

**Elizabeth City State University**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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 | 26   | 134  | 309  | 520   | 496   | 638   | 534   | 515   | 424   | 396   | 106   | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 4103   |
| 2   | 0 | 0 | 0 | 0 | 0 | 0 | 51   | 225  | 410  | 573   | 692   | 752   | 753 ? | 669   | 530   | 351   | 159   | 25   | 0  | 0  | 0  | 0  | 0  | 0  | 5191   |
| 3   | 0 | 0 | 0 | 0 | 0 | 0 | 45   | 211  | 396  | 560   | 674   | 737 ? | 725   | 653   | 533   | 357   | 161   | 26   | 0  | 0  | 0  | 0  | 0  | 0  | 5080   |
| 4   | 0 | 0 | 0 | 0 | 0 | 0 | 44   | 209  | 387  | 554   | 674   | 734   | 718 ? | 649   | 516   | 346   | 154   | 26   | 0  | 0  | 0  | 0  | 0  | 0  | 5011   |
| 5   | 0 | 0 | 0 | 0 | 0 | 0 | 41   | 202  | 391  | 550   | 668   | 724   | 726 ? | 598 ? | 515   | 346   | 151   | 22   | 0  | 0  | 0  | 0  | 0  | 0  | 4933 ? |
| 6   | 0 | 0 | 0 | 0 | 0 | 0 | 29   | 155  | 216  | 199   | 226   | 155   | 120   | 106   | 25    | 19    | 13    | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 1267   |
| 7   | 0 | 0 | 0 | 0 | 0 | 0 | 50   | 229  | 430  | 598   | 720   | 774   | 761   | 687   | 550   | 369   | 161   | 25   | 0  | 0  | 0  | 0  | 0  | 0  | 5354   |
| 8   | 0 | 0 | 0 | 0 | 0 | 0 | 48   | 223  | 424  | 593   | 712   | 766   | 748   | 677   | 544   | 353   | 145   | 24   | 0  | 0  | 0  | 0  | 0  | 0  | 5257   |
| 9   | 0 | 0 | 0 | 0 | 0 | 0 | 48   | 221  | 418  | 582   | 700   | 750   | 738   | 657   | 488   | 345   | 140   | 22   | 0  | 0  | 0  | 0  | 0  | 0  | 5108   |
| 10  | 0 | 0 | 0 | 0 | 0 | 0 | 46   | 221  | 400  | 561   | 686   | 770   | 658   | 633   | 435   | 253   | 80    | 24   | 0  | 0  | 0  | 0  | 0  | 0  | 4767   |
| 11  | 0 | 0 | 0 | 0 | 0 | 0 | 49   | 203  | 392  | 558   | 608   | 729 ? | 718 ? | 645   | 479   | 338   | 113 ? | 14   | 0  | 0  | 0  | 0  | 0  | 0  | 4845   |
| 12  | 0 | 0 | 0 | 0 | 0 | 0 | 38   | 180  | 392  | 548   | 661   | 668   | 627   | 500 ? | 509   | 279   | 85    | 16   | 0  | 0  | 0  | 0  | 0  | 0  | 4502   |
| 13  | 0 | 0 | 0 | 0 | 0 | 0 | 35   | 194  | 375  | 529   | 647   | 707   | 712 ? | 618   | 422   | 132 ? | 74    | 13   | 0  | 0  | 0  | 0  | 0  | 0  | 4459   |
| 14  | 0 | 0 | 0 | 0 | 0 | 0 | 33   | 157  | 365  | 520   | 651   | 710   | 668   | 598   | 459   | 234   | 92    | 11   | 0  | 0  | 0  | 0  | 0  | 0  | 4501   |
| 15  | 0 | 0 | 0 | 0 | 0 | 0 | 33   | 190  | 382  | 546   | 659   | 709   | 701   | 623   | 491   | 389 ? | 117   | 15   | 0  | 0  | 0  | 0  | 0  | 0  | 4854   |
| 16  | 0 | 0 | 0 | 0 | 0 | 0 | 37   | 187  | 407  | 458   | 534   | 584   | 686   | 570   | 454   | 303   | 109   | 10   | 0  | 0  | 0  | 0  | 0  | 0  | 4339   |
| 17  | 0 | 0 | 0 | 0 | 0 | 0 | 40   | 196  | 394  | 556   | 672   | 725   | 712   | 634   | 493   | 313   | 112   | 13   | 0  | 0  | 0  | 0  | 0  | 0  | 4859   |
| 18  | 0 | 0 | 0 | 0 | 0 | 0 | 37   | 186  | 383  | 544   | 659   | 710   | 695   | 617   | 480   | 304   | 106   | 12   | 0  | 0  | 0  | 0  | 0  | 0  | 4734   |
| 19  | 0 | 0 | 0 | 0 | 0 | 0 | 40   | 183  | 360  | 519   | 634   | 681   | 671   | 594   | 459   | 231   | 58    | 10   | 0  | 0  | 0  | 0  | 0  | 0  | 4440   |
| 20  | 0 | 0 | 0 | 0 | 0 | 0 | 30   | 92   | 329  | 353   | 451   | 562   | 610   | 436   | 271   | 190   | 91    | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 3421   |
| 21  | 0 | 0 | 0 | 0 | 0 | 0 | 40   | 184  | 326  | 351   | 523   | 595   | 624   | 564   | 445   | 271   | 90    | 12   | 0  | 0  | 0  | 0  | 0  | 0  | 4025   |
| 22  | 0 | 0 | 0 | 0 | 0 | 0 | 15   | 147  | 345  | 489   | 603   | 662   | 623   | 561   | 433   | 192   | 86    | 8    | 0  | 0  | 0  | 0  | 0  | 0  | 4163   |
| 23  | 0 | 0 | 0 | 0 | 0 | 0 | 22   | 87   | 333  | 298   | 447   | 499   | 505   | 239   | 312   | 265   | 78    | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 3089   |
| 24  | 0 | 0 | 0 | 0 | 0 | 0 | 18   | 96   | 196  | 460   | 589   | 621   | 644   | 551   | 423   | 252   | 74    | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 3926   |
| 25  | 0 | 0 | 0 | 0 | 0 | 0 | 16   | 130  | 298  | 323 ? | 480 ? | 489   | 464   | 531 ? | 364 ? | 255   | 81    | 5    | 0  | 0  | 0  | 0  | 0  | 0  | 3435 ? |
| 26  | 0 | 0 | 0 | 0 | 0 | 0 | 27   | 159  | 359  | 522   | 631   | 683   | 683 ? | ?     | ?     | 221 ? | 84    | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 3377 ? |
| 27  | 0 | 0 | 0 | 0 | 0 | 0 | 26   | 153  | 347  | 504   | 617   | 666   | 525   | 464   | 400   | 147   | 44    | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 3894   |
| 28  | 0 | 0 | 0 | 0 | 0 | 0 | 26   | 147  | 340  | 389   | 307   | 333   | 378   | 505   | 445   | 264   | 66    | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 3202   |
| 29  | 0 | 0 | 0 | 0 | 0 | 0 | 28   | 147  | 342  | 495   | 608   | 648   | 634   | 558   | 420   | 243   | 48    | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 4174   |
| 30  | 0 | 0 | 0 | 0 | 0 | 0 | 23   | 140  | 327  | 463   | 553   | 535   | 554   | 514   | 373   | 208   | 53    | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 3749   |
| 31  | 0 | 0 | 0 | 0 | 0 | 0 | 22   | 123  | 282  | 466 ? | 593 ? | 609   | 588   | 520   | 391   | 214   | 52    | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 3865 ? |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 34   | 171  | 357  | 490   | 593   | 643   | 629   | 556   | 436   | 270   | 96    | 12   | 0  | 0  | 0  | 0  | 0  | 0  | 4256   |
| S D | 0 | 0 | 0 | 0 | 0 | 0 | 11   | 41   | 55   | 97    | 115   | 134   | 132   | 124   | 102   | 84    | 39    | 8    | 0  | 0  | 0  | 0  | 0  | 0  | 848    |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0.31 | 0.24 | 0.15 | 0.2   | 0.19  | 0.21  | 0.21  | 0.22  | 0.23  | 0.31  | 0.4   | 0.68 | 0  | 0  | 0  | 0  | 0  | 0  | 0.2    |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 15   | 87   | 196  | 199   | 226   | 155   | 120   | 106   | 25    | 19    | 13    | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 1267   |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 51   | 229  | 430  | 598   | 720   | 774   | 761   | 687   | 550   | 396   | 161   | 26   | 0  | 0  | 0  | 0  | 0  | 0  | 5354   |
| n   | 0 | 0 | 0 | 0 | 0 | 0 | 297  | 366  | 365  | 359   | 358   | 361   | 333   | 340   | 355   | 350   | 368   | 149  | 0  | 0  | 0  | 0  | 0  | 0  | 4001   |

Daylight Data Recovery: 0.0% missing; 4.0% exceed the 15% QC threshold -- 4166 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 25823F3    Calibration Factor: 9.830 μV/W/m<sup>2</sup>    Calibration Date: 05/1998

| 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

October 2001

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 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 2   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | 826 ? | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 3   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | 926 ? | ?     | ?     | *     | *    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 4   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | 784 ? | ?     | *     | *    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 5   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | 655 ? | 724 ? | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 6   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | *     | ?     | ?    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 7   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 8   | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 9   | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 10  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 11  | 0 | 0 | 0 | 0 | 0 | 0 | 714 ? | ?       | ?     | ?     | ?     | ?     | 895 ? | ?     | ?     | ?    | ?     | 321 ? | ?  | 0  | 0  | 0  | 0  | 0  | ?        |
| 12  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | ?     | ?     | ?     | ?     | 392 ? | 544 ? | 793 ? | ?    | 243 ? | ?     | 0  | 0  | 0  | 0  | 0  | 0  | 1974 **? |
| 13  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | 795 ? | ?     | 79 ? | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 14  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 15  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 16  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 17  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 18  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 19  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | *     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 20  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 21  | 0 | 0 | 0 | 0 | 0 | 0 | *     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 22  | 0 | 0 | 0 | 0 | 0 | 0 | *     | 362 **? | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 23  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 24  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | *     | 166 ? | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 25  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | 455 ? | 228 ? | 176 ? | ?     | ?     | ?     | 548 ? | ?    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | 1407 **? |
| 26  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | *     | *     | *     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 27  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | *     | *     | *     | *     | *     | *     | *     | *    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | *        |
| 28  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | *       | *     | *     | *     | *     | *     | *     | *     | *    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | *        |
| 29  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | *       | *     | *     | *     | *     | ?     | ?     | ?     | ?    | *     | *     | 0  | 0  | 0  | 0  | 0  | 0  | *        |
| 30  | 0 | 0 | 0 | 0 | 0 | 0 | ?     | ?       | ?     | ?     | ?     | ?     | ?     | ?     | ?     | ?    | ?     | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| 31  | 0 | 0 | 0 | 0 | 0 | 0 | *     | *       | ?     | 705 ? | ?     | ?     | ?     | ?     | ?     | ?    | 399 ? | ?     | 0  | 0  | 0  | 0  | 0  | 0  | ?        |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 714   | 362     | 455   | 366   | 176   | 926   | 691   | 705   | 688   | 79   | 321   | N/A   | 0  | 0  | 0  | 0  | 0  | 0  | N/A **?  |
| SD  | 0 | 0 | 0 | 0 | 0 | 0 | 0     | 0       | 0     | 295   | 0     | 0     | 264   | 130   | 127   | 0    | 78    | 0     | 0  | 0  | 0  | 0  | 0  | 0  | 0        |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0     | 0       | 0     | 0.81  | 0     | 0     | 0.38  | 0.19  | 0.18  | 0    | 0.24  | 0     | 0  | 0  | 0  | 0  | 0  | 0  | 0        |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 714   | 362     | 455   | 166   | 176   | 926   | 392   | 544   | 548   | 79   | 243   | N/A   | 0  | 0  | 0  | 0  | 0  | 0  | N/A      |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 714   | 362     | 455   | 705   | 176   | 926   | 895   | 826   | 793   | 79   | 399   | N/A   | 0  | 0  | 0  | 0  | 0  | 0  | N/A      |
| n   | 0 | 0 | 0 | 0 | 0 | 0 | 3     | 3       | 5     | 15    | 2     | 2     | 11    | 14    | 11    | 2    | 13    | 0     | 0  | 0  | 0  | 0  | 0  | 0  | 0        |

Daylight Data Recovery: 18.4% missing; 79.5% exceed the 15% QC threshold -- 4166 total daylight measurements.

Instrument: Eppley NIP Serial Number: 25519E6 Calibration Factor: 7.533 μV/W/m² Calibration Date: 05/1998

| 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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 | 23   | 93   | 199  | 205   | 276   | 464   | 391   | 276   | 342  | 58   | 51  | 6    | 0  | 0  | 0  | 0  | 0  | 0  | 2384   |
| 2   | 0 | 0 | 0 | 0 | 0 | 0 | 24   | 57   | 74   | 83    | 87    | 91    | 93 ?  | 88    | 91   | 82   | 55  | 14   | 0  | 0  | 0  | 0  | 0  | 0  | 839    |
| 3   | 0 | 0 | 0 | 0 | 0 | 0 | 27   | 73   | 98   | 111   | 118   | 114 ? | 111   | 104   | 87   | 71   | 48  | 14   | 0  | 0  | 0  | 0  | 0  | 0  | 974    |
| 4   | 0 | 0 | 0 | 0 | 0 | 0 | 24   | 66   | 93   | 99    | 100   | 98    | 98 ?  | 96    | 90   | 75   | 48  | 14   | 0  | 0  | 0  | 0  | 0  | 0  | 901    |
| 5   | 0 | 0 | 0 | 0 | 0 | 0 | 24   | 69   | 93   | 107   | 113   | 114   | 112 ? | 102 ? | 88   | 73   | 52  | 12   | 0  | 0  | 0  | 0  | 0  | 0  | 959 ?  |
| 6   | 0 | 0 | 0 | 0 | 0 | 0 | 26   | 122  | 198  | 182   | 206   | 143   | 110   | 96    | 23   | 18   | 12  | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 1139   |
| 7   | 0 | 0 | 0 | 0 | 0 | 0 | 17   | 40   | 52   | 56    | 57    | 55    | 54    | 55    | 53   | 46   | 31  | 9    | 0  | 0  | 0  | 0  | 0  | 0  | 524    |
| 8   | 0 | 0 | 0 | 0 | 0 | 0 | 18   | 42   | 52   | 57    | 63    | 73    | 79    | 64    | 59   | 56   | 49  | 15   | 0  | 0  | 0  | 0  | 0  | 0  | 627    |
| 9   | 0 | 0 | 0 | 0 | 0 | 0 | 19   | 42   | 50   | 57    | 61    | 65    | 102   | 78    | 83   | 60   | 42  | 13   | 0  | 0  | 0  | 0  | 0  | 0  | 672    |
| 10  | 0 | 0 | 0 | 0 | 0 | 0 | 23   | 55   | 64   | 68    | 75    | 121   | 255   | 193   | 176  | 95   | 67  | 22   | 0  | 0  | 0  | 0  | 0  | 0  | 1214   |
| 11  | 0 | 0 | 0 | 0 | 0 | 0 | 20   | 42   | 51   | 54    | 64    | 63 ?  | 63 ?  | 60    | 62   | 48   | 36  | 11   | 0  | 0  | 0  | 0  | 0  | 0  | 575    |
| 12  | 0 | 0 | 0 | 0 | 0 | 0 | 27   | 57   | 56   | 56    | 74    | 99    | 175   | 169 ? | 95   | 82   | 66  | 15   | 0  | 0  | 0  | 0  | 0  | 0  | 973    |
| 13  | 0 | 0 | 0 | 0 | 0 | 0 | 20   | 45   | 53   | 52    | 57    | 61    | 64 ?  | 62    | 79   | 98   | 72  | 12   | 0  | 0  | 0  | 0  | 0  | 0  | 675    |
| 14  | 0 | 0 | 0 | 0 | 0 | 0 | 24   | 56   | 72   | 87    | 171   | 165   | 229   | 131   | 143  | 108  | 66  | 11   | 0  | 0  | 0  | 0  | 0  | 0  | 1262   |
| 15  | 0 | 0 | 0 | 0 | 0 | 0 | 15   | 40   | 47   | 51    | 54    | 54    | 53    | 47    | 42   | 39 ? | 30  | 9    | 0  | 0  | 0  | 0  | 0  | 0  | 479    |
| 16  | 0 | 0 | 0 | 0 | 0 | 0 | 16   | 43   | 98   | 213   | 268   | 211   | 145   | 173   | 90   | 54   | 30  | 6    | 0  | 0  | 0  | 0  | 0  | 0  | 1348   |
| 17  | 0 | 0 | 0 | 0 | 0 | 0 | 14   | 35   | 44   | 50    | 53    | 53    | 54    | 53    | 50   | 42   | 27  | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 482    |
| 18  | 0 | 0 | 0 | 0 | 0 | 0 | 16   | 39   | 48   | 53    | 54    | 54    | 53    | 51    | 45   | 39   | 25  | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 483    |
| 19  | 0 | 0 | 0 | 0 | 0 | 0 | 17   | 45   | 56   | 63    | 70    | 76    | 72    | 69    | 70   | 90   | 52  | 9    | 0  | 0  | 0  | 0  | 0  | 0  | 690    |
| 20  | 0 | 0 | 0 | 0 | 0 | 0 | 21   | 76   | 152  | 229   | 259   | 264   | 177   | 148   | 176  | 105  | 52  | 7    | 0  | 0  | 0  | 0  | 0  | 0  | 1665   |
| 21  | 0 | 0 | 0 | 0 | 0 | 0 | 29   | 81   | 96   | 218   | 176   | 141   | 152   | 102   | 82   | 65   | 36  | 10   | 0  | 0  | 0  | 0  | 0  | 0  | 1187   |
| 22  | 0 | 0 | 0 | 0 | 0 | 0 | 12   | 66   | 66   | 65    | 67    | 101   | 98    | 84    | 69   | 61   | 30  | 6    | 0  | 0  | 0  | 0  | 0  | 0  | 726    |
| 23  | 0 | 0 | 0 | 0 | 0 | 0 | 20   | 80   | 84   | 175   | 219   | 225   | 132   | 174   | 145  | 47   | 23  | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 1329   |
| 24  | 0 | 0 | 0 | 0 | 0 | 0 | 16   | 88   | 180  | 157   | 99    | 87    | 91    | 78    | 65   | 54   | 28  | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 947    |
| 25  | 0 | 0 | 0 | 0 | 0 | 0 | 13   | 54   | 134  | 202 ? | 251 ? | 194   | 190   | 200 ? | 91 ? | 53   | 29  | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 1415 ? |
| 26  | 0 | 0 | 0 | 0 | 0 | 0 | 12   | 33   | 46   | 51    | 58    | 60    | 60 ?  | ?     | ?    | 42 ? | 26  | 5    | 0  | 0  | 0  | 0  | 0  | 0  | 392 ?  |
| 27  | 0 | 0 | 0 | 0 | 0 | 0 | 12   | 36   | 52   | 58    | 61    | 79    | 163   | 212   | 168  | 117  | 36  | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 998    |
| 28  | 0 | 0 | 0 | 0 | 0 | 0 | 14   | 42   | 64   | 147   | 277   | 310   | 323   | 118   | 53   | 40   | 20  | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 1411   |
| 29  | 0 | 0 | 0 | 0 | 0 | 0 | 13   | 36   | 47   | 55    | 60    | 90    | 60    | 51    | 43   | 33   | 17  | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 507    |
| 30  | 0 | 0 | 0 | 0 | 0 | 0 | 11   | 33   | 45   | 89    | 184   | 249   | 186   | 103   | 107  | 77   | 32  | 3    | 0  | 0  | 0  | 0  | 0  | 0  | 1119   |
| 31  | 0 | 0 | 0 | 0 | 0 | 0 | 17   | 57   | 81   | 93    | 97 ?  | 98    | 96    | 96    | 93   | 87   | 38  | 4    | 0  | 0  | 0  | 0  | 0  | 0  | 858    |
| Avg | 0 | 0 | 0 | 0 | 0 | 0 | 19   | 56   | 82   | 105   | 123   | 131   | 130   | 111   | 95   | 65   | 40  | 8    | 0  | 0  | 0  | 0  | 0  | 0  | 960    |
| S D | 0 | 0 | 0 | 0 | 0 | 0 | 5    | 21   | 45   | 61    | 79    | 93    | 81    | 58    | 61   | 24   | 16  | 5    | 0  | 0  | 0  | 0  | 0  | 0  | 427    |
| S/A | 0 | 0 | 0 | 0 | 0 | 0 | 0.27 | 0.37 | 0.55 | 0.58  | 0.64  | 0.7   | 0.62  | 0.52  | 0.64 | 0.38 | 0.4 | 0.59 | 0  | 0  | 0  | 0  | 0  | 0  | 0.44   |
| Min | 0 | 0 | 0 | 0 | 0 | 0 | 11   | 33   | 44   | 50    | 53    | 53    | 53    | 47    | 23   | 18   | 12  | 2    | 0  | 0  | 0  | 0  | 0  | 0  | 392    |
| Max | 0 | 0 | 0 | 0 | 0 | 0 | 29   | 122  | 199  | 229   | 277   | 464   | 391   | 276   | 342  | 117  | 72  | 22   | 0  | 0  | 0  | 0  | 0  | 0  | 2384   |
| n   | 0 | 0 | 0 | 0 | 0 | 0 | 297  | 370  | 370  | 366   | 358   | 361   | 335   | 340   | 354  | 354  | 370 | 149  | 0  | 0  | 0  | 0  | 0  | 0  | 4024   |

Daylight Data Recovery: 0.0% missing; 3.4% exceed the 15% QC threshold -- 4166 total daylight measurements.

Instrument: Eppley PSP    Serial Number: 25819F3    Calibration Factor: 9.070 μV/W/m<sup>2</sup>    Calibration Date: 05/1998

| 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**Dry Bulb Temperature (Tower)**  
**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   | 11.5 | 11.3 | 11.4 | 11   | 10.9 | 10.6 | 10   | 10.7 | 13   | 14.9 | 15.7 | 16.7 | 17.4 | 18   | 18   | 18.6 | 18.4 | 17.4 | 16.6 | 16   | 14.3 | 13   | 12.4 | 12.7 | 14.2  |
| 2   | 12.9 | 12.4 | 12   | 12.1 | 11.6 | 11   | 10.9 | 13.6 | 17   | 20   | 22.2 | 23.5 | 24.2 | 24.7 | 25.3 | 25.5 | 25.1 | 23.6 | 21.3 | 19.1 | 18.1 | 18.2 | 17.7 | 17.1 | 18.3  |
| 3   | 17.1 | 17   | 15.7 | 15.6 | 15.6 | 15.3 | 15.4 | 16.7 | 19.8 | 23.1 | 25.1 | 26.4 | 27.3 | 27.6 | 27.5 | 27.6 | 27.1 | 25.3 | 22.7 | 21.4 | 20.4 | 19.5 | 19   | 18.6 | 21.1  |
| 4   | 18.3 | 17.8 | 17.4 | 17   | 16.5 | 16.2 | 16.4 | 17.8 | 19.8 | 22   | 24   | 26.1 | 27.4 | 27.9 | 28.1 | 27.8 | 27.3 | 25.5 | 23   | 21.5 | 20.7 | 20.4 | 19.9 | 19.4 | 21.6  |
| 5   | 18.7 | 18.2 | 17.8 | 17.3 | 17   | 17   | 17.1 | 18.5 | 20.6 | 22.8 | 24.7 | 25.9 | 26.3 | 27.1 | 27.3 | 27.1 | 26.4 | 24.5 | 22.8 | 21.9 | 21.2 | 20.8 | 20.6 | 20.5 | 21.8  |
| 6   | 20.8 | 20.8 | 20.5 | 20.4 | 21   | 21.2 | 21.5 | 22.2 | 22.9 | 23.7 | 24.2 | 23.7 | 23.1 | 21.5 | 17   | 13.4 | 12.4 | 12.4 | 12.5 | 12.8 | 12.6 | 12.4 | 12.6 | 12.8 | 18.3  |
| 7   | 12.6 | 12.1 | 11.5 | 10.7 | 9.8  | 9.4  | 9.1  | 11   | 12.8 | 13.9 | 14.4 | 15.2 | 16   | 16.6 | 16.8 | 16.7 | 16.5 | 15   | 13   | 12   | 11.9 | 10.9 | 10.3 | 9.9  | 12.8  |
| 8   | 9.1  | 7.8  | 8    | 7.9  | 7.8  | 7.5  | 7.5  | 9.4  | 11.5 | 12.6 | 13.4 | 14   | 14.1 | 14.2 | 14.3 | 14   | 13.4 | 12.1 | 10.8 | 10.4 | 9.2  | 8.3  | 7.8  | 7    | 10.5  |
| 9   | 7.1  | 7.2  | 6.8  | 6.4  | 5.8  | 5.6  | 6.3  | 9.4  | 13   | 15.6 | 16.5 | 17.2 | 17.4 | 17.6 | 17.7 | 17.3 | 16.6 | 15.5 | 14.4 | 13.5 | 13.1 | 12.9 | 11.7 | 10.7 | 12.3  |
| 10  | 11.1 | 11.3 | 11.4 | 11.9 | 10.5 | 10.1 | 10   | 13.6 | 18   | 20.4 | 21.6 | 22.3 | 22.8 | 22.9 | 22.6 | 21.8 | 20.6 | 19.8 | 18.4 | 17.6 | 17.2 | 17.2 | 17.1 | 16.7 | 17    |
| 11  | 16.4 | 16   | 15.5 | 15.4 | 15.3 | 15.1 | 14.8 | 17.2 | 19.9 | 21.6 | 22.1 | 23.1 | 23.4 | 23.4 | 23.2 | 22.4 | 21.6 | 20.1 | 18.7 | 17.8 | 17.4 | 17.1 | 16.6 | 16.4 | 18.8  |
| 12  | 15.6 | 15.1 | 14.1 | 13.3 | 12.6 | 11.6 | 11.3 | 13.8 | 18   | 21.4 | 22.7 | 23.4 | 24.6 | 24.8 | 24.9 | 22.8 | 21.4 | 19.7 | 18.7 | 18.3 | 18   | 17.3 | 16.1 | 15.4 | 18.1  |
| 13  | 15.2 | 14.6 | 14.3 | 13.9 | 13.3 | 13.1 | 13.4 | 15.9 | 18.9 | 22.1 | 23.1 | 23.8 | 24.5 | 24.7 | 24.1 | 22.3 | 20.9 | 19.3 | 18.1 | 17.5 | 17   | 16.6 | 16.5 | 16.2 | 18.3  |
| 14  | 16.1 | 16.2 | 16.4 | 16.8 | 17.1 | 17.1 | 17.4 | 18.4 | 21.1 | 23.1 | 24.1 | 25.3 | 25.9 | 26.1 | 26   | 25.5 | 24.8 | 23.6 | 23   | 22.9 | 22.8 | 23.1 | 22.1 | 22   | 21.5  |
| 15  | 21.9 | 20.8 | 19.2 | 18   | 17.2 | 16.7 | 15.9 | 16.4 | 18.2 | 19.7 | 21.1 | 22.2 | 23   | 23.8 | 24.1 | 22.5 | 20.6 | 19   | 18.1 | 17.4 | 16.9 | 16.5 | 15.5 | 15.5 | 19.2  |
| 16  | 14.3 | 13   | 13.1 | 12.6 | 13.5 | 13.7 | 14.3 | 16.4 | 18.8 | 20   | 21.4 | 22.2 | 23.5 | 23.8 | 24.2 | 24.2 | 23.8 | 22.2 | 20.6 | 20.2 | 19.3 | 16.9 | 15.9 | 15.3 | 18.5  |
| 17  | 14   | 12.9 | 11   | 9.2  | 8.1  | 7.4  | 7    | 8.4  | 10.8 | 13   | 14.6 | 15.6 | 16.5 | 17.1 | 17.7 | 17.6 | 16.9 | 15.2 | 13.3 | 12.1 | 10.9 | 9.6  | 9.6  | 9    | 12.4  |
| 18  | 7.9  | 7.3  | 6.6  | 5.8  | 5.5  | 5    | 5.1  | 7.9  | 11.3 | 12.9 | 14   | 14.9 | 15.6 | 15.8 | 16   | 15.6 | 14.6 | 12.7 | 11.9 | 11.1 | 9.2  | 7.6  | 7.5  | 7.9  | 10.4  |
| 19  | 8    | 7.2  | 7.1  | 7.4  | 7.7  | 6.6  | 5.8  | 8.7  | 14.3 | 16.1 | 18   | 18.8 | 19.9 | 20.8 | 21.3 | 21.2 | 19.5 | 18.1 | 17.2 | 16.8 | 16.1 | 15.8 | 15.2 | 14.5 | 14.3  |
| 20  | 14.8 | 14.7 | 14.8 | 14.1 | 13.4 | 13.4 | 12.7 | 13.9 | 17.4 | 20.3 | 21.9 | 22.9 | 24   | 24   | 24.1 | 24.3 | 24.2 | 22.5 | 20.7 | 19.8 | 18.7 | 17.9 | 17.4 | 17.4 | 18.7  |
| 21  | 17.5 | 16.7 | 15.9 | 15.4 | 15.3 | 15.5 | 15.5 | 18   | 20.7 | 22.4 | 23.7 | 24.3 | 24.9 | 24.8 | 24.9 | 24.2 | 23.3 | 21.7 | 20.6 | 19.9 | 19.4 | 18.9 | 18.1 | 17.7 | 20    |
| 22  | 17.1 | 16.3 | 16   | 15.1 | 14.8 | 14.7 | 14.4 | 15.9 | 19.7 | 23.2 | 25   | 26.3 | 27.4 | 28   | 27.3 | 27   | 26.1 | 23.5 | 21.6 | 20.6 | 19.5 | 18.5 | 17.9 | 17.7 | 20.6  |
| 23  | 17.1 | 16.6 | 16.6 | 16.2 | 15.6 | 15.5 | 15.9 | 17.4 | 20.5 | 22.7 | 24.7 | 26.6 | 27.5 | 26.1 | 26   | 26.7 | 26.3 | 24.3 | 22.8 | 22   | 21.8 | 21.2 | 20.9 | 20.8 | 21.3  |
| 24  | 20.6 | 20.3 | 20.1 | 20.1 | 20.3 | 20.4 | 20   | 19.6 | 20.1 | 21.9 | 24.3 | 26.4 | 27.7 | 28.4 | 29.1 | 29.4 | 28.4 | 25.7 | 24.3 | 23.5 | 22.9 | 22.4 | 22.2 | 22   | 23.3  |
| 25  | 21.6 | 21.4 | 21.3 | 21.2 | 21.3 | 21.4 | 21.5 | 22.3 | 23.7 | 24.6 | 25.7 | 26.8 | 27.2 | 27.7 | 27.7 | 27.2 | 25.3 | 22.5 | 20.7 | 20.4 | 19   | 18   | 17   | 16.2 | 22.6  |
| 26  | 15.1 | 14.3 | 13.5 | 12.6 | 11.7 | 10.8 | 10.4 | 11.4 | 14.2 | 15.7 | 16.6 | 17   | 17.3 | 17.6 | 17.7 | 17.5 | 16.8 | 15.4 | 13.5 | 12.1 | 10.9 | 10.3 | 9.4  | 8.6  | 13.8  |
| 27  | 7.8  | 7    | 5.1  | 4.3  | 3.7  | 3.2  | 2.9  | 3.9  | 6.3  | 8.5  | 9.7  | 10.6 | 11.2 | 11.4 | 11.9 | 11.4 | 10.9 | 10.3 | 9.7  | 9.1  | 7.8  | 7.3  | 7.1  | 6.4  | 7.8   |
| 28  | 5.7  | 5    | 4.1  | 3.6  | 3.3  | 2.8  | 2.6  | 4.4  | 7.1  | 8.8  | 8.9  | 9.2  | 9.5  | 10.3 | 11.2 | 11.1 | 10.4 | 9.1  | 7.8  | 6.1  | 5.9  | 5.1  | 5    | 4.8  | 6.8   |
| 29  | 4.1  | 3.4  | 3.1  | 2.6  | 1.8  | 1.7  | 2    | 3.9  | 7.5  | 10.6 | 12.1 | 13.5 | 14.7 | 15.3 | 15.9 | 16.3 | 14.4 | 11.6 | 10.2 | 8.7  | 7.8  | 7    | 6.3  | 5.7  | 8.3   |
| 30  | 5.9  | 5.8  | 5.6  | 5.7  | 5    | 4.4  | 5    | 6.8  | 10.4 | 14.2 | 17.1 | 18.5 | 19.6 | 19.3 | 18.9 | 18.3 | 16.6 | 14.8 | 13.7 | 12.8 | 12.1 | 10.9 | 10.8 | 11   | 11.8  |
| 31  | 10.7 | 10.2 | 10.3 | 9.9  | 9.6  | 9.5  | 9.3  | 10.9 | 14.1 | 17.1 | 18.2 | 19.3 | 19.8 | 19.5 | 18.9 | 18.6 | 17.9 | 16.1 | 15   | 13.8 | 13.2 | 12.6 | 12.4 | 11.6 | 14.1  |
| Avg | 13.8 | 13.2 | 12.8 | 12.4 | 12   | 11.7 | 11.7 | 13.4 | 16.2 | 18.3 | 19.7 | 20.7 | 21.4 | 21.6 | 21.6 | 21.2 | 20.3 | 18.7 | 17.3 | 16.4 | 15.7 | 15   | 14.5 | 14.1 | 16.4  |
| S D | 5    | 5    | 5.1  | 5.1  | 5.3  | 5.5  | 5.5  | 5.1  | 4.8  | 4.7  | 4.9  | 5.1  | 5.2  | 5.1  | 5.1  | 5.2  | 5.2  | 5    | 4.7  | 4.7  | 4.8  | 5    | 4.9  | 5    | 4.7   |
| S/A | 0.36 | 0.38 | 0.4  | 0.41 | 0.44 | 0.47 | 0.47 | 0.39 | 0.3  | 0.26 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.25 | 0.26 | 0.27 | 0.27 | 0.29 | 0.31 | 0.33 | 0.34 | 0.35 | 0.29  |
| Min | 4.1  | 3.4  | 3.1  | 2.6  | 1.8  | 1.7  | 2    | 3.9  | 6.3  | 8.5  | 8.9  | 9.2  | 9.5  | 10.3 | 11.2 | 11.1 | 10.4 | 9.1  | 7.8  | 6.1  | 5.9  | 5.1  | 5    | 4.8  | 6.8   |
| Max | 21.9 | 21.4 | 21.3 | 21.2 | 21.3 | 21.4 | 21.5 | 22.3 | 23.7 | 24.6 | 25.7 | 26.8 | 27.7 | 28.4 | 29.1 | 29.4 | 28.4 | 25.7 | 24.3 | 23.5 | 22.9 | 23.1 | 22.2 | 22   | 23.3  |
| 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**Relative Humidity (Tower)**  
**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   | 92.9   | 93.2   | 91.2   | 90.6 | 91.1   | 92     | 93.7   | 91     | 77.5   | 67.2   | 61.2 | 57.3 | 57.6 | 55.5 | 46.4   | 46.3 | 52.5 | 58.2 | 61.1 | 63.9 | 72   | 78.7   | 79.4   | 74.5   | 72.7   |      |
| 2   | 70.7   | 77.5   | 80.2   | 77.5 | 78.3   | 80.4   | 83.4   | 74.7   | 67.7   | 61     | 52.7 | 48.1 | 46.3 | 44.1 | 45.9   | 48.3 | 50.8 | 58.9 | 70.2 | 81.9 | 84.7 | 82.4   | 83.4   | 86.2   | 68.1   |      |
| 3   | 83.4   | 80.8   | 88.4   | 89.3 | 87.1   | 87.7   | 86.8   | 82.3   | 73     | 60.4   | 52.8 | 46.4 | 43.4 | 43.2 | 40.1   | 41.3 | 44.8 | 54.3 | 66.3 | 73.9 | 80.4 | 85.1   | 88     | 91     | 69.6   |      |
| 4   | 90.4   | 91.5   | 94.6   | 95.5 | 97     | 97.1   | 94.1   | 85.9   | 76.8   | 69.5   | 62.3 | 52.8 | 46.6 | 42.9 | 43.8   | 43.7 | 46.6 | 53   | 65.3 | 73.8 | 79.5 | 85.4   | 87.3   | 86.6   | 73.4   |      |
| 5   | 87.2   | 86.5   | 88     | 92.5 | 95.9   | 98.8   | 99.7 ? | 96.3   | 86.8   | 76.7   | 65.9 | 61.6 | 57.6 | 53.1 | 52.8   | 52.6 | 55.6 | 63.8 | 74.1 | 81.8 | 88.3 | 93     | 94.7   | 95.4   | 79.1   |      |
| 6   | 93.1   | 95.7   | 98.9   | ?    | ?      | ?      | ?      | 98.5   | 95.4   | 90     | 85.8 | 87.3 | 90.9 | 98.5 | 97.6 ? | ?    | ?    | ?    | 98.9 | ?    | ?    | 98.4 ? | 92.6   | 94.4 ? |        |      |
| 7   | 90.5   | 87.3   | 84.9   | 80.4 | 80.8   | 83.2   | 85.9   | 73.9   | 54.7   | 44.4   | 40   | 40.1 | 39.4 | 39.8 | 39.5   | 38.9 | 41.3 | 44.9 | 55.1 | 66.9 | 70   | 73.6   | 74.9   | 75.8   | 62.8   |      |
| 8   | 80.1   | 84.6   | 78.7   | 75.4 | 72.3   | 71.6   | 70.6   | 64.8   | 54.9   | 45.4   | 40.8 | 44.3 | 44.5 | 40.5 | 38.9   | 46.4 | 46.2 | 55.4 | 65.5 | 66.5 | 66.6 | 66.5   | 65.7   | 71.5   | 60.7   |      |
| 9   | 74.7   | 75.3   | 77     | 80.5 | 85.1   | 88.3   | 88.9   | 79.5   | 68.9   | 59.7   | 54.2 | 53.9 | 55.1 | 56.3 | 56.7   | 57.9 | 61.1 | 69   | 77.2 | 81.1 | 84.5 | 88.6   | 95.4   | 99.2   | 73.7   |      |
| 10  | ?      | ?      | ?      | ?    | ?      | ?      | ?      | 95.4 ? | 87.9   | 72.8   | 60.2 | 55.7 | 55.5 | 55.9 | 57.6   | 61.1 | 68.1 | 71.4 | 78.2 | 83.5 | 87.1 | 86     | 88.1   | 90.6   | 73.8 ? |      |
| 11  | 92     | 94.8   | 96.4   | 95.4 | 95.2   | 96.4   | 96.6   | 89.8   | 76.7   | 70.9   | 63.6 | 53.3 | 53.4 | 53.6 | 56.1   | 59.1 | 63.2 | 75.2 | 87.4 | 93   | 98   | 98.3   | 99.6 ? | 99.9 ? | 81.6   |      |
| 12  | ?      | ?      | ?      | ?    | ?      | ?      | ?      | ?      | 91.6 ? | 71     | 60.5 | 54.7 | 48.4 | 46   | 51.1   | 61.1 | 66.8 | 79.4 | 86.9 | 92.2 | 94.2 | 96.4   | 99.3 ? | ?      | 73.3 ? |      |
| 13  | ?      | ?      | ?      | ?    | ?      | ?      | ?      | ?      | 87.8   | 68.1   | 65.1 | 59.6 | 56.9 | 55.9 | 57.8   | 63.1 | 72.2 | 85.8 | 96.8 | 99.8 | ?    | ?      | ?      | ?      | 72.4 ? |      |
| 14  | ?      | ?      | ?      | ?    | ?      | ?      | ?      | ?      | 95.3 ? | 84.4   | 78.8 | 70.7 | 66.6 | 66   | 68.2   | 72.2 | 76.5 | 84   | 89.1 | 92.4 | 95.1 | 94.9   | 99.1 ? | ?      | 82.2 ? |      |
| 15  | ?      | 99.4 ? | 99.3   | 99.3 | 96.2   | 94.3   | 91.9   | 87.5   | 81.3   | 72.6   | 64.4 | 57.7 | 50.3 | 43.7 | 42.3   | 55.2 | 63.6 | 70.2 | 73.4 | 77.7 | 77.3 | 76.8   | 84.1   | 85.8   | 75.8   |      |
| 16  | 92.9   | 96.7   | 98.3 ? | ?    | ?      | 99.4 ? | 97.8   | 88.5   | 79.9   | 68.8   | 61.1 | 68.6 | 69.7 | 69.8 | 68.9   | 67.5 | 69.5 | 75.1 | 82.1 | 87.1 | 80.8 | 49.8   | 47.9   | 43.2   | 75.6 ? |      |
| 17  | 45.6   | 48.6   | 56.4   | 64.3 | 70.2   | 74.8   | 79     | 74.7   | 66.2   | 56.6   | 49   | 45.2 | 42.4 | 40.7 | 38.2   | 38.1 | 39.8 | 47.8 | 56   | 61.8 | 64.4 | 66.8   | 63.4   | 66.5   | 56.5   |      |
| 18  | 73.5   | 76.8   | 80.4   | 84.5 | 85.8   | 88.3   | 88     | 76.9   | 61     | 51.6   | 45.6 | 43.2 | 42.4 | 42.9 | 42.9   | 45.6 | 51.8 | 60.5 | 65.2 | 69.9 | 80.5 | 88.8   | 91.5   | 90.3   | 67.8   |      |
| 19  | 98.7 ? | ?      | ?      | ?    | ?      | ?      | ?      | 93.3 ? | 75.6   | 70     | 64.2 | 63.9 | 59.3 | 56   | 55.8   | 57.1 | 66.2 | 73.9 | 81   | 86   | 89.8 | 92.1   | 96.3   | 99.2   | 76.6 ? |      |
| 20  | 99.1   | 99.5   | 99.7 ? | ?    | ?      | ?      | ?      | ?      | 91.5 ? | 82.3   | 75.2 | 68.7 | 61.1 | 61.6 | 62.7   | 62.4 | 64.3 | 71.3 | 78   | 77   | 82.4 | 86.8   | 90.1   | 91.5   | 79.2 ? |      |
| 21  | 95.1   | 97.8   | 99.6 ? | ?    | ?      | ?      | ?      | 94.6 ? | 83.7   | 72.4   | 65.1 | 62.5 | 62.7 | 64.3 | 63.5   | 65.4 | 69.2 | 74.9 | 80.7 | 82.9 | 83.4 | 86.8   | 92.1   | 95.8   | 79.6 ? |      |
| 22  | 98.2   | 99.8 ? | ?      | ?    | ?      | ?      | ?      | ?      | 93.1   | 75     | 69.4 | 65.5 | 60.5 | 58   | 62.4   | 63.5 | 65.8 | 74.7 | 86.6 | 92.1 | 95.9 | 98.5   | 99.3 ? | 98.2   | 80.9 ? |      |
| 23  | 99     | 99.9 ? | ?      | ?    | ?      | ?      | ?      | ?      | 98.3 ? | 96.6   | 85.3 | 68   | 66.5 | 75.2 | 80.3   | 73.9 | 73.5 | 84   | 92.5 | 97.2 | 97.4 | 98.2   | ?      | ?      | 86.6 ? |      |
| 24  | ?      | ?      | ?      | ?    | ?      | ?      | ?      | ?      | ?      | 97.4 ? | 90.5 | 79.1 | 73.6 | 65.1 | 56.3   | 50.1 | 57.1 | 71.6 | 82.3 | 92.5 | 94.9 | 96.4   | 96.3   | 95.9   | 80 ?   |      |
| 25  | 97.1   | 97.8   | 98     | 98.5 | 99.9 ? | ?      | ?      | 98.3 ? | 93.3   | 88     | 80.6 | 70.7 | 65.7 | 56.3 | 47.2   | 36.9 | 23.3 | 25.2 | 27.5 | 26.8 | 30.3 | 32.8   | 34.6   | 35.1   | 62 ?   |      |
| 26  | 38.1   | 40.2   | 41.5   | 45.7 | 51.1   | 55.1   | 56.4   | 54.8   | 44.4   | 36.3   | 29.9 | 26.4 | 24.5 | 24.3 | 23.3   | 22.2 | 22   | 24.3 | 29.2 | 33.1 | 35.8 | 36.9   | 43.2   | 50.8   | 37.1   |      |
| 27  | 52.7   | 52.1   | 62     | 63.8 | 63.7   | 64.6   | 65.4   | 61.3   | 55     | 46.8   | 42.6 | 40.3 | 40.1 | 39.5 | 38.3   | 40   | 42.4 | 46.6 | 51.9 | 54.3 | 59   | 59.7   | 60.4   | 63.3   | 52.7   |      |
| 28  | 65.5   | 69.3   | 74.5   | 78.4 | 81.3   | 85.1   | 87.4   | 80.8   | 68.3   | 64.6   | 64.1 | 60.4 | 57   | 50.5 | 43.5   | 42.1 | 49.4 | 57.8 | 66.1 | 73.4 | 72.7 | 72.1   | 69.8   | 73.4   | 67     |      |
| 29  | 79.5   | 82.4   | 83.1   | 85.3 | 91     | 94.7   | 96.3   | 91.8   | 76.4   | 62.9   | 56.6 | 48.7 | 42.1 | 38.8 | 36.4   | 33.1 | 50   | 64.9 | 73   | 82.4 | 89.8 | 95.6   | 96.9   | 98.4   | 72.9   |      |
| 30  | 98.3   | 99     | 95.3   | 91.5 | 92.2   | 90.5   | 82.4   | 73.1   | 61     | 48.1   | 41   | 39.3 | 37.1 | 40.9 | 43.6   | 47.8 | 56.9 | 67   | 72.9 | 78.5 | 84.2 | 89.1   | 91.7   | 95.2   | 71.5   |      |
| 31  | 97.8   | 99.1   | 98.6   | 98.7 | 99.8   | 99.8 ? | ?      | 96.9   | 85.7   | 74.5   | 67.7 | 63.1 | 60.4 | 63.7 | 66.8   | 67.1 | 70.7 | 80   | 89.5 | 95.7 | 99.1 | ?      | ?      | ?      | 83.7 ? |      |
| Avg | 83.5   | 85     | 85.4   | 83.5 | 84.9   | 86.4   | 85.8   | 83.5   | 77     | 67.9   | 61.2 | 56.7 | 54.1 | 53   | 52.4   | 52   | 56   | 64.1 | 72   | 78   | 79.9 | 80.6   | 82.5   | 82.5   | 72.4 ? |      |
| S D | 17.4   | 17     | 15.4   | 14.1 | 13.2   | 12.4   | 11.7   | 12.2   | 14.3   | 15.1   | 14.5 | 12.9 | 13   | 14   | 14.8   | 12.6 | 13.8 | 15.5 | 16.5 | 17.3 | 16.7 | 17.9   | 18.4   | 18.1   | 11     |      |
| S/A | 0.21   | 0.2    | 0.18   | 0.17 | 0.15   | 0.14   | 0.14   | 0.15   | 0.19   | 0.22   | 0.24 | 0.23 | 0.24 | 0.27 | 0.28   | 0.24 | 0.25 | 0.24 | 0.23 | 0.22 | 0.21 | 0.22   | 0.22   | 0.22   | 0.15   |      |
| Min | 38.1   | 40.2   | 41.5   | 45.7 | 51.1   | 55.1   | 56.4   | 54.8   | 44.4   | 36.3   | 29.9 | 26.4 | 24.5 | 24.3 | 23.3   | 22.2 | 22   | 24.3 | 27.5 | 26.8 | 30.3 | 32.8   | 34.6   | 35.1   | 37.1   |      |
| Max | 99.1   | 99.9   | 99.7   | 99.3 | 99.9   | 99.8   | 99.7   | 98.5   | 98.3   | 97.4   | 90.5 | 87.3 | 90.9 | 98.5 | 97.6   | 73.9 | 76.5 | 85.8 | 96.8 | 99.8 | 99.1 | 98.5   | 99.6   | 99.9   | 94.4   |      |
| n   | 293    | 274    | 257    | 228  | 217    | 218    | 208    | 266    | 338    | 366    | 372  | 372  | 372  | 372  | 366    | 360  | 360  | 360  | 360  | 360  | 372  | 346    | 335    | 306    | 303    | 7623 |

Data Recovery: 0.0% missing; 14.6% 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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   | 11.7 | 11.3 | 11.2 | 11.1 | 10.8 | 10.4 | 9.5  | 10   | 12.5 | 16.1 | 17.9 | 19.2 | 20   | 20.5 | 20.4 | 20.7 | 20.6 | 18.3 | 16.9 | 15.9 | 14.1 | 12.1 | 10.9 | 11.1 | 14.7  |
| 2   | 11.6 | 11.1 | 10.7 | 10.5 | 10.4 | 9.9  | 9.9  | 13.1 | 17.5 | 21.5 | 24.6 | 26.7 | 27.6 | 27.4 | 27.9 | 28   | 27.3 | 25.1 | 21.2 | 18.6 | 16.7 | 16.3 | 16.1 | 15.8 | 18.6  |
| 3   | 15.4 | 15.3 | 14.5 | 14   | 14.2 | 13.9 | 14.1 | 16.6 | 20   | 23.8 | 27.1 | 29.2 | 30   | 30   | 30   | 29.6 | 28.8 | 26.8 | 23.2 | 21   | 19.6 | 18.5 | 17.8 | 17.4 | 21.3  |
| 4   | 17.1 | 16.7 | 16.1 | 15.8 | 15.3 | 14.9 | 15.1 | 17.5 | 20.4 | 23.3 | 26.3 | 28.7 | 30   | 30.4 | 30.5 | 30.2 | 29   | 26.9 | 23.4 | 21   | 19.6 | 19   | 18.8 | 18.3 | 21.8  |
| 5   | 17.6 | 16.9 | 16.4 | 16.1 | 15.8 | 15.6 | 16   | 18.1 | 21.2 | 24.2 | 26.6 | 28.4 | 28.9 | 29.3 | 29.7 | 29.5 | 28.5 | 26.2 | 23.2 | 21.7 | 20.7 | 20.1 | 19.7 | 19.4 | 22.1  |
| 6   | 19.5 | 19.6 | 19.6 | 19.6 | 20.1 | 20.6 | 21   | 22.1 | 23   | 24   | 24.7 | 24.3 | 24   | 22.3 | 19.7 | 15.2 | 13.3 | 12.5 | 12.2 | 12.1 | 12.2 | 12.2 | 12   | 11.9 | 18.2  |
| 7   | 11.9 | 11.2 | 10.4 | 9.4  | 8.2  | 7.5  | 7.5  | 10.3 | 13.4 | 15.5 | 16.8 | 18   | 19   | 19.2 | 19.4 | 19.1 | 18.4 | 16.1 | 11.9 | 9.6  | 9    | 8.6  | 7.7  | 7.4  | 12.7  |
| 8   | 7.1  | 6    | 5.5  | 5.5  | 5.3  | 4.9  | 5    | 8.3  | 11.8 | 14.2 | 15.8 | 17.3 | 17.6 | 17.1 | 17   | 16.6 | 15.4 | 13   | 10.1 | 8.7  | 7.6  | 6.3  | 5.5  | 4.8  | 10.3  |
| 9   | 4.4  | 4.8  | 4.7  | 4.3  | 3.5  | 3.3  | 3.9  | 7.9  | 12.7 | 16.4 | 18.7 | 20.3 | 20.8 | 20.8 | 20.8 | 20.3 | 19.1 | 16.8 | 14   | 12.3 | 11.4 | 11   | 10.3 | 9.2  | 12.2  |
| 10  | 9.2  | 9.6  | 9.9  | 10.1 | 9.9  | 9.3  | 9.1  | 12.1 | 17.4 | 21.3 | 23.8 | 25.3 | 26.2 | 26.1 | 25.5 | 24.7 | 22.1 | 20.5 | 18.4 | 16.8 | 16   | 15.9 | 15.7 | 15.1 | 17.1  |
| 11  | 14.7 | 14.2 | 13.5 | 13.1 | 13   | 12.7 | 12.7 | 15.7 | 20   | 23.4 | 25.2 | 26.4 | 27.2 | 26.7 | 26.2 | 25.3 | 23.9 | 21.4 | 18.8 | 17.2 | 16.4 | 15.8 | 15.2 | 15   | 18.9  |
| 12  | 14.5 | 13.6 | 12.8 | 12   | 11.4 | 10.8 | 10.5 | 13   | 18.1 | 23.1 | 26.3 | 27.9 | 28.7 | 28.4 | 28.9 | 26.6 | 23.7 | 20.6 | 18.7 | 17.9 | 17.4 | 16.8 | 15.6 | 14.6 | 18.8  |
| 13  | 14.1 | 13.1 | 12.5 | 12.1 | 11.9 | 11.5 | 11.9 | 15.1 | 19.1 | 23.9 | 27.1 | 28.3 | 28.5 | 28.2 | 27.6 | 24.8 | 22.2 | 20   | 18.1 | 16.9 | 16.1 | 15.4 | 15.2 | 15   | 18.7  |
| 14  | 15   | 15.1 | 15.3 | 15.7 | 16   | 16.2 | 16.6 | 18.4 | 21.2 | 24.5 | 26.4 | 27.7 | 28.6 | 28.5 | 28.4 | 27.7 | 26.4 | 24.6 | 23.3 | 22.9 | 22.1 | 22.7 | 22   | 21.7 | 22    |
| 15  | 21.6 | 20.8 | 19.2 | 17.8 | 16.7 | 16.6 | 15.9 | 17   | 19.6 | 22   | 24.1 | 26   | 26.8 | 27.1 | 27.4 | 26.4 | 23.6 | 20.5 | 17.8 | 16.4 | 15.4 | 14.6 | 13.7 | 13.2 | 20    |
| 16  | 11.9 | 10.9 | 10.5 | 10   | 10.3 | 11.1 | 11.7 | 14.5 | 18.7 | 21.3 | 23.3 | 25.1 | 26.1 | 27.1 | 27.1 | 26.8 | 26   | 23.4 | 20.4 | 19.3 | 18.6 | 17.4 | 16.1 | 15.5 | 18.5  |
| 17  | 14.5 | 13.3 | 11.5 | 8.9  | 7.2  | 6.1  | 5.8  | 8.1  | 11.4 | 14.4 | 16.7 | 18.5 | 19.2 | 19.4 | 19.8 | 19.7 | 18.6 | 15.8 | 12.5 | 10.6 | 9.5  | 8.4  | 7.5  | 7.1  | 12.7  |
| 18  | 6.1  | 5.2  | 4.4  | 3.4  | 2.7  | 2.6  | 2.8  | 6.3  | 10.8 | 14.1 | 16.5 | 18.2 | 19.3 | 19.2 | 19.4 | 18.7 | 17.3 | 14.1 | 11.2 | 9.7  | 7.4  | 5.4  | 4.1  | 3.7  | 10.1  |
| 19  | 4.3  | 4.3  | 4    | 4.4  | 4.7  | 5    | 4.4  | 7.3  | 12.6 | 17.2 | 20.3 | 22.7 | 23.3 | 24   | 24.2 | 23.7 | 21.6 | 18.9 | 17.1 | 16.4 | 15.1 | 14.6 | 13.8 | 12.9 | 14    |
| 20  | 12.9 | 13   | 13.2 | 13.1 | 12.4 | 11.7 | 11.9 | 13.1 | 16   | 20.6 | 23.5 | 25   | 26.9 | 27.5 | 26.3 | 26.1 | 25.6 | 23.7 | 21.5 | 19.7 | 18.1 | 17   | 16   | 15.8 | 18.8  |
| 21  | 16   | 15.5 | 14.7 | 14.7 | 14.2 | 14.2 | 14.1 | 16.6 | 20.6 | 23   | 25.5 | 26.8 | 27.7 | 27.9 | 27.6 | 26.8 | 25.5 | 22.9 | 20.8 | 19.5 | 18.5 | 17.9 | 17   | 16.3 | 20.2  |
| 22  | 15.9 | 15.2 | 14.5 | 13.9 | 13.6 | 13.5 | 13.5 | 15.1 | 19.2 | 24.2 | 28   | 29.9 | 31.4 | 31.7 | 31.3 | 29.7 | 28.3 | 25.4 | 22.3 | 20.1 | 18.6 | 17.3 | 16.5 | 16   | 21    |
| 23  | 15.4 | 14.8 | 14.7 | 14.8 | 14.8 | 14.8 | 15.3 | 16.5 | 20.1 | 24   | 27   | 29.4 | 31.8 | 29.7 | 28.5 | 29.1 | 28.3 | 25.9 | 23.4 | 21.8 | 21.1 | 20.5 | 20.2 | 20.1 | 21.8  |
| 24  | 20   | 19.8 | 19.6 | 19.6 | 19.9 | 20.3 | 20.2 | 19.8 | 20.4 | 23.3 | 27.1 | 29.5 | 30.6 | 31.2 | 31.3 | 31   | 30.1 | 27.1 | 24.4 | 23.2 | 22.4 | 21.8 | 21.3 | 21.2 | 24    |
| 25  | 20.9 | 20.6 | 20.5 | 20.5 | 20.4 | 20.5 | 20.7 | 21.9 | 24.3 | 25.4 | 26.8 | 28.6 | 28.8 | 29.3 | 29   | 28.7 | 27.1 | 23.2 | 19.4 | 18.6 | 17.5 | 16.3 | 15.4 | 14.5 | 22.5  |
| 26  | 13.5 | 12.6 | 11.7 | 10.7 | 9.7  | 9.1  | 8.6  | 10.8 | 14.1 | 16.8 | 18.5 | 19.3 | 19.6 | 19.3 | 19.2 | 18.9 | 17.9 | 15.4 | 12.6 | 10.3 | 8.9  | 8.2  | 7.5  | 6.8  | 13.3  |
| 27  | 6    | 5.1  | 3.4  | 2.3  | 1.7  | 1.2  | 0.9  | 3.2  | 6.5  | 9.9  | 12.1 | 13.9 | 14.9 | 14.1 | 14.5 | 13.2 | 11.9 | 10.3 | 9.6  | 8.8  | 7    | 5.8  | 5.5  | 5    | 7.8   |
| 28  | 4.3  | 3.8  | 2.8  | 2.1  | 1.7  | 1.1  | 0.8  | 3.1  | 6.9  | 9.7  | 10.1 | 10.6 | 10.8 | 11.7 | 12.7 | 13   | 11.8 | 8.9  | 6.7  | 4.1  | 2.7  | 2.2  | 2.2  | 2    | 6.1   |
| 29  | 1.4  | 0.9  | 0.4  | 0.4  | -0.1 | -0.3 | -0.3 | 2.4  | 7    | 11.3 | 14.6 | 17.1 | 18.4 | 18.5 | 18.6 | 18.6 | 16.7 | 12.4 | 9.3  | 6.8  | 5.3  | 4.5  | 3.9  | 3    | 8     |
| 30  | 3.1  | 3.5  | 3.3  | 3.1  | 2.4  | 1.7  | 1.8  | 4.9  | 9.9  | 14.5 | 18.1 | 20.3 | 21.6 | 22.1 | 21.6 | 20.8 | 18.7 | 15.4 | 13.2 | 11.5 | 10.5 | 9.1  | 8.6  | 8.6  | 11.2  |
| 31  | 8.5  | 8.4  | 8.4  | 8.4  | 8.1  | 8    | 8    | 9.4  | 13.4 | 17.7 | 20.6 | 22.6 | 23.8 | 23.6 | 22.3 | 21.2 | 19.5 | 16.7 | 14.5 | 12.7 | 11.6 | 11.2 | 10.5 | 10.1 | 14.1  |
| Avg | 12.3 | 11.8 | 11.3 | 10.9 | 10.5 | 10.3 | 10.3 | 12.5 | 16.1 | 19.5 | 21.9 | 23.6 | 24.5 | 24.5 | 24.3 | 23.6 | 22.2 | 19.6 | 17.1 | 15.5 | 14.4 | 13.6 | 13   | 12.5 | 16.5  |
| S D | 5.5  | 5.5  | 5.5  | 5.6  | 5.7  | 5.9  | 6    | 5.5  | 5    | 4.8  | 5    | 5.2  | 5.3  | 5.3  | 5.2  | 5.2  | 5.3  | 5.3  | 5.1  | 5.2  | 5.3  | 5.5  | 5.5  | 5.6  | 5     |
| S/A | 0.45 | 0.47 | 0.49 | 0.51 | 0.55 | 0.58 | 0.59 | 0.44 | 0.31 | 0.25 | 0.23 | 0.22 | 0.22 | 0.22 | 0.21 | 0.22 | 0.24 | 0.27 | 0.3  | 0.34 | 0.37 | 0.4  | 0.42 | 0.44 | 0.3   |
| Min | 1.4  | 0.9  | 0.4  | 0.4  | -0.1 | -0.3 | -0.3 | 2.4  | 6.5  | 9.7  | 10.1 | 10.6 | 10.8 | 11.7 | 12.7 | 13   | 11.8 | 8.9  | 6.7  | 4.1  | 2.7  | 2.2  | 2.2  | 2    | 6.1   |
| Max | 21.6 | 20.8 | 20.5 | 20.5 | 20.4 | 20.6 | 21   | 22.1 | 24.3 | 25.4 | 28   | 29.9 | 31.8 | 31.7 | 31.3 | 31   | 30.1 | 27.1 | 24.4 | 23.2 | 22.4 | 22.7 | 22   | 21.7 | 24    |
| 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: TC-107 Calibration Factor: 1.00 deg C/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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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   | 1.8  | 2    | 1.8  | 2    | 1.7  | 2    | 2.5  | 2.2  | 2.8  | 3.3  | 3.9  | 3.7  | 3.4  | 3.9  | 3.9  | 2.2  | 1.6  | 0.7  | 1.3  | 0.6  | 0.3  | 0.4  | 0.4  | 0.7 | 2.1   |
| 2   | 1.5  | 1.7  | 2.7  | 2.3  | 2.3  | 1.7  | 1.3  | 1.1  | 1    | 1.6  | 1.9  | 1.9  | 2.6  | 2.5  | 2.1  | 1.6  | 1.3  | 0.3  | 0.2  | 0    | 0.4  | 0.8  | 1.1  | 1   | 1.5   |
| 3   | 1.2  | 0.7  | 0.8  | 1.5  | 1.6  | 1.2  | 1.4  | 1.8  | 1.9  | 2.5  | 2.4  | 2.6  | 2.9  | 2.9  | 3.7  | 3.3  | 2.3  | 1.2  | 1.4  | 1.2  | 1.5  | 1.2  | 1.8  | 1.9 | 1.9   |
| 4   | 1.9  | 1.8  | 1.7  | 1.4  | 1.2  | 1.2  | 1.2  | 1.9  | 2.8  | 2.3  | 2.3  | 2    | 2.2  | 2.7  | 3.1  | 3.1  | 2.3  | 1.3  | 1    | 1    | 1.2  | 1.8  | 1.8  | 1.6 | 1.9   |
| 5   | 1.3  | 1.2  | 1.4  | 1.4  | 1.5  | 1.7  | 1.6  | 2.2  | 2.7  | 3.1  | 3.6  | 3.6  | 4.3  | 3.3  | 3.4  | 3.2  | 3.1  | 2.2  | 3    | 2.9  | 2.5  | 2.5  | 2    | 1.7 | 2.5   |
| 6   | 2.3  | 2.3  | 2.3  | 2.3  | 3.1  | 3    | 3.7  | 4.1  | 4.2  | 5.3  | 4.7  | 4.3  | 4.2  | 3.7  | 4.4  | 4.3  | 3.5  | 2.4  | 1.7  | 1.6  | 0.4  | 0.7  | 1    | 1.6 | 3     |
| 7   | 1.2  | 1.6  | 1.8  | 1.5  | 1.4  | 1.6  | 1.7  | 3    | 3.9  | 4.3  | 4.4  | 3    | 2.5  | 2.3  | 3    | 2.8  | 1.9  | 1.2  | 0.3  | 0.4  | 1    | 0.6  | 0.9  | 1.4 | 2     |
| 8   | 1.3  | 1    | 1.5  | 1.4  | 1.2  | 1.1  | 1.1  | 1.4  | 3    | 3.9  | 3.3  | 3    | 3.3  | 3.8  | 3.6  | 3.4  | 2.7  | 1.9  | 1.4  | 1.3  | 1.2  | 0.9  | 0.8  | 0.7 | 2     |
| 9   | 1.6  | 1.6  | 1.4  | 0.9  | 0.6  | 0.9  | 0.9  | 1.2  | 1.7  | 3.3  | 3.8  | 3.3  | 3.4  | 3.3  | 2.8  | 3.1  | 2.8  | 2.3  | 1    | 0.9  | 0.8  | 1    | 0.2  | 0.2 | 1.8   |
| 10  | 0.9  | 0.9  | 0.8  | 0.1  | 0    | 0.6  | 0.3  | 0    | 1.2  | 3.4  | 3.8  | 3.4  | 3.1  | 3    | 3.3  | 3.8  | 2.8  | 2.6  | 2    | 1.3  | 1.7  | 1.9  | 1.6  | 0.9 | 1.8   |
| 11  | 0.9  | 0.5  | 0.5  | 0.5  | 0.9  | 0.1  | 0    | 0.2  | 1.3  | 1.8  | 2.5  | 2.7  | 3.1  | 3.6  | 3.7  | 4.1  | 3.6  | 2.6  | 1.7  | 1.6  | 1.8  | 0.8  | 1.3  | 1.1 | 1.7   |
| 12  | 0.3  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.4  | 0.9  | 0.9  | 0.9  | 0.6  | 1.9  | 3.3  | 2.6  | 1.9  | 1.6  | 0.8  | 0.9  | 0    | 0.2  | 0   | 0.7   |
| 13  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.3  | 0.2  | 1.2  | 1.9  | 2.5  | 3.2  | 3.4  | 2.8  | 2.8  | 3.1  | 2.2  | 1.6  | 0.4  | 0.2  | 0.3  | 0.1 | 1.1   |
| 14  | 0.2  | 0.2  | 0.5  | 0.5  | 0.6  | 0.3  | 1.3  | 1.4  | 2.1  | 3.7  | 5.1  | 4.7  | 5.4  | 5.6  | 5.2  | 5.1  | 4.8  | 4.4  | 4.7  | 4.6  | 4.5  | 3.5  | 2.5  | 2.4 | 3.1   |
| 15  | 2.3  | 2.5  | 2.3  | 2.1  | 2    | 1.6  | 1.4  | 1.8  | 1.5  | 2.5  | 2    | 1.5  | 1.7  | 1.2  | 1.2  | 3.4  | 3.1  | 2.3  | 1.9  | 1.9  | 1.5  | 1.3  | 1.1  | 0.7 | 1.9   |
| 16  | 0    | 0.1  | 0.2  | 0    | 0.4  | 0.9  | 1.3  | 2.1  | 3.4  | 3.3  | 3.1  | 3    | 2.7  | 2.6  | 2.6  | 2.9  | 1.7  | 0.6  | 1.2  | 1.6  | 3    | 3.4  | 2.6  | 3.7 | 1.9   |
| 17  | 3.1  | 3.5  | 2.8  | 2.5  | 2.1  | 1.6  | 2.3  | 3.1  | 2.7  | 3.4  | 3.2  | 3    | 3.2  | 3.3  | 2.5  | 2.6  | 2.5  | 1    | 0.8  | 1.3  | 1.7  | 1.6  | 1.9  | 1.4 | 2.4   |
| 18  | 1    | 1    | 0.3  | 0.3  | 0.5  | 0.9  | 1    | 1.3  | 2.5  | 3    | 2.7  | 2.1  | 2.2  | 2    | 1.9  | 2    | 2.5  | 2.6  | 1.9  | 0.7  | 0    | 0    | 0    | 0   | 1.3   |
| 19  | 0.1  | 0    | 0    | 0    | 0.4  | 0    | 0    | 0    | 0.5  | 1.7  | 1.7  | 2.5  | 1.7  | 2    | 2    | 1.7  | 2.9  | 2.6  | 1.9  | 0.8  | 0.8  | 1    | 0.2  | 0   | 1     |
| 20  | 0.5  | 0.8  | 0.2  | 0    | 0    | 0    | 0    | 0    | 0.2  | 1.3  | 1.7  | 2.2  | 2.5  | 2.6  | 1.4  | 1.5  | 0.9  | 0.7  | 1.2  | 1.1  | 0.4  | 0.2  | 0.6  | 0.2 | 0.8   |
| 21  | 0.8  | 0    | 0.1  | 0.2  | 0    | 0    | 0    | 0.7  | 2.2  | 3    | 3.4  | 3.4  | 3.4  | 3.9  | 4.2  | 4.5  | 3.5  | 3.4  | 2.7  | 1.9  | 1    | 1    | 0.3  | 0.8 | 1.9   |
| 22  | 0.6  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.8  | 0.9  | 1.7  | 1.4  | 1.2  | 1.2  | 2    | 2.4  | 2.2  | 2.4  | 1.4  | 0.5  | 0    | 0    | 0.3  | 0.2 | 0.8   |
| 23  | 0    | 0    | 0    | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0    | 0.2  | 0.7  | 0.3  | 0.6  | 2.1  | 2.7  | 2.4  | 1.2  | 1.6  | 1.3  | 1.2  | 1.2  | 0.9  | 1.4  | 0.9 | 0.8   |
| 24  | 0.5  | 0.3  | 0.1  | 0.5  | 0.4  | 1.9  | 1.8  | 1.2  | 1.4  | 1.6  | 1.5  | 2.5  | 2.3  | 3.2  | 3.3  | 3.6  | 1.8  | 1.2  | 2    | 2    | 2.6  | 2.1  | 2.5  | 2.5 | 1.8   |
| 25  | 2.4  | 2.2  | 2.5  | 2.3  | 2.8  | 2.1  | 2.8  | 3.5  | 4.2  | 5.6  | 5.7  | 5.5  | 5.5  | 5.7  | 5.5  | 4.7  | 3.1  | 1.4  | 2    | 2.4  | 1.9  | 2.3  | 2.2  | 2.3 | 3.4   |
| 26  | 2.2  | 1.8  | 1.6  | 1.2  | 1.3  | 1.8  | 1.7  | 2    | 3.8  | 5    | 5.6  | 5.4  | 6.2  | 5.6  | 5.4  | 5.5  | 4.8  | 2.7  | 1.2  | 0.9  | 1.4  | 1.8  | 2.1  | 1.9 | 3     |
| 27  | 2.1  | 1    | 1.2  | 1.1  | 1.4  | 1.4  | 1.4  | 2.1  | 2.7  | 3.3  | 2.8  | 2.5  | 2.6  | 2.7  | 2.9  | 2.7  | 1.6  | 1.6  | 2.3  | 1.7  | 2.2  | 2.9  | 3.1  | 3.1 | 2.2   |
| 28  | 2.9  | 2.6  | 2.2  | 2.2  | 1.7  | 1.6  | 1.8  | 2.5  | 3.8  | 4.4  | 5    | 5.4  | 5.5  | 5.5  | 4    | 4.2  | 2.8  | 1.9  | 0.9  | 0.3  | 0.4  | 0.8  | 1    | 0.7 | 2.7   |
| 29  | 0.8  | 0.7  | 0.9  | 1.1  | 1.3  | 1.2  | 1.4  | 1.4  | 1.8  | 2    | 2    | 1.3  | 1.7  | 2    | 1.4  | 1.1  | 1.5  | 1    | 0.1  | 0    | 0    | 0.1  | 0    | 0.1 | 1     |
| 30  | 0.8  | 0.8  | 1.1  | 0.8  | 0.1  | 0.8  | 0.9  | 1.1  | 1    | 1.6  | 2.3  | 2.7  | 2.4  | 3.2  | 3.3  | 2.7  | 2.5  | 1.6  | 1    | 0.5  | 0.3  | 0.3  | 0.2  | 0.3 | 1.3   |
| 31  | 0.5  | 0.6  | 1.3  | 1.3  | 0.8  | 1.1  | 0.8  | 0.8  | 1.3  | 2    | 2.6  | 1.9  | 1.7  | 2.9  | 3.4  | 2.8  | 1.8  | 1.7  | 0.6  | 0    | 0    | 0.1  | 0    | 0   | 1.3   |
| Avg | 1.2  | 1.1  | 1.1  | 1    | 1    | 1    | 1.1  | 1.4  | 2    | 2.7  | 3    | 2.8  | 2.9  | 3.1  | 3.1  | 3.1  | 2.5  | 1.9  | 1.5  | 1.3  | 1.2  | 1.2  | 1.1  | 1.1 | 1.8   |
| S D | 0.9  | 0.9  | 0.9  | 0.9  | 0.9  | 0.8  | 0.9  | 1.1  | 1.3  | 1.4  | 1.4  | 1.3  | 1.4  | 1.3  | 1.1  | 0.9  | 0.9  | 0.9  | 0.9  | 0.9  | 1    | 1    | 0.9  | 1   | 0.7   |
| S/A | 0.74 | 0.86 | 0.83 | 0.84 | 0.86 | 0.75 | 0.81 | 0.79 | 0.62 | 0.51 | 0.46 | 0.45 | 0.47 | 0.41 | 0.36 | 0.34 | 0.37 | 0.48 | 0.58 | 0.75 | 0.86 | 0.85 | 0.79 | 0.9 | 0.39  |
| Min | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0.2  | 0.7  | 0.3  | 0.6  | 0.6  | 1.2  | 1.1  | 0.9  | 0.3  | 0.1  | 0    | 0    | 0    | 0    | 0   | 0.7   |
| Max | 3.1  | 3.5  | 2.8  | 2.5  | 3.1  | 3    | 3.7  | 4.1  | 4.2  | 5.6  | 5.7  | 5.5  | 6.2  | 5.7  | 5.5  | 5.5  | 4.8  | 4.4  | 4.7  | 4.6  | 4.5  | 3.5  | 3.1  | 3.7 | 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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   | 153 | 174 | 185 | 181 | 176 | 180 | 188 | 190 | 188 | 197 | 210 | 214 | 199 | 219 | 242 | 249 | 246 | 221 | 206 | 220 | 115 | 112 | 160 | 141 | 201   |
| 2   | 132 | 132 | 145 | 153 | 152 | 142 | 155 | 170 | 190 | 204 | 199 | 225 | 175 | 191 | 167 | 182 | 197 | 175 | 99  | 82  | 108 | 110 | 114 | 107 | 165   |
| 3   | 118 | 117 | 114 | 125 | 123 | 117 | 124 | 122 | 137 | 125 | 146 | 118 | 115 | 83  | 136 | 125 | 119 | 61  | 67  | 71  | 80  | 90  | 80  | 100 | 113   |
| 4   | 97  | 98  | 103 | 105 | 108 | 100 | 106 | 118 | 119 | 124 | 137 | 98  | 110 | 122 | 123 | 117 | 126 | 117 | 58  | 65  | 88  | 85  | 100 | 90  | 109   |
| 5   | 99  | 91  | 74  | 87  | 94  | 91  | 101 | 100 | 123 | 116 | 121 | 117 | 122 | 88  | 66  | 78  | 80  | 69  | 57  | 61  | 87  | 89  | 85  | 82  | 92    |
| 6   | 94  | 87  | 84  | 87  | 77  | 90  | 111 | 102 | 94  | 114 | 129 | 143 | 155 | 131 | 254 | 247 | 241 | 250 | 262 | 245 | 162 | 193 | 184 | 207 | 136   |
| 7   | 195 | 206 | 212 | 211 | 206 | 223 | 196 | 230 | 244 | 239 | 225 | 235 | 205 | 210 | 195 | 184 | 206 | 196 | 243 | 268 | 259 | 244 | 244 | 228 | 219   |
| 8   | 231 | 213 | 231 | 222 | 225 | 222 | 204 | 224 | 235 | 237 | 255 | 254 | 242 | 260 | 252 | 257 | 260 | 283 | 276 | 259 | 245 | 221 | 213 | 209 | 245   |
| 9   | 231 | 233 | 231 | 228 | 214 | 220 | 232 | 248 | 270 | 301 | 323 | 310 | 305 | 304 | 318 | 331 | 338 | 318 | 302 | 289 | 282 | 293 | 233 | 238 | 296   |
| 10  | 268 | 281 | 312 | 284 | 207 | 232 | 228 | 228 | 345 | 21  | 29  | 51  | 41  | 49  | 19  | 26  | 23  | 20  | 29  | 27  | 26  | 33  | 20  | 30  | 24    |
| 11  | 33  | 29  | 29  | 22  | 20  | 28  | 6   | 11  | 14  | 333 | 324 | 329 | 329 | 328 | 343 | 5   | 359 | 14  | 356 | 356 | 345 | 352 | 360 | 3   | 351   |
| 12  | 5   | 13  | 205 | 209 | 188 | 198 | 203 | 245 | 238 | 184 | 268 | 277 | 312 | 40  | 354 | 2   | 1   | 356 | 346 | 344 | 1   | 50  | 114 | 144 | 349   |
| 13  | 80  | 79  | 80  | 80  | 100 | 143 | 314 | 76  | 119 | 333 | 300 | 342 | 355 | 326 | 336 | 10  | 334 | 335 | 348 | 4   | 351 | 335 | 354 | 347 | 343   |
| 14  | 355 | 352 | 18  | 11  | 7   | 17  | 18  | 16  | 27  | 44  | 46  | 64  | 60  | 47  | 58  | 47  | 71  | 40  | 59  | 43  | 72  | 66  | 66  | 125 | 54    |
| 15  | 147 | 185 | 177 | 183 | 202 | 217 | 186 | 172 | 199 | 246 | 248 | 227 | 202 | 194 | 240 | 9   | 350 | 349 | 333 | 327 | 332 | 330 | 321 | 327 | 242   |
| 16  | 345 | 343 | 340 | 282 | 333 | 317 | 309 | 308 | 342 | 345 | 334 | 26  | 48  | 71  | 69  | 62  | 75  | 77  | 104 | 70  | 73  | 159 | 172 | 174 | 47    |
| 17  | 156 | 173 | 157 | 152 | 160 | 153 | 142 | 156 | 173 | 167 | 188 | 175 | 201 | 161 | 183 | 170 | 196 | 142 | 148 | 161 | 172 | 170 | 198 | 208 | 170   |
| 18  | 213 | 196 | 189 | 195 | 208 | 209 | 203 | 230 | 257 | 274 | 266 | 276 | 301 | 321 | 309 | 327 | 314 | 330 | 330 | 328 | 81  | 96  | 19  | 290 | 285   |
| 19  | 262 | 229 | 258 | 232 | 254 | 232 | 196 | 232 | 314 | 337 | 332 | 344 | 35  | 88  | 80  | 85  | 19  | 13  | 33  | 31  | 37  | 57  | 76  | 77  | 26    |
| 20  | 55  | 55  | 60  | 103 | 343 | 232 | 197 | 226 | 171 | 135 | 143 | 135 | 141 | 120 | 125 | 113 | 81  | 59  | 20  | 45  | 360 | 46  | 40  | 28  | 106   |
| 21  | 24  | 27  | 261 | 254 | 273 | 3   | 355 | 6   | 1   | 358 | 10  | 33  | 7   | 351 | 13  | 12  | 9   | 11  | 14  | 39  | 39  | 41  | 57  | 62  | 13    |
| 22  | 116 | 162 | 181 | 84  | 38  | 193 | 47  | 91  | 152 | 146 | 140 | 155 | 87  | 20  | 355 | 41  | 43  | 14  | 13  | 37  | 44  | 28  | 27  | 44  | 53    |
| 23  | 36  | 15  | 320 | 233 | 223 | 233 | 237 | 256 | 341 | 318 | 298 | 296 | 86  | 312 | 332 | 53  | 66  | 31  | 19  | 41  | 74  | 75  | 93  | 84  | 26    |
| 24  | 87  | 106 | 70  | 91  | 94  | 122 | 136 | 120 | 132 | 113 | 124 | 120 | 86  | 93  | 108 | 111 | 76  | 59  | 81  | 76  | 82  | 82  | 90  | 98  | 100   |
| 25  | 100 | 95  | 93  | 75  | 95  | 81  | 94  | 111 | 112 | 121 | 131 | 125 | 143 | 126 | 134 | 157 | 180 | 179 | 167 | 137 | 127 | 141 | 149 | 161 | 127   |
| 26  | 146 | 154 | 138 | 129 | 138 | 149 | 139 | 128 | 159 | 135 | 149 | 162 | 141 | 149 | 155 | 149 | 156 | 167 | 153 | 158 | 152 | 162 | 195 | 209 | 152   |
| 27  | 218 | 209 | 156 | 161 | 150 | 150 | 192 | 181 | 175 | 200 | 202 | 199 | 187 | 201 | 184 | 177 | 187 | 210 | 197 | 182 | 182 | 195 | 193 | 193 | 189   |
| 28  | 191 | 193 | 188 | 182 | 196 | 168 | 182 | 193 | 230 | 230 | 238 | 251 | 232 | 249 | 245 | 242 | 242 | 251 | 241 | 225 | 236 | 215 | 208 | 212 | 226   |
| 29  | 192 | 195 | 180 | 177 | 182 | 197 | 195 | 207 | 226 | 241 | 250 | 255 | 257 | 232 | 232 | 239 | 5   | 33  | 32  | 31  | 109 | 102 | 97  | 107 | 225   |
| 30  | 113 | 117 | 118 | 127 | 173 | 201 | 187 | 196 | 199 | 219 | 276 | 249 | 280 | 297 | 316 | 301 | 293 | 292 | 282 | 280 | 276 | 238 | 250 | 279 | 270   |
| 31  | 253 | 236 | 240 | 234 | 254 | 262 | 236 | 262 | 274 | 308 | 310 | 291 | 289 | 336 | 326 | 338 | 309 | 329 | 338 | 308 | 292 | 280 | 288 | 289 | 300   |
| Avg | 148 | 160 | 153 | 151 | 149 | 155 | 155 | 160 | 179 | 184 | 203 | 176 | 154 | 121 | 18  | 57  | 14  | 2   | 22  | 44  | 78  | 113 | 130 | 148 | 139   |
| n   | 372 | 371 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 372 | 371 | 372 | 371 | 370 | 8923  |

Data Recovery: 0.0% missing; 0.1% 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.

Prepared by: Afshin M. Andreas, NREL



**Elizabeth City State University**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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   | 3.6  | 3.8  | 3.4 | 4.1  | 3.6  | 3.9  | 4.8 | 4.3  | 5.5  | 6.5  | 7   | 6.7  | 5.8  | 6.4  | 6.5  | 3.9  | 3.2  | 2    | 2.6  | 1.6  | 0.7 | 0.8  | 0.9  | 1.2  | 3.9   |
| 2   | 1.9  | 2.3  | 3.5 | 3.2  | 3.1  | 2.4  | 2.1 | 2.3  | 2.4  | 3.2  | 3.9 | 4    | 5    | 5    | 4.4  | 3.4  | 2.6  | 0.7  | 0.4  | 0.1  | 0.8 | 1.2  | 1.4  | 1.5  | 2.5   |
| 3   | 1.6  | 1.1  | 1.2 | 2    | 2.2  | 1.7  | 1.9 | 2.6  | 2.9  | 3.8  | 3.9 | 4.6  | 5    | 5.3  | 5.6  | 4.9  | 3.5  | 2.3  | 2.7  | 2.3  | 2.8 | 2.2  | 3.1  | 3.3  | 3     |
| 4   | 2.9  | 2.9  | 2.6 | 2.2  | 1.9  | 1.8  | 2   | 3.1  | 4.8  | 3.8  | 3.8 | 3.3  | 4.5  | 4.5  | 4.9  | 4.7  | 3.8  | 1.9  | 1.8  | 1.8  | 2.1 | 3    | 3    | 2.6  | 3.1   |
| 5   | 2.2  | 2.2  | 2.4 | 2.6  | 2.4  | 2.6  | 2.6 | 3.7  | 4.4  | 4.7  | 5.8 | 5.9  | 6.6  | 5.6  | 6.1  | 5.3  | 5.4  | 4    | 5    | 4.9  | 4.6 | 4.2  | 3.7  | 3.3  | 4.2   |
| 6   | 4    | 4    | 3.9 | 4    | 4.9  | 5.3  | 6.3 | 6.9  | 6.9  | 8.8  | 7.3 | 6.7  | 6.8  | 6.4  | 7.2  | 6.6  | 5.5  | 3.9  | 3.4  | 3.1  | 1.3 | 2.1  | 2.6  | 3.3  | 5.1   |
| 7   | 2.5  | 3.2  | 3.5 | 3.1  | 2.8  | 3    | 3.3 | 5.4  | 6.6  | 7.6  | 7.4 | 5.4  | 5    | 4.3  | 5.5  | 4.9  | 4.1  | 2.8  | 0.8  | 0.8  | 1.9 | 1.3  | 1.6  | 2.1  | 3.7   |
| 8   | 2.2  | 2    | 2.7 | 2.5  | 2.4  | 2.3  | 2.2 | 2.9  | 5.2  | 6.5  | 5.6 | 5.4  | 5.6  | 6.3  | 6    | 5.6  | 4.9  | 3.3  | 2.7  | 2.4  | 2.3 | 1.8  | 1.9  | 1.5  | 3.6   |
| 9   | 2.4  | 2.4  | 2.5 | 1.7  | 1.3  | 1.5  | 1.6 | 2.1  | 2.9  | 5.2  | 6   | 5.3  | 5.2  | 5.1  | 4.6  | 5    | 4.3  | 3.4  | 1.7  | 1.4  | 1.5 | 1.6  | 0.6  | 0.6  | 2.9   |
| 10  | 1.4  | 1.3  | 1.2 | 0.4  | 0.2  | 1    | 0.5 | 0.1  | 2.2  | 5    | 5.6 | 5.4  | 5.1  | 4.9  | 5.3  | 5.7  | 4.1  | 3.7  | 2.8  | 2.1  | 2.7 | 2.8  | 2.6  | 1.8  | 2.8   |
| 11  | 1.7  | 1.1  | 1.1 | 1.2  | 1.4  | 0.6  | 0.1 | 0.5  | 2.2  | 2.8  | 3.7 | 4.1  | 4.3  | 5.2  | 5.8  | 5.9  | 5.3  | 3.9  | 2.4  | 2.3  | 2.5 | 1.4  | 1.9  | 1.8  | 2.6   |
| 12  | 0.5  | 0    | 0.1 | 0    | 0.2  | 0.3  | 0   | 0    | 0    | 1.4  | 2.3 | 2    | 2    | 1.7  | 3.4  | 4.8  | 4    | 2.8  | 2.7  | 1.5  | 1.6 | 0.3  | 0.5  | 0.2  | 1.3   |
| 13  | 0    | 0    | 0   | 0    | 0    | 0    | 0   | 0    | 0.9  | 0.9  | 2.2 | 3.3  | 4    | 4.6  | 4.9  | 4.1  | 4.1  | 4.7  | 3.2  | 2.3  | 0.7 | 0.9  | 0.7  | 0.2  | 1.7   |
| 14  | 0.8  | 0.7  | 1.1 | 1.3  | 1.4  | 0.9  | 2.1 | 2.5  | 3.5  | 6.1  | 7.7 | 7.5  | 8.6  | 8.2  | 8.7  | 7.9  | 8.2  | 6.8  | 7.4  | 7.1  | 7.1 | 6.3  | 4.7  | 4.2  | 5     |
| 15  | 4    | 4.7  | 4.4 | 4.3  | 4.2  | 3.6  | 3   | 3.8  | 3.3  | 4.4  | 3.7 | 3.2  | 3.6  | 2.8  | 2.6  | 5.2  | 4.8  | 3.5  | 2.9  | 2.8  | 2.2 | 1.9  | 1.7  | 1.1  | 3.4   |
| 16  | 0.1  | 0.2  | 0.3 | 0    | 0.7  | 1.5  | 1.7 | 3.1  | 5.1  | 5    | 4.7 | 4.7  | 4.8  | 4.5  | 4.8  | 4.7  | 3.2  | 1.4  | 2.1  | 2.9  | 5.8 | 6.2  | 5.1  | 6.5  | 3.3   |
| 17  | 6    | 6.4  | 5.4 | 4.6  | 3.6  | 2.7  | 3.8 | 5.7  | 5.2  | 6.9  | 6.2 | 5.6  | 5.9  | 5.9  | 4.8  | 4.8  | 5    | 2.2  | 1.4  | 2.1  | 3.1 | 3.3  | 3.6  | 2.7  | 4.4   |
| 18  | 2    | 2.1  | 1.2 | 1.1  | 1.2  | 1.7  | 2   | 2.5  | 4.2  | 5.2  | 4.4 | 3.9  | 3.8  | 3.7  | 3.6  | 3.5  | 3.8  | 3.9  | 2.7  | 1.2  | 0.1 | 0    | 0    | 0    | 2.4   |
| 19  | 0.2  | 0.2  | 0.1 | 0.1  | 0.7  | 0.1  | 0   | 0.1  | 1    | 2.9  | 3.2 | 3.9  | 3.3  | 3.7  | 3.7  | 3.3  | 4.3  | 3.7  | 3.2  | 1.7  | 1.7 | 1.7  | 0.7  | 0.2  | 1.8   |
| 20  | 1.1  | 1.2  | 0.6 | 0    | 0.1  | 0    | 0.2 | 0.1  | 1    | 2.4  | 3.6 | 4.2  | 4.8  | 4.3  | 2.8  | 2.6  | 2    | 1.6  | 2.3  | 2.2  | 1   | 0.8  | 1.2  | 0.6  | 1.7   |
| 21  | 1.4  | 0.1  | 0.3 | 0.3  | 0    | 0    | 0.1 | 1.4  | 3.3  | 4.7  | 5.2 | 5.7  | 5.4  | 6.3  | 6.3  | 6.5  | 5.2  | 4.6  | 3.9  | 2.9  | 1.7 | 1.8  | 0.9  | 1.7  | 2.9   |
| 22  | 1.2  | 0.1  | 0   | 0    | 0.1  | 0    | 0   | 0    | 1.7  | 2    | 3.6 | 3.3  | 2.6  | 2.6  | 3.3  | 3.8  | 3.6  | 3.4  | 2.4  | 0.9  | 0.1 | 0.1  | 0.6  | 0.6  | 1.5   |
| 23  | 0.1  | 0.1  | 0   | 0.2  | 0.3  | 0.3  | 0.2 | 0    | 0.7  | 1.6  | 1.6 | 1    | 1.5  | 3.2  | 4.2  | 4.2  | 2.3  | 2.5  | 2.2  | 2.1  | 2.4 | 2.2  | 2.7  | 2    | 1.6   |
| 24  | 1.4  | 1    | 0.6 | 1.5  | 1.3  | 3.3  | 3   | 2.4  | 2.7  | 3    | 3   | 4.4  | 4.2  | 5.5  | 5.4  | 5.8  | 3.5  | 2.3  | 3.6  | 3.8  | 4.5 | 3.8  | 4.4  | 4.5  | 3.3   |
| 25  | 4.2  | 3.8  | 4.3 | 4.2  | 4.7  | 4.1  | 4.8 | 6    | 6.7  | 8.5  | 9.2 | 8.9  | 8.4  | 9.2  | 9.1  | 7.9  | 5.9  | 2.9  | 3.6  | 3.8  | 2.9 | 3.5  | 3.5  | 3.7  | 5.6   |
| 26  | 3.3  | 3    | 2.8 | 1.9  | 2    | 2.6  | 2.6 | 3.2  | 6.9  | 9.1  | 9.1 | 8.6  | 10.2 | 9.2  | 9.4  | 8.5  | 8.2  | 4.5  | 2    | 1.5  | 2.2 | 3.5  | 4    | 3.3  | 5.1   |
| 27  | 3.6  | 2    | 1.9 | 1.9  | 2.3  | 2.5  | 2.6 | 4.3  | 5.3  | 6.6  | 5.3 | 5.2  | 5.2  | 4.9  | 5.6  | 5.2  | 3.3  | 3.5  | 5.2  | 3.8  | 4   | 5    | 5.8  | 5.8  | 4.2   |
| 28  | 5.6  | 5    | 4.4 | 4.1  | 3.5  | 3    | 3.5 | 4.6  | 6.9  | 7.7  | 8.4 | 8.7  | 8.8  | 8.6  | 7.3  | 6.6  | 4.9  | 3.3  | 1.7  | 0.8  | 0.9 | 1.5  | 1.8  | 1.3  | 4.7   |
| 29  | 1.5  | 1.6  | 1.8 | 2.1  | 2.4  | 2.2  | 2.2 | 2.7  | 3.3  | 3.8  | 4   | 2.8  | 3.5  | 3.7  | 2.7  | 2.8  | 2.5  | 1.8  | 0.5  | 0.2  | 0   | 0.3  | 0.1  | 0.1  | 2     |
| 30  | 1.1  | 1.2  | 1.4 | 1.3  | 0.3  | 1.3  | 1.7 | 2.3  | 2.4  | 2.9  | 3.9 | 4.6  | 4.1  | 5.1  | 4.7  | 4.2  | 3.9  | 2.6  | 1.8  | 0.9  | 0.5 | 0.7  | 0.7  | 0.8  | 2.3   |
| 31  | 0.8  | 1.1  | 1.9 | 1.9  | 1.5  | 1.6  | 1.2 | 1.6  | 2.4  | 3.4  | 4   | 3.3  | 3.4  | 4.4  | 5.1  | 4.1  | 2.8  | 2.6  | 1.1  | 0.2  | 0.1 | 0.2  | 0    | 0    | 2     |
| Avg | 2.1  | 1.9  | 2   | 1.9  | 1.8  | 1.9  | 2   | 2.6  | 3.6  | 4.7  | 5   | 4.9  | 5.1  | 5.2  | 5.3  | 5    | 4.3  | 3.1  | 2.7  | 2.2  | 2.1 | 2.1  | 2.1  | 2    | 3.2   |
| SD  | 1.6  | 1.6  | 1.6 | 1.5  | 1.4  | 1.4  | 1.6 | 2    | 2    | 2.3  | 2   | 1.9  | 2    | 1.8  | 1.7  | 1.5  | 1.4  | 1.2  | 1.4  | 1.5  | 1.7 | 1.7  | 1.6  | 1.7  | 1.2   |
| S/A | 0.74 | 0.84 | 0.8 | 0.81 | 0.79 | 0.74 | 0.8 | 0.76 | 0.56 | 0.48 | 0.4 | 0.38 | 0.39 | 0.35 | 0.33 | 0.29 | 0.34 | 0.38 | 0.54 | 0.67 | 0.8 | 0.79 | 0.76 | 0.85 | 0.38  |
| Min | 0    | 0    | 0   | 0    | 0    | 0    | 0   | 0    | 0    | 0.9  | 1.6 | 1    | 1.5  | 1.7  | 2.6  | 2.6  | 2    | 0.7  | 0.4  | 0.1  | 0   | 0    | 0    | 0    | 1.3   |
| Max | 6    | 6.4  | 5.4 | 4.6  | 4.9  | 5.3  | 6.3 | 6.9  | 6.9  | 9.1  | 9.2 | 8.9  | 10.2 | 9.2  | 9.4  | 8.5  | 8.2  | 6.8  | 7.4  | 7.1  | 7.1 | 6.3  | 5.8  | 6.5  | 5.6   |
| 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**  
**36.3 N Latitude 76.25 W Longitude 4 Meters AMSL Time Zone -5**

**October 2001**

**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   | 1013 | 1012 | 1012 | 1011 | 1011 | 1011 | 1012 | 1012 | 1012 | 1012 | 1012 | 1012 | 1011 | 1011 | 1011 | 1011 | 1010 | 1011 | 1011 | 1012 | 1012 | 1013 | 1013 | 1013 | 1012  |
| 2   | 1012 | 1013 | 1012 | 1012 | 1012 | 1013 | 1014 | 1015 | 1015 | 1016 | 1016 | 1016 | 1016 | 1015 | 1015 | 1015 | 1015 | 1015 | 1016 | 1016 | 1017 | 1017 | 1018 | 1018 | 1015  |
| 3   | 1018 | 1018 | 1018 | 1018 | 1018 | 1019 | 1019 | 1020 | 1020 | 1020 | 1020 | 1020 | 1019 | 1018 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1019 | 1018 | 1018  |
| 4   | 1018 | 1018 | 1017 | 1018 | 1018 | 1018 | 1019 | 1019 | 1019 | 1020 | 1019 | 1019 | 1018 | 1017 | 1016 | 1016 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018  |
| 5   | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1019 | 1019 | 1019 | 1019 | 1019 | 1018 | 1017 | 1016 | 1015 | 1015 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1017  |
| 6   | 1013 | 1012 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1011 | 1010 | 1010 | 1009 | 1010 | 1011 | 1011 | 1012 | 1013 | 1013 | 1014 | 1014 | 1014 | 1014 | 1012  |
| 7   | 1014 | 1015 | 1015 | 1016 | 1017 | 1018 | 1019 | 1020 | 1021 | 1021 | 1021 | 1021 | 1020 | 1020 | 1019 | 1020 | 1020 | 1021 | 1022 | 1022 | 1023 | 1023 | 1024 | 1024 | 1020  |
| 8   | 1025 | 1025 | 1025 | 1026 | 1026 | 1027 | 1028 | 1029 | 1030 | 1031 | 1031 | 1031 | 1030 | 1030 | 1030 | 1030 | 1031 | 1031 | 1032 | 1032 | 1032 | 1033 | 1033 | 1033 | 1030  |
| 9   | 1033 | 1033 | 1033 | 1033 | 1033 | 1034 | 1034 | 1035 | 1035 | 1035 | 1035 | 1034 | 1034 | 1033 | 1033 | 1032 | 1032 | 1032 | 1032 | 1032 | 1032 | 1032 | 1032 | 1031 | 1033  |
| 10  | 1031 | 1030 | 1030 | 1030 | 1030 | 1030 | 1030 | 1031 | 1031 | 1031 | 1031 | 1030 | 1030 | 1029 | 1028 | 1028 | 1028 | 1028 | 1028 | 1028 | 1028 | 1028 | 1027 | 1027 | 1029  |
| 11  | 1026 | 1026 | 1026 | 1025 | 1025 | 1026 | 1026 | 1027 | 1027 | 1027 | 1026 | 1026 | 1025 | 1024 | 1023 | 1023 | 1023 | 1023 | 1023 | 1022 | 1022 | 1022 | 1021 | 1021 | 1024  |
| 12  | 1020 | 1020 | 1019 | 1019 | 1019 | 1020 | 1020 | 1020 | 1021 | 1021 | 1020 | 1020 | 1019 | 1018 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1019  |
| 13  | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1019 | 1019 | 1020 | 1020 | 1019 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1018 | 1017 | 1018  |
| 14  | 1017 | 1017 | 1016 | 1016 | 1016 | 1016 | 1015 | 1015 | 1015 | 1016 | 1015 | 1014 | 1013 | 1012 | 1011 | 1010 | 1010 | 1009 | 1010 | 1010 | 1010 | 1010 | 1010 | 1010 | 1013  |
| 15  | 1010 | 1010 | 1011 | 1012 | 1013 | 1015 | 1016 | 1017 | 1018 | 1018 | 1019 | 1019 | 1019 | 1018 | 1018 | 1018 | 1019 | 1019 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1017  |
| 16  | 1020 | 1020 | 1019 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1016 | 1015 | 1015 | 1013 | 1012 | 1011 | 1009 | 1009 | 1008 | 1009 | 1009 | 1009 | 1011 | 1011 | 1012 | 1014  |
| 17  | 1012 | 1013 | 1013 | 1014 | 1015 | 1015 | 1016 | 1016 | 1017 | 1017 | 1017 | 1017 | 1017 | 1016 | 1016 | 1016 | 1017 | 1017 | 1018 | 1019 | 1020 | 1021 | 1021 | 1021 | 1017  |
| 18  | 1022 | 1022 | 1022 | 1023 | 1024 | 1024 | 1024 | 1025 | 1026 | 1026 | 1026 | 1025 | 1024 | 1024 | 1023 | 1023 | 1023 | 1023 | 1024 | 1023 | 1024 | 1023 | 1023 | 1023 | 1024  |
| 19  | 1023 | 1023 | 1022 | 1022 | 1021 | 1021 | 1021 | 1022 | 1022 | 1022 | 1021 | 1021 | 1020 | 1019 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1018 | 1020  |
| 20  | 1017 | 1017 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1019 | 1019 | 1019 | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1019 | 1020 | 1020 | 1020 | 1021 | 1018  |
| 21  | 1021 | 1021 | 1021 | 1021 | 1021 | 1021 | 1022 | 1022 | 1023 | 1023 | 1023 | 1023 | 1022 | 1021 | 1021 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1020 | 1019 | 1019 | 1021  |
| 22  | 1018 | 1018 | 1017 | 1017 | 1017 | 1017 | 1018 | 1018 | 1018 | 1018 | 1017 | 1016 | 1015 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1013 | 1016  |
| 23  | 1013 | 1013 | 1012 | 1012 | 1012 | 1012 | 1013 | 1013 | 1013 | 1013 | 1013 | 1012 | 1011 | 1010 | 1010 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1011  |
| 24  | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1009 | 1010 | 1010 | 1010 | 1009 | 1008 | 1007 | 1007 | 1006 | 1006 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1008  |
| 25  | 1007 | 1007 | 1007 | 1007 | 1007 | 1006 | 1006 | 1007 | 1007 | 1007 | 1007 | 1007 | 1006 | 1006 | 1006 | 1006 | 1006 | 1007 | 1008 | 1009 | 1009 | 1010 | 1011 | 1011 | 1008  |
| 26  | 1011 | 1012 | 1012 | 1012 | 1012 | 1012 | 1013 | 1013 | 1013 | 1013 | 1012 | 1012 | 1011 | 1010 | 1010 | 1010 | 1010 | 1011 | 1012 | 1012 | 1013 | 1013 | 1014 | 1014 | 1012  |
| 27  | 1015 | 1015 | 1015 | 1015 | 1016 | 1016 | 1016 | 1017 | 1017 | 1017 | 1017 | 1016 | 1016 | 1016 | 1016 | 1017 | 1017 | 1018 | 1019 | 1020 | 1020 | 1021 | 1021 | 1021 | 1017  |
| 28  | 1021 | 1022 | 1022 | 1023 | 1024 | 1025 | 1025 | 1026 | 1027 | 1028 | 1029 | 1029 | 1028 | 1028 | 1028 | 1028 | 1029 | 1029 | 1030 | 1031 | 1031 | 1031 | 1031 | 1031 | 1027  |
| 29  | 1031 | 1031 | 1031 | 1031 | 1031 | 1032 | 1032 | 1033 | 1033 | 1033 | 1033 | 1032 | 1031 | 1030 | 1029 | 1029 | 1029 | 1029 | 1029 | 1029 | 1030 | 1029 | 1029 | 1028 | 1031  |
| 30  | 1028 | 1028 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1029 | 1029 | 1028 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028 | 1028 | 1029 | 1029 | 1030 | 1030 | 1029 | 1028  |
| 31  | 1029 | 1029 | 1029 | 1029 | 1029 | 1029 | 1029 | 1030 | 1030 | 1030 | 1030 | 1030 | 1029 | 1028 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1027 | 1028  |
| Avg | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1020 | 1020 | 1021 | 1021 | 1020 | 1020 | 1019 | 1018 | 1018 | 1018 | 1018 | 1018 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019 | 1019  |
| S/D | 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  |
| Min | 1007 | 1007 | 1007 | 1007 | 1007 | 1006 | 1006 | 1007 | 1007 | 1007 | 1007 | 1007 | 1006 | 1006 | 1006 | 1006 | 1006 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1007 | 1008  |
| Max | 1033 | 1033 | 1033 | 1033 | 1033 | 1034 | 1034 | 1035 | 1035 | 1035 | 1035 | 1035 | 1034 | 1034 | 1033 | 1033 | 1032 | 1032 | 1032 | 1032 | 1032 | 1032 | 1033 | 1033 | 1033  |
| 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