

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Global Solar Radiation on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|---|---|---|---|---|---|------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|----|----|----|----|----|----|--------|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 101 | 266 | 357 | 380 | 474 | 577 | 630 | 388 | 286 | 136 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 3659 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 183 | 255 | 384 | 585 | 495 | 554 | 288 | 312 | 284 | 138 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 3543 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 157 | 303 | 300 | 397 | 523 | 457 | 413 | 416 | 203 | 97 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 3317 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 82 | 109 ? | 325 | 343 | 289 | 146 | 271 | 204 | 269 | 92 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 2225 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 210 | 375 | 570 | 653 | 796 | 633 | 610 | 485 | 282 | 114 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 4794 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 234 | 439 | 614 | 745 | 809 | 799 | 717 | 573 | 386 | 177 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 5577 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 279 ? | 429 | 602 | 723 | 779 | 778 | 700 | 557 | 374 | 168 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 5483 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 189 | 351 | 580 | 704 | 762 | 758 | 686 | 551 | 361 | 138 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 5155 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 194 | 415 | 454 | 623 | 384 | 483 | 465 | 373 | 215 | 71 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 3731 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 202 | 326 | 517 | 671 | 712 | 638 | 558 | 503 | 326 | 128 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4618 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 132 | 410 | 455 | 482 | 533 | 717 | 581 | 562 | 351 | 164 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 4436 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 236 | 422 | 588 | 708 | 765 | 759 | 682 | 543 | 355 | 146 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 5276 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 171 | 269 | 349 | 242 | 234 ? | 101 ? | 101 ? | 52 ? | 71 | 23 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1666 ? |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 32 | 100 | 130 | 185 | 248 | 386 | 191 | 122 | 147 | 60 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1617 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 29 | 56 | 87 | ? | 78 | 70 | 50 ? | 212 | 227 | 136 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 966 ? |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 199 | 396 | 561 | 681 | 741 | 704 | 637 | 506 | 323 | 123 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4920 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 201 | 410 | 582 | 705 | 761 | 749 | 667 | 525 | 340 | 132 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 5124 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 187 | 384 | 546 | 418 | 700 | 661 | 308 | 207 | 221 | 70 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3739 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 108 | 284 | 372 | 468 | 741 | 565 | 503 | 311 | 109 | 42 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3515 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 ? | 46 ? | 109 | 152 | 96 | 143 | 90 | 77 | 50 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 795 ? |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 73 | 109 | 179 | 223 | 318 | 175 | 149 | 103 | 45 | 22 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1415 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 35 | 64 | 178 | 168 | 275 | 216 | 257 | 169 | 98 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1495 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 167 | 360 | 441 | 485 | 582 | 632 | 623 | 486 | 299 | 99 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 4202 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 27 | 61 | 88 | 99 | 107 | 191 | 168 | 104 | 50 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 924 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 48 | 101 | 154 | 139 | 103 | 111 | 101 | 72 | 38 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 893 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 103 | 186 ? | 259 ? | 259 ? | 168 ? | 194 ? | 298 ? | 388 | 256 | 85 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2224 ? |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 123 | 289 | 430 | 522 | 337 | 334 | 382 | 438 | 249 | 48 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3168 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 137 | 340 | 502 | 597 | 509 | 478 | 536 | 430 | 246 | 68 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3865 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 106 | 216 | 256 | 299 | 186 | 169 | 157 | 110 | 57 | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1595 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 33 | 80 | 113 | 404 | 610 | 602 | 526 | 370 | 207 | 59 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3014 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 89 | 308 | 481 | 569 | 654 | 593 | 433 | 452 | 250 | 85 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 3940 |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 132 | 263 | 373 | 454 | 476 | 464 | 412 | 342 | 225 | 87 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 3255 |
| S D | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 74 | 134 | 177 | 206 | 249 | 245 | 217 | 176 | 111 | 51 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1543 |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0.64 | 0.56 | 0.51 | 0.47 | 0.45 | 0.52 | 0.53 | 0.53 | 0.51 | 0.49 | 0.59 | 0.81 | 0 | 0 | 0 | 0 | 0 | 0 | 0.47 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 46 | 87 | 99 | 78 | 70 | 50 | 52 | 38 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 795 |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 279 | 439 | 614 | 745 | 809 | 799 | 717 | 573 | 386 | 177 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 5577 |
| n | 0 | 0 | 0 | 0 | 0 | 0 | 293 | 359 | 353 | 361 | 347 | 358 | 359 | 355 | 363 | 370 | 368 | 146 | 0 | 0 | 0 | 0 | 0 | 0 | 4033 |

Daylight Data Recovery: 0.0% missing; 3.1% exceed the 15% QC threshold -- 4161 total daylight measurements.

Instrument: Eppley PSP Serial Number: 31256F3 Calibration Factor: 7.561 μV/W/m² Calibration Date: 08/2003

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Direct Normal Solar Radiation
Hourly Integrated and Daily Totals
Instrument: Eppley NIP
Watt-Hours per Square Meter

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|---|---|---|---|---|---|------|-------|------|------|------|------|------|------|------|------|------|------|----|----|----|----|----|----|--------|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 3 | 57 | 57 | 50 | 45 | 155 | 379 | 245 | 216 | 128 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 1399 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 141 | 93 | 142 | 283 | 185 | 295 | 22 | 57 | 178 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1497 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 73 | 116 | 27 | 111 | 202 | 176 | 144 | 267 | 41 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1176 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 43 | 26 | 3 | 0 | 7 | 4 | 230 | 19 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 350 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 127 | 396 | 455 | 624 | 672 | 763 | 434 | 541 | 504 | 357 | 165 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5039 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 287 | 631 | 787 | 869 | 920 | 936 | 931 | 911 | 868 | 787 | 613 | 266 | 0 | 0 | 0 | 0 | 0 | 0 | 8806 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 269 | 670 ? | 793 | 862 | 891 | 900 | 904 | 888 | 843 | 766 | 592 | 212 | 0 | 0 | 0 | 0 | 0 | 0 | 8590 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 606 | 762 | 826 | 850 | 865 | 866 | 852 | 814 | 692 | 381 | 111 | 0 | 0 | 0 | 0 | 0 | 0 | 7786 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 234 | 654 | 384 | 371 | 47 | 116 | 200 | 188 | 85 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 2287 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 219 | 263 | 454 | 789 | 714 | 463 | 354 | 617 | 526 | 308 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 4718 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 140 | 633 | 300 | 237 | 350 | 623 | 542 | 629 | 552 | 530 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 4626 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 260 | 626 | 798 | 875 | 899 | 909 | 908 | 890 | 851 | 754 | 542 | 171 | 0 | 0 | 0 | 0 | 0 | 0 | 8482 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 101 | 115 | 56 | 9 | 32 ? | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 353 |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 16 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 174 | 371 | 89 | 0 | 0 | 0 | 0 | 0 | 0 | 707 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 231 | 602 | 767 | 844 | 878 | 899 | 768 | 816 | 790 | 688 | 430 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 7783 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 266 | 631 | 811 | 892 | 929 | 937 | 934 | 913 | 868 | 787 | 569 | 176 | 0 | 0 | 0 | 0 | 0 | 0 | 8713 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 227 | 583 | 742 | 769 | 285 | 736 | 654 | 57 | 1 | 145 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4223 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 251 | 104 | 61 | 555 | 263 | 336 | 149 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1832 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 51 | 59 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 126 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 420 | 649 | 374 | 374 | 542 | 671 | 863 | 831 | 733 | 419 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 5918 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 ? | 3 ? | 7 ? | 0 ? | 1 ? | 58 ? | 475 | 600 | 371 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 1548 ? |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 140 | 553 | 363 | 255 | 5 | 35 | 221 | 709 | 532 | 115 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2931 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 79 | 371 | 696 | 758 | 584 | 360 | 302 | 600 | 633 | 530 | 233 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5146 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 73 | 94 | 84 | 46 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 301 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139 | 575 | 644 | 640 | 464 | 318 | 133 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2914 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 86 | 557 | 743 | 718 | 806 | 565 | 217 | 555 | 503 | 213 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4972 |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 221 | 343 | 337 | 335 | 367 | 346 | 339 | 371 | 329 | 201 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 3299 |
| S D | 0 | 0 | 0 | 0 | 0 | 0 | 102 | 249 | 334 | 356 | 359 | 379 | 353 | 352 | 344 | 300 | 218 | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 3113 |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 1.52 | 1.13 | 0.97 | 1.05 | 1.07 | 1.03 | 1.02 | 1.04 | 0.93 | 0.91 | 1.08 | 1.74 | 0 | 0 | 0 | 0 | 0 | 0 | 0.94 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 287 | 670 | 811 | 892 | 929 | 937 | 934 | 913 | 868 | 787 | 613 | 266 | 0 | 0 | 0 | 0 | 0 | 0 | 8806 |
| n | 0 | 0 | 0 | 0 | 0 | 0 | 295 | 369 | 363 | 363 | 362 | 359 | 367 | 366 | 372 | 371 | 372 | 146 | 0 | 0 | 0 | 0 | 0 | 0 | 4105 |

Daylight Data Recovery: 0.0% missing; 1.3% exceed the 15% QC threshold -- 4161 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25521E6 Calibration Factor: 8.034 μV/W/m² Calibration Date: 06/2002

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Diffuse Solar Radiation (Shadow Band) on a Horizontal Surface
Hourly Integrated and Daily Totals
Instrument: Eppley PSP
Watt-Hours per Square Meter

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|---|---|---|---|---|---|------|------|-------|-------|-------|-------|-------|-------|------|------|------|------|----|----|----|----|----|----|--------|
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 101 | 235 | 318 | 336 | 435 | 438 | 326 | 233 | 178 | 104 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 2762 |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 128 | 199 | 284 | 346 | 331 | 299 | 271 | 185 | 120 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2495 |
| 3 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 136 | 233 | 280 | 305 | 352 | 304 | 298 | 236 | 185 | 92 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 2473 |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | 74 ? | 82 | 86 | 287 | 324 | 288 | 146 | 268 | 202 | 165 | 87 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 2036 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 80 | 135 | 151 | 137 | 172 | 268 | 199 | 167 | 118 | 65 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 1538 |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 42 | 52 | 56 | 56 | 58 | 57 | 53 | 48 | 40 | 28 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 519 |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 39 ? | 44 | 53 | 58 | 65 | 63 | 62 | 58 | 48 | 34 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 556 |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 46 | 56 | 62 | 76 | 79 | 78 | 75 | 71 | 63 | 49 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 697 |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 93 | 127 | 215 | 336 | 345 | 388 | 309 | 257 | 173 | 70 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 2370 |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 147 | 181 | 204 | 93 | 151 | 248 | 283 | 141 | 103 | 56 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1644 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 80 | 105 | 261 | 300 | 254 | 228 | 176 | 195 | 123 | 51 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1814 |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 40 | 48 | 56 | 62 | 66 | 67 | 63 | 58 | 50 | 33 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 568 |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 147 | 209 | 316 | 204 | 175 | 73 ? | 101 ? | 38 | 71 | 22 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1402 ? |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 32 | 100 | 130 | 185 | 248 | 376 | 191 | 122 | 147 | 60 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1607 |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 29 | 56 | 79 | 35 ? | 78 | 70 | 48 | 160 | 161 | 66 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 798 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 41 | 54 | 62 | 68 | 70 | 126 | 86 | 75 | 61 | 41 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 711 |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 38 | 52 | 58 | 63 | 66 | 65 | 62 | 56 | 45 | 28 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 554 |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 43 | 60 | 95 | 207 | 148 | 170 | 261 | 207 | 170 | 63 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1444 |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 72 | 168 | 308 | 411 | 310 | 335 | 268 | 215 | 109 | 42 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2249 |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 ? | 34 | 109 | 152 | 96 | 143 | 90 | 77 | 50 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 785 |
| 21 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 73 | 109 | 179 | 222 | 314 | 175 | 149 | 103 | 43 | 21 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1409 |
| 22 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 35 | 64 | 178 | 168 | 275 | 216 | 220 | 137 | 92 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1419 |
| 23 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 56 | 77 | 217 | 226 | 177 | 143 | 69 | 58 | 44 | 23 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1109 |
| 24 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 27 | 61 | 88 | 95 | 102 | 191 | 168 | 104 | 50 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 914 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 48 | 101 | 154 | 139 | 103 | 111 | 101 | 72 | 38 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 894 |
| 26 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 94 | 161 ? | 219 ? | 197 ? | 167 ? | 175 ? | 254 ? | 142 | 57 | 27 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1517 ? |
| 27 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 74 | 104 | 221 | 333 | 307 | 239 | 87 | 70 | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1804 |
| 28 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 56 | 67 | 90 | 222 | 242 | 256 | 162 | 117 | 72 | 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1328 |
| 29 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 86 | 164 | 207 | 265 | 186 | 169 | 156 | 110 | 57 | 20 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1440 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 33 | 80 | 113 | 297 | 204 | 159 | 134 | 132 | 102 | 36 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 1301 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 62 | 89 | 89 | 113 | 107 | 201 | 289 | 190 | 83 | 52 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 1298 |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 67 | 107 | 166 | 194 | 193 | 195 | 175 | 133 | 95 | 45 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1402 |
| S D | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 36 | 59 | 89 | 108 | 107 | 106 | 91 | 68 | 51 | 28 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 631 |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0.67 | 0.55 | 0.55 | 0.54 | 0.56 | 0.55 | 0.54 | 0.52 | 0.51 | 0.53 | 0.61 | 0.85 | 0 | 0 | 0 | 0 | 0 | 0 | 0.45 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 34 | 53 | 35 | 58 | 57 | 48 | 38 | 38 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 519 |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 147 | 235 | 318 | 411 | 435 | 438 | 326 | 271 | 185 | 120 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 2762 |
| n | 0 | 0 | 0 | 0 | 0 | 0 | 275 | 366 | 361 | 363 | 356 | 361 | 362 | 358 | 370 | 371 | 372 | 146 | 0 | 0 | 0 | 0 | 0 | 0 | 4061 |

Daylight Data Recovery: 0.0% missing; 2.4% exceed the 15% QC threshold -- 4161 total daylight measurements.

Instrument: Eppley PSP Serial Number: 17880F3 Calibration Factor: 8.067 μV/W/m² Calibration Date: 07/2002

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Dry Bulb Temperature (Roof)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Degrees Celsius

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 19.9 | 20.1 | 20 | 19.8 | 20 | 19.8 | 19.9 | 20.6 | 21.6 | 22.5 | 22.9 | 23.4 | 23.4 | 23.7 | 23.7 | 23.6 | 22.7 | 21.8 | 21.1 | 20.6 | 20.6 | 20.5 | 20.7 | 20.6 | 21.4 |
| 2 | 20.8 | 21 | 20.9 | 21.3 | 21 | 20.7 | 21.3 | 22.5 | 23.9 | 25 | 25.5 | 25.8 | 26.5 | 26.3 | 25.5 | 25.7 | 25.3 | 23.5 | 21.8 | 21 | 21 | 20.7 | 20.6 | 20.1 | 22.8 |
| 3 | 19.7 | 19.6 | 19.4 | 19.2 | 18.7 | 18.3 | 18.5 | 19.5 | 20.7 | 22.1 | 22.7 | 23.6 | 24.1 | 24 | 24 | 23 | 21.7 | 20.9 | 20.5 | 20 | 19.7 | 19.5 | 19.5 | 19.2 | 20.7 |
| 4 | 19.1 | 18.8 | 18.2 | 17.9 | 18 | 17.8 | 17.9 | 19.1 | 19.4 | 20.4 | 21.5 | 22.4 | 22.3 | 22.5 | 22.9 | 23.2 | 22.4 | 21.4 | 20.6 | 20.1 | 19.5 | 18.8 | 18.5 | 18.1 | 20 |
| 5 | 17.5 | 16.4 | 15.6 | 15.3 | 14.8 | 14.4 | 15.5 | 16.9 | 17.8 | 19 | 20 | 20.5 | 20.7 | 20.6 | 20.1 | 19.2 | 18.4 | 17.3 | 16.4 | 15.7 | 15.3 | 15.2 | 14.6 | 14.1 | 17.1 |
| 6 | 13.9 | 13.5 | 13.4 | 13 | 12.5 | 12.4 | 12.4 | 14 | 15.8 | 16.8 | 17.5 | 18.1 | 18.7 | 19.3 | 19.8 | 19.3 | 18.5 | 16.6 | 15.2 | 14.4 | 13.8 | 13.2 | 12 | 10.3 | 15.2 |
| 7 | 9.4 | 9.3 | 8.6 | 7.9 | 7.9 | 8.4 | 8.9 | 12 | 15.1 | 17.4 | 19.2 | 20.6 | 21.2 | 21.6 | 21.7 | 21.8 | 20.8 | 19 | 17.7 | 16.7 | 14.8 | 13.6 | 13.2 | 12.8 | 15 |
| 8 | 11.7 | 11.9 | 11.6 | 11.8 | 10.9 | 11.4 | 11.9 | 14.7 | 17.6 | 20.1 | 21.4 | 22.6 | 23.2 | 23.1 | 22.9 | 22.7 | 21.6 | 19.8 | 18.6 | 18 | 17.4 | 16.8 | 16.3 | 15.2 | 17.2 |
| 9 | 14.4 | 14.4 | 14.3 | 14.2 | 13.4 | 12.8 | 12.5 | 14.1 | 18.3 | 21.7 | 23.6 | 24.4 | 24.6 | 24.7 | 23.9 | 23.2 | 22.1 | 21.1 | 20.1 | 19.5 | 18.9 | 18.3 | 18.2 | 17.7 | 18.8 |
| 10 | 16.9 | 16.4 | 15.9 | 15.4 | 15.4 | 15.4 | 15.6 | 16.5 | 18.9 | 21.3 | 22.6 | 23.5 | 24.2 | 23.9 | 23.6 | 23.2 | 22.5 | 20.5 | 19.1 | 18 | 17.3 | 16.6 | 16 | 15.6 | 18.9 |
| 11 | 15.3 | 14.2 | 13.1 | 12.8 | 12.5 | 11.8 | 11.1 | 11.9 | 13.6 | 14.7 | 15.3 | 16.1 | 17.2 | 17.6 | 17.9 | 17.8 | 17.4 | 15.6 | 14 | 13.1 | 12.3 | 10.9 | 10.1 | 9.5 | 14 |
| 12 | 9.2 | 8.8 | 8.4 | 8.1 | 7.9 | 7.6 | 8 | 10.1 | 12.8 | 15.4 | 17.2 | 18.7 | 19.7 | 20.8 | 21.7 | 22.4 | 22.2 | 20.4 | 18.6 | 17.5 | 16.9 | 16.1 | 14.9 | 14.2 | 14.9 |
| 13 | 13 | 13.1 | 13.6 | 12.9 | 12.6 | 12.5 | 13 | 14.9 | 17.5 | 20 | 20.4 | 19.3 | 19.1 | 18.6 | 18.5 | 19.2 | 19.4 | 19.1 | 18.7 | 18.8 | 18.9 | 19.3 | 19.7 | 19.5 | 17.2 |
| 14 | 19.6 | 19.7 | 19.6 | 18.6 | 17.2 | 16.6 | 15.9 | 15.1 | 14.8 | 15 | 15.4 | 15.8 | 16.5 | 17 | 16.6 | 16.8 | 17.1 | 16.8 | 16.6 | 16 | 15.6 | 15.1 | 14.9 | 15.1 | 16.6 |
| 15 | 15.5 | 16 | 16.3 | 16.8 | 16.8 | 16.7 | 17 | 17 | 17 | 17.7 | 17.5 | 17.3 | 17.6 | 17.6 | 17.2 | 18 | 18.1 | 16.9 | 16 | 15.9 | 15.7 | 14.2 | 12.9 | 12 | 16.4 |
| 16 | 11.6 | 11.1 | 11 | 10.7 | 10.3 | 9.9 | 9.7 | 11 | 13.1 | 15 | 16.5 | 17.3 | 18 | 18.8 | 19.4 | 19.7 | 19.5 | 17.9 | 17.2 | 16.8 | 16.2 | 15.6 | 14.7 | 14.1 | 14.8 |
| 17 | 12.3 | 10.8 | 9.4 | 8.5 | 8.7 | 9.1 | 9.7 | 11 | 13 | 14.7 | 15.6 | 16.5 | 17.4 | 18.2 | 18.9 | 19.2 | 18.9 | 16.7 | 14.8 | 14.5 | 14.1 | 13.4 | 13.1 | 12.7 | 13.8 |
| 18 | 12.3 | 12.6 | 12.3 | 11.9 | 10.9 | 10 | 9.8 | 12.7 | 15.4 | 17.4 | 18.4 | 19.9 | 21 | 21.1 | 19.7 | 20.1 | 19.9 | 19 | 19.5 | 19.1 | 18.4 | 18.4 | 19.3 | 19.8 | 16.6 |
| 19 | 19.6 | 19.6 | 20 | 19.5 | 19.5 | 19.9 | 20 | 20.3 | 21.5 | 22.6 | 23.7 | 25.4 | 25.9 | 26.2 | 26.3 | 25.7 | 24.9 | 23.5 | 22.9 | 22.7 | 21.5 | 20.6 | 19 | 19 | 22.1 |
| 20 | 18.9 | 18.8 | 18.6 | 18.5 | 18.4 | 18.1 | 17.3 | 16.9 | 16.7 | 16.8 | 17.5 | 17.8 | 17.7 | 17.8 | 17.7 | 17.4 | 17 | 16.6 | 16.5 | 16.7 | 16.8 | 16.7 | 16.6 | 16.5 | 17.4 |
| 21 | 16.6 | 16.5 | 16.2 | 16 | 16 | 16 | 15.9 | 16.2 | 16.6 | 17 | 17.4 | 17.8 | 17.4 | 17.1 | 17.2 | 17 | 16.3 | 16.1 | 15.6 | 15.7 | 15.6 | 15.2 | 15 | 14.8 | 16.3 |
| 22 | 14.7 | 14.6 | 14.4 | 14.3 | 14.3 | 14.2 | 14.1 | 13.7 | 14.2 | 15.1 | 15.5 | 15.4 | 15.9 | 16 | 15.8 | 15.1 | 13.9 | 13.8 | 13.9 | 13.8 | 13.5 | 13.2 | 13 | 12.8 | 14.4 |
| 23 | 12 | 11.6 | 10.6 | 10.4 | 10.3 | 10.3 | 9.9 | 11.3 | 13.3 | 15.1 | 15.9 | 16.2 | 16.7 | 16.8 | 16.7 | 16 | 14.9 | 13.3 | 12.2 | 11.3 | 10.1 | 9.8 | 9.2 | 9.9 | 12.7 |
| 24 | 9.8 | 9.1 | 9.2 | 9.6 | 9.9 | 10 | 10.3 | 10.3 | 10.4 | 10.8 | 11.1 | 11.2 | 11.1 | 11.5 | 11.4 | 11.5 | 11.6 | 11.4 | 11.1 | 11 | 10.4 | 9.8 | 9.4 | 9.2 | 10.5 |
| 25 | 9.2 | 9.1 | 9.4 | 10.2 | 10.5 | 10.2 | 10 | 10.5 | 11.4 | 12.3 | 13 | 13.2 | 13.4 | 13.6 | 13.6 | 13.6 | 13.4 | 13.2 | 13 | 12.8 | 12.8 | 12.8 | 12.8 | 12.4 | 11.9 |
| 26 | 11.6 | 11.7 | 11.6 | 11.6 | 11.7 | 11.6 | 11.6 | 12.1 | 13.7 | 15.1 | 16.1 | 17.3 | 17.8 | 18.4 | 18.5 | 18.4 | 17.5 | 15.4 | 14.1 | 13.5 | 12.5 | 11.3 | 10.6 | 10 | 13.9 |
| 27 | 9.7 | 9.5 | 9.5 | 9.3 | 9.2 | 9 | 8.8 | 9.6 | 12.1 | 14.7 | 16.1 | 16.6 | 17 | 17.1 | 18.1 | 18.2 | 17.2 | 15.5 | 14.1 | 13.6 | 13.6 | 14 | 13.8 | 13.4 | 13.3 |
| 28 | 13.4 | 13.3 | 13.3 | 13.1 | 13 | 12.5 | 11.6 | 12.7 | 15.2 | 16.8 | 17.8 | 17.8 | 18.1 | 18.5 | 18.4 | 18 | 16.6 | 15.1 | 14.1 | 13.8 | 13.3 | 12.7 | 12.7 | 12.8 | 14.8 |
| 29 | 12.9 | 12.1 | 11.1 | 11.2 | 11.8 | 11.6 | 11.5 | 12.5 | 14.7 | 16.5 | 17.3 | 17.6 | 17.5 | 17.7 | 17.7 | 17.8 | 17.4 | 16.9 | 16.9 | 16.8 | 16.3 | 16.5 | 16.6 | 16.8 | 15.2 |
| 30 | 16.9 | 16.9 | 16.8 | 16.8 | 16.9 | 17 | 17.2 | 17.5 | 18 | 18.6 | 20.3 | 23 | 24.4 | 25.6 | 26 | 26 | 25.5 | 23.9 | 23 | 22 | 21.9 | 21.6 | 20.8 | 20.6 | 20.7 |
| 31 | 20.7 | 20.6 | 20.5 | 20.2 | 20 | 19.7 | 19.5 | 19.7 | 20.8 | 23 | 24.9 | 26.1 | 26.8 | 27.2 | 27.7 | 27.7 | 26.8 | 25.1 | 23.5 | 23 | 22.2 | 21.2 | 20.8 | 20.4 | 22.8 |
| Avg | 14.8 | 14.6 | 14.3 | 14.1 | 13.9 | 13.7 | 13.8 | 14.7 | 16.3 | 17.8 | 18.7 | 19.4 | 19.8 | 20.1 | 20.1 | 20 | 19.4 | 18.2 | 17.3 | 16.8 | 16.3 | 15.9 | 15.5 | 15.1 | 16.7 |
| S D | 3.8 | 3.9 | 4 | 4 | 3.9 | 3.9 | 3.9 | 3.6 | 3.3 | 3.4 | 3.5 | 3.8 | 3.9 | 3.9 | 3.8 | 3.8 | 3.7 | 3.4 | 3.3 | 3.3 | 3.3 | 3.4 | 3.5 | 3.6 | 3.3 |
| S/A | 0.25 | 0.27 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.24 | 0.2 | 0.19 | 0.19 | 0.2 | 0.2 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.2 | 0.21 | 0.23 | 0.24 | 0.19 |
| Min | 9.2 | 8.8 | 8.4 | 7.9 | 7.9 | 7.6 | 8 | 9.6 | 10.4 | 10.8 | 11.1 | 11.2 | 11.1 | 11.5 | 11.4 | 11.5 | 11.6 | 11.4 | 11.1 | 11 | 10.1 | 9.8 | 9.2 | 9.2 | 10.5 |
| Max | 20.8 | 21 | 20.9 | 21.3 | 21 | 20.7 | 21.3 | 22.5 | 23.9 | 25 | 25.5 | 26.1 | 26.8 | 27.2 | 27.7 | 27.7 | 26.8 | 25.1 | 23.5 | 23 | 22.2 | 21.6 | 20.8 | 20.6 | 22.8 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C Serial Number: P0520031 Calibration Factor: 1.00 deg C/mV Calibration Date: 03/1988

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Relative Humidity (Roof)
Hourly and Daily Averages
Instrument: CSI HMP-35C
Percent

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|-------|---------|---------|---------|---------|-------|---------|---------|---------|-------|---------|-------|---------|---------|---------|------|------|-------|-------|---------|---------|---------|---------|---------|---------|
| 1 | 103.6 | 103 | 103 | 103.2 | 103.3 | 103.6 | 103.6 | 101.6 | 97 | 90.7 | 87.7 | 85.3 | 86 | 84.2 | 85.2 | 85.4 | 89.1 | 88.1 | 90.3 | 91.1 | 88.9 | 88.6 | 85.6 | 86.3 | 93.1 |
| 2 | 84.6 | 87.9 | 95 | 97.2 | 99.2 | 101.4 | 101.7 | 100.6 | 97.3 | 91.4 | 90.8 | 89 | 86.1 | 87.3 | 91.3 | 88.1 | 89.3 | 96.2 | 100.9 | ? | ? | ? | ? | ? | 93.4 ? |
| 3 | ? | ? | ? | ? | ? | ? | ? | ? | 102.9 | 98.2 | 94.6 | 88.7 | 84.8 | 85.2 | 83.6 | 87.7 | 94.1 | 96.8 | 98.9 | 100.8 | 102.3 | 101.3 | 100.8 | 100.7 | 95.1 ? |
| 4 | 101.1 | 102 | 104.1 | 104.9 ? | ? | ? | 104.7 ? | 102.9 | 103.3 | 100.7 | 94.2 | 89.7 | 90.5 | 89.1 | 87.9 | 87.3 | 92.5 | 98.2 | 100.2 | 101.8 | 102.9 | 104.5 ? | ? | ? | 98.1 ? |
| 5 | ? | ? | ? | ? | ? | ? | 103.8 ? | 100.1 | 89.9 | 83.8 | 76.8 | 72.2 | 70.7 | 69.2 | 70.3 | 72.5 | 77.1 | 81.8 | 86.6 | 87.2 | 84.9 | 84 | 85.9 | 86.4 | 82.4 ? |
| 6 | 87.9 | 88.6 | 86 | 84.4 | 85 | 83 | 81.3 | 73.1 | 66.3 | 61.7 | 51.8 | 45.4 | 45.3 | 45.4 | 47.5 | 53.2 | 59.5 | 69.7 | 76.9 | 80.3 | 83.3 | 89.9 | 97.5 | 100.6 | 72.6 |
| 7 | 103.2 | 102.5 | 102.9 | 104.7 | 104.3 | 101.2 | 98.1 | 86.8 | 78.3 | 73.8 | 68.8 | 64.6 | 59.6 | 55.7 | 56.5 | 58.7 | 63.9 | 72 | 79.5 | 87.1 | 95.8 | 99.3 | 101.9 | 103.2 | 84.3 |
| 8 | 105 ? | 104.2 ? | 104.6 | ? | ? | ? | 103.8 ? | 100.2 | 93.9 | 84.1 | 79.2 | 74.3 | 70 | 66.8 | 67.1 | 68.6 | 79.1 | 90.4 | 97.2 | 100 | 101.9 | 104.1 | 104.8 | ? | 90 ? |
| 9 | ? | ? | ? | ? | ? | ? | ? | ? | ? | 95.5 | 79 | 71.9 | 67 | 67.8 | 79.3 | 85.1 | 91.6 | 96.6 | 100.2 | 102.7 | 104.5 ? | ? | ? | ? | 86.8 ? |
| 10 | ? | ? | ? | ? | ? | ? | ? | 100.6 ? | 91.5 | 83.6 | 79.5 | 75.3 | 67.2 | 68.9 | 63.4 | 61.3 | 63.2 | 70.3 | 77.3 | 81 | 82.7 | 84.1 | 85.1 | 85 | 77.6 ? |
| 11 | 89.2 | 94.7 | 98.3 | 95.2 | 93.4 | 97.4 | 100 | 95.9 | 84.3 | 78.8 | 74.9 | 69.6 | 64.2 | 62 | 60.5 | 60.4 | 62.8 | 72.7 | 82.3 | 87.5 | 91.7 | 98.8 | 100.6 | 102.7 | 84.1 |
| 12 | 103.4 | 103 | 103.1 | 104 | 104.8 | 104.8 | 103 | 95.6 | 86.8 | 74.7 | 63.8 | 61 | 61 | 57 | 51.9 | 51.7 | 54.8 | 65 | 74.6 | 81.6 | 86.4 | 91.4 | 96.8 | 100.4 | 82.5 |
| 13 | 103.1 | 104.6 | 104.8 ? | ? | ? | ? | ? | 104.1 ? | 99.5 | 86.8 | 83.3 | 95.3 | 100.9 | 104.3 ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | 98.7 ? |
| 14 | ? | ? | ? | ? | ? | ? | ? | ? | ? | 104.1 | 102.4 | 100.6 | 98.1 | 96.3 | 97.7 | 97.4 | 96.8 | 97.7 | 99 | 100.6 | 102.8 | 104.4 | 104.8 ? | 104.9 ? | 100.5 ? |
| 15 | 105 ? | 104.9 ? | 104.9 ? | 103.8 ? | 102.7 | 102 | 100.5 | 101.8 | 102.4 | 101 | 103.3 ? | 105 ? | 105 ? | ? | 101.9 | 95.7 | 89.2 | 94.5 | 98 | 97.6 | 80.7 | 78.2 | 79.7 | 81.7 | 97.4 ? |
| 16 | 82.7 | 85 | 86.1 | 87 | 88.7 | 90.4 | 91.4 | 86.5 | 78.6 | 69.8 | 60.9 | 56 | 52.8 | 53.3 | 53.2 | 54 | 57.8 | 67 | 72.8 | 78.5 | 80.9 | 83.7 | 88 | 84.2 | 74.5 |
| 17 | 90.4 | 97 | 103 | 103.4 | 100.8 | 96.6 | 87.5 | 82.6 | 65.3 | 50.9 | 41.7 | 40.1 | 38.8 | 37.6 | 36 | 36 | 39.6 | 51.3 | 63.5 | 64.8 | 68.2 | 73.9 | 76.7 | 80.2 | 67.7 |
| 18 | 84.2 | 84.3 | 83.9 | 83.3 | 87.9 | 95.2 | 94.1 | 83.6 | 79.9 | 76.3 | 68.8 | 55.4 | 46.6 | 49.8 | 77.3 | 66.1 | 69.1 | 79.9 | 71.5 | 75 | 83.3 | 87.7 | 92.3 | 96.8 | 78 |
| 19 | 99.4 | 100.5 | 99.5 | 102.6 | 104.4 | 104.1 | 104.8 ? | 104.9 ? | 103.1 | 99.2 | 92.1 | 80.5 | 77.6 | 75.6 | 73.6 | 78.4 | 82.7 | 89.4 | 95.8 | 95.2 | 100.9 | 102.1 | ? | ? | 93.9 ? |
| 20 | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | 104.9 ? | 104.3 | 104.7 ? | 104.8 ? | 104.8 ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | 104.7 ? |
| 21 | 104.7 | 104.7 | ? | ? | 104.8 ? | 104.3 | 104.8 | 103.8 | 102.4 | 100.8 | 98.9 | 96.5 | 97 | 97.9 | 96.6 | 96.3 | 99.2 | 98.2 | 99.6 | 98.6 | 95.9 | 97.1 | 97.3 | 97.3 | 99.8 ? |
| 22 | 97.5 | 97.5 | 98 | 97 | 96.9 | 97.1 | 97.8 | 98.9 | 97.6 | 93.2 | 90.4 | 90.4 | 86.2 | 85.7 | 84 | 85.9 | 95.1 | 93.8 | 88.1 | 82.4 | 83.2 | 85.9 | 88.3 | 89.8 | 91.7 |
| 23 | 92.7 | 95.9 | 99.9 | 101.4 | 101.9 | 102.2 | 103.6 | 100.6 | 94.6 | 82.4 | 73.4 | 67.8 | 59 | 54.7 | 55.8 | 56.7 | 60.9 | 70.3 | 78.8 | 83 | 91 | 94.8 | 97.6 | 96.2 | 84 |
| 24 | 97.2 | 99.2 | 98.8 | 97.6 | 96.5 | 95.9 | 95 | 97.4 | 101 | 102.5 | 102.4 | 101 | 98.7 | 96.3 | 98.5 | 99.1 | 99.9 | 101.4 | 104.2 | 104.9 ? | 104.9 ? | ? | ? | ? | 99.6 ? |
| 25 | ? | ? | ? | ? | ? | ? | ? | ? | 103.9 ? | 100.2 | 97.2 | 96.6 | 96.3 | 95.5 | 96 | 94.9 | 95.3 | 96.9 | 98.1 | 98.7 | 98.8 | 98.5 | 99.1 | 100.4 | 97.9 ? |
| 26 | 103.9 | 104.5 | 104.4 | 104.6 | 104.8 | ? | 104.7 | 103.4 | 96.8 | 89 | 84.1 | 76.9 | 74 | 67.8 | 66.2 | 64.2 | 69.3 | 88.2 | 96.9 | 99.1 | 101.5 | 104.4 | ? | ? | 90.9 ? |
| 27 | ? | ? | ? | ? | ? | ? | ? | ? | 100.3 | 88.8 | 79.4 | 76.7 | 75.6 | 74.2 | 69.6 | 71.1 | 75.6 | 85.5 | 94.3 | 97.3 | 94.4 | 90.9 | 90.3 | 93.4 | 84.8 ? |
| 28 | 94.6 | 95.5 | 94.7 | 94.3 | 94.8 | 97.8 | 100.9 | 98.7 | 87 | 78 | 73.1 | 72.6 | 73.1 | 72.5 | 71.2 | 73.6 | 80 | 87.8 | 94.1 | 97 | 98.8 | 100.5 | 101.9 | 102.4 | 88.9 |
| 29 | 102.2 | 104.1 | ? | ? | ? | ? | ? | ? | 100.7 | 89.1 | 81.8 | 81.3 | 78.8 | 72.4 | 72.2 | 79.2 | 83.3 | 88.3 | 91 | 90.6 | 95.5 | 99.2 | 101.1 | 101.8 | 89.6 ? |
| 30 | 102.9 | 103.9 | 104.9 ? | ? | ? | ? | ? | ? | 104.4 | 102.6 | 98.2 | 89.1 | 83.7 | 79.3 | 77.6 | 77.7 | 80 | 87.4 | 92 | 95.9 | 96.8 | 98.1 | 100.7 | 102.1 | 93.5 ? |
| 31 | 102.2 | 102.6 | 103.3 | 104 | 104.2 | 104.2 | 104.2 | 103.5 | 99.4 | 84.9 | 71.4 | 59 | 47.7 | 41.6 | 44.6 | 46.4 | 50.9 | 57.3 | 64.8 | 68.2 | 73.4 | 78.5 | 80.6 | 83.1 | 78.3 |
| Avg | 97.4 | 98.7 | 99.2 | 98.5 | 98.8 | 98.9 | 99.5 | 96.8 | 93.2 | 87.2 | 82.2 | 78.5 | 75.7 | 73.3 | 74 | 73.5 | 77.3 | 83.9 | 88.5 | 90.3 | 92 | 93.2 | 93.8 | 94.5 | 88.9 ? |
| S D | 7.5 | 6.6 | 6.6 | 7.2 | 6.5 | 5.8 | 6.4 | 8.4 | 11.1 | 12.9 | 15.5 | 17.1 | 18.7 | 18.8 | 18.4 | 17.1 | 16.4 | 13.6 | 11.8 | 10.8 | 9.9 | 9.1 | 8.5 | 8.3 | 9.2 |
| S/A | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.09 | 0.12 | 0.15 | 0.19 | 0.22 | 0.25 | 0.26 | 0.25 | 0.23 | 0.21 | 0.16 | 0.13 | 0.12 | 0.11 | 0.1 | 0.09 | 0.09 | 0.1 |
| Min | 82.7 | 84.3 | 83.9 | 83.3 | 85 | 83 | 81.3 | 73.1 | 65.3 | 50.9 | 41.7 | 40.1 | 38.8 | 37.6 | 36 | 36 | 39.6 | 51.3 | 63.5 | 64.8 | 68.2 | 73.9 | 76.7 | 80.2 | 67.7 |
| Max | 105 | 104.9 | 104.9 | 104.9 | 104.8 | 104.8 | 104.8 | 104.9 | 104.4 | 104.1 | 104.9 | 105 | 105 | 104.8 | 104.8 | 99.1 | 99.9 | 101.4 | 104.2 | 104.9 | 104.9 | 104.5 | 104.8 | 104.9 | 104.7 |
| n | 257 | 261 | 229 | 202 | 205 | 202 | 214 | 246 | 325 | 358 | 360 | 362 | 359 | 345 | 352 | 348 | 348 | 348 | 348 | 333 | 324 | 307 | 268 | 257 | 7162 |

Data Recovery: 0.0% missing; 19.8% failed QC -- 8928 total measurements.

Instrument: CSI HMP-35C Serial Number: P0520031 Calibration Factor: 0.10 %/mV Calibration Date: 01/1999

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Dry Bulb Temperature (CR10)
Hourly and Daily Averages
Instrument: CSI
Degrees Celsius

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 19.5 | 19.6 | 19.6 | 19.6 | 19.5 | 19.5 | 19.4 | 20.1 | 21.3 | 23.1 | 24.7 | 25.5 | 26.2 | 27 | 27 | 26.9 | 26 | 24.4 | 22.4 | 21.1 | 20.5 | 20.3 | 20.2 | 20.1 | 22.2 |
| 2 | 20 | 20.3 | 20.5 | 20.8 | 21 | 20.5 | 20.4 | 21.5 | 23.5 | 25.8 | 27.2 | 28.5 | 29 | 29.4 | 28.7 | 28.4 | 27.9 | 26.6 | 24.5 | 22.6 | 21.7 | 21.1 | 20.8 | 20.5 | 23.8 |
| 3 | 20.1 | 19.8 | 19.5 | 19.3 | 19 | 18.5 | 18.2 | 18.9 | 20.1 | 22.2 | 23.9 | 25.4 | 26.7 | 27.3 | 27.2 | 26.5 | 25 | 23.1 | 21.7 | 20.9 | 20.1 | 19.7 | 19.6 | 19.2 | 21.7 |
| 4 | 18.7 | 18.6 | 18.3 | 17.8 | 17.7 | 17.5 | 17.4 | 18 | 19 | 19.7 | 21.4 | 23.5 | 24.3 | 24 | 25 | 25.2 | 25.3 | 23.5 | 21.7 | 20.3 | 19.4 | 18.5 | 17.8 | 17.6 | 20.4 |
| 5 | 17.3 | 17.1 | 16.1 | 15.2 | 14.6 | 14.3 | 14.3 | 15.5 | 17.5 | 19.6 | 21.7 | 23.1 | 24 | 24.1 | 24 | 23.2 | 21.8 | 19.5 | 17.3 | 15.8 | 14.8 | 14.4 | 14.1 | 13.5 | 18 |
| 6 | 13 | 12.6 | 12.2 | 11.8 | 11.5 | 11.2 | 11 | 12.5 | 15.3 | 17.9 | 19.7 | 21 | 21.6 | 22.1 | 22.7 | 23.2 | 22.6 | 20.6 | 17 | 14.3 | 12.4 | 11.3 | 10.4 | 9.3 | 15.7 |
| 7 | 8.2 | 7.6 | 7.3 | 6.7 | 6.2 | 6.1 | 6.4 | 8.4 | 12.6 | 16.9 | 20.3 | 22.9 | 24.6 | 25 | 25.3 | 25.5 | 25.1 | 23 | 19.4 | 17 | 15 | 13 | 11.7 | 11.2 | 15.2 |
| 8 | 10.6 | 10.4 | 10.4 | 10.2 | 10 | 9.9 | 10.2 | 12.1 | 15.7 | 19.7 | 23.1 | 25.4 | 26.7 | 27 | 26.8 | 26.5 | 25.7 | 23.4 | 20.1 | 17.9 | 16.9 | 16.2 | 15.8 | 15 | 17.7 |
| 9 | 14.2 | 13.8 | 13.8 | 13.7 | 13.4 | 13.1 | 12.9 | 13.3 | 16.6 | 20.9 | 24.7 | 27.4 | 28 | 28.5 | 28.1 | 27 | 25.4 | 23.3 | 21.2 | 19.7 | 18.9 | 18.2 | 17.7 | 17.5 | 19.6 |
| 10 | 17 | 16.8 | 16.7 | 16.2 | 15.9 | 15.7 | 15.7 | 16.3 | 17.9 | 21.4 | 24.7 | 27 | 27.7 | 27.8 | 27.4 | 27 | 26 | 23.8 | 20.6 | 18.4 | 16.9 | 15.7 | 15 | 14.7 | 20.1 |
| 11 | 14.6 | 14.3 | 13.4 | 12.6 | 12.2 | 12.3 | 11.8 | 11.5 | 13.1 | 16.1 | 17.9 | 18.9 | 19.8 | 21 | 21.2 | 21.7 | 21.2 | 19.2 | 15.7 | 13.4 | 11.6 | 10.2 | 9.2 | 8.6 | 15.1 |
| 12 | 8.3 | 7.9 | 7.5 | 7.3 | 7.2 | 7 | 6.9 | 8.3 | 11.5 | 15.3 | 18.7 | 21 | 22.3 | 23 | 23.6 | 24.3 | 24.6 | 23.2 | 19.9 | 17.8 | 16.5 | 15.6 | 14.6 | 13.3 | 15.2 |
| 13 | 12.4 | 11.6 | 11.8 | 11.9 | 11.3 | 11.2 | 11.5 | 13.3 | 15.6 | 18.8 | 21.4 | 21 | 19.7 | 19.1 | 19 | 19.1 | 19.5 | 19.6 | 19.4 | 19.2 | 19.2 | 19.3 | 19.6 | 19.7 | 16.8 |
| 14 | 19.6 | 19.8 | 19.9 | 19.7 | 18.8 | 17.8 | 17.2 | 16.6 | 16.2 | 16.3 | 16.6 | 17.2 | 18 | 19.1 | 19 | 18.5 | 18.4 | 18.1 | 17.6 | 16.9 | 15.8 | 14.9 | 14.5 | 14.4 | 17.5 |
| 15 | 14.7 | 15.1 | 15.6 | 16 | 16.3 | 16.2 | 16.4 | 16.6 | 16.8 | 17 | 17.4 | 17.5 | 17.7 | 17.8 | 17.6 | 17.9 | 19.1 | 18.8 | 16.8 | 15.7 | 15.5 | 14.9 | 13.6 | 12.3 | 16.4 |
| 16 | 11.4 | 10.7 | 10.4 | 10.1 | 9.8 | 9.3 | 8.9 | 10 | 12.7 | 15.4 | 17.7 | 19.2 | 20.1 | 20.8 | 21.4 | 21.8 | 21.7 | 20.3 | 17.9 | 16.9 | 16.3 | 15.5 | 14.6 | 13.9 | 15.3 |
| 17 | 12.7 | 10.7 | 9.1 | 8 | 7.3 | 7.2 | 7.1 | 8.8 | 12.1 | 14.9 | 17.1 | 18.4 | 19.3 | 19.9 | 20.4 | 20.9 | 20.9 | 19.4 | 15.7 | 13.5 | 12.6 | 11.9 | 11.4 | 11.1 | 13.8 |
| 18 | 10.6 | 10.6 | 10.7 | 10.5 | 10.1 | 9.1 | 7.9 | 9.3 | 13.4 | 17.3 | 20.3 | 21.6 | 23.5 | 24.4 | 23.5 | 22.3 | 22.1 | 20.7 | 19.7 | 19.5 | 18.9 | 18.1 | 18 | 18.7 | 16.7 |
| 19 | 19.1 | 19.2 | 19.3 | 19.4 | 19.3 | 19.5 | 19.7 | 20 | 22.9 | 24.6 | 26.6 | 28.5 | 28.9 | 28.9 | 28.2 | 26.8 | 25.3 | 24 | 23.3 | 22.6 | 21.6 | 20.4 | 19.7 | 22.9 | |
| 20 | 19.4 | 19.2 | 19.1 | 18.9 | 18.9 | 18.8 | 18.5 | 18 | 17.6 | 17.4 | 17.9 | 18.7 | 18.9 | 19.1 | 18.9 | 18.4 | 18 | 17.5 | 17.2 | 17.1 | 17 | 17 | 16.9 | 18.1 | |
| 21 | 16.8 | 16.7 | 16.6 | 16.5 | 16.4 | 16.3 | 16.3 | 16.5 | 17 | 17.6 | 18.4 | 19.3 | 19.8 | 19.3 | 18.9 | 18.5 | 17.8 | 17.1 | 16.7 | 16.3 | 16.2 | 16 | 15.7 | 15.5 | 17.2 |
| 22 | 15.3 | 15.2 | 15 | 14.9 | 14.8 | 14.7 | 14.6 | 14.3 | 14.3 | 15 | 16.2 | 16.6 | 17.3 | 17.6 | 17.7 | 17.3 | 16.2 | 14.9 | 14.4 | 14.3 | 14.1 | 13.8 | 13.6 | 13.4 | 15.2 |
| 23 | 12.7 | 11.7 | 11 | 10.4 | 10 | 9.6 | 9.3 | 9.8 | 12.5 | 15.3 | 17.6 | 18.7 | 19.6 | 20 | 20.1 | 19.7 | 18.6 | 16 | 13 | 11.1 | 9.5 | 8.5 | 8.1 | 8.1 | 13.4 |
| 24 | 8.5 | 8.2 | 8 | 8.6 | 9.1 | 9.3 | 9.7 | 10.1 | 10.3 | 10.6 | 11 | 11.3 | 11.3 | 11.5 | 11.9 | 11.7 | 11.6 | 11.7 | 11.6 | 11.5 | 10.9 | 9.9 | 9.6 | 9.4 | 10.3 |
| 25 | 9.3 | 9.1 | 8.9 | 9.4 | 10 | 10.3 | 10.3 | 10.5 | 11 | 12 | 13.4 | 14.2 | 14.5 | 14.8 | 14.9 | 14.8 | 14.5 | 14.2 | 13.8 | 13.5 | 13.3 | 13.2 | 13.2 | 13.1 | 12.3 |
| 26 | 12 | 11.7 | 11.8 | 11.5 | 11.7 | 11.7 | 11.8 | 11.9 | 13.2 | 15.8 | 18.3 | 20.1 | 20.8 | 21.1 | 21.3 | 21.3 | 20.7 | 18.4 | 15.3 | 13.4 | 12.2 | 11 | 10 | 9.3 | 14.9 |
| 27 | 8.9 | 8.6 | 8.7 | 8.7 | 8.5 | 8.2 | 8.3 | 8.6 | 10.8 | 14.1 | 17.3 | 19.3 | 19.7 | 20.1 | 20.8 | 21.5 | 20.9 | 18 | 15.4 | 14 | 13.2 | 13.5 | 13.8 | 13.9 | 13.9 |
| 28 | 13.8 | 13.7 | 13.5 | 13.2 | 13.1 | 12.7 | 11.7 | 11.5 | 14 | 17.6 | 20.1 | 21.7 | 22 | 22.3 | 22.5 | 22.1 | 20.8 | 17.8 | 15 | 13.6 | 12.9 | 12.1 | 11.5 | 11.7 | 15.9 |
| 29 | 12.1 | 12.2 | 11.5 | 10.9 | 11.1 | 11.3 | 11.3 | 11.6 | 13.2 | 16 | 18.4 | 19.7 | 19.7 | 19.7 | 19.6 | 19.4 | 19 | 18.3 | 17.8 | 17.6 | 17.1 | 16.8 | 17 | 17.2 | 15.8 |
| 30 | 17.3 | 17.4 | 17.4 | 17.3 | 17.4 | 17.5 | 17.6 | 17.8 | 18.2 | 18.9 | 20 | 23 | 25.8 | 27.4 | 28.3 | 28.2 | 27.7 | 25.9 | 24 | 23 | 22.1 | 21.7 | 21.3 | 20.6 | 21.5 |
| 31 | 20.5 | 20.4 | 20.4 | 20.3 | 20 | 19.7 | 19.4 | 19.4 | 20.4 | 22.9 | 25.6 | 27.6 | 28.6 | 29 | 29.1 | 29.7 | 29.1 | 27.2 | 24.7 | 23 | 22.3 | 21.4 | 20.6 | 20.1 | 23.4 |
| Avg | 14.5 | 14.2 | 14 | 13.8 | 13.6 | 13.4 | 13.3 | 13.9 | 15.6 | 17.9 | 19.9 | 21.3 | 22.1 | 22.5 | 22.6 | 22.5 | 21.9 | 20.4 | 18.4 | 17.2 | 16.3 | 15.7 | 15.2 | 14.8 | 17.3 |
| S D | 4 | 4.2 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4 | 3.5 | 3.4 | 3.7 | 4.1 | 4.4 | 4.5 | 4.4 | 4.4 | 4.2 | 3.8 | 3.5 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 3.4 |
| S/A | 0.28 | 0.29 | 0.31 | 0.32 | 0.32 | 0.32 | 0.33 | 0.29 | 0.22 | 0.19 | 0.18 | 0.19 | 0.2 | 0.2 | 0.2 | 0.19 | 0.19 | 0.19 | 0.19 | 0.2 | 0.22 | 0.24 | 0.25 | 0.26 | 0.2 |
| Min | 8.2 | 7.6 | 7.3 | 6.7 | 6.2 | 6.1 | 6.4 | 8.3 | 10.3 | 10.6 | 11 | 11.3 | 11.3 | 11.5 | 11.9 | 11.7 | 11.6 | 11.7 | 11.6 | 11.1 | 9.5 | 8.5 | 8.1 | 8.1 | 10.3 |
| Max | 20.5 | 20.4 | 20.5 | 20.8 | 21 | 20.5 | 20.4 | 21.5 | 23.5 | 25.8 | 27.2 | 28.5 | 29 | 29.4 | 29.1 | 29.7 | 29.1 | 27.2 | 24.7 | 23.3 | 22.6 | 21.7 | 21.3 | 20.6 | 23.8 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI Serial Number: Internal Temp Calibration Factor: N/A Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Wind Speed
Hourly and Daily Averages
Instrument: NRG MAX-40
Meters per Second

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|-----|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 0.9 | 1.2 | 1.1 | 0.9 | 1.4 | 1.6 | 2 | 1.9 | 2.4 | 3.4 | 3.5 | 3.8 | 3.8 | 4 | 3.3 | 3.1 | 3.2 | 2.6 | 2.5 | 2.1 | 2.1 | 2.3 | 2.4 | 1.9 | 2.4 |
| 2 | 2.4 | 2.1 | 1.6 | 1.7 | 1.5 | 1.6 | 2 | 2 | 2.5 | 3.5 | 3.8 | 4.2 | 3.6 | 3 | 4.2 | 3.2 | 2.4 | 2.4 | 2.3 | 2 | 1.2 | 1 | 0.6 | 0.8 | 2.3 |
| 3 | 0.7 | 0.6 | 0.8 | 0.6 | 0.2 | 0.3 | 0.8 | 1.3 | 1.7 | 2 | 2.8 | 2.6 | 2.5 | 3 | 2.9 | 3.2 | 3.4 | 2.3 | 1.3 | 1.7 | 1.7 | 1.8 | 1.9 | 1.8 | 1.7 |
| 4 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 | 0.8 | 1.1 | 1.3 | 1.7 | 1.7 | 1.6 | 1.7 | 1.6 | 1.2 | 1.6 | 1.8 | 2.6 | 2.1 | 1.3 | 1.1 | 0.3 | 0 | 0.3 | 0.3 | 1.1 |
| 5 | 0.5 | 0 | 0 | 0 | 0.7 | 1.6 | 2.4 | 3.9 | 4 | 4 | 4.1 | 4.1 | 3.5 | 3.7 | 4.1 | 3.2 | 2.6 | 2.4 | 1.9 | 1.7 | 2.1 | 2.3 | 2.1 | 1.9 | 2.4 |
| 6 | 2.2 | 1.9 | 1.7 | 2.1 | 2.4 | 2.4 | 1.9 | 2.5 | 2.9 | 3.2 | 3.6 | 3.8 | 3.4 | 2.5 | 2.1 | 2.1 | 2.3 | 2 | 1.5 | 0.8 | 0.8 | 0.5 | 0.1 | 0.1 | 2 |
| 7 | 0.2 | 0.6 | 0.4 | 0.1 | 0.5 | 0.9 | 0.8 | 1.2 | 1.9 | 2.5 | 2.5 | 2.2 | 2.5 | 2.4 | 2.6 | 2 | 2.3 | 2.5 | 2.2 | 1.3 | 0.2 | 0.1 | 0.1 | 0.1 | 1.3 |
| 8 | 0.4 | 0.8 | 0.3 | 0 | 0.4 | 0.4 | 0.4 | 0.5 | 1.2 | 2 | 2.6 | 2.8 | 3.1 | 3.4 | 3.6 | 2.8 | 2.5 | 1.9 | 0.7 | 1.3 | 0.8 | 1 | 0.6 | 0.3 | 1.4 |
| 9 | 0.5 | 0.6 | 0.7 | 0.2 | 0.1 | 0.2 | 0 | 0 | 0.7 | 0.9 | 1.2 | 0.5 | 0.9 | 1.7 | 2.4 | 2.2 | 1.8 | 1.5 | 0.8 | 0.3 | 0.2 | 0 | 0 | 0 | 0.7 |
| 10 | 0.3 | 0 | 0.1 | 0.4 | 0.1 | 0.3 | 0.8 | 0.7 | 0.6 | 1.5 | 1.7 | 3.3 | 3.5 | 4.3 | 3.6 | 3.3 | 2.3 | 1.8 | 1.5 | 1.4 | 1.2 | 1 | 1.9 | 2.4 | 1.6 |
| 11 | 3.1 | 1.9 | 1.7 | 2.4 | 2 | 1 | 1.2 | 1.4 | 2.4 | 2.3 | 2.6 | 2.9 | 2.2 | 2.3 | 2 | 2.1 | 1.8 | 1.7 | 1.7 | 0.8 | 0.3 | 0.3 | 0.6 | 1.1 | 1.7 |
| 12 | 0.9 | 0.9 | 1.7 | 2 | 1.8 | 1.8 | 1.9 | 1.8 | 1.8 | 2.2 | 2.9 | 2.9 | 3.7 | 3.7 | 3.5 | 2.8 | 2.2 | 1.2 | 1.7 | 1.5 | 1.5 | 1.3 | 0.7 | 0.4 | 1.9 |
| 13 | 0.5 | 0.5 | 0.5 | 0 | 0.2 | 0 | 0.6 | 0.7 | 2.3 | 3.1 | 4.2 | 3.1 | 2.9 | 3 | 4.1 | 2.6 | 2.4 | 2.2 | 2.2 | 1.6 | 0.4 | 0.6 | 0.8 | 1.2 | 1.7 |
| 14 | 0.4 | 1.2 | 1.4 | 3 | 2.9 | 2.6 | 2.5 | 2.3 | 2.5 | 2.9 | 2.5 | 3.4 | 3.1 | 2.6 | 2.3 | 2.3 | 2.5 | 1.9 | 1.1 | 1 | 0.3 | 0.3 | 0.7 | 1 | 1.9 |
| 15 | 1.4 | 1.3 | 1 | 1.3 | 1.1 | 1.4 | 2.1 | 1.1 | 1.3 | 1.3 | 1.1 | 2.2 | 1.7 | 2.7 | 2.6 | 3.1 | 3.1 | 1.9 | 2 | 3.1 | 4.7 | 4.6 | 3.7 | 2.7 | 2.2 |
| 16 | 2.5 | 3.5 | 3.3 | 3.2 | 3 | 2.1 | 2.1 | 2.6 | 3.3 | 4.1 | 5.3 | 5.5 | 5.2 | 4.5 | 4.7 | 4.9 | 3.3 | 2.1 | 2.1 | 2.5 | 2.5 | 2 | 1.7 | 1.8 | 3.2 |
| 17 | 0.9 | 0.4 | 0.5 | 0.8 | 1.3 | 1.5 | 1.9 | 2.2 | 3.7 | 4.5 | 5.1 | 5.4 | 4.8 | 5.3 | 5.1 | 4.6 | 3.1 | 1 | 1.1 | 1.4 | 1.3 | 1.3 | 1.3 | 0.9 | 2.5 |
| 18 | 1.2 | 1.4 | 1.2 | 1.3 | 1.1 | 0.1 | 0.3 | 0.7 | 2 | 1.9 | 1.8 | 2.8 | 2.6 | 2.2 | 2.1 | 2.7 | 2.3 | 1.9 | 2 | 2 | 1.7 | 1.7 | 2.4 | 2.6 | 1.8 |
| 19 | 2.6 | 2.2 | 2.3 | 2.1 | 2.6 | 3.4 | 2.2 | 1.8 | 3.2 | 4.3 | 4.2 | 4.2 | 4.2 | 4.5 | 3.8 | 2.2 | 1.3 | 1.9 | 2.2 | 2.3 | 2.4 | 2.6 | 1.6 | 1.5 | 2.7 |
| 20 | 0.6 | 0.4 | 0.3 | 0.2 | 0.4 | 2 | 1.5 | 2.2 | 2.2 | 2.3 | 1.9 | 2.3 | 2.3 | 2.3 | 2.4 | 2.6 | 2.7 | 2.6 | 2.1 | 2.1 | 2 | 2.1 | 2.4 | 2.2 | 1.8 |
| 21 | 1.1 | 1.2 | 1.1 | 1.7 | 1.8 | 1.5 | 1.4 | 1.8 | 2.1 | 2.3 | 3 | 3.5 | 3.3 | 2.7 | 2.8 | 2.9 | 2.5 | 3 | 2.7 | 2.2 | 2.6 | 2 | 2 | 2.2 | 2.2 |
| 22 | 2 | 2.1 | 2.3 | 3 | 2.6 | 2.7 | 2.6 | 2.7 | 3.1 | 3.2 | 3.8 | 3.3 | 3.8 | 4 | 3.7 | 4.2 | 3.9 | 2.9 | 2.9 | 3 | 2.8 | 3.3 | 3 | 2.7 | 3.1 |
| 23 | 2.6 | 2.3 | 1.7 | 1.8 | 2 | 2.2 | 1.5 | 2.7 | 3.6 | 3.7 | 4 | 4 | 3.7 | 3.6 | 3.7 | 3.6 | 3.4 | 2.2 | 1.4 | 0.7 | 0.6 | 1 | 1.1 | 1.7 | 2.5 |
| 24 | 1.1 | 1.1 | 1.2 | 0.8 | 0.6 | 0.9 | 0.8 | 0.6 | 0.5 | 0.7 | 1 | 0.9 | 1.9 | 0.9 | 0.5 | 0.5 | 0.2 | 0.5 | 0.8 | 0.5 | 0.3 | 0.5 | 0.6 | 0.3 | 0.7 |
| 25 | 0.7 | 0.7 | 0.8 | 0.6 | 0.1 | 0.4 | 0.6 | 0.3 | 0.3 | 0.8 | 1.4 | 1.9 | 1.6 | 2.1 | 1.7 | 2.2 | 1.5 | 1.5 | 1 | 1.3 | 0.7 | 0.8 | 0.8 | 0.3 | 1 |
| 26 | 1.1 | 1.3 | 1.4 | 1.4 | 0.9 | 1 | 1.2 | 1.3 | 1.6 | 2 | 2.5 | 2.7 | 2.6 | 3.2 | 2.8 | 2.9 | 2.3 | 1.6 | 0.9 | 0.6 | 0.1 | 0 | 0 | 0.1 | 1.5 |
| 27 | 0.3 | 0.7 | 0.8 | 0.7 | 0.1 | 0.2 | 0.1 | 0.3 | 1.3 | 1.9 | 2 | 1.4 | 1.1 | 1.6 | 1.6 | 1.5 | 1.5 | 1.3 | 1.1 | 0.9 | 1.1 | 0.2 | 0.9 | 1.1 | 1 |
| 28 | 0.8 | 1.3 | 1.1 | 1.5 | 1.5 | 0.9 | 0.4 | 0.9 | 1.6 | 2.8 | 2.6 | 2.4 | 2.2 | 2.3 | 2.5 | 2.5 | 2.4 | 1.6 | 1.3 | 1.5 | 1.2 | 0.5 | 1.4 | 0.4 | 1.6 |
| 29 | 0 | 0.2 | 0.2 | 0.2 | 0 | 0 | 0 | 0 | 0.1 | 0.8 | 1.1 | 1.3 | 1.4 | 1.4 | 1.1 | 1 | 1.6 | 1.4 | 1.7 | 1.5 | 1.7 | 2.6 | 2.6 | 2.4 | 1 |
| 30 | 2.5 | 3.2 | 2.9 | 2.5 | 2.7 | 2.5 | 2.8 | 3.1 | 3.2 | 3.9 | 3.1 | 3.8 | 4 | 3.7 | 3.6 | 3.5 | 2.4 | 2.3 | 3.3 | 3.2 | 4.1 | 3.9 | 2.3 | 3.4 | 3.2 |
| 31 | 3.9 | 3.6 | 3.5 | 3.2 | 3.3 | 3.4 | 3.4 | 3.6 | 3.8 | 3.8 | 4.2 | 5.5 | 5.7 | 5.1 | 4.8 | 4.9 | 2.9 | 1.5 | 1.3 | 2.1 | 1.9 | 1.5 | 1.6 | 2.2 | 3.4 |
| Avg | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 | 1.3 | 1.4 | 1.6 | 2.1 | 2.6 | 2.8 | 3 | 3 | 3 | 3 | 2.8 | 2.4 | 1.9 | 1.7 | 1.6 | 1.4 | 1.4 | 1.4 | 1.4 | 1.9 |
| SD | 1 | 1 | 0.9 | 1 | 1 | 1 | 0.9 | 1 | 1.1 | 1.1 | 1.2 | 1.3 | 1.2 | 1.1 | 1.1 | 1 | 0.7 | 0.6 | 0.7 | 0.8 | 1.1 | 1.2 | 1 | 1 | 0.7 |
| S/A | 0.8 | 0.75 | 0.74 | 0.8 | 0.81 | 0.74 | 0.64 | 0.64 | 0.51 | 0.43 | 0.42 | 0.41 | 0.39 | 0.37 | 0.38 | 0.36 | 0.31 | 0.28 | 0.39 | 0.47 | 0.78 | 0.84 | 0.71 | 0.72 | 0.38 |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.7 | 1 | 0.5 | 0.9 | 0.9 | 0.5 | 0.5 | 0.2 | 0.5 | 0.7 | 0.3 | 0.1 | 0 | 0 | 0 | 0.7 |
| Max | 3.9 | 3.6 | 3.5 | 3.2 | 3.3 | 3.4 | 3.4 | 3.9 | 4 | 4.5 | 5.3 | 5.5 | 5.7 | 5.3 | 5.1 | 4.9 | 3.9 | 3 | 3.3 | 3.2 | 4.7 | 4.6 | 3.7 | 3.4 | 3.4 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40 Serial Number: 0 Calibration Factor: 0.76171 m/s/mV Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Wind Direction
Hourly and Daily Averages
Instrument: NRG Vane
Degrees from North

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1 | 57 | 64 | 59 | 70 | 63 | 52 | 64 | 71 | 72 | 77 | 81 | 79 | 85 | 90 | 93 | 81 | 93 | 82 | 77 | 76 | 78 | 82 | 84 | 93 | 79 |
| 2 | 98 | 104 | 104 | 97 | 81 | 88 | 102 | 102 | 116 | 143 | 148 | 155 | 163 | 167 | 159 | 160 | 145 | 69 | 34 | 88 | 154 | 182 | 228 | 280 | 130 |
| 3 | 288 | 285 | 295 | 296 | 287 | 301 | 326 | 356 | 359 | 25 | 37 | 28 | 36 | 55 | 38 | 56 | 61 | 54 | 44 | 44 | 62 | 61 | 65 | 74 | 39 |
| 4 | 69 | 103 | 321 | 343 | 38 | 12 | 42 | 61 | 50 | 69 | 105 | 121 | 115 | 105 | 78 | 85 | 119 | 113 | 117 | 112 | 160 | 146 | 215 | 218 | 93 |
| 5 | 225 | 265 | 246 | 245 | 288 | 310 | 339 | 355 | 8 | 21 | 26 | 33 | 35 | 33 | 45 | 38 | 14 | 5 | 344 | 332 | 332 | 346 | 351 | 347 | 10 |
| 6 | 360 | 355 | 354 | 1 | 357 | 0 | 349 | 359 | 17 | 16 | 22 | 12 | 360 | 3 | 356 | 23 | 18 | 42 | 49 | 52 | 45 | 27 | 345 | 290 | 10 |
| 7 | 302 | 309 | 303 | 298 | 303 | 303 | 312 | 331 | 336 | 4 | 35 | 43 | 63 | 66 | 40 | 45 | 65 | 73 | 75 | 64 | 272 | 308 | 13 | 354 | 35 |
| 8 | 307 | 323 | 324 | 341 | 315 | 346 | 351 | 352 | 354 | 54 | 68 | 69 | 67 | 92 | 88 | 79 | 72 | 65 | 43 | 54 | 46 | 40 | 56 | 332 | 61 |
| 9 | 316 | 353 | 27 | 29 | 316 | 307 | 305 | 334 | 27 | 45 | 61 | 69 | 75 | 42 | 90 | 63 | 58 | 68 | 67 | 15 | 11 | 47 | 14 | 0 | 55 |
| 10 | 314 | 271 | 243 | 277 | 314 | 291 | 280 | 283 | 306 | 334 | 351 | 1 | 348 | 358 | 355 | 15 | 3 | 4 | 0 | 349 | 322 | 323 | 327 | 344 | |
| 11 | 356 | 344 | 318 | 338 | 326 | 283 | 299 | 323 | 331 | 355 | 344 | 335 | 327 | 337 | 329 | 338 | 351 | 1 | 20 | 37 | 65 | 227 | 249 | 269 | 337 |
| 12 | 274 | 279 | 266 | 264 | 265 | 263 | 270 | 272 | 290 | 289 | 310 | 289 | 280 | 265 | 268 | 267 | 275 | 265 | 243 | 240 | 242 | 238 | 235 | 285 | 271 |
| 13 | 228 | 225 | 230 | 237 | 237 | 20 | 54 | 75 | 102 | 100 | 101 | 113 | 87 | 110 | 96 | 83 | 66 | 54 | 64 | 67 | 68 | 108 | 154 | 219 | 94 |
| 14 | 210 | 215 | 247 | 266 | 255 | 265 | 270 | 269 | 268 | 260 | 265 | 260 | 270 | 280 | 267 | 256 | 267 | 266 | 240 | 218 | 147 | 152 | 129 | 120 | 259 |
| 15 | 128 | 147 | 164 | 159 | 184 | 166 | 170 | 163 | 131 | 140 | 213 | 228 | 182 | 138 | 163 | 206 | 220 | 214 | 212 | 229 | 266 | 267 | 265 | 242 | 208 |
| 16 | 240 | 235 | 242 | 245 | 241 | 248 | 246 | 241 | 226 | 222 | 221 | 221 | 216 | 212 | 206 | 218 | 207 | 205 | 204 | 206 | 211 | 251 | 246 | 281 | 226 |
| 17 | 294 | 304 | 200 | 224 | 233 | 219 | 223 | 242 | 262 | 264 | 265 | 262 | 249 | 245 | 246 | 250 | 240 | 219 | 211 | 213 | 210 | 212 | 209 | 213 | 245 |
| 18 | 219 | 220 | 232 | 241 | 238 | 330 | 266 | 63 | 80 | 109 | 122 | 127 | 141 | 130 | 88 | 111 | 116 | 117 | 145 | 133 | 145 | 147 | 162 | 165 | 138 |
| 19 | 163 | 173 | 170 | 163 | 162 | 184 | 199 | 191 | 202 | 215 | 218 | 219 | 220 | 224 | 221 | 216 | 194 | 152 | 167 | 185 | 187 | 255 | 252 | 247 | 202 |
| 20 | 260 | 280 | 274 | 293 | 274 | 343 | 338 | 334 | 336 | 339 | 356 | 351 | 342 | 343 | 348 | 344 | 342 | 334 | 356 | 15 | 20 | 26 | 38 | 48 | 352 |
| 21 | 357 | 343 | 345 | 341 | 342 | 347 | 344 | 341 | 344 | 359 | 22 | 32 | 33 | 26 | 23 | 21 | 13 | 15 | 7 | 22 | 9 | 353 | 347 | 338 | 6 |
| 22 | 337 | 342 | 333 | 343 | 349 | 359 | 357 | 346 | 347 | 3 | 359 | 357 | 17 | 25 | 20 | 23 | 27 | 10 | 1 | 353 | 334 | 338 | 338 | 335 | 358 |
| 23 | 332 | 324 | 301 | 299 | 322 | 330 | 315 | 337 | 345 | 8 | 14 | 356 | 0 | 351 | 357 | 357 | 4 | 5 | 4 | 325 | 305 | 298 | 296 | 325 | 345 |
| 24 | 311 | 315 | 320 | 323 | 323 | 328 | 307 | 301 | 295 | 287 | 319 | 309 | 324 | 317 | 315 | 285 | 302 | 284 | 292 | 304 | 299 | 283 | 288 | 314 | 310 |
| 25 | 307 | 308 | 309 | 331 | 317 | 272 | 282 | 296 | 307 | 336 | 347 | 352 | 324 | 336 | 330 | 348 | 352 | 336 | 326 | 313 | 305 | 316 | 306 | 302 | 329 |
| 26 | 288 | 291 | 298 | 308 | 304 | 308 | 315 | 318 | 331 | 320 | 354 | 11 | 354 | 352 | 6 | 350 | 11 | 50 | 36 | 32 | 35 | 0 | 0 | 299 | 344 |
| 27 | 289 | 286 | 283 | 294 | 306 | 303 | 299 | 321 | 349 | 331 | 346 | 356 | 330 | 347 | 11 | 11 | 29 | 47 | 43 | 26 | 14 | 351 | 360 | 349 | |
| 28 | 348 | 351 | 358 | 354 | 350 | 354 | 324 | 350 | 24 | 48 | 54 | 44 | 38 | 59 | 58 | 55 | 64 | 60 | 68 | 61 | 60 | 71 | 66 | 52 | 41 |
| 29 | 20 | 279 | 283 | 25 | 23 | 303 | 284 | 283 | 120 | 171 | 154 | 165 | 210 | 203 | 202 | 195 | 190 | 187 | 198 | 213 | 218 | 223 | 225 | 229 | 206 |
| 30 | 225 | 228 | 232 | 235 | 233 | 231 | 232 | 235 | 240 | 239 | 236 | 235 | 231 | 221 | 214 | 218 | 205 | 210 | 222 | 225 | 222 | 220 | 206 | 220 | 226 |
| 31 | 218 | 221 | 226 | 224 | 228 | 225 | 230 | 231 | 240 | 260 | 255 | 256 | 254 | 257 | 256 | 260 | 252 | 241 | 218 | 226 | 224 | 217 | 219 | 228 | 240 |
| Avg | 285 | 276 | 273 | 285 | 281 | 290 | 290 | 313 | 329 | 345 | 0 | 341 | 339 | 352 | 20 | 7 | 35 | 42 | 41 | 39 | 270 | 276 | 282 | 277 | 329 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG Vane Serial Number: 0 Calibration Factor: 0.1408 deg/mV Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Peak Wind Speed (1-Minute Gust)
Hourly and Daily Averages
Instrument: NRG MAX-40
Meters per Second

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 1.6 | 1.8 | 2 | 1.5 | 2.3 | 2.6 | 3.2 | 3.4 | 4.3 | 5.6 | 5.9 | 6.2 | 6.2 | 6.2 | 5.5 | 4.9 | 5.2 | 4.5 | 3.9 | 3.4 | 3.4 | 3.8 | 4 | 3.3 | 3.9 |
| 2 | 3.9 | 3.4 | 2.7 | 2.7 | 2.3 | 2.5 | 3.1 | 3.3 | 4 | 5.8 | 6.2 | 7.1 | 5.7 | 5.1 | 6.8 | 5.1 | 4.3 | 3.9 | 3.8 | 3.1 | 2.1 | 2.3 | 1.3 | 1.7 | 3.8 |
| 3 | 1.7 | 2 | 2.5 | 2 | 1.1 | 1.3 | 2.4 | 2.9 | 3.5 | 4.1 | 5.1 | 4.7 | 4.4 | 5 | 5.1 | 5.4 | 5.5 | 3.8 | 2.8 | 2.9 | 2.9 | 3.5 | 3.4 | 3 | 3.4 |
| 4 | 1.1 | 0.7 | 0.6 | 0.7 | 0.7 | 1.4 | 2 | 2.3 | 2.9 | 3.3 | 2.9 | 2.8 | 2.7 | 2.3 | 2.6 | 2.9 | 3.9 | 3.4 | 2 | 1.8 | 0.9 | 0.3 | 0.5 | 0.8 | 1.9 |
| 5 | 1 | 0.3 | 0.3 | 0 | 1.6 | 3.2 | 4.8 | 6.7 | 7.5 | 7.8 | 7.6 | 7.4 | 6.5 | 6.6 | 7 | 6 | 4.8 | 4.3 | 3.4 | 3.1 | 3.8 | 4 | 3.9 | 3.3 | 4.4 |
| 6 | 3.7 | 3.3 | 3 | 3.6 | 4 | 4.2 | 3.3 | 4.4 | 5.3 | 5.7 | 6.1 | 6.8 | 6 | 4.7 | 4.2 | 4 | 4.2 | 3.5 | 2.7 | 1.2 | 1.2 | 0.9 | 0.6 | 0.3 | 3.6 |
| 7 | 0.6 | 1 | 0.8 | 0.5 | 1 | 1.4 | 1.5 | 2.4 | 3.4 | 4.4 | 4.5 | 4.1 | 4.4 | 4.4 | 4.3 | 3.5 | 3.7 | 3.8 | 3.2 | 2.2 | 0.5 | 0.3 | 0.3 | 0.2 | 2.3 |
| 8 | 0.8 | 1.2 | 0.6 | 0.1 | 0.8 | 0.7 | 1 | 1.2 | 2.1 | 3.5 | 4.6 | 5 | 5 | 5.2 | 5.8 | 4.6 | 4.2 | 3.1 | 1.3 | 1.9 | 1.4 | 1.7 | 1.1 | 0.5 | 2.4 |
| 9 | 1 | 1 | 1.3 | 0.5 | 0.4 | 0.7 | 0.4 | 0.2 | 1.4 | 1.8 | 2.3 | 1.4 | 1.8 | 2.9 | 3.9 | 3.6 | 3 | 2.5 | 1.4 | 0.9 | 0.7 | 0.2 | 0.1 | 0 | 1.4 |
| 10 | 0.6 | 0.1 | 0.4 | 1.1 | 0.5 | 1.1 | 2 | 2.2 | 2.1 | 3.2 | 3.4 | 5.7 | 6.2 | 7 | 6.3 | 5.8 | 4.3 | 3.1 | 2.4 | 2.4 | 1.8 | 1.9 | 3.2 | 4.1 | 3 |
| 11 | 5.4 | 3.3 | 3.2 | 4 | 3.7 | 2.1 | 2.4 | 3.2 | 4.6 | 4.3 | 4.9 | 5.5 | 4.8 | 4.5 | 4.1 | 4 | 3.5 | 3 | 3.1 | 1.7 | 0.7 | 0.5 | 0.9 | 1.6 | 3.3 |
| 12 | 1.5 | 1.6 | 2.5 | 2.7 | 2.5 | 2.6 | 3 | 3.3 | 3.6 | 4.3 | 5.4 | 5.8 | 6.9 | 7 | 6.5 | 5.1 | 3.8 | 2.2 | 2.4 | 2.2 | 2.1 | 1.7 | 1 | 0.8 | 3.4 |
| 13 | 1.2 | 0.7 | 0.9 | 0.1 | 0.4 | 0 | 1 | 1.4 | 3.9 | 5.4 | 6.7 | 5.1 | 4.6 | 5 | 6.5 | 4.5 | 4 | 4.1 | 3.8 | 2.8 | 1.2 | 1.3 | 2 | 3.1 | 2.9 |
| 14 | 1.4 | 2.7 | 3.2 | 5.3 | 5.4 | 5 | 4.7 | 4.6 | 4.9 | 5.5 | 4.9 | 5.6 | 5.3 | 4.9 | 4.7 | 3.9 | 4.6 | 3.6 | 2.3 | 1.8 | 0.9 | 0.8 | 1.3 | 1.7 | 3.7 |
| 15 | 2.4 | 2.4 | 1.9 | 2.5 | 2.2 | 2.5 | 3.6 | 2.3 | 2.4 | 2.9 | 2.6 | 4.3 | 3.5 | 4.4 | 4.8 | 5.9 | 5.3 | 3.2 | 3.6 | 5 | 9.2 | 8.1 | 6.6 | 4.5 | 4 |
| 16 | 4.4 | 5.8 | 5.4 | 5.4 | 4.7 | 3.5 | 3.5 | 4.3 | 5.7 | 7.1 | 8.6 | 9.2 | 8.3 | 7.9 | 8 | 8.4 | 5.8 | 3.6 | 3.7 | 4.3 | 4.1 | 3.3 | 2.6 | 3.1 | 5.5 |
| 17 | 1.9 | 0.8 | 1 | 1.3 | 1.9 | 2.2 | 2.6 | 3.7 | 6.3 | 8.3 | 8.9 | 9.4 | 8.1 | 8.9 | 8.5 | 7.9 | 5 | 1.7 | 1.8 | 2.3 | 2.1 | 2.2 | 2 | 1.6 | 4.2 |
| 18 | 1.8 | 2 | 1.6 | 1.9 | 1.9 | 0.3 | 0.7 | 1.4 | 3.3 | 3.5 | 3 | 4.6 | 4.4 | 3.6 | 3.2 | 4.6 | 3.6 | 3 | 3.3 | 3.1 | 3.1 | 3 | 4.3 | 4.3 | 2.9 |
| 19 | 4.1 | 3.8 | 4.2 | 3.6 | 4.2 | 5.7 | 4.2 | 3.2 | 5.6 | 7.2 | 7 | 6.9 | 7 | 7.2 | 6.3 | 3.6 | 2.3 | 3 | 4 | 4.5 | 4.4 | 5.3 | 3.2 | 2.7 | 4.7 |
| 20 | 1.7 | 1.4 | 1 | 0.8 | 1.3 | 3.8 | 3.3 | 4.3 | 4.4 | 4.6 | 3.7 | 4.3 | 4.2 | 4.3 | 4.7 | 5 | 4.8 | 4.9 | 4.5 | 4.8 | 4.5 | 4.3 | 4.9 | 4.6 | 3.8 |
| 21 | 2.9 | 2.7 | 2.9 | 3.5 | 3.7 | 3.3 | 3.5 | 4 | 4.2 | 4.8 | 5.6 | 6.2 | 6 | 4.9 | 5.5 | 5.1 | 4.7 | 5.5 | 4.9 | 4.1 | 5 | 3.7 | 3.6 | 4 | 4.3 |
| 22 | 3.9 | 3.8 | 4.1 | 4.8 | 4.4 | 4.6 | 4.5 | 4.6 | 5.5 | 6 | 6.6 | 6.1 | 7.2 | 7.3 | 7 | 7.3 | 7.1 | 5 | 5 | 5.4 | 5 | 5.9 | 5.1 | 4.7 | 5.4 |
| 23 | 4.4 | 4.3 | 3.5 | 3.5 | 3.7 | 3.8 | 2.9 | 4.6 | 6.5 | 7.1 | 7.2 | 6.9 | 6.8 | 6.6 | 6.5 | 6.3 | 6 | 3.9 | 2.6 | 1.8 | 1.5 | 2 | 2.2 | 2.9 | 4.5 |
| 24 | 2 | 1.9 | 1.9 | 1.6 | 1.4 | 1.7 | 1.8 | 1.5 | 1.6 | 1.8 | 2.1 | 2.1 | 3.6 | 2.2 | 1.5 | 1.5 | 1 | 1.4 | 2.2 | 1.5 | 1.1 | 1.3 | 1.7 | 1.3 | 1.7 |
| 25 | 2.2 | 2 | 2.3 | 2.1 | 0.9 | 1.3 | 2 | 1.3 | 1.5 | 2.2 | 2.7 | 3.5 | 3.7 | 3.8 | 3.3 | 3.9 | 2.9 | 2.6 | 2.2 | 2.7 | 1.9 | 2 | 1.8 | 1.1 | 2.3 |
| 26 | 2.1 | 2.5 | 2.9 | 2.8 | 2.1 | 2.3 | 2.7 | 3.2 | 3.8 | 4 | 4.5 | 4.6 | 4.7 | 5.8 | 5.4 | 5.1 | 4 | 2.6 | 1.6 | 1.1 | 0.2 | 0 | 0 | 0.5 | 2.9 |
| 27 | 0.9 | 1.5 | 1.7 | 1.6 | 0.8 | 0.9 | 0.8 | 1.2 | 2.6 | 3.6 | 3.8 | 3.2 | 2.4 | 3.4 | 3.1 | 2.9 | 2.9 | 2.3 | 1.9 | 1.6 | 2 | 0.8 | 1.8 | 2.1 | 2.1 |
| 28 | 1.6 | 2.1 | 1.8 | 2.6 | 2.5 | 1.8 | 1.1 | 2.1 | 3.1 | 5.1 | 4.5 | 4.2 | 3.8 | 3.9 | 4.2 | 4.4 | 4.1 | 2.9 | 2 | 2.6 | 2 | 1.2 | 2.2 | 1 | 2.8 |
| 29 | 0.2 | 0.6 | 0.4 | 0.6 | 0.1 | 0.2 | 0.1 | 0.1 | 0.5 | 1.7 | 2.2 | 2.4 | 2.5 | 2.4 | 2.3 | 2.2 | 3 | 2.8 | 3.1 | 2.5 | 2.7 | 4.1 | 4.1 | 4 | 1.9 |
| 30 | 3.9 | 4.9 | 5.2 | 4.2 | 4.3 | 4 | 4.3 | 4.8 | 5.2 | 6.4 | 5.5 | 6.2 | 6.3 | 6.1 | 6 | 5.6 | 4.6 | 3.8 | 5.3 | 5.3 | 6.7 | 6.6 | 3.7 | 5.4 | 5.2 |
| 31 | 6.1 | 5.6 | 5.7 | 5.3 | 5.2 | 5.1 | 5.4 | 5.5 | 6.6 | 6.5 | 7.4 | 9.6 | 9.3 | 9.4 | 8.4 | 8.5 | 4.7 | 2.3 | 2 | 3 | 3 | 2.4 | 2.5 | 3.2 | 5.5 |
| Avg | 2.3 | 2.3 | 2.3 | 2.4 | 2.3 | 2.5 | 2.6 | 3 | 3.9 | 4.8 | 5 | 5.4 | 5.2 | 5.3 | 5.2 | 4.9 | 4.2 | 3.3 | 3 | 2.8 | 2.6 | 2.6 | 2.4 | 2.4 | 3.5 |
| S/D | 1.5 | 1.5 | 1.5 | 1.6 | 1.6 | 1.6 | 1.4 | 1.6 | 1.7 | 1.8 | 1.9 | 2 | 1.8 | 1.9 | 1.8 | 1.6 | 1.2 | 0.9 | 1.1 | 1.3 | 2 | 2 | 1.6 | 1.6 | 1.2 |
| S/A | 0.66 | 0.66 | 0.65 | 0.7 | 0.68 | 0.64 | 0.53 | 0.52 | 0.44 | 0.38 | 0.38 | 0.38 | 0.35 | 0.35 | 0.34 | 0.34 | 0.28 | 0.28 | 0.36 | 0.45 | 0.75 | 0.78 | 0.67 | 0.65 | 0.34 |
| Min | 0.2 | 0.1 | 0.3 | 0 | 0.1 | 0 | 0.1 | 0.1 | 0.5 | 1.7 | 2.1 | 1.4 | 1.8 | 2.2 | 1.5 | 1.5 | 1 | 1.4 | 1.3 | 0.9 | 0.2 | 0 | 0 | 0 | 1.4 |
| Max | 6.1 | 5.8 | 5.7 | 5.4 | 5.4 | 5.7 | 5.4 | 6.7 | 7.5 | 8.3 | 8.9 | 9.6 | 9.3 | 9.4 | 8.5 | 8.5 | 7.1 | 5.5 | 5.3 | 5.4 | 9.2 | 8.1 | 6.6 | 5.4 | 5.5 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: NRG MAX-40 Serial Number: 0 Calibration Factor: 0.76171 m/s/mV Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Station Pressure
Hourly and Daily Averages
Instrument: Viasala PTA-427
Millibars

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily | |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| 1 | 1018 | 1018 | 1018 | 1018 | 1018 | 1019 | 1019 | 1020 | 1021 | 1021 | 1021 | 1022 | 1021 | 1021 | 1020 | 1020 | 1020 | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1020 |
| 2 | 1021 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1018 | 1017 | 1017 | 1019 |
| 3 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1019 | 1019 | 1019 | 1019 | 1018 | 1018 | 1018 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1017 | 1017 | 1017 | 1018 |
| 4 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1017 | 1017 | 1016 | 1015 | 1015 | 1015 | 1015 | 1016 | 1016 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 |
| 5 | 1017 | 1017 | 1017 | 1017 | 1018 | 1019 | 1019 | 1020 | 1021 | 1022 | 1022 | 1022 | 1022 | 1022 | 1022 | 1023 | 1023 | 1023 | 1023 | 1024 | 1024 | 1025 | 1025 | 1025 | 1025 | 1021 |
| 6 | 1025 | 1025 | 1025 | 1025 | 1025 | 1026 | 1026 | 1027 | 1028 | 1028 | 1029 | 1029 | 1028 | 1028 | 1028 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1028 | 1028 | 1028 | 1027 |
| 7 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1029 | 1029 | 1030 | 1029 | 1029 | 1028 | 1028 | 1028 | 1028 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 |
| 8 | 1027 | 1027 | 1026 | 1026 | 1026 | 1026 | 1026 | 1026 | 1027 | 1027 | 1027 | 1026 | 1025 | 1024 | 1023 | 1023 | 1023 | 1023 | 1023 | 1023 | 1023 | 1023 | 1023 | 1023 | 1022 | 1025 |
| 9 | 1022 | 1021 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1021 | 1021 | 1020 | 1020 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1016 | 1019 | 1019 |
| 10 | 1016 | 1015 | 1014 | 1014 | 1014 | 1014 | 1014 | 1015 | 1015 | 1014 | 1014 | 1014 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1014 | 1015 | 1015 | 1015 | 1015 | 1014 | 1014 |
| 11 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1016 | 1016 | 1017 | 1017 | 1017 | 1016 | 1015 | 1015 | 1014 | 1014 | 1014 | 1014 | 1014 | 1015 | 1015 | 1015 | 1015 | 1014 | 1014 | 1015 |
| 12 | 1013 | 1013 | 1012 | 1012 | 1012 | 1012 | 1012 | 1012 | 1011 | 1011 | 1011 | 1010 | 1009 | 1008 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1006 | 1009 | 1009 |
| 13 | 1006 | 1006 | 1006 | 1006 | 1005 | 1005 | 1005 | 1005 | 1005 | 1005 | 1004 | 1003 | 1002 | 1001 | 1001 | 1000 | 1000 | 999 | 999 | 999 | 999 | 999 | 998 | 998 | 1002 | 1002 |
| 14 | 997 | 997 | 997 | 997 | 997 | 997 | 998 | 999 | 1000 | 1000 | 1000 | 1001 | 1000 | 1000 | 1000 | 1001 | 1001 | 1001 | 1001 | 1002 | 1002 | 1003 | 1002 | 1002 | 1000 | 1000 |
| 15 | 1002 | 1001 | 1001 | 1000 | 1000 | 1000 | 1001 | 1001 | 1000 | 999 | 999 | 998 | 997 | 996 | 995 | 995 | 995 | 996 | 996 | 997 | 999 | 1000 | 1001 | 1002 | 999 | 999 |
| 16 | 1002 | 1004 | 1004 | 1005 | 1005 | 1005 | 1005 | 1006 | 1006 | 1006 | 1006 | 1006 | 1005 | 1004 | 1004 | 1004 | 1004 | 1004 | 1005 | 1005 | 1006 | 1007 | 1008 | 1009 | 1005 | 1005 |
| 17 | 1010 | 1010 | 1010 | 1011 | 1012 | 1013 | 1013 | 1014 | 1014 | 1014 | 1014 | 1014 | 1013 | 1012 | 1012 | 1012 | 1012 | 1013 | 1013 | 1014 | 1014 | 1015 | 1015 | 1015 | 1013 | 1013 |
| 18 | 1016 | 1016 | 1016 | 1016 | 1017 | 1017 | 1018 | 1018 | 1018 | 1019 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1016 | 1015 | 1017 | 1017 |
| 19 | 1015 | 1014 | 1013 | 1013 | 1013 | 1013 | 1013 | 1014 | 1014 | 1014 | 1013 | 1013 | 1012 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1010 | 1012 | 1012 |
| 20 | 1010 | 1010 | 1009 | 1010 | 1010 | 1011 | 1012 | 1012 | 1012 | 1012 | 1012 | 1012 | 1012 | 1011 | 1011 | 1011 | 1012 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1012 | 1012 |
| 21 | 1013 | 1013 | 1013 | 1013 | 1014 | 1014 | 1014 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1014 | 1014 | 1015 | 1015 | 1015 | 1016 | 1016 | 1016 | 1016 | 1016 | 1016 | 1015 | 1015 |
| 22 | 1016 | 1016 | 1016 | 1016 | 1016 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1019 | 1018 | 1018 | 1018 | 1017 | 1017 |
| 23 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1018 | 1017 | 1016 | 1016 | 1015 | 1015 | 1016 | 1015 | 1015 | 1015 | 1015 | 1015 | 1014 | 1017 | 1017 |
| 24 | 1014 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1014 | 1014 | 1013 | 1014 | 1013 | 1012 | 1012 | 1012 | 1013 | 1013 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1013 |
| 25 | 1014 | 1014 | 1014 | 1014 | 1014 | 1015 | 1015 | 1016 | 1016 | 1016 | 1016 | 1016 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1016 | 1017 | 1017 | 1017 | 1017 | 1017 | 1015 | 1015 |
| 26 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1019 | 1020 | 1020 | 1020 | 1019 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1019 | 1019 | 1020 | 1020 | 1019 | 1019 | 1018 | 1018 |
| 27 | 1019 | 1019 | 1019 | 1019 | 1019 | 1020 | 1020 | 1020 | 1021 | 1021 | 1021 | 1020 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1020 | 1020 | 1020 | 1020 | 1021 | 1021 | 1020 | 1020 |
| 28 | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1022 | 1023 | 1023 | 1023 | 1023 | 1022 | 1021 | 1021 | 1021 | 1021 | 1022 | 1022 | 1022 | 1022 | 1022 | 1021 | 1021 | 1022 | 1022 |
| 29 | 1021 | 1020 | 1020 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1018 | 1017 | 1016 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1014 | 1014 | 1017 |
| 30 | 1014 | 1013 | 1013 | 1013 | 1013 | 1013 | 1013 | 1014 | 1014 | 1014 | 1014 | 1013 | 1012 | 1011 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1011 | 1011 | 1010 | 1012 | 1012 |
| 31 | 1010 | 1010 | 1010 | 1010 | 1010 | 1011 | 1011 | 1012 | 1013 | 1013 | 1013 | 1012 | 1012 | 1011 | 1011 | 1011 | 1012 | 1012 | 1013 | 1013 | 1013 | 1014 | 1014 | 1014 | 1012 | 1012 |
| Avg | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1016 | 1016 | 1016 | 1016 | 1016 | 1015 | 1015 | 1014 | 1014 | 1014 | 1014 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 | 1015 |
| SD | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| S/A | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Min | 997 | 997 | 997 | 997 | 997 | 997 | 998 | 999 | 1000 | 999 | 999 | 998 | 997 | 996 | 995 | 995 | 995 | 996 | 996 | 997 | 999 | 999 | 998 | 998 | 999 | 999 |
| Max | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1029 | 1029 | 1030 | 1029 | 1029 | 1028 | 1028 | 1028 | 1028 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1028 | 1028 | 1028 | 1028 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 | |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: Viasala PTA-427 Serial Number: 493926 Calibration Factor: 0.104 mBar/mV + 800 mBar Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.

Prepared by: Afshin M. Andreas, NREL

Elizabeth City State University
36.28 N Latitude 76.22 W Longitude 26 Meters AMSL Time Zone -5

October 2004

Battery Voltage (CR10)
Hourly and Daily Averages
Instrument: CSI
Volts DC

| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | Daily |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 2 | 12.8 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13.3 | 13.3 | 13.3 | 13.2 | 13.2 | 13.2 | 13.2 | 13.3 | 13.3 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 3 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.7 | 13.3 | 13.4 | 13.4 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 4 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.7 | 13 | 12.9 | 13.4 | 13.4 | 13.4 | 13.3 | 13.3 | 13.3 | 13.3 | 13.1 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 5 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 13 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 13 |
| 6 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 13.1 | 13.6 | 13.6 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.3 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 13.1 | 13.7 | 13.6 | 13.5 | 13.4 | 13.4 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 13 |
| 8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 13.1 | 13.6 | 13.5 | 13.4 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.2 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 9 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.7 | 13.5 | 13.5 | 13.4 | 13.3 | 13.3 | 13.3 | 13.2 | 13.3 | 13.3 | 13 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 13 |
| 10 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.6 | 13.4 | 13.5 | 13.4 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 11 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 13.2 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 12 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.5 | 13.1 | 13.7 | 13.6 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.3 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 13 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.8 | 13.5 | 13.4 | 13.5 | 13.3 | 13.2 | 13 | 12.9 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 12.7 | 12.6 | 12.9 |
| 14 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.8 | 13.2 | 13.3 | 13.4 | 13.5 | 13.4 | 13.3 | 13.4 | 13.1 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.9 |
| 15 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.8 | 12.6 | 12.8 | 12.8 | 12.6 | 13 | 13.4 | 13.3 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 12.8 |
| 16 | 12.6 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 13 | 13.7 | 13.6 | 13.5 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.3 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 17 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13.1 | 13.7 | 13.6 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | 13.5 | 13.3 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 13.1 |
| 18 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 13 | 13.7 | 13.6 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13 |
| 19 | 12.8 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13 | 13.4 | 13.3 | 13.3 | 13.3 | 13.2 | 13.2 | 13.2 | 13.1 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.9 |
| 20 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.8 | 13.2 | 13.1 | 13.2 | 13.1 | 13 | 12.9 | 12.8 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.8 |
| 21 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.7 | 12.9 | 13.2 | 13.3 | 13.4 | 13.3 | 13.3 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 12.9 |
| 22 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 13.2 | 13.3 | 13.4 | 13.4 | 13.5 | 13.3 | 13.2 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 12.9 |
| 23 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.6 | 13.7 | 13.6 | 13.6 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.5 | 13.3 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 24 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.7 | 12.9 | 13 | 13 | 13.3 | 13.4 | 13.2 | 12.9 | 12.9 | 12.8 | 12.8 | 12.7 | 12.7 | 12.6 | 12.6 | 12.6 | 12.8 |
| 25 | 12.6 | 12.6 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.6 | 12.8 | 13.2 | 13.2 | 13.1 | 13.1 | 13.1 | 13 | 12.8 | 12.8 | 12.7 | 12.7 | 12.6 | 12.6 | 12.5 | 12.5 | 12.5 | 12.7 |
| 26 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 13 | 13.5 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.3 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 27 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13.4 | 13.7 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | 13.4 | 13.1 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 28 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13.5 | 13.6 | 13.5 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.4 | 13.2 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 29 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13.2 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | 13.4 | 13.3 | 13 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| 30 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.9 | 13.3 | 13.3 | 13.3 | 13.2 | 13.2 | 13.2 | 13 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.9 |
| 31 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 13 | 13.4 | 13.3 | 13.3 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.1 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.9 |
| Avg | 12.7 | 12.7 | 12.7 | 12.7 | 12.6 | 12.6 | 12.8 | 13.2 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.3 | 13.1 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 | 13 |
| S D | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.2 | 0.2 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 | 0.03 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.01 |
| Min | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 | 12.6 | 12.6 | 12.8 | 12.6 | 12.8 | 12.8 | 12.6 | 12.9 | 12.8 | 12.8 | 12.7 | 12.7 | 12.6 | 12.6 | 12.5 | 12.5 | 12.5 | 12.7 |
| Max | 12.8 | 12.8 | 12.7 | 12.7 | 12.7 | 12.7 | 13.1 | 13.7 | 13.7 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | 13.5 | 13.4 | 12.9 | 12.9 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 13.1 |
| n | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 8928 |

Data Recovery: 0.0% missing; 0.0% failed QC -- 8928 total measurements.

Instrument: CSI Serial Number: Battery Calibration Factor: N/A Calibration Date: 06/1995

| Data & Flag | Hour Column | Day Column |
|-------------|---------------|---------------|
| <value> * | > 20% Missing | > 10% Missing |
| <value> ? | > 20% Fail QC | > 10% Fail QC |
| <blank> * | > 90% Missing | > 90% Missing |
| <blank> ? | > 90% Fail QC | > 90% Fail QC |

Note: Daily values with a missing flag (*) are not used in monthly statistics.