

HFUS 1 BOU 222200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO

SDF NUMBER 234

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

IA. DESPITE THE LARGE NUMBER OF ACTIVE REGIONS VISIBLE, 15, AND THE HIGH FLARE POTENTIAL IN SOME REGIONS, ENERGETIC FLARE PRODUCTION HAS BEEN LOW. THE LARGEST X-RAY ENHANCEMENT WAS A 12 HOUR C5 EVENT BEGINNING 21/2200Z AND PEAKING NEAR 22/0200Z, WITH NO DEFINITE OPTICAL COUNTER PART. REGION 1943 (N05E41) REMAINS A BETA-GAMMA-DELTA AND RETAINS ITS HIGH FLARE POTENTIAL, BUT HAS PRODUCED ONLY SMALL EVENTS THIS UT DAY. BRIGHT POINTS AND AN ACTIVE FILAMENT ARE STILL PRESENT. REVERSE POLARITY REGION 1929 (S26W37) IS BETA-GAMMA WITH A VERY ACTIVE FILAMENT. REGION 1942 (S32E40) HAS SHOWN RAPID GROWTH THRU THE PAST 24 HOURS BUT IS MAGNETICALLY SIMPLE. NEW REGION 1950 (S21E68) IS OLD AND SIMPLE. ALL OTHER REGIONS APPEAR STABLE OR DECLINING. NO NEW REGIONS ARE SEEN ON THE EAST LIMB FROM BOTH OPTICAL OR RADIO SOURCES.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE THRU THE FORECAST PERIOD. ENERGETIC EVENTS ARE POSSIBLE FROM REGION 1943 AND REGION 1929 AND TO A LESSER DEGREE FROM REGION 1942.

II. THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE THE PAST 24 HOURS. CONDITIONS ARE EXPECTED TO BECOME MORE DISTURBED IN THE NEXT 24 HOURS AS A RESULT OF THE CROSSING OF A SOLAR SECTOR BOUNDARY. A LARGE EQUATORIAL CORONAL HOLE IS NOW APPROACHING CENTRAL MERIDIAN AND SHOULD RESULT IN AN INCREASE IN ACTIVITY ON/ABOUT 26 AUGUST. THE PROTON FLUXES FROM EARLY EVENTS FELL BELOW 10 COUNTS AT GREATER THAN 10 MEV AT 22/1900Z AND THE ABSORPTION ON THE 30 MHZ RIOMETER AT THULE FELL BELOW 2DB AT 22/1515Z.

III. EVENT PROBABILITIES 23 AUGUST - 25 AUGUST

CLASS M 90/90/90

CLASS X 60/40/50

PROTON 30/20/25

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 AUGUST 218

PREDICTED 23-25 AUGUST 224/227/230

90-DAY MEAN 22 AUGUST 170

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 21 AUGUST 28

ESTIMATED AFR/AP 22 AUGUST 16/16

PREDICTED AFR/AP 23-25 AUGUST 20/18 - 15/18 - 10/20

SOLTERWARN

BT