

KG
11366
104

14

Gen. Ledgers

Pleiades

C 18552

18561

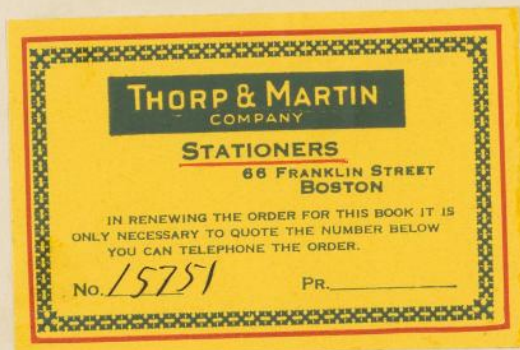
18564

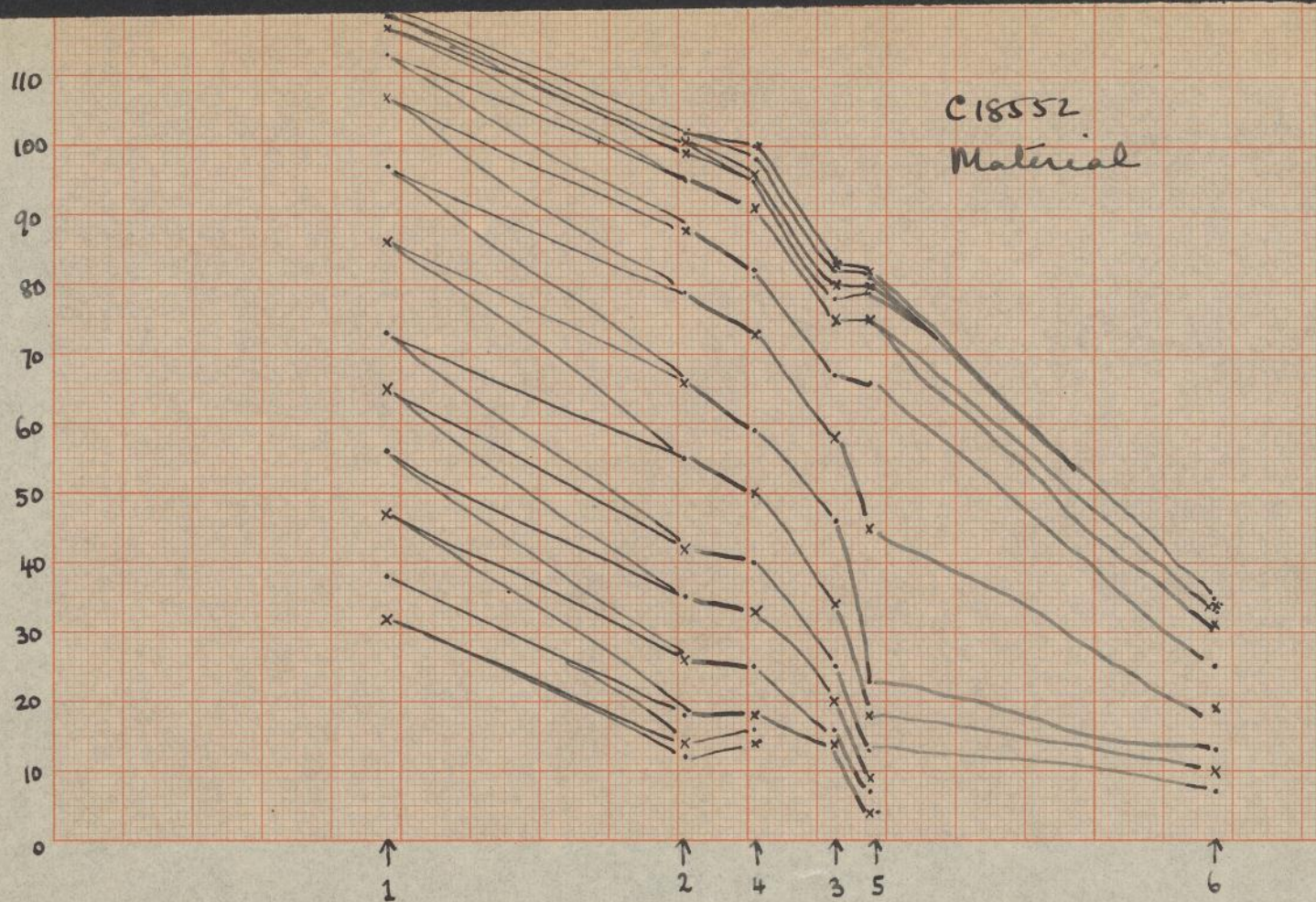
H 2697

2687

142
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KG 11366.104





1924phae.proj.1105

Comparison of several plates 130

15611366.104



C 18552 (2 prisms)
Pleiades

2

2

C18557 Pleiades

| No. | λ | n | m+n | No.1 [λ] | 2.96 [mm] | Δm | n | No.2 m+n | 3.81 [λ] | [m+n] | Δm | n | m+n | No. [λ] |
|-----|-------------------------------------|-----|-----|-----------------------|---------------------|------------|----|-------------|-----------------------|-------|------------|----|-----|----------------------|
| 1 | 37 ³⁴ 34 | 14 | 31 | ¹²² 122 | ¹⁴ 14 | 32 | 4 | 12 | ¹²² 122 | 4 | 12 | - | - | |
| 2 | 37 ⁵⁰ 34 | 15 | 37 | | 15 | 38 | 3 | 14 | | 3 | 14 | - | - | |
| 3 | 37 ⁷¹ 50 | 17 | 46 | | 17 | 47 | 3 | 18 | | 3 | 18 | 6 | 13 | 11 |
| 4 | 37 ⁹⁷ | 20 | 55 | | 20 | 56 | 5 | 26 | | 5 | 26 | 5 | 15 | 11 |
| 5 | ³⁸¹⁹ 37 ⁹⁷ | 58 | 64 | | 59 | 65 | 28 | 34 | | 28 | 35 | 15 | 19 | 11 |
| 6 | 3835 | 34 | 72 | | 35 | 73 | 12 | 41 | | 12 | 42 | 8 | 24 | 11 |
| 6a | - | - | 85 | | - | 86 | - | 54 | | - | 55 | - | 32 | 11 |
| 7 | 3889 | 55 | 95 | | 56 | 97 | 27 | 65 | | 27 | 66 | 17 | 43 | 11 |
| 7a | - | - | 105 | | - | 107 | - | 78 | | - | 79 | - | 55 | 11 |
| 8 | 3970 | 80 | 111 | | 81 | 113 | 48 | 87 | | 49 | 88 | 34 | 63 | 11 |
| 9 | 4026 | 112 | 115 | | 114 | 117 | 89 | 95 | | 90 | 95 | 65 | 71 | 11 |
| 10 | 4101 | 97 | 117 | | 99 | 119 | 65 | 98 | | 66 | 99 | 46 | 74 | 11 |
| 10a | | | 117 | | | 119 | - | 99 | | | 101 | | 77 | 11 |
| 11 | 4340 | 106 | 118 | | 108 | 120 | 71 | 100 | | 72 | 102 | 56 | 79 | 11 |
| 12 | | 116 | 118 | | 118 | 120 | 97 | 100 | | 99 | 102 | 76 | 80 | 11 |
| 13 | 4471 | 116 | 118 | | 118 | 120 | 97 | 100 | | 99 | 102 | 77 | 81 | 11 |
| 13a | - | - | 118 | | | 120 | | | | | | | 82 | 11 |
| 13b | - | - | 117 | | | 119 | | | | | | | 79 | 11 |
| 13c | - | - | 114 | | | 116 | | | | | | | 67 | 11 |
| 14 | 4861 | 89 | 102 | 122 | 91 | 104 | - | - | 122 | - | - | 39 | 48 | 11 |
| | | | | | | | | | | | | - | - | |
| 0 | 3722 | 12 | 24 | | 12 | 24 | 3 | 9 | | 3 | 9 | - | - | |
| -1 | | 11 | 19 | | 11 | 19 | 2 | 7 | | 2 | 7 | - | - | |
| -2 | | 10 | 16 | | 10 | 16 | 2 | 5 | | 2 | 5 | - | - | |

| No.3 | | | No.4 | | | No.5 | | | No.6 | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| 4.25 | 4.02 | 4.37 | 4.25 | 4.02 | 4.37 | 4.25 | 4.02 | 4.37 | 4.25 | 4.02 | 4.37 |
| [m] | [mm] | Am | [m] | [mm] | Am | [m] | [mm] | Am | [m] | [mm] | Am |
| 2+mm | n | m+n | 2+mm | n | m+n | 2+mm | n | m+n | 2+mm | n | m+n |
| | | | 6 | 15 | 134 | 6 | 14 | 2 | 4 | 128 | 4 |
| | | | 7 | 17 | 134 | 7 | 16 | 2 | 4 | 128 | 4 |
| 116 | 6 | 14 | 7 | 20 | 134 | 7 | 19 | 2 | 4 | 127 | 4 |
| 117 | 5 | 16 | 7 | 21 | 134 | 7 | 20 | 2 | 4 | 127 | 4 |
| 117 | 16 | 20 | 7 | 22 | 134 | 7 | 21 | 2 | 4 | 126 | 4 |
| 117 | 9 | 25 | 7 | 23 | 134 | 7 | 22 | 2 | 4 | 126 | 4 |
| 117 | - | 34 | 7 | 24 | 134 | 7 | 23 | 2 | 4 | 126 | 4 |
| 117 | 18 | 46 | 7 | 25 | 134 | 7 | 24 | 2 | 4 | 126 | 4 |
| 117 | - | 58 | 7 | 26 | 134 | 7 | 25 | 2 | 4 | 126 | 4 |
| 117 | 36 | 67 | 7 | 27 | 134 | 7 | 26 | 2 | 4 | 126 | 4 |
| 118 | 68 | 75 | 7 | 28 | 134 | 7 | 27 | 2 | 4 | 126 | 4 |
| 118 | 48 | 78 | 7 | 29 | 134 | 7 | 28 | 2 | 4 | 126 | 4 |
| 119 | - | 80 | 7 | 30 | 134 | 7 | 29 | 2 | 4 | 126 | 4 |
| 119 | 58 | 82 | 7 | 31 | 134 | 7 | 30 | 2 | 4 | 126 | 4 |
| 120 | 78 | 83 | 7 | 32 | 134 | 7 | 31 | 2 | 4 | 126 | 4 |
| 120 | 79 | 84 | 7 | 33 | 134 | 7 | 32 | 2 | 4 | 126 | 4 |
| 121 | - | 84 | 7 | 34 | 134 | 7 | 33 | 2 | 4 | 126 | 4 |
| 121 | - | 81 | 7 | 35 | 134 | 7 | 34 | 2 | 4 | 126 | 4 |
| 121 | - | 69 | 7 | 36 | 134 | 7 | 35 | 2 | 4 | 126 | 4 |
| 121 | 40 | 49 | 7 | 37 | 134 | 7 | 36 | 2 | 4 | 126 | 4 |

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Aperture 3 omitted

| No.6.5.35 | | |
|-----------|------|------|
| 4.25 | 4.02 | 4.37 |
| [m] | [mm] | Am |
| 2+mm | n | m+n |
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Aperture 3 omitted

| No.3 | | | 4.25 | | | No.4 | | | 4.02 | | | No.5 | | | 4.37 | | | No.6.5.35 | | |
|------|-------|----|------|-----|-----|-------|-----|----|------|-----|-------|------|----|-----|------|-------|---|-----------|--|--|
| [n] | [m+n] | Am | n | m+n | [n] | [m+n] | Am | n | m+n | [n] | [m+n] | Am | n | m+n | [n] | [m+n] | n | m+n | | |
| | | | 6 | 15 | 134 | 6 | 14 | 2 | 4 | 128 | 2 | 4 | | | | | | | | |
| | | | 7 | 17 | 133 | 6 | 16 | 2 | 47 | 128 | 2 | 7 | | | | | | | | |
| 116 | 9 | 14 | 7 | 20 | 133 | 6 | 18 | 0 | 9 | 127 | 0 | 9 | | | | | | | | |
| 117 | 5 | 16 | 9 | 27 | 132 | 8 | 25 | 2 | 13 | 127 | 2 | 13 | | | | | | | | |
| 117 | 16 | 20 | 30 | 35 | 132 | 28 | 33 | 13 | 19 | 126 | 13 | 18 | | | | | | | | |
| 117 | 9 | 25 | 14 | 42 | 132 | 13 | 40 | 4 | 24 | 126 | 4 | 23 | 0 | 7 | 128 | | | | | |
| 117 | - | 34 | 24 | 53 | 131 | - | 50 | - | - | - | - | - | - | 10 | 128 | | | | | |
| 117 | 18 | 46 | 24 | 63 | 131 | 23 | 59 | 14 | 25 | 126 | 14 | 24 | 2 | 18 | 127 | | | | | |
| 117 | - | 58 | - | 77 | 130 | - | 73 | - | - | - | - | - | - | 19 | 127 | | | | | |
| 117 | 36 | 67 | 43 | 86 | 130 | 41 | 82 | 29 | 67 | 125 | 29 | 66 | 5 | 25 | 127 | | | | | |
| 118 | 68 | 75 | 89 | 95 | 129 | 86 | 91 | 67 | 76 | 125 | 66 | 75 | 25 | 31 | 126 | | | | | |
| 118 | 48 | 78 | 58 | 97 | 127 | 57 | 95 | 43 | 79 | 124 | 43 | 79 | 10 | 33 | 126 | | | | | |
| 119 | - | 80 | - | 98 | 126 | - | 96 | - | - | - | 50 | 80 | - | 34 | 125 | | | | | |
| 119 | 58 | 82 | 63 | 98 | 124 | 63 | 98 | 49 | 81 | 122 | 49 | 81 | 10 | 34 | 124 | | | | | |
| 120 | 78 | 83 | 95 | 99 | 123 | 96 | 100 | 57 | 82 | 122 | 57 | 82 | 30 | 34 | 124 | | | | | |
| 120 | 79 | 84 | 96 | 99 | 123 | 97 | 100 | 79 | 83 | 122 | 78 | 83 | 30 | 35 | 123 | | | | | |
| 121 | - | 84 | | | | | | | | | 79 | 83 | - | 33 | 122 | | | | | |
| 121 | | 81 | | | | | | | | | | | - | 31 | 122 | | | | | |
| 121 | | 69 | | | | | | | | | | | - | 25 | 122 | | | | | |
| 121 | 40 | 49 | 35 | - | 120 | 36 | - | | | | | | | | | | | | | |
| - | - | - | 4 | 12 | 134 | | | | | | | | | | | | | | | |
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| | | 3p.1. | | | | | 2. | | | | | 3 | | | | |
|----|----------------|-------|-----|-----|-----|------------|----|-----|-----|-----|-----|----|----|-----|-----|---|
| | | n | m | [n] | [m] | Δm | | | | | | | | | | |
| 1 | H λ | 14 | 32 | 348 | 268 | 80 | 4 | 12 | 420 | 362 | 58 | - | - | | | |
| 2 | H κ | 15 | 38 | 342 | 254 | 88 | 3 | 14 | 430 | 348 | 82 | - | - | | | |
| 3 | H ϵ | 17 | 47 | 329 | 233 | 96 | 3 | 18 | 430 | 322 | 108 | 6 | 14 | 402 | 348 | 5 |
| 4 | H δ | 20 | 56 | 311 | 215 | 96 | 5 | 26 | 440 | 287 | 123 | 5 | 16 | 410 | 335 | 7 |
| 5 | 3819 | 59 | 65 | 208 | 192 | 16 | 28 | 35 | 281 | 262 | 119 | 16 | 20 | 335 | 211 | 2 |
| 6 | H η | 35 | 73 | 252 | 175 | 87 | 12 | 42 | 362 | 244 | 118 | 9 | 25 | 382 | 292 | 9 |
| 7 | 3819 H ζ | 56 | 97 | 214 | 112 | 102 | 27 | 66 | 284 | 190 | 94 | 18 | 46 | 322 | 236 | 8 |
| 8 | H ζ | 81 | 113 | 154 | 62 | 92 | 49 | 88 | 229 | 137 | 92 | 36 | 67 | 260 | 188 | 7 |
| 9 | 4026 | 114 | 117 | 49 | 33 | 16 | 90 | 95 | 131 | 118 | 13 | 68 | 75 | 186 | 170 | 1 |
| 10 | H δ | 99 | 119 | 106 | 16 | 90 | 66 | 99 | 190 | 106 | 84 | 48 | 78 | 231 | 162 | 6 |
| 11 | H γ | 108 | 120 | 75 | 0 | 75 | 72 | 102 | 177 | 96 | 81 | 58 | 82 | 210 | 152 | 5 |
| 12 | H γ | 118 | 120 | 25 | 0 | 25 | 99 | 102 | 106 | 96 | 10 | 78 | 83 | 162 | 149 | 1 |
| 13 | 4471 | 118 | 120 | 25 | 0 | 25 | 99 | 102 | 106 | 96 | 10 | 79 | 84 | 160 | 147 | |
| 14 | H β | 91 | 104 | 128 | 90 | 38 | - | - | | | | 40 | 49 | 250 | 229 | 2 |
| 0 | 3722 | 12 | 24 | 362 | 297 | 65 | 3 | 9 | 430 | 382 | 48 | | | | | |
| -1 | | 11 | 19 | 370 | 317 | 53 | 2 | 7 | 395 | 440 | 45 | | | | | |
| -2 | | 10 | 16 | 375 | 335 | 40 | 2 | 5 | 440 | 440 | 30 | | | | | |

Comparison of two Pleiades plates

C18568, 18557

| Line | Sp. 1 ① | Sp. 2 ② | dl, dl _r | dl _r /dl | Sp. 2 ① | Sp. 2 ② | dl | dl _r /dl | Mean dl _r | Sp. 3 ① | Sp. 3 ② | dl | dl _r /dl | Mean dl _r | Sp. 3 ① |
|------|------------|------------|---------------------|---------------------|------------|------------|--------|---------------------|-------------------------|------------|------------|--------|---------------------|-------------------------|------------|
| Hβ | 39 | 30 | | | 20 | 78 | 17, 51 | 0.33 | | 18 | 31 | 16, 25 | 0.64 | | 50 |
| Hγ | 82 | 66 | , 46 | | 56 | 84 | 40, 54 | 0.74 | 47 | 50 | 62 | 37, 44 | 0.84 | 40 | 63 |
| Hδ | 109 | 85 | 53, 54 | 0.99 | 54 | 78 | 92 | 0.90 | 54 | 63 | 71 | 44, 48 | 0.92 | 46 | 80 |
| Hε | 89 | 101 | 63, 61 | 1.02 | 62* | 88 | 111 | 0.88 | 60 | 67 | 78 | 46, 51 | 0.90 | 48 | 97 |
| Hζ | 83 | 103 | 56, 61 | 0.93 | 58 | 82 | 118 | 0.80 | 60 | 66 | 60 | 46, 42 | 1.09 | 44 | 89 |
| Hη | 80 | 102 | 53, 61 | 0.88 | 57 | 79 | 128 | 0.79 | 60 | 72 | 80 | 48, 52 | 0.92 | 50 | 80 |
| Hθ | 68 | 105 | 52, 62 | 0.82 | 78 | - | 51, | | | 70 | 71 | 48, 48 | 1.00 | 48 | 81 |
| Hι | 51 | 122 | 46, 67 | 0.69 | 68 | - | 47, | | | 60 | | 42, | | | 73 |
| Hκ | 36 | 100 | 37, 60 | 0.62 | 60 | | 42, | | | 45 | | 34, | | | 52 |
| Hλ | 20 | 102 | 28, 61 | 0.46 | 46 | | 35, | | | 34 | | 27, | | | 39 |
| Hμ | ↓ | - | 17 | | 26 | | 21, | | | 25 | | 21, | | | 25 |
| Hν | - | - | | | 20 | | 17, | | | 13 | | 11 | | | 18 |

| | Factors | Mean | Res. |
|------------|---------|-------|------|
| Spectrum ① | 4 | 3.82 | .95 |
| ② | 6 | 4.44 | .74 |
| ③ | 6 | 5.31 | .88 |
| ④ | 4 | 3.21 | .80 |
| ⑤ | 5 | 4.51 | .90 |
| ⑥ | 5 | 5.04 | 1.01 |
| | 30 | 26.33 | |

General
mean factor = 0.86

Mean intensities

| Spectrum | No. lines | Sum | Mean |
|----------|-----------|-----|------|
| 1 | 6 | 313 | 52 |
| 2 | 6 | 368 | 60 |
| 3 | 6 | 262 | 47 |
| 4 | 4 | 264 | 66 |
| 5 | 5 | 290 | 58 |
| 6 | 6 | 330 | 55 |

omit ①, $\frac{411}{5} = 82$
omit ①, $\frac{9, 1, 3, 16, 1}{5} = 93$

| an | Sp. 4 | dl | dl | Sp. 5 | dl | Sp. 6 | dl | Sum | Factor | dl |
|----|--------|--------|------|-------|---------------|-------|--------|----------------|--------|-----|
| U | 50 - | 37; | | 56 - | 40,- | 72 49 | 49, 36 | (1.36) | .97(2) | .48 |
| 2 | 63 106 | 44, 63 | 0.72 | 54 | 65 88 45, 56 | 0.80 | 50 | 76 83 50, 53 | 0.94 | 52 |
| 6 | 80 111 | 52, 64 | 0.81 | 58 | 80 97 52, 59 | 0.88 | 56 | 94 94 58, 58 | 1.00 | 58 |
| 8 | 97 117 | 59, 66 | 0.89 | 62 | 88 100 56, 60 | 0.93 | 58* | 96 103 59, 61 | 0.97 | 60 |
| 4 | 89 134 | 56, 71 | 0.79 | 64* | 84 92 54, 57 | 0.95 | 56 | 107 101 63, 61 | 1.03 | 62 |
| 2* | 80 | 52, 38 | | | 86 94 55, 58 | 0.95 | 56 | 119 101 67, 61 | 1.10 | 64* |
| 8 | 81 | 53 - | | | 87 | 55, | | 88 - , 56 | | |
| | 73 | 49 - | | | 75 | 50, | | 122 - , 67 | | |
| | 52 | 38 - | | | 50 | 37, | | 100 - , 60 | | |
| | 39 | 30 - | | | 41 | 31, | | 102 - , 61 | | |
| | 25 | 21 - | | | 29 | 23, | | | | |
| | 18 | 15 - | | | 26 | 21 | | | | |
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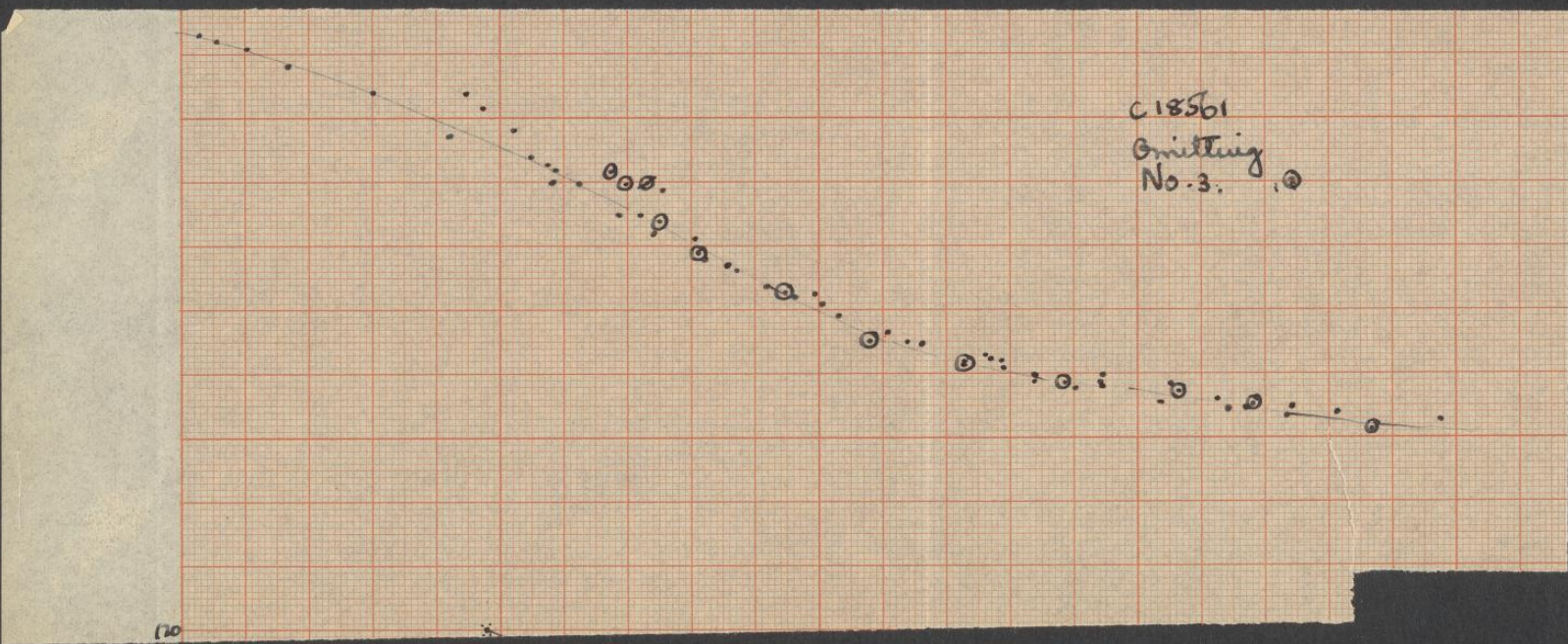
The "factor" is apparently correlated with line depth, greater depth corresponding to smaller factor.

Probably because wider lines go with deeper ones and the narrower a line, the more it is affected by seeing.

Plender's c 1856
Material for reduction

C 18561 Pleiades. 2 prism.

| No. | Line | λ | n | #1 (2.96) | | | Δm | n | #2 (3.81) | | | Δm | n | #3 (4.25) | | | Δm |
|-----|--------------|-----------|----------------|-----------|-----|-------|------------|--------------|-----------|-----|-------|------------|--------------|-----------|-----|-------|------------|
| | | | | m+n | [n] | [m+n] | | | m+n | [n] | [m+n] | | | m+n | [n] | [m+n] | |
| -3 | | | - | - | | | - | - | - | | | - | - | - | | | - |
| -2 | | | - | - | | | - | - | - | | | - | - | - | | | - |
| -1 | | | 2 | 6 | 420 | 326 | 94 | - | - | | | - | - | - | | | - |
| 0 | H ν | 3722 | 3 | 8 | 380 | 298 | 82 | - | - | | | - | - | - | | | - |
| 1 | H μ | 3734 | 4 | 9 | 360 | 284 | 76 | - | - | | | - | - | - | | | - |
| 2 | H γ | 3750 | 5 | 12 | 340 | 257 | 83 | 2 | 5 | 420 | 342 | 78 | 0 | 2 | - | 420 | - |
| 3 | H δ | 3771 | 6 | 15 | 326 | 238 | 88 | 1 | 6 | - | 326 | - | 1 | 3 | - | 380 | - |
| 4 | H ϵ | 3797 | 6 | 19 | 326 | 220 | 106 | 2 | 8 | 420 | 298 | 122 | 1 | 5 | - | 342 | - |
| 5 | H ζ | 3819 | 7 | 24 | 312 | 198 | 114 | 3 | 10 | 380 | 272 | 108 | 2 | 7 | 420 | 312 | 108 |
| 6 | H η | 3835 | 11 | 32 | 264 | 166 | 98 | 4 | 15 | 360 | 238 | 122 | 2 | 9 | 420 | 284 | 136 |
| 6a | | - | - | 40 | - | 138 | - | - | 21 | - | 210 | - | - | 12 | - | 257 | - |
| 7 | H ζ | 3889 | 22 | 47 | 206 | 115 | 91 | 10 | 27 | 272 | 185 | 87 | 5 | 15 | 342 | 238 | 104 |
| 7a | | - | - | 54 | - | 86 | - | - | 35 | - | 155 | - | - | 23 | - | 202 | - |
| 8 | H ϵ | 3970 | 38 | 58 | 144 | 60 | 84 | 20 | 42 | 216 | 131 | 85 | 12 | 29 | 257 | 177 | 80 |
| 9 | | 4026 | 59 | 61 | 52 | 32 | 20 | 43 | 48 | 128 | 112 | 16 | 29 | 34 | 177 | 159 | 18 |
| 10 | H δ | 4101 | 47 | 62 | 115 | 20 | 95 | 29 | 50 | 177 | 105 | 72 | 18 | 36 | 225 | 151 | 74 |
| 10a | | - | - | 62 | - | 20 | - | - | 52 | - | 96 | - | - | 38 | - | 144 | - |
| 11 | H γ | 4340 | 53 | 63 | 92 | 0 | 92 | 36 | 54 | 151 | 86 | 65 | 26 | 40 | 189 | 137 | 52 |
| 12 | | 4388 | 61 | 63 | 32 | 0 | 32 | 51 | 54 | 100 | 86 | 14 | 38 | 40 | 143 | 137 | 06 |
| 13 | | 4471 | - | - | - | - | - | 52 | 54 | 96 | 86 | 10 | 38 | 42 | 143 | 131 | 12 |
| 13a | | - | - | 63 | - | 0 | - | - | 54 | - | 86 | - | - | 42 | - | 131 | - |
| 13b | | - | - | 63 | - | 0 | - | - | 53 | - | 91 | - | - | 41 | - | 134 | - |
| 13c | | - | - | 62 | - | 20 | - | - | 48 | - | 112 | - | - | 35 | - | 155 | - |
| 14 | H β | 4861 | 40 | 50 | 137 | 105 | 32 | 21 | 35 | 211 | 155 | 56 | 18 | 24 | 186 | 198 | 83 |
| | | | $l+m+n = 67.5$ | | | | | $l+m+n = 69$ | | | | | $l+m+n = 69$ | | | | |
| | | | 67.5 | | | | | 68 | | | | | 67.5 | | | | |



Scale readings in
half millimeters

0 2 4 6 8 10

Intermittent in hundreds of a magnitude

#4 (4.02)

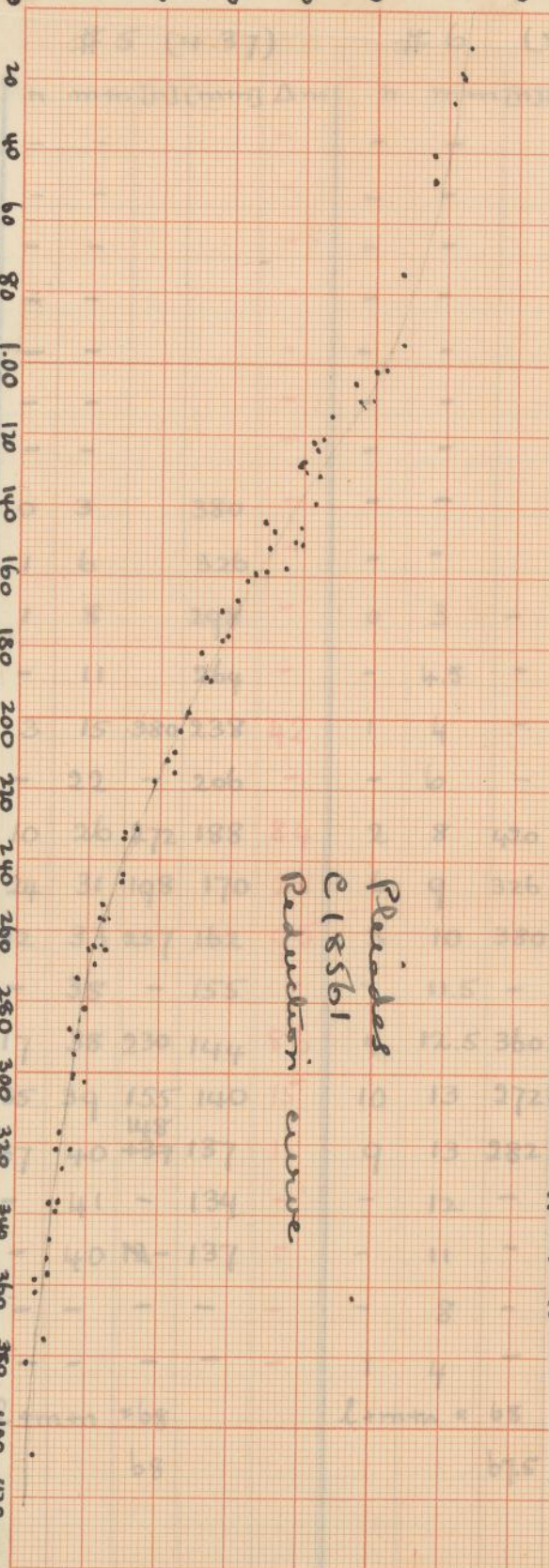
n m+n [n] [m+n]

| | | | |
|----|----|-----|-----|
| - | - | | |
| - | - | | |
| - | - | | |
| - | - | | |
| - | - | | |
| 2 | 5 | 420 | |
| 2 | 6 | 420 | 326 |
| 1 | 8 | - | 298 |
| 2 | 10 | 420 | 272 |
| 2 | 13 | 420 | 252 |
| - | 17 | - | 230 |
| 6 | 22 | 326 | 206 |
| - | 29 | - | 177 |
| 13 | 35 | 252 | 155 |
| 36 | 40 | 151 | 137 |
| 18 | 42 | 225 | 131 |
| - | 43 | - | 128 |
| 21 | 43 | 210 | 128 |
| 41 | 44 | 134 | 124 |
| 41 | 44 | 134 | 124 |
| - | 45 | - | 121 |
| - | 43 | - | 128 |
| - | 37 | - | 148 |
| 12 | 24 | 257 | 198 |

c+m+n = 68

67.5

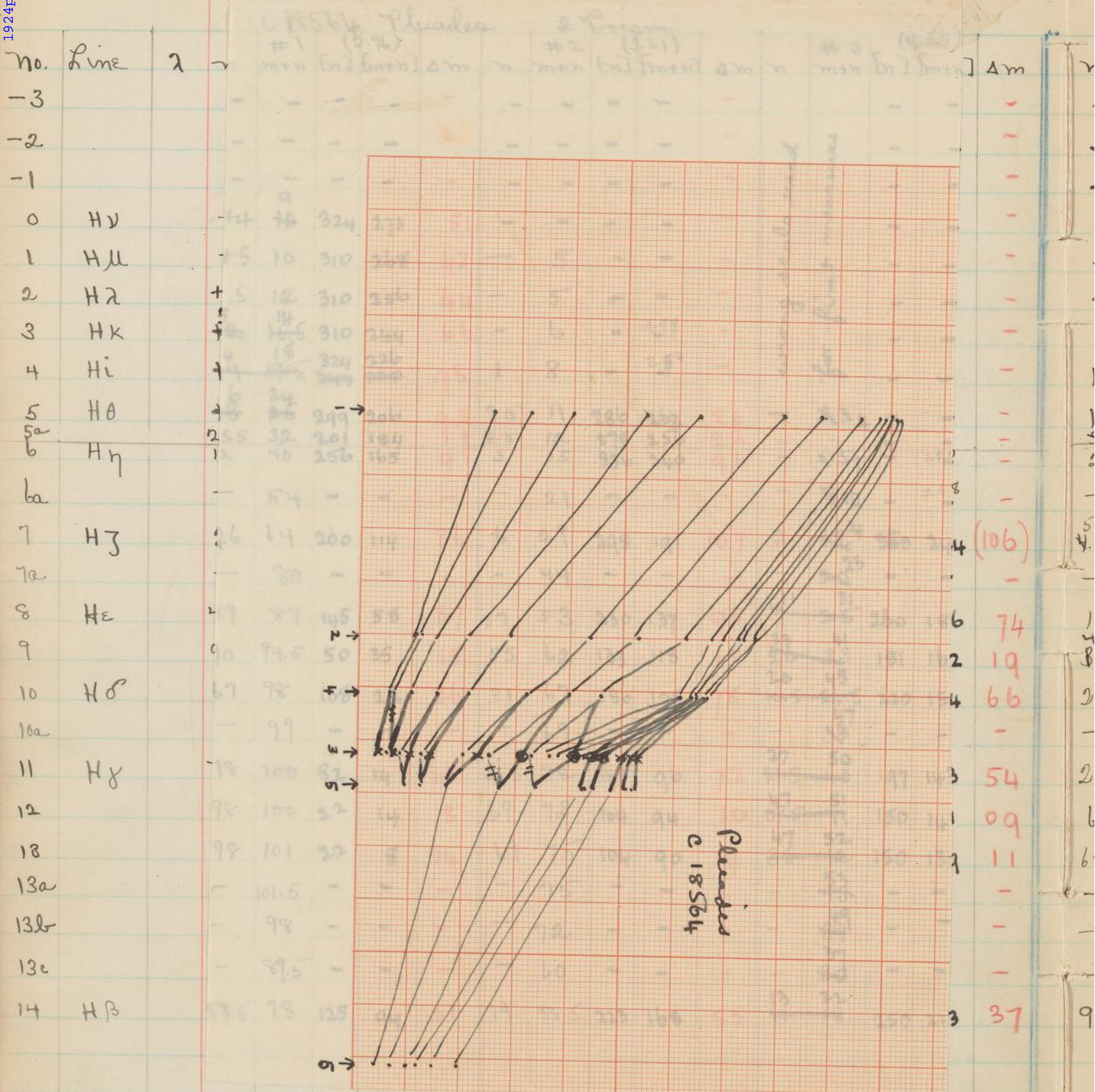
0 20 40 60 80 1.00 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

Periods
C 18561
Reduction curve

.43)

| m+n | Δm |
|-----|-----|
| - | -3 |
| - | -2 |
| - | -1 |
| - | 0 |
| - | 1 |
| - | 2 |
| - | 3 |
| - | 4 |
| - | 5 |
| 380 | 6 |
| 350 | 6a |
| 360 | 7 |
| 326 | 7a |
| 298 | 8 |
| 284 | 9 |
| 272 | 10 |
| 260 | 10a |
| 255 | 11 |
| 252 | 12 |
| 252 | 13 |
| 257 | 13a |
| 264 | 13b |
| 298 | 13c |
| 360 | 14 |

| #4 (4.02) | | | | | #5 (4.37) | | | | | #6 (5.43) | | | | |
|--------------|-----|-----|-------|------------|--------------|-----|-----------------------|-------|------------|--------------|------|-----|-------|------------|
| n | m+n | [n] | [m+n] | Δm | n | m+n | [n] | [m+n] | Δm | n | m+n | [n] | [m+n] | Δm |
| - | - | | | - | - | - | | | - | - | - | | | -3 |
| - | - | | | - | - | - | | | - | - | - | | | -2 |
| - | - | | | - | - | - | | | - | - | - | | | -1 |
| - | - | | | - | - | - | | | - | - | - | | | 0 |
| - | - | | | - | - | - | | | - | - | - | | | 1 |
| 2 | 5 | 420 | | - | - | - | | | - | - | - | | | 2 |
| 2 | 6 | 420 | 326 | 94 | - | - | | | - | - | - | | | 3 |
| 1 | 8 | - | 298 | - | 0 | 3 | | 380 | - | - | - | | | 4 |
| 2 | 10 | 420 | 272 | 148 | 1 | 6 | | 326 | - | - | - | | | 5 |
| 2 | 13 | 420 | 252 | 168 | 1 | 8 | | 298 | - | 0 | 3 | - | 380 | 6 |
| - | 17 | - | 230 | - | - | 11 | | 264 | - | - | 4.5 | - | 350 | 6a |
| 6 | 22 | 326 | 206 | 120 | 3 | 15 | 380 | 238 | 42 | 1 | 4 | - | 360 | 7 |
| - | 29 | - | 177 | - | - | 22 | - | 206 | - | - | 6 | - | 326 | 7a |
| 13 | 35 | 252 | 155 | 97 | 10 | 26 | 272 | 188 | 84 | 2 | 8 | 420 | 298 | 122 |
| 36 | 40 | 151 | 137 | 14 | 24 | 31 | 198 | 170 | 28 | 6 | 9 | 326 | 284 | 142 |
| 18 | 42 | 225 | 131 | 94 | 12 | 33 | 257 | 162 | 95 | 3 | 10 | 380 | 272 | 108 |
| - | 43 | - | 128 | - | - | 35 | - | 155 | - | - | 11.5 | - | 260 | 10a |
| 21 | 43 | 210 | 128 | 82 | 17 | 38 | 230 | 144 | 86 | 4 | 12.5 | 360 | 255 | 105 |
| 41 | 44 | 134 | 124 | 10 | 35 | 39 | 155 | 140 | 15 | 10 | 13 | 272 | 252 | 20 |
| 41 | 44 | 134 | 124 | 10 | 37 | 40 | 137 148 | 137 | 11 | 9 | 13 | 282 | 252 | 30 |
| - | 45 | - | 121 | - | - | 41 | - | 134 | - | - | 12 | - | 257 | 13a |
| - | 43 | - | 128 | - | - | 40 | 12 | 137 | - | - | 11 | - | 264 | 13b |
| - | 37 | - | 148 | - | - | - | - | - | - | - | 8 | - | 298 | 13c |
| 12 | 24 | 257 | 198 | 59 | - | - | - | - | - | 1 | 4 | - | 360 | 14 |
| $l+m+n = 68$ | | | | | $l+m+n = 68$ | | | | | $l+m+n = 68$ | | | | |
| 67.5 | | | | | 68 | | | | | 67.5 | | | | |

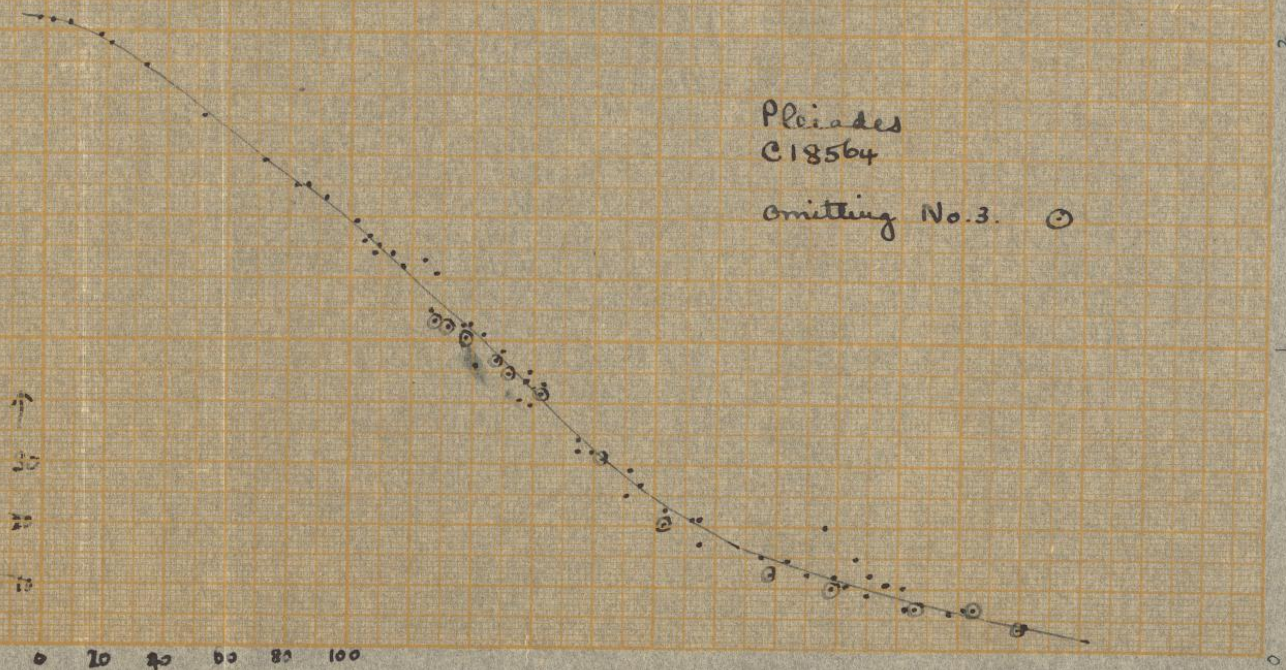


| No. | Line | λ | C 18564 Pleiades | | | | | 2 Prism. | | | | | # 3 (4.25) | | | | |
|-----|--------------|-----------|----------------------------|-------------------------------|-----|-------|------------|----------|-----------|-----|-------|------------|------------|-----------|-----|-------|------------|
| | | | n | #1 m+n | [n] | [m+n] | Δm | n | #2 m+n | [n] | [m+n] | Δm | n | #3 m+n | [n] | [m+n] | Δm |
| -3 | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| -2 | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| -1 | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 0 | H ν | | +4 | ⁹ 10 | 324 | 273 | 51 | - | - | - | - | - | - | - | - | - | - |
| 1 | H μ | | +5 | 10 | 310 | 268 | 42 | - | 5 | - | - | - | - | - | - | - | - |
| 2 | H γ | | +5.5 | 12 | 310 | 256 | 44 | - | 5 | - | - | - | - | - | - | - | - |
| 3 | H δ | | ⁵ 10 | ¹⁴ 10.5 | 310 | 244 | 66 | - | 6 | - | 299 | - | - | - | - | - | - |
| 4 | H ϵ | | ⁴ 14 | ¹⁸ 19.5 | 324 | 226 | 98 | 1 | 8 | - | 250 | - | - | - | - | - | - |
| 5 | H δ | | ⁶ 18 | ²⁴ 25 | 299 | 206 | 93 | 7.5 | 11 | 286 | 262 | 24 | - | 854 | - | - | - |
| 5a | | | 25.5 | 32 | 201 | 184 | 17 | 8.5 | 12 | 278 | 256 | 22 | - | - | - | - | - |
| 6 | H η | | 12 | 40 | 256 | 165 | 91 | 3 | 15 | 936 | 240 | 96 | - | 857 | - | 290 | - |
| 6a | | | - | 54 | - | - | - | - | 21 | - | - | - | - | 810 | - | 268 | - |
| 7 | H ζ | | 26 | 64 | 200 | 114 | 86 | 6 | 29 | 298 | 191 | 107 | 2 | 1214 | 950 | 244 | (106) |
| 7a | | | - | 80 | - | - | - | - | 44 | - | - | - | - | 223 | - | - | - |
| 8 | H ϵ | | 49 | 87 | 145 | 58 | 87 | 17 | 53 | 230 | 137 | 93 | 11 | 31 | 260 | 186 | 74 |
| 9 | | | 90 | 94.5 | 50 | 35 | 15 | 55 | 62 | 133 | 118 | 15 | 33 | 41 | 181 | 162 | 19 |
| 10 | H δ | | 67 | 98 | 108 | 22 | 86 | 31 | 67 | 186 | 108 | 78 | 20 | 45 | 220 | 154 | 66 |
| 10a | | | - | 99 | - | - | - | - | 69 | - | - | - | - | 47 | - | - | - |
| 11 | H γ | | 78 | 100 | 82 | 14 | 68 | 38.5 | 70 | 168 | 96 | 72 | 27 | 50 | 197 | 143 | 54 |
| 12 | | | 98 | 100 | 22 | 14 | 8 | 69 | 73 | 104 | 94 | 10 | 47 | 51 | 150 | 141 | 09 |
| 13 | | | 98 | 101 | 22 | 8 | 14 | 69 | 75 | 104 | 90 | 14 | 47 | 52 | 150 | 139 | 11 |
| 13a | | | - | 101.5 | - | - | - | - | 75 | - | - | - | - | 53 | - | - | - |
| 13b | | | - | 98 | - | - | - | - | 72 | - | - | - | - | 54 | - | - | - |
| 13c | | | - | 89.5 | - | - | - | - | 60 | - | - | - | - | 55 | - | - | - |
| 14 | H β | | 58.5 | 73 | 125 | 94 | 31 | 19 | 88.5 | 223 | 168 | 55 | 13 | 22 | 250 | 213 | 37 |

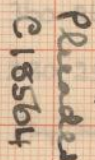
wrong scale used
for first measures

Pleiades
C18564

omitting No. 3. ☉



Internal difference in magnitudes



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

| (4.02) | | | | | (4.37) | | | | | (5.43) | | | | |
|--------|----------------|----------------|----------------|------------|--------|---------------|-----|-------|------------|--------|-----------------|-----|-------|------------|
| n | #4 m+n | [n] | [m+n] | Δm | n | #5 m+n | [n] | [m+n] | Δm | n | #6 m+n | [n] | [m+n] | Δm |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | -3 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | -2 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | -1 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | 0 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 1 | 6 | - | 299 | - | - | - | - | - | - | - | - | - | - | 4 |
| 1 | 7 | - | 290 | - | - | - | - | - | - | - | - | - | - | 5 |
| 56 | 658 | 298 | 280 | 18 | - | - | - | - | - | - | - | - | - | 5a |
| 2 | 10 | 360 | 267 | 93 | 2 | 9 | 360 | 324 | 36 | - | - | - | - | 6 |
| - | 8 | - | 226 | - | - | - | - | - | - | - | - | - | - | - |
| - | 15 | - | - | - | - | 12 | - | - | - | - | - | - | - | 6a |
| 5 | 26 | 314 | 216 | 98 | 6 | 17 | 298 | 230 | 68 | -4 | 4 | - | 324 | 7 |
| - | 40 | - | - | - | - | 26 | - | - | - | - | 7 | - | - | 7a |
| 3 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 18 | 40 | 267 | 164 | 103 | 7 | 34 | 290 | 179 | 111 | 2 | 10 | 360 | 267 | 93 |
| 4 | 58 | 145 | - | - | - | - | - | - | - | - | - | - | - | - |
| 89 | 46 | 324 | 126 | 119 | 31 | 42 | 186 | 160 | 26 | 8 | 12 | 280 | 256 | 24 |
| 23 | 61 | 210 | 121 | 89 | 14 | 45 | 244 | 154 | 90 | 4.5 | 15 | 324 | 244 | 80 |
| - | 63 | - | - | - | - | 48 | - | - | - | - | 18.5 | - | - | - |
| 28 | 64 | 194 | 114 | 90 | 18 | 51 | 226 | 141 | 85 | 4 | 15 | 324 | 240 | 84 |
| 60 | 64 | 123 | 114 | 99 | 46 | 52 | 151 | 139 | 12 | - | - | - | - | - |
| 62 | 65.5 | 119 | 111 | 88 | 48 | 53.5 | 147 | 136 | 11 | - | - | - | - | - |
| - | 66 | - | - | - | - | 55.5 | - | - | - | - | 15.5 | - | - | - |
| - | 62 | - | - | - | - | 54 | - | - | - | - | 14.5 | - | - | - |
| - | 51 | - | - | - | - | - | - | - | - | - | 12 | - | - | - |
| 9 | 31 | 274 | 186 | 88 | - | - | - | - | - | - | 8 | - | - | - |

General ledger of Pleiades plates

| Plate no. | Date | Prisms | Reductions | Additional notes | |
|-----------|--------------|--------|------------|---------------------|--------|
| C 18546 | 1926 Oct. 11 | 2 | | Presto | |
| 18549 | Oct. 15 | 2 | | Presto | |
| 18552 | Oct. 17 | 2 | 14, 2 | Presto | |
| 18555 | Oct. 19 | 2 | | " | |
| 18556 | Oct. 19 | 2 | | " | |
| 18557 | Oct. 26 | 2 | 12, 102 | | o Ceti |
| 18561 | Oct. 28 | 2 | 14, 8 | " | o Ceti |
| 18562 | " " | 2 | | " | |
| 18563 | Nov. 4 | 2 | | " | |
| 18564 | " | 2 | 14, 10 | " | |
| 18565 | " | 2 | | " | |
| 18566 | " | 2 | | " | |
| 18567 | " | 2 | | " | |
| 18568 | " | 2, 1 | 15, 4 | " | o Ceti |
| 18569 | " | 2 | | " | |
| 18570 | " | 2 | | " | |
| 18572 | Nov. 6 | 1 | | Pan | o Ceti |
| 18579 | Nov. 11 | 1 | 13, 6 | Presto | o Ceti |
| 18582 | Nov. 17 | | | " | o Ceti |

General ledger of Mura plates

| Plate No. | Date | Prisms | Standard | Reductions | |
|-----------|--------------|--------|---------------------|------------|--------------|
| 18557 | 1926 Oct. 26 | 2 | Pleiades | 12, 118 | |
| 18558 | Oct. 27 | 2 | Pleiades | | |
| 18560 | Oct. 28 | 2 | " | | Panchromatic |
| 18561 | " " | 2 | Pleiades | 20, 2 | |
| 18568 | Nov. 4 | 2 | Pleiades | 15, 16 | |
| 18572 | Nov. 6 | 1 | Pleiades | | |
| 18579 | Nov. 11 | 1 | Pleiades | 13, 6 | |
| 18582 | Nov. 17 | 1 | Pleiades | | |
| 18586 | Nov. 19 | 1 | β Orionis | | |
| 18587 | Nov. 19 | 1 | β Orionis | | |
| 18590 | Nov. 20 | 1 | α Cygni | 20, 22 | |
| 18591 | " " | 1 | " | | |
| 18592 | Nov. 23 | 1 | | | |
| 18593 | " " | 1 | | | |
| 18595 | Nov. 24 | 1 | | | |
| 18596 | " " | 1 | | | |
| 18599 | Nov. 25 | 1 | | | |
| 18599 | " " | 1 | | | |
| 18601 | Nov. 27 | 1 | α Persei | 20 | |
| 18602 | " " | 1 | Pleiades | 12, 24 | |
| 18614 | Dec. 2 | 1 | Pleiades | | |
| 18680 | Dec. 4-5 | 1 | Pleiades | | |
| 18644 | Dec. 6-7 | 1 | Pleiades | | |
| 18646 | Dec. 8-9 | 1 | Pleiades | | |
| 18650 | " 11-12 | 1 | Pleiades | | |
| 18655 | " 12-13 | 1 | Pleiades | | |
| 18672 | " 18-19 | 1 | δ Androm | | |
| 18673 | " 19-20 | 1 | Pleiades | | |
| 18674 | " 19-20 | 1 | Pleiades | | |

General Ledger of mira plates

| Plate No | Date | Prisms | Standard | Reductions |
|----------|-----------------|--------|----------|------------|
| 18676 | 1926 Dec. 22-23 | 1 | Pleiades | |
| 18679 | " 23-24 | 1 | " | |
| 18682 | " 25-26 | 1 | " | |
| 18683 | " 26-27 | 1 | " | |
| 18689 | " 27-28 | 1 | " | |
| 18695 | " 29-30 | 1 | " | |
| 18700 | " 30 | 1 | " | |

General Ledger of Pleiades results.

| | 18564 | 18567 | 18552 | 18561 | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18596 | 185 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| -3 | | | | | 09 | 08 | | 11 | | | | 15 | |
| -2 | | | | | 09 | 13 | 11 | 15 | 16 | | | 15 | |
| -1 | | | | 94 | 08 | 16 | 13 | 15 | 18 | | | 27 | |
| 0 | 51 | | | 82 | 20 | 22 | 18 | 30 | 34 | | 34 | 23 | 3 |
| 1 | 42 | | 80 | 76 | 36 | 38 | 44 | 44 | 31 | 27 | 36 | 42 | 3 |
| 2 | 44 | | 88 | 83 | 51 | 51 | 60 | 58 | 38 | 34 | 55 | 54 | 8 |
| 3 | 66 | | 96 | 88 | 68 | 68 | 75 | 67 | 53 | 52 | 80 | 70 | 4 |
| 4 | 98 | | 96 | 106 | 80 | 79 | 82 | 85 | 66 | 67 | 87 | 81 | 5 |
| 5 | 93 | | 16 | 114 | 08 | 12 | 14 | 15 | 114 | 79 | 14 | 22 | 5 |
| 5a | 17 | | | | | | | | | | | | 1 |
| 6 | 91 | 109 | 87 | 98 | 83 | 75 | 76 | 83 | 70 | 68 | 81 | 84 | 5 |
| 6a | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 86 | 102 | 102 | 91 | 89 | 82 | 73 | 79 | 76 | 88 | (65) | 77 | 5 |
| 7a | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 87 | 94 | 92 | 84 | 109 | 92 | 68 | 71 | 73 | 766 | (59) | 115 | 5 |
| 8a | 15 | - | 16 | 20 | 28 | 28 | 46 | 19 | 22 | - | (-) | 39 | 1 |
| 10 | 86 | 84 | 90 | 95 | 82 | 71 | 81 | 84 | 67 | 782 | (49) | 84 | 5 |
| 10a | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 68 | 67 | (75) | 92 | | | 60 | - | 53 | 720 | (44) | 74 | 4 |
| 12 | 8 | 06 | (25) | 32 | | | | | | | | | 0 |
| 13 | 14 | - | (25) | - | | | | | | | | | 10 |
| 13a | - | - | - | - | | | | | | | | | - |
| 13b | - | - | - | - | | | | | | | | | - |
| 13c | - | - | - | - | | | | | | | | | - |
| 14 | 31 | 34 | 38 | 32 | | | | | 39 | 18 | 34 | - | 20 |

| | 18564 | 18557 | 18552 | 18561 | Mean | 18563 | 18579 | 18602 | 18610 | 18620 | 18646 | 18650 | 18696 | Mean |
|----|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 6 | | | | | | 08 | 07 | | 10 | | | | 13 | 09 |
| 5 | | | | | | 08 | 11 | 10 | 13 | 14 | | | 13 | 12 |
| 5 | | | | 58 | (58) | 07 | 14 | 11 | 13 | 15 | | | 22 | 14 |
| 7 | | | | 53 | | 17 | 18 | 15 | 24 | 27 | | 27 | 27 | 24 |
| 3 | 37 | | 52 | 50 | | 28 | 30 | 33 | 33 | 25 | 22 | 28 | 32 | 31 |
| 2 | 32 | | 56 | 53 | 52 | 37 | 37 | 42 | 41 | 30 | 27 | 40 | 39 | 39 |
| 4 | 83 | | 59 | 56 | 56 | 47 | 47 | 50 | 46 | 39 | 38 | 52 | 48 | 47 |
| 0 | 46 | | 59 | 62 | 60 | 52 | 52 | 53 | 54 | 46 | 46 | 55 | 53 | 51 |
| 31 | 59 | | 59 | 65 | 61 | 07 | 10 | 42 | 13 | 11 | 51 | 12 | 18 | 12 |
| 2 | 58 | | 59 | 59 | 59 | 53 | 50 | 50 | 53 | 48 | 47 | 53 | 54 | 51 |
| 4 | 14 | 63 | 55 | 59 | 59 | 53 | 50 | 50 | 53 | 48 | 47 | 53 | 54 | 51 |
| | 57 | | | | | - | - | - | - | - | - | - | - | - |
| 7 | 55 | 61 | 61 | 57 | 58 | 56 | 53 | 49 | 52 | 50 | 56 | 45 | 57 | 52 |
| | - | - | - | - | | - | - | - | - | - | - | - | - | - |
| 5 | 55 | 58 | 57 | 54 | 56 | 63 | 57 | 47 | 48 | 49 | 46 | 42 | 65 | 55 |
| 7 | 13 | - | 14 | 17 | 15 | 23 | 23 | 35 | 16 | 18 | - | - | 30 | 24 |
| 4 | 55 | 54 | 56 | 52 | 56 | 53 | 48 | 53 | 54 | 46 | 53 | 36 | 54 | 51 |
| | - | - | - | - | | - | - | - | - | - | - | - | - | - |
| 4 | 47 | 46 | 50 | 57 | 50 | | | 42 | | | 17 | 33 | 49 | 46 |
| | 07 | 05 | 21 | 26 | 15 | | | | | | | | | - |
| | 12 | - | 21 | - | 16 | | | | | | | | | - |
| | - | - | - | - | | | | | | | | | | - |
| | - | - | - | - | | | | | | | | | | - |
| | - | - | - | - | | | | | | | | | | - |
| | 25 | 27 | 30 | 26 | 27 | | | | | 30 | 15 | 27 | | (24) |

General Ledger of Phiadis results

| | 18564 | 18557 | 18552 | 18561 | 18568 #2 | 18579 | 18602 | 18614 | 18644 | 18646 #2 | 18650 | 18630 | 185 |
|-----|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------------|-------|-------|-----|
| -3 | | | | | | | | | | | | 596 | |
| -2 | | | 30 | | 15 | 12 | | | | | | 11 | |
| -1 | | | 45 | | 20 | 15 | 34 | 12 | 16 | | | 14 | 27 |
| 0 | | | 45 | | 26 | 23 | 42 | 23 | 18 | 21 | | 25 | 34 |
| 1 | | | 58 | | 46 | 37 | 57 | 53 | 24 | 41 | | 37 | 43 |
| 2 | | | 82 | 78 | 60 | 54 | 58 | 59 | 31 | 52 | | 45 | 67 |
| 3 | | | 108 | | 68 | 72 | 73 | 75 | 38 | 69 | 93 | 57 | 79 |
| 4 | | | 123 | 122 | 78 | 85 | 82 | 77 | 53 | 75 | 129 | 80 | 89 |
| 5 | | | 148 | 108 | 16 | 16 | 16 | 15 | 66 | 75 | 29 | 08 | 16 |
| 6 | 96 | | 118 | 122 | 79 | 87 | 87 | 83 | 70 | 76 | 94 | 81 | 88 |
| 6a | | | | | - | - | - | - | 3 | - | | - | |
| 7 | 107 | 134 | 94 | 87 | 82 | 86 | 83 | 87 | 76 | 81 | 94 | 85 | 87 |
| 7a | | - | | | - | - | - | - | 4 | - | | - | |
| 8 | 93 | 119 | 92 | 85 | 88 | 82 | 82 | 85 | 73 | 76 | 96 | 86 | 95 |
| 9 | 15 | - | 13 | 16 | 15 | 17 | 16 | 17 | 22 | 10 | | 17 | 14 |
| 10 | 78 | 88 | 84 | 72 | 78 | 71 | 73 | 82 | 67 | 69 | 76 | 75 | 82 |
| 10a | | - | | | - | - | - | - | 10 | - | | - | |
| 11 | 72 | 78 | 81 | 65 | 56 | 55 | 60 | 62 | 53 | 50 | 55 | 62 | 80 |
| 12 | 10 | 12 | 10 | 11 | 06 | 06 | 09 | 07 | 10 | - | - | 18 | 14 |
| 13 | 14 | | 10 | 10 | 06 | 09 | 17 | 07 | 10 | - | - | 12 | 14 |
| 13a | | | | | | | | - | 00 | - | - | | |
| 13b | | | | | | | | - | 00 | - | - | | |
| 13c | | | | | | | | - | 4 | - | - | | |
| 14 | 55 | 82 | | 56 | 20 | 45 | 51 | 49 | 39 | 51 | 57 | 51 | 4 |

| 630 1596 | 18564 | 18557 | 18552 | 18561 | Mean | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | Mean |
|-------------|-------|-------|-------|-------|------|-------|-------|-------|-------|---------------|-------|-------|-------|------|
| - | - | - | 24 | - | (24) | 13 | 10 | - | - | - | - | - | 10 | 12 |
| 27 | - | - | 34 | - | (34) | 17 | 13 | 27 | 10 | 14 | - | - | 12 | 16 |
| 34 | - | - | 36 | - | (36) | 21 | 19 | 32 | 19 | 15 | - | - | 21 | 21 |
| 43 | - | - | 41 | - | (41) | 35 | 29 | 41 | 39 | 20 | 18 | - | 29 | 33 |
| 67 | - | - | 53 | 51 | 52 | 42 | 39 | 41 | 42 | 25 | 31 | - | 34 | 39 |
| 79 | - | - | 63 | - | (63) | 47 | 48 | 49 | 50 | 30 | 38 | 57 | 41 | 49 |
| 89 | - | - | 68 | 67 | 68 | 51 | 54 | 53 | 51 | 39 | 47 | 70 | 52 | 54 |
| 16 | - | - | - | 63 | (63) | 14 | 14 | 14 | 13 | 46 | 50 | 23 | 07 | 14 |
| 88 | 59 | - | 66 | 67 | 64 | 52 | 55 | 55 | 53 | 48 | 50 | 58 | 53 | 53 |
| - | - | - | - | - | - | - | - | - | - | 2 | - | - | - | - |
| 87 | 63 | 71 | 58 | 55 | 62 | 53 | 55 | 53 | 55 | 50 | 53 | 58 | 54 | 54 |
| - | - | - | - | - | - | - | - | - | - | 4 | - | - | - | - |
| 95 | 58 | 67 | 57 | 54 | 59 | 56 | 53 | 53 | 54 | 49 | 50 | 59 | 55 | 54 |
| 14 | 13 | - | 71 | 14 | 12 | 13 | 14 | 14 | 14 | 18 | 09 | - | 14 | 14 |
| 82 | 51 | 56 | 54 | 48 | 52 | 51 | 48 | 49 | 53 | 46 | 47 | 50 | 50 | 53 |
| - | - | - | - | - | - | - | - | - | - | 60 | - | - | - | - |
| 80 | 48 | 51 | 53 | 45 | 49 | 40 | 40 | 42 | 44 | 39 | 37 | 40 | 44 | 42 |
| 14 | 09 | 10 | 09 | 12 | 10 | 05 | 05 | 08 | 06 | 09 | - | - | 15 | 09 |
| 14 | 12 | - | 09 | 09 | 10 | 05 | 08 | 14 | 06 | 09 | - | - | 10 | 09 |
| - | - | - | - | - | - | - | - | - | - | 00 | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | 00 | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | 04 | - | - | - | - |
| 51 | 40 | 53 | - | 40 | 44 | 17 | 34 | 37 | 36 | 30 | 37 | 37 | - | 33 |

General Ledger of Pleiades results

| | 18564 | 18557 | 18552 | 18561 | ^{#3} 18568 | 18577 | 18602 | 18614 | 18644 | ^{#3} 18646 | 18650 | 18630 | 18656 |
|-----|-------|-------|---------------------|-------|------------------------|-------|-------|-------|-------|------------------------|-------|-------|-------|
| -3 | | | | | 23 | 14 | 32 | | | | | 596 | |
| -2 | | | | | 15 | 15 | 30 | | | | | | |
| -1 | | | | | 13 | 24 | 35 | 31 | | | | | |
| 0 | | | | | 25 | 23 | 39 | 31 | 28 | | | 28 | .. |
| 1 | | | | | 34 | 47 | 51 | 38 | 25 | 25 | | 37 | 34 |
| 2 | | | | | 45 | 51 | 63 | 56 | 26 | 2536 | | 37 | 52 |
| 3 | | | 54 | | 60 | 65 | 81 | 69 | 42 | 251 | | 59 | 60 |
| 4 | | | 75 | | 70 | 73 | 89 | 75 | 51 | 5463 | | 64 | 95 |
| 5 | | | ²⁴ 75 | 108 | 10 | 13 | 13 | 14 | 51 | 52 | 20 | 17 | 21 |
| 6 | | | 96 | 136 | 72 | 90 | 81 | 69 | 59 | 72 | 100 | 63 | 84 |
| 6a | | | | | - | - | - | - | 5 | - | | - | |
| 7 | (106) | 66 | 86 | 104 | 66 | 90 | 88 | 66 | 65 | 60 | 75 | 72 | 62 |
| 7a | | - | | | - | - | - | - | 6 | - | | - | |
| 8 | 74 | 84 | 72 | 80 | 67 | 88 | 80 | 70 | 67 | 73 | 68 | 61 | 64 |
| 9 | 19 | - | 16 | 18 | 15 | 12 | 10 | 12 | 16 | 13 | 12 | 15 | 16 |
| 10 | 66 | 76 | 69 | 70 | 63 | 78 | 67 | 60 | 58 | 60 | 65 | 57 | 61 |
| 10a | | - | | | - | - | - | - | 12 | - | - | - | |
| 11 | 54 | 65 | 58 | 52 | 50 | 62 | 57 | 48 | 40 | 51 | 52 | 48 | 49 |
| 12 | 09 | 12 | 13 | 6 | 08 | 04 | 09 | 11 | 13 | - | | 08 | 11 |
| 13 | 11 | | 13 | 12 | 12 | 04 | 10 | 11 | 09 | - | 05 | 12 | 05 |
| 13a | | | | | | | | | 05 | - | | | |
| 13b | | | | | | | | | 04 | - | | | |
| 13c | | | | | | | | | 03 | - | | | |
| 14 | 37 | 33 | 21 | 27 | 18 | 49 | 59 | 29 | 23 | 32 | 22 | 27 | 23 |

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page 118

| | 18564 | 18557 | 18552 | 18561 | mean | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | |
|-----|-------|-------|-------|-------|------|------------------|-------|-------|-------|---------------|-------|-------|-------|----|
| 0 | - | - | - | - | - | 19 | 42 | 26 | | | | | | 29 |
| 596 | - | - | - | - | - | 13 | 13 | 24 | | | | | | 16 |
| | - | - | - | - | - | 11 | 20 | 28 | 25 | | | | | 18 |
| " | - | - | - | - | - | 21 | 19 | 30 | 25 | | | | | 25 |
| 34 | - | - | - | - | - | 27 | 35 | 37 | 30 | 23 | | 23 | 27 | 28 |
| 52 | - | - | - | - | - | 34 | 37 | 44 | 40 | 21 | 21 | 29 | 38 | 34 |
| 60 | - | - | 39 | - | (39) | 42 | 45 | 53 | 47 | 21 | 28 | 42 | 42 | 43 |
| 95 | - | - | 50 | - | (50) | 48 48 | 49 | 56 | 50 | 32 | 37 | 45 | 58 | 48 |
| 21 | - | - | 20 | 63 | 41 | 09 | 11 | 11 | 12 | 37 | 44 | 17 | 14 | 13 |
| 84 | - | - | 56 | 71 | 63 | 48 | 56 | 52 | 47 | 42 | 48 | 60 | 44 | 50 |
| | - | - | - | - | - | - | - | - | - | 45 | - | - | - | - |
| 62 | | 46 | 55 | 61 | 54 | 46 | 56 | 56 | 46 | 45 | 42 | 50 | 48 | 48 |
| | - | - | - | - | - | - | - | - | - | 45 | - | - | - | - |
| 68 | 49 | 54 | 48 | 52 | 51 | 46 | 56 | 52 | 48 | 46 | 49 | 47 | 43 | 48 |
| 15 | 16 | - | 14 | 15 | 15 | 43 43 | 10 | 09 | 10 | 14 | 11 | 10 | 13 | 11 |
| 61 | 46 | 50 | 47 | 49 | 48 | 44 | 51 | 46 | 42 | 41 | 42 | 45 | 41 | 44 |
| | - | - | - | - | - | - | - | - | - | 45 | - | - | - | - |
| 49 | 39 | 45 | 41 | 38 | 41 | 37 | 44 | 41 | 36 | 31 | 37 | 38 | 36 | 37 |
| 1 | 08 | 11 | 11 | 05 | 09 | 07 | 04 | 08 | 10 | 11 | | - | 07 | 08 |
| 05 | 10 | - | 11 | 10 | 10 | 10 | 04 | 09 | 10 | 08 | | 4 | 10 | 09 |
| | - | - | - | - | - | | | | | 45 | | - | - | - |
| | - | - | - | - | - | | | | | 44 | | - | - | - |
| | - | - | - | - | - | | | | | 45 | | - | - | - |
| 23 | 29 | 26 | 18 | 22 | 24 | 15 | 36 | 42 | 23 | 19 | 26 | 18 | 22 | 24 |

General Ledger of Mra results

Continued
on page 50

| 1926 | Oct. 26 | 27 | 28 | 28 | Nov. 4 | 6 | " | 17 | 19 | 1 |
|------|---------|-------|-------|-------|--------|-------|-------|-------|-------|-----|
| C | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18586 | 185 |

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| 19 | 20 | 20 | 23 | 23 | 24 | 24 | 25 | 25 | 27 | 27 |
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| 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 | 18602 |
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| 74 | | | | | | | | | | |
| 52 | | | | | | | | | | |
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| -112 | | | | | | | | | | |
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| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18586 | 185 |
|-------|------------------|-------|-------|------------------|-------|-------|-------|-------|-------|-----|
| i | | | | | 24 | | 08 | | | |
| j | | | | | 30 | | 36 | | | |
| 2 | +49 | | | | 49 | | 28 | | | |
| 3 | 26 | | | | 26 | | 28 | | | |
| 4 | +38 | | | | +38 | | +76 | | | |
| 5 | | | | -149 | -150 | | -176 | | | |
| 6 | | | | | +05 | | 00 | | | |
| 7 | | | | | 34 | | +31 | | | |
| 8-9 | | | | | +38 | | +36 | | | |
| 9X | -34 | | | | -27 | | -36 | | | |
| 9a | | | | | +27 | | +23 | | | |
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| d | | | | | 60 | | 80 | | | |
| e | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 10a | | | | | 138 | | | | | |
| b | | | | | 65 | | 80 | | | |
| c | | | | | 73 | | 103 | | | |
| d | | | | | 42 | | 48 | | | |
| e | | | | | 13 | | 22 | | | |
| f | | | | | 52 | | 54 | | | |
| g | | | | | 95 | | 118 | | | |
| 11 | | | | | 166 | | | | | |
| 12-14 | { 97 72 | | | { 95 55 55 | 32 | | 48 | | | |
| 16 | | | | | 25 | | 38 | | | |
| 17-19 | { 40 28 57 | | | { 69 49 69 | 14 | | 21 | | | |
| 20-21 | { 80 57 | | | { 69 49 | 23 | | 32 | | | |
| 22-23 | { 36 24 | | | { 15 29 | 05 | | 05 | | | |
| 24 | 08 | | | 00 | 05 | | | | | |

| 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 | 18602 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
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| 48 | | | | | | | | | | |
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| 45 | | | | | | | | | | |
| +54 | | | | | | | | | | |
| -115 | | | | | | | | | ? | ? |
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| 52 | | | | | | | | | | |
| +63 | | | | | | | | | | |
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| 82 | | | | | | | | | | |
| 212 | | | | | | | | | | |
| 188 | | | | | | | | | | |
| 66 | | | | | | | | | | |
| 92 | | | | | | | | | | |
| 38 | | | | | | | | | 24 | |
| 16 | | | | | | | | | | |
| 34 | | | | | | | | | | |
| 112 | | | | | | | | | | |
| 180 | | | | | | | | | | |
| 29 | | | | | | | | | 13,49 | |
| 27 | | | | | | | | | 09 | |
| 04 | | | | | | | | | 04,08 | |
| 13,22 | | | | | | | | | 25,12 | |
| 09 | | | | | | | | | | |
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| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18586 | 18587 |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 25 | +15 | | | | | | | | | |
| 26 | 36 | | | 64 | 18 | | 29 | | | |
| 27 | 36 | | | 44 | | | | | | |
| 28 | 15 | | | 44 | | | | | | |
| 29 | 22 | | | 42 | | | | | | |
| 30 | 43 | | | 28 | 16 | | 20 | | | |
| 31 | 15 | | | 42 | 11 | | | | | |
| 32 | 31 | | | 57 | 26 | | 25 | | | |
| 33 | 15 | | | | 07 | | 00 | | | |
| 34 | 51 | | | 69 | 41 | | 40 | | | |
| 35 | +80 | | | +89 | +37 | | +40 | | | |
| 36 | -14 | | | | -07 | | -11 | | | |
| 37 | +30 | | | +32 | | | +11 | | | |
| 38 | 30 | | | 32 | | | | | | |
| 39 | 58 | | | 61 | 34 | | 39 | | | |
| 40 | 37 | | | 61 | | | | | | |
| 41 | 22 | | | 19 | 03 | | 00 | | | |
| 42 | 29 | | | 47 | 18 | | 16 | | | |
| 43 | 35 | | | 47 | 15 | | 17 | | | |
| 44 | 59 | | | 68 | 17 | | 25 | | | |
| 45 | 28 | | | 28 | 09 | | | | | |
| 46 | 19 | | | 07 | 00 | | 00 | | | |
| 47 | 41 | | | 39 | 15 | | 16 | | | |
| 48 | 77 | | | 68 | 50 | | 56 | | | |
| 49 | 40 | | | 31 | 13 | | 16 | | | |
| 50 | 12 | | | 12 | 04 | | | | | |
| 51 | 32 | | | 19 | | | +20 | | | |
| 52 | +30 | | | +11 | 07 | | | | | |
| 53 | -237 | | | -214 | -167 | | -180 | | | |
| 54 | +05 | | | +06 | +11 | | +06 | | | |

| 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 | 18602 |
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| 22 | | | | | | | | | 26 | 38 |
| 18 | | | | | | | | | 17 | |
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| 08 | | | | | | | | | | |
| 17 | | | | | | | | | 28 | 38 |
| 04 | | | | | | | | | 07 | 24 |
| +30 | | | | | | | | | +42 | 57 |
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| +24 | | | | | | | | | +44 | |
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| 10 | | | | | | | | | 21 | |
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| 07 | | | | | | | | | | 18 |
| | | | | | | | | | +12 | 4 |
| +09 | | | | | | | | | | +08 |
| -164 | | | | | | | | | -160 | -186 |
| +21 | | | | | | | | | +19 | +09 |

| | 18557 | 18558 | 18560 | 18561 | 18568 | 185 ⁷² 68 | 18579 | 18582 | 18586 | 18587 |
|-----|-------|-------|-------|-------|-------|---------------------------------|-------|-------|-------|-------|
| 55 | +30 | | | - | | | | | | |
| 56 | 37 | | | 65 | } 24 | | } 30 | | | |
| 57 | 50 | | | 50 | | | | 30 | | |
| 58 | 28 | | | | | | | | | |
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| 60 | 22 | | | | | | | | | |
| 61 | 28 | | | | | | | | | |
| 62 | 22 | | | | | | | | | |
| 63 | 35 | | | 26 | 15 | | 19 | | | |
| 64 | 22 | | | 19 | | | | | | |
| 65 | 35 | | | 19 | | | | | | |
| 66 | 47 | | | 37 | 25 | | 33 | | | |
| 67 | 40 | | | 30 | 19 | | 33 | | | |
| 68 | 55 | | | 49 | 21 | | 33 | | | |
| 69 | +27 | | | +12 | | | | | | |
| 69a | -05 | | | +12 | +06 | | +10 | | | |
| 70 | +27 | | | +23 | | | | | | |
| 71 | 47 | | | 30 | 19 | | 27 | | | |
| 72 | 32 | | | 37 | | | 16 | | | |
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| 82 | 43 | | | | | | | | | |
| 83 | 57 | | | 34 | } 25 | | } 00 | | | |

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| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18583 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 84 | 31 | | | 22 | | | | | |
| 85 | 25 | | | 27 | | | | | |
| 86 | 31 | | | 21 | } 14 | | } 22 | | |
| 87 | 31 | | | 21 | | | | | |
| 88 | 54 | | | 39 | 22 | | 25 | | |
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| 90 | 41 | | | 32 | 14 | | | | |
| 91 | 19 | | | 21 | 12 | | | | |
| 92 | 40 | | | 21 | | | | | |
| 93 | 59 | | | 27 | 24 | | 33 | | |
| 94 | 40 | | | 39 | | | | | |
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| 98 | 29 | | | 18 | | | | | |
| 99 | 34 | | | 26 | | | | | |
| 100 | 59 | | | 51 | 27 | | | | |
| 101 | 81 | | | 51 | 35 | | 44 | | |
| 102 | 50 | | | 44 | 31 | | 35 | | |
| 103 | 70 | | | 76 | | | | | |
| 104 | 206 | | | 140 | 71 | | 106 | | |
| 105 | 44 | | | 41 | 21 | | 30 | | |
| 106 | 38 | | | 41 | | | | | |
| 107 | 33 | | | 30 | | | } 11 | | |
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| 111 | 58 | | | 47 | 23 | | 36 | | |
| 112 | 41 | | | 42 | } 21 | | } 25 | | |
| 113 | 41 | | | 36 | | | | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601/02 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|
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| | | 92 | | | | | | | | 23 |
| | | 32 | | | | | | | | 40 41 |
| | | 12 | | | | | | | | 25 10 |
| | | 08 | | | | | | | | 10 |
| | | 23 | | | | | | | | } 34 |
| | | 35 | | | | | | | | 46 50 |

| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18 |
|---------|-------|-------|-------|--------|-------|-------|-------|-------|----|
| 114 | 36 | | | 28 | | |) | | |
| 115 | 21 | | | 15 | } 09 | | } 19 | | |
| 116 | 17 | | | 20 | | | | | |
| 117 | 17 | | | 20 | | | | | |
| 118 | 52 | | | 47 | } 32 | | } 41 | | |
| 119 | 63 | | | 47 | | | | | |
| 120 | 51 | | | 32 | } 24 | | } 30 | | |
| 121 | 41 | | | 32 | | | | | |
| 122 | 51 | | | 40 | | | | | |
| 123 | 63 | | | 58 | 28 | | 39 | | |
| 124 | 36 | | | 28 | 18 | | 20 | | |
| 124a | | | | 51 | | | | | |
| 125 | 63 | | | 51 | 28 | | 39 | | |
| 126 | 55 | | | 40 | | | | | |
| 127 | 55 | | | | | | | | |
| 128 | 61 | | | 50 | 26 | | 28 | | |
| 129 | 55 | | | 44 | | | | | |
| 130 | 73 | | | 50 | 31 | | 36 | | |
| 131 | 45 | | | 44 | } 25 | | } 27 | | |
| 132 | 35 | | | 36 | | | | | |
| 133 | 40 | | | 36 | | | | | |
| 133a, b | | | | 28, 28 | | | | | |
| 134 | 39 | | | 36 | 27 | | 41 | | |
| 135 | 34 | | | 22 | 27 | | 30 | | |
| 136 | +17 | | | +08 | +17 | | +24 | | |
| 137 | -32 | | | -30 | | | -104 | | |
| 138 | -177 | | | -147 | -103 | | -101 | | |
| 139 | +25 | | | +22 | +17 | | +14 | | |
| 140 | 34 | | | 40 | 32 | | 38 | | |
| 141 | 43 | | | | | | | | |
| 142 | 48 | | | 53 | 24 | | 33 | | |
| 143 | 29 | | | 32 | | | | | |

18586 18587 18590 18591 18592 18593 18595 18596 18597 18599 18601 18602

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| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18 |
|-----|---------------------|-------|-------|-------|-------|-------|-------|-------|----|
| 144 | 34 | | | 37 | | | 19 | | |
| 145 | 29 | | | 32 | | | 08 | | |
| 146 | 29 | | | 37 | 13 | | | | |
| 147 | 24 | | | 17 | | | | | |
| 148 | 11 | | | 17 | 03 | | 03 | | |
| 149 | 07 | | | 13 | | | | | |
| 150 | 32 | | | 37 | 16 | | 14 | | |
| 151 | 20 | | | | | | | | |
| 152 | 24 | | | 3 | | | | | |
| 153 | 32 | | | 37 | 18 | | } 17 | | |
| 154 | 46 | | | 42 | 28 | | 30 | | |
| 155 | 45 | | | 37 | | | | | |
| 156 | 45 | | | 37 | } 21 | | | | |
| 157 | 60 | | | 42 | | | | | |
| 158 | 60 | | | 46 | } 26 | | } 30 | | |
| 159 | 24 | | | 22 | | | | | |
| 160 | 19 | | | 22 | } 08 | | } 02 | | |
| 161 | 60 | | | 46 | | | | | |
| 162 | 69 | | | 62 | | | | | |
| 163 | 69 | | | 62 | } 45 | | } 52 | | |
| 164 | 59 | | | 54 | | | | | |
| 166 | 69 | | | 46 | | | | | |
| 165 | 45 | | | 46 | 38 | | 43 | | |
| 167 | 52 39 | | | 50 | | | | | |
| 168 | 39 | | | 36 | | | | | |
| 169 | 35 33 | | | 36 | | | | | |
| 170 | 43 | | | 40 | | | | | |
| 171 | 43 42 | | | 40 | } 34 | | } 24 | | |
| 172 | 93 | | | 66 | | | | | |
| 173 | 93 | | | 77 | | | | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| | | 28 | | | | | | | | 31 |
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| | | 16 | | | | | | | | 21 16 |
| | | 20 | | | | | | | | 21 13 |
| | | 34 | | | | | | | | 41 30 |
| | | } 28 | | | | | | | | } 25 } 28 |
| | | } 35 | | | | | | | | 28 24 |
| | | } 04 | | | | | | | | 05 |
| | | } 59 | | | | | | | | } 12 12 |
| | | | | | | | | | | } 86 70 |
| | | 48 | | | | | | | | 60 57 |
| | | } 36 | | | | | | | | 26 |
| | | } 78 | | | | | | | | } 48 } 23 |

| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18583 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 174 | 99 | | | 91 | } 58 | | } 71 | | |
| 175 | 81 | | | 81 | | | | | |
| 176 | 81 | | | 62 | | | | | |
| 177 | 56 | | | 54 | } 37 | | } 38 | | |
| 178 | 61 | | | 58 | | | | | |
| 179 | 43 | | | 44 | | | } 30 | | |
| 180 | 50 | | | 40 | 24 | | | | |
| 181 | 46 | | | 34 | } 36 | | } 36 | | |
| 182 | 55 | | | 44 | | | | | |
| 183 | 46 | | | 37 | | | | | |
| 184 | 38 | | | 43 | 34 | | 33 | | |
| 185 | 50 | | | 52 | | | | | |
| 186 | 73 | | | 61 | 47 | | 52 | | |
| 187 | 63 | | | 52 | | | | | |
| 188 | 63 | | | 52 | 39 | | 46 | | |
| 189 | 54 | | | 47 | 34 | | 35 | | |
| 190 | 37 | | | 29 | | | | | |
| 191 | 50 | | | 43 | 32 | | 35 | | |
| 192 | 36 | | | 33 | | | | | |
| 193 | 53 | | | 48 | 27 | | 27 | | |
| 194 | 28 | | | 25 | | | | | |
| 195 | 25 | | | 34 | 21 | | 19 | | |
| 196 | 28 | | | 38 | | | | | |
| 197 | 36 | | | 48 | | | | | |
| 198 | 57 | | | 52 | } 42 | | } 43 | | |
| 199 | 57 | | | 57 | | | | | |
| 200 | 62 | | | 48 | | | | | |
| 201 | 32 | | | 23 | 10 | | 14 | | |
| 202 | 14 | | | 08 | | | | | |
| 202a | 00 | | | 00 | 00 | | 00 | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 | 18602 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | | 78 | | | | | | | | } 104 | 87 |
| | | | | | | | | | | 86 | |
| | | { 47 | | | | | | | | 54 | |
| | | { 43 | | | | | | | | 47 | 46 |
| | | 36 | | | | | | | | 33 | 29 |
| | | 43 | | | | | | | | 49 | 53 |
| | | | | | | | | | | 49 | 49 |
| | | 43 | | | | | | | | | 49 |
| | | 60 | | | | | | | | 77 | 78 |
| | | 51 | | | | | | | | 56 | 51 |
| | | 40 | | | | | | | | 39 | |
| | | 36 | | | | | | | | 37 | 34 |
| | | | | | | | | | | 29 | |
| | | 28 | | | | | | | | 29 | 27 |
| | | 20 | | | | | | | | 22 | 22 |
| | | | | | | | | | | | |
| | | { 40 | | | | | | | | } 51 | 44 |
| | | 04 | | | | | | | | | 11 |
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| | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 203 | 07 | | | 11 | 07 | | 03 | | |
| 204 | 11 | | | 11 | | | | | |
| 205 | 18 | | | 15 | | | | | |
| 206 | 23 | | | 99 | | | | | |
| 207 | 116 | | | ↓ | } 95 | | } 113 | | |
| 208 | 83 | | | 99 | | | | | |
| 209 | 78 | | | 81 | | | | | |
| 210 | 64 | | | 65 | | | | | |
| 211 | 60 | | | 60 | | | | | |
| 212 | 52 | | | 55 | | | | | |
| 213 | 24 | | | 15 | 17 | | 16 | | |
| 213a | 07 | | | 08 | 14 | | 11 | | |
| 214 | 10 | | | 11 | | | | | |
| 215 | 28 | | | 19 | | | | | |
| 216 | 104 | | | 95 | 84 | | 101 | | |
| 217 | 104 | | | 95 | } 80 | | } 92 | | |
| 218 | 98 | | | 95 | | | | | |
| 219 | 101 | | | 90 | | | | | |
| 220 | 96 | | | 95 | | | | | |
| 221 | 101 | | | 90 | 95 | | 87 | | |
| 222 | 96 | | | 90 | | | | | |
| 223 | 76 | | | 102 | } 67 | | } 73 | | |
| 224 | 76 | | | 95 | | | | | |
| 225 | 63 | | | 54 | | | | | |
| 226 | 50 | | | 54 | 41 | | 48 | | |
| 227 | 35 | | | 36 | 36 | | 35 | | |
| 228 | 81 | | | 76 | | | | | |
| 229 | 107 | | | 95 | 71 | | 87 | | |
| 230 | 91 | | | 90 | | | | | |
| 231 | 81 | | | 84 | 57 | | 68 | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601, 02 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|
| | | 00 | | | | | | | | 04 |
| | | } III | | | | | | | | } 181, 156 |
| | | | | | | | | | | 132 |
| | | | | | | | | | | 111 |
| | | | | | | | | | | 63 |
| | | 23 | | | | | | | | 27 |
| | | 15 | | | | | | | | 23 19 |
| | | 98 | | | | | | | | 148, 140 |
| | | 81 | | | | | | | | } 120, 124 |
| | | } 63 | | | | | | | | 102 102 |
| | | | | | | | | | | 91 84 |
| | | 50 | | | | | | | | 10 |
| | | 49 | | | | | | | | 48 46 |
| | | 81 | | | | | | | | 108, 117 |
| | | 63 | | | | | | | | 87, 84 |

| 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 | 18583 |
|-------|-------|-------|---------------|-------|-------|-------|-------|-------|
| 232 | 76 | | 76 | | | | | |
| 233 | 63 | | 58 | | | | | |
| 234 | 50 | | 54 | | | | | |
| 235 | 46 | | 44 | | | | | |
| 236 | 35 | | 31 | | | | | |
| 237 | 31 | | 36 | 19 | | 26 | | |
| 238 | 21 | | 22 | 17 | | 18 | | |
| 239 | 39 | | 31 | 28 | | 26 | | |
| 240 | 59 | | 94 | } 41 | | } 46 | | |
| 241 | 54 | | 72 | | | | | |
| 242 | 45 | | 58 | } 25 | | } 26 | | |
| 243 | 38 | | 44 | | | | | |
| 244 | 34 | | 30 | | | | | |
| 245 | 34 | | 26 | | | | | |
| 246 | 45 | | 40 | 25 | | 32 | | |
| 247 | 31 | | 46 | | | | | |
| 248 | 27 | | 26 | | | | | |
| 249 | 10 | | 0 | | | | | |
| 250 | 00 | | 00 | } 00 | | } 00 | | |
| 251 | 03 | | 04 | | | | | |
| 252 | 239 | | 222 | } 175 | | } 190 | | |
| 253 | 239 | | 182 | | | | | |
| 254 | 188 | | 178 | | | | | |
| 255 | 176 | | 134 | | | | | |
| 256 | 101 | | 95 | 95 | | 104 | | |
| 257 | 126 | | 109 | } 95 | | } 104 | | |
| 258 | 119 | | 109 | | | | | |
| 259 | 113 | | 102 | | | | | |
| 260 | 96 | | 84 | | | | | |
| 261 | 81 | | 73 | | | | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 _{pr} | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------------|-----|
| | | | | | | | | | | 66 | |
| | | | | | | | | | | 42 | |
| | | 26 | | | | | | | | 32 | 29 |
| | | 18 | | | | | | | | 21 | 19 |
| | | 26 | | | | | | | | 25 | |
| | | } 42 | | | | | | | | } 32 49 | 49 |
| | | } 18 | | | | | | | | | 27 |
| | | | | | | | | | | | 25 |
| | | 22 | | | | | | | | 28 | 25 |
| | | } 00 | | | | | | | | } 00 | 00 |
| | | } 189 | | | | | | | | | |
| | | 111 | | | | | | | | | |
| | | 111 | | | | | | | | | |
| | | | | | | | | | | | 165 |
| | | | | | | | | | | } 169 | ↓ |
| | | | | | | | | | | 117 | 108 |
| | | | | | | | | | | 83 | |
| | | | | | | | | | | 86 | |

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| λ | 18557 | 18558 | 18560 | 18561 | 18568 | 18572 | 18579 | 18582 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 262 | 55 | | | 45 | 54 | | 57 | |
| 263 | 63 | | | 55 | | | | |
| 263a | 59 | | | 51 | | | | |
| 264 | 50 | | | 45 | 136 | | 152 | |
| 265 | 169 | | | 146 | | | | |
| 266 | 169 | | | 175 | | | | |
| 267 | 130 | | | 143 | | | | |
| 268 | 116 | | | 115 | | | | |
| 269 | 110 | | | 96 | | | | |
| 270 | 104 | | | 89 | | | | |
| 271 | 98 | | | 89 | | | | |
| 272 | 98 | | | 89 | | | | |
| 273 | 90 | | | 84 | | | | |
| 274 | 80 | | | 66 | | | | |
| 275 | 57 | | | 57 | 53 | | 60 | |
| 276 | 25 | | | | | | | |
| 277 | 107 | | | | | | | |
| 278 | 90 | | | 98 | | | | |
| 279 | 142 | | | 123 | +90 | | 111 | |
| 280 | +113 | | | +88 | | | | |
| * 281 | -84 | | | -73 | | | | |
| 282 | +97 | | | +88 | +70 | | -18 | |
| 283 | 86 | | | 80 | | | +88 | |
| 284 | 86 | | | | | | | |
| 285 | 81 | | | 66 | 49 | | 57 | |
| 286 | 62 | | | 50 | | | | |
| 287 | 59 | | | 50 | 40 | | 54 | |
| 288 | 59 | | | 50 | | | | |
| 289 | 59 | | | 50 | | | | |
| 290 | 60 | | | 50 | | | | |

* From contour of TiO_2 band, not background.

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601,02 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|
| | | | | | | | | | | 86 82 |
| | | } 63 | | | | | | | | |
| | | } 135 | | | | | | | | |
| | | } 95 | | | | | | | | } 119 152 |
| | | | | | | | | | | 120 |
| | | 67 | | | | | | | | 88 92 |
| | | | | | | | | | | |
| | | } 100 | | | | | | | | 108 |
| | | 00 | | | | | | | | 00 00 |
| | | +74 | | | | | | | | +109 123 |
| | | | | | | | | | | |
| | | 63 | | | | | | | | 76 109 |
| | | 10 | | | | | | | | |
| | | | | | | | | | | 82 |
| | | } 52 | | | | | | | | } 51 |

| No. | λ . | 18557 | 18558 | 18559 | 18561 | 18568 | 18572 | 18579 | 18582 | 185 |
|-----|-------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-----|
| 291 | | 42 | | | 45 | | | | | |
| 292 | | 42 | | | 40 | 21 | | 33 | | |
| 293 | | 33 42 | | | 36 | | | | | |
| 294 | | 33 | | | 36 | | | | | |
| 295 | | 25 | | | 22 | | | | | |
| 296 | | 25 | | | 18 | | | | | |
| 297 | | 21 | | | 18 | } 05 | | } 11 | | |
| 298 | | 18 | | | 14 | | | | | |
| 299 | | 00 | | | 00 | 00 | | 00 | | |
| 300 | | | | | | | | | | |

| 18586 | 18587 | 18590 | 18591 | 18592 | 18593 | 18595 | 18596 | 18597 | 18599 | 18601 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| | | 32 | | | | | | | | 59 34 |
| | | 08 | | | | | | | | } 10 19 |
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| | | +284 | | | | | | | | |

2 friends

C18578 has something wrong with it
(cf the reduction curve in Bk. 17. The
and the discordant values suggest
omission)

General ledger of Cygni results.

| No. | λ | 18482 | $\frac{dm}{dl}$ 18577 | 18578 | 18482 | 18577 | 18578 | Mean 18482,577 | Mean dl C5889 Bk. 10 p. 101 |
|-----|-----------|-------|--------------------------|----------|-------|-------|-------|-------------------|-----------------------------------|
| 1 | 3933 | 144 | | | 73 | | | 73 | 73 |
| 2 | 3945 | 45 | 53 | 41 | 34 | 39 | 31 | 36 | 37 |
| 3 | 3952 | 64 | 61 | 35 | 45 | 43 | 28 | 44 | 39 |
| 4 | 3956 | 50 | 58 | 35 | 37 | 41 | 28 | 39 | 30 |
| 5 | 3958 | 34 | 81 | 39 | 27 | 53 | 30 | | 30 |
| 6 | 3970 | 158 | (114) | - | 77 | 65 | - | 71 | 78 |
| 7 | 3982 | 48 | 57 | 36 | 36 | 41 | 28 | 38 | 32 |
| 8 | 3984 | 17 | 30 | 15 | 14 | 17 | 13 | 16 | 14 |
| 9 | 3986 | - | 29 | 14 | - | 23 | 12 | - | 15 |
| 10 | 3987 | 19 | 44 | 14 | 16 | 33 | 12 | 24 | 15 |
| 11 | 3989 | - | 27 | - | - | 22 | - | 22 | 17 |
| 12 | 3990 | - | - | - | - | - | - | - | 16 |
| 13 | 3994 | 25 | - | 20 | 21 | - | 17 | 21 | 18 |
| 14 | 3995 | 38 | 53 | 33 | 30 | 39 | 26 | 34 | 28 |
| 15 | 3997 | 23 | - | - | 19 | - | - | 19 | 26 |
| 16 | 4002-4 | 20 | 28 | 13 | 17 | 23 | 11 | 20 | 17 |
| 17 | | 21 | - | - | 18 | - | - | 18 | 17 |
| 18 | 4005 | 31 | 48 16 | 33 08 | 25 | 36 | 26 | 30 | 33 |
| 19 | 4012 | 10 | 26 | 14 | 09 | 21 | 12 | 15 | 15 |
| 20 | 4014 | 24 | 225 | 14 | 20 | 21 | 12 | 20 | 15 |
| 21 | 4018 | 27 | 20 | 12 | 22 | 17 | 10 | 20 | 14 |
| 22 | 4022-3 | 26 | 24 | 15 | 21 | 20 | 13 | 20 | 18 |
| 23 | 4028 | 43 | 40 | 28 | 33 | 31 | 23 | 32 | 33 |
| 24 | 4030 | 23 | 10 | 12 | 19 | 09 | 10 | 14 | 29 |
| 25 | 4031 | 51 | 56 | 37 | 37 | 40 | 29 | 38 | 40 |
| 26 | 4033 | 43 | 40 | 30 | 33 | 31 | 24 | 32 | 35 |
| 27 | 4035 | 31 | 25 | 19 | 25 | 21 | 16 | 23 | 26 |
| 28 | 4036 | 20 | 10 | 10 | 17 | 09 | 09 | 13 | 15 |
| 29 | 4041 | 29 | 28 | 20 | 30 | 23 | 17 | 26 | 25 |
| 30 | 4046 | 13 | 45 | 38 | 33 | 34 | 30 | 34 | 38 |

1 prism

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1 pr.

| | 18581 | 18585 | 18581 | 18585 | Mean | |
|----|-------|-------|-------|-------|------|-----|
| 1 | 200 | 250 | 84 | 90 | 87 | .. |
| | 45 | 60 | 34 | 42 | 38 | 68 |
| | 41 | .. | 31 | - | 31 | - |
| | 41 | 62 | 31 | 44 | 38 | 50 |
| | 64 | 90 | 45 | 56 | 50 | - |
| | 209 | 248 | 85 | 90 | 88 | 212 |
| | 44 | 55 | 33 | 40 | 36 | 48 |
| | 17 | | 14 | - | 14 | 38 |
| | - | | - | - | - | 48 |
| 10 | 20 | 34 | 17 | 27 | 22 | 38 |
| | - | | - | - | - | 35 |
| | - | | - | - | - | 11 |
| | - | | - | - | - | 17 |
| | 38 | 45 | 30 | 34 | 32 | |
| | - | | - | - | - | 03 |
| | 30 | 27 | 24 | 22 | 23 | 29 |
| | - | | - | - | - | |
| | 36 | 44 | 28 | 33 | 30 | |
| | 15 | 22 | 13 | 18 | 16 | |
| 20 | 14 | 21 | 12 | 18 | 15 | |
| | 12 | 18 | 10 | 15 | 12 | |
| | - | | - | - | - | |
| | 30 | 33 | 24 | 26 | 25 | |
| | - | | - | - | - | |
| | 44 | 43 | 33 | 33 | 33 | |
| | - | | - | - | - | |
| | - | | - | - | - | |
| | - | | - | - | - | |
| | 19 | 23 | 16 | 19 | 18 | |
| 30 | 37 | 34 | 29 | 28 | 28 | |

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2 prisms

| | | 18482 | 18577 | 18578 | 18482 | 18577 | | Mean | dl C5889 | |
|----|---------|-------|-------|-------|-------|-------|---|------|----------|----|
| 31 | 4048 | 24 | 23 | 16 | 20 | 19 | | 20 | 16 | 31 |
| 32 | 4050 | 23 | 22 | 16 | 19 | 18 | | 18 | 18 | |
| 33 | 4052 | - | - | - | - | - | - | - | 16 | |
| 34 | 4054 | 43 | 41 | 28 | 33 | 31 | | 32 | 30 | |
| 35 | 4057 | 28 | - | 20 | 23 | - | | 23 | 11 | |
| 36 | 4059 | 19 | 15 | 11 | 16 | 13 | | 14 | 11 | |
| 37 | | 32 | 36 | | 26 | 28 | | 27 | 04 | |
| 38 | 4064 | 41 | 38 | 36 | 31 | 30 | | 30 | 35 | |
| 39 | 4067 | 30 | 42 | 25 | 24 | 32 | | 28 | 25 | |
| 40 | 4072-4 | 35 | 36 | 25 | 28 | 28 | | 28 | 25 | 40 |
| 41 | 4078 | 62 | 71 | 43 | 44 | 48 | | 46 | 51 | |
| 42 | 4083 | 17 | 30 | 17 | 14 | 24 | | 19 | 18 | |
| 43 | | 23 | 24 | 17 | 19 | 20 | | 20 | 18 | |
| 44 | 4085 | 35 | 40 | 25 | 28 | 31 | | 30 | 26 | |
| 45 | 4087 | 35 | 39 | 25 | 28 | 30 | | 29 | 26 | |
| 46 | | - | 14 | - | - | 12 | | | 04 | |
| 47 | 4092 | 11 | 06 | 08 | 10 | 05 | | 08 | 06 | |
| 48 | 4093 | 12 | 14 | 09 | 10 | 12 | | 11 | 06 | |
| 49 | | 28 | 20 | 17 | 23 | 17 | | 20 | 17 | |
| 50 | 4098 | 44 | 27 | 22 | 33 | 22 | | 28 | 24 | 50 |
| 51 | 4101 | 77 | 78 | 60 | 51 | 51 | | 51 | 51 | |
| 52 | 4106 | 23 | 20 | 13 | 19 | 17 | | 18 | 36 | |
| 53 | 4107 | 39 | 48 | 44 | 30 | 36 | | 33 | 48 | |
| 54 | 4109 | - | 21 | 12 | - | 18 | | 18 | 26 | |
| 55 | 4111 | 20 | 22 | 11 | 17 | 18 | | 18 | 13 | |
| 56 | 4113-15 | 14 | ' | - | 12 | - | | 12 | 05 | |
| 57 | 4119 | 37 | 36? | 30 | 29 | 28 | | 28 | 32 | |
| 58 | 4123 | 42 | 45 | 29 | 32 | 34 | | 33 | 33 | |
| 59 | 4128 | 54 | 54 | 41 | 39 | 39 | | 39 | 43 | |
| 60 | 4132 | 47 | 48 | 34 | 35 | 36 | | 36 | 38 | 60 |

| | dm | | dl | | Mean |
|----|-------|-------|----|----|------|
| | 18581 | 18585 | 18 | | |
| 31 | 19 | 14 | 16 | 12 | 14 |
| | 22 | 20 | 18 | 17 | 18 |
| | - | | - | - | - |
| | 31 | 34 | 25 | 27 | 26 |
| | - | | - | - | - |
| | 13 | 20 | 11 | 17 | 14 |
| | - | | - | - | - |
| | 37 | 35 | 29 | 27 | 28 |
| | 24 | 25 | 20 | 21 | 20 |
| 40 | 28 | 30 | 23 | 24 | 24 |
| | 63 | 64 | 44 | 45 | 44 |
| | - | | - | - | - |
| | - | | - | - | - |
| | - | | - | - | - |
| | } 25 | 22 | 21 | 25 | 23 |
| | - | | - | - | - |
| | } 07 | 08 | 06 | 07 | 06 |
| | - | | - | - | - |
| | 33 | 21 | 26 | 18 | 22 |
| 50 | 34 | 32 | 27 | 26 | 26 |
| | 65 | 70 | 45 | 48 | 46 |
| | - | | - | - | - |
| | 32 | 35 | 26 | 28 | 27 |
| | - | - | - | - | - |
| | - | - | - | - | - |
| | - | - | - | - | - |
| | 29 | 32 | 23 | 26 | 24 |
| | 30 | 33 | 24 | 26 | 25 |
| | 48 | 51 | 36 | 37 | 36 |
| 60 | 39 | 40 | 30 | 31 | 30 |

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| | <i>prisma</i> | 18482 | 18577 | 18578 | 18482 | 18577 | 18578 | Mean | dl C 5889 | |
|----|---------------|-------|-------|-------|-------|-------|-------|------|--------------|----|
| 61 | 4136 | 28 | 35 | 24 | 23 | 28 | | 26 | 24 | 61 |
| 62 | 4139 | 20 | 25 | 17 | 17 | 21 | | 19 | 20 | |
| 63 | 4144 | 52 | 52 | 39 | 38 | 38 | | 38 | 41 | |
| 64 | | 17 | 15 | 16 | 14 | 13 | | 14 | 15 | |
| 65 | 4149 | 35 | 35 | 25 | 28 | 28 | | 28 | 26 | |
| 66 | | 22 | 26 | 16 | 18 | 21 | | 20 | 16 | |
| 67 | 4155 | 34 | 39 | 27 | 27 | 30 | | 28 | 29 | |
| 68 | 4157 | 32 | 37 | 25 | 26 | 29 | | 28 | 26 | |
| 69 | 4162 | 39 | 20 | 12 | 30 | 33 | | 32 | 33 | |
| 70 | 4164 | 25 | 44 | 32 | 21 | 21 | | 21 | 19 | 70 |
| 71 | 4166 | - | 26 | 18 | - | - | | - | 13 | |
| 72 | 4167 | 20 | 23 | 15 | 17 | 19 | | 18 | 18 | |
| 73 | 4172 | 66 | 62 | 49 | 46 | 43 | | 44 | 49 | |
| 74 | 4177 | 66 | 64 | 48 | 46 | 45 | | 46 | 47 | |
| 75 | 4182 | 37 | 37 | 29 | 29 | 29 | | 29 | 28 | |
| 76 | 4184 | 43 | 45 | 33 | 33 | 34 | | 34 | 30 | |
| 77 | 4188 | 49 | 55 | 36 | 36 | 40 | | 38 | 35 | |
| 78 | 4191 | 32 | 50 | 29 | 26 | 36 | | 31 | 29 | |
| 79 | 4196 | 35 | 38 | 27 | 28 | 30 | | 29 | 41 | |
| 80 | 4198 | 55 | 59 | 44 | 40 | 42 | | 41 | 40 | 80 |
| 81 | 4202 | 47 | 49 | 34 | 35 | 36 | | 36 | 33 | |
| 82 | 4205 | 56 | 60 | 41 | 40 | 42 | | 41 | 40 | |
| 83 | 4209 | 35 | 36 | 25 | 28 | 28 | | 28 | 22 | |
| 84 | | 37 | - | 13 | 29 | - | | 29 | 18 | |
| 85 | 4215 | 48 | 57 | 42 | 36 | 41 | | 38 | 34 | |
| 86 | 4219 | 23 | 13 | 17 | 19 | 11 | | 15 | 13 | |
| 87 | 4222 | 31 | 28 | 24 | 25 | 23 | | 24 | 18 | |
| 88 | 4225 | 54 | - | 35 | 39 | - | | 39 | 35 | |
| 89 | 4227 | 62 | 68 | 44 | 44 | 47 | | 46 | 46 | |
| 90 | 4233 | 46 | 51 | 30 | 36 | 37 | | 36 | 36 | 90 |

1 prdm

61

| 18581 | 18585 | 18581 | 18585 | Mean |
|-------|-------|-------|-------|------|
| - | | - | - | - |
| 17 | 15 | 14 | 13 | 14 |
| 39 | 39 | 30 | 30 | 30 |
| - | | - | - | - |
| 27 | 22 | 22 | 18 | 20 |
| - | | - | - | - |
| | | - | - | - |
| } 31 | 28 | 25 | 23 | 24 |
| - | | - | - | - |

70

| | | | | | |
|------|----|----|----|----|---|
| 27 | 25 | 22 | 21 | 22 | ? |
| } 13 | 15 | 11 | 13 | 12 | |
| 56 | 59 | 40 | 42 | 41 | |
| 49 | 53 | 36 | 39 | 38 | |
| 32 | 31 | 26 | 25 | 26 | |
| } 33 | | | | | |

80

| | | | | | |
|---------------|----|----|----|----|--|
| 26 | | 26 | 28 | 27 | |
| 33 | 36 | | | | |
| 26 | 27 | 21 | 22 | 22 | |
| 32 | 28 | 26 | 23 | 24 | |
| 37 | 41 | 29 | 31 | 30 | |
| 35 | 40 | 28 | 31 | 30 | |
| 44 | 44 | 33 | 33 | 33 | |
| 27 | 27 | 22 | 22 | 22 | |
| - | | - | - | - | |
| 35 | 32 | 28 | 26 | 27 | |
| 22 | 22 | 18 | 18 | 18 | |
| 15 | 34 | 13 | 27 | 20 | |
| - | | - | - | - | |

90

| | | | | | |
|----|----|----|----|----|---|
| 51 | 54 | 37 | 39 | 38 | ↑ |
| 57 | 38 | 29 | 29 | 29 | |

1924phae, proj. 1105

104 2 prisms
8 Cygni

| | | 18482 | 18577 | 18578 | 18482 | 18577 | Mean | dl C 5889 | |
|-----|---|--------|-------|------------------|-----------------|-------|------|--------------|----|
| 91 | ↓ | | | | | | | | 91 |
| 92 | ↓ | 4235 | 36 | 54 42 | 27 | 28 | 32 | 30 | 28 |
| 93 | ↓ | 4239 | 33 | 42 37 | 27 | 26 | 29 | 28 | 26 |
| 94 | ↓ | 4243 | 21 | 28 | 16 | 18 | 15 | 16 | 14 |
| 95 | ↓ | 4247 | 50 | 44 | 37 | 37 | 33 | 35 | 35 |
| 96 | ↓ | | 34 | 35 | 25 | 27 | 28 | 28 | 26 |
| 97 | ↓ | 4250 | 25 | 26 | 24 | 21 | 21 | 21 | 16 |
| 98 | ↓ | 4258 | 31 | 32 | 20 | 25 | 26 | 26 | 18 |
| 99 | ↓ | 4260 | 34 | 32 | 24 | 27 | 26 | 26 | 21 |
| 100 | ↓ | 4272 | 44 | 19 46 | 18, 7, 11 33 | 33 | 35 | 34 | 29 |
| 101 | ↓ | 4274 | 27 | 28 | 22 | 22 | 23 | 22 | 18 |
| 102 | ↓ | - | - | 18 | 08 | - | 15 | 15 | 08 |
| 103 | ↓ | - | - | 18 | 12 | - | 15 | 15 | 07 |
| 104 | ↓ | | 19 | 30 | 7 | 16 | 24 | 20 | 11 |
| 105 | ↓ | 4283 | 23 | 18 | 12 | 19 | 15 | 17 | 18 |
| 106 | ↓ | 4288 | 41 | 35 | 23 | 31 | 28 | 30 | 23 |
| 107 | ↓ | 4290 | 57 | 65 | 44 | 41 | 45 | 43 | 39 |
| 108 | ↓ | 4294 | 38 | 38 | 27 | 30 | 30 | 30 | 21 |
| 109 | ↓ | 4296 | 31 | 33 | 21 | 25 | 26 | 26 | 18 |
| 110 | ↓ | 4299 | 65 | 65 | 48 | 45 | 45 | 45 | 42 |
| 111 | ↓ | 4300 | 58 | 65 | 45 | 41 | 45 | 43 | 39 |
| 112 | ↓ | 4306 | 39 | 37 | 25 | 30 | 29 | 30 | 21 |
| 113 | ↓ | 4308-9 | 42 | 40 | 28 | 32 | 31 | 32 | 23 |
| 114 | ↓ | 4315 | 59 | 60 | 42 | 42 | 42 | 42 | 35 |
| 115 | ↓ | | 20 | 17 | 16 | 17 | 15 | 16 | 05 |
| 116 | ↓ | 4321 | 30 | 28 | 10 20 | 24 | 23 | 24 | 15 |
| 117 | ↓ | 4326 | 49 | 51 | 35 24 | 36 | 37 | 36 | 25 |
| 118 | ↓ | 4331 | 33 | 26 | 22 | 26 | 23 | 24 | 15 |
| 119 | ↓ | 4334 | 28 | 19 | 16 | 23 | 16 | 20 | 07 |
| 120 | ↓ | 4337 | 75 | 72 | 49 | 50 | 48 | 49 | 41 |
| | ↓ | 4340 | 106 | 92 | 65 | 62 | 57 | 60 | 52 |

1 prism

91

| 18581 | 18585 | 18581 | 18585 | Mean |
|-------|-------|-------|-------|------|
| 29 | 40 | 23 | 31 | 27 |
| 30 | 32 | 24 | 26 | 25 |
| 19 | 20 | 16 | 17 | 16 |
| 16 | 38 | (14) | 30 | 30 |
| 28 | 32 | 23 | 26 | 24 |
| - | | - | - | - |

?

| | | | | |
|----|----|----|----|----|
| 24 | 25 | 20 | 20 | 20 |
| 36 | | | | |
| 36 | 37 | 28 | 29 | 28 |

100

| | | | | |
|----|----|----|----|----|
| 25 | 31 | 21 | 25 | 23 |
| - | | - | - | - |
| 22 | 20 | 18 | 17 | 18 |
| - | | - | - | - |
| - | | - | - | - |

| | | | | |
|----|----|----|----|----|
| 43 | 52 | 33 | 38 | 36 |
| 30 | 35 | 24 | 28 | 26 |
| 51 | | - | - | - |

110

| | | | | |
|----|----|----|----|----|
| 51 | 53 | 37 | 39 | 38 |
| 41 | 57 | 31 | 41 | 36 |

| | | | | |
|----|----|----|----|----|
| 31 | 35 | 25 | 28 | 26 |
|----|----|----|----|----|

| | | | | |
|----|----|----|----|----|
| 43 | 46 | 33 | 35 | 34 |
|----|----|----|----|----|

| | | | | |
|----|----|----|----|----|
| 15 | 19 | 13 | 16 | 14 |
|----|----|----|----|----|

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

| | | | | |
|----|----|----|----|----|
| 30 | 34 | 24 | 27 | 26 |
|----|----|----|----|----|

| | | | | |
|----|----|----|----|----|
| 19 | 26 | 16 | 21 | 18 |
|----|----|----|----|----|

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

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

120

| | | | | |
|----|----|----|----|----|
| 73 | 83 | 49 | 53 | 57 |
|----|----|----|----|----|

106 Cygni 2 prisms

| No. | λ | 18482 | 18577 | 18578 | 18482 | 18577 | Mean | dl C5889. |
|------|-----------|-------|----------|----------|-------|-------|------|--------------|
| 121 | 4344 | 48 | 40 | 27 | 36 | 31 | 34 | 21 |
| 122 | - | 23 | - | 16 | 19 | - | 19 | 05 |
| 123 | 4352 | 57 | 52 | 34 | 41 | 38 | 40 | 28 |
| 124 | - | 24 | 20 | 13 | 20 | 17 | 18 | 07 |
| 125 | 4359 | 36 | 35 | 22 | 28 | 28 | 28 | 16 |
| 126 | - | 15 | 10 | 07 04 | 13 | 09 | 11 | ? |
| 127 | 4367 | 37 | 30 | 0420 | 29 | 24 | 26 | 16 |
| 128 | 4375 | 58 | 57 | 39 | 41 | 41 | 41 | 38 |
| 129 | 4384 | 67 | 74 61 | 07 45 | 46 | 49 | 48 | 21? |
| 130 | 4391 | 30 | 29 | 19 | 24 | 23 | 24 | 27 |
| 131 | 4395 | 45 | 49 | 34 | 34 | 36 | 35 | 38 |
| 132 | 4400 | 57 | 60 | 40 | 41 | 42 | 42 | 42 |
| 133 | 4405 | 22 | 20 | 15 | 18 | 17 | 18 | 21 |
| 134 | 4408 | 41 | 40 | 27 23 | 31 | 31 | 31 | 33 |
| 135 | 4415 | 47 | 51 | 3937 | 35 | 37 | 36 | 38 |
| 136 | 4416 | 56 | 39 | 2722 | 40 | 30 | 35 | 41 |
| 137 | 4423 | 34 | 30 | 27 | 27 | 24 | 26 | 30 |
| 138 | 4427 | 26 | 25 | 17 | 21 | 21 | 21 | 21 |
| 139 | 4430 | 32 | 30 | 15 | 26 | 24 | 25 | 27 |
| 140 | 4435 | 37 | 36 | 24 | 29 | 28 | 28 | 30 |
| 141 | 4444 | 63 | 67 | 43 10 | 44 | 46 | 45 | 40 |
| 142 | 4450 | 34 | 28 | 12 | 27 | 30 | 28 | 27 |
| 143 | 4455 | 42 | - | - | 32 | - | 32 | 31 |
| 144 | - | 32 | 38 | - | 26 | 30 | 28 | 27 |
| 145 | 4459 | 38 | 38 | - | 30 | 30 | 30 | 28 |
| 146 | 4462 | 35 | 39 33 | - | 28 | 30 | 29 | 15 |
| 147 | 4467 | 45 | 47 | - | 34 | 35 | 34 | 35 |
| 148 | - | 23 | 13 | - | 19 | 11 | 15 | 17 |
| 149 | 4482 | 38 | 36 | - | 30 | 28 | 29 | 33 |
| 150 | 4490 | 37 | 30 | - | 29 | 24 | 26 | 31 |
| 150a | - | - | - | - | - | - | - | - |

1 prism

| 18581 | 18585 | 18581 | 18585 | Mean |
|-------|---------------|-------|-------|------|
| 37 | 53 | 29 | 39 | 34 |
| 26 | 37 | 21 | - | 21 |
| 34 | 39 | 27 | 30 | 28 |
| - | | - | - | - |
| 20 | 22 | 17 | 18 | 18 |
| 14 | 18 | 12 | 15 | 14 |
| 25 | 27 | 21 | 22 | 22 |
| 33 | 35 | 26 | 28 | 27 |
| 50 | 58 | 37 | 41 | 39 |
| 16 | 28 | 14 | 23 | 18 |
| 35 | 35 | 28 | 28 | 28 |
| 39 | 43 | 30 | 33 | 32 |
| 14 | 29 | 12 | 23 | 18 |
| 27 | (42) | 22 | 32 | 27 |
| 37 | 48 | 29 | 36 | 32 |
| 20 | | | | |
| 14 | 26 | 17 | 21 | 19 |
| 25 | 24 | 12 | 20 | 16 |
| 27 | 27 | 21 | 22 | 22 |
| 46 | 33 | 22 | 26 | 24 |
| 26 | 47 | 35 | 35 | 35 |
| + | 25 | 21 | 21 | 21 |
| - | | - | - | - |
| - | | - | - | - |
| 29 | 32 | 23 | 26 | 24 |
| 29 | 36 | 23 | 28 | 26 |
| 36 | 39 | 28 | 30 | 29 |
| - | - | - | - | - |
| 26 | 30 | 21 | 24 | 22 |
| 27 | 31 | 22 | 25 | 24 |
| 23 | 24 | 19 | 20 | 20 |

108 Cygni

2 prisms

dmdl

| No. | λ | 18482 | 18577 | 18482 | 18577 | Mean | C5889 dl |
|-----|------------|-------|--------------------------|-------|-------|------|-------------|
| 151 | 4495 | 27 | 27 | 22 | 22 | 22 | 24 |
| 152 | 4501 | 28 | 31 | 23 | 25 | 24 | 24 |
| 153 | 4508 | 21 | 26 | 18 | 21 | 20 | 21 |
| 154 | 4515 | 20 | 23 | 17 | 19 | 18 | 21 |
| 155 | | 29 | 19 | 23 | 24 | 24 | 24 |
| 156 | 4528 | 36 | 30 | 28 | 26 | 27 | 27 |
| 157 | 4534 | 40 | 33 | 31 | 29 | 30 | 24 |
| 158 | | 22 | 37 | 18 | 23 | 20 | 15 |
| 159 | 4541 40 | 23 | 29 | 19 | 23 | 21 | 15 |
| 160 | 4550 | 36 | 28 | 28 | 29 | 28 | 24 |
| 161 | 4554 | 42 | 37 | 32 | 33 | 32 | 23 |
| 162 | | 12 | 44 | 10 | 12 | 11 | 09 |
| 163 | | - | 14 | - | - | - | 11 |
| 164 | 4564 | 25 | 34 31 | 21 | 25 | 23 | 13 |
| 165 | 4572 | 25 | 22 | 21 | 18 | 20 | 21 |
| 166 | 4576 | 12 | 14 | 10 | 12 | 11 | 11 |
| 167 | 4581 | 24 | 25 | 20 | 21 | 20 | 16 |
| 168 | 4584 | 45 | 43 | 34 | 33 | 34 | 23 |
| 169 | 4616 | 31 | 22, 21, 16 25, 25, 25 | 25 | 21 | 23 | 12 |
| 170 | 4635 | 24 | 16 | 20 | 14 | 17 | 12 |
| 171 | 4646 | 25 | 20 | 21 | 17 | 19 | 12 |
| 172 | 4666 | 22 | - | 18 | - | 18 | 15 |
| 173 | | - | - | - | - | - | 12 |
| 174 | | - | - | - | - | - | 16 |
| 175 | | - | - | - | - | - | 13 |
| 176 | | - | - | - | - | - | 16 |
| 177 | 4765 | 33 | 26 | 26 | 21 | 24 | 23 |
| 178 | 4805 | 12 | 11 | 10 | 10 | 10 | 08 |
| 179 | 4810 | 16 | 17 | 14 | 14 | 14 | 10 |
| 180 | 4824 | 23 | 23 | 19 | 19 | 19 | 16 |

1 prism

| 18581 | 18585 | 18581 | 18585 | Mean |
|---------------|--------------------------------|-------|-------|------|
| 16 | 17 | 14 | 14 | 14 |
| 14 | 14 | 12 | 12 | 12 |
| 17 | 17 | 14 | 14 | 14 |
| 25 | 25 | 21 | 21 | 21 |
| 28 | 28 | 23 | 23 | 23 |
| 29 | 28 | 23 | 23 | 23 |
| 28 | 19 | 23 | 16 | 20 |
| 24 | 26 | 20 | 21 | 20 |
| 10 | | 09 | - | 09 |
| 32 | 31 | 26 | 25 | 26 |
| 35 | 28 | 28 | - | 28 |
| - | | - | - | - |
| - | | - | - | - |
| 28 | 28 | 23 | 23 | 23 |
| 21 | 19 | 18 | 16 | 17 |
| - | | - | - | - |
| - | | - | - | - |
| 36 | ³⁴ 29 | 28 | 27 | 28 |
| 23 | 28 | 19 | 23 | 21 |
| 26 | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| 26 | 24 | 21 | 20 | 20 |
| - | | - | - | - |
| - | | | | |
| 33 | 44 | 26 | 33 | 30 |

110 rgyzui 2 prism

| 180 | λ | 18482 | 18577 | 18482 | 18577 | Mean | C5889 |
|------|-----------|-------|-------|-----------------|-------|------|-------|
| 181 | 4848 | 25 | 21 | 21 | 18 | 20 | 15 |
| 182 | 4854 | 38 | 30 | 30 | 24 | 27 | 30 |
| 183 | 4861 | 68 | 55 | 47 | 40 | 44 | 61 |
| 184 | 4871 | 27 | 20 | 22 | 17 | 20 | 20 |
| 185 | 4876-8 | 13 | 17 | 11 | 15 | 13 | 11 |
| 186 | 4883 | 23 | 18 | 19 | 15 | 17 | 18 |
| 187 | 4890 | 19 | 17 | 16 | 14 | 15 | 20 |
| 188 | 4900 | 18 | 11 | 15 | 10 | 12 | 13 |
| 189 | 4903-4 | 12 | | 10 | - | 10 | 09 |
| 190 | 4924 | 24 | 16 | 20 | 14 | 17 | 16 |
| 191 | 4934 | 34 | 27 | 27 | 22 | 24 | 31 |
| 192 | ? | 31 | 35 | 25 | 27 | 26 | 26 |
| 193 | 4946 | - | 27 | - | 22 | 22 | 07 |
| 194 | | - | 19 | - | 16 | 16 | 16 |
| 195 | 4957 | - | 13 | - | 11 | 11 | 16 |
| 196 | | - | | - | - | - | 16 |
| 200 | 4968-70 | 21 | 29 | 18 | 23 | 20 | 15 |
| 207 | 5018 | 30 | 27 | 24 | 22 | 23 | 26 |
| 168a | | | 22 | 18 - | 18 | 18 | |
| b | | | 21 | - | 18 | 18 | |
| c | | | 16 | - | 14 | 14 | |
| d | | | 16 | - | 14 | 14 | |
| e | | | 09 | - | 08 | 08 | |
| f | | | 12 | - | 10 | 10 | |
| g | | | 13 | - | 11 | 11 | |
| h | | | 09 | - | 08 | 08 | |
| i | | | 17 | - | 14 | 14 | |
| j | | | 17 | - | 14 | 14 | |
| k | | | 10 | - | 09 | 09 | |
| l | | | 16 | - | 14 | 14 | |

1 prism

| 18581 | 18585 | 18581 | 18585 | Mean |
|-------|-------|-------|-------|------|
| 15 | 14 | 13 | 12 | 12 |
| 22 | 10 | 18 | 09 | 14 |
| 34 | 27 | 27 | 22 | 24 |
| 18 | 17 | 15 | 15 | 15 |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| - | | - | - | - |
| 10 | 14 | 09 | 12 | 10 |
| 24 | 26 | 20 | 21 | 20 |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| 33 | 26 | 26 | 21 | 24 |
| 25 | 20 | 21 | 17 | 19 |
| | | - | - | - |
| 23 | 26 | 19 | 21 | 20 |
| | | - | - | - |
| 17 | 11 | 14 | 10 | 12 |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| | | - | - | - |
| 08 | 06 | 07 | 05 | 06 |
| 20 | 15 | 17 | 13 | 15 |
| | | - | - | - |
| 22 | 15 | 18 | 13 | 16 |

112

Cygni

2 prisms

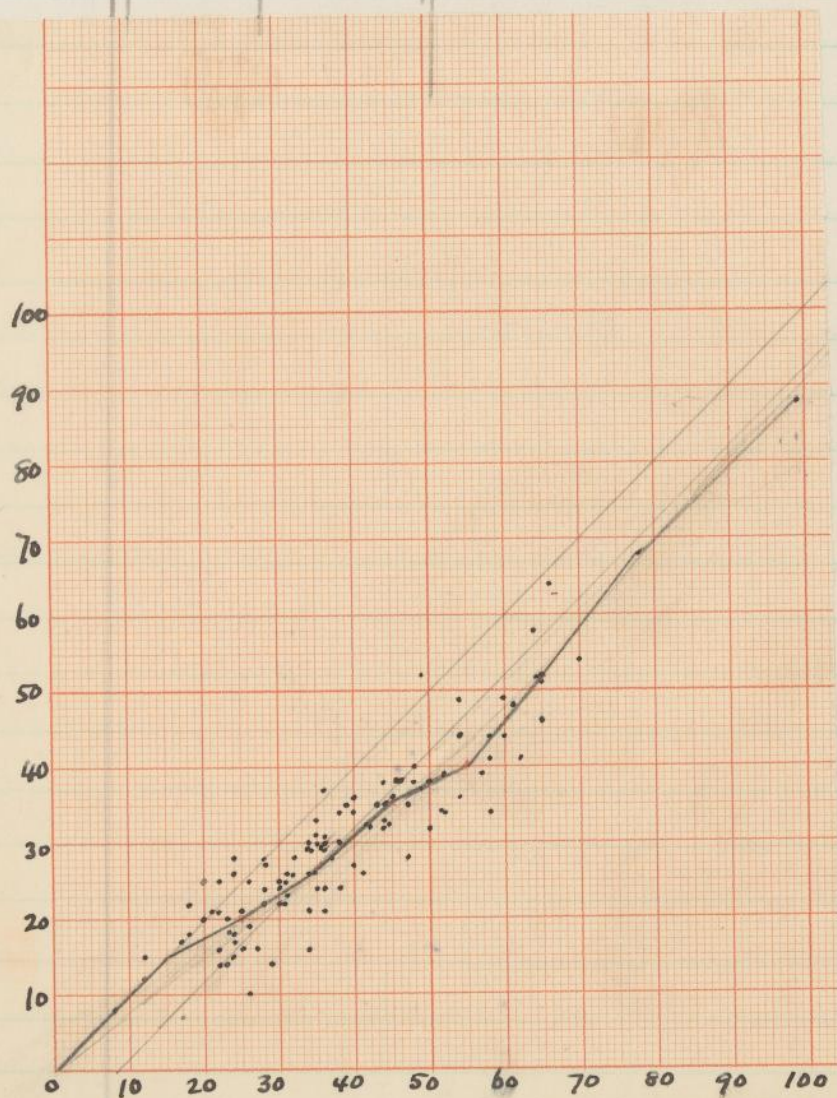
dl

Mean

| No. | λ | 18482 | 18577 | 18482 | 18577 |
|-------|-----------|-------|-------|-------|-------|
| 168 m | - | - | 23 | - | 19 |
| n | - | - | 21 | - | 18 |
| o | - | - | 15 | - | 13 |
| 1 | - | - | 22 | - | 18 |
| q | - | - | 18 | - | 15 |
| n | - | - | 24 | - | 20 |

Cygni
Book 14

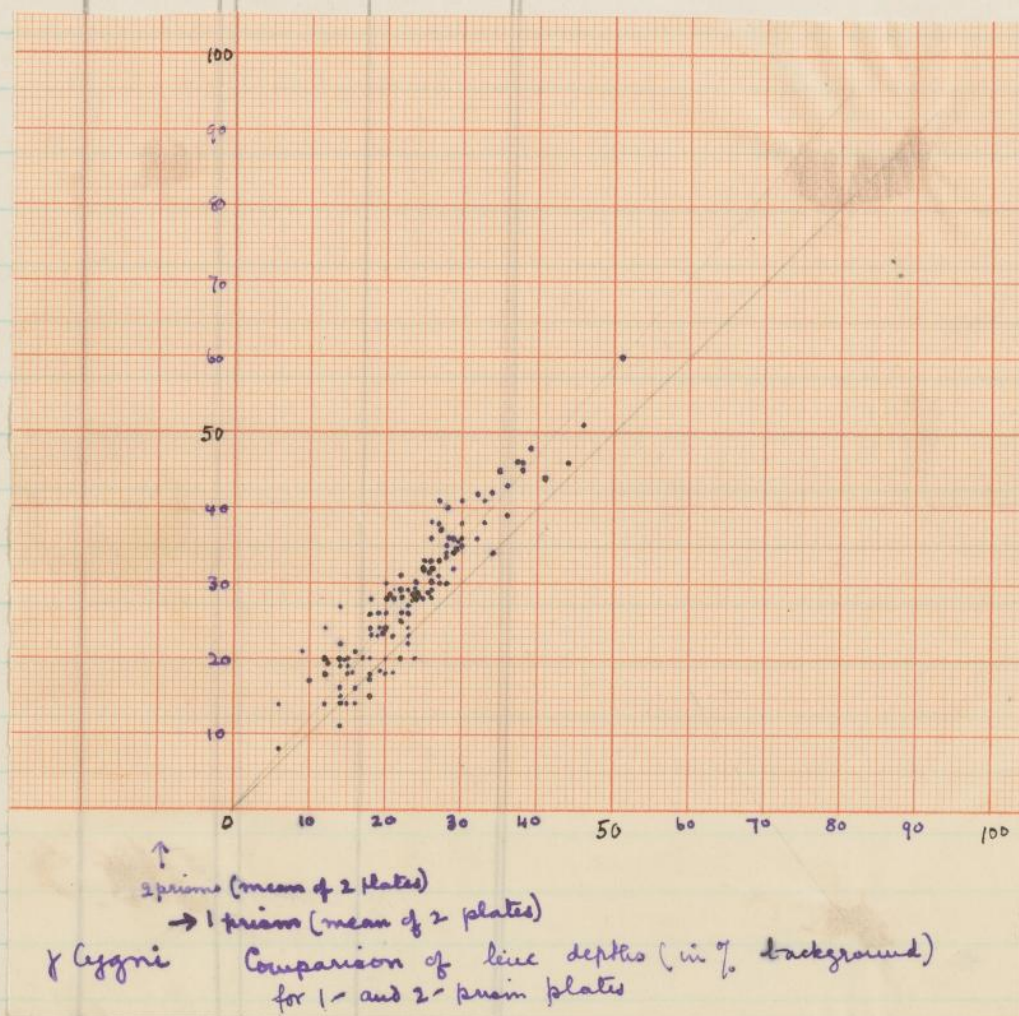
↑ 1 prism
Mean of two plates



Intensity drop for 2 prisms. hundredths
for a magnitude →
Mean of two plates

1 prism

| | <u>dm</u> | | <u>dl</u> | |
|----|-----------|-------|-----------|-------|
| | 18581 | 18585 | 18581 | 18585 |
| 22 | 14 | 18 | 12 | 15 |
| | 18 | - | 15 | 15 |
| 22 | 14 | 18 | 12 | 15 |
| | | - | - | - |
| 18 | 16 | 15 | 14 | 14 |
| - | - | - | - | - |



Cygni Book 14

Mean curve between 1-prism and 2-prism plates

| 2pr. Dm | 1pr. Dm | Δ | 2pr. <u>dl</u> | 1pr. <u>dl</u> | Δ |
|------------|------------|----------|-------------------|-------------------|----------|
| 0 | 0 | 00 | 00 | 00 | 00 |
| 05 | 05 | 00 | 04 | 04 | 00 |
| 10 | 10 | 00 | 09 | 09 | 00 |
| 15 | 15 | 00 | 13 | 13 | 00 |
| 20 | 17 | 03 | 17 | 14 | 03 |
| 25 | 20 | 05 | 21 | 17 | 04 |
| 30 | 23 | 07 | 24 | 19 | 05 |
| 35 | 26 | 09 | 28 | 21 | 07 |
| 40 | 31 | 09 | 31 | 25 | 06 |
| 45 | 35 | 10 | 34 | 28 | 06 |
| 50 | 38 | 12 | 37 | 30 | 07 |
| 55 | 40 | 15 | 40 | 31 | 09 |
| 60 | 46 | 14 | 42 | 35 | 07 |
| 65 | 52 | 13 | 45 | 38 | 07 |
| 75 | 65 | 10 | 50 | 45 | 05 |
| 100 | 89 | 11 | 60 | 56 | 04 |

| | | | | | |
|----|----|----|----|----|----|
| 36 | 30 | 61 | 48 | 34 | 29 |
| 49 | 32 | 38 | 34 | 27 | 16 |
| 54 | 49 | 65 | 52 | 29 | 14 |
| 48 | 40 | 60 | 49 | 24 | 17 |
| 22 | 16 | 40 | 34 | 22 | 25 |
| 52 | 39 | 69 | 44 | 24 | 28 |
| 35 | 24 | 18 | 18 | 33 | 28 |

Comparison of 1 and 2 prism plates

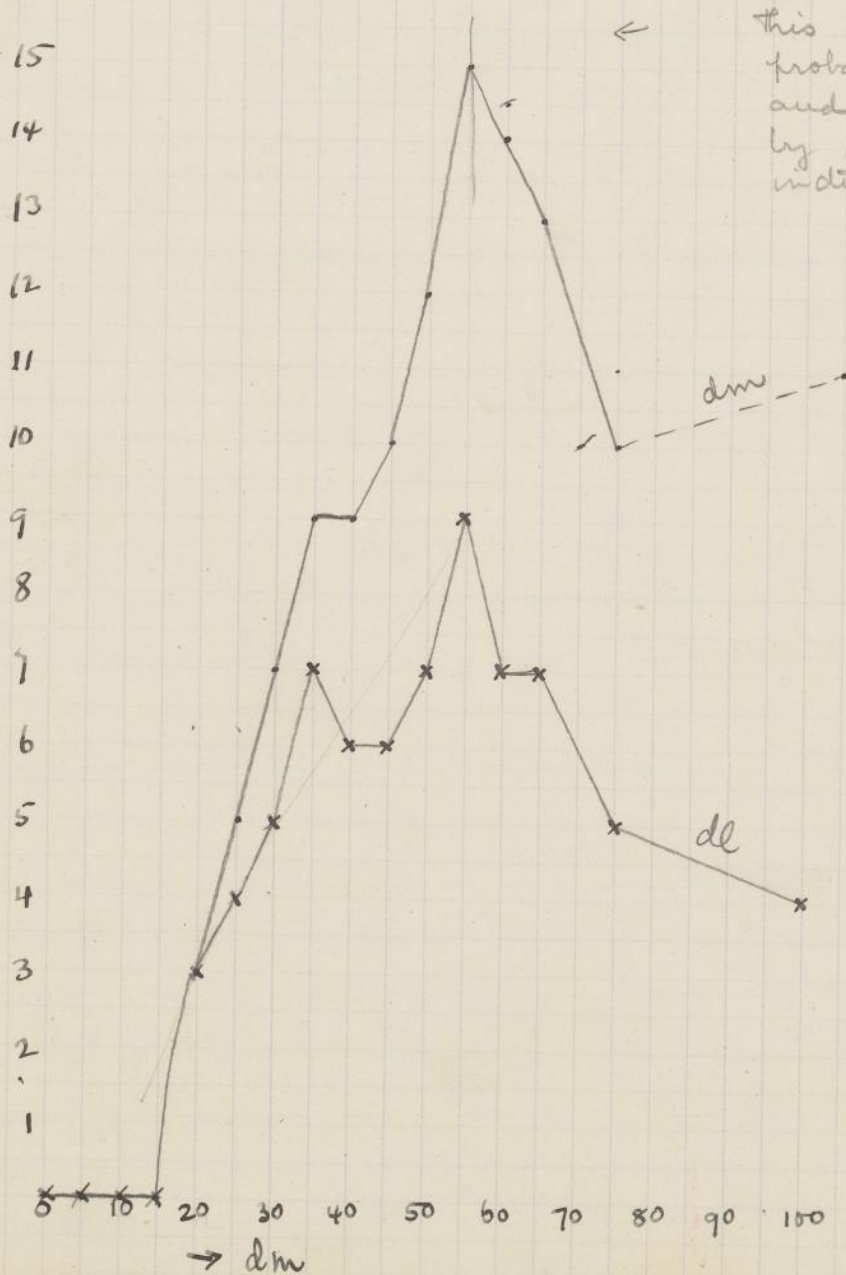
Mean intensity drop. Individual
smaller magnitudes pointsof Cygni Bk.
14

| 2pr. | 1pr. | 2pr. | 1pr. | 2pr. | 1pr. | 2pr. | 1pr. |
|------|------|------|------|------|------|------|------|
| 49 | 52 | 34 | 30 | 50 | 32 | 38 | 24 |
| 62 | 41 | 34 | 26 | 30 | 22 | 26 | 25 |
| 50 | 50 | 22 | 14 | 24 | | 26 | 10 |
| 18 | 17 | 64 | 58 | 99 | 88 | 36 | 30 |
| 46 | 38 | 65 | 51 | 44 | 45? | 43 | 35 |
| 24 | 28 | 37 | 32 | 54 | 36 | 28 | 28 |
| 39 | 40 | 44 | 34 | 22 | - | 24 | 20 |
| 15 | 18 | 52 | 26 | 36 | 21 | 44 | 35 |
| 24 | 18 | 41 | 30 | 12 | 15 | 28 | 24 |
| 24 | 15 | 36 | 39 | 34 | 26 | 30 | 25 |
| 42 | 32 | 57 | 38 | 58 | 34 | 23? | |
| 54 | 44 | 48 | 44 | 70 | 54 | 23 | 14 |
| 34 | 21 | 58 | 27 | 30 | 22 | 34 | 16 |
| 44 | 38 | 36 | 34 | 47 | 35 | 61 | 31 |
| 24 | 16 | 52 | 22 | 58 | 41 | 24 | 18 |
| 22 | 21 | 18 | 25 | 21 | 21 | 12 | 12 |
| 42 | 32 | 30 | 25 | 40 | 27 | 20 | 25 |
| 17 | 17 | 65 | 52 | 49 | 37? | 25 | ? |
| 40 | 36 | 50 | 38 | 32 | 23 | 28 | 22 |
| 36 | 24 | 39 | 35 | 26 | 19 | 17 | 7 |
| 36 | 29 | 35 | 31 | 31 | 26 | | |
| 66 | 64 | 20 | 20 | 36 | 30 | | |
| 37 | 28 | 47 | 27? | 65 | 46 | | |
| 08 | 08 | 34 | 30 | 31 | 26 | | |
| 24 | 26 | 26 | - | 38 | 30 | | |
| 35 | 33 | 30 | 24 | 46 | 38 | | |
| 78 | 68 | 45 | 36 | 18 | - | | |
| 44 | 33 | 28 | 28 | 37 | 28 | | |
| 36 | 30 | 25 | 21 | 34 | 29 | | |
| 49 | 32 | 61 | 48 | 27 | 16 | | |
| 54 | 49 | 38 | 34 | 29 | 14 | | |
| 48 | 40 | 65 | 52 | 24 | 17 | | |
| 22 | 16 | 60 | 49 | 22 | 25 | | |
| 52 | 39 | 40 | 34 | 24 | 28 | | |
| 35 | 24 | 35 | 44 | 33 | 28 | | |
| | | 18 | 18 | | | | |

8 Cygni Box 14

Diff. 7

Comparison of 1- and 2-prism plates.
Mean dm and mean dl ↑
plotted against mean line depth idm
on 2 prism standard.



Pleiades. Background distribution

| Line | | #4, dm = +106 | | | | | #4, dm = +21 | | | | | #4, #3, #2, #1, d | | | | |
|----------------|------|---------------|-----------------------|----------|----------|----------|--------------|------------|----------|---------------|----------|-------------------|----------|----------|----------|----------|
| | | 1hr. 18568 | 1hr. 18602 | 1hr. 579 | 2hr. 561 | 2hr. 552 | 1hr. 18568 | 1hr. 18602 | 1hr. 579 | 2hr. 561 | 2hr. 552 | 1hr. 18568 | 1hr. 602 | 1hr. 579 | 2hr. 561 | 2hr. 552 |
| H _T | 3691 | -4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| H ₀ | 3697 | -3 | +87 | - | +58 | - | - | - | - | - | - | -29 | - | - | - | - |
| H ₅ | 3704 | -2 | ⁹⁴ +101 | 102 | +65 | - | +8 | - | +3 | - | - | -32 | - | -37 | - | - |
| H _v | 3712 | -1 | +96 | 105 | +73 | - | +13 | 21 | +3 | - | - | -34 | -28 | -42 | - | - |
| H _u | 3722 | 0 | +98 | 101 | +75 | - | +08 | 21 | +6 | - | - | -36 | -39 | -45 | - | - |
| H _λ | 3734 | +1 | 102 | 103 | +82 | - | +17 | 16 | +11 | 24 | -14 | -39 | -35 | -44 | - | - |
| H _K | 3750 | 2 | 101 | 108 | +93 | - | 19 | 19 | +20 | - | -13 | -38 | -26 | -37 | - | - |
| H _L | 3771 | 3 | 102 | 105 | +95 | +98 | 13 | 19 | 24 | 0 | 0 | -37 | -30 | -36 | -54 | -26 |
| H _θ | 3797 | 4 | 103 | 102 | 106 | 78 | 17 | 22 | 35 | 0 | +5 | -31 | -28 | -23 | -44 | -43 |
| H _δ | 3819 | 5 | 103 | 104 | 94 | 74 | 18 | 25 | 22 | 0 | +4 | -30 | -29 | -35 | -40 | -45 |
| H _γ | 3835 | 6 | 107 | 104 | 91 | 86 | 21 | 28 | 21 | 14 | +6 | -22 | -29 | -30 | -32 | -42 |
| | 6a | | | 93 | 92 | | | | 22 | 20 | | | | -32 | -27 | |
| H ₅ | 3889 | 7 | 110 | 99 | 99 | 91 | 17 | 26 | 19 | 21 | 18 | -27 | -25 | -30 | -32 | -28 |
| | 7a | | | 92 | 91 | | | | 20 | 22 | | | | -28 | -25 | |
| H _ε | 3970 | 8 | 123? | 93 | 108 | 95 | 14 | 29 | 20 | 24 | 15 | -30 | -23 | -27 | -22 | -36 |
| H _δ | 4026 | 9 | 109? | 125? | 96 | 105 | 15 | 36 | 25 | 25 | 10 | -29 | -21 | -24 | -22 | -42 |
| H _γ | 4101 | 10 | 105? | 118? | 92 | 111 | 23 | 37 | 21 | 26 | 12 | -26 | -21 | -24 | -20 | -44 |
| | 10a | - | | 92 | 108 | | | | 27 | 32 | | | | -24 | -16 | |
| H _γ | 4340 | 11 | - | 105? | 92 | 128? | 12 | 33 | 23 | 42 | +14 | -29 | -24 | -24 | -9 | -42 |
| | 4388 | 12 | - | - | - | 124? | 12 | 33 | 23 | 38 | +6 | -29 | -24 | -20 | -13 | -47 |
| | 4471 | 13 | - | - | - | 102 | 12 | 38 | 17 | 38 | +6 | -25 | -25 | -20 | -7 | -45 |
| | 13a | - | - | - | - | 121? | | | 21 | 35 | - | | | -16 | -10 | - |
| | 13b | - | - | - | - | 128? | | | 17 | 37 | - | | | -24 | -6 | - |
| | 13c | - | - | - | - | 128? | | | 27 | 36 | - | | | -23 | -7 | - |
| H _β | 4861 | 14 | - | - | - | 93 | -17 | +21 | 18 | 43 | - | -31 | -30 | -16 | -0 | - |

| dm = -23 | | #4 - #5 dm = -35 | | | | | #4 - #6 dm = -141 | | | | |
|----------|------|------------------|------|------|------|------|-------------------|------|------|------|------|
| 1hr. | 2hr. | 1hr. | 1hr. | 1hr. | 2hr. | 2hr. | 1hr. | 1hr. | 1hr. | 2hr. | 2hr. |
| 561 | 552 | 18568 | 602 | 579 | 561 | 552 | 18568 | 602 | 579 | 561 | 552 |
| - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | -29 | - | - | - | - | - | - | - | - | - |
| - | - | -27 | -15 | -58 | - | - | - | - | - | - | - |
| - | - | -26 | -13 | -57 | - | - | - | - | - | - | - |
| - | - | -32 | -16 | -53 | - | - | - | - | - | - | - |
| - | - | -36 | -21 | -53 | - | -72 | - | - | - | - | - |
| - | - | -38 | -22 | -48 | - | -60 | - | - | - | - | - |
| - | - | -37 | -24 | -45 | -80 | -60 | - | - | - | - | - |
| -54 | -26 | -31 | -24 | -31 | -54 | -63 | - | - | - | - | - |
| -44 | -43 | -32 | -25 | -38 | -46 | -56 | - | - | - | - | - |
| -40 | -45 | -29 | -24 | -41 | -34 | -49 | -146 | -138 | -150 | - | - |
| 32 | -42 | -38 | -32 | -32 | -32 | -31 | -139 | -135 | -146 | -128 | -145 |
| 27 | - | -35 | -21 | -38 | -29 | -31 | -141 | -120 | - | - | - |
| 32 | -28 | - | -29 | - | -29 | - | -138 | -132 | -140 | -154 | -147 |
| 25 | - | -34 | -18 | -37 | -33 | -38 | -145 | -149 | - | - | - |
| 22 | -36 | -29 | -14 | -35 | -31 | -42 | -143 | -136 | -143 | -143 | -140 |
| 22 | -42 | -29 | -17 | -32 | -27 | -42 | -141 | -134 | -139 | -147 | -143 |
| 20 | -44 | -28 | -16 | -47 | - | - | -139 | -139 | -137 | -141 | -149 |
| 16 | - | -40 | -27 | -28 | -16 | -47 | -134 | -132 | - | - | - |
| -9 | -42 | -37 | -27 | -36 | -16 | -84 | -146 | -150 | -139 | -127 | -155 |
| -13 | -47 | -37 | -32 | -40 | -13 | -50 | -144 | -147 | -138 | -128 | -163 |
| -7 | -45 | -36 | -13 | - | - | - | -143 | -152 | -128 | -128 | -160 |
| -10 | - | -45 | -09 | - | - | - | -140 | -136 | - | - | - |
| -6 | - | -41 | - | - | - | - | - | -136 | - | - | - |
| -7 | - | -35 | -36 | - | - | - | - | -150 | - | - | - |
| -0 | - | - | - | - | - | - | -143 | -156 | -134 | -162 | - |

Continued from
page 24

General Ledger of Pliades results

| | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 | #4 |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 18564 | 18557 | 18552 | 18561 | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | 18630 | 18630 | 18630 |
| -3 | | | | | 16 | | | 18 | | | | | | | |
| -2 | | | | | 19 | 08 | | 12 | | | | | 19 | | |
| -1 | | | | | 18 | 07 | 23 | 28 | | | | 20 | 25 | | |
| 0 | | | | | 25 | 11 | 30 | 34 | | | | 23 | 30 | | |
| 1 | | | 54 | | 39 | 34 | 44 | 43 | 18 | 31 | | 41 | 34 | | |
| 2 | | | 67 | | 52 | 36 | 54 | 52 | 32 | 37 | | 49 | 55 | | |
| 3 | | | 80 | 94 | 73 | 53 | 67 | 75 | 18 | 54 | 88 | 63 | 72 | | |
| 4 | | | 97 | | 81 | 65 | 74 | 75 | 58 | 77 | | 84 | 96 | | |
| 5 | | 37 | 15 | | 12 | 11 | 15 | 12 | 71 | 75 | 15 | 15 | 16 | | |
| 6 | 93 | - | 105 | 108 | 80 | 66 | 76 | 84 | 80 | 16 | 85 | 85 | 87 | 5 | |
| 6a | | - | | | - | - | - | - | 5 | - | | - | - | | |
| 7 | 98 | 127 | 91 | 120 | 89 | 71 | 72 | 91 | 88 | 94 | 106 | 90 | 84 | 5 | |
| 7a | | - | | | - | - | - | - | 4 | - | | - | - | | |
| 8 | 103 | 101 | 95 | 97 | 99 | 64 | 68 | 93 | 86 | 104 | 105 | 74 | 91 | 6 | |
| 9 | 19 | 16 | 13 | 14 | 14 | 15 | 13 | 14 | 9 | 08 | 22 | 14 | 13 | 1 | |
| 10 | 89 | 101 | 94 | 94 | 80 | 67 | 57 | 74 | 76 | 76 | 89 | 83 | 72 | 4 | |
| 10a | | - | | | - | - | - | - | 10 | - | - | - | - | | |
| 11 | 90 | 98 | 88 | 82 | 63 | 54 | 46 | 63 | 63 | 64 | 70 | 66 | 60 | 5 | |
| 12 | 09 | 22 | 14 | 10 | 06 | 12 | 06 | 11 | 12 | - | 8 | 08 | 13 | 0 | |
| 13 | 08 | 16 | 10 | 10 | 11 | 12 | 10 | 06 | 7 | 17 | 8 | 04 | 13 | | |
| 13a | | - | | | - | - | - | | 10 | - | | | | | |
| 13b | | - | | | - | - | - | | 7 | - | | | | | |
| 13c | | - | | | - | - | - | | 8 | - | | | | | |
| 14 | 88 | - | | 59 | 50 | 25 | 29 | 47 | 56 | 58 | 69 | 53 | 47 | 5 | |

| | 18564 | 18557 | 18552 | 18561 | Mean | 18568 | 18579 | 18600 | 18614 | 18644 | 18646 | 18650 | 18630 | |
|-----|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 30 | - | - | - | - | - | 14 | | | 15 | | | | | 14 |
| 596 | - | - | - | - | - | 16 | 07 | | 10 | | | | 16 | 12 |
| 19 | - | - | - | - | - | 15 | 06 | 19 | 23 | | | 17 | 20 | 17 |
| 25 | - | - | - | - | - | 21 | 10 | 24 | 27 | | | 19 | 24 | 21 |
| 30 | - | - | - | - | - | 30 | 27 | 33 | 33 | 15 | 25 | 31 | 27 | 29 |
| 34 | - | - | 39 | - | (39) | 38 | 28 | 39 | 38 | 26 | 29 | 36 | 40 | 34 |
| 55 | - | - | 46 | - | (46) | 49 | 39 | 46 | 50 | 15 | 39 | 56 | 44 | 47 |
| 72 | - | - | 52 | 58 | 55 | 53 | 45 | 49 | 50 | 41 | 51 | 54 | 59 | 51 |
| 96 | - | - | 59 | - | (59) | 10 | 10 | 13 | 10 | 48 | 50 | 13 | 13 | 14 |
| 16 | - | 29 | 13 | - | 21 | 50 | 46 | 48 | 54 | 52 | 14 | 54 | 54 | 55 |
| 87 | 58 | - | 62 | 79 | 66 | - | - | - | - | 05 | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | 05 | - | - | - | - |
| 84 | 59 | 69 | 57 | 67 | 63 | 56 | 48 | 48 | 57 | 56 | 58 | 62 | 56 | 54 |
| - | - | - | - | - | - | - | - | - | - | 04 | - | - | - | - |
| 91 | 61 | 61 | 58 | 59 | 60 | 60 | 45 | 47 | 58 | 55 | 62 | 62 | 58 | 57 |
| 13 | 16 | 14 | 11 | 12 | 13 | 12 | 13 | 11 | 12 | 08 | 07 | 18 | 12 | 11 |
| 72 | 56 | 61 | 58 | 58 | 58 | 52 | 46 | 41 | 49 | 50 | 50 | 56 | 53 | 48 |
| - | - | - | - | - | - | - | - | - | - | 09 | - | - | - | - |
| 60 | 56 | 59 | 56 | 53 | 56 | 44 | 39 | 35 | 44 | 44 | 45 | 48 | 46 | 42 |
| 13 | 08 | 18 | 12 | 09 | 16 | 05 | 10 | 05 | 10 | 10 | - | 7 | 07 | 01 |
| 13 | 07 | 14 | 09 | 09 | 10 | 10 | 10 | 09 | 05 | 06 | 14 | 7 | 04 | 11 |
| - | - | - | - | - | - | - | - | - | - | 09 | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | 06 | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | 07 | - | - | - | - |
| 47 | 56 | - | - | 42 | 49 | 37 | 21 | 23 | 35 | 40 | 41 | 47 | 39 | 35 |

#5

General Ledger of Pleiades results

| | 18564 | 18557 | 18552 | 18561 | 18568 #5 | 18579 | 18602 | 18614 | 18644 #5 | 18646 | 18650 | 18630 | 186 |
|-----|------------------------|-------|-------|-------|-------------|-------|-------|-------|---------------|-------|-------|-------|-------|
| -3 | | | | | 23 | | | | | | | 596 | |
| -2 | | | | | 20 | 18 | 15 | | | | | | |
| -1 | | | | | 26 | 13 | 30 | | | | | 37 | |
| 0 | | | | | 29 | 28 | 38 | 35 | | | 24 | 44 | |
| 1 | | | | | 41 | 41 | 51 | 51 | | | 31 | 29 | |
| 2 | | | 45 | | 50 | 51 | 51 | 61 | 23 | 40 | 41 | 44 | |
| 3 | | | 82 | | 75 | 76 | 73 | 80 | 2340 | 24 | 56 | 74 | |
| 4 | | | 85 | | 87 | 79 | 83 | 89 | 57 40 | 66 | 79 | 88 | |
| 5 | 56 | 32 | 33 | | 11 | 19 | 15 | 17 | 57 | 73 | 17 | 18 | 16 |
| 6 | (36) | 115 | 121 | | 86 | 87 | 78 | 91 | 69 | 84 | 102 | 80 | 92 |
| 6a | | - | | | - | - | - | - | 8 | - | - | - | |
| 7 | 304 42 262 87 | 68 | 85 | 109 | (42) | 84 | 85 | 82 | 83 | 17 | 82 | 104 | 75 83 |
| 7a | | - | | | - | - | - | - | 87 | - | | | |
| 8 | | 111 | 92 | 88 | 84 | 88 | 87 | 87 | 83 | (20) | 97 | 100 | 79 87 |
| 9 | | 26 | 24 | 20 | 28 | 19 | 17 | 15 | 12 | 15 | 13 | 27 | 18 16 |
| 10 | | 90 | 84 | 82 | 95 | 80 | 78 | 74 | 80 | 69 | 86 | 88 | 74 77 |
| 10a | | - | | | - | - | - | - | 14 | - | | | |
| 11 | | 85 | 78 | 70 | 86 | 65 | 63 | 64 | 62 | 62 | 63 | 72 | 65 65 |
| 12 | | 12 | 18 | 24 | 15 | 07 | 07 | 11 | 11 | 4 | 06 | 07 | 8 11 |
| 13 | | 11 | 18 | 10 | 11 | 11 | 07 | 11 | 11 | 9 | 07 | 13 | 12 11 |
| 13a | | | | | - | - | - | - | 4 | - | | | |
| 13b | | | | | - | - | - | - | 4 | - | | | |
| 13c | | | | | - | - | - | - | 5 | - | | | |
| 14 | | | | | 56 | | 51 | 48 | 50 | 58 | 57 | 53 | 53 |

| | 18664 | 18557 | 18552 | 18561 | mean | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | |
|-----|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 30 | - | - | - | - | - | 19 | | | | | | - | - | 19 |
| 596 | - | - | - | - | - | 17 | 15 | 13 | | | | - | - | 15 |
| | - | - | - | - | - | 21 | 11 | 24 | | | | - | - | 21 |
| 37 | - | - | - | - | - | 23 | 23 | 30 | 28 | | | - | 20 | 26 |
| 44 | - | - | - | - | - | 31 | 31 | 37 | 37 | | | - | 25 | 31 |
| 29 | - | - | - | - | - | (34) | 37 | 37 | 43 | | 31 | - | 31 | 34 |
| 44 | - | - | 34 | - | (53) | 50 | 50 | 49 | 52 | 19 | 38 | - | 40 | 44 |
| 74 | - | - | 53 | - | (54) | 55 | 52 | 53 | 56 | 31 | 46 | - | 52 | 52 |
| 88 | - | - | 54 | - | | | | | | 41 | 49 | 14 | 15 | 14 |
| 16 | - | 26 | 26 | - | 26 | 10 | 16 | 13 | 14 | 47 | 54 | 61 | 52 | 54 |
| 92 | - | 65 | 67 | - | 66 | 55 | 55 | 51 | 57 | 68 | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | | | - | - | - |
| 83 | 47 | 54 | 63 | 32 | 49 | 54 | 54 | 53 | 53 | 14 | 53 | 62 | 50 | 53 |
| | - | - | - | - | - | - | - | - | - | 55 | - | - | - | - |
| 87 | 64 | 57 | 56 | 54 | 58 | 56 | 55 | 53 | 53 | 27 | 59 | 60 | 52 | 55 |
| 16 | 21 | 20 | 17 | 23 | 20 | 16 | 14 | 13 | 10 | 13 | 11 | 22 | 15 | 14 |
| 77 | 56 | 54 | 53 | 58 | 55 | 52 | 51 | 49 | 52 | 47 | 52 | 56 | 49 | 51 |
| | - | - | - | - | - | - | - | - | - | 12 | - | - | - | - |
| 65 | 54 | 51 | 48 | 55 | 52 | 45 | 44 | 45 | 44 | 44 | 44 | 48 | 45 | 45 |
| 11 | 10 | 15 | 23 | 13 | 15 | 06 | 06 | 10 | 10 | 04 | 05 | 06 | 07 | 10 |
| 11 | 10 | 15 | 09 | 10 | 11 | 10 | 06 | 10 | 10 | 08 | 06 | 11 | 10 | 10 |
| | - | - | - | - | - | - | - | - | - | 04 | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | 04 | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | 05 | - | - | - | - |
| 53 | - | - | - | - | - | | | | 36 | 37 | 41 | 41 | 39 | 39 |

#6

General Ledger of Pleiades results

| | 18564 | 18557 | 18552 | 18561 | #6 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | 1861 |
|-----|-------|-------|-------|-------|-------------------|-------|-------|-------|-----------------|-------|-------|-------|------|
| -3 | | | | | | | | | | | | 596 | |
| -2 | | | | | | | | | | | | | |
| -1 | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | |
| 1 | | | 86 | | | | | | | | | | |
| 2 | | | | | | | | | 47 | | | | |
| 3 | | | | | | | | | 166 | | | | |
| 4 | | | | | | | | | 1653 | | | | |
| 5 | | | | | 12 13 | 07 | 33 | | 58 | | | 16 | 37 |
| 6 | | | | | 119 119 | 119 | 94 | | 40 | | | | |
| 6a | | | | | - | - | - | | X | - | | | |
| 7 | | | | | 105 102 106 | 87 | 113 | 128 | 57 | 74 | | 97 | |
| 7a | | | | | | - | - | - | X | - | | - | |
| 8 | 93 | | 118 | 122 | 97 85 | 89 | 91 | 118 | 63 | 98 | 78 | 104 | 96 |
| 9 | 24 | 44 | 21 | 42 | 16 13 | 19 | 16 | 011 | 14 | 08 | 14 | 15 | 15 |
| 10 | 80 | 129 | 108 | 108 | 90 87 | 85 | 78 | 97 | 56 | 90 | 74 | 90 | 99 |
| 10a | | - | | | - | - | - | - | X | - | | | |
| 11 | 84 | 104 | 110 | 105 | 76 76 | 73 | 64 | 91 | 56 | 78 | 70 | 88 | 75 |
| 12 | | 19 | 09 | 20 | 09 11 | 14 | 12 | 12 | 8 | 09 | | 11 | 10 |
| 13 | | 44 | 12 | 30 | - | 09 | 14 | 12 | 9 | 09 | | 11 | 11 |
| 13a | | | | | | - | - | - | X | - | | | |
| 13b | | | | | | - | - | - | X | - | | | |
| 13c | | | | | | - | - | - | X | - | | | |
| 14 | | | | | 68 36 | 58 | 90 | - | 81 | 83 | | 57 | 58 |

| | 18664 | 18557 | 18552 | 18561 | mean | 18568 | 18579 | 18602 | 18614 | 18644 | 18646 | 18650 | 18630 | |
|-----|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 596 | - | - | - | - | - | | | | | | | | | |
| | - | - | - | - | - | | | | | | | | | |
| | - | - | - | - | - | | | | | | | | | |
| | - | - | - | - | - | | | | | | | | | |
| | - | - | - | - | - | | | | | | | | | |
| | - | - | - | - | - | | | | | 35 | | | | 35 |
| | - | - | - | - | - | | | | | 46 | | | | 46 |
| | - | - | - | - | - | | | | | 39 | | | | 39 |
| 37 | - | - | - | - | - | 10 | 06 | 26 | | - | | 4 | 21 | 17 |
| | - | - | - | - | - | 67 | 67 | 58 | | ? | | | - | 64 |
| | - | - | - | - | - | - | - | - | | | | | - | - |
| | - | - | - | - | - | 63 | 55 | 65 | 69 | 41 | 49 | 59 | - | 57 |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 76 | 58 | - | 66 | 67 | 64 | 59 | 56 | 57 | 66 | 44 | 59 | 51 | 62 | 59 |
| 15 | 20 | 33 | 18 | 32 | 26 | 12 | 16 | 14 | 10 | 12 | 07 | 12 | 13 | 13 |
| 79 | 52 | 70 | 63 | 63 | 63 | 58 | 54 | 51 | 59 | 40 | 56 | 49 | 56 | 60 |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 75 | 54 | 62 | 64 | 62 | 60 | 50 | 49 | 45 | 57 | 40 | 51 | 46 | 56 | 50 |
| 0 | - | 16 | 08 | 17 | 14 | 09 | 12 | 10 | 10 | 06 | 08 | - | 10 | 09 |
| 19 | - | 33 | 10 | 24 | 22 | - | 08 | 12 | 10 | 07 | 08 | - | 10 | 16 |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 58 | - | - | - | - | - | 48 | 41 | 56 | | 25 | 53 | - | 41 | 42 |
| | | | | | | | | | | | | | | 44 |

2 prisms. Means for individual Pleiades. dl.

| | | 1 | 2 | 3 | 4 | 5 | 6 |
|----|----------------|----|------|------|------|-----------|----|
| 1 | | | (41) | | (39) | | |
| 2 | H _γ | 52 | (52) | | (46) | (34) | |
| 3 | H _γ | 56 | (63) | (39) | 55 | (53) | |
| 4 | H _γ | 60 | 68 | (50) | (59) | (54) | |
| 5 | H _γ | 61 | 63 | (63) | 21 | 26 | |
| 5a | | 14 | | 20 | | | |
| 6 | H _γ | 59 | 64 | 63 | 66 | 66 | |
| 7 | H _γ | 58 | 62 | 54 | 63 | <u>49</u> | |
| 8 | H _γ | 56 | 59 | 51 | 60 | 58 | 64 |
| 9 | | 15 | 12 | 15 | 13 | 20 | 26 |
| 10 | H _γ | 66 | 52 | 48 | 58 | 55 | 63 |
| 11 | H _γ | 50 | 49 | 41 | 56 | 52 | 60 |
| 12 | | 15 | 10 | 09 | 16 | 15 | 14 |
| 13 | | 16 | 10 | 10 | 10 | 11 | 22 |
| 14 | H _β | 27 | 44 | 24 | 49 | .. | .. |

| Placides | | Mean values of dl from nine prism plates. | | | | | | Residuals. | | | | | | | |
|----------|------|---|------|------|------|-----------------|-------------------|-----------------------|-----------------------|------------------------|-------------------------|--|---|----------------------|---|
| No.3 | No.2 | No.4 | No.5 | No.6 | No.1 | Mean 1,2,4,5 | No.1 | No.2 | No.3 | No.4 | No.5 | | | | |
| -3 29 | .. | 14 | 19 | | 09 | 14 | 1,2,1,1,4 | 2 1,2,2,2 | 2 10,13,3 | 9 0,1 | 1 - | | | | |
| -2 16 | 12 | 12 | 15 | | 12 | 13 | 4,5,5,1,2,1 | 2 1,2,11,6,1,4,6 | 4 2,2,8 | 4 4,9,2,4 | 5 2,0,2 | | | | |
| -1 138 | 16 | 17 | 21 | | 14 | 17 | 7,0,1,1,1,8 | 3 | 7,2,10,7 | 6 2,11,2,6,0,3 | 4 0,10,3,8 | | 5 | | |
| 0 25 | 21 | 21 | 26 | | 24 | 23 | 7,6,9,0,2,3,3 | 4 0,2,11,2,1,2,0,6 | 3 4,2,5,0,2,2 | 3 0,11,3,6,5,4,2,3 | 4 2,3,4,2,4,7 | | 4 | | |
| 1 28 | 33 | 29 | 31 | | 31 | 31 | 3,5,11,2,5,2,1 | 4 2,4,8,6,2,2,2,0 | 5 1,7,4,2,7,1,1,1 | 5 1,2,4,4,2,0,2,2 | 2 0,0,6,6,4,0,6,8 | | 4 | | |
| 34 | 39 | 34 | 34 | (35) | 34 | 35 | 2,2,11,2,9,2 | 3 3,0,2,3,9,1,5,7 | 4 1,2,10,4,11,2,2,1 | 4 4,2,5,4,12,5,2,6 | 6 3,3,3,7,15,8,3,1 | | 5 | | |
| 43 | 48 | 47 | 44 | (46) | 47 | 46 | 0,0,6,1,8,7,1,0 | 3 1,0,1,2,9,1,9,2,4 | 4 0,1,8,2,11,2,2,10 | 5 2,8,1,3,4,4,2,2 | 4 6,6,5,8,13,2,4,5 | | 6 | | |
| 48 | 54 | 51 | 52 | (39) | 51 | 52 | 1,1,2,3,3,5,0,2 | 3 3,0,1,3,8,4,11,2,2 | 4 2,6,2,2,2,2,10,4,5 | 5 0,2,2,2,2,0,2,2,3 | 3 3,0,1,4,11,2,4,4 | | 3 | | |
| 50 | 53 | 52 | 54 | 04 | 51 | 52 | 2,1,1,2,2,3,4,2,3 | 2 1,3,3,0,5,3,5,0,3 | 2 2,8,2,2,2,2,2,0,2 | 4 2,2,2,2,2,2,2,3,8 | 2 1,1,2,2,2,2,2,2,3 | | 3 | 3,3,6 | 4 |
| 48 | 54 | 55 | 54 | 57 | 52 | 54 | 4,1,2,0,2,4,1 | 2 1,1,1,1,4,2,1,3,0,1 | 1 2,8,4,0,2,2,1,1,2,2 | 3 1,7,7,2,2,2,2,7,1 | 3 0,0,1,2,2,1,1,1,2,2,1 | | 2 | 6,2,2,0,11,2,2,2 | 8 |
| 48 | 54 | 56 | 56 | 57 | 55 | 55 | 8,2,8,2,7,6,10 | 7 2,1,1,0,5,4,5,4 | 3 0,7,2,2,2,2,2,2,1 | 2 4,11,9,2,2,1,6,4,2,1 | 5 0,1,1,3,3,4,2,2,1 | | 2 | 2,1,1,0,9,13,2,2,5,2 | 4 |
| 44 | 53 | 49 | 57 | 54 | 51 | 51 | 2,2,2,2,2,2,3 | 3 2,2,1,1,0,5,4,5,4 | 2 0,7,4,1,5,0,1,1,1 | 2 3,3,2,0,1,1,7,4,1 | 3 1,1,2,2,1,2,1,5,2,0 | | 3 | 4,0,3,5,14,2,2,2,6 | 5 |
| 37 | 42 | 43 | 45 | 49 | 46 | 44 | 4,5 | 4 2,2,0,2,2,2,2,2,10 | 3 0,3,10,6,13,6,2,4 | 6 1,2,2,2,1,1,2,2,3,1 | 3 0,2,0,2,2,2,2,2,0,0 | | 1 | 1,0,4,8,9,2,2,2,7,1 | 4 |
| 24 | 33 | 35 | 39 | 44 | [24] | 36 | | .. 16,1,4,3,3,4,4,4 | 5 9,12,18,1,5,2,6,2,5 | 7 2,14,12,0,5,6,12,4,0 | 6 2,2,2,2,2,0,0 | | 1 | 4,3,12,19,4,3,2 | 7 |

Mean (1,2,4,5)

43

51

59

59

64

58

58

(15)

55

52

(14)

(12)

40

Pleiades. Durations of No. 3 from average

| Line | λ | (1 prism) | | | (1 prism) | | |
|------|-----------|-----------------------|-----|-----|-----------|-----|-----|
| | | C18630 | dm | | C18596 | dm | |
| 0 | 3722 | 244 | 253 | -09 | | | |
| 1 | 3734 | 244 223 | 234 | -13 | 384 | 402 | -18 |
| 2 | 3750 | 206 | 218 | -12 | 364 | 384 | -20 |
| 3 | 3771 | 186 | 197 | -11 | 341 | 356 | -15 |
| 4 | 3797 | 164 | 176 | -12 | 311 | 321 | -10 |
| 5 | 3819 | 148 | 159 | -11 | 294 | 305 | -11 |
| 6 | 3835 | 134 | 145 | -11 | 281 | 294 | -13 |
| 6a | | 114 | 123 | -09 | 259 | 271 | -12 |
| 7 | 3889 | 97 | 106 | -09 | 247 | 259 | -12 |
| 7a | | 80 | 89 | -09 | 217 | 225 | -08 |
| 8 | 3970 | 70 | 77 | -07 | 201 | 207 | -06 |
| 9 | 4026 | 60 | 63 | -03 | 191 | 197 | -06 |
| 10 | 4101 | 57 | 59 | -02 | 181 | 186 | -05 |
| 10a | | 57 | 59 | -02 | 181 | 186 | -05 |
| 11 | 4340 | 51 | 51 | 00 | 175 | 180 | -05 |
| 12 | 4388 | 51 | 51 | 00 | 175 | 180 | -05 |
| 13 | 4471 | 51 | 51 | 00 | 175 | 180 | -05 |
| 13a | | 55 | 55 | 00 | - | - | .. |
| 13b | | 66 | 62 | +04 | 191 | 191 | 00 |
| 13c | | 91 | 83 | +08 | 213 | 212 | +01 |
| 14 | 4861 | 142 | 129 | +13 | 266 | 259 | +07 |

Background.

Comparison of α CMi, α Aur, and α Per Selected Lines

Hydrogen PD 4861 ✓ Fe (cont) 4307 ✓

4340 ✓ 4271 ✓

4101 ✓ 4202 ✓

(3970) ✓ 4045 ✓

3889 ✓ Fe+ 4351 ✓

Mg S³P 4571 ✓ 4233 ✓

Ca SP 4227 ✓

3P³D 4435 ✓

4455 ✓

Balmer series

Ca+ SP 3970 ✓

H β α CMi 56 α Per 57

3933 ✓

H γ 68 92

Sr 4607 ✓

H δ 78 (74) ✓ Too high

Sr+ 4215 ✓

He " "

4077 ✓

H ϵ 72 104

Ba+ 4554 ✓

H η 77 93

Al 3944 ✓

H θ 68 (66)

3961 ✓

H ζ " 88

Sc+ 4374 ✓

H χ 59 56

4400 ✓

58

4314 ✓

Y+ 4884 ✓

4900 ✓

Tit 4395 ✓

4444 ✓

Cr 4254 ✓

4274 ✓

4289 ✓

Mn 4031 ✓

Fe 4325 ✓

Mean dm

Mean dl

| λ | | α Cmi | α Aur | α Per | α Cmi | α Aur | α Per | |
|-----------|------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| 3889 | H | 72 | | 104 | 49 | (-6) 43 | +19 62 | +13 |
| 3933 | Ca+ | 152 | | 270 | 75 | -3 72 | +20 92 | +17 |
| 3944 | Al * | 28 | | 269 44 | 23 | (27) 50 | -17 33 | +10 * |
| 3961 | Al * | 26 | | 40 | 21 | (24) 45 | -14 31 | +10 * |
| 3970 | Ca+ | 143 | | 269 | 73 | (-1) 72 | +20 92 | +19 |
| 4031 | Mn * | 25 | | 35 | 21 | (+6) 27 | +1 28 | +07 * |
| 4077 | Sr+ | 36 | | 42 | 28 | (+11) 39 | -07 32 | +04 |
| 4101 | H δ | 78 | | 74 | 51 | (-10) 41 | +08 49 | -02 |
| 4045 | Fe | 24 | | 24 | 20 | (+18) 38 | -12 20 | 0 * |
| 4202 | Fe | | | 34 | | 34 | | |
| 4215 | Sr+ | 14 | | 36 | 12 | (22) 34 | -10 24 | +12 |
| 4227 | Ca * | 20 | | 36 | 17 | (28) 45 | -7 28 | +11 * |
| 4233 | Fe+ | 18 | | 24 | 15 | (07) 22 | -2 20 | +05 |
| 4254 | Fe | | | | | 22 | | |
| 4271 | Fe | | | | | 14 | | |
| 4274 | Cr | | | | | 34 | | |
| 4289 | Cr | | | | | 36 | | |
| 4307 | " | | | | | 48 | | |
| 4314 | | | | | | .. | | |
| 4325 | Fe | 24 | | 42 | 20 | (+18) 38 | -06 32 | (+12) * |
| 4340 | H δ | 68 | | 92 | 47 | (-1) 46 | +11 57 | +10 |
| 4351 | | | | | | .. | | |
| 4374 | Y+ | | | | | 16 | | |
| 4395 | | | | | | 42 | | |
| 4400 | | | | | | .. | | |
| 4435 | Ca | | | | | .. | | |
| 4444 | | | | | | 23 | | |
| 4455 | Ca | | | | | 22 | | |
| 4534 | Ba+ | | | | | 18 | | |
| 4571 | Ni | | | | | .. | | |
| 4607 | Sr | | | | | .. | | |
| 4861 | H | 56 | | 57 | 40 | (-4) 36 | +05 41 | +01 |
| 4884 | Y+ | | | | | 18 | | |
| 4900 | Y+ | 10 | | | 09 | (+5) 14 | | |

130

Comparison of
different % range
plates

| | Bk. 12 | | Bk. 15 | | | | Bk. 12A | | | | | |
|-----|--------|--------|--------|----------------------------------|--------|----------------------------------|---------|--------|--------|--------|--------|--------|
| | C18601 | C18590 | C18584 | C18676 | C18630 | C18602 | C18568 | C18514 | C18506 | C14843 | C18529 | C18548 |
| 0 | 660 | | 330 | .. | .. | .. | .. | 560 | | | | |
| 10 | 356 | | 173 | 458 | 307 | 440 | 426 | 416 | | | | |
| 20 | 286 | | 133 | 452 408 | 256 | 362 | 372 | 356 | | | | 298 |
| 30 | 242 | | 96 | 404 368 | 219 | 322 | 334 | 312 | | | | 246 |
| 40 | 233 | | 65 | 332 | 185 | 292 254 | 304 | 280 | | | | 205 |
| 50 | 189 | | 38 | 328 | 156 | 246 | 274 | 246 | | | | 173 |
| 60 | 167 | | 10 | 286 | 126 | 234 | 246 | 218 | | | | 146 |
| 70 | 147 | | .. | 246 | 97 | 204 | 216 | 188 | | | | 114 |
| 80 | 126 | | .. | 204 | 67 | 172 | 177 | 168 | | | | 081 |
| 90 | 88 | | .. | 152 | 23 | 130 | 130 | 108 | | | | 046 |
| 100 | -26 | | .. | .. | .. | 30 | 30 | 018 | | | | .. |

| | Bk. 12A | | Bk. 17 |
|-----|---------|--------|--------|
| | C18557 | C18598 | C18614 |
| 0 | .. | .. | .. |
| 10 | 200 | 576 | .. |
| 20 | 132 | 505 | 386 |
| 30 | 093 | 465 | 333 |
| 40 | 060 | 426 | 295 |
| 50 | 026 | 392 | 263 |
| 60 | .. | 358 | 237 |
| 70 | .. | 322 | 203 |
| 80 | .. | 280 | 167 |
| 90 | .. | 224 | 127 |
| 100 | .. | 090 | 005 |

C18608
C18676

Reduced reduction curves
from six plates

C18601
18554
18670
18630
18602
18555

C18601

C18676

KEUFFEL & ESSER CO NEW YORK.

Reduction to std. at 50

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| | ✓ 18601 | 18590 | ✓ 18584 | 18676 | ✓ 18630 | 18602 | 18568 | ✓ 18514 | 18506 | 18483 | 18529 | 18548 | ✓ 18557 |
|-----|------------|-------|------------|-------|------------|-------|-------|------------|-------|-------|-------|-------|------------|
| 0 | 471 | | 292 | .. | .. | .. | .. | 314 | | | | | .. |
| 10 | 167 | | 135 | .. | 151 | 176 | 152 | 170 | | | | | .. |
| 20 | 097 | | 095 | 124 | 100 | 098 | 098 | 110 | | | | | 125 |
| 30 | 053 | | 058 | 076 | 063 | 058 | 060 | 076 | | | | | 073 |
| 40 | 024 | | 027 | 040 | 029 | 028 | 030 | 034 | | | | | 032 |
| 50 | 000 | | 000 | 000 | 000 | 000 | 000 | 000 | | | | | 000 |
| 60 | 022 | | 028 | 042 | 030 | 030 | 028 | 028 | | | | | 027 |
| 70 | 042 | | .. | 082 | 069 | 060 | 058 | 058 | | | | | 059 |
| 80 | 063 | | .. | 124 | 089 | 092 | 097 | 078 | | | | | 092 |
| 90 | 101 | | .. | 176 | 133 | 134 | 144 | 138 | | | | | 127 |
| 100 | 163 | | .. | .. | .. | 234 | 244 | 228 | | | | | .. |

| | ✓ 18557 | ✓ 18598 | 18614 |
|-----|------------|------------|-------|
| 0 | .. | .. | .. |
| 10 | 174 | 184 | .. |
| 20 | 106 | 113 | 123 |
| 30 | 067 | 073 | 070 |
| 40 | 034 | 034 | 032 |
| 50 | 000 | 000 | 000 |
| 60 | .. | 034 | 026 |
| 70 | .. | 070 | 060 |
| 80 | .. | 112 | 096 |
| 90 | .. | 168 | 136 |
| 100 | .. | 202 | 258 |

1928

| | | Means from H plates of Pleiades | | | | Mean | | C | | |
|-------------------|----|---------------------------------|-----|----------|----|--------|--------|----|----|----|
| | | Irreg. fog | | | | 2696 | 2697 | | | |
| Spectrum | | H 2679 | H A | 2696 | | H 2697 | H 2696 | | | |
| ① Line Alcyone | -1 | 21 | 17 | 32 23 | 18 | 14 | 30 | 19 | 24 | 12 |
| | 0 | 25 | 29 | 42 | 21 | 23 | 31 | 32 | 32 | 14 |
| | 1 | 30 | 38 | 54 | 24 | 30 | 37 | 39 | 38 | 24 |
| | 2 | 51 | 74 | 60 | 37 | 49 | 45 | 42 | 44 | 31 |
| | 3 | 52 | 85 | 69 | 38 | 54 | 53 | 47 | 50 | 39 |
| | 4 | 62 | 117 | 81 | 44 | 66 | 52 | 53 | 52 | 47 |
| | 5 | 72 | 96 | 81 | 48 | 58 | 55 | 53 | 54 | 51 |
| | 6 | 72 | 87 | 82 | 48 | 55 | 55 | 52 | 54 | 51 |
| | 7 | 66 | 92 | 79 | 46 | 57 | 53 | 52 | 52 | 52 |
| | 8 | 85 | 92 | 74 | 54 | 57 | 56 | 49 | 52 | 55 |
| | 9 | ¹⁰ 85 | 09 | 13 | 09 | 08 | 12 | 11 | 12 | 24 |
| | 10 | 58 | 90 | 85 | 41 | 56 | 56 | 54 | 55 | 51 |
| | 11 | 42 | 72 | 67 | 32 | 48 | 53 | 46 | 50 | 46 |
| | 14 | 54 | 54 | 44 | 39 | 39 | 32 | 33 | 32 | 24 |
| ② | 1 | 31 | 29 | 38 | 25 | 23 | 40 | 30 | 35 | 21 |
| | 2 | 36 | 46 | 53 | 28 | 35 | 46 | 39 | 42 | 33 |
| | 3 | 47 | 42 | 70 | 35 | 32 | 48 | 48 | 48 | 39 |
| | 4 | 57 | 72 | 74 | 37 | 48 | 58 | 49 | 54 | 48 |
| | 5 | 62 | 78 | 80 | 44 | 57 | 53 | 52 | 52 | 54 |
| | 6 | 70 | 97 | 76 | 48 | 59 | 53 | 50 | 52 | 53 |
| | 7 | 70 | 96 | 80 | 48 | 59 | 55 | 52 | 54 | 54 |
| | 8 | 69 | 95 | 77 | 47 | 58 | 56 | 51 | 54 | 54 |
| | 9 | 16 | 20 | 11 | 14 | 17 | 14 | 10 | 12 | 14 |
| | 10 | 60 | 86 | 69 | 42 | 55 | 54 | 47 | 50 | 50 |
| | 11 | 57 | 83 | 60 | 41 | 53 | 56 | 42 | 49 | 42 |
| | 14 | 50 | 58 | 41 | 37 | 41 | 31 | 31 | 31 | 33 |

* Omitting 2679 which was fogged & irregular

| C | H-C | | | | | Sum | Mean | |
|-------|-------|----|----|------|--|-----|------|--------------|
| | Sp. 1 | 2 | 4 | 5 | | | | |
| 44 12 | 12 | | | | | 12 | 12 | |
| 32 14 | 18 | | | | | 18 | 18 | |
| 38 24 | 14 | 14 | 13 | | | 41 | 14 | |
| 44 31 | 13 | 9 | 11 | | | 33 | 11 | |
| 50 39 | 11 | 9 | 22 | | | 42 | 14 | |
| 52 47 | 5 | 6 | 15 | | | 26 | 9 | |
| 54 51 | 3 | 2 | 15 | | | 20 | 7 | |
| 54 51 | 3 | -1 | 14 | | | 16 | 5 | |
| 52 52 | 0 | 0 | -2 | | | -2 | -1 | omitting (5) |
| 52 55 | -3 | 0 | 1 | (10) | | 8 | .3 | -1 |
| 12 24 | | | | | | | | |
| 55 51 | 4 | 0 | -3 | (7) | | 8 | 2 | 0 |
| 50 46 | 4 | 7 | 3 | (1) | | 15 | 4 | 5 |
| 32 24 | 8 | -2 | 3 | (3) | | 12 | 3 | 3 |
| 5 21 | | | | | | | | |
| 42 33 | | | | | | | | |
| 48 39 | | | | | | | | |
| 54 48 | | | | | | | | |
| 52 54 | | | | | | | | |
| 52 53 | | | | | | | | |
| 54 54 | | | | | | | | |
| 54 54 | | | | | | | | |
| 12 14 | | | | | | | | |
| 50 50 | | | | | | | | |
| 49 42 | | | | | | | | |
| 31 33 | | | | | | | | |

134

Pleiades

(3)

Merope

| | Inreg. fog | | H 2696 | H 2671 | H A | H 2697 | H 2696 | Mean C 2696 2697 | C |
|-----|------------|----------|--------|--------|-----|---------------------|--------|------------------------|------|
| | H 2679 | 24 36 | | | | | | | |
| 1 | | | | | 20 | 30 | | | 16 |
| | | | | | 28 | 25 | | | 18 |
| 2 | 36 | 44 | | 28 | 33 | 30 | | | 25 |
| 3 | 29 | 48 | | 23 | 36 | 33 | | | 128 |
| 4 | 44 | 60 | | 33 | 42 | 47 | | | 34 |
| 5 | 54 | 54 | | 39 | 39 | 58 | | | 43 |
| 6 | 60 | 70 | | 42 | 48 | 56 | | | 48 |
| 7 | 56 | 74 | | 40 | 49 | 60 | | | 50 |
| 8 | 56 | 66 | | 40 | 46 | 59 | | | 48 |
| 9 | 10 | 15 | | 09 | 13 | 10 | | | (11) |
| 10 | 52 | 64 | | 38 | 45 | 48 | | | 84 |
| 11 | 47 | 67 | | 35 | 46 | 32 | | | 37 |
| 14 | 17 | 23 | | 14 | 19 | 28 | | | 24 |
| 0 | 24 | | | 20 | .. | | | | 17 |
| (4) | | | | | | | | | |
| 1 | 29 | 50 | | 23 | 37 | 34 | | (34) | 21 |
| 2 | 28 | 68 | | 23 | 47 | 34 40 | | (40) | 29 |
| 3 | 48 | 80 | 110 | 36 | 52 | 48 59 | 64 | 56 | 24 |
| 4 | 51 | 96 | 115 | 37 | 59 | 48 67 | 65 | 62 | 47 |
| 5 | 66 | 99 | 112 | 46 | 60 | 51 64 | 64 | 66 | 51 |
| 6 | 72 | 114 | 122 | 48 | 65 | 67 64 | 67 | 66 | 52 |
| 7 | 63 | 86 | 83 | 44 | 55 | 64 53 | 53 | (53) | 55 |
| 8 | 61 | 94 | 84 | 43 | 58 | 56 | 54 | 55 | 56 |
| 9 | .. | 14 | 12 | .. | 12 | 7 | 11 | 9 | |
| 10 | 47 | 84 | 62 | 35 | 54 | 48 | 44 | 46 | 49 |
| 11 | 51 | 93 | 64 | 37 | 58 | 47 | 45 | 46 | 43 |
| 14 | 50 | 68 | 57 | 37 | 47 | 35 | 41 | 38 | 35 |

Mean line depths from 1, 2, and 4

| Line | H plates | | | | C plates | | | | Drift. H-C |
|--------------|----------|----|----|------|----------|----|----|------|---------------|
| | 1 | 2 | 4 | Mean | 1 | 2 | 4 | Mean | |
| -1 | 24 | | | 24 | 12 | 21 | | 12 | 12 |
| H ν | 32 | | | 32 | 14 | 33 | 17 | 16 | 16 |
| H μ | 38 | 35 | 34 | 36 | 24 | 39 | 21 | 22 | 14 |
| H λ | 44 | 42 | 40 | 42 | 31 | 48 | 33 | 29 | 11 |
| H κ | 50 | 48 | 56 | 51 | 39 | 54 | 39 | 34 | 14 |
| H ϵ | 52 | 54 | 62 | 56 | 47 | 53 | 48 | 47 | 9 |
| H δ | 54 | 52 | 66 | 57 | 51 | 54 | 54 | 51 | 5 |
| H γ | 54 | 52 | 66 | 57 | 51 | 55 | 53 | 52 | 5 |
| H β | 52 | 54 | 53 | 53 | 52 | 54 | 55 | 54 | -1 |
| H α | 52 | 54 | 55 | 54 | 55 | 54 | 56 | 55 | -1 |
| H δ | 55 | 56 | 46 | 50 | 51 | 50 | 49 | 50 | 0 |
| H γ | 50 | 49 | 46 | 48 | 46 | 42 | 43 | 44 | 4 |
| H β | 32 | 31 | 38 | 34 | 24 | 33 | 35 | 31 | 3 |

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Pleiades

(5)

| | | Irreg. log | | H 2679 | H A | H 2647 | H 2646 |
|----|------|------------|-------|--------|--------|-----------|-----------|
| 1 | - | | | | .. | | |
| 2 | - | | | | .. | | |
| 3 | - | | | | .. | | |
| 4 | - | | | | .. | | |
| 5 | - | | | | .. | | |
| 6 | - | 72 | | | 48 | | |
| 7 | - | 92 | (135) | | 57 | | |
| 8 | (64) | 78 | (140) | 45 | 51 | 60 | 72 |
| 9 | (25) | 18 | 13 | 21 | 15 | 14 | 12 |
| 10 | (69) | 82 | 79 | 47 | 53 | 64 | 52 |
| 11 | (27) | 69 | 68 | (22) | 47 | 44 | 47 |
| 14 | (43) | 28 | 56 | 33 | 22 | 44 | 40 |

(6)

| | | | | | | | |
|----|----|----|-----|----|----|----|----|
| 1 | - | | | .. | .. | | |
| 2 | - | | | .. | .. | | |
| 3 | - | | | .. | .. | | |
| 4 | - | | | .. | .. | | |
| 5 | 28 | | | 23 | .. | | |
| 6 | 29 | | | 23 | .. | | |
| 7 | 46 | | | 35 | .. | 31 | |
| 8 | 48 | 76 | | 36 | 50 | 44 | 50 |
| 9 | 20 | 1 | 19 | 17 | .. | 18 | 17 |
| 10 | 50 | 58 | | 37 | 41 | 50 | |
| 11 | 56 | 87 | 126 | 40 | 55 | 53 | 69 |
| 14 | 34 | 48 | | 27 | 36 | | |

52

54

54

56

51

45

39

39

64

57

57

54

49

44

138

Pleiades
A. Atlas

| | Ineq. fog | | |
|----|-----------|-----|--------|
| | H 2679 | X | H 2696 |
| 0 | 18 | | |
| 1 | 22 | 45 | |
| 2 | 39 | | |
| 3 | 49 | | |
| 4 | 69 | 100 | 138 |
| 5 | 82 | 124 | 165 |
| 6 | 89 | 128 | 132 |
| 7 | 92 | 122 | 120 |
| 8 | 74 | 122 | 87 |
| 9 | 07 | | 5 |
| 10 | 66 | 101 | 79 |
| 11 | 57 | 105 | 54 |
| 14 | 43 | 78 | 47 |

B. Pleione

| | | |
|----|----|-----|
| 1 | - | |
| 2 | - | |
| 3 | 36 | |
| 4 | 34 | 26 |
| 5 | 30 | 30 |
| 6 | 30 | 41 |
| 7 | 57 | 56 |
| 8 | 82 | 100 |
| 9 | 18 | |
| 10 | 93 | 114 |
| 11 | 65 | 103 |
| 14 | 64 | 72 |

| H 2679 | H A | H 2697 | H 2696 |
|--------|-----|--------|--------|
| 15 | .. | 21 | |
| 18 | 34 | 25 | |
| 30 | .. | 36 | |
| 36 | .. | 38 | |
| 47 | 60 | 48 | 72 |
| 53 | 68 | 20 59 | 78 |
| 56 | 69 | 31 62 | 70 |
| 57 | 67 | 44 63 | 67 |
| 49 | 67 | 47 56 | 55 |
| 06 | .. | 18 06 | 4 |
| 46 | 61 | 59 54 | 52 |
| 41 | 62 | 40 58 | 39 |
| 33 | 57 | 42 61 | 35 |

| | | |
|----|----|----|
| .. | .. | |
| .. | .. | |
| 28 | .. | |
| 27 | 21 | |
| 24 | 24 | 20 |
| 24 | 31 | 31 |
| 37 | 40 | 44 |
| 53 | 60 | 49 |
| 15 | .. | 18 |
| 58 | 65 | 59 |
| 45 | 61 | 40 |
| 45 | 48 | 42 |

| Exp. 1 aperture 5 | | | | | | | | | Exp. 2 aperture 3 | | | | | | | | |
|-------------------|----|-----|-------|----|-----|-----|-------|------------|-------------------|-----|-------|----|-----|--------------------|-------|------------|--|
| | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | |
| ✓ 1 | 5 | 11 | 94 | 5 | 12 | - | 225 | - | 9 | 22 | 100 | 9 | 22 | 246 | 189 | 57 | |
| ✓ 2 | 2 | 13 | 94 | 2 | 14 | - | 216 | - | 7 | 24 | 100 | 7 | 24 | - | 183 | - | |
| 3 | 6 | 14 | 94 | 6 | 15 | - | 213 | - | 16 | 25 | 100 | 16 | 25 | 210 | 180 | 30 | |
| ✓ 4 | 8 | 15 | 94 | 9 | 16 | 246 | 210 | 36 | 19 | 27 | 100 | 19 | 27 | 199 | 175 | 24 | |
| ✓ 5 | 9 | 17 | 94 | 10 | 18 | 238 | 202 | 36 | 20 | 29 | 100 | 20 | 29 | 195 | 169 | 26 | |
| 6 | 9 | 17 | 94 | 10 | 18 | 238 | 202 | 36 | 19 | 30 | 100 | 19 | 30 | 199 | 165 | 34 | |
| 7 | 12 | 18 | 94 | 13 | 19 | 220 | 199 | - | - | 30 | 100 | - | 30 | - | 165 | - | |
| ✓ 8 | 11 | 19 | 94 | 12 | 20 | 225 | 195 | 30 | 25 | 32 | 100 | 25 | 32 | 158 180 | 158 | 22 | |
| 9 | 12 | 20 | 94 | 13 | 21 | 220 | 191 | 29 | - | 32 | 100 | - | 32 | 158 | 158 | - | |
| 10 | 10 | 20 | 94 | 11 | 21 | 230 | 191 | 39 | 20 | 33 | 100 | 20 | 33 | 195 | 154 | 41 | |
| 11 | 11 | 21 | 94 | 12 | 22 | 225 | 189 | 36 | 22 | 34 | 100 | 22 | 34 | 189 | 150 | 39 | |
| ✓ 12 | 11 | 21 | 94 | 12 | 22 | 225 | 189 | 36 | 21 | 35 | 100 | 21 | 35 | 191 | 145 | (65) | |
| 13 | 5 | 22 | 94 | 5 | 23 | - | 186 | - | 16 | 35 | 100 | 16 | 35 | 210 | 145 | (89) | |
| 14 | 3 | 22 | 94 | 3 | 23 | - | 186 | - | 11 | 36 | 100 | 11 | 36 | 230 | 141 | (68) | |
| 15 | 5 | 23 | 94 | 5 | 24 | - | 183 | - | 17 | 37 | 100 | 17 | 37 | 206 | 138 | - | |
| ✓ 16 | 11 | 23 | 94 | 12 | 24 | 225 | 183 | 32 | 20 | 38 | 100 | 20 | 38 | 195 | 135 | 60 | |
| ✓ 17 | 16 | 24 | 94 | 17 | 26 | 206 | 178 | 28 | 29 | 39 | 100 | 29 | 39 | 169 | 131 | 38 | |
| 18 | 16 | 25 | 94 | 17 | 27 | 206 | 175 | 31 | 32 | 40 | 100 | 32 | 40 | 158 | 128 | 30 | |
| 19 | 18 | 25 | 94 | 19 | 27 | 199 | 175 | 24 | 32 | 41 | 100 | 32 | 41 | 158 | 124 | 34 | |
| ✓ 20 | 21 | 27 | 94 | 22 | 29 | 189 | 169 | 20 | 37 | 43 | 100 | 37 | 43 | 138 | 118 | 20 | |
| ✓ 21 | 20 | 28 | 94 | 21 | 30 | 191 | 165 | 26 | 37 | 44 | 100 | 37 | 44 | 138 | 116 | 22 | |
| 22 | 25 | 28 | 94 | 27 | 30 | 175 | 165 | 10 | 42 | 45 | 100 | 42 | 45 | 121 | 113 | 08 | |
| 23 | 24 | 30 | 94 | 26 | 32 | 178 | 158 | 20 | 43 | 47 | 100 | 43 | 47 | 118 | 107 | 11 | |
| ✓ 24 | - | 30 | 94 | - | 32 | - | 158 | - | - | 47 | 100 | - | 47 | - | 107 | - | |
| 25 | 21 | 31 | 94 | 22 | 33 | 189 | 154 | 35 | 37 | 48 | 100 | 37 | 48 | 138 | 104 | 34 | |
| ✓ 26 | 23 | 32 | 94 | 24 | 34 | 183 | 150 | 33 | 40 | 50 | 100 | 40 | 50 | 128 | 98 | 30 | |
| 27 | 25 | 33 | 94 | 27 | 35 | 175 | 145 | 30 | 39 | 51 | 100 | 39 | 51 | 131 | 96 | 35 | |
| 28 | 16 | 33 | 94 | 17 | 35 | 206 | 145 | 61 | 26 | 52 | 100 | 26 | 52 | 178 | 94 | 84 | |
| ✓ 29 | 12 | 34 | 94 | 13 | 36 | 220 | 141 | 79 | 24 | 53 | 100 | 24 | 53 | 183 | 91 | 92 | |
| 30 | 15 | 34 | 94 | 16 | 36 | 210 | 141 | 69 | - | 53 | 100 | - | 53 | - | 91 | - | |

Exp. 4. Aperture 7

Exp. 2, ap. 5

| m | n | mtm | ltm | ntm | mtm (n) | ltm (n) | Δm | | | | | | | | |
|----|---|-----|-----|-----|---------|---------|------------|----|----|----|----|----|-----|-----|----|
| 7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 30 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 24 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 26 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 34 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 65 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | - | - | - | - | - | - | - | 2 | 15 | 92 | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | 4 | 15 | 92 | - | - | - | - | - |
| 0 | - | - | - | - | - | - | - | 5 | 16 | 92 | 6 | 19 | - | 206 | - |
| 8 | - | - | - | - | - | - | - | 10 | 16 | 92 | 11 | 17 | 230 | 206 | 24 |
| 0 | - | - | - | - | - | - | - | 11 | 17 | 92 | 12 | 18 | 225 | 202 | 23 |
| 4 | - | - | - | - | - | - | - | 12 | 18 | 92 | 13 | 19 | 220 | 199 | 21 |
| 20 | - | - | - | - | - | - | - | 15 | 19 | 92 | 16 | 21 | 210 | 191 | 19 |
| 2 | - | - | - | - | - | - | - | 15 | 20 | 92 | 16 | 22 | 210 | 189 | 21 |
| 8 | - | - | - | - | - | - | - | 18 | 20 | 92 | 20 | 22 | 195 | 189 | 06 |
| 11 | - | - | - | - | - | - | - | 18 | 20 | 92 | 20 | 22 | 195 | 189 | 06 |
| - | - | - | - | - | - | - | - | 21 | 22 | 92 | 23 | 24 | - | 183 | - |
| 34 | - | - | - | - | - | - | - | 16 | 23 | 92 | - | - | - | - | - |
| 30 | - | - | - | - | - | - | - | 17 | 24 | 92 | 19 | 26 | 199 | 178 | 21 |
| 35 | - | - | - | - | - | - | - | 16 | 25 | 92 | - | - | - | - | - |
| 84 | - | - | - | - | - | - | - | 9 | 25 | 92 | - | - | - | - | - |
| 92 | 2 | 10 | 98 | 2 | 10 | - | - | 8 | 26 | 92 | 9 | 28 | 246 | 172 | 74 |
| - | 3 | 10 | 98 | 3 | 10 | - | - | 10 | 26 | 92 | - | - | - | - | - |

142

20 270 274 315

Values of Δl

| OMP | 3 | 74 | 2 | 5 | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | |
|-----|----|----|----|---|------|-----|-------|----|-----|-----|-------|------------|------|-----|-------|-------|-----|-----|-------|------------|------|
| 51 | 3 | | | | | | | | | | | | | | | | | | | | |
| | | | | | 31 | 23 | 35 | 94 | 24 | 37 | 183 | 138 | (45) | — | — | — | — | — | — | — | |
| | | | | | 32 | 24 | 35 | 94 | 26 | 37 | 178 | 138 | (40) | 39 | 54 | 100 | 39 | 54 | 131 | 89 | (42) |
| | | | | | ✓ 33 | 25 | 36 | 94 | 27 | 38 | 175 | 135 | (40) | 42 | 55 | ✓ 100 | 42 | 55 | 121 | 86 | (35) |
| | | | | | 34 | 31 | 37 | 94 | 33 | 39 | 154 | 131 | (23) | 47 | 56 | 100 | 47 | 56 | 107 | 83 | (24) |
| | | | | | 35 | 27 | 37 | 94 | 29 | 39 | 169 | 131 | (38) | 44 | 57 | 100 | 44 | 57 | 116 | 80 | (36) |
| 11 | 7 | 11 | 13 | ✓ | 36 | 34 | 38 | 94 | 36 | 40 | 141 | 128 | 13 | 55 | 58 | ✓ 100 | 55 | 58 | 86 | 78 | 08 |
| 21 | 23 | 27 | 24 | | 37 | 32 | 39 | 94 | 34 | 41 | 150 | 124 | 26 | 48 | 59 | 100 | 48 | 59 | 104 | 75 | 29 |
| 24 | 26 | 27 | 28 | | 38 | 31 | 39 | 94 | 33 | 41 | 154 | 124 | 30 | 47 | 59 | 100 | 47 | 59 | 107 | 75 | 32 |
| 26 | 26 | 24 | 28 | | 39 | 32 | 40 | 94 | 34 | 43 | 150 | 118 | 32 | 48 | 60 | 100 | 48 | 60 | 104 | 72 | 32 |
| 29 | 21 | 24 | 28 | ✓ | 40 | 33 | 40 | 94 | 35 | 43 | 145 | 118 | 37 | 50 | 60 | ✓ 100 | 50 | 60 | 98 | 72 | 26 |
| 22 | 21 | 18 | 26 | | 41 | 33 | 40 | 94 | 35 | 43 | 145 | 118 | 27 | 51 | 61 | 100 | 51 | 61 | 96 | 70 | 26 |
| | | | | | 42 | 30 | 41 | 94 | 32 | 44 | 158 | 116 | (42) | — | — | — | — | — | — | — | — |
| | | | | | 43 | 4 | 42 | 94 | 4 | 45 | — | 113 | — | 6 | 63 | 100 | 6 | 63 | — | 66 | — |
| | | | | | ✓ 44 | 2 | 42 | 94 | 2 | 45 | — | 113 | — | 5 | 63 | ✓ 100 | 5 | 63 | — | 66 | — |
| | | | | | 45 | 3 | 43 | 94 | 3 | 46 | — | 109 | — | 7 | 63 | 100 | 7 | 63 | — | 66 | — |
| | | | | | 46 | 8 | 43 | 94 | 9 | 46 | 246 | 109 | (37) | — | — | — | — | — | — | — | — |
| | | | | | 47 | 31 | 44 | 94 | 33 | 47 | 154 | 107 | (47) | 44 | 65 | 100 | 44 | 65 | 116 | 61 | (55) |
| | | | | | ✓ 48 | 30 | 45 | 94 | 32 | 48 | 158 | 104 | (54) | 47 | 65 | ✓ 100 | 47 | 65 | 107 | 61 | (46) |
| | | | | | 49 | 34 | 45 | 94 | 36 | 48 | 141 | 104 | (37) | 50 | 66 | 100 | 50 | 66 | 98 | 59 | (39) |
| 28 | 28 | 20 | 33 | | 50 | 35 | 46 | 94 | 37 | 49 | 138 | 102 | 36 | 53 | 67 | 100 | 53 | 67 | 91 | 56 | 35 |
| 26 | 28 | 28 | 33 | ✓ | 51 | 36 | 47 | 93 | 39 | 50 | 131 | 98 | 33 | 54 | 68 | ✓ 100 | 54 | 68 | 89 | 53 | 36 |
| | | | | | 52 | 4 | 48 | 93 | 4 | 52 | — | 94 | — | 58 | 70 | 100 | 58 | 70 | 78 | 49 | (29) |
| | | | | | 53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| | | | | | 54 | — | — | — | — | — | — | — | — | 40 | 71 | 100 | 40 | 71 | 128 | 47 | (81) |
| | | | | | 55 | — | — | — | — | — | — | — | — | 55 | 72 | 100 | 55 | 72 | 86 | 45 | (41) |
| 26 | 26 | 23 | 33 | ✓ | 56 | 40 | 51 | 93 | 43 | 55 | 118 | 86 | 32 | 58 | 72 | ✓ 100 | 58 | 72 | 78 | 45 | 33 |
| 15 | 15 | 20 | 18 | | 57 | 45 | 51 | 93 | 48 | 55 | 104 | 86 | 18 | 65 | 73 | 100 | 65 | 73 | 61 | 43 | 18 |
| 14 | 15 | 11 | 13 | | 58 | 46 | 51 | 93 | 49 | 55 | 102 | 86 | 16 | 65 | 73 | 99 | 65 | 73 | 61 | 43 | 18 |
| 26 | 21 | 22 | 23 | ✓ | 59 | 42 | 53 | 93 | 45 | 57 | 113 | 80 | 33 | 63 | 74 | ✓ 99 | 63 | 74 | 66 | 40 | 26 |
| 12 | 21 | 19 | 15 | | 60 | 48 | 53 | 93 | 52 | 57 | 94 | 80 | 14 | 66 | 75 | 99 | 68 | 75 | 53 | 38 | 15 |

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| | n | mtn | lt.mtn | n | mtn | (n) | (mtn) | Δm | n | mtn | lt.mtn | n | mtn | (n) | (mtn) | Δm |
|----|----|-----|--------|----|-----|-----|-------|------------|----|-----|--------|----|-----|-----|-------|------------|
| 31 | 5 | 11 | 98 | 5 | 11 | - | 230 | | 18 | 26 | 92 | 14 | 28 | 216 | 172 | (44) |
| 32 | 6 | 11 | 98 | 6 | 11 | - | 230 | | 17 | 27 | 92 | 18 | 29 | 202 | 169 | (33) |
| 33 | 8 | 12 | 98 | 8 | 12 | - | 225 | | 18 | 28 | 92 | 20 | 30 | 195 | 165 | (30) |
| 34 | 6 | 12 | 98 | 6 | 12 | - | 225 | | 21 | 28 | 92 | 23 | 30 | 186 | 165 | (21) |
| 35 | 5 | 12 | 98 | 5 | 12 | - | 225 | | 20 | 29 | 92 | 22 | 31 | 189 | 161 | (28) |
| 36 | 10 | 12 | 98 | 10 | 12 | 238 | 225 | 13 | 27 | 30 | 92 | 29 | 33 | 169 | 154 | 15 |
| 37 | 8 | 13 | 98 | 8 | 13 | - | 220 | | 23 | 31 | 92 | 25 | 34 | 180 | 150 | 30 |
| 38 | 8 | 13 | 98 | 8 | 13 | - | 220 | | 21 | 31 | 92 | 23 | 34 | 186 | 150 | 36 |
| 39 | 9 | 14 | 98 | 9 | 14 | 246 | 216 | 30 | 21 | 31 | 92 | 23 | 34 | 186 | 150 | 36 |
| 40 | 9 | 14 | 98 | 9 | 14 | 246 | 216 | 30 | 23 | 32 | 92 | 25 | 35 | 180 | 145 | 35 |
| 41 | 10 | 14 | 98 | 10 | 14 | 238 | 216 | 22 | 24 | 32 | 92 | 26 | 35 | 178 | 145 | 33 |
| 42 | 6 | 14 | 98 | 6 | 14 | - | 216 | | - | - | - | - | - | - | - | - |
| 43 | 2 | 15 | 98 | 2 | 15 | - | 213 | | 1 | 33 | 92 | 1 | 36 | - | 141 | - |
| 44 | 1 | 15 | 98 | 1 | 15 | - | 213 | | -1 | 33 | 92 | -1 | 36 | - | 141 | - |
| 45 | 3 | 16 | 98 | 3 | 16 | - | 210 | | 1 | 34 | 92 | 1 | 37 | - | 138 | - |
| 46 | 5 | 16 | 98 | 5 | 16 | - | 210 | | - | - | - | - | - | - | - | - |
| 47 | 7 | 16 | 98 | 7 | 16 | - | 210 | | 18 | 34 | 92 | 20 | 37 | 195 | 138 | (57) |
| 48 | 8 | 17 | 98 | 8 | 17 | - | 206 | | 21 | 35 | 92 | 23 | 38 | 186 | 135 | (51) |
| 49 | 8 | 17 | 98 | 8 | 17 | - | 206 | | 24 | 35 | 92 | 26 | 38 | 178 | 135 | (43) |
| 50 | 11 | 17 | 98 | 11 | 17 | 230 | 206 | 24 | 25 | 36 | 92 | 27 | 39 | 175 | 131 | 44 |
| 51 | 10 | 18 | 98 | 10 | 18 | 238 | 202 | 36 | 26 | 37 | 92 | 28 | 40 | 172 | 128 | 44 |
| 52 | 1 | 19 | 98 | 1 | 19 | - | 199 | | 0 | 38 | 92 | 0 | 41 | - | 124 | - |
| 53 | 3 | 20 | 98 | 3 | 20 | - | 195 | | - | - | - | - | - | - | - | - |
| 54 | 8 | 20 | 98 | 8 | 20 | - | 195 | | 14 | 38 | 92 | 15 | 41 | 213 | 124 | (89) |
| 55 | 12 | 20 | 98 | 12 | 20 | 225 | 195 | (30) | 23 | 39 | 92 | 25 | 42 | 180 | 121 | (59) |
| 56 | 13 | 21 | 98 | 13 | 21 | 220 | 191 | 29 | 28 | 39 | 92 | 30 | 42 | 165 | 121 | 44 |
| 57 | 15 | 22 | 97 | 15 | 22 | 213 | 189 | 24 | 34 | 40 | 92 | 37 | 44 | 138 | 116 | 22 |
| 58 | 18 | 22 | 97 | 18 | 22 | 202 | 189 | 13 | 35 | 40 | 91 | 39 | 44 | 131 | 116 | 15 |
| 59 | 14 | 22 | 97 | 14 | 22 | 216 | 189 | 27 | 33 | 41 | 91 | 36 | 45 | 141 | 113 | 28 |
| 60 | 17 | 23 | 97 | 17 | 24 | 206 | 183 | 23 | 36 | 41 | 91 | 39 | 45 | 131 | 113 | 18 |

144

 7681
 686
 740
 Values of Δm

| values of Δm | | | | | | | | | | | | | | | | | | | | |
|----------------------|----|----|----|------|-----|-----|----|-----|------|-------|------------|------|-----|-----|----|-----|-----|-------|------------|------|
| exp. | 3 | 4 | 2 | | | | | | | | | | | | | | | | | |
| 1 | 3 | 4 | 2 | n | mtm | ltm | n | mtm | (n) | (mtm) | Δm | n | mtm | ltm | n | mtm | (n) | (mtm) | Δm | |
| 25 | 19 | 24 | 21 | 61 | 43 | 54 | 93 | 46 | 58 | 169 | 78 | 31 | 65 | 75 | 99 | 76 | 59 | 36 | 23 | |
| | | | | 62 | 50 | 54 | 93 | 54 | 58 | 89 | 78 | (11) | 73 | 76 | 99 | 74 | 77 | 40 | 33 | (07) |
| 19 | 10 | 10 | 8 | 63 | 50 | 54 | 93 | 54 | 58 | 89 | 78 | 11 | 71 | 76 | 99 | 72 | 77 | 45 | 33 | 12 |
| 7 | 9 | 13 | 10 | 64 | 51 | 54 | 93 | 55 | 59 | 86 | 78 | 08 | 72 | 76 | 99 | 73 | 77 | 43 | 33 | 10 |
| 7 | 7 | 5 | 8 | 65 | 52 | 55 | 93 | 56 | 59 | 83 | 75 | 08 | 74 | 77 | 99 | 75 | 78 | 38 | 30 | 08 |
| 16 | 13 | 14 | 14 | ✓ 66 | 48 | 55 | 93 | 52 | ✓ 59 | 94 | 75 | 19 | 71 | 77 | 99 | 72 | 78 | 45 | 30 | 15 |
| 21 | 22 | 21 | 18 | 67 | 47 | 56 | 93 | 50 | 60 | 98 | 72 | 26 | 67 | 78 | 99 | 68 | 79 | 53 | 28 | 27 |
| 21 | 19 | 18 | 18 | ✓ 68 | 47 | 56 | 93 | 50 | ✓ 60 | 98 | 72 | 26 | 68 | 78 | 99 | 69 | 79 | 51 | 28 | 23 |
| 10 | 7 | 4 | 5 | 69 | 52 | 56 | 93 | 56 | 60 | 83 | 72 | 11 | 75 | 78 | 99 | 76 | 79 | 36 | 28 | 08 |
| 20 | 15 | 14 | 12 | 70 | 48 | 57 | 93 | 52 | 61 | 94 | 70 | 24 | 72 | 79 | 99 | 73 | 80 | 43 | 25 | 18 |
| 18 | 17 | 14 | 14 | 71 | 49 | 57 | 93 | 53 | 61 | 91 | 70 | 21 | 71 | 79 | 99 | 72 | 80 | 45 | 25 | 20 |
| 14 | 10 | 10 | 10 | 72 | 51 | 57 | 93 | 55 | 61 | 86 | 70 | 16 | 75 | 79 | 99 | 76 | 80 | 36 | 25 | 11 |
| 16 | 15 | 14 | 12 | 73 | 50 | 57 | 93 | 54 | 61 | 89 | 70 | 19 | 72 | 79 | 99 | 73 | 80 | 43 | 25 | 18 |
| 11 | 11 | 7 | 8 | 74 | 52 | 57 | 93 | 56 | 61 | 83 | 70 | 13 | 75 | 80 | 99 | 76 | 81 | 36 | 23 | 13 |
| 13 | 13 | 14 | 10 | 75 | 52 | 58 | 93 | 56 | 62 | 83 | 68 | 15 | 74 | 80 | 99 | 75 | 81 | 38 | 23 | 15 |
| 30 | 28 | 28 | 30 | 76 | 44 | 58 | 93 | 47 | 62 | 107 | 68 | 39 | 65 | 80 | 99 | 66 | 81 | 59 | 23 | 36 |
| 15 | 13 | 16 | 12 | 77 | 51 | 58 | 93 | 55 | 62 | 86 | 68 | (18) | 75 | 80 | 99 | 76 | 81 | 36 | 23 | (13) |
| ↓ | ↓ | ↓ | ↓ | ✓ 78 | 51 | 58 | 93 | 55 | 62 | 86 | 68 | 18 | 74 | 80 | 99 | 75 | 81 | 38 | 23 | 15 |
| 6 | 4 | 7 | 6 | 79 | 55 | 58 | 93 | 59 | 62 | 75 | 68 | 07 | 78 | 80 | 99 | 79 | 81 | 28 | 23 | 05 |
| 6 | 8 | 10 | 6 | 80 | 55 | 58 | 93 | 59 | 62 | 75 | 68 | 07 | 77 | 81 | 99 | 78 | 82 | 30 | 21 | 09 |
| 23 | 20 | 19 | 18 | 81 | 48 | 59 | 93 | 52 | 63 | 94 | 66 | 28 | 71 | 81 | 99 | 72 | 82 | 45 | 21 | 24 |
| 54 | 47 | 41 | 51 | 82 | 32 | 59 | 93 | 34 | 63 | 150 | 66 | 84 | 53 | 81 | 99 | 54 | 82 | 89 | 21 | 68 |
| 19 | 16 | 18 | 21 | ✓ 83 | 50 | 59 | 93 | 54 | 63 | 89 | 66 | 23 | 73 | 81 | 99 | 74 | 82 | 40 | 21 | 19 |
| 5 | 6 | 8 | 10 | 84 | 56 | 59 | 93 | 60 | 63 | 72 | 66 | 06 | 78 | 81 | 99 | 79 | 82 | 28 | 21 | 07 |
| 12 | 10 | 14 | 17 | 85 | 53 | 59 | 93 | 57 | 63 | 80 | 66 | 14 | 76 | 81 | 99 | 77 | 82 | 33 | 21 | 12 |
| 14 | 15 | 14 | 17 | 86 | 52 | 59 | 93 | 56 | 63 | 83 | 66 | 17 | 75 | 82 | 99 | 76 | 83 | 36 | 18 | 18 |
| 19 | 21 | 21 | 23 | 87 | 50 | 59 | 93 | 54 | 63 | 89 | 66 | 23 | 72 | 82 | 99 | 73 | 83 | 43 | 18 | 25 |
| 21 | 18 | 14 | 21 | 88 | 51 | 60 | 93 | 55 | 65 | 86 | 61 | 25 | 73 | 82 | 99 | 74 | 83 | 40 | 18 | 22 |
| 8 | 4 | 5 | 9 | 89 | 57 | 60 | 93 | 61 | 65 | 70 | 61 | 09 | 80 | 82 | 99 | 81 | 83 | 23 | 18 | 05 |
| 16 | 14 | 15 | 16 | 90 | 53 | 60 | 93 | 57 | 65 | 80 | 61 | 19 | 76 | 83 | 99 | 77 | 84 | 33 | 16 | 17 |

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| m | n | m+n | lt m+n | n | m+n | (n) | (m+n) | Δm | n | m+n | lt m+n | n | m+n | (n) | (m+n) | Δm | |
|----|----|-----|--------|----|-----|-----|-------|------------|-----|-----|--------|----|-----|-----|-------|------------|------|
| 3 | 61 | 15 | 23 | 97 | 15 | 24 | 213 | 183 | 30 | 34 | 41 | 91 | 37 | 45 | 138 | 113 | 25 |
| 7) | 62 | — | 23 | 97 | — | 24 | — | 183 | () | 40 | 42 | 91 | 44 | 46 | 116 | 109 | (07) |
| 2 | 63 | 20 | 24 | 97 | 21 | 25 | 191 | 180 | 11 | 39 | 42 | 91 | 43 | 46 | 118 | 109 | 09 |
| 0 | 64 | 19 | 24 | 97 | 20 | 25 | 195 | 180 | 15 | 39 | 43 | 91 | 43 | 47 | 118 | 107 | 11 |
| 8 | 65 | 22 | 24 | 97 | 23 | 25 | 186 | 180 | 06 | 40 | 43 | 91 | 44 | 47 | 116 | 107 | 09 |
| 5 | 66 | 19 | 25 | 97 | 20 | 26 | 195 | 178 | 17 | 38 | 43 | 91 | 41 | 47 | 124 | 107 | 17 |
| 7 | 67 | 16 | 25 | 97 | 17 | 26 | 206 | 178 | 26 | 34 | 43 | 91 | 37 | 47 | 138 | 107 | 21 |
| 3 | 68 | 18 | 25 | 97 | 19 | 26 | 199 | 178 | 21 | 36 | 43 | 91 | 37 | 47 | 138 | 107 | 21 |
| 8 | 69 | 23 | 25 | 97 | 24 | 26 | 183 | 178 | 05 | 41 | 43 | 91 | 45 | 47 | 113 | 107 | 06 |
| 3 | 70 | 20 | 26 | 97 | 21 | 27 | 191 | 175 | 16 | 39 | 44 | 91 | 43 | 48 | 118 | 104 | 14 |
| 0 | 71 | 20 | 26 | 97 | 21 | 27 | 191 | 175 | 16 | 38 | 44 | 91 | 42 | 48 | 121 | 104 | 17 |
| 1 | 72 | 22 | 26 | 97 | 23 | 27 | 186 | 175 | 11 | 40 | 44 | 91 | 44 | 48 | 116 | 104 | 12 |
| 3 | 73 | 20 | 26 | 97 | 21 | 27 | 191 | 175 | 16 | 39 | 44 | 91 | 43 | 48 | 118 | 104 | 14 |
| 5 | 74 | 23 | 26 | 97 | 24 | 27 | 183 | 175 | 08 | 41 | 44 | 91 | 45 | 48 | 113 | 104 | 09 |
| 6 | 75 | 20 | 26 | 97 | 21 | 27 | 191 | 175 | 16 | 40 | 44 | 91 | 44 | 48 | 116 | 104 | 12 |
| 3) | 76 | 16 | 26 | 97 | 16 | 27 | 210 | 175 | 35 | 33 | 45 | 91 | 36 | 49 | 141 | 102 | 39 |
| 5 | 77 | — | 27 | 97 | — | 28 | — | 172 | — | 41 | 45 | 90 | 45 | 49 | 113 | 102 | (11) |
| 5 | 78 | 20 | 27 | 97 | 21 | 28 | 191 | 172 | 19 | 40 | 45 | 90 | 44 | 49 | 116 | 102 | 14 |
| 9 | 79 | 24 | 27 | 97 | 25 | 28 | 180 | 172 | 08 | 42 | 45 | 90 | 46 | 49 | 109 | 102 | 07 |
| 4 | 80 | 23 | 27 | 97 | 24 | 28 | 183 | 172 | 11 | 42 | 45 | 90 | 46 | 49 | 109 | 102 | 07 |
| 8 | 81 | 19 | 27 | 97 | 20 | 28 | 195 | 172 | 23 | 37 | 45 | 90 | 41 | 49 | 124 | 102 | 22 |
| 1 | 82 | 11 | 27 | 97 | 11 | 28 | 230 | 172 | 58 | 23 | 45 | 90 | 25 | 49 | 180 | 102 | 78 |
| 7 | 83 | 20 | 28 | 97 | 21 | 29 | 191 | 169 | 22 | 38 | 46 | 90 | 42 | 51 | 121 | 96 | 25 |
| 2 | 84 | 25 | 28 | 97 | 26 | 29 | 178 | 169 | 09 | 43 | 46 | 90 | 47 | 51 | 107 | 96 | 11 |
| 8 | 85 | 22 | 28 | 97 | 23 | 29 | 186 | 169 | 17 | 40 | 46 | 90 | 44 | 51 | 116 | 96 | 20 |
| 5 | 86 | 22 | 28 | 97 | 23 | 29 | 186 | 169 | 17 | 40 | 46 | 90 | 44 | 51 | 116 | 96 | 20 |
| 2 | 87 | 19 | 28 | 97 | 20 | 29 | 195 | 169 | 26 | 37 | 46 | 90 | 41 | 51 | 124 | 96 | 28 |
| 5 | 88 | 22 | 28 | 97 | 23 | 29 | 186 | 169 | 17 | 38 | 46 | 90 | 42 | 51 | 121 | 96 | 25 |
| 7 | 89 | 26 | 28 | 97 | 27 | 29 | 175 | 169 | 06 | 44 | 47 | 90 | 48 | 52 | 104 | 94 | 10 |
| | 90 | 23 | 28 | 97 | 24 | 29 | 183 | 165 | 18 | 41 | 47 | 90 | 45 | 52 | 113 | 94 | 19 |

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 351057/1170
 Values of Δl
 exp

| Values of the | | | | | | | | | | | | | | | | | | | |
|---------------|----|----|----|-----|-----|-------|----|-----|-----|-----------------|------------|----|-----|-------|----|-----|-----|-------|------------|
| exp | 3 | 4 | 2 | n | mtm | ltmtm | n | mtm | (m) | (mtm) | Δm | n | mtm | ltmtm | n | mtm | (m) | (mtm) | Δm |
| 1 | 3 | 4 | 2 | 55 | | | 59 | 75 | 12 | | | | | | | | | | |
| 10 | 10 | 13 | 13 | 91 | 60 | 93 | 64 | 63 | 4 | 78 | 83 | 99 | 79 | 84 | 28 | 16 | | 12 | |
| 14 | 14 | 15 | 18 | 92 | 53 | 60 | 57 | 64 | 80 | 63 | 17 | 76 | 83 | 99 | 77 | 84 | 33 | 16 | 17 |
| 14 | 12 | 13 | 13 | 93 | 55 | 61 | 59 | 66 | 75 | 59 | 16 | 77 | 83 | 99 | 78 | 84 | 30 | 16 | 14 |
| 10 | 6 | 10 | 7 | 94 | 57 | 61 | 61 | 66 | 70 | 59 | 11 | 80 | 83 | 99 | 81 | 84 | 23 | 16 | 07 |
| 30 | 26 | 30 | 31 | 95 | 47 | 61 | 50 | 66 | 98 | 59 | 39 | 69 | 83 | 99 | 70 | 84 | 49 | 16 | 33 |
| 30 | 29 | 24 | 26 | 96 | 47 | 61 | 50 | 66 | 98 | 59 | 39 | 72 | 83 | 99 | 73 | 84 | 43 | 16 | 37 |
| 27 | 22 | 18 | 21 | 97 | 52 | 61 | 56 | 66 | 83 | 59 | 34 | 76 | 83 | 99 | 77 | 84 | 33 | 16 | 27 |
| 27 | 22 | 18 | 18 | 98 | 52 | 61 | 56 | 66 | 83 | 59 | 34 | 76 | 83 | 99 | 77 | 84 | 33 | 16 | 27 |
| 16 | 10 | 18 | 18 | 99 | 54 | 61 | 58 | 66 | 78 | 59 | 19 | 79 | 84 | 99 | 80 | 85 | 25 | 14 | 11 |
| 24 | 18 | 23 | 22 | 100 | 50 | 61 | 54 | 66 | 89 | 59 | 30 | 75 | 84 | 99 | 76 | 85 | 36 | 14 | 22 |
| | | | | 101 | 51 | 61 | 55 | 66 | 86 | 59 | (27) | 76 | 84 | 99 | 77 | 85 | 33 | 14 | (19) |
| 24 | 18 | 23 | 24 | 102 | 50 | 61 | 54 | 66 | 89 | 59 | 30 | 75 | 84 | 99 | 76 | 85 | 36 | 14 | 22 |
| 10 | 12 | 18 | 13 | 103 | 54 | 62 | 58 | 67 | 78 | 56 | 12 | 78 | 84 | 99 | 79 | 85 | 28 | 14 | 14 |
| 20 | 14 | 18 | 15 | 104 | 53 | 62 | 57 | 67 | 80 | 56 | 24 | 77 | 84 | 99 | 78 | 85 | 30 | 14 | 16 |
| 28 | 18 | 24 | 26 | 105 | 49 | 62 | 53 | 67 | 91 | 56 | 35 | 75 | 84 | 99 | 76 | 85 | 36 | 14 | 22 |
| 21 | 14 | 21 | 17 | 106 | 54 | 63 | 58 | 68 | 78 | 56 ³ | 25 | 78 | 85 | 99 | 79 | 86 | 28 | 11 | 17 |
| 21 | 12 | 17 | 13 | 107 | 56 | 62 | 60 | 67 | 72 | 56 | 26 | 79 | 85 | 99 | 80 | 86 | 25 | 11 | 14 |
| * | | | | 108 | - | 62 | - | 67 | - | 56 | - | 81 | 85 | 99 | 82 | 86 | 21 | 11 | (10) |
| 16 | 14 | 18 | 13 | 109 | 55 | 62 | 59 | 67 | 75 | 56 | 19 | 78 | 85 | 99 | 79 | 86 | 28 | 11 | 17 |
| 14 | 10 | 17 | 15 | 110 | 56 | 62 | 60 | 67 | 72 | 56 | 16 | 80 | 85 | 99 | 81 | 86 | 23 | 11 | 12 |
| | | | | 111 | - | 62 | - | 67 | - | 56 | - | 82 | 85 | 99 | 83 | 86 | 18 | 11 | (07) |
| 16 | 12 | 17 | 15 | 112 | 56 | 63 | 60 | 68 | 72 | 53 | 19 | 80 | 85 | 99 | 80 | 86 | 25 | 11 | 14 |
| | | | | 113 | - | 63 | - | 68 | - | 53 | - | 84 | 85 | 99 | 85 | 86 | 14 | 11 | (03) |
| 16 | 12 | 20 | 18 | 114 | 56 | 63 | 60 | 68 | 72 | 53 | 19 | 79 | 85 | 99 | 80 | 86 | 25 | 11 | 14 |
| 14 | 10 | 15 | 14 | 115 | 57 | 63 | 61 | 68 | 70 | 53 | 17 | 80 | 85 | 99 | 81 | 86 | 23 | 11 | 12 |
| 13 | 6 | 15 | 9 | 116 | 58 | 63 | 62 | 68 | 68 | 53 | 15 | 82 | 85 | 99 | 83 | 86 | 18 | 11 | 07 |
| 24 | 14 | 23 | 22 | 117 | 52 | 63 | 56 | 68 | 83 | 53 | 30 | 78 | 85 | 99 | 79 | 86 | 28 | 11 | 17 |
| 13 | 10 | 12 | 15 | 118 | 58 | 63 | 62 | 68 | 68 | 53 | 15 | 80 | 85 | 99 | 81 | 86 | 23 | 11 | 12 |
| 28 | 21 | 29 | 28 | 119 | 51 | 64 | 55 | 69 | 86 | 51 | 35 | 75 | 85 | 99 | 76 | 86 | 36 | 11 | 25 |
| 18 | 10 | 15 | 10 | 120 | 56 | 64 | 60 | 69 | 72 | 51 | 21 | 80 | 85 | 99 | 81 | 86 | 23 | 11 | 12 |

| m. | | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm |
|----|-----|----|-----|-------|----|-----|-----|-------|------------|----|-----|-------|----|-----|-----|-------|------------|
| 2 | q1 | 24 | 29 | 97 | 25 | 30 | 180 | 165 | 15 | 42 | 47 | 90 | 46 | 52 | 109 | 94 | 15 |
| 7 | q2 | 28 | 29 | 97 | 24 | 30 | 183 | 165 | 18 | 40 | 47 | 90 | 44 | 52 | 116 | 94 | 22 |
| 4 | q3 | 24 | 29 | 97 | 25 | 30 | 180 | 165 | 15 | 42 | 47 | 90 | 46 | 52 | 109 | 94 | 15 |
| 7 | q4 | 27 | 30 | 97 | 28 | 31 | 172 | 161 | 11 | 45 | 47 | 90 | 49 | 52 | 102 | 94 | 08 |
| 3 | q5 | 18 | 30 | 97 | 19 | 31 | 199 | 161 | 38 | 35 | 47 | 90 | 38 | 52 | 135 | 94 | 41 |
| 7 | q6 | 20 | 30 | 97 | 21 | 31 | 191 | 161 | 30 | 37 | 48 | 90 | 41 | 53 | 124 | 91 | 33 |
| 7 | q7 | 23 | 30 | 97 | 24 | 31 | 183 | 161 | 22 | 40 | 48 | 90 | 44 | 53 | 116 | 91 | 25 |
| 7 | q8 | 28 | 30 | 97 | 24 | 31 | 183 | 161 | 22 | 41 | 48 | 90 | 45 | 53 | 113 | 91 | 22 |
| 1 | q9 | 23 | 30 | 96 | 24 | 31 | 183 | 161 | 22 | 41 | 48 | 90 | 45 | 53 | 113 | 91 | 22 |
| 2 | 100 | 21 | 30 | 96 | 22 | 31 | 189 | 161 | 28 | 39 | 48 | 90 | 43 | 53 | 118 | 91 | 27 |
| 9) | 101 | - | 30 | 96 | - | 31 | - | 161 | - | - | - | - | - | - | - | - | () |
| 2 | 102 | 21 | 30 | 96 | 22 | 31 | 189 | 161 | 28 | 38 | 48 | 90 | 42 | 53 | 121 | 91 | 30 |
| 4 | 103 | 23 | 30 | 96 | 24 | 31 | 183 | 161 | 22 | 44 | 49 | 90 | 48 | 54 | 104 | 89 | 15 |
| 6 | 104 | 23 | 30 | 96 | 24 | 31 | 183 | 161 | 22 | 43 | 49 | 90 | 47 | 54 | 107 | 89 | 18 |
| 2 | 105 | 20 | 30 | 96 | 21 | 31 | 191 | 161 | 30 | 38 | 49 | 90 | 42 | 54 | 121 | 89 | 32 |
| 7 | 106 | 23 | 31 | 96 | 24 | 32 | 183 | 158 | 25 | 42 | 49 | 90 | 46 | 54 | 109 | 89 | 20 |
| 4 | 107 | 25 | 31 | 96 | 26 | 32 | 178 | 158 | 20 | 44 | 49 | 90 | 48 | 54 | 104 | 89 | 15 |
| 0) | 108 | 26 | 31 | 96 | 27 | 32 | 175 | 158 | (17) | 47 | 49 | 90 | 52 | 54 | 94 | 89 | (05) |
| 7 | 109 | 24 | 31 | 96 | 25 | 32 | 180 | 158 | 22 | 44 | 49 | 90 | 48 | 54 | 104 | 89 | 15 |
| 2 | 110 | 25 | 31 | 96 | 26 | 32 | 178 | 158 | 20 | 44 | 50 | 90 | 48 | 55 | 104 | 86 | 18 |
| 7) | 111 | 27 | 31 | 96 | 28 | 32 | 172 | 158 | (14) | 47 | 50 | 90 | 52 | 55 | 94 | 86 | (08) |
| 4 | 112 | 25 | 31 | 96 | 26 | 32 | 178 | 158 | 20 | 44 | 50 | 90 | 48 | 55 | 104 | 86 | 18 |
| 3) | 113 | 29 | 32 | 96 | 30 | 33 | 165 | 154 | (11) | 48 | 50 | 90 | 53 | 55 | 91 | 86 | (05) |
| 4 | 114 | 25 | 32 | 96 | 26 | 33 | 178 | 154 | 24 | 43 | 50 | 90 | 47 | 55 | 107 | 86 | 21 |
| 2 | 115 | 27 | 32 | 96 | 28 | 33 | 172 | 154 | 18 | 45 | 50 | 90 | 49 | 55 | 102 | 86 | 16 |
| 7 | 116 | 27 | 32 | 96 | 28 | 33 | 172 | 154 | 18 | 46 | 50 | 90 | 51 | 55 | 96 | 86 | 10 |
| 7 | 117 | 23 | 32 | 96 | 24 | 33 | 183 | 154 | 29 | 41 | 50 | 90 | 45 | 55 | 113 | 86 | 27 |
| 2 | 118 | 25 | 32 | 96 | 26 | 33 | 178 | 154 | 14 | 44 | 50 | 90 | 48 | 55 | 104 | 86 | 18 |
| 5 | 119 | 20 | 32 | 96 | 21 | 33 | 191 | 154 | 37 | 38 | 50 | 90 | 42 | 55 | 121 | 86 | 35 |
| 2 | 120 | 27 | 32 | 96 | 28 | 33 | 172 | 154 | 18 | 43 | 51 | 90 | 47 | 56 | 107 | 83 | 24 |

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|-----|----|-----|-------|----|-----|-----|-------|------------|----|-----|-------|----|-----|-----|-------|------------|
| 121 | 25 | 33 | 96 | 26 | 34 | 178 | 150 | 28 | 43 | 50 | 90 | 48 | 55 | 104 | 86 | 18 |
| 122 | 28 | 33 | 96 | 29 | 34 | 169 | 150 | 19 | 46 | 50 | 90 | 51 | 55 | 96 | 86 | 10 |
| 123 | 25 | 33 | 96 | 26 | 34 | 178 | 150 | 28 | 43 | 51 | 89 | 48 | 57 | 104 | 80 | 24 |
| 124 | 27 | 33 | 96 | 28 | 34 | 172 | 150 | 22 | 45 | 51 | 89 | 51 | 57 | 96 | 80 | 16 |
| 125 | 11 | 33 | 96 | 11 | 34 | 230 | 150 | 80 | 26 | 51 | 89 | 29 | 57 | 169 | 80 | 89 |
| 126 | 25 | 33 | 96 | 26 | 34 | 178 | 150 | 28 | 43 | 51 | 89 | 48 | 57 | 104 | 80 | 24 |
| 127 | 30 | 34 | 96 | 31 | 35 | 161 | 145 | 16 | 47 | 51 | 89 | 53 | 57 | 91 | 80 | 11 |
| 128 | 32 | 34 | 96 | 33 | 35 | 154 | 145 | (09) | 49 | 51 | 89 | 55 | 57 | 86 | 80 | (06) |
| 129 | 30 | 34 | 96 | 31 | 35 | 161 | 145 | 16 | 46 | 51 | 89 | 52 | 57 | 94 | 80 | 14 |
| 130 | 28 | 34 | 96 | 29 | 35 | 169 | 145 | 24 | 46 | 52 | 89 | 52 | 58 | 94 | 78 | 16 |
| 131 | 33 | 34 | 96 | 34 | 35 | 150 | 145 | (05) | 49 | 52 | 89 | 55 | 58 | 86 | 78 | (08) |
| 132 | 27 | 34 | 96 | 28 | 35 | 172 | 145 | 27 | 43 | 52 | 89 | 48 | 58 | 104 | 78 | 26 |
| 133 | 32 | 34 | 96 | 33 | 35 | 154 | 145 | 09 | 47 | 52 | 89 | 53 | 58 | 91 | 78 | 13 |
| 134 | 29 | 34 | 96 | 30 | 35 | 165 | 145 | 20 | 46 | 52 | 89 | 52 | 58 | 94 | 78 | 16 |
| 135 | 28 | 35 | 96 | 29 | 35 | 169 | 145 | 24 | 45 | 52 | 89 | 51 | 58 | 96 | 78 | 18 |
| 136 | 31 | 35 | 96 | 32 | 35 | 158 | 145 | (13) | 49 | 52 | 89 | 55 | 58 | 86 | 78 | (08) |
| 137 | 29 | 35 | 96 | 30 | 35 | 165 | 145 | 20 | 48 | 52 | 89 | 54 | 58 | 89 | 78 | 11 |
| 138 | 26 | 35 | 96 | 27 | 36 | 175 | 141 | 34 | 43 | 52 | 89 | 49 | 58 | 102 | 78 | 24 |
| 139 | 31 | 35 | 96 | 32 | 36 | 158 | 141 | (17) | 49 | 52 | 89 | 55 | 58 | 86 | 78 | (08) |
| 140 | 30 | 35 | 96 | 31 | 36 | 161 | 141 | 20 | 49 | 52 | 89 | 55 | 58 | 86 | 78 | 08 |
| 141 | 29 | 35 | 96 | 30 | 36 | 165 | 141 | 24 | 48 | 52 | 89 | 54 | 58 | 89 | 78 | 11 |
| 142 | 27 | 35 | 96 | 28 | 36 | 172 | 141 | 31 | 46 | 52 | 89 | 52 | 58 | 94 | 78 | 16 |
| 143 | 30 | 36 | 96 | 31 | 37 | 161 | 138 | 23 | 48 | 52 | 89 | 54 | 58 | 89 | 78 | 11 |
| 144 | 30 | 36 | 96 | 31 | 37 | 161 | 138 | 23 | 48 | 53 | 89 | 54 | 59 | 89 | 75 | 14 |
| 145 | 29 | 36 | 96 | 30 | 37 | 165 | 138 | 27 | 46 | 53 | 89 | 52 | 59 | 94 | 75 | 19 |
| 146 | 35 | 36 | 96 | 36 | 37 | 141 | 138 | (03) | 51 | 53 | 89 | 57 | 59 | 80 | 75 | (05) |
| 147 | 31 | 36 | 96 | 32 | 37 | 158 | 138 | 20 | 43 | 53 | 89 | 54 | 59 | 89 | 75 | 14 |
| 148 | 31 | 37 | 96 | 32 | 39 | 158 | 131 | 27 | 49 | 53 | 88 | 55 | 59 | 80 | 75 | 11 |
| 149 | 35 | 37 | 96 | 36 | 39 | 141 | 131 | 10 | 50 | 53 | 88 | 56 | 59 | 83 | 75 | 08 |
| 150 | 34 | 37 | 96 | 35 | 39 | 145 | 131 | 14 | 51 | 53 | 88 | 57 | 59 | 80 | 75 | 05 |

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150

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| 1 | 3 | 4 | 2 | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | n | mtm | ltmtm | n | mtm | (n) | (mtm) | Δm | |
|----|----|----|----|-----|-----|-------|----|-----|-----|-------|----|----|-----|-------|----|-----|-----|-------|----|----|
| 4 | 2 | 5 | 3 | 151 | 66 | 68 | 93 | 71 | 73 | 47 | 43 | 4 | 87 | 88 | 98 | 89 | 90 | 02 | 0 | 2 |
| 5 | 8 | 9 | 4 | 152 | 65 | 68 | 93 | 70 | 73 | 49 | 43 | 6 | 85 | 88 | 98 | 87 | 90 | 09 | 0 | 9 |
| 9 | 8 | 16 | 10 | 153 | 63 | 68 | 93 | 68 | 73 | 53 | 43 | 10 | 85 | 88 | 98 | 87 | 90 | 09 | 0 | 9 |
| 9 | 10 | 19 | 12 | 154 | 63 | 68 | 93 | 68 | 73 | 53 | 43 | 10 | 84 | 88 | 98 | 86 | 90 | 11 | 0 | 11 |
| 11 | 10 | 16 | 14 | 155 | 62 | 68 | 93 | 67 | 73 | 56 | 43 | 13 | 84 | 88 | 98 | 86 | 90 | 11 | 0 | 11 |
| 11 | 8 | 5 | 12 | 156 | 62 | 68 | 93 | 67 | 72 | 56 | 43 | 13 | 85 | 88 | 98 | 87 | 90 | 09 | 0 | 9 |
| 7 | 5 | 9 | 4 | 157 | 64 | 68 | 93 | 69 | 73 | 51 | 43 | 8 | 86 | 88 | 98 | 88 | 90 | 06 | 0 | 6 |
| 11 | 10 | 19 | 12 | 158 | 62 | 68 | 93 | 67 | 73 | 56 | 43 | 13 | 84 | 88 | 98 | 86 | 90 | 11 | 0 | 11 |
| 14 | 12 | 21 | 12 | 159 | 61 | 68 | 93 | 66 | 73 | 59 | 43 | 16 | 83 | 88 | 97 | 85 | 90 | 14 | 0 | 14 |
| 7 | 5 | 9 | 10 | 160 | 64 | 68 | 93 | 69 | 73 | 51 | 43 | 8 | 85 | 88 | 97 | 88 | 90 | 6 | 0 | 6 |
| 7 | 5 | 9 | 4 | 161 | 64 | 68 | 93 | 69 | 73 | 51 | 43 | 8 | 86 | 88 | 97 | 88 | 90 | 6 | 0 | 6 |
| 11 | 5 | 13 | 4 | 162 | 62 | 68 | 93 | 67 | 73 | 56 | 43 | 13 | 85 | 88 | 97 | 88 | 90 | 6 | 0 | 6 |
| 12 | 12 | 21 | 14 | 163 | 61 | 67 | 93 | 66 | 72 | 59 | 45 | 14 | 83 | 88 | 97 | 85 | 90 | 14 | 0 | 14 |
| 8 | 10 | 13 | 12 | 164 | 63 | 67 | 93 | 68 | 72 | 53 | 45 | 9 | 84 | 88 | 97 | 86 | 90 | 11 | 0 | 11 |
| 7 | 10 | 13 | 10 | 165 | 63 | 67 | 93 | 68 | 72 | 53 | 45 | 8 | 84 | 88 | 97 | 86 | 90 | 11 | 0 | 11 |
| 5 | 5 | 5 | 10 | 166 | 64 | 67 | 93 | 69 | 72 | 51 | 45 | 6 | 85 | 88 | 97 | 88 | 90 | 6 | 0 | 6 |
| 5 | 5 | 13 | 4 | 167 | 63 | 66 | 93 | 68 | 71 | 53 | 47 | 6 | 85 | 88 | 97 | 88 | 90 | 6 | 0 | 6 |
| 4 | 10 | 3 | 2 | 168 | 64 | 66 | 93 | 69 | 71 | 51 | 47 | 4 | 84 | 87 | 97 | 86 | 90 | 11 | 0 | 11 |
| 4 | 10 | 11 | 10 | 169 | 64 | 66 | 93 | 69 | 71 | 51 | 47 | 4 | 84 | 87 | 97 | 86 | 90 | 11 | 0 | 11 |
| 5 | 5 | 6 | 7 | 170 | 63 | 66 | 93 | 68 | 71 | 53 | 47 | 6 | 85 | 87 | 97 | 88 | 90 | 6 | 0 | 6 |
| 5 | 10 | 11 | 10 | 171 | 63 | 66 | 93 | 68 | 71 | 53 | 47 | 6 | 84 | 87 | 97 | 86 | 90 | 11 | 0 | 11 |
| 6 | 8 | 11 | 10 | 172 | 62 | 65 | 93 | 67 | 70 | 56 | 49 | 7 | 84 | 86 | 97 | 86 | 89 | 11 | 2 | 9 |
| 4 | 4 | 17 | 8 | 173 | 63 | 65 | 93 | 68 | 70 | 53 | 49 | 4 | 85 | 86 | 97 | 88 | 89 | 6 | 2 | 4 |
| 14 | 10 | 20 | 15 | 174 | 59 | 65 | 93 | 63 | 70 | 66 | 49 | 17 | 83 | 86 | 97 | 85 | 89 | 14 | 2 | 12 |
| 2 | 8 | 8 | 5 | 175 | 63 | 64 | 93 | 68 | 69 | 53 | 51 | 2 | 84 | 86 | 97 | 86 | 89 | 11 | 2 | 9 |
| | | | | 176 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | 177 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | 178 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | 179 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 9 | 10 | 6 | 180 | 59 | 62 | 92 | 63 | 67 | 56 | 50 | 10 | 82 | 85 | 97 | 84 | 88 | 16 | 6 | 10 |

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| | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm |
|-----|----|-----|-------|----|-----|-----|-------|------------|----|-----|-------|----|-----|-----|-------|------------|
| 151 | 35 | 37 | 96 | 36 | 38 | 141 | 135 | 6 | 52 | 53 | 88 | 58 | 59 | 78 | 75 | 3 |
| 152 | 34 | 37 | 96 | 35 | 38 | 145 | 135 | 10 | 51 | 53 | 88 | 57 | 59 | 80 | 75 | 5 |
| 153 | 32 | 37 | 96 | 33 | 38 | 154 | 135 | 19 | 50 | 53 | 88 | 55 | 59 | 86 | 75 | 11 |
| 154 | 31 | 37 | 96 | 32 | 38 | 158 | 135 | 23 | 49 | 53 | 88 | 54 | 59 | 89 | 75 | 14 |
| 155 | 32 | 37 | 96 | 33 | 38 | 154 | 135 | 19 | 48 | 53 | 88 | 53 | 59 | 91 | 75 | 16 |
| 156 | 35 | 37 | 96 | 36 | 38 | 141 | 135 | 6 | 49 | 53 | 88 | 54 | 59 | 89 | 75 | 14 |
| 157 | 34 | 37 | 96 | 35 | 38 | 145 | 135 | 10 | 51 | 53 | 88 | 57 | 59 | 80 | 75 | 5 |
| 158 | 31 | 37 | 96 | 32 | 38 | 158 | 135 | 23 | 49 | 53 | 88 | 54 | 59 | 89 | 75 | 14 |
| 159 | 30 | 37 | 96 | 31 | 38 | 161 | 135 | 26 | 48 | 53 | 88 | 53 | 59 | 91 | 75 | 16 |
| 160 | 34 | 37 | 96 | 35 | 38 | 145 | 135 | 10 | 50 | 53 | 88 | 55 | 59 | 86 | 75 | 11 |
| 161 | 34 | 37 | 96 | 35 | 38 | 145 | 135 | 10 | 51 | 53 | 88 | 57 | 59 | 80 | 75 | 5 |
| 162 | 33 | 37 | 96 | 34 | 38 | 150 | 135 | 15 | 51 | 53 | 88 | 57 | 59 | 80 | 75 | 5 |
| 163 | 30 | 37 | 96 | 31 | 38 | 161 | 135 | 26 | 48 | 53 | 88 | 53 | 59 | 91 | 75 | 16 |
| 164 | 33 | 37 | 96 | 34 | 38 | 150 | 135 | 15 | 49 | 53 | 88 | 54 | 59 | 89 | 75 | 14 |
| 165 | 33 | 37 | 96 | 34 | 38 | 150 | 135 | 15 | 50 | 53 | 88 | 55 | 59 | 86 | 75 | 11 |
| 166 | 35 | 37 | 96 | 36 | 38 | 141 | 135 | 6 | 50 | 53 | 88 | 55 | 59 | 86 | 75 | 11 |
| 167 | 33 | 37 | 96 | 34 | 38 | 150 | 135 | 15 | 50 | 53 | 88 | 57 | 59 | 80 | 75 | 5 |
| 168 | 30 | 36 | 96 | 36 | 37 | 141 | 138 | 3 | 51 | 52 | 88 | 57 | 58 | 80 | 78 | 2 |
| 169 | 33 | 36 | 96 | 34 | 37 | 150 | 138 | 12 | 49 | 52 | 88 | 54 | 58 | 89 | 78 | 11 |
| 170 | 34 | 36 | 96 | 35 | 37 | 145 | 138 | 7 | 50 | 52 | 88 | 55 | 58 | 86 | 78 | 8 |
| 171 | 33 | 36 | 96 | 34 | 37 | 150 | 138 | 12 | 49 | 52 | 88 | 54 | 58 | 89 | 78 | 11 |
| 172 | 32 | 35 | 96 | 33 | 36 | 154 | 141 | 13 | 48 | 51 | 88 | 53 | 57 | 91 | 80 | 11 |
| 173 | 30 | 35 | 96 | 31 | 36 | 161 | 141 | 20 | 49 | 51 | 88 | 54 | 57 | 89 | 80 | 9 |
| 174 | 29 | 35 | 96 | 30 | 36 | 165 | 141 | 24 | 45 | 51 | 88 | 50 | 57 | 98 | 86 | 18 |
| 175 | 33 | 35 | 96 | 34 | 36 | 150 | 141 | 09 | 49 | 50 | 88 | 54 | 56 | 89 | 83 | 6 |
| 176 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 177 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 178 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 179 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 180 | 36 | 33 | 96 | 31 | 34 | 161 | 150 | 11 | 45 | 48 | 88 | 50 | 53 | 98 | 91 | 7 |

1564 2018

| 1 | 3 | 4 | 2 | 181 | n | mtn | ltmtn | n | mtn | (n) | (mtn) | Δm | n | mtn | ltmtn | n | mtn | (n) | (mtn) | Δm |
|----|----|----|----|-----|----|-----|-------|----|-----|-----|-------|------------|----|-----|-------|----|-----|-----|-------|------------|
| | | | | 181 | | | | | | | | | | | | | | | | |
| | | | | 182 | 60 | 62 | 92 | 65 | 67 | 61 | 56 | 5 | - | - | - | | | | | |
| | | | | 183 | 60 | 61 | 92 | 65 | 66 | 61 | 59 | 2 | - | - | - | | | | | |
| | | | | 184 | 57 | 61 | 92 | 62 | 66 | 68 | 59 | 19 | 80 | 83 | 97 | 82 | 85 | 21 | 14 | 07 |
| | | | | 185 | 58 | 60 | 92 | 63 | 65 | 66 | 61 | 5 | 81 | 83 | 97 | 83 | 85 | 18 | 14 | 04 |
| | | | | 186 | 59 | 60 | 92 | 64 | 65 | 63 | 61 | 2 | 81 | 82 | 97 | 83 | 84 | 18 | 16 | 02 |
| | | | | 187 | 57 | 58 | 92 | 62 | 63 | 68 | 66 | 2 | 80 | 82 | 97 | 82 | 84 | 21 | 16 | 05 |
| | | | | 188 | 53 | 58 | 92 | 57 | 63 | 80 | 66 | 14 | 77 | 81 | 97 | 79 | 83 | 28 | 18 | 10 |
| | | | | 189 | 54 | 56 | 92 | 58 | 61 | 78 | 70 | (6) | - | - | - | - | - | | | |
| | | | | 190 | 52 | 55 | 92 | 56 | 59 | 83 | 75 | (8) | - | - | - | - | - | | | |
| | | | | 191 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | | | | 192 | 50 | 53 | 92 | 54 | 57 | 89 | 80 | (9) | - | - | - | - | - | | | |
| | | | | 193 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| | | | | 194 | - | - | - | - | - | - | - | - | - | - | - | - | - | | | |
| 15 | 6 | 8 | 14 | 195 | 48 | 50 | 92 | 52 | 55 | 94 | 86 | 18 | 72 | 75 | 97 | 74 | 77 | 40 | 33 | 7 |
| | | | | 196 | 47 | 49 | 92 | 51 | 54 | 96 | 89 | 7 | 71 | 74 | 97 | 73 | 76 | 43 | 36 | 7 |
| | | | | 197 | 45 | 48 | 92 | 49 | 53 | 102 | 91 | 11 | 70 | 72 | 97 | 72 | 74 | 45 | 40 | 5 |
| | | | | 198 | 45 | 47 | 92 | 49 | 52 | 102 | 94 | 8 | 65 | 71 | 97 | 67 | 73 | 56 | 43 | 13 |
| | | | | 199 | 43 | 46 | 92 | 46 | 51 | 109 | 96 | 13 | - | 71 | 97 | - | 73 | - | | |
| 41 | 40 | 40 | 34 | 200 | 28 | 44 | 92 | 31 | 48 | 161 | 104 | 57 | 48 | 69 | 97 | 49 | 71 | 102 | 47 | 55 |
| | | | | 201 | 36 | 42 | 92 | 39 | 45 | 131 | 113 | 18 | 58 | 66 | 97 | 60 | 68 | 72 | 53 | 19 |
| | | | | 202 | - | 41 | 92 | - | 44 | - | 116 | | - | 65 | 97 | - | 67 | - | | |
| | | | | 203 | 35 | 40 | 92 | 37 | 43 | 138 | 118 | 20 | 59 | 63 | 97 | 61 | 65 | 70 | 61 | 9 |
| | | | | 204 | 35 | 39 | 92 | 37 | 42 | 138 | 121 | 17 | 58 | 63 | 97 | 60 | 65 | 72 | 61 | 11 |
| | | | | 205 | 34 | 36 | 92 | 36 | 39 | 141 | 131 | 10 | 57 | 60 | 97 | 59 | 62 | 75 | 68 | 7 |
| | | | | 206 | 32 | 34 | 92 | 34 | 37 | 150 | 138 | 12 | 54 | 58 | 97 | 56 | 60 | 83 | 72 | 11 |
| | | | | 207 | 28 | 33 | 92 | 30 | 36 | 165 | 141 | 24 | 49 | 55 | 97 | 50 | 57 | 98 | 80 | 18 |
| | | | | 208 | 26 | 30 | 92 | 28 | 32 | 172 | 158 | 14 | - | 54 | 97 | - | 56 | - | | |
| | | | | 209 | 26 | 29 | 92 | 28 | 31 | 172 | 161 | 11 | 48 | 52 | 97 | 49 | 54 | 102 | 89 | 13 |
| | | | | 210 | 27 | 27 | 92 | 29 | 29 | 169 | 169 | 0 | 47 | 48 | 97 | 48 | 49 | 104 | 102 | 2 |

| | n | $m+n$ | $k+m+n$ | n | $m+n$ | (n) | $(m+n)$ | Δm | n | $m+n$ | $k+m+n$ | n | $m+n$ | (n) | $(m+n)$ | Δm |
|-----|-----|-------|---------|-----|-------|-------|---------|------------|-----|-------|---------|-----|-------|-------|---------|------------|
| 181 | — | — | — | | | | | | — | — | — | | | | | |
| 182 | — | — | — | | | | | | — | — | — | | | | | |
| 183 | 28 | 32 | 96 | 29 | 33 | 169 | 154 | 15 | — | — | — | | | | | |
| 184 | — | — | — | | | | | | 43 | 46 | 88 | 48 | 51 | 104 | 96 | 8 |
| 185 | — | — | — | | | | | | — | — | — | | | | | |
| 186 | — | — | — | | | | | | — | — | — | | | | | |
| 187 | — | — | — | | | | | | — | — | — | | | | | |
| 188 | — | — | — | | | | | | 38 | 43 | 87 | 42 | 48 | 121 | 104 | 17 |
| 189 | 25 | 29 | 96 | 26 | 30 | 178 | 165 | (13) | — | — | — | | | | | |
| 190 | — | — | — | | | | | | — | — | — | | | | | |
| 191 | — | — | — | | | | | | — | — | — | | | | | |
| 192 | — | — | — | | | | | | — | — | — | | | | | |
| 193 | — | — | — | | | | | | — | — | — | | | | | |
| 194 | — | — | — | | | | | | — | — | — | | | | | |
| 195 | 19 | 22 | 96 | 20 | 23 | 195 | 186 | 09 | 37 | 36 | 87 | 38 | 40 | 135 | 128 | 7 |
| 196 | — | — | — | | | | | | — | — | — | | | | | |
| 197 | — | — | — | | | | | | — | — | — | | | | | |
| 198 | — | — | — | | | | | | — | — | — | | | | | |
| 199 | — | — | — | | | | | | — | — | — | | | | | |
| 200 | 8 | 18 | 95 | 8 | 19 | (254) | 199 | 55 | 18 | 31 | 87 | 20 | 34 | 195 | 150 | 45 |
| 201 | | | | | | | | | | | | | | | | |
| 202 | | | | | | | | | | | | | | | | |
| 203 | | | | | | | | | | | | | | | | |
| 204 | | | | | | | | | | | | | | | | |
| 205 | | | | | | | | | | | | | | | | |
| 206 | | | | | | | | | | | | | | | | |
| 207 | | | | | | | | | | | | | | | | |
| 208 | | | | | | | | | | | | | | | | |
| 209 | | | | | | | | | | | | | | | | |
| 210 | | | | | | | | | | | | | | | | |

| | n | m | l | \bar{n} | \bar{m} | (n) | (m) | Δm | n | m | l | \bar{n} | \bar{m} | (n) | (m) | Δm |
|-----|-----|-----|-----|-----------|-----------|-------|-------|------------|-----|-----|-----|-----------|-----------|-------|-------|------------|
| 211 | — | — | — | — | — | — | — | — | — | — | — | | | | | |
| 212 | — | — | — | — | — | — | — | — | — | — | — | | | | | |
| 213 | — | — | — | — | — | — | — | — | — | — | — | | | | | |
| 214 | — | — | — | — | — | — | — | — | — | — | — | | | | | |
| 215 | — | — | — | — | — | — | — | — | 34 | 39 | 97 | 35 | 40 | 145 | 128 | |

| | | | | |
|---------|------------|-------|-------|------|
| | Σx | 2 | 3 | 4 |
| | 1873 | 1828 | 1564 | 2018 |
| No. 119 | 119 | 119 | 119 | 119 |
| Mean | 15.78 | 15.35 | 13.14 | 16.9 |

| | α | m_{tr} | $\log m_{\text{tr}}$ | $\bar{\alpha}$ | \bar{m}_{tr} | (m) | (m_{tr}) | Δm |
|-----|----------|-----------------|----------------------|----------------|-----------------------|-------|-------------------|------------|
| 211 | - | - | - | | | | | |
| 212 | - | - | - | | | | | |
| 213 | - | - | - | | | | | |
| 214 | - | - | - | | | | | |
| 215 | - | - | - | | | | | |

| Exp I | | | | | | | | | | Exp II | | | | | | | | | |
|-------|---|-----|-------|-----------|-------------------|-----|-------|------------|----|--------|----|-----|-------|-----------|-------------------|-----|-------|------------|----|
| | n | m+n | l+m+n | \bar{n} | $\bar{m}+\bar{n}$ | [n] | [m+n] | ΔM | dL | | n | m+n | l+m+n | \bar{n} | $\bar{m}+\bar{n}$ | [n] | [m+n] | Δm | dL |
| 1 | 0 | 5 | 140 | | | | | | | | 1 | 10 | 139 | | | | | | |
| 1a | | 11 | 140 | | | | | | | | 28 | 27 | 139 | | | | | | |
| 2 | 3 | 10 | 140 | | | | | | | | 6 | 24 | 130 | | | | | | |
| 2a | 8 | 9 | 140 | | | | | | | | 18 | 21 | 139 | | | | | | |
| 3 | 2 | 8 | 140 | | | | | | | | 3 | 18 | 139 | | | | | | |
| 3a | 5 | 7 | 140 | | | | | | | | 13 | 15 | 139 | | | | | | |
| 4 | 2 | 6 | 141 | | | | | | | | 0 | 12 | 140 | | | | | | |

Exp III

| | n | $m+n$ | $\bar{m}+n$ | \bar{n} | $\bar{m}+n$ | $[n]$ | $[m+n]$ | ΔM | ΔL | | n | $m+n$ | $\bar{m}+n$ | \bar{n} | $\bar{m}+n$ | $[n]$ | $[m+n]$ | ΔM | ΔL |
|----|-----|-------|-------------|-----------|-------------|-------|---------|------------|------------|--|-----|-------|-------------|-----------|-------------|-------|---------|------------|------------|
| 1 | 5 | 19 | 14 | | | | | | | | | | | | | | | | |
| 1a | 4 | 13 | 14 | | | | | | | | | | | | | | | | |
| 2 | 11 | 39 | 14 | | | | | | | | | | | | | | | | |
| 2a | 3 | 35 | 14 | | | | | | | | | | | | | | | | |
| 3 | 8 | 30 | 14 | | | | | | | | | | | | | | | | |
| 3a | 28 | 29 | 14 | | | | | | | | | | | | | | | | |
| 4 | 4 | 22 | 14 | | | | | | | | | | | | | | | | |
| 5 | 3 | 12 | 14 | | | | | | | | | | | | | | | | |

Lines in spectrum of β Cassiopeiae.

| No. | Measure λ | $\Delta\lambda$ | $\Delta\lambda$ | α CNI | λ Strds with asterisk | |
|-----|-------------------|-----------------|-----------------|--------------|-------------------------------|--------------|
| 1 | 244 | 3835* | 53 | 46 | 51 | 3835 |
| 2 | 337 | | 29 | 25 | | |
| 3 | 336 | | 21 | 18 | | |
| 4 | 324 | 3848 | 28 | 24 | 18 | 3850 |
| 5 | 330 | 3852 | 13 | 11 | 11 | 3856 |
| 6 | 328 | 3855 | 07 | 6 | \downarrow | \downarrow |
| 7 | 325 | 3858 | 12 | 10 | 20 | 3860 |
| 8 | 322 | 3863 | 15 | 13 | 02 | 3863 |
| 9 | 319 | 3865 | 06 | 5 | | |
| 10 | 317 | 3868 | 05 | 4 | 7 | 3866 |
| 11 | 311 | 3875 | 21 | 18 | 18 | 3872 |
| 12 | 306 | 3881 | 21 | 18 | 17 | 3879 |
| 13 | 303 | 3884 | 21 | 18 | 23 | 3886 |
| 14 | 298 | 3889* | 52 | 45 | 48 | 3889 |
| 15 | 294 | 3895 | 24 | 21 | 27 | 3896** |
| 16 | 292 | 3897 | 21 | 18 | | |
| 17 | 290 | 3899 | 20 | 17 | 17 | 3901 |
| 18 | 286 | 3904 | 14 | 12 | 15 | 3905 |
| 19 | 284 | 3906 | 16 | 14 | | |
| 20 | 278 | 3913 | 10 | 9 | .. | |
| 21 | 275 | 3917 | 12 | 10 | 10 | 3916 |
| 22 | 273 | 3920 | 10 | 9 | 11 | 3920 |
| 23 | 271 | 3922 | 04 | 3 | | |
| 24 | 268 | 3926 | 14 | 12 | | |
| 25 | 262 | 3933* | 69 | 59 | 75 | 3933 |
| 26 | 254 | 3943 | 16 | 14 | 23 | 3944 |
| 27 | 251 | 3947 | 15 | 13 | | |
| 28 | 248 | 3951 | 14 | 12 | 19 | 3950 |
| 29 | 245 | 3955 | 23 | 20 | 21 | 3956 |
| 30 | 240 | 3961 | 26 | 22 | 36 | 3961 |

| No. | | | | dl. | | |
|-----|------------------|-------|----|-----|----|------|
| 31 | 235 ⁻ | 3968* | 73 | 63 | 73 | 3968 |
| 32 | — | — | .. | .. | | |
| 33 | 230 | 3975 | 25 | 22 | .. | |
| 34 | 226 | 3981 | 18 | 15 | 12 | 3982 |
| 35 | 222 | 3986 | 14 | 12 | .. | |
| 36 | 220 | 3989 | 10 | 9 | 18 | 3991 |
| 37 | 214 | 3998 | 18 | 15 | 19 | 3997 |
| 38 | 211 | 4002 | 06 | 5 | 07 | 4002 |
| 39 | 208 | 4006 | 20 | 17 | 21 | 4005 |
| 40 | 205 ⁻ | 4011 | 05 | 4 | 5 | 4012 |
| 41 | 203 | 4014 | 09 | 8 | 5 | 4 |
| 42 | 200 | 4018 | 07 | 6 | 5 | 4018 |
| 43 | 194 | 4027 | 14 | 12 | 15 | 4025 |
| 44 | 190 | 4032 | 22 | 19 | 20 | 4031 |
| 45 | 187 | 4036 | 18 | 15 | 18 | 4033 |
| 46 | 183 | 4042 | 10 | 9 | 5 | 4041 |
| 47 | 179 | 4048 | 20 | 17 | 21 | 4046 |
| 48 | 177 | 4053 | 07 | 6 | .. | |
| 49 | 173 | 4056 | 13 | 11 | 15 | 4055 |
| 50 | 171 | 4059 | 13 | 11 | | |
| 51 | 167 | 4065 | 19 | 16 | 19 | 4064 |
| 52 | 164 | 4069 | 13 | 11 | 21 | 4067 |
| 53 | 161 | 4073 | 18 | 15 | 18 | 4072 |
| 54 | 157 | 4079 | 27 | 23 | 28 | 4077 |
| 55 | 151 | 4087 | 17 | 14 | 17 | 4087 |
| 56 | 147 | 4093 | 14 | 12 | 15 | 4092 |
| 57 | 141 | 4101* | 57 | 49 | 51 | 4102 |
| 58 | 135 ⁻ | 4111 | 18 | 15 | 21 | 4110 |
| 59 | 130 | 4119 | 14 | 12 | 14 | 4119 |
| 60 | 127 | 4124 | 15 | 13 | 14 | 4123 |

| no. | measure | λ | dl_2 | dl_1 | α Cmi | λ |
|-----|---------------|-----------|--------|--------|--------------|-----------|
| 61 | 124 | 4129 | 14 | 12 | 12 | 4128 |
| 62 | 121 | 4133 | 18 | 15 | 20 | 4133 |
| 63 | 118 | 4138 | 05 | 4 | 6 | 4137 |
| 64 | 114 | 4145 | 17 | 15 | 19 | 4144 |
| 65 | 110 | 4152 | 10 | 9 | 10 | 4152 |
| 66 | 107 | 4156 | 18 | 15 | | |
| 67 | 103 | 4162 | 14 | 12 | 15 | 4161 |
| 68 | 99 | 4169 | 12 | 10 | | |
| 69 | 96 | 4173 | 27 | 23 | 13 | 4173 |
| 70 | 92 | 4180 | 21 | 18 | 23 | 4177 |
| 71 | 90 | 4183 | 17 | 15 | | |
| 72 | 87 | 4188 | 23 | 20 | 16 | 4187 |
| 73 | 85 | 4191 | 16 | 14 | | |
| 74 | 82 | 4196 | 15 | 13 | 14 | 4196 |
| 75 | 80 | 4199 | 26 | 22 | | |
| 76 | 78 | 4202 | 18 | 15 | 17 | 4202 |
| 77 | 73 | 4210 | 15 | 13 | 12 | 4210 |
| 78 | 70 | 4215* | 21 | 18 | 12 | 4215 |
| 79 | 63 | 4227* | 28 | 24 | 17 | 4227 |
| 80 | 60 | 4232 | 17 | 15 | 15 | 4233 |
| 81 | 58 | 4235 | 15 | 13 | | |
| 82 | 55 | 4241 | 14 | 12 | 14 | 4242 |
| 83 | 54 | 4243 | 09 | 8 | | |
| 84 | 52 | 4247 | 18 | 15 | | |
| 85 | 50 | 4250 | 15 | 13 | | |
| 86 | 48 | 4254 | 10 | 9 | 11 | 4258 |
| 87 | 44 | 4261 | 15 | 13 | | |
| 88 | 38 | 4271 | 18 | 15 | 10 | 4272 |
| 89 | 36 | 4276 | 14 | 12 | | |
| 90 | 32 | 4283 | 12 | 10 | | |

| No. | M. | λ | dl_2 | dl_1 | α Cmi | λ |
|-----|----|-------------------|--------|--------|--------------|-----------|
| 91 | 28 | 4290 | 26 | 22 | 6 | 4290 |
| 92 | 25 | 4295 | 16 | 14 | | |
| 93 | 22 | 4300 | 24 | 21 | 20 | 4300 |
| 94 | 20 | 4304 | 24 | 21 | 15 | 4306 |
| 95 | 17 | 4310 | 18 | 15 | ↓ | ↓ |
| 96 | 14 | 4315 | 23 | 20 | 18 | 4314 |
| 97 | 10 | 4322 | 17 | 15 | | |
| 98 | 8 | 4326 | 26 | 22 | 12 | 4326 |
| 99 | 5 | 4331 | 23 | 20 | 16 | 4330 |
| 100 | 0 | 4340 [*] | 60 | 52 | 47 | 4340 |
| 101 | 6 | 4352 | 29 | 25 | 20 | 4352 |
| 102 | 10 | 4361 | 14 | 12 | | |
| 103 | 15 | 4363 | 14 | 12 | | |
| 104 | 18 | 4369 | 21 | 18 | 11 | 4368 |
| 105 | 23 | 4390 | 24 | 21 | " | 4375 |
| 106 | 29 | 4402 | 19 | 16 | 19 | 4400 |
| 107 | 32 | 4409 | 19 | 16 | | |
| 108 | 34 | 4414 | 12 | 10 | 13 | 4415 |
| 109 | 35 | 4416 | 10 | 9 | 12 | 4417 |
| 110 | 39 | 4424 | 16 | 14 | 12 | 4427 |
| 111 | 42 | 4430 | 09 | 8 | 12 | 4435 |
| 112 | 49 | 4446 | 12 | 10 | 12 | 4444 |
| 113 | 53 | 4455 | 21 | 18 | 5 | 4455 |
| 114 | 57 | 4464 | 12 | 10 | .. | |
| 115 | 59 | 4468 | 17 | 15 | 7 | 4468 |
| 116 | 62 | 4475 | 14 | 12 | | |
| 117 | 66 | 4484 | 17 | 15 | 12 | 4481 |
| 118 | 72 | 4497 | 23 | 20 | 10 | 4501 |
| 119 | 81 | 4518 | 10 | 9 | 12 | 4515 |
| 120 | 85 | 4527 | 09 | 8 | 10 | 4523 |

β Cass H_p.I

| no. | measure | | de_2 | de_1 | | |
|-----|---------|-------|--------|--------|----|-------|
| 121 | 95 | 4549 | 15 | 13 | .. | 4550 |
| 122 | 97 | 4553 | 20 | 17 | | 4556 |
| 123 | 100 | 4559 | 12 | 10 | | |
| 124 | 104 | 4568 | 17 | 15 | | 4564 |
| 125 | 106 | 4573 | 15 | 13 | 12 | 4572 |
| 126 | 110 | 4581 | 12 | 10 | 8 | 4581 |
| 127 | 114 | 4592 | 10 | 9 | .. | 4592 |
| 128 | 116 | 4597 | 04 | 3 | | |
| 129 | 119 | 4601 | 15 | 13 | 4 | 4601 |
| 130 | 123 | 4610 | 10 | 9 | 11 | 4619? |
| 131 | 135 | 4639 | 09 | 8 | 6 | 4638 |
| 132 | 146 | 4664 | 09 | 8 | 4 | 4663 |
| 133 | 150 | 4673 | 09 | 8 | | |
| 134 | 155 | 4685 | 09 | 8 | 9 | 4682 |
| 135 | 160 | 4696 | 05 | 4 | | |
| 136 | 169 | 4717 | 07 | 6 | | |
| 137 | 172 | 4724 | 07 | 6 | | |
| 138 | 180 | 4742 | 06 | 5 | | |
| 139 | 183 | 4749 | 06 | 5 | | |
| 140 | 191 | 4757 | 05 | 4 | | |
| 141 | 195 | 4776 | 09 | 8 | | |
| 142 | 207 | 4804 | 05 | 4 | | |
| 143 | 210 | 4810 | 05 | 4 | | |
| 144 | 217 | 4827 | 09 | 8 | | |
| 145 | 228 | 4852 | 14 | 12 | | |
| 146 | 232 | 4861* | 52 | 45 | | |
| 147 | 235 | | 18 | 15 | | |
| 148 | 237 | | 12 | 10 | | |
| 149 | 240 | | 10 | 9 | | |
| 150 | 242 | | 11 | 10 | | |

no. Measure

151 246

06 5

152 249

08 7

153 254

11 10

154 257

09 8

155 259

07 6

156 266

10 9

157 270

07 6

158 275

15 13

159 282

10 9

160 286

14 12

#2697

No. 1 Olajone

No. 2 Electra

| | n | m+n | l+m+n | \bar{n} | $\overline{m+n}$ | (n) | (m+n) | Δm | | n | m+n | l+m+n | \bar{n} | $\overline{m+n}$ | (n) | (m+n) | Δm | |
|----|----|-----|-------|-----------|------------------|-----|-------|------------|----|----|-----|-------|-----------|------------------|-----|-------|------------|----|
| -2 | 15 | 19 | 72 | 16 | 20 | 318 | 285 | 33 | 26 | - | - | - | - | - | - | - | - | - |
| -1 | 16 | 21 | 72 | 17 | 22 | 310 | 272 | 38 | 30 | 15 | 19 | 73 | 15 | 20 | 326 | 285 | 41 | 31 |
| 0 | 18 | 25 | 72 | 19 | 26 | 292 | 252 | 40 | 31 | 15 | 20 | 73 | 15 | 21 | 326 | 278 | 48 | 36 |
| 1 | 19 | 29 | 72 | 20 | 30 | 285 | 234 | 51 | 37 | 16 | 23 | 73 | 16 | 24 | 318 | 262 | 56 | 40 |
| 2 | 19 | 33 | 72 | 20 | 34 | 285 | 220 | 65 | 45 | 17 | 27 | 73 | 17 | 28 | 310 | 243 | 67 | 46 |
| 3 | 19 | 37 | 72 | 20 | 39 | 285 | 203 | 82 | 53 | 17 | 30 | 73 | 17 | 31 | 310 | 230 | 70 | 48 |
| 4 | 21 | 40 | 72 | 22 | 42 | 272 | 192 | 80 | 52 | 17 | 34 | 73 | 17 | 35 | 310 | 216 | 94 | 58 |
| 5 | 23 | 44 | 72 | 24 | 46 | 262 | 176 | 86 | 55 | 19 | 38 | 73 | 20 | 39 | 285 | 203 | 82 | 53 |
| 6 | 26 | 46 | 72 | 27 | 48 | 248 | 162 | 86 | 55 | 21 | 41 | 73 | 22 | 42 | 272 | 192 | 80 | 53 |
| 6a | - | - | - | - | - | - | - | - | - | - | 44 | 72 | - | 46 | - | 176 | - | - |
| 7 | 32 | 50 | 72 | 33 | 52 | 223 | 140 | 83 | 53 | 27 | 47 | 72 | 28 | 49 | 243 | 156 | 87 | 55 |
| 7a | - | 53 | 72 | - | 55 | - | 123 | - | - | - | 49 | 72 | - | 51 | - | - | - | - |
| 8 | 38 | 45 | 72 | 40 | 47 | 200 | 140 | 90 | 56 | 32 | 51 | 72 | 33 | 53 | 223 | 135 | 88 | 56 |
| 9 | 55 | 57 | 72 | 57 | 59 | 110 | 96 | 14 | 12 | 50 | 53 | 72 | 52 | 55 | 140 | 123 | 017 | 14 |
| 10 | 45 | 59 | 72 | 47 | 61 | 169 | 80 | 89 | 56 | 38 | 54 | 72 | 40 | 56 | 200 | 116 | 84 | 54 |
| 11 | 57 | 65 | 73 | 58 | 67 | 104 | 21 | 83 | 53 | 40 | 56 | 72 | 42 | 58 | 192 | 104 | 88 | 56 |
| a | - | 66 | 73 | - | 68 | - | 14 | - | - | - | 56 | 71 | - | 58 | - | 104 | - | - |
| b | - | 67 | 73 | - | 69 | - | 4 | - | - | - | 57 | 71 | - | 59 | - | 96 | - | - |
| c | - | 65 | 73 | - | 67 | - | 21 | - | - | - | 55 | 71 | - | 57 | - | 110 | - | - |
| 14 | 50 | 57 | 73 | 51 | 58 | 146 | 104 | 42 | 32 | 33 | 43 | 70 | 34 | 45 | 220 | 180 | 40 | 31 |

Merope

No. 3

No. 4

Maia

| dl | | n | m+n | l+m+n | n | m+n | (n) | (m+n) | am | n | m+n | l+m+n | n | m+n | (n) | (m+n) | am | dl |
|----|----|----|-----|-------|----|-----|-----|-------|--------|----|-----|-------|----|-----|-----|-------|-----|----|
| | -2 | - | - | - | | | - | - | | - | - | - | | | | | | |
| 31 | -1 | 6 | 9 | 75 | 6 | 9 | 396 | 370 | 26 21 | 5 | 8 | 71 | 5 | 8 | 400 | 378 | 22 | 18 |
| 36 | 0 | 5 | 10 | 75 | 5 | 10 | 400 | 362 | 38 30 | 4 | 9 | 71 | 4 | 10 | .. | 362 | - | - |
| 40 | 1 | 7 | 11 | 75 | 7 | 11 | 386 | 355 | 31 25 | 5 | 10 | 71 | 5 | 11 | 400 | 355 | 45 | 34 |
| 46 | 2 | 8 | 13 | 75 | 8 | 13 | 378 | 340 | 38 30 | 6 | 12 | 71 | 6 | 13 | 396 | 340 | 56 | 40 |
| 48 | 3 | 9 | 15 | 75 | 9 | 15 | 370 | 326 | 44 33 | 6 | 14 | 71 | 6 | 15 | 396 | 326 | 70 | 48 |
| 58 | 4 | 8 | 17 | 75 | 8 | 17 | 378 | 310 | 68 47 | 6 | 17 | 71 | 6 | 18 | 396 | 300 | 96 | 59 |
| 53 | 5 | 7 | 19 | 75 | 7 | 19 | 386 | 292 | 94 58 | 5 | 21 | 71 | 5 | 21 | 400 | 278 | 122 | 67 |
| 53 | 6 | 10 | 22 | 75 | 10 | 22 | 362 | 272 | 90 56 | 9 | 25 | 71 | 10 | 26 | 362 | 252 | 110 | 64 |
| | 6a | - | 25 | 75 | - | 25 | - | 258 | - | - | 29 | 71 | - | 31 | - | 230 | - | |
| 55 | 7 | 12 | 27 | 75 | 12 | 27 | 348 | 248 | 100 60 | 13 | 32 | 71 | - | 34 | - | 220 | - | |
| - | 7a | - | 29 | 75 | - | 29 | - | 239 | - | - | 35 | 71 | - | 37 | - | 210 | - | |
| 56 | 8 | 15 | 31 | 75 | 15 | 31 | 326 | 230 | 96 59 | 18 | 37 | 71 | 19 | 39 | 292 | 203 | 89 | 56 |
| 14 | 9 | 30 | 33 | 75 | 30 | 33 | 234 | 223 | 11 10 | 38 | 40 | 71 | 40 | 42 | 200 | 192 | 08 | 7 |
| 54 | 10 | 20 | 35 | 74 | 20 | 36 | 285 | 213 | 72 48 | 25 | 43 | 70 | 27 | 46 | 248 | 176 | 72 | 48 |
| 56 | ? | 11 | 30 | 74 | 31 | 43 | 230 | 188 | 42 32 | 36 | 50 | 70 | 39 | 53 | 203 | 135 | 68 | 47 |
| - | ca | - | 45 | 74 | - | 46 | - | 176 | - | - | 52 | 70 | - | 56 | - | 116 | - | - |
| - | 6 | - | 48 | 74 | - | 49 | - | 166 | - | - | 54 | 70 | - | 58 | - | 104 | - | - |
| - | c | - | 46 | 74 | - | 47 | - | 169 | - | - | 53 | 70 | - | 57 | - | 110 | - | - |
| 31 | 14 | 23 | 31 | 74 | 23 | 31 | 266 | 230 | 36 28 | 28 | 40 | 70 | 30 | 43 | 234 | 188 | 46 | 35 |

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H 2697

No. 5 *Laygeta*No. 6 *Celaeno*

| | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm | n | m+n | l+m+n | n | m+n | (n) | (m+n) | Δm |
|----|----|-----|-------|----|-----|-----|-------|--------|----|-----|-------|----|-----|-----|-------|-------|
| -2 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| -1 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| 0 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| 1 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| 2 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| 3 | - | - | - | | | - | - | | - | - | - | | | - | - | |
| 4 | - | - | - | | | - | - | | 2 | 6 | 72 | 2 | 6 | .. | 396 | - |
| 5 | 1 | 5 | 72 | 1 | 5 | .. | 400 | | 3 | 7 | 72 | 3 | 7 | .. | 386 | - |
| 6 | 1 | 7 | 72 | 1 | 7 | .. | 386 | | 3 | 8 | 72 | 3 | 8 | .. | 378 | - |
| 6a | - | 9 | 72 | - | 9 | .. | 370 | | - | 9 | 72 | - | 9 | - | 370 | - |
| 7 | 3 | 11 | 71 | 3 | 12 | .. | 348 | | 6 | 11 | 72 | 6 | 11 | 396 | 355 | 41 31 |
| 7a | - | 14 | 71 | - | 15 | .. | 326 | | - | 12 | 72 | - | 13 | 370 | 340 | - |
| 8 | 5 | 17 | 71 | 5 | 18 | 400 | 300 | 100 60 | 6 | 13 | 72 | 6 | 14 | 396 | 334 | 62 44 |
| 9 | 20 | 23 | 71 | 21 | 24 | 278 | 262 | 16 14 | 12 | 15 | 71 | 13 | 16 | 340 | 318 | 22 18 |
| 10 | 12 | 29 | 70 | 13 | 31 | 340 | 230 | 110 64 | 7 | 16 | 71 | 7 | 17 | 386 | 310 | 76 50 |
| 11 | 25 | 41 | 70 | 26 | 43 | 252 | 188 | 64 44 | 10 | 20 | 70 | 11 | 22 | 355 | 272 | 83 53 |
| a | - | 45 | 69 | - | 47 | - | 169 | - | - | 21 | 70 | - | 23 | - | 266 | - |
| b | - | 46 | 69 | - | 49 | - | 156 | - | - | 21 | 70 | - | 23 | - | 266 | - |
| c | - | 44 | 69 | - | 46 | - | 176 | - | - | 18 | 69 | - | 20 | - | 285 | - |
| 14 | 18 | 29 | 68 | 19 | 31 | 292 | 230 | 62 44 | 14 | 9 | 69 | 4 | 10 | .. | 362 | - |

Pleiades
H2697
Pleione

atlas

171

| | n | $m+n$ | $l+m+n$ | \bar{n} | $\overline{m+n}$ | (n) | $(m+n)$ | Δm | n | $m+n$ | $l+m+n$ | \bar{n} | $\overline{m+n}$ | (n) | $(m+n)$ | ΔN | | |
|----|-----|-------|---------|-----------|------------------|-------|---------|------------|-----|-------|---------|-----------|------------------|-------|---------|------------|-----|----|
| -2 | - | - | - | | | - | - | | 5 | 7 | 75 | 5 | 7 | 400 | 386 | 14 | 12 | |
| -1 | - | - | - | | | - | - | | 6 | 8 | 75 | 6 | 8 | 396 | 378 | 18 | 15 | |
| 0 | - | - | - | | | - | - | | 6 | 9 | 75 | 6 | 9 | 396 | 370 | 26 | 21 | |
| 1 | - | - | - | | | - | - | | 7 | 11 | 75 | 7 | 11 | 386 | 355 | 31 | 25 | |
| 2 | - | - | - | | | - | - | | 7 | 12 | 75 | 7 | 12 | 386 | 348 | 38 | 30 | |
| 3 | - | - | - | | | - | - | | 8 | 15 | 75 | 8 | 15 | 378 | 326 | 52 | 38 | |
| 4 | - | - | - | | | - | - | | 9 | 18 | 75 | 9 | 18 | 370 | 300 | 70 | 48 | |
| 5 | 7 | 10 | 76 | 7 | 10 | 386 | 362 | 24 | 20 | 9 | 22 | 75 | 9 | 22 | 370 | 272 | 98 | 59 |
| 6 | 6 | 11 | 76 | 6 | 11 | 396 | 355 | 41 | 31 | 10 | 25 | 75 | 10 | 25 | 362 | 258 | 104 | 62 |
| 6a | - | 12 | 76 | - | 12 | - | 348 | - | - | 30 | 75 | - | 30 | - | 234 | - | - | |
| 7 | 6 | 14 | 76 | 6 | 14 | 396 | 334 | 62 | 44 | 14 | 32 | 75 | 14 | 32 | 334 | 226 | 108 | 63 |
| 7a | - | 14 | 76 | - | 14 | - | 334 | - | - | 37 | 75 | - | 37 | - | 210 | - | - | |
| 8 | 5 | 15 | 76 | 5 | 15 | 400 | 326 | 74 | 49 | 20 | 41 | 75 | 20 | 41 | 285 | 196 | 89 | 56 |
| 9 | 13 | 16 | 76 | 13 | 16 | 340 | 318 | 22 | 18 | 43 | 45 | 75 | 43 | 45 | 188 | 180 | 88 | 56 |
| 10 | 6 | 18 | 75 | 6 | 18 | 396 | 300 | 96 | 59 | 31 | 50 | 74 | 31 | 51 | 230 | 146 | 84 | 54 |
| 11 | 13 | 20 | 75 | 13 | 20 | 340 | 285 | 55 | 40 | 43 | 59 | 74 | 44 | 60 | 184 | 89 | 95 | 58 |
| a | - | 28 | 75 | - | 28 | - | 243 | - | - | 61 | 74 | - | 62 | - | 72 | - | - | |
| b | - | 30 | 75 | - | 30 | - | 234 | - | - | 61 | 74 | - | 62 | - | 72 | - | - | |
| c | - | 26 | 74 | - | 26 | - | 252 | - | - | 58 | 74 | - | 59 | - | 96 | - | - | |
| 14 | 8 | 16 | 74 | 8 | 16 | 378 | 318 | 60 | 42 | 22 | 46 | 74 | 22 | 47 | 272 | 169 | 103 | 61 |

172

Pleiades H2687. Ilford panchromatic, unammoniated
 from darkness Reduced to 73

1. Alcyone

2. Electra

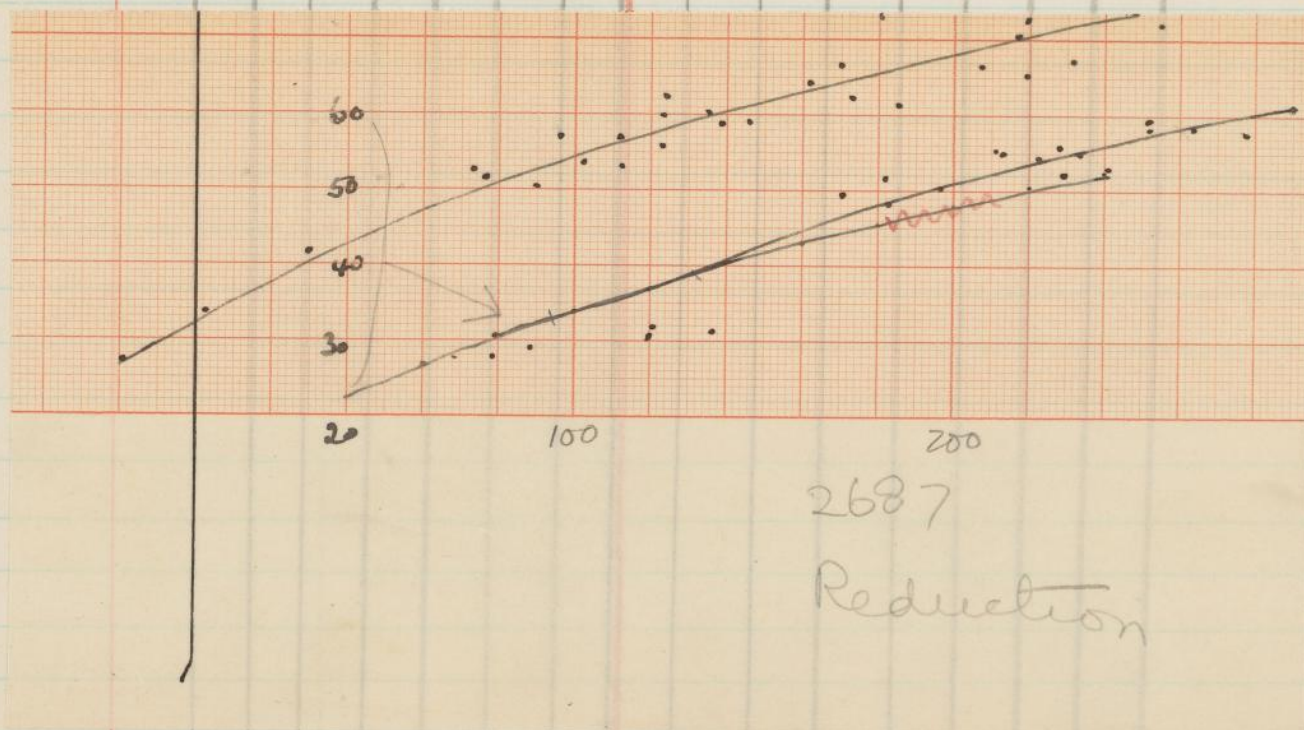
| | violet | λ | mm | mm | \bar{n} | mm | [n] | [mm] | Δm | n | mm | mm | \bar{n} | mm | [n] | [mm] | Δm |
|------------------------------|--------|-----------|----|----|-----------|----|-----|------|------------|----|----|----|-----------|-----|-----|------|------------|
| (half mm) from H α | -25 | 37 | 37 | 84 | - | 32 | | | | - | - | 73 | | | | | |
| | -20 | - | 36 | 84 | - | 31 | | | | - | 55 | 73 | 55 | | | | |
| | -15 | - | 34 | 84 | - | 29 | | | | - | 52 | 73 | 52 | | | | |
| | -10 | - | 32 | 84 | - | 28 | | | | - | 50 | 73 | 50 | | | | |
| | -8 | - | 31 | 84 | - | 27 | | | | - | 53 | 73 | 53 | | | | |
| | -5 | - | 32 | 84 | - | 28 | | | | - | 53 | 73 | 53 | | | | |
| H α | | 33 | 39 | 84 | 28 | 34 | 228 | 260 | 32 | 58 | 57 | 73 | 57 | 260 | 258 | 10 | |
| | +5 | - | 48 | 84 | - | 41 | | | | - | 62 | 73 | 62 | | | | |
| | +10 | - | 59 | 84 | - | 51 | | | | - | 66 | 73 | 66 | | | | |
| | +15 | - | 69 | 84 | - | 60 | | | | - | 70 | 73 | 70 | | | | |
| | +20 | - | 76 | 84 | - | 66 | | | | - | 74 | 73 | 74 | | | | |
| | +25 | - | 80 | 84 | - | 70 | | | | - | 76 | 73 | 76 | | | | |

3 Menope

| n | mm | lun | n | mm | [n] | [mm] | Δn |
|----|----|-----|----|-----|-----|------|------------|
| - | 65 | 80 | - | 59 | | | |
| - | 64 | | - | 58 | | | |
| - | 63 | | - | 57 | | | |
| - | 62 | | - | 56 | | | |
| - | 62 | | - | 56 | | | |
| - | 63 | | - | 57 | | | |
| 62 | 67 | 56 | 60 | 240 | 276 | 36 | |
| - | 71 | - | 64 | | | | |
| - | 74 | - | 66 | | | | |
| - | 77 | - | 70 | | | | |
| - | 78 | | 71 | | | | |
| - | 79 | | 72 | | | | |

4 Maia

| n | mm | lun | n | mm | [n] | [mm] | Δn |
|---------------------|----|-----|----|----|-----|------|------------|
| $\swarrow \searrow$ | 78 | | | | | | |
| 56 | - | - | 52 | | | | |
| 54 | - | - | 50 | | | | |
| 52 | - | - | 48 | | | | |
| 54 | - | - | 51 | | | | |
| 57 | 59 | 55 | 53 | 55 | 216 | 236 | 16 |
| 62 | - | - | 58 | | | | |
| 65 | - | - | 61 | | | | |
| 69 | - | - | 65 | | | | |
| 71 | - | - | 67 | | | | |
| 72 | - | - | 67 | | | | |

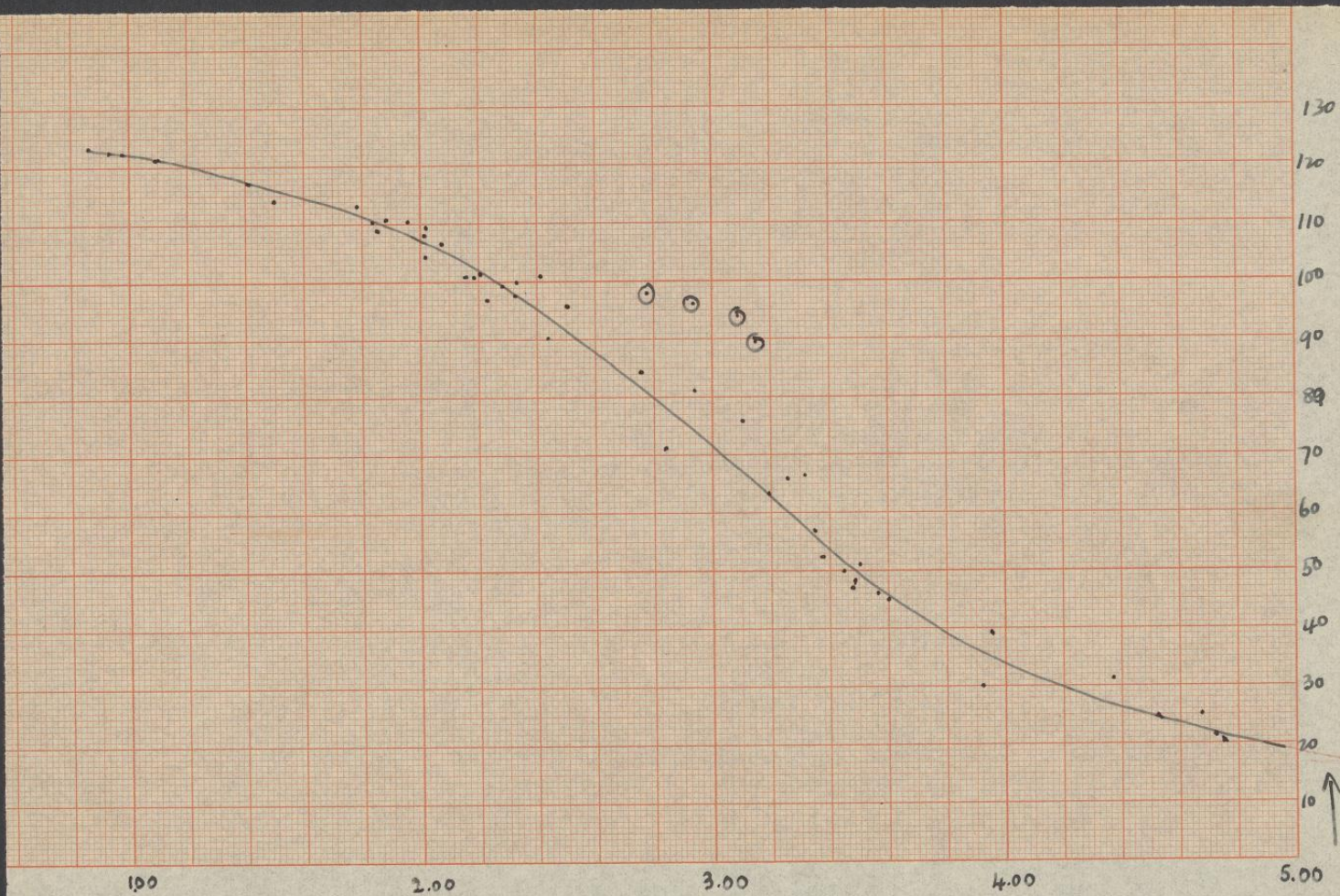


174

5 Jaygeta

6 Celaeno

| | n | mtu | ltm tn | \bar{n} | mtu | [n] | [mtu] | Δm | n | mtu | lt mt n | \bar{n} | mtu | [n] | [mtu] | Δm |
|------------|----|-----|-----------|-----------|-----|-----|-------|------------|---|-----|---------------|-----------|-----|-----|-------|------------|
| -25 | | 56 | 72 | | 57 | | | | - | - | - | | | | | |
| | | 55 | 72 | | 56 | | | | - | - | - | | | | | |
| | | 54 | 72 | | 55 | | | | - | - | - | | | | | |
| | | 54 | 72 | | 55 | | | | - | - | - | | | | | |
| | | 55 | 72 | | 56 | | | | - | - | - | | | | | |
| H α | 60 | 57 | 72 | | 59 | - | - | | - | - | - | | | | | |
| | | 60 | 71 | | 62 | | | | - | - | - | | | | | |
| | | 63 | 71 | | 65 | | | | - | - | - | | | | | |
| | | 65 | 71 | | 67 | | | | - | - | - | | | | | |
| | | 66 | 71 | | 68 | | | | - | - | - | | | | | |
| | | 67 | 71 | | 69 | | | | - | - | - | | | | | |



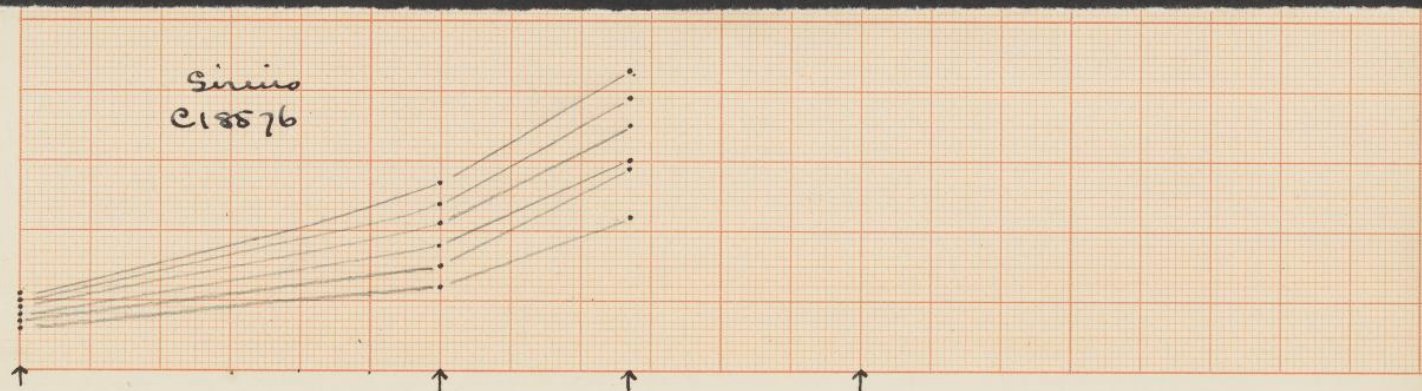
Atlas

n mtn \bar{n} \bar{mtn} $[u]$ $[\bar{u}]$ Δu n mtn \bar{n} \bar{mtn} $[r]$ $[\bar{r}]$ Δr

Mean line depths and dl for H α
 Ammoniated plate, wt. 3
 unammoniated " , wt. 1

| Star | Am. plate | | Un. plate | | 3A+U | mean |
|---------|-----------|-----|-----------|-----|------|------|
| | dm | dl | dm | dl | | |
| Alcyone | -23 | -23 | -32 | -23 | 103 | -26 |
| Electra | +14 | +14 | +10 | +9 | +57 | +13 |
| Merope | -4 | -43 | -36 | -39 | -168 | -42 |
| Maia | | 25 | +16 | +14 | 89 | +22 |
| Jaygeta | | 23 | .. | | +14 | +23 |
| Celaeno | | | .. | | | |
| Atlas | | 30 | .. | | | +30 |
| Pleione | | | .. | | | |

KEUFFEL & ESSER CO NEW YORK.



Pleiades. Background distribution

[illegible]

P. Perseus.

| dl | C18561 | | | | | | [m+n] | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|--------|------|------|------|------|------|-------|--|-----|----|------|----|------|----|-----|----|------|----|
| | No 1. | No 2 | No 3 | No 4 | No 5 | No 6 | | | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -2 | | | | | | | | | | | | | | | | | | |
| -1 | 326 | | | | | | | | | | | | | | | | | |
| 0 | 298 | | | | | | | | | | | | | | | | | |
| 1 | 284 | | | | | | | | | | | | | | | | | |
| 2 | 257 | 342 | 420 | | | | | | 85 | 54 | 163 | 77 | | | | | | |
| 3 | 238 | 326 | 380 | 326 | 336 | | | | 88 | 55 | 142 | 73 | 88 | 56 | | | | |
| 4 | 220 | 298 | 342 | 298 | 380 | | | | 78 | 51 | 122 | 67 | 78 | 51 | 160 | 77 | | |
| 5 | 198 | 272 | 312 | 272 | 326 | | | | 74 | 49 | 114 | 65 | 74 | 49 | 128 | 69 | | |
| 6 | 168 | 238 | 284 | 252 | 298 | 380 | | | 70 | 47 | 116 | 66 | 84 | 54 | 130 | 70 | 21 2 | 86 |
| 6a | 138 | 210 | 257 | 230 | 264 | 350 | | | 72 | 48 | 119 | 67 | 92 | 57 | 126 | 69 | 21 2 | 86 |
| 7 | 115 | 185 | 238 | 206 | 238 | 360 | | | 70 | 47 | 123 | 68 | 91 | 57 | 123 | 68 | 29 5 | 89 |
| 7a | 86 | 155 | 202 | 177 | 206 | 326 | | | 69 | 47 | 116 | 66 | 91 | 57 | 120 | 67 | 24 0 | 89 |
| 8 | 60 | 131 | 177 | 155 | 188 | 298 | | | 71 | 48 | 117 | 66 | 95 | 58 | 128 | 69 | 238 | 89 |
| 8a | 32 | 112 | 159 | 137 | 170 | 284 | | | 80 | 52 | 127 | 69 | 105 | 61 | 138 | 72 | 252 | 90 |
| 10 | 20 | 105 | 151 | 131 | 162 | 272 | | | 85 | 54 | 131 | 70 | 111 | 64 | 142 | 73 | 252 | 90 |
| 10a | 20 | 96 | 144 | 128 | 155 | 260 | | | 76 | 50 | 124 | 68 | 108 | 63 | 135 | 71 | 240 | 89 |
| 11 | 0 | 86 | 137 | 128 | 144 | 255 | | | 86 | 54 | 137 | 72 | 128 | 69 | 144 | 73 | 255 | 90 |
| 12 | 0 | 86 | 137 | 124 | 140 | 252 | | | 86 | 54 | 137 | 72 | 124 | 68 | 140 | 72 | 252 | 90 |
| 13 | — | 86 | 131 | 124 | 137 | 252 | | | — | — | — | — | — | — | — | — | — | — |
| 13a | 0 | 86 | 131 | 121 | 134 | 257 | | | 86 | 54 | 131 | 70 | 121 | 67 | 134 | 71 | 257 | 91 |
| 13b | 0 | 91 | 134 | 128 | 137 | 264 | | | 91 | 56 | 134 | 71 | 128 | 69 | 137 | 72 | 264 | |
| 13c | 20 | 112 | 155 | 148 | — | 298 | | | 92 | 57 | 135 | 71 | 128 | 69 | — | — | 278 | |
| 14 | 105 | 155 | 198 | 198 | — | 360 | | | 50 | 37 | 98 | 58 | 93 | 58 | — | — | 155 | 76 |
| | | | | | | | | | 414 | | 1235 | | 1027 | | 993 | | 1054 | |
| | | | | | | | | | 102 | | 137 | | — | | 142 | | 88 | |
| | | | | | | | | | 51 | | 68 | | 66 | | 71 | | | |

P Peiades

| | C 18568 [m+n] | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|---------------|------|------|------|------|------|-----|----|-----|----|-----|----|-----|----|-----|----|
| | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -3 | 299 | — | 415 | 386 | 415 | | — | — | 116 | 66 | 87 | 55 | 116 | 66 | | |
| -2 | 285 | 371 | 411 | 379 | 406 | | 86 | 55 | 126 | 69 | 94 | 58 | 121 | 67 | | |
| -1 | 272 | 355 | 402 | 368 | 394 | | 83 | 53 | 130 | 70 | 96 | 59 | 122 | 67 | | |
| 0 | 252 | 342 | 386 | 350 | 382 | | 90 | 56 | 124 | 71 | 98 | 59 | 130 | 70 | | |
| 1 | 227 | 312 | 368 | 329 | 365 | | 85 | 54 | 141 | 73 | 102 | 61 | 138 | 72 | | |
| 2 | 205 | 287 | 344 | 306 | 344 | | 82 | 53 | 139 | 72 | 101 | 61 | 139 | 72 | | |
| 3 | 180 | 269 | 319 | 282 | 319 | | 89 | 56 | 139 | 72 | 102 | 61 | 139 | 72 | | |
| 4 | 158 | 244 | 292 | 261 | 292 | | 86 | 55 | 134 | 71 | 103 | 61 | 134 | 71 | | |
| 5 | 139 | 224 | 272 | 242 | 274 | 388 | 85 | 54 | 133 | 71 | 103 | 61 | 135 | 71 | 249 | 90 |
| 6 | 125 | 211 | 254 | 232 | 261 | 376 | 86 | 56 | 129 | 70 | 107 | 63 | 136 | 71 | 246 | 90 |
| 6a | | | 214 | | | | | | | | | | | | | |
| 7 | 77 | 170 | 214 | 187 | 222 | 325 | 93 | 56 | 137 | 72 | 110 | 64 | 145 | 74 | 248 | 90 |
| 7a | | | | | | | | | | | | | | | | |
| 8 | 20 | 129 | 173 | 143 | 177 | 285 | 109 | 63 | 153 | 76 | 123 | 68 | 157 | 76 | 266 | |
| 9 | 20 | 114 | 158 | 129 | 158 | 270 | 94 | 58 | 138 | 72 | 109 | 63 | 138 | 72 | 255 | 90 |
| 10 | 20 | 102 | 151 | 125 | 154 | 264 | 82 | 53 | 131 | 70 | 105 | 62 | 134 | 71 | 244 | 90 |
| 10a | | | | | | | | | | | | | | | | |
| 11 | | 102 | 143 | 114 | 154 | | | | | | | | | | | |
| 12 | | 102 | 143 | 114 | 151 | | | | | | | | | | | |
| 13 | | 102 | 139 | 114 | 151 | | | | | | | | | | | |
| 13a | | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | | |
| 14 | | 222 | 236 | 205 | 240 | | | | | | | | | | | |

| C 18602 [m+n] | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | | |
|---------------|------|------|------|------|------|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | dec | dl | dec | dl | dec | dl | dec | dl | dec | dl | |
| -4 | | | | | | | | | | | | | | | | |
| -2 | 308 | | 410 | | 425 | | | 102 | 61 | | | 117 | 66 | | | |
| -1 | 292 | 376 | 397 | 425 | 410 | 84 | 54 | 105 | 62 | 133 | 71 | 118 | 66 | | | |
| 0 | 270 | 350 | 371 | 410 | 387 | 80 | 52 | 101 | 61 | 140 | 72 | 117 | 66 | | | |
| 1 | 243 | 330 | 346 | 381 | 367 | 87 | 55 | 103 | 61 | 138 | 72 | 124 | 68 | | | |
| 2 | 216 | 305 | 324 | 350 | 346 | 89 | 56 | 108 | 63 | 134 | 71 | 130 | 70 | | | |
| 3 | 195 | 281 | 300 | 330 | 324 | 86 | 55 | 105 | 62 | 135 | 71 | 129 | 70 | | | |
| 4 | 172 | 252 | 274 | 302 | 298 | 80 | 52 | 102 | 61 | 130 | 70 | 126 | 69 | | | |
| 5 | 150 | 229 | 254 | 283 | 279 | 392 | 79 | 52 | 104 | 62 | 133 | 71 | 129 | 70 | 242 | 89 |
| 6 | 137 | 213 | 241 | 270 | 265 | 376 | 76 | 50 | 104 | 62 | 133 | 71 | 128 | 69 | 239 | 89 |
| 6a | 96 | | | | | | | | | | | | | | | |
| 7 | 96 | 169 | 195 | 220 | 216 | 327 | 73 | 49 | 99 | 60 | 124 | 68 | 120 | 67 | 231 | 88 |
| 7a | 13 | | | | | | | | | | | | | | | |
| 8 | 61 | 125 | 154 | 177 | 172 | 290 | 64 | 50 | 93 | 58 | 116 | 66 | 111 | 64 | 229 | 88 |
| 9 | 15 | 104 | 140 | 161 | 154 | 274 | 89 | 56 | 125 | 68 | 146 | 74 | 139 | 72 | 259 | 91 |
| 10 | 15 | 96 | 133 | 154 | 150 | 272 | 81 | 53 | 118 | 66 | 139 | 72 | 135 | 71 | 257 | 91 |
| 10a | | | | | | | | | | | | | | | | |
| 11 | 15 | 87 | 120 | 144 | 147 | 270 | 72 | 48 | 105 | 62 | 129 | 70 | 132 | 70 | 255 | 90 |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 13a | | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |

Pleiades - Background distribution

| | C 18676 [m+n] | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|---------------|------|------|------|------|------|-----|----|-----|----|-----|----|-----|----|-----|----|
| | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -3 | 2- | - | - | - | - | - | | | | | | | | | | |
| -2 | - | - | - | - | - | - | | | | | | | | | | |
| -1 | - | - | - | - | - | - | | | | | | | | | | |
| 0 | - | 380 | - | 382 | 486 | - | | | | | | | | | | |
| 1 | 290 | 352 | 406 | 364 | 414 | - | 62 | 42 | 116 | | 74 | | 124 | 67 | - | |
| 2 | 260 | 328 | 390 | 340 | 390 | 500 | 68 | 47 | 130 | | 80 | | 130 | 70 | 240 | 89 |
| 3 | 232 | 302 | 366 | 312 | 360 | 484 | 70 | 48 | 134 | | 80 | | 128 | 69 | 252 | 90 |
| 4 | 212 | 268 | 328 | 282 | 328 | 452 | 56 | 40 | 116 | | 70 | | 116 | 66 | 240 | 89 |
| 5 | 194 | 244 | 308 | 258 | 308 | 430 | 50 | 37 | 114 | | 64 | | 114 | 65 | 236 | 89 |
| 6 | 184 | 224 | 286 | 240 | 282 | 414 | 40 | 31 | 102 | | 52 | | 98 | 59 | 230 | 88 |
| 6a | 164 | 194 | 260 | 216 | 258 | 394 | 30 | | 96 | | 52 | | 94 | 58 | 230 | 88 |
| 7 | 156 | 184 | 236 | 194 | 232 | 366 | 28 | | 80 | | 38 | | 76 | 50 | 210 | 86 |
| 7a | 116 | 150 | 210 | 164 | 206 | 340 | 34 | | 94 | | 48 | | 90 | 56 | 224 | 87 |
| 8 | 106 | 144 | 190 | 150 | 190 | 316 | 38 | | 84 | | 44 | | 84 | 54 | 210 | 86 |
| 9 | 42 | 124 | 176 | 124 | 164 | 294 | 82 | | 134 | | 82 | | 122 | 67 | 252 | 90 |
| 10 | - | 116 | 160 | 124 | 164 | 290 | - | | - | | | | | | | |
| 10a | - | 106 | 156 | 116 | 160 | 286 | - | | - | | | | | | | |
| 11 | - | 68 | 150 | 116 | 156 | 282 | - | | - | | | | | | | |
| 12 | - | 68 | 144 | 106 | 156 | 278 | - | | - | | | | | | | |
| 13 | - | 42 | 144 | 106 | 150 | 282 | - | | - | | | | | | | |
| 13a | - | 68 | 144 | 116 | 156 | 290 | - | | - | | | | | | | |
| 13b | - | 68 | 156 | 138 | 164 | 306 | - | | - | | | | | | | |
| 13c | 42 | 116 | 180 | 156 | 190 | 332 | 74 | | 138 | | 114 | | 148 | | 290 | |
| 14 | 106 | 176 | 228 | 198 | 240 | 376 | 70 | | 122 | | 92 | | 134 | | 270 | |

| H 2679 C 18630 | | | | | | | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | | A-1 | | B-1 | |
|-------------------|-----------------------|-------|-------|-------|-------|-------|-------|----|----|----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|-----|----|
| No. 1 | No. 2 | No. 3 | No. 4 | No. 5 | No. 6 | No. 7 | No. 8 | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -3 | | | | | | | | | | | | | | | | | | | | | | | | | |
| -2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| -1 | 256 | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 241 226 | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 241 205 | 241 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 241 194 | 226 | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 241 184 | 215 | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 241 164 | 205 | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 241 143 | 189 | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 241 136 | 171 | 251 | 210 | | | | | | | | | | | | | | | | | | | | | |
| 6a | 136 | 164 | 236 | 200 | | | | | | | | | | | | | | | | | | | | | |
| 7 | 128 128 | 150 | 226 | 194 | | | | | | | | | | | | | | | | | | | | | |
| 7a | 111 | 143 | 215 | 189 | | | | | | | | | | | | | | | | | | | | | |
| 8 | 86 86 | 136 | 210 | 177 | 370 | 340 | 388 | | | | | | | | | | | | | | | | | | |
| 9 | 76 76 | 120 | 200 | 171 | 297 | 302 | 310 | | | | | | | | | | | | | | | | | | |
| 10 | 62 62 | 111 | 189 | 158 | 310 | 316 | 370 | | | | | | | | | | | | | | | | | | |
| 10a | 44 | 100 | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 62 | 86 | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13a | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 20 | 127 | | | | | | | | | | | | | | | | | | | | | | | |

Pleiades Background distribution

| | C 18614 | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|---------|----------------|------|------|----------------------------------|------|-----|----|-----|----|-----|----|-----|----|-----|----|
| | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | dm | dl | dun | dl | dun | dl | dun | dl | dun | dl |
| -3 | 298 | | | 357 | | | | | | | 59 | 42 | | | | |
| -2 | 283 | 249 | | 349 | | | | | | | 66 | 46 | | | | |
| -1 | 268 | 349 | 397 | 333 | | | 81 | 53 | 129 | 70 | 65 | 45 | | | | |
| 0 | 245 | 330 | 380 | 319 | 369 | | 85 | 54 | 135 | 71 | 74 | 49 | 124 | 68 | | |
| 1 | 222 | 300 | 353 | 306 | 353 | | 78 | 51 | 131 | 70 | 84 | 54 | 131 | 70 | | |
| 2 | 200 | 278 | 330 | 289 | 330 | 447 | 78 | 51 | 130 | 70 | 89 | 56 | 130 | 70 | 247 | 90 |
| 3 | 183 | 258 | 306 | 270 | 306 | 419 | 75 | 50 | 123 | 68 | 87 | 57 | 123 | 68 | 236 | 89 |
| 4 | 155 | 235 | 278 | 248 | ²⁸⁰ 369 | 391 | 80 | 52 | 123 | 68 | 93 | 58 | 125 | 68 | 236 | 89 |
| 5 | 137 | 212 | 261 | 230 | 263 | | 75 | 50 | 124 | 68 | 93 | 58 | 126 | 69 | | |
| 6 | 123 | 250 | 250 | 219 | 250 | 357 | 77 | 51 | 127 | 70 | 96 | 59 | 127 | 69 | 234 | 88 |
| 6a | | 151 | | 177 | | | | | | | | | | | | |
| 7 | 82 | 158 | 209 | 177 | 212 | 319 | 76 | 50 | 127 | 70 | 95 | 58 | 130 | 70 | 237 | 89 |
| 7a | | | | | | | | | | | | | | | | |
| 8 | 52 | 118 | 170 | 137 | 170 | 286 | 66 | 46 | 118 | 66 | 85 | 54 | 118 | 66 | 234 | 88 |
| 9 | 33 | 96 | 158 | 118 | 155 | 272 | 63 | 44 | 125 | 68 | 85 | 54 | 122 | 67 | 239 | 89 |
| 10 | 5 | 82 | 152 | 118 | 144 | 268 | 77 | 51 | 147 | 74 | 113 | 66 | 139 | 72 | 263 | |
| 10a | - | | | | | | | | | | | | | | | |
| 11 | - | 82 | 144 | 107 | 144 | 266 | | | | | | | | | | |
| 12 | - | 82 | 141 | | | | | | | | | | | | | |
| 13 | - | 82 | 141 | | | | | | | | | | | | | |
| 13a | - | | | | | | | | | | | | | | | |
| 13L | - | | | | | | | | | | | | | | | |
| 13C | - | | | | | | | | | | | | | | | |
| 14 | - | 186 | 227 | | | | | | | | | | | | | |

| C 18557 | | | | | | | | | | | | | | | |
|---------|------|------|------|----------------|------|-----|-------------------|------------------|-----|-----|-----|-----|-----|-----|-----|
| | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
| No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -3 | | | | | | | | | | | | | | | |
| -2 | | | | | | | | | | | | | | | |
| -1 | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | |
| 1 | 380 | | | | | | | | | | | | | | |
| 2 | 358 | | | | | | | | | | | 22 | | | |
| 3 | 358 | | | | | | | | | | | | | | |
| 4 | 317 | | 380 | | | | | | | 63 | 44 | | | | |
| 5 | 191 | 350 | 309 | 318 | 328 | 109 | 109 63 | 118 | 66 | 127 | 69 | 137 | 72 | | |
| 6 | 271 | 380 | 358 | 358 | 380 | 109 | 109 63 | 87 | 55 | | | 109 | 63 | | |
| 6a | - | - | - | - | | | | | | | | | | | |
| 7 | 211 | 309 | 286 | 341 | 328 | 98 | 98 60 | 75 | 50 | 130 | 70 | 117 | 66 | | |
| 7a | - | - | - | 341 | | | | | | | | | | | |
| 8 | 151 | 246 | 258 | 265 | 293 | 95 | 95 58 | 107 | 63 | 114 | 65 | 142 | 73 | | |
| 9 | 43 | 128 | 180 | 148 | 183 | 317 | 85 | 85 54 | 137 | 72 | 105 | 62 | 140 | 72 | 274 |
| 10 | 105 | 191 | 226 | 236 | 252 | 380 | 86 | 86 55 | 121 | 67 | 131 | 70 | 147 | 74 | 275 |
| 10a | - | - | - | - | | | | | | | | | | | |
| 11 | 76 | 176 | 207 | 221 | 236 | 358 | 100 | 60 | 131 | 70 | 145 | 74 | 160 | 77 | 282 |
| 12 | 13 | 101 | 155 | 135 | 162 | 286 | 88 | 56 | 142 | 73 | 122 | 67 | 149 | 75 | 273 |
| 13 | 13 | 101 | 151 | 125 | 162 | 309 | 88 | 56 | 138 | 72 | 112 | 64 | 149 | 75 | 296 |
| 13a | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | |
| 14 | 125 | 265 | 252 | - | - | | 140 | 72 | 127 | 69 | - | - | - | - | |

Pleiades - Background distribution.

| | C 18596 | | | | | | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|---------|------|------|------|------|-------|-----|----|-----|----|-----|----|----------------------|----|-------|----|
| | N0.1 | N0.2 | N0.3 | N0.4 | N0.5 | N0.6 | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| - 3 | 345 | | | | | | | | | | | | | | | |
| - 2 | 330 | | | 390 | 436 | | | | | | 60 | 42 | 106 60 | 62 | | |
| - 1 | 313 | 409 | | 384 | 416 | | 96 | 59 | | | 71 | 48 | 103 71 | 61 | | |
| 0 | 294 | 390 | 424 | 372 | 409 | | 96 | 59 | 130 | 70 | 78 | 52 | 115 78 | 65 | | |
| 1 | 271 | 366 | 402 | 356 | 395 | (510) | 95 | 58 | 131 | 70 | 85 | 54 | 124 85 | 68 | (239) | 89 |
| 2 | 247 | 335 | 384 | 340 | 372 | 480 | 88 | 56 | 137 | 72 | 93 | 58 | 125 93 | 68 | 233 | 88 |
| 3 | 221 | 305 | 356 | 317 | 350 | 453 | 84 | 54 | 135 | 71 | 96 | 59 | 129 96 | 70 | 232 | 88 |
| 4 | 197 | 271 | 321 | 294 | 321 | 436 | 74 | 49 | 124 | 68 | 97 | 59 | 124 | 68 | 239 | 89 |
| 5 | 180 | 251 | 305 | 275 | 301 | 416 | 71 | 48 | 125 | 68 | 95 | 58 | 121 | 67 | 236 | 89 |
| 6 | 167 | 233 | 294 | 263 | 286 | 402 | 66 | 46 | 127 | 70 | 96 | 59 | 119 | 67 | 235 | 89 |
| 6a | 147 | 212 | 271 | 242 | 267 | 390 | 65 | 45 | 124 | 68 | 95 | 58 | 120 | 67 | 243 | 89 |
| 7 | 130 | 191 | 259 | 221 | 247 | 366 | 61 | 43 | 129 | 70 | 91 | 57 | 117 | 66 | 233 | 88 |
| 7a | 85 | 167 | 225 | 197 | 221 | 330 | 82 | 53 | 140 | 72 | 112 | 64 | 136 | 71 | 245 | 90 |
| 8 | 46 | 147 | 207 | 180 | 207 | 313 | 101 | 61 | 161 | 77 | 134 | 71 | 161 | 77 | 267 | 91 |
| 9 | 46 | 130 | 197 | 167 | 191 | 298 | 84 | 54 | 151 | 75 | 121 | 67 | 145 | 74 | 252 | 90 |
| 10 | 46 | 120 | 186 | 161 | 186 | 291 | 74 | 49 | 140 | 72 | 115 | 65 | 140 | 72 | 245 | 90 |
| 10a | 46 | 120 | 186 | 154 | 186 | 286 | 74 | 49 | 140 | 72 | 108 | 63 | 140 | 72 | 240 | 89 |
| 11 | 46 | 106 | 180 | 161 | 186 | 291 | 60 | 42 | 134 | 71 | 115 | 65 | 140 | 72 | 245 | 90 |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 13a | | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |

18614

-157

-17

-39

+36

+24

+39

+16
+20

186 14

+ 30

+ 23

16

30

34

30

12

30

19

05

08

35

18614

171

} 20

24

} 14

24

60

72

139

30

23

06

} 12

44

186 14

24

15

27

27

11

31

39

04

38

48

21

16

+06

-162

| | No.1 | No.2 | No.3 | No.4 | No.5 | No.6 | 2-1 | | 3-1 | | 4-1 | | 5-1 | | 6-1 | |
|-----|------|------|------|------|------|------|-----|----|-----|----|-----|----|-----|----|-----|----|
| | | | | | | | dm | dl | dm | dl | dm | dl | dm | dl | dm | dl |
| -3 | | | | | | | | | | | | | | | | |
| -2 | | | | | | | | | | | | | | | | |
| -1 | | | | | | | | | | | | | | | | |
| 0 | | | | | | | | | | | | | | | | |
| 1 | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 6a | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 7a | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 10a | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 13a | | | | | | | | | | | | | | | | |
| 13b | | | | | | | | | | | | | | | | |
| 13c | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |

Pleiades.

Hydrogen Line Depths.

24" Reflector Plates.

#1 Alcyone

#2 Electra

| No. | H | H-2698 (Amm) | un | 2694 | 2695 | 2696 | 2697 | Total all | Mean | H-2698 (Amm) | un | 2694 | 2695 | 2696 | 2697 | Total | Mean | H-2698 (Amm) |
|-----|------------|-----------------|----|------|------|------|------|--------------|------|-----------------|----|------|------|------|------|-------|------|-----------------|
| 15 | α | -23 | | | | | | | -26 | 14 | | | | | | | +13 | -43 |
| 14 | β | 31 | | 30 | 24 | 33 | 32 | 119 | 30 | 36 | | 28 | 34 | 31 | 31 | 124 | 31 | 18 |
| 11 | γ | 46 | | 41 | 33 | 46 | 53 | 173 | 43 | 40 | | 39 | 44 | 42 | 56 | 181 | 45 | 29 |
| 10 | δ | 52 | | 54 | 48 | 54 | 56 | 212 | 53 | 38 | | 44 | 51 | 47 | 54 | 196 | 49 | 28 |
| 8 | ϵ | 45 | | 49 | 52 | 49 | 56 | 216 | 54 | 42 | | 46 | 52 | 51 | 56 | 205 | 49 | |
| 7 | ζ | 44 | | 49 | 53 | 52 | 53 | 207 | 52 | 36 | | 59 | 54 | 52 | 55 | 256 | 57 | |
| 6 | η | (36) | | 48 | 53 | 53 | 55 | 209 | 52 | | | 46 | 56 | 50 | 53 | | | |
| 4 | θ | (33) | | 57 | 56 | 53 | 55 | 221 | 55 | | | 49 | 56 | 52 | 53 | | | |
| 3 | i | | | 55 | 53 | 53 | 52 | 213 | 53 | | | 50 | 59 | 49 | 58 | | | |
| 2 | κ | (21) | | 55 | 53 | 47 | 53 | 208 | 52 | | | 48 | 56 | 48 | 48 | | | |
| 1 | λ | | | 49 | 48 | 42 | 45 | 184 | 46 | | | 42 | 56 | 39 | 46 | | | |
| 0 | μ | | | 41 | 39 | 39 | 37 | 156 | 39 | | | 37 | 42 | 30 | 40 | | | |
| -1 | ν | | | 32 | 39 | 32 | 31 | 134 | 33 | | | 24 | 34 | | | | | |
| | | | | 26 | 23 | 19 | 30 | 98 | 24 | | | 17 | 23 | | | | | |

#5 Taygeta.

#6 Celaeno.

| No. | H | H-2698 (Amm) | un | 2694 | 2695 | 2696 | 2697 | Total | Mean | un | 2694 | 2695 | 2696 | 2697 | Total | Mean | H-2698 (Amm) |
|-----|------------|-----------------|----|------|------|------|------|-------|------|----|------|------|------|------|-------|------|-----------------|
| 15 | α | 23 | | | | | | | +23 | | | | | | | | 30 |
| 14 | β | 27 | | 37 | 44 | 40 | 44 | | 41 | | (33) | | 69 | 53 | 155 | 52 | 41 |
| 11 | γ | 26 | | 40 | 46 | 47 | 44 | | 42 | | 55 | | | 50 | | 52 | 41 |
| 10 | δ | | | 57 | 54 | 52 | 64 | | 57 | | (59) | | | 44 | | 52 | 50 |
| 8 | ϵ | | | 70 | 68 | 72 | 60 | 270 | 68 | | (56) | | | 31 | 87 | 44 | |
| 7 | ζ | | | (69) | 62 | | | | 65 | | (49) | | | | | 49 | 32 |
| 6 | η | | | (64) | | | | | 64 | | | | | | | | |
| 4 | θ | | | (64) | | | | | 64 | | | | | | | | |
| 3 | i | | | (52) | | | | | 52 | | | | | | | | |
| 2 | κ | | | (42) | | | | | 42 | | | | | | | | |
| 1 | λ | | | (28) | | | | | 28 | | | | | | | | |
| 0 | μ | | | | | | | | | | | | | | | | |
| -1 | ν | | | | | | | | | | | | | | | | |

3 Merope

4 Maia

| Mean | H-2698 mm. | un | 2694 | 2695 | 2696 | 2697 | Total | Mean | H-2698 mm. | un | 2694 | 2695 | 2696 | 2697 | Total | Mean |
|------|---------------|------|------|------|------|------|-------|------|---------------|----|------|------|------|------|-------|------|
| 3 | -43 | | | | | | | -42 | 25 | | | | | | | +22 |
| 1 | 18 | 18 | 23 | 21 | 28 | 108 | 22 | 33 | 33 | 38 | 41 | 35 | 187 | 36 | | |
| 15 | 29 | 31 | 34 | 35 | 32 | 161 | 32 | 29 | 54 | 44 | 45 | 47 | 249 | 34 | | |
| 9 | 28 | 48 | 50 | 47 | 48 | 221 | 44 | 40 | 44 | 48 | 44 | 48 | 224 | 36 | | |
| 9 | | 59 | 57 | 58 | 59 | | 58 | | 56 | 59 | 54 | 56 | 225 | 56 | | |
| 7 | | 64 | 62 | 63 | 60 | | 62 | | 59 | 67 | 53 | | 179 | 60 | | |
| | | 57 | | 66 | 56 | 179 | 60 | | 70 | 71 | 67 | 64 | 272 | 68 | | |
| | | 52 | | | 58 | | 55 | | 63 | | 64 | 67 | 194 | 65 | | |
| | | (48) | | | 47 | | 48 | | (71) | | 65 | 59 | 195 | 65 | | |
| | | (46) | | | 33 | 89 | 44 | | (71) | | 64 | 48 | 183 | 61 | | |
| | | (33) | | | 30 | | 32 | | (40) | | | 40 | | 40 | | |
| | | (33) | | | 25 | 58 | 29 | | (40) | | | 34 | | 37 | | |
| | | (28) | | | 30 | | 29 | | (46) | | | | | 46 | | |
| | | | | | | | | | (24) | | | | | 34 | | |

A. Atlas

B. Pleione

| Mean | H-2698 mm. | 2694 | 2695 | 2696 | 2697 | Total | Mean | 2694 | 2695 | 2696 | 2697 | Total | Mean |
|------|---------------|------|------|------|------|-------|------|------|------|------|------|-------|------|
| 30 | | | | | | | +30 | | | | | | |
| 52 | 41 | 32 | | 35 | 61 | 127 | 42 | (44) | 49 | 48 | | 46 | |
| 52 | 46 | 44 | | 39 | 58 | 141 | 47 | 56 | 56 | 61 | | 58 | |
| 52 | 50 | 48 | | 52 | 54 | 154 | 51 | 62 | 77 | 65 | | 64 | |
| 14 | | 57 | | 55 | 56 | | 54 | 46 | | 60 | | 54 | |
| 19 | 32 | 65 | | 67 | 63 | | 65 | (40) | | 40 | | 40 | |
| | | 69 | | 70 | 62 | | 67 | (33) | | 31 | | 32 | |
| | | 65 | | 78 | 59 | | 67 | (36) | | 24 | | 30 | |
| | | (69) | | 72 | 48 | | 63 | (27) | | 21 | | 24 | |
| | | (51) | | | | | 51 | | | | | | |
| | | (40) | | | | | 40 | | | | | | |
| | | (36) | | | | | 36 | | | | | | |
| | | (20) | | | | | 20 | | | | | | |

Pleiades Means for different instruments.

Weights:

| | | | | Alcyone. | | | Corrected | | | C ₂ | C ₁ | H | Σ | n | Mean |
|--------------------|--------------------|--------------------|--------------------|----------------|----------------|----|----------------|----------------|------|----------------|----------------|-----|-----|----|------|
| C ₂ = 4 | C ₁ = 9 | H ₁ = 4 | H _P = 9 | C ₂ | C ₁ | H | C ₂ | C ₁ | Mean | | | | | | |
| | Hβ | 23 | 24 | 30 | 23 | 24 | 23 | 24 | 23 | 92 | 216 | 120 | 428 | 17 | 25 |
| | γ | 43 | 46 | 43 | 43 | 46 | 43 | 46 | 43 | 182 | 414 | 172 | 768 | | 43 |
| | δ | 48 | 51 | 53 | 48 | 51 | 48 | 51 | 48 | 192 | 459 | 212 | 863 | | 51 |
| | ε | 48 | 55 | 54 | 48 | 55 | 48 | 55 | 48 | 192 | 495 | 216 | 893 | | 52 |
| | ζ | 50 | 52 | 52 | 50 | 52 | 50 | 52 | 50 | 200 | 468 | 208 | 876 | | 52 |
| | η | 51 | 51 | 52 | 52 | 52 | 52 | 52 | 52 | 208 | 468 | 208 | 884 | | 52 |
| | θ | 53 | 51 | 55 | 57 | 55 | 57 | 55 | 57 | 228 | 495 | 225 | 948 | | 56 |
| | ι | 52 | 47 | 53 | 58 | 53 | 58 | 53 | 58 | 232 | 477 | 222 | 931 | | 55 |
| | κ | 48 | 39 | 52 | 56 | 43 | 56 | 43 | 56 | 224 | 387 | 208 | 819 | | 48 |
| | λ | 45 | 31 | 46 | 60 | 46 | 60 | 46 | 60 | 240 | 414 | 184 | 838 | | 49 |
| | μ | .. | 24 | 39 | .. | 39 | .. | 39 | .. | .. | 351 | 156 | 507 | 13 | 39 |
| | ν | .. | 14 | 33 | .. | 32 | .. | 32 | .. | .. | 288 | 132 | 420 | | 32 |
| | ξ | .. | 12 | 24 | .. | 24 | .. | 24 | .. | .. | 216 | 96 | 312 | | 24 |
| | | | 91 | 12 | .. | 12 | .. | 12 | .. | .. | 108 | 48 | | | 12 |

| | | | | Electra | | | Corrected | | | C ₂ | C ₁ | H | Σ | n | Mean |
|--|----|----|----|----------------|----------------|----|----------------|----------------|------|----------------|----------------|-----|-----|---|------|
| | | | | C ₂ | C ₁ | H | C ₂ | C ₁ | Mean | | | | | | |
| | Hβ | 39 | 33 | 31 | 39 | 33 | 39 | 33 | 39 | 156 | 297 | 124 | 577 | | 34 |
| | Hγ | 42 | 42 | 45 | 42 | 42 | 42 | 42 | 42 | 168 | 378 | 180 | 726 | | 43 |
| | Hδ | 45 | 50 | 49 | 45 | 50 | 45 | 50 | 45 | 180 | 450 | 196 | 826 | | 49 |
| | Hε | 51 | 54 | 50 | 51 | 54 | 51 | 54 | 51 | 204 | 486 | 200 | 890 | | 52 |
| | Hζ | 53 | 54 | 51 | 53 | 54 | 53 | 54 | 53 | 212 | 486 | 204 | 902 | | 53 |
| | η | 55 | 53 | 52 | 56 | 54 | 56 | 54 | 56 | 226 | 486 | 208 | 920 | | 54 |
| | θ | 54 | 54 | 53 | 58 | 58 | 58 | 58 | 58 | 232 | 522 | 212 | 966 | | 57 |
| | ι | 59 | 48 | 54 | 64 | 54 | 64 | 54 | 64 | 256 | 486 | 216 | 958 | | 57 |
| | κ | 54 | 39 | 50 | 62 | 47 | 62 | 47 | 62 | 248 | 423 | 200 | 871 | | 52 |
| | λ | 45 | 33 | 46 | 65 | 48 | 65 | 48 | 65 | 240 | 422 | 184 | 846 | | 50 |
| | μ | .. | 21 | 37 | .. | 36 | .. | 36 | .. | .. | 324 | 148 | 472 | | 36 |
| | ν | .. | 16 | 29 | .. | 34 | .. | 34 | .. | .. | 306 | 116 | 422 | | 32 |
| | ξ | .. | 12 | 20 | .. | 24 | .. | 24 | .. | .. | 216 | 80 | 296 | | 23 |
| | | | 17 | | .. | | .. | | .. | .. | 68 | | 68 | | 17 |

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| | Maia H | | | Corrected | | | | | Σ | n | Mean |
|--------------|--------|-------|----|-----------|-------|-----------------------|-----------------------|-----|------------------------|---|------|
| | c_2 | c_1 | | c_2 | c_1 | | | | | | |
| H β | 42 | 35 | 36 | 42 | 35 | 168 | 315 | 144 | 627 | | 37 |
| H γ | 48 | 43 | 34 | 48 | 43 | 192 | 387 | 136 | 715 | | 42 |
| H δ | 50 | 49 | 36 | 50 | 49 | 200 | 441 | 144 | 785 | | 46 |
| H ϵ | 52 | 56 | 56 | 52 | 56 | 208 | 504 | 224 | 936 | | 55 |
| H ζ | 54 | 55 | 60 | 54 | 55 | 216 | 495 | 240 | 951 | | 56 |
| H η | 57 | 52 | 68 | 58 | 53 | 232 | 477 | 272 | 981 | | 58 |
| H θ | 57 | 57 | 65 | 55 | 55 | 225 | 495 | 260 | 980 | | 58 |
| H ι | 48 | 47 | 65 | 54 | 53 | 216 | 477 | 260 | 953 | | 56 |
| H κ | 40 | 34 | 61 | 52 | 56 | 208 256 | 504 | 244 | 956 1004 | | 56 |
| H λ | 34 | 29 | 40 | 49 | 44 | 196 | 396 | 160 | 752 | | 44 |
| H μ | .. | 21 | 37 | .. | 36 | .. | 324 | 148 | 472 | | 36 |
| H ν | .. | 17 | 46 | .. | 35 | .. | 315 | 184 | 499 | | 38 |
| H ξ | .. | 12 | 34 | .. | 24 | .. | 216 | 136 | 352 | | 27 |
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| Menope | | | | | | | | | | | |
| ρ | 21 | 24 | 22 | 21 | 24 | 84 | 216 | 88 | 388 | | 23 |
| γ | 35 | 37 | 32 | 35 | 37 | 100 | 333 | 128 | 561 | | 33 |
| δ | 41 | 44 | 44 | 41 | 44 | 164 | 396 | 176 | 736 | | 43 |
| ϵ | 44 | 48 | 58 | 44 | 48 | 176 | 432 | 232 | 840 | | 49 |
| ζ | 46 | 48 | 62 | 46 | 48 | 184 | 432 | 248 | 864 | | 51 |
| η | 54 | 50 | 60 | 55 | 51 | 220 220 | 459 456 | 240 | 919 | | 54 |
| θ | 35 | 48 | 55 | 39 | 52 | 156 | 468 | 220 | 844 | | 49 |
| ι | 34 | 43 | 48 | 40 | 49 | 160 | 441 | 192 | 793 | | 47 |
| κ | .. | 34 | 44 | .. | 46 | 156 306 | 176 | | | | 46 |
| λ | .. | 28 | 32 | .. | 43 | 387 | 128 | | 515 | | 40 |
| μ | .. | 15 | 29 | .. | 30 | 252 270 | 116 | | 386 | | 30 |
| ν | .. | 18 | 29 | .. | 36 | 334 | 116 | | 450 | | 35 |
| H ξ | .. | 16 | | .. | 28 | 156 252 | | | | | 28 |
| | | | | | | 144 | | | | | ✓ |

| | Jaygeta H | | | C ₂ C ₁ | | C ₂ | C ₁ | H | | Mean |
|------------|-----------|----|----|-------------------------------|----|----------------|----------------------------------|-----|-----|------|
| β | 39 | 41 | | | | | 351 | 164 | 515 | 40 |
| γ | 45 | 45 | 42 | | | 180 | 405 | 168 | 753 | 44 |
| δ | 47 | 51 | 57 | | | 188 | 459 | 228 | 875 | 52 |
| ϵ | 50 | 56 | 68 | | | 200 | 504 | 272 | 976 | 57 |
| ζ | 42 | 54 | 65 | | | 168 | 486 | 260 | 914 | 54 |
| η | 57 | 54 | 64 | 58 | 55 | 495 | ²³² 486 | 256 | 983 | 58 |
| θ | 47 | 52 | 64 | 51 | 56 | 504 | ²⁰⁴ 468 | 256 | 964 | 56 |
| ι | 46 | 44 | 52 | 48 | 50 | 450 | ¹⁹² 396 | 208 | 850 | 50 |
| κ | 39 | 34 | 42 | 51 | 55 | 495 | ²⁰⁴ 306 | 168 | 867 | 51 |
| λ | .. | 31 | 28 | 46 | 46 | 414 | 279 | 112 | 526 | 40 |
| μ | .. | 26 | | .. | 41 | 369 | 234 | | | 41 |
| ν | .. | 21 | | | 39 | 351 | 189 | | | 39 |
| ξ | .. | 15 | | | 27 | 243 | 95 | | | 27 |

| Colaeno | | | | H (wt. 2) | | | | | |
|------------|----|----|----|---------------------|-----|-----|-----|-----|----|
| β | .. | 44 | | ⁵² 52 | | 396 | 104 | 500 | 44 |
| γ | 52 | 49 | | 52 | 156 | 441 | 104 | 701 | 50 |
| δ | 54 | 54 | | 52 | 162 | 486 | 104 | 752 | 54 |
| ϵ | 55 | 57 | | 44 | 165 | 573 | 88 | 766 | 55 |
| ζ | .. | 57 | | 49 | | 573 | 98 | 611 | 55 |
| η | .. | 64 | 65 | | | | | | 65 |
| θ | .. | 39 | 43 | | | | | | 43 |
| ι | .. | 46 | 52 | | | | | | 52 |
| κ | .. | 35 | 46 | | | | | | 46 |

