

HFUS 1 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 236

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 24 AUGUST 1979

IA. SOLAR ACTIVITY HAS BEEN LOW TO MODERATE. REGION 1943 (N05E16) HAS PRODUCED A C5/SB AT 23/2333Z; A C9/1N AT 1159Z; AND A C8/1B AT 1814Z. MODERATE SHORT WAVE FADES ACCOMPANIED THESE FLARES. REGION 1943 REMAINS LARGE AND MAGNETICALLY COMPLEX WITH ONLY MINOR STRUCTURAL CHANGES. REGION 1951 (N18E24) HAS EMERGED STRONGLY DURING THE PAST 24 HOURS. THE REGION IS COMPACT IN SUNSPOT STRUCTURE WITH A DELTA CONFIGURATION. THE FILAMENT THAT DEFINED THE UNIPOLAR ISLAND OF POLARITY WITHIN WHICH REGION 1951 HAS EMERGED DISAPPEARED THIS AFTERNOON. REGIONS 1939 (S13W14) AND 1942 (S32E15) REMAIN WITH SOME MAGNETIC COMPLEXITY AND HAVE PRODUCED CLASS C SUBFLARE ACTIVITY. REGION 1954 (N06E60) IS SPOTLESS BUT HAS PRODUCED TWO SUBFLARES TODAY.

IB. SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH REGIONS 1943 AND 1951 PRODUCING EXPECTED CLASS M ACTIVITY AND REGIONS 1939 AND 1942 CONTRIBUTING TO THE CLASS C ACTIVITY.

II. THE GEOMAGNETIC FIELD HAD BEEN QUIET BUT BECAME ACTIVE AFTER 1500Z. THE FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE ON THE 25TH WITH ACTIVE TO STORM CONDITIONS ON THE 26TH AND 27TH AS THE EARTH COMES WITHIN THE INFLUENCE OF AN EQUATORIAL CORONAL HOLE. THE CHANCE OF FLARE INDUCED MAGNETIC ACTIVITY IS INCREASING AS THE ACTIVE REGIONS APPROACH CENTRAL MERIDIAN.

III. EVENT PROBABILITIES 25 - 27 AUG

CLASS M 90/90/90

CLASS X 40/40/40

PROTON 25/30/40

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 AUG 220

PREDICTED 25 - 27 AUG 228/226/220

90-DAY MEAN 24 AUG 172

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 23 AUG 07

ESTIMATED AFR/AP 24 AUG 10/11

PREDICTED AFR/AP 25 - 27 AUG 13/15 30/25 35/55

SOLTERWARN

BT