

HFUS3 BOU 192200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 231

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 19 AUG 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100 TO 19/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW. A NEW REGION HAS APPEARED AND WAS NUMBERED AS REGION 4690 (S18W45). IT CONSISTS OF A BETA-TYPE SPOT GROUP EXHIBITING A REVERSE POLARITY MAGNETIC CONFIGURATION. SO FAR THIS REGION HAS NOT BEEN TOO ACTIVE, BUT IT DESERVES WATCHING BECAUSE OF ITS MAGNETIC CHARACTERISTICS. THE OBSERVATORIES HAVE NOTED STRONG ARCH FILAMENT SYSTEMS ASSOCIATED WITH THE REGION. THIS INDICATES THAT THE REGION IS NOT READY TO DIE, AT LEAST IN THE SHORT TERM.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN VERY LOW.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z: THE GEOMAGNETIC FIELD WAS ACTIVE THROUGH 0900Z, AND QUIET TO UNSETTLED THEREAFTER.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE AT MIDDLE LATITUDES FOR THE NEXT THREE DAYS. AT HIGH LATITUDES THE FIELD IS EXPECTED TO BE UNSETTLED TO ACTIVE ON THE 20TH, AND ACTIVE ON THE 21ST AND 22ND. THIS INCREASE IN ACTIVITY IS FORECAST BASED ON RECURRENT PATTERNS OBSERVED OVER THE PAST THREE SOLAR ROTATIONS.

III. EVENT PROBABILITIES 20 AUG-22 AUG

CLASS M 01/01/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 AUG 068

PREDICTED 20 AUG-22 AUG 067/068/068

90 DAY MEAN 19 AUG 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 AUG 014/015

ESTIMATED AFR/AP 19 AUG 015/015

PREDICTED AFR/AP 20 AUG-22 AUG 015/015-015/020-015/020

SOLTERWARN

BT