

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 STABILIZED 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 UNSETTLED AND IS EXPECTED TO REMAIN UNSETTLED 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
UMBRA L 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). LEARMONTH 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 UNSETTLED. THE FIELD IS EXPECTED TO REMAIN UNSETTLED 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

SOLTERWARN

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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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