

NNNN

KMSC

HAUS BOU 310400Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 523A ISSUED 0400Z 31 JANUARY 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 13 HOURS

A. SOLAR ACTIVITY HAS REMAINED AT A HIGH LEVEL DURING THE PAST 24 HOURS. THE REGION S16W61 HAS PRODUCED MOST ACTIVITY. THE REGION S08W25 HAS INCREASED IN ACTIVITY DURING THE PAST 11 HOURS. THE SATELLITE PROTON COUNT HAS BEEN SLOWLY DECREASING. THE MAGNETIC DISTURBANCE HAS NOT REACHED STORM PROPORTIONS.

B. SOLAR ACTIVITY WILL REMAIN AT ITS PRESENT LEVEL. MORE ACTIVITY IS EXPECTED FROM REGION S08W25. THE REGION S16W61 IS STILL THE MOST ACTIVE AND IS STILL CAPABLE OF PRODUCING CLASS X FLARES. MAGNETIC DISTURBANCE WILL CONTINUE DURING NEXT 24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 31 JAN/0400Z ENDING 03 FEB/0400Z.

CLASS M OR GREATER 80/80/80

CLASS X 40/40/40

PROTON EVENTS 20/20/20

D. OTTAWA 10.7CM FLUXES AT 30/1700Z AND 2000Z WERE 168 AND 161 RESPECTIVELY.

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FMSC

HAUS BOU 311905Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 523B ISSUED 1700Z 31 JANUARY 1970

CLASS M FLARES ARE EXPECTED IN THE NEXT 11 HOURS.

A. A CLASS M FLARE BEGAN 31/1505Z. ITS OPTICAL IMPORTANCE WAS 2B, BUT ONLY MODERATE X-RAYS (AS EVIDENCED BY PROMPT IONOSPHERIC EFFECTS) WERE APPARENT. RADIO NOISE AT 10 CENTIMETERS WAS MINOR (28 FLUX UNITS) BUT DEKAMETRIC TYPE II AND TYPE IV (WEAK) WAS OBSERVED. PROTONS (OBSERVED BY ATS-1) IN THE 20-70 AND 5-20 MEV ENERGY RANGES BEGAN AT 31/1628Z. CURRENTLY, THE FLUX IN THE HIGH ENERGY RANGE IS ABOUT ~~200~~ PER SQ CM PER SEC, AND INCREASING. THE OPTICAL FLARE ORIGINATED CLOSE TO A DECAYING SPOT WHOSE COORDINATES YESTERDAY WERE S22W49, AND CANNOT BE SEEN TODAY. FROM THIS IGNITION POINT TWO PARALLEL RIBBONS EXTENDED NORTHWESTWARD ALONG THE NEUTRAL LINE AND EXTENDED INTO THE SPOT GROUP AT S16W72 (TODAY'S COORDINATES). THE PARALLEL RIBBONS THEN EXTENDED SOUTHEASTWARD FROM THE IGNITION POINT ON BOTH SIDES OF A LARGE FILAMENT, WHICH EXTENDED FROM THE "DISAPPEARED SPOT" TOWARD THE SOUTH POLE. A PORTION OF THIS FILAMENT DISAPPEARED, BUT HAS SINCE REAPPEARED. ELSEWHERE, PENUMBRAL REORGANIZATION IS REPORTED IN THE S16W72 REGION, WITH MOUNT WILSON INDICATING THAT THE DELTA CONFIGURATION, REPORTED YESTERDAY, WAS NO LONGER PRESENT. THE GEOMAGNETIC FIELD IS QUIET.

B. POLAR CAP ABSORPTION OF MODERATE STRENGTH IS EXPECTED DURING THIS FORECAST PERIOD. CLASS M FLARES ARE EXPECTED FROM THE S16W72 REGION. A GEOMAGNETIC DISTURBANCE IS EXPECTED BEGINNING 01/2100Z FEB APPROXIMATELY.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 31 JAN/1700Z ENDING 03 FEB/1700Z.

CLASS M OR GREATER            80/80/80

CLASS X                        35/35/25

PROTON EVENTS                15/15/10

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 152. PREDICTED 145/135/125.

E. MAGNETIC A-FREDERICKSBURG FOR 30 JAN WAS 12. FOR 31 JAN ABOUT 06. PREDICTED AP FOR 01-03 FEB,    40/25/10.

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