

HFUS 1 BOU 2922 00Z

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 088

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 29 MARCH 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. THE LARGEST EVENT WAS A M1/1N (0730Z X-RAY MAX) FROM REGION 1661 (S24E45). THIS REGION IS LARGE AND GROWING WITH A VERY COMPLEX, BETA GAMMA DELTA, NEUTRAL LINE. THE NEUTRAL LINE FROM REGION 1661 IS CONTINUOUS SOUTHWARD TO REGION 1667 (S37E54) WITH PLAGE STRUCTURE FOLLOWING THIS NEUTRAL LINE. THIS COMBINED STRUCTURE COULD PRECIPITATE A LARGE OPTICAL FLARE. ADDITIONALLY, SYMPATHETIC RESPONSES BETWEEN REGIONS 1661, 1649 (N07W34), AND 1660 (N32W25) INDICATE EXTENSIVE CORONAL CONNECTIONS BETWEEN THESE REGIONS ON THE VISIBLE DISK.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. THE PROBABILITY OF LARGER MORE ENERGETIC EVENTS IS INCREASING AS REGION 1661 CONTINUES ITS EVOLUTIONARY GROWTH. THIS REGION SHOULD DOMINATE SOLAR ACTIVITY FOR THE NEXT 10 DAYS.

II. THE GEOMAGNETIC FIELD HAS BEEN AT STORM LEVEL TODAY. THE FIELD IS EXPECTED TO BE GENERALLY ACTIVE, WITH PERIODS AT STORM LEVEL, DURING THE FORECAST PERIOD. A SLOW ABATEMENT IN THE SEVERITY OF THE GEOMAGNETIC RESPONSE IS EXPECTED OVER THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 MAR - 01 APR

CLASS M 75/80/85

CLASS X 10/15/15

PROTON 10/15/20

PCAF GREEN

IV. OTTAWA 29 MAR 195

PREDICTED 30 MAR - 01 APR 198/200/205

90-DAY MEAN 29 MAR 199

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 28 MAR 33

ESTIMATED AFR/AP 29 MAR 44/60

PREDICTED AFR/AP 30 MAR - 01 APR 27/30 - 18/22 - 14/16

SOLTERWAR N

BT