

60 inch Telescope Log
 Observer: COLVSN
 FI: All, Kirshner, Balog

Spectrograph: FAST
 Grating: 5000
 Date: 8/2/00

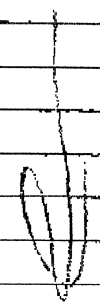
Page: 4719(a)

| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
|--------|----------|-------|-------|------|-----|----------------------------|
| 1-3 | DARK | | | | 15m | |
| 4-13 | BIAS | | | | 0s | |
| 14-23 | FLAT | | | | 6s | |
| 24-33 | BIAS | | | | 0s | |
| 34-43 | FLAT | | | | 12s | |
| 44-45 | HD192281 | 20 12 | 40 16 | #56 | 9s | |
| 46 | comp | | | ↑ | | |
| 47-48 | HD192281 | 20 12 | 40 16 | #56 | 9s | |
| 49 | comp | | | ↑ | | |
| 50-51 | HD192281 | 20 12 | 40 16 | #56 | 4s | PA=79° |
| 52 | comp | | | ↑ | | |
| 53 | V5866 | 15 06 | 55 46 | #59 | 4m | } dust lane |
| 54 | comp | | | ↑ | | |
| 55 | V5866 | 15 06 | 55 46 | #59 | 4m | |
| 56 | comp | | | ↑ | | |
| 57-58 | SN2000cn | 17 57 | 27 49 | #2 | 20m | PA=65° Row=78 |
| 59 | comp | | | ↑ | | very faint, poor condition |
| 60 | id1214 | 20 07 | 35 56 | #115 | 3m | |
| 61 | comp | | | ↑ | | |
| 62 | id1200 | 20 07 | 35 33 | #115 | 5m | |
| 63 | comp | | | ↑ | | |
| 64 | id1195 | 20 07 | 35 39 | #115 | 30s | |
| 65 | comp | | | ↑ | | |
| 66 | id1199 | 20 07 | 35 56 | #115 | 5m | |
| 67 | comp | | | ↑ | | |
| 68 | id1183 | 20 07 | 35 38 | #115 | 3m | |
| 69 | comp | | | ↑ | | |
| 70 | id1185 | 20 07 | 35 45 | #115 | 3m | |
| 71 | comp | | | ↑ | | |
| 72 | id1182 | 20 07 | 35 50 | #115 | 3m | |

| 60 inch Telescope Log | | | Spectrograph: <u>FAST</u> | | | |
|-------------------------|--------|-------|---------------------------|------|------------------|----------|
| Observer: <u>CALVIN</u> | | | Grating: <u>300</u> | | Page: <u>870</u> | |
| PI: <u>BALOG</u> | | | Date: <u>8/2/00</u> | | | |
| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
| 73 | comp | | | 0 | | |
| 74 | id1178 | 20 07 | 35 37 | F115 | 3m | |
| 75 | comp | | | ↑ | | |
| 76 | id1175 | 20 07 | 35 40 | F115 | 5m | |
| 77 | comp | | | ↑ | | |
| 78 | id1179 | 20 07 | 35 53 | F115 | 2.5m | |
| 79 | comp | | | ↑ | | |
| 80 | id1163 | 20 07 | 35 35 | F115 | 5s | |
| 81 | comp | | | ↑ | | |
| 82 | id1866 | 20 07 | 35 35 | F115 | 10s | |
| 83 | comp | | | ↑ | | |
| 84 | id1170 | 20 07 | 35 53 | F115 | 2m | |
| 85 | comp | | | ↑ | | |
| 86 | id1159 | 20 07 | 35 41 | F115 | 5m | |
| 87 | comp | | | ↑ | | |
| 88 | id1154 | 20 07 | 35 37 | F115 | 2m | |
| 89 | comp | | | ↑ | | |
| 90 | id1147 | 20 07 | 35 37 | F115 | 30s | |
| 91 | comp | | | ↑ | | |
| 92 | id1144 | 20 07 | 35 36 | F115 | 5m | |
| 93 | comp | | | ↑ | | |
| 94 | id1149 | 20 07 | 35 52 | F115 | 4s | |
| 95 | comp | | | ↑ | | |
| 96 | id1140 | 20 07 | 35 42 | F115 | 1.5m | |
| 97 | comp | | | ↑ | | |
| 98 | id1133 | 20 07 | 35 38 | F115 | 3.5m | |
| 99 | comp | | | ↑ | | |
| 100 | id1134 | 20 07 | 35 48 | F115 | 25s | |
| 101 | comp | | | ↑ | | |
| 102 | id1127 | 20 07 | 35 42 | F115 | 3m | |

| | | |
|---------------------------|---------------------------|-------------------|
| 60 inch Telescope Log | Spectrograph: <u>FAST</u> | |
| Observer: <u>CALVIN S</u> | Grating: <u>2006</u> | Page: <u>8721</u> |
| PI: <u>HALOG</u> | Date: <u>8/2/00</u> | |

| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|--------|-------|-------|------|------|-------------|
| 103 | comp | | | ↑ | | |
| 104 | id1119 | 20 07 | 35 57 | F115 | 4m | |
| 105 | comp | | | ↑ | | |
| 106 | id1122 | 20 07 | 35 42 | F115 | 5s | |
| 107 | comp | | | ↑ | | |
| 108 | id1114 | 20 07 | 35 40 | F115 | 45s | |
| 109 | comp | | | ↑ | | thru clouds |
| 110 | id1109 | 20 07 | 35 50 | F115 | 45s | |
| 111 | comp | | | ↑ | | |
| 112 | id1099 | 20 07 | 35 47 | F115 | 5m | |
| 113 | comp | | | ↑ | | |
| 114 | id1101 | 20 07 | 35 57 | F115 | 4m | |
| 115 | comp | | | ↑ | | |
| 116 | id1092 | 20 07 | 35 40 | F115 | 5m | |
| 117 | comp | | | ↑ | | |
| 118 | id1094 | 20 07 | 35 52 | F115 | 45s | |
| 119 | comp | | | ↑ | | |
| 120 | id1085 | 20 07 | 35 30 | F115 | 35s | |
| 121 | comp | | | ↑ | | |
| 122 | id1080 | 20 07 | 35 42 | F115 | 2.5m | |
| 123 | comp | | | ↑ | | |
| 124 | id1083 | 20 07 | 35 43 | F115 | 5m | |
| 125 | comp | | | ↑ | | |
| 126 | id1087 | 20 07 | 35 55 | F115 | 3s | |
| 127 | comp | | | ↑ | | |
| 128 | id1099 | 20 07 | 35 41 | F115 | 5m | |
| 129 | comp | | | ↑ | | |
| 130 | id1074 | 20 07 | 35 37 | F115 | 5m | |
| 131 | comp | | | ↑ | | |
| 132 | id1065 | 20 07 | 35 38 | F115 | 5m | |



| 60 inch Telescope Log | | | | Spectrograph: <u>FAST</u> | | |
|---------------------------------------|----------|-------|--------|---------------------------|---------|------------------------------------|
| Observer: <u>CALXSUS</u> <i>Kenpa</i> | | | | Grating: <u>300L</u> | | Page: <u>8722</u> |
| PI: <u>Szalog, Mucha, Kishner</u> | | | | Date: <u>8/2/00</u> | | |
| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
| 133 | comp | | | ↑ | | |
| 134 | id1004 | 20 07 | 35 43 | F115 | 3m | |
| 135 | comp | | | ↑ | | |
| 136 | M74509 | 20 49 | -10 42 | F126 | 4m | |
| 137 | comp | | | ↑ | | |
| 138 | Alm 564 | 22 42 | 29 43 | F126 | 5m | |
| 139 | comp | | | ↑ | | |
| 140 | M7469 | 23 03 | 8 52 | F126 | 2.5m | Row 75 |
| 141 | comp | | | ↑ | | |
| 142 | ZM231443 | 23 14 | 44 53 | F168 | 3m | |
| 143 | comp | | | ↑ | | |
| 144 | ZM231930 | 23 19 | 12 58 | F168 | 2m | |
| 145 | comp | | | ↑ | | |
| 146 | ZM232307 | 23 23 | 49 35 | F168 | 2m | Row 75 |
| 147 | comp | | | ↑ | | |
| 148 | ZM233135 | 23 31 | 44 54 | F168 | 100s | |
| 149 | comp | | | ↑ | | |
| 150 | ZM235727 | 23 57 | 47 52 | F168 | 5m | |
| 151 | comp | | | ↑ | | |
| 152 | ZM193911 | 19 39 | 25 11 | F168 | 20m | PA = 110° to update <i>type II</i> |
| 153 | comp | | | ↑ | | Row = 74 |
| 154 | ZM194652 | 19 46 | 32 21 | F168 | 17m | Row = 73 |
| 155 | comp | | | ↑ | | |
| 156-158 | sn2000ca | 21 29 | 9 31 | F12 | 5m | PA = -35°, Row 78 |
| 159 | comp | | | ↑ | | |
| 160, 161 | sn2000ca | 00 14 | 48 09 | F12 | 15m | PA = -7°, Type II |
| 162 | comp | | | ↑ | | |
| 163, 164 | EG And | 00 44 | 40 40 | F12 | 1/5s | |
| 165 | comp | | | ↑ | | |
| 166-168 | AX Per | 01 36 | 51 15 | F12 | 1/10/60 | |

| 60 inch Telescope Log | | | Spectrograph: <u>FAST</u> | | Page: <u>8723</u> | |
|--------------------------|------------|-------|---------------------------|-----|---------------------|----------|
| Observer: <u>CALKINS</u> | | | Grating: <u>300L</u> | | Date: <u>8/2/00</u> | |
| PI: <u>Kenyon, All</u> | | | | | | |
| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
| 169 | comp | | | ↑ | | |
| 170, 171 | V741 Per | 01 58 | 52 53 | 12 | 10/100 | |
| 172 | comp | | | ↑ | | |
| 173-175 | M10 Cat | 2 19 | 2 58 | 12 | 1/2/8 | |
| 176 | comp | | | ↑ | | |
| 177-179 | V627 Cas | 22 57 | 58 49 | 12 | 5/10/100 | |
| 180 | comp | | | ↑ | | |
| 181, 182 | HD 217 086 | 22 56 | 6 3 43 | 56 | 3s | |
| 183 | comp | | | ↑ | | |
| 184, 185 | HD 217 086 | 22 56 | 6 2 43 | 56 | 3s | |
| 186 | comp | | | ↑ | | |
| 187 | M 31 | 00 42 | 41 16 | 57 | 60s | |
| 188 | comp | | | ↑ | | |
| 189 | M 31 | 00 42 | 41 16 | 57 | 60s | |
| 190 | comp | | | ↑ | | |
| 191-195 | sky | | | 57 | 2s | |
| 196 | comp | | | ↑ | | |
| 197-206 | BIAS | | | | 0s | |
| 207-216 | FLAT | | | | 6s | |
| 217-226 | BIAS | | | | 0s | |
| 227-236 | FLAT | | | | 12s | |
| 237-246 | DARK | | | | 15m | |

| 60 inch Telescope Log | | Spectrograph: <u>FAST</u> | | | | |
|--------------------------------|------------|---------------------------|-------|-----|-------------------|-----------------|
| Observer: <u>CALKINS</u> | | Grating: <u>300L</u> | | | Page: <u>8724</u> | |
| PI: <u>All, Wilkes, Kenyon</u> | | Date: <u>8/4/00</u> | | | | |
| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
| 1-10 | DARK | | | | 15m | |
| 11-20 | BKAS | | | | 0s | |
| 21-30 | FLAT | | | | 6s | |
| 31-40 | BKAS | | | | 0s | |
| 41-50 | FLAT | | | | 12s | |
| 51, 52 | BDP 284211 | 21 51 | 28 51 | R56 | 30s | |
| 53 | comp | | | ↑ | | |
| 54, 55 | BDP 284211 | 21 51 | 28 51 | R56 | 50s | |
| 56 | comp | | | ↑ | | |
| 57 | N7331 | 22 37 | 34 24 | R57 | 5m | Thin cirrus |
| 58 | comp | | | ↑ | | |
| 59 | N7331 | 22 37 | 34 24 | R57 | 3m | |
| 60 | comp | | | ↑ | | |
| 61 | SC930.? | 18 42 | 79 46 | R6 | 10m | |
| 62 | comp | | | ↑ | | |
| 63 | MR6509 | 20 44 | 70 42 | R6 | 5m | |
| 64 | comp | | | ↑ | | |
| 65 | Akn 564 | 22 42 | 29 44 | R6 | 5m | |
| 66 | comp | | | ↑ | | |
| 67 | N7469 | 23 03 | 8 52 | R6 | 2.5m | Row 75 |
| 68 | comp | | | ↑ | | |
| 69, 70 | V1413Agl | 19 03 | 16 26 | R12 | 1.8m | much extinction |
| 71 | comp | | | ↑ | | |
| 72-74 | BFCy9 | 19 23 | 29 40 | R12 | 3s/pos 2m | |
| 75 | comp | | | ↑ | | |
| 76-78 | GHCy9 | 19 23 | 29 40 | R12 | 1/5/50 | |
| 79 | comp | | | ↑ | | |
| 80-82 | HMSce | 19 41 | 16 44 | R12 | 29/40/4m | |
| 83 | comp | | | ↑ | | |
| 84-86 | A360 | 19 45 | 13 36 | R12 | 30/60/2m | |

| 60 inch Telescope Log | | | Spectrograph: <u>FAST</u> | | Page: <u>872.5</u> | |
|--------------------------|-----------|-------|---------------------------|-----|---------------------|--------------------|
| Observer: <u>CLUSTON</u> | | | Grating: <u>700L</u> | | Date: <u>8/4/00</u> | |
| PI: <u>Kenyon, Al</u> | | | | | | |
| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
| 87 | comp | | | ↑ | | Thru clouds |
| 88, 89 | S129 | 19 49 | 46 15 | F12 | 4m/16m | |
| 90 | comp | | | ↑ | | |
| 91-93 | CIC 99 | 19 50 | 35 40 | F12 | 3/15/10s | |
| 94 | comp | | | ↑ | | |
| 95-97 | PLU 61 | 20 21 | 21 33 | F12 | 3/15/10s | |
| 98 | comp | | | ↑ | | |
| 99-101 | V1016 Cyg | 19 57 | 39 49 | F12 | 3/15/10s | |
| 102 | comp | | | ↑ | | |
| 103, 104 | He 2m 467 | 20 35 | 20 11 | F12 | 2m/40s | |
| 105 | comp | | | ↑ | | |
| 106, 107 | V1329 Cyg | 20 50 | 35 34 | F12 | 2m/50s | Thick clouds/storm |
| 108 | comp | | | ↑ | | to east at sunrise |
| 109-118 | BTAS | | | | 0s | |
| 119-128 | FLAT | | | | 10s | |
| 129-138 | BTAS | | | | 0s | |
| 139-148 | FLAT | | | | 12s | |
| 149-158 | DARK | | | | 15m | |

reduced with Dasher 149-157
 Could not get 158 over the rest (down) until
 after reductions were done