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FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 352 ISSUED 2200Z 18 DEC 1971

ACTIVE GEOMAGNETIC CONDITIONS AND MINOR SOLAR FLARES ARE EXPECTED.

A. REGIONS 388 /S15E52/ AND 391 /S17E70-REGION 354 ON PREVIOUS DISK PASSAGE/ HAVE PRODUCED OCCASIONAL CLASS C SUBFLARES DURING THE PAST 24 HOURS. A SUB-BRILLIANT FLARE AT 18/1923Z IN REGION 388 WAS ACCOMPANIED BY WEAK IONOSPHERIC EFFECTS AND BY A CENTIMETER-WAVELENGTH BURST OF SHORT DURATION. MEASUREMENTS AT THE ALGONGUIN OBSERVATORY NEAR OTTAWA INDICATED A MAXIMUM 2800 MHZ FLUX OF 263 FLUX UNITS ABOVE BACKGROUND AT 18/1923Z. REGION 388 CONTAINS BRIGHT, FLUCTUATING PLAGE AND A DEVELOPING E-TYPE SPOT GROUP. REGION 391 APPARENTLY CONTAINS AN H-TYPE SPOT LOCATED EAST OF ENHANCED PLAGE. REGION 380 /N13W18/ HAS SHOWN SOME DEVELOPMENT IN WHITE LIGHT, BUT THE PLAGE IS NO LONGER AS IMPRESSIVE AS IT WAS 24 HOURS AGO. OTHER CENTERS ARE RELATIVELY UNIMPRESSIVE. THE GEOMAGNETIC STORM REPORTED ON YESTERDAYS REPORT HAS CONTINUED, BUT GRADUAL STABILIZATION IS NOW OCCURRING. K-INDICES AT MIDDLE-LATITUDE OBSERVATORIES HAVE NOT EXCEEDED 7 DURING THIS STORM. AIS-1 PROTON FLUXES HAVE DECREASED TO ABOUT 2 PARTICLES/CM2/SEC AT 5-21 MEV AND 1 PARTICLE/CM2/SEC AT 21-70 MEV.

B. SMALL CLASS M FLARES ARE LIKELY TO OCCUR IN REGIONS 388 AND 391 DURING THE FORECAST PERIOD. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN UNSETTLED TO ACTIVE DURING THE NEXT WEEK. AIS-1 PROTON COUNTING RATES PROBABLY WILL DECREASE SLOWLY TO BACKGROUND LEVELS DURING THE NEXT 2-3 DAYS.

C. EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 19 DEC/0000Z ENDING 21 DEC/2400Z.

CLASS M OR GREATER 65/65/65

CLASS X 05/05/05

PROTON EVENT 05/05/05

D. OTTAWA 10.7 CM FLUXES FOR 18/1400Z, 1700Z AND 2000Z WERE 136, 139 AND 138. PREDICTED 10.7 CM FLUXES FOR 19-21 DEC ARE 138/139/139.

E. MAGNETIC A-FREDERICKSBURG FOR 17 DEC WAS 37. FOR 18 DEC ABOUT 25. PREDICTED AP FOR 19-21 DEC ARE 21/18/15.

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