

HFUS 1 BOU 251300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 056A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 25 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/1200Z TO 25/1200Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST 24 HOURS. THE LARGEST EVENT OBSERVED WAS A C5/1B FROM REGION 3625 (N15E59) AT 25/0351Z. THIS EVENT WAS ACCCOMPANIED BY VERY MINOR DISCRETE FREQUENCY RADIO BURSTS. THIS REGION'S GROWTH CONTINUES AT A MODERATE PACE AND NOW DISPLAYS A BETA GAMMA MAGNETIC COMPLEXITY. REGION 3613 (N06W16) PRODUCED A C7/SB AT 24/1637Z MAXIMUM WITH NO RADIO BURSTS REPORTED. THIS REGION HAS DOUBLED ITS SPOT COUNT IN THE LAST 24 HOURS. TWO NEW REGIONS HAVE BECOME VISIBLE AT THE EAST LIMB DURING THE PAST FEW HOURS, REGION 3627 (N08E69) AND 3628 (N16E75). BOTH ARE C-TYPE GROUPS. SURGING AT NE15 INDICATES ANOTHER REGION SHOULD BE COMING INTO VIEW.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO GRADUALLY INCREASE TO THE MODERATE LEVEL. DEVELOPMENT IN REGIONS 3625 AND 3613 IS EXPECTED TO RESULT IN ISOLATED M-CLASS FLARE PRODUCTION. THE 10.7CM EAST-WEST RADIO SCAN INDICATES ADDITIONAL ACTIVE REGIONS NEARING EAST LIMB ROTATION.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS UNSETTLED THROUGH THE REMAINDER OF THE UT DAY ON THE 24TH, BUT SHORTLY AFTER 0300UT ON THE 25TH, A STRONG STORM BEGAN WITH K INDEXES OF 6 (AT BOULDER) AND 7 (AT LORING, ME) RECORDED. A POSSIBLE SOURCE OF THIS ACTIVITY COULD HAVE BEEN A HYDER FLARE OBSERVED ON THE 20TH AT 1810Z MAXIMUM. THE SOURCE OF THIS FLARE, REGION 3614 AT S15E65, WAS THOUGHT TO BE TOO FAR EAST TO INFLUENCE THE EARTH'S MAGNETIC FIELD. ACTIVE CONDITIONS ARE FORECAST FOR THE REMAINDER OF THE PERIOD AS THE RESULT OF THE EXPECTED INFLUENCE OF A HIGH SPEED SOLAR WIND STREAM.

III. EVENT PROBABILITIES 26 FEB-28 FEB

CLASS M 50/60/60

CLASS X 05/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 FEB 188

ESTIMATED 25 FEB 192

PREDICTED 26 FEB-28 FEB 197/202/206

90 DAY MEAN 24 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 23 FEB 022 AP 24 FEB 025

ESTIMATED AFR 24 FEB 019 AFR/AP 25 FEB 030/035

PREDICTED AFR/AP 26 FEB-28 FEB 020/025-020/025-015/020

SOLTERWARN

BT

HXUS BOU 251300

PREDM 05026 06027 06028

PREDX 00526 01027 01028

PREDP 00126 00127 00128

PCAF 00126

TENCM 19726 20227 20628

AFRED 02026 02027 01528

AFAPF 02526 02527 02028

13344 33333 44433

NNNNCVZDZEZGVZLVZOUU

KBOU

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 056B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 25 FEBRUARY 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
25/1200Z TO 25/2100Z:

SOLAR ACTIVITY HAS BEEN LOW. AN INCREASING NUMBER OF SMALL FLARES HAVE OCCURRED IN AN ACTIVITY COMPLEX IN THE SUN'S NORTHEAST QUADRANT. FLARES HAVE OCCURRED IN REGIONS 3624 (N05E45), 3625 (N14E53) AND 3628 N16E67. THE LATTER TWO REGIONS HAVE LARGE SPOTS AND ARE MAGNETICALLY COMPLEX. ALL OTHER REGIONS ARE SMALL AND LITTLE CHANGED. GROWTH MAY BE OCCURRING IN THE NE COMPLEX AND IN REGION 3622 (S13E36).

IB. SOLAR ACTIVITY FORECAST:

SOLAR ACTIVITY IS EXPECTED TO INCREASE TO A MODERATE LEVEL AS THE 3625-3628 COMPLEX DEVELOPS.

II. GEOPHYSICAL SUMMARY AND FORECAST:

THE MINOR MAGNETIC STORM THAT BEGAN EARLY TODAY HAS DECREASED TO SLIGHTLY ACTIVE. A RESUMPTION OF STRONGER ACTIVITY IS EXPECTED IN THE NEXT 12 HOURS.

III. EVENT PROBABILITIES: 26-28 FEB

CLASS M 50/60/60

CLASS X 05/10/10

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 FLUX

OBSERVED 25 FEB 188

PREDICTED 26-28 FEB 197/202/206

90 DAY MEAN 25 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 FEB 24/25

ESTIMATED AFR/AP 25 FEB 30/35

PREDICTED AFR/AP 26-28 FEB 20/25 20/25 15/20

SOLTERWARN

BT

NNNN