

NNNN0506

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KMSC

HAUS BOU 170506Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 599A ISSUED 0400Z 17 APR 1970

SMALL M FLARES ARE ANTICIPATED FROM THE NW QUADRANT DURING THE NEXT 13-HOUR PERIOD.

A. SINCE THE 16/1700Z MESSAGE RANDOM CLASS C SUBFLARES HAVE BEEN ERUPTING WITHIN THREE OF THE ELEVEN SMALL SPOT GROUPS PRESENTLY DOTTING THE DISK. ABOUT 8 1/2 HOURS AGO, I.E. AT 16/1930Z, A STRICTLY LOW-ENERGY PCA EVENT WAS DETECTED BOTH ON THE GROUND BY VLF AS WELL AS BY THE ATS-1 GEOSTATIONARY SATELLITE. DAYTIME 30MHZ RIOMETER ABSORPTION ALONG ESSA'S ALASKAN CHAIN PEAKED NEAR 1.2DB AT THE PAXSON SITE (L ABOUT 5.0, 16/2030Z). FORT CHURCHILL REPORTED COSMIC NOISE ATTENUATION OF THE SAME ORDER OF MAGNITUDE, NAMELY 2DB, ABOUT 3PM THEIR TIME. ONLY THE LOWER ENERGY CHANNEL (5-21MEV) OF AEROSPACE'S ATS-1 EXPERIMENT HAS BEEN AFFECTED. THE CURRENT OMNIDIRECTIONAL FLUX OF THESE NONRELATIVISTIC PROTONS IS ROUGHLY 20 PARTICLES/CM2/SEC - DOWN A FACTOR OF 2 FROM THE VALUE QUOTED NEAR ONSET TIME. THE DEEP RIVER NEUTRON MONITOR IS DEPRESSED APPROXIMATELY 3.2 PER CENT, AND HAS ACTUALLY BEEN FLUCTUATING A FEW TENTHS OF A PERCENT ABOUT THE 3 PER CENT LEVEL FOR THE PAST 2 1/2 DAYS. CONDITIONS ARE ARE QUIET GEOMAGNETICALLY.

B. A SUBSTORM LEVEL GEOMAGNETIC DISTURBANCE (A SUB P LESS THAN 20) IS EXPECTED TO BEGIN SOMETIME BEFORE 17/1200Z. ON THE DISK THE REGIONS NEAR N12W15 AND N17W55 SHOULD GIVE RISE TO BORDERLINE M ACTIVITY THESE NEXT 3 DAYS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 17 APR/0400Z ENDING 20/0400Z.

CLASS M OR GREATER 80/80/70

CLASS X 30/20/20

PROTON EVENTS 30/20/20

D. OTTAWA 10.7CM FLUX FOR 16/1700Z WAS 151.

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HAUS BOU 171715Z

FROM SPACE DISTURBANCE FORECAST CENTER ESSA BOULDER COLO

SDF NUMBER 599B ISSUED 1700Z 17 APRIL 1970

CLASS M FLARES ARE EXPECTED DURING THE NEXT 11 HOURS.

A. A SMALL CLASS M SUBFLARE NORMAL OCCURRED AT 17/0132Z IN THE GROWING REGION NEAR N12W23. OVERALL ACTIVITY REMAINS AT A VERY LOW LEVEL. THE LEADING PORTION OF THE REGION NEAR N17W63, WHERE A NEW BIPOLAR SET BEGAN TO EMERGE YESTERDAY, CONTINUES TO DEVELOP AND CONSOLIDATE. THE LOW ENERGY PROTON EVENT WHICH BEGAN 16/1930Z IS DECAYING. THE 5-21 MEV CHANNEL IS CURRENTLY READING ONLY ABOUT 5 PARTICLES/SQ CM/SEC. HIGH LATITUDE VLF AND FORWARD SCATTER CIRCUITS INDICATE THAT THE MINOR PCA EVENT REACHED MAXIMUM ABOUT 16/2130Z AND ENDED BY ABOUT 16/2300Z. THE DEEP RIVER NEUTRON MONITOR COUNTING RATE REMAINS DEPRESSED BY ABOUT 3 PERCENT. THE GEOMAGNETIC FIELD HAS BEEN DISTURBED.

B. INFREQUENT CLASS M FLARES ARE EXPECTED FROM THE N12W23 AND N17W63 REGIONS. A SIGNIFICANT EVENT, LARGE CLASS M OR CLASS X, IS POSSIBLE FROM THE N17W63 REGION BEFORE IT COMPLETES WEST LIMB PASSAGE. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN UNSETTLED FOR THE NEXT 24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 17 APRIL/1700Z ENDING 20/1700Z.

CLASS M OR GREATER 80/80/70

CLASS X 30/20/20

PROTON EVENTS 30/20/20

D. OTTAWA 10.7 CM FLUX AT 1400Z WAS 148. PREDICTED 140/135/135.

E. MAGNETIC A-FREDERICKSBURG FOR 16 APRIL WAS 11. FOR 17 APRIL ABOUT 18. PREDICTED AP FOR 18-20 APRIL, 12/10/08.

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