

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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