

HFUS 1 BOU 182200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 077

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 18 MARCH 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE DURING THE LAST 24 HOURS. AN M1/IB FLARE OCCURRED FROM REGION 1638 (N07E26) AT 18/1418Z WITH MINOR RADIO BURSTS AND SHORT WAVE FADES. THIS REGION SHOWS SOME SHARP BENDS IN THE NEUTRAL LINE ALONG WITH MAGNETIC INTRUSION OF NEGATIVE POLARITY INTO THE POSITIVE FIELD. REGION 1637 (S16E10) HAD A C5/IB FLARE AT 18/175Z. THIS REGION IS A SMALL "C" TYPE SPOT GROUP AND THIS FLARE WAS PROBABLY AN ISOLATED EVENT. SEVERAL OTHER SMALL C-CLASS X-RAY EVENTS AND SUBFLARES WERE OBSERVED DURING THE PERIOD FROM REGIONS 1634 (S12E15), 1632 (N18W13), AND 1629 (N07W22). REGION 1633 (S25W62) IS A MODERATELY COMPLEX "E" TYPE BETA-GAMMA GROUP, BUT HAS EXHIBITED DECAY DURING THE PERIOD.

IB. SOLAR ACTIVITY SHOULD REMAIN MODERATE DURING THE FORECAST PERIOD. REGIONS 1638, 1633, 1630 (N19W12), AND 1634 (S12E15) ARE ALL CAPABLE OF PRODUCING MODERATELY ENERGETIC EVENTS. REGION 1630 SHOULD BE WATCHED FOR CONTINUED RAPID GROWTH LEADING TO GREATER FLARE POTENTIAL.

II. THE GEOMAGNETIC FIELD HAS BEEN AT UNSETTLED LEVELS, BUT SHOULD INCREASE TO PREDOMINATELY ACTIVE LEVELS WITH POSSIBLE MINOR STORM PERIODS AS A CONSEQUENCE OF A RETURNING CORONAL HOLE.

III. EVENT PROBABILITIES 19 MARCH - 21 MARCH

CLASS M 60/65/65

CLASS X 10/15/15

PROTON 10/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MARCH 196

PREDICTED 19-21 MARCH 197/198/194

90-DAY MEAN 18 MARCH 195

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 17 MARCH 18

ESTIMATED AFR/AP 18 MARCH 08/08

PREDICTED AFR/AP 19-21 MARCH 15/18 - 20/25 - 20/25

SOLTERWAR N

BT