

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