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HFUS BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 109 ISSUED 2200Z 18 APRIL 1972

A. A MINOR PROTON EVENT BEGAN ABOUT 18/0000Z. THE EVENT WAS IN PROGRESS WHEN FIRST RECORDED BY ATS-1 AT 0200Z. MAXIMUM HOURLY AVERAGE FLUX VALUES RECORDED BY ATS-1 WERE -- 27 PROTONS PER CMSQ-SEC /21-70 MEV/ AT 18/0300Z AND 1544 PROTONS PER CMSQ-SEC /5-21 MEV/ AT 18/1200Z. A SMALL PCA BEGAN AT 18/0015Z WITH ABOUT 1 DB ABSORPTION RECORDED ON 30 MHZ RIOMETER AT THULE. THE SOURCE OF THESE PROTONS IS NOT DEFINITE, BUT THE MOST LIKELY CAUSE WAS A SERIES OF EVENTS /WEAK X-RAYS/EPL/CORONAL RAIN/ OBSERVED NEAR S10W90 AT 17/1830Z. ACTIVITY ON THE SOLAR DISK TODAY HAS BEEN CONFINED TO REGION 148 /S08E40/. THIS REGION PRODUCED A CLASS M-3 EVENT AT 0058Z, A CLASS M-2 AT 1800Z AND A POSSIBLE SMALL CLASS M AT 1503Z TODAY. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. (c-s)

B. THE 5-10 MEV PROTON FLUX HAS INCREASED SLIGHTLY DURING THE PERIODS 2000-2100Z. HOWEVER, A GENERAL DECREASE IS EXPECTED DURING THE NEXT 24 HOURS WITH A RETURN TO BACKGROUND LEVEL BY 19/1800Z. CONTINUED CLASS M ACTIVITY IS EXPECTED FROM REGION 148. THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED DURING THE NEXT 24 HOURS.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 19 APR/0000Z ENDING 21 APR/2400Z.
CLASS M OR GREATER 80/80/80
CLASS X 02/02/02
PROTON EVENTS 01/01/01

D. OTTAWA 10.7 CM FLUXES FOR 18 APR/1400Z, 18/1700Z AND 18/2000Z WERE 118, 115 AND 111 RESPECTIVELY. PREDICTED 10.7 CM FLUX FOR 19-21 APR ARE 112/112/114.

E. MAGNETIC A-FREDERICKSBURG FOR 17 APR WAS 06. FOR 18 APR ABOUT 12. PREDICTED AP FOR 19-21 APR, 09/09/09.

SOLTERWARN

SPAN