

| | | | | | | | | | | | | | | | | | | | |
|-------|-------|----------|---|--------|--------|--------|--|--|--|-----|--|--|--|--|--|--|--|--|-------------------|
| S5115 | 10 | 41 | - | Feb.21 | Feb.22 | | | | | | | | | | | | | | J 2 A 1 |
| S5116 | 18 | 36 | - | Feb.22 | Feb.22 | | | | | | | | | | | | | | A 1 |
| S5117 | 12 | 7 | - | Feb.22 | Feb.22 | | | | | | | | | | | | | | A 1 |
| S5118 | 3- | 5354-359 | | Feb.22 | Feb.22 | Feb.22 | | | | B 5 | | | | | | | | | |
| S5119 | 8-10 | 287-297 | | Feb.27 | Feb.22 | Mar. 4 | | | | | | | | | | | | | C 5 - - - A 1 |
| S5120 | 23 | 305 | - | Feb.28 | Feb.28 | | | | | | | | | | | | | | J 2 |
| S5121 | 16-18 | 260-268 | | Mar. 1 | Feb.28 | Mar. 6 | | | | C 5 | | | | | | | | | - - J 3 J 2 J 2 |
| S5122 | 20-21 | 242-243 | | Mar. 3 | Feb.28 | Mar. 5 | | | | | | | | | | | | | J 2 - - - J 4 J 3 |

TABLE OF SUNSPOT GROUPS

MARCH 1990

| Group NO. | Heliographic | | C.M. Passage | First Obs. | Last Obs. | E-Side | | | | | | C.M. | W-Side | | | | | | |
|-----------|--------------|------------|--------------|------------|-----------|-------------------------|---------|--|--|--|--|-------------------|-------------------------|---------------------|--|--|--|--|--|
| | Lati-tude | Longi-tude | | | | | | | | | | | | | | | | | |
| N5662 | 15-16 | 259-260 | - | Mar. 4 | Mar. 4 | | | | | | | | A 2 | | | | | | |
| N5663 | 25-29 | 177-187 | Mar. 7 | Mar. 4 | Mar. 13 | C10 G10 G 8 | | | | | | - | C 9 D10 D 8 D 6 D 5 D 4 | | | | | | |
| N5664 | 11 | 140-143 | - | Mar. 6 | Mar. 16 | A 1 - | | | | | | | B 7 D 7 D 5 J 2 J 2 | | | | | | |
| N5665 | 18-21 | 98-102 | Mar. 14 | Mar. 8 | Mar. 20 | J 2 J 3 J 2 J 2 J 4 J 4 | C 7 | | | | | | C 5 J 3 J 3 - J 2 J 2 | | | | | | |
| N5666 | 30-34 | 69-78 | Mar. 16 | Mar. 10 | Mar. 21 | J 3 C 4 D13 D19 D16 D21 | D25 | | | | | | C20 - C20 D14 B 5 | | | | | | |
| N5667 | 26 | 100-103 | - | Mar. 11 | Mar. 13 | A 1 A 2 C 3 | | | | | | | | | | | | | |
| N5668 | 5- 7 | 26-29 | Mar. 19 | Mar. 14 | Mar. 23 | J 2 J 2 J 2 J 2 | - | | | | | | C 3 | D 8 A 3 .. A 1 | | | | | |
| N5669 | 40-42 | 34-39 | Mar. 19 | Mar. 15 | Mar. 20 | D 6 D 7 C 5 .. | | | | | | J 2 | J 2 | | | | | | |
| N5670 | 15-18 | 1- 7 | Mar. 21 | Mar. 15 | Mar. 25 | J 2 C 5 D 8 .. | C11 C15 | | | | | | D18 | C12 B 9 - A 1 | | | | | |
| N5671 | 28 | 50 | - | Mar. 16 | Mar. 16 | A 1 | | | | | | | | | | | | | |
| N5672 | 12 | 11 | - | Mar. 19 | Mar. 19 | A 2 | | | | | | | | | | | | | |
| N5673 | 18 | 350 | - | Mar. 19 | Mar. 19 | A 1 | | | | | | | | | | | | | |
| N5674 | 14 | 322 | Mar. 24 | Mar. 19 | Mar. 25 | A 3 .. A 2 A 3 .. | | | | | | - | A 2 | | | | | | |
| N5675 | 2 | 26 | - | Mar. 20 | Mar. 20 | | | | | | | A 1 | | | | | | | |
| N5676 | 11 | 33 | - | Mar. 21 | Mar. 21 | | | | | | | A 1 | | | | | | | |
| N5677 | 14 | 9-12 | Mar. 21 | Mar. 21 | Mar. 21 | | | | | | | B 3 | | | | | | | |
| N5678 | 26 | 357 | - | Mar. 23 | Mar. 23 | | | | | | | A 1 | | | | | | | |
| N5679 | 21-22 | 328-333 | Mar. 24 | Mar. 23 | Mar. 27 | B 3 | | | | | | - | C 4 C 4 C 6 | | | | | | |
| N5680 | 16 | 333-334 | - | Mar. 25 | Mar. 26 | | | | | | | A 2 A 1 | | | | | | | |
| N5681 | 8 | 256 | - | Mar. 25 | Mar. 27 | A 1 .. A 2 | | | | | | | | | | | | | |
| N5682 | 24-26 | 242-248 | Mar. 30 | Mar. 25 | Apr. 5 | C 3 C 4 C 3 - - | | | | | | J 2 | - J 3 J 3 J 3 - J 2 | | | | | | |
| N5683 | 11 | 299 | - | Mar. 27 | Mar. 27 | | | | | | | A 1 | | | | | | | |
| N5684 | 27-28 | 233-234 | - | Mar. 27 | Mar. 27 | A 4 | | | | | | | | | | | | | |
| N5685 | 18-22 | 269-275 | - | Mar. 30 | Apr. 2 | | | | | | | D 5 - C 5 D 5 | | | | | | | |
| N5686 | 10 | 264 | - | Mar. 30 | Mar. 30 | | | | | | | A 1 | | | | | | | |
| N5687 | 18-21 | 155-167 | Apr. 5 | Mar. 30 | Apr. 11 | J 2 - E16 E17 E27 - | | | | | | E28 | E29 - E23 C14 D 5 J 4 | | | | | | |
| S5123 | 10-13 | 173-182 | Mar. 8 | Mar. 4 | Mar. 13 | C10 G10 G 8 | | | | | | - | C 9 | D10 D 8 D 6 D 5 D 4 | | | | | |
| S5124 | 12-15 | 215-225 | - | Mar. 6 | Mar. 10 | | | | | | | B 2 - D 8 D 9 C 5 | | | | | | | |
| S5125 | 22-23 | 113-114 | - | Mar. 10 | Mar. 11 | A 3 A 2 | | | | | | | | | | | | | |
| S5126 | 8 | 105-108 | - | Mar. 11 | Mar. 12 | B 2 A 1 | | | | | | | | | | | | | |

| | | | | | | | | |
|-------|-------|---------|--------|--------|--------|-----------------------|-----|---------------------------|
| S5127 | 31-36 | 7-26 | Mar.20 | Mar.14 | Mar.27 | C 3 E11 E14 E16 - F28 | F32 | F39 F36 F35 - F15 E12 D 6 |
| S5128 | 18 | 20 | Mar.20 | Mar.14 | Mar.22 | J 2 C 3 J 2 J 2 - J 2 | J 2 | J 2 J 2 |
| S5129 | 11 | 349 | Mar.22 | Mar.17 | Mar.23 | J 2 - J 2 J 2 J 2 | J 2 | J 2 |
| S5130 | 24 | 91 | - | Mar.19 | Mar.19 | | | A 1 |
| S5131 | 31-33 | 33-36 | Mar.19 | Mar.19 | Mar.21 | | B 4 | C 4 A 1 |
| S5132 | 10-15 | 327-341 | Mar.23 | Mar.19 | Mar.30 | A 1 C 3 C10 C22 | D32 | - E57 E42 E48 - - H 8 |
| S5133 | 29-30 | 333-335 | - | Mar.19 | Mar.21 | A 4 A 2 A 1 | | |
| S5134 | 28-36 | 318-332 | Mar.24 | Mar.19 | Mar.30 | D17 E18 E29 E29 E38 | - | E23 E22 D15 - - C 4 |
| S5135 | 15-19 | 310-318 | Mar.25 | Mar.19 | Mar.30 | J 3 J 3 J 4 J 9 J 5 - | C13 | J 9 J12 - - J 6 |
| S5136 | 4- 8 | 297-312 | Mar.25 | Mar.19 | Mar.30 | J 4 G 4 G 6 G 9 G19 - | G27 | G22 G22 - - G10 |
| S5137 | 16 | 334 | - | Mar.20 | Mar.21 | J 2 A 1 | | |
| S5138 | 12-15 | 319-321 | - | Mar.20 | Mar.23 | B 3 A 1 .. A 6 | | |
| S5139 | 11-12 | 33-35 | - | Mar.23 | Mar.23 | | | A 4 |
| S5140 | 18-21 | 301-306 | Mar.26 | Mar.25 | Mar.27 | | D 6 | D 8 B 2 |
| S5141 | 10-11 | 227-230 | Mar.31 | Mar.26 | Apr. 6 | J 2 J 2 - - J 2 | - | J 2 C 4 J 2 - J 2 J 2 |
| S5142 | 22 | 310 | - | Mar.27 | Mar.27 | | | A 2 |
| S5143 | 39 | 294 | - | Mar.27 | Mar.27 | | | A 1 |
| S5144 | 13-17 | 247-255 | Mar.30 | Mar.30 | Apr. 3 | | D17 | - D16 C13 D 5 |
| S5145 | 32 | 242 | Mar.30 | Mar.30 | Mar.30 | | A 5 | |
| S5146 | 13 | 208-210 | - | Mar.30 | Mar.30 | A 1 | | |
| S5147 | 11 | 184 | - | Mar.30 | Apr. 3 | J 2 - J 2 J 2 J 3 | | |
| S5148 | 7- 9 | 179-182 | Apr. 4 | Mar.30 | Apr.10 | J 2 - J 2 C 3 J 3 | - | J 2 J 2 - J 2 J 2 J 2 |

TABLE OF SUNSPOT GROUPS

| Group NO. | Heliographic | | C.M. Passage | APRIL 1990 | | E-Side | | | | | C.M. | W-Side | | | | | |
|-----------|--------------|-----------|--------------|------------|-----------|-------------------------|---------|-------------------|---------|-----------------|-----------------|-----------------|-------------|---|---------|---|--|
| | Latitude | Longitude | | First Obs. | Last Obs. | . | . | . | . | . | | . | . | . | . | . | |
| N5688 | 17 | 245 | - | Apr. 1 | Apr. 1 | | | | | | | | A 1 | | | | |
| N5689 | 29 | 246 | - | Apr. 1 | Apr. 1 | | | | | | | | A 1 | | | | |
| N5690 | 29-31 | 179-187 | Apr. 4 | Apr. 3 | Apr. 9 | | | | | | C10 | - | D11 C13 | - | D 9 C 6 | | |
| N5691 | 22-23 | 103-112 | Apr. 10 | Apr. 5 | Apr. 10 | | D11 D 8 | - | C 6 J 4 | J 2 | | | | | | | |
| N5692 | 19 | 96 | - | Apr. 5 | Apr. 6 | | A 1 J 2 | | | | | | | | | | |
| N5693 | 29-31 | 71-77 | Apr. 12 | Apr. 6 | Apr. 18 | J 2 | - | J 2 J 3 J 2 C 3 | J 2 | - | J 2 J 2 J 2 | - | A 1 | | | | |
| N5694 | 19 | 91 | - | Apr. 8 | Apr. 8 | | | A 1 | | | | | | | | | |
| N5695 | 14-16 | 82-85 | Apr. 11 | Apr. 8 | Apr. 15 | | | D 5 D 6 C 4 | C 6 | A 1 | - | .. | A 1 | | | | |
| N5696 | 32 | 140 | - | Apr. 10 | Apr. 11 | | | | | | | | A 1 A 1 | | | | |
| N5697 | 20-24 | 59-66 | Apr. 13 | Apr. 10 | Apr. 18 | | | A 1 D14 D16 | - | D10 D 8 J 2 | - | J 2 | | | | | |
| N5698 | 3- 5 | 66-67 | - | Apr. 11 | Apr. 11 | | | A 3 | | | | | | | | | |
| N5699 | 16-18 | 54-57 | - | Apr. 14 | Apr. 16 | | | | | | | | J 4 C 8 B 3 | | | | |
| N5700 | 24 | 355 | - | Apr. 14 | Apr. 14 | | | A 1 | | | | | | | | | |
| N5701 | 27-35 | 336-351 | Apr. 19 | Apr. 14 | Apr. 25 | E20 E30 E36 | - | E40 E32 | F39 F26 | - | C14 H12 D10 | | | | | | |
| N5702 | 11-12 | 29-37 | Apr. 15 | Apr. 15 | Apr. 20 | | | | A 1 | B 2 | - | C 6 D 8 A 2 | | | | | |
| N5703 | 13 | 19-21 | - | Apr. 15 | Apr. 15 | | | | | B 2 | | | | | | | |
| N5704 | 14-15 | 4- 5 | - | Apr. 15 | Apr. 16 | | | | J 3 | A 2 | | | | | | | |
| N5705 | 23 | 342 | - | Apr. 18 | Apr. 18 | | | | | A 2 | | | | | | | |
| N5706 | 18-22 | 322-330 | Apr. 20 | Apr. 18 | Apr. 26 | | | C 3 A 1 | B 2 | C 5 | - | D10 C10 C 8 D 4 | | | | | |
| N5707 | 24-27 | 291-301 | - | Apr. 18 | Apr. 21 | | | B 4 C 4 C 3 A 2 | | | | | | | | | |
| N5708 | 11-12 | 265-273 | Apr. 24 | Apr. 19 | Apr. 26 | | | C 3 D 4 D 8 | - | C 4 J 4 | J 2 A 2 | | | | | | |
| N5709 | 15-17 | 15-19 | - | Apr. 20 | Apr. 21 | | | | | | | | D 8 C 3 | | | | |
| N5710 | 14 | 323 | Apr. 20 | Apr. 20 | Apr. 20 | | | | | A 1 | | | | | | | |
| N5711 | 23-24 | 286-288 | - | Apr. 20 | Apr. 20 | | | C 3 | | | | | | | | | |
| N5712 | 13 | 286 | - | Apr. 20 | Apr. 20 | | | A 1 | | | | | | | | | |
| N5713 | 14-16 | 264-270 | Apr. 25 | Apr. 21 | Apr. 30 | | | A 1 - D10 C16 | D16 | D14 D13 D 7 | - | D 4 | | | | | |
| N5714 | 25-29 | 247-256 | Apr. 26 | Apr. 21 | Apr. 28 | | | C 3 - J 3 C 3 C 6 | C 5 | D12 C10 | | | | | | | |
| N5715 | 12-15 | 205-215 | Apr. 29 | Apr. 23 | May 3 | J 3 J 3 C 5 J 3 J 5 J 4 | | | - | C 6 C 6 C 5 J 3 | | | | | | | |
| N5716 | 17 | 256 | - | Apr. 24 | Apr. 24 | | | | | A 1 | | | | | | | |
| N5717 | 8 | 262 | - | Apr. 26 | Apr. 26 | | | | | | | | A 1 | | | | |
| N5718 | 26 | 229 | - | Apr. 26 | Apr. 26 | | | | J 2 | | | | | | | | |
| N5719 | 3 | 255 | - | Apr. 27 | Apr. 27 | | | | | | | | J 2 | | | | |
| N5720 | 19-20 | 162-163 | May 3 | Apr. 27 | May 9 | J 2 J 3 - J 2 J 2 J 3 | | | J 4 | - | T 3 J 2 - - J 2 | | | | | | |

| | | | | | | | | | |
|-------|-------|---------|---------|---------|---------|-----------------------|-----|---------------------------|---------------------|
| S5149 | 24-25 | 151-153 | Apr. 6 | Apr. 1 | Apr. 8 | J 2 J 2 J 2 - J 2 | J 3 | - | C 3 |
| S5150 | 18-19 | 145-149 | Apr. 6 | Apr. 2 | Apr. 8 | B 2 .. - B 5 | D 9 | - | B 4 |
| S5151 | 8 | 164-166 | - | Apr. 3 | Apr. 3 | A 3 | | | |
| S5152 | 15-16 | 176-178 | - | Apr. 5 | Apr. 6 | | | A 3 | A 3 |
| S5153 | 37-39 | 81-84 | Apr. 11 | Apr. 6 | Apr. 12 | J 2 - D 4 J 5 J 4 | C 6 | B 4 | |
| S5154 | 9 | 134 | - | Apr. 8 | Apr. 8 | | | A 1 | |
| S5155 | 43 | 75-76 | Apr. 12 | Apr. 8 | Apr. 12 | J 4 J 5 J 3 J 3 | A 1 | | |
| S5156 | 28-32 | 4-12 | Apr. 17 | Apr. 11 | Apr. 21 | J 2 J 2 - D13 C13 C16 | - | D24 D24 D 7 D 6 | |
| S5157 | 7-10 | 19-23 | Apr. 16 | Apr. 12 | Apr. 19 | A 2 - C 7 C13 | B 3 | - | A 3 A 1 |
| S5158 | 34-37 | 4-11 | - | Apr. 14 | Apr. 16 | A 1 B 4 C 4 | | | |
| S5159 | 10-16 | 346-353 | Apr. 18 | Apr. 14 | Apr. 21 | D 8 D10 D15 - | C17 | C17 A 2 A 2 | |
| S5160 | 9-17 | 329-340 | Apr. 19 | Apr. 14 | Apr. 26 | C12 D21 D27 - E51 | E47 | E44 E42 - C16 D11 D10 A 2 | |
| S5161 | 15-20 | 310-317 | Apr. 21 | Apr. 18 | Apr. 27 | D17 D21 D19 | C12 | - | J10 J 8 J 8 J 3 A 1 |
| S5162 | 9 | 346 | Apr. 19 | Apr. 19 | Apr. 21 | | A 1 | A 1 A 1 | |
| S5163 | 12-14 | 317-323 | Apr. 21 | Apr. 19 | Apr. 26 | B 4 D10 | D15 | - | D13 C11 C 5 J 2 |
| S5164 | 19 | 305 | - | Apr. 20 | Apr. 21 | A 2 A 1 | | | |
| S5165 | 31-33 | 357- 3 | - | Apr. 20 | Apr. 21 | | | D14 | C 7 |
| S5166 | 8-11 | 252-260 | Apr. 26 | Apr. 20 | Apr. 27 | J 2 J 3 - C 7 C10 | B 3 | B 5 | A 2 |
| S5167 | 27 | 256-258 | - | Apr. 21 | Apr. 21 | A 2 | | | |
| S5168 | 4-5 | 208-219 | Apr. 28 | Apr. 23 | May 3 | C 4 D 8 D10 D 8 D 8 | G 5 | - | D 6 J 3 J 2 J 2 |
| S5169 | 40-41 | 308-310 | - | Apr. 24 | Apr. 25 | | | C 4 | A 2 |
| S5170 | 19-23 | 357-267 | Apr. 25 | Apr. 24 | May 1 | A 1 | A 1 | .. | B 8 D15 - D 8 A 1 |
| S5171 | 14 | 262 | Apr. 25 | Apr. 25 | Apr. 25 | | A 1 | | |
| S5172 | 18-20 | 245-251 | - | Apr. 27 | May 1 | | | B 6 | B 5 - C 4 A 1 |
| S5173 | 8-10 | 149-151 | - | Apr. 30 | May 2 | C 4 A 1 J 3 | | | |

TABLE OF SUNSPOT GROUPS

| Heliographic | | | MAY 1990 | | | | E-side | | W-Side | | | | | | | | | |
|--------------|----------|-----------|--------------|------------|-----------|---------------------|--------|-----|--------|------|---------------|-----|-----|-----|-----|-----|-----|-----|
| Group NO. | Latitude | Longitude | C.M. Passage | First Obs. | Last Obs. | | | | | C.M. | | | | | | | | |
| N5721 | 26 | 225 | - | May 3 | May 3 | | | | | | A 1 | | | | | | | |
| N5722 | 14-19 | 72-87 | May 9 | May 3 | May 15 | C 3 | - | E14 | E21 | - | - | E36 | E32 | E26 | G18 | - | - | J 2 |
| N5723 | 13-15 | 141-147 | - | May 6 | May 9 | | | | | | C 5 - - B 6 | | | | | | | |
| N5724 | 12-13 | 17-21 | May 13 | May 9 | May 15 | J 2 J 3 A 1 B 6 | | | | - | - A 6 | | | | | | | |
| N5725 | 14 | 42 | - | May 10 | May 11 | A 1 A 1 | | | | | | | | | | | | |
| N5726 | 20-25 | 346-356 | May 15 | May 10 | May 21 | J 2 C 5 D 6 - - | | | | C21 | E21 | E14 | - | - | D 4 | C 4 | | |
| N5727 | 16-19 | 40-47 | May 12 | May 11 | May 12 | D 7 | | | | C 6 | | | | | | | | |
| N5728 | 25-29 | 328-339 | May 17 | May 11 | May 17 | J 2 D 7 - - E17 C13 | | | | C 7 | | | | | | | | |
| N5729 | 31-37 | 316-324 | May 18 | May 12 | May 25 | C 8 - - H25 H29 H27 | | | | - | - | C37 | H37 | H33 | H25 | H18 | J 2 | |
| N5730 | 18 | 20-22 | - | May 15 | May 17 | | | | | | C 5 A 2 A 1 | | | | | | | |
| N5731 | 8 | 287 | - | May 17 | May 17 | A 1 | | | | | | | | | | | | |
| N5732 | 6- | 9262-272 | May 22 | May 17 | May 27 | B 2 - - D17 D17 | | | | C23 | C23 | D28 | D18 | D12 | B 6 | | | |
| N5733 | 24-26 | 221-224 | May 25 | May 20 | May 27 | J 3 J 2 J 2 J 3 C 7 | | | | C 7 | J 4 J 3 | | | | | | | |
| N5734 | 21 | 321-324 | - | May 21 | May 22 | | | | | | C 4 A 1 | | | | | | | |
| N5735 | 10-11 | 318-320 | - | May 21 | May 21 | | | | | | B 3 | | | | | | | |
| N5736 | 16-19 | 266-273 | May 22 | May 21 | May 27 | C 6 | | | | C 7 | C 9 | C 5 | D 5 | D 7 | A 1 | | | |
| N5737 | 11 | 200 | - | May 25 | May 25 | A 1 | | | | | | | | | | | | |
| N5738 | 11-13 | 180-185 | May 28 | May 25 | May 30 | A 1 C 5 D 5 | | | | J 3 | C 8 C 5 | | | | | | | |
| N5739 | 20-22 | 169-172 | May 29 | May 25 | May 29 | J 2 J 3 J 4 J 4 | | | | B 5 | | | | | | | | |
| N5740 | 17-21 | 143-158 | May 30 | May 25 | May 30 | J 3 C14 E25 E22 E28 | | | | E26 | | | | | | | | |
| N5741 | 13-15 | 117-121 | Jun. 2 | May 27 | Jun. 6 | A 3 D 5 D 5 D 4 - - | | | | - | D 8 | - | - | A 1 | | | | |
| N5742 | 13 | 131 | - | May 29 | May 29 | A 1 | | | | | | | | | | | | |
| S5174 | 12-15 | 109-116 | May 6 | May 1 | May 12 | J 2 J 3 J 2 - C 4 | | | | J 3 | - | - | C 5 | J 2 | J 2 | J 2 | | |
| S5175 | 10 | 246 | - | May 2 | May 2 | | | | | | A 1 | | | | | | | |
| S5176 | 8-10 | 195-196 | - | May 3 | May 6 | | | | | | A 1 - A 2 A 4 | | | | | | | |
| S5177 | 10-14 | 88-97 | May 8 | May 5 | May 12 | A 2 D16 - - | | | | - | D19 | D16 | C 8 | J 3 | | | | |
| S5178 | 10-12 | 75-81 | May 9 | May 5 | May 12 | D 6 D 6 - - | | | | C 9 | A 4 | A 2 | B 2 | | | | | |
| S5179 | 18 | 107 | - | May 6 | May 6 | A 1 | | | | | | | | | | | | |
| S5180 | 15-20 | 31-36 | May 12 | May 9 | May 15 | C11 C14 C17 | | | | C13 | - | - | A 1 | | | | | |
| S5181 | 16 | 20 | - | May 15 | May 15 | | | | | | A 1 | | | | | | | |

| | | | | | | | | | |
|-------|-------|---------|--------|--------|--------|-----------------|-----|-------------------------|-------------------------|
| S5182 | 12-19 | 302-317 | May 18 | May 15 | May 25 | E40 E73 E74 | - | - | F79 F74 F53 F41 F38 D 9 |
| S5183 | 14-17 | 28-30 | - | May 16 | May 17 | | | | A 1 B 4 |
| S5184 | 20 | 347 | - | May 17 | May 17 | | | | A 2 |
| S5185 | 14 | 336 | May 17 | May 17 | May 17 | | A 1 | | |
| S5186 | 13 | 327 | May 17 | May 17 | May 22 | | A 1 | - - .. | A 1 B 2 |
| S5187 | 10 | 253-255 | - | May 20 | May 21 | J 4 B 3 | | | |
| S5188 | 16-21 | 237-247 | May 24 | May 20 | May 30 | C 8 D14 D25 D26 | D27 | D15 C12 C12 C 4 J 3 J 3 | |
| S5189 | 8-14 | 231-240 | May 24 | May 20 | May 29 | C 7 D12 D23 D22 | D32 | D17 D24 E33 E16 B 7 | |
| S5190 | 12-13 | 286-290 | - | May 22 | May 22 | | | | B 4 |
| S5191 | 9-11 | 248-250 | - | May 22 | May 22 | | | | B 2 |
| S5192 | 8 | 223 | - | May 23 | May 23 | | A 1 | | |
| S5193 | 12 | 245-246 | - | May 25 | May 26 | | | | A 2 A 1 |
| S5194 | 10-12 | 164-173 | May 29 | May 26 | Jun. 3 | A 1 C 4 C 4 | C 4 | C12 - - - D14 | |
| S5195 | 25 | 139 | - | May 26 | May 27 | A 1 A 1 | | | |
| S5196 | 16-18 | 183-188 | May 28 | May 28 | May 30 | | D 7 | D 9 B 4 | |
| S5197 | 4- 5 | 208-211 | - | May 29 | May 29 | | | | B 2 |

| | | | | | | | | | | | | |
|-------|--------|---------|--------|--------|--------|-------------|-----|---------|-----|-----|---------------------|-------------------------|
| S5205 | 9-10 | 12-15 | - | Jun.11 | Jun.11 | | | | | | | B 4 |
| S5206 | 20 | 359 | Jun.11 | Jun.11 | Jun.11 | | | | | A 1 | | |
| S5207 | 14-15 | 356-357 | Jun.11 | Jun.11 | Jun.11 | | | | | A 2 | | |
| S5208 | 18 | 312-319 | - | Jun.11 | Jun.11 | | | | | | B 2 | |
| S5209 | 12-17 | 310-317 | Jun.15 | Jun.11 | Jun.19 | | | | | | H 3 H 3 C14 C14 | - - C10 C 9 C 5 |
| S5210 | 12-17 | 333-341 | - | Jun.12 | Jun.12 | | | | | | B 5 | |
| S5211 | 128-31 | 278-288 | Jun.17 | Jun.13 | Jun.23 | | | | | | D 5 D12 - - | D11 D 8 G10 - - C 3 J 2 |
| S5212 | 6-10 | 254-263 | Jun.19 | Jun.13 | Jun.23 | J 2 C 6 | - - | C15 D13 | C 6 | - - | - C 6 J 2 | |
| S5213 | 26-27 | 305-307 | - | Jun.17 | Jun.17 | | | | | | | B 4 |
| S5214 | 32-35 | 291-295 | - | Jun.17 | Jun.17 | | | | | | | C 5 |
| S5215 | 20 | 279 | Jun.17 | Jun.17 | Jun.17 | | | | | A 1 | | |
| S5216 | 7 | 275 | Jun.17 | Jun.17 | Jun.17 | | | | | A 1 | | |
| S5217 | 3- 4 | 187-190 | - | Jun.19 | Jun.19 | | | | | | B 2 | |
| S5218 | 7-10 | 179-185 | Jun.25 | Jun.22 | Jun.29 | | | C10 D14 | - - | - - | - - C 9 B 4 | |
| S5219 | 17 | 142 | - | Jun.22 | Jun.23 | J 2 J 2 | | | | | | |
| S5220 | 18-24 | 113-131 | Jun.29 | Jun.23 | Jul. 6 | J 2 - - - - | - - | F32 F33 | - - | - - | - - G 5 J 2 | |
| S5221 | 6- 8 | 162-168 | - | Jun.28 | Jun.29 | | | | | | D13 C11 | |
| S5222 | 9-13 | 81-97 | Jul. 1 | Jun.28 | Jul. 8 | | | A 4 C11 | - - | - - | - - E29 E11 E 8 A 1 | |
| S5223 | 19-22 | 67-80 | Jul. 3 | Jun.28 | Jul. 9 | E11 E16 | - - | - - | - - | - - | E30 E19 E18 E14 B 5 | |
| S5224 | 26-27 | 50-56 | Jul. 4 | Jun.28 | Jul. 5 | J 2 C 4 | - - | - - | - - | - - | C 9 | |
| S5225 | 17-18 | 139 | - | Jun.29 | Jun.29 | | | | | | | A 3 |

| | | | | | | | | | | | | | | | | | | | | |
|-------|-------|---------|--------|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-------------|
| S5234 | 9 | 321-322 | Jul.11 | Jul.11 | Jul.11 | | | | | | | | | | | | | | | A 2 |
| S5235 | 18 | 262 | - | Jul.11 | Jul.11 | | | | | | A 1 | | | | | | | | | |
| S5236 | 9 | 261 | - | Jul.11 | Jul.11 | | | | | | A 1 | | | | | | | | | |
| S5237 | 27 | 253 | - | Jul.17 | Jul.17 | | | | | | | | | | | | | | | A 1 |
| S5238 | 25-28 | 160-174 | JUL.23 | Jul.17 | Jul.27 | J 3 | E16 | E28 | E27 | E27 | - | G17 | G14 | - | - | G 7 | | | | |
| S5239 | 14 | 201-202 | - | Jul.21 | Jul.21 | | | | | | | | | | | | | | | A 2 |
| S5240 | 20-21 | 121-122 | Jul.26 | Jul.21 | Jul.31 | J 2 | - | J 2 | J 2 | - | - | J 3 | - | - | J 2 | J 2 | | | | |
| S5241 | 15-16 | 204-207 | - | Jul.23 | JUL.24 | | | | | | | | | | | | | | | B 3 J 2 |
| S5242 | 15 | 169 | Jul.23 | Jul.23 | Jul.24 | | | | | | | A 1 | A 1 | | | | | | | |
| S5243 | 11-12 | 104-106 | Jul.28 | Jul.23 | Aug. 2 | J 3 | J 4 | - | - | J 4 | - | - | J 3 | J 5 | J 3 | J 2 | | | | |
| S5244 | 17-19 | 180-192 | - | JUL.24 | Jul.27 | | | | | | | | | | | | | | | A 2 - - E 9 |
| S5245 | 18-20 | 130-133 | - | Jul.24 | JUL.24 | | | | | | | | | | | | | | | C 4 |
| S5246 | 23-27 | 77-89 | Jul.29 | Jul.24 | Aug. 5 | J 2 | - | - | C 8 | - | - | C 8 | E13 | E33 | E30 | E23 | E10 | C 5 | | |
| S5247 | 10-12 | 71-80 | Jul.30 | Jul.24 | Aug. 4 | J 2 | - | - | C 6 | - | - | C 5 | C 6 | J 3 | C 4 | J 2 | A 1 | | | |
| S5248 | 16-20 | 69-76 | Jul.30 | JUL.27 | Aug. 1 | | | | C17 | - | - | B 8 | B 6 | A 3 | | | | | | |
| S5249 | 7- 8 | 48-52 | - | Jul.30 | Jul.31 | | | | | | | C 5 | A 1 | | | | | | | |
| S5250 | 8 | 75 | - | Jul.31 | Jul.31 | | | | | | | | | | | | | | | A 1 |
| S5251 | 7- 8 | 34-37 | Aug. 2 | Jul.31 | Aug. 3 | | | | | | | J 5 | C 4 | J 3 | B 3 | | | | | |
| S5252 | 6- 8 | 341-348 | Aug. 6 | Jul.31 | Aug. 7 | A 1 | J 2 | J 2 | J 3 | B 5 | B 5 | A 3 | A 4 | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | |
|-------|-------|---------|---------|---------|---------|--|-----|------|------|------|------|------|------|------|------|------|------|------|--|-----|
| S5256 | 15-18 | 346-353 | Aug. 5 | Aug. 5 | Aug. 11 | | | | | | | | C 8 | D10 | D17 | D14 | - | - | D 6 | |
| S5257 | 16-17 | 44-47 | - | Aug. 6 | Aug. 6 | | | | | | | | | | | | | | C 3 | |
| S5258 | 21-22 | 338-343 | Aug. 6 | Aug. 6 | Aug. 11 | | | | | | | | J 2 | .. | D 7 | - | - | A 1 | | |
| S5259 | 11-13 | 253-259 | Aug. 12 | Aug. 7 | Aug. 16 | | J 2 | J 5 | - | - | J 6 | | C 6 | - | C 9 | C 5 | J 3 | | | |
| S5260 | 10 | 309 | Aug. 8 | Aug. 8 | Aug. 8 | | | | | | | | A 1 | | | | | | | |
| S5261 | 5 | 320 | - | Aug. 11 | Aug. 12 | | | | | | | | | | | | | | A 1 J 2 | |
| S5262 | 17 | 274 | Aug. 11 | Aug. 11 | Aug. 14 | | | | | | | | J 2 | J 2 | - | A 1 | | | | |
| S5263 | 33-34 | 251-256 | - | Aug. 11 | Aug. 11 | | | | | | | | | | | | | | B 4 | |
| S5264 | 8-11 | 243-250 | Aug. 13 | Aug. 11 | Aug. 16 | | | | | | | | | | | | | | A 1 .. - D17 D17 D10 | |
| S5265 | 14-18 | 192-200 | Aug. 17 | Aug. 11 | Aug. 21 | | B 2 | C 3 | - | D 4 | B 5 | B 15 | - | - | C 7 | B 4 | A 1 | | | |
| S5266 | 2 | 207-211 | Aug. 16 | Aug. 14 | Aug. 16 | | | | | | | | | | | | | | B 4 A 3 B 3 | |
| S5267 | 8-12 | 162-175 | Aug. 19 | Aug. 14 | Aug. 25 | | | B 2 | B 3 | C 5 | - | - | E 25 | E 51 | E 39 | - | - | E 25 | E 14 | |
| S5268 | 25-30 | 159-162 | Aug. 20 | Aug. 14 | Aug. 26 | | J 2 | J 2 | J 2 | - | - | H 5 | H 3 | J 2 | - | - | J 2 | J 2 | J 2 | |
| S5269 | 17-18 | 267-268 | - | Aug. 15 | Aug. 15 | | | | | | | | | | | | | | A 2 | |
| S5270 | 12 | 194 | - | Aug. 15 | Aug. 15 | | | | | | | | | | | | | | A 1 | |
| S5271 | 18 | 184 | - | Aug. 15 | Aug. 15 | | | | | | | | | | | | | | A 1 | |
| S5272 | 16-19 | 206-211 | - | Aug. 19 | Aug. 21 | | | | | | | | | | | | | | C 5 C 8 B 3 | |
| S5273 | 33-35 | 180-190 | - | Aug. 19 | Aug. 21 | | | | | | | | | | | | | | C 10 C 8 D 9 | |
| S5274 | 15-16 | 167-173 | Aug. 19 | Aug. 19 | Aug. 21 | | | | | | | | | | | | | | B 3 B 3 B 3 | |
| S5275 | 8-14 | 92-107 | Aug. 24 | Aug. 19 | Aug. 30 | | | E 7 | F 21 | F 23 | - | - | E 39 | E 33 | E 24 | C 26 | C 18 | E 10 | E 7 | |
| S5276 | 16-25 | 90-104 | Aug. 24 | Aug. 19 | Aug. 31 | | | C 11 | E 24 | E 31 | - | - | E 58 | E 60 | E 42 | E 37 | E 25 | E 15 | E 12 | A 1 |
| S5277 | 24-27 | 64-83 | Aug. 26 | Aug. 20 | Sep. 2 | | J 4 | G 8 | - | - | F 22 | F 23 | F 13 | G 11 | G 14 | G 9 | C 6 | C 7 | J 2 | A 1 |
| S5278 | 5- 8 | 67-78 | Aug. 26 | Aug. 20 | Sep. 1 | | J 3 | D 10 | - | - | D 24 | D 22 | D 24 | D 22 | D 16 | D 11 | C 10 | C 6 | J 2 | |
| S5279 | 19-22 | 79-89 | Aug. 25 | Aug. 21 | Aug. 30 | | | | | | | | | | | | | | D 5 - - B 12 B 15 C 12 D 9 D 8 B 2 A 2 | |
| S5280 | 11-13 | 110-116 | - | Aug. 24 | Aug. 27 | | | | | | | | | | | | | | B 5 B 10 C 4 A 1 | |
| S5281 | 8 | 113 | - | Aug. 24 | Aug. 25 | | | | | | | | | | | | | | A 1 A 1 | |
| S5282 | 14-16 | 349-354 | Sep. 1 | Aug. 28 | Sep. 2 | | | | | | | | | | | | | | A 1 B 4 B 5 B 4 B 5 B 2 | |
| S5283 | 10-13 | 335-342 | Sep. 2 | Aug. 28 | Sep. 8 | | J 2 | J 3 | C 7 | C 6 | C 9 | D 14 | - | D 14 | - | C 6 | - | J 2 | | |
| S5284 | 22 | 59 | - | Aug. 29 | Aug. 29 | | | | | | | | | | | | | | A 1 | |
| S5285 | 9 | 18 | Aug. 30 | Aug. 30 | Aug. 30 | | | | | | | | | | | | | | A 1 | |
| S5286 | 19-20 | 343-347 | Sep. 2 | Aug. 30 | Sep. 6 | | | | | | | | | | | | | | C 4 C 5 C 5 J 2 - A 1 - A 1 | |
| S5287 | 12-13 | 312-320 | Sep. 4 | Aug. 31 | Sep. 10 | | | | | | | | | | | | | | A 1 A 1 B 6 - B 3 - B 6 - D 6 C 4 A 2 | |

TABLE OF SUNSPOT GROUPS
SEPTEMBER 1990

| Group NO. | Heliographic | | C.M. Passage | First Obs. | Last Obs. | E-Side | | | | | C.M. | W-Side | | | | | | |
|-----------|--------------|-----------|--------------|------------|-----------|--------|-----|-----|-----|-----|------|--------|-----|-----|-----|-----|-----|-----|
| | Latitude | Longitude | | | | . | . | . | . | . | | . | . | . | . | . | . | . |
| N5818 | 4- | 5260-267 | Sep. 8 | Sep. 2 | Sep.13 | J 2 | - | C 5 | - | C 5 | - | C 7 | C11 | J 3 | C 4 | J 2 | J 2 | |
| N5819 | 17 | 271-273 | - | Sep. 4 | Sep. 4 | | | | | D 4 | | | | | | | | |
| N5820 | 14-19 | 245-253 | - | Sep. 4 | Sep. 6 | | | C 3 | - | B 5 | | | | | | | | |
| N5821 | 11-13 | 234-236 | Sep.10 | Sep. 4 | Sep.13 | J 2 | - | J 3 | - | J 4 | J 3 | C 5 | J 3 | J 4 | J 3 | | | |
| N5822 | 7- | 8213-216 | Sep.12 | Sep. 6 | Sep.13 | J 2 | - | J 2 | C 4 | J 2 | J 2 | J 2 | J 3 | | | | | |
| N5823 | 21-23 | 283-287 | - | Sep. 8 | Sep.11 | | | | | | | | | A 1 | B 3 | C 6 | A 3 | |
| N5824 | 16-19 | 204-206 | Sep.12 | Sep. 8 | Sep.13 | | | J 2 | C 5 | C 4 | C 6 | C 5 | J 4 | | | | | |
| N5825 | 35 | 279 | - | Sep.10 | Sep.11 | | | | | | | | | | A 1 | A 1 | | |
| N5826 | 9-11 | 150-152 | Sep.17 | Sep.11 | SEp.23 | J 2 | J 2 | J 3 | - | - | - | - | J 2 | J 2 | J 2 | J 2 | J 2 | J 2 |
| N5827 | 21-23 | 132-142 | Sep.18 | Sep.12 | Sep.21 | D 8 | D 6 | - | - | - | - | D12 | B 7 | B 2 | A 1 | | | |
| N5828 | 12 | 214 | - | Sep.13 | Sep.13 | | | | | | | | A 1 | | | | | |
| N5829 | 11 | 170 | - | Sep.13 | Sep.13 | | | | | A 1 | | | | | | | | |
| N5830 | 18-20 | 111-122 | Sep.19 | Sep.13 | Sep.23 | J 2 | - | - | - | - | C 3 | C 5 | C 8 | J 2 | C 6 | J 3 | | |
| N5831 | 14-16 | 148-152 | - | Sep.19 | Sep.23 | | | | | | | | | B 4 | C 4 | A 4 | J 4 | B 3 |
| N5832 | 25 | 56 | - | Sep.20 | Sep.20 | | | A 1 | | | | | | | | | | |
| N5833 | 11-16 | 21-34 | Sep.26 | Sep.20 | Oct. 2 | J 2 | E10 | E15 | E12 | - | - | - | G23 | - | - | - | C 4 | A 1 |
| N5834 | 5- 6 | 31-36 | - | Sep.20 | Sep.23 | A 3 | B 4 | B 7 | A 1 | | | | | | | | | |
| N5835 | 10-11 | 133-135 | - | Sep.22 | Sep.22 | | | | | | | | | | | | A 3 | |
| S5288 | 13-14 | 286-290 | Sep. 6 | Sep. 2 | Sep.10 | | | J 3 | - | D 6 | - | C 6 | - | J 2 | J 2 | A 2 | | |
| S5289 | 8 | 261 | Sep. 8 | Sep. 8 | Sep. 8 | | | | | | | A 1 | | | | | | |
| S5290 | 17-20 | 252-255 | Sep. 9 | Sep. 9 | Sep. 9 | | | | | | | A 4 | | | | | | |
| S5291 | 8-11 | 169-180 | Sep.15 | Sep. 9 | Sep.21 | J 2 | C 3 | C 6 | C 7 | C 3 | - | - | - | - | J 2 | C 8 | J 2 | J 2 |
| S5292 | 8 | 307-311 | - | Sep.10 | Sep.10 | | | | | | | | | | | B 2 | | |
| S5293 | 15-17 | 200-204 | Sep.13 | Sep.10 | Sep.18 | | | A 1 | A 2 | C 4 | | C 5 | - | - | - | - | A 1 | |
| S5294 | 31-32 | 191-193 | - | Sep.11 | Sep.11 | | | | | A 2 | | | | | | | | |
| S5295 | 17-18 | 185-187 | - | Sep.11 | Sep.11 | | | | | A 2 | | | | | | | | |
| S5296 | 24-27 | 138-147 | Sep.17 | Sep.11 | Sep.23 | A 1 | J 3 | J 3 | - | - | - | - | .. | B 7 | C 7 | C 7 | C 5 | J 2 |
| S5297 | 10-16 | 134-149 | Sep.17 | Sep.11 | Sep.23 | J 3 | J 3 | D 8 | - | - | - | - | C13 | C 9 | C10 | D 9 | C 8 | C 6 |
| S5298 | 0 | 200 | Sep.13 | Sep.13 | Sep.13 | | | | | | | A 1 | | | | | | |
| S5299 | 11-15 | 100-109 | Sep.20 | Sep.18 | Sep.23 | | | | | H13 | H22 | H11 | H10 | H12 | H 9 | | | |

| | | | | | | | | | | | | | | | | | | | |
|-------|-------|---------|--------|--------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|-----|-----|-----|
| S5300 | 6-10 | 76-83 | Sep.22 | Sep.18 | Sep.27 | | | | | A 2 | D 7 | D16 | D20 | D11 | D 8 | - | - | - | A 3 |
| S5301 | 22-25 | 52-55 | Sep.24 | Sep.18 | Sep.27 | J 2 | J 2 | J 3 | J 2 | C 3 | C 3 | C 4 | | | - | - | - | J 2 | |
| S5302 | 17 | 125 | - | Sep.19 | Sep.19 | | | | | | | | | | A 2 | | | | |
| S5303 | 23 | 101 | - | Sep.19 | Sep.19 | | | | | | | | A 1 | | | | | | |
| S5304 | 5 | 105 | - | Sep.21 | Sep.21 | | | | | | | | | | A 1 | | | | |
| S5305 | 5 | 85 | - | Sep.21 | Sep.21 | | | | | | | | A 1 | | | | | | |
| S5306 | 28 | 44 | - | Sep.22 | Sep.22 | | | | | A 1 | | | | | | | | | |
| S5307 | 4-9 | 349-3 | Sep.28 | Sep.23 | Oct. 3 | C 7 | - | - | - | E29 | | | | - | - | - | C20 | H19 | D12 |
| S5308 | 11 | 51 | - | Sep.27 | Sep.27 | | | | | | | | | | | | | A 1 | |
| S5309 | 31 | 357 | - | Sep.27 | Sep.27 | | | | | | | | A 1 | | | | | | |
| S5310 | 12 | 343-345 | Sep.29 | Sep.27 | Oct. 1 | | | | | J 3 | - | - | | | - | - | B 2 | | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|-------|-------|---------|--------|--------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|---|
| S5315 | 18-20 | 312-314 | - | Oct. 3 | Oct. 3 | | | | | | | | | | | | | | | | | | A 2 |
| S5316 | 10 | 235 | - | Oct.10 | Oct.10 | | | | | | | | | | | | | | | | | | A 1 |
| S5317 | 13-17 | 205-214 | Oct.10 | Oct.10 | Oct.11 | | | | | | | | | | | | | | | | | | C13 C14 |
| S5318 | 6- 8 | 192-200 | Oct.10 | Oct.10 | Oct.16 | | | | | | | | | | | | | | | | | | C 5 C 3 - - - - A 1 |
| S5319 | 22-26 | 185-194 | Oct.11 | Oct.10 | Oct.16 | | | | | | | | | | | | | | | | | | D11 C10 - - - - A 1 |
| S5320 | 12 | 179 | - | Oct.10 | Oct.11 | | | | | | | | | | | | | | | | | | J 2 J 3 |
| S5321 | 16-20 | 134-149 | Oct.14 | Oct.10 | Oct.20 | | | | | | | | | | | | | | | | | | E19 F23 - - - - C 9 - C21 H 3 H 3 |
| S5322 | 13-14 | 145-146 | Oct.14 | Oct.10 | Oct.20 | | | | | | | | | | | | | | | | | | J 2 J 2 - - - - J 2 - J 2 J 2 J 2 |
| S5323 | 18 | 216 | - | Oct.11 | Oct.11 | | | | | | | | | | | | | | | | | | A 1 |
| S5324 | 18-20 | 177-201 | - | Oct.11 | Oct.11 | | | | | | | | | | | | | | | | | | B 2 |
| S5325 | 14-16 | 192-196 | Oct.11 | Oct.11 | Oct.11 | | | | | | | | | | | | | | | | | | B 7 |
| S5326 | 21-22 | 136-139 | - | Oct.16 | Oct.16 | | | | | | | | | | | | | | | | | | A 3 |
| S5327 | 23-27 | 97-109 | Oct.17 | Oct.16 | Oct.20 | | | | | | | | | | | | | | | | | | C19 - C16 B 3 B 4 |
| S5328 | 18-20 | 100-105 | Oct.17 | Oct.16 | Oct.18 | | | | | | | | | | | | | | | | | | B11 - A 1 |
| S5329 | 5-10 | 87-100 | Oct.18 | Oct.16 | Oct.24 | | | | | | | | | | | | | | | | | | D22 - E40 E41 E34 E20 C11 J 2 B 3 |
| S5330 | 12 | 71-75 | - | Oct.16 | Oct.22 | | | | | | | | | | | | | | | | | | B 2 - A 1 |
| S5331 | 24-25 | 44-45 | Oct.22 | Oct.16 | Oct.28 | | | | | | | | | | | | | | | | | | J 2 - J 2 J 2 J 2 J 2 J 2 J 2 J 2 - - - - A 1 |
| S5332 | 6- 7 | 112-116 | - | Oct.18 | Oct.18 | | | | | | | | | | | | | | | | | | B 7 |
| S5333 | 6 | 1 | - | Oct.20 | Oct.23 | | | | | | | | | | | | | | | | | | J 2 J 2 J 2 A 1 |
| S5334 | 10-12 | 3- 5 | - | Oct.21 | Oct.22 | | | | | | | | | | | | | | | | | | A 1 A 4 |
| S5335 | 18 | 45 | Oct.22 | Oct.22 | Oct.23 | | | | | | | | | | | | | | | | | | A 1 A 1 |
| S5336 | 11-16 | 322-331 | Oct.28 | Oct.23 | Nov. 3 | | | | | | | | | | | | | | | | | | A 4 D17 - - - - D25 D21 - D11 D 8 C 7 J 2 |
| S5337 | 9-10 | 67-72 | - | Oct.24 | Oct.24 | | | | | | | | | | | | | | | | | | D 7 |
| S5338 | 29 | 52 | - | Oct.24 | Oct.24 | | | | | | | | | | | | | | | | | | A 1 |
| S5339 | 35-37 | 20-23 | Oct.24 | Oct.24 | Oct.24 | | | | | | | | | | | | | | | | | | B 4 |
| S5340 | 6 | 325 | - | Oct.24 | Oct.24 | | | | | | | | | | | | | | | | | | A 1 |
| S5341 | 19-20 | 350-356 | - | Oct.28 | Oct.31 | | | | | | | | | | | | | | | | | | B10 A 1 - J 2 |
| S5342 | 2- 7 | 238-248 | Nov. 3 | Oct.28 | Nov. 8 | | | | | | | | | | | | | | | | | | H 2 D11 - E20 E24 D25 D21 - C29 D21 C12 D 6 |
| S5343 | 16-21 | 210-219 | Nov. 5 | Oct.31 | Nov.10 | | | | | | | | | | | | | | | | | | J 2 C 9 D 8 C15 - C13 C10 J 9 J 4 - J 2 |

TABLE OF SUNSPOT GROUPS

November 1990

| Group NO. | Heliographic | | C.M. Passage | First Obs. | Last Obs. | E-Side | | | C.M. | W-Side | | |
|-----------|--------------|-----------|--------------|------------|-----------|-----------------------|---|---|-------|---------------------------|---|---------|
| | Latitude | Longitude | | | | . | . | . | | . | . | . |
| N5863 | 6 | 334 | - | Nov. 1 | Nov. 1 | | | | | | | A 1 |
| N5864 | 22 | 341 | - | Nov. 2 | Nov. 2 | | | | | | | A 1 |
| N5865 | 11-13 | 247-250 | Nov. 3 | Nov. 3 | Nov. 3 | | | | B 3 | | | |
| N5866 | 7- | 8230-237 | - | Nov. 5 | Nov. 7 | | | | | D10 C 4 A 1 | | |
| N5867 | 15-18 | 217-225 | Nov. 5 | Nov. 5 | Nov. 11 | | | | A 1 | B 6 C24 D22 - D 9 C 5 | | |
| N5868 | 12-19 | 147-161 | Nov. 10 | Nov. 5 | Nov. 17 | G 5 G14 E23 C26 - | | | C21 | D11 D 9 - D13 D 9 C 4 J 2 | | |
| N5869 | 6- | 9125-135 | Nov. 12 | Nov. 6 | Nov. 17 | H 5 H 7 D13 - D 9 D13 | | | E17 | - D19 D18 D 8 D 7 | | |
| N5870 | 8-10 | 151-156 | Nov. 10 | Nov. 7 | Nov. 12 | | | | C 7 | D 7 B 5 | | |
| N5871 | 10 | 117 | Nov. 13 | Nov. 8 | Nov. 15 | J 2 - J 2 J 2 .. | | | - | A 6 A 4 | | |
| N5872 | 40 | 76 | - | Nov. 11 | Nov. 12 | A 1 A 1 | | | | | | |
| N5873 | 5 | 140 | - | Nov. 12 | Nov. 12 | | | | | A 1 | | |
| N5874 | 14-23 | 15-37 | Nov. 19 | Nov. 14 | Nov. 27 | F22 F35 F45 F69 F95 | | | - | - F98 F75 - F54 F35 J 3 | | |
| N5875 | 23 | 54 | - | Nov. 16 | Nov. 16 | | | | | A 1 | | |
| N5876 | 18 | 68-69 | - | Nov. 17 | Nov. 17 | | | | | A 2 | | |
| N5877 | 16 | 70 | - | Nov. 21 | Nov. 22 | | | | | | | A 1 J 3 |
| N5878 | 15 | 9 | Nov. 21 | Nov. 21 | Nov. 21 | | | | A 1 | | | |
| N5879 | 23 | 11 | - | Nov. 22 | Nov. 22 | | | | | A 1 | | |
| N5880 | 11 | 260-262 | - | Nov. 27 | Nov. 27 | | | | | | | C 3 |
| N5881 | 14-16 | 221-226 | Dec. 2 | Nov. 27 | Dec. 7 | C 6 - - - C 5 | | | D11 | C 5 C 6 J 3 J 2 J 2 | | |
| S5344 | 14 | 203 | - | Nov. 1 | Nov. 3 | A 1 A 1 A 1 | | | | | | |
| S5345 | 23-25 | 207-217 | Nov. 5 | Nov. 3 | Nov. 11 | | | | B 7 - | D19 E15 E13 E10 - E 8 J 2 | | |
| S5346 | 20-21 | 222-226 | Nov. 5 | Nov. 5 | Nov. 7 | | | | C10 | D 5 C 4 | | |
| S5347 | 23 | 204 | - | Nov. 5 | Nov. 5 | | | | | A 1 | | |
| S5348 | 10 | 165 | - | Nov. 5 | Nov. 6 | A 1 A 2 | | | | | | |
| S5349 | 16-19 | 145-149 | Nov. 10 | Nov. 5 | Nov. 12 | A 1 J 2 J 4 J 3 - | | | B 2 | A 1 A 4 | | |
| S5350 | 14-17 | 193-201 | Nov. 7 | Nov. 6 | Nov. 12 | | | | A 6 | D17 D15 - E 8 J 4 C 3 | | |
| S5351 | 26 | 147 | - | Nov. 6 | Nov. 6 | A 1 | | | | | | |
| S5352 | 12 | 136-140 | - | Nov. 6 | Nov. 10 | J 2 J 4 J 2 - | | | B 2 | | | |
| S5353 | 26-32 | 121-134 | Nov. 12 | Nov. 6 | Nov. 18 | J 2 C 7 D12 - E16 E18 | | | E23 | - E26 C12 C 5 C 3 J 2 | | |
| S5354 | 8 | 185 | - | Nov. 7 | Nov. 7 | | | | | A 1 | | |

| | | | | | | | | | | | | | | | | | | | | | | |
|-------|-------|----------|--------|--------|--------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|---------------|
| S5355 | 22-24 | 189-193 | - | Nov.12 | Nov.12 | | | | | | | | | | | | | | | | | B 2 |
| S5356 | 9 | 142 | - | Nov.12 | Nov.12 | | | | | | | | | | | | | | | | | A 1 |
| S5357 | 20-23 | 97-103 | Nov.14 | Nov.12 | Nov.18 | | | B 3 | - | A 2 | D12 | C20 | C15 | J 5 | | | | | | | | |
| S5358 | 26 | 140 | - | Nov.14 | Nov.14 | | | | | | | | | | | | | | | | | A 1 |
| S5359 | 16-17 | 133-136 | - | Nov.14 | Nov.15 | | | | | | | | | | | | | | | | | C 4 A 1 |
| S5360 | 1 | 97 | Nov.14 | Nov.14 | Nov.14 | | | | | | | | | | | | | | | | | A 1 |
| S5361 | 17-18 | 346-348 | Nov.22 | Nov.17 | Nov.25 | | J 2 | J 2 | - | - | C 4 | J 4 | - | J 4 | J 4 | | | | | | | |
| S5362 | 15-17 | 41-47 | - | Nov.21 | Nov.24 | | | | | | | | | | | | | | | | | D 6 C 7 - A 1 |
| S5363 | 1- | 5317-329 | Nov.24 | Nov.22 | Nov.27 | | | | | | B 3 | - | D28 | D20 | - | E23 | | | | | | |
| S5364 | 8- | 9309-315 | Nov.25 | Nov.22 | Nov.27 | | | | | | A 4 | - | A 3 | C 3 | - | D 9 | | | | | | |
| S5365 | 5- | 7261-267 | Nov.29 | Nov.24 | Dec. 4 | | D 5 | D 7 | - | C13 | - | - | - | B 2 | J 2 | C 4 | B 4 | | | | | |
| S5366 | 3 | 245 | Nov.30 | Nov.25 | Dec. 5 | | J 2 | - | J 2 | - | - | - | J 2 | J 2 | J 2 | J 2 | A 1 | | | | | |
| S5367 | 19-20 | 232-233 | Dec. 1 | Nov.27 | Dec. 6 | | | J 2 | - | - | - | J 3 | J 2 | J 2 | J 2 | J 2 | J 2 | | | | | |
| S5368 | 14-15 | 209-210 | Dec. 3 | Nov.27 | Dec. 8 | | A 1 | - | - | - | J 2 | J 2 | J 3 | J 3 | J 2 | J 2 | J 2 | J 2 | | | | |

TABLE OF SUNSPOT GROUPS

DECEMBER 1990

| Group NO. | Heliographic | | C.M. Passage | First Obs. | Last Obs. | E-Side | | | | C.M. | W-Side | | | | | | | |
|-----------|--------------|------------|--------------|------------|-----------|--------|------|------|------|---------|--------|--------|------|------|------|------|------|------------------|
| | Lati-tude | Longi-tude | | | | . | . | . | . | | . | . | . | . | . | . | | |
| N5882 | 6 | 285 | - | Dec. 1 | Dec. 2 | | | | | | | | | | | | | J 2 A 1 |
| N5883 | 8-11 | 202-208 | Dec. 3 | Dec. 1 | Dec. 6 | | | | | B 5 C 4 | B 5 | A 1 .. | A 1 | | | | | |
| N5884 | 32-35 | 176-182 | Dec. 5 | Dec. 1 | Dec. 10 | | D 4 | D 4 | D 5 | D 6 | C 8 | C 6 | J 4 | J 4 | - | J 2 | | |
| N5885 | 19-21 | 160-165 | Dec. 6 | Dec. 2 | Dec. 13 | | | A 1 | J 2 | C 3 | C 4 | C 3 | B 3 | A 1 | - | A 2 | - | D 12 J 3 |
| N5886 | 11-12 | 146-160 | Dec. 7 | Dec. 2 | Dec. 13 | | D 10 | D 26 | D 27 | D 32 | C 38 | C 40 | C 35 | - | D 31 | - | D 8 | J 3 |
| N5887 | 7-12 | 139-150 | Dec. 8 | Dec. 2 | Dec. 14 | J 2 | D 4 | D 8 | D 9 | D 24 | E 29 | D 35 | - | C 20 | - | C 17 | C 9 | H 8 |
| N5888 | 12-15 | 161-170 | Dec. 6 | Dec. 3 | Dec. 13 | | | C 5 | C 6 | J 4 | A 3 | A 4 | B 9 | - | D 26 | - | C 9 | J 2 |
| N5889 | 10-11 | 156-162 | - | Dec. 5 | Dec. 5 | | | | | B 3 | | | | | | | | |
| N5890 | 6 | 141 | - | Dec. 5 | Dec. 5 | | | | | A 1 | | | | | | | | |
| N5891 | 23 | 145 | Dec. 8 | Dec. 8 | Dec. 8 | | | | | | A 1 | | | | | | | |
| N5892 | 9-10 | 128 | Dec. 9 | Dec. 8 | Dec. 10 | | | | | A 1 | - | A 2 | | | | | | |
| N5893 | 21-22 | 143 | - | Dec. 10 | Dec. 10 | | | | | | | | | | | | | A 2 |
| N5894 | 23 | 80 | - | Dec. 10 | Dec. 10 | | | | | A 1 | | | | | | | | |
| N5895 | 27-28 | 56-57 | Dec. 15 | Dec. 10 | Dec. 15 | J 2 | - | J 3 | J 3 | J 3 | J 3 | | | | | | | |
| N5896 | 1- 6 | 40-56 | Dec. 15 | Dec. 10 | Dec. 21 | D 8 | - | C 27 | E 34 | C 24 | C 32 | - | G 20 | G 19 | G 12 | G 10 | J 2 | |
| N5897 | 9-16 | 30-38 | Dec. 16 | Dec. 12 | Dec. 22 | | | A 1 | J 3 | A 2 | B 7 | - | D 29 | D 39 | D 38 | D 23 | D 15 | D 9 |
| N5898 | 19-22 | 34-37 | Dec. 16 | Dec. 12 | Dec. 18 | | | J 2 | J 4 | J 4 | J 5 | - | A 1 | A 1 | | | | |
| N5899 | 12-22 | 12-30 | Dec. 17 | Dec. 12 | Dec. 24 | G 8 | G 22 | F 34 | F 49 | - | F 42 | F 51 | F 56 | F 60 | F 59 | F 45 | - | H 16 |
| N5900 | 22 | 110 | - | Dec. 15 | Dec. 15 | | | | | | | | | | | | | A 1 |
| N5901 | 14-17 | 5- 8 | - | Dec. 19 | Dec. 19 | | | | | | | | | | | | | B 7 |
| N5902 | 20 | 3 | Dec. 19 | Dec. 19 | Dec. 19 | | | | | | A 1 | | | | | | | |
| N5903 | 16-17 | 290-295 | Dec. 24 | Dec. 19 | Dec. 25 | A 1 | J 3 | J 2 | J 2 | - | D 10 | D 8 | | | | | | |
| N5904 | 17-18 | 352-355 | - | Dec. 21 | Dec. 22 | | | | | | | | | | | | | D 5 J 2 |
| N5905 | 7 | 279-281 | Dec. 25 | Dec. 25 | Dec. 25 | | | | | | A 4 | | | | | | | |
| N5906 | 0 | 230 | Dec. 29 | Dec. 29 | Dec. 29 | | | | | | A 1 | | | | | | | |
| N5907 | 18 | 167 | - | Dec. 29 | Dec. 30 | | | A 1 | A 1 | | | | | | | | | |
| N5908 | 7-11 | 150-154 | Jan. 4 | Dec. 29 | Jan. 10 | J 2 | J 3 | J 5 | - | - | C 7 | C 8 | C 11 | - | C 6 | C 3 | J 2 | J 2 |
| S5369 | 25-26 | 263-267 | - | Dec. 1 | Dec. 1 | | | | | | | | | | | | | C 3 |
| S5370 | 5- 7 | 237-240 | Dec. 1 | Dec. 1 | Dec. 2 | | | | | | C 5 | A 1 | | | | | | |
| S5371 | 19-21 | 212-215 | Dec. 3 | Dec. 1 | Dec. 7 | | | | | J 2 | B 3 | C 7 | A 1 | A 1 | C 8 | J 3 | | |
| S5372 | 21-26 | 186-194 | Dec. 4 | Dec. 1 | Dec. 10 | | | C 5 | J 2 | J 3 | J 5 | D 11 | C 15 | D 21 | D 20 | - | D 18 | |
| S5373 | 21-22 | 257-261 | - | Dec. 2 | Dec. 4 | | | | | | | | | | | | | C 3 A 1 D 5 |
| S5374 | 20-25 | 245-254 | - | Dec. 3 | Dec. 6 | | | | | | | | | | | | | C 3 B 7 D 21 D 5 |

