

**Global Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bluefield State College - April 1998**

Field: GHI

| Hour 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    | 1    | 10   | 83   | 113  | 129  | 366  | 349  | 292  | 789  | 617 | 415  | 197  | 22   | 0    | 0   | 0  | 0  | 0  | 3383  |      |
| 2        | 0 | 0 | 0 | 0 | 0 | 0    | 39   | 221  | 442  | 648  | 812  | 913  | 946  | 899  | 792  | 626 | 425  | 201  | 19   | 0    | 0   | 0  | 0  | 0  | 6985  |      |
| 3        | 0 | 0 | 0 | 0 | 0 | 0    | 33   | 111  | 193  | 279  | 327  | 318  | 234  | 303  | 406  | 417 | 267  | 79   | 5    | 0    | 0   | 0  | 0  | 0  | 2972  |      |
| 4        | 0 | 0 | 0 | 0 | 0 | 0    | 5    | 6    | 10   | 22   | 22   | 30   | 39   | 34   | 28   | 25  | 14   | 7    | 2    | 0    | 0   | 0  | 0  | 0  | 244   |      |
| 5        | 0 | 0 | 0 | 0 | 0 | 0    | 23   | 134  | 459  | 674  | 833  | 933  | 960  | 917  | 808  | 640 | 435  | 209  | 23   | 0    | 0   | 0  | 0  | 0  | 7049  |      |
| 6        | 0 | 0 | 0 | 0 | 0 | 0    | 67   | 270  | 464  | 667  | 831  | 927  | 957  | 916  | 806  | 633 | 428  | 207  | 23   | 0    | 0   | 0  | 0  | 0  | 7197  |      |
| 7        | 0 | 0 | 0 | 0 | 0 | 0    | 29   | 131  | 328  | 515  | 536  | 886  | 932  | 837  | 487  | 400 | 148  | 99   | 21   | 0    | 0   | 0  | 0  | 0  | 5347  |      |
| 8        | 0 | 0 | 0 | 0 | 0 | 0    | 22   | 52   | 248  | 652  | 785  | 903  | 920  | 883  | 775  | 378 | 169  | 103  | 24   | 0    | 0   | 0  | 0  | 0  | 5915  |      |
| 9        | 0 | 0 | 0 | 0 | 0 | 0    | 12   | 190  | 297  | 289  | 474  | 665  | 324  | 383  | 375  | 84  | 57   | 25   | 8    | 0    | 0   | 0  | 0  | 0  | 3183  |      |
| 10       | 0 | 0 | 0 | 0 | 0 | 0    | 5    | 34   | 55   | 126  | 141  | 165  | 120  | 112  | 52   | 30  | 20   | 12   | 5    | 0    | 0   | 0  | 0  | 0  | 876   |      |
| 11       | 0 | 0 | 0 | 0 | 0 | 0    | 49   | 269  | ?    | 511  | ?    | 702  | ?    | 862  | 959  | 981 | 933  | 817  | 643  | 445  | 219 | 30 | 0  | 0  | 0     | 7421 |
| 12       | 0 | 0 | 0 | 0 | 0 | 0    | 102  | 360  | ?    | 488  | 685  | 846  | 944  | 938  | 823  | 656 | 447  | 224  | 27   | 0    | 0   | 0  | 0  | 0  | 7519  |      |
| 13       | 0 | 0 | 0 | 0 | 0 | 0    | 78   | 269  | 472  | 647  | 818  | 944  | 642  | 910  | 727  | 329 | 327  | 209  | 23   | 0    | 0   | 0  | 0  | 0  | 6396  |      |
| 14       | 0 | 0 | 0 | 0 | 0 | 0    | 29   | 62   | 51   | 221  | 432  | 593  | 530  | 703  | 736  | 451 | 221  | 173  | 26   | 0    | 0   | 0  | 0  | 0  | 4228  |      |
| 15       | 0 | 0 | 0 | 0 | 0 | 0    | 84   | 256  | 478  | 687  | 689  | 772  | 777  | 552  | 413  | 299 | 295  | 154  | 18   | 0    | 0   | 0  | 0  | 0  | 5473  |      |
| 16       | 0 | 0 | 0 | 0 | 0 | 1    | 51   | 209  | 322  | 513  | 266  | 66   | 225  | 186  | 113  | 246 | 167  | 14   | 27   | 0    | 0   | 0  | 0  | 0  | 2407  |      |
| 17       | 0 | 0 | 0 | 0 | 0 | 1    | 43   | 165  | 263  | 240  | 321  | 677  | 760  | 264  | 115  | 56  | 63   | 30   | 8    | 0    | 0   | 0  | 0  | 0  | 3005  |      |
| 18       | 0 | 0 | 0 | 0 | 0 | 1    | 21   | 55   | 141  | 189  | 197  | 221  | 110  | 170  | 155  | 96  | 67   | 42   | 4    | 0    | 0   | 0  | 0  | 0  | 1467  |      |
| 19       | 0 | 0 | 0 | 0 | 0 | 2    | 26   | 15   | 30   | 35   | 82   | 127  | 173  | 97   | 87   | 67  | 56   | 40   | 16   | 0    | 0   | 0  | 0  | 0  | 852   |      |
| 20       | 0 | 0 | 0 | 0 | 0 | 1    | 24   | 98   | 219  | 457  | 755  | 821  | 951  | 925  | 592  | 397 | 274  | 112  | 30   | 0    | 0   | 0  | 0  | 0  | 5656  |      |
| 21       | 0 | 0 | 0 | 0 | 0 | 2    | 92   | 272  | 396  | 705  | 866  | 927  | 944  | 498  | 396  | 570 | 238  | 121  | 30   | 0    | 0   | 0  | 0  | 0  | 6055  |      |
| 22       | 0 | 0 | 0 | 0 | 0 | 0    | 18   | 64   | 168  | 192  | 448  | 567  | 761  | 743  | 415  | 186 | 133  | 123  | 39   | 0    | 0   | 0  | 0  | 0  | 3856  |      |
| 23       | 0 | 0 | 0 | 0 | 0 | 2    | 57   | 227  | 401  | 476  | 574  | 284  | 272  | 665  | 813  | 239 | 89   | 168  | 44   | 0    | 0   | 0  | 0  | 0  | 4310  |      |
| 24       | 0 | 0 | 0 | 0 | 0 | 3    | 94   | 306  | 523  | 681  | 852  | 658  | 834  | 878  | 566  | 470 | 491  | 240  | 26   | 0    | 0   | 0  | 0  | 0  | 6621  |      |
| 25       | 0 | 0 | 0 | 0 | 0 | 4    | 96   | 298  | 507  | 702  | 856  | 933  | 897  | 924  | 675  | 400 | 310  | 116  | 33   | 0    | 0   | 0  | 0  | 0  | 6752  |      |
| 26       | 0 | 0 | 0 | 0 | 0 | 3    | 56   | 181  | 449  | 502  | 690  | 404  | 548  | 843  | 740  | 595 | 395  | 221  | 36   | 0    | 0   | 0  | 0  | 0  | 5662  |      |
| 27       | 0 | 0 | 0 | 0 | 0 | 0    | 7    | 21   | 71   | 62   | 96   | 91   | 131  | 120  | 107  | 72  | 114  | 112  | 40   | 1    | 0   | 0  | 0  | 0  | 1044  |      |
| 28       | 0 | 0 | 0 | 0 | 0 | 7    | 120  | 346  | 565  | 764  | 907  | 1012 | 992  | 785  | 652  | 433 | 255  | 128  | 34   | 1    | 0   | 0  | 0  | 0  | 7002  |      |
| 29       | 0 | 0 | 0 | 0 | 0 | 4    | 91   | 250  | 480  | 608  | 352  | 463  | 213  | 386  | 226  | 300 | 89   | 41   | 11   | 0    | 0   | 0  | 0  | 0  | 3512  |      |
| 30       | 0 | 0 | 0 | 0 | 0 | 2    | 21   | 53   | 100  | 330  | 230  | 226  | 231  | 340  | 248  | 167 | 241  | 179  | 46   | 1    | 0   | 0  | 0  | 0  | 2414  |      |
| Avg      | 0 | 0 | 0 | 0 | 0 | 1    | 46   | 165  | 307  | 446  | 534  | 593  | 591  | 581  | 491  | 351 | 236  | 127  | 23   | 0    | 0   | 0  | 0  | 0  | 4493  |      |
| S D      | 0 | 0 | 0 | 0 | 0 | 2    | 33   | 109  | 176  | 240  | 292  | 326  | 342  | 317  | 278  | 210 | 147  | 74   | 12   | 0    | 0   | 0  | 0  | 0  | 2231  |      |
| S/A      | 0 | 0 | 0 | 0 | 0 | 1.49 | 0.72 | 0.66 | 0.57 | 0.54 | 0.55 | 0.55 | 0.58 | 0.55 | 0.57 | 0.6 | 0.62 | 0.58 | 0.51 | 2.11 | 0   | 0  | 0  | 0  | 0.5   |      |
| Min      | 0 | 0 | 0 | 0 | 0 | 0    | 1    | 6    | 10   | 22   | 22   | 30   | 39   | 34   | 28   | 25  | 14   | 7    | 2    | 0    | 0   | 0  | 0  | 0  | 244   |      |
| Max      | 0 | 0 | 0 | 0 | 0 | 7    | 120  | 360  | 565  | 764  | 907  | 1012 | 992  | 938  | 823  | 656 | 491  | 240  | 46   | 1    | 0   | 0  | 0  | 0  | 7519  |      |

Daylight Data Recovery: 0% missing; 5% exceed the 15% QC threshold -- 16480 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

| Data and Flag | Hour Column          | Day Column           |
|---------------|----------------------|----------------------|
| <value>*      | 20% < Missing < 100% | 10% < Missing < 100% |
| <value>?      | 20% < Fail QC < 100% | 10% < Fail QC < 100% |
| <blank>*      | 100% Missing         | 100% Missing         |
| <blank>?      | 100% Fail QC         | 100% Fail QC         |

Station: BS  
Latitude: 37.27° N  
Longitude: 81.24° W  
Elevation: 803 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 8.99 uV/Wm-2  
Serial Number: 25765F3  
Calibration Date: 9/13/96

**Direct Normal Solar Radiation**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bluefield State College - April 1998**

Field: DNI

| Hour 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    | 1    | 42   | 138  | 38   | 954  | 923  | 843  | 674 | 96   | 0   | 0   | 0   | 0  | 0  | 3710  |      |
| 2        | 0 | 0 | 0 | 0 | 0 | 0    | 263  | 708  | 860 | 945  | 996  | 1014 | 1019 | 1000 | 978  | 943  | 871  | 679 | 94   | 0   | 0   | 0   | 0  | 0  | 10371 |      |
| 3        | 0 | 0 | 0 | 0 | 0 | 0    | 40   | 3    | 6   | 10   | 8    | 6    | 1    | 6    | 79   | 318  | 146  | 7   | 0    | 0   | 0   | 0   | 0  | 0  | 630   |      |
| 4        | 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     |      |
| 5        | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 49   | 782 | 941  | 986  | 1009 | 1014 | 1007 | 988  | 947  | 875  | 701 | 114  | 0   | 0   | 0   | 0  | 0  | 9414  |      |
| 6        | 0 | 0 | 0 | 0 | 0 | 0    | 307  | 721  | 873 | 941  | 982  | 1002 | 1011 | 1003 | 980  | 926  | 844  | 665 | 102  | 0   | 0   | 0   | 0  | 0  | 10358 |      |
| 7        | 0 | 0 | 0 | 0 | 0 | 0    | 28   | 21   | 256 | 314  | 180  | 873  | 878  | 683  | 244  | 249  | 6    | 68  | 13   | 0   | 0   | 0   | 0  | 0  | 3813  |      |
| 8        | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 288 | 857  | 762  | 882  | 800  | 828  | 800  | 246  | 10   | 86  | 69   | 0   | 0   | 0   | 0  | 0  | 5628  |      |
| 9        | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 289  | 294 | 132  | 333  | 394  | 135  | 50   | 64   | 0    | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 1690  |      |
| 10       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 1     |      |
| 11       | 0 | 0 | 0 | 0 | 0 | 0    | 57   | 464  | ?   | 732  | ?    | 937  | ?    | 959  | 978  | 996  | 985  | 943 | 876  | 827 | 635 | 109 | 0  | 0  | 0     | 9498 |
| 12       | 0 | 0 | 0 | 0 | 0 | 0    | 331  | 757  | ?   | 872  | 924  | 973  | 994  | 1009 | 1011 | 988  | 959  | 886 | 731  | 144 | 0   | 0   | 0  | 0  | 10580 |      |
| 13       | 0 | 0 | 0 | 0 | 0 | 0    | 355  | 608  | 753 | 729  | 829  | 883  | 327  | 795  | 653  | 97   | 376  | 551 | 41   | 0   | 0   | 0   | 0  | 0  | 6996  |      |
| 14       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 1    | 89   | 279  | 256  | 399  | 637  | 325  | 121  | 261 | 1    | 0   | 0   | 0   | 0  | 0  | 2369  |      |
| 15       | 0 | 0 | 0 | 0 | 0 | 0    | 336  | 600  | 760 | 803  | 564  | 464  | 310  | 86   | 42   | 22   | 240  | 153 | 1    | 0   | 0   | 0   | 0  | 0  | 4380  |      |
| 16       | 0 | 0 | 0 | 0 | 0 | 0    | 8    | 123  | 82  | 195  | 16   | 0    | 1    | 0    | 0    | 39   | 5    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 470   |      |
| 17       | 0 | 0 | 0 | 0 | 0 | 0    | 45   | 188  | 50  | 40   | 63   | 309  | 376  | 0    | 0    | 0    | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 1073  |      |
| 18       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 1    | 1    | 1    | 0    | 1    | 0    | 0    | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 4     |      |
| 19       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 2     |      |
| 20       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 7   | 173  | 569  | 656  | 791  | 696  | 197  | 109  | 71   | 20  | 0    | 0   | 0   | 0   | 0  | 0  | 3289  |      |
| 21       | 0 | 0 | 0 | 0 | 0 | 0    | 374  | 577  | 312 | 851  | 884  | 864  | 744  | 76   | 42   | 421  | 30   | 6   | 0    | 0   | 0   | 0   | 0  | 0  | 5181  |      |
| 22       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 1   | 1    | 67   | 43   | 231  | 319  | 57   | 0    | 0    | 1   | 0    | 0   | 0   | 0   | 0  | 0  | 721   |      |
| 23       | 0 | 0 | 0 | 0 | 0 | 0    | 77   | 186  | 226 | 147  | 187  | 36   | 2    | 318  | 707  | 115  | 24   | 143 | 64   | 0   | 0   | 0   | 0  | 0  | 2232  |      |
| 24       | 0 | 0 | 0 | 0 | 0 | 0    | 239  | 619  | 754 | 626  | 753  | 399  | 518  | 646  | 349  | 375  | 681  | 533 | 9    | 0   | 0   | 0   | 0  | 0  | 6501  |      |
| 25       | 0 | 0 | 0 | 0 | 0 | 10   | 273  | 563  | 705 | 798  | 827  | 808  | 659  | 648  | 350  | 81   | 78   | 2   | 0    | 0   | 0   | 0   | 0  | 0  | 5803  |      |
| 26       | 0 | 0 | 0 | 0 | 0 | 0    | 2    | 86   | 346 | 217  | 267  | 14   | 67   | 526  | 637  | 528  | 386  | 394 | 41   | 0   | 0   | 0   | 0  | 0  | 3510  |      |
| 27       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 1    | 1    | 0    | 0    | 0    | 1   | 0    | 0   | 0   | 0   | 0  | 0  | 4     |      |
| 28       | 0 | 0 | 0 | 0 | 0 | 58   | 463  | 774  | 884 | 932  | 921  | 954  | 786  | 378  | 263  | 84   | 17   | 2   | 0    | 0   | 0   | 0   | 0  | 0  | 6518  |      |
| 29       | 0 | 0 | 0 | 0 | 0 | 0    | 47   | 251  | 511 | 465  | 5    | 20   | 1    | 6    | 0    | 55   | 0    | 0   | 0    | 0   | 0   | 0   | 0  | 0  | 1361  |      |
| 30       | 0 | 0 | 0 | 0 | 0 | 0    | 0    | 0    | 0   | 56   | 1    | 0    | 1    | 4    | 1    | 8    | 27   | 96  | 0    | 0   | 0   | 0   | 0  | 0  | 194   |      |
| Avg      | 0 | 0 | 0 | 0 | 0 | 2    | 108  | 253  | 345 | 401  | 407  | 431  | 402  | 384  | 365  | 288  | 246  | 214 | 30   | 0   | 0   | 0   | 0  | 0  | 3877  |      |
| S D      | 0 | 0 | 0 | 0 | 0 | 11   | 149  | 288  | 346 | 390  | 403  | 416  | 394  | 387  | 386  | 350  | 340  | 277 | 45   | 0   | 0   | 0   | 0  | 0  | 3507  |      |
| S/A      | 0 | 0 | 0 | 0 | 0 | 4.61 | 1.37 | 1.14 | 1   | 0.97 | 0.99 | 0.97 | 0.98 | 1.01 | 1.06 | 1.21 | 1.39 | 1.3 | 1.49 | 0   | 0   | 0   | 0  | 0  | 0.9   |      |
| 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 | 58   | 463  | 774  | 884 | 945  | 996  | 1014 | 1019 | 1011 | 988  | 959  | 886  | 731 | 144  | 0   | 0   | 0   | 0  | 0  | 10580 |      |

Daylight Data Recovery: 0% missing; 5% exceed the 15% QC threshold -- 16480 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

| Data and Flag | Hour Column          | Day Column           |
|---------------|----------------------|----------------------|
| <value>*      | 20% < Missing < 100% | 10% < Missing < 100% |
| <value>?      | 20% < Fail QC < 100% | 10% < Fail QC < 100% |
| <blank>*      | 100% Missing         | 100% Missing         |
| <blank>?      | 100% Fail QC         | 100% Fail QC         |

Station: BS  
Latitude: 37.27° N  
Longitude: 81.24° W  
Elevation: 803 Meters AMSL  
Time Zone: -5

Instrument: NIP  
Calibration Constant: 8.52 uV/Wm-2  
Serial Number: 19791E6  
Calibration Date: 9/13/96

**Diffuse Solar Radiation on a Horizontal Surface**  
**Hourly Integrated and Daily Totals**  
**Watt-Hours per Square Meter**  
**Bluefield State College - April 1998**

Field: DHI

| Hour<br>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    | 1   | 9     | 74    | 101   | 115  | 306  | 215  | 246  | 106  | 80   | 66   | 46   | 12   | 0    | 0  | 0  | 0  | 0  | 1377  |
| 2           | 0 | 0 | 0 | 0 | 0 | 0    | 19  | 50    | 68    | 78    | 82   | 87   | 91   | 90   | 85   | 76   | 63   | 47   | 10   | 0    | 0  | 0  | 0  | 0  | 845   |
| 3           | 0 | 0 | 0 | 0 | 0 | 0    | 34  | 97    | 170   | 251   | 286  | 279  | 210  | 273  | 335  | 210  | 201  | 71   | 5    | 0    | 0  | 0  | 0  | 0  | 2423  |
| 4           | 0 | 0 | 0 | 0 | 0 | 0    | 5   | 6     | 9     | 20    | 19   | 26   | 34   | 30   | 25   | 21   | 13   | 6    | 1    | 0    | 0  | 0  | 0  | 0  | 215   |
| 5           | 0 | 0 | 0 | 0 | 0 | 0    | 21  | 105   | 104   | 95    | 99   | 101  | 100  | 96   | 87   | 79   | 65   | 47   | 12   | 0    | 0  | 0  | 0  | 0  | 1012  |
| 6           | 0 | 0 | 0 | 0 | 0 | 0    | 31  | 68    | 73    | 87    | 96   | 98   | 97   | 94   | 87   | 81   | 67   | 50   | 13   | 0    | 0  | 0  | 0  | 0  | 939   |
| 7           | 0 | 0 | 0 | 0 | 0 | 0    | 28  | 118   | 201   | 315   | 393  | 154  | 174  | 241  | 292  | 236  | 133  | 80   | 18   | 0    | 0  | 0  | 0  | 0  | 2382  |
| 8           | 0 | 0 | 0 | 0 | 0 | 0    | 20  | 46    | 107   | 107   | 199  | 156  | 221  | 184  | 171  | 213  | 148  | 84   | 16   | 0    | 0  | 0  | 0  | 0  | 1672  |
| 9           | 0 | 0 | 0 | 0 | 0 | 0    | 11  | 85    | 172   | 204   | 213  | 320  | 192  | 319  | 306  | 75   | 50   | 22   | 7    | 0    | 0  | 0  | 0  | 0  | 1975  |
| 10          | 0 | 0 | 0 | 0 | 0 | 0    | 4   | 29    | 48    | 111   | 126  | 146  | 106  | 98   | 45   | 26   | 17   | 11   | 5    | 0    | 0  | 0  | 0  | 0  | 772   |
| 11          | 0 | 0 | 0 | 0 | 0 | 0    | 40  | 122 ? | 114 ? | 106 ? | 115  | 127  | 114  | 109  | 109  | 106  | 80   | 60   | 18   | 0    | 0  | 0  | 0  | 0  | 1220  |
| 12          | 0 | 0 | 0 | 0 | 0 | 0    | 39  | 83 ?  | 76    | 92    | 97   | 100  | 97   | 90   | 81   | 70   | 57   | 43   | 13   | 0    | 0  | 0  | 0  | 0  | 940   |
| 13          | 0 | 0 | 0 | 0 | 0 | 0    | 43  | 98    | 115   | 170   | 170  | 188  | 337  | 223  | 219  | 247  | 172  | 65   | 17   | 0    | 0  | 0  | 0  | 0  | 2064  |
| 14          | 0 | 0 | 0 | 0 | 0 | 0    | 26  | 54    | 46    | 199   | 344  | 347  | 289  | 373  | 250  | 242  | 160  | 96   | 23   | 0    | 0  | 0  | 0  | 0  | 2448  |
| 15          | 0 | 0 | 0 | 0 | 0 | 0    | 48  | 78    | 108   | 163   | 229  | 362  | 487  | 488  | 360  | 276  | 188  | 119  | 16   | 0    | 0  | 0  | 0  | 0  | 2923  |
| 16          | 0 | 0 | 0 | 0 | 0 | 1    | 46  | 176   | 287   | 380   | 234  | 58   | 200  | 165  | 102  | 208  | 152  | 12   | 23   | 0    | 0  | 0  | 0  | 0  | 2043  |
| 17          | 0 | 0 | 0 | 0 | 0 | 1    | 33  | 117   | 229   | 205   | 263  | 409  | 409  | 233  | 102  | 50   | 55   | 26   | 7    | 0    | 0  | 0  | 0  | 0  | 2140  |
| 18          | 0 | 0 | 0 | 0 | 0 | 1    | 18  | 48    | 123   | 166   | 178  | 194  | 99   | 150  | 136  | 85   | 58   | 37   | 4    | 0    | 0  | 0  | 0  | 0  | 1297  |
| 19          | 0 | 0 | 0 | 0 | 0 | 2    | 23  | 13    | 26    | 31    | 72   | 113  | 154  | 86   | 77   | 59   | 49   | 35   | 14   | 0    | 0  | 0  | 0  | 0  | 754   |
| 20          | 0 | 0 | 0 | 0 | 0 | 0    | 21  | 87    | 192   | 321   | 290  | 240  | 228  | 306  | 433  | 323  | 237  | 97   | 26   | 0    | 0  | 0  | 0  | 0  | 2803  |
| 21          | 0 | 0 | 0 | 0 | 0 | 1    | 45  | 93    | 205   | 126   | 155  | 166  | 266  | 419  | 351  | 301  | 215  | 108  | 26   | 0    | 0  | 0  | 0  | 0  | 2478  |
| 22          | 0 | 0 | 0 | 0 | 0 | 0    | 16  | 55    | 148   | 168   | 373  | 478  | 506  | 425  | 346  | 165  | 117  | 109  | 34   | 0    | 0  | 0  | 0  | 0  | 2939  |
| 23          | 0 | 0 | 0 | 0 | 0 | 2    | 47  | 143   | 266   | 374   | 404  | 240  | 242  | 371  | 260  | 145  | 72   | 136  | 35   | 0    | 0  | 0  | 0  | 0  | 2739  |
| 24          | 0 | 0 | 0 | 0 | 0 | 3    | 58  | 98    | 129   | 243   | 225  | 304  | 307  | 288  | 228  | 174  | 94   | 24   | 0    | 0    | 0  | 0  | 0  | 0  | 2532  |
| 25          | 0 | 0 | 0 | 0 | 0 | 4    | 59  | 108   | 136   | 148   | 172  | 201  | 281  | 350  | 387  | 349  | 280  | 102  | 29   | 0    | 0  | 0  | 0  | 0  | 2606  |
| 26          | 0 | 0 | 0 | 0 | 0 | 3    | 48  | 136   | 262   | 354   | 446  | 363  | 481  | 372  | 228  | 231  | 198  | 113  | 27   | 0    | 0  | 0  | 0  | 0  | 3264  |
| 27          | 0 | 0 | 0 | 0 | 0 | 0    | 6   | 18    | 62    | 53    | 84   | 80   | 115  | 105  | 94   | 64   | 100  | 97   | 35   | 0    | 0  | 0  | 0  | 0  | 913   |
| 28          | 0 | 0 | 0 | 0 | 0 | 7    | 52  | 75    | 86    | 98    | 129  | 140  | 246  | 430  | 434  | 383  | 222  | 111  | 29   | 0    | 0  | 0  | 0  | 0  | 2445  |
| 29          | 0 | 0 | 0 | 0 | 0 | 4    | 80  | 149   | 205   | 280   | 309  | 409  | 189  | 339  | 197  | 244  | 78   | 35   | 10   | 0    | 0  | 0  | 0  | 0  | 2529  |
| 30          | 0 | 0 | 0 | 0 | 0 | 2    | 18  | 47    | 90    | 272   | 205  | 198  | 203  | 300  | 217  | 145  | 213  | 152  | 40   | 1    | 0  | 0  | 0  | 0  | 2103  |
| Avg         | 0 | 0 | 0 | 0 | 0 | 1    | 31  | 80    | 131   | 177   | 204  | 213  | 225  | 244  | 207  | 167  | 123  | 70   | 18   | 0    | 0  | 0  | 0  | 0  | 1893  |
| S D         | 0 | 0 | 0 | 0 | 0 | 2    | 19  | 43    | 72    | 101   | 110  | 117  | 123  | 127  | 121  | 101  | 72   | 39   | 10   | 0    | 0  | 0  | 0  | 0  | 810   |
| S/A         | 0 | 0 | 0 | 0 | 0 | 1.56 | 0.6 | 0.53  | 0.55  | 0.57  | 0.54 | 0.55 | 0.55 | 0.52 | 0.59 | 0.61 | 0.58 | 0.55 | 0.56 | 2.37 | 0  | 0  | 0  | 0  | 0.43  |
| Min         | 0 | 0 | 0 | 0 | 0 | 0    | 1   | 6     | 9     | 20    | 19   | 26   | 34   | 30   | 25   | 21   | 13   | 6    | 1    | 0    | 0  | 0  | 0  | 0  | 215   |
| Max         | 0 | 0 | 0 | 0 | 0 | 7    | 80  | 176   | 287   | 380   | 446  | 478  | 506  | 488  | 434  | 383  | 280  | 152  | 40   | 1    | 0  | 0  | 0  | 0  | 3264  |

Daylight Data Recovery: 0% missing; 5% exceed the 15% QC threshold -- 16480 total daylight 5-minute measurements.

Note: Fractional values that do not appear in the hour columns are included in the calculation for daily values.

| Data and Flag | Hour Column          | Day Column           |
|---------------|----------------------|----------------------|
| <value>*      | 20% < Missing < 100% | 10% < Missing < 100% |
| <value>?      | 20% < Fail QC < 100% | 10% < Fail QC < 100% |
| <blank>*      | 100% Missing         | 100% Missing         |
| <blank>?      | 100% Fail QC         | 100% Fail QC         |

Station: BS  
Latitude: 37.27° N  
Longitude: 81.24° W  
Elevation: 803 Meters AMSL  
Time Zone: -5

Instrument: PSP  
Calibration Constant: 8.27 uV/Wm-2  
Serial Number: 17880F3  
Calibration Date: 9/13/96