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SOLAR ACTIVITY DURING DECEMBER

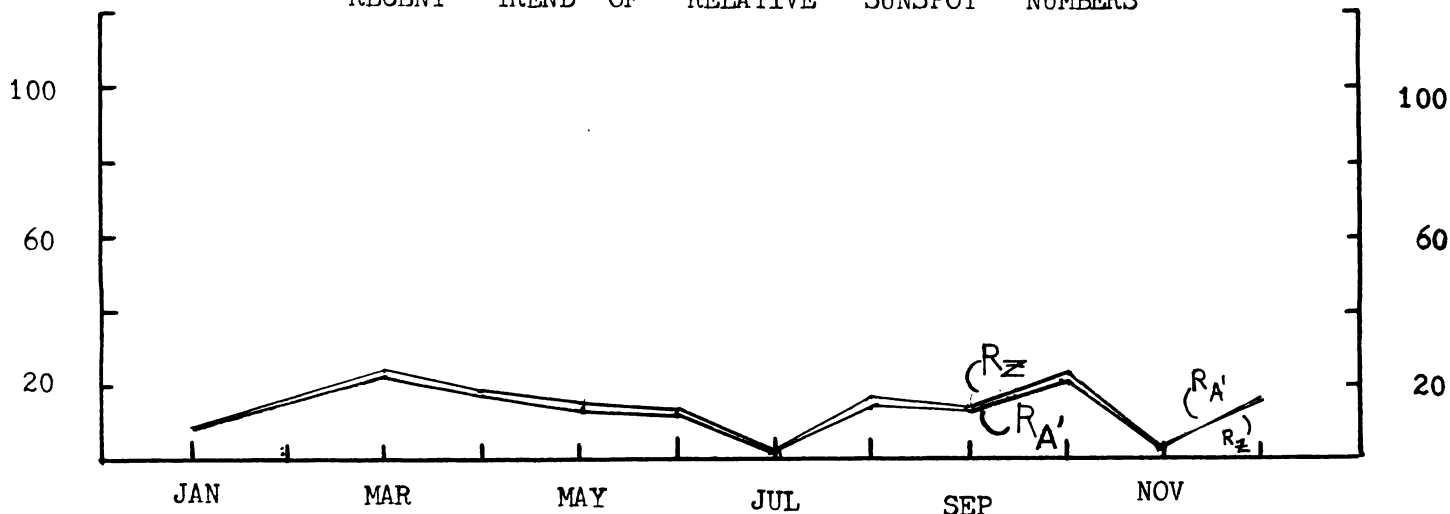
Sunspot activity during December was much greater than that of the previous month. The mean of the American sunspot numbers rose to 15.5 compared to 4.3 in November and the number of spotless days decreased from sixteen to six.

December began with a spotless sun but late on the seventh an old-cycle spot formed on the visible disk. It developed rapidly but quickly decayed by west limb passage. On the fourteenth a spot came over the east limb, apparently having formed on the far side of the sun, and transited the disk being last seen on the twenty-sixth. Spots appearing on the twenty-fifth at the south east limb were part of what appeared to be two close sunspot groups.

Two ionospheric disturbances were recorded during December. Charts are reproduced on page two showing the first event at 2006 UT on the twenty-third. The second event at 0512 UT on the twenty-fifth was recorded as an SEA by A-42 in Tasmania. The A.A.V.S.O. would welcome additional observers in these longitudes where there is little coverage of ionospheric disturbances.

We miss our friend and fellow observer Bob Woolsey of Glen Ellyn, Illinois who observed Sudden Ionospheric Disturbances as A-33. He died December 16, 1976.

RECENT TREND OF RELATIVE SUNSPOT NUMBERS



AMERICAN (R_A) And ZURICH

(R_Z) RELATIVE SUNSPOT

NUMBERS FOR DECEMBER 1976

| DAY | R _A | R _Z |
|------|----------------|----------------|
| 1 | 0 | 0 |
| 2 | 0 | 0 |
| 3 | 0 | 0 |
| 4 | 0 | 0 |
| 5 | 0 | 0 |
| 6 | 0 | 0 |
| 7 | 2 | 0 |
| 8 | 19 | 20 |
| 9 | 20 | 25 |
| 10 | 19 | 16 |
| 11 | 19 | 24 |
| 12 | 18 | 16 |
| 13 | 14 | 12 |
| 14 | 30 | 34 |
| 15 | 36 | 34 |
| 16 | 29 | 39 |
| 17 | 31 | 34 |
| 18 | 22 | 18 |
| 19 | 19 | 16 |
| 20 | 9 | 8 |
| 21 | 10 | 9 |
| 22 | 11 | 9 |
| 23 | 9 | 9 |
| 24 | 17 | 17 |
| 25 | 24 | 20 |
| 26 | 29 | 25 |
| 27 | 19 | 16 |
| 28 | 19 | 16 |
| 29 | 20 | 19 |
| 30 | 22 | 19 |
| 31 | 15 | 11 |
| Mean | 15.5 | 15.0 |

SUDDEN IONOSPHERIC DISTURBANCES RECORDED DURING DECEMBER 1976

| Day | Max. | SEA | SES | Def. | Observers |
|-----|-------|-----|-----|------|------------|
| 23 | 20:06 | 1 | 1 | 5 | A26,31, 37 |
| 25 | 05:12 | 1 | | 1 | A43 |

Charts from the following observers were received and analyzed:

A- 1, 19, 26, 29, 30, 31, 34, 37, 40, 41, 43

