

HFUS 1 BOU 172200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 107

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 17 APRIL 1979

IA. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. ONLY A HALF DOZEN SMALL C-CLASS SUBFLARES HAVE BEEN OBSERVED ON THE DISK DURING THAT TIME. IN ADDITION, A FEW SMALL X-RAY BURSTS WERE NOTED WITHOUT ASSOCIATED OPTICAL ACTIVITY; BUT GROUND COVERAGE WORLDWIDE HAS BEEN HAMPERED BY CLOUDS. REGIONS 1692 (S22W16) AND 1689 (N30W11) HAVE SHOWN SLIGHT GROWTH IN WHITE LIGHT BUT MAGNETIC FIELD STRENGTHS IN THESE REGIONS ARE THE SAME AS, OR WEAKER THAN, YESTERDAY. REGION 1684 (N05W33) HAS DECLINED SOMEWHAT IN ALL PARAMETERS. REGION 1695 (N32E0), WHICH GREW RAPIDLY FOR 24 HOURS, HAS NOW STABILIZED. AS THIS REPORT WAS BEING PREPARED, REGION 1689 PRODUCED A VERY SLOW-RISING C5 X-RAY BURST (IN OPTICALLY). THIS EVENT WAS PECULIAR IN THAT THERE SEEMED TO BE NO IMPULSIVE COMPONENT IN X-RAYS. NO NEW REGIONS WERE OBSERVED TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO REMAIN GENERALLY LOW. REGION 1684 IS NOT LIKELY TO REDEVELOP AT THIS POINT. REGION 1689 CURRENTLY OFFERS THE BEST PROBABILITY OF PRODUCING ENERGETIC ACTIVITY.

II. THE GEOMAGNETIC FIELD HAS BEEN MILDLY UNSETTLED DURING THE PAST 24 HOURS. THE FIELD IS EXPECTED TO CONTINUE ITS TREND TOWARD QUIET TO MILDLY UNSETTLED LEVELS FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 18 APRIL - 20 APRIL 1979

CLASS M 40/30/20

CLASS X 05/05/01

PROTON 10/10/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 APRIL 169

PREDICTED 18-20 APRIL 168/167/166

90-DAY MEAN 17 APRIL 196

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 16 APRIL 12

ESTIMATED AFR/AP 17 APRIL 10/11

PREDICTED AFR/AP 18-20 APRIL 10/13 - 08/10 - 10/12

SOLTERWARN

BT