

26  
Feb 82

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Imp<br>(Min) | Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|-----|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |            |              |     |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0001  |      | 01  | 00314      | 00346    | 0107     | N10 | E04 | 3573                    | 02        | 1.3        | 36           | 1B  |      |            |      |              | 291                                 | 3.1              | EJKU    |
|       | VORO | 01  | 0031       | 0034     | 0045     | N11 | E04 | 3573                    | 02        | 1.3        | 14           | 1B  |      |            |      | 0034         | 314                                 | 3.4              | EJ      |
|       | CULG | 01  | 0031       | 0035     | 0111     | N10 | E04 | 3573                    | 02        | 1.3        | 40           | 1N  |      |            | P    | 0035         | 300                                 | 3.0              |         |
|       | PEKG | 01  | 0035       | 0040     | 0125     | N10 | E04 | 3573                    | 02        | 1.3        | 50           | 1B  |      |            | C    | 0040         | 260                                 | 2.8              | KU      |
| 0002  |      | 01  | 0035       | 0112     | 0126     | N09 | E02 | 3573                    | 02        | 1.2        | 51           | 1N  |      |            |      |              | 231                                 | 2.4              | F       |
|       | PEKG | 01  | 0035       | 0112     | 0125     | N09 | E02 | 3573                    | 02        | 1.2        | 50           | 1N  |      |            | P    | 0112         | 210                                 | 2.2              | F       |
|       | YUNN | 01  | 0050E      | 0050U    | 0127     | N09 | E03 | 3573                    | 02        | 1.2        | 37D          | 1N  |      |            | P    | 0050         | 252                                 | 2.7              | F       |
| 0003  | CULG | 01  | 0036       | 0037U    | 0041U    | S12 | E45 | 3584                    | 02        | 4.4        | 5U           | SN  |      |            | P    | 0037         | 30                                  | .4               |         |
| 0004  |      | 01  | 01082      | 01102    | 0119     | S16 | E30 | 3591                    | 02        | 3.3        | 11           | SN  |      |            |      |              | 98                                  | 1.2              | EJ      |
|       | VORO | 01  | 0108       | 0110     | 0119     | S17 | E30 | 3591                    | 02        | 3.3        | 11           | SN  |      |            | C    | 0110         | 108                                 | 1.3              | EJ      |
|       | CULG | 01  | 0109       | 0111U    | 0111D    | S15 | E30 | 3591                    | 02        | 3.3        | 2D           | SN  |      |            | P    | 0111         | 60                                  | .7               |         |
|       | YUNN | 01  | 0110E      | 0112     | 0117     | S16 | E29 | 3591                    | 02        | 3.2        | 7D           | SN  |      |            | P    |              | 157                                 | 1.9              | E       |
|       | PEKG | 01  | 0110       | 0112     | 0120     | S17 | E29 | 3591                    | 02        | 3.2        | 10           | SN  |      |            | C    | 0112         | 67                                  | .8               | E       |
| 0005  |      | 01  | 0112       | 0114     | 0124     | S13 | E04 | 3576                    | 02        | 1.3        | 12           | SN  |      |            |      |              | 88                                  | .9               | E       |
|       | PEKG | 01  | 0112       | 0114     | 0120     | S13 | E04 | 3576                    | 02        | 1.3        | 8            | SN  |      |            | C    | 0114         | 97                                  | 1.0              | E       |
|       | YUNN | 01  | 0112       | 0114     | 0127     | S13 | E04 | 3576                    | 02        | 1.3        | 15           | SN  |      |            | C    |              | 79                                  | .8               | E       |
| 0006  | CULG | 01  | 0229       | 0230U    | 0238     | N13 | W46 | 3572B                   | 01        | 28.7       | 9            | SF  |      |            | P    | 0230         | 60                                  | .9               |         |
| 0007  | PEKG | 01  | 0304       | 0305     | 0325     | S13 | E09 | 3576                    | 02        | 1.8        | 21           | SN  |      |            | P    | 0305         | 46                                  | .5               | D       |
| 0008  | CULG | 01  | 0323E      | 0325U    | 0340     | S15 | E33 | 3591                    | 02        | 3.6        | 17D          | SF  |      |            | P    | 0325         | 70                                  | .8               | EJ      |
| 0009  |      | 01  | 03391      | 03425    | 0406     | N10 | E16 | 3579                    | 02        | 2.3        | 27           | SN  |      |            |      |              | 131                                 | 1.5              | EFK     |
|       | CULG | 01  | 0339       | 0345U    | 0417     | N11 | E15 | 3579                    | 02        | 2.3        | 38           | SN  |      |            | P    | 0345         | 140                                 | 1.5              | F       |
|       | PEKG | 01  | 0340       | 0342     | 0358     | N09 | E16 | 3579                    | 02        | 2.3        | 18           | SN  |      |            | C    | 0342         | 97                                  | 1.1              | E       |
|       | YUNN | 01  | 0340E      | 0347     | 0404     | N10 | E17 | 3579                    | 02        | 2.4        | 24D          | SN  |      |            | P    |              | 157                                 | 1.8              | EK      |
| 0010  | CULG | 01  | 0352       | 0352     | 0354D    | S11 | E13 | 3590                    | 02        | 2.1        | 2D           | SN  |      |            | P    | 0352         | 40                                  | .4               |         |
| 0011  |      | 01  | 04172      | 04191    | 0428     | S14 | E02 | 3576                    | 02        | 1.3        | 11           | SN  |      |            |      |              | 87                                  | .9               | EF      |
|       | CULG | 01  | 0417       | 0419     | 0427     | S14 | E02 | 3576                    | 02        | 1.3        | 10           | SN  |      |            | C    | 0419         | 60                                  | .6               | F       |
|       | YUNN | 01  | 0418E      | 0419     | 0428     | S13 | E02 | 3576                    | 02        | 1.3        | 10D          | SN  |      |            | P    |              | 126                                 | 1.3              | E       |
|       | PEKG | 01  | 0419       | 0420     | 0428     | S14 | E01 | 3576                    | 02        | 1.2        | 9            | SN  |      |            | C    | 0420         | 76                                  | .8               | E       |
| 0012  | CULG | 01  | 0457       | 0458     | 0502     | S12 | E10 | 3576                    | 02        | 1.9        | 5            | SF  |      |            | C    | 0458         | 30                                  | .3               |         |
| 0013  |      | 01  | 05178      | 0520     | 0530     | S17 | E27 | 3591                    | 02        | 3.3        | 13           | SN  |      |            |      |              | 130                                 | 1.5              | EV      |
|       | YUNN | 01  | 0517       | 0520     | 0523D    | S16 | E27 | 3591                    | 02        | 3.3        | 6D           | 1N  |      |            | P    |              | 189                                 | 2.2              |         |
|       | CULG | 01  | 0519       | 0520     | 0531     | S17 | E27 | 3591                    | 02        | 3.3        | 12           | SB  |      |            | C    | 0520         | 160                                 | 1.8              | V       |
|       | PEKG | 01  | 0525       | 0526U    | 0530     | S17 | E27 | 3591                    | 02        | 3.3        | 5            | SN  |      |            | P    | 0526         | 42                                  | .5               | E       |
| 0014  | CULG | 01  | 0632       | 0633     | 0634     | N16 | W07 | 3581                    | 01        | 31.7       | 2            | SF  |      |            | C    | 0633         | 40                                  | .4               |         |
| 0015  |      | 01  | 07164      | 0720*    | 0746     | S07 | E67 | 3589                    | 02        | 6.3        | 30           | 1N  |      |            |      |              | 114                                 |                  | EFIK    |
|       | CULG | 01  | 0716       | 0719U    | 0736U    | S05 | E66 | 3589                    | 02        | 6.2        | 20U          | SN  |      |            | P    | 0719         | 60                                  |                  | EI      |
|       | CATA | 01  | 0720E      | 0720     | 0815D    | S09 | E68 | 3589                    | 02        | 6.4        | 55D          | 2   | 2    | P          | 0720 | 281          |                                     |                  |         |
|       | YUNN | 01  | 0720       | 0723     | 0723D    | S06 | E69 | 3589                    | 02        | 6.5        | 3D           | SN  |      |            | C    |              | 32                                  |                  | E       |
|       | PEKG | 01  | 0720       | 0725     | 0740     | S09 | E67 | 3589                    | 02        | 6.3        | 20           | 1F  |      |            | P    | 0725         | 168                                 |                  | F       |
|       | YUNN | 01  | 0732E      | 0732     | 0752     | S07 | E66 | 3589                    | 02        | 6.2        | 20D          | SN  |      |            | C    |              | 31                                  |                  | EK      |
| 0016  | CATA | 01  | 0720E      | 0720     | 0815D    | S07 | E63 | 3589                    | 02        | 6.0        | 55D          | 1   | 2    | P          | 0720 | 140          | 3.1                                 |                  |         |
| 0017  |      | 01  | 0727       | 0737     | 0803     | N15 | E28 | 3585A                   | 02        | 3.4        | 36           | SN  |      |            |      |              | 58                                  | .7               | E       |
|       | YUNN | 01  | 0727       | 0737     | 0756     | N14 | E27 | 3585A                   | 02        | 3.3        | 29           | SN  |      |            | C    |              | 47                                  | .6               | E       |
|       | HPR  | 01  | 0742E      |          | 0810     | N16 | E30 | 3585A                   | 02        | 3.6        | 28D          | SF  |      |            | C    | 0749         | 70                                  | .8               | E       |
| 0018  |      | 01  | 0730       | 0731     | 0750     | S13 | E08 | 3576                    | 02        | 1.9        | 20           | SN  |      |            |      |              | 34                                  | .4               | D       |
|       | YUNN | 01  | 0730       | 0731     | 0734     | S12 | E09 | 3576                    | 02        | 2.0        | 4            | SN  |      |            | C    |              | 47                                  | .5               | D       |
|       | HPR  | 01  | 0742E      |          | 0806     | S14 | E07 | 3576                    | 02        | 1.8        | 24D          | SF  |      |            | C    | 0747         | 20                                  | .2               |         |
| 0019  | HPR  | 01  | 0742       |          | 0800     | N12 | E18 | 3582                    | 02        | 2.7        | 18           | SF  |      |            | C    | 0748         | 30                                  | .3               |         |
| 0020  | HPR  | 01  | 0810       | 0812     | 0817     | N13 | W47 | 3572B                   | 01        | 28.9       | 7            | SN  |      |            | C    | 0812         | 50                                  | .7               |         |
| 0021  |      | 01  | 08283      | 08364    | 0901     | S13 | W00 | 3576                    | 02        | 1.3        | 33           | SN  |      |            |      |              | 184                                 | 1.9              | EF      |
|       | HPR  | 01  | 0828       | 0836     | 0900     | S13 | W01 | 3576                    | 02        | 1.3        | 32           | SB  |      |            | C    | 0836         | 180                                 | 1.8              | E       |
|       | PEKG | 01  | 0829       | 0840     | 0850     | S13 | W00 | 3576                    | 02        | 1.3        | 21           | SN  |      |            | C    | 0840         | 168                                 | 1.8              | E       |
|       | YUNN | 01  | 0831       | 0836     | 0913     | S14 | W00 | 3576                    | 02        | 1.3        | 42           | 1N  |      |            | C    |              | 204                                 | 2.1              | F       |

H - ALPHA SOLAR FLARES

27  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | (Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|-------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |            |       |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0022  |      | 01  | 08373      | 08404    | 0848     | N13 | W02 | 3581                    | 02        | 1.2        | 11    | SN         |      |            |      |              | 60                                  | .6               | E       |
|       | PEKG | 01  | 0837       | 0840     | 0845     | N12 | W02 | 3581                    | 02        | 1.2        | 8     | SF         |      | C          | 0840 |              | 76                                  | .8               | E       |
|       | HTPR | 01  | 0839       | 0843     | 0849     | N13 | W02 | 3581                    | 02        | 1.2        | 10    | SN         |      | C          | 0843 |              | 40                                  | .4               | E       |
|       | YUNN | 01  | 0840       | 0844     | 0851     | N13 | W01 | 3581                    | 02        | 1.3        | 11    | SN         |      | C          |      |              | 63                                  | .7               | E       |
| 0023  | HTPR | 01  | 0841       | 0842     | 0849     | S19 | E34 | 3583                    | 02        | 3.9        | 8     | SF         |      | C          | 0842 |              | 30                                  | .4               | E       |
| 0024  |      | 01  | 09123      | 09203    | 0948     | S14 | E40 | 3584                    | 02        | 4.4        | 36    | 1N         |      |            |      |              | 185                                 | 2.4              | EF      |
|       | YUNN | 01  | 0912       | 0921     | 0952     | S14 | E40 | 3584                    | 02        | 4.4        | 40    | 1N         |      | C          |      |              | 220                                 | 3.0              | F       |
|       | KANZ | 01  | 0915       | 0920     | 0952     | S15 | E38 | 3584                    | 02        | 4.3        | 37    | 1N         |      |            | 1    |              |                                     |                  |         |
|       | HTPR | 01  | 0915       | 0923     | 0940     | S14 | E42 | 3584                    | 02        | 4.5        | 25    | SB         |      | C          | 0923 |              | 150                                 | 1.9              | E       |
| 0025  |      | 01  | 09344      | 0941*    | 1007     | N10 | W03 | 3573                    | 02        | 1.2        | 33    | SN         |      |            |      |              | 54                                  | .6               | E       |
|       | YUNN | 01  | 0934       | 0943     | 0958     | N10 | W02 | 3573                    | 02        | 1.2        | 24    | SN         |      | C          |      |              | 79                                  | .8               | E       |
|       | HTPR | 01  | 0935       | 0941     | 1016     | N10 | W04 | 3573                    | 02        | 1.1        | 41    | SB         |      | C          | 0941 |              | 30                                  | .3               | E       |
|       | KANZ | 01  | 0938       | 0952     | 1007     | N10 | W03 | 3573                    | 02        | 1.2        | 29    | SN         |      |            | 1    |              |                                     |                  | E       |
| 0026  | KANZ | 01  | 1002       | 1002     | 1007     | S11 | E07 | 3576                    | 02        | 1.9        | 5     | SF         |      |            | 1    |              |                                     |                  |         |
| 0027  | KANZ | 01  | 1007       | 1007     | 1026     | N12 | W46 | 3572B                   | 01        | 29.0       | 19    | SF         |      |            | 2    |              |                                     |                  |         |
| 0028  | HTPR | 01  | 1023       | 1027     | 1035     | S14 | W01 | 3576                    | 02        | 1.3        | 12    | SF         |      | C          | 1027 |              | 30                                  | .3               | E       |
| 0029  | KANZ | 01  | 1026       | 1036     | 1100     | N11 | E14 | 3579                    | 02        | 2.5        | 34    | SN         |      |            | 2    |              |                                     |                  | E       |
| 0030  |      | 01  | 10413      | 1047*    | 1108     | S18 | W06 | 3576                    | 02        | 1.0        | 27    | SF         |      |            |      |              | 30                                  | .3               | E       |
|       | KANZ | 01  | 1041       | 1104     | 1118     | S19 | W06 | 3576                    | 02        | 1.0        | 37    | SF         |      |            | 2    |              |                                     |                  |         |
|       | HTPR | 01  | 1044       | 1047     | 1057     | S18 | W06 | 3576                    | 02        | 1.0        | 13    | SF         |      | C          | 1047 |              | 30                                  | .3               | E       |
| 0031  | HTPR | 01  | 1047       | 1049     | 1052     | S14 | W01 | 3576                    | 02        | 1.4        | 5     | SF         |      | C          | 1049 |              | 20                                  | .2               |         |
| 0032  | KANZ | 01  | 1118       | 1127     | 1142     | N12 | W46 | 3572B                   | 01        | 29.1       | 24    | SF         |      |            | 2    |              |                                     |                  |         |
| 0033  |      | 01  | 11198      | 11274    | 1142     | S12 | E12 | 3590                    | 02        | 2.4        | 23    | SF         |      |            |      |              | 40                                  | .4               | E       |
|       | HTPR | 01  | 1119       | 1131     | 1142     | S11 | E13 | 3590                    | 02        | 2.4        | 23    | SF         |      | C          | 1131 |              | 40                                  | .4               | E       |
|       | KANZ | 01  | 1127       | 1127     | 1142     | S12 | E12 | 3590                    | 02        | 2.4        | 15    | SF         |      |            | 2    |              |                                     |                  |         |
| 0034  |      | 01  | 11443      | 11452    | 1154     | N16 | E23 | 3582                    | 02        | 3.2        | 10    | SN         |      |            |      |              | 40                                  | .4               | E       |
|       | HTPR | 01  | 1144       | 1145     | 1154     | N16 | E23 | 3582                    | 02        | 3.2        | 10    | SN         |      | C          | 1145 |              | 40                                  | .4               | E       |
|       | KANZ | 01  | 1147       | 1147     | 1155     | N16 | E23 | 3582                    | 02        | 3.2        | 8     | SN         |      |            | 2    |              |                                     |                  |         |
| 0035  |      | 01  | 1159       | 11591    | 1206     | S14 | E00 | 3576                    | 02        | 1.5        | 7     | SN         |      |            |      |              | 30                                  | .3               | E       |
|       | KANZ | 01  | 1159       | 1159     | 1207     | S13 | E02 | 3576                    | 02        | 1.6        | 8     | SN         |      |            | 2    |              |                                     |                  |         |
|       | HTPR | 01  | 1159       | 1200     | 1206     | S14 | W02 | 3576                    | 02        | 1.3        | 7     | SF         |      | C          | 1200 |              | 30                                  | .3               | E       |
| 0036  |      | 01  | 1221*      | 12422    | 1258     | S12 | E05 | 3576                    | 02        | 1.9        | 37    | SN         |      |            |      |              | 70                                  | .7               | EL      |
|       | HTPR | 01  | 1221       | 1244     | 1253     | S12 | E04 | 3576                    | 02        | 1.8        | 32    | SN         |      | C          | 1244 |              | 70                                  | .7               | E       |
|       | KANZ | 01  | 1242       | 1242     | 1302     | S12 | E06 | 3576                    | 02        | 2.0        | 20    | SN         |      |            | 2    |              |                                     |                  | L       |
| 0037  | HTPR | 01  | 1222       | 1225     | 1236     | N15 | E21 | 3582                    | 02        | 3.1        | 14    | SN         |      | C          | 1225 |              | 20                                  | .2               |         |
| 0038  | HTPR | 01  | 1237       | 1242     | 1248     | N09 | E10 | 3579                    | 02        | 2.3        | 11    | SF         |      | C          | 1242 |              | 40                                  | .4               | E       |
| 0039  |      | 01  | 12371      | 1242     | 1300     | N11 | E00 | 3581                    | 02        | 1.5        | 23    | SN         |      |            |      |              | 40                                  | .4               | E       |
|       | HTPR | 01  | 1237       | 1242     | 1302     | N12 | W01 | 3581                    | 02        | 1.4        | 25    | SF         |      | C          | 1242 |              | 40                                  | .4               | E       |
|       | KANZ | 01  | 1238       | 1242     | 1257     | N10 | E01 | 3581                    | 02        | 1.6        | 19    | SN         |      |            | 2    |              |                                     |                  | E       |
| 0040  | HTPR | 01  | 1320       | 1337     | 1350     | S14 | E02 | 3576                    | 02        | 1.7        | 30    | SF         |      | C          | 1337 |              | 20                                  | .2               |         |
| 0041  |      | 01  | 13392      | 13413    | 1402     | S14 | E38 | 3584                    | 02        | 4.4        | 23    | SN         |      |            |      |              | 100                                 | 1.3              | E       |
|       | HTPR | 01  | 1339       | 1344     | 1401     | S14 | E40 | 3584                    | 02        | 4.6        | 22    | SN         |      | C          | 1344 |              | 100                                 | 1.3              | E       |
|       | KANZ | 01  | 1341       | 1341     | 1404     | S14 | E36 | 3584                    | 02        | 4.3        | 23    | SN         |      |            | 2    |              |                                     |                  |         |
| 0042  | KANZ | 01  | 1345       | 1350     | 1410     | N11 | W20 | 3575                    | 01        | 31.1       | 25    | SN         |      |            | 2    |              |                                     |                  |         |
| 0043  |      | 01  | 1350       | 1407     | 1609D    | S16 | W09 | 3576                    | 01        | 31.9       | 139D  | 3B         |      |            |      |              | 1300                                | 13.0             | EUW     |
|       | HTPR | 01  | 1350       |          | 1609D    | S16 | W10 | 3576                    | 01        | 31.8       | 139D  | 3B         |      | C          | 1410 |              | 1300                                | 13.0             | EUW     |
|       | KANZ | 01  | 1350       | 1407     | 1500D    | S16 | W08 | 3576                    | 02        | 1.0        | 70D   | 3B         |      |            | 2    |              |                                     |                  |         |
| 0044  | HTPR | 01  | 1353       | 1354     | 1413     | N10 | W08 | 3573                    | 02        | 1.0        | 20    | SN         |      | C          | 1354 |              | 70                                  | .7               | E       |

28  
Feb 82

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0045  |      | 01  | 14121      | 1453     | 1609D    | S12 | W18 | 3578                    | 01        | 31.2       | 117D         | 1B         |      |            |      |              | 220                                 | 2.2              | W       |
|       | HTPR | 01  | 1412       |          | 1609D    | S13 | W18 | 3578                    | 01        | 31.2       | 117D         | 1B         |      |            | C    | 1430         | 220                                 | 2.2              | W       |
|       | KANZ | 01  | 1413       | 1453     | 1500D    | S11 | W17 | 3578                    | 01        | 31.3       | 47D          | 1B         |      | 1          |      |              |                                     |                  |         |
| 0046  | KANZ | 01  | 1449       | 1453     | 1500     | S06 | E65 | 3589                    | 02        | 6.5        | 11           | SN         |      | 1          |      |              |                                     |                  |         |
| 0047  | HTPR | 01  | 1505       | 1509     | 1534     | N08 | E08 | 3579                    | 02        | 2.2        | 29           | SF         |      |            | C    | 1509         | 30                                  | .3               | E       |
| 0048  | HTPR | 01  | 1528       |          | 1609D    | S14 | W06 | 3576                    | 02        | 1.2        | 41D          | 2B         |      |            | C    | 1542         | 600                                 | 6.0              |         |
| 0049  | BIGB | 01  | 1546E      | 1547U    | 1725     | S14 | W01 | 3576                    | 02        | 1.6        | 99D          | 2B         |      | 2          | P    | 1547         | 600                                 | 6.2              |         |
| 0050  | BIGB | 01  | 1923       | 1946     | 2027D    | N16 | W15 | 3581                    | 01        | 31.7       | 64D          | 1B         |      | 2          | P    | 1946         | 240                                 | 2.6              |         |
| 0051  | BIGB | 01  | 1937       | 1941     | 2024     | S14 | W06 | 3576                    | 02        | 1.4        | 47           | SN         |      | 2          | C    | 1941         | 160                                 | 1.7              |         |
| 0052  | PALE | 01  | 2003E      | 2010U    | 2040D    | S20 | E05 | 3590                    | 02        | 2.2        | 37D          | SF         |      | 1          | C    |              | 25                                  |                  |         |
| 0053  |      | 01  | 2059       | 2101*    | 2115     | S14 | W04 | 3576                    | 02        | 1.6        | 16           | SN         |      |            |      |              | 60                                  | .6               | J       |
|       | CULG | 01  | 2059       | 2101     | 2115     | S15 | W07 | 3576                    | 02        | 1.3        | 16           | SF         |      |            | C    | 2101         | 50                                  | .5               |         |
|       | CULG | 01  | 2109U      | 2130     | 2154U    | S14 | W02 | 3576                    | 02        | 1.7        | 45U          | SN         |      |            | P    | 2130         | 70                                  | .7               | J       |
| 0054  | CULG | 01  | 2157       | 2202     | 2215U    | S19 | E28 | 3583                    | 02        | 4.0        | 18U          | SN         |      |            | P    | 2202         | 60                                  | .7               |         |
| 0055  | CULG | 01  | 2304       | 2311     | 2335     | N11 | W15 | 3573                    | 01        | 31.8       | 31           | 1N         |      |            | C    | 2311         | 160                                 | 2.1              | J       |
| 0056  | CULG | 01  | 2332       | 2349     | 2355     | N09 | E04 | 3579                    | 02        | 2.3        | 23           | SF         |      |            | C    | 2349         | 30                                  | .3               | JK      |
| 0057  | CULG | 01  | 2358       | 2404U    | 2414U    | S15 | W08 | 3576                    | 02        | 1.4        | 16U          | SN         |      |            | P    | 2404         | 60                                  | .6               | J       |
| 0058  | CULG | 02  | 0025       | 0030     | 0045     | S16 | E22 | 3591                    | 02        | 3.7        | 20           | SF         |      |            | C    | 0030         | 50                                  | .6               | EJ      |
| 0059  |      | 02  | 0026E      | 0030     | 0044D    | S15 | W10 | 3576                    | 02        | 1.3        | 18D          | SN         |      |            |      |              | 50                                  | .5               | J       |
|       | CULG | 02  | 0026U      | 0030     | 0044U    | S16 | W12 | 3576                    | 02        | 1.1        | 18U          | SN         |      |            | P    | 0030         | 70                                  | .7               | J       |
|       | YUNN | 02  | 0034E      | 0034U    | 0035D    | S14 | W08 | 3576                    | 02        | 1.4        | 1D           | SN         |      |            | P    | 0034         | 31                                  | .3               |         |
| 0060  | CULG | 02  | 0117       | 0124     | 0131     | S04 | E62 | 3589                    | 02        | 6.7        | 14           | SF         |      |            | C    | 0124         | 40                                  | .8               | J       |
| 0061  |      | 02  | 01213      | 01292    | 0148     | S12 | W00 | 3576                    | 02        | 2.0        | 27           | SF         |      |            |      |              | 79                                  | .8               | EJ      |
|       | CULG | 02  | 0121       | 0129     | 0148     | S12 | W01 | 3576                    | 02        | 2.0        | 27           | SF         |      |            | C    | 0129         | 50                                  | .5               |         |
|       | VORO | 02  | 0124       | 0131     | 0147     | S13 | E00 | 3576                    | 02        | 2.0        | 23           | SF         |      |            | C    | 0131         | 108                                 | 1.1              | EJ      |
| 0062  |      | 02  | 0219       | 02231    | 0230     | S04 | E62 | 3589                    | 02        | 6.7        | 11           | 1F         |      |            |      |              | 80                                  | 1.7              | DJ      |
|       | VORO | 02  | 0219       | 0223     | 0227     | S05 | E61 | 3589                    | 02        | 6.6        | 8            | 1F         |      |            | C    | 0223         | 99                                  | 2.1              | DJ      |
|       | CULG | 02  | 0219       | 0224     | 0233     | S04 | E62 | 3589                    | 02        | 6.7        | 14           | SF         |      |            | C    | 0224         | 60                                  | 1.3              | J       |
| 0063  |      | 02  | 0242*      | 0248*    | 0329     | S13 | W50 | 3577                    | 01        | 29.4       | 47           | 1B         |      |            |      |              | 144                                 | 2.2              | EFJK    |
|       | CULG | 02  | 0242       | 0251     | 0355     | S14 | W51 | 3577                    | 01        | 29.3       | 73           | 1N         |      |            | C    | 0251         | 150                                 | 2.4              | FKJ     |
|       | YUNN | 02  | 0244       | 0248     | 0303     | S12 | W49 | 3577                    | 01        | 29.5       | 19           | 1B         |      |            | C    |              | 189                                 | 2.9              |         |
|       | VORO | 02  | 0248E      |          | 0300D    | S12 | W52 | 3577                    | 01        | 29.3       | 12D          | 1B         |      |            | C    | 0251         | 143                                 | 2.2              | EJ      |
|       | PEKG | 02  | 0300       | 0326U    | 0357D    | S13 | W49 | 3577                    | 01        | 29.5       | 57D          | SN         |      |            | P    | 0326         | 130                                 | 2.0              | F       |
|       | YUNN | 02  | 0317       | 0326     | 0347D    | S16 | W49 | 3577                    | 01        | 29.5       | 30D          | SB         |      |            | P    | 0329         | 110                                 | 1.7              | F       |
| 0064  | YUNN | 02  | 0314E      | 0314U    | 0319     | N16 | E23 | 3592                    | 02        | 3.9        | 5D           | SN         |      |            | P    | 0314         | 79                                  | 1.0              | DG      |
| 0065  |      | 02  | 0327       | 03281    | 0335     | N12 | W56 | 3580                    | 01        | 29.0       | 8            | SN         |      |            |      |              | 48                                  | 1.0              | F       |
|       | CULG | 02  | 0327       | 0328     | 0335     | N12 | W58 | 3580                    | 01        | 28.9       | 8            | SF         |      |            | C    | 0328         | 50                                  | 1.0              |         |
|       | YUNN | 02  | 0327       | 0329     | 0335D    | N13 | W54 | 3580                    | 01        | 29.2       | 8D           | SN         |      |            | P    |              | 47                                  | .9               | F       |
| 0066  |      | 02  | 03512      | 03543    | 0404     | S15 | W11 | 3576                    | 02        | 1.3        | 13           | SN         |      |            |      |              | 40                                  | .4               | DJ      |
|       | CULG | 02  | 0351       | 0354     | 0410     | S15 | W11 | 3576                    | 02        | 1.3        | 19           | SN         |      |            | C    | 0354         | 30                                  | .3               | J       |
|       | PEKG | 02  | 0353       | 0357     | 0359     | S15 | W11 | 3576                    | 02        | 1.3        | 6            | SF         |      |            | C    | 0357         | 50                                  | .5               | D       |
| 0067  | CULG | 02  | 0416       | 0422     | 0432     | S05 | E51 | 3589                    | 02        | 6.0        | 16           | SF         |      |            | C    | 0422         | 30                                  | .5               |         |
| 0068  | CULG | 02  | 0417       | 0421     | 0430     | N10 | W15 | 3573                    | 02        | 1.0        | 13           | SF         |      |            | C    | 0421         | 40                                  | .4               |         |
| 0069  | CULG | 02  | 0438       | 0440     | 0500     | S16 | W49 | 3577                    | 01        | 29.6       | 22           | SF         |      |            | C    | 0440         | 60                                  | .9               | J       |
| 0070  | CULG | 02  | 0445       | 0447     | 0451     | S12 | W03 | 3576                    | 02        | 2.0        | 6            | SN         |      |            | C    | 0447         | 30                                  | .3               |         |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Area Measurement |                                     |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|------------|------|------------|------|------------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      | Time (UT)        | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0071  | CULG | 02  | 0450       | 0451     | 0453     | S15 | W15 | 3576                    | 02        | 1.1        | 3            | SF         |      |            | C    | 0451             | 40                                  | .4               |         |
| 0072  | CULG | 02  | 0457       | 0459     | 0502     | S15 | W20 | 3576                    | 01        | 31.7       | 5            | SF         |      |            | C    | 0459             | 30                                  | .3               |         |
| 0073  | CULG | 02  | 0550U      | 0607     | 0630     | S14 | W12 | 3576                    | 02        | 1.3        | 40U          | SN         |      |            | P    | 0607             | 40                                  | .4               | JK      |
| 0074  | CULG | 02  | 0551       | 0554     | 0600     | N18 | E10 | 3582                    | 02        | 3.0        | 9            | SN         |      |            | C    | 0554             | 30                                  | .3               |         |
| 0075  | CULG | 02  | 0551       | 0610     | 0657     | N10 | E01 | 3579                    | 02        | 2.3        | 66           | 1N         |      |            | C    | 0610             | 210                                 | 2.1              | FIJK    |
| 0076  | YUNN | 02  | 0649E      | 0650U    | 0715     | N10 | E06 | 3579                    | 02        | 2.7        | 26D          | SF         |      |            | P    | 0650             | 157                                 | 1.7              |         |
| 0077  | CULG | 02  | 0649       | 0653     | 0704     | S16 | W50 | 3577                    | 01        | 29.6       | 15           | SF         |      |            | C    | 0653             | 40                                  | .6               |         |
| 0078  |      | 02  | 0741       |          | 0755     | S14 | W14 | 3576                    | 02        | 1.3        | 14           | SF         |      |            |      |                  | 20                                  | .2               |         |
|       | HTPR | 02  | 0741E      |          | 0752     | S14 | W12 | 3576                    | 02        | 1.4        | 11D          | SF         |      |            | C    | 0745             | 20                                  | .2               |         |
|       | HTPR | 02  | 0741E      |          | 0758     | S14 | W15 | 3576                    | 02        | 1.2        | 17D          | SF         |      |            | C    | 0742             | 20                                  | .2               |         |
| 0079  | HTPR | 02  | 0741       |          | 0833     | S14 | W08 | 3576                    | 02        | 1.7        | 52           | SF         |      |            | C    | 0754             | 30                                  | .3               |         |
| 0080  |      | 02  | 0748       | 07537    | 0827     | N13 | W32 | 3575                    | 01        | 31.0       | 39           | 1N         |      |            |      |                  | 214                                 | 2.6              | E       |
|       | CATA | 02  | 0745E      | 0800     | 0805D    | N12 | W31 | 3575                    | 01        | 31.0       | 20D          | 1          |      | 1          | P    | 0800             | 309                                 | 3.9              |         |
|       | HTPR | 02  | 0748       | 0753     | 0827     | N14 | W33 | 3575                    | 01        | 30.9       | 39           | SN         |      |            | C    | 0753             | 120                                 | 1.4              | E       |
| 0081  | HTPR | 02  | 0747       | 0749     | 0750     | S11 | W05 | 3576                    | 02        | 1.9        | 3            | SN         |      |            | C    | 0749             | 20                                  | .2               |         |
| 0082  |      | 02  | 08211      | 08212    | 0824     | S15 | W12 | 3576                    | 02        | 1.4        | 3            | SN         |      |            |      |                  | 50                                  | .5               |         |
|       | CULG | 02  | 0820U      | 0821U    | 0824     | S13 | W09 | 3576                    | 02        | 1.7        | 4U           | SF         |      |            | P    | 0821             | 40                                  | .4               |         |
|       | KANZ | 02  | 0821       | 0821     | 0825     | S16 | W13 | 3576                    | 02        | 1.4        | 4            | SN         |      | 1          |      |                  |                                     |                  |         |
|       | HTPR | 02  | 0822       | 0823     | 0824     | S15 | W15 | 3576                    | 02        | 1.2        | 2            | SN         |      |            | C    | 0823             | 60                                  | .6               |         |
| 0083  | HTPR | 02  | 0824       | 0825     | 0828     | S15 | W20 | 3576                    | 01        | 31.8       | 4            | SN         |      |            | C    | 0825             | 70                                  | .7               | E       |
| 0084  | HTPR | 02  | 0838       | 0841     | 0849     | N10 | E01 | 3579                    | 02        | 2.4        | 11           | SN         |      |            | C    | 0841             | 20                                  | .2               |         |
| 0085  |      | 02  | 08516      | 08555    | 0907     | S14 | W10 | 3576                    | 02        | 1.6        | 16           | SF         |      |            |      |                  | 40                                  | .4               | E       |
|       | KANZ | 02  | 0851       | 0855     | 0907     | S14 | W09 | 3576                    | 02        | 1.7        | 16           | SN         |      | 1          |      |                  |                                     |                  |         |
|       | MONT | 02  | 0855       | 0857     | 0901     | S13 | W10 | 3576                    | 02        | 1.6        | 6            | SF         |      |            | C    | 0857             | 50                                  |                  | E       |
|       | HTPR | 02  | 0857       | 0859     | 0912     | S14 | W09 | 3576                    | 02        | 1.7        | 15           | SF         |      |            | C    | 0859             | 40                                  | .4               | E       |
|       | HTPR | 02  | 0857       | 0900     | 0907     | S14 | W10 | 3576                    | 02        | 1.6        | 10           | SF         |      |            | C    | 0900             | 30                                  | .3               |         |
| 0086  |      | 02  | 08581      | 09014    | 0930     | S14 | E30 | 3584                    | 02        | 4.6        | 32           | SN         |      |            |      |                  | 119                                 | 1.4              | E       |
|       | MONT | 02  | 0858       | 0901     | 0925     | S13 | E29 | 3584                    | 02        | 4.6        | 27           | SN         |      |            | C    | 0901             | 110                                 |                  |         |
|       | HTPR | 02  | 0859       | 0903     | 0935     | S14 | E30 | 3584                    | 02        | 4.6        | 36           | SF         |      |            | C    | 0903             | 50                                  | .5               | E       |
|       | CATA | 02  | 0900E      | 0905     | 0910D    | S15 | E30 | 3584                    | 02        | 4.6        | 10D          | 1          |      | 1          | P    | 0905             | 197                                 | 2.4              |         |
| 0087  |      | 02  | 0859       | 09052    | 0945     | S14 | E24 | 3584                    | 02        | 4.2        | 46           | SN         |      |            |      |                  | 112                                 | 1.3              | E       |
|       | KANZ | 02  | 0859       | 0907     | 0945     | S14 | E23 | 3584                    | 02        | 4.1        | 46           | SN         |      | 2          |      |                  |                                     |                  |         |
|       | CATA | 02  | 0900E      | 0905     | 0910D    | S13 | E26 | 3584                    | 02        | 4.3        | 10D          | S          |      | 1          | P    | 0905             | 112                                 | 1.3              | E       |
| 0088  |      | 02  | 09052      | 0909     | 0921     | S17 | E15 | 3591                    | 02        | 3.5        | 16           | SF         |      |            |      |                  | 54                                  | .6               | E       |
|       | HTPR | 02  | 0905       | 0909     | 0926     | S17 | E17 | 3591                    | 02        | 3.7        | 21           | SF         |      |            | C    | 0909             | 50                                  | .5               | E       |
|       | MONT | 02  | 0907       | 0909     | 0918     | S17 | E15 | 3591                    | 02        | 3.5        | 11           | SF         |      |            | C    | 0909             | 50                                  |                  | E       |
|       | WEND | 02  | 0912E      |          | 0920     | S17 | E13 | 3591                    | 02        | 3.4        | 8D           | SN         |      |            | C    | 0912             | 62                                  | .7               |         |
| 0089  |      | 02  | 09283      | 09365    | 1003     | N10 | W16 | 3573                    | 02        | 1.2        | 35           | SN         |      |            |      |                  | 169                                 | 2.1              | E       |
|       | KANZ | 02  | 0928       | 0940     | 1016     | N09 | W16 | 3573                    | 02        | 1.2        | 48           | SN         |      | 2          |      |                  |                                     |                  |         |
|       | WEND | 02  | 0929       | 0941     | 1002     | N10 | W15 | 3573                    | 02        | 1.3        | 33           | SN         |      |            | C    | 0941             | 110                                 | 1.2              |         |
|       | MONT | 02  | 0930       | 0941     | 0951     | N13 | W15 | 3573                    | 02        | 1.3        | 21           | SN         |      |            | C    | 0941             | 110                                 |                  |         |
|       | HTPR | 02  | 0931       | 0936     | 1003     | N08 | W20 | 3573                    | 01        | 31.9       | 32           | SB         |      |            | C    | 0936             | 120                                 | 1.2              | E       |
|       | CATA | 02  | 0935E      | 0940     | 1025D    | N10 | W16 | 3573                    | 02        | 1.2        | 50D          | 1          |      | 1          | P    | 0940             | 337                                 | 3.8              |         |
| 0090  |      | 02  | 0934       | 09393    | 1010     | S14 | W12 | 3576                    | 02        | 1.5        | 36           | SF         |      |            |      |                  | 48                                  | .5               | E       |
|       | WEND | 02  | 0934       | 0939     | 0954     | S13 | W11 | 3576                    | 02        | 1.6        | 20           | SF         |      |            | C    | 0939             | 46                                  | .5               |         |
|       | HTPR | 02  | 0934       | 0942     | 1025     | S14 | W12 | 3576                    | 02        | 1.5        | 51           | SF         |      |            | C    | 0942             | 50                                  | .5               | E       |
| 0091  |      | 02  | 10272      | 1042*    | 1140     | S11 | W33 | 3578                    | 01        | 31.0       | 73           | 1B         |      |            |      |                  | 503                                 | 5.4              | ELU     |
|       | HTPR | 02  | 1027       | 1056     | 1212     | S11 | W33 | 3578                    | 01        | 31.0       | 105          | 1B         |      |            | C    | 1043             | 220                                 | 2.6              | EU      |
|       | MONT | 02  | 1028       | 1042     | 1126     | S11 | W33 | 3578                    | 01        | 31.0       | 58           | 2B         |      |            | C    | 1042             | 700                                 |                  |         |
|       | KANZ | 02  | 1028       | 1042     | 1142     | S12 | W32 | 3578                    | 01        | 31.0       | 74           | 1B         |      | 3          |      |                  |                                     |                  | U       |
|       | WEND | 02  | 1029       | 1043     | 1125     | S12 | W33 | 3578                    | 01        | 31.0       | 56           | 1B         |      |            | C    | 1043             | 250                                 | 3.1              | L       |
|       | CATA | 02  | 1100E      | 1100     | 1135     | S12 | W34 | 3578                    | 01        | 31.0       | 35D          | 2          |      | 2          | P    | 1100             | 843                                 | 10.5             |         |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | See | Obs<br>Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |    |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|------------|------|-----|-------------|--------------|-------------------------------------|------------------|---------|----|
|       |      |     |            |          |          |                 |     |                         |           |            |              |            |      |     |             |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |    |
| 0092  | HTPR | 02  | 1109       | 1121     | 1155     | S13             | W04 | 3590                    | 02        | 2.2        | 46           | SF         |      |     | C           | 1121         | 20                                  | .2               | E       |    |
| 0093  |      | 02  | 1136*      | 1152*    | 1256     | S17             | E14 | 3583                    | 02        | 3.5        | 80           | 1B         |      |     |             |              |                                     | 300              | 3.7     | EU |
|       | HTPR | 02  | 1136       | 1210     | 1302     | S17             | E15 | 3583                    | 02        | 3.6        | 86           | 1B         |      |     | C           | 1210         | 280                                 | 2.8              | EU      |    |
|       | WEND | 02  | 1145       | 1212     | 1253     | S17             | E12 | 3583                    | 02        | 3.4        | 68           | 1B         |      |     | C           | 1212         | 263                                 | 2.9              |         |    |
|       | KANZ | 02  | 1146       | 1209     | 1259     | S16             | E15 | 3583                    | 02        | 3.6        | 73           | 1B         |      | 3   |             |              |                                     |                  |         |    |
|       | MONT | 02  | 1147       | 1152     | 1152D    | S17             | E15 | 3583                    | 02        | 3.6        | 5D           | SN         |      |     | C           | 1152         | 150                                 |                  |         |    |
|       | CATA | 02  | 1200       | 1220     | 1250     | S17             | E14 | 3583                    | 02        | 3.6        | 50           | 2          |      | 2   | P           | 1220         | 506                                 | 5.5              |         |    |
| 0094  | HTPR | 02  | 1204       | 1205     | 1210     | N12             | W15 | 3581                    | 02        | 1.4        | 6            | SN         |      |     | C           | 1205         | 40                                  | .4               | E       |    |
| 0095  | HTPR | 02  | 1310       | 1312     | 1318     | S14             | W13 | 3576                    | 02        | 1.6        | 8            | SF         |      |     | C           | 1312         | 20                                  | .2               | E       |    |
| 0096  | HTPR | 02  | 1310       | 1320     | 1328     | S08             | W22 | 3578                    | 01        | 31.9       | 18           | SF         |      |     | C           | 1320         | 30                                  | .3               |         |    |
| 0097  | HTPR | 02  | 1312       | 1318     | 1326     | S14             | W26 | 3576                    | 01        | 31.6       | 14           | SF         |      |     | C           | 1318         | 20                                  | .2               |         |    |
| 0098  |      | 02  | 13314      | 1341*    | 1411     | S14             | W57 | 3577                    | 01        | 29.3       | 40           | SN         |      |     |             |              | 95                                  | 1.8              | E       |    |
|       | HTPR | 02  | 1331       | 1341     | 1417     | S13             | W60 | 3577                    | 01        | 29.1       | 46           | SB         |      |     | C           | 1341         | 80                                  | 1.6              | E       |    |
|       | KANZ | 02  | 1335       | 1356     | 1419     | S16             | W56 | 3577                    | 01        | 29.4       | 46           | SN         |      | 2   |             |              |                                     |                  |         |    |
|       | WEND | 02  | 1335       | 1344     | 1358     | S13             | W55 | 3577                    | 01        | 29.5       | 23           | SN         |      |     | C           | 1344         | 110                                 | 2.0              |         |    |
| 0099  | HTPR | 02  | 1416       | 1419     | 1439     | N13             | W22 | 3581                    | 01        | 31.9       | 23           | SB         |      |     | C           | 1419         | 50                                  | .5               | E       |    |
| 0100  |      | 02  | 14163      | 14191    | 1431     | N10             | W18 | 3573                    | 02        | 1.2        | 15           | SN         |      |     |             |              | 22                                  | .2               |         |    |
|       | WEND | 02  | 1416       | 1420     | 1427     | N11             | W16 | 3573                    | 02        | 1.4        | 11           | SF         |      |     | C           | 1420         | 22                                  | .2               |         |    |
|       | KANZ | 02  | 1419       | 1419     | 1435     | N10             | W19 | 3573                    | 02        | 1.2        | 16           | SN         |      | 2   |             |              |                                     |                  |         |    |
| 0101  |      | 02  | 15052      | 15121    | 1530     | N15             | W18 | 3581                    | 02        | 1.3        | 25           | SN         |      |     |             |              | 36                                  | .4               | E       |    |
|       | HTPR | 02  | 1505       | 1513     | 1536     | N16             | W19 | 3581                    | 02        | 1.2        | 31           | SN         |      |     | C           | 1513         | 40                                  | .4               | E       |    |
|       | WEND | 02  | 1507       | 1512     | 1523     | N14             | W16 | 3581                    | 02        | 1.4        | 16           | SF         |      |     | C           | 1512         | 31                                  | .3               |         |    |
| 0102  | HTPR | 02  | 1507       | 1512     | 1540     | N13             | W22 | 3581                    | 02        | 1.0        | 33           | SN         |      |     | C           | 1512         | 40                                  | .4               | E       |    |
| 0103  | HTPR | 02  | 1531       | 1537     | 1541     | S08             | W23 | 3578                    | 01        | 31.9       | 10           | SF         |      |     | C           | 1537         | 30                                  | .3               |         |    |
| 0104  | HTPR | 02  | 1534       |          | 1544     | S14             | W14 | 3576                    | 02        | 1.6        | 10           | SF         |      |     | C           | 1536         | 20                                  | .2               |         |    |
| 0105  |      | 02  | 1552       | 1553     | 1610     | S16             | W18 | 3576                    | 02        | 1.3        | 18           | SN         |      |     |             |              | 65                                  | .7               | E       |    |
|       | BIGB | 02  | 1552       | 1553     | 1614     | S16             | W16 | 3576                    | 02        | 1.4        | 22           | SN         |      | 2   | C           | 1553         | 80                                  | .9               |         |    |
|       | HTPR | 02  | 1556E      |          | 1605     | S15             | W19 | 3576                    | 02        | 1.2        | 9D           | SN         |      |     | C           | 1556         | 50                                  | .5               | E       |    |
|       |      | 02  | 1633       |          | 1647     | No Flare Patrol |     |                         |           |            |              |            |      |     |             |              |                                     |                  |         |    |
| 0106  | BIGB | 02  | 1642       | 1645     | 1712     | N12             | W20 | 3581                    | 02        | 1.2        | 30           | SN         |      | 3   | C           | 1645         | 110                                 | 1.2              |         |    |
| 0107  | BIGB | 02  | 1759       | 1902     | 1923     | S18             | W25 | 3576                    | 01        | 31.8       | 84           | SN         |      | 3   | C           | 1802         | 80                                  | .9               |         |    |
| 0108  | BIGB | 02  | 1820       | 1853     | 1930     | S15             | W59 | 3577                    | 01        | 29.4       | 70           | 1B         |      | 3   | C           | 1853         | 140                                 | 2.8              |         |    |
| 0109  | PALE | 02  | 1949E      | 1949U    | 2004D    | S14             | W43 | 3578                    | 01        | 30.7       | 15D          | SF         |      | 1   | C           |              | 50                                  |                  |         |    |
| 0110  | PALE | 02  | 2003E      | 2010U    | 2017D    | S13             | W24 | 3576                    | 02        | 1.0        | 14D          | SN         |      | 1   | C           |              | 40                                  |                  | FH      |    |
| 0111  |      | 02  | 2030       | 20335    | 2111     | S13             | W10 | 3590                    | 02        | 2.1        | 41           | SB         |      |     |             |              | 110                                 | 1.2              |         |    |
|       | CULG | 02  | 2028U      | 2033     | 2119U    | S13             | W10 | 3590                    | 02        | 2.1        | 51U          | SB         |      |     | C           | 2033         | 100                                 | 1.0              |         |    |
|       | BIGB | 02  | 2030       | 2038     | 2111     | S13             | W10 | 3590                    | 02        | 2.1        | 41           | SN         |      | 3   | C           | 2038         | 120                                 | 1.3              |         |    |
| 0112  | BIGB | 02  | 2030       | 2046     | 2111     | S15             | W59 | 3577                    | 01        | 29.5       | 41           | SN         |      | 3   | C           | 2046         | 90                                  | 1.8              |         |    |
| 0113  | PALE | 02  | 2043E      | 2044U    | 2117D    | S10             | E87 | 3594                    | 02        | 9.4        | 34D          | 1B         |      | 1   | C           |              |                                     |                  | Y       |    |
| 0114  | PALE | 02  | 2054E      | 2054U    | 2104D    | S14             | W29 | 3576                    | 01        | 31.7       | 10D          | SN         |      | 1   | C           |              | 50                                  |                  | F       |    |
| 0115  | PALE | 02  | 2114E      | 2114U    | 2124D    | S13             | W23 | 3576                    | 02        | 1.1        | 10D          | 1N         |      | 1   | C           |              | 250                                 |                  |         |    |
| 0116  |      | 02  | 22191      | 22212    | 2316     | S16             | E08 | 3591                    | 02        | 3.5        | 57           | 1B         |      |     |             |              | 190                                 | 2.0              | F       |    |
|       | BIGB | 02  | 2219       | 2221     | 2347     | S17             | E08 | 3591                    | 02        | 3.5        | 88           | SN         |      | 3   | C           | 2221         | 180                                 | 1.9              |         |    |
|       | CULG | 02  | 2220       | 2223     | 2246     | S16             | E08 | 3591                    | 02        | 3.5        | 26           | 1B         |      |     | C           | 2223         | 200                                 | 2.0              | F       |    |
| 0117  | CULG | 02  | 2344       | 2355     | 2418D    | S12             | W30 | 3576                    | 01        | 31.7       | 34D          | 1F         |      |     | P           | 2355         | 190                                 | 2.2              | F       |    |

H - ALPHA SOLAR FLARES

31  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/ USAF Region | CMP Mo | Day  | Dur (Min) | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks   |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------|--------|------|-----------|---------|------|---------|------|-----------|----------------------------------|---------------|-----------|
|       |      |     |            |          |          |     |     |                   |        |      |           |         |      |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |           |
| 0118  | B1GB | 02  | 2350       | 2353     | 0028E    | S13 | E31 | 3588              | 02     | 5.3  | 38        | 1F      |      | 3       | P    | 2353      | 200                              | 2.4           |           |
| 0119  | LEAR | 03  | 0002E      | 0009     | 0050     | S20 | E01 | 3583              | 02     | 3.1  | 48D       | SN      |      | 3       | C    |           | 125                              |               | F         |
| 0120  | VORO | 03  | 0009       | 0011     | 0020     | S12 | W31 | 3576              | 01     | 31.7 | 11        | SN      |      |         | C    | 0011      | 99                               | 1.2           | DJ        |
| 0121  |      | 03  | 00122      | 00141    | 0020     | S15 | W21 | 3576              | 02     | 1.4  | 8         | SF      |      |         |      |           | 88                               | 1.0           | DJ        |
|       | CULG | 03  | 0012       | 0014     | 0018     | S16 | W22 | 3576              | 02     | 1.3  | 6         | SF      |      |         | C    | 0014      | 60                               | .6            |           |
|       | VORO | 03  | 0014       | 0015     | 0021     | S14 | W20 | 3576              | 02     | 1.5  | 7         | SF      |      |         | C    | 0015      | 116                              | 1.4           | DJ        |
| 0122  |      | 03  | 01022      | 0106*    | 0329     | S16 | W30 | 3576              | 01     | 31.8 | 147       | 2B      |      |         |      |           | 617                              | 8.4           | EF IJKTUW |
|       | MITK | 03  | 0102       | 0116     | 0230     | S17 | W29 | 3576              | 01     | 31.8 | 88        | 2B      |      |         | C    | 0116      | 500                              | 6.0           | FIKUW     |
|       | LEAR | 03  | 0103E      | 0115     | 0446     | S15 | W29 | 3576              | 01     | 31.8 | 223D      | SB      |      | 3       | C    |           | 175                              |               | K         |
|       | CULG | 03  | 0103       | 0125     | 0246     | S16 | W32 | 3576              | 01     | 31.6 | 103       | 2B      |      |         | C    | 0125      | 760                              | 9.1           | JF1       |
|       | LEAR | 03  | 0103E      | 0126U    | 0446     | S15 | W29 | 3576              | 01     | 31.8 | 223D      | 2B      |      | 3       | C    |           | 550                              |               | UYK       |
|       | VORO | 03  | 0104       | 0124     | 0240     | S14 | W32 | 3576              | 01     | 31.6 | 96        | 3B      |      |         | C    | 0124      | 1254                             | 14.7          | E1JK      |
|       | MANI | 03  | 0105E      | 0106     | 0158D    | S17 | W29 | 3576              | 01     | 31.8 | 53D       | SN      |      | 1       | V    |           | 80                               | 1.0           | F         |
|       | MANI | 03  | 0105E      | 0118U    | 0158D    | S17 | W29 | 3576              | 01     | 31.8 | 53D       | 2B      |      | 1       | V    |           | 520                              | 6.2           | F         |
|       | YUNN | 03  | 0121E      | 0124     | 0140D    | S15 | W30 | 3576              | 01     | 31.8 | 19D       | 3B      |      |         | P    |           | 1100                             | 13.2          | FZT       |
| 0123  | PALE | 03  | 0111E      | 0149U    | 0303D    | S15 | W27 | 3576              | 02     | 1.0  | 112D      | 2B      |      | 1       | C    |           | 550                              |               | EF        |
| 0124  |      | 03  | 0113       | 01232    | 0142     | N10 | W24 | 3573              | 02     | 1.2  | 29        | SN      |      |         |      |           | 154                              | 1.8           | F         |
|       | CULG | 03  | 0113       | 0123     | 0143     | N10 | W26 | 3573              | 02     | 1.1  | 30        | SF      |      |         | C    | 0123      | 150                              | 1.8           | F         |
|       | YUNN | 03  | 0121E      | 0125     | 0140     | N10 | W22 | 3573              | 02     | 1.4  | 19D       | SN      |      |         | P    |           | 157                              | 1.8           |           |
| 0125  |      | 03  | 0122E      | 0135U    | 0301D    | S11 | W39 | 3578              | 01     | 31.1 | 99D       | SN      |      |         |      |           | 58                               | .6            |           |
|       | PALE | 03  | 0122E      | 0149U    | 0301D    | S10 | W40 | 3578              | 01     | 31.0 | 99D       | SN      |      | 1       | C    |           | 65                               |               |           |
|       | MANI | 03  | 0135E      | 0135U    | 0158D    | S12 | W38 | 3578              | 01     | 31.2 | 23D       | SN      |      | 1       | V    |           | 50                               | .6            |           |
| 0126  | CULG | 03  | 0226       | 0228     | 0234     | S04 | E43 | 3589              | 02     | 6.3  | 8         | SF      |      |         | C    | 0228      | 110                              | 1.5           |           |
| 0127  |      | 03  | 0416       | 04182    | 0450     | N11 | W27 | 3573              | 02     | 1.1  | 34        | SN      |      |         |      |           | 118                              | 1.1           | F         |
|       | CULG | 03  | 0416       | 0418     | 0432     | N11 | W28 | 3573              | 02     | 1.1  | 16        | SF      |      |         | C    | 0418      | 90                               | 1.1           | F         |
|       | LEAR | 03  | 0416       | 0420     | 0507     | N11 | W26 | 3573              | 02     | 1.2  | 51        | SN      |      | 3       | C    |           | 147                              |               | F         |
| 0128  | YUNN | 03  | 0525       | 0540     | 0620     | S06 | E86 | 3594              | 02     | 9.7  | 55        | SF      |      |         | P    |           |                                  |               | AG        |
| 0129  |      | 03  | 05351      | 0539*    | 0610     | S12 | W14 | 3576              | 02     | 2.2  | 35        | SN      |      |         |      |           | 56                               | .6            | DT        |
|       | CULG | 03  | 0535       | 0539     | 0605     | S12 | W15 | 3576              | 02     | 2.1  | 30        | SN      |      |         | C    | 0539      | 60                               | .6            |           |
|       | YUNN | 03  | 0536       | 0541     | 0611     | S12 | W14 | 3576              | 02     | 2.2  | 35        | SF      |      |         | C    |           | 47                               | .5            | DT        |
|       | TACH | 03  | 0545E      | 0555     | 0615     | S11 | W14 | 3576              | 02     | 2.2  | 30D       | SB      |      |         | C    | 0555      | 62                               | .7            | D         |
| 0130  | MANI | 03  | 0545E      | 0545U    | 0602D    | S16 | W09 | 3591              | 02     | 2.5  | 17D       | SN      |      | 1       | V    |           | 15                               | .2            |           |
| 0131  |      | 03  | 06278      | 06325    | 0658     | S16 | W24 | 3576              | 02     | 1.4  | 31        | SB M    | 1.1  |         |      |           | 113                              | 1.5           | DEFT      |
|       | TACH | 03  | 0627       | 0635     | 0644     | S20 | W23 | 3576              | 02     | 1.5  | 17        | SB      |      |         | C    | 0635      | 141                              | 1.6           | E         |
|       | LEAR | 03  | 0629       | 0632     | 0700     | S15 | W26 | 3576              | 02     | 1.3  | 31        | SB      |      | 3       | C    |           | 58                               |               | F         |
|       | YUNN | 03  | 0629E      | 0634     | 0649     | S15 | W25 | 3576              | 02     | 1.4  | 20D       | SN M    | 1.1  |         | P    |           | 79                               | .9            | DT        |
|       | ATHN | 03  | 0635       | 0637     | 0720     | S13 | W22 | 3576              | 02     | 1.6  | 45        | SN      |      | 2       | V    | 0637      | 175                              | 2.0           |           |
| 0132  |      | 03  | 06341      | 0633*    | 0712     | S12 | W14 | 3576              | 02     | 2.2  | 38        | SN      |      |         |      |           | 83                               | .9            | DT        |
|       | MANI | 03  | 0632E      | 0633     | 0639D    | S13 | W15 | 3576              | 02     | 2.1  | 7D        | SN      |      | 1       | V    |           | 60                               | .7            |           |
|       | YUNN | 03  | 0634       | 0640     | 0707     | S12 | W14 | 3576              | 02     | 2.2  | 33        | SN      |      |         | C    |           | 126                              | 1.3           | T         |
|       | TACH | 03  | 0635       | 0648     | 0716     | S11 | W14 | 3576              | 02     | 2.2  | 41        | SB      |      |         | C    | 0648      | 62                               | .7            | D         |
| 0133  |      | 03  | 07051      | 07053    | 0716     | S13 | W65 | 3577              | 01     | 29.5 | 11        | SN      |      |         |      |           | 68                               | 2.0           | DE        |
|       | CATA | 03  | 0705E      | 0705     | 0710     | S14 | W65 | 3577              | 01     | 29.5 | 5D        | 1       |      | 2       | P    | 0705      | 84                               | 2.0           |           |
|       | LEAR | 03  | 0705       | 0706     | 0716     | S13 | W64 | 3577              | 01     | 29.6 | 11        | SB      |      | 3       | C    |           | 35                               |               | E         |
|       | CULG | 03  | 0705       | 0707     | 0711     | S16 | W67 | 3577              | 01     | 29.3 | 6         | SF      |      |         | C    | 0707      | 40                               |               |           |
|       | YUNN | 03  | 0705       | 0708     | 0716     | S13 | W65 | 3577              | 01     | 29.5 | 11        | 1B      |      |         | C    |           | 157                              | 3.7           | D         |
|       | TACH | 03  | 0706       | 0706     | 0713     | S13 | W67 | 3577              | 01     | 29.3 | 7         | 1B      |      |         | C    | 0706      | 53                               |               | D         |
|       | ATHN | 03  | 0706       | 0708     | 0733     | S13 | W63 | 3577              | 01     | 29.6 | 27        | SN      |      | 2       | V    | 0708      | 80                               | 1.7           |           |
|       | MANI | 03  | 0707E      | 0707U    | 0711D    | S13 | W63 | 3577              | 01     | 29.6 | 4D        | SN      |      | 1       | V    |           | 30                               | .6            |           |
| 0134  |      | 03  | 08154      | 08204    | 0853     | N12 | W34 | 3581              | 01     | 31.8 | 38        | SN      |      |         |      |           | 109                              | 1.4           | EF        |
|       | LEAR | 03  | 0815       | 0822     | 0908     | N12 | W36 | 3581              | 01     | 31.6 | 53        | SN      |      | 3       | C    |           | 111                              |               | F         |
|       | KANZ | 03  | 0816       | 0820     | 0901     | N11 | W37 | 3581              | 01     | 31.6 | 45        | SN      |      | 2       |      |           |                                  |               |           |
|       | WEND | 03  | 0816E      | 0824     | 0829D    | N15 | W36 | 3581              | 01     | 31.6 | 13D       | SN      |      |         | C    | 0824      | 138                              | 1.8           | E         |
|       | YUNN | 03  | 0817E      | 0821     | 0837     | N13 | W36 | 3581              | 01     | 31.6 | 20D       | 1N      |      |         | P    |           | 157                              | 2.1           |           |
|       | ATHN | 03  | 0819       | 0821     | 0845     | N12 | W29 | 3581              | 02     | 1.2  | 26        | SB      |      | 2       | V    | 0821      | 64                               | .8            |           |
|       | MANI | 03  | 0821E      | 0822     | 0832D    | N12 | W33 | 3581              | 01     | 31.9 | 11D       | SN      |      | 1       | V    |           | 75                               | 1.0           | F         |

32  
Feb 82

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day (Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |     |    |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|-----|----|
|       |      |     |            |          |          |                 |     |                         |           |                  |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |    |
| 0135  |      | 03  | 08312      | 08352    | 0850     | S16             | E03 | 3591                    | 02        | 3.6              | 19         | SN   |            |      |              |                                     | 189              | 2.0     | FG  |    |
|       | KANZ | 03  | 0831       | 0835     | 0851     | S16             | E03 | 3591                    | 02        | 3.6              | 20         | SN   | 2          |      |              |                                     |                  |         |     |    |
|       | YUNN | 03  | 0833       | 0837     | 0848     | S15             | E03 | 3591                    | 02        | 3.6              | 15         | SN   |            | C    |              |                                     |                  | 189     | 2.0 | FG |
| 0136  | YUNN | 03  | 0841       | 0845     | 0847     | S15             | W32 | 3576                    | 01        | 31.9             | 6          | SN   |            | C    |              |                                     |                  | 79      | 1.0 | D  |
| 0137  | HTPR | 03  | 0908       |          | 0911D    | N09             | W20 | 3579                    | 02        | 1.9              | 30         | SF   |            | C    | 0911         |                                     |                  | 30      | .3  | E  |
| 0138  | WEND | 03  | 0909       | 0912     | 0914     | N09             | W13 | 3579                    | 02        | 2.4              | 5          | SF   |            | C    | 0912         |                                     |                  | 44      | .5  |    |
| 0139  |      | 03  | 0855*      | 09092    | 0938     | S10             | E89 | 3594                    | 02        | 10.0             | 43         | 1N   |            |      |              |                                     |                  | 128     |     |    |
|       | CATA | 03  | 0825E      | 0910     | 0940     | S13             | E90 | 3594                    | 02        | 10.1             | 75D        | 2    | 2          | P    | 0910         |                                     |                  | 225     |     |    |
|       | KANZ | 03  | 0855       | 0909     | 0925     | S11             | E88 | 3594                    | 02        | 10.0             | 30         | SB   | 2          |      |              |                                     |                  |         |     |    |
|       | HTPR | 03  | 0908E      |          | 0911D    | S09             | E90 | 3594                    | 02        | 10.1             | 3D         | SF   |            | C    | 0911         |                                     |                  | 30      |     |    |
|       | ATHN | 03  | 0909       | 0911     | 0949     | S05             | E89 | 3594                    | 02        | 10.0             | 40         | B    | 2          | V    | 0911         |                                     |                  |         |     |    |
| 0140  |      | 03  | 09294      | 09339    | 1003     | S06             | E41 | 3589                    | 02        | 6.5              | 34         | SN   |            |      |              |                                     |                  | 127     | 1.7 | EF |
|       | KANZ | 03  | 0929       | 0933     | 1012     | S06             | E41 | 3589                    | 02        | 6.5              | 43         | SN   | 2          |      |              |                                     |                  |         |     |    |
|       | WEND | 03  | 0929       | 0935     | 1006     | S07             | E42 | 3589                    | 02        | 6.5              | 37         | SN   |            | C    | 0935         |                                     |                  | 131     | 1.8 |    |
|       | CATA | 03  | 0930       | 0935     | 0945D    | S07             | E41 | 3589                    | 02        | 6.5              | 15D        | 1    | 2          | P    | 0935         |                                     |                  | 197     | 2.7 |    |
|       | ATHN | 03  | 0931       | 0933     | 0954     | S07             | E43 | 3589                    | 02        | 6.6              | 23         | SB   | 2          | V    | 0933         |                                     |                  | 64      | .9  |    |
|       | YUNN | 03  | 0933       | 0942     | 1001     | S06             | E40 | 3589                    | 02        | 6.4              | 28         | SN   |            | C    |              |                                     |                  | 94      | 1.3 | F  |
|       | LEAR | 03  | 0936E      | 0936U    | 1003     | S06             | E41 | 3589                    | 02        | 6.5              | 27D        | SB   | 3          | C    |              |                                     |                  | 149     |     | FE |
| 0141  |      | 03  | 09303      | 0930*    | 0952     | N11             | W29 | 3581                    | 02        | 1.2              | 22         | SN   |            |      |              |                                     |                  | 60      | .8  | F  |
|       | CATA | 03  | 0930       | 0930     | 0945D    | N12             | W29 | 3581                    | 02        | 1.2              | 15D        | S    | 2          | P    | 0930         |                                     |                  | 112     | 1.4 |    |
|       | WEND | 03  | 0930       | 0935     | 0941     | N11             | W29 | 3581                    | 02        | 1.2              | 11         | SF   |            | C    | 0935         |                                     |                  | 56      | .7  |    |
|       | KANZ | 03  | 0933       | 0933     | 0949     | N10             | W31 | 3581                    | 02        | 1.1              | 16         | SN   | 2          |      |              |                                     |                  |         |     |    |
|       | YUNN | 03  | 0933       | 0941     | 0954     | N12             | W29 | 3581                    | 02        | 1.2              | 21         | SN   |            | C    |              |                                     |                  | 31      | .4  | F  |
|       | LEAR | 03  | 0936E      | 0936U    | 1002     | N11             | W28 | 3581                    | 02        | 1.3              | 26D        | SF   | 3          | C    |              |                                     |                  | 42      |     |    |
| 0142  | YUNN | 03  | 0949       | 1001     | 1001D    | S11             | W45 | 3578                    | 01        | 31.0             | 12D        | SN   |            | P    |              |                                     |                  | 31      | .5  | D  |
| 0143  | KANZ | 03  | 1032       | 1039     | 1110     | S06             | E88 | 3594                    | 02        | 10.0             | 38         | SN   | 2          |      |              |                                     |                  |         |     | A  |
| 0144  |      | 03  | 1047       | 1050     | 1056     | S14             | W28 | 3576                    | 02        | 1.3              | 9          | SF   |            |      |              |                                     |                  | 47      | .6  | D  |
|       | WEND | 03  | 1047       | 1050     | 1056     | S14             | W26 | 3576                    | 02        | 1.5              | 9          | SF   |            | C    | 1050         |                                     |                  | 44      | .5  |    |
|       | KHAR | 03  | 1050E      | 1050     | 1100D    | S15             | W29 | 3576                    | 02        | 1.2              | 10D        | SF   |            | P    | 1050         |                                     |                  | 50      | .6  | D  |
| 0145  | ABST | 03  | 1140E      | 1146     | 1155     | N12             | W41 | 3581                    | 01        | 31.4             | 15D        | SF   |            | P    | 1146         |                                     |                  | 87      | 1.2 | D  |
| 0146  |      | 03  | 11496      | 11525    | 1214     | S19             | E07 | 3583                    | 02        | 4.0              | 25         | SN   |            |      |              |                                     |                  | 68      | .7  | D  |
|       | ABST | 03  | 1149       | 1152     | 1201D    | S19             | E07 | 3583                    | 02        | 4.0              | 12D        | SN   |            | P    | 1152         |                                     |                  | 87      | .9  | D  |
|       | KANZ | 03  | 1153       | 1157     | 1213     | S21             | E07 | 3583                    | 02        | 4.0              | 20         | SN   | 2          |      |              |                                     |                  |         |     |    |
|       | ATHN | 03  | 1155       | 1157     | 1214     | S18             | E08 | 3583                    | 02        | 4.1              | 19         | SN   | 2          | V    | 1157         |                                     |                  | 48      | .5  |    |
| 0147  |      | 03  | 1241       | 12441    | 1259     | N14             | E08 | 3592                    | 02        | 4.1              | 18         | SN   |            |      |              |                                     |                  | 75      | .8  |    |
|       | WEND | 03  | 1241       | 1244     | 1254     | N14             | E09 | 3592                    | 02        | 4.2              | 13         | SN   |            | C    | 1244         |                                     |                  | 75      | .8  |    |
|       | KANZ | 03  | 1241       | 1245     | 1304     | N14             | E07 | 3592                    | 02        | 4.0              | 23         | SN   | 3          |      |              |                                     |                  |         |     |    |
| 0148  | KANZ | 03  | 1315       | 1323     | 1335     | S06             | E88 | 3594                    | 02        | 10.1             | 20         | SB   | 3          |      |              |                                     |                  |         |     |    |
| 0149  | WEND | 03  | 1319       | 1322     | 1328     | N14             | W78 | 3580                    | 01        | 28.8             | 9          | SN   |            | C    | 1322         |                                     |                  | 31      |     |    |
| 0150  | KANZ | 03  | 1422       | 1425     | 1441     | S06             | E87 | 3594                    | 02        | 10.1             | 19         | SB   | 3          |      |              |                                     |                  |         |     |    |
|       |      | 03  | 1545       |          | 1728     | No Flare Patrol |     |                         |           |                  |            |      |            |      |              |                                     |                  |         |     |    |
| 0151  | BIGB | 03  | 1649       | 1652     | 1727     | S18             | W22 | 3576                    | 02        | 2.0              | 38         | SB   | 3          | C    | 1652         |                                     |                  | 180     | 2.0 |    |
| 0152  | HOLL | 03  | 1731       | 1921     | 2025     | S07             | E35 | 3589                    | 02        | 6.3              | 174        | SF   | 3          | C    |              |                                     |                  | 70      |     |    |
| 0153  | BIGB | 03  | 1746       | 1753     | 1827     | S12             | E90 | 3594                    | 02        | 10.5             | 41         | 1N   | 3          | C    | 1753         |                                     |                  | 100     |     |    |
| 0154  |      | 03  | 1947*      | 2044     | 2109     | S12             | E90 | 3594                    | 02        | 10.6             | 82         | 1B   |            |      |              |                                     |                  | 110     |     | Y  |
|       | HOLL | 03  | 1947       | 2044     | 2200D    | S11             | E91 | 3594                    | 02        | 10.7             | 133D       | 1B   | 3          | C    |              |                                     |                  |         |     | Y  |
|       | BIGB | 03  | 2039       | 2044     | 2109     | S12             | E90 | 3594                    | 02        | 10.6             | 30         | 1N   | 3          | C    | 2044         |                                     |                  | 110     |     |    |
| 0155  | HOLL | 03  | 1948       | 1952     | 1959     | N12             | W46 | 3573                    | 01        | 31.3             | 11         | SF   | 3          | C    |              |                                     |                  | 22      |     | F  |
| 0156  | HOLL | 03  | 1956       | 1957     | 2001     | S11             | W32 | 3576                    | 02        | 1.4              | 5          | SN   | 3          | C    |              |                                     |                  | 44      |     | F  |

H - ALPHA SOLAR FLARES

33  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |     |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|-----|
|       |      |     |            |          |          |     |     |                         |           |      |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |
| 0157  | HOLL | 03  | 1958       | 2003     | 2033     | S21 | E05 | 3583                    | 02        | 4.2  | 35           | SF         |      |            |      |              |                                     | 71               |         | F   |
| 0158  |      | 03  | 20051      | 20091    | 2014     | S12 | W29 | 3576                    | 02        | 1.6  | 9            | SN         |      |            |      |              |                                     | 48               | .6      | F   |
|       | CULG | 03  | 2005       | 2009     | 2013     | S11 | W26 | 3576                    | 02        | 1.9  | 8            | SF         |      |            |      | 2009         |                                     | 60               | .6      | F   |
|       | HOLL | 03  | 2006       | 2010     | 2016     | S13 | W32 | 3576                    | 02        | 1.4  | 10           | SN         |      |            |      |              |                                     | 35               |         | F   |
| 0159  | HOLL | 03  | 2011       | 2012     | 2020     | N05 | W20 | 3579                    | 02        | 2.3  | 9            | SF         |      |            |      |              |                                     | 21               |         |     |
| 0160  | HOLL | 03  | 2031       | 2044     | 2202     | S06 | E34 | 3589                    | 02        | 6.4  | 91           | SN         |      |            |      |              |                                     | 139              |         |     |
| 0161  | HOLL | 03  | 2038       | 2045     | 2048     | S10 | W50 | 3578                    | 01        | 31.1 | 10           | SF         |      |            |      |              |                                     | 20               |         |     |
| 0162  |      | 03  | 2036*      | 2115*    | 2208     | S14 | W30 | 3576                    | 02        | 1.6  | 92           | 1B         |      |            |      |              |                                     | 250              | 1.2     | EF  |
|       | HOLL | 03  | 2036       | 2115     | 2220     | S14 | W30 | 3576                    | 02        | 1.6  | 104          | 1B         |      |            |      |              |                                     | 399              |         | FE  |
|       | CULG | 03  | 2127       | 2133     | 2157     | S14 | W29 | 3576                    | 02        | 1.7  | 30           | SN         |      |            |      | 2133         |                                     | 100              | 1.2     | F   |
| 0163  |      | 03  | 21043      | 21154    | 2158     | S13 | W24 | 3576                    | 02        | 2.1  | 54           | SB         |      |            |      |              |                                     | 125              | 1.4     |     |
|       | BIGB | 03  | 2104       | 2119     | 2159     | S12 | W24 | 3576                    | 02        | 2.1  | 55           | SB         |      |            |      | 2119         |                                     | 130              | 1.5     |     |
|       | CULG | 03  | 2107       | 2115     | 2157     | S14 | W23 | 3576                    | 02        | 2.1  | 50           | SN         |      |            |      | 2115         |                                     | 120              | 1.3     |     |
| 0164  | CULG | 03  | 2117       | 2131     | 2147     | S05 | E32 | 3589                    | 02        | 6.3  | 30           | 1N         |      |            |      |              |                                     | 190              | 2.2     |     |
| 0165  | HOLL | 03  | 2234       | 2330     | 2351D    | S11 | E79 | 3594                    | 02        | 9.9  | 77D          | SF         |      |            |      |              |                                     |                  |         |     |
| 0166  | PALE | 03  | 2346E      | 2346U    | 0042D    | S18 | E00 | 3583                    | 02        | 4.0  | 56D          | SN         |      |            |      |              |                                     | 100              |         | F   |
| 0167  |      | 04  | 00024      | 00046    | 0027     | S20 | E00 | 3583                    | 02        | 4.0  | 25           | SF         |      |            |      |              |                                     | 90               | .9      | DFJ |
|       | CULG | 04  | 0002       | 0004     | 0018     | S20 | W01 | 3583                    | 02        | 3.9  | 16           | SF         |      |            |      | 0004         |                                     | 90               | .9      | F   |
|       | VORO | 04  | 0006       | 0010     | 0036     | S19 | E01 | 3583                    | 02        | 4.1  | 30           |            |      |            |      |              |                                     |                  |         | DJ  |
| 0168  |      | 04  | 0038       | 00421    | 0051     | S10 | E84 | 3594                    | 02        | 10.3 | 13           | 1N         |      |            |      |              |                                     | 172              |         | ADJ |
|       | VORO | 04  | 0038E      |          | 0050D    | S09 | E90 | 3594                    | 02        | 10.8 | 12D          | 2N         |      |            |      | 0044         |                                     | 278              |         | DJ  |
|       | CULG | 04  | 0038       | 0042     | 0051     | S09 | E84 | 3594                    | 02        | 10.3 | 13           | 1F         |      |            |      | 0042         |                                     | 80               |         |     |
|       | YUNN | 04  | 0038       | 0044U    | 0044D    | S11 | E79 | 3594                    | 02        | 10.0 | 6D           | 1B         |      |            |      | 0044         |                                     | 157              |         | A   |
|       | MANI | 04  | 0042E      | 0043     | 0046D    | S10 | E82 | 3594                    | 02        | 10.2 | 4D           | 1B         |      |            |      |              |                                     |                  |         |     |
| 0169  |      | 04  | 02528      | 02556    | 0310     | S16 | W09 | 3583                    | 02        | 3.4  | 18           | SN         |      |            |      |              |                                     | 78               | .8      | E   |
|       | CULG | 04  | 0252       | 0255     | 0313     | S16 | W10 | 3583                    | 02        | 3.4  | 21           | SN         |      |            |      | 0255         |                                     | 110              | 1.1     |     |
|       | YUNN | 04  | 0300       | 0301     | 0308     | S16 | W08 | 3583                    | 02        | 3.5  | 8            | SN         |      |            |      |              |                                     | 47               | .5      | E   |
| 0170  | CULG | 04  | 0254       | 0255     | 0257     | S11 | W55 | 3578                    | 01        | 31.0 | 3            | SF         |      |            |      |              |                                     | 100              | 1.7     |     |
| 0171  |      | 04  | 03282      | 03323    | 0346     | S12 | W57 | 3578                    | 01        | 30.9 | 18           | SF         |      |            |      |              |                                     | 67               | 1.2     | DEF |
|       | PEKG | 04  | 0328       | 0332     | 0345     | S11 | W56 | 3578                    | 01        | 31.0 | 17           | SF         |      |            |      | 0332         |                                     | 84               | 1.5     | E   |
|       | YUNN | 04  | 0329       | 0335     | 0355     | S12 | W56 | 3578                    | 01        | 31.0 | 26           | SF         |      |            |      |              |                                     | 16               | .3      | D   |
|       | CULG | 04  | 0330       | 0332     | 0339     | S14 | W59 | 3578                    | 01        | 30.8 | 9            | SF         |      |            |      | 0332         |                                     | 100              | 1.9     | F   |
| 0172  |      | 04  | 0330       | 03312    | 0336     | S13 | W40 | 3576                    | 02        | 1.1  | 6            | SN         |      |            |      |              |                                     | 30               | .4      | D   |
|       | YUNN | 04  | 0330       | 0331     | 0336     | S13 | W39 | 3576                    | 02        | 1.2  | 6            | SN         |      |            |      |              |                                     | 31               | .4      | D   |
|       | CULG | 04  | 0330       | 0333     | 0335     | S13 | W42 | 3576                    | 02        | 1.0  | 5            | SF         |      |            |      | 0333         |                                     | 30               | .4      |     |
| 0173  | YUNN | 04  | 0346       | 0347     | 0349D    | S17 | W03 | 3583                    | 02        | 3.9  | 3D           | SF         |      |            |      |              |                                     | 31               | .3      |     |
| 0174  |      | 04  | 0423       | 0424     | 0434     | N06 | W24 | 3579                    | 02        | 2.4  | 11           | SN         |      |            |      |              |                                     | 48               | .5      | D   |
|       | CULG | 04  | 0423       | 0424     | 0427     | N05 | W24 | 3579                    | 02        | 2.4  | 4            | SF         |      |            |      | 0424         |                                     | 50               | .5      |     |
|       | YUNN | 04  | 0425E      | 0425U    | 0441     | N07 | W23 | 3579                    | 02        | 2.5  | 16D          | SN         |      |            |      | 0425         |                                     | 47               | .5      | D   |
| 0175  |      | 04  | 04272      | 04301    | 0438     | S12 | E00 | 3584                    | 02        | 4.2  | 11           | SN         |      |            |      |              |                                     | 46               | .4      | D   |
|       | YUNN | 04  | 0427       | 0430     | 0441     | S12 | E01 | 3584                    | 02        | 4.3  | 14           | SN         |      |            |      |              |                                     | 31               | .3      | D   |
|       | CULG | 04  | 0429       | 0431     | 0436     | S12 | E00 | 3584                    | 02        | 4.2  | 7            | SF         |      |            |      | 0431         |                                     | 60               | .6      |     |
| 0176  | PEKG | 04  | 0500       | 0510     | 0527     | S19 | W03 | 3583                    | 02        | 4.0  | 27           | SF         |      |            |      |              |                                     | 59               | .6      | D   |
| 0177  |      | 04  | 05007      | 05075    | 0519     | S12 | W40 | 3576                    | 02        | 1.2  | 19           | SN         |      |            |      |              |                                     | 56               | .7      | E   |
|       | PEKG | 04  | 0500       | 0510     | 0520     | S11 | W39 | 3576                    | 02        | 1.3  | 20           | SN         |      |            |      | 0510         |                                     | 71               | .9      | E   |
|       | CULG | 04  | 0505       | 0507     | 0514     | S13 | W42 | 3576                    | 02        | 1.0  | 9            | SN         |      |            |      | 0507         |                                     | 30               | .3      |     |
|       | YUNN | 04  | 0506       | 0509     | 0525     | S12 | W39 | 3576                    | 02        | 1.3  | 19           | SN         |      |            |      |              |                                     | 94               | 1.2     | E   |
|       | CULG | 04  | 0507       | 0512     | 0518     | S12 | W38 | 3576                    | 02        | 1.3  | 11           | SF         |      |            |      | 0512         |                                     | 30               | .3      |     |
| 0178  |      | 04  | 0501       | 05021    | 0508     | S14 | W36 | 3576                    | 02        | 1.5  | 7            | SN         |      |            |      |              |                                     | 60               | .8      | D   |
|       | CULG | 04  | 0501       | 0502     | 0508     | S15 | W38 | 3576                    | 02        | 1.3  | 7            | SF         |      |            |      | 0502         |                                     | 40               | .5      |     |
|       | YUNN | 04  | 0501       | 0503     | 0508     | S14 | W35 | 3576                    | 02        | 1.6  | 7            | SN         |      |            |      |              |                                     | 79               | 1.0     | D   |



H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |     |  |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|-----|--|
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |  |
| 0179  | PEKG | 04  | 0520       | 0532     | 0540     | S13 | W46 | 3576                    | 01        | 31.7       | 20           | SF         |      |            |      | P            | 0532                                | 55               | .8      | E   |  |
| 0180  |      | 04  | 0555*      | 06087    | 0639     | S18 | W03 | 3583                    | 02        | 4.0        | 44           | 1N         |      |            |      |              |                                     | 251              | 2.6     | EFJ |  |
|       | PEKG | 04  | 0555       | 0608     | 0645     | S19 | W03 | 3583                    | 02        | 4.0        | 50           | 1N         |      |            |      | C            | 0608                                | 210              | 2.2     | E   |  |
|       | ABST | 04  | 0558E      | 0613     | 0640     | S18 | W04 | 3583                    | 02        | 3.9        | 42D          | SN         |      |            |      | P            | 0613                                | 174              | 1.8     | E   |  |
|       | CULG | 04  | 0602       | 0608     | 0641     | S20 | W04 | 3583                    | 02        | 3.9        | 39           | SB         |      |            |      | C            | 0608                                | 150              | 1.5     | JF  |  |
|       | YUNN | 04  | 0602       | 0613     | 0645     | S18 | W03 | 3583                    | 02        | 4.0        | 43           | 1N         |      |            |      | C            |                                     | 220              | 2.3     | F   |  |
|       | TACH | 04  | 0604       | 0615     | 0635     | S18 | W04 | 3583                    | 02        | 3.9        | 31           | 2N         |      |            |      | C            | 0615                                | 619              | 6.6     | E   |  |
|       | ABST | 04  | 0610       | 0612     | 0630     | S17 | E01 | 3583                    | 02        | 4.3        | 20           | SF         |      |            |      | C            | 0612                                | 131              | 1.3     | EJ  |  |
| 0181  | ABST | 04  | 0610       | 0612     | 0620     | S10 | E80 | 3594                    | 02        | 10.3       | 10           | 1F         |      |            |      | C            | 0612                                | 131              |         | EJV |  |
| 0182  | ABST | 04  | 0611       | 0613     | 0613     | S05 | E29 | 3589                    | 02        | 6.4        | 2            | SN         |      |            |      | C            | 0613                                | 87               | 1.0     | EJ  |  |
| 0183  | ABST | 04  | 0624       | 0626     | 0640     | N13 | W51 | 3581                    | 01        | 31.4       | 16           | SN         |      |            |      | C            | 0626                                | 87               | 1.6     | D   |  |
| 0184  |      | 04  | 06332      | 06352    | 0642     | S14 | W38 | 3576                    | 02        | 1.4        | 9            | SN         |      |            |      |              |                                     | 57               | .7      | D   |  |
|       | PEKG | 04  | 0633       | 0635     | 0640     | S13 | W38 | 3576                    | 02        | 1.4        | 7            | SN         |      |            |      | C            | 0635                                | 71               | .9      | D   |  |
|       | CULG | 04  | 0633       | 0637     | 0642     | S14 | W38 | 3576                    | 02        | 1.4        | 9            | SF         |      |            |      | C            | 0637                                | 50               | .6      |     |  |
|       | YUNN | 04  | 0635       | 0636     | 0641     | S14 | W39 | 3576                    | 02        | 1.3        | 6            | SN         |      |            |      | C            |                                     | 63               | .8      | D   |  |
|       | TACH | 04  | 0635       | 0636     | 0644     | S14 | W38 | 3576                    | 02        | 1.4        | 9            | SF         |      |            |      | C            | 0636                                | 44               | .5      | D   |  |
| 0185  | ABST | 04  | 0658       | 0700     | 0704     | S08 | W80 | 3577                    | 01        | 29.4       | 6            | 1N         |      |            |      | C            | 0700                                | 87               |         | AD  |  |
| 0186  |      | 04  | 08202      | 08251    | 0844     | S19 | W03 | 3583                    | 02        | 4.1        | 24           | SN         |      |            |      |              |                                     | 79               | .8      |     |  |
|       | YUNN | 04  | 0820       | 0825     | 0841     | S18 | W03 | 3583                    | 02        | 4.1        | 21           | SN         |      |            |      | P            |                                     | 79               | .8      |     |  |
|       | KANZ | 04  | 0822       | 0826     | 0846     | S20 | W03 | 3583                    | 02        | 4.1        | 24           | SF         |      |            |      |              |                                     |                  |         |     |  |
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         | 3   |  |
| 0187  |      | 04  | 0825*      | 08342    | 0858     | S16 | W45 | 3576                    | 01        | 31.9       | 33           | SN         |      |            |      |              |                                     | 109              | 1.6     | D   |  |
|       | CATA | 04  | 0825       | 0835     | 0855     | S18 | W45 | 3576                    | 01        | 31.9       | 30           | 1          |      |            |      | 2            | C                                   | 0835             | 169     | 2.5 |  |
|       | YUNN | 04  | 0829       | 0836     | 0904     | S17 | W44 | 3576                    | 02        | 1.0        | 35           | SN         |      |            |      | C            |                                     | 47               | .7      | D   |  |
|       | KANZ | 04  | 0830       | 0834     | 0902     | S17 | W45 | 3576                    | 01        | 31.9       | 32           | SN         |      |            |      |              |                                     |                  |         |     |  |
|       | CATA | 04  | 0835       | 0835     | 0850     | S13 | W47 | 3576                    | 01        | 31.8       | 15           | S          |      |            |      | 2            | C                                   | 0835             | 112     | 1.7 |  |
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         | 3   |  |
| 0188  |      | 04  | 08546      | 08546    | 0909     | S15 | W30 | 3576                    | 02        | 2.1        | 15           | SN         |      |            |      |              |                                     | 78               | 1.0     |     |  |
|       | WEND | 04  | 0852E      |          | 0905     | S14 | W30 | 3576                    | 02        | 2.1        | 13D          | SF         |      |            |      | C            | 0852                                | 38               | .5      |     |  |
|       | YUNN | 04  | 0853E      | 0853U    | 0910     | S14 | W31 | 3576                    | 02        | 2.0        | 17D          | SN         |      |            |      | P            | 0853                                | 141              | 1.7     |     |  |
|       | KANZ | 04  | 0854       | 0854     | 0910     | S17 | W30 | 3576                    | 02        | 2.1        | 16           | SN         |      |            |      |              |                                     |                  |         |     |  |
|       | CATA | 04  | 0900       | 0900     | 0910     | S16 | W31 | 3576                    | 02        | 2.0        | 10           | S          |      |            |      | 2            | C                                   | 0900             | 56      | .7  |  |
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         | 2   |  |
| 0189  |      | 04  | 09202      | 09261    | 0945     | S19 | W05 | 3583                    | 02        | 4.0        | 25           | SF         |      |            |      |              |                                     | 94               | 1.2     | DF  |  |
|       | YUNN | 04  | 0920       | 0927     | 0933D    | S20 | W05 | 3583                    | 02        | 4.0        | 13D          | SN         |      |            |      |              |                                     | 79               | .8      | F   |  |
|       | KHAR | 04  | 0922E      |          | 0929D    | S17 | W07 | 3583                    | 02        | 3.8        | 7D           | SF         |      |            |      | P            | 0928                                | 110              | 1.5     | D   |  |
|       | KANZ | 04  | 0922       | 0926     | 0945     | S20 | W04 | 3583                    | 02        | 4.1        | 23           | SF         |      |            |      |              |                                     |                  |         |     |  |
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         | 3   |  |
| 0190  |      | 04  | 09233      | 09258    | 0944     | S11 | W42 | 3576                    | 02        | 1.2        | 21           | SN         |      |            |      |              |                                     | 108              | 1.5     | E   |  |
|       | KHAR | 04  | 0923E      | 0925     | 0943D    | S09 | W44 | 3576                    | 02        | 1.1        | 20D          | SN         |      |            |      | P            | 0925                                | 130              | 1.9     |     |  |
|       | WEND | 04  | 0923       | 0933     | 0942     | S12 | W39 | 3576                    | 02        | 1.4        | 19           | SF         |      |            |      | C            | 0933                                | 63               | .8      |     |  |
|       | YUNN | 04  | 0924E      | 0927     | 0933D    | S12 | W43 | 3576                    | 02        | 1.1        | 9D           | SF         |      |            |      | P            |                                     | 126              | 1.8     | E   |  |
|       | CATA | 04  | 0925       | 0930     | 0930D    | S12 | W43 | 3576                    | 02        | 1.1        | 5D           | S          |      |            |      | 2            | P                                   | 0930             | 112     | 1.6 |  |
|       | KANZ | 04  | 0926       | 0933     | 0945     | S13 | W43 | 3576                    | 02        | 1.1        | 19           | SN         |      |            |      |              |                                     |                  |         |     |  |
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         | 3   |  |
| 0191  |      | 04  | 1016*      | 10281    | 1053     | S11 | E78 | 3594                    | 02        | 10.3       | 37           | SN         |      |            |      |              |                                     | 25               |         | H   |  |
|       | KANZ | 04  | 1016       | 1028     | 1102     | S10 | E78 | 3594                    | 02        | 10.3       | 46           | SB         |      |            |      |              |                                     |                  |         |     |  |
|       | WEND | 04  | 1027       | 1029     | 1044     | S12 | E76 | 3594                    | 02        | 10.2       | 17           | SF         |      |            |      | C            | 1029                                | 25               |         |     |  |
|       | KHAR | 04  | 1030E      |          | 1059D    | S11 | E80 | 3594                    | 02        | 10.4       | 29D          | SF         |      |            |      | V            | 1032                                |                  |         | H   |  |
| 0192  |      | 04  | 1115*      | 1118*    | 1139     | S14 | W31 | 3576                    | 02        | 2.1        | 24           | SF         |      |            |      |              |                                     | 64               | .9      | E   |  |
|       | WEND | 04  | 1115       | 1120     | 1124     | S12 | W31 | 3576                    | 02        | 2.1        | 9            | SF         |      |            |      | C            | 1120                                | 25               | .3      |     |  |
|       | CATA | 04  | 1115       | 1120     | 1135D    | S14 | W32 | 3576                    | 02        | 2.0        | 20D          | S          |      |            |      | 2            | P                                   | 1120             | 112     | 1.4 |  |
|       | MONT | 04  | 1116       | 1118     | 1124     | S13 | W31 | 3576                    | 02        | 2.1        | 8            | SF         |      |            |      | C            | 1118                                | 50               |         | E   |  |
|       | KANZ | 04  | 1117       | 1139     | 1202     | S16 | W31 | 3576                    | 02        | 2.1        | 45           | SF         |      |            |      |              |                                     |                  |         |     |  |
|       | WEND | 04  | 1139       | 1142     | 1147     | S14 | W31 | 3576                    | 02        | 2.1        | 8            | SN         |      |            |      | C            | 1142                                | 69               | .9      |     |  |
| 0193  | KANZ | 04  | 1139       | 1139     | 1221     | S18 | W06 | 3583                    | 02        | 4.0        | 42           | SF         |      |            |      |              |                                     |                  |         |     |  |
| 0194  | KANZ | 04  | 1254       | 1254     | 1301     | S13 | W45 | 3576                    | 02        | 1.1        | 7            | SF         |      |            |      |              |                                     |                  |         |     |  |
| 0195  |      | 04  | 13211      | 13343    | 1400     | S16 | W32 | 3576                    | 02        | 2.1        | 39           | SB         |      |            |      |              |                                     | 150              | 1.9     | U   |  |
|       | KANZ | 04  | 1321       | 1337     | 1401     | S17 | W33 | 3576                    | 02        | 2.0        | 40           | SB         |      |            |      | 2            |                                     |                  |         | U   |  |
|       | WEND | 04  | 1322       | 1334     | 1400     | S15 | W31 | 3576                    | 02        | 2.2        | 38           | SN         |      |            |      | C            | 1334                                | 150              | 1.9     |     |  |

## H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |     |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|-----|
|       |      |     |            |          |          |     |     |                         |           |            |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |
| 0196  | 04   |     | 13263      | 13332    | 1358     | S19 | W07 | 3583                    | 02        | 4.0        | 32           | 1B         |      |            |      |              |                                     | 450              | 4.9     | I   |
|       | WEND | 04  | 1326       | 1335     | 1352     | S19 | W07 | 3583                    | 02        | 4.0        | 26           | 1N         |      |            |      |              |                                     | 450              | 4.9     | I   |
|       | KANZ | 04  | 1329       | 1333     | 1405     | S19 | W07 | 3583                    | 02        | 4.0        | 36           | 1B         |      | 2          |      |              |                                     |                  |         |     |
| 0197  | WEND | 04  | 1435       | 1439     | 1446     | S13 | E74 | 3594                    | 02        | 10.2       | 11           | SF         |      |            |      |              |                                     | 19               |         |     |
| 0198  | WEND | 04  | 1527       | 1530     | 1543     | N07 | W28 | 3579                    | 02        | 2.5        | 16           | SF         |      |            |      |              |                                     | 63               | .7      | E   |
| 0199  | 04   |     | 1540       | 1543     | 1603     | S12 | W34 | 3576                    | 02        | 2.1        | 23           | 1B         |      |            |      |              |                                     | 220              | 2.8     |     |
|       | WEND | 04  | 1540       | 1543     | 1558     | S12 | W34 | 3576                    | 02        | 2.1        | 18           | 1B         |      |            |      |              |                                     | 181              | 2.3     |     |
|       | BIGB | 04  | 1542E      | 1543     | 1608     | S12 | W34 | 3576                    | 02        | 2.1        | 26D          | 1B         |      | 3          | P    | 1543         |                                     | 260              | 3.2     |     |
| 0200  | BIGB | 04  | 1850       | 1857     | 2023     | S18 | W51 | 3576                    | 01        | 31.9       | 93           | 1B         |      | 3          | C    | 1857         |                                     | 180              | 2.9     |     |
| 0201  | 04   |     | 2038       | 20383    | 2101     | S16 | W44 | 3576                    | 02        | 1.5        | 23           | SB         |      |            |      |              |                                     | 100              | 1.4     |     |
|       | CULG | 04  | 2038       | 2038     | 2049     | S17 | W43 | 3576                    | 02        | 1.6        | 11           | SB         |      |            |      |              |                                     | 80               | 1.1     |     |
|       | BIGB | 04  | 2038       | 2041     | 2113     | S16 | W44 | 3576                    | 02        | 1.5        | 35           | SN         |      | 3          | C    | 2041         |                                     | 120              | 1.7     |     |
| 0202  | CULG | 04  | 2142       | 2147     | 2201     | N15 | W21 | 3582                    | 02        | 3.3        | 19           | SF         |      |            |      |              |                                     | 60               | .7      | F   |
| 0203  | CULG | 04  | 2228       | 2230     | 2235     | N11 | W47 | 3573                    | 02        | 1.4        | 7            | SF         |      |            |      |              |                                     | 40               | .6      |     |
| 0204  | MANI | 05  | 0034E      | 0034U    | 0043D    | N10 | W50 | 3573                    | 02        | 1.3        | 9D           | SN         |      | 1          | V    |              |                                     | 80               | 1.3     | F   |
| 0205  | PEKG | 05  | 0110       | 0111     | 0114     | S15 | W39 | 3576                    | 02        | 2.1        | 4            | SN         |      |            |      |              |                                     | 50               | .7      | D   |
| 0206  | CULG | 05  | 0124       | 0127     | 0135     | S10 | E71 | 3594                    | 02        | 10.4       | 11           | SF         |      |            |      |              |                                     | 40               |         | T   |
| 0207  | 05   |     | 01291      | 01306    | 0146     | S15 | W46 | 3576                    | 02        | 1.6        | 17           | SN         |      |            |      |              |                                     | 106              | 1.6     | EJ  |
|       | CULG | 05  | 0129       | 0130     | 0145     | S16 | W47 | 3576                    | 02        | 1.5        | 16           | SF         |      |            |      |              |                                     | 60               | .9      |     |
|       | VORO | 05  | 0129       | 0136     | 0147     | S15 | W46 | 3576                    | 02        | 1.6        | 18           | 1F         |      |            |      |              |                                     | 242              | 3.5     | EJ  |
|       | PEKG | 05  | 0130       | 0131     | 0140     | S14 | W46 | 3576                    | 02        | 1.6        | 10           | SB         |      |            |      |              |                                     | 76               | 1.1     | E   |
|       | YUNN | 05  | 0137E      | 0138U    | 0150     | S14 | W46 | 3576                    | 02        | 1.6        | 13D          | SN         |      |            |      |              |                                     | 47               | .7      | E   |
| 0208  | 05   |     | 01482      | 01521    | 0158     | S12 | E70 | 3594                    | 02        | 10.3       | 10           | SN         |      |            |      |              |                                     | 54               | .9      | DF  |
|       | CULG | 05  | 0148       | 0152     | 0202     | S10 | E69 | 3594                    | 02        | 10.2       | 14           | 1N         |      |            |      |              |                                     | 110              |         | F   |
|       | MANI | 05  | 0149E      | 0149U    | 0152D    | S12 | E68 | 3594                    | 02        | 10.2       | 3D           | SN         |      | 1          | V    |              |                                     | 40               | .9      |     |
|       | PEKG | 05  | 0150       | 0152     | 0155     | S12 | E72 | 3594                    | 02        | 10.5       | 5            | SB         |      |            |      |              |                                     | 34               |         | D   |
|       | YUNN | 05  | 0150       | 0153     | 0158     | S12 | E69 | 3594                    | 02        | 10.3       | 8            | SN         |      |            |      |              |                                     | 31               |         | D   |
| 0209  | YUNN | 05  | 0153       | 0202     | 0220     | N11 | W80 |                         | 01        | 30.1       | 27           | SF         |      |            |      |              |                                     |                  |         | AG  |
| 0210  | 05   |     | 02061      | 02183    | 0241     | S16 | W41 | 3576                    | 02        | 2.0        | 35           | SN         |      |            |      |              |                                     | 84               | 1.1     | EF  |
|       | PEKG | 05  | 0206       | 0220     | 0250     | S16 | W41 | 3576                    | 02        | 2.0        | 44           | SN         |      |            |      |              |                                     | 80               | 1.1     | E   |
|       | CULG | 05  | 0207       | 0221     | 0232     | S18 | W42 | 3576                    | 02        | 1.9        | 25           | SN         |      |            |      |              |                                     | 70               | .9      | F   |
|       | YUNN | 05  | 0209E      | 0218     | 0240     | S16 | W41 | 3576                    | 02        | 2.0        | 31D          | SB         |      |            |      |              |                                     | 126              | 1.7     | F   |
|       | MANI | 05  | 0216E      | 0216U    | 0228D    | S16 | W41 | 3576                    | 02        | 2.0        | 12D          | SN         |      | 1          | V    |              |                                     | 60               | .8      | F   |
| 0211  | CULG | 05  | 0212       | 0215     | 0222     | S09 | E69 | 3594                    | 02        | 10.3       | 10           | SF         |      |            |      |              |                                     | 40               |         |     |
| 0212  | 05   |     | 02249      | 02352    | 0250     | N16 | W23 | 3582                    | 02        | 3.3        | 26           | SN         |      |            |      |              |                                     | 198              | 2.4     | F   |
|       | CULG | 05  | 0224       | 0235     | 0254     | N16 | W24 | 3582                    | 02        | 3.3        | 30           | 1N         |      |            |      |              |                                     | 290              | 3.5     |     |
|       | YUNN | 05  | 0226       | 0235     | 0245D    | N17 | W22 | 3582                    | 02        | 3.4        | 19D          | SN         |      |            |      |              |                                     | 157              | 1.9     |     |
|       | PEKG | 05  | 0233       | 0237     | 0245     | N16 | W23 | 3582                    | 02        | 3.4        | 12           | SN         |      |            |      |              |                                     | 147              | 1.8     | F   |
| 0213  | 05   |     | 02421      | 02465    | 0259     | S17 | W15 | 3583                    | 02        | 4.0        | 17           | SN         |      |            |      |              |                                     | 77               | .8      | EFJ |
|       | CULG | 05  | 0242       | 0246     | 0303     | S17 | W15 | 3583                    | 02        | 4.0        | 21           | SF         |      |            |      |              |                                     | 100              | 1.1     | FJ  |
|       | YUNN | 05  | 0243       | 0245U    | 0245D    | S17 | W14 | 3583                    | 02        | 4.0        | 2D           | SN         |      |            |      |              |                                     | 47               | .5      |     |
|       | PEKG | 05  | 0251E      | 0251     | 0255     | S18 | W15 | 3583                    | 02        | 4.0        | 4D           | SN         |      |            |      |              |                                     | 84               | .9      | E   |
| 0214  | PEKG | 05  | 0250E      | 0251     | 0254     | S07 | W57 | 3578                    | 01        | 31.8       | 4D           | SN         |      |            |      |              |                                     | 29               | .6      | D   |
| 0215  | 05   |     | 0315E      | 0317     | 0323     | S15 | W48 | 3576                    | 02        | 1.5        | 8D           | SN         |      |            |      |              |                                     | 31               | .5      | DE  |
|       | YUNN | 05  | 0315E      | 0317     | 0325     | S15 | W47 | 3576                    | 02        | 1.6        | 10D          | SN         |      |            |      |              |                                     | 47               | .7      | E   |
|       | CULG | 05  | 0316E      | 0316U    | 0324     | S16 | W49 | 3576                    | 02        | 1.4        | 8D           | SF         |      |            |      |              |                                     | 20               | .3      |     |
|       | PEKG | 05  | 0317E      | 0317     | 0320     | S15 | W48 | 3576                    | 02        | 1.5        | 3D           | SN         |      |            |      |              |                                     | 25               | .4      | D   |
| 0216  | 05   |     | 0315E      | 03161    | 0321     | S11 | E68 | 3594                    | 02        | 10.2       | 6D           | 1F         |      |            |      |              |                                     | 70               |         | EF  |
|       | YUNN | 05  | 0315E      | 0316     | 0323     | S10 | E66 | 3594                    | 02        | 10.1       | 8D           | 1F         |      |            |      |              |                                     | 79               |         | E   |
|       | CULG | 05  | 0316E      | 0316     | 0322     | S10 | E69 | 3594                    | 02        | 10.3       | 6D           | 1N         |      |            |      |              |                                     | 80               |         | F   |
|       | PEKG | 05  | 0317E      | 0317     | 0319     | S12 | E68 | 3594                    | 02        | 10.2       | 2D           | SF         |      |            |      |              |                                     | 50               |         | E   |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|---------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |     |     |                         |               |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0217  | CULG | 05  | 0407       | 0409     | 0413     | S09 | E68 | 3594                    | 02 10.3       | 6            | SF         |      |            | P    | 0409         | 40                                  |                  |         |  |
| 0218  |      | 05  | 04461      | 04481    | 0456     | N16 | W30 | 3582                    | 02 2.9        | 10           | SN         |      |            |      |              | 36                                  | .4               | D       |  |
|       | PEKG | 05  | 0446       | 0449     | 0500     | N17 | W29 | 3582                    | 02 3.0        | 14           | SN         |      |            | C    | 0449         | 42                                  | .5               | D       |  |
|       | CULG | 05  | 0447       | 0448     | 0453     | N16 | W31 | 3582                    | 02 2.8        | 6            | SF         |      |            | C    | 0448         | 30                                  | .4               |         |  |
| 0219  |      | 05  | 04505      | 0500     | 0525     | N16 | W26 | 3582                    | 02 3.2        | 35           | 1N         |      |            |      |              | 146                                 | 1.8              | EF      |  |
|       | PEKG | 05  | 0450       | 0500     | 0525     | N16 | W24 | 3582                    | 02 3.4        | 35           | 1N         |      |            | C    | 0500         | 193                                 | 2.4              | E       |  |
|       | CULG | 05  | 0455       | 0501U    | 0509D    | N15 | W27 | 3582                    | 02 3.2        | 14D          | SF         |      |            | P    | 0501         | 100                                 | 1.2              | F       |  |
| 0220  | PEKG | 05  | 0454E      | 0454     | 0459     | S12 | E65 | 3594                    | 02 10.1       | 5D           | SF         |      |            | P    | 0454         | 17                                  | .4               | D       |  |
| 0221  | PEKG | 05  | 0500       | 0505     | 0510     | S07 | E69 | 3594                    | 02 10.4       | 10           | SF         |      |            | C    | 0505         | 55                                  |                  | E       |  |
| 0222  | PEKG | 05  | 0506       | 0507     | 0540     | S02 | E90 | 3598                    | 02 11.9       | 34           | 2B         |      |            | C    | 0507         |                                     |                  | A       |  |
| 0223  |      | 05  | 06053      | 06091    | 0613     | S12 | E66 | 3594                    | 02 10.2       | 8            | SB         |      |            |      |              | 52                                  | 1.5              | D       |  |
|       | PEKG | 05  | 0605       | 0610     | 0615     | S13 | E64 | 3594                    | 02 10.1       | 10           | SB         |      |            | C    | 0610         | 63                                  | 1.5              | D       |  |
|       | CULG | 05  | 0608       | 0609     | 0611     | S10 | E68 | 3594                    | 02 10.4       | 3            | SB         |      |            | C    | 0609         | 40                                  |                  |         |  |
| 0224  | PEKG | 05  | 0606       | 0610     | 0612     | S14 | W49 | 3576                    | 02 1.5        | 6            | SF         |      |            | P    | 0610         | 63                                  | 1.0              | E       |  |
| 0225  | CULG | 05  | 0633       | 0633     | 0636D    | S10 | E67 | 3594                    | 02 10.3       | 3D           | SN         |      |            | P    | 0633         | 30                                  | .7               |         |  |
| 0226  | PEKG | 05  | 0740E      | 0740     | 0750     | S13 | E66 | 3594                    | 02 10.3       | 10D          | SN         |      |            | C    | 0740         | 55                                  |                  | E       |  |
| 0227  |      | 05  | 09023      | 09069    | 0948     | S15 | W43 | 3576                    | 02 2.1        | 46           | 1B         |      |            |      |              | 286                                 | 3.4              |         |  |
|       | KANZ | 05  | 0902       | 0906     | 0950     | S17 | W44 | 3576                    | 02 2.0        | 48           | 1B         |      |            | 3    |              |                                     |                  |         |  |
|       | MONT | 05  | 0902       | 0907     | 0944     | S15 | W43 | 3576                    | 02 2.1        | 42           | 1B         |      |            | C    | 0907         | 400                                 |                  |         |  |
|       | WEND | 05  | 0904       | 0907     | 0953     | S14 | W44 | 3576                    | 02 2.0        | 49           | 1B         |      |            | C    | 0907         | 288                                 | 4.3              |         |  |
|       | BUCA | 05  | 0905       |          | 0945     | S15 | W43 | 3576                    | 02 2.1        | 40           | 1B         |      |            | V    |              |                                     |                  |         |  |
|       | CATA | 05  | 0915E      | 0915     | 0925D    | S16 | W44 | 3576                    | 02 2.0        | 10D          | 1          |      |            | 2    | P            | 0915                                | 169              | 2.4     |  |
| 0228  |      | 05  | 09073      | 09101    | 0920     | S06 | E73 | 3603                    | 02 10.8       | 13           | SF         |      |            |      |              | 50                                  |                  | D       |  |
|       | MONT | 05  | 0907       | 0911     | 0919     | S06 | E74 | 3603                    | 02 10.9       | 12           | SF         |      |            | C    | 0911         | 50                                  |                  | D       |  |
|       | KANZ | 05  | 0910       | 0910     | 0922     | S06 | E72 | 3603                    | 02 10.8       | 12           | SF         |      |            | 3    |              |                                     |                  |         |  |
| 0229  | HTPR | 05  | 0941       |          | 1010     | S14 | W45 | 3576                    | 02 2.0        | 29           | SB         |      |            | C    | 0945         | 30                                  | .4               |         |  |
| 0230  |      | 05  | 09563      | 10013    | 1018     | N10 | W56 | 3573                    | 02 1.2        | 22           | SF         |      |            |      |              | 51                                  | .8               | E       |  |
|       | HTPR | 05  | 0956       | 1002     | 1013     | N09 | W57 | 3573                    | 02 1.1        | 17           | SF         |      |            | C    | 1002         | 20                                  | .4               |         |  |
|       | KANZ | 05  | 0957       | 1001     | 1020     | N09 | W56 | 3573                    | 02 1.2        | 23           | SN         |      |            | 3    |              |                                     |                  |         |  |
|       | MONT | 05  | 0959       | 1003     | 1014     | N10 | W56 | 3573                    | 02 1.2        | 15           | SF         |      |            | C    | 1003         | 70                                  |                  | E       |  |
|       | WEND | 05  | 0959       | 1004     | 1023     | N11 | W55 | 3573                    | 02 1.3        | 24           | SF         |      |            | C    | 1004         | 63                                  | 1.1              |         |  |
| 0231  | HTPR | 05  | 1000       | 1004     | 1035     | N11 | W61 | 3573                    | 01 31.8       | 35           | SF         |      |            | C    | 1004         | 30                                  | .6               |         |  |
| 0232  |      | 05  | 10452      | 10471    | 1054     | S07 | E75 | 3603                    | 02 11.1       | 9            | SB         |      |            |      |              | 82                                  |                  |         |  |
|       | MONT | 05  | 1045       | 1047     | 1050     | S06 | E74 | 3603                    | 02 11.0       | 5            | SN         |      |            | C    | 1047         | 70                                  |                  |         |  |
|       | HTPR | 05  | 1046       | 1048     | 1052     | S05 | E80 | 3603                    | 02 11.4       | 6            | 1B         |      |            | C    | 1048         | 100                                 |                  |         |  |
|       | WEND | 05  | 1046       | 1048     | 1054     | S10 | E75 | 3603                    | 02 11.1       | 8            | SN         |      |            | C    | 1048         | 75                                  |                  |         |  |
|       | KANZ | 05  | 1047       | 1047     | 1059     | S07 | E72 | 3603                    | 02 10.8       | 12           | SB         |      |            | 3    |              |                                     |                  |         |  |
| 0233  |      | 05  | 10513      | 10572    | 1121     | S12 | E64 | 3594                    | 02 10.3       | 30           | SN         |      |            |      |              | 104                                 | 1.8              |         |  |
|       | KANZ | 05  | 1051       | 1059     | 1142     | S10 | E62 | 3594                    | 02 10.1       | 51           | SN         |      |            | 3    |              |                                     |                  |         |  |
|       | WEND | 05  | 1052       | 1058     | 1117     | S13 | E62 | 3594                    | 02 10.1       | 25           | SN         |      |            | C    | 1058         | 81                                  | 1.8              |         |  |
|       | MONT | 05  | 1053       | 1057     | 1104     | S13 | E64 | 3594                    | 02 10.3       | 11           | SN         |      |            | C    | 1057         | 150                                 |                  |         |  |
|       | HTPR | 05  | 1054       | 1058     | 1120     | S11 | E70 | 3594                    | 02 10.7       | 26           | SF         |      |            | C    | 1058         | 80                                  | 1.9              |         |  |
| 0234  |      | 05  | 10551      | 10572    | 1108     | S18 | E48 | 3593                    | 02 9.1        | 13           | SN         |      |            |      |              | 39                                  | .6               | E       |  |
|       | KANZ | 05  | 1055       | 1059     | 1110     | S18 | E49 | 3593                    | 02 9.2        | 15           | SN         |      |            | 3    |              |                                     |                  |         |  |
|       | HTPR | 05  | 1056       | 1057     | 1110     | S19 | E50 | 3593                    | 02 9.3        | 14           | SN         |      |            | C    | 1057         | 40                                  | .7               | E       |  |
|       | WEND | 05  | 1056       | 1058     | 1104     | S18 | E44 | 3593                    | 02 8.8        | 8            | SF         |      |            | C    | 1058         | 38                                  | .6               |         |  |
| 0235  | HTPR | 05  | 1127       | 1129     | 1147     | S19 | W23 | 3583                    | 02 3.7        | 20           | SF         |      |            | C    | 1129         | 20                                  | .2               |         |  |
| 0236  |      | 05  | 11504      | 1154     | 1204     | S06 | E78 | 3603                    | 02 11.3       | 14           | SN         |      |            |      |              | 30                                  |                  |         |  |
|       | KANZ | 05  | 1150       | 1154     | 1210     | S07 | E75 | 3603                    | 02 11.1       | 20           | SN         |      |            | 3    |              |                                     |                  |         |  |
|       | HTPR | 05  | 1154       | 1154     | 1157     | S05 | E80 | 3603                    | 02 11.5       | 3            | SF         |      |            | C    | 1154         | 30                                  |                  |         |  |
| 0237  |      | 05  | 1152*      | 1159*    | 1320     | S19 | W22 | 3583                    | 02 3.8        | 88           | 1N         |      |            |      |              | 224                                 | 2.5              | EK      |  |
|       | WEND | 05  | 1152       | 1201     | 1220     | S19 | W21 | 3583                    | 02 3.9        | 28           | SF         |      |            | C    | 1201         | 138                                 | 1.6              |         |  |
|       | HTPR | 05  | 1153       | 1159     | 1345     | S19 | W23 | 3583                    | 02 3.7        | 112          | 1N         |      |            | C    | 1230         | 250                                 | 2.7              | EK      |  |
|       | KANZ | 05  | 1154       | 1242     | 1350     | S19 | W21 | 3583                    | 02 3.9        | 116          | 1N         |      |            | 3    |              |                                     |                  |         |  |
|       | CATA | 05  | 1155E      | 1200     | 1205D    | S19 | W21 | 3583                    | 02 3.9        | 10D          | 1          |      |            | 2    | P            | 1200                                | 225              | 2.5     |  |
|       | WEND | 05  | 1225       | 1234     | 1324     | S18 | W23 | 3583                    | 02 3.8        | 59           | 1N         |      |            | C    | 1234         | 281                                 | 3.3              |         |  |

H - ALPHA SOLAR FLARES

37  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | See | Obs<br>Type | Area Measurement |                                     |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------|--------------|------------|------|-----|-------------|------------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |      |              |            |      |     |             | Time<br>(UT)     | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0238  | LVOV | 05  | 1203       | 1208     | 1229     | S05 | W23 | 3595                    | 02        | 3.8  | 26           | 1F         |      |     | C           | 1208             | 200                                 | 2.3              | E       |
| 0239  |      | 05  | 13007      | 13044    | 1322     | S06 | E63 | 3594                    | 02        | 10.2 | 22           | SN         |      |     |             |                  | 20                                  | .4               |         |
|       | KANZ | 05  | 1300       | 1304     | 1331     | S04 | E64 | 3594                    | 02        | 10.3 | 31           | SB         |      | 3   |             |                  |                                     |                  |         |
|       | HTPR | 05  | 1307       | 1308     | 1312     | S07 | E62 | 3594                    | 02        | 10.2 | 5            | SF         |      |     | C           | 1308             | 20                                  | .4               |         |
| 0240  | HTPR | 05  | 1304       | 1310     | 1314     | S15 | W48 | 3576                    | 02        | 1.9  | .10          | SF         |      |     | C           | 1310             | 20                                  | .3               |         |
| 0241  | HTPR | 05  | 1305       | 1317     | 1328     | S06 | E69 | 3594                    | 02        | 10.7 | 23           | SF         |      |     | C           | 1317             | 10                                  | .2               |         |
| 0242  | WEND | 05  | 1310       | 1312     | 1322     | N16 | W25 | 3592                    | 02        | 3.6  | 12           | SF         |      |     | C           | 1312             | 56                                  | .7               |         |
| 0243  | HTPR | 05  | 1310       | 1313     | 1345     | N16 | W61 | 3573                    | 01        | 31.9 | 35           | SB         |      |     | C           | 1313             | 80                                  | 1.6              | E       |
| 0244  | KANZ | 05  | 1311       | 1315     | 1327     | N14 | W31 | 3582                    | 02        | 3.2  | 16           | SF         |      | 3   |             |                  |                                     |                  |         |
| 0245  | HTPR | 05  | 1409       |          | 1436D    | S18 | W58 | 3576                    | 02        | 1.2  | 27D          | SF         |      |     | C           | 1421             | 20                                  | .4               | E       |
| 0246  | HTPR | 05  | 1414       |          | 1436D    | N15 | W23 | 3592                    | 02        | 3.8  | 22D          | SF         |      |     | C           | 1416             | 20                                  | .2               | E       |
| 0247  | HTPR | 05  | 1441       |          | 1453     | S13 | W48 | 3576                    | 02        | 2.0  | 12           | SF         |      |     | C           | 1448             | 30                                  | .5               |         |
| 0248  | WEND | 05  | 1454       | 1456     | 1506     | N11 | W44 | 3590A                   | 02        | 2.3  | 12           | SF         |      |     | C           | 1456             | 75                                  | 1.1              |         |
| 0249  | HTPR | 05  | 1526       |          | 1531D    | N16 | W23 | 3592                    | 02        | 3.9  | 5D           | SF         |      |     | C           | 1531             | 20                                  | .2               |         |
| 0250  | BIGB | 05  | 1751       | 1756     | 1812     | S07 | E75 | 3603                    | 02        | 11.4 | 21           | 1N         |      | 2   | C           | 1756             | 90                                  |                  |         |
|       |      | 05  | 1816       |          | 1828     |     |     | No Flare Patrol         |           |      |              |            |      |     |             |                  |                                     |                  |         |
|       |      | 05  | 1855       |          | 1910     |     |     | No Flare Patrol         |           |      |              |            |      |     |             |                  |                                     |                  |         |
|       |      | 05  | 1925       |          | 2027     |     |     | No Flare Patrol         |           |      |              |            |      |     |             |                  |                                     |                  |         |
| 0251  | CULG | 05  | 2210       | 2210     | 2219     | S06 | W31 | 3595                    | 02        | 3.6  | 9            | SF         |      |     | C           | 2210             | 20                                  | .2               |         |
| 0252  | CULG | 05  | 2300       | 2315     | 2322     | S05 | E55 | 3594                    | 02        | 10.1 | 22           | SN         |      |     | C           | 2315             | 50                                  | .8               |         |
| 0253  | CULG | 05  | 2331       | 2333     | 2335     | S07 | E67 | 3603                    | 02        | 11.0 | 4            | SF         |      |     | C           | 2333             | 40                                  |                  |         |
| 0254  | CULG | 05  | 2339       | 2344     | 2347     | S08 | E54 | 3594                    | 02        | 10.0 | 8            | SF         |      |     | C           | 2344             | 30                                  | .5               |         |
| 0255  | CULG | 05  | 2346       | 2350     | 2354     | S18 | W12 | 3587                    | 02        | 5.1  | 8            | SF         |      |     | C           | 2350             | 40                                  | .4               |         |
| 0256  |      | 06  | 00016      | 00026    | 0007     | S10 | E56 | 3594                    | 02        | 10.2 | 6            | SN         |      |     |             |                  | 50                                  | .8               |         |
|       | CULG | 06  | 0001       | 0002     | 0004     | S09 | E56 | 3594                    | 02        | 10.2 | 3            | SB         |      |     | C           | 0002             | 60                                  | 1.0              |         |
|       | CULG | 06  | 0007       | 0008     | 0010     | S10 | E55 | 3594                    | 02        | 10.1 | 3            | SF         |      |     | C           | 0008             | 40                                  | .6               |         |
| 0257  | CULG | 06  | 0114       | 0118     | 0127     | S17 | W25 | 3583                    | 02        | 4.1  | 13           | SN         |      |     | C           | 0118             | 60                                  | .6               |         |
| 0258  | CULG | 06  | 0118       | 0121     | 0124     | S24 | W09 | 3587                    | 02        | 5.3  | 6            | SF         |      |     | C           | 0121             | 80                                  | .9               |         |
| 0259  |      | 06  | 01191      | 01242    | 0143     | S09 | E67 | 3603                    | 02        | 11.1 | 24           | SF         |      |     |             |                  | 61                                  | .4               | D       |
|       | CULG | 06  | 0119       | 0124     | 0136     | S08 | E67 | 3603                    | 02        | 11.1 | 17           | 1F         |      |     | C           | 0124             | 80                                  |                  |         |
|       | PEKG | 06  | 0120       | 0126     | 0150     | S10 | E67 | 3603                    | 02        | 11.1 | 30           | SF         |      |     | P           | 0126             | 84                                  |                  | D       |
|       | MANI | 06  | 0125E      | 0125U    | 0131D    | S10 | E67 | 3603                    | 02        | 11.1 | 6D           | SF         |      | 1   | V           |                  | 20                                  | .4               |         |
| 0260  |      | 06  | 01311      | 0134     | 0142     | S10 | E53 | 3594                    | 02        | 10.0 | 11           | SF         |      |     |             |                  | 45                                  | .7               | D       |
|       | CULG | 06  | 0131       | 0134     | 0136D    | S09 | E53 | 3594                    | 02        | 10.0 | 5D           | SF         |      |     | P           | 0134             | 40                                  | .6               |         |
|       | PEKG | 06  | 0132       | 0134     | 0142     | S11 | E53 | 3594                    | 02        | 10.0 | 10           | SF         |      |     | P           | 0134             | 50                                  | .8               | D       |
| 0261  |      | 06  | 0215       | 0218U    | 0245     | S17 | W32 | 3583                    | 02        | 3.7  | 30           | SN         |      |     |             |                  | 68                                  | .8               | D       |
|       | PEKG | 06  | 0215       | 0224U    | 0245     | S16 | W32 | 3583                    | 02        | 3.7  | 30           | SF         |      |     | C           | 0224             | 97                                  | 1.2              | D       |
|       | CULG | 06  | 0218E      | 0218U    | 0221D    | S18 | W33 | 3583                    | 02        | 3.6  | 3D           | SN         |      |     | P           | 0218             | 40                                  | .5               |         |
| 0262  |      | 06  | 0318E      | 03188    | 0325     | S08 | E66 | 3603                    | 02        | 11.1 | 7D           | SN         |      |     |             |                  | 52                                  |                  | DE      |
|       | PURP | 06  | 0318E      | 0318     | 0325     | S08 | E66 | 3603                    | 02        | 11.1 | 7D           | SN         |      |     | P           | 0318             | 40                                  |                  | D       |
|       | PEKG | 06  | 0325E      | 0326     | 0337D    | S07 | E67 | 3603                    | 02        | 11.2 | 12D          | SN         |      |     | P           | 0326             | 63                                  |                  | E       |
| 0263  | PEKG | 06  | 0358       | 0359     | 0400     | S12 | E52 | 3594                    | 02        | 10.1 | 2            | SN         |      |     | C           | 0359             | 59                                  | 1.0              | D       |
| 0264  | PEKG | 06  | 0418       | 0421     | 0429     | S12 | E52 | 3594                    | 02        | 10.1 | 11           | SF         |      |     | C           | 0421             | 67                                  | 1.1              | E       |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |                 |     |                         |           |            |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0265  |      | 06  | 0425       | 04277    | 0438     | S06             | W32 | 3595                    | 02        | 3.8        | 13         | SF   |            |      |              | 103                                 | 1.2              | DK      |  |
|       | PEKG | 06  | 0425       | 0427     | 0438     | S07             | W31 | 3595                    | 02        | 3.9        | 13         | SF   | C          | 0427 | 105          | 1.2                                 | DK               |         |  |
|       | PEKG | 06  | 0425       | 0434     | 0438     | S04             | W34 | 3595                    | 02        | 3.6        | 13         | SF   | C          | 0434 | 101          | 1.2                                 | D                |         |  |
| 0266  |      | 06  | 0430       | 04277    | 0443     | S07             | E52 | 3594                    | 02        | 10.1       | 13         | SF   |            |      |              | 84                                  | 1.4              | DEK     |  |
|       | PEKG | 06  | 0427E      | 0427     | 0440     | S07             | E51 | 3594                    | 02        | 10.0       | 13D        | SF   | P          | 0427 | 113          | 1.9                                 | EK               |         |  |
|       | PEKG | 06  | 0427E      | 0434     | 0440     | S07             | E52 | 3594                    | 02        | 10.1       | 13D        | SN   | P          | 0434 | 46           | .8                                  | D                |         |  |
|       | PURP | 06  | 0430       | 0432     | 0448     | S07             | E52 | 3594                    | 02        | 10.1       | 18         | SF   | C          | 0432 | 92           | 1.5                                 | E                |         |  |
| 0267  | PEKG | 06  | 0505       | 0510     | 0517D    | S09             | E66 | 3603                    | 02        | 11.2       | 12D        | SN   | P          | 0510 | 63           |                                     | D                |         |  |
| 0268  | MANI | 06  | 0526E      | 0526U    | 0530D    | S12             | E52 | 3594                    | 02        | 10.1       | 4D         | SF   | 1          | V    |              | 50                                  | .8               |         |  |
| 0269  | ATHN | 06  | 0600E      | 0605     | 0614     | S13             | E53 | 3594                    | 02        | 10.2       | 14D        | SB   | 3          | V    | 0605         | 80                                  | 1.3              |         |  |
| 0270  | CULG | 06  | 0733       | 0736     | 0741     | N13             | W34 | 3592                    | 02        | 3.7        | 8          | SF   |            | C    | 0736         | 120                                 | 1.5              | F       |  |
| 0271  |      | 06  | 07453      | 0750     | 0810     | S19             | W66 | 3576                    | 02        | 1.3        | 25         | 1F   |            |      |              | 105                                 | 1.6              |         |  |
|       | CATA | 06  | 0745       | 0750     | 0825D    | S19             | W66 | 3576                    | 02        | 1.3        | 40D        | 1    | 2          | C    | 0750         | 140                                 |                  |         |  |
|       | CULG | 06  | 0748       | 0750     | 0810     | S19             | W66 | 3576                    | 02        | 1.3        | 22         | SF   |            | C    | 0750         | 70                                  | 1.6              |         |  |
| 0272  | CULG | 06  | 0815       | 0817     | 0821     | S13             | E58 | 3594                    | 02        | 10.7       | 6          | SF   |            | C    | 0817         | 80                                  | 1.5              |         |  |
| 0273  | CATA | 06  | 0830       | 0835     | 0855     | S12             | W90 | 3578                    | 01        | 30.7       | 25         | 1    | 2          | C    | 0835         | 68                                  |                  |         |  |
| 0274  | CATA | 06  | 0835       | 0840     | 0850     | S19             | W16 | 3587                    | 02        | 5.1        | 15         | S    | 2          | C    | 0840         | 112                                 | 1.2              |         |  |
| 0275  |      | 06  | 10082      | 1010     | 1035     | N15             | W42 | 3582                    | 02        | 3.2        | 27         | SN   |            |      |              | 80                                  | 1.1              | E       |  |
|       | HPR  | 06  | 1008       |          | 1023D    | N16             | W43 | 3582                    | 02        | 3.2        | 15D        | SN   |            | C    | 1011         | 80                                  | 1.1              | E       |  |
|       | KANZ | 06  | 1010       | 1010     | 1035     | N14             | W41 | 3582                    | 02        | 3.3        | 25         | SN   | 3          |      |              |                                     |                  |         |  |
| 0276  |      | 06  | 11014      | 11091    | 1125     | S10             | E62 | 3603                    | 02        | 11.1       | 24         | SB   |            |      |              | 84                                  | 1.8              |         |  |
|       | KANZ | 06  | 1101       | 1109     | 1125     | S09             | E62 | 3603                    | 02        | 11.1       | 24         | SB   | 3          |      |              |                                     |                  |         |  |
|       | CATA | 06  | 1105       | 1110     | 1125     | S10             | E61 | 3603                    | 02        | 11.0       | 20         | S    | 2          | C    | 1110         | 84                                  | 1.8              |         |  |
| 0277  | ATHN | 06  | 1110E      | 1113     | 1130D    | S12             | E68 | 3597                    | 02        | 11.6       | 20D        | 1B   | 2          | V    | 1113         | 127                                 | 3.6              |         |  |
| 0278  | KANZ | 06  | 1204       | 1204     | 1214     | S06             | W52 | 3595                    | 02        | 2.6        | 10         | SN   | 3          |      |              |                                     |                  |         |  |
| 0279  | KANZ | 06  | 1226       | 1226     | 1234     | S12             | W43 | 3584                    | 02        | 3.3        | 8          | SN   | 3          |      |              |                                     |                  |         |  |
| 0280  | KANZ | 06  | 1230       | 1230     | 1243     | N09             | W56 | 3579                    | 02        | 2.3        | 13         | SF   | 3          |      |              |                                     |                  |         |  |
| 0281  | CATA | 06  | 1230       | 1230     | 1245D    | S12             | E42 | 3594                    | 02        | 9.7        | 15D        | S    | 2          | P    | 1230         | 112                                 | 1.6              |         |  |
| 0282  | KANZ | 06  | 1302       | 1302     | 1310D    | S06             | W40 | 3595                    | 02        | 3.5        | 8D         | SN   | 3          |      |              |                                     |                  |         |  |
|       |      | 06  | 1326       |          | 1330     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
|       |      | 06  | 1341       |          | 1344     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
|       |      | 06  | 1401       |          | 1404     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
|       |      | 06  | 1408       |          | 1425     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
| 0283  | RAMY | 06  | 1442       | 1534     | 1539D    | S11             | E48 | 3594                    | 02        | 10.2       | 57D        | 2B   | 3          | C    |              | 419                                 |                  | EF      |  |
| 0284  |      | 06  | 1720*      | 1731*    | 1852     | S12             | E43 | 3594                    | 02        | 10.0       | 92         | 1B   |            |      |              | 206                                 | 1.3              | EF      |  |
|       | RAMY | 06  | 1720       | 1731     | 1848     | S12             | E46 | 3594                    | 02        | 10.2       | 88         | 1B   | 3          | C    |              | 311                                 |                  | FE      |  |
|       | BIGB | 06  | 1817       | 1819     | 1857     | S13             | E40 | 3594                    | 02        | 9.8        | 40         | SN   | 3          | C    | 1819         | 100                                 | 1.3              |         |  |
|       |      | 06  | 1731       |          | 1758     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
| 0285  | RAMY | 06  | 1750       | 1752     | 1833     | S13             | W61 | 3576                    | 02        | 2.1        | 43         | SF   | 3          | C    |              | 15                                  |                  |         |  |
| 0286  | BIGB | 06  | 1753       | 1757     | 1820     | S07             | E60 | 3603                    | 02        | 11.2       | 27         | 1N   | 3          | C    | 1757         | 140                                 | 2.9              |         |  |
|       |      | 06  | 1818       |          | 1831     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
| 0287  | PALE | 06  | 1840E      | 1840U    | 1922D    | S12             | E39 | 3594                    | 02        | 9.7        | 42D        | SB   | 2          | C    |              | 75                                  |                  | F       |  |
|       |      | 06  | 1909       |          | 1914     | No Flare Patrol |     |                         |           |            |            |      |            |      |              |                                     |                  |         |  |
| 0288  |      | 06  | 1928*      | 19502    | 2059     | S14             | E39 | 3594                    | 02        | 9.7        | 91         | SB   |            |      |              | 118                                 | 1.6              |         |  |
|       | RAMY | 06  | 1928       | 1950     | 1951D    | S14             | E38 | 3594                    | 02        | 9.7        | 23D        | SB   | 3          | C    |              | 117                                 |                  |         |  |
|       | BIGB | 06  | 1948       | 1952     | 2059     | S13             | E40 | 3594                    | 02        | 9.8        | 71         | SN   | 3          | C    | 1953         | 120                                 | 1.6              |         |  |

## H - ALPHA SOLAR FLARES

39  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Imp<br>(Min) | Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks         |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|-----|------|------------|------|--------------|-------------------------------------|------------------|-----------------|
|       |      |     |            |          |          |     |     |                         |           |            |              |     |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |                 |
| 0289  | PALE | 06  | 1929E      | 1929U    | 1929D    | S08 | E56 | 3603                    | 02        | 11.0       | 71D          | SN  |      | 2          | C    |              | 60                                  |                  | F               |
| 0290  | PALE | 06  | 1931E      | 1931U    | 1931D    | S18 | W39 | 3583                    | 02        | 3.8        | 71D          | SF  |      | 2          | C    |              | 35                                  |                  |                 |
|       |      | 06  | 2015       |          | 2028     |     |     |                         |           |            |              |     |      |            |      |              |                                     |                  | No Flare Patrol |
| 0291  |      | 06  | 20505      | 20564    | 2145     | S17 | W64 | 3576                    | 02        | 2.0        | 55           | 1N  |      |            |      |              | 238                                 | 3.0              | FJ              |
|       | RAMY | 06  | 2050       | 2100     | 2122D    | S15 | W63 | 3576                    | 02        | 2.1        | 32D          | 2B  |      | 3          | C    |              | 453                                 |                  |                 |
|       | BIGB | 06  | 2051       | 2057     | 2157     | S16 | W64 | 3576                    | 02        | 2.0        | 66           | 1N  |      | 3          | C    | 2057         | 160                                 | 3.7              |                 |
|       | CULG | 06  | 2055       | 2056     | 2133     | S19 | W66 | 3576                    | 02        | 1.8        | 38           | 1N  |      |            | C    | 2056         | 100                                 | 2.4              | JF              |
| 0292  |      | 06  | 20508      | 21001    | 2118     | S12 | E38 | 3594                    | 02        | 9.7        | 28           | 1B  |      |            |      |              | 232                                 | 2.8              |                 |
|       | RAMY | 06  | 2050       | 2101     | 2122     | S14 | E38 | 3594                    | 02        | 9.7        | 32           | 1B  |      | 3          | C    |              | 244                                 |                  |                 |
|       | CULG | 06  | 2058       | 2100     | 2113     | S11 | E38 | 3594                    | 02        | 9.7        | 15           | 1B  |      |            | C    | 2100         | 220                                 | 2.8              |                 |
| 0293  | CULG | 06  | 2205       | 2205     | 2208     | S12 | E38 | 3594                    | 02        | 9.8        | 3            | SN  |      |            |      | 2205         | 60                                  | .7               |                 |
| 0294  | CULG | 06  | 2240       | 2242     | 2245     | S11 | E38 | 3594                    | 02        | 9.8        | 5            | SN  |      |            |      | 2242         | 120                                 | 1.5              |                 |
| 0295  |      | 06  | 2333       | 2341     | 2350     | S12 | E36 | 3594                    | 02        | 9.7        | 17           | SF  |      |            |      |              | 150                                 | 1.9              | BD              |
|       | VORO | 06  | 2333E      |          | 2349     | S13 | E36 | 3594                    | 02        | 9.7        | 16D          | SF  |      |            |      | 2341         | 161                                 | 2.0              | BD              |
|       | CULG | 06  | 2333       | 2341     | 2350     | S11 | E37 | 3594                    | 02        | 9.8        | 17           | SF  |      |            |      | 2341         | 140                                 | 1.8              |                 |
| 0296  |      | 06  | 23512      | 2356     | 0032     | S16 | W88 | 3578                    | 01        | 31.3       | 41           | 3B  |      |            |      |              | 642                                 |                  | EFHIK           |
|       | CULG | 06  | 2351       | 2357U    | 2429     | S17 | W86 | 3578                    | 01        | 31.4       | 38           | 2B  |      |            |      | 2357         | 200                                 |                  | F               |
|       | VORO | 06  | 2353       | 2356     | 0036     | S16 | W90 | 3578                    | 01        | 31.2       | 43           | 3B  |      |            |      | 2356         | 1084                                |                  | EHIK            |
| 0297  |      | 07  | 00302      | 00332    | 0054     | S12 | E37 | 3594                    | 02        | 9.8        | 24           | SN  |      |            |      |              | 192                                 | 2.4              | EFK             |
|       | VORO | 07  | 0030       | 0033     | 0057     | S13 | E36 | 3594                    | 02        | 9.7        | 27           | 1N  |      |            |      | 0033         | 233                                 | 2.9              | EK              |
|       | CULG | 07  | 0030       | 0034     | 0053     | S11 | E37 | 3594                    | 02        | 9.8        | 23           | SB  |      |            |      | 0034         | 150                                 | 1.9              | F               |
|       | MITK | 07  | 0032       | 0035     | 0052     | S12 | E37 | 3594                    | 02        | 9.8        | 20           | SN  |      |            |      | 0035         |                                     |                  | E               |
| 0298  |      | 07  | 0105       | 01131    | 0127     | S22 | W38 | 3583                    | 02        | 4.1        | 22           | 1N  |      |            |      |              | 180                                 | 2.4              | F               |
|       | CULG | 07  | 0105       | 0113     | 0124D    | S22 | W38 | 3583                    | 02        | 4.1        | 19D          | SN  |      |            |      | 0113         | 140                                 | 1.8              | F               |
|       | YUNN | 07  | 0107E      | 0114     | 0127     | S21 | W38 | 3583                    | 02        | 4.1        | 20D          | 1F  |      |            |      |              | 220                                 | 2.9              |                 |
| 0299  | YUNN | 07  | 0107E      | 0114     | 0127     | S07 | W45 | 3595                    | 02        | 3.7        | 20D          | SN  |      |            |      |              | 31                                  | .5               | D               |
| 0300  | CULG | 07  | 0118       | 0120     | 0121     | S22 | W33 | 3583                    | 02        | 4.5        | 3            | SF  |      |            |      | 0120         | 40                                  | .4               |                 |
| 0301  |      | 07  | 0207       | 02125    | 0258     | S21 | W38 | 3583                    | 02        | 4.2        | 51           | 1B  |      |            |      |              | 191                                 | 2.5              | F               |
|       | CULG | 07  | 0207       | 0212     | 0300     | S22 | W40 | 3583                    | 02        | 4.0        | 53           | SN  |      |            |      | 0212         | 130                                 | 1.7              | F               |
|       | YUNN | 07  | 0207       | 0217     | 0256     | S20 | W37 | 3583                    | 02        | 4.2        | 49           | 1B  |      |            |      |              | 252                                 | 3.3              | F               |
| 0302  |      | 07  | 03203      | 0326     | 0344     | S14 | W67 | 3576                    | 02        | 2.1        | 24           | 1F  |      |            |      |              | 122                                 | 2.2              |                 |
|       | CULG | 07  | 0320       | 0326     | 0345     | S15 | W69 | 3576                    | 02        | 1.9        | 25           | 1F  |      |            |      | 0326         | 150                                 |                  |                 |
|       | YUNN | 07  | 0323       | 0326     | 0343     | S13 | W65 | 3576                    | 02        | 2.2        | 20           | 1F  |      |            |      |              | 94                                  | 2.2              |                 |
| 0303  | YUNN | 07  | 0332E      | 0334     | 0350     | S19 | E34 | 3599                    | 02        | 9.7        | 18D          | SN  |      |            |      |              | 79                                  | 1.0              | D               |
| 0304  |      | 07  | 03393      | 0343     | 0346     | S08 | W48 | 3595                    | 02        | 3.5        | .7           | SN  |      |            |      |              | 36                                  | .6               |                 |
|       | YUNN | 07  | 0339       | 0343U    | 0347     | S06 | W48 | 3595                    | 02        | 3.5        | 8            | SF  |      |            |      | 0343         | 31                                  | .5               |                 |
|       | CULG | 07  | 0342       | 0343     | 0345     | S09 | W49 | 3595                    | 02        | 3.5        | 3            | SN  |      |            |      | 0343         | 40                                  | .6               |                 |
| 0305  |      | 07  | 03474      | 0353*    | 0411     | S21 | W39 | 3583                    | 02        | 4.2        | 24           | SN  |      |            |      |              | 94                                  | 1.3              | EFK             |
|       | CULG | 07  | 0347       | 0353     | 0413     | S24 | W40 | 3583                    | 02        | 4.1        | 26           | SF  |      |            |      | 0353         | 140                                 | 1.9              | F               |
|       | YUNN | 07  | 0351       | 0353U    | 0353D    | S21 | W38 | 3583                    | 02        | 4.2        | 2D           | SN  |      |            |      | 0353         | 110                                 | 1.5              | F               |
|       | YUNN | 07  | 0358E      | 0358     | 0358D    | S20 | W39 | 3583                    | 02        | 4.2        | 2D           | SN  |      |            |      |              | 110                                 | 1.5              | E               |
|       | YUNN | 07  | 0404E      | 0404     | 0409     | S19 | W40 | 3583                    | 02        | 4.1        | 5D           | SN  |      |            |      |              | 16                                  | .2               | K               |
| 0306  | YUNN | 07  | 0354       | 0358     | 0403     | S05 | W43 | 3595                    | 02        | 3.9        | 9            | SN  |      |            |      |              | 63                                  | .9               |                 |
| 0307  |      | 07  | 04486      | 0452*    | 0536     | S14 | E34 | 3599                    | 02        | 9.8        | 48           | SN  |      |            |      |              | 131                                 | 1.6              | EJW             |
|       | CULG | 07  | 0448       | 0452     | 0539     | S14 | E35 | 3599                    | 02        | 9.8        | 51           | SB  |      |            |      | 0452         | 40                                  | .5               | JW              |
|       | YUNN | 07  | 0452E      | 0511     | 0530     | S14 | E34 | 3599                    | 02        | 9.8        | 38D          | SN  |      |            |      | 0513         | 126                                 | 1.6              |                 |
|       | PEKG | 07  | 0454       | 0505     | 0540     | S14 | E33 | 3599                    | 02        | 9.7        | 46           | 1N  |      |            |      | 0505         | 227                                 | 2.8              | E               |
| 0308  |      | 07  | 0500       | 05115    | 0551     | S18 | W44 | 3583                    | 02        | 3.8        | 51           | 1N  |      |            |      |              | 150                                 | 2.2              | EFKU            |
|       | PEKG | 07  | 0500       | 0511     | 0551     | S18 | W43 | 3583                    | 02        | 3.9        | 51           | 1N  |      |            |      | 0511         | 206                                 | 2.9              | FKU             |
|       | YUNN | 07  | 0512E      | 0516     | 0516D    | S18 | W44 | 3583                    | 02        | 3.9        | 4D           | SN  |      |            |      |              | 94                                  | 1.4              | E               |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |                 |     |                         |           |      |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0309  |      | 07  | 0500*      | 0543     | 0558     | S22             | W40 | 3583                    | 02        | 4.1  | 58           | 1N         |      |            |      |              | 158                                 | 2.2              | EFIK    |  |
|       | PEKG | 07  | 0500       | 0544     | 0551     | S20             | W42 | 3583                    | 02        | 4.0  | 51           | 1N         |      |            | P    | 0544         | 252                                 | 3.6              | F       |  |
|       | CULG | 07  | 0525       | 0543     | 0606     | S23             | W41 | 3583                    | 02        | 4.1  | 41           | 1N         |      |            | P    | 0543         | 160                                 | 2.2              | FIK     |  |
|       | MITK | 07  | 0542       | 0547     | 0554     | S21             | W40 | 3583                    | 02        | 4.2  | 12           | SF         |      |            | C    | 0547         |                                     |                  | E       |  |
|       | YUNN | 07  | 0545E      | 0545     | 0600     | S22             | W39 | 3583                    | 02        | 4.2  | 15D          | SN         |      |            | C    |              | 63                                  | .8               | FK      |  |
| 0310  | CULG | 07  | 0543       | 0545     | 0549     | S08             | E33 | 3594                    | 02        | 9.7  | 6            | SF         |      |            | C    | 0545         | 80                                  | 1.0              |         |  |
| 0311  |      | 07  | 0744*      | 0755     | 0826     | S12             | E33 | 3594                    | 02        | 9.8  | 42           | 1B         |      |            |      |              | 211                                 | 2.6              | EFJ     |  |
|       | ISTA | 07  | 0744       |          | 0824     | S14             | E34 | 3594                    | 02        | 9.9  | 40           | SN         |      |            |      |              |                                     |                  | E       |  |
|       | CATA | 07  | 0750       | 0755     | 0805D    | S13             | E33 | 3594                    | 02        | 9.8  | 15D          | 1          |      | 2          | P    | 0755         | 225                                 | 2.8              |         |  |
|       | BUCA | 07  | 0750       | 0758     | 0823     | S13             | E33 | 3594                    | 02        | 9.8  | 33           | 1N         |      |            | C    | 0758         | 215                                 | 2.6              | E       |  |
|       | CULG | 07  | 0752       | 0758     | 0826     | S11             | E32 | 3594                    | 02        | 9.7  | 34           | SB         |      |            | C    | 0758         | 160                                 | 1.9              | FJ      |  |
|       | ATHN | 07  | 0758       | 0802     | 0827     | S11             | E32 | 3594                    | 02        | 9.7  | 29           | SB         |      |            | 3    | V            | 0802                                | 95               | 1.2     |  |
|       | YUNN | 07  | 0803E      | 0807U    | 0831     | S13             | E33 | 3594                    | 02        | 9.8  | 28D          | 1B         |      |            | P    | 0807         | 362                                 | 4.4              | F       |  |
| 0312  | ATHN | 07  | 0826       | 0826     | 0831     | N12             | W48 | 3592                    | 02        | 3.7  | 5            | SN         |      | 3          | V    | 0826         | 64                                  | .9               |         |  |
| 0313  |      | 07  | 0918       | 0923     | 0936     | S16             | W78 | 3576                    | 02        | 1.5  | 18           | 1N         |      |            |      |              | 50                                  |                  | D       |  |
|       | HTPR | 07  | 0918       | 0923     | 0933     | S15             | W80 | 3576                    | 02        | 1.3  | 15           | SF         |      |            | C    | 0923         | 20                                  |                  |         |  |
|       | YUNN | 07  | 0919       | 0923U    | 0939     | S16             | W76 | 3576                    | 02        | 1.6  | 20           | 1N         |      |            | P    | 0923         | 79                                  |                  | D       |  |
| 0314  | HTPR | 07  | 1024       | 1026     | 1031     | N14             | W49 | 3592                    | 02        | 3.7  | 7            | SF         |      |            | C    | 1026         | 40                                  | .6               | E       |  |
| 0315  | HTPR | 07  | 1038       | 1043     | 1055     | S13             | E41 | 3594                    | 02        | 10.5 | 17           | SB         |      |            | C    | 1043         | 70                                  | .9               | E       |  |
| 0316  | HTPR | 07  | 1115       | 1120     | 1130     | S06             | E38 | 3594                    | 02        | 10.3 | 15           | SF         |      |            | C    | 1120         | 30                                  | .4               |         |  |
| 0317  |      | 07  | 1139       | 1140     | 1147     | S22             | W43 | 3583                    | 02        | 4.2  | 8            | SN         |      |            |      |              | 106                                 | 1.5              | EL      |  |
|       | KANZ | 07  | 1139       | 1141     | 1149     | S23             | W42 | 3583                    | 02        | 4.2  | 10           | SN         |      | 2          |      |              |                                     |                  | L       |  |
|       | CATA | 07  | 1140       | 1140     | 1145     | S23             | W43 | 3583                    | 02        | 4.2  | 5            | S          |      | 2          | C    | 1140         | 112                                 | 1.6              |         |  |
|       | HTPR | 07  | 1140       | 1142     | 1147     | S21             | W44 | 3583                    | 02        | 4.1  | 7            | SN         |      |            | C    | 1142         | 100                                 | 1.4              | E       |  |
| 0318  |      | 07  | 1230       | 1236     | 1244     | N14             | W49 | 3592                    | 02        | 3.8  | 14           | SF         |      |            |      |              | 20                                  | .3               |         |  |
|       | HTPR | 07  | 1230       | 1236     | 1245     | N15             | W51 | 3592                    | 02        | 3.6  | 15           | SF         |      |            | C    | 1236         | 20                                  | .3               |         |  |
|       | KANZ | 07  | 1232       | 1236     | 1243     | N13             | W47 | 3592                    | 02        | 4.0  | 11           | SF         |      | 2          |      |              |                                     |                  |         |  |
| 0319  | KANZ | 07  | 1250       | 1254     | 1331     | S11             | E37 | 3594                    | 02        | 10.3 | 41           | SN         |      | 3          |      |              |                                     |                  |         |  |
| 0320  |      | 07  | 1251       | 1304     | 1333     | S15             | W75 | 3576                    | 02        | 1.8  | 42           | 1B         |      |            |      |              | 108                                 | 2.5              |         |  |
|       | HTPR | 07  | 1251       | 1304     | 1337     | S14             | W71 | 3576                    | 02        | 2.2  | 46           | 1B         |      |            | C    | 1304         | 120                                 |                  |         |  |
|       | ATHN | 07  | 1253       | 1255     | 1334     | S15             | W78 | 3576                    | 02        | 1.6  | 41           | 1B         |      | 3          | V    | 1255         | 95                                  | 2.5              |         |  |
|       | KANZ | 07  | 1254       | 1305     | 1328     | S16             | W76 | 3576                    | 02        | 1.8  | 34           | SB         |      | 3          |      |              |                                     |                  |         |  |
| 0321  |      | 07  | 1339       | 1341     | 1359     | S12             | E31 | 3594                    | 02        | 9.9  | 20           | SN         |      |            |      |              | 80                                  | .9               | E       |  |
|       | HTPR | 07  | 1339       | 1341     | 1400     | S13             | E32 | 3594                    | 02        | 10.0 | 21           | SN         |      |            | C    | 1341         | 80                                  | .9               | E       |  |
|       | KANZ | 07  | 1339       | 1346     | 1358     | S12             | E30 | 3594                    | 02        | 9.8  | 19           | SN         |      | 3          |      |              |                                     |                  |         |  |
| 0322  | HTPR | 07  | 1423       | 1424     | 1430     | S13             | E31 | 3594                    | 02        | 9.9  | 7            | SF         |      |            | C    | 1424         | 20                                  | .2               |         |  |
| 0323  |      | 07  | 1444       | 1448     | 1454     | S13             | E31 | 3594                    | 02        | 9.9  | 10           | SF         |      |            | C    | 1448         | 60                                  | .7               | E       |  |
|       |      | 07  | 1939       |          | 1948     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
|       |      | 07  | 1955       |          | 1958     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
| 0324  | CULG | 07  | 2051       | 2104     | 2130D    | S13             | E26 | 3594                    | 02        | 9.8  | 39D          | 1B         |      |            | P    | 2104         | 300                                 | 3.3              | F       |  |
| 0325  | CULG | 07  | 2249       | 2253     | 2256     | S12             | E19 | 3594                    | 02        | 9.4  | 7            | SF         |      |            | C    | 2253         | 120                                 | 1.3              |         |  |
| 0326  | CULG | 07  | 2338E      | 2338U    | 2343     | S09             | E72 | 3601                    | 02        | 13.4 | 5D           | SF         |      |            | P    | 2338         | 40                                  |                  |         |  |
| 0327  |      | 08  | 0028       | 0119*    | 0222D    | S11             | E31 | 3594                    | 02        | 10.3 | 114D         | 1N         |      |            |      |              | 217                                 | 3.1              | EFK     |  |
|       | LEAR | 08  | 0028       | 0119     | 0222D    | S11             | E32 | 3594                    | 02        | 10.4 | 114D         | SN         |      | 3          | C    |              | 91                                  |                  | K       |  |
|       | LEAR | 08  | 0028       | 0149     | 0222D    | S11             | E32 | 3594                    | 02        | 10.4 | 114D         | 1B         |      | 3          | C    |              | 300                                 |                  | FEK     |  |
|       | PEKG | 08  | 0110E      | 0119U    | 0200D    | S11             | E29 | 3594                    | 02        | 10.2 | 50D          | 1N         |      |            | P    | 0119         | 260                                 | 3.1              | F       |  |
| 0328  |      | 08  | 0029       | 0033*    | 0105     | S13             | E22 | 3594                    | 02        | 9.7  | 36           | SN         |      |            |      |              | 90                                  | 1.0              | EK      |  |
|       | CULG | 08  | 0029       | 0033     | 0105     | S12             | E24 | 3594                    | 02        | 9.8  | 36           | SB         |      |            | C    | 0033         | 60                                  | .6               |         |  |
|       | PEKG | 08  | 0039E      | 0039     | 0104D    | S13             | E22 | 3594                    | 02        | 9.7  | 25D          | SN         |      |            | P    | 0039         | 97                                  | 1.1              | EK      |  |
|       | PEKG | 08  | 0039E      | 0057     | 0104D    | S13             | E21 | 3594                    | 02        | 9.6  | 25D          | SN         |      |            | P    | 0057         | 113                                 | 1.2              | E       |  |

H - ALPHA SOLAR FLARES

41  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo Day | Dur<br>(Min) | Imp<br>Opt Xray | Obs<br>See | Type   | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|---------------|--------------|-----------------|------------|--------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |               |              |                 |            |        |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0329  |      | 08  | 01423      | 01481    | 0203     | S07 | E31 | 3594                    | 02 10.4       | 21           | 1B              |            |        |              | 244                                 | 2.9              | EFJ     |
|       | CULG | 08  | 0142       | 0148     | 0208     | S07 | E31 | 3594                    | 02 10.4       | 26           | 1B              |            |        |              | 220                                 | 2.6              | F       |
|       | VORO | 08  | 0145       | 0148     | 0203     | S06 | E30 | 3594                    | 02 10.3       | 18           | 1N              |            | C 0148 | 323          | 3.8                                 | EJ               |         |
|       | YUNN | 08  | 0147E      | 0149     | 0159     | S08 | E31 | 3594                    | 02 10.4       | 12D          | 1B              |            | C      | 189          | 2.3                                 | F                |         |
| 0330  |      | 08  | 0149       | 0151     | 0210     | N04 | E37 |                         | 02 10.8       | 21           | 1F              |            |        |              | 104                                 | 1.4              | EFG     |
|       | CULG | 08  | 0149       | 0151     | 0201U    | N06 | E38 |                         | 02 10.9       | 12U          | 1F              |            | C 0151 | 160          | 2.1                                 | F                |         |
|       | YUNN | 08  | 0149       | 0151     | 0210     | N03 | E36 |                         | 02 10.8       | 21           | SF              |            | C      | 47           | .6                                  | EG               |         |
| 0331  |      | 08  | 02356      | 02421    | 0251     | S08 | E27 | 3594                    | 02 10.1       | 16           | 1B              |            |        |              | 286                                 | 3.3              | EFJU    |
|       | LEAR | 08  | 0235       | 0243     | 0251     | S09 | E27 | 3594                    | 02 10.1       | 16           | 1B              | 3          | C      | 257          |                                     | UF               |         |
|       | CULG | 08  | 0239       | 0243     | 0252     | S06 | E28 | 3594                    | 02 10.2       | 13           | 1B              |            | C 0243 | 250          | 2.7                                 |                  |         |
|       | PEKG | 08  | 0240       | 0243U    | 0249D    | S07 | E27 | 3594                    | 02 10.1       | 9D           | 1B              |            | P 0243 | 359          | 4.2                                 | F                |         |
|       | VORO | 08  | 0241       | 0242     | 0251     | S08 | E27 | 3594                    | 02 10.1       | 10           | 1B              |            | C 0242 | 278          | 3.1                                 | EJ               |         |
| 0332  | LEAR | 08  | 0333       | 0333     | 0342     | S09 | E26 | 3594                    | 02 10.1       | 9            | SF              | 3          | C      |              | 43                                  |                  | H       |
|       |      | 08  | 0426       | 0427     | 0426     | S12 | E28 | 3594                    | 02 10.3       | 9            | SN              |            |        |              | 38                                  | .4               | D       |
|       | PEKG | 08  | 0418E      | 0418U    | 0421     | S11 | E28 | 3594                    | 02 10.3       | 3D           | SN              |            | P 0418 | 42           | .5                                  | D                |         |
|       | PEKG | 08  | 0426       | 0427     | 0432     | S12 | E28 | 3594                    | 02 10.3       | 6            | SN              |            | C 0427 | 34           | .4                                  | D                |         |
| 0334  |      | 08  | 05184      | 05198    | 0526     | S10 | E16 | 3594                    | 02 9.4        | 8            | SN              |            |        |              | 30                                  | .3               | D       |
|       | PEKG | 08  | 0518       | 0519     | 0522     | S10 | E16 | 3594                    | 02 9.4        | 4            | SF              |            | P 0519 | 21           | .2                                  | D                |         |
|       | CULG | 08  | 0522       | 0527     | 0530     | S11 | E16 | 3594                    | 02 9.4        | 8            | SN              |            | C 0527 | 40           | .4                                  |                  |         |
| 0335  |      | 08  | 0605E      | 0605*    | 0620     | S04 | W62 | 3595                    | 02 3.6        | 15D          | SF              |            |        |              | 48                                  | 1.0              | DEK     |
|       | PEKG | 08  | 0605E      | 0605     | 0620     | S04 | W62 | 3595                    | 02 3.6        | 15D          | SF              |            | P 0605 | 42           | .9                                  | DK               |         |
|       | PEKG | 08  | 0605E      | 0618     | 0620     | S04 | W62 | 3595                    | 02 3.6        | 15D          | SF              |            | P 0618 | 55           | 1.2                                 | E                |         |
| 0336  |      | 08  | 06465      | 06561    | 0701     | S06 | E23 | 3594                    | 02 10.0       | 15           | SN              |            |        |              | 175                                 | 1.9              | EJKLT   |
|       | ISTA | 08  | 0646       |          | 0701     | S06 | E21 | 3594                    | 02 9.8        | 15           | 1N              |            |        |              |                                     |                  | E       |
|       | ABST | 08  | 0647       | 0656     | 0700     | S04 | E24 | 3594                    | 02 10.1       | 13           | SF              |            | C 0656 | 174          | 1.9                                 | EJL              |         |
|       | PEKG | 08  | 0651       | 0656     | 0702     | S07 | E24 | 3594                    | 02 10.1       | 11           | SB              |            | C 0656 | 181          | 2.0                                 | ET               |         |
|       | CULG | 08  | 0652E      | 0657     | 0701     | S06 | E24 | 3594                    | 02 10.1       | 9D           | SB              |            | P 0657 | 170          | 1.8                                 | K                |         |
| 0337  | ABST | 08  | 0647       | 0652     | 0700     | S13 | E18 | 3594                    | 02 9.6        | 13           | SF              |            | C 0652 | 87           | .9                                  | DJ               |         |
| 0338  | ABST | 08  | 0654       | 0656     | 0705     | S12 | E28 | 3594                    | 02 10.4       | 11           | SF              |            | C 0656 | 87           | .9                                  | D                |         |
| 0339  | ATHN | 08  | 0658       | 0701     | 0706     | S08 | E24 | 3594                    | 02 10.1       | 8            | SN              | 3          | V 0701 | 95           | 1.1                                 |                  |         |
| 0340  |      | 08  | 07123      | 07145    | 0722     | S06 | E23 | 3594                    | 02 10.0       | 10           | SN              |            |        |              | 142                                 | 1.5              | EFK     |
|       | CULG | 08  | 0712       | 0714     | 0721     | S06 | E24 | 3594                    | 02 10.1       | 9            | SB              |            | C 0714 | 150          | 1.6                                 | F                |         |
|       | ABST | 08  | 0712       | 0714     | 0724     | S04 | E24 | 3594                    | 02 10.1       | 12           | SF              |            | C 0714 | 174          | 1.9                                 | EK               |         |
|       | ISTA | 08  | 0715       |          | 0720     | S06 | E21 | 3594                    | 02 9.9        | 5            | 1N              |            |        |              |                                     |                  | E       |
|       | PEKG | 08  | 0717E      | 0719     | 0722     | S07 | E23 | 3594                    | 02 10.0       | 5D           | SN              |            | P 0719 | 101          | 1.1                                 | E                |         |
| 0341  | ABST | 08  | 0744       | 0746     | 0800     | N11 | E90 | 3606                    | 02 15.1       | 16           | 1N              |            | C 0746 | 87           |                                     | AD               |         |
| 0342  | ISTA | 08  | 0754       |          | 0759     | N18 | E85 | 3602                    | 02 14.8       | 5            | SF              |            |        |              |                                     |                  | A       |
| 0343  |      | 08  | 07569      | 08064    | 0820     | S06 | E23 | 3594                    | 02 10.0       | 24           | 1B              |            |        |              | 217                                 | 2.4              | EF      |
|       | ISTA | 08  | 0756       |          | 0817     | S06 | E21 | 3594                    | 02 9.9        | 21           | 1B              |            |        |              |                                     |                  | F       |
|       | ATHN | 08  | 0804       | 0807     | 0828     | S08 | E24 | 3594                    | 02 10.1       | 24           | SB              | 3          | V 0807 | 143          | 1.6                                 |                  |         |
|       | CULG | 08  | 0805       | 0807     | 0818     | S06 | E24 | 3594                    | 02 10.1       | 13           | SB              |            | C 0807 | 120          | 1.3                                 |                  |         |
|       | CATA | 08  | 0805E      | 0807     | 0820     | S07 | E23 | 3594                    | 02 10.0       | 15D          | 1               | 2          | P 0807 | 225          | 2.5                                 |                  |         |
|       | ABST | 08  | 0806E      | 0806     | 0816D    | S04 | E24 | 3594                    | 02 10.1       | 10D          | SN              |            | P 0806 | 174          | 1.9                                 | E                |         |
|       | YUNN | 08  | 0808E      | 0810     | 0819     | S06 | E23 | 3594                    | 02 10.1       | 11D          | 1N              |            | P      | 424          | 4.8                                 | F                |         |
| 0344  |      | 08  | 08132      | 0814     | 0824     | S06 | E39 | 3603                    | 02 11.3       | 11           | SF              |            |        |              | 112                                 | 1.4              | EJ      |
|       | YUNN | 08  | 0813       | 0815U    | 0819D    | S05 | E39 | 3603                    | 02 11.2       | 6D           | SN              |            | P 0815 | 94           | 1.2                                 |                  |         |
|       | ABST | 08  | 0814E      | 0814     | 0816D    | S05 | E39 | 3603                    | 02 11.3       | 2D           | SF              |            | P 0814 | 131          | 1.6                                 | EJ               |         |
|       | ISTA | 08  | 0815       |          | 0824     | S08 | E40 | 3603                    | 02 11.3       | 9            | SF              |            |        |              |                                     |                  | E       |
| 0345  | ISTA | 08  | 0822       |          | 0827     | S11 | E15 | 3594                    | 02 9.5        | 5            | SF              |            |        |              |                                     |                  | D       |
| 0346  | LEAR | 08  | 0955       | 0958     | 1007     | S05 | W63 | 3595                    | 02 3.7        | 12           | SF              | 3          | C      |              | 22                                  |                  | F       |
| 0347  |      | 08  | 1028       | 1020*    | 1048     | S12 | E22 | 3594                    | 02 10.1       | 20           | SB              |            |        |              | 161                                 | 1.8              |         |
|       | CATA | 08  | 1015E      | 1020     | 1025D    | S11 | E23 | 3594                    | 02 10.1       | 10D          | S               | 2          | P 1020 | 169          | 1.9                                 |                  |         |
|       | ATHN | 08  | 1028       | 1030     | 1048     | S12 | E21 | 3594                    | 02 10.0       | 20           | SB              | 3          | V 1030 | 153          | 1.7                                 |                  |         |



H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | NOAA/USAF       |     |        | CMP Mo | Dur (Min) | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|--------|--------|-----------|---------|------|---------|------|-----------|----------------------------------|---------------|---------|--|
|       |      |     |            |          |          | Lat             | CMD | Region |        |           |         |      |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |         |  |
| 0348  |      | 08  | 1204       | 1223*    | 1316D    | N15             | W88 | 3576   | 02     | 1.8       | 72D     | 1B   |         |      |           | 47                               |               | K       |  |
|       | RAMY | 08  | 1204       | 1223     | 1316D    | N15             | W88 | 3576   | 02     | 1.8       | 72D     | SN   | 3       | C    |           | 47                               |               | K       |  |
|       | RAMY | 08  | 1204       | 1251     | 1316D    | N15             | W88 | 3576   | 02     | 1.8       | 72D     | 1B   | 3       | C    |           |                                  |               | K       |  |
| 0349  | ATHN | 08  | 1250       | 1252     | 1319     | S13             | W88 | 3576   | 02     | 1.9       | 29      | 1B X | 1.4     | 3    | V         | 1252                             | 111           |         |  |
|       |      | 08  | 1401       |          | 1407     | No Flare Patrol |     |        |        |           |         |      |         |      |           |                                  |               |         |  |
|       |      | 08  | 1417       |          | 2003     | No Flare Patrol |     |        |        |           |         |      |         |      |           |                                  |               |         |  |
| 0350  |      | 08  | 2016       | 20237    | 2040     | S07             | E29 | 3603   | 02     | 11.0      | 24      | 1N   |         |      |           | 304                              | 2.4           | F       |  |
|       | CULG | 08  | 2016       | 2023     | 2040     | S06             | E28 | 3603   | 02     | 10.9      | 24      | 1F   |         | C    | 2023      | 210                              | 2.3           | F       |  |
|       | RAMY | 08  | 2016       | 2027     | 2052D    | S08             | E28 | 3603   | 02     | 10.9      | 36D     | 2B   | 3       | C    |           | 492                              |               |         |  |
|       | BIGB | 08  | 2030E      | 2030     | 2049D    | S06             | E30 | 3603   | 02     | 11.1      | 19D     | 1N   | 2       | P    | 2030      | 210                              | 2.5           |         |  |
| 0351  | CULG | 08  | 2121       | 2122     | 2127     | S04             | E21 | 3594   | 02     | 10.4      | 6       | SN   |         | C    | 2122      | 40                               | .4            | W       |  |
| 0352  |      | 09  | 00431      | 00466    | 0103     | S06             | E15 | 3594   | 02     | 10.1      | 20      | SB   |         |      |           | 167                              | 1.7           | EJK     |  |
|       | PEKG | 09  | 0043       | 0046     | 0101     | S07             | E16 | 3594   | 02     | 10.2      | 18      | SB   |         | C    | 0046      | 189                              | 2.0           | E       |  |
|       | VORO | 09  | 0044       | 0052     | 0101     | S06             | E16 | 3594   | 02     | 10.2      | 17      | 1B   |         | C    | 0052      | 233                              | 2.4           | EJ      |  |
|       | CULG | 09  | 0045E      | 0046U    | 0106     | S06             | E14 | 3594   | 02     | 10.1      | 21D     | SN   |         | P    | 0046      | 80                               | .8            | EK      |  |
| 0353  | CULG | 09  | 0053       | 0055     | 0100     | N10             | E44 | 3598B  | 02     | 12.3      | 7       | SF   |         | C    | 0055      | 40                               | .6            |         |  |
| 0354  | PEKG | 09  | 0107       | 0110     | 0111     | S13             | E11 | 3594   | 02     | 9.9       | 4       | SN   |         | C    | 0110      | 109                              | 1.2           | E       |  |
| 0355  |      | 09  | 01071      | 01111    | 0124     | S03             | E17 | 3594   | 02     | 10.3      | 17      | SN C | 3.7     |      |           | 80                               | .9            | DEJ     |  |
|       | PEKG | 09  | 0107       | 0111     | 0121     | S07             | E18 | 3594   | 02     | 10.4      | 14      | SB C | 3.7     | C    | 0111      | 160                              | 1.7           | E       |  |
|       | VORO | 09  | 0108       | 0111     | 0130     | S03             | E18 | 3594   | 02     | 10.4      | 22      | SN   |         | C    | 0111      | 90                               | 1.0           | DJ      |  |
|       | CULG | 09  | 0110E      | 0112     | 0122     | N02             | E16 | 3594   | 02     | 10.2      | 12D     | SN   |         | P    | 0112      | 50                               | .6            | D       |  |
|       | MANI | 09  | 0119E      | 0119U    | 0125D    | S05             | E16 | 3594   | 02     | 10.2      | 6D      | SN   | 1       | V    |           | 20                               | .2            |         |  |
| 0356  |      | 09  | 0140       | 01429    | 0208     | S09             | E16 | 3594   | 02     | 10.3      | 28      | SN C | 3.7     |      |           | 134                              | 1.4           | EF IJU  |  |
|       | PEKG | 09  | 0140       | 0142     | 0202     | S11             | E16 | 3594   | 02     | 10.3      | 22      | 1N   |         | C    | 0142      | 227                              | 2.4           | EU      |  |
|       | CULG | 09  | 0140       | 0151     | 0213     | S05             | E17 | 3594   | 02     | 10.3      | 33      | SN   |         | C    | 0151      | 140                              | 1.4           | FIJ     |  |
|       | MANI | 09  | 0143E      | 0145U    | 0153D    | S11             | E16 | 3594   | 02     | 10.3      | 10D     | SN C | 3.7     | 1    | V         | 35                               | .4            | F       |  |
| 0357  |      | 09  | 0336       | 03393    | 0402     | S12             | E05 | 3594   | 02     | 9.5       | 26      | 1B M | 2.5     |      |           | 362                              | 3.8           | EF IJU  |  |
|       | PEKG | 09  | 0336E      | 0341     | 0359     | S12             | E04 | 3594   | 02     | 9.4       | 23D     | 2N   |         | P    | 0341      | 505                              | 5.2           | F       |  |
|       | CULG | 09  | 0336       | 0341     | 0410     | S10             | E05 | 3594   | 02     | 9.5       | 34      | 1B M | 2.5     | C    | 0341      | 220                              | 2.2           | J       |  |
|       | MITK | 09  | 0336       | 0342     | 0409     | S13             | E04 | 3594   | 02     | 9.4       | 33      | 1N   |         | C    | 0342      | 450                              | 4.7           | EI      |  |
|       | MANI | 09  | 0338E      | 0339     | 0352     | S13             | E06 | 3594   | 02     | 9.6       | 14D     | 1B   | 1       | V    |           | 275                              | 2.9           | FU      |  |
| 0358  |      | 09  | 0423       | 0438     | 0529     | S14             | W90 | 3576   | 02     | 2.4       | 66      | 1B   |         |      |           | 62                               |               | AE      |  |
|       | PEKG | 09  | 0410E      | 0438     | 0529     | S12             | W90 | 3576   | 02     | 2.4       | 79D     | 1B   |         | C    | 0438      | 105                              |               | AE      |  |
|       | CULG | 09  | 0423       | 0430U    | 0445U    | S17             | W90 | 3576   | 02     | 2.3       | 22U     | SN   |         | P    | 0430      | 20                               |               |         |  |
| 0359  | CULG | 09  | 0451       | 0454U    | 0501     | N01             | E12 |        | 02     | 10.1      | 10      | SN   |         | P    | 0454      | 40                               | .4            |         |  |
| 0360  | CULG | 09  | 0557       | 0558     | 0606     | N06             | E22 | 3598   | 02     | 10.9      | 9       | SF   |         | C    | 0558      | 30                               | .3            |         |  |
| 0361  |      | 09  | 06349      | 06365    | 0648     | S06             | E14 | 3594   | 02     | 10.3      | 14      | SN   |         |      |           | 38                               | .4            | DEJKT   |  |
|       | ISTA | 09  | 0634       |          | 0651     | S06             | E14 | 3594   | 02     | 10.3      | 17      | SF   |         |      |           |                                  |               | D       |  |
|       | CULG | 09  | 0634       | 0636     | 0643     | S07             | E11 | 3594   | 02     | 10.1      | 9       | SF   |         | C    | 0636      | 30                               | .3            | J       |  |
|       | PEKG | 09  | 0641E      | 0641     | 0704D    | S05             | E15 | 3594   | 02     | 10.4      | 23D     | SN   |         | P    | 0641      | 46                               | .5            | DKT     |  |
|       | ISTA | 09  | 0643       |          | 0650     | S07             | E14 | 3594   | 02     | 10.3      | 7       | SN   |         |      |           |                                  |               | E       |  |
| 0362  | PEKG | 09  | 0641E      | 0703     | 0704D    | S06             | E13 | 3594   | 02     | 10.2      | 23D     | SF   |         | P    | 0703      | 126                              | 1.3           | E       |  |
| 0363  | ISTA | 09  | 0656       |          | 0709     | S12             | E12 | 3603   | 02     | 10.2      | 13      | SN   |         |      |           |                                  |               | E       |  |
| 0364  |      | 09  | 0700*      | 0702*    | 0726     | S06             | E12 | 3594   | 02     | 10.2      | 26      | SN   |         |      |           | 139                              | 1.4           | EFJK    |  |
|       | ISTA | 09  | 0700       |          | 0708     | S07             | E11 | 3594   | 02     | 10.1      | 8       | SN   |         |      |           |                                  |               | E       |  |
|       | CULG | 09  | 0701       | 0702     | 0708     | S07             | E10 | 3594   | 02     | 10.0      | 7       | SN   |         | C    | 0702      | 40                               | .4            | E       |  |
|       | ABST | 09  | 0710       | 0713     | 0725D    | S05             | E13 | 3594   | 02     | 10.3      | 15D     | SN   |         | P    | 0713      | 174                              | 1.8           | FJ      |  |
|       | ISTA | 09  | 0711       | 0712     | 0727     | S07             | E11 | 3594   | 02     | 10.1      | 16      | 1B   |         |      |           |                                  |               | F       |  |
|       | CULG | 09  | 0711       | 0712     | 0735     | S07             | E09 | 3594   | 02     | 10.0      | 24      | SB   |         | C    | 0712      | 150                              | 1.5           | EKJ     |  |
|       | PEKG | 09  | 0712       | 0713     | 0738     | S06             | E12 | 3594   | 02     | 10.2      | 26      | 1F   |         | C    | 0713      | 244                              | 2.6           | FK      |  |
|       | PEKG | 09  | 0712       | 0725     | 0738     | S06             | E11 | 3594   | 02     | 10.1      | 26      | SF   |         | C    | 0725      | 168                              | 1.8           | E       |  |
|       | MANI | 09  | 0716E      | 0718U    | 0728D    | S05             | E15 | 3594   | 02     | 10.4      | 12D     | SN   | 1       | V    |           | 60                               | .6            | F       |  |
| 0365  | ATHN | 09  | 0714       | 0715     | 0740     | S12             | E20 | 3603   | 02     | 10.8      | 26      | 1B M | 1.0     | 2    | V         | 0715                             | 255           | 2.8     |  |

H - ALPHA SOLAR FLARES

43  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day  | Start (UT) | Max (UT) | End (UT) | Lat | CMD  | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | (Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|------|------------|----------|----------|-----|------|-------------------------|-----------|------------|-------|------------|-------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |      |            |          |          |     |      |                         |           |            |       |            |       |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0366  |      | 09   | 08069      | 08127    | 0823     | S12 | W00  | 3594                    | 02        | 9.3        | 17    | SN         | C 4.1 |            |      |              | 63                                  | .6               | EJ      |
|       | ABST | 09   | 0806       | 0812     | 0825     | S12 | W01  | 3594                    | 02        | 9.3        | 19    | SN         |       | C          | 0812 | 131          | 1.3                                 | EJ               |         |
|       | ISTA | 09   | 0807       |          | 0822     | S12 | E00  | 3594                    | 02        | 9.3        | 15    | SN         |       |            |      |              |                                     |                  | E       |
|       | PEKG | 09   | 0807E      | 0812     | 0822     | S12 | E00  | 3594                    | 02        | 9.3        | 15D   | SF         |       | P          | 0812 | 42           | .4                                  | E                |         |
|       | KANZ | 09   | 0810       | 0814     | 0825     | S12 | E01  | 3594                    | 02        | 9.4        | 15    | SN         |       |            | 2    |              |                                     |                  |         |
|       | CULG | 09   | 0811       | 0813U    | 0826U    | S11 | W01  | 3594                    | 02        | 9.3        | 15U   | SN         |       | P          | 0813 | 30           | .3                                  |                  |         |
| ATHN  | 09   | 0815 | 0819       | 0821     | S12      | E00 | 3594 | 02                      | 9.3       | 6          | SN    | C 4.1      | 2     | V          | 0819 | 48           | .5                                  |                  |         |
| 0367  | KHAR | 09   | 0914       |          | 0925D    | S12 | W01  | 3594                    | 02        | 9.3        | 11D   | SF         |       | V          | 0916 |              |                                     | D                |         |
| 0368  | ATHN | 09   | 0927       | 0928     | 0931     | S17 | W70  | 3583                    | 02        | 4.1        | 4     | SN         |       | 2          | V    | 0928         | 32                                  | 1.0              |         |
| 0369  | KHAR | 09   | 0929E      | 0929     | 0940D    | N20 | W80  | 3582                    | 02        | 3.3        | 11D   | SF         |       | P          | 0929 |              |                                     | EH               |         |
| 0370  |      | 09   | 10431      | 10474    | 1114     | S05 | E24  | 3603                    | 02        | 11.2       | 31    | SF         |       |            |      |              | 30                                  | .3               |         |
|       | KANZ | 09   | 1043       | 1050     | 1112     | S05 | E24  | 3603                    | 02        | 11.2       | 29    | SN         |       | 2          |      |              |                                     |                  |         |
|       | HTPR | 09   | 1044       | 1047     | 1117     | S05 | E24  | 3603                    | 02        | 11.2       | 33    | SF         |       | C          | 1047 | 30           | .3                                  |                  |         |
|       | KHAR | 09   | 1051E      | 1051     | 1058D    | S04 | E24  | 3603                    | 02        | 11.2       | 7D    | SF         |       | V          | 1051 |              |                                     |                  |         |
| 0371  |      | 09   | 11031      | 11112    | 1132     | S12 | W01  | 3594                    | 02        | 9.4        | 29    | 1N         |       |            |      |              | 483                                 | 5.6              | E       |
|       | KHAR | 09   | 1102E      | 1111     | 1148D    | S12 | W01  | 3594                    | 02        | 9.4        | 46D   | 1N         |       | P          | 1111 | 400          | 4.1                                 | E                |         |
|       | HTPR | 09   | 1103       | 1113     | 1130     | S12 | W01  | 3594                    | 02        | 9.4        | 27    | 2N         |       | C          | 1113 | 700          | 7.0                                 | E                |         |
|       | KANZ | 09   | 1104       | 1112     | 1134     | S13 | W00  | 3594                    | 02        | 9.5        | 30    | 1N         |       | 2          |      |              |                                     |                  |         |
|       | MONT | 09   | 1106E      | 1112     | 1112D    | S13 | W01  | 3594                    | 02        | 9.4        | 6D    | 1B         |       | C          | 1112 | 350          |                                     |                  |         |
| 0372  |      | 09   | 11261      | 11255    | 1145     | S07 | W48  | 3589                    | 02        | 5.9        | 19    | SF         |       |            |      |              | 35                                  | .6               | E       |
|       | KHAR | 09   | 1125E      | 1125     | 1142D    | S07 | W48  | 3589                    | 02        | 5.9        | 17D   | SF         |       | P          | 1125 | 50           | .8                                  | E                |         |
|       | HTPR | 09   | 1126       | 1128     | 1146     | S06 | W49  | 3589                    | 02        | 5.8        | 20    | SF         |       | C          | 1128 | 20           | .3                                  |                  |         |
|       | KANZ | 09   | 1127       | 1130     | 1144     | S09 | W48  | 3589                    | 02        | 5.9        | 17    | SF         |       | 2          |      |              |                                     |                  |         |
| 0373  |      | 09   | 1158*      | 12103    | 1243     | S12 | E12  | 3594                    | 02        | 10.4       | 45    | SF         |       |            |      |              | 45                                  | .4               |         |
|       | HTPR | 09   | 1158       | 1210     | 1255     | S12 | E11  | 3594                    | 02        | 10.3       | 57    | SF         |       | C          | 1210 | 40           | .4                                  |                  |         |
|       | KHAR | 09   | 1205E      |          | 1228D    | S11 | E13  | 3594                    | 02        | 10.5       | 23D   | SF         |       | P          | 1205 | 50           | .5                                  |                  |         |
|       | KANZ | 09   | 1209       | 1213     | 1231     | S12 | E13  | 3594                    | 02        | 10.5       | 22    | SF         |       | 2          |      |              |                                     |                  |         |
| 0374  | HTPR | 09   | 1230       | 1237     | 1247     | S09 | E13  | 3594                    | 02        | 10.5       | 17    | SF         |       | C          | 1237 | 30           | .3                                  |                  |         |
| 0375  | HTPR | 09   | 1330       | 1342     | 1403     | S05 | E20  | 3603                    | 02        | 11.0       | 33    | SN         |       | C          | 1342 | 20           | .2                                  |                  |         |
| 0376  | HTPR | 09   | 1355       | 1356     | 1410     | S10 | E06  | 3594                    | 02        | 10.0       | 15    | SF         |       | C          | 1356 | 20           | .2                                  |                  |         |
| 0377  |      | 09   | 1355       | 13566    | 1420     | S12 | E11  | 3594                    | 02        | 10.4       | 25    | SN         |       |            |      |              | 40                                  | .4               | E       |
|       | HTPR | 09   | 1355       | 1356     | 1423     | S12 | E11  | 3594                    | 02        | 10.4       | 28    | SN         |       | C          | 1356 | 40           | .4                                  | E                |         |
|       | KANZ | 09   | 1355       | 1402     | 1417     | S12 | E11  | 3594                    | 02        | 10.4       | 22    | SN         |       | 2          |      |              |                                     |                  |         |
| 0378  |      | 09   | 14011      | 1409     | 1423     | N11 | W83  | 3582                    | 02        | 3.3        | 22    | SN         |       |            |      |              | 30                                  |                  | A       |
|       | HTPR | 09   | 1401       | 1409     | 1425     | N13 | W87  | 3582                    | 02        | 3.0        | 24    | SF         |       | C          | 1409 | 30           |                                     |                  |         |
|       | KANZ | 09   | 1402       | 1409     | 1421     | N09 | W79  | 3592                    | 02        | 3.6        | 19    | SN         |       | 2          |      |              |                                     |                  | A       |
| 0379  | KANZ | 09   | 1413       | 1417     | 1447     | S06 | W05  | 3594                    | 02        | 9.2        | 34    | SF         |       | 2          |      |              |                                     |                  |         |
| 0380  | BIGB | 09   | 1631       | 1636     | 1651     | S12 | E02  | 3594                    | 02        | 9.8        | 20    | SF         |       | 2          | C    | 1636         | 70                                  | .7               |         |
| 0381  |      | 10   | 00523      | 01008    | 0156     | N17 | E54  | 3602                    | 02        | 14.1       | 64    | 2B         | M 3.8 |            |      |              | 784                                 | 14.6             | FJUZ    |
|       | MITK | 10   | 0052       | 0100     | 0200     | N15 | E55  | 3602                    | 02        | 14.2       | 68    | 2B         |       | C          | 0100 | 420          | 8.5                                 | FU               |         |
|       | VORO | 10   | 0055       | 0102     | 0150     | N18 | E54  | 3602                    | 02        | 14.1       | 55    | 4N         |       | C          | 0102 | 1415         | 25.6                                | J                |         |
|       | MANI | 10   | 0056E      | 0105     | 0127D    | N16 | E54  | 3602                    | 02        | 14.1       | 31D   | 3B         | M 3.8 | 1          | V    |              | 700                                 | 13.0             | ZU      |
|       | PEKG | 10   | 0057E      | 0101     | 0140     | N17 | E54  | 3602                    | 02        | 14.1       | 43D   | 2B         |       | C          | 0101 | 568          | 11.5                                | U                |         |
|       | PALE | 10   | 0103E      | 0103U    | 0137D    | N18 | E56  | 3602                    | 02        | 14.3       | 34D   | 3B         |       | 2          | C    |              | 860                                 |                  | ZU      |
|       | LEAR | 10   | 0104E      | 0108     | 0215     | N16 | E54  | 3602                    | 02        | 14.1       | 71D   | 2B         |       | 3          | C    |              | 740                                 |                  | ZU      |
| 0382  |      | 10   | 0027*      | 02282    | 0237     | S14 | E01  | 3594                    | 02        | 10.1       | 130   | 1N         |       |            |      |              | 203                                 | 2.4              | EFJ     |
|       | PURP | 10   | 0027       | 0228     | 0234     | S14 | E01  | 3594                    | 02        | 10.1       | 127   | SN         |       | C          | 0228 | 92           | 1.0                                 |                  |         |
|       | MITK | 10   | 0227       | 0228     | 0237     | S14 | E01  | 3594                    | 02        | 10.2       | 10    | 1N         |       | C          | 0228 | 200          | 2.1                                 | E                |         |
|       | VORO | 10   | 0227       | 0230     | 0240     | S14 | E00  | 3594                    | 02        | 10.1       | 13    | 1N         |       | C          | 0230 | 394          | 4.0                                 | EJ               |         |
|       | LEAR | 10   | 0228       | 0228     | 0238     | S14 | E01  | 3594                    | 02        | 10.2       | 10    | SB         |       | 3          | C    |              | 127                                 |                  | FE      |
| 0383  | LEAR | 10   | 0308       | 0309     | 0323     | S20 | W83  | 3583                    | 02        | 3.8        | 15    | SN         |       | 3          | C    |              |                                     |                  | F       |
| 0384  | PEKG | 10   | 0515       | 0523     | 0535     | S10 | E32  | 3600                    | 02        | 12.6       | 20    | SN         |       | P          | 0523 | 29           | .4                                  | D                |         |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day   | Start (UT) | Max (UT) | End (UT) | Lat | CMD   | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-------|------------|----------|----------|-----|-------|-------------------------|-----------|------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |       |            |          |          |     |       |                         |           |            |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0385  |      | 10    | 08043      | 08093    | 0820     | S11 | W08   | 3593B                   | 02        | 9.7        | 16           | SN         |      |            |      |              | 62                                  |                  | F       |
|       | KANZ | 10    | 0804       | 0812     | 0823     | S10 | W10   | 3593B                   | 02        | 9.6        | 19           | SF         |      | 3          |      |              |                                     |                  |         |
|       | LEAR | 10    | 0807       | 0809     | 0816     | S12 | W05   | 3593B                   | 02        | 10.0       | 9            | SN         |      | 3          | C    |              | 62                                  |                  | F       |
| 0386  |      | 10    | 0840*      | 08503    | 0902     | S11 | W08   | 3593B                   | 02        | 9.7        | 22           | SN         |      |            |      |              | 138                                 | 1.4              | EF      |
|       | UPIC | 10    | 0840       | 0850U    | 0900     | S11 | W07   | 3593B                   | 02        | 9.8        | 20           | SF         |      |            | P    | 0850         | 143                                 |                  | E       |
|       | WEND | 10    | 0846       | 0852     | 0859     | S12 | W07   | 3593B                   | 02        | 9.8        | 13           | SF         |      |            | C    | 0852         | 50                                  | .5               |         |
|       | LEAR | 10    | 0846       | 0852     | 0900     | S11 | W08   | 3593B                   | 02        | 9.8        | 14           | SN         |      | 3          | C    |              | 135                                 |                  | F       |
|       | KANZ | 10    | 0847       | 0851     | 0907     | S11 | W08   | 3593B                   | 02        | 9.8        | 20           | SN         |      | 3          |      |              |                                     |                  |         |
|       | HTPR | 10    | 0850E      |          | 0905     | S11 | W08   | 3593B                   | 02        | 9.8        | 15D          | SN         |      |            | C    | 0851         | 180                                 | 1.8              | E       |
|       | CATA | 10    | 0850       | 0850     | 0905     | S12 | W07   | 3593B                   | 02        | 9.8        | 15           | S          |      | 2          | C    | 0850         | 169                                 | 1.8              |         |
| MONT  | 10   | 0853E | 0853       | 0858     | S11      | W10 | 3593B | 02                      | 9.6       | 5D         | SN           |            |      | C          | 0853 | 150          |                                     |                  |         |
| 0387  | HTPR | 10    | 0918       | 0925     | 1005     | S09 | E04   | 3594                    | 02        | 10.7       | 47           | SN         |      |            | C    | 0925         | 100                                 | 1.0              |         |
| 0388  |      | 10    | 09423      | 09433    | 0958     | S10 | E15   | 3603                    | 02        | 11.5       | 16           | SN         |      |            |      |              | 106                                 | 1.0              | DE      |
|       | HTPR | 10    | 0942       | 0945     | 0957     | S10 | E15   | 3603                    | 02        | 11.5       | 15           | SB         |      |            | C    | 0945         | 160                                 | 1.6              | E       |
|       | MONT | 10    | 0942       | 0945     | 0959     | S10 | E15   | 3603                    | 02        | 11.5       | 17           | SN         |      |            | C    | 0945         | 70                                  |                  | D       |
|       | KANZ | 10    | 0942       | 0946     | 0959     | S10 | E15   | 3603                    | 02        | 11.5       | 17           | SB         |      | 3          |      |              |                                     |                  |         |
|       | KHAR | 10    | 0943E      | 0943     | 0953D    | S10 | E14   | 3603                    | 02        | 11.4       | 10D          | SN         |      |            | P    | 0943         | 110                                 | 1.2              |         |
|       | WEND | 10    | 0943       | 0945     | 0957     | S11 | E16   | 3603                    | 02        | 11.6       | 14D          | SN         |      |            | C    | 0945         | 44                                  | .5               |         |
|       | LEAR | 10    | 0943       | 0946     | 1001     | S11 | E14   | 3603                    | 02        | 11.4       | 18           | SN         |      | 3          | C    |              | 165                                 |                  |         |
| CATA  | 10   | 0945  | 0945       | 0945D    | S11      | E14 | 3603  | 02                      | 11.4      | 18D        | S            |            | 2    | P          | 0945 | 84           | .9                                  |                  |         |
| 0389  | HTPR | 10    | 1047       | 1050     | 1140     | S04 | W02   | 3594                    | 02        | 10.3       | 53           | SF         |      |            | C    | 1050         | 20                                  | .2               |         |
| 0390  |      | 10    | 11148      | 1122     | 1125     | S10 | E14   | 3603                    | 02        | 11.5       | 11           | SF         |      |            |      |              | 50                                  | .5               |         |
|       | HTPR | 10    | 1114       | 1122     | 1124     | S10 | E14   | 3603                    | 02        | 11.5       | 10           | SF         |      |            | C    | 1122         | 50                                  | .5               |         |
|       | KANZ | 10    | 1122       | 1122     | 1126     | S11 | E14   | 3603                    | 02        | 11.5       | 4            | SF         |      | 3          |      |              |                                     |                  |         |
| 0391  | KANZ | 10    | 1144       | 1148     | 1155     | S11 | E13   | 3603                    | 02        | 11.5       | 11           | SF         |      | 3          |      |              |                                     |                  |         |
| 0392  | RAMY | 10    | 1157E      | 1222     | 1243     | S20 | W08   | 3599                    | 02        | 9.9        | 46D          | SF         |      | 3          | C    |              | 62                                  |                  |         |
| 0393  | RAMY | 10    | 1208       | 1239     | 1500     | S11 | W11   | 3593B                   | 02        | 9.7        | 172          | SN         |      | 3          | C    |              | 49                                  |                  | K       |
| 0394  | HTPR | 10    | 1212       |          | 1214D    | S07 | E11   | 3603                    | 02        | 11.3       | 2D           | SF         |      |            | C    | 1213         | 40                                  | .4               |         |
| 0395  | HTPR | 10    | 1248       | 1248     | 1251     | S14 | E38   | 3601                    | 02        | 13.4       | 3            | SF         |      |            | C    | 1248         | 50                                  | .6               |         |
| 0396  |      | 10    | 1250*      | 1259*    | 1334     | S09 | E00   | 3594                    | 02        | 10.5       | 44           | SN         |      |            |      |              | 126                                 | 1.5              | E       |
|       | UPIC | 10    | 1250       | 1305     | 1315     | S11 | E01   | 3594                    | 02        | 10.6       | 25           | SF         |      |            | P    | 1305         | 102                                 |                  |         |
|       | HTPR | 10    | 1256       | 1259     | 1410     | S09 | E01   | 3594                    | 02        | 10.6       | 74           | SN         |      |            | C    | 1259         | 150                                 | 1.5              | E       |
|       | KANZ | 10    | 1313       | 1313     | 1317     | S07 | W02   | 3594                    | 02        | 10.4       | 4            | SN         |      | 3          |      |              |                                     |                  |         |
| 0397  | HTPR | 10    | 1253       | 1253     | 1258     | S07 | E12   | 3603                    | 02        | 11.4       | 5            | SN         |      |            | C    | 1253         | 30                                  | .3               |         |
| 0398  | HTPR | 10    | 1305       | 1313     | 1315     | S14 | E38   | 3601                    | 02        | 13.4       | 10           | SF         |      |            | C    | 1313         | 40                                  | .5               |         |
| 0399  |      | 10    | 1311*      | 1313*    | 1333     | S08 | E12   | 3603                    | 02        | 11.4       | 22           | SN         |      |            |      |              | 65                                  | .6               |         |
|       | HTPR | 10    | 1311       | 1313     | 1326     | S07 | E12   | 3603                    | 02        | 11.4       | 15           | SF         |      |            | C    | 1313         | 80                                  | .8               |         |
|       | HTPR | 10    | 1334       | 1337     | 1340     | S08 | E12   | 3603                    | 02        | 11.5       | 6            | SN         |      |            | C    | 1337         | 50                                  | .5               |         |
| 0400  |      | 10    | 1312*      | 13258    | 1336     | S11 | E12   | 3603                    | 02        | 11.4       | 24           | SN         |      |            |      |              | 56                                  | .6               | E       |
|       | HTPR | 10    | 1312       | 1325     | 1327     | S10 | E13   | 3603                    | 02        | 11.5       | 15           | SN         |      |            | C    | 1325         | 110                                 | 1.1              | E       |
|       | WEND | 10    | 1325       | 1325     | 1327     | S11 | E13   | 3603                    | 02        | 11.5       | 2            | SF         |      |            | C    | 1325         | 25                                  | .3               |         |
|       | RAMY | 10    | 1325       | 1325     | 1342     | S12 | E12   | 3603                    | 02        | 11.5       | 17           | SN         |      | 3          | C    |              | 57                                  |                  |         |
|       | KANZ | 10    | 1325       | 1325     | 1344     | S11 | E12   | 3603                    | 02        | 11.5       | 19           | SN         |      | 3          |      |              |                                     |                  |         |
|       | HTPR | 10    | 1332       | 1333     | 1342     | S10 | E13   | 3603                    | 02        | 11.5       | 10           | SF         |      |            | C    | 1333         | 30                                  | .3               |         |
| 0401  |      | 10    | 1329       | 1331     | 1338     | S14 | E38   | 3601                    | 02        | 13.4       | 9            | SF         |      |            |      |              | 50                                  | .6               |         |
|       | HTPR | 10    | 1329       | 1331     | 1335     | S14 | E38   | 3601                    | 02        | 13.4       | 6            | SF         |      |            | C    | 1331         | 50                                  | .6               |         |
|       | KANZ | 10    | 1329       | 1332     | 1340     | S14 | E37   | 3601                    | 02        | 13.3       | 11           | SF         |      | 3          |      |              |                                     |                  |         |
| 0402  | HTPR | 10    | 1339       | 1344     | 1358     | S10 | W15   | 3593B                   | 02        | 9.4        | 19           | SF         |      |            | C    | 1344         | 20                                  | .2               |         |
| 0403  |      | 10    | 1208*      | 14124    | 1441     | S11 | W10   | 3593B                   | 02        | 9.7        | 153          | SN         |      |            |      |              | 127                                 | 1.4              | EK      |
|       | RAMY | 10    | 1208       | 1412     | 1500     | S11 | W11   | 3593B                   | 02        | 9.7        | 172          | SN         |      | 3          | C    |              | 121                                 |                  | K       |
|       | HTPR | 10    | 1407       | 1415     | 1445     | S12 | W11   | 3593B                   | 02        | 9.7        | 38           | SB         |      |            | C    | 1415         | 180                                 | 1.8              | E       |
|       | KANZ | 10    | 1411       | 1415     | 1431     | S11 | W10   | 3593B                   | 02        | 9.8        | 20           | SN         |      | 3          |      |              |                                     |                  |         |
| WEND  | 10   | 1413  | 1416       | 1428     | S10      | W10 | 3593B | 02                      | 9.8       | 15         | SF           |            |      | C          | 1416 | 81           | .9                                  |                  |         |

H - ALPHA SOLAR FLARES

45  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP Mo | Dur Day | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|--------|---------|---------|------|---------|------|-----------|----------------------------------|---------------|---------|
|       |      |     |            |          |          |     |     |                         |        |         |         |      |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |         |
| 0404  | HTPR | 10  | 1412       | 1413     | 1430     | S18 | W05 | 3599                    | 02     | 10.2    | 18      | SF   |         | C    | 1413      | 30                               | .3            |         |
| 0405  | HTPR | 10  | 1428       | 1433     | 1450     | S09 | W01 | 3594                    | 02     | 10.5    | 22      | SF   |         | C    | 1433      | 30                               | .3            |         |
| 0406  | RAMY | 10  | 1511       | 1603     | 1613     | S09 | W13 | 3594                    | 02     | 9.6     | 62      | SF   | 3       | C    |           | 26                               |               |         |
| 0407  | HTPR | 10  | 1512       | 1516     | 1520     | S07 | E09 | 3603                    | 02     | 11.3    | 8       | SF   |         | C    | 1516      | 30                               | .3            |         |
| 0408  | HTPR | 10  | 1523       | 1526     | 1529     | S10 | E10 | 3603                    | 02     | 11.4    | 6       | SF   |         | C    | 1526      | 30                               | .3            | E       |
| 0409  | HTPR | 10  | 1529       | 1534     | 1543     | S14 | E06 | 3597                    | 02     | 11.1    | 14      | SF   |         | C    | 1534      | 20                               | .2            |         |
| 0410  |      | 10  | 1600       | 1603     | 1627     | S10 | E10 | 3603                    | 02     | 11.4    | 27      | SN   |         |      |           | 84                               | .6            | E       |
|       | RAMY | 10  | 1600       | 1604     | 1627     | S12 | E10 | 3603                    | 02     | 11.4    | 27      | SB   | 3       | C    |           | 133                              |               |         |
|       | HOLL | 10  | 1602       | 1603     | 1619D    | S11 | E10 | 3603                    | 02     | 11.4    | 17D     | SB   | 3       | C    |           | 83                               |               |         |
|       | HTPR | 10  | 1606E      |          | 1613D    | S07 | E10 | 3603                    | 02     | 11.4    | 7D      | SF   |         | C    | 1609      | 60                               | .6            | E       |
|       | HTPR | 10  | 1606E      |          | 1613D    | S10 | E11 | 3603                    | 02     | 11.5    | 7D      | SF   |         | C    | 1606      | 60                               | .6            | E       |
| 0411  | RAMY | 10  | 1603       | 1604     | 1610     | S15 | E10 | 3597                    | 02     | 11.4    | 7       | SN   | 3       | C    |           | 75                               |               |         |
| 0412  | RAMY | 10  | 1610       | 1611     | 1615     | S20 | W10 | 3599                    | 02     | 9.9     | 5       | SF   | 3       | C    |           | 22                               |               |         |
| 0413  | RAMY | 10  | 1648       | 1654     | 1704     | S10 | W02 | 3594                    | 02     | 10.5    | 16      | SN   | 3       | C    |           | 46                               |               |         |
| 0414  | RAMY | 10  | 1711       | 1713     | 1721     | S08 | E08 | 3603                    | 02     | 11.3    | 10      | SF   | 3       | C    |           | 28                               |               |         |
| 0415  | RAMY | 10  | 1748       | 1749     | 1805     | S11 | W11 | 3594                    | 02     | 9.9     | 17      | SF   | 3       | C    |           | 46                               |               |         |
| 0416  | RAMY | 10  | 1818       | 1827     | 1836     | S09 | W14 | 3594                    | 02     | 9.7     | 18      | SF   | 3       | C    |           | 45                               |               |         |
| 0417  |      | 10  | 1816*      | 1853E    | 2010     | S13 | W13 | 3593B                   | 02     | 9.8     | 114     | 2B   |         |      |           | 517                              |               | EF      |
|       | HOLL | 10  | 1816       | 1859     | 2029     | S14 | W12 | 3593B                   | 02     | 9.8     | 133     | 2B   | 3       | C    |           | 551                              |               | E       |
|       | RAMY | 10  | 1839       | 1853     | 1951     | S12 | W13 | 3593B                   | 02     | 9.8     | 72      | 2B   | 3       | C    |           | 699                              |               | FE      |
|       | PALE | 10  | 1853E      | 1853U    | 1909D    | S12 | W13 | 3593B                   | 02     | 9.8     | 16D     | 1B   | 1       | C    |           | 300                              |               | FE      |
| 0418  | RAMY | 10  | 1838       | 1839     | 1845     | S11 | E32 | 3601                    | 02     | 13.2    | 7       | SF   | 3       | C    |           | 22                               |               |         |
| 0419  | HOLL | 10  | 1847       | 1848     | 1901     | S07 | W64 | 3589                    | 02     | 6.0     | 14      | SF   | 3       | C    |           | 25                               |               |         |
| 0420  | RAMY | 10  | 1850       | 1854     | 1921     | S19 | W15 | 3599                    | 02     | 9.6     | 31      | SF   | 3       | C    |           | 64                               |               |         |
| 0421  |      | 10  | 1851       | 1853     | 1904     | S13 | E02 | 3603                    | 02     | 10.9    | 13      | SN   |         |      |           | 38                               |               |         |
|       | HOLL | 10  | 1851       | 1853     | 1902     | S13 | E03 | 3603                    | 02     | 11.0    | 11      | SN   | 3       | C    |           | 41                               |               |         |
|       | RAMY | 10  | 1852       | 1853     | 1905     | S13 | E02 | 3603                    | 02     | 10.9    | 13      | SN   | 3       | C    |           | 36                               |               |         |
| 0422  | RAMY | 10  | 1912       | 1913     | 1922     | S08 | E07 | 3603                    | 02     | 11.3    | 10      | SN   | 3       | C    |           | 46                               |               |         |
| 0423  |      | 10  | 2000       | 2002     | 2021     | S11 | E08 | 3603                    | 02     | 11.4    | 21      | 1B   |         |      |           | 426                              | 3.2           | EFH     |
|       | HOLL | 10  | 2000       | 2002     | 2026     | S12 | E09 | 3603                    | 02     | 11.5    | 26      | 1B   | 3       | C    |           | 469                              |               | EH      |
|       | RAMY | 10  | 2000       | 2003     | 2022     | S13 | E08 | 3603                    | 02     | 11.4    | 22      | 2B   | 3       | C    |           | 517                              |               | FE      |
|       | CULG | 10  | 2001E      | 2001E    | 2016     | S07 | E09 | 3603                    | 02     | 11.5    | 15D     | 1B   |         | P    | 2001      | 320                              | 3.2           |         |
|       | PALE | 10  | 2001E      | 2001U    | 2018D    | S11 | E08 | 3603                    | 02     | 11.4    | 17D     | 1B   | 1       | C    |           | 400                              |               | FE      |
| 0424  |      | 10  | 2005       | 2025     | 2123     | S20 | W73 | 3587                    | 02     | 5.2     | 78      | SF   |         |      |           | 82                               |               |         |
|       | RAMY | 10  | 2005       | 2028     | 2032D    | S18 | W71 | 3587                    | 02     | 5.4     | 27D     | SF   | 3       | C    |           | 65                               |               |         |
|       | HOLL | 10  | 2006       | 2025     | 2123     | S19 | W73 | 3587                    | 02     | 5.3     | 77      | SF   | 3       | C    |           |                                  |               |         |
|       | PALE | 10  | 2028E      | 2028U    | 2128D    | S22 | W75 | 3587                    | 02     | 5.1     | 60D     | SN   | 1       | C    |           | 100                              |               |         |
| 0425  | RAMY | 10  | 2015       | 2022     | 2029     | S11 | W13 | 3594                    | 02     | 9.9     | 14      | SF   | 3       | C    |           | 41                               |               |         |
| 0426  | CULG | 10  | 2108       | 2110U    | 2119U    | S15 | W06 | 3594                    | 02     | 10.4    | 11U     | SF   |         | P    | 2110      | 50                               | .5            | EI      |
| 0427  | HOLL | 10  | 2116       | 2117     | 2132     | S08 | E06 | 3603                    | 02     | 11.3    | 16      | SN   | 3       | C    |           | 48                               |               |         |
| 0428  |      | 10  | 2150       | 2154     | 2206     | S06 | E06 | 3603                    | 02     | 11.3    | 16      | SN   |         |      |           | 60                               | .4            | J       |
|       | HOLL | 10  | 2150       | 2154     | 2209     | S08 | E06 | 3603                    | 02     | 11.3    | 19      | SB   | 3       | C    |           | 80                               |               |         |
|       | CULG | 10  | 2151       | 2154     | 2203     | S04 | E05 | 3603                    | 02     | 11.3    | 12      | SF   |         | C    | 2154      | 40                               | .4            | J       |
| 0429  | HOLL | 10  | 2214       | 2217     | 2236     | S13 | W09 | 3594                    | 02     | 10.2    | 22      | SB   | 3       | C    |           | 159                              |               | E       |
| 0430  |      | 10  | 2323       | 2330     | 2356     | S07 | E03 | 3603                    | 02     | 11.2    | 33      | 1N   |         |      |           | 230                              | 2.7           | FJ      |
|       | CULG | 10  | 2323       | 2328U    | 2345D    | S06 | E02 | 3603                    | 02     | 11.1    | 22D     | SN   |         | P    | 2328      | 90                               | .9            | J       |
|       | VORO | 10  | 2326       | 2330     | 2346     | S06 | E03 | 3603                    | 02     | 11.2    | 20      | 1N   |         | C    | 2330      | 439                              | 4.5           | J       |
|       | LEAR | 10  | 2333E      | 2337     | 0008     | S07 | E02 | 3603                    | 02     | 11.1    | 35D     | 1N   | 2       | C    |           | 217                              |               | F       |
|       | HOLL | 10  | 2340E      | 2340U    | 2355     | S08 | E06 | 3603                    | 02     | 11.4    | 15D     | SN   | 3       | C    |           | 175                              |               | F       |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Imp<br>(Min) | Opt Xray | Obs<br>See | Type | Area Measurement |                                  | Remarks |               |     |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|----------|------------|------|------------------|----------------------------------|---------|---------------|-----|
|       |      |     |            |          |          |     |     |                         |           |            |              |          |            |      | Time (UT)        | Apparent (10 <sup>-6</sup> Disk) |         | Corr (Sq Deg) |     |
| 0431  | CULG | 11  | 0002       | 0006     | 0012     | S13 | W11 | 3594                    | 02        | 10.2       | 10           | SN       | C 4.2      | C    | 0006             | 50                               | .5      |               |     |
| 0432  |      | 11  | 00505      | 00561    | 0116     | S07 | E04 | 3603                    | 02        | 11.3       | 26           | SB       | C 5.2      |      |                  | 160                              | 1.6     | EJK           |     |
|       | PEKG | 11  | 0050       | 0056     | 0110D    | S08 | E04 | 3603                    | 02        | 11.3       | 20D          | SB       |            | P    | 0056             | 122                              | 1.2     | E             |     |
|       | CULG | 11  | 0054       | 0057     | 0115     | S06 | E03 | 3603                    | 02        | 11.3       | 21           | SN       | C 5.2      | C    | 0057             | 80                               | .8      | J             |     |
|       | VORO | 11  | 0055       | 0057     | 0116     | S08 | E04 | 3603                    | 02        | 11.3       | 21           | IB       |            | C    | 0057             | 278                              | 2.8     | EJK           |     |
| 0433  | PEKG | 11  | 0056E      | 0056     | 0059D    | S10 | W07 | 3594                    | 02        | 10.5       | 3D           | SF       |            | P    | 0056             | 29                               | .3      | E             |     |
| 0434  | CULG | 11  | 0140       | 0143     | 0150     | S05 | E03 | 3603                    | 02        | 11.3       | 10           | SF       |            | C    | 0143             | 60                               | .6      | J             |     |
| 0435  | CULG | 11  | 0238       | 0246     | 0257     | S04 | E01 | 3603                    | 02        | 11.2       | 19           | SF       |            | C    | 0246             | 60                               | .6      |               |     |
| 0436  | CULG | 11  | 0347       | 0349     | 0357     | S06 | W01 | 3603                    | 02        | 11.1       | 10           | SF       | C 2.0      | C    | 0349             | 40                               | .4      | J             |     |
| 0437  | CULG | 11  | 0414       | 0420     | 0449     | S07 | E00 | 3603                    | 02        | 11.2       | 35           | SN       |            | C    | 0420             | 70                               | .7      | JKT           |     |
| 0438  | CULG | 11  | 0502       | 0507     | 0516     | S07 | E17 | 3600                    | 02        | 12.5       | 14           | SF       |            | C    | 0507             | 30                               | .3      |               |     |
| 0439  |      | 11  | 0619       | 06221    | 0634     | S09 | W06 | 3594                    | 02        | 10.8       | 15           | 1N       |            |      |                  | 166                              | 1.7     | FJ            |     |
|       | ABST | 11  | 0619       | 0622     | 0635     | S13 | W05 | 3594                    | 02        | 10.9       | 16           | 1N       |            | C    | 0622             | 261                              | 2.7     | FJ            |     |
|       | CULG | 11  | 0619       | 0623     | 0633     | S05 | W07 | 3594                    | 02        | 10.7       | 14           | SF       |            | C    | 0623             | 70                               | .7      |               |     |
| 0440  | ABST | 11  | 0629       | 0631     | 0635     | N17 | E38 | 3602                    | 02        | 14.1       | 6            | SF       |            | C    | 0631             | 87                               | 1.3     | D             |     |
| 0441  | ABST | 11  | 0631       | 0632     | 0640     | S10 | E01 | 3603                    | 02        | 11.3       | 9            | SN       |            | C    | 0632             | 87                               | .9      | DV            |     |
| 0442  | ABST | 11  | 0636       | 0639     | 0645     | S12 | W15 | 3594                    | 02        | 10.1       | 9            | SN       |            | C    | 0639             | 131                              | 1.3     | E             |     |
| 0443  | CULG | 11  | 0638       | 0640     | 0643     | S08 | W16 | 3594                    | 02        | 10.1       | 5            | SF       |            | C    | 0640             | 40                               | .4      |               |     |
| 0444  |      | 11  | 0644*      | 0659     | 0704     | S10 | E02 | 3603                    | 02        | 11.4       | 20           | SN       |            |      |                  | 58                               | .6      | DJK           |     |
|       | CULG | 11  | 0644       | 0659     | 0703     | S11 | E02 | 3603                    | 02        | 11.4       | 19           | SF       |            | C    | 0659             | 30                               | .3      | KJ            |     |
|       | ABST | 11  | 0657       | 0659     | 0705     | S10 | E01 | 3603                    | 02        | 11.4       | 8            | SN       |            | C    | 0659             | 87                               | .9      | D             |     |
| 0445  | ABST | 11  | 0657       | 0659     | 0705     | N02 | E80 | 3607                    | 02        | 17.3       | 8            | 1F       |            | C    | 0659             | 87                               |         | D             |     |
| 0446  |      | 11  | 07011      | 0704     | 0716     | S10 | W15 | 3594                    | 02        | 10.2       | 15           | SN       |            |      |                  | 112                              | 1.2     | DE            |     |
|       | CULG | 11  | 0701       | 0704     | 0717     | S07 | W15 | 3594                    | 02        | 10.2       | 16           | SF       |            | C    | 0704             | 50                               | .5      | E             |     |
|       | ABST | 11  | 0702       | 0704     | 0715     | S13 | W15 | 3594                    | 02        | 10.2       | 13           | SN       |            | C    | 0704             | 174                              | 1.8     | D             |     |
| 0447  |      | 11  | 0730       | 07301    | 0737     | S13 | W14 | 3594                    | 02        | 10.2       | 7            | SN       | C 3.1      |      |                  | 85                               | .9      | DV            |     |
|       | CATA | 11  | 0730       | 0730     | 0740     | S14 | W14 | 3594                    | 02        | 10.2       | 10           | S        | C 3.1      | 2    | C                | 0730                             | 112     | 1.2           |     |
|       | CULG | 11  | 0730       | 0731     | 0734     | S14 | W15 | 3594                    | 02        | 10.2       | 4            | SF       | C 3.1      |      | C                | 0731                             | 50      | .5            |     |
|       | ABST | 11  | 0730       | 0731     | 0735     | S11 | W14 | 3594                    | 02        | 10.2       | 5            | SN       | C 3.1      |      | C                | 0731                             | 87      | .9            | DV  |
|       | KANZ | 11  | 0731E      | 0731     | 0739     | S14 | W14 | 3594                    | 02        | 10.2       | 8D           | SN       | C 3.1      | 3    |                  |                                  |         |               |     |
| 0448  |      | 11  | 07346      | 07382    | 0750     | S11 | E01 | 3603                    | 02        | 11.4       | 16           | SN       | C 2.8      |      |                  | 60                               | .6      | DEHK          |     |
|       | CULG | 11  | 0734       | 0739     | 0748     | S11 | E02 | 3603                    | 02        | 11.5       | 14           | SN       |            | C    | 0739             | 40                               | .4      |               |     |
|       | ABST | 11  | 0735       | 0738     | 0750     | S10 | E01 | 3603                    | 02        | 11.4       | 15           | SN       | C 2.8      |      | C                | 0738                             | 87      | .9            | DHK |
|       | KANZ | 11  | 0736       | 0739     | 0749     | S12 | E01 | 3603                    | 02        | 11.4       | 13           | SN       | C 2.8      | 1    |                  |                                  |         |               |     |
|       | PEKG | 11  | 0736       | 0740     | 0743     | S11 | E01 | 3603                    | 02        | 11.4       | 7            | SF       | C 2.8      |      | C                | 0740                             | 76      | .8            | E   |
|       | CATA | 11  | 0740       | 0740     | 0755     | S12 | E01 | 3603                    | 02        | 11.4       | 15           | S        | C 2.8      | 2    | C                | 0740                             | 56      | .6            | H   |
|       | HTPR | 11  | 0744E      |          | 0756     | S11 | E01 | 3603                    | 02        | 11.4       | 12D          | SN       | C 2.8      |      | C                | 0745                             | 40      | .4            |     |
| 0449  |      | 11  | 08181      | 0819     | 0824     | S14 | W14 | 3594                    | 02        | 10.3       | 6            | SN       |            |      |                  | 20                               | .2      |               |     |
|       | HTPR | 11  | 0818       | 0819     | 0824     | S13 | W15 | 3594                    | 02        | 10.2       | 6            | SN       |            | C    | 0819             | 20                               | .2      |               |     |
|       | KANZ | 11  | 0819       | 0819     | 0823     | S14 | W14 | 3594                    | 02        | 10.3       | 4            | SN       |            |      | 2                |                                  |         |               |     |
| 0450  | HTPR | 11  | 0844       | 0848     | 0922     | S09 | W10 | 3594                    | 02        | 10.6       | 38           | SF       |            | C    | 0848             | 60                               | .6      |               |     |
| 0451  | HTPR | 11  | 0907       | 0908     | 0912     | S15 | W17 | 3594                    | 02        | 10.1       | 5            | SF       |            | C    | 0908             | 20                               | .2      |               |     |
| 0452  |      | 11  | 09161      | 09191    | 0926     | S08 | W01 | 3603                    | 02        | 11.3       | 10           | SF       |            |      |                  | 30                               | .3      | E             |     |
|       | KANZ | 11  | 0916       | 0920     | 0926     | S08 | W01 | 3603                    | 02        | 11.3       | 10           | SF       |            |      | 2                |                                  |         |               |     |
|       | HTPR | 11  | 0917       | 0919     | 0925     | S07 | W01 | 3603                    | 02        | 11.3       | 8            | SF       |            | C    | 0919             | 30                               | .3      | E             |     |
| 0453  | KANZ | 11  | 0920       | 0920     | 0926     | S15 | E28 | 3601                    | 02        | 13.5       | 6            | SF       |            |      | 2                |                                  |         |               |     |
| 0454  |      | 11  | 09317      | 09384    | 0959     | S15 | W16 | 3594                    | 02        | 10.2       | 28           | SF       |            |      |                  | 35                               | .4      |               |     |
|       | HTPR | 11  | 0931       | 0942     | 1002     | S15 | W15 | 3594                    | 02        | 10.3       | 31           | SF       |            | C    | 0942             | 30                               | .3      |               |     |
|       | HTPR | 11  | 0933       | 0939     | 0947     | S15 | W17 | 3594                    | 02        | 10.1       | 14           | SF       |            | C    | 0939             | 40                               | .4      |               |     |
|       | KANZ | 11  | 0938       | 0938     | 1009     | S16 | W16 | 3594                    | 02        | 10.2       | 31           | SF       |            |      | 2                |                                  |         |               |     |

H - ALPHA SOLAR FLARES

47  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |                 |     |                         |           |      |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0455  | HTPR | 11  | 0936       | 0946     | 1000     | S13             | W20 | 3593B                   | 02        | 9.9  | 24           | SF         |      |            | C    | 0946         | 30                                  | .3               |         |
| 0456  |      | 11  | 09473      | 0952*    | 1016     | S06             | W03 | 3603                    | 02        | 11.2 | 29           | SN         |      |            |      |              | 20                                  | .2               |         |
|       | HTPR | 11  | 0947       | 0952     | 1015     | S05             | W04 | 3603                    | 02        | 11.1 | 28           | SN         |      |            | C    | 0952         | 20                                  | .2               |         |
|       | KANZ | 11  | 0950       | 1009     | 1017     | S08             | W02 | 3603                    | 02        | 11.2 | 27           | SN         |      | 3          |      |              |                                     |                  |         |
| 0457  |      | 11  | 09528      | 09546    | 1012     | S06             | W16 | 3594                    | 02        | 10.2 | 20           | SN         |      |            |      |              | 59                                  | .6               | L       |
|       | HTPR | 11  | 0952       | 0954     | 1018     | S05             | W17 | 3594                    | 02        | 10.1 | 26           | SN         |      |            | C    | 0954         | 30                                  | .3               |         |
|       | WEND | 11  | 0953       | 0957     | 1008     | S05             | W15 | 3594                    | 02        | 10.3 | 15           | SF         |      |            | C    | 0957         | 34                                  | .4               |         |
|       | KANZ | 11  | 0954       | 0954     | 1009     | S06             | W16 | 3594                    | 02        | 10.2 | 15           | SN         |      | 3          |      |              |                                     |                  |         |
|       | CATA | 11  | 1000       | 1000     | 1010D    | S07             | W17 | 3594                    | 02        | 10.1 | 10D          | S          |      | 2          | P    | 1000         | 112                                 | 1.2              | L       |
| 0458  | HTPR | 11  | 1022       | 1027     | 1036     | S13             | W20 | 3593B                   | 02        | 9.9  | 14           | SF         |      |            | C    | 1027         | 30                                  | .3               |         |
| 0459  | HTPR | 11  | 1025       | 1027     | 1033     | S15             | W18 | 3594                    | 02        | 10.1 | 8            | SN         |      |            | C    | 1027         | 40                                  | .4               | E       |
| 0460  |      | 11  | 10312      | 10351    | 1039     | S05             | W17 | 3594                    | 02        | 10.2 | 8            | SN         |      |            |      |              | 72                                  | .8               | E       |
|       | HTPR | 11  | 1031       | 1035     | 1037     | S05             | W17 | 3594                    | 02        | 10.2 | 6            | SN         |      |            | C    | 1035         | 70                                  | .7               | E       |
|       | KANZ | 11  | 1032       | 1036     | 1040     | S06             | W17 | 3594                    | 02        | 10.2 | 8            | SN         |      | 3          |      |              |                                     |                  |         |
|       | WEND | 11  | 1033       | 1035     | 1039     | S05             | W16 | 3594                    | 02        | 10.2 | 6            | SF         |      |            | C    | 1035         | 75                                  | .8               |         |
| 0461  |      | 11  | 1114*      | 11365    | 1200     | S09             | E16 | 3600                    | 02        | 12.7 | 46           | 1N         |      |            |      |              | 211                                 | 2.2              | E       |
|       | HTPR | 11  | 1114       | 1141     | 1210     | S08             | E18 | 3600                    | 02        | 12.8 | 56           | 1N         |      |            | C    | 1141         | 240                                 | 2.4              | E       |
|       | KANZ | 11  | 1117       | 1136     | 1200     | S10             | E15 | 3600                    | 02        | 12.6 | 43           | 1N         |      | 3          |      |              |                                     |                  |         |
|       | WEND | 11  | 1117       | 1138     | 1155     | S09             | E15 | 3600                    | 02        | 12.6 | 38           | SN         |      |            | C    | 1138         | 112                                 | 1.2              |         |
|       | CATA | 11  | 1130       | 1140     | 1155     | S10             | E15 | 3600                    | 02        | 12.6 | 25           | 1          |      | 2          | P    | 1140         | 281                                 | 3.0              |         |
| 0462  | HTPR | 11  | 1121       | 1128     | 1235     | S10             | E03 | 3603                    | 02        | 11.7 | 74           | SF         |      |            | C    | 1128         | 30                                  | .3               |         |
| 0463  |      | 11  | 12092      | 12111    | 1224     | S12             | E01 | 3597                    | 02        | 11.6 | 15           | SB         |      |            |      |              | 129                                 | 1.3              | E       |
|       | WEND | 11  | 1209       | 1212     | 1221     | S12             | E02 | 3597                    | 02        | 11.6 | 12           | SN         |      |            | C    | 1212         | 78                                  | .8               |         |
|       | HTPR | 11  | 1209       | 1212     | 1224     | S11             | E01 | 3597                    | 02        | 11.6 | 15           | SB         |      |            | C    | 1212         | 180                                 | 1.8              | E       |
|       | KANZ | 11  | 1211       | 1211     | 1227     | S12             | E00 | 3597                    | 02        | 11.5 | 16           | SB         |      | 3          |      |              |                                     |                  |         |
| 0464  |      | 11  | 1337       | 13471    | 1409     | S12             | E02 | 3597                    | 02        | 11.7 | 32           | 1B C 9.7   |      |            |      |              | 194                                 | 2.0              | E       |
|       | HTPR | 11  | 1337       | 1347     | 1416     | S12             | E02 | 3597                    | 02        | 11.7 | 39           | 1B C 9.7   |      |            | C    | 1347         | 300                                 | 3.0              | E       |
|       | KANZ | 11  | 1337       | 1348     | 1404     | S12             | E01 | 3597                    | 02        | 11.6 | 27           | 1B C 9.7   |      | 3          |      |              |                                     |                  |         |
|       | WEND | 11  | 1357E      |          | 1408     | S13             | E03 | 3597                    | 02        | 11.8 | 11D          | SN         |      |            | C    | 1357         | 87                                  | .9               |         |
| 0465  |      | 11  | 14272      | 14383    | 1504     | S10             | W12 | 3594                    | 02        | 10.7 | 37           | SN         |      |            |      |              | 119                                 | 1.2              | E       |
|       | HTPR | 11  | 1426E      |          | 1511     | S09             | W12 | 3594                    | 02        | 10.7 | 45D          | SB         |      |            | C    | 1437         | 120                                 | 1.2              | E       |
|       | KANZ | 11  | 1427       | 1441     | 1447D    | S10             | W12 | 3594                    | 02        | 10.7 | 20D          | 1N         |      | 3          |      |              |                                     |                  |         |
|       | WEND | 11  | 1429       | 1438     | 1457     | S10             | W12 | 3594                    | 02        | 10.7 | 28           | SN         |      |            | C    | 1438         | 118                                 | 1.3              |         |
| 0466  | HTPR | 11  | 1427       |          | 1457     | S07             | W15 | 3594                    | 02        | 10.5 | 30           | SF         |      |            | C    | 1437         | 20                                  | .2               |         |
| 0467  | HTPR | 11  | 1556       | 1558     | 1608     | S07             | W02 | 3603                    | 02        | 11.5 | 12           | SN         |      |            | C    | 1558         | 30                                  | .3               | E       |
| 0468  |      | 11  | 1604       | 1616     | 1644     | S08             | W16 | 3594                    | 02        | 10.5 | 40           | SN         |      |            |      |              | 95                                  | 1.0              | E       |
|       | HTPR | 11  | 1604       |          | 1632D    | S06             | W16 | 3594                    | 02        | 10.5 | 28D          | SN         |      |            | C    | 1615         | 80                                  | .8               | E       |
|       | BIGB | 11  | 1610E      | 1616     | 1644     | S10             | W16 | 3594                    | 02        | 10.5 | 34D          | SN         |      | 3          | P    | 1616         | 110                                 | 1.2              |         |
| 0469  |      | 11  | 16251      | 1628     | 1646D    | S06             | W06 | 3603                    | 02        | 11.2 | 21D          | SN         |      |            |      |              | 105                                 | 1.1              | E       |
|       | BIGB | 11  | 1625       | 1628     | 1646D    | S08             | W07 | 3603                    | 02        | 11.1 | 21D          | SN         |      | 3          | P    | 1628         | 140                                 | 1.5              |         |
|       | HTPR | 11  | 1626       |          | 1632D    | S05             | W06 | 3603                    | 02        | 11.2 | 6D           | SN         |      |            | C    | 1628         | 70                                  | .7               | E       |
|       |      | 11  | 1909       |          | 2005     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |
| 0470  | BIGB | 11  | 1916       | 1926     | 1955     | S10             | W15 | 3594                    | 02        | 10.7 | 39           | SF         |      | 3          | C    | 1926         | 120                                 | 1.3              |         |
| 0471  |      | 11  | 2031       | 20343    | 2159     | S10             | W18 | 3594                    | 02        | 10.5 | 88           | SN         |      |            |      |              | 85                                  | .9               | JK      |
|       | CULG | 11  | 2031       | 2034     | 2200     | S11             | W18 | 3594                    | 02        | 10.5 | 89           | SN         |      |            | C    | 2034         | 80                                  | .9               | JK      |
|       | BIGB | 11  | 2031       | 2037     | 2158     | S10             | W18 | 3594                    | 02        | 10.5 | 87           | SN         |      | 3          | C    | 2037         | 90                                  | .9               |         |
| 0472  |      | 11  | 22151      | 2220     | 2231     | S14             | W26 | 3594                    | 02        | 10.0 | 16           | SN         |      |            |      |              | 45                                  | .5               |         |
|       | CULG | 11  | 2215       | 2220     | 2228     | S15             | W25 | 3594                    | 02        | 10.0 | 13           | SF         |      |            | C    | 2220         | 20                                  | .2               |         |
|       | BIGB | 11  | 2216       | 2220     | 2234     | S14             | W26 | 3594                    | 02        | 10.0 | 18           | SN         |      | 3          | C    | 2220         | 70                                  | .8               |         |
| 0473  |      | 11  | 23211      | 23241    | 2334     | S08             | W25 | 3594                    | 02        | 10.1 | 13           | SN         |      |            |      |              | 75                                  | .8               | J       |
|       | BIGB | 11  | 2321       | 2325     | 2335     | S07             | W25 | 3594                    | 02        | 10.1 | 14           | SN         |      | 3          | C    | 2325         | 80                                  | .9               |         |
|       | CULG | 11  | 2322       | 2324     | 2332     | S08             | W25 | 3594                    | 02        | 10.1 | 10           | SF         |      |            | C    | 2324         | 70                                  | .8               | J       |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Imp<br>(Min) | Opt | Xray | Obs<br>See | Type           | Time<br>(UT) | Area Measurement                    |                  | Remarks |   |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|-----|------|------------|----------------|--------------|-------------------------------------|------------------|---------|---|
|       |      |     |            |          |          |                 |     |                         |           |            |              |     |      |            |                |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |   |
| 0474  |      | 11  | 23501      | 23532    | 0004     | S12             | W06 | 3597                    | 02        | 11.5       | 14           | SB  | C    | 6.8        |                |              | 178                                 | 1.8              | EFJ     |   |
|       | CULG | 11  | 2350       | 2353     | 0010     | S11             | W07 | 3597                    | 02        | 11.5       | 20           | SN  |      |            | C              | 2353         | 90                                  | .9               | F       |   |
|       | VORO | 11  | 2350       | 2355     | 0004     | S12             | W06 | 3597                    | 02        | 11.5       | 14           | 1B  |      |            | C              | 2355         | 305                                 | 3.1              | EJ      |   |
|       | BIGB | 11  | 2351       | 2353     | 2357     | S12             | W06 | 3597                    | 02        | 11.5       | 6            | SB  | C    | 6.8        | 3              | C            | 2353                                | 140              | 1.5     |   |
| 0475  |      | 12  | 0325       | 03261    | 0336     | S06             | W12 | 3603                    | 02        | 11.2       | 11           | 1N  | C    | 2.3        |                |              | 142                                 | 1.4              | EJ      |   |
|       | CULG | 12  | 0325       | 0326     | 0333     | S07             | W12 | 3603                    | 02        | 11.2       | 8            | SF  | C    | 2.3        |                | C            | 0326                                | 60               | .6      | J |
|       | PEKG | 12  | 0327E      | 0327     | 0340     | S06             | W12 | 3603                    | 02        | 11.2       | 13D          | 1N  |      |            | C              | 0327         | 223                                 | 2.3              | E       |   |
| 0476  | PEKG | 12  | 0440       | 0447     | 0454     | S12             | W10 | 3603                    | 02        | 11.4       | 14           | SF  |      |            | C              | 0447         | 21                                  | .2               | D       |   |
| 0477  |      | 12  | 04543      | 04591    | 0524     | S08             | E04 | 3600                    | 02        | 12.5       | 30           | SN  |      |            |                |              | 68                                  | .7               | E       |   |
|       | CULG | 12  | 0454       | 0500     | 0509D    | S08             | E04 | 3600                    | 02        | 12.5       | 15D          | SN  |      |            | P              | 0500         | 70                                  | .7               |         |   |
|       | PEKG | 12  | 0457       | 0459     | 0524     | S09             | E04 | 3600                    | 02        | 12.5       | 27           | SN  |      |            | C              | 0459         | 67                                  | .7               | E       |   |
| 0478  |      | 12  | 05423      | 05506    | 0605     | S12             | W11 | 3603                    | 02        | 11.4       | 23           | 1B  | C    | 7.1        |                |              | 282                                 | 2.9              | DEFHKV  |   |
|       | TACH | 12  | 0542       | 0550     | 0606     | S12             | W12 | 3603                    | 02        | 11.3       | 24           | 2B  |      |            | C              | 0550         | 575                                 | 6.1              | EH      |   |
|       | PEKG | 12  | 0545       | 0551     | 0600     | S11             | W11 | 3603                    | 02        | 11.4       | 15           | 1B  | C    | 7.1        |                | C            | 0551                                | 378              | 4.0     | F |
|       | MITK | 12  | 0547E      |          | 0554D    | S12             | W11 | 3603                    | 02        | 11.4       | 7D           | 1N  |      |            | P              | 0553         | 210                                 | 2.2              | E       |   |
|       | CULG | 12  | 0547E      | 0550     | 0559D    | S12             | W12 | 3603                    | 02        | 11.3       | 12D          | SB  |      |            | P              | 0550         | 160                                 | 1.6              | V       |   |
|       | ABST | 12  | 0556E      | 0556     | 0610     | S14             | W11 | 3603                    | 02        | 11.4       | 14D          | SN  |      |            | P              | 0556         | 87                                  | .9               | DK      |   |
| 0479  | ABST | 12  | 0624       | 0626     | 0630     | N04             | E80 | 3607                    | 02        | 18.2       | 6            | 1F  |      |            | C              | 0626         | 87                                  |                  | D       |   |
| 0480  | PEKG | 12  | 0630E      | 0630     | 0630D    | S11             | W28 | 3594                    | 02        | 10.2       | 6D           | SF  |      |            | P              | 0630         | 55                                  | .6               | E       |   |
| 0481  |      | 12  | 07305      | 07323    | 0740     | S12             | W12 | 3603                    | 02        | 11.4       | 10           | SB  |      |            |                |              | 76                                  | .8               | D       |   |
|       | TACH | 12  | 0730       | 0732     | 0735D    | S11             | W12 | 3603                    | 02        | 11.4       | 5D           | SB  |      |            | C              | 0732         | 97                                  | 1.0              | D       |   |
|       | CATA | 12  | 0735       | 0735     | 0740     | S12             | W13 | 3603                    | 02        | 11.3       | 5            | S   |      |            | 2              | C            | 0735                                | 56               | .6      |   |
| 0482  |      | 12  | 0917       | 09173    | 0926     | S11             | W23 | 3594                    | 02        | 10.6       | 9            | SN  |      |            |                |              | 20                                  | .2               | E       |   |
|       | KANZ | 12  | 0917       | 0917     | 0925     | S11             | W23 | 3594                    | 02        | 10.6       | 8            | SN  |      |            | 3              |              |                                     |                  |         |   |
|       | HTPR | 12  | 0917       | 0920     | 0926     | S11             | W23 | 3594                    | 02        | 10.6       | 9            | SF  |      |            | C              | 0920         | 20                                  | .2               | E       |   |
| 0483  |      | 12  | 10023      | 10041    | 1017     | S07             | W15 | 3603                    | 02        | 11.3       | 15           | SN  | C    | 1.9        |                |              | 156                                 | 1.6              | EH      |   |
|       | HTPR | 12  | 1002       | 1004     | 1015     | S07             | W15 | 3603                    | 02        | 11.3       | 13           | SF  | C    | 1.9        |                | C            | 1004                                | 30               | .3      | E |
|       | CATA | 12  | 1005E      | 1005     | 1015D    | S08             | W15 | 3603                    | 02        | 11.3       | 10D          | 1   |      |            | 2              | P            | 1005                                | 281              | 3.0     | H |
|       | KANZ | 12  | 1005       | 1005     | 1019     | S07             | W15 | 3603                    | 02        | 11.3       | 14           | SN  | C    | 1.9        | 3 <sup>b</sup> |              |                                     |                  |         | H |
| 0484  |      | 12  | 10109      | 10234    | 1047     | S20             | W40 | 3599                    | 02        | 9.4        | 37           | SF  |      |            |                |              | 47                                  | .6               | G       |   |
|       | HTPR | 12  | 1010       | 1024     | 1110     | S20             | W41 | 3599                    | 02        | 9.3        | 60           | SF  |      |            | C              | 1024         | 50                                  | .7               |         |   |
|       | WEND | 12  | 1016       | 1023     | 1036     | S18             | W39 | 3599                    | 02        | 9.4        | 20           | SF  |      |            | C              | 1023         | 44                                  | .6               |         |   |
|       | KANZ | 12  | 1019       | 1027     | 1035     | S21             | W40 | 3599                    | 02        | 9.4        | 16           | SF  |      |            | 3              |              |                                     |                  |         | G |
| 0485  |      | 12  | 10423      | 10441    | 1104     | S08             | W16 | 3603                    | 02        | 11.2       | 22           | SF  |      |            |                |              | 76                                  | .8               |         |   |
|       | WEND | 12  | 1042       | 1044     | 1058     | S08             | W16 | 3603                    | 02        | 11.2       | 16           | SF  |      |            | C              | 1044         | 41                                  | .4               |         |   |
|       | CATA | 12  | 1045       | 1045     | 1110     | S08             | W17 | 3603                    | 02        | 11.2       | 25           | S   |      |            | 2              | C            | 1045                                | 112              | 1.2     |   |
| 0486  | HTPR | 12  | 1042       | 1045     | 1100     | S20             | W41 | 3599                    | 02        | 9.3        | 18           | SF  |      |            | C              | 1045         | 20                                  | .2               |         |   |
| 0487  |      | 12  | 13285      | 13314    | 1348     | S12             | W15 | 3603                    | 02        | 11.4       | 20           | SF  |      |            |                |              | 45                                  | .4               | H       |   |
|       | HTPR | 12  | 1328       | 1331     | 1400     | S11             | W16 | 3603                    | 02        | 11.3       | 32           | SF  |      |            | C              | 1331         | 50                                  | .5               |         |   |
|       | KANZ | 12  | 1331       | 1335     | 1342     | S11             | W15 | 3603                    | 02        | 11.4       | 11           | SF  |      |            | 3              |              |                                     |                  |         |   |
|       | WEND | 12  | 1333       | 1334     | 1342     | S13             | W14 | 3603                    | 02        | 11.5       | 9            | SN  |      |            | C              | 1334         | 40                                  | .4               | H       |   |
| 0488  | HTPR | 12  | 1332       | 1335     | 1338     | S12             | W12 | 3597                    | 02        | 11.6       | 6            | SF  |      |            | C              | 1335         | 60                                  | .6               |         |   |
| 0489  | KANZ | 12  | 1401       | 1405     | 1409     | S12             | W30 | 3594                    | 02        | 10.3       | 8            | SF  |      |            | 3              |              |                                     |                  |         |   |
| 0490  | HTPR | 12  | 1413       | 1413     | 1416     | N01             | E70 | 3607                    | 02        | 17.8       | 3            | SF  |      |            | C              | 1413         | 30                                  | .7               |         |   |
| 0491  | HTPR | 12  | 1445       | 1449     | 1500     | S08             | W09 | 3600                    | 02        | 11.9       | 15           | SF  |      |            | C              | 1449         | 20                                  | .2               | E       |   |
| 0492  | HTPR | 12  | 1510       | 1513     | 1517     | S11             | W33 | 3594                    | 02        | 10.1       | 7            | SF  |      |            | C              | 1513         | 40                                  | .5               | E       |   |
| 0493  | HTPR | 12  | 1544       |          | 1600     | S15             | E06 | 3601                    | 02        | 13.1       | 16           | SF  |      |            | C              | 1551         | 30                                  | .3               | E       |   |
|       |      | 12  | 2035       |          | 2042     | No Flare Patrol |     |                         |           |            |              |     |      |            |                |              |                                     |                  |         |   |
|       |      | 12  | 2047       |          | 2054     | No Flare Patrol |     |                         |           |            |              |     |      |            |                |              |                                     |                  |         |   |
| 0494  | CULG | 12  | 2132U      | 2144U    | 2204U    | S14             | W41 | 3593B                   | 02        | 9.8        | 32U          | 1N  |      |            | P              | 2144         | 230                                 | 3.0              |         |   |

H - ALPHA SOLAR FLARES

49  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |   |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|---|
|       |      |     |            |          |          |                 |     |                         |           |      |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |   |
| 0495  | CULG | 12  | 2156U      | 2158     | 2210D    | S12             | W22 | 3603                    | 02        | 11.2 | 14U          | SB         |      |            | P    | 2158         | 100                                 | 1.1              |         |   |
|       |      | 12  | 2211       |          | 2312     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |   |
| 0496  |      | 13  | 0117       | 0118     | 0121     | S10             | W09 | 3600                    | 02        | 12.4 | 4            | SF         |      |            |      |              | 87                                  | .9               | DJ      |   |
|       | CULG | 13  | 0117E      | 0117U    | 0122U    | S10             | W09 | 3600                    | 02        | 12.4 | 5U           | SF         |      |            | P    | 0117         | 40                                  | .4               | J       |   |
|       | VORO | 13  | 0117       | 0118     | 0121     | S10             | W09 | 3600                    | 02        | 12.4 | 4            | SF         |      |            | C    | 0118         | 134                                 | 1.4              | D       |   |
| 0497  | VORO | 13  | 0133       |          | 0142     | S11             | W37 | 3594                    | 02        | 10.3 | 9            | SN         |      |            | C    | 0133         | 81                                  | 1.0              | D       |   |
| 0498  | YUNN | 13  | 0206       | 0211     | 0217     | S08             | W34 | 3594                    | 02        | 10.5 | 11           | SN         |      |            | C    |              | 31                                  | .4               | D       |   |
| 0499  | PEKG | 13  | 0220       | 0225     | 0235     | N13             | E13 | 3602                    | 02        | 14.1 | 15           | SF         |      |            | C    | 0225         | 38                                  | .4               | D       |   |
| 0500  |      | 13  | 0221       | 02231    | 0227     | S09             | W10 | 3600                    | 02        | 12.3 | 6            | SF         |      |            |      |              | 126                                 | 1.4              | DE      |   |
|       | VORO | 13  | 0221       | 0223     | 0229     | S09             | W10 | 3600                    | 02        | 12.3 | 8            | SF         |      |            | C    | 0223         | 161                                 | 1.7              | D       |   |
|       | PEKG | 13  | 0222E      | 0224     | 0225     | S09             | W09 | 3600                    | 02        | 12.4 | 3D           | SF         |      |            | C    | 0224         | 92                                  | 1.0              | E       |   |
| 0501  |      | 13  | 0433       | 0436     | 0446     | S12             | E02 | 3601                    | 02        | 13.3 | 13           | SN         |      |            |      |              | 78                                  | .5               | F       |   |
|       | LEAR | 13  | 0433       | 0436     | 0446     | S14             | E03 | 3601                    | 02        | 13.4 | 13           | SN         |      |            | 2    | C            |                                     | 110              |         | F |
|       | YUNN | 13  | 0436E      | 0436U    | 0436D    | S10             | E01 | 3601                    | 02        | 13.3 | 13D          | SF         |      |            | P    | 0436         | 47                                  | .5               | F       |   |
| 0502  |      | 13  | 06467      | 06515    | 0706     | S10             | W38 | 3594                    | 02        | 10.4 | 20           | SF         |      |            |      |              | 50                                  |                  | F       |   |
|       | LEAR | 13  | 0646       | 0651     | 0652     | S10             | W38 | 3594                    | 02        | 10.4 | 6            | SF         |      |            | 3    | C            | 49                                  |                  | F       |   |
|       | LEAR | 13  | 0653       | 0656     | 0721     | S10             | W37 | 3594                    | 02        | 10.5 | 28           | SF         |      |            | 3    | C            | 51                                  |                  | F       |   |
| 0503  |      | 13  | 0832       | 08341    | 0838     | N02             | E56 | 3607                    | 02        | 17.5 | 6            | SF         |      |            |      |              | 19                                  | .4               |         |   |
|       | WEND | 13  | 0832       | 0834     | 0838     | N02             | E56 | 3607                    | 02        | 17.5 | 6            | SF         |      |            | C    | 0834         | 19                                  | .4               |         |   |
|       | KANZ | 13  | 0835E      | 0835     | 0838     | N03             | E56 | 3607                    | 02        | 17.5 | 3D           | SF         |      |            | 2    |              |                                     |                  |         |   |
| 0504  |      | 13  | 0914       | 09142    | 0920     | N04             | E58 | 3607                    | 02        | 17.7 | 6            | SN         |      |            |      |              | 19                                  | .4               |         |   |
|       | KANZ | 13  | 0914       | 0914     | 0921     | N05             | E59 | 3607                    | 02        | 17.8 | 7            | SN         |      |            | 2    |              |                                     |                  |         |   |
|       | WEND | 13  | 0914       | 0916     | 0919     | N03             | E58 | 3607                    | 02        | 17.7 | 5            | SN         |      |            | C    | 0916         | 19                                  | .4               |         |   |
| 0505  | WEND | 13  | 1024       | 1037     | 1042     | S11             | W02 | 3601                    | 02        | 13.3 | 18           | SF         |      |            | C    | 1037         | 38                                  | .4               |         |   |
| 0506  | WEND | 13  | 1119       | 1124     | 1134     | S11             | W53 | 3593B                   | 02        | 9.5  | 15           | SN         |      |            | C    | 1124         | 47                                  | .8               |         |   |
| 0507  | ATHN | 13  | 1126       | 1130     | 1138     | S11             | W44 | 3594                    | 02        | 10.2 | 12           | SN         |      |            | 3    | V            | 1130                                | 32               | .4      |   |
| 0508  |      | 13  | 11302      | 11341    | 1142     | N00             | E57 | 3607                    | 02        | 17.7 | 12           | SN         |      |            |      |              | 32                                  | .6               |         |   |
|       | ATHN | 13  | 1130       | 1135     | 1144     | N02             | E60 | 3607                    | 02        | 18.0 | 14           | SN         |      |            | 3    | V            | 1135                                | 32               | .7      |   |
|       | WEND | 13  | 1132       | 1134     | 1140     | S01             | E54 | 3607                    | 02        | 17.5 | 8            | SF         |      |            | C    | 1134         | 31                                  | .5               |         |   |
| 0509  | RAMY | 13  | 1245       | 1340     | 1419     | N03             | E60 | 3607                    | 02        | 18.0 | 94           | SF         |      |            | 3    | C            | 55                                  |                  |         |   |
| 0510  | ATHN | 13  | 1246       | 1257     | 1316     | S15             | W61 | 3593B                   | 02        | 8.9  | 30           | SN         |      |            | 3    | V            | 1257                                | 32               | .6      |   |
| 0511  | RAMY | 13  | 1344       | 1345     | 1353     | S11             | W43 | 3594                    | 02        | 10.3 | 9            | SF         |      |            | 3    | C            | 58                                  |                  |         |   |
| 0512  | RAMY | 13  | 1437       | 1440     | 1441D    | S12             | W43 | 3594                    | 02        | 10.4 | 4D           | SF         |      |            | 3    | C            | 62                                  |                  |         |   |
| 0513  | RAMY | 13  | 1601       | 1605     | 1616     | S12             | W05 | 3601                    | 02        | 13.3 | 15           | SN         |      |            | 3    | C            | 67                                  |                  |         |   |
| 0514  | RAMY | 13  | 1607       | 1607     | 1613     | N03             | E59 | 3607                    | 02        | 18.1 | 6            | SF         |      |            | 3    | C            | 18                                  |                  |         |   |
| 0515  | RAMY | 13  | 1810       | 1817     | 1818     | N02             | E50 | 3607                    | 02        | 17.5 | 8            | SF         |      |            | 3    | C            | 31                                  |                  |         |   |
| 0516  | BIGB | 13  | 1920       | 1922     | 1932     | S07             | W49 | 3594                    | 02        | 10.1 | 12           | SN         |      |            | 3    | C            | 1922                                | 100              | 1.6     |   |
| 0517  |      | 13  | 19274      | 19305    | 1954     | S10             | W46 | 3594                    | 02        | 10.3 | 27           | SB         |      |            |      |              | 90                                  | 1.1              | EF      |   |
|       | BIGB | 13  | 1927       | 1930     | 1955     | S10             | W48 | 3594                    | 02        | 10.2 | 28           | SN         |      |            | 3    | C            | 1930                                | 70               | 1.1     |   |
|       | RAMY | 13  | 1931       | 1935     | 2004D    | S11             | W45 | 3594                    | 02        | 10.4 | 33D          | SB         |      |            | 3    | C            | 92                                  |                  |         |   |
|       | HOLL | 13  | 1934E      | 1935U    | 1954     | S10             | W46 | 3594                    | 02        | 10.3 | 20D          | SB         |      |            | 2    | C            | 107                                 |                  | FE      |   |
|       |      | 13  | 1928       |          | 1929     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |   |
| 0518  |      | 13  | 19363      | 19401    | 1951     | N00             | W24 | 3598                    | 02        | 12.0 | 15           | SN         |      |            |      |              | 30                                  |                  |         |   |
|       | RAMY | 13  | 1936       | 1940     | 2004D    | S00             | W24 | 3598                    | 02        | 12.0 | 28D          | SN         |      |            | 3    | C            | 39                                  |                  |         |   |
|       | HOLL | 13  | 1939       | 1941     | 1951     | S00             | W24 | 3598                    | 02        | 12.0 | 12           | SN         |      |            | 3    | C            | 22                                  |                  |         |   |



H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |                 |     |                         |           |            |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0519  |      | 13  | 19392      | 19441    | 2002     | N17             | E05 | 3602                    | 02        | 14.2       | 23           | SN         |      |            |      |              | 169                                 | 1.2              | F       |
|       | RAMY | 13  | 1939       | 1945     | 2005D    | N17             | E05 | 3602                    | 02        | 14.2       | 26D          | 1N         |      | 3          | C    |              | 233                                 |                  |         |
|       | HOLL | 13  | 1941       | 1944     | 2001     | N17             | E05 | 3602                    | 02        | 14.2       | 20           | SN         |      | 2          | C    |              | 155                                 |                  | F       |
|       | BIGB | 13  | 1941       | 1944     | 2003     | N18             | E06 | 3602                    | 02        | 14.3       | 22           | SF         |      | 3          | C    | 1944         | 120                                 | 1.2              |         |
| 0520  | HOLL | 13  | 1955       | 1955     | 2014     | S02             | E48 | 3607                    | 02        | 17.4       | 19           | SF         |      | 2          | C    |              | 22                                  |                  |         |
| 0521  | HOLL | 13  | 2053       | 2057     | 2136     | N04             | E53 | 3607                    | 02        | 17.8       | 43           | SB         |      | 3          | C    |              | 100                                 |                  | EF      |
|       |      | 13  | 2120       |          | 2121     | No Flare Patrol |     |                         |           |            |              |            |      |            |      |              |                                     |                  |         |
| 0522  | HOLL | 13  | 2131       | 2136     | 2152     | S01             | E58 | 3608                    | 02        | 18.2       | 21           | SF         |      | 3          | C    |              | 25                                  |                  |         |
| 0523  | HOLL | 13  | 2209       | 2209     | 2213     | S12             | W31 | 3603                    | 02        | 11.6       | 4            | SF         |      | 3          | C    |              | 26                                  |                  | F       |
| 0524  | CULG | 13  | 2215E      | 2216U    | 2221     | N04             | E47 | 3607                    | 02        | 17.4       | 6D           | SF         |      |            | P    | 2216         | 30                                  | .5               |         |
| 0525  |      | 13  | 2331*      | 23512    | 0014     | S01             | E46 | 3607                    | 02        | 17.4       | 43           | SF         |      |            |      |              | 29                                  | .6               | JK      |
|       | CULG | 13  | 2331       | 2351     | 0020     | N01             | E47 | 3607                    | 02        | 17.5       | 49           | SF         |      |            | C    | 2351         | 40                                  | .6               | KJ      |
|       | HOLL | 13  | 2351       | 2352     | 0008D    | S02             | E46 | 3607                    | 02        | 17.4       | 17D          | SN         |      | 3          | C    |              | 28                                  |                  |         |
|       | LEAR | 13  | 2352       | 2353     | 0007     | S02             | E46 | 3607                    | 02        | 17.4       | 15           | SF         |      | 3          | C    |              | 19                                  |                  |         |
| 0526  |      | 13  | 23462      | 23491    | 2359     | S12             | W33 | 3597                    | 02        | 11.5       | 13           | SN         |      |            |      |              | 121                                 | 1.4              | DEFJ    |
|       | VORO | 13  | 2346       | 2349     | 2359     | S12             | W33 | 3597                    | 02        | 11.5       | 13           | 1N         |      |            | C    | 2349         | 206                                 | 2.5              | DJ      |
|       | CULG | 13  | 2346       | 2349     | 2401     | S13             | W33 | 3597                    | 02        | 11.5       | 15           | SN         |      |            | C    | 2349         | 60                                  | .7               | F       |
|       | HOLL | 13  | 2347       | 2349     | 2358     | S12             | W32 | 3597                    | 02        | 11.6       | 11           | SB         |      | 3          | C    |              | 141                                 |                  | FE      |
|       | BIGB | 13  | 2347       | 2350     | 2352D    | S12             | W33 | 3597                    | 02        | 11.5       | 5D           | SN         |      | 3          | P    | 2349         | 70                                  | .9               |         |
|       | LEAR | 13  | 2348       | 2349     | 2359     | S12             | W33 | 3597                    | 02        | 11.5       | 11           | SN         |      | 3          | C    |              | 127                                 |                  | F       |
| 0527  |      | 14  | 00011      | 00031    | 0020     | S01             | W26 | 3598                    | 02        | 12.0       | 19           | SN         |      |            |      |              | 118                                 | 1.3              | EFIJ    |
|       | HOLL | 14  | 0001       | 0003     | 0004D    | S01             | W27 | 3598                    | 02        | 12.0       | 3D           | SB         |      | 3          | C    |              | 129                                 |                  | FE      |
|       | CULG | 14  | 0001       | 0004U    | 0017U    | S01             | W26 | 3598                    | 02        | 12.0       | 16U          | SF         |      |            | P    | 0004         | 90                                  | 1.0              | IF      |
|       | VORO | 14  | 0001       | 0004     | 0019     | S01             | W24 | 3598                    | 02        | 12.2       | 18           | SN         |      |            | C    | 0004         | 143                                 | 1.6              | EJ      |
|       | LEAR | 14  | 0002       | 0004     | 0020     | S01             | W26 | 3598                    | 02        | 12.0       | 18           | SB         |      | 3          | C    |              | 112                                 |                  |         |
| 0528  |      | 14  | 0013       | 0014     | 0026     | S12             | W56 | 3593B                   | 02        | 9.8        | 13           | 1N         |      |            |      |              | 142                                 | 2.5              | EJ      |
|       | CULG | 14  | 0012U      | 0014U    | 0020D    | S12             | W57 | 3593B                   | 02        | 9.7        | 8U           | SF         |      |            | P    | 0014         | 70                                  | 1.3              |         |
|       | VORO | 14  | 0013       | 0014     | 0026     | S13             | W55 | 3593B                   | 02        | 9.8        | 13           | 1N         |      |            | C    | 0014         | 215                                 | 3.7              | EJ      |
| 0529  |      | 14  | 00267      | 00342    | 0042     | S08             | W19 | 3600                    | 02        | 12.6       | 16           | SN         |      |            |      |              | 184                                 | 2.6              | EFJK    |
|       | CULG | 14  | 0024U      | 0028U    | 0042     | S08             | W19 | 3600                    | 02        | 12.6       | 18U          | SN         |      |            | P    | 0028         | 80                                  | .9               | KJ      |
|       | VORO | 14  | 0026       | 0036     | 0042     | S08             | W19 | 3600                    | 02        | 12.6       | 16           | 1N         |      |            | C    | 0036         | 412                                 | 4.4              | EJK     |
|       | LEAR | 14  | 0033       | 0034     | 0043     | S08             | W18 | 3600                    | 02        | 12.7       | 10           | SN         |      | 3          | C    |              | 59                                  |                  | F       |
| 0530  | CULG | 14  | 0108E      | 0108     | 0113     | N04             | E46 | 3607                    | 02        | 17.5       | 5D           | SF         |      |            | P    | 0108         | 80                                  | 1.2              |         |
| 0531  | CULG | 14  | 0120       | 0123     | 0130     | S08             | W52 | 3594                    | 02        | 10.1       | 10           | SF         |      |            | C    | 0123         | 40                                  | .6               |         |
| 0532  |      | 14  | 01401      | 01436    | 0208     | N04             | E50 | 3607                    | 02        | 17.8       | 28           | 1N         |      |            |      |              | 257                                 | 5.2              | EFJ     |
|       | LEAR | 14  | 0140       | 0143     | 0221     | N04             | E51 | 3607                    | 02        | 17.9       | 41           | SB         |      | 3          | C    |              | 119                                 |                  | F       |
|       | PEKG | 14  | 0140       | 0149     | 0155     | N04             | E49 | 3607                    | 02        | 17.7       | 15           | 1N         |      |            | P    | 0149         | 168                                 | 2.7              | F       |
|       | VORO | 14  | 0141       | 0145     | 0209     | N05             | E50 | 3607                    | 02        | 17.8       | 28           | 2N         |      |            | C    | 0145         | 484                                 | 7.8              | EJ      |
| 0533  |      | 14  | 0320       | 0345     | 0345D    | S12             | W63 | 3593B                   | 02        | 9.4        | 25D          | SF         |      |            |      |              | 67                                  | 1.4              | E       |
|       | CULG | 14  | 0320       | 0329U    | 0344U    | S13             | W64 | 3593B                   | 02        | 9.3        | 24U          | SF         |      |            | P    | 0329         | 50                                  | 1.1              |         |
|       | PEKG | 14  | 0345E      | 0345     | 0345D    | S11             | W62 | 3593B                   | 02        | 9.5        | 24D          | SF         |      |            | P    | 0345         | 84                                  | 1.8              | E       |
| 0534  |      | 14  | 0325*      | 03443    | 0403     | S12             | W51 | 3594                    | 02        | 10.3       | 38           | 1N         |      |            |      |              | 197                                 | 2.2              | EFK     |
|       | PEKG | 14  | 0325       | 0347     | 0352     | S10             | W51 | 3594                    | 02        | 10.3       | 27           | 1N         |      |            | C    | 0347         | 151                                 | 2.5              | E       |
|       | LEAR | 14  | 0341       | 0344     | 0417     | S12             | W51 | 3594                    | 02        | 10.3       | 36           | 1B         |      | 3          | C    |              | 310                                 |                  | FK      |
|       | MITK | 14  | 0343       | 0345     | 0359     | S12             | W50 | 3594                    | 02        | 10.4       | 16           | SN         |      |            | C    | 0345         |                                     |                  | E       |
|       | CULG | 14  | 0344E      | 0344U    | 0347D    | S13             | W52 | 3594                    | 02        | 10.2       | 3D           | SN         |      |            | P    | 0344         | 130                                 | 1.8              |         |
| 0535  |      | 14  | 0341*      | 04081    | 0417     | S09             | W53 | 3594                    | 02        | 10.2       | 36           | SB         |      |            |      |              | 98                                  | 1.6              | EKV     |
|       | LEAR | 14  | 0341       | 0409     | 0417     | S12             | W51 | 3594                    | 02        | 10.3       | 36           | SB         |      | 3          | C    |              | 109                                 |                  | K       |
|       | CULG | 14  | 0408       | 0408     | 0418U    | S08             | W54 | 3594                    | 02        | 10.1       | 10U          | SB         |      |            | P    | 0408         | 80                                  | 1.4              | V       |
|       | PEKG | 14  | 0408       | 0409     | 0417     | S06             | W53 | 3594                    | 02        | 10.2       | 9            | SN         |      |            | C    | 0409         | 105                                 | 1.8              | E       |
| 0536  |      | 14  | 03539      | 04066    | 0438     | N18             | W00 | 3602                    | 02        | 14.2       | 45           | SN         |      |            |      |              | 107                                 | 1.2              | E       |
|       | PEKG | 14  | 0353       | 0410     | 0434     | N18             | E00 | 3602                    | 02        | 14.2       | 41           | SN         |      |            | C    | 0410         | 67                                  | .8               | E       |
|       | CULG | 14  | 0400E      | 0406     | 0425D    | N19             | W01 | 3602                    | 02        | 14.1       | 25D          | SN         |      |            | P    | 0406         | 100                                 | 1.1              |         |
|       | LEAR | 14  | 0402       | 0408     | 0441     | N18             | E01 | 3602                    | 02        | 14.2       | 39           | SN         |      | 3          | C    |              | 108                                 |                  |         |
|       | PURP | 14  | 0403E      | 0412     | 0414D    | N17             | W01 | 3602                    | 02        | 14.1       | 11D          | SF         |      |            | V    | 0412         | 152                                 | 1.7              |         |

H - ALPHA SOLAR FLARES

51  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | NOAA/USAF       |     |        | Dur (Min) | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement |     | Remarks |                                  |               |
|-------|------|-----|------------|----------|----------|-----------------|-----|--------|-----------|---------|------|---------|------|-----------|------------------|-----|---------|----------------------------------|---------------|
|       |      |     |            |          |          | Lat             | CMD | Region |           |         |      |         |      |           | Mo               | Day |         | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |
| 0537  | CULG | 14  | 0459       | 0501     | 0510     | N01             | E45 | 3607   | 02        | 17.6    | 11   | SF      |      | C         | 0501             | 30  | .5      |                                  |               |
| 0538  |      | 14  | 0538       | 0540     | 0546     | S12             | W37 | 3597   | 02        | 11.4    | 8    | SF      |      |           |                  | 65  | .8      | EF                               |               |
|       | PEKG | 14  | 0538E      | 0540     | 0545     | S11             | W37 | 3597   | 02        | 11.4    | 7D   | SN      |      | P         | 0540             | 92  | 1.2     | E                                |               |
|       | LEAR | 14  | 0538       | 0540     | 0547     | S12             | W36 | 3597   | 02        | 11.5    | 9    | SF      |      | C         |                  | 64  |         | F                                |               |
|       | CULG | 14  | 0542E      | 0542U    | 0548U    | S13             | W38 | 3597   | 02        | 11.4    | 6U   | SF      |      | P         | 0542             | 40  | .5      |                                  |               |
| 0539  |      | 14  | 05482      | 0551     | 0604     | S12             | W52 | 3594   | 02        | 10.3    | 16   | SN      |      |           |                  | 56  | .8      | E                                |               |
|       | LEAR | 14  | 0548       | 0551     | 0604     | S13             | W53 | 3594   | 02        | 10.2    | 16   | SF      |      | C         |                  | 65  |         |                                  |               |
|       | YUNN | 14  | 0550       | 0551     | 0552D    | S12             | W51 | 3594   | 02        | 10.4    | 2D   | SN      |      | P         |                  | 47  | .8      | E                                |               |
| 0540  |      | 14  | 0812       | 08143    | 0830     | S12             | W37 | 3603   | 02        | 11.5    | 18   | 1B      |      |           |                  | 203 | 1.7     | EU                               |               |
|       | LEAR | 14  | 0812       | 0814     | 0834     | S13             | W37 | 3603   | 02        | 11.5    | 22   | 1B      |      | C         |                  | 346 |         | UE                               |               |
|       | PURP | 14  | 0813E      | 0814     | 0824     | S11             | W38 | 3603   | 02        | 11.5    | 11D  | 1N      |      | C         | 0814             | 198 | 2.6     |                                  |               |
|       | ATHN | 14  | 0817E      | 0817     | 0832     | S11             | W36 | 3603   | 02        | 11.6    | 15D  | SB      |      | V         | 0817             | 64  | .8      |                                  |               |
| 0541  | LEAR | 14  | 0938       | 0938     | 0947     | N01             | E41 | 3607   | 02        | 17.5    | 9    | SF      |      | C         |                  | 22  |         |                                  |               |
| 0542  |      | 14  | 0940       | 09404    | 0955     | S10             | W40 | 3603   | 02        | 11.4    | 15   | 1B      |      |           |                  | 160 | 1.6     | H                                |               |
|       | LEAR | 14  | 0940       | 0940     | 0955     | S10             | W41 | 3603   | 02        | 11.3    | 15   | 1B      |      | C         |                  | 200 |         | H                                |               |
|       | WEND | 14  | 0940E      | 0944     | 0957D    | S10             | W39 | 3603   | 02        | 11.5    | 17D  | SB      |      | C         | 0944             | 119 | 1.6     |                                  |               |
|       |      | 14  | 1028       |          | 1042     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
|       |      | 14  | 1048       |          | 1057     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
|       |      | 14  | 1136       |          | 1450     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
|       |      | 14  | 1510       |          | 1518     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
|       |      | 14  | 1556       |          | 1654     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
| 0543  | HOLL | 14  | 1654E      | 1658U    | 1659     | S11             | W64 | 3594   | 02        | 9.9     | 5D   | SN      |      | C         |                  | 19  |         |                                  |               |
| 0544  |      | 14  | 17311      | 17311    | 1748     | N05             | E42 | 3607   | 02        | 17.9    | 17   | SN      |      |           |                  | 63  | 1.3     | F                                |               |
|       | BIGB | 14  | 1731       | 1731     | 1750     | N05             | E43 | 3607   | 02        | 17.9    | 19   | SN      |      | C         | 1731             | 90  | 1.3     |                                  |               |
|       | HOLL | 14  | 1732       | 1732     | 1745     | N05             | E41 | 3607   | 02        | 17.8    | 13   | SF      |      | C         |                  | 36  |         | F                                |               |
|       |      | 14  | 1748       |          | 1818     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
| 0545  | RAMY | 14  | 1837       | 1838     | 1854     | N00             | E38 | 3607   | 02        | 17.6    | 17   | SF      |      | C         |                  | 30  |         |                                  |               |
|       |      | 14  | 1842       |          | 1849     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
| 0546  | RAMY | 14  | 1920       | 1920     | 1923     | N04             | E36 | 3607   | 02        | 17.5    | 3    | SF      |      | C         |                  | 29  |         |                                  |               |
| 0547  |      | 14  | 20088      | 20257    | 2126     | S13             | W69 | 3593B  | 02        | 9.6     | 78   | 1B      |      |           |                  | 201 |         |                                  |               |
|       | RAMY | 14  | 2008       | 2025     | 2107D    | S12             | W69 | 3593B  | 02        | 9.6     | 59D  | 1B      |      | C         |                  | 249 |         | EFK                              |               |
|       | RAMY | 14  | 2008       | 2032     | 2107D    | S12             | W69 | 3593B  | 02        | 9.6     | 59D  | S       |      | C         |                  | 214 |         | FEK                              |               |
|       | BIGB | 14  | 2016       | 2028     | 2126     | S15             | W68 | 3593B  | 02        | 9.7     | 70   | 1B      |      | C         | 2028             | 140 |         | K                                |               |
| 0548  |      | 14  | 20392      | 2045     | 2121     | S02             | E36 | 3607   | 02        | 17.5    | 42   | SB      |      |           |                  | 110 | 1.2     |                                  |               |
|       | BIGB | 14  | 2039       | 2045     | 2121     | S03             | E37 | 3607   | 02        | 17.6    | 42   | SN      |      | C         | 2045             | 90  | 1.2     |                                  |               |
|       | RAMY | 14  | 2041       | 2045     | 2046D    | S00             | E36 | 3607   | 02        | 17.5    | 5D   | SB      |      | C         |                  | 129 |         |                                  |               |
|       |      | 14  | 2108       |          | 2241     | No Flare Patrol |     |        |           |         |      |         |      |           |                  |     |         |                                  |               |
| 0549  |      | 14  | 23093      | 2312     | 2325     | S12             | W46 | 3603   | 02        | 11.5    | 16   | SB      |      |           |                  | 113 | 1.2     | F                                |               |
|       | LEAR | 14  | 2309       | 2312     | 2325     | S11             | W45 | 3603   | 02        | 11.6    | 16   | SN      |      | C         |                  | 146 |         | F                                |               |
|       | BIGB | 14  | 2312       | 2312     | 2325     | S13             | W47 | 3603   | 02        | 11.4    | 13   | SB      |      | C         | 2312             | 80  | 1.2     |                                  |               |
| 0550  | VORO | 15  | 0025       | 0027     | 0035     | N05             | E33 | 3607   | 02        | 17.5    | 10   | SF      |      | C         | 0027             | 116 | 1.4     | D                                |               |
| 0551  |      | 15  | 03059      | 03179    | 0331     | N06             | E32 | 3607   | 02        | 17.5    | 26   | SN      |      |           |                  | 66  | .8      | E                                |               |
|       | PEKG | 15  | 0305       | 0326     | 0330     | N05             | E31 | 3607   | 02        | 17.4    | 25   | SN      |      | C         | 0326             | 92  | 1.1     | E                                |               |
|       | CULG | 15  | 0314       | 0317     | 0332     | N07             | E32 | 3607   | 02        | 17.5    | 18   | SF      |      | C         | 0317             | 40  | .5      |                                  |               |
| 0552  |      | 15  | 03211      | 03321    | 0408     | N09             | E38 | 3609   | 02        | 18.0    | 47   | 1B      |      |           |                  | 312 | 4.2     | EU                               |               |
|       | CULG | 15  | 0321       | 0333     | 0337D    | N10             | E38 | 3609   | 02        | 18.0    | 16D  | 1B      |      | P         | 0333             | 300 | 3.9     | U                                |               |
|       | MITK | 15  | 0322       | 0332     | 0424     | N09             | E38 | 3609   | 02        | 18.0    | 62   | 1N      |      | C         | 0332             | 270 | 3.7     | E                                |               |
|       | PEKG | 15  | 0325E      | 0332     | 0353     | N08             | E39 | 3609   | 02        | 18.1    | 28D  | 1B      |      | P         | 0332             | 365 | 5.0     | U                                |               |
| 0553  |      | 15  | 03272      | 03292    | 0358     | S12             | W48 | 3603   | 02        | 11.5    | 31   | SN      |      |           |                  | 51  | .8      | E                                |               |
|       | CULG | 15  | 0327       | 0329     | 0337D    | S13             | W49 | 3603   | 02        | 11.4    | 10D  | SN      |      | P         | 0329             | 60  | .9      |                                  |               |
|       | PEKG | 15  | 0329       | 0331     | 0358     | S11             | W48 | 3603   | 02        | 11.5    | 29   | SN      |      | C         | 0331             | 42  | .6      | E                                |               |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD             | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | (Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |     |
|-------|------|-----|------------|----------|----------|-----------------|-----------------|-------------------------|-----------|------------|-------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|-----|
|       |      |     |            |          |          |                 |                 |                         |           |            |       |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |
| 0554  | CULG | 15  | 0633       | 0636U    | 0643U    | S15             | W25             | 3601                    | 02        | 13.4       | 10U   | SF         |      |            | P    | 0636         | 50                                  | .6               |         |     |
| 0555  | LEAR | 15  | 0645       | 0647     | 0700     | S02             | E30             | 3607                    | 02        | 17.5       | 15    | SF         |      | 3          | C    |              | 41                                  |                  |         |     |
| 0556  |      | 15  | 0719       | 0722     | 0755     | S12             | W26             | 3601                    | 02        | 13.3       | 36    | 1B         |      |            |      |              | 260                                 | 2.2              | EF1     |     |
|       | LEAR | 15  | 0719       | 0722     | 0755     | S12             | W26             | 3601                    | 02        | 13.3       | 36    | 1B         |      | 3          | C    |              | 319                                 |                  | FE      |     |
|       | CULG | 15  | 0720E      | 0722U    | 0737D    | S12             | W27             | 3601                    | 02        | 13.3       | 17D   | 1N         |      |            | P    | 0722         | 200                                 | 2.2              | I       |     |
| 0557  | LEAR | 15  | 0834       | 0836     | 0841     | N00             | E29             | 3607                    | 02        | 17.5       | 7     | SF         |      | 3          | C    |              | 24                                  |                  |         |     |
| 0558  | LEAR | 15  | 0926       | 0929     | 0941     | S11             | W52             | 3603                    | 02        | 11.5       | 15    | SN         |      |            | 3    | C            |                                     | 40               |         |     |
|       |      |     | 15         | 1027     |          | 1029            | No Flare Patrol |                         |           |            |       |            |      |            |      |              |                                     |                  |         |     |
| 0559  | RAMY | 15  | 1252       | 1254     | 1259     | N01             | E27             | 3607                    | 02        | 17.5       | 7     | SN         |      |            | 3    | C            |                                     | 30               |         |     |
| 0560  | RAMY | 15  | 1255       | 1300     | 1302     | S11             | W54             | 3603                    | 02        | 11.5       | 7     | SF         |      |            | 3    | C            |                                     | 20               |         |     |
| 0561  |      | 15  | 1320       | 1321*    | 1418     | N00             | E27             | 3607                    | 02        | 17.6       | 58    | SB         |      |            |      |              | 108                                 |                  | K       |     |
|       | RAMY | 15  | 1320       | 1321     | 1418     | N00             | E27             | 3607                    | 02        | 17.6       | 58    | SB         |      |            | 3    | C            |                                     | 143              |         | K   |
|       | RAMY | 15  | 1320       | 1400     | 1418     | N00             | E27             | 3607                    | 02        | 17.6       | 58    | SN         |      |            | 3    | C            |                                     | 74               |         | K   |
| 0562  |      | 15  | 1425       | 1425*    | 1446     | S01             | E29             | 3607                    | 02        | 17.8       | 21    | SN         |      |            |      |              | 36                                  |                  | K       |     |
|       | RAMY | 15  | 1425       | 1425     | 1446     | S01             | E29             | 3607                    | 02        | 17.8       | 21    | SF         |      |            | 3    | C            |                                     | 29               |         | K   |
|       | RAMY | 15  | 1425       | 1440     | 1446     | S01             | E29             | 3607                    | 02        | 17.8       | 21    | SN         |      |            | 3    | C            |                                     | 44               |         | K   |
|       |      | 15  | 1610       |          | 1617     | No Flare Patrol |                 |                         |           |            |       |            |      |            |      |              |                                     |                  |         |     |
|       |      | 15  | 1621       |          | 1623     | No Flare Patrol |                 |                         |           |            |       |            |      |            |      |              |                                     |                  |         |     |
| 0563  | HOLL | 15  | 1721       | 1729     | 1800     | S02             | E23             | 3607                    | 02        | 17.4       | 39    | SN         |      |            | 3    | C            |                                     | 71               |         | F   |
| 0564  | HOLL | 15  | 1727       | 1728     | 1733     | S12             | W56             | 3603                    | 02        | 11.5       | 6     | SF         |      |            | 3    | C            |                                     | 18               |         | H   |
| 0565  | HOLL | 15  | 1747       | 1749     | 1753     | N11             | E70             | 3610                    | 02        | 21.0       | 6     | SF         |      |            | 3    | C            |                                     | 13               |         |     |
| 0566  | HOLL | 15  | 1802       | 1804     | 1817     | N00             | E24             | 3607                    | 02        | 17.5       | 15    | SN         |      |            |      |              | 90                                  |                  | F       |     |
|       |      |     | 15         | 1828     |          | 1837            | No Flare Patrol |                         |           |            |       |            |      |            |      |              |                                     |                  |         |     |
| 0567  |      | 15  | 19261      | 19282    | 1938     | S15             | W32             | 3601                    | 02        | 13.4       | 12    | SN         |      |            |      |              | 31                                  |                  |         |     |
|       | HOLL | 15  | 1926       | 1930     | 1935     | S15             | W32             | 3601                    | 02        | 13.4       | 9     | SF         |      |            | 3    | C            |                                     | 28               |         |     |
|       | RAMY | 15  | 1927       | 1928     | 1942     | S15             | W32             | 3601                    | 02        | 13.4       | 15    | SN         |      |            | 3    | C            |                                     | 34               |         |     |
| 0568  | HOLL | 15  | 2000       | 2000     | 2010     | S11             | W72             | 3594                    | 02        | 10.4       | 10    | SF         |      |            | 3    | C            |                                     | 18               |         |     |
| 0569  | HOLL | 15  | 2018       | 2019     | 2024     | S10             | W46             | 3600                    | 02        | 12.4       | 6     | SF         |      |            | 3    | C            |                                     | 19               |         |     |
| 0570  |      | 15  | 2029       | 2036     | 2100     | N16             | W24             | 3602                    | 02        | 14.0       | 31    | SN         |      |            |      |              | 33                                  | .5               | F       |     |
|       | CULG | 15  | 2027U      | 2037U    | 2050U    | N18             | W24             | 3602                    | 02        | 14.0       | 23U   | SN         |      |            |      | P            | 2037                                | 40               | .5      |     |
|       | HOLL | 15  | 2029       | 2036     | 2100     | N14             | W24             | 3602                    | 02        | 14.0       | 31    | SF         |      |            | 3    | C            |                                     | 26               |         | F   |
| 0571  | CULG | 15  | 2119       | 2123U    | 2132     | N06             | E22             | 3607                    | 02        | 17.5       | 13    | SF         |      |            |      | P            | 2123                                | 40               | .4      |     |
| 0572  |      | 15  | 22242      | 2228     | 2251     | N06             | E20             | 3607                    | 02        | 17.4       | 27    | SF         |      |            |      |              | 44                                  | .7               | FJW     |     |
|       | CULG | 15  | 2224       | 2227U    | 2240     | N06             | E21             | 3607                    | 02        | 17.5       | 16    | SF         |      |            |      | P            | 2227                                | 60               | .7      | FWJ |
|       | HOLL | 15  | 2226       | 2228     | 2302     | N05             | E20             | 3607                    | 02        | 17.4       | 36    | SF         |      |            | 3    | C            |                                     | 28               |         | F   |
| 0573  | HOLL | 15  | 2225       | 2227     | 2247     | N12             | E67             | 3610                    | 02        | 21.0       | 22    | SF         |      |            | 3    | C            |                                     | 25               |         |     |
| 0574  |      | 16  | 01022      | 01063    | 0123     | S00             | E20             | 3607                    | 02        | 17.5       | 21    | 1N         |      |            |      |              | 272                                 | 3.2              | EFHJ    |     |
|       | CULG | 16  | 0102       | 0106     | 0129     | N01             | E20             | 3607                    | 02        | 17.5       | 27    | 1B         |      |            |      | C            | 0106                                | 280              | 3.1     |     |
|       | VORO | 16  | 0103       | 0106     | 0126     | S01             | E20             | 3607                    | 02        | 17.5       | 23    | 1N         |      |            |      | C            | 0106                                | 376              | 4.1     | J   |
|       | YUNN | 16  | 0104       | 0107     | 0120     | S01             | E21             | 3607                    | 02        | 17.6       | 16    | 1N         |      |            |      | C            |                                     | 321              | 3.6     |     |
|       | PURP | 16  | 0104       | 0108     | 0121     | N00             | E20             | 3607                    | 02        | 17.5       | 17    | SN         |      |            |      | C            | 0108                                | 172              | 1.9     | E   |
|       | LEAR | 16  | 0104       | 0109     | 0122     | N00             | E21             | 3607                    | 02        | 17.6       | 18    | 1N         |      |            | 2    | C            |                                     | 213              |         | FH. |
| 0575  | LEAR | 16  | 0142       | 0155     | 0158     | N05             | E32             | 3608                    | 02        | 18.5       | 16    | SF         |      |            | 2    | C            |                                     | 21               |         |     |
| 0576  | PEKG | 16  | 0427E      | 0453     | 0513D    | N11             | E66             | 3610                    | 02        | 21.1       | 46D   | SN         |      |            |      | P            | 0453                                | 63               |         | E   |
| 0577  | CULG | 16  | 0628       | 0630     | 0639     | N14             | E59             | 3610                    | 02        | 20.7       | 11    | SF         |      |            |      | C            | 0630                                | 30               | .6      |     |

H - ALPHA SOLAR FLARES

53  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Area Measurement |                                     |                  | Remarks |     |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|-------|------------|------|------------------|-------------------------------------|------------------|---------|-----|
|       |      |     |            |          |          |                 |     |                         |           |      |              |            |       |            |      | Time (UT)        | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |     |
| 0578  |      | 16  | 0650*      | 0755     | 0800     | N12             | E64 | 3610                    | 02        | 21.1 | 70           | SN         |       |            |      |                  | 40                                  | 1.0              | D       |     |
|       | ISTA | 16  | 0650       |          | 0800     | N10             | E66 | 3610                    | 02        | 21.2 | 70           | SN         |       |            |      |                  |                                     |                  | D       |     |
|       | CULG | 16  | 0750       | 0755     | 0800     | N15             | E63 | 3610                    | 02        | 21.1 | 10           | SN         |       | C          | 0755 |                  | 40                                  | 1.0              |         |     |
| 0579  |      | 16  | 07492      | 0752     | 0808     | N02             | E17 | 3607                    | 02        | 17.6 | 19           | SF         |       |            |      |                  | 26                                  | .2               |         |     |
|       | CULG | 16  | 0749       | 0752     | 0806     | N02             | E17 | 3607                    | 02        | 17.6 | 17           | SF         |       | C          | 0752 |                  | 20                                  | .2               |         |     |
|       | LEAR | 16  | 0751       | 0752     | 0809     | N01             | E17 | 3607                    | 02        | 17.6 | 18           | SF         |       | 3          | C    |                  | 31                                  |                  |         |     |
| 0580  | LEAR | 16  | 0909E      | 0910     | 0915     | S09             | W77 | 3594                    | 02        | 10.6 | 6D           | SF         |       | 3          | C    |                  |                                     |                  |         |     |
| 0581  | YUNN | 16  | 0910       | 0914     | 0921     | N11             | E16 | 3609                    | 02        | 17.6 | 11           | SN         |       |            | C    |                  | 32                                  | .4               | D       |     |
| 0582  |      | 16  | 1003       | 10061    | 1055D    | N00             | E16 | 3607                    | 02        | 17.6 | 52D          | SN         | C 2.4 |            |      |                  | 178                                 | 1.8              | EFH     |     |
|       | KHAR | 16  | 0959E      | 1006     | 1055D    | N02             | E16 | 3607                    | 02        | 17.6 | 56D          | SN         |       |            | V    | 1006             |                                     |                  | EH      |     |
|       | HTPR | 16  | 1003       |          | 1019D    | N00             | E16 | 3607                    | 02        | 17.6 | 16D          | SB         | C 2.4 |            | C    | 1006             |                                     | 180              | 1.8     | E   |
|       | LEAR | 16  | 1003       | 1007     | 1019D    | S01             | E15 | 3607                    | 02        | 17.5 | 16D          | SN         |       | 3          | C    |                  | 176                                 |                  | F       |     |
| 0583  | HTPR | 16  | 1008       | 1010     | 1016     | N02             | E21 | 3607                    | 02        | 18.0 | 8            | SF         |       |            | C    | 1010             |                                     | 20               | .2      |     |
|       |      | 16  | 1150       |          | 1223     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |                  |                                     |                  |         |     |
|       |      | 16  | 1237       |          | 1242     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |                  |                                     |                  |         |     |
|       |      | 16  | 1252       |          | 1257     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |                  |                                     |                  |         |     |
| 0584  |      | 16  | 1256E      | 1302     | 1332     | N00             | E16 | 3607                    | 02        | 17.7 | 36D          | SB         |       |            |      |                  | 122                                 | 1.4              |         |     |
|       | ATHN | 16  | 1256E      | 1302     | 1332     | N01             | E18 | 3607                    | 02        | 17.9 | 36D          | SB         |       | 2          | V    | 1302             |                                     | 143              | 1.6     |     |
|       | WEND | 16  | 1304E      |          | 1314D    | S01             | E14 | 3607                    | 02        | 17.6 | 10D          | SN         |       |            | C    | 1305             |                                     | 100              | 1.1     |     |
| 0585  |      | 16  | 15067      | 1516     | 1858     | N00             | E12 | 3607                    | 02        | 17.5 | 232          | SB         |       |            |      |                  | 99                                  |                  | K       |     |
|       | RAMY | 16  | 1506       | 1516     | 1859     | N00             | E12 | 3607                    | 02        | 17.5 | 233          | SB         |       | 3          | C    |                  | 99                                  |                  | K       |     |
|       | HOLL | 16  | 1513       | 1516     | 1858     | N01             | E11 | 3607                    | 02        | 17.4 | 225          | SN         |       | 3          | C    |                  | 99                                  |                  | K       |     |
| 0586  |      | 16  | 15067      | 16338    | 1831     | N01             | E12 | 3607                    | 02        | 17.5 | 205          | SB         |       |            |      |                  | 110                                 | .8               | EFK     |     |
|       | RAMY | 16  | 1506       | 1637     | 1859     | N00             | E12 | 3607                    | 02        | 17.5 | 233          | SB         |       | 3          | C    |                  | 126                                 |                  | FEK     |     |
|       | HOLL | 16  | 1513       | 1633     | 1858     | N01             | E11 | 3607                    | 02        | 17.4 | 225          | SB         |       | 3          | C    |                  | 124                                 |                  | FEK     |     |
|       | BIGB | 16  | 1636E      | 1641     | 1737     | N01             | E12 | 3607                    | 02        | 17.6 | 61D          | SN         |       | 3          | P    | 1641             |                                     | 80               | .8      |     |
| 0587  | RAMY | 16  | 1556       | 1556     | 1639     | N11             | E13 | 3609                    | 02        | 17.6 | 43           | SF         |       | 3          | C    |                  | 31                                  |                  |         |     |
| 0588  |      | 16  | 16421      | 1644     | 1648     | S15             | W42 | 3601                    | 02        | 13.5 | 6            | SF         |       |            |      |                  | 26                                  |                  |         |     |
|       | RAMY | 16  | 1642       | 1644     | 1649     | S15             | W42 | 3601                    | 02        | 13.5 | 7            | SF         |       | 3          | C    |                  | 28                                  |                  |         |     |
|       | HOLL | 16  | 1643       | 1644     | 1648     | S15             | W42 | 3601                    | 02        | 13.5 | 5            | SF         |       | 3          | C    |                  | 23                                  |                  |         |     |
| 0589  |      | 16  | 22431      | 22442    | 2310     | N00             | E08 | 3607                    | 02        | 17.5 | 27           | SN         |       |            |      |                  | 67                                  | .8               | F       |     |
|       | CULG | 16  | 2243       | 2246     | 2308     | N01             | E08 | 3607                    | 02        | 17.5 | 25           | SN         |       |            | C    | 2246             |                                     | 100              | 1.0     |     |
|       | HOLL | 16  | 2244       | 2244     | 2306D    | S00             | E08 | 3607                    | 02        | 17.5 | 22D          | SN         |       | 3          | C    |                  | 31                                  |                  | F       |     |
|       | BIGB | 16  | 2244       | 2245     | 2312     | N00             | E09 | 3607                    | 02        | 17.6 | 28           | SN         |       | 3          | C    | 2245             |                                     | 70               | .7      |     |
|       |      | 17  | 0940       |          | 1410     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |                  |                                     |                  |         |     |
| 0590  | CULG | 17  | 0016       | 0026     | 0033     | N05             | E05 | 3607                    | 02        | 17.4 | 17           | SF         |       |            | C    | 0026             |                                     | 20               | .2      |     |
| 0591  | CULG | 17  | 0055       | 0058     | 0103     | N12             | E50 | 3610                    | 02        | 20.8 | 8            | SN         |       |            | C    | 0058             |                                     | 60               | 1.0     |     |
| 0592  |      | 17  | 0114       | 01191    | 0126     | N12             | E50 | 3610                    | 02        | 20.8 | 12           | 1B         | C 2.2 |            |      |                  | 113                                 | 1.8              |         |     |
|       | CULG | 17  | 0114       | 0120     | 0129     | N14             | E49 | 3610                    | 02        | 20.7 | 15           | 1B         |       |            | C    | 0120             |                                     | 140              | 2.1     |     |
|       | PURP | 17  | 0118E      | 0119     | 0122     | N10             | E50 | 3610                    | 02        | 20.8 | 4D           | SB         | C 2.2 |            | P    | 0119             |                                     | 86               | 1.5     |     |
| 0593  | CULG | 17  | 0244       | 0253     | 0302     | N12             | E49 | 3610                    | 02        | 20.8 | 18           | SN         |       |            | C    | 0253             |                                     | 70               | 1.2     |     |
| 0594  |      | 17  | 03204      | 03271    | 0337     | N10             | E50 | 3610                    | 02        | 20.9 | 17           | SN         | C 2.8 |            |      |                  | 106                                 | 1.8              |         |     |
|       | CULG | 17  | 0320       | 0328     | 0337     | N12             | E49 | 3610                    | 02        | 20.8 | 17           | SN         |       |            | C    | 0328             |                                     | 100              | 1.7     |     |
|       | PURP | 17  | 0324       | 0327     | 0328D    | N09             | E50 | 3610                    | 02        | 20.9 | 4D           | SF         | C 2.8 |            | P    | 0327             |                                     | 112              | 1.9     |     |
| 0595  | CULG | 17  | 0438       | 0439     | 0447     | N01             | E09 | 3607                    | 02        | 17.9 | 9            | SF         |       |            | C    | 0439             |                                     | 30               | .3      |     |
| 0596  | PEKG | 17  | 0507E      | 0507     | 0507D    | N11             | E49 | 3610                    | 02        | 20.9 | 9D           | SF         |       |            | P    | 0507             |                                     | 59               | 1.0     | E   |
| 0597  | ABST | 17  | 0558E      | 0701     | 0710D    | N11             | E47 | 3610                    | 02        | 20.8 | 72D          | 1N         |       |            | P    | 0701             |                                     | 262              | 4.2     | FJ  |
| 0598  | ABST | 17  | 0629       | 0630     | 0632     | N05             | E06 | 3607                    | 02        | 17.7 | 3            | SF         |       |            | C    | 0630             |                                     | 87               | .9      | DJV |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/ | CMP | Dur  | Imp | Obs | Area | Measurement | Corr | Remarks |         |      |      |     |
|-------|------|-----|------------|----------|----------|-----|-----|-------|-----|------|-----|-----|------|-------------|------|---------|---------|------|------|-----|
|       |      |     |            |          |          |     |     | USAF/ |     |      |     |     |      |             |      |         | Reg lon | Mo   | Day  | Opt |
| 0599  |      | 17  | 0643*      | 07108    | 0734     | N00 | E04 | 3607  | 02  | 17.6 | 51  | SB  | C    | 2.2         |      | 139     | 1.4     | EFJK |      |     |
|       | ABST | 17  | 0643       | 0710     | 0712D    | N01 | E05 | 3607  | 02  | 17.6 | 29D | 1N  |      |             | P    | 0710    | 306     | 3.2  | FJK  |     |
|       | CULG | 17  | 0708       | 0714     | 0725D    | N01 | E04 | 3607  | 02  | 17.6 | 17D | SN  | C    | 2.2         | P    | 0714    | 80      | .8   |      |     |
|       | TACH | 17  | 0710       | 0718     | 0738     | S00 | E04 | 3607  | 02  | 17.6 | 28  | SB  |      |             | C    | 0718    | 106     | 1.1  | E    |     |
|       | YUNN | 17  | 0714E      | 0714U    | 0731     | N00 | E03 | 3607  | 02  | 17.5 | 17D | SB  |      |             | P    | 0714    | 64      | .7   |      |     |
| 0600  | ABST | 17  | 0729E      | 0729     | 0733D    | N11 | E47 | 3610  | 02  | 20.8 | 4D  | 1N  |      |             | P    | 0729    | 262     | 4.2  | EJ   |     |
| 0601  |      | 17  | 0747       | 0750     | 0758     | N10 | E48 | 3610  | 02  | 20.9 | 11  | 1B  | C    | 3.2         |      |         | 159     | 2.7  |      |     |
|       | ISTA | 17  | 0747       |          | 0756     | N10 | E48 | 3610  | 02  | 20.9 | 9   | 1N  |      |             |      |         |         |      |      |     |
|       | ATHN | 17  | 0747       | 0750     | 0800     | N11 | E49 | 3610  | 02  | 21.0 | 13  | 1B  | C    | 3.2         | 2    | V       | 0750    | 159  | 2.7  |     |
| 0602  | BIGB | 17  | 1855       | 1856     | 1938     | N11 | E11 | 3608  | 02  | 18.6 | 43  | SF  |      |             | 3    | C       | 1856    | 80   | .8   |     |
| 0603  | BIGB | 17  | 1935       | 1939     | 1956     | N07 | E16 | 3608  | 02  | 19.0 | 21  | SF  |      |             | 3    | C       | 1936    | 120  | 1.2  |     |
| 0604  | BIGB | 17  | 1943       | 1946     | 1958     | N11 | E40 | 3610  | 02  | 20.8 | 15  | SN  |      |             | 3    | C       | 1946    | 90   | 1.2  |     |
| 0605  |      | 17  | 2132       | 2142*    | 2248     | S00 | W05 | 3607  | 02  | 17.5 | 76  | 1B  |      |             |      |         | 225     | 2.3  | J    |     |
|       | CULG | 17  | 2132       | 2142     | 2300U    | N00 | W05 | 3607  | 02  | 17.5 | 88U | 1B  |      |             | P    | 2142    | 290     | 2.9  | J    |     |
|       | BIGB | 17  | 2151E      | 2156     | 2248     | S01 | W05 | 3607  | 02  | 17.5 | 57D | SN  |      |             | 3    | P       | 2156    | 160  | 1.7  |     |
| 0606  |      | 17  | 23234      | 23303    | 2354     | N13 | E35 | 3610  | 02  | 20.6 | 31  | 1B  |      |             |      |         | 245     | 3.2  | DHJV |     |
|       | CULG | 17  | 2323       | 2330     | 2410     | N14 | E34 | 3610  | 02  | 20.5 | 47  | 2B  |      |             | C    | 2330    | 400     | 5.2  | VJ   |     |
|       | VORO | 17  | 2326E      |          | 2351     | N13 | E36 | 3610  | 02  | 20.7 | 25D | 1N  |      |             | C    | 2332    | 367     | 4.9  | DJ   |     |
|       | BIGB | 17  | 2326       | 2333     | 2356     | N13 | E37 | 3610  | 02  | 20.8 | 30  | SB  |      |             | 3    | C       | 2333    | 130  | 1.7  |     |
|       | MITK | 17  | 2327       | 2332     | 2349     | N12 | E35 | 3610  | 02  | 20.6 | 22  | 1N  |      |             | C    | 2332    | 160     | 2.2  | H    |     |
|       | MANI | 17  | 2328E      | 2332     | 2343     | N12 | E35 | 3610  | 02  | 20.6 | 15D | 1B  |      |             | 1    | V       | 170     | 2.3  |      |     |
| 0607  | CULG | 18  | 0005       | 0009     | 0027     | N05 | W09 | 3607  | 02  | 17.3 | 22  | SN  |      |             |      | C       | 0009    | 30   | .3   |     |
| 0608  |      | 18  | 0009*      | 00343    | 0059     | N01 | W06 | 3607  | 02  | 17.5 | 50  | SN  |      |             |      |         | 159     | 1.6  | EFJK |     |
|       | CULG | 18  | 0009       | 0034     | 0100     | N01 | W06 | 3607  | 02  | 17.5 | 51  | SB  |      |             | C    | 0034    | 150     | 1.5  | JKF  |     |
|       | VORO | 18  | 0033       | 0037     | 0058     | N00 | W07 | 3607  | 02  | 17.5 | 25  | 1F  |      |             | C    | 0037    | 206     | 2.1  | EJ   |     |
|       | MANI | 18  | 0034E      | 0035U    | 0047D    | N03 | W05 | 3607  | 02  | 17.6 | 13D | SN  |      |             | 1    | V       | 120     | 1.3  | F    |     |
| 0609  | YUNN | 18  | 0111       | 0112     | 0113     | N01 | W06 | 3607  | 02  | 17.6 | 2   | SN  |      |             |      | C       |         | 64   | .7   |     |
| 0610  | CULG | 18  | 0130       | 0134     | 0139     | N11 | E36 | 3610  | 02  | 20.8 | 9   | SF  |      |             |      | C       | 0134    | 40   | .5   |     |
| 0611  |      | 18  | 0226*      | 02401    | 0248     | N14 | E33 | 3610  | 02  | 20.6 | 22  | SN  |      |             |      |         | 56      | .7   | FJK  |     |
|       | CULG | 18  | 0226       | 0241     | 0252     | N14 | E33 | 3610  | 02  | 20.6 | 26  | SN  |      |             | C    | 0241    | 80      | 1.0  | JFK  |     |
|       | YUNN | 18  | 0240       | 0240     | 0244     | N13 | E33 | 3610  | 02  | 20.6 | 4   | SN  |      |             | C    |         | 32      | .4   |      |     |
| 0612  | VORO | 18  | 0227       | 0229     | 0234     | S01 | W07 | 3607  | 02  | 17.6 | 7   | 1F  |      |             |      | C       | 0229    | 314  | 3.2  | EJK |
| 0613  |      | 18  | 0321       | 0323     | 0346     | N00 | W07 | 3607  | 02  | 17.6 | 25  | SB  |      |             |      |         | 83      | .8   | DFJK |     |
|       | MANI | 18  | 0313E      | 0323     | 0332D    | N01 | W07 | 3607  | 02  | 17.6 | 19D | SN  |      |             | 1    | V       | 70      | .7   | F    |     |
|       | CULG | 18  | 0321       | 0323     | 0346     | N00 | W08 | 3607  | 02  | 17.5 | 25  | SB  |      |             | C    | 0323    | 100     | 1.0  | JK   |     |
|       | YUNN | 18  | 0324E      | 0324U    | 0346     | S00 | W07 | 3607  | 02  | 17.6 | 22D | SB  |      |             | P    | 0324    | 80      | .8   | D    |     |
| 0614  |      | 18  | 03373      | 0341     | 0350     | N11 | E34 | 3610  | 02  | 20.7 | 13  | SN  |      |             |      |         | 72      | .9   | DEJ  |     |
|       | CULG | 18  | 0337       | 0341     | 0353     | N11 | E35 | 3610  | 02  | 20.8 | 16  | SN  |      |             | C    | 0341    | 80      | 1.0  | JD   |     |
|       | YUNN | 18  | 0340       | 0343U    | 0346     | N11 | E34 | 3610  | 02  | 20.7 | 6   | SN  |      |             | P    | 0343    | 64      | .8   | E    |     |
| 0615  |      | 18  | 0404       | 0410     | 0422     | N04 | W03 | 3607  | 02  | 17.9 | 18  | SN  |      |             |      |         | 59      | .6   | E    |     |
|       | CULG | 18  | 0404       | 0410     | 0425     | N04 | W03 | 3607  | 02  | 17.9 | 21  | SF  |      |             | C    | 0410    | 70      | .7   | E    |     |
|       | YUNN | 18  | 0411E      | 0411U    | 0419     | N04 | W03 | 3607  | 02  | 18.0 | 8D  | SN  |      |             | P    | 0411    | 48      | .5   | E    |     |
| 0616  |      | 18  | 0443       | 0449     | 0525     | N13 | E32 | 3610  | 02  | 20.6 | 42  | 1B  |      |             |      |         | 232     | 3.0  | EJUT |     |
|       | CULG | 18  | 0443       | 0449     | 0525     | N14 | E32 | 3610  | 02  | 20.6 | 42  | 2B  |      |             | C    | 0449    | 400     | 5.2  | UJT  |     |
|       | YUNN | 18  | 0448E      | 0448U    | 0453D    | N12 | E31 | 3610  | 02  | 20.5 | 5D  | SB  |      |             | P    | 0448    | 64      | .8   | E    |     |
| 0617  |      | 18  | 0647       | 0651     | 0718     | N11 | E38 | 3610  | 02  | 21.1 | 31  | SB  |      |             |      |         | 32      | .4   | U    |     |
|       | ISTA | 18  | 0640E      |          | 0735     | N11 | E39 | 3610  | 02  | 21.2 | 55D | SB  |      |             |      |         |         |      | U    |     |
|       | YUNN | 18  | 0647       | 0651     | 0702     | N11 | E36 | 3610  | 02  | 21.0 | 15  | SN  |      |             | C    |         | 32      | .4   |      |     |
| 0618  |      | 18  | 07223      | 0726     | 0740     | N10 | E33 | 3610  | 02  | 20.8 | 18  | SN  |      |             |      |         | 48      | .6   | D    |     |
|       | YUNN | 18  | 0722       | 0726     | 0740     | N12 | E32 | 3610  | 02  | 20.7 | 18  | SN  |      |             | C    |         | 48      | .6   | D    |     |
|       | ISTA | 18  | 0725       |          | 0740     | N08 | E34 | 3610  | 02  | 20.8 | 15  | SN  |      |             |      |         |         |      | D    |     |

H - ALPHA SOLAR FLARES

55  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |    |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|------------|-------|------------|------|--------------|-------------------------------------|------------------|---------|----|
|       |      |     |            |          |          |                 |     |                         |           |            |              |            |       |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |    |
| 0619  |      | 18  | 08154      | 0827     | 0840     | N08             | E32 | 3610                    | 02        | 20.7       | 25           | SF         |       |            |      |              |                                     |                  |         | BD |
|       | ISTA | 18  | 0815       |          | 0833     | N08             | E34 | 3610                    | 02        | 20.9       | 18           | SF         |       |            |      |              |                                     |                  |         | BD |
|       | KANZ | 18  | 0819       | 0827     | 0848     | N09             | E31 | 3610                    | 02        | 20.7       | 29           | SF         |       | 2          |      |              |                                     |                  |         |    |
| 0620  |      | 18  | 08295      | 0833     | 0840     | N04             | W13 | 3607                    | 02        | 17.4       | 11           | SF         |       |            |      |              |                                     |                  |         | D  |
|       | KANZ | 18  | 0829       | 0833     | 0840     | N04             | W14 | 3607                    | 02        | 17.3       | 11           | SF         |       | 2          |      |              |                                     |                  |         | D  |
|       | ISTA | 18  | 0834       |          | 0840     | N03             | W12 | 3607                    | 02        | 17.5       | 6            | SF         |       |            |      |              |                                     |                  |         |    |
| 0621  |      | 18  | 0903       | 09051    | 0926     | N11             | E31 | 3610                    | 02        | 20.7       | 23           | SN         | M 1.8 |            |      |              | 106                                 | 1.4              | L       |    |
|       | KANZ | 18  | 0903       | 0906     | 0927     | N10             | E30 | 3610                    | 02        | 20.6       | 24           | 1B         | M 1.8 | 3          |      |              |                                     |                  | L       |    |
|       | MANI | 18  | 0904E      | 0905     | 0910D    | N12             | E31 | 3610                    | 02        | 20.7       | 6D           | SF         |       | 1          | V    |              | 150                                 | 2.0              |         |    |
|       | WEND | 18  | 0913E      |          | 0925     | N10             | E31 | 3610                    | 02        | 20.7       | 12D          | SN         |       |            | C    | 0913         | 63                                  | .8               |         |    |
| 0622  | HTPR | 18  | 1250       | 1252     | 1255     | N03             | W12 | 3607                    | 02        | 17.6       | 5            | SF         |       |            | C    | 1252         | 20                                  | .2               |         |    |
| 0623  |      | 18  | 1305       | 1324     | 1400     | N01             | W13 | 3607                    | 02        | 17.6       | 55           | SB         | M 3.4 |            |      |              | 120                                 | 1.2              | E       |    |
|       | HTPR | 18  | 1305       | 1324     | 1342     | N03             | W12 | 3607                    | 02        | 17.6       | 37           | SB         |       |            | C    | 1324         | 80                                  | .8               | E       |    |
|       | HTPR | 18  | 1305       | 1324     | 1418     | S01             | W14 | 3607                    | 02        | 17.5       | 73           | SB         | M 3.4 |            | C    | 1324         | 100                                 | 1.0              | E       |    |
|       | WEND | 18  | 1322E      |          | 1343D    | N01             | W14 | 3607                    | 02        | 17.5       | 21D          | SB         |       |            | C    | 1328         | 181                                 | 1.9              | E       |    |
| 0624  | HTPR | 18  | 1457       | 1524     | 1532     | N04             | W13 | 3607                    | 02        | 17.6       | 35           | SF         |       |            | C    | 1524         | 20                                  | .2               |         |    |
| 0625  | HTPR | 18  | 1522       | 1524     | 1530     | N11             | E27 | 3610                    | 02        | 20.7       | 8            | SF         |       |            | C    | 1524         | 20                                  | .2               |         |    |
| 0626  | HTPR | 18  | 1610       |          | 1625D    | N04             | W15 | 3607                    | 02        | 17.5       | 15D          | SN         |       |            | C    | 1624         | 120                                 | 1.2              | E       |    |
|       |      | 18  | 1722       |          | 1728     | No Flare Patrol |     |                         |           |            |              |            |       |            |      |              |                                     |                  |         |    |
|       |      | 18  | 1744       |          | 1749     | No Flare Patrol |     |                         |           |            |              |            |       |            |      |              |                                     |                  |         |    |
|       |      | 18  | 1833       |          | 1851     | No Flare Patrol |     |                         |           |            |              |            |       |            |      |              |                                     |                  |         |    |
| 0627  | CULG | 18  | 2037       | 2039U    | 2051     | N14             | E35 | 3610                    | 02        | 21.5       | 14           | SN         |       |            | P    | 2039         | 60                                  | .8               |         |    |
| 0628  |      | 18  | 20395      | 20489    | 2130     | N17             | W62 | 3602                    | 02        | 14.1       | 51           | SN         |       |            |      |              | 75                                  | 1.8              |         |    |
|       | BIGB | 18  | 2039       | 2057     | 2129     | N18             | W63 | 3602                    | 02        | 14.1       | 50           | SN         |       | 3          | C    | 2057         | 80                                  | 1.8              |         |    |
|       | CULG | 18  | 2044       | 2048     | 2130     | N16             | W62 | 3602                    | 02        | 14.2       | 46           | SF         |       |            | C    | 2048         | 70                                  | 1.7              |         |    |
| 0629  | CULG | 18  | 2107       | 2114     | 2132     | S03             | W18 | 3607                    | 02        | 17.5       | 25           | SN         |       |            | C    | 2114         | 80                                  | .8               | J       |    |
| 0630  | CULG | 18  | 2143       | 2145     | 2153     | S01             | W16 | 3607                    | 02        | 17.7       | 10           | SF         |       |            | C    | 2145         | 40                                  | .4               |         |    |
| 0631  | CULG | 18  | 2232       | 2234     | 2246     | S02             | W19 | 3607                    | 02        | 17.5       | 14           | SN         |       |            | C    | 2234         | 50                                  | .5               | J       |    |
| 0632  |      | 18  | 2300*      | 23353    | 2445     | N00             | W19 | 3607                    | 02        | 17.5       | 105          | SB         |       |            |      |              | 210                                 | 2.3              | EFJKT   |    |
|       | CULG | 18  | 2300       | 2336     | 2445     | S01             | W19 | 3607                    | 02        | 17.5       | 105          | 1B         |       |            | C    | 2336         | 300                                 | 3.3              | FKJT    |    |
|       | BIGB | 18  | 2331       | 2338     | 0017D    | S01             | W19 | 3607                    | 02        | 17.6       | 46D          | SB         |       | 3          | P    | 2338         | 150                                 | 1.6              |         |    |
|       | MANI | 18  | 2334E      | 2335     | 2355D    | N02             | W19 | 3607                    | 02        | 17.6       | 21D          | SN         |       | 1          | V    |              | 180                                 | 2.0              | FE      |    |
| 0633  |      | 18  | 2301       | 2307     | 2320     | N13             | W18 | 3609                    | 02        | 17.6       | 19           | SN         |       |            |      |              | 105                                 | 1.3              |         |    |
|       | BIGB | 18  | 2301       | 2307     | 2321     | N14             | W18 | 3609                    | 02        | 17.6       | 20           | SN         |       | 3          | C    | 2307         | 120                                 | 1.3              |         |    |
|       | LEAR | 18  | 2307E      | 2307     | 2318     | N12             | W18 | 3609                    | 02        | 17.6       | 11D          | SN         |       | 2          | C    |              | 90                                  |                  |         |    |
| 0634  | CULG | 18  | 2332       | 2334     | 2348     | S08             | W14 | 3612A                   | 02        | 17.9       | 16           | SN         |       |            | C    | 2334         | 100                                 | 1.0              |         |    |
| 0635  |      | 19  | 00053      | 0009     | 0013     | N12             | E20 | 3610                    | 02        | 20.5       | 8            | SF         |       |            |      |              | 30                                  | .4               | F       |    |
|       | CULG | 19  | 0005       | 0009     | 0016U    | N13             | E20 | 3610                    | 02        | 20.5       | 11U          | SF         |       |            | P    | 0009         | 40                                  | .4               |         |    |
|       | LEAR | 19  | 0008       | 0009     | 0013     | N11             | E21 | 3610                    | 02        | 20.6       | 5            | SF         |       | 3          | C    |              | 20                                  |                  | F       |    |
| 0636  |      | 19  | 0010       | 0028     | 0030D    | N20             | E45 | 3616                    | 02        | 22.4       | 20D          | SF         |       |            |      |              | 45                                  | .8               | F       |    |
|       | CULG | 19  | 0010       | 0028     | 0030U    | N21             | E46 | 3616                    | 02        | 22.5       | 20U          | SF         |       |            | P    | 0028         | 40                                  | .7               |         |    |
|       | MANI | 19  | 0014E      | 0014U    | 0022D    | N18             | E44 | 3616                    | 02        | 22.4       | 8D           | SF         |       | 1          | V    |              | 50                                  | .8               | F       |    |
| 0637  | MANI | 19  | 0014E      | 0015     | 0030D    | N01             | W20 | 3607                    | 02        | 17.5       | 16D          | SF         |       | 1          | V    |              | 150                                 | 1.7              |         |    |
| 0638  | YUNN | 19  | 0044E      | 0044U    | 0100     | S01             | W20 | 3607                    | 02        | 17.5       | 16D          | SN         |       |            | P    | 0044         | 113                                 | 1.2              | F       |    |
| 0639  |      | 19  | 00502      | 00532    | 0107     | N12             | E20 | 3610                    | 02        | 20.5       | 17           | SB         |       |            |      |              | 85                                  | .8               | DHJ     |    |
|       | CULG | 19  | 0050       | 0053     | 0115     | N14             | E20 | 3610                    | 02        | 20.5       | 25           | SB         |       |            | C    | 0053         | 80                                  | .9               | JD      |    |
|       | YUNN | 19  | 0051       | 0055     | 0100     | N12             | E20 | 3610                    | 02        | 20.5       | 9            | SN         |       |            | C    |              | 80                                  | .9               |         |    |
|       | LEAR | 19  | 0052       | 0054     | 0106     | N11             | E20 | 3610                    | 02        | 20.5       | 14           | SB         |       | 3          | C    |              | 120                                 |                  | H       |    |
|       | MANI | 19  | 0054E      | 0054U    | 0059D    | N11             | E20 | 3610                    | 02        | 20.5       | 5D           | SN         |       | 1          | V    |              | 60                                  | .7               |         |    |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray  | See | Obs<br>Type | Area Measurement |                                     |                  | Remarks |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|-----------|------------|--------------|------------|-------|-----|-------------|------------------|-------------------------------------|------------------|---------|
|       |      |     |            |          |          |     |     |                         |           |            |              |            |       |     |             | Time<br>(UT)     | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0640  | CULG | 19  | 0126       | 0128     | 0132     | N02 | W20 | 3607                    | 02        | 17.6       | 6            | SN         |       |     | C           | 0128             | 70                                  | .8               | DJ      |
| 0641  |      | 19  | 02361      | 02381    | 0246     | N02 | W20 | 3607                    | 02        | 17.6       | 10           | SF         |       |     |             |                  | 50                                  | .6               |         |
|       | CULG | 19  | 0236       | 0239     | 0247     | N02 | W21 | 3607                    | 02        | 17.5       | 11           | SF         |       |     | C           | 0239             | 50                                  | .6               |         |
|       | LEAR | 19  | 0237       | 0238     | 0244     | N02 | W19 | 3607                    | 02        | 17.7       | 7            | SF         |       | 3   | C           |                  | 51                                  |                  |         |
| 0642  | CULG | 19  | 0305       | 0307     | 0332     | N04 | W25 | 3607                    | 02        | 17.2       | 27           | SN         |       |     | C           | 0307             | 30                                  | .5               | LW      |
| 0643  | CULG | 19  | 0354       | 0401     | 0430     | N17 | E22 | 3610                    | 02        | 20.8       | 36           | SF         |       |     | C           | 0401             | 110                                 | 1.3              | EJ      |
| 0644  |      | 19  | 0423*      | 04547    | 0537     | N01 | W23 | 3607                    | 02        | 17.5       | 74           | 1B         | C 7.6 |     |             |                  | 358                                 | 4.1              | EFJKT   |
|       | CULG | 19  | 0423       | 0457     | 0535     | N00 | W23 | 3607                    | 02        | 17.5       | 72           | 1B         |       |     | C           | 0457             | 320                                 | 3.5              | FKJT    |
|       | LEAR | 19  | 0452       | 0454     | 0538     | N01 | W22 | 3607                    | 02        | 17.5       | 46           | 1B         |       | 3   | C           |                  | 332                                 |                  | FE      |
|       | PEKG | 19  | 0452E      | 0501     | 0537     | N01 | W23 | 3607                    | 02        | 17.5       | 45D          | 1N         | C 7.6 |     | C           | 0501             | 421                                 | 4.7              | F       |
| 0645  | CULG | 19  | 0458       | 0507     | 0516     | N12 | E67 | 3613                    | 02        | 24.2       | 18           | SF         |       |     | C           | 0507             | 50                                  |                  | EIJ     |
| 0646  |      | 19  | 04594      | 05013    | 0508     | N12 | E17 | 3610                    | 02        | 20.5       | 9            | SN         |       |     |             |                  | 116                                 | 1.6              | EF      |
|       | CULG | 19  | 0459       | 0504     | 0513     | N13 | E16 | 3610                    | 02        | 20.4       | 14           | SN         |       |     | C           | 0504             | 140                                 | 1.5              |         |
|       | PEKG | 19  | 0501E      | 0501     | 0504     | N12 | E17 | 3610                    | 02        | 20.5       | 3D           | SN         |       |     | P           | 0501             | 147                                 | 1.7              | E       |
|       | LEAR | 19  | 0503       | 0504     | 0507     | N11 | E18 | 3610                    | 02        | 20.6       | 4            | SN         |       | 3   | C           |                  | 61                                  |                  | F       |
| 0647  |      | 19  | 05562      | 05571    | 0616     | N05 | W21 | 3607                    | 02        | 17.7       | 20           | SN         |       |     |             |                  | 74                                  | .8               | EF      |
|       | CULG | 19  | 0556       | 0557     | 0615     | N05 | W22 | 3607                    | 02        | 17.6       | 19           | SN         |       |     | C           | 0557             | 70                                  | .8               | E       |
|       | LEAR | 19  | 0558       | 0558     | 0618     | N05 | W20 | 3607                    | 02        | 17.7       | 20           | SN         |       | 3   | C           |                  | 78                                  |                  | F       |
| 0648  | CULG | 19  | 0624       | 0628     | 0639     | N02 | W27 | 3607                    | 02        | 17.2       | 15           | SN         |       |     | C           | 0628             | 40                                  | .4               | DJV     |
| 0649  | ABST | 19  | 0632E      | 0635     | 0639D    | N02 | E70 | 3613                    | 02        | 24.5       | 7D           | 1F         |       |     | P           | 0635             | 175                                 |                  | E       |
| 0650  | CULG | 19  | 0640       | 0641     | 0645     | N14 | E23 | 3610                    | 02        | 21.0       | 5            | SF         |       |     | C           | 0641             | 30                                  | .4               |         |
| 0651  | CULG | 19  | 0706       | 0712     | 0719     | N08 | E69 | 3613                    | 02        | 24.5       | 13           | 1F         |       |     | C           | 0712             | 90                                  |                  | J       |
| 0652  |      | 19  | 08233      | 0827     | 0834     | N05 | W20 | 3607                    | 02        | 17.8       | 11           | SN         |       |     |             |                  | 43                                  | .4               | EF      |
|       | HPR  | 19  | 0823       | 0827     | 0837     | N06 | W20 | 3607                    | 02        | 17.8       | 14           | SF         |       |     | C           | 0827             | 40                                  | .4               | E       |
|       | LEAR | 19  | 0826       | 0827     | 0832     | N04 | W19 | 3607                    | 02        | 17.9       | 6            | SN         |       | 3   | C           |                  | 46                                  |                  | F       |
| 0653  | HPR  | 19  | 0918       | 0919     | 0922     | N03 | W25 | 3607                    | 02        | 17.5       | 4            | SF         |       |     | C           | 0919             | 20                                  | .2               |         |
| 0654  | HPR  | 19  | 1137       | 1140     | 1142     | N03 | W28 | 3607                    | 02        | 17.4       | 5            | SF         |       |     | C           | 1140             | 30                                  | .3               |         |
| 0655  |      | 19  | 11443      | 1152     | 1217     | N14 | E20 | 3610                    | 02        | 21.0       | 33           | SF         |       |     |             |                  | 118                                 | 1.3              | E       |
|       | HPR  | 19  | 1144       | 1152     | 1217     | N16 | E20 | 3610                    | 02        | 21.0       | 33           | SF         |       |     | C           | 1152             | 80                                  | .8               | E       |
|       | WEND | 19  | 1147       |          | 1237D    | N13 | E21 | 3610                    | 02        | 21.1       | 50D          | SF         |       |     | C           | 1153             | 156                                 | 1.8              | E       |
| 0656  |      | 19  | 1200*      | 1341*    | 1549     | N01 | W27 | 3607                    | 02        | 17.5       | 229          | 2B         |       |     |             |                  | 493                                 | 4.4              | EFU     |
|       | RAMY | 19  | 1200       | 1341     | 1636     | S00 | W27 | 3607                    | 02        | 17.5       | 276          | 2B         |       | 3   | C           |                  | 701                                 |                  | UF      |
|       | HPR  | 19  | 1325       |          | 1426D    | N03 | W27 | 3607                    | 02        | 17.5       | 61D          | 1N         |       |     | C           | 1346             | 240                                 | 2.6              | E       |
|       | WEND | 19  | 1355E      | 1359     | 1502     | S01 | W26 | 3607                    | 02        | 17.6       | 67D          | 2B         |       |     | C           | 1359             | 538                                 | 6.2              |         |
| 0657  | HPR  | 19  | 1242       | 1252     | 1304     | S01 | W24 | 3607                    | 02        | 17.7       | 22           | SN         |       |     | C           | 1252             | 50                                  | .5               | E       |
| 0658  |      | 19  | 1247*      | 13364    | 1358     | N00 | W16 | 3608                    | 02        | 18.3       | 71           | SF         |       |     |             |                  | 51                                  | .5               | E       |
|       | HPR  | 19  | 1247       |          | 1307D    | N00 | W16 | 3608                    | 02        | 18.3       | 20D          | SF         |       |     | C           | 1253             | 30                                  | .3               |         |
|       | HPR  | 19  | 1331       | 1340     | 1407     | N00 | W16 | 3608                    | 02        | 18.4       | 36           | SN         |       |     | C           | 1343             | 70                                  | .7               | E       |
|       | RAMY | 19  | 1333       | 1336     | 1349     | S00 | W15 | 3608                    | 02        | 18.4       | 16           | SF         |       | 3   | C           |                  | 52                                  |                  |         |
| 0659  | HPR  | 19  | 1338       | 1340     | 1348     | S06 | W21 | 3612A                   | 02        | 18.0       | 10           | SF         |       |     | C           | 1340             | 30                                  | .3               |         |
| 0660  |      | 19  | 1523       | 1538     | 1556     | S01 | W28 | 3607                    | 02        | 17.5       | 33           | 1N         |       |     |             |                  | 142                                 | 2.3              | F       |
|       | HOLL | 19  | 1415E      | 1415U    | 1556     | S01 | W27 | 3607                    | 02        | 17.6       | 101D         | SN         |       | 2   | C           |                  | 85                                  |                  | F       |
|       | WEND | 19  | 1523       | 1538     | 1603D    | S01 | W28 | 3607                    | 02        | 17.5       | 40D          | 1F         |       |     | C           | 1538             | 200                                 | 2.3              |         |
| 0661  |      | 19  | 16173      | 16211    | 1629     | N11 | E13 | 3610                    | 02        | 20.6       | 12           | SB         |       |     |             |                  | 135                                 | 1.0              | EF      |
|       | HPR  | 19  | 1617       | 1621     | 1627     | N11 | E14 | 3610                    | 02        | 20.7       | 10           | SN         |       |     | C           | 1621             | 120                                 | 1.2              | E       |
|       | RAMY | 19  | 1619       | 1621     | 1626     | N11 | E12 | 3610                    | 02        | 20.6       | 7            | SB         |       | 3   | C           |                  | 149                                 |                  |         |
|       | HOLL | 19  | 1619       | 1621     | 1628     | N10 | E12 | 3610                    | 02        | 20.6       | 9            | SB         |       | 3   | C           |                  | 190                                 |                  | F       |
|       | BIGB | 19  | 1620       | 1622     | 1636     | N11 | E13 | 3610                    | 02        | 20.6       | 16           | SN         |       | 3   | C           | 1622             | 80                                  | .8               |         |
| 0662  |      | 19  | 1746       | 17491    | 1800     | N10 | E12 | 3610                    | 02        | 20.6       | 14           | SN         |       |     |             |                  | 82                                  |                  |         |
|       | HOLL | 19  | 1746       | 1749     | 1759     | N09 | E12 | 3610                    | 02        | 20.6       | 13           | SN         |       | 3   | C           |                  | 94                                  |                  |         |
|       | RAMY | 19  | 1746       | 1750     | 1800     | N10 | E13 | 3610                    | 02        | 20.7       | 14           | SN         |       | 3   | C           |                  | 70                                  |                  |         |

## H - ALPHA SOLAR FLARES

57  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo Day | Dur<br>(Min) | Imp<br>Opt Xray | Obs<br>See Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |      |
|-------|------|-----|------------|----------|----------|-----|-----|-------------------------|---------------|--------------|-----------------|-----------------|--------------|-------------------------------------|------------------|---------|------|
|       |      |     |            |          |          |     |     |                         |               |              |                 |                 |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |      |
| 0663  |      | 19  | 19031      | 19071    | 1929     | N03 | W34 | 3607                    | 02 17.2       | 26           | SB              |                 |              | 120                                 | .9               | E       |      |
|       | BIGB | 19  | 1903       | 1907     | 1916     | N03 | W34 | 3607                    | 02 17.2       | 13           | SN              |                 |              | 70                                  | .9               |         |      |
|       | RAMY | 19  | 1904       | 1907     | 1934     | N03 | W33 | 3607                    | 02 17.3       | 30           | SB              | 3               | C            | 1907                                | 84               |         |      |
|       | HOLL | 19  | 1904       | 1908     | 1937     | N03 | W34 | 3607                    | 02 17.2       | 33           | 1B              | 3               | C            |                                     | 205              |         | E    |
| 0664  | BIGB | 19  | 1913       | 1916     | 1934     | N06 | W25 | 3607                    | 02 17.9       | 21           | SN              | 3               | C            | 1916                                | 100              | 1.1     |      |
| 0665  |      | 19  | 20102      | 2011*    | 2046     | S01 | W30 | 3607                    | 02 17.6       | 36           | SN              |                 |              | 58                                  |                  | F       |      |
|       | RAMY | 19  | 2010       | 2011     | 2044     | S01 | W30 | 3607                    | 02 17.6       | 34           | SN              | 3               | C            |                                     | 43               |         |      |
|       | HOLL | 19  | 2012       | 2024     | 2047     | S01 | W30 | 3607                    | 02 17.6       | 35           | SF              | 3               | C            |                                     | 72               |         | F    |
| 0666  | HOLL | 19  | 2143       | 2151     | 2157     | N11 | E19 | 3610                    | 02 21.3       | 14           | SF              | 3               | C            |                                     | 74               |         | F    |
| 0667  | CULG | 19  | 2144       | 2150     | 2158     | N11 | E08 | 3610                    | 02 20.5       | 14           | SN              |                 | C            | 2150                                | 70               | .8      | JK   |
| 0668  | HOLL | 19  | 2154       | 2226     | 2308     | N00 | W30 | 3607                    | 02 17.7       | 74           | SF              | 3               | C            |                                     | 68               |         | F    |
| 0669  | CULG | 19  | 2217       | 2225     | 2233     | N14 | E07 | 3610                    | 02 20.4       | 16           | SF              |                 | C            | 2225                                | 30               | .3      |      |
| 0670  |      | 20  | 02402      | 02432    | 0251     | N04 | W31 | 3607                    | 02 17.8       | 11           | SN              |                 |              | 46                                  | .6               | DFJ     |      |
|       | CULG | 20  | 0240       | 0244     | 0258     | N04 | W32 | 3607                    | 02 17.7       | 18           | SN              |                 | C            | 0244                                | 40               | .4      | J    |
|       | VORO | 20  | 0241       | 0243     | 0252     | N04 | W32 | 3607                    | 02 17.7       | 11           | SF              |                 | C            | 0243                                | 81               | 1.0     | DJ   |
|       | LEAR | 20  | 0242       | 0243     | 0247     | N04 | W31 | 3607                    | 02 17.8       | 5            | SN              | 3               | C            |                                     | 38               |         | F    |
|       | PEKG | 20  | 0243E      | 0245     | 0246D    | N05 | W31 | 3607                    | 02 17.8       | 3D           | SF              |                 | P            | 0245                                | 55               | .7      | D    |
|       | YUNN | 20  | 0244E      | 0244U    | 0246     | N05 | W31 | 3607                    | 02 17.8       | 2D           | SN              |                 | P            | 0244                                | 16               | .2      |      |
| 0671  |      | 20  | 03512      | 03562    | 0408     | N11 | E16 | 3610                    | 02 21.4       | 17           | SB              |                 |              | 88                                  | 1.1              | EFH     |      |
|       | CULG | 20  | 0351       | 0356     | 0412     | N12 | E15 | 3610                    | 02 21.3       | 21           | SB              |                 | C            | 0356                                | 100              | 1.1     | E    |
|       | LEAR | 20  | 0353       | 0358     | 0405     | N10 | E16 | 3610                    | 02 21.4       | 12           | SB              | 3               | C            |                                     | 75               |         | FH   |
| 0672  |      | 20  | 07072      | 0711*    | 0750     | N04 | W33 | 3607                    | 02 17.8       | 43           | SN              |                 |              | 187                                 | 1.9              | FIJKT   |      |
|       | LEAR | 20  | 0707       | 0711     | 0731D    | N02 | W34 | 3607                    | 02 17.7       | 24D          | SF              | 3               | C            |                                     | 122              |         | K    |
|       | LEAR | 20  | 0707       | 0729     | 0731D    | N02 | W34 | 3607                    | 02 17.7       | 24D          | 1N              | 3               | C            |                                     | 384              |         | FK   |
|       | YUNN | 20  | 0709       | 0729     | 0745     | N05 | W32 | 3607                    | 02 17.9       | 36           | SB              |                 | C            |                                     | 161              | 2.0     | F    |
|       | CULG | 20  | 0710E      | 0729     | 0755     | N05 | W33 | 3607                    | 02 17.8       | 45D          | SB              |                 | P            | 0729                                | 130              | 1.6     | FIJT |
|       | MANI | 20  | 0728E      | 0728U    | 0733D    | N05 | W34 | 3607                    | 02 17.8       | 5D           | SF              | 1               | V            |                                     | 100              | 1.3     | F    |
|       | CATA | 20  | 0735E      | 0735     | 0735D    | N03 | W33 | 3607                    | 02 17.8       | 5D           | 1               | 2               | P            | 0735                                | 225              | 2.8     |      |
| 0673  | CATA | 20  | 0735E      | 0735     | 0735D    | S03 | W33 | 3607                    | 02 17.8       | 5D           | S               | 2               | P            | 0735                                | 140              | 1.7     |      |
| 0674  | PEKG | 20  | 0751       | 0752     | 0810     | N06 | W33 | 3607                    | 02 17.8       | 19           | SF              |                 | P            | 0752                                | 113              | 1.5     | E    |
| 0675  | WEND | 20  | 0839       | 0844     | 0846D    | N01 | W38 | 3607                    | 02 17.5       | 7D           | SF              |                 | C            | 0844                                | 63               | .8      |      |
| 0676  |      | 20  | 0915*      | 0926*    | 1026     | S01 | W38 | 3607                    | 02 17.5       | 71           | 1B              |                 |              | 319                                 | 3.6              | EFKU    |      |
|       | HTPR | 20  | 0911E      |          | 0932D    | N00 | W40 | 3607                    | 02 17.4       | 21D          | SN              |                 | C            | 0930                                | 120              | 1.6     | E    |
|       | LEAR | 20  | 0915       | 0926     | 1029D    | N00 | W38 | 3607                    | 02 17.5       | 74D          | 1B              | 3               | C            |                                     | 373              |         | K    |
|       | LEAR | 20  | 0915       | 0937     | 1029D    | N00 | W38 | 3607                    | 02 17.5       | 74D          | 2B              | 3               | C            |                                     | 503              |         | UFK  |
|       | WEND | 20  | 0915       | 0942     | 1026     | N00 | W37 | 3607                    | 02 17.6       | 71           | 2B              |                 | C            | 0942                                | 413              | 5.3     |      |
|       | MONT | 20  | 0924       | 0929     | 0950D    | S01 | W40 | 3607                    | 02 17.4       | 26D          | 1N              |                 | C            | 0929                                | 250              |         |      |
|       | CATA | 20  | 0925       | 0935     | 1005D    | S03 | W37 | 3607                    | 02 17.6       | 40D          | 2               | 2               | P            | 0935                                | 506              | 6.5     |      |
|       | HTPR | 20  | 1013E      |          | 1036D    | S02 | W40 | 3607                    | 02 17.4       | 23D          | SN              |                 | C            | 1021                                | 70               | .9      |      |
| 0677  | WEND | 20  | 1049       | 1058     | 1113     | N04 | W34 | 3607                    | 02 17.9       | 24           | SN              |                 | C            | 1058                                | 156              | 1.9     |      |
| 0678  | WEND | 20  | 1203       | 1208     | 1223     | S01 | W40 | 3607                    | 02 17.5       | 20           | SF              |                 | C            | 1208                                | 88               | 1.2     |      |
| 0679  |      | 20  | 1235       | 1239     | 1248     | N06 | W20 | 3608                    | 02 19.0       | 13           | SF              |                 |              | 62                                  | .6               |         |      |
|       | HTPR | 20  | 1232E      |          | 1244D    | N06 | W20 | 3608                    | 02 19.0       | 12D          | SF              |                 | C            | 1236                                | 30               | .3      |      |
|       | WEND | 20  | 1235       | 1239     | 1248     | N05 | W21 | 3608                    | 02 18.9       | 13           | SF              |                 | C            | 1239                                | 94               | 1.0     |      |
| 0680  | WEND | 20  | 1303       | 1305     | 1311     | N04 | E53 | 3613                    | 02 24.5       | 8            | SF              |                 | C            | 1305                                | 56               | 1.0     |      |
| 0681  |      | 20  | 17552      | 1806*    | 1938     | S15 | E65 | 3614                    | 02 25.7       | 103          | 2B              |                 |              | 335                                 |                  | EFSU    |      |
|       | BIGB | 20  | 1755       | 1817     | 1932     | S17 | E65 | 3614                    | 02 25.7       | 97           | 1B              | 3               | C            | 1817                                | 280              |         |      |
|       | RAMY | 20  | 1756       | 1806     | 1951     | S15 | E65 | 3614                    | 02 25.7       | 115          | 2B              | 3               | C            |                                     | 358              |         | FE   |
|       | HOLL | 20  | 1757       | 1808     | 1930     | S14 | E66 | 3614                    | 02 25.7       | 93           | 2B              | 3               | C            |                                     | 367              |         | US   |
| 0682  |      | 20  | 1846       | 1846.1   | 1905     | N00 | W44 | 3607                    | 02 17.5       | 19           | SN              |                 |              | 32                                  |                  | F       |      |
|       | HOLL | 20  | 1846       | 1846     | 1911     | S02 | W45 | 3607                    | 02 17.4       | 25           | SN              | 3               | C            |                                     | 33               |         | F    |
|       | RAMY | 20  | 1846       | 1847     | 1859     | N02 | W42 | 3607                    | 02 17.6       | 13           | SN              | 3               | C            |                                     | 31               |         |      |



H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|------------|-------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |                 |     |                         |           |            |              |            |       |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0683  | HOLL | 20  | 1947       | 1950     | 1956     | S02             | W43 | 3607                    | 02        | 17.6       | 9            | SN         |       | 3          | C    |              | 24                                  |                  | F       |  |
| 0684  | HOLL | 20  | 2014       | 2016     | 2020     | N04             | W40 | 3607                    | 02        | 17.8       | 6            | SF         |       | 3          | C    |              | 31                                  |                  | F       |  |
| 0685  |      | 20  | 21565      | 22029    | 2225     | N02             | W49 | 3607                    | 02        | 17.2       | 29           | SN         |       |            |      |              | 57                                  | 1.0              | EJ      |  |
|       | CULG | 20  | 2156       | 2202     | 2223     | N02             | W50 | 3607                    | 02        | 17.2       | 27           | SN         |       |            | C    | 2202         | 40                                  | .6               | EJ      |  |
|       | BIGB | 20  | 2156       | 2202     | 2230     | N02             | W48 | 3607                    | 02        | 17.3       | 34           | SN         |       | 3          | C    | 2202         | 100                                 | 1.5              |         |  |
|       | HOLL | 20  | 2201       | 2211     | 2223     | N02             | W49 | 3607                    | 02        | 17.2       | 22           | SN         |       | 3          | C    |              | 30                                  |                  |         |  |
| 0686  | HOLL | 20  | 2341       | 2344     | 2357     | S01             | W42 | 3607                    | 02        | 17.8       | 16           | SF         |       | 3          | C    |              | 49                                  |                  | F       |  |
| 0687  | YUNN | 21  | 0029E      | 0029U    | 0032     | S03             | W46 | 3607                    | 02        | 17.6       | 3D           | IN         |       |            | P    | 0029         | 161                                 | 2.4              | D       |  |
| 0688  |      | 21  | 0124I      | 0128*    | 0214     | N00             | W47 | 3607                    | 02        | 17.5       | 50           | SN         | C 5.1 |            |      |              | 109                                 | 1.5              | DEFK    |  |
|       | LEAR | 21  | 0124       | 0128     | 0233     | N01             | W47 | 3607                    | 02        | 17.5       | 69           | SB         |       | 3          | C    |              | 65                                  |                  | FEK     |  |
|       | PURP | 21  | 0124       | 0130     | 0213     | S01             | W47 | 3607                    | 02        | 17.5       | 49           | SN         | C 5.1 |            | C    | 0130         | 132                                 | 2.0              | E       |  |
|       | LEAR | 21  | 0124       | 0141     | 0233     | N01             | W47 | 3607                    | 02        | 17.5       | 69           | SB         |       | 3          | C    |              | 207                                 |                  | K       |  |
|       | CULG | 21  | 0125       | 0130U    | 0221     | S03             | W48 | 3607                    | 02        | 17.5       | 56           | SN         |       |            | C    | 0130         | 120                                 | 1.8              | FK      |  |
|       | MANI | 21  | 0126E      | 0128     | 0140     | N02             | W47 | 3607                    | 02        | 17.5       | 14D          | SN         |       | 1          | V    |              | 60                                  | .9               | F       |  |
|       | YUNN | 21  | 0127E      | 0133     | 0201     | N01             | W46 | 3607                    | 02        | 17.6       | 34D          | SB         |       |            | P    |              | 129                                 | 1.9              | F       |  |
|       | PEKG | 21  | 0129E      | 0130     | 0155D    | N00             | W46 | 3607                    | 02        | 17.6       | 26D          | SN         |       |            | P    | 0130         | 55                                  | .8               | DK      |  |
|       | PEKG | 21  | 0129E      | 0141     | 0155D    | S01             | W48 | 3607                    | 02        | 17.5       | 26D          | SN         |       |            | P    | 0141         | 101                                 | 1.5              | E       |  |
| 0689  | CULG | 21  | 0153       | 0155U    | 0200     | S08             | E79 | 3618                    | 02        | 27.0       | 7            | SF         |       |            | C    | 0155         | 40                                  |                  |         |  |
| 0690  |      | 21  | 0340E      | 0340     | 0347     | S00             | W50 | 3607                    | 02        | 17.4       | 7D           | SF         |       |            |      |              | 24                                  | .4               | D       |  |
|       | PEKG | 21  | 0340E      | 0340     | 0347     | N01             | W49 | 3607                    | 02        | 17.5       | 7D           | SF         |       |            | C    | 0343         | 17                                  | .3               | D       |  |
|       | CULG | 21  | 0342E      | 0342U    | 0347     | S02             | W50 | 3607                    | 02        | 17.4       | 5D           | SF         |       |            | P    | 0342         | 30                                  | .4               |         |  |
| 0691  | LEAR | 21  | 0852       | 0853     | 0903     | N04             | W47 | 3607                    | 02        | 17.8       | 11           | SF         |       | 3          | C    |              | 18                                  |                  |         |  |
| 0692  |      | 21  | 1055       | 1059     | 1110     | S00             | W54 | 3607                    | 02        | 17.4       | 15           | SF         |       |            |      |              | 38                                  | .6               | D       |  |
|       | WEND | 21  | 1055       | 1059     | 1110     | S01             | W51 | 3607                    | 02        | 17.6       | 15           | SF         |       |            | C    | 1059         | 38                                  | .6               |         |  |
|       | KHAR | 21  | 1057E      | 1059     | 1108D    | N00             | W56 | 3607                    | 02        | 17.3       | 11D          | SF         |       |            | V    | 1100         |                                     |                  | D       |  |
| 0693  | KANZ | 21  | 1333       | 1333     | 1348     | N05             | W50 | 3607                    | 02        | 17.8       | 15           | SN         |       | 2          |      |              |                                     |                  |         |  |
| 0694  | KANZ | 21  | 1423       | 1427     | 1433     | N04             | W58 | 3607                    | 02        | 17.3       | 10           | SN         |       | 1          |      |              |                                     |                  |         |  |
|       |      | 21  | 1530       |          | 1539     | No Flare Patrol |     |                         |           |            |              |            |       |            |      |              |                                     |                  |         |  |
| 0695  |      | 21  | 1623       | 16238    | 1648     | N04             | W50 | 3607                    | 02        | 17.9       | 25           | SN         |       |            |      |              | 76                                  | 1.8              | F       |  |
|       | HOLL | 21  | 1623       | 1623     | 1643     | N03             | W49 | 3607                    | 02        | 18.0       | 20           | SF         |       | 3          | C    |              | 43                                  |                  | F       |  |
|       | BIGB | 21  | 1623       | 1631     | 1654     | N04             | W50 | 3607                    | 02        | 17.9       | 31           | SN         |       | 3          | C    | 1631         | 110                                 | 1.8              |         |  |
| 0696  |      | 21  | 1851I      | 1856I    | 1917     | N04             | W52 | 3607                    | 02        | 17.9       | 26           | SB         | C 2.7 |            |      |              | 100                                 | 1.3              | EF      |  |
|       | HOLL | 21  | 1851       | 1856     | 1917     | N03             | W52 | 3607                    | 02        | 17.9       | 26           | SB         |       | 3          | C    |              | 120                                 |                  | FE      |  |
|       | BIGB | 21  | 1852       | 1857     | 1917     | N05             | W51 | 3607                    | 02        | 18.0       | 25           | SN         | C 2.7 | 3          | C    | 1857         | 80                                  | 1.3              |         |  |
| 0697  | BIGB | 21  | 2049       | 2057     | 2205     | S03             | W58 | 3607                    | 02        | 17.5       | 76           | SN         |       | 3          | C    | 2057         | 60                                  | 1.2              |         |  |
| 0698  | CULG | 21  | 2147E      | 2147U    | 2147D    | S06             | E68 | 3618                    | 02        | 27.0       | 76D          | SF         |       |            | P    | 2147         | 40                                  |                  |         |  |
| 0699  | CULG | 21  | 2311       | 2313     | 2321     | S18             | E05 |                         | 02        | 22.3       | 10           | SF         |       |            | C    | 2313         | 20                                  | .2               |         |  |
| 0700  |      | 22  | 0207       | 02082    | 0224     | N00             | W56 | 3607                    | 02        | 17.9       | 17           | SN         | C 1.4 |            |      |              | 70                                  | 1.4              | EFJ     |  |
|       | CULG | 22  | 0207       | 0207U    | 0213D    | N00             | W56 | 3607                    | 02        | 17.9       | 6D           | SF         |       |            | P    | 0207         | 90                                  | 1.6              | F       |  |
|       | VORO | 22  | 0207       | 0208     | 0216     | N00             | W57 | 3607                    | 02        | 17.8       | 9            | SN         | C 1.4 |            | C    | 0208         | 67                                  | 1.2              | EJ      |  |
|       | LEAR | 22  | 0207       | 0210     | 0233     | N01             | W56 | 3607                    | 02        | 17.9       | 26           | SN         |       | 3          | C    |              | 54                                  |                  | F       |  |
| 0701  |      | 22  | 0911       | 09132    | 0922     | N02             | W66 | 3607                    | 02        | 17.4       | 11           | SN         | C 4.2 |            |      |              | 88                                  | 2.0              | D       |  |
|       | MONT | 22  | 0911       | 0913     | 0919     | N03             | W65 | 3607                    | 02        | 17.5       | 8            | SF         | C 4.2 |            | C    | 0913         | 50                                  |                  | D       |  |
|       | LEAR | 22  | 0911       | 0915     | 0925     | N01             | W67 | 3607                    | 02        | 17.4       | 14           | SB         |       | 3          | C    |              | 116                                 |                  |         |  |
|       | YUNN | 22  | 0912E      | 0912U    | 0917D    | N01             | W64 | 3607                    | 02        | 17.6       | 5D           | SN         |       |            | P    | 0912         | 80                                  | 1.9              | D       |  |
|       | MANI | 22  | 0913E      | 0914     | 0922D    | N01             | W68 | 3607                    | 02        | 17.3       | 9D           | IN         |       | 1          | V    |              | 105                                 | 2.2              |         |  |
| 0702  | LEAR | 22  | 0938       | 0938     | 0945     | N01             | W64 | 3607                    | 02        | 17.6       | 7            | SF         |       | 3          | C    |              | 14                                  |                  |         |  |
| 0703  | KHAR | 22  | 1130E      | 1130     | 1143D    | N06             | E26 | 3613                    | 02        | 24.4       | 13D          | SF         |       |            | P    | 1130         | 50                                  | .6               | E       |  |
| 0704  | KHAR | 22  | 1203E      | 1207     | 1213D    | N06             | E27 | 3613                    | 02        | 24.5       | 10D          | SF         |       |            | P    | 1207         | 20                                  | .2               | D       |  |

H - ALPHA SOLAR FLARES

59  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | NOAA/USAF       |         | CMP Mo | Dur (Min) | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks |
|-------|------|-----|------------|----------|----------|-----------------|---------|--------|-----------|---------|------|---------|------|-----------|----------------------------------|---------------|---------|
|       |      |     |            |          |          | Region          | Lat CMD |        |           |         |      |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |         |
| 0705  | KHAR | 22  | 1210E      | 1213     | 1223D    | N00             | W70     | 3607   | 02 17.3   | 13D     | 1N   |         | P    | 1217      | 100                              |               | E       |
|       |      | 22  | 1224       |          | 1246     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 1256       |          | 1422     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 1526       |          | 1606     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 1726       |          | 1825     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 1838       |          | 1914     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 1921       |          | 1940     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 2012       |          | 2019     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 2059       |          | 2108     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 2209       |          | 2215     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 22  | 2219       |          | 2223     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
| 0706  | LEAR | 23  | 0311       | 0313     | 0318     | N08             | W61     | 3608   | 02 18.5   | 7       | SF   | 3       | C    |           | 14                               |               |         |
| 0707  | LEAR | 23  | 0318       | 0318     | 0324     | S01             | W75     | 3607   | 02 17.5   | 6       | SN   | 3       | C    |           |                                  |               |         |
| 0708  | KANZ | 23  | 0948       | 0948     | 0952     | N05             | E12     | 3613   | 02 24.3   | 4       | SF   | 1       |      |           |                                  |               |         |
| 0709  | KANZ | 23  | 1114       | 1121     | 1210     | N05             | E12     | 3613   | 02 24.4   | 56      | SF   | 1       |      |           |                                  |               |         |
| 0710  | KANZ | 23  | 1253       | 1301     | 1320     | S36             | W18     | 3621   | 02 22.1   | 27      | SN   | 1       |      |           |                                  |               | G       |
|       |      | 23  | 1450       |          | 1520     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
|       |      | 23  | 1534       |          | 1551     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
| 0711  | RAMY | 23  | 1736       | 1737     | 1749     | N05             | E08     | 3613   | 02 24.3   | 13      | SF   | 3       | C    |           | 38                               |               |         |
| 0712  |      | 23  | 1738       | 17407    | 1754     | N13             | W38     | 3610   | 02 20.9   | 16      | SF   |         |      |           | 24                               |               | K       |
|       | RAMY | 23  | 1738       | 1740     | 1754     | N13             | W38     | 3610   | 02 20.9   | 16      | SF   | 3       | C    |           | 25                               |               | K       |
|       | RAMY | 23  | 1738       | 1747     | 1754     | N13             | W38     | 3610   | 02 20.9   | 16      | S    | 3       | C    |           | 24                               |               | K       |
| 0713  | HOLL | 23  | 1808       | 1810     | 1818     | N11             | E89     | 3625   | 03 2.4    | 10      | SF   | 3       | C    |           |                                  |               |         |
|       |      | 23  | 1941       |          | 1951     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
| 0714  | HOLL | 23  | 2001       | 2003     | 2010     | N11             | W38     | 3610   | 02 21.0   | 9       | SF   | 3       | C    |           | 30                               |               |         |
|       |      | 23  | 2018       |          | 2029     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
| 0715  | BIGB | 23  | 2048       | 2130     | 2159     | N12             | W40     | 3610   | 02 20.8   | 71      | SN   | 3       | C    | 2130      | 70                               | .9            |         |
|       |      | 23  | 2227       |          | 2232     | No Flare Patrol |         |        |           |         |      |         |      |           |                                  |               |         |
| 0716  | LEAR | 24  | 0016       | 0017     | 0022     | N12             | W41     | 3610   | 02 20.9   | 6       | SN   | 3       | C    |           | 41                               |               |         |
| 0717  | LEAR | 24  | 0114       | 0115     | 0121     | N13             | E75     | 3625   | 03 1.7    | 7       | SN   | 3       | C    |           |                                  |               |         |
| 0718  | LEAR | 24  | 0351       | 0353     | 0416     | N11             | E75     | 3625   | 03 1.8    | 25      | SF   | 3       | C    |           |                                  |               |         |
| 0719  | ABST | 24  | 0827       | 0829     | 0831     | N15             | E80     | 3625   | 03 2.4    | 4       | SF   |         | C    | 0829      | 70                               |               | D       |
| 0720  | YUNN | 24  | 0936       | 0945     | 1000     | S12             | E60     | 3622   | 02 28.9   | 24      | SN   |         | C    |           | 64                               | 1.3           | E       |
| 0721  | HTPR | 24  | 1215       | 1224     | 1229     | S12             | E50     | 3619   | 02 28.3   | 14      | SF   |         | C    | 1224      | 20                               | .3            |         |
| 0722  | RAMY | 24  | 1329E      | 1330     | 1336     | N13             | E80     | 3625   | 03 2.6    | 7D      | SF   | 3       | C    |           |                                  |               |         |
| 0723  |      | 24  | 13304      | 13371    | 1356     | S12             | E50     | 3622   | 02 28.3   | 26      | SN   |         |      |           | 80                               | .4            |         |
|       | RAMY | 24  | 1330       | 1337     | 1402     | S13             | E51     | 3622   | 02 28.4   | 32      | SN   | 3       | C    |           | 129                              |               |         |
|       | HTPR | 24  | 1334       | 1338     | 1350     | S12             | E50     | 3622   | 02 28.3   | 16      | SF   |         | C    | 1338      | 30                               | .4            |         |
| 0724  | RAMY | 24  | 1411       | 1412     | 1418     | N11             | E72     | 3625   | 03 2.0    | 7       | SF   | 3       | C    |           |                                  |               |         |
| 0725  | HTPR | 24  | 1515       | 1526     | 1532     | S12             | E49     | 3619   | 02 28.3   | 17      | SF   |         | C    | 1526      | 30                               | .4            |         |
| 0726  |      | 24  | 15511      | 15531    | 1601     | N14             | E70     | 3625   | 03 1.9    | 10      | 1B   |         |      |           | 110                              | 1.9           | EZ      |
|       | HTPR | 24  | 1551       | 1554     | 1559     | N15             | E70     | 3625   | 03 1.9    | 8       | SB   |         | C    | 1554      | 80                               | 1.9           | E       |
|       | RAMY | 24  | 1552E      | 1552U    | 1554D    | N13             | E68     | 3625   | 03 1.8    | 2D      | 1B   | 3       | C    |           | 125                              |               |         |
|       | HOLL | 24  | 1552       | 1553     | 1603     | N15             | E71     | 3625   | 03 2.0    | 11      | 1B   | 2       | C    |           | 125                              |               | Z       |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day   | Start (UT) | Max (UT) | End (UT)        | NOAA/USAF |       |        | CMP Mo | Dur (Min) | Imp Opt | Xray | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks |
|-------|------|-------|------------|----------|-----------------|-----------|-------|--------|--------|-----------|---------|------|---------|------|-----------|----------------------------------|---------------|---------|
|       |      |       |            |          |                 | Lat       | CMD   | Region |        |           |         |      |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |         |
| 0727  | 24   | 16285 | 16335      | 1749D    | N08             | W04       | 3613  | 02     | 24.4   | 81D       | SB      |      |         |      | 164       | 2.2                              | U             |         |
|       | HTPR | 24    | 1628       |          | 1646D           | N08       | W05   | 3613   | 02     | 24.3      | 18D     | 1N   |         | C    | 1637      | 220                              | 2.2           |         |
|       | RAMY | 24    | 1628       | 1638     | 1749D           | N07       | W03   | 3613   | 02     | 24.5      | 81D     | SB   | 3       | C    |           | 193                              |               |         |
|       | HOLL | 24    | 1633       | 1633     | 1725D           | N08       | W05   | 3613   | 02     | 24.3      | 52D     | SB   | 2       | C    |           | 80                               |               | U       |
|       | 24   | 1726  |            | 1752     | No Flare Patrol |           |       |        |        |           |         |      |         |      |           |                                  |               |         |
|       | 24   | 1959  |            | 2015     | No Flare Patrol |           |       |        |        |           |         |      |         |      |           |                                  |               |         |
| 0728  | CULG | 24    | 2150       | 2154     | 2203            | N17       | E66   | 3625   | 03     | 1.9       | 13      | SF   |         | C    | 2154      | 80                               |               |         |
| 0729  | MANI | 24    | 2336E      | 2337     | 2339            | N16       | E72   | 3625   | 03     | 2.4       | 3D      | SF   | 1       | V    |           | 40                               | .9            | F       |
| 0730  | 25   | 00531 | 00562      | 0107     | N14             | E66       | 3625  | 03     | 2.0    | 14        | SN      |      |         |      | 46        | 1.6                              | D             |         |
|       | CULG | 25    | 0053       | 0056     | 0104            | N15       | E65   | 3625   | 03     | 1.9       | 11      | SF   |         | P    | 0056      | 60                               | 1.6           |         |
|       | YUNN | 25    | 0054       | 0058     | 0110            | N13       | E66   | 3625   | 03     | 2.0       | 16      | SN   |         | C    |           | 32                               |               | D       |
| 0731  | 25   | 0114* | 0129*      | 0156     | N05             | W10       | 3613  | 02     | 24.3   | 42        | SN      |      |         |      | 151       | 1.6                              | EFJK          |         |
|       | CULG | 25    | 0114       | 0148U    | 0158D           | N06       | W11   | 3613   | 02     | 24.2      | 44D     | SN   |         | P    | 0148      | 180                              | 1.8           | F       |
|       | PURP | 25    | 0121       |          | 0150D           | N06       | W10   | 3613   | 02     | 24.3      | 29D     | SN   |         | V    | 0140      | 59                               | .6            |         |
|       | PEKG | 25    | 0129E      | 0129     | 0131            | N07       | W10   | 3613   | 02     | 24.3      | 2D      | SF   |         | P    | 0129      | 63                               | .7            | E       |
|       | VORO | 25    | 0136       | 0154     | 0214            | N03       | W11   | 3613   | 02     | 24.2      | 38      | SN   |         | C    | 0154      | 134                              | 1.4           | EJK     |
|       | YUNN | 25    | 0142       | 0150     | 0202            | N06       | W09   | 3613   | 02     | 24.4      | 20      | 1N   |         | C    |           | 321                              | 3.4           | F       |
| 0732  | PEKG | 25    | 0129E      | 0129     | 0130            | N13       | E64   | 3625   | 03     | 1.9       | 1D      | SF   |         | P    | 0129      | 84                               |               | E       |
| 0733  | 25   | 0200  | 0202       | 0211     | N14             | E67       | 3625  | 03     | 2.1    | 11        | SN      |      |         |      | 52        |                                  | EJ            |         |
|       | CULG | 25    | 0148E      | 0152U    | 0158D           | N16       | E66   | 3625   | 03     | 2.1       | 10D     | SF   |         | P    | 0152      | 60                               |               |         |
|       | VORO | 25    | 0200       | 0202     | 0211            | N13       | E68   | 3625   | 03     | 2.2       | 11      | SN   |         | C    | 0202      | 45                               |               | EJ      |
| 0734  | PEKG | 25    | 0337       | 0340     | 0342            | N11       | E65   | 3625   | 03     | 2.0       | 5       | SN   |         | P    | 0340      | 34                               |               | E       |
| 0735  | 25   | 03397 | 0340*      | 0403     | N13             | E60       | 3625  | 03     | 1.7    | 24        | 1B      |      |         |      | 113       |                                  | EFHK          |         |
|       | LEAR | 25    | 0339       | 0340     | 0405            | N13       | E59   | 3625   | 03     | 1.6       | 26      | SN   | 3       | C    |           | 51                               |               | K       |
|       | LEAR | 25    | 0339       | 0350     | 0405            | N13       | E59   | 3625   | 03     | 1.6       | 26      | 1B   | 3       | C    |           | 205                              |               | FHK     |
|       | PEKG | 25    | 0346       | 0348     | 0400            | N13       | E61   | 3625   | 03     | 1.7       | 14      | SN   |         | P    | 0348      | 76                               |               | E       |
|       | PURP | 25    | 0346E      | 0351     | 0357D           | N13       | E61   | 3625   | 03     | 1.7       | 11D     | 1B   |         | P    | 0351      | 119                              |               |         |
| 0736  | LEAR | 25    | 0519       | 0520     | 0526            | S06       | E69   | 3626   | 03     | 2.4       | 7       | SF   | 3       | C    |           | 29                               |               | F       |
| 0737  | LEAR | 25    | 0524       | 0537     | 0541            | N11       | E62   | 3625   | 03     | 1.9       | 17      | SF   | 3       | C    |           | 15                               |               | F       |
| 0738  | 25   | 0631  | 06316      | 0652     | N12             | E62       | 3625  | 03     | 1.9    | 21        | SF      |      |         |      | 45        | 2.0                              | DJT           |         |
|       | ABST | 25    | 0630E      | 0631     | 0701            | N13       | E61   | 3625   | 03     | 1.9       | 31D     | SF   |         | P    | 0631      | 87                               | 2.0           | DJ      |
|       | LEAR | 25    | 0631       | 0632     | 0651            | N11       | E62   | 3625   | 03     | 1.9       | 20      | SF   | 3       | C    |           | 19                               |               |         |
|       | PEKG | 25    | 0637E      | 0637     | 0645            | N12       | E63   | 3625   | 03     | 2.0       | 8D      | SF   |         | P    | 0637      | 29                               |               | DT      |
| 0739  | ABST | 25    | 0706E      | 0710     | 0735            | N17       | E84   | 3628   | 03     | 3.7       | 29D     | 1F   |         | P    | 0710      | 79                               |               | D       |
| 0740  | 25   | 07168 | 07242      | 0733     | N13             | E62       | 3625  | 03     | 2.0    | 17        | 1N      |      |         |      | 126       | 3.0                              | DEJK          |         |
|       | ABST | 25    | 0716       | 0724     | 0734            | N12       | E61   | 3625   | 03     | 1.9       | 18      | 1N   |         | C    | 0724      | 175                              | 4.1           | EJ      |
|       | PURP | 25    | 0720       | 0724     | 0726D           | N12       | E64   | 3625   | 03     | 2.1       | 6D      | 1N   |         | C    | 0724      | 99                               |               |         |
|       | HTPR | 25    | 0720       | 0726     | 0731            | N13       | E63   | 3625   | 03     | 2.0       | 11      | SN   |         | C    | 0726      | 40                               | .8            | E       |
|       | TACH | 25    | 0721       | 0725     | 0732            | N14       | E65   | 3625   | 03     | 2.2       | 11      | SB   |         | C    | 0725      | 132                              |               | DK      |
|       | YUNN | 25    | 0724       | 0725     | 0730            | N12       | E62   | 3625   | 03     | 2.0       | 6       | 1N   |         | C    |           | 113                              | 2.7           | E       |
|       | CATA | 25    | 0725E      | 0725     | 0740            | N15       | E59   | 3625   | 03     | 1.8       | 15D     | 1    | 2       | P    | 0725      | 197                              | 4.4           |         |
| 0741  | 25   | 0830* | 08378      | 0851     | N14             | E58       | 3625  | 03     | 1.7    | 21        | 1N      |      |         |      | 181       | 4.0                              | EF            |         |
|       | LEAR | 25    | 0830       | 0840     | 0856            | N13       | E57   | 3625   | 03     | 1.6       | 26      | 1N   | 3       | C    |           | 132                              |               | F       |
|       | YUNN | 25    | 0831       | 0837     | 0850            | N15       | E59   | 3625   | 03     | 1.8       | 19      | SN   |         | C    |           | 32                               | .7            |         |
|       | HTPR | 25    | 0831       | 0841     | 0846            | N15       | E60   | 3625   | 03     | 1.9       | 15      | SF   |         | C    | 0841      | 80                               | 1.6           | E       |
|       | MANI | 25    | 0837E      | 0839     | 0850D           | N15       | E60   | 3625   | 03     | 1.9       | 13D     | SN   | 1       | V    |           | 100                              | 2.0           |         |
|       | CATA | 25    | 0840       | 0845     | 0845D           | N15       | E57   | 3625   | 03     | 1.7       | 5D      | 2    | 2       | P    | 0845      | 562                              | 11.8          |         |
| 0742  | 25   | 0943  | 09491      | 1001     | N14             | E61       | 3625  | 03     | 2.0    | 18        | 1N      |      |         |      | 76        | 1.6                              |               |         |
|       | HTPR | 25    | 0943       | 0949     | 1001            | N13       | E63   | 3625   | 03     | 2.1       | 18      | SN   |         | C    | 0949      | 40                               | .8            |         |
|       | CATA | 25    | 0945E      | 0950     | 0950D           | N15       | E59   | 3625   | 03     | 1.9       | 5D      | 1    | 2       | P    | 0950      | 112                              | 2.5           |         |
| 0743  | HTPR | 25    | 0954       | 1001     | 1020            | N12       | E27   | 3618B  | 02     | 27.4      | 26      | SF   |         | C    | 1001      | 70                               | .8            | E       |
| 0744  | 25   | 1228  | 12323      | 1300     | N11             | E24       | 3618B | 02     | 27.3   | 32        | SN      |      |         |      | 91        | 1.0                              | E             |         |
|       | HTPR | 25    | 1228       | 1232     | 1300            | N12       | E24   | 3618B  | 02     | 27.3      | 32      | SN   |         | C    | 1232      | 70                               | .8            | E       |
|       | CATA | 25    | 1235E      | 1235     | 1240D           | N10       | E23   | 3618B  | 02     | 27.2      | 5D      | S    | 2       | P    | 1235      | 112                              | 1.3           |         |

H - ALPHA SOLAR FLARES

61  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day   | Start (UT) | Max (UT) | End (UT) | Lat             | CMD  | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |
|-------|------|-------|------------|----------|----------|-----------------|------|-------------------------|-----------|------|--------------|------------|-------|------------|------|--------------|-------------------------------------|------------------|---------|
|       |      |       |            |          |          |                 |      |                         |           |      |              |            |       |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0745  |      | 25    | 1230       | 1235     | 1240     | N14             | E60  | 3625                    | 03        | 2.0  | 10           | 1B         |       |            |      |              | 120                                 | 2.6              |         |
|       | HTPR | 25    | 1230       | 1235     | 1240     | N13             | E60  | 3625                    | 03        | 2.0  | 10           | SB         |       |            | C    | 1235         | 100                                 | 2.0              |         |
|       | CATA | 25    | 1235E      | 1235     | 1240D    | N14             | E59  | 3625                    | 03        | 2.0  | 5D           | 1          |       | 2          | P    | 1235         | 140                                 | 3.1              |         |
| 0746  |      | 25    | 1439       | 1443     | 1451     | N14             | E56  | 3625                    | 03        | 1.8  | 12           | 1B         |       |            |      |              | 120                                 | 2.3              | EF      |
|       | HTPR | 25    | 1439       | 1443     | 1451     | N15             | E58  | 3625                    | 03        | 2.0  | 12           | 1N         |       |            | C    | 1443         | 120                                 | 2.3              | E       |
|       | RAMY | 25    | 1440       | 1443     | 1451     | N13             | E55  | 3625                    | 03        | 1.8  | 11           | SB         |       | 3          | C    |              | 119                                 |                  | FE      |
| 0747  | HTPR | 25    | 1606       |          | 1635D    | N12             | W65  | 3610                    | 02        | 20.8 | 29D          | SF         |       |            | C    | 1607         | 30                                  | .6               | E       |
| 0748  | HTPR | 25    | 1616       |          | 1635D    | N07             | W40  |                         | 02        | 22.7 | 19D          | SF         |       |            | C    | 1622         | 20                                  | .3               | E       |
|       |      | 25    | 1656       |          | 1704     | No Flare Patrol |      |                         |           |      |              |            |       |            |      |              |                                     |                  |         |
| 0749  |      | 25    | 1732       | 1811*    | 1926     | N11             | E66  | 3627                    | 03        | 2.7  | 114          | SN         |       |            |      |              | 51                                  |                  | K       |
|       | RAMY | 25    | 1732       | 1811     | 1926     | N11             | E66  | 3627                    | 03        | 2.7  | 114          | SN         |       | 3          | C    |              | 39                                  |                  | K       |
|       | RAMY | 25    | 1732       | 1853     | 1926     | N11             | E66  | 3627                    | 03        | 2.7  | 114          | SN         |       | 3          | C    |              | 63                                  |                  | K       |
| 0750  | RAMY | 25    | 1855       | 1907     | 1917     | N13             | E59  | 3625                    | 03        | 2.2  | 22           | SN         |       | 3          | C    |              | 110                                 |                  |         |
| 0751  | RAMY | 25    | 1952       | 1957     | 2052D    | N05             | E46  | 3624                    | 03        | 1.3  | 60D          | SN         |       | 3          | C    |              | 124                                 |                  | F       |
| 0752  | CULG | 25    | 2128       | 2130     | 2136     | N22             | E60  | 3628                    | 03        | 2.5  | 8            | SF         |       |            | C    | 2130         | 80                                  | 1.9              |         |
| 0753  | CULG | 25    | 2321E      | 2321     | 2324     | N14             | E54  | 3625                    | 03        | 2.0  | 3D           | SF         |       |            | C    | 2321         | 60                                  | 1.1              |         |
| 0754  | CULG | 25    | 2340       | 2342     | 2344     | N14             | E54  | 3625                    | 03        | 2.1  | 4            | SN         |       |            | C    | 2342         | 70                                  | 1.3              |         |
| 0755  | PEKG | 26    | 0211E      | 0211U    | 0218     | S11             | E37  | 3622                    | 02        | 28.9 | 7D           | SN         |       |            | P    | 0211         | 25                                  | .3               | E       |
| 0756  |      | 26    | 0302*      | 03195    | 0355     | N14             | E65  | 3628                    | 03        | 3.0  | 53           | 1N         |       |            |      |              | 204                                 | 5.7              | EFU     |
|       | PURP | 26    | 0302       | 0319     | 0335D    | N14             | E68  | 3628                    | 03        | 3.3  | 33D          | 2B         |       |            | C    | 0319         | 244                                 |                  |         |
|       | MITK | 26    | 0306       | 0320     | 0348     | N15             | E63  | 3628                    | 03        | 2.9  | 42           | 1F         |       |            | C    | 0320         | 140                                 |                  | E       |
|       | PEKG | 26    | 0311       | 0328U    | 0353     | N13             | E65  | 3628                    | 03        | 3.0  | 42           | SN         |       |            | C    | 0328         | 55                                  |                  | FU      |
|       | LEAR | 26    | 0315       | 0324     | 0358     | N12             | E65  | 3628                    | 03        | 3.0  | 43           | 1B         |       | 3          | C    |              | 305                                 |                  | FE      |
|       | YUNN | 26    | 0336E      | 0338U    | 0358     | N16             | E64  | 3628                    | 03        | 3.0  | 22D          | 2N         |       |            | P    | 0338         | 241                                 |                  | F       |
| CULG  | 26   | 0338E | 0338U      | 0357     | N17      | E65             | 3628 | 03                      | 3.1       | 19D  | 2B           |            |       | P          | 0338 | 240          | 5.7                                 |                  |         |
| 0757  |      | 26    | 0315*      | 03352    | 0346     | N15             | E48  | 3625                    | 03        | 1.8  | 31           | SB         | M 1.7 |            |      |              | 157                                 | 1.7              | DEF     |
|       | PEKG | 26    | 0315       | 0337     | 0348     | N14             | E47  | 3625                    | 03        | 1.7  | 33           | SB         | M 1.7 |            | C    | 0337         | 59                                  | 1.0              | E       |
|       | PURP | 26    | 0319       | 0335     | 0335D    | N14             | E51  | 3625                    | 03        | 2.0  | 16D          | SB         |       |            | V    | 0335         | 92                                  | 1.6              |         |
|       | MITK | 26    | 0332       | 0335     | 0345     | N16             | E48  | 3625                    | 03        | 1.8  | 13           | SN         |       |            | C    | 0335         |                                     |                  | D       |
|       | LEAR | 26    | 0332       | 0336     | 0346     | N13             | E46  | 3625                    | 03        | 1.6  | 14           | 1B         |       | 3          | C    |              | 372                                 |                  | FE      |
|       | YUNN | 26    | 0336E      | 0338U    | 0338D    | N16             | E46  | 3625                    | 03        | 1.6  | 2D           | 1N         |       |            | P    | 0338         | 225                                 | 3.7              |         |
| CULG  | 26   | 0338E | 0338U      | 0338D    | N18      | E47             | 3625 | 03                      | 1.7       | 2D   | SB           |            |       | P          | 0338 | 40           | .6                                  |                  |         |
| 0758  |      | 26    | 0408*      | 0416*    | 0426     | N14             | E54  | 3625                    | 03        | 2.2  | 18           | SF         |       |            |      |              | 54                                  | .8               | D       |
|       | LEAR | 26    | 0408       | 0416     | 0421     | N16             | E54  | 3625                    | 03        | 2.3  | 13           | SF         |       | 3          | C    |              | 20                                  |                  |         |
|       | LEAR | 26    | 0422       | 0426     | 0431     | N16             | E55  | 3625                    | 03        | 2.3  | 9            | SN         |       | 3          | C    |              | 96                                  |                  |         |
|       | PEKG | 26    | 0426E      | 0426U    | 0426D    | N11             | E52  | 3625                    | 03        | 2.1  | 9D           | SF         |       |            | P    | 0426         | 46                                  | .8               | D       |
| 0759  | LEAR | 26    | 0508       | 0508     | 0519     | S21             | E90  | 3629                    | 03        | 5.1  | 11           | SF         |       | 3          | C    |              |                                     |                  |         |
| 0760  |      | 26    | 0523       | 0528     | 0625     | N16             | E69  | 3628                    | 03        | 3.4  | 62           | SF         |       |            |      |              | 32                                  |                  | DET     |
|       | PEKG | 26    | 0523       | 0528     | 0625     | N15             | E69  | 3628                    | 03        | 3.4  | 62           | SF         |       |            | C    | 0528         | 21                                  |                  | D       |
|       | PEKG | 26    | 0555E      | 0555U    | 0625     | N17             | E69  | 3628                    | 03        | 3.5  | 30D          | SF         |       |            | C    | 0555         | 42                                  |                  | ET      |
| 0761  | LEAR | 26    | 0614       | 0616     | 0625     | S21             | E88  | 3629                    | 03        | 5.0  | 11           | SF         |       | 3          | C    |              |                                     |                  |         |
| 0762  | PEKG | 26    | 0616       | 0621     | 0630     | N11             | E50  | 3625                    | 03        | 2.0  | 14           | SF         |       |            | P    | 0621         | 17                                  | .3               | D       |
| 0763  |      | 26    | 0619       | 0621     | 0630     | S04             | E56  | 3626                    | 03        | 2.4  | 11           | SF         |       |            |      |              | 64                                  | 1.2              | D       |
|       | ABST | 26    | 0619       | 0621     | 0630     | S04             | E56  | 3626                    | 03        | 2.4  | 11           | SF         |       |            | C    | 0621         | 87                                  | 1.5              | D       |
|       | PEKG | 26    | 0621E      | 0621     | 0621D    | S04             | E57  | 3626                    | 03        | 2.5  | 11D          | SF         |       |            | P    | 0621         | 42                                  | .8               | D       |
| 0764  |      | 26    | 0721       | 07242    | 0735     | N16             | E53  | 3625                    | 03        | 2.3  | 14           | SF         | C 2.6 |            |      |              | 72                                  | 1.5              | EFJ     |
|       | HTPR | 26    | 0721       | 0725     | 0730     | N18             | E54  | 3625                    | 03        | 2.4  | 9            | SF         |       |            | C    | 0725         | 50                                  | .8               |         |
|       | ABST | 26    | 0722       | 0724     | 0742     | N15             | E54  | 3625                    | 03        | 2.4  | 20           | 1N         | C 2.6 |            | C    | 0724         | 122                                 | 2.2              | EJ      |
|       | LEAR | 26    | 0722       | 0726     | 0733     | N14             | E52  | 3625                    | 03        | 2.2  | 11           | SF         |       | 3          | C    |              | 43                                  |                  | F       |
| 0765  |      | 26    | 0725       | 07264    | 0735     | N16             | E65  | 3628                    | 03        | 3.2  | 10           | SN         |       |            |      |              | 51                                  | 1.0              | DFJ     |
|       | LEAR | 26    | 0725       | 0726     | 0734     | N14             | E63  | 3628                    | 03        | 3.1  | 9            | SN         |       | 3          | C    |              | 26                                  |                  | F       |
|       | ABST | 26    | 0725       | 0726     | 0739     | N18             | E65  | 3628                    | 03        | 3.2  | 14           | 1N         |       |            | C    | 0726         | 87                                  |                  | DJ      |
|       | HTPR | 26    | 0725       | 0730     | 0733     | N17             | E67  | 3628                    | 03        | 3.4  | 8            | SN         |       |            | C    | 0730         | 40                                  | 1.0              |         |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD | NOAA/USAF |       | CMP Mo | Dur (Min) | Imp Opt | Xray  | Obs See | Type | Time (UT) | Area Measurement                 |               | Remarks |       |    |      |  |      |                 |  |
|-------|------|-----|------------|----------|----------|-----|-----|-----------|-------|--------|-----------|---------|-------|---------|------|-----------|----------------------------------|---------------|---------|-------|----|------|--|------|-----------------|--|
|       |      |     |            |          |          |     |     | Region    | Class |        |           |         |       |         |      |           | Apparent (10 <sup>-6</sup> Disk) | Corr (Sq Deg) |         |       |    |      |  |      |                 |  |
| 0766  |      | 26  | 0729E      | 0732     | 0738     | N13 | E64 | 3628      | 03    | 3.1    | 9D        | SN      | C 2.2 |         |      |           | 51                               | 1.7           | DT      |       |    |      |  |      |                 |  |
|       | PEKG | 26  | 0729E      | 0731U    | 0731D    | N14 | E64 | 3628      | 03    | 3.1    | 2D        | SF      |       | C       | 0731 |           | 38                               |               | DT      |       |    |      |  |      |                 |  |
|       | ATHN | 26  | 0730E      | 0732     | 0738     | N12 | E63 | 3628      | 03    | 3.0    | 8D        | SB      | C 2.2 | 4       | V    | 0732      |                                  | 64            | 1.7     |       |    |      |  |      |                 |  |
| 0767  | HTPR | 26  | 0801       | 0805     | 0810     | N16 | E47 | 3625      | 03    | 1.9    | 9         | SF      |       |         | C    | 0805      |                                  | 20            | .3      |       |    |      |  |      |                 |  |
| 0768  | ABST | 26  | 0836       | 0840     | 0846     | N15 | E62 | 3628      | 03    | 3.0    | 10        | SF      |       |         | C    | 0840      |                                  | 87            | 2.0     | DJ    |    |      |  |      |                 |  |
| 0769  |      | 26  | 09079      | 09152    | 0928     | N18 | E52 | 3628      | 03    | 2.3    | 21        | 1N      |       |         |      |           |                                  | 120           | 2.2     | F     |    |      |  |      |                 |  |
|       | HTPR | 26  | 0907       | 0915     | 0930     | N18 | E52 | 3628      | 03    | 2.3    | 23        | SF      |       |         | C    | 0915      |                                  | 30            | .5      |       |    |      |  |      |                 |  |
|       | YUNN | 26  | 0916       | 0917     | 0926     | N17 | E51 | 3628      | 03    | 2.3    | 10        | 1N      |       |         | C    |           |                                  | 209           | 3.8     | F     |    |      |  |      |                 |  |
| 0770  | HTPR | 26  | 1146       | 1147     | 1150     | S15 | E27 | 3622      | 02    | 28.5   | 4         | SF      |       |         | C    | 1147      |                                  | 50            | .6      | E     |    |      |  |      |                 |  |
| 0771  | HTPR | 26  | 1305       | 1307     | 1310     | N14 | E51 | 3625      | 03    | 2.4    | 5         | SF      |       |         | C    | 1307      |                                  | 30            | .5      |       |    |      |  |      |                 |  |
| 0772  | HTPR | 26  | 1517       | 1520     | 1534     | N17 | E44 | 3625      | 03    | 2.0    | 17        | SN      |       |         | C    | 1520      |                                  | 80            | 1.1     | E     |    |      |  |      |                 |  |
|       |      |     |            |          |          |     |     |           |       |        |           |         |       |         |      |           |                                  |               |         |       | 26 | 1625 |  | 2017 | No Flare Patrol |  |
| 0773  | BIGB | 26  | 1736       | 1741     | 1753     | S04 | W86 | 3625      | 02    | 20.3   | 17        | SN      |       | 3       | C    | 1741      |                                  | 70            |         |       |    |      |  |      |                 |  |
|       |      |     |            |          |          |     |     |           |       |        |           |         |       |         |      |           |                                  |               |         |       | 26 | 2019 |  | 2043 | No Flare Patrol |  |
|       |      |     |            |          |          |     |     |           |       |        |           |         |       |         |      |           |                                  |               |         |       | 26 | 2045 |  | 2100 | No Flare Patrol |  |
| 0774  | CULG | 26  | 2211       | 2217     | 2232     | N20 | E45 | 3628      | 03    | 2.4    | 21        | SN      |       |         | P    | 2217      |                                  | 80            | 1.2     |       |    |      |  |      |                 |  |
| 0775  | CULG | 27  | 0103       | 0104     | 0110     | N21 | E37 | 3625      | 03    | 1.9    | 7         | SF      |       |         | C    | 0104      |                                  | 40            | .7      |       |    |      |  |      |                 |  |
| 0776  | LEAR | 27  | 0318       | 0319     | 0341     | S14 | E22 | 3622      | 02    | 28.8   | 23        | SF      |       | 3       | C    |           |                                  | 23            |         |       |    |      |  |      |                 |  |
| 0777  | LEAR | 27  | 0342       | 0342     | 0350     | N17 | E51 | 3628      | 03    | 3.0    | 8         | SF      |       | 3       | C    |           |                                  | 22            |         | F     |    |      |  |      |                 |  |
| 0778  | LEAR | 27  | 0343       | 0345     | 0354     | S09 | W04 | 3618      | 02    | 26.8   | 11        | SF      |       | 3       | C    |           |                                  | 35            |         | F     |    |      |  |      |                 |  |
| 0779  |      | 27  | 04591      | 05046    | 0516     | S22 | E83 | 3629      | 03    | 5.6    | 17        | SF      |       |         |      |           |                                  | 40            |         |       |    |      |  |      |                 |  |
|       | CULG | 27  | 0459       | 0504     | 0516     | S20 | E84 | 3629      | 03    | 5.6    | 17        | SF      |       |         | C    | 0504      |                                  | 40            |         |       |    |      |  |      |                 |  |
|       | LEAR | 27  | 0500       | 0510     | 0517     | S23 | E82 | 3629      | 03    | 5.5    | 17        | SF      |       | 3       | C    |           |                                  |               |         |       |    |      |  |      |                 |  |
| 0780  | CULG | 27  | 0533E      | 0536U    | 0543     | S07 | E77 | 3631      | 03    | 5.0    | 10D       | SF      |       |         | P    | 0536      |                                  | 50            |         |       |    |      |  |      |                 |  |
| 0781  |      | 27  | 06261      | 06277    | 0635     | S11 | W88 |           | 02    | 20.6   | 9         | SF      |       |         |      |           |                                  | 106           |         | ADG   |    |      |  |      |                 |  |
|       | YUNN | 27  | 0626       | 0628     | 0634     | S12 | W83 |           | 02    | 21.0   | 8         | 1N      |       |         | C    |           |                                  | 161           |         | AG    |    |      |  |      |                 |  |
|       | LEAR | 27  | 0627       | 0627     | 0633     | S11 | W90 |           | 02    | 20.5   | 6         | SF      |       | 3       | C    |           |                                  |               |         |       |    |      |  |      |                 |  |
|       | PEKG | 27  | 0629E      | 0634     | 0637     | S10 | W90 |           | 02    | 20.5   | 8D        | SF      |       |         | P    | 0634      |                                  | 50            |         | D     |    |      |  |      |                 |  |
| 0782  | KANZ | 27  | 0759       |          | 0809     | S13 | W90 |           | 02    | 20.5   | 10        | SN      |       | 2       |      |           |                                  |               |         | AG    |    |      |  |      |                 |  |
| 0783  | ISTA | 27  | 0800       |          | 0820     | S25 | E90 |           | 03    | 6.3    | 20        | SN      |       |         |      |           |                                  |               |         | D     |    |      |  |      |                 |  |
| 0784  |      | 27  | 08314      | 08356    | 0857     | S21 | E83 | 3629      | 03    | 5.7    | 26.       | 1N      |       |         |      |           |                                  | 117           |         | ACEFJ |    |      |  |      |                 |  |
|       | LEAR | 27  | 0831       | 0836     | 0848     | S23 | E81 | 3629      | 03    | 5.6    | 17        | 1B      |       | 3       | C    |           |                                  |               |         | FE    |    |      |  |      |                 |  |
|       | ABST | 27  | 0832       | 0836     | 0903     | S20 | E85 | 3629      | 03    | 5.8    | 31        | 1N      |       |         | C    | 0836      |                                  | 175           |         | F     |    |      |  |      |                 |  |
|       | KANZ | 27  | 0833       | 0837     | 0902     | S22 | E80 | 3629      | 03    | 5.5    | 29        | SB      |       | 2       |      |           |                                  |               |         |       |    |      |  |      |                 |  |
|       | HTPR | 27  | 0834       | 0837     | 0842     | S21 | E75 | 3629      | 03    | 5.1    | 8         | SN      |       |         | C    | 0837      |                                  | 50            |         |       |    |      |  |      |                 |  |
|       | WEND | 27  | 0834       | 0838     | 0858     | S22 | E85 | 3629      | 03    | 5.9    | 24        | 1N      |       |         | C    | 0838      |                                  | 136           |         | A     |    |      |  |      |                 |  |
|       | ISTA | 27  | 0835       |          | 0902     | S20 | E88 | 3629      | 03    | 6.1    | 27        | 2B      |       |         |      |           |                                  |               |         | CJ    |    |      |  |      |                 |  |
|       | CATA | 27  | 0835       | 0835     | 0900     | S19 | E80 | 3629      | 03    | 5.5    | 25        | 1       |       | 2       | C    | 0835      |                                  | 112           |         |       |    |      |  |      |                 |  |
|       | MANI | 27  | 0836E      | 0837     | 0853D    | S22 | E81 | 3629      | 03    | 5.6    | 17D       | 1N      |       | 1       | V    |           |                                  | 150           |         |       |    |      |  |      |                 |  |
|       | ATHN | 27  | 0837E      | 0837     | 0916D    | S17 | E89 | 3629      | 03    | 6.1    | 39D       | 1B      |       | 1       | V    | 0837      |                                  | 80            |         |       |    |      |  |      |                 |  |
|       | YUNN | 27  | 0841E      | 0841     | 0900     | S21 | E87 | 3629      | 03    | 6.0    | 19D       | SF      |       |         | C    |           |                                  |               |         |       | A  |      |  |      |                 |  |
| 0785  |      | 27  | 08591      | 09023    | 0907     | N16 | E32 | 3625      | 03    | 1.8    | 8         | SN      |       |         |      |           |                                  | 27            |         | F     |    |      |  |      |                 |  |
|       | KANZ | 27  | 0859       | 0902     | 0906     | N16 | E32 | 3625      | 03    | 1.8    | 7         | SN      |       | 3       |      |           |                                  |               |         |       |    |      |  |      |                 |  |
|       | LEAR | 27  | 0900       | 0905     | 0908     | N15 | E32 | 3625      | 03    | 1.8    | 8         | SN      |       | 3       | C    |           |                                  | 27            |         | F     |    |      |  |      |                 |  |
| 0786  | LEAR | 27  | 0901       | 0902     | 0909     | N04 | E27 | 3624      | 03    | 1.4    | 8         | SF      |       | 3       | C    |           |                                  | 27            |         |       |    |      |  |      |                 |  |
| 0787  |      | 27  | 09242      | 09255    | 0939     | S13 | W89 |           | 02    | 20.7   | 15        | SN      |       |         |      |           |                                  | 81            |         | AG    |    |      |  |      |                 |  |
|       | LEAR | 27  | 0924       | 0926     | 0939     | S12 | W90 |           | 02    | 20.6   | 15        | SN      |       | 3       | C    |           |                                  |               |         |       |    |      |  |      |                 |  |
|       | HTPR | 27  | 0924       | 0927     | 0936     | S12 | W90 |           | 02    | 20.6   | 12        | SN      |       |         | C    | 0927      |                                  | 50            |         |       |    |      |  |      |                 |  |
|       | CATA | 27  | 0925       | 0925     | 0945     | S15 | W90 |           | 02    | 20.6   | 20        | 1       |       | 2       | C    | 0925      |                                  | 112           |         |       |    |      |  |      |                 |  |
|       | YUNN | 27  | 0926       | 0930     | 0936     | S13 | W84 |           | 02    | 21.0   | 10        | SF      |       |         | C    |           |                                  |               |         | AG    |    |      |  |      |                 |  |
|       | KANZ | 27  | 0926       | 0930     | 0942     | S13 | W90 |           | 02    | 20.6   | 16        | SN      |       | 1       |      |           |                                  |               |         |       |    |      |  |      |                 |  |

H - ALPHA SOLAR FLARES

63  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Day  | Dur<br>(Min) | Imp<br>Opt | Xray | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |                 |     |                         |           |      |              |            |      |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0788  | ISTA | 27  | 0928       |          | 0943     | S22             | E90 |                         | 03        | 6.3  | 15           | SB         |      |            |      |              |                                     |                  | D       |  |
| 0789  | KANZ | 27  | 1017       | 1021     | 1029     | N17             | E51 | 3628                    | 03        | 3.3  | 12           | SF         |      | 2          |      |              |                                     |                  |         |  |
| 0790  |      | 27  | 10401      | 10492    | 1058     | N14             | E31 | 3625                    | 03        | 1.8  | 18           | SN         |      |            |      |              | 28                                  | .3               |         |  |
|       | KANZ | 27  | 1040       | 1051     | 1059     | N15             | E31 | 3625                    | 03        | 1.8  | 19           | SN         |      | 3          |      |              |                                     |                  |         |  |
|       | WEND | 27  | 1041       | 1049     | 1058     | N14             | E31 | 3625                    | 03        | 1.8  | 17           | SN         |      |            | C    | 1049         | 28                                  | .3               |         |  |
| 0791  | CATA | 27  | 1105       | 1110     | 1120     | S14             | W90 |                         | 02        | 20.7 | 15           | I          |      | 2          | P    | 1110         | 84                                  |                  |         |  |
| 0792  |      | 27  | 11332      | 11371    | 1157     | S21             | E80 | 3629                    | 03        | 5.6  | 24           | 1B         |      |            |      |              | 56                                  |                  | A       |  |
|       | KANZ | 27  | 1133       | 1137     | 1204     | S20             | E81 | 3629                    | 03        | 5.7  | 31           | SB         |      | 3          |      |              |                                     |                  |         |  |
|       | WEND | 27  | 1135       | 1138     | 1150     | S22             | E79 | 3629                    | 03        | 5.5  | 15           | 1N         |      |            | C    | 1138         | 56                                  |                  | A       |  |
| 0793  | HTPR | 27  | 1136       | 1137     | 1141     | S15             | E80 | 3631                    | 03        | 5.5  | 5            | SB         |      |            | C    | 1137         | 40                                  |                  |         |  |
| 0794  | KANZ | 27  | 1200       | 1200     | 1206     | S12             | E17 | 3622                    | 02        | 28.8 | 6            | SF         |      | 3          |      |              |                                     |                  |         |  |
| 0795  |      | 27  | 13131      | 1318     | 1324     | S22             | E77 | 3629                    | 03        | 5.5  | 11           | SF         |      |            |      |              | 34                                  |                  |         |  |
|       | WEND | 27  | 1313       | 1318     | 1326     | S22             | E79 | 3629                    | 03        | 5.6  | 13           | SF         |      |            | C    | 1318         | 34                                  |                  |         |  |
|       | KANZ | 27  | 1314       | 1318     | 1322     | S22             | E75 | 3629                    | 03        | 5.3  | 8            | SF         |      | 3          |      |              |                                     |                  |         |  |
| 0796  |      | 27  | 14007      | 1418*    | 1536     | S19             | E04 | 3619                    | 02        | 27.9 | 96           | 1N         |      |            |      |              | 249                                 | 2.6              | EIS     |  |
|       | HTPR | 27  | 1400       | 1426     | 1550     | S20             | E04 | 3619                    | 02        | 27.9 | 110          | 1N         |      |            | C    | 1426         | 260                                 | 2.6              | ES      |  |
|       | KANZ | 27  | 1407       | 1418     | 1506D    | S18             | E04 | 3619                    | 02        | 27.9 | 59D          | SN         |      | 3          |      |              |                                     |                  |         |  |
|       | WEND | 27  | 1421E      | 1428     | 1522     | S18             | E03 | 3619                    | 02        | 27.8 | 61D          | 1N         |      |            | C    | 1428         | 238                                 | 2.6              | I       |  |
| 0797  | WEND | 27  | 1551       | 1553     | 1555     | N14             | E29 | 3625                    | 03        | 1.8  | 4            | SN         |      |            | C    | 1553         | 31                                  | .4               |         |  |
| 0798  | HTPR | 27  | 1615       |          | 1648D    | N20             | E51 | 3628                    | 03        | 3.6  | 33D          | SF         |      |            | C    | 1620         | 20                                  | .3               |         |  |
| 0799  | HTPR | 27  | 1626       | 1632     | 1645     | N16             | E36 | 3625                    | 03        | 2.4  | 19           | SF         |      |            | C    | 1632         | 20                                  | .3               |         |  |
|       |      | 27  | 1649       |          | 1656     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
|       |      | 27  | 1711       |          | 1715     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
|       |      | 27  | 1730       |          | 1746     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
|       |      | 27  | 1809       |          | 1818     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
| 0800  | HOLL | 27  | 1916       | 1934     | 2113D    | N15             | E43 | 3628                    | 03        | 3.0  | 117D         | SN         |      | 3          | C    |              | 159                                 |                  | F       |  |
| 0801  | HOLL | 27  | 1929       | 1931     | 1951     | S19             | E68 | 3629                    | 03        | 5.0  | 22           | SF         |      | 3          | C    |              | 20                                  |                  |         |  |
|       |      | 27  | 2124       |          | 2134     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
| 0802  | CULG | 27  | 2139U      | 2141U    | 2153U    | N20             | E31 | 3628                    | 03        | 2.3  | 14U          | SN         |      |            | P    | 2141         | 80                                  | 1.0              | EJ      |  |
|       |      | 27  | 2158       |          | 2213     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
|       |      | 27  | 2216       |          | 2223     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |              |                                     |                  |         |  |
| 0803  |      | 28  | 0020       | 0021*    | 0036     | N17             | E31 | 3628                    | 03        | 2.4  | 16           | SN         |      |            |      |              | 58                                  | .7               | DF      |  |
|       | MANI | 28  | 0020       | 0021     | 0030     | N16             | E30 | 3628                    | 03        | 2.3  | 1Q           | SB         |      | 1          | V    |              | 80                                  | 1.0              | F       |  |
|       | PEKG | 28  | 0026E      | 0026     | 0027     | N17             | E31 | 3628                    | 03        | 2.4  | 1D           | SN         |      |            | P    | 0026         | 46                                  | .6               | D       |  |
|       | YUNN | 28  | 0031E      | 0036     | 0051     | N17             | E31 | 3628                    | 03        | 2.4  | 20D          | SN         |      |            | P    | 0031         | 48                                  | .6               | D       |  |
| 0804  | CULG | 28  | 0105       | 0112     | 0130U    | S20             | E68 | 3629                    | 03        | 5.2  | 25U          | SN         |      |            | P    | 0112         | 60                                  |                  |         |  |
| 0805  | CULG | 28  | 0121       | 0123     | 0134U    | N21             | E45 | 3628                    | 03        | 3.5  | 13U          | SN         |      |            | P    | 0123         | 30                                  | .5               | D       |  |
| 0806  | LEAR | 28  | 0222       | 0224     | 0237     | N15             | E40 | 3628                    | 03        | 3.1  | 15           | SF         |      | 3          | C    |              | 30                                  |                  | F       |  |
| 0807  | CULG | 28  | 0347       | 0349     | 0351D    | S15             | W03 | 3619                    | 02        | 27.9 | 4D           | SN         |      |            | P    | 0349         | 30                                  | .3               |         |  |
| 0808  |      | 28  | 04021      | 04036    | 0423     | N16             | E28 | 3625                    | 03        | 2.3  | 21           | SN         |      |            |      |              | 50                                  | .7               | EF      |  |
|       | LEAR | 28  | 0402       | 0403     | 0424     | N15             | E27 | 3625                    | 03        | 2.2  | 22           | SB         |      | 3          | C    |              | 33                                  |                  | FE      |  |
|       | PEKG | 28  | 0403       | 0405     | 0420     | N15             | E28 | 3625                    | 03        | 2.3  | 17           | SN         |      |            | C    | 0405         | 59                                  | .7               | E       |  |
|       | YUNN | 28  | 0405E      | 0409     | 0425     | N16             | E29 | 3625                    | 03        | 2.4  | 20D          | SN         |      |            | P    |              | 48                                  | .6               | E       |  |
|       | MANI | 28  | 0409E      | 0410U    | 0413D    | N16             | E27 | 3625                    | 03        | 2.2  | 4D           | SN         |      | 1          | V    |              | 60                                  | .8               |         |  |
| 0809  |      | 28  | 04202      | 04223    | 0445     | S26             | E64 | 3629                    | 03        | 5.1  | 25           | SF         |      |            |      |              | 32                                  | .9               | F       |  |
|       | CULG | 28  | 0420       | 0422     | 0441U    | S24             | E64 | 3629                    | 03        | 5.1  | 21U          | SF         |      |            | P    | 0422         | 40                                  | .9               | F       |  |
|       | LEAR | 28  | 0422       | 0425     | 0445     | S27             | E64 | 3629                    | 03        | 5.2  | 23           | SF         |      | 3          | C    |              | 25                                  |                  | F       |  |

H - ALPHA SOLAR FLARES

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | (Min) | Imp<br>Opt | Xray  | Obs<br>See | Type | Time<br>(UT) | Area Measurement                    |                  | Remarks |  |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|-------|------------|-------|------------|------|--------------|-------------------------------------|------------------|---------|--|
|       |      |     |            |          |          |                 |     |                         |           |            |       |            |       |            |      |              | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |  |
| 0810  | CULG | 28  | 0421U      | 0423     | 0425D    | S16             | E03 | 3622A                   | 02        | 28.4       | 4U    | SF         |       |            | P    | 0423         | 50                                  | .5               | E       |  |
| 0811  | CULG | 28  | 0423       | 0425U    | 0440U    | S16             | E24 | 3630                    | 03        | 2.0        | 17U   | SF         |       |            | P    | 0425         | 40                                  | .4               | J       |  |
| 0812  |      | 28  | 04383      | 04447    | 0534     | N14             | E37 | 3628                    | 03        | 3.0        | 56    | SN         |       |            |      |              | 160                                 | 2.4              | FJ      |  |
|       | CULG | 28  | 0438       | 0448U    | 0456D    | N15             | E37 | 3628                    | 03        | 3.0        | 18D   | SN         |       |            | P    | 0448         | 100                                 | 1.4              | FJ      |  |
|       | LEAR | 28  | 0440       | 0444     | 0533     | N13             | E35 | 3628                    | 03        | 2.8        | 53    | SN         |       | 3          | C    |              | 108                                 |                  | F       |  |
|       | YUNN | 28  | 0441       | 0445     | 0515     | N14             | E37 | 3628                    | 03        | 3.0        | 34    | 1F         |       |            | C    |              | 321                                 | 4.5              | F       |  |
|       | PEKG | 28  | 0441       | 0451     | 0555     | N14             | E36 | 3628                    | 03        | 2.9        | 74    | 1N         |       |            | C    | 0451         | 172                                 | 2.4              | F       |  |
|       | MANI | 28  | 0457E      | 0459U    | 0502D    | N15             | E39 | 3628                    | 03        | 3.1        | 5D    | SN         |       | 1          | V    |              | 100                                 | 1.4              | F       |  |
| 0813  |      | 28  | 0450       | 04521    | 0522     | N19             | E24 | 3625A                   | 03        | 2.0        | 32    | 2B         | M 2.0 |            |      |              | 511                                 | 5.4              | EF1U    |  |
|       | PURP | 28  | 0445E      | 0445U    | 0457D    | N20             | E25 | 3625A                   | 03        | 2.1        | 12D   | 2B         |       |            | V    | 0445         | 482                                 | 6.1              |         |  |
|       | LEAR | 28  | 0450       | 0452     | 0523     | N19             | E24 | 3625A                   | 03        | 2.0        | 33    | 2B         |       | 3          | C    |              | 927                                 |                  | FE      |  |
|       | PEKG | 28  | 0450E      | 0453     | 0545     | N20             | E23 | 3625A                   | 03        | 2.0        | 55D   | 2B         | M 2.0 |            | C    | 0453         | 610                                 | 7.7              | FU      |  |
|       | MAN1 | 28  | 0452E      | 0452U    | 0508     | N17             | E25 | 3625A                   | 03        | 2.1        | 16D   | 1B         |       | 1          | V    |              | 190                                 | 2.4              | F       |  |
|       | YUNN | 28  | 0452E      | 0453     | 0513     | N21             | E23 | 3625A                   | 03        | 2.0        | 21D   | 2B         |       |            | P    |              | 675                                 | 8.6              | F1      |  |
|       | CULG | 28  | 0455E      | 0456U    | 0456D    | N19             | E22 | 3625A                   | 03        | 1.9        | 1D    | 1B         |       |            | P    | 0456         | 180                                 | 2.2              | F       |  |
| 0814  |      | 28  | 0453       | 0454     | 0459     | N22             | E04 |                         | 02        | 28.5       | 6     | SN         |       |            |      |              | 110                                 | 1.2              | EFG1    |  |
|       | YUNN | 28  | 0453       | 0454     | 0459     | N22             | E04 |                         | 02        | 28.5       | 6     | SN         |       |            | C    |              | 129                                 | 1.5              | EG      |  |
|       | CULG | 28  | 0455E      | 0456U    | 0456D    | N22             | E03 |                         | 02        | 28.4       | 1D    | SN         |       |            | P    | 0456         | 90                                  | 1.0              | F1      |  |
| 0815  | PEKG | 28  | 0538       | 0540     | 0546     | S10             | W10 | 3619                    | 02        | 27.5       | 8     | SF         |       |            | P    | 0540         | 17                                  | .2               | DH      |  |
| 0816  |      | 28  | 05492      | 05532    | 0606     | N19             | E43 | 3628                    | 03        | 3.5        | 17    | SN         |       |            |      |              | 45                                  | .8               | DEF     |  |
|       | YUNN | 28  | 0549       | 0553     | 0607     | N20             | E43 | 3628                    | 03        | 3.5        | 18    | SN         |       |            | C    |              | 48                                  | .8               | D       |  |
|       | LEAR | 28  | 0551       | 0553     | 0608     | N18             | E42 | 3628                    | 03        | 3.4        | 17    | SN         |       | 3          | C    |              | 28                                  |                  | F       |  |
|       | PEKG | 28  | 0551       | 0555     | 0602     | N19             | E44 | 3628                    | 03        | 3.6        | 11    | SF         |       |            | P    | 0555         | 59                                  | .9               | E       |  |
| 0817  | LEAR | 28  | 0558       | 0603     | 0610     | S17             | E23 | 3630                    | 03        | 2.0        | 12    | SN         |       | 3          | C    |              | 42                                  |                  |         |  |
| 0818  | LEAR | 28  | 0625       | 0628     | 0640     | N17             | E42 | 3628                    | 03        | 3.4        | 15    | SN         |       | 3          | C    |              | 42                                  |                  | F       |  |
| 0819  |      | 28  | 07082      | 0712     | 0717     | N18             | E21 | 3625                    | 03        | 1.9        | 9     | SN         |       |            |      |              | 50                                  | .7               | EF      |  |
|       | YUNN | 28  | 0708       | 0712     | 0712D    | N18             | E22 | 3625                    | 03        | 2.0        | 4D    | SN         |       |            | P    |              | 80                                  | 1.0              | E       |  |
|       | LEAR | 28  | 0709       | 0712     | 0718     | N17             | E21 | 3625                    | 03        | 1.9        | 9     | SN         |       | 3          | C    |              | 29                                  |                  | F       |  |
|       | PEKG | 28  | 0710       | 0712     | 0716     | N19             | E21 | 3625                    | 03        | 1.9        | 6     | SF         |       |            | P    | 0712         | 42                                  | .4               | E       |  |
| 0820  | LEAR | 28  | 0747       | 0749     | 0752     | S16             | E20 | 3630                    | 03        | 1.8        | 5     | SN         |       | 3          | C    |              | 29                                  |                  |         |  |
| 0821  | LEAR | 28  | 0751       | 0751     | 0805     | N20             | E36 | 3628                    | 03        | 3.1        | 14    | SF         |       | 3          | C    |              | 38                                  |                  |         |  |
| 0822  | LEAR | 28  | 0813       | 0813     | 0822     | N15             | E37 | 3628                    | 03        | 3.1        | 9     | SB         |       | 3          | C    |              | 19                                  |                  | EF      |  |
| 0823  |      | 28  | 0910       | 0906*    | 0930     | S06             | E28 | 3626                    | 03        | 2.5        | 20    | SB         |       |            |      |              | 151                                 | 1.7              | EFHKL   |  |
|       | LEAR | 28  | 0848E      | 0904U    | 0932D    | S08             | E27 | 3626                    | 03        | 2.4        | 44D   | SN         |       | 2          | C    |              | 155                                 |                  | F       |  |
|       | YUNN | 28  | 0904E      | 0906     | 0930     | S06             | E28 | 3626                    | 03        | 2.5        | 26D   | 1B         |       |            | P    |              | 225                                 | 2.6              |         |  |
|       | PEKG | 28  | 0910       | 0912U    | 0936D    | S05             | E28 | 3626                    | 03        | 2.5        | 26D   | SN         |       |            | P    | 0912         | 63                                  | .7               | EHK     |  |
|       | PEKG | 28  | 0910       | 0918     | 0936D    | S05             | E27 | 3626                    | 03        | 2.4        | 26D   | SB         |       |            | P    | 0918         | 160                                 | 1.8              | FL      |  |
| 0824  |      | 28  | 0917       | 0918     | 0906     | N06             | W52 | 3613                    | 02        | 24.5       | 1429  | SF         |       |            |      |              | 38                                  | .4               | DF      |  |
|       | LEAR | 28  | 0848E      | 0849U    | 0906     | N06             | W52 | 3613                    | 02        | 24.5       | 18D   | SF         |       | 2          | C    |              | 51                                  |                  | F       |  |
|       | PEKG | 28  | 0917       | 0918     | 0918D    | N07             | W52 | 3613                    | 02        | 24.5       | 1D    | SF         |       |            | P    | 0918         | 25                                  | .4               | D       |  |
| 0825  | LEAR | 28  | 0920       | 0921     | 0932D    | N16             | E26 | 3625                    | 03        | 2.4        | 12D   | SN         |       | 3          | C    |              | 37                                  |                  | F       |  |
| 0826  | KANZ | 28  | 1119       | 1119     | 1142     | N16             | E22 | 3625                    | 03        | 2.1        | 23    | SN         |       | 3          |      |              |                                     |                  |         |  |
| 0827  | KANZ | 28  | 1142       | 1142     | 1149     | N09             | W17 | 3618B                   | 02        | 27.2       | 7     | SN         |       | 3          |      |              |                                     |                  | G       |  |
| 0828  | KANZ | 28  | 1223       | 1231     | 1245     | N19             | E31 | 3628                    | 03        | 2.9        | 22    | SN         |       | 3          |      |              |                                     |                  |         |  |
| 0829  | KANZ | 28  | 1326       | 1326     | 1330     | N19             | E33 | 3628                    | 03        | 3.1        | 4     | SF         |       | 3          |      |              |                                     |                  |         |  |
| 0830  | KANZ | 28  | 1337       | 1337     | 1345     | S18             | E18 | 3630                    | 03        | 1.9        | 8     | SF         |       | 3          |      |              |                                     |                  |         |  |
|       |      | 28  | 1436       |          | 1439     | No Flare Patrol |     |                         |           |            |       |            |       |            |      |              |                                     |                  |         |  |
|       |      | 28  | 1503       |          | 2038     | No Flare Patrol |     |                         |           |            |       |            |       |            |      |              |                                     |                  |         |  |
| 0831  | HOLL | 28  | 2039       | 2047     | 2128     | N14             | E26 | 3628                    | 03        | 2.8        | 49    | 1B         |       | 3          | C    |              | 232                                 |                  | EF      |  |

H - ALPHA SOLAR FLARES

65  
Feb 82

FEBRUARY 1982

| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF<br>Region | CMP<br>Mo | Dur<br>Day | Dur<br>(Min) | Imp |      | Obs<br>See | Type | Area Measurement |                                  | Remarks |               |
|-------|------|-----|------------|----------|----------|-----------------|-----|-------------------------|-----------|------------|--------------|-----|------|------------|------|------------------|----------------------------------|---------|---------------|
|       |      |     |            |          |          |                 |     |                         |           |            |              | Opt | Xray |            |      | Time (UT)        | Apparent (10 <sup>-6</sup> Disk) |         | Corr (Sq Deg) |
| 0832  | HOLL | 28  | 2106       | 2107     | 2114     | S22             | E57 | 3629                    | 03        | 5.2        | 8            | SN  |      | 3          | C    |                  | 20                               |         | F             |
|       |      | 28  | 2129       |          | 2223     | No Flare Patrol |     |                         |           |            |              |     |      |            |      |                  |                                  |         |               |
| 0833  | HOLL | 28  | 2224       | 2224     | 2242     | S17             | E14 | 3630                    | 03        | 2.0        | 18           | SF  |      | 3          | C    |                  | 38                               |         | F             |
| 0834  | HOLL | 28  | 2228       | 2234     | 2243     | N16             | E18 | 3625                    | 03        | 2.3        | 15           | SF  |      | 3          | C    |                  | 22                               |         |               |
| 0835  | HOLL | 28  | 2252       | 2254     | 2305     | S19             | E53 | 3629                    | 03        | 5.0        | 13           | SF  |      | 3          | C    |                  | 33                               |         |               |
| 0836  | HOLL | 28  | 2351       | 0007     | 0009D    | N12             | E15 | 3625                    | 03        | 2.1        | 18D          | SB  |      | 3          | C    |                  | 134                              |         |               |

"Remarks":

- |  |   |
|--|---|
| <p>A = Eruptive prominence whose base is less than 90° from central meridian.<br/>                 B = Probably the end of a more important flare.<br/>                 C = Invisible 10 minutes before.<br/>                 D = Brilliant point.<br/>                 E = Two or more brilliant points.<br/>                 F = Several eruptive centers.<br/>                 G = No visible spots in the neighborhood.<br/>                 H = Flare accompanied by high-speed dark filament.<br/>                 I = Active region very extended.<br/>                 J = Distinct variations of plage intensity before or after the flare.<br/>                 K = Several intensity maxima.<br/>                 L = Existing filaments show signs of sudden activity.<br/>                 M = White-light flare.<br/>                 N = Continuous spectrum shows effects of polarization.</p> | <p>O = Observations have been made in the H and K lines of Ca II.<br/>                 P = Flare shows helium D3 in emission.<br/>                 Q = Flare shows Balmer continuum in emission.<br/>                 R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.<br/>                 S = Brightness follows disappearance of filament in same position.<br/>                 T = Region active all day.<br/>                 U = Two bright branches, parallel or converging.<br/>                 V = Occurrence of an explosive phase: important, expansion within roughly 1 minute that often includes a significant intensity increase.<br/>                 W = Great increase in area after time of maximum intensity.<br/>                 X = Unusually wide H-alpha line.<br/>                 Y = System of loop-type prominences.<br/>                 Z = Major sunspot umbra covered by flare.</p> |
|--|---|