

HFUS 1 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLO

SDF NUMBER 131

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY
ISSUED 2200Z 11 MAY 1979

I A. SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. REGION 1734 (N 18W 08) HAS CONTINUED ITS DEVELOPMENT IN STRUCTURE AND MAGNETIC COMPLEXITY. SUNSPOT AREA HAS AT LEAST DOUBLED IN THE PAST 24 HOURS AND A WEAK DELTA CONFIGURATION APPEARS TO BE FORMING JUST EAST OF THE LARGE ASYMETRIC LEADER SPOT. THIS REGION HAS PRODUCED SEVERAL OPTICAL SUBFLARES WITH ASSOCIATED C-CLASS X-RAY EVENTS. REGION N 1724 (N 21W 43) HAS SIMPLIFIED AND PRESENTLY EXHIBITS SLOW DECAY. ONLY A FEW OPTICAL SUBFLARES WERE OBSERVED IN THIS REGION WITH NO ASSOCIATED X-RAY BURSTS. NEW REGION 1739 (N 13E 72) HAS ROTATED ONTO THE DISK AS A C-TYPE GROUP AND HAS PRODUCED A FEW OPTICAL SUBFLARES. REGION 1740 (N 16E 50) B-TYPE GROUP @ SHOWING RAPID GROWTH.

I B. SOLAR ACTIVITY IS EXPECTED TO BE AT LOW TO MODERATE LEVELS DURING THE NEXT 24 HOURS. REGION 1734 IS CAPABLE OF PRODUCING M-CLASS X-RAY FLARES. REGION 1724 HAS LITTLE POTENTIAL FOR ENERGETIC EVENTS UNLESS A MORE DYNAMIC DECAY BEGINS.

III. THE GEOMAGNETIC FIELD HAS BEEN ACTIVE DURING THE LAST 24 HOURS. THE BOULDER MAGNETOMETERS RECORDED A K VALUE OF 5 FROM 11/05 00Z - 0900Z AS A RESULT OF NIGHT TIME SUBSTORM ACTIVITY. THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE WITH POSSIBLE PERIODS AT MINOR STORM LEVEL DURING THE NEXT 24 HOURS AS THE RESULT OF CORONAL HOLE INFLUENCE. THE FIELD SHOULD THEN RETURN TO GENERALLY UNSETTLED CONDITIONS FOR THE REMAINDER OF THIS FORECAST PERIOD.

IV. EVENT PROBABILITIES 12 MAY - 14 MAY

CLASS M 65/65/65

CLASS X 25/105/105

PREDICTED 105/105/105

PCAF GREEN

V. OTTAWA 10.7 CM FLUX

OBSERVED 11 MAY 175

PREDICTED 12 MAY - 14 MAY 175/174/173

90-DAY MEAN 11 MAY 186

VI. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 10 MAY 07

ESTIMATED AFR/AP 11 MAY 16/19

PREDICTED AFR/AP 12 MAY - 14 MAY 20/28 15/19 10/14

SOLTERWARN

BT