

V. PROGRAM OBJECTS
 BD=284211A RIGHT ASCENSION = 21 50 4 GRATING NO. 1 GR TILT = 21400 CENTRAL WAVELENGTH = 5453.7
 DECLINATION = 28 45 0 SLIT WIDTH = 115 DECKER = 387 FILTERS - UPPER = 963 LOWER = 26
 ORDER = 1
 OBSERVING LOG FILE NO APERTURE INT TIME HOUR ANGLE AIRPASS PST
 361 L 61.55 0 38 1.021 3 37
 362 R 61.55 0 40 1.022 3 39
 (COMMENT=POL=119.92)
 DATA FOR BOTH APERTURE(S) APERTURE BALANCE FACTORS LEFT/RIGHT = 1.01 SKY/OBJ = 1.00
 BROAD BAND MAGNITUDES AND COLORS
 V = 11.75

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| *OVR* | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU |
|-------|---------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|-----|
| 2 | 4251.21 | 9.602 | 10.152 | 0.37 | 11.373 | 122 | 4375.05 | 11.122 | 0.38 | 11.374 | 242 | 4501.73 | 11.606 | 0.38 | 11.288 | | | | | |
| 3 | 4251.12 | 10.684 | 10.684 | 0.37 | 11.373 | 124 | 4377.10 | 11.120 | 0.38 | 11.373 | 244 | 4503.90 | 11.629 | 0.37 | 11.305 | | | | | |
| 4 | 4250.99 | 10.684 | 10.684 | 0.37 | 11.373 | 125 | 4379.12 | 11.120 | 0.38 | 11.374 | 245 | 4506.09 | 11.629 | 0.37 | 11.305 | | | | | |
| 5 | 4250.86 | 10.684 | 10.684 | 0.37 | 11.373 | 126 | 4381.16 | 11.117 | 0.38 | 11.378 | 246 | 4508.28 | 11.640 | 0.37 | 11.310 | | | | | |
| 6 | 4250.73 | 10.684 | 10.684 | 0.37 | 11.373 | 127 | 4383.20 | 11.110 | 0.38 | 11.383 | 248 | 4510.47 | 11.640 | 0.37 | 11.310 | | | | | |
| 7 | 4250.60 | 10.684 | 10.684 | 0.37 | 11.373 | 128 | 4385.24 | 11.105 | 0.38 | 11.389 | 249 | 4512.66 | 11.640 | 0.37 | 11.310 | | | | | |
| 8 | 4250.47 | 10.684 | 10.684 | 0.37 | 11.373 | 129 | 4387.28 | 11.100 | 0.38 | 11.395 | 250 | 4514.85 | 11.640 | 0.37 | 11.310 | | | | | |
| 9 | 4250.34 | 10.684 | 10.684 | 0.37 | 11.373 | 130 | 4389.32 | 11.095 | 0.38 | 11.401 | 251 | 4517.04 | 11.640 | 0.37 | 11.310 | | | | | |
| 10 | 4250.21 | 10.684 | 10.684 | 0.37 | 11.373 | 131 | 4391.36 | 11.090 | 0.38 | 11.407 | 252 | 4519.23 | 11.640 | 0.37 | 11.310 | | | | | |
| 11 | 4250.08 | 10.684 | 10.684 | 0.37 | 11.373 | 132 | 4393.40 | 11.085 | 0.38 | 11.413 | 253 | 4521.42 | 11.640 | 0.37 | 11.310 | | | | | |
| 12 | 4249.95 | 10.684 | 10.684 | 0.37 | 11.373 | 133 | 4395.44 | 11.080 | 0.38 | 11.419 | 254 | 4523.61 | 11.640 | 0.37 | 11.310 | | | | | |
| 13 | 4249.82 | 10.684 | 10.684 | 0.37 | 11.373 | 134 | 4397.48 | 11.075 | 0.38 | 11.425 | 255 | 4525.80 | 11.640 | 0.37 | 11.310 | | | | | |
| 14 | 4249.69 | 10.684 | 10.684 | 0.37 | 11.373 | 135 | 4399.52 | 11.070 | 0.38 | 11.431 | 256 | 4528.00 | 11.640 | 0.37 | 11.310 | | | | | |
| 15 | 4249.56 | 10.684 | 10.684 | 0.37 | 11.373 | 136 | 4401.56 | 11.065 | 0.38 | 11.437 | 257 | 4530.19 | 11.640 | 0.37 | 11.310 | | | | | |
| 16 | 4249.43 | 10.684 | 10.684 | 0.37 | 11.373 | 137 | 4403.60 | 11.060 | 0.38 | 11.443 | 258 | 4532.38 | 11.640 | 0.37 | 11.310 | | | | | |
| 17 | 4249.30 | 10.684 | 10.684 | 0.37 | 11.373 | 138 | 4405.64 | 11.055 | 0.38 | 11.449 | 259 | 4534.57 | 11.640 | 0.37 | 11.310 | | | | | |
| 18 | 4249.17 | 10.684 | 10.684 | 0.37 | 11.373 | 139 | 4407.68 | 11.050 | 0.38 | 11.455 | 260 | 4536.76 | 11.640 | 0.37 | 11.310 | | | | | |
| 19 | 4249.04 | 10.684 | 10.684 | 0.37 | 11.373 | 140 | 4409.72 | 11.045 | 0.38 | 11.461 | 261 | 4538.95 | 11.640 | 0.37 | 11.310 | | | | | |
| 20 | 4248.91 | 10.684 | 10.684 | 0.37 | 11.373 | 141 | 4411.76 | 11.040 | 0.38 | 11.467 | 262 | 4541.14 | 11.640 | 0.37 | 11.310 | | | | | |
| 21 | 4248.78 | 10.684 | 10.684 | 0.37 | 11.373 | 142 | 4413.80 | 11.035 | 0.38 | 11.473 | 263 | 4543.33 | 11.640 | 0.37 | 11.310 | | | | | |
| 22 | 4248.65 | 10.684 | 10.684 | 0.37 | 11.373 | 143 | 4415.84 | 11.030 | 0.38 | 11.479 | 264 | 4545.52 | 11.640 | 0.37 | 11.310 | | | | | |
| 23 | 4248.52 | 10.684 | 10.684 | 0.37 | 11.373 | 144 | 4417.88 | 11.025 | 0.38 | 11.485 | 265 | 4547.71 | 11.640 | 0.37 | 11.310 | | | | | |
| 24 | 4248.39 | 10.684 | 10.684 | 0.37 | 11.373 | 145 | 4419.92 | 11.020 | 0.38 | 11.491 | 266 | 4549.90 | 11.640 | 0.37 | 11.310 | | | | | |
| 25 | 4248.26 | 10.684 | 10.684 | 0.37 | 11.373 | 146 | 4421.96 | 11.015 | 0.38 | 11.497 | 267 | 4552.09 | 11.640 | 0.37 | 11.310 | | | | | |
| 26 | 4248.13 | 10.684 | 10.684 | 0.37 | 11.373 | 147 | 4424.00 | 11.010 | 0.38 | 11.503 | 268 | 4554.28 | 11.640 | 0.37 | 11.310 | | | | | |
| 27 | 4248.00 | 10.684 | 10.684 | 0.37 | 11.373 | 148 | 4426.04 | 11.005 | 0.38 | 11.509 | 269 | 4556.47 | 11.640 | 0.37 | 11.310 | | | | | |
| 28 | 4247.87 | 10.684 | 10.684 | 0.37 | 11.373 | 149 | 4428.08 | 11.000 | 0.38 | 11.515 | 270 | 4558.66 | 11.640 | 0.37 | 11.310 | | | | | |
| 29 | 4247.74 | 10.684 | 10.684 | 0.37 | 11.373 | 150 | 4430.12 | 10.995 | 0.38 | 11.521 | 271 | 4560.85 | 11.640 | 0.37 | 11.310 | | | | | |
| 30 | 4247.61 | 10.684 | 10.684 | 0.37 | 11.373 | 151 | 4432.16 | 10.990 | 0.38 | 11.527 | 272 | 4563.04 | 11.640 | 0.37 | 11.310 | | | | | |
| 31 | 4247.48 | 10.684 | 10.684 | 0.37 | 11.373 | 152 | 4434.20 | 10.985 | 0.38 | 11.533 | 273 | 4565.23 | 11.640 | 0.37 | 11.310 | | | | | |
| 32 | 4247.35 | 10.684 | 10.684 | 0.37 | 11.373 | 153 | 4436.24 | 10.980 | 0.38 | 11.539 | 274 | 4567.42 | 11.640 | 0.37 | 11.310 | | | | | |
| 33 | 4247.22 | 10.684 | 10.684 | 0.37 | 11.373 | 154 | 4438.28 | 10.975 | 0.38 | 11.545 | 275 | 4569.61 | 11.640 | 0.37 | 11.310 | | | | | |
| 34 | 4247.09 | 10.684 | 10.684 | 0.37 | 11.373 | 155 | 4440.32 | 10.970 | 0.38 | 11.551 | 276 | 4571.80 | 11.640 | 0.37 | 11.310 | | | | | |
| 35 | 4246.96 | 10.684 | 10.684 | 0.37 | 11.373 | 156 | 4442.36 | 10.965 | 0.38 | 11.557 | 277 | 4574.00 | 11.640 | 0.37 | 11.310 | | | | | |
| 36 | 4246.83 | 10.684 | 10.684 | 0.37 | 11.373 | 157 | 4444.40 | 10.960 | 0.38 | 11.563 | 278 | 4576.19 | 11.640 | 0.37 | 11.310 | | | | | |
| 37 | 4246.70 | 10.684 | 10.684 | 0.37 | 11.373 | 158 | 4446.44 | 10.955 | 0.38 | 11.569 | 279 | 4578.38 | 11.640 | 0.37 | 11.310 | | | | | |
| 38 | 4246.57 | 10.684 | 10.684 | 0.37 | 11.373 | 159 | 4448.48 | 10.950 | 0.38 | 11.575 | 280 | 4580.57 | 11.640 | 0.37 | 11.310 | | | | | |
| 39 | 4246.44 | 10.684 | 10.684 | 0.37 | 11.373 | 160 | 4450.52 | 10.945 | 0.38 | 11.581 | 281 | 4582.76 | 11.640 | 0.37 | 11.310 | | | | | |
| 40 | 4246.31 | 10.684 | 10.684 | 0.37 | 11.373 | 161 | 4452.56 | 10.940 | 0.38 | 11.587 | 282 | 4584.95 | 11.640 | 0.37 | 11.310 | | | | | |
| 41 | 4246.18 | 10.684 | 10.684 | 0.37 | 11.373 | 162 | 4454.60 | 10.935 | 0.38 | 11.593 | 283 | 4587.14 | 11.640 | 0.37 | 11.310 | | | | | |
| 42 | 4246.05 | 10.684 | 10.684 | 0.37 | 11.373 | 163 | 4456.64 | 10.930 | 0.38 | 11.599 | 284 | 4589.33 | 11.640 | 0.37 | 11.310 | | | | | |
| 43 | 4245.92 | 10.684 | 10.684 | 0.37 | 11.373 | 164 | 4458.68 | 10.925 | 0.38 | 11.605 | 285 | 4591.52 | 11.640 | 0.37 | 11.310 | | | | | |
| 44 | 4245.79 | 10.684 | 10.684 | 0.37 | 11.373 | 165 | 4460.72 | 10.920 | 0.38 | 11.611 | 286 | 4593.71 | 11.640 | 0.37 | 11.310 | | | | | |
| 45 | 4245.66 | 10.684 | 10.684 | 0.37 | 11.373 | 166 | 4462.76 | 10.915 | 0.38 | 11.617 | 287 | 4595.90 | 11.640 | 0.37 | 11.310 | | | | | |
| 46 | 4245.53 | 10.684 | 10.684 | 0.37 | 11.373 | 167 | 4464.80 | 10.910 | 0.38 | 11.623 | 288 | 4598.09 | 11.640 | 0.37 | 11.310 | | | | | |
| 47 | 4245.40 | 10.684 | 10.684 | 0.37 | 11.373 | 168 | 4466.84 | 10.905 | 0.38 | 11.629 | 289 | 4600.28 | 11.640 | 0.37 | 11.310 | | | | | |
| 48 | 4245.27 | 10.684 | 10.684 | 0.37 | 11.373 | 169 | 4468.88 | 10.900 | 0.38 | 11.635 | 290 | 4602.47 | 11.640 | 0.37 | 11.310 | | | | | |
| 49 | 4245.14 | 10.684 | 10.684 | 0.37 | 11.373 | 170 | 4470.92 | 10.895 | 0.38 | 11.641 | 291 | 4604.66 | 11.640 | 0.37 | 11.310 | | | | | |
| 50 | 4245.01 | 10.684 | 10.684 | 0.37 | 11.373 | 171 | 4472.96 | 10.890 | 0.38 | 11.647 | 292 | 4606.85 | 11.640 | 0.37 | 11.310 | | | | | |
| 51 | 4244.88 | 10.684 | 10.684 | 0.37 | 11.373 | 172 | 4475.00 | 10.885 | 0.38 | 11.653 | 293 | 4609.04 | 11.640 | 0.37 | 11.310 | | | | | |
| 52 | 4244.75 | 10.684 | 10.684 | 0.37 | 11.373 | 173 | 4477.04 | 10.880 | 0.38 | 11.659 | 294 | 4611.23 | 11.640 | 0.37 | 11.310 | | | | | |
| 53 | 4244.62 | 10.684 | 10.684 | 0.37 | 11.373 | 174 | 4479.08 | 10.875 | 0.38 | 11.665 | 295 | 4613.42 | 11.640 | 0.37 | 11.310 | | | | | |
| 54 | 4244.49 | 10.684 | 10.684 | 0.37 | 11.373 | 175 | 4481.12 | 10.870 | 0.38 | 11.671 | 296 | 4615.61 | 11.640 | 0.37 | 11.310 | | | | | |
| 55 | 4244.36 | 10.684 | 10.684 | 0.37 | 11.373 | 176 | 4483.16 | 10.865 | 0.38 | 11.677 | 297 | 4617.80 | 11.640 | 0.37 | 11.310 | | | | | |
| 56 | 4244.23 | 10.684 | 10.684 | 0.37 | 11.373 | 177 | 4485.20 | 10.860 | 0.38 | 11.683 | 298 | 4620.00 | 11.640 | 0.37 | 11.310 | | | | | |
| 57 | 4244.10 | 10.684 | 10.684 | 0.37 | 11.373 | 178 | 4487.24 | 10.855 | 0.38 | 11.689 | 299 | 4622.19 | 11.640 | 0.37 | 11.310 | | | | | |
| 58 | 4243.97 | 10.684 | 10.684 | 0.37 | 11.373 | 179 | 4489.28 | 10.850 | 0.38 | 11.695 | 300 | 4624.38 | 11.640 | 0.37 | 11.310 | | | | | |
| 59 | 4243.84 | 10.684 | 10.684 | 0.37 | 11.373 | 180 | 4491.32 | 10.845 | 0.38 | 11.701 | 301 | 4626.57 | 11.640 | 0.37 | 11.310 | | | | | |

| *OVR* | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU | CH NO | LAMBDA (ANG) | FNU (ECS) | SIGMA | MNU |
|-------|---------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|--------|-------|--------------|-----------|-------|-----|
| 2 | 4251.21 | 9.602 | 10.152 | 0.37 | 11.373 | 122 | 4375.05 | 11.122 | 0.38 | 11.374 | 242 | 4501.73 | 11.606 | 0.38 | 11.288 | | | | | |
| 3 | 4251.12 | 10.684 | 10.684 | 0.37 | 11.373 | 124 | 4377.10 | 11.120 | 0.38 | 11.373 | 244 | 4503.90 | 11.629 | 0.37 | 11.305 | | | | | |
| 4 | 4250.99 | 10.684 | 10.684 | 0.37 | 11.373 | 125 | 4379.12 | 11.120 | 0.38 | 11.374 | 245 | 4506.09 | 11.629 | 0.37 | 11.305 | | | | | |
| 5 | 4250.86 | 10.684 | 10.684 | 0.37 | 11.373 | 126 | 4381.16 | 11.117 | 0.38 | 11.378 | 246 | 4508.28 | 11.640 | 0.37 | 11.310 | | | | | |
| 6 | 4250.73 | 10.684 | 10.684 | 0.37 | 11.373 | 127 | 4383.20 | 11.110 | 0.38 | 11.383 | 248 | 4510.47 | 11.640 | 0.37 | 11.310 | | | | | |
| 7 | 4250.60 | 10.684 | 10.684 | 0.37 | 11.373 | 128 | 4385.24 | 11.105 | 0.38 | 11.389 | 249 | 4512.66 | 11.640 | 0.37 | 11.310 | | | | | |
| 8 | 4250.47 | 10.684 | 10.684 | 0.37 | 11.373 | 129 | 4387.28 | 11.100 | 0.38 | 11.395 | 250 | 4514.85 | 11.640 | 0.37 | 11.310 | | | | | |
| 9 | 4250.34 | 10.684 | 10.684 | 0.37 | 11.373 | 130 | 4389.32 | 11.095 | 0.38 | 11.401 | 251 | 4517.04 | 11.640 | 0.37 | 11.310 | | | | | |
| 10 | 4250.21 | 10.684 | 10.684 | 0.37 | 11.373 | 131 | 4391.36 | 11.090 | 0.38 | 11.407 | 252 | 4519.23 | 11.640 | 0.37 | 11.310 | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | |