

HFUS 1 BOU 2222 00

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SD NUMBER 081

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 22 MARCH 1979

IA. SOLAR ACTIVITY HAS BEEN MODERATE. REGION 1638 (N 07W 30) HAS PRODUCED A C8/SB AT 21/2049Z; A M3/2N AT 22/0324Z; AND A M3/2B AT 22/1317Z. BOTH THE 2324Z AND 1317Z EVENTS WERE PARALLEL RIBBON FLARES WITH THE 1317Z FLARE HAVING ABOUT 20 PER CENT UMBRAL COVERAGE. REGION 1649 (N 06E 61) PRODUCED A M1/SB AT 22/1813Z. CENTIMETRIC BURSTS AND SHORT WAVE FADES ACCCOMPANIED THESE FLARES. REGION 1638 REMAINS THE MOST SIGNIFICANT REGION WITH AN ENST - WEST NEUTRAL LINE AND A BETA GAMMA MAGNETIC CLASSIFICATION. REGION 1649 IS THE LARGEST IN SPOT AREA BUT CURRENTLY IS NOT COMPLEX IN STRUCTURE. REGIONS 1651 (N 12W 55), 1652 (S 24W 41), 1653 (N 00W 21), AND 1654 (S 30E 60) ARE EMERGING SLOWLY TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH BOTH REGIONS 1638 AND 1649 CAPABLE OF PRODUCING CLASS M X-RAY FLARES.

II. THE GEOMAGNETIC FIELD WAS QUIET UNTIL A SUDDEN COMMENCEMENT OCCURRED AT 0827Z. THE FIELD WAS THEN AT MAG STORM LEVEL UNTIL 2000Z. THE FIELD IS EXPECTED TO BE HIGHLY VARIABLE THROUGH THE NEXT THREE DAYS, FROM UNSETLED TO PERIODS AT STORM LEVEL, IN RESPONSE TO THE SERIES OF FLARES FROM REGION 1638.

III. EVENT PROBABILITIES 23 - 25 MAR

CLASS M 85/85/85

CLASS X 10/10/10

PROTON 15/15/15

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 MAR 181

PREDICTED 23-25 MAR 179/175/175

90-DAY MEAN 22 MAR 197

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 21 MAR 03

ESTIMATED AFR/AP 22 MAR 35/36

PREDICTED AFR/AP 23-25 MAR 25/20 - 25/20 - 20/25

SOLTERWAR N

BT