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HFUS BOU 230500

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 235A ISSUED 0500Z 23 AUGUST 1971

ONE, PERHAPS TWO, SMALL M FLARES ARE EXPECTED TO OCCUR SOMETIME BEFORE 1200Z TODAY.

A. ACTIVE CENTER 235 (S11E09) HAS BEEN THE SOLE SOURCE OF SUBFLARE ACTIVITY SINCE THE LAST MESSAGE, GENERATING NON-ENERGETIC EVENTS AT THE RATE OF ABOUT ONE PER HOUR. THE MOST RECENT M FLARE FROM THIS TYPE F, BETA-GAMMA GROUP WAS THE M2 (1B) EVENT OF 22/0747Z. AN IMPRESSIVE ARRAY OF INDICES MAY BE TABULATED FOR THIS DISK FEATURE. AS EXAMPLES CONSIDER THE FOLLOWNOD- MAXIMUM 9.1 CM BRIGHTNESS TEMPERATURE 910 THOUSAND DEGREES K, MOST INTENSE LONGITUDINAL FIELD STRENGTH 2900 GAUSS, AREA 1620 MILLIONTHS OF THE DISK, AND SPREAD IN LONGITUDE AND LATITUDE 20 AND 10 DEGREES HELIOCENTRIC RESPECTIVELY. FIVE OTHER GROUPS ARE VISIBLE, HOWEVER, WHEN COMPARED TO REGION 235 THEY ARE TRULY MINISCULE SPOTS.

B. DESPITE THE SIZE OF 235 AND THE INTRICATE FINE DETAIL SURROUNDING IT IN H-ALPHA, HARD X-RAY EVENTS ARE EXPECTED TO BE RARE DURING THE NEXT 3 DAYS. THIS FEATURE, AT LEAST FOR THE MOMENT, LACKS THE RIGHT KIND OF COMPLEXITY, FOR THERE ARE NO SHARP GRADIENTS IN B, NO NEW EMERGING REGIONS, OR NO NEARBY GROUP ABOUT TO INTERACT WITH THE MASSIVE LEADER OR FOLLOWER. SMALL CLASS M EVENTS SHOULD THEREFORE CONTINUE TO MARK THE UPPER LIMIT IN FLARE ENERGETICS. GEOMAGNETICALLY CONDITIONS REMAIN UNCHANGED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 23 AUG/0000Z ENDING 25 AUG/2400Z

CLASS M OR GREATER 90/85/80

CLASS X 25/20/20

PROTON EVENTS 25/20/20

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HFUS BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 235B ISSUED 2200Z 23 AUGUST 1971

CLASS M ACTIVITY IS EXPECTED DURING THE NEXT 24 HOURS.

A. SOLAR ACTIVITY DURING THE PAST 24 HOURS HAS CONSISTED ENTIRELY OF SUBFLARES FROM REGION 235 /S11W01/. TWENTY-THREE SUCH EVENTS HAVE BEEN OBSERVED SO FAR THIS UT DAY. ONE SUB-BRIGHT FLARE AT 23/0941Z WAS CLASS M2 AND PRODUCED A 116 FLUX UNIT BURST AT 2700 MHZ. MINOR SHORT WAVE FADEOUTS WERE REPORTED. ALL OTHER EVENTS WERE CLASS C. REGION 235 IS CLASSIFIED MAGNETICALLY AS BETA-GAMMA BECAUSE OF SOME ADMIXTURE OF POLARITIES NE OF ITS LARGE LEADER AND IN ITS SMALL INTERMEDIATE SPOTS, BUT IT APPEARS TO BE BASICALLY A LARGE BIPOLAR STRUCTURE WITH A RELATIVELY UNCOMPLICATED N-S NEUTRAL LINE. IT HAS CHANGED LITTLE IN STRUCTURE OR BEHAVIOR DURING THE PAST 24 HOURS. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED.

B. FOR THE NEXT THREE DAYS SOLAR ACTIVITY IS EXPECTED TO CONTINUE AT ITS PRESENT LEVEL--FREQUENT SUBFLARES AND OCCASIONAL CLASS M EVENTS FROM REGION 235. MAJOR ACTIVITY MUST CERTAINLY BE REGARDED AS POSSIBLE, BUT WE DO NOT EXPECT SUCH ACTIVITY FOR THE REASONS GIVEN IN PART B OF OUR 23/0500Z MESSAGE. THE GEOMAGNETIC FIELD WILL CONTINUE TO BE QUIET TO UNSETTLED.

C. FLARE AND PROTON EVENT PROBABILITIES FOR THE NEXT THREE 24 HOUR PERIODS BEGINNING 24 AUG/0000Z ENDING 26 AUG/2400Z.

CLASS M OR GREATER 90/90/90

CLASS X 20/20/20

PROTON EVENTS 20/20/20

D. OTTAWA 10.7 CM FLUXES FOR 23/1400Z, 23/1700Z AND 23/2000Z WERE 148, 145 AND 144 RESPECTIVELY.

PREDICTED 10.7 CM FLUX FOR 24-26 AUG IS 142/139/136.

E. MAGNETIC A-FREDERICKSBURG FOR 22 AUG WAS 11. FOR 23 AUG ABOUT 11. PREDICTED AP FOR 24-26 AUG, 09/08/08.

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