

HFUS 1 BOU 121300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 102A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 12 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
11/1200Z TO 12/1200Z: SOLAR ACTIVITY WAS MODERATE DURING THE
PAST 24 HOURS. REGION 3681 (S09E06) PRODUCED AN M1/SF AT
12/1149Z MAXIMUM. THE XRAY SIGNATURE OF THIS FLARE WAS A
STAIR-STEP PATTERN WHICH APPARENTLY ACCOMPANIED NUMEROUS POINT
BRIGHTENINGS ALONG THE ACTIVE NEUTRAL LINE THROUGH THE REGION.
NO RADIO EMISSION WAS OBSERVED WITH THIS FLARE. THE REGION HAS
UNDERGONE RAPID DECAY DURING THE LAST SIX HOURS. REGION 3688
(N16W03) IS NOW THE MOST INTERESTING OF THE DISK REGIONS WITH
RAPID GROWTH AND SPOT INTERACTION WITH REGION 3679 (N12E01)
REPORTED. THE STRONGEST GRADIENTS ARE LOCATED BETWEEN THE LARGE
MATURE H-TYPE SPOT OF 3679 AND THE TRAILER SPOTS OF 3688, AND
HAVE RESULTED IN SMALL SUBFLARES IN THIS LOCATION DURING THE
PAST 24 HOURS. SUBFLARES HAVE ALSO BEEN OBSERVED IN REGIONS
3671 (N06W70) 3680 (S04W01) AND 3684 (S27E20). THE REMAINING
DISK REGIONS HAVE SHOWN LITTLE CHANGE. A SMALL NEW REGION IS
ROTATING OVER EAST LIMB AT NE10, BUT APPEARS INACTIVE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
GENERALLY LOW, HOWEVER, ISOLATED MODERATE FLARES ARE NOW MORE
LIKELY AS THE 3679/3688 COMPLEX CONTINUES TO DEVELOP.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN GRADUALLY SETTLING FROM THE MINOR STORM CONDITIONS
OBSERVED ON THE 11TH. MID-LATITUDE K VALUES HAVE DECREASED TO
THE ACTIVE CATEGORY ALTHOUGH CURRENT ISEE DATA INDICATES MINOR
ACTIVITY IS STILL POSSIBLE THROUGH THE NEXT FEW HOURS.
UNSETTLED CONDITIONS ARE FORECAST FOR THE REMAINDER OF THE
PERIOD.

III. EVENT PROBABILITIES 13 APR-15 APR

CLASS M 40/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 APR 186

ESTIMATED 12 APR 189

PREDICTED 13 APR-15 APR 191/193/193

90 DAY MEAN 11 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 10 APR 030 AP 11 APR 042

ESTIMATED AFR 11 APR 034 AFR/AP 12 APR 015/020

PREDICTED AFR/AP 13 APR-15 APR 010/012-010/012-008/012

SOLTERWARN

BT

HXUS BOU 121300

PREDM 04013 05014 05015

PREDX 00113 00114 00115

PREDP 00113 00114 00115

PCAFT 00113

TENCM 19113 19314 19315

AFRED 01013 01014 00815

AFAPF 01213 01214 01215

KKK 33333 22222 33322

BT

HFUS 3 BOU 122200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 102B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 12 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
12/1200Z TO 12/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THIS
PERIOD. REGIONS 3675 (S13W48) 3686 (N16E31) AND 3688 (N16W09)
SHOW SIGNS OF GROWTH AND COULD BECOME SIGNIFICANT FLARE
PRODUCERS BUT THIS IS DOUBTFUL. NEW REGIONS NUMBERED DURING
THIS PERIOD ARE 3690 (S20W03), 3691 (N14E54) AND 3692 (S23E68).
NO REGION ON THE DISK AT THE PRESENT SHOWS PROMISE OF
SIGNIFICANT FLARE PRODUCTION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW
FOR THE NEXT 48 HOURS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD FOR
THIS PERIOD HAS BEEN UNSETTLED AND SHOULD CONTINUE AT THIS
LEVEL FOR THE NEXT 48 HOURS.

III. EVENT PROBABILITIES 13 APR-15 APR

CLASS M 40/50/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 12 APR 178

PREDICTED 13 APR-15 APR 185/187/189

90 DAY MEAN 12 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 11 APR 035/042

ESTIMATED AFR/AP 12 APR 014/020

PREDICTED AFR/AP 13 APR-15 APR 010/012-010/012-008/012

SOLTERWARN

BT

HXUS BOU 122200

PREDM 04013 05014 05015

PREDX 00113 00114 00115

PREDP 00113 00114 00115

PCAFT 00113

TENCM 18513 18714 18915

AFRED 01013 01014 00815

AFAPF 01213 01214 01215

BT