

HFUS 1 BOU 241300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 055A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 24 FEB 1982

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/1200Z TO 24/1200Z: SOLAR ACTIVITY INCREASED TO THE MODERATE LEVEL WITH THE OCCURRENCE OF AN M1.9 AT 24/0703Z MAXIMUM. SEVERAL OBSERVATORIES WERE SEEING DURING THE PERIOD OF THE FLARE, BUT SAW NO VISIBLE DISK FLARE. THE SLOW RISE/DECAY OF THE X-RAY EVENT INDICATES IT WAS FROM BEHIND THE LIMB. A REPORT OF AN APR AT S04 EAST LIMB AT THE APPROXIMATE TIME OF THE X-RAY BURST COULD INDICATE THE FLARE WAS FROM AN ACTIVE REGION JUST BEYOND THE EAST LIMB. REGION 3625 (N14E75) IS NOW THE MOST COMPLEX OF THE DISK REGIONS (WITH THE WEST LIMB ROTATION OF REGION 3607) DISPLAYING A COMPACT D-CLASS SPOT GROUP AND FREQUENT FLUCTUATIONS AND SURGING. REGION 3613 (N06W03) IS GROWING SLOWLY AND MAY START PRODUCING SMALL FLARES IN THE NEAR FUTURE.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE GENERALLY LOW, BUT REGION 3625 AND THE PROSPECTS OF AN ACTIVE REGION ROTATING OVER EAST LIMB SHOULD CONTRIBUTE TO A GRADUAL INCREASE IN M-CLASS FLARE PRODUCTION DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS AGAIN ACTIVE FOR THE PAST 24 HOURS. THE BOULDER K-INDEXES VARIED FROM A 2 TO A 5 FOR THE 24/03-06Z PERIOD. UNSETLED TO ACTIVE CONDITIONS ARE EXPECTED DURING THE FORECAST PERIOD, INCREASING SLOWLY TOWARDS THE END OF THE PERIOD.

III. EVENT PROBABILITIES 25 FEB-27 FEB

CLASS M 40/50/60

CLASS X 05/05/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 FEB 177

ESTIMATED 24 FEB 187

PREDICTED 25 FEB-27 FEB 192/195/197

90 DAY MEAN 23 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 22 FEB 028 AP 23 FEB 026

ESTIMATED AFR 23 FEB 020 AFR/AP 24 FEB 018/024

PREDICTED AFR/AP 25 FEB-27 FEB 012/015-015/020-015/015

SOLTERWARN

BT

HXUS BOU 241300

PREDM 04025 05026 06027

PREDX 00525 00526 01027

PREDP 00125 00126 00127

PCAFAT 00125

TENCM 19225 19526 19727

AFRED 01225 01526 01527

AFAPF 01525 02026 01527

KKK 32233 32223 34332

BT

KBOT

HFUS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 055B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 200Z 24 FEBRUARY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
24/1200Z TO 24/2100Z:

SOLAR ACTIVITY HAS BEEN LOW. THE LARGEST CLASS C EVENTS HAVE  
BEEN DIVIDED BETWEEN REGION 3613 (N06W09) AND 3625 (N15E66).  
REGION 3613 HAS GROWN SLIGHTLY AND ITS MAGNETIC INVERSION  
LINE IS ORIENTED NEARLY EAST-WEST, AN ACTIVE ASPECT. REGION  
3625 IS NOW SEEN AS A SMALL CLASS D SPOT GROUP WITH A BRIGHT  
AND SLIGHTLY COMPLEX PLAGE. ADDITIONAL PLAGE, SURGES AND BRIGHT  
RADIO CORONA FOLLOW THIS REGION AT THE LIMB.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO BE MODERATE WITH SMALL CLASS  
M EVENTS FROM REGION 3625 AND POSSIBLY FROM REGION(S) YET TO  
ROTATE INTO VIEW.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS QUIETED FROM ACTIVE TO UNSETTLED  
CONDITIONS. A RESUMPTION OF ACTIVE CONDITIONS IS EXPECTED ON  
26 FEBRUARY DUE TO A HIGH-SPEED SOLAR WIND STREAM.

III. EVENT PROBABILITIES: 25-27 FEBRUARY

CLASS M 40/50/60

CLASS X 05/05/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 24 FEBRUARY 188

PREDICTED 25-27 FEBRUARY 192/197/202

90 DAY MEAN 24 FEBRUARY 201

V. GEOMAGNETIC INDICES

OBSERVED AFR/AP 23 FEB 22/26

ESTIMATED AFR/AP 24 FEB 19/24

PREDICTED AFR/AP 25-27 FEB 12/15 15/20 15/15

SOLTERWARN

BT