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HFUS BOU 282200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 149B ISSUED 2200Z 28 MAY 1972

A. THERE HAS BEEN NO SIGNIFICANT ACTIVITY SINCE THE 2B FLARE IN REGION 210 AT 28/1315Z WHICH WAS DESCRIBED IN SDF 149A.

THE TOTAL DURATION OF THIS FLARE WAS 3 HOURS 15 MINUTES.

PRELIMINARY DATA INDICATE THAT IT WAS CLASS X4. REGION 210 /N09E21/ REMAINS MAGNETICALLY COMPLEX WITH A SHARPLY KINKED EAST-WEST NEUTRAL LINE. BESIDES 210 THERE IS ONE SMALL REGION ON THE VISIBLE DISK. PROTON FLUXES AT THE ATS-1 SATELLITE HAVE BEEN INCREASING SLOWLY SINCE ABOUT 28/1830Z. AT 28/2100Z THE FLUXES WERE 18 PART CM-2 SEC-1 AT 5-21 MEV /BACKGROUND 0.5/ AND 5 AT 21-70 MEV /BACKGROUND 0.5/. THE THULE 30 MHZ RIO-METER HAS REGISTERED 0.2 TO 0.3 DB ABSORPTION. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED FOLLOWING AN ACTIVE PERIOD FROM 28/1330-1730Z.

B. REGION 210 REMAINS CAPABLE OF PRODUCING ENERGETIC ACTIVITY. ACTIVITY IS EXPECTED TO BE RELATIVELY INFREQUENT BUT EVENTS UP TO CLASS X ARE POSSIBLE. A SIMPLE DIFFUSION ANALYSIS INDICATES THAT THE 21-70 MEV PARTICLE FLUX SHOULD PEAK AT 40-50 PARTICLES CM-2 SEC-1 AROUND 29/0300Z AND DECAY TO BACKGROUND BY ABOUT 30/0000Z. POLAR CAP ABSORPTION OF 1-2 DB IS EXPECTED. A MINOR GEOMAGNETIC STORM IS EXPECTED TO BEGIN WITH A SUDDEN COMMENCEMENT BETWEEN 30/1200Z AND 30/1800Z. THE FIELD WILL REMAIN UNSETTLED TO ACTIVE PRIOR TO STORM ONSET.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 29 MAY/0000Z ENDING 31 MAY/2400Z.

CLASS M OR GREATER 80/85/85

CLASS X 10/15/15

PROTON EVENTS 10/20/20

D. OTTAWA 10.7 CM FLUX FOR 28/1700Z WAS 110. PREDICTED 10.7 CM FLUX FOR 29-31 MAY IS 110/110/110.

E. MAGNETIC A-FREDERICKSBURG FOR 27 MAY WAS 06. FOR 28 MAY ABOUT 14 PREDICTED AP FOR 29-31 MAY, 15/35/25.

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