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HXUS BOU 020710

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 245A ISSUED 0500Z 02 SEPT 1971

NO ENERGETIC FLARES ARE EXPECTED FROM THE PORE-LIKE SPOT GROUPS VISIBLE ON THE DISK. ANOTHER MASSIVE ERUPTION FROM BEHIND THE WEST LIMB REMAINS A DISTINCT POSSIBILITY DURING THE NEXT 24 HOURS.

A. NO FLARES HAVE BEEN OBSERVED SINCE ABOUT 01/2100Z AND WITH THE EXCEPTION OF AN ACTIVE PROMINENCE NEAR S10W90, BOTH LIMBS HAVE BEEN QUIET TOO. INACTIVITY ALONG THE SUN'S EASTERN EDGE LENDS FURTHER SUPPORT TO A BEYOND-THE-WEST-LIMB SOURCE OF YESTERDAY'S GROUND LEVEL AND PCA EVENTS.

IF REGION 235 WAS INDEED THE ORIGIN OF THE GEOPHYSICAL ACTIVITY DESCRIBED EARLIER AND BELOW, IT MUST BE KEPT IN MIND THAT ITS CENTROID WAS APPROXIMATELY 2.3 DAYS BEHIND THE LIMB. SINCE THE REGION SPANNED NEARLY 15 DEGREES IN LONGITUDE, THE MASSIVE ERUPTION COULD HAVE TAKEN PLACE AS FAR AS 37 DEGREES BEYOND THE LIMB OR AS CLOSE AS 23.

OPTICALLY ONLY A FAINT WISP OF MATERIAL WAS IN EVIDENCE NEAR 235'S LATITUDE DURING THE TIME OF THE CM BURST.

PEAK ABSORPTION OCCURRED ABOUT 02/0115Z ON THE THULE RIOMETER-A VALUE NEAR 2.2DB UNDER DAYLIGHT CONDITIONS. TWO HOURS LATER THE MAXIMUM ABSORPTION HAD SHIFTED TO LOWER LATITUDES, PRODUCING READINGS AS HIGH AS 3.5 AND 2.4DB AT FORT YUKON AND COLLEGE RESPECTIVELY. AT THIS TIME THE MOST COMPLETE PARTICLE DATA STEM FROM THE VELA SERIES OF SATELLITES. A QUICK SUMMARY OF THEIR GREATER THAN 25 MEV SENSORS READS AS FOLLOWS: ONSET SOMETIME BETWEEN 01/1900 AND 2000Z, MAXIMUM AT 2300Z WITH A FLUX OF APPROXIMATELY 2560 PART/CM²/SEC. AND A MOST RECENT DATA POINT 3 HOURS AGO AT 2280 PART/CM²/SEC. NEAR CONTINUOUS STRIP CHART DATA FROM THE ATS-1 SATELLITE GAVE AND APPROXIMATE DELAY FROM THE ONSET OF THE RADIO BURST TO THAT OF THE PARTICLES OF 30 MINUTES. SUBSEQUENT FLUXES AS RECORDED BY THIS GEOSTATIONARY DEVICE'S 5-21 MEV CHANNEL HAVE BEEN CONSISTENT WITH GROUND LEVEL ABSORPTION. NEUTRON MONITOR COUNTING RATES WERE AS HIGH AS 12 PERCENT ABOVE BACKGROUND SOME 2 HOURS AND 20 MINUTES FROM THE INITIAL INCREASE (01/2030Z). THE RECORDED COUNTS PER TEN MINUTE INTERVAL REMAINED AT 10 PERCENT OR GREATER ABOVE THE QUIET DAY MEAN FOR MORE THAN 2 HOURS.

B. THE COSMIC EVENT IN PROGRESS SHOULD CONTINUE TO BE DETECTED ON THE GROUND THROUGH THE REMAINDER OF THE DAY. EARTH IS NOT EXPECTED TO INTERCEPT WHATEVER STORM PARTICLES REGION 235 UNDOUBTEDLY PRODUCED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 02 SEPT/0000Z ENDING 04 SEPT/2400Z.

CLASS M OR GREATER 02/05/05

CLASS X 00/00/00

PROTON EVENTS 100 (PCA IN PROGRESS)/00/00

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HFUS BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 245B ISSUED 2200Z 02 SEP 1971

NO SIGNIFICANT FLARES EXPECTED.

A. THE PCA EVENT CONTINUES. SPECIFIC SATELLITE FLUX LEVELS ARE SPARSE, BUT FLUX LEVELS WERE DOWN TO ABOUT HALF THEIR MAXIMUM AT 1700Z IN THE 10-100 MEV RANGE. ATS-1 5-21 MEV FLUX WAS ABOUT 900 PARTICLES PER CM² SEC AT 1630Z. 21-70 ATS-1 ENERGY LEVELS ARE UNAVAILABLE. THE THULE 30 MHZ RIOMETER HAD 3.1 DB ABSORPTION LATE IN THE THULE DAYTIME PERIOD. THE GEOMAGNETIC FIELD HAS BEEN QUIET.

B. NOMINAL DECAY OF THE PROTON EVENT IS EXPECTED. NO FLARES OF SIGNIFICANCE ARE EXPECTED ON THE SUN. UNSETTLED GEOMAGNETIC CONDITIONS ARE EXPECTED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 03 SEP/0000Z ENDING 05 SEP/2400Z.

CLASS M OR GREATER 05/05/05

CLASS X 00/00/00

PROTON EVENTS IN PROGRESS/00/00

D. OTTAWA 10.7 CM FLUXES FOR 02/1400Z, 02/1700Z AND 02/2000Z WERE 90, 88 AND 87 RESPECTIVELY.

PREDICTED 10.7 CM FLUX FOR 03-05 SEP IS 091/093/095.

E. MAGNETIC A-FREDERICKSBURG FOR 01 SEP WAS 11. FOR 02 SEP ABOUT 01. PREDICTED AP FOR 03-05 SEP, 08/08/08.

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