

HFUS 3 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 112

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 22 APRIL 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 21/2100Z
TO 22/2100Z.

SOLAR ACTIVITY CONTINUED LOW THIS PERIOD, HOWEVER THE LARGEST EVENT
RECORDED TODAY WAS A C9, NO OPTICAL, AT 0905UT. REGION 4154 (S11E 74)
IS NOW A LARGE 500 MILLIONTHS, "D" TYPE GROUP AND A SIMPLE BETA
MAGNETICALLY. NEW REGION 4155 (N18E 50) IS A SIMPLE "A" TYPE
GROUP. WEATHER AND EQUIPMENT PROBLEMS AT THE OPTICAL OBSERVATORIES
HAS HAMPERED ANALYSIS.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE LOW TO MODERATE. REGION 4154 MAY
PRODUCE AN ISOLATED "M" EVENT DURING THE NEXT THREE DAYS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 21/2100Z TO 22/2100Z:
THE GEOMAGNETIC FIELD WAS AT GENERALLY ACTIVE LEVELS UNTIL 0300UT
WHEN CONDITIONS WENT TO MINOR STORM LEVELS, MAJOR STORM LEVELS
AT THE HIGH LATITUDE SITES. THE FIELD RETURNED TO ACTIVE TO
UNSETLED CONDITIONS AFTER 1130UT.

IIB. GEOPHYSICAL ACTIVITY FORECAST:

THE FIELD IS EXPECTED TO RETURN TO ACTIVE LEVELS WITH SHORT PERIODS
AT MINOR STORM LEVELS AFTER 23/0300UT. THE FIELD IS THEN EXPECTED
TO REMAIN ACTIVE FOR THE REST OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 23 TO 25 APRIL 1983

CLASS M 30/30/30

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 22 APR 138

PREDICTED 23 - 25 APR 142/144/144

90 DAY MEAN 22 APR 120

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 21 APR 10/15

ESTIMATED AFR/AP 22 APR 23/30

PREDICTED AFR/AP 23-25 APR 15/30 20/25 25/25

SOLTERWARN

BT