

HFUS 3 BOU 202200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 020

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 20 JAN 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 19/2100 TO 20/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. AN M1/1N FLARE REACHED MAXIMUM AT 20/1427Z IN REGION 4393(S16W59). THIS REGION HAS GONE INTO DECAY, SHOWING LOSS OF AREA, LOSS OF SPOTS AND REORGANIZATION IN WHITE LIGHT. REGION 4394(S05E20) HAS SHOWN SLIGHT DEVELOPMENT IN WHITE LIGHT. NEW REGIONS TODAY ARE 4397(N17E75) ROTATING ONTO THE DISK, AND 4396(S05E09) RAPIDLY DEVELOPING. REGION 4396 HAS BECOME A SMALL D CLASS GROUP WITHIN THE REPORT PERIOD. REMAINING REGIONS APPEAR STABLE AND QUIET.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW WITH POSSIBLE BRIEF PERIODS AT MODERATE LEVEL. REGION 4393 MAY CONTRIBUTE TO SIGNIFICANT ACTIVITY BRIEFLY AS IT CONTINUES TO DECAY. REGION 4396 MAY BEGIN TO CONTRIBUTE SIGNIFICANTLY IF RAPID GROWTH CONTINUES. MAJOR FLARE ACTIVITY IS UNLIKELY FROM ANY OF THE VISIBLE REGIONS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 19/2100Z TO 20/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. A DECLINING TREND FROM ACTIVE LEVELS EARLIER, IS EVIDENT. AN EQUATORIAL CORONAL HOLE AT CENTRAL MERIDIAN EARLY ON 20 JAN. MAY CAUSE INCREASED ACTIVITY AROUND 23 JAN.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY SHOULD BE UNSETTLED TRENDING TOWARD QUIET UNTIL LATE IN THE FORECAST PERIOD. ACTIVE LEVELS MAY OCCUR BEGINNING ON 23 JAN.

III. EVENT PROBABILITIES 21 JAN-23 JAN

CLASS M 30/30/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 20 JAN 097

PREDICTED 21 JAN-23 JAN 100/102/102

90 DAY MEAN 20 JAN 094

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 19 JAN 016/021

ESTIMATED AFR/AP 20 JAN 012/015

PREDICTED AFR/AP 21 JAN-23 JAN 012/015-012/015-018/020

SOLTERWARN

BT