

KMSC

HAUS BOU 100400

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 806A ISSUED 0400Z 10 NOVEMBER 1970

ONLY CLASS C ACTIVITY IS EXPECTED DURING THE NEXT 13 HOURS.

A. SOLAR ACTIVITY CONTINUES AT A LOW LEVEL. THE REGION N16E57 HAS SHOWN SMALL GROWTH AND HAS BRIGHT PLAGE. THIS REGION HAS PRODUCED FIVE SUBFLARES DURING THE PAST 11 HOURS. THE OTHER REGIONS ON THE DISK ARE VERY QUIET. THE GEOMAGNETIC FIELD IS QUIET.

B. SOLAR ACTIVITY WILL CONTINUE AT LOW LEVEL. THE REGION N16E57 COULD, IF IT CONTINUES TO GROW AND DEVELOP, PRODUCE A FEW ENERGETIC FLARES. THE GEOMAGNETIC FIELD WILL BE QUIET WITH PERIODS OF MINOR DISTURBANCE.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 10 NOV/0400Z ENDING 13 NOV/0400Z

CLASS M OR GREATER 40/40/40

CLASS X 01/01/01

PROTON EVENTS 01/01/01

D. OTTAWA 10.7 CM FLUXES FOR 09/1700Z AND 09/2000Z WERE 145 AND 143 RESPECTIVELY.

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HAUS BOU 101720

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDF NUMBER 806B ISSUED 1700Z 10 NOVEMBER 1970

NOTHING MORE ENERGETIC THAN CLASS C FLARES ARE EXPECTED  
DURING THE 11-HOUR INTERVAL BETWEEN FORECAST MESSAGES.

A. ACTIVITY DURING THE PAST 24 HOURS HAS BEEN QUITE LOW WITH  
NO ENERGETIC EVENTS AMONG THE LESS THAN 10 SUBFLARES REPORTED  
SO FAR TODAY. ONLY ONE DISK FEATURE HAS GROWN SINCE YESTERDAY-  
THAT NEAR N15E50. ALL REGIONS ARE SMALL IN WHITE LIGHT AND  
MAGNETICALLY EITHER ALPHA OR BETA. K-INDICES FROM 1 TO 4  
HAVE CHARACTERIZED LOW MAGNETIC LATITUDE OBSERVATORIES SINCE EARLY  
ON THE 9TH.

B. NO CHANGE

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24  
HOUR PERIODS BEGINNING 10 NOV/1700Z ENDING 13 NOV/1700Z.

CLASS M OR GREATER 40/40/35

CLASS X 01/01/01

PROTON EVENTS 01/01/01

D. OTTAWA 10.7CM FLUX FOR 10/1400Z WAS 151.

PREDICTED 10.7CM FLUX FOR 11-13 NOV IS 145/142/139.

E. MAGNETIC A-FREDERICKSBURG FOR 09 NOV WAS 08. FOR 10 NOV  
ABOUT 12. PREDICTED AP FOR 11-13 NOV IS 03/10/14.

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HAUS BOU 100000

FROM SPACE DISTURBANCE FORECAST CENTER BOULDER COLO

SDFR 001 ISSUED 10 NOVEMBER 1970

HIGHLIGHTS FOR THE PERIOD 04-09 NOVEMBER 1970:

THE PAST SIX DAYS WERE HIGHLIGHTED BY AN IMPORTANCE 3B CLASS X2 PROTON FLARE AT 05/0309Z IN MCMATH REGION 019 (NOW LOCATED NEAR S10W31, L125). EXCEPT FOR THIS EVENT THE REGION HAS PRODUCED NOTHING BUT CLASS C SUBFLARES. AT THE TIME OF THE FLARE REGION 019 WAS MARKED BY AN EXTENSIVE PLAGE OF ABOUT 6000 MILLIONTHS OF THE SOLAR HEMISPHERE AND THREE SMALL SPOT GROUPS WITH A COMBINED AREA OF LESS THAN 100 MILLIONTHS. ALL OF THE SPOT GROUPS APPEARED TO BE OF SIMPLE BIPOLAR MAGNETIC CONFIGURATION. THE FLARE ITSELF WAS LOCATED NEAR S12E37, BEGAN ABOUT 0309Z, REACHED MAXIMUM AT 0320Z, AND ENDED NEAR 0700Z. THE ASSOCIATED COMPLEX RADIO BURST WAS CHARACTERIZED BY PEAK ENHANCEMENTS OF 629 FLUX UNITS AT 1415 MHZ, 988 UNITS AT 2700 MHZ, AND 2080 UNITS AT 5000 MHZ. THE 1-8A X-RAY BURST DETECTED BY SOLRAD-9 BEGAN AT 0305Z, REACHED A PEAK OF 0.23 ERG/CM<sup>2</sup>/SEC AT 0332Z, AND DECAYED VERY SLOWLY, REACHING THE PRE-BURST LEVEL AT 1210Z. THE PIONEER 6 SPACECRAFT, WHICH IS LOCATED 3.7 DAYS BEHIND THE EARTH (I.E. TOWARD THE EAST LIMB OF THE SUN), OBSERVED A HIGH ENERGY PROTON EVENT IN PROGRESS AT 05/0425Z; AT THIS TIME THE FLUX OF PARTICLES WITH ENERGIES GREATER THAN 190 MEV WAS A FACTOR OF 30 ABOVE BACKGROUND, AND THAT FOR 70-190 MEV PARTICLES WAS UP BY A FACTOR OF 270. PROTONS WERE DETECTED AT EARTH BY THE ATS-1 SATELLITE AT 05/0700Z. THE 20-70 MEV CHANNEL ON ATS-1 PEAKED AT 06/0100Z WITH 20 PARTICLES/CM<sup>2</sup>/SEC, AND THE 5-20 MEV CHANNEL PEAKED AT 07/0900Z AT SOMETHING IN EXCESS OF 2000 PARTICLES/CM<sup>2</sup>/SEC. BOTH ENERGY RANGES ARE STILL SLIGHTLY ENHANCED BUT DECAYING SLOWLY AS OF 10/0000Z. POLAR CAP ABSORPTION OF 0.5 TO 1 DB WAS OBSERVED. A FORBUSH DECREASE BEGAN AT 07/0400Z. AT 07/1900Z THE COUNTING RATES ON THE DEEP RIVER NETRON MONITOR WERE ABOUT 7 PERCENT BELOW NORMAL. A MINOR GEOMAGNETIC STORM BEGAN WITH A SUDDEN COMMENCEMENT AT 07/0046Z, ROUGHLY 46 HOURS AFTER THE FLARE, AND ENDED NEAR 08/0300Z. THE FREDERICKSBURG A-INDEX WAS 37 FOR 07 NOVEMBER.

FORECAST FOR THE PERIOD 11-18 NOVEMBER 1970:

INFREQUENT SMALL TO MEDIUM-SIZED CLASS M EVENTS ARE EXPECTED. PREVIOUSLY ACTIVE MCMATH REGION 002 (N17 L247) SHOULD BEGIN TO RETURN TOWARD THE END OF THE PERIOD BUT IS EXPECTED TO BE RELATIVELY INACTIVE.

28-DAY FORECAST FOR THE PERIOD 11 NOVEMBER - 09 DECEMBER 1970:  
ACTIVITY IS EXPECTED TO BE AT A LOW TO MODERATE LEVEL THROUGHOUT THE PERIOD.

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