

HFUS 1 BOU 2822 20

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO.

SDF NUMBER 287

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2230Z 28 MARCH 1979.

IA. SOLAR ACTIVITY HAS DECREASED TO LOW LEVELS DURING THE PAST 24 HOURS WITH THE DEPARTURE OF REGION 1638. REGION 1660 (N32E47) AND 1661 (S23E53) EACH PRODUCED A IN OPTICAL FLARE WITH VERY LOW C-CLASS X-RAYS ASSOCIATED DURING THE PERIOD. REGION 1661 APPEARS TO BE A MAGNETICALLY COMPLEX BETA GAMMA DELTA SPOT GROUP AND HAS BEEN RAPIDLY GROWING IN SIZE AND COMPLEXITY. REGION 1660 SEEMS TO HAVE A SHARP KINK IN THE NEUTRAL LINE THAT COULD INDICATE MAGNETIC INSTABILITY, ALTHOUGH IT DOES NOT APPEAR AS COMPLEX MAGNETICALLY AS REGION 1661.

IB. SOLAR ACTIVITY SHOULD BE MODERATE DURING THE FORECAST PERIOD. REGIONS 1660 AND 1661 APPEAR TO BE POTENTIALLY CAPABLE OF PRODUCING MODERATELY ENERGETIC EVENTS.

II. THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE LEVELS WITH OCCASIONAL PERIODS AT MINOR STORM LEVELS DURING THE PAST 24 HOURS. THE DISTURBANCES ARE APPARENTLY THE RESULTS OF FLARE EVENTS AND POSSIBLE FURTHER DISTURBANCES CAN BE EXPECTED FROM THE X-CLASS FLARES WHICH OCCURRED ON 26 AND 27 MARCH. THE GEOMAGNETIC FIELD SHOULD REMAIN PREDOMINATELY ACTIVE DURING THE NEXT 24 HOURS WITH A CHANCE OF MINOR STORM LEVELS DURING LOCAL NIGHTTIME.

III. EVENT PROBABILITIES 29-31 MARCH

CLASS M 64/62/65

CLASS X 25/25/25

PROTON 21/21/25

PCAF GREEN

IV. OTTAWA 13.7 CM FLUX

OBSERVED 28 MARCH 191

PREDICTED 29-31 MARCH 194/196/196

90-DAY MEAN 28 MARCH 199

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 27 MARCH 18

ESTIMATED AFR/AP 28 MARCH 25/36

PREDICTED AFR/AP 29-31 MARCH 20/25 - 15/20 - 12/16

SOLTERWAR N

BT