

| 60 inch Telescope Log | | | Spectrograph: <u>FAET</u> | | Page: <u>7514</u> | |
|--------------------------|--------------|-------|---------------------------|-----|---------------------|----------------------|
| Observer: <u>K Rines</u> | | | Grating: <u>300d</u> | | Date: <u>9/6/99</u> | |
| PI: <u>Kenyon</u> | | | | | | |
| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
| 1 | COMP | | | | | |
| 2-11 | DARK | | | | 15m | |
| 12-21 | BIAS | | | | 0 | |
| 22-27 | DARK | | | | 20m | |
| 28-37 | FLAT | | | | 6s | |
| 38-44 | sky | | | | 2s | 7:05 |
| 45 | COMP | | | | 6s | clouds clearing to E |
| 46-55 | FLAT | | | | 12s | bin by 2 |
| 56 | Obj 082 no.9 | 20 31 | 41 04 | 56 | 20s | bin by 4 |
| 57 | " | | | ↑ | 20s | bin by 2 |
| 58 | COMP | | | ^ | | |
| 59 | COMP | | | 1 | | bin by 4 |
| 60 | N 5866 | 15 05 | 55 57 | 57 | 150s | |
| 61 | COMP | | | ↑ | | |
| 62-64 | H0154791 | 17 06 | 23 58 | 12 | 0.1, 1, 10 | ? wrong object?? |
| 65 | COMP | | | ↑ | | |
| 66, 67, 68 | DracoCl | 17 19 | 57 50 | 12 | 20, 200, 000 | |
| 69 | COMP | | | ↑ | | |
| 70, 71 | RSOph | 17 39 | -11 56 | 12 | 5, 60 | |
| 72 | COMP | | | ↑ | | |
| 73, 74 | RTSec | 17 50 | -6 42 | 12 | 10, 100 | |
| 75 | COMP | | | ↑ | | |
| 76, 77 | UUsec | 17 42 | -15 24 | 12 | 30, 300 | ? wrong object?? |
| 78 | COMP | | | ↑ | | |
| 79 | V | | | | | WRONG not reduced |
| 80, 81 | V24165yr | 17 57 | -21 41 | 12 | 20, 200 | |
| 82 | COMP | | | ↑ | | |
| 83, 84 | AS270 | 18 05 | -20 20 | 12 | 30, 300 | |
| 85 | COMP | | | ↑ | | |

60 inch Telescope Log

Observer: K Rines

PI: Kenyon Falco

Spectrograph: FAST

Grating: 300R

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Date: 9/6/99

| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
|--------|----------------|-------|--------|-----|--------|----------|
| 86,87 | A5289 | 18 12 | -11 40 | 12 | 5.60 | |
| 88 | COMP | | | ↑ | | |
| 89,90 | VYHer | 18 14 | 20 59 | 12 | 20,200 | |
| 91 | COMP | | | ↑ | | |
| 92,93 | V443Her | 18 22 | 23 27 | 12 | 20,200 | |
| 94 | COMP | | | ↑ | | |
| 95 | 16438+5122-155 | 16 45 | 51 15 | 84 | 8m | |
| 96 | COMP | | | ↑ | | |
| 97 | 16407+5756-152 | 16 41 | 57 50 | 84 | 4m | |
| 98 | COMP | | | ↑ | | |
| 99 | 16375 16322 | 16 38 | 63 15 | 84 | 7m | cm |
| 100 | COMP | | | ↑ | | |
| 101 | 16438+7345 | 16 42 | 73 39 | 84 | 8m | * to W |
| 102 | COMP | | | ↑ | | |
| 103 | 16445+7447 | 16 43 | 74 42 | 84 | 4m | |
| 104 | COMP | | | ↑ | | |
| 105 | 16461+7547 | 16 44 | 75 40 | 84 | 4m | |
| 106 | COMP | | | ↑ | | |
| 107 | 16356+7712 | 16 33 | 77 05 | 84 | 5m | |
| 108 | COMP | | | ↑ | | |
| 109 | 16337+7903 | 16 30 | 78 57 | 84 | 10m | |
| 110 | COMP | | | ↑ | | |
| 111 | 16310+8300 | 16 28 | 82 53 | 84 | 6m | |
| 112 | COMP | | | ↑ | | |
| 113 | 16280+7500 | 16 26 | 74 53 | 84 | 6m | |
| 114 | COMP | | | ↑ | | |
| 115 | 16290+7403 | 16 27 | 73 57 | 84 | 5m | |
| 116 | | | | ↑ | | |
| 117 | 16528+7439 | 16 51 | 74 34 | 84 | 8m | |
| 118 | | | | ↑ | | |

60 inch Telescope Log

Observer: IC Rines

PI: Falco

Spectrograph: FAST

Grating: 300A

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Date: 9/6/99

| Number | Object | R. A. | Dec. | LIR | Exp | Comments |
|--------|------------|-------|--------|-----|-----|----------------------------|
| 119 | 16560+8140 | 16 51 | 81 34 | 84 | 4m | |
| 120 | COMP | | | ↑ | | |
| 121 | 16580+8144 | 16 53 | 81 38 | 84 | 3m | |
| 122 | COMP | | | ↑ | | |
| 123 | 17480+8309 | 17 41 | 83 07 | 84 | 4m | |
| 124 | COMP | | | ↑ | | |
| 125 | 21256+0823 | 21 28 | 08 37 | 84 | 3m | star? <i>just a</i> |
| 126 | COMP | | | ↑ | | |
| 127 | N 7194 | 22 03 | 12 38 | 84 | 2m | |
| 128 | COMP | | | ↑ | | |
| 129 | N 7332 | 22 37 | 23 47 | 84 | 30s | |
| 130 | COMP | | | ↑ | | |
| 131 | 22338+3343 | 22 36 | 33 58 | 84 | 2m | |
| 132 | COMP | | | ↑ | | |
| 133 | 22306+3858 | 22 32 | 39 12 | 84 | 6m | |
| 134 | COMP | | | ↑ | | |
| 135 | 22567+4046 | 22 58 | 40 55 | 84 | 30s | interesting SCUT + NJ only |
| 136 | COMP | | | ↑ | | |
| 137 | 22463+2721 | 22 48 | 27 36 | 84 | 2m | |
| 138 | COMP | | | ↑ | | |
| 139 | N 7437 | 22 58 | 14 18 | 84 | 8m | broad! |
| 140 | COMP | | | ↑ | | |
| 141 | 23077+4218 | 23 10 | 42 34 | 84 | 2m | |
| 142 | COMP | | | ↑ | | |
| 143 | 22571+5326 | 22 59 | 53 44 | 84 | 4m | 2 stars to NE |
| 144 | COMP | | | ↑ | | |
| 145 | 22578+0122 | 23 00 | +01 37 | 84 | 12m | pretty spiral |
| 146 | COMP | | | ↑ | | |
| 147 | 23148+0522 | 23 17 | 05 38 | 84 | 4m | |
| 148 | COMP | | | ↑ | | |

125 - superposed star; fuzz around it - tried to extract but nothing there (no em lines)

60 inch Telescope Log

Observer: K Rines

PI: Falco, Rines

Spectrograph: EAST

Grating: 300A

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Date: 9/6/99

| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|------------|-------|--------|-----|-----|----------|
| 149 | N7567 | 23 16 | 15 51 | 84 | 6m | |
| 150 | COMP | | | ↑ | | |
| 151 | 23149+1826 | 23 17 | 18 42 | 84 | 2m | |
| 152 | COMP | | | ↑ | | |
| 153 | 23208+2019 | 23 23 | 20 35 | 84 | 4m | |
| 154 | COMP | | | ↑ | | |
| 155 | N7609 | 23 19 | 09 30 | 84 | 60s | |
| 156 | COMP | | | ↑ | | |
| 157 | 23171+0112 | 23 19 | 01 28 | 84 | 6m | |
| 158 | COMP | | | ↑ | | |
| 159 | 23170-0207 | 23 19 | -01 50 | 84 | 6m | |
| 160 | COMP | | | ↑ | | |
| 161 | a119-021 | 1 01 | -2 52 | 64 | 4m | |
| 162 | COMP | | | ↑ | | |
| 163 | 022 | 0 59 | +0 54 | 64 | 8m | |
| 164 | COMP | | | ↑ | | |
| 165 | 023 | 0 52 | -4 53 | 64 | 6m | * to W ? |
| 166 | COMP | | | ↑ | | |
| 167 | 024 | 0 59 | -3 08 | 64 | 12m | * to E ? |
| 168 | COMP | | | ↑ | | |
| 169 | 025 | 1 01 | -4 05 | 64 | 8m | |
| 170 | COMP | | | ↑ | | |
| 171 | 026 | 0 53 | -3 37 | 64 | 4m | |
| 172 | COMP | | | ↑ | | |
| 173 | 027 | 0 52 | -3 16 | 64 | 4m | |
| 174 | COMP | | | ↑ | | |
| 175 | 028 | 1 03 | -1 30 | 64 | 8m | |
| 176 | COMP | | | ↑ | | |
| 177 | 029 | 1 01 | -1 17 | 64 | 6m | |
| 178 | COMP | | | ↑ | | |

60 inch Telescope Log

Observer: K Rines

PI: Rines

Spectrograph: FAST

Grating: 300l

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Date: 9/6/99

| Number | Object | R.A. | Dec. | L/R | Exp | Comments |
|--------|------------|------|-------|-----|-----|------------------------------|
| 179 | a119 - 030 | 0 49 | -4 12 | 64 | 4m | |
| 180 | COMP | | | ↑ | | |
| 181 | 031 | 0 44 | -2 50 | 64 | 4m | |
| 182 | COMP | | | ↑ | | |
| 183 | 031 | 0 44 | -2 50 | 64 | 6m | |
| 184 | COMP | | | ↑ | | |
| 185 | 032 | 1 01 | -3 08 | 64 | 4m | |
| 186 | COMP | | | ↑ | | |
| 187 | 033 | 1 03 | +1 52 | 64 | 5m | |
| 188 | COMP | | | ↑ | | |
| 189 | 034 | 0 50 | -4 14 | 64 | 4m | |
| 190 | COMP | | | ↑ | | |
| 191 | 035 | 1 05 | -4 24 | 64 | 12m | |
| 192 | COMP | | | ↑ | | |
| 193 | 036 | 0 55 | +0 38 | 64 | 5m | |
| 194 | COMP | | | ↑ | | |
| 195 | 037 | 0 52 | -4 50 | 64 | 6m | poor SN } may be combined |
| 196 | COMP | | | ↑ | | |
| 197 | 037 | 0 52 | -4 50 | 64 | 9m | |
| 198 | COMP | | | ↑ | | |
| 199 | 038 | 1 05 | -4 25 | 64 | 5m | com |
| 200 | COMP | | | ↑ | | |
| 201 | 039S | 0 50 | +1 09 | 64 | 4m | |
| 202 | COMP | | | ↑ | | |
| 203 | 039N | 0 50 | +1 09 | 64 | 4m | |
| 204 | COMP | | | ↑ | | |
| 205 | 040 | 0 45 | -3 50 | 64 | 12m | |
| 206 | COMP | | | ↑ | | |
| 207 | 041 | 0 46 | -2 31 | 64 | 8m | |
| 208 | COMP | | | ↑ | | |

195 + 197 combined to rule 9597.

60 inch Telescope Log

Observer: K Rines

PI: Rines, Kirshner, Bragg

Spectrograph: FAST

Grating: 300R

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Date: 9/6/99

| Number | Object | R. A. | Dec. | L/R | Exp | Comments |
|----------|---------------|-------|-------|-----|------|------------------------------|
| 209 | a119_042 | 1 03 | -4 45 | 64 | 6m | |
| 210 | COMP | | | ↑ | | |
| 211 | 043 | 1 03 | -3 32 | 64 | 5m | |
| 212 | COMP | | | ↑ | | |
| 213 | 044 | 1 02 | -4 30 | 64 | 12m | |
| 214 | COMP | | | ↑ | | |
| 216 | COMP | | | 2 | | bin by 2 @215 is bin |
| 217, 218 | sn 99dq | 2 33 | 20 58 | 2 | 20m | $\Delta = 0$; $\Delta = 25$ |
| 219 | COMP | | | ↑ | | |
| 220 | Fey 25 | 2 36 | 5 15 | 56 | 2m | $\Delta = 25$ |
| 221 | COMP | | | ↑ | | |
| 222 | a119b-001 | 1 04 | -0 45 | 64 | 3m | $\Delta = 90$, bin by 4 |
| 223 | COMP | | | ↑ | | |
| 224 | b-002 | 0 40 | -0 19 | 64 | 5m | |
| 225 | COMP | | | ↑ | | |
| 226 | b-003 | 1 04 | -0 48 | 64 | 150s | |
| 227 | COMP | | | ↑ | | |
| 228 | b-004 | 0 57 | -0 25 | 64 | 2m | |
| 229 | COMP | | | ↑ | | |
| 230 | b-032 | 0 57 | -0 24 | 64 | 4m | |
| 231 | COMP | | | ↑ | | |
| 232 | b-005 | 1 04 | -1 04 | 64 | 2m | |
| 233 | COMP | | | ↑ | | |
| 234 | b-006 | 1 10 | -0 16 | 64 | 5m | |
| 235 | COMP | | | ↑ | | |
| 236 | b-007 | 1 03 | -1 06 | 64 | 4m | |
| 237 | COMP | | | ↑ | | |
| 238 | 021809p570242 | 2 18 | 57 02 | 83 | 2m | |
| 239 | COMP | | | ↑ | | |

60 inch Telescope Log

Observer: K Rines

PI: Bragg, All

Spectrograph: FAST

Grating: 300R

Date: 9/6/99

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| Number | Object | R.A. | Dec. | LIR | Exp | Comments |
|---------|-----------|------|-------|-----|-----|----------|
| 240 | 021810p57 | 2 18 | 57 07 | 83 | 5m | |
| 241 | COMP | | | ↑ | | |
| 242 | Feige 25 | 2 38 | +5 28 | 56 | 2m | 5:25 |
| 243 | COMP | | | ↑ | | |
| 244-253 | BIAS | | | | 0s | clear |
| 254-263 | FLAT | | | | 6s | |
| 264-273 | FLAT | | | | 12s | bin by 2 |
| 274-283 | BIAS | | | | 0s | |
| 284-293 | DARK | | | | 20m | bin by 2 |
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