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PP KGFF

DE R01 211715Z

HFFF IS THE MESSAGE FOR RFFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 238A ISSUED 1700Z 21 APRIL 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 12 HOURS

A. ACTIVE CENTERS OF INTEREST ARE CURRENTLY LOCATED NEAR N22W32,  
N22W60, AND S10W15. THE N22W32 REGION REMAINS THE MOST IMP-  
RESSIVE AND ACTIVE. THIS REGION HAS SHOWN SPOT GROWTH, CHIEFLY  
PENUMBRAL DEVELOPMENT, AND THE ASSOCIATED PLAGE CONSISTS OF  
BRIGHT, PARALLEL E-W RIBBONS. THE REGION PRODUCED TWO CLASS M  
FLARES, 21/0346Z IMP SUB NORMAL AND 21/0805Z IMP ONE BRIGHT, AND  
AN IMP ONE NORMAL CLASS C FLARE AT 20/2225Z. THE N22W60 REGION  
APPEARS TO BE A NEW, RAPIDLY DEVELOPING REGION WITH COMPLEX  
ABSORPTION FEATURES. SIGNIFICANT SPOT GROWTH HAS OCCURRED IN  
THE S10W15 REGION AND THE ASSOCIATED COMPACT PLAGE IS CURRENTLY  
THE BRIGHTEST FEATURE ON THE DISK. THIS REGION PRODUCED AN IMP  
ONE NORMAL CLASS C FLARE AT 21/1145Z. THE GEOMAGNETIC FIELD HAS  
BEEN QUIET.

B. THE ABOVE MENTIONED REGIONS ARE EXPECTED TO CONTINUE TO  
PRODUCE CLASS M FLARES. THE N22W32 AND N22W60 REGIONS ARE  
CONSIDERED TO BE APPROACHING CLASS X POTENTIAL. IF PRESENT  
TRENDS CONTINUE EITHER OR BOTH OF THESE REGIONS COULD PRODUCE  
CLASS X EVENTS BEFORE WEST LIMP PASSAGE.

FORECASTS FOR 22-24 APRIL

C. DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS  
CLASS M OR GREATER 80/80/80

CLASS X 20/25/30

PROTON EVENTS 20/25/30

D. OTTAWA 10.7 CM FLUX TODAY IS 156. PREDICTED 158/160/155.

E. N/A.

F. KP ESTIMATED FOR 1200-1500Z WAS 1. KP FORECAST FOR NEXT  
24 HOURS ; 1/1/1/1/1/1/1/1.

SOLTEPWARN

BT

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PP KGFF  
DE BOU 212325Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 238B ISSUED 2300Z 21 APRIL 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 18 HOURS.

A. AN IMP THREE BRIGHT FLARE IN THE REGION NEAR N22W32 AT 21/1959Z  
WAS A LARGE CLASS M AND POSSIBLY CLASS X. SATELLITE X-RAY DATA  
CURRENTLY AVAILABLE MISSED FLARE PEAK. THE FLARE CONSISTED OF A  
RIBBON ALONG THE NEUTRAL LINE AND SHOWED PARTIAL COVERAGE OF THE  
MAIN UMBRA. RADIO BURST DATA CURRENTLY AVAILABLE GIVE CONFLICTING  
IMPRESSIONS OF THE ENERGY OUTPUT OF THE FLARE. HOWEVER, MODERATE  
TO SEVERE IONOSPHERIC DISTURBANCES WERE OBSERVED. THE FORT CHURCHILL  
30 MHZ RIOMETER SHOWED 2DB ABSORPTION FOR 15 MIN FOLLOWING THE FLARE  
ONSET. PROTONS MUST BE CONSIDERED A DISTINCT POSSIBILITY.

SECTIONS B C AND D REMAIN UNCHANGED FROM SDF 238A.

E. MAGNETIC A-FREDERICKSBURG FOR 20 APRIL WAS 06. FOR 21 APRIL  
ABOUT 10. PREDICTED AP FOR 22-24 APRIL 10/15/20.

BT