

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 234A ISSUED 0500Z 22 AUGUST 1971  
CLASS M FLARES ARE EXPECTED DURING THE NEXT 24 HOURS.  
A. IN ADDITION TO FREQUENT CLASS C SUBFLARES AND DARK SURGES, A ONE-BRILLIANT FLARE HAS OCCURRED IN REGION 235 (S12E21) DURING THE PAST SEVEN HOURS. THIS 1B FLARE BEGAN AT 22/0338Z AND WAS ACCCOMPANIED BY A COMPLEX, IMPULSIVE 2695MHZ RADIO BURST OF 119 FLUX UNIT ABOVE BACKGROUND. MODERATE IONOSPHERIC EFFECTS WERE PRODUCED BY THIS PROBABLE CLASS M FLARE. SOME FRACTURING HAS OCCURRED BETWEEN THE TWO MAIN UMBRAE IN THE ELONGATED LEADER OF REGION 235, BUT NO REAL DECAY IS EVIDENT IN WHITE LIGHT. IN H-ALPHA, REGION 235 IS VERY IMPRESSIVE. OTHER DISK FEATURES ARE RELATIVELY SIMPLE AND STABLE. THE GEOMAGNETIC FIELD HAS REMAINED QUIET FOR THE PAST SEVEN HOURS.  
B. DURING THE THREE-DAY FORECAST PERIOD, REGION 235 PROBABLY WILL PRODUCE SEVERAL CLASS M FLARES AND PERHAPS ONE MAJOR CLASS X FLARE. THERE IS A SMALL BUT INCREASING CHANCE THAT A PROTON EVENT COULD RESULT FROM A SUFFICIENTLY ENERGETIC FLARE IN REGION 235. THE GEOMAGNETIC FIELD PROBABLY WILL REMAIN GENERALLY QUIET WITH A FEW SHORT PERIODS OF MINOR DISTURBANCE.  
C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 22 AUG/0000Z ENDING 24 AUG/2400Z  
CLASS M OR GREATER 90/92/95  
CLASS X 20/25/25  
PROTON EVENTS 25/25/30  
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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 234B ISSUED 2200Z 22 AUGUST 1971  
CLASS M FLARES EXPECTED THE NEXT 24 HOURS.

A. SOLAR FLARE ACTIVITY HAS DECLINED DURING THE PAST 17 HOURS.  
REGION 235 /S11E12/ HAS DECLINED IN BOTH FLARE ACTIVITY AND  
RADIO BRIGHTNESS. A CLASS M2 IMPORTANCE 1B FLARE WAS PRODUCED  
BY 235 ALONG WITH A REPORTED 2700 MHZ RADIO BURST FROM 140-185  
FLUX UNITS AT ABOUT 22/0750Z. REGION 235 IS NOW OF  
CLASS/AREA F/1620 MILLIONTHS OF THE SOLAR HEMISPHERE WITH A  
RELATIVELY SIMPLE BIPOLAR SPOT STRUCTURE. POINT BRIGHTENINGS  
AND FLUCTUATIONS CONTINUE IN 235. ALL OTHER REGIONS REMAIN  
STABLE. THE GEOMAGNETIC FIELD HAS BEEN UNSETLED THE PAST  
24 HOURS.

B. CLASS M FLARES ARE EXPECTED FROM REGION 235. CLASS X EVENTS  
ARE POSSIBLE. EXPECT THE GEOMAGNETIC FIELD TO REMAIN UNSETLED  
TO QUIET FOR THE NEXT 72 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24  
HOUR PERIODS BEGINNING 23 AUG/0000Z ENDING 25 AUG/2400Z.

CLASS M OR GREATER 90/85/80

CLASS X 25/20/20

PROTON EVENTS 25/20/20

D. OTTAWA 10.7 CM FLUXES FOR 22/1400Z, 22/1700Z AND 22/2000Z  
WERE 149, 148 AND 150 RESPECTIVELY.

PREDICTED 10.7 CM FLUX FOR 23-25 AUG IS 145/145/140.

E. MAGNETIC A-FREDERICKSBURG FOR 21 AUG WAS 10. FOR 22 AUG  
ABOUT 10. PREDICTED AP FOR 23-25 AUG, 09/08/06.

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