

NNNN0350

NNNN0351

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KMSC

HAUS BOU 200400Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 481A ISSUED 0400Z 20 DECEMBER 1969

THE MOST SIGNIFICANT ACTIVITY ANTICIPATED DURING THE NEXT 13 HOURS IS ONE OR PERHAPS 2 CLASS M FLARES.

A. INACTIVITY HAS BEEN THE ORDER SINCE THE LAST MESSAGE. THERE HAS BEEN LITTLE CHANGE REPORTED IN ANY OF THE DISC FEATURES. CURRENTLY THE BRIGHTEST PLAGE IS THAT ASSOCIATED WITH THE SMALL REGION NEAR S09W26.

B. THERE EXISTS SOME PIONEER 7 AND 8 SPACECRAFT DATA THAT INDICATE A MAGNETIC DISTURBANCE WILL BEGIN DEC 21.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 20 DEC/0400Z ENDING 23 DEC/0400Z.

CLASS M OR GREATER 60/60/40

CLASS X 10/10/05

PROTON EVENTS 05/15/10

D. OTTAWA 10.7 CM FLUXES FOR 19/1700 AND 2000Z WERE 152 AND 151

RESPECTIVELY

SOLTERWARN

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NNNN1831

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KMSC

HAUS BOU 201815Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 481B ISSUED 1700Z 20 DEC 1969

CLASS M FLARES ARE EXPECTED IN THE NEXT 11 HOURS.

A. CONSIDERABLE WHITE LIGHT GROWTH IS APPARENT IN THE THREE SOUTHERN REGIONS. THE REGION AT S10W30 IS MAGNETICALLY CLASSIFIED A GAMMA BY MOUNT WILSON ALTHOUGH ITS H-ALPHA APPEARANCE IS RATHER BROKEN. GROWTH AND INSTABILITY (MINOR FLARES) ARE APPARENT IN THE S08W06 REGION. MARKED WHITE LIGHT GROWTH IS APPARENT IN THE REGION AT S11E48 BUT THE REGION IS AS YET SIMPLE BIPOLAR.

A NEW GROUP IS APPARENT AT S26W32 AND A REGION MAY BE CROSSING EAST LIMB AT N05. SATELLITE MEASUREMENTS OF PROTON FLUX ARE ENHANCED. ATS-1 SHOWS AN INCREASE IN BOTH HIGH AND LOW ENERGY RANGES BEGINNING 20/0045Z. THE MAXIMUM FLUX SEEMS TO HAVE BEEN REACHED AT ABOUT 04Z FOR HIGH ENERGIES (17 PROTONS PER SQ CM PER SECOND) AND AT ABOUT 09Z FOR LOW ENERGY PROTONS (FLUX ABOUT 113 SAME UNITS). NO ABSORPTION IS REPORTED FROM THULE OR ALASKAN RIOMETERS SINCE ZENITH ANGLES ARE GREATER THAN 90 DEGREES FOR ALL. PIONEER VIII REPORTED A SOLAR WIND INCREASE WITH MAXIMUM VELOCITY 980 KM/SEC AT 18/2250Z. PIONEER IX IS CURRENTLY SHOWING A PARTICLE FLUX INCREASE AND FURTHER EVALUATION WILL BE IN SDF 482A. THE GEOMAGNETIC FIELD IS CURRENTLY QUIET.

B. CLASS M FLARES EXPECTED. INCREASED MAGNETIC ACTIVITY EXPECTED ABOUT 22/01Z.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 20 DEC/1700Z ENDING 23 DEC/1700Z.

CLASS M OR GREATER 60/60/60

CLASS X 05/05/05

PROTON EVENTS 05/05/05

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 158. PREDICTED 164/170/175.

E. MAGNETIC A-FREDERICKSBURG FOR 19 DEC WAS 03. FOR 20 DEC ABOUT 02. PREDICTED AP FOR 21-23 DEC; 10/28/19.

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