

NNNN0350

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KMSC

HAUS BOU 080400Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 559A ISSUED 0400Z 08 MARCH 1970

CLASS M FLARES ARE PROBABLE DURING THE NEXT 13 HOURS.

A. DURING THE SOLAR ECLIPSE THE FOLLOWING FLARES WERE OBSERVED-

2N S13E42 1601Z, SN S15W80 1735Z, SN N04W38 1818Z, SF N06W35 1822Z,
SN N06W36 1844Z, SN N08W38 1858Z, SF S17W21 1919Z. THE FLARE 1601Z
WAS CLASSIFIED AS AN M FLARE ALL OTHERS WERE CLASS C. FLARE ACTIVITY
HAS BEEN QUITE ACTIVE DURING PAST 24 HOURS. THE ATS-1 SATELLITE
INDICATES PROTON COUNT ON 20-70 MEV TO BE ABOUT 20 PARTICLES PER SQ
CM PER SECOND AT PRESENT TIME. A SMALL PCA HAS BEEN REPORTED FROM
THE THULE RIOMETERS. THE GEOMAGNETIC FIELD REMAINS DISTURBED.

B. FLARES CAN BE EXPECTED FROM REGIONS S14E37, N05W39, AND FROM
S20W80 AS IT STARTS ITS WEST LIMB PASSAGE. A NEW REGION S16W22
WHICH SHOWED RAPID GROWTH 07/2000-2300Z SHOULD BE WATCHED FOR FLARE
ACTIVITY. THE GEOMAGNETIC FIELD WILL REMAIN DISTURBED DURING THE
PERIOD.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR
PERIODS BEGINNING 08 MAR/0400Z ENDING 11 MAR/0400Z

CLASS M OR GREATER 80/80/80

CLASS X 30/30/30

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUX 07/1700Z AND 2000Z WERE BOTH 173.

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HAUS BOU 081758Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 559B ISSUED 1700Z 08 MAR 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS. A MAJOR GEOMAGNETIC DISTURBANCE IS EXPECTED TO CONTINUE.

A. SOLAR ACTIVITY HAS BEEN LOW AND APPARENTLY ALL CLASS C THE PAST 13 HOURS. FLARES INCLUDE AN IMP ONE BRIGHT AT 08/0105 NEAR N08W50 AND AN IMP ONE NORMAL AT 08/0330Z NEAR S20W88 AND SUBFLARES FROM REGIONS NEAR S15E26 AND S11W11. BOTH THE LATTER REGIONS HAVE SHOWN FURTHER SPOT DEVELOPMENT AND APPARENT INCREASE IN COMPLEXITY. PROTON FLUXES NEAR EARTH REMAIN ENHANCED. ATS-1 CURRENTLY INDICATES A FLUX OF ABOUT 20 PARTICLES PER SQ CM PER SEC IN THE 20-70 MEV RANGE. THE THULE 30MHZ RIOMETER SHOWED

1.5 DB ABSORPTION AT 08/0947Z. A MAJOR MAGNETIC DISTURBANCE BEGAN AT ABOUT 08/1420Z. AT BOULDER, BOTH THE H AND D TRACES SHOWED POSITIVE INCREASES OF ABOUT 50 GAMMA FOLLOWED BY NEGATIVE EXCURSIONS IN EXCESS OF 200 GAMMA WITHIN A TIME SPAN OF 10 MIN. PRELIMINARY REPORTS FROM FT. CHURCHILL INDICATE A MAXIMUM DEVIATION IN EXCESS OF 1000 GAMMA WITH A RATE OF CHANGE OF THE ORDER OF 6 GAMMA PER SECOND. TUCSON REPORTED A K-INDEX OF 8 FROM THE EVENT. THE MAGNETIC DISTURBANCE WAS ACCOMPANIED BY A SEVERE IONOSPHERIC DISTURBANCE. HF RADIO COMMUNICATIONS WERE SEVERLY DISRUPTED AND THE THULE RIOMETERS SHOWED 5.9DB ABSORPTION AT 30MHZ AND TOTAL ABSORPTION AT 20MHZ FOLLOWING THE ONSET OF THE EVENT.

B. CLASS M FLARES ARE EXPECTED FROM THE S15E26 AND S11W11 REGIONS. LIMB EVENTS ARE POSSIBLE FROM THE REGION WHICH JUST CROSSED WEST LIMB NEAR S20. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN SEVERELY DISTURBED FOR THE NEXT 12-24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 08 MAR/1700Z ENDING 11/1700Z.

CLASS M OR GREATER 80/80/80

CLASS X 30/30/30

PROTON EVENTS 10/10/10

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 175. PREDICTED 180/138/196.

E. MAGNETIC A-FREDERICKSBURG FOR 07 MAR WAS 32. FOR 08 MAR ABOUT 50 PREDICTED AP FOR 09-11 MAR, 30/20/15.

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