

Short note : A solar flare event in Ca II K on 1989 March 9

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On 1989 March 9 a flare was recorded in Ca II K near a complex spot group (NOAA active region No. 5395: 35°N, 42°E) of magnetic class D and strength 3000 gauss (*Solar Geophysical Data* Pt I No. 537). The telescope was a f/15 15 cm coude refractor by Carl Zeiss Jena and the filter a Daystar (3933.7Å) with a passband of 1.2Å. A CN-line photograph was also taken using a Daystar filter (3883.0Å) with a passband of 1.5Å.

Figures 1, 2, and 3 show respectively photographs of the same region in the white light (02^h26^m30^s UT), in CN line (02^h36^m30^s), and in K-line (02^h42^m00^s).

The area of the flare as measured by us from two exposures in Ca II K line (figure 3 is one) is about 575 millionths of the visible disc in Ca II K. The observations in H α give it the importance class 2N, and its area as 455 millionths of the visible disc (*Solar Geophysical Data*). A loop like structure of the flare is very conspicuously seen in its decay phase. Since this flare appears to be an intense event, we plan to study it once data at the other radiations become available.

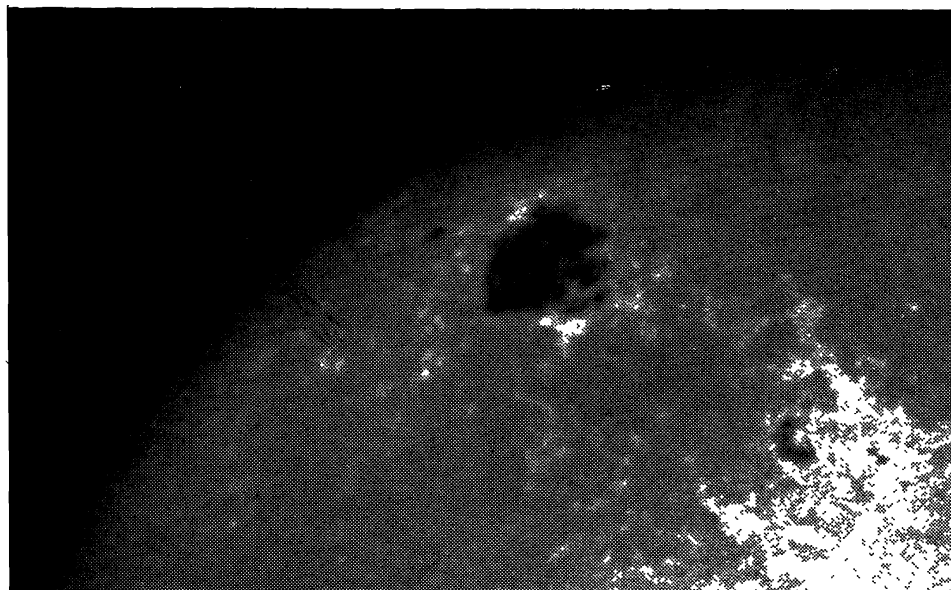


Figure 1. White light photograph (exposure time $\sim 1/500$ sec).

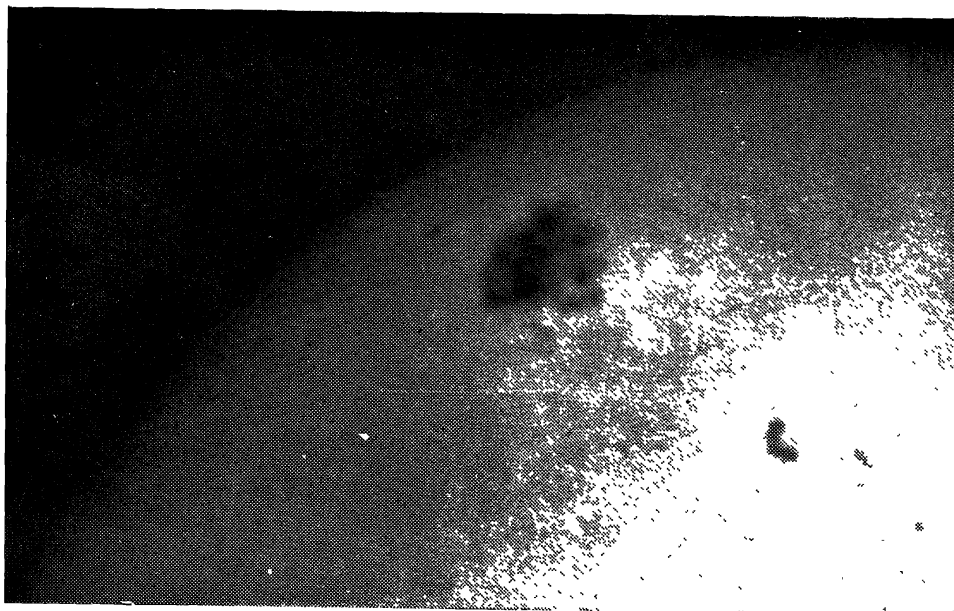


Figure 2. CN filtergram (exposure time $\sim 1/8$ sec).

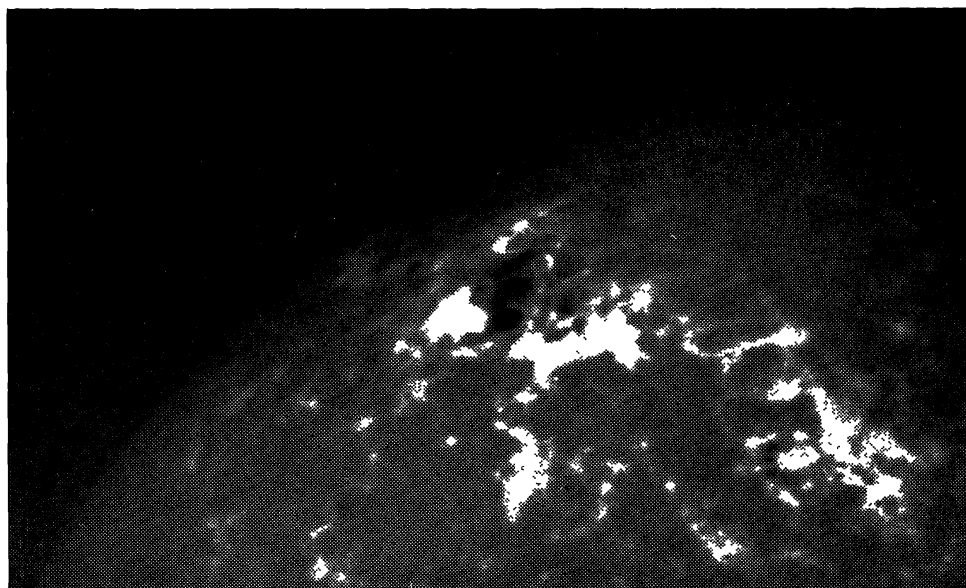


Figure 3. Ca II K filtergram of the flare (exposure time $\sim 1/2$ sec).

We thank Dr K. Sinha for encouragement and help in the installation and testing of the instrument; and Dr V. P. Gaur for helpful suggestions.