

HFUS 1 BOU 291300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 210A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 29 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 28/1200Z TO 29/1200Z: SOLAR ACTIVITY HAS CONTINUED VERY LOW FOR THE PAST 24 HOURS. NO XRAY EVENT HAS REACHED CLASS C LEVEL SINCE THE C2 EVENT 25 HOURS AGO. REGION 3828(N06E21) HAS STABILIZED AT A SMALL CLASS D WITH SIMPLE STRUCTURE. REGION 3829(S12E73) HAS FORMED VERY SMALL SPOTS AND HAS PRODUCED A SINGLE FAINT FLARE. MINOR SURGES AT NE15 SIGNAL A SMALL REGION ABOUT TO APPEAR ON THE SOLAR DISK. THE DISK IS DOMINATED BY TWO LARGE CORONAL HOLES, ONE OF EACH MAGNETIC POLARITY AND IN OPPOSITE HEMISPHERES.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW UNTIL IMPORTANT FLUX EMERGENCE AND/OR EAST LIMB ACTIVITY INCREASES. NO SIGNIFICANT REGIONS ARE EXPECTED TO RETURN DURING THIS FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS REMAINED IN AN ACTIVE STATE FOR YET ANOTHER DAY. IT IS SPECULATED THAT THIS SUSTAINED ACTIVITY IS DUE TO AN INVISIBLE EXTENSION OF OPEN SOLAR MAGNETIC FIELDS TO EQUATORIAL LATITUDES JUST WEST OF A SOLAR SECTOR BOUNDARY. ALIGNMENT OF THIS SECTOR BOUNDARY WITH THE EARTH IS EXPECTED TO END THIS ACTIVITY EARLY ON 30 JULY. UNSETLED TO QUIET CONDITIONS ARE EXPECTED FOR THE BALANCE OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 30 JUL-01 AUG

CLASS M 05/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 28 JUL 094

ESTIMATED 29 JUL 093

PREDICTED 30 JUL-01 AUG 095/100/105

90 DAY MEAN 28 JUL 162

V. GEOMAGNETIC A INDICES

OBSERVED AFR 27 JUL 020 3AP 28 JUL 1025

ESTIMATED AFR 28 JUL 021 AFR/AP 29 JUL 015/018

PREDICTED AFR/AP 30 JUL-01 AUG 010/010-006/010-006/010

SOLTERWARN

BT

HXUS 3 BOU 292200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 210B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 29 JUL 1982

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 29/1200Z TO 29/2100Z: SOLAR ACTIVITY CONTINUES VERY LOW. TWO NEW REGIONS HAVE BEEN NUMBERED DURING THE PERIOD - 3829 (S12E65) AND 3830 (N15E80). 3830 IS ROTATING ONTO THE DISK WITH MODERATELY ACTIVE SURGING AND A SMALL H SPOT IS VISIBLE. 3829 IS A SMALL CLASS C GROUP AND APPEARS STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW FOR THE NEXT THREE DAYS WITH INFREQUENT CLASS C FLARES FORECAST FROM CURRENT DISK REGIONS. AT THE END OF THE PERIOD THE LEADING EDGE OF OLD REGION 3804 (WHICH PRODUCED 67 CLASS M AND 5 CLASS X FLARES LAST ROTATION) WILL BE ABOUT ONE DAY FROM THE EAST LIMB. ACTIVITY LEVELS SHOULD BEGIN TO ESCALATE AT THAT TIME.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS CONTINUED ACTIVE BUT IS CALMING. SOLAR WIND VELOCITIES HAVE DROPPED IN RECENT HOURS FROM 700 KM/S TO APPROXIMATELY 500 KM/S. UNSETTLED LEVELS ARE FORECAST FOR 30 JULY WITH NEAR QUIET CONDITIONS EXPECTED FOR 31 JUL AND 01 AUG.

III. EVENT PROBABILITIES 30 JUL-01 AUG

CLASS M 05/10/15

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 29 JUL 095

PREDICTED 30 JUL-01 AUG 100/105/113

90 DAY MEAN 29 JUL 161

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 28 JUL 020/025

ESTIMATED AFR/AP 29 JUL 017/027

PREDICTED AFR/AP 30 JUL-01 AUG 010/010-006/010-006/010

SOLTERWARN

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HXUS BOU 292200

PREDM 00530 01031 01501

PREDX 00130 00131 00101

PREDP 00130 00131 00101

PCAF 00130

TENCM 10030 10531 11301

AFRED 01030 00631 00601

AFAPF 01030 01031 01001