

HFXS 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 ACCCOMPANIED 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

PCAF 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 OCCURRED 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

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HXUS BOU 192200

PREDM 04020 05021 06022

PREDX 00120 00121 00122

PREDP 00120 00121 00122

PCAFAT 00120

TENCM 15120 15321 15522

AFRED 01020 01021 01822

AFAPF 01220 0122 01722

BT