

HFUS 1 BOU 262200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 238

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 26 AUGUST 1979

IA. SOLAR ACTIVITY HAS BEEN HIGH DURING THE PAST 24 HOURS. REGION  
1943 (N25W11) PRODUCED A SERIES OF ABOUT A DOZEN C-CLASS SUBFLARES  
BEFORE PRODUCING A MAJOR FLARE WITH A MAXIMUM AT 26/1700Z.

THIS WAS AN X2 EVENT IN X-RAYS (A 2B OPTICALLY WITH PARALLEL FLARE  
RIBBONS). THE FLARE WAS ACCOMPANIED BY STRONG SWF'S AT H.F.  
FREQUENCIES. THE 10 CENTIMETER RADIO BURST REACHED 640 F.V.

IB. REGION 1943 CAN BE EXPECTED TO RELAX FOR A DAY OR TWO BUT WILL  
PROBABLY PRODUCE STILL MORE MAJOR FLARES DURING ITS DISK TRANSIT.  
REGION 1942 (S30W11) HAS GROWN MORE COMPLEX AND MAY NOW BEGIN ENERGETIC  
FLARE PRODUCTION. REGION 1951 (N18W00) LOOKS CAPABLE OF PRODUCING  
OCCASIONAL M-CLASS FLARES. A NEW REGION, REGION 1956 (N17E75), IS  
NOT COMPLETELY ON THE DISK YET AND ALREADY LOOKS LIKE A FLARE PRODUCER.

II. THE GEOMAGNETIC FIELD HAS BEEN MILDLY ACTIVE TO UNSETTLED DURING  
THE PAST 24 HOURS. A MAJOR MAGNETIC STORM IS EXPECTED TO BEGIN  
ABOUT 27/1300Z AS A RESULT OF TODAY'S MAJOR FLARE NEAR CENTRAL  
MERIDIAN. THE FLARE CHARACTERISTICS ALSO INDICATE GREATER  
THAN 10 MEV PROTONS SHOULD BEGIN ARRIVING AT THE EARTH ANY TIME NOW.  
A MAJOR PROTON EVENT IS NOT ANTICIPATED BUT EVENT THRESHOLDS  
(10 PARTICLES/CM2/SEC/STERADIAN) ARE LIKELY TO BE EXCEEDED.

#### III. EVENT PROBABILITIES

CLASS M 70/75/80

CLASS X 30/35/40

PROTON 40/40/40

PCAF RED

#### IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 AUGUST 223

PREDICTED 27 - 29 AUGUST 2.18/2.18/2.16

90-DAY MEAN 26 AUGUST 173

#### V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 25 AUGUST 16

ESTIMATED AFR/AP 26 AUGUST 14/19

PREDICTED AFR/AP 27 - 29 AUGUST 50/55 30/55 16/30

SOLTERWARN

BT