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PP KGFF  
DE BOU 181715Z  
HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER, ESSA BOULDER COLO  
SDF NUMBER 235A ISSUED 1700Z 18 APRIL 1969

CLASS M FLARES ARE EXPECTED DURING THE NEXT 6 HOURS

A. HIGHLIGHTS FOR THE PERIOD 10-17 APRIL 1969 CLN

CLASS C ACTIVITY WAS AT A HIGH LEVEL IN THE REGIONS CURRENTLY  
EXTENDING FROM N08-25 IN LATITUDE AND W24-E17 /L106-065/ IN  
LONGITUDE. ADDITIONALLY, 10 SMALL CLASS M EVENTS HAVE BEEN  
OBSERVED SINCE THE EVENTS ON THE NE LIMB AT 10/0355Z /CLASS X/  
AND 10/1056Z /CLASS M/ WITH THE LAST BEGINNING 18/1015Z AT  
N22E29 /L037/. ACTIVITY DURING THE PERIOD WAS DOMINATED BY  
AN ENERGETIC PARTICLE EVENT WHICH BEGAN ABOUT 11/1200Z AND WHICH  
WAS PRESUMABLY ASSOCIATED WITH ONE OR BOTH OF THE ABOVE LIMB  
EVENTS. THE FLUX OF HIGH ENERGY PROTONS, /ENERGY GREATER THAN  
25 MEV/, REACHED A PEAK OF 2100 PERCENT ABOVE BACKGROUND AT  
12/0200-0800Z AND DECAYED SLOWLY BUT STEADILY THEREAFTER. THESE  
HIGH ENERGY PARTICLES HAVE NOW RETURNED TO ALMOST BACKGROUND LEVEL.  
THE FLUX OF PROTONS WITH ENERGIES FROM 3-20 MEV REACHED LEVELS 570  
PERCENT ABOVE ITS LEVEL ON 10 APRIL OR 200,000 PERCENT ABOVE ITS  
LEVEL BEFORE THE 30 MARCH 1969 PROTON EVENT, AND THE FLUX OF THESE  
LOW ENERGY PROTONS HAS DECAYED VERY LITTLE. A SMALL FORBUSH DECREASE  
FIRST BECAME DETECTABLE ABOUT 13/0000Z; BY 13/0800Z NEUTRON MONITOR  
COUNTING RATES WERE DEPRESSED BY ABOUT 5 PERCENT, AND THE REMAIN  
DEPRESSED BY 3 TO 4 PERCENT. THE IONOSPHERE AT HIGH LATITUDES  
DECAME DISTURBED ON 12 APRIL, AND BY 13/0000Z THE DISTURBANCE  
HAD BECOME SEVERE. DURING 13 APRIL 30 MHZ RIOMETERS SHOWED THE  
FOLLOWING MAXIMUM ABSORPTION; THULE 12 DB, FORT YUKON 11 DB,  
COLLEGE 20 DB, AND PAXSON 20 DB, ALTHOUGH THE LAST TWO MEASUREMENTS  
MAY BE CONTAMINATED WITH ELECTRON PRECIPITATION. THE PCA EVENT  
CONTINUES AT GREATLY REDUCED INTENSITY. THE GEOMAGNETIC FIELD  
WAS MODERATELY DISTURBED AT HIGH LATITUDES THROUGHOUT THE PERIOD,  
AND A MINOR STORM AT ALL LATITUDES BEGAN WITH A SUDDEN COMMENCEMENT  
AT 12/2046Z.

B. FORECAST FOR THE WEEK 19-25 APRIL 1969 CLN

FREQUENT CLASS M FLARES ARE EXPECTED DURING THE WEEK. THE SEVERAL  
ACTIVE CENTERS IN THE NORTHERN HEMISPHERE ARE CONNECTED BY EM-  
BEDDED FILAMENTS AND BRIGHT PLAGE LINKAGES, INDICATING THAT INTER-  
ACTION MAY OCCUR BETWEEN THEM.

28-DAY FORECAST FOR 19 APRIL -16 MAY 1969 CLN

ACTIVITY IS EXPECTED TO BE ENHANCED DURING THE PERIODS 19-26 APRIL  
AND 02-06 MAY.

FORECASTS FOR 19-21 APRIL AND EXPECTED MEAN FORECASTS FOR 22-25  
APRIL 1969

C. DAILY PERCENT PROBABILITIES FOR FLARES AND PROTON EVENTS

CLASS M OR GREATER 80/80/80 /80/

CLASS X 15/15/15 /15/

PROTON EVENTS 15/15/15 /15/

D. OTTAWA 10.7 CM FLUX TODAY IS 152. PREDICTED 145/140/135 /135/.

E. N/A.

F. KP ESTIMATED FOR 1200-1500Z WAS 1. KP FORECAST FOR NEXT 24  
HOURS PER KP 15.3; 2/2/2/2/2/2/2/2.

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THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 235B ISSUED 2300Z 18 APRIL 1969

CLASS M FLARES ARE EXPECTED.

A. MINOR FLARE ACTIVITY HAS BEEN CONFINED TO THE REGIONS AT N07W25 AND N24E23. PATHOLOGIC EVOLUTION IS REPORTED IN THE GROUP AT S14W26. THE FILAMENT IN THE REGION AT N22E03 IS STILL ACTIVE. PROTON PRECIPITATION IS STILL IN EVIDENCE AT HIGH LATITUDES, WITH THULE RIOMETER REPORTING 0.7 DB ABSORPTION AT 30 MHZ. THE GEO-MAGNETIC FIELD IS MODERATELY DISTURBED.

B. CLASS M FLARES ARE PROBABLE. INTENSIFIED MAGNETIC DISTURBANCE IS EXPECTED, BEGINNING BETWEEN 6 AND 9 HOURS UT.

SECTION C REMAINS UNCHANGED FROM SDF 235A.

E. MAGNETIC A-FREDERICKSBURG FOR 17 APR WAS 13. FOR 18 APR ABOUT 15. PREDICTED AP FOR 19-21 APR 25/15/10.

BT