

HFUS 1 BOU 102200  
FROM SPACE ENVIRONMENT SERVICES CENTER BOULDER COLO  
SDF NUMBER 041  
JOINT USAF/NOAA PRIMARY REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200Z 10 FEBRUARY 1980

IA. SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS.  
THREE M-CLASS X-RAY BURSTS HAVE BEEN OBSERVED DURING THAT TIME.  
THE FIRST, FROM REGION 2281 (N08E 74) WITH AN M1 MAXIMUM AT  
10/1043Z HAD NO FIRM OPTICAL REPORT. THEN, REGION 2276 (S12W 26)  
PRODUCED AN M2/2B FLARE IN ITS TRAILER SPOTS (ALSO INVOLVING  
REGION 2278 (S12E 13) TO SOME EXTENT.). THIS SECOND M-FLARE  
REACHED MAXIMUM AT 1535Z AND WAS ACCCOMPANIED BY SMALL DISCRETE  
FREQUENCY RADIO BURSTS AT CENTIMETRIC WAVELENGTHS AND MODERATE  
SID'S. THIS ACTIVITY MAY HERALD THE EMERGENCE OF A NEW GROUP  
BETWEEN REGIONS 2276 AND 2278. FINALLY, ANOTHER M1 BURST WAS  
SEEN IN REGION 2281 WITH A MAXIMUM AT 2027Z. THIS SB FLARE WAS  
ACCOMPANIED BY BOTH BRIGHT AND DARK SURGES, BUT LITTLE IN THE  
WAY OF SID RESPONSE.

IB. SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE FOR A DAY  
OR TWO. IT IS DIFFICULT TO DETERMINE WHETHER REGION 2281 (OLD  
REGION 2245) WILL DEFINE A NEW SET OF ACTIVE LONGITUDES, WITHOUT  
A BETTER LOOK AT THE REGION. IT IS CURRENTLY ESTIMATED THAT  
THE PRESENT MODERATE LEVEL OF ACTIVITY WILL DIMINISH WITHIN  
SEVERAL DAYS.

II. THE GEOMAGNETIC FIELD HAS BEEN QUIET FOR THE PAST 24 HOURS.  
THE FIELD IS STILL EXPECTED TO BECOME MILDLY ACTIVE ON  
11 FEBRUARY DUE TO THE X2 BURST SEEN ON 08 FEBRUARY. ANY SUCH  
DISTURBANCE IS EXPECTED TO BE BRIEF.

III. EVENT PROBABILITIES 11 FEBRUARY - 13 FEBRUARY

CLASS M 9/9/0/9/0

CLASS X 15/20/25

PREDICTED 10/15/20

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 FEBRUARY 221

PREDICTED 11-13 FEBRUARY 216/211/207

90-DAY MEAN 10 FEBRUARY 208

V. GEOMAGNETIC INDICES

OBSERVED FREDERICKSBURG 09 FEBRUARY 11

ESTIMATED AFR/AP 10 FEBRUARY 06/07

PREDICTED AFR/AP 11-13 FEBRUARY 14/18 - 09/12 - 07/08

SOLAR/WARN

BT