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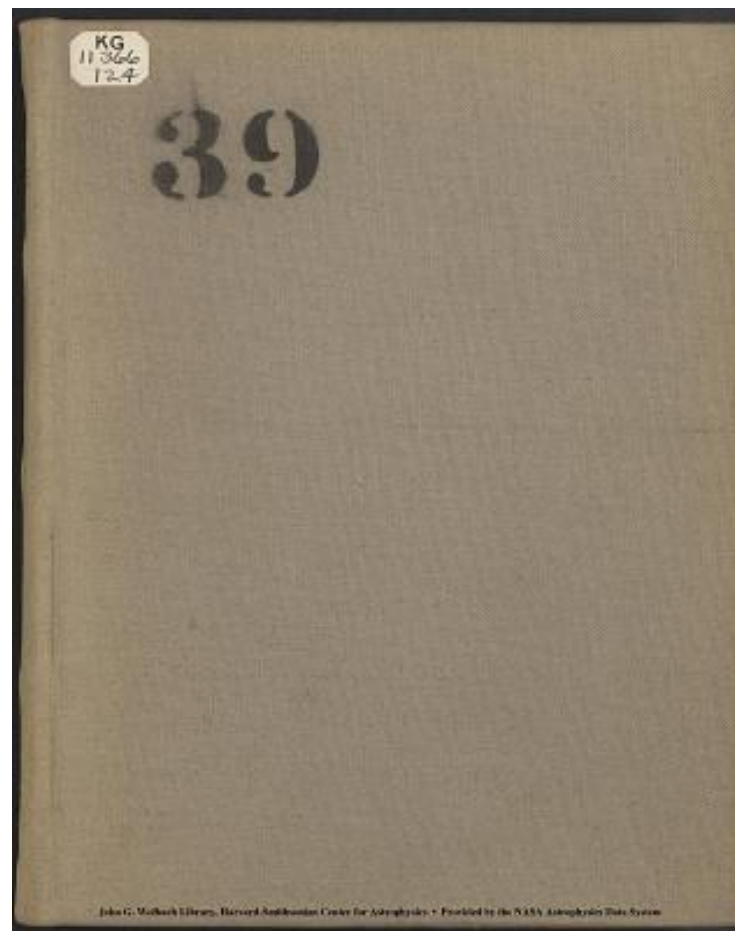
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[[book cover]]39



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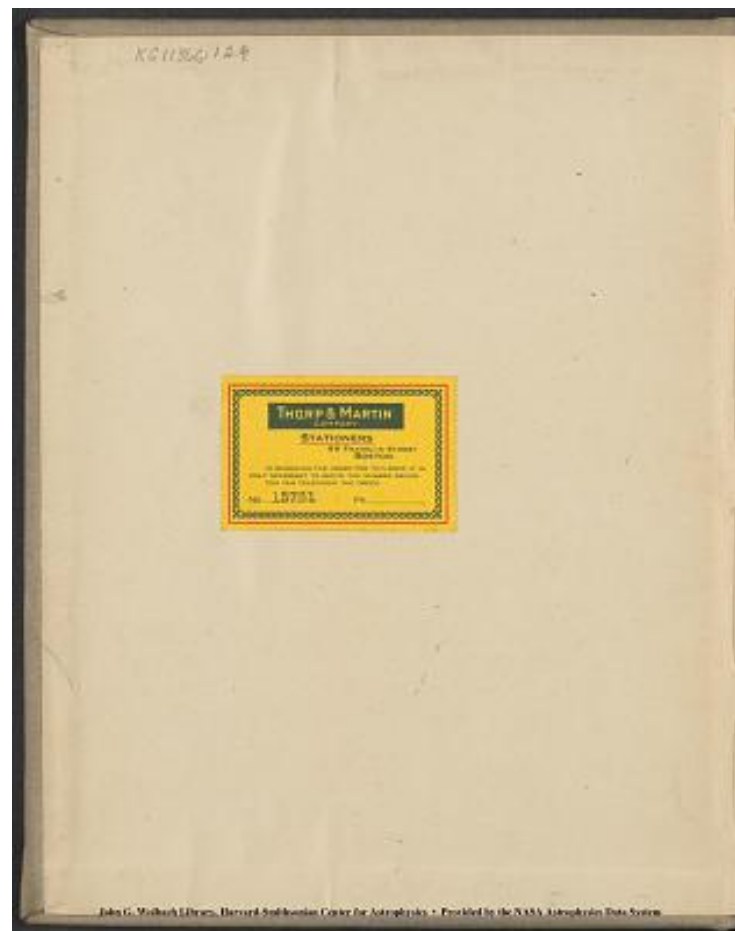
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% LOSS OF LIGHT CORRESPONDING TO AN INCREASE M IN
STELLAR MAGNITUDE.

[[13 columned table]]

m|0|1|2|3|4|5|6|7|8|9|m|0

0.0	00	01	02	03	04	05	06	07	08	2.5	90	
0.1	09	10	10	11	12	13	14	14	15	16	2.6	91
0.2	17	18	18	19	20	21	21	22	23	23	2.7	92
0.3	24	25	26	26	27	28	28	29	30	30	2.8	92
0.4	31	31	32	33	33	34	34	35	36	36	2.9	93

0.5	37	37	38	39	39	40	40	41	41	42	3.0	94
0.6	42	43	44	44	44	45	46	46	46	47	3.1	94
0.7	48	48	48	49	49	50	50	51	51	52	3.2	95
0.8	52	53	53	53	54	54	55	55	56	56	3.3	95
0.9	56	57	57	58	58	58	59	59	59	60	3.4	96

1.0	60	61	61	61	62	62	62	63	63	63	3.5	96
1.1	64	64	64	65	65	65	66	66	66	67	3.6	96
1.2	67	67	67	68	68	68	69	69	69	70	3.7	97
1.3	70	70	70	71	71	71	72	72	72	72	3.8	97
1.4	72	73	73	73	73	74	74	74	74	75	3.9	97

1.5	75	75	75	76	76	76	76	77	77	77	4.0	97
1.6	77	77	78	78	78	78	78	79	79	79	4.1	98
1.7	79	79	79	80	80	80	80	80	81	81	4.2	98
1.8	81	81	81	81	82	82	82	82	82	82	4.3	98
1.9	83	83	83	83	83	83	84	84	84	84	4.4	98

2.0	84	84	84	85	85	85	85	85	85	85	4.5	98
2.1	86	86	86	86	86	86	86	86	87	87	4.6	99
2.2	87	87	87	87	87	87	88	88	88	88	4.7	99
2.3	88	88	88	88	88	88	89	89	89	89	4.8	99
2.4	89	89	89	89	89	90	90	90	90	90	4.9	99

2.5	90	90	90	90	90	90	90	91	91	91	5.0	99
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MEAN REDUCTION TABLE

[[11 columned table]]

---0|1|2|3|4|5|6|7|8|9

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

0|---|---|---|---|487|469|456|446|437

1|428|421|413|406|399|392|385|379|374|369

2|363|358|353|349|345|341|337|334|330|327

3|324|321|319|316|313|311|308|305|303|300

4|297|295|293|290|288|286|284|282|280|278

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

5|276|274|273|271|269|267|265|263|262|260

6|258|256|255|253|251|249|248|246|244|243

7|241|239|238|236|234|233|231|229|228|226

8|224|223|221|219|217|216|214|213|211|209

9|208|206|205|203|201|200|198|197|195|193

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

10|192|190|188|187|185|184|182|181|180|178

11|176|175|173|171|170|168|166|165|163|162

12|160|159|157|156|154|153|151|149|148|146

13|145|143|141|140|138|137|135|133|132|130

14|129|127|125|124|122|121|119|117|116|114

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

15|113|111|110|108|106|105|103|102|100|98

16|97|95|93|92|90|88|86|85|83|81

17|79|77|75|73|71|69|67|64|62|60

18|57|55|52|49|46|43|40|36|31|27

19|21|15|8|2|---|---|---|---|---|---|

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MEAN REDUCTION TABLE

[[10 Columned Table]]

0|1|2|3|4|5|6|7|8|9
0| | | |467|469|456|446|437
1|426|421|413|406|399|392|385|379|374|369
2|363|358|353|349|345|341|337|334|330|327
3|324|321|319|316|313|311|308|305|303|300
4|297|295|293|290|288|286|284|282|280|278

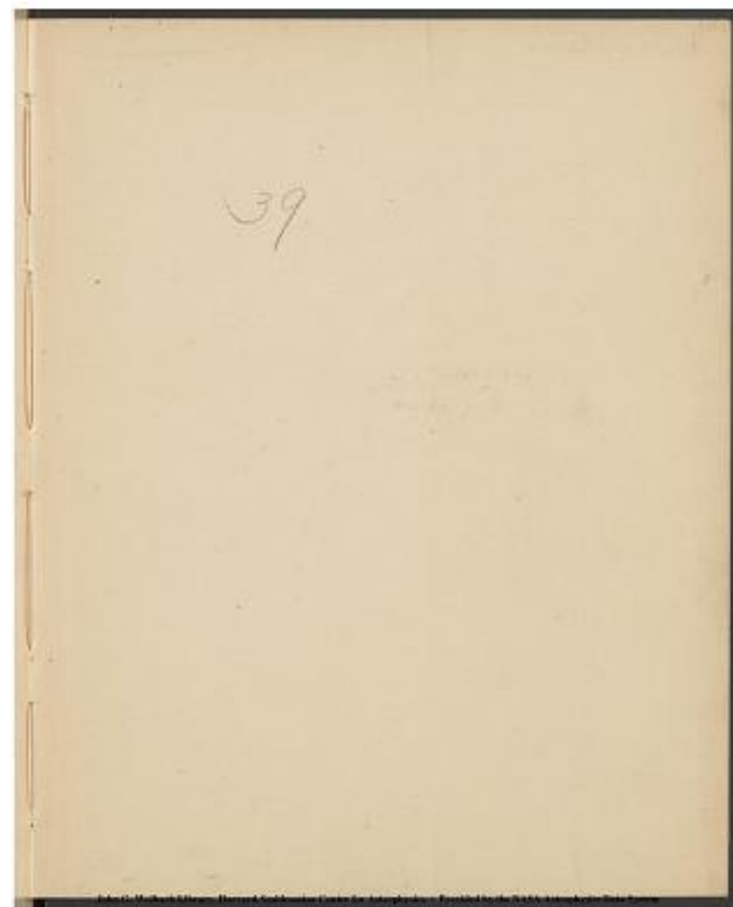
5|276|274|273|271|269|267|265|263|262|260
6|258|256|255|253|251|249|248|246|244|243
7|241|239|238|236|234|233|231|229|228|226
8|224|223|221|219|217|216|214|213|211|209
9|208|206|205|203|201|200|198|197|195|193

10|192|190|188|187|185|184|182|181|180|178
11|176|175|173|171|170|168|166|165|163|162
12|160|159|157|156|154|153|151|149|148|146
13|145|143|141|140|138|137|135|133|132|130
14|129|127|125|124|122|121|119|117|116|114

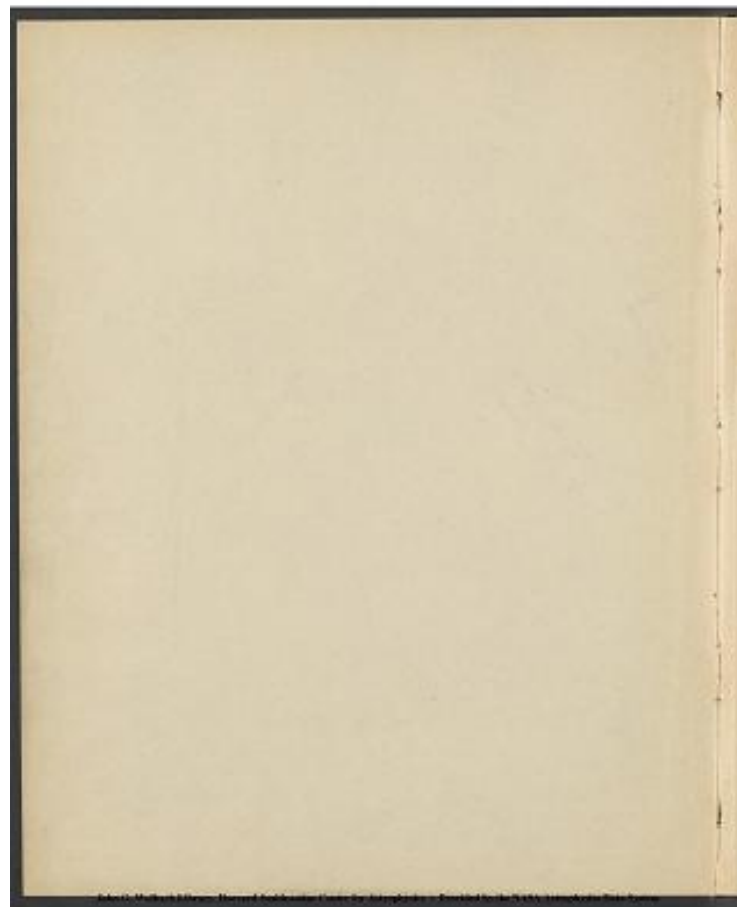
15|113|111|110|108|106|105|103|102|100|98
16|97|95|93|92|90|88|86|85|83|81
17|79|77|75|73|71|69|67|64|62|60
18|57|55|52|49|46|43|40|36|31|27
19|21|15|8|2| | | | |

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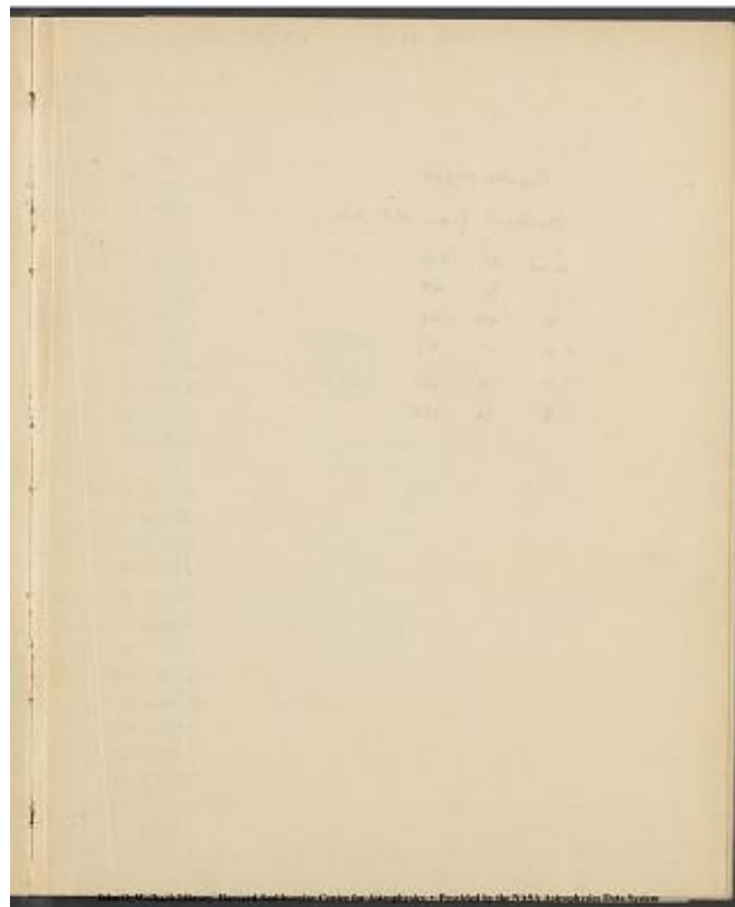


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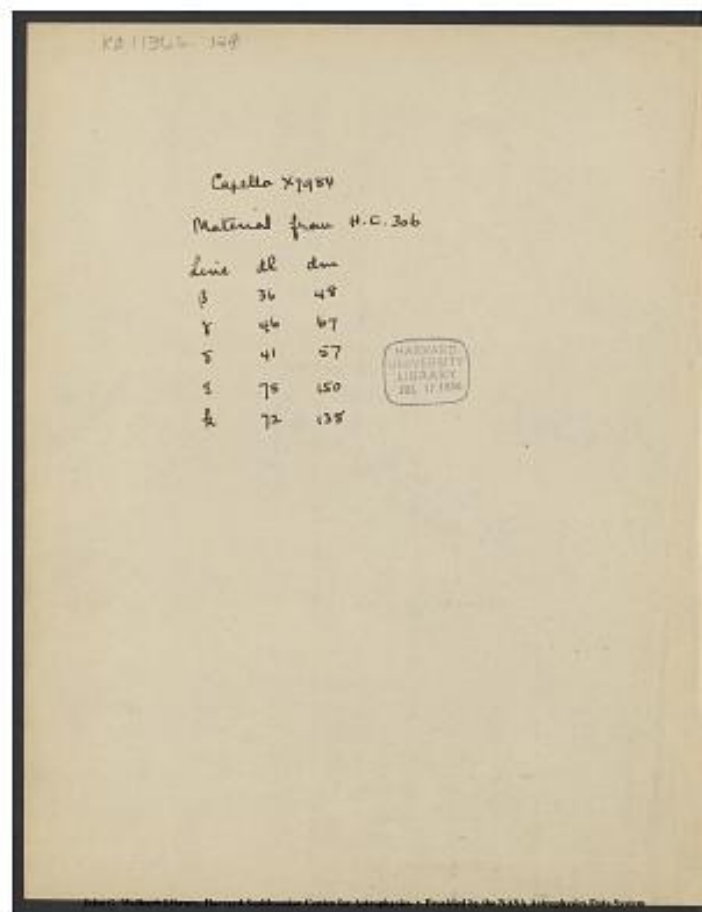
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Capella X7984

Material From H.C.306

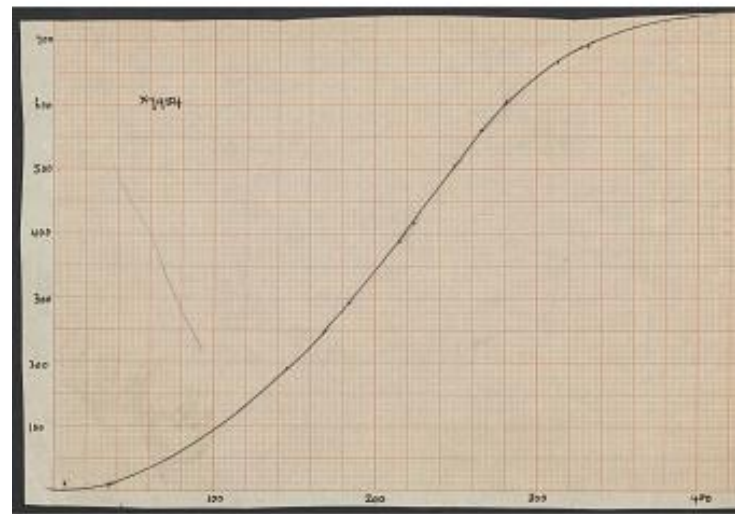
Line 3 8 5 (backwards 3) k
dl 36 46 41 75 72
dm 48 67 57 150 138

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[[image - line graph with data points, X7984]]



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[[top left]] 1
 Capella x7984 M02448,2449 770

[[Line ?]] | m | m+m | l+m+n | [[m-bar]] | [[m+n-bar]] | [n] | [m+n] | dm | dl |
 From X |

1 115 | 180 | 695 | 130 | 200 | 120 | 150 | 30 | 24 | 26 30 |
 2 185 | 220 | 700 | 200 | 240 | 150 | 166 | 16 | 14 | 25 90 |
 3 190 | 230 | 700 | 210 | 268 | 154 | 172 | 18 | 15 | 25 80 |
 4 190 | 260 | 700 | 210 | 285 | 154 | 182 | 28 | 23 | 25 55 |
 5 195 | 280 | 700 | 215 | 310 | 156 | 190 | 34 | 27 | 25 45 |
 6 240 | 315 | 700 | 260 | 345 | 172 | 201 | 29 | 30 | 25 20 |
 7 325 | 360 | 700 | 360 | 395 | 206 | 216 | 10 | 09 | 24 70 |
 8 315 | 400 | 700 | 345 | 440 | 201 | 230 | 29 | 23 | 24 40 |
 9 415 | 445 | 700 | 455 | 495 | 234 | 246 | 12 | 10 | 23 95 |
 10 440 | 475 | 700 | 485 | 520 | 244 | 254 | 10 | 09 | 23 55 |
 11 495 | 505 | 705 | 540 | 550 | 260 | 264 | 04 | 04 | 23 10 |
 12 | 485 | 525 | 705 | 530 | 575 | 257 | 271 | 14 | 12 | 22 85 |
 13 510 | 560 | 705 | 555 | 610 | 265 | 284 | 19 | 16 | 22 20 |
 14 505 | 565 | 705 | 550 | 620 | 264 | 288 | 24 | 20 | 22 15 |
 15 550 | 580 | 705 | 600 | 635 | 280 | 296 | 16 | 14 | 21 85 |
 16 580 | 590 | 705 | 635 | 645 | 296 | 301 | 05 | 04 | 21 55 |
 17 580 | 610 | 710 | 630 | 660 | 293 | 308 | 15 | 13 | 21 10 |
 18 610 | 620 | 710 | 660 | 670 | 308 | 314 | 06 | 05 | 20 65 |
 19 595 | 625 | 710 | 645 | 675 | 301 | 317 | 16 | 14 | 20 40 |
 H B 20 558 | 635 | 710 | 600 | 690 | 280 | 328 | 48 | 36 | 20 00 |
 21 620 | 645 | 710 | 670 | 700 | 314 | 337 | 23 | 19 | 19 80 |
 22 640 | 650 | 715 | 690 | 700 | 328 | 337 | 09 | 08 | 19 50 |

Capella X 7984 M02448,2449										1
Line	m	m+m	l+m+n	[[m-bar]]	[[m+n-bar]]	[n]	[m+n]	dm	dl	
1	115	180	695	130	200	120	150	30	24	26 30
2	185	220	700	200	240	150	166	16	14	25 90
3	190	230	700	210	268	154	172	18	15	25 80
4	190	260	700	210	285	154	182	28	23	25 55
5	195	280	700	215	310	156	190	34	27	25 45
6	240	315	700	260	345	172	201	29	30	25 20
7	325	360	700	360	395	206	216	10	09	24 70
8	315	400	700	345	440	201	230	29	23	24 40
9	415	445	700	455	495	234	246	12	10	23 95
10	440	475	700	485	520	244	254	10	09	23 55
11	495	505	705	540	550	260	264	04	04	23 10
12	485	525	705	530	575	257	271	14	12	22 85
13	510	560	705	555	610	265	284	19	16	22 20
14	505	565	705	550	620	264	288	24	20	22 15
15	550	580	705	600	635	280	296	16	14	21 85
16	580	590	705	635	645	296	301	05	04	21 55
17	580	610	710	630	660	293	308	15	13	21 10
18	610	620	710	660	670	308	314	06	05	20 65
19	595	625	710	645	675	301	317	16	14	20 40
20	558	635	710	600	690	280	328	48	36	20 00
21	620	645	710	670	700	314	337	23	19	19 80
22	640	650	715	690	700	328	337	09	08	19 50
23	640	655	715	695	705	328	337	09	08	19 50
24	645	655	715	695	705	328	337	09	08	19 50
25	660	675	715	710	725	337	352	19	16	19 65
26	670	680	720	715	725	337	352	19	16	19 65
27	675	680	720	720	735	342	357	19	16	19 65
28	675	685	720	720	735	342	357	19	16	19 65
29	685	690	720	720	735	342	357	19	16	19 65
30	675	690	720	720	735	342	357	19	16	19 65

23 645 | 655 | 715 | 695 | 705 | 332 | 340 | 08 | 07 | 19 35 |
24 645 | 655 | 715 | 695 | 705 | 332 | 340 | 08 | 07 | 1925 |
25 660 | 675 | 715 | 710 | 725 | 348 | 367 | 19 | 16 | 18 60 |
26 670 | 680 | 720 | 715 | 725 | 354 | 367 | 13 | 11 | 1795 |
27 675 | 680 | 720 | 720 | 725 | 360 | 367 | 07 | 06 | 1770 |
28 675 | 685 | 720 | 720 | 730 | 360 | 376 | 17 | 14 | 1720 |
29 685 | 690 | 720 | 730 | 740 | 376 | 400 | 24 | 20 | 1655 |
30 675 | 690 | 720 | 720 | 740 | 360 | 400 | 40 | 31 | 1630 |

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[[top left]] 2
 Capella x7984 Reduce to 770

Line | n | m+n | l+m+n | [[n-bar]] | [[m+n-bar]] | [n] | [m+n] | dm | dl | From
 X |

31 | 680 | 690 | 720 | 730 | 740 | 376 | 400 | 24 | | 1585 |

32 | 685 | 700 | 725 | 730 | 745 | 376 | - | - | | 1475 |

33 | 690 | 700 | 725 | 735 | 745 | 384 | - | - | | 1415 |

34 | 690 | 700 | 725 | 735 | 745 | 384 | - | - | | 1390 |

35 | 695 | 705 | 730 | 735 | 745 | 384 | - | - | | 1355 |

36 | 700 | 705 | 730 | 740 | 745 | 400 | - | - | | 1270 |

37 | 700 | 705 | 730 | 740 | 745 | 400 | - | - | | 1245 |

38 | 700 | 705 | 730 | 740 | 745 | 400 | - | - | | 1240 |

39 | 685 | 710 | 730 | 720 | 750 | 360 | - | - | | 1215 |

40 | 700 | 710 | 730 | 740 | 750 | 400 | - | - | | 1165 |

41 | 695 | 710 | 735 | 725 | 745 | 367 | - | - | | 1120 |

42 | 705 | 710 | 735 | 740 | 745 | 400 | - | - | | 1090 |

43 | 705 | 710 | 735 | 740 | 745 | 400 | - | - | | 1065 |

44 | 705 | 710 | 735 | 740 | 745 | 400 | - | - | | 975 |

45 | 705 | 715 | 735 | 740 | 750 | 400 | - | - | | 935 |

46 | 705 | 715 | 735 | 740 | 750 | 400 | - | - | | 910 |

47 | 700 | 710 | 735 | 735 | 745 | 384 | - | - | | 890 |

48 | 700 | 710 | 740 | 730 | 740 | 376 | 400 | 24 | 20 | 825 |

49 | 705 | 710 | 740 | 735 | 740 | 384 | 400 | 16 | 14 | 775 |

50 | 700 | 710 | 740 | 730 | 740 | 376 | 400 | 24 | 20 | 745 |

51 | 695 | 710 | 740 | 725 | 740 | 367 | 400 | 33 | 26 | 695 |

52 | 695 | 710 | 740 | 725 | 740 | 367 | 400 | 33 | 26 | 670 |

2 Capella x7984 Reduce to 770

Line	n	m+n	l+m+n	[[n-bar]]	[[m+n-bar]]	[n]	[m+n]	dm	dl	From X
31	680	690	720	730	740	376	400	24		1585
32	685	700	725	730	745	376	-	-		1475
33	690	700	725	735	745	384	-	-		1415
34	690	700	725	735	745	384	-	-		1390
35	695	705	730	735	745	384	-	-		1355
36	700	705	730	740	745	400	-	-		1270
37	700	705	730	740	745	400	-	-		1245
38	700	705	730	740	745	400	-	-		1240
39	685	710	730	720	750	360	-	-		1215
40	700	710	730	740	750	400	-	-		1165
41	695	710	735	725	745	367	-	-		1120
42	705	710	735	740	745	400	-	-		1090
43	705	710	735	740	745	400	-	-		1065
44	705	710	735	740	745	400	-	-		975
45	705	715	735	740	750	400	-	-		935
46	705	715	735	740	750	400	-	-		910
47	700	710	735	735	745	384	-	-		890
48	700	710	740	730	740	376	400	24	20	825
49	705	710	740	735	740	384	400	16	14	775
50	700	710	740	730	740	376	400	24	20	745
51	695	710	740	725	740	367	400	33	26	695
52	695	710	740	725	740	367	400	33	26	670

53 | 700 | 710 | 745 | 725 | 735 | 367 | 384 | 17 | 14 | 650 |
54 | 700 | 710 | 745 | 725 | 735 | 367 | 384 | 17 | 14 | 625 |
55 | 690 | 710 | 745 | 715 | 735 | 354 | 384 | 30 | 24 | 595 |
56 | 685 | 710 | 745 | 710 | 735 | 348 | 384 | 36 | 28 | 570 |
57 | 700 | 710 | 745 | 725 | 735 | 367 | 384 | 17 | 14 | 535 |
58 | 700 | 710 | 750 | 720 | 730 | 360 | 376 | 16 | 14 | 520 |
59 | 700 | 710 | 750 | 720 | 730 | 360 | 376 | 16 | 14 | 500 |
60 | 705 | 710 | 750 | 725 | 730 | 367 | 376 | 09 | 08 | 470 |

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[[11 column table]]

Line | n | m+n | l+m+n | m | n | m+n | dm | dl | From x

61	700	710	750	720	730	360	376	16	14	435
62	690	710	750	710	730	348	376	28	23	405
63	690	710	750	710	730	348	376	28	23	375
64	685	710	750	705	730	340	376	36	28	335
65	700	705	750	720	725	360	367	07	06	310
66	680	705	755	695	720	332	360	28	46	270
67	670	705	755	685	720	324	360	36	28	235
68	670	705	755	685	720	324	360	36	28	220
69	670	700	755	685	715	324	354	30	24	205
70	690	700	755	705	715	340	354	14	12	180
71	695	700	755	705	715	340	354	14	12	165
^[[4444]]	72	670	700	755	685	715	324	354	30	24 | 140
^[[4431]]	73	670	700	760	680	710	320	348	28	23 | 100
74	675	695	760	685	705	324	340	16	14	80
75	675	695	760	685	705	314	340	16	14	40
^[[4415]]	76	660	695	760	670	705	314	340	26	21
77	660	695	760	670	705	314	340	26	21	
^[[4405]]	78	650	695	760	660	705	308	340	32	26
^[[4402]]	79	660	695	760	670	705	314	340	26	21
^[[4395]]	80	660	695	760	670	705	314	340	26	21
^[[4402]]	81									
^[[5]]	82	590								
^[[4384]]	82	590								
^[[4375]]	83	645								
^[[4367]]	84	670								
^[[4359]]	85	660								
^[[4352]]	86	^[[690 | 735 | 795 | 670 | 710 | 314 | 348 | 34 | 27]]	640							
690 | 770 | 640	690	298	328	30	24	26				
^[[H sigma]]	87	^[[620 | 735 | 795 | 595 | 710 | 232 | 348 | 76 | 50]]	560							
690 | 770 | 560	690	266	328	62	44	47				
88	^[[720 | 730 | 795]]	695	705	332						
340 | 8 | 7]]	670	680	770	670	680	314	320	06	05	6
89	^[[715 | 730 | 795 | 690 | 705 | 328 | 340 | 12 | 10]]	670	680	770						
670 | 680 | 314 | 320 | 06 | 05 | 8										
^[[4326]]	90	^[[650 | 730 | 790 | 630 | 710 | 293 | 348 | 45 | 34]]	590							
680 | 770 | 590 | 690 | 276 | 320 | 44 | 33 | 34										

The image shows a handwritten astronomical data table on aged paper. The table has multiple columns, likely representing different astronomical parameters such as line numbers, wavelengths, and measurements. The handwriting is in ink, and the paper shows signs of age and wear. The table is organized into rows, with some entries appearing to be corrected or crossed out. The overall layout is dense and typical of scientific data recording from the early 20th century.

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Caprila

x7984

| 11 Column Table |

line u w+u l+w+u u(bar) w+u(bar) [u] [w+u] lu dl

580 | 720 | 790 | 565 | 700 | 268 | 337 | 69 | 47

4308 91 530 | 670 | 775 | 530 | 665 | 257 | 311 | 54 | 39 |right margin| 43
|right margin|

605 | 718 | 790 | 590 | 695 | 276 | 332 | 56 | 40

4303 | 92 560 | 670 | 780 | 780 | 555 | 660 | 265 | 308 | 43 | 33 |right
margin| 38 |right margin|

580 | 715 | 790 | 565 | 695 | 268 | 332 | 64 | 44

4299 93 | 530 | 670 | 780 | 525 | 660 | 253 | 308 | 53 | 39 |right margin|
42 |right margin|

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[[[?]]]	u	w+u	w+w	[u]	[w+u]	d	w	d		
4173	121	520	650	780	515	640	252	298	46	34
4168	122	590	650	780	580	640	272	298	26	21
4162	123	600	645	780	590	635	276	296	20	17
4160	124	560	640	780	555	630	265	293	28	23
4157	125	565	640	780	560	630	266	293	27	22
4150	126	570	640	780	565	630	268	293	25	21
4144	127	525	635	780	520	625	254	291	37	29
4137	128	600	630	780	590	620	276	288	12	10
4133	129	540	630	780	535	620	258	288	30	24
4128	130	570	630	780	565	620	268	288	20	17
4124	131	580	625	780	570	615	270	286	16	14
4119	132	560	625	780	555	615	265	286	21	18
4111	133	560	620	775	555	615	265	286	21	18
[[[HS?]]]	134	420	610	775	415	605	222	282	60	42
4097	135	550	610	775	545	605	262	282	20	17
4096	136	550	610	775	545	605	262	282	20	17
4092	137	580	610	775	575	605	271	282	11	10
4087	138	610	775	575	605	271	282	11	10	
4078	139	435	595	775	545	545	262	278	16	14
4072	140	500	590	775	495	585	246	274	28	23
4068	141	510	585	775	505	580	250	272	22	18
4063	142	450	585	775	445	580	231	272	41	31
4059	143	490	575	775	485	570	244	270	26	21
4058	144	500	570	770	390	560	352	266	12	10
4046	145	390	560	770	390	560	215	266	51	37
4041	146	515	560	770	515	560	252	266	12	10
4033	147	440	555	770	440	555	230	265	35	28
4030	148	440	540	770	440	540	230	260	30	24
..	149	530	535	770	530	535	257	258	01	01
4026	150	480	530	480	530	242	257	15	13	

[illegible]

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[Caprila up 2448]
 [[?]]u[w+u[[?]]u[u][w+u][u][w+u]du|dl
 4021|151|490|525|770|490|525|245|255|10|09
 4018|152|470|520|770|470|520|239|254|15|13
 4017|153|480|510|770|480|510|242|251|09|08
 4016|154|465|500|770|465|500|237|248|11|10
 4006|155|350|485|770|350|485|202|244|42|32
 4002|156|445|470|770|445|470|231|239|08|07
 3999|157|360|460|770|360|460|206|236|30|24]
 3997|158|380|450|770|380|450|212|232|20|17
 3990|159|390|445|770|390|445|215|231|16|14
 3988|160|370|430|770|370|430|208|226|18|15
 3984|161|355|410|770|355|410|204|220|16|14
 3983|162|310|390|770|310|390|190|215|15|13
 ?[h3]|163|15|360|770|230|360|162|206|44|33
 [Ae3962]|164|100|290|765|100|290|103|185|80|56
 3957|165|175|265|765|175|265|138|174|36|28
 3957|166|160|250|765|160|250|132|170|38|30
 39..|167|145|235|765|145|235|125|164|39|30
 [AC]3944|168|90|220|765|90|220|98|158|60|42
 |169|80|210|765|80|210|92|154|62|44
 k|170|10|190|760|10|190|34|146|122|64
 |171|35|170|760|35|170|60|136|76|50
 |172|80|150|760|80|150|92|128|36|28
 |173|60|140|760|60|140|78|122|44|33
 |174|90|135|760|90|135|98|120|22|18
 |175|90|120|760|90|130|98|118|76|17
 |176|100|120|760|100|120|103|114|111|64
 |177|90|110|760|90|110|98|108|10|09
 |178|40|95|760|40|95|64|100|36|28
 |179|50|90|760|50|90|72|98|26|21
 |180|50|80|760|50|80|72|92|20|17

6 Capella - p 2448

Year	Month	Day	Hour	Min	Sec	Angle	Dist	Magn	Other
4021	151	490	525	770	490	525	245	255	10 09
4018	152	470	520	770	470	520	239	254	15 13
4017	153	480	510	770	480	510	242	251	09 08
4016	154	465	500	770	465	500	237	248	11 10
4006	155	350	485	770	350	485	202	244	42 32
4002	156	445	470	770	445	470	231	239	08 07
3999	157	360	460	770	360	460	206	236	30 24]
3997	158	380	450	770	380	450	212	232	20 17
3990	159	390	445	770	390	445	215	231	16 14
3988	160	370	430	770	370	430	208	226	18 15
3984	161	355	410	770	355	410	204	220	16 14
3983	162	310	390	770	310	390	190	215	15 13
?	163	15	360	770	230	360	162	206	44 33
[Ae3962]	164	100	290	765	100	290	103	185	80 56
3957	165	175	265	765	175	265	138	174	36 28
3957	166	160	250	765	160	250	132	170	38 30
39..	167	145	235	765	145	235	125	164	39 30
[AC]3944	168	90	220	765	90	220	98	158	60 42
|169	80	210	765	80	210	92	154	62	44
k|170	10	190	760	10	190	34	146	122	64
|171	35	170	760	35	170	60	136	76	50
|172	80	150	760	80	150	92	128	36	28
|173	60	140	760	60	140	78	122	44	33
|174	90	135	760	90	135	98	120	22	18
|175	90	120	760	90	130	98	118	76	17
|176	100	120	760	100	120	103	114	111	64
|177	90	110	760	90	110	98	108	10	09
178	40	95	760	40	95	64	100	36	28
179	50	90	760	50	90	72	98	26	21
180	50	80	760	50	80	72	92	20	17

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[[?]] - 47983

25-16	120-82	235-122	340-100	445-164
30-0	135-84	240-123	345-150	450-164
35-10	140-86	245-125	350-151	455-145
40-20	145-88	250-127	355-152	460-165
45-28	150-90	265-128	360-153	465-166
50-36	155-91	260-130	365-154	470-166
55-42	160-94	265-132	370-155	475-166
60-48	165-95	270-130	375-156	
65-52	170-97	275-134	380-157	
70-55	175-99	280-136	385-158	
75-58	180-101	285-137	390-158	
80-60	185-103	290-138	395-158	
85-62	190-105	295-140	400-159	
90-64	195-106	300-141	405-160	
95-67	200-109	305-142	410-160	
100-70	205-111	310-143	415-161	
105-72	210-113	315-144	420-162	
110-74	215-114	320-146	425-162	
115-76	220-116	325-147	430-163	
120-78	225-118	330-148	435-164	
125-80	230-120	335-149	440-164	

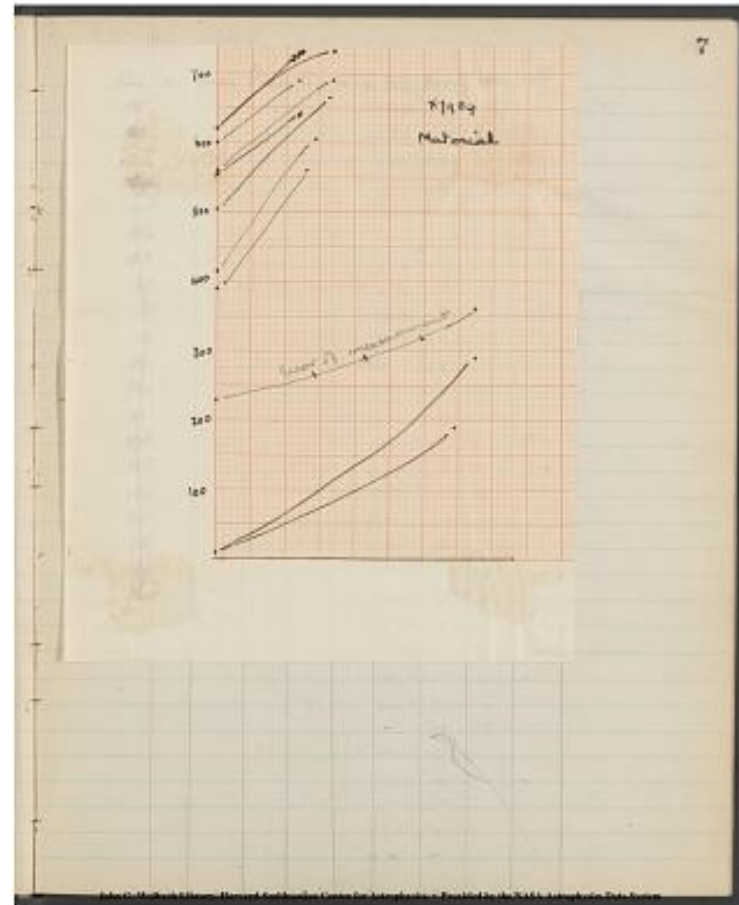
John. G Wolbach Library, Harvard-Smithsonian Center for Astrophysics
{Dot} Provided by the NASA Astrophysics Data System

Reduction - 47983

25-16	120-82	235-122	340-100	445-164
30-0	135-84	240-123	345-150	450-164
35-10	140-86	245-125	350-151	455-145
40-20	145-88	250-127	355-152	460-165
45-28	150-90	265-128	360-153	465-166
50-36	155-91	260-130	365-154	470-166
55-42	160-94	265-132	370-155	475-166
60-48	165-95	270-130	375-156	
65-52	170-97	275-134	380-157	
70-55	175-99	280-136	385-158	
75-58	180-101	285-137	390-158	
80-60	185-103	290-138	395-158	
85-62	190-105	295-140	400-159	
90-64	195-106	300-141	405-160	
95-67	200-109	305-142	410-160	
100-70	205-111	310-143	415-161	
105-72	210-113	315-144	420-162	
110-74	215-114	320-146	425-162	
115-76	220-116	325-147	430-163	
120-78	225-118	330-148	435-164	
125-80	230-120	335-149	440-164	

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[[image - multi-line graph., X7984 Material]]



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X-13705 [?] 2479 Reduce[?] [~~9660~~]
200 and mean
#1

[[12 column table]]

[illegible]

beta[415|440|565|410|435|147|156|117|103|14|12
gamma|395|430|560|395|430|141|154|127|106|21|10
chi|365|430|560|365|430|130|154|145|106|39|30
G|290|420|560|290|420|104|150|195|113|72|48
4227|270|385|560|270|385|96|138|198|132|66|46
4215|310|380|560|310|380|111|136|175|135|40|31
sigma|270|325|560|270|325|96|116|198|166|32|26
4077|250|310|560|250|310|89|111|209|175|24|20
4046|210|290|555|210|290|76|105|231|184|47|35
epsilon|20|190|555|20|190|7|68|456|244|212|86
kappa|05|120|555|05|120|2|43|...|290|...|

[illegible]

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X 13705 u of 2480

#2

[[12 column chart]]|Line|u|ui+u|+ui+u|u [[line over u]]|ui+u[[line over top of both]]|u|+u|dw|dl|~~[[strikethrough last 4 words]]~~|du|

B|140|230|580|135|220|48|79|280|226|52 38
O|140|245|580|135|235|48|85|280|216|64 44
X|500|240|580|195|230|69|83|243|219|24 20
G|175|235|580|170|225|60|81|258|223|35 28
4227|170|215|580|165|205|58|74|262|234|28 23
4515|200|215|580|195|205|69|74|243|234|09 8
S|90|180|580|85|175|31|62|321|255|66 46
4077|135|170|580|130|165|46|59|284|260|24 20
4046|135|160|580|130|155|46|55|284|267|27 22
e|05|100|580|05|95|2|34|..|313|..
k|00|75|580|00|75|0|26|..|337|..

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~ Provided by the NASA Astrophysics Data System

Handwritten astronomical data table on lined paper, page 9. The table has 12 columns. The first column contains letters (B, O, X, G, S, e, k) and the second column contains numbers. The remaining columns contain various numerical data, some of which are underlined or have other markings. The page is numbered '9' in the top right corner.

Letter	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12
B	140	230	580	135	220	48	79	280	226	52	38
O	140	245	580	135	235	48	85	280	216	64	44
X	500	240	580	195	230	69	83	243	219	24	20
G	175	235	580	170	225	60	81	258	223	35	28
4227	170	215	580	165	205	58	74	262	234	28	23
4515	200	215	580	195	205	69	74	243	234	09	8
S	90	180	580	85	175	31	62	321	255	66	46
4077	135	170	580	130	165	46	59	284	260	24	20
4046	135	160	580	130	155	46	55	284	267	27	22
e	05	100	580	05	95	2	34	..	313	..	
k	00	75	580	00	75	0	26	..	337	..	

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10

x - 1370 5 u of [[?]]2481 200 and mean

[[10 Columned Table]]

	h	i	u		w	+	u		l	+	w	+	u		w	+	u		[[bar]]		[[u]]		[[w+u]]		dw		dl	
	---	---	---		---	---	---		---	---	---	---	---		---	---	---		---		---		---		---		---	
	20	70	540		20	70	7		26																			
|	25	60	555	|	35	60	13	|	22	|		|		|				|		|		|		|		|		|

10

K-1020 W in P 2481

200 and mean

h i u w l w l w l	h i u w l w l w l	h i u w l w l w l	h i u w l w l w l	h i u w l w l w l	h i u w l w l w l	h i u w l w l w l
20	70	540	20	70	7	26
25	60	555	35	60	13	22

John G. Mielke III, James H. Mielke III, David G. Mielke III, David G. Mielke III, David G. Mielke III, David G. Mielke III, David G. Mielke III

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B|435|470|490|435|470|178|192|
 [?]445|480|490|445|480|181|196|
 S|415|470|490|415|470|169|192|
 E|280|455|490|280|455|114|186|
 k|270|440|490|270|440|110|180|
 3|250|395|490|250|395|102|161|
 n|150|300|490|150|300|61|122|
 O|110|220|485|110|220|46|91|
 c|90|150|485|90|150|37|62|
 k|70|120|485|70|191|29|49|
 [A?]65|100|485|55|70|23|33|
 u p 2484 #2

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12 C-16587-ud2485 200 + mean
 [[?]] u mtn l twtu [[u with line across top]] [[mtn with line across top]] [u][w
 + u] deu dl dm dl
 B 90|120|500|90|120|36|48|308|280|18 23
 [[?]] 90|125|510|85|120|35|49|311|278|23 19
 [[?]] ~~50~~ ~~90~~ ~~110~~ ~~120~~ ~~130~~ ~~140~~ ~~150~~ ~~160~~ ~~170~~ ~~180~~ ~~190~~ ~~200~~ ~~210~~ ~~220~~ ~~230~~ ~~240~~ ~~250~~ ~~260~~ ~~270~~ ~~280~~ ~~290~~ ~~300~~ ~~310~~ ~~320~~ ~~330~~ ~~340~~ ~~350~~ ~~360~~ ~~370~~ ~~380~~ ~~390~~ ~~400~~ ~~410~~ ~~420~~ ~~430~~ ~~440~~ ~~450~~ ~~460~~ ~~470~~ ~~480~~ ~~490~~ ~~500~~ ~~510~~ ~~520~~ ~~530~~ ~~540~~ ~~550~~ ~~560~~ ~~570~~ ~~580~~ ~~590~~ ~~600~~ ~~610~~ ~~620~~ ~~630~~ ~~640~~ ~~650~~ ~~660~~ ~~670~~ ~~680~~ ~~690~~ ~~700~~ ~~710~~ ~~720~~ ~~730~~ ~~740~~ ~~750~~ ~~760~~ ~~770~~ ~~780~~ ~~790~~ ~~800~~ ~~810~~ ~~820~~ ~~830~~ ~~840~~ ~~850~~ ~~860~~ ~~870~~ ~~880~~ ~~890~~ ~~900~~ ~~910~~ ~~920~~ ~~930~~ ~~940~~ ~~950~~ ~~960~~ ~~970~~ ~~980~~ ~~990~~ ~~1000~~ ~~1010~~ ~~1020~~ ~~1030~~ ~~1040~~ ~~1050~~ ~~1060~~ ~~1070~~ ~~1080~~ ~~1090~~ ~~1100~~ ~~1110~~ ~~1120~~ ~~1130~~ ~~1140~~ ~~1150~~ ~~1160~~ ~~1170~~ ~~1180~~ ~~1190~~ ~~1200~~ ~~1210~~ ~~1220~~ ~~1230~~ ~~1240~~ ~~1250~~ ~~1260~~ ~~1270~~ ~~1280~~ 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~~12150~~ ~~1~~

[[Top Right 13]]

[[10 Columned Table]]

Line|n|m+n|l+m+n|n-bar|m-bar+n-bar|[n]||m+n|dn|dl

Line	n	m+n	l+m+n	n-bar	m-bar+n-bar	[n]	m+n	dn	dl
1	1	2	3	4	5	6	7	8	9
2	10	11	12	13	14	15	16	17	18
3	19	20	21	22	23	24	25	26	27
4	28	29	30	31	32	33	34	35	36
5	37	38	39	40	41	42	43	44	45
6	46	47	48	49	50	51	52	53	54
7	55	56	57	58	59	60	61	62	63
8	64	65	66	67	68	69	70	71	72
9	73	74	75	76	77	78	79	80	81
10	82	83	84	85	86	87	88	89	90
11	91	92	93	94	95	96	97	98	99
12	100	101	102	103	104	105	106	107	108
13	109	110	111	112	113	114	115	116	117

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

14

C-19342 nof[?] 2599

null -335

#1

hue | n |w+n||w+n| n |m+n|[n]||w+n| dm |dl
 beta |100|130| 340 |100|455|100| 130 | 246|12|10
 gamma |100|140| 335 |410|100| 140 | 246 |26|21
 G |100|140| 335 |405|100| 140 | 246 |27|22
 delta |90|115| 335 |405|90 | 115 | 246 |12|10
 epsilon|20|90 | 335 |455|20 | 90 | 246 |12|10
 rho |15|80 | 335 |15 | 80 | 246 |12|10

#2. [?] 2598

beta. |100|135|350|95|180|106|60|46|34
 gamma. |110|140|350|115|135|80|54|26|21
 G. |105|135|345|100|130|100|60|40|31
 delta. |80|110|345|80|105|130|93|37|29
 epsilon.|20|75|340|20|75|-|138|-
 rho. |10|60|340|10|60|-|159|-

#3. [?] 2599

beta. |55|110|340|55|110|170|87|83|53
 gamma. |60|130|340|60|130|159|60|99|60
 delta. |50|115|335|50|115|178|80|98|59
 epsilon.|35|100|330|35|100|216|100|116|66
 zeta. |20|70|330|20|70|-|144|-
 eta. |10|40|330|10|40|-|203|-
 alpha. |10|30|330|10|30|-|236|-

14 C-19342 nof 2599 null-335

Run #1

Run #1	n	w+n	dm	dl	beta	gamma	G	delta	epsilon	rho
1	100	130	340	100	130	110	60	46	34	
2	110	140	350	110	140	115	80	54	26	21
3	105	135	345	100	130	100	60	40	31	
4	90	115	345	80	110	130	93	37	29	
5	20	75	340	20	75	-	138	-		
6	10	60	340	10	60	-	159	-		

#2 nof 2598

1	100	135	350	95	180	106	60	46	34	
2	110	140	350	115	135	80	54	26	21	
3	105	135	345	100	130	100	60	40	31	
4	90	110	345	80	110	130	93	37	29	
5	20	75	340	20	75	-	138	-		
6	10	60	340	10	60	-	159	-		

#3 nof 2599

1	55	110	340	55	110	170	87	83	53	
2	60	130	340	60	130	159	60	99	60	
3	50	115	335	50	115	178	80	98	59	
4	35	100	330	35	100	216	100	116	66	
5	20	70	330	20	70	-	144	-		
6	10	40	330	10	40	-	203	-		
7	10	30	330	10	30	-	236	-		

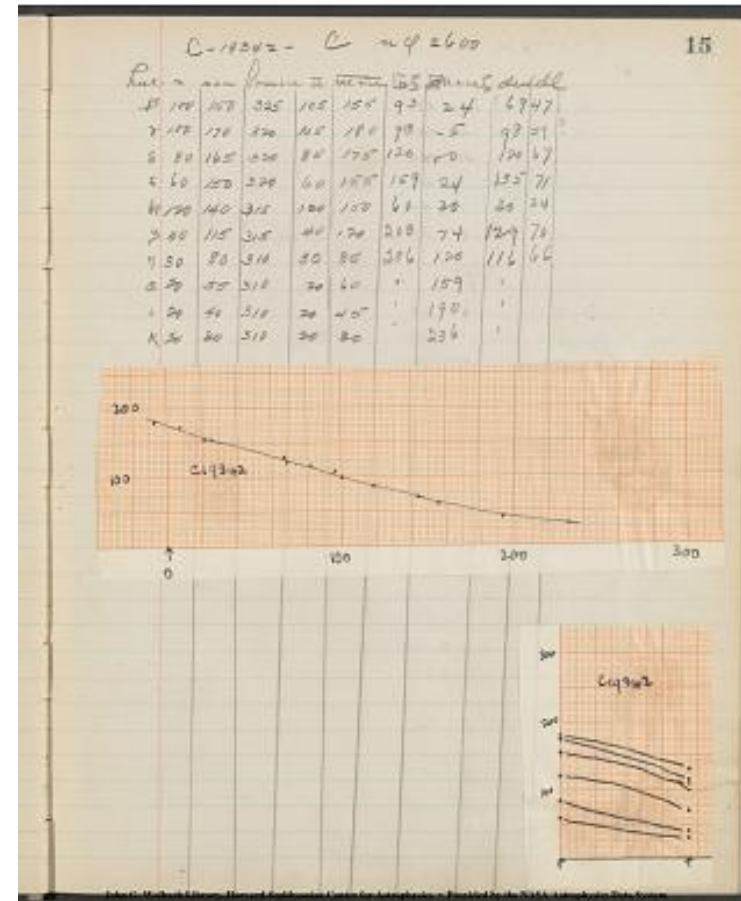
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[[10 columns table]]

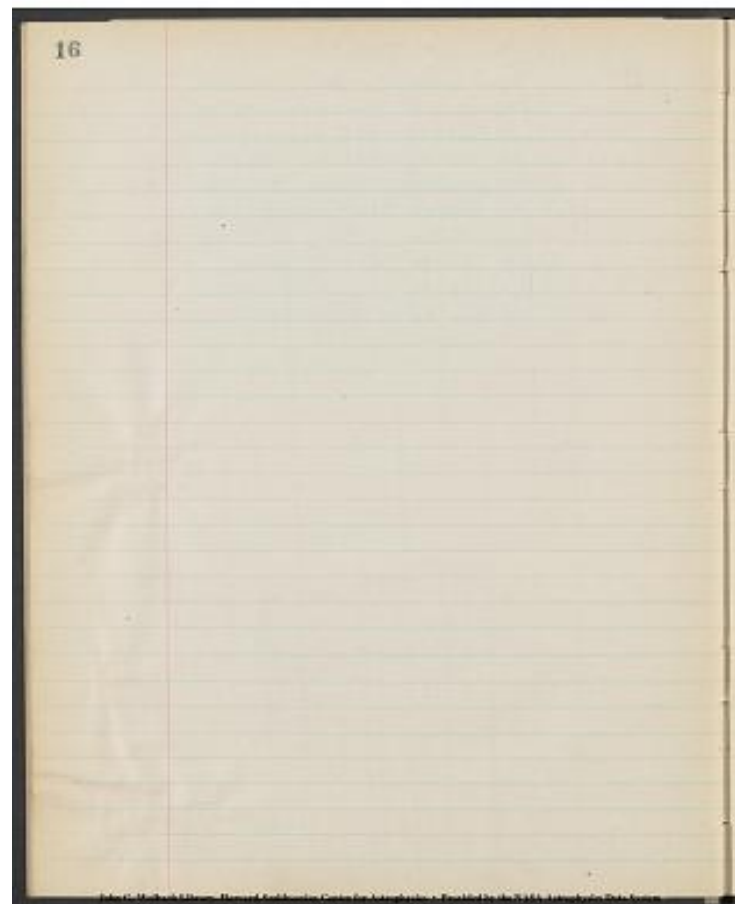
| Line | n | m+n | l+m+n | [[mean]]m+n|[[n]]|[[m+n]]|dm|dl|

	100	150	325	105	155	93	24	69	47
	100	170	320	105	180	93	-5	98	59
	80	165	320	85	175	120	00	120	67
	60	150	320	60	155	159	24	135	71
K	120	140	315	130	150	60	30	30	24
Z	40	115	315	40	120	203	74	129	70
eta (n)	30	80	310	30	85	236	120	116	66
a	20	55	310	20	60	'	159	'	'
iota	20	40	310	20	45	'	190	'	'
K (kappa)	20	30	310	20	30	'	236	'	'

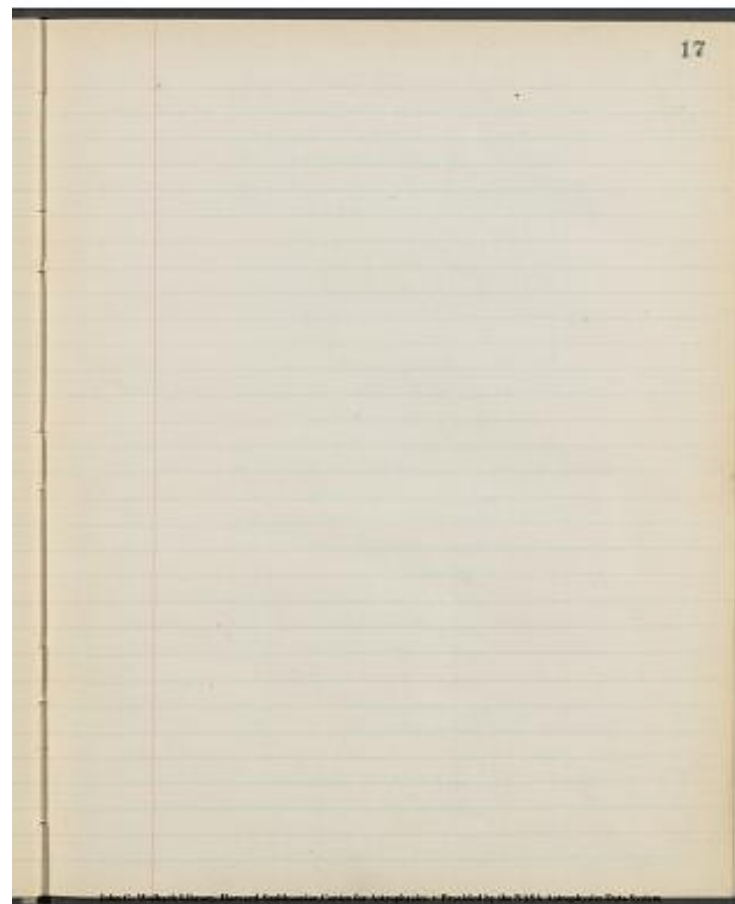
[[2 graphs]]



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Extracted Aug-29-2022 05:00:12



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Extracted Aug-29-2022 05:00:12

Centauri B Y 7541 mu gamma 2605 Reduced to 770

[[margin]]long[[/margin]]

[[10 column table]]

Line|u|w+u|l+m+n|[[n bar]]|[[m+n bar]]|[[u]]|w+u|dw|dl

1	30	40	380	60	80	78	92	14	12
2	30	50	380	60	100	78	103	25	21
3	45	55	380	90	110	98	108	10	09
4	50	55	380	100	110	103	108	05	04
5	50	60	380	100	120	103	114	11	10
6	50	70	380	100	140	103	122	19	16
7	60	75	380	120	150	114	128	14	12
8	70	85	380	140	170	122	136	14	12
9	80	90	380	160	180	132	141	09	08
10	80	90	380	160	180	132	141	09	08
11	80	100	380	160	200	132	150	18	15
12	95	105	380	195	215	148	156	08	07
13	105	110	380	215	225	156	160	04	04
14	100	120	380	205	245	152	168	16	14
15	100	120	380	205	245	152	168	16	14
16	120	130	380	245	265	168	174	06	05
17	130	140	380	265	285	174	182	08	07
18	135	150	380	275	305	178	188	10	09
19	145	155	380	295	315	184	191	07	06
20	140	165	380	285	335	182	198	16	14
21	170	180	380	345	365	201	207	06	05
22	175	186	380	355	365	204	207	03	03
23	170	190	380	345	385	201	214	13	11
24	180	200	380	365	405	207	219	12	10
25	175	220	380	355	445	204	231	27	22
26	220	250	380	445	510	231	251	20	17
27	240	270	380	490	550	245	264	19	16
28	270	280	380	550	570	264	270	06	05
29	285	290	380	580	590	272	276	04	04
30	300	310	380	610	630	284	293	09	08

18
Centauri B Y 7541 mu gamma 2605 Reduced to 770

Long

Line	u	w+u	l+m+n	[[n bar]]	[[m+n bar]]	[[u]]	w+u	dw	dl
1	30	40	380	60	80	78	92	14	12
2	30	50	380	60	100	78	103	25	21
3	45	55	380	90	110	98	108	10	09
4	50	55	380	100	110	103	108	05	04
5	50	60	380	100	120	103	114	11	10
6	50	70	380	100	140	103	122	19	16
7	60	75	380	120	150	114	128	14	12
8	70	85	380	140	170	122	136	14	12
9	80	90	380	160	180	132	141	09	08
10	80	90	380	160	180	132	141	09	08
11	80	100	380	160	200	132	150	18	15
12	95	105	380	195	215	148	156	08	07
13	105	110	380	215	225	156	160	04	04
14	100	120	380	205	245	152	168	16	14
15	100	120	380	205	245	152	168	16	14
16	120	130	380	245	265	168	174	06	05
17	130	140	380	265	285	174	182	08	07
18	135	150	380	275	305	178	188	10	09
19	145	155	380	295	315	184	191	07	06
20	140	165	380	285	335	182	198	16	14
21	170	180	380	345	365	201	207	06	05
22	175	186	380	355	365	204	207	03	03
23	170	190	380	345	385	201	214	13	11
24	180	200	380	365	405	207	219	12	10
25	175	220	380	355	445	204	231	27	22
26	220	250	380	445	510	231	251	20	17
27	240	270	380	490	550	245	264	19	16
28	270	280	380	550	570	264	270	06	05
29	285	290	380	580	590	272	276	04	04
30	300	310	380	610	630	284	293	09	08

18 C. H. Payne, Harvard-Smithsonian Center for Astrophysics, Transcribed and Reviewed by Digital Volunteers, Extracted Aug-29-2022 05:00:12

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[[Centauri B]] WP 2605 770

Line |u|w+u||w+u|m-bar|m-bar+c-bar|[u]||w+u||dw|dl

4431	305	320	380	620	650	288	303	15	13
4415	285	310	380	580	630	272	293	21	18
4405	290	310	385	580	620	272	288	16	14
4402	280	310	385	560	620	266	288	22	18
4395	260	310	385	520	620	254	288	34	27
4384	230	310	385	460	620	236	288	52	38
4375	275	305	385	550	610	264	284	20	17
4370	290	305	385	580	610	272	284	12	10
4367	290	300	385	580	600	272	280	08	07
4363	295	300	385	595	600	278	280	02	02
4359	290	300	385	580	600	272	280	08	07
4355	285	300	385	570	600	270	280	10	09
4352	270	300	385	540	600	260	280	20	17
4340	265	300	385	540	600	257	280	23	19
4326	230	295	385	460	595	237	278	41	31
4316	265	295	385	530	595	257	278	21	18
4313	235	290	385	470	580	239	272	33	26
4310	200	290	385	400	580	218	272	54	39
4303	230	290	385	460	580	236	272	36	28
4300	220	290	385	440	580	230	272	42	32
4299	215	290	385	430	580	226	272	46	34
4294	240	290	385	480	580	242	272	30	24
4290	260	285	385	520	570	254	270	16	14
4288	265	285	385	530	570	257	270	13	11
4283	260	285	385	520	570	255	270	15	13
4280	220	285	385	440	570	230	270	40	31
4275	210	285	385	420	570	224	270	46	34
4268	260	285	385	520	570	254	270	16	14
4261	230	280	385	460	560	236	266	30	24
42568	230	280	385	460	560	236	266	30	24

Handwritten astronomical data table for Centauri B, showing spectral line measurements. The table includes columns for wavelength (Å), intensity (I), and other parameters. The data is organized into two main sections, one for the H&K lines and another for the Ca lines.

Line	Wavelength (Å)	Intensity (I)	Other Parameters
4431	305	320	380 620 650 288 303 15 13
4415	285	310	380 580 630 272 293 21 18
4405	290	310	385 580 620 272 288 16 14
4402	280	310	385 560 620 266 288 22 18
4395	260	310	385 520 620 254 288 34 27
4384	230	310	385 460 620 236 288 52 38
4375	275	305	385 550 610 264 284 20 17
4370	290	305	385 580 610 272 284 12 10
4367	290	300	385 580 600 272 280 08 07
4363	295	300	385 595 600 278 280 02 02
4359	290	300	385 580 600 272 280 08 07
4355	285	300	385 570 600 270 280 10 09
4352	270	300	385 540 600 260 280 20 17
4340	265	300	385 540 600 257 280 23 19
4326	230	295	385 460 595 237 278 41 31
4316	265	295	385 530 595 257 278 21 18
4313	235	290	385 470 580 239 272 33 26
4310	200	290	385 400 580 218 272 54 39
4303	230	290	385 460 580 236 272 36 28
4300	220	290	385 440 580 230 272 42 32
4299	215	290	385 430 580 226 272 46 34
4294	240	290	385 480 580 242 272 30 24
4290	260	285	385 520 570 254 270 16 14
4288	265	285	385 530 570 257 270 13 11
4283	260	285	385 520 570 255 270 15 13
4280	220	285	385 440 570 230 270 40 31
4275	210	285	385 420 570 224 270 46 34
4268	260	285	385 520 570 254 270 16 14
4261	230	280	385 460 560 236 266 30 24
42568	230	280	385 460 560 236 266 30 24

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

4255	225	280	385	450	555	232	264	32	26
4250	250	280	385	500	555	248	264	16	14
4240	260	280	385	510	555	251	264	13	11
4236	245	275	385	490	550	245	264	19	16
4234	240	275	385	480	550	242	264	22	18
4230	240	270	385	480	540	242	260	18	15
4227	160	270	385	320	540	192	260	68	46
4220	250	270	385	500	540	250	260	10	09
4215	220	270	385	440	540	230	260	30	24
4211	240	270	385	480	540	242	260	18	15
4207	250	270	385	500	540	239	260	10	09
4205	735	270	385	470	540	239	260	21	18
4202	210	270	385	420	540	224	260	36	28
4199	205	270	390	405	530	219	257	38	30
4197	220	270	390	435	530	228	257	29	23
4193	230	265	390	455	520	234	254	20	17
4189	210	265	390	415	520	222	254	32	26
4184	220	265	390	415	570	228	254	26	21
4182	220	265	390	435	520	225	254	29	23
4179	8 215	265	390	425	520	225	254	29	23
4173	210	260	390	415	510	222	251	29	23
4168	215	260	390	425	510	225	251	26	21
4166	235	260	390	465	510	237	251	17	12
4162	230	260	390	455	510	234	251	17	14
4160	215	260	390	425	510	225	251	26	21
4157	210	260	390	415	510	222	251	29	23
4152	215	255	390	425	505	225	250	25	21
4150	220	255	390	435	505	228	250	22	18
4149	210	255	390	415	505	222	250	28	23
4144	185	255	390	365	505	207	250	43	33
4140	235	255	390	465	505	237	250	13	11

20
x Contours B 4-7541 up 2605

Long

4205	225	280	385	450	555	232	264	32	26
4200	250	280	385	500	555	248	264	16	14
4195	260	280	385	510	555	251	264	13	11
4190	245	275	385	490	550	245	264	19	16
4185	240	275	385	480	550	242	264	22	18
4180	240	270	385	480	540	242	260	18	15
4175	160	270	385	320	540	192	260	68	46
4170	250	270	385	500	540	250	260	10	09
4165	220	270	385	440	540	230	260	30	24
4160	240	270	385	480	540	242	260	18	15
4155	250	270	385	500	540	239	260	10	09
4150	735	270	385	470	540	239	260	21	18
4145	210	270	385	420	540	224	260	36	28
4140	205	270	390	405	530	219	257	38	30
4135	220	270	390	435	530	228	257	29	23
4130	230	265	390	455	520	234	254	20	17
4125	210	265	390	415	520	222	254	32	26
4120	220	265	390	415	570	228	254	26	21
4115	220	265	390	435	520	225	254	29	23
4110	8 215	265	390	425	520	225	254	29	23
4105	210	260	390	415	510	222	251	29	23
4100	215	260	390	425	510	225	251	26	21
4095	235	260	390	465	510	237	251	17	12
4090	230	260	390	455	510	234	251	17	14
4085	215	260	390	425	510	225	251	26	21
4080	210	260	390	415	510	222	251	29	23
4075	215	255	390	425	505	225	250	25	21
4070	220	255	390	435	505	228	250	22	18
4065	210	255	390	415	505	222	250	28	23
4060	185	255	390	365	505	207	250	43	33
4055	235	255	390	465	505	237	250	13	11

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21
Centauri B

[[psi]]-741 [[mu gamma]] 2605-

[[10 column table]]

|line|u|w+u|+w+u|u[[bar]]|w+u[[bar]]|u[[bar]]|w[[bar]]+u|dw|de

4137	230	250	390	455	495	234	246	12	10
4135	210	250	390	410	495	220	246	26	21
4133	205	250	390	405	495	219	246	27	22
4129	230	250	390	455	495	234	246	12	10
4128	230	250	390	455	495	234	246	12	10
4121	230	250	390	455	495	234	246	12	10
4119	230	250	390	455	495	234	246	12	10
4115	225	250	390	445	495	231	246	15	13
4112	230	245	390	455	485	234	244	10	09
4111	235	245	390	465	485	237	244	07	06
4104	210	245	390	415	485	222	244	22	18
4101	200	245	390	395	485	216	244	28	23
4097	210	240	390	415	475	222	240	18	15
4090	230	241	390	455	475	234	240	06	05
4087	220	240	390	435	475	228	240	12	10
4082	225	240	390	445	475	231	240	09	08
4078	195	235	390	385	465	214	237	23	19
4077	200	235	390	395	465	216	237	21	18
4072	180	235	390	355	465	204	237	33	26
4068	180	230	390	355	455	204	234	30	24
4063	150	230	390	295	455	184	234	50	37
4059	185	230	390	365	455	207	234	27	22
4058	210	230	390	415	455	222	234	12	10
4055	210	225	390	415	445	222	231	09	08
4053	190	225	390	375	445	210	231	21	18
4046	140	220	390	275	435	178	228	50	37
4042	210	220	390	415	435	222	228	06	05
4036	190	220	390	375	435	210	228	18	15
4033	160	220	390	315	435	191	228	37	29
4031	160	220	390	315	435	191	228	37	29

Handwritten astronomical data table on aged paper, showing columns for line number, wavelength (u), and various spectral measurements. The table is titled "Centauri B" and "2605-". The data is organized into columns corresponding to the header in the adjacent block.

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Extracted Aug-29-2022 05:00:12

Centauri B

- 7541

2605

[[margin]]Long[[/margin]]

Line|u|m+u|l+m+u|n-bar|m-bar+n-bar|[n]||[m+n]|dm|dl

4025	175	220	390	345	435	201	228	17	14
4022	200	220	390	395	435	216	228	12	10
4021	195	215	390	385	425	214	225	11	10
4018	205	215	390	405	425	219	225	06	05
4017	190	215	390	375	425	210	225	15	13
4016	190	210	390	375	415	210	222	12	10
4013	190	210	390	375	415	210	222	12	10
4009	190	205	390	375	405	210	219	09	08
4006	160	200	390	315	395	191	216	25	21
4002	185	195	390	365	385	207	214	07	06
3999	165	190	390	325	375	194	210	16	14
3997	170	180	390	335	355	198	204	06	05
3995	180	180	390	355	355	204	204	00	00
3990	150	165	390	295	325	184	194	10	09
3988	140	155	390	275	305	178	188	10	09

Centauri A C-7541 - e607

[[delta]]|180|355|400|350|690|202|328|126|69

[[epsilon]]|250|370|400|485|720|244|360|114|65

260 ~~7~~

[[beta]]|360|380|380|730|770|376| -

22 Centauri B C-7541 - e607

Long

4025	175	220	390	345	435	201	228	17	14
4022	200	220	390	395	435	216	228	12	10
4021	195	215	390	385	425	214	225	11	10
4018	205	215	390	405	425	219	225	06	05
4017	190	215	390	375	425	210	225	15	13
4016	190	210	390	375	415	210	222	12	10
4013	190	210	390	375	415	210	222	12	10
4009	190	205	390	375	405	210	219	09	08
4006	160	200	390	315	395	191	216	25	21
4002	185	195	390	365	385	207	214	07	06
3999	165	190	390	325	375	194	210	16	14
3997	170	180	390	335	355	198	204	06	05
3995	180	180	390	355	355	204	204	00	00
3990	150	165	390	295	325	184	194	10	09
3988	140	155	390	275	305	178	188	10	09

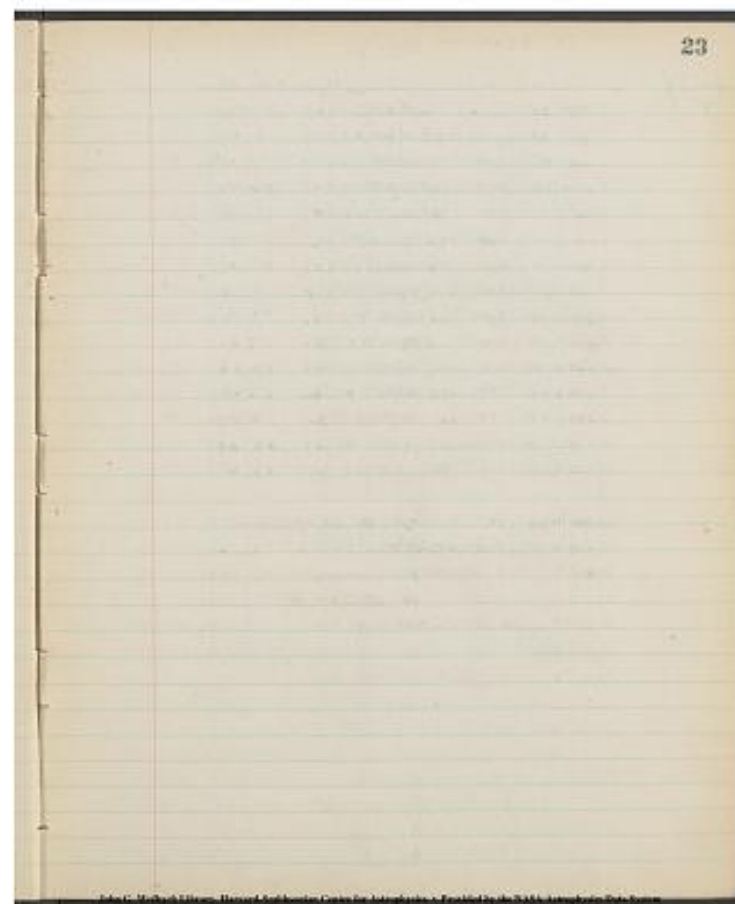
Centauri A C-7541 - e607

180	355	400	350	690	202	328	126	69
250	370	400	485	720	244	360	114	65
260	7							
360	380	380	730	770	376			

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Centauri B
- 7550
2603
Red. 770
[[Epsilon]] Scorpii
Long

[[10 column table]]

Line | u | w+u | l+w+u | u[[bar]] | w+u[[bar]] | [u][w+u] | dw | dl |

1	65	120	800	65	115	82	111	23	
2	110	130	800	105	125	106	116	10	09
3	105	140	800	100	135	103	120	17	14
4	110	160	800	105	155	106	130	24	20
5	130	170	800	125	175	116	138	22	18
6	130	205	800	125	195	116	148	32	26
7	190	230	800	185	220	143	158	15	13
8	230	260	800	220	250	158	170	12	10
9	240	275	800	230	265	162	174	12	10
10	210	295	800	200	285	150	182	32	26
11	245	310	800	235	300	164	186	22	18
12	275	340	800	265	330	174	196	22	18
13	250	350	800	240	340	166	200	34	27
14	270	375	800	260	360	172	206	34	27
15	340	405	800	330	390	196	215	19	16
16	380	430	805	365	410	207	220	13	11
17	390	440	805	375	420	210	224	14	12
18	420	470	805	400	450	218	232	14	12
19	460	490	805	440	470	230	239	09	08
20	470	505	805	450	485	232	244	12	10
21	480	520	805	460	500	236	248	12	10
22	495	530	805	475	505	240	250	10	09
23	490	545	805	470	520	239	254	15	13
24	545	570	805	520	545	254	262	08	07
25	520	580	805	500	555	248	265	17	14
26	555	590	805	530	565	257	268	11	10
27	586	600	805	555	575	265	271	06	05
28	580	605	805	555	580	265	272	07	06
29	570	610	805	545	585	262	274	12	10
30	545	610	805	520	585	254	274	20	17

24

Long

4 - 7550 - 2603

Red. 770

Line | u | w+u | l+w+u | u[[bar]] | w+u[[bar]] | [u][w+u] | dw | dl |

1	65	120	800	65	115	82	111	23	
2	110	130	800	105	125	106	116	10	09
3	105	140	800	100	135	103	120	17	14
4	110	160	800	105	155	106	130	24	20
5	130	170	800	125	175	116	138	22	18
6	130	205	800	125	195	116	148	32	26
7	190	230	800	185	220	143	158	15	13
8	230	260	800	220	250	158	170	12	10
9	240	275	800	230	265	162	174	12	10
10	210	295	800	200	285	150	182	32	26
11	245	310	800	235	300	164	186	22	18
12	275	340	800	265	330	174	196	22	18
13	250	350	800	240	340	166	200	34	27
14	270	375	800	260	360	172	206	34	27
15	340	405	800	330	390	196	215	19	16
16	380	430	805	365	410	207	220	13	11
17	390	440	805	375	420	210	224	14	12
18	420	470	805	400	450	218	232	14	12
19	460	490	805	440	470	230	239	09	08
20	470	505	805	450	485	232	244	12	10
21	480	520	805	460	500	236	248	12	10
22	495	530	805	475	505	240	250	10	09
23	490	545	805	470	520	239	254	15	13
24	545	570	805	520	545	254	262	08	07
25	520	580	805	500	555	248	265	17	14
26	555	590	805	530	565	257	268	11	10
27	586	600	805	555	575	265	271	06	05
28	580	605	805	555	580	265	272	07	06
29	570	610	805	545	585	262	274	12	10
30	545	610	805	520	585	254	274	20	17

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Extracted Aug-29-2022 05:00:12

epsilon Scorpii

[[10 column table]]

|line|u|w+u|l+w+u|u[[bar]]|w+u[[bar]]|u|w+u|dw|dl|

31	605	620	805	580	595	272	278	06	05
32	600	620	810	570	590	270	276	06	05
33	580	620	810	550	590	264	276	12	10
34	570	625	810	540	545	260	278	18	15
35	570	630	810	540	600	260	280	20	17
36	570	630	810	540	600	260	280	20	17
37	590	640	810	560	610	266	284	18	15
38	600	640	810	570	620	270	288	18	15
39	595	650	810	565	620	268	288	20	17
40	620	650	810	590	620	276	288	12	10
41	560	660	810	530	630	254	293	39	30
42	610	660	810	580	630	272	293	21	18
43	580	665	810	550	630	264	293	29	23
44	610	665	810	580	630	272	293	21	18
45	625	665	810	595	630	278	293	15	13
46	645	665	810	615	630	286	293	07	06
47	655	670	810	625	640	291	298	07	06
48	650	670	810	620	640	288	298	10	09
49	645	670	810	615	640	286	298	12	10
50	620	670	810	590	640	276	298	22	18
51	620	670	810	590	640	276	298	22	18
52	610	670	810	580	640	272	298	26	21
53	620	670	810	590	640	276	298	22	18
54	610	670	810	580	640	272	298	26	21
55	610	670	810	580	640	272	298	26	21
56	610	670	810	580	640	272	298	26	21
57	580	670	810	540	640	260	298	38	30
58	610	670	810	580	640	272	298	26	21
59	610	670	810	580	640	272	298	26	21
60	610	670	810	580	640	272	298	26	21

epsilon Scorpii

25

line	u	w+u	l+w+u	u[[bar]]	w+u[[bar]]	u	w+u	dw	dl
31	605	620	805	580	595	272	278	06	05
32	600	620	810	570	590	270	276	06	05
33	580	620	810	550	590	264	276	12	10
34	570	625	810	540	545	260	278	18	15
35	570	630	810	540	600	260	280	20	17
36	570	630	810	540	600	260	280	20	17
37	590	640	810	560	610	266	284	18	15
38	600	640	810	570	620	270	288	18	15
39	595	650	810	565	620	268	288	20	17
40	620	650	810	590	620	276	288	12	10
41	560	660	810	530	630	254	293	39	30
42	610	660	810	580	630	272	293	21	18
43	580	665	810	550	630	264	293	29	23
44	610	665	810	580	630	272	293	21	18
45	625	665	810	595	630	278	293	15	13
46	645	665	810	615	630	286	293	07	06
47	655	670	810	625	640	291	298	07	06
48	650	670	810	620	640	288	298	10	09
49	645	670	810	615	640	286	298	12	10
50	620	670	810	590	640	276	298	22	18
51	620	670	810	590	640	276	298	22	18
52	610	670	810	580	640	272	298	26	21
53	620	670	810	590	640	276	298	22	18
54	610	670	810	580	640	272	298	26	21
55	610	670	810	580	640	272	298	26	21
56	610	670	810	580	640	272	298	26	21
57	580	670	810	540	640	260	298	38	30
58	610	670	810	580	640	272	298	26	21
59	610	670	810	580	640	272	298	26	21
60	610	670	810	580	640	272	298	26	21

Project PHaEDRA - Cecilia H. Payne #39
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26

Scorpii
7550
2603
Long

[[10 column table]]

|line|u|w+u|l+w+u|u[[bar]]|w+u[[bar]]|[[u]]|w+u|dw|dl|

31	605	620	805	580	595	272	278	06	05
61	580	670	810	550	640	264	298	34	27
62	560	670	810	530	640	257	298	41	31
63	670	665	810	580	630	272	293	21	18
64	615	665	810	580	630	272	293	21	18
65	640	665	810	605	630	282	293	11	10
66	610	660	810	575	625	271	291	20	17
67	560	660	810	530	625	257	291	34	27
68	575	660	810	545	625	262	291	29	23
69	570	655	810	540	620	260	288	28	23
70	600	655	810	570	620	270	288	18	15
71	560	650	815	530	615	257	286	29	23
72	480	645	815	455	610	242	284	42	32
73	515	645	815	485	610	244	284	40	31
74	530	645	815	500	610	248	284	36	28
75	580	640	815	550	605	264	282	18	15
76	530	640	815	500	605	248	282	34	27
77	500	640	815	470	605	239	282	43	33
78	525	635	815	495	600	246	280	34	27
79	520	630	815	490	595	245	278	33	26
80	470	630	815	445	595	231	278	47	35
81	460	625	815	435	590	228	276	48	36
82	510	620	815	480	585	242	274	32	26
83	495	620	815	470	585	239	274	35	28
84	480	620	815	455	585	234	274	40	31
85	465	620	815	440	585	230	274	44	33
86	275	610	815	260	575	172	271	99	66
87	455	610	815	430	575	226	271	45	34
88	520	610	815	490	575	245	271	26	21
89	550	610	815	520	575	254	271	17	14
90	510	605	815	480	570	242	270	28	23

26

6. Scorpii 4 7550 w of 2603

Long

Line	u	w+u	l+w+u	u[[bar]]	w+u[[bar]]	[[u]]	w+u	dw	dl
31	605	620	805	580	595	272	278	06	05
61	580	670	810	550	640	264	298	34	27
62	560	670	810	530	640	257	298	41	31
63	670	665	810	580	630	272	293	21	18
64	615	665	810	580	630	272	293	21	18
65	640	665	810	605	630	282	293	11	10
66	610	660	810	575	625	271	291	20	17
67	560	660	810	530	625	257	291	34	27
68	575	660	810	545	625	262	291	29	23
69	570	655	810	540	620	260	288	28	23
70	600	655	810	570	620	270	288	18	15
71	560	650	815	530	615	257	286	29	23
72	480	645	815	455	610	242	284	42	32
73	515	645	815	485	610	244	284	40	31
74	530	645	815	500	610	248	284	36	28
75	580	640	815	550	605	264	282	18	15
76	530	640	815	500	605	248	282	34	27
77	500	640	815	470	605	239	282	43	33
78	525	635	815	495	600	246	280	34	27
79	520	630	815	490	595	245	278	33	26
80	470	630	815	445	595	231	278	47	35
81	460	625	815	435	590	228	276	48	36
82	510	620	815	480	585	242	274	32	26
83	495	620	815	470	585	239	274	35	28
84	480	620	815	455	585	234	274	40	31
85	465	620	815	440	585	230	274	44	33
86	275	610	815	260	575	172	271	99	66
87	455	610	815	430	575	226	271	45	34
88	520	610	815	490	575	245	271	26	21
89	550	610	815	520	575	254	271	17	14
90	510	605	815	480	570	242	270	28	23

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Extracted Aug-29-2022 05:00:12

27

epsilon Scorpis

[[10 columned table]]

Line	n	m+n	m+n	[[mean]]	n	[[mean]]	m+n	[[n]]	[[m+n]]	dm	dl
91	500	600	815	470	565	239	268	29	23		
92	450	600	815	420	565	224	268	44	33		
93	540	600	815	505	565	250	268	18	15		
94	515	595	815	485	560	244	266	22	18		
95	420	595	815	395	560	216	266	50	37		
96	300	590	815	280	555	180	265	85	54		
97	520	585	815	490	550	245	264	19	16		
98	200	575	815	190	545	146	262	116	66		
99	280	570	815	255	540	171	260	89	56		
100	260	570	815	245	540	168	260	92	57		
101	405	565	815	380	535	212	258	46	34		
102	310	560	815	290	530	183	257	74	49		
103	410	560	815	385	530	214	257	43	33		
104	410	550	815	385	520	214	254	40	31		
105	310	550	820	290	515	183	252	69	47		
106	280	545	820	260	510	172	251	79	52		
107	345	535	820	325	500	194	248	54	39		
108	340	530	820	320	500	192	248	56	40		
109	340	530	820	320	500	192	248	56	40		
110	435	525	820	410	495	222	246	24	10		
111	390	520	820	365	490	207	245	38	30		
112	360	520	820	340	490	200	245	45	24		
113	400	520	820	375	490	210	245	35	28		
114	135	510	820	125	480	116	242	126	69		
115	240	500	820	225	470	160	239	79	52		
116	340	500	820	320	470	192	239	47	35		
117	300	495	820	280	465	180	237	57	41		
118	250	490	820	235	460	164	236	72	48		
119	245	485	820	230	455	162	234	72	48		
120	300	480	820	280	450	180	232	52	38		

epsilon Scorpis

Line n m+n m+n [[mean]] n [[mean]] m+n [[n]] [[m+n]] dm dl

91	500	600	815	470	565	239	268	29	23		
92	450	600	815	420	565	224	268	44	33		
93	540	600	815	505	565	250	268	18	15		
94	515	595	815	485	560	244	266	22	18		
95	420	595	815	395	560	216	266	50	37		
96	300	590	815	280	555	180	265	85	54		
97	520	585	815	490	550	245	264	19	16		
98	200	575	815	190	545	146	262	116	66		
99	280	570	815	255	540	171	260	89	56		
100	260	570	815	245	540	168	260	92	57		
101	405	565	815	380	535	212	258	46	34		
102	310	560	815	290	530	183	257	74	49		
103	410	560	815	385	530	214	257	43	33		
104	410	550	815	385	520	214	254	40	31		
105	310	550	820	290	515	183	252	69	47		
106	280	545	820	260	510	172	251	79	52		
107	345	535	820	325	500	194	248	54	39		
108	340	530	820	320	500	192	248	56	40		
109	340	530	820	320	500	192	248	56	40		
110	435	525	820	410	495	222	246	24	10		
111	390	520	820	365	490	207	245	38	30		
112	360	520	820	340	490	200	245	45	24		
113	400	520	820	375	490	210	245	35	28		
114	135	510	820	125	480	116	242	126	69		
115	240	500	820	225	470	160	239	79	52		
116	340	500	820	320	470	192	239	47	35		
117	300	495	820	280	465	180	237	57	41		
118	250	490	820	235	460	164	236	72	48		
119	245	485	820	230	455	162	234	72	48		
120	300	480	820	280	450	180	232	52	38		

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28 Loug

Scorpii X7550 m42603

9 column table

huie u [[?]] ltectu u wtu [u] Lue+u due dl								
128280	475	820	260	445	172	231	59	42
122255	470	820	240	440	166	230	64	44
123240	470	820	225	440	160	230	70	58
124220	465	820	205	435	152	228	76	50
125280	460	820	265	430	174	226	52	38
126250	460	820	235	430	164	226	62	44
121300	460	820	280	430	180	226	46	34
128300	455	820	225	425	160	225	65	45
130228	450	820	205	425	152	225	73	49
131255	445	820	240	420	166	224	58	41
132170	435	820	160	410	132	220	88	56
133310	430	820	290	405	193	219	36	28
134240	430	820	225	405	160	219	59	42
135220	430	820	205	405	152	219	67	46
136300	425	820	280	400	180	218	38	30
137295	420	820	275	395	178	216	38	38
138280	420	820	265	395	174	216	42	32
139280	410	820	265	385	174	214	40	31
140290	400	820	270	375	176	210	34	27
144250	400	820	235	375	164	210	46	34
142280	400	825	260	370	172	208	36	28
143280	305	825	260	370	172	208	36	28
144340	390	825	315	360	191	206	15	13
145300	380	825	280	355	180	204	24	20
146210	375	825	195	350	148	202	54	39
147230	365	825	215	340	156	200	44	33
148240	360	825	220	335	158	198	40	31
140190	355	825	190	325	134	196	62	44
150205	350	825	190	325	146	194	48	36

28 Loug

Scorpii X7550 m42603

Find a new location in the field

128280	475	820	260	445	172	231	59	42
122255	470	820	240	440	166	230	64	44
123240	470	820	225	440	160	230	70	58
124220	465	820	205	435	152	228	76	50
125280	460	820	265	430	174	226	52	38
126250	460	820	235	430	164	226	62	44
121300	460	820	280	430	180	226	46	34
128300	455	820	225	425	160	225	65	45
130228	450	820	205	425	152	225	73	49
131255	445	820	240	420	166	224	58	41
132170	435	820	160	410	132	220	88	56
133310	430	820	290	405	193	219	36	28
134240	430	820	225	405	160	219	59	42
135220	430	820	205	405	152	219	67	46
136300	425	820	280	400	180	218	38	30
137295	420	820	275	395	178	216	38	38
138280	420	820	265	395	174	216	42	32
139280	410	820	265	385	174	214	40	31
140290	400	820	270	375	176	210	34	27
144250	400	820	235	375	164	210	46	34
142280	400	825	260	370	172	208	36	28
143280	305	825	260	370	172	208	36	28
144340	390	825	315	360	191	206	15	13
145300	380	825	280	355	180	204	24	20
146210	375	825	195	350	148	202	54	39
147230	365	825	215	340	156	200	44	33
148240	360	825	220	335	158	198	40	31
140190	355	825	190	325	134	196	62	44
150205	350	825	190	325	146	194	48	36

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 Transcribed and Reviewed by Digital Volunteers
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E Scarpu

Line u0 W+u l+w+u u w+u [u] [w+u] du de
 151|250|340|825|235|320|164|196|3E|26
 152|125|330|825|115|310|111|190|79|52
 153|290|325|830|270|300|176|186|10|09
 154|110|310|830|105|290|106|183|77|51
 155|240|305|830|220|285|158|182|24|20
 156|225|300|830|210|280|154|180|26|21
 157|240|290|830|220|270|158|176|18|15
 158|245|280|830|225|260|160|172|12|10
 159|249|279|830|220|250|158|170|12|10
 160|165|260|830|155|240|130|166|36|28
 161|160|245|830|150|225|128|160|32|26
 162|155|230|830|145|215|125|156|31|25
 163|150|225|830|140|210|122|154|32|26
 164| 80|210|830| 75|195| 89|148|59|42
 [[\slashthrough]] column 1 165-180 [[\slashthrough]]

E Scarpu									
Line u0 W+u l+w+u u w+u [u] [w+u] du de									
151	250	340	825	235	320	164	196	3E	26
152	125	330	825	115	310	111	190	79	52
153	290	325	830	270	300	176	186	10	09
154	110	310	830	105	290	106	183	77	51
155	240	305	830	220	285	158	182	24	20
156	225	300	830	210	280	154	180	26	21
157	240	290	830	220	270	158	176	18	15
158	245	280	830	225	260	160	172	12	10
159	249	279	830	220	250	158	170	12	10
160	165	260	830	155	240	130	166	36	28
161	160	245	830	150	225	128	160	32	26
162	155	230	830	145	215	125	156	31	25
163	150	225	830	140	210	122	154	32	26
164	80	210	830	75	195	89	148	59	42
165									
166									
167									
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 Extracted Aug-29-2022 05:00:12

30 LOUG

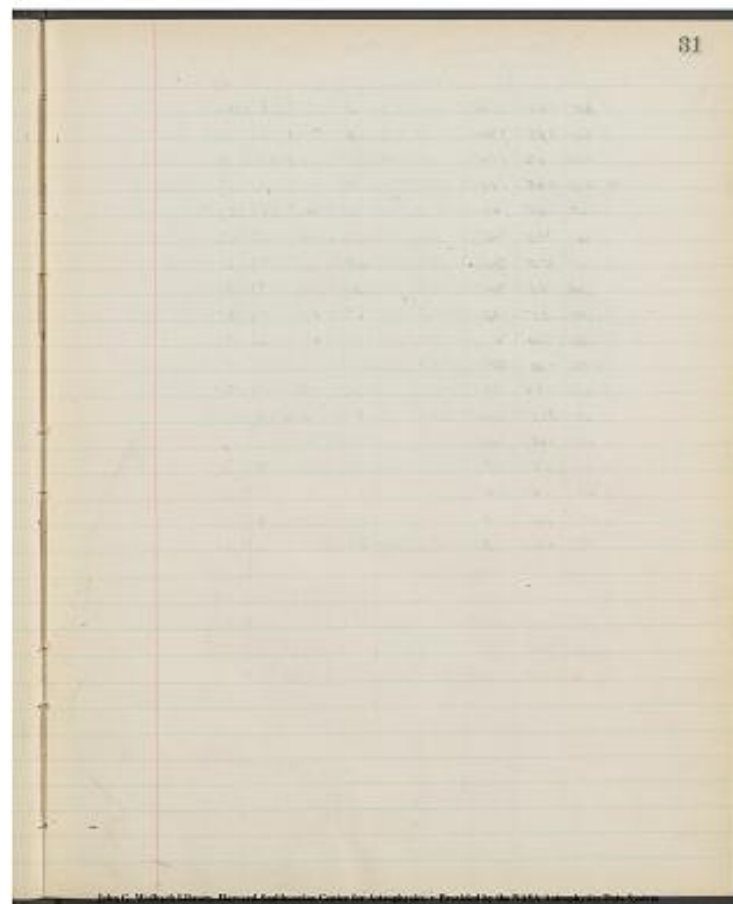
X-7551 ml 2601 + 2602
0 Scalpi

||huE|u|m+u|tm+u|m|m+u||u||m+u||dm|dl||
---B|545|680|750|550|700|264|337|73|49||
---?|690|770|665|685|765|324|---||
4267|750|770|780|740|760|400|440|40|31||
4215|750|765|780|740|755|400|---||
4177|745|765|785|730|750|376|420|44|33||
4172|740|765|785|725|750|367|420|63|39||
---s|655|760|785|640|745|298|410|12|10||
4077|730|760|790|710|740|348|400|52|38||
4046|730|755|790|710|735|348|384|36|28||
---E|170|680|785|165|660|134|308|174|80||
---R|180|620|785|100|610|103|280|177|80||
---3|235|500|780|230|295|164|246|82|53||
---n|60|250|775|60|250|78|170|92|57||
---o|40|120|775|40|120|64|114|50|37||
---c|30|75|770|30|75|54|89|35|28||
---K|20|55|770|20|55|46|75|29|23||
---?|20|45|770|20|45|46|68|22|18||
---m|15|40|770|15|40|40|64|24|20||

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Extracted Aug-29-2022 05:00:12

31

[[no entries]]



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32

Jgem

[[[]] 3 geminor [[?]] No 1 Red. to 330

C-19345 mu phi 2613

[[left margin]] Jgem [[/left margin]]

[[10 columns table]]

[Line][n][m+n][+m+n][[[[mean]]n][[[[mean]]m+n][[n][m+n]][dm|dl]

beta|65|125|330|65|125|140|208|68|46|

gamma|120|195|330|120|195|202|271|69|47|

delta|105|185|330|105|185|187|262|75|50|

epsilon|75|160|330|75|160|151|242|91|57|

zeta|50|125|335|50|125|123|208|85|54|

eta|30|85|340|30|80|96|156|60|42|

theta|30|55|340|30|55|96|128|32|26|

iota|20|40|340|20|35|70|110|40|31|

kappa|20|35|340|20|35|70|101|31|25|

lambda|20|30|340|20|30|70|96|26|21|

#2 mu phi 2614

[[10 columns table]]

beta|250|290|360|230|265|302|336|34|27|

gamma|310|340|360|285|310|354|395|41|31|

delta|300|340|365|270|310|340|395|55|

epsilon|270|325|370|240|

zeta|220|280|370|195|

eta|170|230|370|150|

theta|135|195|370|120|

iota|120|170|370|105|

kappa|110|150|370|95|

lambda|100|135|370|90|

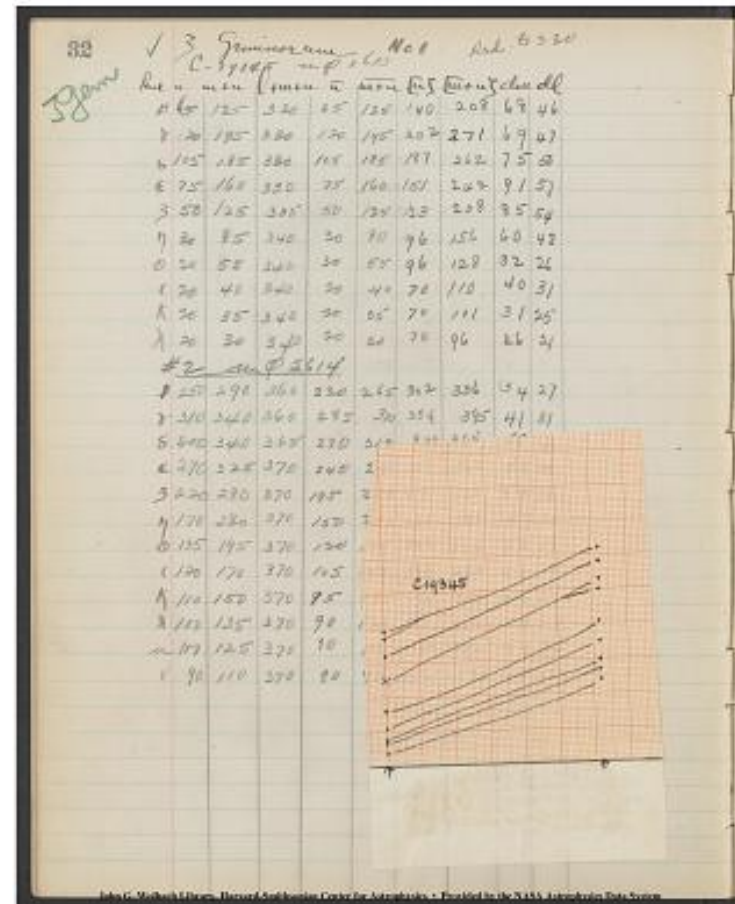
mu|100|125|370|90|

nu|90|110|370|80|

[[graph]]C19345

John G. Wolbach Library, Harvard-Smithsonian Center for Astrophysics.

Provided by the NASA Astrophysics Data System



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32

Jgem

[[checkmark]] 3 geminor [[?]] No 1 Red to 330

C-19345 [[?]] 2613

[[10 columns table]]

Line|n|m+n|l+m+n|[[[mean]]n|[[[mean]]m+n|[[n|[[m+n|]]dm|dl|

beta|65|125|330|65|125|140|208|68|46|

gamma|120|195|330|120|195|202|271|69|47|

delta|105|185|330|105|185|187|262|75|50|

epsilon|75|160|330|75|160|151|242|91|57|

zeta|50|125|335|50|125|123|208|85|54|

eta|30|85|340|30|80|96|156|60|42|

theta|30|55|340|30|55|96|128|32|26|

iota|20|40|340|20|40|70|110|40|31|

kappa|20|35|240|20|35|70|101|31|25|

lambda|20|30|340|20|30|70|96|26|21|

#2 [?] 5614

[[10 columns table]]

beta|250|290|360|230|265|302|336|34|27|

gamma|310|340|360|285|310|354|395|41|31|

delta|300|340|365|270|310|340|395|55|40|

epsilon|270|325|370|240|290|313|360|47|35|

zeta|220|280|370|195|250|271|323|52|38|

eta|170|230|370|150|205|233|280|47|35|

theta|135|195|370|120|175|212|254|52|38|

iota|120|170|370|105|150|187|233|46|38|

kappa|110|150|370|95|135|174|219|45|34|

lambda|100|135|370|90|120|168|202|34|27|

mu|100|125|370|90|110|168|192|24|20|

nu|90|110|370|80|95|156|174|18|15|

[[graph]]

82 ✓ 3 Geminor Nov 1934

C-19345

32

Line	n	m+n	l+m+n	[[[mean]]n	[[[mean]]m+n	[[n	[[m+n	]]dm	]]dl
beta	65	125	330	65	125	140	208	68	46
gamma	120	195	330	120	195	202	271	69	47
delta	105	185	330	105	185	187	262	75	50
epsilon	75	160	330	75	160	151	242	91	57
zeta	50	125	335	50	125	123	208	85	54
eta	30	85	340	30	80	96	156	60	42
theta	30	55	340	30	55	96	128	32	26
iota	20	40	340	20	40	70	110	40	31
kappa	20	35	240	20	35	70	101	31	25
lambda	20	30	340	20	30	70	96	26	21
#2 [?] 5614									
beta	250	290	360	230	265	302	336	34	27
gamma	310	340	360	285	310	354	395	41	31
delta	300	340	365	270	310	340	395	55	40
epsilon	270	325	370	240	290	313	360	47	35
zeta	220	280	370	195	250	271	323	52	38
eta	170	230	370	150	205	233	280	47	35
theta	135	195	370	120	175	212	254	52	38
iota	120	170	370	105	150	187	233	46	38
kappa	110	150	370	95	135	174	219	45	34
lambda	100	135	370	90	120	168	202	34	27
mu	100	125	370	90	110	168	192	24	20
nu	90	110	370	80	95	156	174	18	15

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Extracted Aug-29-2022 05:00:12

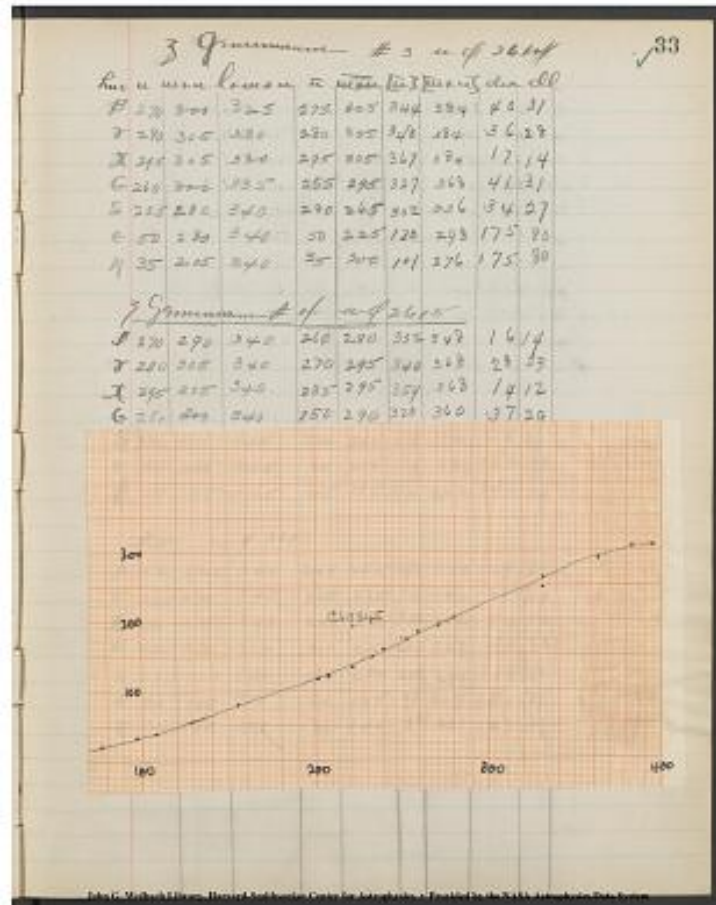
33

zeta geminorum #3 mu chi 2614

[[10 columns table]]

Line|u|m+u|l+m+u|n-bar|m-bar+n-bar|[n]|[m+n]|dm|dl

beta|270|300|325|275|305|344|384|40|31|
 gamma|280|305|330|280|305|348|384|36|28|
 chi|295|305|330|295|305|367|384|17|14|
 G|260|300|335|255|295|327|368|41|31|
 S|235|280|340|230|265|302|336|34|27|
 epsilon|50|230|340|50|225|120|298|175|80|
 kappa|35|205|340|35|200|101|276|175|80|
 zeta [[?]] of mu chi 2615
 beta|270|290|340|260|280|332|348|16|14|
 gamma|280|305|340|270|295|340|368|28|23|
 chi|295|305|340|285|295|354|368|14|12|
 G|260|300|340|250|290|323|360|37|29|
 [[graph]]



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 Extracted Aug-29-2022 05:00:12

33

zeta Geminorum #3 mu phi 2614

[[10 columns table]]

Line|u|m+u|l+m+u|n-bar|m-bar+n-bar|[n]|m+n|dm|dl

beta|270|300|325|275|305|344|384|40|31|
 gamma|280|305|330|280|305|348|384|36|28|
 chi|295|305|330|295|305|367|384|17|14|
 G|260|300|335|255|295|327|368|41|31|
 delta|235|280|340|50|225|120|298|175|80|
 epsilon|50|230|340|50|225|120|298|175|80|
 kappa|35|205|340|35|200|101|276|175|80|

zeta Geminorum # of mu phi 2615

beta|270|290|340|260|280|332|348|16|14|
 gamma|280|305|340|270|295|340|368|28|23|
 chi|295|305|340|285|295|354|368|14|12|
 G|260|300|340|250|290|323|360|37|29|
 delta|230|270|345|60|210|134|284|150|75|
 epsilon|60|220|345|60|210|134|284|150|75|
 kappa|45|195|345|45|185|116|262|146|74|

#5 mu chi 2613

beta|230|260|340|225|255|298|327|29|23|
 gamma|245|275|345|235|265|306|336|30|24|
 chi|260|275|350|210|255|284|327|43|33|
 G|220|270|350|210|255|284|327|43|33|
 delta|190|235|350|180|220|258|294|36|28|
 epsilon|30|175|350|30|165|96|247|151|75|
 kappa|30|150|350|30|140|96|223|127|69|

39 Geminorum #3 of 2614 ✓33

Line	u	m+u	l+m+u	n-bar	m-bar+n-bar	[n]	m+n	dm	dl
beta	270	300	325	275	305	344	384	40	31
gamma	280	305	330	280	305	348	384	36	28
chi	295	305	330	295	305	367	384	17	14
G	260	300	335	255	295	327	368	41	31
delta	235	280	340	50	225	120	298	175	80
epsilon	50	230	340	50	225	120	298	175	80
kappa	35	205	340	35	200	101	276	175	80

zeta Geminorum # of mu phi 2615

beta	270	290	340	260	280	332	348	16	14
gamma	280	305	340	270	295	340	368	28	23
chi	295	305	340	285	295	354	368	14	12
G	260	300	340	250	290	323	360	37	29
delta	230	270	345	60	210	134	284	150	75
epsilon	60	220	345	60	210	134	284	150	75
kappa	45	195	345	45	185	116	262	146	74

#5 mu chi 2613

beta	230	260	340	225	255	298	327	29	23
gamma	245	275	345	235	265	306	336	30	24
chi	260	275	350	210	255	284	327	43	33
G	220	270	350	210	255	284	327	43	33
delta	190	235	350	180	220	258	294	36	28
epsilon	30	175	350	30	165	96	247	151	75
kappa	30	150	350	30	140	96	223	127	69

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34

[[checkmark]] C-19344 Red to 310

A1 [[?]] [[?]] 2618

[[10 column table]]

Line|u|w+u||+w+u||mu||w + mu|u||[w+u]||du|dl|

beta|145|200|310|145|200|112|158|46|34|

gamma|210|270|310|210|270|167|227|60|42|

delta|190|265|315|185|260|145|215|70|48|

epsilon|150|250|315|145|245|112|199|87|55|

zeta|110|205|315|110|200|86|158|72|48|

eta|70|160|315|70|155|54|120|66|46|

theta|58|120|320|50|115|30|90|60|42|

iota|50|75|320|50|85|30|68|38|30|

kappa|45|75|320|50|75|30|59|29|23|

lambda|45|60|320|45|60|20|44|24|20|

mu|35|50|320|35|50|-|30|-|[[empty]]|

#2

[[10 column table]]

beta|270|290|310|270|290|227|269|42|32|

gamma|305|310|310|

delta|300|310|310|

epsilon|290|305|310|

zeta|270|290|310|

eta|240|280|310|

theta|210|255|310|

iota|190|240|310|

kappa|190|230|310|

lambda|180|200|310|

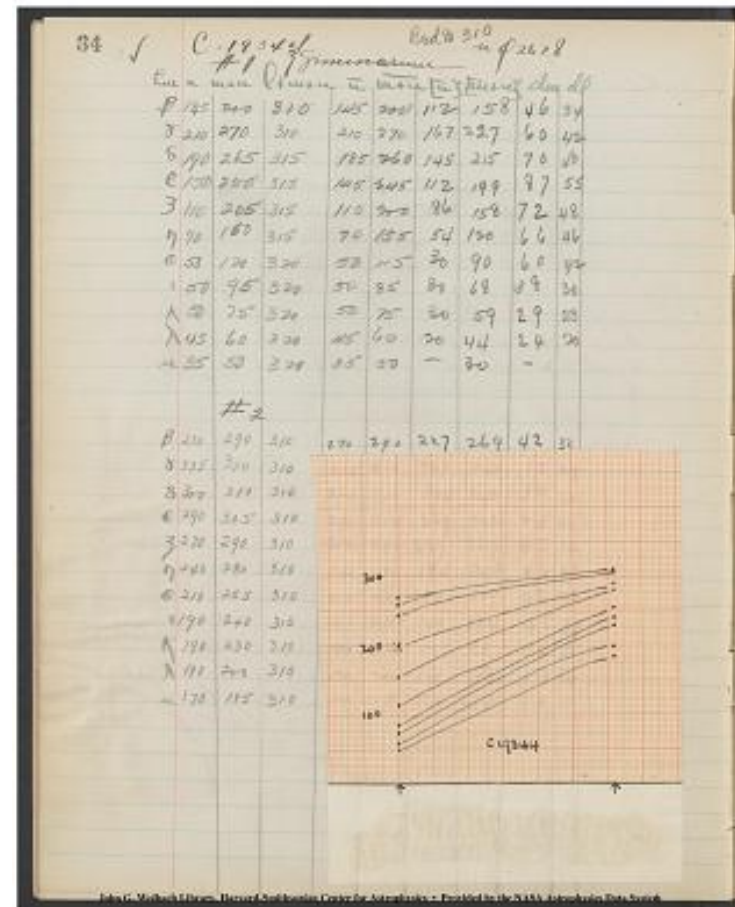
mu|170|185|310|

300 [[graph]]

200 [[graph]]

100 [[graph]]

C19344



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[[checkmark]]C-19344 Red to 310
mu phi 2618
zeta Geminorum
#1

[[10 column table]]

Line|u|w+u|l+w+u|u[[bar]]|w+u[[bar]]|u[[bar]]|w+u|dw|dl

beta|145|200|310|145|200|112|158|46|34
gamma|210|270|310|210|270|167|227|60|42
delta|190|265|315|185|260|145|215|70|48
epsilon|150|250|315|145|245|112|199|87|55
zeta|110|205|315|110|200|86|158|72|48
nu|70|160|315|70|155|54|120|66|46
theta|50|120|320|50|115|30|90|60|42
iota|50|95|320|50|85|30|68|38|30
kappa|50|75|320|50|75|30|59|29|23
lambda|45|60|320|45|60|20|44|24|20
mu|35|50|320|35|50|30|30|30|30

#2

beta|270|290|310|270|290|227|269|42|32
gamma|305|310|310|305|310|333|343|10|09
delta|300|310|310|300|310|304|343|39|30
epsilon|290|305|310|290|305|269|332|63|44
zeta|270|290|310|270|290|227|269|42|32
nu|240|280|310|240|280|194|240|46|34
theta|210|255|310|210|255|167|209|42|32
iota|190|240|310|190|240|149|194|45|34
kappa|190|230|310|190|230|149|185|36|28
lambda|180|200|310|180|200|141|158|17|14
mu|170|185|310|170|185|132|145|13|11

[[partial graph]]

84 ✓ C-19344 Red to 310
#1

Line	u	w+u	l+w+u	u[[bar]]	w+u[[bar]]	u[[bar]]	w+u	dw	dl
beta	145	200	310	145	200	112	158	46	34
gamma	210	270	310	210	270	167	227	60	42
delta	190	265	315	185	260	145	215	70	48
epsilon	150	250	315	145	245	112	199	87	55
zeta	110	205	315	110	200	86	158	72	48
nu	70	160	315	70	155	54	120	66	46
theta	50	120	320	50	115	30	90	60	42
iota	50	95	320	50	85	30	68	38	30
kappa	50	75	320	50	75	30	59	29	23
lambda	45	60	320	45	60	20	44	24	20
mu	35	50	320	35	50	30	30	30	30

#2

Line	u	w+u	l+w+u	u[[bar]]	w+u[[bar]]	u[[bar]]	w+u	dw	dl
beta	270	290	310	270	290	227	269	42	32
gamma	305	310	310	305	310	333	343	10	09
delta	300	310	310	300	310	304	343	39	30
epsilon	290	305	310	290	305	269	332	63	44
zeta	270	290	310	270	290	227	269	42	32
nu	240	280	310	240	280	194	240	46	34
theta	210	255	310	210	255	167	209	42	32
iota	190	240	310	190	240	149	194	45	34
kappa	190	230	310	190	230	149	185	36	28
lambda	180	200	310	180	200	141	158	17	14
mu	170	185	310	170	185	132	145	13	11

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Extracted Aug-29-2022 05:00:12

C-19346 [[mu phi]] 2610, #13Geminorum 37

[[superscript]] Rad to 345 [[/superscript]]

[[10 column table]]

line|u|w+u|l+w+u|u[[bar]]|w+u[[bar]]|u[[bar]]|w+u|dw|dl| [[checkmark]]

110	170	365	115	160	96	130	34	27	
180	250	365	170	235	138	189	51	37	
155	240	360	150	230	122	185	63	44	
115	215	360	110	205	92	163	71	48	
70	160	360	65	155	52	126	74	49	
45	110	355	45	105	27	89	62	44	
30	85	355	30	85	-	68	-	-	
20	65	355	20	65	-	52	-	-	
20	50	355	20	50	-	34	-	-	
20	40	355	20	40	-	20	-	-	

#2

265	300	365	250	285	200	235	35	28	
335	350	365	310	330	266	300	34	27	
330	345	360	315	330	271	300	29	23	
300	340	360	290	325	240	286	46	34	
260	315	360	250	300	200	253	53	39	
210	275	360	200	265	160	214	54	39	
175	245	360	170	235	138	189	51	37	
160	220	360	155	210	126	168	42	32	
160	195	360	155	185	126	149	23	19	
150	180	355	145	175	117	140	23	19	
145	160	355	140	155	114	126	12	10	
130	150	355	125	145	104	117	13	11	
120	140	355	115	135	96	110	14	12	

C-19346 μ ϕ 2610 #13 Geminorum 37 ✓

110	170	365	115	160	96	130	34	27
180	250	365	170	235	138	189	51	37
155	240	360	150	230	122	185	63	44
115	215	360	110	205	92	163	71	48
70	160	360	65	155	52	126	74	49
45	110	355	45	105	27	89	62	44
30	85	355	30	85	-	68	-	-
20	65	355	20	65	-	52	-	-
20	50	355	20	50	-	34	-	-
20	40	355	20	40	-	20	-	-
265	300	365	250	285	200	235	35	28
335	350	365	310	330	266	300	34	27
330	345	360	315	330	271	300	29	23
300	340	360	290	325	240	286	46	34
260	315	360	250	300	200	253	53	39
210	275	360	200	265	160	214	54	39
175	245	360	170	235	138	189	51	37
160	220	360	155	210	126	168	42	32
160	195	360	155	185	126	149	23	19
150	180	355	145	175	117	140	23	19
145	160	355	140	155	114	126	12	10
130	150	355	125	145	104	117	13	11
120	140	355	115	135	96	110	14	12

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38 [[checkmark]]

C-19346 mu phi 2608
#3 zeta geminorum

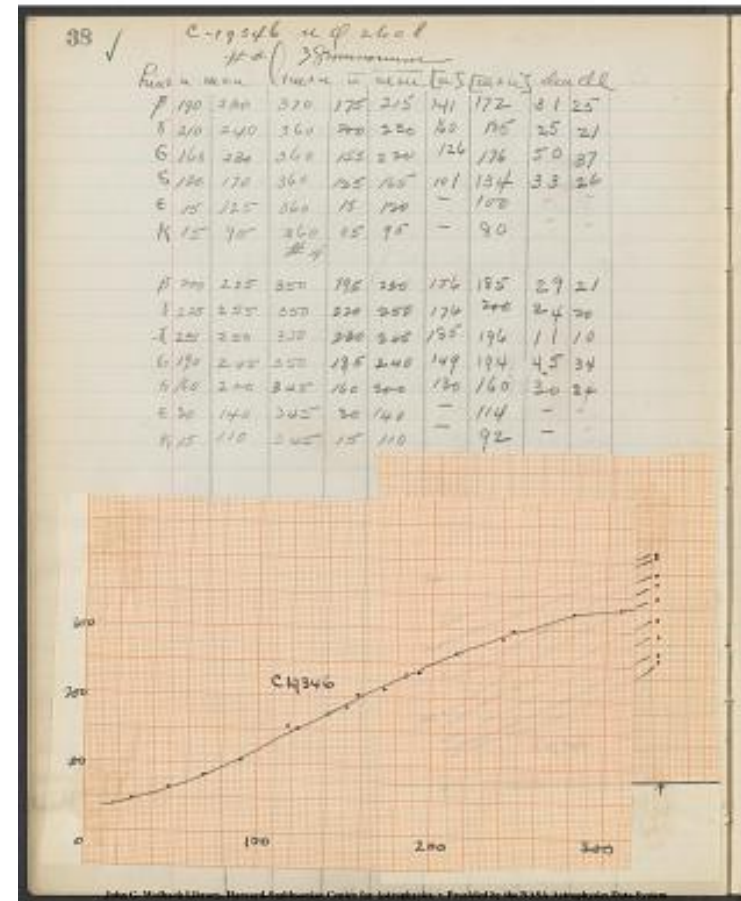
[[10 column table]]

Line|u|w+u||+w+u|u[[bar]]|w+u[[bar]]|u||w+u|dw|dl
|---|---|---|---|---|---|---|---|---|---|
beta|190|230|370|175|215|141|172|31|25
gamma|210|240|360|200|230|160|185|25|21
G|160|230|360|155|220|126|176|50|37
delta|130|170|360|125|165|101|134|33|26
epsilon|15|125|360|15|120|-|100|-|-|
kappa|05|95|360|05|95|-|80|-|-|

#4

beta|200|235|350|195|230|156|185|29|21
gamma|225|255|350|220|250|176|200|24|20
chi|235|250|350|280|245|185|196|11|10
G|190|245|350|185|240|149|194|45|34
delta|160|200|345|160|200|130|160|30|24
epsilon|30|140|345|30|140|-|114|-|-|
kappa|15|110|345|15|110|0|92|-|-|

[[graph]]



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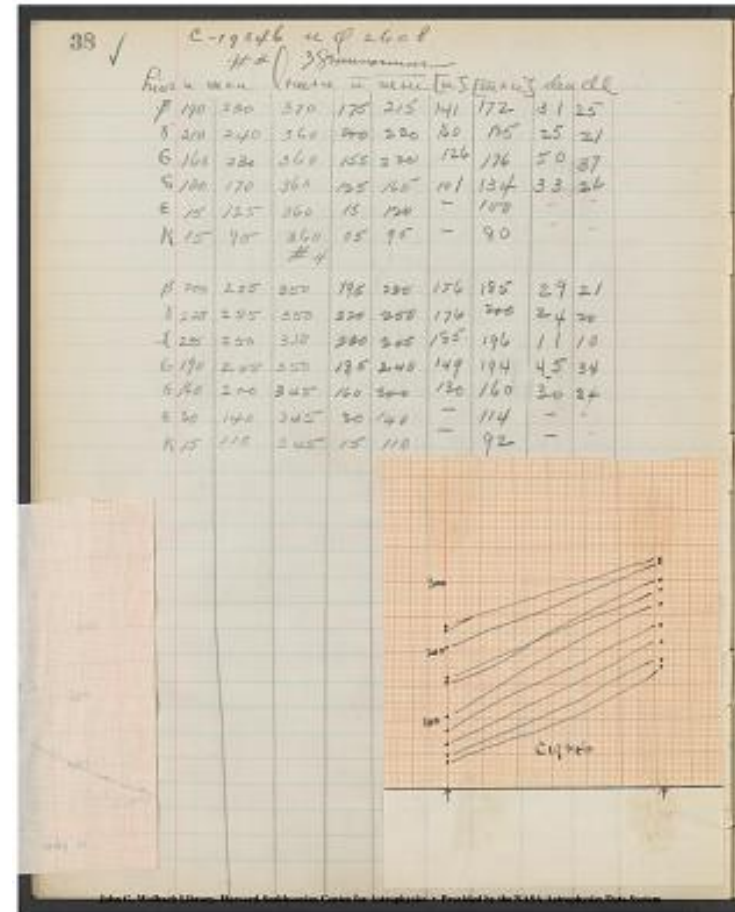
38 C-19346 u 4 2608

#3 38

[[?]] | u | w+u | l+w+u | w+u [[bar]] | [u] | [w+u] | deu | dl |

190	230	370	175	215	141	172	31	25
210	240	360	200	230	160	185	25	21
G	160	230	360	155	220	126	50	37
	130	170	360	125	165	101	134	33
	15	125	360	15	120	-	100	-
K	05	95	360	05	95	-	80	-
		#4						
	200	235	350	195	230	156	185	29
	225	255	350	220	250	176	200	24
X	235	250	350	230	245	185	196	11
G	190	245	350	185	240	149	194	45
	160	200	345	160	300	130	160	30
	30	140	345	30	140	-	114	-
K	15	110	345	15	110	-	92	-

[[graph]]



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chi -7575 mu phi 2611
alpha Pavonis Red to 770

[[10 column table]]

Line|u|w+u||l+w+u||w+u|[bar]||[u]||[w+u]|dw|dl|

4122	540	575	735	570	600	270	280	10	09
	540	630	735	570	660	270	308	38	30
4471	660	690	735	690	720	328	360	32	26
4387	670	690	735	700	720	337	360	23	19
gamma	620	690	735	650	720	303	360	57	41
4144	655	680	735	685	710	324	348	24	20
4116	665	680	740	690	710	328	348	20	17
delta	590	680	740	610	710	284	348	64	44
4026	620	670	740	645	700	301	337	36	28
4004	640	670	740	670	700	314	337	23	19
epsilon	570	715	825	530	665	257	311	54	39
zeta	415	610	835	385	570	214	270	56	40
eta	230	435	840	210	400	154	218	64	44
3819	270	380	840	245	350	168	202	34	27
theta	130	310	840	120	285	114	182	68	46
iota	110	245	850	100	225	103	160	57	41
kappa	100	190	850	90	170	98	136	38	30
lambda	80	150	850	75	140	89	122	33	26
mu	75	120	850	70	110	85	108	23	19
nu	70	100	850	65	90	82	98	16	14

χ -7575 μ φ 2611
α Pavonis Red to 770

39 ✓

Line	u	w+u	l+w+u	w+u	[bar]	[u]	[w+u]	dw	dl
4122	540	575	735	570	600	270	280	10	09
4471	660	690	735	690	720	328	360	32	26
4387	670	690	735	700	720	337	360	23	19
γ	620	690	735	650	720	303	360	57	41
4144	655	680	735	685	710	324	348	24	20
4116	665	680	740	690	710	328	348	20	17
δ	590	680	740	610	710	284	348	64	44
4026	620	670	740	645	700	301	337	36	28
4004	640	670	740	670	700	314	337	23	19
ε	570	715	825	530	665	257	311	54	39
ζ	415	610	835	385	570	214	270	56	40
η	230	435	840	210	400	154	218	64	44
3819	270	380	840	245	350	168	202	34	27
θ	130	310	840	120	285	114	182	68	46
ι	110	245	850	100	225	103	160	57	41
κ	100	190	850	90	170	98	136	38	30
λ	80	150	850	75	140	89	122	33	26
μ	75	120	850	70	110	85	108	23	19
ν	70	100	850	65	90	82	98	16	14

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40

[[checkmark]] chi-8188 mu phi 2623 770

zeta Puppio

[[10 column table]]

|Phi|u|w+u|+w+u|U|W+U|[[u]]|[[w+u]]|dw|dl|

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

beta|600|615|640|720|740|360|400|40|31|

gamma|640|645|645|765|770|-[|[[empty]]|]||[[empty]]|

delta|635|645|650|750|765|420|-[|[[empty]]|]||[[empty]]|

epsilon|600|615|630|730|750|376|420|44|33|

zeta|525|560|635|635|680|296|320|24|20|

eta|360|410|635|435|495|228|246|18|15|

theta|240|290|640|290|350|183|202|19|16|

iota|190|230|640|230|275|162|178|16|14|

kappa|155|185|640|185|225|143|160|17|14|

lambda|140|155|640|170|185|136|143|07|06|

40	✓	X-2188	mu phi 2623	770
3 Puppio				
Puppio 3 Puppio = 12216 12216 12216 12216 12216				
1	600	615	640	720 740 360 400 40 31
2	640	645	645	765 770 - -
3	645	645	650	750 765 420 -
4	600	615	630	730 750 376 420 44 33
5	525	560	635	635 680 296 320 24 20
6	360	410	635	435 495 228 246 18 15
7	240	290	640	290 350 183 202 19 16
8	190	230	640	230 275 162 178 16 14
9	155	185	640	185 225 143 160 17 14
10	140	155	640	170 185 136 143 07 06

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41
 chi-8241 mu psi 2625 chi-7834
 3 puppis

[[10 columned table]]
 Line|u|w+u|l+w+u|w+u|bar||u||w+u|dw|dl

 beta |690|710|740 |720|740|360|400 |40 |31
 gamma |725|740|740 |755|770|- | |
 4200 |725|735|735 |760|770|440|- | |
 delta |710|725|735 |745|760|410|440 |30 |24
 4026 |715|720|730 |755|760|- |440 |- |
 epsilon|7|~~20~~||~~60~~||~~735~~||~~strikethrough~~||770|780|750|760|420|440|20|17
 zeta |720|735|760 |730|745|376|410 |34 |27
 eta |585|630|740 |610|655|284|306 |22 |18
 theta |345|400|735 |360|420|206|224 |18 |15
 iota |205|250|730 |215|265|156|174 |18 |15
 kappa |150|180|720 |160|190|132|146 |14 |12
 lambda|120|140|720 |130|150|118|128 |10 |09

χ = 8241 μ = 2625 ψ = 7834 ✓ 41

3 Puppis

Line	u	w+u	l+w+u	w+u	<u>bar</u>	u	w+u	dw	dl
B 676	710	740	720	740	360	400	40	31	
γ 725	740	740	755	770	-	-			
4200	725	735	735	760	770	440	-		
δ 710	725	735	745	760	410	440	30	24	
4026	715	720	730	755	760	-	440	-	
ε 7	20	780	780	750	760	420	440	20	17
ζ 720	735	760	730	745	376	410	34	27	
η 585	630	740	610	655	284	306	22	18	
θ 345	400	735	360	420	206	224	18	15	
ι 205	250	730	215	265	156	174	18	15	
κ 150	180	720	160	190	132	146	14	12	
λ 120	140	720	130	150	118	128	10	09	

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Summary of plates of zeta Puppis

[[7 column table]]

| X8188 | dm 8241 | 8245 | [[Sum symbol]] | | dl Mean |

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

beta | 40 | [[strikethrough]]40[[strikethrough]] | 20 | 60 | 30 | 24 |

beta' | - | - | 10 | 10 | (10) | 9 |

gamma | - | - | 34 | 34 | (34) | 27 |

gamma' | - | - | 26 | 26 | (26) | 21 |

delta | - | [[strikethrough]]30[[strikethrough]] | 36 | 36 | (36) | 28 |

delta' | - | - | 26 | 26 | (26) | 21 |

epsilon | 44 | [[strikethrough]]20[[strikethrough]] | 40 | 84 | 42 | 32 |

zeta | 24 | [[strikethrough]]34[[strikethrough]] | 19 | 43 | 22 | 18 |

eta | 18 | 22 | 17 | 35 | 18 | 15 |

theta | 19 | 18 | 20 | 39 | 20 | -? [17] |

iota | 16 | 18 | 16 | 32 | 16 | 14 |

kappa | 17 | 14 | 12 | 29 | 14 | 12 |

lambda | 7 | 10 | 8 | 15 | 8 | 7 |

✓ 43

Summary of plates of zeta Puppis

	X8188	dm 8241	8245	Σ	Mean
β	40	40	20	80	30
β'	-	-	10	10	(10)
γ	-	-	34	34	(34)
γ'	-	-	26	26	(26)
δ	-	30	36	36	(36)
δ'	-	-	26	26	(26)
ϵ	44	20	40	84	42
ζ	24	34	19	43	22
η	18	22	17	35	18
θ	19	18	20	39	20
ι	16	18	16	32	16
κ	17	14	12	29	14
λ	7	10	8	15	8

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beta Centauri X-7577 mu phi 2631 + 2630

[[10 column table]]

Line |n|m+n|l+m+n|[[mean]]n|[[mean]]m+n|[[n]]|[[m+n]]dm|dl|

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

beta |815|845|880|

gamma |830|850|870|

delta |735|760|780|

epsilon |720|755|795|

zeta |615|690|800|

eta |420|590|810|

theta |320|510|815|

iota |280|435|815|

kappa |260|375|815|

lambda |445|[or 245?]]|820|[or 320?]]|820|

mu |230|275|820|

nu |190|230|820|

xi |150|200|820|

44 ✓ *β Centauri X-7577 - φ 2631 + 2630*

Line n m+n l+m+n [[mean]] n [[mean]] m+n [[n]] [[m+n]] dm dl

1	815	845	880				
2	830	850	870				
3	735	760	780				
4	720	755	795				
5	615	690	800				
6	420	590	810				
7	320	510	815				
8	280	435	815				
9	260	375	815				
10	445	[or 245?]	820	[or 320?]	820		
11	230	275	820				
12	190	230	820				
13	150	200	820				

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45

C-19350 mu phi 2628 lo 470
#1 zeta Geminorum [[checkmark]]

[[10 column table]]

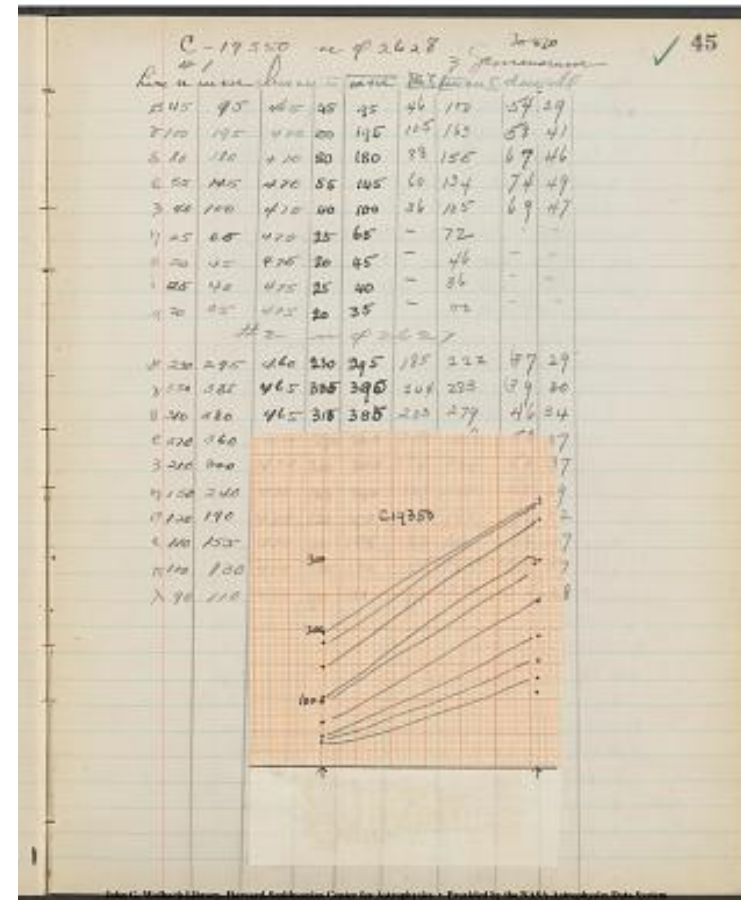
Line|m|m+n|l+m+n|[[mean]]n|[[mean]]m+n|n|[[mean m+n]]dm|dl|

beta	45	95	465	45	95	46	100	54	39
gamma	100	195	470	100	195	105	163	58	41
delta	80	180	470	80	180	88	155	67	46
epsilon	55	145	470	55	145	60	134	74	49
zeta	40	100	470	40	100	36	105	69	47
eta	25	65	470	25	65	-	72	-	-
theta	20	45	475	20	45	-	46	-	-
iota	25	40	475	25	40	-	36	-	-
mu	20	35	475	20	35	-	100	-	-

#2 mu phi 2627

beta	230	295	460	230	295	185	222	37	29
gamma	330	385	465	335	390	244	283	39	30
delta	310	380	465	315	385	233	279	46	34
epsilon	270	360	470	270	360	?	?	?	?
zeta	210	300	470	210	300	?	?	?	?
eta	150	240	470	150	?	?	?	?	?
theta	120	190	470	120	?	?	?	?	?
iota	110	155	470	?	155	?	?	?	?
kappa	100	130	470	100	?	?	?	?	?
lambda	90	110	470	90	?	?	?	?	?

[[graph covers table]]



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45

C-19350 mu phi 2628 lo 470
#1 zeta geminorum [[checkmark]]

[[10 column table]]

Line|u|w+u|l+w+u|[[mean]]u|[[mean]]w+u|u|[[w[[bar]]+u]]dm|dl|

	u	w+u	l+w+u	[[mean]]u	[[mean]]w+u	u	[[w[[bar]]+u]]	dm	dl
beta	45	95	465	45	95	46	100	54	39
gamma	100	195	470	100	195	105	163	58	41
delta	80	180	470	80	180	88	155	67	46
epsilon	55	145	470	55	145	60	134	74	49
zeta	40	100	470	40	100	36	105	69	47
eta	25	65	470	25	65	-	72	-	-
theta	20	45	475	20	45	-	46	-	-
iota	25	40	475	25	40	-	36	-	-
mu	20	35	475	20	35	-	100	-	-

#2 mu phi 2627

beta	230	295	460	230	295	185	222	37	29
gamma	330	385	465	335	390	244	283	39	30
delta	310	380	465	315	385	233	279	46	34
epsilon	270	360	470	270	360	208	258	50	37
zeta	210	300	470	210	300	174	224	50	37
eta	150	240	470	150	240	137	190	53	39
theta	120	190	470	120	190	118	160	42	32
iota	110	155	470	110	155	132	140	08	07
kappa	100	130	470	100	130	105	125	20	17
lambda	90	110	470	90	110	97	132	35	28

[[graph]]



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46 C-19350 mu psi 2627

#3

[[10 column table]]

Line|u|w+u||w+u|[[mean]]u|[[mean]]w+u|u|w|w|bar|+u|dm|dl|

[290|350|475|285|345|216|251|35|28]
gamma|325|390|476|320|385|236|279|43|33|
chi |370|390|475|365|385|262|279|17|14|
G |335|385|475|330|380|241|274|33|26|
4227 |335|375|475|330|370|241|266|25|21|
4215 |355|375|475|350|370|253|266|13|11|
4177 |330|370|470|330|370|241|266|25|21|
4172 |315|370|470|315|370|233|266|33|26|
delta|290|360|470|290|360|219|258|39|30|
4077 |290|350|470|290|350|219|244|25|21|
4046 |295|340|470|295|340|222|248|26|21|
55	295	470	55	295	00	222	222	87
35	250	470	35	250	20	196	176	80
120	190	470	120	190	118	160	42	32
60	120	470	60	120	70	118	98	59
45|90|470|45|90|[[~~118~~]]46[[~~118~~]]97|51|37

#4 mu psi 2629

|225|345|475 |225|340|182|248 |66|46|
gamma|315|390|475 |310|385|230|279 |49|36|
chi |365|390|480 |355|380|256|274 |18|15|
|320|385|480 |315|375|233|270 |37|29|
4227 |330|375|480 |325|365|238|262 |24|20|
4215 |345|375|480 |335|365|245|262 |17|14|
delta|275|355|480 |270|345|208|251 |43|33|
4077 |280|350|480 |275|340|210|248 |38|30|
4046 |285|335|480 |280|330|214|241 |27|22|
|60|280|480 |60|275|70|210 |140|72|
k |40|235|480 |40|230|36|184 |148|74|
|110|170|480 |110|165|112|146 |34|27|
y |65|150|480 |65|120|72|118 |46|34|
|60|95|480 |60|95|70|100 |30|24|

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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

47

C-19350-mu phi2628
#5

[[10 column table]]

Line|u|w+u|l+w+u|[[mean]]u|[[mean]]w+u|u|[[w|bar]]+u|dm|dl|

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

beta|350|395|480|340|385|248|279|31|25

gamma|390|430|480|380|420|274|-|-|

chi|420|430|480|410|420|-|-|-|

G|390|425|480|380|415|274|-|-|

delta|370|410|485|360|400|258|290|32|26

4077|370|410|485|360|400|258|290|32|26

4046|365|410|485|355|400|256|290|34|27

epsilon|105|340|485|100|330|105|241|136|~~28~~|~~28~~

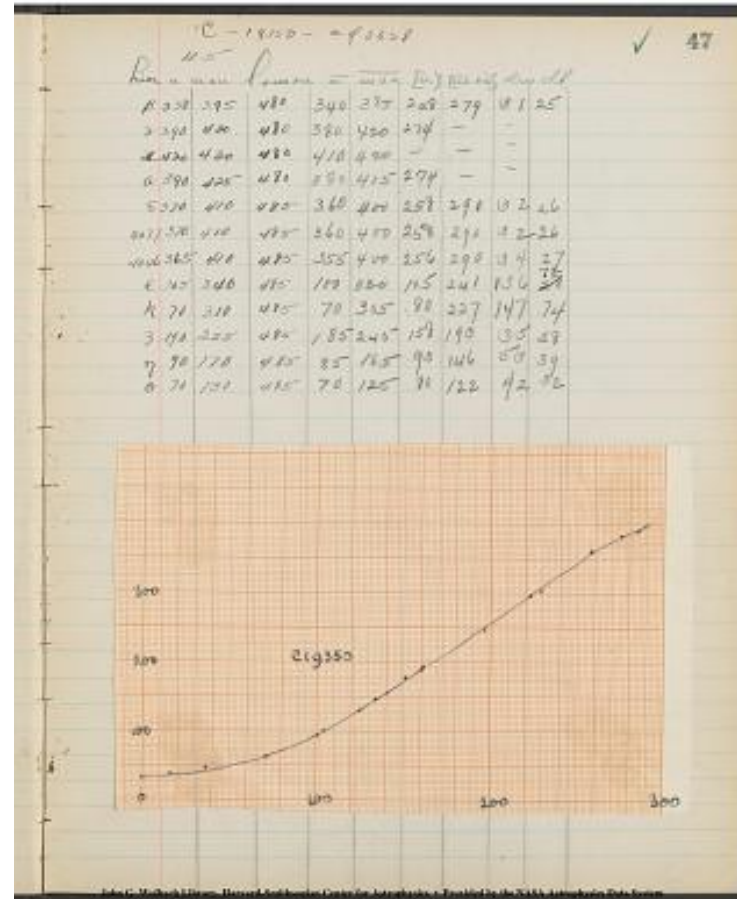
kappa|70|310|485|70|305|80|227|147|74

zeta|190|255|485|185|245|158|193|35|28

eta|90|170|485|85|165|93|146|53|39

theta|70|130|485|70|125|80|122|42|32

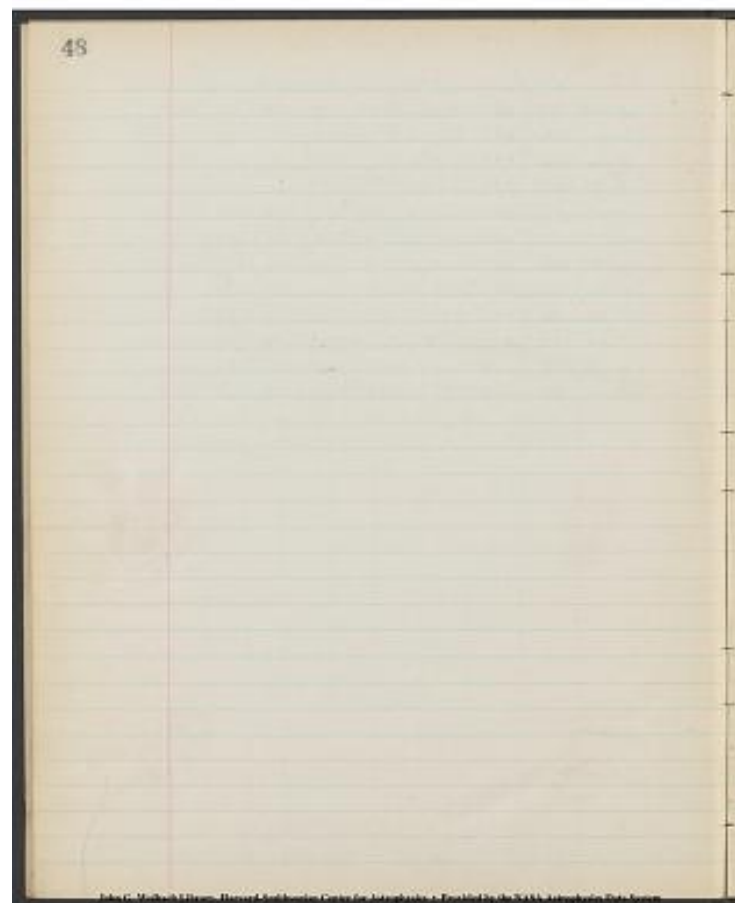
[[graph]]



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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

48

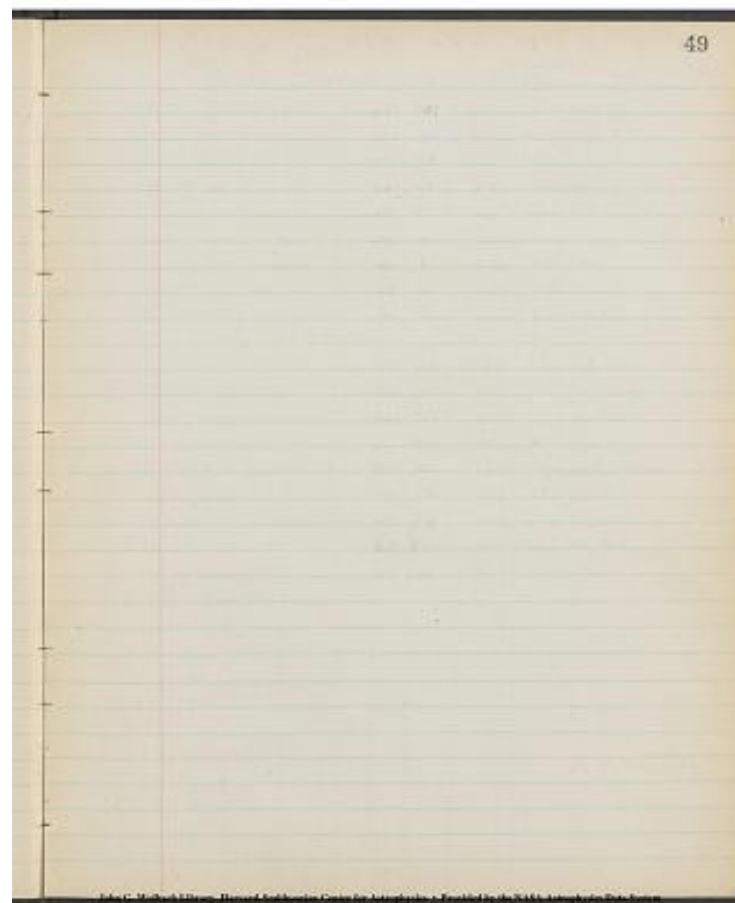
[[no entries]]



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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

49

[[no entries]]



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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

50

chi-7595 mu phi 2635 & 36

iota Carinae 200 and mean

[[10 column table]]

Line|u|w+u|+w+u|[[mean]]u|[[mean]]w+u|u|[[bar]]|w|[[bar]]+u|dm|dl|

Line	u	w+u	+w+u	[[mean]]u	[[mean]]w+u	u	[[bar]]	w	[[bar]]+u	dm	dl
beta	450	610	745	121	164						
gamma	410	635	720	114	176						
delta	315	595	705	89	169						
epsilon	300	520	700	86	149						
kappa	30	495	740	8	134						
zeta	50	375	735	14	102						
eta	10	165	725	3	46						
theta	15	80	720	4	22						
iota	20	50	715	6	14						

alpha Carinae mu phi 2637

beta	190	360	680	56	106	265	182	83	53
4471	455	520	705	129	148	146	116	30	24
4388	470	515	710	133	145	140	121	19	16
gamma	355	510	710	100	144	192	122	70	48
4144	440	496	725	122	135	157	137	20	17
delta	300	485	730	82	133	221	140	81	53
4026	360	455	735	98	124	195	154	41	31
4009	395	440	740	10	118	162	119	16	16
epsilon	170	385	740	46	104	284	185	99	60

50	chi-7595	mu phi 2635 & 36	200 and mean
Line	u	w+u	+w+u
beta	450	610	745
gamma	410	635	720
delta	315	595	705
epsilon	300	520	700
kappa	30	495	740
zeta	50	375	735
eta	10	165	725
theta	15	80	720
iota	20	50	715
alpha	190	360	680
4471	455	520	705
4388	470	515	710
4026	360	455	735
4009	395	440	740
epsilon	170	385	740

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

C-19349 mu phi 2632 51

#1

[[10 column table]]

Line|u|w+u|+w+u|[[mean]]u|[[mean]]w+u|[[u[[bar]]]]|[[w[[bar]]+u]]|dm|dl| 3
gem

	u	w+u	+w+u	[[mean]]u	[[mean]]w+u	[[u[[bar]]]]	[[w[[bar]]+u]]	dm	dl
beta	100	190	525						
gamma	215	335	525						
delta	185	320	525						
epsilon	130	280	525						
zeta	90	205	525						
eta	50	135	525						
theta	45	95	525						
iota	45	75	525						
kappa	35	60	525						

#2

	u	w+u	+w+u	[[mean]]u	[[mean]]w+u	[[u[[bar]]]]	[[w[[bar]]+u]]	dm	dl
beta	325	380	490						
gamma	415	445	480						
delta	395	435	480						
epsilon	355	420	475						
zeta	300	380	475						
eta	225	320	475						
theta	180	270	475						
iota	170	230	475						
160 kappa	[[?]]	210	475						
lambda	150	185	475						

C-19349 mu phi 2632 51

Run on 11/11/11 to 11/11/11 3 gem

	u	w+u	+w+u	[[mean]]u	[[mean]]w+u	[[u[[bar]]]]	[[w[[bar]]+u]]	dm	dl
beta	100	190	525						
gamma	215	335	525						
delta	185	320	525						
epsilon	130	280	525						
zeta	90	205	525						
eta	50	135	525						
theta	45	95	525						
iota	45	75	525						
kappa	35	60	525						
lambda	150	185	475						
mu	160	210	475						
nu	170	230	475						
xi	180	270	475						
omicron	190	310	475						
pi	200	350	475						
rho	210	390	475						
sigma	220	430	475						
tau	230	470	475						
upsilon	240	510	475						
phi	250	550	475						
chi	260	590	475						
psi	270	630	475						
omega	280	670	475						

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

52
C-19349
mu phi 2637 #3 200 and weau

[[10 column table]]
Line|u|w+u|l+w+u|[[mean]]u|[[mean]]w+u|u[[bar]]|w[[bar]]+u|dm|dl| J
gem
|---|---|---|---|---|---|---|---|---|---|
beta|315|340|370|170|184|79|46|33
gamma|330|345|365|181|189|55|27|28
G|330|345|365|181|189|55|27|28
delta|300|325|365|164|178|90|62|28
epsilon|100|300|365|55|164|267|90|177
kappa|70|275|365|38|150|303|113|190
zeta|180|240|370|97|130|197|145|52
eta|100|170|370|54|98|269|205|64
theta|70|130|370|38|70|303|241|62

[[right margin]] wrong l+m+n?

mu phi 2633 #4
beta|255|320|470|117|1|~~4~~|~~36~~|165|135|30|
24
gamma|299|365|470|127|156|149|103|46|34
chi|343|560|465|148|155|116|105|11|10
G|300|360|465|129|155|146|105|41|31
4227|305|345|465|131|148|143|116|27|22
4215|320|345|465|138|148|132|116|16|14
delta|250|320|465|95|138|200|132|68|46
4077|250|315|465|95|136|200|135|65|45
4046|245|300|465|106|129|182|146|36|28
epsilon|40|250|465|17|~~125~~|~~107~~|379|181|1|
98|84
kappa|30|220|465|13|95|406|200|206|85
zeta|95|155|465|41|67|295|246|49|36
eta|45|90|465|19|39|369|300|69|47
theta|30|70|465|13|30|406|374|82|53

52 C-19349 #3 200 and weau

mu phi 2637

39am

Wrong l+m+n?

beta	315	340	370	170	184	79	46	33
gamma	330	345	365	181	189	55	27	28
G	330	345	365	181	189	55	27	28
delta	300	325	365	164	178	90	62	28
epsilon	100	300	365	55	164	267	90	177
kappa	70	275	365	38	150	303	113	190
zeta	180	240	370	97	130	197	145	52
eta	100	170	370	54	98	269	205	64
theta	70	130	370	38	70	303	241	62
mu phi 2633 #4								
beta	255	320	470	117	1	36	165	135
gamma	299	365	470	127	156	149	103	46
chi	343	560	465	148	155	116	105	11
G	300	360	465	129	155	146	105	41
4227	305	345	465	131	148	143	116	27
4215	320	345	465	138	148	132	116	16
delta	250	320	465	95	138	200	132	68
4077	250	315	465	95	136	200	135	65
4046	245	300	465	106	129	182	146	36
epsilon	40	250	465	17	125	107	379	181
98	84							
kappa	30	220	465	13	95	406	200	206
zeta	95	155	465	41	67	295	246	49
eta	45	90	465	19	39	369	300	69
theta	30	70	465	13	30	406	374	82

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

C-19349 mu phi 2633 #5

[[10 column table]]

Line | n | m+n | l+m+n | [[mean]]n | [[mean]]m+n | [n] | [m+n] | dm | dl |
zeta gem

beta	195	270	470	83	115	219	168	51	37
gamma	220	310	475	93	131	203	143	60	42
[[?]]	285	310	425	120	131	160	143	17	14
[[?]]	230	305	480	96	127	198	149	49	36
4227	240	290	480	111	119	175	162	13	11
4215	265	285	480	73	118	236	163	73	49
delta	175	260	480	73	118	236	163	73	49
4077	175	250	480	73	118	236	185	51	37
4046	180	240	480	75	100	233	192	41	31
epsilon	20	180	485	8	74	446	234	212	86
K	10	135	485	4	45	..	265	..	..

C-19349 mu phi 2633 #5

33 gem

beta	195	270	470	83	115	219	168	51	37
gamma	220	310	475	93	131	203	143	60	42
[[?]]	285	310	425	120	131	160	143	17	14
[[?]]	230	305	480	96	127	198	149	49	36
4227	240	290	480	100	121	192	169	33	26
4215	265	285	480	111	119	175	162	13	11
delta	175	260	480	73	118	236	163	73	49
4077	175	250	480	73	118	236	185	51	37
4046	180	240	480	75	100	233	192	41	31
epsilon	20	180	485	8	74	446	234	212	86
K	10	135	485	4	45	..	265

Project PHaEDRA - Cecilia H. Payne #39
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 Extracted Aug-29-2022 05:00:12

54
chi-7247 mu phi 2644 #3 200 and mean*
A.G.C. 451
[[left margin]]beta Lucavae

[[10 column table]]
Line|u|w+u|l+w+u|[[mean]]u|[[mean]]w+u|u|[[bar]]|w+u|dw|dl|
|---|---|---|---|---|---|---|---|---|---|
beta1 |210|300|520|81|115
beta2 |305|360|525|117|138
gamma1
|450|490|525|[[/strikethrough]]169|[[/strikethrough]]173|18|[[/strikethrough]]
4|[[/strikethrough]]8
gamma2
|465|495|525|[[/strikethrough]]174|[[/strikethrough]]179|[[/strikethrough]]18
6|[[/strikethrough]]191
delta1
|425|490|520|[[/strikethrough]]160|[[/strikethrough]]164|18|[[/strikethrough]]
4|[[/strikethrough]]8
delta2
|450|490|520|[[/strikethrough]]169|[[/strikethrough]]173|18|[[/strikethrough]]
4|[[/strikethrough]]8
epsilon1|370|460|520|[[/strikethrough]]139|[[/strikethrough]]142|17|[[/strikethrough]]
hrough]]3|[[/strikethrough]]7
epsilon2|385|455|520|145|17|[[/strikethrough]]1|[[/strikethrough]]5
kappa |295|430|520|114|166
zeta1 |260|385|520|[[/strikethrough]]98|[[/strikethrough]]100|148
zeta2 |275|355|520|106|137
eta1 |170|260|520|65|100
eta2 |165|210|520|63|81
theta1 |100|145|520|38|56
theta2 |105|120|520|39|46

A.G.C. 467 mu phi 2645
beta |20 |90 |530|8 |34
gamma|105|310|520|39|120
delta|80 |300|510|31|118
epsilon|35|230|510|14|90
kappa|120|190|510|47|74
zeta |20 |120|505|8 |47
eta |10 |65 |505|4 |26
theta|05 |35 |505|2 |14

* (l+m+n) assumed 520 throughout

54

X-7247 mu phi 2644 #3 200 and mean*

A.G.C. 451

beta Lucavae

Line	u	w+u	l+w+u	[[mean]]u	[[mean]]w+u	u|[[bar]]	w+u	dw	dl
beta1	210	300	520	81	115				
beta2	305	360	525	117	138				
gamma1	450	490	525	169	173	18			
gamma2	465	495	525	174	179	18			
delta1	425	490	520	160	164	18			
delta2	450	490	520	169	173	18			
epsilon1	370	460	520	139	142	17			
epsilon2	385	455	520	145	17	1			
kappa	295	430	520	114	166				
zeta1	260	385	520	98	100	148			
zeta2	275	355	520	106	137				
eta1	170	260	520	65	100				
eta2	165	210	520	63	81				
theta1	100	145	520	38	56				
theta2	105	120	520	39	46				

A.G.C. 467 mu phi 2645

Line	u	w+u	l+w+u	[[mean]]u	[[mean]]w+u	u|[[bar]]	w+u	dw	dl
beta	20	90	530	8	34				
gamma	105	310	520	39	120				
delta	80	300	510	31	118				
epsilon	35	230	510	14	90				
kappa	120	190	510	47	74				
zeta	20	120	505	8	47				
eta	10	65	505	4	26				
theta	05	35	505	2	14				

* (l+m+n) assumed 520 throughout

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

55
 chi-7600 mu phi 2640
 200 and mean
 nu Pavonis

[[10 column table]]
 Line|n|m+n|l+m+n|[[mean]]n|[[mean]]m+n|[[n[[bar]]]]|[[m+n]]dm|dl|
 |---|---|---|---|---|---|---|---|---|---|
 beta|10|90|750|3|24
 gamma|50|260|750|13|64
 delta|25|215|750|7|57
 epsilon|05|110|745|..|30
 zeta|00|30|745|0|8

beta Pavonis mu phi 2639
 beta|280|515|740|76|139
 gamma|360|620|740|97|168
 delta|270|580|740|73|157
 epsilon|70|465|740|19|126
 kappa|100|370|740|100
 zeta|25|220|740|7|60

#3 - mu phi 2643
 beta|40|130|530|15|49
 gamma|60|245|530|23|92
 delta|35|210|530|13|79
 epsilon|20|145|530|8|55
 kappa|70|110|530|26|41
 zeta|10|70|530|4|26
 eta|10|30|530|4|11

chi-7600 mu phi 2640
 200 and mean
 nu Pavonis

Line	n	m+n	l+m+n	[[mean]]n	[[mean]]m+n	[[n[[bar]]]]	[[m+n]]dm	dl
beta	10	90	750	3	24			
gamma	50	260	750	13	64			
delta	25	215	750	7	57			
epsilon	05	110	745	..	30			
zeta	00	30	745	0	8			
beta Pavonis mu phi 2639								
beta	280	515	740	76	139			
gamma	360	620	740	97	168			
delta	270	580	740	73	157			
epsilon	70	465	740	19	126			
kappa	100	370	740	27	100			
zeta	25	220	740	7	60			
#3 - mu phi 2643								
beta	40	130	530	15	49			
gamma	60	245	530	23	92			
delta	35	210	530	13	79			
epsilon	20	145	530	8	55			
kappa	70	110	530	26	41			
zeta	10	70	530	4	26			
eta	10	30	530	4	11			

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

56

4 - 14926 mu phi 2638 200 and mean

Muscae

[[9 column table]]

Luieu | w + u | l + w + u | mean of u | mean of w+u | [u] | [w+u] | [diu] | [dl]

230|250|520|89|96|209|198|21|
390|425|515|152|165|110|88|22|
350|390|515|136|152|135|110|25|
225|320|515|88|124|211|154|57|
170|195|515|66|76|248|231|17|

2641

160|175|375|85|93| || ||
454|2|290|300|375|154|160| || ||
447|1|280|305|375|149|162| || ||
|275|300|375|147|160| || ||
|245|280|375|147|160| || ||
4026|235|255|375|125|136| || ||
|190|225|375|105|120| || ||
|120|140|375|64|75| || ||

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56

4 - 14926 mu phi 2638 200 and mean

Muscae

Luieu | w + u | l + w + u | mean of u | mean of w+u | [u] | [w+u] | [diu] | [dl]

230	250	520	89	96	209	198	21
390	425	515	152	165	110	88	22
350	390	515	136	152	135	110	25
225	320	515	88	124	211	154	57
170	195	515	66	76	248	231	17

mu phi 2641

80	160	175	375	85	93
454	2	290	300	375	154
447	1	280	305	375	149
275	300	375	147	160	160
245	280	375	147	160	150
4026	235	255	375	125	136
190	225	375	105	120	130
120	140	375	64	75	75

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

57
 C - 2243 mu phi 2646
 alpha Leporis
 200 and mean

Line|m|m+n|+m+n|[[mean]]n|[[mean]]m+n|n|[[mean m+n]]dm|dl|
 beta | 270 | 385 | 535 | 101 | 144 | 190 | 122 | 68 | |
 gamma | 430 | 490 | 530 | 162 | 185 | 93 | 43 | 50 | |
 delta | 420 | 490 | 530 | 159 | 185 | 98 | 43 | 55 | |
 epsilon | 200 | 475 | 525 | 76 | 181 | 231 | 55 | 176 | |
 kappa | 155 | 465 | 525 | 59 | 177 | 260 | 64 | 196 | |
 zeta | 285 | 455 | 525 | 109 | 173 | 178 | 73 | 105 | |
 eta | 120 | 410 | 525 | 46 | 156 | 284 | 103 | 181 | |
 theta | 125 | 355 | 525 | 48 | 135 | 280 | 137 | 143 | |
 iota | 100 | 290 | 520 | 38 | 112 | 303 | 173 | 130 | |
 kappa | 55 | 220 | 520 | 21 | 85 | 358 | 216 | 142 | |
 lambda | 50 | 180 | 520 | 19 | 69 | 369 | 243 | 126 | |
 mu | 65 | 135 | 520 | 25 | 52 | 241 | 273 | 168 | |
 nu | 50 | 100 | 520 | 19 | 38 | 369 | 303 | 66 | |
 xi | 40 | 70 | 520 | 15 | 27 | 392 | 334 | 58 | |
 omicron | 35 | 50 | 520 | 13 | 19 | 406 | 369 | 37 | |
 pi | 30 | 40 | 520 | 12 | 15 | 413 | 392 | 21 | |
 rho | 20 | 35 | 520 | 8 | 13 | 446 | 406 | 40 | |

57

C. 2243 mu phi 2646
 alpha Leporis
 200 and mean

Line	m	m+n	+m+n	[[mean]]	n	[[mean]]	m+n	n	[[mean m+n]]	dm	dl
beta	270	385	535	101	144	190	122	68			
gamma	430	490	530	162	185	93	43	50			
delta	420	490	530	159	185	98	43	55			
epsilon	200	475	525	76	181	231	55	176			
kappa	155	465	525	59	177	260	64	196			
zeta	285	455	525	109	173	178	73	105			
eta	120	410	525	46	156	284	103	181			
theta	125	355	525	48	135	280	137	143			
iota	100	290	520	38	112	303	173	130			
kappa	55	220	520	21	85	358	216	142			
lambda	50	180	520	19	69	369	243	126			
mu	65	135	520	25	52	241	273	168			
nu	50	100	520	19	38	369	303	66			
xi	40	70	520	15	27	392	334	58			
omicron	35	50	520	13	19	406	369	37			
pi	30	40	520	12	15	413	392	21			
rho	20	35	520	8	13	446	406	40			

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

58

X-5158 mu phi 2642

200 and mean

Line|m|m+n|+m+n|[mean]n|[mean]m+n|[n][mean m+n]dm|dl|

[beta]]1	270	340	530	102	128				
[beta]]2	320	370	530	121	140				
[gamma]]1	370	435	530	121	164				
[gamma]]2	395	435	530	140	164				
[delta]]1	330	420	530	149	159				
[delta]]2	270	370	530	125	140				
[epsilon]]1	285	355	530	108	134				
[epsilon]]2	300	325	530	113	123				
R	160	280	530	60	106				
[zeta?]]1	160	255	530	60	96				
[zeta?]]2	170	250	530	64	94				
[eta]]1	75	150	530	28	57				
[eta]]2	75	125	520	28	47				

58

1-5158 mu phi 2642 200 and mean

Line

Line	m	m+n	+m+n	[mean]n	[mean]m+n	[n]	[mean m+n]	dm	dl
[beta]]1	270	340	530	102	128				
[beta]]2	320	370	530	121	140				
[gamma]]1	370	435	530	121	164				
[gamma]]2	395	435	530	140	164				
[delta]]1	330	420	530	149	159				
[delta]]2	270	370	530	125	140				
[epsilon]]1	285	355	530	108	134				
[epsilon]]2	300	325	530	113	123				
R	160	280	530	60	106				
[zeta?]]1	160	255	530	60	96				
[zeta?]]2	170	250	530	64	94				
[eta]]1	75	150	530	28	57				
[eta]]2	75	125	520	28	47				

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59
oo and mean
X-13673 1279
#1
[[10 columns table]]
Line|m|m+n|+m+n|[[mean]]n|[[mean]]m+n|[n]|[[m+n]]dm|dl|
[[left margin]]|[[left margin]]
265|290|425|125|136|153|135|18|15|
200|250|415|96|120|198|160|38|30|
160|245|415|77|118|229|163|66|46|
G|100|240|415|48|116|280|166|114|65|
4227|60|200|415|29|96|327|198|129|70|
4215|130|190|415|63|92|253|205|48|36|
|85|135|410|41|6|~~[[strike through]]~~5|~~[[strike through]]~~6|295|248|47|35|
4077|70|120|410|34|58|313|262|41|31|
4046|55|100|410|27|49|334|278|56|40|
#2
40|110|390|21|56| | | | |
70|165|400|35|82| | | | |
65|140|400|32|70| | | | |
40|95|405|20|47| | | | |
30|60|410|15|29| | | | |
+13674 1287 #1
210|250|365|115|137|168|133|35|28|
140|210|365|77|115|229|168|61|43|
[[left margin]]|[[left margin]]
140|200|365|77|110|229|176|53|39|
G|100|195|365|55|107|267|181|86|55|
4227|90|165|365|49|90|278|208|70|48|
4215|100|160|365|55|88|267|211|56|40|
|75|120|365|41|66|295|248|57|41|
4077|60|110|365|33|60|316|258|58|41|30|
4046|90|365|33|49|316|278|38|30|

59

K-13673 1279 and mean
 1279

Line	m	m+n	+m+n	[[mean]]n	[[mean]]m+n	[n]	[[m+n]]dm	dl
265	290	425	125	136	153	135	18	15
200	250	415	96	120	198	160	38	30
160	245	415	77	118	229	163	66	46
G|100	240	415	48	116	280	166	114	65
4227	60	200	415	29	96	327	198	129
4215	130	190	415	63	92	253	205	48
|85	135	410	41	6	[[strike through]] 5	[[strike through]] 6	295	248
4077	70	120	410	34	58	313	262	41
4046	55	100	410	27	49	334	278	56
#2								
40	110	390	21	56				
70	165	400	35	82				
65	140	400	32	70				
40	95	405	20	47				
30	60	410	15	29				
+13674	1287	#1						
210	250	365	115	137	168	133	35	28
140	210	365	77	115	229	168	61	43
[[left margin]]	[[left margin]]							
140	200	365	77	110	229	176	53	39
G|100	195	365	55	107	267	181	86	55
4227	90	165	365	49	90	278	208	70
4215	100	160	365	55	88	267	211	56
|75	120	365	41	66	295	248	57	41
4077	60	110	365	33	60	316	258	58
4046	90	365	33	49	316	278	38	30

Project PHaEDRA - Cecilia H. Payne #39
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60

X 13674 #2 mu phi 1285

[[10 column table]]

Line|m|m+n|+m+n|[[mean]]n|[[mean]]m+n|[n]|[[m+n]]dm|dl|

beta |320|340|370|173|184
gamma |330|350|375|178|190|170|187
delta |330|355|380|178|192|174|187
epsilon |320|355|380|173|192|168|187
zeta |295|330|380|160|178|155|174
eta |250|300|385|135|162|130|156
theta |215|270|385|116|146|112|140
iota |200|240|385|108|130|104|124
kappa |180|210|390|97|114|92|108
lambda |155|175|390|84|95|80|90
beta |230|280|380|121|148
gamma |255|300|385|153|156
delta |230|290|390|118|149
4026 |270|280|390|138|144
epsilon |190|260|390|97|134
zeta |120|195|390|61|100
eta |60|125|390|31|64
theta |45|85|400|22|42
iota |40|60|400|20|30
kappa |30|50|400|15|25
beta |30|85|355|17|48
gamma |50|130|350|29|74
delta |40|105|350|23|60
epsilon |25|70|350|14|40
zeta |10|40|350|6|23

60

13674 #2 mu phi 1285

Line	m	m+n	+m+n	[[mean]]n	[[mean]]m+n	[n]	[[m+n]]dm	dl
B 320	320	370	173	184				
B 330	330	375	178	190	170	187		
B 340	340	380	178	192	174	187		
B 350	350	385	175	192	168	187		
B 360	360	390	170	190	155	174		
B 370	370	395	165	185	150	156		
B 380	380	400	160	180	145	140		
B 390	390	405	155	175	140	134		
B 400	400	410	150	170	135	129		
B 410	410	420	145	165	130	124		
B 420	420	430	140	160	125	119		
B 430	430	440	135	155	120	114		
B 440	440	450	130	150	115	109		
B 450	450	460	125	145	110	104		
B 460	460	470	120	140	105	99		
B 470	470	480	115	135	100	94		
B 480	480	490	110	130	95	89		
B 490	490	500	105	125	90	84		
B 500	500	510	100	120	85	79		
B 510	510	520	95	115	80	74		
B 520	520	530	90	110	75	69		
B 530	530	540	85	105	70	64		
B 540	540	550	80	100	65	59		
B 550	550	560	75	95	60	54		
B 560	560	570	70	90	55	49		
B 570	570	580	65	85	50	44		
B 580	580	590	60	80	45	39		
B 590	590	600	55	75	40	34		
B 600	600	610	50	70	35	29		
B 610	610	620	45	65	30	24		
B 620	620	630	40	60	25	19		
B 630	630	640	35	55	20	14		
B 640	640	650	30	50	15	9		
B 650	650	660	25	45	10	4		
B 660	660	670	20	40	5	-1		
B 670	670	680	15	35	0	-6		
B 680	680	690	10	30	-5	-11		
B 690	690	700	5	25	-10	-16		
B 700	700	710	0	20	-15	-21		
B 710	710	720	-5	15	-20	-26		
B 720	720	730	-10	10	-25	-31		
B 730	730	740	-15	5	-30	-36		
B 740	740	750	-20	0	-35	-41		
B 750	750	760	-25	-5	-40	-46		
B 760	760	770	-30	-10	-45	-51		
B 770	770	780	-35	-15	-50	-56		
B 780	780	790	-40	-20	-55	-61		
B 790	790	800	-45	-25	-60	-66		
B 800	800	810	-50	-30	-65	-71		
B 810	810	820	-55	-35	-70	-76		
B 820	820	830	-60	-40	-75	-81		
B 830	830	840	-65	-45	-80	-86		
B 840	840	850	-70	-50	-85	-91		
B 850	850	860	-75	-55	-90	-96		
B 860	860	870	-80	-60	-95	-101		
B 870	870	880	-85	-65	-100	-106		
B 880	880	890	-90	-70	-105	-111		
B 890	890	900	-95	-75	-110	-116		
B 900	900	910	-100	-80	-115	-121		
B 910	910	920	-105	-85	-120	-126		
B 920	920	930	-110	-90	-125	-131		
B 930	930	940	-115	-95	-130	-136		
B 940	940	950	-120	-100	-135	-141		
B 950	950	960	-125	-105	-140	-146		
B 960	960	970	-130	-110	-145	-151		
B 970	970	980	-135	-115	-150	-156		
B 980	980	990	-140	-120	-155	-161		
B 990	990	1000	-145	-125	-160	-166		

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Extracted Aug-29-2022 05:00:12

61

X-13691 mu phi 1282 #1

[[10 column table]]

|Line|m|m+n|l+m+n|[[mean]]n|[[mean]]m+n|[[n]]|m+n|dm|dl|

beta	225	265	440	102	120	188	160	28	23
gamma	160	220	435	734	101	234	190	44	33
chi	135	210	435	62	97	255	197	58	41
sigma	80	205	435	37	94	305	201	104	62
4227	40	160	435	18	74	374	234	140	72
4215	80	155	435	37	71	305	239	66	46
delta	50	100	435	23	46	349	284	65	45
4077	40	90	435	18	41	374	295	79	52
4046	25	70	430	12	33	413	316	97	59

mu phi 1283 X 13691 #2

beta	50	165	435	23	76				
gamma	70	220	430	33	102				
delta	50	170	430	23	79				
epsilon	20	110	430	9	51				
zeta	15	55	430	7	26				
eta	10	25	430	5	12				

#3

beta	40	110	420	19	52				
4481	175	190	420	83	90				
4471	165	190	420	79	90				
gamma	50	175	420	24	83				
delta	30	140	420	14	67				
4026	95	120	420	45	57				
epsilon	15	90	420	7	43				

61

X-13691 mu phi 1282 #1

Line	m	m+n	l+m+n	[[mean]]	n	[[mean]]	m+n	dm	dl
beta	225	265	440	102	120	188	160	28	23
gamma	160	220	435	734	101	234	190	44	33
chi	135	210	435	62	97	255	197	58	41
sigma	80	205	435	37	94	305	201	104	62
4227	40	160	435	18	74	374	234	140	72
4215	80	155	435	37	71	305	239	66	46
delta	50	100	435	23	46	349	284	65	45
4077	40	90	435	18	41	374	295	79	52
4046	25	70	430	12	33	413	316	97	59
mu phi 1283									
beta	50	165	435	23	76				
gamma	70	220	430	33	102				
delta	50	170	430	23	79				
epsilon	20	110	430	9	51				
zeta	15	55	430	7	26				
eta	10	25	430	5	12				
X-13691 mu phi 1283									
beta	40	110	420	19	52				
4481	175	190	420	83	90				
4471	165	190	420	79	90				
gamma	50	175	420	24	83				
delta	30	140	420	14	67				
4026	95	120	420	45	57				
epsilon	15	90	420	7	43				

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62

mu phi 1282 X 13691 ^ 200 #4

Beta | 20 | 130 | 420 | 20 | 60 | | |
 gamma | 10 | 180 | 420 | 10 | 85 | | |
 delta | 10 | 140 | 425 | 10 | 65 | | |
 epsilon | 10 | 90 | 430 | 10 | 65 | | |
 k | 35 | 60 | 420 | 15 | 30 | | |
 zeta | 0 | 35 | 430 | 0 | 15 | | |

#5 mu phi 1284

beta | 50 | 165 | 430 | 25 | 75 | | |
 gamma | 70 | 220 | 430 | 25 | 75 | | |
 delta | 50 | 175 | 425 | 20 | | | |
 epsilon | 20 | 115 | 425 | | | | |
 kappa | 70 | 90 | 425 | | | | |
 zeta | 10 | 60 | 425 | | | | |
 eta | 0 | 25 | 425 | | | | |

X 13688 mu phi 1277 #1

beta | 290 | 340 | 520* | 112 | 131 | 173 | 143 | 30 | 24
 gamma | 220 | 310 | 515 | 85 | 119 | 216 | 162 | 54 | 39
 xi | 200 | 300 | 515 | 77 | 116 | 229 | 166 | 63 | 44
 G | 120 | 295 | 515 | 46 | 114 | 284 | 170 | 114 | 65
 4227 | 115 | 250 | 515 | 44 | 96 | 288 | 198 | 90 | 56
 4215 | 120 | 245 | 515 | 46 | 94 | 284 | 201 | 83 | 53
 delta | 120 | 175 | 520 | 46 | 67 | 284 | 246 | 28 | 30
 4077 | 75 | 160 | 520 | 29 | 62 | 327 | 255 | 72 | 48
 4046 | 80 | 145 | 520 | 31 | 56 | 321 | 265 | 56 | 40
 epsilon | 00 | 75 | 520 | 0 | 29 | 0 | 327 | .. | |
 kappa | 00 | 45 | 520 | 0 | 17 | 0 | 379 | .. | |

* assumed uniform 520

62

mu phi 1282 X 13691 #4

# 20	140	420	20	60				
5 10	180	420	10	85				
6 10	180	425	10	65				
4 10	90	430	10	65				
4 35	60	420	15	30				
3 0	35	430	0	15				
#5 mu phi 1284								
5 50	165	430	25	75				
5 70	220	430	25	75				
5 50	175	425	20					
6 20	115	425						
4 70	90	425						
3 10	60	425						
1 0	25	425						
X 13688 mu phi 1277 #1								
2 290	340	520*	112	131	173	143	30	24
2 220	310	515	85	119	216	162	54	39
2 200	300	515	77	116	229	166	63	44
2 120	295	515	46	114	284	170	114	65
4227	115	250	515	44	96	288	198	90
4215	120	245	515	46	94	284	201	83
delta	120	175	520	46	67	284	246	28
4077	75	160	520	29	62	327	255	72
4046	80	145	520	31	56	321	265	56
epsilon	00	75	520	0	29	0	327	..
kappa	00	45	520	0	17	0	379	..

* assumed uniform 520

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 Extracted Aug-29-2022 05:00:12

63
X 13688 mu phi 1277 #2

beta	320 400 530								
gamma	340 440 530								
delta	|280|380|530|	|	|	|	|	|	|	|	|
4026	|330|350|530|	|	|	|	|	|	|	|	|
epsilon	|200|315|530|	|	|	|	|	|	|	|	|
zeta	|110|225|530|	|	|	|	|	|	|	|	|
eta	|50|115|525|	|	|	|	|	|	|	|	|
theta	|30|60|525|	|	|	|	|	|	|	|	|

C 12527 mu phi 1160 Arcturus

1	|280|410|435|	|	|	|	|
2	|195|400|435|	|	|	|	|
3	|370|390|435|	|	|	|	|
4	|370|375|430|	|	|	|	|
5	|330|380|430|	|	|	|	|
6	|320|375|430|	|	|	|	|
7	|300|370|430|	|	|	|	|
8	|280|365|430|	|	|	|	|
9	|300|360|430|	|	|	|	|
10	|245|360|430|	|	|	|	|
11	|275|350|430|	|	|	|	|
12	|220|350|430|	|	|	|	|
13	|200|340|430|	|	|	|	|
14	|170|340|430|	|	|	|	|
15	|180|335|430|	|	|	|	|
16	275 325 430				
17	220 320 430				
18	240 315 430				
19	230 310 430				
20	280 305 430				
21	215 300 430				

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63

X 13688 mu phi 1277 #2

1	280	410	435
2	195	400	435
3	370	390	435
4	370	375	430
5	330	380	430
6	320	375	430
7	300	370	430
8	280	365	430
9	300	360	430
10	245	360	430
11	275	350	430
12	220	350	430
13	200	340	430
14	170	340	430
15	180	335	430
16	275	325	430
17	220	320	430
18	240	315	430
19	230	310	430
20	280	305	430
21	215	300	430

C 12527 mu phi 1160 Arcturus

1	280	410	435
2	195	400	435
3	370	390	435
4	370	375	430
5	330	380	430
6	320	375	430
7	300	370	430
8	280	365	430
9	300	360	430
10	245	360	430
11	275	350	430
12	220	350	430
13	200	340	430
14	170	340	430
15	180	335	430
16	275	325	430
17	220	320	430
18	240	315	430
19	230	310	430
20	280	305	430
21	215	300	430

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

64

C12527 ud 1160 archives

[[9 columned table]]

22	200	290	430	---	---	---	---	---
23	165	290	430	---	---	---	---	---
24	110	280	430	---	---	---	---	---
25	135	280	430	---	---	---	---	---
26	80	270	430	---	---	---	---	---
27	190	265	430	---	---	---	---	---
28	110	260	430	---	---	---	---	---
29	150	245	430	---	---	---	---	---
30	145	240	430	---	---	---	---	---
31	200	220	430	---	---	---	---	---
32	190	220	430	---	---	---	---	---
33	130	210	430	---	---	---	---	---
34	140	190	430	---	---	---	---	---
35	150	170	425	---	---	---	---	---
36	150	170	425	---	---	---	---	---
37	140	165	425	---	---	---	---	---
38	140	155	425	---	---	---	---	---
39	60	120	425	---	---	---	---	---
40	30	90	425	---	---	---	---	---
41	15	50	425	---	---	---	---	---
42	15	50	425	---	---	---	---	---
43	10	40	425	---	---	---	---	---
44	---	---	---	---	---	---	---	---

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64

C12527 ud 1160 Archives

22	200	290	430					
23	165	290	430					
24	110	280	430					
25	135	280	430					
26	80	270	430					
27	190	265	430					
28	110	260	430					
29	150	245	430					
30	145	240	430					
31	200	220	430					
32	190	220	430					
33	130	210	430					
34	140	190	430					
35	150	170	425					
36	150	170	425					
37	140	165	425					
38	140	155	425					
39	60	120	425					
40	30	90	425					
41	15	50	425					
42	15	50	425					
43	10	40	425					
44	---	---	---					

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Extracted Aug-29-2022 05:00:12

[[?]]-13503 [[?]]1194

[beta]15|60|540
[[?]]20|135|540
[delta]20|115|540
[epsilon]20|80|540

#2

[beta]240|330|550|87|120|213|160|53|39
[[?]]190|325|550|69|118|243|163|80|52
[chi]230|315|550|83|114|219|170|49|36
[[?]]140|305|550|51|111|274|175|99|60
4227|160|265|545|59|97|260|197|63|44
4215|180|260|545|66|95|248|200|48|36
[delta]125|200|545|46|74|284|234|50|37
4077|110|190|545|40|70|297|241|56|40
4046|120|160|540|44|59|288|260|28|23

#4

[beta]125|290|535
[[?]]170|410|535
[delta]135|380|535
[epsilon]90|310|535
[[?]]45|190|535
[eta]10|100|535
[alpha]05|40|535

Handwritten table with columns and rows of numbers. The page is numbered 65 in the top right corner. The table contains numerical data, likely astronomical observations, with some entries in red ink. The header includes handwritten notes: "4-13-5018" and "40771144".

4-13-5018 40771144									
#1									
B	15	60	540						
3	20	105	040						
B	20	115	540						
6	20	80	540						
#2									
4	240	330	550	87	120	213	160	53	39
1	190	325	550	69	118	243	163	80	52
2	230	315	550	83	114	219	170	49	36
1	140	305	550	51	111	274	175	99	60
4	227	160	265	545	59	97	260	197	63
4	215	180	260	545	66	95	248	200	48
4	077	110	190	545	40	70	297	241	56
4	046	120	160	540	44	59	288	260	28
#4									
4	125	290	535						
1	170	410	535						
1	135	380	535						
1	90	310	535						
1	45	190	535						
1	10	100	535						
1	05	40	535						

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Extracted Aug-29-2022 05:00:12

X13546 1202 H.D.152293

#10 dm

[[10 Column Table]]

310	400	530	117	151	165	111	54	39
310	420	530	117	158	165	100	65	45
390	420	525	148	158	116	100	16	14
4227	340	395	525	130	159	145	113	32
4215	370	390	525	141	149	127	114	13
	240	350	525	92	134	205	138	67
4077	285	340	525	109	130	178	145	33
4046	270	315	525	113	120	187	160	27
	20	250	525	8	95	446	200	246
	10	190	525	4	72	(500)	238	(262)
	50	110	525	19	42	369	294	76
	10	40	525	4	15	(500)	392	

#11

475	485	520	182	186	165	111	54
460	470	500	151	165	111	54	
420	440	490					
365	390	490					
340	355	490					
270	280	490					
150	165	485					
80	100	485					

66

X13546 1202 H.D.152293
#10

dm

B	310	400	530	117	151	165	111	54	39
X	310	420	530	117	158	165	100	65	45
X	390	420	530	148	158	116	100	16	14
4227	340	395	525	130	150	145	113	32	26
4215	370	390	525	141	149	127	114	13	11
2340	250	525	92	134	205	138	67	46	
4077	285	340	525	109	130	178	145	33	26
4046	270	315	525	113	120	187	160	27	22
6	20	250	525	8	95	446	200	246	90
1	10	190	525	4	72	(500)	238	(262)	91
3	50	110	525	19	42	369	294	76	50
7	10	40	525	4	15	(500)	392		

#11

B	475	485	520	182	186	165	111	54
X	460	470	500	151	165	111	54	
2	420	440	490					
6	365	390	490					
7	340	355	490					
3	270	280	490					
7	150	165	485					
5	80	100	485					

Project PHaEDRA - Cecilia H. Payne #39
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67

mu phi 1198 X 13550 #1

[[10 column table]]

beta |430 |460 |535 |161 |172 |95 |75 |20 |17

4583 |410 |480 |540 |152 |178 |110 |62 |48 |36

gamma |340 |470 |540 |144 |174 |122 |71 |51 |37

xi |380 |465 |540 |141 |172 |127 |75 |52 |38

G |315 |460 |540 |117 |170 |165 |79 |86 |55

4227 |250 |425 |540 |93 |158 |203 |100 |103 |61

4215 |300 |420 |540 |93 |158 |175 |103 |72 |48

(delta?) gamma |275 |370 |540 |111 |156 |188 |133 |55 |40

4077 |230 |360 |540 |85 |133 |216 |140 |76 |50

4046 |200 |345 |540 |74 |128 |234 |148 |86 |55

Epsilon |20 |230 |540 |7 |85 |456 |216 |240 |89

Kappa |00 |140 |540 |0 |52 |... |273 |... |

X 13657 mu phi 1260 #1

Beta |420 |450 |540 |156 |167 |103 |85 |18 |15

gamma |380 |430 |535 |142 |160 |125 |97 |28 |23

xi |320 |430 |535 |120 |160 |160 |97 |63 |144

G |290 |420 |535 |108 |157 |180 |102 |72 |48

4227 |340 |400 |535 |127 |150 |149 |113 |36 |28

4215 |355 |395 |535 |133 |148 |140 |116 |24 |20

delta |310 |360 |535 |116 |134 |166 |138 |28 |23

4077 |305 |345 |535 |114 |129 |170 |146 |24 |20

4046 |280 |320 |535 |105 |119 |184 |162 |22 |18

epsilon |20 |230 |535 |7 |86 |456 |214 |242 |89

pi |00 |160 |535 |0 |60 |... |258 |... |

67

mu phi 1198 X 13550 #1

beta	430	460	535	161	172	95	75	20	17
4583	410	480	540	152	178	110	62	48	36
gamma	340	470	540	144	174	122	71	51	37
xi	380	465	540	141	172	127	75	52	38
G	315	460	540	117	170	165	79	86	55
4227	250	425	540	93	158	203	100	103	61
4215	300	420	540	93	158	175	103	72	48
(delta?) gamma	275	370	540	111	156	188	133	55	40
4077	230	360	540	85	133	216	140	76	50
4046	200	345	540	74	128	234	148	86	55
Epsilon	20	230	540	7	85	456	216	240	89
Kappa	00	140	540	0	52	...	273	...	

X 13657 mu phi 1260 #1

Beta	420	450	540	156	167	103	85	18	15
gamma	380	430	535	142	160	125	97	28	23
xi	320	430	535	120	160	160	97	63	144
G	290	420	535	108	157	180	102	72	48
4227	340	400	535	127	150	149	113	36	28
4215	355	395	535	133	148	140	116	24	20
delta	310	360	535	116	134	166	138	28	23
4077	305	345	535	114	129	170	146	24	20
4046	280	320	535	105	119	184	162	22	18
epsilon	20	230	535	7	86	456	214	242	89
pi	00	160	535	0	60	...	258	...	

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Extracted Aug-29-2022 05:00:12

69

am
 mu phi 2737 beta | 310 | 350 | 530 | 117 | 132 | 165 | 141 | 24 | 20
 X14805.3 gamma | 275 | 355 | 540 | 102 | 132 | 188 | 141 | 47 | 35
 x | 215 | 345 | 540 | 80 | 128 | 224 | 148 | 76 | 50
 G | 125 | 335 | 540 | 46 | 124 | 284 | 154 | 30 | 24
 4227 | 45 | 280 | 540 | 17 | 104 | 379 | 185 | 194 | 83
 4215 | 145 | 275 | 540 | 54 | 102 | 269 | 188 | 81 | 53
 delta | 90 | 190 | 540 | 33 | 70 | 316 | 241 | 75 | 50
 4077 | 70 | 170 | 540 | 26 | 63 | 337 | 253 | 84 | 54
 4046 | 40 | 140 | 540 | 15 | 52 | 392 | 273 | 119 | 67
 epsilon | 0 | 50 | 540 | 0 | 18 | .. | 374 | .. |

mu phi 2663 beta | 300 | 385 | 505 |
 X12349.1 gamma | 305 | 465 | 505 |
 delta | 350 | 445 | 505 |
 2 | 290 | 400 | 505 |
 zeta~~[[strikethrough]]~~ k ~~[[strikethrough]]~~ | 170 | 285 | 500 |
 eta~~[[strikethrough]]~~ zeta ~~[[strikethrough]]~~ | 60 | 155 | 500 |
 theta~~[[strikethrough]]~~ eta ~~[[strikethrough]]~~ | 15 | 65 | 500 |
 iota ~~[[strikethrough]]~~ theta ~~[[strikethrough]]~~ | 0 | 30 | 500 |
~~[[strikethrough]]~~ iota ~~[[strikethrough]]~~ |

mu phi 2683
 X13699.6 beta | 130 | 260 | 530 | | 98 | | 195 |
 gamma | 175 | 320 | 540 | | 119 | | 162 |
 delta | 145 | 295 | 550 | | 108 | | 180 |
 epsilon | 95 | 235 | 550 | | 85 | | 212 |
 zeta | 50 | 135 | 555 |
 eta | 25 | 65 | 555 |

69

mu phi 2737 beta	310	350	530	117	132	165	141	24	20
X14805.3 gamma	275	355	540	102	132	188	141	47	35
x	215	345	540	80	128	224	148	76	50
G	125	335	540	46	124	284	154	30	24
4227	45	280	540	17	104	379	185	194	83
4215	145	275	540	54	102	269	188	81	53
delta	90	190	540	33	70	316	241	75	50
4077	70	170	540	26	63	337	253	84	54
4046	40	140	540	15	52	392	273	119	67
epsilon	0	50	540	0	18	..	374	..	
mu phi 2663 beta	300	385	505						
X12349.1 gamma	305	465	505						
delta	350	445	505						
2	290	400	505						
zeta [[strikethrough]] k [[strikethrough]]	170	285	500						
eta [[strikethrough]] zeta [[strikethrough]]	60	155	500						
theta [[strikethrough]] eta [[strikethrough]]	15	65	500						
iota [[strikethrough]] theta [[strikethrough]]	0	30	500						
[[strikethrough]] iota [[strikethrough]]									
mu phi 2683									
X13699.6 beta	130	260	530						
gamma	175	320	540						
delta	145	295	550						
epsilon	95	235	550						
zeta	50	135	555						
eta	25	65	555						

Project PHaEDRA - Cecilia H. Payne #39
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 Extracted Aug-29-2022 05:00:12

70
dm
[[10 column chart]]
wp2683 beta|430|460|530|162|174| 93| 71| 22|18
X13699.4 gamma|390|445|540|144|165|122| 88| 34|27|
chi|390|445|540|146|165|119| 88| 31|25|
overlap G|350|435|540|130|161|145| 95| 50|37|
can't 4227|340|415|540|126|154|151|106| 45|34|
No.6. 4215|345|410|540|128|152|128|110| 38|30|
how 5|310|370|540|115|137|168|133| 35|28|
serious? 4077|290|360|540|108|134|180|138| 42|32|
4046| 50| 85|520| 19| 33|369|316| 53|39|
epsilon | 40|240|545| 15| 88|392|211|181|81|
k| 25|160|545| 9| 59|437|260| 77|80|
wp 2684 gamma|265|335|530| 98|126|195|151| 44|33|
x13699.3 chi|240|330|530| 91|125|206|153| 53|39| violet only)
G|160|320|530| 60|120|258|160| 98|59|
4227|145|280|530| 55|106|267|182| 85|54|
4215|170|275|530| 64|104|251|185| 66|46|
5|140|215|530| 53| 81|271|223| 48|36|
4077|115|200|530| 43| 75|290|233| 57|41|
4046| 95|180|530| 36| 68|308|244| 64|44|
epsilon| 10|100|530| 4| 38|(500)|303|197| 84|very blunt
kappa| 0| 50|530| 0| 19|..|369| | |
wp 2685 gamma|120|195|525| 46| 74|284|234| 50|37|
x13699.4 chi|105|185|525| 40| 70|297|241| 56|40| violet only) G|
65|180|520| 25| 69|341|243| 98|59|
4227| 60|150|520| 23| 58|349|262| 87|55|
4215| 75|150|520| 29| 58|327|262| 65|45|
5| 60|105|520| 23| 40|349|297| 52|38|
4077| 55| 95|520| 21| 37|358|305| 53|39|
4046| 45| 80|520| 17| 31|379|321| 58|41|
| | | | | | | | | |

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70

dm

wp 2683 beta 430 460 530 162 174 93 71 22 18 18

X13699.4 gamma 390 445 540 144 165 122 88 34 27 27

chi 390 445 540 146 165 119 88 31 25 25

overlap G 350 435 540 130 161 145 95 50 37 37

can't 4227 340 415 540 126 154 151 106 45 34 34

No.6. 4215 345 410 540 128 152 128 110 38 30 30

how 5 310 370 540 115 137 168 133 35 28 28

serious? 4077 290 360 540 108 134 180 138 42 32 32

4046 50 85 520 19 33 369 316 53 39 39

epsilon 40 240 545 15 88 392 211 181 81 81

k 25 160 545 9 59 437 260 77 80 80

wp 2684 gamma 265 335 530 98 126 195 151 44 33 33

x13699.3 chi 240 330 530 91 125 206 153 53 39 39 violet only)

G 160 320 530 60 120 258 160 98 59 59

4227 145 280 530 55 106 267 182 85 54 54

4215 170 275 530 64 104 251 185 66 46 46

5 140 215 530 53 81 271 223 48 36 36

4077 115 200 530 43 75 290 233 57 41 41

4046 95 180 530 36 68 308 244 64 44 44

epsilon 10 100 530 4 38 (500) 303 197 84 very blunt

kappa 0 50 530 0 19 .. 369 | |

wp 2685 gamma 120 195 525 46 74 284 234 50 37 37

x13699.4 chi 105 185 525 40 70 297 241 56 40 40 violet only) G

65 180 520 25 69 341 243 98 59 59

4227 60 150 520 23 58 349 262 87 55 55

4215 75 150 520 29 58 327 262 65 45 45

5 60 105 520 23 40 349 297 52 38 38

4077 55 95 520 21 37 358 305 53 39 39

4046 45 80 520 17 31 379 321 58 41 41

| | | | | | | | | |

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Extracted Aug-29-2022 05:00:12

[[10 column chart]]

X13699.4 beta|155|205|510| 61| 80|256|224| 32|26|
 gamma|110|190|515| 43| 74|290|234| 56|40|
 chi|110|185|515| 43| 72|290|238| 52|38|
 G| 60|180|515| 23| 70|349|241|108|63|
 4227| 70|150|520| 27| 58|334|262| 72|48|
 4215| 80|150|520| 31| 58|321|262| 59|42|
 5| 70|110|520| 27| 42|334|293| 41|31|
 4077| 55|100|520| 21| 38|358|303| 55|40|
 4046| 50| 85|520| 19| 33|369|316| 53|39|
 | | | | | | | | | | | |
 wp 2686 beta|310|340|540|115|126|168|151| 17|14|
 x13699.1 gamma|265|315|540| 98|117|195|165| 30|24|
 chi|220|310|540| 81|115|223|168| 55|40|
 G|140|300|540| 52|111|273|175| 98|59|
 4227|105|260|540| 39| 96|300|198|102|61|
 4215|175|255|540| 65| 94|249|201| 48|36|
 5|130|190|540| 48| 70|280|241| 39|30|
 4077|115|180|535| 43| 67|290|246| 44|33|
 4046| 85|150|535| 32| 56|319|265| 54|39|
 epsilon| 0| 80|530| 0| 30| 0|324| ..| |
 kapp| 0| 40|530| 0| 15| 0|391| ..| |

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71

X13699.4	β	155	205	510	61	80	256	224	32	26
γ	110	190	515	43	74	290	234	56	40	
α	110	185	515	43	72	290	238	52	38	
G	60	180	515	23	70	349	241	108	63	
4227	70	150	520	27	58	334	262	72	48	
4215	80	150	520	31	58	321	262	59	42	
5	70	110	520	27	42	334	293	41	31	
4077	55	100	520	21	38	358	303	55	40	
4046	50	85	520	19	33	369	316	53	39	
wp 2686	β	310	340	540	115	126	168	151	17	14
x13699.1	γ	265	315	540	98	117	195	165	30	24
α	220	310	540	81	115	223	168	55	40	
G	140	300	540	52	111	273	175	98	59	
4227	105	260	540	39	96	300	198	102	61	
4215	175	255	540	65	94	249	201	48	36	
5	130	190	540	48	70	280	241	39	30	
4077	115	180	535	43	67	290	246	44	33	
4046	85	150	535	32	56	319	265	54	39	
ε	0	80	530	0	30	0	324	..		
κ	0	40	530	0	15	0	391	..		

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 Extracted Aug-29-2022 05:00:12

[[Top Left 72]]

Measures for x

[[12 columned table]]

Plate | uep | Stan | n | m+n | l+m+n | n | m+n bar | [n] | [m+n] | dn|dl|
 C16035|2341|Cup|175|230|535|66|86|248|214|34|27|
 C15906|2339|fDra|125|205|430|58|95|262|200|62|44|
 C15988|2374|KCap|115|165|495|67|147|282|246|36|28|
 C15267|2260|Cao|170|230|540|63|85|253|216|47|35|
 C9643|2238|+30°q1|345|380|485|142|156|125|103|22|18|
 C9675|2234|CMi|245|305|480|102|123|188|156|32|26|
 C9675|2235|CMi|240|285|470|102|121|188|159|29|23|
 C14974|2298|+32°4349|55|120|545|20|44|363|288|75|50|

Plate	uep	Stan	n	m+n	l+m+n	n	m+n	[n]	[m+n]	dn	dl
C16035	2341	Cup	175	230	535	66	86	248	214	34	27
C15906	2339	fDra	125	205	430	58	95	262	200	62	44
C15988	2374	KCap	115	165	495	67	147	282	246	36	28
C15267	2260	Cao	170	230	540	63	85	253	216	47	35
C9643	2238	+30°q1	345	380	485	142	156	125	103	22	18
C9675	2234	CMi	245	305	480	102	123	188	156	32	26
C9675	2235	CMi	240	285	470	102	121	188	159	29	23
C14974	2298	+32°4349	55	120	545	20	44	363	288	75	50

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 Extracted Aug-29-2022 05:00:12

through]]65[[/striketrough]]293|255|38|30|
4077|80|140|520|^[[31]][[striketrough]]30[[/striketrough]]^[[54]][[striket
rough]]55[[/striketrough]]321|269|52|38|
4046|70|120|520|^[[27]][[striketrough]]25[[/striketrough]]^[[46]][[striket
rough]]45[[/striketrough]]334|284|50|37
epsilon|00|60|520|00|^[[23]][[striketrough]]25[[/striketrough]]|..|349|..|
|
R|00|35|520|00|^[[12]][[striketrough]]05[[/striketrough]]|..|413|..| |

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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

75

X+13678 [mu][phi]1275 #3 14620

[[10 column table]]

	beta	gamma	chi	sigma	delta	epsilon	kappa
210	240	370	114	130	170	145	25
160	210	375	85	112	216	173	43
140	210	375	75	112	233	173	60
100	205	375	53	110	271	176	95
90	190	380	47	100	282	192	90
115	180	380	60	95	258	200	58
110	150	385	57	78	263	228	35
90	140	385	47	73	282	236	46
70	130	390	36	67	305	246	52
10	70	390	5	36	487	308	179
00	60	405	0	30	549	324	150

x-13678 [[symbol]][[symbol]] 12741

	beta	gamma	chi	sigma	delta	epsilon	kappa
340	360	420	162	172	93	75	18
280	320	410	136	166	135	86	49
250	310	410	122	151	157	111	46
190	305	410	93	148	203	116	87
135	270	410	66	132	248	141	107
200	265	410	98	130	195	145	50
160	220	410	78	108	228	180	48
140	200	410	68	98	244	195	49
110	175	410	54	85	269	216	53
100	160	405	5	49	487	278	209
00	60	405	0	30	549	324	150

X+13678 [mu][phi]1275 #3 14620

	beta	gamma	chi	sigma	delta	epsilon	kappa
210	240	370	114	130	170	145	25
160	210	375	85	112	216	173	43
140	210	375	75	112	233	173	60
100	205	375	53	110	271	176	95
90	190	380	47	100	282	192	90
115	180	380	60	95	258	200	58
110	150	385	57	78	263	228	35
90	140	385	47	73	282	236	46
70	130	390	36	67	305	246	52
10	70	390	5	36	487	308	179
00	60	405	0	30	549	324	150

X-13678 [[symbol]][[symbol]] 12741

	beta	gamma	chi	sigma	delta	epsilon	kappa
340	360	420	162	172	93	75	18
280	320	410	136	166	135	86	49
250	310	410	122	151	157	111	46
190	305	410	93	148	203	116	87
135	270	410	66	132	248	141	107
200	265	410	98	130	195	145	50
160	220	410	78	108	228	180	48
140	200	410	68	98	244	195	49
110	175	410	54	85	269	216	53
100	160	405	5	49	487	278	209
00	60	405	0	30	549	324	150

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 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

76

3678 1274 #2

beta|170|200|410| 83| 98|219|195| 24|20^d|
 gamma|130|160|410| 63| 78|253|228| 25|21|
 chi|100|155|410| 49| 76|278|231| 49|35|
 G| 65|100|410| 32| 73|319|236| 83|53|
 4227| 50|120|410| 24| 59|345|260| 85|54|
 4210| 80|120|410| 39| 59|300|260| 40|31|
 delta| 60| 90|410| 29| 44|327|288| 39|30|
 4077| 60| 85|410| 29| 42|327|293| 34|27|
 4046| 40| 80|410| 20| 39|363|300| 63|44|

[[~~3~~]]3[[~~3~~]]3669 #1 1257
 beta|380|410|530|144|155|122|105| 17|14|
 gamma|295|365|530|112|138|173|132| 41|31|
 chi|275|360|530|104|136|185|135| 50|37|
 G|190|355|530| 72|134|238|138|100|60|
 4277|200|320|530| 75|121|233|159| 74|49|
 4215|235|320|530| 89|121|209|159| 50|37|
 delta|195|265|530| 74|100|234|192| 42|32|
 4077|180|250|535| 67| 93|246|203| 43|33|
 epsilon| 00|140|535| 0.| 52| ..|273| ..| |
 kappa| 00|100|535| 0.| 37| ..|305| ..| |

13669 #3 1259

beta|80|150|545|29|55|327|267|60|42
 gamma|70|160|545|26|59|337|260|77|51
 chi|110|155|545|37|57|305|263|42|32
 G|90|150|545|33|55|316|267|49|36
 4227|90|130|545|33|48|316|280|36|28
 4215|115|125|540|43|46|290|284|006|5
 delta|40|90|540|15|33|392|316|76|60
 4046|45|75|540|17|28|379|330|49|36

76

873678 4241274 #2

dl

B	170	200	410	83	98	219	195	24	20
T	120	160	410	63	78	253	228	25	21
L	100	155	410	49	76	278	231	49	35
G	65	100	410	32	73	319	236	83	53
4227	50	120	410	24	59	345	260	85	54
4210	80	120	410	39	59	300	260	40	31
S	60	90	410	29	44	327	288	39	30
4077	60	85	410	29	42	327	293	34	27
4046	40	80	410	20	39	363	300	63	44

X 873669 #1 4241257

B	380	410	530	144	155	122	105	17	14
T	295	365	530	112	138	173	132	41	31
L	275	360	530	104	136	185	135	50	37
G	190	355	530	72	134	238	138	100	60
4277	200	320	530	75	121	233	159	74	49
4215	235	320	530	89	121	209	159	50	37
S	195	265	530	74	100	234	192	42	32
4077	180	250	535	67	93	246	203	43	33
4046	120	270	535	56	82	265	231	44	33
B	80	150	545	29	55	327	267	60	42
T	70	160	545	26	59	337	260	77	51
L	110	155	545	37	57	305	263	42	32
G	90	150	545	33	55	316	267	49	36
4227	90	130	545	33	48	316	280	36	28
4215	115	125	540	43	46	290	284	006	5
S	40	90	540	15	33	392	316	76	60
4046	45	75	540	17	28	379	330	49	36

Y 873669 #3 4241259

B	80	150	545	29	55	327	267	60	42
T	70	160	545	26	59	337	260	77	51
L	110	155	545	37	57	305	263	42	32
G	90	150	545	33	55	316	267	49	36
4227	90	130	545	33	48	316	280	36	28
4215	115	125	540	43	46	290	284	006	5
S	40	90	540	15	33	392	316	76	60
4046	45	75	540	17	28	379	330	49	36

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1258 13669 #2

[[10 column table]]

beta | 260 | 315 | 530 | 98 | 119 | 195 | 162 | 33 | 26^dl

4383 | 70 | 225 | 530 | 26 | 85 | 337 | 216 | 121 | 67

gamma | 110 | 195 | 525 | 42 | 74 | 293 | 234 | 59 | 42

x | 80 | 185 | 525 | 30 | 70 | 324 | 241 | 083 | 53

G | 45 | 170 | 525 | 17 | 65 | 379 | 249 | 130 | 70

4227 | 00 | 105 | 525 | 0 | 40 | .. | 297 | .. | ..

1255 #3 13666

[[10 column table]]

beta | 360 | 390 | 510 | 142 | 153 | 125 | 108 | 17 | 14 |

gamma | 255 | 325 | 520 | 98 | 125 | 195 | 153 | 42 | 32 |

x | 250 | 320 | 520 | 96 | 123 | 198 | 156 | 42 | 32 |

G | 180 | 310 | 520 | 69 | 120 | 243 | 160 | 83 | 53 |

4227 | 140 | 265 | 520 | 54 | 102 | 269 | 188 | 81 | 53 |

4215 | 210 | 260 | 520 | 81 | 100 | 223 | 192 | 31 | 25 |

delta | 120 | 195 | 520 | 46 | 75 | 284 | 233 | 51 | 37 |

4077 | 110 | 170 | 520 | 42 | 65 | 293 | 249 | 44 | 33 |

4046 | 100 | 150 | 520 | 38 | 58 | 303 | 262 | 41 | 31 |

epsilon | 00 | 75 | 530 | 0 | 28 | .. | 330 | .. | ..

[[rho?]] | 00 | 50 | 530 | 0 | 19 | .. | 369 | .. | ..

13666 1254 #1

[[10 column table]]

beta | 255 | 310 | 550 | 93 | 113 | 203 | 171 | 32 | 26

gamma | 210 | 280 | 540 | 78 | 104 | 228 | 185 | 43 | 33

chi | 180 | 280 | 540 | 67 | 104 | 246 | 185 | 61 | 43

G | 105 | 270 | 546 | 39 | 100 | 300 | 192 | 108 | 63

4227 | 100 | 230 | 535 | 37 | 86 | 305 | 214 | 91 | 57

4215 | 135 | 230 | 535 | 50 | 86 | 276 | 214 | 62 | 44

delta | 100 | 170 | 535 | 37 | 64 | 305 | 251 | 54 | 39

4077 | 100 | 150 | 530 | 38 | 57 | 303 | 263 | 40 | 31

4046 | 70 | 135 | 530 | 26 | 51 | 337 | 274 | 63 | 44

epsilon | 10 | 80 | 530 | 4 | 30 | .. | 324 | .. | ..

Handwritten ledger page 77, showing two tables of numerical data. The page is titled "K-13669 #2" and "K-13666 #1". The tables contain columns of numbers, likely representing astronomical data. Red checkmarks are visible next to some rows in both tables.

K-13669 #2									
13669	260	315	530	98	119	195	162	33	26^dl
4383	70	225	530	26	85	337	216	121	67
gamma	110	195	525	42	74	293	234	59	42
x	80	185	525	30	70	324	241	083	53
G	45	170	525	17	65	379	249	130	70
4227	00	105	525	0	40	..	297	..	..
K-13666 #1									
13666	360	390	510	142	153	125	108	17	14
gamma	255	325	520	98	125	195	153	42	32
x	250	320	520	96	123	198	156	42	32
G	180	310	520	69	120	243	160	83	53
4227	140	265	520	54	102	269	188	81	53
4215	210	260	520	81	100	223	192	31	25
delta	120	195	520	46	75	284	233	51	37
4077	110	170	520	42	65	293	249	44	33
4046	100	150	520	38	58	303	262	41	31
epsilon	00	75	530	0	28	..	330	..	..
[[rho?]]	00	50	530	0	19	..	369	..	..

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

-13666 1254 #2

G|390|520|530|185|198|43|...|...|
 4227|480|510|530|181|192|55|8|47|35|
 4215|490|510|530|185|192|43|8|35|28|
 delta|475|490|525|181|187|55|36|19|16|
 4077|480|490|525|183|187|49|36|13|11|
 4046|450|480|520|173|184|73|46|27|22|
 epsilon|155|425|520|60|174|258|71|187|82|
 k|75|280|520|29|146|327|119|208|85|

-13660 1265 #3

beta|220|266|305|144|174|122|71|51|37|
 gamma|180|230|305|118|151|163|111|52|38|
 chi|160|220|305|105|144|184|122|62|44|
 G|105|220|305|69|144|184|122|62|44|
 4227|110|200|305|69|144|243|122|121|67|
 4215|120|195|305|79|128|336|148|78|51|
 delta|110|150|305|72|98|238|195|43|33|
 4077|100|140|305|66|92|248|205|43|33|
 4046|90|120|305|59|79|260|226|34|27|
 epsilon|05|80|305|3|52|...|273|...|...|
 k|00|60|310|0|39|...|300|...|...|

-13657 1260 #2

beta|425|455|540|157|168|102|83|19|16|
 gamma|380|430|535|142|160|125|97|28|23|
 chi|370|430|535|138|160|132|97|35|28|
 G|295|425|535|110|159|176|98|88|56|
 4227|340|400|535|127|150|149|113|36|28|
 4215|360|395|535|134|148|138|116|22|18|
 delta|310|355|535|116|133|166|140|26|21|
 4077|305|345|535|114|129|170|146|24|20|
 4046|280|320|535|105|120|184|160|24|20|
 epsilon|20|230|535|7|86|456|214|242|89|
 kappa|00|[[?]]|160|535|0|60|...|258|...|

78

V-13666 1254 #2

G	490	520	530	185	198	43	...	...	...
4227	480	510	530	181	192	55	8	47	35
4215	490	510	530	185	192	43	8	35	28
delta	475	490	525	181	187	55	36	19	16
4077	480	490	525	183	187	49	36	13	11
4046	450	480	520	173	184	73	46	27	22
epsilon	155	425	520	60	174	258	71	187	82
k	75	280	520	29	146	327	119	208	85

V-13660 1265 #3

beta	220	266	305	144	174	122	71	51	37
gamma	180	230	305	118	151	163	111	52	38
chi	160	220	305	105	144	184	122	62	44
G	105	220	305	69	144	184	122	62	44
4227	110	200	305	69	144	243	122	121	67
4215	120	195	305	79	128	336	148	78	51
delta	110	150	305	72	98	238	195	43	33
4077	100	140	305	66	92	248	205	43	33
4046	90	120	305	59	79	260	226	34	27
epsilon	05	80	305	3	52	...	273	...	...
k	00	60	310	0	39	...	300	...	...

V-13657 1260 #2

beta	425	455	540	157	168	102	83	19	16
gamma	380	430	535	142	160	125	97	28	23
chi	370	430	535	138	160	132	97	35	28
G	295	425	535	110	159	176	98	88	56
4227	340	400	535	127	150	149	113	36	28
4215	360	395	535	134	148	138	116	22	18
delta	310	355	535	116	133	166	140	26	21
4077	305	345	535	114	129	170	146	24	20
4046	280	320	535	105	120	184	160	24	20
epsilon	20	230	535	7	86	456	214	242	89
kappa	00	[[?]]	160	535	0	60	...	258	...

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

79

-13898 1195 #2

[[10 column table]]

| | | | | | | | | | dl | HD 190056 -32° 15682

beta | 425 | 450 | 535 | 159 | 168 | 98 | 83 | 15 | 13 | 19^h58.0, -32 20

gamma | 410 | 450 | 525 | 156 | 171 | 103 | 77 | 26 | 21 | K0 7^m.3 pg

x | 380 | 445 | 525 | 145 | 170 | 121 | 79 | 42 | 32

G | 300 | 440 | 520 | 116 | 170 | 166 | 79 | 87 | 55

4227 | 250 | 400 | 520 | 96 | 154 | 198 | 106 | 92 | 57

4215 | 340 | 390 | 520 | 131 | 150 | 143 | 113 | 30 | 24

delta | 280 | 330 | 515 | 109 | 128 | 178 | 148 | 30 | 24

4077 | 260 | 370 | 515 | 101 | 124 | 190 | 154 | 36 | 28

4046 | 215 | 300 | 510 | 84 | 118 | 217 | 163 | 54 | 39

epsilon | 05 | 160 | 510 | 2 | 63 | .. | 253 | .. | ..

K | 40 | 80 | 510 | -4 | 31 | .. | 321 | .. | ..

X-13903 mu phi 1272 #1

[[10 column table]]

beta | 225 | 280 | 485 | 93 | 116 | 203 | 166 | 37 | 29

gamma | 240 | 305 | 485 | 99 | 126 | 193 | 151 | 42 | 32

x | 220 | 300 | 485 | 91 | 124 | 206 | 154 | 52 | 38

G | 150 | 300 | 485 | 62 | 124 | 255 | 154 | 101 | 61

4227 | 140 | 265 | 495 | 58 | 110 | 262 | 176 | 86 | 55

4215 | 180 | 260 | 485 | 74 | 107 | 234 | 181 | 53 | 39

delta | 150 | 210 | 490 | 67 | 86 | 256 | 214 | 42 | 32

4077 | 140 | 190 | 490 | 57 | 78 | 263 | 228 | 35 | 28

4046 | 100 | 170 | 490 | 40 | 69 | 295 | 243 | 52 | 38

epsilon | 00 | 105 | 490 | 0 | 43 | .. | 240 | .. | ..

K | 40 | 60 | 490 | -4 | 24 | .. | 345 | .. | ..

Handwritten transcription of two tables from a notebook page (79).

Table 1 (Top): X-13898 mu phi 1195 #2

	19	225	280	485	93	116	203	166	37	29
beta	425	450	535	159	168	98	83	15	13	19^h58.0, -32 20
gamma	410	450	525	156	171	103	77	26	21	K0 7^m.3 pg
x	380	445	525	145	170	121	79	42	32	
G	300	440	520	116	170	166	79	87	55	
4227	250	400	520	96	154	198	106	92	57	
4215	340	390	520	131	150	143	113	30	24	
delta	280	330	515	109	128	178	148	30	24	
4077	260	370	515	101	124	190	154	36	28	
4046	215	300	510	84	118	217	163	54	39	
epsilon	05	160	510	2	63	..	253	..	..
K	40	80	510	-4	31	..	321	..	..

Table 2 (Bottom): X-13903 mu phi 1272 #1

	225	280	485	93	116	203	166	37	29
beta	225	280	485	93	116	203	166	37	29
gamma	240	305	485	99	126	193	151	42	32
x	220	300	485	91	124	206	154	52	38
G	150	300	485	62	124	255	154	101	61
4227	140	265	495	58	110	262	176	86	55
4215	180	260	485	74	107	234	181	53	39
delta	150	210	490	67	86	256	214	42	32
4077	140	190	490	57	78	263	228	35	28
4046	100	170	490	40	69	295	243	52	38
epsilon	00	105	490	0	43	..	240	..	..
K	40	60	490	-4	24	..	345	..	..

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

[[to be examined table]]								[d]

beta	270	350	480	112	146	173	119	54	39
gamma	310	265	480	129	152	146	110	36	28
chi	270	360	480	112	150	173	113	60	42
G	190	350	480	79	146	226	119	107	63
4227	190	310	475	80	130	224	145	79	52
4215	210	310	475	88	130	211	145	66	46
delta	170	233	475	72	99	238	193	45	34
4077	150	220	475	46	80	284	224	60	42
4046	110	190	475	46	80	284	224	60	42
epsilon	10	120	475	450	...	...	...	...	...

mu phi K0 2774	Beta	150	210	620	48	68	280	244	36	28
----------------	------	-----	-----	-----	----	----	-----	-----	----	----

K	Virginis|Gammaj|130|200|620|42|64|293|251|42|32|
|chi|95|190|620|31|61|321|256|65|45|	
G|35|170|620|11|55|421|267|154|76|	
4227 20|120|620|6|39|469|300|160|79|very wide |	
4215 50|115|620|16|37|385|305|80|52|	
delta 20|70|620|6|23|469|349|120|67|	
4077 -|-|-|	

2774	Mean
------	------

mu	phi	K0	2775	beta	195	240	530	74	91	234	206	28	23	28	26
K	Virginis	gamma	145	230	530	55	87	267	213	54	39	32	36		
chi	100	225	530	38	85	303	216	87	55	45	50				
G	50	215	530	19	81	369	23	146	74	76	75				
42	27	20	170	525	8	65	446	249	197	84	79	82			
42	15	70	165	525	27	63	334	253	81	53	52	52			
delta	35	100	525	13	38	406	303	103	61	67	64				
40	46	15	65	525	6	25	469	341	128	69	69				

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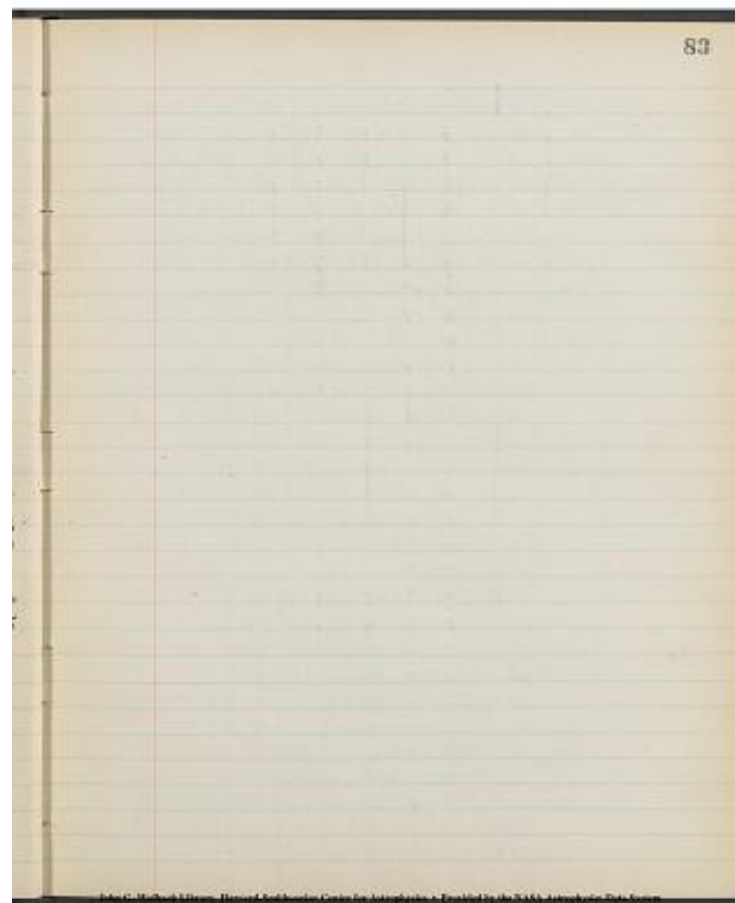
Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

4~~1~~37
 chi|160|210|320|100|131|192|143|49|61|43|41|42|42|
 sigma|115|210|320|72|131|238|143|95|118|66|68|64|66|
 4227|130|200|320|81|125|223|153|70|87|55|56|65|59|
 4215|155|195|320|97|122|197|157|40|50|37|35|35|35|36|
 delta|130|175|320|81|109|223|178|45|56|40|[^][[36]]~~38~~~~st~~
 rikethrough]]|47|41|
 4077|105|155|320|65| | | | | | | | | |
 4046|105|155|65|97|249|197|52|65|45|36|33|38|
 epsilon|5|100|320|3|62|..|255|..| | | | | | |
 kappa|0|70|320|0|44|..|288|..| | | | | | |

Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

83

[[no entries]]



Project PHaEDRA - Cecilia H. Payne #39
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Extracted Aug-29-2022 05:00:12

[[10 column table]]

12	13	28	28	330	330	00	0
13	6	7	28	33	330	316	14
14	6	7	28	33	330	316	14
15	6	8	28	37	330	305	25
16	6	8	28	37	330	305	25
17	5	8	23	37	349	305	44
18	4	9	19	42	369	293	76
19	2	10	9	42	437	282	155
20	1	10	4	47	-	282	...
21	1	11	4	51	-	274	...
22	1	11	9	51	437	274	163
23	2	12	9	56	369	265	104
24	6	12	28	56	330	265	65
25	7	13	33	61	316	256	60
26	9	14	42	65	293	249	44
27	9	14	42	65	293	249	44
28	7	15	33	70	316	241	75
29	3	15	14	70	399	241	158
30	1	16	4	75	-	233	...
31	2	16	9	75	437	233	204
32	5	17	23	79	349	226	123
33	10	18	47	84	282	217	65
34	13	18	61	84	256	217	39
35	15	19	70	89	241	209	32
36	17	20	79	93	226	203	23
37	18	20	84	93	217	203	14
38	19	21	89	98	209	195	14
39	20	21	93	98	203	195	08
40	21	22	98	102	195	188	07
41	22	22	102	102	188	188	00

84	2 Cor	Gal	Col	1 Th	2 Th	1 Tim	2 Tim	Tit	Phile
12	6	6	28	28	28	28	28	28	28
13	6	7	28	28	28	28	28	28	28
14	6	8	28	28	28	28	28	28	28
15	6	8	28	28	28	28	28	28	28
16	6	8	28	28	28	28	28	28	28
17	5	8	28	28	28	28	28	28	28
18	4	9	28	28	28	28	28	28	28
19	2	10	28	28	28	28	28	28	28
20	1	10	28	28	28	28	28	28	28
21	1	11	28	28	28	28	28	28	28
22	2	11	28	28	28	28	28	28	28
23	4	12	28	28	28	28	28	28	28
24	6	12	28	28	28	28	28	28	28
25	7	13	28	28	28	28	28	28	28
26	9	14	28	28	28	28	28	28	28
27	9	14	28	28	28	28	28	28	28
28	7	15	28	28	28	28	28	28	28
29	3	15	28	28	28	28	28	28	28
30	1	16	28	28	28	28	28	28	28
31	2	16	28	28	28	28	28	28	28
32	5	17	28	28	28	28	28	28	28
33	10	18	28	28	28	28	28	28	28
34	13	18	28	28	28	28	28	28	28
35	15	19	28	28	28	28	28	28	28
36	17	20	28	28	28	28	28	28	28
37	18	20	28	28	28	28	28	28	28
38	19	21	28	28	28	28	28	28	28
39	20	21	28	28	28	28	28	28	28
40	21	22	28	28	28	28	28	28	28
41	22	22	28	28	28	28	28	28	28

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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

[er] car [xi]-4064
 48|4|4|53|15|15|392|392|0|0
 49|3|4|12|15|413|392|21|18
 50|2|5|8|19|446|369|77|51
 51|1|5|4|19|(500)|369|(131)|(70)
 52|2|5|8|19|446|369|77|51
 53|3|6|12|23|413|349|64|44
 54|4|6|15|23|392|349|43|33
 55|5|6|19|23|369|349|20|17
 56|5|7|19|27|369|334|35|28
 57|4|7|15|27|392|334|58|41
 58|3|8|12|30|413|324|89|56
 59|2|8|8|30|446|324|122|67
 60|3|8|12|30|413|324|89|56
 61|5|9|19|34|369|313|56|40
 62|7|9|27|34|334|313|21|18
 63|8|9|30|34|324|313|11|10
 64|9|10|34|38|313|303|10|9
 65|10|10|38|38|303|303|0|0
 4 car [xi]4733
 72|7|7|51|27|27|334|334|00|0
 73|7|8|27|31|334|321|13|11
 74|6|8|24|31|345|321|24|20
 75|5|9|20|35|363|311|52|38
 76|4|10|16|40|385|297|88|56
 77|2|10|8|40|446|297|149|75
 78|00|11|00|43|00|293|..
 79|00|12|00|47|00|282|..
 80|00|12|00|47|00|282|..
 81|02|13|8|51|446|274|172|79
 82|05|14|20|55|363|267|196|59

EP Car 4064										85
48	4	4	53	15	15	392	392	0	0	
49	3	4		12	15	413	392	21	18	
50	2	5		8	19	446	369	77	51	
51	1	5		4	19	(500)	369	(131)	(70)	
52	2	5		8	19	446	369	77	51	
53	3	6		12	23	413	349	64	44	
54	4	6		15	23	392	349	43	33	
55	5	6		19	23	369	349	20	17	
56	5	7		19	27	369	334	35	28	
57	4	7		15	27	392	334	58	41	
58	3	8		12	30	413	324	89	56	
59	2	8		8	30	446	324	122	67	
60	3	8		12	30	413	324	89	56	
61	5	9		19	34	369	313	56	40	
62	7	9		27	34	334	313	21	18	
63	8	9		30	34	324	313	11	10	
64	9	10		34	38	313	303	10	9	
65	10	10		38	38	303	303	0	0	
4 Car 4733										
72	7	7	51	27	27	334	334	00	0	
73	7	8		27	31	334	321	13	11	
74	6	8		24	31	345	321	24	20	
75	5	9		20	35	363	311	52	38	
76	4	10		16	40	385	297	88	56	
77	2	10		8	40	446	297	149	75	
78	00	11		00	43	00	293	..		
79	00	12		00	47	00	282	..		
80	00	12		00	47	00	282	..		
81	02	13		8	51	446	274	172	79	
82	05	14		20	55	363	267	196	59	

Project PHaEDRA - Cecilia H. Payne #39
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X car X4733

[[10 column table]]

83	7	14	51	24	55	230	267	73	49
84	8	15		31	58	321	260	61	43
85	7	16		28	63	330	253	77	57
86	5	17		20	67	362	246	117	66
87	03	17		0	67	-	-	-	-
88	1	18		4	71	(570)	234	(26)	911
89	6	19		24	75	345	233	112	64
90	11	20		45	78	240	228	62	44
91	15	21		59	82	250	221	59	30
92	17	22		67	86	246	214	32	26
93	19	23		75	90	233	208	25	21
94	21	23		82	90	221	208	13	11
95	23	24		90	94	208	201	7	6
96	24	25		94	98	201	195	6	5
97	26	26		102	102	188	188	0	0

[[Arcturus?]], 4227

Total = 51

[[9 column table]]

0	43.4	45.2	170	177	177	79	64	16	13
1	42.5	166	86	63	23	19			
2	41.0	161	95	62	33	26			
3	38.2	150	113	61	52	38			
4	10	45.4	39	179	300	60	240	89	
5	32	126	151	59	92	57			
6	36	141	127	58	69	47			
7	40	157	102	58	44	33			
8	43	45.7	169	180	81	57	24	20	

86

X CAR X4733

83	7	14	51	24	55	230	267	73	49
84	8	15		31	58	321	260	61	43
85	7	16		28	63	330	253	77	57
86	5	17		20	67	362	246	117	66
87	03	17		0	67	-	-	-	-
88	1	18		4	71	(570)	234	(26)	911
89	6	19		24	75	345	233	112	64
90	11	20		45	78	240	228	62	44
91	15	21		59	82	250	221	59	30
92	17	22		67	86	246	214	32	26
93	19	23		75	90	233	208	25	21
94	21	23		82	90	221	208	13	11
95	23	24		90	94	208	201	7	6
96	24	25		94	98	201	195	6	5
97	26	26		102	102	188	188	0	0

Arcturus, 4227

Total = 51

0	43.4	45.2	170	177	177	79	64	16	13
1	42.5		166			86	63	23	19
2	41.0		161			95	62	33	26
3	38.2		150			113	61	52	38
4	10	45.4	39	179	300	60	240	89	
5	32		126			151	59	92	57
6	36		141			127	58	69	47
7	40		157			102	58	44	33
8	43	45.7	169	180	81	57	24	20	

Project PHaEDRA - Cecilia H. Payne #39
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 Extracted Aug-29-2022 05:00:12

Arcturus

[[9 columned table]]

HE. [Total = 49|14.5|19.3|59|79|260|226|34|27|
 32|16|19.0|65|7|~~7~~|~~7~~|8|249|228|21|18|
 33|17|18.8|69|77|243|229|14|12|
 34|17.5|18.5|71|75|239|233|6|5|
 35|17.7|18.2|72|74|238|234|4|4|
 36|18|18.0|73|73|236|236|0|0|
 7| | | | | | | | |
 8|28.6|28.6|117|117|165|165|0|0|
 9|27.7|28.3|113|115|171|168|3|3|
 10|26.8|28.0|110|114|176|170|6|5|
 11|26|27.3|106|111|182|175|7|6|
 12|24.4|27.0|100|110|192|176|16|14|
 13|22.9|26.8|93|109|203|178|25|21|
 14|21.5|26.3|88|108|211|180|31|25|
 15|19.3|26.0|79|106|226|182|44|33|
 16|17|25.2|69|103|243|187|56|40|
 17|14|25.0|57|102|263|188|75|50|
 18|~~11.5~~|~~24.6~~|~~47~~|~~100~~|~~282~~|~~192~~|~~90~~|~~56~~|
 19|8.5|24.1|35|98|311|195|116|66|
 20|5|23.9|20|97|263|197|166|78|
 21|2|23.4|8|95|446|200|246|90|
 22|0|23.0|0|94|...|201|...| |
 23|0|22.7|0|93|...|203|...| |
 24|0.4|22.2|2|90|...|208|...| |
 25|~~21.8~~|~~88~~|~~446~~|~~211~~|~~235~~|~~88~~|
 26|4|21.1|16|86|385|214|171|79|
 27|5.5|20.7|22|84|353|217|136|71|
 28|8.2|20.2|34|82|313|221|92|57|
 29|10.2|20.0|42|81|293|223|70|48|
 30|13|29.6|53|80|271|224|47|35|

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87

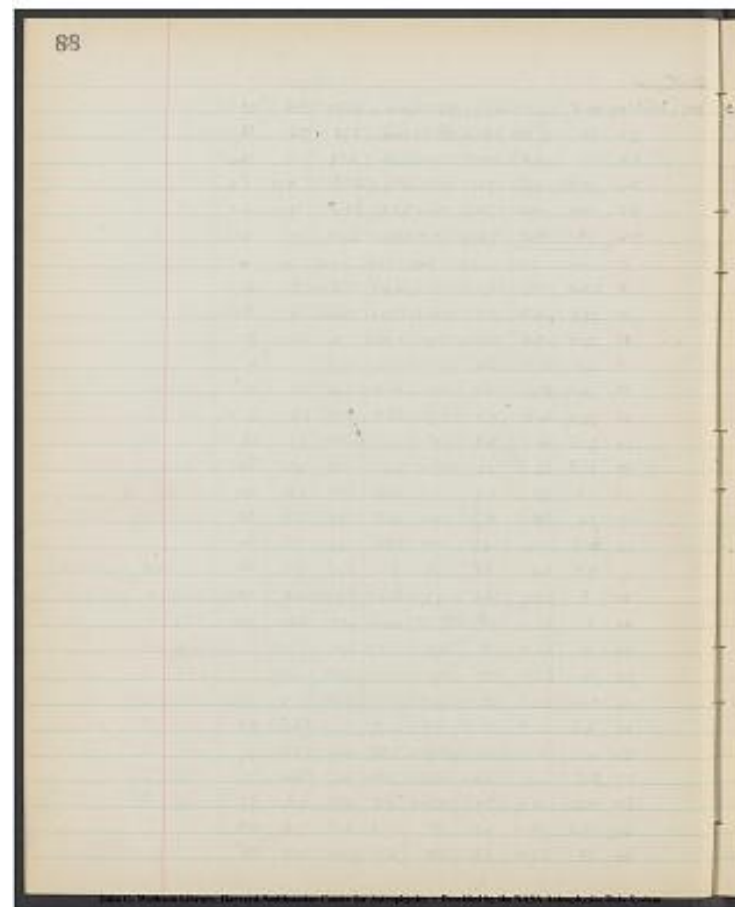
Arcturus

He. Total	14.5	19.3	59	79	260	226	34	27
32	16	19.0	65	77	249	228	21	18
33	17	18.8	69	77	243	229	14	12
34	17.5	18.5	71	75	239	233	6	5
35	17.7	18.2	72	74	238	234	4	4
36	18	18.0	73	73	236	236	0	0
7								
8	28.6	28.6	117	117	165	165	0	0
9	27.7	28.3	113	115	171	168	3	3
10	26.8	28.0	110	114	176	170	6	5
11	26	27.3	106	111	182	175	7	6
12	24.4	27.0	100	110	192	176	16	14
13	22.9	26.8	93	109	203	178	25	21
14	21.5	26.3	88	108	211	180	31	25
15	19.3	26.0	79	106	226	182	44	33
16	17	25.2	69	103	243	187	56	40
17	14	25.0	57	102	263	188	75	50
18	11.5	24.6	47	100	282	192	90	56
19	8.5	24.1	35	98	311	195	116	66
20	5	23.9	20	97	263	197	166	78
21	2	23.4	8	95	446	200	246	90
22	0	23.0	0	94	...	201	...	
23	0	22.7	0	93	...	203	...	
24	0.4	22.2	2	90	...	208	...	
25	21.8	88	446	211	235	88		
26	4	21.1	16	86	385	214	171	79
27	5.5	20.7	22	84	353	217	136	71
28	8.2	20.2	34	82	313	221	92	57
29	10.2	20.0	42	81	293	223	70	48
30	13	29.6	53	80	271	224	47	35

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88

[[no entries]]



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Balmer lines; Class A and B.

[[10 columned table]]

e15.197.5 epsilon|445|475|490|182|194|52|2|50| |
 zeta|415|465|490|169|190|81|21|60| |
 eta|355|440|490|145|180|121|57|64| |
 theta|300|405|490|122|165|157|88|69| |
 iota|280|380^|[(400)]|490|114|155^|[(163)]|170|105^|[(92)]|65| |
 |
 kappa|270|350^|[(375)]|490|110|143^|[(152)]|176|124^|[(110)]|52| |
 lambda|260|320|490|106|130|182|145|47| |
 mu|235|290|490|96|118|198|163|35| |
 nu|230|270|490|94|110|201|176|25| |
 xi|225|245|490|92|100|205|192|13| |

89

Balmer Lines; Class A and B.

	2.517.5	ε	445	475	490	182	194	52	2	50
z	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
η	3.5	4.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
θ	3.0	3.5	4.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5
ι	2.5	3.0	3.5	4.0	4.5	4.5	4.5	4.5	4.5	4.5
κ	2.0	2.5	3.0	3.5	4.0	4.5	4.5	4.5	4.5	4.5
λ	1.5	2.0	2.5	3.0	3.5	4.0	4.5	4.5	4.5	4.5
μ	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	4.5	4.5
ν	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	4.5
ξ	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5

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Ultra violet band

[[13 columned table]]

| a|b|c|d| | | | | | | | | |
 alpha Cygni|center|band|backg.|total|mean a|mean b|mean c|[mean
 a]|[mean b]|[mean c]|Line|
 | | | | | | | | | | | | | | | dm dl|

C18514 epsilon|515|650|650|695|149|188|188|114|31|31|83|
 No mu phi NO zeta|480|610|610|695|138|176|176|132|67|67|65|
 eta|380|535|565|695|110|154|164|176|106|90|70|
 theta|320|470|505|695|92|136|146|205|135|119|70|
 iota|270|410|440|695|78|118|127|228|163|149|65|
 kappa|250|370|390|695|72|[[strikethrough]]
 104|[[strikethrough]]|107|112|238|[[strikethrough]]|185|[[strikethrough]]|181
 |173|57|
 lambda|230|340|340|695|66|[[strikethrough]]|101|[[strikethrough]]|98|[[stri
 kethrough]]|101|[[strikethrough]]|98|248|[[strikethrough]]|190|[[strikethroug
 h]]|195|[[strikethrough]]|190|[[strikethrough]]|195|53|
 mu|220|300|300|695|63|87|87|253|213|213|40|
 nu|190|260|260|690|55|75|75|267|233|233|34|
 xi|170|220|620|690|49|63|63|278|253|253|25|

[[left margin mu phi 136

Op 3

no plate No]]

epsilon|370|570|570|705|105|162|162|184|93|93|91
 zeta|315|490|490|705|89|139|139|209|130|130|79
 eta|205|375|400|705|58|106|114|262|182|170|80
 theta|145|290|325|700|41|83|93|295|219|203|76
 iota|105|240|270|700|30|69|77|324|243|229|81
 kappa|100|200|225|700|29|57|64|327|263|251|64
 lambda|85|170|185|695|24|49|53|345|278|271|57
 mu|70|150|150|695|20|43|43|363|290|290|73
 nu|60|130|130|695|17|37|37|379|305|305|74
 xi|50|100|100|695|14|29|29|359|327|327|72

[[left margin mu phi 258

C18590]]

epsilon|165|340|[[strikethrough]]|425|[[strikethrough]]|340|425|78|160|160|
 228|97|97|131|
 zeta|150|285|285|425|71|134|134|239|138|138|101|
 eta|110|220|235|425|52|104|110|273|185|176|98|
 theta|80|175|195|425|38|83|92|303|219|205|104|
 iota|75|145|160|425|35|68|75|311|244|233|67|
 kappa|70|125|140|425|33|59|66|316|260|248|56|
 lambda|60|115|120|425|28|54|57|330|269|263|61|
 mu|70|100|100|425|33|47|47|316|282|282|34|
 nu|55|85|85|425|26|40|40|337|297|297|40|

90 Ultra violet band

design	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	total	mean	std
C18514	515	650	650	695	149	188	188	114	31	31	83																		
No mu phi NO	3	480	610	610	695	138	176	176	132	67	67	65																	
epsilon	370	570	570	705	105	162	162	184	93	93	91																		
zeta	315	490	490	705	89	139	139	209	130	130	79																		
eta	205	375	400	705	58	106	114	262	182	170	80																		
theta	145	290	325	700	41	83	93	295	219	203	76																		
iota	105	240	270	700	30	69	77	324	243	229	81																		
kappa	100	200	225	700	29	57	64	327	263	251	64																		
lambda	85	170	185	695	24	49	53	345	278	271	57																		
mu	70	150	150	695	20	43	43	363	290	290	73																		
nu	60	130	130	690	17	37	37	379	305	305	74																		
xi	50	100	100	690	14	29	29	359	327	327	72																		
mu phi 136	3	370	570	570	705	105	162	162	184	93	93	91																	
Op 3	3	315	490	490	705	89	139	139	209	130	130	79																	
No plate No	3	205	375	400	705	58	106	114	262	182	170	80																	
epsilon	370	570	570	705	105	162	162	184	93	93	91																		
zeta	315	490	490	705	89	139	139	209	130	130	79																		
eta	205	375	400	705	58	106	114	262	182	170	80																		
theta	145	290	325	700	41	83	93	295	219	203	76																		
iota	105	240	270	700	30	69	77	324	243	229	81																		
kappa	100	200	225	700	29	57	64	327	263	251	64																		
lambda	85	170	185	695	24	49	53	345	278	271	57																		
mu	70	150	150	695	20	43	43	363	290	290	73																		
nu	60	130	130	690	17	37	37	379	305	305	74																		
xi	50	100	100	690	14	29	29	359	327	327	72																		
mu phi 258	3	165	340	[[strikethrough]]	425	78	160	160	228	97	97	131																	
C18590	3	150	285	285	425	71	134	134	239	138	138	101																	
epsilon	370	570	570	705	105	162	162	184	93	93	91																		
zeta	315	490	490	705	89	139	139	209	130	130	79																		
eta	205	375	400	705	58	106	114	262	182	170	80																		
theta	145	290	325	700	41	83	93	295	219	203	76																		
iota	105	240	270	700	30	69	77	324	243	229	81																		
kappa	100	200	225	700	29	57	64	327	263	251	64																		
lambda	85	170	185	695	24	49	53	345	278	271	57																		
mu	70	150	150	695	20	43	43	363	290	290	73																		
nu	60	130	130	690	17	37	37	379	305	305	74																		
xi	50	100	100	690	14	29	29	359	327	327	72																		

Intensity of band

[[11 columned table]]

Band	Line from	Frequency	|	|	C[μ phi]	μ phi	|
dm	dl	from backgd	|	|	18514	136	258
0	0	83	2518821	|	0	0	0
0	0	65	2571289	|	0	0	0
16	14	86	2607290	|	14	10	8
16	14	86	2633034	|	14	14	12
14	12	79	2652098	|	12	12	10
8	7	65	2666524	|	7	10	10
0	0	53	2678021	|	0	6	5
0	0	40	2686872	|	0	0	0
0	0	34	2694038	|	0	0	0
0	0	25		|	0	0	0
0	0	91		|			
0	0	79		|			
12	10	92		|			
16	14	92		|			
14	12	95		|			
12	10	76		|			
7	6	74		|			
0	0	73		|			
0	0	74		|			
[[underlined]]0 0 72[[/underlined]]							
0	0	131					
0	0	101					
9	8	107					
14	12	198					
11	10	198					
12	10	68					
6	5	67					
0	0	34					
0	0	40					

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		Intensity of band		91	
Band	Line from	Frequency	C[μ phi]	μ phi	Mean
0	0	83	2518821	0	0
0	0	65	2571289	0	0
16	14	86	2607290	14	10
16	14	86	2633034	14	14
14	12	79	2652098	12	12
8	7	65	2666524	7	10
0	0	53	2678021	0	6
0	0	40	2686872	0	0
0	0	34	2694038	0	0
0	0	25		0	0
0	0	91		0	0
0	0	79		0	0
12	10	92		12	10
16	14	92		16	14
14	12	95		14	12
12	10	76		12	10
7	6	74		7	6
0	0	73		0	0
0	0	74		0	0
0	0	72		0	0
0	0	131		0	0
0	0	101		0	0
9	8	107		9	8
14	12	198		14	12
11	10	198		11	10
12	10	68		12	10
6	5	67		6	5
0	0	34		0	0
0	0	40		0	0

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St.	Frequency	Line no.	Alt.	Intensity of band per 100 per 1000 per 1000 Mean			
				0	0	0	0
0	2231645	28		2	—	—	2
2	2250725	40		2	5	1	3
2	2304147	48		5	5	4	5
5	2326122	27		10	10	11	10
0	2365744	47		10	11	11	11
0	2394063	37		8	2	11	9
2	2396927	29		0	0	0	0
2	2438630	125					
7		30					
2		139					
1		25					
0		40					
1		37					
9		22					
0		171					
0		148					
1		25					
4		101					
4		20					
3		36					
0		39					
4		31					
2		128					

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Beta Orionis Ultra violet dip

[[12 columned table]]

mu phi 1510|a|b|c|d|mean a|mean b|mean c|[a]|[b]|[c]
 C18704|epsilon|595|640|640|670|178|191|191|62|15|15|
 zeta|545|615|615|675|162|182|93|52|52|
 eta|475|555|565|675|141|164|167|127|90|85|
 theta|420|500|525|680|124|147|154|154|117|106|
 iota|390|465|485|680|115|137|143|168|133|116|

kappa|370|450|460|680|109|132|135|178[[strikethrough]]|141[[/strikethrough]]|141|137|

lambda|350|425|425|680|103|125|125|187|153|153|

mu|340|390|390|680|100|115|115|192|168|168|

mu phi 1537|epsilon|420|455|455|475|177|192|192|64|8|8|

C18795|zeta|390|435|435|480|16[[strikethrough]]|4[[/strikethrough]]|2|18[[strikethrough]]|3[[/strikethrough]]|2|18[[strikethrough]]|3[[/strikethrough]]|2|9|3|52|52|

eta|335|400|405|480|140|167|169|129|85|81|

theta|295|360|375|480|123|150|156|156|113|103|

iota|270|340|358|480|112|142|149|173|125|114|

kappa|260|325|340|48[[strikethrough]]|5[[/strikethrough]]|0|108|136|142|180|135|125|

lambda|245|310|310|480|102|129|129|188|146|146|

mu|235|300|300|480|98|125|125|195|153|153|

mu phi 1512|epsilon|340|445|445|655|104|1369|136|185|135|135|

C18704|zeta|280|370|370|655|86|113|113|214|171|171|

eta|190|275|290|655|58|84|88|262|217|211|

theta|135|215|240|655|41|66|73|295|248|236|

iota|120|180|200|655|37|55|61|305|267|256|

kappa|100|160|165|655|30|49|50|324|278|276|

lambda|90|140|140|655|28|43|43|330|290|290|

mu|75|120|120|655|23|37|37|349|305|305|

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94

B Orionis Ultra violet dip

	a	b	c	d	\bar{a}	\bar{b}	\bar{c}	[a]	[b]	[c]
mu phi 1510	5	595	640	640	178	191	191	62	15	15
C18704	3	545	615	615	162	182	182	93	52	52
	7	475	555	565	141	164	167	127	90	85
	8	420	500	525	124	147	154	117	106	
	6	390	465	485	115	137	143	133	116	
	4	370	450	460	109	132	135	141	137	
	3	350	425	425	103	125	125	187	153	153
	2	340	390	390	100	115	115	192	168	168
mu phi 1537	2	420	455	455	177	192	192	64	8	8
C18795	3	390	435	435	16	18	18	93	52	52
	7	335	400	405	140	167	169	129	85	81
	8	325	340	375	123	150	156	113	103	
	6	310	340	360	112	142	149	173	125	114
	4	300	325	340	102	129	129	188	146	146
	3	295	310	310	102	129	129	188	146	146
	2	280	300	300	98	125	125	195	153	153
mu phi 1512	5	340	445	445	104	136	136	185	135	135
C18704	3	280	370	370	86	113	113	214	171	171
	7	190	275	290	58	84	88	262	217	211
	8	135	215	240	41	66	73	295	248	236
	6	120	180	200	37	55	61	305	267	256
	4	100	160	165	30	49	50	324	278	276
	3	90	140	140	28	43	43	330	290	290
	2	75	120	120	23	37	37	349	305	305

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95
 Intensity fbaud | Intensity fbaud
 Dip | Luie | Luie | wp | wp | wp |
 dm | dm | room back | 1510 | 1537 | 1512 | Mean |
 0 0 | 47 | 47 | 0 0 | 0 0 |
 0 0 | 41 | 41 | 0 0 | 0 0 |
 5 4 | 37 | 42 | 4 4 | 5 4 |
 11 10 | 37 | 48 | 10 9 | 10 10 |
 17 15 | 35 | 52 | 15 10 | 10 12 |
 4 4 | 37 | 41 | 4 9 | 2 5 |
 0 0 | 34 | 34 | 0 0 | 0 0 |
 0 0 | 24 | 24 | 0 0 | 0 0 |

0 0 | 56 | 56 |
 0 0 | 41 | 41 |
 4 4 | 44 | 48 |
 10 9 | 43 | 63 |
 11 10 | 48 | 59 |
 10 9 | 45 | 55 |
 0 0 | 42 | 42 |
 0 0 | 42 | 42 |

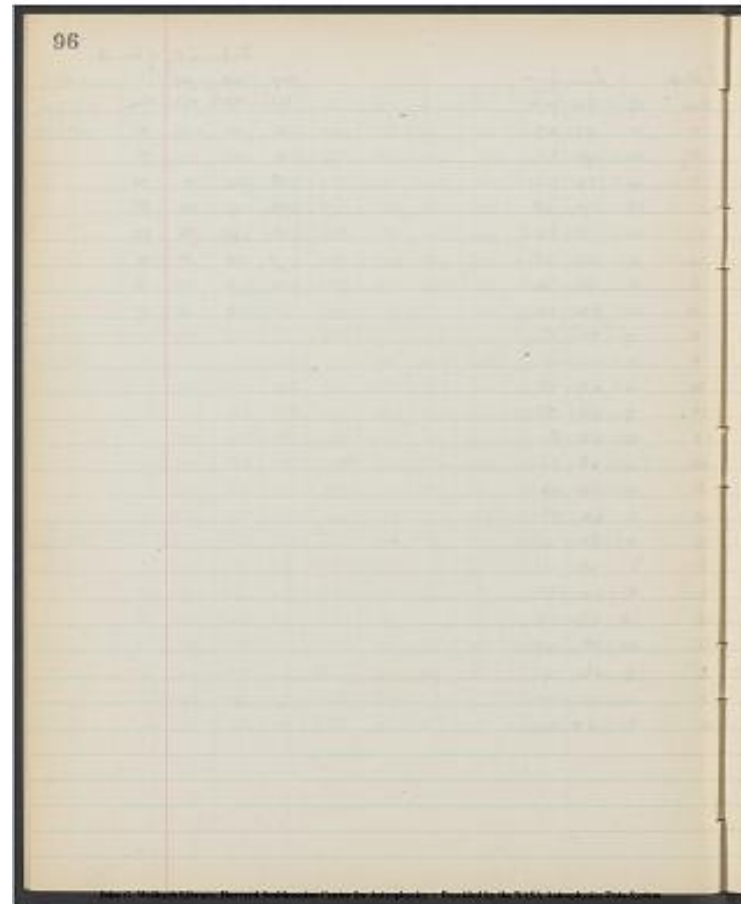
0 0 | 50 | 50 |
 0 0 | 43 | 43 |
 6 5 | 45 | 51 |
 12 10 | 47 | 59 |
 11 10 | 38 | 49 |
 2 2 | 46 | 48 |
 0 0 | 40 | 40 |
 0 0 | 44 | 44 |

Dip		Line		Sum		Intensity of band 95			
dm	dl	dm	dl	dm	back	wp	wp	wp	Mean
0	0	47	47	0	0	0	0	0	0
0	0	41	41	0	0	0	0	0	0
5	4	37	42	4	4	5	4		
11	10	37	48	10	9	10	10		
17	15	35	52	15	10	10	12		
4	4	37	41	4	9	2	5		
0	0	34	34	0	0	0	0		
0	0	24	24	0	0	0	0		
0	0	56	56						
0	0	41	41						
4	4	44	48						
10	9	43	63						
11	10	48	59						
10	9	45	55						
0	0	42	42						
0	0	42	42						
0	0	50	50						
0	0	43	43						
6	5	45	51						
12	10	47	59						
11	10	38	49						
2	2	46	48						
0	0	40	40						
0	0	44	44						

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[[bottom margin]]

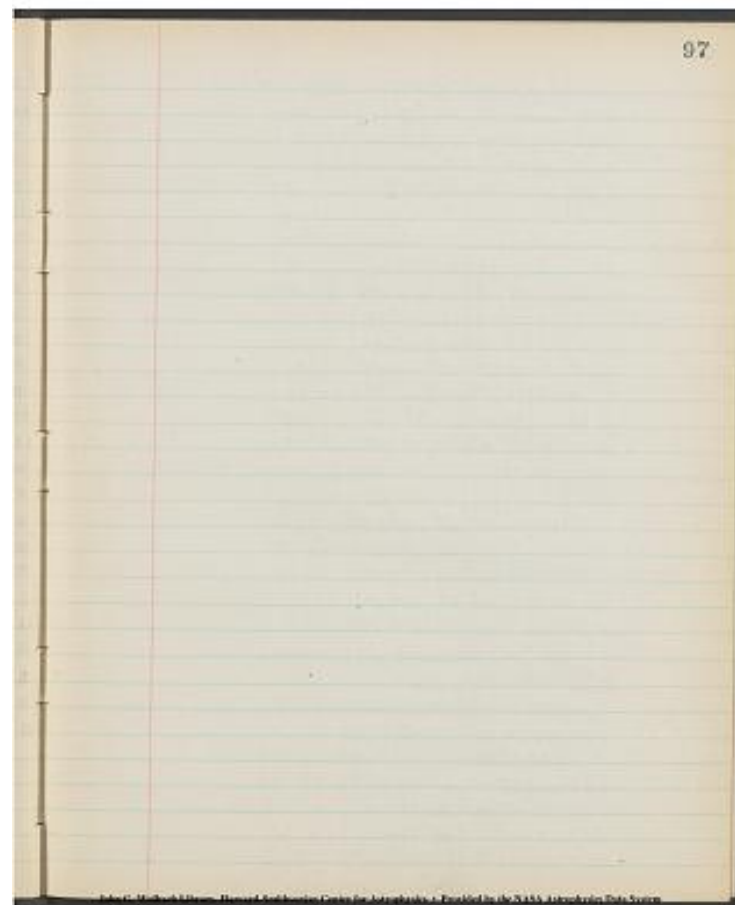
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97

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V Puppies X 8050, Mep 3846

No	n	m+n	l+m+n	m	m+n	n	m+n	dm	dl
1.5	19.5	19.5	38	37	37	305	305	0	0
2	19.5	20	38	37	38	305	303	2	02
3	19.5	20	38	37	38	305	303	2	02
4	20	20.5	38	38	39	303	300	3	03
E5	20	20.5	38	38	39	303	300	3	03
6	20	21	38	38	40	303	297	6	05
7	19.5	21	38	39	40	305	297	8	07
8	19	21.5	38	36	40.7	308	296	12	10
9	18	21.5	38	34.2	40.7	313	296	17	14
10	16.5	22	38	31.4	41.7	320	294	26	21
11	16	22	38	30.4	41.7	323	294	29	23
12	16	22	38	30.4	41.7	323	294	29	23
13	17	22	38	32.3	41.7	318	294	24	20
14	19	22.5	38	36	42.7	308	291	17	14
15	20.5	23	38	39	43.7	300	289	11	10
16	21.5	23	38	40.7	43.7	296	289	7	06
17	22.5	23	38	42.7	43.7	291	289	2	02
18	23	23.5	38	43.7	44.7	289	287	2	02
19	23.5	23.5	38	44.7	44.7	287	287	0	0
20	24	24	38	45.5	45.5	285	285	0	0
"1	28.5	28.5	38	54.1	54.1	269	269	0	0
2	28.5	28.5	38	54.1	54.1	269	269	0	0
S3	28.5	28.5	38	54.1	54.1	269	269	0	0
4	28.5	28.5	38	54.1	54.1	269	269	0	0
5	28	28.5	38	53.3	54.1	270	269	1	01
6	28	28.5	38	53.3	54.1	270	269	1	01
7	27.5	28.5	38	52.3	54.1	272	269	3	03
8	27.5	29	38	52.3	55	272	267	5	04
9	27	29	38	51.3	55	274	267	7	06

98

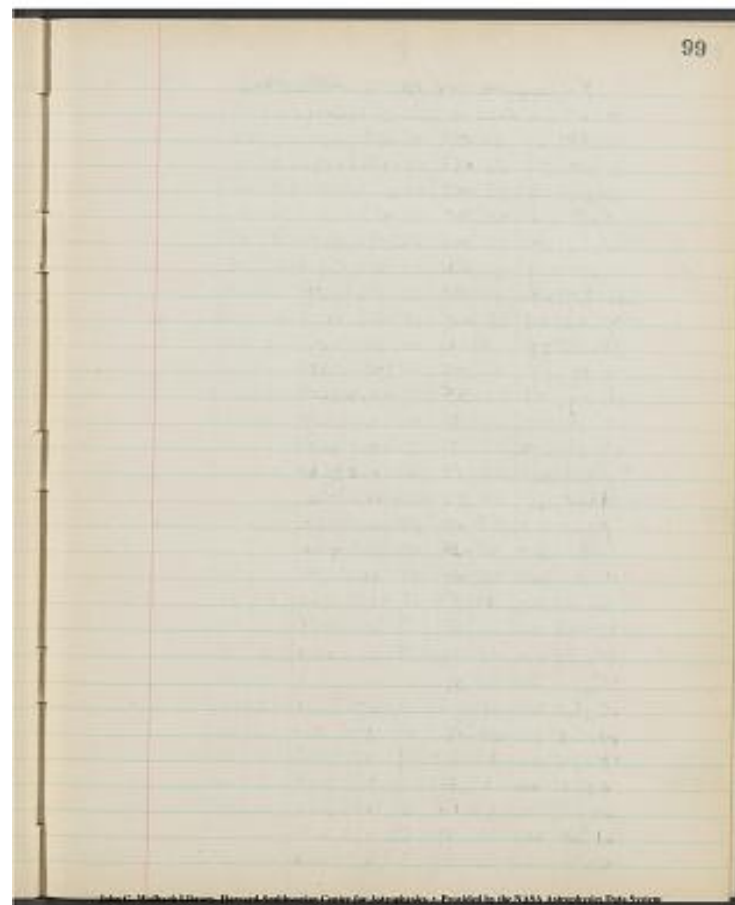
V Puppies X 8050, Mep 3846

No	n	m+n	l+m+n	m	m+n	n	m+n	dm	dl
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2	19.5	20	38	37	38	305	303	2	02
3	19.5	20	38	37	38	305	303	2	02
4	20	20.5	38	38	39	303	300	3	03
E5	20	20.5	38	38	39	303	300	3	03
6	20	21	38	38	40	303	297	6	05
7	19.5	21	38	39	40	305	297	8	07
8	19	21.5	38	36	40.7	308	296	12	10
9	18	21.5	38	34.2	40.7	313	296	17	14
10	16.5	22	38	31.4	41.7	320	294	26	21
11	16	22	38	30.4	41.7	323	294	29	23
12	16	22	38	30.4	41.7	323	294	29	23
13	17	22	38	32.3	41.7	318	294	24	20
14	19	22.5	38	36	42.7	308	291	17	14
15	20.5	23	38	39	43.7	300	289	11	10
16	21.5	23	38	40.7	43.7	296	289	7	06
17	22.5	23	38	42.7	43.7	291	289	2	02
18	23	23.5	38	43.7	44.7	289	287	2	02
19	23.5	23.5	38	44.7	44.7	287	287	0	0
20	24	24	38	45.5	45.5	285	285	0	0
"1	28.5	28.5	38	54.1	54.1	269	269	0	0
2	28.5	28.5	38	54.1	54.1	269	269	0	0
S3	28.5	28.5	38	54.1	54.1	269	269	0	0
4	28.5	28.5	38	54.1	54.1	269	269	0	0
5	28	28.5	38	53.3	54.1	270	269	1	01
6	28	28.5	38	53.3	54.1	270	269	1	01
7	27.5	28.5	38	52.3	54.1	272	269	3	03
8	27.5	29	38	52.3	55	272	267	5	04
9	27	29	38	51.3	55	274	267	7	06

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99

[[no entries]]



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100

VPuppies, X 8050, MP 3846

No|n|m+n||m+n|m|m+n|[m][m+n]|dm|dl|

10	25.5	29	38	48.5	55	279	267	12	10
11	24	29	38	45.5	55	285	267	18	15
12	24	29	38	45.5	55	285	267	18	15
13	24.5	29	38	46.5	55	283	267	16	14
14	26.5	29	38	50.4	55	275	267	8	07
15	27.5	29	38	52.3	55	272	267	5	04
16	28	29	38	53.3	55	270	267	3	03
17	28.5	29	38	54.1	55	269	267	2	02
18	28.5	29	38	54.1	55	269	267	2	02
19	29	29	38	55	55	267	267	0	0
20	29	29	38	55	55	267	267	0	0
21	29	29	38	55	55	267	267	0	0
22	29	29	38	55	55	267	267	0	0
"7	30.5	30.5	38	58	58	262	262	0	0
8	30.5	30.5	38	58	58	262	262	0	0
9	30.5	30.5	38	58	58	262	262	0	0
10	30	30.5	38	57	58	263	263	1	01
11	30	30.5	38	57	58	263	263	1	01
12	30	30.5	38	57	58	263	263	1	01
13	29.5	30	38	56	57	265	263	2	02
14	28.5	30	38	54.1	57	269	263	6	05
15	27.5	30	38	52.3	57	272	263	9	08
16	26.5	30	38	50.4	57	275	263	12	10
17	26.5	30	38	50.4	57	275	263	12	10
18	27.5	30	38	52.3	57	272	263	9	08
19	28.5	30	38	54.1	57	269	263	6	05
20	29	30	38	55	57	267	263	4	04
21	30	30.5	38	57	58	263	262	1	01
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100

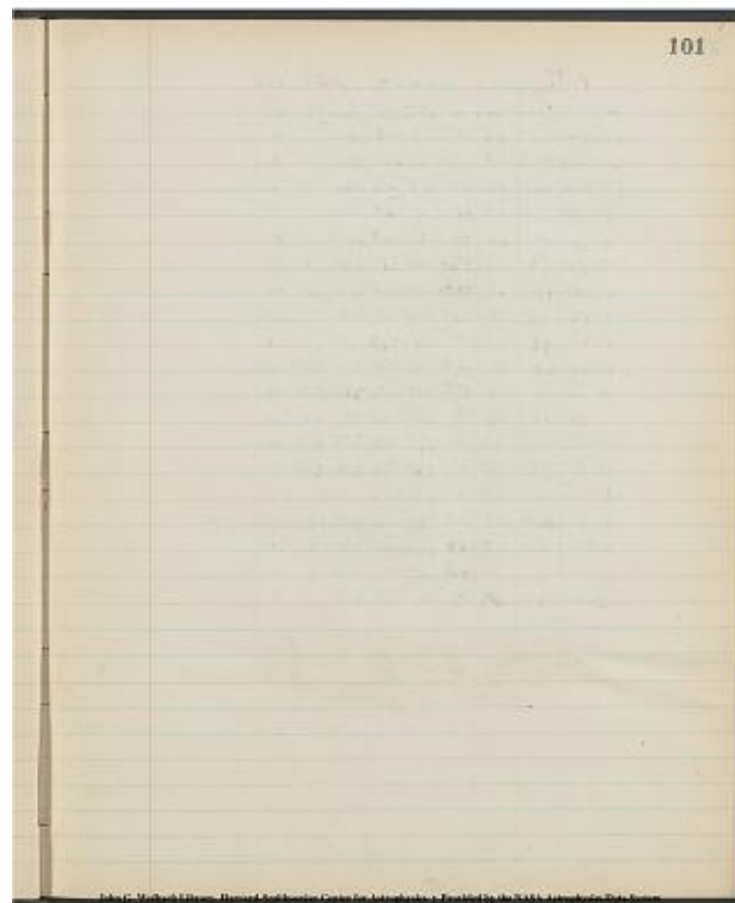
VPuppies, X 8050, MP 3846

No.	n	m	m+n	m	m+n	[m]	[m+n]	dm	dl
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11	24	29	38	45.5	55	285	267	18	15
12	24	29	38	45.5	55	285	267	18	15
13	24.5	29	38	46.5	55	283	267	16	14
14	26.5	29	38	50.4	55	275	267	8	07
15	27.5	29	38	52.3	55	272	267	5	04
16	28	29	38	53.3	55	270	267	3	03
17	28.5	29	38	54.1	55	269	267	2	02
18	28.5	29	38	54.1	55	269	267	2	02
19	29	29	38	55	55	267	267	0	0
20	29	29	38	55	55	267	267	0	0
21	29	29	38	55	55	267	267	0	0
22	29	29	38	55	55	267	267	0	0
"7	30.5	30.5	38	58	58	262	262	0	0
8	30.5	30.5	38	58	58	262	262	0	0
9	30.5	30.5	38	58	58	262	262	0	0
10	30	30.5	38	57	58	263	263	1	01
11	30	30.5	38	57	58	263	263	1	01
12	30	30.5	38	57	58	263	263	1	01
13	29.5	30	38	56	57	265	263	2	02
14	28.5	30	38	54.1	57	269	263	6	05
15	27.5	30	38	52.3	57	272	263	9	08
16	26.5	30	38	50.4	57	275	263	12	10
17	26.5	30	38	50.4	57	275	263	12	10
18	27.5	30	38	52.3	57	272	263	9	08
19	28.5	30	38	54.1	57	269	263	6	05
20	29	30	38	55	57	267	263	4	04
21	30	30.5	38	57	58	263	262	1	01
22	30	30.5	38	57	58	263	262	1	01

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101

[[no entries]]



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V Puppis, X8050, mu phi 3846

[[10 columned table]]

Line n | m+n | +m+n | mean n | mean m+n | [n] | [m+n] | dm | dl |

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25	30.5	30.5	38	58	58	262	262	0	0
26	30.5	30.5	38	58	58	262	262	0	0
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85	30.5	30.5	38	58	58	262	262	0	0
86	30.5	30.5	38	58	58	262	262	0	0
87	30.5	30.5	38	58	58	262	262	0	0
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89	30.5	30.5	38	58	58	262	262	0	0
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92	30.5	30.5	38	58	58	262	262	0	0
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96	30.5	30.5	38	58	58	262	262	0	0
97	30.5	30.5	38	58	58	262	262	0	0
98	30.5	30.5	38	58	58	262	262	0	0
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[[graph]]

40

30

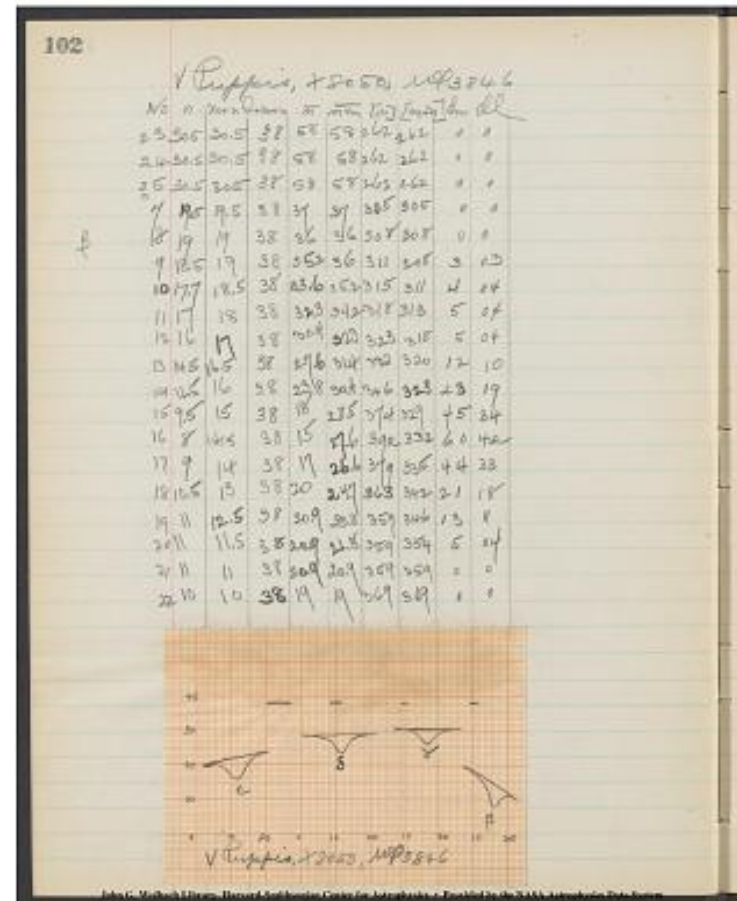
20

10 epsilon delta gamma beta

0 10 20 0 10 20 10 20 10 20

V Puppis, X8050, mu phi 3846

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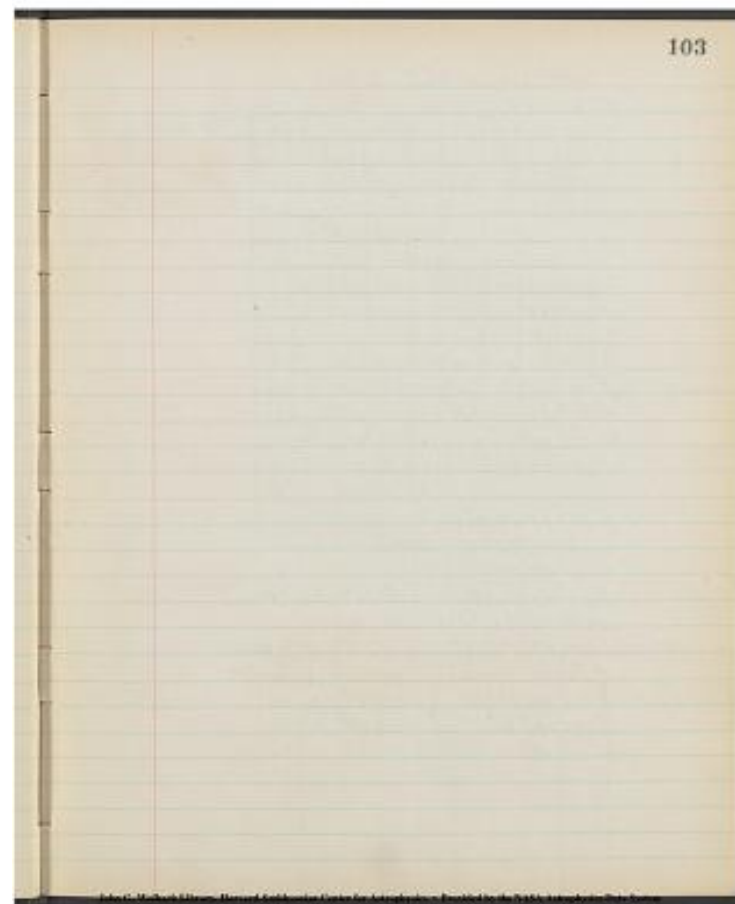


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103

[[bottom margin]]

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mu phi 2604, M Vel, 2 pr X

[[11 columned table]]

[No|n|m+n|l+m+n|mean n|mean m+n|[n]|m+n|dm|dl]

No	n	m+n	l+m+n	mean n	mean m+n	[n]	m+n	dm	dl
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7	21.5	21.5	80	53.7	53.7	270	270	0	0
8	21.5	21.5	80	53.7	53.7	270	270	0	0
9	21.5	21.5	80	53.7	53.7	270	270	0	0
10	21.5	21.5	80	53.7	53.7	270	270	0	0
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12	21.5	21.5	80	53.7	53.7	270	270	0	0
13	21.5	21.5	80	53.7	53.7	270	270	0	0
14	21.5	21.5	80	53.7	53.7	270	270	0	0
15	21.5	21.5	80	53.7	53.7	270	270	0	0
16	21.5	21.5	80	53.7	53.7	270	270	0	0
17	21.5	21.5	80	53.7	53.7	270	270	0	0
18	21.5	21.5	80	53.7	53.7	270	270	0	0
19	21.5	21.5	80	53.7	53.7	270	270	0	0
20	21.5	21.5	80	53.7	53.7	270	270	0	0
21	21.5	21.5	80	53.7	53.7	270	270	0	0
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24	21.5	21.5	80	53.7	53.7	270	270	0	0
25	21.5	21.5	80	53.7	53.7	270	270	0	0
26	21.5	21.5	80	53.7	53.7	270	270	0	0
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45	21.5	21.5	80	53.7	53.7	270	270	0	0
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58	21.5	21.5	80	53.7	53.7	270	270	0	0
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[[graph]]

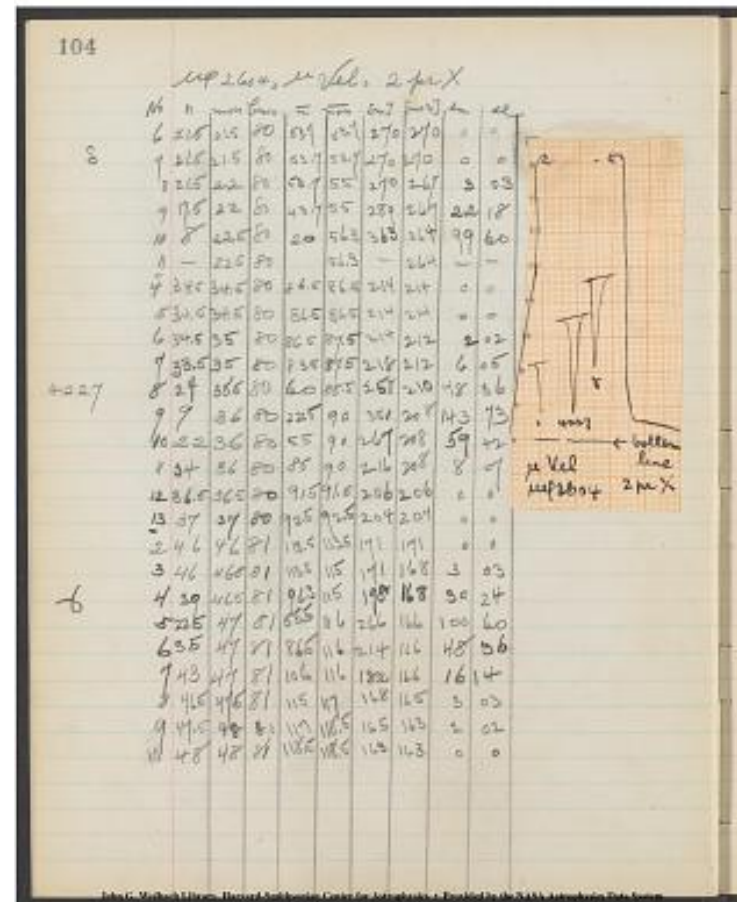
delta 4227 gamma

bottom line

mu Vel

mu phi 2604 2 pr X

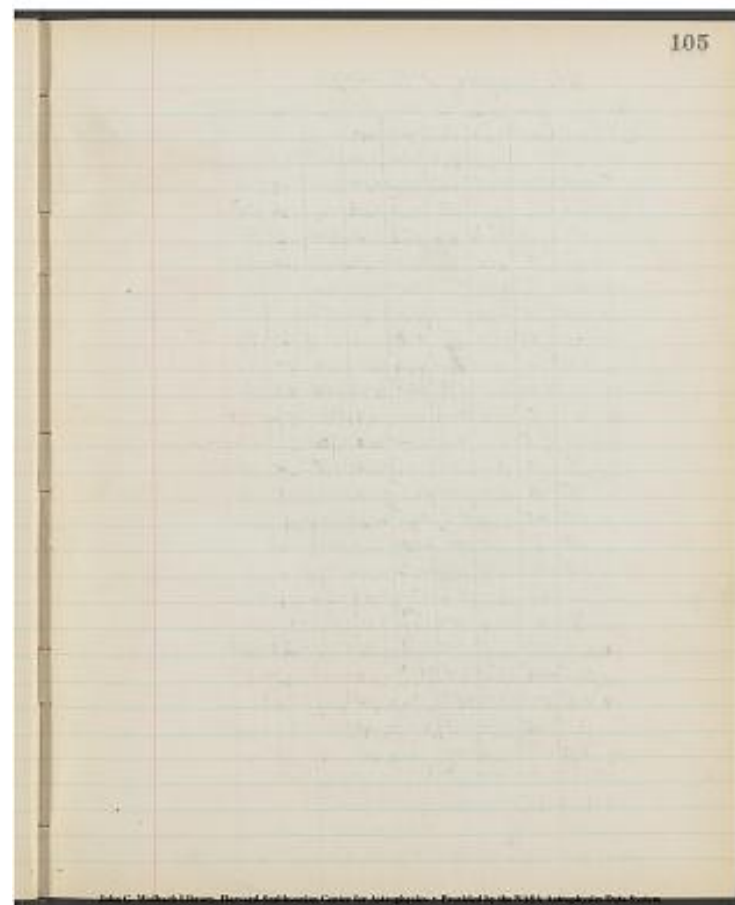
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105

[[no entries]]



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HD 173791, mu phi 1177

[[right margin]]

[[graph]]

AD 173791

mu phi 1177

30

20

10

0 10 20 30

[[/right margin]]

[[10 columned table]]


No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

3	4.5	4.5	36.5	24.7	24.7	343	343	0	0
4	5	5	36.5	24.7	24.7	343	343	0	0
5	4.5	5.5	36.5	24.7	24.7	343	343	19	16
6	4	6	36.5	24.7	24.7	343	343	39	29
7	3.5	6.5	36.5	24.7	24.7	343	343	58	41
8	2	7	36.5	24.7	24.7	343	343	119	67
9	0.5	7	36.5	24.7	24.7	343	343	202	119
10	0.5	7	36.5	24.7	24.7	343	343	285	167
11	1.5	8	36.5	24.7	24.7	343	343	374	216
12	3.5	8	36.5	24.7	24.7	343	343	468	285
13	5	8	36.5	24.7	24.7	343	343	562	374
14	6	9	36.5	24.7	24.7	343	343	657	468
15	7	9	36.5	24.7	24.7	343	343	751	562
16	7	10	36.5	24.7	24.7	343	343	846	657
17	5	10	36.5	24.7	24.7	343	343	940	751
18	2.5	10.5	36.5	24.7	24.7	343	343	1035	846
19	0.5	11	36.5	24.7	24.7	343	343	1129	940
20	2.5	11	36.5	24.7	24.7	343	343	1224	1035
21	6.5	11.5	36.5	24.7	24.7	343	343	1318	1129
22	9	12	36.5	24.7	24.7	343	343	1413	1224
23	11.5	12.5	36.5	24.7	24.7	343	343	1507	1318
24	11.5	13	36.5	24.7	24.7	343	343	1602	1413
25	12.5	13.5	36.5	24.7	24.7	343	343	1696	1507
26	13	14	36.5	24.7	24.7	343	343	1791	1602
27	13.5	14.5	36.5	24.7	24.7	343	343	1885	1696
28	14	15	36.5	24.7	24.7	343	343	1980	1791
29	14.5	15.5	36.5	24.7	24.7	343	343	2074	1885
30	15	15.5	36.5	24.7	24.7	343	343	2169	1980

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106

HD 173791, mu phi 1177

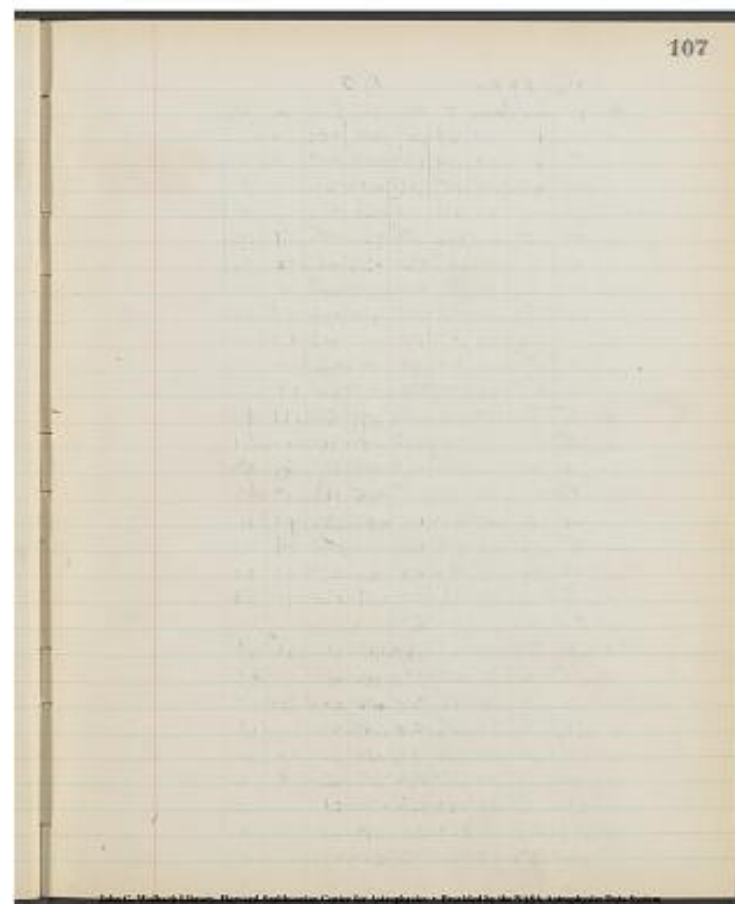


No	n	m	n+m	mean n	mean m+n	[n]	[m+n]	dm	dl
3	4.5	4.5	36.5	24.7	24.7	343	343	0	0
4	5	5	36.5	24.7	24.7	343	343	0	0
5	4.5	5.5	36.5	24.7	24.7	343	343	19	16
6	4	6	36.5	24.7	24.7	343	343	39	29
7	3.5	6.5	36.5	24.7	24.7	343	343	58	41
8	2	7	36.5	24.7	24.7	343	343	119	67
9	0.5	7	36.5	24.7	24.7	343	343	202	119
10	0.5	7	36.5	24.7	24.7	343	343	285	167
11	1.5	8	36.5	24.7	24.7	343	343	374	216
12	3.5	8	36.5	24.7	24.7	343	343	468	285
13	5	8	36.5	24.7	24.7	343	343	562	374
14	6	9	36.5	24.7	24.7	343	343	657	468
15	7	9	36.5	24.7	24.7	343	343	751	562
16	7	10	36.5	24.7	24.7	343	343	846	657
17	5	10	36.5	24.7	24.7	343	343	940	751
18	2.5	10.5	36.5	24.7	24.7	343	343	1035	846
19	0.5	11	36.5	24.7	24.7	343	343	1129	940
20	2.5	11	36.5	24.7	24.7	343	343	1224	1035
21	6.5	11.5	36.5	24.7	24.7	343	343	1318	1129
22	9	12	36.5	24.7	24.7	343	343	1413	1224
23	11.5	12.5	36.5	24.7	24.7	343	343	1507	1318
24	11.5	13	36.5	24.7	24.7	343	343	1602	1413
25	12.5	13.5	36.5	24.7	24.7	343	343	1696	1507
26	13	14	36.5	24.7	24.7	343	343	1791	1602
27	13.5	14.5	36.5	24.7	24.7	343	343	1885	1696
28	14	15	36.5	24.7	24.7	343	343	1980	1791
29	14.5	15.5	36.5	24.7	24.7	343	343	2074	1885
30	15	15.5	36.5	24.7	24.7	343	343	2169	1980

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107

[[no entries]]



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Extracted Aug-29-2022 05:00:12

108
HD 190056, KO

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KO
50
40
30
20
10
0
10 20 30
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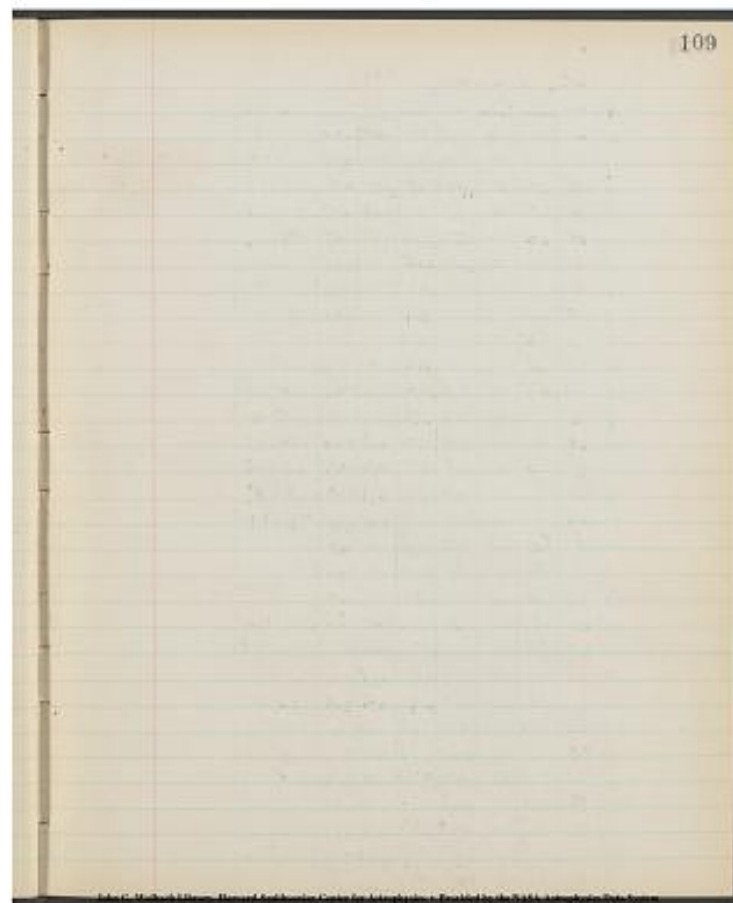
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9|4|4|
10|4.5|4.5|
11|5|5|
12|5|5|
13|5|5|
14|4|4|
15|2.5|2.5|
16|1|1|
17|0|0|
18|0|0|
19|1.5|1.5|
20|3.5|3.5|
21|6.5|6.5|
22|9.5|9.5|
23|10.5|10.5|
24|8|11.5|
25|5|12|
26|2|13|
27|0.5|14|
28|3|15|
29|8.5|15.5|
30|13|16.5|
31|16|17.5|
32|18|18|
33|20|19|
34|21|
35|22.5|
36|23.5|
37|24.5|
38|25|



Project PHaEDRA - Cecilia H. Payne #39
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109

[[no entries]]



Project PHaEDRA - Cecilia H. Payne #39
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α_1 Cap., μ phi 1193

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|n|l|m+n|dm|dl|

6	2	2	54	7.4	7.4	454	454	0	0
7	2	2.5	54	7.4	9.3	454	436	18	15
8	2	3	54	7.4	11.1	454	421	33	26
9	2	3.5	54	7.4	12.9	454	407	47	35
10	1.5	3.5	54	5.6	12.9	454	407	68	46
11	1	3.5	54	5.6	12.9	475	407	-	-
12	0.5	4	54	-	14.8	-	393	-	-
13	0	4.5	54	-	16.7	-	381	-	-
14	0	4.5	54	-	16.7	-	381	-	-
15	0.5	5	54	-	18.5	-	372	-	-
16	1.5	5.5	54	5.6	20.4	475	361	114	65
17	3	6	54	11.1	22.2	421	353	68	46
18	3.5	6	54	12.9	22.2	407	353	54	39
19	4	6.5	54	14.8	24	393	345	48	36
20	3.5	7	54	12.9	25.9	407	338	69	49
21	2.5	7	54	9.3	25.9	436	338	98	59
22	1	7.5	54	3.7	27.8	-	331	-	-
23	0	8	54	-	29.6	-	325	-	-
24	0.5	8.5	54	-	31.4	-	320	-	-
25	2	9	54	7.4	33.3	454	315	139	72
26	4.5	9.5	54	16.7	35.2	381	311	70	48
27	6.5	10	54	24	37	345	305	40	31
28	7.5	10	54	27.8	37	331	305	26	21
29	8.5	10.5	54	31.4	38.8	320	301	19	16
30	9.5	11	54	35.2	40.7	311	296	15	13
31	10.5	11.5	54	38.8	42.5	301	292	9	08
32	11	12	54	40.7	44.5	296	287	9	08
33	12	12.5	54	44.5	46.3	287	283	41	04
34	12.5	12.5	54	46.3	46.3	283	283	0	0
35	13	13	54	48	48	280	280	0	0
36	14	14	54	51.7	51.7	274	274	0	0
37	14.5	14.5	54	53.5	53.5	270	270	0	0

110

2, Cape, May 1193

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|n|l|m+n|dm|dl|

6|2|2|54|7.4|7.4|454|454|0|0|

7|2|2.5|54|7.4|9.3|454|436|18|15|

8|2|3|54|7.4|11.1|454|421|33|26|

9|2|3.5|54|7.4|12.9|454|407|47|35|

10|1.5|3.5|54|5.6|12.9|454|407|68|46|

11|1|3.5|54|5.6|12.9|475|407|-|-|

12|0.5|4|54|-|14.8|393|-|-|

13|0|4.5|54|-|16.7|381|-|-|

14|0|4.5|54|-|16.7|381|-|-|

15|0.5|5|54|-|18.5|372|-|-|

16|1.5|5.5|54|5.6|20.4|475|361|114|65|

17|3|6|54|11.1|22.2|421|353|68|46|

18|3.5|6|54|12.9|22.2|407|353|54|39|

19|4|6.5|54|14.8|24|393|345|48|36|

20|3.5|7|54|12.9|25.9|407|338|69|49|

21|2.5|7|54|9.3|25.9|436|338|98|59|

22|1|7.5|54|3.7|27.8|-|331|-|-|

23|0|8|54|-|29.6|-|325|-|-|

24|0.5|8.5|54|-|31.4|-|320|-|-|

25|2|9|54|7.4|33.3|454|315|139|72|

26|4.5|9.5|54|16.7|35.2|381|311|70|48|

27|6.5|10|54|24|37|345|305|40|31|

28|7.5|10|54|27.8|37|331|305|26|21|

29|8.5|10.5|54|31.4|38.8|320|301|19|16|

30|9.5|11|54|35.2|40.7|311|296|15|13|

31|10.5|11.5|54|38.8|42.5|301|292|9|08|

32|11|12|54|40.7|44.5|296|287|9|08|

33|12|12.5|54|44.5|46.3|287|283|41|04|

34|12.5|12.5|54|46.3|46.3|283|283|0|0|

35|13|13|54|48|48|280|280|0|0|

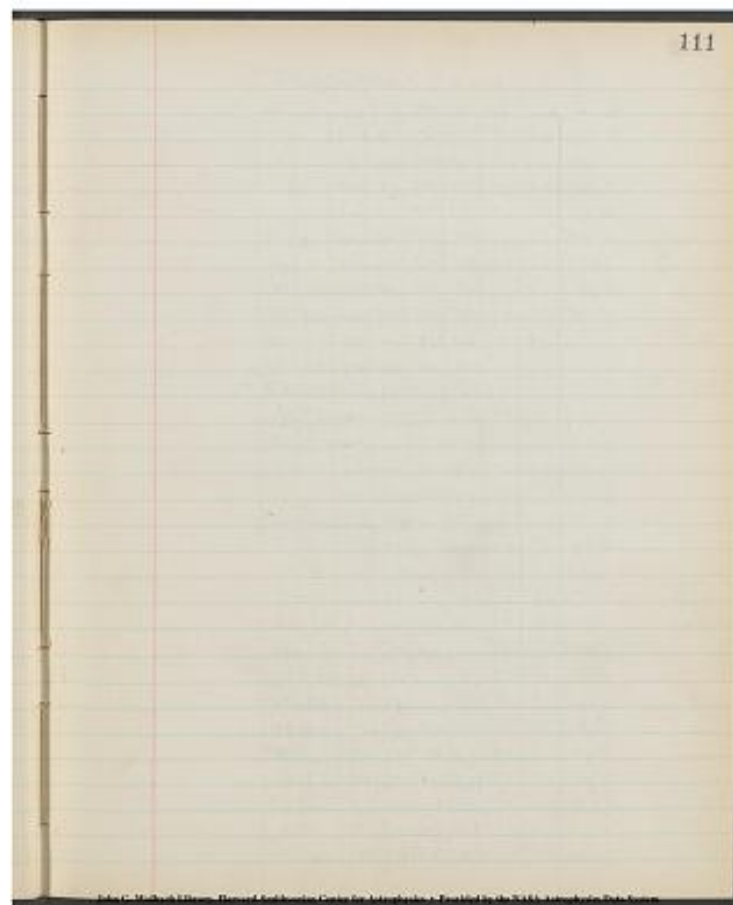
36|14|14|54|51.7|51.7|274|274|0|0|

37|14.5|14.5|54|53.5|53.5|270|270|0|0|

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111

[[no entries]]



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C19179, #2, mu phi 2015

[[10 columned table]]

[No][n][m+n][l+m+n][mean n][mean m+n][n][m+n][dm][dl]

No	n	m+n	l+m+n	mean n	mean m+n	n	m+n	dm	dl
0	29	29	37	157	157	102	102	0	0
1	29	29	37	157	157	102	102	0	0
2	29	29	37	157	157	102	102	0	0
3	29	29	37	157	157	102	102	0	0
4	28.5	29	37	157	157	102	102	0	0
5	28.5	29	37	157	157	102	102	0	0
6	27.5	29	37	157	157	102	102	0	0
7	25	29	37	157	157	102	102	0	0
8	16	29	37	157	157	102	102	0	0
9	21.5	29	37	157	157	102	102	0	0
10	25	29	37	157	157	102	102	0	0
11	27	29	37	157	157	102	102	0	0
12	28	29	37	157	157	102	102	0	0
13	28.5	29	37	157	157	102	102	0	0
14	28.5	29	37	157	157	102	102	0	0
15	28.5	29	37	157	157	102	102	0	0
0	27	27	37	146	146	119	119	0	0
1	26.5	27	37	143	146	124	119	5	04
2	25.5	27	37	138	146	132	119	13	11
3	24	27	37	130	146	145	119	26	21
4	20.5	27	37	111	146	175	119	56	40
5	12	27	37	65	146	249	119	130	70
6	19.5	27	37	105.5	146	183	119	64	44
7	23.5	27	37	127	146	149	119	30	24
8	25	27	37	135	146	137	119	18	15
9	25.5	27	37	138	146	132	119	13	11
10	26.5	26.5	37	143	124	124	0	0	0
0	25	25	37	135	135	137	137	0	0
1	25	25	37	135	135	137	137	0	0

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 ~ Provided by the NASA Astrophysics Data System

112

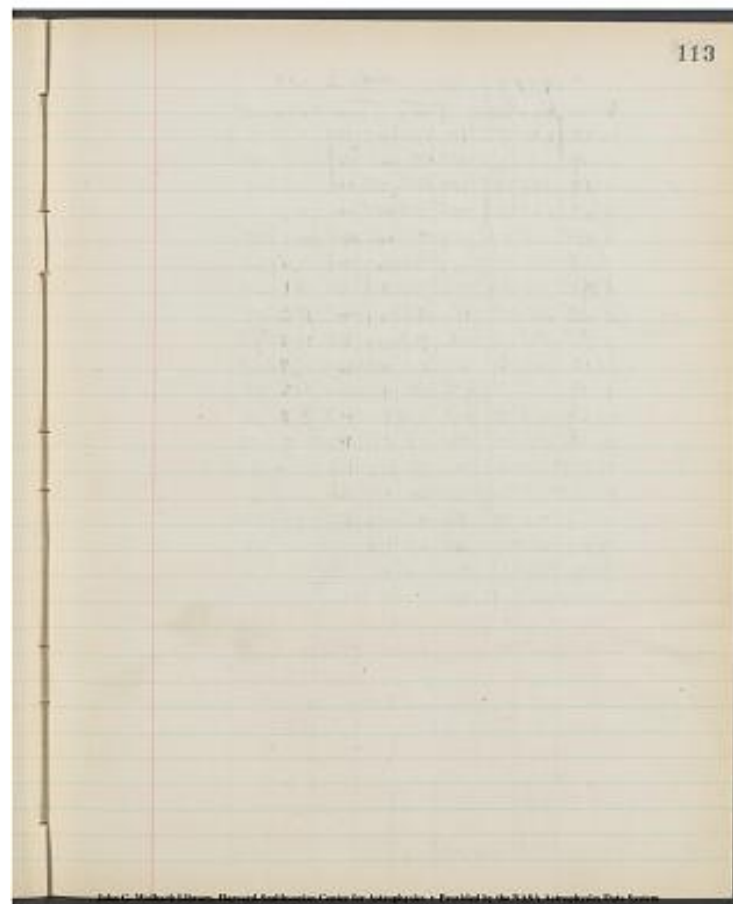
C 19179, #2, mu phi 2015

No	n	m+n	l+m+n	mean n	mean m+n	n	m+n	dm	dl
0	29	29	37	157	157	102	102	0	0
1	29	29	37	157	157	102	102	0	0
2	29	29	37	157	157	102	102	0	0
3	29	29	37	157	157	102	102	0	0
4	28.5	29	37	157	157	102	102	0	0
5	28.5	29	37	157	157	102	102	0	0
6	27.5	29	37	157	157	102	102	0	0
7	25	29	37	157	157	102	102	0	0
8	16	29	37	157	157	102	102	0	0
9	21.5	29	37	157	157	102	102	0	0
10	25	29	37	157	157	102	102	0	0
11	27	29	37	157	157	102	102	0	0
12	28	29	37	157	157	102	102	0	0
13	28.5	29	37	157	157	102	102	0	0
14	28.5	29	37	157	157	102	102	0	0
15	28.5	29	37	157	157	102	102	0	0
0	27	27	37	146	146	119	119	0	0
1	26.5	27	37	143	146	124	119	5	04
2	25.5	27	37	138	146	132	119	13	11
3	24	27	37	130	146	145	119	26	21
4	20.5	27	37	111	146	175	119	56	40
5	12	27	37	65	146	249	119	130	70
6	19.5	27	37	105.5	146	183	119	64	44
7	23.5	27	37	127	146	149	119	30	24
8	25	27	37	135	146	137	119	18	15
9	25.5	27	37	138	146	132	119	13	11
10	26.5	26.5	37	143	124	124	0	0	0
0	25	25	37	135	135	137	137	0	0
1	25	25	37	135	135	137	137	0	0

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113

[[no entries]]



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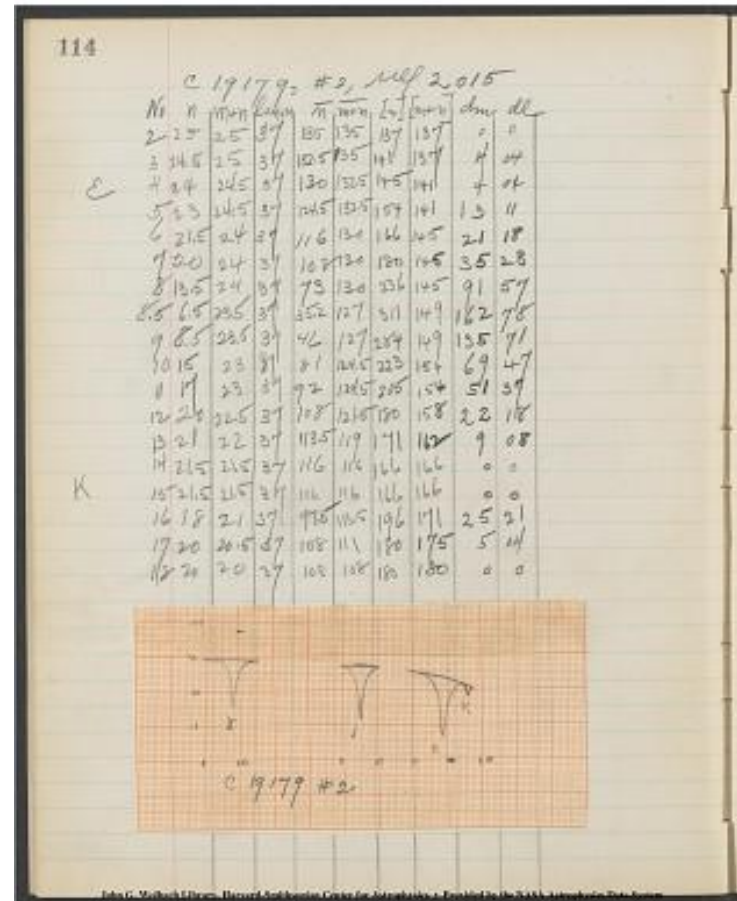
C19179, #2 mu phi 2015

[[11 columned table]]

|No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

2	25	25	37	135	135	137	137	0	0
3	24.5	25	37	132.5	135	141	137	4	04
4	24	24.5	37	130	132.5	145	141	4	04
5	23	24.5	37	124.5	132.5	154	141	13	11
6	21.5	24	37	116	130	166	145	21	18
7	20	24	37	108	130	180	145	35	28
8	13.5	24	37	73	130	236	145	91	57
9	8.5	23.5	37	46	127	284	149	135	71
10	15	23	37	81	124.5	223	154	69	47
11	17	23	37	92	124.5	205	154	51	37
12	20	22.5	37	108	121.5	180	158	22	18
13	21	22	37	113.5	119	171	162	9	08
14	21.5	21.5	37	116	116	166	166	0	0
15	21.5	21.5	37	116	116	166	166	0	0
16	18	21	37	108	116	196	171	25	21
17	20	20.5	37	108	111	180	175	5	04
18	20	20	37	108	108	180	180	0	0

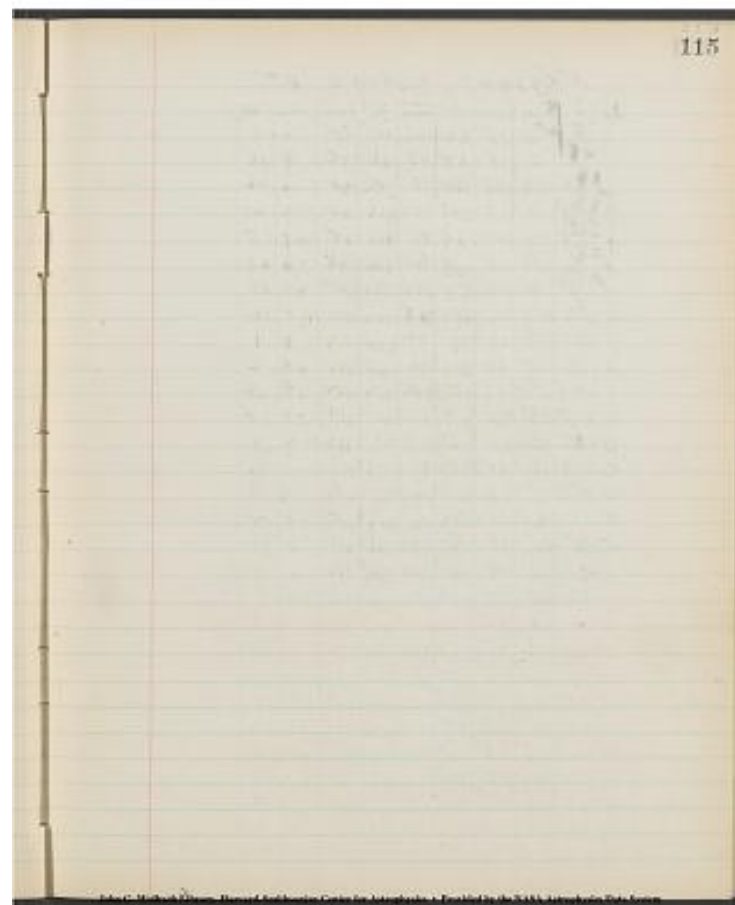
[[image graph]]



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 Extracted Aug-29-2022 05:00:12

115

[[no entries]]



Project PHaEDRA - Cecilia H. Payne #39
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mu phi 2083, C19192, #3

[[11 columned table]]

No	n	m+n	l+m+n	n	m+n	[n]	[m+n]	dm	dl	
0	11.5	11.5	38	60.5	60.5	257	257	0	0	
1	11	12	38	58	63	262	253	9	08	
2	9.5	13	38	50	68.5	276	244	32	26	
3	4.5	13	38	23.7	68.5	346	244	102	61	
3.5	1.5	13.5	38	7.9	71	448	239	209	85	
4	7	14	38	36.8	73.5	306	235	71	48	
k	5	11.5	14	38	60.5	73.5	257	235	22	18
6	13	14.5	38	68.5	76.5	244	230	14	12	
7	13.5	15	38	71	79	239	226	13	11	
8	13	15	38	68.5	79	244	226	18	15	
9	10.5	15.5	38	55.3	81.5	266	222	44	33	
10	5.5	16	38	29	84	327	217	110	64	
11	5	16.5	38	26.3	87	336	213	123	68	
Epsilon	12	12.5	17	38	65.7	89.5	249	209	40	31
13	15.5	17	38	81.5	89.5	222	209	13	11	
14	17	17.5	38	89.5	92	209	205	4	04	
15	18	18	38	94.8	94.8	201	201	0	0	
delta	8	21	21	38	110.5	110.5	176	176	0	0
9	21	21	38	110.5	110.5	176	176	0	0	
10	21	21	38	110.5	110.5	176	176	0	0	
11	20.5	21	38	108	110.5	180	176	4	04	
12	22.5	21	38	105	113	184	171	13	11	
13	19.5	21.5	38	102.5	113	188	171	17	14	
14	16.5	21.5	38	87	113	213	171	42	32	
15	10	22	38	52.5	116	272	166	106	66	
16	18.5	22	38	97.5	116	196	166	30	24	
17	21	22	38	110.5	116	176	166	10	09	
18	22	22	38	116	116	166	166	0	0	
6	26	26	38	137	137	133	133	0	0	

116

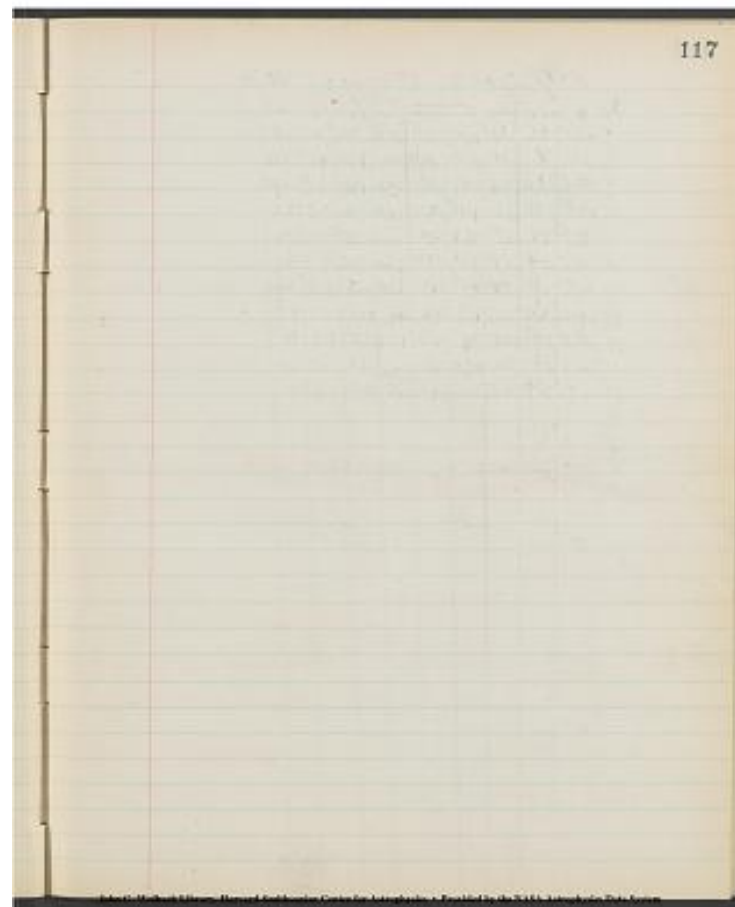
mu phi 2083, C19192 #3

No	n	m+n	l+m+n	n	m+n	[n]	[m+n]	dm	dl
0	11.5	11.5	38	60.5	60.5	257	257	0	0
1	11	12	38	58	63	262	253	9	68
2	9.5	13	38	50	68.5	276	244	32	26
3	4.5	13	38	23.7	68.5	346	244	102	61
3.5	1.5	13.5	38	7.9	71	448	239	209	85
4	7	14	38	36.8	73.5	306	235	71	48
5	11.5	14	38	60.5	73.5	257	235	22	18
6	13	14.5	38	68.5	76.5	244	230	14	12
7	13.5	15	38	71	79	239	226	13	11
8	13	15	38	68.5	79	244	226	18	15
9	10.5	15.5	38	55.3	81.5	266	222	44	33
10	5.5	16	38	29	84	327	217	110	64
11	5	16.5	38	26.3	87	336	213	123	68
12	12.5	17	38	65.7	89.5	249	209	40	31
13	15.5	17	38	81.5	89.5	222	209	13	11
14	17	17.5	38	89.5	92	209	205	4	04
15	18	18	38	94.8	94.8	201	201	0	0
16	21	21	38	110.5	110.5	176	176	0	0
17	21	21	38	110.5	110.5	176	176	0	0
18	21	21	38	110.5	110.5	176	176	0	0
19	21	21	38	110.5	110.5	176	176	0	0
20	21	21	38	110.5	110.5	176	176	0	0
21	21	21	38	110.5	110.5	176	176	0	0
22	21	21	38	110.5	110.5	176	176	0	0
23	21	21	38	110.5	110.5	176	176	0	0
24	21	21	38	110.5	110.5	176	176	0	0
25	21	21	38	110.5	110.5	176	176	0	0
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99	21	21	38	110.5	110.5	176	176	0	0
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 Extracted Aug-29-2022 05:00:12

117

[[no entries]]

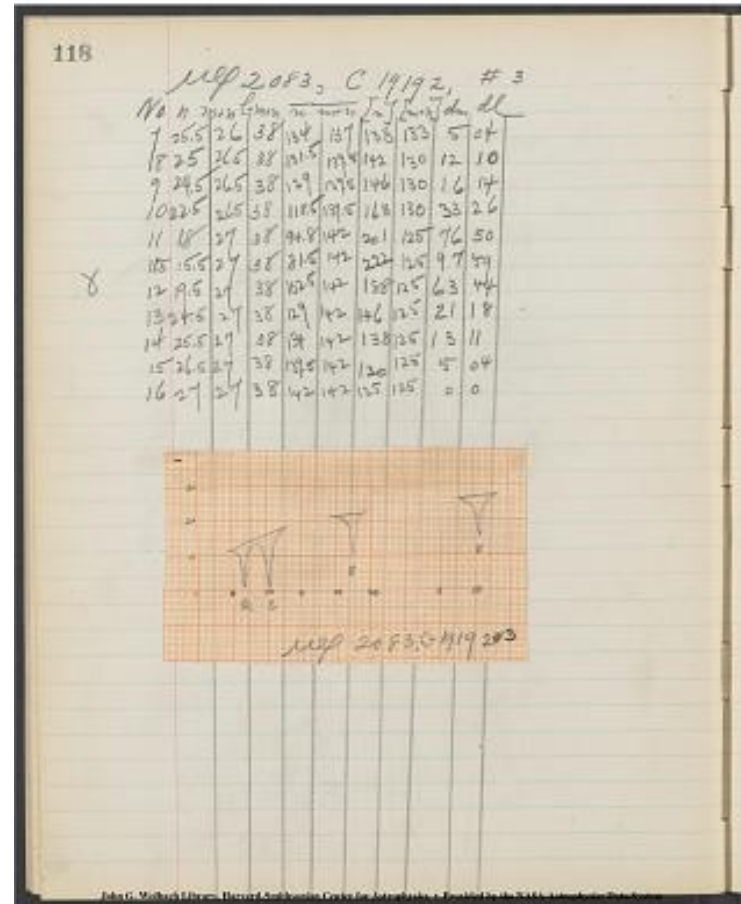


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Extracted Aug-29-2022 05:00:12

mu phi 2083, C19192, #3

[[11 columned table]]

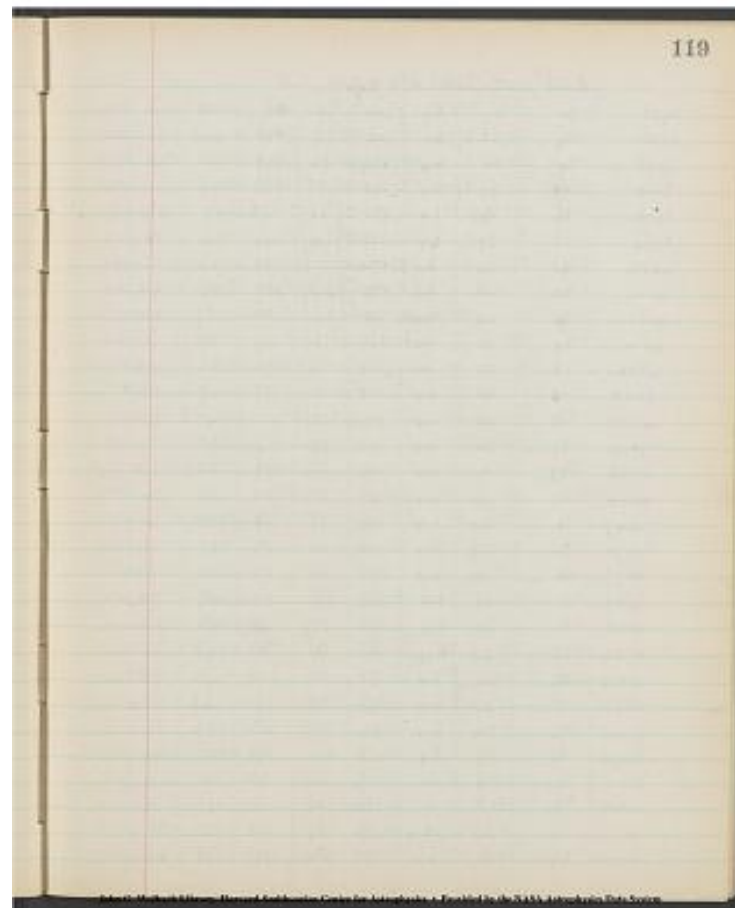
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9	24.5	26.5	38	129	139.5	146	130	16	14	
10	22.5	26.5	38	118.5	139.5	163	130	33	26	
11	18	27	38	94.8	142	201	125	76	50	
11.5	15.5	27	38	81.5	142	222	125	97	59	
gamma	12	19.5	27	38	102.5	142	188	125	63	44
13	24.5	27	38	129	142	146	125	21	18	
14	25.5	27	38	134	142	138	125	13	11	
15	26.5	27	38	139.5	142	130	125	5	04	
16	27	27	38	142	142	125	125	0	0	



Project PHaEDRA - Cecilia H. Payne #39
 Transcribed and Reviewed by Digital Volunteers
 Extracted Aug-29-2022 05:00:12

119

[[no entries]]



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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

Project PHaEDRA - Cecilia H. Payne #39
Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

121 M

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4233	13	19	65	159	141	98	127	29	23
4242	12	16	65	162	150	93	113	20	17
4258	12	16	65	162	150	93	113	20	17
4284	12	16	65	162	150	93	113	20	17
4294	12	14	65	162	156	93	103	10	9
4296	12	15	65	162	153	93	108	15	13
4300	12	14	65	162	156	93	103	10	9
4303	11	15	65	166	153	86	108	22	18
4307	11	13	65	166	159	86	98	12	10
4314	11	14	65	166	156	86	103	17	14
4325	11	14	65	166	156	86	103	17	14
4337	11	14	65	166	156	86	103	17	14
4340	11	17	65	166	147	86	117	31	25
4352	10	14	65	169	156	81	103	22	18
4357	10	12	65	162	81	93	12	10	
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4384	10	15		153	81	108	27	22	
4387	10	16		150	81	113	32	26	
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4416	10	14		156	81	103	22	18	
4431	10	13		159	81	98	17	14	
4433	10	14		156	81	103	22	18	
4471	9	16		172	150	75	113	38	30
4481	9	17		147	75	117	42	32	
4489	9	11		166	75	86	11	10	
4491	9	11		166	75	86	11	10	
4508	9	12		162	75	93	18	15	
4515	9	11		166	75	86	11	10	
4520	9	11		166	75	86	11	10	

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 Provided by the NASA Astrophysics Data System

4200	13	17	64	159	147	98	117	19	16
4233	13	19	65	159	141	98	127	29	23
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4340	11	17	65	166	147	86	117	31	25
4352	10	14	65	169	156	81	103	22	18
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4471	9	16		172	150	75	113	38	30
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4491	9	11		166	75	86	11	10	
4508	9	12		162	75	93	18	15	
4515	9	11		166	75	86	11	10	
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[[9 Columned Table]]

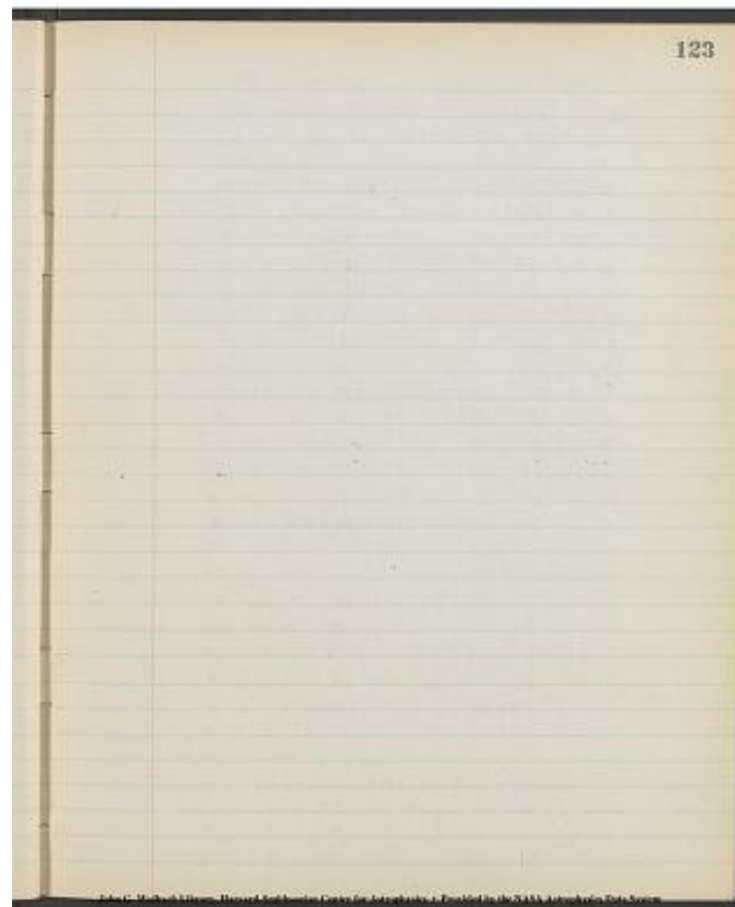
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4621	9	12	162	75	93	18	15	
4629	9	12	162	75	93	18	15	
4634	9	12	162	75	93	18	15	
4713	11	13	166	159	86	98	12	10
4861	20	23	137	128	133	148	15	13
4922	26	32	119	150	162	192	30	24

122	4 Sep							
4522	9	12	172	162	75	93	18	15
4534	9	11.5		164	75	90	15	13
4541	9	11.5		164	75	90	15	13
4549	9	12		162	75	93	18	15
4552	9	11		166	75	86	11	10
4555	9	12.5		161	75	95	20	17
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4618	9	11		166	75	86	11	10
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4634	9	12		162	75	93	18	15
4713	11	13		166	159	86	98	12
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Project PHaEDRA - Cecilia H. Payne #39
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 Extracted Aug-29-2022 05:00:12

123

[[no entries]]



Project PHaEDRA - Cecilia H. Payne #39
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Extracted Aug-29-2022 05:00:12

124

[?] 2 65 5, C60 75, HP 551, Bq
[10 columned table]

No[n|m+n|b+m+n|n|line on top|m+n|[n]||m+n|dm|dl|

6|17|17|50|68|68|244|244|0|0|
7|17|18|50|68|72|244|238|05|
8|11.5|18|46|72|284|238|46|34|
9|15.5|18.5|62|74|76|255|243|21|18|
10|18.5|19|50|74|76|234|231|3|03|
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7|29|29|50|116|116|166|166|0|0|
8|28.5|28.5|50|114|114|170|170|0|0|
9|28|28.5|50|112|114|173|170|3|03|
10|27.5|28.5|50|110|114|176|170|6|05|
11|19|28.5|50|76|114|231|170|61|43|
12|23.5|28.5|50|94|114|201|170|31|25|
13|27.5|28.5|50|110|114|176|170|6|05|
14|28|28.5|50|112|114|173|170|3|03|
15|28.5|28.5|50|114|114|170|170|0|0|

9|26|26|50|104|104|185|185|0|0|
10|25.5|26|50|102|104|188|185|3|03|
11|25|26|50|100|104|192|185|7|06|
12|24.5|26|50|98|104|195|185|10|09|
13|17|26|50|68|104|244|185|59|42|
14|18|26|50|72|104|238|185|53|39|
15|24|26|50|96|104|198|185|13|11|
16|25.5|26|50|102|104|188|185|3|03|
17|26|26|50|104|104|185|185|0|0|
18|26|26|50|104|104|185|185|0|0|

5|22|22|50|88|211|211|0|0|
6|21.5|22|50|86|88|214|211|3|03|
7|20.5|22|50|82|88|221|211|10|09|
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124

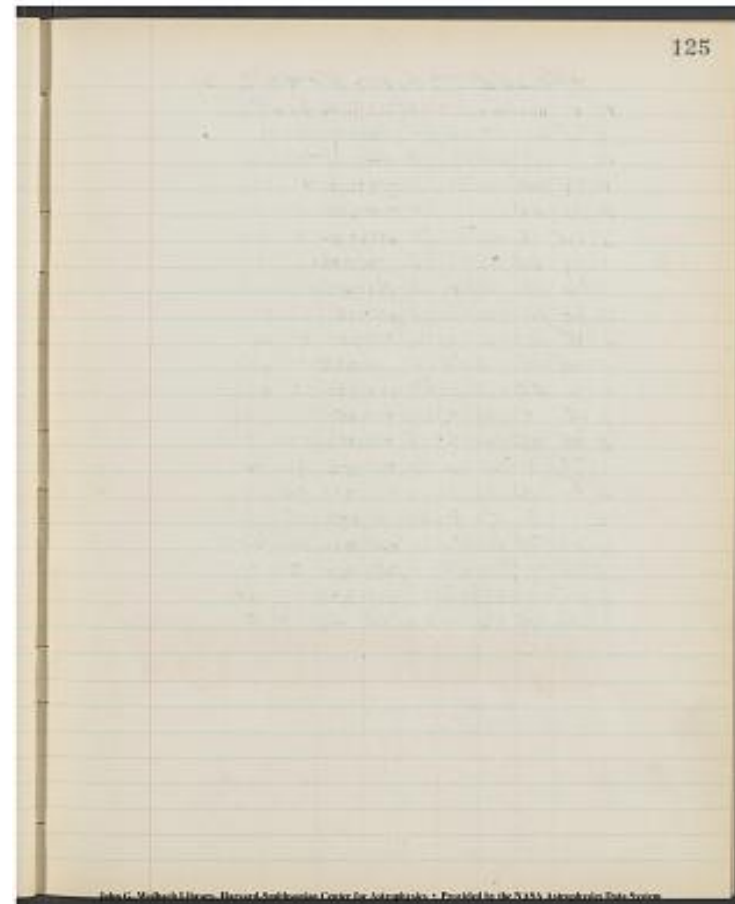
HP 2 65 5, C60 75, HP 551, Bq

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7	17	18	50	68	72	244	238	6	05	
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9	15.5	18.5	50	62	74	255	243	21	18	
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11	19.5	19.5	50	78	78	228	228	0	0	
7	29	29	50	116	116	166	166	0	0	
8	28.5	28.5	50	114	114	170	170	0	0	
9	28	28.5	50	112	114	173	170	3	03	
10	27.5	28.5	50	110	114	176	170	6	05	
11	19	28.5	50	76	114	231	170	61	43	
12	23.5	28.5	50	94	114	201	170	31	25	
13	27.5	28.5	50	110	114	176	170	6	05	
14	28	28.5	50	112	114	173	170	3	03	
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9	26	26	50	104	104	185	185	0	0	
10	25.5	26	50	102	104	188	185	3	03	
11	25	26	50	100	104	192	185	7	06	
12	24.5	26	50	98	104	195	185	10	09	
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14	18	26	50	72	104	238	185	53	39	
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17	26	26	50	104	104	185	185	0	0	
18	26	26	50	104	104	185	185	0	0	
5	22	22	50	88	88	211	211	0	0	
6	21.5	22	50	86	88	214	211	3	03	
7	20.5	22	50	82	88	221	211	10	09	
8	16.5	21.5	50	66	86	248	214	34	27	

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125

[[no entries]]



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mu phi 2655, C6075, HP551, B9p

[[11 columned table]]

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9	5.5	21	50	22	84	353	217	136	71
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11	19	20.5	50	76	82	231	224	18	09
12	20	20	50	80	80	224	224	0	0
0	17.5	17.5	50	70	241	241	0	0	0
k	1	17	50	68	244	244	0	0	0
2	16	16.5	50	64	251	248	3	03	
3	14	16	50	56	265	251	14	12	
4	7.5	16	50	30	324	301	75	40	
5	14.5	15.5	50	58	324	255	17	06	
6	15	15.5	50	60	258	255	3	03	
7	15	15	50	60	258	258	0	0	
0	9.5	9.5	50	38	303	303	0	0	
1	7.5	9	50	30	304	308	16	14	
2	5	8.5	50	20	343	313	50	27	
3	1	8	50	4	446	446	0	0	
4	2.5	7.5	50	10	428	324	104	62	
5	5.5	7	50	22	353	330	23	19	
6	6.5	7	50	26	337	330	7	06	
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[[graph]]

50

40

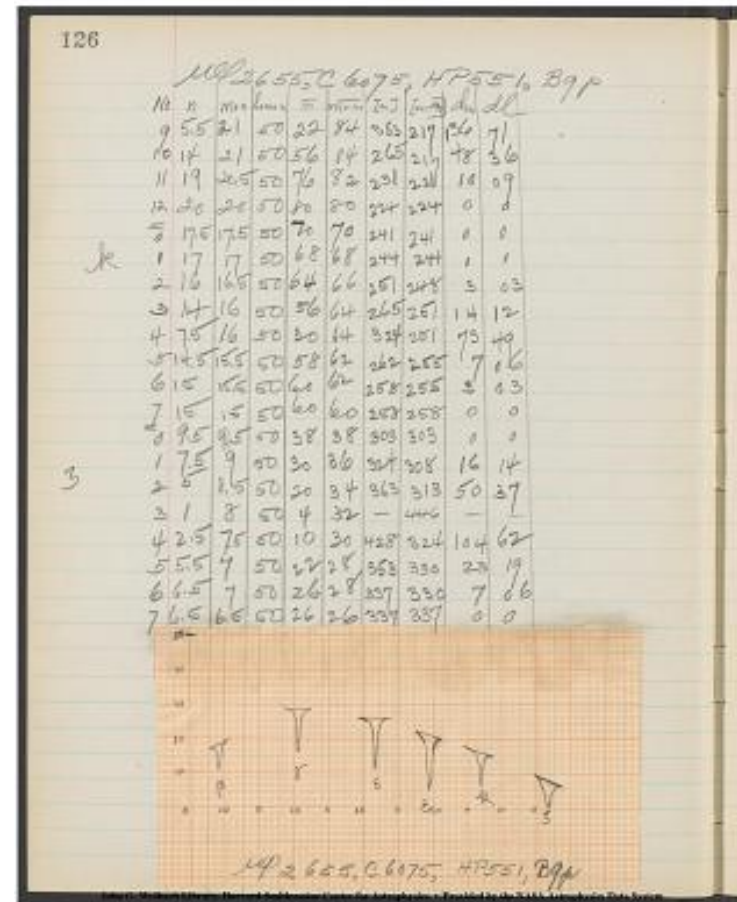
30

20

10 beta gamma delta epsilon kappa zeta

0 10 0 10 0 10 0 10 0 10 0

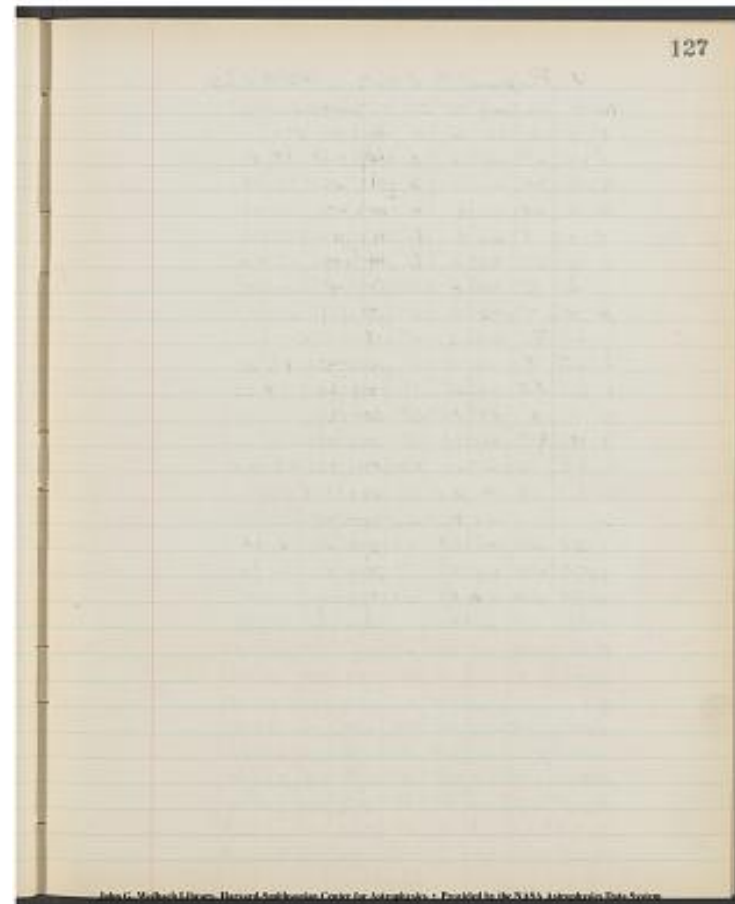
mu phi 2655, C6075, HP551, B9p

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 Extracted Aug-29-2022 05:00:12

127

[[no entries]]



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Transcribed and Reviewed by Digital Volunteers
Extracted Aug-29-2022 05:00:12

128

V Puppis, X 8063, mu phi 3862

[10 columned table]

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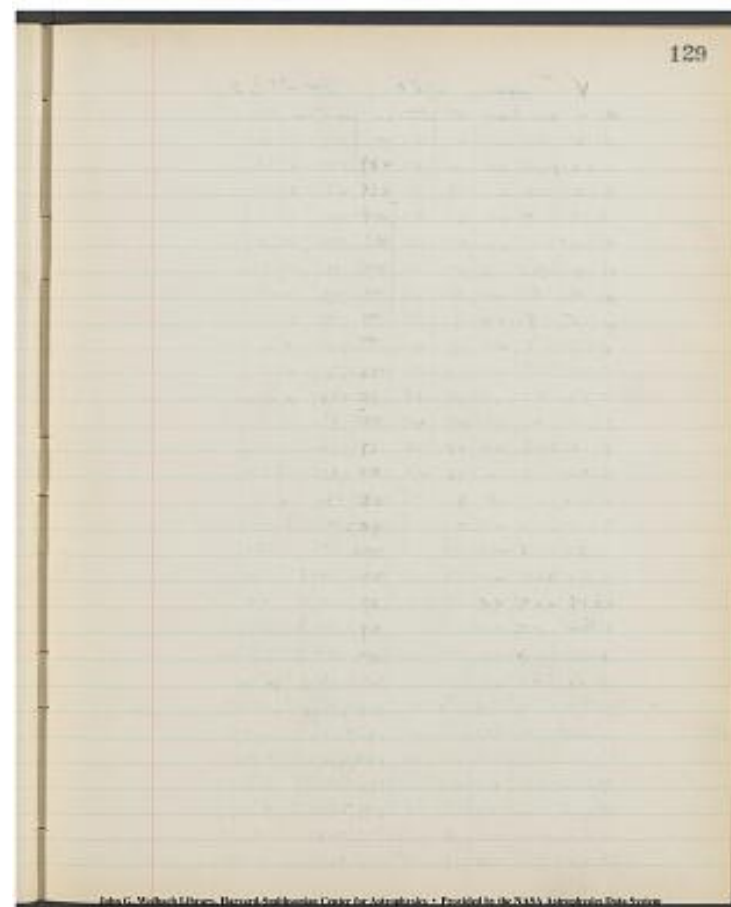
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 2|2.5|3|40|5|6|487|469|18|15|
 3|3.5|4|40|6|7|469|456|13|11|
 4|3.4|5|40|6|9|469|437|32|26|
 5|3|5|40|6|10|469|428|41|31|
 6|3.5|5|40|6|11|469|421|48|36|
 7|2|6|40|12|4|13|1|1|
 8|1.5|7|40|3|14|1|399|1|1|
 9|1.5|7.5|40|3|15|1|392|1|1|
 10|5|8|40|16|428|385|43|33|
 11|6.5|8.5|40|13|17|406|379|27|22|
 12|8|9|40|16|18|385|374|11|10|
 13|9|9.5|40|18|19|374|369|5|04|
 14|9.5|10|40|19|20|369|363|6|05|
 15|10.5|10.5|40|21|21|358|358|0|0|
 16|11|11|40|22|22|353|353|0|0|
 gamma
 1|25.5|25.5|40|51|51|274|274|0|0|
 2|25.5|25.5|40|51|51|274|274|0|0|
 3|25.5|25.5|40|51|51|274|274|0|0|
 4|25.5|25.5|40|51|51|274|274|0|0|
 5|25|25.5|40|50|51|276|274|2|02|
 6|24.5|25.5|40|49|51|278|274|4|04|
 7|24|25.5|40|48|51|280|274|6|05|
 8|23.5|25.5|40|47|51|282|274|8|07|
 9|22.5|22.5|40|45|51|286|274|12|10|
 10|20.5|25.5|40|41|51|295|274|21|18|
 11|20|25.5|40|40|51|297|274|23|19|
 12|19.5|25.5|40|39|51|300|274|26|21|
 13|20.5|25.5|40|41|51|295|274|21|18|

128									
V Puppis, X 8063, mu phi 3862									
No	n	m	n+m	mean n	mean m+n	[n]	[m+n]	dm	dl
1	2	2	4	4	4	—	—	—	—
2	2.5	3	5	5	5	487	469	18	15
3	3	3.5	6	6	6	469	456	13	11
4	3	4.5	7	7	7	469	437	32	26
5	3	5	8	8	8	469	428	41	31
6	3	5.5	8.5	8.5	8.5	469	421	48	36
7	2	6	8	8	8	—	413	—	—
8	1.5	7	8.5	8.5	8.5	—	399	—	—
9	1.5	7.5	9	9	9	—	392	—	—
10	5	8	13	13	13	428	385	43	33
11	6.5	8.5	15	15	15	406	379	27	22
12	8	9	17	17	17	385	374	11	10
13	9	9.5	18.5	18.5	18.5	374	369	5	04
14	9.5	10	19.5	19.5	19.5	369	363	6	05
15	10.5	10.5	21	21	21	358	358	0	0
16	11	11	22	22	22	353	353	0	0
1	25.5	25.5	51	51	51	274	274	0	0
2	25.5	25.5	51	51	51	274	274	0	0
3	25.5	25.5	51	51	51	274	274	0	0
4	25.5	25.5	51	51	51	274	274	0	0
5	25	25.5	50.5	50.5	50.5	276	274	2	02
6	24.5	25.5	50	50	50	278	274	4	04
7	24	25.5	49.5	49.5	49.5	280	274	6	05
8	23.5	25.5	49	49	49	282	274	8	07
9	22.5	22.5	45	45	45	286	274	12	10
10	20.5	25.5	46	46	46	295	274	21	18
11	20	25.5	45.5	45.5	45.5	297	274	23	19
12	19.5	25.5	45	45	45	300	274	26	21
13	20.5	25.5	46	46	46	295	274	21	18

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129

[[no entries]]



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V Puppis, X8063, mu phi 3862

[[11 columned table]]

No	n	m+n	m+n	mean n	mean m+n	n	m+n	dm	dl
14	22.5	25.5	40	45	51	286	274	12	10
15	24	25.5	40	48	51	280	274	6	05
16	24.5	25	40	49	50	278	276	2	02
17	25	25	40	50	50	276	276	0	0
18	25	25	40	50	50	276	276	0	0
19	25	25	40	50	50	276	276	0	0
20	25	25	40	50	50	276	276	0	0
[[underlined]]21[[/underlined]]25|25|40|50|276|276|0|0|									
0	23	23	40	46	46	284	284	0	0
1	23	23	40	46	46	284	284	0	0
2	23	23	40	46	46	284	284	0	0
delta 3 | 22.5 | 22.5 | 40 | 45 | 286 | 286 | 0 | 0 |									
4	22	22.5	40	44	45	288	286	2	02
5	22	22.5	40	44	45	288	286	2	02
6	21.5	22.5	40	43	45	290	286	4	04
7	20.5	22.5	40	41	45	295	286	9	08
8	19.5	22.5	40	39	45	300	286	14	12
9	18.5	22.5	40	37	45	305	286	19	16
10	17	22.5	40	34	45	313	286	27	22
11	16.5	22.5	40	33	45	316	286	30	24
12	16.5	22.5	40	33	45	316	286	30	24
13	17	22.5	40	34	45	313	286	27	22
14	18.5	22	40	37	44	305	288	17	14
15	20.5	22	40	41	44	295	288	7	06
16	21	22	40	42	44	293	288	5	04
17	21.5	22	40	43	44	290	288	2	02
18	21.5	22	40	43	44	290	288	2	02
19	22	22	40	44	44	288	288	0	0
20	22	22	40	44	44	288	288	0	0

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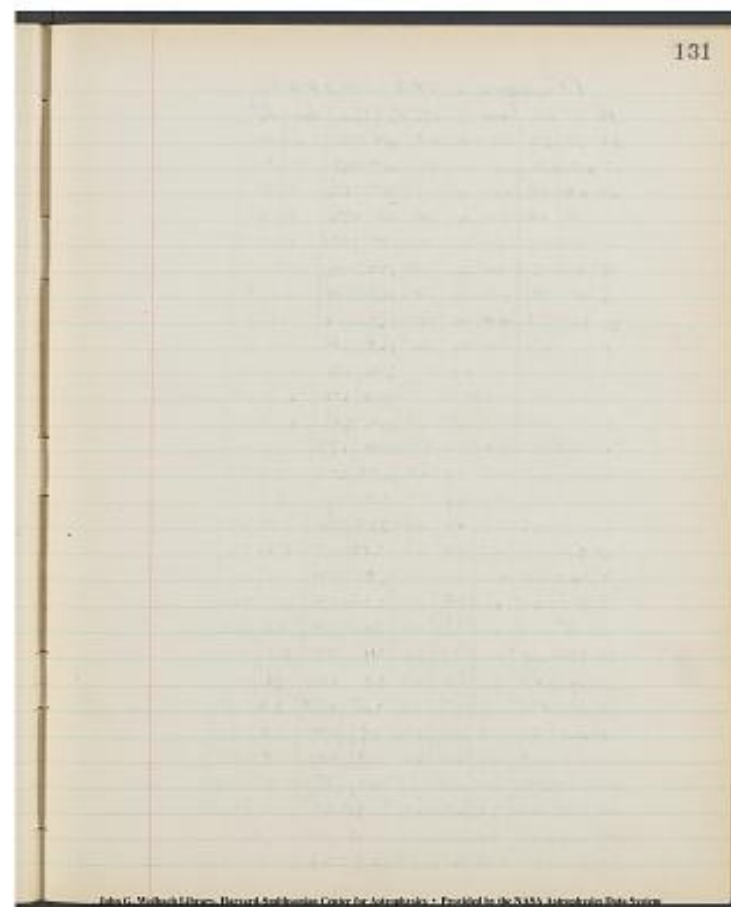
V Puppis, X8063, mu phi 3862

No	n	m+n	m+n	mean n	mean m+n	n	m+n	dm	dl
14	22.5	25.5	40	45	51	286	274	12	10
15	24	25.5	40	48	51	280	274	6	05
16	24.5	25	40	49	50	278	276	2	02
17	25	25	40	50	50	276	276	0	0
18	25	25	40	50	50	276	276	0	0
19	25	25	40	50	50	276	276	0	0
20	25	25	40	50	50	276	276	0	0
[[underlined]]21[[/underlined]]25|25|40|50|276|276|0|0|									
0	23	23	40	46	46	284	284	0	0
1	23	23	40	46	46	284	284	0	0
2	23	23	40	46	46	284	284	0	0
delta 3 | 22.5 | 22.5 | 40 | 45 | 286 | 286 | 0 | 0 |									
4	22	22.5	40	44	45	288	286	2	02
5	22	22.5	40	44	45	288	286	2	02
6	21.5	22.5	40	43	45	290	286	4	04
7	20.5	22.5	40	41	45	295	286	9	08
8	19.5	22.5	40	39	45	300	286	14	12
9	18.5	22.5	40	37	45	305	286	19	16
10	17	22.5	40	34	45	313	286	27	22
11	16.5	22.5	40	33	45	316	286	30	24
12	16.5	22.5	40	33	45	316	286	30	24
13	17	22.5	40	34	45	313	286	27	22
14	18.5	22	40	37	44	305	288	17	14
15	20.5	22	40	41	44	295	288	7	06
16	21	22	40	42	44	293	288	5	04
17	21.5	22	40	43	44	290	288	2	02
18	21.5	22	40	43	44	290	288	2	02
19	22	22	40	44	44	288	288	0	0
20	22	22	40	44	44	288	288	0	0

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 Extracted Aug-29-2022 05:00:12

131

[[no entries]]



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V Puppis, X 8063, mu phi 3852

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[[10 columned table]]

[No][n][m+n][l+m+n][mean n][mean m+n][n][m+n][dm][dl]

21	22	22	40	44	44	288	288	0	0
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23	22	22	40	44	44	288	288	0	0
24	22	22	40	44	44	288	288	0	0
25	22	22	40	44	44	288	288	0	0
26	22	22	40	44	44	288	288	0	0
5	27	27	40	54	54	269	269	0	0
6	27	27	40	54	54	269	269	0	0
7	27	27	40	54	54	269	269	0	0
8	26.5	26.5	50	53	53	271	271	0	0
9	26	26	50	52	53	273	271	2	02
10	26	26	50	52	53	273	271	2	02
11	25.5	26	40	51	52	274	273	1	01
12	25	26	40	50	52	276	273	3	03
13	24	25.5	40	48	51	280	274	6	05
14	23	25.5	40	46	51	284	274	10	09
15	22	25	40	44	50	288	276	12	10
16	20.5	25	40	41	50	295	276	19	16
17	18.5	24.5	40	37	49	305	278	27	22
18	18	24.5	40	36	49	308	278	30	24
19	17.5	24	40	35	48	311	280	31	25
20	17.5	24	40	35	48	311	280	31	25
21	17.5	24	40	35	48	311	280	31	25
22	20	23	40	46	297	284	13	11	
23	21	23	40	42	293	284	9	08	
24	21.5	22.5	40	43	290	286	4	04	
25	21.5	22	40	43	290	288	2	02	
26	22	22	40	44	288	288	0	0	
27	21.5	21.5	40	43	290	290	0	0	

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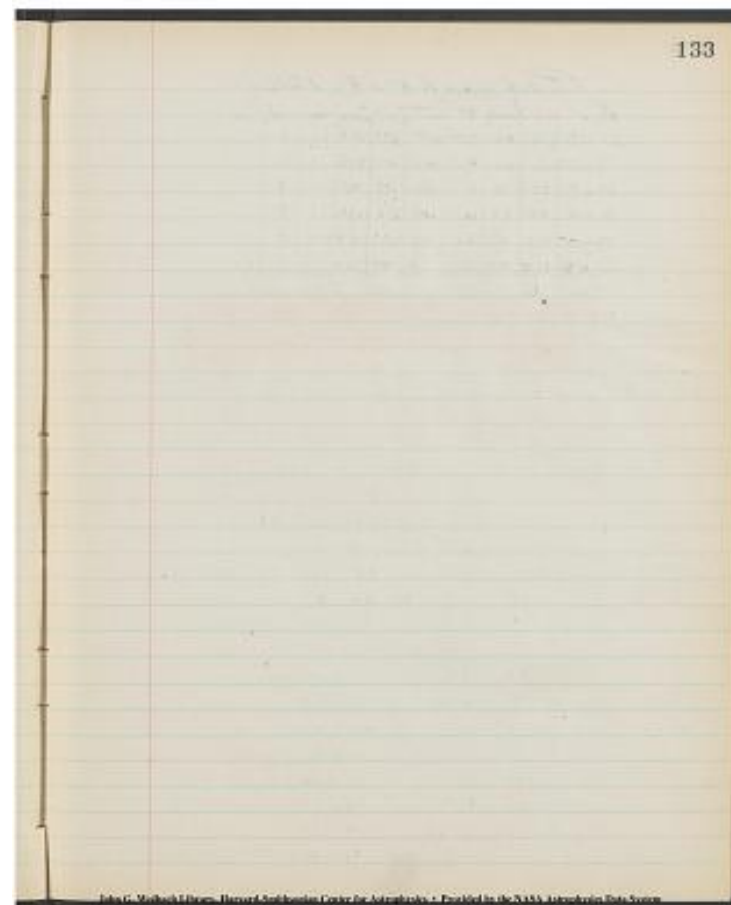
V Puppis, X 8063, mu phi 3852

No	n	m+n	l+m+n	mean n	mean m+n	n	m+n	dm	dl
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22	22	22	40	44	44	288	288	0	0
23	22	22	40	44	44	288	288	0	0
24	22	22	40	44	44	288	288	0	0
25	22	22	40	44	44	288	288	0	0
26	22	22	40	44	44	288	288	0	0
5	27	27	40	54	54	269	269	0	0
6	27	27	40	54	54	269	269	0	0
7	27	27	40	54	54	269	269	0	0
8	26.5	26.5	50	53	53	271	271	0	0
9	26	26	50	52	53	273	271	2	02
10	26	26	50	52	53	273	271	2	02
11	25.5	26	40	51	52	274	273	1	01
12	25	26	40	50	52	276	273	3	03
13	24	25.5	40	48	51	280	274	6	05
14	23	25.5	40	46	51	284	274	10	09
15	22	25	40	44	50	288	276	12	10
16	20.5	25	40	41	50	295	276	19	16
17	18.5	24.5	40	37	49	305	278	27	22
18	18	24.5	40	36	49	308	278	30	24
19	17.5	24	40	35	48	311	280	31	25
20	17.5	24	40	35	48	311	280	31	25
21	17.5	24	40	35	48	311	280	31	25
22	20	23	40	46	297	284	13	11	
23	21	23	40	42	293	284	9	08	
24	21.5	22.5	40	43	290	286	4	04	
25	21.5	22	40	43	290	288	2	02	
26	22	22	40	44	288	288	0	0	
27	21.5	21.5	40	43	290	290	0	0	

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133

[[no entries]]



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Extracted Aug-29-2022 05:00:12

134

V Puppis, X 8063, mu phi 3862

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

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29	21	40	42	42	293	293	0	0
30	21	40	42	42	293	293	0	0
31	20.5	40	41	41	295	295	0	0
32	20	40	40	40	297	297	0	0
33	19.5	40	39	39	300	300	0	0

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40

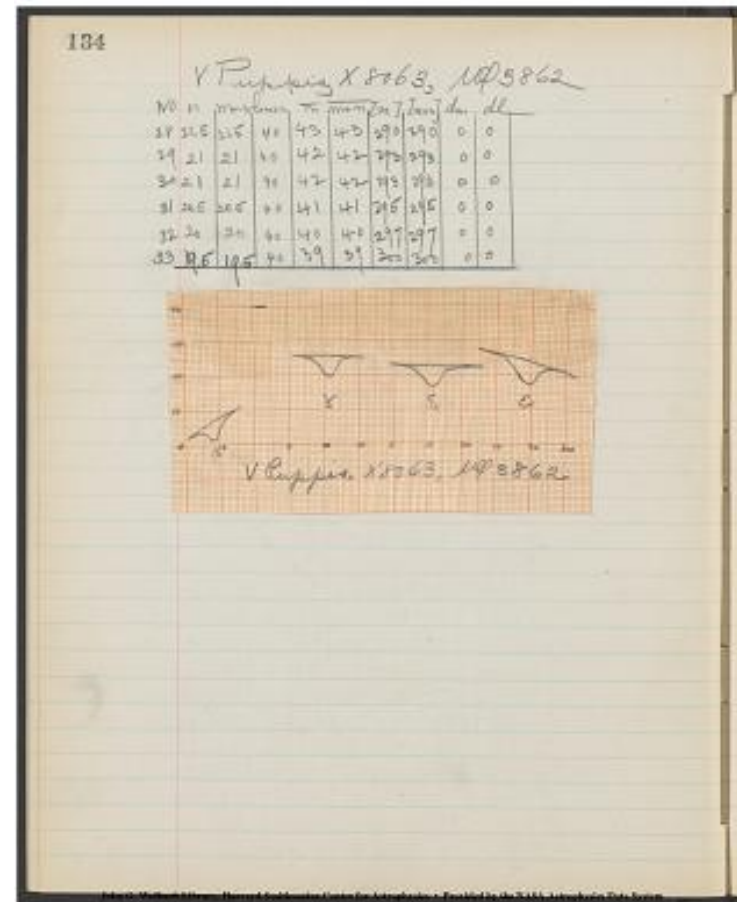
30

20 beta gamma delta epsilon

10 10 0 10 20 0 10 20 10 20 30

V Puppis, X8063, mu phi 3862

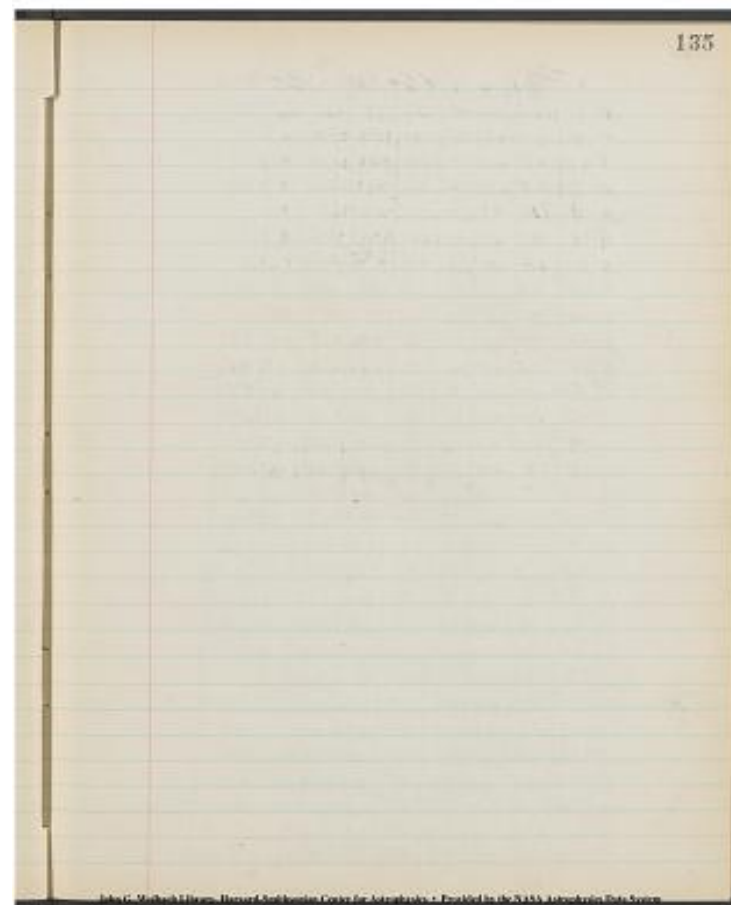
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135

[[no entries]]



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Extracted Aug-29-2022 05:00:12

V Puppis, X8068, mu phi 3865

[[11 columned table]]

[No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl]

	0	1	1	1	1	4	0	2	2	3	5	3	5	3	0	0
	1	1	1	5	1	1	5	4	0	2	3	2	3	3	4	9
Epsilon	2	1	1	1	1	5	4	0	2	2	2	3	3	5	3	4
	3	1	1	1	2	4	0	2	2	2	4	3	5	3	4	5
	4	1	1	1	2	4	0	2	2	4	3	5	3	4	5	8
	5	1	1	1	2	5	4	0	2	2	2	5	3	5	3	4
	6	1	0	5	1	2	5	4	0	2	1	2	5	3	5	8
	7	1	0	1	3	4	0	2	0	2	6	3	6	3	3	7
	8	8	5	1	3	4	0	1	7	2	6	3	7	9	3	3
	9	6	5	1	3	5	4	0	1	3	2	7	4	0	6	3
	10	5	5	1	4	4	0	1	1	2	8	4	2	1	3	3
	11	5	5	1	4	4	0	1	1	2	8	4	2	1	3	3
	12	7	1	4	5	4	0	1	4	2	9	3	9	9	3	2
	13	1	0	1	5	4	0	2	0	3	0	3	6	3	3	2
	14	1	1	5	1	5	4	0	2	3	3	0	3	4	9	3
	15	1	3	5	1	5	4	0	2	7	3	0	3	3	4	3
	16	1	4	1	5	5	4	0	2	8	3	1	3	3	0	2
	17	1	4	5	1	5	5	4	0	2	9	3	1	3	2	7
	18	1	5	5	1	6	4	0	3	1	3	2	3	1	3	1
	19	1	6	1	6	4	0	3	2	3	1	9	3	1	9	0
	20	1	6	5	1	6	5	4	0	3	3	3	3	1	6	3
	21	1	6	5	1	6	5	4	0	3	3	3	3	1	6	3
	22	1	6	5	1	6	5	4	0	3	3	3	3	1	6	3
delta	4	2	1	5	2	1	5	4	0	4	3	4	3	2	9	0
	5	2	1	5	2	1	5	4	0	4	3	4	3	2	9	0
	6	2	1	5	2	1	5	4	0	4	3	4	3	2	9	0
	7	2	1	5	2	1	5	4	0	4	3	4	3	2	9	0
	8	2	1	2	1	5	4	0	4	2	4	3	2	9	3	0
	9	2	0	5	2	1	5	4	0	4	1	4	3	2	9	5

136

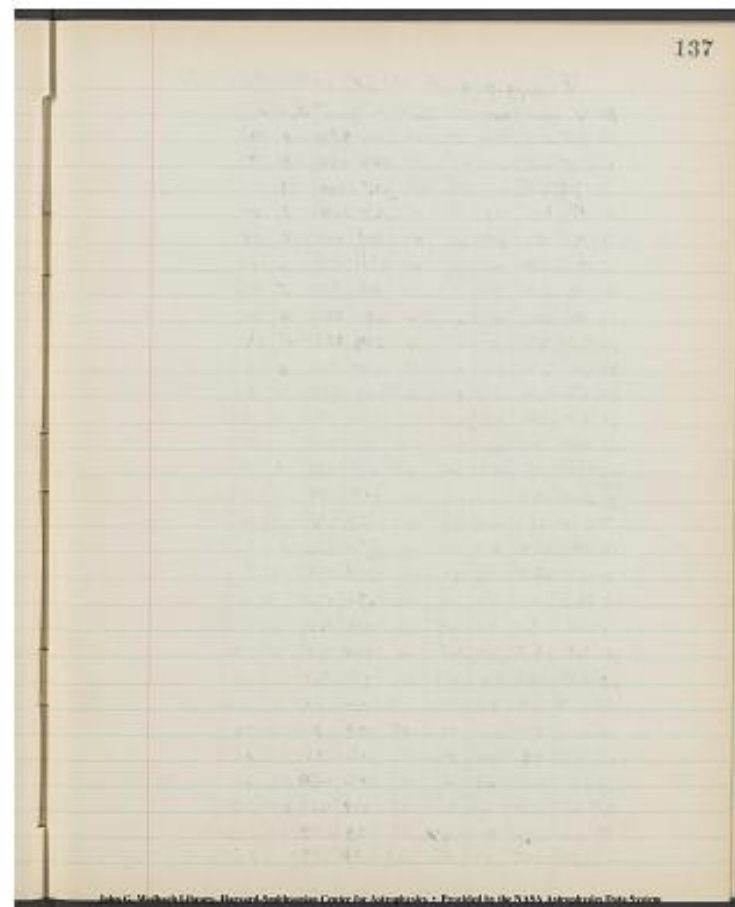
V Puppis, X8068, μ 3865

No	n	m+n	mean n	mean m+n	[n]	[m+n]	dm	dl
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1	11.5	40	23	349	349	0	0	
2	11	40	22	353	349	4	04	
3	11	40	22	353	345	8	07	
4	11	40	22	353	345	8	07	
5	11	40	22	353	341	12	10	
6	10.5	40	21	365	341	17	14	
7	10	40	20	363	337	26	21	
8	8.5	40	17	379	337	42	32	
9	6.5	40	13	379	334	72	48	
10	5.5	40	11	384	330	91	57	
11	5.5	40	11	384	330	91	57	
12	7	40	14	399	327	72	48	
13	10	40	20	363	324	39	30	
14	11.5	40	23	349	324	25	21	
15	13.5	40	27	330	324	10	09	
16	14	40	28	330	321	9	08	
17	14.5	40	29	327	321	6	05	
18	15.5	40	31	321	319	2	02	
19	16	40	32	319	319	0	0	
20	16.5	40	33	316	316	0	0	
21	16.5	40	33	316	316	0	0	
22	16.5	40	33	316	316	0	0	
delta	4	21.5	40	43	290	290	0	0
5	21.5	40	43	290	290	0	0	
6	21.5	40	43	290	290	0	0	
7	21.5	40	43	290	290	0	0	
8	21	40	42	293	290	3	03	
9	20.5	40	41	295	290	5	04	

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137

[[no entries]]



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V Puppis, 8068, 3865

[[11 columned table]]

[No|n|m+n||+m+n|mean n|mean m+n|[n]||m+n]|dm|dl|

10	19.5	21.5	40	39	43	300	290	10	09
11	18.5	21.5	40	37	43	305	290	15	13
12	17.5	21.5	40	35	43	311	290	21	18
13	14.5	21.5	40	29	43	327	290	37	29
14	14.5	22	40	29	44	327	288	39	30
15	17.5	22	40	35	44	311	288	39	30
16	19	22	40	38	44	303	288	15	13
17	20	22	40	40	44	297	288	9	08
18	21	22	40	42	44	293	288	5	04
19	21.5	22	40	43	44	290	288	2	02
20	22	22	40	44	44	288	288	0	0
21	22	22	40	44	44	288	288	0	0
22	22	22	40	44	44	288	288	0	0
23	22	22	40	44	44	288	288	0	0
6	24.5	24.5	40	49	49	278	278	0	0
7	24.5	24.5	40	49	49	278	278	0	0
8	24.5	24.5	40	49	49	278	278	0	0
9	24.5	24.5	40	49	49	278	278	0	0
10	24.5	24.5	40	49	49	278	278	0	0
11	24	24.5	40	48	49	280	278	2	02
12	24	24.5	40	48	49	280	278	2	02
13	23.5	24.5	40	47	49	282	278	4	04
14	23	24	40	46	48	284	280	4	04
15	20.5	24	40	41	48	295	280	15	13
16	18.5	24	40	37	48	305	280	25	21
17	17	24	40	34	48	313	280	33	26
18	18	24	40	36	48	308	280	28	23
19	21	24.5	40	42	49	293	278	15	13
20	22.5	24.5	40	45	49	286	278	8	07

138

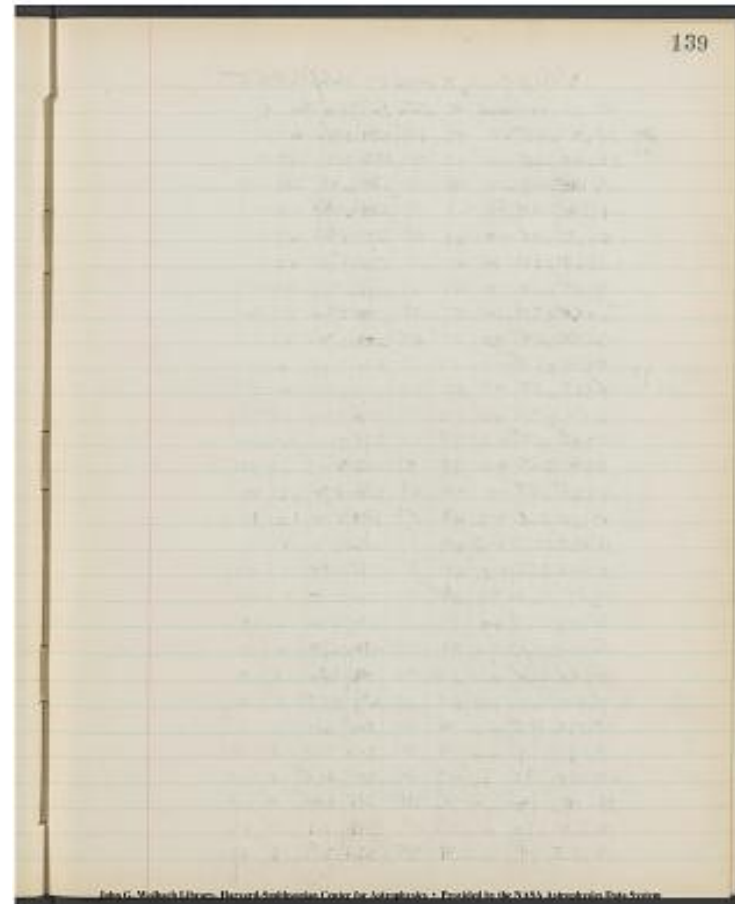
V Puppis X 8068 MP 3865

N	n	m	n+m	n	m	n+m	n	m	n+m	dm	dl
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11	18.5	21.5	40	37	43	305	290	15	13		
12	17.5	21.5	40	35	43	311	290	21	18		
13	14.5	21.5	40	29	43	327	290	37	29		
14	14.5	22	40	29	44	327	288	39	30		
15	17.5	22	40	35	44	311	288	39	30		
16	19	22	40	38	44	303	288	15	13		
17	20	22	40	40	44	297	288	9	08		
18	21	22	40	42	44	293	288	5	04		
19	21.5	22	40	43	44	290	288	2	02		
20	22	22	40	44	44	288	288	0	0		
21	22	22	40	44	44	288	288	0	0		
22	22	22	40	44	44	288	288	0	0		
23	22	22	40	44	44	288	288	0	0		
6	24.5	24.5	40	49	49	278	278	0	0		
7	24.5	24.5	40	49	49	278	278	0	0		
8	24.5	24.5	40	49	49	278	278	0	0		
9	24.5	24.5	40	49	49	278	278	0	0		
10	24.5	24.5	40	49	49	278	278	0	0		
11	24	24.5	40	48	49	280	278	2	02		
12	24	24.5	40	48	49	280	278	2	02		
13	23.5	24.5	40	47	49	282	278	4	04		
14	23	24	40	46	48	284	280	4	04		
15	20.5	24	40	41	48	295	280	15	13		
16	18.5	24	40	37	48	305	280	25	21		
17	17	24	40	34	48	313	280	33	26		
18	18	24	40	36	48	308	280	28	23		
19	21	24.5	40	42	49	293	278	15	13		
20	22.5	24.5	40	45	49	286	278	8	07		

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139

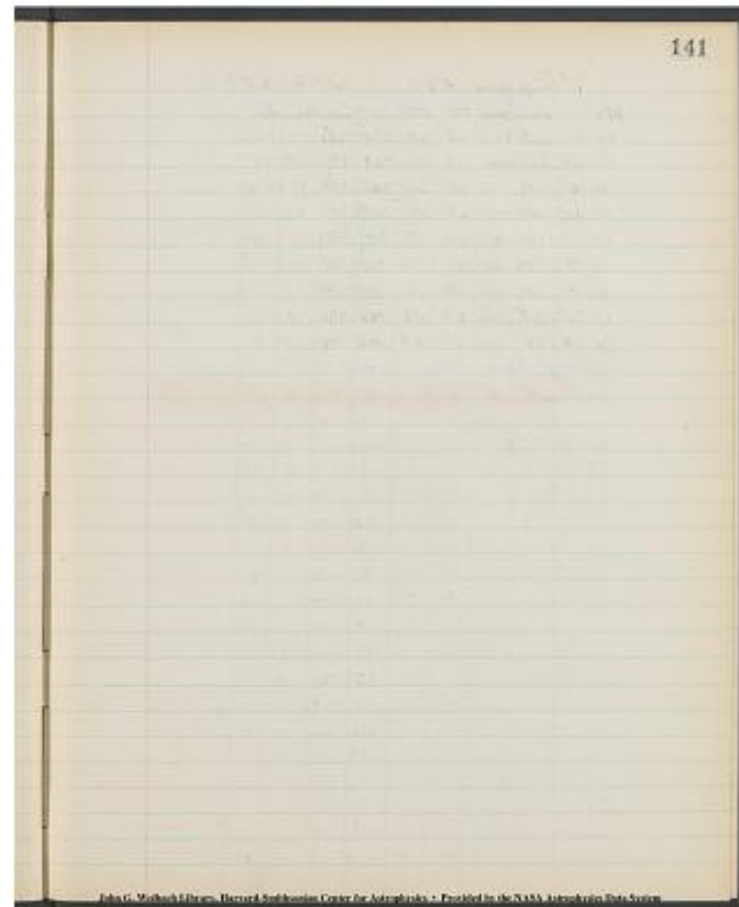
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141

[[no entries]]



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V Puppis, X8068, mu phi 3865

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

14	14	16.5	40	28	33	330	316	14	12
15	11.5	16	40	23	32	349	319	30	24
16	10	15	40	20	30	365	334	39	30
17	11.5	14.5	40	23	28	349	335	32	18
18	13	14	40	26	28	337	330	7	06
19	13	13.5	40	26	27	337	334	3	03
20	13	13	40	26	26	337	337	0	0
21	12.5	12.5	40	25	25	341	341	0	0
22	12	12	40	24	24	345	345	0	0

[[graph]]

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30

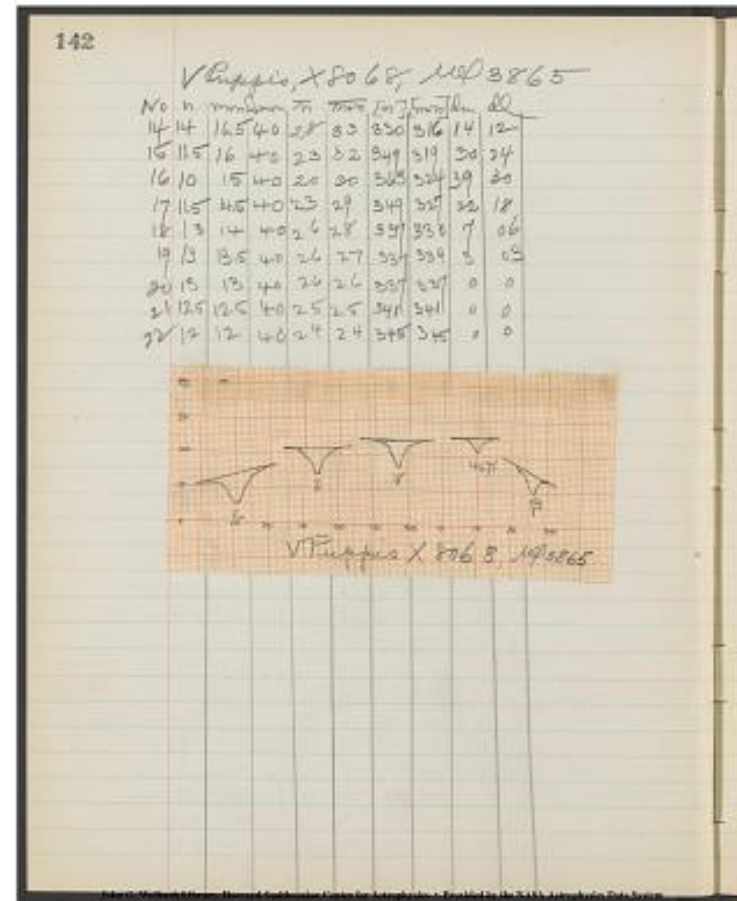
20

10 epsilon delta gamma 4471 beta

0 10 20 10 20 10 20 0 10 10 20

V Puppis X8068, mu phi 3865

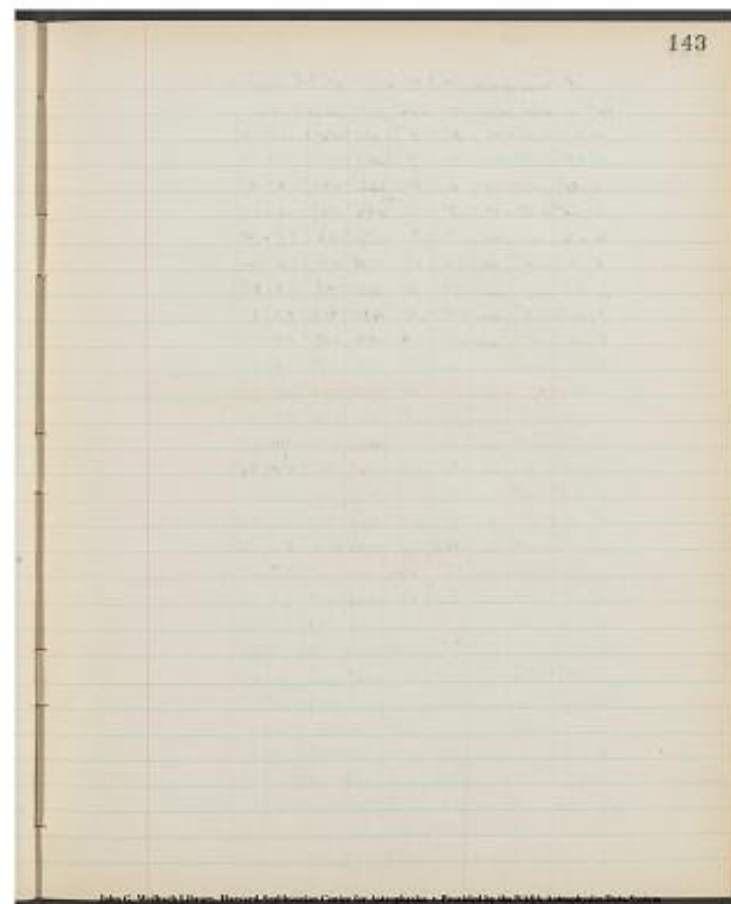
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143

[[no entries]]



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V Puppis, X8039, 3866

No[n|m+n|+m+n|n [[repeating sign]]|m+n [[repeating sign]]|n]
[m+n]dm|d|

0|2.5|2.5|40|5|5|487|489|0|0|

1|3.5|3.5|40|7|7|456|456|0|0|

2|4|4|40|8|8|446|446|0|0|

3|4|4|40|8|8|446|446|0|0|

4|4.5|5.5|40|9|11|437|421|16|14|

zeta 5|5|6|40|10|12|428|43|15|14|

6|5.5|7|40|11|14|421|399|22|18|

7|6|7.5|40|12|15|413|392|21|18|

8|6|8|40|12|16|413|385|28|23|

9|6|8.5|40|12|17|413|379|34|27|

10|6|9|40|12|18|413|374|39|30|

11|5.5|9.5|40|11|19|421|369|52|38|

12|5|10.5|40|10|21|428|358|70|48|

13|4.5|11|11|40|9|22|437|353|84|54|

14|4.5|11.5|40|9|23|437|349|88|56|

15|5|12|40|10|24|428|345|83|53|

16|5.5|12.5|40|11|25|421|341|80|52|

17|7.5|13|40|15|26|392|337|55|40|

18|10|13.5|40|20|27|363|334|29|23|

19|11.5|14|40|23|28|349|330|19|16|

20|13.5|15|40|27|30|334|324|10|09|

21|14.5|15.5|40|29|31|327|321|6|05|

22|15.5|16|40|31|32|321|319|2|02|

23|16.5|16.5|40|33|33|316|316|0|0|

24|17|17|40|34|34|313|313|0|0|

25|18|18|40|36|36|308|308|0|0|

26|18.5|18.5|40|37|37|305|305|0|0|

6|26|26|40|52|52|273|273|0|0|

7|26|26|40|52|52|273|273|0|0|

144

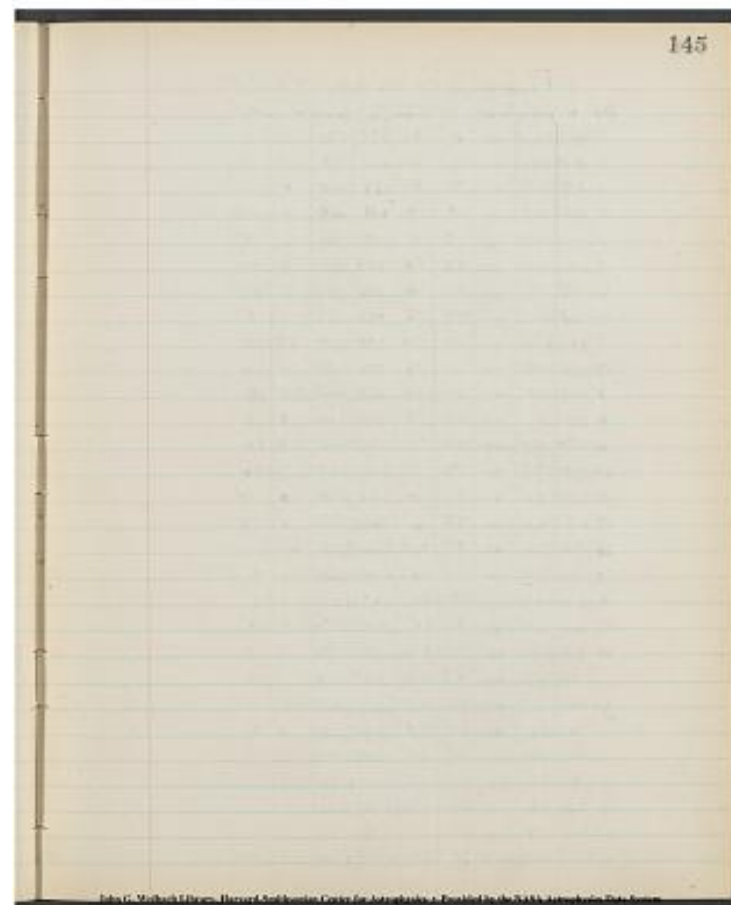
V Puppis, X8039, 3866

M	n	m+n	dm	dn	m+n	dm	dn	m+n	dm	dn
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1	3.5	3.5	40	7	7	456	456	0	0	
2	4	4	40	8	8	446	446	0	0	
3	4	4	40	8	8	446	446	0	0	
4	4.5	5.5	40	9	11	437	421	16	14	
5	5	6	40	10	12	428	43	15	14	
6	5.5	7	40	11	14	421	399	22	18	
7	6	7.5	40	12	15	413	392	21	18	
8	6	8	40	12	16	413	385	28	23	
9	6	8.5	40	12	17	413	379	34	27	
10	6	9	40	12	18	413	374	39	30	
11	5.5	9.5	40	11	19	421	369	52	38	
12	5	10.5	40	10	21	428	358	70	48	
13	4.5	11	40	9	22	437	353	84	54	
14	4.5	11.5	40	9	23	437	349	88	56	
15	5	12	40	10	24	428	345	83	53	
16	5.5	12.5	40	11	25	421	341	80	52	
17	7.5	13	40	15	26	392	337	55	40	
18	10	13.5	40	20	27	363	334	29	23	
19	11.5	14	40	23	28	349	330	19	16	
20	13.5	15	40	27	30	334	324	10	09	
21	14.5	15.5	40	29	31	327	321	6	05	
22	15.5	16	40	31	32	321	319	2	02	
23	16.5	16.5	40	33	33	316	316	0	0	
24	17	17	40	34	34	313	313	0	0	
25	18	18	40	36	36	308	308	0	0	
26	18.5	18.5	40	37	37	305	305	0	0	
6	26	26	40	52	52	273	273	0	0	
7	26	26	40	52	52	273	273	0	0	

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145

[[no entries]]



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[[10 column table]]

No|n|m+n|l+m+n|n[[repeating sign]]|m+n [[repeating sign]]|n|l|m+n|l|m|l

8|26.5|26.5|40|53|53|271|271|0|0

9|26.5|26.5|40|53|53|271|271|0|0

sigma 10|27|27|40|54|54|269|269|0|0

11|26.5|27|40|53|54|271|269|2|02

12|26|27.5|40|52|55|273|267|6|05

13|26|28|40|52|56|273|265|8|07

14|25.5|28|40|51|56|274|265|9|08

15|24.5|28|40|49|56|278|265|13|11

16|24|28.5|40|48|57|280|263|17|14

17|23.5|28.5|40|47|57|282|263|19|16

18|23.5|29|40|47|58|282|262|20|17

19|24|29|40|48|58|280|262|18|15

20|25.5|29.5|40|51|59|274|260|14|12

21|27.5|29.5|40|55|59|267|260|7|06

22|28.5|30|40|57|60|263|258|5|04

23|29|30|40|58|60|262|258|4|04

24|29.5|30|40|59|60|260|258|2|02

25|30|30|40|60|60|258|258|0|0

26|30.5|30.5|40|61|61|256|256|0|0

27|30.5|30.5|40|61|61|256|256|0|0

28|31|31|40|62|62|255|255|0|0

39|31|31|40|62|62|255|255|0|0

30|31|31|40|62|62|255|255|0|0

1|34|34|40|68|68|244|244|0|0

2|34|34|40|68|68|244|244|0|0

3|34|34|40|68|68|244|244|0|0

4|34|34|40|68|68|244|244|0|0

5|33.5|34|40|67|68|246|244|2|02

6|33.5|34|40|67|68|246|244|2|02

V Puffis, X 8039, 144 3866

No|n|m+n|l+m+n|n[[repeating sign]]|m+n [[repeating sign]]|n|l|m+n|l|m|l

8|26.5|26.5|40|53|53|271|271|0|0

9|26.5|26.5|40|53|53|271|271|0|0

10|27|27|40|54|54|269|269|0|0

11|26.5|27|40|53|54|271|269|2|02

12|26|27.5|40|52|55|273|267|6|05

13|26|28|40|52|56|273|265|8|07

14|25.5|28|40|51|56|274|265|9|08

15|24.5|28|40|49|56|278|265|13|11

16|24|28.5|40|48|57|280|263|17|14

17|23.5|28.5|40|47|57|282|263|19|16

18|23.5|29|40|47|58|282|262|20|17

19|24|29|40|48|58|280|262|18|15

20|25.5|29.5|40|51|59|274|260|14|12

21|27.5|29.5|40|55|59|267|260|7|06

22|28.5|30|40|57|60|263|258|5|04

23|29|30|40|58|60|262|258|4|04

24|29.5|30|40|59|60|260|258|2|02

25|30|30|40|60|60|258|258|0|0

26|30.5|30.5|40|61|61|256|256|0|0

27|30.5|30.5|40|61|61|256|256|0|0

28|31|31|40|62|62|255|255|0|0

39|31|31|40|62|62|255|255|0|0

30|31|31|40|62|62|255|255|0|0

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3|34|34|40|68|68|244|244|0|0

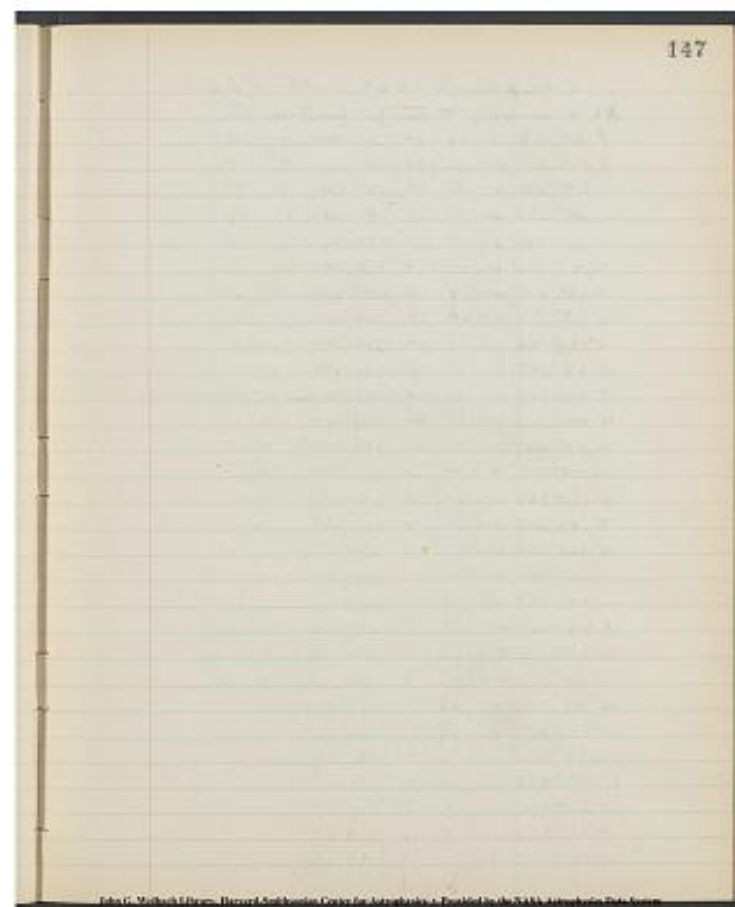
4|34|34|40|68|68|244|244|0|0

5|33.5|34|40|67|68|246|244|2|02

6|33.5|34|40|67|68|246|244|2|02

147

[[no entries]]



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[[10-column table]]

No|n|m+n||m+n|n[[repeating sign]]|m+n[[repeating sign]]|n|[[m+n]]|dm|dl

7	33	34	40	66	68	248	244	4	04
8	32.5	34	40	65	68	249	244	5	04
9	31.5	34	40	63	68	253	244	9	08
10	31	34	40	62	68	255	244	11	10
11	31	34	40	62	68	255	244	11	10
12	31	34	40	62	68	255	244	11	10
13	31.5	34	40	63	68	253	244	9	08
14	33	34	40	66	68	248	244	4	04
15	33.5	34	40	67	68	246	244	2	02
16	34	34.5	40	68	69	244	243	1	01
17	34.5	34.5	40	69	69	243	243	0	0
18	34.5	34.5	40	69	69	243	243	0	0
19	34.5	34.5	40	69	69	243	243	0	0
20	34.5	34.5	40	69	69	243	243	0	0

=

gamma

6	35.5	35.5	40	71	71	239	239	0	0
7	35.5	35.5	40	71	71	239	239	0	0
8	35.5	35.5	40	71	71	239	239	0	0
9	35.5	35.5	40	71	71	239	239	0	0
10	35.5	35.5	40	70	71	241	239	2	02
11	34.5	35.5	40	69	71	243	239	4	04
12	34	35.5	40	68	71	244	239	5	04
13	33	35.5	40	66	71	248	239	9	08
14	33	35.5	40	66	71	248	239	9	08
15	33.5	35.5	40	67	71	246	239	7	06
16	33.5	35.5	40	67	71	246	239	7	06
17	33.5	35.5	40	67	71	246	239	7	06
18	33.5	35.5	40	67	71	246	239	7	06
19	33.5	35.5	40	67	71	246	239	7	06
20	33.5	35.5	40	67	71	246	239	7	06
21	33.5	35.5	40	67	71	246	239	7	06

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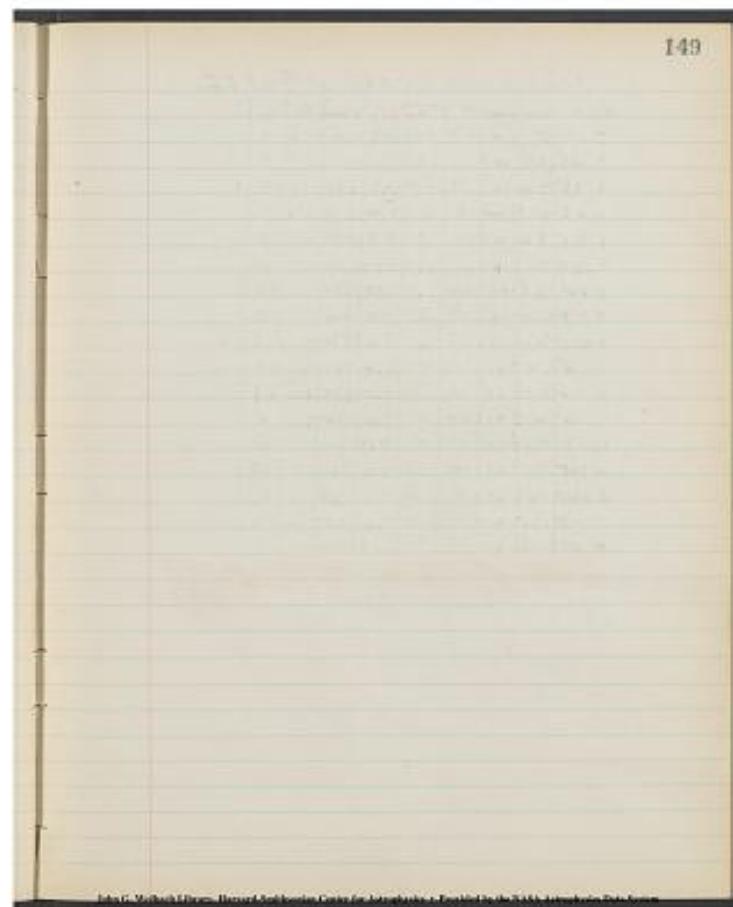
148

V Puppis X 8039, 3866

No	n	m+n	n	m+n	n	m+n	n	m+n	n
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8	32.5	34	40	65	68	249	244	5	04
9	31.5	34	40	63	68	253	244	9	08
10	31	34	40	62	68	255	244	11	10
11	31	34	40	62	68	255	244	11	10
12	31	34	40	62	68	255	244	11	10
13	31.5	34	40	63	68	253	244	9	08
14	33	34	40	66	68	248	244	4	04
15	33.5	34	40	67	68	246	244	2	02
16	34	34.5	40	68	69	244	243	1	01
17	34.5	34.5	40	69	69	243	243	0	0
18	34.5	34.5	40	69	69	243	243	0	0
19	34.5	34.5	40	69	69	243	243	0	0
20	34.5	34.5	40	69	69	243	243	0	0
21	34.5	34.5	40	69	69	243	243	0	0
22	35.5	35.5	40	71	71	239	239	0	0
23	35.5	35.5	40	71	71	239	239	0	0
24	35.5	35.5	40	71	71	239	239	0	0
25	35.5	35.5	40	71	71	239	239	0	0
26	35.5	35.5	40	71	71	239	239	0	0
27	35.5	35.5	40	71	71	239	239	0	0
28	35.5	35.5	40	71	71	239	239	0	0
29	35.5	35.5	40	71	71	239	239	0	0
30	35.5	35.5	40	71	71	239	239	0	0
31	35.5	35.5	40	71	71	239	239	0	0

149

[[no entries]]



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150

V Puppis X8039, mu phi 3866

[[left margin]]
beta
[[/left margin]]

[[10 columned table]]

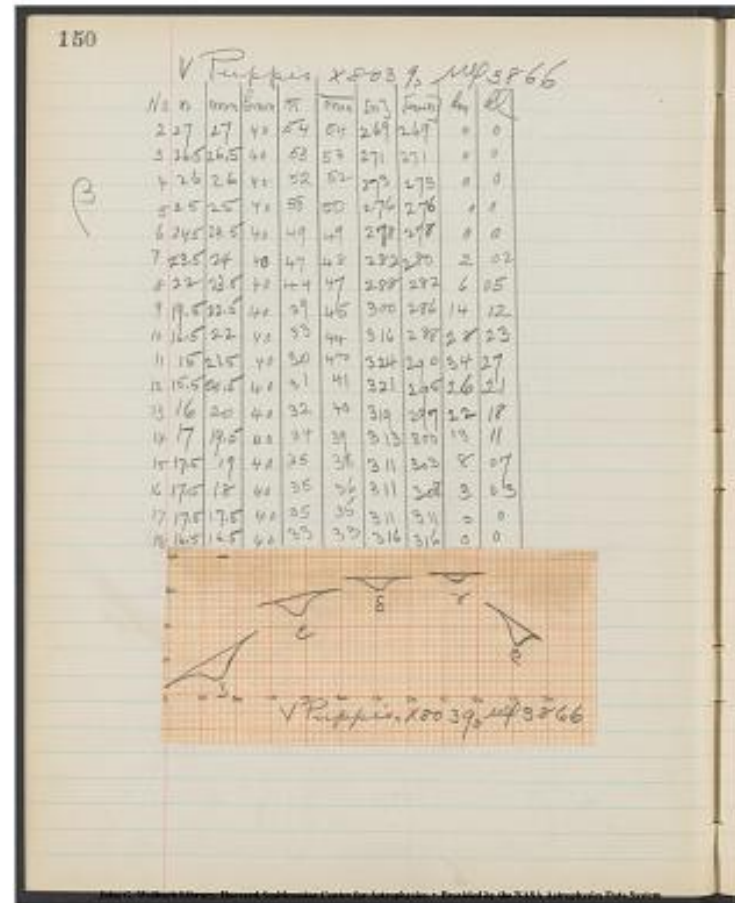
No|n|m+n||+m+n|mean n|mean m+n|[n]||[m+n]|dm|dl|
2|27|27|40|54|54|269|269|0|0|
3|26.5|26.5|40|53|53|271|271|0|0|
4|26|26|40|52|52|273|273|0|0|
5|25|25|40|50|50|276|276|0|0|
6|24.5|24.5|40|49|49|278|278|0|0|
7|23.5|24|40|47|48|282|280|2|02|
8|22|23.5|40|44|47|288|282|6|05|
9|19.5|22.5|40|39|45|300|286|14|12|
10|16.5|22|40|33|44|316|288|28|23|
11|15|21.5|40|30|43|324|290|34|27|
12|15.5|20.5|40|31|41|321|295|26|21|
13|16|20|40|32|40|319|297|22|18|
14|17|19.5|40|34|39|313|300|13|11|
15|17.5|19|40|35|38|311|303|8|07|
16|17.5|18|40|35|36|311|308|3|03|
17|17.5|17.5|40|35|35|311|311|0|0|
18|16.5|16.5|40|33|33|316|316|0|0|

[[graph]]

40
30
20

10 zeta epsilon delta gamma beta
0 10 20 10 20 20 10 20 10 20 10 20
V Puppis, X8039, mu phi 3866

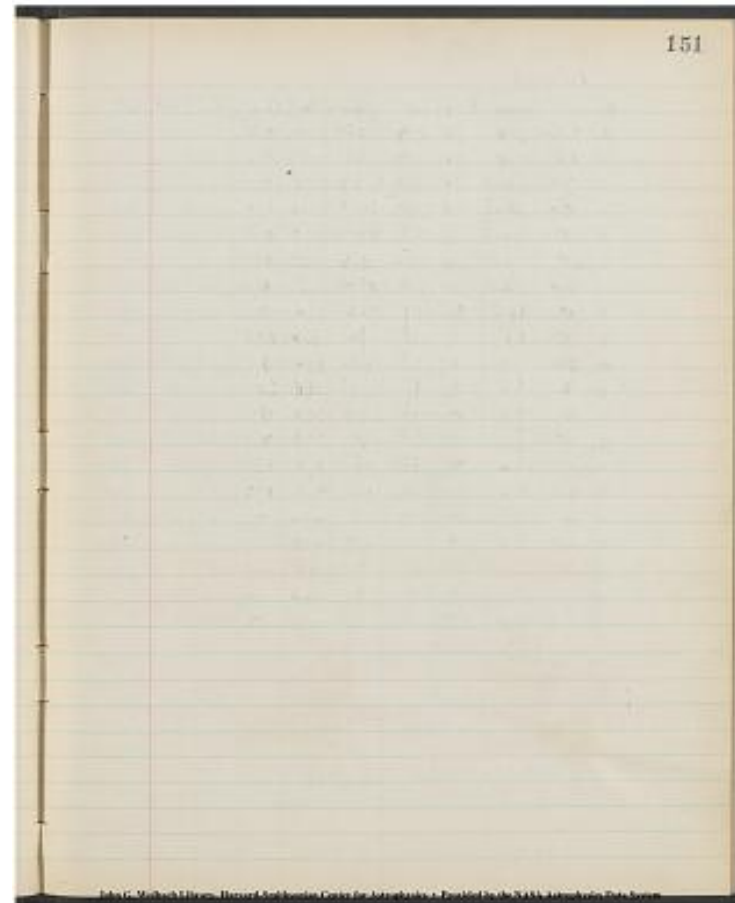
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151

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152

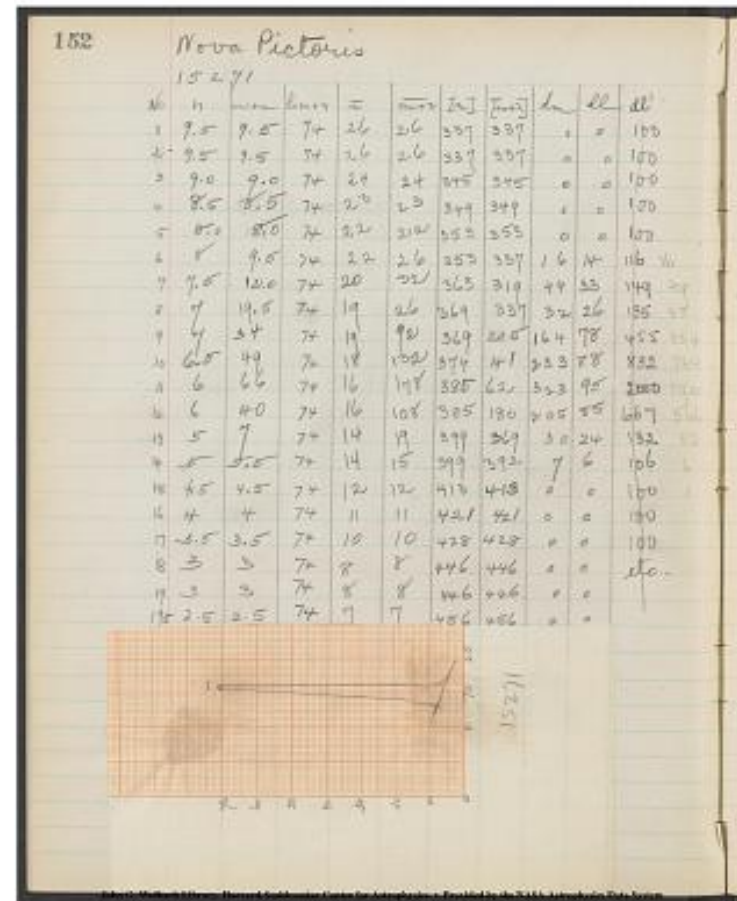
Nova Pictoris
15271

[[11 columned table]]

[No|n|m+n|l+m+n|mean n|mean

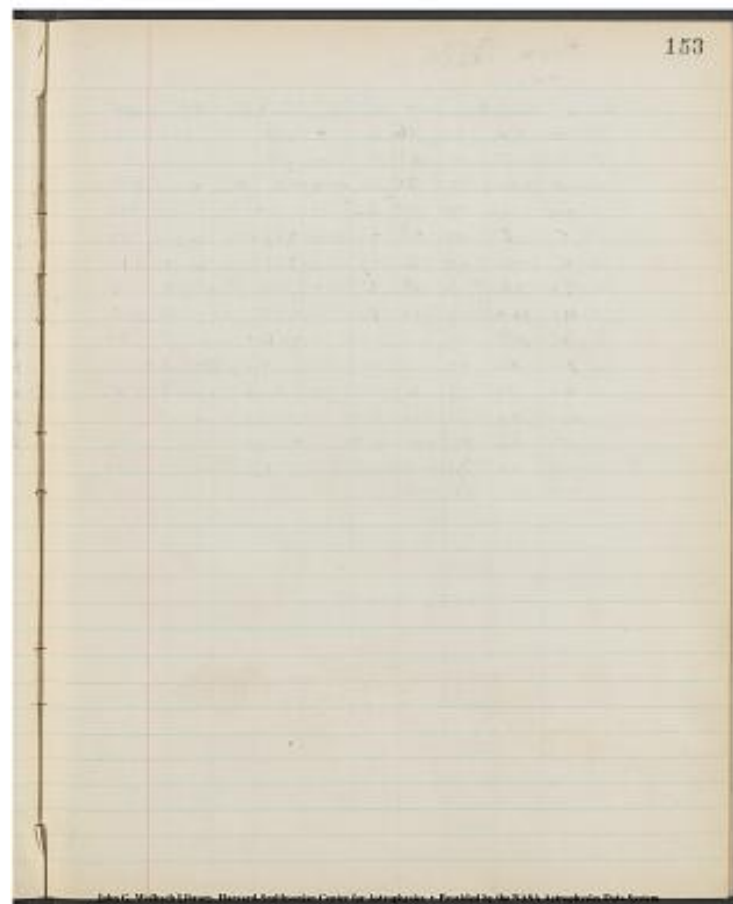
m+n|n|n|m+n|dw|dl|dl^{superscript}]]1^{superscript}]]

No	n	m+n	l+m+n	mean n	mean m+n	n	m+n	l+m+n	mean n	mean m+n	dw	dl	dl ^{superscript}
1	9.5	9.5	74	2.6	2.6	337	337	0	0	0	100	100	100
2	9.5	9.5	74	2.6	2.6	337	337	0	0	0	100	100	100
3	9.0	9.0	74	2.9	2.9	345	345	0	0	0	100	100	100
4	8.5	8.5	74	2.3	2.3	349	349	0	0	0	100	100	100
5	8.0	8.0	74	2.2	2.2	353	353	0	0	0	100	100	100
6	7.5	7.5	74	2.0	2.0	353	353	0	0	0	100	100	100
7	7.0	7.0	74	1.9	1.9	353	353	0	0	0	100	100	100
8	6.5	6.5	74	1.8	1.8	353	353	0	0	0	100	100	100
9	6.0	6.0	74	1.6	1.6	353	353	0	0	0	100	100	100
10	5.5	5.5	74	1.4	1.4	353	353	0	0	0	100	100	100
11	5.0	5.0	74	1.2	1.2	353	353	0	0	0	100	100	100
12	4.5	4.5	74	1.0	1.0	353	353	0	0	0	100	100	100
13	4.0	4.0	74	0.8	0.8	353	353	0	0	0	100	100	100
14	3.5	3.5	74	0.6	0.6	353	353	0	0	0	100	100	100
15	3.0	3.0	74	0.4	0.4	353	353	0	0	0	100	100	100
16	2.5	2.5	74	0.2	0.2	353	353	0	0	0	100	100	100
17	2.0	2.0	74	0.1	0.1	353	353	0	0	0	100	100	100
18	1.5	1.5	74	0.0	0.0	353	353	0	0	0	100	100	100
19	1.0	1.0	74	0.0	0.0	353	353	0	0	0	100	100	100
20	0.5	0.5	74	0.0	0.0	353	353	0	0	0	100	100	100
21	0.0	0.0	74	0.0	0.0	353	353	0	0	0	100	100	100

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153

[[no entries]]



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154

Nova Pictoris x

15061

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

No	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	dm	dl
1	2.0	3.0	4.3	4.6	4.69				
2	2.0	2.5	4.3	4.5	4.87				
3	2.5	2.5	4.3	5.5	4.87	0	0		
4	2.0	2.0	4.3	4.4					
5	1.5	2.5	4.3	3.5	4.87				
6	1.5	2.0	4.3	3.3	2.90				
7	1.0	4.0	4.3	2.96	1.98				
8	1.0	3.0	4.3	2.73	2.36				
9	0.5	18.5	4.3	1.40	2.97				
10	0	0	4.3	0					
11	0	0	4.3	0					
12	0	1.0	4.3	0.2					
13	0	2.0	4.3	0.4					
14	0	2.0	4.3	0.4					
15	0	4.3	0						

[[graph]]

15061

50

40

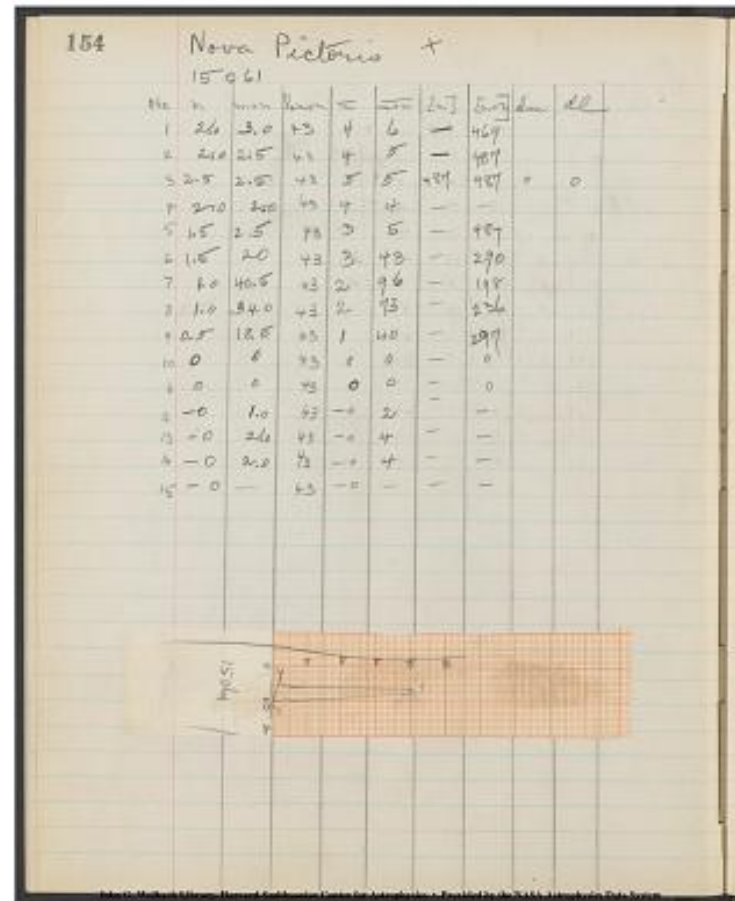
30

20

10

0 10 20

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155

Nova Pictoris 15061

no l+m+n n m+n [n] [m+n] dm dl 100-dl dl/(100-dl)

1	43	9	14	437	399	38	30	70	429
2	43	9	12	437	413	24	20	80	250
3	43	12	12	413	413	0	0	100	0
4	43	9	9	437	437	0	0	100	0
5	43	7	12	456	413	43	33	67	492
6	43	7	93	456	203	253	90	10	9000
7	43	5	188	487	31	456	98	2	49000
8	43	5	158	487	100	387	97	3	32300
9	43	2	86	-	214	-	-	-	-
10	43	0	0	-	-	-	-	-	-
11	43	0	0	-	-	-	-	-	-
12	43	0	5	-	487	-	-	-	-
13	43	0	9	-	437	-	-	-	-
14	43	0	9	-	437	-	-	-	-
15	43	0	-	-	-	-	-	-	-

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155

Nova Pictoris 15061

no	l+m+n	n	m+n	[n]	[m+n]	dm	dl	100-dl	dl/(100-dl)
1	43	9	14	437	399	38	30	70	429
2	43	9	12	407	413	24	20	80	250
3	43	12	12	413	413	0	0	100	0
4	43	9	9	437	437	0	0	100	0
5	43	7	12	456	413	43	33	67	492
6	43	7	93	456	203	253	90	10	9000
7	43	5	188	487	31	456	98	2	49000
8	43	5	158	487	100	387	97	3	32300
9	43	2	86	-	214	-	-	-	-
10	43	0	0	-	-	-	-	-	-
11	43	0	0	-	-	-	-	-	-
12	43	0	5	-	487	-	-	-	-
13	43	0	9	-	437	-	-	-	-
14	43	0	9	-	437	-	-	-	-
15	43	0	-	-	-	-	-	-	-

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156

Nova Pictoris

14880

[[12 columned table]]

No|n|m+n|i+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|100-dl|dl/100-dl|

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

2.5|11.5|-|68|34|-|313|-|-|-|-|-|

3|11|-|68|32|-|319|-|-|-|-|-|

4|11|-|68|32|-|319|-|-|-|-|-|

5|10.5|8.5|68|30|25|324|341|[[underlined]]17|14|86|[[/underlined]]|[[striketrough]]163|[[/strikethrough]]|

6|10|25|68|29|74|327|234|93|58|42|1380|

7|10|50|68|29|147|327|117|210|86|14|6150|

8|9|65|68|26|191|337|15|322|95|5|19000|

9|9|65.5|68|26|192|337|8|329|95|5|19000|

10|8|50|68|24|147|345|117|228|88|12|7340|

11|8|12|68|24|35|345|311|34|27|73|370|

12|7|8.5|68|20|25|363|341|22|18|82|210|

13|7|7|68|20|20|363|363|0|0|0|-|

14|6|6|68|18|18|374|374|0|0|0|-|

15|6|6|68|18|18|374|374|0|0|0|-|

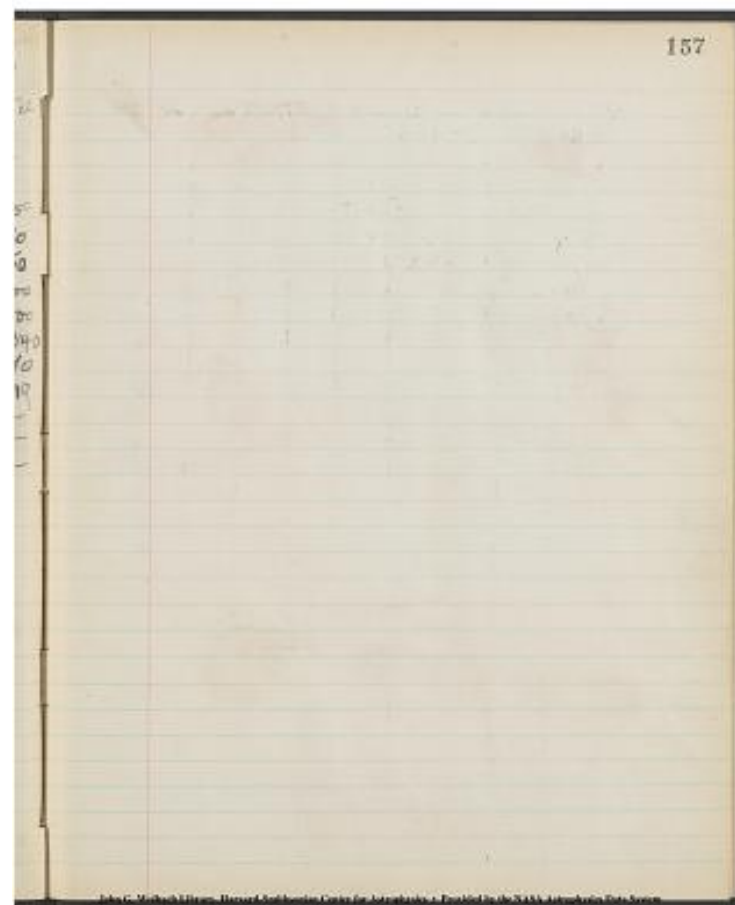
[[image - graph]]

156 Nova Pictoris											
14880											
No	n	m+n	i+m+n	mean n	mean m+n	[n]	[m+n]	dm	dl	100-dl	dl/100-dl
1.5	11.5	-	68	34	-	313	-	-	-	-	-
3	11	-	68	32	-	319	-	-	-	-	-
4	11	-	68	32	-	319	-	-	-	-	-
5	10.5	8.5	68	30	25	324	341	17	14	86	163
6	10	25	68	29	74	327	234	93	58	42	1380
7	10	50	68	29	147	327	117	210	86	14	6150
8	9	65	68	26	191	337	15	322	95	5	19000
9	9	65.5	68	26	192	337	8	329	95	5	19000
10	8	50	68	24	147	345	117	228	88	12	7340
11	8	12	68	24	35	345	311	34	27	73	370
12	7	8.5	68	20	25	363	341	22	18	82	210
13	7	7	68	20	20	363	363	0	0	0	-
14	6	6	68	18	18	374	374	0	0	0	-
15	6	6	68	18	18	374	374	0	0	0	-

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157

[[no entries]]



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14862 beta Nova Pictoris^{[[x]]}

[[11 columned table]]

No.[n][m+n][l+m+n][[[line]]n][[[line]]m+n][n][m+n][dm][dl][dl']

2	7.0	10.0	46.5	16	23	385	349	36	28	|
3	6.5	8.5	46.5	15	20	392	363	29	23	|
4	6.0	5.5	46.5	14	13	399	406	7	06	|
5	6.0	4.0	46.5	14	9	399	437	38	30	|
6	6.0	6.0	46.5	14	14	399	399	0	0	|
7	5.5	39	46.5	13	90	406	208	198	84	|
8	5.5	46.0	46.5	13	107	406	181	225	87	|
9	5.0	46.0	46.5	12	107	413	181	232	88	|
10	5.0	30.0	46.5	12	70	413	241	172	79	|
11	5.0	6.5	46.5	12	15	413	392	21	18	|
12	4.5	5.0	46.5	10	12	428	413	15	13	|
13	4.0	9.5	46.5	9	22	437	353	84	54	|
14	2.5	9.0	46.5	8	21	446	358	88	56	|
15	3.5	9.0	46.5	8	26	446	337	109	63	|
16	3.0	12.5	46.5	7	29	456	327	129	70	|
17	2.0	5.0	46.5	5	12	487	413	74	49	
18	1.5	-	46.5	4	-	-	-	-	-	
19	1	-	46.5	2	-	-	-	-	-	

[[graph]]

14862

beta

50

40

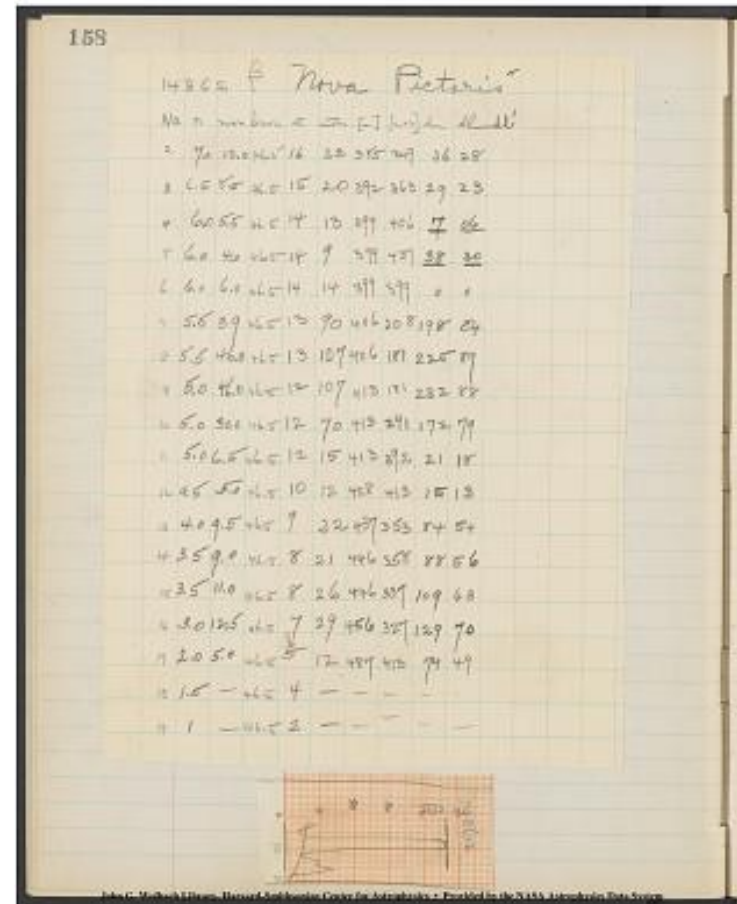
30

20

10

0 10 20

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14862 Nova Pictoris

No	n	m+n	[n]	[m+n]	dm	dl	100-dl	dl/(100-dl)
2	30	43	324	290	34	217	73	340
3	28	36	330	308	22	18	82	219
4	26	24	337	345	8	07	93	75
5	26	17	337	379	42	32	68	470
6	26	26	337	337	0	0	0	0
7	24	168	345	83	262	91	9	10110
8	24	198	345	-	-	-	-	-
9	22	198	353	-	-	-	-	-
10	22	129	353	146	207	85	15	5661
11	22	28	353	330	23	19	81	234
12	19	22	369	353	16	14	86	163
13	17	41	379	295	84	54	46	1174
14	15	39	392	300	92	57	43	1325
15	15	47	392	282	110	64	36	1778
16	13	54	406	269	137	72	28	2566
17	8	22	446	353	93	58	42	1380
18	6	-	469	-	-	-	-	-
19	4	-	-	-	-	-	-	-

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No	n	m+n	[n]	[m+n]	dm	dl	100-dl	dl/(100-dl)
2	30	43	324	290	34	217	73	340
3	28	36	330	308	22	18	82	219
4	26	24	337	345	8	07	93	75
5	26	17	337	379	42	32	68	470
6	26	26	337	337	0	0	0	0
7	24	168	345	83	262	91	9	10110
8	24	198	345	-	-	-	-	-
9	22	198	353	-	-	-	-	-
10	22	129	353	146	207	85	15	5661
11	22	28	353	330	23	19	81	234
12	19	22	369	353	16	14	86	163
13	17	41	379	295	84	54	46	1174
14	15	39	392	300	92	57	43	1325
15	15	47	392	282	110	64	36	1778
16	13	54	406	269	137	72	28	2566
17	8	22	446	353	93	58	42	1380
18	6	-	469	-	-	-	-	-
19	4	-	-	-	-	-	-	-

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160

Nova Pictoris 14846 +

[10 columned table]

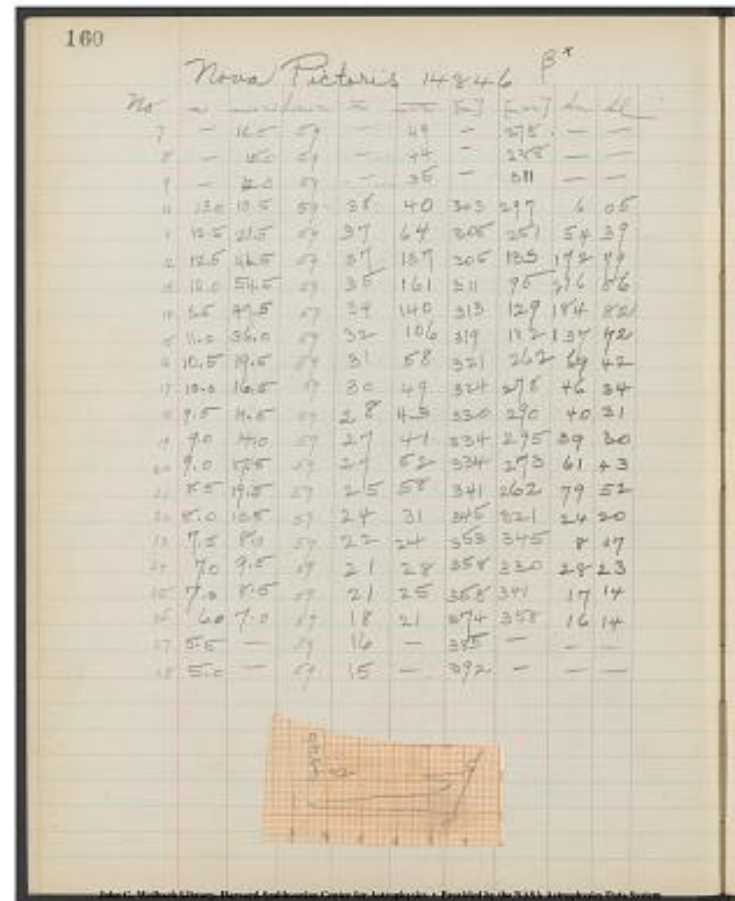
No. | n | m+n | +m+n | mean n | mean m+n | [n] | [m+n] | dm | dl |

7	--	16.5	59	--	49	-	278	-	--
8	--	15.0	59	--	44	-	288	-	--
9	--	12.0	59	--	35	-	311	-	--
10	13.0	13.5	59	38	40	303	297	6	05
11	12.5	21.5	59	37	64	305	251	54	39
12	12.5	46.5	59	37	137	305	133	172	79
13	12.0	54.5	59	35	161	311	95	216	86
14	11.5	47.5	59	34	140	313	129	184	82
15	11.0	36.0	59	32	106	319	182	137	72
16	10.5	19.5	59	31	58	321	262	59	42
17	10.0	16.5	59	30	49	324	278	46	34
18	9.5	14.5	59	28	43	330	290	40	31
19	9.0	14.0	59	27	41	334	295	39	30
20	8.5	17.5	59	27	52	334	273	61	43
21	8.5	19.5	59	25	58	341	262	79	52
22	8.0	10.5	59	24	31	345	321	24	20
23	7.5	8.0	59	22	24	353	345	8	07
24	7.0	9.5	59	21	28	358	330	28	23
25	7.0	8.5	59	21	25	358	341	17	14
26	6.0	7.0	59	18	21	374	358	16	14
26	5.5	--	59	16	--	385	--	--	--
28	5.0	--	59	15	--	392	--	--	--

[[graph - 14846]]

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Nova Pictoris 14846

[No] n|m+n|[n] | [m+n] | dm|dl|100-dl|dl/100-dl|
 7|-56|-265|-|-|-|
 8|-51|-274|-|-|-|
 9|-40|-297|-|-|-|
 10|44|46|288|284|4|04|96|42|
 11|42|73|293|236|57|41|59|695|
 12|42|158|293|100|193|83|17|4882|
 13|40|185|297|43|254|90|10|9000|
 14|39|161|300|95|205|85|15|5661|
 15|37|122|305|157|148|74|26|2842|
 16|36|66|308|248|60|42|58|724|
 17|34|58|313|262|51|37|63|587|
 18|32|49|319|278|41|31|69|449|
 19|30|48|324|280|44|33|67|492|
 20|30|59|324|260|64|44|56|786|
 21|29|99|327|248|79|52|48|1082|
 22|27|36|334|308|26|21|79|266|
 23|25|27|341|334|7|06|94|64|
 24|24|32|345|319|26|21|79|266|
 25|24|29|345|327|18|15|85|176|
 26|20|24|363|345|18|15|85|176|
 27|18|-|374|-|-|-|
 28|17|-|379|-|-|-|

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161

Nova Pictoris 14846 B

No	n	m+n	[n]	[m+n]	dm	dl	100-dl	dl/100-dl	dl/100-dl
7	-	56	-	265	-	-	-	-	-
8	-	51	-	274	-	-	-	-	-
9	-	40	-	297	-	-	-	-	-
10	44	46	288	284	4	04	96	42	
11	42	73	293	236	57	41	59	695	
12	42	158	293	100	193	83	17	4882	
13	40	185	297	43	254	90	10	9000	
14	39	161	300	95	205	85	15	5661	
15	37	122	305	157	148	74	26	2842	
16	36	66	308	248	60	42	58	724	
17	34	58	313	262	51	37	63	587	
18	32	49	319	278	41	31	69	449	
19	30	48	324	280	44	33	67	492	
20	30	59	324	260	64	44	56	786	
21	29	99	327	248	79	52	48	1082	
22	27	36	334	308	26	21	79	266	
23	25	27	341	334	7	06	94	64	
24	24	32	345	319	26	21	79	266	
25	24	29	345	327	18	15	85	176	
26	20	24	363	345	18	15	85	176	
27	18	-	374	-	-	-	-	-	
28	17	-	379	-	-	-	-	-	

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Nova Pictoris 14830 H beta⁺[[x]]

[[left margin]]

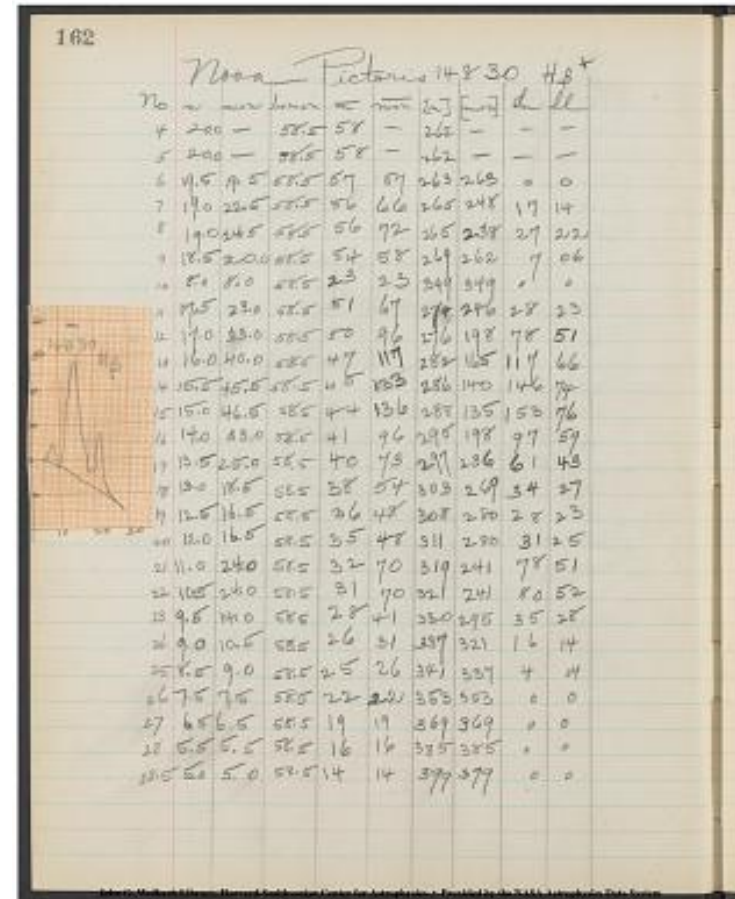
[[image - graph, 4830 H beta

[[left margin]]

[[10 columned table]]

No|n|m+n|l+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

4	20.0	58.5	58	262	262	0	0		
5	20.0	58.5	58	262	262	0	0		
6	19.5	58.5	57	263	263	0	0		
7	19.0	58.5	56	265	248	17	14		
8	19.0	58.5	56	265	238	27	22		
9	18.5	58.5	54	269	262	7	06		
10	8.0	58.5	23	349	349	0	0		
11	17.5	58.5	51	274	246	28	23		
12	17.0	58.5	50	276	198	78	51		
13	16.0	58.5	47	282	165	117	66		
14	15.5	58.5	45	286	140	146	74		
15	15.0	58.5	44	288	135	153	76		
16	14.0	58.5	41	295	198	97	59		
17	13.5	58.5	40	297	236	61	43		
18	13.0	58.5	38	303	269	34	27		
19	12.5	58.5	36	308	280	28	23		
20	12.0	58.5	35	311	280	31	25		
21	11.0	58.5	32	319	241	78	51		
22	10.5	58.5	31	321	241	80	52		
23	9.5	58.5	28	330	295	35	28		
24	9.0	58.5	26	337	321	16	14		
25	8.5	58.5	25	341	337	4	04		
26	7.5	58.5	22	353	353	0	0		
27	6.5	58.5	19	369	369	0	0		
28	5.5	58.5	16	385	385	0	0		
28.5	5.0	58.5	14	399	399	0	0		



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Nova Pictoris 14830 H

[[9 columned table]]

[No|mean n|mean m+n|[n]||m+n]|dm|dl|100-dl|dl/100-dl|

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

4|68|244|-----|-----|-----|-----|-----|

5|68|244|-----|-----|-----|-----|-----|

6|66|66|248|248|0|0|0|0|

7|65|74|249|229|20|17|83|205|

8|65|74|249|217|32|26|74|351|

9|63|68|253|244|9|08|92|84|

10|27|334|334|0|0|0|0|

11|60|78|258|228|30|24|76|316|

12|58|112|262|171|91|57|43|1325|

13|55|137|267|133|134|71|29|2444|

14|53|155|271|105|166|78|22|3542|

15|51|159|274|98|176|80|20|4000|

16|48|113|280|171|109|63|37|1701|

17|46|86|284|214|70|48|52|923|

18|44|63|288|253|35|35|28|72|389|

19|42|56|293|265|28|23|77|298|

20|41|56|295|265|30|24|76|316|

21|38|82|303|221|82|53|47|1128|

22|36|82|308|221|87|55|45|1221|

23|32|48|319|280|39|30|70|429|

24|31|36|321|308|13|11|89|124|

25|29|31|327|321|6|05|95|53|

26|26|26|337|337|0|0|0|0|

27|22|22|353|353|0|0|0|0|

28|19|19|369|369|0|0|0|0|

28.5|17|17|379|379|0|0|0|0|

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No	n	m+n	ln3	ln4	dm	dl	100-dl	dl/100-dl
4	68	—	244	—	—	—	—	—
5	68	—	244	—	—	—	—	—
6	66	66	248	248	0	0	0	0
7	65	74	249	229	20	17	83	205
8	65	74	249	217	32	26	74	351
9	63	68	253	244	9	08	92	84
10	27	27	334	334	0	0	0	0
11	60	78	258	228	30	24	76	316
12	58	112	262	171	91	57	43	1325
13	55	137	267	133	134	71	29	2444
14	53	155	271	105	166	78	22	3542
15	51	159	274	98	176	80	20	4000
16	48	113	280	171	109	63	37	1701
17	46	86	284	214	70	48	52	923
18	44	63	288	253	35	28	72	389
19	42	56	293	265	28	23	77	298
20	41	56	295	265	30	24	76	316
21	38	82	303	221	82	53	47	1128
22	36	82	308	221	87	55	45	1221
23	32	48	319	280	39	30	70	429
24	31	36	321	308	13	11	89	124
25	29	31	327	321	6	05	95	53
26	26	26	337	337	0	0	0	0
27	22	22	353	353	0	0	0	0
28	19	19	369	369	0	0	0	0
28.5	17	17	379	379	0	0	0	0

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Nova Pictoris X 14579 Bx

No	m	m+n	l+m+n	m	m+n	[m]	[m+n]	dm	dl
3	10.5	10.5	17	89	89	209	209	0	0
4	10.0	10.0	17	85	85	216	216	0	0
5	10.0	10.0	17	85	85	216	216	0	0
6	9.5	10.0	17	81	85	223	216	7	06
7	9.0	10.0	17	76	85	231	216	15	13
8	7.5	9.5	17	64	81	251	223	28	23
9	8.5	9.5	17	72	81	238	223	15	13
10	9.0	9.0	17	76	76	231	231	0	0
11	9.0	9.0	17	76	76	231	231	0	0
12	8.5	8.5	17	72	72	238	238	0	0
12.5	8.5	8.5	17	72	72	238	238	0	0

To be done over

[[image]]

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164

Nova Pictoris X 14579 Bx

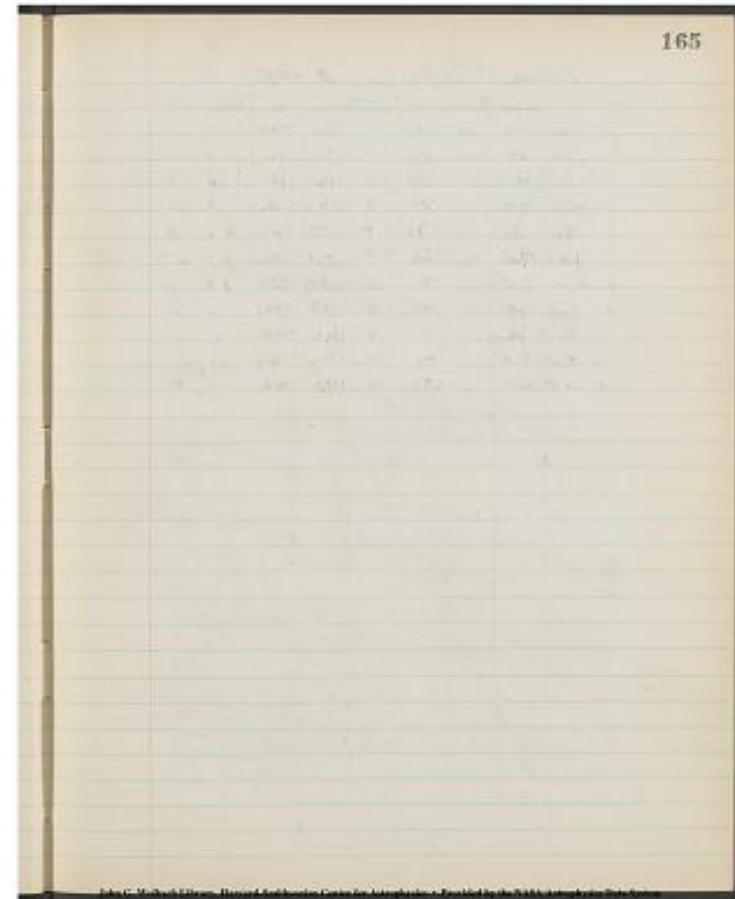
No	m	m+n	l+m+n	m	m+n	[m]	[m+n]	dm	dl
3	10.5	10.5	17	89	89	209	209	0	0
4	10.0	10.0	17	85	85	216	216	0	0
5	10.0	10.0	17	85	85	216	216	0	0
6	9.5	10.0	17	81	85	223	216	7	06
7	9.0	10.0	17	76	85	231	216	15	13
8	7.5	9.5	17	64	81	251	223	28	23
9	8.5	9.5	17	72	81	238	223	15	13
10	9.0	9.0	17	76	76	231	231	0	0
11	9.0	9.0	17	76	76	231	231	0	0
12	8.5	8.5	17	72	72	238	238	0	0
12.5	8.5	8.5	17	72	72	238	238	0	0

To be done over

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165

[[no entries]]



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[[strikethrough, entire table]]

$$|No|n| m+n|+m+n|mean n|mean m+n|[n]||m+n]|dm|dl|$$

Epsilon

4	12.5	--	45	28	-	330	-	---	
5	13.0	--	45	29	-	327	-	---	
6	14.0	14.0	45	32	32	319	319	0	0
7	14.5	14.5	45	33	33	316	316	0	0
8	15.0	14	45	34	32	313	319	6	05
9	16.0	13.5	45	36	30	308	324	16	14
10	16.5	13.5	45	37	30	305	324	19	16
11	17.0	12.5	45	38	28	303	330	27	12
12	17.5	9.0	45	39	20	300	363	63	44
13	18.0	12.5	45	40	28	297	330	33	26
14	18.5	20.5	45	42	46	293	284	9	08
15	19.0	24.5	45	43	55	290	267	23	19
16	19.5	22.5	45	44	50	288	276	12	10
17	20.0	22.0	45	45	49	286	278	8	07
18	20.5	20.5	45	46	46	284	284	0	0
19	21.0	20.5	45	47	46	282	284	2	02
20	21.5	18.5	45	48	42	280	193	13	11
21	21.5	--	45	48	-	280	-	---	
22	22.0	--	45	49	-	278	-	---	
23	22.5	--	45	50	-	276	-	---	
24	23.0	--	45	51	-	274	-	---	

0	31	0	31	0	45	70	70	241	241	0	0
1	31	0	30	5	45	70	69	241	243	2	02
2	30	5	29	5	45	69	66	243	248	5	04
3	30	5	32	0	45	69	72	243	238	5	04
4	30	0	30	5	45	68	69	244	243	1	01
5	30	0	30	5	45	68	69	244	243	1	01
6	30	0	34	5	45	68	78	244	228	6	1
7	29	5	34	5	45	66	78	248			
8	29	0	35	5	45	65	80	249			

[[/strikethrough, entire table]]

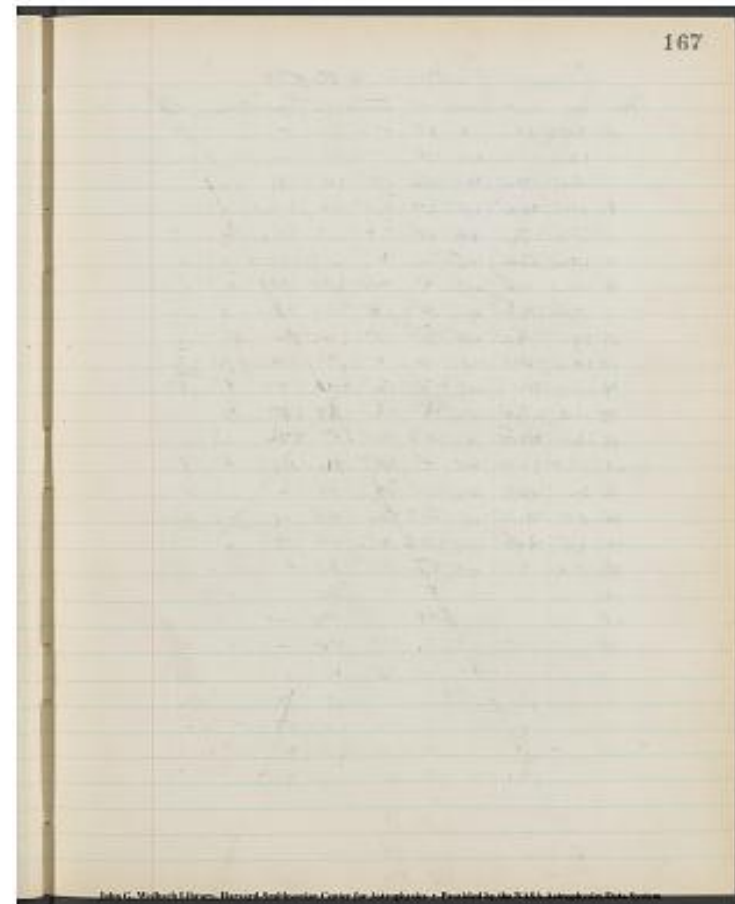
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• Provided by the NASA Astrophysics Data System

Nova Pictoris, 14584									
No.	mag	mag	mag	mag	mag	mag	mag	mag	mag
4	12.5	—	45	28	—	330	—	—	—
5	13.4	—	45	29	—	327	—	—	—
6	14.0	14.0	45	32	32	319	319	0	0
7	14.5	14.5	45	33	33	316	316	0	0
8	15.0	15.0	45	34	34	313	319	0	0.05
9	16.0	13.5	45	36	30	308	324	16	14
10	16.5	13.5	45	37	30	305	320	19	16
11	17.0	12.5	45	38	28	303	320	27	22
12	17.5	9.0	45	39	20	300	323	52	44
13	18.0	11.5	45	40	28	297	330	33	26
14	18.5	10.5	45	42	46	290	234	9	28
15	19.0	24.5	45	43	55	280	267	25	19
16	19.5	23.5	45	44	50	278	276	12	10
17	20.0	22.0	45	45	49	276	275	8	07
18	20.5	20.5	45	46	46	284	284	0	0
19	21.0	20.5	45	47	44	282	284	2	02
20	21.5	19.5	45	48	42	280	283	12	11
21	21.5	—	45	48	—	280	—	—	—
22	22.0	—	45	49	—	278	—	—	—
23	22.5	—	45	50	—	276	—	—	—
24	23.0	—	45	51	—	274	—	—	—
1	31.0	21.0	45	70	70	241	241	0	0
2	31.0	30.5	45	70	69	241	243	2	02
3	30.5	29.5	45	69	66	243	248	5	27
4	30.5	32.0	45	69	72	243	238	5	04
5	30.0	30.5	45	68	69	244	243	1	01
6	30.0	20.5	45	68	69	244	243	1	01
7	30.0	24.5	45	68	78	244	238	1	01
8	29.5	24.5	45	66	78	244	—	—	—
9	29.0	35.5	45	65	80	241	—	—	—

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167

[[no entries]]



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168
Nova Pictoris 14584

[[left margin]]
beta
[[/left margin]]

[[striketthrough]]

[[10 columned table]]

No	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	dm	dl
9	29.0	33.5	45	65	76				
10	28.5	31.0	45	64	70				
11	28.0	28.5	45	63	64				
12	28.0	28.0	45	63	63				
13	27.5	27.5	45	62	62				
14	27.0	27.5	45	61	62				
15	26.0	29.5	45	58	66				
16	25.5	26.5	45	57	60				
17	24.5	25.0	45	55	56				
18	24.0	24.5	45	54	55				
19	23.5	23.5	45	53	53				
20	23.0	23.0	45	52	52				
21	21.5	21.5	45	48	48				
22	21.0	21.0	45	47	47				
23	20.0	20.0	45	45	45				
24	19.0	19.0	45	43	43				
25	18.5	18.5	45	42	42				
26	18.0	18.0	45	40	40				

[[/striketthrough]]

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168

Nova Pictoris 14584

700

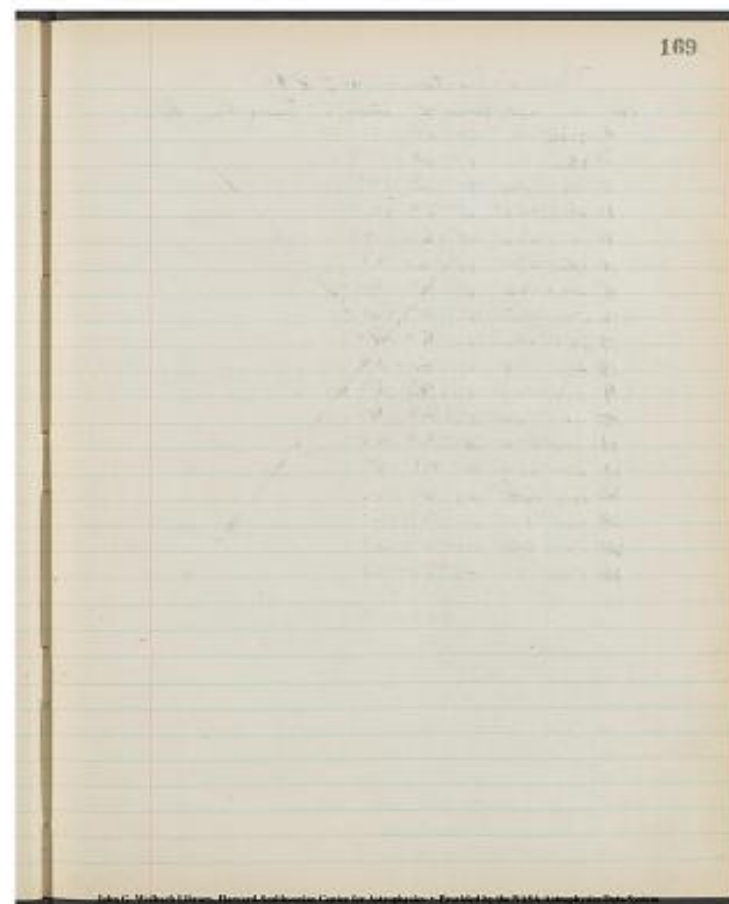
3

No	n	m+n	l+m+n	mean n	mean m+n	[n]	[m+n]	dm	dl
9	29.0	33.5	45	65	76				
10	28.5	31.0	45	64	70				
11	28.0	28.5	45	63	64				
12	28.0	28.0	45	63	63				
13	27.5	27.5	45	62	62				
14	27.0	27.5	45	61	62				
15	26.0	29.5	45	58	66				
16	25.5	26.5	45	57	60				
17	24.5	25.0	45	55	56				
18	24.0	24.5	45	54	55				
19	23.5	23.5	45	53	53				
20	23.0	23.0	45	52	52				
21	21.5	21.5	45	48	48				
22	21.0	21.0	45	47	47				
23	20.0	20.0	45	45	45				
24	19.0	19.0	45	43	43				
25	18.5	18.5	45	42	42				
26	18.0	18.0	45	40	40				

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169

[[no entries]]



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170

Nova Pictoris 14584⁺[[+]][[right margin]]Epsilon[[/right margin]]
[[10 column table]]

No|n|m+n||m+n|mean n| mean m+n|[m+n]|dm|dl

4|42.5|-|75|159|-|98|-|-|-

5|43.0|-|75|161|-|95|-|-|-

6|44.0|44.0|75|165|88|88|0|0

7|44.5|44.5|75|167|85|85|0|0

8|45.0|44.5|75|169|167|81|85|[[underline]]4|[[/underline]]|[[underline]]04|[[/underline]]

9|46.0|43.5|75|172|163|75|92|[[underline]]17|[[/underline]]|[[underline]]14|[[/underline]]

10|46.5|43.5|75|174|163|71|92|[[underline]]21|[[/underline]]|[[underline]]18|[[/underline]]

11|47.0|42.5|75|176|159|67|98|[[underline]]31|[[/underline]]|[[underline]]25|[[/underline]]

12|47.5|39.0|75|178|146|62|119|[[underline]]57|[[/underline]]|[[underline]]41|[[/underline]]

13|48.0|42.5|75|180|159|57|98|[[underline]]41|[[/underline]]|[[underline]]31|[[/underline]]

14|48.5|50.5|75|182|189|52|27|25|21

15|49.0|54.5|75|184|204|46|-|-|-

16|49.5|52.5|75|186|197|40|-|-|-

17|50.0|52.0|75|187|195|36|-|-|-

18|50.5|50.5|75|189|189|27|27|0|0

19|51.0|50.5|75|191|189|15|27|[[underline]]12|[[/underline]]|[[underline]]10|[[/underline]]

20|51.5|48.5|75|193|182|2|52|[[underline]]50|[[/underline]]|[[underline]]37|[[/underline]]

21|51.5|-|75|193|-|2|-|-|-

22|52.0|-|75|195|-|-|-|-

23|52.5|-|75|197|-|-|-|-

24|53.0|-|75|199|-|-|-|-

[[right margin]]Beta[[/right margin]]

0|61.0|61.0|75|228|228

1|61.0|60.5|75|228|227

2|60.5|59.5|75|227|223

3|60.5|62.0|75|227|232

4|60.0|60.5|75|225|227

5|60.0|60.5|75|225|227

6|60.0|64.5|75|225|242

7|59.5|64.5|75|223|242

8|59.0|65.5|75|222|246

170

Nova Pictoris 14584⁺

No	n	m+n	mean n	mean m+n	[m+n]	dm	dl
4	42.5	—	75	169	—	98	—
5	43.0	—	75	161	—	95	—
6	44.0	44.0	75	165	88	88	0
7	44.5	44.5	75	167	85	85	0
8	45.0	44.5	75	169	81	85	4
9	46.0	43.5	75	172	163	75	92
10	46.5	43.5	75	174	163	71	92
11	47.0	42.5	75	176	159	67	98
12	47.5	39.0	75	178	146	62	119
13	48.0	42.5	75	180	159	57	98
14	48.5	50.5	75	182	189	52	27
15	49.0	54.5	75	184	204	46	—
16	49.5	52.5	75	186	197	40	—
17	50.0	52.0	75	187	195	36	—
18	50.5	50.5	75	189	189	27	27
19	51.0	50.5	75	191	189	15	27
20	51.5	48.5	75	193	182	2	52
21	51.5	—	75	193	—	—	—
22	52.0	—	75	195	—	—	—
23	52.5	—	75	197	—	—	—
24	53.0	—	75	199	—	—	—
0	61.0	61.0	75	228	228	—	—
1	61.0	60.5	75	228	227	—	—
2	60.5	59.5	75	227	223	—	—
3	60.5	62.0	75	227	232	—	—
4	60.0	60.5	75	225	227	—	—
5	60.0	60.5	75	225	227	—	—
6	60.0	64.5	75	225	242	—	—
7	59.5	64.5	75	223	242	—	—
8	59.0	65.5	75	222	246	—	—

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171

Nova [[Pictions?]] 14584

[left margin]

[2 column table]

-|-

-|-

0|0

0|0

98|20 [scratched out]

91|99 [scratched out]

90|111 [scratched out]

85|146 [scratched out]

73|370 [scratched out]

81|234 [scratched out]

92|84

82|219

90|111

91|99

0|0

98|20

89|124 [scratched out]

-|-

-|-

-|-

-|-

0|0

94|31 [scratched out]

94|31 [scratched out]

94|64

98|20

98|20

82|219

81|234

74|351

[2 column table]

[left margin]

[graph]

[y-axis descending]

80

70

60

50

40

30

20

10

[y-axis descending]

[x-axis moving right]

10

20

0

10

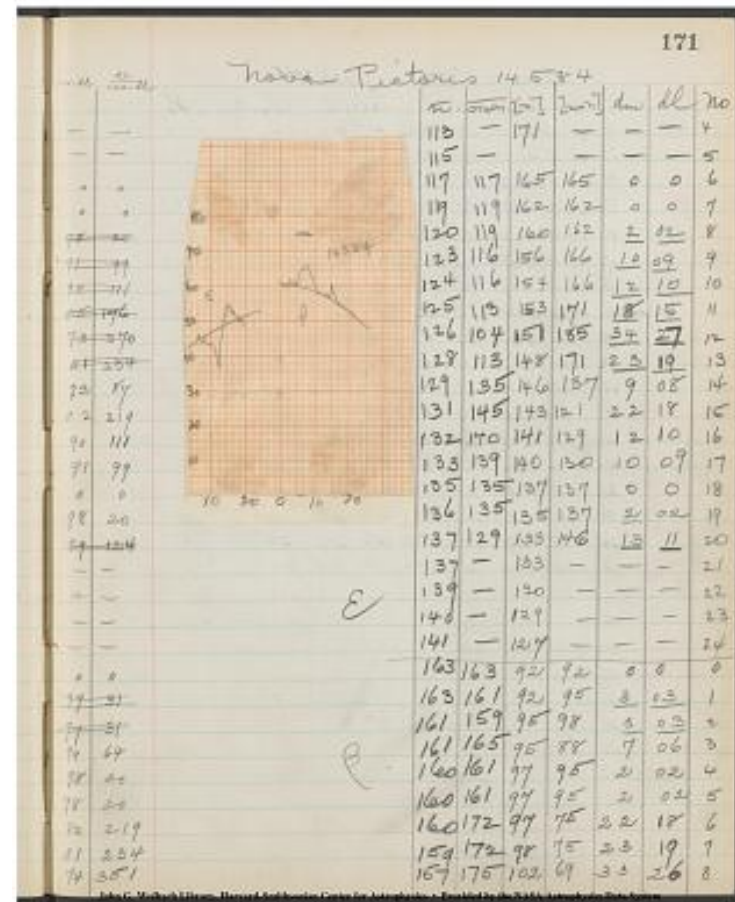
20

[x-axis moving right]

[x-axis moving right]

[scribble]

[scribble]



14584

B

[/graph]

E

B

[7 column table]

n[line over][m+n[line over]][n][m+n]dm|d|no| 113|-|171|-|-|4|115|-| | |-
|-|5|117|117|165|0|0| 6|119|119|162|162|0|0|7|
|120|119|160|162|2|2|02|8|123|116|156|166|10[un
derlined]|09|9|124|116|
|154|166|12|12|10|10|125|113|153|171|18[underline
d]|15|15|11|126|104|151|185|34|27|12|
128|113| 148|171|23|19|13|129|135|
|146|137|9|08|14|131|145|
143|143|121|22|18|15|132| 140|141|129|12|10|16|133|
139|140|130|10|09|17|135| 135|137|137|2|2|
02|19|137|129|133|146| 13|11|20|137|-|133|-|-
|21| 139|-|130|-|-|22|140|-| 129|-|-|23|141|-|124|-|-
|24|163|163|92|92|0|0|
163|161|92|95|3|03|1|161|159|95|98|3|03|2|161|165|95|88|7|06|3|160|161|97|95|2|02|4|160|161|
97|75|22|18|6| 159|172|98|75|23|19|7|157|175|102|102|69|33|26|8|
[/7 column table]

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172

nova Pictoris 14584

[[10 column table]]

no|n|m+n|+m+n|mean n|mean m+n|[n]|[m+n]|dm|dl|

9|59.0|63.5|75|222|238| | | |

10|58.5|61.0|75|220|228| | | |

11|58.0|58.5|75|218|220| | | |

beta 12|58.0|58.0|75|218|218| | | |

13|57.5|57.5|75|216|216| | | |

14|57.0|57.5|75|214|216| | | |

15|56.0|59.5|75|210|223| | | |

16|55.5|56.5|75|208|212| | | |

17|54.5|55.0|75|204|206| | | |

18|54.0|54.5|75|202|204| | | |

19|53.5|53.5|75|200|200| | | |

20|53.0|53.0|75|198|198| | | |

21|51.5|51.5|75|193|193|2|2|0|0|

22|51.0|51.0|75|191|191|15|15|0|0|

23|50.0|50.0|75|188|188|31|31|0|0|

24|49.0|49.0|75|184|184|46|46|0|0|

25|48.5|48.5|75|182|182|52|52|0|0|

26|48.0|48.0|75|180|180|57|57|0|0|

nova Pictoris 14584									
no	n	m+n	dm	dl	mean n	mean m+n	[n]	[m+n]	dm|dl
9	59.0	63.5	75	222	238				
10	58.5	61.0	75	220	228				
11	58.0	58.5	75	218	220				
12	58.0	58.0	75	218	218				
13	57.5	57.5	75	216	216				
14	57.0	57.5	75	214	216				
15	56.0	59.5	75	210	223				
16	55.5	56.5	75	208	212				
17	54.5	56.0	75	204	206				
18	54.0	54.5	75	202	204				
19	53.5	53.5	75	200	200				
20	53.0	53.0	75	198	198				
21	51.5	51.5	75	193	193	2	2	0	0
22	51.0	51.0	75	191	191	15	15	0	0
23	50.0	50.0	75	188	188	31	31	0	0
24	49.0	49.0	75	184	184	46	46	0	0
25	48.5	48.5	75	182	182	52	52	0	0
26	48.0	48.0	75	180	180	57	57	0	0

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Nova Pictoris 14584

[[9 columned table]]

| mean n | mean m+n | [n] | [m+n] | dm | dl | | |

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

9|154|169|102|81|21|18|100-dl|dl/100-dl|

10|156|163|103|92|11|10|90|111|

beta 11|155|156|105|103|2|02|98|20|

12|155|155|105|105|0|0|0|0|

13|153|153|108|108|0|0|0|0|

14|152|153|110|108|2|02|98|20|

15|149|159|114|98|16|14|86|163|

16|148|151|116|111|5|04|96|42|

17|145|147|121|117|4|04|96|42|

18|144|145|122|121|1|01|99|10|

19|143|143|124|124|0|0|0|0|

20|141|141|127|127|0|0|0|0|

21|137|137|133|133|0|0|0|0|

22|136|136|135|135|0|0|0|0|

23|133|133|140|140|0|0|0|0|

24|131|131|143|143|0|0|0|0|

25|129|129|146|146|0|0|0|0|

26|128|128|148|148|0|0|0|0|

173

Nova Pictoris

3

	mean n	mean m+n	[n]	[m+n]	dm	dl		
9	154	169	102	81	21	18	100-dl	dl/100-dl
10	156	163	103	92	11	10	90	111
11	155	156	105	103	2	02	98	20
12	155	155	105	105	0	0	0	0
13	153	153	108	108	0	0	0	0
14	152	153	110	108	2	02	98	20
15	149	159	114	98	16	14	86	163
16	148	151	116	111	5	04	96	42
17	145	147	121	117	4	04	96	42
18	144	145	122	121	1	01	99	10
19	143	143	124	124	0	0	0	0
20	141	141	127	127	0	0	0	0
21	137	137	133	133	0	0	0	0
22	136	136	135	135	0	0	0	0
23	133	133	140	140	0	0	0	0
24	131	131	143	143	0	0	0	0
25	129	129	146	146	0	0	0	0
26	128	128	148	148	0	0	0	0

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[[Top Left 174]]

Nova Pictoris, 14617 ^x

[[10 columned table]]

No|n|m+n||+m+n|n-bar|m-bar+n-bar|[n]||m+n|dn|dl

6|22.0|-62|68|-244|-|-

7|22.0|-62|68|-244|-|-

8|22.5|-62|70|-241|-|-

9|23.0|-62|72|-238|-|-

[[Left Middle Margin epsilon]] 10|23.0|-62|72|-238|-|-

11|23.0|23.0|62|72|238|238|0|0

12|23.5|25.0|62|73|78|236|228|8|07

13|24.0|30.0|62|74|93|234|203|31|25

14|24.0|36.5|62|74|113|234|171|63|44

15|24.0|42.5|62|74|132|234|141|93|58

16|24.5|47.0|62|76|146|231|119|112|64

17|24.5|52.0|62|76|161|231|95|136|71

18|24.5|48.0|62|76|149|231|114|117|66

19|25.0|40.0|62|78|124|228|154|74|49

20|25.0|33.0|62|78|102|228|188|40|31

21|25.0|27.5|62|78|85|228|216|12|10

22|25.0|26.5|62|78|82|228|221|7|06

23|25.5|28.0|62|79|87|226|213|13|11

24|25.5|30.0|62|79|93|226|203|23|19

25|26.0|31.0|62|80|96|224|198|26|21

26|26.0|31.5|62|80|98|224|195|29|23

27|26.0|-62|80|-224|-|-

28|26.0|-62|80|-224|-|-

29|26.0|-62|80|-224|-|-

30|26.0|-62|80|-224|-|-

8|39.5|39.5|62|122|122|157|157|0|0

9|39.5|37.0|62|122|115|157|168|11|11|11|

10|11|

10|39.0|38.5|62|121|119|159|162|3|3|3|

03|11|

[[Left Bottom Margin beta]] 11|38.5|41.5|62|119|129|162|146|16|14

174

Nova Pictoris, 14617

No	n	m+n	n-bar	m-bar	n-bar	[n]	m+n	dn	dl
6	22.0	-	62	68	-	244	-	-	-
7	22.0	-	62	68	-	244	-	-	-
8	22.5	-	62	70	-	241	-	-	-
9	23.0	-	62	72	-	238	-	-	-
10	23.0	-	62	72	-	238	-	-	-
11	23.0	23.0	62	72	72	238	238	0	0
12	23.5	25.0	62	73	78	236	228	8	07
13	24.0	30.0	62	74	93	234	203	31	25
14	24.0	36.5	62	74	113	234	171	63	44
15	24.0	42.5	62	74	132	234	141	93	58
16	24.5	47.0	62	76	146	231	119	112	64
17	24.5	52.0	62	76	161	231	95	136	71
18	24.5	48.0	62	76	149	231	114	117	66
19	25.0	40.0	62	78	124	228	154	74	49
20	25.0	33.0	62	78	102	228	188	40	31
21	25.0	27.5	62	78	85	228	216	12	10
22	25.0	26.5	62	78	82	228	221	7	06
23	25.5	28.0	62	79	87	226	213	13	11
24	25.5	30.0	62	79	93	226	203	23	19
25	26.0	31.0	62	80	96	224	198	26	21
26	26.0	31.5	62	80	98	224	195	29	23
27	26.0	-	62	80	-	224	-	-	-
28	26.0	-	62	80	-	224	-	-	-
29	26.0	-	62	80	-	224	-	-	-
30	26.0	-	62	80	-	224	-	-	-
8	39.5	39.5	62	122	122	157	157	0	0
9	39.5	37.0	62	122	115	157	168	11	11
10	39.0	38.5	62	121	119	159	162	3	3
11	38.5	41.5	62	119	129	162	146	16	14

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175

Nova Pictoris, 14617

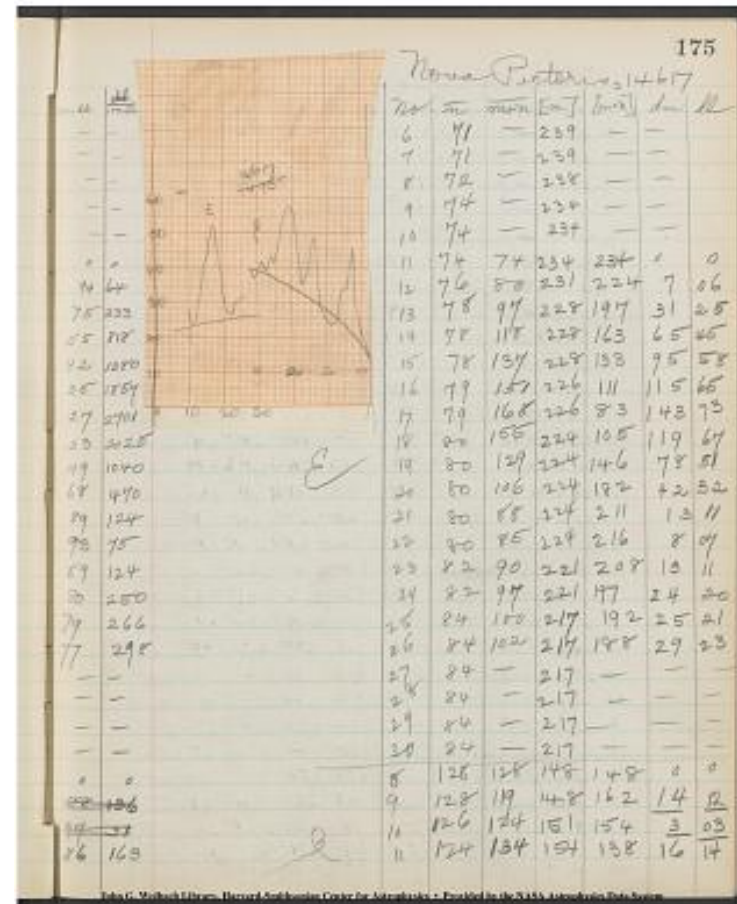
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No|mean n|mean m+n|n|m+n|dm|dl|100 -dl|dl/100-dl
epsilon

6 71|-239|-|-|-|
7 71|-239|-|-|-|
8 72|-238|-|-|-|
9 74|-234|-|-|-|
10 74|-234|-|-|-|
11 74 74|234|234|0|0|0|0|
12 76 80|231|224|7|06|94|64|
13 78 97|228|197|31|25|75|333|
14 78 118|228|163|65|45|55|818|
15 78 137|228|133|95|58|42|1380|
16 79 151|226|111|115|65|35|1857|
17 79 168|226|83|143|73|27|2701|
18 80 155|224|105|119|67|33|2025|
19 80 129|224|146|78|51|49|1040|
20 80 106|224|182|42|32|68|470|
21 80 88|224|211|13|11|89|124|
22 80 85|224|216|8|07|93|75|
23 82 90|221|208|13|11|89|124|
24 82 97|221|197|24|20|80|250|
25 84 100|217|192|25|21|79|266|
26 84 102|217|188|29|23|77|298|
27 84|-217|-|-|-|
28 84|-217|-|-|-|
29 84|-217|-|-|-|
30 84|-217|-|-|-|

--
beta

8 128|128|128|148|148|0|0|0|0|
9 128|119|148|162|14|12|~~88~~|136|~~97~~|31|~~97~~|31|
10 126|124|151|154|3|03|~~97~~|31|~~97~~|31|
11 124|134|154|138|16|14|86|163



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176

Nova Pictoris, 14617

[[10 columned table]]

No|n|m+n|l+m+n|mean n| mean m+n|[m+n]|dm|dl

12	38.5	40.0	62	119	124	162	154	8	07
13	38.0	40.5	62	118	126	163	151	12	10
14	37.5	43.0	62	116	133	166	140	26	21
15	37.0	41.5	62	115	129	168	146	22	18
16	36.0	46.0	62	112	142	173	125	48	36
17	36.0	52.5	62	112	163	173	92	81	53
18	35.0	55.5	62	108	172	180	75	105	62
19	34.5	57.5	62	107	178	181	62	119	67
20	34.0	56.5	62	105	175	184	69	115	65
21	33.5	50.0	62	104	155	185	105	80	52
22	33.0	41.5	62	102	129	188	146	42	32
23	32.0	35.5	62	99	110	193	176	17	14
24	31.5	37.0	62	98	115	195	168	27	22
25	31.0	43.0	62	96	133	198	140	58	41
26	30.5	47.5	62	94	147	201	117	84	54
27	30.0	42.0	62	93	130	203	145	58	41
28	29.0	29.5	62	90	92	208	205	3	03
29	28.5	26.5	62	88	82	211	221	10	09
30	27.5	24.5	62	85	76	216	231	15	13
31	27.0	23.5	62	84	73	217	236	19	16
32	26.0	23.5	62	80	73	224	236	12	10
33	25.0	26.0	62	78	80	228	224	4	04
34	24.0	32.0	62	74	99	234	193	41	31
35	23.0	33.5	62	72	104	238	185	53	39
36	22.0	35.5	62	68	110	244	176	68	46
37	20.5	42.5	62	64	132	251	141	110	64
38	19.5	35.0	62	60	108	258	180	78	51
39	18.5	25.0	62	58	78	262	228	34	27
40	17.0	20.5	62	53	64	271	251	20	17
41	15.5	17.5	62	48	54	280	269	11	10
42	13.2	14.5	62	42	45	293	286	7	06

176

Nova Pictoris, 14617

No	n	m+n	l	m+l	n+l	mean n	mean m+n	[m+n]	dm	dl
12	38.5	40.0	62	119	124	162	154	8	07	
13	38.0	40.5	62	118	126	163	151	12	10	
14	37.5	43.0	62	116	133	166	140	26	21	
15	37.0	41.5	62	115	129	168	146	22	18	
16	36.0	46.0	62	112	142	173	125	48	36	
17	36.0	52.5	62	112	163	173	92	81	53	
18	35.0	55.5	62	108	172	180	75	105	62	
19	34.5	57.5	62	107	178	181	62	119	67	
20	34.0	56.5	62	105	175	184	69	115	65	
21	33.5	50.0	62	104	155	185	105	80	52	
22	33.0	41.5	62	102	129	188	146	42	32	
23	32.0	35.5	62	99	110	193	176	17	14	
24	31.5	37.0	62	98	115	195	168	27	22	
25	31.0	43.0	62	96	133	198	140	58	41	
26	30.5	47.5	62	94	147	201	117	84	54	
27	30.0	42.0	62	93	130	203	145	58	41	
28	29.0	29.5	62	90	92	208	205	3	03	
29	28.5	26.5	62	88	82	211	221	10	09	
30	27.5	24.5	62	85	76	216	231	15	13	
31	27.0	23.5	62	84	73	217	236	19	16	
32	26.0	23.5	62	80	73	224	236	12	10	
33	25.0	26.0	62	78	80	228	224	4	04	
34	24.0	32.0	62	74	99	234	193	41	31	
35	23.0	33.5	62	72	104	238	185	53	39	
36	22.0	35.5	62	68	110	244	176	68	46	
37	20.5	42.5	62	64	132	251	141	110	64	
38	19.5	35.0	62	60	108	258	180	78	51	
39	18.5	25.0	62	58	78	262	228	34	27	
40	17.0	20.5	62	53	64	271	251	20	17	
41	15.5	17.5	62	48	54	280	269	11	10	
42	13.2	14.5	62	42	45	293	286	7	06	

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[[9 columned table]]

No|mean n|mean m+n|[n]||m+n||dm|dl|100-dl|dl/100-dl

12	124	129	154	146	8	07	93	75
13	122	131	157	143	14	12	88	136
14	121	139	159	130	29	23	77	298
15	119	134	162	138	24	20	80	250
16	116	148	166	116	50	37	63	587
17	116	170	166	79	87	55	45	122.1
18	113	179	171	60	111	64	36	1778
19	111	185	175	43	132	70	30	2326
20	110	182	176	52	124	68	32	2122
21	108	161	180	95	85	54	46	1174
22	106	134	182	138	44	33	67	492
23	103	114	187	170	17	14	86	163
24	102	119	190	162	28	23	77	298
25	100	139	192	130	62	44	56	706
26	98	153	195	108	87	55	45	122.1
27	96	135	198	137	61	43	59	754
28	94	95	201	200	1	01	99	10
29	92	86	205	214	9	08	92	87
30	88	79	211	226	15	13	84	149
31	87	76	213	231	18	15	85	176
32	84	76	217	231	14	12	88	136
33	80	84	224	217	7	06	94	64
34	78	103	228	187	41	31	69	449
35	74	108	234	180	54	39	61	639
36	71	114	239	170	69	47	53	886
37	66	137	248	113	115	65	35	1857
38	63	113	253	171	82	53	41	1128
39	60	80	258	224	34	27	73	370
40	55	66	267	248	19	16	84	190
41	50	56	276	265	11	10	90	111
42	44	46	288	284	4	04	96	42

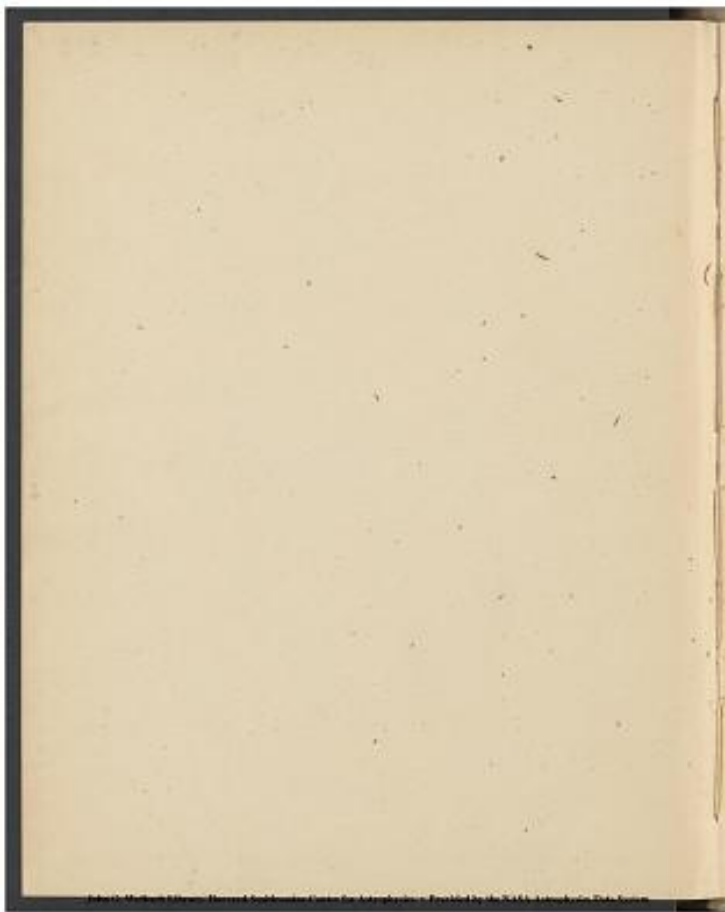
177

Nova Pictoris, 14617

No	n	m	n+m	[n]	[m]	dm	dl	100-dl	dl/100-dl
12	124	129	154	146	8	07	93	75	
13	122	131	157	143	14	12	88	136	
14	121	139	159	130	29	23	77	298	
15	119	134	162	138	24	20	80	250	
16	116	148	166	116	50	37	63	587	
17	116	170	166	79	87	55	45	122.1	
18	113	179	171	60	111	64	36	1778	
19	111	185	175	43	132	70	30	2326	
20	110	182	176	52	124	68	32	2122	
21	108	161	180	95	85	54	46	1174	
22	106	134	182	138	44	33	67	492	
23	103	114	187	170	17	14	86	163	
24	102	119	190	162	28	23	77	298	
25	100	139	192	130	62	44	56	706	
26	98	153	195	108	87	55	45	122.1	
27	96	135	198	137	61	43	59	754	
28	94	95	201	200	1	01	99	10	
29	92	86	205	214	9	08	92	87	
30	88	79	211	226	15	13	84	149	
31	87	76	213	231	18	15	85	176	
32	84	76	217	231	14	12	88	136	
33	80	84	224	217	7	06	94	64	
34	78	103	228	187	41	31	69	449	
35	74	108	234	180	54	39	61	639	
36	71	114	239	170	69	47	53	886	
37	66	137	248	113	115	65	35	1857	
38	63	113	253	171	82	53	41	1128	
39	60	80	258	224	34	27	73	370	
40	55	66	267	248	19	16	84	190	
41	50	56	276	265	11	10	90	111	
42	44	46	288	284	4	04	96	42	

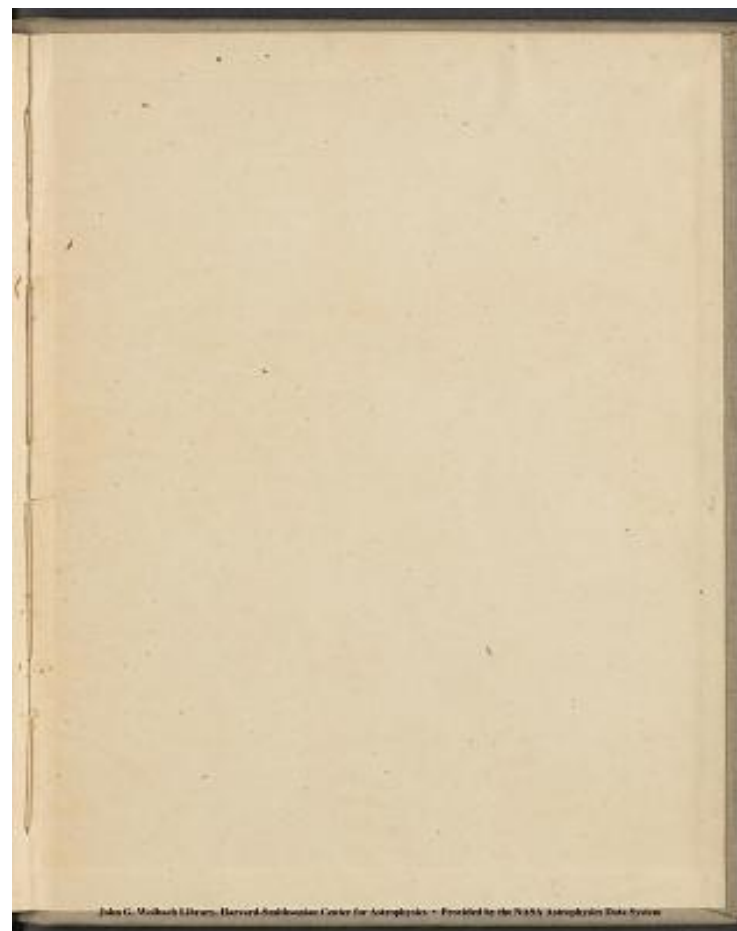
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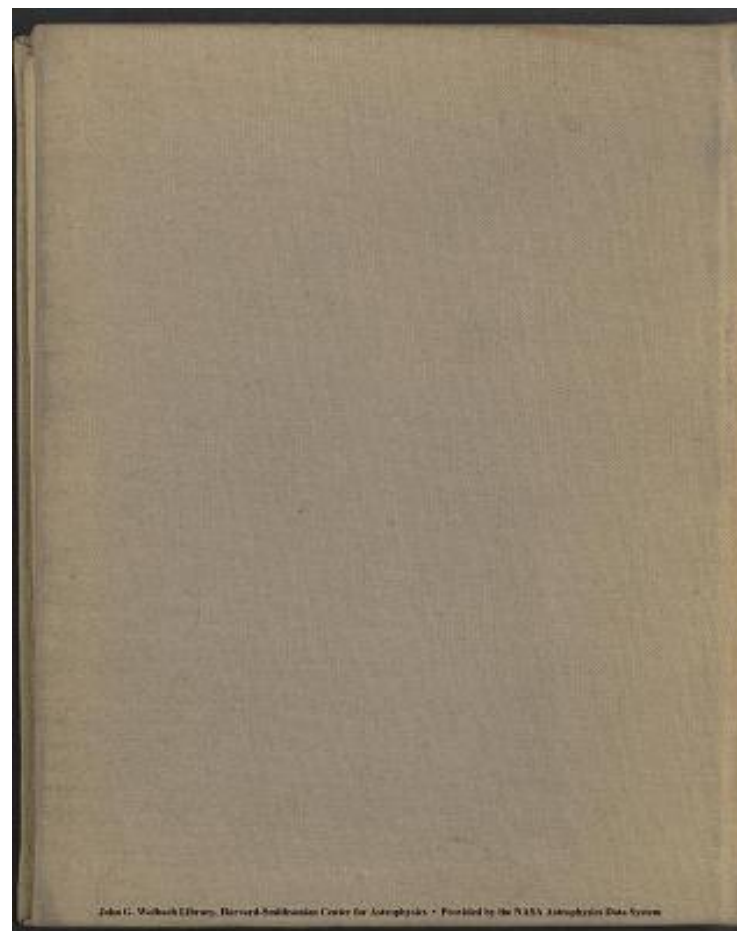
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