

| 60 inch Telescope Log | | Spectrograph: <u>FAST</u> | | | | |
|-------------------------|------------|---------------------------|--------|-----|------------------|----------|
| Observer: <u>CARLOS</u> | | Grating: <u>300L</u> | | | Page: <u>770</u> | |
| PI: <u>All Kacharek</u> | | Date: <u>11/10/99</u> | | | | |
| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
| 1-3 | DARK | | | | 15m | |
| 4-13 | BIAS | | | | 0s | |
| 14-23 | FLAT | | | | 7s | |
| 24-33 | BIAS | | | | 0s | |
| 34-43 | FLAT | | | | 14s | |
| 44, 45 | RDP 284211 | 21 51 | 28 51 | F56 | 30s | |
| 46 | comp | | | ↑ | | |
| 47, 48 | RDP 284211 | 21 51 | 28 51 | F56 | 30s | |
| 49 | comp | | | ↑ | | |
| 50, 51 | RDP 284211 | 21 51 | 28 51 | F56 | 30s | PA=0° |
| 52 | comp | | | ↑ | | |
| 53 | M31 | 00 42 | 41 16 | F57 | 1m | |
| 54 | comp | | | ↑ | | |
| 55 | M31 | 00 42 | 41 16 | F57 | 1m | |
| 56 | comp | | | ↑ | | |
| 57 | 3C390, 3 | 22 36 | 73 49 | F6 | 12m | |
| 58 | comp | | | ↑ | | |
| 59 | MIR 235 | 00 06 | 20 12 | F6 | 4m | |
| 60 | comp | | | ↑ | | |
| 61 | MIR 509 | 20 44 | -10 42 | F6 | 4m | |
| 62 | comp | | | ↑ | | |
| 63 | AKN 564 | 22 42 | 29 43 | F6 | 5m | |
| 64 | comp | | | ↑ | | |
| 65 | N7469 | 23 02 | 08 52 | F6 | 3m | |
| 66 | comp | | | ↑ | | |
| 67 | 001430 | 00 14 | -7 09 | F88 | 3m | |
| 68 | comp | | | ↑ | | |
| 69 | 001833 | 00 18 | -6 15 | F88 | 3m | |
| 70 | comp | | | ↑ | | |
| 71 | 002617 | 00 26 | -4 28 | F88 | 10m | |

60 inch Telescope Log
 Observer: CALKINS
 PI: Kochanek, Bragg

Spectrograph: FAST
 Grating: 300L
 Date: 11/10/99

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| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|--------|-------|--------|-----|------|----------|
| 72 | comp | | | ↑ | | |
| 73 | 00353 | 00 33 | -2 50 | #88 | 2.5m | |
| 74 | comp | | | ↑ | | |
| 75 | 003522 | 00 35 | -5 50 | #88 | 2.5m | |
| 76 | comp | | | ↑ | | |
| 77 | 003628 | 00 36 | -10 06 | #88 | 3.5m | |
| 78 | comp | | | ↑ | | |
| 79 | 021907 | 02 19 | 57 00 | #83 | 6m | |
| 80 | comp | | | ↑ | | |
| 81 | 021907 | 02 19 | 57 05 | #83 | 8m | |
| 82 | comp | | | ↑ | | |
| 83 | 021908 | 2 19 | 57 03 | #83 | 8m | Row 74 |
| 84 | comp | | | ↑ | | |
| 85 | 021908 | 2 19 | 57 09 | #83 | 9m | Row 74 |
| 86 | comp | | | ↑ | | |
| 87 | 021909 | 2 19 | 57 00 | #83 | 9m | |
| 88 | comp | | | ↑ | | |
| 89 | 021909 | 2 19 | 57 09 | #83 | 9m | |
| 90 | comp | | | ↑ | | |
| 91 | 021909 | 2 19 | 57 16 | #83 | 15m | |
| 92 | comp | | | ↑ | | |
| 93 | 021910 | 2 19 | 57 00 | #83 | 9m | |
| 94 | comp | | | ↑ | | |
| 95 | 021910 | 2 19 | 57 10 | #83 | 15m | |
| 96 | comp | | | ↑ | | |
| 97 | 021910 | 2 19 | 57 11 | #83 | 10m | |
| 98 | comp | | | ↑ | | |
| 99 | 021910 | 2 19 | 57 13 | #83 | 12m | |
| 100 | comp | | | ↑ | | |
| 101 | 021911 | 2 19 | 57 05 | #83 | 15m | |

60 inch Telescope Log

Observer: Calkins

PI: Bragg

Spectrograph: FAST

Grating: 300L

Date: 11/10/99

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| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|--------|---------|-------|-----|-----|------------------|
| 102 | comp | | | ↑ | | |
| 103 | 021911 | 02 19 | 57 06 | F83 | 11m | Row 74 |
| 104 | comp | | | ↑ | | |
| 105 | 021912 | 02 19 | 57 07 | F83 | 4m | Row 71 |
| 106 | comp | | | ↑ | | |
| 107 | 021913 | 02 19 | 57 07 | F83 | 30s | |
| 108 | comp | | | ↑ | | |
| 109 | 021913 | 02 19 | 57 15 | F83 | 12m | |
| 110 | comp | | | ↑ | | |
| 111 | 021914 | 02 19 | 56 59 | F83 | 9m | |
| 112 | comp | | | ↑ | | |
| 113 | 021914 | 02 19 | 57 06 | F83 | 9m | |
| 114 | comp | | | ↑ | | |
| 115 | 021917 | 02 19 | 56 59 | F83 | 7m | |
| 116 | comp | | | ↑ | | |
| 117 | 021918 | 02 19 | 57 03 | F83 | 15m | |
| 118 | comp | | | ↑ | | |
| 119 | 021918 | 2 19 | 57 06 | F83 | 15m | |
| 120 | comp | 2:19:10 | 57:00 | ↑ | | MOVING? OR MOVED |
| 121 | 021919 | 2 19 | 57 00 | F83 | 15m | |
| 122 | comp | | | ↑ | | |
| 123 | 021921 | 2 19 | 57 04 | F83 | 15m | |
| 124 | comp | | | ↑ | | |
| 125 | 021921 | 2 19 | 57 15 | F83 | 10m | |
| 126 | comp | | | ↑ | | |
| 127 | 021922 | 2 19 | 57 00 | F83 | 10m | |
| 128 | comp | | | ↑ | | |
| 129 | 021924 | 2 19 | 57 00 | F83 | 40s | |
| 130 | comp | | | ↑ | | |
| 131 | 021924 | 2 19 | 57 14 | F83 | 15m | |

USED FILE 118 COMP FOR FILE 119

60 inch Telescope Log

Observer: Calvin

PI: Dragg, Calvet

Spectrograph: FAST

Grating: 5006

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Date: 11/10/99

| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
|--------|---------------|-------|-------|------|-----|--------------|
| 132 | comp | | | ↑ | | |
| 133 | 021925 | 2 19 | 57 00 | #83 | 8m | |
| 134 | comp | | | ↑ | | |
| 135 | 021925 | 2 19 | 57 00 | #83 | 5m | |
| 136 | comp | | | ↑ | | |
| 137 | 021925 | 2 19 | 57 00 | #83 | 40s | |
| 138 | comp | | | ↑ | | |
| 139 | 021926 | 2 19 | 57 02 | #83 | 13m | |
| 140 | comp | | | ↑ | | |
| 141 | 021926 | 2 19 | 57 04 | #83 | 20s | |
| 142 | comp | | | ↑ | | |
| 143 | 021926 | 2 19 | 57 07 | #83 | 12m | |
| 144 | comp | | | ↑ | | |
| 145 | 021926 | 2 19 | 57 10 | #83 | 13m | |
| 146 | comp | | | ↑ | | |
| 147 | 021927 | 2 19 | 57 08 | #83 | 12m | |
| 148 | comp | | | ↑ | | |
| 149 | 021927 | 2 19 | 57 09 | #83 | 12m | |
| 150 | comp | | | ↑ | | |
| 151 | quasars 33000 | 5 23 | -1 55 | #112 | 8m | $PA=0^\circ$ |
| 152 | comp | | | ↑ | | ↓ |
| 153 | quasars 33218 | 5 24 | -1 56 | #112 | 8m | |
| 154 | comp | | | ↑ | | |
| 155 | quasars 33234 | 5 24 | -2 05 | #112 | 7m | |
| 156 | comp | | | ↑ | | |
| 157 | quasars 33467 | 5 24 | -1 38 | #112 | 10m | |
| 158 | comp | | | ↑ | | |
| 159 | quasars 33672 | 5 24 | -2 02 | #112 | 8m | |
| 160 | comp | | | ↑ | | |
| 161 | quasars 33929 | 5 25 | -1 58 | #112 | 4m | |

60 inch Telescope Log

Observer: Calvin

PI: Calvet, Rines

Spectrograph: FAST

Grating: 3006

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Date: 11/10/99

| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|--------------|-------|-------|------|-----|----------|
| 162 | comp | | | ↑ | | |
| 163 | gusola 34012 | 5 29 | -1 57 | "112 | 8m | |
| 164 | comp | | | ↑ | | |
| 165 | gusola 34492 | 5 26 | -2 08 | "112 | 7m | |
| 166 | comp | | | ↑ | | |
| 167 | gusola 35479 | 5 27 | -1 56 | "112 | 8m | |
| 168 | comp | | | ↑ | | |
| 169 | gusola 35463 | 5 27 | -1 42 | "112 | 7m | |
| 170 | comp | | | ↑ | | |
| 171 | gusola 35877 | 5 28 | -1 46 | "112 | 7m | |
| 172 | comp | | | ↑ | | |
| 173 | gusola 36258 | 5 28 | -2 01 | "112 | 6m | |
| 174 | comp | | | ↑ | | |
| 175 | gusola 36707 | 5 29 | -1 42 | "112 | 4m | |
| 176 | comp | | | ↑ | | |
| 177 | gusola 37023 | 5 30 | -1 37 | "112 | 5m | |
| 178 | comp | | | ↑ | | |
| 179 | a5766-075 | 7 25 | 54 21 | "64 | 8m | |
| 180 | comp | | | ↑ | | |
| 181 | a5766-77 | 7 20 | 56 40 | "64 | 8m | |
| 182 | comp | | | ↑ | | |
| 183 | a5766-078 | 7 27 | 55 24 | "64 | 9m | |
| 184 | comp | | | ↑ | | |
| 185 | a5766-079 | 7 16 | 55 20 | "64 | 12m | |
| 186 | comp | | | ↑ | | |
| 187 | a5766-080 | 7 25 | 56 42 | "64 | 12m | |
| 188 | comp | | | ↑ | | |
| 189 | N3377 | 10 47 | 13 59 | "57 | 90s | |
| 190 | comp | | | ↑ | | |
| 191 | Hiltner 600 | 6 45 | 2 08 | "57 | 45s | |

