

HFUS 3 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 071

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 12 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 11/2100 TO 12/2100Z: SOLAR ACTIVITY BECAME MODERATE FOR A BRIEF PERIOD WITH THE OCCURRENCE OF AN M1.9 XRAY BURST AT 1424Z MAXIMUM. THIS EVENT, WHICH WAS UNCORRELATED OPTICALLY DUE TO WEATHER AT MOST OF THE OBSERVATORIES, HAD MINOR DISCRETE FREQUENCY RADIO BURSTS ASSOCIATED WITH IT. ALTHOUGH NOT VIEWED OPTICALLY, THIS EVENT WAS PROBABLY PRODUCED BY REGION 4104 (S21W91), WHICH IS IN THE PROCESS OF ROTATING OVER WEST LIMB. THIS REGION WAS THE ONLY AREA TO DISPLAY ANY OPTICAL ACTIVITY DURING THE PERIOD, PRODUCING MINOR SURGING AT THE LIMB. THE OTHER THREE SPOTTED DISK REGIONS HAVE SHOWN LITTLE CHANGE. MINOR SURGING IS ALSO VISIBLE AT SE20.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD RETURN TO LOW LEVELS OBSERVED PRIOR TO TODAY'S M1 XRAY EVENT WITH THE ROTATION OF REGION 4104. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN TO EAST LIMB.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 11/2100Z TO 12/2100Z: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE TO BRIEF MINOR STORM LEVELS FOR MID-LATITUDE STATIONS, AND AT MINOR STORM LEVELS FOR HIGH-LATITUDE SITES.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD SHOULD REMAIN AT ACTIVE TO OCCASIONAL MINOR STORM LEVELS FOR THE DURATION OF THE PERIOD.

III. EVENT PROBABILITIES 13 MAR-15 MAR

CLASS M 05/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 MAR 104

PREDICTED 13 MAR-15 MAR 095/090/085

90 DAY MEAN 12 MAR 143

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 11 MAR 017/019

ESTIMATED AFR/AP 12 MAR 025/035

PREDICTED AFR/AP 13 MAR-15 MAR 020/025-025/030-020/020

SOLTERWARN

BT