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Project PHaEDRA - Cecilia H. Payne #20

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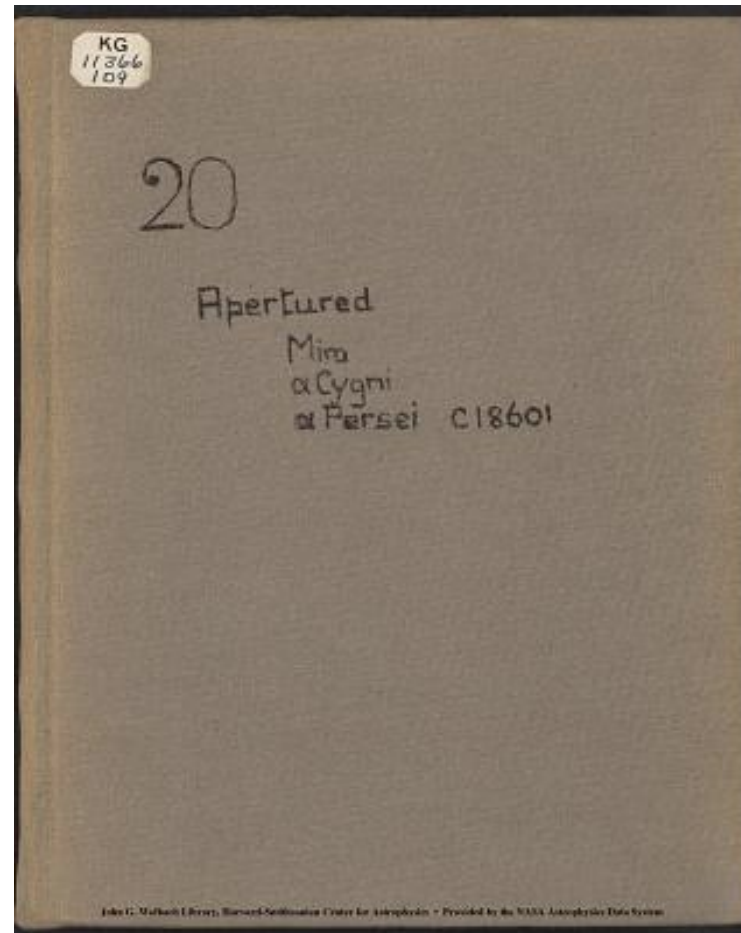
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11366
109
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Apertured
Mim
[[alpha symbol]] Cygni
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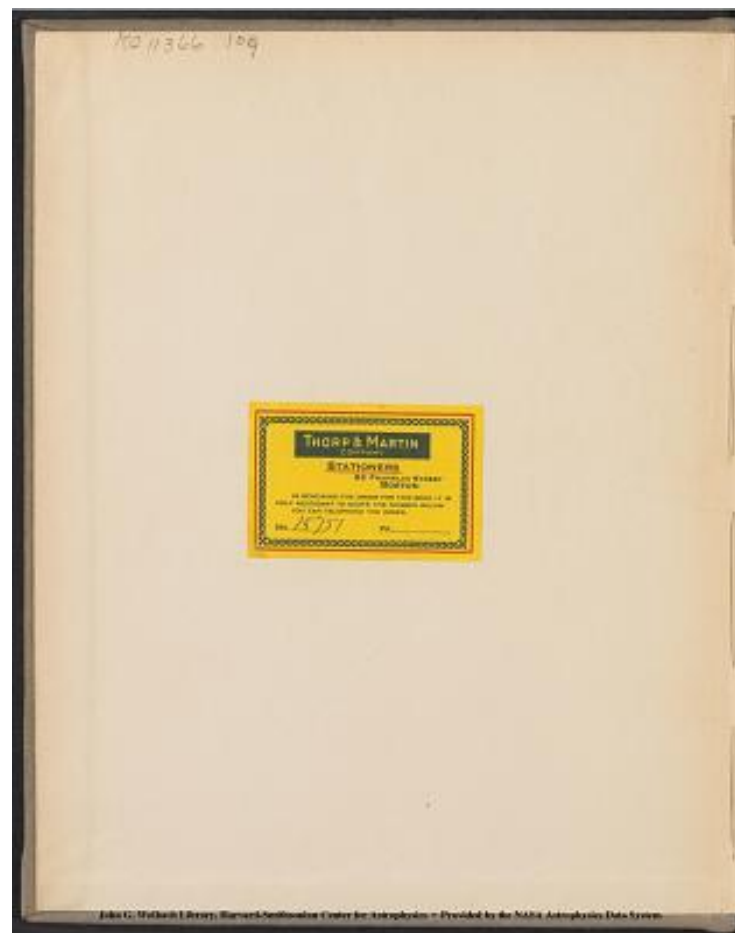
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^[[KG11366.109]]

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THORP & MARTIN COMPANY
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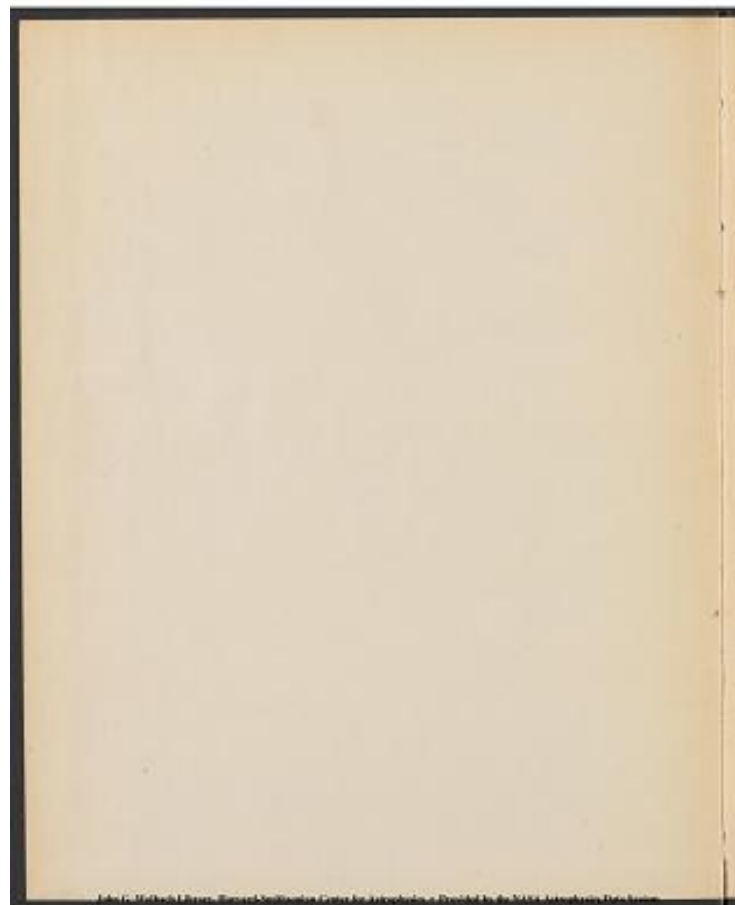
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Plate	Star	Prism	Page
C 18561	Mira	1	1
18590	Cyg		12
"	Mira		22
18601	Persci		30

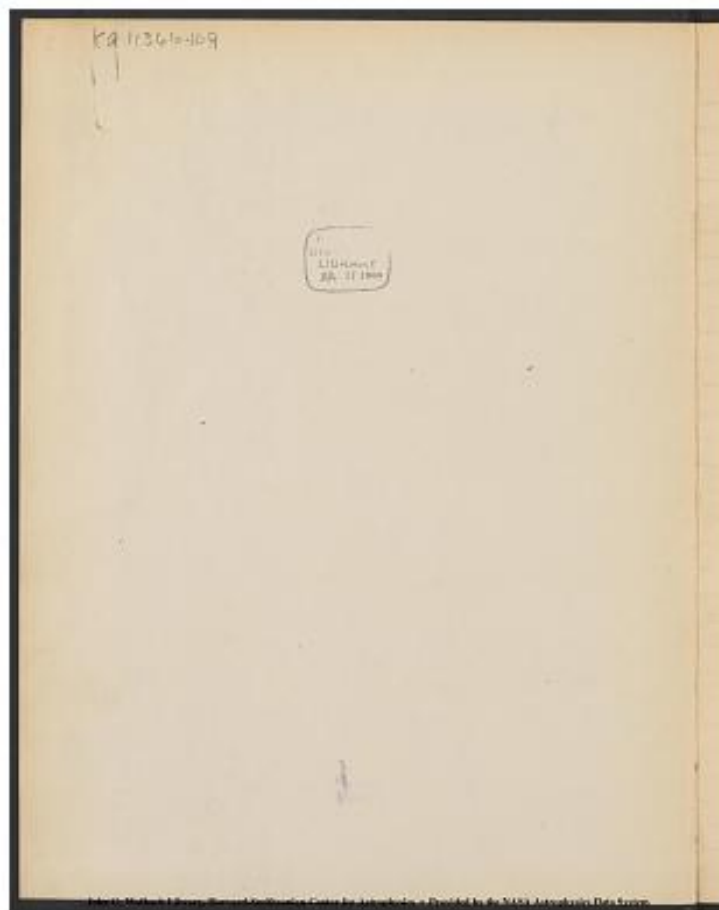
-18678 Qriouis 76

Plate	Star	Prism	Page
C 18561	Mira	1	1
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"	Mira		22
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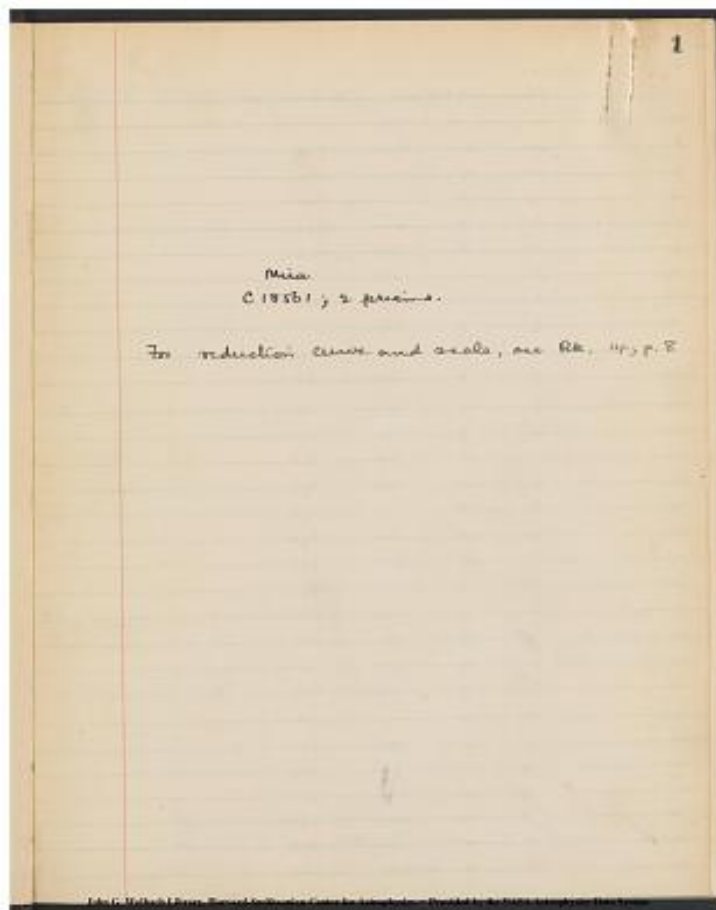


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[[preprint]] 1 [[/preprint]]

Mira
C18561; 2 prisms.

For reduction curve and scale, see Pk. 14, p.8



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[[preprint]] 2 [[/preprint]]

Mira. C18561 2 prisms.

No.	n	m+n	[n]	[m+n]	m
5	10	2	271	420	-149
10	-1	4	-	360	-
11	0	5	-	340	-
12	2	6	420	325	95
13	3	6	380	325	55
14	3	6	380	325	55
16	3	6	380	325	55
17	3	7	380	311	69
18	4	7	360	311	49
19	3	7	380	311	69
20	3	7	380	311	69
21	4	7	360	311	69
22	7	8	311	296	15
23	6	8	325	296	29
24	8	8	-	296	-
26	4	8	360	296	64
27	5	8	340	296	44
28	5	8	340	296	44
29	6	9	325	283	42
30	7	9	325	283	28
31	6	9	325	283	42
32	5	9	340	283	57
34	5	10	340	271	69
35	4	10	360	271	89
36	9	11	283	264	19
37	8	11	296	264	32
38	8	11	296	264	32
39	6	11	325	264	61
40	6	11	325	264	61

		Mira. C18561		2 prisms		
No.	λ	n	m+n	[n]	[m+n]	Δn
5		10	2	271	420	-149
10		-1	4	-	360	-
11		0	5	-	340	-
12		2	6	420	325	95
13		3	6	380	325	55
14		3	6	380	325	55
16		3	6	380	325	55
17		3	7	380	311	69
18		4	7	360	311	49
19		3	7	380	311	69
20		3	7	380	311	69
21		4	7	360	311	69
22		7	8	311	296	15
23		6	8	325	296	29
24		8	8	-	296	-
26		4	8	360	296	64
27		5	8	340	296	44
28		5	8	340	296	44
29		6	9	325	283	42
30		7	9	325	283	28
31		6	9	325	283	42
32		5	9	340	283	57
34		5	10	340	271	69
35		4	10	360	271	89
36		9	11	283	264	19
37		8	11	296	264	32
38		8	11	296	264	32
39		6	11	325	264	61
40		6	11	325	264	61

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[[preprint]] 2 [[/preprint]]

[[image - grid sheet paper pasted over top of page]]

C18561. Reduction table

0 -
1 - 31 168
2 420 32 165
3 380 33 162
4 360 34 158
5 340 35 155
6 325 36 150
7 311 37 147
8 296 38 144
9 283 39 140
10 271 40 137
11 264 41 134
12 257 42 131
13 252 43 127
14 246 44 124
15 238 45 121
16 234 46 118
17 230 47 115
18 225 48 112
19 220 49 109
20 216 50 105
21 210 51 100
22 206 52 96
23 202 53 92
24 198 54 87
25 193 55 80
26 188 56 75
27 184 57 68
28 180 58 60
29 176 59 51
30 173 60 41
61 32
62 20
63 0

[[image]]

38 | 8 | 11 | 296 | 264 | 32
39 | 6 | 11 | 325 | 264 | 61
40 | 6 | 11 | 325 | 264 | 61

C18561. Reduction Table

0	-	31	168
1	-	32	165
2	420	33	162
3	380	34	158
4	360	35	155
5	340	36	150
6	325	37	147
7	311	38	144
8	296	39	140
9	283	40	137
10	271	41	134
11	264	42	131
12	257	43	127
13	252	44	124
14	246	45	121
15	238	46	118
16	234	47	115
17	230	48	112
18	225	49	109
19	220	50	105
20	216	51	100
21	210	52	96
22	206	53	92
23	202	54	87
24	198	55	80
25	193	56	75
26	188	57	68
27	184	58	60
28	180	59	51
29	176	60	41
30	173	61	32
	62	20	
	63	0	

38 | 8 | 11 | 296 | 264 | 32
39 | 6 | 11 | 325 | 264 | 61
40 | 6 | 11 | 325 | 264 | 61

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[[preprint]] 3 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
41	9	11	283	264	19
42	7	11	311	264	47
43	7	11	311	264	47
44	6	12	325	257	68
45	9	12	283	257	28
46	11	12	264	257	07
47	8	12	296	257	39
48	6	12	325	257	68
49	9	13	283	252	31
50	11	13	264	252	12
51	10	13	271	252	19
52	12	14	257	246	11
53	61	14	32	246	-214
54	1	14	352	246	06
56	7	14	311	246	65
57	8	14	296	246	50
59	11	15	264	238	26
63	11	15	264	238	26
64	12	15	257	238	19
65	12	15	257	238	19
66	10	16	271	234	37
67	11	16	264	234	30
68	9	16	283	234	49
69a	14	16	246	234	12
70	12	16	257	234	23
71	11	16	264	234	30
72	10	16	271	234	37
73	13	16	252	234	18
74	13	16	252	234	18
75	13	17	252	230	22

No.	n	m+n	[n]	[m+n]	m
41	9	11	283	264	19
42	7	11	311	264	47
43	7	11	311	264	47
44	6	12	325	257	68
45	9	12	283	257	28
46	11	12	264	257	07
47	8	12	296	257	39
48	6	12	325	257	68
49	9	13	283	252	31
50	11	13	264	252	12
51	10	13	271	252	19
52	12	14	257	246	11
53	61	14	32	246	-214
54	1	14	352	246	06
56	7	14	311	246	65
57	8	14	296	246	50
59	11	15	264	238	26
63	11	15	264	238	26
64	12	15	257	238	19
65	12	15	257	238	19
66	10	16	271	234	37
67	11	16	264	234	30
68	9	16	283	234	49
69a	14	16	246	234	12
70	12	16	257	234	23
71	11	16	264	234	30
72	10	16	271	234	37
73	13	16	252	234	18
74	13	16	252	234	18
75	13	17	252	230	22

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No.	n	m+n	[n]	[m+n]	m
76	13	17	252	230	22
77	15	17	238	230	08
78	16	17	234	230	04
79	15	17	238	230	08
83	11	17	264	230	34
84	13	17	252	230	22
85	13	18	252	225	27
86	14	18	246	225	21
87	14	18	246	225	21
88	11	18	264	225	39
89	13	18	252	225	27
90	12	18	257	225	32
91	14	18	246	225	21
92	14	18	246	225	21
93	13	18	252	225	27
94	11	18	264	225	39
95	13	19	252	220	32
96	12	19	257	220	37
97	14	19	246	220	26
98	15	19	238	220	18
99	14	19	246	220	26
100	10	19	271	220	51
101	10	19	271	220	51
102	11	19	264	220	44
103	8	19	296	220	76
104	4	19	360	220	140
105	12	20	257	216	41
106	12	20	257	216	41
107	14	20	246	216	30
108	18	20	225	216	09

No.	λ	n	m+n	[n]	[m+n]	Δm
76		13	17	252	230	22
77		15	17	238	230	08
78		16	17	234	230	04
79		15	17	238	230	08
83		11	17	264	230	34
84		13	17	252	230	22
85		13	18	252	225	27
86		14	18	246	225	21
87		14	18	246	225	21
88		11	18	264	225	39
89		13	18	252	225	27
90		12	18	257	225	32
91		14	18	246	225	21
92		14	18	246	225	21
93		13	18	252	225	27
94		11	18	264	225	39
95		13	19	252	220	32
96		12	19	257	220	37
97		14	19	246	220	26
98		15	19	238	220	18
99		14	19	246	220	26
100		10	19	271	220	51
101		10	19	271	220	51
102		11	19	264	220	44
103		8	19	296	220	76
104		4	19	360	220	140
105		12	20	257	216	41
106		12	20	257	216	41
107		14	20	246	216	30
108		18	20	225	216	09

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No.	n	m+n	[n]	[m+n] m
109	16	20	234	[[/del]]2[[/del]] 18
110	14	20	246	30
111	12	21	257	47
112	13	21	252	42
113	14	21	246	36
114	15	21	238	28
115	18	21	225	15
116	17	21	230	20
117	17	21	230	20
118	12	21	257	47
119	12	21	257	47
120	15	22	238	32
121	15	22	238	32
122	14	22	246	40
123	11	22	264	[[/del]]6[[/del]] 58
124	16	22	234	28
124a	12	22	257	[[/del]]4[[/del]] 51
125	12	22	257	51
126	14	22	246	40
128	13	23	252	50
129	14	23	246	44
130	13	23	252	50
131	14	23	246	44
132	15	23	238	36
133	15	23	238	36
133a	17	23	230	28
133b	17	23	230	28
134	15	23	238	36
135	19	24	220	22
136	22	24	206	08

5

No.	n	m+n	[n]	[m+n] | m
109	16	20	234	18
110	14	20	246	30
111	12	21	257	47
112	13	21	252	42
113	14	21	246	36
114	15	21	238	28
115	18	21	225	15
116	17	21	230	20
117	17	21	230	20
118	12	21	257	47
119	12	21	257	47
120	15	22	238	32
121	15	22	238	32
122	14	22	246	40
123	11	22	264	6 58
124	16	22	234	28
124a	12	22	257	4 51
125	12	22	257	51
126	14	22	246	40
128	13	23	252	50
129	14	23	246	44
130	13	23	252	50
131	14	23	246	44
132	15	23	238	36
133	15	23	238	36
133a	17	23	230	28
133b	17	23	230	28
134	15	23	238	36
135	19	24	220	22
136	22	24	206	08

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No.	n	m+n	[n]	[m+n]	m	
137	31	24	168	198	-30	
138	59	24	57	198	-147	
139	19	24	220	198	22	
140	15	24	238	198	40	
142	14	25	246	193	53	
143	18	25	225	193	32	
144	17	25	230	193	37	
145	18	25	225	193	32	
146	17	25	230	193	37	
147	21	25	210	193	17	
148	21	25	210	193	17	
149	22	25	206	193	13	
150	18	26	225	188	37	
153	18	26	225	188	37	
154	17	26	230	188	42	
155	18	26	225	188	37	
156	18	26	225	188	37	
157	17	26	230	188	42	
158	17	27	230	184	46	
159	22	[[/strikethrough]]5[[/strikethrough]]	27	206	184	22
160	22	27	206	184	22	
161	17	[[/strikethrough]]5[[/strikethrough]]	27	230	184	46
162	14	27	246	184	62	
163	14	27	246	184	62	
164	15	27	238	184	54	
165	17	27	230	184	46	
166	17	28	230	180	46	
167	17	28	230	180	50	
168	20	28	216	180	36	
169	20	28	216	180	36	

№	λ	η	μ	[η]	[μ]	Δ
131		24	24	188	198	-30
132		24	24	21	198	-147
133		24	24	220	198	32
134		24	24	238	198	40
135		25	25	240	193	53
136		25	25	138	193	32
137		25	25	230	193	57
138		25	25	225	193	32
139		25	25	230	193	37
140		26	26	240	193	17
141		26	26	240	193	17
142		26	26	246	193	12
143		26	26	225	188	37
144		26	26	228	188	37
145		26	26	230	188	42
146		26	26	225	188	37
147		26	26	225	188	37
148		26	26	230	188	42
149		27	27	230	184	46
150		27	27	206	184	22
151		27	27	206	184	22
152		27	27	230	184	46
153		27	27	240	184	62
154		27	27	240	184	62
155		27	27	238	184	54
156		27	27	230	184	46
157		28	28	230	180	46
158		28	28	220	180	50
159		28	28	214	180	54
160		28	28	214	180	54

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[[preprint]] 7 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
170	19	28	220	180	40
171	19	28	220	180	40
172	14	28	246	180	66
173	12	28	257	180	77
174	10	28	271	176	91
175	12	29	257	176	81
176	15	29	238	176	62
177	17	29	230	176	54
178	16	29	234	176	58
179	19	29	220	176	44
180	20	29	216	176	40
181	21	29	210	176	34
182	19	29	220	176	44
183	21	30	210	173	37
184	20	30	216	173	43
185	18	30	225	173	52
186	16	30	234	173	61
187	18	30	225	173	52
188	18	30	225	173	52
189	19	30	220	173	47
190	23	30	202	173	29
191	20	30	216	173	43
192	22	30	206	173	33
193	20	31	216	168	48
194	25	31	193	168	25
195	23	31	202	168	34
196	22	31	206	168	38
197	20	31	216	168	48
198	19	31	220	168	52
199	18	31	225	168	57

7

No.	n	m+n	[n]	[m+n]	m
170	19	28	220	180	40
171	19	28	220	180	40
172	14	28	246	180	66
173	12	28	257	180	77
174	10	28	271	176	91
175	12	29	257	176	81
176	15	29	238	176	62
177	17	29	230	176	54
178	16	29	234	176	58
179	19	29	220	176	44
180	20	29	216	176	40
181	21	29	210	176	34
182	19	29	220	176	44
183	21	30	210	173	37
184	20	30	216	173	43
185	18	30	225	173	52
186	16	30	234	173	61
187	18	30	225	173	52
188	18	30	225	173	52
189	19	30	220	173	47
190	23	30	202	173	29
191	20	30	216	173	43
192	22	30	206	173	33
193	20	31	216	168	48
194	25	31	193	168	25
195	23	31	202	168	34
196	22	31	206	168	38
197	20	31	216	168	48
198	19	31	220	168	52
199	18	31	225	168	57

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No.	n	m+n	[n]	[m+n]	m
200	20	31	246	168	48
201	26	32	188	165	23
202	30	32	173	165	08
202a	32	32	165	165	00
203	29	32	176	165	11
204	29	32	176	165	11
204	28	32	180	165	15
206	11	32	264	165	99
208	11	32	264	165	99
209	14	32	246	165	81
210	17	32	230	165	65
211	18	32	225	165	60
212	19	32	220	165	55
213	28	32	180	165	15
213a	30	32	173	165	08
214	29	32	176	165	11
215	27	32	184	165	19
216	12	33	257	162	98
217	12	33	257	162	98
218	12	33	257	162	98
219	13	33	252	162	90
220	12	33	257	162	95
221	13	33	252	162	90
222	13	33	252	162	90
223	11	33	264	162	102
224	12	33	257	162	95
225	20	33	216	162	[[strikethrough]]4[[/strikethrough]]54
226	20	33	216	162	54
227	24	33	198	162	36
228	15	33	238	162	76

8							
No.	λ	n	m+n	[n]	[m+n]	Δ_{m+n}	N
200		20	31	246	168	48	2
201		26	32	188	165	23	2
202		30	32	173	165	08	2
202a		32	32	165	165	00	2
203		29	32	176	165	11	2
204		29	32	176	165	11	2
204		28	32	180	165	15	2
206		11	32	264	165	99	2
208		11	32	264	165	99	2
209		14	32	246	165	81	2
210		17	32	230	165	65	2
211		18	32	225	165	60	2
212		19	32	220	165	55	2
213		28	32	180	165	15	2
213a		30	32	173	165	08	2
214		29	32	176	165	11	2
215		27	32	184	165	19	2
216		12	33	257	162	98	2
217		12	33	257	162	98	2
218		12	33	257	162	98	2
219		13	33	252	162	90	2
220		12	33	257	162	95	2
221		13	33	252	162	90	2
222		13	33	252	162	90	2
223		11	33	264	162	102	2
224		12	33	257	162	95	2
225		20	33	216	162	[[strikethrough]]4[[/strikethrough]]54	2
226		20	33	216	162	54	2
227		24	33	198	162	36	2
228		15	33	238	162	76	2

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[[preprint]] 2 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
229	12	33	257	162	95
230	13	33	252	162	90
231	14	33	246	162	84
232	15	33	238	162	76
233	19	33	220	162	58
234	20	33	216	162	54
235	22	33	206	162	44
236	25	33	193	162	31
237	24	33	198	162	36
238	27	33	184	162	22
239	25	33	193	162	31
240	13	34	252	158	94
241	17	34	230	158	72
242	20	34	216	158	58
243	23	34	202	158	44
244	26	34	188	158	30
245	27	34	184	158	26
246	24	34	198	158	40
248	27	34	184	158	26
250	3 3	34	162	158	04
251	33	34	162	158	04
252	3	34	380	158	222
253	5	34	340	158	182
254	5	33	340	162	178
255	8	33	296	162	134
256	12	33	257	162	95
257	10	33	271	162	109
258	10	33	271	162	109
259	11	33	264	162	102
260	14	33	246	162	184

3~~3~~4 | 34 | 158 | 158 | 00

No.	λ	n	m+n	[n]	[m+n]	Δn
229	12	33	257	162	95	
230	13	33	252	162	90	
231	14	33	246	162	84	
232	15	33	238	162	76	
233	19	33	220	162	58	
234	20	33	216	162	54	
235	22	33	206	162	44	
236	25	33	193	162	31	
237	24	33	198	162	36	
238	27	33	184	162	22	
239	25	33	193	162	31	
240	13	34	252	158	94	
241	17	34	230	158	72	
242	20	34	216	158	58	
243	23	34	202	158	44	
244	26	34	188	158	30	
245	27	34	184	158	26	
246	24	34	198	158	40	
248	27	34	184	158	26	
249	26	34	188	158	30	
250	3	34	380	158	222	
251	5	34	340	158	182	
252	5	33	340	162	178	
253	8	33	296	162	134	
254	12	33	257	162	95	
255	10	33	271	162	109	
256	10	33	271	162	109	
257	11	33	264	162	102	
258	14	33	246	162	184	

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[[preprint]] 10 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
261	15	32	238	165	73
262	21	32	210	165	45
263	19	32	220	165	55
263a	20	3 2	210	165	45
264	21	32	210	165	45
265	7	32	311	16 5	175
266	5	32	340	165	175
267	7	31	311	168	143
268	9	31	283	168	115
269	11	31	264	168	96
270	12	31	257	168	89
271	12	31	257	168	89
272	12	31	257	168	89
273	13	31	252	168	84
274	16	31	234	168	66
275	17	30	230	173	57
278	10	30	271	173	98
279	8	30	296	173	123
280	11	29	264	176	+88
281	27	12	184	257	-73
282	11	29	264	176	+88
283	14	29	246	176	80
285	14	28	246	180	66
286	17	28	230	180	50
287	17	28	230	180	50
288	17	28	230	180	50
289	17	28	230	180	50
290	17	28	230	180	50
291	18	28	225	180	45
292	19	28	220	180	40

No.	n	m+n	[n]	[m+n]	Δm
261	15	32	238	165	73
262	21	32	210	165	45
263	19	32	220	165	55
264	20	32	216	165	51
265	21	32	210	165	45
266	7	32	311	165	146
267	5	32	340	165	175
268	7	31	311	168	143
269	9	31	283	168	115
270	11	31	264	168	96
271	12	31	257	168	89
272	12	31	257	168	89
273	13	31	252	168	84
274	16	31	234	168	66
275	17	30	230	173	57
276	17	30	230	173	57
277	17	30	230	173	57
278	10	30	271	173	98
279	8	30	296	173	123
280	11	29	264	176	+88
281	27	12	184	257	-73
282	11	29	264	176	+88
283	14	29	246	176	80
284	14	28	246	180	66
285	17	28	230	180	50
286	17	28	230	180	50
287	17	28	230	180	50
288	17	28	230	180	50
289	17	28	230	180	50
290	17	28	230	180	50
291	18	28	225	180	45
292	19	28	220	180	40

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[[preprinted]] 11 [[/preprinted]]

293	2	20	28	216	180	36
294		19	27	220	184	36
295		22	27	206	184	22
296		22	26	206	188	18
297		22	26	206	188	18
298		23	26	202	188	14
299		25	25	193	193	00
301		1	(25)	?	(193)	

[[The rightmost column is in red]]

293	2	20	28	216	180	36
294	19	27	27	220	184	36
295	22	27	27	206	184	22
296	22	26	26	206	188	18
297	22	26	26	206	188	18
298	23	26	26	202	188	14
299	25	25	25	193	193	00
301	1	(25)	?	(193)	(193)	

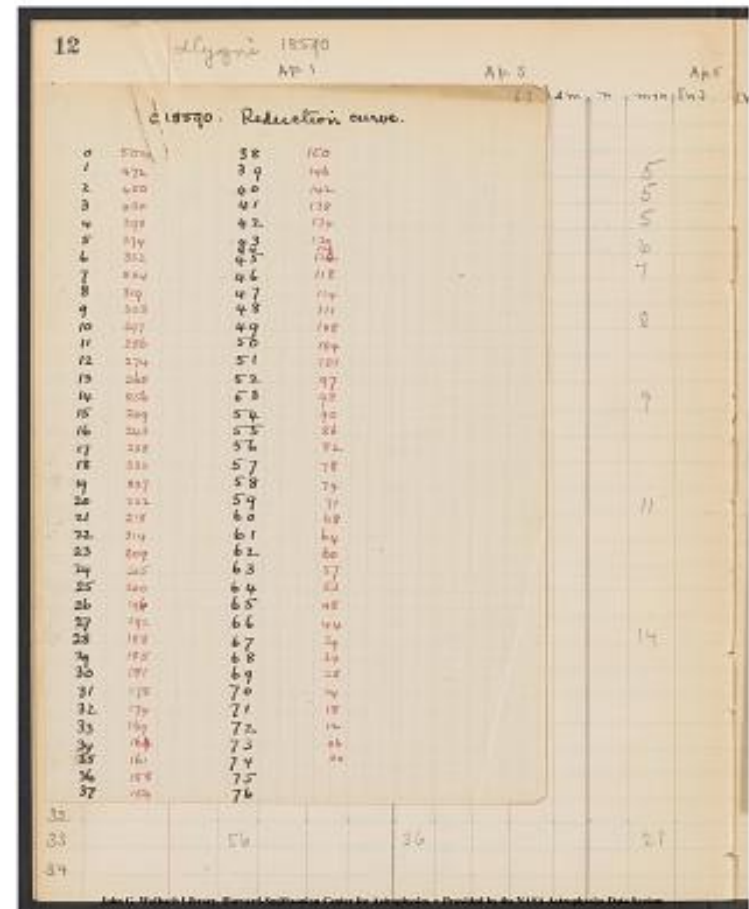
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[[preprinted]] 12 [[/preprinted]]

[[Table overlain on page 12]]

C 18590 Reduction Curve

0	500	38	150
1	472	39	146
2	450	40	142
3	420	41	138
4	398	42	134
5	374	43	130
	44	126	
6	352	45	120
7	334	46	118
8	319	47	114
9	308	48	111
10	297	49	108
11	286	50	104
12	274	51	101
13	265	52	97
14	256	53	93
15	249	54	90
16	243	55	86
17	238	56	82
18	232	57	78
19	227	58	74
20	222	59	71
21	218	60	68
22	214	61	64
23	209	62	60
24	205	63	57
25	200	64	53
26	196	65	48
27	192	66	44
28	188	67	39
29	185	68	34
30	181	69	28
31	178	70	24
32	174	71	18
33	169	72	12
34	164	73	06
35	161	74	00
36	158	75	
37	154	76	



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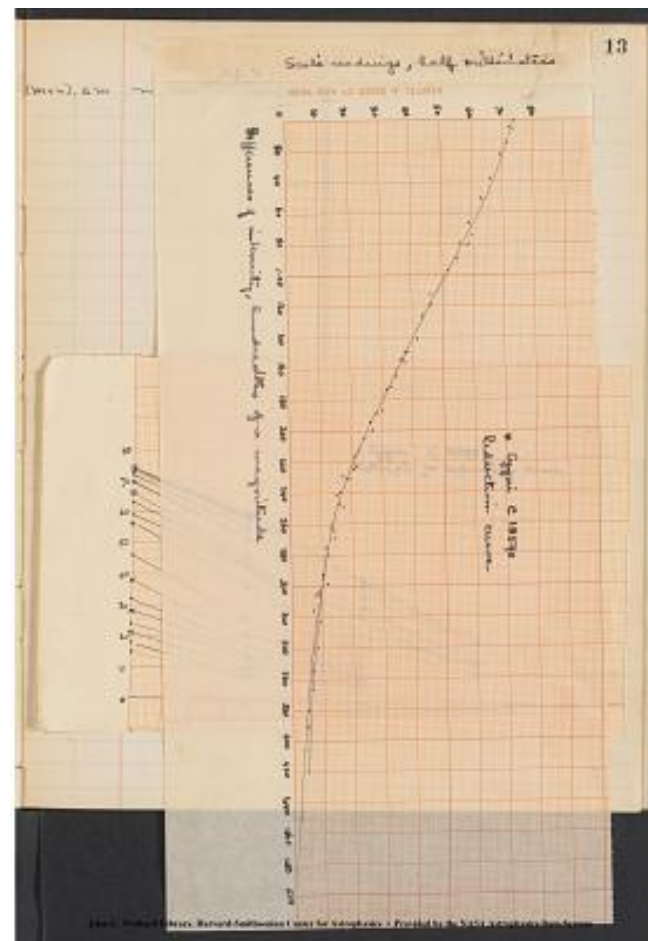
[[preprinted]] 13 [[/preprinted]]

alpha Cygni C 18590
Reduction curve

[[image - line graph plotted through data points]]

[[y-axis: 0 - 80]]
Scale readings, half millimeters

[[x axis: 0 - 500]]
Differences of intensity, hundredths of a magnitude



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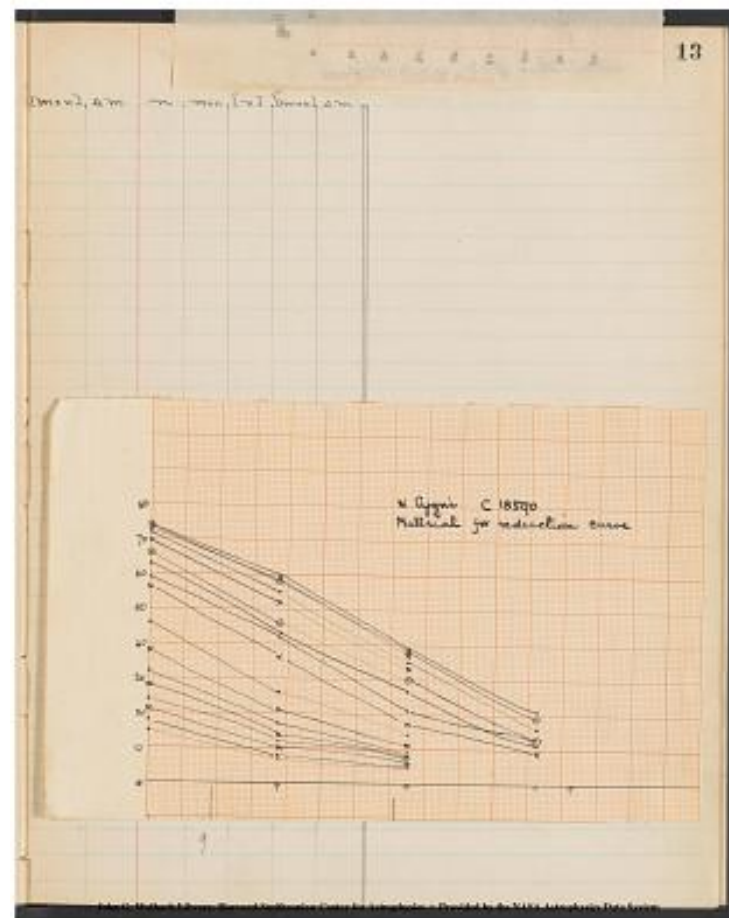
[[preprinted]] 13 [[/preprinted]]

alpha Cygni C 18590
Material for reduction Curve

[[image - multiple line graphs plotted through data points]]

[[y axis: 0 - 80]]

[[x axis: no scale shown]]



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[[preprinted]] 14 [[/preprinted]]

Ap. 1	Ap.3	Ap.5										
No.	lambda	n	m+n	[n]	[m+n]	delta m	n	m+n	[n]	[m+n]	delta	
m	n	m+n	[n]									
35												
36												
37												
38												
39												
40												
41		63				43					26.5	
42												
43												
44												
45												
46		66				46					30	
47												
50												
51												
52												
53		69.5				52					33	
54												
55												
56												
57												
58												
59												
60												
61												
62		72				55					35	
63												
64												
65												
66												
67												

14										
No.										
	lambda	n	m+n	[n]	[m+n]	delta m	n	m+n	[n]	[m+n]
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
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66										
67										

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[[preprinted]] 15 [[/preprinted]]

Ap. 7

[m+n] | delta m | n | m+n | [n] | [m+n] | delta m

		11				
		13				
		-				
		16				

		11				
		13				
		-				
		16				

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[[preprinted]] 16 [[/preprinted]]

Ap. 1 | Ap.3 | Ap.5

No. | lambda | n | m+n | [n] | [m+n] | delta m | n | m+n | [n] | [m+n] | delta
m | n | m+n | [n]

68 | | | | | | | | | | | | |
69 | | | | | | | | | | | | |
70 | | | | | | | | | | | | |
71 | | | | | | | | | | | | |

72 | | | | | | | | | | | | |
73 | | | | | | | | | | | | |
74 | | | | | | | | | | | | |
75 | | | | | | | | | | | | |
76 | | | | | | | | | | | | |
77 | | | | | | | | | | | | |
78 | | 73 | | | | 57 | | | | 36.5 | | |
79 | | | | | | | | | | | | |
80 | | | | | | | | | | | | |
81 | | | | | | | | | | | | |
82 | | | | | | | | | | | | |
83 | | | | | | | | | | | | |
84 | | | | | | | | | | | | |
85 | | | | | | | | | | | | |
86 | | | | | | | | | | | | |
87 | | | | | | | | | | | | |
88 | | | | | | | | | | | | |
89 | | | | | | | | | | | | |
90 | | | | | | | | | | | | |
91 | | | | | | | | | | | | |
92 | | 74 | | | | 58 | | | | 38 | | |
93 | | | | | | | | | | | | |
94 | | | | | | | | | | | | |
95 | | | | | | | | | | | | |
96 | | | | | | | | | | | | |
97 | | | | | | | | | | | | |

16												
No.	lambda	Ap. 1				Ap. 3				Ap. 5		
		m	n	m+n	[n]	m	n	m+n	[n]	m	n	m+n
68												
69												
70												
71												
72												
73												
74												
75												
76												
77												
78			73					57				36.5
79												
80												
81												
82												
83												
84												
85												
86												
87												
88												
89												
90												
91												
92			74					58				38
93												
94												
95												
96												
97												

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[[preprinted]] 17 [[/preprinted]]

$$[m+n] \mid \text{delta } m \mid n \mid m+n \mid [n] \mid [m+n] \mid \text{delta } m$$

17 | | | |

19 | | | |



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[[preprinted]] 18 [[/preprinted]]

	ap1	ap3	ap5							
No	Lambda	n	n+m	[[n]][[m+n]]delta m	n	m+n	[n]	[[m+n]]	delta m	
n	m+n	[n]								
98										
99										
100										
101										
102										
103										
104	74.5			60					39	
105										
106										
107										
108										
109										
110										
111										
112										
113	74			60					39	
114										
115										
116										
117										
118										
119	74			60					-	
120										
121										
122										
123										
124										
125										
126										
127										

18										

	Apt.7	19
[m+n]	Am	n m+n
[n]	[m+n]	Am
-		
21		
[[symbol-arrow]]		
-		



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

	Ap1				Ap.3				Ap.5			
No	a	n	m+n	[n]	[m+n]	delta	m	n	m+n	[n]	[m+n]	delta
128	73				59					37		
129												
130												
131	59				42					21		
132												
133												
134												

20												
Ap.1				Ap.2				Ap.3				
No	a	n	m+n	[n]	[m+n]	delta	m	n	m+n	[n]	[m+n]	delta
128	73				59					37		
129												
130												
131	59				42					21		
132												
133												
134												

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[[preprinted]] 21 [[/preprinted]]

Ap7

|[m+n]|delta m|n|m+n|[n]|[m+n]|delta m|

| | | - | | |
| | | 13 | | |

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[[preprint]] 22 [[/preprint]]

Mira

C~~18561~~¹⁸⁶18590

Line | n | m+n | [n] | [m+n] | m

-18	1	4	472	398	74
-17	2	4	450	398	52
-16	2	4	450	398	52
-15	11	4	286	398	- 112
-14	5	5	374	374	0
-13	3	5	420	374	46
-12	2	5	450	374	66
-11	2	6	450	352	98
-10	6	6	352	352	00
-9	11	6	286	352	- 56
-8	4	6	298	352	46
-7	5	6	374	352	22
-6	5	6	374	352	22
-5	5	6	374	352	22
-4	4	7	398	334	64
-3	4	7	398	334	64
-2	2	7	450	334	116
-1	3	8	420	319	1 1 01
0	7	8	334	319	15
1	21	8	218	319	- 101
a	4	8	398	319	79
b	8	9	319	308	11
c	6	9	352	308	44
e	6	10	352	297	55
f	4	10	398	297	101
g	6	10	352	2 96 7	55
h	10	11	297	286	11
i	8	11	319	286	33
j	7	11	334	286	48

The image shows a handwritten table on aged, slightly discolored paper. The table is organized into columns with headers that appear to be 'Line', 'λ', 'n', 'm+n', '[n]', '[m+n]', and 'Δm'. The entries are numerical, with some values in red ink. The table contains approximately 25 rows of data, with some rows having multiple entries in the same column. The handwriting is in a cursive style, and the paper shows signs of age and wear.

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[[preprint]] 23 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
138	62	42	60	134	26 ⁷⁴
139	36	42	158	134	24
140	31	42	178	134	44
142	34	43	164	130	34
1445	36	43	185	130	28
147	39	43	146	130	1 ²⁶
148	41	43	138	130	08
150	39	43	146	130	16
153	4 ³⁸	43	150	130	20
154	34	43	164	130	34
155	36	43	158	130	28
159-60	4 ¹⁵⁷	43	44 ³⁵	130	161 ¹²⁶
161-4	29	44	185	126	59
165	32	44	174	126	48
170-1	36	45	158	122	36
172-6	25	45	200	122	78
177-8	33	45	169	122	47
179	35	46	161	118	43
180	37	46	154	118	36
181	35	46	161	118	43
184	35	46	161	118	43
186	31	46	178	118	60
188	33	46	169	118	51
189	36	46	158	118	40
191	37	46	154	118	36
193	40	47	142	114	28
195	42	47	134	114	20
199	37	47	154	114	40
201	46	47	118	114	04

23						
No.	n	m+n	[n]	[m+n]	Δ_{m+n}	
138	62	42	60	134	26	
139	36	42	158	134	24	
140	31	42	178	134	44	
142	34	43	164	130	34	
1445	36	43	185	130	28	
147	39	43	146	130	1	
148	41	43	138	130	08	
150	39	43	146	130	16	
153	4	43	150	130	20	
154	34	43	164	130	34	
155	36	43	158	130	28	
159-60	4	43	44	130	161	
161-4	29	44	185	126	59	
165	32	44	174	126	48	
170-1	36	45	158	122	36	
172-6	25	45	200	122	78	
177-8	33	45	169	122	47	
179	35	46	161	118	43	
180	37	46	154	118	36	
181	35	46	161	118	43	
184	35	46	161	118	43	
186	31	46	178	118	60	
188	33	46	169	118	51	
189	36	46	158	118	40	
191	37	46	154	118	36	
193	40	47	142	114	28	
195	42	47	134	114	20	
199	37	47	154	114	40	
201	46	47	118	114	04	

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[[preprint]] 24 [[/preprint]]

No.	n	m+n	[n]	[m+n]	m
2	7	12	334	274	60
3	8	12	319	274	45
4	8	13	319	265	54
5	38	13	150	265	85 -115
6	12	13	274	265	09
7	9	14	308	256	52
8-9	8	14	319	249	63
9x	16	15	243	249	-0 1 6
a	11	15	286	249	37
b	11	15	286	243	37
c	12	16	274	238	31
d	7	17	334	238	96
e	3	17	420	238	82
10	2	17	450	232	212
a	3	18	420	232	188
b	9	18	308	227	66
c	8	19	319	227	92
d	13	19	265	222	38
e	17	20	238	222	16
f	14	20	256	222	34
g	7	20	334	218	112
11	4	21	398	214	180
12-14	16	22	243	205	29
16	18	24	232	205	27
17-19	23	24	209	205	04
20	21	24	218	205	13
21	20	25	222	200	22
22-23	23	25	209	200	09
24	25	25	200	200	00

24					
No.	λ	n	m+n	[n]	[m+n]
2	7	12	334	274	60
3	8	12	319	274	45
4	8	13	319	265	54
5	38	13	150	265	-115
6	12	13	274	265	09
7	9	14	308	256	52
8-9	8	14	319	249	63
9x	16	15	243	249	-016
a	11	15	286	249	37
b	11	15	286	243	37
c	12	16	274	238	31
d	7	17	334	238	96
e	3	17	420	238	82
10	2	17	450	232	212
a	3	18	420	232	188
b	9	18	308	227	66
c	8	19	319	227	92
d	13	19	265	222	38
e	17	20	238	222	16
f	14	20	256	222	34
g	7	20	334	218	112
11	4	21	398	214	180
12-14	16	22	243	205	29
16	18	24	232	205	27
17-19	23	24	209	205	04
20	21	24	218	205	13
21	20	25	222	200	22
22-23	23	25	209	200	09
24	25	25	200	200	00

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No.		n		m+n		[n]		[m+n]		m
2020		48		111		111		00		
203		4		111		3		111		00
206-8		20		222		111		111		
213		42		134		111		023		
213a	|	44	|	126	|	111	|	015		
216	|	23	|	209	|	111	|	98		
220-2	|	27	|	192	|	111	|	81		
223-4	|	32	|	174	|	111	|	63		
226	|	35	|	161	|	111	|	50		
227	|	38	|	150	|	111	|	49		
229	|	27	|	192	|	111	|	81		
231	|	32	|	174	|	111	|	63		
237	|	42	|	134	|	108	|	26		
238	|	44	|	126	|	108	|	18		
239	|	42	|	134	|	108	|	26		
240-1	|	38	|	150	|	108	|	42		
242-3	|	44	|	126	|	108	|	18		
246	|	43	|	130	|	108	|	22		
250-1	|	49	|	108	|	108	|	00		
252-5	|	10	|	297	|	108	|	189		
256	|	20	|	222	|	111	|	111		
257	|	20	|	222	|	111	|	111		
262-4	|	32	|	174	|	111	|	63		
265-6	|	15	|	249	|	114	|	135		
269-73	|	23	|	209	|	114	|	95		
275	|	30	|	181	|	114	|	67		
279-80	|	22	|	214	|	114	|	100		
281	|	28	|	111	|	111	|	111		
282	|	27	|	192	|	118	|	74		

25									
No.	λ	μ	ν	ρ	σ	τ	θ	ϕ	ψ
2020	48	111	111	00					
203	4	111	3	111	00				
206-8	20	222	111	111					
213	42	134	111	023					
213a	44	126	111	015					
216	23	209	111	98					
220-2	27	192	111	81					
223-4	32	174	111	63					
226	35	161	111	50					
227	38	150	111	49					
229	27	192	111	81					
231	32	174	111	63					
237	42	134	108	26					
238	44	126	108	18					
239	42	134	108	26					
240-1	38	150	108	42					
242-3	44	126	108	18					
246	43	130	108	22					
250-1	49	108	108	00					
252-5	10	297	108	189					
256	20	222	111	111					
257	20	222	111	111					
262-4	32	174	111	63					
265-6	15	249	114	135					
269-73	23	209	114	95					
275	30	181	114	67					
279-80	22	214	114	100					
281	28	111	111	111					
282	27	192	118	74					

Project PHaEDRA - Cecilia H. Payne #20
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[[preprinted]] 26 [[/preprinted]]

No.	n	m+n	[n]	[m+n]	m
26	21	26	218	196	22
27	22	26	214	196	18
29-30	25	26	200	196	04
31	25	27	200	192	08
32	23	27	209	192	17
33	27	28	192	188	04
34-5	21	28	218	188	+ 2 ³ 0
36	30	28	181	188	-07
39	23	29	209	185	+24
41	28	30	188	181	07
42	27	30	192	181	11
43	27	30	192	181	11
44	28	31	188	178	10
46	31	31	178	178	00
47	29	32	185	174	11
48	22	32	514	174	40
49	30	32	181	174	09
50-2	31	33	178	169	+ 1 ⁰ 9
53	74	34	00	164	-164
54	29	34	185	164	+21
55	27	34	182	164	28
57	28	34	188	164	24
63	30	35	181	161	20
66	28	35	188	161	27
67	28	35	188	161	27
68	29	35	185	161	24
69	33	35	169	161	08
71	30	36	181	158	23
73	32	36	174	158	16
75	33	36	169	158	11

26					
No.	n	m+n	[n]	[m+n]	Diff.
26	21	26	218	196	22
27	22	26	214	196	18
29-30	25	26	200	196	04
31	25	27	200	192	08
32	23	27	209	192	17
33	27	28	192	188	04
34-5	21	28	218	188	+ 2 ³ 0
36	30	28	181	188	-07
39	23	29	209	185	+24
41	28	30	188	181	07
42	27	30	192	181	11
43	27	30	192	181	11
44	28	31	188	178	10
46	31	31	178	178	00
47	29	32	185	174	11
48	22	32	514	174	40
49	30	32	181	174	09
50-2	31	33	178	169	+ 1 ⁰ 9
53	74	34	00	164	-164
54	29	34	185	164	+21
55	27	34	182	164	28
57	28	34	188	164	24
63	30	35	181	161	20
66	28	35	188	161	27
67	28	35	188	161	27
68	29	35	185	161	24
69	33	35	169	161	08
71	30	36	181	158	23
73	32	36	174	158	16
75	33	36	169	158	11

Project PHaEDRA - Cecilia H. Payne #20
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[[preprinted]] 27 [[/preprinted]]

No.	n	m+n	[n]	[m+n]	m
285	30	46	181	118	63
286	34	32	164	174	10
287-9	32	3	3	3	3
292	37	45	154	122	32
296	42	44	134	126	08
299	44	44	126	126	00
301	3	44	420	126	284

27

No.	n	m+n	[n]	[m+n]	m
285	30	46	181	118	63
286	34	32	164	174	10
287-9	32	3	3	3	3
292	37	45	154	122	32
296	42	44	134	126	08
299	44	44	126	126	00
301	3	44	420	126	284

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[[preprinted]] 28 [[/preprinted]]

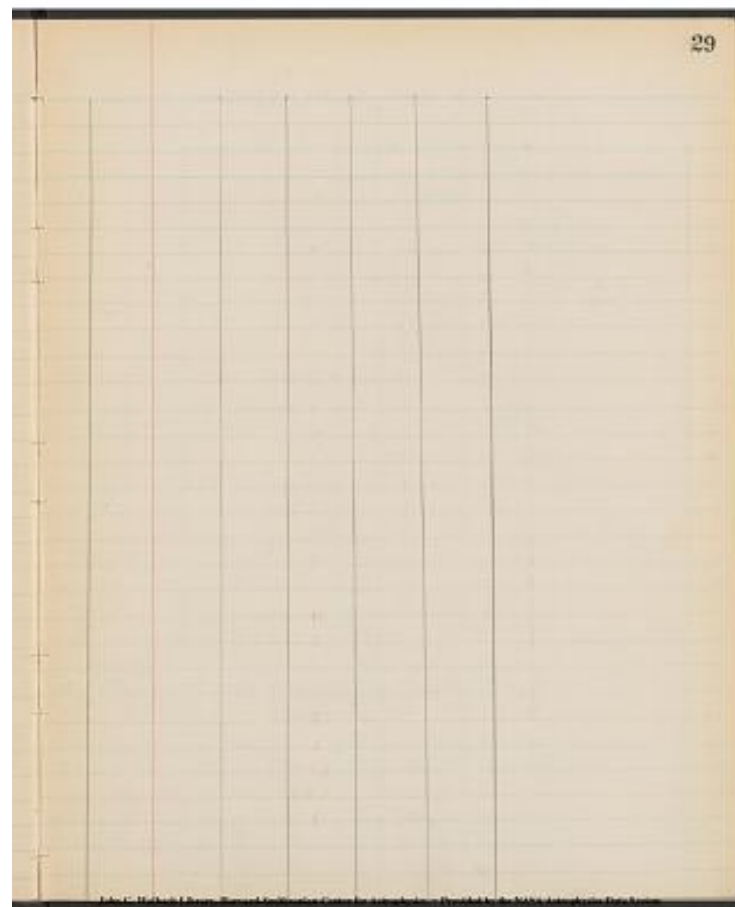
No.	n	m+n	[n]	[m+n]	m
78	34	36	164	158	06
79	36	37	158	154	04
80	35	37	161	154	07
82-3	30	37	181	154	27
85-7	32	37	174	154	20
88	31	37	178	154	24
93	31	38	178	150	28
95-6	33	38	169	150	19
97-9	37	38	154	150	04
100	30	38	181	150	31
101	28	38	188	150	38
102	28	38	188	150	38
104	17	39	238	146	92
105	31	39	178	146	32
107	36	39	158	146	12
108-9	37	39	154	146	08
110	33	39	169	146	23
111	30	39	181	146	35
115-17	35	39	161	146	15
118-19	29	40	185	142	43
120-2	22	40	214	142	72
123	31	40	178	142	36
124	35	40	161	142	19
125	21	41	218	138	80
128	34	41	164	138	26
130	31	41	178	138	40
131-3	42	41	163	138	-[[strikethrough]]4[[/strikethrough]]04
134	30	41	181	138	43
135	33	41	169	138	31
136	35	41	161	138	23

28						
No.	λ	rev	mag	[r]	[m+n]	Δm
78	34	36	164	158	06	
79	36	37	158	154	04	
80	35	37	161	154	07	
82-3	30	37	181	154	27	
85-7	32	37	174	154	20	
88	31	37	178	154	24	
93	31	38	178	150	28	
95-6	33	38	169	150	19	
97-9	37	38	154	150	04	
100	30	38	181	150	31	
101	28	38	188	150	38	
102	28	38	188	150	38	
104	17	39	238	146	92	
105	31	39	178	146	32	
107	36	39	158	146	12	
108-9	37	39	154	146	08	
110	33	39	169	146	23	
111	30	39	181	146	35	
115-17	35	39	161	146	15	
118-19	29	40	185	142	43	
120-2	22	40	214	142	72	
123	31	40	178	142	36	
124	35	40	161	142	19	
125	21	41	218	138	80	
128	34	41	164	138	26	
130	31	41	178	138	40	
131-3	42	41	163	138	-[[strikethrough]]4[[/strikethrough]]04	
134	30	41	181	138	43	
135	33	41	169	138	31	
136	35	41	161	138	23	

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[[no entries]]



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alpha Persei C-18601

Ap. 1 | Ap. 3 | Ap. 5

No. | | n | m+n | [n] | [m+n] | m | n | m+n | [n] | [m+n] | m | n | m+n | [n]

-10		9	19	408	322	86								
-9		10	24	396	400	300	^	295		96	^	105		
-8	|	9	30	408	278	130	|	|	|	|	|	|	|	|
-7	|	20	35	318	262	56	|	|	|	|	|	|	|	|
-5	|	23	37	304	256	48	|	|	|	|	|	|	|	|
-4	|	27	38	290	254	36	|	|	|	|	|	|	|	|
-3	|	21	40	314	248	66	|	|	|	|	|	|	|	|
-2	|	17	41	332	244	88	|	|	|	|	|	|	|	|
-1	|	27	43	290	240	50	|	|	|	|	|	|	|	|
0	|	28	44	286	238	48	|	|	|	|	|	|	|	|
1	|	40	45	248	236	12	8	19	424	322	102	3	11	582
2	|	42	47	242	232	10	13	23	364	304	60	9	12	408
3	|	33	50	270	224	46	15	25	346	296	50	10	12	396
4	|	36	51	260	222	38	-	-	-	-	8	13	424	
5	|	19	55	322	215	107	18	27	328	290	38	9	13	408
6	|	38	57	254	211	43	16	27	338	290	48	8	13	424
7	|	46	60	234	206	28	21	28	314	286	28	11	14	382
8	|	46	61	234	204	30	20	29	318	282	36	11	14	382
9	|	56	62	214	202	12	21	29	314	282	32	12	14	370
10	|	53	63	218	201	17	18	31	328	276	52	10	15	396
11	|	47	72	232	186	46	19	32	322	272	50	10	15	396
12	|	47	74	232	184	48	15	33	346	270	76	9	15	408
13	|	30	76	278	180	98	15	34	346	266	80	6	16	476
14	|	26	78	292	176	116	14	35	356	262	94	9	16	408
15	|	27	80	290	174	116	10	35	396	262	134	8	17	424
16	|	48	80	228	174	54	17	36	332	260	72	8	17	424
17	|	64	81	200	172	28	26	38	292	254	38	11	18	382
18	|	67	83	194	169	25	30	39	278	250	28	15	18	346
19		68	85	192	166	26	29	41	282	244	38	13	19	364
20		77	88	178	161	17	34	44	266	238	28	16	20	338

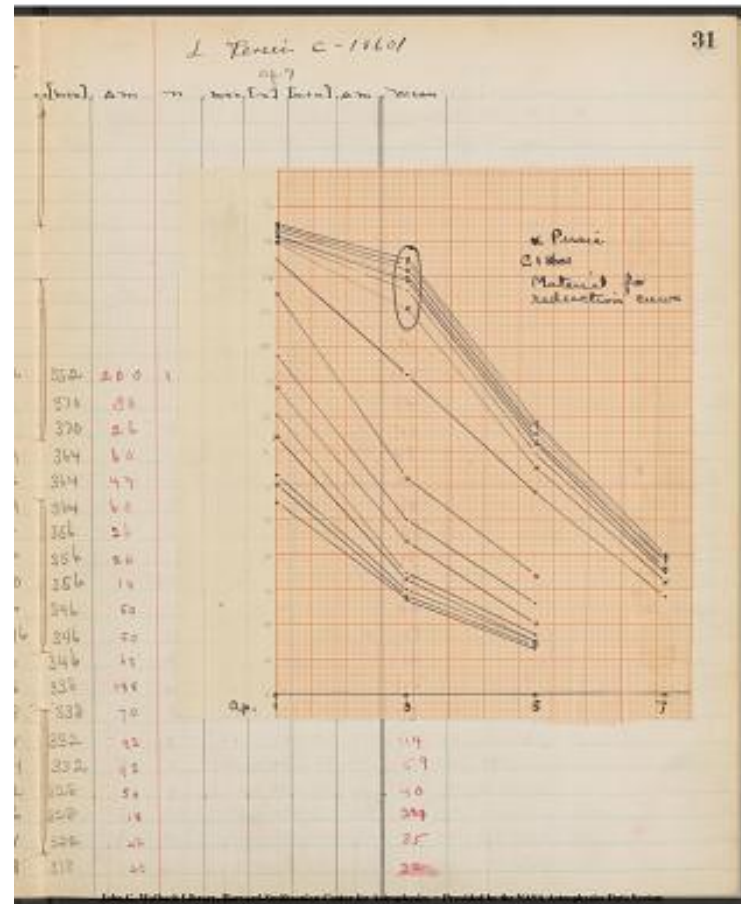
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[[preprinted]] 31 [[/preprinted]]

[[image - several line graphs drawn through data points]]

alpha Persei
C 18601
Material for reduction curve

[[Y Axis:]] 0 - 140
[[X Axis:]] 1 - 7



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[[preprinted]] 31 [[/preprinted]]

alpha Persei C-18601
Ap. 7

[m+n] | m | n | m+n | [n] | [m+n] | m | Mean

382	200	1					105
370	38						36
370	26						41
364	60						49
364	44						66
364	60						50
356	26						27
356	26						31
356	14						19
346	50						40
346	50						49
346	62						62
338	138						105
338	70						73
332	92						114
332	92						59
328	54						40
328	18						24
322	42						35
318	20						22

alpha Persei C-18601
Ap. 7

[m+n]	m	n	m+n	[n]	[m+n]	m	Mean
382	200	1					105
370	38						36
370	26						41
364	60						49
364	44						66
364	60						50
356	26						27
356	26						31
356	14						19
346	50						40
346	50						49
346	62						62
338	138						105
338	70						73
332	92						114
332	92						59
328	54						40
328	18						24
322	42						35
318	20						22

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alpha Persei C-18601

Ap. 1 | Ap. 3 | Ap. 5

No. | | n | m+n | [n] | [m+n] | m | n | m+n | [n] | [m+n] | m | n | m+n | [n]

21	75	90	182	158	24	33	45	270	236	34	15	22	346
22	86	92	164	155	09	41	47	244	232	12	19	23	322
23	85	94	166	152	14	41	48	244	228	16	21	24	314
24	89	95	160	151	09	51	49	232	226	4	22	25	310
25	74	97	184	148	36	34	50	266	224	42	17	26	332
26	79	99	175	146	29	36	52	260	220	40	16	28	338
27	81	101	172	143	29	38	53	254	218	36	20	29	318
28	61	102	204	142	62	27	54	290	216	74	13	30	364
29	49	103	226	140	86	19	55	322	215	107	10	31	396
30	50	103	224	140	84	24	58	300	210	90	11	31	382
31	67	104	194	138	56	39	59	250	208	42	17	32	332
32	82	105	170	137	33	41	59	244	208	36	18	33	328
33	85	105	166	137	29	41	60	244	206	38	21	34	314
34	86	106	164	136	28	48	62	228	202	26	25	35	296
35	85	107	166	134	32	45	63	236	201	35	22	35	310
36	105	108	137	133	04	58	64	210	200	10	32	36	272
37	93	109	154	132	22	49	65	226	198	28	24	37	300
38	92	110	155	130	23	47	67	232	194	38	25	38	296
39	95	110	151	130	21	48	68	228	192	36	24	39	300
40	99	111	146	128	18	52	69	220	191	29	27	39	290
44	3933	10	114	396	122	274	5	72	500	186	314	5	43
500													
47	90	115	158	120	38	47	75	232	182	50	22	45	310
48	94	116	152	119									
76	224	180	44	26	45	292							
49	100	117	144	116	28	53	77	218	178	40	29	46	282
50	101	118	143	114	29	58	78	210	176	34	31	47	276
51	100	118	144	114	30	56	80	214	174	40	30	48	278
52	3970	15	120	346	108	2							
6	84	476	167	309	4	50	552						
55	103	122	140	104	36	60	85	206	166	40	34	52	266
56	107	122	134	104	30	66	86	196	164	32	37	53	256
57	116	123	119	100	19	75	87	182	162	20	42	54	242

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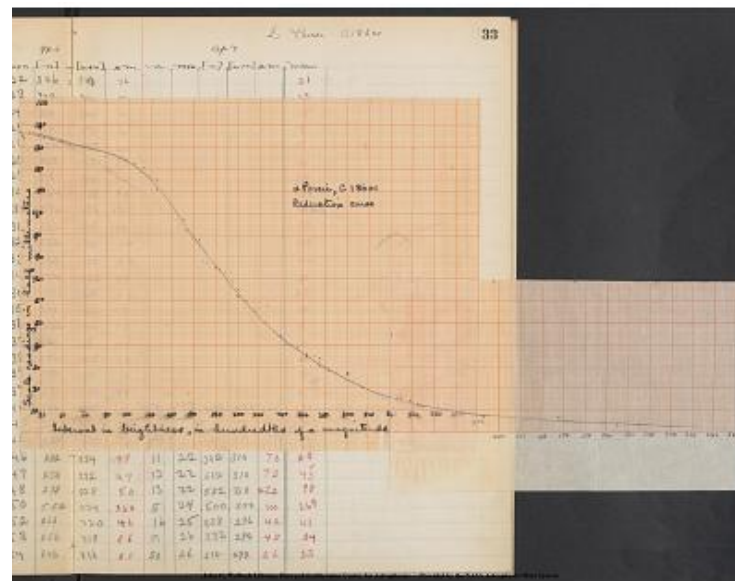
[[preprinted]] 33 [[/preprinted]]

[[image - line graph plotted though data points]]

alpha Persei C 18601
Reduction curve

[[x axis:]] 20 - 420, Interval in brightness, in hundredths of a magnitude

[[y axis:]] 10 - 150, Scale readings in half millimeters



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alpha Persei C-18601

Ap. 7

[m+n] | m | n | m+n | [n] | [m+n] | m | Mean

310	36				31		
304	18				13		
300	14				15		
296	14				9		
292	40				39		
286	52				40		
282	36				34		
278	86				74		
276	120				71	104	
276	106				93		
272	60				53		
270	58				42		
266	48				38		
262	34				29		
262	48				38		
260	12				9		
256	44				31		
254	42				35		
250	50				36		
250	40				29		
240	260	4	19	552	322	230	270
236	74	-	-	-	54		
236	56	-	-	-	44		
234	48	11	22	382	310	72	272
98							
224	328	5	24	500	300	200	269
220	46	16	25	338	296	42	41
218	36	17	26	332	292	40	34
216	26	20	26	292	26	23	

33

ap-7

[m+n]	m	n	m+n	[n]	[m+n]	m	Mean
310	36				31		
304	18				13		
300	14				15		
296	14				9		
292	40				39		
286	52				40		
282	36				34		
278	86				74		
276	120				71	104	
276	106				93		
272	60				53		
270	58				42		
266	48				38		
262	34				29		
262	48				38		
260	12				9		
256	44				31		
254	42				35		
250	50				36		
250	40				29		
240	260	4	19	552	322	230	270
236	74	-	-	-	54		
236	56	-	-	-	44		
234	48	11	22	382	310	72	272
98							
224	328	5	24	500	300	200	269
220	46	16	25	338	296	42	41
218	36	17	26	332	292	40	34
216	26	20	26	292	26	23	

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alpha Persei C 18601

Ap.1 || Ap.3 || Ap.5
No. | alpha | n | m+n | [n] | [m+n] | delta m || n | m+n | [n] | [m+n] | delta m || n
| m+n | [n] |
58 | 117 | 123 | 116 | 100 | 16 | 78 | 87 | 176 | 162 | 14 | 45 | 54 | 236 |
59 | 112 | 124 | 126 | 98 | 28 | 71 | 88 | 188 | 161 | 27 | 37 | 56 | 256 |
60 | 120 | 125 | 108 | 92 | 16 | 83 | 90 | 169 | 158 | 11 | 48 | 57 | 228 |
61 | 116 | 125 | 119 | 92 | 27 | 74 | 91 | 184 | 156 | 28 | 39 | 57 | 250 |
62 | 123 | 125 | 100 | 92 | 8 | 88 | 92 | 161 | 155 | 6 | 53 | 58 | 218 |
63 | 124 | 126 | 106 | 88 | 18 | 86 | 92 | 164 | 155 | 9 | 52 | 58 | 220 |
64 | 123 | 126 | 100 | 88 | 12 | 86 | 93 | 164 | 154 | 10 | 52 | 59 | 220 |
65 | 124 | 126 | 98 | 88 | 10 | 89 | 94 | 160 | 152 | 8 | 55 | 59 | 215 |
66 | 120 | 126 | 108 | 88 | 20 | 82 | 95 | 170 | 151 | 19 | 47 | 60 | 232 |
67 | 117 | 127 | 116 | 84 | 32 | 77 | 96 | 178 | 150 | 28 | 43 | 60 | 240 |
68 | 118 | 127 | 114 | 84 | 30 | 81 | 96 | 172 | 150 | 22 | 44 | 60 | 238 |
69 | 125 | 128 | 92 | 78 | 14 | 91 | 97 | 156 | 148 | 8 | 55 | 61 | 215 |
70 | 121 | 128 | 106 | 78 | 28 | 84 | 97 | 168 | 148 | 20 | 51 | 62 | 222 |
71 | 121 | 128 | 106 | 78 | 28 | 85 | 98 | 166 | 147 | 19 | 49 | 63 | 226 |
72 | 125 | 128 | 92 | 78 | 14 | 92 | 98 | 155 | 147 | 8 | 52 | 63 | 220 |
73 | 122 | 129 | 104 | 66 | 38 | 86 | 99 | 164 | 146 | 18 | 51 | 63 | 222 |
74 | 124 | 129 | 98 | 66 | 32 | 90 | 99 | 158 | 146 | 12 | 54 | 64 | 216 |
75 | 124 | 129 | 98 | 66 | 32 | 89 | 100 | 160 | 144 | 16 | 54 | 64 | 216 |
76 | 118 | 129 | 114 | 66 | 48 | 75 | 100 | 182 | 144 | 38 | 44 | 65 | 238 |
77 | 128 | 129 | 78 | 66 | 12 | 91 | 101 | 156 | 143 | 13 | 59 | 65 | 208 |
78 | 125 | 130 | 92 | 60 | 32 | 90 | 101 | 158 | 143 | 15 | 57 | 65 | 211 |
79 | 108 | 130 | 78 | 60 | 18 | 97 | 102 | 148 | 142 | 6 | 61 | 65 | 204 |
80 | 125 | 130 | 92 | 60 | 32 | 92 | 102 | 155 | 142 | 13 | 61 | 66 | 204 |
81 | 117 | 130 | 116 | 60 | 56 | 80 | 102 | 174 | 142 | 32 | 49 | 66 | 226 |
82 | 4101 lambda | 111 | 130 | 128 | 60 | 68 | 55 | 102 | 215 | 142 | 73 | 26 | 67 | 292 |
83 | 124 | 130 | 98 | 60 | 38 | 87 | 103 | 162 | 140 | 22 | 50 | 67 | 224 |
84 | 129 | 130 | 66 | 60 | 6 | 96 | 104 | 150 | 138 | 12 | 63 | 67 | 201 |
85 | 126 | 130 | 88 | 60 | 28 | 92 | 104 | 155 | 138 | 17 | 54 | 67 | 216 |
86 | 126 | 130 | 88 | 60 | 28 | 91 | 104 | 156 | 138 | 18 | 55 | 68 | 215 |
87 | 124 | 130 | 98 | 60 | 38 | 87 | 105 | 162 | 137 | 25 | 51 | 68 | 222 |

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Ap. 7

[[8 column Table]]

[m+n]	m	n	m+n	[n]	[m+n]	m	Mean
216	20	21	27	314	290	24	20
214	42	17	27	332	290	42	35
211	17	22	28	310	286	24	17
211	39	22	28	322	286	36	32
210	8	26	28	292	286	6	7
210	10	25	29	296	282	14	18
208	12	24	29	300	282	18	13
208	7	26	29	292	282	10	9
206	26	23	29	304	282	22	22
206	34	19	30	322	278	44	25
206	32	22	30	310	278	32	29
204	11	26	30	292	278	14	14
202	20	23	31	304	276	28	24
201	25	26	31	292	276	16	22
201	19	23	31	304	276	28	17
201	21	25	31	296	276	20	24
200	16	24	32	300	272	28	22
200	16	25	32	296	272	24	22
198	40	21	32	314	272	42	42
198	10	26	32	292	272	20	14
198	13	24	33	300	270	30	23
198	6	28	33	286	270	16	12
196	8	25	33	296	270	26	20
196	30	20	33	318	270	48	42
194	98	18	33	328	270	58	74
194	30	24	34	300	266	34	31
194	7	29	34	282	266	16	10
194	22	27	34	290	266	24	24
192	23	24	34	300	266	34	26
192	30	23	34	304	266	38	32

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ap.1 | ap.3 | ap.5

[[16 column Table, 14 of the columns divided into 3 sections; ap.1, ap.3, ap.5]]

No|lambda|[[start ap.1]]n|m+n|n|[[m+n]]m|[[end ap.1]]|[[start ap.3]]n|m+n|n|[[m+n]]m|[[end ap.3]]|[[start ap.5]]n|m+n|n|[[m+n]]m|[[end ap.5]] -- see next page]]

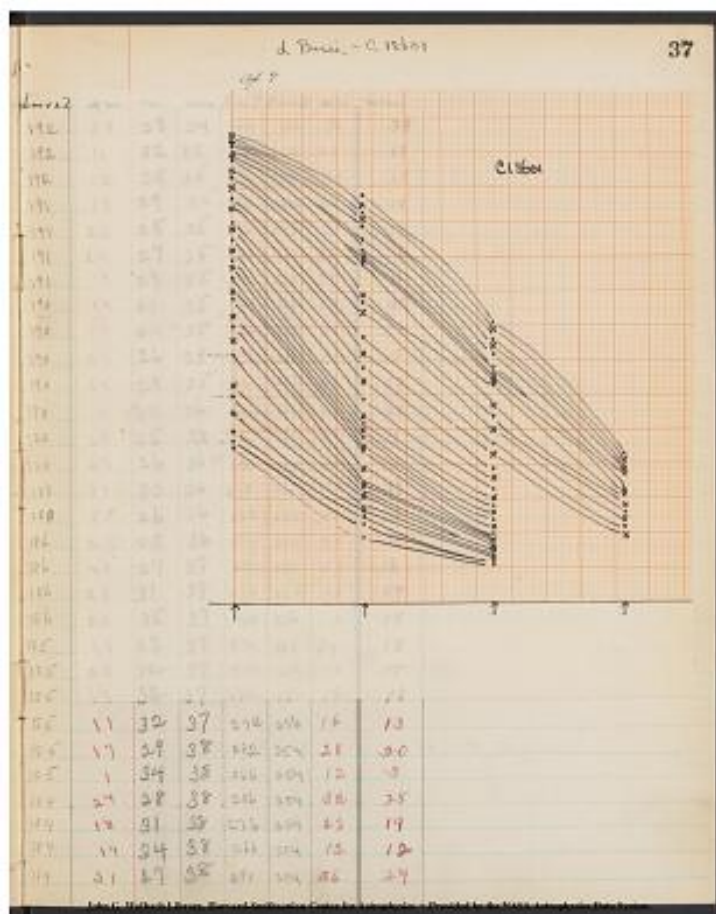
88	|	125	|	130	|	92	|	60	|	32	|	89	|	105	|	160	|	137	|	23	|	52	|	68	|	220	|	19
89	|	128	|	131	|	78	|	54	|	24	|	100	|	106	|	144	|	136	|	8	|	62	|	68	|	202	|	19
90	|	126	|	131	|	88	|	54	|	34	|	92	|	106	|	155	|	136	|	19	|	56	|	68	|	214	|	19
91	|	128	|	131	|	78	|	54	|	24	|	96	|	106	|	150	|	136	|	14	|	59	|	69	|	208	|	19
92	|	127	|	131	|	84	|	54	|	34	|	92	|	106	|	155	|	136	|	19	|	56	|	69	|	214	|	19
93	|	128	|	131	|	84	|	54	|	34	|	92	|	106	|	150	|	136	|	14	|	57	|	69	|	214	|	19
94	|	130	|	131	|	60	|	54	|	6	|	100	|	106	|	144	|	136	|	8	|	64	|	69	|	200	|	19
95	|	122	|	131	|	104	|	54	|	50	|	84	|	106	|	168	|	136	|	8	|	64	|	69	|	200	|	19
96	|	125	|	131	|	92	|	58	|	54	|	23	|	88	|	107	|	161	|	105	|	134	|	104	|		|	
97	|	128	|	131	|	78	|	54	|	24	|	93	|	107	|	154	|	134	|	20	|	55	|	70	|	215	|	
98	|	127	|	131	|	84	|	54	|	30	|	93	|	107	|	154	|	135	|	20	|	56	|	70	|	214	|	
99	|	129	|	131	|	66	|	54	|	12	|	99	|	107	|	146	|	134	|	12	|	60	|	70	|	206	|	
100	|	127	|	132	|	84	|	46	|	38	|	91	|	108	|	156	|	133	|	23	|	54	|	71	|	216	|	
101	|	127	|	132	|	84	|	46	|	38	|	92	|	108	|	155	|	133	|	22	|	55	|	71	|	215	|	
102	|	126	|	132	|	88	|	46	|	42	|	92	|	108	|	155	|	133	|	22	|	53	|	71	|	218	|	
103	|	129	|	132	|	66	|	46	|	20	|	98	|	108	|	147	|	133	|	14	|	59	|	71	|	208	|	
104	|	128	|	132	|	78	|	46	|	32	|	96	|	109	|	150	|	132	|	18	|	57	|	72	|	211	|	
105	|	125	|	132	|	12	|	46	|	46	|	90	|	109	|	158	|	132	|	26	|	49	|	72	|	226	|	
106	|	128	|	132	|	78	|	46	|	32	|	95	|	109	|	151	|	132	|	19	|	57	|	72	|	211	|	
107	|	129	|	132	|	66	|	46	|	20	|	99	|	109	|	146	|	132	|	14	|	60	|	72	|	206	|	
108	|	131	|	132	|	54	|	46	|	8	|	101	|	110	|	143	|	130	|	13	|	65	|	73	|	198	|	
109	|	128	|	132	|	78	|	46	|	32	|	97	|	110	|	148	|	130	|	18	|	59	|	73	|	208	|	
110	|	129	|	133	|	66	|	40	|	26	|	101	|	110	|	143	|	130	|	13	|	61	|	73	|	204	|	
111	|	130	|	133	|	60	|	40	|	20	|	106	|	110	|	136	|	130	|	6	|	66	|	73	|	196	|	
112	|	130	|	133	|	60	|	40	|	20	|	101	|	110	|	143	|	130	|	13	|	62	|	73	|	202	|	
113	|	133	|	133	|	40	|	40	|	0	|	110	|	110	|	130	|	130	|	0	|	72	|	73	|	186	|	
114	|	129	|	133	|	66	|	40	|	26	|	99	|	111	|	146	|	128	|	18	|	59	|	74	|	208	|	
115	|	130	|	133	|	60	|	40	|	20	|	101	|	111	|	143	|	128	|	15	|	62	|	74	|	202	|	
116		131		133		54		40		14		104		111		138		128		10		65		74		198		
117		129		133		66		40		26		96		111		150		128		22		55		74		215		

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[[image - line graphs plotted through data points]]

C 18601



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Ap. 7

[[8 column Table]]

[m+n] | m | n | m+n | [n] | [m+n] | m | Mean

192	28	23	34	304	266	38	34
192	10	32	35	272	262	10	13
192	12	25	35	296	262	34	25
191	17	29	35	282	262	20	19
191	23	25	35	296	262	34	28
191	20	27	35	290	262	28	26
191	9	29	35	282	262	20	11
190	46	21	35	314	262	52	45
190	^181 | 38 ^45 | 26 | 35 | 292 ^288 | 262 ^256 | 30 ^32 | 33 ^35						
190	25	26	35	292	262	30	25
190	24	29	35	282	262	20	27
190	16	23	36	304	260	44	21
188	28	25	36	296	260	36	31
188	27	26	36	292	260	32	30
188	30	30	36	278	260	18	28
188	20	26	36	292	260	32	22
186	25	23	36	304	260	44	30
186	40	27	37	290	256	34	36
186	25	31	37	276	256	20	24
186	20	35	37	262	256	6	15
185	13	27	37	290	256	34	17
185	23	32	37	272	256	16	22
185	19	32	37	272	256	16	18
185	11	32	37	272	256	16	13
185	17	29	38	282	254	28	20
185	1	34	38	266	254	12	3
184	24	28	38	286	254	32	25
184	18	31	38	276	254	22	19
184	14	34	38	266	254	12	12
184	31	27	38	290	254	36	29

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Ap. 7

192	28	23	34	304	266	38	34
192	10	32	35	272	262	10	13
192	12	25	35	296	262	34	25
191	17	29	35	282	262	20	19
191	23	25	35	296	262	34	28
191	20	27	35	290	262	28	26
191	9	29	35	282	262	20	11
190	46	21	35	314	262	52	45
190	^181 | 38 ^45 | 26 | 35 | 292 ^288 | 262 ^256 | 30 ^32 | 33 ^35						
190	25	26	35	292	262	30	25
190	24	29	35	282	262	20	27
190	16	23	36	304	260	44	21
188	28	25	36	296	260	36	31
188	27	26	36	292	260	32	30
188	30	30	36	278	260	18	28
188	20	26	36	292	260	32	22
186	25	23	36	304	260	44	30
186	40	27	37	290	256	34	36
186	25	31	37	276	256	20	24
186	20	35	37	262	256	6	15
185	13	27	37	290	256	34	17
185	23	32	37	272	256	16	22
185	19	32	37	272	256	16	18
185	11	32	37	272	256	16	13
185	17	29	38	282	254	28	20
185	1	34	38	266	254	12	3
184	24	28	38	286	254	32	25
184	18	31	38	276	254	22	19
184	14	34	38	266	254	12	12
184	31	27	38	290	254	36	29

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Ap1 || Ap3 || Ap5

No | L | n | m+n | [n] | [m+n] | delta m || n | m+n | [n] | [m+n] | delta m || n | m+n | [n]

118 | 129 | 133 | 66 | 40 | 26 || 102 | 111 | 142 | 128 | 14 | 63 | 75 | 201

119 | [[symbol-check mark]] | 127 | 133 | 84 | 40 | 44 || 91 | 112 | 156 |

126 | 30 || 52 | 75 | 220

120 | 130 | 133 | 60^[[37]] | 40^[[25]] | 20^[[12]] || 101 | 112 | 143 | 126 | 17 || 61 | 75 | 204

121 | 129 | 133 | 66 | 40 | 26 || 99 | 112 | 146 | 126 | 20 || 58 | 75 | 210

122 | 132 | 133 | 46 | 40 | 6 || 105 | 112 | 137 | 126 | 11 | 67 | 76 | 194

123 | 131 | 133 | 54 | 40 | 14 || 100 | 112 | 144 | 126 | 18 || 60 | 76 | 206

124 | 130 | 134 | 60 | 34 | 26 || 102 | 113 | 142 | 124 | 18 || 63 | 76 | 201

125 | x | 115 | 134 | 120 | 34 | ~~[[strikethrough]]7[[/strikethrough]]~~86 || 68 |

113 | 192 | 124 | ~~[[strikethrough]]5[[/strikethrough]]~~68 || 33 | 77 | 270

126 | 131 | 134 | 54 | 34 | 20 || 100 | 113 | 144 | 124 | 20 || 60 | 77 | 206

127 | 133 | 134 | 40 | 34 | 6 || 108 | 114 | 133 | 122 | 11 || 70 | 77 | 190

128 | [[symbol-check mark]] | 134 | 134 | 34 | 34 | 0 || 111 | 114 | 128 |

122 | 6 || 75 | 77 | 182

129 | 132 | 134 | 46 | 34 | 12 || 107 | 114 | 134 | 122 | 12 || 69 | 78 | 191

130 | 132 | 135 | 46 | 26 | 20 || 104 | 115 | 138 | 120 | 18 || 66 | 78 | 191

131 | [[symbol-check mark]] | 131 | 135 | 54 | 26 | 28 || 113 | 115 | 124 |

120 | 4 || 71 | 78 | 188

132 | 130 | 135 | 60 | 26 | 34 || 98 | 115 | 127 | 120 | 27 || 58 | 78 | 210

133 | 134 | 135 | 34 | 26 | 8 || 110 | 115 | 130 | 120 | 10 || 71 | 78 | 188

134 | 132 | 135 | 46 | 26 | 20 || 104 | 115 | 138 | 120 | 18 || 65 | 79 | 198

135 | 133 | 135 | 40 | 26 | 14 || 103 | 115 | 140 | 120 | 20 || 62 | 79 | 185

136 | 134 | 135 | 34 | 26 | 8 || 110 | 115 | 130 | 120 | 10 || 73 | 79 | 185

137 | 132 | 135 | 46 | 26 | 20 || 107 | 115 | 134 | 120 | 14 || 70 | 79 | 190

138 | 131 | 135 | 54 | 26 | 28 || 100 | 116 | 144 | 119 | 25 || 64 | 79 | 200

139 | - | - | - | - | - || 110 | 116 | 130 | 119 | 11 || 71 | 80 | 188

140 | - | - | - | - | - || 109 | 116 | 132 | 119 | 13 || 72 | 80 | 186

141 | - | - | - | - | - || 109 | 116 | 132 | 119 | 13 || 71 | 80 | 188

142 | 132 | 135 | 46 | 26 | 20 || 104 | 117 | 138 | 116 | 22 || 63 | 80 | 201

143 | | | | | | || 107 | 117 | 134 | 116 | 18 || 70 | 80 | 190

144 | | | | | | || 108 | 117 | 133 | 116 | 17 || 69 | 81 | 191

145 | | | | | | || 107 | 118 | 134 | 114 | 20 || 68 | 81 | 192

146 | | | | | | || 115 | 118 | 120 | 114 | 6 || 77 | 81 | 178

147 | | | | | | || 109 | 118 | 132 | 114 | 18 || 71 | 81 | 188

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Ap7

[m+n] | delta m | n | m+n | [n] | [m+n] | delta m || mean

182	79	32	38	272	254	18	19
182	38	23	39	304	250	54	42
182	22	29	39	282	250	32	23
182	28	27	39	290	250	40	28
180	14	32	39	272	250	22	13
180	26	29	39	282	250	32	22
180	21	30	39	278	250	28	23
178	92	12	40	370	248	122	
64							
178	28	27	40	290	248	42	28
178	12	32	40	272	248	24	13
178	4	37	40	256	248	8	4
176	15	33	40	270	248	22	15
176	20	30	40	278	248	30	22
176	12	35	40	262	248	14	14
176	34	27	40	290	248	42	34
176	12	36	40	260	248	12	10
175	23	30	41	278	244	34	24
175	27	31	41	276	244	32	23
175	10	33	41	270	244	26	14
175	15	33	41	270	244	26	19
175	25	29	41	282	244	38	29
174	14	34	41	266	244	22	16
174	12	35	41	262	244	18	14
174	14	34	41	266	244	22	16
174	27	31	42	276	242	34	26
174	16	32	42	272	242	30	21
172	19	32	42	272	242	30	16
172	11						
172	6	38	43	254	240	14	9
172	16	33	43	270	240	30	21

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alpha

172	174	176	178	180	182	184	186	188	190	192	194	196	198	200	202	204	206	208	210	212	214	216	218	220	222	224	226	228	230	232	234	236	238	240	242	244	246	248	250	252	254	256	258	260	262	264	266	268	270	272	274	276	278	280	282	284	286	288	290	292	294	296	298	300	302	304	306	308	310	312	314	316	318	320	322	324	326	328	330	332	334	336	338	340	342	344	346	348	350	352	354	356	358	360	362	364	366	368	370	372	374	376	378	380	382	384	386	388	390	392	394	396	398	400	402	404	406	408	410	412	414	416	418	420	422	424	426	428	430	432	434	436	438	440	442	444	446	448	450	452	454	456	458	460	462	464	466	468	470	472	474	476	478	480	482	484	486	488	490	492	494	496	498	500	502	504	506	508	510	512	514	516	518	520	522	524	526	528	530	532	534	536	538	540	542	544	546	548	550	552	554	556	558	560	562	564	566	568	570	572	574	576	578	580	582	584	586	588	590	592	594	596	598	600	602	604	606	608	610	612	614	616	618	620	622	624	626	628	630	632	634	636	638	640	642	644	646	648	650	652	654	656	658	660	662	664	666	668	670	672	674	676	678	680	682	684	686	688	690	692	694	696	698	700	702	704	706	708	710	712	714	716	718	720	722	724	726	728	730	732	734	736	738	740	742	744	746	748	750	752	754	756	758	760	762	764	766	768	770	772	774	776	778	780	782	784	786	788	790	792	794	796	798	800	802	804	806	808	810	812	814	816	818	820	822	824	826	828	830	832	834	836	838	840	842	844	846	848	850	852	854	856	858	860	862	864	866	868	870	872	874	876	878	880	882	884	886	888	890	892	894	896	898	900	902	904	906	908	910	912	914	916	918	920	922	924	926	928	930	932	934	936	938	940	942	944	946	948	950	952	954	956	958	960	962	964	966	968	970	972	974	976	978	980	982	984	986	988	990	992	994	996	998	1000
172	174	176	178	180	182	184	186	188	190	192	194	196	198	200	202	204	206	208	210	212	214	216	218	220	222	224	226	228	230	232	234	236	238	240	242	244	246	248	250	252	254	256	258	260	262	264	266	268	270	272	274	276	278	280	282	284	286	288	290	292	294	296	298	300	302	304	306	308	310	312	314	316	318	320	322	324	326	328	330	332	334	336	338	340	342	344	346	348	350	352	354	356	358	360	362	364	366	368	370	372	374	376	378	380	382	384	386	388	390	392	394	396	398	400	402	404	406	408	410	412	414	416	418	420	422	424	426	428	430	432	434	436	438	440	442	444	446	448	450	452	454	456	458	460	462	464	466	468	470	472	474	476	478	480	482	484	486	488	490	492	494	496	498	500	502	504	506	508	510	512	514	516	518	520	522	524	526	528	530	532	534	536	538	540	542	544	546	548	550	552	554	556	558	560	562	564	566	568	570	572	574	576	578	580	582	584	586	588	590	592	594	596	598	600	602	604	606	608	610	612	614	616	618	620	622	624	626	628	630	632	634	636	638	640	642	644	646	648	650	652	654	656	658	660	662	664	666	668	670	672	674	676	678	680	682	684	686	688	690	692	694	696	698	700	702	704	706	708	710	712	714	716	718	720	722	724	726	728	730	732	734	736	738	740	742	744	746	748	750	752	754	756	758	760	762	764	766	768	770	772	774	776	778	780	782	784	786	788	790	792	794	796	798	800	802	804	806	808	810	812	814	816	818	820	822	824	826	828	830	832	834	836	838	840	842	844	846	848	850	852	854	856	858	860	862	864	866	868	870	872	874	876	878	880	882	884	886	888	890	892	894	896	898	900	902	904	906	908	910	912	914	916	918	920	922	924	926	928	930	932	934	936	938	940	942	944	946	948	950	952	954	956	958	960	962	964	966	968	970	972	974	976	978	980	982	984	986	988	990	992	994	996	998	1000

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no|L|n|m+n|[n]^{[[ap.1]]}[[m+n]delta m|n|m+n|[n]^{[[ap.3]]}[[m+n]delta
m|n|m+n|[n]^{[[ap.5]]}

148					111	118	128	114	14	71	82	188	
149					113	118	124	114	10	74	82	184	
150					114	119	122	112	10	76	82	180	
151					116	119	119	112	7	79	83	175	
152					114	119	122	112	10	76	83	180	
153					111	119	128	112	16	75	83	182	
154					111	119	128	112	16	72	83	186	
155					111	119	128	112	16	70	82	190	
156					112	119	126	112	14	71	82	188	
157					115	119	120	112	8	75	82	182	
158					110	119	130	112	18	70	82	190	
159					109	119	132	112	20	69	81	191	
160					113	119	124	112	12	74	81	184	
161					114	118	122	114	8	74	81	184	
162					116	118	119	114	5	77	81	178	
163					109	118	132	114	18	67	81	194	
164					113	118	124	114	10	74	81	184	
165					112	118	126	114	12	72	80	186	
166					114	118	122	114	8	75	80	182	
167					113	117	124	116	8	73	80	185	
168					114	117	122	116	6	72	79	186	
169					112	117	126	116	10	74	78	184	
170					114	117	122	116	6	75	78	182	
171					112	116	126	119	7	73	78	185	
172					112	115	126	120	6	70	77	190	
173					109	115	132	120	12	70	76	190	
174	132	135	46	26	20	106	114	136	122	14	66	76	196
175					111	113	128	124	4	71	75	188	
176					112	113	126	124	2	71	74	188	
177					110	112	130	126	4	70	74	190	

40	A. Bresson - C. 18601												
no	L	n	m+n	[n] ^{[[ap.1]]}	[[m+n]delta m|n|m+n|[n] ^{[[ap.3]]}	[[m+n]delta m|n|m+n|[n] ^{[[ap.5]]}							
148					111	118	128	114	14	71	82	188	
149					113	118	124	114	10	74	82	184	
150					114	119	122	112	10	76	82	180	
151					116	119	119	112	7	79	83	175	
152					114	119	122	112	10	76	83	180	
153					111	119	128	112	16	75	82	182	
154					111	119	128	112	16	72	83	186	
155					111	119	128	112	16	70	82	190	
156					112	119	126	112	14	71	82	188	
157					115	119	120	112	8	75	82	182	
158					110	119	130	112	18	70	82	190	
159					109	119	132	112	20	69	81	191	
160					113	119	124	112	12	74	81	184	
161					114	118	122	114	8	74	81	184	
162					116	118	119	114	5	77	81	178	
163					109	118	132	114	18	67	81	194	
164					113	118	124	114	10	74	81	184	
165					112	118	126	114	12	72	80	186	
166					114	118	122	114	8	75	80	182	
167					113	117	124	116	8	73	80	185	
168					114	117	122	116	6	72	79	186	
169					112	117	126	116	10	74	78	184	
170					114	117	122	116	6	75	78	182	
171					112	116	126	119	7	73	78	185	
172					112	115	126	120	6	70	77	190	
173					109	115	132	120	12	70	76	190	
174	132	135	46	26	20	106	114	136	122	14	66	76	196
175					111	113	128	124	4	71	75	188	
176					112	113	126	124	2	71	74	188	
177					110	112	130	126	4	70	74	190	

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[m+n]delta m|n|m+n|n|[m+n]delta m|mean

170|18|33|43|270|240|30|16
170|14|37|43|256|240|16|13
170|10|37|43|256|240|16|12
169|6|40|43|248|240|8|7
169|11|38|43|254|240|14|12
169|13|38|43|254|240|14|14
169|17|35|43|262|240|22|18
170|20|33|43|270|240|30|22
170|18|34|43|266|240|26|19
170|12|37|43|256|240|16|12
170|20|35|43|262|240|22|20
172|19|32|43|272|240|32|24
172|12|35|43|262|240|22|15
172|12|36|42|260|242|18|13
172|6|38|42|254|242|12|8
172|22|31|42|276|242|34|25
172|12|37|42|256|242|14|12
174|12|37|42|256|242|14|13
174|8|39|42|250|242|8|8
174|11|34|41|266|244|22|14
175|11|35|41|262|244|18|12
176|8|35|40|262|248|14|11
176|6|37|40|256|248|8|7
176|9|35|40|262|248|14|10
178|12|35|39|262|250|12|10
180|10|32|39|272|250|22|14
180|16|30|38|278|254|24|18
182|6|34|37|266|256|10|7
184|4|34|37|266|256|10|5
184|6|34|36|266|260|6|5

Handwritten astronomical data table for alpha Persei -C18601, Ap. 7. The table has 7 columns: m, n, delta m, n, m+n, delta m, and mean. It contains 30 rows of data with handwritten numbers and some corrections.

m	n	delta m	n	m+n	delta m	mean
170	18	33	43	270	240	30
170	14	37	43	256	240	16
170	10	37	43	256	240	12
169	6	40	43	248	240	8
169	11	38	43	254	240	14
169	13	38	43	254	240	14
169	17	35	43	262	240	22
170	20	33	43	270	240	30
170	18	34	43	266	240	26
170	12	37	43	256	240	16
170	20	35	43	262	240	22
172	19	32	43	272	240	32
172	12	35	43	262	240	22
172	12	36	42	260	242	18
172	6	38	42	254	242	12
172	22	31	42	276	242	34
172	12	37	42	256	242	14
174	12	37	42	256	242	14
174	8	39	42	250	242	8
174	11	34	41	266	244	22
175	11	35	41	262	244	18
176	8	35	40	262	248	14
176	6	37	40	256	248	8
176	9	35	40	262	248	14
178	12	35	39	262	250	12
180	10	32	39	272	250	22
180	16	30	38	278	254	24
182	6	34	37	266	256	10
184	4	34	37	266	256	10
184	6	34	36	266	260	6

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alpha Persei-C 18601

[m+n]|delta m|n|m+n|[n] ^[[ap.7]]|[m+n]|delta m|mean
185|7|32|36|272|260|12|9
185|11|29|35|282|262|20|13
186|12|29|34|282|266|16|12
188|6|30|34|278|266|12|7
190|4|31|33|276|270|6|4
191|7|30|33|278|270|8|7
192|9|26|31|292|276|16|10
194|6|29|30|282|278|4|4
198|2|29|29|282|282|0|1
200|4|26|29|292|282|10|6
201|17|23|28|304|286|18|15
204|4|24|27|300|290|10|7
210|5|24|26|300|292|8|6
214|1|23|25|304|296|8|5
215|3|22|25|310|296|14|8
218|6|20|24|318|300|18|10
224|2|20|23|318|304|14|7
232|6|17|21|332|314|18|12
232|4|---|---|16
234|4|---|---|16
238|6|---|---|11
244|12|---|---|13
256|72|(6|16|476|338|138)|59
260|18|---|---|19
260|16|---|---|14
266|20|---|---|16
270|22|---|---|14
278|12|---|---|6
286|14|---|---|8
292|36|---|---|21 [[?]]

Handwritten astronomical data table for alpha Persei-C 18601, page 43. The table contains multiple columns of numbers and some text, with a title 'alpha Persei-C 18601' at the top right.

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alpha Persei-C 18601

no|lambda|n|m+n|[n] ^[[ap.1]]|[m+n]delta m|n|m+n|[n] ^[[ap.3]]|
|[m+n]delta m|n|m+n|[n] ^[[ap.5]]|
208|95|102|151|142|9|50|57|224|211|13|20|24|318
209|93|100|154|144|10|47|55|232|215|17|18|23|328
210|93|96|154|150|4|49|52|226|220|6|18|21|328
211|87|95|162|151|11|47|49|232|226|6|16|19|338
212|86|93|164|154|10|41|47|244|232|12|15|17|346
213|82|90|170|158|12|39|44|250|238|12|15|17|346
214|82|87|170|162|8|36|42|260|242|18|15|16|346
215|68|77|192|178|14|28|35|286|262|24|9|15|408
216|---|---|---|---|---|---|---|---|---|---|---|---|---|
217|---|---|---|---|---|---|---|---|---|---|---|---|---|
218|---|---|---|---|---|---|---|---|---|---|---|---|---|
219|---|---|---|---|---|---|---|---|---|---|---|---|---|
220|41|59|244|208|36|---|---|---|---|---|5|10|500
221|---|---|---|---|---|---|---|---|---|---|6|9|476
222|---|---|---|---|---|---|---|---|---|---|7|9|446
223|---|---|---|---|---|---|---|---|---|---|5|8|500
224|---|---|---|---|---|---|---|---|---|---|3|7|582
225|---|---|---|---|---|---|---|---|---|---|3|7|582

44													
alpha Persei - C 18601													
ap 1													
no.	lambda	m	n	m+n	[n]	delta m	n	m+n	[n]	delta m	n	m+n	[n]
208	95	102	151	142	9	50	57	224	211	13	20	24	318
209	93	100	154	144	10	47	55	232	215	17	18	23	328
210	93	96	154	150	4	49	52	226	220	6	18	21	328
211	87	95	162	151	11	47	49	232	226	6	16	19	338
212	86	93	164	154	10	41	47	244	232	12	15	17	346
213	82	90	170	158	12	39	44	250	238	12	15	17	346
214	82	87	170	162	8	36	42	260	242	18	15	16	346
215	68	77	192	178	14	28	35	286	262	24	9	15	408
216	---	---	---	---	---	---	---	---	---	---	10	13	276
217	---	---	---	---	---	---	---	---	---	---	10	13	276
218	---	---	---	---	---	---	---	---	---	---	8	12	254
219	---	---	---	---	---	---	---	---	---	---	6	11	214
220	41	59	244	208	36	---	---	---	---	---	5	10	500
221	---	---	---	---	---	---	---	---	---	---	6	9	476
222	---	---	---	---	---	---	---	---	---	---	7	9	446
223	---	---	---	---	---	---	---	---	---	---	5	8	500
224	---	---	---	---	---	---	---	---	---	---	3	7	582
225	---	---	---	---	---	---	---	---	---	---	3	7	582

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alpha Persei- C18601

ap.7

[m+n] | m | n | m+n | [n] | [m+n] | m || mean

300 | 18 | | | | | 13

304 | 24 | | | | | 17

314 | 14 | | | | | 8

322 | 16 | | | | | 11

332 | 14 | | | | | 12

332 | 14 | | | | | 13

338 | 8 | | | | | 11

346 | 62 | | | | | 33

364 | 32 | | | | |

364 | 32 | | | | |

370 | 54 | | | | |

382 | 95 | | | | |

396 | 104 | | | | | || ~~46~~ 70

408 | 68 | | | | |

408 | 36 | | | | |

424 | 96 | | | | |

446 | 136 | | | | |

446 | 136 | | | | |

Handwritten astronomical data table for alpha Persei (C18601) on page 45. The table has 7 columns: [m+n], m, n, m+n, [n], [m+n], and m. It contains 18 rows of data with some values in red ink. A vertical line is drawn after the 6th column. The page is numbered 45 in the top right corner.

	[m+n]	m	n	m+n	[n]	[m+n]	m
300	18						13
304	24						17
314	14						8
322	16						11
332	14						12
332	14						13
338	8						11
346	62						33
364	32						
364	32						
370	54						
382	95						
396	104						46 70
408	68						
408	36						
424	96						
446	136						
446	136						

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[[preprint]] 46 [[/preprint]]

alpha Persei C-18601

Line No. | Reading

-10 | 39 | 3718 | H mu

-9 | 44 | 3730 | H lambda

-8 | 52 | 3748 | 3750 H kappa

-7 | 56 | 3757

-6 | - |

-5 | 57 | 3759

-4 | 59 | 3764

-3 | 60 | 3766

-2 | 62 | 3770 | 3770 H iota

-1 | 63 | 3773

0 | 64 | 3775

1 | 65 | 3777

2 | 67 | 3782

3 | 69 | 3786

4 | 71 | 3790

5 | 74 | 379~~7~~ | 3797 | H theta 3797

6 | 75 | 3800

7 | 77 | 3804

8 | 78 | 3807

9 | 79 | 3809

10 | 84 | 3820

11 | 86 | 3824

12 | 87 | 3826

13 | 90 | 3833

14 | 91 | 3835

15 | 91 | 38~~3~~ | 3835 | H theta 3835

16 | 92 | 3838

17 | 94 | 3842

18 | 95 | 3845

19 | 97 | 3850

46	α Persei C-18601	
Line No.	Reading	
-10	39	3718 H μ
-9	44	3730 H λ
-8	52	3748 3750 H κ
-7	56	3757
-6	-	
-5	57	3759
-4	59	3764
-3	60	3766
-2	62	3770 3770 H ι
-1	63	3773
0	64	3775
1	65	3777
2	67	3782
3	69	3786
4	71	3790
5	74	379 7 3797 H θ 3797
6	75	3800
7	77	3804
8	78	3807
9	79	3809
10	84	3820
11	86	3824
12	87	3826
13	90	3833
14	91	3835
15	91	38 3 3835 H θ 3835
16	92	3838
17	94	3842
18	95	3845
19	97	3850

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[[preprint]] 47 [[/preprint]]

alpha Persei C-18601

Line No. | Reading

20 | 99 | 3855 |

21 | 101 | 3860 |

22 | 102 | 3862 |

23 | 104 | 3867 |

24 | 104 | 3867 |

25 | 106 | 3872 |

26 | 109 | 3879 |

27 | 111 | 3884 |

28 | 112 | 3886 |

29 | 113 | 3889 3889 | H zeta

30 | - | - |

31 | - | - |

32 | 115 | 3894 |

33 | 117 | 3898 |

34 | 119 | 3901 |

35 | 120 | 3905 | [[symbol-check mark]]

36 | - | 3972 |

37 | 123 | 3912 |

38 | 124 | 3914 |

39 | 126 | 3919 |

40 | 127 | 3921 |

41 | - | - |

42 | - | - |

43 | - | - |

^[[44]] 45 | ^[[132]] - | ^[[39~~70~~]]33 3933]] -

|

46 | - | - |

47 | 134 | 3938 |

48 | 135 | 3941 |

49 | 137 | 3946 |

50 | 138 | 3950 |

Line No.	Reading	
99	3855	
101	3860	
102	3862	
104	3867	
104	3867	
106	3872	
109	3879	
111	3884	
112	3886	
113	3889 3889	H zeta
-	-	
-	-	
115	3894	
117	3898	
119	3901	
120	3905	[[symbol-check mark]]
-	3972	
123	3912	
124	3914	
126	3919	
127	3921	
-	-	
-	-	
-	-	
45	^[[132]] -	^[[39 70]]33 3933]] -
-	-	
134	3938	
135	3941	
137	3946	
138	3950	

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[[preprinted]] 48 [[/preprinted]]

No.	Reading	
51	140	3956
52	145	39703970
53	-	-
54	-	-
55	147	3976
56	149	3981
57	151	3987
58	152	3990
59	155	3998
60	157	400 0 4
61	158	4007
62	159	4010
63	160	4012
64	-	-
65	162	4018
66	165	4026
67	167	4032
68	-	-
69	170	4041
70	172	4047
71	175	4055
72	176	4058
73	178	4064
74	179	4067
75	181	4072
76	183	4078
77	185	4084
78	185	4084
79	186	4086
80	188	4092

No.	Reading	
51	140	3956
52	145	39703970
53	-	-
54	-	-
55	147	3976
56	149	3981
57	151	3987
58	152	3990
59	155	3998
60	157	400 0 4
61	158	4007
62	159	4010
63	160	4012
64	-	-
65	162	4018
66	165	4026
67	167	4032
68	-	-
69	170	4041
70	172	4047
71	175	4055
72	176	4058
73	178	4064
74	179	4067
75	181	4072
76	183	4078
77	185	4084
78	185	4084
79	186	4086
80	188	4092

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[[preprint]] 49 [[/preprint]]

No.	Reading
81	190 4098
82	191 41014101
83	194 4110
84	195 41 0 14
85	197 4120
86	198 4124
87	200 4130
88	201 4133
89	202 4136
90	205 4146
91	207 3 4155
92	209 4158
93	210 4162
94	212 4168
95	214 4174
96	215 4178
97	217 4184
98	218 4188
99	219 4190
100	221 4196
101	221+ 4196
102	223 4203
103	225 4211
104	227 4216
105	230 4227 4227
106	232 4234
107	233 4238
108	235 4244
109	236 4248
110	237 4252

No.	Reading
190	4098
191	41014101
194	4110
195	41 0 14
197	4120
198	4124
200	4130
201	4133
202	4136
205	4146
207	3 4155
209	4158
210	4162
212	4168
214	4174
215	4178
217	4184
218	4188
219	4190
221	4196
221+	4196
223	4203
225	4211
227	4216
230	4227 4227
232	4234
233	4238
235	4244
236	4248
237	4252

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[[preprint]] 50 [[/preprint]]

No.	Reading
111	238 4256
112	239+ 4260
113	240+ 4262
114	243 4273
115	244 | 4276
116	246 | 428 0 4
117	248 | 4291 <input checked="" type="checkbox"/>
118	249 | 4294
119	251 | 4302
120	252 | 4305
121	255 | 4316
122	256 | 4320
123	258 | 4326
124	259 | 4330
125	262 | 434 0 4340
126	256 | 4354
127	266 | 43358
128	268 | 4367
129	269 | 4372
130	271 | 4381
131	272 | 4386
132	274 | 4394
133	275 | 4400
134	276 | 4403
135	278 | 4413
136	278+ | 4413
137	280 | 4421
138	282 | 443 0 1
139	- | -
140	- | -

50		
No.	Reading	
111	238	4256
112	239+	4260
113	240+	4262
114	243	4273
115	244	4276
116	246	428 0 4
117	248	4291 <input checked="" type="checkbox"/>
118	249	4294
119	251	4302
120	252	4305
121	255	4316
122	256	4320
123	258	4326
124	259	4330
125	262	434 0 4340
126	256	4354
127	266	43358
128	268	4367
129	269	4372
130	271	4381
131	272	4386
132	274	4394
133	275	4400
134	276	4403
135	278	4413
136	278+	4413
137	280	4421
138	282	443 0 1
139	-	-
140	-	-

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No.	Reading									
142	288	4458		141	286+	4452		171	334	4672
174	339	4462		4462	4462	4462		4690		142 288
4460	172	336	4682							
195	370	4830	|	143	291	4474	|	173	338	4690
196	372	4839	|	144	293+	4484	|	174	339	4695
197	373	4844	|	145	294+	4490	|	175	342	4708
198	375	4852	|	146	296	4497	|	176	343	4713
199	375	4852	|	147	297+	4504	|	177		
345 | ...										
200	377	4861	4861	|	148	299+	4512	|	178	|
346 | 345 | 4722										
201	379	4870	|	149	301	4520	|	179		
347 | 346 | 4727										
202	380	487	7	5	|	150	302	4524	|	
180	347	4732								
203	381	4880	|	151	304	4533	|	181	349	4740
204	381+	4880	|	152	306	4542	|	182	350	4746
205	384	4891	|	153	307	4547	|	183	351	4750
206	386	4901	|	154	309	4556	|	184	352	4754
207	388	4913	|	155	310	4561	|	185	354	4764
208	389	4916	|	156	312	4570	|	186	354	4764+
209	390	4920	|	157	313	4575	|	187	356	4772
210	392	4930	|	158	314	4580	|	188	358	4782
211	393	4934	|	159	315	4585	|	189	360	4791
212	393	4934	|	160	317	4594	|	190	361	4796
213	395	4943	|	161	319	4603	|	191	362	4800
214	395	4943	|	162	320	4608	|	192	365	4815
215	398	4957	|	163	321	4612	|	193	366	4818
220	404	-	|	164	32	3	|	4617	|	194 |
367	4823									
		165	323	4622	(200 | 375) |					
		166	325	4630						
		167	328	4636						
		168	330	4654						
		169	331	4658						
		170	332	4663						

51

No.	Reading									
142	288	4458		141	286+	4452		171	334	4672
174	339	4462		142	288	4460		172	336	4682
195	370	4830		143	291	4474		173	338	4690
196	372	4839		144	293+	4484		174	339	4695
197	373	4844		145	294+	4490		175	342	4708
198	375	4852		146	296	4497		176	343	4713
199	375	4852		147	297+	4504		177	345	
200	377	4861		148	299+	4512		178	346	4722
201	379	4870		149	301	4520		179	347	4727
202	380	4875		150	302	4524		180	347	4732
203	381	4880		151	304	4533		181	349	4740
204	381+	4880		152	306	4542		182	350	4746
205	384	4891		153	307	4547		183	351	4750
206	386	4901		154	309	4556		184	352	4754
207	388	4913		155	310	4561		185	354	4764
208	389	4916		156	312	4570		186	354	4764+
209	390	4920		157	313	4575		187	356	4772
210	392	4930		158	314	4580		188	358	4782
211	393	4934		159	315	4585		189	360	4791
212	393	4934		160	317	4594		190	361	4796
213	395	4943		161	319	4603		191	362	4800
214	395	4943		162	320	4608		192	365	4815
215	398	4957		163	321	4612		193	366	4818
220	404	-		164	322	4617		194	367	4823
				165	323	4622		(200 375)		
				166	325	4630				
				167	328	4636				
				168	330	4654				
				169	331	4658				
				170	332	4663				

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alpha Canis Minoris C-18589

No.	Reading		
1	0	3708	
2	1	3710	
3	2	3712	
4	3	3714	
5	6	3719	
6	9	3752	
7	11	3729	
8	12	3731	
9	15	3738	3737 Fe
10	19	3745	^[[3742]]
11	22	375	[[0]]3750
12	23	3752	
13	25	3756	
14	27	3760	
15	29	3764	
16	30	3766	
17	32	377	[[0]]3770
18	34	3779	
19	41	3789	
20	42	3791	
21	44	3795	
22	45	379	[[7]]3797
23	48	3804	
24	50	3808	
25	53	3815	
26	55	3820	
27	57	3824	
28	58	3826	
29	62	38	[[35]]3835
30	67	3848	

52		alpha Canis Minoris C-18589	
No.	Reading		
1	0	3708	
2	1	3710	
3	2	3712	
4	3	3714	
5	6	3719	
6	9	3752	
7	11	3729	
8	12	3731	
9	15	3738	3737 Fe
10	19	3745	^[[3742]]
11	22	375	[[0]]3750
12	23	3752	
13	25	3756	
14	27	3760	
15	29	3764	
16	30	3766	
17	32	377	[[0]]3770
18	34	3779	
19	41	3789	
20	42	3791	
21	44	3795	
22	45	379	[[7]]3797
23	48	3804	
24	50	3808	
25	53	3815	
26	55	3820	
27	57	3824	
28	58	3826	
29	62	38	[[35]]3835
30	67	3848	

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alpha Canis Minoris C - 18589

No.	Reading		
31	68	3850	
32	70	3855	
33	72	3860	
34	74	3865	
35	75	3867	
36	78	3875	
37	80	3880	
38	82	3885	
39	84	3889	
40	86	3894	
41	89	3901	
42	90	3904	
43	91	3906	
44	95	3916	
45	96	3918	
46	96	3918	
47	97	3921	
48	102	3933	3933|Ca
49	106	3945	3944|A1
			Fe
			Fe
			Fe
50	108	3950	3945|Co
			Fe
51	109	3953	3951|mn
52	111	3959	3961|A1
			Fe
53	114	3967	3963|T1
54	115	3470	3970|H
			Cr
			Fe
55	120	3484	3984|Mn
56	122	3990	3989|Fe
57	123	3993	3993|V, Cr, Ur
58	126	4001	4005|Fe
59	127	4004	4008|Mn, Ti
60	129	4010	4012|Ti+

α Canis Minoris				53
No.	Reading			
31	68	3850		
32	70	3855		
33	72	3860		
34	74	3865		
35	75	3867		
36	78	3875		
37	80	3880		
38	82	3885		
39	84	3889		
40	86	3894		
41	89	3901		
42	90	3904		
43	91	3906		
44	95	3916		
45	96	3918		
46	96	3918		
47	97	3921		
48	102	3933	3933|Ca	
49	106	3945	3944|A1	
			Fe	
			Fe	
			Fe	
50	108	3950	3945|Co	
			Fe	
51	109	3953	3951|mn	
52	111	3959	3961|A1	
			Fe	
53	114	3967	3963|T1	
54	115	3470	3970|H	
			Cr	
			Fe	
55	120	3484	3984|Mn	
56	122	3990	3989|Fe	
57	123	3993	3993 V, Cr, Ur	
58	126	4001	4005 Fe	
59	127	4004	4008 Mn, Ti	
60	129	4010	4012 Ti+	

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No.	Reading		
61	131	4015	4016 Fe
62	133	4021	4022 Fe
63	136	4029	4029 Fe
64	138	4035	4031 Mn
65	139	4038	4035 ^[[4034]] | Mn ^[[Mn]]
66	141	4043	4043 La
67	143	4049	4048 Cr ^[[Mn]] ^[[Fe+]]
68	146	4057	4056 Fe
69	147	4062	4062 Fe
70	149	4065	4065 Fe ^[[Ti]] ^[[Mn]]
71	150	4068	4069 Un
72	152	4074	4074 Fe ^[[Un]]
73	154	4079	4078 Srt [[strikethrough]] In t [[strikethrough]]
74	156	4084	4084 Fe
75	160	4096	4096 Fe
76	161	4099	4098 Ca?
77	162	4101	4101 | 4102 | H delta
78	164	4108	4107 Zr. ^[[Fe]] ^[[Ce]]
79	166	4114	4111 V
80	168	4121	4122 Fe
81	169	4125	4125 Un
82	170	4128	4129 Un
83	173	4138	4136 Zr
84	174	4142	4142 Un ^[[Cr]] ^[[Fe]]
85	176	4148	4150 Co ^[[Un]]
86	177	4152	4153 Un
87	180	4162	4165 Ce ^[[Fe]]
88	183	4172	4175 Fe
89	185	4179	4179 V ^[[Fe+]]
90	186	4182	4180 Un

No.	Reading				
61	131	4015	4016	Fe	
62	133	4021	4022	Fe	
63	136	4029	4029	Fe	
64	138	4035	4031	Mn	
65	139	4038	4035	^[[4034]] | Mn ^[[Mn]]	
66	141	4043	4043	La	
67	143	4049	4048	Cr ^[[Mn]] ^[[Fe+]]	
68	146	4057	4056	Fe	
69	147	4062	4062	Fe	
70	149	4065	4065	Fe ^[[Ti]] ^[[Mn]]	
71	150	4068	4069	Un	
72	152	4074	4074	Fe ^[[Un]]	
73	154	4079	4078	Srt [[strikethrough]] In t [[strikethrough]]	
74	156	4084	4084	Fe	
75	160	4096	4096	Fe	
76	161	4099	4098	Ca?	
77	162	4101	4101	| 4102 | H delta	
78	164	4108	4107	Zr. ^[[Fe]] ^[[Ce]]	
79	166	4114	4111	V	
80	168	4121	4122	Fe	
81	169	4125	4125	Un	
82	170	4128	4129	Un	
83	173	4138	4136	Zr	
84	174	4142	4142	Un ^[[Cr]] ^[[Fe]]	
85	176	4148	4150	Co ^[[Un]]	
86	177	4152	4153	Un	
87	180	4162	4165	Ce ^[[Fe]]	
88	183	4172	4175	Fe	
89	185	4179	4179	V ^[[Fe+]]	
90	186	4182	4180	Un	

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No.	Reading			
91	188	4189	4189	Un
92	190	4195	4196	Fe
93	193	4206	4207	Fe
94	194	4210	4212	Zr
95	198	4222	4215	Sr+ ^[[Fe]]
96	200	4229	4225	Fe
97	201	4232	4227	Fe
98	204	424 [[/del]] 1 [[/del]] 3	4233	Fe ^[[Fe+]]
99	205	4246	4243	Fe
100	208	4256	4250	Fe
101	211	4266	4272	Fe
102	215	4280	7282	Ca ^[[Fe]]
103	218	4290	7291	Fe ^[[Ti]]
104	220	4297	7297	^[[4296]] Ti ^[[Un]] ^[[Fe+]]
105	223	4306	4306	Un ^[[Ti]]
106	225	4313	4313	Sc ^[[Ti+]]
107	226	4316	4317	Ti?
108	228	4324	4328	Un
109	230	4330	4330	Ti+
110	231	4334	4333	V
111	233	434 [[/del]] 0 [[/del]] 4340	4340	H y
112	236	4354	4352	Fe
113	238	4362	4360	Zr ^[[Fe]] ^[[Ti]]
114	241	4377	4376	Fe
115	243	4386	7387	Ti+
116	245	4396	7395	V ^[[Ti+]]
117	249+	4414	4417	Ti+ ^[[Cr]]
118	250+	4418	4420	Zr ^[[Un]]
119	253	4432	4432	Cr ^[[Un]]
120	255	4440	4438	Fe

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No.	Reading		
121	258	4453	Ti [^] [[Mn]]
122	260	4462	Mn [^] [[V]]
123	263	4476	Ag [^] [[Fe]]
124	265	4486	Fe
125	266	4490	Fe+
126	270	4508	Fe+
127	272	4518	[^] [[4417]] | Un [^] [[Ti]] [^] [[Fe]]
128	273	4522	Fe
129	276	4534	4 [[/del]] 534_5 | 4534 | Co [^] [[Ti+]]
130	282	4562	Ti+
131	284	4570	Fe
132	285	4576	Fe+
133	286	4580	Ni [^] [[Fe]] [^] [[V]] [^] [[Cr]]
134	289	4594	V
135	291	4606	Fe
136	293	4612	Fe
137	295	4620	Cr [^] [[Fe]] [^] [[Fe]]
138	297	4629	Fe [^] [[Co]] [^] [[Ti]] [^] [[Fe+]]
139	301	4647	[^] [[4646]] | Ni [^] [[Fe]] [^] [[Cr]]
140	303	4657	4657 | Ti+ [^] [[Ti]]
141	304	4660	Cr [^] [[Co]] [^] [[Cr]]
142	307	4674	Fe [^] [[Un]]
143	309	4683	Co [^] [[Fe?]] [^] [[Ti]]
144	311	4692	Fe [^] [[Ti]]
145	314	4706	Fe
146	316	4714	Ni
147	318	4723	Zn
148	320	4732	Un
149	321	4736	Fe
150	324	4750	Ni

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No.	Reading		
121	258	4453	Ti [^] [[Mn]]
122	260	4462	Mn [^] [[V]]
123	263	4476	Ag [^] [[Fe]]
124	265	4486	Fe
125	266	4490	Fe+
126	270	4508	Fe+
127	272	4518	[^] [[4417]] | Un [^] [[Ti]] [^] [[Fe]]
128	273	4522	Fe
129	276	4534	4 [[/del]] 534_5 | 4534 | Co [^] [[Ti+]]
130	282	4562	Ti+
131	284	4570	Fe
132	285	4576	Fe+
133	286	4580	Ni [^] [[Fe]] [^] [[V]] [^] [[Cr]]
134	289	4594	V
135	291	4606	Fe
136	293	4612	Fe
137	295	4620	Cr [^] [[Fe]] [^] [[Fe]]
138	297	4629	Fe [^] [[Co]] [^] [[Ti]] [^] [[Fe+]]
139	301	4647	[^] [[4646]] | Ni [^] [[Fe]] [^] [[Cr]]
140	303	4657	4657 | Ti+ [^] [[Ti]]
141	304	4660	Cr [^] [[Co]] [^] [[Cr]]
142	307	4674	Fe [^] [[Un]]
143	309	4683	Co [^] [[Fe?]] [^] [[Ti]]
144	311	4692	Fe [^] [[Ti]]
145	314	4706	Fe
146	316	4714	Ni
147	318	4723	Zn
148	320	4732	Un
149	321	4736	Fe
150	324	4750	Ni

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No.	Reading			
151	326	4758	4756	Ni ^[[Cr]]
152	329	4772	4771	Fe ^[[Un]]
153	330	4777	4779	Co ^[[Fe]]
154	335	4800	4800	Cr ^[[Ti]] ^[[F]]
155	339	4818	4824	Fe ^[[Cr+]] ^[[Mn]]
156	341	4826	4856	Ti ^[[Fe]] ^[[Ni]]
157	346	4848	4848	Cr+
158	349	4861	4861	H beta -
159	351	4871		
160	353	4880		
161	354	4886		
162	356	4894		
163	359	4908		
164	362	4925		
165	365	4935		
166	368	4948		
167	370	4958		

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No.	Reading			
151	326	4758	4756	Ni ^[[Cr]]
152	329	4772	4771	Fe ^[[Un]]
153	330	4777	4779	Co ^[[Fe]]
154	335	4800	4800	Cr ^[[Ti]] ^[[F]]
155	339	4818	4824	Fe ^[[Cr+]] ^[[Mn]]
156	341	4826	4856	Ti ^[[Fe]] ^[[Ni]]
157	346	4848	4848	Cr+
158	349	4861	4861	H beta -
159	351	4871		
160	353	4880		
161	354	4886		
162	356	4894		
163	359	4908		
164	362	4925		
165	365	4935		
166	368	4948		
167	370	4958		

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Probable errors of line depths from two 1-prism plates of Capella.

Range in d|0-10|10-20|20-30|30-40|40-50|50-75|70-
[[strikethrough]]100[[/strikethrough]] ^[[30]]|10-20 (cont)
Residuals|2|4 ^[[sq.]]|2|4 ^[[sq.]]|0|0 ^[[sq.]]|5|25
^[[sq.]]|[[strikethrough]]20[[/strikethrough]] ^[[5]]|25 ^[[sq.]]|2|4 ^[[sq.]]|0|0
^[[sq.]]|0|0
|1|1|1|1|0|0|2|4|[[strikethrough]]20[[/strikethrough]] ^[[4]]| 16|10|100|1|1|0
0
|0|0|2|4|1|1|5|25|0|0| | |2|4|0|0
|0|0|1|1|1|1|2|4|16| | |0|0|0|0
|0|0|0|0|1|1|1|1|0|0| | |2|4|0|0
2|4|0|0|1|1|0|0|1|1| | |2|4|0|0
|0|0|0|0|1|1|5|25|2|4| | |1|1|0|0
2|4|0|0|0|0|1|1|2|4|[[underlined]]10-20[[/underlined]] Cont.| |2|4|1|1
|0|0|0|0|0|0|0|0| | |2|4|0|0|0|0
| | |0|0|0|0|1|1| | |0|0|0|0|0|0
| | |2|4|5|25|1|1| | |1|1|2|4|0|0
| | |2|4|0|0|0|0| | |1|1|0|0|0|0
| | |1|1|0|0|1|1| | |0|0|1|1|1|1
| | |2|4|1|1|1|1| | |0|0|0|0|2|4
| | |0|0|2|4|1|1| | |2|4|0|0|2|4
| | |3|9|1|1|1|1| | |0|0|1|1|3|9
| | |4|16|0|0|0|0| | |0|0|0|0|0|0
| | |2|4|0|0| | | |2|4|2|4|0|0
| | |1|1|0|0| | | |2|4|0|0|0|0
| | |2|4|0|0| | | |2|4|1|1|0|0
| | |0|0|1|1| | | |0|0|1|1|2|4
| | |0|0|1|1| | | |6|36|[[underlined]]2|4[[/underlined]]|1|1
| | |1|1|2|4| | | |1|1| |34|0|0
| | |0|0|0|0| | | |[[underlined]]0|0[[/underlined]]| |55|1|1
| | |0|0|1|1| | | |59| |0|0
| | |2|4|2|4| | | |62| |2|4
| | |0|0|2|4| | | |29| |0|0
| | |0|0|2|4| | | | | |0|0
| | |13|x| |[[strikethrough]]0[[/strikethrough]]| | |91| |66| |150|
|89|[[strikethrough]]0[[/strikethrough]]|

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Probable errors of line depths from two 1-prism plates of Capella.

Range in d	0-10	10-20	20-30	30-40	40-50	50-75	70-100	10-20
Residuals	2 4	2 4	0 0	2 4	2 4	2 4	2 4	2 4
	1 1	1 1	0 0	2 4	2 4	2 4	2 4	2 4
	0 0	2 4	1 1	2 4	2 4	2 4	2 4	2 4
	0 0	1 1	1 1	2 4	2 4	2 4	2 4	2 4
	0 0	0 0	1 1	1 1	0 0	2 4	2 4	2 4
	2 4	0 0	1 1	0 0	1 1	2 4	2 4	2 4
	0 0	0 0	1 1	2 4	2 4	2 4	2 4	2 4
	2 4	0 0	0 0	1 1	1 1	2 4	2 4	2 4
	0 0	0 0	0 0	0 0	0 0	2 4	2 4	2 4
	0 0	0 0	0 0	1 1	1 1	0 0	0 0	0 0
	2 4	5 25	1 1	1 1	1 1	1 1	2 4	0 0
	2 4	0 0	0 0	2 4	0 0	1 1	0 0	0 0
	1 1	0 0	0 0	1 1	1 1	0 0	1 1	1 1
	2 4	1 1	1 1	1 1	1 1	0 0	0 0	2 4
	0 0	2 4	1 1	1 1	1 1	2 4	0 0	2 4
	3 9	1 1	1 1	1 1	1 1	0 0	1 1	3 9
	4 16	0 0	0 0	0 0	0 0	0 0	0 0	0 0
	2 4	0 0	|	|	|	2 4	2 4	0 0
	1 1	0 0	|	|	|	2 4	0 0	0 0
	2 4	0 0	|	|	|	2 4	0 0	0 0
	0 0	1 1	|	|	|	2 4	1 1	0 0
	0 0	1 1	|	|	|	0 0	1 1	2 4
	1 1	2 4	|	|	|	6 36	2 4	1 1
	0 0	0 0				1 1	34	0 0
						[[underlined]]0 0[[/underlined]]	55	1 1
	0 0	1 1				59		0 0
	2 4	2 4				62		2 4
	0 0	2 4				29		0 0
		0 0 2 4						0 0

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| 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-75
sigma v^2 | 13 | 150 | 89 | 91 | 66 | 104
n | 9 | 72 | ~~89~~ | ~~50~~ | 17 | 8 | 2 158
 u^2 | 1.44 | 2.07 | 1.78 | 5.34 | 8.32 | 52
u | 1.20 | 1.44 | 1.33 | 2.31 | 2.88 | 7.21
r | 0.81 | 0.97 | 0.90 | 1.53 | 1.95 | 4.88 Probable errors of dl values for
these depths

	0-10	10-20	20-30	30-40	40-50	50-75	
Σv^2	13	150	89	91	66	104	
n	9	72	89	50	17	8	158
μ^2	1.44	2.07	1.78	5.34	8.32	52	
u	1.20	1.44	1.33	2.31	2.88	7.21	
r	0.81	0.97	0.90	1.53	1.95	4.88	Probable errors of dl values for these depths

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Probable errors for two 1 prism plates of gamma Cygni

Range in dl residuals |0-10|10-20|10-20|10-20|20-30|20-30|30-40|40-50|50-75|75-100

1|1|1|1|0|0|	3|9|1|1|2|4|2|4|3|9|2|4								
1|1|2|4|2|4|	0|0|2|4|1|1|3|9|2|4|1|1								
2|4|2|4|	0|0|2|4|2|4|1|1|								
0|0|2|4|	0|0|2|4|0|0|2|4|								
2|4|2|4|	1|1|1|1|1|1|1|1|								
1|1|3|9|	1|1|2|4|1|1|								
3|9|3|9|	1|1|0|0|0|0|								
1|1|0|0|	0|0|1|1|1|1|								
2|4|3|9|	2|4|0|0|1|1|								
1|1|	0|0|	2|4|5|25|1|1|							
0|0|	43|	0|0|0|0|0|0|							
1|1|	148|	1|1|2|4|1|1|							
1|1|	291|	2|4|0|0|0|1|							
2|4|		1|1|2|4|2|4|							
3|9|		1|1|2|4|1|1|							
0|0|		1|1|1|1|5|25|							
1|1|		1|1|2|4|1|1|							
5|25|		1|1|1|1|5|25|							
5|25|		0|0|0|0|1|1|	0|0|1|1|	2|2|					
2|4|		1|1|0|0|1|1|							
4|16|		0|0|0|0|4|16|							
0|0|		1|1|0|0|0|0|							
0|0|		7|49|1|1|3|9|							
0|0|		0|0|1|1|							
4|16|		4|16|0|0|1|1|	0|0|1|1|						
1|1|		1|1|1|1|3|9|	1|1|9|						
0|0|		2|4|2|4|							
5|25|		0|0|0|0|							
		2|4|							

| 2| | | 291| | | 102|64|186| 100| 19| 13| 5

60	Probable errors for two 1 prism plates of γ Cygni											
Range in dl Residuals	0-10	10-20	10-20	10-20	20-30	20-30	20-30	30-40	40-50	50-75	75-100	
1	1	1	0	0	3	9	1	1	2	4	3	9
2	2	4	2	4	0	0	2	4	1	1	3	9
3	3	4	2	4	0	0	2	4	2	4	1	1
4	0	0	2	4	0	0	2	4	0	0	2	4
5	2	4	2	4	1	1	1	1	1	1	1	1
6	1	1	3	4	1	1	2	4	1	1	1	1
7	3	9	3	4	1	1	0	0	0	0	0	0
8	1	1	0	0	0	0	1	1	1	1	1	1
9	2	4	3	4	2	4	0	0	1	1	1	1
10	1	1	0	0	2	4	5	25	1	1	1	1
11	0	0			0	0	0	0	0	0	0	0
12	1	1			1	1	2	4	1	1	1	1
13	1	1			2	4	0	0	0	0	0	0
14	2	4			1	1	2	4	2	4	1	1
15	3	4			1	1	2	4	1	1	1	1
16	0	0			1	1	1	1	5	25	1	1
17	1	1			1	1	1	1	1	1	1	1
18	5	25			1	1	1	1	5	25	1	1
19	5	25			0	0	0	0	2	2	1	1
20	2	4			1	1	0	0	1	1	1	1
21	4	16			2	4	0	0	4	16	1	1
22	0	0			1	1	0	0	0	0	0	0
23	0	0			7	49	1	1	3	9	1	1
24	0	0			0	0	1	1	1	1	1	1
25	4	16			4	16	0	0	1	1	1	1
26	1	1			1	1	1	1	1	1	1	1
27	0	0			2	4	2	4	1	1	1	1
28	5	25			0	0	0	0	1	1	1	1
29	1	1			1	1	1	1	1	1	1	1
30	0	0			2	4	2	4	1	1	1	1
31	5	25			0	0	0	0	1	1	1	1

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| 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-75 | 75-100 | 50-100
 Sigma nu^{[[2]]} | 2 | 291 | 1~~[[/del]]~~86 | 100 | 19
 | (13) | (5) | 18 |
 n | 2 | 38 | 60 | 23 | 5 | (2) | (2) | 4 | 132
 mu^{[[2]]} | 1 | 7.66 | 3.10 | 4.35 | 3.80 | (6.50) | (2.50) | 4.50 |
 mu | 1 | 2.77 | 1.76 | 2.09 | 1.95 | (2.55) | (1.58) | 2.12 |
 [[?]] | 0.67 | 1.92 | 1.22 | ~~[[/del]]~~3.06~~[[/del]]~~^{[[1.44]]} |
 1.34 | | | 1.46 |

		0-10	10-20	20-30	30-40	40-50	50-75	75-100	50-100	
NO	$\Sigma \nu^2$	2	291	186	100	19	(13)	(5)	18	
n	n	2	38	60	23	5	(2)	(2)	4	132
μ^2	μ^2	1	7.66	3.10	4.35	3.80	(6.50)	(2.50)	4.50	
μ	μ	1	2.77	1.76	2.09	1.95	(2.55)	(1.58)	2.12	
σ	σ	0.67	1.92	1.22	3.06	1.34			1.46	

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Probable errors for two 2 prism plates of gamma Cygni C 18482 18577

Range in dl Residuals

0-10 | 10-20 | 10-20 | 20-30 | 20-30 | 20-30 | 30-40 | 40-50 | 50-75

~~3~~ | 9 | 1 | 1 | 6 | 36 |
| 6 | 36 | 2 | 4 | 0 | 0 | 1 | 1 | 2 | 4 | 2 | 4 | 2 | 4 | 0 | 0 |
| 3 | 9 | 0 | 0 | 3 | 9 | 4 | 16 | 3 | 9 | 3 | 9 | 1 | 1 | 3 | 9 |
5 | 25 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 4 | 5 | 25 | 1 | 1 | 1 | 1 | 45 |
4	16	0	0	0	1	1	3	9	6	36	0	1	0	1		
1	1	2	4	2	4	1	1	3	9	1	1	1	1	1	1	
0	0	2	4	3	9	4	16	2	4	2	4	4	1	16	1	
1	1	1	1	1	1	0	0	1	1	1	1	2	4			
5	25	2	4	4	16	2	4	3	9	0	0	0	0			
1	1	3	9	0	0	0	1	1	1							
1	1	3	9	35	0	0	2	4	54	0	0	0	0			
1	1	174	1	1	0	0		175	81	1	1	1	1			
0	0	6	36	1	1			3	9	2	4					
0	0	0	0	0	0			1	1	0		0				
1	1	2	4	2	4			0	0			41				
1	1	2	4	2	4			0	0			30-40				
4	16		0	0	1	1			0	0	1	1				
1	1		1	1	1	1			1	1	1	1				
0	0		2	4	2	4			0	0	1	1				
0	0		1	1	0	0			2	4	3	9				
2	4		0	0	1	1			5	25	1	1				
1	1		0	0	1	1			0	0	0	0				
1	1		1	1	0	0			3	9	1	1				
2	4		0	0	1	1			1	1	5	25				
1	1		1	1	3	9			2	4	0	0				
4	16		1	1	2	4			2	4	1	1				
1	1		0	0	1	1			1	1	1	1				
1	1		0	0	2	4			2	4	1	1				
1	1		0	0	1	1			0	0	1	1				
9 | | | 209 | | (175) | | (81) | | 310 | | (154) | (43) | 197 | | |

62	Probable errors for two 2 prism plates of gamma Cygni																C 18482 18577
Range in dl Residuals	0-10	10-20	10-20	20-30	20-30	20-30	30-40	30-40	40-50	40-50	50-75						
3	9	1	1	3	9	9	8	0	0	2	4	2	9	1	1	4	36
		6	36	2	4	0	0	1	1	2	4	2	4	2	4	0	0
		3	9	0	0	3	9	4	16	3	9	3	4	1	1	3	9
		5	25	0	0	1	1	0	0	2	4	5	25	1	1	0	0
		4	16	0	0	0	0	1	1	3	9	4	16	3	9	1	1
		1	1	2	4	2	4	1	1	3	9	1	1	1	1	1	1
		0	0	2	4	3	9	4	16	2	4	2	4	4	1	16	1
		1	1	1	1	1	1	0	0	1	1	1	1	2	4		
		5	25	2	4	4	16	2	4	3	9	0	0	0	0		
		1	1	<u>3</u>	9	<u>0</u>	0	1	1	<u>1</u>							
		3	9	35	0	0	2	4	54	0	0	0	0				
		1	1	174	1	1	0	0		175	81	1	1	1	1		
		0	0	6	36	1	1			3	9	2	4				
		0	0	0	0	0	0			1	1	0		<u>0</u>			
		1	1	2	4	2	4			0	0			41			
		1	1	2	4	2	4			0	0			<u>30-40</u>			
		4	16		0	0	1	1		0	0	1	1				
		1	1		1	1	1	1		1	1	1	1				
		0	0		2	4	2	4		0	0	1	1				
		0	0		1	1	0	0		2	4	3	9				
		2	4		0	0	1	1		5	25	1	1				
		1	1		0	0	1	1		0	0	0	0				
		1	1		1	1	0	0		3	9	1	1				
		2	4		0	0	1	1		1	1	5	25				
		1	1		1	1	3	9		2	4	0	0				
		4	16		1	1	2	4		2	4	1	1				
		1	1		0	0	1	1		1	1	1	1				
		1	1		0	0	2	4		2	4	1	1				
		1	1		0	0	1	1		0	0	1	1				
		9			209		(175)			(81)		310			(154)	(43)	197

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	0-10	10-20	20-30	30-40	40-50	50-75
sigma v ²	9	209	310	197	44	45
r	1	39	68	42	18	3
u ²	9	5.37	4.56	4.70	2.27	15.0
u	| 3.00	| 2.32	| 2.14	| 2.17	| 1.51	| 3.87
r	| 2.05	| 1.56	| 1.44	| 1.46	| 1.02	| 2.60

	0-10	10-20	20-30	30-40	40-50	50-75
Σv^2	9	209	310	197	44	45
r	1	39	68	42	18	3
u^2	9	5.37	4.56	4.70	2.27	15.0
u	3.00	2.32	2.14	2.17	1.51	3.87
r	2.05	1.56	1.44	1.46	1.02	2.60

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Probable errors of dl for 9 1-prism plates of Pleiades

10-20|10-20|~~30-40~~ ^[[10-20]]|20-30|
20-30|30-40|30-40

1 1|3 9|0 0|7 49|2 4|3 9|0 0
2 4|3 9|10 100|6 36|3 9|1 1|2 4
1 1|8 64|3 9|9 81|3 9|11 121|2 4
1 1|4 16|8 64|0 0|3 9|2 4|0 0
4 16|9 81|173|3 9|4 16|6 36|0 0
1 1|2 4|573|2 4|2 4|4 16|6 36
2 4|4 16|548|1294|3 9|4 16|3 9|6 36
2 4|2 4|3 9|7 49|1 0|0 0
2 4|0 0|0 0|116|2 4|6 36
2 4|2 4|2 4|675|4 16|8 64
10 100|1 1|11 121|791|8 64|2 4
13 169|7 49|2 4|6 36|2 4
3 9|0 0|1 1|8 64|11 121
0 0|1 1|3 9|2 4|2 2
1 1|1 1|0 0|2 4|9 81
4 16|1 1|6 36|0 0|3 9
1 1|8 64|4 16|1 1|0 0
1 1|7 49|6 36|7 49|2 4
1 1|2 2|5 25|9 81|3 9
2 4|10 100|0 0|2 4|9 81
1 1|7 49|2 4|7 49|1 1
1 1|2 2|2 4|7 49|5 25
3 9|11 11|0 0|1 1|7 49
11 121|2 2|11 121|1 1|1 1
6 36|6 6|3 9|1 1|2 4
1 1|0 0|6 36|2 4|10 100
4 16|3 3|6 36|4 16|4 16
6 36|0 0|4 16|4 16|11 121
[[573]] | [[548]] | [[675]] | [[670]] | [[857]]

Probable error of dl for q				1-pm plates of P. laevis			
10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90
1	1	3	4	0	0	7	44
2	4	3	4	10	100	6	36
1	1	8	44	3	4	9	37
1	1	4	16	8	2	0	4
4	6	9	31	873	3	4	16
1	1	2	4	873	1	4	2
2	4	4	16	548	3	0	4
2	2	2	0	1394	3	4	7
2	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
10	100	1	0	10	100	8	24
13	44	7	44	2	4	6	36
3	4	0	0	1	1	8	44
0	0	0	0	3	4	2	4
1	1	1	1	0	0	2	4
4	16	1	1	6	36	0	0
1	1	8	44	4	16	1	1
1	1	7	44	6	36	7	44
1	1	2	2	5	25	9	81
2	4	10	100	0	0	2	4
1	1	7	44	2	4	7	44
1	1	2	2	2	4	2	44
3	9	11	11	0	0	1	1
11	121	2	2	11	121	1	1
6	36	6	6	3	9	1	1
1	1	0	0	6	36	1	4
4	16	3	3	6	36	4	16
6	36	0	0	4	16	3	9

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Date from table of means, Book 14

30-40|30-40|40-50|40-50|40-50|50-60|50-60|50-60|50-60|50-60|50-60
1 1|1 1|0 0|3 9|6 36|1 1|10 100|1 1|2 4|1 1|1 1|1 1
1 1|5 25|0 0|6 36|[[2 4]] 13 169|1 1|2 4|4 16|6 36|3 9|[[7 49]] 7 49|[[1 1]] 3 9
4 16|2 4|6 36|4 16|[[3 9]] 6 36|9 81|3 9|1 1|2 4|1 1|[[2 4]] 1 1|[[3 9]] 4 16
6 36|6 36|1 1|8 64|[[7 49]] 5 25|3 9|2 4|3 9|3 9|0 0|[[3 9]] 7 49|[[4 16]] 1 1
5 25|2 4|8 64|3 9|[[1 1]] 4 16|5 25|3 9|0 0|8 64|7 49|[[1 1]] 1 1|[[1 1]] 0 0
4 16|5 25|1 1|2 4|1 1|0 0|5 25|1 1|2 4|4 16|[[4 16]] 11 121|[[2 4]] 1 1
19 36|2 4|5 25|6 36|4 16|4 16|3 9|2 4|10 100|1 1|[[9 81]] 2 4|[[4 16]] 1 1
5 25|14 196|1 1|6 36|8 64|2 4|3 9|1 1|6 36|6 36|[[1 1]] 6 36|[[5 25]] 2 4
2 4|12 144|1 1|5 25|1 1|2 4|0 0|1 1|4 16|0 0|[[6 36]] 2 4|[[0 0]] 3 9
6 36|0 0|0 0|8 64|1 1|1 1|1 1|0 0|2 4|1 1|[[1 1]] 3 9|[[3 9]] 6 36
3 9|5 25|1 1|13 169|2 4|1 1|3 9|5 25|8 64|1 1|[[3 9]] 8 64|[[6 36]] 2 4
3 9|6 36|2 4|2 4|5 25|2 4|8 64|4 16|8 64|4 16|8 64|1 1|[[0 0]] 1 1|[[8 64]] 12 144
3 9|12 144|9 81|4 16|3 9|3 9|4 16|5 25|2 4|0 0|[[1 1]] 7 49|[[16 256]] 8 64
9 81|4 16|1 1|5 25|1 1|4 16|16 256|4 16|3 9|6 36|[[4 16]] 1 1|[[2 4]] 2 4
15 225|0 0|9 81|4 16|0 0|2 4|2 4|1 1|5 25|4 16|[[3 9]] 0 0|[[1 1]] 0 0
3 9|3 9|7 49|5 25|1 1|3 9|2 4|2 4|2 4|2 4|[[1 1]] 4 16|[[9 81]] 13 169
3 9|2 4|4 16|2 4|0 0|4 16|1 1|1 1|0 0|0 0|[[11 121]] 3 9|[[2 4]] 6 36
1 1|2 4|0 0|2 4|1 1|1 1|3 9|3 9|4 16|2 4|[[0 0]] 4 16|[[5 25]] 2 4
16 256|2 4|1 1|0 0|1 1|3 9|3 9|4 16|2 4|2 4|[[1 1]] 1 1|[[4 16]] 0 0
1 1|0 0|8 64|2 4|1 1|0 0|0 0|3 9|8 64|3 9|[[3 9]] 3 9|[[3 9]] 5 25
4 16|0 0|2 4|3 9|3 9|2 4|5 25|0 0|4 16|2 4|[[7 49]] 0 0|[[14 196]] 2 4
3 9|4 16|11 121|5 25|0 0|4 16|3 9|0 0|0 0|6 36|[[7 49]] 2 4|[[5 25]] 2 4
3 9|3 9|4 16|2 4|0 0|1 1|5 25|3 9|2 4|2 4|[[3 9]] 0 0|[[6 36]]
4 16|12 144|2 4|2 4|1 1|8 64|0 0|1 1|7 49|1 1|[[0 0]] 1 1|1370
4 16|19 36|10 100|10 100|0 0|2 4|3 9|1 1|2 4|3 9|[[1 1]] 1 1|[[449]] 613
4 16|9 81|2 4|0 0|4 16|8 64|1 1|5 25|2 4|1 1|[[1 1]] 8 64|[[396]] 621
9 81|3 9|8 64|39|8 64|7 49|1 1|2 4|3 9|3 9|[[4 16]] 1 1|1317
12 144|2 4|1 1|10 100|9 81|6 36|1 1|0 0|2 4|8 64|0
0|[[1002]] 1002|[[18 324]] [[13 85]] [[852]] [[670]] |
(817)|[[142]] [[746]] (449)(613)(196)(621)(317)
)|1002|[[4568]] [[1761]] [[4592]] (746)|
(1761)|[[1761]] [[4592]] (746)|
[[2605]] | | | | |

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Pleiades

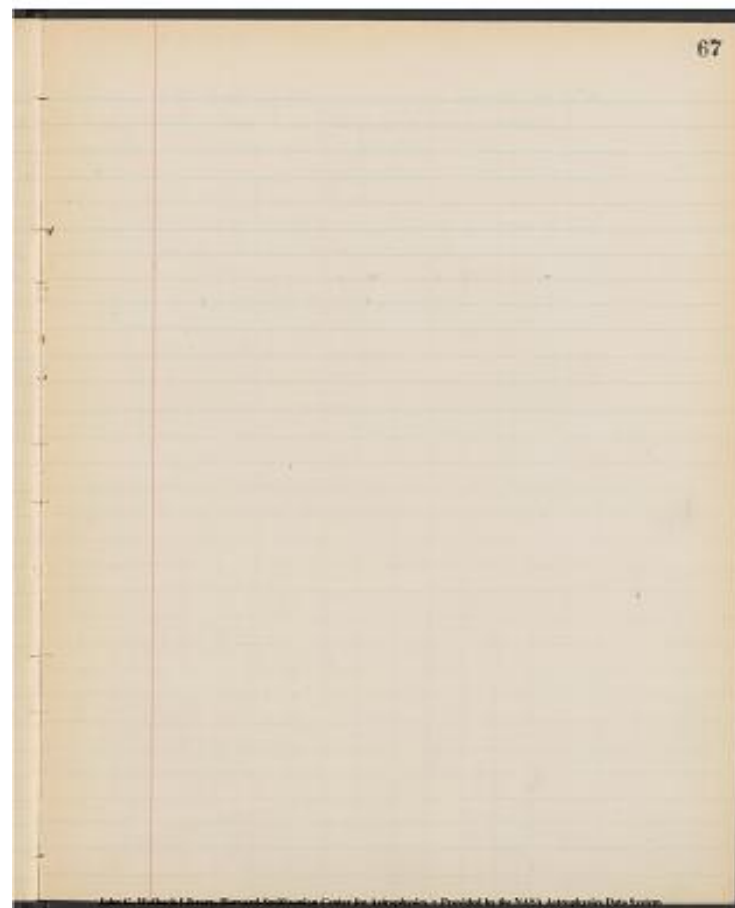
| 10-20 | 20-30 | 30-40 | 40-50 | 50-60
sigma v² | 1294 | 791 | 4592 | 2605 | 4568
n | 60 | 46 | ~~86~~ ~~115~~ | 88 | 210 | 519
u² | 21.6 | 17.2 | 39.8 | 29.6 | 21.7
u | 4.65 | 4.15 | 6.31 | 5.44 | 4.66
r | 3.14 | 2.80 | 4.26 | 3.68 | 3.15
[checkmark]n | 7.75 | 6.78 | 10.72 | 9.38 | 14.49
[[underlined]] r [[/underlined]] | .405 | .413 | .398 | .393 | .217
[[checkmark]] n

66	Pleiades				
	10-20	20-30	30-40	40-50	50-60
ΣN^2	1294	791	4592	2605	4568
n	60	46	1596	88	210
μ^2	21.6	17.2	39.8	29.6	21.7
μ	4.65	4.15	6.31	5.44	4.66
r	3.14	2.80	4.26	3.68	3.15
n	7.75	6.78	10.72	9.38	14.49
$\frac{r}{n}$.405	.413	.398	.393	.217

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[[no entries]]



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[illegible]

68

Reduced to hours 95

W 36 95 (Seymour)

Xuygetu

m	min	sec	W	min	sec	hour	am	m	min	sec	W	min	sec	hour	am
2	22	24	22	22	24	22	19	—	—	—	—	—	—	—	—
3	21	25	24	21	25	24	28	—	—	—	—	—	—	—	—
4	21	24	24	21	24	24	59	2	2	24	5	2	—	—	—
5	24	25	24	24	25	24	54	8	14	25	8	14	—	—	—
6	23	24	23	23	24	23	70	7	11	23	7	11	—	—	—
7	25	24	24	25	24	25	82	8	13	24	8	13	—	—	—
8	24	24	24	24	24	24	82	9	14	24	9	14	—	—	—
9	24	24	24	24	24	24	90	10	17	24	10	17	—	—	—
10	26	24	24	26	24	26	92	11	20	24	11	22	—	—	—
11	27	24	24	27	24	27	82	12	23	24	12	25	2.05	2.10	1.04
12	22	24	24	22	24	22	80	13	24	24	13	26	2.05	2.10	1.24
13	25	24	24	25	24	25	70	14	24	24	14	26	2.05	2.10	1.34
14	28	24	24	28	24	28	44	15	25	24	15	27	2.05	2.10	1.44
15	27	24	24	27	24	27	30	16	27	24	16	29	2.05	2.10	1.54

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Maia Celaeno

|n|m+n|+m+n|mean n|mean m+n|(n)|(m+n)|delta m|m+n|+m+n|mean

n|mean m+n|(n)|(m+n)|delta m

pi|9|11|93|9|11|---|---|---|---|

omicron|9|11|93|9|11|---|---|---|---|

xi|9|12|93|9|12|---|---|---|---|

nu|9|14|93|9|14|3.44|---|---|---|

mu|9|17|93|9|17|3.18|---|---|---|

lambda|11|20|93|11|20|2.96|---|---|---|

kappa|12|23|93|12|23|2.74|---|---|---|

iota|11|27|93|11|28|2.44|---|---|---|

theta|12|30|93|12|31|2.30|4|10|94|4|10|---

eta|15|35|93|14|36|3.44|2.10|34|5|12|94|5|12|---

zeta|18|42|93|18|43|3.10|1.88|1.22|6|15|4|6|15|3.34|

epsilon|24|50|93|25|51|2.62|1.66|96|8|18|94|8|18|3.10|

delta|34|57|93|35|58|2.14|1.42|72|7|22|94|7|22|2.82|

gamma|49|68|93|50|69|1.68|1.04|64|10|26|93|10|27|2.50|

beta|36|53|93|37|54|2.08|1.56|52|7|14|93|7|14|3.44|

70

Maia

Celaeno

n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m	n	m
π	9	11	93	9	11	---	---	---	---	---	---	---	π	11	93	11	93	11	93	11	93	11	93	11	93	11	93
σ	9	11	93	9	11	---	---	---	---	---	---	---	σ	11	93	11	93	11	93	11	93	11	93	11	93	11	93
ξ	9	12	93	9	12	---	---	---	---	---	---	---	ξ	12	93	12	93	12	93	12	93	12	93	12	93	12	93
ν	9	14	93	9	14	---	---	---	---	---	---	---	ν	14	93	14	93	14	93	14	93	14	93	14	93	14	93
μ	9	17	93	9	17	---	---	---	---	---	---	---	μ	17	93	17	93	17	93	17	93	17	93	17	93	17	93
λ	11	20	93	11	20	---	---	---	---	---	---	---	λ	20	93	20	93	20	93	20	93	20	93	20	93	20	93
κ	12	23	93	12	23	---	---	---	---	---	---	---	κ	23	93	23	93	23	93	23	93	23	93	23	93	23	93
ι	11	27	93	11	28	---	---	---	---	---	---	---	ι	27	93	27	93	27	93	27	93	27	93	27	93	27	93
θ	12	30	93	12	31	---	---	---	---	---	---	---	θ	30	93	30	93	30	93	30	93	30	93	30	93	30	93
η	15	35	93	15	36	---	---	---	---	---	---	---	η	35	93	35	93	35	93	35	93	35	93	35	93	35	93
ζ	18	42	93	18	43	---	---	---	---	---	---	---	ζ	42	93	42	93	42	93	42	93	42	93	42	93	42	93
ε	24	50	93	25	51	---	---	---	---	---	---	---	ε	50	93	50	93	50	93	50	93	50	93	50	93	50	93
δ	34	57	93	35	58	---	---	---	---	---	---	---	δ	57	93	57	93	57	93	57	93	57	93	57	93	57	93
γ	49	68	93	50	69	---	---	---	---	---	---	---	γ	68	93	68	93	68	93	68	93	68	93	68	93	68	93
β	36	53	93	37	54	---	---	---	---	---	---	---	β	53	93	53	93	53	93	53	93	53	93	53	93	53	93

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gamma	0.1	0.3	0.5	0.7	0.9	1.1	1.3	1.5	1.7	1.9	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	5.5	5.7	5.9	6.1	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.1	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	11.9	12.1	12.3	12.5	12.7	12.9	13.1	13.3	13.5	13.7	13.9	14.1	14.3	14.5	14.7	14.9	15.1	15.3	15.5	15.7	15.9	16.1	16.3	16.5	16.7	16.9	17.1	17.3	17.5	17.7	17.9	18.1	18.3	18.5	18.7	18.9	19.1	19.3	19.5	19.7	19.9	20.1	20.3	20.5	20.7	20.9	21.1	21.3	21.5	21.7	21.9	22.1	22.3	22.5	22.7	22.9	23.1	23.3	23.5	23.7	23.9	24.1	24.3	24.5	24.7	24.9	25.1	25.3	25.5	25.7	25.9	26.1	26.3	26.5	26.7	26.9	27.1	27.3	27.5	27.7	27.9	28.1	28.3	28.5	28.7	28.9	29.1	29.3	29.5	29.7	29.9	30.1	30.3	30.5	30.7	30.9	31.1	31.3	31.5	31.7	31.9	32.1	32.3	32.5	32.7	32.9	33.1	33.3	33.5	33.7	33.9	34.1	34.3	34.5	34.7	34.9	35.1	35.3	35.5	35.7	35.9	36.1	36.3	36.5	36.7	36.9	37.1	37.3	37.5	37.7	37.9	38.1	38.3	38.5	38.7	38.9	39.1	39.3	39.5	39.7	39.9	40.1	40.3	40.5	40.7	40.9	41.1	41.3	41.5	41.7	41.9	42.1	42.3	42.5	42.7	42.9	43.1	43.3	43.5	43.7	43.9	44.1	44.3	44.5	44.7	44.9	45.1	45.3	45.5	45.7	45.9	46.1	46.3	46.5	46.7	46.9	47.1	47.3	47.5	47.7	47.9	48.1	48.3	48.5	48.7	48.9	49.1	49.3	49.5	49.7	49.9	50.1	50.3	50.5	50.7	50.9	51.1	51.3	51.5	51.7	51.9	52.1	52.3	52.5	52.7	52.9	53.1	53.3	53.5	53.7	53.9	54.1	54.3	54.5	54.7	54.9	55.1	55.3	55.5	55.7	55.9	56.1	56.3	56.5	56.7	56.9	57.1	57.3	57.5	57.7	57.9	58.1	58.3	58.5	58.7	58.9	59.1	59.3	59.5	59.7	59.9	60.1	60.3	60.5	60.7	60.9	61.1	61.3	61.5	61.7	61.9	62.1	62.3	62.5	62.7	62.9	63.1	63.3	63.5	63.7	63.9	64.1	64.3	64.5	64.7	64.9	65.1	65.3	65.5	65.7	65.9	66.1	66.3	66.5	66.7	66.9	67.1	67.3	67.5	67.7	67.9	68.1	68.3	68.5	68.7	68.9	69.1	69.3	69.5	69.7	69.9	70.1	70.3	70.5	70.7	70.9	71.1	71.3	71.5	71.7	71.9	72.1	72.3	72.5	72.7	72.9	73.1	73.3	73.5	73.7	73.9	74.1	74.3	74.5	74.7	74.9	75.1	75.3	75.5	75.7	75.9	76.1	76.3	76.5	76.7	76.9	77.1	77.3	77.5	77.7	77.9	78.1	78.3	78.5	78.7	78.9	79.1	79.3	79.5	79.7	79.9	80.1	80.3	80.5	80.7	80.9	81.1	81.3	81.5	81.7	81.9	82.1	82.3	82.5
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[[preprinted]] 72 [[/preprinted]]
 C 18851 Reduced to 85
 Vega Ap. 6 mu phi 748 | Vega Ap. 6 mu phi 749

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n
 | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

beta | 12 | 43 | 86 | 12 | 43 | 120 | 306 | 186 | | | | | | | |
~~delta~~ ~~gamma~~ | 20 | 61 | 84 | 20 | 62 |
 170 | 379 | 209 | | | | | | | | | | | |
~~epsilon~~ ~~delta~~ | 14 | 55 | 82 | 15 | 57 |
 139 | 360 | 221 | 16 | 58 | 86 | 57 | 16 | 145 | 360 | 215
~~kappa~~ ~~epsilon~~ | - | - | - | | | | | | | | 7 |
 47 | 86 | 46 | 7 | 087 | 320 | 233
~~zeta~~ ~~kappa~~ | - | - | - | | | | | | | | 25 |
 41 | 86 | 41 | 25 | 203 | 297 | 94
~~eta~~ ~~zeta~~ | - | - | - | | | | | | | | 1 | 27 |
 86 | 27 | 1 | 42 | 216 | 174
 eta | - | - | - | | | | | 1 | 10 | 86 | 10 | 1 | 42 | 106 | 64

C 18844 Sirius Ap. 1 mu phi 742 | C 18844 Reduced to - Sirius Ap. 1 mu phi 743

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n
 | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

beta | 47 | 53 | 54 | | | | | | | | | | | |
 gamma | 46 | 51 | 52 | | | | | | | | | | | |
 delta | 40 | 50 | 50 | | | | | | | | | | | |
 epsilon | - | - | - | | | | | | | | | | | |
 kappa | - | - | - | | | | | | | | | | | |
 zeta | - | - | - | | | | | | | | | | | |
 eta | - | - | - | | | | | | | | | | | |
 theta | - | - | - | | | | | | | | | | | |
 vu | - | - | - | | | | | | | | | | | |
 kappa | - | - | - | | | | | | | | | | | |
 lambda | - | - | - | | | | | | | | | | | |

The image shows two handwritten tables of astronomical data. The top table is for Vega (Ap. 6 mu phi 748) and the bottom table is for Sirius (Ap. 1 mu phi 742). Both tables are organized into columns for different measurements and calculations, with some entries in red ink. The tables are handwritten on aged paper and include various numerical values and symbols.

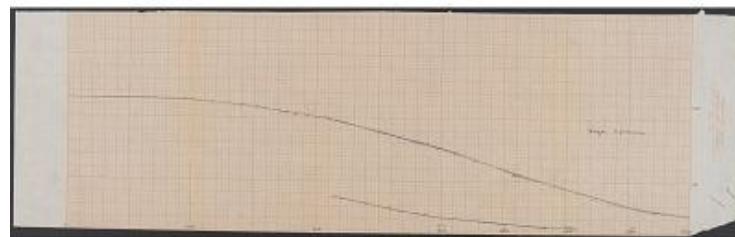
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Vega z prism

[[image - two line graphs plotted through data points]]

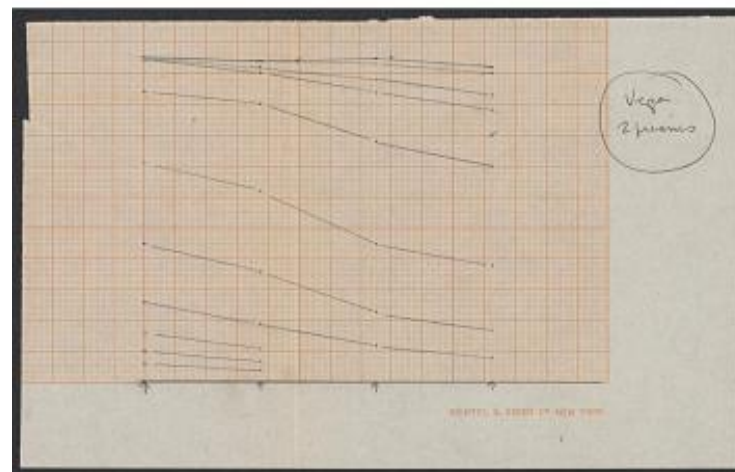
[[x axis: 200 - 500]]

[[y axis: 0 - 100]]



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[[image - several line graphs plotted through data points]]
Vega
2 prisms



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beta	- -					- -	- -										
gamma	- -	- -	- -	- -	- -	- -	- -										
delta	27	61	83	28	62	221	378	157	51	180	83	52	82	343	485	(142)	
epsilon	16	55	82	28	57	221	360	139	38	75	83	39	77	285	438	153	
kappa	35	49	82	36	51	268	339	7	162	72	83	63	74	382	425	43	
xij	3	34	82	3	35	053	262	209	20	62	83	20	63	170	382	212	
eta	0	14	81	0	15	034	139	>105	6	42	83	6	[[[[
h	j	^	[	[	4	]3	080	306	226							
theta	-1	4	81	-1	4	|	|	|	|	4	26	83	4	27	068	216	149
nu										2	16	83	2	16	050	145	95
kappa										3	11	83	3	11	059	113	54
lambda										2	9	83	2	9	050	100	50
mu										2	7	83	2	7	050	087	37

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[[preprinted]] 74 [[/preprinted]]

n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

[[no entries]]

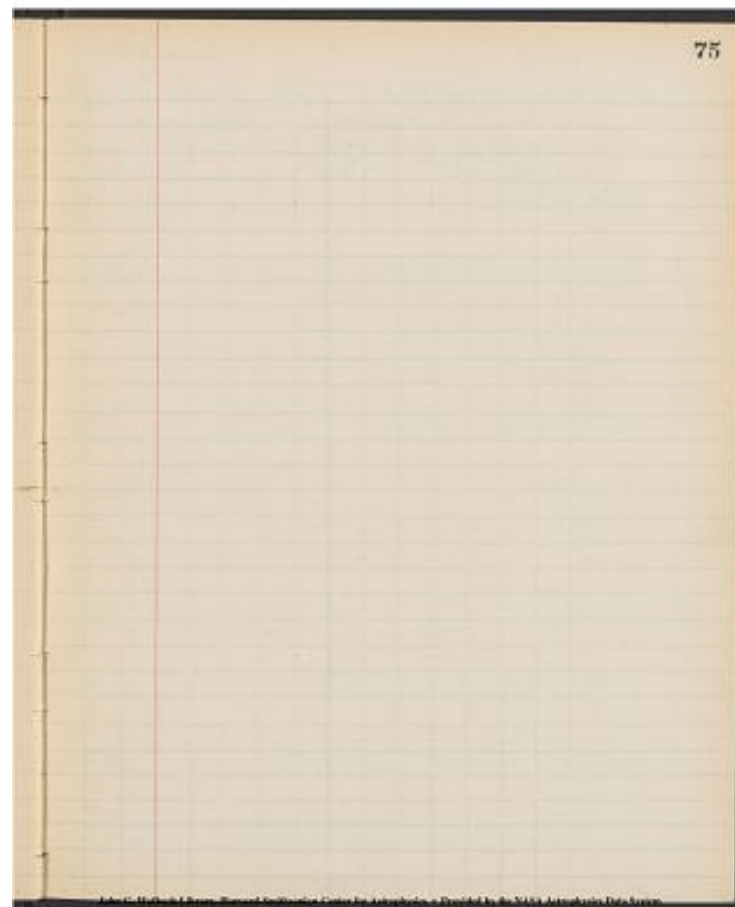
74

n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m

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[[printed]]75[[/printed]]

[[no entries]]



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[[preprinted]] 77 [[/preprinted]]
 No 5 || No 7
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m |
 1 | - | - | - | - | - | - | - | - | - | - | - |
 2 | | | | | | | | | | | |
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77

	No. 5						No. 7				
	n	m+n	l+m+n	mean n	mean m+n	[n]	n	m+n	l+m+n	mean n	mean m+n
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3											
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6											
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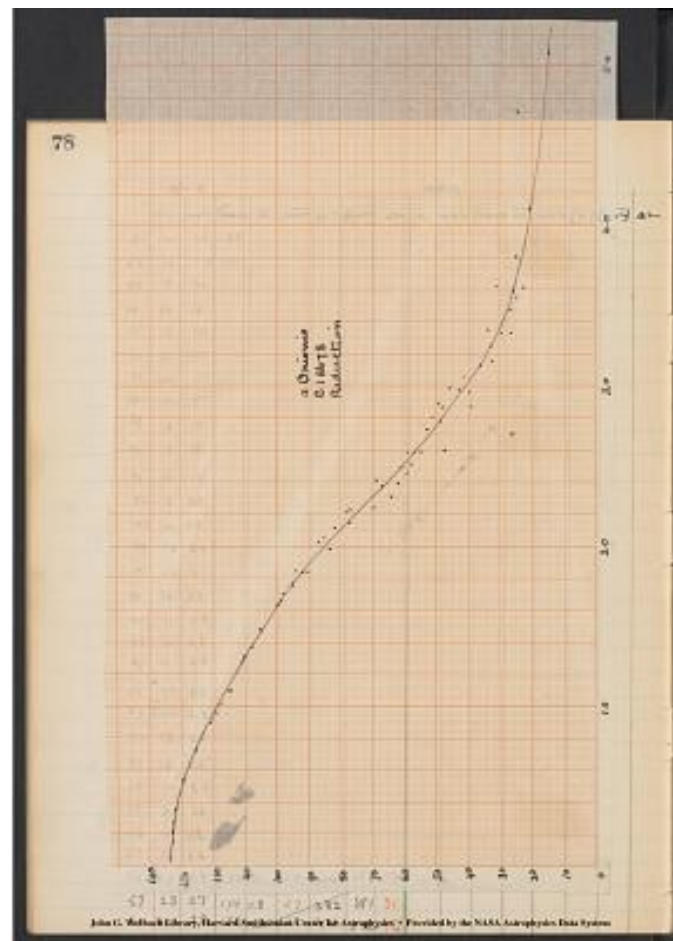
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[[preprinted]]78[[/preprinted]]

[[alpha symbol]] Orionis
C 18678
Reduction

[[image - line graph through data points]]

y axis: 0 - 140
x axis: 0 - 5.0



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[[preprinted]] 78 [[/preprinted]]
 No.1 || No.3
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
 31 | 10 | 15 | 134 | | | | - | - | | | |
 32 | 10 | 15 | 134 | | | | - | - | | | |
 33 | 9 | 16 | | | | | - | - | - | - | |
 34 | 10 | 16 | | | | | | | | | |
 35 | 11 | 16 | | | | | | | | | |
 36 | 11 | 17 | | | | | | | | | |
 37 | 10 | 17 | | | | | | | | | |
 38 | 11 | 17 | | | | | | | | | |
 39 | 13 | 17 | | | | | | | | | |
 40 | 9 | 18 | | | | | | | | | |
 41 | 10 | 19 | | | | | | | | | |
 42 | 11 | 20 | | | | | | | | | |
 43 | 12 | 20 | | | | | | | | | |
 44 | 13 | 20 | | | | | | | | | |
 45 | 12 | 21 | | | | | | | | | |
 46 | 14 | 22 | | | | | | | | | |
 47 | 11 | 22 | | | | | | | | | |
 48 | 12 | 22 | | | | | | | | | |
 49 | 11 | 22 | | | | | | | | | |
 50 | 13 | 23 | | | | | | | | | |
 51 | 11 | 23 | | | | | | | | | |
 52 | 13 | 24 | | | | | | | | | |
 53 | 18 | 25 | | | | | | | | | |
 54 | 15 | 25 | | | | | | | | | |
 55 | 20 | 26 | | | | | | | | | |
 56 | 15 | 26 | - | - | | | | | | | |
 57 | 16 | 26 | - | - | | | | | | | |
 58 | 21 | 27 | 134 | 21 | 27 | 404 | 351 |
~~59 | 23 | 27 | 134 | 2 | 1 | 351 | 31 |~~
~~60 | 20 | 28 | 134 | 20 | 28 | 420 | 346 |~~
~~74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 |~~

78

No. 1										No. 3									
1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
31	10	15	134																
32	10	15	134																
33	9	16																	
34	10	16																	
35	11	16																	
36	11	17																	
37	10	17																	
38	11	17																	
39	13	17																	
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54	15	25																	
55	20	26																	
56	15	26	-	-															
57	16	26	-	-															
58	21	27	134	21	27	404	351												
59	23	27	134	2	1	351	31												
60	20	28	134	20	28	420	346												
74	74	74	74	74	74	74	74												

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[[preprinted]] 79 [[/preprinted]]

No 5

E.oh

No. 7

m | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | m | m+n |

l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

31 | - | - | - | - | - | - | - | - | - |

32 | - | - | - | - | - | - | - | - | - |

33 | - | - | - | - | - | - | - | - | - |

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56 | 15 | 15 | 135 | 5 | 15

57 | - | - | - | - | -

58 | - | - | - | - | -

59 | - | - | - | - | -

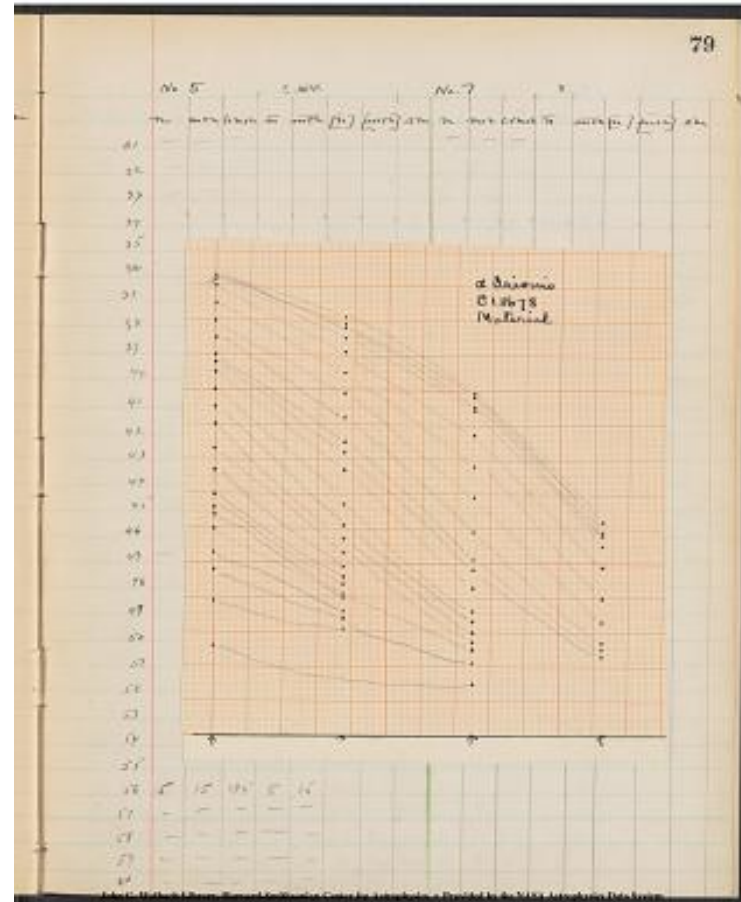
60 | - | - | - | - | -

[[image - several line graphs drawn through data points]]

alpha Orionis

C18678

Material



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No. 1										No. 2									
in	deg	hour	min	sec	lat	lon	alt	az	dist	in	deg	hour	min	sec	lat	lon	alt	az	dist
61	23	30	13	02	30	307	307	19											
62	22	30			28	307	307	19											
63	22	30			26	307	307	19											
64	18	42	1	18	32														
65	24	22			30	307	307	19											
66	26	40			28	307	307	19											
67	24	32			26	307	307	19											
68	22	35			24	307	307	19											
69	23	47			22	307	307	19											
70	24	35	24	33	20	307	307	19	34	22	23	19	19	19	19	19	19	19	19
71	26	40			18	307	307	19	10	47	26	19	19	19	19	19	19	19	19
72	26	42			16	307	307	19	10	47	26	19	19	19	19	19	19	19	19
73	26	40			14	307	307	19	10	47	26	19	19	19	19	19	19	19	19
74	17	40			12	307	307	19	10	47	26	19	19	19	19	19	19	19	19
75	18	48			10	307	307	19	10	47	26	19	19	19	19	19	19	19	19
76	23	50			8	307	307	19	10	47	26	19	19	19	19	19	19	19	19
77	28	52			6	307	307	19	10	47	26	19	19	19	19	19	19	19	19
78	35	54			4	307	307	19	10	47	26	19	19	19	19	19	19	19	19
79	46	56			2	307	307	19	10	47	26	19	19	19	19	19	19	19	19
80	38	58			0	307	307	19	10	47	26	19	19	19	19	19	19	19	19
81	30	50			34	307	307	19	10	47	26	19	19	19	19	19	19	19	19
82	20	40			32	307	307	19	10	47	26	19	19	19	19	19	19	19	19
83	12	30			30	307	307	19	10	47	26	19	19	19	19	19	19	19	19
84	22	30	19	32	28	307	307	19	10	47	26	19	19	19	19	19	19	19	19
85	40	20	12	47	26	307	307	19	10	47	26	19	19	19	19	19	19	19	19
86	23	33	10	27	24	307	307	19	10	47	26	19	19	19	19	19	19	19	19
87	43	22	13	47	22	307	307	19	10	47	26	19	19	19	19	19	19	19	19
88	40	25	10	43	20	307	307	19	10	47	26	19	19	19	19	19	19	19	19
89	47	22	10	43	18	307	307	19											

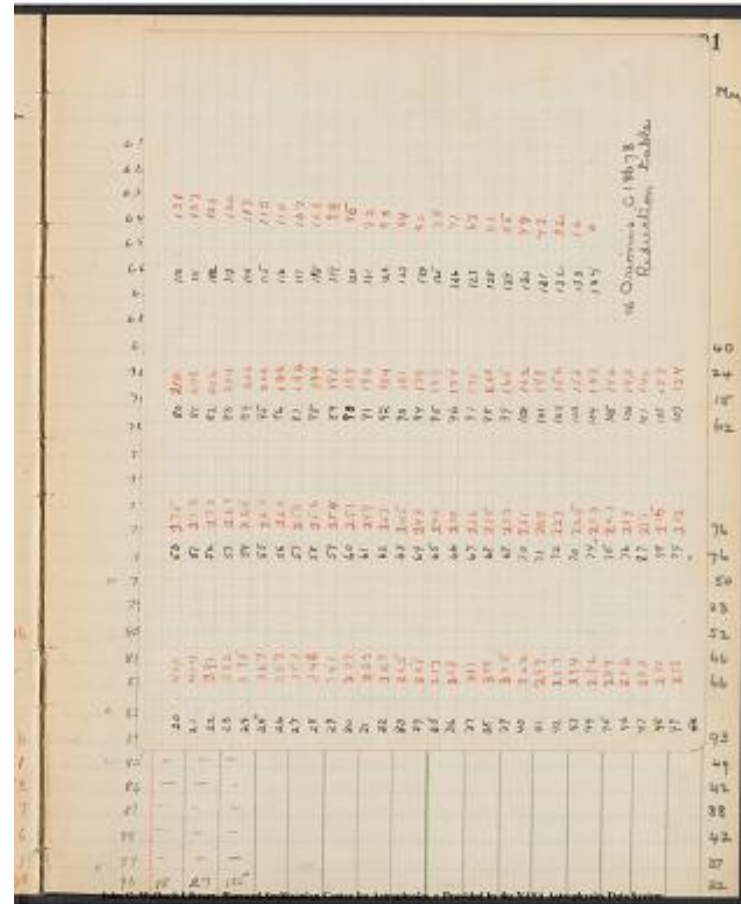
[n] | m+n | |m+m+n| mean n | mean m+n | [n] | [m+n] | delta m || n || m+n
|l+m+n| mean n | mean m+n | [n] | [m+n]
61 | 22 | 30 | 134 | 22 | 30 | 391 | [[strikethrough]]337 | [[strikethrough]]54
||
62 | 22 | 30 | " | 22 | [[strikethrough]]30[[/strikethrough]] |
[[strikethrough]]391[[/strikethrough]] | [[strikethrough]]337 |
[[strikethrough]]54 |
63 | 25 | 30 | " | [[strikethrough]]25[[/strikethrough]] |
[[strikethrough]]30[[/strikethrough]] | [[strikethrough]]367 |
[[strikethrough]]337 | [[strikethrough]]30[[/strikethrough]] | | | | | | |
64 | 18 | 32 | " | [[strikethrough]]18[[/strikethrough]] |
[[strikethrough]]32[[/strikethrough]]- | [[strikethrough]]- |
[[strikethrough]]-[[/strikethrough]] |
65 | 24 | 32 | " | [[strikethrough]]24[[/strikethrough]] |
[[strikethrough]]32[[/strikethrough]] | [[strikethrough]]375[[/strikethrough]] |
[[strikethrough]]329[[/strikethrough]] |
[[strikethrough]]46[[/strikethrough]] | | | | | | |
66 | 25 | 34 | " | [[strikethrough]]25[[/strikethrough]] |
[[strikethrough]]34[[/strikethrough]] | [[strikethrough]]367 | 321 | 46 | - | - | - |
- | | | | |
67 | 24 | 35 | " | [[strikethrough]]24[[/strikethrough]] |
[[strikethrough]]35[[/strikethrough]] | 375 | 317 | 58 | | - | - | - | | | | |
68 | 32 | 36 | " | [[strikethrough]]22[[/strikethrough]] | 36 | 329 | 313 | 16 | |
- | - | - | - | |
69 | 27 | 37 | " | 27 | 37 | 351 | 311 | 40 | - | - | - | | | | |
70 | 32 | 39 | 134 | 32 | 39 | 329 | 305 | 24 | | 14 |
3[[strikethrough]]0[[/strikethrough]]1 | 134 | 14 | 31 | | | |
71 | 35 | 40 | " | 35 | 40 | 317 | 302 | 15 | 17 | 31 | 134 | 17 | 31 | | |
72 | 26 | 42 | " | 26 | 42 | 359 | 297 | 62 | 15 | 32 | 134 | 15 | 32 | | |
73 | 22 | 43 | " | [[strikethrough]]22[[/strikethrough]] |
[[strikethrough]]43[[/strikethrough]] | [[strikethrough]]391[[/strikethrough]] |
294 | 97 | 13 | 32 | 134 | 13 | 32 | |
74 | 17 | 46 | " | [[strikethrough]]17[[/strikethrough]] | 46 | 466 | 286 |
[[strikethrough]]180[[/strikethrough]] | 12 | 33 | 134 | 12 | 33 | | |
75 | 18 | 48 | " | [[strikethrough]]18[[/strikethrough]] | 48 | - | - | - | | 13 | 34 |
134 | 13 | 34 | |
76 | 27 | 50 | " | 27 | 50 | 351 | 275 | 76 | 14 | 34 | 134 | 14 | 34 | | |
77 | 28 | 52 | " | 28 | 52 | 346 | 270 | 76 | | - | - | - | - | | |
78 | 35 | 53 | " | 35 | 53 | 317 | 267 | 50 | 17 | 36 | 134 | 17 | 36 | | - | |
79 | 46 | 55 | " | 46 | 55 | 286 | 263 | 23 | 18 | 37 | 134 | 18 |
[[strikethrough]]37[[/strikethrough]] | - | - | - |
80 | 38 | 58 | " | 38 | 58 | 308 | 256 | 52 | 22 | 39 | 134 |
[[strikethrough]]22[[/strikethrough]] | 39 | 391 | 305 | 86 |
81 | 30 | 60 | " | 30 | 60 | 337 | 251 | 66 | 19 | 40 | 134 |
[[strikethrough]]19[[/strikethrough]] | [[strikethrough]]40[[/strikethrough]] |
- | [[strikethrough]]-[[/strikethrough]] |
82 | [[strikethrough]]1[[/strikethrough]]26 | 62 | " | 36 | 62 | 313 | 247 | 66 |
14 | 40 | 134 | 14 | 40 | - | [[strikethrough]]-[[/strikethrough]] |
[[strikethrough]]-[[/strikethrough]] |
83 | 19 | 64 | " | [[strikethrough]]19[[/strikethrough]] |
[[strikethrough]]64[[/strikethrough]] | [[strikethrough]]-[[/strikethrough]] |
^((420)) | - ^([[strikethrough]](243)[[/strikethrough]]) | -
^([[strikethrough]](177)[[/strikethrough]]) | 13 |
4[[strikethrough]]0[[/strikethrough]]1 | 134 |
[[strikethrough]]13[[/strikethrough]] | [[strikethrough]]41[[/strikethrough]] |
- | [[strikethrough]]-[[/strikethrough]] |
84 | 32 | 66 | 134 | [[strikethrough]]6[[/strikethrough]]32 | 67 | 329 | 236 |
93 | 20 | 43 | 134 | 20 | [[strikethrough]]43[[/strikethrough]] | 420 |

~~294~~ | 126
85 | 49 | 70 | 134 | 49 | 71 | 278 | 229 | 49 || 25 | 46 | 134 |
~~25~~ | 46 |
~~367~~ | 386 | 81
86 | 59 | 73 | 134 | 59 | 74 | 254 | 223 | 31 ||
~~2~~ | 31 | 48 | 134 | 31 | 48 | 333 | 281 | 52
87 | 63 | 77 | 134 | 63 | 78 | 245 | 215 | 30 || 33 | 49 | 134 | 33 | 49 | 325 |
378 | 47
88 | 60 | 78 | 134 | 60 | 79 | 251 | 212 | 39 || 34 |
~~4~~ | 50 | 134 | 34 | 50 | 321 | 275 | 46
89 | 67 | 82 | 134 | 68 | 83 | 235 | 204 | 31 || 36 | 52 | 134 | 36 | 52 | 313 |
370 | 43
90 | 70 | 83 | 135 | 70 | 83 | 231 | 204 | 27 || 39 | 53 | 134 | 39 | 53 | 305 |
267 | 38

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[sideways looseleaf data paper overlying page]

20 420
21 404
22 391
23 382
24 375
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 102 156
 103 153
 104 149
 105 146
 106 143
 107 140
 108 137
 109 134
 110 131
 111 127
 112 123
 113 120
 114 117
 115 113
 116 110
 117 [117 or 107?]
 118 103
 119 98
 120 96
 121 92
 122 88
 123 84
 124 80
 125 75
 126 71
 127 67
 128 61
 129 55
 130 49
 131 43
 132 32
 133 16
 134 0

a Orionis C 18g78 Reduction table
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[underneath page]
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 ...Mean

61...
62...
63...
64...
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68...
69... 40
70... 24
71... 15
72... 62
73...
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77... 76
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90 18 27 135... 32

[/underneath page]

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[[preprinted]]82[[/preprinted]]

No.1 No.3

|n|m+n|+m+n|mean n|mean m+n|mean n|mean m+n|delta m
m|n|m+n|+m+n|mean n|mean m+n|mean n|mean m+n|delta m

91|72|84|135|72|84|227|202|25|39|53|134|39|53|305|267|38
92|79|87|135|79|87|212|196|16|48|55|134|48|55|281|263|18
93|72|89|135|72|89|227|191|36|42|56|134|42|56|297|260|37
94|70|90|135|70|90|231|189|42|39|57|134|39|57|305|258|47
95|65|92|135|65|92|240|184|64|37|59|134|37|59|311|254|57
96|60|93|135|60|93|251|181|70|33|60|134|33|60|325|251|74
97|81|95|135|81|95|208|177|31|49|61|134|49|61|278|249|29
98|66|96|135|66|96|238|174|64|37|63|134|37|63|311|245|66
99|82|98|135|82|98|206|168|38|46|65|134|46|65|286|240|46
100|82|98|135|82|98|206|168|38|46|65|134|46|65|286|240|46
101|74|100|135|74|100|223|162|61|43|67|134|43|67|294|235|59
102|88|100|135|88|100|215|151|55|61|134|55|61|278|235|59
^[[194]]|162|[[/strickethrough]]533[[/strickethrough]]
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^[[45]]|68|134|61|69|249|233|16
103|81|101|135|81|101|208|159|49|53|69|134|53|70|267|231|36
104|69|102|135|69|102|233|156|77|40|70|134|40|71|302|229|73
105|89|102|135|89|102|191|156|35|56|71|134|56|72|260|227|33
106|94|103|135|94|103|179|153|26|61|72|134|61|73|249|225|24
107|96|103|135|96|103|174|153|21|65|73|134|65|74|240|223|17
108|92|104|135|92|104|184|149|35|59|74|134|59|75|254|221|33
109|73|104|135|73|104|225|149|76|40|75|134|40|76|302|219|83
110|87|105|135|82|105|196|146|50|54|77|134|54|77|265|217|48
111|90|106|135|90|106|189|143|46|60|77|134|60|78|251|215|36
112|90|107|135|90|107|189|140|49|47|78|134|47|79|283|212|71
113|90|107|135|90|107|189|140|49|47|80|134|47|80|283|210|73
114|88|107|135|88|107|194|140|54|45|81|134|45|82|289|206|83
115|88|108|135|88|108|194|137|57|55|82|134|55|83|263|204|59
a|92|109|135|92|109|184|134|50|60|83|134|60|84|251|202|49
b|94|109|135|94|109|179|134|44|61|83|134|61|84|249|202|47
c|101|109|135|101|109|159|134|25|71|84|134|72|85|227|200|27
d|99|110|135|99|110|165|131|34|69|85|134|70|86|231|198|35
e|99|110|135|99|110|165|131|34|67|85|134|68|86|235|198|37

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[[preprinted]]84[[/preprinted]]
 No 1 No 3
 |n|m+n|+m+n|mean n|mean m+n|mean n|mean m+n|delta
 m|n|m+n|+m+n|mean n|mean m+n|mean n|mean m+n|delta m
 116|84|110|135|84|110|202|131|71|51|86|134|51|87|273|196|67
 117|92|111|135|92|111|184|12|57|62|87|134|62|88|247|194|53
 118|100|111|135|100|111|162|127|35|71|87|134|72|88|227|194|33
 119|98|112|135|98|112|168|123|45|67|88|134|68|89|235|191|44
 120|98|112|135|98|112|168|123|45|65|88|134|65|89|240|191|49
 121|91|113|135|91|113|186|120|66|57|89|134|57|90|258|189|69
 122|94|113|135|94|113|179|120|59|59|89|134|59|90|254|189|55
 123|101|113|135|101|113|159|120|39|57|91|134|57|92|258|184|74
 124|93|114|135|93|114|181|117|[[arrow pointing to top right corner]] 64|-
 |---|---|---|
 125|71|115|135|[[strikethrough]]229[[/strikethrough]]
 ^[[71]]|[[strikethrough]]113[[/strikethrough]]
 ^[[115]]|229|113|116|37|93|134|37|93|311|182|129
 126|95|115|135|95|115|177|113|64|58|93|134|58|94|256|179|77
 127|102|115|135|102|115|156|113|63|72|94|134|73|95|225|177|48
 128|105|116|135|105|116|146|110|36|76|94|134|77|95|217|177|40
 129|99|117|135|99|117|165|107|58|69|95|134|[[strikethrough]]90[[/striket
 hrough]] ^[[70]]|96|[[strikethrough]]189[[/strikethrough]]
 ^[[231]]|174|[[strikethrough]]15[[/strikethrough]] ^[[57]]
 130|98|117|135|98|117|168|107|61|65|95|134|65|96|240|174|66
 131|104|118|135|104|118|149|103|46|74|96|134|75|97|221|171|50
 132|110|118|135|110|118|131|103|28|---|134|---|---|
 133|97|118|135|97|118|171|103|68|65|97|134|65|98|240|168|72
 134|99|118|135|99|118|165|103|62|---|134|---|---|
 135|108|119|135|108|119|137|98|39|80|97|134|81|98|208|208|168|40
 136|94|119|135|[[strikethrough]]179[[/strikethrough]]
 ^[[94]]|[[strikethrough]]98[[/strikethrough]]
 ^[[119]]|179|98|81|58|98|134|58|99|256|65|91
 137|98|120|135|98|120|168|96|72|66|99|134|66|100|238|162|76
 138|103|120|135|103|120|153|96|57|71|99|134|72|100|227|162|65
 139|115|121|135|115|121|113|92|19|87|100|135|87|100|196|162|34
 a|116|121|135|116|121|110|92|18|92|101|135|92|101|184|159|25
 140|112|122|135|112|122|123|88|35|82|101|135|82|101|206|159|47
 141|120|122|135|120|122|95|88|7|95|101|135|95|101|177|159|18
 142|107|123|135|107|123|140|84|56|75|102|135|75|102|221|156|65
 143|119|124|135|119|124|98|81|18|94|103|135|94|103|179|153|26
 144|116|124|135|116|124|110|80|30|90|103|135|90|103|189|153|36

84

No 1										No 3									
116	84	110	135	84	110	202	131	71	51	86	134	51	87	273	196	67			
117	92	111	135	92	111	184	12	57	62	87	134	62	88	247	194	53			
118	100	111	135	100	111	162	127	35	71	87	134	72	88	227	194	33			
119	98	112	135	98	112	168	123	45	67	88	134	68	89	235	191	44			
120	98	112	135	98	112	168	123	45	65	88	134	65	89	240	191	49			
121	91	113	135	91	113	186	120	66	57	89	134	57	90	258	189	69			
122	94	113	135	94	113	179	120	59	59	89	134	59	90	254	189	55			
123	101	113	135	101	113	159	120	39	57	91	134	57	92	258	184	74			
124	93	114	135	93	114	181	117	[[arrow pointing to top right corner]]	64	---	---	---	---	---	---	---			
125	71	115	135	[[strikethrough]]229	[[/strikethrough]]	---	---	---	---	---	---	---	---	---	---	---			
126	95	115	135	95	115	177	113	64	58	93	134	58	94	256	179	77			
127	102	115	135	102	115	156	113	63	72	94	134	73	95	225	177	48			
128	105	116	135	105	116	146	110	36	76	94	134	77	95	217	177	40			
129	99	117	135	99	117	165	107	58	69	95	134	[[strikethrough]]90	[[/strikethrough]]	---	---	---			
130	98	117	135	98	117	168	107	61	65	95	134	65	96	240	174	66			
131	104	118	135	104	118	149	103	46	74	96	134	75	97	221	171	50			
132	110	118	135	110	118	131	103	28	---	134	---	---	---	---	---	---			
133	97	118	135	97	118	171	103	68	65	97	134	65	98	240	168	72			
134	99	118	135	99	118	165	103	62	---	134	---	---	---	---	---	---			
135	108	119	135	108	119	137	98	39	80	97	134	81	98	208	208	168	40		
136	94	119	135	[[strikethrough]]179	[[/strikethrough]]	---	---	---	---	---	---	---	---	---	---	---			
137	98	120	135	98	120	168	96	72	66	99	134	66	100	238	162	76			
138	103	120	135	103	120	153	96	57	71	99	134	72	100	227	162	65			
139	115	121	135	115	121	113	92	19	87	100	135	87	100	196	162	34			
a	116	121	135	116	121	110	92	18	92	101	135	92	101	184	159	25			
140	112	122	135	112	122	123	88	35	82	101	135	82	101	206	159	47			
141	120	122	135	120	122	95	88	7	95	101	135	95	101	177	159	18			
142	107	123	135	107	123	140	84	56	75	102	135	75	102	221	156	65			
143	119	124	135	119	124	98	81	18	94	103	135	94	103	179	153	26			
144	116	124	135	116	124	110	80	30	90	103	135	90	103	189	153	36			

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No 5 | No 7

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n
| l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | |

116 | 25 | 52 | 185 | ~~25~~ | 52 | 367 | 270 | 97
[[/strikethrough]] | 8 | 25 | 135 | 8 | | | 69
117 | 33 | 52 | 135 | 33 | 52 | 325 | 270 | 55 | - | - | - | - | - | - | 55
118 | 41 | 53 | 135 | 41 | 53 | 299 | 267 | 32 | 18 | 25 | 135 | 18 | 25 | | |
| 33
119 | 35 | 54 | 135 | 35 | 54 | 317 | 265 | 52 | 15 | 25 | 135 | 15 | 25 | | |
| 47
120 | 34 | 54 | 135 | 34 | 54 | 321 | 265 | 56 | 15 | 25 | 135 | 15 | 25 | | |
| 50
121 | 28 | 55 | 135 | 28 | 55 | 346 | 263 | 83 | 17 | 26 | 135 | 17 | 26 | | |
| 73
122 | 32 | 56 | 135 | 32 | 56 | 329 | 260 | 69 | 19 | 26 | 135 | 19 | 26 | | |
| 61
123 | 42 | 57 | 135 | ~~42~~ | 57 | 297 | 258 | 39
[[/strikethrough]] | 16 | 26 | 135 | 16 | 26 | | | 39/76
124 | 28 | 58 | 135 | 28 | 58 | 346 | 256 | 90 | 15 | 27 | 135 | 15 | 27 | | |
| " [[ditto for 76]]
125 | 20 | 59 | 135 | ~~420~~ | 254 [[/strikethrough]] | 20 | 59 |
[[/strikethrough]] | 420 | 254 | 166 [[/strikethrough]] | 12 | 27 | 135 | 12 | 27 |
| - | 127
126 | 21 | 60 | 135 | ~~21~~ | 60 | 404 | 251 | 153
[[/strikethrough]] | 15 | 23 | 135 | 15 | 28 | | | - | 70
127 | 39 | 61 | 135 | 39 | 61 | 305 | 249 | 56 | 18 | 28 | 135 | 18 | 28 | | |
| - | 59
128 | 43 | 62 | 135 | 43 | 62 | 294 | 247 | 47 | 22 | 28 | 135 |
[[/strikethrough]] | 22 | 26 | 391 | 346 | 45 [[/strikethrough]] | 41
129 | 35 | 62 | 135 | 35 | 62 | 317 | 247 | 70 | 20 | 28 | 135 |
[[/strikethrough]] | 20 | 28 | 420 | 346 | 74 [[/strikethrough]] | 62
130 | 34 | 63 | 135 | 34 | 63 | 321 | 245 | 76 | 17 | 27 | 135 |
[[/strikethrough]] | 17 | 29 | - | - | - | [[/strikethrough]] | 68
131 | 38 | 64 | 135 | 38 | 64 | 308 | 243 | 65 | 20 | 29 | 135 |
[[/strikethrough]] | 20 | 24 | 420 | 341 | 79 [[/strikethrough]] | 54
132 | 55 | 64 | 135 | 55 | 64 | 263 | 243 | 20 | 24 | 30 | 135 |
[[/strikethrough]] | 24 | 30 | 375 | 337 | 38 [[/strikethrough]] | 24
133 | 35 | 65 | 135 | 35 | 65 | 317 | 240 | 77 | 17 | 30 | 135 |
[[/strikethrough]] | 17 | 30 | - | 337 | - | [[/strikethrough]] | 72
134 | 38 | 65 | 135 | 38 | 65 | 308 | 240 | 68 | 17 | 21 | 135 |
[[/strikethrough]] | 17 | 31 | - | - | - | [[/strikethrough]] | 65
135 | 46 | 66 | 135 | 46 | 66 | 286 | 238 | 48 | 24 | 31 | 135 |
[[/strikethrough]] | 24 | 31 | 375 | 333 | 42 [[/strikethrough]] | 42
136 | 30 | 68 | 136 | 30 | 67 | 337 | 236 | 91 | 15 | 32 | 135 |
[[/strikethrough]] | 15 | 32 | - | - | - | [[/strikethrough]] | 88
137 | 35 | 69 | 136 | 35 | 68 | 317 | 235 | 82 | 16 | 33 | 135 |
[[/strikethrough]] | 16 | 33 | - | - | - | [[/strikethrough]] | 77
138 | 38 | 70 | 136 | 38 | 69 | 308 | 233 | 75 | 19 | 33 | 135 |
[[/strikethrough]] | 19 | 33 | - | - | - | [[/strikethrough]] | 66
139 | 53 | 70 | 136 | 53 | 69 | 267 | 233 | 34 | 23 | 34 | 126 |
[[/strikethrough]] | 23 | 34 | 382 | 321 | 61 [[/strikethrough]] | 29
a | 58 | 71 | 136 | 56 | 70 | 256 | 231 | 25 | 28 | 35 | 136 | [[/strikethrough]]
25 | 35 | 346 | 317 | 29 [[/strikethrough]] | 23
140 | 48 | 72 | 136 | 48 | 71 | 281 | 229 | 52 | 22 | 35 | 136 |
[[/strikethrough]] | 22 | 35 | 391 | 317 | 74 [[/strikethrough]] | 45
141 | 61 | 72 | 136 | 61 | 71 | 249 | 229 | 20 | 31 | 36 | 136 |
[[/strikethrough]] | 31 | 36 | 333 | 313 | 20 [[/strikethrough]] | 15

142 | 40 | 74 | 136 | 40 | 73 | ~~226~~ 302 |
225 | ~~000~~ 77 | 20 | 37 | 136 |
~~20~~ | 37 | 420 | 311 | 109 ~~66~~
143 | 62 | 74 | 136 | 62 | 73 | ~~225~~ 247 |
225 | ~~000~~ 22 | 29 | 38 | 136 | 29 | 28 |
341 | 308 | 33 | 25
144 | 55 | 75 | 136 | 55 | 74 | ~~223~~ 263 |
223 | ~~000~~ 40 | 27 | 39 | 136 | 27 | 39 |
351 | 305 | 46 | 38

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175	126	132	135	126	132	71	32	39	104	116	135	104
116	149	110	39									

[illegible]

174 | 129 | 132 | 135 | 126 | 132 | 55 | 32 | 23 || 111 | 117 | 135 | 111 |
117 | 127 | 107 | 20

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No 5. | No 7

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| l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | M

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305	28	24													
146	66	78	136	66	77	238	217	21	33	40	136	33	40	325	
302	23	18													
147	56	78	136	56	77	260	217	43	25	41	136				
			25	41	367	299	68							40	|
148	47	79	136	47	78	283	215	68	24	42	136				|
			24	42	375	297	78							64	|
149	58	80	136	58	79	256	212	44	26	42	136	26	42	359	|
297	62	47													|
150	66	80	136	66	79	238	212	26	32	43	136	32	43	329	|
294	35	30													|
151	66	81	136	66	80	238	210	28	33	43	136	33	43	325	|
294	31	28													|
152	48	81	136	48	80	281	212	44	26	42	136	26	42	359	|
90	71														|
153	64	82	136	64	81	243	208	35	32	45	136	32	45	329	|
289	40	34													|
154	66	83	136	66	82	238	206	32	34	45	136	34	45	321	|
289	32	32													|
155	64	84	136	64	83	243	204	39	30	46	136	30	46	337	|
286	51	42													|
156	57	84	136	57	83	258	204	54	27	46	136	27	46	351	|
286	65	52													|
157	61	85	136	61	84	249	202	47	28	47	136	28	47	346	|
283	63	48													|
158	61	86	136	61	85	249	200	49	30	48	136	30	48	337	|
281	56	50													|
159	56	87	136	56	86	260	193	67	28	49	136	28	49	346	|
278	68	60													|
160	62	87	136	62	86	247	193	54	30	49	136	30	49	337	|
278	59	52													|
161	70	88	136	69	87	233	196	37	34	50	136	34	50	321	|
275	46	38													|
162	75	89	136	74	88	223	194	29	36	51	136	36	51	313	|
273	40	30													|
163	72	90	136	71	89	229	191	38	39	52	136	39	52	305	|
270	65	43													|
164	84	90	136	83	89	204	191	13	43	52	136	43	52	294	|
270	24	16													|
165	83	91	136	82	90	206	189	17	44	53	136	44	53	292	|
267	25	20													|
166	79	91	136	78	90	215	189	26	42	53	136	42	53	297	|
267	30	26													|
167	82	92	136	81	91	208	186	22	45	54	136	45	54	289	|
265	24	22													|
168	72	92	136	71	91	229	186	43	36	54	136	36	54	313	|
265	48	44													|
169	71	93	136	70	92	231	184	47	36	55	136	36	55	313	|
263	50	46													|
170	82	94	136	81	93	208	181	27	44	55	136	44	55	292	|
263	29	26													|
171	80	94	136	79	93	212	181	31	42	56	136	42	56	297	|
260	37	32													|

172	78	94	136	77	93	217	181	36	41	56	136	41	56	299
260	39	35												
173	73	95	136	72	94	227	179	48	37	56	136	37	56	311
260	51	44												
174	85	95	136	84	94	202	179	23	44	51	126	44	57	292
255	34	25												

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No. 1 No. 3

|n|m+n||m+n|mean n|mean m+n|[n]||m+n|delta m|n|m+n||m+n|mean
n|mean m+n|[n]||m+n|delta m

175|130|132|135|130|132|49|32|17|115|117|135|115|117|113|107|6
176|129|132|135|129|132|55|32|23|113|118|135|113|118|120|103|17
177|---|---|---|---|109|118|135|109|118|134|103|31
178|126|132|135|126|132|71|32|39|108|119|135|108|119|137|98|39
179|128|133|135|128|133|61|16|45|110|119|135|110|119|131|98|33
180|---|133|---|---|111|119|135|111|119|127|98|29
181|132|133|135|132|133|32|16|16|117|120|135|117|120|107|96|11
182|129|133|135|129|133|55|16|39|111|120|135|111|120|127|96|31
183|1133|135|128|133|61|16|45|109|120|135|109|120|134|96|38
184|128|133|135|128|133|61|16|45|109|120|135|109|120|134|96|38
185|128|133|135|128|133|61|16|45|107|120|135|109|120|134|96|38
186|129|135|135|129|133|55|16|39|111|121|135|111|121|127|92|35
187|128|133|136|127|132|67|32|35|109|121|135|109|121|134|92|42
188|129|133|136|128|132|61|32|29|110|121|135|110|121|131|92|39
189|129|133|136|128|132|61|32|29|111|121|135|111|121|127|92|35
190|130|133|136|129|132|55|32|23|113|121|135|113|121|120|92|28
191|131|133|136|130|132|49|32|17|116|121|135|116|121|110|92|18
192|130|133|136|129|132|55|32|23|115|121|135|115|121|113|92|21
193|130|133|136|129|132|55|32|23|113|121|135|113|121|120|92|30
194|130|133|136|129|132|55|32|23|116|121|135|116|121|110|92|18
195|131|133|136|130|132|49|32|17|113|120|135|113|120|120|96|24
196|---|---|---|---|116|120|135|116|120|110|96|14
197|---|---|---|---|116|120|135|116|120|110|96|14
198|122|133|136|121|132|92|32|60|100|119|135|100|119|162|98|64
199|126|133|136|125|132|75|32|43|105|119|135|105|119|146|98|48
200|127|132|136|126|131|71|43|28|108|118|136|107|117|140|107|33
201|128|132|136|127|131|67|43|24|109|118|136|108|117|137|107|30
202|122|132|136|121|131|92|43|49|102|117|136|101|116|159|110|49
203|125|131|136|124|130|80|49|31|105|117|136|104|116|149|110|39
204|124|131|136|123|130|84|49|35|104|116|136|103|115|153|113|40

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No 5. | No 7

| | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n
| l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | |

175 | 90 | 95 | 136 | 89 | 94 | 191 | 179 | 12 | 51 | 58 | 136 | 51 | 58 | 273 |
256 | 17 | 13 |
176 | 86 | 96 | 136 | 85 | 95 | 200 | 177 | 24 | 47 | 58 | 136 | 47 | 58 | 283 |
256 | 27 | 23 |
177 | 81 | 97 | 136 | 80 | 96 | 210 | 174 | 36 | 43 | 59 | 136 | 43 | 59 | 294 |
254 | 40 | 36 |
178 | 79 | 97 | 136 | 78 | 96 | 215 | 174 | 41 | 40 | 59 | 136 | 40 | 59 | 302 |
250 | 48 | 42 |
[[symbol-check mark]] 179 | 88 | 98 | 137 | 82 | 99 | 206 | 171 | 35 | 43 |
69 | 136 | 45 | 59 | 289 | 254 | 35 | 37 |
180 | - | - | 137 | - | - | - | - | - | - | - | - | - | - | 29 |
181 | 94 | 98 | 137 | 93 | 97 | 181 | 171 | 10 | 57 | 60 | 136 | 57 | 60 | 258 |
251 | 07 | 11 |
182 | 84 | 99 | 137 | 83 | 98 | 204 | 168 | 35 | 46 | 60 | 136 | 46 | 60 | 286 |
251 | 35 | 35 |
183 | 80 | 99 | 137 | 79 | 98 | 212 | 168 | 44 | 43 | 61 | 136 | 43 | 61 | 294 |
249 | 45 | 43 |
184 | 81 | 99 | 137 | 80 | 98 | 210 | 168 | 42 | 41 | 61 | 136 | 41 | 61 | 299 |
249 | 50 | 44 |
185 | 80 | 99 | 137 | 79 | 98 | 212 | 168 | 44 | 40 | 61 | 136 | 40 | 61 | 302 |
249 | 53 | 45 |
186 | 84 | 99 | 137 | 83 | 98 | 204 | 168 | 36 | 44 | 61 | 136 | 44 | 61 | 292 |
249 | 43 | 38 |
187 | 80 | 99 | 137 | 79 | 98 | 212 | 168 | 44 | 41 | 62 | 136 | 41 | 62 | 299 |
247 | 52 | ~~46~~ 43 |
[[symbol-check mark]] 188 | 84 | 99 | 137 | 83 | 96 | 204 | 168 | 36 | 45 |
62 | 136 | 45 | 62 | 289 | 247 | 42 | 36 |
189 | 83 | 100 | 137 | 82 | 99 | 206 | 165 | 41 | 46 | 62 | 136 | 46 | 62 | 286 |
247 | 39 | 36 |
190 | 87 | 100 | 137 | 89 | 99 | 198 | 165 | 33 | 47 | 62 | 136 | 47 | 62 | 283 |
247 | 36 | 30 |
191 | 93 | 100 | 137 | 92 | 99 | 184 | 165 | 19 | 53 | 62 | 136 | 53 | 62 | 267 |
247 | 20 | 18 |
192 | 89 | 99 | 137 | 88 | 98 | 194 | 168 | 26 | 50 | 62 | 136 | 50 | 62 | 275 |
247 | 28 | 24 |
193 | 89 | 99 | 137 | 88 | 98 | 194 | 168 | 26 | 48 | 62 | 136 | 48 | 62 | 281 |
247 | 34 | 28 |
194 | 93 | 99 | 137 | 92 | 98 | 184 | 168 | 16 | 55 | 62 | 136 | 55 | 62 | 263 |
247 | 16 | 18 |
195 | 88 | 99 | 137 | 87 | 98 | 196 | 168 | 28 | 46 | 61 | 136 | 46 | 61 | 286 |
249 | 37 | 26 |
196 | 91 | 99 | 137 | 90 | 98 | 189 | 168 | 21 | 51 | 61 | 136 | 51 | 61 | 273 |
249 | 24 | 20 |
197 | - | - | 137 | - | - | - | - | - | 54 | 61 | 136 | 54 | 61 | 265 | 249 | 16 | 15 |
198 | 67 | 97 | 137 | 68 | 96 | 235 | 174 | 61 | 30 | 59 | 137 | 30 | 58 | 337 |
256 | 81 | 66 |
199 | 74 | 96 | 137 | 73 | 95 | 225 | 177 | 48 | 36 | 58 | 137 | 36 | 57 | 313 |
256 | 81 | 66 |
[[symbol-check mark]] 200 | 77 | 95 | 137 | 76 | 94 | 219 | 179 | 40 | 42 |
58 | 137 | 41 | 57 | 299 | 258 | 41 | 36 |
201 | 82 | 95 | 137 | 81 | 94 | 208 | 179 | 29 | 41 | 57 | 137 | 40 | 56 | 302 |
260 | 42 | 31 |
202 | 69 | 94 | 137 | 68 | 93 | 235 | 181 | 54 | 31 | 56 | 137 | 31 | 55 | 333 |
263 | 70 | 55 |
203 | 74 | 92 | 137 | 73 | 91 | 225 | 186 | 39 | 35 | 55 | 137 | 35 | 54 | 317 |
265 | 52 | 40 |

204 | 72 | 91 | 137 | 71 | 90 | 229 | 189 | 40 | 36 | 54 | 137 | 36 | 53 | 313 |
267 | 46 | 40

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No.1 | No.3

n|m+n|+m+n|mean n|mean m+n|[n]|[m+n]|delta m|[n|m+n|L+m+n|mean
n|mean m+n|[n]|[m+n]|delta yn|

205 | 125 | 131 | 136 | 124 | 130 | 80 | 49 | 31 | 107 | 115 | 136 | 106 |
114 | 143 | 117 | 26
206 | 123 | 130 | 136 | 123 | 129 | 84 | 55 | 29 | 102 | 115 | 136 | 101 |
114 | 159 | 117 | 42
207 | 119 | 130 | 136 | 118 | 129 | 103 | 55 | 48 | 96 | 114 | 136 | 95 | 113
| 17 | 120 | 57
208 | - | - | - | - | - | - | - | - | - | 136 | - | - | - |
209 | - | - | - | - | - | - | - | - | - | 102 | 113 | 136 | 101 | 112 | 159 | 123 | 36
210 | 122 | 129 | 136 | 121 | 128 | 92 | 61 | 31 | 102 | 112 | 136 | 101 |
111 | 159 | 127 | 32
211 | 123 | 128 | 136 | 122 | 127 | 88 | 67 | 21 | 101 | 111 | 136 | 100 |
110 | 162 | 131 | 31
212 | 123 | 128 | 136 | 122 | 127 | 88 | 67 | 21 | 102 | 100 | 136 | 101 | 99
| 159 | 134 | 25
[[symbol-check mark]]213 | 123 | 127 | 136 | 122 | 126 | 88 | 71 | 17 |
102 | 109 | 136 | 101 | 108 | 159 | 137 | 22
214 | 120 | 126 | 136 | 119 | 125 | 98 | 75 | 23 | 97 | 108 | 136 | 96 | 107 |
174 | 140 | 34
215 | 120 | 125 | 136 | 119 | 124 | 98 | 80 | 18 | 98 | 106 | 136 | 97 | 185 |
171 | 146 | 25
216 | 98 | 123 | 136 | 97 | 122 | 171 | 88 | 83 | 65 | 100 | 136 | 64 | 99 |
243 | 165 | 78
[[symbol-check mark]]217 | 97 | 121 | 136 | 96 | 120 | 174 | 86 | 88 | 65 |
98 | 136 | 64 | 97 | 243 | 171 | 72
218 | - | - | - | - | - | - | - | - | - | 136 | - | - | - | - |
219 | 98 | 118 | 136 | 97 | 117 | 171 | 107 | 64 | 65 | 91 | 136 | 64 | 90 |
243 | 189 | 54
220 | - | - | - | - | - | - | - | - | - | 67 | 88 | 136 | 66 | 87 | 238 | 196 | 42
[[symbol-check mark]]221 | 93 | 114 | 136 | 92 | 113 | 184 | 120 | 64 | 55
| 81 | 136 | 54 | 80 | 265 | 210 | 55
222 | 84 | 110 | 136 | 83 | 109 | 204 | 134 | 70 | 47 | 75 | 136 | 46 | 74 |
286 | 223 | 63
[[symbol-check mark]]223 | 88 | 109 | 136 | 87 | 108 | 196 | 137 | 59 | 49
| 73 | 136 | 48 | 72 | 281 | 227 | 54
224 | - | - | - | - | - | - | - | - | - | 53 | 72 | 136 | 52 | 71 | 270 | 229 | 41
[[symbol-check mark]]225 | 83 | 102 | 136 | 82 | 101 | 206 | 159 | 47 | 46
| 65 | 136 | 45 | 64 | 289 | 243 | 46
226 | 89 | 98 | 136 | 88 | 97 | 194 | 171 | 23 | 53 | 60 | 136 | 52 | 59 | 270 |
254 | 16
227 | 85 | 92 | 136 | 84 | 91 | 202 | 186 | 16 | 48 | 55 | 136 | 47 | 54 | 283 |
265 | 18
[[symbol-check mark]]228 | 76 | 86 | 136 | 75 | 85 | 221 | 200 | 21 | 40 |
50 | 136 | 39 | 49 | 305 | 278 | 27
229 | 76 | 79 | 136 | 75 | 78 | 221 | 215 | 6 | 40 | 44 | 136 | 39 | 43 | 305 |
294 | 11
230 | 66 | 75 | 136 | 65 | 74 | 240 | 223 | 17 | 32 | 39 | 136 | 32 | 39 | 329 |
305 | 24
[[symbol-check mark]]231 | 60 | 67 | 136 | 59 | 66 | 254 | 237 | 16 | 27 |
35 | 136 | 27 | 35 | ~~317~~ ~~351~~ | 317 |
~~317~~ ~~351~~ | 0 ~~34~~
232 | - | - | - | - | - | - | - | - | - | 29 | 32 | 136 | 29 | 32 | 341 | 329 | 12
233 | - | - | - | - | - | - | - | - | - | 32 | 29 | 136 | 23 | 29 | 382 | 341 | 41

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No 5 | No 7

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m |
205 | 76 | 91 | 137 | 75 | 90 | 221 | 189 | 32 | 37 | 53 | 137 | 37 | 52 | 311 |
270 | 41 | 32 |
206 | 66 | 89 | 137 | 65 | 88 | 240 | 194 | 46 | 31 | 51 | 137 | 31 | 50 | 333 |
275 | 58 | 44 |
207 | 58 | 88 | 137 | 57 | 87 | 258 | 196 | 62 | 25 | 50 | 137 |
[[/strikethrough]]25[[/strikethrough]] | [[/strikethrough]]49[[/strikethrough]] |
[[/strikethrough]]367[[/strikethrough]] | [[/strikethrough]]278[[/strikethrough]] |
[[/strikethrough]]89[[/strikethrough]] | 56 |
208 | 67 | 87 | 137 | 66 | 86 | 238 | 198 | 40 | 28 |
4[[/strikethrough]]8[[/strikethrough]]9 | 137 | 28 | 48 | 346 | 281 | 65 | 52 |
209 | - | - | + | - | - | - | - | 31 | 48 | 137 | 31 | 47 | 333 | 283 | 50 | 43 |
210 | 68 | 85 | 137 | 67 | 84 | 236 | 202 | 34 | 30 | 47 | 137 | 30 | 46 | 337 |
286 | 51 | 37 |
2[[/strikethrough]]20[[/strikethrough]]11 | 70 | 84 | 137 | 69 | 83 | 233 | 204 |
29 | 31 | 46 | | 137 | 31 | 45 | 333 | 289 | 44 | 31 |
2[[/strikethrough]]21[[/strikethrough]]12 | 73 | 82 | 137 | 72 | 81 | 227 | 208 |
[[/strikethrough]]2[[/strikethrough]]19 | 33 | 44 | 137 | 33 | 43 | 325 | 294 |
31 | 24 |
[[symbol-check mark]]2[[/strikethrough]]23[[/strikethrough]]13 | 69 | 81 | 137 |
68 | 80 | 235 | 210 | 25 | 32 | 42 | 137 | 32 | 41 | 329 | 299 | 40 | 23 |
2[[/strikethrough]]23[[/strikethrough]]14 | 62 | 79 | 137 | 61 | 78 | 249 | 215 |
34 | 29 | 40 | 137 | 29 | 39 | 341 | 305 | 36 | 32 |
2[[/strikethrough]]24[[/strikethrough]]15 | 63 | 75 | 137 | 62 | 74 | 247 | 223 |
24 | 27 | 37 | 137 | 27 | 37 | 351 | 311 | 40 | 27 |
2[[/strikethrough]]25[[/strikethrough]]16 | 29 | 67 | 137 | 29 | 66 | 341 | 238 |
103 | 12 | 29 | 137 | 12 | 29 | - | - | [[/strikethrough]][[/strikethrough]] | 88 |
[[symbol-check mark]]2[[/strikethrough]]26[[/strikethrough]]17 | 30 | 62 | 137 |
30 | 61 | 337 | 249 | 88 | 9 | 27 | 137 | 9 | 27 | [[/strikethrough]]-
[[/strikethrough]] | [[/strikethrough]]-[[/strikethrough]] | 83 |
2[[/strikethrough]]27[[/strikethrough]]18 | 33 | 60 | 137 | 33 | 59 | 325 | 254 |
71 | 12 | 25 | 137 | [[/strikethrough]]12[[/strikethrough]] |
[[/strikethrough]]25[[/strikethrough]] | - | - | 71 |
2[[/strikethrough]]28[[/strikethrough]]19 | 28 | 55 | 137 | 28 | 54 | 346 | 265 |
81 | 9 | 23 | [[/strikethrough]]137[[/strikethrough]] | 9 | 23 | - | - | 67 |
2[[/strikethrough]]29[[/strikethrough]]20 | 30 | 51 | 137 | 30 | 50 | 337 | 275 |
62 | [[/strikethrough]]10[[/strikethrough]] | [[/strikethrough]]20[[/strikethrough]] |
137 | 10 | 20 | - | - | 52 |
[[symbol-check mark]]2[[/strikethrough]]30[[/strikethrough]]21 | 22 | 46 | 137 |
[[/strikethrough]]22[[/strikethrough]] | [[/strikethrough]]45[[/strikethrough]] |
[[/strikethrough]]391[[/strikethrough]] | [[/strikethrough]]289[[/strikethrough]] |
[[/strikethrough]]102[[/strikethrough]] | - | - | - | - | - | 59 |
2[[/strikethrough]]31[[/strikethrough]]22 | 19 | 40 | 137 | 19 | 39 | - |
[[/strikethrough]]-[[/strikethrough]] | [[/strikethrough]]-[[/strikethrough]] | - | - | - |
| | | 66 |
[[symbol-check mark]]2[[/strikethrough]]32[[/strikethrough]]23 | 20 | 38 | 137 |
[[/strikethrough]]20[[/strikethrough]] | [[/strikethrough]]38[[/strikethrough]] |
[[/strikethrough]]420[[/strikethrough]] | 308 | 12 | - | - | - | - | 56 |
2[[/strikethrough]]33[[/strikethrough]]24 | - | - | - | - | - | - | - | - | - | - |
| 41 |
[[symbol-check mark]]225[[/strikethrough]]4[[/strikethrough]] | 18 | 30 | 137 |
18 | 30 | - | - | - | - | - | - | - | - | 46 |
226 | - | - | - | - | - | - | - | - | - | - | 20 |
22[[/strikethrough]]6[[/strikethrough]]7 | - | - | - | - | - | - | - | - | - | - |
17 |
[[symbol-check mark]]22[[/strikethrough]]7[[/strikethrough]]8 | - | - | - | - | - |
| - | - | - | - | - | - | 24 |

~~22~~~~8~~9 | - | - | - | | | | | - | - | - | | | | 8
~~2~~~~29~~30 | - | - | - | | | | | - | - | - | | | |
20
[[symbol-check mark]]23~~0~~1 | - | - | - | | |
| | - | - | - | | | | 25
232 | - | - | - | | | | - | - | - | | | | 12
233 | - | - | - | | | | - | - | - | | | | 41

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No 1. || No 3

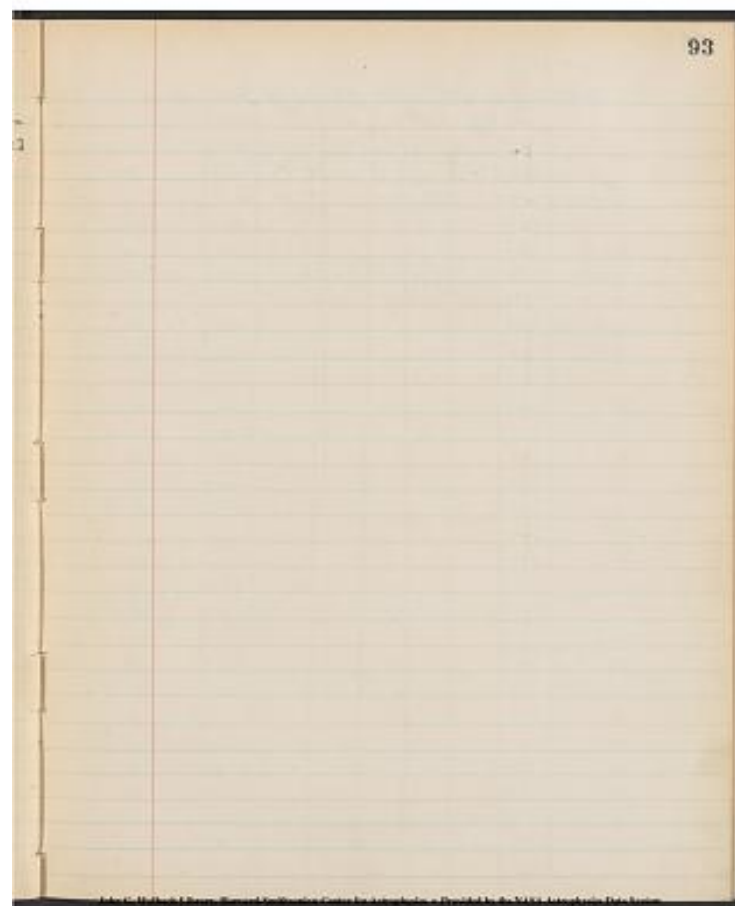
n m+n l+m+n mean n mean m+n [n] [m+n] delta m n m+n
+m+n mean n mean m+n [n] [m+n] delta m
234 46 55 136 46 55 286 263 23 18 27 136 23
235 | 17 | 45 | 136 | 17 | 45 | | | 7 | 20 | 136 | | | |
236 | - | - | - | - | - | | 6 | 18 | 136 | | | |
237 | 19 | 37 | 136 | 19 | 37 | | | 6 | 14 | 136 | | | |
238 | 16 | 30 | 136 | 16 | 30 | | | 5 | 11 | 136 | | | |
239 | 15 | 23 | 136 | 15 | 23 | | | 3 | 9 | 136 | | | |
240 | 15 | 19 | 136 | 15 | 19 | | | - | - | - | | | |

92													
No 1.							No 3						
n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]
234	46	55	136	46	55	286	263	23	18	27	136		23
235	17	45	136	17	45		7	20	136				
236	-	-	-	-	-		6	18	136				
237	19	37	136	19	37		6	14	136				
238	16	30	136	16	30		5	11	136				
239	15	23	136	15	23		3	9	136				
240	15	19	136	15	19		-	-	-				

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[[no entries]]



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alpha Orionis C 18678

Ap.3) Approximate wave lengths for Betelgeuse

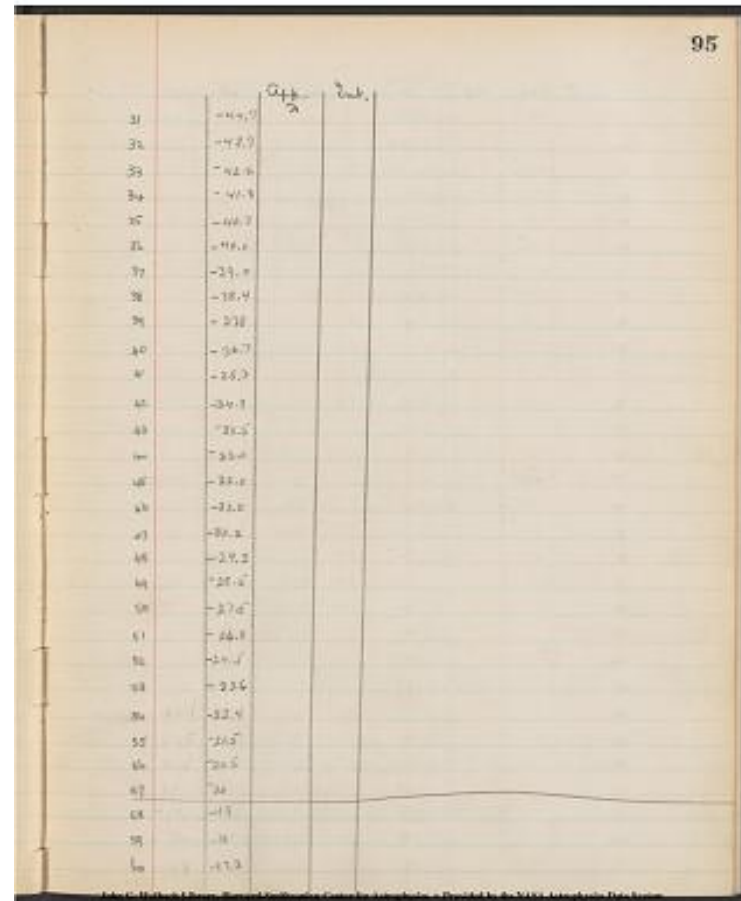
	Ap 1)	App. lambda Lnt.^["*"]
1	73.0	
2	71.3	
3	70.	
4	69.2	
5	68.	
6	66.9	
7	65.5	
8	64.2	
9	63.5	
10	62.2	
11	61.4	
12	60.5	
13	60.	
14	59.4	
15	58.5	
16	57.0	
17	56.2	
18	55.2	
19	54.5	
20	52.9	
21	53.1	
22	52.2	
23	51.4	
24	50.7	
25	50.	
26	48.8	
27	47.8	
28	47.	
29	46.	
30	45.2	

94	Beta C 18678		
	Sp. Approximate wave lengths for Betelgeuse		
	180	App.	Int.
2	71.3		
3	70.		
4	69.2		
5	68.		
6	66.9		
7	65.5		
8	64.2		
9	63.5		
10	62.2		
11	61.4		
12	60.5		
13	60.		
14	59.4		
15	58.5		
16	57.0		
17	56.2		
18	55.2		
19	54.5		
20	52.9		
21	53.1		
22	52.2		
23	51.4		
24	50.7		
25	50.		
26	48.8		
27	47.8		
28	47.		
29	46.		
30	45.2		

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	App. lambda	Int.
31	-44.7	
32	-43.7	
33	-42.2	
34	-41.3	
35	-40.7	
36	-40.0	
37	-39.0	
38	-38.4	
39	-27.8	
40	-36.7	
41	-25.3	
42	-34.3	
43	-33.5	
44	-33.0	
45	-32.0	
46	-31.0	
47	-30.2	
48	-29.3	
49	-28.5	
50	-27.5	
51	-26.0	
52	-24.5	
53	-23.6	
54	-22.4	
55	-21.5	
56	-20.5	
57	-20	
58	-19	
59	-18	
60	-17.3	



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approx.

	Meas.	Std	lambda	Int.	lambda	[[lambda]] AI
61	-16.9	3878				
62	-16.1	3883				
63	-15.6	3885				
64	-14.7	3889				
65	-14	3892				
66	-12.8	3896				
67	-11.9	3902				
68	-11.2	3905				
69	-10.1	3910	40	3905.6		
70	-9	3918	24	3914.5		
71	-8.2	3922	15	391 1 8.6		
72	-7.5	3922	62	{21.0^[[3920.4]]}		
73	-7	3925				
74	-5.4	3933	3933	(180)	3933.8	3933.8
75	-11.6?	3944	76	3944.1	3944.1	
76	-3.2	3944	76	3944.1	3944.1	
77	-2.8	3946	76	3945.2	3945.2	
78	-1.7	3952	50	3953.0	3953.0	
79	-8	3957	23	3956.6	3956.6	
80	0	3930	52	3961.6	3958.4	
81	1	3965	66	396 4 5.3	3.4	
82	1.5	3967	66	3964.5	3964.5	
83	2.4	3970	3970	(177)	3968.6	3968.6
84	3.4	3977	93	3975		
85	5	3986	49	3982.0	3982	
86	6.6	3994	4 3 2	3990.0	3990	
87	7.7	4000	3 4 8	3994.2		
88	8.1	4003	42	3998.8		
89	9.8	4008	37	4005.3	4005	
90	10.2	4013	32	4009.9	4009	

[[~~lambda~~]]

	Meas.	Std	lambda	Int.	lambda	AI
61	-16.9	3878				
62	-16.1	3883				
63	-15.6	3885				
64	-14.7	3889				
65	-14	3892				
66	-12.8	3896				
67	-11.9	3902				
68	-11.2	3905				
69	-10.1	3910	40	3905.6		
70	-9	3918	24	3914.5		
71	-8.2	3922	15	391 1 8.6		
72	-7.5	3922	62	{21.0^[[3920.4]]}		
73	-7	3925				
74	-5.4	3933	3933	(180)	3933.8	3933.8
75	-11.6?	3944	76	3944.1	3944.1	
76	-3.2	3944	76	3944.1	3944.1	
77	-2.8	3946	76	3945.2	3945.2	
78	-1.7	3952	50	3953.0	3953.0	
79	-8	3957	23	3956.6	3956.6	
80	0	3930	52	3961.6	3958.4	
81	1	3965	66	396 4 5.3	3.4	
82	1.5	3967	66	3964.5	3964.5	
83	2.4	3970	3970	(177)	3968.6	3968.6
84	3.4	3977	93	3975		
85	5	3986	49	3982.0	3982	
86	6.6	3994	4 3 2	3990.0	3990	
87	7.7	4000	3 4 8	3994.2		
88	8.1	4003	42	3998.8		
89	9.8	4008	37	4005.3	4005	
90	10.2	4013	32	4009.9	4009	

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	Meas.	Approx lambda	Int.	lambda	dl
91	10.9	4017	32	4011	
92	12.	4024	17	4017	
93	12.5	402[[/strickethrough]]7[[/strickethrough]]6	36	4020	
94	13.1	4028	44	4022	
95	14.3	40[[/strickethrough]]4[[/strickethrough]]36	60	4031	
96	14.2	40[[/strickethrough]]4[[/strickethrough]]39	72	40	4033
97	16.1	40[[/strickethrough]]5[[/strickethrough]]46	30	4041	
		4035[[/strickethrough]]4041			
98	16.9	4051	65	4045.9	4046
99	18.5	4059	42	4055	
100	19.1	4062	40	4058	
101	20.0	4068	60	4063.7	4064
102	20.8	4072	25	4071.9	4067
103	21.7	4077	42	4077.9	4072
104	22.5	4082	75	4083.8	4077
105	23.5	4088	35	4086.8	4082
106	24.	4091	25	4090.2	4087
107	25.1	4097	20		
		409[[/strickethrough]]7[[/strickethrough]]6. [[/strickethrough]]3[[/strickethrough]]2		4093	
108	25.9	4101	34	4100.9	4096
109	26.4	4103	80	4101.0	4101
110	29.9	4116	52	4113	
111	31.1	4120	43	4116	
112	22.	412[[/strickethrough]]9[[/strickethrough]]	58	4122	
113	31.3	4132	61	4132	
? 114	22.	4137	71	4143.9	4135
115	32.6	4143	62	4149	4144
116	38.5	4170	[[/strickethrough]]53[[/strickethrough]]69	4172	4172
117	39.2	4177	[[/strickethrough]]49[[/strickethrough]]55	4177	4182
118	40.	4184	[[/strickethrough]]35[[/strickethrough]]33		
		4187[[/strickethrough]]4182		4187	
119	40.7	4187	47	4187	4189
120	41.2	4190	50	4192	4192

	Meas.	Approx λ	Int.	λ	dl
91	10.9	4017	32		4011
92	12.	4024	17		4017
93	12.5	4026	36		4020
94	13.1	4028	44		4022
95	14.3	4036	60		4031
96	14.2	4039	72	40	4033
97	16.1	4046	30	4041	4041
98	16.9	4051	65	4045.9	4046
99	18.5	4059	42		4055
100	19.1	4062	40		4058
101	20.0	4068	60	4063.7	4064
102	20.8	4072	25	4071.9	4067
103	21.7	4077	42	4077.9	4072
104	22.5	4082	75	4083.8	4077
105	23.5	4088	35	4086.8	4082
106	24.	4091	25	4090.2	4087
107	25.1	4097	20		
		4097	20	4093	
108	25.9	4101	34	4100.9	4096
109	26.4	4103	80	4101.0	4101
110	29.9	4116	52		4113
111	31.1	4120	43		4116
112	22.	4129	58		4122
113	31.3	4132	61		4132
? 114	22.	4137	71	4143.9	4135
115	32.6	4143	62	4149	4144
116	38.5	4170	[[/strickethrough]]53[[/strickethrough]]69	4172	4172
117	39.2	4177	[[/strickethrough]]49[[/strickethrough]]55	4177	4182
118	40.	4184	[[/strickethrough]]35[[/strickethrough]]33		
		4187		4187	
119	40.7	4187	47	4187	4189
120	41.2	4190	50	4192	4192

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Ap 3 | Ap 1. | Ap 5. | Approx. lambda | Int. | lambda | dl |
121 | 42.4 | | | 4196 | 73 | 419[[strikethrough]]7[[/strikethrough]]8 |
[[symbol-check mark]] |
122 | 43. | | | 4202 | 61 | 4205 | |
123 | 44.7 | | | 4214 | 39 | 4207 | |
124 | 45.8 | | | 4220 | 76 | 4215 | [[symbol-check mark]] |
125 | 46.2 | | 4227 | 4227 | 122 | 4227 | [[symbol-check mark]] |
126 | 47.4 | | 4232 | 70 | 4234 | [[symbol-check mark]] |
127 | 48.4 | | 42[[strikethrough]]4[[/strikethrough]]38 | 59 | 4240 |
[[symbol-check mark]] |
128 | 49.7 | | | 4246 | 41 | 4247 | [[symbol-check mark]] |
129 | 50. | | | 4249 | 62 | 4251 | [[symbol-check mark]] |
130 | 50.6 | | | 4254 | 68 | 4254 | [[symbol-check mark]] |
131 | 51.3 | | | 4257 | 54 | 4259 | [[symbol-check mark]] |
132 | - | | 52.5 | 4265 | 24 | | |
133 | 53.1 | | | 4269 | 72 | 4272 | [[symbol-check mark]] |
134 | - | | 53.5 | 4272 | 65 | 4275 | [[symbol-check mark]] |
135 | 54.8 | | | 4278 | 42 | | |
136 | 55.5 | | | 4284 | 88 | 4289 | [[symbol-check mark]] |
137 | 57.2 | | | 4295 | 77 | 4295 | [[symbol-check mark]] |
138 | 58.2 | | | 4301 | 66 | 4300 | [[symbol-check mark]] |
139 | 59.3 | | | 4308 | 29 | 4305? | |
140 | 60.8 | | | 4317 | [[symbol-up arrow]]23 | 4309 | [[symbol-check mark]] |
141 | 61.6 | | | 4323 | [[symbol-up arrow]]45 | 4315 | [[symbol-check mark]] |
142 | 62.7 | | | 4330 | 66^[[15]] | 4326 | [[symbol-check mark]] |
143 | 63.6 | | | 43[[strikethrough]]4[[/strikethrough]]37 | 25 | 4330 | |
144 | 64.4 | | | 4341 | 38[[strikethrough]]0[[/strikethrough]] | 4337 | |
145 | 65.5 | | | 4[[underline]]35[[/underline]]0 | 24 | 4340 | |
146 | 66.7 | | | 4346 | 18 | [[strikethrough]]4337[[/strikethrough]]4345 | |
147 | 67.4 | | | 4352 | 40 | [[strikethrough]]4340[[/strikethrough]]4348 | |
148 | 68.6 | | | 4363 | 64 |
[[strikethrough]]4352[[/strikethrough]]435[[strikethrough]]0[[/strikethrough]]2 | |
149 | 69.5 | | | 4370 | 47 | 4363 | |
150 | 70.2 | | | 4376 | 30 | 4368 | [[symbol-check mark]] |

Ap	Ap1	Ap2	Approx. lambda	Int.	lambda	dl
121	42.4		4196	73	4198	✓
122	43.		4202	61	4205	
123	44.7		4214	39	4207	
124	45.8		4220	76	4215	✓
125	46.2		4227	4227	4227	✓
126	47.4		4232	70	4234	✓
127	48.4		42[[strikethrough]]4[[/strikethrough]]38	59	4240	
128	49.7		4246	41	4247	✓
129	50.		4249	62	4251	✓
130	50.6		4254	68	4254	✓
131	51.3		4257	54	4259	✓
132	-	52.5	4265	24		
133	53.1		4269	72	4272	✓
134	-	53.5	4272	65	4275	✓
135	54.8		4278	42		
136	55.5		4284	88	4289	✓
137	57.2		4295	77	4295	✓
138	58.2		4301	66	4300	✓
139	59.3		4308	29	4305?	
140	60.8		4317	[[symbol-up arrow]]23	4309	✓
141	61.6		4323	[[symbol-up arrow]]45	4315	✓
142	62.7		4330	66^[[15]]	4326	✓
143	63.6		43[[strikethrough]]4[[/strikethrough]]37	25	4330	✓
144	64.4		4341	38[[strikethrough]]0[[/strikethrough]]	4337	
145	65.5		4[[underline]]35[[/underline]]0	24	4340	
146	66.7		4346	18	[[strikethrough]]4337[[/strikethrough]]4345	
147	67.4		4352	40	[[strikethrough]]4340[[/strikethrough]]4348	
148	68.6		4363	64		
149	69.5		4370	47	4363	
150	70.2		4376	30	4368	✓

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	Ap3	Ap1	Approx lambda	Int	lambda	dl
151	70.9		4383	48	4376	[[symbol-check mark]]
152	71.6		4387	71	4383	[[symbol-check mark]]
153	72.8		[[strikethrough]]4398[[/strikethrough]]	[[strikethrough]]4395	34	
4	[[strikethrough]]0[[/strikethrough]]	9	[[strikethrough]]1			
154	73.6		[[strikethrough]]4405[[/strikethrough]]	4402	32	4395
155	74.2		[[strikethrough]]4411[[/strikethrough]]	4410	42	
	4405^	4408				
156	75.2		4420	52	4415	
157	76.1		[[strikethrough]]4427[[/strikethrough]]	4427	48	4422
158	77.7		[[strikethrough]]4490[[/strikethrough]]	4444	50	4435
159	78.4		[[strikethrough]]4496[[/strikethrough]]	4450	60	4442-4
160	79.1		[[strikethrough]]4502[[/strikethrough]]	4460	52	4455
161	80.7		[[strikethrough]]4515[[/strikethrough]]	4475	38	4467
162	81.8					
	[[strikethrough]]4	[[strikethrough]]2	[[strikethrough]]525	[[strikethrough]]		
30	4475					
163	82.7		[[strikethrough]]4532[[/strikethrough]]	4495	43	4484
164	83.2		[[strikethrough]]4341[[/strikethrough]]	4502	16	4497
165	84.		[[strikethrough]]4545[[/strikethrough]]	4509	20	4501
166	84.5		[[strikethrough]]4551[[/strikethrough]]	4515	26	4507
167	85.2		[[strikethrough]]4553[[/strikethrough]]	4522	22	4518
168	86.4		[[strikethrough]]4565[[/strikethrough]]	4534	44	4528
169	87.0		[[strikethrough]]4570[[/strikethrough]]	4540	46	4536
170	87.7		[[strikethrough]]4575[[/strikethrough]]	4549	26	4541-4
171	88.5		[[strikethrough]]4583[[/strikethrough]]	4555	22	4549
172	88.7		[[strikethrough]]4585[[/strikethrough]]	4560	35	4554
173	88.2		[[strikethrough]]4590[[/strikethrough]]	4565	44	4554
174	90.4		[[strikethrough]]4599[[/strikethrough]]	4575	25	4572
175	-	91.1	[[strikethrough]]4605[[/strikethrough]]	4584	13	4580
176	92.2		[[strikethrough]]4615[[/strikethrough]]	4592	23	1 ?
177	93.		[[strikethrough]]4622[[/strikethrough]]	4600		
	[[strikethrough]]2	[[strikethrough]]36	4596			
178	93.9		[[strikethrough]]4629[[/strikethrough]]	4610	42	4607
179	94.6		4635^	4617	37	4613-16
180	95.2		[[strikethrough]]4640[[/strikethrough]]	4625	29	4625

99

Ap3	Ap1	Approx lambda	Int	lambda	dl
151	70.9	4383	48	4376	
152	71.6	4387	71	4383	
153	72.8	4398	34	4395	
154	73.6	4405	32	4402	
155	74.2	4411	42	4410	
156	75.2	4420	52	4415	
157	76.1	4427	48	4422	
158	77.7	4490	50	4435	
159	78.4	4496	60	4442-4	
160	79.1	4502	52	4455	
161	80.7	4515	38	4467	
162	81.8				
30	4475				
163	82.7	4532	43	4484	
164	83.2	4341	16	4497	
165	84.	4545	20	4501	
166	84.5	4551	26	4507	
167	85.2	4553	22	4518	
168	86.4	4565	44	4528	
169	87.0	4570	46	4536	
170	87.7	4575	26	4541-4	
171	88.5	4583	22	4549	
172	88.7	4585	35	4554	
173	88.2	4590	44	4554	
174	90.4	4599	25	4572	
175	-	4605	13	4580	
176	92.2	4615	23	1 ?	
177	93.	4622			
	2	36			
178	93.9	4629	42	4607	
179	94.6	4635^	37	4613-16	
180	95.2	4640	29	4625	

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	Approx. lambda	Int	lambda	dl
181	96.		4646	4630 11
462			4646	4630 11
182	97.6		4662	4647 35 4647
183	98.3		4667	4655 | 43 | 4657 |
184	98.9		4672	4660 | 44 | 4664 |
185	99.7		4678	4670 | 45 | 4668 |
186	100.4		4685	4676 | 38 | 4674 |
187	101.6		4694	4687 | 43 | 4682 |
188	102.		4698	4690 | 46 | 4688 |
189	103.3		4710	4705 | 46 | 4703 |
190	104.		4715	4710 | 60 | 4710 |
191	105.1		4725	4725 | 18 | 4728 |
192	105.9	4733	24	4734
193	106.6	4742	28	4743
194	107.4	4746	18	4746
195	108.	4755	26	4754
196	108.9	TiO	4764	20 | 4764 |
197	109.3	4768	15	4768
198	111.4	4780	66	4773
199	113.2	4800	48	4799
200	113.9	48	48	4808? |
201	114.8	4814	31	4813
202	115.5	4820	55	4824
203	116.2	4828	40	4829
204	117.8	4840	40	4834
205	118.6	4850	32	4848
206	119.5	48	48	4857 |
207	120.2	4861	56	4861
208	120.5	4865	52	4865
209	121.5	4877	43	4876
210	122.2	4885	37	4885

100				
	Approx.	Int	lambda	dl
181	96.		4646	4630 | 11 |
182	97.6		4662	4647 | 35 | 4647 |
183	98.3		4667	4655 | 43 | 4657 |
184	98.9		4672	4660 | 44 | 4664 |
185	99.7		4678	4670 | 45 | 4668 |
186	100.4		4685	4676 | 38 | 4674 |
187	101.6		4694	4687 | 43 | 4682 |
188	102.		4698	4690 | 46 | 4688 |
189	103.3		4710	4705 | 46 | 4703 |
190	104.		4715	4710 | 60 | 4710 |
191	105.1		4725	4725 | 18 | 4728 |
192	105.9	4733	24	4734
193	106.6	4742	28	4743
194	107.4	4746	18	4746
195	108.	4755	26	4754
196	108.9	TiO	4764	20 | 4764 |
197	109.3	4768	15	4768
198	111.4	4780	66	4773
199	113.2	4800	48	4799
200	113.9	48	48	4808? |
201	114.8	4814	31	4813
202	115.5	4820	55	4824
203	116.2	4828	40	4829
204	117.8	4840	40	4834
205	118.6	4850	32	4848
206	119.5	48	48	4857 |
207	120.2	4861	56	4861
208	120.5	4865	52	4865
209	121.5	4877	43	4876
210	122.2	4885	37	4885

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[[preprinted]]101[[/preprinted]]
 | | Approx. lambda | Int. | lambda | dl |
 211 | 123. | 4890 | 31 | 4891 | |
 212 | 123.9 | 4904 | 24 | 4904 | |
 213 | 124.8 | 4913 | 23 | 4911 | |
 214 | 125.7 | 4924 | 32 | 4921 | |
 215 | 127.2 | 4940 | 27 | 4939 | |
 216 | 128.8 | TiO | 4957 | 88 | 4957 | |
 217 | 129.3 | 4961 | 83 | 4961 | |
 218 | 130.0 | 4970 | 71 | 4968 | |
 219 | 130.8 | 4976 | 67 | 4979? | |
 220 | 131.5 | 4985 | 52 | 4983 | |
 221 | 132.6 | 5002 | 59 | ~~4~~5000 | |
 222 | 133.4 | 5012 | 66 | 5012-14 | |
 223 | 133.9 | 5019 | 56 | 5019 | |
 224 | 134.2 | 5025 | 41 | 5023 | |
 225 | 135.3 | 5037 | 46 | 5036 | |
 226 | 136.4 | 5050 | 20 | 5050 | |
 227 | 137.7 | 5065 | 17 | 5065 | |
 228 | 138.5 | 5075 | 24 | 5075 | |
 229 | 139.7 | 5090 | 8 | - | |
 230 | 140.8 | 5106 | 20 | 5107? | |
 231 | 141.8 | 5115 | 25 | 5113 | |
 232 | 142.4 | 5122 | 12 | 5125? | |
 233 | 143. | 5130 | 41 | 5128 | |
 234 | 143.5 | 5135 | 23 | | |
 235 | 145. | 5156 | | | |
 236 | 145.5 | TiO | 5167 | | |
 237 | 146.6 | 5175 | | | |
 238 | 147.6 | 5186 | | | |
 239 | 148.7 | 5200 | | | |
 240 | 149. | 5207 | | | |

					101				
					Approx. lambda	Int.	lambda	dl	
211	123.	4890	31	4891	4890	31	4891		
212	123.9	4904	24	4904	4904	24	4904		
213	124.8	4913	23	4911	4913	23	4911		
214	125.7	4924	32	4921	4924	32	4921		
215	127.2	4940	27	4939	4940	27	4939		
216	128.8	TiO	4957	88	4957	88	4957		
217	129.3	4961	83	4961	4961	83	4961		
218	130.0	4970	71	4968	4970	71	4968		
219	130.8	4976	67	4979?	4976	67	4979?		
220	131.5	4985	52	4983	4985	52	4983		
221	132.6	5002	59	4 5000	5002	59	5000		
222	133.4	5012	66	5012-14	5012	66	5012-14		
223	133.9	5019	56	5019	5019	56	5019		
224	134.2	5025	41	5023	5025	41	5023		
225	135.3	5037	46	5036	5037	46	5036		
226	136.4	5050	20	5050	5050	20	5050		
227	137.7	5065	17	5065	5065	17	5065		
228	138.5	5075	24	5075	5075	24	5075		
229	139.7	5090	8	-	5090	8	-		
230	140.8	5106	20	5107?	5106	20	5107?		
231	141.8	5115	25	5113	5115	25	5113		
232	142.4	5122	12	5125?	5122	12	5125?		
233	143.	5130	41	5128	5130	41	5128		
234	143.5	5135	23		5135	23			
235	145.	5156			5156				
236	145.5	TiO	5167		5167				
237	146.6	5175			5175				
238	147.6	5186			5186				
239	148.7	5200			5200				
240	149.	5207			5207				

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[[preprinted]] 102 [[/preprinted]]
 beta Geminorum. Mean line depths from C 18788, 18789

No. 1 2 3 5 18789 Mean | dl No. 1 2 3 5 18789 Mean | dl
 18789 Mean | dl 18789 Mean | dl

28	20	..	23	..	..	22	18	59	11	10	6	26	10	13	11
29	30	..	23	..	..	26	21	60	28	33	31	43	30	33	26
30	28	..	32	..	..	30	24	61	40	42	41	51	..	44	39
31	58	..	43	..	..	50	37	62	29	28	28	47	30	32	26
32	13	..	14	..	..	14	12	63	22	37	33	47	25	33	26
36	32	..	78	..	..	55	40	67	56	77	61	..	..	65	45
37	53	45	43	..	..	47	35	68	52	49	58	68	..	57	41
38	43	30	34	..	..	36	28	69	52	61	58	..	..	57	41
39	46	26	42	..	..	38	30	70	39	..	38	53	40	42	32
40	111	..	..	..	..	111	64	71	50	59	49	..	40	49	36
41	..	..	..	..	..	..	72	64	69	63	..	..	..	65	45
42	32	34	31	..	..	32	26	73	60	69	61	..	..	63	44
43	14	19	17	..	..	17	15	74	48	59	53	73	..	58	41
44	27	32	19	..	..	26	21	75	48	49	..	73	..	56	40
45	33	36	30	16	..	29	23	76	62	75	70	..	..	69	47
46	8	13	9	12	..	11	10	77	58	70	58	70	..	64	45
47	8	9	9	12	..	10	09	78	50	47	45	70	51	53	39
48	5	9	8	21	..	11	10	79	56	67	61	70	..	64	45
49	14	18	8	21	..	16	15	80	84	91	81	..	..	85	54
50	41	49	34	33	..	39	30	81	47	91	40	67	55	50	37
51	12	8	9	..	..	16	11	82	44	51	47	50	47	48	36
52	55	66	61	..	..	61	43	83	40	44	38	47	39	42	32
53	27	37	27	37	..	32	26	84	46	51	43	57	47	49	36
54	30	42	36	45	..	38	30	85	87	67	64	87	..	76	50
55	52	55	56	..	..	54	40	86	34	37	36	55	..	41	31
56	34	40	38	45	..	39	30	87	56	57	47	62	57	56	40
57	44	35	47	45	..	43	33	88	84	49	77	91	..	75	50
58	19	26	15	19	..	18	19	89	97	104	94	..	..	50	37

102 β Geminorum. Mean line depths from C 18788, 18789															
No.	1	2	3	5	18789	Mean	dl	No.	1	2	3	5	Mean	dl	dl
28	30	..	33	..	..	22	18	59	11	10	6	26	10	13	11
29	30	..	33	..	..	26	21	60	28	33	31	43	30	33	26
30	28	..	32	..	..	30	24	61	40	42	41	51	..	44	39
31	58	..	43	..	..	50	37	62	29	28	28	47	30	32	26
32	13	..	14	..	..	14	12	63	22	37	33	47	25	33	26
36	32	..	78	..	..	55	40	67	56	77	61	..	..	65	45
37	53	45	43	..	..	47	35	68	52	49	58	68	..	57	41
38	43	30	34	..	..	36	28	69	52	61	58	..	..	57	41
39	46	26	42	..	..	38	30	70	39	..	38	53	40	42	32
40	111	..	..	..	..	111	64	71	50	59	49	..	40	49	36
41	..	..	..	..	..	..	72	64	69	63	..	..	..	65	45
42	32	34	31	..	..	32	26	73	60	69	61	..	..	63	44
43	14	19	17	..	..	17	15	74	48	59	53	73	..	58	41
44	27	32	19	..	..	26	21	75	48	49	..	73	..	56	40
45	33	36	30	16	..	29	23	76	62	75	70	..	..	69	47
46	8	13	9	12	..	11	10	77	58	70	58	70	..	64	45
47	8	9	9	12	..	10	09	78	50	47	45	70	51	53	39
48	5	9	8	21	..	11	10	79	56	67	61	70	..	64	45
49	14	18	8	21	..	16	15	80	84	91	81	..	..	85	54
50	41	49	34	33	..	39	30	81	47	91	40	67	55	50	37
51	12	8	9	..	..	16	11	82	44	51	47	50	47	48	36
52	55	66	61	..	..	61	43	83	40	44	38	47	39	42	32
53	27	37	27	37	..	32	26	84	46	51	43	57	47	49	36
54	30	42	36	45	..	38	30	85	87	67	64	87	..	76	50
55	52	55	56	..	..	54	40	86	34	37	36	55	..	41	31
56	34	40	38	45	..	39	30	87	56	57	47	62	57	56	40
57	44	35	47	45	..	43	33	88	84	49	77	91	..	75	50
58	19	26	15	19	..	18	19	89	97	104	94	50	37

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[[preprinted]] 103 [[/preprinted]]

No. 1 | 2 | 3 | 5 | | Mean | d | | No. 1 | 2 | 3 | 5 | | Mean | d | |
90 | 59 | 62 | 59 | 71 | 55 | 61 | 43 | 121 | 20 | ~~[[/del]] 25
[[/del]] 30 | 17 | 31 | 17 | 23 | 19 |
91 | 14 | 17 | 9 | ~~[[/del]] 61~~ ~~[[/del]] 19 | 15 | 13 | 122 | 12 |
[[/del]] 15~~ ~~[[/del]] 22 | 19 | 14 | 8 | 15 | 13 |
92 | 46 | 52 | 41 | 23 | 37 | 40 | 31 | 123 | 15 | ~~[[/del]] 33
[[/del]] 18 | 7 | 14 | 8 | 14 | 12
93 | 31 | 33 | 31 | 41 | 27 | 33 | 26 | 124 | 12 | 28 | 15 | 20 | 11 | 17 | 14
94 | 21 | 25 | 17 | 32 | 22 | 23 | 19 | 125 | 10 | 25 | 12 | 20 | 8 | 15 | 13
95 | 25 | 25 | 17 | 36 | 15 | 23 | 19 | 126 | 16 | 26 | 10 | 22 | 11 | 17 | 14
96 | 33 | 36 | 32 | 49 | 33 | 37 | 29 | 127 | 10 | ~~[[/del]] 19
[[/del]] 13 | 10 | 22 | 6 | 12 | 10
97 | 72 | 74 | 63 | 75 | 60 | 69 | 47 | 128 | 12 | ~~[[/del]] 19
[[/del]] 23 | 15 | 23 | 11 | 17 | 14
98 | 36 | 40 | 34 | 49 | 55 | 43 | 33 | 129 | 10 | ~~[[/del]] 28
[[/del]] 13 | 10 | 14 | 16 | 13 | 11
99 | 28 | 31 | 31 | 36 | 32 | 32 | 26 | 130 | 10 | ~~[[/del]] 15
[[/del]] 10 | 7 | 14 | 8 | 10 | 09
100 | 46 | 54 | 31 | 59 | 38 | ~~[[/del]] 54~~ ~~[[/del]] 47 | 35 |
131 | 13 | ~~[[/del]] 30~~ ~~[[/del]] 9 | 12 | 17 | 14 | 13 | 11
101 | 31 | 32 | 22 | 40 | 17 | 28 | 23 | 132 | 14 | ~~[[/del]] 22
[[/del]] 11 | 13 | 23 | 10 | 14 | 12
102 | 26 | 33 | 23 | 31 | 20 | 27 | 22 | 133 | 36 | 33 | 29 | 20 | 22 | 28 | 23
103 | 29 | 33 | 23 | 43 | 20 | 30 | 22 | 134 | 24 | 27 | 14 | 16 | 22 | 21 | 18
104 | 26 | 27 | 19 | 29 | 16 | 23 | 19 | 135 | 24 | 24 | 16 | 24 | 21 | 22 | 18
105 | 32 | 36 | 25 | 39 | 30 | 32 | 26 | 136 | 11 | .. | .. | 17 | 14 | 12
106 | 38 | 36 | 29 | 39 | 30 | 34 | 27 | 139 | 28 | - | - | .. | 28 | 23
107 | 22 | 25 | 15 | 28 | 17 | 21 | 18 | 138 | 16 | .. | .. | .. | 16 | 14
108 | 20 | 24 | 17 | 23 | 17 | 20 | 17 | 139 | 7 | .. | .. | .. | 7 | 06
109 | 19 | 24 | 12 | 19 | 17 | 18 | 15 | 140 | 8 | .. | .. | .. | 8 | 07
110 | 25 | 25 | 16 | 26 | 51 | 31 | 25 | 141 | 9 | .. | .. | .. | 9 | 08
111 | 15 | 15 | 11 | 13 | 13 | 13 | 11 |
112 | 29 | 33 | 23 | 31 | 26 | 28 | 23 |
113 | 20 | 18 | 11 | 17 | 15 | 16 | 14 |
114 | 20 | 18 | 15 | 21 | 15 | 18 | 15 |
115 | 17 | ~~[[/del]] 26~~ ~~[[/del]] 15 | 8 | 13 | 13 | 13 | 11 |
116 | 20 | ~~[[/del]] 19~~ ~~[[/del]] 26 | 17 | 26 | 15 | 21 | 18 |
117 | 17 | 19 | 13 | 17 | 18 | 17 | 14 |
118 | 9 | 19 | 19 | 17 | 6 | 14 | 12 |
119 | 19 | 28 | 18 | 22 | 14 | 20 | 17 |
120 | 9 | 15 | 9 | 13 | 6 | 10 | 09 |~~~~~~~~~~~~~~~~~~~~~~~~

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Mira Ceti reduced to 100
C 18644 mu phi 310 | C 18630 mu phi 341

[illegible]

29 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
30 | 22 | 27 | 99 | 22 | 27 | 265 | 252 | 13 | 26 | 32 | 93 | 28 | 34 | 225 |
203 | 22

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31 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
32 | 22 | 28 | 99 | 22 | 28 | 265 | 249 | 16 | 25 | 33 | 93 | 27 | 35 | 229 |
200 | 29
33 | 26 | 28 | 99 | 26 | 28 | 254 | 249 | 5 | 29 | 33 | 93 | 31 | 35 | 215 | 200
15
34 | 21 | 28 | 99 | 21 | 28 | 268 | 249 | 19 | }23 | 34 | 93 | 25 | 37 | 236 |
194 | 42
35 | 19 | 28 | 99 | 19 | 28 | 274 | 249 | 25 | }23 | 34 | 93 | 25 | 37 | 236 |
194 | 42
36 | 28 | 28 | 99 | 28 | 28 | 249 | 249 | 0 | 34 | 34 | 93 | 37 | 37 | 194 | 194
0
37 | 23 | 29 | 99 | 23 | 29 | 262 | 247 | 15 | 30 | 35 | 93 | 32 | 38 | 211 |
191 | 20
38 | 22 | 29 | 99 | 22 | 29 | 265 | 247 | 18 | 29 | 35 | 93 | 31 | 38 | 215 |
191 | 24
39 | 20 | 30 | 99 | 20 | 30 | 271 | 245 | 26 | 25 | 35 | 93 | 27 | 38 | 229 |
191 | 38
40 | 27 | 30 | 99 | 27 | 30 | 252 | 245 | 7 | 30 | 36 | 93 | 32 | 39 | 211 | 188
23
41 | 25 | 30 | 99 | 25 | 30 | 257 | 245 | 12 | 29 | 36 | 93 | 31 | 39 | 215 |
188 | 27
42 | }25 | 31 | 99 | 25 | 31 | 257 | 243 | 14 | }31 | 36 | 93 | 33 | 39 | 207 |
185 | 19
43 | }25 | 31 | 99 | 25 | 31 | 257 | 243 | 14 | }31 | 36 | 93 | 33 | 39 | 207 |
188 | 19
44 | 26 | 31 | 99 | 26 | 31 | 254 | 243 | 11 | 30 | 37 | 93 | 32 | 40 | 211 |
185 | 26
45 | }29 | 31 | 99 | 29 | 31 | 247 | 243 | 4 | - | - | - | - | - | - |
46 | }29 | 31 | 99 | 29 | 31 | 247 | 243 | 4 | - | - | - | - | - | - |
47 | 29 | 31 | 99 | 29 | 31 | 247 | 243 | 4 | 33 | 37 | 93 | 35 | 40 | 200 | 185
15
48 | 21 | 32 | 99 | 21 | 32 | 268 | 241 | 27 | 24 | 37 | 93 | 26 | 40 | 233 |
185 | 48
49 | 28 | 32 | 99 | 28 | 32 | 249 | 241 | 8 | 32 | 38 | 93 | 34 | 41 | 203 | 182
21
50 | 31 | }32 | 99 | 31 | 32 | 243 | 241 | 2 | 34 | 38 | 93 | 37 | 41 | 194 | 182
12
51 | 28 | 32 | 99 | 28 | 32 | 249 | 241 | 8 | 32 | 38 | 93 | 34 | 41 | 203 | 182
21
52 | 33 | 32 | 99 | 33 | 32 | 238 | 241 | -3 | 35 | 38 | 93 | 38 | 41 | 191 | 182
9
53 | 86 | 32 | 99 | 87 | 32 | 100 | 241 | -141 | 85 | 38 | 93 | 91 | 41 | 17 |
182 | -165
54 | 31 | 33 | 99 | 31 | 33 | 243 | 238 | 5 | 33 | 38 | 93 | 35 | 41 | 200 | 182
18
55 | }25 | 33 | 99 | 25 | 33 | 257 | 238 | 19 | }29 | 39 | 93 | 31 | 42 | 215 |
179 | 36
56 | }25 | 33 | 99 | 25 | 33 | 257 | 238 | 19 | }29 | 39 | 93 | 31 | 42 | 215 |
179 | 36
57 | }25 | 33 | 99 | 25 | 33 | 257 | 238 | 19 | }29 | 39 | 93 | 31 | 42 | 215 |
179 | 36
58 | 27 | 33 | 99 | 27 | 33 | 252 | 238 | 14 | - | - | - | - | - | - |
59 | }28 | 34 | 99 | 28 | 34 | 249 | 236 | 13 | }32 | 39 | 93 | 34 | 42 | 203 |
179 | 24

[illegible]

60 | }28 | 34 | 99 | 28 | 34 | 249 | 236 | 13 | }32 | 39 | 93 | 34 | 42 | 203 |
179 | 24

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	n	$m+n$	$l+m+n$	Mean n	Mean $m+n$	$[n]$	$[m+n]$	δm	n	$m+n$
	$l+m+n$	Mean n	Mean $m+n$	$[n]$	$[m+n]$	δm				

61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
63 | 24 | 34 | 99 | 24 | 34 | 260 | 236 | 24 | 35 | 39 | 93 | 38 | 42 | 191 |
179 | 12
64 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
66 | 25 | 35 | 99 | 25 | 35 | 257 | 234 | 23 | 28 | 39 | 93 | 30 | 42 | 219 |
179 | 40
67 | 28 | 35 | 99 | 28 | 35 | 249 | 234 | 15 | - | - | - | - | - | - | -
68 | 27 | 35 | 99 | 27 | 35 | 252 | 234 | 18 | 29 | 39 | 93 | 31 | 42 | 215 |
179 | 36
69 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
69a | 32 | 35 | 100 | 32 | 35 | 241 | 234 | 7 | 35 | 39 | 93 | 38 | 42 | 191 |
179 | 12
70 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
71 | 29 | 35 | 100 | 29 | 35 | 247 | 234 | 13 | 33 | 39 | 93 | 35 | 42 | 200 |
179 | 21
72 | - | - | - | - | - | - | - | 33 | 40 | 93 | 35 | 43 | 200 | 176 | 24
73 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
74 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
75 | 32 | 36 | 100 | 32 | 36 | 241 | 231 | 10 | 34 | 40 | 93 | 37 | 43 | 194 |
176 | 18
76 | - | - | - | - | - | - | - | 37 | 40 | 93 | 40 | 43 | 185 | 176 | 9
77 | - | - | - | - | - | - | - | 38 | 40 | 93 | 41 | 43 | 182 | 176 | 6
78 | 35 | 36 | 100 | 35 | 36 | 234 | 231 | 3 | 38 | 40 | 93 | 41 | 43 | 182 |
176 | 6
79 | 34 | 36 | 100 | 34 | 36 | 236 | 231 | 5 | 38 | 40 | 93 | 41 | 43 | 182 |
176 | 6
80 | 34 | 36 | 100 | 34 | 36 | 236 | 231 | 5 | 38 | 40 | 93 | 41 | 43 | 182 |
176 | 9
81 | 32 | 36 | 100 | 32 | 36 | 241 | 231 | 10 | 27 | 40 | 93 | 40 | 43 | 185 |
176 | 9
82 | 26 | 37 | 100 | 26 | 37 | 254 | 229 | 25 | }30 | 40 | 93 | 32 | 43 | 211 |
176 | 35
83 | 27 | 37 | 100 | 27 | 37 | 252 | 229 | 25 | }30 | 40 | 93 | 32 | 43 | 211 |
176 | 35
84 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | -
85 | }33 | 37 | 100 | 33 | 37 | 238 | 229 | 9 | }33 | 40 | 93 | 35 | 100 | 200 |
176 | 24
86 | }33 | 37 | 43 | 33 | 37 | 238 | 229 | 9 | }33 | 40 | 93 | 35 | 43 | 200 |
176 | 24
87 | }33 | 37 | 100 | 33 | 37 | 238 | 229 | 9 | }33 | 40 | 93 | 35 | 43 | 200 |
176 | 24
88 | - | - | - | - | - | - | - | }34 | 40 | 93 | 37 | 43 | 194 | 176 | 18
89 | - | - | - | - | - | - | - | }34 | 40 | 93 | 37 | 43 | 194 | 176 | 18
90 | - | - | - | - | - | - | - | }34 | 40 | 93 | 37 | 43 | 194 | 176 | 18

[illegible]

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| n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
| l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m

91 | 31 | 37 | 100 | 31 | 37 | 243 | 229 | 14 | 34 | 40 | 93 | 37 | 43 | 194 |
176 | 18
92 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
93 | 28 | 37 | 100 | 28 | 37 | 249 | 229 | 20 | 34 | 41 | 93 | 37 | 44 | 194 |
173 | 21
94 | 31 | 37 | 100 | 31 | 37 | 243 | 229 | 14 | 35 | 41 | 93 | 38 | 44 | 191 |
173 | 18
95 | 29 | 37 | 100 | 29 | 37 | 247 | 229 | 18 | 33 | 41 | 93 | 35 | 44 | 200 |
173 | 27
96 | 29 | 37 | 100 | 29 | 37 | 247 | 229 | 18 | 33 | 41 | 93 | 35 | 44 | 200 |
173 | 27
97 | 31 | 38 | 100 | 31 | 38 | 243 | 226 | 17 | 35 | 41 | 93 | 38 | 44 | 191 |
173 | 18
98 | 31 | 38 | 100 | 31 | 38 | 243 | 226 | 17 | 35 | 41 | 93 | 38 | 44 | 191 |
173 | 18
99 | 32 | 38 | 100 | 32 | 38 | 241 | 226 | 15 | 36 | 41 | 93 | 39 | 44 | 188 |
173 | 15
100 | 29 | 38 | 100 | 29 | 38 | 247 | 226 | 21 | 32 | 41 | 93 | 34 | 44 | 203 |
173 | 30
101 | 25 | 38 | 100 | 25 | 38 | 257 | 226 | 31 | 27 | 41 | 93 | 29 | 44 | 222 |
173 | 49
102 | 24 | 38 | 100 | 24 | 38 | 260 | 226 | 34 | 28 | 41 | 93 | 30 | 44 | 219 |
173 | 46
103 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
104 | 8 | 38 | 100 | 8 | 38 | 239 | 226 | 11 | 41 | 93 | 12 | 44 | 296 |
173 | 123
105 | 28 | 38 | 100 | 28 | 38 | 249 | 226 | 23 | 34 | 41 | 93 | 37 | 44 | 194 |
173 | 21
106 | 32 | 38 | 100 | 32 | 38 | 241 | 226 | 15 | 34 | 41 | 93 | 37 | 44 | 194 |
173 | 21
107 | 35 | 39 | 100 | 35 | 39 | 234 | 223 | 11 | 37 | 41 | 93 | 40 | 44 | 185 |
173 | 12
108 | 39 | 39 | 100 | 39 | 39 | 223 | 223 | 0 | 40 | 42 | 93 | 43 | 45 | 176 |
170 | 6
109 | 39 | 39 | 100 | 39 | 39 | 223 | 223 | 0 | 40 | 42 | 93 | 43 | 45 | 176 |
170 | 6
110 | 27 | 39 | 100 | 27 | 39 | 252 | 223 | 29 | 30 | 42 | 93 | 32 | 45 | 211 |
170 | 41
111 | 27 | 39 | 100 | 27 | 39 | 252 | 223 | 29 | 30 | 42 | 93 | 32 | 45 | 211 |
170 | 41
112 | 29 | 39 | 100 | 27 | 39 | 252 | 223 | 29 | 33 | 42 | 93 | 35 | 45 | 200 |
170 | 30
113 | 29 | 39 | 100 | 29 | 39 | 247 | 223 | 24 | 33 | 42 | 93 | 35 | 45 | 200 |
170 | 30
114 | 29 | 39 | 100 | 29 | 39 | 247 | 223 | 24 | 33 | 42 | 93 | 35 | 45 | 200 |
170 | 30
115 | 34 | 39 | 100 | 34 | 39 | 236 | 223 | 13 | 36 | 42 | 93 | 39 | 45 | 188 |
170 | 18
116 | 38 | 39 | 100 | 38 | 39 | 226 | 223 | 3 | - | - | - | - | - | - | - |
117 | 35 | 40 | 100 | 35 | 40 | 234 | 220 | 14 | 37 | 42 | 93 | 40 | 45 | 185 |
170 | 15
118 | 26 | 40 | 100 | 26 | 40 | 254 | 220 | 34 | 27 | 43 | 93 | 29 | 46 | 222 |
168 | 54
119 | 25 | 40 | 100 | 25 | 40 | 257 | 220 | 37 | 27 | 43 | 93 | 29 | 46 | 222 |

168 | 54
120 | 32 | 40 | 100 | 32 | 40 | 241 | 220 | 21 | 33 | 43 | 93 | 35 | 46 | 200 |
168 | 32

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C 18644 | C 18630

| n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
| l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m

121 | 32 | 40 | 100 | 32 | 40 | 241 | 220 | 21 | 33 | 43 | 93 | 35 | 46 | 200 |
168 | 32
122 | 32 | 40 | 100 | 32 | 40 | 241 | 220 | 21 | 33 | 43 | 93 | 35 | 46 | 200 |
168 | 32
123 | 33 | 40 | 100 | 33 | 40 | 238 | 220 | 18 | 33 | 43 | 93 | 35 | 46 | 200 |
168 | 32
124 | 38 | 40 | 100 | 38 | 40 | 226 | 220 | 6 | 37 | 43 | 93 | 40 | 46 | 185 |
168 | 17
125 | - | - | - | - | - | - | - | 31 | 43 | 93 | 33 | 46 | 207 | 168 | 39
126 | - | - | - | - | - | - | - | - | - | - | - | - | - | -
127 | - | - | - | - | - | - | - | - | - | - | - | - | - | -
128 | 31 | 40 | 100 | 31 | 40 | 243 | 220 | 23 | 32 | 43 | 93 | 34 | 46 | 203 |
168 | 35
129 | - | - | - | - | - | - | - | 33 | 44 | 93 | 35 | 47 | 200 | 165 | 35
130 | 27 | 41 | 100 | 27 | 40 | 252 | 220 | 32 | 29 | 44 | 93 | 31 | 47 | 215 |
165 | 50
131 | 32 | 41 | 100 | 32 | 41 | 241 | 218 | 23 | 32 | 44 | 93 | 34 | 47 | 203 |
165 | 38
132 | 32 | 41 | 100 | 32 | 41 | 241 | 218 | 23 | 32 | 44 | 93 | 34 | 47 | 203 |
165 | 38
133 | 32 | 41 | 100 | 32 | 41 | 241 | 218 | 23 | 32 | 44 | 93 | 34 | 47 | 203 |
165 | 38
134 | 32 | 41 | 100 | 32 | 41 | 241 | 218 | 23 | 34 | 44 | 93 | 37 | 47 | 194 |
165 | 29
135 | 33 | 41 | 100 | 33 | 41 | 338 | 218 | 20 | 39 | 44 | 93 | 42 | 47 | 179 |
165 | 14
136 | 40 | 41 | 100 | 40 | 41 | 220 | 218 | 2 | 39 | 44 | 93 | 42 | 47 | 179 |
165 | 14
137 | 46 | 41 | 100 | 46 | 41 | 205 | 218 | 7 | 47 | 44 | 93 | 50 | 47 | 156 |
165 | -9
138 | 54 | 41 | 100 | 64 | 41 | 162 | 218 | -56 | 61 | 44 | 93 | 65 | 47 | 112 |
165 | -53
139 | 36 | 41 | 100 | 36 | 41 | 231 | 218 | 3 | 36 | 44 | 93 | 31 | 48 | 215 |
162 | 53
140 | 27 | 42 | 100 | 27 | 42 | 252 | 215 | 37 | 29 | 45 | 93 | 31 | 48 | 215 |
162 | 53
141 | 30 | 42 | 100 | 30 | 42 | 245 | 215 | 30 | 33 | 45 | 93 | 35 | 48 | 200 |
162 | 38
142 | 30 | 42 | 100 | 30 | 42 | 245 | 215 | 30 | 33 | 45 | 93 | 35 | 48 | 200 |
162 | 38
143 | 34 | 42 | 100 | 34 | 42 | 236 | 215 | 21 | 34 | 45 | 93 | 37 | 48 | 194 |
162 | 32
144 | 33 | 42 | 100 | 33 | 42 | 238 | 215 | 23 | 35 | 45 | 93 | 38 | 48 | 191 |
162 | 29
145 | 35 | 42 | 101 | 35 | 42 | 234 | 215 | 19 | 40 | 45 | 93 | 43 | 48 | 176 |
162 | 14
146 | 35 | 42 | 101 | 35 | 42 | 234 | 215 | 19 | 40 | 45 | 93 | 43 | 48 | 176 |
162 | 14
147 | - | - | - | - | - | - | - | - | - | - | - | - | - | -
148 | 38 | 42 | 101 | 38 | 42 | 226 | 215 | 11 | 43 | 45 | 93 | 46 | 48 | 168 |
162 | 6
149 | - | - | - | - | - | - | - | - | - | - | - | - | - | -
150 | 35 | 43 | 101 | 35 | 43 | 234 | 212 | 22 | 38 | 45 | 93 | 41 | 48 | 182 |
162 | 20

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C	18644		C18630																
	n		m+n		+m+n		Mean n		Mean m+n		[n]		[m+n]		delta m		n		m+n
	+m+n		Mean n		Mean m+n		[n]		[m+n]		delta m								

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C18644|C18630

| | n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
| l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m

181 | 28 | 45 | 101 | 28 | 45 | 249 | 208 | 41 | 24 | 48 | 93 | 37 | 52 | 194 |
150 | 44
182 | 28 | 45 | 101 | 28 | 45 | 249 | 208 | 41 | 24 | 48 | 93 | 87 | 52 | 194 |
150 | 44
183 | - | - | - | - | - | - | - | - | 24 | 48 | 93 | 37 | 52 | 194 | 150 | 44
184 | - | - | - | - | - | - | - | - | 34 | 48 | 93 | 37 | 52 | 194 | 150 | 44
185 | - | - | - | - | - | - | - | - | 34 | 48 | 93 | 37 | 52 | 194 | 150 | 44
186 | 23 | 46 | 101 | 23 | 46 | 262 | 205 | 57 | 27 | 48 | 93 | 29 | 52 | 222 |
150 | 72
187 | 23 | 46 | 101 | 23 | 46 | 262 | 205 | 57 | - | - | - | - | - | - |
188 | 23 | 46 | 101 | 23 | 46 | 262 | 205 | 57 | 39 | 48 | 93 | 42 | 52 | 179 |
150 | 29
189 | 29 | 46 | 101 | 29 | 46 | 247 | 205 | 42 | 33 | 48 | 93 | 35 | 52 | 200 |
150 | 50
190 | 32 | 46 | 101 | 32 | 46 | 241 | 205 | 36 | 36 | 48 | 93 | 39 | 52 | 188 |
150 | 38
191 | 32 | 46 | 101 | 32 | 46 | 241 | 205 | 36 | 37 | 48 | 93 | 40 | 52 | 185 |
150 | 38
192 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
193 | 31 | 46 | 101 | 31 | 46 | 243 | 205 | 38 | 27 | 48 | 93 | 40 | 52 | 185 |
150 | 35
194 | - | - | - | - | - | - | - | - | 40 | 49 | 93 | 43 | 53 | 176 | 147 | 29
195 | 37 | 46 | 101 | 37 | 46 | 229 | 205 | 24 | 40 | 49 | 93 | 43 | 53 | 176 |
147 | 29
196 | 37 | 47 | 101 | 37 | 47 | 229 | 203 | 26 | 40 | 49 | 93 | 43 | 53 | 176 |
147 | 29
197 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
198 | 31 | 47 | 101 | 31 | 47 | 243 | 203 | 40 | 36 | 49 | 93 | 39 | 53 | 188 |
147 | 39
199 | 29 | 47 | 101 | 29 | 47 | 247 | 203 | 44 | 33 | 49 | 93 | 35 | 93 | 35 |
53 | 200 | 147 | 53
200 | 29 | 47 | 101 | 29 | 47 | 247 | 203 | 44 | 33 | 49 | 93 | 35 | 53 | 200 |
147 | 53
201 | 41 | 47 | 101 | 41 | 47 | 218 | 203 | 15 | 43 | 49 | 93 | 46 | 53 | 168 |
147 | 21
202 | - | - | - | - | - | - | - | - | 45 | 49 | 93 | 48 | 53 | 162 | 147 | 15
202a | 46 | 47 | 101 | 46 | 47 | 205 | 203 | 2 | 49 | 49 | 93 | 53 | 53 | 147 |
147 | 0
203 | 44 | 47 | 101 | 44 | 47 | 210 | 203 | 7 | 47 | 49 | 93 | 50 | 53 | 156 |
147 | 9
204 | 47 | 47 | 101 | 47 | 47 | 210 | 203 | 7 | 47 | 49 | 93 | 50 | 53 | 156 |
147 | 9
205 | 46 | 47 | 101 | 46 | 47 | 205 | 203 | 2 | - | - | - | - | - | - |
206 | 8 | 47 | 102 | 8 | 46 | - | 205 | - | 10 | 49 | 93 | 11 | 53 | 301 | 147 |
54
207 | 8 | 47 | 102 | 8 | 46 | - | 205 | - | 10 | 49 | 93 | 11 | 53 | 301 | 147 |
54
208 | 8 | 47 | 102 | 8 | 46 | - | 205 | - | 10 | 49 | 93 | 11 | 53 | 301 | 147 |
54
209 | 16 | 47 | 102 | 16 | 46 | 288 | 205 | 83 | 23 | 49 | 93 | 25 | 53 | 236 |
147 | 89
210 | 22 | 47 | 102 | 22 | 46 | 265 | 205 | 60 | 26 | 49 | 93 | 28 | 53 | 225 |
147 | 78

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[illegible][illegible]

239 | 36 | 49 | 102 | 35 | 48 | 234 | 201 | 33 | 39 | 48 | 93 | 42 | 52 | 179 |
150 | 29 |
240 | 31 | 49 | 102 | 30 | 48 | 245 | 201 | 44 | 33 | 48 | 93 | 35 | 52 | 200 |
150 | 50 |

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

C 18644|C 18630

| n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
| l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m

241 | 32 | 49 | 102 | 31 | 48 | 243 | 201 | 42 | 33 | 48 | 93 | 35 | 52 | 200 |
150 | 50
242 | - | - | - | - | - | - | - | 38 | 48 | 93 | 41 | 52 | 182 | 150 | 32
243 | 39 | 49 | 102 | 38 | 48 | 226 | 201 | 25 | 38 | 48 | 93 | 41 | 52 | 182 |
150 | 32
244 | 39 | 49 | 102 | 38 | 48 | 226 | 201 | 25 | 41 | 48 | 93 | 44 | 51 | 173 |
153 | 20
245 | 39 | 49 | 102 | 38 | 48 | 226 | 201 | 25 | 39 | 48 | 94 | 42 | 51 | 179 |
153 | 26
246 | 35 | 49 | 102 | 34 | 48 | 236 | 201 | 35 | 37 | 48 | 94 | 40 | 51 | 185 |
153 | 32
247 | 37 | 49 | 102 | 36 | 48 | 231 | 201 | 30 | - | - | - | - | - | - |
248 | - | - | - | - | - | - | - | 43 | 48 | 94 | 46 | 51 | 168 | 153 | 15
249 | 44 | 49 | 102 | 43 | 48 | 212 | 201 | 11 | 47 | 48 | 94 | 50 | 51 | 156 |
153 | 3
250 | 48 | 48 | 102 | 47 | 47 | 203 | 203 | 0 | 48 | 48 | 94 | 51 | 153 | 153 |
0
251 | 48 | 48 | 102 | 47 | 47 | 203 | 203 | 0 | 48 | 48 | 94 | 51 | 51 | 153 |
153 | 0
252 | 1 | 47 | 102 | 47 | 47 | 203 | 203 | 0 | 2 | 47 | 94 | 2 | 50 | - | 156 | -
253 | 1 | 47 | 102 | 1 | 46 | - | 205 | - | 2 | 47 | 94 | 2 | 50 | - | 156 | -
254 | 1 | 47 | 102 | 1 | 46 | - | 205 | - | 2 | 47 | 94 | 2 | 50 | - | 156 | -
255 | 1 | 47 | 102 | 1 | 46 | - | 205 | - | 4 | 47 | 94 | 4 | 50 | - | 156 | -
256 | 13 | 47 | 102 | 13 | 46 | 303 | 205 | 98 | 17 | 47 | 94 | 18 | 50 | 265 |
156 | 9
257 | 10 | 47 | 102 | 10 | 46 | 340 | 205 | 135 | 14 | 47 | 94 | 15 | 50 | 280 |
156 | 24
258 | 10 | 47 | 102 | 10 | 46 | 340 | 205 | 135 | 14 | 47 | 94 | 15 | 50 | 280 |
156 | 24
259 | 10 | 47 | 102 | 10 | 46 | 340 | 205 | 135 | 14 | 47 | 94 | 15 | 50 | 280 |
156 | 24
260 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
261 | 15 | 47 | 102 | 15 | 46 | 293 | 205 | 88 | 19 | 46 | 94 | 20 | 49 | 256 |
159 | 97
262 | 19 | 46 | 102 | 19 | 45 | 274 | 208 | 66 | 26 | 46 | 94 | 28 | 49 | 225 |
159 | 66
263 | 19 | 46 | 102 | 19 | 45 | 274 | 208 | 66 | 26 | 46 | 94 | 28 | 49 | 225 |
159 | 66
264 | 22 | 46 | 102 | 31 | 45 | 243 | 208 | 35 | 19 | 46 | 94 | 28 | 49 | 225 |
159 | 66
265 | 5 | 46 | 102 | 5 | 45 | - | 208 | - | 7 | 46 | 94 | 7 | 49 | 323 | 159 |
164
266 | 5 | 46 | 102 | 5 | 45 | - | 208 | - | 7 | 46 | 94 | 7 | 49 | 323 | 159 |
164
267 | 12 | 45 | 102 | 12 | 44 | 310 | 210 | 100 | 17 | 45 | 94 | 18 | 48 | 265 |
162 | 103
268 | 12 | 45 | 102 | 12 | 44 | 310 | 210 | 100 | 17 | 45 | 94 | 18 | 48 | 265 |
162 | 103
269 | 12 | 45 | 102 | 12 | 44 | 310 | 210 | 100 | 17 | 45 | 94 | 18 | 48 | 265 |
162 | 103
270 | 15 | 45 | 102 | 15 | 44 | 293 | 210 | 83 | 20 | 45 | 94 | 21 | 48 | 252 |
162 | 90

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[[preprinted]] 113 [[/preprinted]]

C 18644 | C18630
| | n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
| l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m
271 | 15 | 45 | 102 | 15 | 44 | 293 | 210 | 83 | 20 | 45 | 94 | 21 | 48 | 252 |
162 | 90 |
274 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
275 | 21 | 45 | 102 | 21 | 44 | 268 | 210 | 58 | 25 | 45 | 94 | 27 | 48 | 229 |
162 | 67 |
276 | 19 | 44 | 102 | 19 | 43 | 274 | 212 | 62 | - | - | - | - | - | - | - |
277 | 15 | 44 | 103 | 15 | 43 | 293 | 212 | 81 | 18 | 44 | 94 | 19 | 47 | 260 |
165 | 95 |
278 | 15 | 44 | 103 | 15 | 43 | 293 | 212 | 81 | 18 | 44 | 94 | 19 | 47 | 260 |
165 | 95 |
279 | 11 | 44 | 103 | 11 | 43 | 323 | 212 | 111 | 15 | 17 | 94 | 16 | 18 | 275 |
265 | 10 |
280 | 12 | 44 | 103 | 12 | 43 | 310 | 212 | 98 | 16 | 18 | 275 | 265 | 10 |
281 | 18 | 43 | 103 | 18 | 42 | 279 | 215 | 64 | 20 | 19 | 94 | 21 | 20 | 252 |
256 | 96 |
282 | 15 | 43 | 103 | 15 | 42 | 293 | 215 | 78 | 19 | 22 | 94 | 20 | 23 | 256 |
244 | 12 |
283 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
284 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
285 | 20 | 43 | 103 | 19 | 42 | 274 | 215 | 59 | 24 | 26 | 94 | 26 | 28 | 233 |
225 | 8 |
286 | 15 | 43 | 103 | 15 | 42 | 293 | 215 | 78 | - | - | - | - | - | - | - |
287 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
288 | 22 | 42 | 103 | 21 | 41 | 268 | 218 | 50 | 25 | 30 | 94 | 27 | 32 | 229 |
211 | 18 |
289 | 21 | 41 | 268 | 218 | 50 | 27 | 32 | 229 | 211 | 18 |
290 | 25 | 42 | 103 | 24 | 41 | 260 | 218 | 42 | - | - | - | - | - | - | - |
291 | 27 | 42 | 103 | 26 | 41 | 254 | 218 | 36 | 29 | 32 | 94 | 30 | 34 | 219 |
203 | 16 |
292 | 30 | 41 | 103 | 29 | 40 | 247 | 220 | 27 | 29 | 32 | 30 | 34 | 219 | 211 |
18 |
293 | - | - | - | - | - | - | - | 29 | 32 | 30 | 34 | 219 | 203 | 16 |
294 | 30 | 41 | 103 | 29 | 40 | 247 | 220 | 27 | 29 | 34 | 94 | 30 | 36 | 219 |
197 | 22 |
295 | 35 | 41 | 103 | 34 | 40 | 236 | 220 | 16 | 32 | 35 | 94 | 34 | 37 | 203 |
194 | 9 |
296 | 36 | 40 | 103 | 34 | 39 | 234 | 223 | 11 | 37 | 40 | 94 | 39 | 43 | 188 |
176 | 12 |
297 | 37 | 40 | 103 | 36 | 39 | 231 | 223 | 8 | 39 | 43 | 188 | 176 | 12 |
298 | 37 | 40 | 103 | 36 | 39 | 231 | 223 | 8 | 40 | 41 | 94 | 43 | 44 | 176 |
173 | 3 |
299 | 40 | 40 | 103 | 39 | 39 | 223 | 223 | 0 | 41 | 41 | 94 | 44 | 44 | 173 |
173 | 0 |
300 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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C 18644 | C18630
 | | n | m+n | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m | n | m+n
 | l+m+n | Mean n | Mean m+n | [n] | [m+n] | delta m
 301 -4 -4 | 103 -4 -4 | | | -3 | 1 | 94 | -3 | 1 | - | -
 302 -4 0 | 103 -4 0 | | | 0 | 2 | 94 | 0 | 2 | - | -
 303 -1 1 | 103 0 2 | | | -2 | 5 | 94 | 2 | 5 | - | -
 304 0 2 | 103 0 2 | | | - | - | - | - | - | - | -
 305 - | - | - | - | - | - | - | - | - | - | - | -
 306 3 | 3 | 103 | 3 | 3 | | | - | - | - | - | - | -
 307 - | - | - | - | - | - | 7 | 6 | 94 | 17 | 6 | - | - | -
 308 3 | 4 | 103 | 3 | 4 | | | 7 | 6 | 94 | 7 | 6 | - | - | -
 309 3 | 4 | 103 | 3 | 4 | | | 7 | 6 | 94 | 7 | 6 | - | - | -
 310 3 | 4 | 103 | 3 | 4 | | | -1 | 7 | 94 | 1 | 7 | - | - | -
 311 - | - | - | - | - | - | 1 | 7 | 94 | 1 | 7 | - | - | -
 312 - | - | - | - | - | - | 1 | 7 | 94 | 1 | 7 | - | - | -
 -20 - | - | - | - | - | - | 0 | 4 | 92 | 0 | 4 | - | - | -
 -19 - | - | - | - | - | - | 2 | 5 | 92 | 2 | 5 | - | - | -
 -18 - | - | - | - | - | - | 2 | 5 | 92 | 2 | 5 | - | - | -
 17 - | - | - | - | - | - | 2 | 5 | 92 | 2 | 5 | - | - | -
 -16 - | - | - | - | - | - | 2 | 5 | 92 | 2 | 5 | - | - | -
 -15 12 | 8 | 97 | 12 | 8 | | | -12 | 6 | 92 | 13 | 7 | 291 | 323 | -68
 -14 - | - | - | - | - | - | 4 | 6 | 92 | 4 | 7 | - | 323 | -
 -13 - | - | - | - | - | - | - | - | - | - | - | - | -
 -12 - | - | - | - | - | - | 3 | 6 | 92 | 3 | 7 | - | 323 | -
 -11 4 | 8 | 97 | 4 | 8 | | | -3 | 7 | 92 | 3 | 8 | - | 317 | -
 -10 3 | 8 | 97 | 3 | 8 | | | -3 | 7 | 92 | 3 | 8 | - | 317 | -
 -9 13 | 8 | 97 | 13 | 8 | | | -13 | 7 | 92 | 14 | 8 | 286 | 317 | -69
 -8 8 | 8 | 97 | 8 | 8 | | | -5 | 7 | 92 | 6 | 8 | - | 317 | -
 -7 4 | 8 | 97 | 4 | 8 | | | -2 | 7 | 92 | 3 | 8 | - | 317 | -
 -6 5 | 8 | 97 | 5 | 8 | | | -4 | 8 | 92 | 4 | 9 | - | 312 | -
 -5 4 | 8 | 97 | 4 | 8 | | | -5 | 8 | 92 | 5 | 9 | - | 312 | -
 -4 4 | 8 | 97 | 4 | 8 | | | -2 | 8 | 92 | 2 | 9 | - | 312 | -
 -3 3 | 8 | 97 | 3 | 8 | | | -3 | 8 | 92 | 3 | 9 | - | 312 | -
 -2 4 | 8 | 97 | 4 | 8 | | | -3 | 9 | 92 | 3 | 10 | - | 307 | -
 -1 3 | 8 | 97 | 3 | 8 | | | -4 | 9 | 92 | 4 | 10 | - | 307 | -

The image shows a handwritten astronomical data table from a notebook. The page number 114 is visible at the top left. The table is divided into two main sections by a red vertical line, labeled 'C 18644' and 'C 18630'. Each section contains multiple columns of data, including numerical values and some text. The data appears to be related to astronomical observations, possibly of a comet or planet, given the context of the Smithsonian Institution Transcription Center and the Harvard-Smithsonian Center for Astrophysics. The handwriting is in ink, and the paper shows signs of age and wear.

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[[preprinted]] 115 [[/preprinted]]

	n	m+n	l+m+n	Mean n	Mean m+n	[n]	[m+n]	delta m	n	m+n					
	l+m+n	Mean n	Mean m+n	[n]	[m+n]	delta m									
1 a	5	9	98	5	9	5	1	5	9	92	5	10	-	-	
b	8	9	98	8	9		-	7	10	92	8	11	317	301	16
c	8	9	98	8	9		-	7	10	92	8	11	317	301	16

[[d, e, and f, the next rows, are surrounded by curly bracket]]

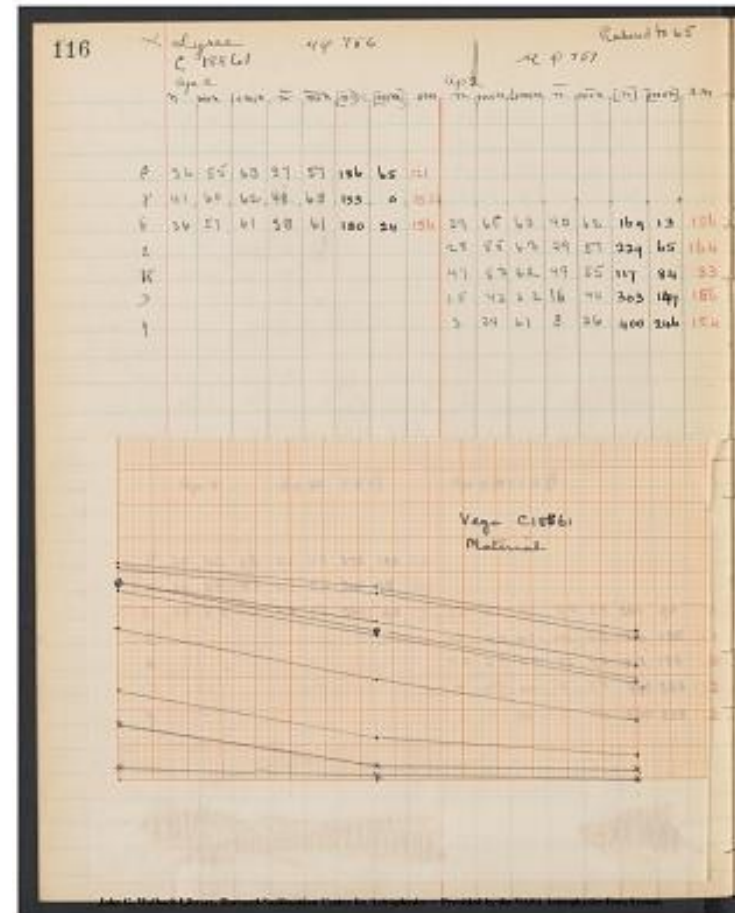
d	7	9	98	7	9		-	7	10	92	8	11	317	301	16	
e	3	9	98	3	9		-	4	11	92	5	12	-	-	-	
f			3	9		-	4	11	92	5	12	-	-	-	-	
g	6	10	98	6	10		-	7	11	92	8	12	317	296	21	
h	8	10	98	8	10		-	8	11	92	9	12	312	296	21	
i	7	10	98	7	10		-	[[bracketed with row below]]	8	12	92	9	13	312	291	21
j	-	-	-	-	-	-	-	[[bracketed with row above]]		9	13	312	291	21		
9	20	20	14	92	22	15	248	280	-32							
a	11	13	98	11	13	323	303	20	12	15	92	13	16	291	275	
b	10	14	98	10	14	340	298	40	12	15	92	13	16	291	275	
c	13	14	98	13	14	303	298	5	13	15	92	14	16	286	275	
d	8	15	98	8	15	-	293	-	8	16	92	8	17	317	270	42
e	b	15	98	6	15	-	293	-	7	16	92	8	17	317	270	47
10 a	-	-	99	-	-	-	6	18	92	7	20	323	256	67		
b	7	16	99	7	16	-	288	-	9	18	92	10	20	307	256	51
c	8	17	99	8	17	-	283	-	9	19	92	10	21	307	252	55
d	14	17	99	14	17	298	283	15	15	20	92	16	22	307	248	59
e	15	17	99	15	17	293	283	10	18	20	92	20	22	256	248	8
f	11	18	99	11	18	323	279	44	13	21	92	14	23	286	244	42
g	17	19	99	7	19	-	274	-	19	22	92	21	24	252	240	12

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[[preprinted]] 116 [[/preprinted]]

C18861^[a Lyrae] mu phi 956 | mu phi 757 ^[[Reduced to 65]]
Ap2 | Ap2
| n | m+n | l+m+n | mean n | mean m+n | [n] | [n+m] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
beta | 36 | 55 | 63 | 37 | 57 | 186 | 65 | 121 | | | | |
gamma | 41 | 60 | 62 | 43 | 63 | 153 | 0 | 153 | | | | |
delta | 36 | 57 | 61 | 38 | 61 | 180 | 24 | 156 | 39 | 60 | 63 | 40 | 62 | 169 |
13 | 156
epsilon | | | | | | | 28 | 55 | 63 | 29 | 57 | 229 | 65 | 164
Kappa | | | | | | | 47 | 53 | 62 | 49 | 55 | 117 | 84 | 33
zeta | | | | | | | 15 | 42 | 62 | 16 | 44 | 303 |
1~~[[strikethrough]]6[[/strikethrough]]~~47 | 156
eta | | | | | | | 3 | 24 | 61 | 3 | 26 | 100 | 246 | 154

[[image - line graphs plotted though data points]]
Vega C18861
Material



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[[preprinted]] 116 [[/preprinted]]

Ap2 | Ap2
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
 beta | 36 | 55 | 63 | 37 | 57 | 186 | 65 | 121 | | | | | | | |
 gamma | 41 | 60 | 62 | 43 | 63 | 153 | 0 | 153 | | | | | | | |
 delta | 36 | 57 | 61 | 38 | 61 | 180 | 24 | 156 | 39 | 60 | 63 | 40 | 62 | 169 |
 13 | 156
 epsilon | | | | | | | 28 | 55 | 63 | 29 | 57 | 229 | 65 | 164
 kappa | | | | | | | 47 | 53 | 62 | 49 | 55 | 117 | 84 | 33
 zeta | | | | | | | 15 | 42 | 62 | 16 | 44 | 303 |
 1~~[[strikethrough]]6[[/strikethrough]]~~47 | 156
 eta | | | | | | | 3 | 24 | 61 | 3 | 26 | 400 | 246 | 154

Ap4 (mu phi 758) | Ap4 (mu phi 759)
 beta | 20 | 42 | 63 | 21 | 43 | 273 | 153 | 120 | | | | | | | |
 gamma | 26 | 54 | 63 | 27 | 56 | 240 | 75 | 165 | | | | | | | |
 delta | 22 | 52 | 63 | 23 | 54 | 261 | 90 | 171 | 22 | 51 | 61 | 23 | 54 | 261 |
 90 | 171
 epsilon | | | | | | | 13 | 43 | 61 | 14 | 46 | 316 | 135 | 181
 kappa | | | | | | | 30 | 39 | 60 | 32 | 42 | 213 | 153 | 60
 zeta | | | | | | | 4 | 27 | 60 | 4 | 29 | 390 | 228 | 172
 eta | | | | | | | 1 | 11 | 60 | 1 | 12 | 500 | 328 | 172

116

44 758

44 759

	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
beta	36	55	63	37	57	186	65	121								
gamma	41	60	62	43	63	153	0	153								
delta	36	57	61	38	61	180	24	156	39	60	63	40	62	169		
epsilon																
kappa																
zeta																
eta																

	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
beta	20	42	63	21	43	273	153	120								
gamma	26	54	63	27	56	240	75	165								
delta	22	52	63	23	54	261	90	171	22	51	61	23	54	261		
epsilon																
kappa																
zeta																
eta																

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[[preprinted]] 117 [[/preprinted]]

[[image - line graph plotted through data points]]
[[Y Axis: no scale]]
[[X Axis: 0 - 500]]

Vega C 18661
reduction



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[[preprinted]] 117 [[/preprinted]]

Ap 6 (760) | Ap 6 (761)
| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
beta | 8 | 29 | 64 | 8 | 29 | 352 |
[[~~316~~]]^[[~~2~~]]5[[~~28~~]] | 124 | | | | | | |
gamma | 14 | 44 | 66 | 14 | 43 | 316 | 152 | 164 | 12 | 42 | 63 | 12 | 43 |
328 | 152 | 176
delta | 11 | 42 | 66 | 11 | 41 | 335 | 163 | 172 | 10 | 40 | 63 | 10 | 41 | 341 |
163 | 78
epsilon | | | | | | | 6 | 32 | 63 | 6 | 33 | 367 | 208 | 159
kappa | | | | | | | 15 | 27 | 63 | 15 | 28 | 308 | 234 | 74
zeta | | | | | | | 3 | 16 | 63 | 3 | 17 | 400 | 295 | 105
eta | | | | | | | 0 | 7 | 63 | 0 | 7 | 500 | 360 | 140

Means. (63 to 5 only)

| | | | | sigma | Mean
beta | 121 | | 120 | | 124 | | 364 | 121
gamma | 153 | | 165 | | 164 | 176 | | 658 | 164
delta | 156 | 156 | 171 | 171 | 172 | 178 | | 1004 | 167
epsilon | [[~~164~~]] | 164[[~~164~~]] | 164 | | 181 | | 159 | | 504 |
168
zeta^[[~~kappa~~]] | | 156 | | .. | | .. | | 156
eta | 154 | | .. | | .. | | 154
kappa | | 33 | | 60 | | 74 | | 164 | 56

117													
Ap 6 (760)							Ap 6 (761)						
B	γ	δ	ε	ζ	η	κ	B	γ	δ	ε	ζ	η	κ
121	153	156	171	172	178	1004	121	153	156	171	172	178	1004
120	165	164	176	178	178	1004	120	165	164	176	178	178	1004
124	165	164	176	178	178	1004	124	165	164	176	178	178	1004
364	165	164	176	178	178	1004	364	165	164	176	178	178	1004
121	153	156	171	172	178	1004	121	153	156	171	172	178	1004
120	165	164	176	178	178	1004	120	165	164	176	178	178	1004
124	165	164	176	178	178	1004	124	165	164	176	178	178	1004
364	165	164	176	178	178	1004	364	165	164	176	178	178	1004
121	153	156	171	172	178	1004	121	153	156	171	172	178	1004
120	165	164	176	178	178	1004	120	165	164	176	178	178	1004
124	165	164	176	178	178	1004	124	165	164	176	178	178	1004
364	165	164	176	178	178	1004	364	165	164	176	178	178	1004
121	153	156	171	172	178	1004	121	153	156	171	172	178	1004
120	165	164	176	178	178	1004	120	165	164	176	178	178	1004
124	165	164	176	178	178	1004	124	165	164	176	178	178	1004
364	165	164	176	178	178	1004	364	165	164	176	178	178	1004

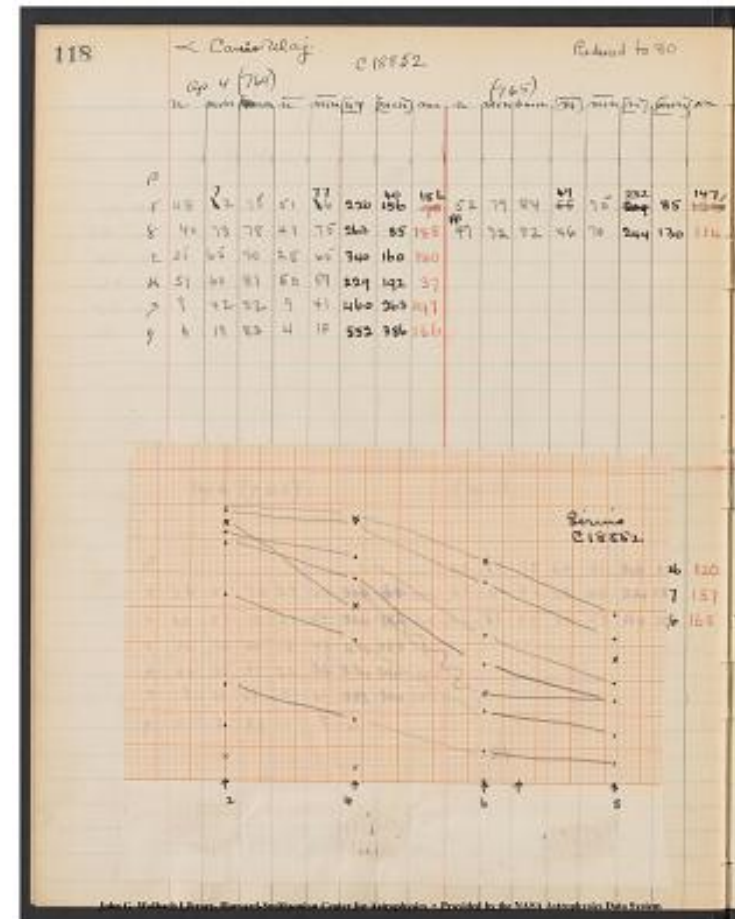
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[[preprinted]] 118 [[/preprinted]]

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

beta | | | | | | | | | | | | | | | |
gamma | 48 | ~~6~~ | ~~72~~ | 75 | 51 |
~~6~~ | ~~6~~ | ~~77~~ | 226 |
~~156~~ | ~~140~~ |
~~70~~ | ~~186~~ | 52 | 79 | 84 |
~~55~~ | ~~49~~ | 75 |
~~209~~ | ~~232~~ | 95 |
~~124~~ | ~~147~~ |  |
delta | 40 | 73 | 78 | 41 | 75 | 163 | 58 | 188 | 47 | β |
7 | ~~1~~ | ~~2~~ | 82 | 46 | 70 | 244 | 130 | 114 |
epsilon | 25 | 65 | 80 | 25 | 65 | 340 | 160 | 180 | | | | | | | | | |
kappa | 51 | 60 | 81 | 50 | 59 | 229 | 192 | 37 | | | | | | | | | |
zeta | 9 | 42 | 82 | 9 | 41 | 460 | 263 | 197 | | | | | | | | | |
eta | 4 | 19 | 83 | 4 | 18 | 552 | 386 | 166 | | | | | | | | | |

[[image - line graphs drawn through data points]]
Sirius
C18852



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[illegible]

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Reduced to 85
epsilon Orionis C 18852

(762) | (763)
n | m+n | +m+n | n | m+n | [n] | [m+n] | delta m | n | m+n | (+m+n) | [n m+n n]
|[m+n]| delta m

1	9	15	84	9	15	460	410	50								
2	24	34	84	24	34	346	294	52								
3	45	49	84	46	50	244	228	16								
4	44	50	84	45	51	248	224	24								
5	53	55	84	54	56	212	204	8								
6	53	57	84	54	58	212	196	6								
7	44	58	84	45	59	248	192	56								
8	60	63	84	61	64	182	166	16								
9	57	65	83	58	67	196	150	46								
10	64	68	83	66	70	156	130	26								
11	67	68	83	69	70	136	130	6								
12	60	69	83	61	71	182	124	58								
13	64	69	83	66	71	156	124	32								
14	57	69	83	58	71	196	124	72								
15	63	69	83	64	71	166	124	42								
16	65	69	83	67	71	150	124	26								
17	65	69	83	67	71	150	124	26								
18	68	70	82	70	73	130	106	25								
19	69	71	82	71	74	124	96	28								
20	69	71	82	72	74	116	96	20								
21	61	71	82	63	74	172	96	76								
22	69	71	82	72	74	116	96	20								
23	70	71	82	73	74	106	96	10	71	73	84	72	74	116	96	
24	69	72	82	72	75	116	86	30	69	73	84	70	74	130	96	
25	70	72	81	73	76	106	74	32	72	74	84	73	75	106	86	
26	65	72	81	68	96	142	74	68	67	74	84	68	75	142	86	
27									73	75	83	75	77	86	58	28
28									73	75	83	75	77	86	58	28
29									73	75	83	75	77	86	58	28
30									73	75	83	75	77	86	58	28

120

E Orionis

C 18852

Reduced to 85

(762)

(763)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	8	15	84	9	15	460	410	50																						
2	24	34	84	24	34	346	294	52																						
3	45	49	84	46	50	244	228	16																						
4	44	50	84	45	51	248	224	24																						
5	53	55	84	54	56	212	204	8																						
6	53	57	84	54	58	212	196	6																						
7	44	58	84	45	59	248	192	56																						
8	60	63	84	61	64	182	166	16																						
9	57	65	83	58	67	196	150	46																						
10	64	68	83	66	70	156	130	26																						
11	67	68	83	69	70	136	130	6																						
12	60	69	83	61	71	182	124	58																						
13	64	69	83	66	71	156	124	32																						
14	57	69	83	58	71	196	124	72																						
15	63	69	83	64	71	166	124	42																						
16	65	69	83	67	71	150	124	26																						
17	65	69	83	67	71	150	124	26																						
18	68	70	82	70	73	130	106	25																						
19	69	71	82	71	74	124	96	28																						
20	69	71	82	72	74	116	96	20																						
21	61	71	82	63	74	172	96	76																						
22	69	71	82	72	74	116	96	20																						
23	70	71	82	73	74	106	96	10	71	73	84	72	74	116	96	20														
24	69	72	82	72	75	116	86	30	69	73	84	70	74	130	96	24														
25	70	72	81	73	76	106	74	32	72	74	84	73	75	106	86	28														
26	65	72	81	68	96	142	74	68	67	74	84	68	75	142	86	26														
27									73	75	83	75	77	86	58	28														
28									73	75	83	75	77	86	58	28														
29									73	75	83	75	77	86	58	28														
30									73	75	83	75	77	86	58	28														

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epsilon Orionis C 18852
(762) | 763

n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

[[attached page]]

Sirius C 18852

1	31	308	61	182	
2	616	32	302	62	178
3	574	33	298	63	172
4	550	34	294	64	166
5	526	35	290	65	162
6	502	36	284	66	156
7	488	37	280	67	150
8	470	38	276	68	142
9	460	39	270	69	136
10	450	40	266	70	130
11	440	41	262	71	124
12	434	42	258	72	116
13	426	43	254	73	106
14	418	44	252	74	96
15	410	45	248	75	86
16	402	46	244	76	74
17	294	47	240	77	58
18	388	48	236	78	40
19	380	49	232	79	18
20	370	50	228	80	
21	364	51	224		
22	358	52	220		
23	352	53	216		
24	346	54	212		
25	340	55	208		
26	334	56	204		
27	328	57	200		
28	322	58	196		
29	318	59	192		
30	314	60	188		

[[/attached page]]

23	70	71	82	73	74	106	96	10	71	73	84	72	74	116	96	|
24	69	72	82	72	75	116	86	30	69	73	84	70	74	130	96	|
25	70	72	81	73	76	106	74	32	72	74	84	73	75	106	86	|
26	65	72	81	68	76	142	74	68	67	74	84	68	75	142	86	|
27																|
28																|
29																|
30																|

120

E. Orionis

C 18852

Reduced to 85

(762)

(763)

Sirius C 18852

1	41	248	54	182	
2	46	30	182	49	178
3	574	33	298	63	172
4	550	34	294	64	166
5	526	35	290	65	162
6	502	36	284	66	156
7	488	37	280	67	150
8	470	38	276	68	142
9	460	39	270	69	136
10	450	40	266	70	130
11	440	41	262	71	124
12	434	42	258	72	116
13	426	43	254	73	106
14	418	44	252	74	96
15	410	45	248	75	86
16	402	46	244	76	74
17	294	47	240	77	58
18	388	48	236	78	40
19	380	49	232	79	18
20	370	50	228	80	
21	364	51	224		
22	358	52	220		
23	352	53	216		
24	346	54	212		
25	340	55	208		
26	334	56	204		
27	328	57	200		
28	322	58	196		
29	318	59	192		
30	314	60	188		

23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
70	71	82	73	74	106	96	10	71	73	84	72	74	116	96	2.0		
69	72	82	72	75	116	86	30	69	73	84	70	74	130	96	2.1		
70	72	81	73	76	106	74	32	72	74	84	73	75	106	86	2.2		
65	72	81	68	76	142	74	68	67	74	84	68	75	142	86	2.3		
2.7																	
2.8																	
2.9																	
3.0																	

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[[preprint]] 121 [[/preprint]]

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[[graph overlain on page 121]]

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MADE IN U.S.A. [[/preprint]]



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(762) || (763)

| | | | | | | | | | n | m+n | l+m+n | mean n | mean m | [n] | [m+n] | delta
m |

31										73	74	83	75	76	86	74	12
32										72	74	83	74	76	96	74	22
33										68	74	83	70	76	130	74	56
34										72	74	83	74	76	96	74	22
35										73	74	82	76	77			
5										7	7	8	7	58	0		
36										72	73	82	75	76	86	74	12
37										71	73	82	74	76	96	74	22
38										70	72	82	73	75	106	86	20
39										68	71	82	70	74	130	96	36
40										47	58	81	49	61	232	182	50
41										39	46	81	41	48	262	236	26
42										21	25	80	22	27	358	328	30

(762)																	121
(763)																	
31	73	74	83	75	76	86	74	12	73	74	83	75	76	86	74	12	
32	72	74	83	74	76	96	74	22	72	74	83	74	76	96	74	22	
33	68	74	83	70	76	130	74	56	68	74	83	70	76	130	74	56	
34	72	74	83	74	76	96	74	22	72	74	83	74	76	96	74	22	
35	73	74	82	76	77				73	74	82	76	77				
36	72	73	82	75	76	86	74	12	72	73	82	75	76	86	74	12	
37	71	73	82	74	76	96	74	22	71	73	82	74	76	96	74	22	
38	70	72	82	73	75	106	86	20	70	72	82	73	75	106	86	20	
39	68	71	82	70	74	130	96	36	68	71	82	70	74	130	96	36	
40	47	58	81	49	61	232	182	50	47	58	81	49	61	232	182	50	
41	39	46	81	41	48	262	236	26	39	46	81	41	48	262	236	26	
42	21	25	80	22	27	358	328	30	21	25	80	22	27	358	328	30	

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mulira Ceti C18650 Reduced to 55

No. | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | No | n
| m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
-9 | 5 | 3 | 54 | 5 | 3 | - | - | 61 | 11 | 14 | 55 | 11 | 14 | 420 | 332 | 88
[[/strickethrough]]2[[/strickethrough]]1 | 9 | 5 | 54 | 9 | 5 | - | - | 62 | 9 | 14 |
55 | 9 | 14 | - | 332 | -
5 | 16 | 7 | 54 | 16 | 7 | 310 | - | 63 | 10 | 14 | 55 | 10 | 14 | - | 332 | -
9x | 7 | 8 | 54 | 7 | 8 | - | - | 64 | - | - | - | - | - | - | - | -
10 | 2 | 8 | 54 | 2 | 8 | - | - | 65 | - | - | - | - | - | - | - | -
1[[/strickethrough]]2[[/strickethrough]]1 | 3 | 10 | 54 | 3 | 10 | - | - | 66 | 11 |
15 | 55 | 11 | 15 | 420 | 320 | 100
37 | 9 | 13 | 54 | 9 | 13 | - | 346 | - | 67 | - | - | - | - | - | - | -
38 | - | - | - | - | - | - | 68 | - | - | - | - | - | - | - | -
39 | 9 | 13 | 54 | 9 | 13 | - | 346 | - | 69 | - | - | - | - | - | - | -
40 | - | - | - | - | - | - | 70 | - | - | - | - | - | - | - | -
41 | - | - | - | - | - | - | 71 | 12 | 15 | 55 | 12 | 15 | 368 | 320 | 48
42 | - | - | - | - | - | - | 72 | - | - | - | - | - | - | - | -
43 | - | - | - | - | - | - | 73 | - | - | - | - | - | - | - | -
44 | - | - | - | - | - | - | 74 | - | - | - | - | - | - | - | -
45 | - | - | - | - | - | - | 75 | - | - | - | - | - | - | - | -
46 | - | - | - | - | - | - | 76 | - | - | - | - | - | - | - | -
47 | - | - | - | - | - | - | 77 | - | - | - | - | - | - | - | -
48 | 9 | 14 | 54 | 9 | 14 | - | 332 | 78 | - | - | - | - | - | - | - | -
49 | - | - | - | - | - | - | 79 | - | - | - | - | - | - | - | -
50 | - | - | - | - | - | - | 80 | - | - | - | - | - | - | - | -
51 | - | - | - | - | - | - | 81 | - | - | - | - | - | - | - | -
52 | - | - | - | - | - | - | 82 | 11 | 15 | 55 | 11 | 15 | 420 | 320 | 150
53 | 37 | 14 | 55 | 37 | 14 | 168 | 332 | -16.4 | 83 | 10 | 15 | 55 | 10 | 15 | - |
320 | -
54 | - | - | - | - | - | - | 84 | - | - | - | - | - | - | - | -
55 | 11 | 14 | 55 | 11 | 14 | 420 | 332 | 88 | 85 | - | - | - | - | - | - | -
56 | 11 | 14 | 55 | 11 | 14 | 420 | 332 | 88 | 86 | - | - | - | - | - | - | -
57 | 11 | 14 | 55 | 11 | 14 | 420 | 332 | 88 | 87 | - | - | - | - | - | - | -
58 | + | - | - | - | - | - | 88 | - | - | - | - | - | - | - | -
59 | 10 | 14 | 55 | 10 | 14 | - | 332 | - | 89 | - | - | - | - | - | - | -
60 | 10 | 14 | 55 | 10 | 14 | - | 332 | - | 90 | - | - | - | - | - | - | -

122

mulira Ceti C18650

Reduced to 55

No.	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	No.	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
-9	5	3	54	5	3	-	-	-	41	11	14	55	11	14	420	332	88
1	7	8	54	7	8	-	-	-	42	9	14	55	9	14	-	332	-
5	16	7	54	16	7	310	-	-	43	10	14	55	10	14	-	332	-
9x	7	8	54	7	8	-	-	-	44	-	-	-	-	-	-	-	-
10	2	8	54	2	8	-	-	-	45	-	-	-	-	-	-	-	-
11	3	10	54	3	10	-	-	-	46	11	15	55	11	15	420	320	150
12	9	13	54	9	13	-	346	-	47	-	-	-	-	-	-	-	-
13	9	13	54	9	13	-	346	-	48	9	14	54	9	14	-	332	78
14	-	-	-	-	-	-	-	-	49	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	50	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	51	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	52	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	53	37	14	55	37	14	168	332	-16.4
19	-	-	-	-	-	-	-	-	54	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	55	11	14	55	11	14	420	332	88
21	-	-	-	-	-	-	-	-	56	11	14	55	11	14	420	332	88
22	-	-	-	-	-	-	-	-	57	11	14	55	11	14	420	332	88
23	-	-	-	-	-	-	-	-	58	11	14	55	11	14	420	332	88
24	-	-	-	-	-	-	-	-	59	10	14	55	10	14	-	332	-
25	-	-	-	-	-	-	-	-	60	10	14	55	10	14	-	332	-
26	-	-	-	-	-	-	-	-									
27	-	-	-	-	-	-	-	-									
28	-	-	-	-	-	-	-	-									
29	-	-	-	-	-	-	-	-									
30	-	-	-	-	-	-	-	-									
31	-	-	-	-	-	-	-	-									
32	-	-	-	-	-	-	-	-									
33	-	-	-	-	-	-	-	-									
34	-	-	-	-	-	-	-	-									
35	-	-	-	-	-	-	-	-									
36	-	-	-	-	-	-	-	-									
37	-	-	-	-	-	-	-	-									
38	-	-	-	-	-	-	-	-									
39	-	-	-	-	-	-	-	-									
40	-	-	-	-	-	-	-	-									
41	-	-	-	-	-	-	-	-									
42	-	-	-	-	-	-	-	-									
43	-	-	-	-	-	-	-	-									
44	-	-	-	-	-	-	-	-									
45	-	-	-	-	-	-	-	-									
46	-	-	-	-	-	-	-	-									
47	-	-	-	-	-	-	-	-									
48	-	-	-	-	-	-	-	-									
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52	-	-	-	-	-	-	-	-									
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54	-	-	-	-	-	-	-	-									
55	-	-	-	-	-	-	-	-									
56	-	-	-	-	-	-	-	-									
57	-	-	-	-	-	-	-	-									
58	-	-	-	-	-	-	-	-									
59	-	-	-	-	-	-	-	-									
60	-	-	-	-	-	-	-	-									

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No+	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	No+
n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m		
91	-	-	-	-	-	121	-	-	-
92	11	15	55	11	15	420	320	100	122
93	-	-	-	-	-	123	-	-	-
94	-	-	-	-	-	124	-	-	-
95	-	-	-	-	-	125	-	-	-
96	-	-	-	-	-	126	-	-	-
97	-	-	-	-	-	127	-	-	-
98	-	-	-	-	-	128	10	15	55
99	-	-	-	-	-	129	-	-	-
100	-	-	-	-	-	130	10	15	55
101	-	-	-	-	-	131	-	-	-
102	10	11	15	11	15	132	9	15	55
103	-	-	-	-	-	133	-	-	-
104	5	15	55	5	15	320	-	-	134
105	-	-	-	-	-	135	-	-	-
106	-	-	-	-	-	136	-	-	-
107	-	-	-	-	-	137	-	-	-
108	15	15	55	15	15	320	320	0	138
230	310	-50							
109	15	15	55	15	15	320	320	0	139
368	310	58							
110	11	15	55	11	15	420	320		
100	140	9	16	55	9	16	-	-	310
111	-	-	-	-	-	141	10	16	55
112	-	-	-	-	-	142	10	16	55
113	-	-	-	-	-	143	+	-	-
114	-	-	-	-	-	144	12	16	55
115	-	-	-	-	-	145	-	-	-
116	-	-	-	-	-	146	-	-	-
117	-	-	-	-	-	147	-	-	-
118	10	15	55	10	15	-	320		148
119	10	15	55	10	15	-	320		149
120	-	-	-	-	-	150	-	-	-

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	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
	[[underline]]No[[/underline]]							
	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
151	-	-	-	-	-	181	-	-
152	-	-	-	-	-	182	-	-
153	-	-	-	-	-	183	-	-
154	11	16	55	11	16	420	310	110
155	11	16	55	11	16	420	310	110
156	-	-	-	-	-	186	9	17
157	12	16	55	12	16	368	310	58
158	12	16	55	12	16	368	310	58
159	-	-	-	-	-	189	-	-
160	-	-	-	-	-	190	-	-
161	8	16	55	8	16	310	191	-
162	8	16	55	8	16	310	192	-
163	8	16	55	8	16	310	193	-
164	8	16	55	8	16	310	194	-
165	-	-	-	-	-	195	-	-
166	10	17	55	10	17	300	196	-
167	-	-	-	-	-	197	-	-
168	-	-	-	-	-	198	-	-
169	-	-	-	-	-	199	11	17
170	-	-	-	-	-	200	11	17
171	-	-	-	-	-	201	-	-
172	7	17	55	7	17	300	202	-
173	-	-	-	-	-	203	-	-
174	-	-	-	-	-	204	-	-
175	-	-	-	-	-	205	-	-
176	-	-	-	-	-	206	4	17
177	-	-	-	-	-	207	4	17
178	-	-	-	-	-	208	4	17
179	-	-	-	-	-	209	-	-
180	-	-	-	-	-	210	-	-

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[[preprinted]] 125 [[/preprinted]]

n m+n l+m+n mean n mean m+n [n] [m+n] delta m No. n
m+n l+m+n mean n mean m+n [n] [m+n] delta m
211 | - | - | - | - | - | 241 | 11 | 17 | 55 | 11 | 17 | 420 | 300 | 120
212 | - | - | - | - | - | 242 | - | - | - | - | - | - | - | -
213 | - | - | - | - | - | 243 | - | - | - | - | - | - | - | -
214 | - | - | - | - | - | 244 | - | - | - | - | - | - | - | -
215 | - | - | - | - | - | 245 | - | - | - | - | - | - | - | -
216 | 4 | 17 | 55 | 4 | 17 | - | 300 | 246 | 13 | 17 | 55 | 13 | 17 | 346 | 300
| 46
217 | 4 | 17 | 55 | 4 | 17 | - | 300 | 247 | - | - | - | - | - | - | -
218 | - | - | - | - | - | 248 | - | - | - | - | - | - | - | -
219 | - | - | - | - | - | 249 | - | - | - | - | - | - | - | -
220 | - | - | - | - | - | 250 | 17 | 17 | 55 | 17 | 17 | 300 | 300 | 0
221 | - | - | - | - | - | 251 | 17 | 17 | 55 | 17 | 17 | 300 | 300 | 0
222 | - | - | - | - | - | 252 | 2 | 16 | 55 | 2 | 16 | 310 | -
223 | - | - | - | - | - | 253 | - | - | - | - | - | - | - | -
224 | - | - | - | - | - | 254 | - | - | - | - | - | - | - | -
225 | - | - | - | - | - | 255 | 1 | 16 |
226 | - | - | - | - | - | 256 | 1 | 16 | 55 | 1 | 16 | 310 | -
227 | - | - | - | - | - | 257 | - | - | - | - | - | - | - | -
228 | 8 | 17 | 55 | 8 | 17 | - | 300 | 258 | - | - | - | - | - | - | -
229 | 7 | 17 | 55 | 7 | 17 | - | 300 | 259 | - | - | - | - | - | - | -
230 | - | - | - | - | - | 260 | - | - | - | - | - | - | - | -
231 | - | - | - | - | - | 261 | - | - | - | - | - | - | - | -
232 | - | - | - | - | - | 262 | - | - | - | - | - | - | - | -
233 - - - - - 263 - - - - - - - -
234 - - - - - 264 - - - - - - - -
235 - - - - - 265 - - - - - - - -
236 - - - - - 266 - - - - - - - -
237 - - - - - 267 - - - - - - - -
238 - - - - - 268 - - - - - - - -
239 - - - - - 269 - - - - - - - -
240 10 17 55 10 17 [[?]] 300 270 - - - - - - -

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[[preprinted]] 126 [[/preprinted]]

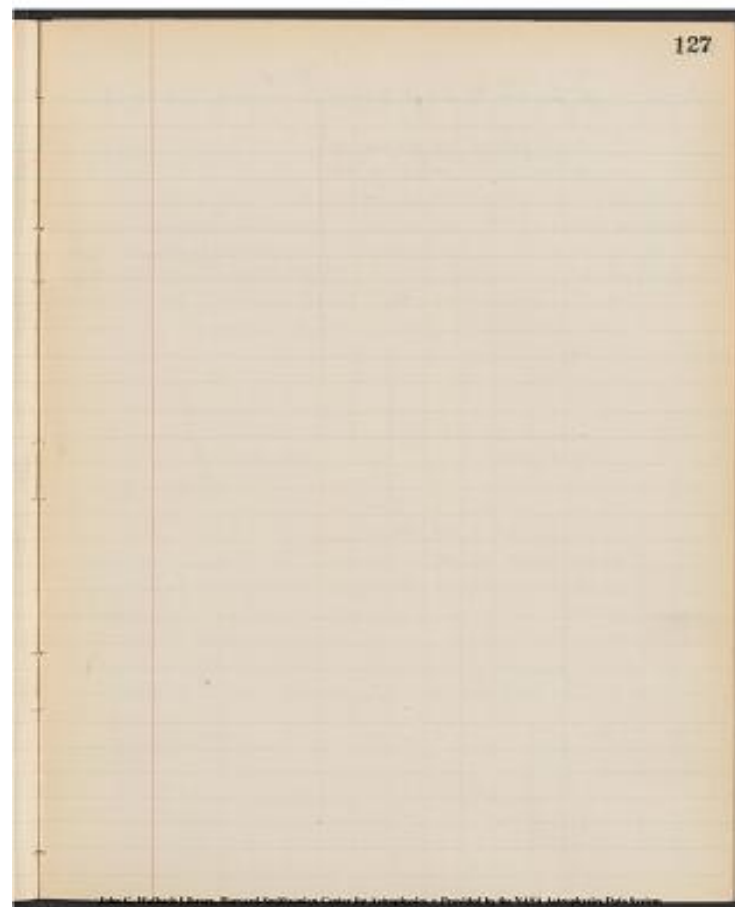
	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
271	-	-	-	-	-	-	-	-
272	-	-	-	-	-	-	-	-
273	-	-	-	-	-	-	-	-
274	-	-	-	-	-	-	-	-
275	-	-	-	-	-	-	-	-
276	-	-	-	-	-	-	-	-
277	-	-	-	-	-	-	-	-
278	-	-	-	-	-	-	-	-
279	4	16	55	4	16	-	310	-
280	5	16	55	5	16	-	310	-
281	-	-	-	-	-	-	-	-
282	-	-	-	-	-	-	-	-
283	-	-	-	-	-	-	-	-
284	-	-	-	-	-	-	-	-
285	-	-	-	-	-	-	-	-
286	-	-	-	-	-	-	-	-
287	-	-	-	-	-	-	-	-
288	-	-	-	-	-	-	-	-
289	-	-	-	-	-	-	-	-
290	-	-	-	-	-	-	-	-
291	-	-	-	-	-	-	-	-
292	-	-	-	-	-	-	-	-
293	-	-	-	-	-	-	-	-
294	-	-	-	-	-	-	-	-
295	-	-	-	-	-	-	-	-
296	-	-	-	-	-	-	-	-
297	-	-	-	-	-	-	-	-
298	-	-	-	-	-	-	-	-
299	15	15	55	15	15	320	320	0
300	-	-	-	-	-	-	-	-

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
270	-	-	-	-	-	-	-
272	-	-	-	-	-	-	-
273	-	-	-	-	-	-	-
274	-	-	-	-	-	-	-
275	-	-	-	-	-	-	-
276	-	-	-	-	-	-	-
277	-	-	-	-	-	-	-
278	-	-	-	-	-	-	-
279	4	16	55	4	16	210	-
280	5	16	55	6	16	210	-
281	-	-	-	-	-	-	-
282	-	-	-	-	-	-	-
283	-	-	-	-	-	-	-
284	-	-	-	-	-	-	-
285	-	-	-	-	-	-	-
286	-	-	-	-	-	-	-
287	-	-	-	-	-	-	-
288	-	-	-	-	-	-	-
289	-	-	-	-	-	-	-
290	-	-	-	-	-	-	-
291	-	-	-	-	-	-	-
292	-	-	-	-	-	-	-
293	-	-	-	-	-	-	-
294	-	-	-	-	-	-	-
295	-	-	-	-	-	-	-
296	-	-	-	-	-	-	-
297	-	-	-	-	-	-	-
298	-	-	-	-	-	-	-
299	-	-	-	-	-	-	-
300	15	16	55	15	16	210	0
301	-	-	-	-	-	-	-

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[[preprinted]]127[[/preprinted]]

[[no entries]]



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[[preprinted]] 128 [[\preprinted]]

alpha Lyrae C 18855 ~~[[\strickethrough]] mu psi [[\strickethrough]]~~
Reduced to 85

Ap.2 Ap2
mu psi 776 mu psi 777

| n |m+n|+m+n|mean n|mean m+n|[n]|[m + n]|delta m| n
|m+n|+m+n|mean n|mean m+n|[n]|[m+n]|delta m

beta |28|65|85|28|65|244|102|142| | | | | |

gamma|43|80|85|43|80|196|0 |196| | | | | |

delta|39|77|85|39|77|208|34 |174|35|73|82|36|76|218|42|176

epsilon|| | | | | | | |23|69|82|24|72|256|68|188

kappa| | | | | | | |
|50|64|82|52|66|162|96|~~[[\strickethrough?]]1[[\strickethrough?]]~~66

[[?]] | | | | | | |10|47|82|10|49|316|174|(142)

eta | | | | | | | |3|22|83|3|23|404|260|(144)

Ap 4 (774) Ap4 (775)

beta |15|48|83|15|49|294|174|120| | | | | |

gamma|21|66|83|22|68|264|88|186| | | | | |

delta|15|61|82|16|63|290|112|178|16|68|82|17|65|286|102|184

epsilon|| | | | | | | |9|52|83|9|53|322|158|164

128

alpha Lyrae C 18855 Ap 4 (774)

mu psi Ap 4 (775)

Reduced to 85

	pos. ang.	dist.	mag.	pos. ang.	dist.	mag.	pos. ang.	dist.	mag.
B	28	65	85	28	65	244	102	142	192
Y	43	80	85	43	80	196	0	196	196
S	39	77	85	39	77	208	34	174	174
E									
K									
S									
K									

Ap 4 (774)

B	15	48	83	15	49	294	174	120	120
Y	21	66	83	22	68	264	88	186	186
S	15	61	82	16	63	290	112	178	178
E									
K									
S									
K									

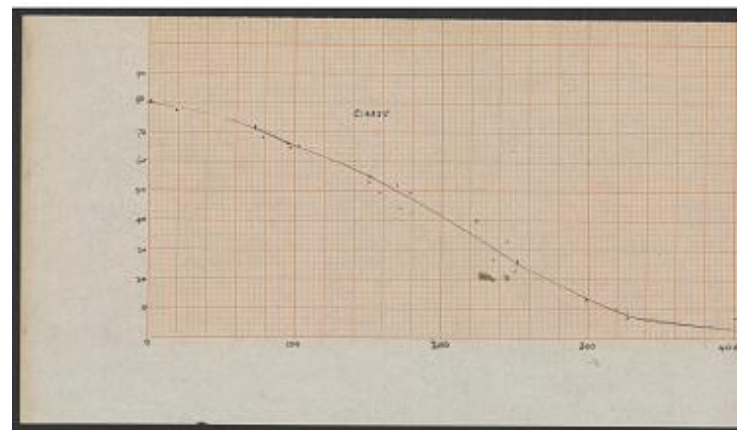
Ap 4 (775)

B	15	48	83	15	49	294	174	120	120
Y	21	66	83	22	68	264	88	186	186
S	15	61	82	16	63	290	112	178	178
E									
K									
S									
K									

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C18855

[[graph]]



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alpha Lyrae C1885

1	31	234	61	124	
2	32	232	62	118	
3	404	33	228	63	112
4	382	34	224	64	106
5	362	35	222	65	102
6	344	36	218	66	96
7	334	37	216	67	92
8	326	38	212	68	88
9	322	39	208	69	84
10	316	40	204	70	78
11	312	41	202	71	74
12	308	42	200	72	68
13	302	43	196	73	64
14	298	44	192	74	56
15	294	45	188	75	50
16	290	46	184	76	42
17	286	47	180	77	34
18	282	48	178	78	22
19	278	49	174	79	10
20	274	50	170	80	0
21	270	51	166		
22	264	52	162		
23	260	53	158		
24	256	54	154		
25	252	55	150		
26	250	56	146		
27	246	57	142		
28	244	58	138		
29	240	59	134		
30	238	60	128		

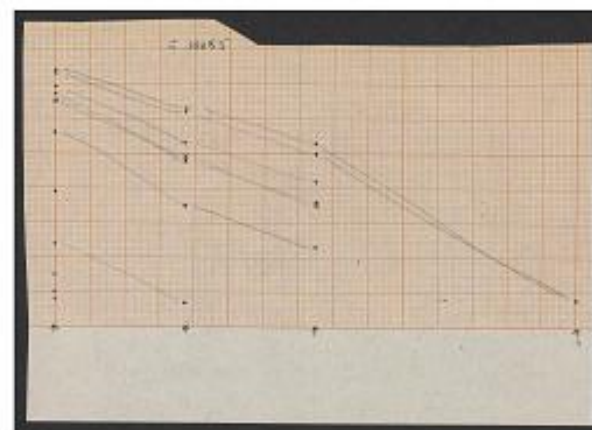
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C 18865

[[image - multiple lines graphs plotted through data]]

[[Y axis: no scale]]
[[X axis: no scale]]



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[[preprinted]]129[[/preprinted]]

(772) (773)

Ap6 Ap6

n|m+n|+m+n|mean n|mean m+n|[[mean n]]|[[mean m+n]]|delta
m|n|m+n|+m+n|mean n|mean m+n|[[mean n]]|[[mean m+n]]|delta m

beta|4|26|84|4|26|382|250|132| | | | | | | |
gamma|11|54|84|11|55|312|150|162| | | | | | | |
delta|11|51|84|11|52|312|162|150|10|50|83|10|51|316|166|150
epsilon| | | | | | | | |6|39|83|(6)|40|344|204|(140)
kappa| | | | | | | | |18|32|83|18|33|282|228|54
xi| | | | | | | | |3|20|82|3|21|404|270|(134)
eta| | | | | | | | |0|7|82|0|7|1|1|

[[underlined]]Ap 8[[/underlined]] (779) | Ap 8 (779)

beta|0|7|83|0|7|1|1| | | | | | | | | |
gamma|1|20|85|1|20|1|1|20|81|1|21|1|1| | | | |
delta| | | | | | | | |0|19|82|0|20|1|1| | | | |
epsilon| | | | | | | | |[[underlined]]Means[[/underlined]]| | | | |0|13|83|0|13|1|1| | |
kappa|beta|142 ^[[2]]|2|120 ^[[44]]|132 ^[[66]]|88|394 ^[[sigma]]|131
^[[Mn.]]|4|10|83|4|10|382|316|66
zeta|gamma|196| |186|162| |544|181|0|7|84|0|7|1|1| | | | |
eta|delta|174|176|178|150 ^[[150]]| |1018|169|0|4|84|0|4|1|1| | | | |
xi| |188|164 ^[[184]]| | |352|176| | | | | | | | | |
zeta| |66|48|54|66|234|58| | | | | | | | | | |
eta| | | | | | | | | | | | | | | | | |

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 alpha Lyrae C18851 Reduced to 75
 Ap 4 (785) | Ap 4 (786)
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
 beta | 23 | 48 | 73 | 24 | 49 | 306 | 186 | 120 | | | | |
 gamma | 30 | 60 | 71 | 32 | 63 | 266 | 108 | 158 | 32 | 64 | 75 | 32 | 64 |
 266 | 102 | 164
 delta | | | | | | | 27 | 62 | 75 | 27 | 62 | 290 | 114 | 176
 epsilon | | | | | | | 18 | 53 | 75 | 18 | 53 | 332 | 166 | 166
 kappa | | | | | | | 36 | 48 | ~~50~~ ~~50~~ | 75 | 36
 | 48 | 242 | 190 | 52
 zeta | | | | | | | 6 | 35 | 75 | 6 | 35 | - | - | -
 eta | | | | | | | 2 | 7 | 75 | 2 | 7 | - | - | -
 theta | | | | | | | | | | | | | | |
 nu | | | | | | | | | | | | | | |
 kappa | | | | | | | | | | | | | | |
 lambda | | | | | | | | | | | | | | |
 Ap 6 (787) | Ap 6 (788)
 beta | 10 | 34 | 73 | 10 | 35 | 364 | 248 | 116 | | | | | |
 gamma | 18 | 51 | 72 | 19 | 53 | 328 | 166 | 162 | | | | | |
 delta | 13 | 46 | 72 | 14 | 48 | 348 | 190 | 158 | 15 | 52 | 76 | 15 | 51 | 344 |
 174 | 170
 epsilon | | | | | | | 8 | 42 | 76 | 8 | 42 | 370 | 216 | 154
 kappa | | | | | | | 22 | 36 | 76 | 22 | 36 | 316 | 242 |
~~1~~ ~~1~~
 zeta | | | | | | | 2 | 23 | 76 | 2 | 23 | - | - | -
 eta | | | | | | | | | | | | | | |
 theta | | | | | | | | | | | | | | |
 nu | | | | | | | | | | | | | | |
 kappa | | | | | | | | | | | | | | |
 lambda | | | | | | | | | | | | | | |

130

alpha Lyrae C 18851

Reduced to 75

Ap 4 (785) Ap 4 (786)

	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
B	23	48	73	24	49	306	186	120	32	64	75	32	64	75	32	64
Y	20	41	71	32	63	266	108	158	32	64	75	32	64	75	32	64
S									27	62	75	27	62	290	114	176
K									18	53	75	18	53	332	166	166
H									36	48	50	75	36			
J									6	35	75	6	35	-	-	-
I									2	7	75	2	7	-	-	-
G																
F																
E																
D																
C																
B																
A																

Ap 6 (787) Ap 6 (788)

	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
B	10	34	73	10	35	364	248	116	15	52	76	15	51	344	174	170
Y	18	51	72	19	53	328	166	162	8	42	76	8	42	370	216	154
S	13	46	72	14	48	348	190	158	22	36	76	22	36	316	242	
K									2	23	76	2	23	-	-	-
H																
J																
I																
G																
F																
E																
D																
C																
B																
A																

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Alpha Lyrae C18851

1	31	270	61	122	
2	32	26	62	114	
3	33	260	63	108	
4	34	254	64	102	
5	35	248	65	96	
6	36	242	66	90	
7	376	37	238	67	84
8	370	38	234	68	78
9	366	39	228	69	70
10	364	40	224	70	62
11	360	41	220	71	54
12	356	42	216	72	44
13	352	43	212	73	30
14	348	44	208	74	2
15	344	45	204	75	
16	340	46	198	76	
17	336	47	194	77	
18	332	48	190	78	
19	328	49	186	79	
20	324	50	180	80	
21	320	51	174		
22	316	52	170		
23	310	53	166		
24	306	54	160		
25	300	55	156		
26	296	56	150		
27	290	57	146		
28	284	58	140		
29	280	59	134		
30	274	60	128		

α Lyrae, C 18851

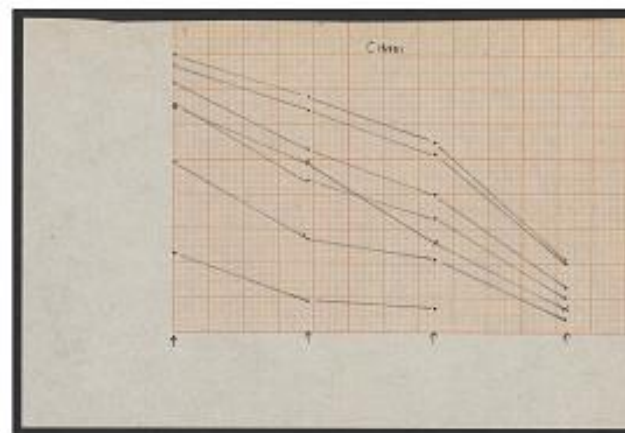
1	31	270	61	122
2	32	268	62	114
3	33	260	63	108
4	34	254	64	102
5	35	248	65	96
6	36	242	66	90
7	376	37	238	84
8	370	38	234	78
9	366	39	228	70
10	364	40	224	62
11	360	41	220	54
12	356	42	216	44
13	352	43	212	30
14	348	44	208	218
15	344	45	204	
16	340	46	198	
17	336	47	194	
18	332	48	190	
19	328	49	186	
20	324	50	180	
21	320	51	174	
22	316	52	170	
23	310	53	166	
24	306	54	160	
25	300	55	156	
26	296	56	150	
27	290	57	146	
28	284	58	140	
29	280	59	134	
30	274	60	128	

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C18551

[[graph]]

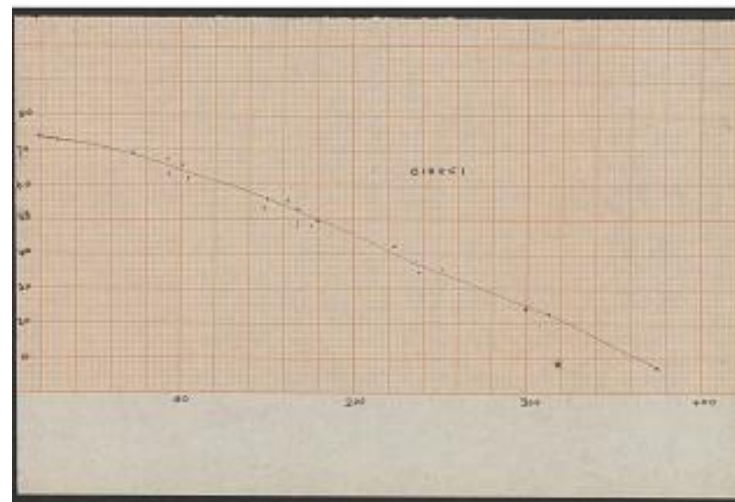


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C18851

[[graph]]



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<u>ap</u>	2	<u>ap</u>	(782)	<u>ap</u>
<u>2</u>	<u>ap</u>	(784)	Reduced to 75	
$ n m+n +m+n mean\ n mean\ m+n [n] m+n delta\ m n m+n +m+n mean$				
$|n|mean\ m+n|[n]||m+n|delta\ m$				
Beta	42	64	74	43
Gamma	49	69	70	52
Delta	43	67	68	47
Epsilon				
Kappa				
Xi				
Eta				
Theta				
Upsilon				
Kappa				
Lambda				
<u>ap</u>	10	<u>ap</u>	(780)	<u>Reduced to 85</u>
Means				
Beta				
Gamma				
Delta				
Epsilon				
Kappa				
Xi				
Eta				
Theta				
Upsilon				
Kappa				
Lambda				

[illegible]

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[[preprinted]] 132[[/preprinted]]															
alpha Siruis C 18846 Reduced to 100															
[[underlined]]ap 2[[/underlined]] (792) - [[?]] [[?]] (791)															
|n|m+n||+m+n|mean n|mean m+n|[n]||m+n]|delta m|n|m+n||+m+n|mean															
n|mean m+n|[n]||m+n]|delta m															
1															
2	2	22	105	2	21	-|-									
3	29	34	105	28	32	216	204	12							
4	32	36	105	30	34	210	198	12							
5	32	51	105	30	48	210	158	52							
6	56	61	105	53	58	144	128	16							
7	53	64	105	50	61	152	120	32							
8	63	68	106	59	64	126	112	14							
9	49	68	109	46	64	164	112	52	51	69	100	51	69	150	100
10							59	69	100	51	69	126	100	26	
11							64	69	100	64	69	112	100	12	
12							62	69	100	62	69	118	100	18	
13							64	69	100	64	69	112	100	12	
14							64	70	100	64	70	112	98	14	
15							64	70	100	64	70	112	98	14	
16							67	72	100	67	72	106	92	14	
17							69	72	100	69	72	100	92	8	
18							70	72	100	70	72	98	92	6	
19							70	73	100	70	73	98	90	8	
20							55	73	100	55	73	138	90	48	
21							67	73	100	67	73	106	90	16	
22							70	73	100	70	73	98	90	8	
23							69	74	100	69	74	100	86	14	
24							65	74	100	65	74	110	86	24	
25							71	74	100	71	74	94	86	8	
26							72	75	100	72	75	92	82	10	
27							72	75	100	72	75	92	82	10	
28							69	73	100	69	73	100	90	10	
29							69	72	100	69	72	100	92	8	
30							67	70	100	67	70	106	98	8	

132		C 10096		Reduced to 100	
1943-44		1944-45		1945-46	
Year	Area	Area	Area	Area	Area
1	2	2	2	2	2
2	2	2	2	2	2
3	2	2	2	2	2
4	2	2	2	2	2
5	2	2	2	2	2
6	2	2	2	2	2
7	2	2	2	2	2
8	2	2	2	2	2
9	2	2	2	2	2
10	2	2	2	2	2
11	2	2	2	2	2
12	2	2	2	2	2
13	2	2	2	2	2
14	2	2	2	2	2
15	2	2	2	2	2
16	2	2	2	2	2
17	2	2	2	2	2
18	2	2	2	2	2
19	2	2	2	2	2
20	2	2	2	2	2
21	2	2	2	2	2
22	2	2	2	2	2
23	2	2	2	2	2
24	2	2	2	2	2
25	2	2	2	2	2
26	2	2	2	2	2
27	2	2	2	2	2
28	2	2	2	2	2
29	2	2	2	2	2
30	2	2	2	2	2

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[[preprinted]] 133 [[/preprinted]]

n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n
l+m+n	mean n	mean m+n	[n]	[m+n]	delta m				
31	65	69	100	65	69	110	100	10	
32	51	54	100	51	54	150	140	10	
33	49	52	100	49	52	156	146	10	
34	48	49	100	48	49	158	156	2	
35	28	43	100	28	43	213	172	44	
36	24	30	100	24	30	226	210	16	
37	21	25	100	21	25	236	224	12	
38									

120 ap. No790 Reduced to 100

20	81	92	103	79	89				
21	89	92	103	86	89				
22	89	92	103	86	89				
23	90	93	103	10	3	87	90		
24	88	93	103	85	90				
25	88	93	103	85	90				
26	-	-							
27	-	-							
28	-	-							
29	-	-							
30	-	-							
31	-	-							
32	-	-							
33	-	-							
34	-	-							
35	63	77	104	60	74	122	86	36	
36	57	62	104	55	60	138	122	16	

133

No. 120 ap. No790 Reduced to 100

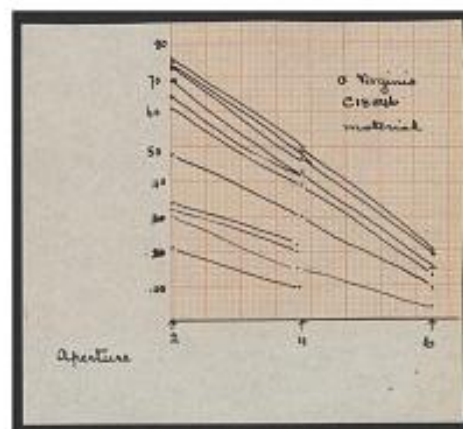
20	81	92	103	79	89				
21	89	92	103	86	89				
22	89	92	103	86	89				
23	90	93	103	10	3	87	90		
24	88	93	103	85	90				
25	88	93	103	85	90				
26	-	-							
27	-	-							
28	-	-							
29	-	-							
30	-	-							
31	-	-							
32	-	-							
33	-	-							
34	-	-							
35	63	77	104	60	74	122	86	36	
36	57	62	104	55	60	138	122	16	

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alpha Virginis
C18846
material

[[graph]]

Aperture

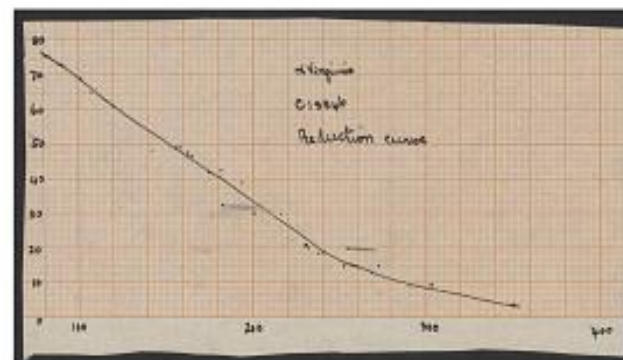


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alpha Virginis
C18846
Reduction curve

[[graph]]



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alpha Virginis C18846

1	31	208	61	120	
2	32	204	62	118	
3	352	33	202	63	114
4	342	34	198	64	112
5	334	35	196	65	110
6	324	36	194	66	108
7	314	37	190	67	106
8	304	38	188	68	102
9	294	39	184	69	100
10	286	40	182	70	98
11	280	41	178	71	94
12	274	42	176	72	92
13	268	43	172	73	90
14	264	44	170	74	86
15	258	45	166	75	82
16	252	46	164	76	80
17	248	47	160	77	
18	244	48	158	78	
19	240	49	156	79	
20	238	50	152	80	
21	236	51	150		
22	232	52	146		
23	230	53	144		
24	226	54	140		
25	224	55	138		
26	222	56	134		
27	218	57	130		
28	216	58	128		
29	212	59	126		
30	210	60	122		

alpha Virginis C18846

1	31	208	61	120	
2	32	204	62	118	
3	352	33	202	63	114
4	342	34	198	64	112
5	334	35	196	65	110
6	324	36	194	66	108
7	314	37	190	67	106
8	304	38	188	68	102
9	294	39	184	69	100
10	286	40	182	70	98
11	280	41	178	71	94
12	274	42	176	72	92
13	268	43	172	73	90
14	264	44	170	74	86
15	258	45	166	75	82
16	252	46	164	76	80
17	248	47	160	77	
18	244	48	158	78	
19	240	49	156	79	
20	238	50	152	80	
21	236	51	150		
22	232	52	146		
23	230	53	144		
24	226	54	140		
25	224	55	138		
26	222	56	134		
27	218	57	130		
28	216	58	128		
29	212	59	126		
30	210	60	122		

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beta | 71 | 95 | 106 | 72 | 97 | 278 | 159 | 119 | 62 | 94 | 110 | 61 | 92 |
 315 | ~~[[striketrough]]~~ 278 | ~~[[striketrough]]~~ 193 | 122
 gamma | 78 | 103 | 106 | 80 | 105 | 247 | 95 | (152) | 70 | 103 | 109 | 69 |
 102 | 288 | 117 | 171
 delta | 67 | 102 | 106 | 69 | 104 | 288 | 95 | (193) | 56 | 99 | 107 | 57 | 100
 | 327 | 140 | 187
 epsilon | 68/40 | 103/98 | 109/108 | 67/46 | 102/98 | 295/358 | 117/153 |
 178/205 | 35 | 92 | 107 | 35 | 93 | 398 | 184 | 214
 kappa | 86 | 94 | 108 | 86 | 94 | 224 | 177 | 47 | 77 | 86 | 106 | 79 | 88 |
 251 | 216 | 35
 zeta | 22 | 77 | 107 | 22 | 78 | 440 | 255 | 185 | 18 | 68 | 106 |
~~[[striketrough]]~~ 20 | ~~[[striketrough]]~~ 18 | 70 | 459 | 285 | 174
 eta | 6 | 45 | 107 | 6 | 45 | 552 | 362 | 190 | 13 | 36 | 105 | 13 | 37 | 487 |
 391 | 196
 theta | 1 | 23 | 107 | 1 | 23 | " ~~[[ditto for 552]]~~ | | | 0 | 16 | 104 | 0 | 17 | "
~~[[ditto for 487]]~~ | | |
 iota | 2 | 12 | 106 | 2 | 12 | " ~~[[ditto for 552]]~~ | | | 0 | 8 | 104 | 0 | 8 | "
~~[[ditto for 487]]~~ | | |
 kappa | | | | | | | | | | | | | | | | | |
 lambda | | | | | | | | | | | | | | | | | |
 mu | | | | | | | | | | | | | | | | | |

[illegible]

	1	2	3	4	sigma	Mean
beta	123	126	119	122	490	122
gamma	-	-	-	171	171	
delta	-	-	178	187	365	182
epsilon	178	181	205	214	778	194
zeta	58	31	47	35	171	43
eta	199	187	185	174	746	186
theta	188	170	190		548	183
iota	(169)	(158)			327	164
kappa						

Means (all up to 104, down to 19)						
	1	2	3	4	Σ	Mean
123	123	126	119	122	490	122
110	-	-	-	171		171
105	-	-	178	187	365	182
98	178	181	205	214	778	194
81	58	31	47	56	191	47
177	199	187	185	174	745	186
170	188	178	190		546	182
159	(162)	(158)			327	164
10						

[[preprinted]] 138 [[/preprinted]]

[[alpha]] Sirzieis? C 18846 Reduced to 105

[[underlined]] Ap 4 [[/underlined]] (794) | (793)

| n | n+m | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | n+m |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

31 | 38 | 41 | 108 | 37 | 40 | 190 | 182 | 8 | | | | | | |

32 | 22 | 27 | 107 | 22 | 27 | 232 | 218 | 14 | | | | | | |

33 | - | - | - | - | - | - | - | | | | | | |

34 | - | - | - | - | - | - | - | | | | | | |

35 | 10 | 19 | 107 | 10 | 19 | 286 | 240 | 46 | | | | | | |

36 | | | | | | | | | | | | |

37 | | | | | | | | | | | | |

38 | | | | | | | | | | | | |

39 | | | | | | | | | | | | |

40 | | | | | | | | | | | | |

Sirzieis? C 18846 Reduced to 105									
(794)					(793)				
n	n+m	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	n+m
31	38	41	108	37	40	190	182	8	
32	22	27	107	22	27	232	218	14	
33	-	-	-	-	-	-	-	-	
34	-	-	-	-	-	-	-	-	
35	10	19	107	10	19	286	240	46	
36									
37									
38									
39									
40									

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No Ap. | Ap 2 | Ap 4 | Ap 6 | Sigma | mean | dl

1	-					
2		66	66	66	46	
3	12	14	26	13	11	
4	12	6	18	9	18	
5	52	48	48	148	49	36
6	16	14	40	70	23	19
7	32	26	26	84	28	23
8	14	12	16	42	14	12
9	51	45	53	149	50	37
10		26	18	44	22	18
11	12	8	-	20	10	09
12	18	22	16	56	19	16
13	12	12	22	46	15	13
14	14	-	16	30	15	13
15	14	-	16	30	15	13
16	14	12	-	26	13	11
17	8	10	-	18	9	08
18	6	8	-	14	7	06
19	8	12	14	34	11	10
20	48	56	46	150	50	37
21	16	24	18	58	19	16
22	8	18	18	44	15	13
23	14	16	24	54	18	15
24	24	32	30	86	29	23
25	8	10	10	28	9	08
26	10	14	6	30	10	09
27	10	8	6	24	8	07
28	10	20	-	30	15	13
29	8	12	-	20	10	09
30	8	12	-	20	10	09
31	10	8	18	9	08	
32	10	14	24	12	10	
33	10	-	10	10	09	
34	2	-	2	2	02	
35	36	44	46	90	45	34
36	16	16	16	16	14	
37	12	12	12	12	10	

139

No.	Ap. 1	Ap. 2	Ap. 4	Ap. 6	Σ	mean	dl
1							
2		66	66	66	198	66	46
3	12	14	26	13	65	16.25	11
4	12	6	18	9	45	11.25	18
5	52	48	48	148	396	99	36
6	16	14	40	70	140	35	19
7	32	26	26	84	168	42	23
8	14	12	16	42	84	21	12
9	51	45	53	149	398	99.5	37
10		26	18	44	88	22	18
11	12	8	-	20	40	10	09
12	18	22	16	56	112	28	16
13	12	12	22	46	92	23	13
14	14	-	16	30	60	15	13
15	14	-	16	30	60	15	13
16	14	12	-	26	52	13	11
17	8	10	-	18	36	9	08
18	6	8	-	14	28	7	06
19	8	12	14	34	68	17	10
20	48	56	46	150	300	75	37
21	16	24	18	58	116	29	16
22	8	18	18	44	88	22	13
23	14	16	24	54	108	27	15
24	24	32	30	86	172	43	23
25	8	10	10	28	56	14	08
26	10	14	6	30	60	15	09
27	10	8	6	24	48	12	07
28	10	20	-	30	60	15	13
29	8	12	-	20	40	10	09
30	8	12	-	20	40	10	09
31	10	8	18	9	45	11.25	08
32	10	14	24	12	60	15	10
33	10	-	10	10	40	10	09
34	2	-	2	2	8	2	02
35	36	44	46	90	180	45	34
36	16	16	16	16	64	16	14
37	12	12	12	12	48	12	10

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[[preprinted]] 140 [[/preprinted]]
 alpha Cygni C.18869 || [[?]] Cygni C
 18[[/strickethrough]]0[[/strickethrough]]559
 (mu phi [[/strickethrough]]826) || (mu phi 529) Ap 4
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
 1 | - | - | - | - | - | - | - | - | - | - | - |
 2 | - | - | - | - | - | - | - | - | - | - | - |
 3 | - | - | - | - | - | - | - | - | - | - | - |
 4 | - | - | - | - | - | - | - | - | - | - | - |
 5 | - | - | - | - | - | - | - | - | - | - | - |
 6 | - | - | - | - | - | - | - | - | - | - | - |
 7 | - | - | - | - | - | - | - | - | - | - | - |
 8 | - | - | - | - | - | - | - | - | - | - | - |
 9 | - | - | - | - | - | - | - | - | - | - | - |
 10 | - | - | - | 5 | 02 | 81 | - | - | - | - | - | - |
 11 | - | - | - | 2 | - | - | - | - | - | - | - | - |
 12 | - | - | - | - | - | - | - | - | - | - | - | - |
 13 | - | - | - | - | - | - | - | - | - | - | - | - |
 14 | - | - | - | 20 | 26 | 82 | - | - | - | - | - | - |
 15 | - | - | - | 15 | 30 | 82 | - | - | - | - | - | - |
 16 | - | - | - | 27 | 31 | 82 | - | - | - | - | - | - |
 17 | - | - | - | 9 | 36 | 82 | - | - | - | - | - | - |
 18 | - | - | - | - | - | - | - | - | - | - | - | - |
 19 | - | - | - | 31 | 36 | 82 | - | - | - | - | - | - |
 20 | - | - | - | 30 | - | - | - | - | - | - | - | - |
 21 | - | - | - | - | - | - | - | - | - | - | - | - |
 22 | - | - | - | - | - | - | - | - | - | - | - | - |
 23 | - | - | - | - | - | - | - | - | - | - | - | - |
 24 | - | - | - | - | - | - | - | - | - | - | - | - |
 25 | - | - | - | - | - | - | - | - | - | - | - | - |
 26 | - | - | - | - | - | - | - | - | - | - | - | - |
 27 | - | - | - | - | - | - | - | - | - | - | - | - |
 28 | - | - | - | - | - | - | - | - | - | - | - | - |
 29 | - | - | - | - | - | - | - | - | - | - | - | - |
 30 | - | - | - | - | - | - | - | - | - | - | - | - |

140

alpha Cygni C.18869

alpha Cygni C.18869 Ap 4

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1																														
2																														
3																														
4																														
5																														
6																														
7																														
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28																														
29																														
30																														

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[illegible]

C.1655-Y (2020) 4/20-5

x	y
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
19	0
20	0
21	0
22	0
23	0
24	0
25	0
26	0
27	0
28	0
29	0
30	0
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32	0
33	0
34	0
35	0
36	0
37	0
38	0
39	0
40	0
41	0
42	0
43	0
44	0
45	0
46	0
47	0
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49	0
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51	0
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85	0
86	0
87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0

R.1655-Y 4/20 (5-51)

x	y
0	0
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
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17	0
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86	0
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88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0

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[illegible]

142				C 18549 Reduced to 228				C 18557 Reduced to 25			
				Op 4 549							
no.	area	from	to	area	from	to	area	no.	area	from	to
20								17	45	82	
22								21	45	82	
25								25	45	82	
34								29	45	82	
36	23	18	182					32	45	82	
38	40	18	158					35	45	82	
47	65	18	127					38	45	82	
48	50	18	125					39	45	82	
51	74	18	112					42	45	82	
55	77	18	107					45	45	82	
56	76	18	102					48	45	82	
65	77	18	102					50	45	82	
67								51	45	82	
68	81	18	102					53	45	82	
71	66	18	101					55	45	82	
74	50	18	101					57	45	82	
81	40	18	101					59	45	82	
88	79	18	102					62	45	82	
89	76	18	101					65	45	82	
90	81	18	101					67	45	82	
91	75	18	101					68	45	82	
92	75	18	101					71	45	82	
97	81	18	101					73	45	82	
98	52	18	101					75	45	82	
99	76	18	101					76	45	82	
100	76	18	101					77	45	82	
101	76	18	101					78	45	82	
102	76	18	101					79	45	82	
103	76	18	101					80	45	82	
104	76	18	101					81	45	82	
105	76	18	101					82	45	82	
106	76	18	101					83	45	82	
107	76	18	101					84	45	82	
108	76	18	101					85	45	82	
109	76	18	101					86	45	82	
110	76	18	101					87	45	82	
111	76	18	101					88	45	82	
112	76	18	101					89	45	82	
113	76	18	101					90	45	82	
114	76	18	101					91	45	82	
115	76	18	101					92	45	82	
116	76	18	101					93	45	82	
117	76	18	101					94	45	82	
118	76	18	101					95	45	82	
119	76	18	101					96	45	82	
120	76	18	101					97	45	82	
121	76	18	101					98	45	82	
122	76	18	101					99	45	82	
123	76	18	101					100	45	82	
124	76	18	101					101	45	82	
125	76	18	101					102	45	82	
126	76	18	101					103	45	82	
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25											

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[[preprinted]] 143 [[/preprinted]]

C18559 || C18~~8~~559

Ap 5 (532) || Ap 6 (555)

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m || n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m |

[illegible][illegible]

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[[preprinted]]144[[/preprinted]]
 C 18869 C. 18559
 (826) Ap. 4 (529)
 |n|m+n|+m+n|mean n|mean m+n|[n]||m+n|delta m|n|m+n|+m+n|mean
 n|mean m+n|[n]||m+n|delta m
 61|73|88|122| | | | |43|50|83| | | | |
 62|83|85|122| | | | |46|50|83| | | | |
 63|85|89|122| | | | |48|51|83| | | | |
 64|85|89|122| | | | |46|51|83| | | | |
 65|86|89|122| | | | |49|51|83| | | | |
 66|77|89|122| | | | |41|51|83| | | | |
 67|86|90|122| | | | |48|51|83| | | | |
 68|85|90|122| | | | |47|51|83| | | | |
 69|86|90|122| | | | |49|51|83| | | | |
 70|89|90|122| | | | |47|51|83| | | | |
 71|85|90|122| | | | |48|52|83| | | | |
 72|83|90|122| | | | |47|52|83| | | | |
 ^[[220]] 73|89|91|122| | | | |^[[46]] -|^[[52]] -|^[[83]] -| | | | |
 74|86|91|122| | | | |48|52|83| | | | |
 75|87|91|122| | | | |49|52|83| | | | |
 76|82|91|122| | | | |44|52|83| | | | |
 77|83|91|122| | | | |45|52|83| | | | |
 78|86|91|122| | | | |47|52|83| | | | |
 79|88|92|122| | | | |48|52|83| | | | |
 80|87|92|122| | | | |47|58|83| | | | |
 81|88|92|122| | | | |47|52|83| | | | |
 82|80|92|122| | | | |43|52|83| | | | |
 83|87|92|122| | | | |47|52|83| | | | |
 84|85|91|121| | | | |47|52|83| | | | |
 85|85|91|121| | | | |46|52|83| | | | |
 86|86|91|121| | | | |47|52|83| | | | |
 87|83|86|121| | | | |44|46|83| | | | |
 88|71|76|121| | | | |33|37|83| | | | |
 89|68|74|121| | | | | | | | | | | | | |
 90|68|72|121| | | | |29|34|83| | | | |
 91|48|70|121|51|74|249|186|63|26|32|83| | | | |

144	C 18869										C 18559									
	(826)										(529)									
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
61	73	85	122								43	50	83							
62	83	85	122								46	50	83							
63	85	89	122								48	51	83							
64	85	89	122								46	51	83							
65	86	89	122								49	51	83							
66	77	89	122								41	51	83							
67	86	90	122								48	51	83							
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69	86	90	122								49	51	83							
70	89	90	122								47	51	83							
71	85	90	122								48	52	83							
72	83	90	122								47	52	83							
^[[220]] 73 89 91 122 ^[[46]] - ^[[52]] - ^[[83]] -																				
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75	87	91	122								49	52	83							
76	82	91	122								44	52	83							
77	83	91	122								45	52	83							
78	86	91	122								47	52	83							
79	88	92	122								48	52	83							
80	87	92	122								47	58	83							
81	88	92	122								47	52	83							
82	80	92	122								43	52	83							
83	87	92	122								47	52	83							
84	85	91	121								47	52	83							
85	85	91	121								46	52	83							
86	86	91	121								47	52	83							
87	83	86	121								44	46	83							
88	71	76	121								33	37	83							
89	68	74	121																	
90	68	72	121								29	34	83							
91	48	70	121	51	74	249	186	63	26	32	83									

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C18559 | C18669

Ap 5 (532) Ap 6 (555)

| m | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | m | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

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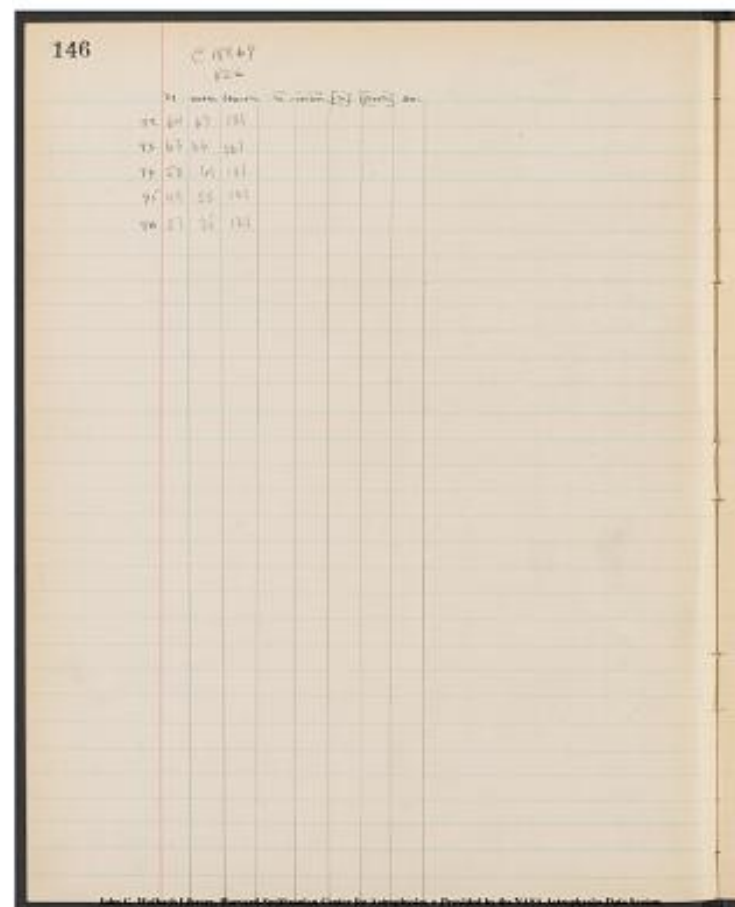
[[no entries]]

C18559	C18669
Ap 5 (532)	Ap 6 (555)
61	61
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66	66
67	67
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81	81
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87	87
88	88
89	89
90	90
91	91

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[[preprinted]] 146 [[/preprinted]]
 C18869
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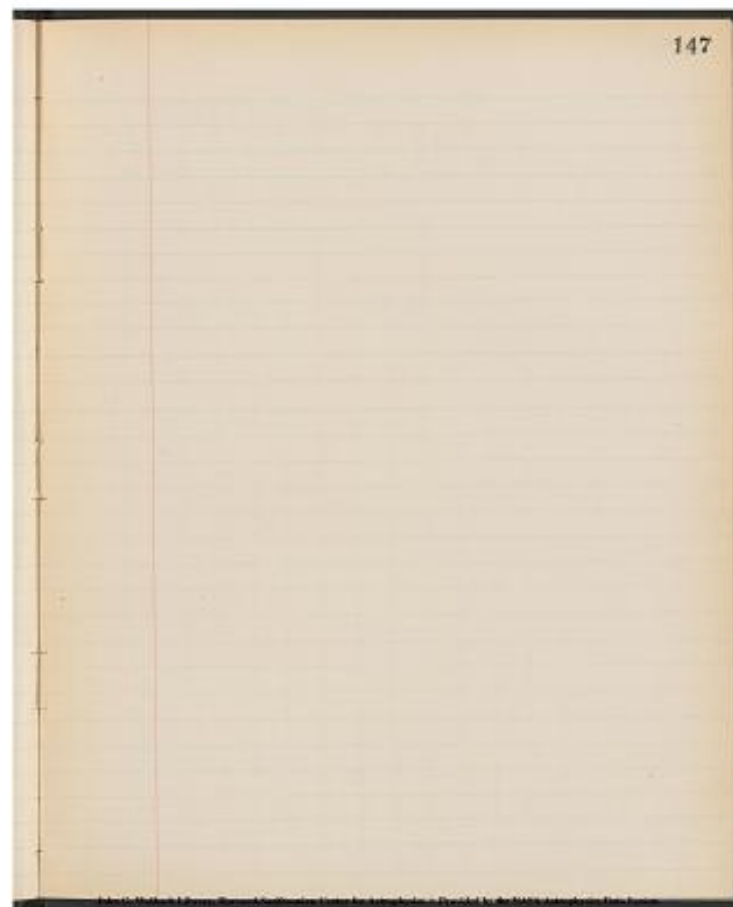
	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m
92	64	67	121					
93	63	66	121					
94	58	61	121					
95	49	58	121					
96	27	35	121					



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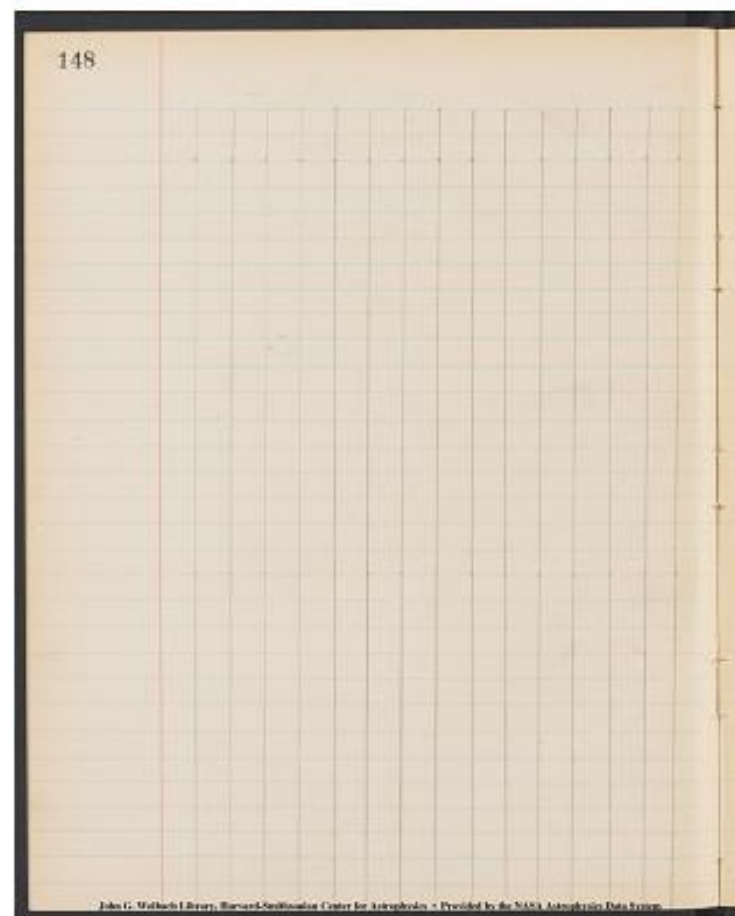
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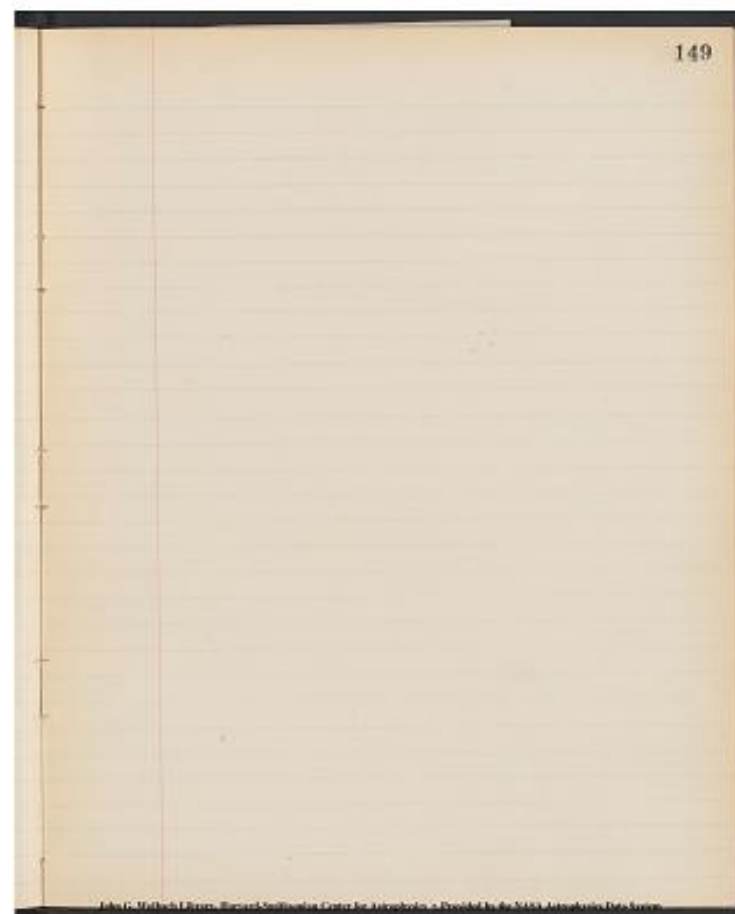
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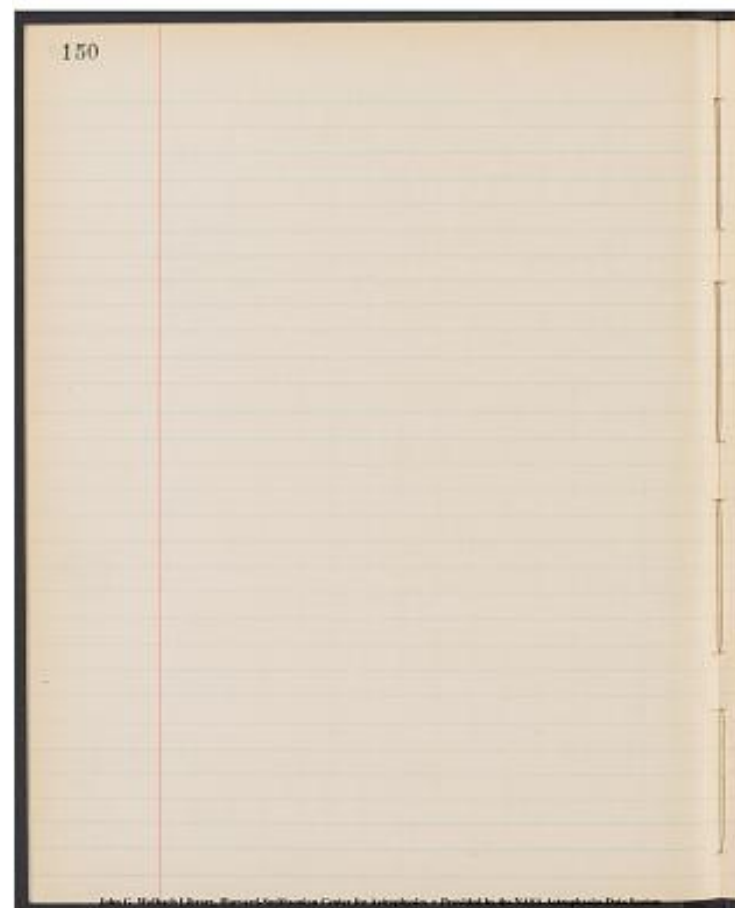
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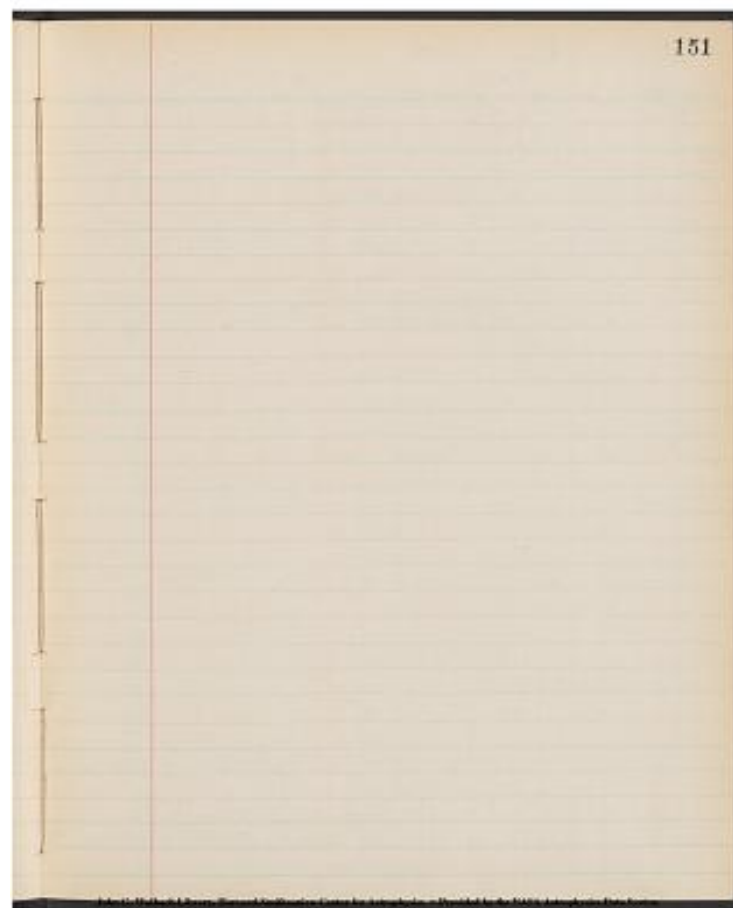
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Arcturus C 18416

Reduced to 95

ap 1 | ap 3

n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

[[margin]] [[underlined]]ap 1[[/underlined]] mu phi 835 [[/margin]]

1	6	17	92	6	18	380	298	82											
2	7	19	92	7	20	370	288	82											
3	7	21	92	7	22	370	280	90											
4	12	22	92	12	23	330	276	54											
5	17	24	92	18	25	298	268	30											
6	17	24	92	18	25	296	268	30											
7	16	25	92	17	26	302	266	36											
8	19	26	92	20	27	288	262	26	-	-	-	-	-	-	-	-	-	-	-
9	14	27	92	15	28	312	258	54	4	11	96	4	11	398	336				
62																			
10	25	29	92	26	30	266	252	14	-	-	-	-	-	-	-	-	-	-	-
11	28	30	93	29	31	256	250	6	-	-	-	-	-	-	-	-	-	-	-
12	26	31	93	27	33	262	242	16	-	-	-	-	-	-	-	-	-	-	-
13	26	31	93	27	33	262	242	20	-	-	-	-	-	-	-	-	-	-	-
14	24	32	93	25	33	268	242	26	-	-	-	-	-	-	-	-	-	-	-
15	25	32	93	26	33	266	242	24	-	-	-	-	-	-	-	-	-	-	-
16	14	33	93	14	34	318	240	78	4	18	96	4	18	398	298				
100																			
17	16	34	93	16	35	306	236	70											
18	19	34	93	16	35	306	236	70											
19	9	36	93	9	37	352	230	122											
20	2	38	93	2	39	-	-	-2	16	96	-2	16	-	-	-	-	-	-	-
21	15	42	93	15	43	315	208	104	4	18	96	4	18	398	298				
100																			
22	26	43	93	27	44	262	206	56	8	19	96	8	19	360	292				
68																			
23	30	43	93	31	44	250	206	44	11	20	96	11	20	336					
288																			
24	30	45	93	31	46	250	198	52	9	21	96	9	21	352	284				
68																			
25	33	46	93	34	47	240	196	54	3	22	96	3	22	-	-	-	-	-	-
26	35	47	93	36	48	232	192	40	5	23	96	5	23	388	276				
116																			
27	14	48	93	14	49	318	188	30	0	23	96	0	23	-	-	-	-	-	-
28	3	51	93	3	52	-	176	-	-1	24	96	-1	24	-	-	-	-	-	-
29	35	54	93	36	55	232	166	66	13	26	96	13	26	342					
266																			
30	44	55	93	45	56	202	162	40	19	27	96	19	27	292					
262																			
30																			

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[[preprinted]] 154 [[/preprinted]]

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
31 | 42 | 56 | 93 | 43 | 57 | 208 | 158 | 50 | 19 | 28 | 96 | 19 | 28 | 292 |
258 | 44
32 | 46 | 57 | 93 | 47 | 58 | 196 | 154 | 42 | 22 | 29 | 96 | 22 | 29 | 280 |
256 | 24
[[symbol- check mark]]33 | 50 | 58 | 93 | 51 | 59 | 180 | 152 | 28 | 26 | 29 |
96 | 26 | 29 | 266 | 256 | 10
34 | 46 | 59 | 93 | 47 | 60 | 196 | 148 | 48 | 23 | 30 | 96 | 23 | 30 | 276 |
252 | 24
35 | 53 | 60 | 94 | 54 | 61 | 168 | 144 | 24 | 24 | 31 | 96 | 27 | 31 | 262 |
250 | 12
36 | 52 | 6[[/strikethrough]]0[[/strikethrough]]1 | 94 | 53 | 62 | 172 | 140 |
32 | 25 | 31 | 96 | 25 | 31 | 268 | 250 | 18
37 | 49 | 62 | 94 | 50 | 63 | 184 | 136 | 48 | 24 | 32 | 96 | 24 | 32 | 282 |
246 | 26
38 | 57 | 63 | 94 | 58 | 64 | 154 | 132 | 22 | 31 | 34 | 96 | 31 | 34 | 250 |
240 | 10
39 | 59 | 63 | 94 | 60 | 64 | 148 | 132 | 16 | - | - | - | - | - | - |
40 | 42 | 64 | 94 | 42 | 65 | 212 | 128 | 84 | 20 | 35 | 96 | 20 | 35 | 288 |
236 | [[/strikethrough]]16[[/strikethrough]]^[[52]]
41 | 58 | 65 | 94 | 59 | 66 | 152 | 124 | 28 | 33 | 37 | 96 | 33 | 37 | 242 |
230 | 12
42 | 58 | 66 | 94 | 59 | 67 | 152 | 120 | 32 | 32 | 38 | 96 | 32 | 38 | 246 |
226 | 20
43 | 59 | 66 | 94 | 60 | 67 | 148 | 120 | 28 | 34 | 39 | 96 | 34 | 39 | 240 |
222 | 18
44 | 57 | 67 | 94 | 58 | 68 | 145 | 116 | 38 | 32 | 40 | 96 | 32 | 40 | 246 |
218 | 28
[[symbol- check mark]]45 | 61 | 68 | 94 | 62 | 69 | 140 | 114 | 28 | 33 | 41 |
96 | 34 | 41 | 240 | 216 | 24
46 | 61 | 68 | 94 | 62 | 69 | 140 | 114 | 28 | 34 | 42 | 96 | 34 | 42 | 240 |
212 | 28
47 | 55 | 69 | 94 | 45 | 70 | 162 | 108 | 54 | 31 | 42 | 96 | 31 | 42 | 250 |
212 | 38
48 | 64 | 69 | 94 | 65 | 70 | 128 | 108 | 20 | 39 | 42 | 96 | 39 | 42 |
2[[/strikethrough]]50[[/strikethrough]]22 | 212 | 10
49 | 51 | 70 | 94 | 52 | 71 | 176 | 104 | 52 | 27 | 43 | 96 | 27 | 43 |
2[[/strikethrough]]58[[/strikethrough]]62 | 208 | 54
50 | 51 | 70 | 94 | 52 | 71 | 176 | 104 | 52 | 26 | 43 | 96 | 26 | 43 | 266 |
208 | 58
51 | 62 | 71 | 94 | 63 | 72 | 136 | 100 | 36 | 37 | 44 | 96 | 37 | 44 | 230 |
206 | 24
52 | 34 | 71 | 94 | 34 | 72 | 240 | 100 | 140 | 17 | 44 | 96 | 17 |
4[[/strikethrough]]3[[/strikethrough]]4 | 302 | 206 | 96
53 | 65 | 71 | 94 | 66 | 72 | 124 | 100 | 24 | 40 | 45 | 96 | 40 | 45 | 218 |
202 | 16
54 | 65 | 72 | 94 | 66 | 73 | 124 | 96 | 28 | 27 | 45 | 96 | 27 | 45 | 262 | 202 |
60
55 | 60 | 72 | 94 | 61 | 73 | 144 | 96 | 4[[/strikethrough]]6[[/strikethrough]]8
| 34 | 46 | 96 | 34 | 46 | 240 | 198 | 42
56 | 56 | 72 | 94 | 57 | 73 | 158 | 96 | 62 | 29 | 46 | 96 | 29 | 46 | 256 | 198 |
58
[[symbol- check mark]]57 | 40 | 73 | 94 | 40 | 74 | 218 | 92 | 126 | 21 | 47 |
96 | 21 | 47 | 284 | 196 | 88
58 | 60 | 73 | 94 | 61 | 74 | 144 | 92 | 52 | 35 | 48 | 96 | 35 |
4[[/strikethrough]]7[[/strikethrough]]8 | 236 | 192 | 44
59 | 49 | 73 | 94 | 50 | 74 | 184 | 92 | 92 | 29 | 48 | 96 | 29 | 48 | 256 | 192 |
64

60 | 50 | 74 | 9~~4~~5 | 50 | 74 | 184 | 92 | 92
| 26 | 49 | 96 | 26 | 49 | 266 | 188 | 78

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Arcturus

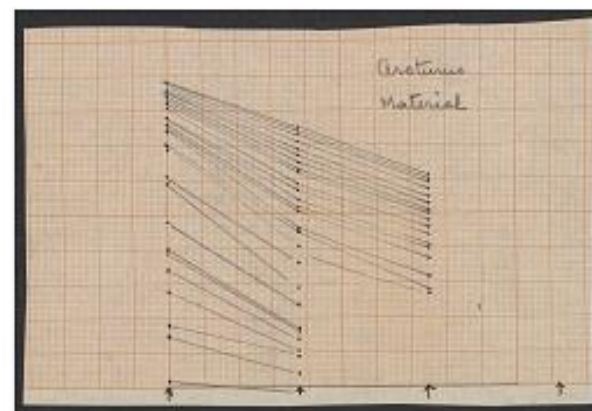
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7	370	36	232	65	128
8	360	37	230	66	124
9	352	38	226	67	120
10	344	39	222	68	116
11	336	40	218	69	112
12	330	41	216	70	108
13	324	42	212	71	104
14	318	43	208	72	100
15	312	44	206	73	96
16	306	45	202	74	92
17	302	46	198	75	88
18	298	47	196	76	84
19	292	48	192	77	78
20	288	49	188	78	74
21	284	50	184	79	70
22	280	51	180	80	64
23	276	52	176	81	60
24	271	53	172	82	56
25	268	54	168	83	50
26	266	55	166	84	42
27	262	56	162	85	36
28	258	57	158	86	28
29	256	58	164	87	20
30	252	59	152	88	10
32	250	60	148	89	0
32	246	61	144		

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Arcturus
Material

[[graph]]



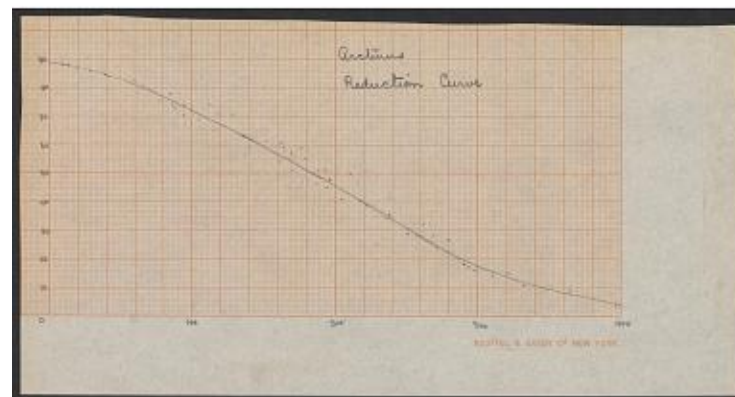
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Arcturus
Reduction Curve

[[graph]]

[[preprint]] KEUFFEL & ESSER C^O NEW YORK. [[/preprint]]



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[[preprinted]] 155 [[/preprinted]]

n	m+n	l+m+n	mean n	mean m+n	[n]	[m]	delta m	n	m+n
l+m+n	mean n	mean m+n	[n]	^[[mean]]	delta m	dl			
31					57	41			
32					34	27			
33					19	16			
34					36	28			
35					18	15			
36					25	21			
37					37	29			
38					16	14			
39					16	14			
40	10	25	95	10	25	344	265	76	71
41	17	25	95	17	25	302	268	34	25
42	18	25	95	18	25	298	268	30	27
43	18	26	95	18	26	298	266	32	26
44	18	26	95	18	26	298	266	32	33
45	19	27	95	19	27	292	262	30	27
46	18	27	95	18	27	298	262	36	31
47	17	27	95	17	27	302	262	40	44
48	23	28	95	23	28	276	258	16	15
49	15	28	95	15	28	312	228	54	53
50	15	29	95	15	29	312	256	56	55
51	22	29	95	22	29	280	256	24	28
52	11	30	95	11	30	336	252	84	107
53	26	31	95	26	31	266	250	16	19
54	22	31	95	22	31	280	250	30	39
55	20	31	95	20	31	288	250	38	43
56	17	32	95	17	32	302	246	56	59
57	14	32	95	14	32	318	246	72	95
58	21	33	95	21	33	284	242	42	46
59	19	33	95	19	33	292	242	50	69
60	16	34	95	16	34	306	240	66	79

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[[preprinted]]156[[/preprinted]]
|n|m+n||+m+n|mean n|mean m+n|[n]||[m+n]|delta m|n|m+n||+m+n|mean
n|mean m+n|[n]||[m+n]|delta m

61	65	74	95	65	74	123	92	36	40	50	96	40	50	218	184	34
62	66	74	95	66	74	124	92	32	40	50	96	40	50	218	184	34
63	71	74	95	71	75	104	92	12	47	51	96	47	50	196	184	12
64	66	75	95	66	75	124	88	36	44	51	96	44	50	206	184	22
65	59	75	95	59	75	152	88	64	30	52	96	30	57	252	180	72
66	53	75	95	53	75	172	88	84	30	52	96	30	51	252	150	72
67	63	75	95	63	75	136	88	48	39	52	96	39	51	222	180	42
68	70	76	95	70	76	108	84	24	44	52	96	44	51	206	180	26
69	64	76	95	64	76	132	84	48	39	52	96	39	51	222	180	42
70	61	76	95	61	76	144	84	60	36	52	96	36	51	232	180	52
71	68	76	95	68	76	116	84	32	3	52	96	43	51	208	180	28
72	59	76	95	59	76	152	84	68	34	52	96	34	57	240	180	60
73	66	76	95	66	76	124	84	40	-|-|-|-|-|-|-|-							
74	64	76	95	64	76	132	84	48	39	53	96	37	52	280	176	54
75	70	76	95	70	76	108	84	24	42	53	96	42	52	212	176	36
76	65	76	95	65	76	128	84	44	39	53	96	39	52	222	176	46
77	62	76	95	62	76	140	84	56	37	53	96	37	52	230	176	54
78	55	76	95	55	76	166	84	82	32	54	96	32	53	146	172	74
79	59	77	95	59	77	152	78	74	33	54	96	33	53	243	172	71
80	66	77	95	66	77	124	78	46	42	54	96	42	53	212	172	40
81	41	77	95	41	77	216	78	38	20	54	96	20	53	288	172	116
82	62	77	95	62	77	140	78	62	34	55	96	34	54	240	168	72
83	63	77	95	63	77	136	78	58	36	55	96	37	54	230	168	62
84	63	77	95	63	77	136	78	58	37	55	96	38	54	226	168	58
85	62	78	95	62	78	140	74	66	36	55	96	37	54	230	168	62
86	68	78	95	68	78	116	74	42	40	55	96	40	54	218	168	50
87	64	78	95	64	78	132	74	58	39	56	96	39	55	222	166	56
88	62	78	95	62	78	140	74	66	37	56	96	37	55	230	166	64
89	67	78	95	67	78	120	74	46	- - - - - - - -							
90	51	78	95	51	78	180	74	106	28	56	91	28	55	258	166	92

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[[preprinted]]158[[/preprinted]]
 n|m+n|+m+n|mean n|mean m+n|n|[[m+n]]delta m|n|m+n|+m+n|mean
 n|mean m+n|n|[[m+n]]delta m
 91|61|78|95|61|78|144|74|70|36|56|96|36|55|232|166|66
 92|63|78|95|63|78|136|74|62|37|57|96|37|56|230|162|68
 93|60|9|95|60|78|148|74|74|35|57|96|35|56|236|162|74
 94|63|79|96|62|78|140|74|66|37|57|96|37|56|230|162|68
 95|60|79|96|59|78|152|74|78|34|58|96|34|57|240|158|82
 96|58|79|96|57|78|158|74|84|33|58|96|33|57|242|158|84
 97|68|79|96|67|78|120|74|46|32|58|96|32|57|246|158|88
 98|63|79|96|62|78|140|74|66|37|58|96|37|57|230|152|72
 99|69|79|96|68|78|116|74|42|43|58|96|43|57|208|158|50
~~[[/underlined]]ap 1[[/underlined]]~~~~[[/strickethrough]]~~
 100|67|79|96|66|78|124|74|50|40|59|96|40|58|218|154|64
~~[[/strickethrough]] mu phi 834[[/strickethrough]]~~
 101|50|79|96|50|78|184|74|10|32|59|96|32|58|246|154|92
 102|75|80|96|74|79|92|70|22|49|59|96|49|58|188|154|34
 103|23|80|96|23|79|276|70|206|10|59|96|10|58|344|154|190
 104|~~[[/underlined]]72|80|96|71|79|104|70|34|~~~~[[/underlined]]~~47|59|96|46|58|198|154|44
~~[[/underlined]]ap 1[[/underlined]]~~ Mu phi 834.
 105|67|80|94|68|81|116|60|56|42|60|96|42|59|212|152|60
 106|63|80|94|64|81|132|60|72|40|60|96|40|59|218|152|66
 107|69|80|94|70|81|108|60|48|44|60|96|44|59|206|152|54
 108|71|80|94|72|81|100|60|40|47|60|96|47|59|196|152|44
 109|71|80|94|72|81|100|60|40|44|61|96|44|60|206|148|58
 110|62|80|94|63|81|136|60|76|40|61|96|40|60|218|148|70
 111|63|80|94|64|81|132|60|72|39|61|96|39|60|222|146|74
 112|68|81|94|69|82|112|56|56|40|62|96|40|61|218|144|74
 113|61|81|94|62|82|140|56|84|38|62|96|38|61|226|144|82
 114|77|81|94|78|82|74|56|18|54|62|96|54|61|168|144|24
 115|71|81|94|72|82|100|56|44|49|62|95|49|62|188|140|48
 116|48|81|94|48|82|192|56|136|31|62|95|31|62|250|140|110
 117|61|81|94|62|82|140|56|84|37|62|95|37|62|230|140|90
 118|75|81|94|76|82|84|56|28|11|62|95|11|62|212|140|72
 119|67|82|94|68|83|116|50|66|42|62|95|42|62|212|140|72
 120|71|82|94|72|83|100|50|50|50|63|95|50|63|184|136|48

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[[preprinted]]159[[/preprinted]]
 |n|m+n|l+m+n|mean n|mean m+n|[n]|m+n|delta m|n|m+n|l+m+n|mean
 n|mean m+n|[n]|m+n|mean delta m|dl
 91|23|42|95|23|42|276|212|64| | | | | |67|46
 92|23|43|95|23|43|276|208|68| | | | | |66|46
 93|23|43|95|23|43|276|208|68| | | | | |72|48
 94|24|43|95|24|43|272|208|64| | | | | |66|46
 95|22|44|95|22|44|280|206|71| | | | | |78|51
 96|21|44|95|21|44|284|206|78| | | | | |82|53
 97|21|44|95|21|44|284|206|78| | | | | |71|48
 98|27|44|95|27|44|262|206|56| | | | | |65|45
 99|28|44|95|28|44|258|206|52| | | | | |48|36
 100|28|45|95|28|45|258|202|52| | | | | |55|40
 101|24|45|95|24|45|272|202|70| | | | | |91|57
 102|35|45|95|35|45|268|202|66| | | | | |41|31
 103|10|45|95|10|45|344|202|142| | | | | |179|81
 104|34|46|95|34|46|240|198|42| | | | | |40|31
 105|30|46|95|30|46|252|198|54| | | | | |57|41
 106|27|46|95|27|46|262|198|64| | | | | |67|46
 107|31|46|95|31|46|250|198|52| | | | | |51|37
 108|34|46|95|34|46|240|198|42| | | | | |42|32
 109|30|47|95|30|46|252|198|54| | | | | |51|37
 110|29|47|95|29|46|256|198|58| | | | | |68|47
 111|29|47|95|29|47|256|196|60| | | | | |69|47
 112|---|---|---|---|---|---|---|---|65|45
 113|28|47|95|28|47|258|196|62| | | | | |76|50
 114|40|48|95|40|48|218|192|36| | | | | |26|21
 115|33|48|95|33|48|242|192|50| | | | | |47|35
 116|22|48|95|22|48|280|192|88| | | | | |111|64
 117|27|48|95|27|48|262|192|70| | | | | |81|53
 118|---|---|---|---|---|---|---|---|28|23
 119|32|49|95|32|49|246|188|58| | | | | |65|45
 120|35|39|95|35|49|236|188|48| | | | | |49|36

159														
no.	date	hours	min	sec	lat	long	alt	temp	wind	dir	speed	dir	speed	alt
91	23	42	95	23	42	276	212	64						67
92	23	43	95	23	43	276	208	68						66
93	23	43	95	23	43	276	208	68						72
94	24	43	95	24	43	272	208	64						66
95	22	44	95	22	44	280	206	71						78
96	21	44	95	21	44	284	206	78						82
97	21	44	95	21	44	284	206	78						71
98	27	44	95	27	44	262	206	56						65
99	28	44	95	28	44	258	206	52						48
100	28	45	95	28	45	258	202	52						55
101	24	45	95	24	45	272	202	70						91
102	35	45	95	35	45	268	202	66						41
103	10	45	95	10	45	344	202	142						179
104	34	46	95	34	46	240	198	42						40
105	30	46	95	30	46	252	198	54						57
106	27	46	95	27	46	262	198	64						67
107	31	46	95	31	46	250	198	52						51
108	34	46	95	34	46	240	198	42						42
109	30	47	95	30	46	252	198	54						51
110	29	47	95	29	46	256	198	58						68
111	29	47	95	29	47	256	196	60						69
112	---	---	---	---	---	---	---	---						65
113	28	47	95	28	47	258	196	62						76
114	40	48	95	40	48	218	192	36						26
115	33	48	95	33	48	242	192	50						47
116	22	48	95	22	48	280	192	88						111
117	27	48	95	27	48	262	192	70						81
118	---	---	---	---	---	---	---	---						28
119	32	49	95	32	49	246	188	58						65
120	35	39	95	35	49	236	188	48						49

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|n|m+n||+m+n|mean n|mean m+n|[n]||[m+n]|delta m|n|m+n||+m+n|mean
n|mean m+n|[n]||[m+n]|delta m
121|68|82|94|69|83|112|50|62|44|63|95|44|63|206|136|70
122|56|82|94|57|83|158|50|108|37|63|95|37|63|230|136|94
123|68|82|94|69|83|112|50|62|---|---|---|---|
124|70|82|94|71|83|104|50|54|48|63|95|48|63|192|136|56
125|55|2|94|56|83|162|50|112|31|63|95|31|63|250|136|114
126|62|82|94|63|83|136|50|86|37|64|95|37|64|230|132|98
127|61|82|94|62|83|140|50|90|---|---|---|---|
128|50|82|94|50|83|184|50|134|29|64|95|29|64|256|132|124
129|59|82|94|60|83|148|50|98|---|---|---|---|
130|69|83|94|70|84|108|72|66|42|64|95|42|64|212|132|80
131|70|83|94|71|84|104|42|62|47|64|95|47|64|196|132|64
132|81|83|94|82|84|56|42|14|61|64|95|61|64|144|132|12
133|77|83|94|78|84|78|42|32|56|65|95|56|65|162|128|34
134|70|83|94|71|84|104|42|62|---|---|---|---|
135|56|83|94|57|84|158|42|116|33|65|95|33|65|242|128|[[? 1]]14
136|77|83|94|78|84|74|42|32|55|65|95|55|65|166|128|38
137|80|83|94|81|84|60|42|18|59|65|95|59|65|152|128|24
138|71|83|94|72|84|100|42|58|68|66|95|48|66|192|124|68
139|67|83|94|68|84|116|42|74|43|66|95|43|66|208|124|84
140|78|83|94|79|84|70|42|28|56|66|95|56|66|162|124|38
141|79|83|94|80|84|64|42|22|57|66|95|57|66|158|124|34
142|69|83|94|70|84|108|42|66|46|66|95|46|66|198|124|74
143|78|84|94|79|85|70|36|34|54|66|95|54|66|168|124|44
144|76|84|94|77|85|78|36|42|53|66|95|53|66|172|124|48
145|80|84|94|81|85|60|36|24|59|67|95|59|67|152|120|32
146|77|84|94|78|85|74|36|38|54|67|95|54|67|168|120|48
147|80|84|94|81|85|60|36|24|58|67|95|58|67|154|120|34
148|72|84|94|73|85|96|36|28|49|67|95|49|67|188|120|68
149|79|84|94|80|85|64|36|28|57|68|95|57|68|158|116|42
150|51|84|94|51|85|180|36|144|30|68|95|30|68|252|116|136

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n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n	
l+m+n	mean n	mean m+n	[n]	delta m	^	[[mean]]	dl			
121	33	49	95	33	49	242	188	54	62	44
122	25	49	95	25	49	268	188	80	94	58
123	-	-	-	-	-	-	-	-	62	44
124	34	49	95	34	49	240	188	52	54	39
125	21	50	95	21	50	284	184	100	109	63
126	26	50	95	26	50	466	184	82	92	57
127	22	50	95	22	50	280	184	96	93	58
128	19	50	95	19	50	292	184	108	122	67
129	25	50	95	25	50	268	184	84	91	57
130	30	50	95	30	50	252	184	68	71	48
131	-	-	-	-	-	-	-	-	63	44
132	47	50	95	47	50	196	184	12	13	11
133	43	50	95	43	50	208	184	24	30	24
134	41	50	95	41	50	216	184	32	47	35
135	25	51	95	25	51	268	180	88	106	62
136	42	51	95	42	51	212	180	32	34	27
137	45	51	95	45	51	202	180	22	21	18
138	35	[[/strikethrough]]4[[/strikethrough]]51				95	35	51	236	180
56			61	43						
139	32	52	95	32	52	246	176	70	76	50
140	44	52	95	44	52	206	176	30	32	26
141	43	52	95	43	52	208	176	32	29	23
142	34	52	95	34	52	240	176	64	68	47
143	42	52	95	42	52	212	176			
[[/strikethrough]]2[[/strikethrough]]36								38	30	
144	40	52	95	40	52	218	176			
[[/strikethrough]]3[[/strikethrough]]42								44	33	
145	44	53	95	44	53	206	172	34	30	24
146	42	53	95	42	53	212	172	40	42	32
147	44	53	95	44	53	206	172	34	31	25
148	37	53	95	37	53	230	172	58	62	44
149	44	53	95	44	53	206	172	34	35	28
150	23	54	95	23	54	276	168	108	129	70

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[[preprinted]] 162 [[/preprinted]]

| n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
| m+n | mean n | mean m+n | [n] | [m+n] | ^[[mean]] delta m | dl
151 | 79 | 84 | 94 | 79 | 85 | 70 | 36 | 34 | 57 | 68 | 95 | 57 | 68 | 158 | 116
| 42
152 | 75 | 84 | 94 | 76 | 85 | 84 | 36 | 48 | 52 | 68 | 95 | 52 | 68 | 176 | 116
| 60
153 | 76 | 84 | 94 | 77 | 85 | 78 | 36 | 42 | 53 | 68 | 95 | 53 | 68 | 172 | 116
| 56
154 | 7[[strikethrough]]4[[/strikethrough]]6 | 84 | 94 | 77 | 85 | 78 | 36 | 42
| 55 | 69 | 95 | 55 | 69 | 166 | 112 | 54
155 | 65 | 84 | 94 | 66 | 85 | 124 | 36 | [88] | 43 | 69 | 95 | 43 | 69 | 208 |
| 112 | 96
156 | 74 | 84 | 94 | 75 | 85 | 88 | 36 | 52 | 53 | 69 | 95 | 53 | 69 | 172 | 112
| 60
157 | 82 | 84 | 94 | 83 | 85 | 50 | 36 | 14 | 64 | 69 | 95 | 64 | 69 | 132 | 112
| 20
158 | 74 | 84 | 94 | 7[[strikethrough]]3[[/strikethrough]]5 | 85 | 88 | 36 | 52
| 52 | 69 | 95 | 52 | 69 | 176 | 112 | 64
159 | 80 | 84 | 94 | 81 | 85 | 60 | 36 | 24 | 60 | 70 | 95 | 60 | 70 | 148 | 108
| 40
160 | 79 | 85 | 94 | [[strikethrough]]7[[/strikethrough]]80 | 86 | 64 |
28[[strikethrough]]36[[/strikethrough]] | 36 | 57 | 70 | 95 | 57 | 70 | 158 |
| 108 | 50
161 | - | - | - | - | - | - | - | - | - | - | - | - | - | -
162 | - | - | - | - | - | - | - | 60 | 70 | 95 | 60 | 70 | 148 | 108 | 40
163 | 78 | 85 | 94 | 79 | 86 | 70 | 28 | 42 | 57 | 70 | 95 | 57 | 70 | 158 | 108
| 50
164 | 76 | 85 | 94 | 77 | 86 | 78 | 28 | 50 | 53 | 70 | 95 | 53 | 70 | 172 | 108
| 64
165 | 79 | 85 | 94 | 80 | 86 | 64 | 28 | 36[[symbol-check mark]] | 57 | 71 |
| 95 | 57 | 71 | 158 | 104 | 65
166 | 82 | 85 | 94 | 84 | 86 | 42 | 28 | 14 | 65 | 71 | 95 | 65 | 71 | 128 | 104
| 24
167 | 81 | 85 | 94 | 82 | 86 | 56 | 28 | [[strikethrough]]1[[/strikethrough]]28
| 64 | 71 | 95 | 64 | 71 | 132 | 104 | 28
168 | 78 | 8[[strikethrough]]4[[/strikethrough]]5 | 94 | 79 | 86 | 70 | 28 | 42
| 59 | 71 | 95 | 59 | 71 | 152 | 104 | 48
169 | 80 | 85 | 94 | 81 | 86 | 60 | 28 | 32 | 59 | 72 | 95 | 59 | 71 | 152 | 100
| 52
170 | 77 | 85 | 94 | 78 | 86 | 74 | 28 | 46 | 56 | 72 | 95 | 56 | 72 | 162 | 100
| 62
171 | 82 | 85 | 94 | 83 | 86 | 50 | 20 | 22 | 65 | 72 | 95 | 65 | 72 | 128 | 100
| 28
172 | 81 | 8[[strikethrough]]4[[/strikethrough]]5 | 93 | 83 | 87 | 50 | 20 | 30
| 62 | 72 | 95 | 62 | 72 | 140 | 100 | 40
173 | 84 | 85 | 93 | 86 | 87 | 28 | 10 | 8 | 68 | 72 | 95 | 68 | 72 | 116 | 100 |
| 16
174 | 82 | 86 | 93 | 84 | 8[[strikethrough]]7[[/strikethrough]]8 | 42 | 10 | 32
| 63 | 73 | 95 | 63 | 73 | 136 | 96 | 40
175 | 82 | 86 | 93 | 84 | 8[[strikethrough]]7[[/strikethrough]]8 | 42 | 10 |
32[[symbol-check mark]] | 64 | 73 | 95 | 64 | 73 | 132 | 96 | 36
176 | 81 | 86 | 93 | 83 | 8[[strikethrough]]7[[/strikethrough]]8 | 50 | 10 | 40
| 63 | 73 | 95 | 63 | 73 | 136 | 96 | 40
177 | 82 | 86 | 93 | 84 | 88 | 42 | 10 | 32 | 63 | 73 | 95 | 63 | 73 | 136 | 96 |
| 40
178 | 8[[strikethrough]]5[[/strikethrough]]3 | 86 | 93 | 85 | 88 | 36 | 10 | 26
| 67 | 73 | 95 | 67 | 73 | 120 | 96 | 24
179 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 71 | 74 | 95 | 71 | 74 | 104 | 96 |
| 8

The image shows a page from a handwritten manuscript, labeled '162' at the top. The page is filled with a dense grid of numbers, organized into columns and rows. Some numbers are crossed out with horizontal lines, and others are written in a different color (possibly red or blue ink) to indicate corrections or specific data points. The handwriting is in a cursive or semi-cursive style, typical of 18th or 19th-century scientific or mathematical records. The paper appears aged and slightly discolored.

180 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 68 | 74 | 95 | 68 | 74 | 116 | 96 |
2~~1~~0

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n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n
+m+n	mean n	mean m+n	[n]	[mean]	delta m	dl			
151	-	-	-	-	-	-	-	38	30
152	42	54	95	42	54	212	168	44	51
153	42	54	95	42	54	212	168	44	47
154	41	54	95	41	54	216	168	48	48
155	33	55	95	33	55	242	166	76	87
156	41	55	95	41	55	216	166	50	54
157	-	-	-	-	-	-	-	17	14
158	40	55	95	40	55	48	166	52	56
159	-	-	-	-	-	-	-	32	26
160	45	55	95	45	55	2	6	02	166
161	47	56	95	47	56	196	162	34	34
162	47	56	95	47	56	196	162	34	37
163	45	56	95	45	56	2	6	02	162
164	43	56	95	43	56	208	162	46	53
165	43	57	95	43	57	208	158	50	47
166	51	59	95	51	57	180	158	22	20
167	50	59	95	50	57	184	158	26	27
168	45	59	95	45	57	202	158	44	45
169	44	59	95	44	57	206	158	48	44
170	42	5	9	9	8	95	42	58	212
171	49	58	95	49	58	188	154	34	28
172	47	58	95	47	58	196	154	42	37
173	54	58	95	54	58	168	154	14	13
174	50	58	95	50	58	184	154	30	34
175	50	59	95	50	59	184	152	32	33
176	48	59	95	48	59	192	152	40	40
177	-	-	-	-	-	-	-	36	
178	54	59	95	54	59	168	152	16	22
179	57	60	95	57	60	158	148	10	9
180	55	60	95	55	60	166	148		08
181	55	60	95	55	60	166	148	16	14

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n m+n l+m+n mean n mean m+n [n] [m+n] delta m n m+n
m+n mean n mean m+n [n] [m+n] ^[[mean]] delta m dl
181 83 86 93 85 88 36 10 26 67 74 95 67 74 120 92
28
182 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 69 | 74 | 69 | 74 | 112 | 92 | 20
183 | 82 | 86 | 93 | 84 | 88 | 42 | 10 | 32 | 62 | 74 | 62 | 74 | 140 | 92 | 48
184 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 63 | 74 | 63 | 74 | 136 | 92 | 44
185 | 81 | 86 | 93 | 83 | 88 | 50 | 10 | 40[[symbol- check mark]] | 62 | 74 |
95 | 62 | 74 | 140 | 92 | 48
186 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 67 | 74 | 67 | 74 | 120 | 92 | 28
187 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 67 | 74 | 67 | 74 | 120 | 92 | 28
188 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 69 | 74 | 69 | 74 | 112 | 92 | 20
189 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 70 | 74 | 70 | 74 | 108 | 92 | 16
190 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 68 | 74 | 68 | 74 | 116 | 92 | 24
191 | 85 | 86 | 93 | 84 | 88 | 20 | 10 | 10 | 82 | 74 | 72 | 74 | 100 | 92 | 8
192 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 65 | 74 | 65 | 75 | 128 | 92 | 36
193 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 69 | 74 | 69 | 75 | 112 | 92 | 20
194 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 72 | 74 | 72 | 75 | 100 | 92 | 8
195 | 8[[/strickethrough]]5[[/strickethrough]]2 | 86 | 93 | 84 | 88 | 42 | 10 | 32
| 67 | 75 | 95 | 67 | 75 | 120 | 88 | 32
196 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 70 | 75 | 70 | 75 | 108 | 88 | 20
197 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 70 | 75 | 70 | 75 | 108 | 88 | 20
198 | 8[[/strickethrough]]3[[/strickethrough]]4 | 86 | 93 | 86 | 88 | 28 | 10 | 18
| 69 | 75 | 69 | 75 | 112 | 88 | 24
199 | 83 | 86 | 93 | 85 | 88 | 36 | 10 | 26 | 70 | 75 | 70 | 75 | 108 | 88 | 20
200 | 84 | 86 | 93 | 86 | 88 | 28 | 10 |
[[/strickethrough]]26[[/strickethrough]]18 | 71 | 75 | 71 | 75 | 104 | 88 | 16
201 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 72 | 75 | 72 | 75 | 100 | 88 | 12
202 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 72 | 75 | 72 | 75 | 100 | 88 | 12
203 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 73 | 75 | 73 | 75 | 96 | 88 | 8
204 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10 | 74 | 75 | 74 | 75 | 92 | 88 | 4
205 | 85 | 86 | 93 | 87 | 88 | 20 | 10 | 10[[symbol- check mark]] | 73 | 75 |
95 | 73 | 75 | 96 | 88 | 8
206 | 84 | 86 | 93 | 86 | 88 | 28 | 10 | 18 | 72 | 75 | 72 | 75 | 100 | 88 | 12
207 | 84 | 86 | 93 | 86 | 88 | 20 | 10 | 18 | 70 | 75 | 70 | 75 | 108 | 88 |
[[/strickethrough]]1[[/strickethrough]]20
208 | 82 | 86 | 93 | 84 | 88 | 42 | 10 | 32 | 68 | 75 | 68 | 75 | 116 | 88 | 28
209 85 85 93 87 87 20 20 [[/strickethrough]]0[[/strickethrough]]0
- - - - - -
210 85 85 93 85 87 36 20 16 70 76 70 76 108 84 24

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[[preprinted]] 165 [[/preprinted]]

| n | m+n | l+m+n | mean n | mean m | [n] | [m+n] | delta m | n | m+n |
l+m+n | mean n | mean m | [n] | [m+n] | delta m ^[[mean]] | dl

181	55	60	95	55	60	166	148	18								24	20
182	55	60	95	55	60	166	148	18								19	16
183	48	60	95	48	60	192	148	44								41	31
184	50	60	95	50	60	184	148	36								35	28
185	49	60	95	49	60	188	148	40								43	33
186	54	60	95	64	60	168	148	20								25	21
187	56	60	95	46	60	162	148	14								20	17
188	54	60	95	54	60	167	148	20								22	18
189	53	61	95	53	61	174	144	28								21	18
190	-	-	-	-	-			25	21								
191	-	-	-	-	-			9	08								
192	53	61	95	53	61	172	144	28								27	22
193	55	61	95	55	61	166	144	22								23	19
194	57	61	95	57	61	158	144	14								11	10
195	54	61	95	54	61	168	144	24								29	23
196	55	61	95	55	61	166	144	22								23	19
197	55	61	95	55	61	166	144	22								20	17
198	56	61	95	56	61	162	144	18								20	17
199	55	61	95	55	61	166	144	22								22	18
200	56	62	95	56	62	162	140	22								19	16
201	59	62	95	59	62	152	140	12								11	10
202	59	62	95	59	62	152	140	12								14	12
203	60	62	95	60	62	148	140	8								9	08
204	59	62	95	59	62	152	140	12								9	08
205	56	62	95	55	62	162	140	22								13	11
206	55	62	95	56	62	162	140	26								19	16
207	56	62	95	56	62	162	140	22								20	17
208	53	62	95	53	62	172	140	32								31	25
209	59	62	95	59	62	152	140	12								6	05
210	55	62	95	55	62	166	140	26								22	18

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[[preprinted]] 166 [[/preprinted]]
 | n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |
 l+m+n | mean n | mean m+n | [n] | [m+n] | delta m
 211 | 84 | 85 | 93 | 86 | 87 | 28 | 20 | 8 | 71 | 75 | 95 | 71 | 75 | 104 | 88 |
 16
 212 | 81 | 85 | 93 | 83 | 87 | 50 | 20 | 30 | 65 | 75 | 95 | 65 | 75 | 128 | 88 |
 40
 213 | 84 | 85 | 93 | 86 | 87 | 28 | 20 | 8 | 71 | 75 | 95 | 71 | 95 | 104 | 88 |
 16
 214 | 83 | 85 | 93 | 85 | 87 | 36 | 20 | 16 | 69 | 74 | 95 |
 [[/strickethrough]]7[[/strickethrough]]69 | 74 | 112 | 92 | 20
 215 | 84 | 85 | 93 | 86 | 87 | 28 | 20 | 8 | 70 | 74 | 95 | 70 | 74 | 108 | 92 |
 16
 216 | - | - | - | - | - | - | - | - | 70 | 74 | 95 |
 7[[/strickethrough]]6[[/strickethrough]]0 | 74 | 108 | 92 | 16
 217 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
 218 | 82 | 85 | 93 | 84 | 87 | 42 | 20 | 22 | - | - | - | - | - | - | - |
 219 | 83 | 85 | 93 | 85 | 87 | 36 | 20 | 16 | - | - | - | - | - | - | - |
 220 | 8[[/strickethrough]]3[[/strickethrough]]2 | 85 | 93 | 83 | 87 | 50 | 20 | 30 |
 67 | 73 | 67 | 73 | 120 | 96 | 24
 221 | 83 | 85 | 93 | 85 | 87 | 36 | 20 | 16 | 67 | 73 | 67 | 73 | 120 | 96 | 24
 222 | 83 | 85 | 93 | 85 | 87 | 36 | 20 | 16 | 69 | 73 | 69 | 73 | 112 | 96 | 16
 223 | 84 | 85 | 93 | 86 | 87 | 28 | 20 | 8 | 71 | 73 | 71 | 73 | 104 | 96 | 8
 224 | 81 | 84 | 93 | 83 | 8[[/strickethrough]]7[[/strickethrough]]7 | 50 | 20 | 30 |
 66 | 73 | 66 | 73 | 124 | 96 | 28
 225 | 83 | 84 | 92 | 86 | 87 | 28 | 20 | 8 | 70 | 72 | 95 | 70 | 72 | 108 | 100 |
 8
 226 | 83 | 84 | 92 | 86 | 87 | 28 | 20 | 8 | 70 | 72 | 70 | 72 | 108 | 100 | 8
 227 | 83 | 84 | 92 | 86 | 87 | 28 | 20 | 8 | 68 | 72 | 68 | 72 | 116 | 100 | 16
 228 | 83 | 84 | 92 | 86 | 87 | 28 | 20 | 8 | 69 | 72 | 69 | 72 | 112 | 100 | 12
 229 | 82 | 84 | 92 | 85 | 87 | 36 | 20 | 16 | 72 | 72 | 62 | 72 | 140 | 100 |
 40
 230 | 82 | 84 | 92 | 85 | 87 | 36 | 20 | 16 | 68 | 68 | 72 | 68 | 72 | 116 |
 100 | 16
 231 | 81 | 84 | 92 | 84 | 87 | 42 | 20 | 22 | 68 | 71 | 68 | 71 | 116 | 104 |
 12
 23[[/strickethrough]]3[[/strickethrough]]2 | 82 | 83 | 92 | 85 | 86 | 36 | 28 | 8 |
 65 | 71 | 65 | 71 | 128 | 104 | 24
 23[[/strickethrough]]4[[/strickethrough]]3 | 81 | 83 | 92 | 84 | 86 | 42 | 28 | 14 |
 68 | 70 | 68 | 70 | 116 | 108 | 8
 23[[/strickethrough]]5[[/strickethrough]]4 | 81 | 83 | 92 | 84 | 86 | 42 | 28 | 14 |
 67 | 70 | 67 | 70 | 120 | 108 | 12
 23[[/strickethrough]]6[[/strickethrough]]5 | 80 | 83 | 92 | 83 | 86 | 50 | 28 | 22 |
 62 | 70 | 95 | 62 | 70 | 140 | 108 | 32
 23[[/strickethrough]]7[[/strickethrough]]6 | 80 | 83 | 92 | 83 | 86 | 50 | 28 | 22 |
 65 | 69 | 65 | 69 | 128 | 112 | 16
 23[[/strickethrough]]8[[/strickethrough]]7 | - | - | - | - | - | - | - | - | 64 | 69 | 64 |
 69 | 132 | 112 | 20
 23[[/strickethrough]]9[[/strickethrough]]8 | - | - | - | - | - | - | - | - | 65 | 68 | 65 |
 68 | 128 | 116 | 12
 2[[/strickethrough]]4[[/strickethrough]]39 | 80 | 82 | 92 | 83 | 86 | 50 | 28 | 22 |
 65 | 68 | 64 | 68 | 132 | 116 | 16
 240 | 80 | 82 | 92 | 83 | 86 | 50 | 28 | 22 | 64 | 67 | 94 | 65 | 68 | 128 | 116 |
 12

166

	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240
211	84	85	93	86	87	28	20	8	71	75	95	71	75	104	88	16														
212	81	85	93	83	87	50	20	30	65	75	95	65	75	128	88	40														
213	84	85	93	86	87	28	20	8	71	75	95	71	95	104	88	16														
214	83	85	93	85	87	36	20	16	69	74	95																			
215	84	85	93	86	87	28	20	8	70	74	95	70	74	108	92	16														
216	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
217	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
218	82	85	93	84	87	42	20	22	-	-	-	-	-	-	-	-														
219	83	85	93	85	87	36	20	16	-	-	-	-	-	-	-	-														
220	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8														
221	83	85	93	85	87	36	20	16	67	73	67	73	120	96	24															
222	83	85	93	85	87	36	20	16	69	73	69	73	112	96	16															
223	84	85	93	86	87	28	20	8	71	73	71	73	104	96	8															
224	81	84	93	83	8	8	8	8	8	8	8	8	8	8	8	8														
225	83	84	92	86	87	28	20	8	70	72	95	70	72	108	100	8														
226	83	84	92	86	87	28	20	8	70	72	70	72	108	100	8															
227	83	84	92	86	87	28	20	8	68	72	68	72	116	100	16															
228	83	84	92	86	87	28	20	8	69	72	69	72	112	100	12															
229	82	84	92	85	87	36	20	16	72	72	62	72	140	100	40															
230	82	84	92	85	87	36	20	16	68	68	72	68	72	116	100	16														
231	81	84	92	84	87	42	20	22	68	71	68	71	116	104	12															
232	82	83	92	85	86	36	28	8	65	71	65	71	128	104	24															
233	81	83	92	84	86	42	28	14	68	70	68	70	116	108	8															
234	81	83	92	84	86	42	28	14	67	70	67	70	120	108	12															
235	80	83	92	83	86	50	28	22	62	70	95	62	70	140	108	32														
236	80	83	92	83	86	50	28	22	65	69	65	69	128	112	16															
237	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
238	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
239	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														
240	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-														

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	n	m+n	l+m+n	mean n	mean m	n	m+n	delta m	n	m+n		
	l+m+n	mean n	mean m	n	m+n	delta m	l+m+n	mean n	mean m	n	m+n	
211	56	62	95	56	62	162	140	22			15	13
212	49	61	95	49	61	188	144	44			38	30
213	59	61	95	56	61	162	144	18			14	12
214	54	61	95	54	61	168	144	24			20	17
215	56	60	95	56	60	162	148	14			13	11
216	55	60	95	55	60	166	148	18			17	14
217	-	-	-	-	-	-	-	-			-	-
218	52	60	95	52	60	179	148	28			25	21
219	54	59	95	54	59	168	152	16			16	14
220	53	59	95	53	59	172	152	20			25	21
221	55	59	95	55	59	166	152	14			18	15
222	55	59	95	55	59	166	152	14			15	13
223	57	59	95	57	59	158	152	6			7	6
224	50	58	95	50	58	184	154	30			19	16
225	53	58	95	53	58	172	154	18			11	10
226	53	58	95	53	58	172	154	18			11	10
227	53	58	95	53	58	172	154	18			14	12
228	-	-	-	-	-	-	-	10	09			
229	-	-	-	-	-	-	-	28	23			
230	53	57	95	53	57	172	158	14			15	13
231	51	57	95	51	57	180	158	7			180	158
232	50	57	95	50	57	184	158	26			19	16
233	53	56	95	53	56	172	162	10			11	10
234	50	56	95	50	56	184	162	22			16	14
235	49	56	95	49	56	188	162	26			27	22
236	50	56	95	50	56	184	162	22			20	17
237	52	55	95	52	55	176	166	10			15	13
238	50	54	95	50	54	184	168	16			14	12
239	50	53	95	50	53	184	172	12			17	14
240	46	52	95	46	52	198	176	22			19	16

167

	n	m+n	l+m+n	mean n	mean m	n	m+n	delta m	n	m+n
211	56	62	95	56	62	162	140	22		
212	49	61	95	49	61	188	144	44		
213	59	61	95	56	61	162	144	18		
214	54	61	95	54	61	168	144	24		
215	56	60	95	56	60	162	148	14		
216	55	60	95	55	60	166	148	18		
217	-	-	-	-	-	-	-	-		
218	52	60	95	52	60	179	148	28		
219	54	59	95	54	59	168	152	16		
220	53	59	95	53	59	172	152	20		
221	55	59	95	55	59	166	152	14		
222	55	59	95	55	59	166	152	14		
223	57	59	95	57	59	158	152	6		
224	50	58	95	50	58	184	154	30		
225	53	58	95	53	58	172	154	18		
226	53	58	95	53	58	172	154	18		
227	53	58	95	53	58	172	154	18		
228	-	-	-	-	-	-	-	10	09	
229	-	-	-	-	-	-	-	28	23	
230	53	57	95	53	57	172	158	14		
231	51	57	95	51	57	180	158	7		
232	50	57	95	50	57	184	158	26		
233	53	56	95	53	56	172	162	10		
234	50	56	95	50	56	184	162	22		
235	49	56	95	49	56	188	162	26		
236	50	56	95	50	56	184	162	22		
237	52	55	95	52	55	176	166	10		
238	50	54	95	50	54	184	168	16		
239	50	53	95	50	53	184	172	12		
240	46	52	95	46	52	198	176	22		

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	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n					
	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m									
241	79	81	92	82	84	56	42	14	62	66	94	63	67	136	120
6															
242	78	81	92	80	84	64	142	22	60	65	94	61	66	144	
124	20														
243	79	80	92	82	83	56	50	6	60	64	94	61	65	144	128
16															
244	77	80	92	79	83	70	50	20	57	64	94	58	65	154	128
26															
245	72	80	92	74	83	92	50	42	50	63	94	50	64	184	132
52															
246	75	79	92	77	82	78	56	22	-	-	-	-	-	-	-
247	76	79	92	78	82	74	56	18	-	-	-	-	-	-	-
248	75	78	92	77	80	78	64	14	-	-	-	-	-	-	-
249	74	78	91	76	80	84	64	20	-	-	-	-	-	-	-
250	73	77	92	75	79	88	70	18	52	59	94	53	60	172	148
24															
251	75	77	92	77	79	78	70	8	56	58	94	57	59	158	152
6															
252	75	77	92	77	79	78	70	8	55	57	94	56	58	162	154
8															
253	72	76	92	74	78	92	74	18	50	56	94	51	57	180	158
22															
254	67	75	92	69	77	112	78	34	44	54	94	44	55	206	
166	40														
255	70	75	92	72	77	100	78	22	47	53	94	48	54	192	
168	24														
[[symbol- checkmark]]256	70	74	92	72	76	108	84	16	46	52					
94	47	53	196	172	24										
257	66	73	92	68	75	116	88	28	44	51	94	44	52	206	
176	30														
258	70	72	92	72	74	100	92	8	45	49	94	45	50	202	184
18															
259	63	70	92	65	72	128	100	28	41	47	94	41	48	216	
192	24														
260	62	68	92	64	70	132	108	14	41	45	94	41	45	216	
202	14														
261	60	65	92	62	69	140	112	28	38	42	94	38	42	226	
212	14														
262	57	64	92	59	66	152	124	28	35	40	94	35	40	236	
218	18														
263	59	62	92	61	64	144	132	12	35	39	94	35	39	236	
222	14														
264	59	61	92	61	63	144	136	8	34	37	94	34	37	240	
230	10														
265	55	59	92	57	61	158	144	14	31	36	94	31	36	250	
232	18														
266	52	57	92	54	59	168	152	16	31	35	94	31	35	250	
23	14														
267	49	55	92	51	57	180	158	22	27	33	94	27	33	262	
242	20														
268	49	54	92	51	56	180	162	18	25	31	94	25	31	268	
250	18														
269	49	52	92	51	54	180	168	12	26	30	94	26	30	266	
252	14														
[[symbol- checkmark]]270	40	49	92	41	51	216	180	36	19	27					
94	19	27	292	262	30										

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	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	delta m	n	m+n
	l+m+n	mean n	mean m+n	[n]	[m+n]	^[[mean]]	delta m	dl		
241	45	52	95	45	52	202	176	26	19	16
242	45	51	95	45	51	202	180	22	21	18
243	45	50	95	45	50	202	184	18	13	11
244	43	49	95	43	49	208	188	20	22	18
245	36	49	95	36	49	232	188	44	46	35
246	[[strikethrough]]39[[/strikethrough]]					47	95	38	47	226 | 196 |
30				26	21					
247	39	47	95	39	47	222	196	26	22	18
248	38	46	95	38	46	226	198	28	21	18
249	38	45	95	38	45	226	202	24	22	18
250	38	45	95	38	45	226	202	24	22	18
251	36	43	95	36	43	232	208	24	13	11
252	38	43	95	38	43	226	208	18	11	10
253	35	42	95	35	42	236	212	24	21	18
254	29	40	95	29	40	256	218	38	37	29
255	31	39	95	31	39	250	222	28	25	21
256	30	37	95	30	37	252	230	22	21	18
257	28	35	95	28	35	258	236	22	27	22
258	32	34	95	32	34	246	240	6	11	10
259	27	30	95	27	30	262	252	10	12	18
260	26	28	95	26	28	266	258	8	12	10
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n m+n l+m+n mean n mean m+n [n] [m+n] delta m n m+n
m+n mean n mean m+n [n] [m+n] delta m
271 42 46 92 43 48 208 192 16 22 25 94 22 25 280
268 | 12
272 | 43 | 44 | 92 | 44 | 45 | 206 | 202 | 4 | 21 | 23 | 94 | 21 | 23 | 284 |
276 | 8
273 | 39 | 42 | 92 | 38 | 4 | 39 | 226 | 222 |
4 | 18 | 21 | 94 | 18 | 21 | 298 | 284 | 14
274 | 39 | 40 | 92 | 38 | 39 | 226 | 222 | 4 | - | - | - | - | - | - | - | - | - | - |
275 | 31 | 38 | 91 | 32 | 40 | 246 | 218 | 28 | 13 | 17 | 94 | 13 | 17 | 324 |
302 | 22
276 | 35 | 37 | 91 | 36 | 39 | 232 | 222 | 10 | - | - | - | - | - | - | - | - | - | - |
27 7 | 3 | 38 | 91 | 36 | 39 | 232 | 222 | 10 | - | - | - | - | - | - | - | - | - | - |
6 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
278 | 30 | 34 | 91 | 31 | 36 | 250 | 232 | 18 | - | - | - | - | - | - | - | - | - | - |
279 | 28 | 32 | 91 | 29 | 33 | 256 | 242 | 14 | - | - | - | - | - | - | - | - | - | - |
280 | 24 | 31 | 91 | 25 | 32 | 268 | 246 | 22 | 11 | 14 | 94 | 11 | 14 | 336 |
318 | 18
281 | 22 | 28 | 91 | 23 | 29 | 276 | 256 | 20 | - | - | - | - | - | - | - | - | - | - |
282 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
283 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
284 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
285 | 18 | 23 | 91 | 19 | 24 | 292 | 272 | 20 | 6 | 10 | 94 | 6 | 10 | 380 | 344 |
36
286 | 15 | 20 | 91 | 16 | 21 | 306 | 284 | 22 | - | - | - | - | - | - | - | - | - | - |
287 | 15 | 19 | 91 | 16 | 20 | 306 | 288 | 18 | - | - | - | - | - | - | - | - | - | - |
288 | 8 | 17 | 91 | 8 | 18 | 360 | 298 | 62 | 6 | 9 | 94 | 6 | 9 | 380 | 352 | 28
289 | 7 | 14 | 91 | 7 | 15 | 370 | 312 | 58 | | | | | | | | | | | | | | | | | |
290 | 9 | 12 | 91 | 9 | 13 | 352 | 324 | 28 | | | | | | | | | | | | | | | | | |
291 9 12 91 9 13 352 324 28
292 7 11 91 7 11 370 336 34
293 6 10 91 6 10 380 344 36
294 5 9 91 5 9 388 352 36
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	n	m+n	l+m+n	mean n	mean n+m	[n]	[m+n]	delta m	m	m+n
	l+m+n	mean n	mean n+m	[n]	[m+n]	mean delta m	dl			
271						14	12			
272						6	05			
273						9	08			
274						4	04			
275						25	21			
276						10	9			
277						6	05			
278						18	15			
279						14	12			
280						20	17			
281						20	17			
282						-	-			
283						-	-			
284						-	-			
285						28	23			
286						22	18			
287						18	15			
288						45	34			
289						58	41			
290						28	23			
291						28	23			
292						34	27			
293						36	28			
294						36	28			
295										
296										
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[[preprinted]] 172 [[/preprinted]]
 Vega, C 18869
 3 prisms
 Reduced to 128

Aperture 2 Aperture 4
 beta | 52 | 74 | 125 | 54 | 76 | | | 19 | 61 | 127 | 19 | 61
 gamma | 58 | 108 | 126 | 60 | 110 | | | 27 | 81 | 128 | 27 | 81
 delta | 45 | 102 | 126 | 49 | 104 | | | 21 | 76 | 129 | 21 | 75
 epsilon | 33 ^[[49]] | 93 ^[[104]] | 128 ^[[128]] | 33 ^[[49]] | 93 ^[[104]] | | |
 | 10 ^[[21]] | 59 ^[[76]] | 128 ^[[128]] | 10 ^[[21]] | 59 ^[[76]] | | |
 kappa | 65 | 84 | 128 | 65 | 84 | | | 34 | 50 | 128 | 34 | 50
 zeta | 12 | 64 | 128 | 12 | 64 | | | 3 | 29 | 128 | 3 | 29
 eta | 4 | 34 | 128 | 4 | 34 | | | 1 | 11 | 128 | 1 | 11
 theta | 1 | 15 | 128 | 1 | 15
 iota | 1 | 8 | 128 | 1 | 8

Aperture 8
 beta | | | | | 2 | 17 | 127 | 2 | 17
 gamma | | | | | 2 ^[[1]] | 33 ^[[32]] | 128 ^[[127]] | 2 ^[[1]] | 33
 ^[[32]]
 delta | | | | | 2 ^[[1]] | 27 ^[[28]] | 128 ^[[127]] | 1 | 28
 epsilon | | | | | 1 | 19 | 127 | 1 ^[[2]] | 19 ^[[27]]
 kappa | | | | | 1 | 9 | 128 | 1 | 9
 zeta | | | | | - | 4 | 128 | - | 4
 eta
 theta
 iota

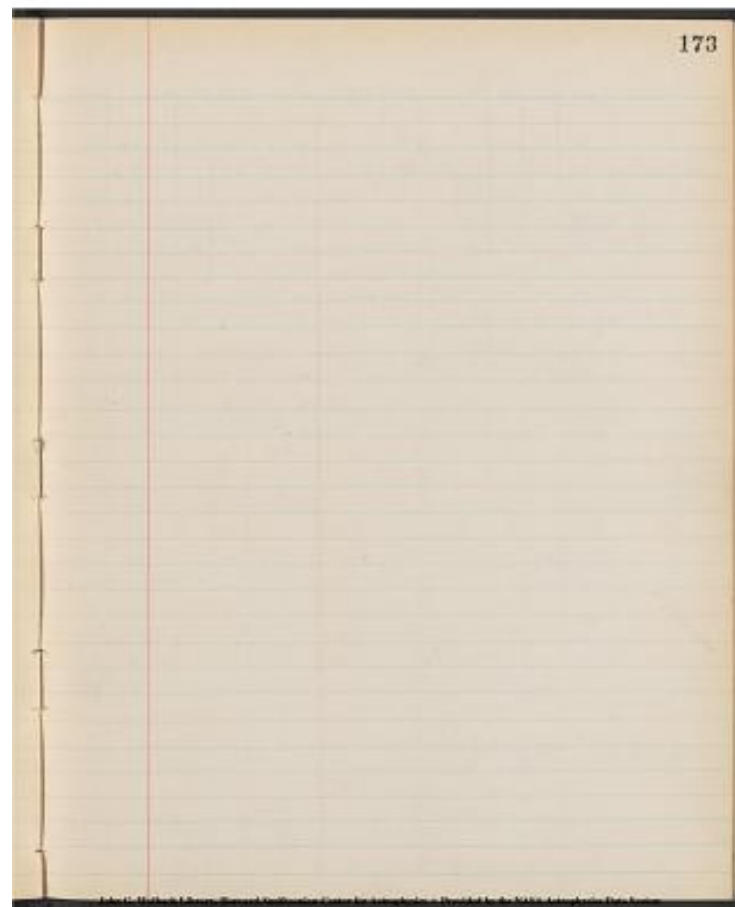
172

Vega, C 18869 3 prisms Reduced to 128

Aperture 2										Aperture 4									
B	52	74	125	54	76					19	61	127	19	61					
γ	58	108	126	60	110					27	81	128	27	81					
δ	45	102	126	49	104					21	76	129	21	75					
ε	33	93	128	33	93					10	59	128	10	59					
κ	65	84	128	65	84					34	50	128	34	50					
ζ	12	64	128	12	64					3	29	128	3	29					
η	4	34	128	4	34					1	11	128	1	11					
θ	1	15	128	1	15														
ι	1	8	128	1	8														

Aperture 8									
B									
γ									
δ									
ε									
κ									
ζ									
η									
θ									
ι									

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alpha Can Majoris
C - 18605
Reduced to 85

Ap1 mu phi 899

Ap2 mu phi 900

n | m+n | l+m+n | mean n | mean m+n | [n] | [m+n] | delta m | n | m+n |

l+m+n | mean n | mean m+n | [n] | [m+n] | delta m

beta | 79 | 83 | 84 | 80 | 84 | 92 | 66 | 52[^][[x2]] | 61 | 77 | 85 | 61 | 77 | 140 |

104 | 72[^][[x2]]
gamma | 82 | 83 | 84 | 83 | 84 | 74 | 66 | (16) | 75 | 84 | 85 | 75 | 84 | 110 |

66 | 88

delta | 80 | 84 | 84 | 81 | 85 | 86 | 54 | (64) | 69 | 84 | 85 | 69 | 84 | 122 |

66 | 112

epsilon | 74 | 83 | 83 | 76 | 85 | 108 | 54 | 108 | 54 | 81 | 85 | 54 | 81 | 152 |

86 | 112

kappa | 82 | 83 | 83 | 84 | 85 | 66 | 54 | 24 | 77 | 79 | 84 | 78 | 80 | 102 |

92 | 20

zeta | 62 | 81 | 83 | 63 | 88 | 136 | 74 | 124 | 40 | 73 | 84 | 40 | 74 | 176 |

112 | 128

eta | 48 | 76 | 83 | 49 | 78 | 162 | 102 | 120 | 26 | 61 | 84 | 26 | 62 | 202 |

138 | 128

theta | 38 | 68 | 83 | 39 | 70 | 178 | 122 | 112 | 18 | 47 | 84 | 18 | 48 | 222 |

164 | 116

iota | 34 | 60 | 83 | 35 | 61 | 186 | 140 | 92 | 14 | 37 | 84 | 14 | 37 | 234 |

182 | 104

kappa | 33 | 52 | 83 | 34 | 53 | 186 | 154 | 64 | 13 | 29 | 84 | 13 | 29 | 236 |

196 | 80

lambda | 32 | 46 | 83 | 33 | 47 | 190 | 164 | 52 | 12 | 23 | 84 | 12 | 23 | 240 |

208 | 64

Ap3 mu phi 901

Ap4 mu phi 902

beta | 35 | 58 | 84 | 35 | 59 | 186 | 142 | 88 | 17 | 36 | 84 | 17 | 36 | 225 |

184 | 82

gamma | 53 | 78 | 84 | 54 | 79 | 152 | 98 | 108 | 32 | 63 | 83 | 33 | 65 | 189 |

132 | 114

delta | 45 | 75 | 83 | 46 | 77 | 166 | 104 | 124 | 25 | 58 | 83 | 26 | 59 | 202 |

143 | 118

epsilon | 32 | 69 | 83 | 33 | 71 | 190 | 120 | 140 | 17 | 50 | 82 | 18 | 52 |

222 | 156 | 132

kappa | 60 | 65 | 83 | 61 | 67 | 140 | 128 | 24 | 40 | 45 | 82 | 42 | 47 | 174 |

165 | 18

zeta | 21 | 56 | 83 | 22 | 57 | 212 | 146 | 132 | 10 | 36 | 82 | 10 | 37 | 247 |

182 | 130

eta | 13 | 40 | 83 | 13 | 41 | 236 | 176 | 120 | 4 | 21 | 82 | 4 | 22 | - | - |

theta | 8 | 27 | 82 | 8 | 28 | 254 | 198 | 112 | 3 | 12 | 81 | 3 | 12 | - | - |

iota | 7 | 19 | 82 | 7 | 20 | 258 | 216 | 84 | 3 | 8 | 82 | 3 | 8 | - | - |

kappa | 6 | 13 | 82 | 6 | 13 | 262 |

~~196~~[^][[237]] |

~~132~~[^]50 | 3 | 5 | 82 | 3 | 5 | - | - |

lambda | 4 | 10 | 82 | 4 | 10 | - | - | - | - |

174

alpha Can Majoris C-18605 Reduced to 85

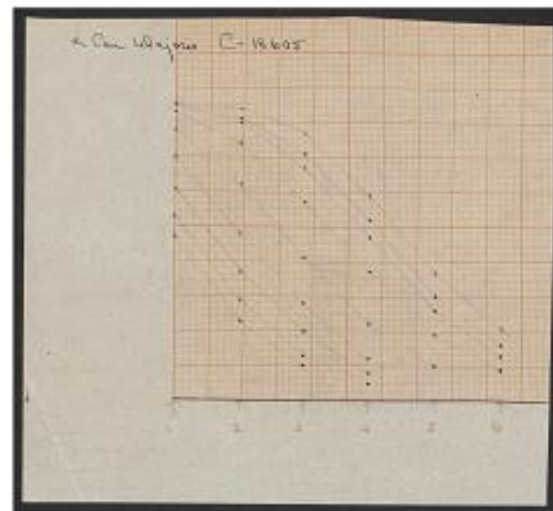
Obs.	Calc.	Diff.	Obs.	Calc.	Diff.	Obs.	Calc.	Diff.	Obs.	Calc.	Diff.
Ap1	899		Ap2	900							
beta	79	83	84	80	84	92	66	52 [^] [[x2]]	61	77	85
gamma	82	83	84	83	84	74	66	(16)	75	84	85
delta	80	84	84	81	85	86	54	(64)	69	84	85
epsilon	74	83	83	76	85	108	54	108	54	81	85
kappa	82	83	83	84	85	66	54	24	77	79	84
zeta	62	81	83	63	88	136	74	124	40	73	84
eta	48	76	83	49	78	162	102	120	26	61	84
theta	38	68	83	39	70	178	122	112	18	47	84
iota	34	60	83	35	61	186	140	92	14	37	84
kappa	33	52	83	34	53	186	154	64	13	29	84
lambda	32	46	83	33	47	190	164	52	12	23	84
Ap3	901		Ap4	902							
beta	35	58	84	35	59	186	142	88	17	36	84
gamma	53	78	84	54	79	152	98	108	32	63	83
delta	45	75	83	46	77	166	104	124	25	58	83
epsilon	32	69	83	33	71	190	120	140	17	50	82
kappa	60	65	83	61	67	140	128	24	40	45	82
zeta	21	56	83	22	57	212	146	132	10	36	82
eta	13	40	83	13	41	236	176	120	4	21	82
theta	8	27	82	8	28	254	198	112	3	12	81
iota	7	19	82	7	20	258	216	84	3	8	82
kappa	6	13	82	6	13	262					
lambda	4	10	82	4	10						

[[Alpha symbol]] Can Majoris C - 18605

[[image - several line graphs plotted through data points]]

[[Y Axis: no scale]]

[[X Axis: 1 - 6]]



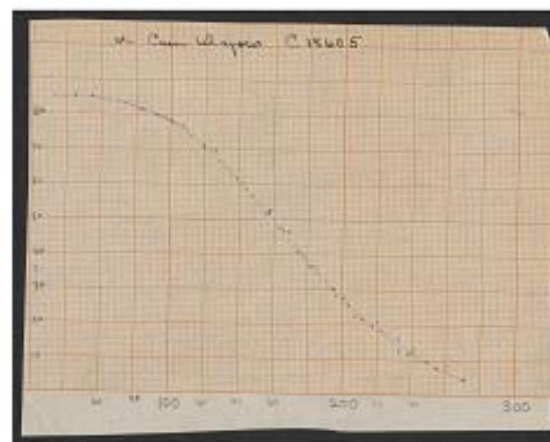
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alpha Can Majoris C 18605

[[image - line graphs plotted through data points]]

[[Y Axis: 0 - 80]]
[[X Axis: 20 - 300]]



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Reduced plates of Sirius

| | | | dl | | Mean dl

[[margin]] 3 prisms [[/margin]]

beta | 123[^][[18852]] | [^][[~~18604~~]]~~[[18852]]~~ |

119[^][[18844]] | | 68[^][[18852]] | 67[^][[18844]] | 68

gamma | 160 | | 174 | | 77 | 80 | 78

delta | 177 | | 176 | | 80 | 80 | 80

epsilon | 176 | | 170 | | 80 | 78 | 79

[[~~zeta~~]]kappa | 43 | | 52 | | 33 | 38 | 36

zeta | 185 | | .. | | 81 | .. | 81

eta | 166 | | .. | | 78 | .. | 78[^][[386]]

theta | 142 | | .. | | 73 | .. | 73

C18604 H2699

| | | H2699[^][[dl]] | | 18604[^][[dl]] | | Ap. Rated 1 prism H

[[margin]] 1 prism [[/margin]]

beta | 87 | 139 | (72) | 55 | 59 | 53

gamma | 116 | 160 | (77) | 66 | 72 | 62

delta | 140 | 182 | (81) | 72 | 74 | 67

epsilon | 147 | 208 | (85) | 74 | 74 | 69

kappa | 31 | 32 | (26) | 25 | 26 | 26

zeta | 136 | 176 | (80) | 71 | 76 | 74

eta | .. | 162 | (76) | | |

theta | .. | 132 | (70) | | |

| | 108 | (63) | | |

| | 96 | (59) | | |

| | 94 | | | |

| | 66 | | | |

| IR8293 | IR8298 | {dl | } | Mean

beta | 106 | 96 | 62 | 59 | 60

gamma | 164 | 130 | 78 | 70 | 74

[[margin]] Yerkes [[/margin]]

delta | 155 | 146 | 76 | 74 | 75

epsilon | 122 | 145 | 67 | 74 | 70

kappa | 55 | 54 | 40 | 39 | 40

zeta | 127 | .. | 66 | .. | 66

eta | .. | .. | | |

218

Reduced plates of Sirius

Mean dl

3 prisms	B	18852	18844	18852	18844	18852	18844	18852	18844
		123	119	119	119	119	119	119	119
	B	160	174	174	174	174	174	174	174
	E	177	176	176	176	176	176	176	176
	K	43	52	52	52	52	52	52	52
	S	185	185	185	185	185	185	185	185
	T	166	166	166	166	166	166	166	166
	D	142	142	142	142	142	142	142	142

1 prism	B	18604	H 2699	dl 18604	dl 18604	dl 18604	dl 18604	dl 18604	dl 18604
		116	116	116	116	116	116	116	116
	B	140	182	(51)	72	74	67	67	67
	E	167	208	(85)	74	74	69	69	69
	K	31	32	(56)	25	26	26	26	26
	S	136	176	(80)	71	76	74	74	74
	T	162	162	(76)					
	D	132	132	(70)					

Yerkes	B	IR 8293	IR 8298	dl IR 8293	dl IR 8298	Mean	Mean
		106	96	106	96	106	96
	B	155	146	75	70	74	147
	E	155	146	75	74	75	150
	K	55	54	57	54	56	134
	S	127	127	66	66	66	54
	T	127	127	66	66	66	127

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Reduced Plates of Vega dl

beta | 121 ^[[18861]] | 117 ^[[18851]] | 131 ^[[18855]] | d ^[[dl]] | 67
^[[18861]] | 66 ^[[18851]] | 70 ^[[18855]] |
gamma | 164 | 159 | 181 | | 78 | 77 | 81 |
delta | 167 | 165 | 169 | | 79 | 78 | 79 |
[[margin]] 3 prism [[/margin]] epsilon | 168 | 166 | 176 | | 79 | 78 | 80 |
kappa | 56 | 63 | 58 | | 40 | 44 | 41 |
zeta | 156 | 170 | .. | | 76 | 78 | .. |
eta | 154 | 142 | .. | | 76 | 73 | .. |
theta | | | | | | |

e 18428

| dm | dl

beta | 122 | 67

[[margin]] 2 prism [[/margin]] gamma | 171 | 73

delta | 182 | 81

epsilon | 194 | 83

kappa | 43 | 33

zeta | 188 | 82

eta | 183 | 81

theta | 164 | 78

Sum, HB - HS | Vega

Sirius | 3 m. | 1 m. | 1 m. refe. | yerhes. | | 3 m. | 2 m.

| 386 | 338 | (an)355^[[325]] | 345 | | 382 | 386

kappa | 36 | 25 | 26^[[26]] | 40 | | 42 | 33

3m/1. = 1.142

kappa live, 3m/1m. = 1.44

3m/2m = 1.00

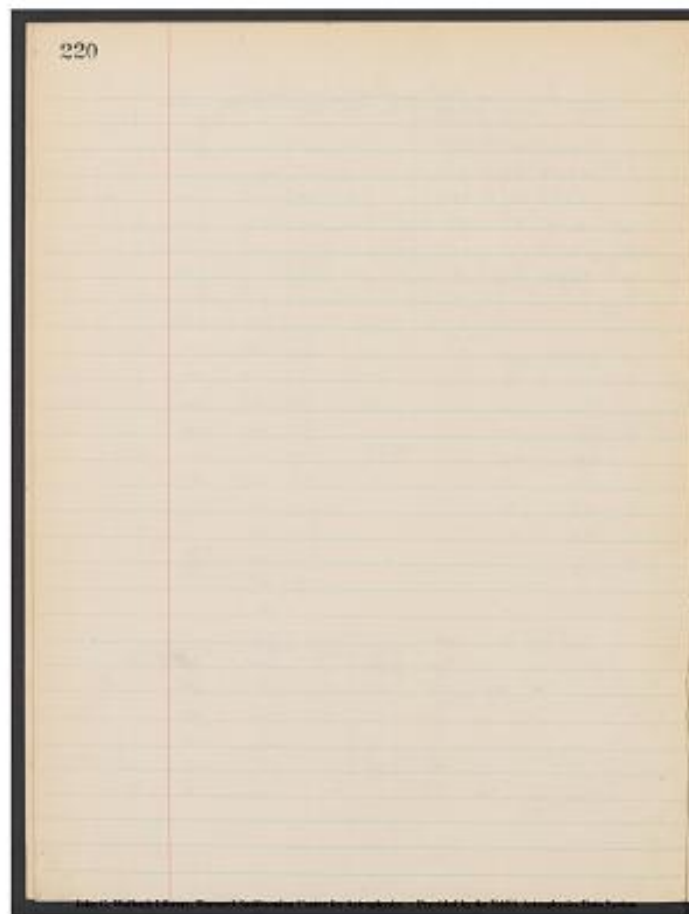
kappa live, 1.3

219									
Reduced Plates of Vega dl									
E. Mann									
3 prism									
1	121	117	131	67	66	70			
2	164	159	181	78	77	81			
3	167	165	169	79	78	79			
4	168	166	176	79	78	80			
5	56	63	58	40	44	41			
6	156	170	..	76	78	..			
7	154	142	..	76	73	..			
8									
Sum, HB - HS									
Sirius									
1	386	338	(an)355	345	382	386			
2	36	25	26	40	42	33			
3m/1. = 1.142									
kappa live, 3m/1m. = 1.44									
3m/2m = 1.00									
kappa live, 1.3									

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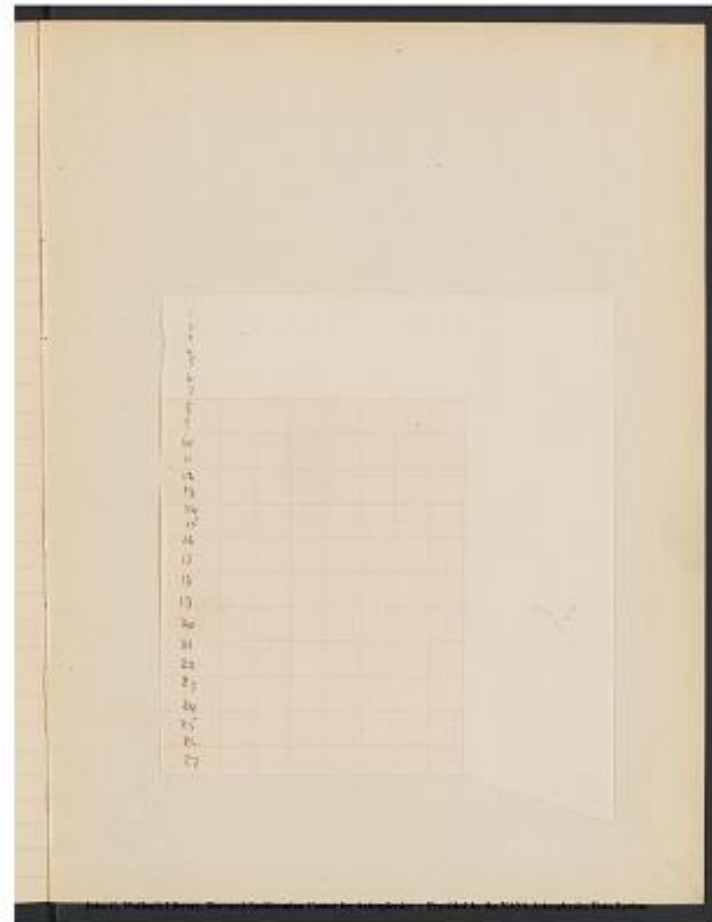
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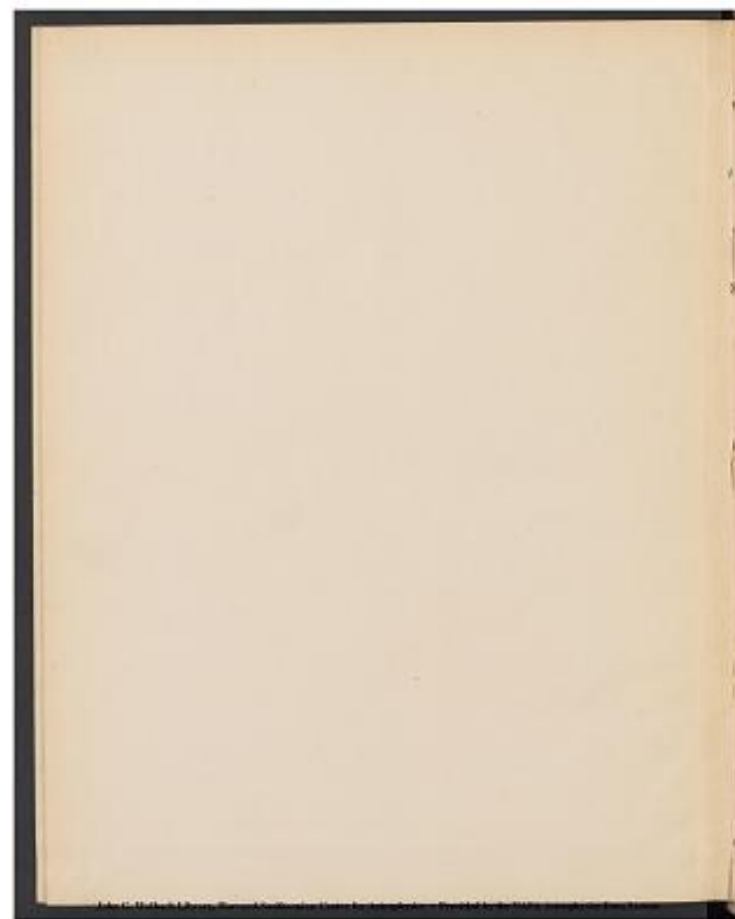
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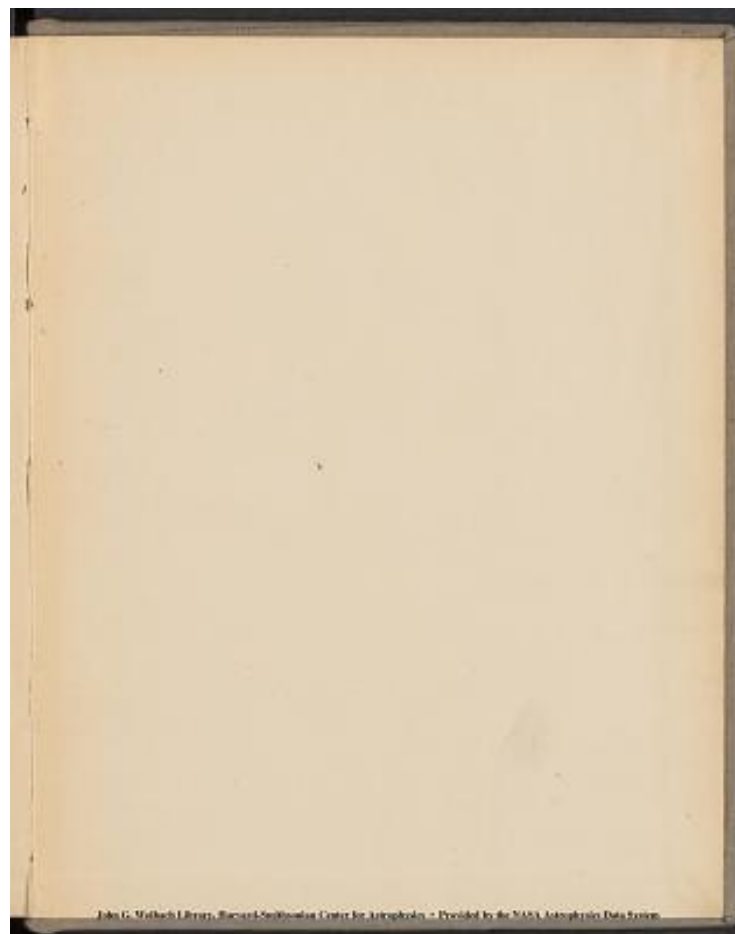
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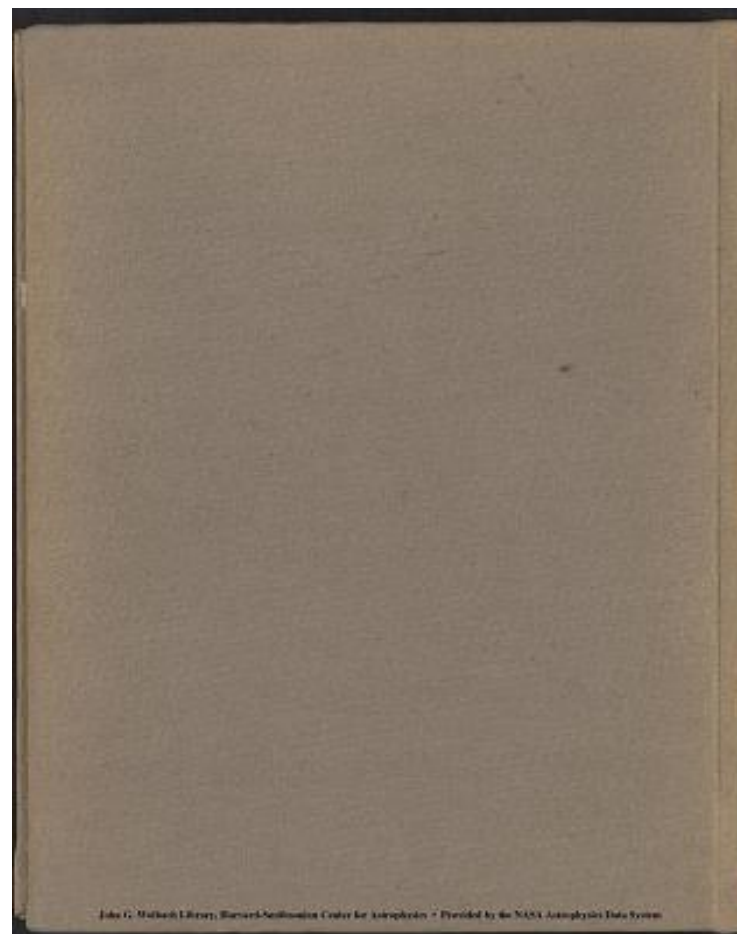
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