

HFUS 1 BOU 231300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 054A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 23 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
22/1200Z TO 23/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE
PAST 24 HOURS. REGION 3607 (N03W80) HAS NOW DECAYED TO A POINT
WHERE IT IS NO LONGER A THREAT FOR MODERATE FLARES. THE LARGEST
FLARE IT COULD PRODUCE (AND THE ONLY OBSERVED OPTICALLY FROM
THIS REGION) WAS A SUBNORMAL AT 23/0318Z MAXIMUM. THIS FLARE
AND A SUBFAINT IN REGION 3608 (N06W68) AT 23/0313Z MAXIMUM BOTH
CONTRIBUTED TO THE X-RAY BURST OF A C7 AT 0321Z MAXIMUM. THE
LARGEST EVENT OF THE PERIOD WAS A SLOW RISING C9 AT 23/0936Z
MAXIMUM. UNFORTUNATELY WEATHER AT SEVERAL OBSERVATORIES
PRECLUDED OBSERVATION OF THIS EVENT, BUT WITH A WEAK TYPE II
RADIO SWEEP REPORTED, IT IS SUSPECTED TO BE AN EAST LIMB EVENT.
REPORTS OF AN ACTIVE PROMINENCE BETWEEN NE08 AND 14 COULD
INDICATE THE RETURN OF A SIGNIFICANT REGION. THE REMAINING DISK
REGIONS HAVE CHANGED LITTLE IN THE PAST 24 HOURS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
REMAIN GENERALLY LOW, HOWEVER, RETURNING ACTIVE LONGITUDES
NEARING THE EAST LIMB COULD PRODUCE ISOLATED MODERATE ACTIVITY
DURING THE FORECAST PERIOD. THESE REGIONS ARE EXPECTED TO
COMPENSATE FOR THE LOSE OF RADIO FLUX FROM REGION 3607 AS IT
ROTATES OVER THE WEST LIMB.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS
ACTIVE DURING THE PAST 24 HOURS. THE QUIETEST PERIOD WAS FROM
03-09Z, WHEN UNSETTLED LEVELS WERE OBSERVED. UNSETTLED TO
OCCASIONALLY ACTIVE CONDITIONS ARE EXPECTED DURING THE NEXT 24
HOURS, FOLLOWED BY DECREASING ACTIVITY UNTIL THE 26TH, WHEN WE
SHOULD SEE THE EFFECTS OF A FAVORABLY LOCATED CORONAL HOLE.

III. EVENT PROBABILITIES 24 FEB-26 FEB

CLASS M 40/30/30
CLASS X 05/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 22 FEB 167
ESTIMATED 23 FEB 165
PREDICTED 24 FEB-26 FEB 163/168/175
90 DAY MEAN 22 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 21 FEB 022 AP 22 FEB 039
ESTIMATED AFR 22 FEB 025 AFR/AP 23 FEB 014/020
PREDICTED AFR/AP 24 FEB-26 FEB 010/015-008/012-015/012

SOLTERWARN

BT

HXUS BOU 231300
PREDM 04024 03025 03026
PREDX 00524 00125 00126
PREDP 00124 00125 00126
PCAFT 00124
TENCM 16324 16825 17526
AFRED 01024 00825 01526
AFAPF 01524 01225 01226
KKK 32233 22222 33222

BT

HEUS 3 R011 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 054R

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 23 FEBRUARY 1982

I. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
23/1200Z TO 23/2100Z:

SOLAR ACTIVITY HAS BEEN LOW. THE LARGEST EVENT WAS C2/SF AT
1748Z. ONLY SURGES WITHOUT SIGNIFICANT X-RAYS HAVE OCCURRED
IN REGION 3607 (N02W86) AS THIS COMPLEX REGION CONTINUES TO
DECAY. A SMALL NEW REGION HAS EMERGED AT N18W14 (REGION 3623)
AND LEADER SPOTS HAVE ROTATED OVER EAST LIMB FOR REGION 3624
(N04E70) AND REGION 3625 (N14E82). THE LAST REGION HAS PRO-
DUCED LARGE SURGES AND ACTIVE PROMINENCES. REGION 3619 IS
NOW DISCERNABLE AS TWO SEPARATE REGIONS WITH THE TWO LARGE
SPOTS BOTH OF LEADER POLARITY (S10E49 AND S12E58).

IR. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW BUT WITH AN ISOLATED
CLASS M EVENT POSSIBLE FROM REGIONS NEAR EAST LIMB.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE GEOMAGNETIC FIELD HAS BEEN MOSTLY ACTIVE THIS PERIOD. UN-
SETTLED CONDITIONS ARE EXPECTED FOR THE NEXT TWO DAYS. A HIGH-
SPEED SOLAR WIND STREAM FROM A LARGE CORONAL HOLE IS EXPECTED
TO BRING ACTIVE CONDITIONS ON 26 FEBRUARY.

III. EVENT PROBABILITIES: 24-26 FEBRUARY

CLASS M 40/30/30

CLASS X 05/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 23 FEB 177

PREDICTED 24-26 FEB 185/190/195

90 DAY MEAN 23 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 FEB 28/39

ESTIMATED AFR/AP 23 FEB 20/23

PREDICTED AFR/AP 24-26 FEB 10/15 08/15 15/20

SOLTERWARM

BT