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Dec 93

# H $\alpha$ SOLAR FLARES

DECEMBER 1993

| 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<br>(UT)     | Apparent<br>(10-6 Disk) | Corr<br>(Sq Deg) |         |
| 0001  |      | 01  | 0024       | 0039     | 0046     | N04             | W18 | 7624                    | 11        | 29.8 | 22           | SF         |      |            |      |                  | 17                      |                  | F       |
|       | LEAR | 01  | 0024       | 0039     | 0046     | N05             | W18 | 7624                    | 11        | 29.8 | 22           | SF         |      | 3          | E    |                  | 21                      |                  | F       |
|       | PALE | 01  | 0025E      | 0037U    | 0046D    | N02             | W18 | 7624                    | 11        | 29.8 | 21D          | SF         |      | 3          | E    |                  | 13                      |                  |         |
| 0002  | LEAR | 01  | 0057       | 0112     | 0134     | N06             | W18 | 7624                    | 11        | 29.8 | 37           | SF         |      | 3          | E    |                  | 25                      |                  |         |
| 0003  |      | 01  | 0149       | 0151     | 0154     | N04             | W19 | 7624                    | 11        | 29.7 | 5            | SF         |      |            |      |                  | 17                      |                  |         |
|       | PALE | 01  | 0148E      | 0150U    | 0151D    | N02             | W19 | 7624                    | 11        | 29.7 | 3D           | SF         |      | 3          | E    |                  | 14                      |                  |         |
|       | LEAR | 01  | 0149       | 0151     | 0154     | N05             | W19 | 7624                    | 11        | 29.7 | 5            | SF         |      | 3          | E    |                  | 20                      |                  |         |
| 0004  |      | 01  | 0159       | 0205     | 0227     | N04             | W18 | 7624                    | 11        | 29.8 | 28           | SF C 3.2   |      |            |      |                  | 66                      |                  |         |
|       | LEAR | 01  | 0159       | 0205     | 0227     | N05             | W18 | 7624                    | 11        | 29.8 | 28           | SF C 3.2   |      | 3          | E    |                  | 80                      |                  |         |
|       | PALE | 01  | 0201E      | 0209U    | 0215D    | N02             | W18 | 7624                    | 11        | 29.8 | 14D          | SF         |      | 2          | E    |                  | 53                      |                  |         |
| 0005  |      | 01  | 0235       | 0237     | 0250     | N04             | W18 | 7624                    | 11        | 29.9 | 15           | SF         |      |            |      |                  | 10                      |                  |         |
|       | LEAR | 01  | 0235       | 0237     | 0250     | N05             | W19 | 7624                    | 11        | 29.8 | 15           | SF         |      | 3          | E    |                  | 10                      |                  |         |
|       | PALE | 01  | 0238E      | 0238U    | 0240D    | N02             | W18 | 7624                    | 11        | 29.9 | 2D           | SF         |      | 2          | E    |                  | 10                      |                  |         |
| 0006  | LEAR | 01  | 0415       | 0419     | 0431     | N05             | W21 | 7624                    | 11        | 29.7 | 16           | 1N C 5.0   |      | 3          | E    |                  | 128                     |                  | F       |
| 0007  | LEAR | 01  | 0439       | 0443     | 0449     | N04             | W16 | 7624                    | 11        | 30.0 | 10           | SF         |      | 3          | E    |                  | 19                      |                  |         |
| 0008  | LEAR | 01  | 0555       | 0603     | 0616     | N04             | W20 | 7624                    | 11        | 29.8 | 21           | SF         |      | 3          | E    |                  | 54                      |                  | F       |
| 0009  | LEAR | 01  | 0701       | 0702     | 0710     | S23             | E65 | 7627                    | 12        | 6.3  | 9            | SF C 3.1   |      | 3          | E    |                  | 51                      |                  | F       |
| 0010  | LEAR | 01  | 0842       | 0859     | 0902     | N06             | W23 | 7624                    | 11        | 29.7 | 20           | SF         |      | 3          | E    |                  | 35                      |                  | F       |
| 0011  | LEAR | 01  | 0932       | 0932     | 0938     | N05             | W24 | 7624                    | 11        | 29.7 | 6            | SF         |      | 3          | E    |                  | 20                      |                  | F       |
| 0012  | SVTO | 01  | 1121       |          | 1124D    | N03             | W22 | 7624                    | 11        | 29.9 | 3D           | SF C 1.4   |      | 3          | E    |                  | 17                      |                  | H       |
| 0013  | RAMY | 01  | 1229       | 1230     | 1234     | N04             | W24 | 7624                    | 11        | 29.8 | 5            | SF B 8.6   |      | 3          | E    |                  | 21                      |                  |         |
| 0014  | HTPR | 02  | 0954       | 0959     | 1021     | S22             | E62 | 7629                    | 12        | 7.2  | 27           | 1F         |      |            | C    | 0959             | 110                     | 2.4              | DKT     |
| 0015  | CATA | 02  | 1236E      | 1240     | 1245D    | S23             | E56 | 7627                    | 12        | 6.8  | 9D           | SN         |      | 2          | C    | 1240             | 56                      | 1.1              |         |
| 0016  | RAMY | 02  | 1553       | 1557     | 1605     | S16             | E55 | 7627                    | 12        | 6.8  | 12           | SF B 6.4   |      | 3          | E    |                  | 13                      |                  |         |
| 0017  | PALE | 02  | 1928E      | 1928U    | 1941D    | S18             | E48 | 7627                    | 12        | 6.5  | 13D          | SF B 4.5   |      | 3          | E    |                  | 16                      |                  |         |
|       |      | 02  | 1943       |          | 1944     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                         |                  |         |
| 0018  |      | 02  | 2236       | 2241     | 2309     | S18             | E48 | 7627                    | 12        | 6.6  | 33           | SF B 9.2   |      |            |      |                  | 38                      |                  | F       |
|       | HOLL | 02  | 2236       | 2241     | 2309     | S19             | E48 | 7627                    | 12        | 6.6  | 33           | SF B 9.2   |      | 3          | E    |                  | 51                      |                  | F       |
|       | LEAR | 02  | 2238E      | 2238U    | 2254D    | S18             | E48 | 7627                    | 12        | 6.6  | 16D          | SF         |      | 3          | E    |                  | 25                      |                  | F       |
| 0019  | HTPR | 03  | 1231       | 1300     | 1317     | S16             | E44 | 7627                    | 12        | 6.8  | 46           | SF         |      |            | C    | 1300             | 70                      | 1.0              |         |
| 0020  | HTPR | 03  | 1236       | 1243     | 1251     | S20             | E65 | 7629                    | 12        | 8.5  | 15           | F          |      |            | C    | 1243             | 30                      |                  | D       |
| 0021  | RAMY | 03  | 1348       | 1353     | 1418D    | S17             | E41 | 7627                    | 12        | 6.7  | 30D          | SF         |      | 3          | E    |                  | 12                      |                  |         |
| 0022  |      | 03  | 1657       | 1658     | 1702     | S18             | E40 | 7627                    | 12        | 6.7  | 5            | SF         |      |            |      |                  | 16                      |                  |         |
|       | RAMY | 03  | 1657       | 1658     | 1702     | S17             | E40 | 7627                    | 12        | 6.7  | 5            | SF         |      | 3          | E    |                  | 13                      |                  |         |
|       | HOLL | 03  | 1657       | 1658     | 1703     | S19             | E39 | 7627                    | 12        | 6.7  | 6            | SF         |      | 3          | E    |                  | 18                      |                  |         |
| 0023  |      | 03  | 1801       | 1805     | 1808     | S18             | E39 | 7627                    | 12        | 6.7  | 7            | SF         |      |            |      |                  | 25                      |                  |         |
|       | HOLL | 03  | 1801       | 1805     | 1807     | S18             | E39 | 7627                    | 12        | 6.7  | 6            | SF         |      | 3          | E    |                  | 25                      |                  |         |
|       | RAMY | 03  | 1801       | 1805     | 1808     | S18             | E39 | 7627                    | 12        | 6.7  | 7            | SF         |      | 3          | E    |                  | 25                      |                  |         |
| 0024  | HOLL | 03  | 1932       | 1938     | 1945     | S22             | E57 | 7629                    | 12        | 8.2  | 13           | SF         |      | 3          | E    |                  | 19                      |                  |         |
| 0025  | LEAR | 04  | 0112       | 0118     | 0125     | S23             | E52 | 7629                    | 12        | 8.0  | 13           | SF C 1.2   |      | 3          | E    |                  | 52                      |                  | F       |
| 0026  | LEAR | 04  | 0410       | 0411     | 0416     | S22             | E53 | 7629                    | 12        | 8.2  | 6            | SF B 5.2   |      | 3          | E    |                  | 44                      |                  | F       |
| 0027  | LEAR | 04  | 0510       | 0511     | 0514     | S23             | E50 | 7629                    | 12        | 8.1  | 4            | SF B 5.2   |      | 3          | E    |                  | 17                      |                  |         |

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DECEMBER 1993

| 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>(10-6 Disk) | Corr<br>(Sq Deg) |         |
| 0028  | LEAR | 04  | 0518       | 0518     | 0526     | S23             | E50 | 7629                    | 12        | 8.1  | 8            | SF         | B 6.6 | 3   | E           |                  | 18                      |                  |         |
| 0029  | LEAR | 04  | 0547       | 0554     | 0559     | S23             | E50 | 7629                    | 12        | 8.1  | 12           | SF         | B 6.3 | 3   | E           |                  | 22                      |                  |         |
| 0030  | LEAR | 04  | 0603       | 0608     | 0620     | S23             | E49 | 7629                    | 12        | 8.0  | 17           | SF         | B 5.7 | 3   | E           |                  | 15                      |                  |         |
| 0031  |      | 04  | 07412      | 0747     | 0756     | S23             | E50 | 7629                    | 12        | 8.2  | 15           | SF         | B 3.4 |     |             |                  | 35                      |                  |         |
|       | LEAR | 04  | 0741       | 0747     | 0757     | S23             | E51 | 7629                    | 12        | 8.2  | 16           | SF         | B 3.4 | 3   | E           |                  | 35                      |                  |         |
|       | KANZ | 04  | 0743       | 0747     | 0755     | S23             | E49 | 7629                    | 12        | 8.1  | 12           | SF         |       | 2   | C           |                  |                         |                  |         |
| 0032  | KANZ | 04  | 0950       | 0950     | 0954     | S23             | E48 | 7629                    | 12        | 8.1  | 4            | SF         |       | 2   | C           |                  |                         |                  |         |
| 0033  | HTPR | 04  | 1432       | 1435     | 1443     | N04             | W66 | 7624                    | 11        | 29.8 | 11           | SF         |       |     | C           | 1435             | 40                      | 0.9              | D       |
| 0034  | RAMY | 04  | 1432       | 1436     | 1442     | S21             | E49 | 7629                    | 12        | 8.4  | 10           | SF         | B 8.3 | 3   | E           |                  | 13                      |                  |         |
| 0035  | RAMY | 04  | 1736       | 1738     | 1747     | S22             | E44 | 7629                    | 12        | 8.1  | 11           | SF         | B 5.6 | 4   | E           |                  | 13                      |                  | F       |
| 0036  | LEAR | 04  | 2252       | 2254     | 2256     | S11             | E43 | 7630                    | 12        | 8.2  | 4            | SF         |       | 3   | E           |                  | 22                      |                  | F       |
| 0037  | LEAR | 04  | 2252       | 2253     | 2256     | S23             | E42 | 7629                    | 12        | 8.2  | 4            | SF         |       | 3   | E           |                  | 40                      |                  | F       |
| 0038  | RAMY | 05  | 1541       | 1542     | 1548     | S22             | E35 | 7629                    | 12        | 8.3  | 7            | SF         | B 6.7 | 3   | E           |                  | 12                      |                  | F       |
| 0039  |      | 05  | 1626*      | 1645     | 1650     | S22             | E33 | 7629                    | 12        | 8.2  | 24           | SF         | C 1.6 |     |             |                  | 36                      |                  | F       |
|       | RAMY | 05  | 1626       | 1645     | 1652     | S22             | E33 | 7629                    | 12        | 8.2  | 26           | SF         | C 1.6 | 4   | E           |                  | 30                      |                  | F       |
|       | HOLL | 05  | 1643       | 1645     | 1647     | S22             | E33 | 7629                    | 12        | 8.2  | 4            | SF         |       | 4   | E           |                  | 41                      |                  | F       |
|       |      | 05  | 2038       |          | 2044     | No Flare Patrol |     |                         |           |      |              |            |       |     |             |                  |                         |                  |         |
|       |      | 05  | 2138       |          | 2156     | No Flare Patrol |     |                         |           |      |              |            |       |     |             |                  |                         |                  |         |
|       |      | 05  | 2206       |          | 2210     | No Flare Patrol |     |                         |           |      |              |            |       |     |             |                  |                         |                  |         |
|       |      | 06  | 0324       |          | 0354     | No Flare Patrol |     |                         |           |      |              |            |       |     |             |                  |                         |                  |         |
| 0040  | LEAR | 06  | 0638       | 0638     | 0642     | S09             | E26 | 7630                    | 12        | 8.2  | 4            | SF         |       | 3   | E           |                  | 14                      |                  |         |
| 0041  | LEAR | 06  | 0638       | 0653     | 0701     | S23             | E25 | 7629                    | 12        | 8.2  | 23           | SF         | B 7.1 | 3   | E           |                  | 48                      |                  | F       |
| 0042  |      | 06  | 0704E      | 0715U    | 0800     | S22             | E24 | 7629                    | 12        | 8.1  | 56D          | SF         |       |     |             |                  | 54                      |                  | F       |
|       | KANZ | 06  | 0704E      | 0715U    | 0800     | S23             | E22 | 7629                    | 12        | 8.0  | 56D          | SF         |       | 2   | C           |                  |                         |                  |         |
|       | SVTO | 06  | 0710E      | 0715U    | 0730D    | S22             | E26 | 7629                    | 12        | 8.3  | 20D          | SF         |       | 2   | E           |                  | 54                      |                  | F       |
| 0043  | LEAR | 06  | 0736       | 0744     | 0746     | S22             | E24 | 7629                    | 12        | 8.2  | 10           | SF         |       | 3   | E           |                  | 58                      |                  | F       |
| 0044  |      | 06  | 07524      | 0756     | 0817     | S24             | E24 | 7629                    | 12        | 8.2  | 25           | SN         |       |     |             |                  | 56                      | 0.6              |         |
|       | KANZ | 06  | 0752       | 0756     | 0804     | S23             | E26 | 7629                    | 12        | 8.3  | 12           | SF         |       | 2   | C           |                  |                         |                  |         |
|       | CATA | 06  | 0756       | 0756     | 0830     | S24             | E23 | 7629                    | 12        | 8.1  | 34           | SN         |       | 1   | C           | 0756             | 56                      | 0.6              |         |
| 0045  |      | 06  | 08017      | 0808     | 0825     | S22             | E26 | 7629                    | 12        | 8.3  | 24           | SF         |       |     |             |                  | 67                      |                  | F       |
|       | LEAR | 06  | 0801       | 0808     | 0826     | S22             | E24 | 7629                    | 12        | 8.2  | 25           | SF         |       | 3   | E           |                  | 67                      |                  | F       |
|       | KANZ | 06  | 0808       | 0808     | 0824     | S21             | E28 | 7629                    | 12        | 8.5  | 16           | SF         |       | 2   | C           |                  |                         |                  |         |
| 0046  |      | 06  | 10361      | 10373    | 1120     | S24             | E22 | 7629                    | 12        | 8.1  | 44           | SN         |       |     |             |                  | 56                      | 0.6              |         |
|       | KANZ | 06  | 1036       | 1040     | 1120     | S25             | E22 | 7629                    | 12        | 8.1  | 44           | SF         |       | 2   | C           |                  |                         |                  |         |
|       | CATA | 06  | 1037       | 1037     | 1117D    | S24             | E22 | 7629                    | 12        | 8.1  | 40D          | SN         |       | 1   | C           | 1037             | 56                      | 0.6              |         |
| 0047  |      | 06  | 12262      | 12284    | 1238     | S22             | E20 | 7629                    | 12        | 8.0  | 12           | SF         | C 1.7 |     |             |                  | 22                      |                  | FH      |
|       | RAMY | 06  | 1226       | 1232     | 1240     | S22             | E21 | 7629                    | 12        | 8.1  | 14           | SF         | C 1.7 | 3   | E           |                  | 22                      |                  | FH      |
|       | KANZ | 06  | 1228       | 1228     | 1236     | S22             | E20 | 7629                    | 12        | 8.0  | 8            | SF         |       | 2   | C           |                  |                         |                  |         |
| 0048  | RAMY | 06  | 1608       | 1609     | 1624     | S22             | E21 | 7629                    | 12        | 8.3  | 16           | SF         | B 7.8 | 3   | E           |                  | 12                      |                  | F       |
| 0049  |      | 06  | 1717       | 1721     | 1814     | S22             | E19 | 7629                    | 12        | 8.2  | 57           | 1N         | C 9.7 |     |             |                  | 99                      |                  | EF      |
|       | RAMY | 06  | 1717       | 1721     | 1812     | S21             | E19 | 7629                    | 12        | 8.2  | 55           | SN         |       | 3   | E           |                  | 89                      |                  | FE      |
|       | HOLL | 06  | 1717       | 1721     | 1817     | S22             | E19 | 7629                    | 12        | 8.2  | 60           | 1N         | C 9.7 | 3   | E           |                  | 109                     |                  | F       |
| 0050  | PALE | 06  | 1746E      | 1746U    | 1814D    | S21             | E19 | 7629                    | 12        | 8.2  | 28D          | SF         |       | 4   | E           |                  | 29                      |                  | H       |
| 0051  |      | 06  | 2040       | 2045     | 2106     | S22             | E16 | 7629                    | 12        | 8.1  | 26           | SF         | C 7.5 |     |             |                  | 53                      |                  | FH      |
|       | HOLL | 06  | 2040       | 2045     | 2106     | S23             | E16 | 7629                    | 12        | 8.1  | 26           | SF         | C 7.5 | 3   | E           |                  | 56                      |                  |         |
|       | PALE | 06  | 2044E      | 2047U    | 2058D    | S22             | E15 | 7629                    | 12        | 8.0  | 14D          | SF         |       | 2   | E           |                  | 50                      |                  | FH      |

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# H $\alpha$ SOLAR FLARES

DECEMBER 1993

| Grp # | Sta  | Start Day (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<br>Apparent<br>(10-6 Disk) | Measurement<br>Corr<br>(Sq Deg) | Remarks |
|-------|------|----------------|----------|----------|-----------------|-----|-------------------------|-----------|-----|--------------|------------|-------|------------|------|--------------|---------------------------------|---------------------------------|---------|
| 0052  | LEAR | 06 2227        | 2254     | 2256     | S21             | E14 | 7629                    | 12        | 8.0 | 29           | SF         |       | 3          | E    |              | 45                              |                                 | F       |
| 0053  |      | 07 0021*       | 0045     | 0104     | S22             | E11 | 7629                    | 12        | 7.8 | 43           | SF         | C 3.8 |            |      |              | 37                              | 0.2                             | EF      |
|       | LEAR | 07 0021        | 0045     | 0118     | S22             | E12 | 7629                    | 12        | 7.9 | 57           | SF         | C 3.8 | 3          | E    |              | 55                              |                                 | F       |
|       | PALE | 07 0038E       | 0039U    | 0103D    | S21             | E11 | 7629                    | 12        | 7.9 | 25D          | SF         |       | 2          | E    |              | 42                              |                                 |         |
|       | MITK | 07 0044        | 0045     | 0050     | S22             | E11 | 7629                    | 12        | 7.9 | 6            | SN         |       |            | C    | 0045         | 13                              | 0.2                             | E       |
| 0054  |      | 07 02111       | 02132    | 0232     | S21             | E11 | 7629                    | 12        | 7.9 | 21           | SN         | C 4.2 |            |      |              | 53                              | 1.0                             | EF      |
|       | LEAR | 07 0211        | 0213     | 0236     | S21             | E12 | 7629                    | 12        | 8.0 | 25           | SF         | C 4.2 | 3          | E    |              | 32                              |                                 | F       |
|       | PALE | 07 0211E       | 0215U    | 0224D    | S21             | E11 | 7629                    | 12        | 7.9 | 13D          | SF         |       | 2          | E    |              | 40                              |                                 |         |
|       | MITK | 07 0212        | 0215     | 0228     | S22             | E10 | 7629                    | 12        | 7.9 | 16           | SB         |       |            | C    | 0215         | 86                              | 1.0                             | E       |
| 0055  |      | 07 04144       | 04194    | 0433     | S22             | E10 | 7629                    | 12        | 7.9 | 19           | SN         | C 1.7 |            |      |              | 46                              | 0.6                             | EF      |
|       | LEAR | 07 0414        | 0419     | 0437     | S21             | E10 | 7629                    | 12        | 7.9 | 23           | SF         | C 1.7 | 3          | E    |              | 39                              |                                 | F       |
|       | MITK | 07 0418        | 0423     | 0429     | S22             | E09 | 7629                    | 12        | 7.9 | 11           | SN         |       |            | C    | 0423         | 53                              | 0.6                             | E       |
| 0056  | MITK | 07 0527        | 0528     | 0528     | S23             | E09 | 7629                    | 12        | 7.9 | 1            | SN         |       |            | C    | 0528         | 13                              | 0.2                             | D       |
| 0057  | SVTO | 07 0649E       | 0654U    | 0657     | S17             | W23 | 7627                    | 12        | 5.5 | 8D           | SF         |       | 2          | E    |              | 51                              |                                 | FH      |
| 0058  |      | 07 07047       | 07102    | 0726     | S22             | E12 | 7629                    | 12        | 8.2 | 22           | SF         |       |            |      |              | 54                              |                                 | F       |
|       | SVTO | 07 0704        | 0710     | 0719     | S22             | E14 | 7629                    | 12        | 8.4 | 15           | SF         |       | 2          | E    |              | 68                              |                                 | F       |
|       | LEAR | 07 0711        | 0712     | 0732     | S22             | E09 | 7629                    | 12        | 8.0 | 21           | SF         |       | 3          | E    |              | 41                              |                                 | F       |
| 0059  |      | 07 0820        | 08255    | 0903     | S18             | W11 | 7627                    | 12        | 6.5 | 43           | SN         | B 9.3 |            |      |              | 93                              | 1.8                             | EFHL    |
|       | LEAR | 07 0820        | 0829     | 0903     | S18             | W11 | 7627                    | 12        | 6.5 | 43           | SF         | B 9.3 | 3          | E    |              | 56                              |                                 | FH      |
|       | CATA | 07 0821E       | 0825     | 0850D    | S18             | W11 | 7627                    | 12        | 6.5 | 29D          | SB         |       | 1          | C    | 0825         | 168                             | 1.8                             |         |
|       | SVTO | 07 0822E       | 0830     | 0905D    | S19             | W11 | 7627                    | 12        | 6.5 | 43D          | SF         |       | 3          | E    |              | 56                              |                                 | FH      |
|       | KHAR | 07 0835E       | 0835U    | 0850D    | S16             | W11 | 7627                    | 12        | 6.5 | 15D          | SF         |       | 2          | V    | 0835         |                                 |                                 | EL      |
| 0060  | HTPR | 07 0920E       |          | 0958     | S22             | E08 | 7629                    | 12        | 8.0 | 38D          | SF         |       |            | C    | 0920         | 120                             | 1.3                             | E       |
| 0061  | KHAR | 07 0938        | 0942     | 0946     | S14             | W69 | 7623                    | 12        | 2.2 | 8            | SF         |       | 2          | P    | 0942         |                                 |                                 | DO      |
| 0062  | HOLL | 07 2050E       | 2051U    | 2105D    | S11             | E02 | 7630                    | 12        | 8.0 | 15D          | SF         | B 6.2 | 2          | E    |              | 18                              |                                 | F       |
| 0063  |      | 08 0150        | 0152     | 0155     | S22             | E01 | 7629                    | 12        | 8.1 | 5            | SF         | C 1.0 |            |      |              | 30                              |                                 | F       |
|       | LEAR | 08 0150        | 0152     | 0155     | S22             | E01 | 7629                    | 12        | 8.1 | 5            | SF         | C 1.0 | 3          | E    |              | 13                              |                                 | F       |
|       | PALE | 08 0150E       | 0152U    | 0157D    | S21             | E01 | 7629                    | 12        | 8.1 | 7D           | SF         |       | 3          | E    |              | 47                              |                                 |         |
|       |      | 08 0242        |          | 0246     | No Flare Patrol |     |                         |           |     |              |            |       |            |      |              |                                 |                                 |         |
|       |      | 08 0355        |          | 0403     | No Flare Patrol |     |                         |           |     |              |            |       |            |      |              |                                 |                                 |         |
| 0064  |      | 08 0933*       | 0939*    | 1011     | S22             | W04 | 7629                    | 12        | 8.1 | 38           | 1N         | C 1.8 |            |      |              | 123                             | 2.2                             | F       |
|       | LEAR | 08 0933        | 0939     | 1012     | S22             | W04 | 7629                    | 12        | 8.1 | 39           | SF         | C 1.8 | 3          | E    |              | 61                              |                                 | F       |
|       | HTPR | 08 0945E       |          | 1010     | S23             | W04 | 7629                    | 12        | 8.1 | 25D          | 1N         |       |            | C    | 0945         | 210                             | 2.3                             |         |
|       | SVTO | 08 0945        | 0954     | 1005D    | S22             | W04 | 7629                    | 12        | 8.1 | 20D          | SF         |       | 3          | E    |              | 24                              |                                 |         |
|       | CATA | 08 0946E       | 0946     | 1015D    | S22             | W04 | 7629                    | 12        | 8.1 | 29D          | 1N         |       | 1          | C    | 0946         | 196                             | 2.1                             |         |
| 0065  |      | 08 10123       | 10151    | 1032     | S24             | W22 | 7627                    | 12        | 6.7 | 20           | SN         | B 6.9 |            |      |              | 68                              | 1.3                             |         |
|       | SVTO | 08 1012        | 1016     | 1032     | S24             | W21 | 7627                    | 12        | 6.8 | 20           | SF         | B 6.9 | 3          | E    |              | 25                              |                                 |         |
|       | CATA | 08 1015        | 1015     | 1015D    | S24             | W22 | 7627                    | 12        | 6.7 | 20D          | SN         |       | 1          | C    | 1015         | 112                             | 1.3                             |         |
| 0066  | KANZ | 08 1129        | 1133     | 1137     | S22             | W06 | 7629                    | 12        | 8.0 | 8            | SF         |       | 2          | C    |              |                                 |                                 |         |
| 0067  | KANZ | 08 1206        | 1218     | 1234     | S22             | W06 | 7629                    | 12        | 8.0 | 28           | SF         |       | 2          | C    |              |                                 |                                 |         |
| 0068  | RAMY | 08 1501        | 1502     | 1515     | S22             | W08 | 7629                    | 12        | 8.0 | 14           | SF         | B 7.9 | 3          | E    |              | 45                              |                                 | F       |
| 0069  | PALE | 08 1759E       | 1800U    | 1803D    | S21             | W08 | 7629                    | 12        | 8.1 | 4D           | SF         | B 3.5 | 3          | E    |              | 14                              |                                 |         |
| 0070  |      | 08 1941        | 1942     | 1946     | S10             | W10 | 7630                    | 12        | 8.1 | 5            | SF         | B 8.3 |            |      |              | 14                              |                                 | F       |
|       | PALE | 08 1939E       | 1940U    | 1942D    | S09             | W09 | 7630                    | 12        | 8.1 | 3D           | SF         |       | 3          | E    |              | 13                              |                                 |         |
|       | RAMY | 08 1941        | 1942     | 1946     | S10             | W11 | 7630                    | 12        | 8.0 | 5            | SF         | B 8.3 | 3          | E    |              | 15                              |                                 | F       |
| 0071  | PALE | 08 2053E       | 2053U    | 2056D    | S21             | W09 | 7629                    | 12        | 8.2 | 3D           | SF         |       | 3          | E    |              | 20                              |                                 |         |
| 0072  | MITK | 09 0115        | 0115     | 0116     | S20             | W16 | 7629                    | 12        | 7.8 | 1            | SN         |       |            | C    | 0115         | 13                              | 0.2                             | D       |

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| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat | CMD   | NOAA/       | CMP | Dur  | Imp  | Obs      | Area Measurement |     |           | Remarks |                      |               |
|-------|------|-----|------------|----------|----------|-----|-------|-------------|-----|------|------|----------|------------------|-----|-----------|---------|----------------------|---------------|
|       |      |     |            |          |          |     |       | USAF Region |     |      |      |          | Mo               | Day | Time (UT) |         | Apparent (10-6 Disk) | Corr (Sq Deg) |
| 0073  | MITK | 09  | 0212       | 0212     | 0213     | S16 | W36   | 7627        | 12  | 6.4  | 1    | SN       |                  | C   | 0212      | 13      | 0.2                  | E             |
| 0074  | LEAR | 09  | 0321       | 0321     | 0326     | S22 | W15   | 7629        | 12  | 8.0  | 5    | SF B 4.1 | 3                | E   |           | 14      |                      |               |
|       |      |     | 10 0440    |          | 0456     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 10 0541    |          | 0629     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 10 0636    |          | 0653     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 10 1959    |          | 2003     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 10 2301    |          | 2311     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 11 2108    |          | 2213     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
| 0075  | LEAR | 12  | 0203       | 0203     | 0210     | S20 | W62   | 7633        | 12  | 7.3  | 7    | SF B 3.9 | 3                | E   |           | 13      |                      |               |
| 0076  | LEAR | 12  | 0229       | 0231U    | 0237     | S22 | W75   | 7627        | 12  | 6.3  | 8    | 1F B 6.5 | 3                | E   |           | 142     |                      |               |
| 0077  | LEAR | 12  | 0423       | 0424     | 0429     | S20 | W64   | 7633        | 12  | 7.3  | 6    | SF B 2.3 | 3                | E   |           | 35      |                      |               |
| 0078  |      | 12  | 0824       | 0830     | 0836     | S22 | W64   | 7629        | 12  | 7.4  | 12   | SN       |                  |     |           | 35      |                      |               |
|       | SVTO | 12  | 0824       | 0826U    | 0830     | S21 | W64   | 7629        | 12  | 7.4  | 6    | SF       | 3                | E   |           | 14      |                      |               |
|       | CATA | 12  | 0830       | 0830     | 0842     | S22 | W64   | 7629        | 12  | 7.4  | 12   | SN       | 1                | C   | 0830      | 56      |                      |               |
| 0079  | LEAR | 12  | 0826       | 0826     | 0834     | S21 | W55   | 7629        | 12  | 8.1  | 8    | SF B 7.9 | 3                | E   |           | 19      |                      |               |
| 0080  | KANZ | 12  | 1126       | 1126     | 1134     | S22 | W61   | 7629        | 12  | 7.8  | 8    | SF       | 2                | C   |           |         |                      |               |
| 0081  | KANZ | 12  | 1206       | 1206     | 1210     | S21 | W63   | 7629        | 12  | 7.7  | 4    | SF       | 2                | C   |           |         |                      |               |
|       |      |     | 12 1501    |          | 1538     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 12 1540    |          | 1618     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 12 2128    |          | 2204     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
| 0082  | MITK | 13  | 0100       | 0105     | 0119     | S15 | W68   | 7633        | 12  | 7.9  | 19   | SN       |                  | C   | 0105      | 29      |                      | D             |
|       |      |     | 14 0058    |          | 0107     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 14 0127    |          | 0422     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
| 0083  |      | 14  | 2100       | 2102     | 2114     | S13 | W78   | 7634        | 12  | 9.0  | 14   | SF       |                  |     |           | 26      |                      | H             |
|       | HOLL | 14  | 2100       | 2102     | 2114     | S12 | W79   | 7634        | 12  | 8.9  | 14   | SF       | 3                | E   |           | 27      |                      | H             |
|       | PALE | 14  | 2104E      | 2104U    | 2116D    | S14 | W77   | 7634        | 12  | 9.0  | 12D  | SF       | 3                | E   |           | 26      |                      |               |
| 0084  | PALE | 14  | 2123E      | 2127U    | 2137D    | S14 | W77   | 7634        | 12  | 9.1  | 14D  | SF       | 2                | E   |           | 27      |                      |               |
| 0085  | HOLL | 14  | 2233       | 2234     | 2238     | S11 | W80   | 7634        | 12  | 8.9  | 5    | SF       | 3                | E   |           | 23      |                      |               |
|       |      |     | 15 0035    |          | 0041     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 15 0051    |          | 0113     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 15 1117    |          | 1122     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 15 1256    |          | 1257     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 16 0731    |          | 0845     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 16 0911    |          | 0926     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 16 0954    |          | 0958     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
| 0086  | CATA | 16  | 1015E      | 1015     | 1015D    | N08 | W01   | 7637        | 12  | 16.3 | 5D   | SN       | 1                | C   | 1015      | 112     | 1.1                  |               |
| 0087  |      | 17  | 1958       | 2001     | 2150     | N06 | E40   | 7635        | 12  | 20.8 | 112  | SF C 2.0 |                  |     |           | 52      |                      | FH            |
|       | HOLL | 17  | 1958       | 2001     | 2149     | N07 | E43   | 7635        | 12  | 21.0 | 111  | SF C 2.0 | 3                | E   |           | 29      |                      | FH            |
|       | PALE | 17  | 2001E      | 2001U    | 2150     | N05 | E37   | 7635        | 12  | 20.6 | 109D | SF       | 3                | E   |           | 76      |                      | H             |
| 0088  |      | 18  | 13313      | 13371    | 1345     | N02 | E30   | 7635        | 12  | 20.8 | 14   | SF       |                  |     |           | 50      | 0.6                  | E             |
|       | HTPR | 18  | 1331       | 1337     | 1344     | N04 | E30   | 7635        | 12  | 20.8 | 13   | SF       |                  | C   | 1337      | 50      | 0.6                  | E             |
|       | KANZ | 18  | 1334       | 1338     | 1346     | S00 | E30   | 7635        | 12  | 20.8 | 12   | SF       | 2                | C   |           |         |                      |               |
| 0089  |      | 18  | 1455       | 1510     | 1538D    | N02 | E29   | 7635        | 12  | 20.8 | 43D  | SN B 3.6 |                  |     |           | 44      | 0.7                  | EK            |
|       | HTPR | 18  | 1455       | 1510     | 1528D    | N04 | E30   | 7635        | 12  | 20.9 | 33D  | SF       |                  | C   | 1510      | 60      | 0.7                  | EK            |
|       | RAMY | 18  | 1512E      | 1516U    | 1538D    | N00 | E28   | 7635        | 12  | 20.7 | 26D  | SN B 3.6 | 2                | E   |           | 27      |                      |               |
| 0090  | HTPR | 18  | 1455       | 1521     | 1528D    | N04 | E30   | 7635        | 12  | 20.9 | 33D  | SF       |                  | C   | 1521      | 50      | 0.6                  | EK            |
|       |      |     | 18 1539    |          | 1716     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |
|       |      |     | 18 2148    |          | 2220     | No  | Flare | Patrol      |     |      |      |          |                  |     |           |         |                      |               |

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# S O L A R F L A R E S

DECEMBER 1993

| Grp # | Sta  | Start Day (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<br>Apparent<br>(10-6 Disk) | Measurement<br>Corr<br>(Sq Deg) | Remarks |
|-------|------|----------------|----------|----------|-----|-----|-------------------------|-----------|------|--------------|------------|-------|------------|------|--------------|---------------------------------|---------------------------------|---------|
| 0091  | PALE | 19 0304E       | 0304U    | 0310D    | N02 | E24 | 7635                    | 12        | 20.9 | 60           | SF         |       | 2          | E    |              | 14                              |                                 |         |
|       |      | 19 2059        |          | 2127     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
|       |      | 20 1247        |          | 1300     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
| 0092  | RAMY | 20 1425        | 1426     | 1431     | N08 | E80 | 7640                    | 12        | 26.6 | 6            | SF         | B 6.0 | 3          | E    |              | 12                              |                                 |         |
| 0093  | RAMY | 20 1533        | 1535     | 1553     | N07 | E76 | 7640                    | 12        | 26.3 | 20           | SF         | B 6.8 | 3          | E    |              | 50                              |                                 |         |
| 0094  | RAMY | 20 1819        | 1820     | 1829     | N07 | E75 | 7640                    | 12        | 26.4 | 10           | SF         |       | 3          | E    |              | 20                              |                                 | F       |
| 0095  |      | 20 1849        | 1852     | 1902     | N08 | E73 | 7640                    | 12        | 26.2 | 13           | SF         | B 6.4 |            |      |              | 29                              |                                 | F       |
|       | RAMY | 20 1849        | 1852     | 1902     | N08 | E74 | 7640                    | 12        | 26.3 | 13           | SF         | B 6.4 | 3          | E    |              | 32                              |                                 | F       |
|       | PALE | 20 1858E       | 1858U    | 1903D    | N07 | E72 | 7640                    | 12        | 26.2 | 5D           | SF         |       | 2          | E    |              | 26                              |                                 |         |
| 0096  | RAMY | 20 1916        | 1917     | 1927     | N07 | E72 | 7640                    | 12        | 26.2 | 11           | SF         |       | 3          | E    |              | 18                              |                                 |         |
|       |      | 21 1600        |          | 1615     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
|       |      | 21 1645        |          | 1658     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
|       |      | 21 2023        |          | 2036     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
|       |      | 21 2058        |          | 2229     |     |     | No Flare Patrol         |           |      |              |            |       |            |      |              |                                 |                                 |         |
| 0097  | SVTO | 22 0757        | 0800     | 0809     | N08 | E55 | 7640                    | 12        | 26.4 | 12           | SF         |       | 3          | E    |              | 10                              |                                 |         |
| 0098  |      | 22 09325       | 09346    | 0944     | N08 | E58 | 7640                    | 12        | 26.7 | 12           | SN         | C 2.1 |            |      |              | 58                              | 1.6                             | F       |
|       | HPR  | 22 0932        | 0934     | 0944     | N09 | E59 | 7640                    | 12        | 26.8 | 12           | SB         |       |            | C    | 0934         | 70                              |                                 |         |
|       | LEAR | 22 0936        | 0937     | 0943     | N09 | E56 | 7640                    | 12        | 26.6 | 7            | SF         | C 2.1 | 3          | E    |              | 21                              |                                 | F       |
|       | KANZ | 22 0937        | 0937     | 0945     | N09 | E59 | 7640                    | 12        | 26.8 | 8            | SF         |       | 2          | C    |              |                                 |                                 |         |
|       | CATA | 22 0940E       | 0940     | 0940D    | N07 | E58 | 7640                    | 12        | 26.7 | 8D           | SN         |       | 1          | C    | 0940         | 84                              | 1.6                             |         |
| 0099  | KANZ | 22 1033        | 1033     | 1049     | N07 | E59 | 7640                    | 12        | 26.8 | 16           | SF         |       | 2          | C    |              |                                 |                                 |         |
| 0100  | HPR  | 22 1104        | 1108     | 1123     | N09 | E50 | 7640                    | 12        | 26.2 | 19           | SN         |       |            | C    | 1108         | 80                              | 1.2                             | K       |
| 0101  |      | 22 11047       | 11134    | 1122     | N08 | E49 | 7640                    | 12        | 26.1 | 18           | SF         | C 1.2 |            |      |              | 66                              | 1.4                             | K       |
|       | HPR  | 22 1104        | 1117     | 1123     | N09 | E50 | 7640                    | 12        | 26.2 | 19           | SN         |       |            | C    | 1117         | 90                              | 1.4                             | K       |
|       | KANZ | 22 1109        | 1113     | 1122     | N07 | E49 | 7640                    | 12        | 26.1 | 13           | SF         |       | 2          | C    |              |                                 |                                 |         |
|       | SVTO | 22 1111        | 1115     | 1121D    | N07 | E49 | 7640                    | 12        | 26.1 | 10D          | SF         | C 1.2 | 3          | E    |              | 43                              |                                 |         |
| 0102  |      | 22 1146*       | 12383    | 1246     | N08 | E49 | 7640                    | 12        | 26.2 | 60           | SF         |       |            |      |              | 30                              | 0.8                             | E       |
|       | SVTO | 22 1146        | 1239     | 1242     | N07 | E48 | 7640                    | 12        | 26.1 | 56           | SF         |       | 3          | E    |              | 11                              |                                 |         |
|       | KANZ | 22 1214        | 1238     | 1250     | N07 | E48 | 7640                    | 12        | 26.1 | 36           | SF         |       | 2          | C    |              |                                 |                                 |         |
|       | HPR  | 22 1224        | 1241     | 1242D    | N09 | E50 | 7640                    | 12        | 26.3 | 18D          | SF         |       |            | C    | 1241         | 50                              | 0.8                             | E       |
| 0103  |      | 22 13002       | 1302     | 1309     | N06 | E47 | 7640                    | 12        | 26.0 | 9            | SF         | B 7.0 |            |      |              | 26                              |                                 |         |
|       | RAMY | 22 1300        | 1302     | 1308     | N06 | E46 | 7640                    | 12        | 26.0 | 8            | SF         | B 7.0 | 3          | E    |              | 26                              |                                 |         |
|       | KANZ | 22 1302        | 1302     | 1310     | N07 | E48 | 7640                    | 12        | 26.1 | 8            | SF         |       | 2          | C    |              |                                 |                                 |         |
| 0104  | KANZ | 22 1326        | 1350     | 1358D    | N07 | E48 | 7640                    | 12        | 26.1 | 32D          | SF         |       | 2          | C    |              |                                 |                                 |         |
| 0105  | HOLL | 22 1606E       | 1616U    | 1643     | N07 | E45 | 7640                    | 12        | 26.0 | 37D          | SF         | B 3.5 | 2          | E    |              | 31                              |                                 |         |
| 0106  | RAMY | 22 1647        | 1648     | 1651     | N05 | E44 | 7640                    | 12        | 26.0 | 4            | SF         | B 7.6 | 3          | E    |              | 12                              |                                 | F       |
| 0107  |      | 22 1723        | 1725     | 1737     | N06 | E46 | 7640                    | 12        | 26.2 | 14           | 1N         | M 1.4 |            |      |              | 80                              |                                 | FH      |
|       | HOLL | 22 1723        | 1725     | 1737     | N07 | E45 | 7640                    | 12        | 26.1 | 14           | 1B         | M 1.4 | 3          | E    |              | 133                             |                                 | H       |
|       | PALE | 22 1731E       | 1731U    | 1738D    | N06 | E46 | 7640                    | 12        | 26.2 | 7D           | SF         |       | 1          | E    |              | 27                              |                                 | FH      |
| 0108  | HOLL | 22 2233        | 2238     | 2246     | N07 | E42 | 7640                    | 12        | 26.1 | 13           | SF         | B 4.5 | 3          | E    |              | 18                              |                                 |         |
| 0109  |      | 22 2252*       | 23023    | 2308     | N07 | E42 | 7640                    | 12        | 26.1 | 16           | SF         | B 4.7 |            |      |              | 22                              |                                 | F       |
|       | HOLL | 22 2252        | 2305     | 2310     | N07 | E41 | 7640                    | 12        | 26.0 | 18           | SF         | B 4.7 | 3          | E    |              | 30                              |                                 | F       |
|       | LEAR | 22 2302        | 2302     | 2307     | N07 | E42 | 7640                    | 12        | 26.1 | 5            | SF         |       | 3          | E    |              | 13                              |                                 |         |
| 0110  | HOLL | 22 2311        | 2315U    | 2325     | N08 | E46 | 7640                    | 12        | 26.4 | 14           | SF         | B 4.3 | 2          | E    |              | 28                              |                                 | F       |
| 0111  | LEAR | 23 0011        | 0012     | 0016     | N07 | E42 | 7640                    | 12        | 26.1 | 5            | SF         | C 1.4 | 3          | E    |              | 11                              |                                 |         |

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| 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>(10-6 Disk) | Corr<br>(Sq Deg) |     |         |
| 0112  |      | 23  | 0019       | 0023     | 0034     | N07 | E42 | 7640                    | 12 26.1       | 15           | SF C 1.1        |                 |              |                         | 22               |     | H       |
|       | LEAR | 23  | 0019       | 0023     | 0034     | N07 | E41 | 7640                    | 12 26.1       | 15           | SF C 1.1        | 3               | E            |                         | 23               |     |         |
|       | PALE | 23  | 0021E      | 0021U    | 0023D    | N07 | E42 | 7640                    | 12 26.2       | 2D           | SF              | 1               | E            |                         | 21               |     | H       |
| 0113  | LEAR | 23  | 0253       | 0257     | 0307     | N07 | E39 | 7640                    | 12 26.0       | 14           | SF B 5.5        | 3               | E            |                         | 25               |     |         |
| 0114  | LEAR | 23  | 0530       | 0532     | 0538     | N07 | E38 | 7640                    | 12 26.1       | 8            | SF C 4.4        | 3               | E            |                         | 27               |     |         |
| 0115  | CATA | 23  | 0738E      | 0740     | 0740D    | N07 | E38 | 7640                    | 12 26.2       | 2D           | SB              | 1               | C            | 0740                    | 56               | 0.7 |         |
| 0116  | KANZ | 23  | 0807       | 0811     | 0819     | N07 | E37 | 7640                    | 12 26.1       | 12           | SF              | 2               | C            |                         |                  |     |         |
| 0117  |      | 23  | 0839I      | 0841Z    | 0850     | N06 | E42 | 7640                    | 12 26.5       | 11           | SF              |                 |              |                         | 13               |     |         |
|       | KANZ | 23  | 0839       | 0843     | 0851     | N05 | E41 | 7640                    | 12 26.4       | 12           | SF              | 2               | C            |                         |                  |     |         |
|       | SVTO | 23  | 0840       | 0841     | 0850     | N06 | E42 | 7640                    | 12 26.5       | 10           | SF              | 3               | E            |                         | 13               |     |         |
| 0118  |      | 23  | 08594      | 0903I    | 0907     | N07 | E37 | 7640                    | 12 26.1       | 8            | SF C 2.9        |                 |              |                         | 34               |     | H       |
|       | KANZ | 23  | 0859       | 0903     | 0907     | N08 | E37 | 7640                    | 12 26.1       | 8            | SF              | 2               | C            |                         |                  |     |         |
|       | SVTO | 23  | 0859       | 0904     | 0908     | N07 | E37 | 7640                    | 12 26.1       | 9            | SF C 2.9        | 3               | E            |                         | 33               |     | H       |
|       | LEAR | 23  | 0903       | 0903     | 0907     | N07 | E36 | 7640                    | 12 26.1       | 4            | SF              | 3               | E            |                         | 35               |     |         |
| 0119  |      | 23  | 0951Z      | 0954I    | 1002     | N07 | E36 | 7640                    | 12 26.1       | 11           | SF C 1.2        |                 |              |                         | 28               |     |         |
|       | LARI | 23  | 0951       | 0954     | 0957     | N08 | E35 | 7640                    | 12 26.0       | 6            | SF              |                 | P            | 0954                    |                  |     |         |
|       | LEAR | 23  | 0953       | 0954     | 1000     | N07 | E35 | 7640                    | 12 26.0       | 7            | SF              | 3               | E            |                         | 23               |     |         |
|       | SVTO | 23  | 0953       | 0955     | 1008     | N07 | E37 | 7640                    | 12 26.2       | 15           | SF C 1.2        | 3               | E            |                         | 32               |     |         |
| 0120  |      | 23  | 1044Z      | 1045Z    | 1054     | N08 | E35 | 7640                    | 12 26.1       | 10           | SF              |                 |              |                         | 20               | 0.2 |         |
|       | HTPR | 23  | 1044       | 1045     | 1056     | N08 | E35 | 7640                    | 12 26.1       | 12           | SF              |                 | C            | 1045                    | 20               | 0.2 |         |
|       | KANZ | 23  | 1047       | 1047     | 1051     | N07 | E35 | 7640                    | 12 26.1       | 4            | SF              | 2               | C            |                         |                  |     |         |
| 0121  |      | 23  | 1114*      | 1144Z    | 1204     | N08 | E35 | 7640                    | 12 26.1       | 50           | SF              |                 |              |                         | 20               | 0.2 | E       |
|       | HTPR | 23  | 1114       | 1145     | 1159     | N08 | E35 | 7640                    | 12 26.1       | 45           | SF              |                 | C            | 1145                    | 20               | 0.2 | E       |
|       | LARI | 23  | 1136       | 1144     | 1214     | N08 | E34 | 7640                    | 12 26.0       | 38           | SF              |                 | P            | 1144                    |                  |     |         |
|       | KANZ | 23  | 1143       | 1151     | 1159     | N08 | E36 | 7640                    | 12 26.2       | 16           | SF              | 2               | C            |                         |                  |     |         |
| 0122  |      | 23  | 1232Z      | 1234Z    | 1254     | N07 | E35 | 7640                    | 12 26.1       | 22           | SN C 1.9        |                 |              |                         |                  |     |         |

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| Grp # | Sta  | Start 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<br>Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) | Remarks |
|-------|------|-----------|------------|----------|----------|-----------------|-----|-------------------------|-----------|------|--------------|------------|-------|------------|------|--------------|---------------------------------------------------------|------------------|---------|
| 0133  |      | 24        | 1144E      | 1145*    | 1210     | N08             | E23 | 7640                    | 12        | 26.2 | 26D          | 1N         |       |            |      |              | 84                                                      |                  |         |
|       | SVTO | 24        | 1144E      | 1145     | 1205     | N08             | E22 | 7640                    | 12        | 26.1 | 21D          | 1F         |       | 3          | E    |              | 108                                                     |                  |         |
|       | RAMY | 24        | 1151E      | 1157     | 1215     | N07             | E24 | 7640                    | 12        | 26.3 | 24D          | SB         |       | 2          | E    |              | 60                                                      |                  |         |
| 0134  | SVTO | 24        | 1211       | 1214     | 1226     | N08             | E22 | 7640                    | 12        | 26.1 | 15           | SF         | C 5.1 | 3          | E    |              | 97                                                      |                  | F       |
| 0135  | SVTO | 24        | 1318       | 1319     | 1328D    | N04             | W49 | 7635                    | 12        | 20.9 | 10D          | SF         |       | 3          | E    |              | 38                                                      |                  | F       |
| 0136  | SVTO | 24        | 1322       | 1324     | 1329D    | N08             | E26 | 7640                    | 12        | 26.5 | 7D           | SF         |       | 3          | E    |              | 16                                                      |                  | F       |
| 0137  | RAMY | 24        | 1324       | 1325     | 1328     | N06             | E34 | 7640                    | 12        | 27.1 | 4            | SF         |       | 3          | E    |              | 16                                                      |                  |         |
| 0138  | RAMY | 24        | 1335       | 1341     | 1409     | N07             | E20 | 7640                    | 12        | 26.1 | 34           | SF         | C 2.5 | 3          | E    |              | 40                                                      |                  | F       |
| 0139  | RAMY | 24        | 1451       | 1503     | 1537     | N08             | E29 | 7640                    | 12        | 26.8 | 46           | 1N         | M 1.3 | 3          | E    |              | 195                                                     |                  | EF      |
| 0140  |      | 24        | 1729       | 1730I    | 1738     | N06             | E20 | 7640                    | 12        | 26.2 | 9            | SN         | C 3.9 |            |      |              | 66                                                      |                  | EF      |
|       | HOLL | 24        | 1729       | 1730     | 1734     | N07             | E23 | 7640                    | 12        | 26.4 | 5            | SF         |       | 3          | E    |              | 66                                                      |                  |         |
|       | RAMY | 24        | 1729       | 1731     | 1741     | N06             | E17 | 7640                    | 12        | 26.0 | 12           | SN         | C 3.9 | 3          | E    |              | 67                                                      |                  | FE      |
| 0141  |      | 24        | 1804       | 1814     | 1835     | N06             | E20 | 7640                    | 12        | 26.2 | 31           | 1B         | M 1.1 |            |      |              | 144                                                     |                  | EF      |
|       | HOLL | 24        | 1804       | 1814     | 1835     | N07             | E20 | 7640                    | 12        | 26.2 | 31           | 1N         | M 1.1 | 3          | E    |              | 124                                                     |                  |         |
|       | PALE | 24        | 1810E      | 1818U    | 1840D    | N06             | E20 | 7640                    | 12        | 26.2 | 30D          | 1B         |       | 2          | E    |              | 165                                                     |                  | FE      |
| 0142  |      | 24        | 2106       | 2106     | 2110     | N06             | E16 | 7640                    | 12        | 26.1 | 4            | SF         | C 1.8 |            |      |              | 30                                                      |                  | FH      |
|       | HOLL | 24        | 2106       | 2106     | 2110     | N07             | E16 | 7640                    | 12        | 26.1 | 4            | SF         | C 1.8 | 3          | E    |              | 18                                                      |                  |         |
|       | PALE | 24        | 2107E      | 2108U    | 2126D    | N05             | E15 | 7640                    | 12        | 26.0 | 19D          | SF         |       | 2          | E    |              | 42                                                      |                  | FH      |
| 0143  |      | 24        | 2116I      | 2117I    | 2122     | N06             | E14 | 7640                    | 12        | 25.9 | 6            | SN         | C 2.1 |            |      |              | 22                                                      |                  |         |
|       | RAMY | 24        | 2116       | 2118     | 2121D    | N06             | E14 | 7640                    | 12        | 25.9 | 5D           | SN         |       | 2          | E    |              | 19                                                      |                  |         |
|       | HOLL | 24        | 2117       | 2117     | 2122     | N06             | E15 | 7640                    | 12        | 26.0 | 5            | SF         | C 2.1 | 3          | E    |              | 25                                                      |                  |         |
| 0144  | LEAR | 24        | 2354       | 2355     |          | N07             | E15 | 7640                    | 12        | 26.1 |              | SF         | B 9.1 | 3          | E    |              | 16                                                      |                  |         |
| 0145  | LEAR | 25        | 0132       | 0134     | 0137     | N06             | E13 | 7640                    | 12        | 26.0 | 5            | SF         |       | 3          | E    |              | 16                                                      |                  |         |
| 0146  |      | 25        | 0425I      | 0428I    | 0436     | N06             | E12 | 7640                    | 12        | 26.1 | 11           | 1N         | C 6.2 |            |      |              | 143                                                     | 2.3              | F       |
|       | MITK | 25        | 0425       | 0428     | 0432     | N06             | E13 | 7640                    | 12        | 26.1 | 7            | 1B         |       |            | C    | 0428         | 212                                                     | 2.3              |         |
|       | LEAR | 25        | 0426       | 0429     | 0441     | N07             | E12 | 7640                    | 12        | 26.1 | 15           | SF         | C 6.2 | 3          | E    |              | 74                                                      |                  | F       |
| 0147  |      | 25        | 04424      | 04505    | 0500     | N02             | E16 | 7640                    | 12        | 26.4 | 18           | SN         | C 4.3 |            |      |              | 58                                                      | 0.6              | EF      |
|       | LEAR | 25        | 0442       | 0455     | 0507     | N03             | E15 | 7640                    | 12        | 26.3 | 25           | SF         | C 4.3 | 3          | E    |              | 55                                                      |                  | F       |
|       | MITK | 25        | 0446       | 0450     | 0452     | N01             | E16 | 7640                    | 12        | 26.4 | 6            | SN         |       |            | C    | 0450         | 60                                                      | 0.6              | E       |
| 0148  |      | 25        | 05186      | 0529I    | 0606     | N06             | E12 | 7640                    | 12        | 26.1 | 48           | 1N         | C 4.4 |            |      |              | 178                                                     | 2.7              | F       |
|       | LEAR | 25        | 0518       | 0530     | 0640     | N07             | E11 | 7640                    | 12        | 26.0 | 82           | SF         | C 4.4 | 3          | E    |              | 98                                                      |                  | F       |
|       | MITK | 25        | 0524       | 0529     | 0533     | N06             | E12 | 7640                    | 12        | 26.1 | 9            | 1B         |       |            | C    | 0529         | 258                                                     | 2.7              |         |
|       |      | 25        | 0632       |          | 0805     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |              |                                                         |                  |         |
| 0149  | LEAR | 25        | 0657       | 0738     | 0847     | N07             | E10 | 7640                    | 12        | 26.0 | 110          | SF         | C 5.8 | 3          | E    |              | 89                                                      |                  | F       |
| 0150  | SVTO | 25        | 0835E      | 0835U    | 0848D    | N08             | E17 | 7640                    | 12        | 26.6 | 13D          | SF         | C 4.5 | 2          | E    |              | 93                                                      |                  | F       |
|       |      | 25        | 0849       |          | 0958     | No Flare Patrol |     |                         |           |      |              |            |       |            |      |              |                                                         |                  |         |
| 0151  | ISTA | 25        | 1020       |          | 1030     | S15             | W72 |                         | 12        | 20.0 | 10           | SN         |       |            | P    |              |                                                         |                  | DG      |
| 0152  |      | 25        | 1139*      | 1244I    | 1253     | N07             | E08 | 7640                    | 12        | 26.1 | 74           | SF         |       |            |      |              | 24                                                      |                  | F       |
|       | SVTO | 25        | 1139       | 1245     | 1253     | N08             | E10 | 7640                    | 12        | 26.2 | 74           | SN         |       | 3          | E    |              | 34                                                      |                  | F       |
|       | RAMY | 25        | 1213       | 1244     | 1254     | N07             | E08 | 7640                    | 12        | 26.1 | 41           | SF         |       | 3          | E    |              | 15                                                      |                  | F       |
|       | KANZ | 25        | 1244       | 1244     | 1252     | N06             | E07 | 7640                    | 12        | 26.0 | 8            | SF         |       | 2          | C    |              |                                                         |                  |         |
| 0153  | RAMY | 25        | 1444       | 1452     | 1500     | N07             | E07 | 7640                    | 12        | 26.1 | 16           | SF         | C 6.0 | 3          | E    |              | 15                                                      |                  | EF      |
| 0154  | HOLL | 25        | 1521       | 1524     | 1530     | N07             | E06 | 7640                    | 12        | 26.1 | 9            | SF         |       | 3          | E    |              | 12                                                      |                  | H       |
| 0155  | HOLL | 25        | 1559       | 1602     | 1606     | N07             | E06 | 7640                    | 12        | 26.1 | 7            | SF         |       | 3          | E    |              | 21                                                      |                  |         |

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| Grp # | Sta  | Day | Start (UT) | Max (UT) | End (UT) | Lat             | CMD | NOAA/<br>USAF Region | CMP Mo | Day  | Dur (Min) | Imp Opt  | Xray | Obs See | Type | Area Measurement |                      |               | Remarks |
|-------|------|-----|------------|----------|----------|-----------------|-----|----------------------|--------|------|-----------|----------|------|---------|------|------------------|----------------------|---------------|---------|
|       |      |     |            |          |          |                 |     |                      |        |      |           |          |      |         |      | Time (UT)        | Apparent (10-6 Disk) | Corr (Sq Deg) |         |
| 0156  | HOLL | 25  | 1615       | 1615     | 1623     | N07             | E06 | 7640                 | 12     | 26.1 | 8         | SF       |      | 3       | E    |                  | 14                   |               |         |
| 0157  |      | 25  | 1709       | 1710     | 1720     | N08             | E07 | 7640                 | 12     | 26.2 | 11        | SF C 4.6 |      |         |      |                  | 30                   |               | F       |
|       | RAMY | 25  | 1709       | 1710     | 1720     | N08             | E07 | 7640                 | 12     | 26.2 | 11        | SF       |      | 3       | E    |                  | 28                   |               | F       |
|       | HOLL | 25  | 1709       | 1711     | 1720     | N08             | E07 | 7640                 | 12     | 26.2 | 11        | SF C 4.6 |      | 3       | E    |                  | 33                   |               | F       |
| 0158  | RAMY | 25  | 1743       | 1745     | 1750     | N04             | E08 | 7640                 | 12     | 26.3 | 7         | SF       |      | 3       | E    |                  | 10                   |               | F       |
| 0159  |      | 25  | 1744       | 1752     | 1818     | N07             | E06 | 7640                 | 12     | 26.2 | 34        | SN M 1.5 |      |         |      |                  | 74                   |               | EF      |
|       | RAMY | 25  | 1744       | 1757     | 1820     | N07             | E06 | 7640                 | 12     | 26.2 | 36        | SN M 1.5 |      | 3       | E    |                  | 69                   |               | FE      |
|       | HOLL | 25  | 1744       | 1759     | 1815     | N07             | E05 | 7640                 | 12     | 26.1 | 31        | SF       |      | 3       | E    |                  | 80                   |               | F       |
| 0160  |      | 25  | 1826       | 1834     | 1901     | N07             | E04 | 7640                 | 12     | 26.1 | 35        | SF       |      |         |      |                  | 32                   |               | F       |
|       | RAMY | 25  | 1826       | 1834     | 1903     | N07             | E04 | 7640                 | 12     | 26.1 | 37        | SF       |      | 3       | E    |                  | 21                   |               | F       |
|       | HOLL | 25  | 1828       | 1841     | 1859     | N07             | E04 | 7640                 | 12     | 26.1 | 31        | SF       |      | 3       | E    |                  | 42                   |               |         |
| 0161  | RAMY | 25  | 1931       | 1934     | 1938     | N06             | E04 | 7640                 | 12     | 26.1 | 7         | SF       |      | 3       | E    |                  | 14                   |               | F       |
| 0162  |      | 25  | 1939       | 1940     | 1946     | N07             | E04 | 7640                 | 12     | 26.1 | 7         | SF C 1.8 |      |         |      |                  | 44                   |               | F       |
|       | RAMY | 25  | 1939       | 1940     | 1946     | N07             | E04 | 7640                 | 12     | 26.1 | 7         | SF C 1.8 |      | 3       | E    |                  | 47                   |               | F       |
|       | PALE | 25  | 1940E      |          | 1946     | N07             | E05 | 7640                 | 12     | 26.2 | 60        | SF       |      | 3       | E    |                  | 40                   |               | F       |
| 0163  | HOLL | 25  | 2258       | 2309     | 2322     | N08             | E08 | 7640                 | 12     | 26.5 | 24        | SF       |      | 3       | E    |                  | 51                   |               |         |
| 0164  | LEAR | 25  | 2258       | 2302     | 2320     | N06             | E01 | 7640                 | 12     | 26.0 | 22        | SF       |      | 3       | E    |                  | 33                   |               |         |
|       |      | 25  | 2355       |          | 2400     | No Flare Patrol |     |                      |        |      |           |          |      |         |      |                  |                      |               |         |
|       |      | 26  | 0000       |          | 0046     | No Flare Patrol |     |                      |        |      |           |          |      |         |      |                  |                      |               |         |
| 0165  | LEAR | 26  | 0347       | 0349     | 0356     | N06             | W01 | 7640                 | 12     | 26.1 | 9         | SF B 6.6 |      | 3       | E    |                  | 32                   |               |         |
| 0166  | LEAR | 26  | 0402       | 0413     | 0444     | N06             | W02 | 7640                 | 12     | 26.0 | 42        | 1N M 1.5 |      | 3       | E    |                  | 192                  |               | EF      |
| 0167  |      | 26  | 0511       | 0517     | 0542     | N06             | W03 | 7640                 | 12     | 26.0 | 31        | SN C 1.7 |      |         |      |                  | 49                   | 0.8           | DF      |
|       | LEAR | 26  | 0511       | 0517     | 0558     | N05             | W04 | 7640                 | 12     | 25.9 | 47        | SF C 1.7 |      | 3       | E    |                  | 25                   |               | F       |
|       | MITK | 26  | 0516       | 0519     | 0527     | N07             | W02 | 7640                 | 12     | 26.1 | 11        | SN       |      |         | C    | 0519             | 73                   | 0.8           | D       |
| 0168  | MITK | 26  | 0539       | 0546     | 0554     | N06             | W02 | 7640                 | 12     | 26.1 | 15        | SN       |      |         | C    | 0546             | 179                  | 1.9           | E       |
| 0169  | LEAR | 26  | 0608       | 0616     | 0629     | N07             | W03 | 7640                 | 12     | 26.0 | 21        | SF C 2.5 |      | 3       | E    |                  | 48                   |               | F       |
| 0170  | LEAR | 26  | 0718       | 0733     | 0749     | N06             | W06 | 7640                 | 12     | 25.8 | 31        | 1F C 4.6 |      | 3       | E    |                  | 123                  |               | F       |
| 0171  | LEAR | 26  | 0843       | 0848     | 0858     | N06             | W05 | 7640                 | 12     | 26.0 | 15        | SF C 3.6 |      | 3       | E    |                  | 46                   |               | F       |
| 0172  | SVTO | 26  | 0850E      | 0853U    | 0857D    | N06             | E04 | 7640                 | 12     | 26.7 | 7         | SF       |      | 1       | E    |                  | 62                   |               | F       |
| 0173  | LEAR | 26  | 0913       | 0914     | 0932     | N06             | E00 | 7640                 | 12     | 26.4 | 19        | SF C 2.8 |      | 3       | E    |                  | 46                   |               | F       |
| 0174  | LEAR | 26  | 0940       | 0941     | 0946     | N05             | W09 | 7640                 | 12     | 25.7 | 6         | SF C 2.5 |      | 3       | E    |                  | 19                   |               | H       |
| 0175  | LEAR | 26  | 1003       | 1015     | 1027     | N06             | W05 | 7640                 | 12     | 26.0 | 24        | SF C 1.4 |      | 3       | E    |                  | 32                   |               |         |
| 0176  | RAMY | 26  | 1331       | 1340     | 1357     | N10             | W01 | 7640                 | 12     | 26.5 | 26        | 1N C 2.4 |      | 3       | E    |                  | 113                  |               | EF      |
| 0177  |      | 26  | 1456       | 1504     | 1551     | N07             | W06 | 7640                 | 12     | 26.2 | 55        | 1N C 5.7 |      |         |      |                  | 143                  |               | EF      |
|       | HOLL | 26  | 1456       | 1505     | 1626     | N07             | W06 | 7640                 | 12     | 26.2 | 90        | 1F C 5.7 |      | 3       | E    |                  | 173                  |               | FE      |
|       | RAMY | 26  | 1501       | 1504     | 1516     | N07             | W06 | 7640                 | 12     | 26.2 | 15        | 1N       |      | 3       | E    |                  | 113                  |               | FE      |
| 0178  | RAMY | 26  | 1542       | 1558     | 1621     | N07             | W11 | 7640                 | 12     | 25.8 | 39        | 1F C 6.5 |      | 3       | E    |                  | 148                  |               | EF      |
| 0179  |      | 26  | 1705       | 1707     | 1710     | N06             | W12 | 7640                 | 12     | 25.8 | 5         | SF C 2.2 |      |         |      |                  | 14                   |               |         |
|       | HOLL | 26  | 1705       | 1707     | 1710     | N06             | W12 | 7640                 | 12     | 25.8 | 5         | SF C 2.2 |      | 3       | E    |                  | 15                   |               |         |
|       | RAMY | 26  | 1706       | 1707     | 1711     | N06             | W11 | 7640                 | 12     | 25.9 | 5         | SF       |      | 3       | E    |                  | 14                   |               |         |
| 0180  |      | 26  | 1714*      | 1758     | 1823     | N11             | W10 | 7640                 | 12     | 26.0 | 69        | SF C 1.0 |      |         |      |                  | 36                   |               | F       |
|       | RAMY | 26  | 1714       | 1801     | 1830     | N11             | W09 | 7640                 | 12     | 26.0 | 76        | SF C 1.0 |      | 3       | E    |                  | 56                   |               | F       |
|       | HOLL | 26  | 1757       | 1758     | 1816     | N11             | W10 | 7640                 | 12     | 26.0 | 19        | SF C 2.0 |      | 3       | E    |                  | 16                   |               |         |

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| 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<br>(UT)     | Apparent<br>(10 <sup>-6</sup> Disk) | Corr<br>(Sq Deg) |         |
| 0181  | RAMY | 26  | 1831       | 1840     | 1847     | N06             | W09 | 7640                    | 12        | 26.1 | 16           | SF         |      | 3          | E    |                  | 23                                  |                  |         |
| 0182  |      | 26  | 19031      | 19041    | 1919     | N06             | W10 | 7640                    | 12        | 26.0 | 16           | SF C 1.6   |      |            |      |                  | 48                                  |                  | F       |
|       | RAMY | 26  | 1903       | 1904     | 1923     | N06             | W10 | 7640                    | 12        | 26.0 | 20           | SF C 1.6   | 3    | E          |      |                  | 47                                  |                  | F       |
|       | HOLL | 26  | 1904       | 1905     | 1915     | N06             | W10 | 7640                    | 12        | 26.0 | 11           | SF         |      | 3          | E    |                  | 48                                  |                  |         |
| 0183  | RAMY | 26  | 1924       | 1936     | 1939     | N05             | W14 | 7640                    | 12        | 25.8 | 15           | SF C 1.5   | 3    | E          |      |                  | 14                                  |                  | F       |
|       |      | 26  | 2158       |          | 2223     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
| 0184  |      | 26  | 2238       | 2239     | 2253     | N10             | E04 | 7640                    | 12        | 27.2 | 15           | SF C 3.0   |      |            |      |                  | 50                                  |                  | F       |
|       | PALE | 26  | 2237E      | 2239U    | 2255D    | N11             | E05 | 7640                    | 12        | 27.3 | 18D          | SF         |      | 2          | E    |                  | 47                                  |                  | F       |
|       | LEAR | 26  | 2238       | 2239     | 2253     | N08             | E02 | 7640                    | 12        | 27.1 | 15           | SF C 3.0   | 3    | E          |      |                  | 54                                  |                  | F       |
| 0185  | PALE | 26  | 2357E      | 2357U    | 2409D    | N06             | W17 | 7640                    | 12        | 25.7 | 12D          | SF         |      | 1          | E    |                  | 13                                  |                  |         |
| 0186  | PALE | 27  | 0218E      | 0219U    | 0240D    | N09             | E04 | 7640                    | 12        | 27.4 | 22D          | SF         |      | 3          | E    |                  | 20                                  |                  | F       |
| 0187  |      | 27  | 03131      | 0317     | 0322     | N05             | W18 | 7640                    | 12        | 25.8 | 9            | SN C 1.6   |      |            |      |                  | 34                                  | 0.5              | DF      |
|       | LEAR | 27  | 0313       | 0317     | 0325     | N04             | W18 | 7640                    | 12        | 25.8 | 12           | SF C 1.6   | 3    | E          |      |                  | 23                                  |                  | F       |
|       | MITK | 27  | 0314       | 0317     | 0320     | N06             | W17 | 7640                    | 12        | 25.9 | 6            | SN         |      |            | C    | 0317             | 46                                  | 0.5              | D       |
| 0188  |      | 27  | 03507      | 03572    | 0402     | N06             | W18 | 7640                    | 12        | 25.8 | 12           | SN C 1.5   |      |            |      |                  | 18                                  | 0.1              | D       |
|       | LEAR | 27  | 0350       | 0357     | 0405     | N05             | W19 | 7640                    | 12        | 25.7 | 15           | SF C 1.5   | 3    | E          |      |                  | 23                                  |                  |         |
|       | MITK | 27  | 0357       | 0359     | 0400     | N07             | W17 | 7640                    | 12        | 25.9 | 3            | SN         |      |            | C    | 0359             | 13                                  | 0.1              | D       |
| 0189  |      | 27  | 0916       | 09171    | 0930     | N10             | W03 | 7644                    | 12        | 27.2 | 14           | SB         |      |            |      |                  | 68                                  | 1.1              | F       |
|       | CATA | 27  | 0912E      | 0917     | 0949D    | N11             | W03 | 7644                    | 12        | 27.1 | 37D          | SB         |      | 1          | C    | 0917             | 112                                 | 1.1              |         |
|       | SVTO | 27  | 0916       | 0918     | 0930     | N10             | W03 | 7644                    | 12        | 27.2 | 14           | SN         |      | 3          | E    |                  | 25                                  |                  | F       |
| 0190  | LEAR | 27  | 0912       | 0915     | 0941     | N07             | W13 | 7640                    | 12        | 26.4 | 29           | SF C 4.8   | 3    | E          |      |                  | 46                                  |                  | FH      |
| 0191  |      | 27  | 0953       | 0954     | 1006     | N06             | W24 | 7640                    | 12        | 25.6 | 13           | SF C 4.3   |      |            |      |                  | 34                                  |                  | FH      |
|       | LEAR | 27  | 0953       | 0954     | 1001     | N06             | W25 | 7640                    | 12        | 25.5 | 8            | SF C 4.3   | 3    | E          |      |                  | 28                                  |                  |         |
|       | SVTO | 27  | 0956E      | 0958U    | 1012     | N06             | W23 | 7640                    | 12        | 25.7 | 16D          | SF         |      | 3          | E    |                  | 39                                  |                  | FH      |
|       |      | 27  | 1111       |          | 1140     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
|       |      | 27  | 1212       |          | 1248     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
|       |      | 27  | 1259       |          | 1308     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
|       |      | 27  | 1352       |          | 1406     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
|       |      | 27  | 1412       |          | 1419     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
| 0192  | RAMY | 27  | 1559       | 1559     | 1605     | N07             | W24 | 7640                    | 12        | 25.9 | 6            | SF C 1.4   | 3    | E          |      |                  | 15                                  |                  | F       |
| 0193  | RAMY | 27  | 1843       | 1900     | 1922     | N10             | W20 | 7640                    | 12        | 26.3 | 39           | SF M 1.9   | 3    | E          |      |                  | 28                                  |                  | F       |
|       |      | 27  | 2158       |          | 2202     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
| 0194  | HOLL | 27  | 2207       | 2208     | 2312D    | N09             | W18 | 7644                    | 12        | 26.6 | 65D          | SF         |      | 3          | E    |                  | 42                                  |                  |         |
|       |      | 27  | 2228       |          | 2237     | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                                     |                  |         |
| 0195  | LEAR | 28  | 0152       | 0157     | 0207     | N07             | W25 | 7640                    | 12        | 26.2 | 15           | SF         |      | 3          | E    |                  | 30                                  |                  | F       |
| 0196  | LEAR | 28  | 0240       | 0243     | 0258     | N10             | W15 | 7644                    | 12        | 27.0 | 18           | SF         |      | 3          | E    |                  | 23                                  |                  | F       |
| 0197  |      | 28  | 0227*      | 02508    | 0314     | N10             | W24 | 7640                    | 12        | 26.3 | 47           | SF C 8.4   |      |            |      |                  | 71                                  | 0.8              | EFIJ    |
|       | LEAR | 28  | 0227       | 0253     | 0331     | N09             | W24 | 7640                    | 12        | 26.3 | 64           | SF C 8.4   | 3    | E          |      |                  | 88                                  |                  | F       |
|       | VORO | 28  | 0244U      | 0250     | 0300D    | N09             | W27 | 7640                    | 12        | 26.1 | 16U          | SF         |      | 1          | C    | 0250             | 99                                  | 1.2              | EIJ     |
|       | MITK | 28  | 0257       | 0258     | 0258     | N11             | W22 | 7640                    | 12        | 26.5 | 1            | SN         |      |            | C    | 0258             | 26                                  | 0.3              | E       |
| 0198  | PALE | 28  | 0258E      | 0306U    | 0306D    | N10             | W27 | 7640                    | 12        | 26.1 | 8D           | SF         |      | 2          | E    |                  | 28                                  |                  |         |
| 0199  | LEAR | 28  | 0649       | 0653     | 0705     | N11             | W16 | 7644                    | 12        | 27.1 | 16           | SF C 3.0   | 3    | E          |      |                  | 73                                  |                  | F       |
| 0200  |      | 28  | 07564      | 08031    | 0816     | N05             | W32 | 7640                    | 12        | 25.9 | 20           | SF         |      |            |      |                  | 35                                  |                  | F       |
|       | SVTO | 28  | 0756       | 0803     | 0816     | N05             | W33 | 7640                    | 12        | 25.9 | 20           | SF         |      | 3          | E    |                  | 35                                  |                  | F       |
|       | KANZ | 28  | 0800       | 0804     | 0816D    | N05             | W31 | 7640                    | 12        | 26.0 | 16D          | SF         |      | 2          | C    |                  |                                     |                  |         |

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| 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<br>(UT)     | Apparent<br>(10-6 Disk) | Corr<br>(Sq Deg) |         |
| 0201  |      | 28  | 0833       | 0835     | 0844     | N04             | W35 | 7640                    | 12 25.7       | 11           | SF         |      |            |      |                  | 30                      |                  | F       |
|       | LEAR | 28  | 0833       | 0835     | 0842     | N03             | W35 | 7640                    | 12 25.7       | 9            | SF         |      | 3          | E    |                  | 25                      |                  |         |
|       | SVTO | 28  | 0833       | 0836     | 0846     | N04             | W35 | 7640                    | 12 25.7       | 13           | SF         |      | 3          | E    |                  | 35                      |                  | F       |
| 0202  |      | 28  | 0853       | 0901     | 0918     | N06             | W34 | 7640                    | 12 25.8       | 25           | SF C 2.7   |      |            |      |                  | 63                      |                  | F       |
|       | SVTO | 28  | 0853       | 0901     | 0920     | N06             | W34 | 7640                    | 12 25.8       | 27           | SF C 2.7   |      | 3          | E    |                  | 64                      |                  | F       |
|       | LEAR | 28  | 0859       | 0901     | 0917     | N05             | W34 | 7640                    | 12 25.8       | 18           | SF         |      | 3          | E    |                  | 62                      |                  | F       |
| 0203  |      | 28  | 1013       | 1015     | 1027     | N10             | W17 | 7644                    | 12 27.1       | 14           | SF         |      |            |      |                  | 19                      |                  |         |
|       | LEAR | 28  | 1013       | 1015     | 1026     | N11             | W18 | 7644                    | 12 27.1       | 13           | SF         |      | 3          | E    |                  | 19                      |                  |         |
|       | KANZ | 28  | 1016       | 1016     | 1028     | N10             | W16 | 7644                    | 12 27.2       | 12           | SF         |      | 2          | C    |                  |                         |                  |         |
| 0204  | KANZ | 28  | 1032       | 1036     | 1052     | N11             | E83 | 7645                    | 01 3.7        | 20           | SF         |      | 2          | C    |                  |                         |                  |         |
| 0205  | KANZ | 28  | 1100       | 1104     | 1120     | N10             | W16 | 7644                    | 12 27.2       | 20           | SF         |      | 2          | C    |                  |                         |                  |         |
| 0206  | KANZ | 28  | 1208       | 1208     | 1212     | N07             | W29 | 7640                    | 12 26.3       | 4            | SF         |      | 2          | C    |                  |                         |                  |         |
| 0207  | KANZ | 28  | 1212       | 1220     | 1236     | N07             | W31 | 7640                    | 12 26.2       | 24           | SF         |      | 2          | C    |                  |                         |                  |         |
|       |      |     | 28 1353    |          | 1418     | No Flare Patrol |     |                         |               |              |            |      |            |      |                  |                         |                  |         |
|       |      |     | 28 1429    |          | 1434     | No Flare Patrol |     |                         |               |              |            |      |            |      |                  |                         |                  |         |
| 0208  | RAMY | 28  | 1530       | 1534     | 1538     | N08             | W36 | 7640                    | 12 25.9       | 8            | SF         |      | 3          | E    |                  | 60                      |                  | F       |
|       |      |     | 28 1547    |          | 1555     | No Flare Patrol |     |                         |               |              |            |      |            |      |                  |                         |                  |         |
| 0209  | RAMY | 28  | 1602       | 1604     | 1611     | N13             | W19 | 7644                    | 12 27.2       | 9            | SF C 2.6   |      | 3          | E    |                  | 11                      |                  |         |
| 0210  | RAMY | 28  | 1653       | 1656     | 1713     | N07             | W37 | 7640                    | 12 25.9       | 20           | 1N M 1.1   |      | 3          | E    |                  | 134                     |                  | EF      |
|       |      |     | 28 1730    |          | 1734     | No Flare Patrol |     |                         |               |              |            |      |            |      |                  |                         |                  |         |
|       |      |     | 28 1809    |          | 1956     | No Flare Patrol |     |                         |               |              |            |      |            |      |                  |                         |                  |         |
| 0211  | RAMY | 28  | 2002       | 2005     | 2018     | N08             | W35 | 7640                    | 12 26.2       | 16           | SF         |      | 3          | E    |                  | 24                      |                  | F       |
| 0212  | HOLL | 28  | 2153       | 2157     | 2206     | N07             | W39 | 7640                    | 12 26.0       | 13           | SF         |      | 3          | E    |                  | 11                      |                  |         |
| 0213  | HOLL | 28  | 2157       | 2157     | 2204     | N06             | W31 | 7641                    | 12 26.6       | 7            | SF         |      | 3          | E    |                  | 17                      |                  |         |
| 0214  | HOLL | 28  | 2220       | 2221     | 2224     | N06             | W42 | 7640                    | 12 25.8       | 4            | SF         |      | 3          | E    |                  | 10                      |                  |         |
| 0215  | PALE | 29  | 0143       | 0146     | 0154D    | S10             | E84 | 7646                    | 01 4.4        | 11D          | SF         |      | 4          | E    |                  | 45                      |                  | F       |
| 0216  |      | 29  | 0217       | 0220     | 0234     | N10             | W37 | 7640                    | 12 26.3       | 17           | SF C 1.9   |      |            |      |                  | 55                      | 1.2              | DFIJ    |
|       | VORO | 29  | 0217       | 0220     | 0232     | N10             | W38 | 7640                    | 12 26.2       | 15           | SF         |      | 1          | C    | 0220             | 90                      | 1.2              | DIJ     |
|       | LEAR | 29  | 0218       | 0220     | 0237     | N10             | W36 | 7640                    | 12 26.4       | 19           | SF C 1.9   |      | 3          | E    |                  | 20                      |                  | F       |
| 0217  | LEAR | 29  | 0242       | 0247     | 0252     | N07             | W41 | 7640                    | 12 26.0       | 10           | SF C 1.4   |      | 3          | E    |                  | 27                      |                  | F       |
| 0218  | LEAR | 29  | 0257       | 0300     | 0303     | S09             | E80 | 7646                    | 01 4.1        | 6            | SF         |      | 3          | E    |                  | 32                      |                  |         |
| 0219  | LEAR | 29  | 0634       | 0636     | 0647     | N07             | W42 | 7640                    | 12 26.1       | 13           | SF C 1.1   |      | 3          | E    |                  | 32                      |                  | F       |
| 0220  |      | 29  | 0746       | 0747     | 0752     | S13             | E76 | 7646                    | 01 4.0        | 6            | SF C 1.6   |      |            |      |                  | 25                      |                  |         |
|       | LEAR | 29  | 0746       | 0748     | 0752     | S13             | E75 | 7646                    | 01 4.0        | 6            | SF C 1.6   |      | 3          | E    |                  | 25                      |                  |         |
|       | KANZ | 29  | 0747       | 0747     | 0751     | S13             | E78 | 7646                    | 01 4.2        | 4            | SF         |      | 2          | C    |                  |                         |                  |         |
| 0221  | KANZ | 29  | 0931       | 0931     | 0935     | N12             | E81 | 7645                    | 01 4.5        | 4            | SF         |      | 2          | C    |                  |                         |                  |         |
| 0222  | LEAR | 29  | 0940       | 0942     | 0949     | S09             | E76 | 7646                    | 01 4.1        | 9            | SF         |      | 3          | E    |                  | 19                      |                  |         |
| 0223  | RAMY | 29  | 1245       | 1252     | 1310     | S11             | E76 | 7646                    | 01 4.2        | 25           | SF         |      | 3          | E    |                  | 23                      |                  |         |
| 0224  | RAMY | 29  | 1439       | 1444     | 1447     | S11             | E77 | 7646                    | 01 4.4        | 8            | SF         |      | 3          | E    |                  | 29                      |                  |         |
| 0225  | RAMY | 29  | 1530       | 1539     | 1604     | N12             | W43 | 7640                    | 12 26.4       | 34           | SF C 9.9   |      | 3          | E    |                  | 50                      |                  | F       |
| 0226  | PALE | 29  | 1755E      | 1756U    | 1759     | N14             | W45 | 7640                    | 12 26.3       | 4D           | SF C 1.5   |      | 2          | E    |                  | 34                      |                  | F       |

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| Grp # | Sta  | Start Day | 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) |         |  |
|       |      | 29        | 2131     | 2217     | No Flare Patrol |         |                         |           |      |              |            |       |     |             |                  |                                     |                  |         |  |
| 0227  | LEAR | 29        | 2256     | 2258     | 2303            | N11 E67 | 7645                    | 01        | 4.0  | 7            | SF         | C 3.7 | 3   | E           |                  | 18                                  |                  | F       |  |
| 0228  | LEAR | 30        | 0027     | 0032     | 0054            | N08 W43 | 7640                    | 12        | 26.8 | 27           | SF         |       | 3   | E           |                  | 28                                  |                  | F       |  |
| 0229  | MITK | 30        | 0349     | 0350     | 0350            | N13 W45 | 7640                    | 12        | 26.8 | 1            | SN         |       |     | C           | 0350             | 7                                   | 0.1              | E       |  |
| 0230  | MITK | 30        | 0355     | 0355     | 0356            | N13 W45 | 7640                    | 12        | 26.8 | 1            | SN         |       |     | C           | 0355             | 20                                  | 0.3              |         |  |
| 0231  | MITK | 30        | 0441     | 0449     | 0450            | N13 W46 | 7640                    | 12        | 26.7 | 9            | SN         |       |     | C           | 0449             | 26                                  | 0.4              | D       |  |
| 0232  | MITK | 30        | 0501     | 0503     | 0512            | N13 W46 | 7640                    | 12        | 26.7 | 11           | SN         |       |     | C           | 0503             | 105                                 | 1.6              |         |  |
| 0233  | MITK | 30        | 0526     | 0526     | 0526            | N13 W46 | 7640                    | 12        | 26.7 | 11           | SN         |       |     | C           | 0526             | 7                                   | 0.1              | D       |  |
| 0234  | MITK | 30        | 0530     | 0533     | 0533            | N13 W46 | 7640                    | 12        | 26.7 | 3            | SN         |       |     | C           | 0533             | 33                                  | 0.5              | D       |  |
| 0235  | MITK | 30        | 0535     | 0536     | 0536            | N13 W47 | 7640                    | 12        | 26.7 | 1            | SN         |       |     | C           | 0536             | 7                                   | 0.1              | D       |  |
| 0236  | MITK | 30        | 0542     | 0542     | 0543            | N13 W46 | 7644                    | 12        | 26.8 | 1            | SN         |       |     | C           | 0542             | 13                                  | 0.2              | D       |  |
| 0237  | TACH | 30        | 0548     | 0553     | 0609            | N12 E66 | 7645                    | 01        | 4.2  | 21           | 1N         |       | 2   | C           | 0553             | 184                                 |                  | ,EZ     |  |
| 0238  | TACH | 30        | 0618     | 0623     | 0631            | N11 W53 | 7640                    | 12        | 26.3 | 13           | 1B         |       | 2   | C           | 0623             | 245                                 | 4.3              | ,VZ     |  |
|       |      | 30        | 0718     | 0735     | No Flare Patrol |         |                         |           |      |              |            |       |     |             |                  |                                     |                  |         |  |
|       |      | 30        | 0838     | 0845     | No Flare Patrol |         |                         |           |      |              |            |       |     |             |                  |                                     |                  |         |  |
| 0239  | CATA | 30        | 1032     | 1032     | 1040            | N13 E57 | 7645                    | 01        | 3.7  | 8            | SB         |       | 1   | C           | 1032             | 56                                  | 1.1              |         |  |
| 0240  | CATA | 30        | 1037     | 1037     | 1101            | N14 E68 | 7645                    | 01        | 4.6  | 24           | SB         |       | 1   | C           | 1037             | 67                                  |                  |         |  |
| 0241  | CATA | 30        | 1149     | 1149     | 1208            | S12 E66 | 7646                    | 01        | 4.5  | 19           | 1B         |       | 1   | C           | 1149             | 168                                 |                  |         |  |
| 0242  | CATA | 30        | 1200     | 1200     | 1208            | N12 E56 | 7645                    | 01        | 3.7  | 8            | SB         |       | 1   | C           | 1200             | 84                                  | 1.6              |         |  |
| 0243  |      | 30        | 1211     | 1227     | 1242            | N10 W48 | 7644                    | 12        | 26.9 | 31           | SF         |       |     |             |                  | 18                                  |                  |         |  |
|       | RAMY | 30        | 1211     | 1227     | 1242            | N10 W50 | 7644                    | 12        | 26.7 | 31           | SF         |       | 3   | E           |                  | 12                                  |                  |         |  |
|       | SVTO | 30        | 1217E    | 1224U    | 1238D           | N10 W47 | 7644                    | 12        | 27.0 | 21D          | SF         |       | 3   | E           |                  | 25                                  |                  |         |  |
| 0244  |      | 30        | 1220     | 12207    | 1305            | N10 E60 | 7645                    | 01        | 4.0  | 45           | SF         |       |     |             |                  | 22                                  |                  |         |  |
|       | SVTO | 30        | 1217E    | 1220     | 1302D           | N10 E59 | 7645                    | 01        | 3.9  | 45D          | SF         |       | 2   | E           |                  | 33                                  |                  |         |  |
|       | RAMY | 30        | 1220     | 1227     | 1305            | N09 E61 | 7645                    | 01        | 4.1  | 45           | SF         |       | 3   | E           |                  | 10                                  |                  |         |  |
|       |      | 30        | 1241     | 1244     | No Flare Patrol |         |                         |           |      |              |            |       |     |             |                  |                                     |                  |         |  |
| 0245  | RAMY | 30        | 1248     | 1306     | 1320            | N09 W51 | 7644                    | 12        | 26.7 | 32           | SF         | C 1.2 | 3   | E           |                  | 39                                  |                  |         |  |
|       |      | 30        | 1254     | 1259     | No Flare Patrol |         |                         |           |      |              |            |       |     |             |                  |                                     |                  |         |  |
| 0246  | RAMY | 30        | 1308     | 1314     | 1319            | N10 E62 | 7645                    | 01        | 4.2  | 11           | SF         |       | 3   | E           |                  | 43                                  |                  |         |  |
| 0247  | RAMY | 30        | 1321     | 1322     | 1344            | N09 E62 | 7645                    | 01        | 4.2  | 23           | SF         | C 1.2 | 3   | E           |                  | 47                                  |                  | F       |  |
| 0248  | RAMY | 30        | 1357     | 1400     | 1418            | N10 W50 | 7644                    | 12        | 26.8 | 21           | SF         |       | 3   | E           |                  | 11                                  |                  |         |  |
| 0249  | RAMY | 30        | 1509     | 1539     | 1600            | N10 E59 | 7645                    | 01        | 4.1  | 51           | SF         |       | 3   | E           |                  | 32                                  |                  | F       |  |
| 0250  | RAMY | 30        | 1513     | 1609     | 1715            | N12 W57 | 7640                    | 12        | 26.3 | 122          | 1N         | C 5.5 | 3   | E           |                  | 141                                 |                  | EF      |  |
| 0251  |      | 30        | 1705     | 1710     | 1742            | N10 E58 | 7645                    | 01        | 4.1  | 37           | SN         | C 7.7 |     |             |                  | 76                                  |                  | F       |  |
|       | RAMY | 30        | 1705     | 1710     | 1742            | N10 E58 | 7645                    | 01        | 4.1  | 37           | SN         | C 7.7 | 3   | E           |                  | 55                                  |                  | F       |  |
|       | HOLL | 30        | 1705     | 1710     | 1742            | N10 E58 | 7645                    | 01        | 4.1  | 37           | SF         | C 7.7 | 3   | E           |                  | 96                                  |                  |         |  |
| 0252  | RAMY | 30        | 1740     | 1755     | 1818            | N08 W61 | 7640                    | 12        | 26.2 | 38           | SF         |       | 3   | E           |                  | 25                                  |                  | F       |  |
| 0253  |      | 30        | 1820     | 18211    | 1835            | N10 E58 | 7645                    | 01        | 4.1  | 15           | SF         |       |     |             |                  | 16                                  |                  | F       |  |
|       | RAMY | 30        | 1820     | 1821     | 1827            | N09 E56 | 7645                    | 01        | 4.0  | 7            | SF         |       | 3   | E           |                  | 15                                  |                  | F       |  |
|       | HOLL | 30        | 1820     | 1822     | 1843            | N10 E60 | 7645                    | 01        | 4.3  | 23           | SF         |       | 3   | E           |                  | 17                                  |                  |         |  |

H $\alpha$  SOLAR FLARES15  
Dec 93

DECEMBER 1993

| Grp<br># | Sta  | Day | Start<br>(UT) | Max<br>(UT) | End<br>(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<br>(UT)     | Apparent<br>(10-6 Disk) | Corr<br>(Sq Deg) |         |
| 0254     |      | 30  | 1848          | 1848        | 1900        | N10             | E57 | 7645                    | 01        | 4.1  | 12           | SF         |      |            |      |                  | 10                      |                  | F       |
|          | HOLL | 30  | 1848          | 1848        | 1855        | N09             | E58 | 7645                    | 01        | 4.1  | 7            | SF         |      | 3          | E    |                  | 10                      |                  |         |
|          | RAMY | 30  | 1848          | 1848        | 1904        | N10             | E56 | 7645                    | 01        | 4.0  | 16           | SF         |      | 3          | E    |                  | 11                      |                  | F       |
| 0255     |      | 30  | 19142         | 1917        | 1933        | N09             | E59 | 7645                    | 01        | 4.2  | 19           | SF C 3.0   |      |            |      |                  | 48                      |                  | F       |
|          | RAMY | 30  | 1914          | 1917        | 1936        | N09             | E58 | 7645                    | 01        | 4.1  | 22           | SN C 3.0   | 3    | E          |      |                  | 59                      |                  |         |
|          | HOLL | 30  | 1916          | 1916U       | 1930        | N09             | E58 | 7645                    | 01        | 4.1  | 14           | SF         |      | 3          | E    |                  | 56                      |                  |         |
|          | PALE | 30  | 1916E         | 1917U       | 1927D       | N09             | E62 | 7645                    | 01        | 4.4  | 11D          | SF         |      | 3          | E    |                  | 29                      |                  | F       |
| 0256     | PALE | 30  | 2017E         | 2019U       | 2030D       | N09             | W62 | 7645                    | 12        | 26.2 | 13D          | SF         |      | 3          | E    |                  | 31                      |                  | F       |
| 0257     |      | 30  | 20157         | 20193       | 2031        | N10             | E58 | 7645                    | 01        | 4.2  | 16           | SF C 1.6   |      |            |      |                  | 13                      |                  | F       |
|          | RAMY | 30  | 2015          | 2019        | 2028        | N09             | E58 | 7645                    | 01        | 4.2  | 13           | SF C 1.6   | 3    | E          |      |                  | 14                      |                  | F       |
|          | HOLL | 30  | 2022          | 2022        | 2034        | N10             | E59 | 7645                    | 01        | 4.3  | 12           | SF         |      | 3          | E    |                  | 12                      |                  |         |
| 0258     | PALE | 30  | 2117E         | 2119U       | 2131D       | N16             | W49 | 7644                    | 12        | 27.2 | 14D          | SF         |      | 3          | E    |                  | 63                      |                  | F       |
| 0259     | HOLL | 30  | 2117          | 2118        | 2129        | N11             | W61 | 7640                    | 12        | 26.3 | 12           | SN C 7.6   | 3    | E          |      |                  | 77                      |                  |         |
| 0260     | HOLL | 30  | 2208          | 2211        | 2217        | N08             | W67 | 7640                    | 12        | 25.9 | 9            | SF         |      | 3          | E    |                  | 21                      |                  |         |
| 0261     |      | 31  | 0043          | 0048        | 0056        | N12             | E52 | 7645                    | 01        | 3.9  | 13           | SF C 2.5   |      |            |      |                  | 48                      |                  |         |
|          | LEAR | 31  | 0043          | 0048        | 0056        | N13             | E49 | 7645                    | 01        | 3.7  | 13           | SF C 2.5   | 3    | E          |      |                  | 40                      |                  |         |
|          | PALE | 31  | 0045E         | 0050U       | 0105D       | N12             | E55 | 7645                    | 01        | 4.2  | 20D          | SF         |      | 3          | E    |                  | 55                      |                  |         |
| 0262     | LEAR | 31  | 0145          | 0149        | 0152        | S09             | E55 | 7646                    | 01        | 4.2  | 7            | SF         |      | 3          | E    |                  | 35                      |                  |         |
|          |      | 31  | 0341          |             | 0543        | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                         |                  |         |
| 0263     | LEAR | 31  | 0526          | 0536        | 0559        | N12             | W54 | 7644                    | 12        | 27.1 | 33           | SF         |      | 3          | E    |                  | 33                      |                  | F       |
| 0264     | LEAR | 31  | 0526          | 0536        | 0555        | N08             | W70 | 7640                    | 12        | 26.0 | 29           | SF C 2.8   | 3    | E          |      |                  | 35                      |                  | F       |
| 0265     | LEAR | 31  | 0624          | 0628        | 0639        | N11             | E52 | 7645                    | 01        | 4.2  | 15           | SF C 3.2   | 3    | E          |      |                  | 24                      |                  | F       |
| 0266     | LEAR | 31  | 0644          | 0646        | 0655        | N12             | W55 | 7644                    | 12        | 27.1 | 11           | SF C 4.1   | 3    | E          |      |                  | 24                      |                  | F       |
| 0267     |      | 31  | 0818          | 08204       | 0827        | N12             | E46 | 7645                    | 01        | 3.8  | 9            | SN         |      |            |      |                  | 28                      | 0.5              |         |
|          | CATA | 31  | 0817E         | 0824        | 0824D       | N12             | E44 | 7645                    | 01        | 3.7  | 7D           | SN         | 1    | C          | 0824 |                  | 39                      | 0.5              |         |
|          | SVTO | 31  | 0818          | 0820        | 0827        | N12             | E47 | 7645                    | 01        | 3.9  | 9            | SF         |      | 3          | E    |                  | 16                      |                  |         |
| 0268     | LEAR | 31  | 0903          | 0905        | 0911        | S08             | E50 | 7646                    | 01        | 4.1  | 8            | SF         |      | 3          | E    |                  | 42                      |                  | F       |
| 0269     | SVTO | 31  | 1120          | 1121        | 1132        | N09             | W62 | 7640                    | 12        | 26.8 | 12           | SF C 2.1   | 3    | E          |      |                  | 33                      |                  |         |
| 0270     | SVTO | 31  | 1138          | 1139        | 1146        | N12             | E44 | 7645                    | 01        | 3.8  | 8            | SF         |      | 3          | E    |                  | 25                      |                  |         |
| 0271     | RAMY | 31  | 1441          | 1442        | 1445        | N09             | W69 | 7640                    | 12        | 26.4 | 4            | SF C 2.0   | 3    | E          |      |                  | 24                      |                  | F       |
| 0272     | RAMY | 31  | 1802          | 1804        | 1807        | S10             | E44 | 7646                    | 01        | 4.0  | 5            | SF         |      | 3          | E    |                  | 18                      |                  |         |
| 0273     | RAMY | 31  | 1918          | 1928        | 1942        | N09             | W78 | 7640                    | 12        | 26.0 | 24           | SF C 1.7   | 3    | E          |      |                  | 50                      |                  |         |
|          |      | 31  | 2046          |             | 2159        | No Flare Patrol |     |                         |           |      |              |            |      |            |      |                  |                         |                  |         |
| 0274     |      | 31  | 2233          | 2235        | 2240        | N12             | E39 | 7645                    | 01        | 3.9  | 7            | SF C 1.8   |      |            |      |                  | 27                      |                  | H       |
|          | LEAR | 31  | 2233          | 2235        | 2240        | N13             | E38 | 7645                    | 01        | 3.8  | 7            | SF         |      | 2          | E    |                  | 39                      |                  |         |
|          | HOLL | 31  | 2236E         | 2238U       | 2242D       | N12             | E40 | 7645                    | 01        | 3.9  | 6D           | SF C 1.8   | 3    | E          |      |                  | 15                      |                  | H       |
| 0275     |      | 31  | 23111         | 23112       | 2316        | N10             | W80 | 7640                    | 12        | 25.9 | 5            | SF         |      |            |      |                  | 24                      |                  |         |
|          | HOLL | 31  | 2311          | 2311        | 2313        | N10             | W81 | 7640                    | 12        | 25.9 | 2            | SF         |      | 3          | E    |                  | 18                      |                  |         |
|          | LEAR | 31  | 2311          | 2312        | 2320        | N09             | W79 | 7640                    | 12        | 26.0 | 9            | SF         |      | 2          | E    |                  | 29                      |                  |         |
|          | PALE | 31  | 2312          | 2313        | 2325D       | N10             | W80 | 7640                    | 12        | 25.9 | 13D          | SF         |      | 3          | E    |                  | 25                      |                  |         |