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PP KGFF  
DE BOU 231720Z

HERE IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 270A ISSUED 1700Z 23 MAY 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT SIX HOURS.

A. HIGHLIGHTS FOR THE PERIOD 15-22 MAY 1969 CLN

THE WEEK BEGAN QUIETLY, WITH ONLY CLASS C FLARES REPORTED ON THE 15TH AND 16TH. ON THE 17TH, A NEW REGION AT N09(L312) BEGAN ROTATING ONTO THE VISIBLE DISK. IT PRODUCED A CLASS M EVENT AT 17/1922Z (OPTICAL IMP 1B). ON THE 18TH IT PRODUCED 3 CLASS M EVENTS AND 1 CLASS X EVENT. THE OLDER REGION AT N17(L068) PRODUCED 3 CLASS M EVENTS ON THAT DATE. THE SAME DAY, A LARGE REGION AT S15(L319) BEGAN ROTATION ONTO THE VISIBLE DISK AND A NEW REGION WAS BORN ON THE DISK AT S12(L338) AND BEGAN GROWING VIGOROUSLY. ON THE 19TH AND 20TH, THE NORTHWEST REGION PRODUCED A CLASS M EVENT DAILY BEFORE PASSING OVER WEST LIMB. THE N09(L312) REGION DID NOT SHOW MUCH CHANGE IN AREA DURING THE LAST HALF OF THE WEEK, BUT BEGAN A PHASE IN WHICH NEW GROWTH OF SATELLITE SPOTS ENCIRCLED THE OLDER PENUMBRA. FLARES CONTINUED FROM THE REGION OF A KINK IN THE NEUTRAL LINE AT AN AVERAGE RATE OF ONE CLASS M EVENT PER DAY. STARTING ON THE 19TH, NEW REGIONS CONTINUED TO ROTATE OVER EAST LIMB. CURRENTLY, THESE (THREE) SEEM MAGNETICALLY SIMPLE, BUT CLASS M FLARES AT 22/0431Z, AND PARTICULARLY AT 22/1902Z WHICH MAY HAVE TRIGGERED A SYMPATHETIC RESPONSE AT 22/1935Z FROM N09(L312) INDICATE TENDENCY OF THE REGIONS TO INTERACT. THE S12 (L338) REGION GREW RAPIDLY IN SIZE AND COMPLEXITY, BUT TO DATE HAS PRODUCED ONLY TWO CLASS M EVENTS. RECENT NEW GROWTH ON ITS SOUTHERN SIDE INDICATES INCREASING MAGNETIC COMPLEXITY. FROM THE S15(L319) REGION, ONLY ONE CLASS M EVENT HAS BEEN REPORTED, AND THE REGION APPEARS QUIET. THE DEKAMETRIC RADIO CONTINUUM AND METRIC NOISE STORM ENDED AT SOME TIME AFTER 23/0000Z. THE MAGNETIC STORM WHICH BEGAN 14/1930Z ENDED 16/1400Z WITH THE MAXIMUM A-VALUE OF 64 REPORTED ON THE 15TH. THE FIELD HAS BEEN SOMEWHAT DISTURBED SINCE THEN, WITH POLAR VALUES SHOWING HIGH K INDICES NIGHTLY. PROTON FLUXES AT ORBIT EARTH WERE AT BACKGROUND THROUGHOUT THE WEEK IN BOTH HIGH AND LOW ENERGY RANGES.

B. FORECAST FOR THE WEEK 24-30 MAY 1969 CLN

THE S12(L338) REGION APPEARS TO HAVE EVOLVED TOWARD SIMPLICITY. TWO NEW BIPOLE REGIONS HAVE EMERGED ON THE POLAR SIDE OF THIS REGION, THUS SHOWING INTERACTIVE POTENTIAL. CLASS M ACTIVITY IS EXPECTED. THE N09(L312) REGION IS STILL EVOLVING TOWARD GREATER MAGNETIC COMPLEXITY, AND SEEMS POTENTIALLY A SEAT FOR MAJOR FLARE ACTIVITY. INTERACTION BETWEEN REGIONS HAS ALREADY OCCURRED AS DESCRIBED ABOVE. CLASS M ACTIVITY IS PROBABLE AND SPORADIC. MAJOR ACTIVITY IS POSSIBLE. ACTIVITY DURING THE WEEK IS THUS EXPECTED TO BE MODERATELY ENHANCED.

28-DAY FORECAST FOR 24 MAY-20 JUNE 1969 CLN

ACTIVITY IS EXPECTED TO BE MODERATELY ENHANCED DURING 24-30 MAY AND ENHANCED CONSIDERABLY 04-10 JUNE 1969.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 23/1700Z ENDING 26/1700Z.

CLASS M OR GREATER 90/90/90

CLASS X 30/30/30

PROTON EVENTS 20/20/20

D. OTTAWA 10.7 CM FLUX TODAY IS 168. PREDICTED 165/165/165.

E. N/A

F. KP ESTIMATED FOR 1200-1500Z WAS 03. KP FORECAST FOR NEXT 24 HOURS PER KP 15.3; 3/3/3/3/3/2/2/3.

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NNNNUV  
PP KGFF  
DE BOU 232300Z  
THIS IS THE MESSAGE FOR REFILE

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO  
SDF NUMBER 270B ISSUED 2300Z 23 MAY 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT 18 HOURS.

A. ALTHOUGH ONLY CLASS C FLARES HAVE BEEN REPORTED IN THE LAST 6 HOURS, DEVELOPMENT IN TWO REGIONS IS INTERESTING. IN THE SOUTHERN PORTION OF THE REGION AT N09E08 CLOSELY SPACED SPOTS OF OPPOSITE POLARITY RESULT IN THE PRESENCE OF HIGH MAGNETIC GRADIENTS.

SIMILARLY, THE TRAILING PORTION OF THE NEW REGION AT S20W22 AND THE LEADING SPOT OF THE NEW REGION AT S24W17 ARE OF OPPOSITE POLARITY AND ARE QUITE CLOSE. A DARK, HARD FILAMENT POINTS TO THE PLAGE CORRIDOR TRANSVERSE TO THIS REGION OF HIGH GRADIENT, ENHANCING INTEREST IN THIS LOCALITY. H-ALPHA PLAGE IS BRIGHT AROUND THIS LOCATION. PLAGE IN THE N11W09 REGION IS BRIGHT, BUT MAGNETIC COMPLEXITY IS LACKING. THE GEOMAGNETIC FIELD IS SLIGHTLY DISTURBED. PROTON FLUXES REMAIN AT BACKGROUND.

B. CLASS M FLARES ARE EXPECTED FROM N09E08 AND S20-26 W17-23 REGIONS. GEOMAGNETIC DISTURBANCE IS EXPECTED TO SUBSIDE, WITH RENEWED ACTIVITY BEGINNING 26/0000Z, APPROXIMATELY.

SECTIONS C AND D REMAIN UNCHANGED FROM SDF 270A.

E. MAGNETIC A-FREDERICKSBURG FOR 22 MAY WAS 09. FOR 23 MAY ABOUT 10. PREDICTED AP FOR 24-26 MAY 10/10/25.

BT

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