SOLAR ACTIVITY DURING OCTOBER

Twelve separate ionospheric disturbances were recorded by the Solar Division observers during October. Of these twelve events, seven were of minor importance, indicating a continuation of low level of activity.

The most widely recorded and largest event of the month is reproduced as recorded by observers in Pennsylvania, Wisconsin, and Missouri. The "flat top" or "second peak" was quite noticeable in recordings made by other SEA and SES observers. These recordings also illustrate how the "sunrise dip" may vary as related to local sunrise time. For the event of the 23rd, the normal "sunset rise" appears to be delayed on this date for approximately one hour. This is a common departure when preceded by a SID near sunset. While some scientific papers have been published concerning these anomalies, no theories have been widely accepted, however these variations do suggest that the recordings of observers may contribute to a better knowledge of the earth's environment in addition to the study of the sun's activities.

Sunspot activity was off from the level of last month. The monthly mean of the American sunspot numbers returned to the August level of 98.1 from 106.6 in September. The highest sunspot counts occurred during the latter third of the month, correlating with ionospheric activity.

The most confusing group was seen at the east limb on the 23rd. By the usual criteria this one could easily have been called several groups but magnetic data indicated a single group having an unusual spread in latitude. This group was easily visible to the unaided eye during most of its transit across the disk. It was not until it approached the west limb that it started to take on the appearance of a single group.

![Graph showing recent trend of relative sunspot numbers from December to October with labeled points RA' and RZ.](image-url)