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Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4

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KG
11365
970

Observing Book.

E.F. Leland.

No 4

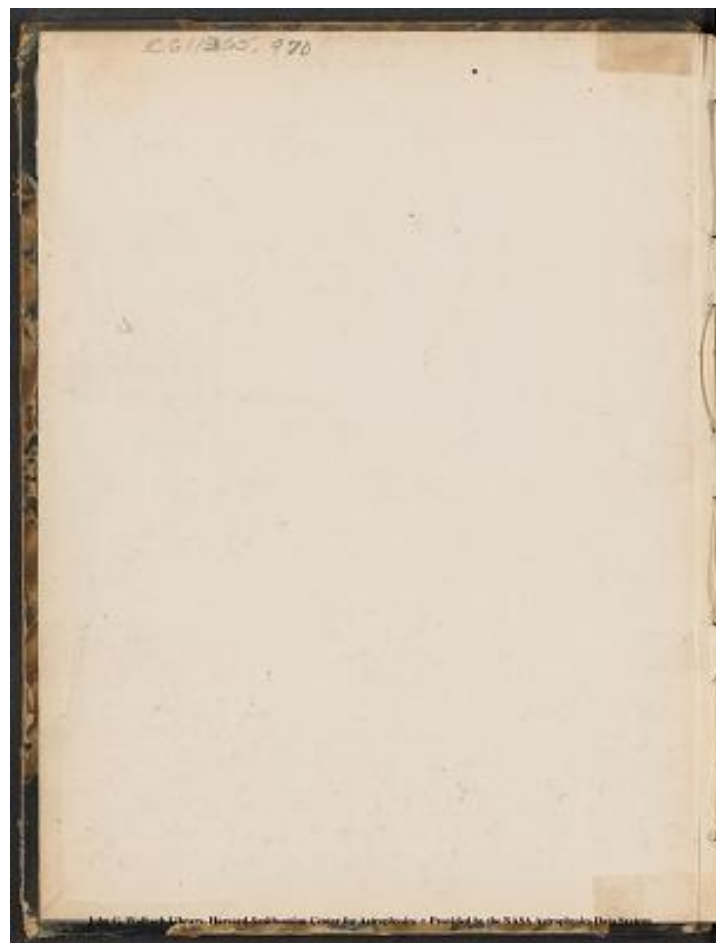
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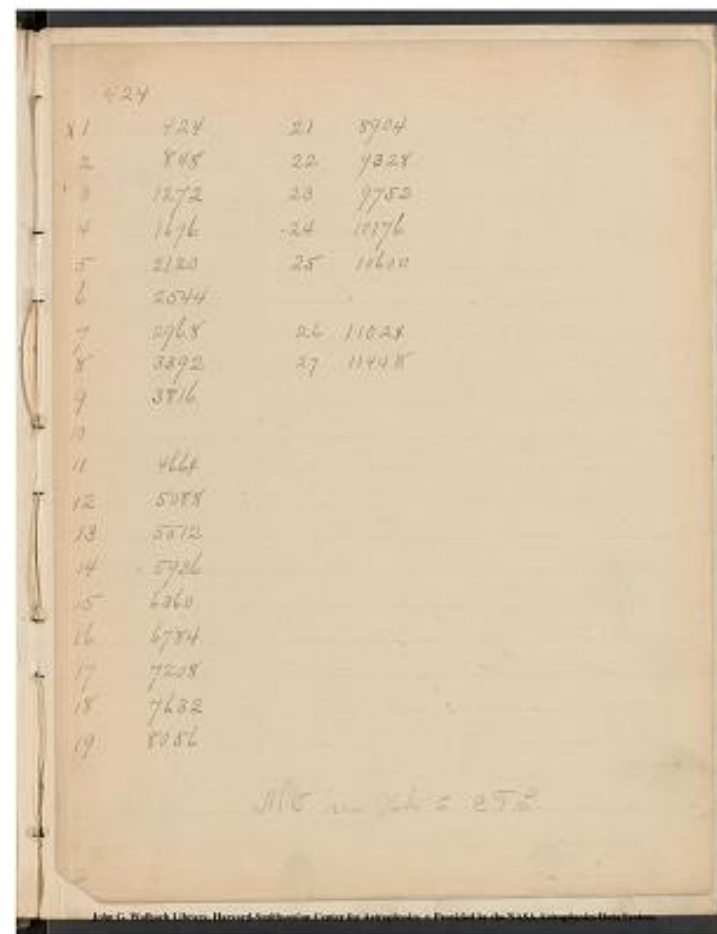
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424

X1	424	21	8904
2	848	22	9328
3	1272	23	9752
4	1696	24	10176
5	2120	25	10600
6	2544		
7	2968	26	11024
8	3392	27	11448
9	3816		
10			
11	4664		
12	5088		
13	5512		
14	5936		
15	6360		
16	6784		
17	7208		
18	7632		
19	8056		

M 5 in Bk 5 E.F.L

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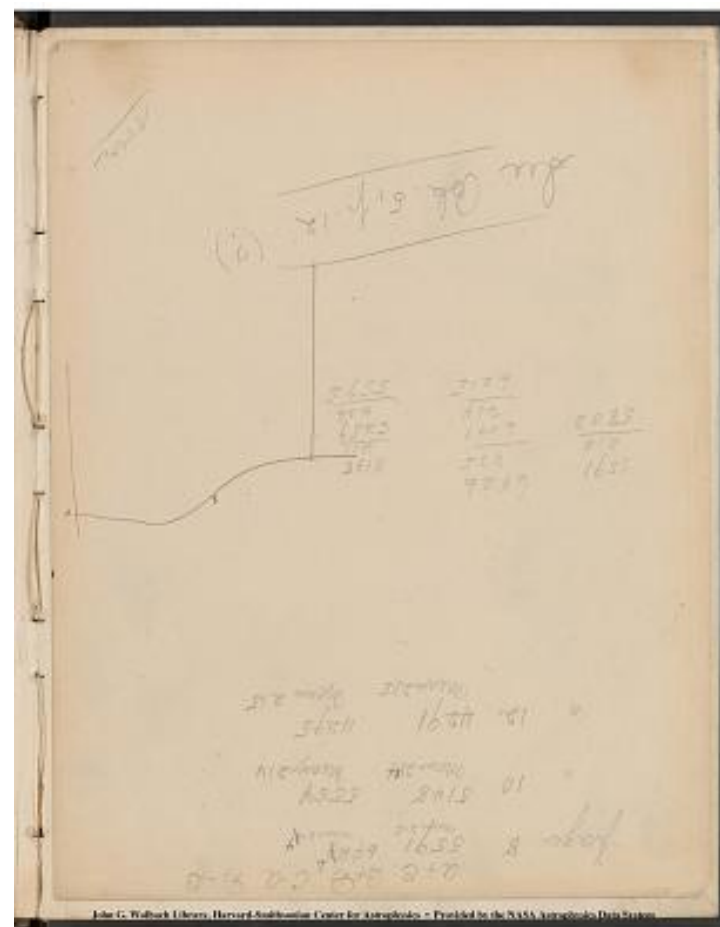
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[[table]]
A+C	B+D	C-A	D-B
page 8	5591 MEAN 215	622 [[/strikethrough]] 4[[/strikethrough]]6 MEAN	
21[[/strikethrough]] 6[[/strikethrough]]4			
page 10	5148 [MEAN 214	5554 214	
page 12	4291 [MEAN 215	4295 MEAN 215	
 [[table]]

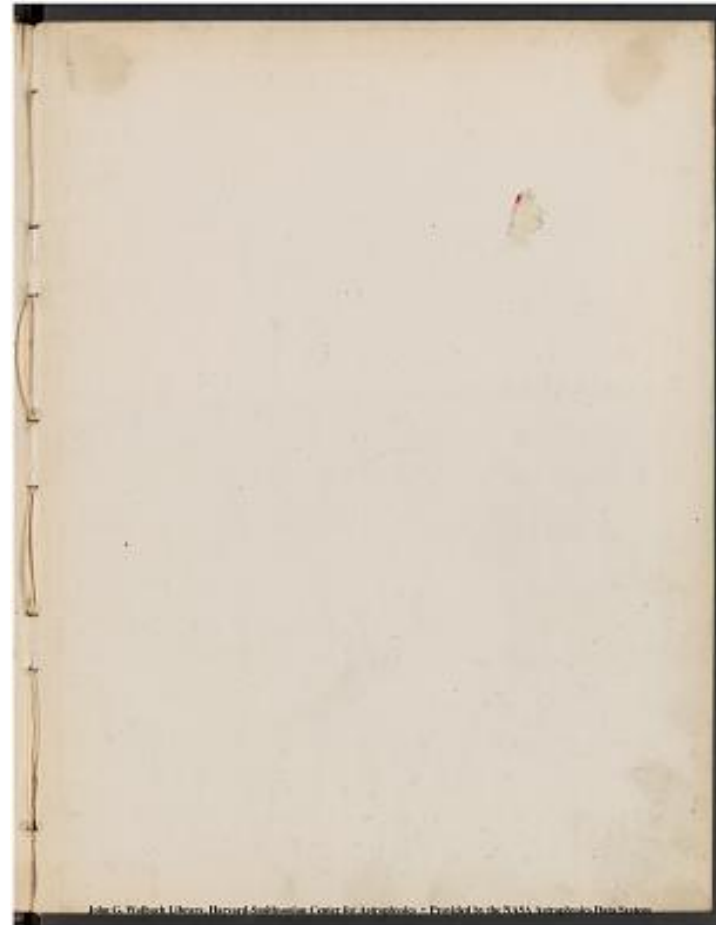
5591+212=5803
 6426-425=6001+214=6215
 5148+211=5359+216=5575
 [[image]]

SEE BK. 5, p.12 (?)

over



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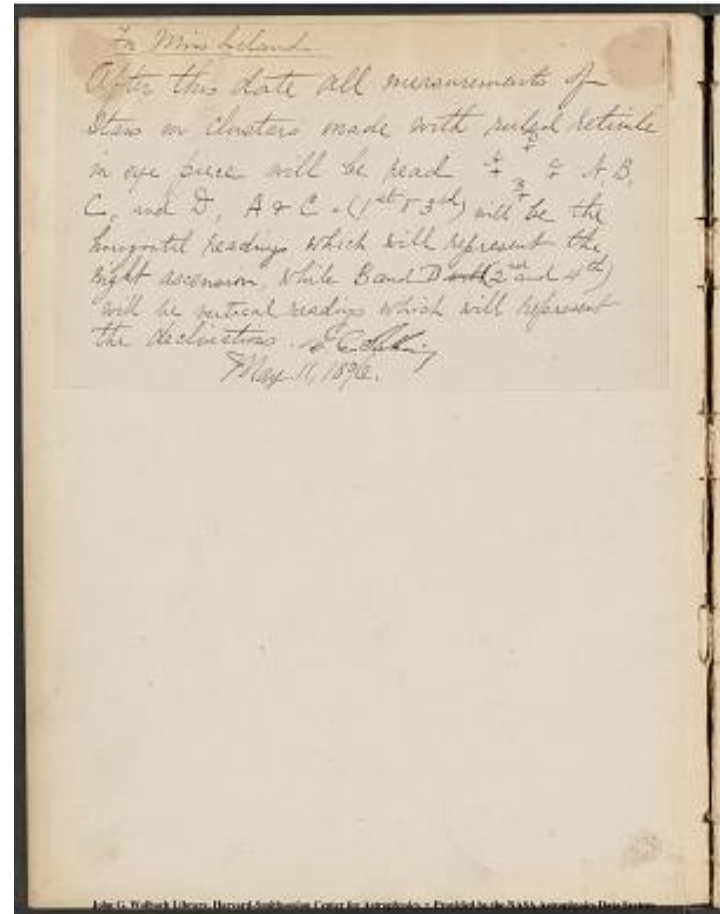
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For Miss Leland..

After this date all measurements of stars in clusters made with ruled reticule in eye piece will be read +A, B+, +C, +D, A, B, C, and D, A and C = (1st & 3rd) will be the horizontal readings which will represent the right ascension, while B and D ~~will~~ ~~will~~ (2nd and 4th) will be vertical readings which will represent the declinations. E. C. S((???)

May 11, 1896

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[[preprinted]]2[[/preprinted]]
 April 29, 1896.

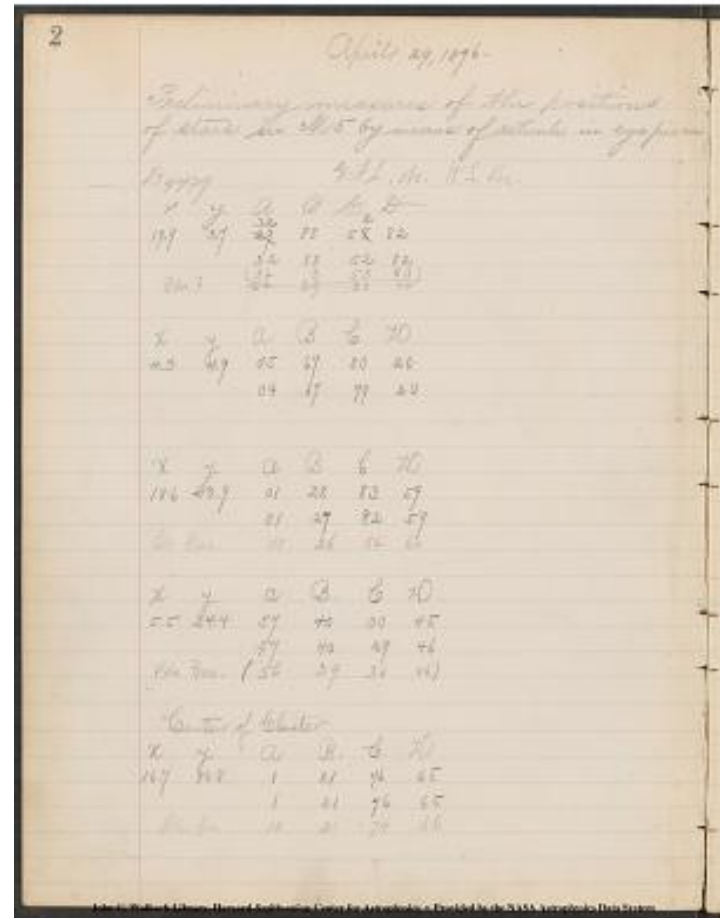
Preliminary measures of the positions of stars in M5 by means of
 reticule in eye piece

D4429 G, F, L, rs, H, S, Rec.

[[table]]					
x	y	A	B	C	D

19.9	3.7	32	88	52	82
32 88 52 82					
Prs, 7 56 39 30 46 32 2 53 83					
x	y	A	B	C	D
4.3	4.9	05	67	80	20
04 67 79 20					
x	y	A	B	C	D
18.6	23.9	01	28	83	59
01 27 82 59					
Prs, 7 rec. 01 27 84 60					
x	y	A	B	C	D
5.5	24.4	57	40	30	45
57 40 29 46					
Prs, 7 rec 56 39 30 46					
[[/table]]					
Center of Cluster					
[[table]]					
x	y	A	B	C	D

16.7	16.8	1	21	76	65
1 21 76 65					
Prs, rec 10 21 74 66					
[[/table]]					



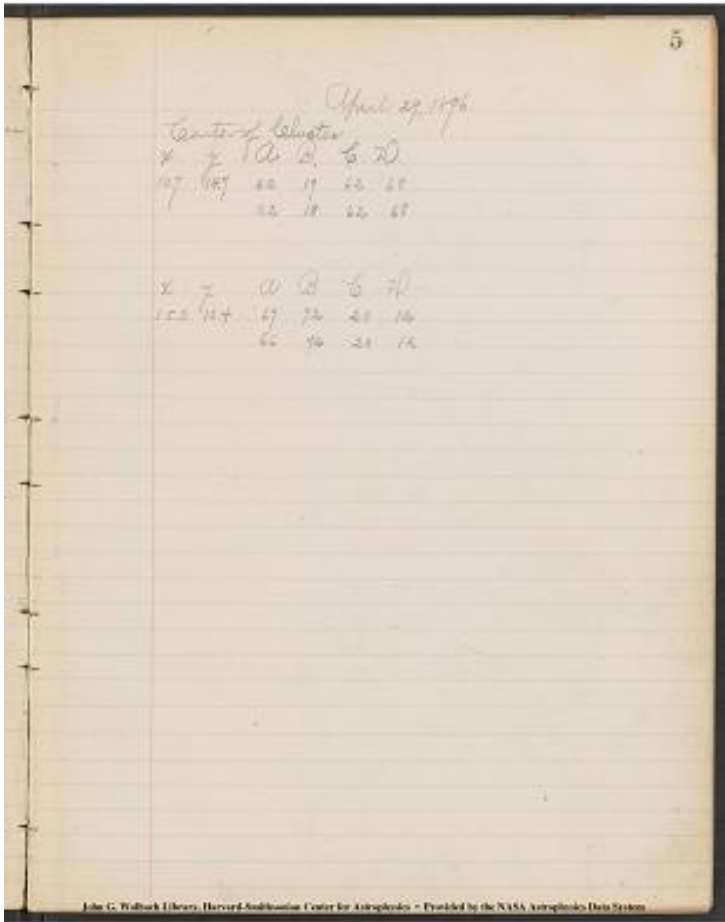
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[[preprinted]]5[[/preprinted]]
April 29, 1896.

Center of Clusters

[[table]]					
x	y	A	B	C	D

10.7	14.7	22	19	62	68
		22	18	62	68
x	y	A	B	C	D
15.3	12.4	67	72	20	12
		66	72	20	12
[[/table]]					



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April 29, 1896

Second set of Preliminary measures of the positions of stars in M5 by means of reticule in eye-piece.

D4440

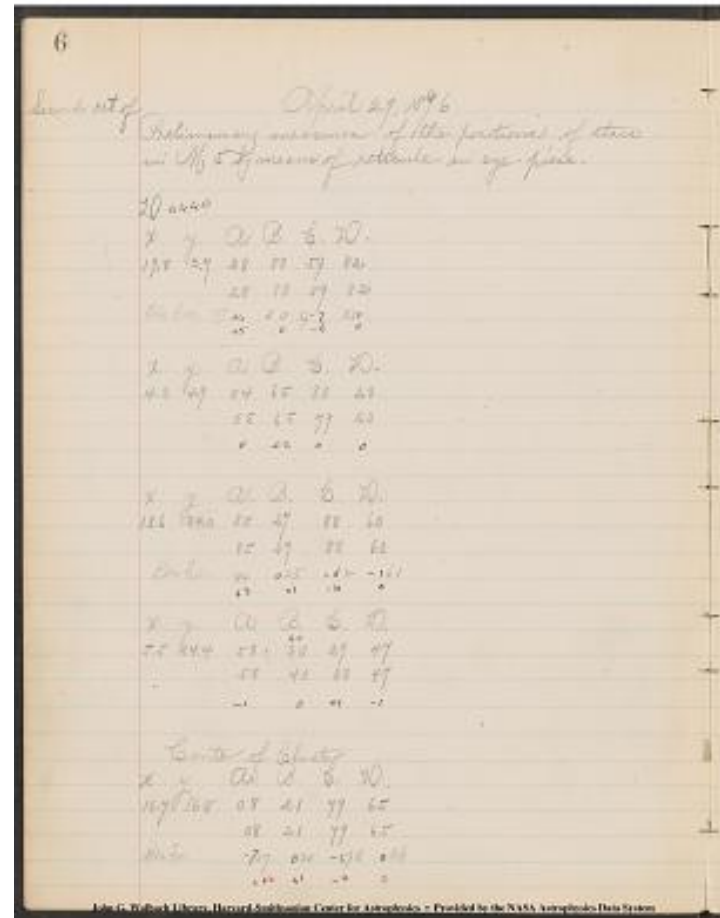
[[table]]						
x	y	A	B	C	D	
19.8	3.7	28	88	59	82	
		28	88	59	82	
P,rs,7rec		27+4	20	59-7	83	
		+5	0	-6	0	
x	y	A	B	C	D	
4.3	4.9	04	65	80	20	
		05	65	79	20	
		0	+2	0	0	
x	y	A	B	C	D	
5.5	24.4	58	40	(30)	29	47
		58	40	28	47	
		-1	0	+1	-1	

[[/table]]

Center of Cluster

[[table]]						
x	y	A	B	C	D	
16.7	16.8	08	21	79	65	
		08	21	79	65	
p,rs,7,rec		-7(07)	0(20)	-3(78)	0(66)	
		+03	+1	-4	0	

[[/table]]



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April 29, 1896.
Center of cluster

[[table]]				
x y A B C D				
10.7 14.7 21 18 6	7 3 68			
21 18 64 68				
+1 0 -2 0				
x y A B C D				
15.2 12.4 63 73 21 11				
63 74 21 11				
+4 -2 -1 +1				
[[/table]]				

[[table]]									
+4 0 -7 0 +5 0 -6 0									
0 +2 0 0									
- 0 -6 -1 +3 +1 -4 0									
-1 0 +1 -1									
[[/strickethrough]] -1[[/strickethrough]]+2 0 -3 0 +3 +1 -4 0									
+1 0 -2 0									
+4 -2 -1 +1									
[[/table]]									

7				
April 29, 1896.				
Center of cluster				
x	y	A	B	C
10.7	14.7	21	18	6
		41	12	68
		41	12	68
		41	12	68
x	y	A	B	C
15.2	12.4	63	73	21
		63	74	21
		63	74	21
		63	74	21
+4	0	-7	0	+5
0	+2	0	0	
-1	0	-6	-1	+3
-1	0	+1	-1	
[[/strickethrough]] -1				
+1	0	-2	0	
+4	-2	-1	+1	

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[[/strikethrough]] May 1 [[/strikethrough]] April 30, 1896

Preliminary measures of the positions of stars in M% by means of
reticule in eye-piece

23.05

D4429 E, F, L, obs H. S. Rec

[[table]]

Design|x|y|[[/strikethrough]] A.|B.|C.|D.|A+C|B+D|C-A|D-
B|[[/strikethrough]]D|A|B|C|B+D|A+C|B-D ^[[y]]|C-A^[[x]]|y|x|

-----|-----|-----|-----|-----|-----|-----|-----|

|I|19.9|3.6|80|[[/strikethrough]]220|[[/strikethrough]]6

|131|209|211|[[/strikethrough]]429|[[/strikethrough]]215|

51|[[/strikethrough]]-11|[[/strikethrough]]+203|50|[[/strikethrough]]-
11|[[/strikethrough]]+201|

|II|4.4|4.9|10|[[/strikethrough]]115|[[/strikethrough]]62|203|50|213|
212|193|-112|191|-111|

|III|18.6|23.9|05|65|209|150|214|215|204|+85|202|84|

|IV|5.5|24.4|141|99|71|114|212|213|-70|15|-69|15|

|V|16.4|16.8|28|51|189|162|217|213|161|111|159|110|

|VI|10.4|14.6|59|45|159|169|218|214|100|124|99|123|

|VII|15.3|12.4|165|182|50|31|215|213|-115|-151|-

114|[[/strikethrough]]-150|[[/strikethrough]]-149|

|Comp. b.|3.3|11.0|[[/strikethrough]]218|[[/strikethrough]]4|185|211|29|
429|214|[[/strikethrough]]-07|[[/strikethrough]]+207|-156|[[/strikethrough]]-
07|[[/strikethrough]]+205|-154|

|Comp. d|13.1|

25.4|129|209|89|[[/strikethrough]]220|[[/strikethrough]]6|218|[[/strikethrough]]
h|429|[[/strikethrough]]215|-40|[[/strikethrough]]11|[[/strikethrough]]203|-
40|[[/strikethrough]]11|[[/strikethrough]]-201|

|Comp. e|11.9|18.4|149|[[/strikethrough]]

219|[[/strikethrough]]5|71|210|220|[[/strikethrough]]

429|[[/strikethrough]]215|-78|[[/strikethrough]]09|[[/strikethrough]]+205|-
77|[[/strikethrough]]-09|[[/strikethrough]]|[[/strikethrough]]-
[[/strikethrough]]+203|

|Comp f.|12.7|17.7|52|50|159|161|211|211|+107|+111|106|110|

|Comp. g|[[/strikethrough]]16.8|10.8|17.5|7.0|22.2|100|205|(170)|425
7|30|-17|[[/strikethrough]]11.9|17.5|12.0|09|92|205|212|214|-28|+196|-
28|194|

|Comp h.|11.8|16.6|71|22|145|190|216|212|74|+168|73|166|

|Comp i.|10.6|15.7|48|64|169|150|217|214|121|86|120|85|

|Comp m.|9.9|16.6|99|[[/strikethrough]]
220|[[/strikethrough]]6|119|209|218|[[/strikethrough]]
429|[[/strikethrough]]215|20|[[/strikethrough]]-
11|[[/strikethrough]]+203|20|[[/strikethrough]]11|[[/strikethrough]]+201|

|Comp n.|11|[[/strikethrough]]
1|[[/strikethrough]]5|15.6|80|125|135|92|215|217|55|-33|54|-33|

|Comp o.|11.6|15.5|128|99|87|118|215|217|-41|+19|-41|+19|

|Comp p.|11.2|15.4|155|196|60|20|215|216|-95|-176|-94|-174|

|Comp q.|11.1|14.8|25|210|190|08|215|218|165|-2|[[/strikethrough]]
02|[[/strikethrough]]163|-200|

|No. 1.|14.2|16.8|21|190|196|20|217|210|175|-170|173|-168|

|No. 2.|5.2|12.8|28|194|189|19|217|213|161|-175|159|-173|

|No. 3.|17.3|15.6|85|180|130|33|215|213|45|-147|44|-145|

|No. 4.|13.2|14.8|21|202|192|12|213|214|171|-190|169|-188|

|No. 5.|13.3|14.4|131|186|80|29|211|215|-51|-157|-50|-155|

|No. 6.|13.7|12.0|210|40|[[/strikethrough]]
219|[[/strikethrough]]5|179|[[/strikethrough]]489
[[/strikethrough]]2|[[/strikethrough]]
1|[[/strikethrough]]25|219|[[/strikethrough]]09|[[/strikethrough]]-
205|139|[[/strikethrough]]09|[[/strikethrough]]-203|137|

[[/table]]
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[[annotation]]23.35[[/annotation]]

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[[preprinted]] 9[[/preprinted]]

[[table]]
x⁴[[x424]]|y⁴[[x424]] | |Corr.x|Corr.y⁴[[x-5)624 (y-5)424]]
---|---|---|---|---|---|
805.6|127.2|[[/strikethrough]]
8⁴[[1]]00.6|126.1|[[/strikethrough]]|825.5|[[/strikethrough]]|6|[[/strikethrough]]⁴
[[7]]|[[/strikethrough]]|147.3|[[/strikethrough]]|132.2⁴[[822.6 131.4]]
1696|1696|[[/strikethrough]]|150.5⁴[[188.7]]|158.5
[[/strikethrough]]|158.5|188.7⁴[[165.4 186.6]]
763.2|975.2|[[/strikethrough]]|743.0⁴[[783.4]]|983.6
[[/strikethrough]]|771.6|995.4
212.0|1017.6|[[/strikethrough]]|205.1|1019.1
[[/strikethrough]]|213.5|1010.7|
678.4|678.4|[[/strikethrough]]|662.5⁴[[694.3]]|689.4
[[/strikethrough]]|689.4|[[/strikethrough]]|662.5|[[/strikethrough]]|694.3|
424.0|593.6|[[/strikethrough]]|4141⁴[[4339]]|605.9
[[/strikethrough]]|436.3|603.5|
636.0|508.8|[[/strikethrough]]|624.6|493.9|[[/strikethrough]]|621.1|497.4|
1272|466.4|[[/strikethrough]]
126.5|451.0|[[/strikethrough]]|[[/strikethrough]]|147.7|[[/strikethrough]]|111.8|
486.9 -1 dir y=444.5 Mar 10 1902 error found by Prof Bailey|
551.2|1060.0|[[/strikethrough]]
547.2|1061.1|[[/strikethrough]]|531.1|[[/strikethrough]]
1039.9|[[/strikethrough]]|1056.0|
466.4|763.2|[[/strikethrough]]|458.7|762.3|[[/strikethrough]]
4|[[/strikethrough]]|4|[[/strikethrough]]|86.7|[[/strikethrough]]
742.9|[[/strikethrough]]|755.5|
508.8|720.8|[[/strikethrough]]
498.2⁴[[519.4]]|709.8⁴[[731.8]]|[[/strikethrough]]|519.8|731.4|
[[/strikethrough]]|678.4|[[/strikethrough]]|466.4|720.8|[[/strikethrough]]
463.6|740.2|[[/strikethrough]]|485.8|718.0|
466.4|678.4|[[/strikethrough]]|474⁴[[3]].7|695.0
[[/strikethrough]]|483.0|685.7|
424.0|636.0|[[/strikethrough]]|436.0|644.5 |[[/strikethrough]]|432.5|648.0|
381.6|678.4|[[/strikethrough]]|383.6|677.3|[[/strikethrough]]|401.7|[[/strikethrough]]
rough]]|658.3|[[/strikethrough]]|680.4|
466.4|636.0|[[/strikethrough]]|471.8|632.7 |[[/strikethrough]]|463.1|641.4|
466.4|636.0|[[/strikethrough]]|462.3|637.9 |[[/strikethrough]]|468.3|631.9|
466.4|636.0|[[/strikethrough]]|457.0|618.6 |[[/strikethrough]]|449.0|626.6|
466.4|593.6|[[/strikethrough]]|450.1⁴[[482.7]]|573.6
[[/strikethrough]]|446.4|609.9|
593.6|678.4|[[/strikethrough]]|576.3⁴[[610.9]]|661.6
[[/strikethrough]]|576.8|695.7|
212.0|508.8|227.9|[[/strikethrough]]|491.5|194.7 |[[/strikethrough]]|524.7|
72|[[/strikethrough]]|8.0|[[/strikethrough]]|0.8|636.0|[[/strikethrough]]|732.4|62
1.5|[[/strikethrough]]|[[/strikethrough]]|713.5|[[/strikethrough]]|706.3|[[/strikethrough]]
rough]]|631.6|[[/strikethrough]]|640.4|]]
551.2|593.6|[[/strikethrough]]|568.1|574.8|[[/strikethrough]]|532.4|610.5|
551.2|593.6|[[/strikethrough]]|546.2|578.1|[[/strikethrough]]|535.7|588.6|
551.2|508.8|[[/strikethrough]]|552.1|522.5|[[/strikethrough]]|[[/strikethrough]]
530.9|[[/strikethrough]]|564.9|488.5|
[[/table]]

Handwritten astronomical observation table on aged paper. The table contains multiple columns of numbers, some with superscripts, and some entries are crossed out with a single stroke. There are handwritten notes in the right margin, including "x=500.0" and "y=444.5". The paper shows signs of age, including creases and discoloration.

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23.45 ~~May 1~~ April 30, 1896
Preliminary measures of the positions of stars in M5 by means of
reticule in eye piece

[[table]]
D4429 ~~No. 7~~ x y ~~[[/table]]~~
A.B.C.D.A+C|B+D|C-A|D-B|~~D|A|B|C|B+D|A+C|B-D|C-~~
A|y|x|
|---|---|---|---|---|---|---|---|---|---|
No. 7. |12.8|18.6|75|24|139|189|214|213|64|165|63|163|
No. 8. |16.4|9.4|38|161|179|51|217|212|141|-110|139|-109|
No. 9. |19.9|14.9|10|9|202|205|212|214|192|+196|190|194|
No. 10. |16.4|21.9|05|160|211|54|216|214|206|-106|204|-105|
No. 11. |~~9.6~~|15.4|89|65|74|149|(163)|214|-
15|+84|~~9.6~~|15.4|140|65|71|149|211|214|-69|+84|-68|83|
No. 12. |9.2|12.9|04|198|210|19|214|217|206|-179|204|-177|
No. 13. |13.5|11.6|89|120|128|95|217|215|29|-25|39|-25|
No. 14. |9.7|15.7|49|~~230~~|~~18~~|
~~168~~|~~70~~|200|219|218|121|182|120|180|
No. 15. |17.7|12.9|09|48|205|169|214|217|196|121|194|120|
No. 16. |15.5|14.9|00|109|212|109|212|218|212|00|210|00|
No. 17. |12.6|14.3|168|70|45|142|213|212|-123|72|-122|71|
No. 18. |16.6|10.5|130|69|85|144|215|213|-45|75|-44|74|
No. 19. |18.6|97|50|75|164|141|214|216|114|66|113|65|
No. 20. |7.3|12.8|20|179|194|32|214|211|174|-147|172|-145|
No. 21. |20.9|14.5|119|10|99|2.02|218|212|-20|102|-20|190|
No. 22. |~~8.7~~|22.5|69|30|42|182|(111)|212|-
27|152|~~8.7~~|22.5|117|29|99|182|216|216|-18|+153|-
18|151|
No. 23. |7.4|13.4|162|162|51|50|213|212|-111|-112|-110|-111|
No. 24. |12.1|11.6|101|202|111|10|212|212|10|-192|10|-190|
No. 25. |12.4|10.3|179|130|39|81|218|211|-140|-49|-138|-48|
19.9	3.6	79	05	134	209	213	214	55	204	54	202
4.4	4.9	10	162	205	50	215	212	195	-112	193	-111
18.6	23.9	0.1	65	211	149	212	214	210	84	208	83
5.5	24.4	141	99	71	111	212	210	-70	12	-69	12
16.6	16.7	25	51	190	16	~~16~~					
9	~~215~~	212	165	110	163	109					
10.7	14.6	58	47	159	169	217	216	101	122	100	121
15.3	12.4	162	181	50	32	212	213	-112	-149	-111	-147
[[/table]]
2.4.2.5

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Variables M5 #4
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[[table]]

Xx42.4 | Yx42.4 | | xCorr. | yCorr. |

508.8	763.2	515.1	779.5	525.1	769.5
678.4	381.6	692.3	370.7	667.5	395.5
805.6	593.6	824.6	613.0	825.0	612.6
678.4	890.4	698.8	879.9	667.9	910.8
381.6	636.0	374.8	644.0	7 3	389.9
629.2					
381.6	508.8	402.0	491.1	363.9	529.2
551.2	466.4	555.1	463.9	548.7	470.3
381.6	636.0	393.6	654.0	399.6	648.0
720.8	508.8	740.2	520.8	732.8	528.2
636.0	593.6	657.0	593.6	636.0	614.6
508.8	593.6	496.6	600.7	515.9	581.4
678.4	424.0	674.0	431.4	685.8	419.6
763.2	381.6	774.5	388.1	769.7	392.9
296.8	508.8	314.0	494.3	282.3	526.0
848.0	593.6	846.0	57 614.6	867.0	
591.6					
339.2	932.8	337.4	917.7 947.9		
354.3	931.0				
296.8	551.2	285.8	540.1	285.7	540.2
508.8	466.4	509.8	447.4	489.8	467.4
508.8	424.0	495.0	419.2	504.0	410.2
805.6	127.2	811.0	147.4	825.8	132.6
169.6	169.6	188.9	158.5	158.5	188.9
763.2	975.2	784.0	983.5	771.5	996.0
212.0	1017.6	205.1	1018.8	213.2	1010.7
678.4	678.4	694.7	689.3	689.3	694.7
424.0	593.6	434.0	605.7	436.1	603.6
636.0	508.8	624.9	494.1	621.3	497.7

11

	Xx42.4	Yx42.4		xCorr.	yCorr.
1	508.8	763.2	515.1	779.5	525.1
2	678.4	381.6	692.3	370.7	667.5
3	805.6	593.6	824.6	613.0	825.0
4	678.4	890.4	698.8	879.9	667.9
5	381.6	636.0	374.8	644.0	7 3
6	629.2				
7	381.6	508.8	402.0	491.1	363.9
8	551.2	466.4	555.1	463.9	548.7
9	381.6	636.0	393.6	654.0	399.6
10	720.8	508.8	740.2	520.8	732.8
11	636.0	593.6	657.0	593.6	636.0
12	508.8	593.6	496.6	600.7	515.9
13	678.4	424.0	674.0	431.4	685.8
14	763.2	381.6	774.5	388.1	769.7
15	296.8	508.8	314.0	494.3	282.3
16	848.0	593.6	846.0	57 614.6	867.0
17	591.6				
18	339.2	932.8	337.4	917.7 947.9	
19	354.3	931.0			
20	296.8	551.2	285.8	540.1	285.7
21	508.8	466.4	509.8	447.4	489.8
22	508.8	424.0	495.0	419.2	504.0
23	805.6	127.2	811.0	147.4	825.8
24	169.6	169.6	188.9	158.5	158.5
25	763.2	975.2	784.0	983.5	771.5
26	212.0	1017.6	205.1	1018.8	213.2
27	678.4	678.4	694.7	689.3	689.3
28	424.0	593.6	434.0	605.7	436.1
29	636.0	508.8	624.9	494.1	621.3

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Measures of positions of stars in M5 (cont)

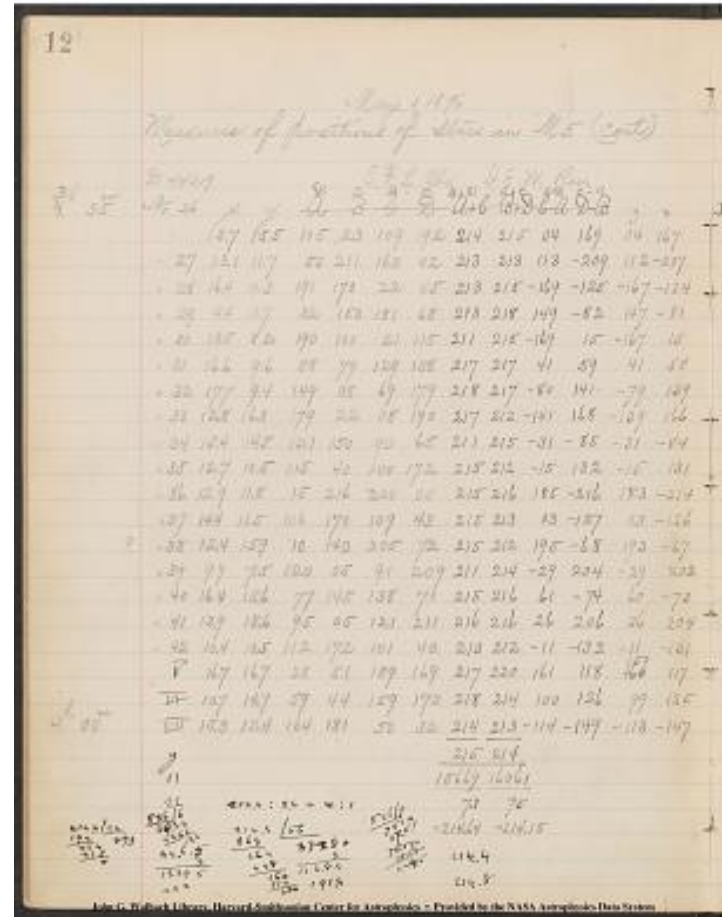
~~4~~^{3^h} 35^m

[[table]]

D4429 No. 26|x|y|~~A~~|~~B~~|~~C~~|~~D~~|A+C|B+D|C-A|D-
B|~~D~~|~~A~~|~~B~~|~~C~~|~~B~~+~~D~~|~~A~~+~~C~~|~~B~~-~~D~~|C-A|y|x|

No. 27	13.7	15.5	105	23	109	192	214	215	04	169	04	167	-
No. 28	16.4	10.3	191	170	22	45	213	215	-169	-125	-167	-	
No. 29	4.4	11.7	32	150	181	68	213	218	149	-82	147	-81	
No. 30	13.5	8.2	190	100	21	115	211	215	-169	15	-167	15	
No. 31	16.6	9.6	88	79	129	138	217	217	41	59	41	58	
No. 32	17.7	9.4	149	38	69	179	218	217	-80	141	-79	139	
No. 33	12.8	16.3	179	22	38	190	217	212	-141	168	-139	166	
No. 34	15.4	14.5	121	150	90	65	211	215	-31	-85	-31	-84	
No. 35	12.7	10.5	115	40	100	172	215	212	-15	132	-15	131	
No. 36	12.9	11.8	15	216	200	00	215	216	185	-216	183	-214	
No. 37	14.4	11.5	106	170	109	43	215	213	03	-127	03	-126	
No. 38	12.4	15.9	10	140	205	72	215	212	195	-68	193	-67	
No. 39	9.9	7.5	120	05	91	209	211	214	-29	204	-29	202	
No. 40	16.4	15.6	77	145	138	71	215	216	61	-74	60	-73	
No. 41	13.9	18.6	95	05	121	211	216	216	26	206	26	204	
No. 42	10.4	10.5	112	172	101	40	213	212	-11	-132	-11	-131	
V	16.7	16.7	28	51	189	169	217	220	161	118			
VI	10.7	14.7	59	44	159	170	218	214	100	126	99	125	
VII	15.3	12.4	164	181	50	32	214	213	-114	-149	-113	-147	

[[/table]]



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[[table]]
Xx424 |Yx424| |xCorr |yCorr|
|---|---|---|---|
551.2|636.0|~~551.6~~|652.7|~~567.9~~|636.4|
551.2|466.4|~~562.4~~|445.7|~~530.5~~|477.6|
678.4|424.0|~~661.7~~|411.6|~~666.0~~|~~567.3~~|407.3|
[[/table]]
169.6|466.4|~~184.3~~|458.3|~~161.5~~|481.1|
551.2|339.2|~~534.5~~|340.7|~~552.7~~|322.5|
678.4|381.6|~~682.5~~|387.4|~~684.2~~|~~376.5~~|385.7|
720.8|381.6|~~712.9~~|395.5|~~734.7~~|373.7|
508.8|678.4|~~494.9~~|695.0|~~525.4~~|664.5|
636.0|593.6|~~632.9~~|585.2|~~627.6~~|~~589.5~~|590.5|
508.8|424.0|~~507.3~~|437.1|~~521.9~~|422.5|
508.8|466.4|~~527.1~~|445.0|~~487.4~~ +
dir|~~448.1~~|~~484.7~~ x=529.8 Ma101902 Error
found by Prof Bailey|
593.6|466.4|~~593.9~~|453.8|~~581.0~~|466.7|
508.8|636.0|~~528.1~~|629.3|~~502.1~~|655.3|
381.6|296.8|~~378.7~~|317.0|~~401.8~~|293.9|
678.4|636.0|~~684.4~~|628.7|~~671.1~~|642.0|
551.2|763.2|~~553.8~~|783.6|~~571.6~~|765.8|
424.0|424.0|~~422.9~~|410.9|~~410.9~~|422.9|
678.4|678.4|~~694.3~~|690.1|~~690.1~~|694.3|
424.0|593.6|~~433.9~~|606.1|~~436.5~~|603.5|
636.0|508.8|~~624.7~~|494.1|~~621.3~~|497.5|
[[/table]]
[[table]]
Sub.|4429|4440|1429|4440|
|---|---|---|---|
0|~~0~~|~~0~~ to 446|0 to 38.2|~~0~~ to 44|0 to 38|
1|~~44.7~~|~~133.9~~|38.3 to 114.8|~~45~~ to
133|39 to 114|
2|~~134.0~~ to 223|114.9 to
191.4|~~134~~|~~14~~|~~134~~ to 223|115
6 191|
3|~~191.5~~ to 223|~~192~~ 6 220|
4| | |
[[/table]]

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22.45

May 3, 1896.

E FS. Ols. H.J.S Rec.

Measures of positions of variable stars in M 5

D4440

[[table]]

Design x|y|[[/strikethrough]] A|B|C|D|A+C|B+D|C-A|D-B|C-A|D-
B|[[/strikethrough]] D|A|B|C|B+D|A+C|B-D|C-A|Corr. B-D y|Corr. C-A x|

19.9	3.6	69	04	148	209	217	213	79	205	78	202
4.4	4.8	11	162	201	51	212	213	190	-111	188	-110
18.6	24.0	210	64	[[/strikethrough]] 219 [[/strikethrough]] 4	149						
[[/strikethrough]] 429 [[/strikethrough]] 214 | 216 | [[/strikethrough]] 109
[[/strikethrough]] -206 | 82 | [[/strikethrough]] 09 [[/strikethrough]] -203 | 81

| 5.5 | 24.4 | 142 | 100 | 71 | 114 | 213 | 214 | -71 | 14 | -70 | 14 |
* [[/strikethrough]] 16.7 [[/strikethrough]] 16.7 | [[/strikethrough]] 16.7 | [[/strikethrough]] 16.8

[[/strikethrough]] 16.8 | [[/strikethrough]] 19 [[/strikethrough]] 20 |

[[/strikethrough]] 52 [[/strikethrough]] 51 | [[/strikethrough]] 147

[[/strikethrough]] 195 | [[/strikethrough]] 162 [[/strikethrough]] 165 |

[[/strikethrough]] 166 [[/strikethrough]] 215 | [[/strikethrough]] 214

[[/strikethrough]] 216 | [[/strikethrough]] 128 [[/strikethrough]] +175 |

[[/strikethrough]] 110 [[/strikethrough]] +114 | 173 | 113 |

| 10.7 | 14.7 | 52 | 43 | 160 | 170 | 212 | 213 | 108 | 127 | 107 | 125 |

| 15.3 | 12.4 | 158 | 182 | 58 | 30 | 216 | 212 | -100 | -152 | -99 | -150 |

No. 1. | 14.3 | 16.8 | 19 | 191 | 199 | 23 | 218 | 214 | 180 | -168 | 178 | -

166 |

No. 2. | 5.2 | 12.8 | 28 | 195 | 189 | 20 | 217 | 215 | 161 | -175 | 159 | -

173 |

No. 3. | 17.3 | 15.6 | 79 | 177 | 138 | 39 | 217 | 216 | 59 | -138 | 58 | -136

No. 4. | 13.1 | 14.8 | [[/strikethrough]] 17 [[/strikethrough]] 5 | 204 | 200 |

10 | 215 | 214 | 185 | -194 | 183 | -191 |

No. 5. | 13.3 | 14.4 | 130 | 189 | 85 | 26 | 215 | 215 | -45 | -163 | -44 | -

161 |

No. 6. | 13.7 | 12.2 | 205 | 37 | [[/strikethrough]] 224 [[/strikethrough]] 10

175 | 215 | 212 | -195 | 138 | -192 | 136 |

No. 7. | 12.7 | 8.6 | 70 | 21 | 145 | 192 | 215 | 213 | 75 | 171 | 74 | 169 |

No. 8. | 16.4 | 9.7 | 31 | 164 | 185 | 51 | 216 | 215 | 154 | -113 | 152 | -

112 |

No. 9. | 17.9 | 14.9 | 00 | 05 | 211 | 209 | 211 | 214 | 211 | 204 | 208 |

201 |

No. 10. | 16.4 | 220 | 208 | 161 | 05 | 52 | 213 | 213 | -203 | -109 | -200 |

-108 |

No. 11. | 9.6 | 15.4 | 139 | 65 | 78 | 150 | 217 | 215 | -61 | 85 | -60 | 84 |

No. 12. | 9.2 | 13.0 | 00 | 194 | 214 | 20 | 214 | 217 | 214 | -177 | 211 | -

175

No. 13. | 13.5 | 11.6 | 82 | 119 | 131 | 95 | 213 | 214 | 49 | -24 | 48 | -24 |

No. 14. | 9.8 | 15.7 | 41 | 15 | 174 | 200 | 215 | 215 | 133 | 185 | 131 |

183 |

No. 15. | 17.7 | 13.0 | 210 | 43 | [[/strikethrough]] 219 [[/strikethrough]]

03 | 170 | 213 | 213 | -207 | 127 | -204 | 125 |

No. 16. | 15.5 | 15.1 | 208 | 107 | 05 | 107 | 213 | 214 | -203 | 00 | -200 |

00 |

No. 17. | 12.6 | 14.4 | 168 | 81 | 48 | 134 | 216 | 215 | -120 | 53 | -118 |

52 |

No. 18. | 16.6 | 10.5 | 122 | 69 | 91 | 150 | 213 | 219 | -31 | 81 | -31 | 80 |

No. 19. | 18.6 | 9.7 | 40 | 71 | 175 | 141 | 215 | 212 | 135 | 70 | 133 | 69 |

[[/table]]

14

May 3, 1896.

Measures of positions of variable stars in M 5

Design	x	y	A	B	C	D	A+C	B+D	C-A	D-B	C-A	D-B
1	19.9	3.6	69	04	148	209	217	213	79	205	78	202
2	4.4	4.8	11	162	201	51	212	213	190	-111	188	-110
3	18.6	24.0	210	64	219	4	149	429	214	216	109	-206
4	82	09	-203	81	5.5	24.4	142	100	71	114	213	214
5	-71	14	-70	14	16.7	16.7	16.7	16.7	16.8	16.8	16.8	16.8
6	10.7	14.7	52	43	160	170	212	213	108	127	107	125
7	15.3	12.4	158	182	58	30	216	212	-100	-152	-99	-150
8	No. 1.	14.3	16.8	19	191	199	23	218	214	180	-168	178
9	No. 2.	5.2	12.8	28	195	189	20	217	215	161	-175	159
10	No. 3.	17.3	15.6	79	177	138	39	217	216	59	-138	58
11	No. 4.	13.1	14.8	17	5	204	200	10	215	214	185	-194
12	No. 5.	13.3	14.4	130	189	85	26	215	215	-45	-163	-44
13	No. 6.	13.7	12.2	205	37	224	10	175	215	212	-195	138
14	No. 7.	12.7	8.6	70	21	145	192	215	213	75	171	74
15	No. 8.	16.4	9.7	31	164	185	51	216	215	154	-113	152
16	No. 9.	17.9	14.9	00	05	211	209	211	214	211	204	208
17	No. 10.	16.4	220	208	161	05	52	213	213	-203	-109	-200
18	No. 11.	9.6	15.4	139	65	78	150	217	215	-61	85	-60
19	No. 12.	9.2	13.0	00	194	214	20	214	217	214	-177	211
20	No. 13.	13.5	11.6	82	119	131	95	213	214	49	-24	48
21	No. 14.	9.8	15.7	41	15	174	200	215	215	133	185	131
22	No. 15.	17.7	13.0	210	43	219	03	170	213	213	-207	127
23	No. 16.	15.5	15.1	208	107	05	107	213	214	-203	00	-200
24	No. 17.	12.6	14.4	168	81	48	134	216	215	-120	53	-118
25	No. 18.	16.6	10.5	122	69	91	150	213	219	-31	81	-31
26	No. 19.	18.6	9.7	40	71	175	141	215	212	135	70	133

23.20

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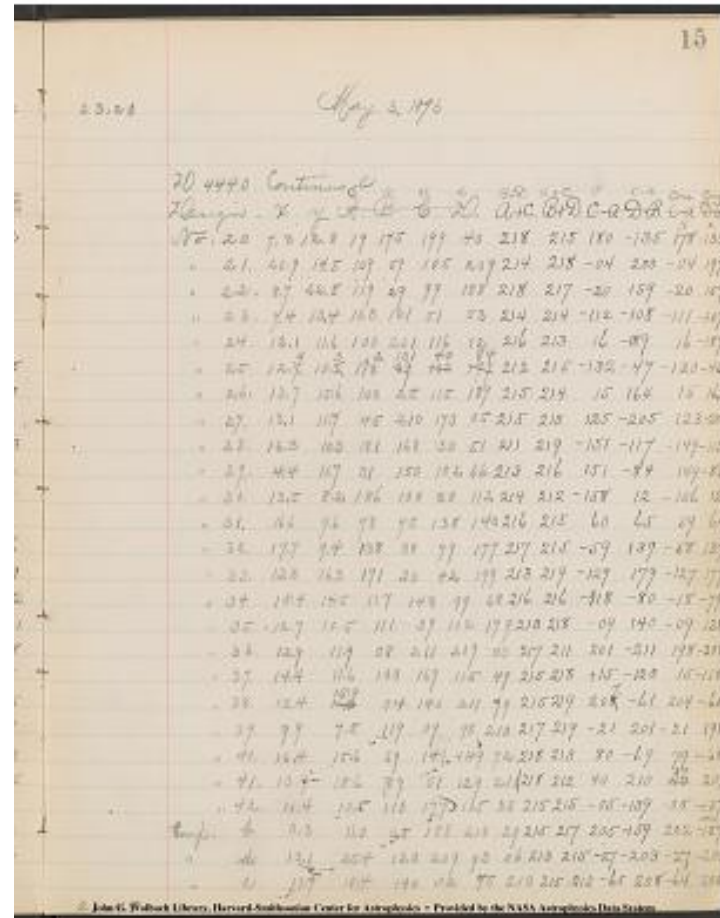
23, 20
May 3, 1896
D4440 Continued

[[table]]

Design x|y|~~A|B|C|D|A+C|B+D|C-A|D-B|C-A|D-B|~~A|B|C|B+D|A+C|B-D|C-A|~~Corr. y|Corr. C-A x|~~

No. 20	7.3	12.8	19	175	199	40	218	215	180	-135	178	-133
No. 21	20.9	14.5	109	09	105	209	214	218	-04	200	-04	197
No. 22	8.7	22.5	119	29	99	188	218	217	-20	159	-20	157
No. 23	7.4	13.4	163	161	51	53	214	214	-112	-108	-111	-107
No. 24	12.1	11.6	100	201	116	12	216	213	16	-189	16	-187
No. 25	12.1	12	7	4	10	1	3	17	1	2	39	102
No. 26	13.7	15.6	100	25	115	189	215	214	15	164	15	162
No. 27	13.1	11.7	45	210	170	05	215	215	125	-205	123	-202
No. 28	16.3	10.3	181	168	30	51	211	219	-151	-117	-149	-115
No. 29	4.4	11.7	31	150	182	66	213	216	151	-84	149	-83
No. 30	13.5	8.2	186	100	28	112	214	212	-158	12	-156	12
No. 31	16.6	9.6	78	75	138	140	216	215	60	65	59	64
No. 32	17.7	9.4	138	38	79	177	217	215	-59	139	-58	137
No. 33	12.8	16.3	171	20	42	199	213	219	-129	179	-127	177
No. 34	15.4	14.5	117	148	99	68	216	216	-118	80	-18	-79
No. 35	12.7	10.5	111	39	102	179	213	218	-09	140	-09	138
No. 36	12.9	11.9	08	211	209	00	217	211	201	-211	198	-208
No. 37	14.4	11.6	100	169	115	49	215	218	+15	-120	15	-118
No. 38	12.4	16.0	15.9	04	140	211	79	215	219	20	8	7
No. 39	9.9	7.5	119	09	98	210	217	219	-21	201	-21	198
No. 40	16.4	15.6	69	141	149	72	218	213	80	-69	79	-68
No. 41	13.9	18.6	89	01	129	211	218	212	40	210		
No. 42	10.4	10.5	110	177	105	38	215	215	-05	-139	-05	-137
comp. b	3.3	11.0	0.5	188	210	29	215	217	205	-159	202	-157
comp. d	13.1	25.4	120	209	93	06	213	215	-27	-203	-27	-200
comp. e	11.9	18.4	140	02	75	210	215	212	-65	208	-64	205

[[/table]]
2.3.4.5



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Variables M5 #4
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D4440 Continued

[[table]]

| x|y|[[~~strickethrough~~]] A|B|C|D|A+C|B+D|C-A|D-B|C-A|D-B|
|~~strickethrough~~]]D|A|B|C|B+D|A+C|B-D|C-A|Corr. y|Corr. C-A x|

|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|Comp. F | 12.7 | 17.7 | 50 | 51 | 165 | 165 | 215 | 216 | 115 | 114 |
| 113 | 113 |

|Comp. g. | 11.9 | 27.5 | 119 | 09 | 98 | 204 | 217 | 213 | -21 | 195 | -21 |
| 192 |

|Comp. h. | 11.8 | 16.6 | 6.8 | 21 | 149 | 191 | 217 | 212 | 81 | 170 | 80 |
| 168 |

|Comp. l. | 10.6 | 15.7 | 41 | 60 | 173 | 151 | 214 | 211 | 132 | 91 | 130 | 90
| 201 |

|Comp. m. | 9.9 | 16.6 | 95 | 06 | 120 | 210 | 215 | 216 | 25 | 204 | 25 |
| 201 |

|Comp. n. | 11.5 | 15.6 | 78 | 120 | 139 | 95 | 217 | 215 | 61 | -25 | 60 | -25
| 196 |

|Comp. o. | 11.5 | 15.5 | 126 | 99 | 90 | 117 | 216 | 216 | -36 | +18 | -36 |
| 18 |

|Comp. p. | 11.2 | 15.4 | 151 | 189 | 62 | 26 | 213 | 215 | -89 | -163 | -88 | -
| 161 |

|Comp. q. | 11.0 | 14.8 | 21 | 207 | 197 | 08 | 218 | 215 | 176 | -199 | 174 |
| -196 |

| 19.9 | 3.6 | 70 | 05 | 148 | 210 | 218 | 215 | 78 | 205 | 77 |
| 20|~~strickethrough~~]]3|~~strickethrough~~]]2 |

| 4.4 | 4.9 | 11 | 162 | 205 | 50 | 216 | 212 | 194 | -112 | 191 | -111 |
| 18.6 | 24.1 | 210 | 65 | 05 | 149 | 215 | 214 | -205 | 84 | -202 | 83 |

| 5.5 | 24.4 | 142 | 100 | 70 | 115 | 212 | 215 | -72 | 15 | -71 | 15 |
| 16.7 | 16.8 | 19 | 51 | 198 | 164 | 217 | 215 | 179 | 113 | 177 | 112 |

| 10.7 | 14.7 | 54 | 41 | 160 | 170 | 214 | 211 | 106 | 129 | 105 | 127 |
| 15.3 | 12.4 | 160 | 184 | 55 | 29 | 215 | 213 | -105 | -155 | -104 | -153 |

| 13|~~strickethrough~~]]5|~~strickethrough~~]]4 | 13.0 | 182 | 159 | 29 | 55 |
| 211 | 214 | -153 | -104 | -151 | -103 |

| 13.5 | 13.0 | 180 | 162 | 35 | 50 | 215 | 215 | 215 | 215 | 215 | 215 |
| 215 | 212 | 212 | 212 | 212 | 212 | 212 | 212 | 212 | 212 | 212 |

| 11.9 | 17.5 | 120 | 09 | 92 | 205 | 212 | 214 | -28 |
| 19|~~strickethrough~~]]4|~~strickethrough~~]]6 adopt. | | |

| 9.6 | 15.4 | 140 | 65 | 71 | 149 | 211 | 214 | -69 | 84 adopt. | | |
| 8.8 | 22.4 | 116 | 30 | 99 | 69 | 215 | 99 | -17 | 39 | | |

| | 182 | 163 | 31 | 54 | 213 | 217 | -151 | -109 | -149 | -108 |
| | 179 | 165 | 35 | 50 | 214 | 215 | -144 | -115 | -142 | -113 |

| 8.7 | 22.5 | 117 | 29 | 99 | 69 | 2|~~strickethrough~~]]4|~~strickethrough~~]]16 |
| 98 | -18 | 40 | | |

| | 117 | 29 | 99 | 182 | 216 | 211 | -18 | 153 adopt. | | |
| 16.7 | 16.8 | 20 | 51 | 195 | 165 | 215 | 215 | 215 | 215 | 215 |

| 216 | 216 | 216 | 216 | 216 | 216 | 216 | 216 | 216 | 216 | 216 |
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| 15024|216 | | | | | | | | | | | |
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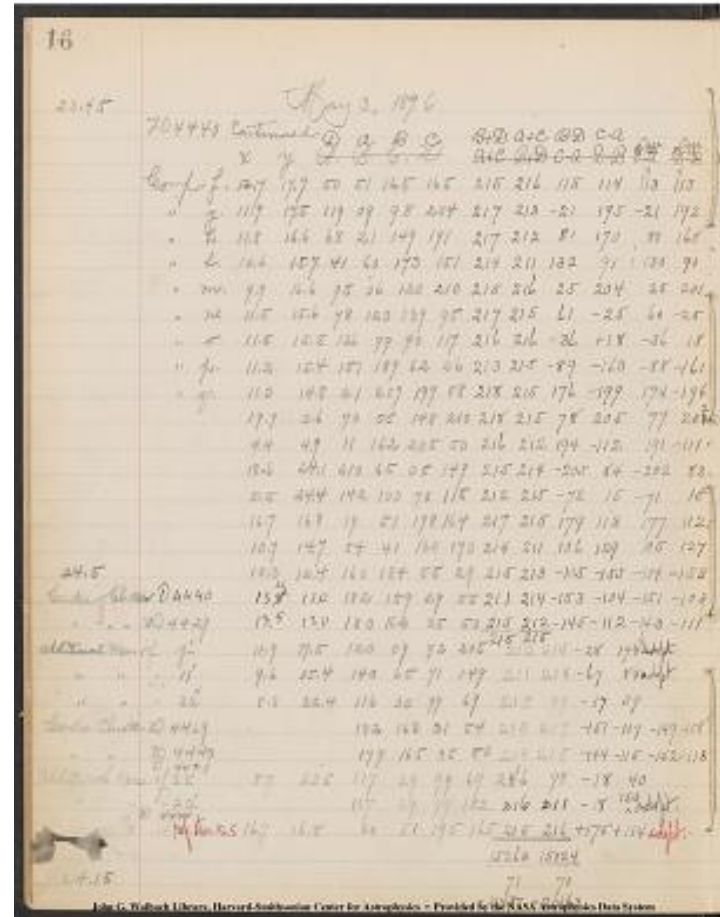
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[[annotation]]Center Cluster D4429[[/annotation]]
[[annotation]]Center Cluster D4440[[/annotation]]
[[annotation]]Center Cluster D4429[[/annotation]]
[[annotation]]Additional Meas. of 22[[/annotation]]
[[annotation]]Additional Meas. of 22[[/annotation]]
[[annotation]]Additional Meas. of D4440 ref. star No.5 [[/annotation]]
[[annotation]] 24.15 [[/annotation]]

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[[preprinted]] 17 [[/preprinted]]
[[table]]
Xx42.4|yx42.4| | |x Corr.|y Corr.|
|---|---|---|---|---|
508.8|720.8|~~520.1~~|732.1|~~520.1~~|732.1|
466.4|720.8|~~464.3~~|740.0|
~~485.6~~|71|~~7~~|~~8.7~~|
466.4|678.4|~~474.4~~|695.2|
~~483.2~~|~~670.4~~|~~686.4~~|
424.0|636.0|~~623.0~~|~~649.0~~|
437.0|645.0|433.0|~~384.1~~|698.5|~~401.7~~|680.9|
381.6|678.4|~~472.4~~|633.5|~~463.9~~|642.0|
466.4|636.0|~~462.8~~|637.8|~~468.2~~|632.4|
466.4|636.0|~~457.6~~|619.9|~~450.3~~|627.2|
466.4|593.6|~~483.8~~|574.0|~~446.8~~|611.0|
805.6|127.2|~~813.3~~|147.4|~~825.8~~|134.9|
169.6|169.6|~~188.7~~|158.5|~~158.5~~|188.7|
763.2|1017.6|~~743.0~~|1025.9|~~771.5~~|997.4|
212.0|1017.6|~~213.5~~|1010.5|
204.9|1019.1|~~696.1~~|689.6|~~689.6~~|696.1|
678.4|678.4|~~434.5~~|606.3|~~436.7~~|604.1|
424.0|593.6|~~625.6~~|493.5|~~620.7~~|498.4|
551.2|551.2|~~540.9~~|
540.9|536.1|
551.2|551.2|~~540.1~~|
540.1|536.9|
466.4|720.8| | | |
381.6|636.0| | | |
339.2|932.8| | | |
551.2|551.2| |540.4|536.3|
551.2|551.2| |539.9|537.0|
339.2|932.8| | | |
678.4|678.4| | | |
[[/table]]

17

MJD	RA	DEC	Mag	PA
508.8	720.8	520.1	732.1	520.1
466.4	720.8	464.3	740.0	
485.6	71	7	8.7	
466.4	678.4	474.4	695.2	
483.2		670.4	686.4	
424.0	636.0			
437.0	645.0	433.0		
381.6	678.4	384.1	698.5	401.7
466.4	636.0	472.4	633.5	463.9
466.4	636.0	462.8	637.8	468.2
466.4	636.0	457.6	619.9	450.3
466.4	593.6	483.8	574.0	446.8
805.6	127.2	813.3	147.4	825.8
169.6	169.6	188.7	158.5	158.5
763.2	1017.6	743.0	1025.9	771.5
212.0	1017.6			
204.9	1019.1			
678.4	678.4	696.1	689.6	689.6
424.0	593.6	434.5	606.3	436.7
636.0	508.8	625.6	493.5	620.7
551.2	551.2			
540.9	536.1			
551.2	551.2			
540.1	536.9			
466.4	720.8			
381.6	636.0			
339.2	932.8			
551.2	551.2		540.4	536.3
551.2	551.2		539.9	537.0
339.2	932.8			
678.4	678.4			

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Reduction of readings on page 14. $x+(c-a)y+(B-D)$

[[table]]

X x 42.2|Y x 42.2| | |x Corr.|y Corr.|

---|---|---|---|

805.6|127.2|813.4|147.4|825.8|135.0|

169.6|169.6|188.4|158.6|158.6|188.4|

763.2|1017.6|~~764.1~~|~~742.9~~|

1025.7|771.3|~~1018.5~~|~~997.3~~|

212.0|1017.6|205.0|1019.~~4~~|~~213.4~~|

1010.6|

678.4|678.4|695.7|689.7|689.7|695.7|

424.0|593.6|434.7|606.1|436.5|604.3|

636.0|508.8|626.1|493.8|621.0|498.9|

1|593.6|678.4|611.4|661.8|577.0|696.2|

2|212.0|508.8|227.9|491.5|194.7|52~~3~~|~~4~~.7|

3|720.8|636.0|~~715.0~~|~~726.6~~|

622.4|707.2|641.8|

4|551.2|593.6|569.5|574.5|532.1|611.9|

5|551.2|593.6|546.8|577.5|535.1|589.2|

6|551.2|508.8|532.0|522.4|564.8|489.6|

7|508.8|339.2|516.2|356.1|525.7|346.6|

8|678.4|381.6|693.6|370.4|667.2|396.8|

9|720.8|593.6|~~700.0~~|~~741.6~~|

~~573.5~~|~~613.7~~|740.9|614.4|

10|678.4|932.8|658.4|922.0|667.6|912.8|

11|381.6|636.0|375.6|644.4|390.0|63~~6~~|~~6~~|0.

0|

12|381.6|551.2|402.7|53~~4~~|~~3~~.7|364.1|572.

3|

13|551.2|466.4|556.0|464.0|548.8|471.2|

14|381.6|636.0|394.7|654.3|399.9|649.1|

15|720.8|551.2|700.4|563.7|733.3|530.8|

16|636.0|636.0|616.0|636.0|636.0|616.0|

17|508.8|593.6|497.0|598.8|514.0|581.8|

18|678.4|424.0|675.3|432.0|686.4|420.9|

19|763.2|381.6|776.5|388.5|770.1|394.9|

Reduction of readings on page 14.

805.6	127.2	813.4	147.4	825.8	135.0
169.6	169.6	188.4	158.6	158.6	188.4
763.2	1017.6	764.1	742.9		
1025.7	771.3	1018.5	997.3		
212.0	1017.6	205.0	1019. 4	213.4	
1010.6					
678.4	678.4	695.7	689.7	689.7	695.7
424.0	593.6	434.7	606.1	436.5	604.3
636.0	508.8	626.1	493.8	621.0	498.9
1	593.6	678.4	611.4	661.8	577.0
2	212.0	508.8	227.9	491.5	194.7
3	720.8	636.0	715.0	726.6	
622.4	707.2	641.8			
4	551.2	593.6	569.5	574.5	532.1
5	551.2	593.6	546.8	577.5	535.1
6	551.2	508.8	532.0	522.4	564.8
7	508.8	339.2	516.2	356.1	525.7
8	678.4	381.6	693.6	370.4	667.2
9	720.8	593.6	700.0	741.6	
573.5	613.7	740.9	614.4		
10	678.4	932.8	658.4	922.0	667.6
11	381.6	636.0	375.6	644.4	390.0
63 6	6	0			
12	381.6	551.2	402.7	53 4	3 .7
364.1	572.				
13	551.2	466.4	556.0	464.0	548.8
471.2					
14	381.6	636.0	394.7	654.3	399.9
649.1					
15	720.8	551.2	700.4	563.7	733.3
530.8					
16	636.0	636.0	616.0	636.0	616.0
17	508.8	593.6	497.0	598.8	514.0
581.8					
18	678.4	424.0	675.3	432.0	686.4
420.9					
19	763.2	381.6	776.5	388.5	770.1
394.9					

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Reduction of readings on page 15.

[[table]]

	Xx42.4	yx42.4		xCorr.	yCorr.	yCorr.
20	296.8	508.8	314.6	495.5	283.5	526.6
21	848.0	593.6	847.6	613.3	867.7	847.6
22	339.2	932.8	337.2	948.5	354.9	337.2
23	296.8	551.2	285.7	540.5	286.1	285.7
24	508.8	466.4	510.4	447.7	490.1	510.4
25	508.8	424.0	495.8	419.4	504.2	495.8
26	551.2	636.4	552.7	652.2	567.4	552.7
27	551.2	466.4	563.4	446.2	531.0	563.5
28	678.4	424.0	663.5	412.5	666.9	663.5
29	169.6	466.4	184.5	458.1	161.3	184.5
30	551.2	339.2	535.6	340.4	552.4	535.6
31	678.4	381.6	684.3	388.0	684.8	684.3
[[375.7]]						
32	720.8	381.6	715.0	395.3	734.5	715.0
33	508.8	678.4	496.1	696.1	526.5	496.1
34	636.0	593.6	634.2	585.7	628.1	634.2
35	508.8	424.0	507.9	437.8	522.6	507.9
36	508.8	466.4	528.6	445.6	488.0	528.6
^[[x=530.4]]						
37	593.6	466.4	595.1	454.6	581.8	595.1
38	508.8	636.0	529.2	630.0	502.8	529.2
39	381.6	296.8	379.5	316.6	401.4	379.5
40	678.4	636.0	686.3	629.2	671.6	686.3
41	551.2	763.2	555.1	783.9	571.9	555.1
42	424.0	424.0	423.5	410.3	410.3	423.5
b	127.2	466.4	147.4	450.7	111.5	147.4
d	551.2	1060.0	548.5	1040.0	531.2	548.5
e	466.4	763.2	460.0	783.7	460.0	756.8

19

Reduction of readings on page 15.

20	296.8	508.8	314.6	495.5	283.5	526.6
21	848.0	593.6	847.6	613.3	867.7	847.6
22	339.2	932.8	337.2	948.5	354.9	337.2
23	296.8	551.2	285.7	540.5	286.1	285.7
24	508.8	466.4	510.4	447.7	490.1	510.4
25	508.8	424.0	495.8	419.4	504.2	495.8
26	551.2	636.4	552.7	652.2	567.4	552.7
27	551.2	466.4	563.4	446.2	531.0	563.5
28	678.4	424.0	663.5	412.5	666.9	663.5
29	169.6	466.4	184.5	458.1	161.3	184.5
30	551.2	339.2	535.6	340.4	552.4	535.6
31	678.4	381.6	684.3	388.0	684.8	684.3
[[375.7]]						
32	720.8	381.6	715.0	395.3	734.5	715.0
33	508.8	678.4	496.1	696.1	526.5	496.1
34	636.0	593.6	634.2	585.7	628.1	634.2
35	508.8	424.0	507.9	437.8	522.6	507.9
36	508.8	466.4	528.6	445.6	488.0	528.6
^[[x=530.4]]						
37	593.6	466.4	595.1	454.6	581.8	595.1
38	508.8	636.0	529.2	630.0	502.8	529.2
39	381.6	296.8	379.5	316.6	401.4	379.5
40	678.4	636.0	686.3	629.2	671.6	686.3
41	551.2	763.2	555.1	783.9	571.9	555.1
42	424.0	424.0	423.5	410.3	410.3	423.5
b	127.2	466.4	147.4	450.7	111.5	147.4
d	551.2	1060.0	548.5	1040.0	531.2	548.5
e	466.4	763.2	460.0	783.7	460.0	756.8

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[[preprinted]] 20 [[/preprinted]]

[[image]] -10th line from top.

[[image]] -19th line from bottom

22.30 May 4, 1896.

Measurement of Scale 23.20

[[table]]

|10th H. line |19th line from bottom|

|---|

22875 | 7374

23833 ^[[958]] -32 | 8328 ^[[954]] -25

24759 ^[[926]] +35 | 9257 ^[[929]] +23

25720 ^[[961]] -12 | 10209 ^[[952]] -10

26669 ^[[949]] +01 | 11151 ^[[942]] +16

27619 ^[[950]] -19 | 12109 ^[[958]] -31

28550 ^[[931]] +22 | 13036 ^[[927]] +2~~[[strikethrough]]~~

3~~[[strikethrough]]~~4

29503 ^[[953]] -15 | 13987 ^[[951]] -07

30441 ^[[938]] +15 | 14931 ^[[944]] -35

31394 ^[[953]] -14 | 15840 ^[[909]] +74

32333 ^[[969]] +10 | 16823 ^[[983]] -32

332821 ^[[949]] +02 | 17774 ^[[951]] -04

34233 ^[[951]] +02 | 187211 ^[[947]] 00

35186 ^[[953]] -05 | 19688 ^[[947]] +03

36134 ^[[948]] -09 | 20618 ^[[950]] -03

37073 ^[[939]] +05 | 21565 ^[[947]] -07

38017 ^[[944]] +07 | 22505 ^[[940]] +10

38968 ^[[951]] -16 | 23455 ^[[950]] -14

39903 ^[[935]] +27 | 24391 ^[[936]] +27

40865 ^[[962]] -16 | 25354 ^[[963]] -23

41811 ^[[946]] +03 | 26294 ^[[940]] +07

42760 ^[[949]] -06 | 27241 ^[[947]] +05

43703 ^[[943]] +01 | 28193 ^[[952]] -14

44647 ^[[944]] +05 | 29131 ^[[938]] +23

45596 ^[[949]] -06 | 30092 ^[[961]] -21

46539 ^[[943]] +12 | 31032 ^[[940]] +02

47494 ^[[955]] -15 | 31974 ^[[942]] +08

48434 ^[[940]] +07 | 32924 ^[[950]] -04

49381 ^[[947]] +07 | 33870 ^[[946]] +04

954 | 950

[[/table]]

26

May 4, 1896. Measurement of Scale 23.20

10th H. line	19th line from bottom
22875 ^[[958]] -32	7374
23833 ^[[954]] -25	8328
24759 ^[[926]] +35	9257
25720 ^[[961]] -12	10209
26669 ^[[949]] +01	11151
27619 ^[[950]] -19	12109
28550 ^[[931]] +22	13036
29503 ^[[953]] -15	13987
30441 ^[[938]] +15	14931
31394 ^[[953]] -14	15840
32333 ^[[969]] +10	16823
332821 ^[[949]] +02	17774
34233 ^[[951]] +02	187211
35186 ^[[953]] -05	19688
36134 ^[[948]] -09	20618
37073 ^[[939]] +05	21565
38017 ^[[944]] +07	22505
38968 ^[[951]] -16	23455
39903 ^[[935]] +27	24391
40865 ^[[962]] -16	25354
41811 ^[[946]] +03	26294
42760 ^[[949]] -06	27241
43703 ^[[943]] +01	28193
44647 ^[[944]] +05	29131
45596 ^[[949]] -06	30092
46539 ^[[943]] +12	31032
47494 ^[[955]] -15	31974
48434 ^[[940]] +07	32924
49381 ^[[947]] +07	33870

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[[table]]

10th. H line 19th line from bottom 23.30

---|---

50335	-12	34820	-10
51277	942	+05	35760 940 +08
52224	947	-01	36708 948 -02
53170	946	-01	37654 946 +05
54115	945	+04	38605 951 -03
55064	949	-06	39553 948 +01
56007	943	+02	40502 949 -07
56952	945	+06	41444 942 -01
57903	951	-14	42387 943 +07
58840	937	+05	43337 950 -01
59782	942	+11	44286 949 00
60735	953	-06	45235 949 -15
61682	947	+16	46169 934 +18
62645	963	-19	47121 952 00
63589	944	-01	48073 952 -09
64532	943	+04	49016 943 +08
65479	947	-03	49967 951 -08
66423	944	+01	50910 943 +01
67368	945	+09	51854 944 +10
68322	954	-08	52808 954 [[/strikethrough]] -09 [[/strikethrough]] -11
69268	946	+01	53751 943 +09
70215	947	-08	54703 952 -19
71154	939	+16	55636 933 +24
72109	955	-13	56593 957 -08
73051	942	+09	57542 949 -02
74002	951	-01	58489 947 -01
74952	950	-13	59435 946 +01
75889	937	+15	60382 947 +01
76841	9 [[/strikethrough]] 6 [[/strikethrough]] 52 [[/strikethrough]] 61330	948	

[[/table]]

22.50

21

10th. H line 19th line from bottom 22.50

50335	-12	34820	-10
51277	942	+05	35760 940 +08
52224	947	-01	36708 948 -02
53170	946	-01	37654 946 +05
54115	945	+04	38605 951 -03
55064	949	-06	39553 948 +01
56007	943	+02	40502 949 -07
56952	945	+06	41444 942 -01
57903	951	-14	42387 943 +07
58840	937	+05	43337 950 -01
59782	942	+11	44286 949 00
60735	953	-06	45235 949 -15
61682	947	+16	46169 934 +18
62645	963	-19	47121 952 00
63589	944	-01	48073 952 -09
64532	943	+04	49016 943 +08
65479	947	-03	49967 951 -08
66423	944	+01	50910 943 +01
67368	945	+09	51854 944 +10
68322	954	-08	52808 954 [[/strikethrough]] -09 [[/strikethrough]] -11
69268	946	+01	53751 943 +09
70215	947	-08	54703 952 -19
71154	939	+16	55636 933 +24
72109	955	-13	56593 957 -08
73051	942	+09	57542 949 -02
74002	951	-01	58489 947 -01
74952	950	-13	59435 946 +01
75889	937	+15	60382 947 +01
76841	9 [[/strikethrough]] 6 [[/strikethrough]] 52 [[/strikethrough]] 61330	948	

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[[preprinted]]22[[/preprinted]]

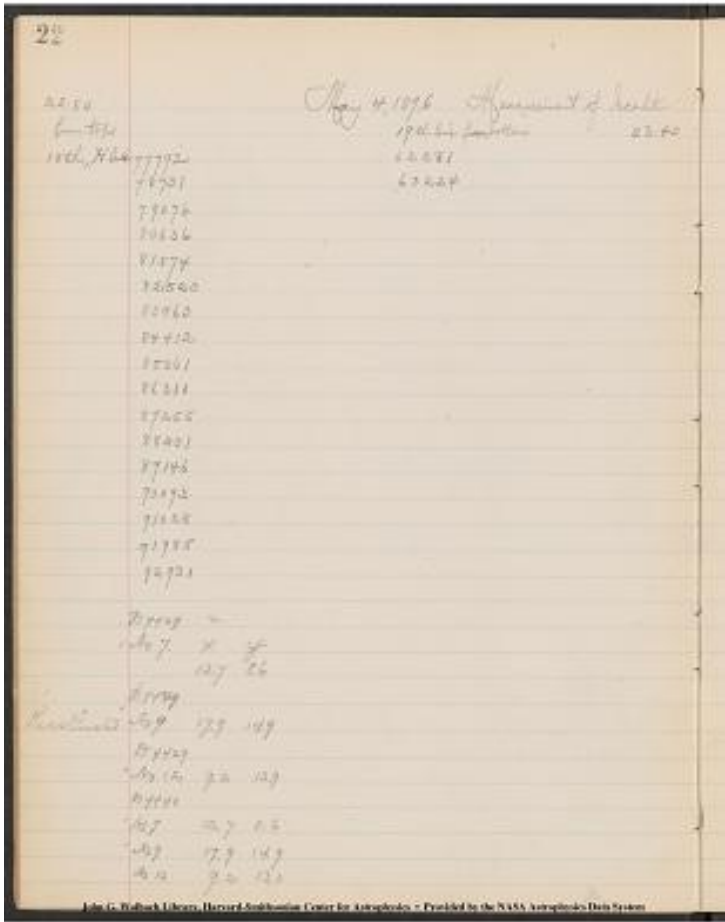
May 4, 1896 Measurement of Scale
19th line from bottom 23.40
62281
63224

22.50 from top 10th H line
77792
78731
80636
81574
82520
83463
84412
85361
86310
87255
88201
89146
90093
91028
91985
92931

[[table]]

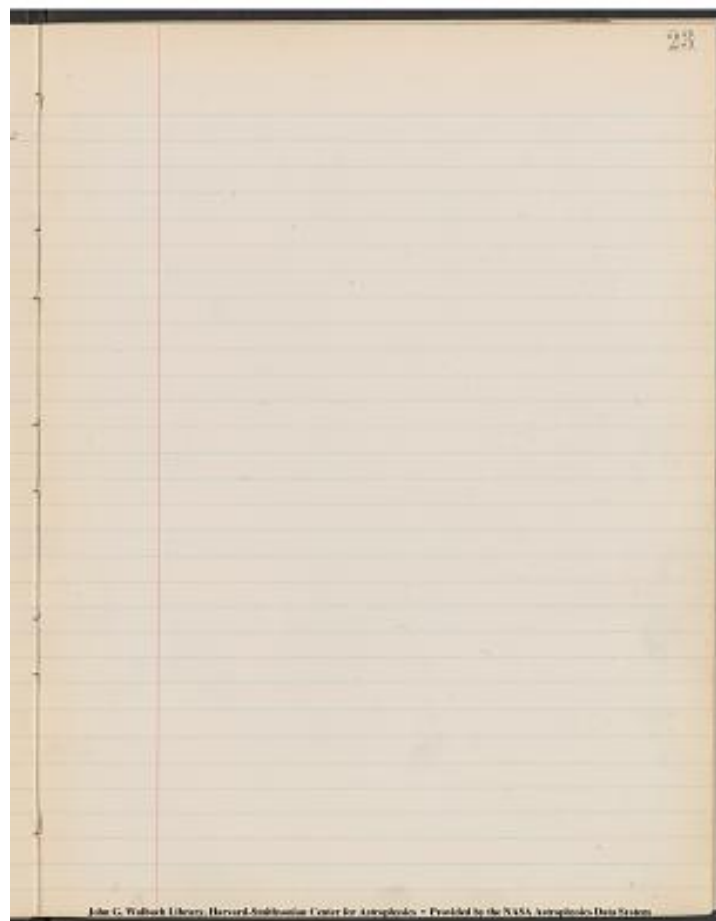
	----	----	----
D4429	x		
No 7	x	y	
	12.7	8.6	
D4429			
^[[Reestimates]]	No9	17.9	14.9
D4429			
No 12	9.2	12.9	
D4440			
No7	12.7	8.6	
No9	17.9	14.9	
No 12	9.2	13.0	

[[/table]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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[[preprinted]] 23 [[/preprinted]]



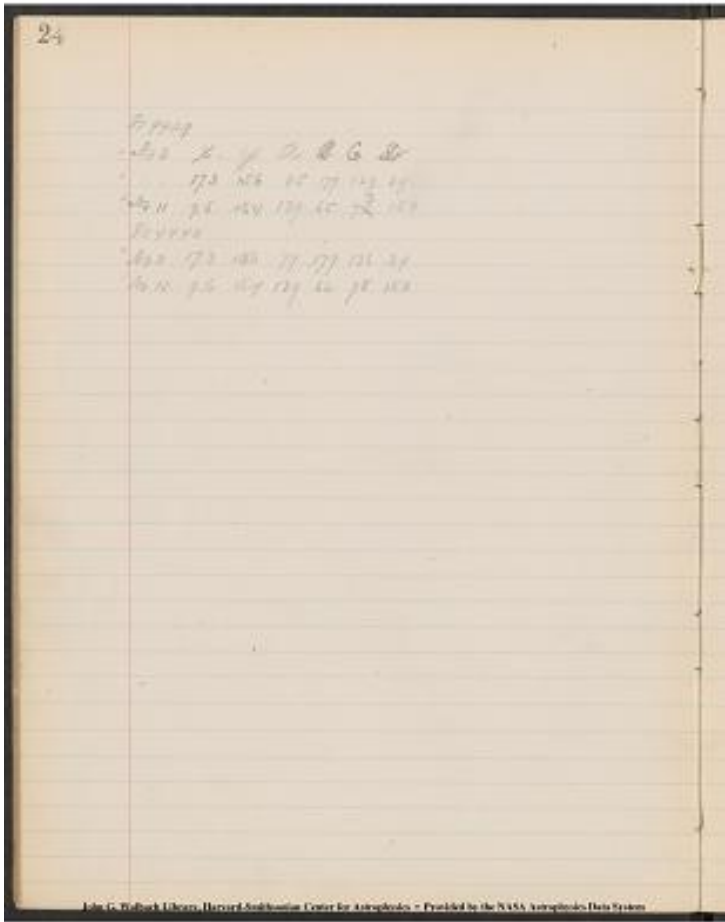
Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
Extracted Sep-23-2023 08:55:04

D4429

No 3	X.	Y	A	B	C	D
No 3	17.3	15.6	85	179	129	34
No 11	9.6	15.4	139	65	7	2

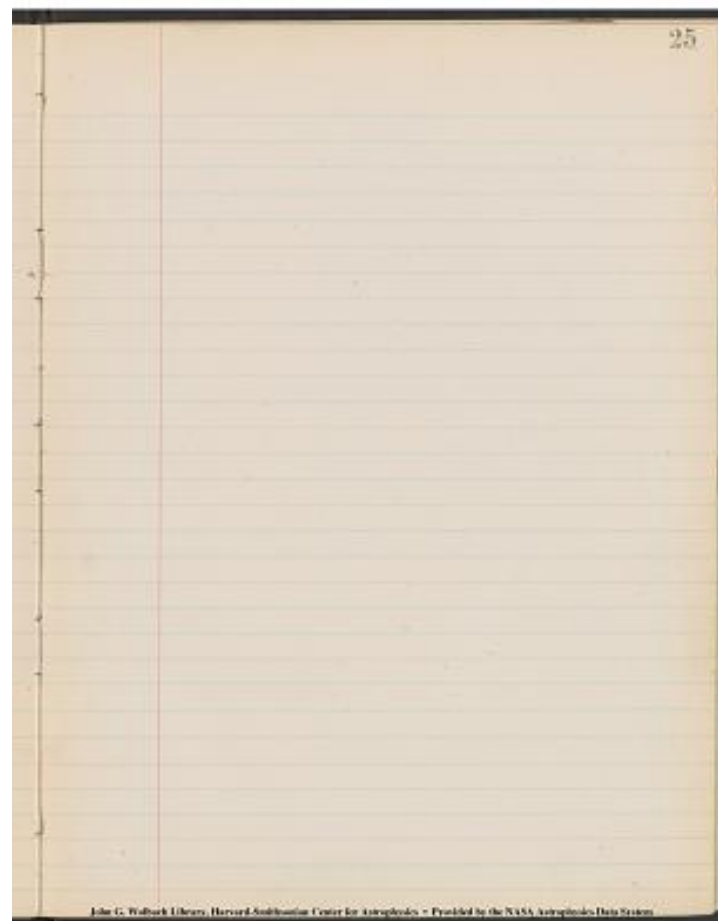
D4440

No 3	17.3	15.6	79	179	136	34
No 11	9.6	15.4	139	66	78	150



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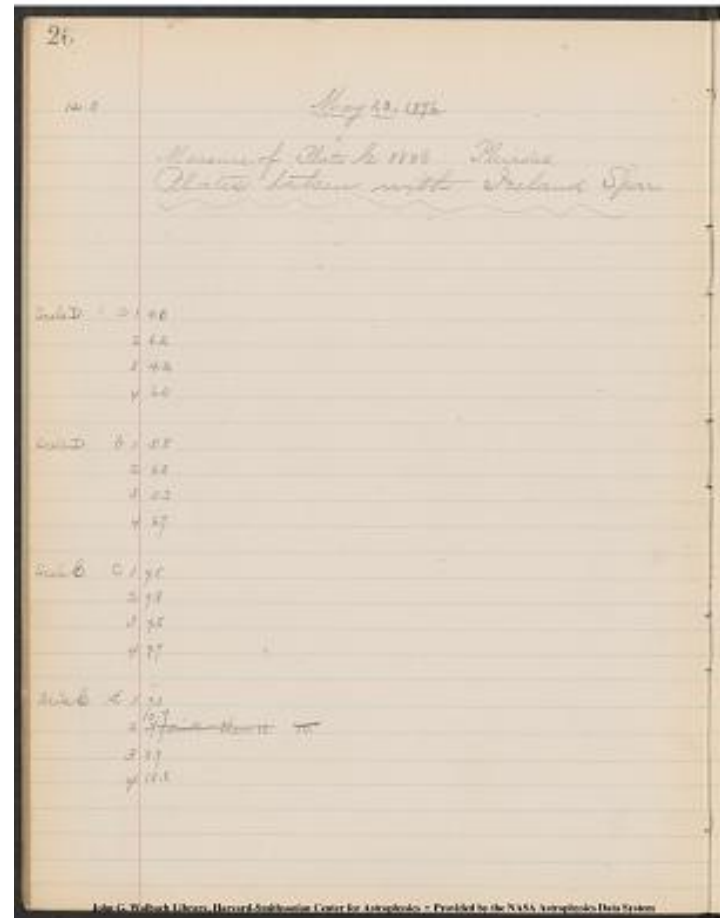
[[preprinted]] 25 [[/preprinted]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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Extracted Sep-23-2023 08:55:04

26

12.0
 May 23, 1896
 Measure of Plate C 8836 Pleiades.
 Plates taken with Iceland Spar.
 Scale D a1|4.0
 2|6.2
 3|4.2
 4|6.0
 Scale D b1|5.5
 2|6.8
 3|5.3
 4|6.7
 Scale C c1|7.5
 2|9.8
 3|7.5
 4|9.7
 Scale C d1|9.0
 2|~~.7 fainter than 10~~ 10. ~~10.7~~
 3|8.9
 4|10.8



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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27
 May 23, 1896
 Measure of Plate C 8914 Pleiades
 [[table]]
 Scale D. a. 1 | 4.3
 2 | 6.7
 3 | 4.2
 4 | 6.7
 Scale D. b. 1 | 4.8
 2 | 6.9
 3 | 4.8
 4 | 7.0
 Scale b c. 1 | 5.8
 2 | 8.1
 3 | 5.7
 4 | 7.9
 Scale b d. 1 | 6.0
 2 | 8.8
 3 | 6.1
 4 | 8.9
 f. 1 | 6.9
 2 | 9.6
 3 | 7.0
 4 | 9.7
 [[/table]]
 12.15

27

May 23, 1896

Measure of Plate C 8914 Pleiades

Scale D. a. 1	4.3
2	6.7
3	4.2
4	6.7
Scale D. b. 1	4.8
2	6.9
3	4.8
4	7.0
Scale b c. 1	5.8
2	8.1
3	5.7
4	7.9
Scale b d. 1	6.0
2	8.8
3	6.1
4	8.9
f. 1	6.9
2	9.6
3	7.0
4	9.7
12.15	

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

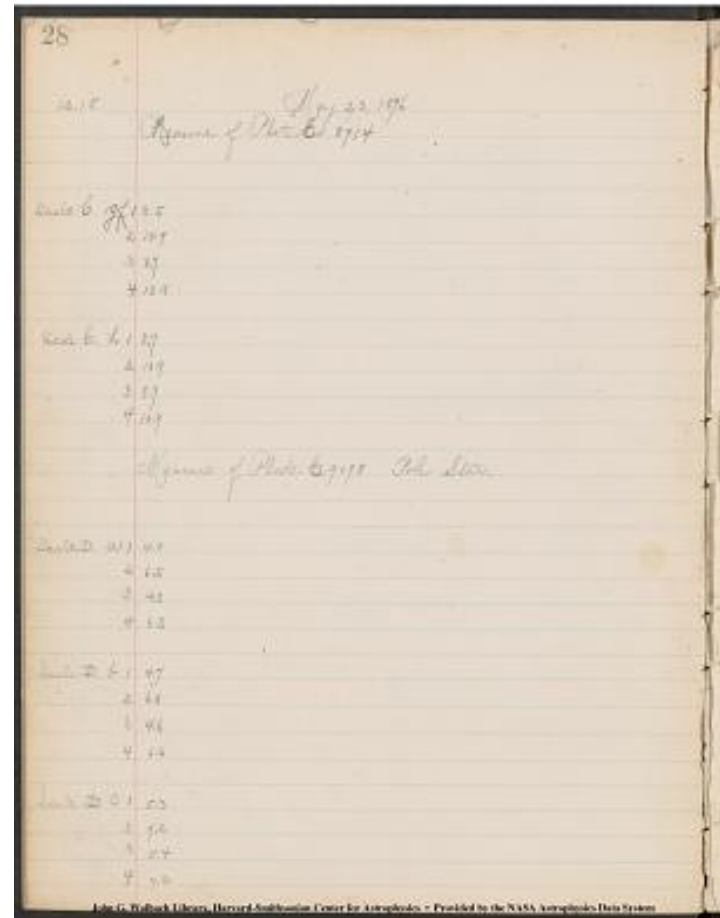
Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
 Variables M5 #4
 Transcribed and Reviewed by Digital Volunteers
 Extracted Sep-23-2023 08:55:04

28
 12.35 May 23, 1896
 Measure of Plate C 8914

Scale C g	11	8.5
2	10.9	
3	8.7	
4	10.8	
Scale C, h	1	8.7
2	10.9	
3	8.9	
4	10.9	

Measure of Plate C 9098 Pole Star.

Scale D. a	1	4.0
2	6.5	
3	4.0	
4	6.3	
Scale D. b	1	4.7
2	6.8	
3	4.6	
4	6.6	
Scale D C	1	5.3
2	7.2	
3	5.4	
4	7.2	



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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[[preprinted]] 2 [[/preprinted]]

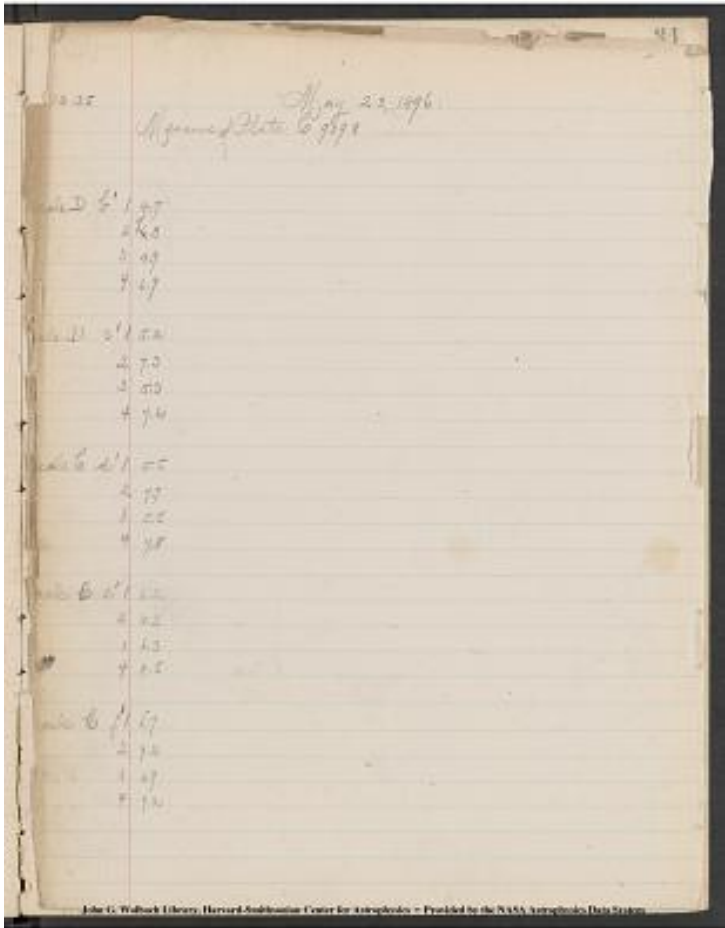
May 23, 189~~3~~ 3 ~~6~~
Measure Of Plate C. 9098

1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
30	1
31	1
32	1
33	1
34	1
35	1
36	1
37	1
38	1
39	1
40	1
41	1
42	1
43	1
44	1
45	1
46	1
47	1
48	1
49	1
50	1
51	1
52	1
53	1
54	1
55	1
56	1
57	1
58	1
59	1
60	1
61	1
62	1
63	1
64	1
65	1
66	1
67	1
68	1
69	1
70	1
71	1
72	1
73	1
74	1
75	1
76	1
77	1
78	1
79	1
80	1
81	1
82	1
83	1
84	1
85	1
86	1
87	1
88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

May 23, 1893	
Measure Of Plate C. 9098	
Scale C. d1	5.5
2	8.0
3	5.5
4	7.8
Scale C. e1	6.3
2	8.6
3	6.4
4	8.6
Scale C. f1	6.0
2	9.1
3	7.1
4	9.3
Scale C. g,1	7.2
2	9.8
3	7.3
4	9.9
Scale D. a'1	4.0
2	6.7
3	4.2
4	6.6
12.35	

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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[[preprinted]]31 [[/preprinted]]
12.35 May 23, 1896
Measured Plate 6 9098
[[table]]
Scale D l'1|4.7|
2|~~6.0~~ |~~6.0~~ |
3|4.9|
4|6.9|
Scale D c'1|5.2|
2|7.3|
3|5.3|
4|7.2|
Scale 6 d'1|5.5|
2|7.7|
3|5.5|
4|7.8|
Scale 6 c'1|6.2|
2|8.3|
3|6.3|
4|8.5|
Scale 6 f'1|6.7|
2|9.2|
3|6.9|
4|9.2|
[[/table]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
Extracted Sep-23-2023 08:55:04

31

May 23, 1896
Measure of Plate 6 9098

[[table]]

[[table]]

Scale C g'1 | 7.7

2 | 9.9

3 | 8.0

4 | 10.0

[[table]]

Measure of Plate 6 9140 Praesefe

[[table]]

[[table]]

Scale C. a 1 | 6.5

2 | 8.8

3 | 6.5

4 | 8.7

Scale C. b 1 | 6.9

2 | 9.2

3 | 7.0

4 | 9.0

Scale C. c 1 | 7.0

2 | 9.5

3 | 7.1

4 | 9.3

Scale C. e 1 | 7.2

2 | 9.7

3 | 7.3

4 | 9.7

[[table]]

1.5

31	
May 23, 1896	
Measure of Plate 6 9098	
[[table]]	
[[table]]	
Scale C g'1 7.7	
2	9.9
3	8.0
4	10.0
[[table]]	
Measure of Plate 6 9140 Praesefe	
[[table]]	
[[table]]	
Scale C. a 1 6.5	
2	8.8
3	6.5
4	8.7
Scale C. b 1 6.9	
2	9.2
3	7.0
4	9.0
Scale C. c 1 7.0	
2	9.5
3	7.1
4	9.3
Scale C. e 1 7.2	
2	9.7
3	7.3
4	9.7
[[table]]	
1.5	

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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32

1.5

May 23, 1896

Measure of Plate C 9140

[[table]]

1.5

Scale C. f1 | 7.7 |

2 | 9.8 |

3 | 7.8 |

4 | 10.0 |

Scale C g 1 | 7.8 |

2 | 9.8 |

3 | 7.7 |

4 | 10.0 |

Scale C h 1 | 7.8 |

2 | 9.8 |

3 | 7.7 |

4 | 9.9 |

[[strikethrough]] Scale C k 1 | 9.3 |

2 | |

3 | 9.4 |

4 | |

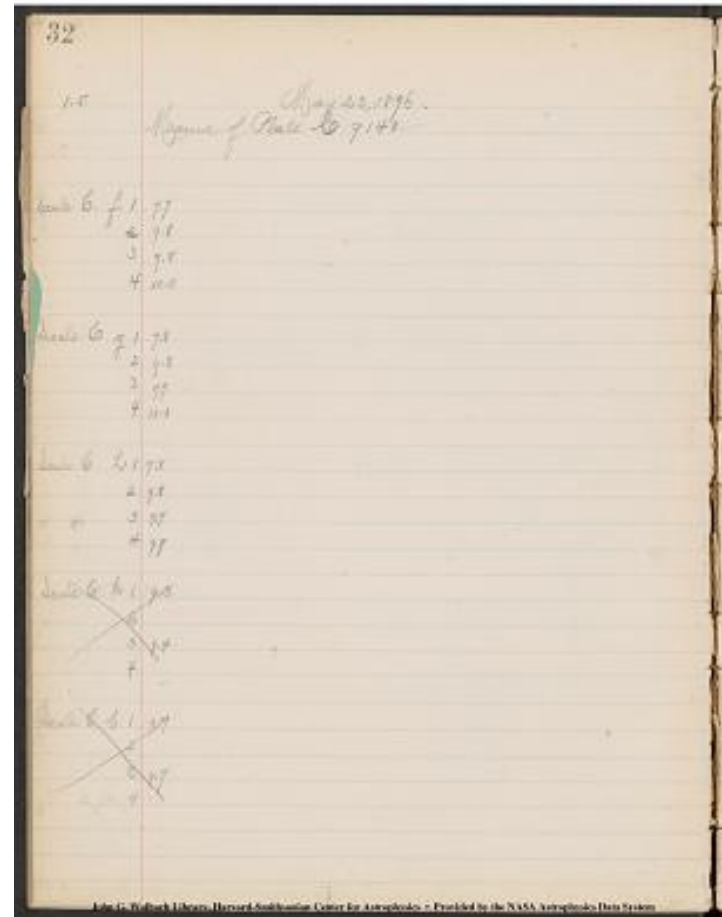
Scale C l 1 | 9.7 |

2 | |

3 | 9.7 |

4 | [[/strikethrough]]

[[/table]]

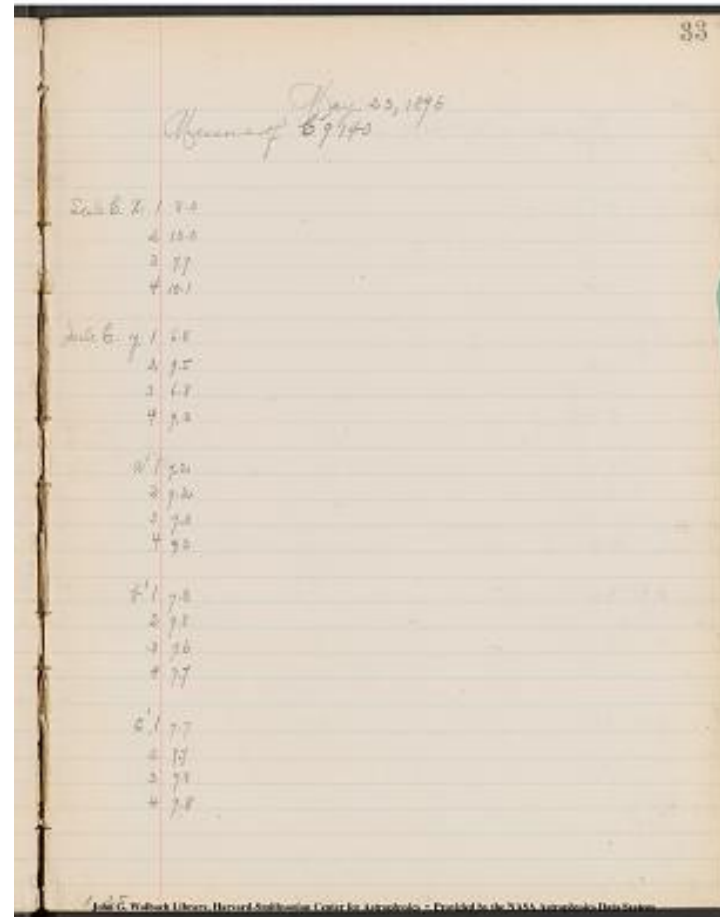


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Extracted Sep-23-2023 08:55:04

33

May 23, 1896
Measures of 69140

Scale 6. X 1 8.0	
2 10.0	
3 7.9	
4 10.1	
Scale 6. y 1 6.8	
2 9.5	
3 6.8	
4 9.3	
a' 1 7.2	
2 9.2	
3 7.0	
4 9.3	
b' 1 7.8	
2 9.8	
3 7.6	
4 9.7	
c' 1 7.7	
2 9.7	
3 7.8	
4 9.8	
[[/table]]	
1	25



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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Extracted Sep-23-2023 08:55:04

34

1.25

May 23, 1896

Measure of C 9140

[[table]]

| | |

Scale C e' 1 | 7.9 |

2 | 9.9 |

3 | 8.0 |

4 | 10.0 |

Scale C f' 1 | 8.2 |

2 | 10.1 |

3 | 8.2 |

4 | 10.2 |

Scale C g' 1 | ~~7.8~~ 8.2 |

2 | ~~9.8~~ 10.1 |

3 | ~~7.8~~ 8.3 |

4 | 10. ~~0~~ 2 |

Scale C h' 1 | ~~7.7~~ 8.0 |

2 | ~~9.7~~ 10.1 |

3 | ~~7.8~~ 8.1 |

4 | ~~9.9~~ 10.1 |

Scale C X' 1 | 8.2 |

2 | 10.5 |

3 | 8.3 |

4 | 10.8 |

Scale C Y' 1 | 7.3 |

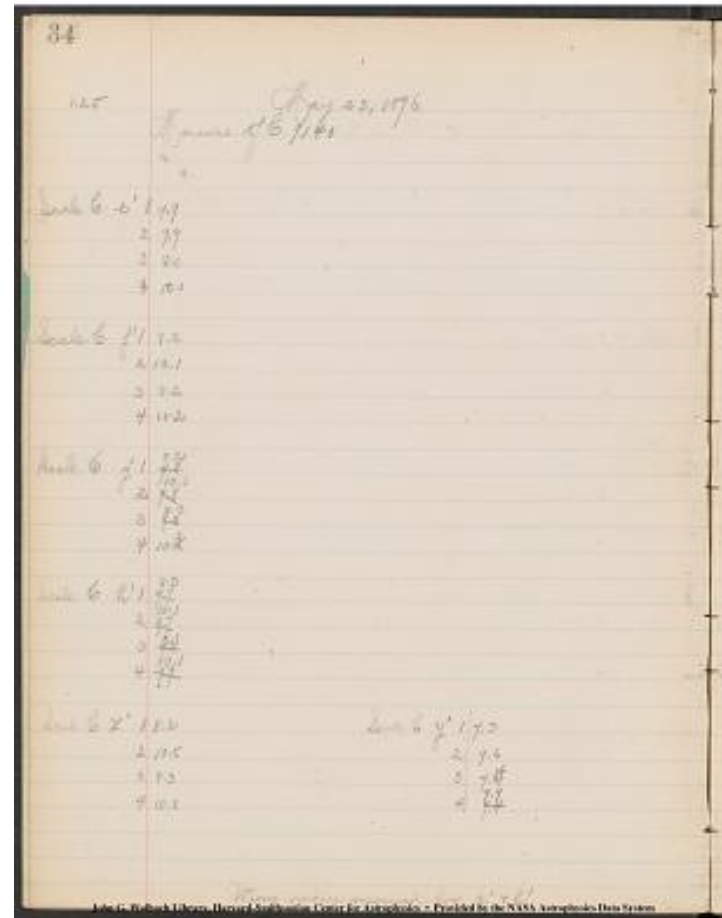
2 | 9.6 |

3 | 7. ~~2~~ 4 |

4 | ~~7.4~~ 9.7 |

[[/table]]

Wrong image measured for g' + h'



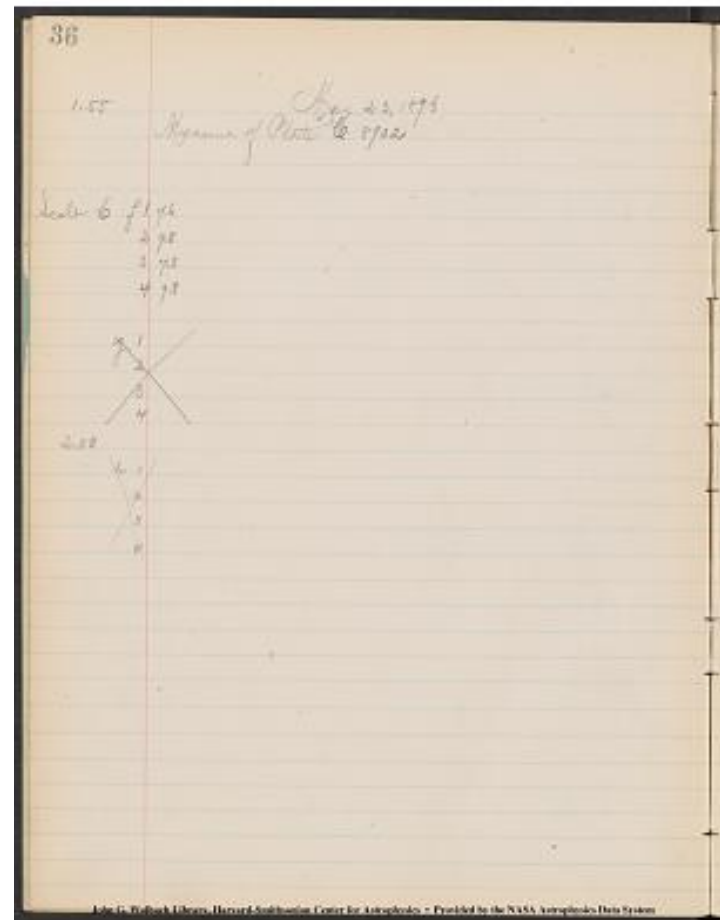
Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
Extracted Sep-23-2023 08:55:04

35
 May 23, 1896
 Measure of 6 8902 Pleiades
 [[table]]
 | | |
 |---|
 Scale D. a 1|4. ~~9~~ 7
 2|7.0
 3|4.8
 4|7.1
 Scale D b 1|5.0
 2|7.1
 3|5.1
 4|7.1
 Scale C. c 1|6.0
 2|8.2
 3|6.4
 4|8.7
 Scale C d 1|6.8
 2|8.9
 3|7.0
 4|9.1
 Scale C e 1|7.7
 2|9.8
 3|7.6
 4|10.0
 [[/table]]
 1.55

May 23, 1896	
Measure of 6 8902 Pleiades	
Scale D. a 1	4.7
2	7.0
3	4.8
4	7.1
Scale D b 1	5.0
2	7.1
3	5.1
4	7.1
Scale C. c 1	6.0
2	8.2
3	6.4
4	8.7
Scale C d 1	6.8
2	8.9
3	7.0
4	9.1
Scale C e 1	7.7
2	9.8
3	7.6
4	10.0

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36
 1.55
 May 23 1896
 Measure of Plate 6 8902
 [[table]]
Scale C f 1	7.6
2	9.8
3	7.8
4	9.8
[[~~g~~]] g 1	
 2|
 3|
 4|[[~~h~~]]
 2.00 [[~~h~~]] h 1|
 2|
 3|
 4|[[~~h~~]]|



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 Variables M5 #4
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22.20

[[underlined]] May 24, 1896 [[/underlined]]

Measure of Plate 6 9143

Set of measures farthest from plate no. a Scale 6

[[table]]

| | |
|---|

1|7.0

2|9.3

3|7.1

4|9.4

Scale C b 1|7.5

2|~~9.7~~8|~~9.7~~

3|7.5

4|9.7

Scale C c 1|7.5

2|9.6

3|7.6

4|9.8

Scale C e 1|7.8

2|9.9

3|7.8

4|10.0

Scale C f 1|8.2

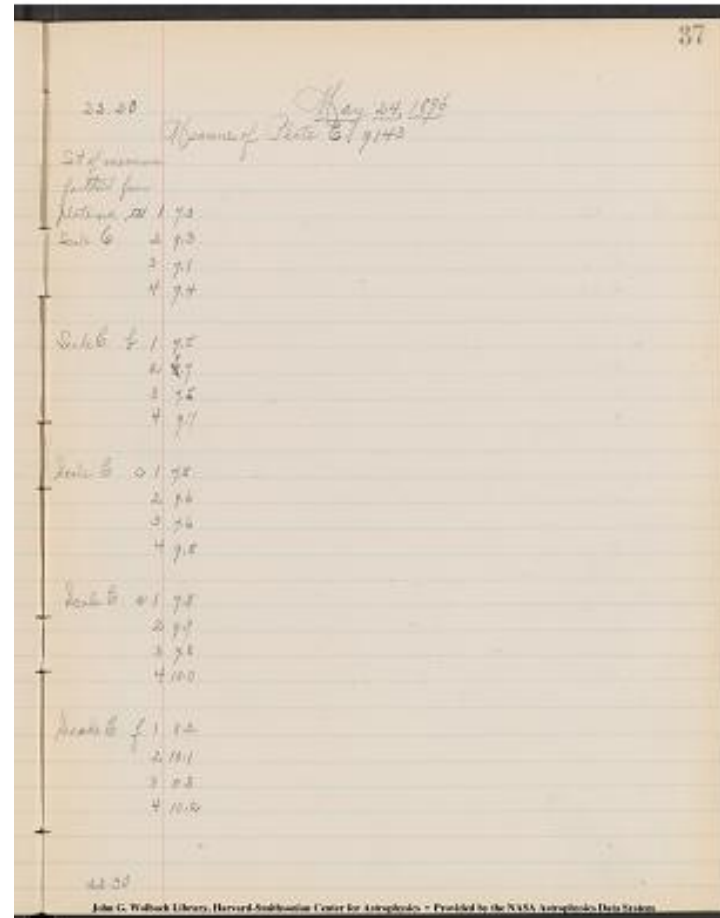
2|10.1

3|8.3

4|10.2

[[/table]]

22.30



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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38

2,2.30 May 234, 1896
Measure Of Plate 6, 9143

[[table]]

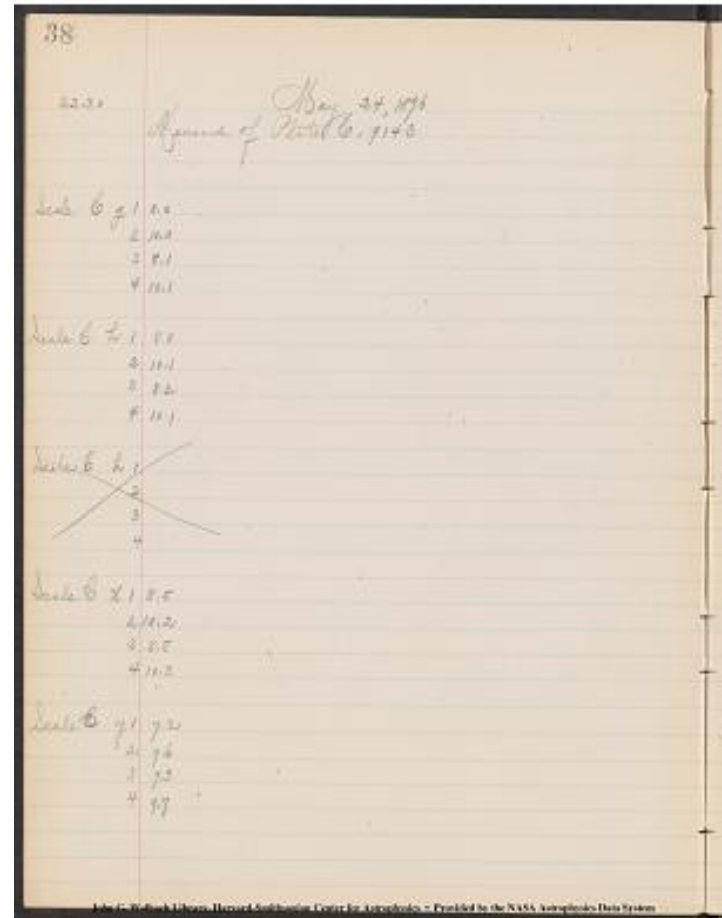
Scale C g1|8.0
2|10.0
3|8.1
4|10.1

Scale C h1|8.0
2|10.1
3|8.2
4|10.1

[[~~Scale C h1~~]]
2|
3|

4|[[~~Scale C h1~~]]
Scale C h1|8.5
2|10.2
3|8.5
4|10.3

Scale C y1|7.2
2|9.6
3|7.3
4|9.7



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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May 24, 1896
Measure Of Plate 6 9143

[[table]]

---|---|

Scale C a'1|4.5

2|9.6

3|7.7

4|9.7

Scale C f'1|8.1

2|10.0

3|8.1

4|10.1

Scale C c'1|8.2

2|10.1

3|8.3

4|10.2

Scale C e'1|8.5

2|10.3

3|8.5

4|10.4

~~Scale C f'1|~~

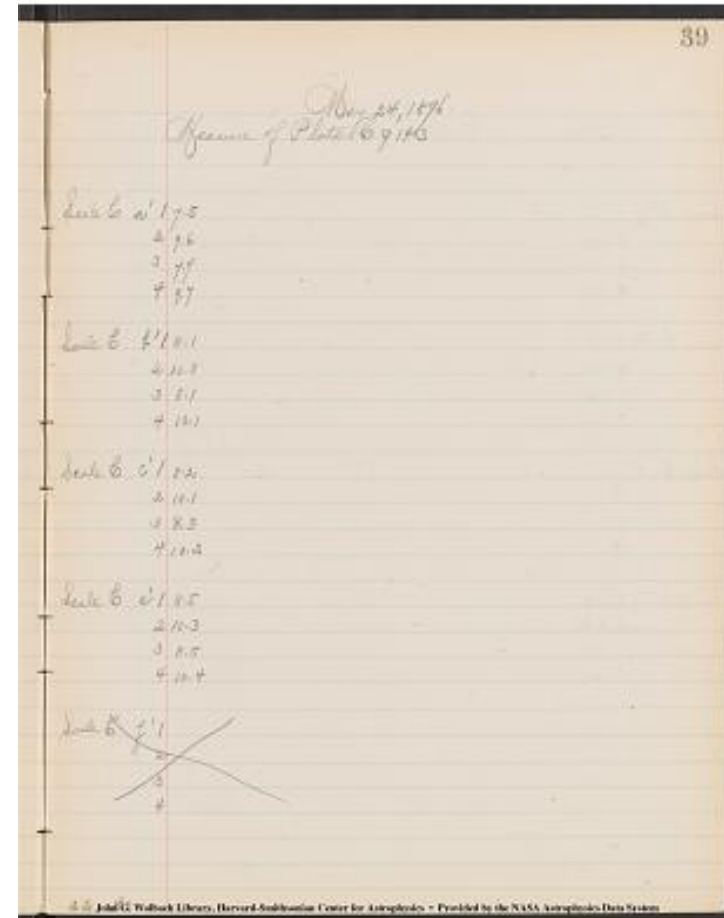
2|

3|

4|~~Scale C f'1|~~

[[table]]

2,2,40



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40

22.40

May 24, 1896

Measure Of Plate 6 9143

[[table]]

1 1 1

Scale C g'1|8.6

2|10.3

3|8.7

4|10.3

Scale C h'1|8.7

2|10.4

3|8.6

4|10.4

~~Scale C y'1~~

2|

3|

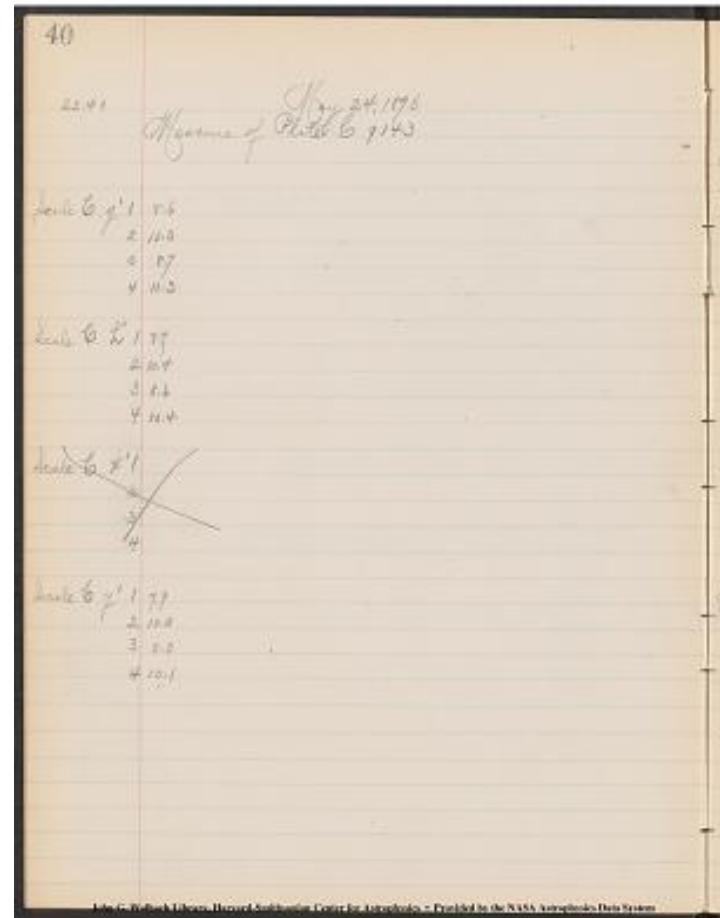
4|~~Scale C y'1~~

Scale C y'1|7.9

2|10.0

3|8.0

4|10.1



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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41

May 24, 1896

Measure Of Plate 69141

Set of measure farthest from Plate no.

[[table]]

1 1 1
1 1 1

Scale C a 1|7.2

2|9.6

3|7.3

4|9.7

Scale C l'1|~~7.6~~ ~~8.2~~ ~~8.3~~

2|~~9.7~~ ~~10.1~~ ~~10.2~~

3|~~7.8~~ ~~8.2~~ ~~8.3~~

4|~~9.9~~ ~~10.2~~ ~~10.3~~

Scale C c1|~~7.7~~ ~~8.3~~ ~~8.3~~

2|~~9.9~~ ~~10.2~~ ~~10.2~~

3|~~7.9~~ ~~8.4~~ ~~8.4~~

4|~~10.0~~ ~~10.3~~ ~~10.3~~

Scale C e1|8.0

2|10.1

3|8.2

4|10.2

Scale C f1|8.5

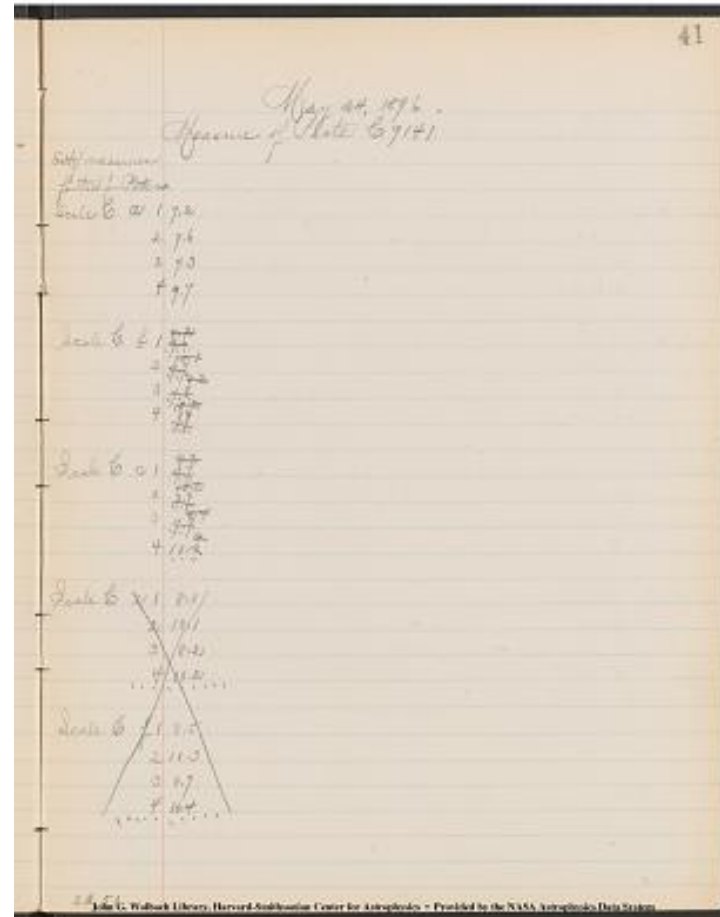
2|10.3

3|8.7

4|10.4|~~10.4~~

[[table]]

22.50



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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42

22.50 May 24, 1896
Measure of Plate C9141

[[table]]

Scale C g 1 | 8.2
2 | 10.2
3 | 8.3
4 | 10.3

Scale C h 1 | 8.1

2 | 10.2

3 | 8.3

4 | 10.3

Scale C x 1 |

2 |

3 |

4 |

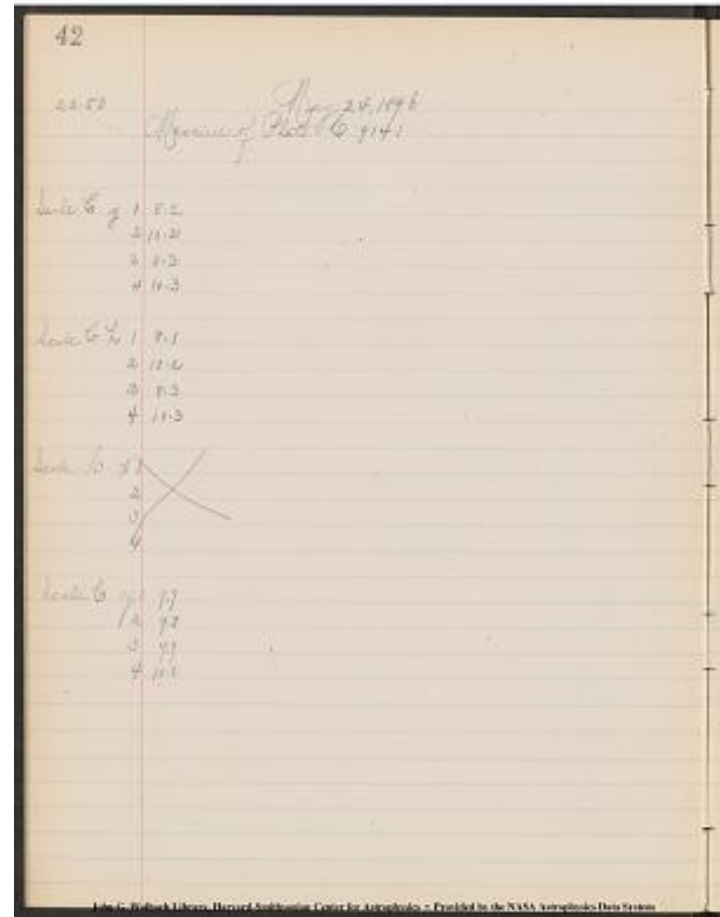
4 |

Scale C y 1 | 7.7

2 | 9.8

3 | 7.9

4 | 10.0



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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43

May 24, 1896
Measure of Plate C9141

[[table]]

Scale C a 1 | 7.8
2 | 9.8
3 | 7.9
4 | 10.0

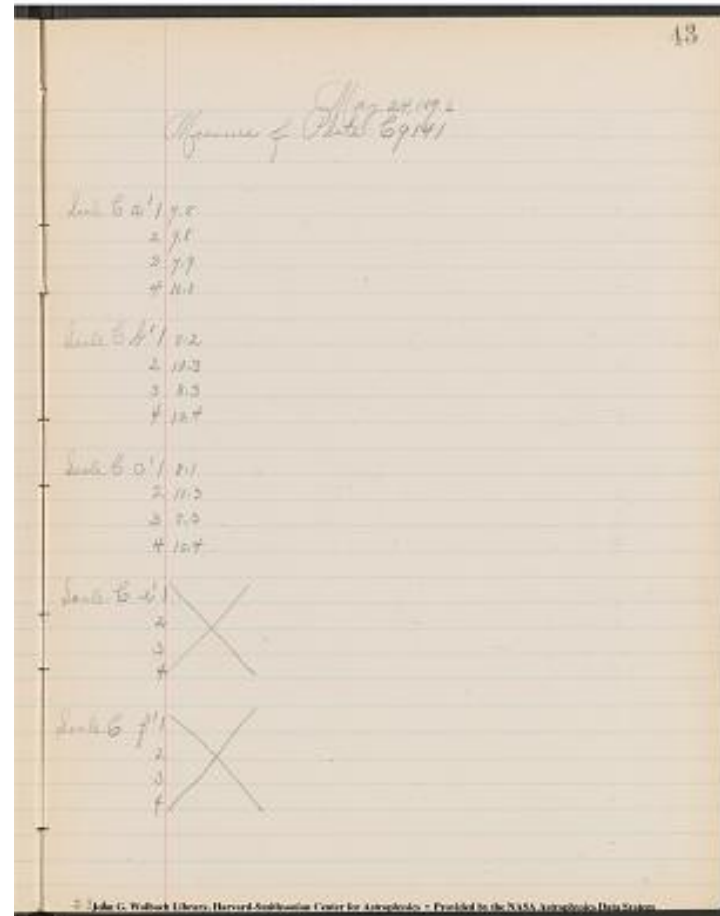
Scale C b 1 | 8.2
2 | 10.3
3 | 8.3
4 | 10.4

Scale C c 1 | 8.1
2 | 10.3
3 | 8.3
4 | 10.4

Scale C e 1 |
2 |
3 |
4 |

Scale C f 1 |
2 |
3 |
4 |

[[/table]]
230

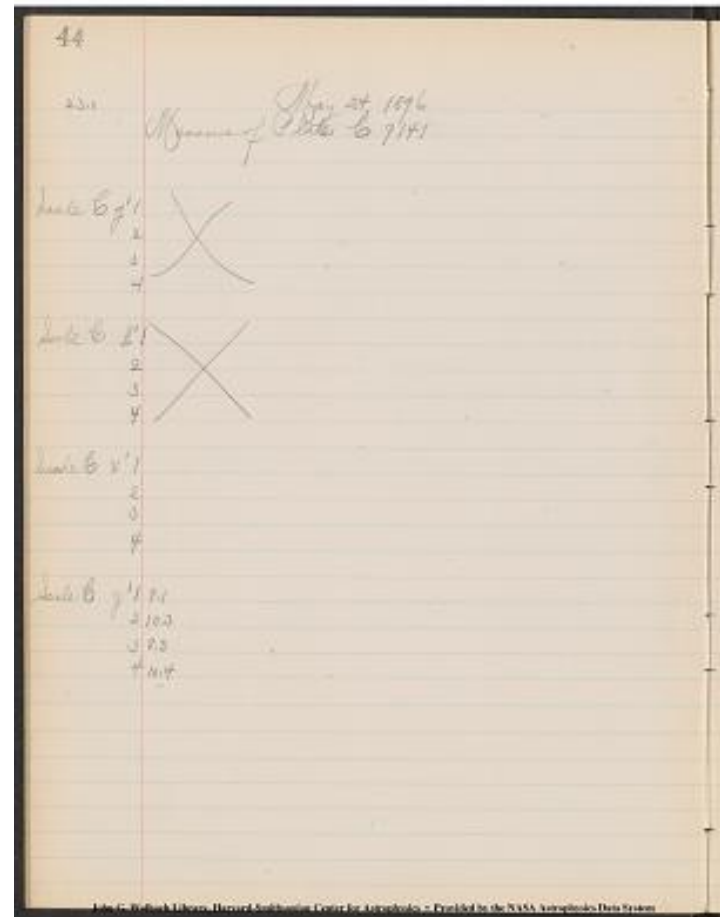


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Variables M5 #4
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Extracted Sep-23-2023 08:55:04

44

23.0 May 24, 1896
Measure of Plate C9141

[[table]]
Scale C g 1 | \ /
2 | V
3 | ^
4 | / \
Scale C h 1 | \ /
2 | V
3 | ^
4 | / \
Scale C x 1 |
2 |
3 |
4 |
Scale C y 1 | 8.1
2 | 10.3
3 | 8.3
4 | 10.4



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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set of images nearest plate number.

May 24, 1896

Measure of Plate C 9095

[[table]]

---|---

Scale ~~D~~ ~~C a 1~~ | ~~6.0~~

~~5.6~~

2 | ~~5.6~~ ~~7.9~~

3 | 5.8

4 | 8.0

Scale C f 1 | 6.2

2 | 8.2

3 | 6.3

4 | 8.4

Scale C c 1 | 6.2

2 | 8.3

3 | 6.3

4 | 8.5

Scale C d 1 | 9.3

2 | 10.4

3 | 9.3

4 | 10.3

Scale C e 1 | 6.8

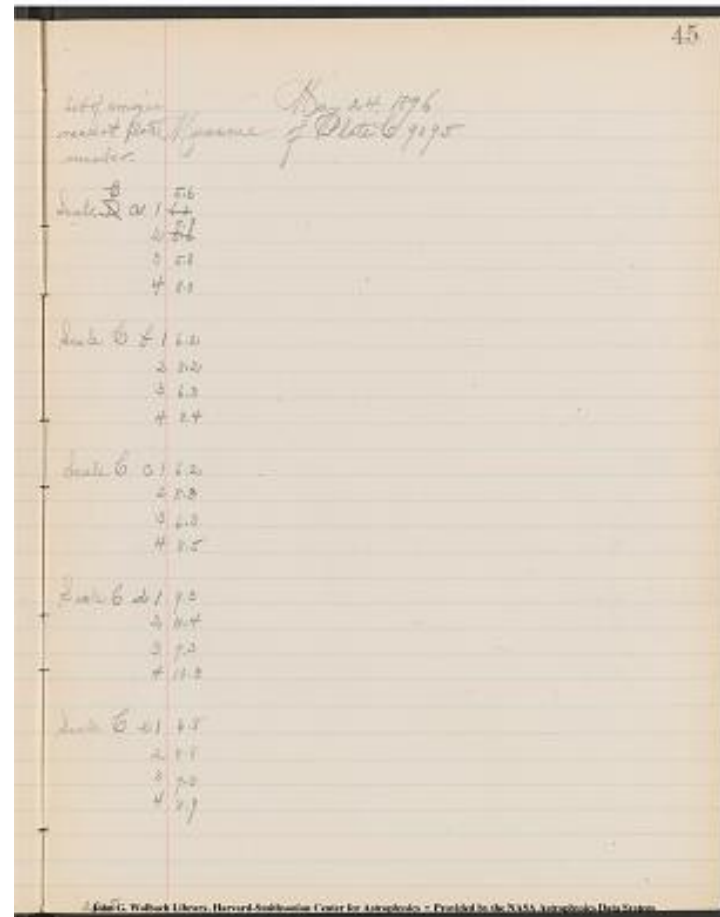
2 | 8.8

3 | 7.0

4 | 8.9

[[table]]

23. 5



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46

23.5 May 24, 1896
Measure of Plate C 9095

[[table]]

Scale C f 1 | 6.8
2 | 9.0
3 | 7.0
4 | 9.1

Scale C g 1 | 6.9
2 | 9.0
3 | 7.0
4 | 9.0

Scale C h 1 | 6.9
2 | 8.8
3 | 7.0
4 | 9.0

Scale C k 1 | 8.6
2 | 10.1
3 | 8.7
4 | 10.2

Scale C l 1 | 8.7
2 | 10.3
3 | 8.6
4 | 10.4

46	
23.5	May 24, 1896 Measure of Plate C 9095
Scale C f 1	6.8
2	9.0
3	7.0
4	9.1
Scale C g 1	6.9
2	9.0
3	7.0
4	9.0
Scale C h 1	6.9
2	8.8
3	7.0
4	9.0
Scale C k 1	8.6
2	10.1
3	8.7
4	10.2
Scale C l 1	8.7
2	10.3
3	8.6
4	10.4

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Variables M5 #4
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May 24, 1896
Measure of Plate C 9095

2	10.3
3	8.8
4	10.4

Scale C m 1 | 8.9

2	10.3
3	8.9
4	10.4

Scale C n 1 | 9.2

2	10.4
3	9.3
4	10.5

Scale C o 1 | 9.2

2	10.3
3	9.3
4	10.4

Scale C p 1 | 9.2

2	10.5
3	9.4
4	10.5

Scale C q 1 | 9.4

2	10.5
3	9.4
4	10.5

23.15

47

May 24, 1896
Measure of Plate C 9095

Scale C m 1	8.9
2	10.3
3	8.8
4	10.4

Scale C n 1	9.2
2	10.3
3	8.9
4	10.4

Scale C o 1	9.2
2	10.4
3	9.3
4	10.5

Scale C p 1	9.2
2	10.3
3	9.3
4	10.4

Scale C q 1	9.4
2	10.5
3	9.4
4	10.5

23.15

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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48

23.15 May 24, 1896
Measure of Plate C, 9095

[[table]]
Scale C n 1 | 9.4

2 | 10.5
3 | 9.5
4 | 10.5

Scale C a' 1 | 6.4

2 | 8.3
3 | 6.7
4 | 8.5

Scale C b' 1 | 6.8

2 | 8.7
3 | 7.0
4 | 8.9

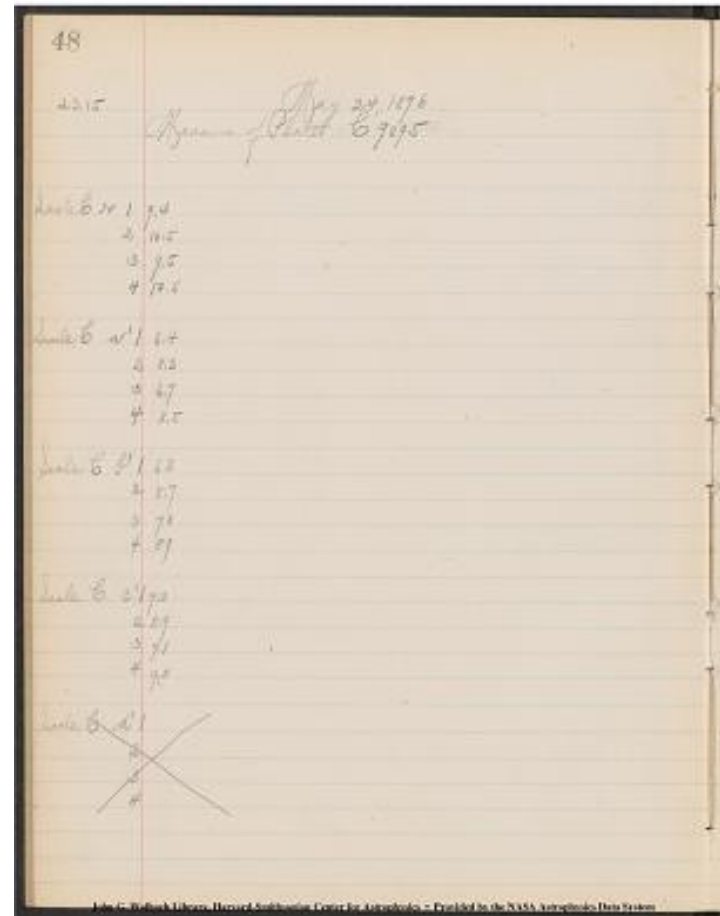
Scale C c' 1 | 7.0

2 | 8.9
3 | 7.1
4 | 9.0

~~Scale C d' 1~~

2 |
3 |

4 | ~~Scale C d' 1~~



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Variables M5 #4
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May 24, 1896
Measure of Plate C9095

[[table]]

1	1

Scale C e' 1 | 4.4

2 | 9.2

3 | 7.5

4 | 9.3

Scale C f' 1 | 7.7

2 | 9.6

3 | 7.9

4 | 9.7

Scale C g' 1 | 7.7

2 | 9.6

3 | 7.9

4 | 9.7

Scale C h' 1 | 7.7

2 | 9.6

3 | 7.8

4 | 9.7

Scale C k' 1 | 9.1

2 | 10.3

3 | 9.2

4 | 10.4

l' | too faint

[[/table]]

23.20

49

May 24, 1896
Measure of Plate C9095

Scale C e' 1	4.4
2	9.2
3	7.5
4	9.3
Scale C f' 1	7.7
2	9.6
3	7.9
4	9.7
Scale C g' 1	7.7
2	9.6
3	7.9
4	9.7
Scale C h' 1	7.7
2	9.6
3	7.8
4	9.7
Scale C k' 1	9.1
2	10.3
3	9.2
4	10.4
l'	too faint
23.20	

l' too faint

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Variables M5 #4
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50

23.20 May 24, 1896
set of images farther from Plate No.
Measure of Plate 6 9142

[[table]]

2	8.0
3	6.1
4	8.1

2	8.5
3	6.3
4	8.6

2	8.6
3	6.5
4	8.7

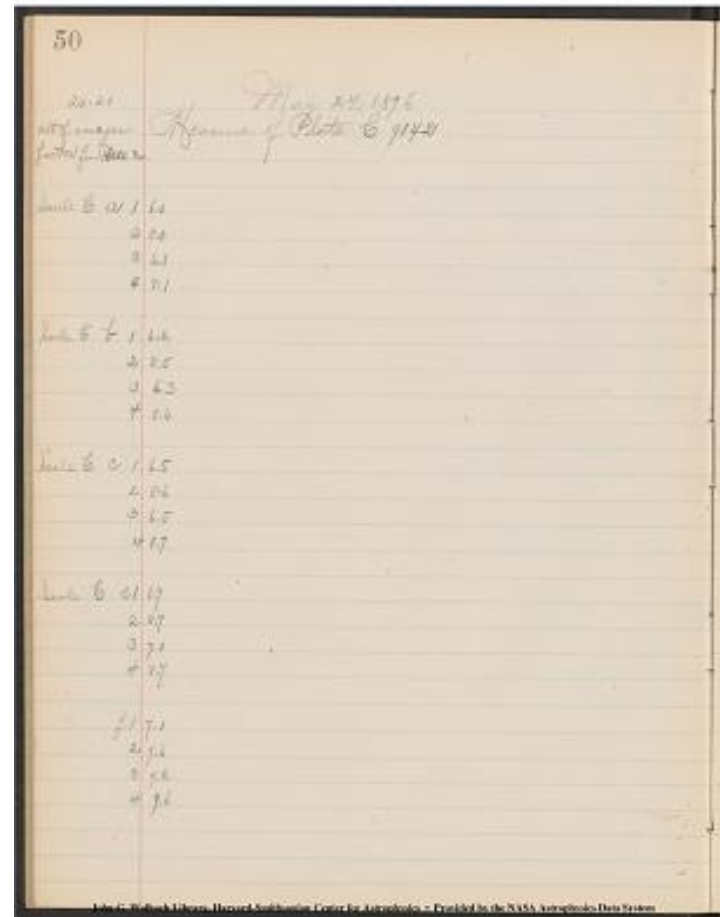
2	8.7
3	7.0
4	8.7

2	9.6
3	7.2
4	9.6

2	9.6
3	7.2
4	9.6

2	9.6
3	7.2
4	9.6

2	9.6
3	7.2
4	9.6



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Variables M5 #4
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51

May 24, 1896
Measure of plate C 9142

[[table]]

Scale C g 1 | 7.0
2 | 9.5
3 | 7.1
4 | 9.6

Scale C h 1 | 7.2
2 | 9.5
3 | 7.2
4 | 9.6

k | too faint

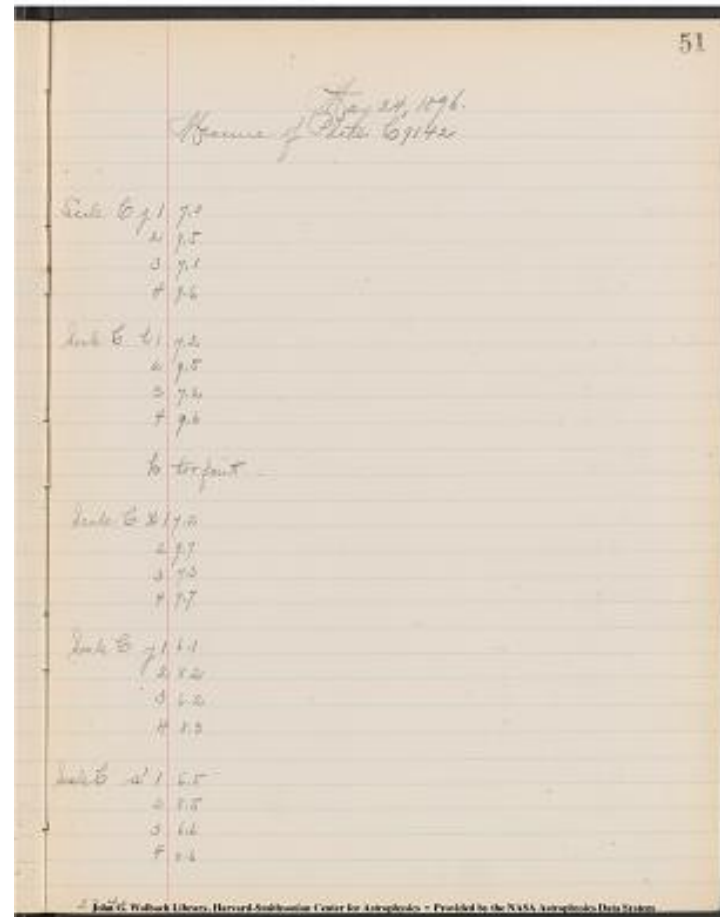
Scale C x 1 | 7.2
2 | 9.7
3 | 7.3
4 | 9.7

Scale C q 1 | 6.1
2 | 8.2
3 | 6.2
4 | 8.3

Scale C a^1 1 | 6.5
2 | 8.5
3 | 6.6
4 | 8.6

[[/table]]

23.40

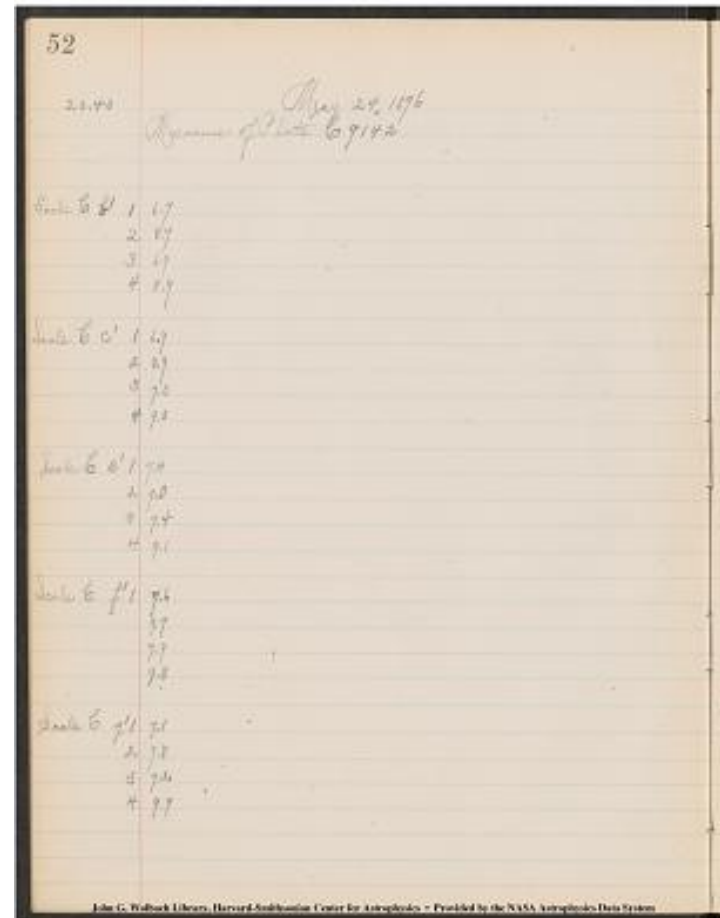


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52

23.40
May 24, 1896
Measure of Plate C 9142

[[table]]
Scale C b^1 1	6.7
2	8.7
3	6.9
4	8.9
Scale C c^1 1	6.9
2	8.9
3	7.0
4	9.0
Scale C e^1 1	7.4
2	9.0
3	7.4
4	9.1
Scale C f^1 1	7.6
9.7	
7.9	
9.8	
Scale C g^1 1 | 7.1
2 | 9.8
3 | 7.2
4 | 9.9



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Variables M5 #4
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May 24, 1896
Measure of Plate C 91421

[[table]]

| | |

Scale C h' 1 | 7.7 |

2 | 9.7 |

3 | 7.9 |

4 | 9.7 |

k' | too faint |

Scale C k' 1 | 8.0 |

2 | 10.0 |

3 | 8.1 |

4 | 10.0 |

Scale C y' 1 | 6. ~~3~~ ~~7~~ |

2 | 9.0 |

3 | 6.8 |

4 | 9.1 |

| | Measure of Plate C 9109 |

Set of measures farthest from Plate no. |

Scale a 1 | 7.9 |

2 | 10.2 |

3 | 8.1 |

4 | 10.3 |

[[table]]

23.50

53	
May 24, 1896	
Measure of Plate C 91421	
Scale C h' 1	7.7
2	9.7
3	7.9
4	9.7
k'	too faint
Scale C k' 1	8.0
2	10.0
3	8.1
4	10.0
Scale C y' 1	6. 3 7
2	9.0
3	6.8
4	9.1
Measure of Plate C 9109	
Set of measures farthest from Plate no.	
Scale a 1	7.9
2	10.2
3	8.1
4	10.3
[[table]]	
23.50	

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Variables M5 #4
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54

23.50 May 24, 1896
Measure of Plate C 9109

b 1 | too faint

a 1 | too faint

set farthest from Measure of Plate C9108|

plate no. |

Scale C a 1 | 6.5

2 | 8.9

3 | 6.5

4 | 9.2

Scale C b 1 | 7.0

2 | 9.7

3 | 7.1

4 | 9.8

Scale C c 1 | 7.0

2 | 9.7

3 | 7.1

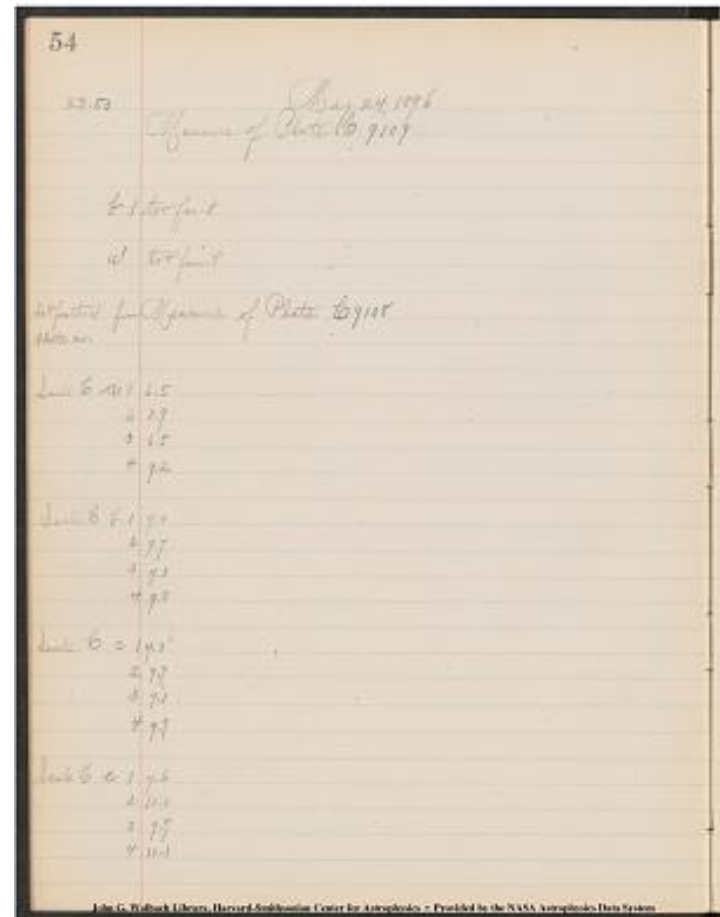
4 | 9.7

Scale 6 e 1 | 7.6

2 | 10.0

3 | 7.7

4 | 10.1



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Variables M5 #4
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55

May 24, 1896
Measure of Plate C 9108

[[table]]

1	10.1
2	7.9
3	10.0

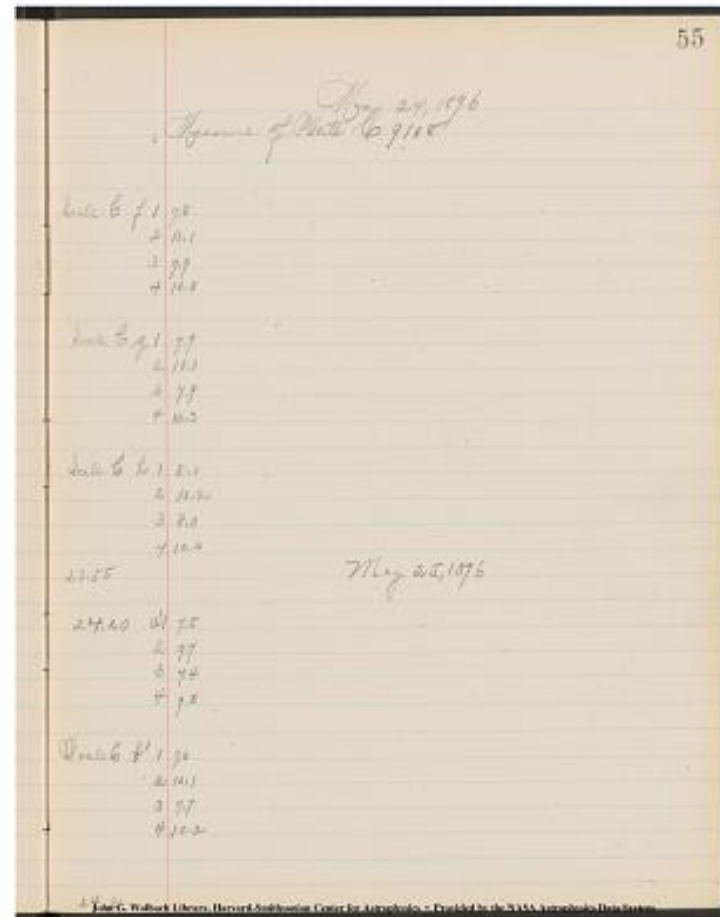
2	10.0
3	7.9
4	10.3

2	10.2
3	8.0
4	10.3

2	9.7
3	7.4
4	9.8

2	10.1
3	7.7
4	10.2

24.21



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56

24.21

May 2 ~~4~~ ~~5~~, 1896.

Measure of Plate C 9108

[[table]]

---|---

Scale C c 1 | 7.8

2 | 10.2

3 | 7.8

4 | 10.3

e' 1 | too faint

measures | Measure of Plate C9056

farthest from plate no. |

Scale C a 1 | 4.9

2 | 6.4

3 | 4.8

4 | 6.5

Scale C b 1 | 7.3

2 | 9.7

3 | 7.1

4 | 9.7

Scale C c 1 | 8.2

2 | 10.1

3 | 8.0

4 | 10.1

56	
24.21	Measure of Plate C 9108
Scale C c 1	7.8
2	10.2
3	7.8
4	10.3
e' 1	too faint
measures	Measure of Plate C9056
farthest from plate no.	
Scale C a 1	4.9
2	6.4
3	4.8
4	6.5
Scale C b 1	7.3
2	9.7
3	7.1
4	9.7
Scale C c 1	8.2
2	10.1
3	8.0
4	10.1

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Variables M5 #4
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57

May 2 ~~4~~ ~~5~~, 1896.

Measure of Plate C 9056

[[table]]

| | |
| | |

Scale C d 1 | 9.0

2 | 10.2

3 | 9.0

4 | 10.2

e | n.s

f | too faint

Scale C* a 1 | 4.8

2 | 7.1

3 | 4.9

4 | 7.2

Scale C f 1 | 7.8

2 | 9.8

3 | 7.7

4 | 9.7

Scale C c 1 | 8.3

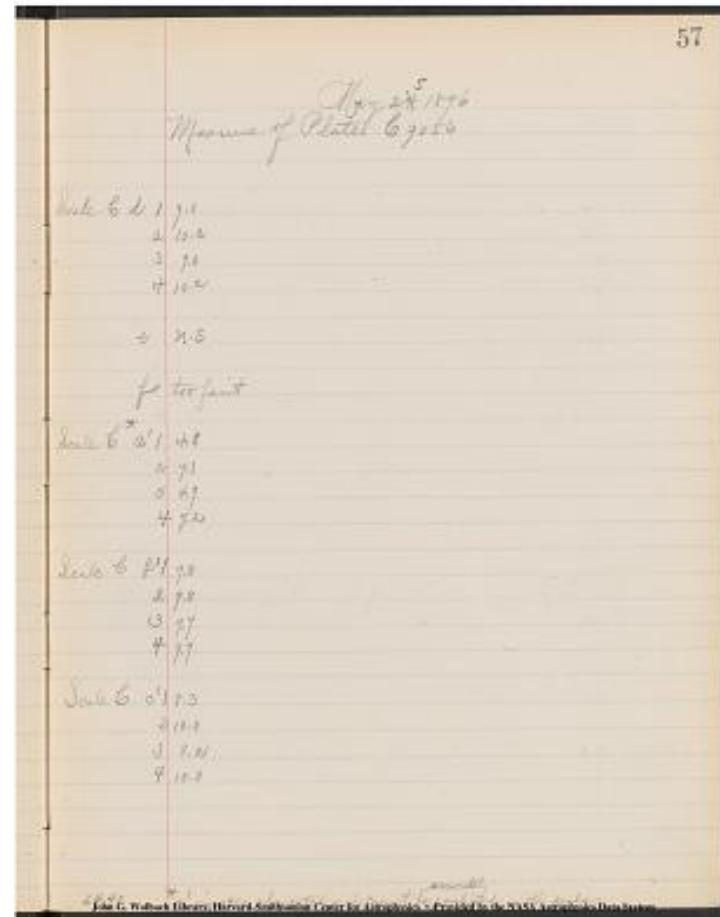
2 | 10.0

3 | 8.2

4 | 10.0

24.40

* a images estimated and cannot be accurately compared with scale.



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58

24.40

May 2 ~~4~~ ~~5~~, 1896.

Measure of Plate C 9056

[[table]]

---|---

Scale C d 1 | 9.0

2 | 10.5

3 | 9.1

4 | 10.4

e | n.s

Scale C f | too faint

Measure of Plate C 9057*

Scale C a 1 | 4.9

2 | 7.1

3 | 5.0

4 | 7.0

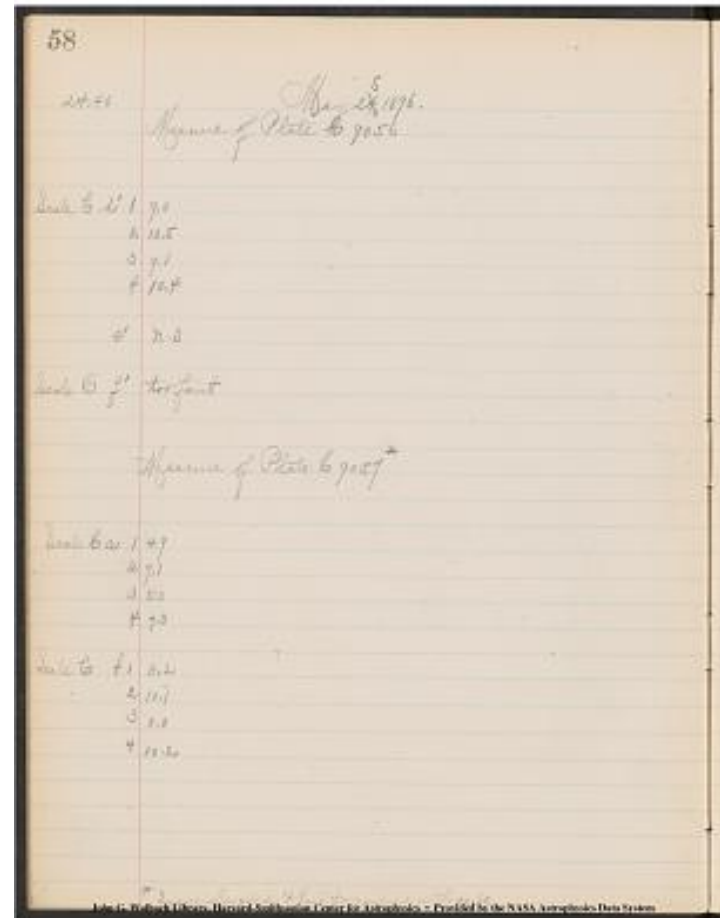
Scale C f 1 | 8.2

2 | 10.1

3 | 8.0

4 | 10.2

* Images estimated + hard to compare with scale.



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59

May 2 ~~4~~ 5, 1896.

Measure of Plate C

[[table]]

---|---|

Slate C c | too faint

set of measures | Measures of Plate C9097

nearest plate no |

Scale ~~C~~ ~~D a 1~~ | 4.6

2 | 7.0

3 | 4.7

4 | 6.9

Scale ~~C~~ ~~D b 1~~ | 5.0

2 | 7.2

3 | 5.0

4 | 7.1

Scale ~~C~~ ~~D c 1~~ | 5.8

2 | 7.6

3 | 6.0

4 | 7.6

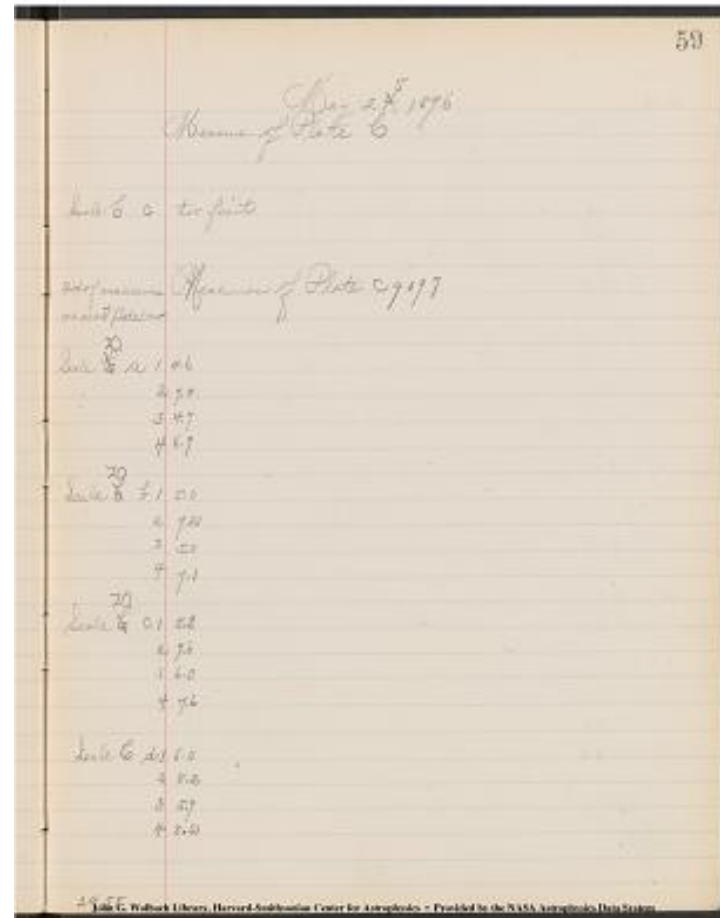
Scale C d 1 | 6.0

2 | 8.2

3 | 5.9

4 | 8.2

24.55



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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60

24.55

May 2 ~~4~~ ~~5~~, 1896.

Measure of Plate C 9097

[[table]]

[[table]]

Scale C e 1 | ~~8.9~~ ~~6.7~~

2 | ~~6.8~~ ~~8.9~~

3 | ~~8~~ ~~6.8~~

4 | 8.9

Scale C f 1 | 7.8

2 | 9.6

3 | 7.7

4 | 9.7

Scale ~~C~~ ~~C~~ ~~D a 1~~ | 4.3

2 | 6.9

3 | 4.5

4 | 6.7

Scale ~~C~~ ~~C~~ ~~D b 1~~ | 5.2

2 | 7.1

3 | 5.3

4 | 7.0

Scale D c 1 | 5.8

2 | 7.5

3 | 6.0

4 | 7.7

60	
24.55	May 2 ⁵ 1896. Measure of C 9097
Scale C e 1	2 6.7 3 6.8 4 8.9
Scale C f 1	2 9.6 3 7.7 4 9.7
Scale C C D a 1	2 6.9 3 4.5 4 6.7
Scale C C D b 1	2 7.1 3 5.3 4 7.0
Scale D c 1	2 7.5 3 6.0 4 7.7

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Variables M5 #4
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61

May 25, 1896.
Measure of Plate C 9097

[[table]]

Scale C d 1 | 6.0

2 | 8.1

3 | 6.1

4 | 8.2

Scale C e 1 | 6.8

2 | 8.7

3 | 7.0

4 | ~~7~~ ~~8.7~~

Scale C f 1 | 7.7

2 | 9.7

3 | 7.8

4 | 9.8

set of images | Measures of Plate C9096

nearest plate no |

Scale C a 1 | 5.7

2 | 8.2

3 | 5. ~~8~~ ~~9~~

4 | 8.2

Scale C f 1 | 6.0

2 | 8.7

3 | 6.2

4 | 9.8

25

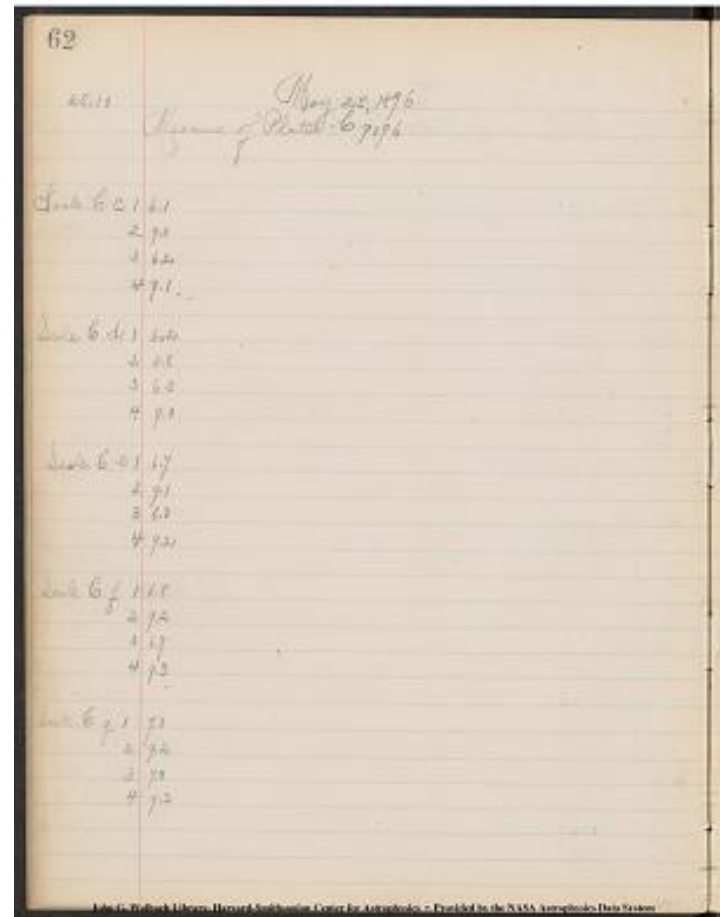
61	
May 25, 1896 Measure of Plate C 9097	
Scale C d 1	6.0
2	8.1
3	6.1
4	8.2
Scale C e 1	6.8
2	8.7
3	7.0
4	7 8.7
Scale C f 1	7.7
2	9.7
3	7.8
4	9.8
set of images Measures of Plate C9096	
nearest plate no	
Scale C a 1	5.7
2	8.2
3	5. 8 9
4	8.2
Scale C f 1	6.0
2	8.7
3	6.2
4	9.8

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Variables M5 #4
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62

25.10
May 25, 1896
Measure of Plate C 9096

[[table]]
|---|
Scale C c 1 | 6.1
2 | 9.0
3 | 6.2
4 | 9.1
Scale C d 1 | 6.2
2 | 8.8
3 | 6.3
4 | 9.0
Scale C e 1 | 6.7
2 | 9.1
3 | 6.8
4 | 9.2
Scale C f 1 | 6.8
2 | 9.2
3 | 6.9
4 | 9.3
Scale C g 1 | 7.0
2 | 9.2
3 | 7.0
4 | 9.3



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May 25, 1896.
Measure of Plate C 9096
[[table]]

Scale C h 1 | 6.9

3 | ~~6~~ 7.1

Scale C | 1 | 8.7

3	9.0
---	-----

m | too faint

2 | 10.1

4	10.2
---	------

Scale ~~D~~ C a 1 | 4.8

3 | 5.0

Scale 0

3	6.0
---	-----

455

25 25

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Variables M5 #4
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25.25
May 25, 1896.
Measure of Plate C 9096

[[table]]	
2	8.2
3	6.4
4	8.3
Scale C d 1 6.9	
2	9.1
3	7.0
4	8.9
Scale C e 1 7.1	
2	9.1
3	7.2
4	9.2
Scale C f 1 7.2	
2	9.2
3	7.4
4	9.5
Scale C g 1 7.1	
2	9.2
3	7.3
4	9.3

64	
25.25	May 25, 1896
	Measure of Plate C 9096
Scale C c 1 6.2	
2	8.2
3	6.4
4	8.3
Scale C d 1 6.9	
2	9.1
3	7.0
4	8.9
Scale C e 1 7.1	
2	9.1
3	7.2
4	9.2
Scale C f 1 7.2	
2	9.2
3	7.4
4	9.5
Scale C g 1 7.1	
2	9.2
3	7.3
4	9.3

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Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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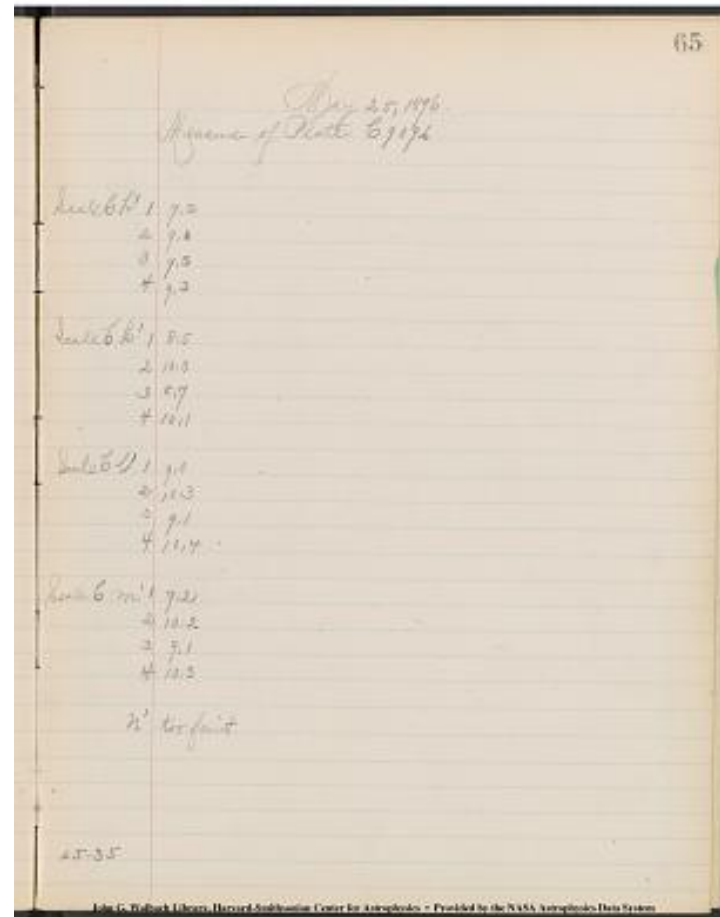
65

May 25, 1896.
Measure of Plate C 9096
[[table]]

1	9.0
2	7.3
3	9.3
4	10.0
5	8.7
6	10.1
7	10.3
8	9.1
9	10.4
10	10.2
11	9.1
12	10.3
13	too faint

25.35

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Variables M5 #4
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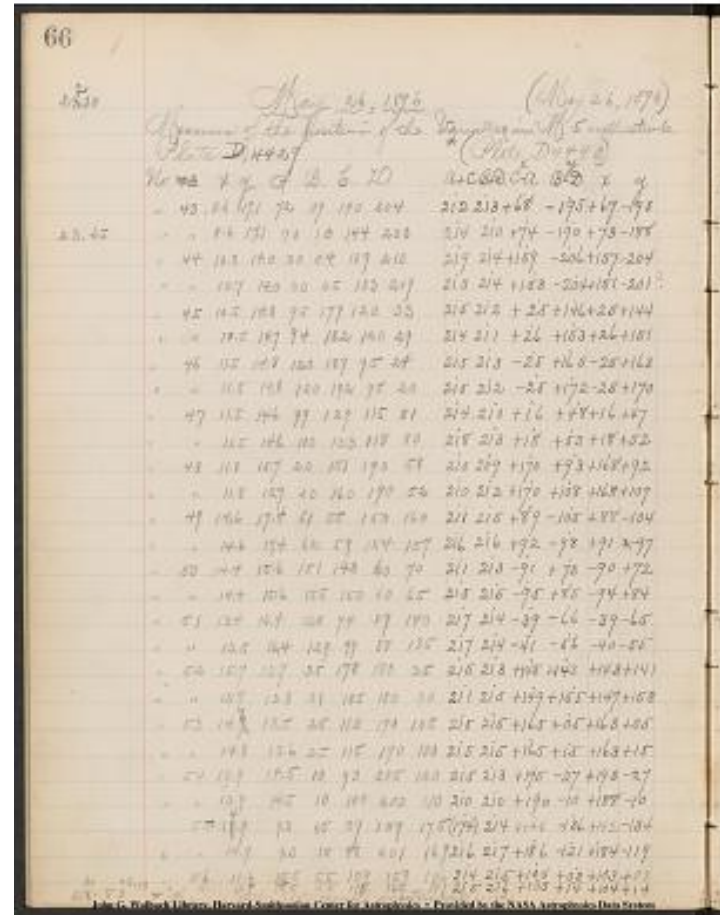
2~~1~~2.30 May 26, 1896
(May 26, 1896)

Measures of the positions of the Variables in M 5 with reticule
 Plate D 4429

No. 43 8.6 17.1 72 09 140 204										
^[[23.25]] No. 43 8.6 17.1 70 10 144 200										
No. 44 10.8 14.0 30 04 189 210										
No. 44 10.7 14.0 30 05 183 209										
No. 45 10.5 14.8 95 179 120 33										
No. 45 10.5 14.7 94 182 120 29										
No. 46 11.5 14.8 120 189 95 24										
No. 46 11.5 14.8 120 192 95 20										
No. 47 11.5 14.6 99 129 115 81										
No. 47 11.5 14.6 100 133 118 80										
No. 48 11.8 15.7 20 151 190 58										
No. 48 11.8 15.7 20 160 190 52										
No. 49 14.6 17.4 61 55 150 160										
No. 49 14.6 17.4 62 59 154 157										
No. 50 14.4 15.6 151 143 60 70										
No. 50 14.4 15.6 155 150 60 65										
No. 51 13.4 16.4 128 74 89 140										
No. 51 13.5 16.4 129 79 88 135										
No. 52 15.7 13.7 35 178 180 35										
No. 52 15.7 13.8 31 185 180 30										
No. 53 14.7 13.5 25 110 190 105										
No. 53 14.8 13.6 25 115 190 100										
No. 54 13.9 14.5 10 93 205 120										
No. 54 13.9 14.5 10 100 200 110										
No. 55 14.9 9.3 15 48 201 169										
No. 55 14.9 9.3 15 48 201 169										
^[[2 23.50]] No. 56 11.6 15.5 55 109 159 106										
^[[2X 50]] No. 56 11.7 15.5 55 115 160 101										

*(Plate D4440)

A+C B+D x C-A y B-D x y										
212 213 +68 -195 +67 -193										
214 210 +74 -190 +73 -188										
219 214 +159 -206 +157 -204										
213 214 +153 -204 +151 -201 ?										
215 212 +25 +146 +25 +144										
214 211 +26 +153 +26 +151										
215 213 -25 +165 -25 +163										
215 212 -25 +172 -25 +170										
214 210 +16 +48 +16 +47										
218 213 +18 +53 +18 +52										
210 209 +170 +93 +168 +92										
210 212 +170 +108 +168 +107										
211 215 +89 -105 +88 -104										
216 216 +92 -98 +91 +[[striketrough]]-97										
211 213 -91 +73 -90 +72										



215	215	-95	+85	-94	+84
217	214	-39	-66	-39	-65
217	214	-41	-56	-40	-55
215	213	+145	+143	+143	+141
211	215	+149	+155	+147	+153
215	215	+165	+05	+163	+05
215	215	+165	+15	+163	+15
215	213	+195	-27	+193	-27
210	210	+190	-10	+188	-10
(174)	214	+144	-136	+142	-134
216	217	+186	-121	+184	-119
214	215	+104	+03	+103	+03
215	216	+105	+14	+104	+14

[[/table]]

*More of this plate recorded on intermediate lines

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[[table]]												
x*42.4 y*42.4 x Corr. y Corr. x-40.2 40.4 y-361 37.1 Mean x												
Mean y x-x' y-y' Corr y-y'												
----	----	----	----	----	----	----	----	----	----	----	----	----
339.2	720.8	345.9	701.5	305.7	665.4	305.9	665.2	-0.4	+0.5	-0.1		
339.2	720.8	346.5	702.0	306.1	664.9							
424.0	593.6	439.7	573.2	399.5	536.1	399.1	536.2	+0.8	-0.3	-0.5		
424.0	593.6	439.1	573.5	398.7	536.4							
424.0	593.6	426.5	608.0	386.3	571.9	386.2	571.8	+0.1	+0.3	-0.1		
424.0	593.6	426.6	608.7	386.2	571.6							
466.4	593.6	463.9	609.9	423.7	573.8	423.6	573.6	+0.2	+0.3	-0.1		
466.4	593.6	463.9	610.6	423.5	573.5							
466.4	593.6	468.0	598.3	427.8	562.2	427.8	562.0	0.0	+0.5	+0.3		
466.4	593.6	468.2	598.8	427.8	561.7							
466.4	636.0	483.2	645.2	443.0	609.1	442.9	609.4	+0.2	-0.5	-0.8		
466.4	636.0	483.2	646.7	442.8	609.6							
593.6	720.8	602.4	710.4	562.2	674.3	562.2	674.2	-0.1	+0.3	+0.2		
593.6	720.8	602.7	711.1	562.3	674.0							
593.6	636.0	584.6	643.2	544.4	607.1	544.1	607.2	+0.6	-0.2	-0.3		
593.6	636.0	584.2	644.4	543.8	607.3							
551.2	678.4	547.3	671.9	507.1	635.8	507.0	635.8	+0.3	0.0	-0.2		
551.2	678.4	547.2	672.9	506.8	635.8							
636.0	551.2	650.3	565.3	610.1	529.2	610.2	529.3	-0.2	-0.2	-0.1		
636.0	551.2	650.7	566.5	610.3	529.4							
593.6	551.2	609.9	551.7	569.7	515.6	569.6	515.6	+0.2	0.0	-0.1		
593.6	551.2	609.9	552.7	569.5	515.6							
551.2	593.6	570.5	590.9	530.3	554.8	530.0	555.2	+0.7	-0.7	-0.7		
551.2	593.6	570.0	592.6	529.6	555.5							
593.6	381.6	607.8	368.2	567.6	332.1	332.4	(-0.5)	[[striketrough]] -				
0.8[[striketrough]]-0.1 see next page												
593.6	381.6	612.0	369.7	571.6	332.6							
466.4	636.0	476.7	636.3	436.5	600.2	436.4	600.2	+0.1	-0.1	-0.4		
466.4	636.0	476.8	637.4	436.4	600.3							
[[/table]]												

67

339.2	720.8	345.9	701.5	305.7	665.4	305.9	665.2	-0.4	+0.5	-0.1		
339.2	720.8	346.5	702.0	306.1	664.9							
424.0	593.6	439.7	573.2	399.5	536.1	399.1	536.2	+0.8	-0.3	-0.5		
424.0	593.6	439.1	573.5	398.7	536.4							
424.0	593.6	426.5	608.0	386.3	571.9	386.2	571.8	+0.1	+0.3	-0.1		
424.0	593.6	426.6	608.7	386.2	571.6							
466.4	593.6	463.9	609.9	423.7	573.8	423.6	573.6	+0.2	+0.3	-0.1		
466.4	593.6	463.9	610.6	423.5	573.5							
466.4	593.6	468.0	598.3	427.8	562.2	427.8	562.0	0.0	+0.5	+0.3		
466.4	593.6	468.2	598.8	427.8	561.7							
466.4	636.0	483.2	645.2	443.0	609.1	442.9	609.4	+0.2	-0.5	-0.8		
466.4	636.0	483.2	646.7	442.8	609.6							
593.6	720.8	602.4	710.4	562.2	674.3	562.2	674.2	-0.1	+0.3	+0.2		
593.6	720.8	602.7	711.1	562.3	674.0							
593.6	636.0	584.6	643.2	544.4	607.1	544.1	607.2	+0.6	-0.2	-0.3		
593.6	636.0	584.2	644.4	543.8	607.3							
551.2	678.4	547.3	671.9	507.1	635.8	507.0	635.8	+0.3	0.0	-0.2		
551.2	678.4	547.2	672.9	506.8	635.8							
636.0	551.2	650.3	565.3	610.1	529.2	610.2	529.3	-0.2	-0.2	-0.1		
636.0	551.2	650.7	566.5	610.3	529.4							
593.6	551.2	609.9	551.7	569.7	515.6	569.6	515.6	+0.2	0.0	-0.1		
593.6	551.2	609.9	552.7	569.5	515.6							
551.2	593.6	570.5	590.9	530.3	554.8	530.0	555.2	+0.7	-0.7	-0.7		
551.2	593.6	570.0	592.6	529.6	555.5							
593.6	381.6	607.8	368.2	567.6	332.1	332.4	(-0.5)	[[striketrough]] -				
0.8[[striketrough]]-0.1 see next page												
593.6	381.6	612.0	369.7	571.6	332.6							
466.4	636.0	476.7	636.3	436.5	600.2	436.4	600.2	+0.1	-0.1	-0.4		
466.4	636.0	476.8	637.4	436.4	600.3							

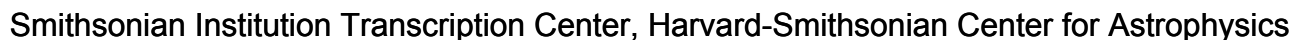
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2 ~~1~~2.50
23.50

[illegible]

[[table]]
X	y	A.	B.	C.	D.						
No. 55 | 14.9 | 9.3 | 15 | 40 | 200 | 173 | 215 | 213 | +185 | -133 | +183 | -132 |
D4440 | | | 15 | 48 | 201 | 169 | 216 | 217 | +186 | -121 | +184 | -119 |
February 21, 1896 |
No. 55 | x | y | a | B | C | D | | | | | | |
PI D4429 * No. 63 | 183 | 183 | 14.1 | 14 | ~~4~~ | 2 |
15 | 70 | 200 | 212 | 215 | -72f | -185 | -71 | -183 |
D 4440 No. 63 | 18.3 | 14.2 | 140 | 21 | 71 | 193 | 211 | 214 | -69 | -172 | -68 | -170 |
[[/table]]
No. 62 is Mr. Pickering's variable
No. 63 is Mr. Bailey's variable



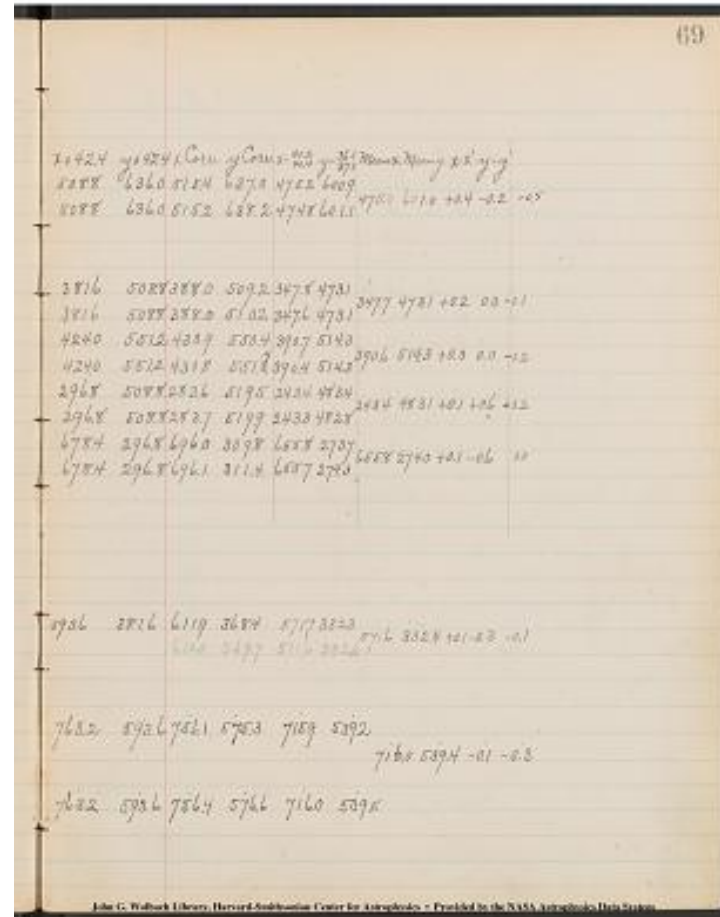
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[[table]]

Xx42.4 | Yx42.4 | xCorr. | yCorr. | x - 40.4^[[40.2]] | y - 37.1^[[36.1]] |
 Mean x. | Mean y. | x - x' | y - y' |

508.8	636.0	515.4	637.0	475.2	600.9	475.0	601.0	+0.4	-0.2	-0.5
508.8	636.0	515.2	638.2	474.8	601.1	475.0	601.0	+0.4	-0.2	-0.5
381.6	508.8	388.0	509.2	347.8	473.1	347.7	473.1	+0.2	0.0	-0.1
381.6	508.8	388.0	510.2	347.6	473.1	347.7	473.1	+0.2	0.0	-0.1
424.0	551.2	430.9	550.4	390.7	514.3	390.6	514.3	+0.3	0.0	-0.2
424.0	551.2	430.8	551. [[strikethrough]] 0 [[strikethrough]] 4	390.4	514.3	390.6	514.3	+0.3	0.0	-0.2
296.8	508.8	283.6	519.5	243.4	483.4	243.4	483.1	+0.1	+0.6	+0.2
296.8	508.8	283.7	519.9	243.3	482.8	243.4	483.1	+0.1	+0.6	+0.2
678.4	296.8	696.0	309.8	655.8	273.7	655.8	274.0	+0.1	-0.6	0.0
678.4	296.8	696.1	311.4	655.7	274.3	655.8	274.0	+0.1	-0.6	0.0
593.6	381.6	611.9	368.4	571.7	332.3	571.6	332.4	+0.1	-0.3	-0.1
763.2	593.6	756.1	575.3	715.9	539.2	715.9	539.2	0.0	0.0	0.0
763.2	593.6	756.4	576.6	716.0	539.5	716.0	539.5	0.0	0.0	0.0



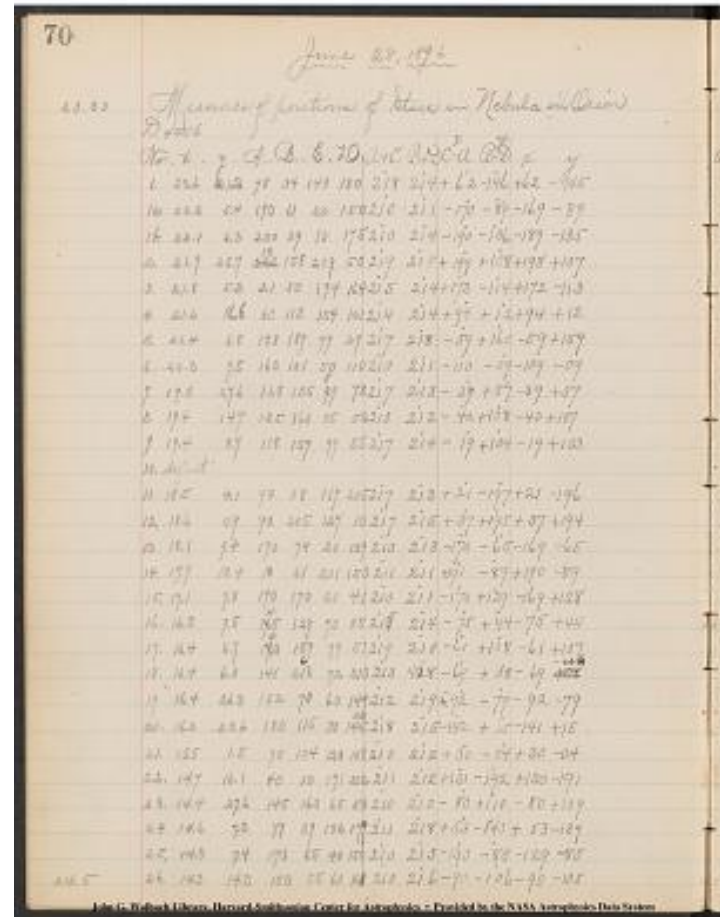
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[[June 28, 1896]]

23.30 Measures of positions of Stars in Nebula in Orion
D4556

[[13 columned table]]

No.	x.	y.	A.	B.	C.	D.	a+c	B+D	c-a	^[[x]]	B-D	^[[y]]	x y
1.	23.6	21.2	78	34	140	180	218	[[^]]	214	[[^]]	+62	[[^]]	-146
1a.	23.2	5.4	190	61	20	150	210	[[^]]	211	[[^]]	-170	[[^]]	-89
1b.	22.1	6.3	2.00	39	10	175	210	[[^]]	214	[[^]]	-190	[[^]]	-136
2.	21.9	25.7	10	[[220]]	158	209	50	219	[[^]]	208	[[^]]	+199	[[^]]
3.	21.8	5.3	21	50	1.94	164	215	[[^]]	214	[[^]]	+173	[[^]]	-114
4.	21.6	16.6	60	113	154	101	214	[[^]]	214	[[^]]	+94	[[^]]	+12
5.	21.4	6.8	138	189	79	29	217	[[^]]	218	[[^]]	-59	[[^]]	+160
6.	20.3	7.5	160	101	50	110	210	[[^]]	211	[[^]]	-110	[[^]]	-09
7.	19.5	27.6	128	135	8	[[9]]	9	[[9]]	9	[[9]]	9	[[9]]	78
8.	19.4	14.7	125	160	85	52	210	[[^]]	212	[[^]]	-40	[[^]]	+108
9.	19.4	3.7	118	159	99	55	217	[[^]]	214	[[^]]	-19	[[^]]	+104
10.	defect												
11.	18.5	4.1	98	08	119	205	217	[[^]]	213	[[^]]	+21	[[^]]	-197
12.	18.6	0.9	90	205	127	10	217	[[^]]	215	[[^]]	+37	[[^]]	+195
13.	18.1	9.4	190	74	20	139	210	[[^]]	213	[[^]]	-170	[[^]]	-65
14.	17.9	18.4	10	61	201	150	211	[[^]]	211	[[^]]	+191	[[^]]	-89
15.	17.1	7.8	190	170	20	41	210	[[^]]	211	[[^]]	-170	[[^]]	+129
16.	16.3	9.5	14	[[9]]	5	129	70	85	21	[[9]]	0	[[9]]	5
17.	16.4	8.7	14	[[9]]	0	159	79	51	219	[[^]]	210	[[^]]	-61
18.	16.4	6.0	141	218	72	210	213	[[^]]	428	[[^]]	-69	[[^]]	+08
19.	16.4	26.3	152	70	60	149	212	[[^]]	219	[[^]]	-92	[[^]]	-79
20.	16.2	23.6	180	115	38	1	[[45]]	45	[[45]]	45	[[45]]	45	[[45]]
21.	15.5	1.5	90	104	120	108	210	[[^]]	212	[[^]]	+30	[[^]]	-04
22.	14.7	16.1	40	10	171	202	211	[[^]]	212	[[^]]	+131	[[^]]	-192
23.	14.4	27.6	145	160	65	50	210	[[^]]	210	[[^]]	-80	[[^]]	+110



| 24 | 14.6 | 7.3 | 79 | 39 | 132 | 179 | 211 [[^]] | 218 [[^]] | +53 [[^]] | -140
[[^]] | +53 | -139 |
| 25. | 14.3 | 7.4 | 170 | 65 | 40 | 150 | 210 [[^]] | 215 [[^]] | -130 [[^]] | -
85 [[^]] | -129 | -85 |
| 26. | 14.3 | 14.3 | 150 | 55 | 60 | 161 | 210 [[^]] | 216 [[^]] | -90 [[^]] | -
106 [[^]] | -90 | -105 |

[[left margin]] 24.5 [[/left margin]]

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[[13 columned table]]

Est. x x 42.4 | Est. y x 42.4 | x Corr. | y Corr. | | Vol. V | Vol. V No. | 520
685 | Corr. x -520 | Corr. y -485 | Corr. x -520.0 | Corr. y -485.0 |--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
975.2 | 890.4 | 981.4 | 875.9 | +462 -396 | +464.7 +391.2 | 808 | 516.7
484.7 | 928.4 | 827.4 | 461.4 | 390.9 |975.2 | 212.0 | 958.3 | 2[[/strikethrough]] 8 [[/strikethrough]] 03.1 | | | |
906.3 | 154.6 | 439.3 | -281.9 |932.8 | 254.4 | 913.9 | 240.9 | +396 +246 | +395.9 -245.7 | 789 | 518.0
486.6 | 861.9 | 192.4 | 393.9 | -244.1 |890.4 | 1060.0 | 9[[/strikethrough]] 0 [[/strikethrough]] 10.2 | 1070.7 |
+384 -588 | +389.7 +587.2 | 785 | 5[[/strikethrough]] 1[[/strikethrough]] 20.5 | 483.5 | 848.2 | 1022.2 | 3[[/strikethrough]] 8
[[/strikethrough]] 90.2 | 585.7 |890.4 | 212.0 | 907.6 | 200.7 | +384 +288 | +388.4 -286.0 | 784 | 519.2 |
486.7 | 855.6 | 152.2 | 387.6 | -284.3 |890.4 | 678.4 | 899.8 | 679.6 | +372 -198 | +373.8 +195.5 | 781 | 526.0 |
484.1 | 847.8 | 631.1 | 379.8 | 194.6 |890.4 | 254.4 | 884.5 | 270.3 | +372 +216 | +366.7 -216.0 | 778 | 517.8 |
486.3 | 832.5 | 221.8 | 364.5 | -214.7 |848.0 | 296.8 | 837.1 | 295.9 | +318 +192 | +317.0 -193.9 | 767 | 520.1 |
4[[/strikethrough]] 9 [[/strikethrough]] 89.8 | 785.1 | 247.4 | 317.1 | -189.1 |805.6 | 1144.8 | 801.7 | 1150.5 | +276 -666 | +280.5 +666.1 | 757 |
521.2 | 484.4 | 749.7 | 1102.0 | 281.7 | 665.5 |805.6 | 593.6 | 801.6 | 604.3 | | | | 749.6 | 555.8 | 281.6 | 119.3
805.6 | 127.2 | 803.7 | 137.5 | +276 +345 | +277.7 -348.3 | 755 | 526.0 |485.8 | 751.7 | 89.0 | 283.7 | -347.5 |
763.2 | 169.6 | 765.3 | 150.0 | +234 +3[[/strikethrough]] 8[[/strikethrough]] 30 | +236.4 -333.4 | 747 | 528.9 | 483.4 | 713.3 | 101.5 |
245.3 | -335.0 |763.2 | 0.0 | 766.9 | 19.4 | +252 +462 | +248.4 -467.1 | 750 | 518.5 | |
714.9 | | 246.9 | -465.6 |763.2 | 381.6 | 746.3 | 375.1 | +222 +108 | +225.9 -110.5 | 741 | 520.4 |
385.6 | 694.3 | 326.6 | 226.3 | -109.9 |720.8 | 763.2 | 739.8 | 754.3 | +216 -270 | +220.2 +266.1 | 737 | 519.6 |
488.2 | 687.8 | 705.8 | 219.8 | 269.3 |720.8 | 296.8 | 703.9 | 309.6 | +186 +174 | +183.3 -176.0 | 724 | 520.6 |
485.6 | 651.9 | 261.1 | 1[[/strikethrough]] 2 [[/strikethrough]] 83.9 | -175.4 |678.4 | 381.6 | 670.9 | 386.0 | +150 +96 | +151.4 -98.5 | 708 | 519.5 |
484.5 | 618.9 | 337.5 | 150.9 | -99.0 |678.4 | 339.2 | 672.3 | 349.9 | +150 +138 | +152.9 -136.4 | 709 | 519.4 |
486.3 | 620.3 | 301.4 | 152.3 | -135.1 |678.4 | 254.4 | 671.5 | 214.0 [[/strikethrough]] 255.2 [[/strikethrough]] |
+144 +252 | +151.2 -253.5 | 707 | 520.3 | 508.7 | 619.5 | [[/strikethrough]]251.0 [[/strikethrough]] [[/strikethrough]] 206.7 [[/strikethrough]] 151.5 | -
251.0 [[/strikethrough]] -229.8 [[/strikethrough]]678.4 | 1102.4 [[/strikethrough]] 9752 [[/strikethrough]] | 669.2 | 1094.5 |
+140 -615 | +147.2 +611.2 | 705 | 522.0 | 483.3 | 617.2 | 1046.0 | 149.2 |609.5 |
678.4 | 9752 | 664.3 | 976.7 | +14[[/strikethrough]] 5 [[/strikethrough]] 0 -498 | +143.4 +492.7 | 700 | 520.9 | 484.0 | 612.3 | 928.2 | 144.3 | 491.7 |
636.0 | 42.4 | 639.0 | 42.0 | +114 +444 | +119.4 -443.7 | 690 | 519.6 |485.7 | 587.0 | -6.5 | 119.0 | -443.0 |
593.6 | 678.4 | 606.6 | 659.3 | | | | 554.6 | 610.8 | 86.6 | 174.3 |593.6 | 1144.8 | 585.6 | 1155.7 | +63 -670 | +64.2 +673.2 | 670 | 521.4 |
482.5 | 533.6 | 11072 | 65.6 | 670.7 |593.6 | 296.8 | 598.9 | 282.9 | +84 +210 | +78.6 -201.4 | 677 | 520.3 |
484.3 | 5469 | 234.4 | 78.9 | -20[[/strikethrough]] 19 [[/strikethrough]] 2.1 |

The image shows a handwritten manuscript page, likely a transcription of a table. The page is numbered '71' in the top right corner. It contains a table with multiple columns of numbers and text, written in a cursive script. The handwriting is dense and fills most of the page. The table appears to be a continuation of the data presented in the typed transcription on the left.

| 593.6 | 296.8 | 580.7 | 288.3 | 66 ~~1126~~
+204 | +59.7 -195.8 | 666 | 521.0 | 484.1 | 528.7 | 239.8 | 60.7 | -196.7 |
| 593.6 | 593.6 | 584.6 | 583.1 | | | | 532.6 | 534.6 | 64.6 | 98.1 |

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72
 June 28, 1896
 continued
 24.5 Measure of positions of Stars in Nebula in Orion.
 D4556
 [[table]]
 |No.|x.|y.|A.|B.|C.|D|a+c|B+D|C-a(x)|B-D(y)|x|y|
 |---|---|---|---|---|---|---|---|---|---|---|---|
 27. 14.1|15.4|190|85|20|131|210|216|-170|-46|-169|-46
 28. 13.6|15.7|60|170|151|41|211|211|+91|+129|+91|+128
 28a|13.5|15.9|99|197|120|10|219|207|+21|+187|+21|+186
 29. 13.5|22.1|99|10|119|205|218|215|+20|-195|+20|-194
 30. 13.4|21.5|129|102|89|105|218|207|-40|-03|-40|-03
 31. 13.0|14.3|220|49|210|161|215|210|+205|-112|+204|-111
 32. 11.9|1.3|9|39|209|171|218|210|+200|-132|+199|-131
 33. 11.3|8.2|180|30|30|189|210|219|-150|-159|-149|-158
 34. 11.0|20.9|215|210|05|04|220|214|-150|+206|-209|+205
 35. 10.7|7.7|49|159|161|55|210|214|+112|+104|+111|+104
 36. 10.5|5.5|95|112|119|101|214|213|+24|+11|+24|+11
 37. 10.4|2.6|136|118|73|98|209|216|-63|+20|-63|+20
 38. 9.1|9.2|199|25|14|181|213|206|-185|-156|-184|-155
 39. 8.6|23.9|65|204|150|10|215|214|+85|+194|+85|+193
 40. 8.9|27.5|05|129|200|90|205|219|+195|+39|+194|+39
 41. 8.3|2.5|160|100|49|119|209|219|-111|-19|-110|-19
 42. 7.1|12.4|198|70|14|141|212|211|-184|-71|-183|-71
 43. 7.1|9.2|190|32|20|179|210|211|-170|-147|-169|-146
 44. 6.4|11.2|159|26|51|189|210|215|-108|-163|-107|-162
 45. 5.6|12.1|85|10|129|209|214|219|+44|-199|+44|-198
 46. 5.5|1.9|109|195|105|15|214|210|-04|+180|-04|+179
 47. 3.7|10.8|49|184|165|22|214|206|+116|+162|+115|+161
 48. 3.4|18.4|127|72|89|140|216|212|-38|-68|-38|-68
 49. 1.7|9.4|30|81|-130|211|-49|-49
 [[/table]]
 25.10
 213.30 213.08
 50 52
 Adapt mean 213, and
 subtract 1 for all values
 of 10.6 or greater
 July 14, 1896 E C Neilley[?]

72
June 28, 1896

Measure of positions of stars in Nebula in Orion.

No. x. y. A. B. C. D. a+c. B+D. C-a(x). B-D(y). x. y.

No.	x.	y.	A.	B.	C.	D.	a+c	B+D	C-a(x)	B-D(y)	x	y
27.	14.1	15.4	190	85	20	131	210	216	-170	-46	-169	-46
28.	13.6	15.7	60	170	151	41	211	211	+91	+129	+91	+128
28a	13.5	15.9	99	197	120	10	219	207	+21	+187	+21	+186
29.	13.5	22.1	99	10	119	205	218	215	+20	-195	+20	-194
30.	13.4	21.5	129	102	89	105	218	207	-40	-03	-40	-03
31.	13.0	14.3	220	49	210	161	215	210	+205	-112	+204	-111
32.	11.9	1.3	9	39	209	171	218	210	+200	-132	+199	-131
33.	11.3	8.2	180	30	30	189	210	219	-150	-159	-149	-158
34.	11.0	20.9	215	210	05	04	220	214	-150	+206	-209	+205
35.	10.7	7.7	49	159	161	55	210	214	+112	+104	+111	+104
36.	10.5	5.5	95	112	119	101	214	213	+24	+11	+24	+11
37.	10.4	2.6	136	118	73	98	209	216	-63	+20	-63	+20
38.	9.1	9.2	199	25	14	181	213	206	-185	-156	-184	-155
39.	8.6	23.9	65	204	150	10	215	214	+85	+194	+85	+193
40.	8.9	27.5	05	129	200	90	205	219	+195	+39	+194	+39
41.	8.3	2.5	160	100	49	119	209	219	-111	-19	-110	-19
42.	7.1	12.4	198	70	14	141	212	211	-184	-71	-183	-71
43.	7.1	9.2	190	32	20	179	210	211	-170	-147	-169	-146
44.	6.4	11.2	159	26	51	189	210	215	-108	-163	-107	-162
45.	5.6	12.1	85	10	129	209	214	219	+44	-199	+44	-198
46.	5.5	1.9	109	195	105	15	214	210	-04	+180	-04	+179
47.	3.7	10.8	49	184	165	22	214	206	+116	+162	+115	+161
48.	3.4	18.4	127	72	89	140	216	212	-38	-68	-38	-68
49.	1.7	9.4	30	81	-130	211	-49	-49				

Adapt mean 213, and subtract 1 for all values of 10.6 or greater

July 14, 1896 E C Neilley

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73

[[10 columned table]]

Est.x x 42.4	Est.y x 42.4	xCorr.	yCorr.	Vol. V	Vol. V No.
Corr.x -520.0	Corr.y. -485.0				
593.6	636.0	576.7	631.4	56.7	146.4
551.2	636.0	560.3	648.8	40.3	163.8
551.2	636.0	553.3	654.6	33.3	169.6
551.2	932.8	553.2	913.4	+3[[6]]	6 [[6]] -
432	+30.8 +429.7	653	522.4 483.7	33.2	428.4
551.2	890.4	547.2	890.1	+24 -408	+28.5 +408.8
481.3	27.2	405.1		650	518.7
551.2	593.6	571.6	582.5	51.6	97.5
466.4	42.4	486.3	29.3	-42 +450	-38.6 -455.1
481.3	27.2	405.1		598	524.9 484.4
466.4	339.2	451.5	323.4	-78 +156	-76.1 -159.1
482.5	-68.5	-161.6		581	527.6
466.4	848.0	445.5	868.5	-[[78]]	[[78]] -
384	-77.6 +385.8	580	523.1 482.7	-74.5	383.5
424.0	296.8	435.1	307.2	-90 +180	-87.3 -179.0
486.2	-84.9	-177.8		573	522.4
424.0	212.0	426.4	213.1	-102 +270	-94.8 -273.2
486.3	-93.6	-271.9		570	521.2
424.0	84.8	417.7	86.8	-105 +408	-104.1 -406.3
493.1	-102.3	-398.2		466	521.8
381.6	381.6	363.2	366.1	-162 +120	-158.9 -118. [[9]]
9 [[9]]	558	522.1 484.7		-156.8	-118.9
339.2	975.2	347.7	994.5	-174 -510	-175.1 +510.8
483.7	-172.3	509.5		551	522.8
339.2	1144.8	358.6	1148.7	-162 -670	-163.1 +666.0
482.7	-1614	663.7		554	521.7
339.2	84.8	328.2	82.9	-198 +396	-195.5 -401.3
484.2	-191.8	-402.1		545	523.7
296.8	508.8	278.5	501.7	-228 -30	-241.4 +16.8
484.9	-241.5	16.7		524	519.9
296.8	381.6	279.9	367.0	-246 +115	-242.3 -116.0
483.0	-240.1	-118.0		523	522.2
254.4	466.4	243.7	450.2	-276 +30	-276.0 -29.5
479.7	-276.3	-34.8		516	519.7
212.0	508.8	216.4	489.0	-306 -[[306]]	+ [[306]]
212.0	42.4	211.6	60.3	-312 +426	-309.6 -424.7
485.0	-3084	-424.7		505	521.2
127.2	424.0	138.7	440.1	-378 +48	-380.7 -49.3
489.4	-381.3	-44.9		490	519.4
127.2	763.2	123.4	756.4	-402 -276	-400.4 +272.3
484.1	-396.6	271.4		479	523.8
42.4	381.6	376.7	-468 +108	-464.7 -107.8	458

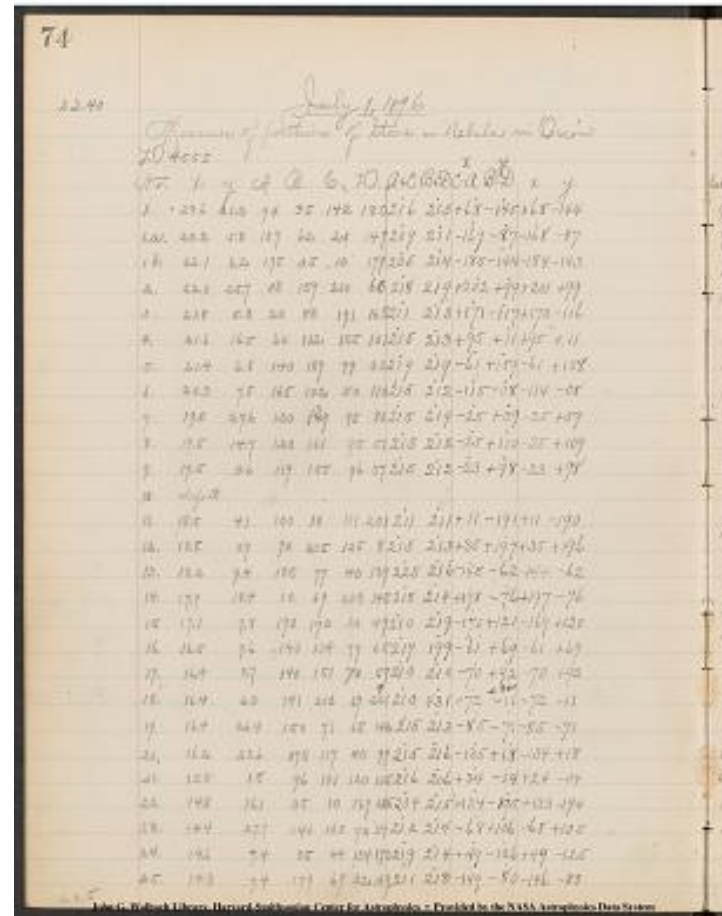
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22.40 July 1, 1896
Measure of positions of Stars in Nebula in Orion
D4555

[table]											
No.	x	y	A	B	C	D	a+c	B+D	C-a(x)	B-D(y)	x y
1.	23.6	21.3	74	35	142	180	216	215	215	215	215
145	23.6	21.3	74	35	142	180	216	215	215	215	215
1a.	23.2	5.3	189	62	20	149	209	211	211	211	211
1b.	22.1	6.2	195	35	10	179	205	214	214	214	214
2.	22.0	25.7	08	159	210	60	218	219	219	219	219
3.	21.8	5.3	20	48	191	165	211	213	213	213	213
4.	21.6	16.5	60	112	155	101	215	213	213	213	213
5.	21.4	6.8	140	189	79	302	19	219	219	219	219
6.	20.3	7.5	165	102	50	110	215	219	219	219	219
7.	19.5	27.6	120	139	95	80	215	212	212	212	212
8.	19.5	14.7	120	161	95	51	215	212	212	212	212
9.	19.5	3.6	119	155	96	57	215	212	212	212	212
10.	defect										
11.	18.5	4.1	100	10	111	201	211	211	211	211	211
12.	18.5	0.9	90	205	125	8	215	213	213	213	213
13.	18.2	9.4	185	77	40	139	225	216	216	216	216
14.	17.9	18.4	10	69	208	145	218	214	214	214	214
15.	17.1	7.8	190	170	20	49	210	219	219	219	219
16.	16.5	9.6	140	134	79	65	219	199	199	199	199
17.	16.4	8.7	140	151	70	59	210	210	210	210	210
18.	16.4	6.0	141	210	69	221	201	143	143	143	143
19.	16.4	26.4	150	71	65	142	215	213	213	213	213
20.	16.2	23.6	175	117	40	99	215	216	216	216	216
21.	15.5	1.5	96	101	120	105	216	206	206	206	206
22.	14.8	16.1	35	10	169	205	204	215	215	215	215
23.	14.4	27.7	140	160	72	54	212	214	214	214	214
24.	14.6	7.4	85	44	134	170	219	214	214	214	214
25.	14.3	7.4	179	69	320	149	211	218	218	218	218



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[[preprinted]]75 [[/preprinted]]

[[table]]

|Est.xx 42.4|Est.yx 42.4|x Corr.ly Corr.|No. Vol V|x Vol V|y Vol V|Plate
4555 x-520.0|y-485.0|Plate 4556 x-520.0|y-485.0|4555-4556 -Vol V x|
Vol V y|4555-4556 x o|

-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
975.2|8904|9820|8760|808|+464.7|+391.2|462.0|391.0|461.4|390.9|-2.7-
3.3|-0.2-0.3|+0.6+0.1
975.2|2120|9584|2033| | |438.4|-281.7|438.3|-281.9||+0.1+0.2|
932.8|254.4|914.4|240.1|789|+395.9|-245.7|394.4|-244.9|393.9|-244.1|-
1.5-2.0|+0.8+1.6|+0.5-0.8
932.8|1060.0|952.9|1069.9|785|+389.7|+587.2|(432.9)|5847.9|390.2|585
.7|+0.8+0.5|-2.3-1.5|
890.4|212.0|907.4|200.4|784|+388.4|-286.0|387.4|-284.6|387.6|-284.3|-
1.0-0.8|+1.4+1.7|-0.2-0.3
890.4|678.4|899.9|679.5|781|+373.8|+195.5|379.9|194.5|379.8|194.6|+6
+1.6-0|-1.0-0.9|+0.1-0.1
890.4|254.4|884.3|270.2|778|+366.7|-216.0|364.3|214.8|364.5|-214.7|-
2.4-2.2|+1.2+1.3|
848.0|296.8|836.6|296.0|767|+31.70|-193.9|316.6|-189.0|317.1|-189.1|-
0.4+0.1|+4.9+4.8|
805.6|1144.8|803.1|1150.7|757|+280.5|+666.1|283.1|665.7|281.7|665.5|
+2.6+1.2|-0.4-0.6|
805.6|593.6|803.1|604.5|||283.1|119.5|281.6|11.9.9|||
805.6|127.2|803.3|137.0|755|277.7|-348.3|283.3|-348.0|283.7|-
347.5|+5.6+6.0|+0.3+0.8|
763.2|169.9|764.3|150.6|747|+236.4|-333.4|244.3|-334.4|245.3|-335.0||
763.2|0.0|766.7|19.6|750|248.4|-467.1|246.7|-465.4|246.9|-465.6|-1.7-
1.5|+1.7+1.5|
763.2|381.6|748.8|375.4|741|225.9|-110.5|228.8|-109.6|226.3|-
109.9|+2.9+0.4|+0.9+0.6|
720.8|763.2|740.5|755.6|737|+220.2|+266.1||220.5|270.6|219.8|269.3|+0
3.0-4|+4.5+3.2|
720.8|296.8|703.9|308.8|724|+183.3|-176.0|183.9|-176.2|183.9|-
175.4|+0.6+0.6|-0.2+0.6|
678.4|381.6|672.3|388.5|708|+151.4-98.5|152.3|-96.5|150.9|-99.0|+0.9-
0.5|+2.0-0.5|
678.4|339.2|671.4|348.4|709|+152.9-136.4|151.4|-136.6|152.3|-135.1|-
1.5-0.6|-0.2+1.3|
678.4|212.0|671.2|232.1||707|+151.2-253.5|151.2|-252.9|151.5|-251.0|
0.0+0.3|+21.8+2.37|
678.4|1102.4|669.9|1095.3|705|+147.2+611.2|149.9|610.3|149.2|609.5|
+2.7+2.0|-0.9-1.7|
678.4|975.2|666|[[/strickethrough]]4.9[[/strickethrough]]5.0|977.0|700|+143.4
+492.7|14[[/strickethrough]]4.9[[/strickethrough]]5.0|492.0|144.3
491.7|+1.1[[/strickethrough]]5[[/strickethrough]]6+0.9|+0.7+0.7|
636.0|42.4|638.4|42.0|690|+119.4|-443.7|118.4|-443.0|119.0|-443.0|-1.0-
0.4|+0.7+0.7|
593.6|678.4|60[[/strickethrough]]7.0[[/strickethrough]]6.9|659.0|
| |8[[/strickethrough]]7.0[[/strickethrough]]6.9|17[[/strickethrough]]
3.9[[/strickethrough]]4.0|86.6|174.3||
593.6|1144.8|586.8|1155.3|670|+64.2|+673.2|66.8|670.0|[[/strickethrough]]
4[[/strickethrough]]3|656|670.7|+2.6+1.4|-2.9-2.5|
593.6|296.8|598.5|284.0|[[/strickethrough]]2[[/strickethrough]]3|677|+78.6|-
201.4|78.5|-200.0|[[/strickethrough]]18[[/strickethrough]]7|78.9|-202.1|-
0.1+0.3|+0.7+0.7|
593.6|296.8|57[[/strickethrough]]8.9[[/strickethrough]]9.0|288.8|666|+59.7|-
195.8|5[[/strickethrough]]8.9[[/strickethrough]]9.0|-196.2|60.7|-196.7|-
0.0|[[/strickethrough]]8[[/strickethrough]]7+1.0|-0.4-0.9|
[[/table]]

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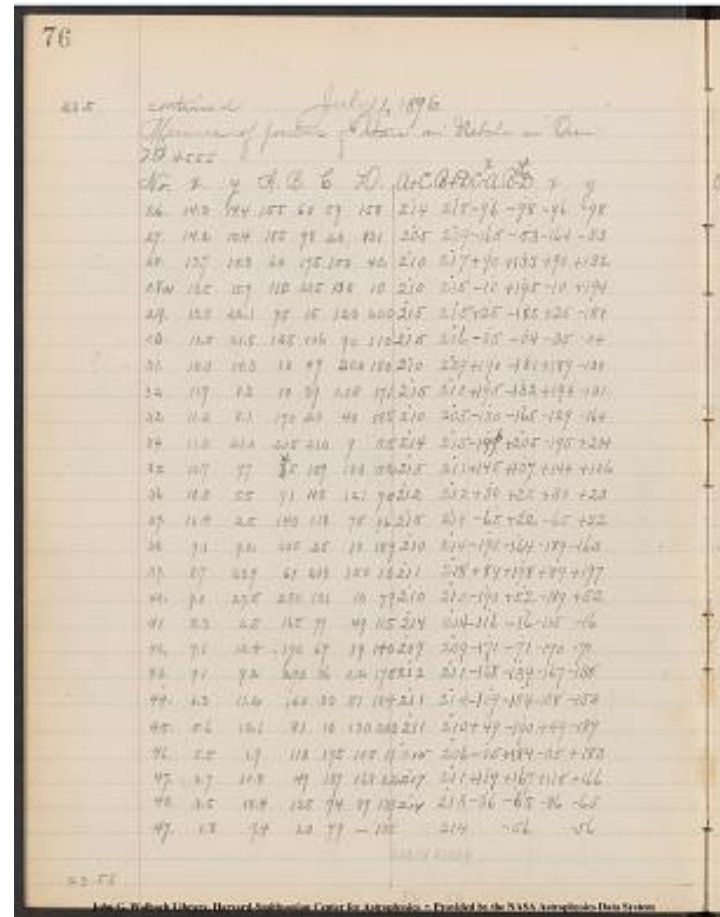
23.5 Continued July 11, 1896.
Measures of positions of Stars in Nebula in Orion
LO 4555

[13 column table]

No.	x.	z	A.	B.	C.	D.	A+C	B+D	C ¹ [x]-A	B ¹ [y]-D	x y
26.	14.3	14.4	155	60	59	158	214	218	-96	-98	-96 -98
27.	14.2	15.4	185	78	20	131	205	209	-165	-53	-164 -53
28.	13.7	15.8	60	175	150	42	210	217	+90	+133	+90 +132
28a	13.5	15.9	110	205	100	10	210	215	-10	+195	-10 +194
29.	13.5	22.1	95	15	120	200	215	215	+25	-185	+25 -184
30.	13.5	21.5	125	106	90	110	215	216	-35	-04	-35 -04
?	31.	13.0	14.3	10	49	200	180	210	229	+190	-131 +189
32.	11.9	1.3	10	39	205	171	215	210	+195	-132	+194 -131
33.	11.2	8.1	170	20	40	185	210	205	-130	-165	-129 -164
34.	11.0	21.0	205	210	9	05	214	215	-196	9	9 +205 -195 +204
35.	10.7	7.7	4	4	4	4	4	4	4	4	4 4 4 4
36.	10.5	5.5	91	11.8	121	95	212	213	+30	+23	+30 +23
37.	10.4	2.5	140	118	75	96	215	214	-65	+22	-65 +22
38.	9.1	9.2	200	25	10	189	210	214	-190	-164	-189 -163
39.	8.7	23.9	61	208	150	10	211	218	+89	+198	+89 +197
40.	9.0	27.5	200	131	10	79	210	210	-190	+52	-189 +52
41.	8.3	2.5	165	99	49	115	214	214	-116	-16	-115 -16
42.	7.1	12.4	190	69	19	140	209	209	-171	-71	-170 -71
43.	7.1	9.2	2	2	2	2	2	2	2	2	2 2 2 2
44.	6.3	11.2	160	30	51	184	211	214	-109	-154	-108 -153
45.	5.6	12.1	81	10	130	200	211	210	+49	-190	+49 -189
46.	5.5	1.9	110	195	105	11	215	206	-05	+184	-05 +183
47.	3.7	10.8	49	189	168	22	217	211	+119	+167	+118 +166
48.	3.5	18.4	125	74	89	139	214	213	-36	-65	-36 -65
49.	1.8	9.4	20	79	-135	214	-56	-56	-56	-56	-56 -56
23.55			213.14	213.44							

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[[table]]

Est.Xx42.4 Est.yx42.4|xCorr. yCorr.|Vol V No.|Vol V x y|Plate 4555 x-520.0 y-485.0|Plate 4456 x-520.0 y-485.0|

593.6	593.6	584.0	583.8	64.0	98.8	64.6	98.1
593.6	636.0	577.2	630.7	57.2	145.7	56.7	146.4
551.2	636.0	560.2	649.2	40.2	164.2	40.3	163.8
551.2	636.0	550.2	655.4	30.2	170.4	33.3	169.6
551.2	932.8	553.7	914.4	653	+30.8	+429.7	33.7 429.4
428.4	+2.9	+2.4	-0.3	-1.3			
551.2	890.4	547.7	890.0	650	+28.5	+408.8	27.7 405.0
1.3	-3.8	-3.7					
551.2	593.6	570.1	580.6	50.1	95.6	51.6	97.5
466.4	42.4	485.8	29.3	598	-38.6	-455.1	-34.2 -455.7
455.7	+4.4	[[/strickethrough]]	[[/strickethrough]]	4.9	-0.6	-0.6	
466.4	339.2	453.5	322.8	581	-76.1	-159.1	-66.5 -162.2
161.6	+9.6	+7.6	-3.1	[[/strickethrough]]	17	[[/strickethrough]]	2.5
466.4	890.4	446.9	910.8	580	-77.6	+385.8	-73.1
[[/strickethrough]]	425.8	[[/strickethrough]]	383.4	[[42.4?]]			-74.5
383.5	+4.5	+3.1					
424.0	296.8	438.4	307.4	573	-87.3	-179.0	-81.6 -177.6
177.8	[[/strickethrough]]	-2.4	[[/strickethrough]]	+5.7	+2.4	+1.4	+1.2
424.0	212.0	427.0	21	[[/strickethrough]]	2	[[/strickethrough]]	4.3
570	-94.8	-273.2	-93.0	270.7	-93.6	-271.9	+1.8+1.2 +2.5+1.3
424.0	84.8	417.5	87.0	466	-104.1	-406.3	102.5 -398.0
-102.3	-398.2	+1.6	+1.8	+8.3	+8.1		
381.6	381.6	362.7	365.3	558	-158.9	-118.6	-157.3 -119.7
156.8	-118.9	[[/strickethrough]]	-2.1	[[/strickethrough]]	+1.6	+2.1	-1.1-0.3
339.2	975.2	348.1	994.9	551	-175.1	+510.8	-171.9 . 509.9
172.3	509.5	+3.2	+2.8	-0.9	-1.3		
381.6	1144.8	362.7	1150.0	554	-163.1	+666.0	-157.3 6650
-161.4	663.7	+5.8	+1.7	-1.0	-2.3		
339.2	84.8	327.7	83.2	545	-195.5	-401.3	-192.3 -401.8
-191.8	402.1	+3	[[/strickethrough]]	7	[[/strickethrough]]	2	+3.7 -0.5-0.8
296.8	508.8	279.8	501.7	524	-241.4	+16.8	-240.2 16.7
-241.5	16.7	+1.2	[[/strickethrough]]	[[/strickethrough]]	-0.1	-0.1	-0.1
296.8	381.6	280.1	367.8	523	-242.3	-116.0	-239.9 -117.2
240.1	-118.0	+2.4	+2.2	-1.2	-2.0		
254.4	466.4	243.6	451.1	516	-276.0	-29.5	-276.4
[[/strickethrough]]	2	[[/strickethrough]]	33.9	-276.3			
34.8	[[/strickethrough]]	[[/strickethrough]]	[[/strickethrough]]				
0.4	[[/strickethrough]]	[[/strickethrough]]	-0.3	-4.4	-5.3		
21.2	0.508.8	2169	489.9	506	-306.0	+5.6	-303.1 4.9
-303.6	4.0	+2.9	+2.4	-0.7	-1.6		
212.0	42.4	211.5	60.7	505	-309.6	-424.7	-308.5 -424.3
-308.4	424.7	[[/strickethrough]]	-0.9	[[/strickethrough]]	+1.1	+1.2	+0.4.0.0
127.2	424.0	139.0	440.6	490	-380.7		
49.3	[[/strickethrough]]	41.7	[[/strickethrough]]	-381.0	-44.4	-381.3	
44.9	[[/strickethrough]]	[[/strickethrough]]	[[/strickethrough]]				
0	[[/strickethrough]]	6	[[/strickethrough]]	3			
0	[[/strickethrough]]	3	[[/strickethrough]]	6	+4.9	+4.4	
127.2	763.2	123.6	756.7	479	-400.4	+272.3	-396.4 271.7
-396.6	271.4	+4.0	+3.8	-1.6	-0.9		
42.4	381.6	376.0	458	-464.7	-107.8	-109.0	-108.3

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1.5.5 D455 ~~5~~ ~~5~~
6 August 3, 1896.

Additional measuring of positions of Stars in Nebula of Orion

[[table]]

No. | x | y | A. | B. | C. | D. | A+C | B+D | C-A^[[x]] | B-D^[[y]] | x | y |

-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

2. | 21.9 | 25.7 | 09 | 160 | 205 | 58 | 214 | 218 | +196 | +102 | +195 | +101 |

13. | 18.1 | 19.4 | 192 | 78 | 21 | 134 | 213 | 212 | -171 | -56 | -170 | -56 |

16. | 16.4 | 9.6 | 138 | 140 | 75 | 78 | 213 | 218 | -63 | +62 | -63 | +62 |

28a. | 13.5 | 15.9 | 100 | 200 | 115 | 14 | 215 | 214 | +15 | +186 | +15 | +185 |

33. | 11.2 | 8.2 | 178 | 32 | 38 | 180 | 216 | 212 | -140 | -148 | -139 | -147 |

35. | 10.7 | 7.7 | 45 | 160 | 165 | 51 | 210 | 211 | +120 | +109 | +119 | +108 |

40. | 8.9 | 27.5 | 10 | 125 | 205 | 85 | 215 | 210 | +195 | +40 | +194 | +40 |

[[/table]]

D. 4555

No | x | y | A. | B. | C. | D. | | | | | |

-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

2. | 21.9 | 25.7 | 8 | 159 | 205 | 55 | 213 | 214 | +197 | +104 | +196 | +103 |

13. | 18.1 | 19.4 | 185 | 80 | 20 | 135 | 205 | 215 | -165 | -55 | -164 | -55 |

16. | 16.4 | 9.6 | 139 | 140 | 74 | 78 | 213 | 218 | -65 | +62 | -65 | +62 |

28a. | 13.5 | 15.8 | 102 | 201 | 112 | 15 | 214 | 216 | +10 | +186 | +10 | +185 |

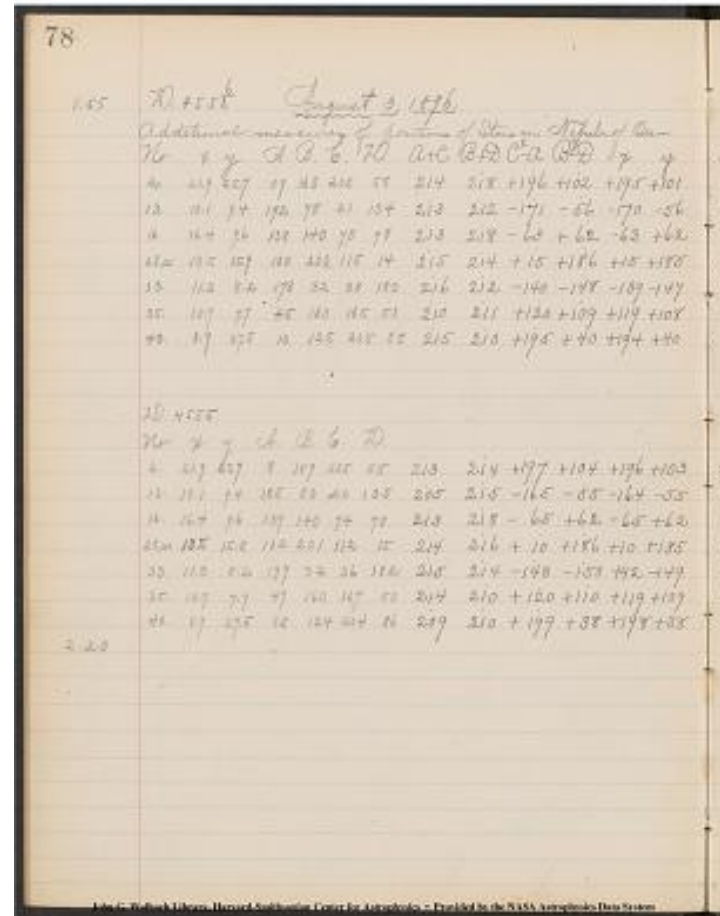
33. | 11.3 | 8.2 | 179 | 32 | 36 | 182 | 215 | 214 | -143 | -150 | +42 | -149 |

35. | 10.7 | 7.7 | 47 | 160 | 167 | 50 | 214 | 210 | +120 | +110 | +119 | +109 |

40. | 8.9 | 27.5 | 05 | 124 | 204 | 86 | 209 | 210 | +199 | +38 | +198 | +38 |

2.20 |

[[/table]]



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[[table]]

| Est.xx42.4 | Est.yx42.4 | xCorr. | yCorr. | x-520.0 | y-485.0 |

|-----|

890.4 | 1060.0 | 909.9 | 1070.1 | +38.99 | +58.51

763.2 | 381.6 | 746.2 | 376.0 | +226.2 | -109.0

678.4 | 381.6 | 672.1 | 387.8 | +152.1 | -97.2

7551.2 | 636.0 | 552.7 | 654.5 | +32.7 | +169.5

466.4 | 339.2 | 452.5 | 324.5 | -67.5 | -160.5

424.0 | 296.8 | 435.9 | 307.6 | -84.1 | -177.4

339.2 | 1144.8 | 358.6 | 1148.8 | -161.4 | +663.8

890.4 | 1060.0 | 910.0 | 1070.3 | +390.0 | +585.3

763.2 | 381.6 | 746.8 | 376.1 | +226.8 | -108.96

678.4 | 381.6 | 671.9 | 387.8 | +151.9 | -9[[~~stri~~ke~~throu~~gh]]8[[~~stri~~ke~~throu~~gh]]7.2

551.2 | 636.0 | 552.2 | 654.5 | +32.2 | +169.5

466.4 | 339.2 | 452.2 | 324.3 | -67.8 | -160.7

424.0 | 296.8 | 435.9 [[~~stri~~ke~~throu~~gh]] 412.1[[~~stri~~ke~~throu~~gh]] | 307.7[[~~stri~~ke~~throu~~gh]] 859[[~~stri~~ke~~throu~~gh]] -84.1 | -177.3339.2 | 1144.8 | 359.0 [[~~stri~~ke~~throu~~gh]] 3194[[~~stri~~ke~~throu~~gh]] | 114.8.6 | -

161.0 | +663.6

79

Est.xx42.4 | Est.yx42.4 | xCorr. | yCorr. | x-520.0 | y-485.0

890.4 | 1060.0 | 909.9 | 1070.1 | +38.99 | +58.51

763.2 | 381.6 | 746.2 | 376.0 | +226.2 | -109.0

678.4 | 381.6 | 672.1 | 387.8 | +152.1 | -97.2

7551.2 | 636.0 | 552.7 | 654.5 | +32.7 | +169.5

466.4 | 339.2 | 452.5 | 324.5 | -67.5 | -160.5

424.0 | 296.8 | 435.9 | 307.6 | -84.1 | -177.4

339.2 | 1144.8 | 358.6 | 1148.8 | -161.4 | +663.8

890.4 | 1060.0 | 910.0 | 1070.3 | +390.0 | +585.3

763.2 | 381.6 | 746.8 | 376.1 | +226.8 | -108.96

678.4 | 381.6 | 671.9 | 387.8 | +151.9 | -9[[~~stri~~ke~~throu~~gh]]

8[[~~stri~~ke~~throu~~gh]]7.2

551.2 | 636.0 | 552.2 | 654.5 | +32.2 | +169.5

466.4 | 339.2 | 452.2 | 324.3 | -67.8 | -160.7

424.0 | 296.8 | 435.9 [[~~stri~~ke~~throu~~gh]] 412.1[[~~stri~~ke~~throu~~gh]] | 307.7

[[~~stri~~ke~~throu~~gh]] 859[[~~stri~~ke~~throu~~gh]] -84.1 | -177.3

339.2 | 1144.8 | 359.0 [[~~stri~~ke~~throu~~gh]] 3194[[~~stri~~ke~~throu~~gh]] | 114.8.6 | -

161.0 | +663.6

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23.30 March 21, 1897 D
48~~78~~

Measures of positions of Stars within 30° of No. Pole

[[13 Columned Table]]

No.	x	y	A.	B.	C.	D.	a+b	B+D	c-a	B-D	52.6 x [^] [[x]]	52.6 y [^] [[y]]
1.	15.3	48.3	99	98	30	32	129	130	-69	+66	789.0	2524.8
2.	15.4	47.7	72	21	55	108	127	129	-17	-87	789.0	2472.2
3.	15.8	56.7	15	25	115	105	130	130	+100	-80	789.0	2945.6
4.	16.2	47.3	114	81	15	48	129	129	-99	+33	841.6	2472.2
5.	16.4	44.9	81	04	45	125	126	129	-36	-121	841.6	2314.4
6.	16.6	51.4	45	75	88	55	133	130	+43	+20	841.6	2682.6
7.	17.1	56.2	115	105	15	25	130	130	-100	+80	894.2	2945.6
8.	17.8	47.4	19	79	109	50	128	129	+90	+29	894.2	2472.2
9.	17.9	46.5	05	55	125	71	130	126	+120	-16	894.2	2419.6
10.	18.4	53.4	70	75	58	55	128	130	-12	+20	946.8	2787.8
11.	18.4	62.6	72	49	55	80	127	129	-17	-31	946.8	3261.2
12.	18.9	40.	8	7	10	30	115	100				
13.	18.9	42.3	05	89	125	41	130	130	+120	+48	946.8	2209.2
14.	19.1	53.6	119	42	10	89	129	131	-109	-47	999.4	2787.8
15.	19.9	64.7	05	32	125	96	130	128	+120	-64	999.4	3366.4
16.	19.9	67.9	01	05	128	125	129	130	+127	-120	999.4	3524.2
17.	20.3	68.9	67.1									
18.	20.5	55.8	54.8									
19.	20.6	50.7	42	40	85	90	127	130	+43	-50	1052.0	2630.0
20.	21.1	40.6	125	44	05	85	130	129	-120	-41	1104.6	2104.0
21.	21.2	4	0	1.2	100	105	29	25				
22.	21.5	43.9	71	04	55	128	126	132	-16	-124	1104.6	2261.8
23.	21.1	46.5	121	59	10	71	131	130	-111	-12	1104.6	2419.6
24.	21.0	47.4	125	81	04	49	129	130	-121	+32	1104.6	2472.2

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March 21, 1897

Measures of positions of Stars within 30° of No. Pole

No.	x	y	A.	B.	C.	D.	a+b	B+D	c-a	B-D	52.6 x [^] [[x]]	52.6 y [^] [[y]]
1.	15.3	48.3	99	98	30	32	129	130	-69	+66	789.0	2524.8
2.	15.4	47.7	72	21	55	108	127	129	-17	-87	789.0	2472.2
3.	15.8	56.7	15	25	115	105	130	130	+100	-80	789.0	2945.6
4.	16.2	47.3	114	81	15	48	129	129	-99	+33	841.6	2472.2
5.	16.4	44.9	81	04	45	125	126	129	-36	-121	841.6	2314.4
6.	16.6	51.4	45	75	88	55	133	130	+43	+20	841.6	2682.6
7.	17.1	56.2	115	105	15	25	130	130	-100	+80	894.2	2945.6
8.	17.8	47.4	19	79	109	50	128	129	+90	+29	894.2	2472.2
9.	17.9	46.5	05	55	125	71	130	126	+120	-16	894.2	2419.6
10.	18.4	53.4	70	75	58	55	128	130	-12	+20	946.8	2787.8
11.	18.4	62.6	72	49	55	80	127	129	-17	-31	946.8	3261.2
12.	18.9	40.	8	7	10	30	115	100				
13.	18.9	42.3	05	89	125	41	130	130	+120	+48	946.8	2209.2
14.	19.1	53.6	119	42	10	89	129	131	-109	-47	999.4	2787.8
15.	19.9	64.7	05	32	125	96	130	128	+120	-64	999.4	3366.4
16.	19.9	67.9	01	05	128	125	129	130	+127	-120	999.4	3524.2
17.	20.3	68.9	67.1									
18.	20.5	55.8	54.8									
19.	20.6	50.7	42	40	85	90	127	130	+43	-50	1052.0	2630.0
20.	21.1	40.6	125	44	05	85	130	129	-120	-41	1104.6	2104.0
21.	21.2	4	0	1.2	100	105	29	25				
22.	21.5	43.9	71	04	55	128	126	132	-16	-124	1104.6	2261.8
23.	21.1	46.5	121	59	10	71	131	130	-111	-12	1104.6	2419.6
24.	21.0	47.4	125	81	04	49	129	130	-121	+32	1104.6	2472.2

25. 21.3 60.0 99 118 128 30
04 129 132 -69 +124 1104.6 3156.0
26. 21.8 67.5 15 60 111 69 126 129 +96 -09 1104.6
3524.2
27. 21.9 51.3 01 95 125 35 126 130 +124 +60 1104.6
2682.6
28. 22.1 41.2 111 101 15 29 126 130 -96 +72 1157.2
2156.6
24.10 29. 22.3 48.8 101 20 25 109 <u>126</u>
<u>129</u> <u>-76</u> <u>-89</u> 1157.2
2524.8

3728/29 = 1286
3761/29 = 12.97

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[[table]]
c-a x 203	B-D x 203	-2610 - 2580
 -14.0 +13.4 | 775.0 2511.4 | -1835.0 -68.6 |
 -3.5 -17.7 | 785.5 2489.9 | -1824.5 -90.1 |
 +20.3 -16.2 | 809.3 2961.8 | -1800.7 +381.8 |
 -20.1 +6.7 | 821.5 2465.5 | -1788.5 -114.5 |
 -7.3 -24.6 | 834.3 2339.0 | -1775.7 -241.0 |
 +8.7 +4.1 | 850.3 2678.5 | -1759.7 +98.5 |
 -20.3 +16.2 | 873.9 2929.4 | -1736.1 +349.4 |
 +18.3 +5.9 | 912.5 2466.3 | -1697.5 -[[/strickethrough]] +[[/strickethrough]]
 113.7 |
 +24.4 -3.2 | 918.6 2422.8 | -1691.4 -157.2 |
 -2.4 +4.1 | 944.4 2783.7 | -1665.6 +203.7 |
 -3.5 -6.3 | 943.4 3267.5 | -1666.7 +687.5 |
 +21.3 -14.2 | 9681 2118.2 | -1641.9 +461.8 |
 +24.4 +9.7 | 971.2 2199.5 | -1638.8 -380.5 |
 -22.1 -9.5 | 977.3 2797.3 | -1632.7 +217.3 |
 +24.4 -13.0 | 1023.8 [[/strickethrough]] 975.0 [[/strickethrough]] 3379.4 | -
 1586.2 +799.4 |
 +25.8 -24.4 | 1025.2 3548.6 | -1584.8 +968.6 |
 -11.6 +22.1 | 1040.4 3502.1 | -1569.6 +922.1 |
 +6.5 -18.5 | 1058.5 2858.9 | -1551.5 +278.9 |
 +8.7 -10.2 | 1060.7 2640.2 | -1549.3 +60.2 |
 -24.4 -8.3 | 1080.2 2112.3 | -1529.8 -467.7 |
 -14.4 +16.2 | 1090.2 2140.4 | -1519.8 -439.6 |
 -3.2 -25.2 | 1101.4 2287.0 | -1508.6 -293.0 |
 -22.5 -2.4 | 1082.1 2422.0 | -1527.9 -158.0 |
 -24.6 +6.5 | 1080.0 2465.7 | -1530.0 -114.3 |
 -14.0 +25.2 | 1090.6 3130.8 | -1519.4 +550.8 |
 +19.5 -1.8 | 1124.1 3526.0 | -1485.9 +946.0 |
 +25.2 +12.2 | 1129.8 2670.4 | -1480.2 +90.4 |
 -19.5 +14.6 | 1137.7 2142.0 | -1472.3 -438.0 |
 -15.4 -18.1 | 1141.8 2542.9 | -1468.2 -37.1 |
 [[/table]]

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c-a	4.4		2610	-2580
203	13.4	775.0	2511.4	-1835.0
-14.0	+13.4	775.0	2511.4	-1835.0
-3.5	-17.7	785.5	2489.9	-1824.5
+20.3	-16.2	809.3	2961.8	-1800.7
-20.1	+6.7	821.5	2465.5	-1788.5
-7.3	-24.6	834.3	2339.0	-1775.7
+8.7	+4.1	850.3	2678.5	-1759.7
-20.3	+16.2	873.9	2929.4	-1736.1
+18.3	+5.9	912.5	2466.3	-1697.5
113.7				
+24.4	-3.2	918.6	2422.8	-1691.4
-2.4	+4.1	944.4	2783.7	-1665.6
-3.5	-6.3	943.4	3267.5	-1666.7
+21.3	-14.2	9681	2118.2	-1641.9
+24.4	+9.7	971.2	2199.5	-1638.8
-22.1	-9.5	977.3	2797.3	-1632.7
+24.4	-13.0	1023.8	975.0	3379.4
1586.2	+799.4			
+25.8	-24.4	1025.2	3548.6	-1584.8
-11.6	+22.1	1040.4	3502.1	-1569.6
+6.5	-18.5	1058.5	2858.9	-1551.5
+8.7	-10.2	1060.7	2640.2	-1549.3
-24.4	-8.3	1080.2	2112.3	-1529.8
-14.4	+16.2	1090.2	2140.4	-1519.8
-3.2	-25.2	1101.4	2287.0	-1508.6
-22.5	-2.4	1082.1	2422.0	-1527.9
-24.6	+6.5	1080.0	2465.7	-1530.0
-14.0	+25.2	1090.6	3130.8	-1519.4
+19.5	-1.8	1124.1	3526.0	-1485.9
+25.2	+12.2	1129.8	2670.4	-1480.2
-19.5	+14.6	1137.7	2142.0	-1472.3
-15.4	-18.1	1141.8	2542.9	-1468.2

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2[[~~striethrough~~]] 4[[~~striethrough~~]].10 continued

March 21, 1897

D48[[~~striethrough~~]] 78[[~~striethrough~~]] 85

Measure of positions of stars within 30 degrees of the No. Pole

[[table]]

[No. | x | y | A | B | C | D | a + c | B + D | C - A | B - D | 52.6 xx | 52.6 xy |

30	22.8	28.8	20	21	105	110	125	131	+85	-89	1157.2	1472.8	
31	22.9	34.8	0	25	130	108	130	133	+130	-83	1157.2	1788.4	
31a	22.5	63.7	7	2	5	6.0	105	130	130	-1.0	-80	1157.2	3313.8
32	23.8	40.8	20	10	109	120	129	130	+89	-110	1209.8	2104.0	
33	23.7	43.2	35	0	98	119	133	129	+63	+91	1209.8	2261.8	
34	23.7	47.6	28	42	101	85	129	127	+73	-43	1209.8	2472.2	
35	23.3	59.0	96	127	31	05	127	132	-65	+122	1209.8	3103.4	
36	23.7	60.1	35	120	95	10	130	130	+60	+110	1209.8	3156.0	
37	23.6	72.9	44	07	89	121	133	128	+45	-114	1209.8	3787.2	
38	24.6	27.3	55	90	70	40	125	130	+15	+50	1262.4	1420.2	
39	24.8	32.5	19	60	109	70	128	130	+90	-10	1262.4	1683.2	
40	25.0	47.3	0	99	130	30	130	129	+130	+69	1315.0	2472.2	
41	25.1	72.7	115	30	15	100	130	130	-100	-70	1315.0	3787.2	
42	25.3	58.3	99	95	30	35	129	130	-69	+60	1315.0	3050.8	
43	25.4	61.0	88	128	41	02	126	130	-44	+126	1315.0	3208.6	
44	25.9	57.7	0	25	130	105	130	130	+130	-80	1315.0	2998.2	
45	26.3	25.3	95	91	38	40	133	131	-57	+51	1367.6	1315.0	
46	26.6	25.8	41	10	89	119	130	129	+48	-109	1367.6	1315.0	
47	26.3	31.4	91	64	35	64	126	128	-56	00	1367.6	1630.6	
48	26.6	31.3	45	7	85	55	130	130	+40	+20	1367.6	1630.6	
48a	26.4	54.1	9.1	12.5	40	0.5	131	130	-51	+120	1367.6	2840.4	
49	27.0	39.9	121	15	05	115	126	130	-116	-100	1420.2	2051.4	
50	27.2	26.8	99	25	30	100	129	125	-69	-75	1420.2	1367.6	
51	27.6	52.7	45	31	85	100	130	131	+40	-69	1420.2	2735.2	
52	27.5	55.3	61	99	65	31	126	130	+04	+68	1420.2	2893.0	
53	27.5	64.4	55	75	72	55	127	130	+17	+20	1420.2	3366.4	
54	27.6	64.6	42	45	89	85	131	130	+47	-40	1420.2	3366.4	
55	27.9	64.6	05	02	125	127	130	129	+120	-125	1420.2	3366.4	
56	27.3	70.7	95	215	35	105	130	130	-60	-80	1420.2	3682.0	
57	27.8	70.4	12	69	69	60	131	129	+107	+09	1420.2	3682.0	

[[/table]]

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continued March 21, 1897

Measure of positions of stars within 30 degrees of the No. Pole

No.	x	y	A	B	C	D	a+c	B+D	C-A	B-D	52.6 xx	52.6 xy	
30	22.8	28.8	20	21	105	110	125	131	+85	-89	1157.2	1472.8	
31	22.9	34.8	0	25	130	108	130	133	+130	-83	1157.2	1788.4	
31a	22.5	63.7	7	2	5	6.0	105	130	130	-1.0	-80	1157.2	3313.8
32	23.8	40.8	20	10	109	120	129	130	+89	-110	1209.8	2104.0	
33	23.7	43.2	35	0	98	119	133	129	+63	+91	1209.8	2261.8	
34	23.7	47.6	28	42	101	85	129	127	+73	-43	1209.8	2472.2	
35	23.3	59.0	96	127	31	05	127	132	-65	+122	1209.8	3103.4	
36	23.7	60.1	35	120	95	10	130	130	+60	+110	1209.8	3156.0	
37	23.6	72.9	44	07	89	121	133	128	+45	-114	1209.8	3787.2	
38	24.6	27.3	55	90	70	40	125	130	+15	+50	1262.4	1420.2	
39	24.8	32.5	19	60	109	70	128	130	+90	-10	1262.4	1683.2	
40	25.0	47.3	0	99	130	30	130	129	+130	+69	1315.0	2472.2	
41	25.1	72.7	115	30	15	100	130	130	-100	-70	1315.0	3787.2	
42	25.3	58.3	99	95	30	35	129	130	-69	+60	1315.0	3050.8	
43	25.4	61.0	88	128	41	02	126	130	-44	+126	1315.0	3208.6	
44	25.9	57.7	0	25	130	105	130	130	+130	-80	1315.0	2998.2	
45	26.3	25.3	95	91	38	40	133	131	-57	+51	1367.6	1315.0	
46	26.6	25.8	41	10	89	119	130	129	+48	-109	1367.6	1315.0	
47	26.3	31.4	91	64	35	64	126	128	-56	00	1367.6	1630.6	
48	26.6	31.3	45	7	85	55	130	130	+40	+20	1367.6	1630.6	
48a	26.4	54.1	9.1	12.5	40	0.5	131	130	-51	+120	1367.6	2840.4	
49	27.0	39.9	121	15	05	115	126	130	-116	-100	1420.2	2051.4	
50	27.2	26.8	99	25	30	100	129	125	-69	-75	1420.2	1367.6	
51	27.6	52.7	45	31	85	100	130	131	+40	-69	1420.2	2735.2	
52	27.5	55.3	61	99	65	31	126	130	+04	+68	1420.2	2893.0	
53	27.5	64.4	55	75	72	55	127	130	+17	+20	1420.2	3366.4	
54	27.6	64.6	42	45	89	85	131	130	+47	-40	1420.2	3366.4	
55	27.9	64.6	05	02	125	127	130	129	+120	-125	1420.2	3366.4	
56	27.3	70.7	95	215	35	105	130	130	-60	-80	1420.2	3682.0	
57	27.8	70.4	12	69	69	60	131	129	+107	+09	1420.2	3682.0	

1796

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83

[[table]]

C-A 2.03| B-D 2.03| | -2610 | -2580. |

---|---|---|---|

+17.3| -18.1| 1174.5| 1490.9| -1435.5| -1089.1|

+26.4| -16.8| 11836| 1805.2| -14264| -774.8|

-20. | ~~3~~ | 16.2 | 1155.2 || ~~3297.6~~ | ~~3330~~ | -1454.8 || ~~71.7.6~~ | +750.0 |

+18.1 | 22.3 | 1227.9 | 2126.3 | -1382.1 | -453.7 |

+12.8|+18.5|1222.6|2243.3|-1387.4|-336.7|

+14.8|-8.7|1224.6|2480.9|-1385.4|-99.1|

-13.2|+24.8|11~~8~~ | 8~~8~~ | 96.6 | 3078.6 | -1413.4

+498.6|

+12.2|+22.3|1222.0| 3133.7|-1388.0| +553.7|

+9.1|-23.1|1218.9|3810.3|-1391.1| +1230.3|

+3.0|+10.2|1265.4|1410.0|-1344.6| -1170.0|

+18.3|-2.0|1280.7| 1685.2|-1329.3| -894.8|

+26.4|+14.0|1341.4| 2458.2|-1268.6| -121.8 ^[[x -1321.2]]

-20.3|-14.2|1294.7| 3801.4|-1315.3| +1221.4|

-14.0|+12.2|1301.0| 3038.6|-1309.0| +458.6|

-8.9|+25.6|1306.1| 3183.0|-1303.9| +603.0|

+26.4|-16.2|1341.4| 3014.4|-1268.6| +434.4|

-11.6|+10.4|1356.0| 1304.6|-1254.0| -1275.4|

+9.7|-22.1|1377.3| 1337.1|-1232.7| -1242.9|

-11.4|0.0|1356.2| 1630.6|-1253.8| -949.4|

+8.1|+4.1|1375.7| 1626.5|-1234.3| -953.5|

-10.4|+24.4|1357.2| 2816.0|-1252.8| +236.0|

-23.5|-20.3|1396.7| 2071.7|-1213.3| -508.3|

-14.0|-15.2|1406.2| 1382.8|-1203.8| -1197.2|

+8.1|-14.0|1428.3| 2749.2|-1181.7| +169.2|

+0.8|+13.8|1421.0| 2879.2|-1189.0| +299.2|

+3.5|+4.1|1423.7|3362.3|-1186.3|+782.3|

+9.5|-8.1|1429.7|3374.5|-1180.3|+794.5|

| ~~24.4~~ | 24.4|-25.4|14~~4~~ || ~~22~~ | 44.6| 3391.8|-11~~8~~ | 87| ~~65.4~~ | +811.8 |

-12.2|-16.2|1408.0| 3698.2|-1202.0| +1118.2|

+21.7|+1.8|1441.9| 3680.2|-1168.1| +1100.2|

[[/table]]

83

C-A 2.03| B-D 2.03| | -2610 | -2580. |

---|---|---|---|

+17.3| -18.1| 1174.5| 1490.9| -1435.5| -1089.1|

+26.4| -16.8| 11836| 1805.2| -14264| -774.8|

-20. | ~~3~~ | 16.2 | 1155.2 |

| ~~3297.6~~ | ~~3330~~ | -1454.8 |

| ~~71.7.6~~ | +750.0 |

+18.1 | 22.3 | 1227.9 | 2126.3 | -1382.1 | -453.7 |

+12.8|+18.5|1222.6|2243.3|-1387.4|-336.7|

+14.8|-8.7|1224.6|2480.9|-1385.4|-99.1|

-13.2|+24.8|11~~8~~ | 8~~8~~ | 96.6 | 3078.6 | -1413.4

+498.6|

+12.2|+22.3|1222.0| 3133.7|-1388.0| +553.7|

+9.1|-23.1|1218.9|3810.3|-1391.1| +1230.3|

+3.0|+10.2|1265.4|1410.0|-1344.6| -1170.0|

+18.3|-2.0|1280.7| 1685.2|-1329.3| -894.8|

+26.4|+14.0|1341.4| 2458.2|-1268.6| -121.8 ^[[x -1321.2]]

-20.3|-14.2|1294.7| 3801.4|-1315.3| +1221.4|

-14.0|+12.2|1301.0| 3038.6|-1309.0| +458.6|

-8.9|+25.6|1306.1| 3183.0|-1303.9| +603.0|

+26.4|-16.2|1341.4| 3014.4|-1268.6| +434.4|

-11.6|+10.4|1356.0| 1304.6|-1254.0| -1275.4|

+9.7|-22.1|1377.3| 1337.1|-1232.7| -1242.9|

-11.4|0.0|1356.2| 1630.6|-1253.8| -949.4|

+8.1|+4.1|1375.7| 1626.5|-1234.3| -953.5|

-10.4|+24.4|1357.2| 2816.0|-1252.8| +236.0|

-23.5|-20.3|1396.7| 2071.7|-1213.3| -508.3|

-14.0|-15.2|1406.2| 1382.8|-1203.8| -1197.2|

+8.1|-14.0|1428.3| 2749.2|-1181.7| +169.2|

+0.8|+13.8|1421.0| 2879.2|-1189.0| +299.2|

+3.5|+4.1|1423.7|3362.3|-1186.3|+782.3|

+9.5|-8.1|1429.7|3374.5|-1180.3|+794.5|

| ~~24.4~~ | 24.4|-25.4|14~~4~~ |

| ~~22~~ | 44.6| 3391.8|-11~~8~~ | 87

| ~~65.4~~ | +811.8 |

-12.2|-16.2|1408.0| 3698.2|-1202.0| +1118.2|

+21.7|+1.8|1441.9| 3680.2|-1168.1| +1100.2|

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22.40 March 22, 1897 ~~D48~~ 85

Measures of positions of Stars within 30° of No. Pole

[table]

No. | x | y | A. | B. | C. | D. | a+b | B+D | C-a | B-D | 52.6x x | 52.6x y | C-a x 203 | B-D x 2.03 |

58.	28.5	23.5	65	60	60	69	125	129	-0.5	-0.9	1472.8	1209.8	-1.0	-1.8
59.	28.5	26.4	55	80	41	50	126	130	+1.6	+3.0	1472.8	1367.6	+3.2	+6.1
60.	28.1	29.6	120	55	10	75	130	130	-11.0	-20	1772.8	1525.4	-22.3	-4.1
61.	28.5	29.7	59	35	70	95	129	130	+1.1	-60	1472.8	1525.4	+2.2	-12.2
62.	28.5	30.7	69	35	60	95	129	130	-0.9	-60	1472.8	1578.0	-1.8	-12.2
63.	28.4	43.8	30	29	99	100	129	129	+69	-71	1472.8	2261.8	+14.0	-14.4
64.	28.6	44.5	49	61	80	68	129	129	+31	-0.7	1472.8	2314.4	+6.3	-1.4
65.	28.4	67.4	71	70	55	59	126	129	-16	+1.1	1472.8	3524.2	-3.2	+2.2
66.	28.5	72.4	65	71	64	58	129	129	-0.1	+1.3	1472.8	3787.2	-0.2	+2.6
67.	29.6	43.8	50	25	79	105	129	130	+2.9	-8.0	1525.4	2261.8	+5.9	-16.2
68.	29.3	44.4	89	88	40	44	129	132	-4.9	+4.4	1525.4	2314.4	-9.9	+8.9
[+89°26=][69.29.744.72222105107127129+8.3]-														
8.51525.42314.4+16.8-17.3														
70.	29.4	51.8	75	25	54	107	129	132	-2.1	-8.2	1525.4	2682.6	-4.3	-16.6
71.	29.4	57.3	75	85	56	45	131	130	-1.9	+4.0	1525.4	2998.2	-3.9	+8.1
72.	29.4	63.0	75	02	55	129	130	131	-2.0	-12.7	1525.4	3313.8	-4.1	-25.8
73.	29.6	64.2	40	109	90	22	130	131	-5.0	+8.7	1525.4	3366.4	-10.2	+17.7
74.	30.6	25.5	45	61	85	69	130	130	+4.0	-8	1578.0	1315.0	+8.1	-1.6
[[defect?]]75.30.540.350997930129129+2.9+6.91578.02104.0+5.9+14.0														
76.	30.9	50.4	04	67	125	62	129	129	+12.1	+0.5	1578.0	2630.0	+24.6	+1.0
[[defect?]]77.30.455.491853845129130-5.3+4.01578.02893.0-10.8+8.1														
78.	30.8	66.8	11	20	119	110	130	130	+10.8	-9.0	1578.0	3471.6	+21.9	-18.3
80.	30.2	67.4	109	80	20	50	129	130	-8.9	+3.0	1578.0	3524.2	-18.1	+6.1
81.	30.4	67.5	71	65	55	65	126	130	-1.6	0.0	1578.0	3524.2	-3.2	0.0
82.	30.4	68.2	89	110	40	20	129	130	-4.9	+9.0	1578.0	3576.8	-9.9	+18.3
83.	30.5	70.0	55	01	71	129	126	130	+1.6	-12.8	1578.0	3682.0	+3.2	-26.0
^[[+89°12]]84.30.674.635399590130129+6.0-5.11578.03892.4+12.2-10.4														
85.	31.3	23.1	100	120	30	10	130	130	-7.0	+110	1630.6	1209.8	-14.2	+22.3

[/table]

[annotation]23.20[/annotation]

[annotation]3604/28 = 128.7[/annotation]

[annotation]3637/28 = 129.8[/annotation]

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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13~~88~~92.5 | |

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23.20 March 22, 1897 D4885

Measures of positions of stars within 30° (cont)

[[table]]

No|x|Y|A.|B.|C.|D.|A+C|B+D|C-A|B-D|526x|526y|C-A x 2.03|B-D x 2.03|

86.|31.9|30.5|06|45|125|86|130|131|+120|-41|1630.6|1578.0|+24.44|-8.3
 87.|31.8|40.0|15|12.5|114|05|129|130|+99|+120|1630.6|2104.0|+20.1|+2.4.4

88.|31.3|43.7|106|19|22|111|128|130|-84|-92|1630.6|2261.8|-17.1|-18.7
 89.|31.1|54.8|121|19|10|110|131|129|-111|-91|1630.6|2840.4|-22.5|-18.5
 db? or def? 90.|31.4|59.4|89|79|40|51|129|130|-49|+28|1630.6|3103.4|-9.9|+5.7

91.|31.4|59.9|81|05|49|125|130|130|-32|-120|1630.6|3103.4|-6.5|-24.4|
 92.|31.3|60.9|101|10|27|120|128|130|-74|-110|1630.6|3156.0|-150|-22.3
 93.|31.9|61.9|15|05|115|124|130|129|+100|-119|1630.6|3208.6|+20.3|-24.2

94.|31.5|71.5|69|61|60|68|129|129|-09|-07|1630.6|3734.6|-1.8|-1.4
 95.|31.8|71.3|20|89|110|41|130|130|+90|+48|1630.6|3734.6|+18.3|+9.7
 96.|32.0|24.3|0|90|129|40|129|130|+129|+50|1683.2|1262.4|+26.2|+10.2
 97.|32.4|28.3|80|101|50|29|130|130|-30|+72|1683.2|1472.8|-6.1|+14.6|
 98.|32.3|51.7|105|25|24|105|129|130|-81|-80|1683.2|2682.6|-16.4|-16.2
 99.|32.4|56.4|75|70|52|60|127|130|-23|+10|1683.2|2945.6|-4.7|+2.0
 100.|32.6|65.2|50|109|80|21|130|130|+30|+88|1683.2|3892.4|+24.4|-14.4

101.|32.9|74.7|05|29|125|100|130|129|+120|-71|1683.2|3892.4|+24.4|-14.4|
 102.|33.9|26.4|10|77|120|55|130|132|+110|+22|1735.8|1367.6|+22.3|+4.5

+89°29=
 103.|33.6|31.1|39|118|91|14|130|132|+52|+104|1735.8|1630.6|+10.6|+21.1
 104.|33.1|35.4|121|69|05|61|126|130|-116|+08|1735.8|1841.0|-23.5|+1.6

105.|33.3|36.9|86|08|41|121|127|129|-45|-113|1735.8|1893.6|-9.1|-22.9
 2p
 106.|33.7|71.3|30|95|100|35|130|130|+70|+60|1735.8|3734.6|+14.2|+12.2

107.|33.7|75.4|31|77|95|100|35|130|130|+70|+60|1735.8|3734.6|+13.0|5.5
 108.|33.9|77.1|10|121|120|09|130|130|+110|+112|1735.8|4050.2|+22.3|+22.7

109.|34.2|21.3|100|92|31|37|131|129|-69|+55|1788.4|1104.6|-14.0|+11.2
 110.|34.5|37.1|59|120|70|10|129|130|+11|+110|1788.4|1946.2|+2.2|+22.3

111.|34.4|41.4|71|89|59|41|130|130|-12|+48|1788.4|2156.6|-2.4|+9.7|
 112.|34.6|57.3|41|100|89|29|130|129|+48|+71|1788.4|2998.2|+9.7|+14.4|
 113.|34.3|58.6|99|59|30|71|129|130|-69|-12|1788.4|3050.8|-14.0|-2.4|

[[/table]]

23.50

Handwritten astronomical observation table from March 22, 1897, page 86. The table contains measures of positions of stars within 30 degrees, with columns for star coordinates and calculated values. The handwriting is in cursive and the paper shows signs of age.

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2.3.50 March 22, 1897 D48~~78~~ Measures of positions of stars within 30° (cont)

[[table]]

No. | x | y | A. | B. | C. | D. | a+b | B+D | C-a | B-D | 52.6x x | 52.6x y | C-a x 203 | B-D x 203 |

114. | 34.7 | 60.1 | 34 | 125 | 95 | 05 | 129 | 130 | +61 | +120 | 1788.4 | 3156.0 | +124 | +24.4

115. | 34.4 | 61.8 | 77 | 2.5 | 511 | 104 | 128 | 132 | -26 | -82 | 1788.4 | 3208.6 | -5.3 | -16.6

116. | 34.8 | 65.6 | 19 | 51 | 111 | 79 | 130 | 130 | +92 | -28 | 1788.4 | 3419.0 | +18.7 | -5.7

117. | 34.4 | 70.2 | 76 | 118 | 51 | 11 | 127 | 129 | -25 | +107 | 1788.4 | 3682.0 | -5.1 | +21.7

118. | 35.2 | 72.39 | 105 | 04 | 25 | 125 | 130 | 129 | -80 | -121 | 1841.0 | 1209.8 | -16.2 | -24.6

119. | 35.3 | 30.3 | 86 | 89 | 44 | 41 | 130 | 130 | -42 | +48 | 1841.0 | 1578.0 | -8.5 | +9.7

120. | 35.5 | 31.6 | 59 | 55 | 70 | 75 | 129 | 130 | +11 | -20 | 1841.0 | 1630.6 | ~~2051.4~~ +2.2 | -4.1

121. | 35.5 | 39.4 | 100 | 76 | 30 | 55 | 130 | 131 | -70 | +21 | 1841.0 | 2051.4 | ~~2419.6~~ -14.2 | +4.3

122. | 35.4 | 46.5 | 75 | 61 | 54 | 68 | 129 | 129 | -21 | -07 | 1841.0 | 2419.6 | -4.3 | -1.4

123. | 35.9 | 61.6 | 06 | 40 | 122 | 89 | 128 | 129 | +116 | -49 | 1841.0 | 3208.6 | +23.5 | -99

^[[24.00]] 124. | 35.4 | 71.8 | 35 | 26 | 95 | 105 | 130 | 131 | +60 | -79 | 1841.0 | 3734.6 | +12.2 | -16.0

^[[March 23, 1897 25.45]] 125. | 35.2 | 66.9 | 118 | 02 | 12 | 125 | 130 | 127 | -106 | -123 | 1841.0 | 3471.6 | -21.5 | -25.0

126. | 35.4 | 67.0 | 90 | 128 | 40 | 02 | 130 | 130 | -50 | +126 | 1841.0 | 3524.2 | -10.2 | +25.6

127. | 36.7 | 19.2 | 30 | 101 | 99 | 29 | 129 | 130 | +69 | +72 | 1893.6 | 999.4 | +14.0 | +14.6

128. | 36.9 | 18.8 | 05 | 10 | 125 | 119 | 130 | 129 | +120 | -109 | 1893.6 | 946.8 | +24.4 | -22.1

129. | 36.3 | 41.1 | 89 | 125 | 40 | 05 | 129 | 130 | -49 | +120 | 1893.6 | 2156.6 | -9.9 | +24.4

130. | 36.5 | 41.0 | 71 | 128 | 59 | 03 | 130 | 131 | -12 | +125 | 1893.6 | 2156.6 | -2.4 | +25.4

131. | 36.4 | 42.1 | 87 | 125 | 41 | 04 | 128 | 129 | -46 | +121 | 1893.6 | 2209.2 | -9.3 | +24.6

132. | 36.7 | 43.2 | 32 | 116 | 95 | 14 | 127 | 130 | +63 | +102 | 1893.6 | 2261.8 | +12.8 | +20.7

133. | 36.3 | 46.5 | 99 | 60 | 30 | 69 | 129 | 129 | -69 | -09 | 1893.6 | 2419.6 | -14.0 | -1.8

134. | 36.4 | 47.3 | 41 | 91 | 60 | 39 | 131 | 130 | -11 | +52 | 1893.6 | 2472.2 | -2.2 | +10.6

135. | 36.4 | 57.4 | 78 | 85 | 51 | 45 | 129 | 130 | -27 | +40 | 1893.6 | 2998.2 | -5.5 | +8.1

136. | 36.6 | 62.0 | 50 | 128 | 80 | 02 | 130 | 130 | +30 | +126 | 1893.6 | 3261.2 | +6.1 | +25.6

137. | 36.1 | 62.5 | 112 | 65 | 15 | 67 | 67 | 127 | 132 | -97 | -~~1893.6~~ 3261.2 | -19.7 | -~~1893.6~~ 3261.2 | +0.4

138. | 36.5 | 63.4 | 61 | 92 | 69 | 36 | 130 | 128 | +08 | +56 | 1893.6 | 3313.8 | +1.6 | +11.4

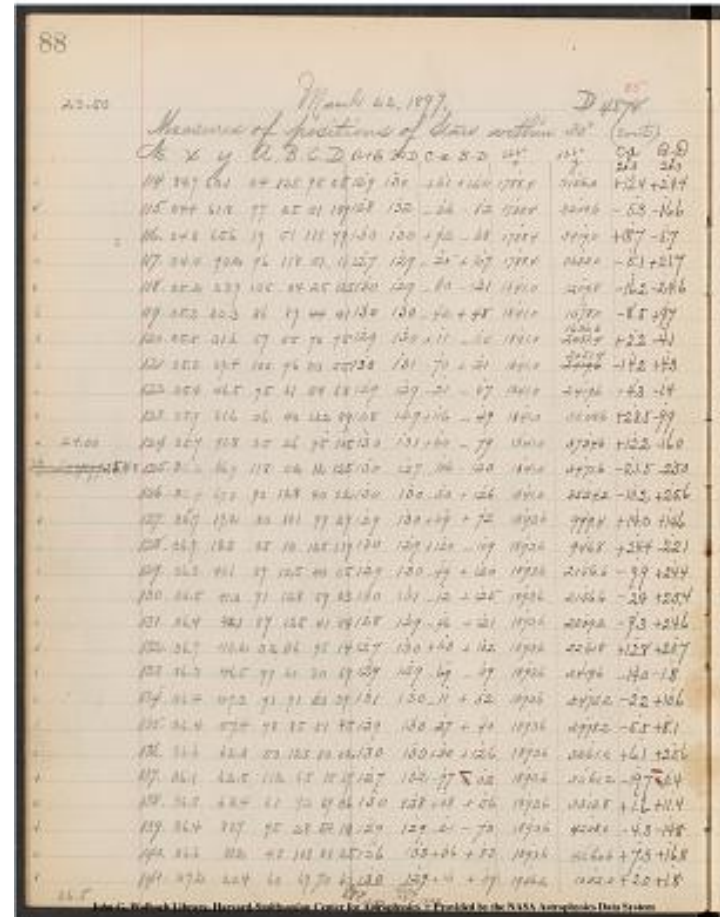
139. | 36.4 | 80.7 | 75 | 28 | 54 | 101 | 129 | 129 | -21 | -73 | 1893.6 | 4208.0 | -4.3 | -14.8

140. | 36.6 | 81.2 | 45 | 108 | 81 | 25 | 126 | 133 | +36 | +83 | 1893.6 | 4260.6 | +7.3 | +16.8

141. | 37.2 | 20.4 | 60 | 69 | 70 | 60 | 130 | ~~3614/28=1290~~ 129 | ~~3636/28=1299~~ +10 | 09 | 1946.2 | 1052.0 | +2.0 | +1.8

[[/table]]

26.5



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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26.5 March 22, 1897 D48 ~~78~~ 85
 Measures of positions of stars within 30° of North Pole (cont.)
 [Table]
 | No x y A, B, C, D | a+c B+D | c-a B-D | 52.6x [^][X] | 52.6xy | c-a [^][x
 2.03] | B-D [^][x 2.03] |
 |-----|-----|-----|-----|-----|-----|
 | 142 34.8 20.9 25 10 105 120 | 130 130 | +80 -110 | 1946.2 | 1052.0 |
 | +16.2 | -22.3 |
 | 143 37.4 37.3 81 100 45 30 | 126 130 | -36 +70 | 1946.2 | 1946.2 | -7.3
 | +14.2 |
 | 144 37.8 37.8 19 19 110 111 | 129 130 | +91 -92 | 1946.2 | 1946.2 |
 | +18.5 | -18.7 |
 | 145 37.5 38.4 59 49 40 51 | 129 130 | +11 +28 | 1946.2 | 1998.8 | +2.2
 | +5.7 |
 | 146 37.6 46.4 44 75 85 56 | 129 131 | +41 +19 | 1946.2 | 2419.6 | +8.3
 | +3.9 |
 | 147 37.5 60.4 64 75 65 55 | 129 130 | +01 +20 | 1646.2 | 3103.4 | -6.5 |
 | -24.4 |
 | 148 37.8 64.3 21 90 109 40 | 130 130 | +88 +50 | 1946.2 | 3156.0 |
 | +17.9 | +10.2 |
 | 149 37.2 64.8 107 25 22 105 | 129 130 | -85 -80 | 1646.2 | 3366.4 | -
 | 17.3 | -16.2 |
 | x&y 150 37.5 79.1 61 119 68 10 | 129 129 | +07 +109 | 1646.2 | 4655.4
+1.4	+22.1			
151 38.9 45.6 01 45 126 85	127 130	+25 -40	1998.8	2367.0
+25.4	-8.1			
d- 152 38.9 48.4 02 82 127 48	129 130	+125 +34	1998.8	2524.8
+25.4	+6.9			
153 38.8 59.2 15 100 111 30	126 130	+96 +70	1998.8	3103.4
+19.5	+14.2			
assumed to be 65.3 [^][F] 154 38.5 *60.3 [^][65.3] 60 99 69 31	129			
130	+09 +68	1998.8	~~3156.0~~ ~~3419.0~~	
+1.8	+13.8			
155 38.2 76.3 110 102 19 27	129 129	-91 +75	1998.8	3997.6
18.5	+15.2			
156 39.2 17.8 100 25 29 105	129 129	-71 -80	2051.4	894.2
-16.2				
157 39.9 19.8 10 22 119 108	129 130	+109 -86	2051.4	999.4
+22.1	-17.5			
158 39.9 26.3 10 81 120 49	130 130	+110 +32	2051.4	1367.6
+22.3	+6.5			
159 39.2 39.2 100 101 28 29	128 130	-72 +72	2051.4	2051.4
14.6	+14.6			
160 39.7 43.9 35 09 91 120	126 129	+56 -111	2051.4	2261.8
+11.4	-22.5			
161 39.9 50.1 10 125 119 05	129 130	+109 +120	2051.4	2630.0
+22.1	+24.4			
l-162 39.7 51.8 31 20 95 109	126 129	+64 -89	2051.4	2682.6
+13.0	-18.1			
163 39.5 60.1 62 121 66 08	128 129	+04 +113	2051.4	3156.0
+0.8	+22.9			
164 39.5 78.0 81 128 45 01	126 129	-36 +127	2051.4	4102.8
7.3	+25.8			
[^][26.25] 165 39.6 78.6 49 49 80 81	129 130	+31 -32	2051.4	
4102.8	+6.3	-6.5		
[^][23.10] March 23, 1897 166				
~~40.3~~ 70.8 ~~45.3~~ 10 ~~0~~				
~~5~~ ~~25~~ ~~98~~ 2				
~~9~~ ~~4~~ ~~105~~				



~~32~~ | 129 130 | -81 +66 | 2104.0 | 2367.0 | -16.4 | +13.4 |
 | 167 40. ~~9~~ ~~7~~ 19.8
~~49.0~~ ~~1.0~~ ~~25~~
 12 ~~2~~ ~~9~~ 119
~~105~~ ~~109~~ ~~01~~ | 130 130 |
 +80 +128 | 2104.0 | 2577.4 | +16.2 | +26.0 |
 | 168 40. ~~9~~ ~~2~~ 26.3
~~61.6~~ ~~5~~ ~~119~~
~~80~~ ~~51~~ ~~121~~
~~110~~ ~~49~~ ~~79~~ | 139 130 | -
 109 -28 | 2104.0 | 3208.6 | -22.1 | -5.7 |
 | 169 40. ~~3~~ ~~4~~ 39.2
~~61.6~~ ~~100~~ ~~98~~
~~101~~ ~~41~~ ~~29~~
~~32~~ ~~28~~ ~~89~~ |
130 130 | -66 -48 | 2104.0 | 3208.6 | -13.4 | -
 9.7 |
~~23.121~~ ~~[[equation]]~~ ~~[[equation]]~~

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[[4 Columned table]]

| | -2610. | -2580. |

|---|---|---|

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1938.9 | 1932.0 | -671.1 | -648.0 |

1964.7 | 1964.9 | -64[[/strickethrough]]3[[/strickethrough]]5.3 | -615.1 |

1948.4 | 1993.1 | -661.6 | -586.9 |

1954.5 | 2415.7 | -655.5 | -164.3 |

1946.4 | 3151.9 | -663.6 | +571.9 |

1964.1 | 3356.2 | -645.9 | +776.2 |

1928.9 | 3382.6 | -681.1 | +1553.3 |

2024.2 | 2375.1 | -585.8 | -204.9 |

20[[/strickethrough]]11.3[[/strickethrough]]24.2 |

25[[/strickethrough]]28.2[[/strickethrough]]17.9 | -585.8 | -62.1

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2000.6 | [[/strickethrough]]3142.2[[/strickethrough]]3405.2 | -609.4 |

[[/strickethrough]]+5622[[/strickethrough]]+825.2 |

1980.3 | 3982.4 | -629.7 | +1402.4 |

2037.0 | 910.4 | -573.0 | -1669.6 |

2073.5 | 1016.9 | -536.5 | -1563.1 |

2073.7 | 1361.1 | -536.3 | -1218.9 |

2036.8 | 2036.8 | -573.2 | -543.2 |

206[[/strickethrough]]3[[/strickethrough]]2.8 | 2284.3 | -

54[[/strickethrough]]6[[/strickethrough]]7.2 | -295.7 |

2073.5 | 2605.5 | -536.5 | +25.6 |

20[[/strickethrough]]57.8[[/strickethrough]]64.4 |

[[/strickethrough]]269.15[[/strickethrough]]2700.7 | -545.6 | +120.7 |

2052.2 | 3133.1 | -557.8 | +553.1 |

2044.1 | 4077.0 | -565.9 | +1497.0 |

2057.7 | 4109.3 | -552.3 | +1529.3 |

2[[/strickethrough]]1[[/strickethrough]]087.6 |

235[[/strickethrough]]4[[/strickethrough]]3.6 | -

[[/strickethrough]]5[[/strickethrough]]422.4 | -226.4 |

2120.2 | 2551.4 | -489.8 | -28.6 |

2081.9 | 3214.3 | -528.1 | +634.3 |

2090.6 | 3218.3 | -519.4 | +638.4 |

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		-2610.	-2580.
1962.4	1074.3	-647.6	-1505.7
1938.9	1932.0	-671.1	-648.0
1964.7	1964.9	-64	3
1948.4	1993.1	-661.6	-586.9
1954.5	2415.7	-655.5	-164.3
1946.4	3151.9	-663.6	+571.9
1964.1	3356.2	-645.9	+776.2
1928.9	3382.6	-681.1	+1553.3
2024.2	2375.1	-585.8	-204.9
20	11.3	24.2	
25	28.2	17.9	-585.8 -62.1
2018.3	3089.2	-591.7	+509.2
2000.6	3142.2	3405.2	-609.4
	5622	825.2	
1980.3	3982.4	-629.7	+1402.4
2037.0	910.4	-573.0	-1669.6
2073.5	1016.9	-536.5	-1563.1
2073.7	1361.1	-536.3	-1218.9
2036.8	2036.8	-573.2	-543.2
206	3	2.8	2284.3 -
54	6	7.2	-295.7
2073.5	2605.5	-536.5	+25.6
20	57.8	64.4	
	269.15	2700.7	-545.6 +120.7
2052.2	3133.1	-557.8	+553.1
2044.1	4077.0	-565.9	+1497.0
2057.7	4109.3	-552.3	+1529.3
2	1	087.6	
235	4	3.6	-
	5	422.4	-226.4
2120.2	2551.4	-489.8	-28.6
2081.9	3214.3	-528.1	+634.3
2090.6	3218.3	-519.4	+638.4

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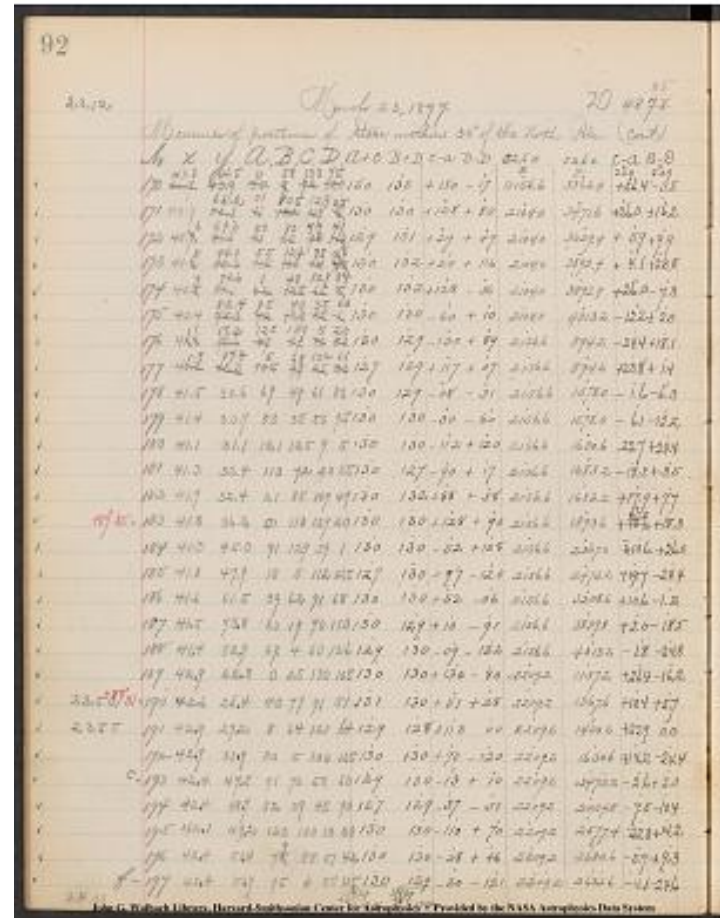
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23.12 March 23. 1987 D48~~78~~85
Measures of positions of Stars within 30° of the North Pole (cont.)

[table]
| No. | x | y | A. | B. | C. | D. | a+c B+D | c-a B-D | 52
6 x X | 52.6 x y | c-a x 2.03 | B-D x 2.03 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 170 | 41.0 ~~40.7~~ | 64.5 ~~64.5~~ | 43.9 ~~43.9~~ | 0 ~~0~~ | 35 ~~35~~ | 58 ~~58~~ | 9 ~~9~~ | 130 ~~130~~ | 92 ~~92~~ |
| 75 ~~75~~ | 120 ~~120~~ | 130 ~~130~~ | 133 ~~133~~ |
| 130 -17 | 2156.6 | 3366.4 | +26.4 | -3.5 |
| 171 | 40.9 | 66.2 ~~50.1~~ | 01 ~~01~~ | 01 ~~01~~ | 105 ~~105~~ | 122 ~~122~~ | 129 ~~129~~ | 119 ~~119~~ | 25 ~~25~~ |
| 5 ~~5~~ | 130 ~~130~~ | 130 ~~130~~ | +128 | +80 | 2104.0 |
| 3471.6 | +26.0 | +16.2 |
| 172 | 40.6 ~~69.3~~ | 51.8 ~~51.8~~ | 50 ~~50~~ | 31 ~~31~~ | 79 ~~79~~ | 98 ~~98~~ | 41 ~~41~~ | 110 ~~110~~ | 129 ~~129~~ | 131 ~~131~~ |
| +29 | +49 | 2104.0 | 3629.4 | +5.9 | +9.9 |
| 173 | 40.5 ~~74.0~~ | 55.3 ~~55.3~~ | 100 ~~100~~ | 75 ~~75~~ | 14 ~~14~~ | 38 ~~38~~ | 40 ~~40~~ | 130 ~~130~~ | 132 ~~132~~ | +20 ~~20~~ |
| +116 | 2104.0 | 3892.4 | +4.1 | +23.5 |
| 174 | 40.9 ~~74.6~~ | 60.1 ~~60.1~~ | 1 ~~1~~ | 62 ~~62~~ | 48 ~~48~~ | 125 ~~125~~ | 84 ~~84~~ | 5 ~~5~~ | 130 ~~130~~ | 132 ~~132~~ | +128 ~~128~~ |
| -36 | 2104.0 | 3892.4 | +26.0 | -7.3 |
| 175 | 40.4 | 82.4 ~~95~~ | 72 ~~72~~ | 70 ~~70~~ | 129 ~~129~~ | 35 ~~35~~ | 55 ~~55~~ | 60 ~~60~~ | 1 ~~1~~ | 130 ~~130~~ | 130 ~~130~~ | -60 | +10 | 2104.0 | 4313.2 |
| -12.2 | +2.0 |
| 176 | 41.1 ~~17.2~~ | 78.6 ~~78.6~~ | 49 ~~49~~ | 5 ~~5~~ | 80 ~~80~~ | 20 ~~20~~ | 81 ~~81~~ | 130 ~~130~~ | 129 ~~129~~ | -120 | +89 | 2156.6 | 894.2 | -24.4 | +18.1 |
| 177 | 41.9 ~~17.4~~ | 45.3 ~~45.3~~ | 5 ~~5~~ | 105 ~~105~~ | 68 ~~68~~ | 99 ~~99~~ | 61 ~~61~~ | 30 ~~30~~ | 127 ~~127~~ | 129 ~~129~~ | +117 | +07 | 2156.6 | 894.2 | +23.8 | +1.4 |
| 178 | 41.5 | 30.6 | 69 | 49 | 61 | 80 | 130 | 129 | -08 | -31 | 2156.6 | 1578.0 | -1.6 | -6.3 |
| 179 | 41.4 | 30.7 | 80 | 35 | 50 | 95 | 130 | 130 | -30 | -60 | 2156.6 | 1578.0 | -6.1 | -12.2 |
| 180 | 41.1 | 31.1 | 121 | 125 | 9 | 5 | 130 | 130 | -112 | +120 | 2156.6 | 1630.6 | -22.7 | +24.4 |
| 181 | 41.3 | 32.4 | 110 | 72 | 20 | 55 | 130 | 127 | -90 | +17 | 2156.6 | 1683.2 | -18.3 | +3.5 |
| 182 | 41.3 | 32.4 | 21 | 85 | 109 | 47 | 130 | 132 | +88 | +38 | 2156.6 | 1683.2 | +17.9 | +7.7 |
| 183 | 183 | 41.8 | 36.2 | 01 | 110 | 129 | 20 | 130 | 130 |



+128 +90 | 2156.6 | 1893.6 | +26.0 ~~10.6~~
~~184 | 41.3 | 45.0 | 91 | 129 | 39 | 1 | 130 130 | -52 +128 | 2156.6 |~~
 2367.0 | ~~185 | 41.8 | 47.9 | 15 | 5 | 112 | 125 | 127 130 | +97 -120 | 2156.6 |~~
~~2472.2 | +19.7 | -24.4 |~~
 186 | 41.6 | 61.5 | 39 | 62 | 91 | 68 | 130 130 | +52 -06 | 2156.6 | 3208.6
 +10.6 | -1.2 |
 187 | 41.5 | 73.8 | 60 | 19 | 70 | 110 | 130 129 | +10 -91 | 2156.6 |
 3839.8 | +2.0 | -18.5 |
 188 | 41.4 | 82.9 | 69 | 4 | 60 | 126 | 129 130 | -09 -122 | 2156.6 |
 4313.2 | -1.8 | -24.8 |
 189 | 42.9 | 22.8 | 0 | 25 | 130 | 105 | 130 130 | +130 -80 | 2209.2 |
 1157.2 | +26.4 | -16.2 |
 ^[[23.50 +89° 31=]] 190 | 42.6 | 26.4 | 40 | 79 | 91 | 51 | 131 130 | +51
 +28 | 2209.2 | 1367.6 | +10.4 | +5.7 |
 ^[[23.55]] 191 | 42.9 | 27.2 | 8 | 64 | 121 | 64 | 129 128 | +113 00 |
 2209.2 | 1420.2 | +22.9 | 0.0 |
 192 | 42.7 | 31.9 | 30 | 5 | 100 | 125 | 130 130 | +70 -120 | 2209.2 |
 1630.6 | +14.2 | -24.4 |
 ^[[c-]] 193 | 42.4 | 47.5 | 71 | 70 | 58 | 60 | 129 130 | -13 +10 | 2209.2 |
 2472.2 | -2.6 | +2.0 |
 194 | 42.4 | 48.7 | 82 | 39 | 45 | 90 | 127 129 | -37 -51 | 2209.2 | 2524.8
 -7.5 | -10.4 |
 195 | 42.1 | 49.2 | 120 | 100 | 10 | 30 | 130 130 | -110 +70 | 2209.2 |
 2577.4 | -22.3 | +14.2 |
 196 | 42.4 | 51.9 | 75 | 4 | 55 | 125 | 130
 ^[[3628]] 129
 ^[[3639]] ^[[28=130.0]] -20 -
 121 | 2209.2 | 2682.6 | -4.1 | -24.6 |
 24.00

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[[table]]

| | -2610 | -2580 |

|---|---|---|

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2109.9 | 3619.5 | -500.1 | +1039.5 ~~[[strickethrough]]~~x =479.6~~[[/strickethrough]]~~

2108.1 | 3868.9 | -501.9 | +1288.9 |

2130.0 | 3899.7 | -480.0 | +1319.7 |

2091.8 | 4311.2 | -518.2 | +1731.2 |

2132.2 | 876.1 | -477.8 | -1703.9 |

2180.4 | 892.8 | -429.6 | -1687.2 |

2155.0 | 1584.3 | -455.0 | -995.7 |

2150.5 | 15902 | -459.5 | -989.8 |

2133.9 | 1606.2 | -476.1 | -973.8 |

2138.3 | 1679.7 | -471.7 | -900.3 |

2174.5 | 1675.5 | -435.5 | -904.5 |

2182.6 | 1875.3 | -427.4 | -704.7 |

2146.0 | 2341.0 | -464.0 | -239.0 |

2176.3 | 2496.6 | -433.7 | -83.4 |

2167.2 | 3209.8 | -442.8 | +629.8 |

2158.6 | 3858.3 | -451.4 | +1278.3 |

2154.8 | 4338.0 | -455.2 | +1758.0 |

2235.6 | 1173.4 | -374.4 | -1406.6 |

2219.6 | 1361.9 | -390.4 | -1218.1 |

2232.1 | 1420.2 | -377.9 | ~~[[strickethrough]]~~+~~[[/strickethrough]]~~ -1~~[[strickethrough]]~~0~~[[/strickethrough]]~~ 159.8 |

2223.4 | 1655.0 | -386.6 | -925.0 |

220 ~~[[strickethrough]]~~7.9~~[[/strickethrough]]~~ 6.6 | 247.~~[[strickethrough]]~~1~~[[/strickethrough]]~~ 02 | -403.4 | 109.8 |

2201.7 | 2535.2 | -408.3 | -44.8

2 ~~[[strickethrough]]~~2~~[[/strickethrough]]~~ 186.9 | 2563.2 | -423.1 | -16.8 |

2203.5 | 2673.3 | -406.5 | +93.3

220 ~~[[strickethrough]]~~7.2~~[[/strickethrough]]~~ 5.1 | 404.9 | +127.2

93

-2610 -2580

2183.0 3369.9 -427.0 +789.9 x = 47.96

2130.0 3455.4 -480.0 +875.4

2109.9 3619.5 -500.1 +1039.5 ~~[[strickethrough]]~~x =

479.6~~[[/strickethrough]]~~

2108.1 3868.9 -501.9 +1288.9

2130.0 3899.7 -480.0 +1319.7

2091.8 4311.2 -518.2 +1731.2

2132.2 876.1 -477.8 -1703.9

2180.4 892.8 -429.6 -1687.2

2155.0 1584.3 -455.0 -995.7

2150.5 15902 -459.5 -989.8

2133.9 1606.2 -476.1 -973.8

2138.3 1679.7 -471.7 -900.3

2174.5 1675.5 -435.5 -904.5

2182.6 1875.3 -427.4 -704.7

2146.0 2341.0 -464.0 -239.0

2176.3 2496.6 -433.7 -83.4

2167.2 3209.8 -442.8 +629.8

2158.6 3858.3 -451.4 +1278.3

2154.8 4338.0 -455.2 +1758.0

2235.6 1173.4 -374.4 -1406.6

2219.6 1361.9 -390.4 -1218.1

2232.1 1420.2 -377.9 ~~[[strickethrough]]~~+~~[[/strickethrough]]~~ -1

~~[[strickethrough]]~~0~~[[/strickethrough]]~~ 159.8

2223.4 1655.0 -386.6 -925.0

220 ~~[[strickethrough]]~~7.9~~[[/strickethrough]]~~ 6.6 | 247.

~~[[strickethrough]]~~1~~[[/strickethrough]]~~ 02 | -403.4 | 109.8 |

2201.7 2535.2 -408.3 -44.8

2 ~~[[strickethrough]]~~2~~[[/strickethrough]]~~ 186.9 | 2563.2 | -423.1 | -16.8 |

2203.5 2673.3 -406.5 +93.3

220 ~~[[strickethrough]]~~7.2~~[[/strickethrough]]~~ 5.1 | 404.9 | +127.2

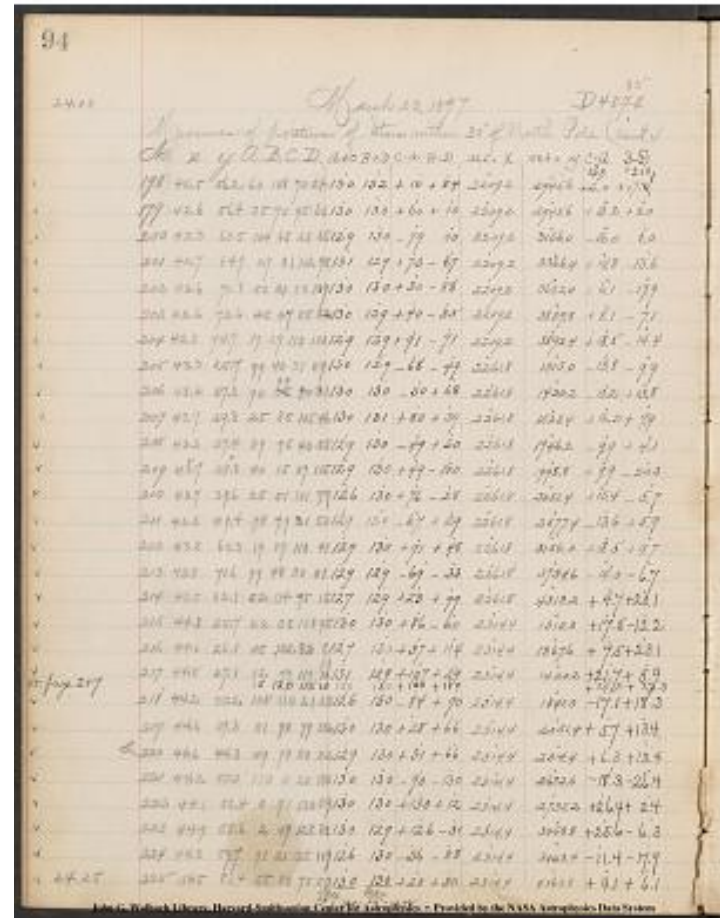
John G. Wolk Library, Harvard-Smithsonian Center for Astrophysics - Provided by the NASA Astrophysics Data System

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24.00 March 23, 1897 D48~~78~~85
Measures of positions of Stars within 30° of North Pole (cont.)

[[13 Columned Table]]

No	x	y	A.	B.	C.	D.	a+c B+D	c-a B-D	52.6 x X	52.6 x Y	c-a ^[[x 2.03]] B-D ^[[x 2.03]]
198	42.5	56.2	60	108	70	24	130 132	+10 +84	2209.2		
2945.6	+2.0	+17.	0	1							
199	42.6	56.4	35	70	95	60	130 130	+60 +10	2209.2	2945.6	
	+12.2	+2.0									
200	42.3	60.5	104	65	25	65	129 130	-79 00	2209.2	3156.0	
	-16.0	0.0									
201	42.7	64.7	29	31	102	98	131 129	+73 -67	2209.2		
3366.4	+14.8	-13.6									
202	42.6	70.8	50	21	80	109	130 130	+30 -88	2209.2		
3682.0	+6.1	-17.9									
203	42.6	73.6	45	47	85	82	130 129	+40 -35	2209.2	3839.8	
	+8.1	-7.1									
204	42.8	74.7	19	29	110	100	129 129	+91 -71	2209.2		
3892.4	+18.5	-14.4									
205	43.3	25.7	99	40	31	89	130 129	-68 -49	2261.8	1315.0	
	-13.8	-9.9									
206	43.4	27.3	90	55	99	40	31				
130 130	-50 +68	2261.8	1420.2	-10.2	+13.8						
207	43.7	29.3	25	85	105	46	130 131	+80 +39	2261.8		
1525.4	+16.2	+7.9									
208	43.3	37.4	89	75	40	55	129 130	-49 +20	2261.8	1946.2	
	-9.9	+4.1									
209	43.7	38.8	40	15	89	115	129 130	+49 -100			
2261.8	+1998.8	+9.9	-20.3								
210	43.7	39.6	25	51	101	79	126 130	+76 -28	2261.8		
2051.4	+15.4	-5.7									
211	43.3	49.4	98	79	31	50	129 129	-67 +29	2261.8		
2577.4	-13.6	+5.9									
212	43.8	60.3	19	89	110	41	129 130	+91 +48	2261.8		
3156.0	+18.5	+9.7									
213	43.3	71.6	99	48	30	81	129 129	-69 -33	2261.8		
3734.6	-14.0	-6.7									
214	43.5	82.1	52	114	75	15	127 129	+23 +99	2261.8		
4313.2	+4.7	+20.1									
215	44.8	25.7	22	35	108	95	130 130	+86 -60	2314.4		
1315.0	+17.5	-12.2									
216	44.6	26.1	45	122	82	8	127 130	+37 +114	2314.4		
1367.6	+7.5	+23.1									
217	44.8	27.1	12	79	119	10	50				
131 129	+10.7 +29	2314.4	1420.2	+21.7	+5.9						
^[[n. page 207]]			1.5	12.0	11.5	1.0	130 130	+100 +110			
	+20.3	+22.3									
218	44.2	35.2	105	110	21	20	126 130	-84 +90	2314.4		
1841.0	-17.1	+18.3									
219	44.6	39.3	51	98	79	32	130 130	+28 +66	2314.4	2051.4	
	+5.7	+13.4									
br. 220	44.6	44.3	49	98	80	32	129 130	+31 +66	2314.4		
2314.4	+6.3	+13.4									
221	44.2	51.0	110	0	20	130	130 130	-90 -130	2314.4		
2682.6	-18.3	-26.4									
222	44.1	52.4	0	71	130	59	130 130	+130 +12	2314.4		



2735.2 | +26.4 | +2.4 |
 | 223 | 44.9 | 58.6 | 2 | 49 | 128 | 80 | 130 129 | +126 -31 | 2314.4 |
 3050.8 | +25.6 | -6.3 |
 | 224 | 44.3 | 59.7 | 91 | 21 | 35 | 109 | 126 130 | -56 -88 | 2314.4 |
 3103.4 | -11.4 | -17.9 |
 | ^[[24.25]] 225 | 44.5 | 83.4 | 55 | 80 | 75 | 50 | 130
 ^[[3616]] [[28 = 129.1]] 130 ^[[3634]]
[[28 = 129.8]] | +20 +30 | 2314.4 | 4365.8 | +4.1 | +6.1 |

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[[table]]

| | -261.0 | -258.0 |

|---|---|---|

2211.2 | 2928. | ~~6~~ | ~~5~~ | -398.8 |+348. | ~~6~~ | ~~5~~ |

2221.4 | 2943.6 | -388.6 | +363.6 |

2193.2 | 3156.0 | -416.8 | +576.0 |

2224.0 | 33 | ~~52.8~~ | ~~80.0~~ | -386.0 | +800.0 |

2215.3 | 3699.9 | -394.7 | +1119.9 |

221 | ~~4~~ | ~~7.3~~ | 3846.9 | -39 | ~~5~~ | ~~2.7~~ | +1266.9 |

2227.7 | 3906.8 | -382.3 | +1326.8 |

2248.0 | 1324.9 | -362.0 | -1255.1 |

2251.6 | | ~~1396.4~~ | ~~1406.4~~ | -358.4 | -1173.6 |2278.0 | 15 | ~~2~~ | ~~17.5~~ | -332.0 | -10 | ~~5~~ | ~~62.5~~ |

2251.9 | 1942.1 | -358.1 | -637.9 |

2271.7 | 2019.1 | -338.3 | -560.9 |

2277.2 | 2057.1 | -332.8 | -522.9 |

2248.2 | 2571.5 | -361.8 | -8.5 |

2280.3 | 3146.3 | -329.7 | +566.3 |

2247.8 | 3741.3 | -362.2 | +1161.3 |

2266.5 | 4293.1 | -343.5 | +1713.1 |

2331.9 | 1327.2 | -278.1 | -1252.8 |

2321.9 | 1344.5 | -288.1 | -1235.5 |

2336.1 | 1414.3 | -273.9 | -1165.7 |

2334.7 | 1397.9 | -275.3 | -1182.1 |

2297.3 | 1822.7 | -312.7 | -757.3 |

2320.1 | 2038.0 | -289.9 | -542.0 |

23 | ~~17.5~~ | ~~20.7~~ |23 | ~~07.8~~ | ~~01.0~~ | -289.3 | -279.0 |

2296.1 | 2709.0 | -313.9 | +129.0 ^[[52.6]]sub. 1 dwy^[[+76.4]] |

2340.8 | 2732.8 | -269.2 | +152.8 x=-321.8

2340.0 | 3057.1 | -270.0 | +477.1 |

2303.0 | 3121.3 | -307.0 | +541.3 |

2318.5 | 4359.7 | -291.5 | +1779.7 |

95

2211.2	2928.	6	5	-398.8
2221.4	2943.6	-388.6	+363.6	
2193.2	3156.0	-416.8	+576.0	
2224.0	33	52.8	80.0	-386.0 +800.0
2215.3	3699.9	-394.7	+1119.9	
221	4	7.3	3846.9	-
39	5	2.7	+1266.9	
2227.7	3906.8	-382.3	+1326.8	
2248.0	1324.9	-362.0	-1255.1	
2251.6		1396.4	1406.4	-358.4 -1173.6
2278.0	15	2	17.5	-332.0 -
10	5	62.5		
2251.9	1942.1	-358.1	-637.9	
2271.7	2019.1	-338.3	-560.9	
2277.2	2057.1	-332.8	-522.9	
2248.2	2571.5	-361.8	-8.5	
2280.3	3146.3	-329.7	+566.3	
2247.8	3741.3	-362.2	+1161.3	
2266.5	4293.1	-343.5	+1713.1	
2331.9	1327.2	-278.1	-1252.8	
2321.9	1344.5	-288.1	-1235.5	
2336.1	1414.3	-273.9	-1165.7	
2334.7	1397.9	-275.3	-1182.1	
2297.3	1822.7	-312.7	-757.3	
2320.1	2038.0	-289.9	-542.0	
23	17.5	20.7		
23	07.8	01.0	-289.3	-279.0
2296.1	2709.0	-313.9	+129.0	^[[52.6]]sub. 1 dwy^[[+76.4]]
2340.8	2732.8	-269.2	+152.8	x=-321.8
2340.0	3057.1	-270.0	+477.1	
2303.0	3121.3	-307.0	+541.3	
2318.5	4359.7	-291.5	+1779.7	

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250	46.2	83.3	109	90	20	40	129 130	-89 +50	2419.6
4365.8	-18.1	+10.2							
251	47.6	17.4	49	92	80	38	129 130	+31 +54	2472.2 894.2
+6.3	+11.0								
252	47.4	17.6	90	40	39	89	129 129	-51 -49	2472.2 894.2
-10.4	-9.9								
253	47.4	28.6	75	40	51	89	<u>126</u>		
^{[[3615/28=129.1]]}	129	^{[[3618/28=129.2]]}	<u>129</u>					-24 -49	
2472.2	1472.8	-4.9	-9.9						

[[/table]]
23.20

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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[[table]]

| | -2610 | -2580 |

|---|---|---|

2369.6 | 1329.4 | -240.4 | -1250.6 |

2370.2 | 1534.9 | -239.8 | -1045.1 |

2344.9 | 2243. | ~~6~~ | ~~5~~ | -265.1 | -336.| ~~4~~ | ~~5~~ |

2341.4 | 2255.5 | -268.6 | -324.5 |

2349.3 | 26 | ~~25.9~~ | ~~34.1~~ | -260.7 | +54.1 |2393.4 | 2668.6 | -216.6 | +88.6 | x = -269 | ~~2~~ |

2345.1 | 2802.0 | -264.9 | +222.0 |

2346.7 | 3695.6 | -263.3 | +1115.6 |

2360.5 | 3706.6 | -249.5 | +1126.6 |

2377.8 | 3851.8 | -232.2 | +1271.8 |

2393.0 | 3908.6 | -217.0 | +1328.6 |

2374.5 | 4173.7 | -235.5 | +1593.7 |

2430.0 | 815.6 | - | ~~2~~ | 180.0 | -1764.4 |

2415.5 | 958.0 | -194.5 | -1622.0 |

2399.1 | 1009.6 | -2 | ~~89~~ | 10.9 | 1570.4 |

2425.7 | 1369.8 | -184.3 | -1210.2 |

2409.0 | 1422.2 | -201.0 | -1157.8 |

2430.0 | 1431.8 | -180.0 | -1148.2 |

2414.9 | 1479.1 | -195.1 | -1100.9 |

24 | ~~05.4~~ | ~~33.8~~ | 1972.2 | -| ~~204.6~~ | ~~176.2~~ | -607.8 | y = -660 | ~~4~~ |

2413.7 | 3111.5 | -

| ~~196.3~~ | ~~168.7~~ |

| +531.5 |

2 | ~~397.9~~ | ~~441.3~~ | 3619.2 | -| ~~202.1~~ | ~~168.7~~ |+ | ~~1039.2~~ | ~~828.8~~ using | ~~Est~~ | y = 65. |

2406.8 | 3874.3 | -203.2 | +1294.3 |

24 | ~~29.1~~ | ~~41.3~~ | 3942.0 | -| ~~180.9~~ | ~~168.7~~ | +1362.0 |

2401.5 | 4355.6 | -208.5 | +1775.6 |

2478.5 | 883.2 | -131.5 | -1696.8 |

2461.8 | 904.1 | -148.2 | -1675.9 |

2467.3 | 1482.7 | -142.7 | 1097.3 |

97

-2610 -2580

2369.6 1329.4 -240.4 -1250.6

2370.2 1534.9 -239.8 -1045.1

2344.9 2243. ~~6~~ ~~5~~ -265.1 -336.

| ~~4~~ | ~~5~~ |

2341.4 2255.5 -268.6 -324.5

2349.3 26 ~~25.9~~ ~~34.1~~ -260.7 +54.1

2393.4 2668.6 -216.6 +88.6 x = -269 | ~~2~~ |

2345.1 2802.0 -264.9 +222.0

2346.7 3695.6 -263.3 +1115.6

2360.5 3706.6 -249.5 +1126.6

2377.8 3851.8 -232.2 +1271.8

2393.0 3908.6 -217.0 +1328.6

2374.5 4173.7 -235.5 +1593.7

2430.0 815.6 - | ~~2~~ | 180.0 -1764.4

2415.5 958.0 -194.5 -1622.0

2399.1 1009.6 -2 | ~~89~~ | 10.9 | 1570.4 |

2425.7 1369.8 -184.3 -1210.2

2409.0 1422.2 -201.0 -1157.8

2430.0 1431.8 -180.0 -1148.2

2414.9 1479.1 -195.1 -1100.9

24 | ~~05.4~~ | ~~33.8~~ | 1972.2 | -

| ~~204.6~~ | ~~176.2~~ | -607.8 | y = -660 | ~~4~~ |

2413.7 | 3111.5 | -

| ~~196.3~~ | ~~168.7~~ |

| +531.5 |

2 | ~~397.9~~ | ~~441.3~~ | 3619.2 | -

| ~~202.1~~ | ~~168.7~~ |

+ | ~~1039.2~~ | ~~828.8~~ using | ~~Est~~ | y = 65. |

2406.8 | 3874.3 | -203.2 | +1294.3 |

24 | ~~29.1~~ | ~~41.3~~ | 3942.0 | -

| ~~180.9~~ | ~~168.7~~ | +1362.0 |

2401.5 | 4355.6 | -208.5 | +1775.6 |

2478.5 | 883.2 | -131.5 | -1696.8 |

2461.8 | 904.1 | -148.2 | -1675.9 |

2467.3 | 1482.7 | -142.7 | 1097.3 |

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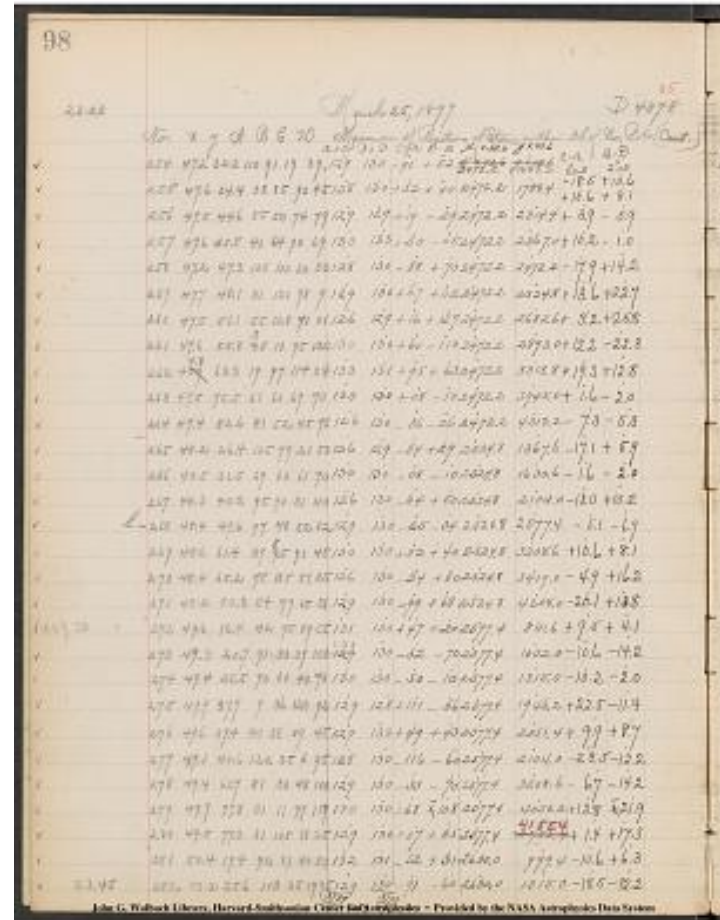
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23.20 March 25, 1897 D48~~[[strickethrough]]~~ 78 ~~[[strickethrough]]~~ 85
Measures of Positions of Stars within 30° of No. Pole (Cont.)

[[13 Columned Table]]

No.	x	y	A	B	C	D.	a+c B+D	c-a B-D	X x 52.6	y x 52.6	c-a ^[[x 2.03]]	B-D ^[[x 2.03]]
254	47.2	32.3	110	91	19	39	129 130	-91 +52	2472.2			
^[[[[strickethrough]] X x 52.6]]] 1683.2 ^[[[[strickethrough]] y x 52.6]]] -18.5 +10.6												
255	47.6	34.4	38	85	90	45	128 130	+52 +40	2472.2	1788.4		
256	47.5	44.6	55	50	74	79	129 129	+19 -29	2472.2	2314.4		
257	47.6	45.5	40	64	90	69	130 133	+50 -05	2472.2	2367.0		
258	47.2	47.3	108	100	20	30	128 130	-88 +70	2472.2			
259	47.7	48.1	31	121	98	9	129 130	+67 +112	2472.2			
260	47.5	51.1	55	128	71	01	126 129	+16 +127	2472.2			
261	47.6	55.8	4	130 130	+60 -110	2472.2	2893.0	+12.2	-22.3			
262	4	133 131	+95 +63	2472.2	3313.8	+19.3	+12.8					
263	47.5	75.5	61	60	69	70	130 130	+08 -10	2472.2	3945.0		
264	47.4	82.6	81	52	45	78	126 130	-36 -26	2472.2	4313.2		
265	48.2	26.4	105	79	21	50	126 129	-84 +29	2524.8			
266	48.5	31.5	69	60	61	70	130 130	-08 -10	2524.8	1630.6		
267	48.3	40.3	95	90	31	40	126 130	-64 +50	2524.8	2104.0		
268	48.4	49.6	77	48	52	82	129 130	-25 -34	2524.8			
269	48.6	61.4	39	130 130	+52 +40	2524.8	3208.6	+10.6	+8.1			
270	48.4	65.2	75	105	51	25	126 130	-24 +80	2524.8			
271	48.2	80.3	114	99	15	31	129 130	-99 +68	2524.8			
272	49.3	20.7	91	30	39	100	129 128	+111 -56	2577.4			
273	49.9	37.7	9	36	120	92	129 128	+111 -56	2577.4			
274	49.4	25.5	90	60	40	70	130 130	-50 -10	2577.4	1315.0		
275	49.9	37.7	9	36	120	92	129 128	+111 -56	2577.4			
276	49.6	39.4	40	88	89	45	129 133	+49 +43	2577.4	2051.4		
277	49.1	40.6	122	35	6	95	128 130	-116 -60	2577.4			
278	49.4	61.7	81	30	48	100	129 130	-33 -70	2577.4			
279	49.4	61.7	81	30	48	100	129 130	-33 -70	2577.4			



| 279 | 49.7 | 77.8 | 31 | 11 | 99 | 119 | 130 130 | +68 ~~+~~ +
~~-108~~ | 2577.4 | 4050.2 | +13.8 | ~~+~~ +
~~-21.9~~ |
 | 280 | 49.5 | 79.3 | 61 | 105 | 68 | 25 | 129 130 | +07 +85 | 2577.4 |
~~2755.4~~ ~~4155.4~~ | +1.4 | +17.3 |
 | 281 | 50.4 | 19.4 | 92 | 81 | 40 | 50 | 132 131 | -52 +31 | 2630.0 | 999.4 |
 -10.6 | +6.3 |
 | ^{23.45} 282 | 50.2 | 25.6 | 110 | 35 | 19 | 95 | 129
³⁷³⁹ 29 = 128.9 130 ³⁷⁷³
29 = 130.1 | -91 -60 | 2630.0 | 1315.0 | -18.5 | -12.2 |

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 Variables M5 #4
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[[table]]

| | -2610 | -2580 |

|---|---|---|

2453.7	1672.6	-156.3	-907.3
2482.8	1780.3	-127.2	-799.7
2476.1	2320.3	-133.9	-259.7
2482.4	2368.0	-127.6	-212.0
2454.3	2458.0	-155.7	-122.0
2485.8	2502.1	-124.2	-77.9
2475.4	2656.8	-134.6	+76.8
2484.4	2915.3	-125.6	+335.3
2491.5	3301.0	-118.5	+721.0
2473.8	3947.0	-136.2	+1367.0
2464.9	4318.5	-145.1	+1738.5
2507.7	1361.7	-102.3	-1218.3
2523.2	1632.6	-86.8	-9[[/strikethrough]]5[[/strikethrough]]47.4
2511.8	2093.8	-98.2	-486.2
2519.7	2584.3	-90.3	+4.3
2535.4	3200.5	-74.6	+620.5
2519.9	3402.8	-90.1	+822.8
2504.7	4194.2	-105.3	+1614.2
2586.9	837.5	-23.1	-1[[/strikethrough]]6[[/strikethrough]]742.5
2566.8	1066.2	-43.2	-1513.8
2567.2	1317.0	-42.8	-1263.0
2599.9	1957.6	-10.1	-622.4
2587.3	2042.7	-22.7	-537.3
2553.9	2116.2	-56.1	-463.8
2570.7	322[[/strikethrough]]4[[/strikethrough]]2	-39.3	
+64[[/strikethrough]]4[[/strikethrough]]2.8			
2591.2	40[[/strikethrough]]28.3[[/strikethrough]]72.1	-18.8	
+[[/strikethrough]]1448.3[[/strikethrough]]1492.1			
2578.8	[[/strikethrough]]2738.1[[/strikethrough]]4138.1	-31.2	
+[[/strikethrough]]158.1[[/strikethrough]]1558.1			
2619.4	993.1	+9.4	-1586.9
2611.5	1327.2	+1.5	-1252.8

99

-2610 -2580

2453.7 1672.6 -156.3 -907.3

2482.8 1780.3 -127.2 -799.7

2476.1 2320.3 -133.9 -259.7

2482.4 2368.0 -127.6 -212.0

2454.3 2458.0 -155.7 -122.0

2485.8 2502.1 -124.2 -77.9

2475.4 2656.8 -134.6 +76.8

2484.4 2915.3 -125.6 +335.3

2491.5 3301.0 -118.5 +721.0

2473.8 3947.0 -136.2 +1367.0

2464.9 4318.5 -145.1 +1738.5

2507.7 1361.7 -102.3 -1218.3

2523.2 1632.6 -86.8 -9[[/strikethrough]]5[[/strikethrough]]47.4 |

2511.8 2093.8 -98.2 -486.2 |

2519.7 2584.3 -90.3 +4.3 |

2535.4 3200.5 -74.6 +620.5 |

2519.9 3402.8 -90.1 +822.8 |

2504.7 4194.2 -105.3 +1614.2 |

2586.9 837.5 -23.1 -1[[/strikethrough]]6[[/strikethrough]]742.5 |

2566.8 1066.2 -43.2 -1513.8 |

2567.2 1317.0 -42.8 -1263.0 |

2599.9 1957.6 -10.1 -622.4 |

2587.3 2042.7 -22.7 -537.3 |

2553.9 2116.2 -56.1 -463.8 |

2570.7 322[[/strikethrough]]4[[/strikethrough]]2 | -39.3 |

+64[[/strikethrough]]4[[/strikethrough]]2.8 |

2591.2 40[[/strikethrough]]28.3[[/strikethrough]]72.1 | -18.8 |

+[[/strikethrough]]1448.3[[/strikethrough]]1492.1 |

2578.8 | [[/strikethrough]]2738.1[[/strikethrough]]4138.1 | -31.2 |

+[[/strikethrough]]158.1[[/strikethrough]]1558.1 |

2619.4 993.1 +9.4 -1586.9 |

2611.5 1327.2 +1.5 -1252.8 |

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23.45 March 25, 1897 D48[[~~strickethrough~~]] 78 [[~~strickethrough~~]] 85
Measures of positions of stars within 30° of North Pole(cont.)

[[table]]
[N. |x|y|A.|B.|C|D|a+c |b+d| c-a| b-d x| x52.6|yx52.6|c-a x 2.03| B-D x 2.03|

-----|-----|-----|-----|-----|-----|-----|-----|

28B|50.3|27.2|105|12.5|24.5|129|130|-81|+120|2630.0|1420.2|-164|+24.4

284|50.9|29.3|9|101|120|29|129|130|+111|+72|2630.0|1525.4|+22.5|+14.6

285|50.3|29.4|105|85|2545|130|130|-80|+40|2630.2|1525.4|-162|+8.1

286|50.4|34.4|85|89|46|41|131|130|-39|+48|2630.0|1788.4|-7.9|+97

287|50.5|48.4|58|89|41|41|129|130|+13|+48|2630.0|2261.8|+2.6|+97

k- 288|50.4|47.9|90|2|39|127|129|129|-51|-125|2630.0|2472.2|-10.4|-25.4

289|50.6|52.3|45|100|85|29|130|129|+40|+71|2630.0|27352.24|+81|+14.4

290|50.4|61.8|91|120|39|118|130|130|-52|-106|2630.0|3208.6|-10.6|-21.5

291|50.5|84.2|65|110|65|20|130|130|00|+90|2630.0|4418.4|0.0|+18.3

292|51.1|19.9|120|5|10|12 [[~~strickethrough~~]] 8 [[~~strickethrough~~]] 7|130|132|-110|-122|2682.6|999.4|-22.3|-24.8

293|51.2|33.8|110|10|20|119|130|129|-90|-109|2682.6|1735.8|-18.3|-22.1

294|51.8|39.7|14|29|115|100|129|129|+101|-71|2682.6|2051.4|+20.5|-14.4

295|51.4|54.2|70|110|60|19|130|129|-10|+91|2682.6|3366.4|-2.0|+18.5

296|51.9|70.5|10|54|119|78|129|132|+109|-24|2682.6|3682.0|+22.1|-4.9

[[24.00 March 26, 1897]] 297|51.7|74.9|31|9|99|120|130|129|+68|-111|2682.6|3892.4|+13.8|-22.5

[[22.26]] 298|52.5|17.7|70|39|60|92|130|131|-10|-53|2735.5| 894.0|-2.0|-10.8

299|52.1|32.1|123|120|4|11|130|131|-116|+109|2735.2|1683.2|-23.5|+22.1

300|52.5|40.8|59|13|71|117|130|130|+12|-104|2735.2|2104.0|+2.4|-21.1

h- 301|52.6|44.5|49|60|81|69|130|129|+32|-09|2735.2|2314.4|+6.5|-1.8

302|52.4|52.5|74|60|56|70|130|130|-18|-10|2735.2|2735.2|-3.7|-2.0

303|52.5|52.7|53|35|76|94|129|129|+23|-59|2732.2|+4.7|-12.0

304|52.8|58.6|11|44|119|87|130|131|+108|-43|2735.2|3050.8|+21.9|-8.7

305|52.4|63.9|78|4|52|126|130|130|-26|-122|2735.2|3313.8|-5.3|-24.8

306|52.8|69.9|19|7|109|124|128|131|+90|-117|2735.2|3629.4|+18.3|-23.5

307|53.5|19.1|67|12.6|61|4|128|130|-06|+12.2|2787.8|999.4|-1.2|+24.8

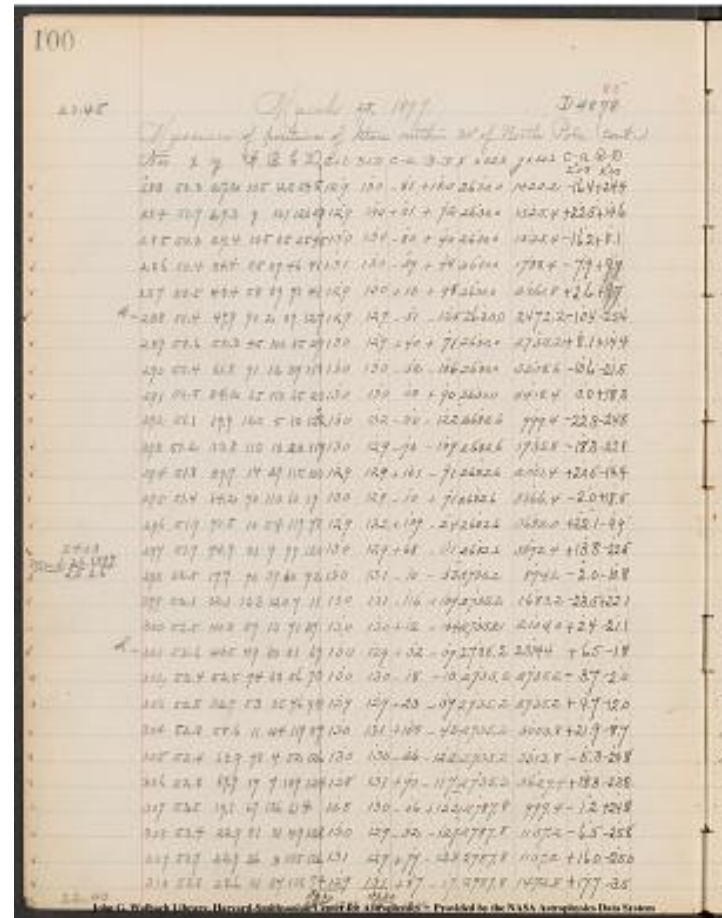
308|53.4|22.9|87|0|149|128|130|129|-32|-127|2787.8|1157.2|-6.5|-25.8

309|53.7|22.9|26|3|105|126|131|129|+79|-123|2787.8|1157.2|+160|-25.0

310|53.8|28.6|21|54|108|74|129|131|+87|-17|2787.8|1472.8|+17.7|-3.5

[[/table]]

22.40 [[equation]] [[equation]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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[[table]]

| | -2610 | -2580

|---|---|---|

2613.6	1395.8	+3.6	-1184.2
2562.5	1510.8	+42.5	-1069.2
2613.8	1517.3	+3.8	-1062.7
2622.1	1778.7	+12.1	-801.3
2632.6	2252.1	+22.6	-327.9
2619.6	2497.6	+9.6	-82.4
2638.1	2720.8	+28.1	+140.8
2619.4	3230.1	+9.4	+650.1
2630.0	4400.1	+20.0	+1820.1
2660.3	1024.2	+50.3	[[strikethrough]] -1555.8
2664.3	1757.9	+54.3	-822.1
2703.1	2065.8	+93.1	-514.2
2680.6	3347.9	+70.6	+767.9
2704.7	3686.9	+94.7	+1106.9
2696.4	3914.9	+86.4	+1334.9
2733.2	905.0	+123.2	-1675.0
2711.7	1161.1	+101.7	-918.9
2737.6	2125.1	+127.6	-454.9
2741.7	2316.2	+131.7	-263.8
2731.5	2737.2	+121.5	+157.2
2739.9	2747.2	+129.9	+167.2
2757.1	3059.5	+147.1	+479.5
2729.9	3338.6	+119.9	+758.6
2753.5	3653.2	+143.5	+1073.2
2786.6	974.6	+176.6	-1605.4
2781.3	1183.0	+171.3	-1397.0
2803.8	1182.2	+193.8	-1397.8
2805.5	1476.3	+195.5	-1103.7

101

-2610 -2580

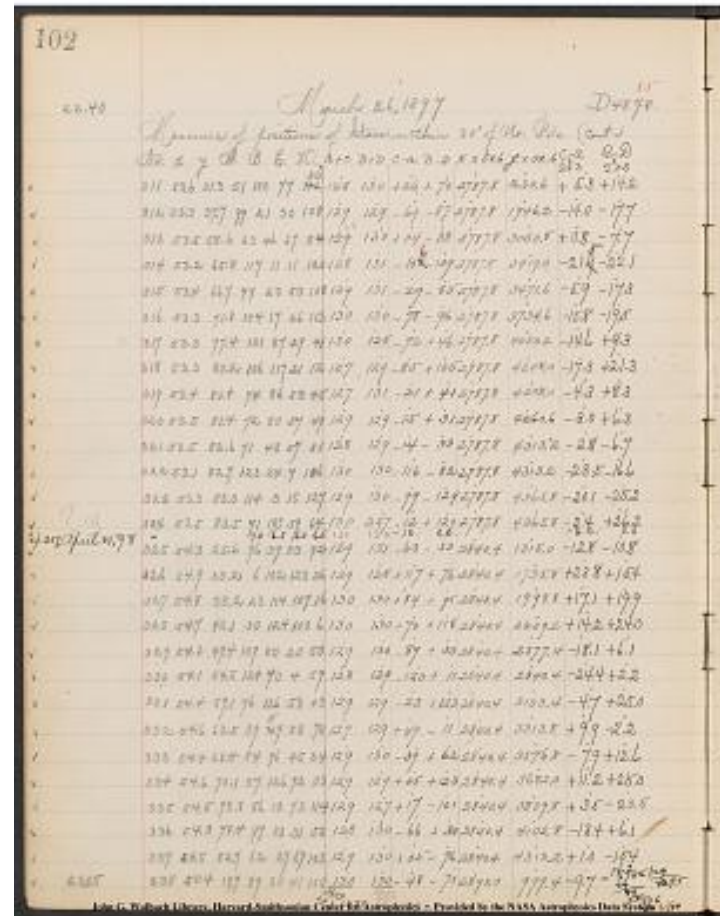
2613.6	1395.8	+3.6	-1184.2
2562.5	1510.8	+42.5	-1069.2
2613.8	1517.3	+3.8	-1062.7
2622.1	1778.7	+12.1	-801.3
2632.6	2252.1	+22.6	-327.9
2619.6	2497.6	+9.6	-82.4
2638.1	2720.8	+28.1	+140.8
2619.4	3230.1	+9.4	+650.1
2630.0	4400.1	+20.0	+1820.1
2660.3	1024.2	+50.3	[[strikethrough]] -1555.8
2664.3	1757.9	+54.3	-822.1
2703.1	2065.8	+93.1	-514.2
2680.6	3347.9	+70.6	+767.9
2704.7	3686.9	+94.7	+1106.9
2696.4	3914.9	+86.4	+1334.9
2733.2	905.0	+123.2	-1675.0
2711.7	1161.1	+101.7	-918.9
2737.6	2125.1	+127.6	-454.9
2741.7	2316.2	+131.7	-263.8
2731.5	2737.2	+121.5	+157.2
2739.9	2747.2	+129.9	+167.2
2757.1	3059.5	+147.1	+479.5
2729.9	3338.6	+119.9	+758.6
2753.5	3653.2	+143.5	+1073.2
2786.6	974.6	+176.6	-1605.4
2781.3	1183.0	+171.3	-1397.0
2803.8	1182.2	+193.8	-1397.8
2805.5	1476.3	+195.5	-1103.7

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[[preprinted]]102[[/preprinted]]

22.40 March 23, 1897 D48~~78~~85
Measures of positions of stars within 30° of North Pole(cont.)
[[table]]
[No. x]y[A. |B. |C. |D. |a+c|B+D|c-a|B-D x|x 52.6|y x 52.6|c-a x2.03|B-D
x2.03]
|-----|
[311|53.6|31.3|51|100|77|~~111~~111|~~111~~111|
30|128|130|+26|+70|2787.8|1630.6|+5.3|+14.2|
[312|53.3|37.7|99|21|30|108|129|129|-69|-87|2787.8|1946.2|-14.0|-17.7|
[313|53.5|58.6|63|46|67|84|~~129~~129|~~129~~129|
130|130|+04|-38|2787.8|3050.8|+08|-7.7|
[314|53.2|65.8|117|11|11|120|128|131|-10|~~129~~129|
8|~~129~~129|6|-109|2787.8|3419.0|-21.1|~~129~~129|
9|~~129~~129|5|-22.1|
[315|53.4|66.7|79|23|50|108|129|131|-29|-85|2787.8|3471.6|-5.9|-17.3|
[316|53.3|71.8|104|17|26|113|130|130|-78|-96|2787.8|3734.6|-15.8|-
19.5|
[317|53.3|77.4|101|87|29|41|130|128|-72|+46|2787.8|4050.2|-14.6|+9.3|
[318|53.3|80.2|106|117|21|12|127|129|-85|+105|2787.8|4208.0|-
17.3|+21.3|
[319|53.4|80.4|74|86|53|45|127|131|-21|+41|2787.8|4208.0|-4.3|+8.3|
[320|53.5|81.4|72|80|57|49|129|129|-15|+31|2787.8|4260.6|-3.0|+6.3|
[321|53.5|82.6|71|48|57|81|128|129|-14|-33|2787.8|4313.2|-2.8|-6.7|
[322|53.1|82.7|123|24|7|10|106|130|130|-116|-82|2787.8|4313.2|-23.5|-
16.6|
[323|53.3|83.0|114|3|15|127|129|130|-99|-124|2787.8|4365.8|-20.1|-
25.2|
[324|53.5|83.5|71|193|59|64|130|257|-12|+129|2787.8|4365.8|-
2.4|+26.2|
[RP] | 7.0|6.5|6.0|6.5|130|130|-10|0.0| | -2.0|0.0|
[325|54.3|25.6|96|39|33|92|129|131|-63|-53|2840.4|1315.0|-12.8|-10.8|
[326|54.9|33.2|6|102|123|26|129|128|+117|+76|2840.4|1735.8|+23.8|+15.
4|
[327|54.8|38.2|23|114|107|16|130|130|+84|+98|2840.4|1998.8|+17.1|+19.
9|
[328|54.7|42.1|30|124|100|6|130|130|+70|+118|2840.4|2209.2|+14.2|+24.
0|
[329|54.3|49.4|109|80|20|50|129|130|-89|+30|2840.4|2577.4|-18.1|+6.1|
[330|54.1|54.5|124|70|4|59|128|129|-120|+11|2840.4|2840.4|-24.4|+2.2|
[331|54.4|59.1|76|126|53|03|129|129|-23|+123|2840.4|3103.4|-
4.7|+25.0|
[332|54.6|63.5|39|~~4~~4|~~59~~59|88|70|127|129|+4
9|-11|2840.4|3313.8|+9.9|-2.2|
[333|54.5|68.4|84|96|45|34|129|130|-39|+62|2840.4|3576.8|-7.9|+12.6|
[334|54.6|70.1|37|126|92|03|129|129|+55|+123|2840.4|3682.0|+11.2|+25.
0|
[335|54.5|73.8|56|13|73|114|129|127|+17|-101|2840.4|3839.8|+3.5|-
20.5|
[336|54.3|78.4|97|80|31|50|128|130|-66|+30|2840.4|4102.8|-13.4|+6.1|
[337|54.5|82.7|62|27|67|103|129|130|+05|-76|2840.4|4313.2|+1.0|-15.4|
[^{23.05}338|55.4|19.7|89|30|41|100|130|130||
d]]-48|-70|2893.0|999.4|-9.7|-14.2|
[[table]]
[[equation]] [[equation]]
[[annotation]]v.p.207, April 14, '98 [[/annotation]]



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[[4 Column Table]]

| | -2610 | -2580 |

2793.1	1616.4	+ 183.1	- 963.6
2773.8	1963.9	+ 163.8	- 616.1
2788.6	3058.5	+178.6	+478.5
276 [[/del]]	5.9 [[/del]]	6.3	3441.1
+15 [[/del]]	5.9 [[/del]]	6.3	+861.1
2781.9	3488.9	+171.9	+908.9
2772.0	3754.1	+162.0	+1174.1
2773.2	4040.9	+163.2	+1460.9
2770.5	4186.7	+160.5	+1606.7
2783.5	4199.7	+173.5	+1619.7
2784.8	4254.3	+174.8	+1674.3
2785.0	4319.9	+175.0	+1739.9
2764.3	4329.8	+154.3	+1749.8
2767.7	4391.0	+157.7	+1811.0
2785.4	4339.6	+175.4	+17 [[/del]] 59.6 [[/del]] 85.9
2785.8	4365.8	+175.8	+1785.8
2827.6	1325.8	+217.6	-1254.2
2864.2	1720.4	+254.2	-859.6
2857.5	1978.9	+247.5	-601.1
2854.6	2185.2	+ [[/del]] 1 [[/del]]	244.6
2822.3	2571.3	+212.3	-8.7
2816.0	2838.2	+206.0	+258.2
2835.7	3078.4	+225.7	+498.4
2850.3	3316.0	+240.3	+736.0
2832.5	3564.2	+222.5	+984.2
2851.6	3657.0	+241.6	+1077.0
2843.9	3860.3	+233.9	+1280.3
2827.0	4096.7	+217.0	+1516.7
2841.4	4328.6	+231.4	+1748.6
2883.3	1013.6	+273.3	-1566.4

[[/table]]

103

-2610 -2580

2793.1 1616.4 + 183.1 - 963.6

2773.8 1963.9 + 163.8 - 616.1

2788.6 3058.5 + 178.6 + 478.5

276~~[[/del]]~~ 5.9~~[[/del]]~~ 6.3 3441.1

+15~~[[/del]]~~ 5.9~~[[/del]]~~ 6.3 +861.1

2781.9 3488.9 + 171.9 + 908.9

2772.0 3754.1 + 162.0 + 1174.1

2773.2 4040.9 + 163.2 + 1460.9

2770.5 4186.7 + 160.5 + 1606.7

2783.5 4199.7 + 173.5 + 1619.7

2784.8 4254.3 + 174.8 + 1674.3

2785.0 4319.9 + 175.0 + 1739.9

2764.3 4329.8 + 154.3 + 1749.8

2767.7 4391.0 + 157.7 + 1811.0

2785.4 4339.6 + 175.4 + 17~~[[/del]]~~59.6~~[[/del]]~~85.9

2785.8 4365.8 + 175.8 + 1785.8

2827.6 1325.8 + 217.6 - 1254.2

2864.2 1720.4 + 254.2 - 859.6

2857.5 1978.9 + 247.5 - 601.1

2854.6 2185.2 + ~~[[/del]]~~1~~[[/del]]~~ 244.6

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2816.0 2838.2 + 206.0 + 258.2

2835.7 3078.4 + 225.7 + 498.4

2850.3 3316.0 + 240.3 + 736.0

2832.5 3564.2 + 222.5 + 984.2

2851.6 3657.0 + 241.6 + 1077.0

2843.9 3860.3 + 233.9 + 1280.3

2827.0 4096.7 + 217.0 + 1516.7

2841.4 4328.6 + 231.4 + 1748.6

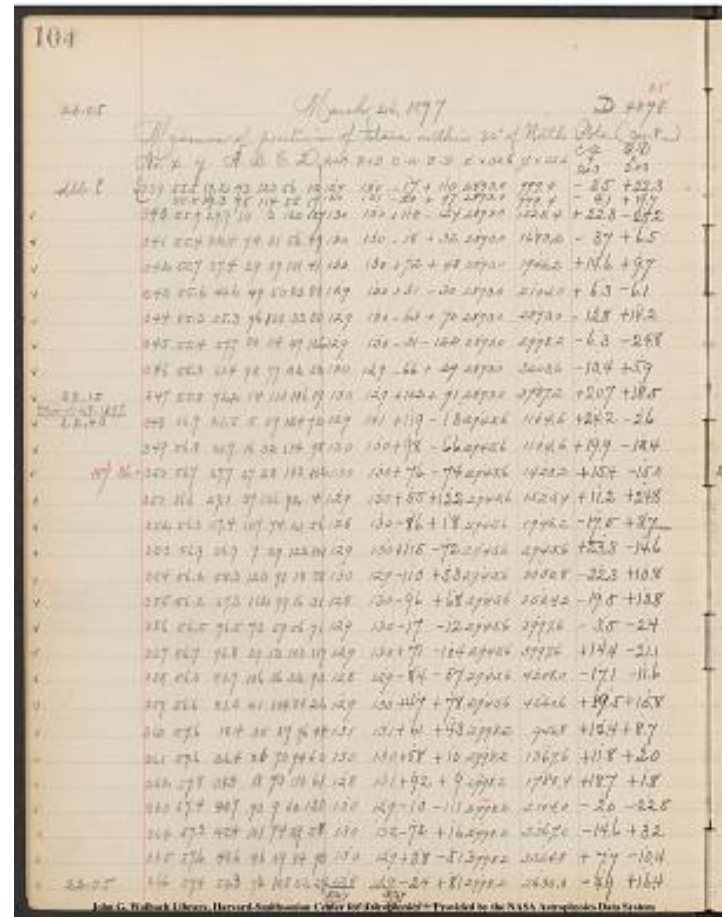
2883.3 1013.6 + 273.3 - 1566.4

7217542 (A-D=9)

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23.05 March 26, 1897 D48[[strikethrough]] 78 [[/strikethrough]]85
 Measures of positions of stars within 30° of North Pole(cont.)
 [[table]]
 |No.|x|y|.A|.B|.C|.D|.A+C|B+D|C-A|B-D|x x 52.6|y y 52.6|C-A x2.03|B-D x2.03|
 |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 |^[[dbl.?]] 339|55.5|^[[55.5]]|19.3|^[[19.2]]|75|^[[73]]|114|^[[120]]|
 55|^[[56]]|17|^[[10]]|130|^[[129]]|131|^[[130]]|-20|^[[17]]|+97|^[[110]]|2893.0|^[[2893.0]]|999.4|^[[999.4]]|-4.1|^[[3.5]]|+19.7|^[[22.3]]|
 340|55.9|29.9|10|3|120|127|130|130|+110|-124|2893.0|1525.4|+22.3|-25.2|
 341|55.4|32.4|74|81|56|49|130|130|-18|+32|2893.0|1683.2|-3.7|+6.5|
 342|55.7|37.4|29|89|101|41|130|130|+72|+48|2893.0|1946.2|+14.6|+9.7|
 343|55.6|40.6|49|50|80|80|129|130|+31|-30|2893.0|2104.0|+6.3|-6.1|
 344|55.3|55.3|96|100|33|30|129|130|-63|+70|2893.0|2893.0|-12.8|+14.2|
 345|55.4|57.9|80|04|49|126|129|130|-31|-122|2893.0|2998.2|-6.3|-24.8|
 346|55.3|61.4|98|79|32|50|130|129|-66|+29|2893.0|3208.6|-13.4|+5.9|
 +18.5 March 28, 1897 347|55.8|72.2|14|110|116|19|130|129|+102|+91|
 2893.0|3787.2|+20.7|23.15|
 22.40 348|56.9|21.5|5|59|124|7.2|129|131|+119|-13|2945.6|1104.6|+24.2|-2.6|
 349|56.8|21.7|16|32|114|98|130|130|+98|-66|2945.6|1104.6|+19.9|-13.4|
 +89° 36= 350|56.7|27.7|27|28|103|102|130|130|+76|-74|
 2945.6|1420.2|+15.4|-15.0|
 351|56.6|29.1|37|126|92|4|129|130|+55|+122|2945.6|1525.4|+11.2|+24.8|
 352|56.3|37.4|107|74|21|56|128|130|-86|+18|2945.6|1946.2|-17.5|+3.7|
 353|56.9|56.7|7|29|122|101|129|130|+115|-72|2945.6|2945.6|+23.3|-14.6|
 354|56.2|58.3|120|91|10|38|130|129|-110|+53|2945.6|3050.8|-22.3|+10.8|
 355|56.2|67.3|112|99|16|31|128|130|-96|+68|2945.6|3524.2|-19.5|+13.8|
 356|56.5|76.5|73|59|56|71|129|130|-17|-12|2945.6|3997.6|-3.5|-2.4|
 357|56.7|76.8|29|13|100|117|129|130|+71|-104|2945.6|3997.6|+14.4|-21.1|
 358|56.3|80.7|106|36|22|93|128|129|-84|-57|2945.6|4208.0|-17.1|-11.6|
 359|56.6|81.3|41|104|88|26|129|130|+47|+78|2945.6|4260.6|+19.5|+15.8|
 360|57.6|18.4|35|87|96|44|131|131|+61|+43|2998.2|1946.8|+12.4|+8.7|
 361|57.6|26.4|36|70|94|60|130|130|+58|+10|2998.2|1367.6|+11.8|+2.0|
 362|57.8|34.4|18|70|110|61|128|131|+92|+9|2998.2|1788.4|+18.7|+1.8|
 363|57.4|40.9|70|96|0|120|130|129|-10|-11|2998.2|2104.0|-2.0|-22.5|
 364|57.3|45.4|10|174|29|58|130|132|-72|+16|2998.2|2367.0|-14.6|+3.2|
 365|57.6|48.6|46|39|84|90|130|129|+38|-51|2998.2|2524.8|+7.7|-10.4|
 [[22.55]] 366|57.4|50.3|76|105|52|24|128|129|-24|+81|2998.2|2630.0|-4.9|+16.4|
 [[/table]]
 [[equation]]
 [[equation]]



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[[Four Columned Table]]

| | | -2610. | -2580. |

|---|---|---|

2889.5	977.1	+279.5	-1602.9
2888.9	979.7	+278.9	-1600.3
2915.3	1550.6	+305.3	-1029.4
2889.3	1676.7	+279.3	-903.3
2907.6	1936.5	+297.6	-643.5
2899.3	2110.1	+289.3	-469.9
2880.2	2878.8	+270.2	+298.8
2886.7	3023.0	+276.7	+443.0
2879.6	3202.7	+269.6	+622.7
2913.7	3768.7	+303.7	+1188.7
2969.8	1107.2	+359.8	-1472.8
2965.5	1118.0	+355.5	-1462.0
2961.0	1435.2	+351.0	-1144.8
2956.8	1500.6	+346.8	-1079.4
2928.1	1942.5	+318.1	-637.5
2968.9	2960.2	+358.9	+380.2
2923.3	3040.0	+313.3	+460.0
2926.1	3510.4	+316.1	+930.4
2942.1	4000.0	+332.1	+1420.0
2960.0	4018.7	+350.0	+1438.7
2928.5	4219.6	+318.5	+1639.6
2955.1	4244.8	+345.1	+1664.8
3010.6	938.1	+400.6	-1641.9
3010.0	1365.6	+400.0	-1214.4
3016.9	1786.6	+406.9	-793.4
2996.2	2126.5	+386.2	-453.5
2983.6	2363.8	+373.6	-216.2
3005.9	2535.2	+395.9	-44.8
2993.3	2613.6	+383.3	+33.6

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-2610. -2580.

2889.5	977.1	+279.5	-1602.9
2888.9	979.7	+278.9	-1600.3
2915.3	1550.6	+305.3	-1029.4
2889.3	1676.7	+279.3	-903.3
2907.6	1936.5	+297.6	-643.5
2899.3	2110.1	+289.3	-469.9
2880.2	2878.8	+270.2	+298.8
2886.7	3023.0	+276.7	+443.0
2879.6	3202.7	+269.6	+622.7
2913.7	3768.7	+303.7	+1188.7
2969.8	1107.2	+359.8	-1472.8
2965.5	1118.0	+355.5	-1462.0
2961.0	1435.2	+351.0	-1144.8
2956.8	1500.6	+346.8	-1079.4
2928.1	1942.5	+318.1	-637.5
2968.9	2960.2	+358.9	+380.2
2923.3	3040.0	+313.3	+460.0
2926.1	3510.4	+316.1	+930.4
2942.1	4000.0	+332.1	+1420.0
2960.0	4018.7	+350.0	+1438.7
2928.5	4219.6	+318.5	+1639.6
2955.1	4244.8	+345.1	+1664.8
3010.6	938.1	+400.6	-1641.9
3010.0	1365.6	+400.0	-1214.4
3016.9	1786.6	+406.9	-793.4
2996.2	2126.5	+386.2	-453.5
2983.6	2363.8	+373.6	-216.2
3005.9	2535.2	+395.9	-44.8
2993.3	2613.6	+383.3	+33.6

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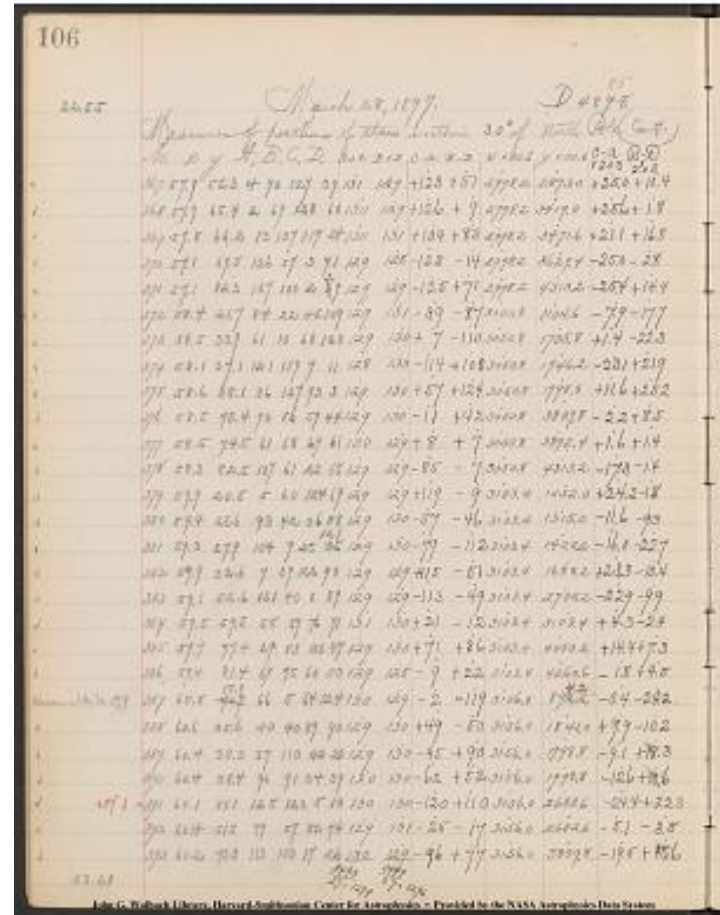
S

22.55 March 28, 1897 D48~~[[strikethrough]]~~ 78 ~~[[/strikethrough]]~~ 85
 Measures of positions of stars within 30° of North Pole (Cont.)

[[15 Columned Table]]

No. | x | y | A. | B. | C. | D. | a+c | B+D | X x 52.6 | y x 52.6 | c-a ^[[x
 2.03]] | B-D ^[[x 2.03]] |

367	57.9	55.3	4	90	127	39	131	129	+123	+51	2998.2	
2893.0	+25.0	+10.4										
368	57.9	65.4	2	69	128	60	130	129	+126	+9	2998.2	
3419.0	+25.6	+1.8										
369	57.8	66.2	13	107	117	24	130	131	+104	+83	2998.2	
3471.6	+21.1	+16.8										
370	57.1	69.5	126	57	3	71	129	128	-123	-14	2998.2	
3629.4	-25.0	-2.8										
371	57.1	82.3	127	100	2	[[strikethrough]] 3	[[/strikethrough]] 29					
129	129	-125	+71	2998.2	4313.2	-25.4	+14.4					
372	58.4	21.7	84	22	45	109	129	131	-39	-87	3050.8	
1104.6	-7.9	-17.7										
373	58.5	33.9	61	10	68	120	129	130	+7	-110	3050.8	
1735.8	+1.4	-22.3										
374	58.1	37.1	121	119	7	11	128	130	-114	+108	3050.8	
1946.2	-23.1	+21.9										
375	58.6	38.1	36	127	93	3	129	130	+57	+124	3050.8	
1998.8	+11.6	+25.2										
376	58.5	73.4	70	86	59	44	129	130	-11	+42	3050.8	
3839.8	-2.2	+8.5										
377	58.5	74.5	61	68	69	61	130	129	+8	+7	3050.8	3892.4
	+1.6	+1.4										
378	58.3	82.5	107	61	22	68	129	129	-85	-7	3050.8	
4313.2	-17.3	-1.4										
379	59.9	20.5	5	60	124	69	129	129	+119	-9	3103.4	
1052.0	+24.2	-1.8										
380	59.4	25.6	93	42	36	88	129	130	-57	-46	3103.4	
1315.0	-11.6	-9.3										
381	59.3	27.9	104	9	25	[[strikethrough]] 35	[[/strikethrough]] 121					
129	130	-79	-112	3103.4	1420.2	-16.0	-22.7					
382	59.9	32.6	7	39	122	90	129	129	+115	-51	3103.4	
1683.2	+23.3	-10.4										
383	59.1	52.6	121	40	8	89	129	129	-113	-49	3103.4	
2735.2	-22.9	-9.9										
384	59.5	59.5	55	59	76	71	131	130	+21	-12	3103.4	
3103.4	+4.3	-2.4										
385	59.7	77.4	29	83	100	47	129	130	+71	+36	3103.4	
4050.2	+14.4	+7.3										
386	59.4	81.4	69	75	60	53	129	128	-9	+22	3103.4	
4260.6	-1.8	+4.5										
[[assumed to be 17.9]]	387	60.5	[[strikethrough]] 70.9									
[[/strikethrough]] 17.9	66	5	64	124	130	129	-2	-119	3156.0			
89 [[strikethrough]] 2.5	[[/strikethrough]] 4.2	-0.4	-24.2									
388	60.6	35.6	40	40	89	90	129	130	+49	-50	3156.0	
1841.0	+9.9	-10.2										
389	60.4	38.3	87	110	42	20	129	130	-45	+90	3156.0	
1998.8	-9.1	+18.3										
390	60.4	38.4	96	91	34	39	130	130	-62	+52	3156.0	
1998.8	-12.6	+10.6										
[[+89° 1=]]	391	60.1	51.1	125	120	5	10	130	130	-120	+110	
3156.0	2682.6	-24.4	+22.3									
392	60.4	51.5	77	57	52	74	129	131	-25	-17	3156.0	
2682.6	-5.1	-3.5										



| 393 | 60.2 | 73.3 | 113 | 103 | 17 | 26 | 130 |
^[[3493/27=1294]] | 129 ^[[3499/27=1296]] |
-96 | +77 | 3156.0 | 3839.8 | -19.5 | +15.6 |
[[/table]]
23.20

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Variables M5 #4
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[[Four Columned Table]]

| | -2610 | -2580 |

|---|---|---|

3023.2	2882.6	+413.2	+302.6
3023.8	3417.2	+413.8	+837.2
3019.3	3454.8	+409.3	+874.8
2973.2	3632.2	+363.2	+1052.2
2972.8	4298.8	+362.8	+1718.8
3042.9	1122.3	+432.9	-1457.7
3052.2	1758.1	+442.2	-821.9
3027.7	1924.3	+417.7	-655.7
3062.4	1973.6	+452.4	-606.4
3048.6	3831.3	+438.6	+1251.3
3052.4	3891.0	+442.4	+1311.0
3033.5	4314.6	+423.5	+1734.6
3127.6	1053.8	+517.6	-1526.2
3091.8	1324.3	+481.8	-1255.7
3087.4	1442.9	+477.4	-1137.1
3126.7	1693.6	+516.7	-886.4
3080.5	2745.1	+470.5	+165.1
3107.7	3105.8	+497.7	+525.8
3117.8	4042.9	+507.8	+1462.9
3101.6	4256.1	+491.6	+1676.1
3155.6	918.4	+545.6	-1661.6
3165.9	1851.2	+555.9	-728.8
3146.9	1980.5	+536.9	-599.5
3143.4	1988.2	+533.4	-591.8
3131.6	2660.3	+521.6	+80.3
3150.9	2686.1	+540.9	+106.1
3136.5	3824.2	+526.5	+1244.2

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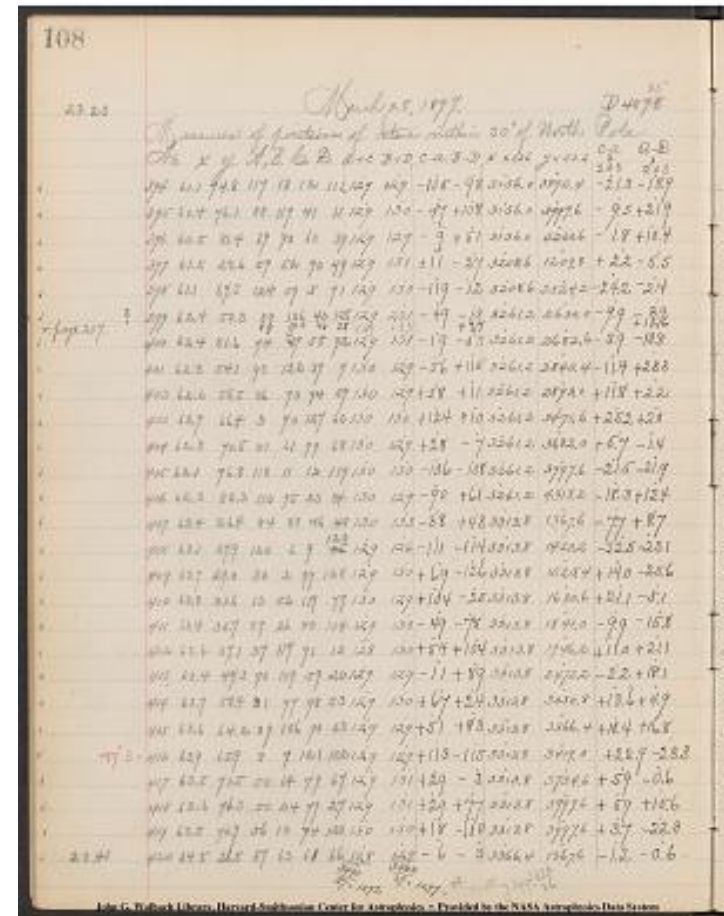
-2610 -2580

3023.2	2882.6	+413.2	+302.6
3023.8	3417.2	+413.8	+837.2
3019.3	3454.8	+409.3	+874.8
2973.2	3632.2	+363.2	+1052.2
2972.8	4298.8	+362.8	+1718.8
3042.9	1122.3	+432.9	-1457.7
3052.2	1758.1	+442.2	-821.9
3027.7	1924.3	+417.7	-655.7
3062.4	1973.6	+452.4	-606.4
3048.6	3831.3	+438.6	+1251.3
3052.4	3891.0	+442.4	+1311.0
3033.5	4314.6	+423.5	+1734.6
3127.6	1053.8	+517.6	-1526.2
3091.8	1324.3	+481.8	-1255.7
3087.4	1442.9	+477.4	-1137.1
3126.7	1693.6	+516.7	-886.4
3080.5	2745.1	+470.5	+165.1
3107.7	3105.8	+497.7	+525.8
3117.8	4042.9	+507.8	+1462.9
3101.6	4256.1	+491.6	+1676.1
3155.6	918.4	+545.6	-1661.6
3165.9	1851.2	+555.9	-728.8
3146.9	1980.5	+536.9	-599.5
3143.4	1988.2	+533.4	-591.8
3131.6	2660.3	+521.6	+80.3
3150.9	2686.1	+540.9	+106.1
3136.5	3824.2	+526.5	+1244.2

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 March 28, 1897
 23.20
 D4885
 Measures of positions of stars [unknown] 30° North Pole
 [[table]]
No.	x	y	A.	B.	C.	D.	a+c	B+D	c-a	B-D	x x52.6	y x52.6	c-a x2.03	B-D x2.03
 394 | 60.1 | 74.8 | 117 | 18 | 12 | 111 | 129 | 129 | -105 | -93 | 3156.0 | 3892.4 | -213.3 | -18.9 |
 395 | 60.4 | 76.1 | 88 | 119 | 41 | 11 | 129 | 130 | -47 | +108 | 3156.0 | 3997.6 | -9.5 | +21.9 |
 396 | 60.5 | 81.4 | 69 | 90 | 60 | 39 | 129 | 129 | -9 | +51 | 3156.0 | 4260.6 | -1.8 | +10.4 |
 397 | 61.5 | 28.6 | 59 | 52 | 70 | 79 | 129 | 131 | +11 | -27 | 3208.6 | 1209.8 | +22 | -5.5 |
 398 | 61.1 | 67.5 | 124 | 59 | 5 | 71 | 129 | 130 | -119 | 12 | 3208.6 | 3524.2 | -24.2 | -2.4 |
 399 | 62.4 | 50.3 | 89 | 106 | 40 | 125 | 129 | 231 | -49 | -19 | 3261.2 | 2630.0 | -9.9 | -13.9 |
 [[v. page 207?]] 400 | 62.4 | 51.6 | 74 | 39 | 55 | 92 | 129 | 131 | -19 | -53 |
 3261.2 | 2682.6 | -3.9 | -108 |
 401 | 62.3 | 54.1 | 93 | 122 | 37 | 7 | 130 | 129 | -56 | +115 | 3261.2 | 2840.4 | -11.4 | +23.3 |
 402 | 62.6 | 55.5 | 36 | 70 | 94 | 59 | 130 | 129 | +58 | +11 | 3261.2 | 2893.0 | +11.8 | +2.2 |
 403 | 62.9 | 66.4 | 3 | 70 | 127 | 60 | 130 | 130 | +124 | +10 | 3261.2 | 3471.6 | +25.2 | +2.0 |
 404 | 62.5 | 70.5 | 51 | 61 | 79 | 68 | 130 | 129 | +128 | -7 | 3261.2 | 3682.0 | +5.7 | -1.4 |
 405 | 62.1 | 76.8 | 118 | 11 | 12 | 119 | 130 | 130 | -106 | -108 | 3261.2 | 3997.6 | -21.5 | -21.9 |
 406 | 62.3 | 82.3 | 110 | 95 | 20 | 34 | 130 | 129 | -90 | +61 | 3261.2 | 4313.2 | -18.3 | +12.4 |
 407 | 63.4 | 26.4 | 84 | 88 | 46 | 45 | 130 | 133 | -38 | +43 | 3313.8 | 1367.6 | -7.7 | +8.7 |
 408 | 63.1 | 27.9 | 120 | 69 | 120 | 129 | 126 | -111 | -114 | 3313.8 | 14202 | -22.5 | -23.1 |
 409 | 63.7 | 29.0 | 30 | 2 | 99 | 128 | 129 | 130 | +69 | -126 | 3313.8 | 1525.4 | +140 | -25.6 |
 410 | 63.8 | 31.6 | 13 | 52 | 117 | 77 | 130 | 129 | +104 | -25 | 3313.8 | 1630.6 | +21.1 | -5.1 |
 411 | 63.4 | 35.7 | 89 | 26 | 40 | 104 | 129 | 130 | -49 | -78 | 3313.8 | 1841.0 | -99 | -15.8 |
 412 | 63.6 | 37.1 | 37 | 117 | 91 | 13 | 128 | 130 | +54 | +104 | 3313.8 | 1946.2 | +11.0 | +21.1 |
 1
 413 | 63.4 | 47.3 | 70 | 109 | 59 | 20 | 129 | 129 | -11 | +89 | 3313.8 | 2472.2 | -2.2 | 18.1 |
 414 | 63.7 | 58.4 | 31 | 77 | 98 | 53 | 129 | 130 | +67 | +24 | 3313.8 | 3050.8 | +13.6 | +4.9 |
 415 | 63.6 | 64.2 | 39 | 106 | 90 | 23 | 129 | 129 | +51 | +83 | 3313.8 | 3419.0 | +22.9 | -23.3 |
 [[+89°3=]] 416 | 63.9 | 65.9 | 8 | 7 | 121 | 122 | 129 | 129 | +113 | -115 |
 3313.8 | 34919.0 | +22.9 | -23.3 |
 417 | 63.5 | 71.5 | 50 | 64 | 79 | 67 | 129 | 131 | +29 | -3 | 3313.8 | 3734.6 | +5.9 | -0.6 |
 418 | 63.6 | 76.3 | 50 | 104 | 79 | 27 | 129 | 131 | +29 | +77 | 3313.8 | 3997.6 | +5.9 | +15.6 |
 419 | 63.5 | 76.9 | 56 | 10 | 74 | 120 | 130 | 130 | +18 | -110 | 3313.8 | 3997.6 | +3.7 | -22.3 |
 420 | 64.5 | 26.5 | 67 | 63 | 61 | 66 | 128 | 129 | -6 | -3 | 3366.4 | 1367.6 | -1.2 | -0.6 |
 3490/27=1292 | 3503/27=1297 | ?
 [[/table]]
 23.40



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[[table]]

| | -2610. | -2580 |

|---|---|---|

3134.7 3911.3 | +524.7 | +1331.3

3146.5 3975.7 | +536.5 | +1395.7

3154.2 4250.2 | +544.2 | +1670.2

3210.8 1215.3 | +600.8 | -1354.7

3184.4 352 ~~[[/strikethrough]]7[[/strikethrough]]6.6~~ | +574.4 |+94~~[[/strikethrough]]7[[/strikethrough]]6.6~~3251.3 2633.9 | +641.3 | +53.9 ~~[[/strikethrough]]y=~~+27.6~~[[/strikethrough]]~~

2614.4 +34.4

3257.3 2693.4 | +647.3 | +113.4

3249.8 2817.1 | +639.8 | +237.1

3273.0 2890.8 | +663.0 | +310.8

3286.4 3469.6 | +676.4 | +889.6

3266.9 3683.4 | +656.9 | +1103.4

3239.7 4019.5 | +629.7 | +1439.5

3242.9 4300.8 | +632.9 | +1720.8

3306.1 1358.9 | +696.1 | -1221.1

3291.3 1443.3 | +681.3 | -1136.7

3327.8 1551.0 | +717.8 | -1029.0 y=-108~~[[checkmark]]~~.6

3334.9 1635.7 | +724.9 | -944.3

3303.9 1856.8 | +693.9 | -723.2

3324.8 1925.1 | +714.8 | -654.9

3311.6 3565.1 | +701.6 | -125.9

33~~[[/strikethrough]]00.2[[/strikethrough]]27.4~~ 3045.9 | +717.4 | +465.9

3324.2 3349.6 | +714.2 | +769.6

3336.7 3442.3 | +726.7 | +862.3

3319.7 3735.2 | +709.7 | +1155.2

3319.7 3982.0 | +709.7 | +1402.0

3317.5 4019.9 | +707.5 | +1439.9

3365.2 1368.2 | +755.2 | -1211.8

109

-2610. -2580.

3134.7	3911.3	+524.7	+1331.3
3146.5	3975.7	+536.5	+1395.7
3154.2	4250.2	+544.2	+1670.2
3210.8	1215.3	+600.8	-1354.7
3184.4	352	[[/strikethrough]]7[[/strikethrough]]6.6	+574.4
3251.3	2633.9	+641.3	+53.9 [[/strikethrough]]y= +27.6 [[/strikethrough]]
2614.4		+34.4	
3257.3	2693.4	+647.3	+113.4
3249.8	2817.1	+639.8	+237.1
3273.0	2890.8	+663.0	+310.8
3286.4	3469.6	+676.4	+889.6
3266.9	3683.4	+656.9	+1103.4
3239.7	4019.5	+629.7	+1439.5
3242.9	4300.8	+632.9	+1720.8
3306.1	1358.9	+696.1	-1221.1
3291.3	1443.3	+681.3	-1136.7
3327.8	1551.0	+717.8	-1029.0 y=-108 [[checkmark]] .6
3334.9	1635.7	+724.9	-944.3
3303.9	1856.8	+693.9	-723.2
3324.8	1925.1	+714.8	-654.9
3311.6	3565.1	+701.6	-125.9
33 [[/strikethrough]]00.2[[/strikethrough]]27.4	3045.9	+717.4	+465.9
3324.2	3349.6	+714.2	+769.6
3336.7	3442.3	+726.7	+862.3
3319.7	3735.2	+709.7	+1155.2
3319.7	3982.0	+709.7	+1402.0
3317.5	4019.9	+707.5	+1439.9
3365.2	1368.2	+755.2	-1211.8

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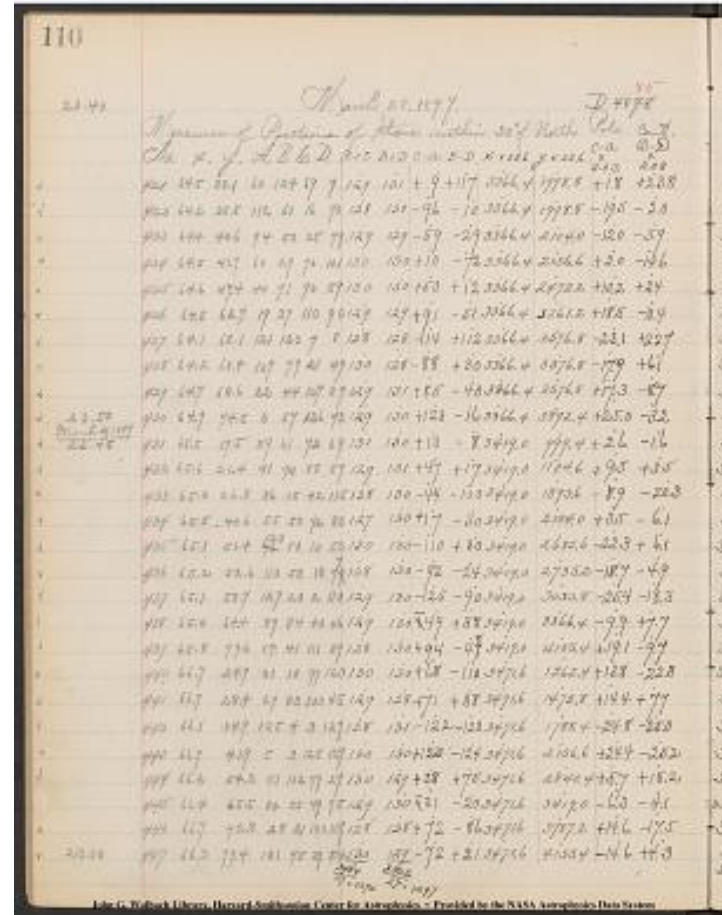
Extracted Sep-23-2023 08:55:04

23.40 March 23, 1897 D48~~[[/strickethrough]]~~ 78 ~~[[/strickethrough]]~~ 85
Measures of positions of stars within 30° of North Pole cont.

[[table]]

[No. | x. | y. | A. | B. | C. | D. | a+c | B+D | c-a | B-D | X x52.6 | y x 52.6 | c-a x 2.03 | B-D x 2.03 |

421	64.5	38.1	60	124	69	7	129	131	+9	+117	3366.4	1998.8	+1.8	+23.8
422	64.2	38.5	112	60	16	70	128	130	-96	-10	3366.4	1998.8	-19.5	-2.0
423	64.4	406	94	50	35	79	129	129	-59	-29	3366.4	2104.0	-12.0	-5.9
424	64.5	41.7	60	29	70	101	130	130	+10	-72	3366.4	2156.6	+2.0	-14.6
425	64.6	47.4	40	71	90	59	130	130	+50	+12	3366.4	2472.2	+10.2	+2.4
426	64.8	62.7	19	39	110	90	129	129	+91	-51	3366.4	3261.2	+18.5	-10.4
427	64.1	68.1	121	120	7	8	128	128	-114	+112	3366.4	3576.8	-23.1	+22.7
428	64.2	68.4	109	79	21	49	130	128	-88	+30	3366.4	3576.8	-17.9	+6.1
429	64.7	68.6	22	44	107	87	129	131	+85	-43	3366.4	35766.8	+17.3	-8.7
430	64.9	74.5	53	57	126	73	129	130	+123	-16	3366.4	3576.8	+17.3	-8.7
431	65.5	19.5	59	61	72	69	131	130	+13	-8	3419.0	999.4	+2.6	-1.6
432	65.3	21.4	41	74	88	57	129	131	+47	+17	3419.0	1104.6	+9.5	+3.5
433	65.3	36.8	86	15	42	115	128	130	-44	-100	3419.0	1893.6	-8.9	-20.3
434	65.5	40.6	55	50	72	80	127	130	+17	-30	3419.0	2104.0	+3.5	-6.1
435	65.1	51.4	70	10	10	10	10	10	10	10	3419.0	2682.6	-22.3	+6.1
436	65.2	52.6	110	53	19	7	128	130	-9	7	3419.0	2735.2	-18.7	-4.9
437	65.1	58.7	127	20	2	110	129	130	-125	-90	3419.0	3050.8	-25.4	-18.3
438	65.4	64.4	89	84	40	46	129	130	130	130	3419.0	3366.4	-9.9	+7.7
439	65.8	79.6	17	41	111	89	128	130	+94	-4	3419.0	3576.8	-9.9	+7.7
440	66.7	24.9	31	10	99	120	130	130	+68	-110	3471.6	1262.4	+13.8	-22.3
441	66.7	28.4	29	83	100	45	129	128	+71	+38	3471.6	1472.8	+14.4	+7.7
442	66.1	34.9	125	4	3	127	128	131	-122	-123	3471.6	1788.4	-24.8	-25.0
443	66.9	41.9	5	3	125	127	130	130	+120	-124	3471.6	2156.6	+24.4	-25.2
444	66.6	54.3	51	102	79	27	130	129	+28	+75	3471.6	2840.4	+5.7	+15.2
445	66.4	65.5	80	55	49	75	129	130	130	130	3471.6	3155.4	-14.6	+4.3
446	66.7	72.8	28	21	100	107	128	128	+72	-86	3471.6	3787.2	+14.6	-17.5
447	66.3	79.4	101	75	29	54	130	129	-72	+21	3471.6	4155.4	-14.6	+4.3
448	66.3	79.4	101	75	29	54	130	129	-72	+21	3471.6	4155.4	-14.6	+4.3



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[[table]]

| | -2610 | -2580 |

|---|---|---|

3368.2	1975.0	+758.2	-605.0
3346.9	2000.8	+736.9	-[[579.2]]
3354.4	2109.9	+744.4	-470.1
3368.4	2171.2	+758.4	-408.8
3376.6	2469.8	+766.6	-110.2
3384.9	3271.6	+774.9	+691.6
3343.3	3554.1	+733.3	+974.1
3348.5	3570.7	+738.5	+990.7
3383.7	3585.5	+773.7	+1005.5
3391.4	3895.6	+781.4	+1315.6
3421.6	1001.0	+811.6	-1579.0
3428.5	1101.1	+818.5	-1478.9
3410.1	1913.9	+800.1	-666.1
3422.5	2110.1	+812.5	-469.9
3396.7	2676.5	+786.7	+96.5
3400.3	2740.1	+790.3	+160.1
3393.6	3069.1	+783.6	+489.1
3409.1	3358.7	+799.1	+778.7
3438.1	4165.1	+828.1	+1585.1
3485.4	1284.7	+875.4	-1295.3
3486.0	1465.1	+876.0	-1114.9
3446.8	1813.4	+836.6	-766.6
3496.0	2181.8	+886.0	-398.2
3477.3	2825.2	+867.3	+245.2
346[[5.3]]	3423.1	+855.3	+843.1
3486.2	3804.7	+876.2	+1224.7
[[3457.0]]	4140.8	+847.0	+1571.1

		-2610	-2580
3368.2	1975.0	+758.2	-605.0
3346.9	2000.8	+736.9	-[[579.2]]
3354.4	2109.9	+744.4	-470.1
3368.4	2171.2	+758.4	-408.8
3376.6	2469.8	+766.6	-110.2
3384.9	3271.6	+774.9	+691.6
3343.3	3554.1	+733.3	+974.1
3348.5	3570.7	+738.5	+990.7
3383.7	3585.5	+773.7	+1005.5
3391.4	3895.6	+781.4	+1315.6
3421.6	1001.0	+811.6	-1579.0
3428.5	1101.1	+818.5	-1478.9
3410.1	1913.9	+800.1	-666.1
3422.5	2110.1	+812.5	-469.9
3396.7	2676.5	+786.7	+96.5
3400.3	2740.1	+790.3	+160.1
3393.6	3069.1	+783.6	+489.1
3409.1	3358.7	+799.1	+778.7
3438.1	4165.1	+828.1	+1585.1
3485.4	1284.7	+875.4	-1295.3
3486.0	1465.1	+876.0	-1114.9
3446.8	1813.4	+836.6	-766.6
3496.0	2181.8	+886.0	-398.2
3477.3	2825.2	+867.3	+245.2
346[[5.3]]	3423.1	+855.3	+843.1
3486.2	3804.7	+876.2	+1224.7
[[3457.0]]	4140.8	+847.0	+1571.1

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[[preprinted]]112[[/preprinted]]

23.00

March 31, 1897 D48[[/strickethrough]]78[[/strickethrough]]85

Measures of Positions of Stars within 30[[symbol - degree symbol]] of North Pole (Cont.)

[[table]]

[No.][x.][y.][A.][B.][C.][D.][A+C][B+D][C-A][B-D]x x52.6|y x 52.6|C-A x 2.03|B-D x 2.03|

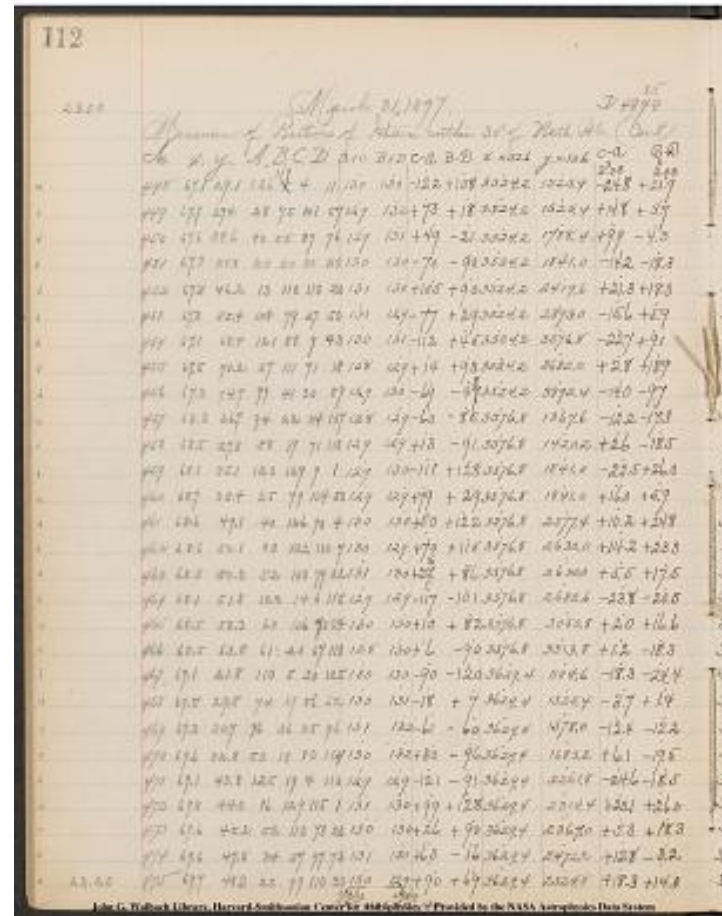
448|67.1|29.1|126|[[/strickethrough]]4|[[/strickethrough]]119|4|11|130|
130|-122|+108|3524.2|1525.4|-24.8|+21.9|
449|67.7|29.4|28|75|101|57|129|132|+73|+18|3524.2|1525.4|14.8|+3.7|
450|67.6|34.6|40|55|89|76|129|131|+49|-21|3524.2|1788.4|+9.9|-4.3|
451|67.3|35.8|100|20|30|110|130|130|-70|-90|3524.2|1841.0|-14.2|-18.3|
452|67.8|46.2|13|110|118|20|131|130|+105|+90|3524.2|2419.6|+21.3|+18.3|
453|67.3|55.4|104|79|27|50|131|129|-77|+29|3524.2|2893.0|-15.6|+5.9|
454|67.1|68.4|121|88|9|43|130|131|-112|+45|3524.2|3576.8|-22.7|+9.1|
455|67.5|70.2|57|111|71|18|128|129|+14|+93|3524.2|3682.0|+2.8|+18.9|
456|67.3|74.7|99|41|30|89|129|130|-69|-4|[[/strickethrough]]
7|[[/strickethrough]]8|3524.2|3892.4|-14.0|-9.7|
457|68.3|26.7|94|22|34|107|128|129|-60|-85|3576.8|1367.6|-12.2|-17.3|
458|68.5|27.8|58|19|71|110|129|129|+13|-91|3576.8|1420.2|+2.6|-18.5|
459|68.1|35.1|120|129|9|1|129|130|-111|+128|3576.8|1841.0|-22.5|+26.0|
460|68.7|35.4|25|79|104|50|129|129|+79|+29|3576.8|1841.0|+16.0|+5.9|
461|68.6|49.1|40|126|90|4|130|130|+50|+122|3576.8|2577.4|+10.2|+24.8|
462|68.6|50.1|30|122|100|7|130|129|+70|+115|3576.8|2630.0|+14.2|+23.3|
463|68.5|50.3|52|108|79|22|131|130|+2|[[/strickethrough]]
7|[[/strickethrough]]6|+86|3576.8|2630.0|+5.5|+17.5|
464|68.1|51.8|123|14|6|115|129|129|-117|-101|3576.8|2682.6|-23.8|-20.5|
465|68.5|58.3|60|106|70|24|130|130|+10|+8.2|3576.8|3050.8|+2.0|+16.6|
466|69.5|63.8|61|20|67|110|128|130|+6|-90|3576.8|3313.8|+1.2|-18.3|
467|69.1|21.8|110|5|20|125|130|130|-90|-120|3576.8|1104.6|-18.3|-24.4|
468|69.5|39.5|74|69|56|62|130|131|-18|+7|3629.4|1525.4|-3.7|+1.4|
469|69.3|30.7|96|36|35|96|131|132|-61|-60|3629.4|1578.0|-12.4|-12.2|
470|69.6|32.8|50|18|80|114|130|132|+30|-96|3629.4|1683.2|+6.1|-19.5|
471|69.1|43.8|125|19|4|110|129|129|-121|-91|3629.4|2261.8|-24.6|-18.5|
472|69.8|44.0|16|129|115|1|131|130|+99|+128|3629.4|2314.4|+20.1|+26.0|
473|69.6|45.2|52|110|78|20|130|130|+26|+90|3629.4|2367.0|+5.3|+18.3|
474|69.6|47.5|34|57|97|73|131|130|+63|-16|3629.4|2472.2|+12.8|-3.2|
475|69.7|58.3|20|99|110|30|130|129|+90|+69|3629.4|2524.8|+18.3|+1.4|

[[/table]]

[[annotation]]23.20[[/annotation]]

[[equation]]

[[equation]]



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[[table]]

| | | -2610. | -2580. |

|---|---|---|

3499.4	1503.5	+889.4	-1076.5
3539.0	1521.7	+929.0	-1058.3
3534.1	1792.7	+924.1	-787.3
3570.0	1859.3	+900.0	-720.7
3545.5	2401.3	+935.5	-178.7
3508.6	2887.1	+898.6	+307.1
3501.5	3567.7	+891.5	+987.7
3527.0	3663.1	+917.0	+1083.1
3510.2	3902.1	+900.2	+1332.1
3564.1	1384.9	+954.6	-1195.1
3579.4	1438.7	+969.4	-1141.3
3554.3	1815.0	+944.3	-765.0
3592.8	1835.1	+982.8	-774.9
3587.0	2552.6	+977.0	-27.4
3591.0	2606.7	+981.0	+26.7
3582.3	2612.5	+972.3	+32.5
3553.0	2703.1	+943.0	+123.1
3578.8	303 [[striketthrough]] 3 [[/striketthrough]] 4.2	+968.8	+454.2
3578.0	3332.1	+968.0	+752.1
3611.1	1129.0	+1001.1	-1451.0
3625.7	1524.0	+1015.7	-1056.0
3617.0	1590.2	+1007.0	-989.8
3635.5	1702.7	+1025.5	-877.3
3604.8	2280.3	+994.8	-299.7
3649.5	2288.4	+1039.5	-291.6
3634.7	2348.7	+1024.7	-231.3
3642.2	2475.4	+1032.2	-104.6
3647.7	2510.8	+1037.7	-69.2

113

-2610. -2580.

3499.4 1503.5 +889.4 -1076.5

3539.0 1521.7 +929.0 -1058.3

3534.1 1792.7 +924.1 -787.3

3570.0 1859.3 +900.0 -720.7

3545.5 2401.3 +935.5 -178.7

3508.6 2887.1 +898.6 +307.1

3501.5 3567.7 +891.5 +987.7

3527.0 3663.1 +917.0 +1083.1

3510.2 3902.1 +900.2 +1332.1

3564.1 1384.9 +954.6 -1195.1

3579.4 1438.7 +969.4 -1141.3

3554.3 1815.0 +944.3 -765.0

3592.8 1835.1 +982.8 -774.9

3587.0 2552.6 +977.0 -27.4

3591.0 2606.7 +981.0 +26.7

3582.3 2612.5 +972.3 +32.5

3553.0 2703.1 +943.0 +123.1

3578.8 303~~[[striketthrough]]~~ 3 ~~[[/striketthrough]]~~ 4.2 +968.8 +454.2

3578.0 3332.1 +968.0 +752.1

3611.1 1129.0 +1001.1 -1451.0

3625.7 1524.0 +1015.7 -1056.0

3617.0 1590.2 +1007.0 -989.8

3635.5 1702.7 +1025.5 -877.3

3604.8 2280.3 +994.8 -299.7

3649.5 2288.4 +1039.5 -291.6

3634.7 2348.7 +1024.7 -231.3

3642.2 2475.4 +1032.2 -104.6

3647.7 2510.8 +1037.7 -69.2

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23.20 March 31, 1897 D48[[striketrough]]78[[striketrough]]85

Measures of positions of stars within 30° of North Pole (cont.)

[[table]]

[No]x.[y].[A].[B].[C].[D].[A+C][B+D][C-a][B-D]x|x 52.6|y x 52.6|c-a x 2.03|B-D x 2.03|

-----|-----|-----|-----|-----|-----|-----|-----|

476|69.1|66.9|120|5|9|12.5|129|130|-111|-129|3629.4|3471.6|-22.5|-24.4
[[+89°.4=]] 477|69.5|69.3|57|101|71|29|128|130|+14|+72|3729.4|

3629.4|+2.8|-24.4|
478|69.2|75.8|110|14|19|115|129|129|-91|*101|3629.4|3945.0|-18.5|-

20.5
479|70.9|23.6|11|50|119|80|130|130|+108|-30|3682.0|1209.8|+21.9|-6.1

480|70.9|23.6|11|50|119|80|130|130|+108|-
30|3682.0|1367.6|+21.3|+22.5

481|70.8|41.7|11|30|119|100|130|130|+108|-70|3682.0|2314.4|-
20.9|+22.3

482|70.2|44.1|116|120|13|10|129|130|-103|+119|3682.0|2314.4|-
20.9|+22.3|

483|70.9|46.2|5|115|124|15|129|130|+119|+100|3682.0|2419.6|+24.2|+2
0.3

484|70.4|51.6|93|42|37|84|130|129|-56|-45|3682.0|2682.6|-11.4|-9.1
485|70.9|56.2|6|112|124|18|130|130|+118|+94|3682.0|2945.6|+24.0|+19.

1
486|70.3|58.9|109|9|20|120|129|129|-89|-111|3682.0|3050.8|-18.1|-22.5
487|70.9|60.3|10|102|120|28|130|130|+110|+74|3682.0|3156.0|+22.3|+1

5.0
488|70.2|75.1|106|116|24|14|130|130|-82|+102|3682.0|3945.0|-
16.6|+20.7

489|70.6|76.1|4.4|119|85|10|129|129|+41|+109|3682.0|3997.6|+8.3|+2.2
1

490|71.1|27.7|125|38|4|93|129|131|-121|-55|3735.6|1420.2|-24.60|-11.2
491|71.6|27.8|49|19|81|111|130|130|+32|-92|3734.6|1420.2|+6.5|-18.7|

492|71.5|29.4|52|70|75|58|127|128|+23|+12|3734.6|1525.4|+4.7|+2.4|

493|71.5|43.9|66|4|64|125|130|129|-2|-121|3734.6|2261.8|-0.4|-24.6|

494|71.5|44.2|60|111|69|18|129|129|+9|+93|3734.6|2314.4|+1.8|+18.9|
495|71.8|46.1|19|120|110|10|129|130|+91|+110|3734.6|2419.6|+18.5|+2

2.3|
496|71.3|51.4|100|80|30|50|130|130|-70|+30|3734.6|2682.6|-14.2|+6.1|
[[23.35 April 1, 1897 23.15]]

497|71.6|55.4|45|86|84|44|129|130|+39|+42|3734.6|2893.0|+7.9|+8.5|

498|71.4|59.6|89|59|41|71|130|130|-48|-12|3734.6|3103.4|-97|-2.4|

499|71.3|62.5|100|62|30|69|130|131|-70|-7|3734.6|3261.2|-14.2|-1.4|

500|71.3|65.3|99|[[striketrough]] 9[[striketrough]]85|31|46|130|131|-
68|+39|3734.6|3419.0|-13.8|+7.9|

[[Defect]] 501|71.6|67.7|54|39|76|90|130|129|+22|-
51|3734.6|3524.2|+4.5|-10.4|

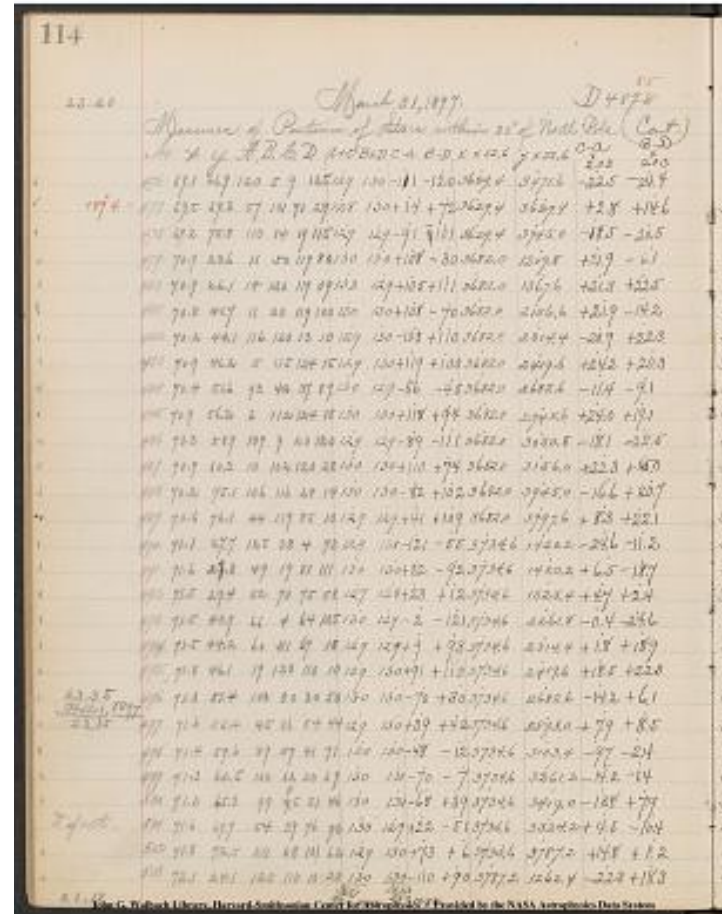
502|71.8|72.5|28|68|101|62|129|130|+73|+6|3734.6|3787.2|+14.8|+1.2|

503|72.1|24.1|120|110|10|20|130|130|-110|+90|3734.6|1262.4|-
22.3|+18.3|

[[table]]

[[equation]]

[[equation]]



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[[table]]

| | | -2610. | -2580 |

|---|---|---|

3606.9|3496.0|+996.9|+916.0|

3632.2|3614.8|+1022.2|+1034.8|

3610.9|39[[~~strikethrough~~]]24[[~~/strikethrough~~]]65.5|+10000.9|+13855|3703.9|13[[~~strikethrough~~]]03.7[[~~/strikethrough~~]]15.9|+1093.9|-1364.1|

37033|1345.1|+1093.3|-1234.9|

3703.9|2170.8|+1093.9|-409.2|

3661.1|2292.1|+1051.1|-287.9|

3706.2|2399.3|+1096.2|-180.7|

3670.6|2691.7|+1060.6|+111.7|

3706.0|2926.5|+1096.0|+346.5|

3663.9|3073.3|+1053.9|+493.3|

3704.3|3141.0|+1094.3|+561.0|

3665.4|3924.3|+1055.4|+1344.3|

3690.3|3975.5|+1080.3|+1395.5|

3710.0|1431.4|+1100.0|-1148.6|

3741.1|1438.9|+1131.1|-1141.1|

373[[~~strikethrough~~]]0[[~~/strikethrough~~]]9.3|1523.0|+1129.3|-1057.0|3734.2|2286.4|+1124.2|-2[[~~strikethrough~~]]8[[~~/strikethrough~~]]93.6|

3736.4|2295.5|+1126.4|-284.5|

3753.1|2397.3|+1143.1|-182.7|

3720.4|2676.5|+1110.4|+965|

3742.5|2884.5|+1132.5|+304.5|

3724.9|3105.8|+1114.9|+[[~~strikethrough~~]]4[[~~/strikethrough~~]]525.8|

3720.4|3262.6|+1110.4|+682.6|

3720.8|3411.1|+1110.8|+831.1|

3739.1|3534.6|+1129.1|+954.6|

3749.4|3786.0|+1139.4|+1206.0|

376[[~~strikethrough~~]]3[[~~/strikethrough~~]]4.9|1244.1|+115[[~~strikethrough~~]]3[[~~/strikethrough~~]]4.9|-1335.9

115

2610. -4580

3606.9 3496.0 +996.9 +916.0

3632.2 3614.8 +1022.2 +1034.8

3610.9 39[[~~strikethrough~~]]24[[~~/strikethrough~~]]65.5 +10000.9 +13855

3703.9 13[[~~strikethrough~~]]03.7[[~~/strikethrough~~]]15.9 +1093.9 -1364.1

37033 1345.1 +1093.3 -1234.9

3703.9 2170.8 +1093.9 -409.2

3661.1 2292.1 +1051.1 -287.9

3706.2 2399.3 +1096.2 -180.7

3670.6 2691.7 +1060.6 +111.7

3706.0 2926.5 +1096.0 +346.5

3663.9 3073.3 +1053.9 +493.3

3704.3 3141.0 +1094.3 +561.0

3665.4 3924.3 +1055.4 +1344.3

3690.3 3975.5 +1080.3 +1395.5

3710.0 1431.4 +1100.0 -1148.6

3741.1 1438.9 +1131.1 -1141.1

373[[~~strikethrough~~]]0[[~~/strikethrough~~]]9.3 1523.0 +1129.3 -1057.0

3734.2 2286.4 +1124.2 -2[[~~strikethrough~~]]8[[~~/strikethrough~~]]93.6

3736.4 2295.5 +1126.4 -284.5

3753.1 2397.3 +1143.1 -182.7

3720.4 2676.5 +1110.4 +965

3742.5 2884.5 +1132.5 +304.5

3724.9 3105.8 +1114.9 +[[~~strikethrough~~]]4[[~~/strikethrough~~]]525.8

3720.4 3262.6 +1110.4 +682.6

3720.8 3411.1 +1110.8 +831.1

3739.1 3534.6 +1129.1 +954.6

3749.4 3786.0 +1139.4 +1206.0

376[[~~strikethrough~~]]3[[~~/strikethrough~~]]4.9 1244.1 +115[[~~strikethrough~~]]3[[~~/strikethrough~~]]4.9 -1335.9

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[[table]]

| | | -2610. | -2580.

|---|---|---|

3764.1|1335.7|+1154.1|-1244.3|

3778.7|2003.1|+1168.7|-576.9|

3809.9|2854.6|+1199.9|+274.6|

3787.0|3105.8|+1177.0|+525.8|

3789.2|3233.4|+1179.2|+653.4|

3805.9|3766.7|+1195.9|+1186.7|

3820.7|1835.3|+1210.7|-744.7|

3857.3|2546.7|+1247.3|-33.3|

[[~~3826.4~~]]~~3142.6~~[[~~2530.1~~]]~~3161.3~~+1216.4[[~~49.9~~]]+581.3|3815.2|[[~~3383.7~~]]+1205.2|+803.7|

3914.5|1425.9|+1304.5|-1154.1|

3895.0|1685.2|+1285.0|-894.8|

3899.1|1686.2|+1289.1|-893.8|

3907.0|1697.2|+1297.0|-882.8|

3881.8|2531.9|+1271.8|-48.1|

3887.9|3138.9|+1277.9|+558.9|

3906. [[~~6~~]]~~3166.6~~+1294.2|+706.8|

3904.2|3286.8|1294.2|+706.8|

3895.4|3693.8|+1285.4|+1113.8|

3959.6|1448.2|+1349.6|-1131.8|

3927.1|1465.9|+1317.1|-1114.1|

3942.6|1592.2|+1332.6|-9877.8|

392[[~~4~~]]~~1729.7~~+1316.3|-850.3|

3959.8|2228.1|+1349.8|-351.9|

3958.8|2585.9|+1348.8|+5.9|

3962.5|3415.1|+1352.5|+835.1|

3926.3|3431.0|+1316.3|+851.0|

3933.8|3484.8|+1323.8|+904.8|

117

-2610. -2580.

3764.1 1335.7+1154.1-1244.3

3778.7 2003.1+1168.7-576.9

3809.9 2854.6+1199.9+274.6

3787.0 3105.8+1177.0+525.8

3789.2 3233.4+1179.2+653.4

3805.9 3766.7+1195.9+1186.7

3820.7 1835.3+1210.7-744.7

3857.3 2546.7+1247.3-33.3

[[~~3826.4~~]]~~3142.6~~[[~~2530.1~~]]~~3161.3~~+1216.4[[~~49.9~~]]+581.3|

3815.2|[[~~3383.7~~]]+1205.2|+803.7|

3914.5|1425.9|+1304.5|-1154.1|

3895.0|1685.2|+1285.0|-894.8|

3899.1|1686.2|+1289.1|-893.8|

3907.0|1697.2|+1297.0|-882.8|

3881.8|2531.9|+1271.8|-48.1|

3887.9|3138.9|+1277.9|+558.9|

3906. [[~~6~~]]~~3166.6~~+1294.2|+706.8|

3904.2|3286.8|1294.2|+706.8|

3895.4|3693.8|+1285.4|+1113.8|

3959.6|1448.2|+1349.6|-1131.8|

3927.1|1465.9|+1317.1|-1114.1|

3942.6|1592.2|+1332.6|-9877.8|

392[[~~4~~]]~~1729.7~~+1316.3|-850.3|

3959.8|2228.1|+1349.8|-351.9|

3958.8|2585.9|+1348.8|+5.9|

3962.5|3415.1|+1352.5|+835.1|

3926.3|3431.0|+1316.3|+851.0|

3933.8|3484.8|+1323.8|+904.8|

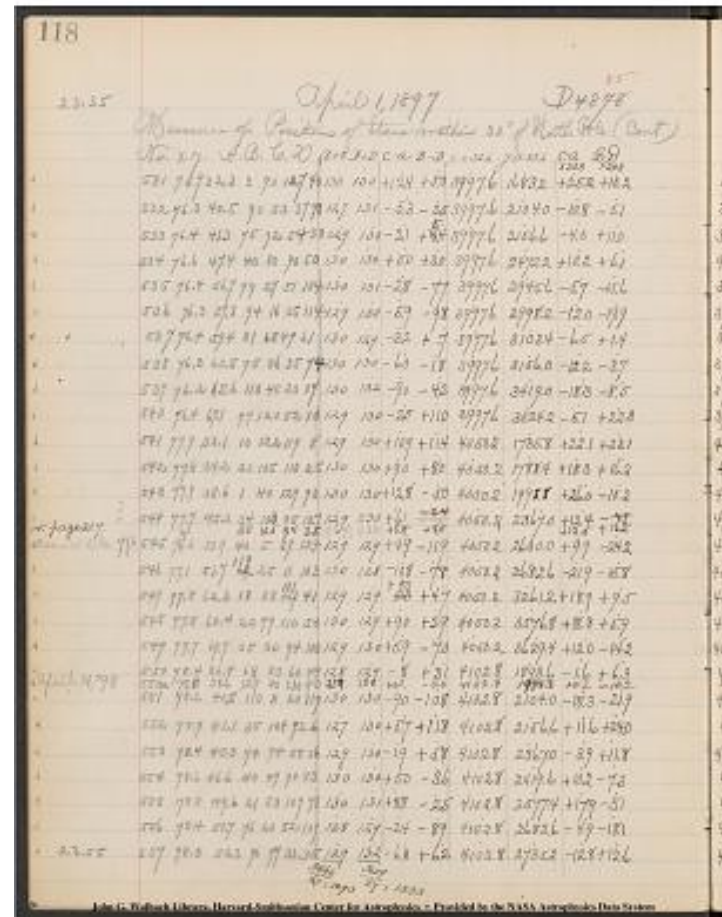
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23.35 April 1, 1897 D48~~[[/strickethrough]]~~ 78 ~~[[/strickethrough]]~~ 85
 Measures of Positions of Stars within 30° of North Pole (Cont)
 [[table]]
 [No. | x. | y. | A. | B. | C. | D. | A+C | B+D | C-A | B-D | X x 52.6 | Y x 52.6 | C-A x 2.03 | B-D x 2.03 |
 |---|---|---|---|---|---|---|---|---|---|---|---|---|---|
 531|76.9|32.3|3|90|127|40|130|130|+124|+5.0|3997.6|1683.2|+25.2|+10.2|
 532|76.3|40.5|90|53|37|78|127|131|-53|-25|3997.6|2104.0|-10.8|-5.1|
 533|76.4|41.3|75|92|54|38|129|130|-21|+~~[[/strickethrough]]~~
 4~~[[/strickethrough]]~~ 5.4|3997.6|2156.6|-4.3|+11.0|
 534|76.6|47.4|40|80|90|50|130|130|+5.0|+3.0|3997.6|2472.2|+10.2|+6.1|
 535|76.4|56.7|79|27|51|104|130|131|-2.8|-7.7|3997.6|2945.6|-5.7|-15.6|
 536|76.3|57.8|94|16|35|114|129|130|-5.9|-9.8|3997.6|2998.2|-12.0|-19.9|
 537|76.4|59.4|81|68|49|61|130|129|-3.2|+7.7|3997.6|3103.4|-6.5|+1.4|
 538|76.3|60.5|95|56|35|74|130|130|-6.0|-1.8|3997.6|3156.0|-12.2|-3.7|
 539|76.2|65.6|110|45|20|87|130|132|-9.0|-4.2|3997.6|3419.0|-18.3|-8.5|
 540|76.4|67.1|77|120|52|10|129|130|-2.5|+11.0|3997.6|3524.2|-5.1|+22.3|
 541|77.9|33.1|10|122|119|8|129|130|+10.9|+11.4|4050.2|1735.8|+22.1|+23.1|
 542|77.8|34.2|20|105|110|25|130|130|+9.0|+8.0|4050.2|1788.4|+18.3|+16.2|
 543|77.9|38.6|1|40|129|90|130|130|+12.8|-5.0|4050.2|1998.8|+26.0|-10.2|
 1[^][[? page 207.]] 544|77.7|45.3|34[^][[3.5]]|103[^][[10.5]]|95[^][[9.4]]|
 127[^][[2.5]]|129[^][[129]]|230[^][[130]]|+6.1[^][[5.9]]|~~[[/strickethrough]]~~+0.6 -
 2.4~~[[/strickethrough]]~~+8.0|4050.2|2367.0|+12.4~~[[/strickethrough]]~~-
 4.9~~[[/strickethrough]]~~
 1[^][[assumed to be 77.6]] 545|7~~[[/strickethrough]]~~ 6~~[[/strickethrough]]~~
 7|6|50.9|40|5|89|124|129|129|+4.9|-11.9|4050.2|2630.0|+9.9|-24.2|
 546|77.1|51.7|~~[[/strickethrough]]~~ 69~~[[/strickethrough]]~~
 119|25|11|103|130|128|-10.8|-7.8|4050.2|2682.6|-21.9|-15.8|
 547|77.8|62.3|18|88~~[[/strickethrough]]~~ 119~~[[/strickethrough]]~~
 111|41|129|129~~[[/strickethrough]]~~
 10.3~~[[/strickethrough]]~~+9.3|+4.7|4050.2|3261.2|+18.9|+9.5|
 548|77.8|68.4|20|79|110|50|130|129|+9.0|+2.9|4050.2|3576.8|+18.3|+5.9|
 549|77.7|69.7|35|30|94|100|129|130|+5.9|-7.0|4050.2|3629.4|+12.0|-14.2|
 550|78.4|36.4|68|80|60|49|128|129|-8|+3.1|4102.8|1893.6|-1.6|+6.3|
 1[^][[April 14, '98.]] 550a|78.0|38.6|129|40|130|90|(259)|(130)|+0.1|-
 5.0|4102.8|1998.8|+0.2|-10.2|
 551|78.2|40.8|110|11|20|119|130|130|-9.0|-10.8|4102.8|2104.0|-18.3|-21.9|
 552|78.7|41.1|35|124|92|6|127|130|+5.7|+11.8|4102.8|2156.6|+11.6|+24.0|
 553|78.4|45.3|74|94|55|36|129|130|-1.9|+5.8|4102.8|2367.0|-3.9|+11.8|
 554|78.6|46.6|40|47|90|83|130|130|+5.0|-3.6|4102.8|2419.6|+10.2|-7.3|
 555|78.8|49.6|21|53|109|78|130|131|+8.8|-2.5|4102.8|2577.4|+17.9|-5.1|
 556|78.4|51.7|76|20|52|109|128|129|-2.4|-8.9|4102.8|2682.6|-4.9|-18.1|
 1[^][[23.55]] 557|78.3|52.3|96|97|33|35|129|132
[[/underlined]]|-6.3|+6.2|4102.8|2735.2|-12.8|+12.6|
 [[table]]
 [[equation]] [[equation]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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[[table]]

| | -2610. | -2580. |

|---|---|---|

4022.8 | 1673.0 | +1412.8 | -907.0

3986.8 | 2109.1 | +1376.8 | -470.9

3993.3 | 2145.6 | +1383.3 | -434.4

400 ~~[[/del]]0~~[[/del]]~~ 7.8 | 2466.1 | +1397.8 | -113.9~~

3991.9 | 2961.2 | +1381.9 | +381.2

3985.6 | 3018.1 | +1375.6 | +438.1

3991.1 | 3102.0 | +1381.1 | +522.0

3985.4 | 3159.7 | +1375.4 | +579.7

3979.3 | 3427.5 | +1369.3 | +847.5

3992.5 | 3501.9 | +1382.5 | +921.9

4072.3 | 1712.7 | +1462.3 | -867.3

4068.5 | 1772.2 | +1458.5 | -807.8

4076.2 | 2009.0 | +1466.2 | - ~~[[/del]]4~~[[/del]]~~ 571.0 |~~4062.2 | ~~[[/del]]2371.9~~[[/del]]~~ 2350.8 | +1452.2 | -~~208.1 ~~[[/del]]~~ 234.4 - from 2 sqs ~~[[/del]]~~ -229.2

4060.1 | 2654.2 | +1450.1 | +74.2

4028.3 | 2698.4 | +1418.3 | +118.4

4069.1 | 3251.7 | +1459.1 | 671.7

4068.5 | 3570.9 | +1458.5 | +990.9

4062.2 | 3643.6 | 7+1452.2 | +1063.6

4101.2 | 1887.3 | +1491.2 | -629.7

4103.0 | 2009.0 | +1493.0 | -571.0 x = 1466.7 2 sqs

4084.5 | 2125.9 | +1474.5 | -454.1

4114.4 | 2132.6 | +1504.4 | -447.4

4098.9 | 2355. ~~[[/del]]~~ 8 ~~[[/del]]~~ 2 | 1488.9 | -224.8

4113.0 | 2426.9 | +1503.0 | -153.1

4120.7 | 2426.5 | 1510.7 | + 2.5

4097.9 | 2700.7 ~~[[/del]]~~ 4120.9 ~~[[/del]]~~ | +1487.9 |

+120.7

40900 | 2722.6 ~~[[/del]]~~ 4090.2 ~~[[/del]]~~ | +1480.0 |

+142.6

119

-2610. -2580.

4022.8 1673.0 +1412.8 -907.0

3986.8 2109.1 +1376.8 -470.9

3993.3 2145.6 +1383.3 -434.4

400 ~~[[/del]]0~~[[/del]]~~ 7.8 | 2466.1 | +1397.8 | -113.9~~

3991.9 2961.2 +1381.9 +381.2

3985.6 3018.1 +1375.6 +438.1

3991.1 3102.0 +1381.1 +522.0

3985.4 3159.7 +1375.4 +579.7

3979.3 3427.5 +1369.3 +847.5

3992.5 3501.9 +1382.5 +921.9

4072.3 1712.7 +1462.3 -867.3

4068.5 1772.2 +1458.5 -807.8

4076.2 2009.0 +1466.2 - ~~[[/del]]4~~[[/del]]~~ 571.0 |~~

4062.2 | ~~[[/del]]2371.9~~[[/del]]~~ 2350.8 | +1452.2 | -~~

208.1 ~~[[/del]]~~ 234.4 - from 2 sqs ~~[[/del]]~~ -229.2

4060.1 2654.2 +1450.1 +74.2

4028.3 2698.4 +1418.3 +118.4

4069.1 3251.7 +1459.1 671.7

4068.5 3570.9 +1458.5 +990.9

4062.2 3643.6 7+1452.2 +1063.6

4101.2 1887.3 +1491.2 -629.7

4103.0 2009.0 +1493.0 -571.0 x = 1466.7 2 sqs

4084.5 2125.9 +1474.5 -454.1

4114.4 2132.6 +1504.4 -447.4

4098.9 2355. ~~[[/del]]~~ 8 ~~[[/del]]~~ 2 | 1488.9 | -224.8

4113.0 2426.9 +1503.0 -153.1

4120.7 2426.5 1510.7 + 2.5

4097.9 2700.7 ~~[[/del]]~~ 4120.9 ~~[[/del]]~~ | +1487.9 |

+120.7

40900 | 2722.6 ~~[[/del]]~~ 4090.2 ~~[[/del]]~~ | +1480.0 |

+142.6

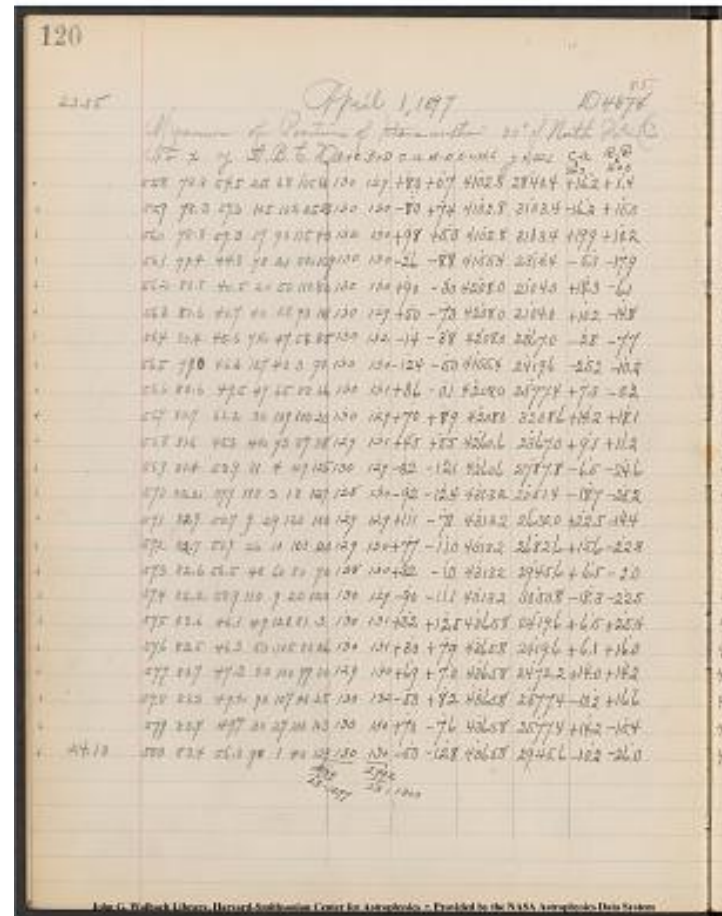
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Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4

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23.55 April 1, 1897 D48~~[[/del]]~~ 78~~[[/del]]~~ 85
 Measures of Positions of Stars within 30° of North Pole (C
 [[table]]
 | No x y A. B. C. D. | a+c B+D | c-a B-D | X x 52.6 | y x 52.6 | c-a ^[[x
 2.03]] B-D ^[[x 2.03]] |
 |---|---|---|---|
 | 55.8 78.8 54.5 25 68 105 61 | 130 129 | +80 +0.7 | 4102.8 | 2840.4 |
 +16.2 +1.4 |
 | 55.9 78.3 59.3 105 102 25 28 | 130 130 | -80 +74 | 4102.8 | 3103.4 | -
 16.2 +15.0 |
 | 56.0 78.8 59.3 17 90 115 40 | 132 130 | +98 +5.0 | 4102.8 | 3103.4 |
 +19.9 +10.2 |
 | 56.1 79.4 44.8 78 21 | 52 10.9 | 130 130 | -26 -8.8 | 4155.4 | 2314.4 | -
 5.3 -17.9 |
 | 56.2 80.8 40.5 20 50 110 80 | 130 130 | +90 -30 | 4208.0 | 2104.0 |
 +18.3 -6.1 |
 | 56.3 80.6 40.7 40 28 90 101 | 130 129 | +50 -7.3 | 4208.0 | 2104.0 |
 +10.2 -14.8 |
 | 56.4 80.4 45.6 72 47 58 85 | 130 132 | -14 -38 | 4208.0 | 2367.0 | -2.8 -
 7.7 |
 | 56.5 79.0 46.6 127 40 3 90 | 130 130 | -124 -5.0 | 4155.4 | 2419.6 | -
 25.2 -10.2 |
 | 56.6 80.6 49.5 47 65 83 66 | 130 131 | +36 -0.1 | 4208.0 | 2577.4 | +7.3
 -0.2 |
 | 56.7 80.7 61.2 30 109 100 20 | 130 129 | +70 +8.9 | 4208.0 | 3208.6 |
 +14.2 +18.1 |
 | 56.8 81.6 45.3 42 93 87 38 | 129 131 | +45 +55 | 4260.6 | 2367.0 | +9.1
 +11.2 |
 | 56.9 81.4 53.9 81 4 49 125 | 130 129 | -32 -12.1 | 4260.6 | 2787.8 | -6.5
 -24.6 |
 | 57.0 82.2 39.9 110 3 18 127 | 128 130 | -92 -12.4 | 4313.2 | 2051.4 | -
 18.7 -25.2 |
 | 57.1 82.9 50.7 9 29 120 100 | 129 129 | +111 -7.1 | 4313.2 | 2630.0 |
 +22.5 -14.4 |
 | 57.2 82.7 51.9 26 10 103 120 | 129 130 | +77 -11.0 | 4313.2 | 2682.6 |
 +15.6 -22.3 |
 | 57.3 82.6 56.5 48 60 80 70 | 128 130 | +32 -1.0 | 4313.2 | 2945.6 | +6.5
 -2.0 |
 | 57.4 82.2 58.9 110 9 20 120 | 130 129 | -90 -11.1 | 4313.2 | 3050.8 | -
 18.3 -22.5 |
 | 57.5 83.6 46.1 49 128 81 3 | 130 131 | +32 +12.5 | 4365.8 | 2419.6 |
 +6.5 +25.4 |
 | 57.6 83.5 46.3 50 105 80 26 | 130 131 | +30 +7.9 | 4365.8 | 2419.6 |
 +6.1 +16.0 |
 | 57.7 83.7 47.3 30 100 99 30 | 129 130 | +69 +7.0 | 4365.8 | 2472.2 |
 +14.0 +14.2 |
 | 57.8 83.3 49.2 90 107 40 25 | 130 132 | -50 +8.2 | 4365.8 | 2577.4 | -
 10.2 +16.6 |
 | 57.9 83.7 49.7 30 27 100 103 | 130 130 | +70 -7.6 | 4365.8 | 2577.4 |
 +14.2 -15.4 |
 | 24.10 | 58.0 83.4 56.0 90 1 40 129 | 130 ^[[2984]]
[[/u]] ^[[23 = 1297]] 130 ^[[2992]] [[/u]]
 ^[[23 = 1300]] | -50 -12.8 | 4365.8 | 2945.6 | -10.2 -26.0 |
 [[/table]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
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[[table]]			
		-26.0	-2580
--- --- --- ---			
4119.0	2839.0	+1509.0	+259.0
4086.6	3088.4	+1476.6	+508.4
4122.7	3093.2	+1512.7	+513.2
4150.1	2332.3	+1540.1	-247.7
4226.3	2110.1	+1616.3	-469.9
4218.2	2118.8	+1608.2	-461.2
4205.2	2374.7	+1595.2	-205.3
4130.2	2429.8	+1520.2	-150.2
4215.3	2577.6	+1605.3	-2.4
4222.2	3190.5	+1612.2	+610.5
4269.7	2355.8	+1659.7	-224.2
4254.1	2812.4	+1644.1	[[67.6]]+232.4
4294.5	2076.6	+1684.5	-503.4
4335.7	2644.4	+1725.4	+64.4
4328.8	2704.9	+1718.8	+124.9
4319.7	2947.6	+1709.7	+367.6
4294.9	3073.3	+1684.9	+493.3
4372.3	2394.2	+1762.3	-185.8
4371.9	2403.6	+1761.9	-176.4
4379.8	2458.0	+1769.8	-122.0
4355.6	2560.8	+1745.6	-19.2
4380.0	2592.8	+1770.0	+12.8
4355.6	2971.6	+1745.6	+39.16 [^] [[y=339.0]]
[[/table]]			

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--- --- --- ---			
4119.0	2839.0	+1509.0	+259.0
4086.6	3088.4	+1476.6	+508.4
4122.7	3093.2	+1512.7	+513.2
4150.1	2332.3	+1540.1	-247.7
4226.3	2110.1	+1616.3	-469.9
4218.2	2118.8	+1608.2	-461.2
4205.2	2374.7	+1595.2	-205.3
4130.2	2429.8	+1520.2	-150.2
4215.3	2577.6	+1605.3	-2.4
4222.2	3190.5	+1612.2	+610.5
4269.7	2355.8	+1659.7	-224.2
4254.1	2812.4	+1644.1	[[67.6]]+232.4
4294.5	2076.6	+1684.5	-503.4
4335.7	2644.4	+1725.4	+64.4
4328.8	2704.9	+1718.8	+124.9
4319.7	2947.6	+1709.7	+367.6
4294.9	3073.3	+1684.9	+493.3
4372.3	2394.2	+1762.3	-185.8
4371.9	2403.6	+1761.9	-176.4
4379.8	2458.0	+1769.8	-122.0
4355.6	2560.8	+1745.6	-19.2
4380.0	2592.8	+1770.0	+12.8
4355.6	2971.6	+1745.6	+39.16 [^] [[y=339.0]]

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Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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[[table]]

521.2	80.3
2473.1	1225.5
726.5	916.4
1021.6	1035.2
1555.6	1335.3
4091.4	39.47.0
2024.5	2028.5
325.9	1888.8
1019.4	1322.8
1783.2	869.3
2450.6	706.8
1847.3	205.8
2432.1	613.3
16	53.3
1067.5	248.8
863.8	970.5
390.4	1218.5
431.7	704.5
350.4	1144.8
2341.6	2255.5
2321.3	2301.2
2205.7	2470.2
2024.0	2518.7
2064.6	2700.9
2204.7	2707.8
2349.7	2634.3
2341.7	2316.4
2619.6	2497.2
2520.3	2584.5
265.3	261.3

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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April 6, 1897.

D48~~[[strikethrough]]~~ 78 ~~[[strikethrough]]~~ 85Measures of Positions of [^][[ten]] No. Polar Standard Stars. (outside circle)

[[table]]

	A	B	C	D	A+C	B+D	C-A	B-D	C-A x2.03	B-D x2.03
23	15	14	114	116	129	130	+9.9	-10.2	+20.1	-20.7
[[strikethrough]] 19	[[strikethrough]] 129	[[strikethrough]] 129	[[strikethrough]] 130	[[strikethrough]] 130	[[strikethrough]] 130	[[strikethrough]] 130	[[strikethrough]] 0	[[strikethrough]] 0	[[strikethrough]] 0	[[strikethrough]] 0
17	61	01	68	129	129	130	+0.7	-12.8	+1.4	-26.0
[[strikethrough]] 24	[[strikethrough]] 43	[[strikethrough]] 10	[[strikethrough]] 87	[[strikethrough]] 120	[[strikethrough]] 120	[[strikethrough]] 120	[[strikethrough]] 0	[[strikethrough]] 0	[[strikethrough]] 0	[[strikethrough]] 0
18	130	69	129	61	25.9	130	-0.1	+0.8	-2.2	+26.3
16	101	120	28	10	129	130	-7.3	+11.0	-14.8	+22.3
25	40	126	90	4	130	130	+5.0	+12.2	+10.2	+24.8
9	9	71	121	60	130	131	+11.2	+1.1	+22.7	+2.2
5	40	7	90	122	130	129	+5.0	-11.5	+10.2	-23.3
5a	93	60	36	70	129	130	-5.7	-1.0	-11.6	-2.0
2	113	20	[[strikethrough]] 1	[[strikethrough]] 17	109	130	129	-9.6	-8.9	-19.5
6	50	116	7	[[strikethrough]] 0	[[strikethrough]] 9	14	129	130	+2.9	+10.2
April 10, 97	a	129	81	1	48	130	129	-12.8	+3.3	-26.0
b	49	98	81	3	[[strikethrough]] 4	[[strikethrough]] 2	130	130	+3.2	+6.6
c	73	70	55	60	128	130	-1.8	+1.0	-3.7	+2.0
d	5	80	12.5	50	130	130	+12.0	+3.0	+2.1	+6.1
e	33	20	96	110	129	130	+6.3	-9.0	+12.8	-18.3
f	74	4	55	126	129	130	-1.9	-12.2	-3.9	-24.8
g	108	55	22	44	130	129	-8.6	-1.9	-17.5	-3.9
h	49	60	80	70	129	130	+3.1	-1.0	+6.3	-2.0
k	91	4	39	126	130	130	-5.2	-12.2	-10.6	-24.8
l	76	47	53	83	129	130	-2.3	-3.6	-4.7	-7.3
+89°	1	125	119	4	10	129	129	-12.1	+10.9	-24.6
3	9	5	120	124	129	129	+11.1	-11.9	+22.5	-
24.	[[strikethrough]] 1	[[strikethrough]] 2	[[strikethrough]] 3	[[strikethrough]] 4	[[strikethrough]] 5	[[strikethrough]] 6	[[strikethrough]] 7	[[strikethrough]] 8	[[strikethrough]] 9	[[strikethrough]] 10
4	59	99	70	30	129	129	+1.1	+6.9	+2.2	+14.0
5a	93	[[strikethrough]] 59	[[strikethrough]] 60	[[strikethrough]] 99	[[strikethrough]] 36	[[strikethrough]] 70	[[strikethrough]] 129	[[strikethrough]] 130	[[strikethrough]] -5.7	[[strikethrough]] -11.6
[[strikethrough]] 30	[[strikethrough]] 1	[[strikethrough]] 2	[[strikethrough]] 3	[[strikethrough]] 4	[[strikethrough]] 5	[[strikethrough]] 6	[[strikethrough]] 7	[[strikethrough]] 8	[[strikethrough]] 9	[[strikethrough]] 10
12	34	37	95	92	129	129	+6.1	-5.5	+12.4	-11.2
26	22	23	106	107	128	130	+8.4	-8.4	+17.1	-17.1
29	37	118	92	11	129	129	+5.5	+10.7	+11.2	+21.7
31	40	75	90	57	130	132	+5.0	+1.8	+10.2	+3.7
35	10	108	119	21	129	129	+10.9	+8.7	+22.1	+17.7
36	27	28	102	103	129	131	+7.5	-7.5	+15.2	-15.2
37	120	110	10	19	<u>130</u>	<u>129</u>	<u>-11.0</u>	<u>+9.1</u>	<u>-22.3</u>	<u>+18.5</u>

[[table]]

[[annotation]] An examination of the plate in April 16, 1897 shared abstract readings B and D should be 80 and 57. 75 and 57 are indistinguishable [[/annotation]]

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April 6, 1897

Measures of Positions of [^][[ten]] No. Polar Standard Stars. (outside circle)

A B C D A+C B+D C-A B-D C-A x2.03 B-D x2.03

23 15 14 114 116 129 130 +9.9 -10.2 +20.1 -20.7

~~[[strikethrough]]~~ 19 ~~[[strikethrough]]~~ 129 ~~[[strikethrough]]~~ 129 ~~[[strikethrough]]~~ 130 ~~[[strikethrough]]~~ 130 ~~[[strikethrough]]~~ 130 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0

17 61 01 68 129 129 130 +0.7 -12.8 +1.4 -26.0

~~[[strikethrough]]~~ 24 ~~[[strikethrough]]~~ 43 ~~[[strikethrough]]~~ 10 ~~[[strikethrough]]~~ 87 ~~[[strikethrough]]~~ 120 ~~[[strikethrough]]~~ 120 ~~[[strikethrough]]~~ 120 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 0

18 130 69 129 61 25.9 130 -0.1 +0.8 -2.2 +26.3

16 101 120 28 10 129 130 -7.3 +11.0 -14.8 +22.3

25 40 126 90 4 130 130 +5.0 +12.2 +10.2 +24.8

9 9 71 121 60 130 131 +11.2 +1.1 +22.7 +2.2

5 40 7 90 122 130 129 +5.0 -11.5 +10.2 -23.3

5a 93 60 36 70 129 130 -5.7 -1.0 -11.6 -2.0

2 113 20 ~~[[strikethrough]]~~ 1 ~~[[strikethrough]]~~ 17 109 130 129 -9.6 -8.9 -19.5 -18.1

6 50 116 7 ~~[[strikethrough]]~~ 0 ~~[[strikethrough]]~~ 9 14 129 130 +2.9 +10.2 +5.9 +20.7

April 10, 97 a 129 81 1 48 130 129 -12.8 +3.3 -26.0 +6.7

b 49 98 81 3 ~~[[strikethrough]]~~ 4 ~~[[strikethrough]]~~ 2 130 130 +3.2 +6.6 +6.5 +13.4

c 73 70 55 60 128 130 -1.8 +1.0 -3.7 +2.0

d 5 80 12.5 50 130 130 +12.0 +3.0

+2 ~~[[strikethrough]]~~ 6 ~~[[strikethrough]]~~ 4.4 +6.1

e 33 20 96 110 129 130 +6.3 -9.0 +12.8 -18.3

f 74 4 55 126 129 130 -1.9 -12.2 -3.9 -24.8

g 108 55 22 44 130 129 -8.6 -1.9 -17.5 -3.9

h 49 60 80 70 129 130 +3.1 -1.0 +6.3 -2.0

k 91 4 39 126 130 130 -5.2 -12.2 -10.6 -24.8

l 76 47 53 83 129 130 -2.3 -3.6 -4.7 -7.3

+89° 1 125 119 4 10 129 129 -12.1 +10.9 -24.6 +22.1

3 9 5 120 124 129 129 +11.1 -11.9 +22.5 -

24. ~~[[strikethrough]]~~ 1 ~~[[strikethrough]]~~ 2 ~~[[strikethrough]]~~ 3 ~~[[strikethrough]]~~ 4 ~~[[strikethrough]]~~ 5 ~~[[strikethrough]]~~ 6 ~~[[strikethrough]]~~ 7 ~~[[strikethrough]]~~ 8 ~~[[strikethrough]]~~ 9 ~~[[strikethrough]]~~ 10

4 59 99 70 30 129 129 +1.1 +6.9 +2.2 +14.0

5a 93 ~~[[strikethrough]]~~ 59 ~~[[strikethrough]]~~ 60 ~~[[strikethrough]]~~ 99 ~~[[strikethrough]]~~ 36 ~~[[strikethrough]]~~ 70 ~~[[strikethrough]]~~ 129 ~~[[strikethrough]]~~ 130 ~~[[strikethrough]]~~ -5.7 ~~[[strikethrough]]~~ -11.6

~~[[strikethrough]]~~ 30 ~~[[strikethrough]]~~ 1 ~~[[strikethrough]]~~ 2 ~~[[strikethrough]]~~ 3 ~~[[strikethrough]]~~ 4 ~~[[strikethrough]]~~ 5 ~~[[strikethrough]]~~ 6 ~~[[strikethrough]]~~ 7 ~~[[strikethrough]]~~ 8 ~~[[strikethrough]]~~ 9 ~~[[strikethrough]]~~ 10

12 34 37 95 92 129 129 +6.1 -5.5 +12.4 -11.2

26 22 23 106 107 128 130 +8.4 -8.4 +17.1 -17.1

29 37 118 92 11 129 129 +5.5 +10.7 +11.2 +21.7

31 40 75 90 57 130 132 +5.0 +1.8 +10.2 +3.7

35 10 108 119 21 129 129 +10.9 +8.7 +22.1 +17.7

36 27 28 102 103 129 131 +7.5 -7.5 +15.2 -15.2

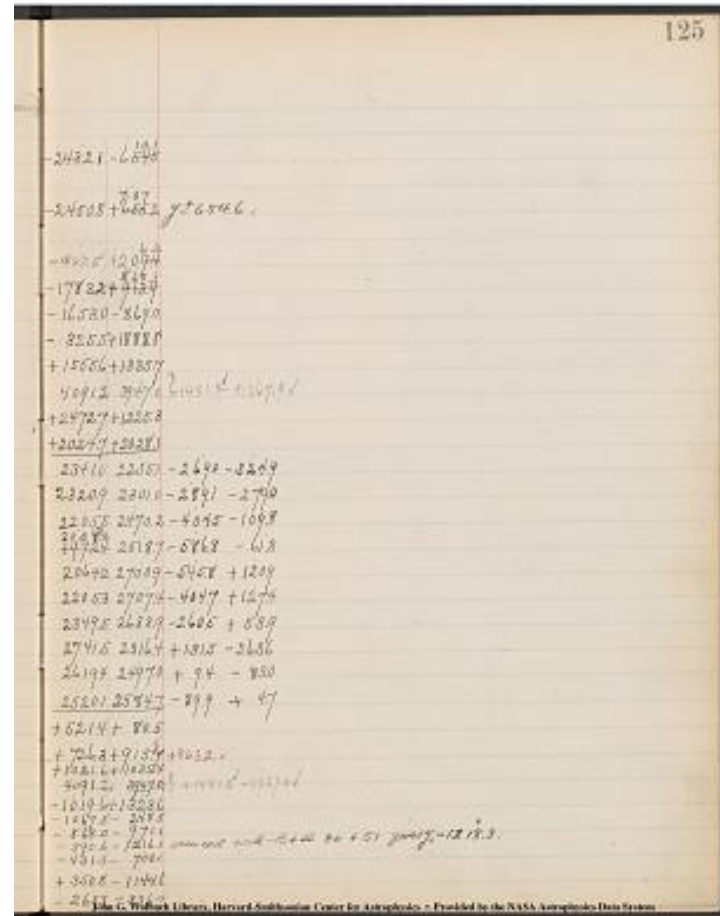
37 120 110 10 19 130 129 -11.0 +9.1 -22.3 +18.5

125

[[table]]

| | | | |

~~-2432.1~~-6~~[[/strikethrough]]~~ 54.5~~[[/strikethrough]]~~ 13.1
~~-2450.8~~+~~[[/strikethrough]]~~ 655~~[[/strikethrough]]~~ 707.2|y=+654.6
~~-1847.5~~~~[[/strikethrough]]~~+20~~[[/strikethrough]]~~ 9.4~~[[/strikethrough]]~~ 6.2
~~-1783.2~~+~~[[/strikethrough]]~~ 913.9~~[[/strikethrough]]~~ 869.3
~~-1653.0~~-869.0
~~-325.5~~+1888.8
~~+1555.6~~+1335.7
4091.2|3947.0|~~[[/strikethrough]]~~ ?~~[[/strikethrough]]~~+1481.2 +1367.0
+2472.7|+1225.3
~~[[/underlined]]~~+2024.7|+2028.1~~[[/underlined]]~~
2341.0|2255.1|- 269.0 -324.9
2320.9|2301.0|-289.1 -279.0
2205.5 2470.2|-404.5 -109.8
~~[[/strikethrough]]~~ 1972.4~~[[/strikethrough]]~~ 202~~[[/strikethrough]]~~
5~~[[/strikethrough]]~~ 3.2|2518.7|-586.8 -61.3
2064.2|2700.9|-545.8 +120.9
2205.3|2707.4|-404.7 +127.4
2349.5|2633.9|-260.5 +53.9
2741.5|2316.4|+131.5 -263.6
2619.4|2497.0|+9.4 -83.0
~~[[/underlined]]~~2520.1|2584.7~~[[/underlined]]~~-89.9 +4.7
+521.4|+80.5|
+726.3|+915.~~[[/strikethrough]]~~ 7~~[[/strikethrough]]~~ 8|+863.2
+1021.6|+1035.4|
4091.2|3~~[[/underlined]]~~ 947.0~~[[/underlined]]~~~~[[/strikethrough]]~~
?~~[[/strikethrough]]~~+1481.2 -1367.0
-1019.6|+1323.6|
-1067.5|-248.5|
-863.0|-971.1|
-390.6|-1216.1|reduced with B+D 80+51 gives y=-1218.3
-431.3|-704.1|
+350.8|-1144.6|
-265.3|-336.7|
[[/table]]



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[[table]]

| | | -2610 | -2580 |

|---|---|---|

2344.7 | 2256.7 | -265.3 | -323.3

2324.6 | 2301.0 | -285.4 | -279.0

2207.2 | 2470.2 | -402.8 | -109.8

2026.~~[[/strikethrough]]~~ 5 ~~[[/strikethrough]]~~ 8 | 2518.5 | -583.~~[[/strikethrough]]~~ 5 ~~[[/strikethrough]]~~ 2 | -61.5

2066.6 | 2700.7 | -543.4 | +120.7

2208.0 | 2707.8 | -402.0 | +127.8

2352.8 | 2634.9 | -257.2 | +54.9

2745.6 | 2316.6 | +135.6 | -263.4

2621.7 | 2497.4 | +11.7 | -82.6

2523.0 | 2584.7 | -87.0 | +4.7

825.4 | 2463.3 | -1784.6 | -116.7

828.2 | 2333.5 | -1781.8 | -246.5

853.2 | 2676.7 | -1756.8 | +96.7

916.5 | 2464.3 | -1693.5 | -115.7

921.4 | 2421.6 | -1688.6 | -158.4

946.6 | 2781.7 | -1663.4 | ~~[[/strikethrough]]~~ 98.3 ~~[[/strikethrough]]~~ +201.7945.8 | 3265.1 | -1664.2 | ~~[[/strikethrough]]~~ 7 ~~[[/strikethrough]]~~ 685.1

971.0 | 2116.8 | -1639.0 | -463.2

9~~[[/strikethrough]]~~ 6 ~~[[/strikethrough]]~~ 74.6 | 2198.4 | -1635.4 | -381.6

979.9 | 2795.5 | -1630.1 | +215.5

1052.0 | 3377.4 | -1558.0 | +797.4 -1584.3

1027.8 | 3546.5 | -1582.2 | +966.5

1042.3 | 3500.9 | -1567.7 | +920.9

[[/table]]

127

		-2610	-2580
2344.7	2256.7	-265.3	-323.3
2324.6	2301.0	-285.4	-279.0
2207.2	2470.2	-402.8	-109.8
2026.	[[/strikethrough]] 5 [[/strikethrough]] 8	2518.5	-
583.	[[/strikethrough]] 5 [[/strikethrough]] 2	-61.5	
2066.6	2700.7	-543.4	+120.7
2208.0	2707.8	-402.0	+127.8
2352.8	2634.9	-257.2	+54.9
2745.6	2316.6	+135.6	-263.4
2621.7	2497.4	+11.7	-82.6
2523.0	2584.7	-87.0	+4.7
825.4	2463.3	-1784.6	-116.7
828.2	2333.5	-1781.8	-246.5
853.2	2676.7	-1756.8	+96.7
916.5	2464.3	-1693.5	-115.7
921.4	2421.6	-1688.6	-158.4
946.6	2781.7	-1663.4	[[/strikethrough]] 98.3 [[/strikethrough]] +201.7
945.8	3265.1	-1664.2	[[/strikethrough]] 7 [[/strikethrough]] 685.1
971.0	2116.8	-1639.0	-463.2
9 [[/strikethrough]] 6	[[/strikethrough]] 74.6	2198.4	-1635.4 -381.6
979.9	2795.5	-1630.1	+215.5
1052.0	3377.4	-1558.0	+797.4 -1584.3
1027.8	3546.5	-1582.2	+966.5
1042.3	3500.9	-1567.7	+920.9

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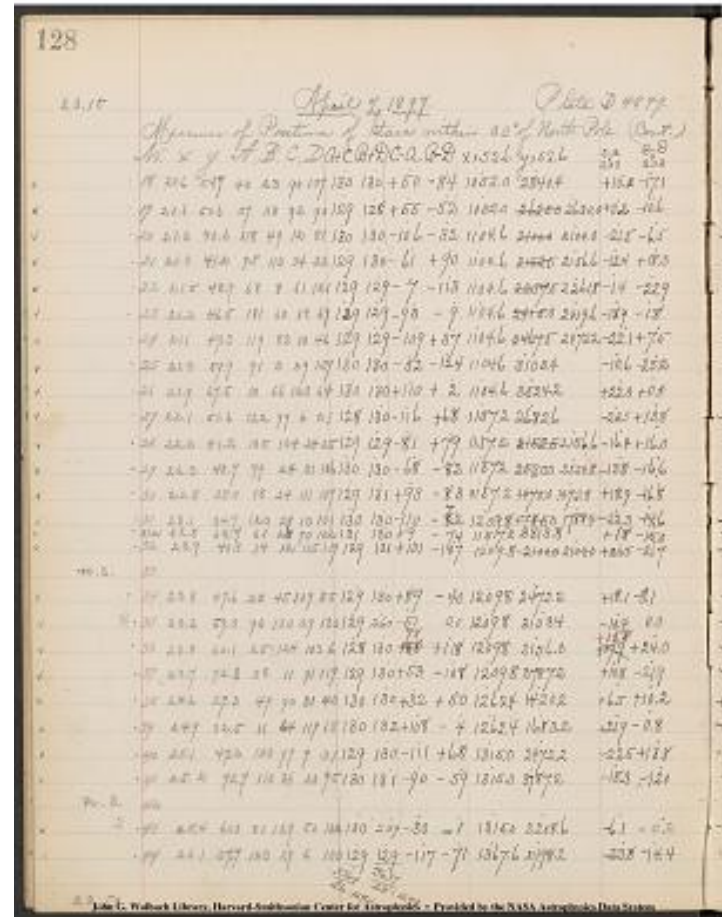
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23.15 April 7, 1897 Plate D 4849.
Measures of Positions of Stars within 30° of No. Pole (Cont.)

[table]												
No.	x	y	A.	B.	C.	D	a+c	B+D	c-a	B-D	X x 52.6	y x 52.6 c-a
^[[x 2.03]] B-D ^[[x 2.03]]												
18	20.6	54.7	40	23	90	107	130	130	+50	-84	1052.0	2840.4 +10.2 -17.1
19	20.6	50.6	37	38	92	90	129	128	+55	-52	1052.0	
20	21.2	40.6	118	49	12	81	130	130	-106	-32	1104.6	
21	21.3	41.2	95	110	34	20	129	130	-61	+90	1104.6	
22	21.5	43.9	68	8	61	121	129	129	-7	-113	1104.6	
23	21.2	46.5	111	60	18	69	129	129	-93	-9	1104.6	
24	21.1	47.3	119	83	10	46	129	129	-109	+37	1104.6	
25	21.3	59.9	91	3	39	127	130	130	-52	-124	1104.6	3103.4 -10.6 -25.2
26	21.9	67.5	10	66	120	64	130	130	+110	+2	1104.6	3524.2 +22.3 +0.4
27	22.1	51.3	122	99	6	31	128	130	-116	+68	1157.2	2682.6 -23.5 +13.8
28	22.2	41.2	105	104	24	25	129	129	-81	+79	1157.2	
29	22.3	48.7	99	24	31	106	130	130	-68	-82	1157.2	
30	22.8	28.8	18	24	111	107	129	131	+93	-83	1157.2	
31	23.1	34.7	120	29	10	101	130	130	-110	-	1157.2	8
32	23.9	40.8	14	12	115	119	129	131	+101	-107	1209.8	
33	23.8	60.1	25	124	103	6	128	130	+	88	1209.8	3156.0 +17.9
34	23.8	47.6	20	45	109	85	129	130	+89	-40	1209.8	2472.2 +18.1 -8.1
35	23.7	72.8	38	11	91	119	129	130	+53	-108	1209.8	3787.2 +10.8 -21.9
36	24.6	27.3	49	90	81	40	130	130	+32	+50	1262.4	1420.2 +6.5 +10.2
37	24.9	32.5	11	64	119	68	130	132	+108	-4	1262.4	1683.2 +21.9 -0.8
38	25.1	47.2	120	99	9	31	129	130	-111	+68	1315.0	2472.2 -22.5 +13.8
39	25.2	72.7	110	36	20	95	130	131	-90	-59	1315.0	3787.2 -18.3 -12.0
40	25.4	61.0	80	129	50	130						
41	25.4	61.0	80	129	50	130						
42	25.4	61.0	80	129	50	130						
43	25.4	61.0	80	129	50	130						



130	259		-30	-1		1315.0	3208.6		-6.1	-0.2						
	44		26.1		57.7		123		29		6		100		<u>129</u>	^{[[3364]]}
	<u>[[26 = 1294]]</u>		<u>129</u>	^{[[3637]]}		<u>[[28</u>										
	= 1299]]			-117	-71		1367.6	2998.2		-23.8	-14.4					

23.50

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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[[table]]

x-2610|y-2580|Corr x|Corr y|

|---|---|---|

-1558.0|+2604|-1547.8|+277.5

-1558.0|+50.0|-1546.8|+60.6

-1505.4|-476.0|-1526.9|-4695

-1505.4|-42.34|-1517.8|-441.7

-1505.4|-318.2|-1506.8|-295.3

-1505.4|-170.4|-1524.3|-168.6

-1505.7|-107.8|-1527.5|-115.3

-1505.4|+523.4|-1516.0|+548.6

-1505.4|+944.2|-1483.1|+943.8

-1452.8|+102.6|-1476.3|+88.8

-1452.8|-423.4|-1469.2|-439.4

-1452.8|-55.2|-1466.6|-38.6

-1452.8|-1107.2|-1433.9|-1090.4

-1400.2|-791.6|-1422.5|-777.0

-1452.8|+733.8|-1451.0|+748.8

-1400.2|-476.0|-1379.7|-454.3

-1400.2|-107.8|-1382.1|-99.7

-1400.2|+523.4|-1410.6|+497.1

-1400.2|+576.0|~~-1382.3~~~~-1384.4~~|+552.0|-1384.4

-1400.2|+1207.2|-1389.4|+1229.1

-1347.6|-1159.8|-~~123~~ 1341.1|-1170.0

-1347.6|-896.8|-1325.7|-896.0

-1295.0|-107.8|-13175|-121.6

-1295.0|+1207.2|-1313.3|+1219.2

-1295.0|+628.6|-1301.1|+628.8|+6y02.5

-1242.4|+418.2|-1266.2|+432.6

[[/table]]

129

1-2110 y-2580 Corr x Corr y

-1558.0 +2604 -1547.8 +277.5

-1558.0 +50.0 -1546.8 +60.6

-1505.4 -476.0 -1526.9 -4695

-1505.4 -42.34 -1517.8 -441.7

-1505.4 -318.2 -1506.8 -295.3

-1505.4 -170.4 -1524.3 -168.6

-1505.7 -107.8 -1527.5 -115.3

-1505.4 +523.4 -1516.0 +548.6

-1505.4 +944.2 -1483.1 +943.8

-1452.8 +102.6 -1476.3 +88.8

-1452.8 -423.4 -1469.2 -439.4

-1452.8 -55.2 -1466.6 -38.6

-1452.8 -1107.2 -1433.9 -1090.4

-1400.2 -791.6 -1422.5 -777.0

-1452.8 +733.8 -1451.0 +748.8

-1400.2 -476.0 -1379.7 -454.3

-1400.2 -107.8 -1382.1 -99.7

-1400.2 +523.4 -1410.6 +497.1

-1400.2 +576.0 ~~-1382.3~~

~~-1384.4~~ +552.0 -1384.4

-1400.2 +1207.2 -1389.4 +1229.1

-1347.6 -1159.8 -~~123~~ 1341.1 -1170.0

-1347.6 -896.8 -1325.7 -896.0

-1295.0 -107.8 -13175 -121.6

-1295.0 +1207.2 -1313.3 +1219.2

-1295.0 +628.6 -1301.1 +628.8 +6y02.5

-1242.4 +418.2 -1266.2 +432.6

-1400.2 -107.8 -1382.1 -99.7

-1400.2 +523.4 -1410.6 +497.1

-1400.2 +576.0 ~~-1382.3~~

~~-1384.4~~ +552.0 -1384.4

-1400.2 +1207.2 -1389.4 +1229.1

-1347.6 -1159.8 -~~123~~ 1341.1 -1170.0

-1347.6 -896.8 -1325.7 -896.0

-1295.0 -107.8 -13175 -121.6

-1295.0 +1207.2 -1313.3 +1219.2

-1295.0 +628.6 -1301.1 +628.8 +6y02.5

-1242.4 +418.2 -1266.2 +432.6

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23.50 April 7, 1897 D4849

Measures of Positions of Stars within 30 degrees of North Pole (Cont.)

[[table]]

[No.]x[y]|A.|B.|C.|D.|a+C|B+D|C-a|B-D|X x 52.6|y x 52.6|c-A x 2.03|B-D x 2.03|

45	26.4	25.3	85	92	44	39	129	131	-41	+53	1367.6	1315.0	-8.3	+10.8
46	26.7	25.8	34	15	95	115	129	130	+61	-100	1367.6	1315.0	+12.4	-20.3

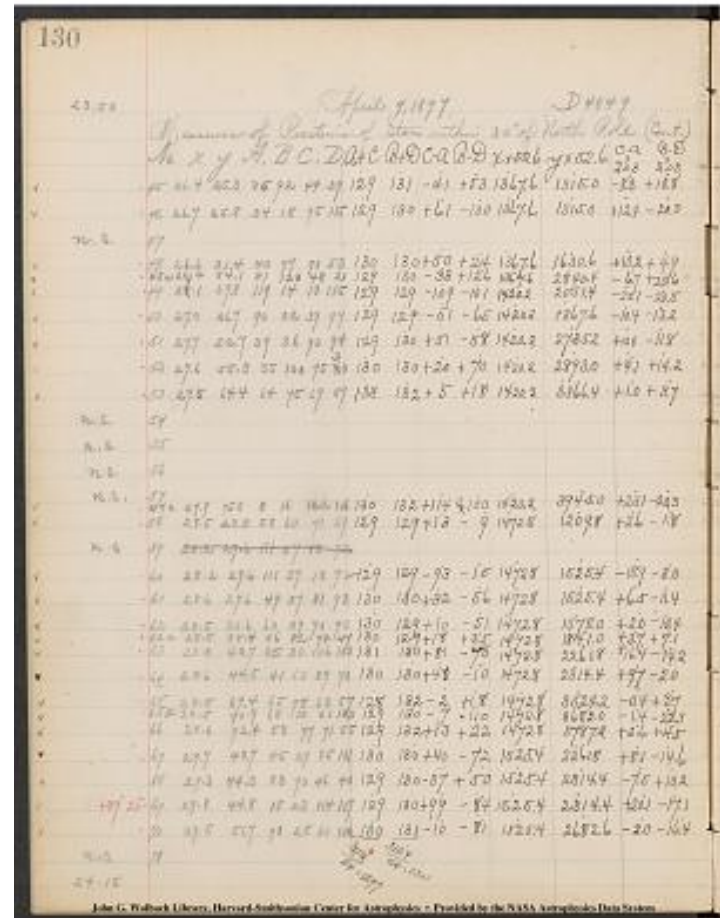
[[n.s]]	47													
48	26.6	31.4	40	77	90	53	130	130	+50	+24	1367.6	1630.6	+10.2	+4.9
48a	26.4	54.1	81	128	48	2	129	130	-33	+126	1367.6	2840.4	-6.7	+25.6
49	2	128	48	2	129	130	-33	+126	1367.6	2840.4	-6.7	+25.6		
109	-101	1420.2	2051.4	-22.1	-20.5									
50	27.3	26.7	90	32	39	97	129	129	-51	-65	1420.2	1367.6	-10.4	-13.2
51	27.7	52.7	39	36	90	94	129	130	+51	-58	1420.2	2735.2	+10.4	-11.8
52	27.6	55.3	55	100	75									
53	27.5	64.4	64	75	69	57	133	132	+5	+18	1420.2	3366.4	+1.0	+3.7

[[n.s]]	54													
[[n.s]]	55													
[[n.s]]	56													
[[n.s]]	57													
57a	27.9	75.8	8	16	122	116	130	132	+114	1420.2	3366.4	+1.0	+3.7	
58	28.5	23.5	58	60	71	69	129	129	+13	-9	1472.8	1209.8	+2.6	-1.8
[[n.s]]	59	28.2	29.6	11	57	18	72	1472.8	1209.8	+2.6	-1.8			

60	28.2	29.6	11	11	57	18	72	129	129	-93	-15	1472.8	1525.4	-18.9	-3.0
61	28.6	29.6	49	37	81	93	130	130	+32	-56	1472.8	1525.4	+6.5	-11.4	
62	28.5	30.6	60	39	70	90	130	129	+10	-51	1472.8	1578.0	+2.0	-10.4	
62a	28.5	35.4	56	82	74	47	130	129	+18	+35	1472.8	1841.0	+3.7	+7.1	
63	28.8	43.7	25	30	106	100	131	130	+81	-70	1472.8	2261.8	+16.4	-14.2	
64	28.6	44.5	41	60	89	70	130	130	+48	-10	1472.8	2314.4	+9.7	-2.0	
65	28.5	67.4	65	75	63	57	128	132	-2	+18	1472.8	3524.2	-0.4	+3.7	
65a	28.5	70.9	68	10	61	120	129	130	-7	-110	1472.8	3682.0	-1.4	-22.3	
66	28.6	72.4	58	77	71	55	129	132	+13	+22	1472.8	3787.2	+2.6	+4.5	
67	29.7	43.7	45	29	85	101	130	130	+40	-72	1525.4	2261.8	+8.1	-14.6	
68	29.3	44.3	83	90	46	40	129	130	-37	+50	1525.4	2314.4	-7.5	+10.2	
[[+89 degrees	26=69]]	29.8	44.8	15	23	114	107	129	130	+99	84	1525.4	2314.4	+20.1	-17.1
70	29.5	51.7	70	25	60	106	130	131	-10	-81	1525.4	2682.6	-2.0	-16.4	
[[n.s]]	71														
4	1297	3124	24=1301												

[[table]]

24.15



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131

[[table]]

| | -2610.|-2580. |

|---|---|---|

135[[/strickethrough]]8[[/strickethrough]]9.3|1304.2|-1250.7|-1275.8|

1380.0|1335.3|-1230.0|-1230.0|-1244.7|

1377.8|1625.7|-12322|-954.3|

1260.9|2814.8|-1249.1|+234.8|

1398.1|2813.8|-1211.9|-508.1|

1409.8|1380.8|-1200.2|-1199.2|

1430.6|2747.0|-1179.4|+167.0|

1424.3|2878.8|-1185.7|+298.8|

1421.2|3362.7|-1188.8|+782.7|

1443.3|3965.3|-11[[/strickethrough]]7[[/strickethrough]]66.7|+1385.3|

1475.4|1211.6|-1134.6|-1368.4|

1453.9|152[[/strickethrough]]5[[/strickethrough]]8.4|-1156.1|-1051.6|

1479.3|1536.8|-1130.7|-1043.2|

1474.8|1588.4|-1135.2|-991.6|

1476.5|1833.9|-1133.5|-[[/strickethrough]]6[[/strickethrough]]746.1|

1489.2|2276.0|-1120.8|-304.0|

1482.5|2316.4|-1127.5|-263.6|

142.4|3520.5|-1127.6|+940.5|

1471.4|3704.3|-1138.6|+1124.3|

1475.4|3782.7|-1134.6|+1202.7|

1533.5|2276.4|-1076.5|-303.6|

[[/strickethrough]]2[[/strickethrough]]1517.9|2304.2|-1092.1|-275.8|

1545.5|2331.5|-1064.5|-248.5|

1523.4|2699.0|-1086.6|+119.0|

131

-2610. -2580.

135 1304.2 -1250.7 -1275.8

1380.0 1335.3 -1230.0 -1230.0 -1244.7

1377.8 1625.7 -12322 -954.3

1260.9 2814.8 -1249.1 +234.8

1398.1 2813.8 -1211.9 -508.1

1409.8 1380.8 -1200.2 -1199.2

1430.6 2747.0 -1179.4 +167.0

1424.3 2878.8 -1185.7 +298.8

1421.2 3362.7 -1188.8 +782.7

1443.3 3965.3 -11[[/strickethrough]]7[[/strickethrough]]66.7 +1385.3

1475.4 1211.6 -1134.6 -1368.4

1453.9 152[[/strickethrough]]5[[/strickethrough]]8.4 -1156.1 -1051.6

1479.3 1536.8 -1130.7 -1043.2

1474.8 1588.4 -1135.2 -991.6

1476.5 1833.9 -1133.5 -[[/strickethrough]]6[[/strickethrough]]746.1

1489.2 2276.0 -1120.8 -304.0

1482.5 2316.4 -1127.5 -263.6

142.4 3520.5 -1127.6 +940.5

1471.4 3704.3 -1138.6 +1124.3

1475.4 3782.7 -1134.6 +1202.7

1533.5 2276.4 -1076.5 -303.6

[[/strickethrough]]2[[/strickethrough]]1517.9 2304.2 -1092.1 -275.8

1545.5 2331.5 -1064.5 -248.5

1523.4 2699.0 -1086.6 +119.0

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24.15 April 7, 1897. Plate D 4849

Measure of Positions of Stars within 30 degrees of North Pole (Cont)

[[table]]

|No.|x|y|A.|B.|C.|D.|a+C|B+D|C-a|B-D|X x 52.6|y x 52.6|C-a x 2.03|B-D x 2.03|

72	29.4	62.9	67	4	61	126	128	130	-6	-122	1525.4	3261.2	-1.2	-24.8
73	29.4	64.2	34	110	95	20	129	130	+61	+90	1525.4	3366.4	+12.4	+18.3

[[n.s.]] 74

[[n.s.]] 75

76|31.0|50.4|125|68|5|64|130|132|-120|+4|1630.6|2630.0|-24.4|+0.8|

[[n.s.]] 77

[[n.s.]] 78

[[n.s.]] 79

80|30.3|67.4|103|82|27|47|130|129|-76|+35|1578.0|3524.2|-15.4|+7.1|

81|30.5|67.4|70|70|60|60|130|130|-10|+10|1578.0|3524.2|-20|+20|

82|30.4|68.2|82|113|49|17|131|130|-33|+96|1578.0|3576.8|-6.7|+19.5|

83|30.6|69.950|5|80|124|130|129|+30|-119|1578.0|3629.4|+6.1|-24.2|

[[+89degrees 12=84]]30.7|74.6|27|40|103|90|130|130|+76|-

50|1578.0|3892.4|+15.428|-10.2|

85|31.3|23.1|93|121|34|8|130|129|-56|+113|1630.6|1209.8|-11.4|+22.9|

86|31.9|30.6|147|129|83|130|130|+128|-36|1630.6|1578.0|+26.0|-7.3|

87|31.9|40.1|9|125|120|4|129|129|+111|+121|1630.6|2104.0|+22.5|+24.6|

88|31.3|43.8|96|18|33|111|129|129|-63|-93|1630.6|2261.8|-12.8|-18.9|

89|31.2|54.8|110|20|20|110|130|130|-90|-90|1630.6|2840.4|-18.3|-18.3|

[[n.s.]] 90

91|31.5|59.9|45|4|54|123|129|130|-21|-116|1630.6|3103.4|-4.3|-23.5|

92|31.3|60.8|96|13|32|117|128|130|-

6|~~8~~|~~8~~|4|-104|1630.6|3156.0|-13.0|-21.1|

92a|31.6|61.6|140|47|90|85|130|132|+50|-38|1630.6|3208.6|+10.2|-

7.7|

93|31.9|61.9|10|9|120|121|130|130|+110|-112|1630.6|3208.6|+22.3|-

22.7|

[[n.s.]] 94

[[24.40 April 21, 1897n.s.]] 95

[[23.05.]] .96|32.1|24.3|122|93|8|37|130|130|-114|+56|1683.2|1262.4|-

23.1|+11.4|

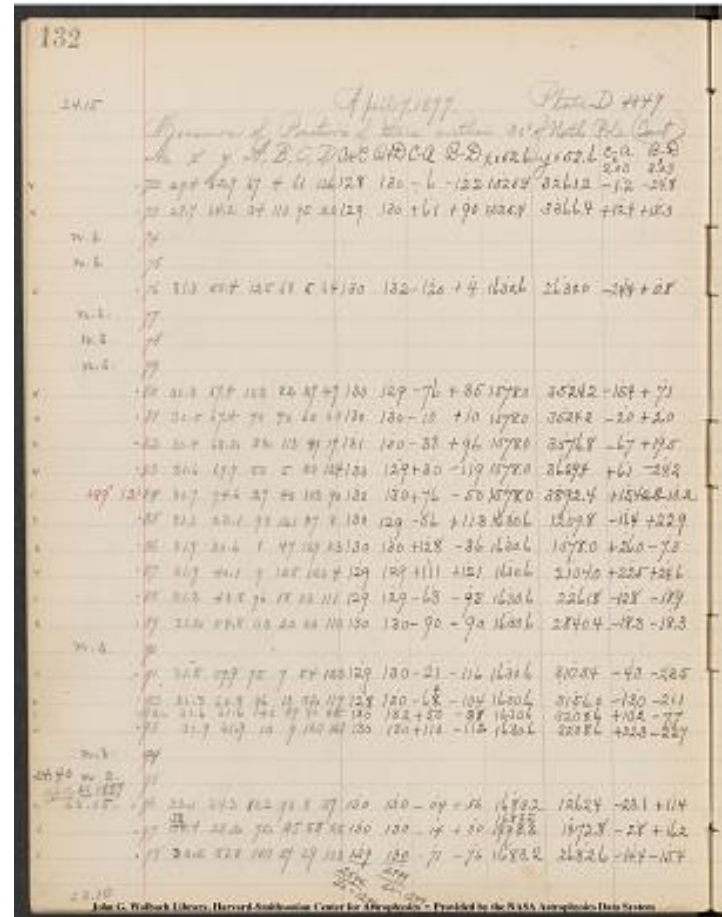
97|~~38~~|~~38~~|

32.4|28.2|72?|105|58|25|130|130|-14|+80|1683.2|1998.8|1472.8|-

2.8|+16.2|

98|32.2|51.8|100|27|29|103|129|130|-71|-76|1683.2|2682.6|-14.4|-15.4|

23.10 2592/20=1296 2599/20=1299



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[[table]]

| | | -2610. | -2580. |

|---|---|---|

1524.2	3286.0	-1085.8	+706.0
1537.8	3348.1	-1072.2	+768.1
1606.2	2629.2	-1003.8	+49.2
1562.6	3517.1	-1047.4	+937.1
1576.0	3522.2	-1034.0	+942.2
1571.3	3557.3	-1038.7	+977.3
1584.1	3653.6	-1025.9	+1073.6
1593.4	3902.6	-1016.6	+1322.6
1619.2	1286.9	-990.8	+1393.1
1656.6	1585.3	-953.4	+994.7
1653.1	2079.4	-956.9	+500.6
1617.8	2280.7	-992.2	+299.3
1612.3	2858.7	-997.7	+278.7
1626.3	3126.9	-983.7	+546.9
1617.6	317.7.1	-992.4	+59.7.1
1640.8	3216.3	-96.9.2	+636.3
1652.9	3231.3	-957.1	+651.3
1660.1	1251.0	-949.9	+1329.0
1680.4	1456.6	-929.6	+1123.4
1668.8	2698.0	-941.2	+118.0

133

			-2610. -2580.
	1524.2	3286.0	-1085.8 + 706.0
	1537.8	3348.1	-1072.2 + 768.1
	1606.2	2629.2	-1003.8 + 49.2
	1562.6	3517.1	-1047.4 + 937.1
	1576.0	3522.2	-1034.0 + 942.2
	1571.3	3557.3	-1038.7 + 977.3
	1584.1	3653.6	-1025.9 + 1073.6
	1593.4	3902.6	-1016.6 + 1322.6
	1619.2	1286.9	-990.8 + 1393.1
	1656.6	1585.3	-953.4 + 994.7
	1653.1	2079.4	-956.9 + 500.6
	1617.8	2280.7	-992.2 + 299.3
	1612.3	2858.7	-997.7 + 278.7
	1626.3	3126.9	-983.7 + 546.9
	1617.6	317.7.1	-992.4 + 59.7.1
	1640.8	3216.3	-96.9.2 + 636.3
	1652.9	3231.3	-957.1 + 651.3
	1660.1	1251.0	-949.9 + 1329.0
	1680.4	1456.6	-929.6 + 1123.4
	1668.8	2698.0	-941.2 + 118.0

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23.10 April 21, 1897 D4849

Measures of positions of stars within 30° No. Pole (Cont.)

[[table]]

No. x y A, B, C, D | a+c B+D | c-a B-D | xx 52.6 yx 52.6 | c-a x 2.03 B-D x 2.03

|---|---|---|---|

n.s 99 ~~[[/strickethrough]]~~ 32.6 65.2 42 111 88 20 ~~[[/strickethrough]]~~

100 32.6 65.2 42 111 88 20 | 130 131 | +46 +91 | 1683.2 3419.0 | +9.3 +18.5

101 33.0 74.7 1 32 129 98 | 130 130 | +128 -66 | 1735.8 3892.4 | +26.0 -13.4

101a 33.4 120.2 84 110 46 20 | 130 130 | -38 +90 | 1735.8 1052.0 | -7.7 +18.3

102 34.0 26.4 1 79 128 51 | 129 130 | +127 +28 | 1788.4 1367.6 | +25.8 +5.7

+89 29 = 103 33.4 31.2 29 114 101 16 | 130 130 | +72 +98 | 1735.8

1630.6 | +14.6 +19.9

104 33.2 35.4 115 70 14 60 | 129 130 | -101 +10 | 1735.8 1841.0 | -20.5 +2.0

105 33.4 36.9 80 9 50 120 | 130 129 | -30 -111 | 1735.8 1893.6 | -6.1 -22.5

106 33.8 71.3 22 99 108 31 | 130 130 | +86 +68 | 1735.8 3734.6 | +17.5 +13.8

107 33.7 45.4 29 80 100 50 | 129 130 | +71 +30 | 1735.8 3945.0 | +14.4 +6.1

n.s 108

109 ~~[[/strickethrough]]~~ 32.3 ~~[[/strickethrough]]~~ 34.3 21.3 90 93 39 37 | 129 130 | -51 +56 | ~~[[/strickethrough]]~~ 1683.2 ~~[[/strickethrough]]~~ 1788.4 1104.6 | -10.4 +11.4

110 34.6 37.1 54 120 75 10 | 129 130 | +21 +110 | 1788.4 1946.2 | +4.3 +22.3

111 34.5 41.4 63 89 66 40 | 129 129 | +03 +49 | 1788.4

215 ~~[[/strickethrough]]~~ 4.4 ~~[[/strickethrough]]~~ 6.6 | +0.6 +9.9

112 34.7 57.3 40 104 90 26 | 130 130 | +50 +78 | 1788.4 2998.2 | 10.2 +15.8

113 34.3 58.5 91 60 39 70 | 130 130 | -52 -10 | 1788.4 3050.8 | -10.6 -2.0

114 34.8 60.1 26 128 103 2 | 129 130 | +77 +126 | 1788.4 3156.0 | +15.6 +2.5

n.s 115

116 34.9 65.5 10 56 120 75 | 130 131 | +110 -19 | 1788.4 | 3419.0 | +22.3 -3.9

117 34.4 70.1 71 120 59 10 | 130 130 | -12 +110 | 1788.4 | 3682.0 | -2.4 | +22.3

118 35.3 23.9 99 3 301 27 | 129 130 | -69 -124 | 184.0 | 1209.8 | -14.0 -25.2

119 35.4 30.3 79 92 50 38 | 129 130 | -29 +54 | 1841.0 | 1578.0 | -5.9 +11.0

120 35.6 31.6 50 56 79 74 | 129 130 | +29 -18 | 1841.0 | 1630.6 | +5.9 -3.7

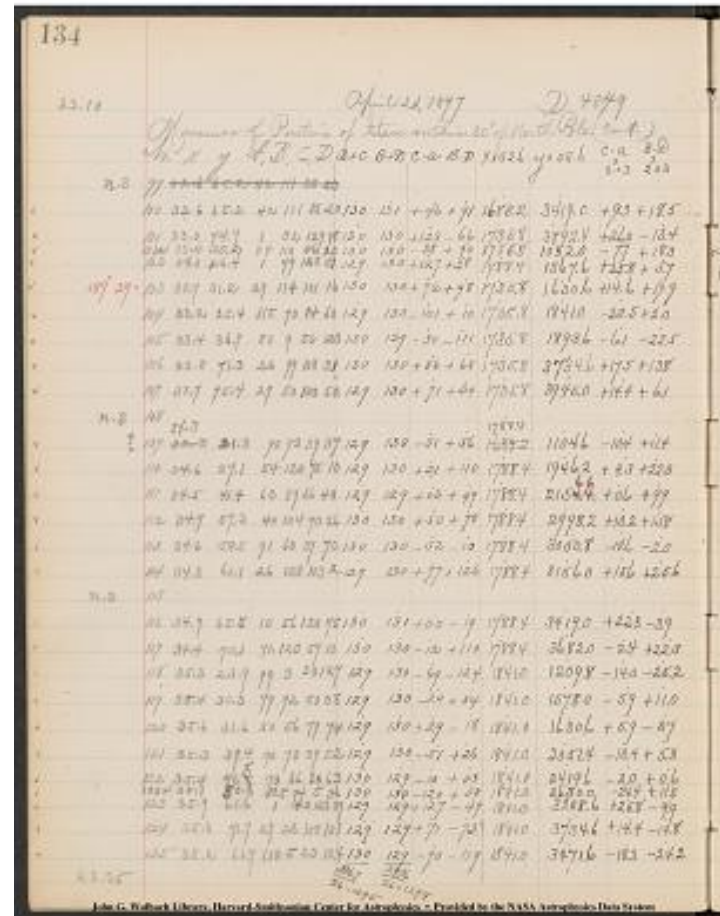
121 35.3 39.4 90 78 39 52 | 129 130 | -51 +26 | 1841.0 | 2051.4 | -10.4 +5.3

122 35.4 46. ~~[[/strickethrough]]~~ 4 ~~[[/strickethrough]]~~ 5 70 66 60 63 | 130 129 | -10 +03 | 1841.0 | 2419.6 | -2.0 +0.6

122a 35.1 50.3 125 94 5 36 | 130 130 | -120 +58 | 1841.0 | 2630.0 | -24.4 +11.8

123 35.9 61.6 1 40 128 89 | 129 129 | +127 -49 | 1841.0 | 3208.6 | +25.8 -9.9 |

124 35.8 71.7 29 28 100 101 | 129 129 | +71 -73 | 1841.0 | 3734.6 |



+14.4 -14.8
125 35.2 66.9 110 5 20 124 | 130 129 | -90 -
119 | 1841.0 | 3471.6 | -183 -24.2
23.35 | | | $3367/26 = 129.5$ $3376/26 = 129.8$ | | | |
| | | | |

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[[5 columned table]]

		-2610.		-2580.		
1692.5	3400.5	-917.5		+820.5		
1761.8	3905.8	-84	[[/strickethrough]] 9	[[/strickethrough]] 8.2		+1325.8
x=900.8						
1728.1	1033.7	-881.9		1546.3		
1814.2	[[/strickethrough]] 2.6	[[/strickethrough]]		1361.9		-795.8 -1218.1
x=848.4						
17	[[/strickethrough]] 6	[[/strickethrough]]		50.4		1610.7 -859.6 -969.3
1715.3	1839.0	-894.7		-741.0		
1729.7	1916.1	-880.3	[[/strickethrough]] 5	[[/strickethrough]]		663.9
1753.3	3720.8	-856.7		+1140.8		
1750.2	3938.9	-859.8		+1358.9		
[[/strickethrough]] 1672.8	[[/strickethrough]]	1778.0		1093.2		
[[/strickethrough]] -937.2	[[/strickethrough]]	^	[[/strickethrough]]	848.0		
[[/strickethrough]] 832.0		-1486.8				
1792.7	1923.9	-817.3		-656.1		
1789.0	214	[[/strickethrough]] 4.5	[[/strickethrough]] 6.7		-821.0	-43
[[/strickethrough]] 5.5	[[/strickethrough]]	3.3				
1798.6	2982.4	-811.4		+402.4		
1777.8	3052.8	-832.2		+472.8		
1804.0	3130.4	-806.0		+550.4		
1810.7	3422.9	-799.3		+842.9		
1786.0	3659.7	-824.0		+1079.7		
1827.0	1235.0	-783.0		-1345.0		
1835.1	1567.0	-774.9		-1013.0		
1846.9	1634.3	-763.1		-945.7		
1830.6	2046.1	[[/strickethrough]] 6	[[/strickethrough]]	779.4		-533.9
1839.0	2419.0	-771.0		-161.0		
1816.6	2618.2	-793.4		+38.2		
1866.8	3218.5	-743.2		+638.5		
1855.4	3749.4	-754.6		+1169.4		
1822.7	3495.8	-787.3		+915.8		

135

-2610. -2580.

1692.5 3400.5 -917.5 +820.5

1761.8 3905.8 -84 9 8.2 +1325.8

x=900.8

1728.1 1033.7 -881.9 1546.3

1814.2 2.6 1361.9 -795.8 -1218.1

x=848.4

17 6 50.4 1610.7 -859.6 -969.3

1715.3 1839.0 -894.7 -741.0

1729.7 1916.1 -880.3 5 663.9

1753.3 3720.8 -856.7 +1140.8

1750.2 3938.9 -859.8 +1358.9

1672.8 1778.0 1093.2

-937.2 ^ 848.0

832.0 -1486.8

1792.7 1923.9 -817.3 -656.1

1789.0 214 4.5 6.7 -821.0 -43

5.5 3.3

1798.6 2982.4 -811.4 +402.4

1777.8 3052.8 -832.2 +472.8

1804.0 3130.4 -806.0 +550.4

1810.7 3422.9 -799.3 +842.9

1786.0 3659.7 -824.0 +1079.7

1827.0 1235.0 -783.0 -1345.0

1835.1 1567.0 -774.9 -1013.0

1846.9 1634.3 -763.1 -945.7

1830.6 2046.1 6 779.4 -533.9

1839.0 2419.0 -771.0 -161.0

1816.6 2618.2 -793.4 +38.2

1866.8 3218.5 -743.2 +638.5

1855.4 3749.4 -754.6 +1169.4

1822.7 3495.8 -787.3 +915.8

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23.35 April 21, 1897 D4849

Measures of Positions of Stars within 30° North Pole (Cont.)

[[15 column table]]

| No. | x | y | A. | B. | C. | D. | a+c | B+D | c-a | B-D | X x 52.6 | y x 52.6 |
 c-a x 2.03 | B-D x 2.03 |

-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

[[n.s]] 126 |

| 127 | ~~[[strikethrough]]~~ 35.8 | ~~[[strikethrough]]~~ 36.8 | 19.2 | 24 | 100 | 105 |
 30 | 129 | 130 | +81 +70 | ~~[[strikethrough]]~~ 1841.0 | ~~[[strikethrough]]~~ 1893.6

| 999.4 | +16.4 | +14.2 |

| ~~[[?]]~~ 128 | 37.0 | 18.8 | 129 | 111 | 130 | 19 | 259 | 130 | +1 | +92 | 1946.2

| 946.8 | +0.2 | +18.7 |

| 129 | 36.4 | 41.1 | 80 | 125 | 49 | 5 | 129 | 130 | -31 | +120 | 1893.6 |

| 2156.6 | -6.3 | +24.4 |

| 130 | 36.5 | 41.1 | 64 | 128 | 65 | 2 | 129 | 130 | +1 | +126 | 1893.6 |

| 2156.6 | +0.2 | +25.6 |

| 131 | 36.4 | 42.0 | 80 | 128 | 50 | 1 | 130 | 129 | -30 | +127 | 1893.6 |

| 2209.2 | -6.1 | +25.8 |

| 132 | 36.8 | 43.2 | 25 | 118 | 104 | 12 | 129 | 130 | +79 | +106 | 1893.6 |

| 2261.8 | +16.0 | +21.5 |

| 133 | 36.3 | 46.5 | 90 | 60 | 40 | 69 | 130 | 129 | -50 -9 | 1893.6 | 2419.6 |

| -10.2 | -1.8 |

| 134 | 36.4 | 47.4 | 72 | 91 | 58 | 39 | 130 | 130 | -14 | +52 | 1893.6 |

| 2472.2 | -2.8 | +10.6 |

| 135 | 36.4 | 57.3 | 70 | 88 | 60 | 42 | 130 | 130 | -10 | +46 | 1893.6 |

| 2998.2 | -2.0 | +9.3 |

| 136 | 36.6 | 61.9 | 43 | 1 | 87 | 129 | 130 | 130 | +44 | -128 | 1893.6 |

| 3208.6 | +8.9 | -26.0 |

| 137 | 36.2 | 62.5 | 107 | 68 | 22 | 61 | 129 | 129 | -85 | +7 | 1893.6 |

| 3261.2 | -17.3 | +1.4 |

| ~~[[strikethrough]]~~ ? | ~~[[strikethrough]]~~ 138 | ~~[[strikethrough]]~~ 53

| ~~[[strikethrough]]~~ 36.5 | 63.3 | 55 | 93 | 75 | 37 | 130 | 130 | +20 | +56 |

| 1893.6 | 3313.8 | +4.1 | +11.4 |

| 139 | 36.4 | 80.7 | 70 | 31 | 60 | 99 | 130 | 130 | -10 | -68 | 189.6 | 4208.0

| -2.0 | 13.8 |

| 140 | 36.6 | 81.2 | 39 | 110 | 90 | 20 | 129 | 130 | +51 | +90 | 1893.6 |

| 4260.6 | +10.4 | +18.3 |

| 141 | 37.2 | 20. | ~~[[strikethrough]]~~ 5 | ~~[[strikethrough]]~~ 4 | 101 | 70 | 29 | 59 |

| 130 | 129 | -72 | +11 | 1946.2 | 4052.0 | -14.6 | +2.2 |

| 142 | 37.8 | 142 | 37.8 | 20.8 | 17 | 10 | 112 | 119 | 129 | +95 | -109

| 1946.2 | 1052.0 | +19.3 | -22.1 |

| 143 | 37.4 | 37.3 | 75 | 100 | 55 | 30 | 130 | 130 | -20 | +70 | 1946.2 |

| 1946.2 | -4.1 | +14.2 |

| 144 | 37.9 | 37.8 | 10 | 20 | 120 | 110 | 130 | 130 | +110 | -90 | 1946.2 |

| 1946.2 | +22.3 | -18.3 |

| 145 | 37.6 | 38.4 | 50 | 79 | 80 | 50 | 130 | 129 | +30 | +29 | 1946.2 |

| 1998.8 | +6.1 | +5.9 |

| 146 | 37.6 | 46.4 | 35 | 78 | 94 | ~~[[strikethrough]]~~ 7 | ~~[[strikethrough]]~~ 54 |

| 129 | 129 | +59 | +21 | 1946.2 | 2419.6 | +12.0 | +4.3 |

| 147 | 37.5 | 60.4 | 58 | 77 | 70 | 54 | 128 | 131 | +12 | +23 | 1946.2 |

| 3156.0 | +2.4 | +4.7 |

| 148 | 37.9 | 64.3 | 19 | 93 | 111 | 37 | 130 | 130 | +92 | +56 | 1946.2 |

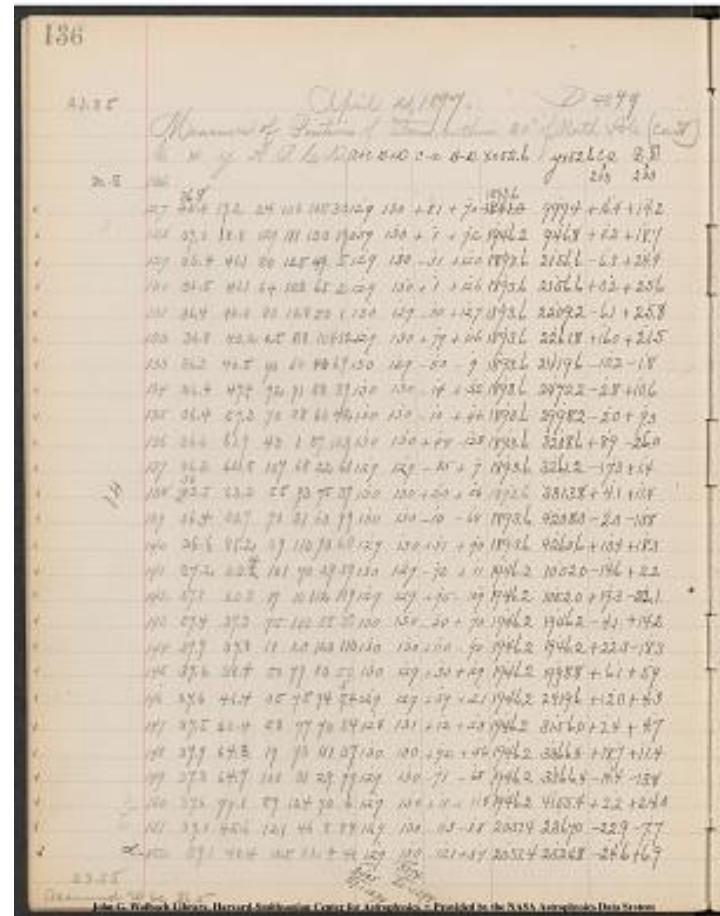
| 3366.4 | +18.7 | +11.4 |

| 149 | 37.3 | 64.7 | 100 | 31 | 29 | 99 | 129 | 130 | -71 | -68 | 1946.2 |

| 3366.4 | -14.4 | -13.6 |

| 150 | 37.6 | 79.1 | 59 | 124 | 70 | 6 | 129 | 130 | +11 | +118 | 1946.2 |

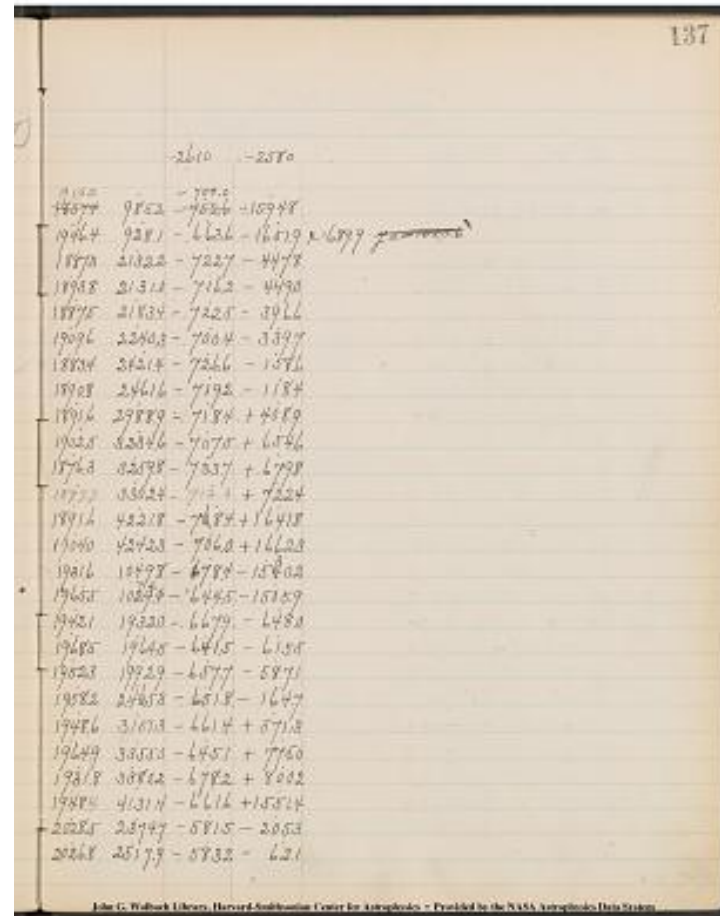
| 4155.4 | +2.2 | +24.0 |



| 151 | 39.0 | 45.6 | 121 | 46 | 8 | 84 | 129 | 130 | -113 | -38 | 2051.4 |
 2367.0 | -22.9 | -7.7 |
 |[[d-]] 152 | 39.1 | 48.4 | 125 | 82 | 4 | 48 | [[underline]]129[[/underline]] |
 [[underline]]130[[/underline]] | -121 | +34 | 205.4 | 2524.8 | -24.6 | +6.9 |
 23.55 | | | | | | [[equation]] 3495/27=1294 | 3374/26=1298
 [[/equation]] | | | | | | |
 Assumed to be 36.5

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
 Variables M5 #4
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137
 [[table]]
	-2610	-2580
 [[/striketrough]]1857.4[[/striketrough]]1910.0 | 985.2 | [[/striketrough]]-
 752.6[[/striketrough]]-700.0 | -1594.8 |
 1946.4 | 928.1 | -663.6 | -1651.9 [[x=689.9[[/striketrough]]y = -
 1625.6[[/striketrough]]]] |
 1887.3 | 2132.2 | -722.7 | -447.8 |
 1893.8 | 2131.0 | -716.2 | -449.0 |
 1887.5 | 2183.4 | -722.5 | -396.6 |
 1909.6 | 2240.3 | -700.4 | -339.7 |
 1883.4 | 2421.4 | -726.6 | -158.6 |
 1890.8 | 2461.6 | -719.2 | -118.4 |
 1891.6 | 2988.9 | -718.4 | +408.9 |
 1902.5 | 3234.6 | -707.5 | +654.6 |
 1876.3 | 3259.8 | -733.7 | +679.8 |
 1897.7 | 3302.4 | -712.3 | +722.4 |
 1891.6 | 4221.8 | -7[[/striketrough]]0[[/striketrough]]18.4 | +1641.8 |
 1904.0 | 4242.3 | -706.0 | + 1662.3 |
 1931.6 | 1049.8 | -678.4 | -15[[/striketrough]]4[[/striketrough]]30.2 |
 1965.5 | 10[[/striketrough]]29[[/striketrough]]74.1 | -644.5 | -1505.9 |
 1942.1 | 1932.0 | -667.9 | -648.0 |
 1968.5 | 1964.5 | -641.5 | -615.5 |
 1952.3 | 1992.9 | -657.7 | -587.1 |
 1958.2 | 24[[/striketrough]]0[[/striketrough]]15.3 | -651.8 | -164.7 |
 1948.6 | 3151.3 | -661.4 | +571.3 |
 1964.9 | 3355.0 | -645.1 | +775.0 |
 1931.8 | 3380.2 | -678.2 | +800.2 |
 1948.4 | 4131.4 | -661.6 | +1551.4 |
 2028.5 | 2374.7 | -581.5 | -205.3 |
 2026.8 | 2517.9 | -583.2 | -62.1 |



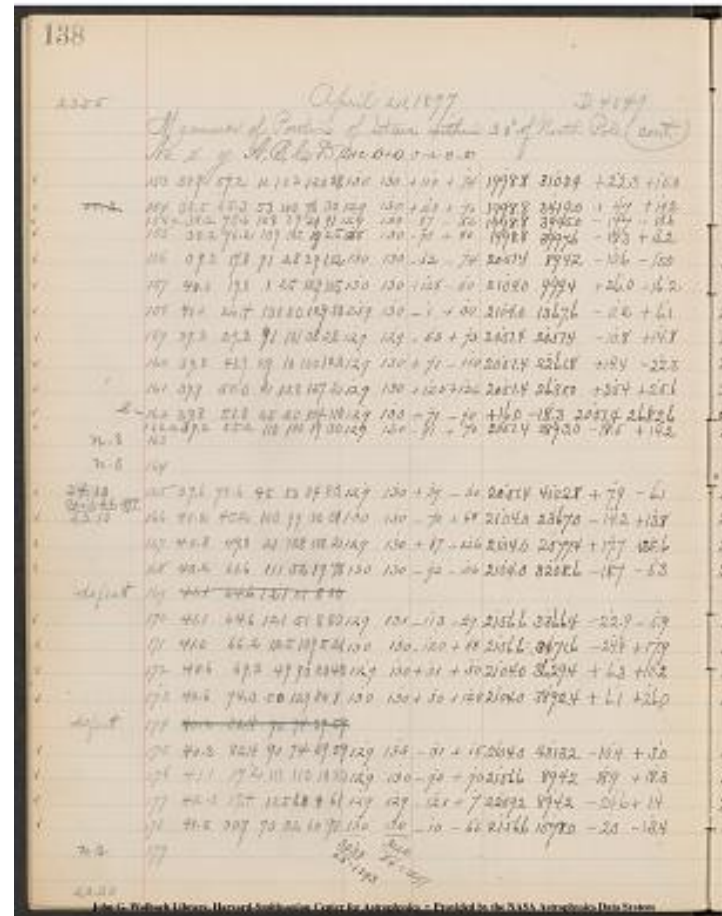
Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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23.55 April 21, 1897 D4849

Measures of Positions of Stars within 30° of North Pole (cont.)

[[table]]

No.	x	y	A.	B.	C.	D.	a+c	B+D	c-a	B-D			
153	38.9	59.2	10	102	120	28	130	130	+110	+74	1998.8		
3103.4	+22.3	+15.0											
[[154]]	38.5	65.3	53	100	76	30							
129	130	+23	+70	1998.8	3419.0	+4.7	+14.2						
154a	38.2	75.6	108	39	21	91	129	130	-87	-52	1998.8		
3945.0	-17.7	-10.6											
155	38.2	76.2	109	105	19	25	128	130	-90	+80	1998.8		
3997.6	-18.3	+16.2											
156	39.3	17.8	91	28	39	102	130	130	-52	-74	2051.4		
894.2	-10.6	-15.0											
157	40.0	19.8	1	25	129	105	130	130	+128	-80	2104.0		
999.4	+26.0	-16.2											
158	40.0	26.4	130	80	129	50	259	130	-1	+30	2104.0		
1367.6	-0.2	+6.1											
159	39.3	39.3	91	101	38	28	129	129	-53	+73	2051.4		
2051.4	-10.8	+14.8											
160	39.8	43.9	29	10	100	120	129	130	+71	-110	2051.4		
2261.8	+14.4	-22.3											
161	39.9	50.0	2	128	127	2	129	130	+125	+126	2051.4		
2630.0	+25.4	+25.6											
[[1-]]	162	39.8	51.8	25	20	104	110	129	130	+79	-90	+16.0	
-18.3	2051.4	2682.6											
162a	39.2	55.2	110	100	19	30	129	130	-91	+70	2051.4		
2893.0	-18.5	+14.2											
[[n.s]]	163												
[[n.s]]	164												
[[24.10]]	165	39.6	78.6	45	50	84	80	129	130	+39	-30		
2051.4	4102.8	+7.9	-6.1										
[[underline]]	April 26, 1897	[[underline]]											
[[23.10]]	166	40.2	45.2	100	99	30	31	130	130	-70	+68		
2104.0	2367.0	-14.2	+13.8										
167	40.8	49.0	21	128	108	2	129	130	+87	+126	2104.0		
2577.4	+17.7	+2[[168]]	5	[[168]]	6								
168	40.2	61.6	111	52	19	78	130	130	-92	-26	2104.0		
3208.6	-18.7	-5.3											
[[defect]]	169	[[169]]	41.1	64.6	121	51	8	80					
[[170]]													
170	41.1	64.6	121	51	8	80	129	131	-113	-29	2156.6		
3366.4	-22.9	-5.9											
171	41.0	66.2	125	109	5	21	130	130	-120	+88	2156.6		
3471.6	-24.4	+17.9											
172	40.6	69.3	49	90	80	40	129	130	+31	+50	2104.0		
3629.4	+6.3	+10.2											
173	40.6	74.0	50	129	80	1	130	130	+30	+128	2104.0		
3892.4	+6.1	+26.0											
[[defect]]	174	[[174]]	40.2	82.4	90	74	39	59					
[[175]]													
175	40.3	82.4	90	74	39	59	129	133	-51	+15	2104.0		
4313.2	-10.4	+3.0											
176	41.1	17.2	111	110	18	20	129	130	-93	+90	2156.6		
894.2	-18.9	+18.3											
177	42.0	17.4	125	68	4	61	129	129	-121	+7	2209.2		
894.2	-24.6	+1.4											
178	41.5	30.7	70	32	60	98	[[underline]]	130	[[underline]]				



130 | -10 | -66 | 2156.6 | 1578.0 | -2.0 | -13.4 |
| n.s. | 179 | $3233/25=1293$ | $3122/24=1297$ |

23.30

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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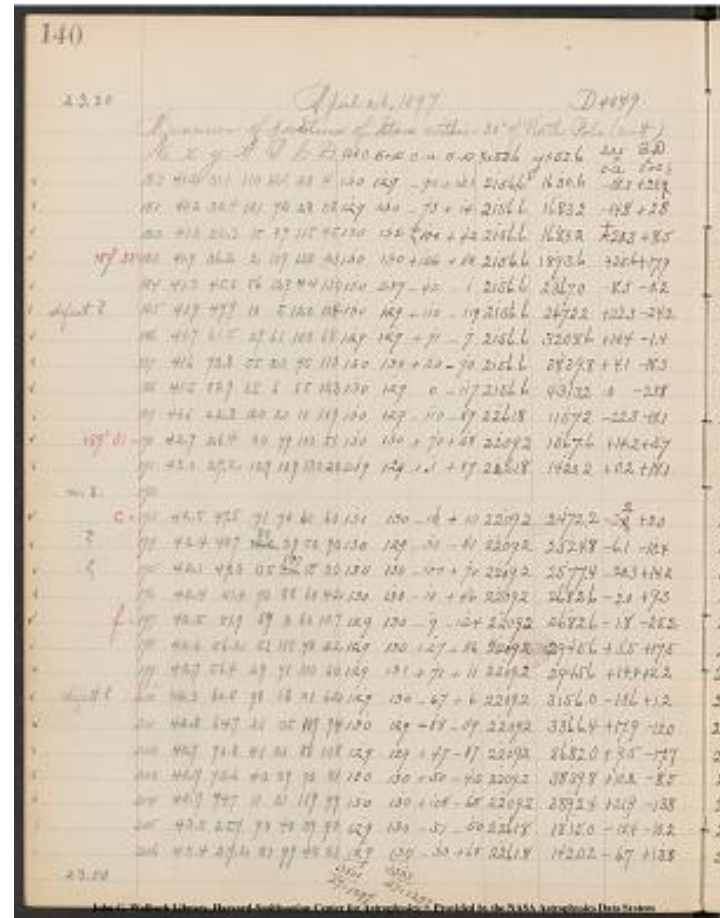
23.30 April 26, 1897 D4849

Measures of positions of stars within 30° No. Pole (Cont.)

[[table]]

[No. | x | y | A | B | C | D | a+c | B+D | C-a | B-D | X x 52.6 | Yx 52.6 | 2.03xC-a | B-D x 2.03]

180	41.2	31.1	110	125	20	4	130	129	-90	+121	2156.6	1630.6	-
183	41.2	32.4	101	72	28	58	129	130	-73	+14	2156.6	1683.2	-14.8
182	41.8	32.3	15	87	115	45	130	132	+100	42	2156.6	1683.2	-
183	41.9	36.2	2	109	128	21	130	130	+126	+88	2156.6	1893.6	+25.6
184	41.3	45.0	86	129	44	130	130	259	-42	-1	2156.6	2367.0	-8.5
185	41.9	47.9	10	51	120	124	130	129	+110	-119	2156.6	2472.2	+22.3
186	41.7	61.5	29	61	100	68	129	129	+71	-7	2156.6	3208.6	+14.4
187	41.6	73.8	55	20	75	110	130	130	+20	-90	2156.6	3839.8	+4.1
188	41.5	82.9	65	65	123	130	129	0	-117	2156.6	4313.2	0	-23.8
189	43.1	22.8	120	20	10	109	130	129	-110	-89	2261.8	1157.2	-22.3
190	42.7	216.4	30	79	100	51	130	130	+70	+28	2209.2	1367.6	4.2
191	43.0	27.2	129	109	130	20	259	129	+1	+89	2261.8	1420.2	+0.2
192	42.5	47.5	71	70	60	60	131	130	-10	+10	2209.2	2472.2	-2
193	42.4	48.7	120	129	-30	-51	2209.2	2524.8	-6.1	-10.4			
194	42.1	49.3	115	20	100	15	30	130	-100	+70	2209.2	2577.4	-20.3
195	42.1	51.4	40	88	60	42	130	130	-10	+46	2209.2	2682.6	-2.0
196	42.6	51.9	69	3	60	127	129	130	-9	-124	2209.2	2682.6	-1.8
197	42.6	56.2	51	108	78	22	129	130	+27	+86	2209.2	2945.6	+5.5
198	42.7	56.4	29	71	100	60	129	131	+71	+11	2209.2	2945.6	+14.4
199	42.3	60.5	98	63	62	129	130	-67	+6		2209.2	3156.0	-13.6
200	42.8	64.7	21	35	109	94	130	129	+88	-59	2209.2	3366.4	+17.9
201	42.7	70.8	41	21	88	108	129	129	+47	-87	2209.2	3682.0	+9.5
202	42.4	73.6	40	39	90	81	130	130	+50	-42	2209.2	3839.8	+10.2
203	42.9	74.7	11	31	119	99	130	130	+108	-68	2209.2	3892.4	+21.9
204	43.5	25.7	90	40	39	90	129	130	-51	-50	2261.8	1315.0	-10.4
205	43.4	27.2	81	99	48	31	129	130	-33	+68	2261.8	1420.2	-6.7
206	43.0	27.2	81	99	48	31	129	130	-33	+68	2261.8	1420.2	-6.7



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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[[table]]

| | | -2610 | -2580 |

|---|---|---|

2138.3|1605.7|-471.7|974.3|

2141.8|1680.4|-468.2|-899.6|

21~~[[/strickethrough]]~~36.3~~[[/strickethrough]]~~76.9|1674.7|-~~[[/strickethrough]]~~473.7~~[[/strickethrough]]~~433.1|-905.3|

2182.2|1875.7|-427.8|-704.3|

2148.1|2367.2|-461.9|-212.8 [[y=239.1]]

2178.9|2496.4|-431.1|-83.6|

2171.0|3210.0|-439.0|+630.0|

2160.7|3858.1|-449.3|+1278.1|

2156.6|4337.0|-453.4|+1757.0|

2239.5|1175.3|-370.5|-1404.7|

2223.4|1361.9|-386.6|-1218.1|

2262.0|1402.1|-348.0|-1177.9[[y=-374.3]]

2207.~~[[/strickethrough]]~~2~~[[/strickethrough]]~~0|2470.2|-40~~[[/strickethrough]]~~2.8~~[[/strickethrough]]~~3.0|-109.8|

2203.1|2535.2|-406.9|-44.8|

2188.9|2563.2|-421.1|-16.8|

2207.2|2673.3|-402.8|+93.3|

2207.4|2707.8|-402.6|+127.8|

2214.7|2928.1|-395.3|+348.1|

2223.6|2943.4|-386.4|+363.4|

2195.6|3154.8|-414.4|+574.8|

2227.1|3378.4|-382.9|+7~~[[/strickethrough]]~~8~~[[/strickethrough]]~~98.4|2218.7|36~~[[/strickethrough]]~~64.3~~[[/strickethrough]]~~99.7|-391.3|+1119.7|

2219.4|3848.3|-390.6|+1268.3|

2231.1|3906.2|-378.9|+1326.2|

2251.4|1325.2|-358.6|-1254.8|

2255.1|1406.4|-354.9|-1173.6|

141

-2610 -2580

2138.3 1605.7 -471.7 974.3

2141.8 1680.4 -468.2 -899.6

21~~[[/strickethrough]]~~36.3~~[[/strickethrough]]~~76.9|1674.7|-~~[[/strickethrough]]~~

473.7~~[[/strickethrough]]~~433.1|-905.3|

2182.2|1875.7|-427.8|-704.3|

2148.1|2367.2|-461.9|-212.8 [[y=239.1]]

2178.9|2496.4|-431.1|-83.6|

2171.0|3210.0|-439.0|+630.0|

2160.7|3858.1|-449.3|+1278.1|

2156.6|4337.0|-453.4|+1757.0|

2239.5|1175.3|-370.5|-1404.7|

2223.4|1361.9|-386.6|-1218.1|

2262.0|1402.1|-348.0|-1177.9[[y=-374.3]]

2207.~~[[/strickethrough]]~~2~~[[/strickethrough]]~~0|2470.2|-40~~[[/strickethrough]]~~

2.8~~[[/strickethrough]]~~3.0|-109.8|

2203.1|2535.2|-406.9|-44.8|

2188.9|2563.2|-421.1|-16.8|

2207.2|2673.3|-402.8|+93.3|

2207.4|2707.8|-402.6|+127.8|

2214.7|2928.1|-395.3|+348.1|

2223.6|2943.4|-386.4|+363.4|

2195.6|3154.8|-414.4|+574.8|

2227.1|3378.4|-382.9|+7~~[[/strickethrough]]~~8~~[[/strickethrough]]~~98.4|

2218.7|36~~[[/strickethrough]]~~64.3~~[[/strickethrough]]~~99.7|-391.3|+1119.7|

2219.4|3848.3|-390.6|+1268.3|

2231.1|3906.2|-378.9|+1326.2|

2251.4|1325.2|-358.6|-1254.8|

2255.1|1406.4|-354.9|-1173.6|

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

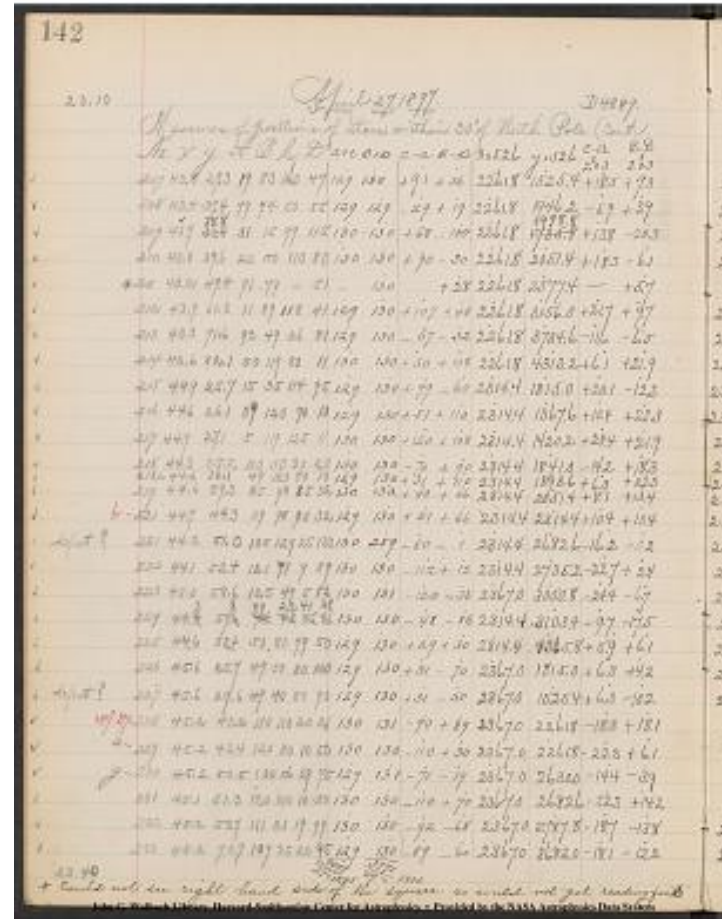
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23.10 April 27, 1897 D4849
Measures of positions of Stars within 30° of No. Pole (cont.)

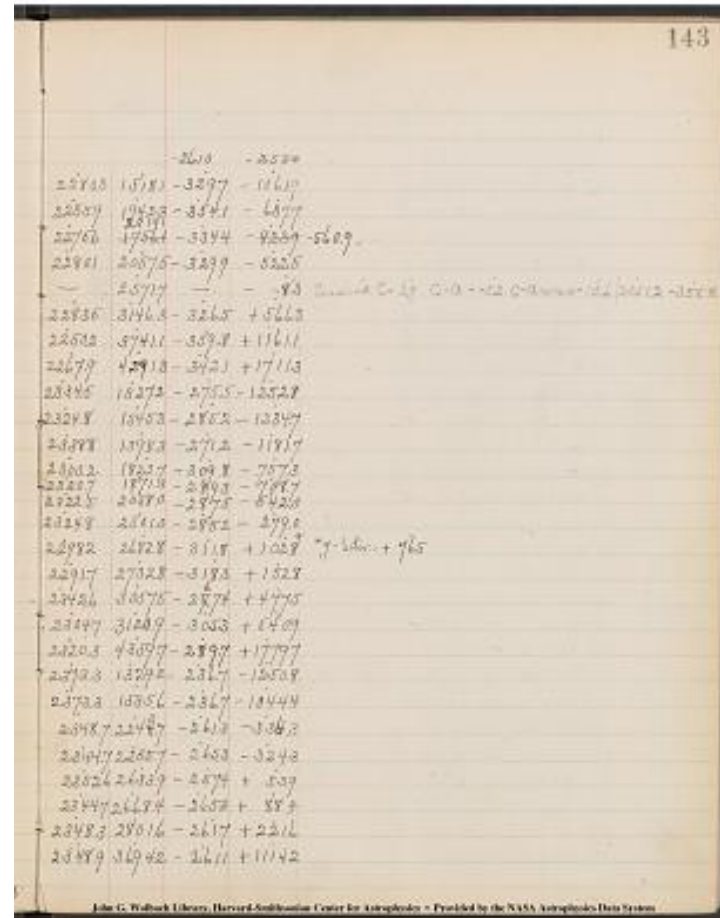
[table]	No.	x	y	a	b	c	d	a+c B+D	c-a B-D	X x 52.6	Y y 52.6	c-a ^[[x 2.03]] B-D ^[[x 2.03]]
207	43.8	29.3	19	83	1	1	1	1	1	1	1	1
47	129	130	+91	+36	2261.8	1525.4	+18.5	+7.3				
208	43.4	37.4	79	74	50	55	129	129	-29	+19	2261.8	
1946.2	-5.9	+3.9										
209	43.74	43.74	33.8	38.8	31	15	99					
115	130	130	+68	-100	2261.8	1735.8	1998.8					
210	43.8	39.6	20	50	110	80	130	130	+90	-30	2261.8	
2051.4	+18.3	-6.1										
*	211	43.2	49.4	91	79	-	51	-	130	+28	2261.8	2577.4
212	43.9	60.3	11	89	118	41	129	130	+107	+48	2261.8	
3156.0	+21.7	+9.7										
213	43.3	71.6	93	49	36	81	129	130	-57	-32	2261.8	
3734.6	-11.6	-6.5										
214	43.6	82.1	50	119	80	11	130	130	+30	+108	2261.8	
4313.2	+6.1	+21.9										
215	44.9	25.7	15	35	114	95	129	130	+99	-60	2314.4	
1315.0	+20.1	-12.2										
216	44.6	26.1	39	120	90	10	129	130	+51	+110	2314.4	
1367.6	+10.4	+22.3										
217	44.9	27.1	5	119	125	11	130	130	+120	+108	2314.4	
1420.2	+24.4	+21.9										
218	44.3	35.2	100	110	30	20	130	130	-70	+90	2314.4	
1841.0	-14.2	+18.3										
218a	44.6	36.1	49	130	80	10	129	130	+31	+110	2314.4	
1893.6	+6.3	+22.3										
219	44.6	39.3	45	98	85	32	130	130	+40	+66	2314.4	
2051.4	+8.1	+13.4										
b=	220	44.7	44.3	39	98	90	32	129	130	+51	+66	2314.4
2314.4	+10.4	+13.4										
defect?	221	44.2	51.0	105	129	25	130	130	259	-80	-1	
2314.4	2682.6	-16.2	-0.2									
222	44.1	52.4	121	71	9	59	130	130	-112	+12	2314.4	
2735.2	-22.7	+2.4										
223	45.0	58.6	125	49	5	82	130	131	-120	-33	2367.0	
3050.4	-24.4	-6.7										
224	44. 44.	44.	3	59.	4	3	59.	4	3	59.	4	3
48	48	48	22	55	41	81	108	130	130	48	86	2314.4
225	44.6	83.4	50	80	79	50	129	130	+29	+30	2314.4	
4365.8	+5.9	+6.1										
226	45.6	25.7	49	30	80	100	129	130	+31	-70	2367.0	
1315.0	+6.3	-14.2										
defect?	227	45.6	29.6	49	40	80	90	129	130	+31	-50	
2367.0	1525.4	+6.3	-10.2									
+89°37'	228	45.2	43.2	110	110	20	21	130	131	-90	+89	
2367.0	2261.8	-18.3	+18.1									
a=	229	45.2	43.4	120	80	10	50	130	130	-110	+30	2367.0
2261.8	-22.3	+6.1										
g=	230	45.2	50.5	100	56	29	75	129	131	-71	-19	2367.0



23.40

Variables M5 #4

[[4 column]]
 | | | -2160|-2580|
 |---|---|---|
 2280.3|1518.1|-329.7|-1061.9|
 2255.9|1942.3|-354.1|-637.7|
 2275.6|~~1756.1~~|~~2019.1~~-|
 334.4|~~823.9~~-|~~560.9~~|
 2280.1|2057.5|-329.9|-522.5|
 |2571.7|-|-8.3 [[Assume C-3.9 C-A=-5.2 C-A cors = -10.6 2251.2-358.8]]
 2283.5|3146.3|-326.5|+566.3|
 2250.2|3741.1|-359.8|+1161.1|
 2267.9|4291.3|-342.1|+1711.3|
 2334.5|1327.2|-275.5|-1252.8|
 2324.8|1345.3|-285.2|-1234.7|
 2338.8|1398.3|-271.2|-1181.7|
 2300.2|1822.7|-309.8|-757.3|
 2320.7|1871.3|-289.3|-708.7|
 2322.5|2038.0|-287.5|-542.0|
 2324.8|2301.0|-285.2|-279.0|
 2298.2|2682.8|-311.8|+102.8*[[* y- 1/2div = +76.5]]|
 2291.7|2732.8|-318.3|+152.8|
 2342.6|3057.5|-2|~~7~~|67.4|+477.5]]|
 2304.7|3120.9|-305.3|+540.9|
 2320.3|4359.7|-289.7|+1779.7|
 2373.3|1329.2|-236.7|-1250.8|
 2373.3|1535.6|-236.7|-1044.4|
 2348.7|224|~~4~~|3.7|-261.3|-334.4|
 2344.7|2255.7|-265.3|-324.3|
 2352.6|2633.9|-257.4|+53.9|
 2344.7|2668.4|-265.3|+88.4|
 2348.3|2801.6|-261.7|+221.6|
 2348.9|3694.2|-261.1|+1114.2|



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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14^[[h]] 45

[[table]]

| No. | x | y | A. | B. | C. | D. | a+c | B+D | c-a | B-D | Xx52.6 | yx52.6 | c-a
x2.03 | B-D x2.03 |

|-----|

| 234 | 45.4 | 70.9 | 75 | 8 | 53 | 121 | 128 | 129 | -22 | -113 | 2367.0 |

| 3682.0 | -4.5 | -22.9 |

| 235 | 45.7 | 73.7 | 31 | 35 | 99 | 96 | 130 | 131 | +68 | -61 | 2367.0 |

| 3839.8 | +13.8 | -12.4 |

| defect 236 | ~~[[[strikethrough]] 45[[/strikethrough]]~~ | ~~[[[strikethrough]]~~
74[[/strikethrough]]

| 237 | 45.6 | 79.8 | 40 | 21 | 90 | 109 | 130 | 130 | +50 | -88 | 2367.0 |

| 4155.4 | +10.2 | -17.9 |

| 238 | 46.7 | 16.0 | 30 | 129 | 99 | 130 | 129 | 259 | +69 | -1 | 2419.6 |

| 841.6 | +14.0 | -0.2 |

| 239 | 46.4 | 18.7 | 68 | 39 | 61 | 91 | 129 | 130 | -7 | -52 | 2419.6 | 946.8 |

| -1.4 | -10.6 |

| 240 | 46.2 | 19.7 | 106 | 39 | 22 | 90 | 128 | 129 | -84 | -51 | 2419.6 |

| 999.4 | -17.1 | -10.4 |

| [[defect?]] 241 | 46.5 | 26.5 | 55 | 69 | 74 | 61 | 129 | 130 | +19 | +8 |

| 2419.6 | 1367.6 | +3.9 | +1.6 |

| 242 | 46.4 | 27.5 | 82 | 60 | 49 | 70 | 131 | 130 | -33 | -10 | 2419.6 |

| 1420.2 | -6.7 | -2.0 |

| 243 | 46.7 | 27.7 | 30 | 35 | 99 | 95 | 129 | 130 | +69 | -60 | 2419.6 |

| 1420.2 | +14.0 | -12.2 |

| [[n.s.]] 244 | ~~[[[strikethrough]] 46.8[[/strikethrough]]~~ || ~~[[[strikethrough]] 37.0[[/strikethrough]]~~ | ~~[[[strikethrough]] 20[[/strikethrough]]~~ || ~~[[[strikethrough]] 128[[/strikethrough]]~~ | ~~[[[strikethrough]] 109[[/strikethrough]]~~ | 3 |

| 245 | 46.8 | 37.0 | 20 | 128 | 109 | 3 | 129 | 131 | +89 | +125 | 2419.6 |

| 1946.2 | +18.1 | +25.4 |

| 246 | 46.4 | 59.6 | 71 | 45 | 59 | 85 | 130 | 130 | -12 | -40 | 2419.6 |

| 3103.4 | -2.4 | -8.1 |

| [[n.s.]] 247 |

| 248 | 46.3 | 74.2 | 90 | 110 | 39 | 20 | 129 | 130 | -51 | +90 | 2419.6 |

| 3892.4 | -10.4 | +18.3 |

| 249 | 46.9 | 75.4 | 6 | 75 | 122 | 54 | 128 | 129 | +116 | +21 | 2419.6 |

| 3945.0 | +23.5 | +4.3 |

| 250 | 46.3 | 83.3 | 103 | 92 | 26 | 38 | 129 | 130 | -77 | +54 | 2419.6 |

| 4365.8 | -15.6 | +11.0 |

| 251 | 47.6 | 17.3 | 40 | 90 | 89 | 39 | 129 | 129 | +49 | +51 | 2472.2 |

| 894.2 | +9.9 | +10.4 |

| 252 | 47.4 | 17.6 | 82 | 40 | 46 | 90 | 128 | 130 | -36 | -50 | 2472.2 | 894.2 |

| -7.3 | -10.2 |

| 253 | 47.5 | 28.6 | 70 | 40 | 59 | 89 | 129 | 129 | -11 | -49 | 2472.2 |

| 1472.8 | -2.2 | -9.9 |

| 254 | 47.3 | 32.3 | 101 | 90 | 28 | 40 | 129 | 130 | -73 | +50 | 2472.2 |

| 1683.2 | -14.8 | +10.2 |

| 255 | 47.7 | 34.4 | 30 | 82 | 99 | 48 | 129 | 130 | +69 | +34 | 2472.2 |

| 1788.4 | +14.0 | +6.9 |

| 256 | 47.6 | 44.6 | 50 | 50 | 80 | 80 | 130 | 130 | +30 | -30 | 2472.2 |

| 2314.4 | +6.1 | -6.1 |

| 257 | 47.7 | 45.5 | 30 | 60 | 100 | 70 | 130 | 130 | +70 | -10 | 2472.2 |

| 2367.0 | +14.2 | -2.0 |

| [[n.s.]] 258 |

| 259 | 47.8 | 48.1 | 29 | 120 | 100 | 10 | 129 | 130 | +71 | +110 | 2472.2 |

| 2524.8 | +14.4 | +22.3 |

| [[defect?]] 260 | 47.6 | 51.1 | 51 | 128 | 79 | 2 |

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14^[[h]] 45

[[table]]

| No. | x | y | A. | B. | C. | D. | a+c | B+D | c-a | B-D | Xx52.6 | yx52.6 | c-a
x2.03 | B-D x2.03 |

|-----|

| 234 | 45.4 | 70.9 | 75 | 8 | 53 | 121 | 128 | 129 | -22 | -113 | 2367.0 |

| 3682.0 | -4.5 | -22.9 |

| 235 | 45.7 | 73.7 | 31 | 35 | 99 | 96 | 130 | 131 | +68 | -61 | 2367.0 |

| 3839.8 | +13.8 | -12.4 |

| defect 236 | ~~[[[strikethrough]] 45[[/strikethrough]]~~ | ~~[[[strikethrough]]~~
74[[/strikethrough]]

| 237 | 45.6 | 79.8 | 40 | 21 | 90 | 109 | 130 | 130 | +50 | -88 | 2367.0 |

| 4155.4 | +10.2 | -17.9 |

| 238 | 46.7 | 16.0 | 30 | 129 | 99 | 130 | 129 | 259 | +69 | -1 | 2419.6 |

| 841.6 | +14.0 | -0.2 |

| 239 | 46.4 | 18.7 | 68 | 39 | 61 | 91 | 129 | 130 | -7 | -52 | 2419.6 | 946.8 |

| -1.4 | -10.6 |

| 240 | 46.2 | 19.7 | 106 | 39 | 22 | 90 | 128 | 129 | -84 | -51 | 2419.6 |

| 999.4 | -17.1 | -10.4 |

| [[defect?]] 241 | 46.5 | 26.5 | 55 | 69 | 74 | 61 | 129 | 130 | +19 | +8 |

| 2419.6 | 1367.6 | +3.9 | +1.6 |

| 242 | 46.4 | 27.5 | 82 | 60 | 49 | 70 | 131 | 130 | -33 | -10 | 2419.6 |

| 1420.2 | -6.7 | -2.0 |

| 243 | 46.7 | 27.7 | 30 | 35 | 99 | 95 | 129 | 130 | +69 | -60 | 2419.6 |

| 1420.2 | +14.0 | -12.2 |

| [[n.s.]] 244 | ~~[[[strikethrough]] 46.8[[/strikethrough]]~~ |

| ~~[[[strikethrough]] 37.0[[/strikethrough]]~~ | ~~[[[strikethrough]] 20[[/strikethrough]]~~ |

| ~~[[[strikethrough]] 128[[/strikethrough]]~~ | ~~[[[strikethrough]] 109[[/strikethrough]]~~ | 3 |

| 245 | 46.8 | 37.0 | 20 | 128 | 109 | 3 | 129 | 131 | +89 | +125 | 2419.6 |

| 1946.2 | +18.1 | +25.4 |

| 246 | 46.4 | 59.6 | 71 | 45 | 59 | 85 | 130 | 130 | -12 | -40 | 2419.6 |

| 3103.4 | -2.4 | -8.1 |

| [[n.s.]] 247 |

| 248 | 46.3 | 74.2 | 90 | 110 | 39 | 20 | 129 | 130 | -51 | +90 | 2419.6 |

| 3892.4 | -10.4 | +18.3 |

| 249 | 46.9 | 75.4 | 6 | 75 | 122 | 54 | 128 | 129 | +116 | +21 | 2419.6 |

| 3945.0 | +23.5 | +4.3 |

| 250 | 46.3 | 83.3 | 103 | 92 | 26 | 38 | 129 | 130 | -77 | +54 | 2419.6 |

| 4365.8 | -15.6 | +11.0 |

| 251 | 47.6 | 17.3 | 40 | 90 | 89 | 39 | 129 | 129 | +49 | +51 | 2472.2 |

| 894.2 | +9.9 | +10.4 |

| 252 | 47.4 | 17.6 | 82 | 40 | 46 | 90 | 128 | 130 | -36 | -50 | 2472.2 | 894.2 |

| -7.3 | -10.2 |

| 253 | 47.5 | 28.6 | 70 | 40 | 59 | 89 | 129 | 129 | -11 | -49 | 2472.2 |

| 1472.8 | -2.2 | -9.9 |

| 254 | 47.3 | 32.3 | 101 | 90 | 28 | 40 | 129 | 130 | -73 | +50 | 2472.2 |

| 1683.2 | -14.8 | +10.2 |

| 255 | 47.7 | 34.4 | 30 | 82 | 99 | 48 | 129 | 130 | +69 | +34 | 2472.2 |

| 1788.4 | +14.0 | +6.9 |

| 256 | 47.6 | 44.6 | 50 | 50 | 80 | 80 | 130 | 130 | +30 | -30 | 2472.2 |

| 2314.4 | +6.1 | -6.1 |

| 257 | 47.7 | 45.5 | 30 | 60 | 100 | 70 | 130 | 130 | +70 | -10 | 2472.2 |

| 2367.0 | +14.2 | -2.0 |

| [[n.s.]] 258 |

| 259 | 47.8 | 48.1 | 29 | 120 | 100 | 10 | 129 | 130 | +71 | +110 | 2472.2 |

| 2524.8 | +14.4 | +22.3 |

| [[defect?]] 260 | 47.6 | 51.1 | 51 | 128 | 79 | 2 |

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

130 | 130 | +28 |
+126 | 2472.2 | 2682.6 | +5.7 | +25.6
15 - 0 | | | | | | | [equation] | [equation]

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[[table]]

| | -2610|-2580|

|---|---|---|

2362.5	3704.9	-247.5	+1124.9
2380.8	3852.2	-229.2	+1272.2
2377.2	4173.3	-232.8	+1593.3
2433.6	841.8	-176.4	-1738.2 [[y = -1764.5]]
2418.2	957.4	-191.8	1[[5]] 622.6
2402.5	1009.8	-207.5	-1570.2
2423.5	1366.0	-186.5	-1214.0
24129	1422.2	-197.1	-1157.8
2433.6	1432.4	-176.4	-1147.6
2437.7	1920.8	-172.3	-659.2
2417.2	3111.5	-192.8	+531.5
2409.2	3874.1	-200.8	+1294.1
2443.1	3940.7	-166.9	+1360.7
2404.0	4354.8	-206.0	+1774.8
2482.1	883.8	-127.9	-1696.2
2464.9	904.4	-145.1	-1675.6
2470.0	1482.7	-140.0	-1097.3
2457.4	1673.0	-152.6	-907.0
2486.2	1781.5	-123.8	-798.5
2478.3	2320.5	-131.7	-259.5
2486.4	2369.0	-123.6	-211.0
2486.6	2502.5	-123.4	-77.5
2477.9	2657.0	-132.1	+77.0

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		-2610	-2580
2362.5	3704.9	-247.5	+1124.9
2380.8	3852.2	-229.2	+1272.2
2377.2	4173.3	-232.8	+1593.3
2433.6	841.8	-176.4	-1738.2
2418.2	957.4	-191.8	1[[5]] 622.6
2402.5	1009.8	-207.5	-1570.2
2423.5	1366.0	-186.5	-1214.0
24129	1422.2	-197.1	-1157.8
2433.6	1432.4	-176.4	-1147.6
2437.7	1920.8	-172.3	-659.2
2417.2	3111.5	-192.8	+531.5
2409.2	3874.1	-200.8	+1294.1
2443.1	3940.7	-166.9	+1360.7
2404.0	4354.8	-206.0	+1774.8
2482.1	883.8	-127.9	-1696.2
2464.9	904.4	-145.1	-1675.6
2470.0	1482.7	-140.0	-1097.3
2457.4	1673.0	-152.6	-907.0
2486.2	1781.5	-123.8	-798.5
2478.3	2320.5	-131.7	-259.5
2486.4	2369.0	-123.6	-211.0
2486.6	2502.5	-123.4	-77.5
2477.9	2657.0	-132.1	+77.0

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Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
 Variables M5 #4
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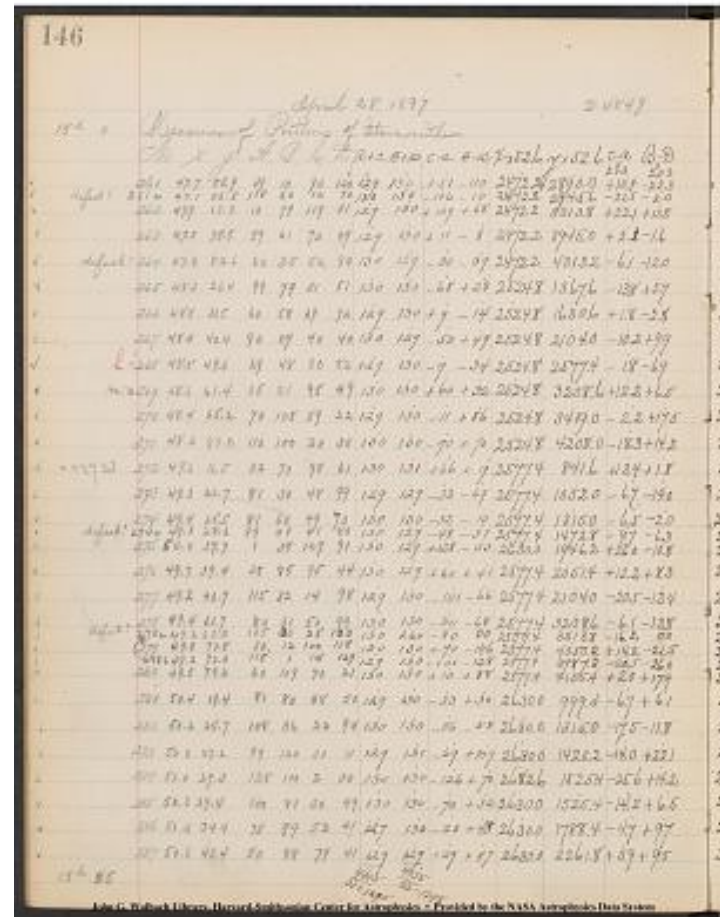
15^[[h]] 0

Measures of Positions of Stars within

[[table]]

No | x | y | A, | B, | C, | D, | A+C | B+D | C-A | B-D | x x 52.6 | y x 52.6 |
 c-a x 2.03 | b-d x 2.03 |

261	47.7	55.9	39	10	90	120	129	130	+51	-110	2472.2	2893.0	+10.4	-22.3
[[defect?]] 261a	47.1	56.5	118	60	12	70	130	130	-106	-10	2472.2	2945.6	-21.5	-2.0
262	47.9	63.3	10	99	119	31	129	130	+109	+68	2472.2	3313.8	+22.1	+13.8
263	47.5	75.5	59	61	70	69	129	130	+11	-8	2472.2	3945.0	+2.1	-1.6
[[defect?]] 264	47.4	82.6	80	35	50	94	130	129	-30	-59	2472.2	4313.2	-6.1	-12.0
265	48.3	26.4	99	79	31	51	130	130	-68	+28	2524.8	1367.6	-13.8	+5.7
266	48.5	31.5	60	58	69	72	129	130	+9	-14	2524.8	1630.6	+1.8	-2.8
267	48.4	40.4	90	89	40	40	130	129	-50	+49	2524.8	2104.0	-10.2	+9.9
[[I=]] 268	48.5	49.6	69	48	60	82	129	130	-9	-34	2524.8	2577.4	-1.8	-6.9
[[[strikethrough]]n.s.]] 269	48.6	61.4	35	81	95	49	130	130	+60	+32	2524.8	3208.6	+12.2	+6.5
270	48.4	65.2	70	108	59	22	129	130	-11	+86	2524.8	3419.0	-2.2	+17.5
271	48.2	80.2	110	100	20	30	130	130	-90	+70	2524.8	4208.0	-18.3	+14.2
[[[= +8933]] 272	49.6	16.5	32	70	98	61	130	131	+66	+9	2577.4	841.6	+13.4	+1.8
273	49.3	20.7	81	30	48	99	129	129	-33	-69	2577.4	1052.0	-6.7	-14.0
274	49.4	25.5	81	60	49	70	130	130	-32	-10	2577.4	1315.0	-6.5	-2.0
[[defect?]] 274a	49.3	28.6	89	49	41	80	130	129	-48	-31	2577.4	1472.8	-9.7	-6.3
275	50.0	37.7	1	38	129	91	130	129	+128	-53	2630.0	1946.2	+26.0	-10.8
276	49.7	39.4	35	85	95	44	130	129	+60	+41	2577.4	2051.4	+12.2	+8.3
277	49.2	40.7	115	32	14	98	129	130	-101	-66	2577.4	2104.0	-20.5	-13.4
278	49.4	61.7	80	31	50	99	130	130	-30	-68	2577.4	3208.6	-6.1	-13.8
[[defect?]] 278a	49.2	63.0	105	130	25	130	130	260	-80	0.0	2577.4	3313.8	-16.2	0.0
279	49.8	77.8	30	12	100	118	130	130	+70	-106	2577.4	4050.2	+14.2	-21.5
278b	49.2	72.0	115	1	14	129	129	130	-101	-128	2577.4	3787.2	-20.5	-26.0
280	49.5	79.2	60	109	70	21	130	130	+10	+88	2577.4	4155.4	+2.0	+17.9
281	50.4	19.4	81	80	48	50	129	130	-33	+30	2630.0	999.4	-6.7	+6.1
282	50.2	25.7	108	36	22	94	130	130	-86	-58	2630.0	1315.0	-17.5	-11.8



283	50.3	27.2	99	120	30	11	129	131	-69	+109	2630.0	
1420.2	-14.0	+22.1										
284	51.0	29.3	128	100	2	30	130	130	-126	+70	2682.6	
1525.4	-25.6	+14.2										
285	50.3	29.4	100	81	30	49	130	130	-70	+32	2630.0	
1525.4	-14.2	+6.5										
286	50.4	34.4	75	89	52	41	127	130	-23	+48	2630.0	
1788.4	-4.7	+9.7										
287	50.6	43.4	50	88	79	41	<u>129</u>					
<u>129</u>	+29	+47	2630.0	2261.8	+5.9	+9.5						
							4015/31=1295	4155/32=1298				

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[[table]]

| | -2610|-2580|

|---|---|---|

2482.6|[[~~2870.7~~]] 2915.3|~~127.4~~|+335.3|

2450.7|2947.6|-159.3|+367.6|

2494.3|3300.0|-115.7|+720.0|

2474.4|3946.6|-135.6|1366.6|

2466.1|4325.2|-143.9|+1745.2|

2511.0|1361.9|-990|-1218.1|

2526.6|1633.4|-83.4|-946.6|

2514.6|2094.1|-95.4|-485.9|

2523.0|2584.3|-87.0|+4.3|

2537.0|3202.1|-73.0|+622.1|

2522.6|3401.5|-87.4|+821.5|

2506.5|4193.8|-103.5|+1613.8|

2590.8|839.8|-19.2|-1740.2|

2570.7|1066.0|-39.3|-1514.0|

2570.9|1317.0|-39.1|-1263.0|

2567.7|1479.1|-42.3|-1100.9|

2656.0|1957.0|[[~~540~~]] +46.0|-623.0 [[X=-6.6]]|

2589.6|2043.1|-20.4|-536.9|

2556.9|2117.4|-53.1|-462.6|

2571.3|3222.4|-38.7|+642.4|

2561.2|3313.8|-4 [[~~9~~]] 8|+733.8[[y=707.5]]|

2591.6|4071.7|-18.4|+1491.7|

2556.9|3813.2|-53.1|+1233.2[[-1 dir y=+1180.6]]|

2579.4|4137.5|-30.6|+15 [[~~6~~]] 7.5|

2623.3|993.3|+13.3|-1586.7|

2612.5|1326.8|+2.5|-1253.2|

2616.0|1398.1|+6.0|-1181.9|

2657.0|1511.2|+47.0|-1068.8|

2615.8|1518.9|+5.8|-1061.1|

2625.3|1778.7|+15.3|-801.3|

2635.9|2252.3|+25.9|-327.7|

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		-2610	-2580
2482.6	2870.7	-1674	+335.3
2450.7	2947.6	-159.3	+367.6
2494.3	3300.0	-115.7	+720.0
2474.4	3946.6	-135.6	+1366.6
2466.1	4325.2	-143.9	+1745.2
2511.0	1361.9	-990	-1218.1
2526.6	1633.4	-83.4	-946.6
2514.6	2094.1	-95.4	-485.9
2523.0	2584.3	-87.0	+4.3
2537.0	3202.1	-73.0	+622.1
2522.6	3401.5	-87.4	+821.5
2506.5	4193.8	-103.5	+1613.8
2590.8	839.8	-19.2	-1740.2
2570.7	1066.0	-39.3	-1514.0
2570.9	1317.0	-39.1	-1263.0
2567.7	1479.1	-42.3	-1100.9
2656.0	1957.0	[[540]]	+46.0 -623.0 [[X=-6.6]]
2589.6	2043.1	-20.4	-536.9
2556.9	2117.4	-53.1	-462.6
2571.3	3222.4	-38.7	+642.4
2561.2	3313.8	-4	[[9]] 8 +733.8[[y=707.5]]
2591.6	4071.7	-18.4	+1491.7
2556.9	3813.2	-53.1	+1233.2[[-1 dir y=+1180.6]]
2579.4	4137.5	-30.6	+15 [[6]] 7.5
2623.3	993.3	+13.3	-1586.7
2612.5	1326.8	+2.5	-1253.2
2616.0	1398.1	+6.0	-1181.9
2657.0	1511.2	+47.0	-1068.8
2615.8	1518.9	+5.8	-1061.1
2625.3	1778.7	+15.3	-801.3
2635.9	2252.3	+25.9	-327.7

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22.3
23.20 | | | | | | 3365/26=1294 | 3505/27=298 | | | | |

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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[[table]]

| | -2610 | -2580 |

|---|---|---|

[[~~3~~]] 3 [[~~2621.7~~]] 2621.7 | 2497.8 | + 11.7 | -822 |

2640.4 | 2725.0 | +30.4 | +145.0 |

2621.7 | 3229.1 | +11.7 | +649.1 |

2631.4 | 4398.3 | +21.4 | +1818.3 |

2663.7 | 1025.0 | +53.7 | -1555.0 |

2668.2 | 1757.9 | +58.2 | -822.1 |

2704.9 | 2066.0 | +94.9 | -514.0 |

2683.4 | 3348.1 | +73.4 | +768.1 |

270 [[~~9~~]] 9 [[~~7.0~~]] 7.0 | 3686.3 | +97.0 | +1106.3 |

2696.8 | 3914.7 | +86.8 | +1334.7 |

[[~~3~~]] 3 [[~~2713.1~~]] 2713.1 | 1661.3 | +103.1 | -918.7 |

2741.3 | 2125.9 | +131.3 | -454.1 |

2745.4 | 2316.8 | +135.4 | -263.2 |

2733.2 | 2737.4 | +123.2 | +157.4 |

2743.3 | 2747.8 | +133.3 | +167.8 |

2758.1 | 3060.5 | +148.1 | +480.5 |

2732.6 | 3391.8 | +122.6 | +811.8 [[y=+759.2]]

2755.3 | 3651.7 | +145.3 | +1071.7 |

2789.8 | 9 [[~~6~~]] 6 [[~~75.0~~]] 75.0 | +179.8 | -1605.0 |

2784.8 | 1210.0 | +174.8 | -1370.0 [[y=-1396.3]]

2806.3 | 1182.6 | +196.3 | -1397.4 |

2807.7 | 1477.7 | +197.7 | -1102.3 |

2796.9 | 1618.4 | +186.9 | -961.6 |

2775.6 | 1964.5 | +165.6 | -615.5 |

2790.0 | 3060.3 | +180.0 | +[[~~19.7~~]] 19.7 [[~~480.3~~]] 480.3 |

2767.7 | 3441.3 | + 157.7 | + 861.3

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 Variables M5 #4
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Measures of positions of stars within 30° No. Pole (Cont)

| No | x | y | A, | B, | C | D | a+c | B+D | ~~[[strikethrough]] a-c~~

~~[[strikethrough]] c-a~~ | B-D | X x 52.6 | y x 52.6 | c-a | B-D |

| 315 | 53.4 | 66.8 | 75 | 21 | 53 | 109 | 128 | 130 | -22 | -88 | 2787.8 |

3471.6 | ^[[x 2.03 -4.5]] | ^[[x 2.03 -17.9]] |

| 316 | 53.3 | 71.8 | 100 | 15 | 29 | 114 | 129 | 129 | -71 | -99 | 2787.8 |

3734.6 | -14.4 | -20.1 |

| 317 | 53.3 | 77.3 | 96 | 90 | 34 | 40 | 130 | 130 | -62 | +50 | 2787.8 |

4050.2 | -12.6 | +10.2 |

| 318 | 53.2 | 80.2 | 105 | 119 | 25 | 10 | 130 | 129 | -80 | +109 | 2787.8 |

4208.0 | -16.2 | +22.1 |

| 319 | 53.5 | 80.4 | 70 | 88 | 60 | 41 | 130 | 129 | -10 | +47 | 2787.8 |

4208.0 | -2.0 | +9.5 |

| 320 | 53.5 | 81.4 | 70 | 81 | 59 | 48 | 129 | 129 | -11 | +33 | 2787.8 |

4260.6 | -2.2 | +6.7 |

| 321 | 53.5 | 82.6 | 69 | 49 | 61 | 80 | 130 | 129 | -8 | -31 | 2787.8 | 4313.2

-1.6 | -6.3 |

| 322 | 53.1 | 82.7 | 120 | 21 | 10 | 109 | 130 | 130 | -110 | -

~~[[strikethrough]] 107~~ ~~[[strikethrough]] 88~~ | 2787.8 | 4313.2 | -22.3 | -17.9

| 323 | 53.2 | 83.0 | 110 | 21 | 19 | 127 | 129 | 129 | -91 | -125 | 2787.8 |

4365.8 | -18.5 | -25.4 |

| 324 | 53.5 | 83.5 | 65 | 61 | 63 | 68 | 128 | 129 | -2 | -7 | 2787.8 | 4365.8 |

-0.4 | -1.4 |

| 325 | 54. ~~[[strikethrough]] 2~~ ~~[[strikethrough]] 3~~ | 25.6 | 90 | 40 | 40 | 91 |

130 131 | -50 | -51 | 2840.4 | 1315.0 | -10.2 | -10.4 |

| 326 | 55.0 | 33.2 | 129 | 100 | 130 | 30 | 259 | 130 | +1 | +70 | 2893.0 |

1735.8 | +0.2 | +14.2 |

| 327 | 54.9 | 38.1 | 15 | 111 | 114 | 20 | 129 | 131 | +99 | +91 | 2840.4 |

1998.8 | +20.1 | +18.5 |

| 328 | 54.8 | 42.1 | 23 | 120 | 106 | 11 | 129 | 131 | +83 | +109 | 2840.4 |

2209.2 | 16.8 | +22.1 |

| 329 | 54.2 | 49.4 | 100 | 80 | 28 | 50 | 128 | 130 | -72 | +30 | 2840.4 |

2577.4 | -14.6 | +6.1 |

| 330 | 54.1 | 54.5 | 120 | 70 | 9 | 60 | 129 | 130 | -111 | +10 | 2840.4 |

2840.4 | -22.5 | +2.0 |

| 331 | 54.5 | 59.1 | 70 | 126 | 60 | 3 | 130 | 129 | -10 | +123 | 2840.4 |

3103.4 | -2.0 | +25.0 |

| 332 | 54.7 | 63.5 | 35 | 59 | 94 | 70 | 129 | 129 | +59 | -11 | 2840.4 |

3313.8 | +12.0 | -2.2 |

| 333 | 54.4 | 68.3 | 79 | 97 | 50 | 35 | 129 | 132 | -29 | +62 | 2840.4 |

3576.8 | -5.9 | +12.6 |

| 334 | 54.7 | 70.1 | 34 | 128 | 96 | 3 | 130 | 131 | +62 | +125 | 2840.4 |

3682.0 | +12.6 | +25.4 |

| 334 alpha | 54.4 | 71.8 | 78 | 20 | 51 | 109 | 129 | 129 | -27 | -89 | 2840.4 |

3734.6 | -5.5 | -18.1 |

| 335 | 54.6 | 73.8 | 49 | 11 | 80 | 118 | 129 | 129 | +31 | -107 | 2840.4 |

3839.8 | +6.3 | -21.7 |

| 336 | 54.3 | 78.4 | 92 | 81 | 37 | 50 | 129 | 131 | -55 | +31 | 2840.4 |

4102.8 | -11.2 | +6.3 |

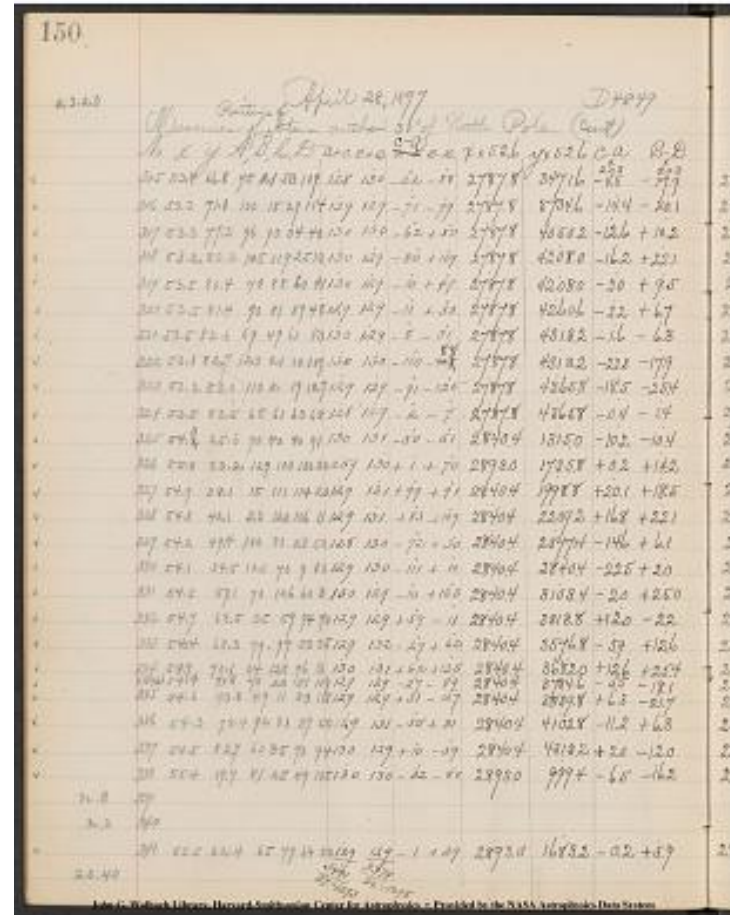
| 337 | 54.5 | 82.7 | 60 | 35 | 70 | 94 | 130 | 129 | +10 | -59 | 2840.4 |

4313.2 | +2.0 | -12.0 |

| 338 | 55.4 | 19.7 | 81 | 25 | 49 | 105 | 130 | 130 | -32 | -80 | 2893.0 |

999.4 | -6.5 | -16.2 |

[[left margin]]n.s. [[left margin]] 339



[[left margin]]n.s[[/left margin]] 340
 | 341 | 55.5 | 32.4 | 65 | 79 | 64 | 50 | [[underline]]129[[/underline]] |
 | [[underline]]129[[/underline]] | -1 | +29 | 2893.0 | 1683.2 | -0.2 | +5.9
 [[left margin]]23.40[[/left margin]] | | | | | | [[equation]]3491/27 =
 1293 [[/equation]] | [[equation]]3374/26 = 1298 [[/equation]] |

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[[table]]

| | -2610. | -2580 |

|---|---|---|

2783.3	3489.5	+173.3	+909.5
2773.4	3754.7	+163.4	+1174.7
2775.2	4040.0	+165.2	+1460.0
2771.6	4185.9	+161.6	+1605.9
2785.8	4198.5	+175.8	+1618.5
2785.6	4253.9	+175.6	+1673.9
2786.2	4319.5	+176.2	+1739.5
2765.5	4331.1	+155.5	+17[[11758.6]] 7 [[11758.6]] 51.1
2769.3	4391.2	+159.3	+1811.2 [[y=11758.6]]
2787.4	4367.2	+177.4	+1787.2
2830.2	1325.4	+220.2	[[11758.6]] + [[11758.6]] -1254.6
2893.2	1721.6	+283.2	-858.4 [[x = 256.9]]
2860.5	1980.3	+250.5	-599.7
2857.2	2187.1	+247.2	-392.9
2825.8	2571.3	+215.8	-8.7
2817.9	2838.4	+207.9	+258.4
2838.4	3078.4	+228.4	+498.4
2852.4	3316.0	+242.4	+736.0
2834.5	3564.2	+224.5	+984.2
2853.0	3656.6	+243.0	+1076.6
2834.9	3752.7	+224.9	+1172.7
2846.7	3861.5	+236.7	+1281.5
2829.2	4096.5	+219.2	+1516.5
2842.4	4325.2	+232.4	+1745.2
2886.5	1015.6	+276.5	-1564.4
2892.8	1677.3	+282.8	-902.7

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-2610 -2580

2783.3	3489.5	+173.3	+909.5
2773.4	3754.7	+163.4	+1174.7
2775.2	4040.0	+165.2	+1460.0
2771.6	4185.9	+161.6	+1605.9
2785.8	4198.5	+175.8	+1618.5
2785.6	4253.9	+175.6	+1673.9
2786.2	4319.5	+176.2	+1739.5
2765.5	4331.1	+155.5	+17[[11758.6]] 7 [[11758.6]] 51.1
2769.3	4391.2	+159.3	+1811.2 [[y=11758.6]]
2787.4	4367.2	+177.4	+1787.2
2830.2	1325.4	+220.2	[[11758.6]] + [[11758.6]] -1254.6
2893.2	1721.6	+283.2	-858.4 [[x = 256.9]]
2860.5	1980.3	+250.5	-599.7
2857.2	2187.1	+247.2	-392.9
2825.8	2571.3	+215.8	-8.7
2817.9	2838.4	+207.9	+258.4
2838.4	3078.4	+228.4	+498.4
2852.4	3316.0	+242.4	+736.0
2834.5	3564.2	+224.5	+984.2
2853.0	3656.6	+243.0	+1076.6
2834.9	3752.7	+224.9	+1172.7
2846.7	3861.5	+236.7	+1281.5
2829.2	4096.5	+219.2	+1516.5
2842.4	4325.2	+232.4	+1745.2
2886.5	1015.6	+276.5	-1564.4
2892.8	1677.3	+282.8	-902.7

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Variables M5 #4
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23.25 April 29, 1897 D 4849

Measure of Positions of Stars within 30° of North Pole (cont.)

[[table]]

[No.]x[y]|A|B|C|D|A+C|B+D|C-A|B-D|X x 52.6|Y x 52.6|C-A x 2.03|B-D x 2.03|

|---|---|---|---|---|---|---|---|---|---|---|---|

369|57.9|66.2|9|109|121|21|130|130|+122+8|~~369~~|9|~~369~~|88|2998.2|3471.6|+22.7|+17.9

370|57.1|69.6|121|58|8|72|129|130|113|14|2998.2|3629.4|-22.9|-2.8

371|57.1|82.2|120|102|10|27|130|129|-110|+75|2998.2|4313.2|-

22.3|+15.2

372|58.4|21.8|79|21|50|109|129|130|-29|-88|3050.8|1104.6|-5.9|-17.9

373|58.5|33.9|57|9|72|120|129|129|+15|-111|3050.8|1735.8|+3.0|-22.5

374|58.1|37.1|116|115|14|14|130|129|-102|+101|3050.8|1946.2|-

207|+20.5

[[N.S.]] 375|

376|58.5|73.4|65|85|64|46|129|131|-1|+39|3050.8|3839.8|-0.2|+7.9

[[N.S.]] 377|

[[Defect?]] 378|58.2|82.4|101|60|27|70|128|130|-74|-10|3050.8|4313.2|-

15.0|-2.0

379|60.0|20.5|128|58|1|72|129|130|-127|-14|3156.0|1052.0|-25.5|-2.8

380|59.4|25.6|88|40|42|91|130|131|-46|-51|3103.4|1315.0|-9.3|-10.4

381|59.3|279|95|5|34|125|129|130|-61|120|3103.4|1420.2|-12.4|24.4

382|60.0|32.6|130|35|129|94|259|129|-1|-59|3156.0|1683.2|-0.2|-12.0

383|59.1|52.7|115|39|14|91|129|130|-101|-52|3103.4|2735.2|20.5|-10.6

[[defect.]] 384|

385|59.8|77.4|25|80|104|50|129|130|+79|+30|3103.4|4050.2|+16.0|+6.1

386|59.5|81.4|69|~~55~~|~~55~~|79|61|51|129|130|-

7|+28|3103.4|4260.6|-1.4|+5.7

387|60.5|17.9|58|37|1|127|129|130|+13|-124|3156.0|894.2|+2.6|-25.2

387|60.5|29.5|61|62|70|68|131|130|+9|-6|3156.0|1525.4|+1.8|-1.2

388|60.7|35.6|39|40|91|90|130|130|+52|-50|3156.0|1841.0|+10.6|-10.2

389|60.4|38.2|80|109|50|24|130|133|-30|+85|3156.0|1998.8|-6.1|+17.3

390|60.3|38.4|90|89|40|40|130|129|-50|+49|3156.0|1998.8|-10.2|+9.9

[[+89°1=]] 391|60.1|51.2|120|118|10|12|130|130|-110|

+106|3156.0|2682.6|-22.3|+21.5

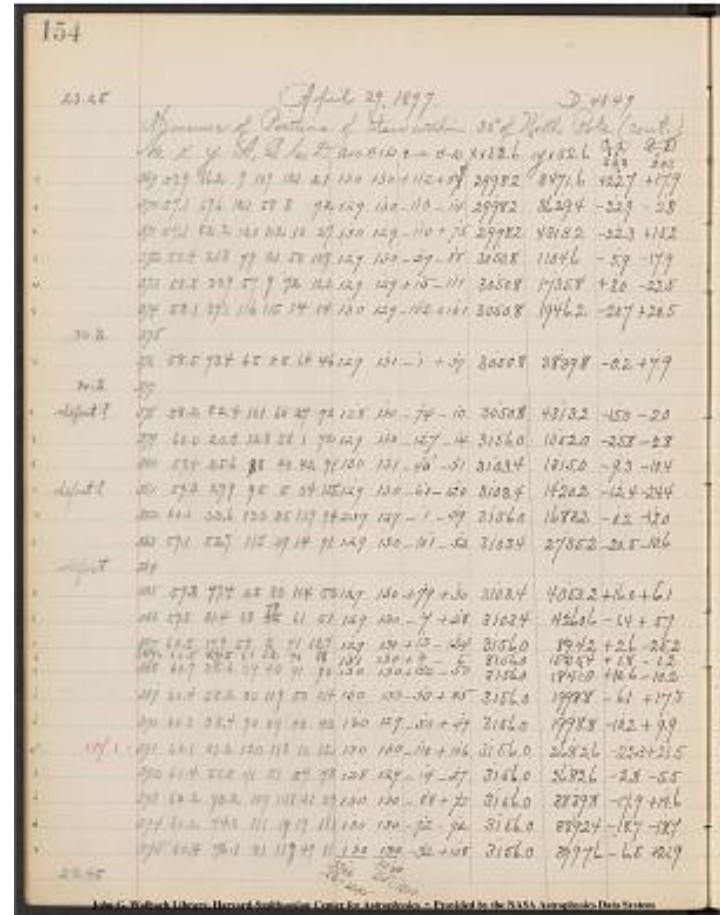
392|60.4|51.5|71|51|57|78|128|129|-14|-27|3156.0|2682.6|-2.8|-5.5

393|60.2|73.2|109|101|21|130|130|-88|+72|3156.0|3839.8|-17.9|+14.6

394|60.2|74.8|111|19|19|111|130|130|-92|-92|3156.0|3892.4|-18.7|-18.7

395|60.4|76.1|119|49|11|130|3366|26=1295|130|3249|25=1300|

32|+108|3156.0|3997.6|-6.5|+21.9



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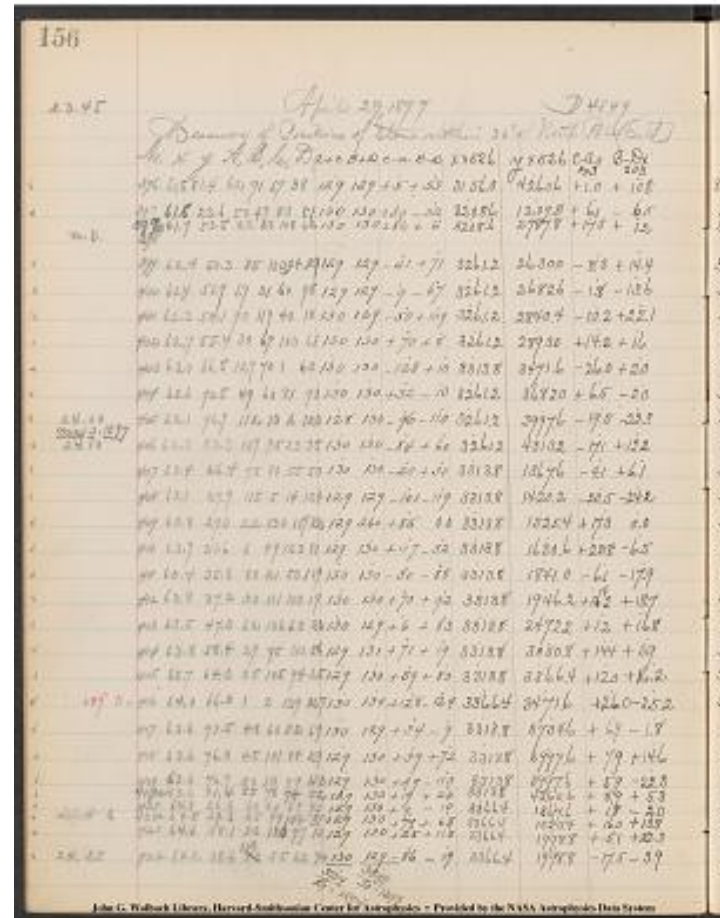
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23.45 April 29, 1897 D4849

Measures of Positions of Stars within 30° North Pole (cont.)

[[table]]

	No.	x	y	A	B	C	D	a+c	B+D	c-a	B-D	X x 52.6	Y x 52.6	c-a x 2.03	B-D x 2.03
	396	60.5	81.4	62	91	67	38	129	129	+5	+53	3156.0			
	4260.6	+1.0	+10.8												
	397	61.6	23.6	50	49	80	81	130	130	+30	-32	3208.6			
	1209.8	+6.1	-6.5												
	397a	61.7	53.5	22	68	108	62	130	130	+86	+6	3208.6			
	2787.8	17.5	+1.2												
	n.s.	398													
	399	62.4	50.3	85	100	44	29	129	129	-41	+71	3261.2			
	2630.0	-8.3	+14.4												
	400	62.4	51.7	69	31	60	98	129	129	-9	-67	3261.2	2682.6		
	-1.8	-13.6													
	401	62.3	54.1	90	119	40	10	130	129	-50	+109	3261.2			
	2840.4	-10.2	+22.1												
	402	62.7	55.4	30	69	100	61	130	130	+70	+8	3261.2			
	2893.0	+14.2	+1.6												
	403	63.0	66.5	129	70	1	60	130	130	-128	+10	3313.8			
	3471.6	-26.0	+2.0												
	404	62.6	70.5	49	60	81	70	130	130	+32	-10	3261.2			
	3682.0	+6.5	-2.0												
	24.00	405	62.1	76.9	112	10	16	120	128	130	-96	-110			
	3261.2	3997.6	-19.5	-22.3											
	May 3, 1897														
	24.10	406	62.3	82.3	107	95	23	35	130	130	-84	+60	3261.2		
	4313.2	-17.1	+12.2												
	407	63.4	26.4	75	80	55	50	130	130	-20	+30	3313.8			
	1367.6	-4.1	+6.1												
	408	63.1	27.9	115	5	14	124	129	129	-101	-119	3313.8			
	1420.2	-20.5	-24.2												
	409	63.8	29.0	22	130	107	130	129	260	+85	0.0	3313.8			
	1525.4	+17.3	0.0												
	410	63.9	31.6	6	49	123	81	129	130	+117	-32	3313.8			
	1630.6	+23.8	-6.5												
	411	63.4	35.8	80	21	50	109	130	130	-30	-88	3313.8			
	1841.0	-6.1	-17.9												
	412	63.8	37.2	30	111	100	19	130	130	+70	+92	3313.8			
	1946.2	+11	6	4.2	+18.7										
	413	63.5	47.3	62	106	68	23	130	129	+6	+83	3313.8			
	2472.2	+1.2	+16.8												
	414	63.8	58.4	29	75	100	56	129	131	+71	+19	3313.8			
	3050.8	+14.4	+3.9												
	415	63.7	64.3	35	105	94	25	129	130	+59	+80	3313.8			
	3366.4	+12.0	+16.2												
	+89° 3'	416	64.0	66.0	1	3	129	127	130	130	+128	-124			
	3366.4	3471.6	+26.0	-25.2											
	417	63.6	71.5	48	60	82	69	130	129	+34	-9	3313.8	3734.6		
	+6.9	-1.8													
	418	63.6	76.3	45	101	84	29	129	130	+39	+72	3313.8			
	3997.6	+7.9	+14.6												
	419	63.6	76.9	50	10	79	120	129	130	+29	-110	3313.8			
	3997.6	+5.9	-22.3												
	419a	63.6	81.4	55	78	74	52	129	130	+19	+26	3313.8			



4260.6 | +3.9 +5.3 |
 | | 420 | 64.5 | 26.5 | 60 | 60 | 69 | 70 | 129 130 | +9 -10 | 3366.4 | 1367.6
 | +1.8 -2.0 |
 | defect? | 420a | 64.8 | 29.3 | 25 | 99 | 104 | 31 | 129 130 | +79 +68 |
 3366.4 | 1525.4 | +16.0 +13.8 |
 | | 421 | 64.6 | 38.1 | 52 | 120 | 77 | 10 | 129 130 | +25 +110 | 3366.4 |
 1998.8 | +5.1 +22.3 |
 | 24.25 | 422 | 64.2 | 38.6 ~~58~~ ~~108~~ | 55 |
 22 | 74 | 130 ³⁷⁵⁴ ^ ^{29 = 1294}
129 ³⁸⁹³ ^ ^{30 = 1298} | -86 -19 | 3366.4 |
 1998.8 | -17.5 -3.9 |

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 Variables M5 #4
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[[table]]

| x - 2610 | y - 2580 |

|---|---|

3157.0	4249.8	+ 547.0	+ 1669.8
3214.7	1216.3	+ 604.7	- 1363.7
3226.1	2786.6	+ 616.1	+ 206.6
3252.9	2615.6	+ 642.9	+ 35.6
3259.4	2696.2	+ 649.4	+ 116.2
3251.0	2818.3	+ 641.0	+ 238.3
3275.4	2891.4	+ 665.4	+ 311.4
3287.8	3469.6	+ 677.8	+ 889.6
3267.7	3684.0	+ 657.7	+ 1104.0
3241.7	4019.9	+ 631.7	+ 1439.9
3244.1	4301.0	+ 634.1	+ 1721.0
3309.7	1361.5	+ 699.7	[[/strickethrough]] + [[/strickethrough]] - 1218.5
3292.3	1444.4	+ 682.3	- 1135.6
3331.1	1525.4	+ 721.1	- 1054.6 [[y = -1080.9]]
3337.6	1637.1	+ 727.6	- 942.9
3307.7	1858.9	+ 697.7	- 721.1
3328.0	19 [[/strickethrough]] 3 [[/strickethrough]] 27.5 + 718.0 - 652.5		
3315.0	2455.4	+ 705.0	- 124.6
3328.2	3046.9	+ 718.2	+ 466.9
3325.8	3350.2	+ 715.8	+ 770.2
3392.4	3496.8	+ 782.4	+ 916.8 [[-52.6) 729.8 # 864.2]]
3320.7	3736.4	+ 710.7	+ 1156.4
3321.7	39 [[/strickethrough]] 7 [[/strickethrough]] 83.0 + 711.7 + 1403.0		
3319.7	4019.9	+ 709.7	+ 1439.9
3317.7	4255.3	+ 707.7	+ 1675.3
3368.2	1369.6	+ 758.2	+ 1210.4
3382.4	1511.6	+ 772.4	- 1068.4
3371.5	1976.5	+ 761.5	- 603.5
3348.9	2002.7	+ 738.9	- 577.3

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	x	y
	-2610	-2580
3157.0	4249.8	+ 547.0 + 1669.8
3214.7	1216.3	+ 604.7 - 1463.7
3226.1	2786.6	+ 616.1 + 206.6
3252.9	2615.6	+ 642.9 + 35.6
3259.4	2696.2	+ 649.4 + 116.2
3251.0	2818.3	+ 641.0 + 238.3
3275.4	2891.4	+ 665.4 + 311.4
3287.8	3469.6	+ 677.8 + 889.6
3267.7	3684.0	+ 657.7 + 1104.0
3241.7	4019.9	+ 631.7 + 1439.9
3244.1	4301.0	+ 634.1 + 1721.0
3309.7	1361.5	+ 699.7 [[/strickethrough]] - 1218.5
3292.3	1444.4	+ 682.3 - 1135.6
3331.1	1525.4	+ 721.1 - 1054.6 [[y = -1080.9]]
3337.6	1637.1	+ 727.6 - 942.9
3307.7	1858.9	+ 697.7 - 721.1
3328.0	19 [[/strickethrough]] 3 [[/strickethrough]] 27.5 + 718.0 - 652.5	
3315.0	2455.4	+ 705.0 - 124.6
3328.2	3046.9	+ 718.2 + 466.9
3325.8	3350.2	+ 715.8 + 770.2
3392.4	3496.8	+ 782.4 + 916.8 [[-52.6) 729.8 # 864.2]]
3320.7	3736.4	+ 710.7 + 1156.4
3321.7	39 [[/strickethrough]] 7 [[/strickethrough]] 83.0 + 711.7 + 1403.0	
3319.7	4019.9	+ 709.7 + 1439.9
3317.7	4255.3	+ 707.7 + 1675.3
3368.2	1369.6	+ 758.2 + 1210.4
3382.4	1511.6	+ 772.4 - 1068.4
3371.5	1976.5	+ 761.5 - 603.5
3348.9	2002.7	+ 738.9 - 577.3

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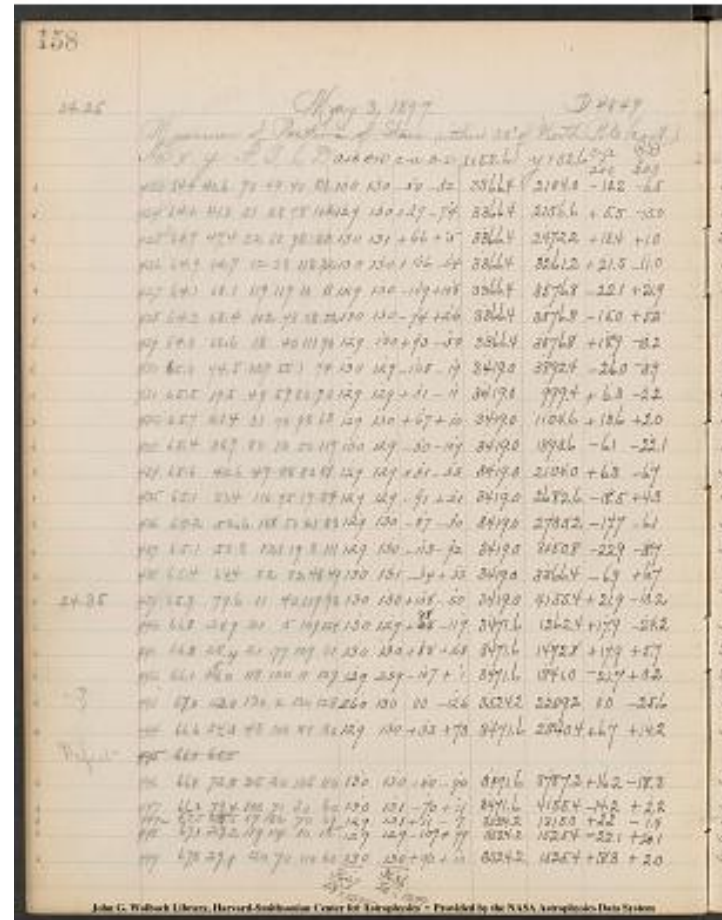
24.25 May 3, 1897. D4849

Measures of Positions of Stars within 30° North Pole (cont)

[[table]]

[No.]x[y]|A.|B.|C.|D.|a+c|B+D|c-a|B-D|x x 52.6|y x 52.6|c-a x 2.03|B-D x 2.03|

423	64.4	40.6	90	49	40	81	130	130	-50	-32	3366.4	2104.0	-10.2	-6.5	
424	64.6	41.8	51	28	78	102	129	130	+27	-74	3366.4	2156.6	+5.5	-15.0	
425	64.7	47.4	32	68	98	63	130	131	+66	+5	3366.4	2472.2	+13.4	+1.0	
426	54.9	62.7	12	38	118	92	130	130	+106	-54	3366.4	3261.2	+21.5	-11.0	
427	64.1	68.1	11	19	119	10	111	129	130	-109	+108	3366.4	3576.8	-22.1	+21.9
428	64.3	68.4	102	78	28	52	130	130	-74	+26	3366.4	3576.8	-15.0	+5.3	
429	64.8	68.6	18	40	111	90	129	130	+93	-50	3366.4	3576.8	+18.9	-10.2	
430	65.0	74.5	129	55	1	74	130	129	-128	-19	3419.0	3892.4	-26.0	-3.9	
431	65.5	19.5	49	59	80	70	129	129	+31	-11	3419.0	999.4	+6.3	-2.2	
432	65.7	21.4	31	70	98	60	129	130	+67	+10	3419.0	1104.6	+13.6	+2.0	
433	65.4	36.9	80	10	50	119	130	129	-30	-109	3419.0	1893.6	-6.1	-22.1	
434	65.6	40.6	49	48	80	81	129	129	+31	-33	3419.0	2104.0	+6.3	-6.7	
435	65.1	51.4	110	75	19	54	129	129	91	+21	3419.0	2682.6	-18.5	+4.3	
436	65.2	52.6	108	50	21	80	129	130	-87	-30	3419.0	2735.0	-17.7	-6.1	
437	65.1	58.8	121	19	8	111	129	130	-113	-92	3419.0	3050.8	-22.9	-18.7	
438	65.4	64.4	82	82	48	4	130	131	-34	+33	3419.0	3366.4	-6.9	+6.7	
[[24.35]]	439	65.9	79.6	11	40	119	90	130	130	+108	-	-	-	-	
50	34	19.0	4	155.4	+21.9	-10.2	-	-	-	-	-	-	-	-	
440	66.8	24.9	21	5	109	124	130	129	+[[strikethrough]]	-	-	-	-	-	
28	[[strikethrough]]	88	-	119	3471.6	1262.4	+17.9	-24.2	-	-	-	-	-	-	
441	66.8	28.4	21	79	109	51	130	130	+88	+28	3471.6	1472.8	+17.9	+5.7	
442	66.1	3	[[strikethrough]]	-	-	-	-	-	-	-	-	-	-	-	
4	[[strikethrough]]	5.0	118	130	11	129	129	259	-107	+1	3471.6	1841.0	-21.7	+0.2	
[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	443	67.0	42.0	130	2	130	-	-	-	-	-	-	
128	260	130	00	-	126	3524.2	2209.2	00	-	25.6	-	-	-	-	
444	66.6	54.3	48	100	81	30	129	130	+33	+70	3471.6	2840.4	+6.7	+14.2	
[[Defect]]	445	[[strikethrough]]	66.3	65.5	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	
446	66.8	72.8	25	20	105	110	130	130	+80	-90	3741.6	3787.2	+16.2	-18.3	
447	66.3	79.4	100	71	30	60	130	131	-70	+11	3471.6	4155.4	-14.2	+2.2	
447a	67.5	25.5	59	62	70	69	129	131	+11	-7	3524.2	1315.0	+22	-1.4	
448	67.1	29.2	119	114	10	15	129	129	-109	+99	3524.2	1525.4	-22.1	+20.1	
449	67.8	29.4	20	70	110	60	[[strikethrough]]	130	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	
hrough]]	130	[[strikethrough]]	[[strikethrough]]	+90	+10	3524.2	1525.4	+18.3	+2.0	-	-	-	-	-	
[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	[[strikethrough]]	



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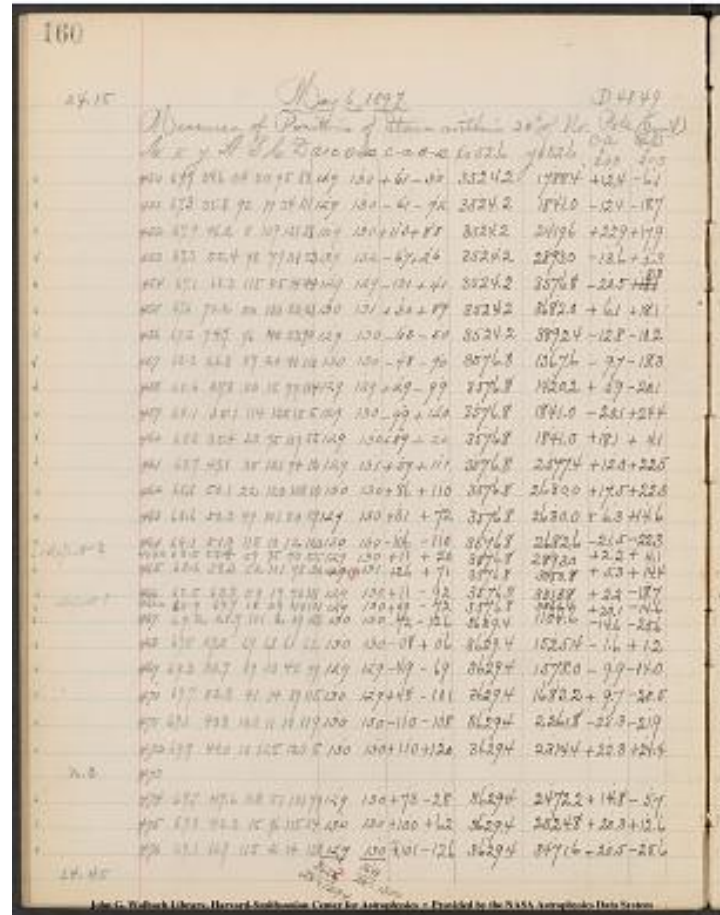
24.15 May 6, 1897 D4849

Measures of Positions of Stars within 30° of No. Pole (cont)

[table]

No. | x | y | A | B | C | D | a+c B+D | c-a B-D | X x 52.6 | y x 52.6 | c-a
^[[x 2.03]] | B-D ^[[x 2.03]] |

450	67.7	34.6	34	50	95	80	129 130	+61 -30	3524.2	
1788.4	+12.4	-6.1								
451	67.3	35.8	95	19	34	111	129 130	-61 -92	3524.2	
1841.0	-12.4	-18.7								
452	67.9	46.2	8	109	121	21	129 130	+113 +88	3524.2	
2419.6	+22.9	+17.9								
453	67.3	55.4	98	79	31	53	129 132	-67 +26	3524.2	
2893.0	-13.6	+5.3								
454	67.1	68.3	115	85	14	44	129 129	-101 +41	3524.2	
3576.8	-20.5	+ 18.1	83							
455	67.6	70.2	50	110	80	21	130 131	+30 +89	3524.2	
3682.0	+6.1	+18.1								
456	67.3	74.7	96	40	33	90	129 130	-63 -50	3524.2	
3892.4	-12.8	-10.2								
457	68.3	26.8	89	20	41	110	130 130	-48 -90	3576.8	
1367.6	-9.7	-18.3								
458	68.6	27.8	50	15	79	114	129 129	+29 -99	3576.8	
1420.2	+5.9	-20.1								
459	68.1	35.1	114	125	15	5	129 130	-99 +120	3576.8	
1841.0	-20.1	+24.4								
460	68.8	35.4	20	75	109	55	129 130	+89 +20	3576.8	
1841.0	+18.1	+4.1								
461	68.7	49.1	35	121	94	10	129 131	+59 +111	3576.8	
2577.4	+12.0	+22.5								
462	68.8	50.1	22	120	108	10	130 130	+86 +110	3576.8	
2630.0	+17.5	+22.3								
463	68.6	50.3	49	101	80	29	129 130	+31 +72	3576.8	
2630.0	+6.3	+14.6								
464	68.1	51.9	118	10	12	120	130 130	-106 -110	3576.8	
2682.6	-21.5	-22.3								
defect?	464a	68.5	55.4	59	75	70	55	129 130	+11 +20	
3576.8	2893.0	+2.2	+4.1							
465	68.6	58.3	52	101	78	30	129			
130 131	+26 +71	3576.8	3050.8	+5.3	+14.4					
466	68.5	63.8	59	19	70	111	129 130	+11 -92	3576.8	
3313.8	+2.2	-18.7								
defect?	466a	68.9	64.7	15	29	114	101	129 130	+99 -72	
3576.8	3366.4	+20.1	-14.6							
467	69.2	21.9	101	2	29	128	130 130	-72 -126	3629.4	
1104.6	-14.6	-25.6								
468	69.5	29.5	69	68	61	62	130 130	-08 +06	3629.4	
1525.4	-1.6	+1.2								
469	69.3	30.7	89	30	40	99	129 129	-49 -69	3629.4	
1578.0	-9.9	-14.0								
470	69.7	32.8	41	14	89	115	130 129	+48 -101	3629.4	
1683.2	+9.7	-20.5								
471	69.1	43.8	120	11	10	119	130 130	-110 -108	3629.4	
2261.8	-22.3	-21.9								
472	69.9	44.0	10	125	120	5	130 130	+110 +120	3629.4	
2314.4	+22.3	+24.4								
n.s.	473									
474	69.7	47.6	28	51	101	79	129 130	+73 -28	3629.4	
2472.2	+14.8	-5.7								



475	69.8	48.3	15	96	115	34	130	130	+100	+62	3629.4
2524.8	+20.3	+12.6									
476	69.1	66.9	115	2	14	128	<u>129</u>	³⁶²			
2	3	<u>28</u>	=	1294							
<u>130</u>	³⁶⁴¹	<u>28</u>	=	1300							
+	-101	-126	3629.4	3471.6	-20.5	-					
25.6											

24.45

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[[table]]

| | -2610. | -2580 |

|---|---|---|

3536.6	1794.5	+ 926.6	- 785.5
3511.8	1859.7	+ 901.8	- 720.3
3547.1	2401.7	+ 937.1	- 178.3
3510.6	2887.7	+ 900.6	- 178.3
3503.7	3568.5	+ 893.7	+ 988.5
3530.3	3663.9	+ 920.3	+ 1083.9
3511.4	3902.6	+ 901.4	+ 1322.6
3567.1	1385.9	+ 957.1	- 1194.1
3582.7	1440.3	+ 972.7	- 1139.7
3556.7	1816.6	+ 946.7	- 763.4
3594.9	1836.9	+ 984.9	- 743.1
3588.8	2554.9	+ 978.8	- 25.1
3594.3	2554.9	+ 984.3	+ 27.7
3583.1	2615.4	+ 973.1	+ 35.4

355 ~~[[/strickethrough]]~~ 4 ~~[[/strickethrough]]~~ 5.3 | 2704.9 | + 94~~[[/strickethrough]]~~ 4 ~~[[/strickethrough]]~~ 5.3 | 124.9 |

3579.0	2888.9	+ 969.0	+ 308.9
3582.1	3036.4	+ 972.1	+ 456.4
3579.0	3332.5	+ 969.0	+ 752.5
3596.9	3381.0	+ 986.9	+ 801.0
3614.8	1130.2	+ 1004.8	- 1449.8
3627.8	1524.2	+ 1017.8	- 1055.8
3619.5	1592.0	+ 1009.5	- 988.0
3639.1	1703.7	+ 1029.1	- 876.3
3607.1	2283.7	+ 997.1	- 296.3
3651.7	2290.0	+ 1041.7	- 290.0
3644.2	2477.9	+ 1034.2	- 102.1
3649.7	2512.2	+ 1039.7	- 67.8
3608.9	3497.2	+ 998.9	+ 917.2

161

-2610 -2580

3536.6	1794.5	+ 926.6	- 785.5
3511.8	1859.7	+ 901.8	- 720.3
3547.1	2401.7	+ 937.1	- 178.3
3510.6	2887.7	+ 900.6	- 178.3
3503.7	3568.5	+ 893.7	+ 988.5
3530.3	3663.9	+ 920.3	+ 1083.9
3511.4	3902.6	+ 901.4	+ 1322.6
3567.1	1385.9	+ 957.1	- 1194.1
3582.7	1440.3	+ 972.7	- 1139.7
3556.7	1816.6	+ 946.7	- 763.4
3594.9	1836.9	+ 984.9	- 743.1
3588.8	2554.9	+ 978.8	- 25.1
3594.3	2554.9	+ 984.3	+ 27.7
3583.1	2615.4	+ 973.1	+ 35.4
355 [[/strickethrough]] 4 [[/strickethrough]] 5.3 2704.9 + 94			
[[/strickethrough]] 4 [[/strickethrough]] 5.3 124.9			
3579.0	2888.9	+ 969.0	+ 308.9
3582.1	3036.4	+ 972.1	+ 456.4
3579.0	3332.5	+ 969.0	+ 752.5
3596.9	3381.0	+ 986.9	+ 801.0
3614.8	1130.2	+ 1004.8	- 1449.8
3627.8	1524.2	+ 1017.8	- 1055.8
3619.5	1592.0	+ 1009.5	- 988.0
3639.1	1703.7	+ 1029.1	- 876.3
3607.1	2283.7	+ 997.1	- 296.3
3651.7	2290.0	+ 1041.7	- 290.0
3644.2	2477.9	+ 1034.2	- 102.1
3649.7	2512.2	+ 1039.7	- 67.8
3608.9	3497.2	+ 998.9	+ 917.2

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[[table]]

| | | -2610. | -2580. |

| --- | --- | --- |

3635.1|36[[/strickethrough]]42.8[[/strickethrough]]16.0|+1025.1|1036.0|

3613.0|3966.5|+1003.0|+1386.5|

3760.0|1216.7|+1150.0|-1363.3[[x=1097.4]]|

3704.3|1347.1|+1094.3|-1232.9|

3706.4|2171.6|+1096.4|-408.4|

3663.7|2292.5|+1053.7|-287.5

3760.6|2401.3|+1150.6|-178.7[[x=1098.0]]|

3672.1|2693.0|+1062.1|113.0

3734.8|2927.3|+1124.8|+347.3[[x=1098.5]]|

3667.0|3076.4|+1057.0|496.4

37[[/strickethrough]]1[[/strickethrough]]05.1|3141.8|+[[/strickethrough]]

1105.1[[/strickethrough]]1095.|+561.8|

3667.0|3924.3|+1057.0|1344.3|

3692.2|397[[/strickethrough]]4[[/strickethrough]]5.3|+1082.2|+1395.3|

3712.3|1434.0|+1102.3|-1146.0|

3744.5|1441.9|+1134.5|-1138.1|

3741.1|1523.8|+1131.1|-1056.2|

3736.6|2314.6|+1126.6|-265.4[[y=-291.7]]|

3737.2|2296.3|+1127.2|-283.7|

[[/strickethrough]]3714.5[[/strickethrough]]3754.7|2398.1|+1144.7|-181.9

3722.4|2678.1|+1112.4|+98.1|

37[[/strickethrough]]2[[/strickethrough]]44. [[/strickethrough]]

7[[/strickethrough]]5|2886.3|+1134.5|+306.3|

3726.5|3106.2|+1116.5|+526.2|

3723.6|3263.4|+1113.6|+683.4|

3723.4|3408.6|+1113.4|+828.6|

3752.1|3786.4|+1142.1|+1206.4|

3768.7|1244.5|+1158.7|-1335.5

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-2610. -2580.

3635.1|36~~42.8~~|16.0|+1025.1|1036.0|

3613.0|3966.5|+1003.0|+1386.5|

3760.0|1216.7|+1150.0|-1363.3|x=1097.4|

3704.3|1347.1|+1094.3|-1232.9|

3706.4|2171.6|+1096.4|-408.4|

3663.7|2292.5|+1053.7|-287.5

3760.6|2401.3|+1150.6|-178.7|x=1098.0|

3672.1|2693.0|+1062.1|113.0

3734.8|2927.3|+1124.8|+347.3|x=1098.5|

3667.0|3076.4|+1057.0|496.4

37~~1~~|~~05.1~~|3141.8|+~~1105.1~~|

3667.0|3924.3|+1057.0|1344.3|

3692.2|397~~4~~|~~5.3~~|+1082.2|+1395.3|

3712.3|1434.0|+1102.3|-1146.0|

3744.5|1441.9|+1134.5|-1138.1|

3741.1|1523.8|+1131.1|-1056.2|

3736.6|2314.6|+1126.6|-265.4|y=-291.7|

3737.2|2296.3|+1127.2|-283.7|

~~3714.5~~~~3754.7~~|2398.1|+1144.7|-181.9

3722.4|2678.1|+1112.4|+98.1|

37~~2~~|~~44~~|

7~~5~~|2886.3|+1134.5|+306.3|

3726.5|3106.2|+1116.5|+526.2|

3723.6|3263.4|+1113.6|+683.4|

3723.4|3408.6|+1113.4|+828.6|

3752.1|3786.4|+1142.1|+1206.4|

3768.7|1244.5|+1158.7|-1335.5

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[illegible]

*	528	75.9	65.4	20	-	110	50	130	+90	-	3945.0	3419.0
		+18.3										
*	529	75.2	65.7	108	-	22	99	130	-86	-	3945.0	3419.0
		17.5										
*	530	75.4	66.8	90	30	40	-	<u>130</u>	³⁶³³			
		<u>28 = 129.7</u>						<u>3374</u>	²⁶			
		= 129.8		-50	-	3945.0	3471.6	-10.2	-			

23.45

* cannot see the line to get heading of "B"(Nos 5 38 + 529) and "D"
no 530

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Measures of Positions of Stars within 30° of No. Pole (cont.)
[[14 Columned Table]]
$$\left[\left[\text{No.} \mid x \mid y \mid A \mid B \mid C \mid D \mid a+c \mid B+D \mid \left[\left[\text{[strikethrough]} \right] a+c \mid B+D \right. \right. \right. \\ \left. \left. \left[\left[\text{[strikethrough]} \right] c-a \mid B-D \mid X \mid x \mid 52.6 \mid y \mid x \mid 52.6 \mid c-a \wedge \left[\left[x \mid 2.03 \right] \right] \mid B-D \wedge \left[\left[x \mid 2.03 \right] \right] \right] \right] \right]$$

~~531~~ | ~~77.1~~ | ~~32.4~~ | ~~124~~ | ~~89~~ | ~~5~~ | ~~42~~ | ~~129~~ | ~~131~~ | ~~-119~~ | ~~82~~
~~+/~~47 | 4050.2 | 1683.2 | ~~-~~9.

[/strikethrough] 24.2 | +9.5 |
 | 532 | 76.4 | 40.6 | 89 | 50 | 41 | 80 | 130 130 | -48 -30 | 3997.6 |
 2104.0 | -9.7 | -6.1 |
 | 533 | 76.4 | 41.4 | 69 | 89 | 60 | 41 | 129 130 | -9 +48 | 3997.6 | 2156.6 |
 -1.8 | +9.7 |

| 534 | 76.7 | 47.4 | 35 | 75 | 94 | 55 | 129 | 130 | +59 +20 | 3997.6 |
2472.2 | +[[strikethrough]] 3.0 [[/strikethrough]] 12.0 | +4.1 |

535	76.4	56.8	72	20	57	109	129	129	-15	-89	3997.6
2945.6	-3.0	-18.1									

536	76.3	57.9	89	10	40	119	129	129	-49	-109	3997.6
2998.2	-9.9	-22.1									

537	76.5	59.5	78	62	51	68	129	130	-27	-06	3997.6
3103.4	-5.5	-1.2									
522	76.4	60.6	61	53	42	72	124	122	54	26	3997.6

538	76.4	60.6	91	52	40	78	131	130	-51	-26	3997.6
3156.0	-10.4	-5.3									
538	76.4	65.6	105	40	35	90	130	130	80	50	3997.6

539	76.3	65.6	105	40	25	90	130	130	-80	-50	3997.6
3419.0	-16.2	-10.2									
540	76.4	67.1	72	30	119						

540 | 76.4 | 67.1 | 72 | ~~30~~ | 119 | 58 |
~~100~~ | 11 | 130 | 130 | -14 +108 | 3997.6 |
3524 2 | -2 | ~~9~~ | ~~8~~ | +21 9 |

3524.2 | -2.1 | 9 | 8 | +21.9 |
 | | 541 | 77.9 | 33.1 | 5 | 119 | 125 | 11 | 130 130 | +120 | +108 | 4050.2 |
 1735.8 | +24 | 5 | 4 | +21.9 |

| 735.8 | +24.~~[]~~ 5~~[]~~ 4 | +21.9 |
| 542 | 77.9 | 34.3 | 11 | 99 | 119 | 31 | 130 130 | +108 +68 | 4050.2 |
1788.4 | +21.9 | +13.8 |

1788.4	+21.9	+13.6
543	78.1	38.7
124	38	5
92	129	130
-119	-54	4102.8
1998.8	-24.2	-11.0

[illegible][illegible][illegible]

547	77.9	62.3	12	81	117	49	129	130	+105	+32	4050.2
3261.2	+21.3	+6.5									

	547a	77.7	62.5	31	60	99	70	130	130	+68	-10	4050.2
	3261.2	+13.8	-2.0									

548	77.9	68.4	15	74	115	55	130	129	+100	+19	4050.2
3576.8	+20.3	+3.9									

549	77.7	69.8	29	25	100	104	129	129	+71	-79	4050.2	3629.4	+14.4	-16.0
-----	------	------	----	----	-----	-----	-----	-----	-----	-----	--------	--------	-------	-------

550	78.5	36.4	60	80	69	50	129	130	+09	+30	4102.8
1893.6	+1.8	+6.1									

april 14, '98.	550a	78.1	38.7	122	38	0.8	9.2	130	130	-114	-
54	4102.8	1998.8	-23.1	-11.0							
	551	78.2	38.8	121	38	0.8	9.2	130	130	-114	-

551	78.2	40.8	101	10	28	120	129	130	-73	-110	4102.8
2104.0	-14.8	-22.3									
552	78.8	41.1	102	10	28	120	129	130	-73	-110	4102.8

552	78.8	41.1	30	120	100	10	130	130	+70	+110	4102.8
2156.6	+14.2	+22.3									

[illegible]

553	78.4	45.4	70	90	60	40	130	130	-10	+50	4102.8
2367.0	-2.0	+10.2									
554	78.7	46.6	35	40	95	89	130	129	+60	-49	4102.8
2419.6	+12.2	-9.9									
555	78.9	49.6	19	50	110	80	129	130	+91	-30	4102.8
2577.4	+18.5	-6.1									
556	78.4	51.8	70	18	60	112	130	130	-10	-94	4102.8
2682.6	-2.0	-19.1									
557	78.3	52.3	90	90	40	39	<u>130</u>	^[3626]			
	<u>^</u>	<u>[28 = 129.5]</u>	<u>129</u>	^[3636]							
	^[28 = 129.9]		-50	+51	4102.8	2735.2	-10.2	+10.4			
24.00											

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[[4 Columned Table]]

| | -2610. | -2580. |

|---|---|---|

40[[~~74.4~~]]26.0 | 1673.7 | +1416.0 | -906.3 |

3987.9 | 2110.1 | +1377.9 | -469.9 |

3995.8 | 2146.9 | +1385.8 | -433.1 |

4009.6 | 2468.1 | +1399.6 | -111.9 |

3994.6 | 2963.7 | +1384.6 | +383.7 |

3987.7 | 3020.3 | +1377.7 | +440.3 |

3992.1 | 3104.6 | +1382.1 | +524.6 |

3987.2 | 3161.3 | +1377.2 | +581.3 |

3981.4 | 3429.2 | +1371.4 | +[[~~849.2~~]] |3994. [[~~7~~]]8 | 3502.3 |+1384. [[~~7~~]]8 | +922.3 |4074. [[~~7~~]]6 | 1713.9 |+1464. [[~~7~~]]6 | -[[~~6~~]]8661.1 |

4072.1 | 1774.6 | +1462.1 | -805.4 |

4078.6 | 2009.8 | +1468.6 | -570.2 |

4065.0 | 2353.2 | +1455.0 | -226.8 |

4062.2 | 2655.8 | +1452.2 | +75.8 |

4031.3 | 2700.9 | +1421.3 | +120.9 |

4071.5 | 3254.7 | +1461.5 | +674.7 |

4064.0 | 3263.2 | +1454.0 | +683.2 |

4070.5 | 3572.9 | +1460.5 | +992.9 |

4064.6 | 3645.4 | +1454.6 | +1065.4 |

4104.6 | 1887.5 | +1494.6 | -692.5 |

4079.7 | 2009.8 | +1469.7 | [[~~2009.8~~]] -

570.2 |

4088.0 | 2126.3 | +1478.0 | -453.7 |

4117.0 | 2134.3 | +1507.0 | -445.7 |

4100.8 | 2356.8 | +1490.8 | -223.2 |

4115.0 | 2429.5 | +1505.0 | -150.5 |

4121.3 | 2583.5 | +1511.3 | +3.5 |

4100.8 | 2701.7 | +1490.8 | +121.7 |

4092.6 | 2724.8 | +1482.6 | +144.8 |

167

2610. -2580.

4074.6 2110.1 +1377.9 -469.9

3995.8 2146.9 +1385.8 -433.1

4009.6 2468.1 +1399.6 -111.9

3994.6 2963.7 +1384.6 +383.7

3987.7 3020.3 +1377.7 +440.3

3992.1 3104.6 +1382.1 +524.6

3987.2 3161.3 +1377.2 +581.3

3981.4 3429.2 +1371.4 +[[~~849.2~~]]

3994. [[~~7~~]]8 3502.3

+1384. [[~~7~~]]8 +922.3

4074. [[~~7~~]]6 1713.9

+1464. [[~~7~~]]6 -

[[~~6~~]]8661.1

4072.1 1774.6 +1462.1 -805.4

4078.6 2009.8 +1468.6 -570.2

4065.0 2353.2 +1455.0 -226.8

4062.2 2655.8 +1452.2 +75.8

4031.3 2700.9 +1421.3 +120.9

4071.5 3254.7 +1461.5 +674.7

4064.0 3263.2 +1454.0 +683.2

4070.5 3572.9 +1460.5 +992.9

4064.6 3645.4 +1454.6 +1065.4

4104.6 1887.5 +1494.6 -692.5

4079.7 2009.8 +1469.7 [[~~2009.8~~]] -

570.2

4088.0 2126.3 +1478.0 -453.7

4117.0 2134.3 +1507.0 -445.7

4100.8 2356.8 +1490.8 -223.2

4115.0 2429.5 +1505.0 -150.5

4121.3 2583.5 +1511.3 +3.5

4100.8 2701.7 +1490.8 +121.7

4092.6 2724.8 +1482.6 +144.8

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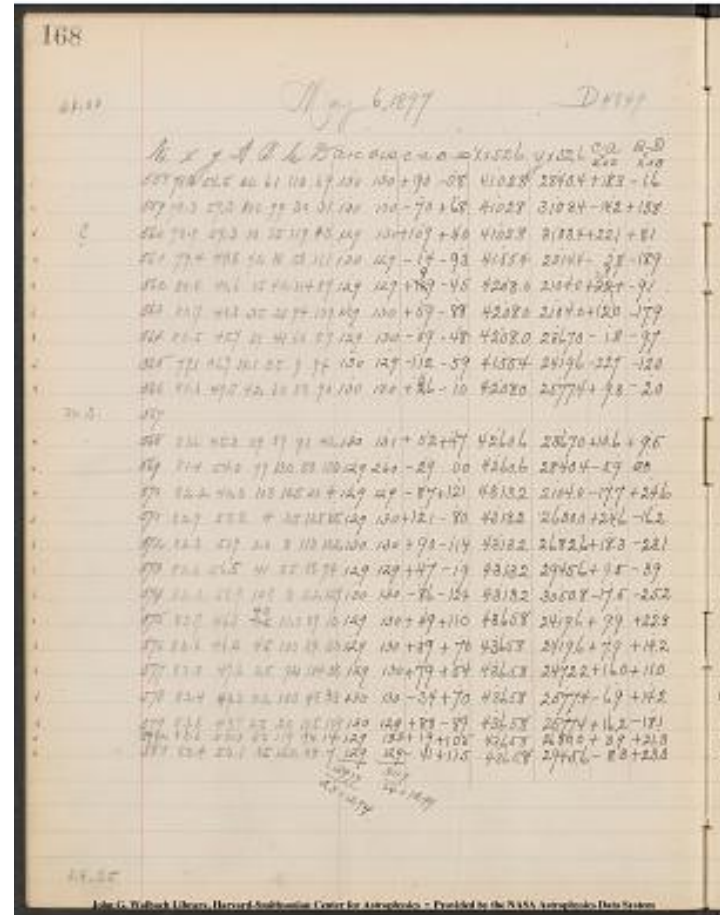
Extracted Sep-23-2023 08:55:04

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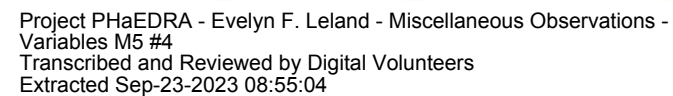
[[table]]

No.	x	y	A.	B.	C.	D.	a+c B+D	c-a B-D	X x 52.6	y x 52.6
558	78.8	54.5	20	61	110	69	130 130	+90 -08	4102.8	
2840.4	+18.3	-1.6								
559	78.3	59.3	100	99	30	31	130 130	-70 +68	4102.8	
3103.4	-14.2	+13.8								
?	560	78.9	59.3	10	85	119	45	129 130	+109 +40	4102.8
3103.4	+22.2	+8.1								
561	79.4	44.8	72	18	58	11.1	130 129	-14 -93	4155.4	
2314.4	-2.8	-18.9								
562	80.8	40.6	15	42	114	87	129 129	+ 10		
99	45	4208.0	2104.0	122.1						
20.1	-9.1									
563	80.7	40.8	35	21	94	109	129 130	+59 -88	4208.0	
2104.0	+12.0	-17.9								
564	80.5	45.7	69	41	60	89	129 130	-09 -48	4208.0	2367.0
-1.8	-9.7									
565	79.1	46.7	121	35	9	94	130 129	-112 -59	4155.4	
2419.6	-22.7	-12.0								
566	80.6	49.5	42	60	88	70	130 130	+ 2		
46	-10	4208.0	2577.4	+9.3	-2.0					
n.s.	567									
568	81.6	45.3	39	89	91	42	130 131	+52 +47	4260.6	
2367.0	+10.6	+9.5								
569	81.4	54.0	79	130	50	130	129 260	-29 00	4260.6	
2840.4	-5.9	0.0								
570	82.2	40.0	108	125	21	4	129 129	-87 +121	4313.2	
2104.0	-17.7	+24.6								
571	82.9	50.8	4	25	125	105	129 130	+121 -80	4313.2	
2630.0	+24.6	-16.2								
572	82.9	51.9	20	8	110	122	130 130	+90 -114	4313.2	
2682.6	+18.3	-23.1								
573	82.6	56.5	41	55	88	74	129 129	+47 -19	4313.2	2945.6
+9.5	-3.9									
574	82.2	58.9	108	3	22	127	130 130	-86 -124	4313.2	
3050.8	-17.5	-25.2								
575	83.7	46.1	35	40	120	89				
10	129 130	+49 +110	4365.8	2419.6	+99	+22.3				
576	83.6	46.3	45	100	84	30	129 130	+39 +70	4365.8	
2419.6	+7.9	+14.2								
577	83.8	47.3	2.5	921	104	38	129 130	+79 +54	4365.8	
2472.2	+16.0	+11.0								
578	83.4	49.3	82	100	48	30	130 130	-34 +70	4365.8	
2577.4	-6.9	+14.2								
579	83.8	49.7	25	20	105	109	130 129	+80 -89	4365.8	
2577.4	+16.2	-18.1								
579.a	83.6	50.1	55	119	74	14	129 133	+19 +105	4365.8	
2630.0	+3.9	+21.3								
580	83.4	56.1	85	122	44	7	<u>129</u>	²⁹⁷⁷		
<u>23</u>	<u>1294</u>	<u>129</u>	³¹¹⁷							
<u>24</u>	<u>1299</u>	-41 +115	4365.8	2945.6	-8.3	+23.3				

24.25



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$$[equation]$$

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Cos x- 2610 Cos. y-2580	
+520.0	+79.9
726.3	726.3 +1225.5
+726.3	916.2 863.6
+1021.4	+1035.2
+1555.3	+1335.3
+1480.8	+1365.0
+2021.2	+2028.3
-326.5	+1888.4
-1021.6	+1322.1
-1786.7	+868.5
-2453.6	+ 703.9 651.3
- 1797.9	1850.5 +203.7
-2436.0	-619.6
-1653.7	- 821.5 874.1
-1068.4	-251.4
-864.0	- 923.8 975.0
-391.1	-1222.6
-431.7	-708.5
+350.2	+ 1146.8
-265.3	-340.1

y	
2251.6	-328.4
2308.3	2300.2 -
301.7	279.8
2215.1	2467.7 -
394.9	112.3
1975.9	2516.3 -
634.1	63.7
2041.2	2697.2 -56
9	8.8 +117.2
2219.8	2700.9 -
400.2	+120.9
2728.7	2313.8
+118.7	266.2
2643.8	2494.5
+33.8	85.5
2526.8	2583.1 -
83.2	+3.1

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Gay. Cal. 2610 2580

+520.0	+79.9
+726.3	+1225.5
+726.3	+916.2
+1021.4	+1035.2
+1555.3	+1335.3
+1480.8	+1365.0
+2021.2	+2028.3
-326.5	+1888.4
-1021.6	+1322.1
-1786.7	+868.5
-2453.6	+ 703.9 651.3
- 1797.9	1850.5 +203.7
-2436.0	-619.6
-1653.7	- 821.5 874.1
-1068.4	-251.4
-864.0	- 923.8 975.0
-391.1	-1222.6
-431.7	-708.5
+350.2	+ 1146.8
-265.3	-340.1
2251.6	-328.4
2308.3	2300.2 -
301.7	279.8
2215.1	2467.7 -
394.9	112.3
1975.9	2516.3 -
634.1	63.7
2041.2	2697.2 -56
9	8.8 +117.2
2219.8	2700.9 -
400.2	+120.9
2728.7	2313.8
+118.7	266.2
2643.8	2494.5
+33.8	85.5
2526.8	2583.1 -
83.2	+3.1

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D4915

24.00 May 6, 1897

[[table]]

Table. | x | y | A | B | C | D | a+c B+D | c-a B-D | c-a x 2.03 B-D x

2.03 | x | y |

1	1	122	128	9	129	131	+127 +113	+25.8 +22.9		
cannot see lines of square										
2	1	-	20	-	110	130	-90	-18.3		

3	120	8	10	122	130	130	-110 -114	-22.3 -23.1		
4	70	100	59	29	129	129	-11 +71	-2.2 +14.4		
5	89	9	41	121	130	130	-48 -112	-9.7 -22.7		
5a	35	66	95	64	130	130	+60 +2	+12.2 +0.4		
6	71	115	59	14	130	129	-12 +101	-2.4 +20.5		
9	119	70	11	60	130	130	-108 +10	-21.9 +2.0		
12	91	42	39	89	130	131	-52 -47	-10.6 -9.5		
16	21	125	109	5	130	130	+88 +120	+17.9 +24.4		
17	61	9	68	120	129	129	+7 -111	+1.4 -22.5		
18	123	79	6	51	129	130	-117 +28	-23.8 +[[strikethrough]]		

56.8 [[/strikethrough]] 5.7

23	105	29	25	101	130	130	-80 -72	-16.2 -14.6		
----	-----	----	----	-----	-----	-----	---------	-------------	--	--

25	86	9	43	121	129	130	-43 -1	[[strikethrough]] 2		
----	----	---	----	-----	-----	-----	--------	---------------------	--	--

[[/strikethrough]] 12 | -8.7 -22.7 |

26	101	30	28	100	129	130	-73 -70	-14.8 -14.		
----	-----	----	----	-----	-----	-----	---------	------------	--	--

[[strikethrough]] 0 [[/strikethrough]] 2 |

29	89	128	40	3	129	131	-49 +125	-9.9 +25.4		
31	88	89	41	40	129	129	-47 +49	-9.5 +9.9		
35	118	119	11	11	129	130	-107 +108	-21.7 +21.9		
36	100	31	29	98	129	129	-71 -67	-14.4 -13.6		
37	10	119	120	11	130	130	+110 +108	+22.3 +21.9		

a	130	89	130	41	160	130	+48	+9.7		2252.1
---	-----	----	-----	----	-----	-----	-----	------	--	--------

b	79	105	50	25	129	1	[[strikethrough]] 25	[[/strikethrough]]		
---	----	-----	----	----	-----	---	----------------------	--------------------	--	--

30 | -29 +80 | -5.9 + 16.2 | [[strikethrough]] 2308.5 [[/strikethrough]] |

2298.2 |

c	50	75	80	55	130	130	+30 +20	+6.1 +4.1		
---	----	----	----	----	-----	-----	---------	-----------	--	--

[[strikethrough]] 2215.3 [[/strikethrough]] | 2468.1 |

d	125	85	4	44	129	129	-121 +41	-24.6 +8.3		
---	-----	----	---	----	-----	-----	----------	------------	--	--

[[strikethrough]] 1974.2 [[/strikethrough]] | 2516.5 |

e	89	25	41	105	130	130	-48 -80	-9.7 -16.2		
---	----	----	----	-----	-----	-----	---------	------------	--	--

[[strikethrough]] 2041.7 [[/strikethrough]] | 2698.8 |

f	39	20	91	111	130	131	+52 -91	+10.6 -18.5		
---	----	----	----	-----	-----	-----	---------	-------------	--	--

[[strikethrough]] 2219.8 [[/strikethrough]] | 2701.1 |

n.s.	g	81	68	49	62	[[strikethrough]]				
------	---	----	----	----	----	-------------------	--	--	--	--

[[equation]] 3757^[[29 = 1296]] 3768^[[29 = 1299]] | h | | 81 | 68 | 49

62 | 130 | 130 | -32 +6 | -6.5 +1.2 | [[strikethrough]] 2728.7

[[/strikethrough]] | 2313.2 |

k	38	11	92	120	130	131	+54 -109	+11.0 -22.1		
---	----	----	----	-----	-----	-----	----------	-------------	--	--

[[strikethrough]] 2641.0 [[/strikethrough]] | 2494.3 |

24.15	1	55	49	74	81	129	130	+1.9 -32	+3.9 -6.5	2528.7
-------	---	----	----	----	----	-----	-----	----------	-----------	--------

2583.9 |

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2610	2580
------	------

~~5202~~+79.7
~~726.1~~+914.7
~~1021.6~~+1035.0
~~1555.1~~+~~1289.7~~~~1335.1~~
~~1480.6~~+1364.6
~~2021.~~~~2~~~~4~~~~4~~
~~2028.3~~
~~3~~~~4~~~~26.3~~+1889.0
~~1021.4~~+1321.9
~~1786.3~~+86~~6.0~~~~7.2~~
~~2453.6~~+~~658.7~~~~703.7~~~~703.7~~
~~1797.2~~~~151.0~~+202.1
~~2436.0~~-619.2
~~1654.5~~-821.5
~~1069.8~~-251.~~6~~~~4~~
~~864.3~~-974.8
~~391.3~~
~~12~~~~2~~~~0~~~~2~~~~3~~~~1222.3~~
~~431.7~~-708.3
~~350.0~~-1146.2
~~265.3~~-340.1

over x sign changed	x-2610
---------------------	--------

~~327.9~~
~~301.5~~~~281.8~~~~2320.3~~-289.7
~~394.7~~~~111.9~~~~2203.1~~-406.9
~~635.8~~~~63.5~~~~2023.4~~-586.6[[38= Est used in K]]
~~568.3~~+118.8~~2061.1~~-548.9
~~390.2~~+121.1~~2198.6~~-411.4
~~118.7~~-266.8~~2741.7~~+131.7
~~31.0~~-85.7~~2619.0~~+9.0
~~81.3~~+3.9~~2520.9~~-89.1

173

~~5202~~+79.7
~~726.1~~+914.7
~~1021.6~~+1035.0
~~1555.1~~+~~1289.7~~~~1335.1~~
~~1480.6~~+1364.6
~~2021.~~~~2~~~~4~~~~4~~
~~2028.3~~
~~3~~~~4~~~~26.3~~+1889.0
~~1021.4~~+1321.9
~~1786.3~~+86~~6.0~~~~7.2~~
~~2453.6~~+~~658.7~~~~703.7~~~~703.7~~
~~1797.2~~~~151.0~~+202.1
~~2436.0~~-619.2
~~1654.5~~-821.5
~~1069.8~~-251.~~6~~~~4~~
~~864.3~~-974.8
~~391.3~~
~~12~~~~2~~~~0~~~~2~~~~3~~~~1222.3~~
~~431.7~~-708.3
~~350.0~~-1146.2
~~265.3~~-340.1

~~327.9~~
~~301.5~~~~281.8~~~~2320.3~~-289.7
~~394.7~~~~111.9~~~~2203.1~~-406.9
~~635.8~~~~63.5~~~~2023.4~~-586.6
~~568.3~~+118.8~~2061.1~~-548.9
~~390.2~~+121.1~~2198.6~~-411.4
~~118.7~~-266.8~~2741.7~~+131.7
~~31.0~~-85.7~~2619.0~~+9.0
~~81.3~~+3.9~~2520.9~~-89.1

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+	520.2	+	78.6	
+	1224.9			
+	726.1	+	914.7	862.1
+	1021.6	+	1035.2	
+	1555.1	+	1335.3	
+	1481.2	+	1364.4	
+	2021.4	+	2026.9	
-	325.9	+	1888.6	
-	1021.4	+	1322.1	
-	1786.7	+	868.3	
-	2453.6	+	703.7	651.1
-	1798.1	1850.7	+	202.1
-	2435.8	+	-619.0	
-	16	6	54.9	-
-	821.5	874.1		
-	1069.8	+	-251.6	
-	864.0	+	-975.0	
-	391.3	+	-1222.6	
-	432.9	+	-708.3	
+	350.2	+	-1147.4	
-	265	7	3	-340.1

x(sign [chi]) x-2610				
-	327.9			
301.3	280.4	2320.1	-289.9	
396.9	112.1	2205.3	-404.7	
633.9	64.5	2021.5	-588.5	
569.0	117.2	2061.8	-5482	
388.6	120.9	2197.0	-413.0	
118.9	2741.5	+	131.5	
31.0	85.5	2	9	9.0
5	619.0	+	9	9.0
79.1	2518.7	+	3.3	-91.3

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+	520.2	+	78.6	
+	1224.9			
+	726.1	+	914.7	862.1
+	1021.6	+	1035.2	
+	1555.1	+	1335.3	
+	1481.2	+	1364.4	
+	2021.4	+	2026.9	
-	325.9	+	1888.6	
-	1021.4	+	1322.1	
-	1786.7	+	868.3	
-	2453.6	+	703.7	651.1
-	1798.1	1850.7	+	202.1
-	2435.8	+	-619.0	
-	16	6	54.9	-
-	821.5	874.1		
-	1069.8	+	-251.6	
-	864.0	+	-975.0	
-	391.3	+	-1222.6	
-	432.9	+	-708.3	
+	350.2	+	-1147.4	
-	265	7	3	-340.1
x(sign [chi]) x-2610				
-	327.9			
301.3	280.4	2320.1	-289.9	
396.9	112.1	2205.3	-404.7	
633.9	64.5	2021.5	-588.5	
569.0	117.2	2061.8	-5482	
388.6	120.9	2197.0	-413.0	
118.9	2741.5	+	131.5	
31.0	85.5	2	9	9.0
5	619.0	+	9	9.0
79.1	2518.7	+	3.3	-91.3

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24.35 May 6, 1897 D4849

North Polar Standard Stars outside circle

[[table]]

	A	B	C	D			C-A	B-D	C-A * 2.03	
2	110	15	19	114	129	129	-91	-99	-18.5	-20.1
5	35	3	94	127	129	130	+59	-124	+12.0	-25.2
5a	90	59	39	71	129	130	-51	-12	-10.4	-2.4
6	48	111	81	19	129	130	+33	+92	+6.7	+18.7
9	1	72	128	58	129	130	+127	+14	+25.8	+2.8
16	95	124	34	5	129	129	-61	+119	-12.4	+24.2
17	51	1	78	129	129	130	+27	-128	+5.5	-26.0
18	12.2	70	8	60	130	130	-114	+10	-23.1	+2.0
23	5	18	125	112	130	130	+120	-94	+24.4	-19.1
24	30	11	100	119	130	130				

24.40 25 | 29 | 128 | 100 | 3 | [[underlined]] 129]]/underlined]]

[[underlined]] 131]]/underlined]] | +71 | +125 | +14.4 | +25.4 |

[[underlined]] May 9, 1897]]/underlined]]

23.05	1	120	119	10	11	130	130	-110	+108	-22.3	+21.9
3	2	130	128	130	130	260	+126	0	+25.6	0.0	
4	50	95	79	34	129	129	+29	+61	+5.9	+12.4	
12	29	40	101	90	130	130	+72	-50	+14.6	-10.2	
26	15	22	114	108	129	130	+99	-86	+20.1	-17.5	
29	29	115	100	14	129	129	+71	+101	+14.4	+20.5	
31	31	19	99	51	130	130	+68	+28	+13.8	+5.7	
35	2	108	129	22	131	130	+127	+86	+25.8	+17.5	
36	20	20	110	110	130	130	+90	-90	+18.3	-18.3	
37	110	109	20	20	[[underline]] 130]]/underline]]						

[[underline]] 129]]/underline]] | -90 | +89 | -18.3 | +18.1 |

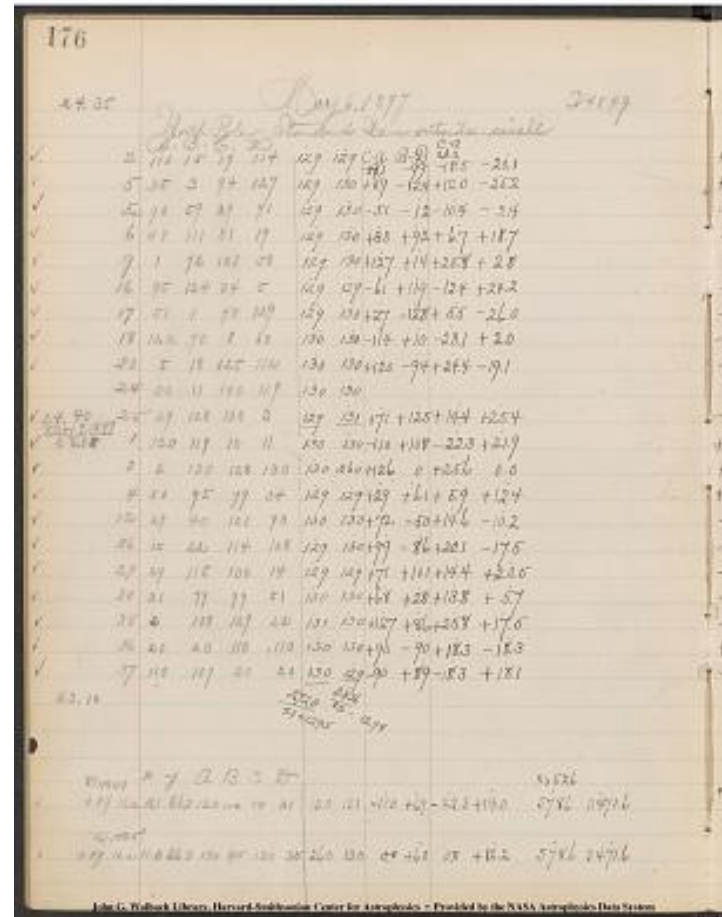
[[/table]]

23.10 [[equation]]

[[table]]

	x	y	A	B	C	D									X x 526
D4849	[[89]]	16a	11.1	66.3	120	100	10	31	130	131	-110				
			+69	-22.3	+14.0	578.6	3471.6								
D4885^[[1]]	[[+89]]	16a	11.0	663	130	95	130	35	260	130					
			0.0	+60	0.0	+12.2	5786	3471.6							

[[/table]]



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[illegible]

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$$\begin{aligned} &+ 23337 + 18273 \quad (2) \\ &+ 14574 + 15324 \quad (4) \\ &+ 14629 + 15324 \quad (5a) \\ &+ 20215 + 21081 \quad (6) \\ &- 3224 + 18832 \quad (9) \\ &- 17808 + 8679 \quad (16) \\ &- 24467 + 1672 \quad (17) \\ &- 18441 + 2158 \quad (18) \\ &- 24278 - 6147 \quad (23) \\ &- 16488 - 8696 \quad (25) \\ &+ 5287 + 887 \quad (1) \\ &+ 7294 + 1552 \quad (3) \quad y = 0.653, \\ &+ 10283 + 10370 \quad (4) \\ &- 10174 + 10226 \quad (12) \\ &- 10495 - 2481 \quad (26) \\ &- 8894 - 9699 \quad (29) \\ &- 3370 - 12181 \quad (31) \\ &- 4276 - 7089 \quad (35) \\ &+ 5519 - 10418 \quad (36) \\ &- 2613 - 3363 \quad (37) \end{aligned}$$

$$\begin{aligned} &- 2611 - 2670 \quad 4x \quad 8_2 \quad 0 \quad 27 \quad \text{Comp.} \quad 6253 - 8_2 \quad 0 \quad 27 \quad \text{Comp.} \\ &- 5407 - 2609 + 8774 \quad 15 \quad 11 + 81 + 98 - 20582 \quad 24 \quad 8_2 + 1391 + 216 + 8774 \\ &5786 \quad 3407 \quad (20000) + 8774 \quad 105 - 23 - 315 + 447 - 20977 + 544128 + 1511 + 4554 + 8774 \\ &\quad \quad \quad - 20277 \quad \quad \quad 716m - 20244 \quad \quad \quad + 8774 \end{aligned}$$

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Variables M5 #4
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Estimates of brightness of No. Polar Stars,
June 16, 1897
 12.10

No. | D4885 Est-Br. | D4849 July 8, 1897 Br.
 22.50 | July 23, 1897 Additional measures
 D4849 | D4885 | July 26, 1897

1	16.0	N.S.					
2	15.8	16.0	N.S.				
3	15.9	1	1				
3	15.0	N.S.					
4	15.0	14.5	5		14.8	2	<u>3</u>
5	16.0	15.8	2		15.9	1	<u>1</u>
6	15.5	15.5	0		15.5	0	0
7	15.0	15.8	<u>8</u>		N.S.		defect.
8	12.0	13.0	<u>10</u>		13.0	13.0	
9	12.8	8	2				
2	13.0	0	0	0	0	0	Rj ?
9	12.2	13.2	<u>10</u>		13.5	13.5	13.4
10	15.8	15.8	0		15.8	0	0
10	15.8	15.8	0		15.8	0	0
11	15.0	15.5	<u>5</u>		15.2		
12	14.0	13.5	5		13.8	2	3
12	14.0	13.5	5		13.8	2	<u>3</u>
13	14.0	13.8	2		13.9	1	<u>1</u>
14	15.5	15.5	0		15.5	0	0
15	15.2	15.5	<u>3</u>		15.4		
16	14.2	14.0	2		14.1	1	1
16	14.2	14.0	2		14.1	1	<u>1</u>
17	11.5	12.5	<u>10</u>		12.5	12.5	12.2
18	14.2	14.5	3		16.6		
18	14.2	14.5	3		16.6		
19	11.5	13.0	15		13.0	12.7	12.7
19	11.5	13.0	<u>15</u>		13.0	12.7	12.7
20	15.0	15.0	0		15.0	0	0
20	15.0	15.0	0		15.0	0	0
21	15.5	15.0	0		15.5	0	0
22	15.5	15.7	<u>2</u>		15.6		
23	11.8	13.0	12		13.0	13.0	13.0
23	11.8	13.0	<u>12</u>		13.0	13.0	13.0
24	14.0	14.8	8		15.2	15.0	15.0
24	14.0	14.8	8		15.2	15.0	15.0
25	16.0	16.0	0		16.0	0	0
25	16.0	16.0	0		16.0	0	0
26	15.9	15.8	1		15.8	0	0
27	12.0	13.8	<u>5</u>		12.2		
28	12.0	12.0	0		12.0	0	0
28	12.0	12.0	0		12.0	0	0
29	13.8	14.5	<u>7</u>		14.5	14.8	14.6
30	16.0	16.0	0		16.0	0	0
30	16.0	16.0	0		16.0	0	0
31	12.45	14.0	14.5	23.10	5		14.2
32	12.45	14.0	14.5	23.10	5		14.2

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Estimates of brightness of No. Polar Stars

June 16, 1897

Date 3 p.m.

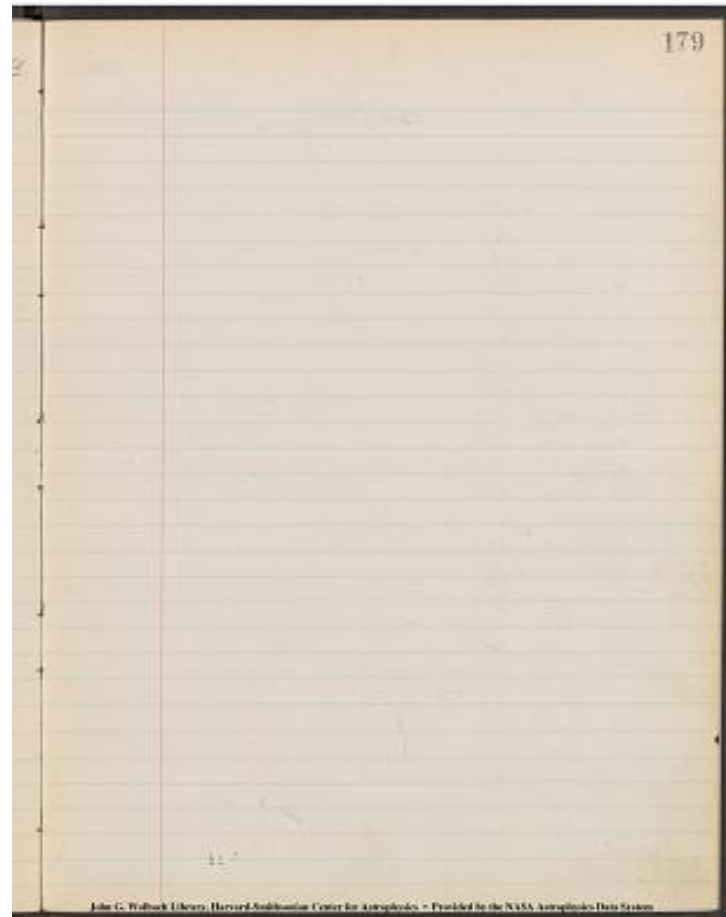
1	16.0	N.S.					
2	15.8	16.0	N.S.				
3	15.0	N.S.					
4	15.0	14.5	5		14.8	2	<u>3</u>
5	16.0	15.8	2		15.9	1	<u>1</u>
6	15.5	15.5	0		15.5	0	0
7	15.0	15.8	<u>8</u>		N.S.		defect.
8	12.0	13.0	<u>10</u>		13.0	13.0	
9	12.8	8	2				
2	13.0	0	0	0	0	0	Rj ?
9	12.2	13.2	<u>10</u>		13.5	13.5	13.4
10	15.8	15.8	0		15.8	0	0
10	15.8	15.8	0		15.8	0	0
11	15.0	15.5	<u>5</u>		15.2		
12	14.0	13.5	5		13.8	2	3
12	14.0	13.5	5		13.8	2	<u>3</u>
13	14.0	13.8	2		13.9	1	<u>1</u>
14	15.5	15.5	0		15.5	0	0
15	15.2	15.5	<u>3</u>		15.4		
16	14.2	14.0	2		14.1	1	1
16	14.2	14.0	2		14.1	1	<u>1</u>
17	11.5	12.5	<u>10</u>		12.5	12.5	12.2
18	14.2	14.5	3		16.6		
18	14.2	14.5	3		16.6		
19	11.5	13.0	15		13.0	12.7	12.7
19	11.5	13.0	<u>15</u>		13.0	12.7	12.7
20	15.0	15.0	0		15.0	0	0
20	15.0	15.0	0		15.0	0	0
21	15.5	15.0	0		15.5	0	0
22	15.5	15.7	<u>2</u>		15.6		
23	11.8	13.0	12		13.0	13.0	13.0
23	11.8	13.0	<u>12</u>		13.0	13.0	13.0
24	14.0	14.8	8		15.2	15.0	15.0
24	14.0	14.8	8		15.2	15.0	15.0
25	16.0	16.0	0		16.0	0	0
25	16.0	16.0	0		16.0	0	0
26	15.9	15.8	1		15.8	0	0
27	12.0	13.8	<u>5</u>		12.2		
28	12.0	12.0	0		12.0	0	0
28	12.0	12.0	0		12.0	0	0
29	13.8	14.5	<u>7</u>		14.5	14.8	14.6
30	16.0	16.0	0		16.0	0	0
30	16.0	16.0	0		16.0	0	0
31	12.45	14.0	14.5	23.10	5		14.2
32	12.45	14.0	14.5	23.10	5		14.2

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180 Estimates of br. of No. Polar Stars. (cont)
June 16, 1897 Plate D 4885

[8 Column Table]

12.45 No | D4885 Est. Br. | D4849 July 8, 1897 Br 23.10 | | D4849
July 23, 1897 | D4885 | July 26, 1897 | |

32	14.0	14.5	<u>5</u>	
33	16.0	N.S.	0	
34	15.5	15.5	0	
35	15.0	15.8	<u>8</u>	15.8 15.8 15.6
			<u>6</u>	222
36	13.9	14.0	<u>1</u>	
37	15.0	15.0	0	
38	15.5	15.5	0	
39	16.0	16.0	0	
40	16.0	16.0	0	
41	14.5	14.0	5	
42	15.5	16.0	<u>5</u>	
43	15.2	15.0	2	
44	15.5	15.8	<u>3</u>	
45	13.0	13.2	<u>2</u>	
46	15.5	15.8	<u>3</u>	
47	15.5	16.0	<u>5</u>	
48	15.7	15.8	<u>1</u>	
49	14.5	14.0	5	
50	14.2	13.8	4	
51	15.5	15.5	0	
52	11.0	11.0	0	
53	15.5	defect 14.0?	15 defect defect	
54	defect?	N.S.		
55	14.8	N.S.		
56	14.8	15.8	<u>10</u>	N.S. defect?
57	defect?	16.0		
58	14.0	14.2	<u>2</u>	
59	15.5	N.S.		
60	12.0	12.8	<u>8</u>	12.7 12.8 12.6
			<u>6</u>	212
61	11.0	11.0	0	
1.05	62	15.5	15.5	0
23.30				

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Estimates of br. of No. Polar Stars (cont)

June 16, 1897 Plate D 4885

July 23, 1897 | D4885 | July 26, 1897 |

32 14.0 14.5 5 |

33 16.0 N.S. 0 |

34 15.5 15.5 0 |

35 15.0 15.8 8 | 15.8 | 15.8 | 15.6 |

6 | 222 |

36 13.9 14.0 1 |

37 15.0 15.0 0 |

38 15.5 15.5 0 |

39 16.0 16.0 0 |

40 16.0 16.0 0 |

41 14.5 14.0 5 |

42 15.5 16.0 5 |

43 15.2 15.0 2 |

44 15.5 15.8 3 |

45 13.0 13.2 2 |

46 15.5 15.8 3 |

47 15.5 16.0 5 |

48 15.7 15.8 1 |

49 14.5 14.0 5 |

50 14.2 13.8 4 |

51 15.5 15.5 0 |

52 11.0 11.0 0 |

53 15.5 defect 14.0? 15 | defect | defect |

54 defect? N.S. |

55 14.8 N.S. |

56 14.8 15.8 10 | N.S. | defect? |

57 defect? 16.0 |

58 14.0 14.2 2 |

59 15.5 N.S. |

60 12.0 12.8 8 | 12.7 | 12.8 | 12.6 |

6 | 212 |

61 11.0 11.0 0 |

1.05 62 15.5 15.5 0 |

23.30

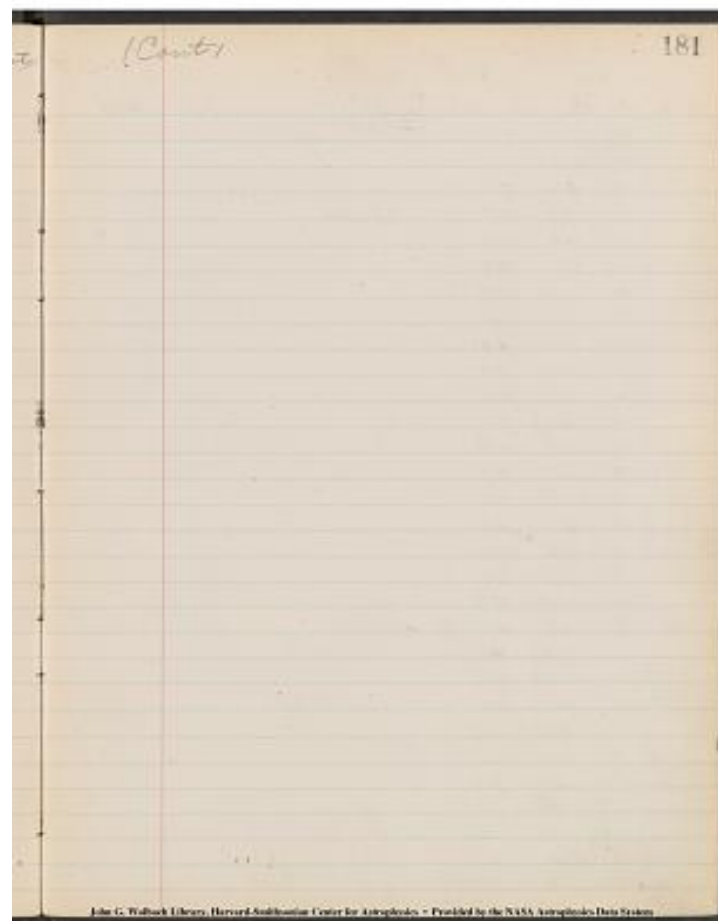
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(Cont)

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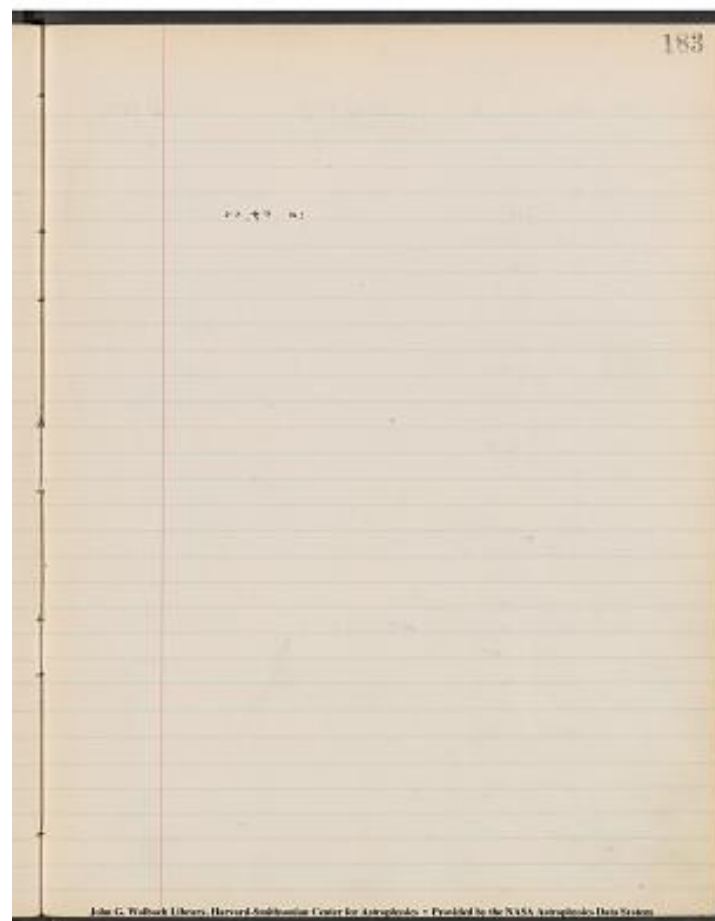


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Variables M5 #4
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22.23 0:

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Variables M5 #4
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 Estimates (cont)
 July 14, 1897
 12.05
 [table]
 [No] D4885 Est. Br. [D4849 Br.] 23.00 [June 2] ~~4~~
~~5~~, 1897 D4849 [D4885 July 23, 1897] July 26, 1897
 defect? 94 | 15.5 | n.s. |
 defect? 95 | 15.5 | n.s. |
 96 | 15.0 | 15.0 | 0 |
 97 | 14.2 | 14.0 | 2 |
 98 | 15.5 | 15.5 | 0 |
 defect? 99 | 16.0 | n.s. |
 100 | 16.0 | 15.7 | 3 |
 101 | 16.0 | 15.8 | 2 |
 102 | 15.8 | 15.5 | 3 |
 too bright 103 | too bright |
 defect 104 | 15.5 | |
 105 | 15.0 | 15.2 | 2 | 2 |
 106 | 12.0 | 12.5 | 5 | 5 |
 107 | 12.0 | 12.2 | 2 | 2 |
 108 | 16.0 | n.s. |
 109 | 11.5 | 12.0 | 5 | 5 |
 defect? 110 | 15.5 | 15.5 | 0 |
 defect? 111 | 15.0 | 15.3 | 3 | 3 |
 112 | 16.0 | 16.0 | 0 |
 113 | 14.0 | 14.7 | 7 | 7 | 14.5 | 14.8 | 14.5 | 14.5 |
 5 | 203 |
 ? 114 | 13.5 | 15.0 | 15 | 14.8 | 14.5 |
 defect 115 | n.s. |
 defect? 116 | 15.5 |
 117 | 14.0 | 14.8 | 8 | 14.8 | 14.5 | 14.5 | 14.5 |
 5 | 330 |
 118 | 11.7 | 12.0 | 3 | 3 |
 119 | 16.0 | 15.8 | 2 |
 120 | 15.5 | 15.0 | 5 |
 121 | 15.8 | 15.5 | 3 |
 122 | 16.0 | 16.0 | 0 |
 123 | 15.5 | 15.5 | 0 |
 12.25 124 | 15.0 | 15.0 | 23.15 |

184

Estimates (cont)

July 14, 1897

12.05

[table]

[No] D4885 Est. Br. [D4849 Br.] 23.00 [June 2] ~~4~~

~~5~~, 1897 D4849 [D4885 July 23, 1897] July 26, 1897 |

defect? 94 | 15.5 | n.s. |

defect? 95 | 15.5 | n.s. |

96 | 15.0 | 15.0 | 0 |

97 | 14.2 | 14.0 | 2 |

98 | 15.5 | 15.5 | 0 |

defect? 99 | 16.0 | n.s. |

100 | 16.0 | 15.7 | 3 |

101 | 16.0 | 15.8 | 2 |

102 | 15.8 | 15.5 | 3 |

too bright 103 | too bright |

defect 104 | 15.5 | |

105 | 15.0 | 15.2 | 2 | 2 |

106 | 12.0 | 12.5 | 5 | 5 |

107 | 12.0 | 12.2 | 2 | 2 |

108 | 16.0 | n.s. |

109 | 11.5 | 12.0 | 5 | 5 |

defect? 110 | 15.5 | 15.5 | 0 |

defect? 111 | 15.0 | 15.3 | 3 | 3 |

112 | 16.0 | 16.0 | 0 |

113 | 14.0 | 14.7 | 7 | 7 | 14.5 | 14.8 | 14.5 | 14.5 |

5 | 203 |

? 114 | 13.5 | 15.0 | 15 | 14.8 | 14.5 |

defect 115 | n.s. |

defect? 116 | 15.5 |

117 | 14.0 | 14.8 | 8 | 14.8 | 14.5 | 14.5 | 14.5 |

5 | 330 |

118 | 11.7 | 12.0 | 3 | 3 |

119 | 16.0 | 15.8 | 2 |

120 | 15.5 | 15.0 | 5 |

121 | 15.8 | 15.5 | 3 |

122 | 16.0 | 16.0 | 0 |

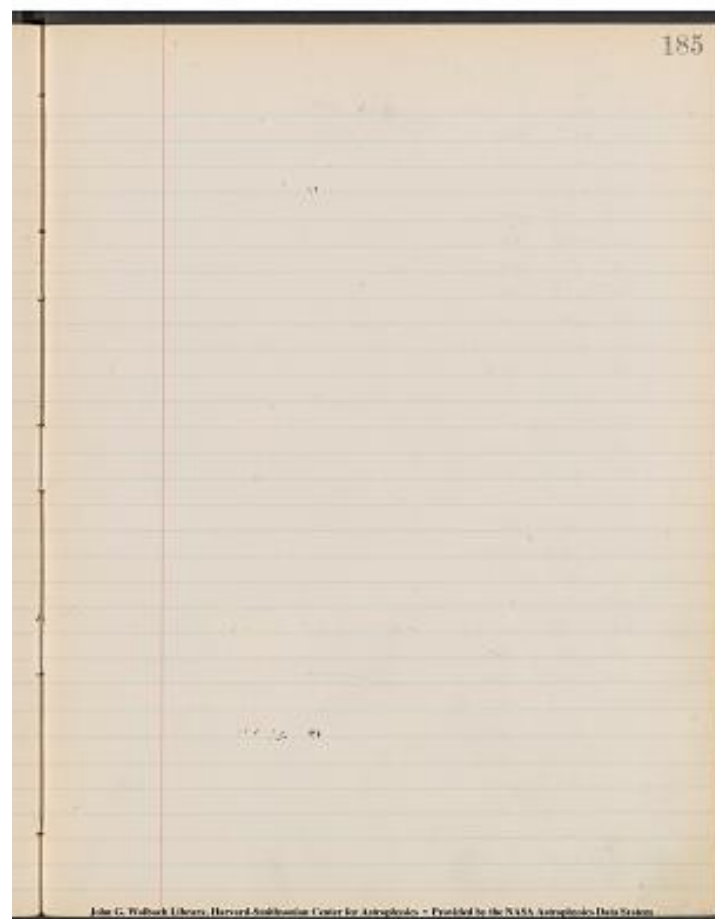
123 | 15.5 | 15.5 | 0 |

12.25 124 | 15.0 | 15.0 | 23.15 |

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[[no input]]



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Variables M5 #4
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186
 Estimates (cont)
 July 14, 1897
 12.25
 [[table]]
 No. | D4885 Br. | D4849 Br. | 23.15 | June 2 | ~~[[strikethrough]]~~
 4 | ~~[[strikethrough]]~~ 5, 1897 July 23, 1897 D4849 | July 26, 1897 D4885 |
 ---|---|---|---|---|
 125 | 15.8 | 15.8 | 0 |
 126 | 16.0 | 16.0 | 0 |
 127 | 14.5 | 15.0 | 5 |
 128 | 15.5 | 15.5 | 0 |
 129 | 14.0 | 13.8 | 2 |
 130 | 14.2 | 14.0 | 2 |
 131 | 15.0 | 15.5 | 5 |
 132 | 13.0 | 13.0 | 0 |
 133 | 16.0 | 16.0 | 0 |
 134 | 12.8 | 12.8 | 0 |
 defect? 135 | 15.0 | 14.9 | 1 |
 136 | 15.9 | 15.3 | 6 | 15.5 | 15.5 | 15.6 3311
 137 | 15.8 | 15.5 | 3 |
 138 | 13.0 | 13.2 | 2 |
 139 | 15.5 | 15.5 | 0 |
 140 | 16.0 | 16.0 | 0 |
 141 | 14.5 | 14.8 | 3 |
 142 | 14.4 | 14.5 | 1 |
 143 | 14.5 | 15.0 | 5 |
 144 | 12.5 | 13.5 | 10 | 12.0 | 13.3 | 127 263 872
 145 | 12.6 | 13.5 | 9 | 13.0 | 13.3 | 131 5412
 146 | 16.0 | 15.8 | 2 |
 147 | 12.5 | 14.5 | 20 | 14.5 | 14.0 | 14.1 61644
 148 | 16.0 | 16.0 | 0 |
 149 | 15.9 | 16.0 | 1 |
 150 | 16.0 | 15.5 | 5 |
 151 | 14.0 | 13.5 | 5 |
 152 | 12.9 | 12.5 | 4 |
 153 | 15.5 | 15.8 | 3 |
 [[see note on page 90]] 154 | 15.5 | n.s |
 155 | 15.0 | 15.0 | 23.25 |
 [[/table]]
 12.40

186

Estimates (cont)

Dr. Br. Br. 23.15 June 2, 1897

12.25

125	15.8	15.8	0
126	16.0	16.0	0
127	14.5	15.0	5
128	15.5	15.5	0
129	14.0	13.8	2
130	14.2	14.0	2
131	15.0	15.5	5
132	13.0	13.0	0
133	16.0	16.0	0
134	12.8	12.8	0
defect?	135	15.0	14.9 1
136	15.9	15.3	6 15.5 15.5 15.6 3311
137	15.8	15.5	3
138	13.0	13.2	2
139	15.5	15.5	0
140	16.0	16.0	0
141	14.5	14.8	3
142	14.4	14.5	1
143	14.5	15.0	5
144	12.5	13.5	10 12.0 13.3 127 263 872
145	12.6	13.5	9 13.0 13.3 131 5412
146	16.0	15.8	2
147	12.5	14.5	20 14.5 14.0 14.1 61644
148	16.0	16.0	0
149	15.9	16.0	1
150	16.0	15.5	5
151	14.0	13.5	5
152	12.9	12.5	4
153	15.5	15.8	3
[[see note on page 90]]	154	15.5	n.s
155	15.0	15.0	23.25

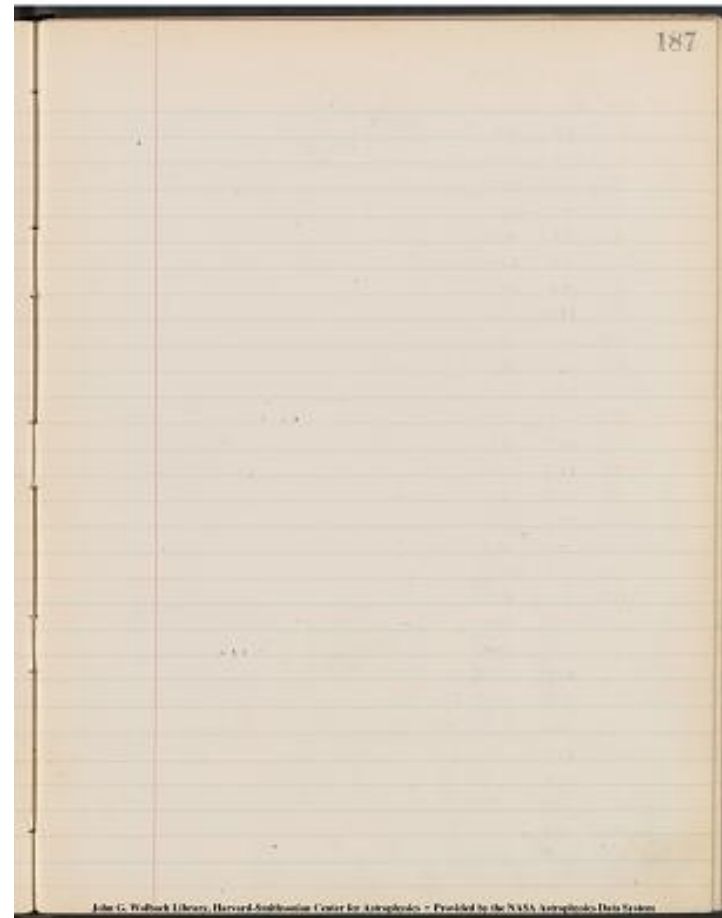
12.40

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188
Estimates (cont)
July 14, 1897
D4885 D4849

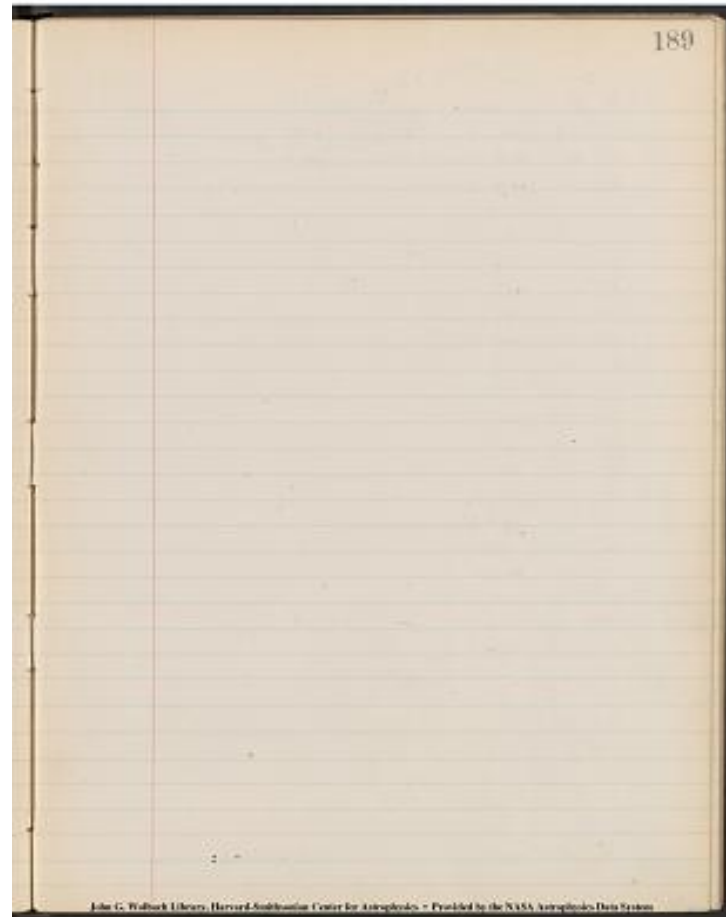
D4849 June 2~~4~~5, 1897
July 23, 1897 ~~July 22, 1897~~
D4885 | July 26, 1897
12.40

[[table]]				
No.	Br.	Br.	23.25	
---	---	---		
156	14.5	14.8	3	
157	15.0	15.5	5	
158	12.0	12.5	5	
159	14.0	14.0	0	
160	15.0	14.8	2	
161	16.0	16.0	0	
162	15.0	15.0	0	
162 alpha		15.5		
defect? 163		n.s		
? 164	16.0	defect		
165	11.0	11.00	0	
166	15.5	15.5	0	
167	16.0	16.0	0	
168	15.0	14.8	2	
169	15.8	16.0	2	
170	12.0	12.5	5	
171	15.5	15.5	0	
172	15.5	15.5	0	
173	16.0	16.0	0	
174	15.9	15.8	1	
175	15.8	16.0	2	
176	15.8	14.5 15.8	0	
177	12.2	14.5 23	[[14.0 13.8 12.8]]	
178	15.8	16.0	2	
179	15.5	15.5	0	
180	11.8	12.5	1 [[12.5 12.0 12.2 4332]]	
181	15.0	14.5	5	
182	15.5	15.8	3	
183	10.0	10.0	0	
184	13.9	12.8	11 [[13.0 13.0 13.2 7422]]	
185	16.0	16.0	0	
[[12.55]] 186			15.8 23.40	

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[[preprinted]]190[[/preprinted]]

Estimates (cont)

July 14, 1897

22.25

[[table]]

No. | D4885 Br. | D4849 Br. | 23.40 | D4849 | June 28, 1897
| July 20, 1897 | D4885 | July 26, 1897 |

-----|-----|-----|-----|

187 | 15.5 | 15.5 | 0

188 | 11.7 | 12.5 | 8 | 12.5 | 12.0

189 | 12.8 | 15.0 | 2 | 15.0

190 | 10.0 | 10.0 | 0

191 | 15.0 | 15.5 | 5 | 15.5

192 | 16.0 | 1 n.s.

193 | 13.9 | 12.8 | 11 | 13.0 | 13.0 | 13.27 | 422 | 422

194 | 15.8 | 15.8 | 0

195 | 16.0 | 16.0 | 0

196 | 15.8 | 15.5 | 3

197 | 15.0 | 14.8 | 2

198 | 15.2 | 15.0 | 2

199 | 15.2 | 15.2 | 0

200 | 16.0 | 16.0 | 0

201 | 10.0 | 10.0 | 0

202 | 15.0 | 14.8 | 2

203 | 15.5 | 15.5 | 0

204 | 16.0 | 16.0 | 0

205 | 15.0 | 15.0 | 0

206 | 15.2 | 15.2 | 0

207 | 15.0 | 14.8 | 2

208 | 15.5 | 15.2 | 3

209 | 16.0 | 16.0 | 0

210 | 16.0 | 16.0 | 0

211 | 15.5 | 15.8 | 3 | 15.8

212 | 15.0 | 15.5 | 5 | 15.5

213 | 14.9 | 14.0 | 9 | 15.0, 15.0 | 15.0, 15.0 | 15.0 100,000

214 | 14.8 | 14.5 | 3

215 | 15.5 | 15.8 | 3 | 15.8

216 | 15.8 | 16.0 | 2 | 16.0

217 | 15.8 | 15.8 | 0350

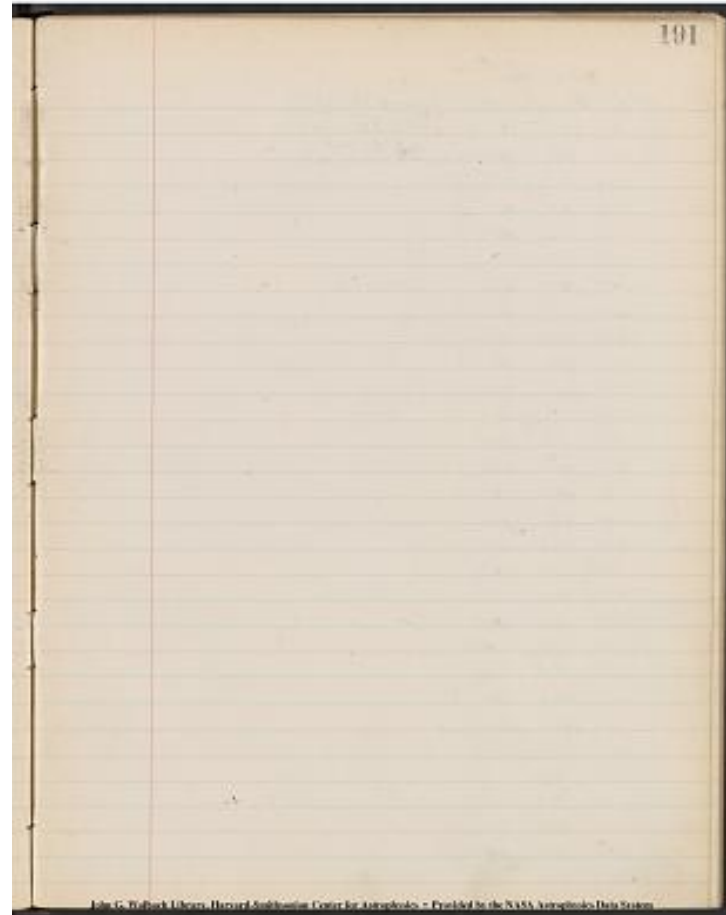
[[/table]]

22.40

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Variables M5 #4
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192
 Estimates (cont)
 July 16, 1897
 22.40
 [table]
 No. | D4885 Br. | D4849 Br. | 12.25 | June 28, 1897 Diff | Additional Measures
 D4849 July 23, 1897 | D4885 | July 26, 1897 |
 218 | 15.0 | 14.8 | 2 |
 219 | 15.1 | 14.5 | 6 | 14.5 | 15.0
 220 | 11.5 | 11.5 | 0 |
 221 | 16.0 | 16.0 | 0 |
 222 | 15.0 | 15.5 | 5 |
 223 | 15.2 | 15.5 | 3 |
 224 | 14.0 | 15.0 | 10 | 15.0 | 16.9 | 15.0 | 0, 01, 00
 225 | 15.5 | 15.5 | 0 |
 226 | 15.5 | 15.8 | 3 |
 227 | 16.0 | 16.0 | 0 |
 228 | 10.0 | 10.0 | 0 |
 229 | 11.0 | 11.0 | 0 |
 230 | 15.9 | 15.8 | 1 |
 231 | 16.0 | 16.0 | 0 |
 232 | 14.2 | 14.5 | 3 |
 233 | 15.0 | 15.0 | 0 |
 234 | 13.5 | 13.5 | 0 |
 235 | 15.5 | 15.3 | 2 |
 236 | 16.0 | 16.0 | 0 |
 237 | 15.8 | 15.5 | 3 |
 238 | 15.8 | 15.8 | 0 |
 239 | 15.5 | 15.2 | 3 |
 240 | 14.5 | 15.8 | 5 |
 241 | 15.8 | defect? |
 242 | 14.8 | 15.2 | 4 |
 243 | 14.0 | 13.3 | 7 | 13.0 | 12.8 | 12.7 | 13.0 | 0 | 23 | 30 |
 244 | [n.s.] |
 245 | 15.5 | 15.8 | 3 |
 246 | 15.5 | 15.8 | 3 |
 247 | 16.0 | 16.0 | 0 |
 22.55 | 248 | 15.2 | 15.5 | 3 (over) | 12.35

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Estimates (cont)

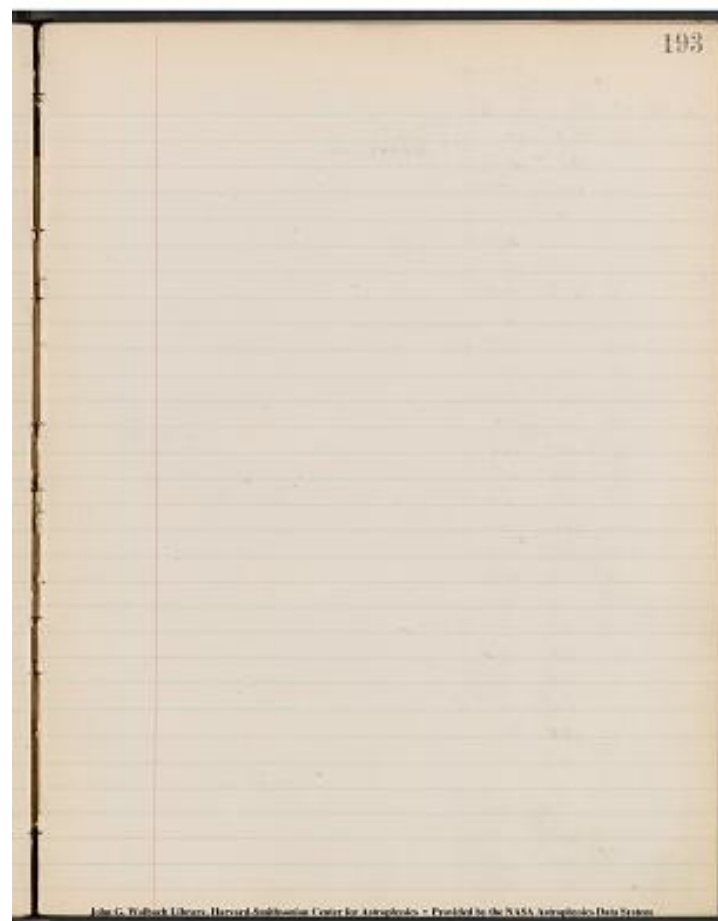
July 16, 1897

22.40

No. | D4885 Br. | D4849 Br. | 12.25 | June 28, 1897 Diff | Additional Measures
 D4849 July 23, 1897 | D4885 | July 26, 1897 |

218 | 15.0 | 14.8 | 2 |
 219 | 15.1 | 14.5 | 6 | 14.5 | 15.0
 220 | 11.5 | 11.5 | 0 |
 221 | 16.0 | 16.0 | 0 |
 222 | 15.0 | 15.5 | 5 |
 223 | 15.2 | 15.5 | 3 |
 224 | 14.0 | 15.0 | 10 | 15.0 | 16.9 | 15.0 | 0, 01, 00
 225 | 15.5 | 15.5 | 0 |
 226 | 15.5 | 15.8 | 3 |
 227 | 16.0 | 16.0 | 0 |
 228 | 10.0 | 10.0 | 0 |
 229 | 11.0 | 11.0 | 0 |
 230 | 15.9 | 15.8 | 1 |
 231 | 16.0 | 16.0 | 0 |
 232 | 14.2 | 14.5 | 3 |
 233 | 15.0 | 15.0 | 0 |
 234 | 13.5 | 13.5 | 0 |
 235 | 15.5 | 15.3 | 2 |
 236 | 16.0 | 16.0 | 0 |
 237 | 15.8 | 15.5 | 3 |
 238 | 15.8 | 15.8 | 0 |
 239 | 15.5 | 15.2 | 3 |
 240 | 14.5 | 15.8 | 5 |
 241 | 15.8 | defect? |
 242 | 14.8 | 15.2 | 4 |
 243 | 14.0 | 13.3 | 7 | 13.0 | 12.8 | 12.7 | 13.0 | 0 | 23 | 30 |
 244 | [n.s.] |
 245 | 15.5 | 15.8 | 3 |
 246 | 15.5 | 15.8 | 3 |
 247 | 16.0 | 16.0 | 0 |
 22.55 | 248 | 15.2 | 15.5 | 3 (over) | 12.35

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
 Variables M5 #4
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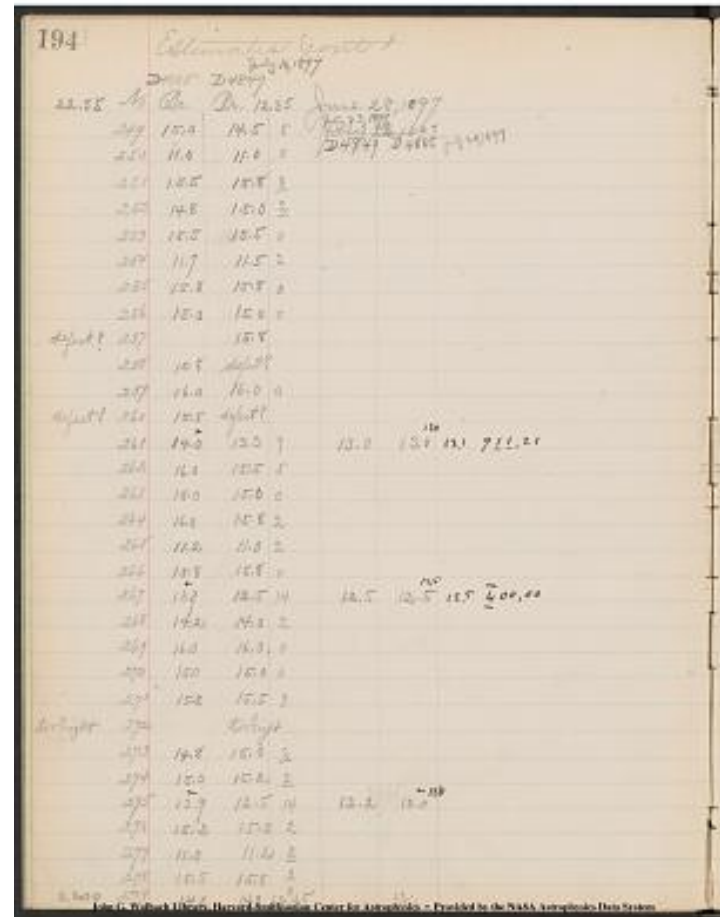


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Variables M5 #4
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[[preprinted]]194[[/preprinted]]
 Estimates (cont)
 July 16, 1897

[[table]]
 | No. | D4885 Br. | D4849 Br. | 12.25 | June 28, 1897 | July 23,
 1897 | ~~July 22, 1897~~ | ~~D48449~~ | D4885 | July
 26, 1897 |

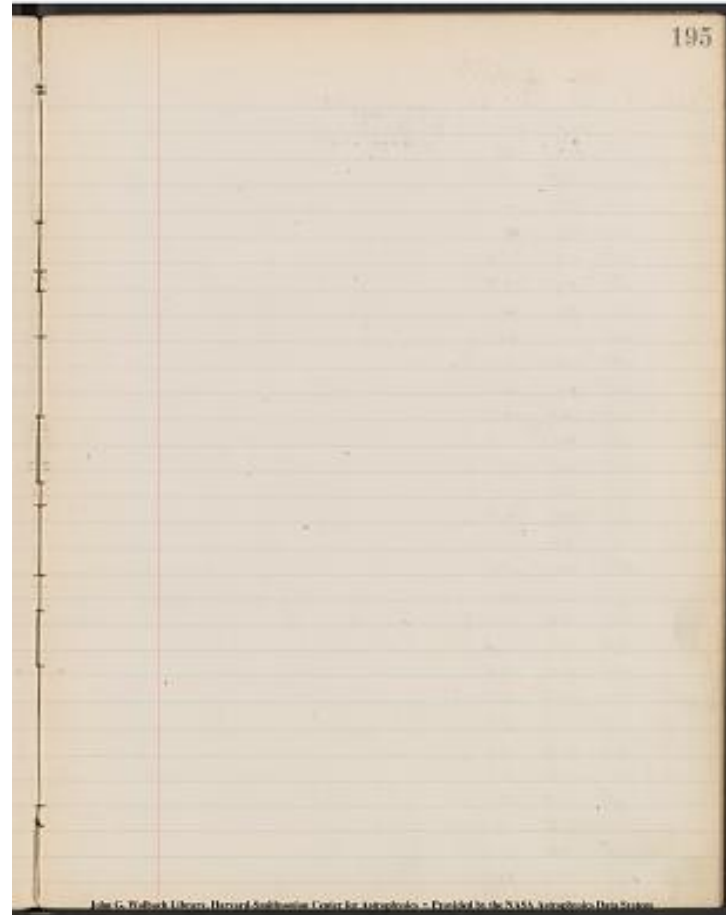
22.55	249	15.0	14.5	5			
250	11.0	11.0	0				
251	15.5	15.8		3			
252	14.8	15.0		2			
253	15.5	15.5	0				
254	11.7	11.5	2				
255	15.8	15.8	0				
256	15.0	15.0	0				
defect?	257	15.8					
258	defect?						
259	16.0	16.0	0				
defect?	260	16.0	16.0	0			
261	14.0	13.3	7	13.0	13.1	9	
1	2	1					
262	16.0	15.5	5				
263	15.0	15.0	0				
264	16.0	15.8	2				
265	11.2	11.0	2				
266	15.8	15.8	0				
267	13.9	12.5	14	12.5	12.5		
4	00.00						
268	14.2	14.0	2				
269	16.0	16.0	0				
270	15.0	15.0	0				
271	15.8	15.5	3				
too bright	272	too bright					
273	14.8	15.0		2			
274	15.0	15.2		2			
275	13.9	12.5	14	12.2	12.0		
276	15.2	15.0	2				
277	11.0	11.2		2			
278	15.5	15.8		3			
23.00	279	14.8	14.8	12.45			
67	77						



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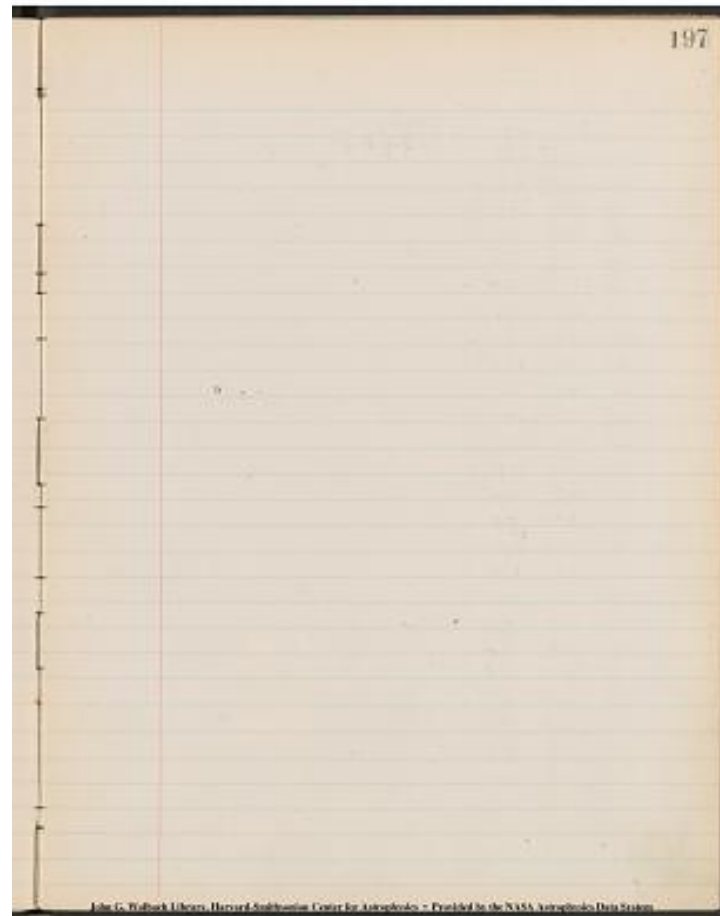
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Estimates. (cont)

July 16, 1897

D4885 D4849

22.40

[[table]]

No. | Br. | Br. | 12.55 | June 30

1897 | July, 22 1897 | ~~Jul 23~~

1897 D4849 | D4885 | July 26, 1897 |

311 | 10.8 | 11.0 | 2 | | | |

312 | 14.5 | 14.8 | 3 | | | |

313 | 14.0 | 13.5 | 5 | | | |

314 | 14.8 | 15.0 | 2 | | | |

315 | 15.5 | 15.5 | 0 | | | |

316 | 10.0 | 10.0 | 0 | | | |

317 | 16.0 | 15.5 | 5 | | | |

318 | 16.0 | 15.8 | 2 | | | |

319 | 16.0 | 16.0 | 0 | | | |

320 | 16.2 | 16.0 | 2 | | | |

321 | 14.5 | 15.0 | 5 | | | |

322 | 14.3 | 14.8 | 5 | | | |

323 | 15.0 | 15.5 | 5 | | | |

324 | 15.8 | 15.5 | 3 | | | |

325 | 15.5 | 15.5 | 0 | | | |

326 | 14.0 | 14.5 | 5 | | | |

^[[defect?]] 327 | 15.8 | | | | |

328 | 14.5 | 15.0 | 5 | | | |

329 | 14.5 | 14.0 | 5 | | | |

330 | 15.0 | 14.5 | 5 | | | |

331 | 13.8 | 12.8 | 10 | 12.5 | 13.0 | 13.0 8 | 2.5 | 2.5 |

0

332 | 13.8 | 13.0 | 8 | 12.5 | 12.5^ | 12.8 | | 127 | 1 2 1,3

2

333 | 14.0 | 13.0 | 10 | 13.0 | 12.8^ | 13.0 | | 13.0 | 0

2 | 0 0 0

334 | 14.1 | 14.7 | 6 | 14.5 | 14.0 | 14.3

2 | 4, 2 | 3 |

334a | 15.5 | | | |

defect? | 335 | 15.5 | 15.5 | 0 | | | |

336 | 15.8 | 15.5 | 3 | | | |

337 | 15.5 | 15.3 | 2 | | | |

338 | 12.5 | 11.7 | 8 | 12.5 | 12.5 | 12.3 2 | 6 | 2 |

2 2 |

defect | 339 | | n.s. | | | |

defect? | 340 | 15.5 | n.s. | | | |

[[/table]]

[[annotation]]23.00 1.05 [[/annotation]]

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Estimates (cont)

July 16, 1897

D4885 D4849

22.40

[[table]]

No. | Br. | Br. | 12.55 | June 30

1897 | July, 22 1897 | ~~Jul 23~~

1897 D4849 | D4885 | July 26, 1897 |

311 | 10.8 | 11.0 | 2 | | | |

312 | 14.5 | 14.8 | 3 | | | |

313 | 14.0 | 13.5 | 5 | | | |

314 | 14.8 | 15.0 | 2 | | | |

315 | 15.5 | 15.5 | 0 | | | |

316 | 10.0 | 10.0 | 0 | | | |

317 | 16.0 | 15.5 | 5 | | | |

318 | 16.0 | 15.8 | 2 | | | |

319 | 16.0 | 16.0 | 0 | | | |

320 | 16.2 | 16.0 | 2 | | | |

321 | 14.5 | 15.0 | 5 | | | |

322 | 14.3 | 14.8 | 5 | | | |

323 | 15.0 | 15.5 | 5 | | | |

324 | 15.8 | 15.5 | 3 | | | |

325 | 15.5 | 15.5 | 0 | | | |

326 | 14.0 | 14.5 | 5 | | | |

^[[defect?]] 327 | 15.8 | | | | |

328 | 14.5 | 15.0 | 5 | | | |

329 | 14.5 | 14.0 | 5 | | | |

330 | 15.0 | 14.5 | 5 | | | |

331 | 13.8 | 12.8 | 10 | 12.5 | 13.0 | 13.0 8 | 2.5 | 2.5 |

0

332 | 13.8 | 13.0 | 8 | 12.5 | 12.5^ | 12.8 | | 127 | 1 2 1,3

2

333 | 14.0 | 13.0 | 10 | 13.0 | 12.8^ | 13.0 | | 13.0 | 0

2 | 0 0 0

334 | 14.1 | 14.7 | 6 | 14.5 | 14.0 | 14.3

2 | 4, 2 | 3 |

334a | 15.5 | | | |

defect? | 335 | 15.5 | 15.5 | 0 | | | |

336 | 15.8 | 15.5 | 3 | | | |

337 | 15.5 | 15.3 | 2 | | | |

338 | 12.5 | 11.7 | 8 | 12.5 | 12.5 | 12.3 2 | 6 | 2 |

2 2 |

defect | 339 | | n.s. | | | |

defect? | 340 | 15.5 | n.s. | | | |

[[/table]]

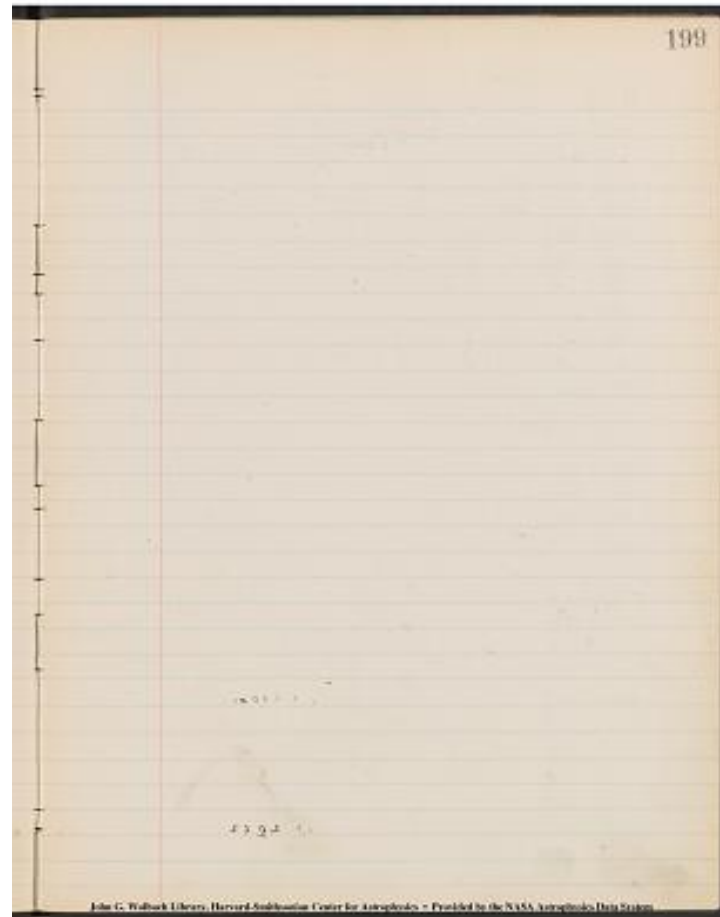
[[annotation]]23.00 1.05 [[/annotation]]

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ss0s

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July 22, 1897 D4849 July 23, 1897 D4885 July 26, 1897
23.00

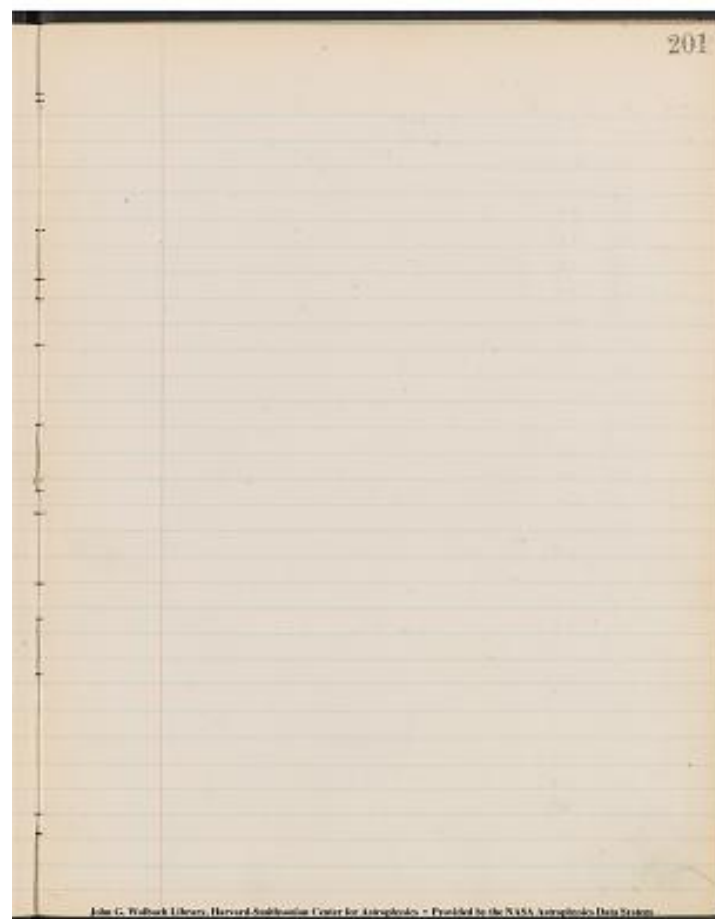
[[table]]			
No.	D4885 Br.	D4849 July 23 '97 Br.	
341	15.0	14.5 [^] [[22.00]]	5
342	13.8	13.5	3
343	16.0	15.8	2
344	15.5	15.5 [^] [[16.0]]	0
345	15.0	15.0	0
346	14.2	14.5	[[underline]]3[[/underline]]
defect? 347	15.5	15.5	0
348	10.0	10.2	[[underline]]2[[/underline]]
349	15.0	155	[[underline]]5[[/underline]]
too bright 350			
351	15.5	15.5	0
too bright 352			
353	15.2	15.5	[[underline]]3[[/underline]]
354	15.5	15.8	[[underline]]3[[/underline]]
355	15.0	15.5	[[underline]]5[[/underline]]
356	15.8	15.8	0
357	15.5	15.5	0
358	13.5	14.0	[[underline]]5[[/underline]]
359	15.8	15.8	0
360	14.8	15.2	[[underline]]4[[/underline]]
361	14.8	15.0	[[underline]]2[[/underline]]
362	15.5	15.8	[[underline]]3[[/underline]]
363	15.8	16.0	[[underline]]2[[/underline]]
364	11.5	11.5	0
365	15.5	15.5	0
366	15.8	15.8	0
367	15.8	15.8	0
368	15.5	16.0	[[underline]]5[[/underline]]
369	15.5	15.5	0
23.10 370	15.8	15.5	3
[[/table]]			
22.20			

200					
22.07	4	18.0	19.5	1	
	445	18.8	21.5	2	
	446	19.1	25.8	2	
	447	10.5	5.5	1	
	448	15.0	15.0	1	
	449	14.0	14.5	1	
April 1	450	15.5	16.0	1	
	451	11.4	12.1	1	
	452	18.0	18.5	2	
to high 1850					
	453	17.5	18.0	1	
to high 1850					
	454	10.0	11.0	1	
	455	12.0	13.0	1	
	456	10.1	10.5	1	
	457	10.8	11.8	1	
	458	10.5	11.2	1	
	459	10.5	11.0	1	
	460	10.8	11.8	1	
	461	14.8	15.8	1	
	462	12.5	13.5	1	
	463	10.8	11.8	1	
	464	11.0	11.8	1	
	465	15.8	16.8	1	
	466	12.8	13.8	1	
	467	10.8	11.8	1	
	468	15.5	16.5	1	
	469	15.5	16.5	1	
6.3.20	470	10.5	11.5	1	

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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• Provided by the NASA Astrophysics Data System



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Variables M5 #4
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[[preprinted]]202[[/preprinted]]

June 30, 1897

23.10

[[table]]

No. | D4885 Br. | D4849 2220 Br. | July 23, 1897 D4849 | July
2 | ~~3~~ | 2, 1897 D 4885 | July 26, 1897 |

defect? | 371 | 15.2 | | | |

372 | 15.8 | ~~12.0~~ | 0 | | |

373 | 16.0 | 16.0 | 0 | | |

374 | 15.5 | 15.7 | 2 | | |

375 | 15.8 | NS | | | |

376 | 15.8 | 15.8 | 0 | | |

377 | 15.8 | NS | | | |

378 | 15.5 | 15.5 | 0 | | |

379 | 13.5 | 14.0 | 5 | | |

380 | 15.5 | 15.5 | 0 | | |

381 | 15.8 | 16.0 | 2 | | |

382 | 15.5 | 15.8 | 3 | | |

383 | 13.9 | 13.0 | 9 | 12.5 | 12.8 | 12.8 | 1 | 0 0 2 3 |

384 | 16.0 | 16.0 | 0 | | |

385 | 16.0 | 15.8 | 2 | | |

386 | 15.5 | 15.5 | 0 | | |

387 | 15.5 | 15.5 | 0 | | |

388 | 16.0 | 16.0 | 0 | | |

389 | 14.8 | 15.0 | 2 | | |

390 | 13.8 | 12.8 | 10 | 12.5 | 13.0 | 13.0 | 8 | 2 5 0 |

[[too bright]] 391 | | | | | |

392 | 15.5 | 15.5 | 0 | | |

393 | 15.3 | 15.2 | 1 | | |

394 | 12.0 | 12.8 | 8 | 12.5 | 12.0 | |

395 | 15.8 | 15.8 | 0 | | |

396 | 12.8 | 12.0 | 3 | | |

397 | 11.5 | 11.5 | 0 | | |

398 | 15.5 | NS | | | |

399 | 15.5 | 15.5 | 0 | | |

400 | 14.2 | 14.8 | 6 | | |

1 | ~~3~~ | 4.0 | 14.0 | |

[[/table]]

[[annotation]]23.25[[/annotation]]

202

June 30, 1897

No. | D4885 Br. | D4849 2220 Br. | July 23, 1897 D4849 | July
2 | ~~3~~ | 2, 1897 D 4885 | July 26, 1897 |

defect? | 371 | 15.2 | | | |

372 | 15.8 | ~~12.0~~ | 0 | | |

373 | 16.0 | 16.0 | 0 | | |

374 | 15.5 | 15.7 | 2 | | |

375 | 15.8 | NS | | | |

376 | 15.8 | 15.8 | 0 | | |

377 | 15.8 | NS | | | |

378 | 15.5 | 15.5 | 0 | | |

379 | 13.5 | 14.0 | 5 | | |

380 | 15.5 | 15.5 | 0 | | |

381 | 15.8 | 16.0 | 2 | | |

382 | 15.5 | 15.8 | 3 | | |

383 | 13.9 | 13.0 | 9 | 12.5 | 12.8 | 12.8 | 1 | 0 0 2 3 |

384 | 16.0 | 16.0 | 0 | | |

385 | 16.0 | 15.8 | 2 | | |

386 | 15.5 | 15.5 | 0 | | |

387 | 15.5 | 15.5 | 0 | | |

388 | 16.0 | 16.0 | 0 | | |

389 | 14.8 | 15.0 | 2 | | |

390 | 13.8 | 12.8 | 10 | 12.5 | 13.0 | 13.0 | 8 | 2 5 0 |

[[too bright]] 391 | | | | | |

392 | 15.5 | 15.5 | 0 | | |

393 | 15.3 | 15.2 | 1 | | |

394 | 12.0 | 12.8 | 8 | 12.5 | 12.0 | |

395 | 15.8 | 15.8 | 0 | | |

396 | 12.8 | 12.0 | 3 | | |

397 | 11.5 | 11.5 | 0 | | |

398 | 15.5 | NS | | | |

399 | 15.5 | 15.5 | 0 | | |

400 | 14.2 | 14.8 | 6 | | |

1 | ~~3~~ | 4.0 | 14.0 | |

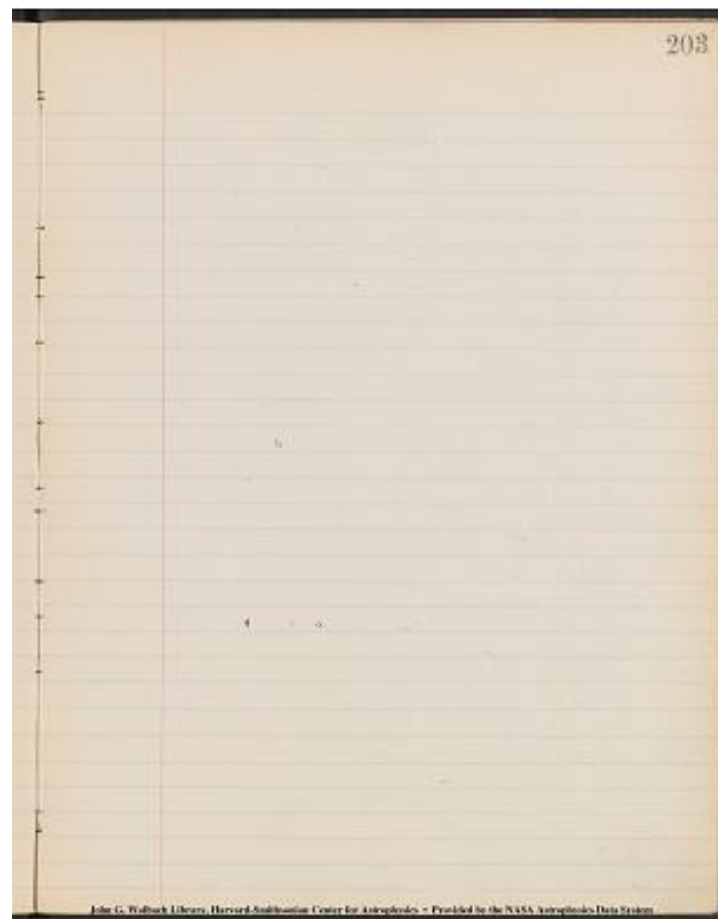
[[/table]]

[[annotation]]23.25[[/annotation]]

Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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203

[[no input]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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D4885 D4849
2235

June 30, 1897

July 23, 1897

July 2~~[[/strickethrough]]~~ 3 ~~[[/strickethrough]]~~ 2, 1897

[[7 columned table]]

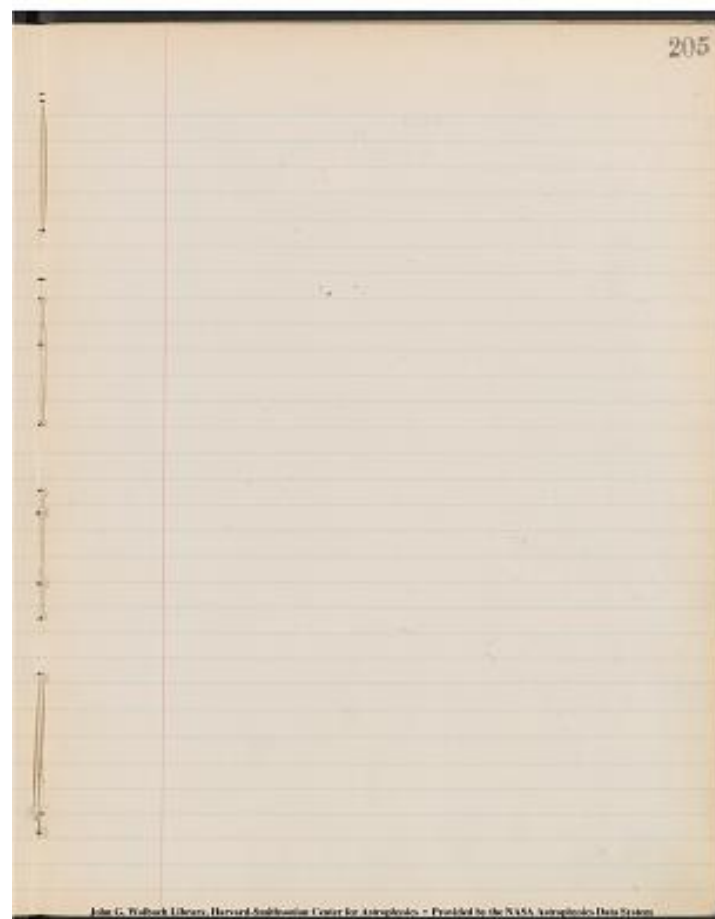
23.25 No. | Br. | Br. | | D4849 | D4885 | July 26, 1897 |

401	14.2	14.5	<u>3</u>	<u>3</u>			
402	15.5	15.8	<u>3</u>	<u>3</u>			
403	15.5	15.8	<u>3</u>	<u>3</u>			
404	15.5	15.5	0				
405	14.0	14.8	<u>8</u>	<u>8</u>		14.5	14.5 14.4
	<u>4</u>	<u>4</u>	<u>411</u>				
406	15.0	15.5	<u>5</u>	<u>5</u>			
407	10.0	11.0	<u>10</u>	<u>10</u>		11.0	11.0 [^] [[10.5]]
10.9	<u>9</u>	<u>9</u>	<u>1</u>	<u>1</u>		<u>4</u>	<u>4</u>
408	1	5.8	4	5.8		<u>16.0</u>	<u>2</u>
409	14.8	15.0	<u>2</u>	<u>2</u>			
too bright 410	10.0						
too bright 411	15	10.0	15	10.0			
defect? 412	15.8	15.8	0				
413	15.0	15.5	<u>5</u>	<u>5</u>			
414	15.1	15.5	<u>4</u>	<u>4</u>			
415	16.0	16.0	0				
too bright 416							
417	14.5	15.0	<u>5</u>	<u>5</u>			
418	16.0	16.0	0				
419	15.0	15.5	<u>5</u>	<u>5</u>			
420	14.5	14.8	<u>3</u>	<u>3</u>			
421	12.5	12.5	0				
defect? 422	14.8	16.0	16.0	0			
423	14.5	14.8	<u>3</u>	<u>3</u>			
424	11.5	11.5	0				
425	16.0	16.0	0				
426	15.5	15.8	<u>3</u>	<u>3</u>			
427	15.5	15.5	0				
428	15.0	15.0	0				
429	10.5	11.0	<u>5</u>	<u>5</u>			
430	16.0	16.0	0				
23.40		22.40					

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205

[[no input]]



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
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23.40 D4885 D4849 ^[[2240]]

June 30, 1897

July 23, 1897

D4849 July 2~~[[/del]]~~ 3 ~~[[/del]]~~ 2, 1897

20 4885 July 26, 1897

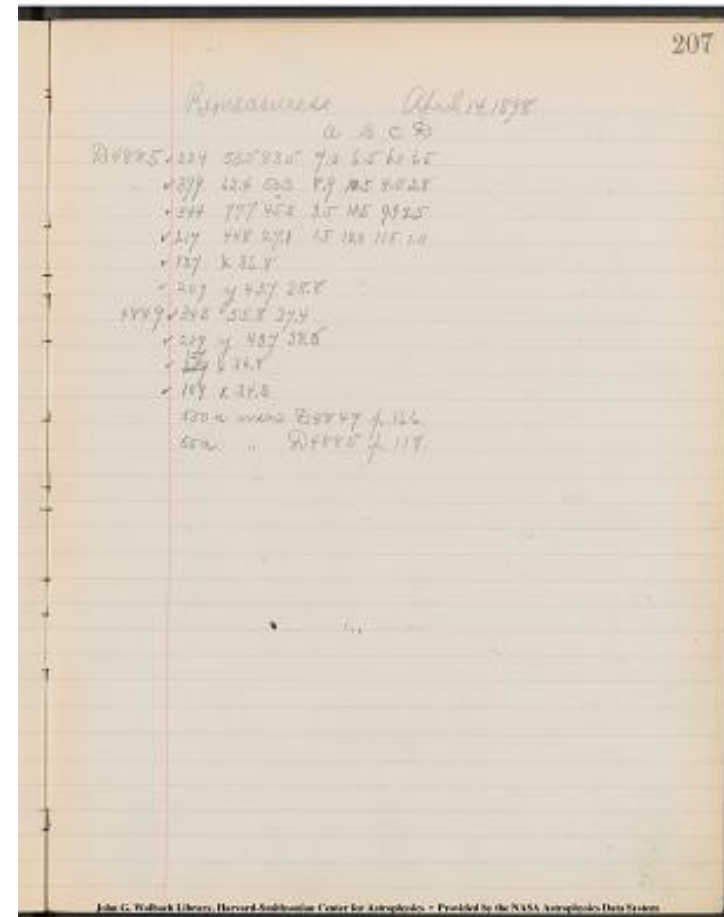
[[table]]									
No.	Br	Br							
431	15.0	15.5		<u>5</u>					
432	15.1	15.7		<u>6</u>		15.5		15.3	
<u>31</u> [[/del]] 31									
433	14.0	15.0		<u>10</u>		14.0 [^] <u>[[14.0]]</u>		14.0	
14.0 00. <u>[[/del]]</u> 0 <u>[[/del]]</u> 00									
434	13.9	14.0		<u>1</u>					
435	16.0	16.0		0					
436	15.8	15.8		0					
437	16.0	15.8		2					
438	11.5	11.5		0					
439	10.5	11.0		<u>5</u>					
440	12.5	12.5		0					
441	10.0	too lr.							
442	14.8	15.0		<u>2</u>					
443	16.0	16.0		0					
444	15.5	15.5		0					
445	15.8	defect							
446	16.0	15.8		2					
447	15.5	15.0		5					
448	14.5	14.8		<u>3</u>					
449	15.8	15.8		0					
450	12.5	11.5		10		12.0		12.2	
<u>0[^][[III=4849]]</u>									
451	15.5	15.8		<u>3</u>					
defect? 452 15.5 15.5 0									
453	11.5	11.5		0					
454	16.0	16.0		0					
455	15.5	15.5		0					
456	[[/del]] 11.3 [[/del]] 12.5 13.5 <u>5</u>								
<u>[[/del]]</u>									
457	15.5	15.5		0					
458	15. [[/del]] 5 [[/del]] 0 15.3 <u>3</u>								
<u>[[/del]]</u>									
459	14.0	15.0		<u>10</u>		14.0		14.0	
460	15.5	15.5		0					
<u>[[/del]]</u>									
23.50 22.45									

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Remeasures April 14, 1998

[[table]]										
			a	B	C	D				
D4885	324	53.5	83.5	7.0	6.5	6.0	6.5			
399	62.4	50.3	8.9	10.5	4.0	2.8				
544	77.7	45.3	3.5	10.5	9.4	2.5				
217	44.8	27.1	1.5	12.0	1.15	1.0				
127	x 36.8									
209	y 43.7	38.8								
4849	342	55.8	37.4							
209	y 43.7	38.8								
[[/striketrough]] 209 [[/striketrough]] 127 x 36.8										
109	x 34.3									
[[/table]]										
550a meas. D4849 h.166.										
55a " D488.5 h 118.										



Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations - Variables M5 #4
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23.00 July 1, 1897

table

No | D4885 Br. | D4849 Br. [^][[2245]] | | D4849 | July 2 ~~[[strickethrough]]~~ 3
~~[[strickethrough]]~~ 2, 1897 July 23, 1897 | D4885 July 26, 1897 |

461	15.8	15.8	0				
462	15.0	15.5	<u>5</u>		<u>5</u>		
463	15.8	16.0	<u>2</u>		<u>2</u>		
464	14.0	14.5	<u>5</u>		<u>5</u>		
465	15.5	15.5	0				
466	15.5	15.5	0				
467	[^] [[a]] 14.0 [^] [[v]] 12.5 [^] [[16.0]] 15 12.7 12.8 [^] [[12.8]] 12.7						
	<u>3</u>	<u>11</u>	<u>2</u>		<u>0</u>		
468	16.0	15.8	<u>2</u>		<u>2</u>		
469	15.8	15.8	0				
470	15.0	15.5	<u>5</u>		<u>5</u>		
471	15.8	16.0	<u>2</u>		<u>2</u>		
472	15.0	15.3	<u>3</u>		<u>3</u>		
defect? 473	15.5	11.5	n.s.				
474	12.0	12.0	0				
475	14.8	15.0	<u>2</u>		<u>2</u>		
476	15.5	15.5	0				
too bright 477		10.0					
478	12.7	14.0 [^] [[?]] <u>13</u>		<u>12.8</u> [^] [[12.7]]			
	12.8	<u>1</u>	<u>0</u>		<u>2</u>		
	<u>0</u>	<u>1</u>					
479	11.2	11.5	<u>3</u>		<u>3</u>		
480	15.8	15.8	0				
481	11.7	12.0	<u>3</u>		<u>3</u>		
482	15.8	15.8	0				
483	15.5	15. [8]	5 0				
484	15.0	15.0	0				
485	15.9	16.0	<u>1</u>		<u>1</u>		
486	16.0	16.0	0				
487	15.5	15.5	0				
488	15.0	15.0	0				
489	15.8	15.5	3				
490	15.5	15.5	0				
491	14.8	14.8	0 2 2 5 5				

table

23.15

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Date Time Br. M5 #

23.11 July 1, 1897

461 15.8 15.8 0

462 15.0 15.5 5

463 15.8 16.0 2

464 14.0 14.5 5

465 15.5 15.5 0

466 15.5 15.5 0

467 14.0 12.5 15 12.7 12.8 12.7

468 16.0 15.8 2

469 15.8 15.8 0

470 15.0 15.5 5

471 15.8 16.0 2

472 15.0 15.3 3

defect? 473 15.5 11.5 n.s.

474 12.0 12.0 0

475 14.8 15.0 2

476 15.5 15.5 0

too bright 477 10.0

478 12.7 14.0 13 12.8 12.7 12.8 1

479 11.2 11.5 3

480 15.8 15.8 0

481 11.7 12.0 3

482 15.8 15.8 0

483 15.5 15. 8 5 0

484 15.0 15.0 0

485 15.9 16.0 1

486 16.0 16.0 0

487 15.5 15.5 0

488 15.0 15.0 0

489 15.8 15.5 3

490 15.5 15.5 0

491 14.8 14.8 0 2 2 5 5

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Second Results of Estimated magnitudes

Obs. [?][?]E.F.L.

July 28 1897

11:06

[[table]]

[[?]] u86 | Plate | | | |

| | | | |

8 | 13.0 | 12.0[^][[not]] or 13.0 | 4885 | 467 | 12.8 | 14.0[^][[not]] or 12.8 | 4885 |9 | ~~12.8~~ | 13.2 | 12.2[^][[not]] or 13.5 |4885 | 478 | -12.7 | 14.0[^][[not]] or 12.8 | 4849 |17 | 12.0 | 11.5 or 12.5[^][[not]] | 4885 | 534 | 13.0 | 14.5[^][[not]] or 13.0 | 4885 |19 | 12.2 | 11.5[^][[v]] or 12.7 | 4885 | 543 | 12.8 | 14.0[^][[not]] or 12.8 | 4885 |23 | 13.0 | 11.8[^][[not]] or 13.0 | 4885 | 550 | 13.0 | 14.0[^][[v]] or 13.0 | 4885 |24 | 15.0 | 14.0[^][[not]] or 15.0 | 4885 | 572 | 11.5 | 13.0[^][[not]] or 11.5 | 4885 |29 | 14.8 | 13.8[^][[not]] or 14.8 | 4885 | 578 | 12.5 |14.1[^][[not]] or 12.8 | 4885 | 578 |

6.6 | Examine after [?][?][no multiple[?]] diff on Plates 4849 and 4845 |

Ex 459[^][[13.0]] | 15.0[^][[n]] or 14.0[^][[n]] |~~4885~~ | 4849 |82 | 15.0 | 13.5[^][[not]] or 15.0 | 4885 | 390 | 114 no coordinates of

variation | |

85 | 15.0 | 14.2[^][[not]] or 15.2 | 4885 | 331 | 177 no coordinates of

variation | |

114 | 13.2 | 13.5 or 14.5[^][[not]] | 4885 | 334 |144 | 13.0 | 12.5 | 13.5[^][[not]] or 12.0[^][[not [?]]] | 4849 | 290 |147 | 13.5 | 12.5[^][[not]] or 14.0 | 4885 | 180 |177 | 12.8 | 12.2[^][[not]] or 13.8[^][[not]] | 4885 | 73 |213 | 15.0 | 15.0 | 14.0[^][[~~not~~]] or 15.0 |

4849 | 66 |

224 | 14.9 | 14.0[^][[not]] or 15.0 | 4885 | | | |

[[number of columns changes from 8 to 10]]

243 | 12.7 | 14.0[^][[not]] or 12.8 | 4885 | 67 | 114[^][[var?]] |177[^][[var?]] | 275 | 300 | 309 | 67 |261 | 13.0 | 14.0[^][[not]] or 13.0 | 4885 | 11.5 | 13.5 | 12.2n | 13.9n |

14.0n | 12.0n |

267 | 12.5 | 13.9[^][[not]] or 12.5 | 4885 | 12.5n | 14.5n | 13.8n | 12.0n |

11.5n | 14.0n |

275 | 12.8 | 13.9[^][[not]] or 12.0[^][[not]] | 4885 | 12.0 | 13.2 |12.8 | 12.8 | 12.8 | 13.0 | 12.8 |285 | 12.5 | 14.5[^][[not]] or 13.0[^][[not [?]]] | 4885 | 12.5 | 15.0 | 14.5 |

12.5 | 12.0 | 14.0 |

300 | 12.8 | 14.0[^][[not]] or 11.5[^][[not]] | 4885 | 12.5 | 14.8 |

14.0 | 12.2 | 12.5 | 14.0 |

308 | 12.0 | 14.2[^][[not]] or 12.5 | 4885 | 565 | 673 | 34 | 128 | 17 |309 | 13.0 | 12.0[^][[not]] or 14.0[^][[not]] | 4885 | 394 | 459 | 14.1 | 13.5 |

12.7 | 12.6 | 13.4 |

332 | 12.8 | 13.8[^][[not]] or 12.5 | 4885 | 12.0 | 14.0 |333 | 13.0 | 14.0[^][[not]] or 12.8 | 4885 | 12.0 | 14.0 |383 | 12.8 | 13.9[^][[not]] or 12.8 | 4885 |407 | 10.5 | 10.0[^][[not]] or 11.0 | 4885 | 12.8 | 15.0n |433 | - 14.0 | 15.0[^][[not]] or 14.0 | 4849 | 12.5 | 13.0[^][[14.0n]] | | | |460 | - 15.0 | 15.0 or 14.0[^][[not]] | 4849 | | 14.0 |

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Second Results of Estimated magnitudes

Obs. [?][?]E.F.L.

July 28 1897

11:06

[[table]]

[[?]] u86 | Plate | | | |

| | | | |

8 | 13.0 | 12.0[^][[not]] or 13.0 | 4885 | 467 | 12.8 | 14.0[^][[not]] or 12.8 | 4885 |

9 | ~~12.8~~ | 13.2 | 12.2[^][[not]] or 13.5 |

4885 | 478 | -12.7 | 14.0[^][[not]] or 12.8 | 4849 |

17 | 12.0 | 11.5 or 12.5[^][[not]] | 4885 | 534 | 13.0 | 14.5[^][[not]] or 13.0 | 4885 |

19 | 12.2 | 11.5[^][[v]] or 12.7 | 4885 | 543 | 12.8 | 14.0[^][[not]] or 12.8 | 4885 |

23 | 13.0 | 11.8[^][[not]] or 13.0 | 4885 | 550 | 13.0 | 14.0[^][[v]] or 13.0 | 4885 |

24 | 15.0 | 14.0[^][[not]] or 15.0 | 4885 | 572 | 11.5 | 13.0[^][[not]] or 11.5 | 4885 |

29 | 14.8 | 13.8[^][[not]] or 14.8 | 4885 | 578 | 12.5 |

14.1[^][[not]] or 12.8 | 4885 | 578 |

6.6 | Examine after [?][?][no multiple[?]] diff on Plates 4849 and 4845 |

Ex 459[^][[13.0]] | 15.0[^][[n]] or 14.0[^][[n]] |

~~4885~~ | 4849 |

82 | 15.0 | 13.5[^][[not]] or 15.0 | 4885 | 390 | 114 no coordinates of

variation | |

85 | 15.0 | 14.2[^][[not]] or 15.2 | 4885 | 331 | 177 no coordinates of

variation | |

114 | 13.2 | 13.5 or 14.5[^][[not]] | 4885 | 334 |

144 | 13.0 | 12.5 | 13.5[^][[not]] or 12.0[^][[not [?]]] | 4849 | 290 |

147 | 13.5 | 12.5[^][[not]] or 14.0 | 4885 | 180 |

177 | 12.8 | 12.2[^][[not]] or 13.8[^][[not]] | 4885 | 73 |

213 | 15.0 | 15.0 | 14.0[^][[~~not~~]] or 15.0 |

4849 | 66 |

224 | 14.9 | 14.0[^][[not]] or 15.0 | 4885 | | | |

[[number of columns changes from 8 to 10]]

243 | 12.7 | 14.0[^][[not]] or 12.8 | 4885 | 67 | 114[^][[var?]] |

177[^][[var?]] | 275 | 300 | 309 | 67 |

261 | 13.0 | 14.0[^][[not]] or 13.0 | 4885 | 11.5 | 13.5 | 12.2n | 13.9n |

14.0n | 12.0n |

267 | 12.5 | 13.9[^][[not]] or 12.5 | 4885 | 12.5n | 14.5n | 13.8n | 12.0n |

11.5n | 14.0n |

275 | 12.8 | 13.9[^][[not]] or 12.0[^][[not]] | 4885 | 12.0 | 13.2 |

12.8 | 12.8 | 12.8 | 13.0 | 12.8 |

285 | 12.5 | 14.5[^][[not]] or 13.0[^][[not [?]]] | 4885 | 12.5 | 15.0 | 14.5 |

12.5 | 12.0 | 14.0 |

300 | 12.8 | 14.0[^][[not]] or 11.5[^][[not]] | 4885 | 12.5 | 14.8 |

14.0 | 12.2 | 12.5 | 14.0 |

308 | 12.0 | 14.2[^][[not]] or 12.5 | 4885 | 565 | 673 | 34 | 128 | 17 |

309 | 13.0 | 12.0[^][[not]] or 14.0[^][[not]] | 4885 | 394 | 459 | 14.1 | 13.5 |

12.7 | 12.6 | 13.4 |

332 | 12.8 | 13.8[^][[not]] or 12.5 | 4885 | 12.0 | 14.0 |

333 | 13.0 | 14.0[^][[not]] or 12.8 | 4885 | 12.0 | 14.0 |

383 | 12.8 | 13.9[^][[not]] or 12.8 | 4885 |

407 | 10.5 | 10.0[^][[not]] or 11.0 | 4885 | 12.8 | 15.0n |

433 | - 14.0 | 15.0[^][[not]] or 14.0 | 4849 | 12.5 | 13.0[^][[14.0n]] | | | |

460 | - 15.0 | 15.0 or 14.0[^][[not]] | 4849 | | 14.0 |

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Variables M5 #4
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210
 23.15
 [[table]]
No	D4885 Br.	D4849 Br.	22.55
 492 | 15.2 | 15.5 | 3 |
 493 | 15.5 | 15.5 | 0 |
 494 | 15.0 | 15.0 | 0 |
 495 | 14.8 | 14.8 | 0 |
 496 | 11.3 | 11.0 | 3 |
 497 | 15.0 | 15.2 | 2 |
 498 | 15.8 | 16.0 | 2 |
 499 | 15.8 | 15.8 | 0 |
 500 | 15.0 | 15.2 | 2 |
 501 | 15.5 | NS | |
 502 | 15.8 | 15.8 | 0 |
 503 | 11.5 | 11.3 | 2 |
 504 | 15.2 | 15.5 | 3 |
 505 | 15.2 | 15.0 | 2 |
 506 | 15.0 | 15.2 | 2 |
 507 | 16.0 | 16.0 | 0 |
 508 | 15.0 | 15.2 | 2 |
 509 | 15.8 | 15.8 | 0 |
 510 | 15.8 | 15.5 | 3 |
 511 | 15.1 | 15.0 | 23.00 |
 512 | 15.5 | 15.5 | 23.15 |
 513 | 14.9 | 15.2 | 3 |
 514 | 15.5 | 15.5 | 0 |
 Diff? 515 | 15.5^[[14.9]] | 15.5^[[15.0]] | 0^[[1]] |
 516 | 15.8 | 16.0 | 15.8 | 0 |
 517 | 15.2 | 15.5 | 3 |
 518 | 15.8 | 16.0 | 2 |
 519 | 16.0 | NS | |
 520 | 13.9 | 13.5 | 4 |
 521 | 16.0 | 15.8 | 2 |
 522 | 15.5 | 16.0 | 52320 |
 [[/table]]
 23.25

210

22.55 23.15 23.25

July 1, 1897

23.15 23.25

492	15.2	15.5	3
493	15.5	15.5	0
494	15.0	15.0	0
495	14.8	14.8	0
496	11.3	11.0	3
497	15.0	15.2	2
498	15.8	16.0	2
499	15.8	15.8	0
500	15.0	15.2	2
501	15.5	NS	
502	15.8	15.8	0
503	11.5	11.3	2
504	15.2	15.5	3
505	15.2	15.0	2
506	15.0	15.2	2
507	16.0	16.0	0
508	15.0	15.2	2
509	15.8	15.8	0
510	15.8	15.5	3
511	15.1	15.0	23.00
512	15.5	15.5	23.15
513	14.9	15.2	3
514	15.5	15.5	0
515	15.5	15.5	0
516	15.8	16.0	15.8
517	15.2	15.5	3
518	15.8	16.0	2
519	16.0	NS	
520	13.9	13.5	4
521	16.0	15.8	2
522	15.5	16.0	52320

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211
23.25
[[table]]
No | D4885 Br. | D4849 Br. | 2320 | | July 1, 1897 July 2
[[strikethrough]] 3 [[/strikethrough]] 2, 1897 D4885 July 26, 1897 |
[[table]]
523 | 15.0 | 15.0 | 0 | | |
524 | 15.8 | 16.0 | [[underline]] 2 [[/underline]] | | |
525 | 15.8 | 15.8 | 0 | | |
526 | 15.5 | 15.3 | 2 | | |
527 | 16.0 | 16.0 | 0 | | |
528 | 15.8 | ns | | | |
^[[defect?]] 529 | 15.8 | 15.5 | 3 | | |
530 | 15.5 | 15.5 | 0 | | |
531 | 15.5 | 15.5 | 0 | | |
532 | 15.8 | 15.8 | 0 | | |
533 | 15.8 | 15.5 | 3 | | |
534 | 14.5 | 13.0 | 15 | 12.8 | 13.0^[[13.0]] 13.0 [[underline]] 5
[[/underline]] 00.0 [[underline]] 2 [[/underline]]
535 | 15.0 | 15.5 | [[underline]] 5 [[/underline]] | | |
536 | 15.8 | 16.0 | [[underline]] 2 [[/underline]] | | |
537 | 15.5 | 15.8 | [[underline]] 3 [[/underline]] | | |
538 | 15.5 | 15.5 | 0 | | |
539 | 15.0 | 15.2 | [[underline]] 2 [[/underline]] | | |
540 | 15.2 | 15.5 | [[underline]] 3 [[/underline]] | | |
541 | 15.7 | 15.8 | [[underline]] 1 [[/underline]] | | |
542 | 15.0 | 14.8 | 2 | | |
543 | 14.0 | 13.0 | 10 | 12.8 | 12.8^[[12.8]] 12.8 200,200 550 a same
star |
544 | 16.0 | 16.0 | 0 | | |
545 | 15.5 | 15.8 | [[underline]] 3 [[/underline]] | | |
546 | 15.5 | 16.0 | [[underline]] 5 [[/underline]] | | |
547 | 15.1 | 15.2 | [[underline]] 1 [[/underline]] | | |
548 | 15.5 | 15.8 | [[underline]] 3 [[/underline]] | | |
549 | 15.7 | 16.0 | [[underline]] 3 [[/underline]] | | |
550 | 14.0 | 1.30 | 10 | 12.8 | 13.0^[[13.0]] 13.0 0000 [[underline]] 2
[[/underline]] |
a | 12.8 | | | |
551 | 16.0 | 15.8 | 2 | | |
552 | 15.5 | 15.5 | 23,25^[[0]] | | |
[[/table]]
Sw p. 216
2330

211

	DATE	DIFF.		
23.25	15.0	15.0	0	
523	15.8	16.0	2	
524	15.8	15.8	0	
525	15.5	15.3	2	
526	16.0	16.0	0	
527	15.8	ns		
529	15.8	15.5	3	
530	15.5	15.5	0	
531	15.5	15.5	0	
532	15.8	15.8	0	
533	15.8	15.5	3	
534	14.5	13.0	15	12.8
535	15.0	15.5	5	
536	15.8	16.0	2	
537	15.5	15.8	3	
538	15.5	15.5	0	
539	15.0	15.2	2	
540	15.2	15.5	3	
541	15.7	15.8	1	
542	15.0	14.8	2	
543	14.0	13.0	10	12.8
544	16.0	16.0	0	
545	15.5	15.8	3	
546	15.5	16.0	5	
547	15.1	15.2	1	
548	15.5	15.8	3	
549	15.7	16.0	3	
550	14.0	1.30	10	12.8
551	16.0	15.8	2	
552	15.5	15.5	23,25	

July 1, 1897
200,200
12.8 12.8 130 200,000
12.8 12.8 130 200,000
12.8 12.8 130 200,000

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212 February 10, 1897

Measurement of Comp Stars of R. Trianguli (scale)

L2235

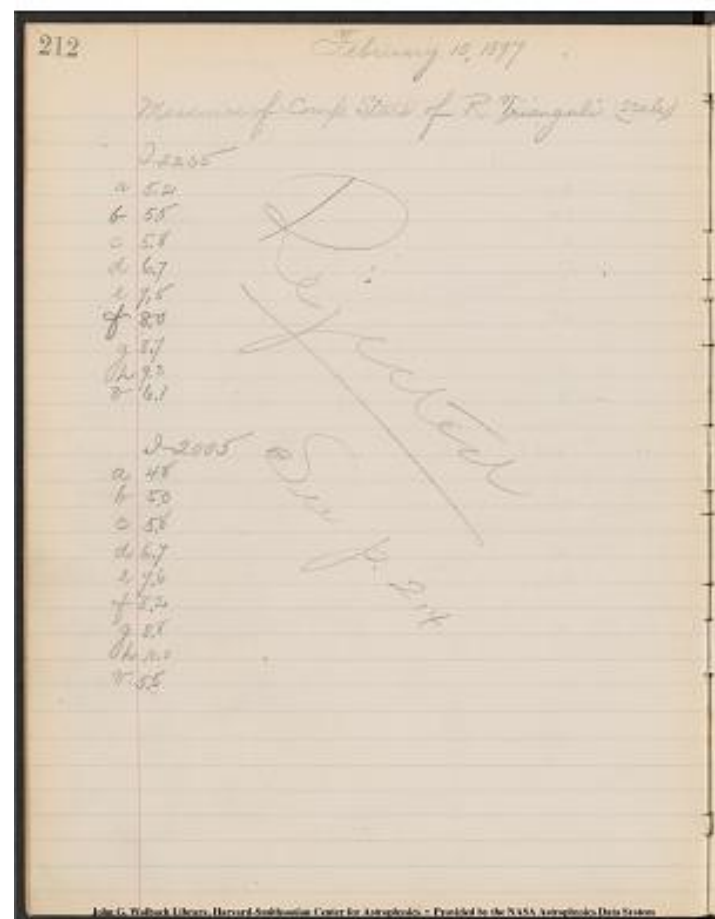
a 5.2
b 5.5
c 5.8
d 6.7
e 7.5
f 8.0
g 8.7
h 9.3
i 6.1

Rejected
Si p. 214

I2005

a 4.8
b 5.0
c 5.8
d 6.7
e 7.6
f 8.2
g 5.8
h 10.0
i 5.5

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February 10, 1897

213

Comb Stars of R. Trianguli (cont.)

I 7824

a 5.2

b 5.4

c 5.7

d 6.5

e 7.4

f 7.9

g 8.7

h 9.3

v 5.8

Rejected

{Underlined}

Sa 2. 214

5803

{Crossed out} 417

a 4.8

b 4.8

c 5.7

d 6.8

e 7.7

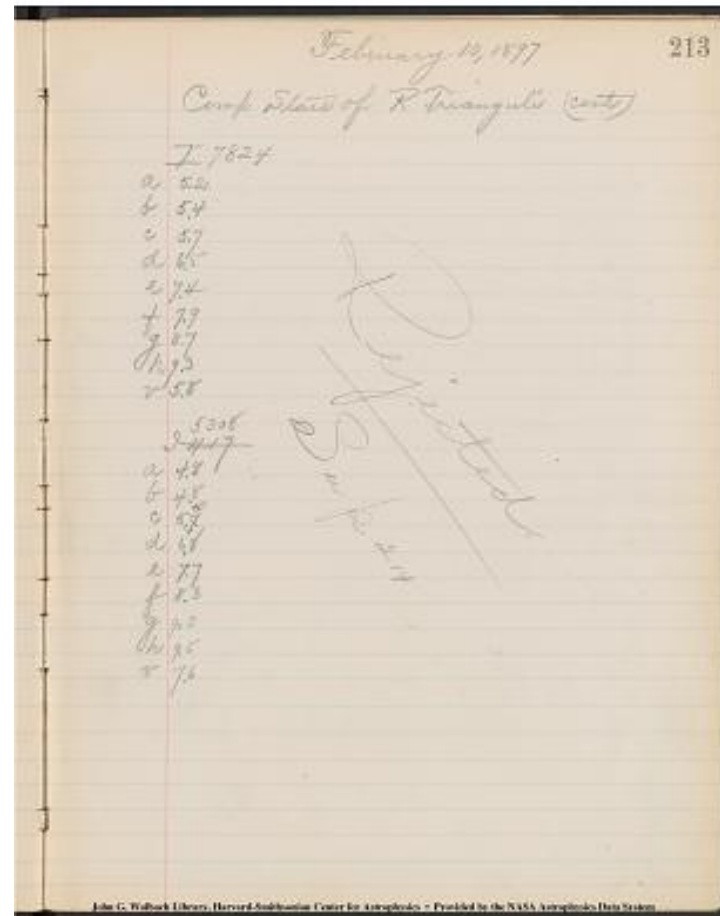
f 8.3

g 9.0

h 9.5

i 7.6

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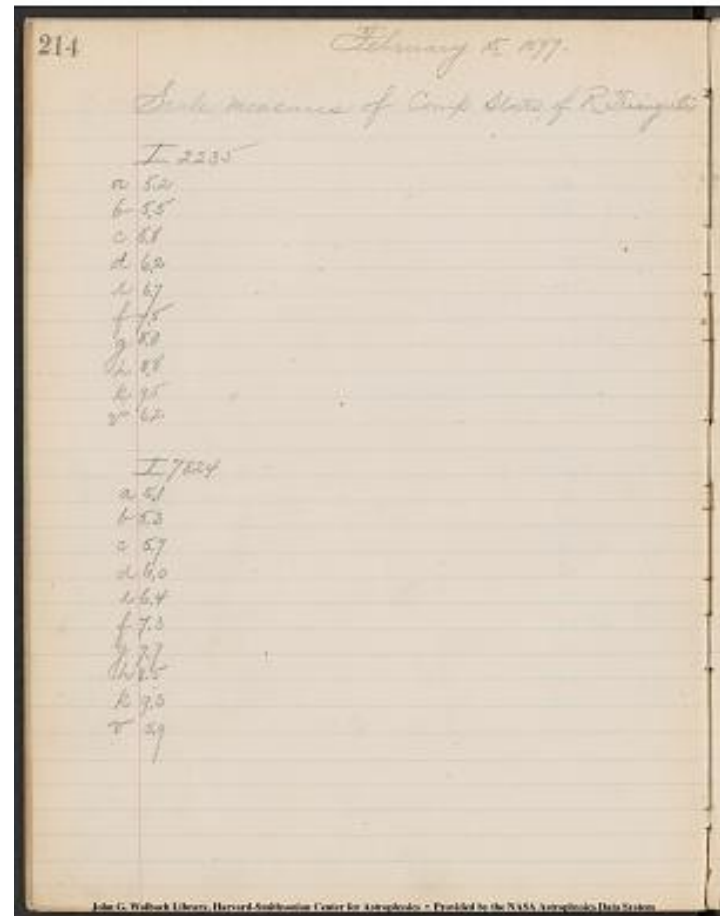
Project PHaEDRA - Evelyn F. Leland - Miscellaneous Observations -
Variables M5 #4
Transcribed and Reviewed by Digital Volunteers
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214 February 15, 1897
Scale measures of Comp Stars of R Trianguli

I 2235
a 5.2
b 5.5
c 5.8
d 6.2
e 6.7
f 7.5
g 8.0
h 8.8
k 9.5
v 6.2

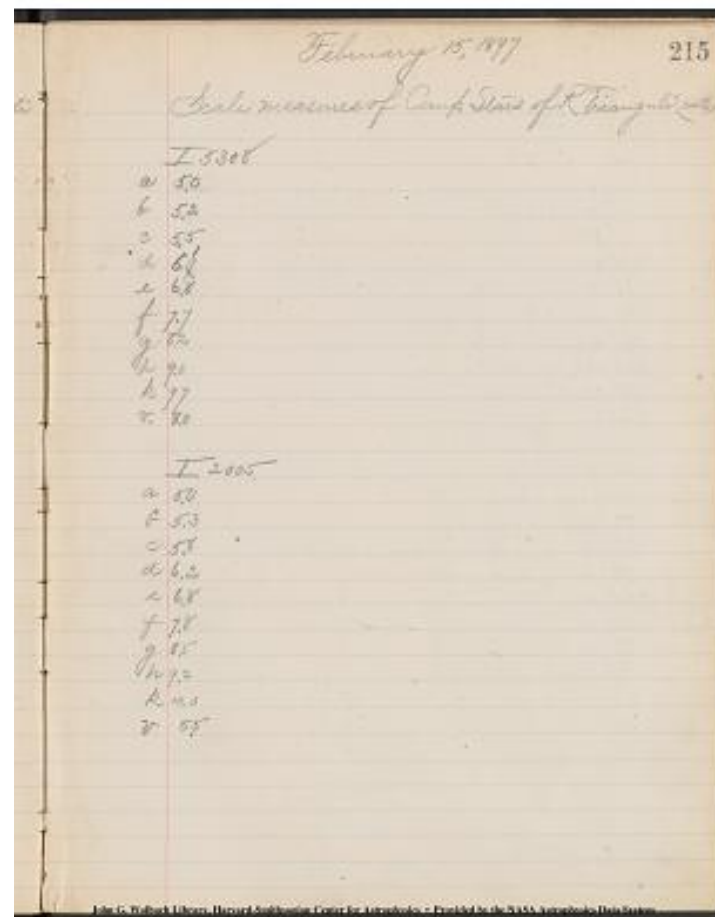
I 7824
a 5.1
b 5.3
c 5.7
d 6.0
e 6.4
f 7.3
g 7.7
h 8.5
k 9.3
v 5.9

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Variables M5 #4
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February 15, 1897 215
 Scale measures of Comp Stars of R Triangle (cont)
 I 5308 |
 a | 5.0
 b | 5.2
 c | 5.5
 d | 6. ~~9~~ 1
 e | 6.8
 f | 7.7
 g | 8.2
 h | 9.0
 k | 9.7
 v | 8.0
 I 2005 |
 a | 5.0
 b | 5.3
 c | 5.8
 d | 6.2
 e | 6.8
 f | 7.8
 g | 8.5
 h | 9.2
 k | 10.0
 v | 5.5



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 Variables M5 #4
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216
 Combined from page 211
 23.30

No	Br	D4849	Br	2325	D4849	July 1, 1879
July 23, 1897	2	3	3	3	3	1897 July 26, 1897

553	16.0	160	0			
554	15.1	15.0	1			
555	15.7	15.5	2			
556	15.7	15.8	<u>1</u>			
557	16.0	16.0	0			
558	15.5	15.5	0			
559	14.3	14.8	<u>5</u>			
560	16.0	16.0	0			
561	16.0	16.0	0			
562	15.5	5	8	15.5	3	
563	15.5	16.0	5			
564	16.0	15.8	2			
565	16.0	16.0	0			
566	16.0	16.2	2			
567	15.0	14.5	-			
defect?	568	15.8	3			
569	1	3	2.8	12.5	5	
570	15.0	15.0	0			
571	15.8	15.8	0			
572	13.0	11.5	15	11.5	11.5	500.00
573	15.0	15.0	0			
574	11.0	11.0	0			
576	15.0	15.2	2			
577	16.0	16.0	0			
578	14.1	13.0	11	12.8	12.5	30320
579	15.8	15.8	0			
580	16.0	16.0	0	25.00	36/58	

23.40 23.30

216 Continued from page 211

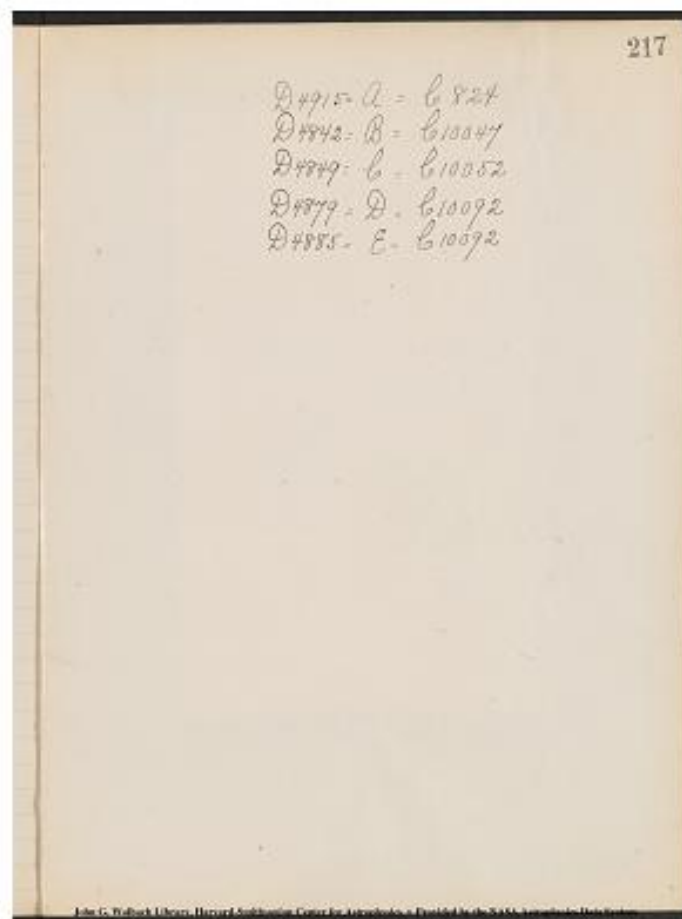
DATE	Br	Br	DATE	Br	Br
23.31	16.0	16.0	July 1, 1897	15.5	15.5
553	15.1	15.0	July 23, 1897	15.5	15.5
554	15.7	15.5	July 26, 1897	15.5	15.5
555	15.7	15.8	15.5	15.5	15.5
556	16.0	16.0	15.5	15.5	15.5
557	15.5	15.5	15.5	15.5	15.5
558	14.3	14.8	15.5	15.5	15.5
559	16.0	16.0	15.5	15.5	15.5
560	16.0	16.0	15.5	15.5	15.5
561	16.0	16.0	15.5	15.5	15.5
562	15.5	15.5	15.5	15.5	15.5
563	15.5	16.0	15.5	15.5	15.5
564	16.0	15.8	15.5	15.5	15.5
565	16.0	16.0	15.5	15.5	15.5
566	16.0	16.2	15.5	15.5	15.5
567	15.0	14.5	15.5	15.5	15.5
defect?	568	15.8	15.5	15.5	15.5
569	1	3	15.5	15.5	15.5
570	15.0	15.0	15.5	15.5	15.5
571	15.8	15.8	15.5	15.5	15.5
572	13.0	11.5	15.5	15.5	15.5
573	15.0	15.0	15.5	15.5	15.5
574	11.0	11.0	15.5	15.5	15.5
576	15.0	15.2	15.5	15.5	15.5
577	16.0	16.0	15.5	15.5	15.5
578	14.1	13.0	15.5	15.5	15.5
579	15.8	15.8	15.5	15.5	15.5
580	16.0	16.0	15.5	15.5	15.5

23.40 23.30

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D4915= A = C 824
D4842= B = C10047
D4849= C = C10052
D4879= D = C10092
D4885= E = C10092



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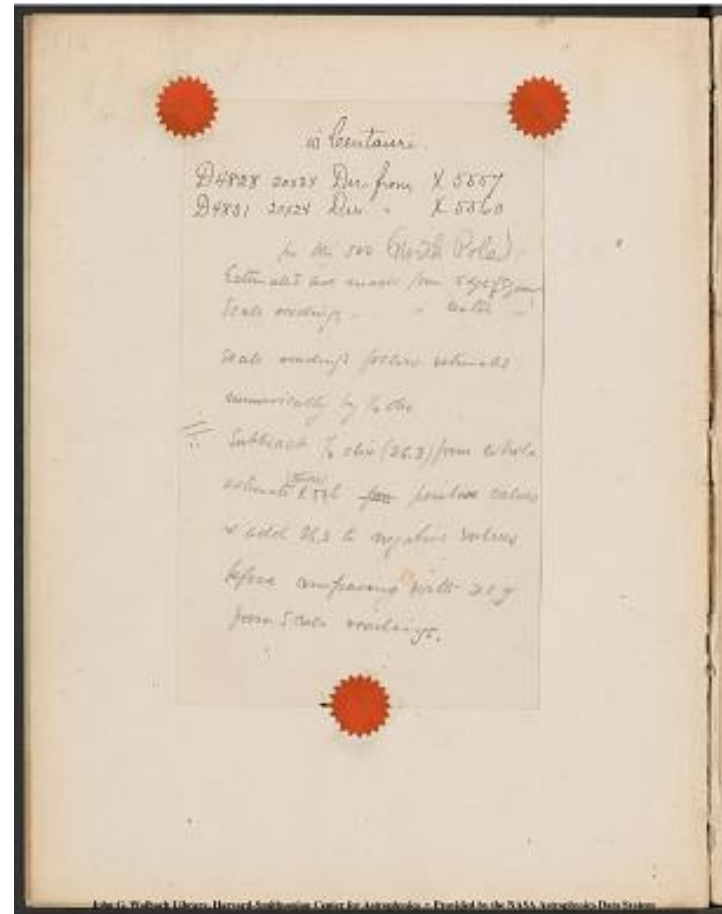
w Centauri.

D4828 20x24 Dir. from X 5557.

D4831 20x24 Dir. from X 5560

In the 500 (North Pole) estimates are made from Edge of sequence
Scale readings made from centre of sequence
Scale readings follow estimates numerically by 1/2 div. Subtract 1/2 div
(26.3) from whole estimate (times) X 52.6 ~~from~~
~~positive values~~ & add 26.3 to negative values before
comparing with x & y from scale readings.

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To be preserved by Miss E.F.L. and produced when called for.
Meas. of Positions of stars in Clusters by means of enlarged reticules.
Instructions to be studied and understood by both observer and recorder.

1. Use only left hand pages of record books.

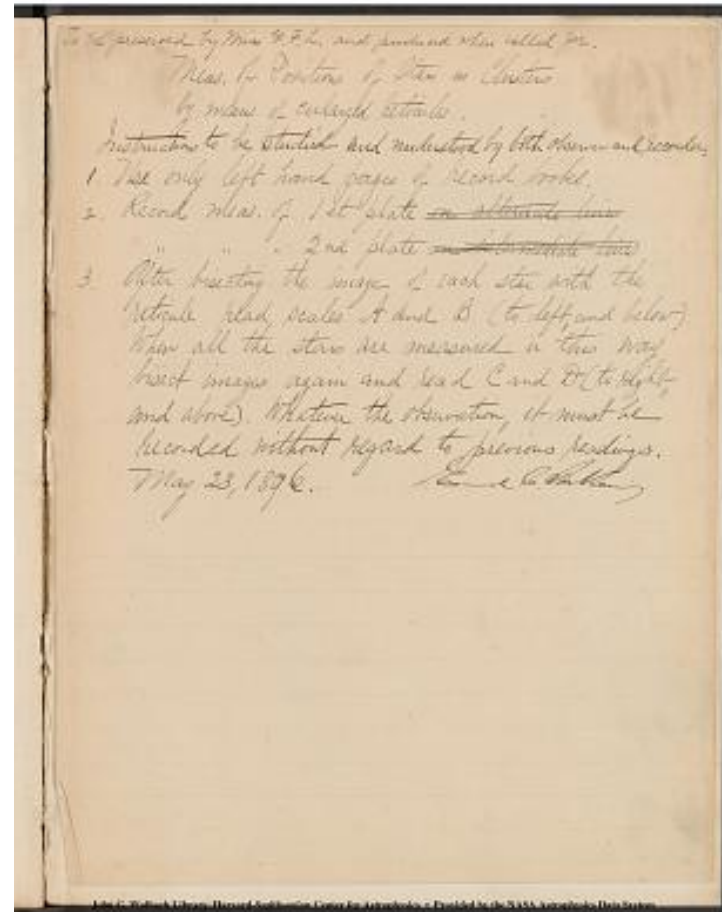
2. Record means. of 1st plate ~~on alternate lines~~

Record means. of 2nd plate ~~on intermediate lines~~

3. After bisecting the image of each star with the reticule read plates A and B (to left, and below). When all the stars are measured in this way bisect images again and read C and D (to right, and above). Whatever the observation, it must be recorded without regard to previous readings.

May 23, 1896. Evelyn F. Leland

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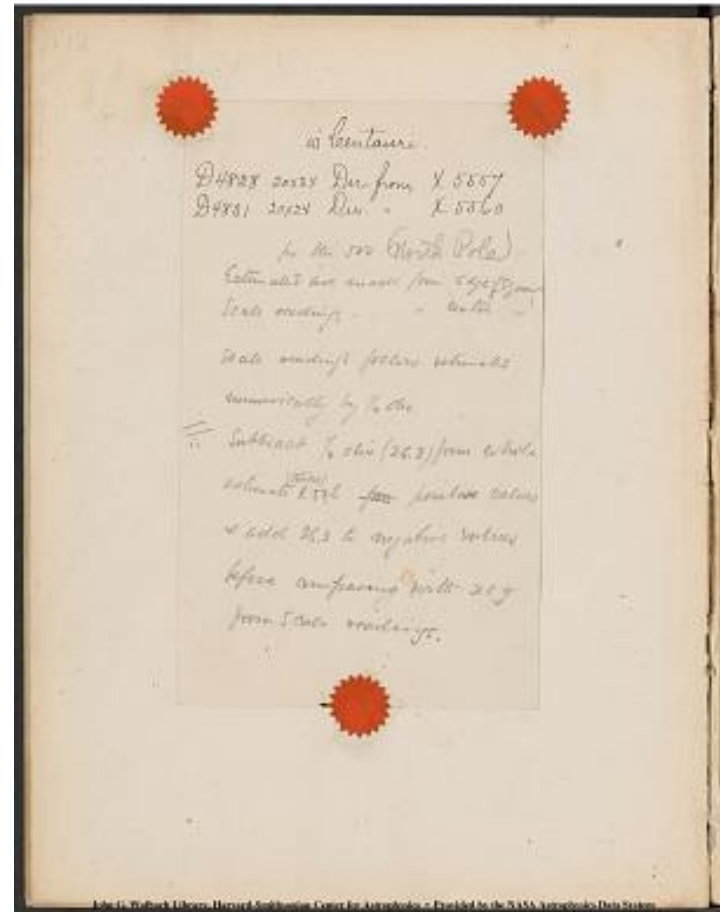
w Centauri.

D4828 20x24 Dir. from X 5557.

D4831 20x24 Dir. from X 5560

In the 500 (North Pole) estimates are made from Edge of sequence
Scale readings made from centre of sequence
Scale readings follow estimates numerically by 1/2 div. Subtract 1/2 div
(26.3) from whole estimate (times) X 52.6 ~~from~~
~~positive values~~ & add 26.3 to negative values before
comparing with x & y from scale readings.

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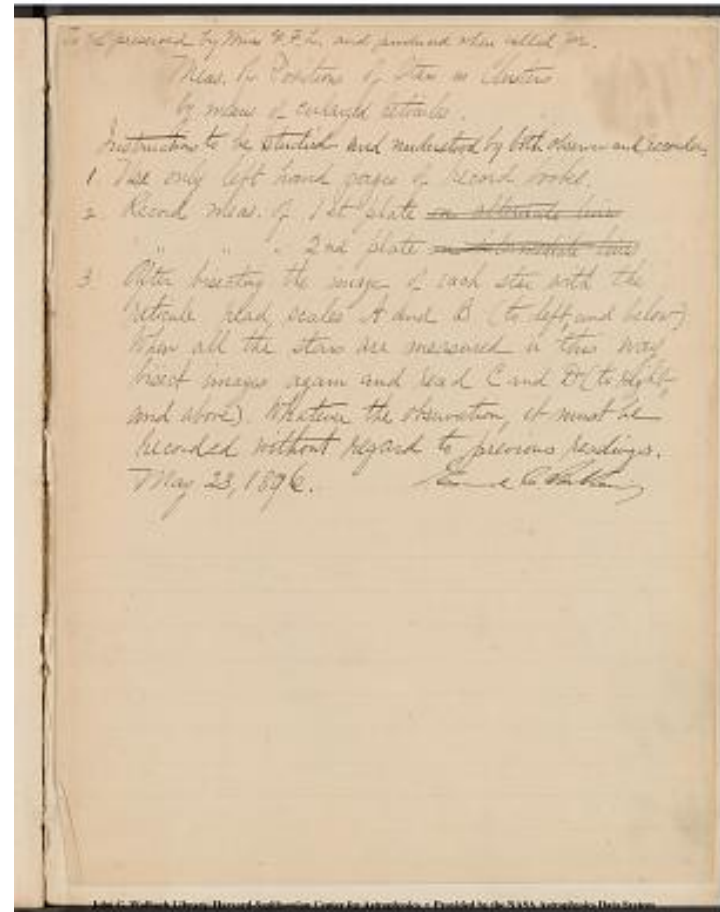
To be preserved by Miss E.F.L. and produced when called for.
 Meas. of Positions of stars in Clusters by means of enlarged reticules.
 Instructions to be studied and understood by both observer and recorder.

1. Use only left hand pages of record books.
 2. Record meas. of 1st plate ~~on alternate lines~~

Record meas. of 2nd plate ~~on intermediate lines~~

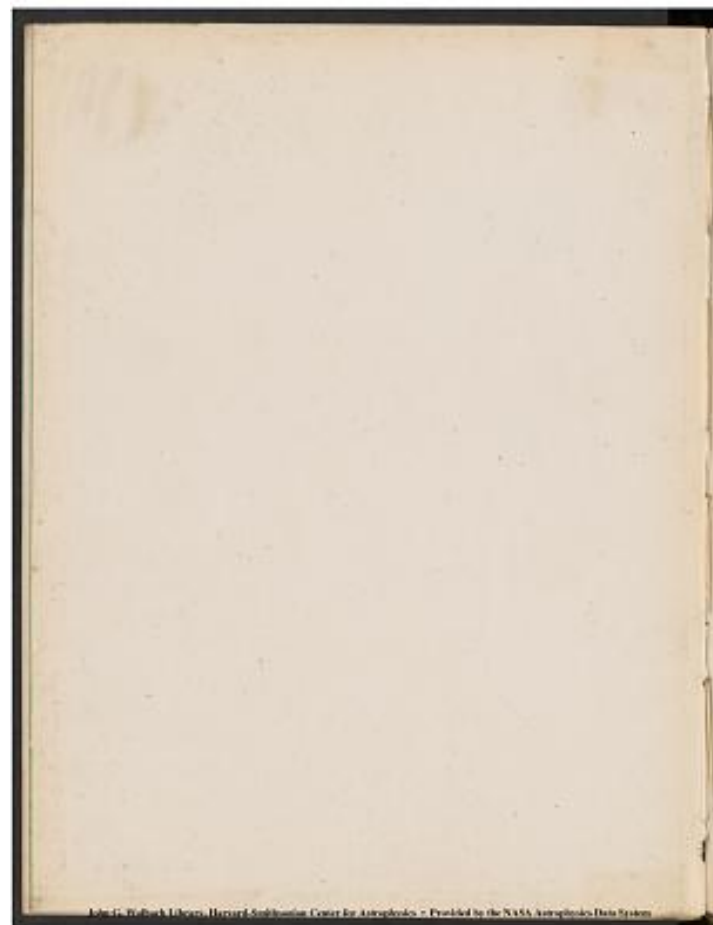
3. After bisecting the image of each star with the reticule read scales A and B (to left, and below). When all the stars are measured in this way bisect images again and read C and D (to right, and above). Whatever the observation, it must be recorded without regard to previous readings.

May 23, 1896. Evelyn F. Leland



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[[back cover]]



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Harvard-Smithsonian Center for Astrophysics

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