

HFUS 1 BOU 261409

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 057A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1200UT 26 FEB 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
25/1200UT TO 26/1200UT:

SOLAR ACTIVITY HAS BEEN LOW. ONLY ONE SUBFLARE FROM REGION  
2957 (S05E19) AND SEVERAL SMALL CLASS C X-RAY EVENTS WERE  
REPORTED. HOWEVER, THE REGIONS ON THE DISK REMAIN INTERESTING.  
REGION 2957 IS A SMALL GROWING REGION LOCATED NEAR REGION  
2954. REGION 2954 (S16E30) IS GROWING IN SPOT COMPLEXITY AND  
PLAGE AREA. IT CONTAINS A DELTA CONFIGURATION IN A SPOT GROUP  
OF CLASS/AREA E/630. REGION 2958 (S12E54) IS GROWING SLOWLY  
AND ALSO CONTAINS A DELTA CONFIGURATION IN A SPOT GROUP  
OF CLASS/AREA E/1000. REGION 2951 (N12W67) HAS BEGUN TO DECAY  
SLIGHTLY.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REACH MODERATE TO HIGH LEVELS WITH  
REGION 2951, 2954 AND 2958 ALL CAPABLE OF PRODUCING A MAJOR  
FLARE.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN ACTIVE. IT IS EXPECTED TO BE  
UNSETLED DURING THE FORECAST PERIOD.

III. EVENT PROBABILITIES: 27 FEB - 01 MAR

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 25 FEB 239

ESTIMATED 26 FEB 240

PREDICTED 27 FEB-01 MAR 243/240/235

90 DAY MEAN 25 FEB 201

V. GEOMAGNETIC INDICES

OBSERVED AFR 24 FEB 14 AP 25 FEB 25

ESTIMATED AFR 25 FEB 18 AFR/AP 26 FEB 17/18

PREDICTED AFR/AP 27 FEB - 01 MAR 14/18 10/15 08/12

SOLTERWARN

BT

HFUS 3 BOU 262200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 057B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY  
ISSUED 2200UT 26 FEBRUARY 1981

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
26/1200UT TO 26/2200UT:

SOLAR ACTIVITY HAS BEEN VERY HIGH. REGION 2958 (S13E~~15~~) HAS PRODUCED TWO X-CLASS EVENTS, AN X1/0B AT 1426UT MAXIMUM FOLLOWED BY AN X4/3B AT 1946UT MAXIMUM. THE X1 EVENT WAS VERY IMPULSIVE AND SHORT-LIVED WITH 830 FLUX UNITS REPORTED AT 2800 MHZ AND 10,000 FLUX UNITS AT 606 MHZ. THE X4/3B WAS SYMPATHETIC TO AN M2/2N FLARE IN REGION 2954 (S17E~~16~~) AT 1849 UT MAXIMUM. THE X4/3B WAS VISIBLE IN WHITE LIGHT IN THE SOUTHWESTERN AND CENTRAL PORTION OF THE LARGE PENUMbra, HAD AN ACCOMPANYING RADIO BURST OF 2800 FLUX UNITS AT 2800MHZ, AND A TYPE II/IV RADIO SWEEP.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE TO HIGH THROUGH THE FORECAST PERIOD WITH LARGE EVENTS POSSIBLE FROM REGIONS 2954 AND 2958.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN GRADUALLY INCREASING IN ACTIVITY DURING THE PAST 10 HOURS. THE FIELD IS CURRENTLY VERY ACTIVE AND EXPECTED TO CONTINUE ACTIVE TO MINOR STORM LEVELS THROUGH THE NEXT 24 HOURS. A LOW ENERGY PARTICLE ENHANCEMENT IS EXPECTED BETWEEN 0600UT AND 1000UT ON THE 27TH AS A RESULT OF TODAYS X4 EVENT.

III. EVENT PROBABILITIES: 27 FEBRUARY - 01 MARCH

CLASS M 90/90/90

CLASS X 50/50/50

PROTON 30/35/40

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 26 FEB 243

PREDICTED 27 FEB - 01 MAR 243/240/235

90 DAY MEAN 26 FEB 201

V. GEOMAGNETIC A. INDICES

OBSERVED AFR/AP 25 FEB 21/25

ESTIMATED AFR/AP 26 FEB 20/28

PREDICTED AFR/AP 27 FEB - 01 MAR (20/25 20/25 25/35)

SOLFERWARM

BT

for  
first  
1200z

G922