

HFUS 1 BOU 261300  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 057A  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 1300Z 26 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 25/1200Z TO 26/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE. AN M2 XRAY EVENT OCCURRED AT 26/0335Z WHILE TWO 1B FLARES WHERE IN PROGRESS IN REGIONS 3625 (N14E47) AND 3628 (N16E61). THE SPOT GROUP IN REGION 3625 HAS GROWN TO CLASS/AREA D/550 AND IS MAGNETICALLY COMPLEX. REGION 3628 CONTAINS A RAPIDLY GROWING SPOT GROUP OF CLASS/AREA C/200 BUT IT IS MAGNETICALLY SIMPLE AT THIS TIME. BOTH REGIONS ALSO PRODUCED SEVERAL C CLASS SUBFLARES IN THE PAST 24 HOURS. A NEW UNNUMBERED REGION IS REPORTED AT S23E80 WHERE A SUBFLARE AND MINOR SURGE ACTIVITY WERE REPORTED AT 26/0616Z.

IB. SOLAR ACTIVITY FORECAST: MODERATE SOLAR ACTIVITY IS EXPECTED DURING THE FORECAST PERIOD WITH ISOLATED M-CLASS EVENTS POSSIBLE FROM REGIONS 3625 AND 3628 AS THEY DEVELOP.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT MINOR STORM LEVELS SINCE 26/0410Z. THE SOURCE OF THIS ACTIVITY APPEARS TO BE A CORONAL HOLE WHICH PASSED CENTRAL MERIDIAN ON 23 FEB. THE FIELD IS EXPECTED TO REMAIN ACTIVE FOR THE NEXT THREE DAYS.

III. EVENT PROBABILITIES 27 FEB-01 MAR

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 FEB 188

ESTIMATED 26 FEB 198

PREDICTED 27 FEB-01 MAR 205/210/212

90 DAY MEAN 25 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 24 FEB 024 AP 25 FEB 032

ESTIMATED AFR 25 FEB 029 AFR/AP 26 FEB 030/025

PREDICTED AFR/AP 27 FEB-01 MAR 025/025-020/020-015/015

SOLTERWARN

BT

HXUS BOU 261300

PREDM 07027 07028 07001

PREDX 00527 00528 00501

PREDP 00127 00128 00101

PCAFF 00127

TENCM 20527 21028 21201

AFRED 02527 02028 01501

AFAPF 02527 02028 01501

KKK 44354 43334 44433

BT

COMMAND? T

HFXS 3 BOU 262200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 057B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 26 FEB 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 26/1200Z TO 26/2100Z: SOLAR ACTIVITY WAS AT LOW LEVELS DURING THIS PERIOD. THE LARGEST FLARE WAS A C3/SN EVENT FROM REGION 3625 (N16E41) AT 1522Z. THE UNUSUAL EVENT OF THE DAY WAS A SHORTWAVE FADE (SWF) TO 22 MHz, OBSERVED BY THE SAGAMORE HILL RADIO OBSERVATORY FROM 1614Z TO 1630Z, WHICH WAS ACCCOMPANIED BY NEITHER XRAY FLUXES NOR AN OPTICAL FLARE. NORMALLY, AT LEAST AN M-CLASS EVENT IS NECESSARY TO CAUSE SUCH A SWF. WE SUSPECT SOME SORT OF TRAVELING IONOSPHERIC DISTURBANCE MAY HAVE BEEN THE CAUSE, BUT WE CANNOT BE CERTAIN.

IB. SOLAR ACTIVITY FORECAST: WE EXPECT SOLAR ACTIVITY TO REMAIN AT MOSTLY MODERATE LEVELS, BUT ONLY ONE OR TWO M-CLASS EVENTS PER DAY ARE LIKELY. REGIONS 3628 (N17E55) AND 3625 ARE MOST LIKELY TO PRODUCED ANY MAJOR ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: FOLLOWING THE MINOR STORM CONDITIONS THAT EXISTED EARLIER TODAY (03-15Z), THE GEOMAGNETIC FIELD HAS RELAXED TO UNSETTLED TO ACTIVE LEVELS. ACTIVE TO UNSETTLED CONDITIONS ARE EXPECTED FOR THE NEXT 3 DAYS.

III. EVENT PROBABILITIES 27 FEB-01 MAR

CLASS M 70/70/70

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 26 FEB 208

PREDICTED 27 FEB-01 MAR 216/222/225

90 DAY MEAN 26 FEB 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 25 FEB 029/032

ESTIMATED AFR/AP 26 FEB 024/025

PREDICTED AFR/AP 27 FEB-01 MAR 025/025-020/020-015/015

SOLTERWARN

BT

HXUS BOU 262200

PREDM 07027 07028 07001

PREDX 00527 00528 00501

PREDP 00127 00128 00101

PCAF 00127

TENCM 21627 22228 22501

AFRED 02527 02028 01501

AFAPP 02527 02028 01501

BT