

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 111

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 APR 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY HAS BEEN AT A MODERATE LEVEL. AN M1 EVENT AT 201654Z (MAX) FROM THE SOUTHEAST LIMB WAS FOLLOWED BY AN M5/1B AT 201940Z (MAX) FROM REGION 4471 (N04W74). THE M5/1B WAS ACCCOMPANIED BY SMALL RADIO BURSTS ON FREQUENCIES 4995 THROUGH 15400 MHZ AND 245 MHZ. THE LARGEST BURST WAS 270 FLUX UNITS AT 15400MHZ. NO SPOTS HAVE BEEN REPORTED IN THE SOUTHEAST AS YET. REGION 4471 REMAINS A BETA TYPE MAGNETICALLY BUT HAS CONTINUED TO GROW IN WHITE LIGHT. REGION 4464 (S16W05) HAS PRODUCED SEVERAL SUBFLARES TODAY BUT IT , LIKE 4468 (N08W63), APPEARS TO BE IN A STAGNANT STATE. THE REST OF THE DISK IS QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO INCREASE OVER THE NEXT FEW DAYS. REGION 4471 AND THE REGION THAT IS APPROACHING THE VISIBLE DISK IN THE SOUTHEAST SHOULD ENHANCE THE POSSIBILITIES FOR ENERGETIC ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD WAS GENERALLY ACTIVE THE PAST 24 HOURS WITH BRIEF STORM CONDITIONS OBSERVED AT HIGH LATITUDES AND FROM 03-06Z AT MID LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT ACTIVE LEVELS FOR THE NEXT THREE DAYS DUE TO RECURRENT EFFECTS.

III. EVENT PROBABILITIES 21 APR-23 APR

CLASS M 70/70/70

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 APR 125

PREDICTED 21 APR-23 APR 128/131/134

90 DAY MEAN 20 APR 131

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 APR 014/013

ESTIMATED AFR/AP 20 APR 017/020

PREDICTED AFR/AP 21 APR-23 APR 015/025-015/020-020/025

SOLTERWARN

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