

HFUS 1 BOU 081300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 039A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 08 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
07/1200Z TO 08/1200Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 3576
(S13W89) PRODUCED A X1/2B AT 1248Z WITH STRONG CENTIMETRIC
BURSTS; 1300 FU WERE RECORDED AT 2695 MHZ AND ALSO MODERATE
SHORT WAVE FADE OCCURRED THROUGH 22 MHZ. THE BALANCE OF THE
ENERGETIC FLARES WERE FROM REGION 3594 (S08E28): M3/2B AT 2049Z
WITH MINOR CENTIMETRIC BURSTS, WEAK TYPE II EMISSION, AND
MODERATE SHORT WAVE FADE THROUGH 12 MHZ; M1/1B AT 0151Z (X-RAY
MAX) WITH MINOR CENTIMETRIC BURSTS; AND, M1/1B AT 0243Z (X-RAY
MAX), AGAIN WITH MINOR CENTIMETRIC BURSTS. RESTRUCTURING IS
OCCURRING IN REGION 3594 WITH PART OF THE CHANGE BEING AN
INCREASE IN THE NUMBER AND STRENGTH OF THE ANOMOLOUS POLARITY
SUNSPOTS AHEAD OF THE LARGE LEADER. FOUR SIMPLE REGIONS WERE
ADDED ON 07 FEBRUARY.

IR. SOLAR ACTIVITY FORECAST: WITH THE CHANGES THAT ARE
OCCURRING IN REGION 3594, ASSOCIATED FLARES ARE EXPECTED TO
PRODUCE HIGHER X-RAY BURSTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE. MODERATELY UNSETTLED TO ACTIVE CONDITIONS ARE
EXPECTED THROUGH THE NEXT THREE DAYS. THE X1 FLARE PRODUCED AN
ENHANCEMENT IN THE 10 MEV PARTICLE FLUX, THE VALUE HOVERING
NEAR THE THRESHOLD OF 10 P/CM2/SEC/STER BETWEEN 07/1400Z AND
07/1600Z.

III. EVENT PROBABILITIES 09 FEB-11 FEB

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 07 FEB 247

ESTIMATED 08 FEB 242

PREDICTED 09 FEB-11 FEB 234/226/218

90 DAY MEAN 07 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 06 FEB 029 AP 07 FEB 032

ESTIMATED AFR 07 FEB 019 AFR/AP 08 FEB 017/020

PREDICTED AFR/AP 09 FEB-11 FEB 014/018-012/015-010/015

SOLTERWARN

BT

HXUS BOU 081300

PREDM 09009 09010 09011

PREDX 02009 02010 02011

PREDP 01509 01510 01511

PCAFT 00209

TENCM 23409 22610 21811

AFRED 01409 01210 01011

AFAPF 01809 01510 01511

KKK 23344 33333 34332

BT

HFUS 3 BOU 082200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 039B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 08 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200Z TO 08/2100Z:

SOLAR ACTIVITY HAS REMAINED HIGH. REGION 3576 (S13W90)
PRODUCED AN X1/1B AT 08/1253Z (MAX) WITH ASSOCIATED RADIO
EMISSIONS OF TYPE V ON THE SWEEP FREQUENCIES AND 880 FLUX
UNITS AT 2695 MHZ ON DISCRETE FREQUENCIES. IMPORTANCE 3 SHORT-
WAVE FADES TO 22 MHZ WERE ALSO REPORTED. SINCE THAT TIME,
OBSERVATORIES HAVE BEEN HAMPERED BY WEATHER BUT SMALL XRAY AND
RADIO DATA INDICATE THAT THE DISK REMAINS DYNAMIC.

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY SHOULD BE AT GENERALLY MODERATE LEVELS. THUS
FAR 3594 HAS SHOWN A PROPENSITY FOR ONLY M CLASS FLARES
AND REGION 3576 SHOULD BE FAR ENOUGH BEHIND THE LIMB
THAT ITS EFFECTS WILL BE MASKED.

II. GEOPHYSICALS SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE. GEN-
ERALLY UNSETTLED CONDITIONS SHOULD CONTINUE.

III. EVENT PROBABILITIES: 09 FEB - 11 FEB

CLASS M 90/90/90

CLASS X 20/20/20

PROTON 15/15/15

IV. OTTAWA 10.7 FLUX

OBSERVED 08 FEB 258

PREDICTED 09-11 FEB 250/243/235

90 DAY MEAN 08 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 07 FEB 19/22 (CORRECTED)

ESTIMATED AFR/AP 08 FEB 18/18

PREDICTED AFR/AP 09-11 FEB 14/18 12/15 10/15

SOLTERWARN

BT