

HFXS 1 BOU 101300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 100A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 10 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/1200Z TO 10/1200Z: SOLAR ACTIVITY REMAINS LOW BUT AN INCREASE IN FREQUENCY OF SUBFLARE OCCURRENCE HAS BEEN NOTED. REGIONS 3671 (N06W44), 3672(N08W56), 3680(S04E27) AND 3684(S27E46) HAVE CONTRIBUTED TO THIS INCREASE. REGION 3680 APPEARS TO BE THE MOST DYNAMIC OF THESE GROUPS HAVING PRODUCED TWO IMPORTANCE 1B FLARES WITHIN A THREE HOUR PERIOD IN ADDITION TO SEVERAL SUBFLARES. ONLY C-CLASS X-RAY EMISSION WAS ASSOCIATED WITH THESE FLARES. REGIONS 3671 AND 3684 ARE SHOWING GROWTH, FLUCTUATIONS AND INCREASED COMPLEXITY. REGIONS 3688(N16E27) AND 3687 ARE ALSO GROWING BUT HAVE NOT FLARED. A NEW REGION IS DEVELOPING NEAR S24W06 WITH A NON-COMPACT, FLUCTUATING PLAGE. THE OTHER DISK FEATURES HAVE BEEN STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD CONTINUE LOW BUT THE POSSIBILITY OF M CLASS FLARES HAS INCREASED.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE SINCE 100600Z AND UNSETLED TO ACTIVE CONDITIONS SHOULD CONTINUE.

III. EVENT PROBABILITIES 11 APR-13 APR

CLASS M 20/20/20

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 09 APR 170

ESTIMATED 10 APR 174

PREDICTED 11 APR-13 APR 176/181/183

90 DAY MEAN 09 APR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR 08 APR 010 09 APR 010

ESTIMATED AFR 09 APR 009 AFR/AP 10 APR 013/020

PREDICTED AFR/AP 11 APR-13 APR 014/014-010/012-010/010

SOLTERWARN

BT

HXUS BOU 101300

PREDM 02011 02012 02013

PREDX 00111 00112 00113

PREDP 00111 00112 00113

PCAF 00111

TENCM 17611 18112 18313

AFRED 01411 01012 01013

AFAPF 01411 01212 01013

KKK 22333 32333 33322

BT

HFXS 3 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 100B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 10 APR 1982

I.A. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/1200Z TO 10/2100Z: SOLAR ACTIVITY HAS BEEN LOW FOR THE PAST 9 HOURS. HOWEVER, SEVERAL SPOT GROUPS ARE DEVELOPING INTO INTERESTING REGIONS. MOST NOTABLY, REGION 3684 (S26E40) HAS BECOME MAGNETICALLY COMPLEX WITH A DELTA CONFIGURATION IN ITS CENTRAL PORTION. REGION 3688 (N16E20) IS SHOWING RAPID GROWTH AND IS CROWDING REGION 3679 (N11E24). REGION 3687 (S10E62) IS TOO NEAR THE EAST LIMB FOR DEFINITIVE ANALYSIS, BUT IT IS OF REVERSED POLARITY AND MAY BE OF BETA-GAMMA MAGNETIC COMPLEXITY. SURGING NEAR N311 INDICATES THAT ANOTHER REGION MAY CROSS THE EAST LIMB SOON.

I.B. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO INCREASE. SIGNIFICANT FLARES ARE LIKELY WITHIN 48 HOURS IF THE PRESENT TREND OF DEVELOPMENT CONTINUES.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT MAJOR STORM LEVELS FOR THE PAST 9 HOURS. THE DISTURBANCE BEGAN GRADUALLY EARLY TODAY WITH INCREASINGLY ACTIVE CONDITIONS WHICH INTENSIFIED INTO A STORM AT ABOUT 1300Z. INTERPLANETARY PARAMETERS MEASURED AT THE ISEE-3 SPACECRAFT INDICATE THAT THIS ACTIVITY IS BEING DRIVEN BY A DENSE, SLOW SOLAR WIND FLOW WITH A STRONGLY SOUTHWARD MAGNETIC FIELD VECTOR. THE DISTURBANCE IS NOT FLARE OR CORONAL HOLE RELATED, BUT MAY BE ASSOCIATED WITH FILAMENT DISAPPEARANCES EARLIER THIS WEEK. THIS ACTIVITY IS EXPECTED TO END WITHIN 24 HOURS BUT CORONAL EFFECTS ARE STILL EXPECTED AND THE FIELD SHOULD REMAIN AT UNSETLED TO ACTIVE LEVELS THROUGHOUT THE FORECAST PERIOD.

III. EVENT PROBABILITIES 11 APR-13 APR

CLASS M 30/40/50

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 APR 1176

PREDICTED 11 APR-13 APR 180/185/190

90 DAY MEAN 10 APR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 APR 010/010

ESTIMATED AFR/AP 10 APR 032/035

PREDICTED AFR/AP 11 APR-13 APR 025/025-015/020-010/012

SOLTERWARN

BT

HFXS BOU 102200

PREDM 03011 04012 05013

PREDX 00111 00112 00113

PREDP 00111 00112 00113

PCAF 00111

TENCM 18011 18512 19013

AFRED 02511 01512 01013

AFAPF 02511 02012 01213

BT