# S U N S P O T  G R O U P S
## (Ordered by Central Meridian Passage Date)

## DECEMBER 2004

| NOAA/ USAF Group | Mt Wilson Group | Sta | Observation Time Mo | Day | (UT) | Lat | CMD | CMP Mo | Day | Max H | Mag Class | Spot Class | Corrected Area (10-6 Hemi) | Spot Count | Long. Extent (Deg) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10708 | | HOLL | 11 | 26 | 1620 | N08 | E85 | 12 | 3.0 | | A | HAX | 120 | 1 | 3 | 3 |
| 10708 | | VORO | 11 | 27 | 0043 | N10 | E79 | 12 | 3.0 | | | HAX | 138 | 1 | | 3 |
| 10708 | | LEAR | 11 | 27 | 0117 | N11 | E78 | 12 | 2.9 | | A | HXX | 120 | 1 | 1 | 3 |
| 10708 | | TACH | 11 | 27 | 0539 | N11 | E78 | 12 | 3.1 | | | HSX | 108 | 1 | 2 | 3 |
| 10708 | | SVTO | 11 | 27 | 0932 | N10 | E74 | 12 | 2.9 | | A | HSX | 60 | 1 | 3 | 3 |
| 10708 | | KAND | 11 | 27 | 1055 | N10 | E74 | 12 | 3.0 | | | HA | | 1 | 1 | 2 |
| 10708 | | HOLL | 11 | 27 | 1610 | N08 | E71 | 12 | 3.0 | | A | HAX | 120 | 2 | 3 | 4 |
| 10708 | | LEAR | 11 | 28 | 0016 | N10 | E67 | 12 | 3.0 | | B | CSO | 150 | 2 | 3 | 3 |
| 10708 | | VORO | 11 | 28 | 0028 | N11 | E65 | 12 | 2.9 | | | HKX | 169 | 1 | | 3 |
| 10708 | | SVTO | 11 | 28 | 0715 | N11 | E67 | 12 | 3.3 | | A | HSX | 120 | 1 | 3 | 3 |
| 10708 | | KAND | 11 | 28 | 0925 | N10 | E63 | 12 | 3.1 | | | HS | | 1 | 3 | 5 |
| 10708 | | VORO | 11 | 29 | 0012 | N10 | E52 | 12 | 2.9 | | | HKX | 167 | 1 | | 3 |
| 10708 | | LEAR | 11 | 29 | 0015 | N10 | E52 | 12 | 2.9 | | A | HSX | 130 | 1 | 2 | 4 |
| 10708 | | KAND | 11 | 29 | 0852 | N11 | E48 | 12 | 3.0 | | | HA | | 1 | 3 | 5 |
| 10708 | | SVTO | 11 | 29 | 0937 | N11 | E47 | 12 | 2.9 | | A | HSX | 140 | 1 | 3 | 2 |
| 10708 | | HOLL | 11 | 29 | 1747 | N08 | E43 | 12 | 3.0 | | A | HKX | 200 | 1 | 3 | 2 |
| 10708 | | LEAR | 11 | 30 | 0001 | N10 | E39 | 12 | 2.9 | | A | HSX | 110 | 1 | 2 | 4 |
| 10708 | | VORO | 11 | 30 | 0008 | N10 | E39 | 12 | 2.9 | | | HKX | 172 | 1 | | 3 |
| 10708 | | KAND | 11 | 30 | 0900 | N10 | E34 | 12 | 2.9 | | | HS | | 1 | 3 | 5 |
| 10708 | | HOLL | 11 | 30 | 1501 | N11 | E31 | 12 | 2.9 | | A | HKX | 170 | 2 | 4 | 2 |
| 10708 | | VORO | 12 | 01 | 0011 | N10 | E25 | 12 | 2.9 | | | HHX | 160 | 1 | | 3 |
| 10708 | | LEAR | 12 | 01 | 0037 | N08 | E25 | 12 | 2.9 | | B | CAI | 140 | 6 | 6 | 2 |
| 10708 | | TACH | 12 | 01 | 0454 | N11 | E22 | 12 | 2.8 | | | HHX | 192 | 1 | 2 | 3 |
| 10708 | | KAND | 12 | 01 | 0810 | N10 | E21 | 12 | 2.9 | | | HS | | 1 | 2 | 4 |
| 10708 | | HOLL | 12 | 01 | 1514 | N10 | E19 | 12 | 3.1 | | B | CSO | 130 | 3 | 4 | 3 |
| 10708 | | VORO | 12 | 02 | 0005 | N10 | E12 | 12 | 2.9 | | | HHX | 157 | 1 | | 3 |
| 10708 | | LEAR | 12 | 02 | 0117 | N10 | E11 | 12 | 2.9 | | A | HSX | 50 | 1 | 2 | 3 |
| 10708 | | TACH | 12 | 02 | 0539 | N10 | E09 | 12 | 2.9 | | | HSX | 154 | 1 | 2 | 2 |
| 10708 | | KAND | 12 | 02 | 0745 | N11 | E07 | 12 | 2.8 | | | HA | | 1 | 2 | 3 |
| 10708 | | HOLL | 12 | 02 | 1505 | N08 | E07 | 12 | 3.1 | | B | DSI | 150 | 16 | 6 | 3 |
| 10708 | | LEAR | 12 | 03 | 0120 | N09 | W01 | 12 | 3.0 | | B | CSO | 170 | 4 | 7 | 3 |
| 10708 | | KAND | 12 | 03 | 0835 | N10 | W06 | 12 | 2.9 | | | CSO | | 6 | 9 | 3 |
| 10708 | | HOLL | 12 | 03 | 1455 | N08 | W07 | 12 | 3.1 | | B | DSI | 150 | 6 | 9 | 3 |
| 10708 | | LEAR | 12 | 04 | 0257 | N08 | W14 | 12 | 3.1 | | B | CAO | 60 | 2 | 1 | 2 |
| 10708 | | TACH | 12 | 04 | 0555 | N10 | W16 | 12 | 3.0 | | | HSX | 135 | 2 | 2 | 4 |
| 10708 | | HOLL | 12 | 04 | 1615 | N10 | W22 | 12 | 3.0 | | B | CAO | 110 | 8 | 3 | 3 |
| 10708 | | LEAR | 12 | 05 | 0159 | N09 | W29 | 12 | 2.9 | | A | HXX | 90 | 1 | 2 | 2 |
| 10708 | | TACH | 12 | 05 | 0848 | N11 | W33 | 12 | 2.9 | | | HSX | 121 | 1 | 2 | 4 |
| 10708 | | SVTO | 12 | 05 | 0903 | N09 | W34 | 12 | 2.8 | | A | HSX | 40 | 1 | 3 | 2 |
| 10708 | | KAND | 12 | 05 | 1045 | N08 | W35 | 12 | 2.8 | | | HS | | 1 | 2 | 3 |
| 10708 | | HOLL | 12 | 05 | 1532 | N10 | W37 | 12 | 2.9 | | A | HSX | 80 | 4 | 4 | 2 |
| 10708 | | VORO | 12 | 06 | 0023 | N09 | W41 | 12 | 2.9 | | | HSX | 132 | 1 | | 2 |
| 10708 | | LEAR | 12 | 06 | 0104 | N09 | W42 | 12 | 2.9 | | A | HAX | 100 | 1 | 2 | 2 |
| 10708 | | KAND | 12 | 06 | 0811 | N08 | W48 | 12 | 2.7 | | | HA | | 1 | 2 | 4 |
| 10708 | | SVTO | 12 | 06 | 1040 | N09 | W48 | 12 | 2.8 | | A | HSX | 110 | 1 | 1 | 2 |
| 10708 | | HOLL | 12 | 06 | 1815 | N11 | W48 | 12 | 3.1 | | B | CSO | 100 | 4 | 6 | 2 |
| 10708 | | VORO | 12 | 07 | 0024 | N09 | W55 | 12 | 2.9 | | | HHX | 172 | 3 | | 3 |
| 10708 | | LEAR | 12 | 07 | 0141 | N09 | W55 | 12 | 2.9 | | A | HAX | 100 | 1 | 2 | 3 |
| 10708 | | SVTO | 12 | 07 | 0935 | N08 | W60 | 12 | 2.9 | | A | HSX | 80 | 1 | 4 | 3 |
| 10708 | | HOLL | 12 | 07 | 1830 | N10 | W67 | 12 | 2.7 | | A | HAX | 60 | 1 | 2 | 3 |
| 10708 | | VORO | 12 | 07 | 2351 | N09 | W67 | 12 | 3.0 | | | HAX | 149 | 2 | | 3 |
| 10708 | | LEAR | 12 | 08 | 0100 | N09 | W69 | 12 | 2.9 | | A | HSX | 50 | 1 | 2 | 3 |
| 10708 | | TACH | 12 | 08 | 0555 | N10 | W72 | 12 | 2.8 | | | HSX | 50 | 1 | 1 | 4 |
| 10708 | | KAND | 12 | 08 | 0850 | N08 | W74 | 12 | 2.8 | | | HA | | 1 | 2 | 3 |
| 10708 | | HOLL | 12 | 08 | 1850 | N09 | W79 | 12 | 2.8 | | A | HAX | 100 | 1 | 2 | 3 |
| 10708 | | LEAR | 12 | 09 | 0120 | N09 | W80 | 12 | 3.0 | | A | HSX | 60 | 1 | 2 | 3 |
| 10709 | | HOLL | 12 | 02 | 1505 | N03 | E78 | 12 | 8.4 | | A | AXX | 30 | 1 | 1 | 3 |
| 10709 | | HOLL | 12 | 03 | 1455 | N06 | E65 | 12 | 8.5 | | A | AXX | 20 | 1 | 1 | 3 |
| 10709 | | LEAR | 12 | 05 | 0159 | N04 | E42 | 12 | 8.2 | | A | AXX | 10 | 2 | 9 | 2 |
| 10709 | | KAND | 12 | 05 | 1045 | N06 | E39 | 12 | 8.4 | | | AX | | 1 | | 3 |
| 10709 | | HOLL | 12 | 05 | 1532 | N07 | E36 | 12 | 8.3 | | A | AXX | | 2 | 1 | 2 |
| 10709 | | LEAR | 12 | 06 | 0104 | N04 | E27 | 12 | 8.1 | | B | BXO | 10 | 4 | 17 | 2 |
| 10709 | | HOLL | 12 | 06 | 1815 | N05 | E18 | 12 | 8.1 | | B | BXO | 10 | 3 | 4 | 2 |
| 10709 | | LEAR | 12 | 07 | 0141 | N05 | E13 | 12 | 8.0 | | A | AXX | 10 | 3 | 4 | 3 |
| 10709 | | HOLL | 12 | 07 | 1830 | N05 | E04 | 12 | 8.1 | | B | BXO | 10 | 5 | 2 | 3 |
| 10709 | | LEAR | 12 | 08 | 0100 | N04 | E01 | 12 | 8.1 | | B | BRO | 20 | 8 | 12 | 3 |
| 10709 | | HOLL | 12 | 08 | 1850 | N05 | W10 | 12 | 8.0 | | B | BXO | 10 | 5 | 2 | 3 |
| 10709 | | LEAR | 12 | 09 | 0120 | N05 | W09 | 12 | 8.4 | | B | BRO | 30 | 7 | 7 | 3 |

# S U N S P O T  G R O U P S
## (Ordered by Central Meridian Passage Date)

## DECEMBER 2004

| NOAA/ USAF Group | Mt Wilson Group | Sta | Observation Mo | Day | Time (UT) | Lat | CMD | CMP Mo | Day | Max H | Mag Class | Spot Class | Corrected Area (10-6 Hemi) | Spot Count | Long. Extent (Deg) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10709 | | LEAR | 12 | 10 | 0120 | N05 | W27 | 12 | 8.0 | | A | AXX | 10 | 1 | 1 | 3 |
| 10709 | | HOLL | 12 | 10 | 1512 | N05 | W34 | 12 | 8.1 | | A | AXX | | 1 | 1 | 3 |
| 10711 | | HOLL | 12 | 10 | 1512 | N13 | W16 | 12 | 9.4 | | B | DSO | 20 | 4 | 4 | 3 |
| 10711 | | VORO | 12 | 11 | 0016 | N11 | W21 | 12 | 9.4 | | | HAX | 31 | 4 | 2 | 3 |
| 10711 | | LEAR | 12 | 11 | 0130 | N13 | W21 | 12 | 9.5 | | B | DAO | 20 | 3 | 3 | 3 |
| 10711 | | TACH | 12 | 11 | 0619 | N12 | W24 | 12 | 9.4 | | | BRO | 32 | 3 | 3 | 2 |
| 10711 | | SVTO | 12 | 11 | 0838 | N13 | W27 | 12 | 9.3 | | B | DRO | 40 | 6 | 4 | 3 |
| 10711 | | HOLL | 12 | 11 | 1530 | N13 | W29 | 12 | 9.4 | | B | DAI | 80 | 10 | 5 | 3 |
| 10711 | | LEAR | 12 | 12 | 0019 | N11 | W34 | 12 | 9.4 | | B | DAO | 90 | 16 | 5 | 3 |
| 10711 | | SVTO | 12 | 12 | 0820 | N13 | W37 | 12 | 9.5 | | B | DAO | 100 | 16 | 7 | 3 |
| 10711 | | KAND | 12 | 12 | 0945 | N11 | W41 | 12 | 9.3 | | | CAI | | 21 | 8 | 3 |
| 10711 | | HOLL | 12 | 12 | 1545 | N13 | W42 | 12 | 9.5 | | B | DAI | 110 | 15 | 7 | 3 |
| 10711 | | VORO | 12 | 13 | 0022 | N12 | W46 | 12 | 9.5 | | | DAI | 123 | 18 | 6 | 3 |
| 10711 | | LEAR | 12 | 13 | 0039 | N13 | W46 | 12 | 9.5 | | BG | DAI | 150 | 12 | 6 | 3 |
| 10711 | | SVTO | 12 | 13 | 1414 | N13 | W57 | 12 | 9.3 | | B | DAO | 90 | 8 | 7 | 2 |
| 10711 | | HOLL | 12 | 13 | 1519 | N13 | W54 | 12 | 9.6 | | B | DAI | 120 | 15 | 8 | 3 |
| 10711 | | LEAR | 12 | 14 | 0023 | N13 | W60 | 12 | 9.5 | | BG | DAO | 220 | 12 | 8 | 3 |
| 10711 | | SVTO | 12 | 14 | 0810 | N13 | W67 | 12 | 9.3 | | B | CSO | 110 | 6 | 9 | 3 |
| 10711 | | HOLL | 12 | 14 | 1620 | N14 | W70 | 12 | 9.4 | | B | DSO | 70 | 6 | 5 | 4 |
| 10711 | | LEAR | 12 | 15 | 0042 | N13 | W76 | 12 | 9.3 | | BG | DAO | 150 | 4 | 6 | 2 |
| 10711 | | TACH | 12 | 15 | 0448 | N12 | W84 | 12 | 8.9 | | | HR | 100 | 2 | 4 | 2 |
| 10710 | | HOLL | 12 | 07 | 1830 | S12 | E59 | 12 | 12.2 | | A | AXX | | 1 | 1 | 3 |
| 10710 | | LEAR | 12 | 08 | 0100 | S07 | E59 | 12 | 12.5 | | A | AXX | 10 | 1 | 1 | 3 |
| 10710 | | TACH | 12 | 08 | 0555 | S06 | E56 | 12 | 12.4 | | | AXX | 9 | 1 | 1 | 4 |
| 10710 | | KAND | 12 | 08 | 0850 | S07 | E56 | 12 | 12.6 | | | AX | | 1 | 1 | 3 |
| 10710 | | HOLL | 12 | 08 | 1850 | S08 | E49 | 12 | 12.4 | | A | AXX | 20 | 2 | 1 | 3 |
| 10710 | | LEAR | 12 | 09 | 0120 | S07 | E45 | 12 | 12.4 | | A | AXX | 10 | 1 | 1 | 3 |
| 10710 | | TACH | 12 | 09 | 0609 | S06 | E42 | 12 | 12.4 | | | AXX | 10 | 1 | 1 | 3 |
| 10710 | | KAND | 12 | 09 | 0830 | S07 | E41 | 12 | 12.4 | | | AX | | 1 | | 3 |
| 10710 | | LEAR | 12 | 10 | 0120 | S07 | E31 | 12 | 12.4 | | B | BXO | 20 | 4 | 3 | 3 |
| 10710 | | HOLL | 12 | 10 | 1512 | S08 | E28 | 12 | 12.7 | | A | AXX | | 1 | 1 | 3 |
| 10710 | | HOLL | 12 | 15 | 1545 | S08 | W42 | 12 | 12.5 | | B | CAO | 20 | 4 | 7 | 4 |
| 10710 | | LEAR | 12 | 16 | 0048 | S04 | W51 | 12 | 12.2 | | A | AXX | 20 | 1 | 1 | 3 |
| 10710 | | VORO | 12 | 16 | 0125 | S06 | W51 | 12 | 12.2 | | | AXX | 9 | 1 | | 3 |
| 10710 | | KAND | 12 | 16 | 1200 | S07 | W57 | 12 | 12.2 | | | CRO | | 2 | 5 | 1 |
| 10710 | | HOLL | 12 | 16 | 1522 | S07 | W56 | 12 | 12.4 | | B | DSO | 40 | 4 | 5 | 3 |
| 10710 | | LEAR | 12 | 17 | 0030 | S08 | W60 | 12 | 12.5 | | B | EAO | 30 | 5 | 13 | 3 |
| 10710 | | VORO | 12 | 17 | 0439 | S07 | W61 | 12 | 12.6 | | | DAO | 77 | 12 | 13 | 3 |
| 10710 | | KAND | 12 | 17 | 0800 | S08 | W62 | 12 | 12.7 | | | CRI | | 7 | 14 | 4 |
| 10710 | | HOLL | 12 | 17 | 1542 | S05 | W67 | 12 | 12.6 | | B | ESI | 70 | 6 | 12 | 2 |
| 10710 | | LEAR | 12 | 18 | 0010 | S08 | W69 | 12 | 12.8 | | B | CAO | 30 | 3 | 9 | 2 |
| 10710 | | VORO | 12 | 18 | 0202 | S07 | W74 | 12 | 12.5 | | | HAX | 13 | 4 | | 3 |
| 10710 | | HOLL | 12 | 18 | 1511 | S07 | W79 | 12 | 12.7 | | A | AXX | | 1 | 1 | 3 |
| 10710A | | SVTO | 12 | 12 | 0820 | S15 | E65 | 12 | 17.3 | | A | AXX | | 1 | | 3 |
| 10710A | | HOLL | 12 | 12 | 1545 | S18 | E59 | 12 | 17.1 | | A | AXX | 10 | 2 | 2 | 3 |
| 10710A | | VORO | 12 | 13 | 0022 | S16 | E54 | 12 | 17.1 | | | AXX | 10 | 6 | | 3 |
| 10710A | | LEAR | 12 | 13 | 0039 | S15 | E54 | 12 | 17.1 | | A | AXX | 20 | 1 | 1 | 3 |
| 10710A | | LEAR | 12 | 14 | 0023 | S14 | E39 | 12 | 17.0 | | A | AXX | 10 | 1 | 1 | 3 |
| 10712 | | LEAR | 12 | 16 | 0048 | S09 | E77 | 12 | 21.8 | | A | AXX | 30 | 1 | 1 | 3 |
| 10712 | | HOLL | 12 | 16 | 1522 | S10 | E68 | 12 | 21.7 | | A | AXX | | 1 | 1 | 3 |
| 10712 | | LEAR | 12 | 17 | 0030 | S09 | E62 | 12 | 21.7 | | A | AXX | 20 | 1 | 2 | 3 |
| 10712 | | KAND | 12 | 17 | 0800 | S09 | E60 | 12 | 21.8 | | | BXO | | 3 | 4 | 4 |
| 10712 | | HOLL | 12 | 17 | 1542 | S11 | E53 | 12 | 21.6 | | B | DSO | 20 | 4 | 6 | 2 |
| 10712 | | LEAR | 12 | 18 | 0010 | S10 | E50 | 12 | 21.8 | | B | CAO | 20 | 3 | 4 | 2 |
| 10712 | | VORO | 12 | 18 | 0202 | S09 | E48 | 12 | 21.7 | | | DRO | 11 | 5 | 4 | 3 |
| 10712 | | SVTO | 12 | 18 | 1358 | S09 | E43 | 12 | 21.8 | | B | BXO | 20 | 4 | 5 | 3 |
| 10712 | | HOLL | 12 | 18 | 1511 | S10 | E41 | 12 | 21.7 | | B | DSI | 40 | 8 | 6 | 3 |
| 10712 | | VORO | 12 | 19 | 0126 | S09 | E35 | 12 | 21.7 | | | DAO | 14 | 4 | 3 | 3 |
| 10712 | | HOLL | 12 | 19 | 1508 | S11 | E28 | 12 | 21.7 | | B | BXO | 10 | 2 | 4 | 3 |
| 10714 | | LEAR | 12 | 22 | 0030 | S03 | E11 | 12 | 22.8 | | B | DSO | 20 | 2 | 2 | 2 |
| 10714 | | VORO | 12 | 22 | 0053 | S04 | E10 | 12 | 22.8 | | | BRI | 22 | 3 | 4 | 3 |
| 10714 | | HOLL | 12 | 22 | 1850 | S04 | E01 | 12 | 22.8 | | B | CAO | 10 | 2 | 3 | 4 |
| 10714 | | VORO | 12 | 23 | 0034 | S04 | W05 | 12 | 22.6 | | | ARX | 8 | 1 | | 3 |
| 10714 | | LEAR | 12 | 23 | 0104 | S03 | W04 | 12 | 22.7 | | B | BXX | 20 | 6 | 4 | 2 |

# S U N S P O T  G R O U P S
## (Ordered by Central Meridian Passage Date)

## DECEMBER 2004

| NOAA/ USAF Group | Mt Wilson Group | Sta | Observation Time Mo | Day | (UT) | Lat | CMD | CMP Mo | Day | Max H | Mag Class | Spot Class | Corrected Area (10-6 Hemi) | Spot Count | Long. Extent (Deg) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10714 | | LEAR | 12 | 24 | 0030 | S04 | W16 | 12 | 22.8 | | B | DAO | 30 | 5 | 4 | 3 |
| 10714 | | VORO | 12 | 24 | 0052 | S04 | W17 | 12 | 22.8 | | | BRO | 11 | 5 | 3 | 3 |
| 10714 | | TACH | 12 | 24 | 0442 | S02 | W18 | 12 | 22.8 | | | BXO | 8 | 2 | 4 | 3 |
| 10714 | | KAND | 12 | 24 | 0735 | S04 | W21 | 12 | 22.7 | | | BXO | | 2 | 4 | 3 |
| 10714 | | SVTO | 12 | 24 | 0747 | S04 | W21 | 12 | 22.7 | | B | CRO | 30 | 2 | 4 | 3 |
| 10714 | | HOLL | 12 | 24 | 1720 | S03 | W27 | 12 | 22.7 | | B | CRO | 10 | 2 | 5 | 4 |
| 10714 | | HOLL | 12 | 25 | 1518 | S03 | W36 | 12 | 22.9 | | A | AXX | | 1 | 1 | 3 |
| 10713 | | LEAR | 12 | 17 | 0030 | S09 | E84 | 12 | 23.3 | | A | AXX | 30 | 1 | 5 | 3 |
| 10713 | | KAND | 12 | 17 | 0800 | S08 | E82 | 12 | 23.5 | | | HA | | 1 | 4 | 4 |
| 10713 | | HOLL | 12 | 17 | 1542 | S11 | E72 | 12 | 23.1 | | A | HAX | 120 | 1 | 1 | 2 |
| 10713 | | LEAR | 12 | 18 | 0010 | S10 | E70 | 12 | 23.3 | | A | HKX | 120 | 1 | 3 | 2 |
| 10713 | | VORO | 12 | 18 | 0202 | S09 | E68 | 12 | 23.2 | | | HKX | 118 | 1 | | 3 |
| 10713 | | KAND | 12 | 18 | 1100 | S09 | E65 | 12 | 23.3 | | | HS | | 1 | 2 | 1 |
| 10713 | | SVTO | 12 | 18 | 1358 | S09 | E63 | 12 | 23.3 | | A | HSX | 80 | 2 | 2 | 3 |
| 10713 | | HOLL | 12 | 18 | 1511 | S11 | E65 | 12 | 23.5 | | B | DAO | 110 | 4 | 7 | 3 |
| 10713 | | VORO | 12 | 19 | 0126 | S09 | E55 | 12 | 23.2 | | | HKX | 162 | 1 | | 3 |
| 10713 | | KAND | 12 | 19 | 0650 | S09 | E54 | 12 | 23.3 | | | HS | | 1 | 4 | 1 |
| 10713 | | SVTO | 12 | 19 | 0855 | S10 | E52 | 12 | 23.3 | | A | HSX | 130 | 1 | 3 | 3 |
| 10713 | | HOLL | 12 | 19 | 1508 | S11 | E52 | 12 | 23.5 | | B | CSO | 100 | 7 | 10 | 3 |
| 10713 | | LEAR | 12 | 20 | 0108 | S07 | E45 | 12 | 23.4 | | BG | CSI | 190 | 16 | 9 | 3 |
| 10713 | | VORO | 12 | 20 | 0146 | S10 | E42 | 12 | 23.2 | | | HHX | 219 | 12 | | 3 |
| 10713 | | TACH | 12 | 20 | 0553 | S08 | E45 | 12 | 23.6 | | | CAI | 195 | 9 | 9 | 3 |
| 10713 | | HOLL | 12 | 20 | 1530 | S11 | E38 | 12 | 23.5 | | BG | EAI | 230 | 24 | 11 | 3 |
| 10713 | | VORO | 12 | 21 | 0043 | S10 | E28 | 12 | 23.1 | | | HKX | 231 | 8 | | 3 |
| 10713 | | LEAR | 12 | 21 | 0143 | S08 | E34 | 12 | 23.6 | | BG | EAI | 210 | 15 | 11 | 3 |
| 10713 | | TACH | 12 | 21 | 0553 | S10 | E30 | 12 | 23.5 | | | CAO | 196 | 4 | 9 | 3 |
| 10713 | | LEAR | 12 | 22 | 0030 | S09 | E20 | 12 | 23.5 | | BG | FSI | 190 | 20 | 16 | 2 |
| 10713 | | VORO | 12 | 22 | 0053 | S10 | E14 | 12 | 23.1 | | | HKX | 285 | 8 | | 3 |
| 10713 | | HOLL | 12 | 22 | 1850 | S10 | E09 | 12 | 23.5 | | BG | FAI | 190 | 27 | 16 | 4 |
| 10713 | | VORO | 12 | 23 | 0034 | S11 | E00 | 12 | 23.0 | | | HKX | 225 | 7 | | 3 |
| 10713 | | LEAR | 12 | 23 | 0104 | S08 | E10 | 12 | 23.8 | | BG | FAC | 230 | 29 | 17 | 2 |
| 10713 | | SVTO | 12 | 23 | 0920 | S09 | W02 | 12 | 23.2 | | B | DAO | 180 | 13 | 8 | 2 |
| 10713 | | LEAR | 12 | 24 | 0030 | S06 | W10 | 12 | 23.3 | | BG | EAI | 220 | 26 | 15 | 3 |
| 10713 | | VORO | 12 | 24 | 0052 | S10 | W10 | 12 | 23.3 | | | CKI | 218 | 13 | 6 | 3 |
| 10713 | | TACH | 12 | 24 | 0442 | S08 | W12 | 12 | 23.3 | | | CSI | 115 | 5 | 5 | 3 |
| 10713 | | KAND | 12 | 24 | 0735 | S11 | W15 | 12 | 23.2 | | | DAO | | 7 | 7 | 3 |
| 10713 | | SVTO | 12 | 24 | 0747 | S09 | W14 | 12 | 23.3 | | B | DSO | 180 | 10 | 8 | 3 |
| 10713 | | HOLL | 12 | 24 | 1720 | S09 | W17 | 12 | 23.4 | | B | EAI | 170 | 24 | 13 | 4 |
| 10713 | | LEAR | 12 | 25 | 0034 | S10 | W23 | 12 | 23.3 | | B | DAI | 150 | 15 | 7 | 3 |
| 10713 | | VORO | 12 | 25 | 0130 | S03 | W23 | 12 | 23.3 | | | AXX | 7 | 4 | | 3 |
| 10713 | | VORO | 12 | 25 | 0130 | S10 | W24 | 12 | 23.2 | | | CKI | 175 | 9 | 6 | 3 |
| 10713 | | TACH | 12 | 25 | 0500 | S08 | W26 | 12 | 23.2 | | | CAI | 130 | 6 | 7 | 3 |
| 10713 | | SVTO | 12 | 25 | 0755 | S09 | W28 | 12 | 23.2 | | B | CSO | 100 | 5 | 6 | 3 |
| 10713 | | KAND | 12 | 25 | 1042 | S12 | W32 | 12 | 23.0 | | | CAO | | 9 | 6 | 4 |
| 10713 | | HOLL | 12 | 25 | 1518 | S08 | W32 | 12 | 23.2 | | B | DSI | 100 | 5 | 8 | 3 |
| 10713 | | LEAR | 12 | 26 | 0051 | S10 | W37 | 12 | 23.2 | | A | HAX | 120 | 7 | 4 | 3 |
| 10713 | | VORO | 12 | 26 | 0118 | S11 | W39 | 12 | 23.1 | | | HAX | 147 | 9 | | 3 |
| 10713 | | TACH | 12 | 26 | 0523 | S09 | W43 | 12 | 23.0 | | | HR | 124 | 3 | 2 | 2 |
| 10713 | | LEAR | 12 | 27 | 0050 | S09 | W52 | 12 | 23.1 | | A | HAX | 100 | 1 | 3 | 3 |
| 10713 | | VORO | 12 | 27 | 0058 | S10 | W52 | 12 | 23.1 | | | HAX | 153 | 1 | | 3 |
| 10713 | | KAND | 12 | 27 | 1150 | S12 | W61 | 12 | 22.9 | | | HS | | 1 | 2 | 3 |
| 10713 | | SVTO | 12 | 27 | 1429 | S11 | W59 | 12 | 23.2 | | A | HSX | 110 | 1 | 2 | 1 |
| 10713 | | HOLL | 12 | 27 | 1955 | S09 | W65 | 12 | 22.9 | | B | CSO | 80 | 2 | 3 | 2 |
| 10713 | | LEAR | 12 | 28 | 0030 | S11 | W67 | 12 | 23.0 | | B | DAO | 160 | 7 | 6 | 3 |
| 10713 | | VORO | 12 | 28 | 0044 | S11 | W66 | 12 | 23.1 | | | HAX | 121 | 4 | 0 | 3 |
| 10713 | | KAND | 12 | 28 | 1020 | S12 | W73 | 12 | 22.9 | | | CAO | | 4 | 5 | 3 |
| 10713 | | SVTO | 12 | 28 | 1117 | S11 | W72 | 12 | 23.0 | | B | DSO | 110 | 5 | 2 | 3 |
| 10713 | | HOLL | 12 | 28 | 1745 | S10 | W76 | 12 | 23.0 | | B | CSO | 50 | 2 | 7 | 2 |
| 10713 | | VORO | 12 | 29 | 0025 | S11 | W78 | 12 | 23.1 | | | AXX | 19 | 2 | 2 | 3 |
| 10713 | | LEAR | 12 | 29 | 0040 | S11 | W80 | 12 | 23.0 | | B | EAI | 150 | 4 | 12 | 2 |
| 10713 | | HOLL | 12 | 29 | 2100 | S10 | W83 | 12 | 23.6 | | B | BXO | 10 | 2 | 8 | 3 |
| 10713F | | VORO | 12 | 21 | 0043 | S10 | E38 | 12 | 23.9 | | | AXX | 8 | 6 | | 3 |
| 10713F | | VORO | 12 | 22 | 0053 | S10 | E24 | 12 | 23.8 | | | AXX | 16 | 5 | | 3 |
| 10713F | | VORO | 12 | 23 | 0034 | S10 | E10 | 12 | 23.8 | | | AXX | 6 | 3 | | 3 |
| 10713F | | VORO | 12 | 24 | 0052 | S11 | W03 | 12 | 23.8 | | | AXX | 1 | 1 | | 3 |
| 10713G | | VORO | 12 | 21 | 0043 | N04 | E53 | 12 | 25.0 | | | AXX | 4 | 3 | | 3 |

# S U N S P O T  G R O U P S
## (Ordered by Central Meridian Passage Date)

## DECEMBER 2004

| NOAA/ USAF Group | Mt Wilson Group | Sta | Observation Time Mo | Day | (UT) | Lat | CMD | CMP Mo | Day | Max H | Mag Class | Spot Class | Corrected Area (10-6 Hemi) | Spot Count | Long. Extent (Deg) | Qual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10713A | | HOLL | 12 | 30 | 1615 | S20 | W53 | 12 | 26.6 | | B | BXO | 10 | 6 | 4 | 3 |
| 10713B | | LEAR | 12 | 29 | 0040 | S21 | W21 | 12 | 27.4 | | A | AXX | 10 | 1 | 1 | 2 |
| 10717 | | HOLL | 12 | 31 | 1600 | N07 | W52 | 12 | 27.8 | | B | CAO | 10 | 3 | 3 | 4 |
| 10717 | | LEAR | 01 | 01 | 0135 | N06 | W60 | 12 | 27.7 | | A | AXX | | 1 | | 3 |
| 10717 | | HOLL | 01 | 01 | 1630 | N08 | W70 | 12 | 27.5 | | B | CAO | 30 | 4 | 3 | 3 |
| 10717 | | LEAR | 01 | 02 | 0110 | N08 | W75 | 12 | 27.5 | | B | CSO | 60 | 4 | 3 | 2 |
| 10717 | | VORO | 01 | 02 | 0156 | N08 | W72 | 12 | 27.8 | | | AXX | 85 | 2 | | 3 |
| 10717 | | SVTO | 01 | 02 | 1010 | N08 | W79 | 12 | 27.6 | | B | DSO | 150 | 2 | 5 | 3 |
| 10713D | | LEAR | 12 | 27 | 0050 | S12 | E14 | 12 | 28.1 | | A | AXX | 10 | 1 | 1 | 3 |
| 10713D | | VORO | 12 | 27 | 0058 | S16 | E13 | 12 | 28.0 | | | AXX | 5 | 2 | 3 | 3 |
| 10713E | | LEAR | 12 | 29 | 0040 | S15 | E03 | 12 | 29.2 | | A | AXX | 10 | 1 | 1 | 2 |

Stations reporting:

HOLL = Holloman
KAND = Kandilli
LEAR = Learmonth
MWIL = Mt. Wilson
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
TACH = Tashkent
VORO = Voroshilov