

HFUS 1 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 084

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 25 MARCH 1979

IA. SOLAR ACTIVITY HAS BEEN HIGH FOR THE LAST 24 HOURS WITH REGION 1638 (N07W73) PRODUCING THE MOST SIGNIFICANT EVENTS. THE LARGEST FLARE OBSERVED WAS AN X1/1B FLARE BY REGION 1638 WHICH REACHED MAXIMUM AT 1810 UT. THIS FLARE WAS ACCOMPANIED BY A 10CM BURST OF 360 FLUX UNITS HOWEVER, NO TYPE II OR TYPE IV WAS OBSERVED. REGION 1638 ALSO PRODUCED AN M2/SB FLARE WHICH REACHED MAXIMUM AT 1650 UT. THIS REGION RETAINS ITS DELTA CONFIGURATION AND SOME EMERGING FLUX HAS BEEN OBSERVED IN THE TRAILING PORTION. REGION 1649 (N07E20) HAS BEEN MODERATELY QUIET TODAY AND ALTHOUGH IT REMAINS SOMEWHAT COMPLEX, IT APPEARS TO BE DECAYING. REGION 1647 (S30W01) HAS BEEN ENHANCED ALL DAY AND HAS EXHIBITED SOME INTERMEDIATE SPOT GROWTH.

IB. SOLAR ACTIVITY SHOULD BE AT A GENERALLY MODERATE LEVEL FOR THE FORECAST PERIOD WITH A GOOD PROBABILITY OF ANOTHER SIGNIFICANT FLARE FROM REGION 1638. THIS TYPE OF COMPACT, COMPLEX REGION DOES NOT SEEM TO REQUIRE THE REGENERATION TIME BETWEEN SIGNIFICANT FLARES, USUALLY SHOWN BY LARGER REGIONS. NO MAJOR REGIONS ARE DUE TO RETURN DURING THE FORECAST PERIOD.

II. THE GEOMAGNETIC FIELD HAS BEEN SLIGHTLY ACTIVE TODAY AND SHOULD REMAIN GENERALLY ACTIVE FOR THE NEXT 72 HOURS. THERE IS A POSSIBILITY OF A MINOR FIELD DISTURBANCE BEGINNING IN APPROXIMATELY 100 HOURS FROM THE FLARE OBSERVED TODAY.

III. EVENT PROBABILITIES 26 - 28 MARCH

CLASS M 90/80/80

CLASS X 25/20/15

PROTON 15/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 MARCH 192

PREDICTED 26-28 MARCH 190/185/180

90-DAY MEAN 25 MARCH 198

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 24 MARCH 12

ESTIMATED AFR/AP 25 MARCH 17/22

PREDICTED AFR/AP 26-28 MARCH 18/20 14/15 14/15

SOLTERWARN

BT