

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 ANC7 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 UNSETLED LEVELS WERE OBSERVED. UNSETLED 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 POU 232200

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

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 FEBRUARY 1982

IA. 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).

IB. 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-
SETLED 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 APR/AP 22 FEB 28/39

ESTIMATED AFR/AP 23 FEB 20/23

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

SOLARFLARE WARN

BT