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PP KGFF  
DE BOU 291730Z  
HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 215A ISSUED 1700Z 29 MARCH 1969  
CLASS M FLARES ARE EXPECTED IN THE NEXT 6 HOURS  
A. THE REGION AT APPROXIMATELY N18E82 NOW APPEARS OF AT LEAST  
BIPOLEAR COMPLEXITY. RAPID GROWTH OF NEW SPOTS IS APPARENT IN  
THE YOUNG REGION AT S08W01. THE MAJOR REGION AT N21 IS ON WEST  
LIMB TODAY, AND PRODUCED A CLASS M FLARE BEGINNING 29/1334Z.  
THIS REGION WAS ALSO THE SOURCE OF THE FLARE BEGINNING 28/0058Z  
WHICH APPEARS TO HAVE BEEN A CLASS X EVENT. THE REGION AT N10E54  
IS MOST IMPRESSIVE IN SIZE-REPORTED VARIOUSLY AS FROM 950 TO  
2000 MILLIONTHS-MAGNETIC COMPLEXITY, AND FLARE PRODUCTION.  
CLASS M FLARES HAVE BEEN REPORTED FROM THIS REGION BEGINNING  
29/0340Z /TIME OF X-RAY BURST; OPTICAL FLARE REPORTED AT 0356Z/  
AND 29/0726Z. THE GEOMAGNETIC FIELD IS DISTURBED.  
B. CLASS M FLARES ARE EXPECTED FROM WEST LIMB AND N10E54 REGIONS.  
CLASS X FLARES ARE QUITE POSSIBLE FROM THE LATTER REGION. SINCE  
THIS REGION PRODUCED A PROTON FLARE AT LAST WEST LIMB PASSAGE,  
PROTONS MUST BE CONSIDERED QUITE POSSIBLE, ALTHOUGH THE REGION  
IS NOT IN TRADITIONAL PROTON LONGITUDE.

FORECASTS FOR 30 MARCH-01 APRIL

C. DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS

CLASS M OR GREATER 80/80/80

CLASS X 40/40/40

PROTON EVENTS 30/30/30

D. OTTAWA 10.7 CM FLUX TODAY IS 187. PREDICTED 190/195/200.

E. N/A.

F. KP ESTIMATED FOR 1200-1500Z WAS 3. 24 HOUR FORECAST PER  
KP 15.3; 3,3,3,3,3,2,2,3.

SOLTERWARN

BT

PP KGFF

DE BOU 29231

THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 215B ISSUED 2300Z 29 MARCH 1969

CLASS X FLARES ARE EXPECTED IN THE NEXT 18 HOURS.

A. IN ADDITION TO THE CLASS M FLARES LISTED IN SDF 215A, A PROGRESSIVE BRIGHTENING OF THE N10E47 REGION MUST NOW BE LISTED AS A TECHNICAL CLASS M EVENT. A REGION CLOSE TO THE TRAILING SPOT INITIATED A SUBFLARE BEGINNING 29/1448Z AND ANOTHER PORTION TO THE SOUTHWEST BRIGHTENED TO SUBFLARE LEVEL BEGINNING 29/1511Z. X-RAY DATA SHOWS A SLOW GRADUAL INCREASE IN 0.5-5 ANGSTROM FLUX BEGINNING 1435Z AND REACHING MAXIMUM AT 1534Z. THIS SUGGESTS THAT THE ACTIVE CENTER ABOVE THE REGION WAS EXPERIENCING CONTINUAL ENERGY INPUT ALTHOUGH THE CHROMOSPHERIC ACTIVITY APPEARED DISCONTINUOUS. TWIN FLARES, OPTICALLY ONE BRIGHT, WERE OBSERVED FROM THIS REGION BEGINNING 29/1913Z AND 29/2000Z. BOTH EVENTS ARE TENTATIVELY CLASSED AS M, AND BOTH PRODUCED RADIO BURSTS WITH FLUX MAXIMA AT 3 CM (OR SHORTER) WAVELENGTH. PRONOUNCED IONOSPHERIC EFFECTS FOLLOWED BOTH EVENTS. A NEW REGION HAS APPEARED AT N15W54, AND SPOT FORMATION AT S15W12 IS EXPECTED. THE REGION AT N21E70 APPEARS DYNAMIC ALSO. THE GEOMAGNETIC FIELD APPEARS TO BE QUIETING.

SECTIONS B C AND D REMAIN UNCHANGED FROM SDF 215A.

E. MAGNETIC A-FREDERICKSBURG FOR 28 MAR WAS 05. FOR 29 MAR ABOUT 08.  
PREDICTED AP FOR 30 MAR-1 APR 10/10/10.

BT