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KMSC

HAUS BOU 120400

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 838A ISSUED 0400Z 12 DECEMBER 1970

CLASS M ACTIVITY IS EXPECTED AND OCCASIONAL CLASS X ACTIVITY IS PROBABLE DURING THE NEXT 13 HOURS.

A. REGION N16W00 PRODUCED A TWO NORMAL FLARE AT 11/2215Z. THIS FLARE PRODUCED A MAJOR RADIO BURST ON 10CM, 1020 FLUX UNITS OVER BACKGROUND. VERY SMALL IONOSPHERIC EFFECTS WERE NOTED FROM THE FLARE. THE REGIONS N11E28 AND N14W00 ARE BOTH CLASSIFIED BY MT WILSON AS BETA GAMMA REGIONS WITH DELTA CONFIGURATIONS. THE REGION S05W21 IS ALSO A BETA GAMMA REGION. THE GEOMAGNETIC FIELD IS QUIET.

B. CLASS M AND CLASS X FLARES ARE PROBABLE FROM THE REGIONS N14W00, N11E28 AND S05W21. THE GEOMAGNETIC FIELD WILL HAVE DISTURBED CONDITIONS IN ABOUT 36 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 12 DEC/0400Z ENDING 15 DEC/0400Z.

CLASS M OR GREATER 100/100/100

CLASS X 50/50/50

PROTON EVENTS 05/05/05

D. OTTAWA 10.7 CM FLUXES FOR 11/1700Z AND 11/2000Z WERE 184 AND 176 RESPECTIVELY.

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HAUS BOU 121700

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 838B ISSUED 1700Z 12 DEC 1970

CLASS-M FLARES ARE EXPECTED AND A CLASS-X FLARE IS LIKELY DURING THE NEXT 11 HOURS.

A. SOLAR ACTIVITY HAS REMAINED AT A RELATIVELY HIGH LEVEL DURING THE PAST 13 HOURS. AT LEAST TWO CLASS-M EVENTS HAVE OCCURRED; THE MOST ENERGETIC OF THESE EVENTS WAS A SUB-BRILLIANT CLASS-M4 FLARE THAT OCCURRED AT 12/0856Z FROM THE REGION AT N12E18. BOTH THE N12E18 AND N15W08 COMPLEXES HAVE PRODUCED OCCASIONAL SMALL FLARES RECENTLY. ALTHOUGH DEVELOPMENT HAS SLOWED IN THE N15W08 COMPLEX, SIGNIFICANT PENUMBRA GROWTH HAS OCCURRED IN THE CENTER OF THE N12E18 REGION. THE REGION AT S04W30 HAS EXHIBITED RAPID GROWTH AND PRESENTLY CONTAINS A D/150 SPOT GROUP, ALTHOUGH LITTLE SIGNIFICANT ACTIVITY HAS BEEN OBSERVED AT THAT SITE. ALL OTHER REGIONS ON THE DISK ARE RELATIVELY UNIMPRESSIVE. A MINOR PROTON ENHANCEMENT IS IN PROGRESS ON THE ATS-1 SATELLITE. THE COUNTING RATES BEGAN INCREASING GRADUALLY AT ABOUT 12/0500Z; PRESENT RATES ARE APPROXIMATELY 25 PARTICLES/CM2/SEC AT 5-20 MEV AND 2 PARTICLES/CM2/SEC AT 20-70 MEV. BOTH PROTON CHANNELS SHOW INCREASING COUNTING RATES AT THIS TIME. THE GEOMAGNETIC FIELD HAS REMAINED RELATIVELY QUIET DURING THE PAST 24 HOURS.

B. THE PRODUCTION OF ENERGETIC FLARES AT THE N12E18, N15W08, AND S04W30 SITES IS EXPECTED TO CONTINUE; DURING THE THREE-DAY FORECAST PERIOD, OCCASIONAL CLASS-M FLARES AND ONE OR TWO CLASS-X FLARES ARE LIKELY. THE GEOMAGNETIC FIELD PROBABLY WILL REMAIN RELATIVELY QUIET FOR THE NEXT 24 HOURS, BUT A GEOMAGNETIC DISTURBANCE IS ANTICIPATED SOMETIME AFTER 13/1700Z. ATS-1 PROTON COUNTING RATES ARE EXPECTED TO INCREASE SLIGHTLY DURING THE NEXT SEVERAL HOURS, BUT A SIGNIFICANT POLARCAP ABSORPTION IS NOT LIKELY TO RESULT FROM THE PRESENT EVENT.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 12 DEC/1700Z ENDING 15 DEC/1700Z.

CLASS M OR GREATER 100/100/100

CLASS X 50/50/50

PROTON EVENTS 10/15/20

D. OTTAWA 10.7 CM FLUX FOR 12/1400Z WAS 184. PREDICTED 10.7 CM FLUX FOR 13-15 DEC IS 187/185/185.

E. MAGNETIC A-FREDERICKSBURG FOR 11 DEC WAS 01. FOR 12 DEC ABOUT 03. PREDICTED AP FOR 13-15 DEC, 12/20/15.

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