

HFUS 1 BOU 091300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 040A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 09 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
08/1200Z TO 09/1200Z: SOLAR ACTIVITY HAS BEEN HIGH. REGION 3576
(S13W102) PRODUCED A X1/1B AT 08/1253Z (X-RAY MAX) WITH
MODERATE TO STRONG CENTIMETRIC BURSTS WITH A 880-FU BURST AT
2695 MHZ AND STRONG SHORT WAVE FADE THROUGH 22 MHZ. THOUGH
BEYOND WEST LIMB, THIS REGION PRODUCED A X1/SPRAY (0.5R) AT
09/0357Z. CULGOORA REPORTS EMISSION ACROSS THE RADIO SPECTRUM
WITH A TYPE II BURST AND STRONG SHORT WAVE FADE THROUGH 40 MHZ;
THE 2695 MHZ BURST WAS 220-FU. LEARMONTH REPORTED MATERIAL
WHICH DID NOT REACH ESCAPE VELOCITY TRACED VERY COMPLEX
MAGNETIC FIELD LINES AND LOOPS BACK TO THE SUN'S SURFACE; A
SPECTACULAR EVENT FOR THOSE FORTUNATE TO HAVE OBSERVED IT.
SHORTLY AFTER THE START OF THE SPRAY IN REGION 3576, ANOTHER
SPRAY ERUPTED AT N12 AND EXTENDED TO 0.3R. REGION 3594 (S10E14)
PRODUCED A M2/1B AT 0334Z AND A M1/SN AT 0710Z. MINOR
CENTIMETRIC BURSTS OCCURRED WITH BOTH THESE FLARES.
ADDITIONALLY, FOUR CLASS M2 X-RAY BURSTS OCCURRED WITHOUT
CORRELATED OPTICAL REPORTS RECEIVED. WEATHER IN THE WESTERN
HEMISPHERE PRECLUDED ANY ANALYSIS AT BOULDER. REGION 3594 IS
EXTENSIVE, 30 DEGREES IN LONGITUDINAL EXTENT. REPORTS INDICATE
THAT FRAGMENTATION AND RESTRUCTURING ARE CONSTANT PROCESSES FOR
THIS LARGE SUNSPOT GROUP.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN MODERATE WITH ISOLATED CLASS X EVENTS IN REGION 3594
DISTINCTLY POSSIBLE.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE. MODERATELY UNSETTLED TO ACTIVE CONDITIONS ARE
EXPECTED THROUGH THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 10 FEB-12 FEB

CLASS M 95/95/95

CLASS X 20/20/20

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 08 FEB 258

ESTIMATED 09 FEB 262

PREDICTED 10 FEB-12 FEB 262/260/255

90 DAY MEAN 08 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR 07 FEB 019 AP 08 FEB 017

ESTIMATED AFR 08 FEB 018 AFR/AP 09 FEB 014/018

PREDICTED AFR/AP 10 FEB-12 FEB 012/015-010/015-014/012

SOLTERWARN

BT

HXUS BOU 091300

PREDM 09510 09511 09512

PREDX 02010 02011 02012

PREDP 01510 01511 01512

PCAFT 00210

TENCM 26210 26011 25512

AFRED 01210 01011 01412

AFAPF 01510 01511 01212

KKK 22344 33333 34433

BT

HFUS 3 BOU 092200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 040B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 09 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
09/1200Z TO 09/2100Z: AT 09/1412Z (MAX) AN M9 WITH AN UNCERTAIN
LOCATION MAY HAVE BEEN FROM REGION 3592 (N13W77) AS LOOPS WERE
REPORTED IN THAT REGION SHORTLY THEREAFTER. 3592 IS
APPROACHING THE WEST LIMB AND APPEARS TO BE A SIMPLE H TYPE
GROUP. REGION 3594 (S08W01) HAS NOT PRODUCED AN M CLASS EVENT
FOR SEVERAL HOURS BUT ITS CAPABILITY APPEARS UNDIMINISHED. THE
PENUMBRA AND UMBRAE NEAR E17 THAT WAS CONSIDERED THE TRAILER OF
3594 HAS NOW BEEN SEPARATED INTO ANOTHER GROUP AND IS REGION
3603 (S08E17). OCCASIONAL SUBFLARES ARE OCCURRING IN SEVERAL
REGIONS BUT 3594 REMAINS THE FOCAL POINT. FOUR REGIONS WERE
NUMBERED TODAY: 3603 (S08E17), 3604 (N23W03), 3605 (N17E27) AND
3606 (N09E57).

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE
FOR THE NEXT 24 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED TO ACTIVE. GENERALLY UNSETTLED CONDITIONS ARE
EXPECTED FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 10 FEB-12 FEB

CLASS M 95/95/95

CLASS X 20/20/20

PROTON 15/15/15

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 FEB 238

PREDICTED 10 FEB-12 FEB 229/222/215

90 DAY MEAN 09 FEB 199

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 08 FEB 016/017

ESTIMATED AFR/AP 09 FEB 015/016

PREDICTED AFR/AP 10 FEB-12 FEB 012/015-010/015-014/012

SOLTERWARN

BT

HXUS BOU 092200

PREDM 09510 09511 09512

PREDX 02010 02011 02012

PREDP 01510 01511 01512

PCAFT 00210

TENCM 22910 22211 21512

AFRED 01210 01011 01412

AFAPF 01510 01511 01212

BT