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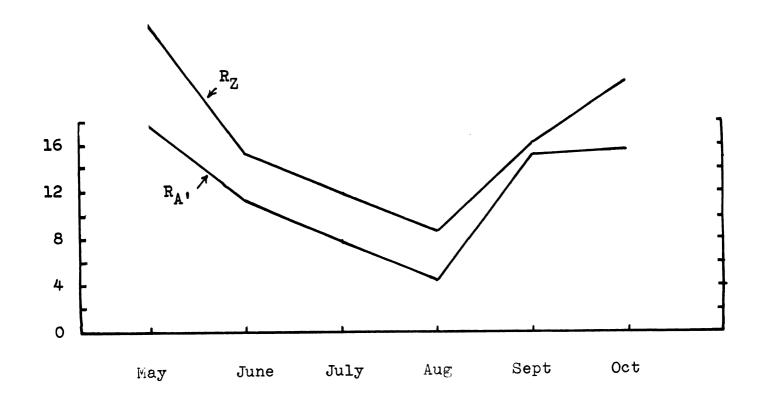
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## SOLAR ACTIVITY DURING OCTOBER

Increased solar activity present at the end of September continued during the first few days of October. A sudden ionospheric disturbance was recorded starting at 2028 UT on the first of October. This SID was associated with a class 2 flare reported at that time in the very active beta-gamma group first seen on the 26th of September. Another SID was recorded starting at 1621 UT on the 2nd in association with another class 2 flare. This large complex group was an active one and produced many flares. The ionospheric effects of these flares was greater than any since those associated with the large sunspot group of May 1965.

Sunspot activity was up slightly from last month. The monthly mean of the American Sunspot Number was 15.6. There were 5 spotless days in October compared to 3 in September. There were only 5 groups with lifetimes greater than 2 days whereas 7 such groups were seen in September.

## RECENT TREND OF RELATIVE SUNSPOT NUMBERS



| (R <sub>A</sub> ,) OCTOBER 1965  | (R <sub>Z</sub> ) OCTOBER 1965  |
|--|---|
| mean = 15.6  | mean = 21.2   |
| 1 33<br>2 39<br>3 50<br>4 43<br>5 26<br>7 16<br>7 16<br>9 10<br>11 11<br>12 9<br>13 10<br>14 2<br>15 0<br>16 0<br>17 0<br>18 8<br>20 14<br>22 23 20<br>24 21<br>25 16<br>27 12<br>28 11<br>29 11<br>30 11<br>31 12 | 1 59<br>735<br>654<br>6897<br>7 8 9<br>10 12<br>13 14<br>15 16<br>17 18<br>19 20<br>21 22<br>23 24<br>25 26<br>27 28<br>29 30<br>31 |

NOTE:  $R_A^{\ \prime}$  = AMERICAN RELATIVE SUNSPOT NUMBER AND IS COMPUTED FROM OBSERVATIONS MADE BY MEMBERS OF THE SOLAR DIVISION OF THE AMERICAN ASSOCIATION OF VARIABLE STAR OBSERVERS.  $R_A^{\ \prime}$  IS COMPUTED FOR THE NATIONAL BUREAU OF STANDARDS.

R<sub>Z</sub> = ZURICH PROVISIONAL SUNSPOT NUMBER AND IS DEPENDENT ON OBSERVATIONS MADE AT THE FEDERAL OBSERVATORY IN ZURICH AND ITS STATIONS IN LOCARNO AND AROSA.

THE WOLF RELATIVE SUNSPOT NUMBER R IS BASED ON THE FORMULA:

R = K(10G + F) WHEREIN K = OBSERVATORY COEFFICIENT, G = TOTAL NUMBER OF GROUPS, AND F = TOTAL NUMBER OF SPOTS (UMBRAE).