obs. II 150-153

see folder

Pf. close double

10471

✓

190

13.8 14.5

p = 0.655815 (perhaps double this) 46 epochs, 188 obs. Bk I 138-139

see folder

Jan. '34

(191)

fl. * (probably 16-16.3) probably does not vary, blurred on majority of MF plates

Bk I 138-139

6579

✗

192

14.8 17.0

p = 231 59 epochs, 111 obs.

Bk I 210-213

see folder

J.D. 23940 + 231

6560

✗

193

14.4 16.5

p = 213 58 epochs, 116 obs.

Bk I 118

see folder

J.D. 24430 + 164

Sept '31

✓

194

15.5 16.5

prob. irregular 133 obs.

II 33-39

May '33

10496

✓

196

14.4 15.8

p = 0 2778 epochs 162 obs.

Bk I 182-183

see folder

Jan '33

✓

197

15.6 13.0

p = 0 2778 epochs 164 obs.

Bk I 119-121

see folder

J.D. 26179.256 + 0.93338

Sept '33

✓

198

13.0 14.0

p = 213 58 epochs, 116 obs.

Bk I 182-183

see folder

J.D. 24380 + 213

Nov. '31

6638

✗

199

15.0 < 16.5

p = 213 58 epochs, 116 obs.

Bk I 182-183

see folder

J.D. 26110 + 213

Nov. '31

6649

✗

200

13.8 < 16.5

p = 273 days 56 epochs, 116 obs.

Bk I 170-173

see folder

J.D. 26110 + 273

Nov. '31

202

defect. 13.2 14.8

A 1299 only max. all obs 14.4

max. on 1299 is trailed differently from other max. irreg.

Feb. '33

203

13.2 14.8

short period

Bk I p. 118

sheet 4

III 51-62 folder look up early obs

Var. A no. Page (Bk 1)

Pos. (Bk 2)

✓ 174 13866 48

175 ^{dup} 13943 48

✓ 176 13866 48

✓ 177 13943 48

✓ 178 13866 48

✓ 179 13943 48

✓ 180 13943 48

181 ^{dup} 13866 48

✓ 182 13866 50

✓ 183 13866 50

184 ^{dup} 13866 50

✓ 185 13943 50

✓ 186 13943 50

? 187 13943 50

✓ 188 13866 50

✓ 189 13866 50

✓ 190 13866 52

✓ 191 ^{doubtful} 13866 52

✓ 192 12995 52

✓ 193 12995 52

✓ 194 13866 52

✓ 195 ^{dup} 13866 52

✓ 196 13866 52

✓ 197 12995 52

(198) 13866 52

✓ 199 12995 54

✓ 200 12995 54

✓ 201 12995 54

✓ 202 13866 54

✓ 203 13866 54

72 17:37:05.0 -43°33'0" ✓

170 17:42:26.0 -43°55'0" ✓

171 17:45:19.7 -46°10'0" ✓

172 17:17:09.0 -44°11'4" ✓

173 17:35:24 -44°57'0" ✓

174 17:35:23.6 -44°57'2" wrong to ✓

106 17:36:10.6 -45°17'8" ✓

73 17:36:29.3 -44°23'1" ✓

82 17:27:35.0 -41°22'6" ✓

77 17:32:39.4 -40°40'0" ✓

163 17:37:51.4 -41°22'5" ✓

63 17:40:22.1 -41°20'2" ✓

65 17:43:04.3 -41°42'8" ✓

62 17:42:35.2 -40°50'9" ✓

87 17:29:34.5 -43°26'1" ✓

88 17:28:42.6 -43°33'9" ✓

74 17:31:27.3 -43°35'8" ✓

88 17:26:39.6 -43°58'8" ✓

80 17:31:17.8 -42°37'0" ✓

68 17:38:53.1 -43°25'0" ✓

68 17:40:35.6 -42°51'3" ✓

119 17:40:04 -43°09'7" ✓

94 17:38:53.7 -43°24'4" ✓

66 17:42:10.5 -42°59'7" ✓

94 17:44:18.8 -43°14'6" ✓

94 17:46:22.2 -43°38'2" ✓

66 17:47:42.2 -43°16'5" ✓

90 17:23:12.9 -43°42'8" ✓

V.

H.V. 6540	✓	204	14.2	14.0	long $p = 299$ day 41 spots 92	II 210-210	Bk I 134-136	J.D. 25740+299 ¹	folder Sept. '31
	✓	205	13.5	14.1	short or irregular (incl cluster) a few per day	144 obs	III 33-39		May '33
6563	✓	206	13.1	14.2	prob. short $b = 232.3^d$ 54 spots, 110 obs	Bk I 4-118	sheet 14	III 104-5, 111	
	✓	208	15.1	14.7	long, not placed on again	II 190-191, 206-209		230 days fits late obs. better	July '31
	✓	209	12.9	14.3	real var. but what?	III 44-5, 48-9			Dec '32
6573	✓	210	14.5	14.5	$p = 293.5^d$ 47 spots, 128 obs. J.D. 23950 + 293.5	made obs below 150 with less because		III 5-10, 18-23	folder Dec '31
10501	✓	211	13.8	14.5	eclipsing $p = 0.447038$ 187 obs	II 188-187, III 85-90	sheet 74		March '33
	✓	212	14.6	16.3	long, about 325 day? up of p. m. to p. m. MF north of type	II 88-93	J.D. 26215		March '33
	✓	215	12.8	13.6	cluster, eclipsing	II 160-161	91-96	sheet 91	
6571	✓	216	15.2	16.6	long $p = 212.2$ 6 spots, 114 obs	J.D. 26070 + 212.2	III 8-10, 18-22		folder Jan. '32
6648	✓	217	13.8	16.6	long with changing period, see card and list	Bk I 158-161			see folder July '32
	✓	219	13.9	15.0	prob. irreg	II 57-8, 80-81, 85-87	Feb. '33		
6618	✓	220	15.7	16.8	prob. irreg	Bk I 172-173	sheet 57		
	✓	221	14.2	15.3	prob. irreg	Bk I 176-180	sheet 57		
6591	✓	222	15.0	16.7	long	Bk I 142-143	sheet 43		
	✓	223	13.4	14.0	prob. irreg	III 18-23, 30-31, 39			January '34
	✓	224	14.2	14.9	prob. irreg	Bk I 142-143	sheet 40		
H.V. 6589	✓	227	14.3	17.0	prob. irreg	Bk I 142-143	sheet 40		
	✓	228	15.0	16.0	short, cluster	Bk I 142-143	sheet 40		
	✓	230			small (4 m) if any, real var.	Bk I 142-143			
6552	✓	232	15.5	16.2	only 3 max. all on A plates, not out of type	II 188-9			July '32
	✓	233	15.0	16.5	long period	Bk I 142-143	sheet 40		

Var. Ans. Page (Bk. I)

✓ 204 12995 54

✓ 205 12995 54

✓ 206 13866 54

✓ ¹¹⁷207 12995 54

✓ 208 12995 54

✓ 209 13866 54

✓ 210 12995 56

✓ 211 13866 56

✓ 212 12995 56

(213) 13866 56

~~214~~ ^{may} 13866 56

✓ 215 12995 58

✓ 216 12995 58

✓ 217 13866 60

~~218~~ ^{Aug 2079} 13866 60

✓ 219 13866 60

✓ 220 13866 60

✓ 221 13866 60

✓ 222 13866 60

✓ 223 13866 60

✓ 224 13866 60

✓ 225 13866 62

✓ 226 13866 62

✓ 227 13866 62

✓ 228 13866 62

✓ 229 13866 62

✓ 230 13866 62

✓ 231 13866 62

✓ 232 13866 62

✓ 233 13866 62

Pos. (Bk. 2)

92 17:20:50.0 -43°05'5" ✓

83 17:28:07.7 -42°43'8" ✓

89 17:26:19.3 -44°29'0" ✓

90 17:27:17.3 -45°11'3" ✓

104 17:28:58.6 -45°22'7" ✓

80 17:29:51.5 -42°12'6" ✓

64 17:42:14.9 -41°57'8" ✓

79 17:36:17.5 -42°24'1" ✓

84 17:27:09.5 -42°10'8" ✓

78 17:33:09.1 -40°39'9" ✓

82 17:28:42.9 -40°44'3" ✓

70 17:43:57.6 -44°50'1" ✓

65 17:45:27.0 -42°41'3" ✓

68 17:39:06.1 -42°54'2" ✓

17:34:15.9 -43°19'6" ✓

72 17:34:53.1 -43°15'3" ✓

17:33:53.1 -43°15'3" ✓

72 17:34:15.9 -43°19'2" ✓

80 17:30:05.0 -42°12'0" ✓

87 17:30:40.8 -42°05'5" ✓

75 17:32:51.2 -44°06'5" ✓)

75 17:33:07.6 -44°13'1" ✓

76 17:33:25.2 -44°28'9" ✓

76 17:31:43.0 -44°47'0" ✓

76 17:31:51.8 -45°08'2" ✓

83 17:25:25.4 -42°35'0" ✓

90 17:23:36.8 -43°35'4" ✓

6621	✓	234	14.1	16.8	$p = 212.5$	62 epochs, 95 obs.	II 150-153	folder	
10475	✓	235	(13.5 14.0)		prob. short, small var. see again	(Sept. '30)	II 160-161	sheet 92	
10470	✓	236	14.0 14.7	Edwin	W. H. H. Type	$p = 0.482018$	12569 epochs	folder	folder
6567	✓	237	13.8 14.5	prob.		II 150-152	180 obs.	J.D. 26183.496 + 0.482018	III 177-178, 110-118
									J.D. 26146.549 + 0.58933
									Oct. '31
									May '33
10458	✓	238	14.8 16.3	cluster	$p = 0.58933$	4402 epochs, 144 obs.	II 178-183	folder	
			14.8	irregular or long with irregularities	$p = 184.4$	30 epochs	172 obs., recent obs.	J.D. 26590 + 10.4	III 95-96, 100-101
			14.1	prob. short				II 178-182	folder
									Jan. '32
10458	✓	240	12.8 13.4	eclipsing	$p = 0.769746$ (double)	183 obs., 787 epochs.	J.D. 26561.445 + 0.769746 (min)	III 24-29, 119, folder	Nov. '33.
		241	13.3 14.0	prob. irregular	190 obs.			III 24-29, 119, folder	Nov. '33
		242		prob. irregular				III 24-29, 119, folder	Nov. '33
10464	✓	243	12.9 14.3	eclipsing	$p = 1.26902$	197 obs., 1532 epochs.	J.D. 26119.420	III 24-29, 119, folder	Nov. '33
10490	✓	244	14.8 16.3	cluster	$p = 0.473049$	5673 epochs, 172 obs.	J.D. 26561.346 + 0.473049	III 33-39	folder Feb. '33
		245	14.0 15.8	irreg.	152 obs.			III 66-68, 71-72, 77-78	Jan. '33
10473	✓	246	13.7 15.3	cluster	$p = 0.47816$	202 obs., 566 epochs	J.D. 26561.467 + 0.47816	III 33-38	folder Feb. '33
		247	13.0 14.3	prob. short				III 104-5-109/10	Sept. '33
6548	✓	248	13.9 14.3	prob. short				J.D. 26240 + 27.5	early obs. only 35 obs.
		249	13.7 14.5	prob. short				J.D. 26180 + 23.5	late obs. only 35 obs.
6629	✓	250	14.6 16.5	prob. short				J.D. 26180 + 23.5	late obs. only 35 obs.
6578	✓	251	14.2 16.0	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6642	✓	252	15.0 16.7	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
		253	15.9 16.7	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6590	✓	254	14.8 16.3	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
10462	✓	255	12.8 16.0	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6596	✓	256	15.1 16.8	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6669	✓	257	13.8 16.5	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6660	✓	258	15.4 16.6	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
		259	15.3 16.0	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6553	✓	260	12.5 16.7	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6581	✓	261	15.3 16.6	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
6595	✓	262	15.6 16.6	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
		263	15.7 16.4	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.
		264	14.4 16.6	prob. long or irreg.				J.D. 26180 + 23.5	late obs. only 35 obs.

Var.	Ans.	Page (Bk. I)	Pos. (Bk. 2)	
✓ 234	13866	62	62 17:39:19.1 -40°52'5" ✓	
235	13866	62	78 17:33:53.4 -40°40'0" ✓	
✓ 236	13866	62	80 17:32:44.2 -42°04'2" ✓	
✓ 237	13866	62	82 17:28:50.6 -41°41'37.5" ✓	
✓ 238	13866	62	82 17:28:18.2 -41°52'7" ✓	
✓ 239	13866	62	93 17:21:26.0 -41°12'3" ✓	
✓ 240	13866	64	86 17:19:10.1 -40°31'0" ✓	
✓ 241	13866	64	130 17:18:53.2 -40°52'6" ✓	
✓ 242	2679	64	85 17:18:46.8 -41°00'1" ✓	wrong measurement star 32
✓ 243	13866	64	85 17:24:51.9 -41°01'2" ✓	
✓ 244	2679	64	85 17:22:45.0 -40°41'7" ✓	
✓ 245	2679	64	72 17:37:18.0 -43°38'6" ✓	
✓ 246	2679	64	68 17:39:34.4 -43°19'1" ✓	
✓ 247	2679	64	83 17:29:49.6 -42°43'6" ✓	
✓ 248	2679	64	89 17:26:58.6 -44°33'1" ✓	
✓ 249	2679	64	17:22:48 -43°45'7" ✓	
✓ 250	2679	64	90 17:23:00.3 -43°46'7" ✓	
✓ 251	2679	64	89 17:28:56.3 -44°40'9" ✓	
✓ 252	2679	64	68 17:40:28.5 -41°00'9" ✓	
✓ 253	2679	64	81 17:31:20.9 -41°29'4" ✓	
✓ 254	2679	64	65 17:42:57.4 -41°52'9" ✓	
✓ 255	13866	68	63 17:39:46.0 -41°27'9" ✓	
✓ 256	13866	68	75 17:33:49.6 -44°14'7" ✓	
✓ 257	13866	68	84 17:21:19.8 -41°58'1" ✓	
✓ 258	13866	68	78 17:25:08.6 -41°28'5" ✓	
✓ 259	6456	68	56 17:47:40.3 -46°09'6" ✓	
✓ 260	6456	68	64 17:45:43.2 -41°37'4" ✓	
✓ 261	6456	68	84 17:42:20.3 -41°56'2" ✓	
✓ 262	6456	68	84 17:23:38.7 -42°06'4" ✓	
✓ 263	6456	68	77 17:32:04.4 -40°33'2" ✓	
			78 17:35:07.5 -41°13'0" ✓	
			79 17:35:49.9 -42°14'9" ✓	

#.V.		Max.	Min.	Period	Page	Blk I	Sheet	
6544	✗	264	14.2	16.5	$p=180.5$	14 epochs, 73 obs.	late obs. may vary in brightness and duration but 150% brighter than in each epoch. Van. appears only once on early plate	J.D. 26480 + 180.5 folder III 24-31 Jan. '32
6653	✗	265	14.8	16.4	$p=216.5$	64 epochs, 103 obs.	J.D. 26540 + 216.5	Oct. '31
9168	✓	266	14.1	15.0	$p=0.61862$	3765 epochs, 146 obs.	no graph	J.D. 26215.211 + 0.61862 (min) Oct. '31
	✓	267	15.5	16.6	irregular	130 obs.	I 146-147, II 215-219	Sept. '33
10476	✓	268	14.8	16.5	cluster $p=0.58443$	3945 epochs, 142 obs.	J.D. 26180.272 + 0.58443	folder II 198-199, 210-213
10480	✓	269	15.3	16.3	cluster $p=0.66975$	137 obs, 4007 epochs	J.D. 26161.346 + 0.66975	Feb. '33
6601	✗	270	15.7	16.7	$p=176.278$	240 obs, 12,809 epochs	J.D. 26179.440 + 176.278	Dec. '31
10469	✓	271	13.7	15.1	short, for few obs.	J.D. 26179.440 + 176.278	see folder	Nov. '32
	✓	272	15.7	17.0	no other with beside 6456	138-139	never appears on	folder Dec. '31
	✗	273	15.7	16.8	base long	I 138-139	late A and MF plate	folder Dec. '31
10463	✓	274	15.5	16.5	cluster $p=0.449342$	5972 epochs, J.D. 26179.304 + 0.449342	folder	Dec. '32
	✓	275	14.8	16.3	long or irregular	II 40-41, 48-49	30	Dec. '32
	✓	276	14.5	16.0	prob. irreg. cluster	III 4041-48-49	31	Dec. '32
6545	✗	277	14.2	16.5	$p=290.5$	43 epochs, 20 obs.	J.D. 26170 + 290.5	folder Jan. '32
	✓	278	15.0	16.0	cluster	138-139	33	III 90-103
	✓	279	14.4	15.8	prob. irreg. cluster	II 172-173, 87-88	50	III 80-85
	✓	280	12.9	13.6	short, small and irregular	158-159	48	Jan. '34
6580	✗	281	13.5	14.3	prob. short	142-143	Sheet 41	
	✗	282	15.1	17.0	$p=130.5$	122 obs, 59 epochs	J.D. 26215 + 130.5	see folder
6547	✗	283	15.4	17.0	$p=226.5$	53 epochs, 95 obs.	J.D. 26170 + 226.5	folder Dec. '31
10511	✓	284	14.7	15.9	prob. cluster $p=0.41617$	7280 epochs	J.D. 26179.220 + 0.41617	March '33
6654	✗	285	15.0	16.4	long, irregular, irregular	150 obs.	J.D. 26145 + 97.5	March '33
	✓	286	13.7	14.3	prob. short	190-195	Sheet 81	
10492	✓	287	14.8	15.8	cluster $p=0.543130$	141 obs, 422 epochs	J.D. 26179.440 + 0.543130	Dec. '33
	✓	288	14.9	15.6	short, cluster	178-183	Sheet 86	
6558	✗	289	15.5	16.7	long $p=30.7$	8 epochs, 56 obs.	J.D. 26440.5 + 30.7	Feb. '32
	✓	290	14.4	14.8	small var, too small to print on a reliability	II 182-184	no graph	
	✓	291	14.5	14.2	prob. irreg. cluster	180 obs.	Sheet 26	Jan. '34
10478	✓	292	15.4	16.7	cluster $p=0.51637$	4465 epochs, 134 obs.	J.D. 26179.504 + 0.51637	Sept. '31
6534	✗	293	11.8	16.5	changing period	period 450	J.D. 11500 - J.D. 18700	17 epochs
					period 420	J.D. 18700 - J.D. 26240	17 epochs	folder

Var.	Ans	Page (Bk I)	Pos. (Bk 2)
✓ 264	13866	68	85 17:21:08.1 -40°47'0 ✓
✓ 265	6456	68	70 17:45:03.6 -45°03'0 ✓
✓ 266	6456	68	71 17:39:09.7 -44°53'6 ✓
✓ 267	6456	68	74 17:31:21.9 -43°54'5 ✓
✓ 268	6456	68	93 17:32:52.6 -43°55'4 ✓
✓ 269	6456	68	76 17:34:17.2 -44°46'5 ✓
✓ 270	6456	70	71 17:35:42.8 -42°52'2 ✓
✓ 271	6456	70	89 17:28:35.8 -44°18'2 ✓
(272)	6456	70	87 17:25:54.0 -43°17'5 ✓
✓ 273	6456	70	83 17:25:26.4 -42°34'9 ✓
✓ 274	6456	70	92 17:21:40.9 -42°50'6 ✓
✓ 275	6456	70	91 17:22:39.4 -43°10'5 ✓
✓ 276	6456	70	91 17:22:13.7 -43°14'8 ✓
✓ 277	6456	70	91 17:22:15.3 -43°21'4 ✓
✓ 278	6456	70	88 17:27:22.2 -43°25'7 ✓
✓ 279	2679	67	66 17:43:08.0 -43°19'7 ✓
✓ 280	2679 (13866)	67	69 17:47:32.8 -44°51'8 ✓
✓ 281	2679	67	76 17:33:51.2 -44°50'8 ✓
✓ 282	2679	67	74 17:31:30.5 -43°56'7 ✓
✓ 283	2679 (13866)	67	119 17:22:42.2 -44°22'6 ✓
✓ 284	2679	72	56 17:46:09.5 -40°28'9 ✓
✓ 285	2679 (13866)	72	56 17:45:07.2 -40°29'4 ✓
✓ 286	2679 (13866)	72	72 17:36:13.4 -41°46'4 ✓
✓ 287	2679 (13866)	72	69 17:39:31.7 -42°21'3 ✓
(✓ 288)	2679 (13866)	72	89 17:29:46.3 -41°42'6 ✓
✓ 289	2679	72	119 23 17:25:22.7 -42°19'3 ✓
✓ 290	2679 (13866)	72	69 17:41:13.4 -42°14'5 ✓
✓ 291	6456 (13866)	74	88 17:27:26.8 -43°27'4 ✓
✓ 292	6456 (13866)	74	75 17:33:01.3 -43°57'0 ✓
✓ 293	6456	74	1.50 17:18:25.2 -44°22'5 ✓

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H.V.

		max	min	kind or type	Page (Ble I)
6570	X	294	14.8 15.1	16.5 long $p = 250 \div 8$ 137 obs. 53 epochs. J.D. 26125 + 250 ⁸ short (too few plates) prob. cluster	40-48-9, 58-61 126-127
10483	✓	295	15.7	17.0 eclipsing $p = 4.5332$ 608 epochs 118 obs.	146-148 # 210-214
	✓	296	15.6	16.7 long or irreg. prob. short	Ble I 142-144 77-81
	✓	297	14.3	15.5 prob. cluster 135 obs.	77-81 I 146-148
6605	X	298	14.5	16.5 $p = 214.5$ days 67 epochs, 112 obs.	Ble I 182-185
6600	X	299	15.5	16.5 $p = 283$ days 53 epochs, 60 obs.	Ble I 182-185
6636	X	300	14.7 15.4	16.2 16.3 semiregular pattern 122 days type unknown, h. obs. 117 obs.	Ble I 182-183 4-8
10507	✓	301	15.7	16.5 cluster type $p = 0.63545$ J.D. 26179.230 + 0.63545 125 obs., 4223 epochs	Ble I 182-183 172-173
10509	✓	302	15.5	16.5 classical eclipsing $p = 2.4412$ 1099 epochs 131 obs.	Ble I 182-183 172-173
6664	X	303	15.0	16.4 long, prob. a short long period to p. 117 obs.	Ble I 186-190
	✓	304	15.8	16.4 prob. short, hard to obs. no triangles	Ble I 186-190
	✓	305	16.1	16.7 eclipsing? only 2 min. perhaps defects	Ble I 186-190
	✓	306	15.0	15.7 prob. cluster III	Ble I 186-190
H.U. 6557	X	307	16.0	16.8 long $p = 203$ 68 epochs, 66 obs.	Ble I 186-190
	✓	308	16.5	17.1 prob. long only 2 max. 16.5, J.D. 26317.26180 $p = 0.516489$ 519 epochs, 160 obs. J.D. 26179.376 + 0.516489	Ble I 186-190
10472	✓	309	15.6 15.7	16.3 16.5 cluster period might be obtainable	Ble I 186-190
6599	X	310	15.7	16.7 $p = 15.4$ late obs. 16 epochs, 66 obs.	Ble I 186-190
	✓	311	14.6	15.7 semiregular eclipsed 5 obs. on MFS, near short long x. 115 obs. (1924-6, 30-32)	Ble I 186-190
	✓	312	15.5	16.4 prob. long for next close double? w. off h. MFS obs. 100	Ble I 186-190
6639	X	313	15.5	16.5 $p = 223.5$ fits all obs. 59 epochs, 66 obs.	Ble I 186-190
6606	X	314	15.5	16.5 $p = 169$ for late obs. 15 epochs, 100 obs.	Ble I 186-190
	✓	315	13.8	15.7 type unknown, prob. long period	Ble I 186-190
	✓	316	15.8	16.3 cluster	Ble I 186-190
	✓	317	14.8	15.9 short, prob. cluster	Ble I 186-190
6582	X	318	15.0	16.8 $p = 233.5$ days 63 epochs, 103 obs. J.D. 26130 + 233.5	Ble I 186-190
		319		really variable short, many kinds of var. where is card?	Ble I 186-190
	✓	321	15.7	16.4 prob. long	Ble I 186-190
	✓	322	14.5	15.6 prob. irreg. eclipsing 7 eclipsing expected minima no period any eclipsing	Ble I 186-190
	✓	323	15.2	16.4 short, cluster	Ble I 186-190

Var.	Amr	Page	Pos	Rt 2
✓ 294	6456 (13866)	74	89	17:28:40.5 -44°39'5 ✓
✓ 295	6456	74	73	17:35:42.2 -44°14'2 ✓
✓ 296	6456	74	75	17:34:14.3 -44°16'6 ✓
✓ 297	6456	74	73	17:35:30.3 -44°05'1 ✓
✓ 298	6456	74	71	17:36:40.1 -42°44'6 ✓
✓ 299	6456	74	71	17:35:42.8 -42°48'8 ✓
✓ 300	6456	74	67	17:41:51.4 -42°56'4 ✓
✓ 301	6456	74	67	17:44:09.8 -42°57'2 ✓
✓ 302	6456	74	65	17:44:25.1 -42°12'1 ✓
✓ 303	6456	74	57	17:46:51.2 -41°59'3 ✓
✓ 304	6456	74	65	17:42:44.6 -42°01'3 ✓
✓ 305	6456	74	81	17:30:34.9 -42°26'7 ✓
✓ 306	6456	76	80	17:30:07.7 -42°19'7 ✓
✓ 307	6456	74	85	17:24:44.6 -41°34'0 ✓
✓ 308	6456	76	81	17:30:07.2 -41°42'7 ✓
✓ 309	6456 (13866)	76	82	17:29:42.9 -41°14'3 ✓
✓ 310	6456	76	78	17:35:27.2 -41°24'3 35 41°24'3 -41°25'9 ✓
✓ 311	6456 (13866)	76	64	17:39:07.4 -41°52'4 ✓
✓ 312	6456 (13866)	76	63	17:38:58.0 -41°36'8 ✓
✓ 313	6456	76	62	17:42:15.3 -40°25'2 ✓
✓ 314	12995	78	77	17:36:57.9 -40°33'4 ✓
✓ 315	12995 (13866)	78	64	17:42:35.2 -41°57'9 ✓
✓ 316	12995 (13866)	78	80	17:32:16.5 -42°27'7 ✓
✓ 317	12995 (13866)	78	79	17:35:41.6 -42°11'8 ✓
✓ 318	12995 (13866)	78	81	17:32:07.1 -41°24'0 ✓
✓ 319	12995 (13866)	78	86	17:14:12.4 -41°52'4 ✓
✓ 320	12995	78		
✓ 321	12995	78	74	17:36:57.5 -44°43'5 ✓
✓ 322	12995 (13866)	78	76	17:34:07.1 -44°33'8 ✓
✓ 323	12943	80	91	17:19:59.4 -43°20'8 ✓

H. V.

6613

324 14.8 216.8 $b = 284.5^d$ 52 epochs, 122 obs. III 33-38, 29-31. folien Feb. '32 J.D. 26170 + 284.5^d

325 15.4 16.3 low sheet 3 E 118 sheet 15 sp. of double

325 13.4 16.3 not plant? I 118 met 13 spr. of double
326 14.4 15.2 cluster? III 91-94 fl.
I 166-167 54 n.b. of close double

6635

327 $\frac{13.8}{4.6} - \frac{15.8}{16.2}$ $p=197^{-2}$ SS apob. 1800. 147-1 better for obs. after J.D. 2395. Many in direction
for all obs. used. $\frac{I}{II} 176-180$ folder w. m. 11.26.30 + 15.2.2
long obs. station 4-8 folder w. m. 11.26.30 + 15.2.2
220.5 65 100-200 J.D. 2424405 + 220.5

6566

328 149 616-6 long p = 22 days 2 epochs, jobs I 130-132 see folder July '31

✓ 329 13-1 *irregular or semicircular* III 72-75
 142 *floral, protuberant* I 62-63 123 obs. Jan. '33
 long b = 294 118 obs. 126 obs. *several obs. on early part of 1st year* II 111-118 118 obs. 126 obs. 129 obs.

6569

[illegible]

331 12.6 13.6 short, prob cluster, too few plates I 134-136 shell 33

(332) no var. 14.0 14.9 ^{upper} troch. III 106-111 Oct '33 near edge of plate

332 13.2 14.6 prob. irreg $\frac{1}{11}$ 139-142 $\frac{1}{11}$ 146-150, 134 $\frac{1}{11}$ 147, 148 nearly obs. " exact 2 May '54

334 14.0 14.6 short two fur plates \pm 115 plant 20 small not real var. Ver by H.H.S.

335. 12.7 13.8 short. to few plates I 114 sheet 14

✓	336	14.0	15.0	"	"	"	E 114	"	15	III 91-96
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(337) 12.9 13.8 *thin* (blood, perhaps cluster too few plates) B.I. 114 sheet 16 (in 33)

(338 137 14.5 color for later 504 17

339 13.0 14.6 " " " " " F 115 " 23

12.9 14.5 179 lbs. ~~To the lake~~ ^{main} ~~lake~~ ^{pano.} ~~pano.~~ ^{III} 56-60, 62-68 ^I 115 24 ^{has} 32

ME 115, sheet 21

542 9.8 110
 proper flat, parallel, like square tiles, either short or irregular, certainly not long.
 past. irreg? 183 obs. on wood plates rebo. III 106-III

✓ 343 128 137 ~~Blank Two few photos~~ 115 sheep 22 Oct. 33

345 n/1 pair vases very close double BZ 114 too seldom separable to make any estimate of period.

692 X 346 13.6 14.2 416.0 b = 209.4 (2 steps, 18000. 0.2.20. 0.4.20. 0.7.4) Jan
~~but short on water~~ (field) Pg 130 III 71-5, 88-9, 58-61 Jan '33

347 14.6 15.6 irregular or semicircular III-98-103 May 33
~~sub basal for 100, base edge of field~~ 8 k I 130-2 ~~shalt~~ 29 140 obs

6555 X 348 14.0 17.0 198.204 gms 198.204 gms 198.204 gms

6679 ~~13.9~~ 13.9 $p=205$ late obs. 13.9 obs. II 203, 214-219 early obs. poor 1.02

cluster $p = 0.456095$ 111060. 58885 epochs

14.1 Ark. inv. 144 obs. III/11, 114-118. redwood. 63-66 Dec. 52

1. D. reusca 104 dy (I 134)

6539 ~~X~~ 352 10.9 12.3 long $b=104.4$ 145 March 2020 $b=93.5$ 141 March 2020 $E=25.9$ unres. III 24-32, 48-9 folder

6533 353 46 6170 long ~~too~~ ^{Impress} ~~juv~~ max. 116 lbs J.D. 26145 + 335 ^{# 901260} _{# 11-14} sf ft par Apr '31

Var.	Ans	Page	Ref	M.Fmt.	Pas.
✓ 324	13943	80		73	17:37:54.2 -43°:50.3 ✓
✓ 325	13943	80		88	17:28:22.1 -44°:29.7 ✓
<i>mid of A plates</i> ✓ 326	2667 ^{mid of A plates}	82	9671 (9792)	17:51:58.2	-42°:37.8 59.7 ✓ <i>wrong star</i>
✓ 327	2679	82	9671 (9792)	67	17:41:26.7 -43°:09.2 ✓
✓ 328	4411	82	9671 (9792)	105	17:28:16.9 -46°:16.9 ✓
✓ 329	2677	82	9671	94	17:49:50.5 -46°:29.8 ✓
✓ 330	4411 ^(rr35)	82	9792	104	17:28:24.4 -46°:58.9 ✓ <i>for hr. 33</i>
✓ 331	4411	82	9792	105	17:29:57.7 -45°:28.3 ✓
222 ✓ 332	7874	14	9792	p. 54	17:11:00.3 -46°:55.8 ✓
✓ 333	7874	"	"	54	17:13:43.2 -46°:37.8 ✓
✓ 334	7874	"	"	p. 53	17:12:18.4 -46°:09.0 ✓
✓ 335	7874	"	"	p. 49	17:18:37.0 -43°:23.2 ✓
✓ 336	7874	"	"	p. 49	17:13:08.5 -43°:47.9 ✓
✓ 337	7874	"	"	p. 50	17:14:14.7 -44°:18.9 ✓
✓ 338	7874	"	"	p. 50	17:14:11.9 -44°:15.2 ✓
✓ 339	7874	"	"	51	17:14:04.2 -45°:39.4 ✓
✓ 340	7874	"	"	51	17:13:07.7 -45°:34.3 ✓
✓ 341	"	"	"	52	17:18:08.2 -45°:48.2 ✓
✓ 342	"	"	"	53	17:16:28.5 -46°:10.9 ✓
✓ 343	"	"	"	52	17:22:38.4 -46°:15.3 ✓
344	7874				
✓ 345	"			p. 51 ^{which star was?}	17:25:45.2 -44°:07.5 ✓ (also 17:25:45.2 -44°:07.6) ✓
237 ✓ 346	"	7723		103	17:34:17.8 -47°:24.8 ✓
✓ 347	7723	7723		103	17:24:10.0 -47°:24.2 ✓
✓ 348	7723	7723		103	17:24:16.8 -47°:18.4 ✓
✓ 349	5636	82	M72229	110	17:49:49 -42°:59.5 ✓
✓ 350	4411	82	12229	115	17:43:08 -46°:51.8 ✓
✓ 351	4411	82	12229 ⁽¹⁷¹⁰⁾	113	17:41:38 -45°:44.7 ✓
✓ 352	6456	82	12229 (9590)	107	17:20:40 -43°:45.7 ✓
✓ 353	6456	82	12229	107	17:18:15 -44°:40.1 ✓

checked Feb. '32
~~Remains for Sunday 379~~

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H.V.

✓	354	10.7	11.8	slant	Bk I p. 119	sheet 7	
6535	✗	355	12.5	14.3	over 100 days small irregular	II 198-204	folder
6550	✗	357	14.5	16.5	$p = 269.5$ prob. 100 days	II 117-121, III 45-46 II 192-204	47 epochs, 84 obs. J.D. 26550 + 269.5 only 30 epochs, 32 sp. of double see again (Jan '31)
6552	✗	358	14.2	16.4	$p = 172$ days 83 epochs 107 obs.	folder I 186-189	
✓	359	12.8	13.5	prob. slant peculiar	sheet, see again Jan '32	Nov. '33	
10494	✓	360	14.0	12.0	irregular $p = 1.27828$	(2028 epochs II 4-8. 125 obs. I 121	J.D. 26155.427 + 1.27828 folder Jan '32
✓	361	15.1	16.4	irregular 141 obs.		III 18-23, 93, 95-96	April '33
6667	✗	362	15.0	16.5	$p = 239.5$ 59 epochs 80 obs.	Bk I p. 166-170	see folder
6659	✗	363	14.4	16.6	$p = 215$ days 61 epochs 91 obs.	Bk I p. 172-174	see folder
✓	364	14.5	15.6	irregular or semiregular		122 obs. Jan '33	
10514	✓	365	14.7	15.9	$p = 0.43535$ 6165 epochs prob. cluster 102 obs.	Bk I p. 162-3 III 72-75 III 72-75 folder	J.D. 26182.430 + 0.43535 sp. of double Jan '33
10513	✓	366	11.3	13.1	classical Cepheid $p = 19.818$, 761 epochs prob. cluster 233 obs.	III 69, 75-80, 82-84 Bk I p. 162-3	J.D. 26154.425 + 19.818 sheet + folder Jan '33
6678	✗	367	14.4	16.6	$p = 221$ days 56 epochs, 85 obs.	J.D. 26065 + 221.2	Oct. '31
✓	368	13.8	15.2	prob. semiregular	III 72-75 118 obs.	Bk I p. 162-163	sheet 53 Jan '33
10510	✓	369	14.9	16.1	$p = 0.456585$ 108 obs. 5878 epochs cluster n.f. of pi.	J.D. 25469.246 + 0.456585 I 162-163 III 63-66	folder inf. of pi. sheet 56 Dec. '32
6622	✗	370	13.5	16.6	$p = 232$ days 128 obs. 61 22 obs. 57 epochs	Bk I p. 158-161	folder I.D. 26470 + 232.2 Sept. '32
10487	✓	371	14.8	16.5	$p = 0.437934$ 6129 epochs, 144 obs.	J.D. 26472.536 + 0.437934 Bk I p. 158-161	folder
6588	✗	372	13.6	16.5	$p = 155$ + 165 days 1587160 + 2 days 85 long 155 + 165 days	Bk I p. 130-132 II 206-208	folder J.D. 26185 + 158.7
6583	✗	373	14.3	16.5	$p = 300.5$ 110 epochs long 155 + 165 days	I p. 130-132 II 206-208	folder J.D. 25725 + 300.5
6574	✗	374	14.5	16.8	$p = 218$ days 90 long 155 + 165 days	II 206-208 I p. 130-132 III 43-46	folder J.D. 2425410 + 218 J.D. 26504.423 + 1.278233 (min) Nov. '33
10454	✓	375	13.8	16.0	$p = 1.892233$ 1601 epochs, 151 obs.	Bk I p. 130-131, II 186-192, 219	folder
✓	376	14.4	15.3	irregular prob. irreg.	178 obs. on vent plate 126 obs. (same A plate)	III 78, 110, 112-118	folder Nov. '33
10448	✓	377	13.2	13.9	irregular $p = 0.89348$ (double period) 6781 epochs $p = 0.1094750$ 140 obs.	J.D. 26119.568 + 0.89348 III 114-118	II 24-28, 32 Oct. '33
10515	✓	378	13.0	13.8	prob. cluster 27674 epochs	II 154-155	folder J.D. 26183.300 + 0.1094750 Oct. '33
6674	✗	379	14.0	16.2	$p = 400$ days 35 epochs 57 obs.	inf. of pi. cluster per. do not fit	II 154-157 the folder Nov. '31
10512	✓	380	14.3	15.9	$p = 15.632$ (or perhaps 31.264) 187 obs., 172 epochs	J.D. 26145.362 + 15.632	early obs. too few and scattered, 15-16 epochs then I 186-187 II 77-61, 63-66 see folder Nov. '32
✓	381	11.4	12.0	prob. irreg. prob. slant	II 59-61, 85-90 I 186-187	191 obs.	much '33 July '32
✓	382	12.0	13.7	prob. irreg. of mass again	II 160-161 III 49-50	sheet 90	fold of 26183
✓	383	14.0	14.0	prob. cluster	II 89-93 III 160-161	155 obs.	folder see again for Jan (Aug. '31) Nov. '33

Var	Ahr.	Page	M#Nr	Position
✓ 354	4411	84	12229(9596)	-46° 26' 17" 17:22:02 -46° 22' 3" ✓
✓ 355	4411	"	12229	114 17:19:06 -47° 12' 6" ✓
W 12 ✓ 356		"	12229(9596)	
✓ 357	4411	"	12229(9596)	114 17:22:53 -47° 18' 6" ✓
✓ 358	6456	"	12229	107 17:44:57 -42° 14' 0" ✓
✓ 359	6456	"	12229(9596)	108 17:16:29 -40° 50' 8" ✓
✓ 360	2677	"	12229(9596)	112 17:40:11 -46° 28' 8" ✓
✓ 361	1876	"	12229	110 17:28:13 -39° 11' 9" ✓
✓ 362	6456	84	11843	107 17:47:18 -43° 01' 2" ✓
✓ 363	6456	"	11843	108 17:45:42 -42° 36' 7" ✓
✓ 364	2677	"	11843	112 17:51:53 -45° 05' 8" ✓
✓ 365	5636	"	11843	109 17:49:18 -44° 50' 3" ✓
✓ 366	2677	"	11843(9596)	111 17:49:17 -45° 45' 4" ✓
✓ 367	2677	"	11843	112 17:49:10 -46° 02' 0" ✓
✓ 368	2677	"	11843	111 17:53:02 -46° 59' 4" ✓
✓ 369	2677 4411	"	11843	112 17:45:42 -46° 46' 4" ✓
✓ 370	4411	86	11843(9596)	115 17:39:19 -46° 27' 3" ✓
✓ 371	4411	"	11843	114 17:38:39 -46° 27' 2" ✓
✓ 372	4411	"	11843	113 17:32:57 -45° 52' 6" ✓
✓ 373	4411	"	11843	113 17:32:22 -46° 02' 0" ✓
✓ 374	4411	"	11843	113 17:30:08 -47° 08' 8" ✓
✓ 375	4411	"	11843(9596)	114 17:58:50 -46° 45' 4" ✓
✓ 376	6456	"	11843	108 17:23:21 -41° 20' 8" ✓
✓ 377	5657	"	11843	115 17:07:59 -41° 54' 5" ✓
✓ 378	5626	86	11843	109 17:51:17 -41° 49' 7" ✓
✓ 379	5626	"	11843	109 17:48:04 -41° 12' 3" ✓
✓ 380	5626	"	11843	109 I 17:47:13 -41° 41' 5" ✓
✓ 381	5626	"	11843	CPD -41° 8' 32" 17:45:38 -41° 37' 4" (97 C.R.D.) ✓
✓ 382	6456	"	11843(9596)	108 17:36:49 -40° 48' 1" ✓
✓ 383	1876	"	11843	111 17:36:14 -39° 18' 9" ✓

Remove for see also 349

28

H.V.

384 14.5 15.9 classical & lead $p=15.66$ { 165 epochs (133 obs. late) J.D. 26103.606 ± 15.66 } 23 early A and B plates for period but time too far apart to include in first curve (49 epochs between J.D. 26000 and 26340) folder Jan '32 III 8-10, 18-23

384 11.4 12.0 ~~probably clear~~ I 186-187 sheet 71

385 H.H.S.

386 10.9 10.0

6524 387 14.2 16.5 $p=42.7$ 32 epochs, 82 obs. (49 28, 1929) if only late plates included: 6 epochs, 74 obs. J.D. 25410 ± 42.7 folder III 24-31 Jan '32

388 H.H.S.

389 H. H.S.

390 H. H.S.

6546 391 13.7 16.0 long $p=90$ 16 epochs, 92 obs. 435 obs. III 98-101 J.D. 26560 ± 90 irregularities on the ascending branch, perhaps primarily but secondary max. see folder May '33

6593 393 15.5 16.6 $p=137.5$ for late obs. 18 epochs, 70 obs. early obs. poor and scattered III 11-14 folder

6682 394 14.0 16.5 $p=181$ day 82 epochs 108 J.D. 26090 ± 181 inf. close double Dec. '31

6685 395 15.0 17.0 $p=217.8$ day 5 epochs 70 obs. Bk I pps 162-165 see folder

6537 396 13.9 17.0 $p=265$ days 48 epochs 70 obs. Bk I pps 138-140 see folder J.D. 25790 ± 265

6536 397 15.0 17.0 $p=245$ day late obs. 11 epochs, 78 obs. II 200-202, III 43-6 J.D. 26240 ± 245

(398) 16.0 17.0 no var. of 330 which was compared with it in measures, 1931 A plates show clearly that 330 is only variable Nov. '33

estimate of type. no graph Bk I pps 130-131

6677 399 14.6 16.4 $p=315.2$ 46 epochs, 89 obs. J.D. 24370 ± 315.2 II 214-219 Bk I pps 166-170 see folder Nov. '31

400

401

402

403

404 15.4 16.0 clear H. H.S. 223

Bk II 170-175

405

II 214

406

407

408

409 15.0 15.5 prob. cluster

III 33-38 see again Feb '32 no graph

6572 411 14.4 16.8 long $p=200.8$ 76 epochs 118 obs. J.D. 26060 ± 200.8 III 40-46, 28-31 folder May '32

10461 412 13.8 15.1 clear $p=0.49421$ 5431 epochs, 132 obs. J.D. 26561.227 ± 0.49421 inf. close double which was to decrease III 51-59 folder Nov. '32

Varko	Ans	Page Bk I	MF Nr	Position (Bk II)
✓ 384	1876	86	11843	110 17:26:09 -39° 50' 0" ✓
✓ 385	1876	"	11843	111 17:42:16 -39° 11' 7" ✓
✓ 386	1876	88	11843 (9596)	110 17:23:31 -39° 35' 2" ✓
✓ 387	5657	"	11843	115 17:10:29 -40° 16' 4" ✓
✓ 388	5622	"	11843	116 17:44:48 -39° 54' 2" ✓
✓ 389	5622	"	11843 (9596)	116 17:50:24 -39° 02' 5" H H S
✓ 390	5622	"	11843 (9596)	116 17:50:43 -38° 53' 5" H H S
✓ 391			11716	117 17:22:16 -46° 24' 6" ✓
W 17	✓ 392	6456	11716	
W 17	✓ 393	6456	11716	116 17:34:26 -41° 59' 6" ✓
	✓ 394	5626	11716	117 17:50:53 -41° 01' 3" ✓
✓ 395	MF 267	88	13256	118 17:51:46 -44° 38' 3" ✓
✓ 396	7874	88	13256	117 17:19:42 -46° 32' 4" ✓
✓ 397	7874	88	13256	117 17:19:40 -45° 18' 7" ✓
✓ 398	(see over 330) 4411	p 130 7723	A 7723	105 17:28:23 -46° 56' 8" ✓
✓ 399	6313 2677	88	13092 (9596)	118 17:49:08 -42° 39' 3" ✓
✓ 400	6456	88	13037 (9596)	118 17:23:25 -40° 51' 8" ✓

pro. reassessed Feb. '52

404

V' 11

409 6456 131 17:30:13.5 -42° 21' 3"

411 7874 90 A 7874, 7656 120 17:29:17 -45° 24' 8"

412 7874 90 A 7874 55 17:20:42 -46° 32' 5"

30

H.V.

413

var. 415-9, 421-420 entered in type section list, May '33

- 6562 ~~long p. not in type list, May '33~~ 414
 6609 300 415 13.4 <16.5 long $p=460^d$ 33 epochs, 95 obs. J.D. 25510 + 460^d III 59-61, 68-9, 71-75 Jan '33 folder
 6568 417 13.7 <16.5 long $p=233^d-5$ 10.17335 + ~~late~~ $p=231^d$ J.D. 26160 ~~very near~~ III 59-61, 68-9 71-2, 77-9 folder Jan '33
 6587 418 15.1 <16.5 long $p=151^d-2$ 19 epochs, 79 obs. J.D. 26460 + 151^d III 68-9, 71-2, 77-9 folder Jan '33
 419 13.2 15.2 irregular or semiregular 151 obs. III 71-75, 68-9, 59-61 Jan '33
 420
 6586 421 15.1 <16.6 long $p=226^d-5$ 62 epochs 140 obs. J.D. 26480 + 226^d III 94-102 folder April '33
 6526 422 14.8 <16.5 long $p=178^d-7$ 80 epochs, 120 obs. J.D. 26505 + 178^d III 94-103 April '33
 H.V. 6523 423 14.4 <16.6 long $p=310^d-4$ 46 epochs 106 obs. J.D. 26505 + 310^d 4 fol. of pair folder III 94-103 May '33
 424 14.1 15.1 irregular 108 obs. very far south in field, off main plates III 94-103 May '33
 6619 425 14.0 <16.8 long $p=377^d$ 40 epochs, 152 obs. J.D. 26470 + 377^d folder III 94-103 May '33
 6594 426 13.8 16.0 long $p=111^d-3$ 45 epochs, 133 obs. J.D. 26125 + 111^d 3 (Emerged from and reentered, although they pair fairly approximately) III 94-102 April '33
 6625 427 14.8 <16.5 long $p=344^d$ 146 obs, 45 epochs, J.D. 26520 + 344^d III 94-102 folder April '33
 6616 428 14.6 <16.8 long $p=405^d$ 134 obs, 38 epochs, J.D. 26460 + 405^d III 94-103 folder May '33
 6530 429 14.9 <16.8 long $p=238^d-1$ 137 obs. 64 epochs J.D. 26570 + 238^d 1 III 82-3, 97-105 folder June '33
 6532 430 15.6 <16.8 long $p=222^d-5$ 123 obs. 64 epochs J.D. 26145 + 222^d 5 III 82-3, 97-105 folder June '33
 6597 431 14.9 <16.6 long $p=214^d$ 103 obs, 14 epochs J.D. 26560 + 214^d III 95-6, 104-10 (82-3, early, no use) folder June '33
 432
 10449 433 12.4 14.0 eclipsing $p=7^d-969388$ 1976 253 1933 epochs, 199 obs. J.D. 26595.309 + 7^d 969388 (min. III 114-5, 120-24, 75-6 folder Feb. '34
 10493 434 14.8 16.3 cluster $p=0^d-644705$ 4699 epochs, 193 obs. J.D. 26179.470 + 0^d 644705 III 112-115, 119-122 folder Feb. '34
 435
 436
 6624 437 14.7 <16.5 $p=219^d-8$ 65 epochs, 152 obs, very few early obs, but they fit curve. J.D. 26170 + 219^d 8 III 125-133 folder Feb. '34
 10491 438 15.0 16.1 cluster $p=0^d-528663$ 5731 epochs, 176 obs. J.D. 26561.380 + 0^d 528663 III 126-133 folder Feb. '34
 439 III 126-133
 6585 440 14.5 <16.8 long $p=377^d$ 39 epochs 134 obs. III 127-133, 124-5, J.D. 26800 + 374^d Feb. '34, folder
 441 15.9 <16.6 prob. long never appears on early plates 70 obs. on recent plates, one good map at J.D. 26600 III 124-5, 127-133
 442
 10459 443 13.1 <16.1 eclipsing $p=8^d-71294$ 1808 epochs, 400 obs. (147 early, 253 recent) J.D. 26472.536 + 8^d 71294 (min) III 111, 125-127, 129-135 75-76 folder Feb. '34

413				
414				
415	marked	A5920	p.122	17:27:15.5 -47°02'1 ✓
416	marked	A5920	p.123	17:39:04.8 -45°52'0 ✓
417	p.122	marked	A7874	17:28:18.0 -46°30'6 ✓
418	p.123	"	A5639	17:32:34.6 -47°39'1 ✓
419	marked	A7874	p.122	17:29:39.0 -47°04'1 ✓
420				
421	marked	A15347	p.120	17:32:35.0 -40°34'1 ✓
422	marked	A7874	p.122	17:12:45.6 -45°36'7 ✓
423	marked	A5650	p.121	17:08:22.6 -45°51'3 ✓
424	marked	A7874	p.121	17:16:27.1 -47°21'3 ✓
425	marked	A6456	p.121	17:39:08.9 -42°57'9 ✓
426	"	"	p.121	17:34:41.4 -41°14'9 ✓
427	A6313		p.120	17:48:44.2 -42°11'2 ✓
428	marked	A15347	p.120	17:38:42.7 -41°43'6 ✓
429	marked	A15720	p.123	17:17:00 -43°43'6
430	"	"	p.124	17:17:44 -45°18'0
431	marked	A15779	p.123	17:35:23 -40°07'8
433	marked	A5657	p.124	17:09:15 -40°42'3
434	"	6456	124	17:39:56 -41°20'1
437	marked	15749	p.124	17:39:24 -41°14'8 ✓
438	"	15749	p.124	17:39:21 -41°10'7
440	marked	A8996	p.125	17:32:28.0 -39°23'8 ✓
441	"	15749	p.125	17:32:57.0 -39°33'2
443	marked	A6456	p.125	17:20:27 -42°53'2

633	* 445	13.2 ⁴ 16.5 long $p=203^{\pm 5}$ 79 epochs, 210 obs. J.D. 26180 + 203 ⁵⁰ $\equiv 129-133, 136-139, 25-26$ folder March '33
680	* 447	15.8 ^{14.0} 16.5 long $p=190^{\pm 6}$ 83 epochs, 177 obs. J.D. 25850 + 190 ⁶ $\equiv 129-133, 136-139, 25-26$ { 1st of pair folder March '34
	446	
10466	✓ 447	14.9 16.4 cluster type $p=0^{\pm 38377}$ 7847 epochs, 172 obs. J.D. 26561.346 + 0 ³⁸³⁷⁷ $\equiv 126-127, 129-139$ folder Feb. '34
6661	* 448	13.5 16.5 long $p=339^{\pm 5}$ 47 epochs, 169 obs. J.D. 27290 + 339 ⁵ $\equiv 127, 129-133, 139-142$ folder March '34
6673	* 449	13.5 ⁵ 16.5 long $p=330^{\pm 6}$ 48 epochs, 174 obs. J.D. 25370 + 330 ⁶ $\equiv 127, 129-133, 139-142$ folder March '34
	✓ 450	15.4 16.5 prob. cluster or cepheid? $\equiv 129-134$ 88 obs. folder April '34
10468	✓ 451	15.2 16.6 cluster type $p=0^{\pm 45213}$ 7507 epochs, 129 obs. J.D. 26561.526 + 0 ⁴⁵²¹³ $\equiv 129-133$ folder April '34
	✓ 452	14.2 15.8 prob. cluster too few max. per period 112 obs. sp. of double $\equiv 129-133$ folder April '34
6670	* 453	14.6 16.5 long $p=292^{\pm 4}$ 54 epochs, 145 obs. J.D. 25460 + 292 ⁴ $\equiv 127, 129-133, 139-142$ folder March '34
	✓ 454	13.2 14.0 prob. irreg. 186 obs. $\equiv 126-128, 136-139, 146-50$ April '34
	✓ 455	15.0 16.5 prob. irreg. 1 real max on all plates abd. 25750 155 obs. on old and new plates $\equiv 133-4, 140-2, 146-150, 26-7$ April '34
	456	
6655	* 456	14.8 ⁵ 16.5 long $p=258^{\pm 2}$ 11 epochs, 111 obs. (recent). J.D. 26085 + 258 ² fairly on poor $\equiv 126-7, 146-150$ folder May '34
6666	* 457	12.5 ⁵ 16.5 long $p=370^{\pm 4}$ 43 epochs, 182 obs. { 106 early J.D. 17800 + 370 ⁴ (prod. J.D. 25845) recent normal max on recent plates $\equiv 140-43, 146-150$ folder May '34
6665	* 458	15.0 16.5 long $p=270^{\pm 4}$ 12 epochs, 77 obs. (recent only, doubtful B. plate obs.) J.D. 25500 + 270 ⁴ folder May '34
6681	* 459	14.7 16.5 long $p=198^{\pm 4}$ 17 epochs, 116 obs. in part of field with no recent A plates J.D. 26860 + 198 ⁴ $\equiv 146-150$ folder May '34
	460	
10498	✓ 461	15.1 16.5 cluster $p=0^{\pm 464459}$ 6524 epochs, 116 obs. J.D. 26119.568 + 0 ⁴⁶⁴⁴⁵⁹ in part of field with no recent A plates $\equiv 146-150$ folder May '34
	462	14.3 15.3 prob. irreg. $\equiv 146-150, 134$ 129 recent obs. May '34
6542	* 463	15.2 16.7 long $p=184^{\pm 1}$ 79 epochs, 300 obs. J.D. 26060 + 184 ¹ $\equiv 139-142, 146-150, 134$ folder May '34
	✓ 464	14.5 15.6 prob. irreg. 116 obs. on recent plates $\equiv 146-150, 134$ May '34
see 333	465	
10450	✓ 466	12.0 13.6 eclipsing $p=6^{\pm 08628}$ 2646 epochs, 460 obs. { 326 recent J.D. 26183.236 + 6 ⁰⁸⁶²⁸ 134 early $\equiv 75-6, 134-142, 144-150$ folder May '34
	467	
	✓ 468	14.9 16.3 prob. irreg. 109 obs. on recent plates, near edge on A plates, hard to observe $\equiv 126-7, 146-150$ May '34

445
~~444~~ marked A 2677 p.126 17:41:02 -47°40'0" ✓
 444
~~445~~ marked A 9063 p.125 17:50:25 -45°16.9" ✓

446

447 marked A 7874 p.126 17:23:49 -45°22'2" ✓

448 " A 14923 p.126 17:46:01 -43°13'2" ✓

449 " A 2467 p.126 17:47:49 -45°18'5" ✓

450 " 7874 127 17:32:58 -46°52'8" ✓

451 " 7874 p.127 17:27:04 -45°51'6" ✓

452 " 6313 p.128 17:52:05 -44°40'7" ✓

453 " 9063 p.127 17:47:43 -45°26'4" ✓

454 " 6410 p.130 17:38:15 -41°22'0" ✓

455 " 12995 p.127 17:28:35 -42°50'3" ✓

456 " 6375 p.130 17:45:16 -44°26'0" ✓

457 " 2677 p.129 17:47:17 -45°54'9" ✓

458 " " 17:47:16 -46°06'7" ✓

459 " " 17:50:43 -46°56'1" ✓

460 " " 17:40:54 -46°39'0" ✓

461 " " 17:40:54 -46°39'0" ✓

* 463 A 7874 p.128 17:22:00 -46°35'1" ✓

464 " " 17:14:23 -45°53'9" ✓

466 A 7874 p.128 C.P.D -45° 8424 17:09:16 -45°18.9" C.P.D mag. 10.0

467

468 A 9063 p.130 17:42:55 -45°20'7" ✓

HS	No.	H.V.	Max.	Min.	Period	Page Bk II	Sheet
61	6656		15.0	16.4	180 days 73 periods 65 obs.	II 166-169	see folder
62			13.8	15.7	$p = 16.55$ 870 epochs, 96 obs.	II 166-169	" folder
63	H.V. 6645		14.0	16.3	$p = 296$ { J.D. 24355 44 epochs, 87 obs.	II 166-169	" folder
(65)			C.D.B. 145				
66			15.3	16.2	cluster $p = 0.601397$ 4964 epochs, 230 obs. J.D. 26179 + 0.601397 ¹⁹⁹ short, prob. cluster, see again when 1930 plates come	III 112-113, 119-124 II 170-171	folder Dec. '33
68			15.1	15.8	prob. cluster inf. of pr.	II 166-167	H.H.S. I
69			14.0	15.0	prob. irregular 321 obs. on recent plates	III 119-124, 114-115	
			13.9	14.9	short, prob. cluster sf. of pr.	II 166-167, 174-5	H.H.S. Dec. '33
100	H.V. 6626		15.5	16.5	$p = 214$ days, 61 epochs, 61 obs. J.D. 25500	II 170-173	folder
103			C.D.B. 234				
118	10499		15.2	16.2	$p = 0.577339$ 5247 epochs, 150 obs. cluster see again (Oct. '30)	III 112-113, 119-122 II 166-167	J.D. 26179.376 + 0.577339 folder Dec. '33
152	6658		15.5	16.4	see again (Sept. '30) when more plates come $p = 253$; 7 epochs, 53 obs.; early obs. poor & scattered, last 2 obs. w/ short *.	II 166-169	folder
153	6603		14.5	16.5	$p = 279$ 47 epochs, 73 obs., sp. of br. *	J.D. 23960 + 279.5 II 170-173	folder
179	6610		15.4	16.6	$p = 208$ days, 63 epochs, 64 obs.	J.D. 24360 + 208 II 170-173	folder
183					Same as C.D.B. 215, see again when 1930 plates come. H.H.S. thinks it is eclipsing		
188					Same as C.D.B. 261 long, period found		
204	6663		13.3	16.2	$p = 148.5$ 89 epochs (108 obs.) inf. of pr. { peculiar curve with max of dip. mag. of period of 297 days. Confirm later (Sept. '30).	II 166-169	folder
222			14.6	15.8	$p = 0.5384$ 3611 epochs 47 obs. w/ short * (first cluster with much diff. from H.H.S. Oct. '30)	II 166-167	
223					$p = 3.04545$ 995 epochs, 350 obs. J.D. 26179.256 + 3.04545 (min.) $p = 19.264$ eclipsing, 1400 epochs, 130 obs. (first eclipsing, repetition of short per. from H.H.S.)	III 112-3, 119-124 II 170-175, 164-165	Dec. '33 folder
224					find graphs		
528			14.8	16.3	long, wait for more plates (Oct. '30), only 2 max. in all obs. inf. of pr.	II 170-173	folder
529			14.6	15.1	prob. short.	II 170-171	Sheet.
530			15.0	15.6	prob. short	II 171-171	Sheet

hr. ~~hr.~~
 61 17:45:18 -40° 06' 5" A 9061
 62 17:43:59 -40° 23' 6" " "
 63

68 17:45:02 -40° 09' 8" A 9

69 17:45:02(2) -40° 32' 8"

100

118 17:41:31 -39° 49' 4"

152 17:45:39 -40° 18' 7"

204 17:46:45 -40° 26' 7" A 9061

204 17:42:30 -40° 41' 7" A 906

1 9.85

2 9.97

3 10.09

4 10.10

5 10.41

6 10.75

7 10.79

8 10.81 - 10.82

9 10.99 - 10.98

10 11.19 11.34

11 11.44 11.28

12 11.65 11.25

13 12.20 12.3

14 12.25 12.4

15 12.49 12.5

16 12.68 12.7

17 12.75 12.65

18 12.93 12.9

19 13.05 13.1

20 13.10 13.0

21 13.63 13.45

22 13.63 13.45 27 15.2

23 13.80 13.7 28 15.4

24 14.08 13.9

25 14.33 14.3

26 14.7

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 7 revis

1 9.85

2 9.97

3 10.09

4 10.10

5 10.41

6 10.75

7 10.79

8 10.82

9 10.9

12 11.25

11 11.28

10 11.34

12a 11.9

13 12.3

14 12.4

15 12.5

17 12.67

16 12.7

18 12.9

20 13.0

19 13.1

21 13.45

22 13.45

23 13.7

24 13.9

25 14.3

26 14.7

27 15.2

28 15.4

hr. *hr.*
 61 17:45:18 -40° 06' 5" A 9061
 62 17:45:59 -40° 23' 6" " "
 63

68 17:45:02 -40° 09' 8" A 9061

69 17:45:02.1 -40° 32' 8"

100

118 17:41:31 -39° 49' 4" A 9061

152 17:45:39 -40° 18' 7" A 9061

204 17:46:45 -40° 20' 7" A 9061

204 17:42:30 -40° 41' 7" A 9061

Retrans
 8' 10.80

7				10' 11.25
10				11' 11.6
10	10'	11.25		12' 11.7
11	11'	11.6		13' 11.8
12	12'	11.7		14' 12.0
13	13'	11.8		15' 12.1
14	14'	12.3		16' 12.3
15	15'	12.75		17' 12.5
16				18' 12.65
17				19' 12.75
18	18'	12.85		
19				8' 10.8
20				8a 11.3
21				9 11.3
22				10 11.5
23				11 11.9
				12 11.5
				13 12.0
				14 12.3
				15 12.4
				16 12.5
				17 12.6
				18 12.7
				19 12.8

May, 1927
 Telephone Tolls
 1 call
 .05
 .05

Henrietta Swope

PD. 6/8/27
 J.H.C.
 Sup plates M F 5944
 7209

hr.

~~hr.~~

61 17:45:18 -40°06'5 A9061

62 17:43:59 -40°23'6 " "

63

68 17:45:02 -40°09'8 A9061

69 17:45:02(2) -40°32'8 "

100

118 17:41:31 -39°49'4 A9061

152 17:45:39 -40°18'7 A9061

204 17:46:45 -40°26'7 A9061

204 17:42:30 -40°41'7 A9061

A7

A13

A18

(336)

A7874

CPD -43° 7980 17:12:43.4 -44° 00' 3 4.2 1.9
 -43° 7983 17:13:17.5 -43° 46' 0 1.5 12.6
 34" 14' 3 5.7 14.5

17:13:08.5 -43° 58.4
 17:13:08.5 -43° 58.4
 17:13:08.5 -43° 47.9 58.4

(65)

A13568

-44° 8389 17:14:43.3 -44° 108' 5 1.1 15.1
 -43° 8015 17:15:39.7 -43° 49' 4 8.2 4.6
 56.4 19.1 9.3 19.7

17:14:50.0 -43° 53' 9
 17:14:50.0 -43° 53' 9
 17:14:50.0 -43° 53' 9

A7874

-43° 8039 17:18:13.2 -43° 31' 1
 -43° 8067 17:19:59.1 -43° 14' 8
 105.9 16.3 19.1 16.5
 17:18:37.0 -43° 23' 2 4.3 8.0
 17:18:37.0 -43° 23' 2 14.8 8.5
 17:18:37.0 -43° 23' 2

(335)

17:19:50.8 -43° 23' 4 17.6 7.8
 17:19:50.8 -43° 23' 4 def. on contact 8.7

(59)

17:19:50.8 -43° 23' 4

17:19:46.9 -43° 27' 8 16.9 3.3
 17:19:46.7 -43° 27' 8 2.2 13.2

(12)

17:19:46.8 -43° 27' 8

$-44^{\circ} 8331$ $17:09:38.8$ $-44^{\circ} 23'.9$
 $-44^{\circ} 8341$ $17:10:21.3$ $-44^{\circ} 39'.9$
 42.5 16.0 8.5 15.7
 $17:10:10.3$ $-44^{\circ} 34'.8$ 6.5 10.7
 $17:10:11.3$ $-44^{\circ} 34'.8$ 2.0 5.0
 (W32) $17:10:11.3$ $-44^{\circ} 34'.8$

$-44^{\circ} 8383$ $17:13:57.3$ $-44^{\circ} 23'.2$
 $-44^{\circ} 8389$ $17:14:43.3$ $-44^{\circ} 08'.5$
 46.0 14.7 8.2 15.2
 $17:14:14.7$ $-44^{\circ} 18'.9$ 3.1 4.4
 $17:14:14.7$ $-44^{\circ} 18'.9$ 5.1 10.8
 (337) $17:14:14.7$ $-44^{\circ} 18'.9$

$17:14:11.9$ $-44^{\circ} 15'.2$ 2.6 8.3
 $17:14:11.9$ $-44^{\circ} 15'.2$ 5.6 6.9
 (338) $17:14:11.9$ $-44^{\circ} 15'.2$

$-44^{\circ} 8430$ $17:16:57.1$ $-44^{\circ} 01'.7$
 $-44^{\circ} 8484$ $17:18:55.5$ $-44^{\circ} 27'.8$
 118.4 26.1 21.9 26.1
 $17:17:08.9$ $-44^{\circ} 11'.4$ 2.2 9.7
 $17:17:09.0$ $-44^{\circ} 11'.4$ 19.7 16.4
 (177) $17:17:09.0$ $-44^{\circ} 11'.4$

$17:18:25.3$ $-44^{\circ} 22'.5$ 16.3 20.8
 $17:18:25.2$ $-44^{\circ} 22'.5$ 5.6 5.3
 (293) $17:18:25.2$ $-44^{\circ} 22'.5$

-44° 8586	17:25:42.3	-44° 04'5		
-44° 8592	17:25:52.8	-44° 14'6		
	10.5	10.1	1.8	10.3
	17:25:45.2	-44° 07'5	.5	3.1
		-44° 07'6		3.2
double	17:25:45.2	-44° 07'5	1.3	7.2
(345)	17:25:45.2	-44° 07'6		7.1
ref	17:25:45.2	-44° 07'5		
spec.	17:25:45.2	-44° 07'6		

-44° 8428	17:09:27.8	-45° 23'3		
-45° 8431	17:09:51.3	-45° 10'9	3.8	
	23.5	12.4	3.8	12.6
	17:09:41.4	-44° 15'1	2.2	8.3
	17:09:41.4	-44° 15'1	1.6	4.3
(3)	17:09:41.4	-44° 15'1		

-44° 8382	17:13:57.3	-44° 55'6		
-44° 8388	17:14:31.8	-44° 44'3		
	34.5	11.3	6.2	11.4
	17:14:14.5	-44° 53'5	3.1	2.1
	17:14:14.5	-44° 53'5	3.1	9.3
(155)	17:14:14.5	-44° 53'5		

-45° 8467	17:12:31.4	-45° 42'8		
-45° 8515	17:16:11.0	-45° 22'8		
	219.6	20.0	38.1	21.6
	17:13:07.7	-45° 34'6	6.3	9.4
	17:13:07.8	-45° 34'1	31.8	11.9

(340)	17:13:07.7	-45° 34'3	6	
	17:14:04.2	-45° 39'4	16.0	3.6
	17:14:04.2	-45° 39'4	22.0	17.4
(339)	17:14:04.2	-45° 39'4		

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17:14:54.3	-45°:29'2"	24.8	14.3
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17:14:54.4	-45°:29'2"	13.3	6.7
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(22) 17:14:54.4 -45°:29'2"

17:15:36.3	-45°:35'8"		
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17:15:36.5	-45°:35'8"	32.1	7.3
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17:15:36.5	-45°:35'8"	6.0	13.7
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(156)

-45°:85'34"	17:17:10.5	-45°:55'6"	
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-45°:85'68"	17:18:53.1	-45°:37'7"	
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102.6	17.9	17.8	18.1
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17:17:30.7	-45°:43'6"	3.5	12.1
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17:17:30.7	-45°:43'6"	14.3	6.0
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(47)

17:17:30.7	-45°:43'6"		
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17:18:08.1	-45°:48'2"	10.0	7.5
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17:18:08.2	-45°:48'2"	7.8	10.6
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(341)

17:18:08.2	-45°:48'2"		
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-45°:86'73"	17:25:52.00	-45°:26'2"	
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-46°:86'77"	17:22:02.0	-46°:22'3"	
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236.0	56.1	41.0	56.2
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17:22:38.4	-46°:15'3"	6.5	7.9
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17:22:38.8	-46°:15'3"	34.5	49.2
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(343)

17:22:38.4	-46°:15'3"		
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17:23:09.4	-46°:01'2"	12.0	21.3
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17:23:09.2	-46°:01'1"	29.0	34.9
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(46)

17:23:09.2	-46°:01'1"		
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measure on 7656

17:24:40.0

17:25:57.1

41.5

51.8

17:24:40.5

-45°:57.2

28.5

25.0

17:24:40

-45°:57.2

12.8

50.8

17:24:01.4

-45°:40.0

21.3

42.4

17:24:01.5

-45°:40.0

19.7

13.8

17:24:01.4

-45°:40.0

17:24:39.6

-45°:56.8

28.1

25.5

17:24:39.6

-45°:56.8

12.9

30.7

17:24:39.6

-45°:56.8

17:25:32.3

-46°:09.9

37.5

12.4

17:25:32.9

-46°:09.9

3.5

43.8

17:25:32.6

-46°:09.9

-46°:36.5

17:17:58.4

-46°:05.4

-46°:35.87

17:15:59.9

-46°:20.2

118.5

14.8

20.3

15.3

17:16:28.5

-46°:10.9

4.9

9.6

17:16:28.5

-46°:10.9

15.4

5.7

17:16:28.5

-46°:10.9

17:17:47.2

-46°:10.8

18.4

9.7

17:17:47.3

-46°:10.8

1.9

5.6

17:17:47.8

-46°:10.8

-46°:35.22

17:12:42.7

-46°:11.2

-46°:35.25

17:12:32.4

-46°:02.5

19.7

8.7

3.1

9.0

17:12:18.4

-46°:09.0

.9

2.3

17:12:18.4

-46°:09.0

22

6.7

17:12:18.4

-46°:09.0

-46° 8508	17:10:54.8	-47°00'8	1.8	5.1
-46° 8510	17:11:13.5	-46°41'4	1.9	14.6
	18.7	19.4	2.7	19.7

17:11:00.3	-46°55'8
17:11:00.3	-46°55'8
17:11:00.3	-46°55'8

(332)

-46° 8538	17:13:30.8	-46°34'4		
-46° 8562	17:14:42.8	-46°43'3		
	72.0	-8.9	12.8	8.6

17:13:43.2	-46°37'8	2.2	3.3
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17:13:43.2	-46°37'8	10.6	5.3
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(333)

17:13:43.2	-46°37'8
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-46° 8654	17:20:23.6	-46°58'2		
-46° 8677	17:22:02.0	-46°22'3		
	98.4	35.9	17.6	36.0
	17:20:40.9	-46°33'0	3.1	25.2
	17:20:40.9	-46°33'8	19.5	9.8

(91)

17:20:40.9	-46°33'1
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17:21:16.1	-46°52'3	9.4	5.9
17:21:16.2	-46°52'3	8.2	30.1

(W12)

17:21:16.2	-46°52'3
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wrong star

-46° 8729	17:26:37.1	-46°36'4	3.8	4.5
-46° 8733	17:26:59.3	-46°40'7	2.7	3.7
	22.2	4.3	1.6	8

17:26:50.0	-46°39'9
17:26:53.5	-46°40'0
17:26:50.0	39.9
17:26:53.5	-46°40'0

(72)

17:26:53.5	-46°40'0
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17:26:50.0	-46°39'9
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Feb '32

7874
A9063

-47° 8396	17:30:28.3	-47° 02'9
-47° 8400	17:30:14.8	-47° 06'9
	5.5	4.0
	17:30:40.5	17:30:39.8
	17:30:40.8	17:30:39.8
	17:30:40.8	-47° 07'0
	17:30:39.8	

9.3
3.1
6.2

(W31)

-46° 8562	17:14:42.8	-46° 43'3		
-46° 8580	17:15:32.0	-46° 58'5		
	49.2	15.2	8.6	15.0
	17:15:02.3	-46° 58'2	3.4	14.7
	17:15:02.2	-46° 58'2	5.2	13
	<u>17:15:02.2</u>	<u>-46° 58'2</u>		

(W15)

17:21:05.0	-46° 53'2	17.1	35.9
17:21:05.0	-46° 53'2	7.2	5.0
17:21:05	-46° 53'2	9.9	30.9

(W12)

(283)

-46° 8644	17:19:52.6	-46° 38'8		
-46° 8661	17:20:54.1	-46° 26'1		
	61.5	12.7	10.6	12.9
	17:20:42.4	-46° 32'5	8.6	6.4
	17:20:42.5	-46° 32'5	2.0	6.5
	<u>17:20:42</u>	<u>-46° 32'5</u>		

14.32

A5626

-40° 8154	17:44:29.7	-40°:44'5		
-40° 8181	17:45:37.9	-40°:03'5		
	68"2	41°0	12.0	44.7
	17:44:36.5	-40°:14'5	1.2	32.6
	17:44:36.5	-40°:14'5	10.8	9.7
(144)	<u>17:44:36.5</u>	<u>-40°:14'5</u>		

17:45:07.2	-40°:29'4	6.6	15.4
17:45:07.2	-40°:29'3	5.4	26.3
17:45:07.2	-40°:29'4		

17:45:19.7	-40°:10'0	48.8	35.1
17:45:19.7	-40°:10'0	3.2	6.6
17:45:19.7	-40°:10'0		

A5626

-40° 8181	17:45:37.9	-40°:03'5		
-40° 8194	17:46:16.7	-40°:38'6		
	138"8	35'1	8.1	35.4
	17:46:09.5	-40°:28'4	6.6	25.1
	17:46:09.5	-40°:28'4	1.5	10.3
(284)	<u>17:46:09.5</u>	<u>-40°:28'4</u>		

A5626

-41° 8340	17:46:12.3	-41°:37'9		
-40° 8229	17:48:10.7	-40°:54'5		
	118"4	43'4	21.8	44.2

17:47:40.3	-41°:09'6	16.2	28.8
17:47:40.3	-41°:09'6	5.6	15.4
17:47:40.3	-41°:09'6		

A5626

A 5626

-41° 83' 40

17:46:12.3

-41° 37' 9

-42° 8' 76

17:48:03.9

-42° 12' 0

111.6

34.1

21.5

34.0

17:46:51.2

-41° 59' 3

7.5

21.3

17:46:51.3

-41° 59' 3

14.0

12.7

(303)

17:46:51.2

-41° 59' 3

17:47:43.7

-41° 58' 7

17.6

20.7

17:47:43.7

-41° 58' 7

3.9

13.3

(82)

17:47:43.7

-41° 58' 3

A 5626

-41° 8' 464

17:53:08.3

-41° 20' 0

-41° 8' 470

17:53:52.3

-41° 01' 3

44.0

18.7

8.3

18.8

17:53:20.0

-41° 07' 6

2.2

12.5

17:53:20.0

-41° 07' 6

6.1

6.3

(17)

17:53:20.0

-41° 07' 6

A 2667

-40° 8' 130

17:42:23.7

-40° 11' 1

-40° 8' 139

17:43:14.2

-40° 24' 7

50.5

13.6

10.2

13.5

17:42:54.9

-40° 17' 8

6.3

6.7

17:42:54.9

-40° 17' 8

3.9

6.8

(49)

17:42:54.9

-40° 17' 8

A 2667 $-42^{\circ} 8' 13.9$ $17:52:29.4$ $-42^{\circ} 2' 0$
 $-41^{\circ} 8' 45.4$ $17:52:39.8$ $-41^{\circ} 5' 4.4$
 10.4 7.8 2.1 7.4

$17:52:33.9$ $-41^{\circ} 59' 8$ $.9$ 2.1
 $17:52:33.8$ $-41^{\circ} 59' 8$ 1.2 5.3

(61)

$17:52:33.8$ $-41^{\circ} 59' 8$

2667 $-42^{\circ} 8' 12.3$ $17:51:28.4$ $-42^{\circ} 31' 9$
 $-42^{\circ} 8' 12.8$ $17:51:43.4$ $-42^{\circ} 17' 5$
 15.0 14.4 2.6 14.5
 $17:51:37.0$ $-42^{\circ} 23' 1$ 1.5 8.9
 $17:51:37.0$ $-42^{\circ} 23' 1$ 1.1 5.6

(W33)

$17:51:37.0$ $-42^{\circ} 23' 1$

2667 $-43^{\circ} 8' 37.2$ $17:52:39.0$ $-43^{\circ} 05' 6$
 $-42^{\circ} 8' 12.3$ $17:51:28.4$ $-42^{\circ} 31' 9$
 70.6 33.7 12.8 34.0
 $17:51:58.2$ $-42^{\circ} 59' 7$ 5.4 28.0
 $17:51:58.2$ $-42^{\circ} 59' 7$ 7.4 6.0

(326)

$17:51:58.2$ $-42^{\circ} 59' 7$

$17:52:25.3$ $-42^{\circ} 44' 8$ 10.3 13.0

$17:52:28.3$ $-42^{\circ} 44' 8$ 2.5 21.0

(32)

$17:52:25.3$ $-42^{\circ} 52' 7$ $-42^{\circ} 44' 8$

2667 $-42^{\circ} 8' 17.8$ $17:54:27.9$ $-42^{\circ} 39' 1$
 $-42^{\circ} 8' 19.9$ $17:54:43.4$ $-42^{\circ} 34' 0$
 15.5 5.1 3.2 5.0

$17:54:37.1$ $-42^{\circ} 35' 7$ 1.9 3.3

$17:54:37.1$ $-42^{\circ} 35' 7$ 1.3 1.7

$17:54:37.1$ $-42^{\circ} 35' 7$

(W7)

2667 -43° 83'69 17:52:28.5 -43° 43'4
 -43° 83'72 17:52:39.0 -43° 05'6
 10.5 37.8 1.8 38.1
 17:52:34.9 -43° 26'0 1.1 17.7
 17:52:34.9 -43° 26'0 .7 20.7
17:52:34.9 -43° 26'0 SV Crn 17:52:48 - 43° 23'

(36)

-43° 83'83 17:53:24.5 -43° 28'9
 2667 -44° 88'88 17:54:41.0 -44° 17'3
 76.5 48.4 13.5 48.6
 17:54:06.8 -44° 01'7 7.3 33.0
 17:54:06.8 -44° 01'8 6.2 15.6
17:54:06.8 -44° 01'8

(37)

17:54:18.9 -43° 40'6 9.6 11.7
 17:54:18.9 -43° 40'4 3.9 38.9
17:54:18.9 -43° 40'5

W22

17:54:24.6 -43° 43'4 10.6 14.6
 17:54:24.6 -43° 43'5 2.9 34.0
17:54:24.6 -43° 43'4

W23

AC 136 -43° 83'83 17:53:24.5 -43° 28'9
 -44° 88'88 17:54:41.0 -44° 17'3
 10.5 76.5 48.4 13.4 48.7
 17:53:39.9 -43° 56'4 2.7 27.7
 17:53:39.9 -43° 56'4 10.7 21.0
17:53:39.9 -43° 56'4

(63)

60

A5636

-42° 8119	17:51:10.4	-42° 34.7		
-42° 8123	17:51:28.4	-42° 31.9		
	18.0	2.8	3.4	2.8
	17:51:13.6	-42° 32.1	.6	2.7
	17:51:13.6	-42° 32.1	2.8	.2
	17:51:13.6	-42° 32.1		

(62)

A5636

-40° 8139	17:43:14.2	-40° 24.7		
-40° 8181	17:45:37.9	-40° 03.5		
	143.7	21.2	27.2	22.0
	17:44:38.7	-40° 12.0	16.0	13.2
	17:44:38.7	-40° 12.0	11.2	8.8
	17:44:38.7	-40° 12.0		

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A 2667

-42° 8020	17:45:16.8	-42° 38.1		
-42° 8013	17:44:23.8	-42° 53.9		
	53.0	15.8	9.5	15.7
	17:45:05.1	-42° 47.7	7.4	6.2
	17:45:05.1	-42° 47.5	2.1	9.5
	17:45:05.1	-42° 47.6		
	17:45:05.1	-42° 44.3		

(151)

A2667

-42° 7957	17:40:27.3	-42° 22.5		
-42° 7961	17:40:48.3	-42° 04.9		
	21.0	17.6	3.3	17.9
	17:40:44.5	-42° 14.5	2.7	8.1
	17:40:44.5	-42° 14.5	.6	9.8
	17:40:44.5	-42° 14.5		

(60)

A2667 -44° 8861 17:59:06.8 -44° 57'8
 -44° 8864 17:51:45.0 -44° 31'2
 38'2 26'6 6.7 26.8
 17:51:16.5 -44° 49'3 1.7 8.6
 17:51:16.5 -44° 49'3 5.0 18.2
 17:51:16.5 -44° 49'3

+2667 (W11) -44° 8838 17:48:23.1 -44° 54'6
 -45° 8963 17:49:21.4 -45° 21'3
 58.3 26'7 10.4 27.0
 17:49:01.1 -45° 14'4 6.8 20.1
 17:49:01.3 -45° 14'5 3.6 6.9

(W21) A2667 -45° 8940 17:47:20.6 -45° 01'9
 -44° 8838 17:48:23.1 -44° 54'6
 62'5 7'3 11.4 7.2
 17:47:45.8 -45° 00'9 4.6 0.8
 17:47:45.8 -45° 00'9 6.8 6.4
 45.8 0.61
 (W18) 17:47:42.5 -45° 00'9

A2667 -43° 8330 17:47:07.4 -43° 46'8
 -44° 8833 17:47:43.6 -44° 11'8
 36'2 25.0 6.8 15.1
 17:47:32.4 -44° 08'5 4.7 2.7
 17:47:32.4 -44° 08'4 2.1 3.4
 (W10) 17:47:32.4 -44° 08'4

A13866 -45° 8821 17:36:50.4 -45° 12'1
 -45° 8832 17:37:40.8 -45° 01'5
 50'4 10'4 8.9 10.7
 17:36:57.4 -45° 06'5 1.3 5.8
 17:36:57.8 -45° 06'3 7.6 4.9
 (68) 17:36:57.6 -45° 06'3

62

6456

-40° 8162 17:44:49.2 -40° 21' 0
 -40° 8181 17:45:37.9 -40° 03' 5
 50.7 17.5

measured +.56

(76)

-40° 8118 17:41:51.0 -40° 15' 8
 -40° 8134 17:42:48.2 -40° 48' 4
 57.2 32.6 10.1 33.1
 17:42:15.4 -40° 24' 7 4.3 9.0
 17:42:15.3 -40° 24' 7 5.8 24.1
 17:42:15.3 -40° 24' 7
17:42:15.3 -40° 25' 2

(313)

-40° 8128 17:42:20.7 -40° 58' 5
 -40° 8134 17:42:48.2 -40° 48' 4
 27.5 10.1 5.7 9.9
 17:42:35.2 -40° 50' 9 3.0 7.4
 17:42:35.2 -40° 50' 9 2.7 25
17:42:35.2 -40° 50' 9

(189)

A13811

-40° 8064 17:39:04.5 -40° 43' 0
 -40° 8246 17:40:42.6 -41° 06' 0
 17.9 23.5
 18.1 23.4
 17:39:18.7 -40° 52' 5 2.7 9.7
 17:39:18.7 -40° 52' 5 15.4 18.8
17:39:19.7 -40° 52' 5

Feb. 32

(234)

6456

17:39:28.5	-41°00'9"	18.5	18.7
17:40:28.5	-41°00'9"	2.6	5.2
17:40:28.5	-41°00'9"		

(250)

-41° 81'92"	17:37:16.8	-41°50'3"	
-41° 82'46"	17:40:42.6	-41°06'0"	
	205".8	44'.3	40'.1
			43'.9
	17:37:51.1	-41°22'6"	6.7
	17:37:51.6	-41°22'5"	33.4
			27.5
			16.4

(185)

17:37:51.4	-41°22'5"		
17:38:57.7	-41°36'9"	19.7	13.3
17:38:58.2	-41°36'8"	20.4	30.6
17:38:58.0	-41°36'8"		

(312)

17:38:50.8	-41°22'4"	18.4	27.8
17:38:51.4	-41°22'5"	21.7	16.3
17:38:51.0	-41°22'4"		

(80)

13:39:19.9	-41°28'1"		24.9
17:39:19.5	-41°28'9"	24.0	21.4
17:39:19.6	-41°28'2"	16.1	22.0
17:39:19.9	-41°28'7"		
17:39:19.7	-41°28'8"		

(79)

17:39:45.8	-41°28'0"	29.1	22.3
17:39:46.1	-41°27'8"	11.0	21.6

(253)

17:39:46.0	-41°27'9"		
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17:40:22.3	-41°20'1"	36.2	29.9
17:40:22.0	-41°20'2"	3.9	14.0

(186)

17:40:22.1	-41°20'2"		
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6456 $-41^{\circ} 8192$ $17:37:16.8$ $-41^{\circ} 50'3$
 $-42^{\circ} 7961$ $17:40:48.3$ $-42^{\circ} 04'9$
 211.5 141.6 39.0 15.8

$17:39:07.5$ $-41^{\circ} 52'4$ 20.4 2.3
 $17:39:07.4$ $-41^{\circ} 52.4$ 18.4 13.5

(31) $17:39:07.4$ $-41^{\circ} 52'4$

$-41^{\circ} 8230$ $17:39:37.1$ $-41^{\circ} 34'7$

$-42^{\circ} 7961$ $17:40:48.3$ $-42^{\circ} 04'9$

 71.2 30.2 12.2 30.8

$17:40:19.7$ $-41^{\circ} 51'6$ 7.3 17.2

$17:40:19.7$ $-41^{\circ} 51'6$ 4.9 13.6

(170) $17:40:19.7$ $-41^{\circ} 51'6$
 $-42^{\circ} 18.1$

CPD -41° 8327 $17:45:17.8$ $-41^{\circ} 43'8$

CPD -41° 8337 $17:45:51.3$ $-41^{\circ} 30'7$

 33.5 3.0 7.0 12.7

$17:45:43.2$ $-41^{\circ} 37'4$ 5.3 6.2

$17:45:43.2$ $-41^{\circ} 37'4$ 1.7 6.5

$17:45:43.2$ $-41^{\circ} 37'4$

(258)

$-42^{\circ} 7977$ $17:42:10.0$ $-42^{\circ} 03'1$

$-41^{\circ} 8293$ $17:43:15.2$ $-41^{\circ} 39'3$

 65.2 23.8 13.2 23.4

$17:42:14.9$ $-41^{\circ} 57'8$ 1.0 5.2

$17:42:14.9$ $-41^{\circ} 57'8$ 12.2 18.2

(211)

$17:42:14.9$ $-41^{\circ} 57'8$

$17:42:52.2$ $-41^{\circ} 57'9$ 4.5 5.1

$17:42:35.2$ $-41^{\circ} 57'9$ 8.7 18.3

(315)

$17:42:35.2$ $-41^{\circ} 57'9$

17:42:44.6	-42°01'3	7.0	1.8
17:42:44.6	-42°01'3	6.2	21.6
<u>17:42:44.6</u>	<u>-42°01'3</u>		

(304)

17:42:57.4	-41°52'0	9.6	10.9
17:42:57.4	-41°52'0	3.6	12.5

(252)

<u>17:42:57.4</u>	<u>-41°52'0</u>		
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17:43:04.3	-41°42'8	11.0	20.0
17:43:04.3	-41°42'8	2.2	3.4

(188)

<u>17:43:04.3</u>	<u>-41°42'8</u>		
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-42° 7977	17:42:10.0	-42°03'1	reidentified computer, dec all right	
-42° 8020	17:45:16.8	-42°38'1		
	186.8	35.0	33.6	36.8

17:43:30.6	-42°19'4	14.5	17.1
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17:43:30.6	-42°19'4	19.1	19.7
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(103)

<u>17:43:30.6</u>	<u>-42°19'4</u>		
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17:44:25.1	-42°12'1	24.3	9.5
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17:44:25.1	-42°12'1	9.3	27.3
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(302)

<u>17:44:25.1</u>	<u>-42°12'1</u>		
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-42° 8020	17:45:16.8	-42°38'1		
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-42° 8031	17:45:58.3	-42°44'8		
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41.5	6.7	7.3	6.9
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17:45:27.0	-42°41'3	1.8	3.3
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17:45:27.0	-42°41'3	5.5	3.6
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(219)

<u>17:45:27.0</u>	<u>-42°41'3</u>		
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6456 -43° 8332 17:47:26.7 -43° 12' 3
 -43 8333 17:47:45.1 -43° 12' 9
 18.4 8.4 3.8 8.3
 17:47:42.2 -43° 16' 5 3.2 4.7
 17:47:42.2 -43° 16' 5 .6 3.6
 (202) 17:47:42.2 -43° 16' 5

-43° 8283 17:41:22.7 -43° 36' 4
 -42° 8013 17:44:23.8 -42° 53' 9
 181.1 42.5 34.9 41.6
 17:42:00.1 -43° 09' 4 7.2 26.4
 17:42:00.0 -43° 09' 3 27.7 15.2
 (15) 17:42:00.0 -43° 09' 3

17:42:10.5 -42° 59' 7 9.2 35.9
 17:42:10.5 -42° 59' 7 25.7 5.7

(199)

-42° 8013
 -43° 8293

17:42:10.5 -42° 59' 7
 17:44:23.8 -42° 53' 9
 17:42:39.2 -43° 02' 7 19.8 8.1
 104.6 8.8 16.1 3.25
 17:43:11.4 -42° 59' 2 13.7 4.9
 17:43:11.4 -42° 59' 2 13.7 5.1

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Feb. '52

(165)

17:43:12.7 -42° 59' 2

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17:43:17.9 -43° 06' 0 22.2 29.8
 17:43:17.8 -43° 06' 0 12.7 11.8
 (166) 17:43:17.8 -43° 06' 0

17:43:08.0 -43° 19' 6 20.3 16.4
 17:43:08.0 -43° 19' 7 14.6 25.2
 (179) 17:43:08.0 -43° 19' 7

35.2

41.2

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r

17:43:22.7

~~-43°22'5~~

23.8

13.6

re-measured

17:43:22.4

-43°22'5

11.9

27.7

Apr. '31

(84)

17:43:23.0

-43°22'5

17:44:09.8

-42°57'2

32.2

38.4

17:44:09.8

-42°57'2

2.7

3.2

(301)

17:44:09.8

-42°57'2

17:44:18.7

-43°00'7

33.9

34.9

17:44:18.6

-43°00'7

7.0

6.7

(109)

17:44:18.6

-43°00'7

-43° 8283

17:41:22.7

-42°36'4

-42 7978

17:42:12.2

-42°33'1

49.5

63.3

11.2

63.4

17:41:26.7

-43°09'2

.9

27.3

17:41:26.7

-43°09'2

10.3

36.1

(327)

17:41:26.7

-43°09'2

17:41:51.4

-42°56'4

6.5

40.1

17:41:51.4

-42°56'4

4.7

23.3

(300)

17:41:51.4

-42°56'4

-42° 7927

17:37:31.5

-42°41'0

-43° 8283

17:41:22.7

-43°36'4

231.2

.55.4

40.8

56.7

17:38:42.3

-43°03'8

12.5

23.4

17:38:42.5

-43°03'9

28.3

33.3

(416)

17:38:42.4

-43°03'8

17:38:36.1

-43°01'1

11.4

20.6

17:38:36.0

-43°01'2

29.4

36.1

(159)

17:38:36.4

-43°01'1

68

6456

 $17:37:31.5$
 $17:41:22.7$
 231.2
 $-42^{\circ}41'0$
 $-43^{\circ}36'4$
 55.4

40.8

56.7

 $17:38:35.6$ $-43^{\circ}15'3$

11.3

35.1

 $17:38:35.7$ $-43^{\circ}15'3$

29.5

21.6

(160)

 $17:38:35.8$ $-43^{\circ}15'3$ $17:38:53.1$ $-43^{\circ}25'0$

14.4

45.0

 $17:38:53.1$ $-43^{\circ}25'0$

26.4

11.7

(190)

 $17:38:53.1$ $-43^{\circ}25'0$ $17:39:12.9$ $-42^{\circ}58'9$

17.9

18.3

 $17:39:12.9$ $-42^{\circ}58'5$

22.9

38.4

(110)

 $17:39:12.9$ $-42^{\circ}58'5$ $17:39:06.1$ $-42^{\circ}54'2$

16.7

13.5

 $17:39:06.1$ $-42^{\circ}54'2$

24.1

43.2

(220)

 $17:39:06.1$ $-42^{\circ}54'2$ $17:39:34.4$ $-43^{\circ}19'1$

21.7

39.0

 $17:39:34.5$ $-43^{\circ}19'1$

19.1

17.7

(245)

 $17:39:34.4$ $-43^{\circ}19'1$ $17:40:35.5$ $-42^{\circ}51'3$

32.5

10.5

 $17:40:35.7$ $-42^{\circ}51'3$

8.3

46.2

(197)

 $17:40:35.6$ $-42^{\circ}51'3$ $17:40:51.5$ $-43^{\circ}05'6$

35.3

25.2

 $17:40:51.5$ $-43^{\circ}05'6$

5.5

31.5

(167)

 $17:40:51.5$ $-43^{\circ}05'6$

A 6456 -42° 7957 17:40:27.3 $-42^{\circ}22'5$
 -42° 7977 17:42:10.0 $-42^{\circ}03'1$
 10 27 14.4 19.8 19.1

(60) already meas. p 60 on A 2667

17:41:13.4 $-42^{\circ}14'5$ 8.9 17.9
 17:41:13.5 $-42^{\circ}14'5$ 10.9 11.2

(290) 17:41:13.4 $-42^{\circ}14'5$

-42° 7940 17:39:08.3 $-42^{\circ}02'9$
 -42° 7957 17:40:27.3 $-42^{\circ}22'5$
 79.0 19.6 18.2 20.3
 17:39:31.7 $-42^{\circ}21'3$ 4.2 19.0
 17:39:31.7 $-42^{\circ}21'2$ 10.0 1.3
17:39:31.7 $-42^{\circ}21'3$

(287)

-44° 8830 17:47:22.6 $-44^{\circ}00'2$
 -44° 8835 17:47:53.1 $-44^{\circ}34'6$
 30.5 25.6 6.6 25.5
 17:47:32.8 $-44^{\circ}51'8$ 2.2 8.4
 17:47:32.8 $-44^{\circ}51'8$ 4.4 17.1

(280)

17:47:32.8 $-44^{\circ}51'8$
 -43° 8330 17:47:07.4 $-43^{\circ}46'8$
 -44° 8835 17:47:53.1 $-44^{\circ}34'6$
 45.7 47.8

already done

(410)

70

6456

 $-44^{\circ} 8758$ $17:39:29.5 -44^{\circ} 27'4$ $-43^{\circ} 8283$ $17:41:22.7 -43^{\circ} 36'4$ 113.2 51.0 21.9 50.6 $17:39:52.7 -44^{\circ} 07'1 4.5 20.2$

(10)

 $17:39:52.7 -44^{\circ} 07'1 17.4 30.4$ $17:39:52.7 -44^{\circ} 07'0$ $17:40:52.2 -44^{\circ} 13'9 16.0 13.4$ $17:40:52.2 -44^{\circ} 13'9 8.9 37.2$

(W19)

 $17:40:52.2 -44^{\circ} 13'9$

13866

 $-43^{\circ} 8283$ $17:41:22.7 -43^{\circ} 36'4$ $-44^{\circ} 8793$ $17:43:07.0 -44^{\circ} 18'1$ 104.3 41.7 17.7 42.7 $17:42:26.4 -43^{\circ} 55'0$ $17:42:27.1 -43^{\circ} 55'6$ 10.9 19.8 $17:42:26.1 -43^{\circ} 55'0$ $17:42:26.9 -43^{\circ} 55'6$ 6.8 23.6

(176)

 $17:42:26.0 -43^{\circ} 55'6$

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6456

 $-44^{\circ} 8793$ $17:43:07.0 -44^{\circ} 18'1$ $-45^{\circ} 8927$ $17:45:26.4 -45^{\circ} 03'5$ 139.4 45.4 23.1 46.8 $17:43:57.7 -44^{\circ} 50'1 8.4 33.0$ $17:43:57.5 -44^{\circ} 50'1 14.7 13.8$

(217)

 $17:43:57.6 -44^{\circ} 50'1$ $17:45:03.6 -45^{\circ} 03'0 19.3 46.3$ $17:45:03.6 -45^{\circ} 03'0 3.8 1.5$

(265)

 $17:45:03.6 -45^{\circ} 03'0$

6456

-45° 8832	17:37:40.8	-45° 01'5		
-44° 8759	17:39:29.5	-44° 27'4		
	108.7	34.1	20.3	33.9
	17:39:09.7	-44° 53'6	16.6	7.9
	17:39:09.7	-44° 53'6	3.7	26.0
(266)	17:39:09.7	-44° 53'6		

17:38:34.4	-44°54'9	10.3	6.6
17:38:34.3	-44°54'8	10.0	27.3
17:38:34.3	-44°54'8		

-43° 8222	17:35:28.1	-43° 11'1		
-42° 7927	17:37:31.5	-42° 41'0		
	123.4	30.1	23.5	30.0

17:35:42.8	- 42° 52' 2	2.8	18.8
17:35:42.8	- 42° 52' 2	20.7	11.2
17:35:42.8	- 42° 52' 2		

17:35:42.8	-42°:48'8	2.8	22.2
17:35:42.8	-42°:48'8	20.7	7.8
17:35:42.8	-42°:48'8		

17:36:21.7	-42°:48'.7	10.2	24.3
17:36:21.6	-42°:46'.7	13.3	5.7
17:36:21.6	-42°:46'.7		

17:36:40.1	-42 ⁰⁴ :44'6	13.7	26.4
17:36:40.1	-42°:44'6	9.8	3.6
17:36:40.1	-42°:44'6		

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-43° 81'93	17:32:29.0	-43° 21'1		
-43° 82'22	17:35:28.1	-43° 11'1		
	17 9.1	16.0	33.0	9.6
	17:33:53.2	-43° 15'3	15.5	5.6
	17:33:53.0	-43° 15'3	17.5	4.0
(222)	<u>17:33:53.1</u>	<u>-43° 15'3</u>		

17:34:15.9	-43°:19'2	19.7	1.8
17:34:15.9	-43°:19'2	13.3	7.8
17:34:15.9	-43°:19'2		

-43° 82'22	17:35:28.1	-43° 11'1		
-43° 82'43	17:37:57.1	-43° 56'4		
	149.0	45.3	26.3	96.0

17:36:48.1	-43°:22'5	14.3	11.6
17:36:48.1	-43°:22.5	12.0	34.4
17:36:48.1	-43°:22'5		

17:37:05.0	-43°32'9	17.1	22.2
17:37:05.0	-43°33'0	9.2	23.8
17:38:05.0	-43°33'0		

17:36:55.9	-43° 41'3	15.5	30.7
17:36:55.9	-43° 41'3	10.8	15.3
17:36:55.9	-43° 41'3		

17:37:18.0	-43°:38'6	19.4	27.9
17:37:18.0	-43°:38'6	8.9	18.1
17:37:18.0	-43°:38'6		

A 6456

(824)

324

-43° 8239
-43° 824317:37:16.6
17:37:57.1
40.5-43° 49'2
-43° 56.4
7.2

7.1

25.87.3

17:37:54.3

-43° 50.3

6.6

1.1

17:37:54.2

-43° 50.3

.5

6.2

17:37:54.2

-43° 50.3

-43° 8215

17:34:57.0

-43° 37.6

-43° 8223

17:35:31.1

-43° 42.4

34.1

4.8

6.2

5.0

17:35:10.2

-43° 41.8

2.4

4.4

17:35:10.2

-43° 41.8

3.8

6.6

17:35:10.2

-43° 41.8

RU Sec

(173)

-43° 8214

17:34:54.0

-43° 58.2

-44° 8717

17:36:43.5

-44° 35.2

109.5

37.0

19.3

37.8

17:35:30.3

-44° 05.1

6.4

7.1

17:35:30.3

-44° 05.1

12.9

30.7

(297)

17:35:30.3

-44° 05.1

17:35:42.2

-44° 14.2

8.5

16.3

17:35:42.2

-44° 14.2

10.8

21.5

(295)

17:35:42.2

-44° 14.2

17:36:29.4

-44° 23.6

16.8

25.4

17:36:29.3

-44° 23.1

2.5

12.4

(180)

17:36:29.3

-44° 23.1

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-44° 8717	17:36:43.5	-44° 35' 2		
-45° 8832	17:37:40.8	-45° 01' 5		
	57.3	26.3	9.4	26.5

17:36:57.5	-44° 43' 4	2.3	8.3
17:36:57.5	-44° 43' 5	7.1	18.2

(322)

17:36:57.5	-44° 43' 5
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-43° 8181	17:30:54.0	-43° 42' 2		
-43° 8193	17:32:29.0	-43° 21' 1		
	95.0	21.1	17.1	21.3

17:31:27.3	-43° 35' 8	6.0	6.5
17:31:27.3	-43° 35' 8	11.1	14.8

(192)

17:31:27.3	-43° 35' 8
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-43° 8181	17:30:54.0	-43° 42' 2		
-44° 8697	17:34:28.9	-44° 26' 3		
	214.9	44.1	38.3	44.7

17:31:22.1	-43° 54' 5	5.0	12.5
17:31:21.9	-43° 54' 5	33.3	32.2

(267)

17:31:21.9	-43° 54' 5
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17:31:30.5	-43° 56' 7	6.5	14.7	remains.
17:31:30.5	-43° 56' 7	31.8	30.0	

(282)

17:31:30.5	-43° 56' 7
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17:31:47.3	-44° 15' 3	9.5	33.5
17:31:47.2	-44° 15' 2	28.8	11.2

(W20)

17:31:47.3	-44° 15' 2
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(225)

17:32:51.2	-44° 06' 5	20.9	24.6
17:32:51.2	-44° 06' 5	17.4	20.1
17:32:51.2	-44° 06' 5		

(292)

17:33:01.4	-43° 57' 0	22.7	15.0
17:33:01.3	-43° 57' 0	15.1	24.7
17:33:01.3	-43° 57' 0		

(226)

17:33:17.7	-44° 13' 1	25.6	31.3
17:33:17.6	-44° 13' 1	12.7	13.4
17:33:17.6	-44° 13' 1		

(254)

17:33:49.7	-44° 14' 6	31.3	32.9
17:33:49.6	-44° 14' 7	7.0	11.8
17:33:49.6	-44° 14' 7		

(38)

17:34:02.0	-44° 16' 2	33.5	34.5
17:34:02.0	-44° 16' 2	4.8	10.2
17:34:02.0	-44° 16' 2		

(296)

17:34:14.2	-44° 16' 6	35.7	34.9
17:34:14.3	-44° 16' 6	2.6	9.8
17:34:14.3	-44° 16' 6		

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-43° 8' 181
-44° 8' 662

17:30:54.0 -43° 42' 2

17:31:42.4 -44° 06' 9

48° 4 24.7

17:31:28.4 -43° 56' 7

17:31:28.0 -43° 56' 7

17:31:28.0 -43° 56' 7

8.3 24.7

5.9 14.5

2.4 10.2

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A 6456

-44° 86 80	17:33:17.4	-45° 00' 2		
-44° 86 97	17:34:28.9	-44° 26' 3		
	71.5	33.9	12.8	33.8

17:33:25.2	-44° 28' 9	1.4	31.2
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17:33:25.2	-44° 28' 9	11.4	2.6
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(227) 17:33:25.2 -44° 28' 9

17:33:39.2	-44° 50' 8	5.7	9.4
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17:33:39.2	-44° 50' 8	7.2	24.4
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(281) 17:33:39.2 -44° 50' 8

17:34:17.2	-44° 46' 5	10.7	13.7
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17:34:17.2	-44° 46' 5	2.1	20.1
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(269) 17:34:17.2 -44° 46' 5

17:34:07.1	-44° 33' 8	8.9	26.3
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17:34:07.1	-44° 33' 8	3.9	7.5
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(322) 17:34:07.1 -44° 33' 8

-45° 87 40	17:31:22.1	-45° 09' 2		
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-44° 86 68	17:32:15.4	-44° 43' 4		
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53.3	25.8	9.7	25.9
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17:31:43.0	-44° 47' 0	3.8	22.3
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17:31:43.0	-44° 47' 0	5.9	3.6
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(228) 17:31:43.0 -44° 47' 0

17:31:51.8	-45° 08' 2	5.4	1.0
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17:31:51.8	-45° 08' 2	4.3	24.9
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(230) 17:31:51.8 -45° 08' 2

A 6456

A 13866

-45° 8788	17:35:04.8	-45° 07' 9"		
-44° 8708	17:35:48.5	-44° 43' 0"		
	43.7	24.8	8.3	24.8
			7.9	
			3	
	24.3			
17:35:23.6	-44° 57' 2"	3.7	10.7	
17:35:23.6	-44° 57' 0"	4.6	14.1	
17:35:23.6	-44° 57' 0"		13.9	
(178)				June '32

A 6456

-40° 8036	17:36:36.9	-40° 34' 9"		
-40° 8045	17:37:24.0	-40° 19' 0"		
	47.1	15.9	9.2	15.8
	17:36:57.9	-40° 33' 4"	4.1	1.5
(814)	17:36:57.9	-40° 33' 4"	5.1	14.3
	17:36:57.9	-40° 33' 4"		
-40° 7947	17:37:45.6	-40° 47' 1"		
-40° 7984	17:38:24.2	-40° 18' 9"		
	158.6	28.2	30.4	28.2
	17:32:04.4	-40° 33' 2"	3.6	13.9
	17:32:04.4	-40° 33' 2"	26.8	14.3
(261)	17:32:04.4	-40° 33' 2"		
	17:32:39.4	-40° 40' 1"	10.3	7.0
	17:32:39.4	-40° 40' 0"	20.1	21.2
(183)	17:32:39.4	-40° 40' 0"		
	17:32:58.2	-40° 25' 6"	13.9	21.5
	17:32:58.0	-40° 25' 6"	16.5	6.7
(29)	17:32:58.1	-40° 25' 6"		

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6456

(215)

17:32:09.1	-40°:39'.9	16.0	7.7
17:33:09.7	-40°:39'.9	14.4	21.0
<u>17:33:09.1</u>	<u>-40°:39'.9</u>		

(235)

17:33:53.4	-40°:40'.0	24.5	7.1
17:33:53.4	-40°:40'.0	5.9	21.1
<u>17:33:53.4</u>	<u>-40°:40'.0</u>		

-41° 8'14.8	17:34:50.7	-41°:04'.2	
-41° 8'19.2	17:37:16.8	-41°:50'.3	
	146'.1	46'.1	27.0 46.8

(250)

17:35:08.6	-41°:28'.5	3.3	24.7
17:35:08.6	-41°:28'.5	23.7	22.1
<u>17:35:08.6</u>	<u>-41°:28'.5</u>		

(262)

17:35:07.5	-41°:13'.1	3.1	9.0
17:35:07.5	-41°:13'.0	23.9	37.8
<u>17:35:07.5</u>	<u>-41°:13'.0</u>		

re-measured

(310)

17:35:37.2	-41°:25'.9	8.6	21.0
17:35:37.2	-41°:25'.9	12.4	25.8
<u>17:35:37.2</u>	<u>-41°:25'.9</u>		

(280)

17:36:13.4	-41°:46'.4	15.3	42.8
17:36:13.4	-41°:46'.4	11.7	4.0
<u>17:36:13.4</u>	<u>-41°:46'.4</u>		

A13266

-41° 8'15.6	17:35:17.2	-41°:28'.8	
-41° 8'16.7	17:36:05.3	-41°:20'.6	
	48'.1	8'.2	9.0 8.1
	17:35:34.8	-41°:24'.3	3.3 4.4
	17:35:34.9	-41°:24'.3	5.7 3.7
	17:35:35	-41°:24'.3	

310

6416 $-42^{\circ} 79' 27''$ $17:37:31.5$ $-42^{\circ} 41' 0''$
 $-42^{\circ} 79' 40''$ $17:39:08.3$ $-42^{\circ} 02' 9''$
 96.8 38.1 18.5 37.9

$17:37:50.9$ $-42^{\circ} 21' 7''$ 3.7 19.2
 $17:37:56.9$ $-42^{\circ} 21' 7''$ 14.8 18.7
 $17:37:50.9$ $-42^{\circ} 21' 7''$

(105)

$-41^{\circ} 21' 50''$ $17:34:57.4$ $-41^{\circ} 57' 4''$
 $-42^{\circ} 79' 17''$ $17:36:21.9$ $-42^{\circ} 25' 3''$
 84.5 27.9 15.3 28.3

$17:35:41.6$ $-42^{\circ} 11' 8''$ 8.0 14.6
 $17:35:41.6$ $-42^{\circ} 11' 8''$ 7.3 13.7
 $17:35:41.6$ $-42^{\circ} 11' 8''$

(317)

$17:35:49.9$ $-42^{\circ} 14' 9''$ 9.5 17.7
 $17:35:49.9$ $-42^{\circ} 14' 9''$ 5.8 10.6
 $17:35:49.9$ $-42^{\circ} 14' 9''$

(253)

$17:36:17.5$ $-42^{\circ} 24' 1''$ 14.5 27.1
 $17:36:17.5$ $-42^{\circ} 24' 1''$ 1.8 1.2
 $17:36:17.5$ $-42^{\circ} 24' 1''$

(212)

6456

$-42^{\circ} 7869$	$17:31:27.0$	$-42^{\circ} 40'3$		
$-41^{\circ} 8150$	$17:34:57.4$	$-41^{\circ} 57'4$		
	210.4	42.9	39.5	43.0

$17:32:16.6$	$-42^{\circ} 27'7$	9.3	12.6
$17:32:16.4$	$-42^{\circ} 27'7$	30.2	30.4

(316)

$17:32:16.5$	$-42^{\circ} 27'7$
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$17:32:44.3$	$-42^{\circ} 04'2$	14.5	36.2
$17:32:44.1$	$-42^{\circ} 04'2$	25.0	6.8

(236)

$17:32:44.2$	$-42^{\circ} 04'2$
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$17:34:20.1$	$-42^{\circ} 02'2$	32.5	38.2
$17:34:20.1$	$-42^{\circ} 02'2$	7.0	4.8

(W17)

$17:34:20.1$	$-42^{\circ} 02'2$
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$-41^{\circ} 8085$	$17:29:18.9$	$-41^{\circ} 57'0$		
$-42^{\circ} 7869$	$17:31:27.0$	$-42^{\circ} 40'3$		
	128.1	43.3	23.6	43.8

$17:29:51.5$	$-42^{\circ} 12'6$	6.0	15.8
$17:29:51.5$	$-42^{\circ} 12'6$	17.1	28.0

(210)

$17:29:51.5$	$-42^{\circ} 12'6$
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$17:30:05.0$	$-42^{\circ} 12'0$	8.5	15.2
$17:30:05.0$	$-42^{\circ} 12'0$	15.1	28.6

(223)

$17:30:05.0$	$-42^{\circ} 12'0$
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$17:30:07.7$	$-42^{\circ} 19'7$	9.0	23.0
$17:30:07.7$	$-42^{\circ} 19'7$	14.6	20.8

(306)

$17:30:07.7$	$-42^{\circ} 19'7$
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6456

17:30:34.9	-42°:26'7	14.0	30.0
17:30:34.9	-42°:26'7	9.6	13.8
17:30:34.9	-42°:26'7		

(305)

17:31:17.8	-42°:37'0	21.9	40.5
17:31:17.8	-42°:37'0	1.7	3.3
17:31:17.8	-42°:37'0		

(194)

-41° 8085	17:29:18.9	-41°:57'0		
-41° 8119	17:32:26.0	-41°:04'6		
	187.1	52.4	34.8	52.6

17:29:46.3	-41°:42'6	5.1	14.5
17:29:46.3	-41°:42'8	29.7	38.1
17:29:46.3	-41°:42'6		

(288)

17:30:07.3	-41°:42'7	9.0	14.4
17:30:07.2	-41°:42'6	25.8	38.2
17:30:07.2	-41°:42'7		

(308)

		15.9	34.1
17:31:00.6	-41°:23'0	18.9	18.5
17:31:00.5	-41°:23'0		
17:31:00.6	-41°:23'0		

(78)

17:31:21.0	-41°:29'4	22.7	27.7
17:31:20.9	-41°:29'4	12.1	24.9
17:31:20.9	-41°:29'4		

(251)

17:32:07.1	-41°:24'0	31.3	33.7
17:32:07.2	-41°:24'0	3.5	19.5
17:32:07.1	-41°:24'0		

(318)

identification of these stars all right.

A 6456 -41° 8058 17:27:13.9 $-41^{\circ}20'0$
 -41° 8085 17:29:18.9 $-41^{\circ}57'0$
 125.0 37.0 24.3 36.9

17:28:50.6 $-41^{\circ}37'5$ 18.8 17.4
 17:28:50.6 $-41^{\circ}37'5$ 5.5 19.5
 (237) 17:28:50.6 $-41^{\circ}37'5$

17:28:18.2 $-41^{\circ}52'7$ 12.5 32.6
 17:28:18.2 $-41^{\circ}52'7$ 11.8 4.3
 (258) 17:28:18.2 $-41^{\circ}52'7$

17:27:35.0 $-41^{\circ}22'6$ 4.1 2.6
 17:27:35.0 $-41^{\circ}22'6$ 20.2 34.3
 (182) 17:27:35.0 $-41^{\circ}22'6$

-41° 8087 17:29:23.4 $-41^{\circ}18'1$
 -41° 8094 17:30:01.9 $-41^{\circ}08'9$
 38.5 9.2 7.3 9.5

17:29:42.9 $-41^{\circ}14'3$ 3.7 3.9
 17:29:42.9 $-41^{\circ}14'3$ 3.6 5.6
 (309) 17:29:42.9 $-41^{\circ}14'3$

-40° 7912 17:28:36.0 $-40^{\circ}55'0$
 -40° 7915 17:29:00.5 $-40^{\circ}40'8$
 24.5 14.2 4.6 14.2

17:28:42.9 $-40^{\circ}44'3$ 1.3 10.7
 17:28:42.9 $-40^{\circ}44'3$ 3.3 3.5
 (216) 17:28:42.9 $-40^{\circ}44'3$

6456 -42° 7833 17:27:48.4 -42°57'0
 -42° 7854 17:30:03.9 -42°17'7
 13 5.5 39.3 24.6 38.5

(W5) { see p 119
 17:27:59.4 -42°20'7 2.0 35.6
~~17:27:59.4 -42°20'7 22.6 2.9 wrong star~~
~~17:27:59.4 -42°20'7~~

(205)
 17:28:07.7 -42°43'8 3.5 12.9
 17:28:07.7 -42°43'8 21.1 25.6
17:28:07.7 -42°43'8

(246)
 17:29:49.6 -42°43'6 22.0 13.1
 17:29:49.6 -42°43'6 2.6 25.4
17:29:49.6 -42°43'6

-42° 7811 17:25:12.9 -42°06'3
 -42° 7833 17:27:48.4 -42°57'0
 155.5 50.7 29.7 50.7 wrong star
~~17:25:22.8 -42°19'3 1.9 13.0 see p. 119~~
~~17:25:22.7 -42°19'3 27.8 37.7~~
 (289) 17:25:22.7 -42°19'3

(273)
 17:25:26.5 -42°34'9 2.6 28.6
 17:25:26.4 -42°34'9 27.1 22.1
17:25:26.4 -42°34'9

(237)
 17:28:25.4 -42°35'0 2.4 28.7
 17:25:25.4 -42°35'0 27.3 22.0
17:25:25.4 -42°35'0

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6456

17:26:37.2	-42°38'3	16.1	32.0
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17:26:37.2	-42°38'3	13.6	18.7
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(W6)

17:26:37.2	-42°38'3		
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170

-42°78'17	17:26:20.9	-42°19'3		
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-42°78'39	17:28:15.2	-42°02'3		
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114.3

17.0

20.9

17.5

17:27:09.6	-42°10'8	12.0	8.8
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17:27:09.4	-42°10'8	8.9	8.7
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17:27:09.5	-42°10'8		
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(213)

-42°77'1	17:20:47.3	-42°19'2		
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-41°80'29	17:24:20.3	-41°50'8		
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213.0

28.4

39.4

29.5

17:21:13.8	-41°58'1	4.9	21.9
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17:21:19.8	-41°58'1	34.5	7.6
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(255)

17:21:19.8	-41°58'1		
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17:22:40.3	-41°56'2	20.9	23.9
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17:22:40.3	-41°56'2	18.5	5.6
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(259)

17:22:40.3	-41°56'2		
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17:23:38.7	-42°06'4	31.7	13.3
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17:23:38.7	-42°06'4	7.7	16.2
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(266)

17:23:38.7	-42°06'4		
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6456	-41° 8029	17:24:20.3	-41° 50' 8"		
	-41° 8041	17:25:26.9	-41° 13' 7"		
		66.6	37.1	11.5	37.6

17:24:44.6	-41° 34' 0"	4.2	17.0
17:24:44.6	-41° 34' 0"	7.3	20.6

(307) 17:24:44.6 -41° 34' 0"

-40° 7886	17:24:39.9	-40° 57' 8"		
-41° 8041	17:25:26.9	-41° 13' 7"		
	47.0	15.9	9.0	15.8

17:24:51.9	-41° 01' 2"	2.3	3.4
17:24:51.9	-41° 01' 2"	6.7	12.4

(242) 17:24:51.9 -41° 01' 2"

-40° 7831	17:20:17.1	-40° 23' 3"		
-40° 7862	17:22:54.7	-40° 58' 6"		
	157.6	35.3	30.9	34.7

17:20:51.7	-40° 54' 7"	6.8	30.9
17:20:51.7	-40° 54' 7"	24.1	3.8

(17) 17:20:51.7 -40° 54' 7"

17:21:08.1	-40° 47' 0"	10.0	23.3
17:21:08.1	-40° 47' 0"	20.9	11.4

(264) 17:21:08.1 -40° 47' 0"

17:22:45.1	-40° 41' 7"	29.0	18.1
17:22:45.0	-40° 41' 7"	1.9	16.6

(243) 17:22:45.0 -40° 41' 7"

6456

-41° 7984 17:18:33.2 -41:14'8

-40° 7831 17:20:17.1 -40:23'3

103.9 51.5 18.3 52.6

17:18:46.8 -41:00'1 2.4 15.0

17:18:46.8 -41:00'1 15.9 37.6

17:18:46.8 -41:00'1

(24) *brony*
fau 32*

17:19:10.1 -40:31'0 6.5 44.7

17:19:10.1 -40:31'0 11.8 7.9

17:19:10.1 -40:31'0

(240)

-41° 7956 17:14:32.6 -41:08'1

-40° 7791 17:15:34.1 -40:47'2

61.5 20.9 10.8 21.7

17:15:11.8 -40:56'6 6.9 11.9

17:15:11.9 -40:56'6 3.9 9.8

17:15:11.9 -40:56'6

(100)

-41° 7949 17:13:55.6 -42:00'1

-41° 7957 17:14:54.1 -41:51'1

58.5 9.0 10.4 9.4

17:14:12.4 -41:52'4 3.0 8.0

17:14:12.5 -41:52'4 7.4 1.4

17:14:12.5 -41:52'4

(319)

6456 -43° 8' 16.6 17:29:13.0 -43° 13' 2
 -42° 7' 8.69 17:31:27.0 -42° 40' 3
 134.0 32.9 24.7 33.0

17:30:14.8 -43° 03' 9 11.4 9.3
 17:30:14.8 -43° 03' 9 13.3 23.7
 17:30:14.8 -43° 03' 9

(168)

17:30:40.8 -43° 05' 5 16.2 7.7
 17:30:40.9 -42° 05' 5 8.5 25.3

(224)

17:30:40.8 -42° 05' 5

-43° 8' 16.6 17:29:13.0 -43° 13' 2
 -43° 8' 18.1 17:30:54.0 -43° 42' 2
 101.0 29.0 18.8 29.5

17:30:17.0 -43° 34' 8 11.9 22.0
 17:30:16.9 -43° 34' 8 6.9 7.5

(171)

17:30:16.9 -43° 34' 8

17:29:34.5 -43° 26' 1 4.0 13.1
 17:29:34.5 -43° 26' 1 14.8 16.4

(190)

17:29:34.5 -43° 26' 1

-43° 8' 12.8 17:25:23.9 -43° 12' 3
 -43° 8' 13.9 17:26:22.4 -43° 35' 0
 58.5 22.7 11.3 22.6

17:25:53.9 -43° 17' 5 5.8 5.2
 17:25:54.0 -43° 17' 5 5.5 17.4

(172)

17:25:54.0 -43° 17' 5

6456

-43° 8'13.9 17:26:22.4 -43° 35'10

-43° 8'16.6 17:29:13.0 -43° 13'12

17 0'6 21'8 30.8 22.1

17:27:26.6 -43° 27'4 11.6 7.7

17:27:26.8 -43° 27'4 19.2 14.4

(291)

17:27:26.8 -43° 27'4

17:27:22.2 -43° 25'7 10.8 9.4

17:27:22.2 -43° 25'7 20.0 12.7

(278)

17:27:22.2 -43° 25'7

17:28:42.5 -43° 33'9 25.3 1.1

17:28:42.6 -43° 33'9 5.5 21.0

(191)

17:28:42.6 -43° 33'9

-43° 8'13.9 17:26:22.4 -43° 35'10

-44° 8'6.1 17:27:41.3 -44° 10'10

78.9 35'10 14.7 35.3

17:26:39.6 -43° 56'8 3.2 21.9

17:26:39.6 -43° 56'7 11.5 13.4

(193)

17:26:39.6 -43° 56'8

-44° 8'6.1 17:27:41.3 -44° 10'10

-44° 8'6.3 17:27:21.8 -44° 48'9

100'5 38'9 18.5 39.0

17:28:22.1 -44° 29'9 7.5 19.9

17:28:22.0 -44° 29'9 11.0 19.1

(325)

17:28:22.1 -44° 29'9

6456

17:28:35.8 -44°:18'2 10.0 8.2

17:28:35.8 -44°:18'2 8.5 30.8

(271)

17:28:35.8 -44°:18'2

17:28:40.5 -44°:39'5 10.9 29.8

17:28:40.5 -44°:39'5 7.6 9.4

(294)

17:28:40.5 -44°:39'5

17:28:56.3 -44°:46'9 13.8 31.0

17:28:56.3 -44°:46'9 4.7 8.0

(249)

17:28:56.3 -44°:46'9

-44° 8593 17:25:56.8 -44°:58'7

-44° 8611 17:27:41.3 -44°:10'0

10 4.5 48.7 18.1 49.1

17:26:19.3 -44°:29'0 3.9 29.9

17:26:19.3 -44°:29'0 14.2 19.2

(206)

17:26:19.3 -44°:29'0

17:26:58.6 -44°:33'1 10.7 25.8

17:26:58.6 -44°:33'1 7.4 23.3

(247)

17:26:58.6 -44°:33'1

17:27:15.9 -44°:27'7 13.7 31.3

17:27:15.9 -44°:27'7 4.4 17.8

(127)

17:27:15.9 -44°:27'7

6456 $-44^{\circ}85'9.3$ $17:25:56.8$ $-44^{\circ}58.7$
 $-45^{\circ}86'9.3$ $17:27:50.0$ $-45^{\circ}14.0$
 $11.3''$ 15.3 20.1 15.3

$17:27:17.7$ $-45^{\circ}11.3$ 14.3 12.6

$17:27:17.3$ $-45^{\circ}11.3$ 5.8 2.7

(208)

$17:27:17.3$ $-45^{\circ}11.3$

$-44^{\circ}85'41$ $17:22:15.7$ $-44^{\circ}09.6$
 $-43^{\circ}81'16$ $17:24:08.9$ $-43^{\circ}29.6$
 $11.3''$ 4.0 19.8 40.8

$17:22:47.8$ $-43^{\circ}53.4$ 5.6 16.5

$17:22:47.8$ $-43^{\circ}53.4$ 14.2 24.3

(172)

$17:22:47.8$ $-43^{\circ}53.4$

$17:22:48.0$ $-43^{\circ}45.7$ 20.1 40.5
 $17:22:00.3$ $-43^{\circ}46.6$ 7.5 24.2
 $22:47.9$ $-43^{\circ}45.7$ 23.4 24.1
 ~~$17:22:00.3$ $-43^{\circ}46.7$ 12.6 16.3~~
 ~~$17:22:48$ $-43^{\circ}45.7$~~
 ~~$17:22:00.3$ $-43^{\circ}46.7$~~

(248)

$17:23:12.9$ $-43^{\circ}42.8$ 10.6 27.3

$17:23:12.9$ $-43^{\circ}42.8$ 9.8 13.5

(263)

$17:23:12.9$ $-43^{\circ}42.8$

$17:23:36.8$ $-43^{\circ}35.4$ 14.2 34.9

$17:23:36.8$ $-43^{\circ}35.4$ 5.6 5.9

(233)

$17:23:36.8$ $-43^{\circ}35.4$

*have again
wrong place*

6456 $-43^{\circ} 80' 8''$ $17:21:21.8$ $-43^{\circ} 08' 1''$
 $-43^{\circ} 81' 1''$ $17:24:08.9$ $-43^{\circ} 29' 6''$
 167.1 21.5 31.2 20.0

$17:22:13.8$ $-43^{\circ} 14' 8''$ 9.7 6.2

$17:22:13.7$ $-43^{\circ} 14' 8''$ 21.5 13.8

(276)

$17:22:13.7$ $-43^{\circ} 14' 8''$

$17:22:15.4$ $-43^{\circ} 21' 4''$ 10.0 12.4

$17:22:15.2$ $-43^{\circ} 21' 4''$ 21.2 7.6

(277)

$17:22:15.3$ $-43^{\circ} 21' 4''$

$17:22:39.5$ $-43^{\circ} 10' 5''$ 14.5 2.2

$17:22:39.4$ $-43^{\circ} 10' 5''$ 16.7 17.8

(278)

$17:22:39.4$ $-43^{\circ} 10' 5''$

$17:23:33.0$ $-43^{\circ} 22' 1''$ 24.5 13.0

$17:23:33.0$ $-43^{\circ} 22' 1''$ 6.7 7.0

(169)

$17:23:33.0$ $-43^{\circ} 22' 1''$

$-43^{\circ} 80' 6''$ $17:19:50.3$ $-43^{\circ} 30' 8''$

$-43^{\circ} 80' 8''$ $17:25:21.8$ $-43^{\circ} 08' 1''$

91.5 22.7 16.0 22.4

$17:19:59.4$ $-43^{\circ} 20' 8''$ 1.6 9.9

$17:19:59.4$ $-43^{\circ} 20' 8''$ 14.4 12.5

(323)

$17:19:59.4$ $-43^{\circ} 20' 8''$

6456

-43° 8088 17:21:21.8

-43° 08' 1

-42° 7788

17:22:26.3

-42° 31' 3

64.5

38.8

10.8

38.3

17:21:40.9

-42° 50' 6

3.2

182

17:21:40.9

-42° 50' 6

7.6

20.1

(274)

17:21:40.9-42° 50' 6

-42° 7753

17:18:11.7

-42° 33' 9

-43° 8088

17:21:21.8

-43° 08' 1

190.1

34.2

36.5

34.4

17:18:24.2

-42° 55' 2

2.4

21.4

17:18:24.1

-42° 55' 2

34.1

13.0

(114)

17:18:24.1-42° 55' 2

17:19:42.9

-42° 55' 0

17.5

21.2

17:19:42.8

-42° 55' 0

19.0

13.2

(115)

17:19:42.8-42° 55' 0

wrong star

~~17:20:51.0~~~~-43° 05' 7~~~~30.6~~~~22.0~~~~17:20:51.1~~~~-43° 05' 7~~~~5.9~~~~2.4~~

(204)

17:21:51.0-43° 05' 7

-43° 8077

17:20:41.3

-43° 06' 4

-43° 8088

17:21:21.8

-43° 08' 1

-43

49.5

1.7

7.6

2.5

17:20:51.4

-43° 06' 6

1.9

.3

17:20:51.4

-43° 06' 6

5.7

2.2

17:20:50-43° 06' 6

6456

-43° 3033

17:17:42.2 -43° 56'2

-43° 3041

17:18:18.3 -43° 39'3

30.1

16.9

4.9

17.1

17:18:08.5

-43° 44'4

3.3

11.9

17:18:08.5

-43° 44'4

1.6

5.2

(22)

17:18:08.5

-43° 44'4

220

-41° 3000

17:20:42.3

-41° 18'5

-41° 3004

17:21:44.8

-41° 09'7

62.5

8.8

11.6

9.3

17:21:26.9

-41° 12'4

8.3

6.5

17:21:26.0

-41° 12'3

3.3

2.8

(239)

17:21:26.0

-41° 12'3

-43° 3193

17:32:29.0

-43° 21'1

-44° 3697

17:34:28.9

-44° 26'3

119.9

65.2

21.3

66.0

17:32:52.6

-43° 55'4

4.2

34.7

17:32:52.6

-43° 55'4

17.1

31.3

(268)

17:32:52.6

-43° 55'4

94

6456

-43° 8316	17:45:04.2	-43° 34'1	
-43° 8330	17:47:07.4	-43° 46'8	
	123.2	12.7	21.8 13.9

17:46:22.2	-43° 38'2	13.8	4.5
17:46:22.2	-43° 38'2	8.0	9.4

(201)

17:46:22.2	-43° 38'2
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-43° 8303	17:43:38.2	-43° 07'1	
-43° 8316	17:45:04.2	-43° 34'1	
	86.0	27.0	14.8 28.0

17:44:18.8	-43° 14'6	7.0	7.8
17:44:18.9	-43° 14'6	7.8	20.2

(200)

17:44:18.8	-43° 14'6
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-42° 7927	17:37:31.5	-42° 41'0	
-43° 8283	17:41:22.7	-43° 36'4	
	23.12	55.4	40.7 56.9

17:38:52.8	-43° 24'4	14.3	44.6
17:38:52.7	-43° 24'4	26.4	12.3
17:38:52.7	-43° 24'4		

(198)

see p. 119, comp. stars too far apart,

2677

-46° 8993	17:49:32.8	-46° 05'5	
-46° 9003	17:50:13.3	-46° 43'9	
	40.5	38.4	7.1 38.6

17:49:50.5	-46° 29'8	3.1	24.4
17:49:50.5	-46° 29'8	4.6	14.2
17:49:50.5	-46° 29'8		

(329)

2677

 $-46^{\circ} 9003$ 17:50:13.3 $-46^{\circ} 43'9$ $-46^{\circ} 9024$ 17:51:50.3 $-46^{\circ} 58'8$

97.0

14.9

16.5

15.0

17:51:29.8 $-46^{\circ} 46'6$ 46.4 13.0 2.7 2.517:51:29.7 $-46^{\circ} 46'6$ 46.4 3.5 12.3 12.5

(W25)

17:51:29.7 $-46^{\circ} 46'6$ $-45^{\circ} 8955$ 17:48:40.4 $-45^{\circ} 34'9$ $-46^{\circ} 8993$ 17:49:32.8 $-46^{\circ} 05'5$

52.4

30.6

9.4

31.0

17:48:52.1 $-45^{\circ} 54'4$ 2.1 19.717:48:52.1 $-45^{\circ} 54'4$ 7.3 11.3

(W24)

17:48:52.1 $-45^{\circ} 54'4$ $-45^{\circ} 8927$ 17:45:26.4 $-45^{\circ} 03'4$ $-45^{\circ} 8936$ 17:46:53.1 $-45^{\circ} 26'7$

86.7

23.3

15.7

23.6

17:46:01.2 $-45^{\circ} 13'1$ 6.3 9.817:46:01.2 $-45^{\circ} 13'1$ 9.4 13.8

(66)

17:46:01.2 $-45^{\circ} 13'1$

96A 2677

comp. star bright -45° 8891 17:39:44.0 -46° 45'6
 -46° 8916 17:41:53.0 -46° 11'0
 129.0 34.6 21.0 35.5

17:39:46.9 -46° 19'3 2.1 27.0
 17:39:46.9 -46° 19'3 18.9 8.5
 17:39:46.9 -46° 19'3

(44)

17:41:17.4 -46° 22'7 15.2 33.8
 17:41:17.4 -46° 12'7 5.8 1.7
 17:41:17.4 -46° 12'7

(43)

17:41:32.8 -46° 34'1 17.7 11.8
 17:41:32.7 -46° 34'1 3.3 23.7
 17:41:32.7 -46° 34'1

(W26)

-47° 8487 17:39:28.8 -47° 10'2
 -47° 8503 17:41:01.9 -47° 21'6
 93.1 11.4 16.2 11.2

17:40:21.9 -47° 16'7 7.5 6.4
 17:40:21.9 -47° 16'7 8.7 4.8
 17:40:21.9 -47° 16'7

(W23)

17:40:50.4 -47° 17'9 14.2 7.6
 17:40:50.4 -47° 17'9 2.0 3.6
 17:40:50.4 -47° 17'9

(W27)

(W27)

A1876 $-39^{\circ}7586$ $17:40:37.1$ $-39^{\circ}07'0$
 $-39^{\circ}7601$ $17:41:30.6$ $-39^{\circ}13'2$
 53.5 6.2 10.2 6.3

$17:41:01.7$ $-39^{\circ}11'9$ 4.7 5.0
 $17:41:01.8$ $-39^{\circ}11'9$ 5.5 1.3
 (99) $17:41:01.7$ $-39^{\circ}11'9$

$-38^{\circ}6968$ $17:33:32.4$ $-38^{\circ}43'1$
 $-39^{\circ}7548$ $17:35:54.5$ $-39^{\circ}39'3$
 142.1 56.2 26.9 57.2

$17:33:57.2$ $-38^{\circ}55'1$ 4.7 12.2
 $17:33:57.3$ $-38^{\circ}55'1$ 22.2 45.0
 (98) $17:33:57.2$ $-38^{\circ}55'1$

$17:35:47.2$ $-39^{\circ}38'3$ 28.5 56.2
 $17:35:47.1$ $-39^{\circ}38'3$ 1.4 1.0
 (69) $17:35:47.1$ $-39^{\circ}38'3$

$-38^{\circ}7062$ $17:43:04.6$ $-38^{\circ}42'3$
 () $-38^{\circ}7079$ $17:43:55.1$ $-38^{\circ}26'7$
 50.5 15.6 10.5 15.3

$17:43:50.3$ $-38^{\circ}36'3$ 9.5 5.9
 $17:43:50.3$ $-38^{\circ}36'3$ 1.0 9.4
 (W2) $17:43:50.3$ $-38^{\circ}36'3$

98

A 1876

-39° 7432	17:26:23.7	-39° 43' 1		
-39° 7445	17:27:15.8	-39° 51' 4		
	52.1	8.3	10.0	8.3

17:26:45.6	-39° 46' 9	4.2	3.8
17:26:45.6	-39° 46' 9	5.8	4.5

(130)

17:26:45.6 -39° 46' 9

-39° 7398	17:22:17.6	-39° 28' 4		
-39° 7399	17:22:54.1	-39° 37' 4		
	36.5	9.0	7.2	9.0

17:22:47.0	-39° 34' 1	5.8	5.7
17:22:47.0	-39° 34' 1	1.4	3.3

(147)

17:22:47.0 -39° 34' 1

-39° 7351	17:15:52.9	-39° 19' 7		
-39° 6812	17:17:22.6	-38° 42' 7		
	89.7	37.0	18.5	38.0

17:16:14.9	-39° 05' 7	4.7	14.4
17:16:14.8	-39° 05' 7	13.8	23.6

(26)

17:16:14.8 -39° 05' 7

17:17:05.7	-38° 46' 7	15.0	33.9
17:17:05.6	-38° 46' 7	3.5	4.1

(W1)

17:17:05.6 -38° 46' 7

A1876

-39° 7359	17:16:48.4	-39° 48'3		
-38° 6825	17:19:25.8	-38° 47'7		
	157.2	60.6	29.1	61.9

17:17:58.7	-39° 29'7	13.0	18.5
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17:17:58.7	-39° 29'7	16.1	43.4
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(100)

17:17:58.7	-39° 29'7
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17:18:52.6	-39° 07'9	23.0	42.2
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17:18:52.6	-39° 07'0	6.1	19.7
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244

(27)

17:18:52.6	-39° 07'0
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A5622

-39° 7757	17:49:19.6	-39° 35'6		
-40° 8263	17:50:04.2	-40° 06'4		
-39° 771	44.6	38.8	7.3	39.9

17:49:38.9	-39° 57'4	3.6	21.8
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17:49:39.0	-39° 57'4	4.7	9.0
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(W14)

17:49:38.9	-39° 57'4
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-39° 7683	17:46:55.6	-39° 34'4
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-39° 7703	17:46:51.6	-39° 14'3
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5.6.0	19.9	10.6	20.2
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17:46:20.9	-39° 27'2	4.8	7.3
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17:46:21.0	-39° 27'0	5.8	12.9
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(50)

17:46:20.9	-39° 27'1
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A 5622

-39° 7791	17:51:02.1	-39° 07'3	
-38° 7238	17:52:03.3	-38° 34'1	
	61.2	33.2	12.2 33.4

17:51:12.1	-38° 58'3	2.0	9.1
17:51:12'1	-38° 58'3	10.2	24.3

(140)

<u>17:51:12.1</u>	<u>-38° 58'3</u>
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17:51:20.7	-38° 46'8	3.7	20.6
17:51:20.7	-38° 46'8	8.5	12.8

(140)

<u>17:51:20.7</u>	<u>-38° 46'8</u>
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-39° 7805	17:51:54.6	-39° 20'8	
-39° 7832	17:53:34.6	-39° 39'5	
	100.0	18.7	19.3 19.0

17:52:07.0	-39° 29'1	2.6	8.4
17:52:07'1	-39° 29'1	16.7	10.6

(W3)

<u>17:52:07.0</u>	<u>-39° 29'1</u>
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17:52:36.5	-39° 34'3	8.1	13.7
17:52:34.6	-39° 34'3	11.2	5.3

(58)

<u>17:52:34.6</u>	<u>-39° 34'3</u>
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17:53:07.1	-39° 37'5	14.0	17.0
17:53:07:2	-39° 37'5	8.3	2.0

(W4)

<u>17:53:07.1</u>	<u>-39° 37'5</u>
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251
31
273

A2664 $-38^{\circ}67'5$ $17:11:39.0$ $-38^{\circ}46'8$
 $-38^{\circ}67'8$ $17:12:39.5$ $-38^{\circ}14'0$
 62.5 26.8 12.0 27.1

$17:11:50.0$ $-38^{\circ}38'1$ 2.2 2.7
 $17:11:50.1$ $-38^{\circ}38'1$ 9.8 24.4

(22)

$17:11:50.1$ $-38^{\circ}38'1$

$-39^{\circ}7'201$ $17:07:56.8$ $-39^{\circ}07'4$
 $-39^{\circ}7'211$ $17:10:10.8$ $-39^{\circ}19'1$
 134.0 11.7 24.2 11.7

$17:09:05.9$ $-39^{\circ}14'1$ 13.5 6.7
 $17:09:05.8$ $-39^{\circ}14'1$ 12.7 5.0

(W13)

$17:09:05.8$ $-39^{\circ}14'1$

A6456 -41° 8230 $17:39:37.1$ $-41^{\circ}34'7$
 -40° 8128 $17:42:20.7$ $-40^{\circ}58'5$
 163.6 36.2 32.1 38.8

$17:40:32.7$ $-41^{\circ}31'6$ 10.9 3.1
 $17:40:32.7$ $-41^{\circ}31'6$ 21.2 32.8

(81)

$17:40:32.7$ $-41^{\circ}31'6$

$17:41:27.1$ $-41^{\circ}29'7$ 21.6 5.0
 $17:41:27.1$ $-41^{\circ}29'6$ 10.5 30.8

(19)

$17:41:27.1$ $-41^{\circ}29'6$

102

A6456

-41° 8' 18.6	17:36:58.8	-41° 35' 8		
-41° 8' 19.2	17:37:16.8	-41° 50' 3		
	18.0	14.5	2.9	14.6

17:37:11.2	-41° 50' 1	2.	14.4
17:37:11.2	-41° 50' 1	.4	.2

(18)

17:37:11.2	-41° 50' 1
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-43° 8' 30.3	17:43:38.2	-43° 07' 1		
-43° 8' 31.1	17:45:04.2	-43° 34' 1		
	86.0	27.0	14.7	28.0

17:43:59.3	-43° 11' 9	3.6	6.0
17:43:59.3	-43° 11' 9	11.1	5.8
			23.8

(134)

17:43:59.3	-43° 11' 9
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-40° 8' 00.3	17:34:55.5	-40° 02' 5		
-40° 8' 03.6	17:36:36.9	-40° 34' 9		
	101.4	32.4	19.2	33.0

17:35:57.3	-40° 14' 9	11.7	12.6
17:35:57.3	-40° 14' 9	17.5	20.4

(145)

17:35:57.3	-40° 14' 9
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A7874 -47° 84'17 17:33:50.8 -47° 29'9
 -47° 84'23 17:34:29.3 -47° 22'0
 38.5 7.9 7.0 7.7

17:34:17.8 -47° 24'8 4.9 5.0
 17:34:17.8 -47° 24'8 2.1 2.7

(346) 17:34:17.8 -47° 24'8

-47° 83'47 17:23:57.9 -47° 27'6
 -47° 83'32 17:24:44.4 -47° 08'9
 46.5 18.7 8.1 18.9

17:24:10.0 -47° 24'2 2.1 3.4
 17:24:10.0 -47° 24'2 6.0 15.5

(347) 17:24:10.0 -47° 24'2

17:24:16.8 -47° 18'4 3.3 9.3
 17:24:16.8 -47° 18'4 4.8 9.6

(348) 17:24:16.8 -47° 18'4

-44° 86'59 17:31:20.4 -44° 19'9
 -44° 86'66 17:32:12.4 -44° 13'9
 52.0 6.0 9.6 5.8

17:31:38.8 -44° 15'8 3.4 4.0
 17:31:38.8 -44° 15'9 6.2 1.8

(W20) 17:31:38.8 -44° 15'9

104

A7874

-45° 8693	17:27:50	-45° 14'2		
-45° 8713	17:29:45.1	-45° 31'1		
	185.1	16.9	29.1	17.9

17:28:58.5	-45° 22'7	11.9	9.0
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17:28:58.7	-45° 22'7	8.1	8.9
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(209)

17:28:58.8	-45° 22'7		
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A2277

-47° 8194	17:12:28.2	-47° 23'8		
-47° 8202	17:12:59.8	-47° 09'8		
	31.6	14.6	53	140

17:12:41.9	-47° 16'0	2.3	7.8
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17:12:41.9	-47° 16'0	3.0	6.2
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(53)

17:12:41.9	-47° 16'0		
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A 4411

-47° 8400	17:31:14.8	-47° 06'9		
-47° 8417	17:33:50.8	-47° 29'9		
	156.0	23.0	26.4	23.3

17:32:23.3	-47° 24'3	11.6	17.6
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17:32:23.3	-47° 24'3	14.8	5.7
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(57)

17:32:23.3	-47° 24'3		
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-48° 8754	17:28:57.6	-48° 58'8		
-46° 8744	17:28:07.1	-48° 39'5		
	50.5	19.3	8.9	8.4
			29.7	19.5

 wrong names. A11535
 Ar.33

17:28:24.9	-47° 56'9	-46° 56'9	2.6	
17:28:25.3	-47° 41'4	-46° 41'4	3.2	
17:28:25.2	-47° 56'9	-46° 56'9	5.6	
	-47° 41'4	-46° 41'4		
17:28:24.2	-47° 56'9	-46° 56'9		
	-47° 41'4	-46° 41'4		
			17.5	(17.6)
			1.9	1.9

(330)

A 4411

 $-46^{\circ} 87' 44''$ $17:28:07.1$ $-46^{\circ} 39' 5''$ $-45^{\circ} 87' 28''$ $17:30:32.1$ $-45^{\circ} 42' 5''$ 145.0 57.0 25.3 57.3 $17:28:16.9$ $-46^{\circ} 16' 2''$ 1.7 23.4 $17:28:16.9$ $-46^{\circ} 16' 2''$ 23.6 33.9

(328)

 $17:28:16.9$ $-46^{\circ} 16' 9''$ $17:29:29.6$ $-46^{\circ} 07' 0''$ 14.4 32.7 $17:29:29.6$ $-46^{\circ} 07' 0''$ 10.9 24.6

(45)

 $17:29:29.6$ $-46^{\circ} 07' 0''$ $17:30:10.2$ $-45^{\circ} 58' 7''$ 21.5 41.6 $17:30:10.3$ $-45^{\circ} 58' 1''$ 3.8 25.7

(125)

 $17:30:10.3$ $-45^{\circ} 58' 1''$ $-45^{\circ} 87' 13''$ $17:29:45.1$ $-45^{\circ} 31' 1''$ $-45^{\circ} 87' 26''$ $17:30:21.1$ $-45^{\circ} 21' 2''$ 36.0 9.9 6.3 10.0 $17:29:57.7$ $-45^{\circ} 28' 3''$ 2.2 2.8 $17:29:57.7$ $-45^{\circ} 28' 3''$ 4.1 7.2

(331)

 $17:29:57.7$ $-45^{\circ} 28' 3''$

A 7723

(393)

same comp. stars as 332

 8.4 19.4 $17:28:23.5$ $-46^{\circ} 56' 8''$ $17:28:23.8$ $-46^{\circ} 56' 8''$ 2.7 17.4 $17:28:28$ $-46^{\circ} 56' 8''$ 5.7 2.0

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A4411

-45° 8804 17:35:51.3 -45° 07' 8

-45° 8823 17:36:52.4 -45° 37' 7

56.1 29.9 9.4 30.8

17:36:10.6 -45° 17' 8 2.4 10.2

17:36:10.6 -45° 17' 8 7.0 20.4

(179)

17:36:10.6 -45° 17' 8

17:36:35.7 -45° 27' 2 6.6 19.8

17:36:35.7 -45° 27' 1 2.8 10.8

(117)

17:36:35.7 -45° 27' 1

-45° 8894 17:43:41.9 -45° 50' 1

-45° 8906 17:44:21.4 -45° 34' 3

39.5 15.8 7.5 15.6

A 1907

~~17:44:15.3 -45° 44' 4 5.7 5.6~~ wrong #~~17:44:12.3 -45° 44' 3 1.7 9.9~~

(42)

17:44:12.3 -45° 44' 3

17:44:20.9 -45° 44' 9 7.4 5.1

17:44:20.9 -45° 44' 9 1 10.5

~~17:44:21 -45° 44' 9~~

Feb. '32

-46° 9058 17:55:21.7 -46° 01' 1

-46° 9063 17:56:13.7 -46° 14' 1

52.0 13.6 9.0 13.2

17:55:44.2 -46° 07' 2 3.9 6.2

17:55:44.3 -46° 07' 2 5.1 7.

(137)

17:55:44.2 -46° 07' 2

275

A 6456	-44° 8484	17:18:55.5	-44° 27' 8		
	-44° 8460	17:17:58.9	-44° 45' 8		
		58.6	18' 0	9.6	18.2

17:18:14.8	-44° 33' 6	2.7	12.4
17:18:14.8	-44° 33' 6	6.9	5.8
17:18:15	-44° 33' 6		

(353)

-43° 8072	17:20:30.3	-43° 35' 6		
-43° 8091	17:21:38.8	-43° 55' 9		
	68.5	20.3	12.9	20.3

17:20:40.4	-43° 45' 7	1.9	10.1
17:20:40.4	-43° 45' 7	11.0	10.2

(352)

-42° 7778	17:43:28.8	-42° 08' 8		
-42° 8020	17:45:16.8	-42° 38' 1		
	108.0	29.3	18.6	29.5

17:44:56.5	-42° 14' 0	15.1	5.2
17:44:56.5	-42° 14' 0	3.5	24.3
17:44:57	-42° 14' 0		

(358)

right
hand

-42° 8046	17:46:49.9	-42° 52' 2		
-43° 8333	17:47:45.1	-43° 12' 9		
	15.2	20.7	8.8	21.2

17:47:17.5	-43° 01' 2	4.4	9.2
17:47:17.5	-43° 01' 2	4.4	12.0
17:47:18	-43° 01' 2		

(362)

108

A 6456

-40° 77' 9"	17:15:34.1	-40° 47' 2"		
-41° 79' 84"	17:18:33.2	-41° 14' 8"		
	17 9.1	27.6	35.0	25.8

(359)

17:16:28.9	-40° 50' 8"	10.7	3.5
17:16:28.9	-40° 50' 8"	24.3	23.3
<u>17:16:29</u>	<u>-40° 50' 8"</u>		

-42° 80' 20"	17:45:16.8	-42° 38' 1"		
-42° 80' 32"	17:45:48.3	-42° 34' 5"		
	41.5	3.6	7.8	3.4

17:45:41.8	-42° 36' 7"	4.7	1.3
17:45:41.8	-42° 36' 7"	3.1	2.1

(363)

<u>17:45:42</u>	<u>-42° 36' 7"</u>		
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-40° 78' 62"	17:22:54.7	-40° 58' 6"		
-41° 80' 29"	17:24:20.3	-41° 50' 8"		
	85.6	52.2	17.5	52.4

17:23:21.1	-41° 20' 8"	5.4	22.3
17:23:21.2	-41° 20' 8"	12.1	30.1

(376)

<u>17:23:21</u>	<u>-41° 20' 8"</u>		
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-40° 80' 36"	17:36:36.9	-40° 34' 9"		
-41° 82' 00"	17:37:52.8	-41° 00' 9"		
	75.9	26.0	14.0	26.4

17:36:49.4	-40° 43' 1"	2.3	8.3
17:36:49.4	-40° 43' 1"	11.7	18.1
<u>17:36:49</u>	<u>-40° 43' 1"</u>		

(382)

5626	-41° 8340	17:46:12.3	-41° 37' 9"		
	-42° 8076	17:48:03.9	-42° 12' 0"		
		111.6	34.1	21.2	34.2

17:47:12.8	-41° 41' 5"	11.5	3.6
17:47:12.9	-41° 41' 5"	9.7	30.6
<u>17:47:13</u>	<u>-41° 41' 5"</u>		

(380)

6313	-41° 8340	17:46:12.3	-41° 37' 9"		
	-40° 8229	17:48:10.7	-40° 54' 5"		
		118.4	43.4	22.1	44.2

17:48:04.9	-41° 12' 4"	21.0	
17:48:04.8	-41° 12' 4"	20.9	26.0
<u>17:48:04.8</u>	<u>-41° 12' 4"</u>	1.2	18.2

(379)

Feb. '32

5626	-41° 8411	17:50:41.3	-41° 42' 0"		
	-41° 8433	17:51:39.0	-41° 57' 2"		
		57.7	15.2	10.9	15.2

17:51:17.3	-41° 49' 7"	6.8	7.7
17:51:17.3	-41° 49' 7"	4.1	7.5
<u>17:51:17</u>	<u>-41° 49' 7"</u>		

(378)

A5636	-44° 8838	17:48:23.1	-44° 54' 6"		
	-44° 8846	17:49:25.5	-44° 24' 5"		
		62.4	30.1	10.9	30.5

17:48:18.0	-44° 50' 3"	9.6	4.4
17:49:18.1	-44° 50' 3"	1.3	26.1
<u>17:49:18.0</u>	<u>-44° 50' 3"</u>		

(365)

110

A 5636

 $-43^{\circ} 83'45''$ 17:49:00.6 $-43^{\circ} 06'9''$ $-42^{\circ} 81'01''$ 17:49:58.4 $-42^{\circ} 51'3''$

52.8

15.6

10.0

15.8

17:49:48.6 $-42^{\circ} 59'5''$ 9.1 7.517:49:48.6 $-42^{\circ} 59'5''$ 0.9 8.3

(349)

17:49:49 $-42^{\circ} 59'5''$

checked Feb. '32

A 1376

 $-39^{\circ} 73'9''$ 17:22:54.1 $-39^{\circ} 37'4''$ $-39^{\circ} 74'10''$ 17:24:12.1 $-39^{\circ} 31'9''$

78.0

5.5

13.8

5.8

17:23:30.8 $-39^{\circ} 35'2''$ 6.5 2.317:23:30.8 $-39^{\circ} 35'2''$ 7.3 3.5

(386)

17:23:31 $-39^{\circ} 35'2''$ $-39^{\circ} 74'27''$ 17:25:25.6 $-39^{\circ} 57'4''$ $-39^{\circ} 74'32''$ 17:26:23.7 $-39^{\circ} 43'1''$

58.1

14.3

11.2

14.4

17:26:08.6 $-39^{\circ} 50'0''$ 8.3 7.517:26:08.6 $-39^{\circ} 50'0''$ 2.9 6.9

(384)

17:26:09 $-39^{\circ} 50'0''$ $-39^{\circ} 74'47''$ 17:27:34.3 $-39^{\circ} 10'2''$ $-39^{\circ} 74'61''$ 17:28:31.3 $-39^{\circ} 14'8''$

57.0

4.6

10.8

4.8

17:28:13.4 $-39^{\circ} 11'9''$ 7.4 1.817:28:13.4 $-39^{\circ} 11'9''$ 3.4 3.0

(361)

17:28:13 $-39^{\circ} 11'9''$

A 1876

 $-39^{\circ} 75' 48''$ 17:35:54.5 $-39^{\circ} 39' 13''$ $-39^{\circ} 75' 52''$ 17:36:29.0 $-39^{\circ} 05' 4''$

34.5

33.9

7.2 34.3

17:36:14.1 $-39^{\circ} 18' 9''$

4.1 20.6

17:36:14.2 $-39^{\circ} 18' 9''$

3.1 13.7

(383)

17:36:14 $-39^{\circ} 18' 9''$ $-39^{\circ} 76' 01''$ 17:41:30.6 $-39^{\circ} 13' 12''$ $-38^{\circ} 70' 53''$ 17:42:28.6 $-38^{\circ} 57' 1''$

58.0

16.1

12.1

15.8

17:42:16.1 $-39^{\circ} 11' 7''$

9.5 1.5

17:42:16.2 $-39^{\circ} 11' 7''$

2.6 14.3

(385)

17:42:16.2 $-39^{\circ} 11' 7''$

A 2677

 $-46^{\circ} 9' 03.8''$ 17:52:41.8 $-46^{\circ} 41' 4''$ $-47^{\circ} 8' 63.5''$ 17:53:08.8 $-47^{\circ} 04' 2''$

27.0

22.8

4.3

23.0

17:53:01.9 $-46^{\circ} 59' 4''$

3.2 18.2

17:53:02.0 $-46^{\circ} 59' 4''$

1.1 4.8

(368)

17:53:02 $-46^{\circ} 59' 4''$ $-45^{\circ} 8' 95.5''$ 17:48:40.4 $-45^{\circ} 34' 9''$ $-46^{\circ} 8' 99.3''$ 17:49:32.8 $-46^{\circ} 05' 5''$

52.4

30.6

9.3

30.9

17:49:17.0 $-45^{\circ} 45' 4''$

6.5 10.6

17:49:17.0 $-45^{\circ} 45' 4''$

2.8 20.3

17:49:17 $-45^{\circ} 45' 4''$

(366)

112

A2677

17:49:09.7	-46°02'0	5.2	27.4
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17:49:09.7	-46°02'0	4.1	3.5
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(367)

17:49:10	-46°02'0		
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-46°88'91

17:39:44.0

-46°45'6

-46°89'16

17:41:53.0

-46°11'0

129.0

34.6

21.0

35.5

17:40:11.0

-46°28'8

4.4

17.2

17:40:11.0

-46°28'8

16.6

18.3

(360)

17:40:11

-46°28'8

-46°89'53

17:45:31.6

-46°24'9

-46°89'57

17:45:53.1

-46°48'7

21.5

23.8

4.2

24.1

17:45:41.8

-46°46'5

2.0

21.8

17:45:41.8

-46°46'4

2.2

2.3

(369)

17:45:42

-46°46'4

-45°89'88

17:51:25.9

-45°03'3

-45°89'96

17:52:10.4

-45°15'5

44.5

12.2

7.8

12.5

17:51:53.3

-45°05'8

4.8

2.6

17:51:53.3

-45°05'8

3.0

9.9

(364)

17:51:53

-45°05'8

A 4411

-45° 8871

17:41:18.9 -45° 54'0

-45° 8881

17:42:07.9 -45° 37'7

49.0

16.3

9.2

16.1

17:41:37.5 -45° 44'7

3.5

9.2

17:41:37.5 -45° 44'7

5.7

6.9

(35)

17:41:38 -45° 44'7

-46° 8794

17:32:20.7 -46° 06'1

-45° 8769

17:33:29.2 -45° 47'5

68.5

18.6

12.7

18.3

17:32:22.3 -46° 02'0

1.3

4.0

17:32:22.3 -46° 02'0

12.4

14.3

(373)

17:32:22.3 -46° 02'0

17:32:57.3 -45° 52'5

6.8

13.3

17:32:57.4 -45° 52'6

5.9

5.0

(372)

17:32:57 -45° 52'6

-47° 8390

17:29:28.2 -47° 10'8

-47° 8396

17:30:22.3 -47° 02'9

54.1

7.9

9.2

8.0

17:30:07.6 -47° 08'8

6.7

2.0

17:30:07.6 -47° 08'8

2.5

6.0

(374)

17:30:08 -47° 08'8

114

A 4411

$-46^{\circ} 8681$ $17:22:27.5$ $-46^{\circ} 57'9$
 $-47^{\circ} 8347$ $17:23:57.9$ $-47^{\circ} 29'6$
 $90''.4$ $29''.7$ $15''.8$ $29''.9$

$17:22:53.2$ $-47^{\circ} 18'5$ 4.5 20.8

$17:22:53.3$ $-47^{\circ} 18'6$ 11.3 9.1

(357)

$17:22:53$ $-47^{\circ} 18'6$

$-46^{\circ} 8580$ $17:15:32.0$ $-46^{\circ} 58'5$

$-46^{\circ} 8589$ $17:16:19.9$ $-46^{\circ} 38'9$

$47''.9$ $19''.6$ 7.4 19.9

$17:15:50.1$ $-46^{\circ} 45'4$ 2.8 13.8

$17:15:50.1$ $-46^{\circ} 45'4$ 8.6 6.6

(375)

$17:15:50$ $-46^{\circ} 45'4$

$-47^{\circ} 8297$ $17:18:32.0$ $-47^{\circ} 17'6$

$-47^{\circ} 8303$ $17:19:13.6$ $-47^{\circ} 08'3$

$41''.0$ $9''.3$ 6.7 9.6

$17:19:06.2$ $-47^{\circ} 12'6$ 5.5 5.2

$17:19:06.3$ $-47^{\circ} 12'6$ 1.2 4.4

(355)

$17:19:06$ $-47^{\circ} 12'6$

$-46^{\circ} 8858$ $17:36:15.4$ $-46^{\circ} 33'4$

$-46^{\circ} 8864$ $17:36:52.9$ $-46^{\circ} 23'7$

$37''.5$ $9''.7$ 6.4 9.8

$17:36:38.8$ $-46^{\circ} 27'2$ 4.0 6.3

$17:36:38.8$ $-46^{\circ} 27'2$ 2.4 3.5

(671)

$17:36:39$ $-46^{\circ} 27'2$

A 4411 $-46^{\circ} 88' 84$ $17:38:41.0$ $-46^{\circ} 36' 2$
 $-46^{\circ} 88' 92$ $17:39:47.0$ $-46^{\circ} 14' 9$
 65.0 $-$ 21.3 12.0 21.2

$17:39:49.4$ $-46^{\circ} 27' 3$ 7.0 8.9
 $17:39:19.6$ $-46^{\circ} 27' 3$ 5.0 12.3
 $17:39:19$ $-46^{\circ} 27' 3$

(370)

$-46^{\circ} 89' 30$ $17:42:56.5$ $-46^{\circ} 52' 9$
 $-46^{\circ} 89' 36$ $17:43:24.5$ $-46^{\circ} 36' 2$
 28.0 16.7 5.6 16.6

$17:43:08.0$ $-46^{\circ} 51' 8$ 2.3 1.1
 $17:43:08.0$ $-46^{\circ} 51' 8$ 8.3 15.5
 $17:43:08$ $-46^{\circ} 51' 8$

(350)

45657 $-41^{\circ} 79' 20$ $17:07:36.3$ $-41^{\circ} 57' 9$
 $-41^{\circ} 79' 25$ $17:08:14.3$ $-41^{\circ} 45' 1$
 38.0 12.8 6.7 12.9

$17:07:59.0$ $-41^{\circ} 54' 5$ 4.0 3.4
 $17:07:59.0$ $-41^{\circ} 54' 5$ 2.7 9.5

(377)

$-40^{\circ} 77' 63$ $17:09:34.4$ $-40^{\circ} 23' 2$
 $-39^{\circ} 73' 15$ $17:11:05.3$ $-39^{\circ} 53' 9$
 90.9 29.3 17.8 30.0

$17:10:29.0$ $-40^{\circ} 16' 4$ 10.7 7.0
 $17:10:29.1$ $-40^{\circ} 16' 4$ 7.1 23.0
 $17:10:29$ $-40^{\circ} 16' 4$

(387)

116

A5622 $-38^{\circ} -38^{\circ} 7196$ $17:50:16.3$ $-38^{\circ} 42'5$
 $-39^{\circ} 1791$ $17:51:02.1$ $-39^{\circ} 07'3$
 45.8 24.8 8.7 25.4

(389)

$17:50:24.2$ $-39^{\circ} 02'5$ 1.5 20.5
 $17:50:24.2$ $-39^{\circ} 02'5$ 7.2 4.9
 $17:50:24$ $-39^{\circ} 02'5$

(390)

$17:50:42.5$ $-38^{\circ} 53'5$ 5.0 11.3
 $17:50:42.6$ $-38^{\circ} 53'5$ 3.7 14.1
 $17:50:43$ $-38^{\circ} 53'5$

$-39^{\circ} 7651$ $17:44:13.6$ $-39^{\circ} 35'3$
 $-40^{\circ} 8181$ $17:45:37.9$ $-40^{\circ} 03'5$
 84.3 28.2 18.8 28.4

(388)

$17:44:48.2$ $-39^{\circ} 54'2$ 6.9 19.0
 $17:44:48.2$ $-39^{\circ} 54'2$ 9.9 9.4
 $17:44:48$ $-39^{\circ} 54'2$

A6456 $-42^{\circ} 7891$ $17:34:00.9$ $-42^{\circ} 09'3$
 $-41^{\circ} 8150$ $17:34:57.4$ $-41^{\circ} 57'4$
 56.5 11.9 10.7 11.7

3

$17:34:26.1$ $-41^{\circ} 59'7$ 4.8 9.6
 $17:34:26.3$ $-41^{\circ} 59'5$ 5.9 2.1
 $17:34:26$ $-41^{\circ} 59'6$

(392)

K 4411

-46° 3677	17:22:02.0	-46° 22'3		
-46° 3679	17:22:20.5	-46° 32'5		
	18'5	10'2	3.5	10.3

17:22:15.7	-46° 24'6	2.6	2.3
17:22:115.7	-46° 24'6	9	8.0

(391)

17:22:16	-46° 24'6
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-40° 8265	17:50:13.2	-40° 43'8		
-41° 8417	17:51:01.4	-41° 09'6		
	48'2	25'8	8.9	26.0

A 5626	-40° 8265	17:50:53.3	-41° 01'3	7.4	17.6
	-41° 8417	17:50:53.3	-41° 01'3	1.5	8.4

(394)

17:50:53	-41° 01'3
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A 7874

-45° 8575	17:19:20.6	-45° 21'1		
-45° 8598	17:20:13.0	-45° 09'1		
	52'4	12'0	9.5	12.0
	19.3		3.5	2.4
	33.1		6.0	9.6

(397)

17:19:39.9	-45° 18'7
17:19:39.9	-45° 118'7

A 7874

-46° 8634	17:19:23.9	-46° 29'2		
-46° 8644	17:19:56.6	-46° 38'8		
	32'7	9'6	5.0	9.8
	17:19:42.3	-46° 32'4	2.8	3.3
	17:19:42.2	-46° 32'4	2.2	6.5
	17:19:42	-46° 32'4		

(396)

118

$-44^{\circ} 38' 61''$ $17:51:06.8$ $-44^{\circ} 57' 8''$
 $-44^{\circ} 38' 65''$ $17:51:54.0$ $-44^{\circ} 36' 4''$
 47.25 21.4 8.5 21.5
 $17:51:45.6$ $-44^{\circ} 38' 3''$ 7.0 19.6
 $17:51:45.7$ $-44^{\circ} 38' 3''$ 1.5 1.9
 $17:51:46$ $-44^{\circ} 38' 3''$

A2677

(395)

$-42^{\circ} 80' 89''$ $17:49:50.4$ $-42^{\circ} 46' 9''$
 $-42^{\circ} 80' 94''$ $17:49:22.9$ $-42^{\circ} 23' 3''$
 32.5 23.6 5.7 23.7
 $17:49:08.1$ $-42^{\circ} 38' 2''$ 3.1 8.7
 $17:49:08.1$ $-42^{\circ} 38' 2''$ 2.5 15.0
 $17:49:08$ $-42^{\circ} 38' 2''$ 38.2 39.3 $Feb. 32$

A2677
6313

(399)

$-40^{\circ} 78' 62''$ $17:24:54.7$ $-40^{\circ} 58' 5''$
 $-40^{\circ} 78' 74''$ $17:23:34.9$ $-40^{\circ} 45' 5''$
 40.2 13.0 7.6 13.2
 $17:23:24.8$ $-40^{\circ} 51' 8''$ 5.7 6.8
 $17:23:24.9$ $-40^{\circ} 51' 8''$ 1.9 6.4
 $17:23:25$ $-40^{\circ} 51' 8''$

A6456

400

$-42^{\circ} 79' 49''$ $17:39:41.3$ $-42^{\circ} 55' 6''$
 $-42^{\circ} 79' 56''$ $17:40:19.3$ $-42^{\circ} 56' 6''$
 38.0 1.0 6.8 1.3
 $17:40:06.5$ $-42^{\circ} 56' 3''$ 4.5 $.9$
 $17:40:06.4$ $-42^{\circ} 56' 3''$ 2.8 $.4$
 $17:40:06.4$ $-42^{\circ} 56' 3''$

33

45456 -43° 32' 71 17:39:49.1 -43° 14' 9
 -42° 77' 56 17:40:19.3 -42° 56' 6
 30" 2 17' 4 6.2 17.5
 17:40:04.2 -43° 09' 7 3.1 4.3
 17:40:04.2 -43° 09' 7 3.1 13.2
 (198) 17:40:04 -43° 09' 7

* 7723 remeasure -44° 85' 41 17:22:25.7 -44° 09' 6
 -44° 85' 48 17:23:01.2 -44° 37' 7
 35" 5 28' 1 7.8 28.3
 17:22:42.4 -44° 22' 6 3.6 13.1
 (283) 17:22:42.1 -44° 22' 6 4.2 15.2
 17:22:42 -44° 22' 6

-42° 78' 29 17:27:22.9 -42° 19' 8
 W5 -42° 78' 37 17:28:13.4 -42° 21' 7
 50" 5 1.9 9.4 1.8
 17:28:00.5 -42° 21' 5 7.0 1.6
 A. 12995 17:28:00.6 -42° 21' 5 2.4 0.2
 wrong * mea p. 83 17:28:01 -42° 21' 5 Feb. '32

6456 -42° 78' 09 17:24:47.4 -42° 23' 1
 -42° 78' 12 17:25:34.4 -42° 17' 3
 47" 0 5' 8 8.4 6.0
 17:25:21.0 -42° 19' 5 6.0 3.7
 A. 14901 17:25:21.0 -42° 19' 5 2.4 2.3
 (289) wrong * mea. p. 83 17:25:21.0 -42° 19' 5 Feb. '32

120

-45° 8693

17:27:50

-45° 14.2

-47° 8713

17:29:48.4

-45° 31.1

A 7874

115.1

16.9

20.0

18.0

T

17:29:17.0

-45° 24.8

15.1

11.3

17:29:16.9

-45° 24.8

4.9

6.7

24.8

17:29:17.0

-45° 25.0

(411)

A 6313

-42° 8088

17:48:38.9

-42° 10.5

-42° 8094

17:49:22.9

-42° 23.3

44.0

12.8

8.3

13.0

17:48:44.2

-42° 11.2

1.0

0.7

17:48:44.2

-42° 11.2

7.3

12.3

17:48:44.2

-42° 11.2

(427)

A 15347

-41° 8215

17:38:30.8

-41° 50.5

-41° 8230

17:39:37.1

-41° 34.7

66.3

15.8

12.8

15.1

17:38:42.7

-41° 43.6

2.3

7.1

17:38:42.7

-41° 43.5

10.5

8.4

17:38:42.7

-41° 43.6

(428)

A 15347

-40° 7954

17:32:20.1

-40° 36.7

-40° 7962

17:32:52.6

-40° 29.6

32.5

6.8

6.1

6.9

17:32:35.0

-40° 34.1

2.8

3.9

17:32:35.0

-40° 34.0

3.3

3.5

17:32:35.0

-40° 34.1

(421)

#6456

 $-41^{\circ} 81'40''$ $17:34:06.5 -41^{\circ} 27'4''$ $-41^{\circ} 81'48''$ $17:34:50.7 -41^{\circ} 04'2''$ $44''.2$ 23.2 8.6 23.5 $17:34:41.5$ $-41^{\circ} 14'8''$ 6.8 12.7 $17:34:41.4$ $-41^{\circ} 14'9''$ 1.8 10.8 $17:34:41.4$ $-41^{\circ} 14'9''$ $.4''$

(426)

A6456

 $-42^{\circ} 79'39''$ $17:39:06.3 -42^{\circ} 00'0''$ $-42^{\circ} 79'49''$ $17:39:41.3 -42^{\circ} 55'16''$ $35''.0$ $4'.4$ 6.7 4.8 $17:39:08.9$ $-42^{\circ} 57'9''$ 0.5 2.1 $17:39:08.9$ $-42^{\circ} 57'9''$ 6.2 2.3 $17:39:08.9$ $-42^{\circ} 57'9''$

(425)

A7874

 $-47^{\circ} 82'50''$ $17:16:04.0$ $-47^{\circ} 13'6''$ $-47^{\circ} 82'63''$ $17:16:57.1$ $-47^{\circ} 36'3''$ $53''.1$ $22'.7$ 9.2 23.2 $17:16:27.1$ $-47^{\circ} 21'3''$ 4.0 7.9 $17:16:27.1$ $-47^{\circ} 21'3''$ 5.2 15.3 $17:16:27.1$ $-47^{\circ} 21'3''$

(424)

 $-45^{\circ} 84'08''$ $17:08:11.8$ $-45^{\circ} 46'9''$ $-45^{\circ} 84'15''$ $17:08:32.8$ $-45^{\circ} 55'9''$ $21''.0$ $9'.0$ 4.0 8.8 $17:08:22.8$ $-45^{\circ} 51'3''$ 2.1 4.3 $17:08:22.8$ $-45^{\circ} 51'3''$ 1.9 4.5 $17:08:22.8$ $-45^{\circ} 51'3''$

(423)

A5650

 3.7 9.0

better with 423

 $17:08:22.6$ $-45^{\circ} 51'3''$ 1.9 4.4 $17:08:22.6$ $-45^{\circ} 51'3''$ 1.8 4.6 $17:08:22.6$ $-45^{\circ} 51'3''$

122

A 7874

-45° 8467	17:12:31.4	-45° 42' 8"		
-45° 8470	17:12:59.9	-45° 32' 2"		
	28" 5	-10' 6"	4.6	10.8
	17:12:45.6	-45° 36' 7"	2.3	6.2
	17:12:45.6	-45° 36' 7"	2.3	4.6
(422)	17:12:45.6	-45° 36' 7"		

A 7874

-46° 8744	17:28:07.1	-46° 39' 5"		
-46° 8752	17:28:50.6	-46° 21' 0"		
	43" 5	18' 5"	8.0	18.3
	17:28:18.0	-46° 30' 6"	2.0	8.8
	17:28:18.0	-46° 30' 6"	6.0	9.5
	17:28:18.0	-46° 30' 6"		

7874

(417)

-47° 8391	17:29:33.2	-47° 05' 8"		
-47° 8396	17:30:22.2	-47° 02' 9"		
	49" 0	2' 9"	8.5	2.7
	17:29:39.0	-47° 04' 1"	1.0	1.6
	17:29:39.0	-47° 04' 1"	7.5	1.1
	17:29:39.0	-47° 04' 1"		

7874

(419)

-47° 8369	17:27:06.9	-47° 15' 3"		
-46° 8736	17:27:13.0	-46° 55' 5"		
	23" 7	19' 8"	4.4	19.9
	17:27:15.5	-47° 02' 1"	1.6	13.2
	17:27:15.5	-47° 02' 1"	2.8	6.7
	17:27:15.5	-47° 02' 1"		

A 920

(415)

A 5920	-48° 8814	17:36:36.8	-45° 41' 2		
	-48° 8829	17:37:32.9	-45° 56' 8		
		56" 1	15' 6	9.0	16.0
		17:37:04.8	-45° 52' 0	4.5	11.1
		17:37:04.8	-45° 52' 0	4.5	4.9
(416)		<u>17:37:04.8</u>	<u>-45° 52' 0</u>		

A 5639	-47° 8403	17:32:15.8	-47° 37' 1		
	-47° 8407	17:32:44.3	-47° 43' 1		
		28" 5	6.0	4.7	6.0
		17:32:34.6	-47° 39' 1	3.1	2.0
		17:32:34.6	-47° 39' 1	1.6	4.0
(418)		<u>17:32:34.6</u>	<u>-47° 39' 1</u>		

A 15599	-40° 8003	17:34:55.5	-40° 02' 5		
	-40° 8018	17:35:39.9	-40° 15' 4		
		44" 4	12' 9	10.2	13.5
		17:35:23.7	-40° 07' 8	6.3	5.5
		17:35:22.9	-40° 07' 8	3.9	8.0
4 (431)		<u>17:35:23</u>	<u>-40° 07' 8</u>		

A 15720	-43° 8025	17:16:57.7	-43° 45' 4		
	-43° 8031	17:17:20.2	-43° 37' 5		
		22" 5	7' 9	4.0	7.9
		17:17:00.5	-43° 43' 6	0.5	1.8
		17:17:00.5	-43° 43' 6	3.5	6.1
(429)		<u>17:17:00</u>	<u>-43° 43' 6</u>		

124

A15720

-44° 8447	17:17:27.9	-44° 11.6		
-44° 8466	17:18:11.0	-44° 30.6		
	43.1	19.0	8.3	19.1
	17:17:44.5	-44° 18.0	3.2	6.4
	17:17:44.5	-44° 18.0	5.1	12.7
	17:17:44	-44° 18.0		

(430)

A5657

-40° 7762	17:08:51.9	-40° 25.9		
-40° 7764	17:09:38.9	-40° 45.0		
	47.0	19.1	9.3	19.2
	17:09:15.1	-40° 42.3	4.6	16.5
	17:09:15.2	-40° 42.3	4.7	2.7
	17:09:15	-40° 42.3		

(433)

6456

-41° 8230	17:39:37.1	-41° 34.7		
-41° 8246	17:40:42.6	-41° 06.0		
	65.5	28.7	13.3	28.8
	17:39:55.8	-41° 20.4	3.8	14.7
	17:39:55.8	-41° 20.1	9.5	14.1
	17:39:56	-41° 20.1		

(434)

A15749

-41° 8210	17:38:21.8	-41° 03.4		
-41° 8229	17:39:34.1	-41° 16.9		
	72.3	13.5	13.3	14.2
	17:39:21.1	-41° 10.7	10.9	9.7
	17:39:21.1	-41° 10.7	2.4	6.5
	17:39:21	-41° 10.7		
	17:39:23.8	-41° 14.8	11.4	12.0
	17:39:23.8	-41° 14.8	1.9	2.2
	17:39:24	-41° 14.8		

(438)

(437)

17:10:12.0
2:10:22.0

$-39^{\circ} 7497$ 17:32:03.8 $-39^{\circ} 18'3$
 A 8996 $-39^{\circ} 7511$ 17:33:16.4 $-39^{\circ} 35'3$
 72.6 17.0 14.7 17.0
 17:32:28.0 $-39^{\circ} 23'8$ 4.9 5.5
 (440) 17:32:28.0 $-39^{\circ} 23'8$ 9.8 11.5
 17:32:28.0 $-39^{\circ} 23'8$

A 15749

17:32:56.4 $-39^{\circ} 33'2$ 14.2 17.4
 17:32:57.0 $-39^{\circ} 33'2$ 10.3 15.3
 (441) 17:32:57.0 $-39^{\circ} 33'2$ 3.9 2.1

$-42^{\circ} 7764$ 17:19:32.3 $-43^{\circ} 00'2$
 $-42^{\circ} 7772$ 17:20:47.8 $-42^{\circ} 46'2$
 75.5 14.0 13.6 13.6

A 6456

17:20:26.7 $-42^{\circ} 53'2$ 9.8 6.8
 17:20:26.7 $-42^{\circ} 53'2$ 3.8 6.8
 (443) 17:20:27 $-42^{\circ} 53'2$

A 9063

$-45^{\circ} 8971$ 17:50:02.4 $-45^{\circ} 10'3$
 $-45^{\circ} 8983$ 17:50:57.9 $-45^{\circ} 26'0$
 55.5 16.7 9.4 17.2

17:50:24.8 $-45^{\circ} 16'9$ 3.8 7.8
 17:50:24.6 $-45^{\circ} 16'9$ 5.6 9.4
 (444) 17:50:25 $-45^{\circ} 16'9$

A2677

 $-47^{\circ} 8499$ 17:40:39.3 - $47^{\circ} 32'9$ $-47^{\circ} 8508$ 17:41:31.4 - $47^{\circ} 40'0$

52.1

7.1

9.0

7.0

17:41:02.5

 $-47^{\circ} 37'1$

4.0

4.1

17:41:02.4

 $-47^{\circ} 37'1$

5.0

2.9

(445)

17:41:02 $-47^{\circ} 37'1$

A7874

 $-45^{\circ} 8640$ 17:23:25.8 - $45^{\circ} 19'3$ $-45^{\circ} 8653$ 17:24:19.9 - $45^{\circ} 27'7$

54.1

8.4

9.5 8.3

17:23:48.6

 $-45^{\circ} 22'2$

4.0

2.9

17:23:48.6

 $-45^{\circ} 22'2$

5.5

5.4

(442)

17:23:49 $-45^{\circ} 22'2$

A2667

 $-45^{\circ} 8944$ 17:47:41.0 - $45^{\circ} 15'7$ $-45^{\circ} 8950$ 17:48:10.0 - $45^{\circ} 27'1$

29.0

11.4

5.2

11.4

17:47:48.3

 $-45^{\circ} 18'5$

1.3

2.8

17:47:48.3

 $-45^{\circ} 18'5$

3.9

8.6

449

17:47:48.3 $-45^{\circ} 18'5$

A14923

 $-43^{\circ} 8320$ 17:45:28.7 - $43^{\circ} 11'4$ $-43^{\circ} 8320$ 17:46:16.2 - $43^{\circ} 21'3$

47.5

9.9

8.2

10.6

17:46:01.1

 $-43^{\circ} 13'2$

5.6

1.9

17:46:01.1

 $-43^{\circ} 13'2$

2.6

8.7

(448)

17:46:01 $-43^{\circ} 13'2$

A7874

 $-45^{\circ} 8681$ 17:26:37.0 $-45^{\circ} 55'9$ $-45^{\circ} 8682$ 17:27:07.5 $-45^{\circ} 49'5$

30".5

6'.4

5.5

6.2

17:27:03.6

 $-45^{\circ} 51'6$

4.8

4.2

17:27:03.6

 $-45^{\circ} 51'6$

.7

2.0

(451)

17:27:03.6

 $-45^{\circ} 51'6$ $-46^{\circ} 8800$

17:32:43.7

 $-46^{\circ} 56'7$ $-46^{\circ} 8806$

17:33:00.7

 $-46^{\circ} 49'4$

17".0

7'.3

3.0

7.3

17:32:57.8-9

 $-46^{\circ} 52'8$

2.5

3.7

17:32:57.9

 $-46^{\circ} 52'8$

.5

3.4

(450)

17:32:58

 $-46^{\circ} 52'8$

A9063

 $-45^{\circ} 8942$

17:47:39.5

 $-45^{\circ} 30'9$ $-45^{\circ} 8948$

17:47:59.7

 $-45^{\circ} 17'2$

20".2

13'.7

3.7

13.8

17:47:43.4

 $-45^{\circ} 26'4$

.7

4.5

17:47:43.2

 $-45^{\circ} 26'4$

3.0

9.3

(453)

17:47:43.8

 $-45^{\circ} 26'4$

A12995

 $-42^{\circ} 7839$

17:28:11.4

 $-42^{\circ} 58'5$ $-42^{\circ} 7843$

17:29:09.9

 $-42^{\circ} 45'3$

55".5

13'.2

10.2

13.4

17:28:35.1

 $-42^{\circ} 50'3$

3.8

8.3

17:28:35.1

 $-42^{\circ} 50'3$

6.4

5.1

(455)

17:28:35

 $-42^{\circ} 50'3$

128

A 6313

 $-44^{\circ} 8865$ 17:51:54.0 $-44^{\circ} 36' 4$ $-44^{\circ} 8867$ 17:52:35.0 $-44^{\circ} 49' 4$

41".0

13'.0

7.4

13.2

17:52:05.1

 $-44^{\circ} 40' 7$

2.0

4.7

17:52:05.1

 $-44^{\circ} 40' 7$

5.4

8.8

17:52:05.1 $-44^{\circ} 40' 7$

(452)

A 7874

 $-45^{\circ} 8421$

17:09:10.3

 $-45^{\circ} 9' 9$ $-45^{\circ} 8428$

17:09:27.8

 $-45^{\circ} 23' 3$

17".5

13'.4

3.6 13.5

17:09:16.6

 $-45^{\circ} 18' 9$

1.3

9.1

17:09:16.6

 $-45^{\circ} 18' 9$

2.3

4.4

(466)

O.P.D. $-45^{\circ} 8424$

17:09:17.8

 $-45^{\circ} 18' 9$ m. 10.0 $-46^{\circ} 8658$

17:20:44.3

 $-46^{\circ} 40' 7$

A 7874

 $-46^{\circ} 8663$

17:21:03.1

 $-46^{\circ} 34' 0$

18'.8

6".7

3.2

6.7

17:21:00.2

 $-46^{\circ} 35' 1$

2.7

5.6

17:21:00.2

 $-46^{\circ} 35' 1$

.5

1.1

(463)

17:21:00 $-46^{\circ} 35' 1$ $-46^{\circ} 8553$

17:14:12.8

 $-46^{\circ} 03' 3$ $-45^{\circ} 8489$

17:14:26.0

 $-45^{\circ} 38' 2$

13".2

25'.1

2.0

25.1

17:14:22.7

 $-45^{\circ} 53' 9$

1.5

9.4

17:14:22.7

 $-45^{\circ} 53' 9$

.5

11.7

(464)

17:14:23 $-45^{\circ} 53' 9$

A 2677

-46° 8961

17:46:25.6 -46°05'1

-46° 8977

17:48:04.5 -46°12'3

98.9

7.2

17.2

7.2

17:47:15.5 -46°06.7

8.7

1.6

17:47:15.8 -46°06.7

8.5

3.6

(458)

17:47:16 -46°06.7

-45° 8939

17:47:12.6 -45°52'6

-46° 8977

17:48:04.5 -46°12'3

51.9

19.7

9.0

19.7

17:47:17.2 -45°54.9

18

2.3

17:47:17.8 -45°54.9

8.2

17.4

(457)

17:47:17 -45°54.9

2677

-46° 9003

17:50:13.3 -46°43'9

-46° 9024

17:51:50.3 -46°58'8

97"

14.9

16.6

15.0

17:50:42.5 -46°56.1

5.0

12.3

17:50:42.6 -46°56.1

11.6

2.7

(459)

17:50:43 -46°56.1

-46° 8897

17:40:13.5 -46°51'1

-46° 8905

17:41:15.5 -46°30.7

62.0

26.4

10.0

21.0

17:40:54.4 -46°39.0

6.6

12.5

17:40:54.7 -46°39.0

3.4

8.5

(461)

17:40:54 -46°39.0

130

9063

$-45^{\circ} 8884$ 17:42:29.4 $-45^{\circ} 27'0$
 $-45^{\circ} 8896$ 17:43:50.9 $-45^{\circ} 19'4$
 81".5 7'.6 14.2 7.7

17:42:54.6 $-45^{\circ} 20'7$ 4.4 6.4
 17:42:54.6 $-45^{\circ} 20'7$ 9.8 1.3
17:42:55 $-45^{\circ} 20'7$

(468)

A6375

$-44^{\circ} 8812$ 17:45:02.5 $-44^{\circ} -44^{\circ} 34'7$
 $-44^{\circ} 8818$ 17:45:36.5 $-44^{\circ} -44^{\circ} 12'8$
 34".0 22'.1 5.9 22.4
 17:45:55.8-7 $-44^{\circ} 26'0$ 2.3 8.8
 17:45:15.7 $-44^{\circ} 26'0$ 3.6 13.6
 456 17:45:16 $-44^{\circ} 26'0$

6456

$-41^{\circ} 8803$ 17:38:01.3 $-41^{\circ} 24'9$
 $-41^{\circ} 8813$ 17:38:27.8 $-41^{\circ} 16'7$
 26".5 8'.2 5.3 8.2

17:38:15.3 $-41^{\circ} 22'0$ 2.8 2.9
 17:38:15.3 $-41^{\circ} 22'0$ 2.5 5.3
17:38:15 $-41^{\circ} 22'0$

(454)

6456

$-41^{\circ} 7984$ 17:18:33.2 $-41^{\circ} 14'8$
 $-40^{\circ} 7818$ 17:18:58.8 $-40^{\circ} 40'0$
 25".6 34'.8 4.1 35.5

17 18 53.2 $-40^{\circ} 52.6$ 3.2 22.6
 17 18 53.2 $-40^{\circ} 52.6$ 0.9 12.9
17:18:53.2 $-40^{\circ} 52.6$

(241)

6456	-42° 7855	17	30	6.2	⁰ -42	¹ 2.6		
	-42° 7859	17	30	32.4	-42°	27.2		
				" 26.2		¹ 24.6	5.4	24.9

17	30	13.5	-42°	21.3	1.5	18.9
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17	30	13.5	-42°	21.3	3.9	6.0
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(409)

<u>17 : 30 : 13.5</u>	<u>-42° 21.3</u>
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Plate	ID	(105)	(211)	(268)	(317)	(262)	(310)	(256)	(393)	(236)	(189)	(250)	(234)	401
8556	23911	16.3	n. sup.	15.9	15.6	15.7	16.3	16.4	16.5	14.5	15.1	16.5	16.4	15.1 16.3
8652	23961	15.6	15.0	15.8	15.7	16.3	16.3	16.4	16.4	14.3	15.0	15.9	16.3	15.4 16.3
8761	24020	16.5	16.0	16.0	15.7	16.4	16.4	16.4	16.0	14.3	15.0	14.4	16.4	15.3 15.8
9548	24352	16.3	"	16.0	15.7	16.5	16.5	16.5	16.6	14.0	15.5	15.0	16.3	15.0 16.2
9564	53	16.2	"	15.9	15.7	16.6	16.4	16.1	16.6	14.0	15.5	14.9	16.4	15.4 16.5
9588	55	16.8	16.0	15.9	15.5	16.3	16.4	16.4	16.6	14.1	15.5	14.9	16.5	15.4 16.3
9596	57	16.5	"	15.9	15.5	16.3	16.3	16.3	16.3	14.3	15.5	15.0	16.3	15.0 16.5
9649	24370	16.4	"	16.4	15.7	16.2	16.3	16.1	16.2	14.2	15.6	14.9	16.1	15.3 16.1
9655	24371	16.4	"	16.3	15.0	16.4	16.3	16.3	16.5	14.3	15.7	15.0	16.5	15.3 16.5
9661	73	16.0	"	16.1	14.6	16.0	16.0	16.0	16.0	14.5	15.4	14.9	16.0	15.2 16.0
9671	74	15.9	"	16.0	14.7	16.5	16.1	16.6	16.5	14.4	15.4	14.9	16.5	15.0 16.5
9683	76	15.8	"	16.0	15.0	16.2	16.2	16.2	16.3	14.0	15.7	15.3	16.3	15.0 16.3
9690	77	15.8	"	16.4	15.4	16.3	15.8	16.4	16.6	14.2	15.7	15.3	16.2	15.2 16.2
9712	83	15.7	"	16.6	15.5	16.3	16.0	16.4	16.5	14.1	15.7	15.4	16.3	15.2 16.1
9758	402	15.6	"	15.8	15.9	15.7	16.0	16.4	16.3	14.2	15.7	16.0	16.3	15.5 16.3
9768	403	15.7	n. sup.	15.9	15.8	15.7	16.0	16.5	16.3	14.3	15.7	16.0	16.5	15.4 16.5
9778	404	15.7	n. sup.	16.0	15.9	15.6	16.0	16.4	16.3	14.1	15.6	16.0	16.4	15.0 16.5
9783	405	15.5	"	16.0	15.7	15.7	16.0	16.2	16.3	13.9	15.6	16.0	16.1	15.3 16.1
9792	406	15.3	"	15.9	15.9	15.7	16.1	16.4	16.3	14.1	15.5	16.1	16.3	15.4 16.4
11633	25381	16.2	16.0	16.0	15.4	16.2	16.0	16.3	16.2	14.3	14.2	16.0	16.4	14.9 16.0
11648	82	16.0	16.0	16.0	15.4	16.2	16.0	16.3	16.2	14.3	14.2	16.0	16.4	14.9 16.0
11690	85	16.0	16.0	16.0	15.4	16.2	16.0	16.3	16.2	14.3	14.2	16.0	16.4	14.9 16.0
11716	88	16.5	16.0	16.0	15.3	16.5	16.6	16.5	16.6	14.3	15.0	14.5	16.3	15.3 16.3
11742	90	16.3	"	15.7	15.2	16.6	16.3	16.3	16.3	14.0	15.0	14.5	16.3	15.4 16.2
11784	409	16.0	16.0	16.0	15.4	16.2	16.0	16.3	16.3	14.0	15.0	14.5	16.3	15.4 16.2
11843	414	16.5	15.9	16.1	15.7	15.6	16.5	16.5	16.6	14.6	15.2	14.8	16.3	15.4 16.6
11865	417	16.5	16.0	15.9	15.6	15.6	16.5	16.5	16.6	14.4	15.4	14.9	16.4	15.2 16.5
11931	423	15.7	"	16.0	15.6	15.6	16.5	16.5	16.6	14.4	15.4	14.9	16.4	15.2 16.5
12154	467	15.8	15.8	15.8	16.1	16.1	16.1	16.1	16.1	14.4	15.4	14.9	16.4	15.2 16.5
12164	469	15.7	n. sup.	15.6	15.6	16.1	16.1	16.1	16.1	14.4	15.4	14.9	16.4	15.2 16.5
12165	"	15.8	"	15.7	15.7	16.1	16.1	16.1	16.1	14.4	15.4	14.9	16.4	15.2 16.5

Plate	S.D.	(105)	(212)	(263)	(317)	(262)	(310)	(256)	(393)	(236)	(189)	(404)	(250)	(234)	(408)
12166	25469	158	h. sep.	15.76	15.9	blu	—	—	46.0	14.1	15.5	415.8	15.8	15.4	
12167	"	158	"	15.7	15.9	16.2	blu	—	46.2	14.3	15.4.3	416.0	15.8	15.2.5	
12168	"	159	"	15.8	15.8	16.3	"	"	46.0	14.3? blu	15.3	416.0	15.7	15.3	
12229	25479	15.7	"	16.0	16.0-15.9	16.5.4	15.7-1	blu	415.8	14.0	15.8	415.8	15.7-16.0	15.2	416.0
12286	496	blu	blu	—	—	blu	—	—	415.8	14.4	15.5	blu	—	—	415.6
13037	25717	15.7	h. sep.	15.9	15.5.6	16.4	415.9	16.5	415.8	14.4	15.4.5	14.0	15.6.7	15.2	415.9
44	22	blu 415.5	—	15.76.0	—	415.7	blu	415.7	415.6	14.0	15.7	14.8	15.7	15.8	
92	41	blu 415.5	—	15.9	15.5	416.0	blu	15.7	blu	—	13.8	415.7	15.8	15.3	15.1
13105	42	blu	—	15.9	blu	416.3	blu	15.5.1	416.0	—	13.8	415.5	blu	15.9	14.9
13131	48	416.0	h. sep.	16.0	15.7	16.5.6	16.5	15.5	416.3	14.0	13.9	416.0	16.0	15.0	14.7
256	77	416.0	"	16.1	15.4	416.1	15.7	16.0	16.1	blu	15.2	416.2	15.0	14.4	
326	99	415.8	"	15.9	15.5	416.0	blu	—	15.9	14.3	15.1	blu	415.7	15.0-14.9	
378	826	415.9	"	16.1	15.3.2	416.0	16.1	blu	16.1	14.3	15.2	416.0	416.0	15.1	415.8
397	832	415.8	"	15.8	14.5	415.8	—	—	415.8	14.0	15.1	416.0	415.9	15.3	415.8
424	834	416.1	"	15.8.7	14.5.4	blu	—	—	16.2.0	14.6	15.0	416.0	416.0	15.2-14.6	
431	836	415.6	"	15.8	15.1	415.7	—	—	16.2	14.3	15.3	415.7	415.6	15.6.7	415.7
447	847	416.2	"	16.1	15.1	16.5	416.2	—	16.4	14.0	15.0	416.1	416.1	15.2	416.3
453	850	415.9	"	16.0	15.2	416.0	16.1	416.0	14.2	15.0	415.8	416.8	15.4	415.7	
494	855	416.0	"	16.1	15.2	16.4	16.2	blu	416.0	14.5	14.8	215.8	15.0	14.9	416.0
12995	23948	15.4	15.7	15.5.4	15.3	16.5	16.8	416.6.8	16.8	14.3	15.1	416.2	416.5	15.2	416.5
13568	24431	15.9.8	16.2	16.2.3	14.7-6	15.6	16.6	16.8	15.7	13.9.8	15.0	416.5	416.6	15.2	16.8.7
13866	24702	416.6	16.0	16.3.4	14.7	16.4	16.0	15.5	15.8.9	13.6.7	13.8	blu	416.5	15.4	14.4
13943	24730	416.7	16.2.3	15.7	15.5	416.8	16.7	16.4	16.6	14.0	14.9	15.4	16.0	14.7	
1761	24767									13.8	13	13.8			
1775	711									13.9					
1862	759									blu					

Date	S.D.	(105)	(212)	(263)	(262)	(310)	(256)	(299)	(238)	(189)	(403)	(250)	(234)	(404)	(310)
2679	14167	2163	157.6	15.9	216.7	167.8	162	16.7	145	149	167.8	153	216.8	15.2	216.5
6456	16317	16.8	16.3	15.5	15.5	16.8	17.1	16.9	137	14.9	15.4	16.2	16.8	15.2	216.6
2667	14162	2163	blu	16.1	216.2	blu	16.0	16.5	16.5	15.0	16.7	15.6	216.5	15.2	blu
5626	15632	15.7	blu	—	215.5	—	—	215.7	—	15.2	15.6	16.3	216.8	15.2	blu
6313	16184	215.7	blu	15.8	—	—	—	215.7	—	15.2	14.5	215.8	14.6	15.2	—
5636	15635	15.7	216.1	16.4	216.2	blu	16.0	216.0	—	15.2	15.5	216.7	16.8	15.3	15.5
6312	16184	16184	—	—	216.4	16.3	216.2	216.4	—	15.2	14.4	215.8	14.5	15.3	16.2
11288	20691	15.2	216.0	15.9	—	—	—	216.1	14.5	—	—	—	—	—	—
7723	17375	15.4	blu	—	—	—	—	—	—	—	—	—	—	—	—
7874	17411	215.8	blu	16.2	—	—	—	—	—	—	—	—	—	—	—
9063	18185	216.2	—	16.0	—	—	—	—	—	—	—	—	—	—	—
8442	17804	15.4	—	blu	—	—	—	—	—	—	—	—	—	—	—
6294	16256	215.7	215.9	16.3	215.9	blu	15.7	16.0	4	15.2	15.6	—	—	—	blu
8996	18157	—	—	—	—	15.7	15.0	14.9	—	—	—	15.0	—	—	15.7
105394	11528	215.7	—	215.7	—	—	—	215.7	blu	14.9	—	—	—	—	—
9811	12662	216.5	—	—	216.4	216.4	15.7	16.7	15.2	15.2	215.6	216.3	216.3	—	—
11345	12961	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13004	13294	—	—	—	—	—	—	—	—	6.0	44.5	—	—	—	—
13353	13329	—	—	—	—	—	—	—	—	blu	215.0	—	—	—	—
15141	13511	blu	—	—	—	—	—	215.5	—	—	blu	216.5	—	—	—
15998	13710	—	—	—	—	—	—	—	—	—	214.5	—	—	—	—
15435	13635	15.4	—	—	—	—	—	215.5	—	214.8	—	—	—	—	—
15529	13656	15.6	—	—	—	—	—	215.5	—	—	215.0	—	—	—	—
15704	13684	215.5	—	—	—	—	—	215.7	—	—	—	—	—	—	—
16097	13714	215.7	—	—	—	—	—	—	—	14.9	45.2	15.4	—	215.5	—
16228	13721	215.8	—	—	—	—	—	—	—	blu	15.0	15.8	—	215.7	—
16451	13730	216.0	—	—	—	—	—	—	—	—	15.0	215.5	—	215.8	—
16654	13744	216.0	—	—	—	—	—	—	—	—	14.6	215.5	—	215.8	—
16698	13759	216.0	—	—	—	—	—	—	—	—	14.0	214.5	214.8	—	—
17259	13798	215.7	—	—	—	—	—	—	—	—	13.8	215.0	215.0	—	—
17535	13834	215.8	—	—	—	—	—	—	—	—	14.8	215.0	—	—	—
18606	13994	—	—	—	—	—	—	—	—	—	45.5	215.5	15.2	—	—

310	Plate v. J. D. 's	(105)	(262)	(310)	(256)	(393)	(197)	(406)	(250)	(234)
165	18725 14017		415.6	x	x			414.5	—	—
166	18922 14037	415.7	415.6	—	—	415.8		415.0	—	—
167	19218 14071						414.5	—	—	140.139
168	19720 14108						414.7	14.5	—	—
169	20284 14181	415.7	415.7	—	—	415.9		14.8?	16.0?	415.0
170	22028 14575						414.0	—	—	—
171	23876 14884						414.5	—	—	—
172	27995 15542		415.3	—	—		14.9	415.0	15.5	15.6
173	31403 16208	415.6	415.5	—	—	415.9	←	14.8?	415.7	14.21
174	31469 16222	415.5	415.5	—	15.6?	15.6?	←	14.7?	415.0	14.5
175	30360 15945	415.5					15.2	415.3	415.0	415.3
176	31528 16229	416.4	416.5	416.5	15.6	16.2	15.3	16.0?	416.4	15.0
177	32058 16293	16.1	15.8	—	16.5	16.6-7	15.0	416.3	15.6	416.3
178	35817 16948									
179	35780 16943						414.0	—	—	—
180	40062 18406						15.1	15.71	15.5	415.5
181	43355 19605						414.2			14.0
182	44675 20313						414.5	—	—	602.4
183	44734 20316	415.6	415.5	—	—	415.8	15.0	15.1	15.5	415.7
184	44834 20335	415.6	415.5	—	—	415.6	15.2	13.7	415.2	—
185	44816 20287	415.6	415.5	—	—	415.6	15.2	415.3	15.34	15.45
186	44895 20342	416.2	16.1	416.0	16.3?	16.2	15.3	13.8	416.2	16.4
187	44902 345							14.0		
188	961 361							dis		
189	MF7607						414.2	—	—	—
190	6776 22553						414.5	—	—	14.2
191	6346						414.5	—	—	—

Date	J.D.	(17)	(594)	(61)	(578)	(579)	(257)	(284)	(285)	(31)	(76)	(C250)	(513)	c.a	P
8536	23911	14.0	14.3	15.0	13.2	16.1	416.6	15.8	15.8	14.3	416.3	13.0-12.9	416.2	12.8	120
8652	23961	15.7	16.0-1	14.75	13.6	16.1	416.3	15.8	15.8	16.1	416.2	14.7	16.2	14.7	
8761	24020	416.0	416.1	14.7	13.6	16.0	16.4	15.0	16.1-0	416.5	16.0-15.9	14.5	15.9		
9548	24352	416.0	416.0	14.7	13.4	15.9	16.1	15.4	15.8	416.43	13.8	18.0-13.9	416.3	14.1	120
9564	53	416.0	416.0	14.6	13.5	16.0	15.8	15.42	15.43	16.4	13.8	13.8	416.4	13.9	122
88	55	416.0	416.0	14.7	13.54	15.9	15.8	15.34	15.7	16.4	13.9	13.8.7	16.23	14.0	130
96	57	416.3	416.1	14.8	13.8	16.0	15.5-6	15.7	15.69	14.0	16.5	13.9	416.3	14.0	
9649	370	n.e.	416.0	15.0	13.5	15.9	14.5	14.7	15.7	13.9	416.2	12.8	416.1		
9655	71	16.5	416.5	15.4-3	13.3	16.2	14.5	15.8	15.4-3	14.0	16.5-6	13.3	416.3	13.1-20	131
9661	73	416.1	deg. in	15.4	13.4	15.9	14.3	15.47	15.2	14.0	16.5-6	13.2	416.3		131
9671	74	16.5	416.4	15.4	13.0	16.3	14.4	15.9	15.4	14.3	16.6	13.0-12.9	416.2		21
9683	76	416.3	416.2	15.6	13.8	16.1	14.4	15.9	15.2	14.7	416.2	13.3	16.1?		3
9690	77	16.3	416.0	15.7	13.7	15.9	14.6	16.0	15.6	15.3-2	416.3	13.5	16.2?		37
9712	83	16.2	16.5	15.8	13.4-3	16.2	14.4	15.3	15.3-1	15.2	16.3	14.0-1	16.2?		39
9753	402	15.8	416.2	15.9	13.7	16.0	14.2	15.6	15.66	16.1	15.7	13.9	416.2		42
9768	403	15.7	416.3	16.0	13.7	16.0	14.8	15.6	15.67	16.2	15.5	13.0	416.3		43
9778	404	15.4-8	416.5	15.8	13.8	16.1	14.8-9	15.7	15.8	16.2	15.4	12.9	16.6		44
9783	405	15.4	416.0	15.8	13.7	15.8	14.3	14.9	15.9-8	16.0	16.0	13.0	416.1	13.0	45
9792	406	15.4	16.6	15.8	13.2	16.0	14.7	15.7	15.39	16.1	15.2	12.9	416.3	13.2	46
11633	25381	416.0	14.8	14.3-2	13.3	15.1	416.1	15.4	16.0	16.3	16.2?	12.9	416.2		
648	82	415.5	14.9	14.0	13.0	15.2	415.7	15.7	415.7	16.0	16.0	13.0	15.8		129
690	85	416.0	14.9	14.0-1	13.6	15.0	16.119	14.7	415.6	16.0	415.7	13.9	15.9	13.5	135
11716	88	416.0	15.1	14.3	13.6	14.6	416.4	15.2	16.4	16.3	16.0	13.9	16.1		13
742	90	15.3	14.3	13.7	15.0	416.0	15.6	415.9	16.4	416.3	15.7	16.3	13.8		131
11784	409	415.5	15.7	14.6	13.7	14.7	16.1155	15.7	16.1157	15.5	16.0	13.0	16.0		
843	414	16.4-5	16.0	14.6	13.0	14.6	16.1157	15.4	16.1	15.5	16.4	12.9	16.5		AX
865	417	16.5	16.5	14.8	13.0	15.3	16.1157	14.8	16.3	15.2	16.5	13.23	216.4		17
11931	423	16.1	16.1158	14.9	13.7	15.0	415.5	14.7	16.0	15.0	16.2	14.2-3	416.0	14.7	18
12154	467	14.4	416.3	15.7	12.9	15.7	416.0	15.4	15.0	14.0	15.9	16.0	13.4	16.1	13.8
12164	469	14.3	415.6	15.8	13.1	15.7-8	415.7	15.4	15.6-1	14.0	415.5	13.0-1	415.7		
12168	"	14.4	16.1	15.8	13.2	15.7-8	416.0	15.2	15.6	14.0	16.0	13.0	16.0		

C.A.	Plate	S.D.	(17)	(394)	(61)	(378)	(379)	(257)	(284)	(285)	(31)	(76)	(26)	(313)	C.G. des
2.8	12166	25469	14.4	15.7	15.6	13.4	15.6	15.8	15.1	15.2	14.0	blue	13.01	16.1	
4.7	67	"	14.3	15.8	15.0	13.0	15.54	blue 16.0	15.0	15.1	13.9	16.0	12.9	16.1	13.0
	65	"	14.2	blue	15.2	13.4	15.5	16.2	15.2	15.4	14.0	16.1	12.9	16.3	13.0
4.1	12229	25479	off	blue	15.5	13.4	15.7	16.0	14.5	15.4	14.5	16.0	14.2	16.1	
	12256	25481													
3.9	12286	496	14.4	blue	15.4	13.0	blue	—	15.7	15.4	blue	blue	12.8	blue	
4.0	13037	25717	14.4	14.1	14.3	13.6	16.0	16.2	15.2	15.4	15.4	blue	13.2	16.0	13.2-3
4.0	44	22	14.5	14.3	15.0	13.4	blue 15.7	blue 15.7	15.7	15.4	15.8	blue	14.2	16.3	13.4-3
	92	41	14.4	14.8	15.5	13.3	15.7	15.9	15.7	15.2	16.2	16.0	12.9	16.2	12.9
3.1-8.0	13105	42	14.4	14.8	15.0	13.5	blue	15.7	15.9	15.5	blue	blue	12.9	16.1	13.0
	13131	48	14.6	15.1	15.5	13.0	16.2	16.2	15.0	15.4	16.3	—	15.3	15.9	13.4
	256	777	15.6	15.6	15.5	13.6	15.2	16.0	15.8	15.6	16.3	15.4	12.9	15.8	12.9-13
	326	779	15.5	15.5	15.7	13.4	14.8	15.6	15.7	15.9	16.0	16.0	12.9	15.8	12.8
	373	25826	off	15.7	15.7	13.4	15.6	13.8	14.9	15.7	16.0	blue	13.0	16.0	12.9-13.0
	397	832	15.8	15.8	15.2	13.7	15.7	13.8	15.3	15.9	15.7	blue	12.8	15.9	12.8
	424	834	15.9	15.8	14.9	13.1	15.5	13.6	15.0	15.6	15.7	blue	13.4	15.8	13.0
	431	836	off	blue	14.9	13.3	15.4	13.8	14.8	15.6	15.4	blue	13.4	blue	13.1
	447	847	16.0	16.0	15.4	13.6	15.7	13.6	15.8	15.4	15.1	15.8	14.1	16.6	14.2-3
3.0	453	850	15.7	blue	15.7	13.1	15.6	13.8	15.9	15.0	14.9	blue	13.9	15.7	13.8-14.0
3.2	494	855	15.8	15.9	15.4	13.4	15.6	13.9	15.4	15.0	14.0	15.9	12.9	16.0	13.4
A	12995	23948	off	—	—	—	15.9	16.2	15.8	15.4	15.8	16.5	13.8	16.6	
3.5	13568	24431	"	—	—	—	blue	15.6	15.8	15.7	16.3	14.9	12.8	16.4	
	13866	24702	"	—	—	—	blue	14.3	14.8	16.3	16.0	16.6	12.8	15.8	
3.8	13943	24730	"	—	—	—	blue	15.5	blue	15.5	16.3	16.5	12.9	16.3	
AX	1761	24707													12.7
	1775	711	14.5	14.5	blue										13.0-1+12
4.7	1862	759	blue	—	—										4.0-2

Date	S.D.	(17)	(394)	(61)	(379)	(257)	60.5	b = 30.43	d = 30.14	(31)	(76)	(313)
8996	18157							0.11400				
2667	14162	17.0	15.7	15.0	15.8	16.8	14.3	90 + 23	90 + 26	2162	15.4	15.7
1876	13741						14.7	87 + 28.3	77 0			
5626	15632	16.5	16.0	13.7	15.9	16.3	13.8	139 + 2	139 + 6	16.1	15.4	16.1
2679	14167				15.5	16.2	14.8	90 + 28	91 + 1	2679	15.7	
6313	16184	16.6	16.6	13.7	14.7	16.5	12.8	157 + 7	157 + 11	460	15.2	15.5
6456	16317				16.2	16.5	13.3	161 + 18	161 + 21	6456	14.3	16.2
5636	15635	16.5	16.2	13.8	15.8	16.5	12.8	159 + 5	139 + 9	6313	15.7	15.6
9061	18184				13.9	16.0	14.0	222 + 29	223 + 5	3636	16.2	15.2
1928	13759						13.0	77 + 16	77 + 18	6312	15.4	16.0
6312	16184						12.8	157 + 6	157 + 11			
5565	15618	14.5		14.0			13.8					
5560	15618	15.7	14.0				13.9	138 + 19	138 + 23			
5562	15618							+19	+23			
5150	11497						132.1	3 + 8.5	3 + 6.7			
85394	11528	15.4	15.4	14.9	14.8		13.0	4 + 6	4 + 6.3	14.8	14.8	14.8
9811	12662	14.5	14.5	15.2	15.8	15.8	13.3	41 + 12	41 + 14.4	15.5	15.5	15.5
7878							13.3					
11345							13.3					
13004	13294	14.8	14.5		14.5		13.5	62 + 3	62 + 7.3	14.0		
13353	13329	14.8	14.5		14.5		12.8	63 + 8	63 + 12.0			
15141	13511	14.4	14.4		14.5		12.9	69 + 7	69 + 11.3	14.3		
15998	13710	14.8	14.8		14.0		14.0	75 + 23	75 + 27.8	14.0		
15435	13635	14.8	14.8	14.5	14.5		13.5	73 + 9	73 + 13.6	14.4		
15529	13656	14.7	14.7		14.5		13.1	74 + 1	74 + 4.2	14.2		
15704	13684	14.7	14.7	15.0	15.0		14.2	75 + 1.8	75 + 16	14.3		
16097	13714	14.8	14.8	15.0	15.0	14.7	13.7	76 + 27	76 + 1.4	15.5	15.5	15.5
16228	13721	14.8	14.8	15.0	15.0	14.7	13.7	76 + 27	76 + 1.4	15.5	15.5	15.5
16451	13730	15.4	15.4	15.0	15.0	14.3	13.7	76 + 27	76 + 1.4	15.5	15.5	15.5
16654	13744	14.8	14.8		14.0	14.0	14.0	77 + 1	77 + 3	15.0	15.0	15.0
16898	13759	14.7	15.0	15.2	15.4	14.0	13.2	77 + 11	77 + 16	15.1	15.1	15.1
17259	13798	14.8	14.8	15.0	15.0	14.2	15.3	78 + 19	78 + 24.5	14.7	14.7	14.7
17535	13834	14.8	14.8	15.0	15.0	15.3	15.3	79 + 25	79 + 25	15.3	15.3	15.3
18666	13994	14.7	15.0	15.0	15.0	15.0	12.8	85 + 2	85 + 7.5	15.2	15.2	15.2
18725	14017	14.0	14.0		14.0	14.0	14.0	86 + 12	86 + 12	14.0	14.0	14.0
18922	14037	14.5	14.5		14.0	14.6	14.3	86 + 14	86 + 14	14.3	14.3	14.3
19218	14071	14.0	14.0		14.0	14.0	14.0	87 + 24	87 + 26	14.0	14.0	14.0
19720	14108	14.0	14.0		14.0	14.0	14.0	89 + 0	89 + 2	14.0	14.0	14.0

(313)	Plate	S.D.	(17)	(394)	(61)	(379)	(267)	Ca	253043	(31)	(76)	(313)
157	20286	14181	115.0	114.8	-	14.8	flur	12.8	91 +12	91 +15	15.5	14.8-6 115.4
161	22028	14575	114.5	-	-	114.2	-	15.2-3	104 +10	104 +13	114.0	-
155 767-8	23876	14884	flur	flur 149	flur	114.2	-	13.6	114 +15	114 +18	14.1	114.0
15-65	27595	15542	15.0	15.7?	15.1	15.7	14.4	12.8	136 +4	136 +8	115.5	15.7? 15.4
463 155	31403	16203	115.0	-	flur	14.8	115.7	136.7	158 0	158 +5	115.7	flur 15.7 158.7
	31469	16222	115.4?	115.5	14.7	45.0	115.0	13.3	158 +14	+19	115.0	-
	30360	15945	115.6	14.3	14.3	115.0	-	12.9-13.0	149 +11	149 +15	115.4	115.2 115.2
	31528	76229	116.0	115.8	14.8	14.9	116.0	14.0-1	158 +21	+26	115.8	flur 16.0
flur	32058	16293	15.7	14.7	15.5	15.9	116.3	14.5	160 +240	161 +29	15.43	116.0 16.6
158.10	35817	16948						13.4	182 +10	182 +15	114.0	-
	35780	16943	114.8	-	-	114.5	14.4	12.9	+5	+11	114.2	-
	41379	18821	114.5	-	-							
	40062	18406	15.0	115.0	14.6	114.5	14.2	12.9	230 +7	230 +14	114.5	-
		19313	114.5	-	-							
	43355	19605	114.8	-	-			13.9-14.0	269 +19	269 +27	114.0	-
	44109	19999	15.7-9	114.5	-			13.5?	282 +18	282 +26	114.2	-
	44675	20313	15.5	14.0	flur			13.8-9	292 +27	293 +6		-
	44734	20316	15.9?	14.3	15.7	115.2	-	13.0-2	+30	+9	15.8?	115.0 115.5
		20335										
	44834	446	114.6	115.0?	114.5	114.7	-	114.0 114.2	293 +19	+28	15.0?	114.5
	44872	20339						114.0		294 +1	114.0	-
	44516	20287	flur 115?	14.8-8	flur	115.0	-	12.8	292 +23	292 +10	114.8	-
		20541	115.4	115.0	-			13.9-14.0	293 +25	294 +3		-
	44895	20342	115.0	115.0?	115.5	115.9	- 115.9	14.0	+26	+4	14.9	115.5
		20339	114.6	-	-				+28			-
	44902	345	114.4	-	-			13.2	+29	6		-
114.5	44961	361						14.2-3 114.0	294 +15	294 +23		-
	46778	21006						113.4	315 +21	316 0		-
	47991	21065						113.2	316 +24	317 +2		-
	47783	21064						113.4	317 +11	+28		-
	47324	21026						14.1? 114.0	+18	+27		-
		21025						13.3-4	13.4-5 +10	316 +20		-
									13.4-3-2 +9	+19	p=10.5	-
115.8?	MF 6346	22525						14.0	365 +18	365 +29	354 +23	114.0
445	6776	22557						14.3?	+16	+27	351 +21	114.2
155	7607	22854	15.0	114.8		114.5	13.9	376 +2	+24	+17	114.0	-

Plate	S.D.	Cat No	p=30.43	Plate	S.D.	Cat No	p=30.43	p=30.4	(293)	min c's
AX 488	23905.829 488	13.9-14.0	+29	AM 1563	22871.708 13.1	376 +29	377 +10			
AX 538	23919.790	13.8-14.0	+12	7515	19223.657 12.8	257 +3	257 +10			<12.5
AX 613	23960.667	14.0	+23	7541	19231.619 13.3?	+11	+18			47.4
AX 645	23965.699	13.8	+28	7625	19249.527 13.3?					<12.0
664	23969.700	13.0	+2	7638	19251.588 13.0?	258 0	258 +8			<12.3
725	993.636	13.0	+25	7675	19264.557 13.0	268 +5	268 +13	11.8		<12.0
770	24023.579	14.0	+25	8294	19560.768 13.0	268 +5	268 +13			13.3
793	24033.572	13.0	+5	8389	19588.675 13.0	269 +2	269 +10			13.3
1049	24285.763	13.0	+13	8462	19600.642 13.4	+18	+26			
1146	24317.710	13.2	+15	8494	19604.633 13.4					
1180	24325.745	14.0	+23	8606	19652.594 12.8	371 +6	+14	413.0		<13.0
1284	24378.576	13.8-7	+15	8844	19888.834 13.2	278 +29	279 +6			<12.0
1316	24404.515	13.2	+10	8870	19893.897 13.1	279 +3	279 +11			<12.0
1360	24432.512	13.0-12.9	+8	8994	19919.785 13.1					<12.0
1575	24623.861	14.0	+16	AM 124	14898.570 13.4	114 +29	115 +2			
1650	24654.757	13.8-9	+27	225	14942.527 13.2	116 +12	116 +16			
1751	24706.709	14.0	+8	656	15278.522 13.2	127 +13	127 +17			
1817	24731.636	12.8-7	+3	879	15560.670 13.5	136 +22	136 +26	413.0		12.5.6
1853	24754.509	13.8-14.0	+26	966	15602.603 13.1	138 +10	138 +14	11.7.6		12.2?
1919	24787.553	13.8	+28	988	15609.642 13.1	138 +10	138 +14	11.8		12.2
1941	24794	13.0	+5	1002	15619.536 13.1	146 +27	147 +1	11.9		12.3
2015	25154.249	14.2-14.0	0	1225	15870.751 13.6	146 +27	147 +1	413.0		<13.0
2265	25355.598	14.4	+18	1171	15841.885 13.8	+25	+29	412.5		<12.5
2413	25386.477	13.5	+19	1213	15868.778 13.8	+25	+29	413.0		13.3
24386	25386.477	13.5	+19	1333	15912.606 13.8			413.0		<12.8
2449	25389.604	14.0-13.8	+22	1829	16177.839 13.1	148 +10	148 +15			412.0
2494	25410.465	13.0-12.9	+12	1351	15914.593 13.1	148 +10	148 +15			412.8
				1374	15918.733 13.3	+23	+28	412.5		412.3
				1397	15927.674 13.3			412.5		412.7
				1440	16034.516 13.2	159 +29	160 +4	412.5		412.5
				1989	15974.567 13.2	160 +10	+15	412.5		412.2
				2024	16279.754 13.1	160 +10	+15	413.0		412.9
				1862	16222.782 13.5	+15	+20			412.8
				2051	16284.742 13.5	+15	+20			
				2054	16286.672 14.0	+17	+22	413.7		13.2
				2081	16296.565 13.4	162 +12				
				2177	16337.654 13.4	162 +12				
				2212	16344.637 13.2	164 +5	164 +10			42.5
				2299	16396.587 13.2	164 +5	164 +10			13.3-4
				2523	16542.721 12.8	171 +5	171 +10			42.5
				2636	16608.759 13.5	+12	+17	412.5		412.5
				2191	16339.653 13.5-4	+12	+17	412.5		13.3
				2655	16615.716 13.5-4	+12	+17	412.5		412.5
				2751	16648.820 13.6	172 +14	172 +19			
				2763	16652.820 13.2-3	+18	+23			

4868		17728		min C's		min C's		min C's	
A.M.	4878	17727	13.0	AM.	J.D.	293	AM	J.D.	293
4820	17706	13.0	42.0	5450	18070	12.4	8084	20366	13.3
4778	17686	13.0	13.4	5575	18111	12.5	10099	20384	13.2
4473	17684	13.0	42.5	5607	18119	15.0	10138	20393	13.2
4590	17476	13.3	13.0	5634	18129	12.3	10213	20426	12.3
4612	17493	13.3	13.3	5688	18149	13.0	10736	20680	12.5
4455	17429	11.9	41.3	5708	18155	13.0	10717	20669	12.5
4486	17433	12.0	41.3	5751	18169	13.3	10812	20694	13.0
4367	17394	12.0	41.5	5986	18388	12.3	11111	20750	12.5
4273	17363	12.5	41.5	6024	18408	12.5	11145	20754	12.5
4329	17378	12.5	41.5	6105	18436	12.4	11155	20755	13.0
4249	17353	13.0	41.0	6190	18457	12.5	11774	21006	13.3
4174	17325	13.0	41.0	6198	18466	12.5	11783	21007	13.3
3928	17124	13.3	12.9	6239	18475	12.6	11802	21009	13.0
3873	17098	12.5	13.3	6287	18483	12.6	11846	21012	13.0
3762	17066	13.0	41.0	6348	18501	12.3	12117	21047	13.0
3703	17037	13.0	13.2	6398	18511	12.6	12142	21050	13.0
3614	17007	12.5	12.3	6432	18523	12.5	12507	21135	12.5
3594	17003	12.5	12.5	6448	18530	13.0	13148	21365	13.0
3575	16999	12.5	41.5	6582	18562	12.5	13167	21368	13.0
3513	16976	11.8	11.8	6727	18818	12.5	13187	21372	13.0
3434	16938	11.8	11.8	7069	18856	12.5	13390	21421	13.0
3420	16935	11.8	11.8	7071	18857	12.5	13399	21424	13.0
3405	16933	11.9	11.9	7209	18898	12.5	13433	21430	13.0
3112	16960	12.0	41.0	7221	18911	13.0	13986	21731	13.0
3058	16744	12.0	41.0	7394	19149	12.5	13994	21732	13.0
2894	16694	13.0	13.5	7495	19215	12.5	14127	21776	13.0
2832	16671	12.5	13.2	7405	19157	12.3	14148	21787	13.0
2865	16669	12.5	13.2	7461	19205	12.3	14456	21866	12.3
2763	16552	12.5	13.2	7498	19243	12.5	14854	22161	13.3
2751	16648	13.6	13.8	7469	19218	12.0	14864	22164	13.3
2691	16634	12.8	13.0	7532	19257	13.0	15290	22514	12.3
5034	17789	12.5	13.2	7534	19259	13.0	15460	22573	12.3
5104	17816	11.9	13.2	7535	19260	13.0			12.3
5358	18034	12.5	13.2	7536	19261	13.0			12.3

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Plate	S.D.	(69)	(383)	(X80)	(98)	(145)	(514)	(382)	(29)	(238)	(215)	(183)	(261)
12166	25469	14.8-9	14.56	15.8	14.87	15.8	15.4	13.4	14.2	13.9	13.40	14.5	16.2
67	"	14.8	14.8	15.8	14.8	15.9	15.4	13.4	14.1	13.9-8	13.3	14.6	16.2
68	"	14.8	14.8	16.0	14.8	15.9	15.4	13.4	14.10	13.8	13.3	15.5	16.3
12229	25479	15.56	15.0	16.2	14.85	15.2	15.7-8	13.4	14.0	14.0	13.0	13.9-14.0	15.9
12256	25481	15.56	14.5	16.0	14.85	15.1	15.0	13.5	14.0	14.0	13.0	14.1	15.9
12286	996	14.8-9	14.35	15.0	14.46	15.15	15.0	12.9-13.3	13.9	13.9	13.6	14.0	15.9
13037	25717	15.6-7	14.1-6	16.0	14.3	15.9	16.0	12.8	14.0	13.9	13.2	14.9-15.0	16.0
44	22	15.8	14.4	15.5	14.9-6	15.8	15.6	13.3-2	14.2	14.0-1	13.2	14.2	16.1
92	41	15.8	14.2-3	15.6	14.8	14.6	16.0	12.9	14.2	13.6	13.0	14.4	15.8
13105	42	15.0	14.5	15.0	14.8	14.7	15.6	12.8	14.1	13.7	13.3	14.5	15.7
13131	48	16.4	14.4	16.2	14.4	15.7	16.3	12.6	14.0	13.6	13.3	14.9	16.3
256	777	14.7-8	14.8	16.3	14.8	15.3	16.2	12.6	14.0	13.5	13.2	15.1	16.3
326	799	16.2	14.7-8	16.0-15.9	14.8	16.0	16.2	12.7	14.0	13.8-9	13.2	14.9	16.1
378	25826	15.0-4	14.9	15.3	15.0-4	15.8	16.0	13.5	14.3-1	13.8	13.3	14.0-13.9	16.2
397	832	14.9	14.8	15.0	15.0-4	15.7	15.9	13.6	14.3-2	13.6	13.3	14.3	16.2
424	834	15.4	14.6-7	15.0	14.8	14.7	15.7	13.6	14.3	13.8	13.3	14.4	16.2
431	836	15.5	14.7	14.4-3	14.5	14.9	15.4	13.7	14.1	13.9-14.0	13.3-4	14.6-7	15.5
447	847	15.8	14.5	13.3	14.5	15.9	15.7	13.8	14.0-2	13.8	12.9	14.1	16.4
453	850	14.8-5	12.2	13.0-12.9	14.5-3	14.7	15.7-6	13.5	14.3	13.7	13.3	14.2-3	16.0
494	855	15.2	14.2-3	12.8	14.8	15.4-5	15.9	13.5	14.0	13.9	13.0	14.0-13.9	16.2

A	12995	23948		16.2	15.6	12.6	14.1	13.5-5	13.0-12.9	15.2	16.6
	13568	24431		16.3	16.3	12.6	14.1	13.7	13.0-12.9	14.5	16.0-1
	13866	24702		15.0	16.6	12.7	14.0	13.5-4	13.6	14.5	16.7-8
	13943	24730		15.5	16.5	12.4	16.6-7	13.7	13.4	15.1	16.7

AX	1761	24707	14.5	12.7
	1775	711	15.0	12.7
	1862	759	14.0	12.6

A6456	16317		13.5-4	13.4	14.8	16.0
2679			14	14.0	12.8	14.8 16.0

Plate	J.D.	(FX 20x)	(69)	145	(26)	(382)	(261)	(235)
A								
8996	12157			150-14.9	12.0-11.9	15.4		
1876	13741	12.2	15.2					
1926	13759				12.0			
6312	16184	16.0	15.9		216.2	11.9	216.5	136.7
6313						11.9		142.3 2667
2667	14162	14162		15.0-1	15.9-16.0	12.0	216.5	14.0 < 8361
5636	15635			15.0		11.8	215.7	
5626	15632			15.2-3.7		11.8	215.5	
5665	15618					11.7		
2679	14167	14167		16.0-1		12.0	216.4	
6456	16517			14.9		12.0	163.4	
6394	16256				216.0	13.0	165.6	
5150	18157					13.1-0		
B						12.1		
5374	11497	11520		215.0				
9811	12662	11.6	16.0	163.4	160-15.9	12.0	216.0	
7878								
11345	12961	13.8				12.1		
46	13294	15.8	15.3-4.6		15.9	12.1		
13004	13329	214.0	214.8			12.0		
13353	13511	13.4		15.0-14.9		12.0		
15141	13710	213.5				12.0		
15998	13635	45.0				12.0		
15435	13656	215.5				12.1		
15529	13684	15.2-15.1	14.8-9	15.3-4.5-1		12.0-11.9		
15704	13714	13.9	215.0	215.2		12.0-1		
16097	13721	13.8	215.0			12.0-11.9		
16228	13730	12.7	215.0	15.6	216.0	12.0	15.9	
16451	13754	12.7	15.0			12.0		
16854	13759	13.4	215.0	15.0-14.9	216.0	12.0		
16898	13798	15.8-6	215.0	215.2		12.0		
17259	13834	216.0	14.9	15.3-4.7		12.0	215.7	
17535	13994	11.5	215.2		16.0	11.9		
18606	14017	11.9		215.4		11.8		
18725	14057	13.2	215.0	15.2		11.9		
18922	14071	213.0				12.0		
19218	14108	215.0				11.9		
19720	14181	214.5	215.0	15.2-1	215.8	11.9		
20286								

Plate	S.D.	FX Sec	(69)	(145)	(261)	(382)	(261)
22028	14575	113.0				12.7	
23876	14884	113.0				12.0	
27595	15142	154		blurred?		11.9	
31403	16208	158.155	152.0	14.7	12.0	15.9.60?	
31469	16222	115.0	14.9	15.0	12.0		
50360	15945	114.0				11.9	
31528	16229	1		15.4-3	116.2		
32058	16293	16.2	15.3	16.2-3	16.2	12.0	16.3?
35817	16948	113.0				12.2	
35780	16943	14.3				12.2	
40379							
40062	18406	114.0		114.8		12.3-4	
43355	19605	15.4	15.1-2			12.6	
44060						blurred 12.5	
44009							
44675	20313					12.2	
44734	20316	12.3	16.0	115.3		12.0	115.6
44834	20335	12.5-6				12.5-4	
44872	20339					12.8-9?	
	20341	12.5		15.0		12.5	
44516	20287	15.0-48	14.9	115.2		12.1	
44895	20342	12.6	15.7	15.1-2	16.4	12.2-1	15.5-6
44902							
44961							
A 6312	16184			15.8-			

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H.H.S.

T.T. Sec

(223)

Plate	J.D	(X 80)	(382)		
488	23905	114.0	blu	14.1	blu
535	23919	113.8	12.5	14.0	blu
613	23960	113.5	blu	vis.	
645	23965	113.8	blu	blu	
664	23969	blu 113.8	12.5? blu	13.8	
725	23993	vis 13.8?	blu	13.9??	
765	24020	blu 12.5?		blu	
770	24023	12.5	12.5	14.2? 0?.	
793	24033	12.5		blu	
1049	24285	12.8		"	
1146	24317	12.7	12.4	14.0?	
1180	24325	13.0	12.4	13.9	
1284	24378	114.5	12.4	14.0? vis.	
1316	24404			13.8	
1560	24432	113.6	1	13.8	
1575	24623	113.6	13.6?	113.8 vis.	
1650	24654	114.0	13.5	13.8	
1757	24706	113.5	blu	blu	
1817	24731	114.0	13.0?	14.0	
1853	24754	114.0	12.6	blu	
1919	24787	12.8	12.4	114.2	
1941	24794	12.9	13.0?	14.0	
2015	25154	113.4		13.8	
2265	25355	13.0-12.8	13.7	14.0	
2423	25386	113.4		13.8?	
2449	25389	14.0?		14.0	
2494	25410	113.8		114.2 1/2 min.	
2784	25479	113.8		14.1? blu	

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Plate	S.D.	(204)	(61)	(68)	(152)	(69)	(62)	(222)	(103)	(68)	(118)
F 8536	23911	14.7-3	14.64	15.5	16.2	14.7	14.3	15.8		14.63	15.7
8652	23961	15.2-3	15.04	15.5	15.4	14.6	14.3	15.7		14.63	16.4 15.9-8
8761	24020	14.63	14.62	15.63-15.9	14.64	14.5	14.6	15.8		15.7-8	16.2
9548	24352	14.7	15.8	15.6	14.63	14.0	13.9	15.7-8		14.2	16.15.7
9564	53	14.4	15.7-6	15.7	14.63	13.9	14.0-13.9	15.6		14.0-13.9	16.2
88	55	14.0	15.7	15.6	14.63	14.3-4	14.2	15.0-14.9		14.0	15.9-16.0
96	57	14.0-13.9	15.8	15.6	14.63	14.3	14.5	15.7		14.1	16.2
9649	370	13.84	16.0	15.5-6	14.62	14.5-6	13.8	15.4-3		15.0	15.7
55	71	13.2	16.0-1	15.3	14.63	14.3	13.9-14.0	15.7		15.2	16.1
9661	73	13.3	16.2-3	15.6	14.62	14.9	14.1-2	15.7		15.0	15.9
71	74	13.5-4	16.2-1	15.6	14.63-4	14.7	14.5	15.2		15.2	16.1
83	76	13.65	16.1	15.7	14.62	14.7	14.9	14.8		15.3	16.0
90	77	13.4-3	16.0-1	15.5-16.0	14.60	14.7	15.4	15.8-5		15.3	15.5-4
9712	83	13.3	14.62	15.6	14.62	14.5-6	15.2-3	14.6		15.5	16.2
58	902	14.1-2	16.4?	15.6	14.63	14.1	13.8	15.0-1		15.9	16.1
68	403	14.2	14.64	15.7	14.64	14.2	13.8-9	14.9		16.2	15.7
78	404	14.6-7	16.5?	15.7-8	14.64	14.3	14.0	15.8-7		16.3?	16.2-1
83	405	14.4	14.63	15.7-6	16.4	14.2	13.8-9	15.7		16.0	16.1
92	406	14.4-5	16.5?	15.7-8	14.64	14.1-2	14.1-2	15.8		16.1	16.2
11633	25381	15.2	15.9	15.4-5	14.60	14.2	13.9	15.7-6		14.62	15.5
48	82	15.0-14.9	15.7?	15.3-6	14.50	14.4	14.1	14.6		14.5-8	15.8?
90	85	15.3-4	15.8	15.7	14.5-9	14.7	14.6	14.6		14.5-8	15.5-4
11716	88	15.3	15.7-6	15.5	14.5-8	14.2	15.4-5	15.6-5		14.63	15.7
742	90	14.9-8	15.6	15.5-4	15.9-6	14.3	15.5	14.9-8		14.62	16.2
84	409	14.4-3-65	15.7	15.5	14.5-5	14.6-5	15.1-2	14.6		14.5-6	-
11843	414	14.3-2	15.8-9	15.4	14.60	14.2	14.2	15.7		14.63	15.6-7
865	417	14.0	15.8	15.3	16.3?	13.9	14.0	14.8		16.5?	15.4
11931	423	14.2	15.9	15.5	16.2?	14.0	15.4	14.6		14.60	16.0
12154	467	15.8	16.4-5	15.4	16.4-5	14.4	14.0	15.1		14.63	16.0
12164	469	15.5	14.5-5	15.2?	14.5-5	14.5	15.0	14.6		14.5-7	14.5-7-2?
65	"	15.5	15.8	15.4	14.5-6	15.0-1	14.6	15.8		14.60	15.6

Plate	S.D.	(204)	(61)	(68)	(152)	(69)	(62)	(222)	(63)	(108)
2166	25469	15.8	415.5	15.7	15.8	14.3-4	15.0	15.8	<16.0	15.3-2
67	"	15.8-7	<16.0	15.8	15.8	14.3-2?	15.1	15.8	<16.0	15.2
68	"	blu 15.8?	<16.0	15.7	15.9	14.3?	15.0	<15.8	<16.0	15.5-6 15.7-8
12229	25479	15.8-9?	<15.8	15.4	15.7	14.2 def. un. 14.0	13.9	15.0-1	<16.0	15.8
12256	81	blu 15.6	<15.4	15.1	15.7?	13.9	14.2-2	vis. 15.7 blu	<15.6	<15.6
286	496	<15.0 blu	<15.0	vis. blu	vis. blu	14.5-6 blu	14.0	blu	<15.6	<15.6
3037	25717	14.4	<15.7	15.6	<15.6	14.5	15.2-3	15.8-7	16.1?	15.9
44	22	14.4	<15.5	blu 15.6?	15.7	14.7-8	def. un.	14.9-15.0	15.8	blu
92	41	15.1	15.3-4	15.4	15.7-6	14.7	14.6	vis. blu	blu	16.1
13105	42	15.2	15.5	15.6-5	15.8	14.7	14.0	vis. blu	<16.0 blu	16.1
13131	48	15.7-6	15.0	15.3	15.8	14.7 14.9-15.0	14.2	15.5	<16.0	16.2
256	777	<16.1	15.6	15.3-2	16.1?	14.6	14.1	14.8-9	16.1?	15.5
326	799	blu 15.0	<15.8	15.2	<15.5	14.6	14.5	15.7-8	15.5	16.0-7
378	826	14.9	<15.8	15.7	<15.5	pool. un.	14.0	15.9	14.6-5	blu 15.9?
397	832	14.9	<15.5	15.5	<15.5	14.9-15.0	15.1	<15.6 blu	14.3	16.1?
424	834	14.7-8	15.9-10	15.0-1	<15.9	14.7	15.2	15.7-8 blu	14.3	15.9-16.0
431	836	14.8-7	<15.3	15.3-2	<15.3	14.5	15.0	15.2-3	14.4	<15.6
447	847	14.0	<15.7	15.4-3	<15.7	14.6	14.4	15.8-9	14.7-6	16.1
453	850	14.0	<15.5	15.4	<15.5	15.0	15.2	blu 15.4	15.1	15.6
494	855	13.8	<15.8	15.3	16.0?	14.9-15.0	15.0	15.8-9	14.9	15.9-8
A 12995	23948	14.8	15.9-16.0	15.3-2	15.6	14.1-2	15.7	blu 15.7	<15.8	off
13568	24431	15.9	<16.0	15.3-2	<15.9	14.4	15.6	14.8	<16.1	16.1
13866	24702	14.3	15.8-9	15.7	blu 15.9	15.0	14.2	blu	off	-
13943	24730	15.8-8	16.3?	15.6	<15.5	14.2	15.3	blu 15.8-9	off	-
MAX 1761	24707	14.3?								
1775	711	14.5?								
1862	759	<14.6								

Date	S.D.	(204)	(61)	(152)	H.9.62	H.H.S. 66
6456	16317	14.7	<16.0	16.6	14.9	16.6
2667						46.0
2679	14167	15.3.4	<18.0	<15.5	15.5	blu 16.2
1876	13741					15.8.7
5626	15632	14.7	<15.5	15.5	13.9-14.0	<16.0
2667	14162	15.0-14.9	216.2	16.1-16.0	13.9-14.0	<16.0
6313	16184	15.3	15.6	<15.7	14.9	<15.2
5636	15635	14.8	16.5?	15.5	14.1	<16.2
5565	15618	14.2-15.5				
6312	16184	15.2	15.6	blu	14.5	<15.8
5560	15618	14.2-3			14.1	
9061	18184	14.6	<15.8	<15.7	14.1	15.5
B						
5394	11497	15.5? blu			14.1	<14.6
9811	12662	15.7	<15.5	—	15.5	<15.5
13004	13294	<15.0			<14.4	<14.8
13359	13329	14.8			14.6	<14.4
15141	13511	<14.5			14.2.3	<14.8
15435	13635	<14.3			14.4?	<14.3
15529	13656	<14.5			<14.5	<14.0
15704	13684	13.9			14.7-8	15.2?
15998	13710	<14.0			14.7-8	blu <14.0
16097	13714	blu <14.0			14.6-5	<14.5
16228	13721	<14.4			<15.0	blu <14.5
16451	13730	<15.0			13.9	15.8
16654	13744	<13.8			blu	blu
16898	13759	<15.5			15.6	blu
17259	13798	15.0-14.9			14.0	<14.6
17535	13834	14.0-13.9			15.2	<15.0
18606	13994	13.8-14.0			13.8-14.0	<14.5
18922	14037	<14.6			<15.2	<14.0
19218						

Plate	S.D.	(204)	(61)	(52)	(62)	(44566)
19720	14108	<13.4				
20286	14181	<14.8			14.8-9	<14.700.11
22028	14575	13.2			14.0	
23876	14584	13.8			14.4 blue	blue
27095	15542	15.3		15.5-6	15.5	<14.7
30366	15945	14.0-13.9			14.1-2	<14.8
31403	16208	14.0	15.6?	15.6?	15.4-5	<15.2
31469	16222	14.1	15.5	15.5	15.5-6	<14.8
31528	16229	14.4-6	<15.9	15.9	14.3-4	<15.7
32058	16293	16.2	<16.2	<16.3	13.8	<16.0
35817	16948	14.2				
37580	16943	14.0				<14.2
40062	18406	<15.0			<14.9	<14.8
44355	1772 19605	14.6-7			14.1	14.4 14.4
44675	20313	<13.8			<14.2	
44734	20316	15.7			13.9	<15.4
44834	20335	15.0			14.3	
44516	20287	<15.0			14.6-7	<14.8
44872	20339	<13.5				
	20341	14.4 blue			15.6	
44895	20342	14.6	<15.8		15.8	<15.5
44902	20345	blue			<14.3	
44761	20361	blue				
NF 6346	22525	<13.8				

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		N	N	N ₁₀₀	N	N	14 H.S. variables	N	N	N	N
		528	100	529	153	179	530	65	223	66	224
8536	23911	14.8 15.0-14.9	16.2	14.8	16.2	—	15.3	15.8	13.8	16.2	12.7
8652	23961	15.76	16.2	14.8 16.2	14.2	16.0-15.9	15.6	15.8-7	13.8-7	16.2	12.5
8761	24020	16.4-16.0	15.7	14.6 16.1	15.9	16.1	15.3	15.7	14.0	16.2	12.6
9548	24352	15.8	16.3	14.8 16.0-15.9	16.2	15.5-4	15.2	15.9	14.0	16.2-3	12.6
9564	53	15.76	16.3	14.8 16.2	16.2	15.4	15.0	15.7	13.8	16.2	12.6
88	55	16.0	16.5	4.7 16.2-3	16.2	15.5-4	15.3	16.0	13.9	16.2-3	12.6
96	57	15.9	16.2	14.9 16.0	16.1	15.5	15.6	16.0	13.8	15.4-5 16.4	12.7
9649	370	16.1	16.3	15.2 16.1-2	16.1	15.4	15.2	15.8-9	13.8	15.6	12.6
55	71	16.1	16.5	14.8 16.2-1	16.3	15.5	15.3	15.9	13.9	16.0-15.9	12.6
61	73	15.9-8	16.1	14.8 16.0	16.0	15.5	15.5	15.4	13.8	16.1 16.2	12.7
71	74	15.9	16.4	14.7 16.3	16.5	15.8	15.3	15.7	14.0	15.8	12.6
83	76	15.9-8	16.3	14.6 16.2-3	16.3	15.7	15.2	15.8	13.8	16.2	12.7
90	77	16.1	16.2	14.7 16.2	16.2	15.8	15.2	15.8	13.7	15.8	12.6
9712	83	16.1	16.1	14.7 16.1	16.2	15.8	15.3	15.7	13.9	16.0	12.6
58	402	16.2-1	16.0	15.8	16.3	16.2	15.4	15.9	13.9-14.0	16.1-16.0	12.6
68	403	15.7	16.1-0	14.8-7 16.1	16.3	16.3	15.0	15.9	13.8	16.1-2	12.7-8
78	404	16.1-2	15.7	14.8-9 16.1	16.5	16.4-5	15.6	16.0	14.0	15.5	12.7
83	405	16.1	15.9-6	14.9 16.0	16.1	16.1	15.2-3	15.8	14.0-13.9	16.2	12.6
92	406	16.3	15.8	14.9 16.6	16.4	16.5	15.3	15.9	13.7	16.2-3	12.6
11633	25381	15.7	16.1	15.0-14.9	14.8-7	15.7-8	15.3	16.0	13.6-7	16.0	12.6
48	82	15.7	15.8	15.1-2	14.9	15.7	15.2	16.0	13.9	16.0	12.7
90	85	15.7-6	15.8	15.1	14.8	15.7	15.3	16.0	13.8	15.9-?	12.6
11716	88	15.7	16.4	14.9	14.9	15.7	15.2	15.9	14.0	15.9	12.6
742	90	15.5	16.3	14.5	15.0	15.8	15.0	15.9	16.1-1 15.9-16.0	16.2	12.7
84	409	15.8	15.5	14.8	15.5-7	15.4	15.4	16.0	13.8	15.4	12.7
11843	414	15.8-9	16.4	14.9	15.9	15.8	15.1-2	15.9-16.0	13.8	16.0-15.9	12.7
865	417	15.6-10	16.5	14.9	15.8	15.8	15.2	16.0	13.7	15.5	12.7
11931	423	15.8	15.7	14.9	16.1	16.2	15.4	16.0	13.9	15.8	12.7
12154	467	16.0-15.9	16.1-2	14.8	16.3	16.3	15.6	15.8	13.8	15.7-8	12.6
12164	469	16.0	—	14.8-7	15.9	15.8	15.3	15.9	13.9	16.0	12.6
65	"	16.0	16.1-2	14.8	16.3	16.3	15.6	15.8	14.0	16.1	12.7

Alt	J.D.	(528)	(100)	(529)	(153)	(79)	(530)	C.O.B. (404)	(223)	(66)	(229)
12166	25469	16.0	blu	14.8	<16.3	—	15.5	blu	13.9-14.0	16.0	12.7
67	"	16.1	16.2	14.8	<16.2	<16.1	15.4	15.8	13.8	16.0	12.6
68	"	16.3	blu 16.0	15.0	<16.2	<16.2	15.4	16.0	13.8	16.1	12.6
12229	79	15.9	15.7	14.8	<16.2	—	15.3	15.4	13.8	15.6	12.7
12256	81	15.8	15.9-8	14.6-5	<15.4	—	15.3 blu	blu	14.1 14.1	15.8	12.6
286	496	blu	15.5-4	14.7	<15.2	—	15.0	15.5 blu	13.9	blu	12.6
13037	25717	16.1-2	15.7-6	14.9/16.2	<16.2	—	15.4	15.5	13.8	16.1	12.6
44	722	blu	15.8	14.7 blu	<15.7	—	15.2	15.5-4	14.2	16.0	12.6
92	741	blu	<15.6-6	14.8	<15.7	—	15.3	16.0	13.8	16.0-1?	12.6
13105	42	blu	15.8	14.8/16.0	<15.7	—	blu 15.4	blu 15.8	13.9	15.3-4	12.6
131	48	16.4-5	15.9-16.0	14.8/16.0	<16.1	—	15.5	blu 15.9	14.0	15.3	13.2
256	777	16.3	<16.2	14.9	<16.2	16.2-1	15.4	16.0	14.0	15.5-8	12.7
326	799	16.1-2	<15.8	14.8	16.2	15.7	15.3-4	16.0 blu	13.8	16.1	12.6
378	25826	blu	—	14.7	<16.1	15.9-16.0	15.3	16.0	13.9	15.7-6	12.6
397	832	<15.6	blu	14.8	<15.9	—	15.5	15.7	13.9	15.7-6	12.6
424	834	16.1-2	blu 15.6	14.8-7	<15.9	blu	15.0	15.5 blu	13.7	15.6	12.7
431	836	blu <15.5	—	15.0-7 blu	<15.8	blu 16.0	15.5	blu	13.8	15.7-7 blu	13.1?
447	847	blu <16.0	—	14.8/16.3	<16.0	—	15.4	15.8	15.8	15.5-4	12.7-6
453	850	<15.5 blu — blu	14.8	<15.6	—	—	15.5	15.8	15.7-8	15.7	12.5
494	855	16.0 blu	<16.0 blu	14.8	16.2	<15.6	15.1	15.8: blu	13.8	15.7	12.6

A 12995	23948	15.9	13.8	16.1
13568	24431	16.0	13.9	16.1
13866	702	15.9	13.8	16.2
13943	24730	15.9	14.0	15.7
			14.0	16.1
AK 1761	24707		13.8	
1775	711		14.6 blu	
1862	759		14.0	

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4.H.S.

Date	J.D.	(528)	(100)	(153)	(179)
8996	18157	16.6	<16.5	15.9-6	15.9
1876	13741	<15.6	15.2-3	<16.4	15.8-7
2679	14167	008	15.5-4	008	15.5
6456	16317	008	15.5-4	4	16.8
5636	15635	"	15.5	008	15.8-7
6312	16184	16.0	<16.0	15.3-4	<16.2
8361		<15.6			

71

B. 5394					
9811	12662	16.2	16.0-15.9	<16.0	<15.5
13004	13294			<14.8	-
13359					
15141					
15435	13635			14.9? blue	
15529					
15704					
15998					
16097					
16228	13721	15.3	15.0	<14.8	-
16451	13730	↑	↑	<14.8	-
16654	15	215.0	15.5?		
16898	13759	blue	<14.3	<15.2	-
17259	13798	15.0?	<14.5	<15.2	-
17535	13934	15.7?	blue	<15.3	
18606	13994	<14.4		<15.0 49.15.0	<15.0
18922	14037				
19218					
19720					

23911
15542
8369

23911 334
15542 348
8369 38

Note	S.D.	(528)	(100)	(153)	(179)
20286	14181	<15.0	15.1	<15.0	-
22028					
23876					
27595	15542	14.5	15.0	<15.0	15.5
30360	15945	<14.9	-	<14.8	-
31403	16208	15.8	<15.7	15.5	<16.0
31469	16222	<15.0	-	15.3	
31528	16229				
32058	16293	15.8	15.0-14.9	<16.3	<16.3
35817	16948			17.9	15.5
35780	16943				
40062	18406	<14.3	-	<15.0	14.76
44355	19605			-	<14.8
44675	20313				
44734	20316	16.0	<15.8	15.3	15.7
44834					
44516					<14.8
44872					
44895	20342	16.3	16.0	<15.8	14.65
	20341				14.65

1933 phase proj. 2560B

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See p. 164 for A.X's Dec. '33

337
2/9/10 335
2/9/10

date	J.D.	c.p.B. 404	223	224	A.45 69	M.45 68	A.45 528
8537	23911	blue	13.8	13.37	14.5	15.6	14.7
8673	23965	16.0	14.0		14.2	15.5	16.0
8724	23992	blue	16.0-1		14.9	15.8	16.0
8785	24026	blue	13.9		14.7	15.1	16.0
8842	0565 ⁰³	blue	15.8-7		14.6	15.6-7	16.0
9816	24411	blue	14.0		14.4	15.8	15.8-9
9828	24412	blue	13.9		14.4	15.8-9	15.8
9838	24413	15.9?	13.8		14.4-3	15.8	15.8
10141	24626	16.0	13.8-7		14.6	15.5	15.2-1
10146	627		14.0		14.2-3	15.4	15.3
10240	24649		13.8		14.3	15.6	15.4
10249	24650		13.8		14.3	15.6-7	15.5
10271	24654	15.8	13.7		14.2	15.4	15.6
10279	24655		13.8		14.1	15.2	15.5-6
10284	656	16.1	13.8		14.0	15.5	15.6
10365	681		13.8		14.9	15.4	15.8
10522	24711	16.1	13.8		14.5	15.7	15.5
10534	712	blue	13.9		14.6	15.5-4	15.5
10572	727	16.1	13.8		14.2-1	15.4	15.7
10574	728		13.8		14.1-2	15.2	15.6
10576	28		13.9		14.3	15.7	15.7
577	28		13.9-14.0		14.2	15.2	15.5
578	728	16.1	13.9		14.2	15.1	15.6
579	28	16.0	13.9		14.1	15.3	15.9-5
11533	May 16/17 25355				14.6	15.7	15.4-3
11662	108 25383	blue	13.9		14.5	15.7	15.6
11705	20 86	"	13.8		14.3	15.7	15.5
11718	25 88	"	14.0-1		14.4	15.5	15.6
11743	28 90		15.9		14.2	15.4-3	15.5-7
11844	116 414		13.8		14.2	15.7	15.9-16.0
11883	418	16.0	13.8		14.4	15.6	16.0

Plate	J.D	404	223	445	445	445	223	223	223
			69	68	528	14115	26071	14.0	(223)
11899 ²¹	419	15.7	14.0-1	14.5	15.8	15.9	15.0	14.143	89
11919 ²³	421		13.9	14.5	15.8	15.8	14.161	91	13.8
11973 ^{July 7-10}	437	15.6?	13.9	14.6	15.5	15.9	14.176	92	13.7
12285 ^{Sept 3}	493		14.1-2	14.5	15.9	15.9?	14.303	119	13.8
12304 ^{Aug 8}	498						14.304	"	13.8
13120 ^{May 13}	745		14.0	15.0	15.3	15.6	14.305	"	13.8
13134 ¹⁷	749		13.9	14.8?	15.2	15.7	14.306	"	13.9
13287	794		13.8	14.8	15.0	15.8	14.307	"	13.9-14.0
13327 ^{July 8}	799		13.9-14.0	14.5	15.4	15.6	14.308	"	13.8
13398 ^{Aug 8}	832		14.0-13.9	14.7	15.5	15.8	14.309	"	13.8
13463 ^{Aug 27}	851		13.9	14.9	15.7	15.7			
13481 ^{Aug 30}	854		13.8	14.6	15.1	15.7			
13495 ^{Aug 31}	855								
13500 ^{Sept 6}	861		13.9	14.9	15.2	15.8			
13502 ^{Sept 7}	862		13.8	14.6	15.2	15.6			
14317 ^{May 23-4}	1930	26120	13.8						
14318 ²³			13.8						
14319 ²³			13.8						
320			13.8						
321			13.8						
322			13.8						
323			13.8						
14164	26091	15.4	14.0						
14175	26092	15.7	13.9						
14150	26099	15.5	14.0						
14144	26089	15.5	14.0						

date	S.D.	(309)	(318)	(78)	(187)	(251)	Nepetrium	see effect of redness	(308)	(237)	(288)	(182)	(238)	
MF 8536	23911 812	416.3	416.3	16.0 blun	416.3	15.8	14.9-15.0 much red.			15.5	15.8? ^{hor}	14.8-9	416.2	121
8652	23961 712	15.8-7	416.3	16.0 blun	416.3	15.5	14.2	" "		15.3	15.3	15.7	15.4-3	121
8761	24020 556	15.9-16.0	416.2	416.2	15.6	14.2	" "			15.6	15.3	416.4	16.2	
9548	24352 650	15.8-9	416.3	416.1	416.0	15.1-2	14.2? ^{blun}	" "		15.1	15.3	416.3	16.5-4	122
9564	53628 160-4	15.8	416.4	416.0	416.3	15.5	15.0 14.7-8	" "		16.1-16.0	15.4	416.5	16.5-4	122
88	55636	15.6-7	16.5?	416.3	416.0	15.8-7	14.8-9			15.1-15.0	15.4	416.5	16.5-6	122
96	57636	16.5-2	16.5? blun	416.3	416.1	15.4-5	14.2? very fuzzy			15.4-5	15.2-3	416.4	16.6-2	130
9649	370585	blun 416.0	—	416.1	416.0	15.8-9	15.0			15.4	15.5-7	416.2	15.3-4-5	
55	71577	416.4	16.6	16.5	416.5	15.8	14.7			15.8-7	15.3	416.5	15.3-4	
61	73579	blun	—	blun	416.0	15.8	12.3			15.0-14.9	15.0	416.0	blun	
71	74556	16.3	16.4-5?	16.5	416.3	15.6-5	14.2			15.8	14.9-8	16.6	15.2-3	
83	76587	416.1	416.1	416.3	416.3	16.0	14.3			16.0-1	15.3	416.4	5.3	
90	77569	16.0	416.0	16.2	416.2	15.8	14.2			16.0	15.2	416.3	15.3-4	
7712	83554	15.5-6	416.1	16.0	416.1	15.8-9	14.4			15.6	15.1	416.4	16.0-1 blun	
58	402519	216.4	16.3? blun	15.8	416.4	15.5	14.6 very fuzzy			16.0	15.2	16.5	15.3-4	
68	403517	16.4	16.4?	15.9	416.5	15.9	14.7			15.8	15.3-2	16.5?	15.3	
78	404512	16.4-4	16.5? blun	15.9	416.5	15.7-8	13.8 pendulum w/ suff			15.0-14.9	15.1-15.0	16.3	15.4	
83	405501	16.2?	16.3? blun	blun 15.9	416.3	15.7-8	14.2-1			416.1-16.2	15.3	16.4	15.4	
92	406533	16.6	blun 416.5	15.8-7	416.4	15.9	14.5			15.6-7	15.4	16.2-3	15.4-5	
11633	25381	15.8? ^{blun}	416.0	416.0 blun	416.0	14.9-15.0	14.2			15.0? blun	15.7	416.2	15.3-4	
48	82	blun	blun	blun	blun	14.5? blun				blun	blun	blun	15.8?	
90	85	16.0?	416.0	blun 15.5	416.0	15.4	14.3			blun	15.5	415.8	415.5	140
11716	88	16.3-4	16.3?	416.3	416.0	15.4	14.2-1			blun	15.3-4	416.3	15.6	14
742	90	416.0	16.1	416.4	416.4	15.4	14.7-8			15.5	15.14.9	416.5	16.3-4	14
84	409	blun	15.4	416.3-4	blun	15.0?	14.2			blun	14.9?	blun 15.5	blun	
11843	414	15.5-4	15.4	16.3-4	416.3	15.3	14.5			15.5? blun	14.9-15.0	415.7	15.6-7	
865	417308	16.2	15.5	16.1-2	416.4	15.3	15.0			15.2	15.4	16.6?	15.5-6	
11931	423	416.0	15.4	blun	416.0	blun 15.4	414.2	blun		14.8	15.8	416.5	15.5-6	
12154	46733	16.3	416.3	416.2	416.2	14.9	14.6 much red.			blun	15.7-8	14.8-9	15.7-16.0	
12164	469	415.8	—	416.0	416.0	14.3	14.3	neb. mass.		blun 15.2-3	blun	blun	15.3-4	

[illegible]

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MF

J.D

		(309)	(319)	(76)	(187)	(251)	TT Sec	(308)	(237)	(288)	(82)	(238)	(W15)	
245	26102.538	blu							15.7?			blu		
252	103.606	15.8							15.1			46.0		
257	104.611	16.0							15.6			16.3		
258	105.544	15.6							15.9?			16.3-4		
276	117.422	15.7	15.2	46.4	415.6	15.5	15.0		15.8	15.2	16.6?	16.3-4	11.0	
293	118.523	416.0	15.2	blu	blu	15.5	13.7-6		15.6 blu	15.2-1	415.8	415.8	11.0	
14303	119.408	416.3	15.2	blu	415.8	416.2	15.4	14.9-15.0	15.3	15.2	416.2	416.2	11.0	
304	" 440	15.7	15.3	416.3	416.2	15.4	14.8-9		14.7	15.2	416.6	16.3-4	11.2	
305	" 473	15.7	15.4	416.1	416.2	15.6	14.6		14.9	15.1	416.5	16.3	11.2-1	
306	" 504	15.7	15.2	415.9	416.1	15.6	14.3		15.1	15.0	416.5	16.3? blu	11.3	
307	" 536	15.8	15.1	416.0	416.1	15.6	14.1		15.4-3	14.7	416.3	416.0	11.3	
308	" 568	16.1	15.1	416.2	416.2	15.5	14.3-4		15.3-4	15.1	416.5	16.1	11.2	
309	" 600	16.4	15.2	16.4	416.3	15.7	14.5		15.4-5	15.2	416.5	416.2	11.2	
14348	123.489	15.8	15.1	blu	415.7	15.4	13.6		415.8 blu	15.2	416.0	blu	11.0	
361	124.467	416.0	15.0	blu	415.8	blu	15.5	14.0	16.0	15.1	416.0	416.0	11.2	
372	125.422	16.2-3	15.0	416.1	416.1	15.6	14.5		15.2-1	15.3	16.6?	16.1	11.3	
384	130.496													
394	131.388	15.7?	15.1?				14.2						11.0-10.9	
411	144.331	15.7	15.4	blu	416.5	15.6	14.1		15.5	15.3	416.4	16.2-1	11.1	
418	145.362	15.8							14.7					
427	146.468	16.0							13.8-14.0					
440	147.044	15.8							417? neb. blu					
446	148.047	15.8							417? neb. blu					
462	149.047	15.8							14.6					
74	154.425	16.2-3	15.6	416.5	416.4	15.4-3	14.9		14.9					
97	155.427	16.4							15.0					
101	156.429	16.3	15.8	416.3	416.3	15.6	14.9		15.0	14.6	416.4	16.0	10.9	
113	158.404	16.2							15.6	15.3	16.5-6	16.0	11.0	
128	159.424	416.0							15.0	14.9	416.0	15.6-7	11.0	
139	160.457	416.1	15.9-16.0	416.3	-	15.8	14.5		14.9	16.0	416.3	15.3-2	10.9	
145	161.450	16.4	16.0	416.4	-	15.6-7	14.5	diffuse	16.5?	15.6?	15.3-4	416.4	15.3	11.0

ME

J.D

(309)

(318)

(18)

(187)

(251)

H Ser

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14552	2616	16.0?	16.1	blu	16.0	14.8	15.8-14.9	(308)	(237)	(258)	(182)	(238)	(115)
568	174	338						14.8	15.3	15.4	blu	15.1	11.0
579	175	424											
591	176	368	16.3	<16.3	16.1	<16.2	15.4	15.8?	15.6	15.5	<16.3	15.8?	blu 11.0
606	177	395	15.7	<16.1	blu	<16.2	15.6-5	14.8	16.0	15.5	<16.0	15.4-5	blu 11.0
617	179	304	<16.2				14.8	16.3	15.6	15.5	<16.3	15.4	11.2
635	180	443	15.7-6				14.7	blu	16.1	15.0	<16.5	15.2	13.1
643	181	307											
659	182	430	16.1	16.0?	16.0	<16.3	15.9	15.0-1	blu	15.8?	15.2	<16.3	15.8?
665	183	205	blu	<15.5	blu	<15.8	15.8?	14.6	blu	15.1?	<15.5	blu	11.0
666	183	236	16.3?	16.3?	15.9	<16.3	15.8	14.7	15.6-7	15.2	<16.3	15.8?	blu 11.0
667	183	268	16.1				14.7	blu	15.6	15.0	<16.5	15.2	11.0
668	183	300	16.0				14.6	blu	15.6	15.2	<16.8	15.1	blu 11.0
669	183	332	blu				14.8-7	blu	15.7-6	15.2	<15.8	15.3-2	11.0
670	183	364	15.8				15.0	blu	15.6	15.2	<16.4	15.3	11.0
671	183	396	16.0				15.0	blu	16.0-1	15.2	<16.4	15.4-3	11.0
672	183	428	16.3				14.9	blu	15.7-7	15.2	<16.4	15.3	11.1
686	186	430	blu		16.0-1	blu	15.5-4?	15.2	16.1	15.2-3	<16.3	blu	10.9
14701	28	188	214	blu			14.8	15.6	15.3	<16.0	15.8-9	11.1	
731	202	599	blu		blu	blu	<15.5	15.0	blu	15.1?	<15.6	15.2?	blu 11.1
737	204	559	blu	<16.0	blu	<16.0	15.8	15.1	15.0-4-9	15.3	<16.0	15.5-3	blu 11.0
748	208	568	15.6	<16.0	16.2-1	<16.1	15.4	14.8	blu	16.0	15.2	<16.2	15.7-8?
757	210	586	16.3	<16.3	blu	<16.0	15.5-4	15.1	15.6-7	15.3	<16.0	16.1	10.9
780	214	496	<16.0	<16.1	blu	<16.2	16.1	15.0	15.6-7	15.3-2	<16.1	<16.1	11.0
795	215	556	blu		blu		14.7	complete	<15.6	blu	<15.2	<15.0	blu 10.8
856	4								<15.5				
857									<15.0				
1543	256	565	16.3						15.8				
423	72	535	16.4-5						15.3				
452	73	534	15.9-16.0						15.5				
474	79	537	15.9						15.0				
493	81	542	15.8-6						15.4-2				
510	83	541	16.0						16.0				
515	84	531	16.4						15.9				
537	86	547	15.8						14.9				
539	89	543	16.2						14.8				
553	91	465	16.5						15.3				
588	94	423	16.0						15.3				

		(319)	(318)	(78)	(187)	(251)	TT det	(308)	(237)	(288)	(182)	(238)
12995	23948	162.7	16.6.7	16.7	16.7	15.5	11.9-12.0 no obs.	16.8	15.7	14.9-15.0	15.3	15.8
13568	24431	156.7	16.6	15.5	16.7	15.5.7	11.9-12.0 " "	16.9	16.0-1	14.9	14.7	15.8-9
13866	24702	16.4.5	15.5	16.8	16.8	15.0	13.5 " "	16.9	15.0	14.8	13.7	15.8-9
13943	24730	16.4	15.4	16.8	15.8	15.9	13.4-3 " "	17.0?	15.8	14.8	14.7	15.8-9
14734	26123	16.43	15.0	16.6	16.5	15.8	13.3	17.1?	16.0	14.6	17.0?	16.0
14742	124.350	15.8-9										16.0
14738	26123	15.6-9	15.10	16.5	16.5	15.8	13.3	16.4	15.0	14.7		
14745	125.333	16.5	15.0	16.8	15.7	15.7	13.0	16.8	14.9-6	14.6		15.9-8
14750	26130	16.3	14.9	16.8	16.5	15.9	13.0	17.0	16.1	14.6		16.1
14754	130.584	blue	blue	blue	—	blue	13.3	16.7	15.7	14.6		blue
14756	131.289	16.4	15.0	16.5		15.9	13.2	16.8	15.5	14.6		16.2
14760	131.576	16.3	14.9	16.5		15.9	13.4-2	16.7	16.4	14.6		16.3
14763	137.133	16.3	16.7	16.5	16.2	16.0	13.3	16.7-8	16.0-1	14.7		16.1
1763	274	16.4	15.1	16.8	16.6	15.8	13.4	16.9	16.3	14.8	16.6	16.2
14769	26145	15.9-16.0	15.8	15.4-2	16.5	16.0	13.3	16.7	15.8-9	14.8		16.1
772	145.550	15.9	15.3	16.7	16.6	15.7	13.1	17.1	16.6	14.8		16.0
775	146.270	16.0	15.3	16.8	16.5	15.7	13.2	17.0-1	14.8	14.9		16.0
778	146.549	16.3-4	15.3	16.7	16.5	15.8	13.3	17.0-1	15.0	14.7		15.9
781	147.215	16.0	15.4	16.5	16.5	15.7	13.4	17.1	16.3	14.7		16.1-16.0
784	147.552	16.5	16.6-7	15.8	16.6	15.8	13.2	16.6	16.0-15.9	14.6		15.1
811	199.199	16.3-4	15.9-16.0	16.6	15.7	13.0		16.7	16.4	14.6	16.8	15.2-4
813	199.261	16.1-2	15.9-16.0	16.6	15.7	13.1		16.8	16.4	14.6		15.0
815	179.314	16.5	16.0	16.5	15.8	13.1		16.8	16.3	14.7		15.0
817	179.376	16.5	16.0	16.5	15.8	13.1		16.7	16.0-15.9	14.7		15.1-0
819	179.440	16.5	16.0	16.5	15.8	13.2-1		16.7	16.0-15.9	14.7		15.1-0
821	179.554	16.5	16.0	16.5	15.8	13.2-1		16.7	16.0-15.9	14.7		15.1-0
824	180.212	16.4	16.0	16.5	15.7	12.9		16.8	15.2-1	14.6-5		15.0
826	180.272	16.4	16.6	16.1	16.5	15.7	13.0-2.9	16.7	15.4	14.8-7		15.2
830	180.227	16.5	16.7	16.0	16.7	15.6	13.0-1000	16.6	16.2	14.8		15.0-1
836	181.399	16.2-3	16.6	16.0-15.9	16.5	15.7	13.2 no obs.	16.5	15.1	14.8		15.0
842	182.206	16.0-1		16.0	16.9	15.7	13.2	16.7	16.4	14.6		15.0
846	182.313	16.5-4		16.0	16.6	15.8	13.2	16.7-8	16.4-5	14.7		15.1
856	182.313	16.0-1		16.0	16.5	15.6	13.2	16.5	15.6-5	14.6		15.2
863	182.313	16.0-1		16.0	16.5	15.6	13.2	16.6	15.7	14.7		15.0
881	182.313	16.0-1		16.0	16.5	15.6	13.2	17.0	15.5-6	14.7		16.2
904	219.203	16.4	16.8	16.9	16.7	15.8	13.4 no obs.	16.9	16.2	14.8	16.8	16.7-2
910	215.016	16.2		16.5	15.4	13.5		16.9	16.2	14.6		15.8
913	216.016	16.4-5		16.2	15.4	13.5		16.5	16.1 blue	14.8 blue		15.9
917	217.016	16.4	16.8	16.7	16.5	15.2	13.4	17.1?	16.3	14.7		15.8-7

Date	S.D.	(78)	(309)	(318)	(187)	(251)	TT	Strang. obj.	(308)	(237)	(288)	(183)
A	S.D.											
5626	15632						12.6					
6456	16317	165-6		15.4-2			13.0-12.9		16.5-16	16.3	14.7-8	13.6
2667	14162			15.4-2			13.8					
2679	44167	<16.7		16.7-8	<16.7	65 n.e.	13.6		<16.9	16.1	15.5-6	<16.8
5636	15635			<15.8		14.4-3	12.7					
6312	16184	<15.8-9		<16.3			13.6		<16.6	15.8-9	14.7	<16.2
1926	13759						14.0					
6394	16256	<16.2		16.4			13.7		<16.6	15.4	14.7-6	<16.6
6313	16184											
331528	16229	<16.3		<16.2			14.7		14.6	<16.0	16.0	<16.4
31403	16208	<15.9-16.0		46.0			14.8 neb?		14.8	<14.5	15.0	<16.1
35780	16943						12.5					
44895	20342	<16.2							14.8-9	<16.0		<16.3
44872	20339						13.0					
32058	16293	blen		15.1			14.2-3					
40062	18406						12.7					
17535	13834	<16.0		<15.5			14.8 nebulous?		<14.4	<14.4	<15.0	<15.5
35817	15948						12.4					
17259	13798	<15.8		<15.6			14.3		<14.5	<14.5	<15.3	<15.5
13004												
16898	13759	<16.0		15.4			14.3-4		<15.0	15.5-3	14.7-8	blen <14.0
16654	13744						14.4		<14.0	<14.0	14.2	16.0 blen
16401	13730	<16.0		15.7?			14.0		<14.3	<14.0	14.2	15.4?
5394	11497						13.2-1		13.8	13.8	13.7	14.2
9811	12662	<16.5		16.5-6			14.8 neb.	14.2	13.8	13.8	13.7	blen
11902	13055						13.0		16.6?	<16.0	<16.2	14.8
44734	20316			15.4		23876 44884	13.0		13.8	<14.0		
						27595 15542	13.5					<15.0
44516	20287			15.7?			13.7-6 y		<14.2		14.8?	<14.8 blen
44961	361						12.8					
44834	335						12.8					
15998	13709						13.7					blen
44902	20341						13.0					<14.8
44895	345						12.4					
44675	20342			<16.2-16.2?			13.8				15.7	
30360	15945			<15.0			12.8					
20425	14185						13.4		<13.8			
31469	16222			<15.2			14.4					
43355	19605						13.3					
5394	11497			<15.5		144961			<14.1			
15141	13511						14.4		<13.4			<15.0
13004	13294								<13.6			blen <14.0
15529	13656						13.7		<13.7			blen <15.0
15704	13684			<15.3			14.4		<14.0		<14.1	15.0-2
15435	13635						13.5		<13.6			
16097	13714			<15.5			14.4		<14.3	14.0	<14.5	14.0-13.9
13604	13294						14.1 blen					<14.0
16228	13721			15.8?			13.8		<14.5	14.6	14.6	14.0-13.9
13353	13329						14.3-4		13.3	<13.5		
11345	13730			15.7?	31920	26268			<13.8			14.6
18606	12961			15.1			12.8					
	13994						14.6		<13.8	<13.9	<14.0	15.1
							14.3					<14.5
17122	14037			<15.8	18725	14017	14.2		<13.9	<13.8	<14.0	<15.2
19218	14071						14.5					
19720	14108						14.3					
20286	14181	14.4-5	14.4-5				14.5		<13.9	<13.9	<14.0	<15.2

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see p
164 for other
AK's

TT Sec.

Date	J.D.	TT Sec.
24707	AX 1761	13.7-6
24711	1775	13.2-1
AX 1802	24759	13.8-7

B.	J.D.	(47)	(122)	(65)
44881	20341	214.1	—	214.0
44060	19987	213.6	13.4	
MF 4460	22190	214.1	—	214.0
A 11324	20710	15.2	15.9	
11334	20719	15.2	215.0	
11347	20727	216.6	14.9	
11415	20777	216.3	13.9	
11493	21064	215.3	15.5? blue	
11513	21072	215.6	15.9	
11518	21077	216.0	216.0	
B 445944	20769		13.4	

39333ae.proj.2508B

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Plate	S.D.	(213)	(175)	(210)	(223)	(306)	(305)	(176)	(65)	(155)	(47)	(122)	(375)	Plate
8536	23911.812	14.6	146.0								146.1	15.6		12165
8652	23961.712	14.65	13.8								146.4	16.42163		66
8761	24020.556	14.6	146.2								146.2	146.3		67
9548	24352.650	14.7	14.0								145.6	15.4		68
64	53.628	14.6	13.9								14.1	15.3		1222
88	55.636	14.6	14.2								14.2	15.1		1225
96	57.636	14.6	14.2								14.4	14.8.7		28
9649	370.585	14.7	14.6								15.1	13.8		1303
55	71.577	14.6	14.6								15.3	13.8		4
61	73.579	14.9?	14.8								15.5	13.8		9
71	74.556	14.6	14.9								15.5	13.7		10
83	76.567	14.6	14.9								15.6	13.6		13
90	77.569	14.6	15.0								15.3	13.6		1321
9712	83.554	14.5	15.2								15.8	13.5		32
58	402.519	14.6	16.2?								146.2	13.7		37
68	403.517	14.6	146.0								146.4	13.8		39
78	404.512	14.6.7	146.4						14.3-4	16.4-2	146.3	13.7		134
83	405.501	14.5	146.2						14.3	16.1	145?	13.8		43
92	406.533	14.5	146.2						14.1	16.1	145?	13.8		44
11633	25381.599								15.5?	146.0	13.9	145.9		45
48	82.596										13.7	145.6		49
90	85.594								15.3?	145.8	13.7	145.7		
11716	88.557										13.7	146.2		1408
742	90.462								15.4-5	16.2-463	13.7	16.0		1411
84	409.490										13.8	14.3		1414
843	414.462								15.8-9?	145.6	13.8	14.3		161
665	417.308								146.4	146.5	14.5	14.4		176
11931	423.514								146.6	16.6	14.5	14.3-2		191
12154	467.336								145.6	145.6	14.5-6	13.9		202
12184	469.214								16.5-6	13.9	16.5?	15.2		227
														238

See Book III
p. 18-23

(reobserved
May 1931)

Plate	Red.	(213)	(W5)	(375)	(65)	(65)	(155)	(4)	(122)	(375)
12165	25469.246							blue 415.8	153.4	
66	69.277					415.10	13.7			
67	69.309					1				
68	69.341									
12229	479.249					16.4?	13.4.5	16.4.5	15.6	
12256	481.264					415.4	13.6.7	415.5	15.5	
286	496.237					15.5-4	13.5	blue		
13037	25717.638			13.8		14.0	416.0	15.7	14.8	13.8
44	722.613			13.9		13.9	416.0	415.9	14.9	13.8
92	71.610			14.0?		14.0.1	415.6	415.4 blue	15.7.6	13.6
105	42.628			14.0				15.8	15.8? blue	14.0
13131	48.587			13.9		14.8	415.8-9	416.0	16.0?	13.9
13256	77.533			14.0?		15.8	415.8	415.6	415.7	13.8
326	99.431			14.1.2		415.7	15.3	415.6	415.7	13.8
378	826.302			13.9		416.0	13.3.2	415.6	415.7	13.8
397	832.307			14.1.2?		415.5	13.3.4	415.5	415.7	14.1
13424	834.313			13.9		415.2	13.3	415.5	415.5	13.9
431	836.278			13.8		415.2	13.3	415.4	415.4	13.8
447	847.272			13.8		416.1	13.7	416.0	416.0	13.8
453	850.280			13.8		415.5	13.8	415.7	415.7	13.9
494	55.258							blue		13.8
								14.0	416.2	14.1
14089	26066			14.1		15.7-8	416.3	416.0	16.2??	13.8
14115	71.551			14.1		15.8-9	416.0	415.8	416.0	13.8
14143	26089.571			13.8		15.3-4	416.0	415.8	416.0	13.8
161	089.591			13.9		14.8				13.9
176	92.570			13.9						13.9
191	93.583			13.8						13.8
202	95.511			13.9		14.5	416.3	416.0	416.3??	13.9
227	97.562			415.5		14.0				13.9
238	98.543			blue						13.8

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cont. from
±142.441

F	J.D	(213)	(W5)	(375)	(65)	(155)	(47)	(122)	(347)	MF
145	26102.538			138					145	1458
252	103.606			138					13.8	55
257	104.611			138					14.4	59
258	105.544			138					13.8	60
276	117.422			13.9	15.2	16.5?	16.4	16.6?	13.9	61
293	118.523			13.9??					14.0	63
303	119.408			"					13.9 15.4	65
304	" 440			"	15.4	16.1			14.8	66
305	" 473			"					13.8	66
306	" 504			"					13.9 14.5	66
307	" 536			"					14.0 14.3	66
308	" 568			"					13.9 14.1	66
309	" 600			"				16.0	14.0 13.7	67
348	123.489			13.9					14.0	67
361	124.467			13.9					14.0 13.8	67
372	125.422			13.9-8	15.6	16.2?	16.0	16.3	14.0 13.9	68
384	130.496								14.0	1470
394	131.388			13.9					14.0 13.9	73
411	144.331			14.0	16.1	15.5?	15.5	15.5	14.1 13.8	73
418	145.362			14.0					14.3	74
427	146.468			13.9	15.8	15.5			13.9	75
440	147.544			13.9					13.9	78
446	148.549			14.3	15.8	14.5	15.6?	15.5	13.9 13.8	79
462	153.500			13.9	16.1	14.0	15.3	16.0?	13.9	148
74	154.425			14.7-8	14.6		15.4-3	15.8	14.2 13.8	1299
87	155.427			13.9			15.2-1	15.9	14.1 13.9 14.0	1356
501	156.429			13.9	16.0	13.8			14.0 13.9	1386
513	158.404			13.9			14.6	15.8	14.0 13.9	1394
528	159.424			13.9					14.0 13.9	1400
539	160.457			13.9	16.5?	13.8?	14.0-1	16.0	13.9	1450

	MF	J.D.	(213)	(WS)	(575)	(65)	(155)	(47)	(122)	(375)
5	4545	26161.450			13.9			14.0	<15.7	13.9
8	552	162.469			14.23 ^{blue}					<15.0 14.2-5.0 blue
4	591	176.368			13.9	<15.8	13.7	13.3	<16.0	13.8-7
8	606	177.395			13.9					13.8
9	617	179.304			13.9 14.0	<16.0	13.9	13.3-2	15.7	13.9-4.0
0	635	180.443			13.9			1	15.2	14.1 13.9
15.4	659	182.430			13.8			13.4	14.8	13.8
1.8	665	183.205			bl. blue					13.9 blue
89	666	" 236			13.9			13.4	14.8-9	14.1 13.8
14.3	667	" 268			13.9					13.8 14.2
14.3	668	" 300			14.0					13.8 14.2
14.1	669	" 332			blue					13.9 14.3
4.0	670	" 364			13.9					13.9 14.3
7	671	" 396			13.9					13.9 14.3
13.8	672	" 428			13.9					14.0 13.9
13.9	686	186.430			15.2					<16.0 14.5
0	14701	188.214			13.8	<15.9	14.3	13.8	14.6-7	13.9
13.9	731	202.599			13.8	<15.5	14.6	14.4	14.2	13.9
13.8	737	204.559			13.8			14.1	14.2-3	13.9-5
3	748	208.568			13.8	15.6-7	15.4	14.6-7	14.2	13.9-4.0
7	757	210.586			13.8			14.6	14.2-1	<15.6 13.9
1	780	214.496			14.0	45.4 blue	15.7-8	14.7-8	14.0-1	14.0 13.8-9
18	795	215.556			13.9			blue	14.6	13.9 <14.5
9	1485-6				13.8					13.8
9	1485-7				13.8					<15.5
213.8	A									
238	12995	23948	15.3	13.0				60f	<15.8 m.e.	
39.40	13568	24731	14.8	<16.0				"	ref	
13.9	13866	24702	14.7-6	16.2				"	<15.6	
139	13943	24730	14.7	13.2				"	<16.0	

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A

J.D. *very*
*low*cont.
I, 134,
II 206
(208)cont.
I 138
(273)cont.
I 134
(277)

(172)

cont.
I 134
(248)

(169)

(293)

(652)

(65)

155

cont.
II 160-161
(29)

(697)

A

734	26123.619	14.6	161	<16.0	46.8 17.0	416.8	16.0	16.3	15.6	15.2	<15.4	13.9	416.0	148.8
738	123.865	14.8-9	16.1				16.1					13.9		149.0
742	124.624	14.7	16.2											9.0
745	125.604	14.7	16.2				16.4					13.8		9.1
750	130.489	14.7	16.4	<16.0	17.0	17.0	16.2-1	16.0	15.0			13.9		9.7
754	130.855	14.7	16.5				16.3			15.8	<15.2			9.0
756	131.580	14.7	16.5				16.3					13.9		9.2
760	131.854	14.6	16.6?				16.3							
763	133.545	14.7	<16.3				16.2-1	16.0	15.0			13.9		
769	145.487	14.7	<16.7				15.2					13.9		46.3
772	145.821	14.7	<16.5	<15.8			15.1			<15.8	out	13.9		5.1
775	146.541	14.6	<16.6		<16.8	16.2	15.3	15.6	15.0			13.8	<15.8	5.6
778	146.820	14.6	<16.7				15.2					13.9 14.0		5.6
781	147.485	14.6	416.8?				15.2-3					13.9 14.0		10.6
784	147.824	14.6	16.7-8?		16.9	16.1	15.2					13.9		10.7
14811	179.469	14.6	<16.8	216.0			15.0	14.9	16.2			13.8		7.6
13	" 526	14.6	<16.7		17.0	15.1	15.0					13.8		7.8
15	" 584	14.6	<16.6				15.1					13.9		7.7
17	" 647	14.6-7	416.7											4.4
19	" 711	14.6	<16.8				15.0					13.9	-15.9	19.0
21	" 774	14.6	<16.8				15.0					13.9		58.0
824	180.492	14.7	<16.7				15.0					14.3		8.4
826	180.543	14.6	<16.7				15.1					14.5		10.4
830	181.496	14.6	<16.7				15.1					13.9		9.0
836	181.669	14.6	<16.7				15.0					13.9		26.5
842	182.476	14.6	<16.7				15.1-0					13.9		13.0
846	182.708	14.6	416.7				15.1					13.9		13.8
851	183.472													13.5
856	186.489	14.6-7	<16.7				15.2					14.0		12.9
863	187.643	14.6-7	<16.7	416.3	17.0	15.3-4	15.1	15.3	16.4			13.9		2.6

A		(212)	(W5)	(208)	(172)	(248)	(149)	(293)	(353)	(65)	155	(47)	(122)	(272)	(277)	(297)
14867	26.188.477					152										45.7
14901	26.213.510	14.6	<16.7	16.1-2		16.78	14.8	<16.3	14			13.8		17.1	16.9-17	
904	214.478	14.6-7	<16.6			16.4						13.9				
910	215.481	14.6	<16.7			16.5						13.8				
913	216.720	14.7	<16.6			16.4						13.9				
917	217.483	14.6	<16.7	15.7	<16.3	14.516	14.6	<16.2	18.0-15.9	16.0		13.8				
923	218.544															

		(399)	(172)	(248)	(72)	(92)	(57)	(46) ²⁰²	(22)	(355)	(W12)
A 6394	16256	<16.5	<16.5					15.5-6	<16.7		
5192	15525	<15.5	-								
5650	15640			15.716			15.8	16.1/16.0	<16.4	12.5	15.6
5657	15646	<16.0	16.0								
2277	14057			<15.5	14.6	14.6	15.8-15.5	<15.26	<15.5	14.3-4	13.6-5
5639	15637			15.8/16.2	14.6-6	13.6	15.9	<15.8	<15.8	12.9	15.7
10686	19917	14.4-0 14.3-8	-	<14.0	14.0	14.0	14.6	<14.2	-	13.0	15.3
10790	20020	15.8	<15.8	15.5	14.0	14.0-13.9	15.8	<16.0	15.8	14.3	15.2
7656	17335	14.5-4	<15.5	15.8.14.4 15.8.14.4	<15.7	15.3-4	15.7-15.5	<14.8	<15.0	13.3-4	13.0
7874	17411	15.4		16.0	17.1	<16.5 17.1	15.7	16.2	15.8-7	13.7	14.9-15.0
7723	17375	14.0-13.9	<16.8	15.8 f.c.	<17.0	<16.8	15.8	16.2	14.2-1	13.6	14.0-2
4411	15168			15.8-9	<16.5	14.4 16.0	15.8	13.2	<15.5	12.8-4	15.2
1907	13759			15.7-8	15.6-7	14.2	15.8-15.5	<15.3	15.2-3	13.2	15.4
5894	15887			<15.5	13.6-5	14.5	15.6-5	<14.0	<13.8	13.8	15.2
8442	17804	<14.8	14.6	15.3-16	<15.0	<15.0	14.0-13.9			13.0	
10469	17260									14.0	13.2
908	18184	<15.0	-	15.4-2	<16.0	15.4-5	14.8-7			15.3	
2658	14156			15.8-16	15.0	14.0-13.9	15.5-6				
13943	24730	14.0	<16.3								
13866	24702	14.9	<16.3								
13568	24431	13.9	<16.2								
12995	23948	<16.5	-								
2679	14167	14.5	13.9								
6456	16317	16.5	<16.8								

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B.

S.P.

No.	J.D.						Reobserved cont I 119		Reobserved see p. 206				4058	
		(355)	(W12)	(348)	(357)	(293)	(72)	(248)	(193)	(233)	(268)	(292)		
536	23911	14.0	15.1-2	15.7	15.3		15.8	15.8	15.5	15.7-15.8	15.5	—	16.0?	1216
5652	23948 23961	13.2-3	15.4	16.0	15.8		16.0	16.0	14.8 15.8	15.0	16.0	15.5	16.0	1216
5761	24020	15.0	13.2	15.5	blu		16.0	14.8	15.9	16.0	16.0	15.3	16.2-16.4	1216
9548	24352	13.7	15.3				16.0	16.0-15.9	16.1 16.2?	16.1	16.3	16.0-15.9		1216
64	53	13.7	15.4								16.0	15.6		122
68	55	13.7-8	15.3-4								15.8	15.7		122
96	57	13.7	15.4				16.0	16.2	16.0	16.1	15.9	16.4		28 130
9649	370	13.6	15.3						16.0	16.0	15.5	—		
55	71	13.5-6	15.3-4				15.8	16.2			15.8	16.0		
61	73	13.5-6	15.3								16.3	16.0		18
71	74	13.6-7	15.3-4				16.0	16.0	16.3	16.3?	15.9	16.0		13
83	76	13.5-6	15.3-4				15.9		15.0		16.0	16.0		132
90	77	13.6	15.3-4						16.0	16.0	15.9?	16.1		3
9712	83	13.5	15.3-4				15.9		15.8	15.8	16.0	15.7		3
58	402	13.5-4	15.4				15.6	16.3	15.5	16.0	15.3-4	16.0		3
68	403	13.5	15.3-4								16.0	16.3?		134
78	404	13.4-3	15.4-3								16.0	—		
83	405	13.2	15.4								15.4	16.0		4
92	406	13.2	15.4-5				15.5	16.0	15.4	15.8-9	14.4-15.0	15.5		4
A 13568 A 13866 A 11633 A 13943	25381	13.6	15.2			13.5-4	13.7	15.3	14.1 14.5 15.6 15.3	15.2-3 15.0 15.8 16.2	15.5	15.9-16.0	16.0	4
48	82	13.8	16.0								15.5	16.0		
90	85	13.8	15.0			13.4			15.5	—	16.0	15.5	15.8	
11716	88	14.0	15.7-15.8			13.5-4	13.8	15.1-2	15.9	16.1	15.5	16.0?	16.0	
742	90	13.8	14.7-14.8				13.8	14.9	15.7	16.0-1	15.9-16.0	15.4	15.9	
84	409	13.6	13.3			12.9	14.1	15.0-15.2	14.7	15.9	15.5?	16.0		
11843	414	13.8	13.0			12.6	14.0	15.3	14.5	15.7	16.2	16.5	15.8	
865	417	13.8	13.0-12.9			12.5	14.1	15.4	14.8	16.0	16.0-1	15.5-6	15.9	
11931	423	13.8	13.2			12.5-4	14.3	15.5?	15.0	15.8	16.0-1	15.5-6	15.9	
12154	467	12.7	14.4-5			12.9-8	15.8	16.1?	16.2	15.8-7	15.6	16.0	16.0-15.9	
12164	469	12.8	14.4-5								15.7	15.6		

Obs	J.D.	(355)	(W12)	(348)	2	(293)	(172)	(248)	(193)	(233)	(268)	(292)	405
12165	25469.	12.9	14.7								15.8	<16.0	
12166	"	12.9	14.4								15.9	<15.5	
12167	"	12.8	14.4								16.0	<16.0	16.1
12168	"	12.8	14.3								<16.0	16.0-15.9?	
12229	479	13.0	14.7			12.7-6	16.2	<16.2	<16.2	16.1	16.1	16.1	46.2
12256	481	13.8	14.8			12.8							
286	496	13.0-1	14.7			13.3 conf p-206			<15.6	<15.6	15.2	<15.5	
13037	25717	12.6	14.8-9								416.1	-	
44	722	13.9	14.9								<15.8	-	
92	741	13.8	15.1								<15.8	15.6-5	
105	42	13.8	15.2								15.9	15.7-8	
13131	48	13.8	15.3								<15.8	15.4-16.0	
13256	77	12.4	15.6								16.1	15.9	
326	99	12.8	15.5-6								15.9	15.7	
378	826	13.8-9	15.4								16.0?	15.6	
397	832	13.8	15.4								<15.9	-	
13424	834										15.6	<15.8	
431	836												
447	847	14.3-4	15.2								15.6	<15.8	
453	850	14.2	15.0								<15.9	-	
494	55												

AX 1179	24325	<	14.5
1244	24356		<14.0
1690	24678		14.3-4
1890	24767		<14.8
1761	24707		<14.5
	24759		<14.5

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		cont from	cont. from	Incomplete long period variables										
		I 138-140	I 142-144	I 119	I 130	I 119	I 115	I 115	(92)	(157)	(328)	(72)		
MF	J.D.	(396)	(397)	(395) (208)	(W12)	(548)	(357)	(46)	(90)	(92)	(157)	(328)	(72)	
13037	25717	16.0	16.1	I 134-136 II 206		off	off	15.6	16.0	13.9	15.7	15.3		
44	722					6.7?	n.e.	13.9		14.1-2	15.9	15.6	19.5-8	
92	741					6.8	6.7	14.8 blue 15.0 blue 15.2 blue		14.8: blue	15.5-7			
13105	742							14.8				15.5	74.0-138	
131	748					6.5-4	6.5-4	15.3-4	15.6	15.2-3	15.6	15.3-2	14.0-15.9	
256	777					6.5-6	6.5-6	13.8-9	15.3	6.5-8	14.4-5	15.9-7?	13.7	
326	799					off	off	15.2-4	15.2	6.5-5	14.7-8 blue	15.6	14.8-9	
378	826	16.0	16.1	16.0?		off	off	15.0-1	14.4?	6.5-4	15.4-5	4.5-6	15.4	
397	832	16.2-3 blue	16.1	15.8		off	off	6.5-4 15.6	blue	15.5	15.5-6 blue	15.4	15.4	
424	834	blue 16.0	16.0			6.5-6	blue 15.0	15.0 blue	14.2	15.1	15.0	6.5-6	15.4 blue	
431	836	1				6.5-0	—	1	4	1				
447	847	16.5?	16.2	16.0		6.5-5	6.5-3	15.0	14.8	16.0	16.0	16.1	15.4-5	
453	850	16.5?	16.0			6.5-2	blue	15.0-14.8 15.0	15.0-14.9	16.0	16.12			
494	855													
14089	26066	13.9	16.9	13.5	15.5	15.4	15.8	15.8	15.0	15.9-8	16.9	16.0	15.2-5	
14115	71	14.0	16.3	13.3	15.3-2	15.3	14.8	15.8-9 blue	14.8-7	15.4-3	15.6	15.4-4	15.3	
14143	89			13.1-0	15.3	14.8	blue 15.0	15.5-6	14.7	14.0-15.9	15.7	16.1	14.0-15.9 15.4-5	
14161	91	15.3	16.5?	13.1	15.0			15.5-4		14.2	16.2		14.2-3	
76	92							15.5-5					14.0-13.9	
191	93							15.4				14.5-4	14.2-3	
202	95	15.6	16.6	13.0	14.8-9	14.4-3	6.5-7	15.9	14.7	13.8-7	16.0-1	16.2?	13.7	
227	97							15.6				blue	13.7-8	
238	98							blue						
245	102							15.5		13.7	15.8?	blue	13.8-9?	
252	103							15.5						
257	104							15.5		13.6-5	15.8	15.2-3?	13.8	
258	105							14.5				blue	13.8	
276	117	16.3	16.3	13.3	13.2-3	15.1-2	6.5-7	13.4-5	15.3-2	14.0-5	15.4	16.4	13.7-6	
293	118			13.4	13.2-3			13.8-9				blue		
303	119							14.0						

MP	J.D.	(396)	(397)	(398)	(412)	(348)	(357)	(46)	(90)	(92)	(157)	(628)	(73)
14304	26119.440		15	13.3	13.3			14.0-1	15.4	14		blue	13.9
305	"									13.9	15.3		13.8
306	"												13.9
307	"												13.8
308	"							14.0-2	15.4				13.8-9
309	"												14.0
348	123			13.0	13.3			15.3					
361	124					blue-214.5	15.5					16.0	13.8
372	125	16.5	16.3	13.3	12.8	15.4	15.7	15.6	15.4	14.0	15.0		
384	130												
394	131			13.3	12.9-13.0	blue	blue						
411	144	15.8	15.9	13.5	13.0	15.7	blue	15.8	15.6	15.4	14.3-4	15.6	14.0-1
418	145							15.8				15.2	14.1
427	146			13.7	13.0	16.0	15.8	15.6	15.5			15.8	14.2-3
440	147							15.8					
446	148							14.5		15.6	14.3	15.6	14.4
462	153			14.1-2	13.2-3	15.5	15.5	15.8-7	15.6			16.0	14.2-3
74	154	16.1	15.9					15.6		15.9-16.0	14.4-5	16.0	
87	155							15.8				16.0	14.2
501	156			14.0	13.3			15.6				15.5	
513	158							15.9	15.6	16.0	14.3	15.5	14.3
528	159					15.4	15.7						
539	160			14.0	13.4-5			15.8				15.7	14.8
14545	26161							15.9-16.0		16.1	14.1		
552	162			13.9	13.5			15.5				15.4	14.5
571	176	15.7	15.7	14.2	13.8-9	15.6	-	15.5-6	15.8	15.8	14.6-7	15.5	14.8
606	177					15.7	-	15.6-7					
617	179							15.4	15.5	15.5	14.6-8	15.2	15.0
635	180			13.9	14.2			15.6				15.3	15.1
659	182							15.2		15.8	15.3-4	15.2	15.0

MF	J.D.	(396)	(397)	(398)	(412)	(397)	(46)	(90)	(92)	(157)	(528)	(72)
665	26183										15	
666												
667												
668		116.1	116.1									
669		1										
670												
671												
672						415.6 -	415.4	415.6				
686	186			14.0	14.6		15.2		15.6	15.5	15.3	15.0
14701	188						13.42-1	415.6			15.3-4	15.3
731	202	115.6 blue	115.6	14.0139	15.0	115.4 -	13.6	115.0	115.4	15.6.2 blue	115.6	115.6
737	204						14.0	blue	415.6		15.5	15.5
748	208			13.7	15.0		15.5	15.1	15.4	115.4	15.5	15.4
757	210	115.7 blue	115.7	13.45	15.12		15.8	blue			15.8	15.3-4
780	214			13.2	15.2	115.2 -	15.7-6	415.6			115.4	115.4
795	215			15.2 blue	15.2				415.5	115.5		
14856	26239		15.1-2		15.5		15.5		115.5	115.5	115.0	115.0
14857	26239		15.3-2.1		15.4		115.4		115.5	115.5	115.3	115.3
11324	20710	14.1	15.5				13.7-6		14.1	15.2		14.6-7
11334	20719	14.7 blue	15.6				15.0	115.6	13.9	14.7-6		14.6-5
11347	20727	13.240	15.4				15.6		13.7	14.5		
11415	20777	007	16.5				14.5-6		007	15.5		
11481												
11493	21064		115.5				12.5					
11498	21065						12.9	115.6	13.8	15.7		
11503	21067		116.0				12.2	115.6	13.8	15.7		
11516	21073						13.0-12.9	115.6	13.7	15.8		
11518	21077		16.7	007	15.6		13.5		13.8	15.8		

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[illegible]

AX J.D. (72) (372) (293)

AX 608	23959	13.8-9		413.7
640	23964	413.	<13.8	413.5
658	23974	13.8-9		413.5
712	23985		vis?	
1067	24290	14.4-5	13.8-7	vis: 413.7?
1098	24299	14.4-5 very clear	13.8	blue
1577	24626	414.3	414.0	12.0
1617	24646	14.6? vis		13.0
649				
1649	24654	14.6 vis	<14.0	13.3
1671	24669	vis? blue		blue
1636	24739	14.4?		
1862	759		13.8-9	413.8
1890	767		13.8	414.0

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MF	J.D.	cont. from I 130		cont. from I 130		uncompleted long period variable		cont. from I 130		see p 198		see p 198		Cont I 134	
		(374)	(51)	(373)	(52)	(338)	(398)	(208)	(293)	(553)	(172)	(248)	(193)	(233)	(69)
3037	25717	<15.8	oof	14.7	14.0-13.9				14.7	<15.8	13.7-6	15.7-8	16.1	15.1-15.0	14.30
44	722	<15.8	15.8.2. ne	14.3-2	14.2-3				13.9	<15.8	13.7-8	<15.8	15.7-8	15.8	15.8
92	741	<15.5	<15.0 n.e	14.3	14.5						14.6-7	vis. blue			vis. blue
105	742	<15.4	<15.0 n.e						13.8	<15.0	14.7	<15.5	14.5-6	<16.0	blue
131	748	<15.8	oof	14.6-7	15.3 14.3-7				14.6	<15.5	14.8	15.8-9	14.5	<16.0	15.5
256	777	<15.6	<15.6	15.5-4	<15.7				13.8	blue vis?	15.6	blue 15.6	<15.5	<15.8	15.5
326	799	<15.5	oof	15.8?	<15.8				14.0	14.8. vis?	<16.0	<15.8	<15.8	<15.8	blue
378	826	<15.0	oof					16.0?	13.7	blue	<15.5	<15.5	<15.5	<15.5	blue
397	832	<14.8	oof	<15.6	15.6-5			<15.8	13.3	blue	<15.4	<15.4	<15.6	<15.6	15.3
424	834	vis. blue?	oof	<15.7	15.1				13.0	blue	<14		<15.6	<15.6	15.3
431	836	<15.2	<15.2	<15.2	15.0				12.9	blue	<14.5	<14.5			15.3
447	847	15.4	<15.5	<16.2	14.3			<16.0	12.3	<15.5	<16.0	<16.0	<16.0	<16.0	15.6
455	850	15.2	<15.3	<15.6	13.9-14.0				11.9	15.5			<15.7	<15.7	15.3
494	855								11.9	blue	<15.0	<15.0			15.3
14089	26066	15.3	<16.0	15.6-8	15.4			16.1-2?	<16.2	<16.2	14.8	<16.2	14.5	<16.1	15.4
115	71	15.2	<15.5	15.3-4	15.3-2			<15.5	<15.5	<15.5	15.1	<15.2	14.4-8	<16.1	15.3
143	89	15.3	<15.5	15					<16.0	<16.0	15.6	<16.0	15.4	<16.0	15.8
161	91	15		16.1-2	15.8			<16.3	<16.2	16.3?	15.6	<16.0	15.3		16.0
176	92														blue
191	93														16.1
202	95	15.3	<15.8	16.1-2	16.0			<16.3	<16.2	16.3?	15.5	<16.1	15.8	<16.1	16.0-15.9
227	97														15.5
238	98														vis. blue
245	102														15.3-4
252	103														15.6
257	104	15.3	<15.8	<16.2	16.1			<16.3	16.3	16.3?	16.3	<16.2	16.2	<16.2	16.0
258	105														16.3
276	117	15.6	<15.8	16.3-4	16.3-2			<16.4	16.2-2	16.0	<16.5	<16.4	<16.3	<16.3	16.6
293	118														<16.0

1933phae.proj.2530B	134	169	MF	J.D.	(374)	(51)	(373)	(372)	(293)	(353)	(172)	(248)	(193)	(233)	(169)
016.0	14	303	26119	156	<15.6				416.0	15.6					16.4
215.8		304	"								416.4	416.4			16.3
215.5		305	"												416.6
15.1		306	"												16.3.2
15.1		307	"												16.0.15.9
15.1		308	"												16.8.2
15.1		309	"												16.2
15.1		348	123												16.1
15.1		361	124												16.1.5.4
15.1		372	125	15.7	415.8	416.0	16.2?	16.2?	15.5		416.0	416.0	416.2	-	16.5
15.1		384	130												
15.1		394	131												
15.1		411	144			415.5	-	15.5	15.2?						15.4.3
15.1		418	145	15.9/6	415.8	416.0	15.6	15.5	14.9.8		16.5?	416.4	416.0	416.0	15.5.4
15.1		427	146	416.0	415.8	415.7	15.5								15.7?
15.1		440	147												16.0?
15.1		446	148			415.2	-					415.5	415.5		15.6.7
15.1		462	153					15.0	15.0						15.8/60
16.0		474	154	415.5	415.5	415.6	15.4				16.5?	416.4	416.0	-	16.0.1.2
16.1		487	155					14.9	15.2						15.6.7
16.1		501	156	415.5	-	415.5	15.2								15.3
16.1		513	158					14.9	15.4		416.2	416.2			16.0.15.9
15.5		528	159			416.0	15.1								15.8
15.5		539	160	415.5	-	415.7	14.8	14.9	15.5				416.0	416.0	15.2
15.5		545	161								16.1	416.0			15.5
15.5		552	162												16.1
16.1		591	176	415.5	-	415.3	13.7	14.5	415.4		415.5	-	415.8	-	16.1
16.3		606	177												15.2.3
16.3		617	179			415.3	13.7						415.8	15.9	15.8.16.1
16.3		635	180	415.5	-			14.6	15.7?		416.0	-			15.2

MF	J.D.	(374)	(51)	(373)	(372)	(208)	(293)	(353)	(172)	(248)	(193)	(233)	(169)	
659	26182			<15.6	13.4.5						<15.8	15.9	15.1	906
665	26183								<15.5	<15.5			blu	765
666	"												15.4	1679
667	"												15.5	772
668	"												15.2	787
669	"												blu	844
670	"												15.3	639
671	"												15.2	519
672	"												15.3	267
686	186	<15.4	-	<15.5	13.5.4		14.5	<15.5			45.8	15.5-6	15.5-6	64
701	188			<15.5	13.7				<15.5	blu?	<15.5	15.6	15.6.8	56
731	202			<15.2	13.9		14.3	blu	<15.0	14.9		15.2	blu	
737	204	<15.0	-	<15.5	13.8				<15.5	14.8			<15.6	
748	208	<15.0	blu	<15.2	13.9.8		14.6	<15.3	<15.2	14.9	<15.8	15.0	15.8.7	
757	210			<15.4	14.2.3				<15.4	14.7	15.8?	15.2	<16.0	
780	214	<14.8	-	<15.4	14.6.7	16.0-15.9			<15.4	14.8	15.6	15.2	<15.5	
795	215	<14.0												
14856	26239?	<14.2	-	<15.0	15.6.7?						14.3	15.6		
14857	26239	<14.5	-	<15.3	15.6.5	15.7-6.5	13.3.4	blu	<15.0	14.3				

A.	J.D.	(193)	(233)
9061	18184	15.87	15.2
7656	17335	15.0	15.2
16790	20020	14.8	15.5
7723	17375	14.54	15.7-8
7874	17411	15.4	16.5
8442	17804	15.0	14.5
6394	16256	15.34	16.4
5192	15525	15.0	15.3
2679	14167	16.3	16.5
6456	16317	16.8	16.0
5675	15646	15.5	16.5-6

210

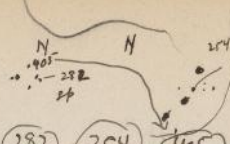
encl.
II
160-161

I 126-128

I 134-6

I 138-40

268

encl.
I 156-60
199encl.
I 146-149

I 148-161

	J.D.	(29)	(115)	(204)	(192)	(268)	(292)	(282)	(254)	(405)	(295)	(178)	(179)	(176)	M.T.
13037	25717	13.8	15.4	14.8	16.1-2	15.5 16.1		45.8	14.6						143
44	722	13.8	15.5	14.7	16.0			45.5 blue	14.8						
92	741	13.8	1		45.8			45.3	14.5-4						
13105	742	13.8			15.8?			blue	14.5						
131	748	13.8	15.7	14.3	15.9-16.0			46.0	14.4-3						
256	777	13.8	16.3-4	15.4-3	15.0-14.9			15.6	13.8						
326	799		16.2	16.0 16.1?	15.4-5			15.2-4	14.1					15.7	
378	826		16.0	16.0	16.0? blue			15.8? blue	14.7			14.8	13.6	13.5-9	
397	832		16.0	16.0	15.8			15.6	14.7			13.7-8	13.5		
424	834		15.5	-	16.1-2			blue	15.0			15.8 15.5	14.3	13.5	
431	836		16.0		15.4			vis?	15.0			vis?	15.5	13.8	
447	847		16.0	16.0	16.3			16.0	15.0			15.0?	15.6	13.8-7	13.5
453	850		15.8	16.0	16.2?			15.5	15.0-1			vis.	15.6	14.2	
494	855		15.7	15.5	15.4 blue							blue	13.4	14.4	13.8
14089	26066	13.8	15.3	15.2-1	15.9-8	15.5	16.1	16.3	14.9-15.0	15.8	15.5	12.7	15.8	15.9	
115	71	13.8	15.4	15.3	16.0	15.0-1	15.7	15.8	15.1-2	15.7	15.5	12.7	15.5	15.8	
143	89	13.8	15.9	15.8	16.4	16.2	16.0	16.0	14.8	blue?	15.6	13.0-1	15.5-4	15.7	
161	91				16.4	15.0	16.0	16.0	14.5	15.8?	16				
176	92	13.8				15.4	15.6	16.0	14.5	15.8?					145
191	93	13.8	15.9	16.0		16.0	16.2	16.0?	14.4	15.7					
202	95	13.7	15.7	15.8	16.6?	15.7	16.0	16.3	14.4	16.4		13.2-3	15.3	15.8	
227	97					16.1	16.0			blue					
238	98	13.7	15.8	15.8		14.7 blue	16.0	15.8	14.3	blue					
245	102	13.7				15.0	15.5-6			15.7		13.6	15.1	15.5	14
252	103	13.7				15.8	15.7?			15.7	15.8	16.0			
257	104	13.7	16.4	16.1	16.6	16.2	15.4-5	16.0	14.2	16.4					
258	105	15.5				16.1	15.6-7	16.0		15.8			14.8		
276	117	13.7	16.2	16.4?	16.5	16.3	16.1	16.5?	13.9-9	15.7	15.9	13.8	14.4	16.0	
293	118	13.7				15.5	-			15.7					
303	119	13.8				16.0	1			15.7					

				(115)	(204)	(192)	(268)	(292)	(282)	(254)	(485)	(298)	(178)	(179)	(119)	(10)	(176)
176	MF	J.D.	(29)														
	14304	26119	13.7				16.5	15.8	416.0	14.2		15.7			13.9		
	305	"	13.7				416.2	150.1				15.8					
	306	"	13.7				415.5	15.2	15			Ren 15.8?					
	307	"	13.7				415.5	15.5-6				15.7					
	308	"	13.7				15.6-7	15.6				15.8					
	309	"	13.7				15.5	15.7				15.8? blen					
15.7	348	123	13.7				blen					15.8? blen					
13.5-9	361	124	13.7				415.6					blen					
13.5	372	125	13.7	16.6	416.5		15.7	16.1	139	139		Ren 15.8				14.7	
	384	130					15.5	15.8-9									
	394	131	13.7														
3.5	411	144	13.8				415.8	15.7	45.5	14.0		15.7					415.5
	418	145	13.7	15.5	416.5		15.9	15.6-7	415.5	14.1		416.3				15.3	
3.8	427	146	13.7				15.6	15.8	415.4	14.3		15.8					415.5
	440	147	13.7				15.7	415.8				pt. blen					
15.9	446	148	13.7				415.5	415.17				Ren 15.8?					
15.8	462	153	13.7				15.7	415.8	415.5	14.2		15.8			14.7	15.5	
15.7	74	154	13.7	416.0	-	16.2	16.1	416.0				pt. def. in	415.6				415.7
	87	155	13.7			16.3	15.6	15.7	416.0	14.6	160.1	15.7					
	14501	156	13.7			16.2	15.6?	15.9?				blen					
	513	158	13.7	416.0	-		16.1	15.7				15.8			14.8		
15.8	528	159	13.7				15.9?	15.9?	416.0	14.5		15.8				no 15.8?	
	539	160	13.7			16.0	15.2	415.8				Ren 15.8					415.7
15.5	14545	26161	13.8				416.0	15.7				15.8	415.6	no?			
	552	162	13.7				415.5	15.5	blen	44.5		Ren 15.8?			15.0	415.6	
	591	176	13.7	416.0	-		415.9	15.4	16.1	14.67		15.7			14.6		415.6
	606	177	13.7				14.9	15.6				15.7					
16.0	617	179	13.7				15.8?	416.0				15.8					
	635	180	13.7	416.0	16.5?	416.0	416.0	16.1	16.0	14.7		416.0?					415.7
	659	182	13.7				416.0	416.0				15.8?					

F	J.D.	(29)	(185)	(192)	(268)	(292)	(282)	(254)	(244)	(295)	(178)	(179)	(W19)	(10)	(176)	A14
6665	26183	13.7			blue					blue						
666	"	13.7			15.5 vis blue					blue						
667	"	13.7			15.3 415.5					15.8						
668	"	13.7			<15.5 -					15.8?						
669	"	13.7			<15.5 -					15.8						
670	"	13.7			15.8-9 415.6					blue						
671	"	13.7			15.8? 415.5					15.8						
672	"	13.7			15.8 415.8					15.8						
686	186	13.7			blue					15.8						
701	188	<15.5	15.8?	415.5	<15.5	blue	15.0			15.8					45.4	
731	202	13.7			415.5 15.6					blue blue vis					10.7?	
737	204	13.7	415.4	415.4	15.2 15.4	15.6?	15.2-3			416.3						
748	208	13.7	15.4-5	415.6	416.0	15.4?	415.4			15.8 blue					15.3-9	
757	210	13.8			16.5	15.8	415.8			15.7						
780	214	13.7	15.4	415.5	16.5	15.5-6	415.5	15.5	15.3	15.7					14.6	
795	215	13.7														
14856	26238	13.7	14.8	415.6	15.5-4	<15.4 -	blue	14.9		blue						
14857	26239	13.7			15.5	blue	vis.	14.9		vis. vis. vis.	14.6	416.5	14.8			

A12995		(268)	(292)													
13568	2	16.5	15.4	16.1	15.3	14.0	16.0									
13866	24702672	3	16.7	16.8	16.8	16.8	16.5									
13943	730.581	16.5	15.4-5	416.5	416.0	14.9	15.9									
6456		16.5	15.3	16.3	16.0	14.8	16.5									
2679		15.8	16.9	417.1	416.5	14.9	17.0									
7723		16.4	16.9	15.4	14.6	13.8	16.67									
7694	175				14.9	15.0										
2667					14.9	15.0										
5635					14.9	15.0										
6313					14.9	15.0										
7442					14.9	15.0										
8063					14.9	15.0										

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info. use.

A	J.D.	(90)	(268)	(292)	(282)	(254)	(405)	(295)	(178)	(179)	(W19)	(10)	(176)	(60)
A14734	26123.617	17.0			16.5	13.8		15.8-9	16.2	15.8	13.9			13.8
738	123.855	16.9	16.5-7	16.5	16.5	14.5	16.5	15.8						13.9
742	124		15.0-14.9	16.7-8	16.7	16.9		15						
745	125.604	16.9	14.9	16.4				15.8	16.5?	16.0			15.5	13.9
750	130.499	16.9	16.3	16.7-8	16.6	16.9		15.7-6	16.5	16.5?	14.1-2			13.8
754	130.855	16.9	16.0-1	17.0	16.9?	14.0								
756	131.561		16.0-1	17.0	16.9?	14.0		15.8						13.9
760	131.854		16.5-6	16.7-6	16.5	16.8		16.4-7-8						14.2
763	133.545	16.9	16.6	16.7	16.5	14.5		15.8-7						13.9
769	145.487		14.8	16.8	16.8?	14.5		16.8						13.9
772	145.821	16.8	16.1	16.3-4	16.5	14.4		16.3						13.9
775	146.541		16.3	16.8	16.5	14.5		15.8-7	16.5	16.0	14.6			14.0
778	146.820		16.0	16.3-4	16.5	14.8		15.7						14.0
781	147.485		16.5	16.8		14.9		15.8						13.9
784	147.824	16.7	14.9	16.3		15.3		16.0						13.9
14811	179.469	16.8	15.5	16.8		16.2		15.8	16.3	14.8	14.8			13.9
13	" 526		15.9-16.0	16.7	16.4			15.8				16.2		13.9
15	" 584		16.3	16.7	16.5	14.9		15.9-16.0						14.0
17	" 647			16.6-7										
19	" 711		16.3	16.6-7				15.8						13.9
21	" 774		16.5	15.5				15.8-7						13.9
824	180.492	16.8	16.0	16.5	16.5-4	14.9		15.8						13.9
826	180.543		14.8	16.6		14.8		15.8						13.9
830	181.496		16.5-4	16.6				15.7						13.9
836	181.669		15.2-3	16.6	16.3	14.7		16.6						15.3
842	182.476		16.1	16.6				15.8-7						13.9
846	182.708		16.4-5	16.7	16.3	14.5		15.8	16.3	14.7	14.9			13.9
851	183.472			15.5										
856	186.489	16.8	15.6	15.5				17.0?						15.8-7
863	187.648		15.4	16.4-5	15.8	14.5		15.7	16.0	14.8	14.9	16.6		13.9
867	188.477													

J.D.	(192)	(268)	(292)	(282)	(254)	(295)	(178)	(179)	(119)	(10)	(176)	(60)
901	26 213 510	16.6	16.1-2 16.7	16.7 16.1-2	15.3	14.6 ^{mp} 14.8 ^{mp}	17.0	16.0	15.2	14.8	16.5 ^{16.5?}	13.9
904	214 478		15.0	16.4	15.3		15.8					13.9
910	215 481	16.5	16.4	16.0-15.9	15.2	15.0 ^{mp} 15.1 ^{mp}	15.8					16.5
913	216 720		16.1	16.7			15.8				16.5	13.9
917	217 483	16.3	15.5	15.4	14.9-15.0	14.9-15.0 ^{mp} 14.9 ^{mp}	15.8		14.8		14.2	13.9
923	218 544							15.5.6				

on mar 266: from 13044, 13431, 447

(349)

A 6313	16184	14.5
5636	15631	15.8
9063	18185	14.15.0?
8442	17864	14.3
5626	15632	15.7
2667	14162	15.8
5565	15618	14.5?
5566	15618	14.7

MF	J.D.	cont. I 112-3 (367)	cont. I 158-161 (43)	I 146-147 (266)	I 158 -161 (265)	I 158 -161 (217)	I 166-167 (W28)	(37)	(W7)	I 119-121 (197)	I 166-167 (399)	I 119 (349)	(379)	(38)	(41)
13037	25717									11.6-5	15.6			12.0	T
44	722									11.5	15.6			11.9	
92	41									11.7	14.9			11.8	
105	42									11.7	15.0			12.0	
131	448									11.7-6	15.0			12.0	
256	777									11.6-5	15.6			12.5	
326	799									12.5-4	15.5			12.0	
378	826			14.0	15.3-4	16.0?				11.6	15.6			12.0	
397	832			14.5?	15.2	15.4				11.6	15.7 ^{sup?}			12.0-11.9	
424	834			14.0						11.6	15.7			11.9	
431	836			14.1	14.8	15.0?				11.6	15.6			12.0	
447	847			14.0-13.9	14.7	14.0				11.6-5	15.5			12.1	
455	850			14.1	15.0-14.9	14.8-3				11.6	15.4			12.8-9	
494	855			14.1	15.0?	14.3?				11.6-7	15.3-2			12.0	
													(379)		
14089	26066	14.2	13.8	14.1	15.3	13.8-7	13.8	15.2 ^{then}		11.6	16.4?	15.2	16.0	11.9-8	15.5
115	71	14.3	13.8-7	14.1	15.4	13.9-14.0	14.3	11.7		11.6	14.6	14.7-8		11.9	16.0
143	89	14.8	13.8	14.6-7	15.7	14.5	15.2-4	11.7		11.7	16.0	13.8	15.8	11.9	
161	91	14.9-15.0	13.7	14.9				12.3		12.3	1	13.8		12.0	15.4
176	92			14.9				11.7		11.7				11.9	
191	93			14.1			14.7-6	11.6-7		11.6-7				11.8	
202	95	15.4	13.1	14.1	15.8-9	14.7	15.4	14.6-5		11.6		13.9	16.0	11.9	
227	97			14.1				11.7		11.7				13.1	
238	98			14.1				11.6-7		11.6-7				11.9	
245	102			14.0-1				11.6		11.6	15.8			11.8	
252	103			14.1 ^{then}				11.6-7		11.6-7				11.9	
257	104	15.8-9	12.3	14.0	15.9	15.5	15.7?	13.0		13.0		13.8	15.5?	11.9	15.3
258	105	15.6	12.0-13.9	14.1				13.1-2		13.1-2				11.9	
276	117	16.2?	12.2-1	14.2-1	16.2	16.0	16.0-1	11.6		11.6	16.5	14.0	16.0	12.0	
293	118			14.8	16.1?			11.7		11.7				11.9	

216

F	J.D.	(367)	(43)	(266)	(265)	(217)	(W28)	(37)	(197)	(399)	(349)	(379)	(38)	(61)
14303	26119.408		11.8	14.1					11.8				12.1	
304	" 440			14.0					12.0	416.3	141		12.0	
305	" 473		11.8	14.1					12.0-1				11.9	15.0
306	" 504			14.5					12.6				11.9	
307	" 536			148.9					13.1				12.6-1	
308	" 568		↑	14.6	416.0	Run			12.8				11.9	
309	" 600		11.8	14.43					12.3	416.0			11.9	
348	123.489		11.8	Run					11.6-7				11.9	
361	124.467			Run 65.					11.6				12.0	
372	125.422	416.0	12.2	14.1	416.0	11.4?	416.0		11.7				12.0	
384	130.496												12.0-11.9	
394	131.388			14.7 ^{phon}					11.6				13.1	
411	144.331	415.5	13.0	Run 65.					11.6				12.0	
418	145.362		12.8	14.1	416.0	416.0	415.8		11.7	416.0	15.2	15.8	12.0	14.2
427	146.468			14.1					11.6				11.8	
440	147.544			Run 65					13.2				11.9	
446	148.549		13.2	14.5 ^{phon}			415.4 ^{phon}		11.7				11.8	14.4
462	153.100	415.8	13.5-6	14.1					11.7				12.2	
474	154.425			14.0	416.0	416.0			11.6	416.0?	15.6		11.8	14.6
487	155.427	415.5	13.8-7	14.0					11.8				11.9	
501	156.429			15.1					11.7				11.8	
513	158.404			14.1					11.7-8	415.5		15.3	11.7	
528	159.424			14.1					11.7		160		13.4	
539	160.457			14.4 ²⁻¹	416.0	416.0	415.6		11.7	415.5			11.8	
545	161.450	415.5	13.5	14.1			415.5		11.6				11.9	14.6
552	162.469			14.1					13.1			15.1	12.1	
591	176.368	415.6	13.2-1	14.0			415.8		11.6	415.5			13.4-5	
606	177.395			14.1					12.9-9				11.9	
617	179.304	415.5	12.6	15.1	416.0	416.0	415.5		12.8		160?	14.5-4	11.9	15.2
635	180.443			14.1					11.8	415.8			11.9	

MF	I.D.	(367)	(43)	(266)	(265)	(217)	(W28)	(37)	(197)	(594)	(349)	(379)	(38)	(61)
14659	26182.430	115.5	12.8	14.8					11.7				12.0	
665	183.205			blu ff?					11.7				118.7	
666	" .236			14.1					11.6				11.8	
667	" .268			14.1					11.7				11.9	
668	" .300			blu 1-2 14.3-4?					11.6				12.0	
669	" .332			14.5?					11.7-8				12.0	
670	" .364			14.8					11.8				11.9	
671	" .396			14.2					11.7				11.9	
672	" .428	115.4	12.6	14.1					11.8		116.0		12.1	
686	186.430	115.5	12.7	14.1-0					11.6	115.5		14.2	12.0	15.3
701	188.214	115.5	12.3	14.1					11.7				12.0	15.5
731	202.210	115.4	12.3	15.1			115.5		11.8	blu		13.9	12.1	
737	204.288			14.1	115.4	15.8?			11.7	115.5			12.8	
748	208.568	115.0	12.1	14.1					11.7				12.0	15.3
757	210.316	115.0	12.4	14.1-2	115.5	—			11.6		115.8		12.0-11.9	
780	214.226	blu	12.6	14.1			115.5		11.6	4roblu		14.5	12.0	
795	215.476	blu	12.6-7	blu ff?					11.7				11.8-7	
14856	238	115?	13.3	14.1	blu	blu		115.3	11.8	115.5		14.8-15.0	13.0	15.2
857	239	115?	13.6	14.1	blu	13.9	115.3		11.6-5		115.6		11.8	
		1146-147												
A	I.D.	(266)					all 438 off		(197)	(407)	(38)			
14734	26123.349	14.1							12.3	13.3	12.1			
14738	23.594	14.2							12.5-4	13.5	11.9			
14742	24.356													
748	25.333	14.0							11.8	13.0	11.9			
750	130.277	14.1							12.5	13.2	11.9			
754	130.584								12.3	13.0	12.2			
756	131.289	14.1							11.8	13.0	13.3-4			
760	131.576	14.1							12.3	12.9	12.5			
763	133.274	14.1							11.8	13.0	11.8			
769	148.217	14.1							11.8	13.0	12.0			
772	145.550	14.2							11.6		11.9			

A	J.D.	(266)	265	217	(197)	(167)	(38)
14775	26146.270	14.2			11.6	13.0	12.0
778	146.549	15.1			11.8	13.3	12.0
781	147.215	14.5			11.6	12.9	12.0
784	147.552	14.1			13.2	12.9	12.2
14811	26179.199	14.1			11.8	13.3	11.9
813	256	14.3-4			13.2	12.9	11.9
815	314	15.1-2			12.8	13.0	11.9
817	376	14.5-4			12.0		11.9
819	440	14.1-2			11.8	12.9	11.9
821	504	14.1			11.8	12.9	11.9
14824	180.212	14.1-2			13.2	12.8	11.9
826	272	14.1			13.4	12.9	11.9
830	181.227	14.1			12.4	12.9	12.2
836	181.339	14.1			11.8-12.0	13.0	11.9
842	182.206	14.0-1			11.8-7	12.9	12.1
846	182.437	15.0			11.8	12.3	11.9
851	183.202						
856	186.219	14.1			11.7	13.3	11.9
863	187.373	15.0			11.6	13.1	12.3
867	188.203	14.1			12.3	12.9	12.0
14901	213.240	14.0-1			12.2	13.0	12.0
904	214.208	14.1			11.9	12.9	11.9
910	215.211	15.0-1			12.1		11.9
913	216.448	15.0-1			12.2	12.8	11.9-8
917	217.213	14.0			12.1	12.3	12.0
923	218.274	15.0			12.1	12.3	12.0
15347	219.469		15.4	14.9-2	13.0	13.4-5	

AX	1.b.	(42)	N7	MF	1.b.	MT (265)	217	(375)	(97)	(399)	(849)	(379)	(382)	(61)
504	23909	Run ft?	414.5	15395	26460	(14.6)	<16.0 th	13.8	11.6	<16.0	15.9/6.4	15.9	11.9	
974	23900	Run ft.		423	72	15.8	15.0	13.8-9	11.6-5		15.8 from 161	12.0		
98	23959	13.6	44.0	438	73	15.5	15.4	13.8	11.6					
680	23964	12.8 13.5	452	75				13.8	11.6	<15.8	16.1 from	12.0		
158	23974	12.8 blue	474	79				13.8	11.6		16.5	12.7		
712	23988	12.5	493	81		15.5	15.4	13.8	11.6-5		16.0	12.2?		
762	24019	13.9-12.8	510	83		15.3	15	14.6-7	12.5-6		15.9	15.9?	12.2	
805	24035	12.8 blue	515	84				13.8	12.3		15.9	12.0	14.8-7	
1067	24290	13.5	537	86		15.3	15.6	13.8	11.5	<15.8	15.9	12.0		
1098	299	blue	539	89				13.8	11.5		15.8	12.0-11.9		
1274	374	13.7	553	901		15.4	16.0	13.8	11.6		15.3	15.9	12.0	
1307	402	12.0-11.9	588	504		15.4	16.0	16.0-7	11.5	<16.0	15.2	12.1	15.2-3	
1577	626	13.5	15735	15544.434				13.8						
1617	646	11.9	133	16056	595.309			14.7-5						
1649	654	12.3	15.0	16189	26801.619			13.8-9						
1671	669	13.0-12.8	13.2	16896	867.518			13.8						
1690	711	13.6	15.0	17201				13.9						
1775	739	12.3	14.5					13.8						
1836	759	13.5-6	13.6											
1865	818	13.6	44.5											
1890	25393	12.8-2												
2472	25412	Run ft	13.9											
2505	25419	15	44.5											
2545	25442	13.6-5	44.5											
2612	25449	13.7	44.5											
2672	25469	12.4-3	44.5											
2737	25478	12.0-11.9	44.5											
2776	25486	12.3	44.5											
2893	25507	Run												

220

W7

B 19327

54517

215.0

54549 26181.436 15.0?

54557 182.500 15.0?

54568 183.456 15.0?

54589 188.461 14.7?

54600 189.464 214.1

54612 202.311 114.8?

54634 212.330 13.5

54668 232.325 214.7

54706 243.293 214.8

54617 204.359 214.8

H. V. 4066 17.58:21 -43°52'.1 14.0 14.1 Cepheid H.B.852

Dec. 18, 1923. - 257 verified - quadrilateral region

112 to get map 1 per. June 1960

257 done

1933phae.proj.25808