

HFXUS 1 BOU 071300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 038A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 07 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 06/1200Z TO 07/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE WITH SEVEN CLASS M EVENTS, ALL OCCURRING ON 06 FEBRUARY. REGION 3576 (S14W81) PRODUCED A M6/2B FLARE AT 2050Z WITH MODERATE SHORT WAVE FADE AND A 780 FU BURST RECORDED AT 2695 MHZ. THIS SAME REGION FOLLOWED WITH A M4/1N FLARE AT 2350Z; EJECTA TO 0.5R OCCURRED WITH THIS FLARE. CENTIMETRIC BURSTS WERE MINOR BUT A TYPE II DEKAMETRIC BURST OCCURRED WITH THIS FLARE. REGION 3576 IS NOW TOO CLOSE TO THE LIMB FOR PROPER EVALUATION. REGION 3594 (S09E42) PRODUCED A M1/2B AT 1534Z(MAX). A 200 FU BURST AT 2695 MHZ AND MODERATE SHORT WAVE FADE ACCCOMPANIED THIS FLARE. THIS REGION ALSO PRODUCED A M1/1B FLARE AT 1720Z. MOST OF THE FLARES IN REGION 3594 HAVE OCCURRED ON THE SW CORNER OF THE LARGE LEADER SPOT WHERE AN ANOMOLOUS POLE EXISTS. THIS REGION IS RESTRUCTURING BUT A GENERAL PENUMBRAL DECAY IN THE TRAILER PORTION HAS BEEN REPORTED. REGION 3583 (S19W45) IS RESTRUCTURING BUT RETAINS A COMPLEX NEUTRAL LINE. REGIONS 3592 (N15W45) AND 3595 (S06W50) ARE GROWING IN SUNSPOT STRUCTURE. SUNSPOTS ARE REPORTED ROTATING ON TO THE DISK NEAR SE07 AND SE12.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE WITH OCCASIONAL SUBSTORM ACTIVITY PRODUCING MID-LATITUDE K-5 VALUES. GENERALLY UNSETTLED TO ACTIVE CONDITIONS ARE EXPECTED THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 08 FEB-10 FEB

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 06 FEB 252

ESTIMATED 07 FEB 242

PREDICTED 08 FEB-10 FEB 230/218/210

90 DAY MEAN 06 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 05 FEB 025 AP 06 FEB 032

ESTIMATED AFR 06 FEB 030 AFR/AP 07 FEB 020/028

PREDICTED AFR/AP 08 FEB-10 FEB 013/020-011/018-010/015

SOLTERWARN

BT

HFXUS BOU 071300  
PREDM 08008 08009 08010  
PREDX 01008 01009 01010  
PREDP 01008 01009 01010  
PCAFT 00108  
TENCM 23008 21809 21010  
AFRED 01308 01109 01010  
AFAPF 02008 01809 01510  
KKK 22344 33333 44433  
BT

KBOU

HFUS 3 BOU 072200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDE NUMBER 038B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 07 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
07/1200Z TO 07/2100Z:

REGION 3576 (S13W84) PRODUCED AN X1/2B AT 071258Z (MAX) AND  
THEN THE DISK WENT INTO A LULL. THE X1/2B HAD A 1300 FLUX UNIT  
BURST AT 10CM AND SHORTLY ADDED TO 22 MHZ. REGION 3576 IS  
NOW CROSSING WEST LIMB. REGION 3594 (S08E34) REMAINS LARGE,  
COMPLEX AND IS CURRENTLY PRODUCING AN M3/2B (07/2105Z MAX). THE  
FIRST SIGNIFICANT FLARE SINCE THE X1/2B AT 071258Z. THE OTHER  
DISK FEATURES ARE ESSENTIALLY QUIET. FOUR NEW REGIONS WERE  
NUMBERED TODAY: 3599 (S19E23), 3600 (S07E61), 3601 (S12E70) AND  
3602 (N16E77). ONLY 3601 APPEARS TO HAVE ANY POTENTIAL AT THIS  
POINT.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE AT MODERATE LEVELS DURING THE COMING  
24 HOURS. REGION 3576 COULD PRODUCE ADDITIONAL ENERGETIC  
ACTIVITY BEFORE IT DEPARTS THE VISIBLE DISK AND REGION 3594  
RETAINS ITS POTENTIAL FOR SIGNIFICANT ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD WAS AT MINOR STORM LEVELS EARLIER TODAY  
BUT HAS SINCE BECOME UNSETLED. QUIET TO UNSETLED CONDITIONS  
SHOULD PERSIST FOR THE NEXT THREE DAYS. THE X1/2B AT 071258Z  
PRECIPITATED AN ENHANCEMENT IN THE 10 MEV PARTICLE FLUX  
THAT HOVERED NEAR EVENT THRESHOLDS BETWEEN 071400Z AND  
07/1600Z.

III. EVENT PROBABILITIES: 08 FEB - 10 FEB

CLASS M 80/80/80

CLASS X 10/10/10

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 FLUX

OBSERVED 07 FEB 247

PREDICTED 08-10 FEB 237/227/219

90 DAY MEAN 07 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 06 FEB 29/32

ESTIMATED AFR/AP 07 FEB 18/20

PREDICTED AFR/AP 08-10 FEB 13/20 11/18 10/15

SOLTERWARN

BT