

HFUS 1 BOU 181300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 077A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 18 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
17/1200Z TO 18/1200Z: SOLAR ACTIVITY WAS MODERATE THIS PERIOD
DUE TO A M1/1B EVENT FROM REGION 3643 (S07W15) AT 18/0407UT.
MINOR RADIO BURSTS WERE ALSO RECORDED WITH THE EVENT, NO TYPE
II/IV SWEEPS WERE OBSERVED. REGIONS 3649 (N14E03), 3640
(N03W33), 3644 (N08W11) AND 3650 (N18E50) HAVE ALL PRODUCED
SEVERAL C-CLASS EVENTS THIS PERIOD. REGION 3643 HAS CONTINUED
TO EXHIBIT GROWTH AND AN INCREASE IN MAGNETIC COMPLEXITY DURING
THE PAST 24 HOURS. REGIONS 3644, 3648 AND 3652 (N04E71) ARE
ALSO GROWING HOWEVER AT A SLOWER RATE. ALL OTHER REGIONS ARE
STABLE OR SLIGHTLY DECAYED THIS PERIOD. POSSIBLE NEW REGION
(N05E51) ARCH FILAMENT SYSTEM HAS BEEN REPORTED THIS POSTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO
GENERALLY MODERATE DURING THIS FORECAST PERIOD. REGION 3643
APPEARS CAPABLE OF ONE M-CLASS EVENT EVERY 24 HOURS WITH AN
ISOLATED CHANCE OF A X-CLASS EVENT. REGIONS 3644 AND 3649 MAY
ALSO CONTRIBUTE, IF GROWTH CONTINUES, TO THE PRODUCTION OF
M-CLASS EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE DURING THE PAST 24 HOURS. THE EFFECTS OF THE
CORONAL HOLE ALONG WITH A FILAMENT WHICH DISAPPEARED LATE ON 15
MARCH IS EXPECTED TO CAUSE THE FIELD TO REMAIN ACTIVE WITH
SHORT PERIODS AT MINOR STORM LEVELS DURING THIS FORECAST
PERIOD.

III. EVENT PROBABILITIES 19 MAR-21 MAR

CLASS M 60/70/70

CLASS X 05/05/10

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 17 MAR 233

ESTIMATED 18 MAR 230

PREDICTED 19 MAR-21 MAR 226/220/210

90 DAY MEAN 17 MAR 196

V. GEOMAGNETIC A INDICES

OBSERVED AFR 16 MAR 003 AP 17 MAR 010

ESTIMATED AFR 17 MAR 011 AFR/AP 18 MAR 018/016

PREDICTED AFR/AP 19 MAR-21 MAR 020/020-015/016-015/015

SOLTERWARN

BT

HXUS BOU 181300

PREDM 06019 07020 07021

PREDX 00519 00520 01021

PREDP 00519 00520 01021

PCAFT 00119

TENCM 22619 22020 21021

AFRED 02019 01520 01521

AFAPF 02019 01620 01521

KKK 44444 33333 44332

BT

HFUS 3 BOU 182200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 077B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 18 MAR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 18/2100Z: SOLAR ACTIVITY HAS BEEN LOW. REGION 3643
(S06W21) PRODUCED A 1B/C5 FLARE AT 18/1352Z. REMAINING
ACTIVITY CONSISTS OF SUBFLARES WITH XRAY LEVELS TO C3 OR LESS
THROUGH THE PERIOD. REGIONS 3640 (N04W38) AND 3649 (N15W02)
WERE THE ONLY OTHERS CONTRIBUTING TO THIS LOW LEVEL ACTIVITY.
SIGNIFICANT GROWTH WAS OBSERVED IN H ALPHA AND WHITE LIGHT
ONLY IN REGION 3643. ALTHOUGH OBSERVATIONS HAVE BEEN EXTREMELY
LIMITED BY WEATHER, THIS REGION IS BELIEVED TO STILL CONTAIN A
DELTA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE MODERATE.
REGION 3643 IS THE MOST LIKELY SOURCE OF ACTIVITY WITH A
LIMITED PROSPECT FOR MAJOR ACTIVITY. REGIONS 3644 AND 3649
ARE POSSIBLE CONTRIBUTORS OF LOW LEVEL ACTIVITY.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN ACTIVE. IT IS EXPECTED TO REMAIN ACTIVE DUE TO CORONAL
HOLE EFFECTS WITH POSSIBLE INFLUENCE DUE TO A DISAPPEARING
FILAMENT ON LATE 15 MARCH. ACTIVE TO UNSETTLED CONDITIONS ARE
EXPECTED TO CONTINUE FOR THE BALANCE OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 19 MAR-21 MAR

CLASS M 60/70/70

CLASS X 05/05/10

PROTON 05/05/10

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 MAR 229

PREDICTED 19 MAR-21 MAR 224/220/216

90 DAY MEAN 18 MAR 197

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 17 MAR 013/010

ESTIMATED AFR/AP 18 MAR 018/016

PREDICTED AFR/AP 19 MAR-21 MAR 020/020-015/016-015/015

SOLTERWARN

BT

HXUS BOU 182200

PREDM 06019 07020 07021

PREDX 00519 00520 01021

PREDP 00519 00520 01021

CAFT 00119

ENCM 22419 22020 21621

FRED 02019 01520 01521

FAPF 02019 01620 01521