

HFXS 1 BOU 021300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 092A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 02 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/1200Z TO 02/1200Z: SOLAR ACTIVITY HAS BEEN MODERATE FOR THE PAST 24 HOURS DUE TO AN M1/SB, M4/1B, AND AN M6/2B, ALL FROM REGION 3659(N11W62). THE LAST TWO PRODUCED SIGNIFICANT RADIO EMISSION. DECAY IN THIS REGION IS CLEARLY EVIDENT, ALTHOUGH IT HAS NOT YET LOST ALL OF ITS FEATURES INDICATIVE OF CONTINUED ACTIVITY. OTHER REGIONS HAVE MADE NO SIGNIFICANT CONTRIBUTION TO SOLAR ACTIVITY.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO CONTINUE MODERATE FOR TWO MORE DAYS UNTIL REGION 3659 ROTATES OVER THE WEST LIMB ON 5 APRIL. HOWEVER, AN X-CLASS X-RAY EVENT CANNOT BE RULED OUT SHOULD REGION 3659 DECAY EXPLOSIVELY WHILE STILL POSSESSING SIGNIFICANT FLARE POTENTIAL.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD REACHED MINOR STORM CONDITIONS AT THE END OF 1 APRIL FOLLOWING A SMALL SUDDEN COMMENCEMENT AT 1305 UT. THE FIELD IS EXPECTED TO REMAIN AT MINOR STORM TO ACTIVE CONDITIONS THROUGH 2 APRIL, BECOMING ACTIVE FOR THE NEXT THREE DAYS DUE LARGELY TO RECENT M-CLASS FLARES.

III. EVENT PROBABILITIES 03 APR-05 APR

CLASS M 70/60/40

CLASS X 15/10/10

PROTON 10/05/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OPSERVED 01 APR 174

ESTIMATED 02 APR 165

PREDICTED 03 APR-05 APR 155/150/145

90 DAY MEAN 01 APR 202

V. GEOMAGNETIC A INDICES

OPSERVED AFR 31 MAR 018 AP 01 APR 013

ESTIMATED AFR 01 APR 013 AFR/AP 02 APR 030/035

PREDICTED AFR/AP 03 APR-05 APR 017/020-015/015-013/020

SOLTERWARN

BT

HFXS BOU 021300

PREDM 07003 06004 04005

PRFDX 01503 01004 01005

PREDP 01003 00504 00505

PCAF 00203

TENCM 15503 15004 14505

AFRED 01703 01504 01805

AFAPF 02003 01504 02005

KKK 43343 32333 44332

RT

HFXUS 3 BOU 022200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 092B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 02 APR 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 02/1200Z TO 02/2100Z: SOLAR ACTIVITY HAS BEEN LOW DURING THE PAST NINE HOURS. ACTIVITY HAS BEEN RESTRICTED TO C-CLASS SUNFLARES. OF THESE EVENTS OBSERVED ALL HAVE BEEN FROM REGION 3659 (N11W68). SEVERAL C-CLASS X-RAY EVENTS WERE NOT OBSERVED DUE TO WEATHER AT THE SITES. REGION 3659 SHOWS SIGNIFICANT WHITE LIGHT DECAY ESPECIALLY IN THE LEADER PORTION OF THE REGION, BUT STILL RETAINS A WEAK DELTA CONFIGURATION IN THE SMALL LEADER SPOTS AND A STRONGER DELTA IN THE LARGE SYMMETRIC TRAILER SPOT. TWO NEW REGIONS WERE NUMBERED TODAY, REGION 3672 (N08E43) AND 3673 (N08E80). BOTH ARE SIMPLE REGIONS.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO RETURN TO THE MODERATE LEVEL WITH M-CLASS FLARES PROBABLE FROM REGION 3659 PRIOR TO ITS LIMB TRANSIT. THE REMAINING DISK REGIONS ARE ONLY CAPABLE OF C-CLASS EVENTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN AT ACTIVE LEVELS SINCE THE MINOR STORM CONDITIONS OBSERVED EARLY IN THE UT DAY. A SLOW SETTLING TREND HAS BEEN NOTICED DURING THE PAST 6 HOURS IN MID-LATITUDE K VALUES, BUT ACTIVITY IS EXPECTED TO INCREASE DURING THE NIGHT TIME HOURS. ACTIVE LEVELS SHOULD CONTINUE THROUGH THE FORECAST PERIOD IN RESPONSE TO THE RECENT FLARE ACTIVITY.

III. EVENT PROBABILITIES 03 APR-05 APR

CLASS M 70/60/40

CLASS X 15/10/05

PROTON 10/05/01

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 02 APR 174

PREDICTED 03 APR-05 APR 165/155/150

90 DAY MEAN 02 APR 201

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 01 APR 014/013

ESTIMATED AFR/AP 02 APR 028/035

PREDICTED AFR/AP 03 APR-05 APR 017/020-015/015-018/020

SOLTERWARN

BT

HFXUS BOU 022200

PREDM 07003 06004 04005

PREDX 01503 01004 00505

PREDP 01003 00504 00105

PCAF 00203

TENCM 16503 15504 15005

AFRED 01703 01504 01805

AFAPF 02003 01504 02005

PT