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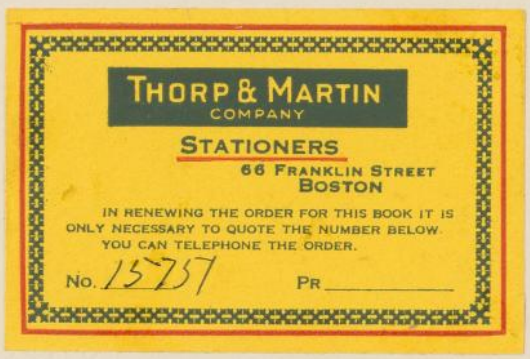
Single spectra

Capella
Rigel
Sirius
Altair

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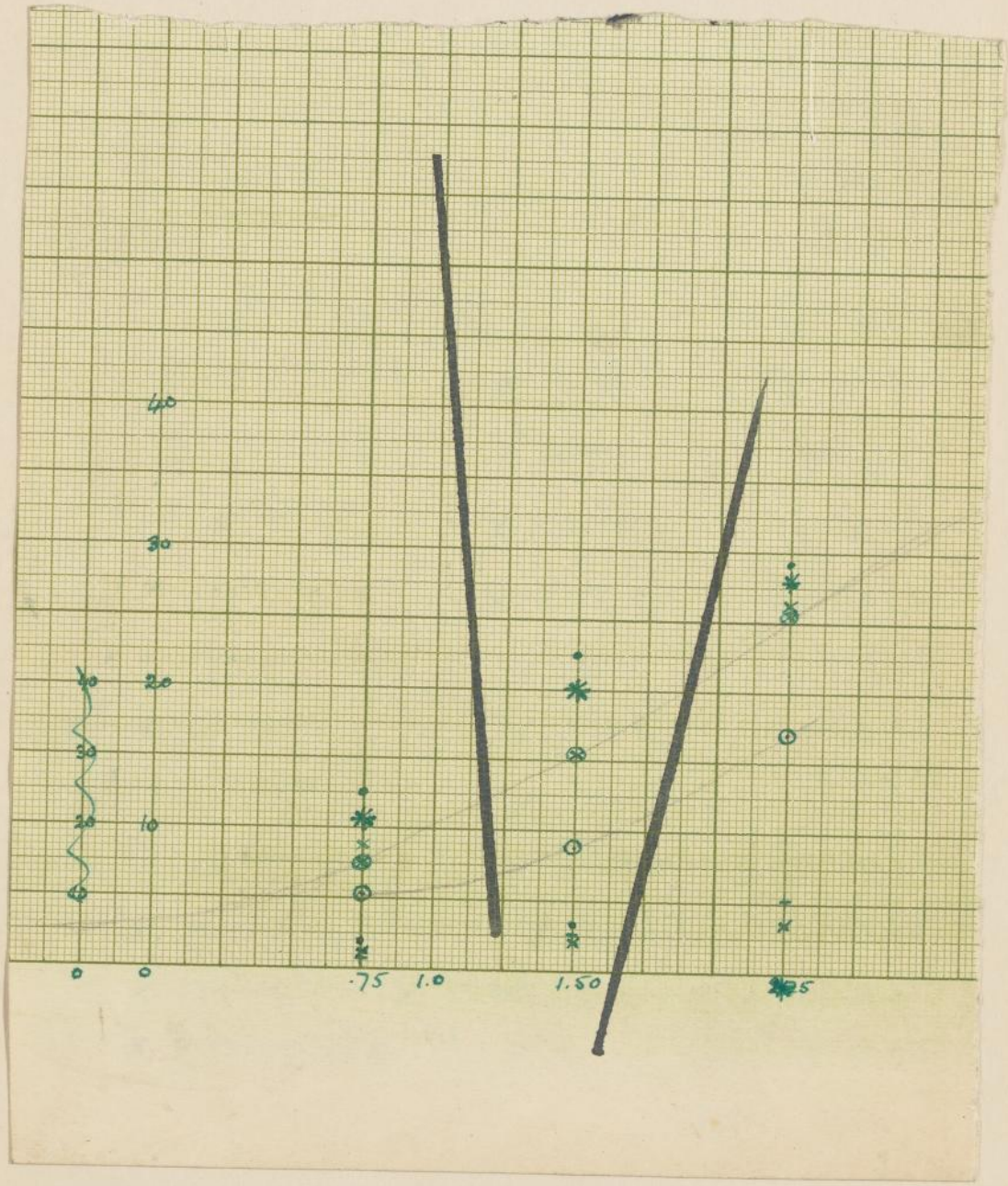
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α Tauri	X 7922	Book 10
α Aurigae	X 7984	Book 12
α Canis Majoris	X 8094	Book 12
β Orionis	X 7945	Book 12
α Tauri	X 7964	Book 10
α Tauri	X 7965	Book 10
α Aurigae	X 7968	Book 12
α Aquilae	X 8083	Book 12
β Orionis	X 8096	Book 12
α Canis Maj.	X 8097	Book 12
α Aurigae	X 8099	Book 12
α Canis Minoris		Book 10
Sun		Book 12
β Orionis	X 8104	Brk 12

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No
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No	Line of Series	n Solar Spectrum. [m+n]	[m+n]	[m+n]	Δm dl
1		-4	~~4~~ 36		
2		10	38		
3		18	40		
4		21	40		
5		26	42		
6		35	43		
7		40	44		
8		38	46		
9		38	47		
10		40	49		
11		44	52		
12		50	54		
13		49	55		
14		49	56		
15		46	57		
16		55	60		
17		55	61		
18		39	62		
19		54	63		
20		59	63		
21		61	64		
22		61	64		
23		60	65		
24		58	65		
25		61	66		
26		62	67		
27		62	67		
28		66	68		
29		53	69		
30		58	70		
31		63	71		

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1924ApJ....59..106P

No	Line	Et	Series	n	m+n	[x]	[m+n]	Δm	dl	No
32				65	71					63
33				68	71					64
34				67	71					65
35				59	71					66
36				46	72					67
37				69	72					68
38				67	74					69
39				66	74					70
40				65	74					71
41				55	74					72
42				68	74					73
43				62	75					74
44				70	75					75
45				66	75					76
46				66	75					77
47				71	75					78
48				70	76					79
49				74	76					80
50				71	76					81
51				71	76					82
52				70	76					83
53				61	76					84
54				73	76					85
55				74	77					86
56				72	77					87
57				74	77					88
58				74	77					89
59				74	77					90
60				73	77					91
61				74	77					92
62				69	78					93

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1924phae.proj.11037

No	Line & Series	n	m+n	[n]	[m+n]	Δm	dl
63		72	78				
64		75	78				
65		69	78				
66		75	78				
67		~~68~~ 73	78				
68		73	78				
69		72	78				
70		72	78				
71		74	78				
72		74	78				
73		75	78				
74		73	79				
75		72	79				
76		74	79				
77		74	79				
78		73	79				
79		74	79				
80		72	79				
81		74	79				
82		73	79				
83		70	79				
84		72	79				
85		77	79				
86		77	79				
87		74	79				
88		74	79				
89		76	80				
90		78	80				
91		77	80				
92		75	80				
93		78	80				

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No.	Line	Int	Series	n	m+n	[n]	[m+n]	Δm	dl
94				77	80				
95				76	80				
96				76	81				
97				77	80				
98				77	80				
99				75	81				
100				73	81				

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14 ζ Bootis

No	Line & Series	n	m+n	[n]	[m+n]	Δm	dl	
1		3 4	17 18					32
2		3 3	14 18					33
3		7	18					34
4		10	19					35
5		15	18					36
6		14	19					37
7		12	20					38
8		9	20					39
9		5	20					40
10		6	20					41
11		7	20					42
12		3	20					43
13		4	20					44
14		7	20					45
15		8	20					46
16		11	20					47
17		10	20					48
18		6	20					49
19		6	20					50
20		9	20					51
21		10	20					52
22		6	21					53
23		9	21					54
24		8	21					55
25		7	21					56
26		10	21					57
27		9	21					58
28		9	22					59
29		4	22					60
30		5	22					61
31		11	22					62

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1924phae.proj.1103P

No	Line	Et	Series	n	m+n	[n]	[m+n]	Δm	dl
32				10	22				
33				12	22				
34				0	22				
35				8	23				
36				7	23				
37				6	23				
38				7	23				
39				9	24				
40				13	24				
41				9	24				
42				11	24				
43				9	24				
44				5	25				
45				9	25				
46				9	25				
47				12	25				
48				8	25				
49				9	25				
50				10	25				
51				8	25				
52				10	25				
53				9	26				
54				15	26				
55				9	26				
56				8	26				
57				7	27				
58				6	27				
59				10	27				
60				12	27				
61				8	27				
62				16	28				

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	Line	El	Series	n	m+n	[n]	[m+n]	Δm	el
63				14	27				
64				8	27				
65				12	28				
66				23	28				
67				-1	30				
68				15	32				
69				14	34				
70				~~77~~ 19	~~87~~ 35				
71				23	36				
72				16	38				
73				15	39				
74				15	39				
75				30	40				
76				19	41				
77				19	41				
78				32	43				
79				25	44				
80				9	45				
81				13	45				
82				21	47				
83				25	48				
84				18	49				
85				20	49				
86				15	50				
87				12	50				
88				24	51				
89				8	53				
90				13	53				
91				15	54				
92				9	55				
93				5	55				

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1924phae.proj.1109P

No	Line of Series	n	mtn	[n]	[mtn]	Δn	dl
94		22	57				
95		53	59				
96		45	60				
97		33	60				
98		13	60				
99		42	61				
100		43	62				
101		24	64				
102		46	64				
103		45	65				
104		28	66				
105		42	68				
106		40	68				
107		50	69				
108		45	70				
109		49	70				
110		47	70				
111		32	71				
112		10	73				
113		38	74				
114		44	75				
115		40	75				
116		45	76				
117		29	77				
118		36	78				
119		42	80				
120		47	81				
121		54	81				
122		53	82				
123		44	83				
124		58	85				
125		65	86				

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1924phae.proj.110gp

	Line	Et	Series	n	m+n	[n²]	[m+n]²	Δm	dl	
126				64	86					157
127				50	87					158
128				47	89					159
129				64	89					160
130				61	90					161
131				60	90					162
132				75	90					163
133				62	92					164
134				69	94					165
135				64	95					166
136				81	95					167
137				88	97					168
138				84	97					169
139				83	98					170
140				81	99					171
141				68	99					172
142				71	100					173
143				77	100					174
144				85	100					175
145				84	101					176
146				84	101					177
147				86	101					178
148				82	101					179
149				83	103					180
150				91	104					181
151				86	105					182
152				90	105					183
153				96	105					184
154				96	107					185
155				94	107					186
156				94	107					187

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No	Line & Series	n	m+n	[n]	[m+n]	Δm	dl
157		95	108				
158		101	108				
159		102	109				
160		103	109				
161		101	109				
162		105	110				
163		105	110				
164		100	111				
165		98	111				
166		94	111				
167		89	112				
168		94	113				
169		87	114				
170		104	114				
171		105	114				
172		99	114				
173		99	113				
174		103	112				
175		94	110				
176		98	110				
177		92	110				
178		100	110				
179		106	110				
180		105	110				
181		105	109				
182		87	108				
183		98	107				
184		97	107				
185		98	106				
186		100	105				
187		95	104				

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No	Line	Et	Series	n	m+n	[m]	[m+n]	Δm	dl
188				94	103				
189				93	101				
190				87	100				
191				92	99				
192				93	98				
193				88	97				
194				87	97				
195				84	96				
196				83	95				
197				82	94				
198				83	92				
199				82	91				
~~200~~				85	91				
201				85	90				
202				86	89				
203				82	88				
204				77	87				
205				79	86				
206				75	85				
207				74	84				
208				77	84				
209				68	81				
210				70	78				
211				66	76				
212				60	75				
213				44	74				
214				57	72				
215				50	70				
216				55	69				
217				47	67.				
218				45	66				

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No	Line	St	Series	n	m+n	[n]	[m+n]	Δ m	dl
219				44	64				
220				46	64				
221				45	61				
222				40	58				
223				47	57				
224				42	56				
225				27	55				
226				32	53				
227				37	52				
228				31	50				
229				26	49				
230				28	46				
231				29	45				
232				20	42				
233				23	41				
~~234~~				16	40				
234				↘	↘				
235				18	39				
236				19	38				
237				15	37				
238				10	35				
239				10	33				
240				9	30				
241				8	30				
242				6	29				
243				5	26				
244				4	24				
245				4	23				
246				5	21				
247				4	19				
~~248~~				1	16				

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No	Line	Et	Series	n	m+n	[N]	[m+n]	Δ m	dl
249				3	17				
250				2	15				
251				1	13				
252				1	11				
253				1	9				
254				1	8				
255				-1	7				

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Arcturus reduction

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Mira

No.	Line	Et	Series	n	m+n	[n]	[m+n]	Δm	dl
9				6	5				
1				12	6	448			
5				34	8	334			
9X				12	8	448			
10				3	10		464		
9				4	11		457		
11				2	12		448		
26				12	17	448	410	38	
31				16	20	418	392	26	
32				15	21	425	387	38	
33				26	21	363	387	24	
35				14	22	432	381	51	
36				21	22	387	381	6	
43				17	24	410	371	39	
47				19	25	397	367	30	
48				16	25	418	367	51	
49				22	26	381	363	18	
50				25	26	367	363	4	
52				24	26	371	363	8	
53				102	26	177	363	~~17~~ 186	
54				25	27	367	358	9	
55				19	27	397	358	9	
57				22	27	381	358	63	
63				24	27	371	358	13	
66				20	28	392	354	38	
67				20	28	392	354	38	
68				20	28	381	354	27	
69a				25	28	367	354	13	
78				25	28	367	354	13	
79				29	29	350	350	0	

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Mira Ceti C-1862

No.	Line Et Series	n	m+n	[n]	[m+n]	Δm	dl
80		28	29	354	350	4	
82-3		22	29	381	350	31	
85		23	30	376	346	30	
88		24	30	371	346	25	
90		27	30	358	346	12	
93		22	30	381	346	35	
95		25	31	367	343	24	
101		19	31	397	343	54	
102		19	32	397	340	57	
104		9	32	478	340	33	
105		22	32	381	340	41	
106		29	32	350	340	10	
111		21	33	387	337	50	
118		20	34	392	334	58	
123		24	34	371	334	37	
125		25	35	367	332	35	
130		23	35	376	332	44	
131		24	35	371	332	39	
132		24	35	371	332	39	
133		22	35	381	332	49	
134		21	35	387	332	55	
135		23	36	376	330	46	
136		33	36	376	330	46	
138		68	96	256	330	~~74~~	
139		30	37	346	327	19	
140		22	37	381	327	54	
144-5-6		23	37	376	327	49	
147		32	37	340	327	13	
148		35	38	332	324	8	
150		32	38	340	324	16	

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No	Lines & Series	n	m+n	[n]	[m+n]	Δm	dl	no
153		33	38	337	324	13		227
154		28	38	354	324	30		229
155-6		29	39	350	322	28		231
157		30	39	346	322	24		237
159		34	39	334	322	12		238
161-4		20	39	392	322	70		240-1
165		23	40	376	319	57		242
170		31	41	343	317	26		243
172		18	41	404	317	87		246
179		26	41	363	317	46		250-
180		31	42	343	314	29		252
181		25	42	367	314	53		255
184		26	42	363	314	49		257
186		20	42	392	314	78		259
189		26	43	363	312	51		262-
191		30	43	346	312	34		265-
193		33	44	337	310	27		29
195		35	44	332	310	22		273
199-200		28	44	354	310	44		275
201		40	45	319	308	11		281
202a		45	45	308	308	0		282
203		43	45	312	308	4		285
203a		45	45	308	308	0		287-
206-8		10	45	464	308	156		292
213a		37	45	327	308	19		296
216		12	45	448	308	140		298
221		14	45	432	308	124		299
223		17	45	410	308	102		301
224		20	45	392	308	84		
226		16	45	418	308	10		

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No.	Lines of Series	n	m+n	[n²]	[m+n]	Δm	dl
227		28	45	354	308	46	
229		15	45	425	308	117	
231		20	45	392	308	84	
237		34	46	334	305	29	
238		38	46	324	305	19	
240-1		28	46	354	305	49	
242		35	46	332	305	27	
243		36	46	330	305	25	
246		36	46	330	305	25	
250-1		46	46	305	305	0	
252		5	46		305	—	
255		3	46		305	—	
257		9	45	473	308	165	
259		16	44	418	310	108	
262-4		20	44	392	310	82	
265-6		6	44		310	—	
269		10	43	464	312	152	
273		14	43	432	312	120	
275		18	43	404	312	92	
281		15	41	425	317	108	
282		13	41	440	317	123	
285		16	40	418	319	109	
287-9		18	39	404	322	82	
292		27	38	358	324	34	
296		31	38	343	324	19	
298		33	37	337	327	10	
299		36	36	330	330	0	
301		3	36		330	—	

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β Orionis ×8096

No	Line of Series	n	m+n	[n]	[m+n]	Δ n	dl	No
1		2	9					32
2		4	10					33
3		7	13					34
4		7	14					35
5		10	16					36
6		13	18					37
7		17	20					38
8		16	22					39
9		27	32					40
10		30	37					41
11		38	42					42
12		47	51					43
13		50	53					44
14		54	59					45
15		62	66					46
16		69	73					47
17		77	82					48
18		87	93					49
19		100	104					50
20		94	109					51
21		126	128					52
22		130	132					53
23		134	136					54
24		118	141					55
25		145	147					56
26		162	164					57
27		165	166					58
28		161	165					59
29		161	165					60
30		161	164					61
31		146	[64					62

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No	Line	Et Series	n	m+n	[m]	[m+n]	Δ m	dl
32			161	164				
33			163	164				
34			162	164				
35			118	137				
36			133	137				
37			135	136				
38			101	136				
39			131	135				
40			116	130				
41			126	128				
42			118	126				
43			116	122				
44			50	110				
45a			→ 96	108				
			→ 101	104				
46			99	102				
47			98	101				
48			96	99				
49			91	93				
50			91	93				
51			87	91				
52			39	86				
53			70	80				
54			66	78				
55			63	74				
56			63	72				
57			66	70				
58			58	63				
59			50	57				
60			44 42	51 48				
61			↓	↓				
62			41	46				

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No	Line	Ht	Series	n	m+n	[n]	[m+n]	Δm	dl
63				36	44				
64				33	43				
65				-17	38				
66				21	28				
67				13	22				
68				6	17				
69				0	11				
70				—	—				

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36 α Tauri X7965

No	Line	Et	Series	n	m+n	[n]	[m+n]	Δ m	dl	No
1				45	9					32
2				2	10					33
3				3	11					34
4				0	13					35
5				6	15					36
6				0	17					37
7				-3	19					38
8				-2	20					39
9				0	21					40
10				8	22					41
11				9	22					42
12				6	23					43
13				-5	25					44
14				11	26					45
15				9	27					46
16				-10	29					47
17				-13	30					48
18				-12	30					49
19				-9	30					50
20				0	32					51
21				1	33					52
22				4	33					53
23				8	35					54
24				13	36					55
25				12	37					56
26				-3	38					57
27				-8	-40 43					58
28				1 -10	46					59
29				-5	48					60
30										61
31				46	51					62

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No	Line	Et Seies	n	m+n	[n]	[m+n]	Δ m	dl
32			18	50				
33			15	52				
34			-10	54				
35			12	55				
36			-6	58				
37			8	59				
38			-10	60				
39			25	62				
40			52	64				
41			44	64				
42			37	64				
43			-5	66				
44			45	67				
45			20	68				
46			21	69				
47			47	69				
48			50	70				
49			21	71				
50			44	73				
51			46	75				
52			30	77				
53			-13	80				
54			45	80				
55			41	81				
56			~~50~~ 45	83				
57			51	84				
58			1	85				
59			31	86				
60			53	88				
61			61	89				
62			62	89				

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No	Line	Et	Series	n	m+n	[n]	[m+n]	Δ m	dl	No
63				58	90					94
64				41	91					95
65				54	93					96
66				80	94					97
67				50	96					98
68				55	96					99
69				48	97					100
70				71	98					101
71				87 88	100 100					102
72				74	101					103
73										104
74				80	103					105
75				69	105					106
76				95	106					107 a
77				96	107					108
78				93	108					109
29				85	109					110
80				92	109					111
81				73	109					112
82				86	110					113
83				78	110					114
84				92	110					115
85				95	111					116
86				100 91	112 112					117
87										118
88				108	113					119
89				98	113					120
90				101	114					121
91				107	114					122
92				99	115					123
43				103	115					124

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No	Line	of Series	n	m+n	[n]	[m+n]	δ m	dl
94			102	115				
95			100	115				
96			105	116				
97			104	116				
98			101	116				
99			110	116				
100			111	116				
101			112	117				
102			110	117				
103			110	117				
104			107	117				
105			102	117				
106			94	117				
107			95	117				
108a			94	117				
109			108	117				
110			105	117				
111			106	116				
112			107	116				
113			103	115				
114			107	115				
115			~~106~~ 102	116				
116			104	114				
117			110	113				
118			93	112				
119			106	112				
120			107	111				
121			104	111				
122			104	110				
123			102	109				
124			89	108				

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	Line	Int	Series	n	m+n	[n]	[m+n]	Δm	dl
125				96	109				
126				98	107				
127				88	106				
128				91	106				
129				90	105				
130				92	104				
131				89	102				
132				91	100				
133				86	98				
134				80	95				
135				80	93				
136				81	92				
137				74	90				
138				59	88				
139				91	87				
140				62	85				
141				69	85				
142				61	84				
143				56	82				
144				53	81				
145				69	79				
146				55	78				
147				34	74				
148				49	73				
149				45	70				
150				34	68				
151				46	65				
152				48	63				
153				18	58				
154				19	55				
155				—	—				

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1924phae.proj.1103P

ζ Tauri X 7964

No	Line	Et	Series	n	m+n	[n]	[m+n]	Δm	dl	No
1				0	13					32
2				9	17					33
3				2	21					34
4				2	27					35
5				28	31					36
6				25	32					37
7				12	38					38
8				24	39					39
9				39	42					40
10				28	45					41
11				14	47					42
12				34	~~48~~ 53					43
13				41	56					44
				40	55					45
14				34	63					46
15				↓	↓					47
16				32	63					48
17				35	64					49
				40	66					
18				50	68					50
19				↓	↓					51
20				40	70					52
21				56	70					53
22				54	71					54
23				45	72					55
24				40	74					56
25				54	75					57
26				64	76					58
27				64	78					59
28				65	80					60
29				67	81					61
30				64	84					62
31				70	85					63

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1924phae.proj.1109P

No	Lines	Int	Series	n	m+n	[n]	[m+n]	Δ m	dl
32				72	86				
33				71	87				
34				78	90				
35				75	93				
36				73	93				
37				79	94				
38				92	96				
39				75	98				
40				75	98				
41				72	98				
42				80	99				
43				87	108				
44				84	101				
45				75	102				
46				81	103				
47				91	103				
48				97	104				
49				97	104				
50				101	106				
51				100	106				
52				96	107				
53				101	108				
54				100	108				
55				95	109				
56				80	109				
57				105	111				
58				96	112				
59				93	112				
60				100	113				
61				89	114				
62				99	115				
63				98	115				

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1924phae.proj.1100P

No	Line	Et	Series	n	m+n	[n]	[m+n]	Δ n	dl	no
64				83	115					96
65				103	116					97
66				100	116					98
67				84	117					99
68				102	117					100
69				105	117					101
70				95	117					102
71				82	117					103
72				92	118					104
73				91	117					105
74				102	117					106
75				102	117					107
76				109	117					108
77				106	117					109
78				109	117					110
79				110	117					111
80				110	117					112
81				110	117					113
82				107	117					114
83				110	117					115
84				95	116					116
85				94	116					117
86				96	116					118
87				91	115					119
88				93	115					120
89				99	114					121
90				94	114					122
91				88	113					123
92				101	113					124
93				93	112					125
94				89	111					126
95				105	110					127

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1924phae.proj.1109P

No	Line & Series	n	n+n	[n]	[n+n]	Δ n	dl
96		76	109				
97		88	109				
98		85	109				
99		81	108				
100		56	108				
101		72	108				
102		55	106				
103		53	106				
104		80	106				
105		84	105				
106		82	105				
107		90	105				
108		87	105				
109		84	104				
110		44	101				
111		64	100				
112		56	97				
113		76	96				
114		53	94				
115		65	93				
116		54	93				
117		29	91				
118		38	90				
119		40	90				
120		62	89				
121		65	88				
122		71	88				
123		38	86				
124		25	84				
125		43	83				
126		46	83				
127		43	82				

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1924pae.proj.1103p

	line	bf	series	n	m+n	[n]	[m+n]	Δ m	dl
128				49	82				
129				35	81				
130				20	80				
131				56	79				
132				15	76				
133				0	76				
134				36	75				
135				27	73				
136				26	72				
137				27	71				
138				-8	70				
139				19	67				
140				31	65				
141				48	64				
142				29	63				
143				14	60				
144				35	59				
145				37	58				
146				32	58				
147				11	56				
148				12	55				
149				42	55				
150				32	54				
151				-3	51				
152				25	50				
153				37	50				
154				12	48				
155				0	46				
156				0	45				
157				1 -2	43 43				
158				↓	↓				
159				7	41				

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L Aurigae X7968

Line	Rev. No.	Series	n	n+n	[n]	[n+n]	Δ n	dd	
			163	177	2.9?				32
2			168	174					33
3			168	173					34
4			169	172					35
5			165	171	2.95?				36
6		140	160	171	2.7?				37
7		139	160	170	2.73				38
8			161	170	2.74?				39
9		138	157	170	2.57				40
10			164	168	2.9				41
11			156 155	168 167	2.52 2.5				43
12		137	148	166	2.27				43
13		136	↓	↓	2.32				44
14		135	150	166	↓				45
15		134	158	165	2.62	2.95?	.33	.26	46
16		133	148	165	2.27	2.95?	.68	.47	47
17		132	147	163	2.25	2.85	.60	.43	48
18			150	163	2.32	2.85	.53	.39	49
19			151	163	2.35	2.85	.50	.37	50
20			155	162	2.5	2.8	.30	.24	51
21		128	149	162	2.29	2.8	.51	.38	52
22		127	143	161	2.17	2.74	.57	.41	53
23		126	139	159	2.11	2.67	.56	.40	54
24		125	142	158	2.15	2.62	.47	.35	55
25		124	141	158	2.14	2.62	.48	.36	56
26			141	158	2.14	2.62	.48	.36	57
27		123	138	157	2.1	2.57	.47	.35	58
28		122	135	157	1.86	2.57	.71	.48	59
29		121	134	156	2.04	2.52	.48	.36	60
30		120	142	154	2.16	2.46	.30	.24	61
81			145	154	2.21	2.46	.25	.21	62

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Line	Rev No Series	n	m+n	[n]	[m+n]	Δn	ll
32	119	142	153	2.16	2.42	.26	.21
33	118	131	153	2.01	2.42	.41	.32
34	115	100	150	1.7	2.32	.62	.44
35	114	141	150	2.14	2.32	.18	.15
36	113	108	148	1.78	2.27	.49	.36
37		140	147	2.12	2.25	.13	.11
38	112	89	144	1.6	2.19	.59	.42
39	111	100	143	1.7	2.17	.47	.35
40	110	85	143	1.57	2.17	.60	.43
41	108	105	141	1.75	2.14	.39	.30
43	107	120	140	1.9	2.12	.22	.18
43	106	122	140	1.91	2.12	.21	.18
44		123	140	1.92	2.12	.20	.17
45		105	138	1.75	2.1	.35	.28
46	104	103	138	1.73	2.1	.38	.30
47	103	105	135	1.75	2.05	.30	.24
48	102	115	134	1.86	2.04	.18	.15
49		119	134	1.89	2.04	.15	.13
50	101	110	133	1.8	2.03	.23	.19
51	100	121	132	1.9	2.02	.12	.11
52	98	118	131	1.87	2.01	.14	.12
53	97	105	131	1.75	2.01	.26	.21
54		110	130	1.8	2.0	.2	.17
55	96	65	128	1.38	1.97	.59	.42
56	95	87	127	1.59	1.96	.37	.29
57	94	103	125	1.73	1.95	.22	.18
58		111	125	1.81	1.95	.14	.12
59	91	86	125	1.58	1.95	.37	.29
60	90	80	124	1.53	1.93	.48	.31
61	89	96	123	1.66	1.92	.26	.21
62	88	87	122	1.59	1.91	.32	.26

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Line	Res No	Series	n	n+n	[n]	[n+n]	Δn	Δl	
63	87		86	121	1.58	1.91	.33	.26	94
64	86		79	120	1.52	1.9	.38	.30	95
65	85		70	119	1.44	1.89	.45	.34	96
66	84		92	119	1.63	1.89	.26	.21	97
67	83		78	118	1.51	1.88	.37	.29	98
68	82		95	118	1.66	1.88	.22	.18	99
69	81		83	116	1.55	1.86	.31	.25	100
70	80		84	116	1.56	1.86	.30	.24	101
			88	115	1.59	1.85	.26	.21	
71	79		90	115	1.61	1.85	.24	.20	102
72	78		97	114	1.67	1.84	.17	.15	103
73			↓	↓	↓	↓			104
74	77		70	114	1.44	1.84	.40	.31	105
75	76		97	110	1.67	1.83	.16	.14	106
76	75		78	113	1.51	1.83	.32	.24	107
77	74		81	111	1.53	1.81	.28	.23	108
78	73		87	110	1.58	1.8	.22	.18	109
79	72		83	109	1.55	1.79	.24	.20	110
80			99	108	1.69	1.78	.09	.08	111
81			87	107	1.58	1.77	.19	.16	112
82	71		85	107	1.57	1.77	.20	.17	113
83			93	106	1.64	1.76	.12	.11	114
84	70		45	105	1.18	1.75	.57	.41	115
85	69		80	105	1.52	1.75	.23	.19	116
86	68		90	104	1.61	1.74	.13	.11	117
87	67		95	103	1.66	1.73	.07	.06	118
88	66		80	103	1.52	1.73	.21	.18	119
89	65		47	100	1.2	1.7	.5	.37	120
90	64		63	100	1.36	1.7	.34	.27	121
91	63		72	98	1.45	1.68	.23	.19	122
92	62		50	97	1.24	1.67	.43	.33	
93	60		53	94	1.26	1.65	.39	.30	

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Line	Rev No	Series	n	m+n	[m]	[m+n]	Δm	dl
94	59		65	93	1.39	1.64	.25	.21
95	58		80	91	1.52	1.63	.11	.10
96	57		36	89	1.05	1.6	.55	.40
97	56		70	87	1.44	1.58	.14	.12
98	55		53	83	1.26	1.55	.29	.23
99	54		49	80	1.22	1.53	.31	.25
100	53		56	77	1.3	1.5	.20	.17
101	52		63	76	1.37	1.49	.12	.11
102	51		57	73	1.31	1.46	.15	.13
103	50		58	71	1.33	1.45	.12	.11
104	49		58	70	1.33	1.44	.11	.10
105	48		56	68	1.3	1.41	.11	.10
106	47		32	65	.99	1.39	.40	.31
107	46		50	62	1.23	1.35	.12	.11
108	45		35	59	1.04	1.33	.29	.23
109			42	57	1.14	1.31	.17	.15
110	44		37	54	1.07	1.28	.21	.18
111	43		32	51	.99	1.24	.25	.21
112	42		30	49	.95	1.23	.28	.23
113			27	45	.89	1.18	.29	.23
114	41		28	44	.91	1.17	.26	.21
115			11	41	.45?	1.13	.68	.47
116			3	38		1.08		
117	40		4	36	.06?	1.05	.99	.60
118			5	34	.12?	1.02	.90	.56
119	39		10	32	.41?	.98	.57	.41
120			21	29	.77?	.93	.16	.14
121			15	27	.68	.88	.82	.53
122			14	25	.56?	.85	.29	.23

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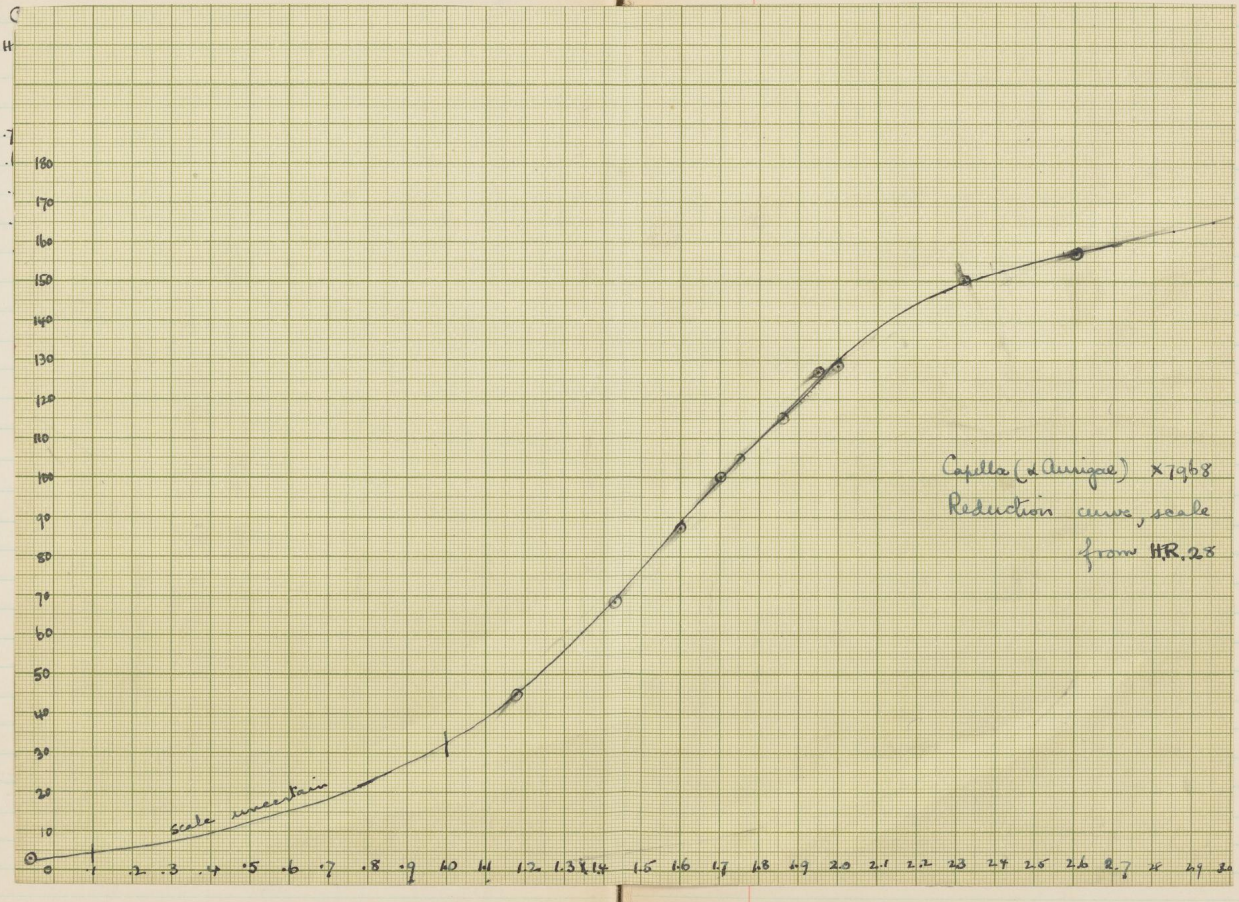
1924phae.proj.110gp

Capella × 7968. Reduction curve. Scale from HR 28

Line	No.	HR 28	n	m+n
4861	out	-		
4444	out	-		
4340	28	.74	115	157 ✓
4326	34	.62	100	150 ✓
4227	55	.57	65	128 ✓
4215	56	.36	87	127 ✓
4101	84	.57	45	105 ✓
3970	116	1.62	3	38 ✓
3933	out	-		

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Lucie	No.
4861	out
4444	out
4340	28
4326	34
4227	55
4215	56
4101	84
3970	116
3933	out



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L Aquilae X8083

	Line	Bt	I	Series	m	m+n	[m]	[m+n]	Δm	dl	No
20											
21					23	28					32
2					23	29					33
3					23	31					34
4					22	32					35
5					20	32					36
6					19	33					37
7					17	34					38
8					13	35					39
9					10	35					41
10					15	37					41
11					10	37					42
12					25	38					43
13					25	39					44
14					24	39					45
15					26	41					46
16					26	42					47
17					29	43					48
18					31	45					49
19					32	46					50
20					34	47					51
21					37	48					52
22					35	48					53
23					38	50					54
24					40	52					55
25					↓	↓					56
26					41	53					57
27					45	54					58
28					44	56					59
29					45	57					60
30					46	58					61
31					47	59					62

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No	Line & Series	n	n+1 n	[n²]	[n+n²]	Δ n	dl
32		52	60				
33		53	60				
34		54	62				
35		57	64				
36		60	66				
37		61	66				
38		62	68				
a-c		64	70				
39		69	72				
40		69	73				
41		70	74				
42		71	76				
43		74	77				
44		74	79				
a-c		78	83				
45		82	84				
46		82	86				
47		82	87				
48		84	87				
49		84	89				
50		87	90				
51		88	91				
52		87	92				
53		90	93				
54		92	95				
55		88	95				
56		90	99				
57		92	97				
58		93	97				
59		94	98				
60		96	99				
61		95	99				
62		95	99				

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Line	Ist Series	n	m+n	[n]	[m+n]	Δm	dl
63		93	98				
64		88	98				
65		95	98				
66		93	98				
67		92	98				
68		93	98				
69		93	98				
70		90	98				
71		94	98				
72		113	120				
73		113	120				
74		110	119				
75		115	118				
76		111	118				
77		99	118				
78		97	118				
79		81	117				
80		50	117				
81		49	117				
82		93	117				
83		101	117				
84		103	117				
85		106	117				
86		106	117				
87		105	117				
88		108	116				
89		106	116				
90		98	117				
91		105	117				
92		110	117				
93		108	117				

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No	Line of Series	n	m+n	[n]	[m+n]	Δ n	dl
94		111	116				
95		112	116				
96		109	116				
97		113	116				
98		110	115				
99		110	115				
100		108	115				
101		109	115				
102		105	115				
103		102	115				
104		107	115				
105		105	115				
106		107	114				
107		103	114				
108		108	114				
109		105	114				
110		105	114				
111		104	114				
112		103	114				
113		108	113				
114		109	113				
115		107	113				
116		105	113				
117		106	113				
118		103	113				
119		43	112				
120		95	112				
121		102	112				
122		102	112				
123		108	113				
124		107	113				

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	Line	Of	Series	n	n+n	[n]	[n+n]	Δn	dl	
125				107	112					156
126				109	113					157
127				107	113					158
128				110	112					159
129				103	112					160
130				104	112					161
131				102	108					162
132				100	104					163
133				97	101					164
134				91	97					165
135				89	104					166
136				82	92					167
137				88	90					168
138				74	89					169
139				69	87					170
140				64	87					171
141				12	81					172
142				56	77					173
143				61	75					174
144				62	73					175
145				63	71					176
146				64	67					177
147				10	62					178
148				50	56					179
149				49	55					180
150				47	54					181
151				43	53					182
152				45	52					183
153				42	50					184
154				40	49					185
155				35	46					186

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	Line & Series	n	m+n	[n]	[m+n]	Δn	dl
156		29	41				
157		27	46				
158		22	44				
159		22	43				
160		18	42				
161		15	41				
162		13	40				
163		11	39				
164		5	38				
165		-1	36				
166		0	35				
167		3	35				
168		8	34				
169		12	32				
170		12	31				
171		13	28				
172		12	27				
173		11	23				
174		13	21				
175		10	21				
176							
177							
178							
179							
180							
181							
182							
183							
184							
185							
186							

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	Line & Series	n	m+n	[n]	[m+n]	Δ n	dl	
1		14	20					32
2		15	22					33
3		5	26					34
4		20	30					35
5		25	33					36
6		26	35					37
7		28	35					38
8		32	35					39a
9		31	36					40
10		28	38					41
11		28	39					42
12		30	40					43
13		30	41					44
14		29	43					45
15		22	46					46
16		39	48					47
17		40	49					48
18		30	51					49
19		46	55					50
20		43	56					51
21		50	60					52
22		55	62					53
23		58	64					54
24		60	66					55
25		63	68					56
26		65	70					57
27		65	73					58
28		21	79					59
29		85	88					60
30		86	90					61
31		90	95					62

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No	Line of Series	n	m+n	[n]	[m+n]	Δ n	dl
32		98	101				
33		100	107				
34		101	108				
35		106	110				
36		103	112				
37		112	115				
38		75	117				
39a		115	118				
		→117	120				
40		125	127				
41		127	130				
42		129	132				
43		123	134				
44		83	135				
45		140	147				
46		141	147				
47		140	151				
48		131	159				
49		155	160				
50		154	160				
51		153	160				
52		154	160				
53		157	161				
54		156	161				
55		159	163				
56		161	165				
57		153	168				
58		167	170				
59		166	170				
60		168	171				
61		166	171				
62		168	172				

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	Line	Int	Series	n	m+n	[n]	[m+n]	Δ n	dd
63				170	172				
64				155	174				
65				170	175				
66				170	176				
67				170	176				
68				172	174				
69				166	174				
70				162	166				
71				137	155				
72				114	126				
73				110	115				
74				55	64				
75				23 21	40 28				
76				15	23				
77				8	15				
78				↓	↓				

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No	Line & Series	n	m+n [IV]	[m+3]	Am	dl
1		1	20			
2		6	22			
3		11	23			
4		10	24			
5		4	26			
6		13	30			
7		3	31			
8		30	35			
9		31	35			
10		28	36			
11		28	38			
12		18	40			
13		29	43			
14		43	45			
15		33	47			
16		20	50			
17		39	55			
18		46	57			
19		44	58			
20		45	60			
21		58	62			
22		39	63			
23		47	64			
24		40	65			
25		46	65			
26		53	68			
27		46	69			
28		55	70			
29		56	70			
30		45	70			
31		58	73			

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No	Line	∆ Lines	n	m+n	[n]	[m+n]	Δn	L
32			65	74				
33			63	75				
34			64	76				
35			65	76				
36			65	77				
37			68	77				
38			70	78				
39			65	80				
40			72	80				
41			75	81				
42			70	82				
43			82	83				
44			75	84				
45			77	84				
46			73	86				
47			60	89				
48			85	90				
49			75	90				
50			73	91				
51			72	92				
52			85	93				
53			81	93				
54			75	94				
55			86	95				
56			89	96				
57			93	97				
58			89	97				
59			92	97				
60			79	99				
61			95	100				
62			98	100				

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1924phae.proj.110sp

No	Line	Int	Series	n	m+n	[n]	[m+n]	Δm	dl
63				90	100				
64				87	101				
65				92	101				
66				91	102				
67				88	101				
68				91	102				
69				91	103				
70				93	103				
71				88	103				
72				93	103				
73				80	104				
74				92	104				
75				90	105				
76				79	105				
77				85	105				
78				92	105				
79				93	104				
80				97	104				
81				95	104				
82				100	104				
83				98	104				
84				99	104				
85				95	104				
86				100	103				
87				88	104				
88				89	104				
89				89	104				
90				90	104				
91				84	103				
92				87	102				
93				90	101				

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No	Lines	St Lines	m	m+n [ZW]	[m+n] Δm	dl
94			83	101		
95			92	101		
96			86	100		
97			82	99		
98			94	99		
99			64	98		
100			82	97		
101			79	97		
102			75	96		
103			58	95		
104			69	95		
105			54	94		
106			74	94		
107			85	94		
108			73	93		
109			76	93		
110			79	92		
111			77	90		
112			80	90		
113			52	89		
114			60	88		
115			82	87		
116			58	87		
117			70	85		
118			54	84		
119			55	83		
120			53	83		
121			34	82		
122			40	82		
123			43	80		
124			58	80		

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No	Line of Series	n	m+n	[m+n]	Δ n	dl
125		63	80			
126		40	78			
127		28	76			
128		43	75			
129		44	75			
130		38	74			
131		25	72			
132		53	71			
133		23	70			
134		7	70			
135		37	69			
136		32	68			
137		37	67			
138		32	66			
139		0	65			
140		43	64			
141		24	63			
142		44	62			
143		37	61			
144		45	60			
145		33	60			
146		20	58			
147		40	57			
148		35	56			
149		20	55			
150		20	54			
151		44	53			
152		35	53			
153		5	51			
154		24	50			
155		39	50			

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No	Line of Series	n'	n'+n[n]	[n+n']+A n d
156		21	49	
157		3	48	
158		2	47	
159		10	47	
160		5	46	
161		14	45	
162		2	43	
163		16	43	
164		18	42	
165		15	41	
166		4	40	
167		2	40	
168		3	39	
169		17	39	
170		29	37	
171		7	36	
172		3	35	
173		6	34	
174		15	33	
175		12	31	
176		9	30	
177		8	30	
178		-2	28	
179		-1	27	
180		13	26	
181		13	25	
182		4	25	
183		11	24	
184		7	24	
185		5	22	
186		7	20	

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No.	Line	Δt	Series	n	m+n	[n]	[m+n]	Δm	dl	m/n
187				15	20					218
188				6	19					219
189				10	18					220
190				8	17					221
191				14	16					
192				11	17					
193				7	17					
194				0	17					
195				3	17					
196				4	17					
197				8	18					
198				7	18					
199				3	17					
200				2	17					
201				3	17					
202				-3	18					
203				5	18					
204				6	18					
205				6	18					
206				1	18					
207				0	18					
208				4	18					
209				4	18					
210				0	18					
211				4	18					
212				2	18					
213				3	18					
214				3	18					
215				6	18					
216				16	18					
217				8	14					

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λ	Line	Int	Series	n	m+n	[m]	[m+n]	Δm	dl
218				6	18				
219				10	18				
220				5	18				
221				6	18				

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92 ζ Canis Majoris X8094

No	Line	Int	Series	n	m+n [En]	[m+n]Δm	dl	No
1				137	145			32
2				137	144			33
3				131	142			34
4				116	142			35
5				124	142			36
6				135	142			37
7				141	142			38
8				138	140			39
9				136	138			40
10				135	138			41
11				131	138			42
12				69	134			43
13				122	133			44
14				127	131			45
15				128	130			46
16				125	129			47
17				127	124			48
18				123	129			49
19				122	127			50
20				124	126			51
21				115	124			52
22				118	123			53
23				100	120			54
24				101	116			55
25				75	112			56
26				48	110			57
27				21	108			58
28				47	105			59
29				66	104			60
30				72	103			61
31				76	102			62

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No.	Reihe	Kl.	Stellen	m	mtm [Ex]	[mtm]	Dm	Kl
32				78	101			
33				83	100			
34				90	99			
35				83	97			
36				88	96			
37				89	94			
38				82	93			
39				82	92			
40				82	91			
41				83	90			
42				75	87			
43				10	77			
44				11	75			
45				27	73			
46				52	67			
47				53	64			
48				47	61			
49				38	57			
50				21	53			
51				10	58			
52				5	47			
53				9	46			
54				14	44			
55				21	42			
56				26	41			
57				27	39			
58				25	36			
59				26	35			
60				1	27			
61				1	26			
62				4	25			

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1924phae.proj.110pp

No	Line	of	Series	n	m+n	Σ n J	[m+n]	Δ m	dl
~~63~~				6	23				
64				11	21				
65				13	20				
66				18	20				
67				14	18				
68				11	17				
69				4	15				
70				2	14				
71				0	14				
72				2	13				
73				5	11				
74				6	9				
75				5	8				
76				2	7				
77				4	7				
78				0	6				
79				0	5				
80				2	5				
81				2	4				
~~82~~									
~~83~~									

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No.	Line	No.	Series	n	m+n	green [m]	green [m+n]	red Δm	blade dl	No.
1				~~8~~	12	.141	.49	.08	.07	32
2				6	13	.38	.50	.14	.12	33
3				8	13	.41	.50	.09	.08	34
4				4	16	.34	.55	.21	.18	35
5				4	16	.34	.55	.21	.18	36
6				6	19	.36	.60	.24	.20	37
7				7	19	.39	.60	.21	.18	38
8		24		4	20	.34	.62	.28	.23	39
9				10	22	.45	.65	.20	.17	40
10				18	23	.59	.67	.08	.07	41
11				19	24	.60	.69	.09	.08	42
12		25		13	26	.50	.73	.23	.19	43
13				19	28	.60	.76	.16	.14	44
14		26		17	29	.57	.78	.21	.18	45
15				18	31	.59	.81	.22	.18	46
16		30		15	34	.54	.86	.32	.26	47
17		31		28	36	.76	.90	.14	.12	48
18		31a		31	37	.81	.92	.11	.10	49
19				30	40	.80	.97	.17	.15	50
20		31b		29	42	.78	1.0	.22	.18	51
21				28	44	.76	1.04	.28	.23	52
22		32		19	44	.60	1.04	.44	.33	53
23				26	47	.73	1.1	.37	.29	54
24				21	49	.64	1.13	.49	.36	55
25				8	50	.41	1.15	.74	.50	56
26				3	50	.32	1.15	.83	.53	57
27		33		-4	54	.20	1.22	1.02	.61	58
28				-3	56	.21	1.26	1.05	.61	59
29				0	57	.27	1.28	1.01	.61	60
30				7	58	.39	1.29	.90	.56	61
31		35		24	60	.69	1.33	.64	.45	62

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No	Line	Rev No	Series	n	m+n	[n]	[m+n]	Δm	dl
32				25	62	.71	1.37	.66	.46
33		36		41	65	.99	1.42	.43	.33
34				49	66	1.13	1.44	.31	.25
35		37		46	69	1.08	1.49	.41	.32
36		38		47	72	1.1	1.54	.44	.33
37				58	73	1.29	1.56	.27	.29
38		39		29	75	.78	1.6	.82	.53
39				27	76	.74	1.62	.88	.56
40				0	80	.27	1.69	.42	.32
41		40		-5	81	.18	1.71	1.53	.39
42				1	82	.2	1.72	1.52	.75
43		41		59	86	1.31	1.8	.49	.36
44		42		74	90	1.54	1.82	.28	.23
45				77	91	1.64	1.84	.20	.17
46		43		82	94	1.72	1.94	.22	.18
47		44		85	96	1.78	1.98	.20	.17
48				91	97	.40	1.99	1.09	.77
49				90	99	.38	2.02	1.64	.78
50		45		83	101	1.75	2.06	.31	.25
51		46		98	104	1.51	.62	.11	.10
52		47		80	106	1.69	2.15	.46	.35
53		48		101	109	.57	.72	.15	.13
54		49		100	111	.55	.78 .93	.23	.19
55		50		103	111	.60	.78	.18	.15
56		51		101	112	.57	.80	.23	.19
57		52		105	113	.65	.82	.17	.15
58		53		102	113	.59	.82	.23	.19
59		54		95	114	.46	.85	.39	.30
60		55		97	114	.50	.85	.35	.28
61		55a		105	114	.65	.85	.20	.17
62		56		112	114	.50	.85	.05	.05

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No	Line	Rev No	Series	n	m+n	[n]	[m+n]	Δ n	dl
63		57		85	115	1.78	2.38	.60	.43
64		58		111	115	.78	.87	.09	.08
65				107	115	.69	.87	.18	.15
66		59		105	115	.65	.87	.22	.18
67		60		112	115	.8	.87	.07	.06
68		62		95	116	.46	.90	.44	.33
69		63		106	116	.66	.90	.24	.20
70		64		102	116	.59	.90	.31	.25
71		65		91	116	.39	.90	.51	.38
72		66		110	117	.74	.92	.18	.15
73				110	117	.74	.92	.18	.15
74		67,8		114	118	.85	.95	.10	.09
75		69		~~184~~ 84	119	.72	.97	.25	.21
76		70		89	119	.36	.97	.61	.43
77		71		111	119	.78	.97	.19	.16
78		72		110	119	.74	.97	.23	.19
79		73		111	119	.78	.97	.19	.16
80		74		110	119	.74	.97	.23	.19
81				110	119	.74	.97	.23	.19
82		75		107	119	.69	.97	.28	.23
83		76		115	119	.87	.97	.10	.09
84	x	77		113	119	.82	.97	.15	.13
85		80		109	119	.72	.97	.25	.21
86		81		109	119	.72	.97	.25	.21
87		↓		118	119	.70	.97	.27	.22
88		82		112	119	.80	.97	.17	.15
89		83		115	119	.87	.97	.10	.09
90		84		111	119	.78	.97	.19	.16
91		85		111	119	.78	.97	.19	.16
92		86		105	120	.65	1.00	.35	.28
93		87		108	119	.73	.97	.27	.22

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1924phae.proj.1109P

No	Line	Rep No Series	n	n+n	[n]	[n+n]	Δm	dl
94		88	109	120	.72	1.00	.28	.23
95		89	113	119	.82	.97	.15	.13
96		90	106	120	.66	1.00	.34	.27
97		91	106	120	.66	1.00	.34	.27
98			110	120	.74	1.00	.26	.21
99		94	113	120	.82	1.00	.18	.15
100		95	107	120	.69	1.00	.31	.25
101		95a	118	120	.95	1.00	.05	.05
102		96	97	120	.50	1.00	.50	.37
103		97	115	120	.87	1.00	.13	.11
104			115	120	.87	1.00	.13	.11
105		101	118	121	.95	1.02	.05	.05
106			115	121	.87	1.02	.13	.11
107		102	116	121	.90	1.02	.10	.09
108		103	114	121	.85	1.02	.15	.13
109			120	121	1.00	1.02	.02	.02
110		104	111	122	.78	1.04	.26	.21
111		105	116	122	.90	1.04	.14	.12
112		106	118	122	.95	1.04	.09	.08
113		107	117	122	.92	1.04	.12	.11
114		108	112	122	.80	1.04	.24	.20
115		110	102	122	.59	1.04	.45	.34
116		111	106	122	.71	1.04	.33	.26
117		112	112	122	.80	1.04	.24	.20
118		113	110	122	.74	1.04	.30	.24
119		114	120	123	1.00	1.06	.06	.05
120		115	106	123	.66	1.06	.40	.31
121		118	116	123	.90	1.06	.16	.14
122		119	120	123	1.00	1.06	.06	.05
123		120	120	123	1.00	1.06	.06	.05
124		124	118	124	.95	1.08	.13	.11

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Run No.

No	Line	Series	n	m+n	[n]	[m+n]	Δm	dd
125		122	110	125	.74	1.09	.35	.28
126		123	119	124	.97	1.09	.12	.11
127		124	119	124	.97	1.09	.12	.11
128		125	119	124	.97	1.09	.12	.11
129		126	117	124	.92	1.09	.17	.15
130		128	118	124	.95	1.09	.14	.12
131		129	120	124	1.00	1.09	.09	.08
132			120	124	1.00	1.09	.09	.08
133			119	124	.97	1.09	.12	.11
134			137	151	1.39	1.85	.46	.35
135			145	151	1.65	1.85	.20	.17
136			144	151	1.60	1.85	.25	.21
137			139	152	1.45	1.91	.46	.35
138			144	153	1.60	2.00	.40	.31
139			129	153	1.20	2.00	.80	.62
140			135	153	1.34	2.00	.66	.46
141			137	153	1.39	2.00	.61	.43
142		110	131	153	1.24	2.00	.76	.50
143		111	150	153	1.8	2.00	.20	.19
144		112	141	153	1.5	2.00	.50	.37
145			150	153	1.8	2.00	.20	.17
146			136	153	1.36	2.00	.64	.45
147			146	153	1.66	2.00	.34	.27
148			150	153	1.80	2.00	.20	.17
149			150	153	1.80	2.00	.20	.17
150			147	153	1.70	2.00	.30	.24
151			139	154	1.45	2.06	.61	.43
152			149	154	1.77	2.06	.29	.23
153			151	156	1.85	2.20	.35	.28
154			150	155	1.80	2.15	.35	.28
155			149	155	1.77	2.15	.38	.30

Duplicated

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No	Line	Rev No of Series	n	m+n	[n]	[m+n]	Δm	dl
156			151	156	1.85	2.20	.35	.28
157			150	155	1.80	2.15	.35	.28
158			152	155	1.91	2.15	.24	.20
159			151	155	1.85	2.15	.30	.24
160		133	151	156	1.85	2.20	.35	.28
161		136	151	156	1.85	2.20	.35	.28
162		137	151	156	1.85	2.20	.35	.28
163		138	153	156	2.00	2.20	.20	.17
164		140	152	156	1.91	2.20	.29	.23
165		141	153	156	2.00	2.20	.20	.17
166			154	156	2.06	2.20	.14	.12
167			155	156	2.15	2.20	.05	.05
168			154	156	2.06	2.20	.14	.12
169			154	156	2.06	2.20	.14	.12
170			155	156	2.15	2.20	.05	.05
171			154	156	2.06	2.20	.14	.12
172			155	156	2.15	2.20	.05	.05
173			156	156	2.20	2.20	.00	.00
174			154	156	2.06	2.20	.14	.12
175			155	156	2.15	2.20	.05	.05
176			155	156	2.15	2.20	.05	.05
177			155	156	2.15	2.20	.05	.05
178			155	156	2.15	2.20	.05	.12
179			154	156	2.06	2.20	.14	.12
180			153	156	2.00	2.20	.20	.17
181			153	157	2.00	2.25	.25	.21
182			152	155	1.91	2.15	.24	.20
183			151	154	1.85	2.06	.21	.18
184			150	151	1.80	1.85	.05	.05
185			146	149	1.66	1.77	.11	.10
186			142	147	1.53	1.70	.17	.15

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1924phae.proj.11cpp

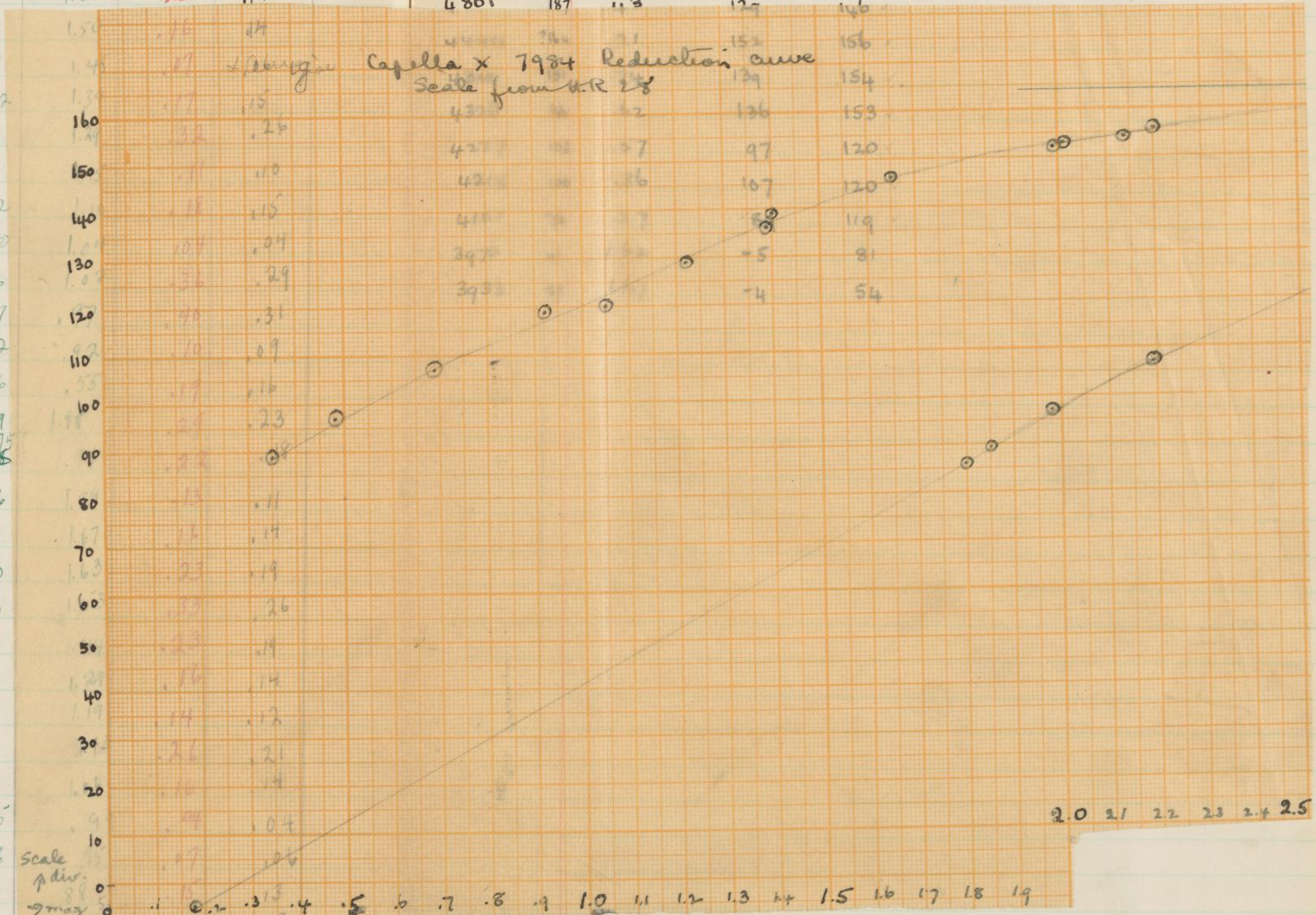
No	Line of Series	n	m+n	$\bar{[n]}$	$\Sigma m+n$	Δm	dl
187		129	146	1.20	1.66	.46	.35
188		138	145	1.42	1.65	.23	.19
189		135	141	1.34	1.50	.16	.14
190		137	139	1.38	1.45	.07	.06
191		130	137	1.22	1.39	.17	.15
192		119	133	~~.97~~	1.29	.32	.26
193		122	127	1.04	1.15	.11	.10
194		117	125	.92	1.10	.18	.15
195		120	122	1.00	1.04	.04	.04
196		106	121 ~~146~~	.66	1.02	.36	.29
197		101	119	.57	.97	.40	.31
198		113	117	.82	.92	.10	.09
199		89	100	.36	.55	.19	.16
200		80	97	1.69	1.98	.29	.23
201		83	96	~~1.75~~ 1.45	1.97	.22	.18
202		84	91	1.76	1.89	.13	.11
203		70	79	1.51	1.67	.16	.14
204		64	77	1.40	1.63	.23	.19
205		53	71	1.20	1.53	.33	.26
206		54	66	1.21	1.44	.23	.19
207		49	58	1.13	1.29	.16	.14
208		44	52	1.05	1.19	.14	.12
209		34	46	.87	1.13	.26	.21
210		36	45	.90	1.06	.16	.14
211		39	41	.95	.99	.04	.04
212		35	39	.88	.95	.07	.06
213		26	35	.73	.88	.15	.13
214		24	29	.69	.78	.09	.08
215		18	27	.58	.74	.16	.14
~~216~~							
~~217~~							

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Σm+n	Δm	dl
1.66	.46	.35
1.65	.23	.19

Capella: reduction curve. H. R. 28

Line	No.	H.R. 28	m	m+n
4861	187	[illegible]	129	146



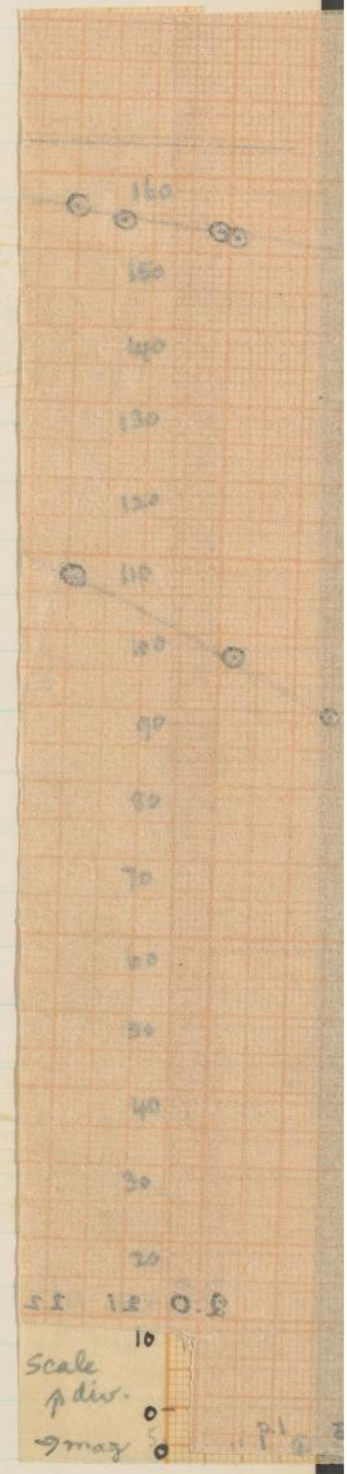
.78	-.09	.08
.74	.16	.14

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Capella: reduction curve. H.R.28

Line	No.	H.R. 28	w	w+w
4861	187	.43	129	146 ✓
4444	?164	.21	152	156 ✓
4340	151	.74	139	154 ✓
4326	146	.62	136	153 ✓
4227	102	.57	97	120 ✓
4215	100	.36	107	120 ✓
4101	76	.57	89	119 ✓
3970	41	1.62	-5	81
3933	27	1.67	-4	54



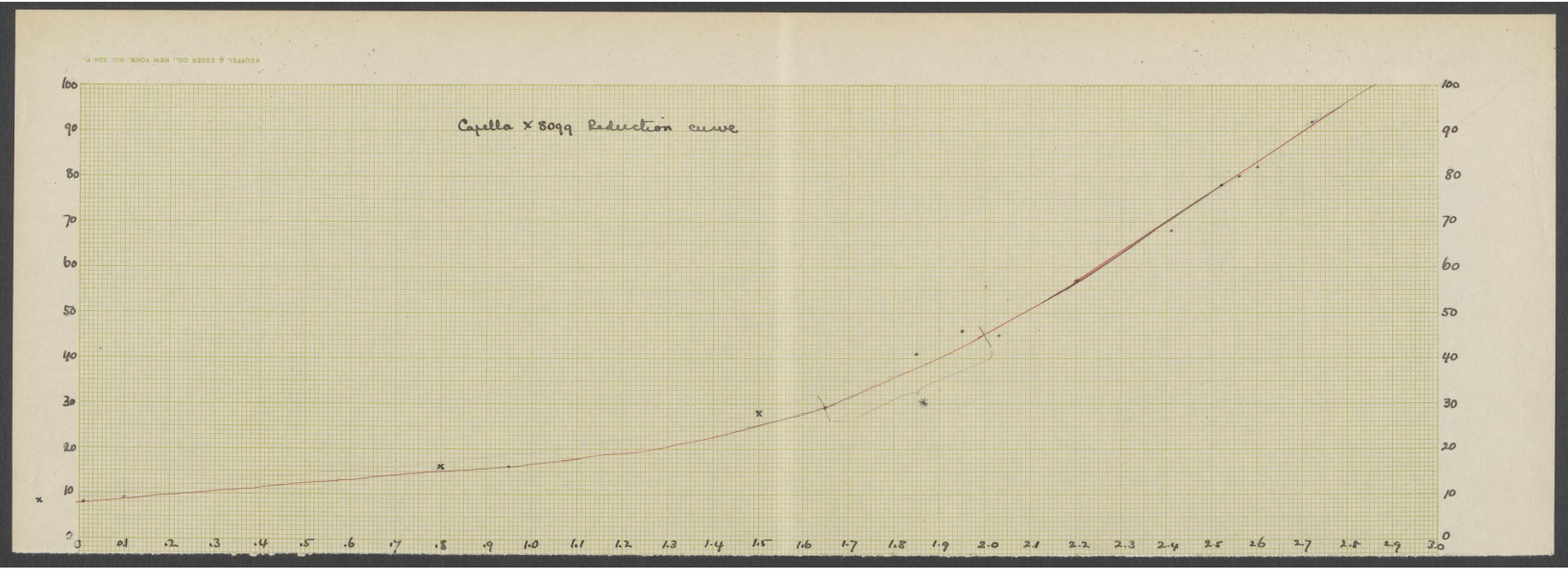
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1924phae.proj.11099

Capella X 8099 μ Cep

No.	Line	Et.	Series	n.	m+n.	[n]	[m+n]	Δm	dl.
1				–	–	–	–	–	
2				–	–	–	–	–	
3				–	–	–	–	–	
4				–	–	–	–	–	
5				–	–	–	–	–	
6				–	–	–	–	–	
7				–	–	–	–	–	
8				–	–	–	–	–	
9				–	–	–	–	–	
10				–	–	–	–	–	
11				–	–	–	–	–	
12				–	–	–	–	–	
13				–	–	–	–	–	
14				–	–	–	–	–	
15				–	–	–	–	–	
16				–	–	–	–	–	
17				–	–	–	–	–	
18				–	–	–	–	–	
19				–	–	–	–	–	
20				–	–	–	–	–	
21				–	–	–	–	–	
22				–	–	–	–	–	
23				–	–	–	–	–	
24				5	7				
25				4	7				
26				5	7				
27				3	8		0.0		
28				6	9		.14		
29				6	10		.23		
30				4	11		.35		

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No.	Line.	Et.	Series.	n.	m+n	[n]	[m+n]	Δm	dl

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No	Line	Int	Series	n	m-n	[n]	[m-n]	Δ m	dl
31				—	—	—	—	—	
32				—	—	—	—	—	
33				3	16		.93		
34				9	19	.14	1.28	1.07	.6267
35				11	20	.35	1.27	.92	5715
36				15	20	.81	1.27	.46	3454
37				16	23	.93	1.42	.49	3632
38				17	24	1.03	1.46	.43	3270
39				12	26	.47	1.53	106	62
40				8	29	.01	1.65	164	78
41				22	31	1.36	1.70	34	27
42				29	34	1.65	1.76	11	10
43				33	37	1.73	1.83	10	09
44				32	38	1.72	1.86	14	12
45				32	42	1.72	1.94	22	18
46				42	44	1.94	1.98	04	04
47				34	45	1.76	1.99	23	26
48				43	46	1.96	2.031	05	05
49				43	47	1.96	2.03	07	06
50				45	48	1.99	2.04	05	05
51				42	49	1.94	2.06	12	11
52				46	50	2.01	2.08	07	06
53				43	51	1.96	2.10	14	12
54				48	54	2.04	2.15	11	10
55				49	54	2.06	2.15	09	08
56				50	57	2.08	2.20	12	11
57				38	58	1.86	2.22	36	28
58				59	60	2.23	2.25	02	02
59				50	61	2.08	2.26	18	15
60				48	61	2.04	2.26	22	18
61				—	—	—	—	—	—

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No	Line	Et.	Series	n	m+n	[n]	[m+n]	Δm	dl
62				41	62	*1.92	2.28	36	28
63				51	63	2.10	2.30	20	17
64				39	63	*1.87	2.30	43	33
65				40	64	*1.89	2.31	42	32
66				55	65	2.17	2.33	16	14
67				61	67	2.27	2.36	9	08
68				—	—	—	—	—	—
69				55	67	2.17	2.36	19	16
70				41	68	x1.92	2.37	45	34
71				58	69	2.22	2.38	16	14
72				57	70	2.20	2.39	19	16
73				59	70	2.24	2.39	15	13
74				57	71	2.20	2.41	21	18
75				53	71	2.14	2.41	27	22
76				62	72	x1.92	2.43	51	38
77				42	73	x1.94	2.44	50	37
78				56	74	2.19	2.46	27	22
79				—	—	—	—	—	—
80				53	74	2.14	2.46	32	26
81				—	—	—	—	—	—
82				60	74	2.25	2.46	21	18
83				61	75	2.26	2.48	22	18
84				58	75	2.22	2.48	26	21
85				46	76	2.01	2.49	48	36
86				58	77	2.08	2.50	42	32
87				54	77	2.16	2.50	34	27
88				55	78	2.17	2.52	35	28
89				59	78	2.24	2.52	28	23
90				53	79	2.14	2.54	40	31
91				—	—	—	—	—	—
92				55	79	2.17	2.54	37	29

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No	Line	Et	Series	n	n+m	[n]	[n+m]	D m	d C
93				59	80	2.23	2.56	23	19
94				63	80	2.29	2.56	17	15
95				57	80	2.20	2.56	36	28
96				45	82	2.01	2.59	58	41
97				65	83	2,33	2,60	27	22
98				64	83	2.31	2.60	29	23
99				68	83	2,37	2.60	23	19
100				—	—	—	—	—	—
101				58	84	2,22	2,61	39	30
102				73	85	2.44	2.63	19	16
103				67	85	2.36	2,63	27	22
104				63	87	2.30	2.66	36	28
105				68	87	2.37	2.66	29	23
106				75	88	2,48	2.67	19	16
107				75	90	2.48	2,71	23	19
108				61	90	2.26	2,71	45	34
109				—	—	—	—	—	—
110				53	91	2,14	2.72	58	41
111				56	92	2,19	2.73	54	39 (34)
112				51	93	2,10	2.75	65	45
113				—	—	—	—	—	—
114				—	—	—	—	—	—
115				—	—	—	—	—	—
116				—	—	—	—	—	—
117				—	—	—	—	—	—
118				—	—	—	—	—	—
119				—	—	—	—	—	—
120				—	—	—	—	—	—
121				65	76	2.33	2.49	16	14
122				53	78	2.14	2.52	38	30
123				69	79	2.38	2.54	16	14

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No	Line	El	Series	n	mtn	[n]	[mtn]	Δ m	dl	No
124				70	79	2.39	2.54	15	13	155
125				70	80	2.39	2.56	17	15	156
126				67	81	2.36	2.57	21	18	157
127				71	82	2.41	2.59	18	15	158
128				70	83	2.39	2.60	21	18	159
129				75	84	2.48	2.61	13	11	160
130				—	—	—	—	—	—	161
131				76	85	2.49	2.63	14	12	162
132				72	85	2.43	2.63	20	17	163
133				73	87	2.44	2.66	20	17	164
134				81	88	2.57	2.67	10	09	165
135				—	—	—	—	—	—	166
136				72	88	2.43	2.67	24	20	167
137				73	90	2.44	2.71	27	22	168
138				78	90	2.52	2.71	19	16	169
139				88	91	2.67	2.72	6	05	170
140				78	92	2.52	2.73	21	18	171
141				82	93	2.59	2.75	16	14	172
142				84	94	2.61	2.76	14	12	173
143				89	95	2.69	2.78	9	08	174
144				93	96	2.75	2.79	4	04	175
145				90	96	2.71	2.79	8	07	176
146				90	96	2.71	2.79	8	07	177
147				83	97	2.60	2.81	21	18	178
148				85	97	2.63	2.81	18	15	179
149				92	97	2.73	2.81	8	07	180
150				88	98	2.67	2.83	16	14	181
151				88	98	2.67	2.83	16	14	182
152				90	98	2.71	2.83	12	11	183
153				94	99	2.76	2.84	9	08	184
154				90	99	2.71	2.84	13	11	185

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No	Line	El	Series	n	m+n	[n]	[m+n]	Δ m	dl
155				91	99	2.72	2.84	12	11
156				92	99	2.73	2.84	11	10
157				94	100	2.76	2.85	9	08
158				97	100	2.81	2.85	4	04
159				97	100	2.81	2.85	4	04
160				90	99	2.71	2.84	13	11
161				93	98	2.75	2.83	8	07
162				87	97	2.66	2.81	15	13
163				91	96	2.72	2.79	7	06
164				92	95	2.73	2.78	5	05
165				89	95	2.69	2.78	9	08
166				89	94	2.69	2.76	7	06
167				88	94	2.67	2.76	9	08
168				89	94	2.69	2.76	7	06
169				86	93	2.63	2.75	12	11
170				89	91	2.69	2.72	3	03
171				85	90	2.63	2.71	8	07
172				80	90	2.56	2.71	15	13
173				84	89	2.61	2.69	8	07
174				82	88	2.59	2.67	8	07
175				81	86	2.57	2.64	7	06
176				80	84	2.56	2.61	5	05
177				77	79	2.50	2.54	4	04
178				70	74	2.39	2.46	7	06
179				66	71	2.34	2.41	7	06
180				59	69	2.24	2.38	14	12
181				46	68	2.01	2.37	36	28
182				55	64	2.17	2.31	14	12
183				50	59	2.08	2.34	16	14
184				51	59	2.10	2.24	14	12
185				52	54	2.12	2.16	4	04

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Capella ×8099 reduction curve

Line	No.	HR28	n		m+m	
			46		68	
4861	1 18	.43	~~38~~		~~49~~	
	140					
4444	~~164~~	.21	~~92~~	78	~~96~~	92 ✓
	122					
4340	~~151~~	.74	~~88~~	53	~~98~~	78 ✓
	96					
4326	~~146~~	~~.62~~	~~90~~	-	~~96~~	-
	96					
4227	~~102~~	.57	~~73~~	45	~~85~~	82 ✓
	95					
4215	~~100~~	.36	-	57	-	80 ✓
4101	~~70~~	.57		41		68
3970	40 ~~41~~	1.62		8		29
3933	33 ~~34~~	1.67		3		16

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No	Line	Et	Series	n	m+n	[n-]	[m+n]	Δ n	dℓ
186				45	50	2.01	2.08	7	06
187				38	46	~~2.08~~ 1.85	2.01	16	14
188				38	41	×1.85	×1.92	7	06
189				34	39	×1.76	×1.88	12	11
190				33	36	×1.74	×1.81	7	06
191				—	—	—	—	—	—
192				29	33	×1.65	×1.74	9	08
193				26	28	1.53	1.61	8	07
194				25	26	1.50	1.53	3	03
195				—	—	—	—	—	—
196				20	24	1.28	1.46	18	15
197				20	22	1.28	1.38	10	09
198				16	20	.95	1.28	33	26
199				14	17	.68	1.04	36	28
200				13	15	.58	.78	20	17
201				—	—	—	—	—	—
202				—	—	—	—	—	—
203				10	13	.23	.58	35	28
204				—	—	—	—	—	—
205				—	—	—	—	—	—
206				—	—	—	—	—	—
207				—	—	—	—	—	—
208				7	10		.23		

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1924phae.proj.110pp

Capella C 5256. prep

No.	Line.	Et.	Series	n	m+n	[n]	[m+n]	Δm	dl	No.
1				–	–	–	–	–		31
2				–	–	–	–	–		32
3				–	–	–	–	–		33
4				–	–	–	–	–		34
5				–	–	–	–	–		35
6				–	–	–	–	–		36
7				–	–	–	–	–		37
8				–	–	–	–	–		38
9				–	–	–	–	–		39
10				–	–	–	–	–		40
11				–	–	–	–	–		41
12				–	–	–	–	–		42
13				–	–	–	–	–		43
14				–	–	–	–	–		44
15				–	–	–	–	–		45
16				–	–	–	–	–		46
17				–	–	–	–	–		47
18				–	–	–	–	–		48
19				–	–	–	–	–		49
20				–	–	–	–	–		50
21				–	–	–	–	–		51
22				–	–	–	–	–		52
23				–	–	–	–	–		53
24				–	–	–	–	–		54
25				–	–	–	–	–		55
26				–	–	–	–	–		56
27				–	–	–	–	–		57
28				–	–	–	–	–		58
29				–	–	–	–	–		59
30				79	86	277	300	23	19	60
										61

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No.	Line	Str.	Series	n	m+n	[n]	[m+n]	Δm	dl
31				—	—	—	—	—	—
32				81	90	286	316	30	24
33				38	92	154	326	172	80
34				81	92	286	326	40	31
35				83	93	289	338	49	36
36				89	93	311	338	27	22
37				89	93	311	338	27	22
38				91	94	321	352	41	32
39				85	95	296	360	74	49
40				53	95	198	360	162	78
41				—	—	—	—	—	—
42				75	96	360	375	15	13
43				95	96	360	375	15	13
44				96	97	375	385	10	09
45				95	97	360	385	25	21
46				97	97	385	385	0	0
47				95	98	360	400	40	31
48				98	98	400	400	0	0
49				97	98	385	400	15	13
50				97	98	385	400	15	13
51				97	98	385	400	15	13
52				97	98	385	400	15	13
53				97	98	385	400	15	13
54				96	98	360	400	25	21
55				96	98	375	400	25	21
56				97	98	385	400	15	13
57				94	98	352	400	48	36
58				98	98	400	400	0	0
59				97	98	385	400	15	13
60				97	98	385	400	15	13
61				—	—	—	—	—	—

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No	Line	Et	Series	n	mtn	[n]	[mtn]	Dm	dl	No
62				95	97	360	385	25	21	93
63				97	98	385	400	15	13	94
64				97	98	385	400	15	13	95
65				95	98	360	400	40	31	96
66				97	98	385	400	15	13	97
67				98	98	400	400	0	0	98
68				98	98	400	400	0	0	99
69				98	98	400	400	0	0	100
70				93	98	338	400	62	44	101
71				97	98	385	400	15	13	102
72				97	98	385	400	15	13	103
73				97	98	385	400	15	13	104
74				97	97	385	385	0	0	105
75				96	97	375	385	10	09	106
76				-	-	-	385	-	-	107
77				95	97	360	385	25	21	108
78				97	97	385	385	0	0	109
79				97	97	385	385	0	0	110
80				96	97	375	385	10	09	111
81				97	97	385	385	0	0	112
82				97	97	385	385	0	0	113
83				97	97	385	385	0	0	114
84				97	97	385	385	0	0	115
85				95	96	360	375	15	13	116
86				95	96	360	375	15	13	117
87				96	96	375	375	0	0	118
88				96	96	375	375	0	0	119
89				96	96	375	375	0	0	120
90				95	96	360	375	15	13	121
91				-	-	-	-	-	-	122
92				95	96	360	375	15	13	123

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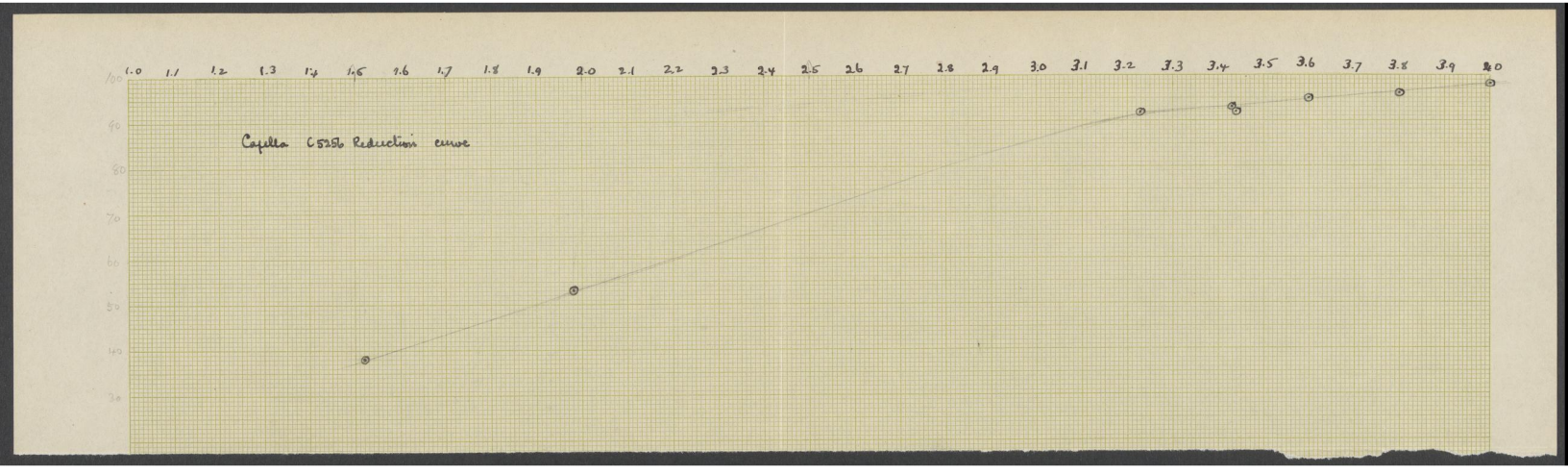
No	Line	Et	Series	n	n+n	[n]	[n+n]	Δ n	dd
93				95	96	360	375	15	13
94				95	96	360	375	15	13
95				94	96	352	375	23	19
96				92	96	326	375	49	36
97				95	96	360	375	15	13
98				95	96	360	375	15	13
99				95	96	360	375	15	13
100				95	96	360	375	15	13
101				95	96	360	375	15	13
102				94	95	352	360	08	07
103				94	95	352	360	08	07
104				93	95	338	360	22	18
105				94	95	352	360	08	07
106				95	95	360	360	0	0
107				94	95	352	360	08	07
108				93	95	338	360	22	18
109				94	95	352	360	08	07
110				92	93	326	360	34	27
111				93	95	338	360	22	18
112				91	94	321	352	31	25
113				92	94	326	352	26	21
114				94	94	352	352	0	0
115				91	93	321	338	17	15
116				93	93	338	338	0	0
117				93	93	338	338	0	0
118				93	93	338	338	0	0
119				93	93	338	338	0	0
120				93	93	338	338	0	0
121				93	93	338	338	0	0
122				91	93	321	338	07	06
123				93	93	338	338	0	0

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No	Line	Ed	Series	n	m+n	[n]	[m+n]	Δm	dl
124				93	93	338	338	0	0
125				93	93	338	338	0	0
126				93	93	338	338	0	0
127				92	93	326	338	12	11
128				92	93	326	338	12	11
129				93	93	338	338	0	0

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1924phae.proj.110sp

Capella C 5256. Reduction curves.

Lwie	No.	HR 28	n	m+n
4861	181	.43	-	-
4444	140	.21	-	-
4340	122	.74	91	93
4326		-	-	-
4227	96	.57	92	96
4215	95	.36	94	96
4101	70	.57	93	98
3970	40	1.62	53	95
3933	33	1.67	38	92

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1924phae.proj.11037

Capella. Results from several plates

Plate	Remarks
MC 21721	Apertured 1 prism
X 7968	2 prism. excellent
X 8099	3 prism. excellent
C 5256	2 prism. burned out
X 7984	2 prism. excellent.

Column 1 Standard for MC 21721, taken from single wave length reductions, used for H.R. 28.

Column 2 MC 21721, reduced anew with single reduction curve for whole spectrum

Column 3 Scale from Column 1

Column 4 " " " "

Column 5 " " " "

Column 6 " " " "

C 5256 gives results which are not accurate, (though they are consistent within their limit of error with the other plates), because the plate is burned out and the blackening / intensity curve is therefore very slow in slope. Readings from C 5256 are placed in the Table but not included in the means.

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1924phae.proj.110gp

Capella. Results from several plates

	MC 21721 (1 hr.) HR 28	MC 21721 2nd rcd.	X7968 p. 56	X8099 p. 106 (3 hr.)	C5256 p. 116 (2 hr.)	X7984 p. 98 2 hr.	Means			
								1	2	
1		31	–	–	–	–	31	–	–	31
2		34	–	–	–	–	34	–	–	34
3		20	–	–	–	–	20	–	–	20
4		30	–	–	–	–	30	–	–	
5		26	–	–	–	–	26	–	–	
6		49	–	–	–	–	49	–	–	
7		33	–	–	–	–	33	–	–	
8		47	–	–	–	–	47	–	–	
9		36	–	–	–	–				
10		27	–	–	–	–				
11		28	–	–	–	–				
12		14	–	–	–	–				
13		32	–	–	–	–				
14		68	–	–	–	–				
15		64	–	–	–	–				
16		16	–	–	–	–				
17		36	–	–	–	–				
18		67	–	–	–	–				
19		74	–	–	–	–				
20		56	–	–	–	–				
21		15	–	–	–	–				
22		23	–	–	–	–				
23		36	–	–	–	–				
24		28	–	22	–	.28	38	28	22	29
25		35	–	34	–	.23	35	23	34	31
26		31	–	22	–	.21	31	21	22	
27		33	–	–	–	–				
28		12	–	–	–	–				
29		12	–	–	–	–				

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HR 28 — Reduction 11, 50

	MC 21721 (1)	MC 21721 (1)	X 7968 (2)	X 8099 (3)	C 5256 (2)	X 7984 (2)	Means all	Pr 2	Pr 3	all
30		20			23	32	20			
31	—	10	-		—	14	10	14	-	
32	—	29	-		30	33	29	33	-	
33	162	~~15~~ 164	-		172	? 102	163	102	-	
34	-	57	-	107 ?	40		57	~~105~~	~~107~~	
35	-	41	-	92	49	64	41	64	92	
36	-	25	-	46	27	43	26	43	46	
37	-	26	-	49	27	41	26	41	49	
38	-	28	-	43	41	44	28		43	
39		95	90	106	74	82	95	86	106	93
~~39~~ 40	167	~~15~~ 171	~~90~~ 153	164	162	~~153~~82	169	153	164	162
~~40~~	—	—	~~90~~	—	—	53	—	53	-	
41	-	68	26	34		49	68	37	34	
42	-	~~35~~ 21	28	11	15	28	21	28	11	
43	-	10	25	10	15	23	10	24	10	
44	-	10	21	14	10	20	10	20	14	
45	-	18	29	22	25	31	18	30	22	
46	-	08	12	04	<10	11	08	12	04	
47	-	25	40	23	40	46	25	43	23	
48	-	06	11	05	<10	15	06	13	05	
49	-	06	11	07	15	23	06	17	07	
50	-	06	12	05	15	18	06	15	05	
51	-	07	15	12	15	23	07	19	12	
52	-	12	12	07	15	17	12	14	07	
53	-	11	20	14	15	23	11	22	14	
54	-	32	31	11	25	39	32	35	11	
55	-	24	29	~~09~~	25	35	24	32	0	
55a	-	-	14	~~1~~ 09		17	-	16	09	
56	-	12	-	12	15	05	12	05	12	
57	-	~~3~~44	55	45	48	60	34	58	45	
58	-	04~~5~~	11	02	<10	09	05	10	02	

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Promo

2	3	all		MC 21721 HR28	MC 21721 Bk 11, 50 (1)	X 7968 (2)	X 8099 (3)	C 5256 (2)	X 7984 (2)	
27	18		59		19	25	18	15	22	34
23	22		60		283	39	22	15	07	30
-	-		61		20	-	-	-		30
44	36		62		36	43	36	25	44	17
24	20		63		16	23	20	15	24	12
32	43		64		3	34	43	15	31	22
50	42		65		41	50	42	40	51	50
20	16		66		14	21	16	15	18	21
08	09		67		09	07	09	<10	10	21
12	-		68		06	13	-	<10	10	15
24	19		69		20	23	19	<10	25	06
59	45		70	57	51	57	45	62	61	24
20	16		71		16	20	16	15	19	18
24	19		72		19	24	19	15	23	24
20	15		73		14	22	15	15	19	40
25	27		74		19	28	21	<10	23	17
30	27		75		33	32	27	10	28	20
13			76		16	16	51	-	10	23
28	50		77		38	40	50	25	15	42
24	27		78		13	24	27	<10		33
26	-		79		19	26	-	<10		70
28	32		80		31	30	32	10	25	58
29	-		81		16	31	-	<10	27	65
20	21		82		07	22	21	<10	17	55
23	22		83		06	37	22	<10	10	12
22	26		84		10	26	26	<10	19	56
	48		85		35	45	48	15	19	17
36	42		86		24	38	42	15	35	11
29	34		87		22	33	34	<10	27	28
30	35		86		25	32	35	<10	28	12
20	28		89		16	26	28	<10	15	12

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Prisms 1	2	3	all		MC 21721	MC 21721	X 7968 (2)	X 8099	C 5256	X 7984 (2)
34	37	40		90		34	40	40	15	34
30	36	–		91		30	37	–	–	34
30	–	37		92		30	–	37	15	–
17	–	23		93		17	–	23	15	–
12	20	17		94		12	22	17	15	18
22	34	36		95	36	22	37	36	23	31
50	54	58		96	57	50	59	58	49	50
21	19	27		97	11	21	26	27	15	13
21	14	29		98	11	21	14	29	15	–
15	–	23		99	15	15	–	23	15	–
06	12	–		100	06	06	12	–	15	–
24	18	39		101		24	23	39	15	13
18	14	19		102		18	18	19	08	10
24	23	27		103		24	30	27	08	15
40	32	36		104		40	38	36	22	26
17	14	29		105		17	–	29	08	14
20	15	19		106		20	21	19	<10	09
23	17	23		107		23	22	23	08	12
42	32	45		108		42	39	45	22	24
33	–	–		109		33	–	–	08	–
70	52	58		110		70	60	58	34	45
58	40	54		111		58	47	54	22	33
65	(59)	65		112		65	59	65	21	24
55	39	–		113		55	49	–	26	30
12	12	–		114		12	18	–	<10	06
56	51	–		115		56	62	–	17	40
17	–	–		116		17	–	–	<10	–
11	–	–		117		11	–	–	<10	–
28	22	–		118		28	41	–	<10	16
12	16	–		119		12	26	–	<10	06
12	18	–		120		12	30	–	<10	06

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Primo 2	3	all		MC21721	MC21721	X7968	X8099	C5256	X7984
25	13	16	121	-	25	-	16	40	13
52	35	38	122	74	52	-	38	07	35
28	12	16	123	-	28	-	16	40	12
18	12	15	124	-	18	-	15	40	12
18	17	17	125	-	18	-	17	40	12
28	17	21	126	-	28	-	21	40	17
17	-	18	127	-	17	-	18	12	-
29	14	21	128	-	29	-	21	12	14
17	09	13	129	-	17	-	13	40	09
14	-	-	130	-	14	-	-	-	-
19	-	14	131	-	19	-	14	-	-
27	-	20	132	-	27	-	20	-	-
20	35	20	133	-	20	-	20	-	35
08	-	10	134	-	08	-	10	-	-
17	-	-	135	-	17	-	-	-	-
22	35	24	136	-	22	-	24	-	35
26	35	27	137	-	26	-	27	-	35
14	20	19	138	-	14	-	19	-	20
06	-	05	139	-	06	-	05	-	-
18	29	21	140	21	18	-	21	-	29
13	20	16	141	-	13	-	16	-	20
11		14	142	-	11	-	14	-	-
04		09	143	-	04	-	09	-	-
00		04	144	-	00	-	04	-	-
07		08	145	-	07	-	08	-	-
00		08	146	-	00	-	08	-	-
16		21	147	-	16	-	21	-	-
10		18	148	-	10	-	18	-	-
07		08	149	-	07	-	08	-	-
07		16	150	-	07	-	14	-	-
10		16	151	-	10	-	16	-	-

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	Mc 21721	Mc 21721	x7968	X8099	C5256	X7984	Prisms 1	2	3	all
152	-	16	-	12	-	-	16			12
153	-	06	-	09	-	-	06			09
154	-	16	-	13	-	-	16			13
155	-	06	-	12	-	-	06			12
156	-	10	-	11	-	-	10			11
157	-	06	-	09	-	-	06			09
158	-	06	-	04	-	-	06			04
159	-	06	-	04	-	-	06			04
160	-	13	-	13	-	-	13			13
161	-	06	-	08	-	-	06			08
167	-	16	-	15	-	-	16			15
163	-	10	-	07	-	-	10			07
164	-	06	-	05	-	-	06			05
165	-	16	-	09	-	-	16			09
166	-	10	-	07	-	-	10			07
167	-	10	-	09	-	-	10			09
168	-	04	-	07	-	-	04			07
169	-	10	-	12	-	-	10			12
170	-	04	-	03	-	-	04			03
171	-	10	-	08	-	-	10			08
172	-	12	-	15	-	-	12			15
173	-	06	-	08	-	-	06			08
174	-	12	-	08	-	-	12			08
175	-	11	-	07	-	-	11			07
176	-	18	-	05	-	-	18			05
177	-	07	-	04	-	-	07			04
178	-	05	-	07	-	-	05			07
179	-	11	-	07	-	-	11			07
180	-	20	-	14	-	-	20			14
181	43	36	-	36	-	-	36			36
182	-	23	-	14	-	-	23			14

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	MC 21721	MC 21721	X7968	X8099 C5256	X7984	Prisms 1	2	3	all
183	-	23	-	16	-	23	-	16	
184	-	~~23~~ 12	-	14	-	12	-	14	
185	-	~~12~~ 11	-	04	-	11	-	04	
186	-	~~11~~ 22	-	07	-	22	-	07	
187	-	29	-	16	-	29	-	16	
188	-	~~29~~ 11	-	07	-	11	-	07	
189	-	12	-	12	-	12	-	12	
190	-	00	-	07	-	00	-	07	
191	-	11	-	—	-	11	-	-	
192	-	12	-	09	-	12	-	09	
193	-	05	-	08	-	05	-	08	
194	-	06	-	03	-	06	-	03	
195	-	00	-	—	-	00	-	-	
196	-	06	-	18	-	06	-	18	
197	-	12	-	10	-	12	-	10	
198	-	15	-	33	-	15	-	33	
199	-	13	-	36	-	13	-	36	
~~200~~	-	13	-	20	-	13	-	20	
201	-	05	-	—	-	05	-	-	
202	-	00	-	—	-	00	-	-	
203	-	10	-	35	-	10	-	35	
204	-	16	-	—	-	16	-	-	
205	-	16	-	—	-	16	-	-	
206	-	28	-	—	-	28	-	-	
207	-	10	-	—	-	10	-	-	
208	-	18	-	-	-	18	-	-	
209	-	18	-	-	-	18	-	-	
210	-	0	-	-	-	0	-	-	
211	-	10	-	-	-	10	-	-	
212	-	9	-	-	-	9	-	-	
213	-	19	-	-	-	19	-	-	

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Plots of 1- and 2 prism results, and 1- and 3- prism results.

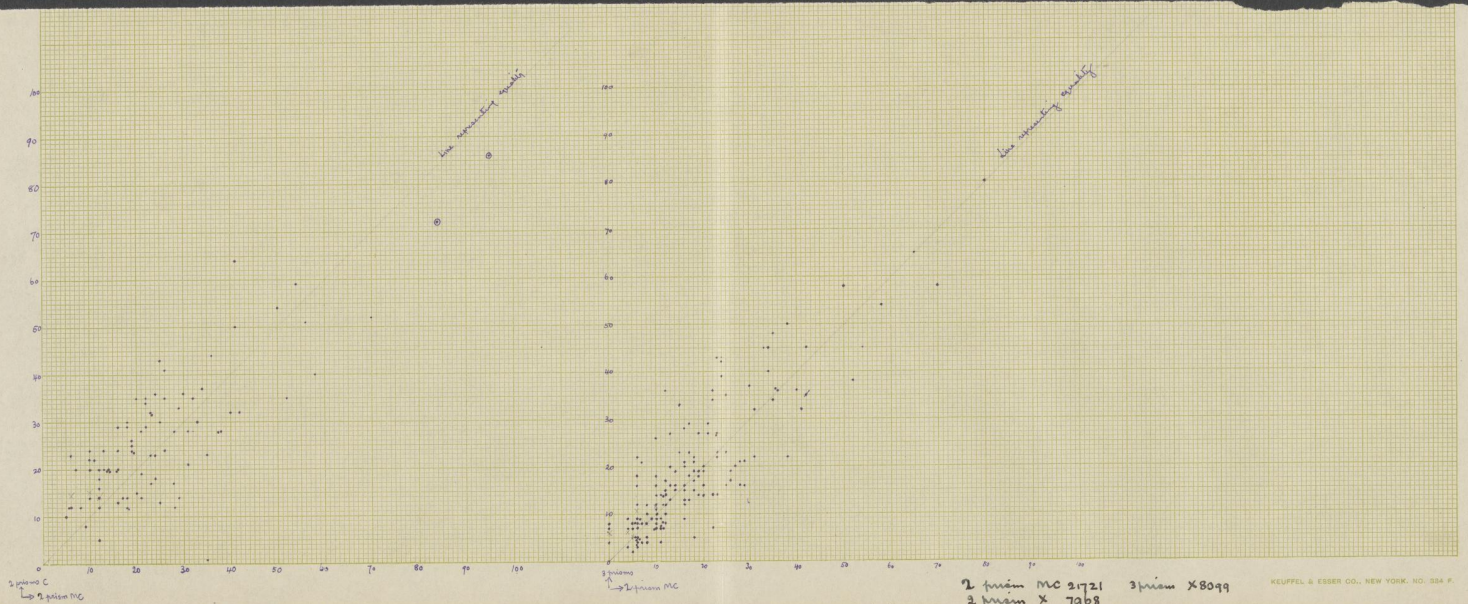
Residuals from line for equality

1 prism depth in mag.	MC to C, 2 prisms		MC to C, 3 prisms	
	Positive	Negative	Positive	Negative
0 - .10	19	1	26	29
.10 - .20	21	8	31	25
.20 - .30	13	13	11	14
.30 - .40	4	7	7	5
.40 - .50	2	2	2	1
.50 - .60	2	3	0	3
.60 - .70	a	+	1	1
.70 - .80	0	1	1	1
.80 - .90	0	1	–	–
.90 - 1.00	0	1	–	–

For lines of residual intensity greater than .20^{m} there does not appears to be a systematic difference between 1- and 2-, or 1- and 3- prism plates.

For lines of residual intensity from .20^{m} down, the apparent systematic difference is greater from 1-2 than from 1-3 prisms. This looks like individual plate difference rather than difference depending on resolution.

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Capella. Summarized result from several plates. Bk. 12, p. 126 2 prism C results are a mean from two plates.

Scale: hundredths of a magnitude

2 prism MC 21721 3 prism X 8099
2 prism X 7968
X 7984
C 5256

KEUFFEL & ESSER CO., NEW YORK. NO. 334 F.

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α Cygni. Results from several plates, all apertured

No.	Line	2 prism MC 21640 2 pr. 1st red	2nd red	C 1 pr.	C 18483 2 pr. CHP	C 18506 2 pr.	Mean 1 pr.	Mean 2 pr	C 18483 2nd red FSH	No.
1	3835			98	108	[124]			113,113	32
2	3846			18	20				23,18	33
3	3850			17	27				19,16	34
4	3854			2	28	28			25,25	35
5	3858			26	53				47,46	36
6	3863			25	42	30			53,36	37
7	3866			10	16	08			34,18	38
8	3873			08	24	07			36,21	39
9	3878			06	19				22,12	40
10	3889	52	42	77	120	74			116,102	41
11	3900			16	? 78	20			38,30	42
12	3903			-	28	16			29,16	43
13	3905-6			14	29	25			31,24	44
14	3912			18	42	33			35,34	45
15	3933	35	34	49	111	55			120,118	46
16	3938			14	20	16			29,20	47
17	3968			?	147	?			151,144	48
18	3970	66	62	100	149	114			150,142	49
19	3973			-	30	16			29,26	50
20	4003			12	16	13			22,19	51
21	4005			-	27				21,19	52
22	4010			08	12				20,18	53
23	4015			04	14				13,11	54
24	4024			14	22	14			21,18	55
25	4025			06	16				16,15	56
26	4030				16				16,12	57
27	4033				8				11,11	58
28	4063			08	14	11			18,18	59
29	4067-71			04	12	08			14,14	60

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No.	Line	MC21640 CHP		C 18514 FSH	C18483 CHP	C 18506 FSH	Mean 1hr.	Mean 2hr.	C 18483 FSH
30	4077				26				17,17
31	4101	56	51	72 5	142	89			143
32	4122			10	20	14			22
33	4128			20	39	23			36
34	4131			08	29	19			31
35	4167			10	19	11			26
36	41734			24	42	32			46
37	4179			30	53	36			52
38	4233			26	49	33			55
39	4242			12	21	18			25
40	4249			? 12	14				28
41	4258				12	11			18
42	4262			06	09	13			18
43					12				
44					15				
45					18				
46					17				
47					19				
48					16				
49	4302			18	33	21			37
50	4308			08	15	10			23
51	4315			18	23	21			29
52	4321				12	08			17
53	4326			10	14	12			19
54	4340	67	60	66	129	80			121
55	4352			18	38	25			40
56	4385			23	38	27			39
57	4390				15	10			13
58	4395			12	21	17			31
59	4400			10	16	10			16
60	4405				11				12

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No.	Line	MC 21640 1st CHP	MC 21640 2nd CHP	C FSH	C 18483 CHP	C 18483 FSH	Mean 1pr.	Mean 2pr.	C 18483	No
					36					
61	4417			16	20 36	23			32	91
62	4444			10	18 20	17			20	92
63	4450			07	23 18	12			16	93
64	4469			11	17 23	13			21	94
65	4471			11	48 17	12			15	95
66	4482			22	23 48	38			47	96
67	4489-91			11	20 23	16			.8	97
68					16 20	16			18	98
69	4501			07	24 16	11			15	
70	4508			09	23 24	17			26	
71	4515			08	23	14			23	
72	4520,22			14	32	20			28	
73					09				11	
74	4534			10	17	14			18	
75	4541			04	15	13			16	
76	4549			13	40	22			38	
77	4556			13	37	24			32	
78	4558				26				22	
79	4564			06	18	10			14	
80	4572-76			06	20	12			16	
81					17				18	
82	4584			18	33	27			42	
83	4586				24				20	
84	4619			10	24	16			19	
85	4629			12	26	16			26	
86	4634			10	19	14			20	
87	4731				17				14	
88	4824				14	08			14	
89	4836				12				10	
90	4848				23				14	

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No.	Line	Mc 21640 1st CHP	Mc 21640 2nd	C 18574 1 prism FSH	C 18483 CHP	C 18506 FSH	Mean 1st	Mean 2nd	C 18483 2nd prism FSH
91	4861	32	28	38 40	85	57			74
92					21				14
93					11				9
94					10				11
95					42				32
96					58				
97					28				
98					40				

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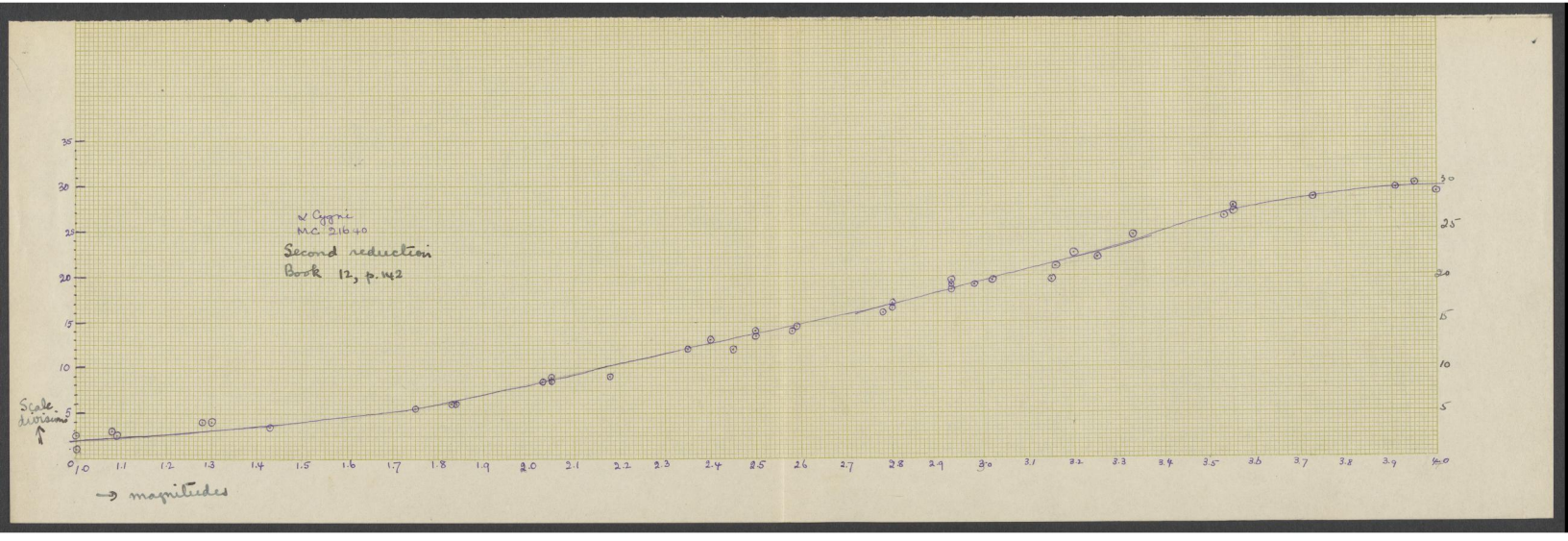
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α Cygni MC 21640 (see Book 6, p. 74) Second reduction

No.	Line	Aperture 1k n	Aperture 1k mtn	Aperture 1B n	Aperture 1B mtn	Aperture 2 n	Aperture 2 mtn	Aperture 3 n	Aperture 3 mtn	Aperture 4 n	Aperture 4 mtn
91	Hβ	1.6	3.2	1	3	6	9	14.5	18.5	24	27
	Hβ l$_1$	–	–	2	3	5.5	7	14.5	16.5	24.5	26
	Hβ l$_2$	–	–	2.5	2.5	~~.90~~ 6	~~.90~~ 7	14.5	15.5	24.5	25
54	Hγ	2.0	4.0	1.5	2.8	3	6	~~17~~ 8.5	~~20~~ 15	16.5	24.5
	Hγ l$_1$	–	–	(30)	(30)	3.5	5	9	11	17	19
	Hγ l$_2$	–	–	(30)	(30)	3.5	4	8.5	9.5	17.0	18
31	Hδ	1.6	4.0	2	4	3.5	7.5	9	15	19	25.5
	Hδ l$_1$	–	–	2.	3	3.5	5.5	9	12	19.5	22.5
	Hδ l$_2$	–	–	2	3	3.5	4.5	9	10	18.5	20.5
18	Hε	2.6	6	3.5	7.5	5.5	12.5	13.5	22.5	27	30
	Hε	–	–	2.5	7	5.5	12	13.5	22.5	–	–
	Hε l$_1$	–	–	3.5	5.5	6	10.5	14.5	18.5	25	28
	Hε l$_1$	–	–	3	5	6	10	14	19	–	–
	Hε l$_2$	–	–	3.5	4.5	6	8.5	14	16.5	24	26.5
	Hε l$_2$	–	–	3	4	6	8	14	17	–	–
15	K	–	–	4.	6.5	8 / 8.5	11 / 11.5	16	21	27	29.5
	K l$_1$	–	–	6	8	8.5	10.5 / 11	17	19	27.5	28.5
	K l$_2$	–	–	4.	5	8.5 / 8.5	9 / 9.5	16.5	17	27	27.5
10	Hζ	–	–	8	13	14	19.5	22	27	29	31.5

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	Aperture 1b			Aperture 1a			Aperture 2			Aperture 3			Aperture 4			Mean	Res.	μ	dl
[3]	-	-	-	-	-	-	1.80	2.08	28	2.58	2.93	35	3.35	3.55	20	28			
7																			
	-	-	-	-	-	-													
	-	-	-	-	-	-													
8	-	-	-	-	-	-	[1.00	1.84]	[84]	2.03	2.62	59	2.77	3.37	60	60			
	-	-	-																
	-	-	-																
4	-	-	-	-	-	-	[0.97	1.95]	[98]	2.08	2.62	54	2.96	3.45	48	51			
14	-	-	-	-	-					1.75	2.39	64	3.35	3.95	60	62			
	-	-	-	[1.0	1.84]	[84]	1.99	2.25	26	2.72	3.12	40	3.54	3.90	36	34			
	-	-																	
	-	-		1.99	2.43	44	2.53	3.01	48	3.20	3.54	34	3.90	?	-	42			

P. 143 top ast. Wrong reductions used

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1924plate.proj.11b9p

Index to Book 12

Plate	Object	Remarks	Pages
	Solar Spectrum	Measures and Reductions	5 - 13
	ζ Bootis	Measures & Reductions	14 - 27
X 8096	β Orionis	Measures & Reductions	28 - 35
X 7965	ζ Tauri	Measures & Reductions	36 - 45
X 7964	ζ Tauri	Measures & Reductions	46 - 55
✓ X 7968	ζ Aurigae	Measures & Reductions	56 - 63
X 8083	ζ Equulei	Measures & Reductions	64 - 73
X 7945	β Orionis	Measures & Reductions	74 - 79
X 7922	ζ Tauri	Measures & Reductions	80 - 91
X 8094	ζ Canis Majoris	Measures & Reductions	92 - 97
✓ X 7984	ζ Aurigae	Measures & Reductions	98 - 105
✓ X 8099	α Aurigae	" " "	106 - 115
✓ C 5256	α Aurigae	" " "	116 - 124
✓	α Aurigae	Comparison of several plates	125 - 134

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