

FUS 3 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SOF NUMBER 117

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 27 APR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/2100
TO 27/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. DUE TO THE
MAGNETIC STRUCTURE OF THE 4154/4156 COMPLEX, THIS AREA IS NOW
DESIGNATED AS REGION 4154 (S13E09). THIS REGION PRODUCED AN
M1/SN AT 27/0256Z AND AN M1/1B AT 27/1356Z. BOTH FLARES
PRODUCED MINOR CENTIMETRIC RADIO BURSTS. THIS REGION IS NOW
CLASSIFIED AS A SMALL CLASS F GROUP WITH A BETA GAMMA MAGNETIC
CONFIGURATION AND EXTENSIVE PLAGE. JUST TO THE EAST OF THIS
GROUP, AND INTRUDING UPON ITS TRAILER, IS NEW REGION 4162
(S15E24) WHICH IS EMERGING QUITE RAPIDLY. REGION 4162 IS
BRIGHT, PRODUCING FREQUENT SUBFLARES, AND IS CURRENTLY A CLASS
C GROUP WITH MANY SMALL SPOTS. REGIONS 4150 (S11W37) AND 4157
(S05E32) HAVE EXHIBITED DECAY AND PRODUCED SEVERAL SUBFLARES. A
LARGE NORTHERN POLAR CROWN FILAMENT HAS FADED DURING THE LAST
TWO DAYS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE
MODERATE. SHOULD 4162 CONTINUE TO EMERGE AT ITS CURRENT RATE
AND IMPINGE FURTHER UPON THE TRAILER OF 4154, THE LIKELIHOOD OF
A MAJOR FLARE WOULD INCREASE. INFREQUENT CLASS M FLARES ARE
POSSIBLE FROM REGIONS 4150 AND 4157. NO SIGNIFICANT REGIONS ARE
DUE TO RETURN.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 26/2100Z TO 27/2100Z:
THE GEOMAGNETIC FIELD WAS ACTIVE DURING NIGHTTIME PERIODS
BECOMING UNSETTLED TO SLIGHTLY ACTIVE DURING DAYLIGHT HOURS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS
EXPECTED TO REMAIN ACTIVE FOR THE EARLY PORTION OF 28 APR.
GENERALLY UNSETTLED CONDITIONS SHOULD BE EXPERIENCED FOR THE
DURATION OF THE FORECAST PERIOD AT MID LATITUDES WITH SLIGHTLY
ACTIVE CONDITIONS PREDICTED FOR HIGH LATITUDES.

III. EVENT PROBABILITIES 28 APR-30 APR

CLASS M	70/70/70
CLASS X	10/10/10
PROTON	01/01/05
PCAF	GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED	27 APR	148
PREDICTED	28 APR-30 APR	150/150/148
90 DAY MEAN	27 APR	121

V. GEOMAGNETIC A INDICES

OBSERVED	AFR/AP	26 APR	025/032
ESTIMATED	AFR/AP	27 APR	017/020
PREDICTED	AFR/AP	28 APR-30 APR	015/020-012/020-012/020

SOLTERWARN

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