

HFUS/1 BOU 272200

FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER, COLO

SDF NUMBER 058

JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 27 FEBRUARY 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. THE LARGEST EVENT WAS AN M1/1B FLARE FROM REGION 2296 (S13E39) AT 0353 UT MAXIMUM. PARALLEL RIBBONS, TYPE II (IMPORTANCE 2) AND TYPE IV (IMPORTANCE 1 PLUS) SWEEPS WERE REPORTED, ALONG WITH SHORT WAVE FADES. SINCE THIS FLARE, THE REGION HAS SIMPLIFIED AND NOW APPEARS UNIMPRESSIVE. THE ENTIRE DISK HAS UNDERGONE SIGNIFICANT CHANGES DURING THE PAST 24 HOURS, WITH AT LEAST 5 NEW REGIONS EMERGING. REGION 2291 (S11W10) HAS UNDERGONE STRUCTURAL CHANGES WITH A DELTA MAGNETIC CONFIGURATION VISIBLE IN THE NORTH WEST PORTION OF THE REGION. REGION 2302 (N17E69) HAS DONE LITTLE SINCE YESTERDAY'S LIMB ACTIVITY; HOWEVER, THE FLARE ASSOCIATED WITH THIS REGION IS LARGE, EXTENDING BACK TO THE EAST LIMB WHERE SURGING IS STILL REPORTED.

IB. SOLAR ACTIVITY SHOULD REMAIN AT MODERATE LEVELS THROUGH THE FORECAST PERIOD, WITH M-CLASS FLARES POSSIBLE FROM REGIONS 2291, 2302, AND TO A LESSER EXTENT, REGIONS 2294 (S26E32) AND 2288 (N11W52). THERE IS ALSO A GOOD POSSIBILITY OF SIGNIFICANT REGIONS STILL APPEARING AT THE EAST LIMB.

II. THE GEOMAGNETIC FIELD IS ALMOST A REPEAT OF YESTERDAY'S LEVELS WITH GENERALLY UNSETTLED CONDITIONS INTERSPERSED WITH SHORT PERIODS OF ACTIVE LEVELS. LOW UNSETTLED CONDITIONS ARE EXPECTED THROUGH THE NEXT 2 DAYS WITH A SLIGHT INCREASE IN THE GEOMAGNETIC ACTIVITY ON THE THIRD DAY DUE TO THE INFLUENCE OF A SOLAR SECTOR BOUNDARY.

III. EVENT PROBABILITIES 28 FEB - 01 MAR

CLASS M 70/80/90

CLASS X 20/25/35

PROTON 01/05/05

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 27 FEB 177

PREDICTED 28 FEB - 01 MAR 183/189/196

90-DAY MEAN 27 FEB 205

V. GEOMAGNETIC A INDICES

OBSERVED FREDERICKSBURG 26 FEB 14

ESTIMATED AFR/AP 27 FEB 12/15

PREDICTED AFR/AP 28 FEB - 01 MAR 08/08 08/08 14/16

SOLTERWARN

BT