

HFUS 1 BOU 041300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 035A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 04 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
03/1200Z TO 04/1200Z: SOLAR ACTIVITY HAS BEEN LOW. THE LARGEST
X-RAY EVENT WAS A C5 AT 1826Z. THOUGH REGION 4077 (S17W23) HAS
DECREASED IN SUNSPOT AREA, THE DELTA CONFIGURATION REMAINS.
RESTRUCTURING CONTINUES IN REGION 4077. REGION 4079 (S17E24)
HAS STARTED A NEW GROWTH PHASE. REGIONS 4081 (S09E37) AND 4082
(S07E16) WERE ADDED YESTERDAY WITH GROWTH CONTINUING IN REGION
4081. ADDITIONALLY, FLUX IS EMERGING NEAR N12E56 AND S14E21.
THE FLUX NEAR REGION 4079 CURRENTLY HAS MODERATE GROWTH WITH
FLARES OCCURRING AT THE SITE.

IB. SOLAR ACTIVITY FORECAST: REGION 4077 STILL RETAINS THE
POTENTIAL FOR ISOLATED ENERGETIC FLARE ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN UNSETTLED AND IS EXPECTED TO REMAIN SO UNTIL THE ONSET OF
THE MAGSTORM. BECAUSE OF THE DELAYED ARRIVAL OF PROTONS, THE
MAGSTORM IS ALSO EXPECTED TO BE DELAYED; THE BRUNT OF THE STORM
IS EXPECTED ON 05 FEBRUARY. A SATELLITE PROTON EVENT BEGAN AT
0040Z WITH THE GREATER THAN 10 MEV FLUX REACHING A MAXIMUM OF
140 P/CM2/SEC/STER AT 0935Z. A CALCULATED PCA EVENT BEGAN NEAR
0200Z AND REACHED A MAXIMUM OF 3.7 DB NEAR 1000Z.

III. EVENT PROBABILITIES 05 FEB-07 FEB

CLASS M 50/50/50
CLASS X 10/10/10
PROTON 10/10/10
PCAF IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 03 FEB 150
ESTIMATED 04 FEB 153
PREDICTED 05 FEB-07 FEB 150/147/145
90 DAY MEAN 03 FEB 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR 02 FEB 003 AP 03 FEB 008
ESTIMATED AFR 03 FEB 007 AFR/AP 04 FEB 015/030
PREDICTED AFR/AP 05 FEB-07 FEB 049/040-018/020-012/020

SOLTERWARN

BT

BT
HFUS 3 BOU 042200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 035B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 04 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
04/1200Z TO 04/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THIS
PERIOD. REGION 4079 (S17E17) PRODUCED ALL OF THE EVENTS OBSERVED
THIS PERIOD THE LARGEST WAS A C2/SN AT 04/1611UT. REGION 4079
HAS CONTINUED TO EXHIBIT GROWTH AND IS NOW A LARGE D TYPE GROUP
BUT STILL HAS A SIMPLE NEUTRAL LINE. REGION 4077 (S16W30) HAS
BEEN OMINOUSLY STABLE HOWEVER IT STILL CONTAINS A DELTA. THE
REST OF THE REGIONS LITTLE CHANGED TODAY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
CONTINUE LOW UNLESS REGION 4077 PRODUCES A MAJOR EVENT. REGION
4079 MAY BECOME A M CLASS EVENT PRODUCER IF GROWTH CONTINUES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD WAS
GENERALLY UNSETTLED UNTIL 1615UT WHEN A SUDDEN COMMENCEMENT OF
80 GAMMAS WAS OBSERVED. THE FIELD HAS BEEN AT MAJOR STORM
LEVELS SINCE THE SSC WITH K VALUES OF 7 AT MID LATITUDE SITES
AND VALUES OF 8 AT THE HIGH LATITUDE SITES. THE FIELD IS
EXPECTED TO REMAIN AT MAJOR LEVELS THRU MID DAY OF 5 FEB. THE
SATELLITE PROTON EVENT CONTINUES IN PROGRESS THE EVENT REACHED
A MAXIMUM OF 340 P/CM2/SEC/STER AT GREATER THAN 10MEV AT
1620UT. THE PROTON EVENT IS EXPECTED TO CONTINUE FOR THE NEXT
20 HOURS. THE CALCULATED PCA EVENT WHICH BEGAN NEAR 0200UT
CONTINUES IN PROGRESS.

FREDERICKSBURG A VALUE FOR 03 FEB WAS NOT RECEIVED AT THIS
STATION HOWEVER THE ESTIMATE FOR FREDERICKSBURG IS 7 (SEVEN).

III. EVENT PROBABILITIES 05 FEB-07 FEB

CLASS M 50/50/50
CLASS X 10/10/10
PROTON 10/10/10
PCAF IN PROGRESS

IV. OTTAWA 10.7 CM FLUX

OBSERVED 04 FEB 161
PREDICTED 05 FEB-07 FEB 168/165/160
90 DAY MEAN 04 FEB 171

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 03 FEB 000/008
ESTIMATED AFR/AP 04 FEB 050/045
PREDICTED AFR/AP 05 FEB-07 FEB 055/050-018/030-012/015

SOLTERWARN

BT