

HFUS 1 BOU 191300
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 109A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 1300Z 19 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
18/1200Z TO 19/1200Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST
24 HOURS. HOWEVER, REGION 3696 (S18W26) HAS PRODUCED NUMEROUS
C-CLASS SUBFLARES INCLUDING TWO C8 X-RAY EVENTS. MINOR RADIO
BURSTS HAVE ACCOMPANIED SEVERAL OF THESE FLARES. OTHER FLARES
WERE OBSERVED IN REGION 3687 (S08W50), WHICH PRODUCED THREE
OPTICAL SUBFLARES, AND NEW REGION 3701 (N05E73), PRESENTLY AN
H-TYPE SPOT NEAR THE EAST LIMB. REGION 3701 AND ANOTHER H-TYPE
SPOT NEAR N12E77 MARK THE RETURN OF OLD REGION 3659 WHICH
PROVIDED 106 OPTICAL FLARES LAST ROTATION INCLUDING ONE X-CLASS
AND 16 M-CLASS EVENTS. WHILE THIS GROUP SHOULD BE CAREFULLY
MONITORED, THERE IS NO INDICATION AS YET OF EXTRAORDINARY
ACTIVITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW BUT WITH THE POSSIBILITY OF ISOLATED M-CLASS EVENTS FROM
REGION 3696.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN MOSTLY QUIET WITH SOME UNSETTLED PERIODS DURING THE PAST
24 HOURS. THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN QUIET
TO SLIGHTLY UNSETTLED THROUGH 21 APRIL, BECOMING ACTIVE ON THE
NEXT DAY IN RESPONSE TO AN HIGH SPEED STREAM FROM AN EQUATORIAL
CORONAL HOLE AT CENTRAL MERIDIAN ON 18 APRIL.

III. EVENT PROBABILITIES 20 APR-22 APR

CLASS M 15/15/15
CLASS X 01/01/01
PROTON 01/01 01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 18 APR 146
ESTIMATED 19 APR 148
PREDICTED 20 APR-22 APR 151/153/155
90 DAY MEAN 18 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR 17 APR 016 AP 18 APR 014
ESTIMATED AFR 18 APR 012 AFR/AP 19 APR 006/012
PREDICTED AFR/AP 20 APR-22 APR 010/012-010/012-018/012

SOLTERWARN

BT

HXUS BOU 191300

PREDM 01520 01521 01522
PREDX 00120 00121 00122
PREDP 00120 00121 00122
PCAFT 00120
TENCM 15120 15321 15522
AFRED 01020 01021 01822
AFAPF 01220 01221 01222
KKK 12333 22222 33332

BT

BT
HFUS 3 BOU 192200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 109B
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 19 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM
19/1200Z TO 19/2100Z: SOLAR ACTIVITY WAS MODERATE AS REGION 3696
PRODUCED A M2/1B PARALLEL RIBBION FLARE WHICH OCCURED AT
1808UT. THIS EVENT HAD A 260 FLUX UNIT BURST AT 2695MHZ AND A
STRONG SHORT WAVE FADE. NO TYPE II/IV SWEEPS WERE OBSERVED.
REGION 3696 (S18W31) CONTAINS A DELTA IN THE LEADER BUT HAS
EXHIBITED LITTLE OR NO GROWTH THIS PERIOD. NEW REGIONS TODAY
ARE 3701 (N06E70) C-TYPE, 3702 (N12E74) LARGE C-TYPE AND 3703
(N18E68) A SMALL A-TYPE. OTHER GROUPS ARE REPORTED TO BE STABLE
THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE
LOW BUT REGION 3696 MAY AGAIN PRODUCE A M-CLASS EVENT.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS
BEEN MOSTLY QUIET EXCEPT FOR A SHORT PERIOD AT ACTIVE LEVELS
BETWEEN 1500UT AND 1800UT. THE FIELD IS EXPECTED TO REMAIN
UNSETTLED UNTIL 22 APRIL WHEN THE EFFECTS OF A EQUATORIAL
CORONAL HOLE ARRIVE.

III. EVENT PROBABILITIES 20 APR-22 APR

CLASS M 40/50/60
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 APR 144
PREDICTED 20 APR-22 APR 151/153/155
90 DAY MEAN 19 APR 202

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 APR 013/014
ESTIMATED AFR/AP 19 APR 013/014
PREDICTED AFR/AP 20 APR-22 APR 010/012-010/012-018/017
SOLTERWARN

BT

HXUS BOU 192200
PREDM 04020 05021 06022
PREDX 00120 00121 00122
PREDP 00120 00121 00122
PCAFT 00120
TENCM 15120 15321 15522
AFRED 01020 01021 01822
AFAPF 01220 0122 01722
BT