

HFUS 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 033B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/1200Z TO 02/2100Z: SOLAR ACTIVITY HAS REMAINED LOW. THE LARGEST XRAY EVENT WAS AN OPTICALLY UNCORRELATED C2 WITH MAXIMUM TIME AT 1400Z. SEVERAL REGIONS PRODUCED SMALL OPTICAL FLARES, MOST OF THESE FLARES WERE IN REGION 4077 (S17W04). THIS REGION REMAINS THE LARGEST ON THE DISK, BUT APPEARS TO HAVE STABALIZED IN WHITE LIGHT AREA. MAGNETICALLY IT IS A BETA-DELTA GROUP WITH AN ESSENTIALLY STRAIGHT NEUTRAL LINE.

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

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED AND IS EXPECTED TO REMAIN UNSETLED WITH A PERIOD OF ACTIVE LEVEL POSSIBLE ON 04 FEBRUARY DUE TO A MINOR FILAMENT DISRUPTION.

III. EVENT PROBABILITIES 03 FEB-05 FEB

CLASS M 25/25/25

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 FEB 165

PREDICTED 03 FEB-05 FEB 162/156/152

90 DAY MEAN 02 FEB 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 FEB 010/012

ESTIMATED AFR/AP 02 FEB 005/010

PREDICTED AFR/AP 03 FEB-05 FEB 012/010-012/020-010/015

SOLTERWARN

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HFUS 1 BOU 031300.  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 034A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 03 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/1200Z TO 03/1200Z: SOLAR ACTIVITY HAS BEEN HIGH WITH REGION 4077 (S17W10) HAVING PRODUCED A MAJOR FLARE, AN X4/3B AT 0539Z WITH X-RAY MAXIMUM AT 0611Z. OPTICALLY, THE FLARE HAD PARALLEL RIBBONS, DISK LOOP PROMINENCE, AND APPROXIMATELY 50 PERCENT UMBRAL COVERAGE. STRONG RADIO BURSTS WERE RECORDED ACROSS THE SPECTRUM WITH 2800 FU REPORTED AT 2695 MHZ. STRONG TYPE II/IV DEKAMETRIC BURSTS OCCURRED WITH CULGOORA REPORTING NEAR SATURATION FOR APPROXIMATELY AN HOUR ON THEIR RADIOHELIOGRAPH (6-8000 MHZ). LEARMONT REPORTED A WEAKENING IN BOTH FIELD STRENGTH AND PENUMBRA AT 0700Z; BUT RESTRUCTURING AND STRENGTHENING OF THE FIELD WAS OCCURRING AT 0813Z. REGION 4375 (S14W21) HAD A 1N FLARE COINCIDENT WITH THIS MAJOR FLARE.

IB. SOLAR ACTIVITY FORECAST: WITH THE RESTRUCTURING AND STRENGTHENING IN REGION 4077, ANOTHER MAJOR FLARE IS POSSIBLE DURING THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETLED. THE FIELD IS EXPECTED TO REMAIN UNSETLED UNTIL THE ARRIVAL OF THE SHOCK FROM TODAY'S MAJOR FLARE. THE ARRIVAL TIME IS EXPECTED TO OCCUR AFTER 04/1200Z. STORM LEVELS ARE EXPECTED TO PERSIST FOR 09-15 HOURS AND THEN THE FIELD IS EXPECTED TO REMAIN GENERALLY ACTIVE. A LOW LEVEL SATELLITE PROTON EVENT IS EXPECTED TO COMMENCE DURING THE NEXT SIX HOURS.

III. EVENT PROBABILITIES 04 FEB-06 FEB

CLASS M 50/50/50  
CLASS X 10/10/10  
PROTON 10/10/10  
PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED	02 FEB	165
ESTIMATED	03 FEB	162
PREDICTED	04 FEB-06 FEB	156/152/147
90 DAY MEAN	02 FEB	170

V. GEOMAGNETIC A INDICES

OBSERVED AFR	01 FEB	010	AP 02 FEB	008
ESTIMATED AFR	02 FEB	005	AFR/AP 03 FEB	008/010
PREDICTED AFR/AP	04 FEB-06 FEB	035/030-035/040-018/020		

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HFUS 3 BOU 032200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 034B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 03 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM  
03/1200Z TO 03/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST  
NINE HOURS. THE LARGEST FLARE WAS A C5 X-RAY FLARE. REGION 4077  
(S17W17) REMAINS THE MOST DYNAMIC AREA ON THE DISK. IT IS  
DECAYING SLIGHTLY BUT MAINTAINS ITS BETA-DELTA MAGNETIC  
CONFIGURATION WITH THE NEUTRAL LINE ORIENTED IN AN EAST-WEST  
DIRECTION. ALL OTHER REGIONS APPEAR STABLE OR DECAYING. NEW  
REGIONS 4081 (S09E43) AND 4082 (S07E22) ARE UNIMPRESSIVE AT  
THIS TIME.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN  
GENERALLY LOW WITH A POSSIBILITY OF ISOLATED MODERATE LEVEL  
EVENTS. REGION 4077 IS THE LIKELY SOURCE OF ANY INCREASED  
ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS  
BEEN QUIET. MINOR STORM CONDITIONS ARE EXPECTED TO OCCUR AFTER  
04/1200Z AND PERSIST FOR 9-15 HOURS. THE FIELD SHOULD BECOME  
ACTIVE THE FINAL DAY OF THE FORECAST PERIOD. THE PROTON EVENT  
EXPECTED TO ARRIVE DURING THIS PERIOD HAS NOT APPEARED AND IS  
NO LONGER EXPECTED.

III. EVENT PROBABILITIES 04 FEB-06 FEB

CLASS M 50/50/50

CLASS X 10/10/10

PROTON 10/10/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 FEB 150

PREDICTED 04 FEB-06 FEB 148/146/144

90 DAY MEAN 03 FEB 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 02 FEB 003/008

ESTIMATED AFR/AP 03 FEB 008/010

PREDICTED AFR/AP 04 FEB-06 FEB 035/010-035/030-018/040

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