

HFUS 1 BOU 2222 00

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF 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 (N07W30) HAS  
PRODUCED A C8/SB AT 21/2049Z; A M3/2N AT 22/0324Z; AND A M3/2B AT  
22/1317Z. BOTH THE 0324Z AND 1317Z EVENTS WERE PARALLEL RIBBON  
FLARES WITH THE 1317Z FLARE HAVING ABOUT 20 PERCENT UMBRAL  
COVERAGE. REGION 1649 (N06E61) PRODUCED A M1/SB AT 22/1813Z.

CENTIMETRIC BURSTS AND SHORT WAVE FADES ACCOMPANIED 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 (N12W55), 1652 (S24W41), 1653 (N00W21),  
AND 1654 (S30E60) 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 UNSETTLED 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