

FUS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 114

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100 TO 24/2100Z: SOLAR ACTIVITY HAS BEEN LOW WITH LOW-MID CLASS C FLARES BEING OBSERVED. REGION 4150 (S12E06) HAS GROWN SLIGHTLY AND ITS MAGNETIC COMPLEXITY IS DECREASING. SEVERAL SUBFLARES HAVE BEEN OBSERVED FROM THIS AREA. REGION 4156 (S16E54) PRODUCED TWO MID CLASS C FLARES AND IS ALSO GROWING SLOWLY WITH TWO ACTIVE DARK FILAMENTS REPORTED. NEARBY REGION 4154 (S13E43) IS STABLE BUT SOME INCREASE IN MAGNETIC GRADIENTS HAS BEEN REPORTED IN THE TRAILER AREA NEAREST REGION 4156. A MODERATE SIZE CLASS C GROUP ROTATED ONTO THE DISK AND WAS NUMBERED 4157 (S03E73). TWO SMALL GROUPS HAVE EMERGED ON THE DISK - 4158 (N10E07) AND 4159 (N14E45).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE GENERALLY LOW WITH ISOLATED CLASS M FLARES POSSIBLE FROM REGION 4150 AND THE 4154/4156 COMPLEX. POTENTIALLY GEOEFFECTIVE FLARES ARE MORE LIKELY FROM THE 4154/4156 AREA BUT ITS CURRENT POSITION IS NOT PRIME FOR THE PROPAGATION OF DISTURBANCES TO THE EARTH. NO SIGNIFICANT ACTIVE REGIONS ARE DUE TO RETURN.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: MINOR GEOMAGNETIC STORM CONDITIONS BEGAN GRADUALLY NEAR 23/2200Z. HIGHLY ACTIVE TO MINOR STORM LEVELS HAVE BEEN EXPERIENCED SINCE THAT TIME AT ALL LATITUDES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: ACTIVE TO MINOR STORM LEVELS SHOULD CONTINUE FOR THE DURATION OF THE FORECAST PERIOD AND INTO 28 APR. NIGHTTIME SECTORS SHOULD EXPERIENCE THE MOST DISTURBED CONDITIONS.

III. EVENT PROBABILITIES 25 APR-27 APR

CLASS M 30/40/40

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 APR 141

PREDICTED 25 APR-27 APR 144/140/138

90 DAY MEAN 24 APR 121

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 APR 017/019

ESTIMATED AFR/AP 24 APR 033/035

PREDICTED AFR/AP 25 APR-27 APR 025/025-025/025-020/025

SOLTERWARN

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