

HFUS 3 BOU 112200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 070

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 11 MAR 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 10/2100 TO 11/2100Z: SOLAR ACTIVITY HAS REMAINED LOW DURING THE PERIOD. THE LARGEST EVENT OBSERVED WAS A C1/SF FLARE FROM REGION 4110 (S02W53) AT 0149Z MAXIMUM. THIS REGION HAS DISPLAYED SLIGHT DECAY AS IT ROTATES TOWARDS WEST LIMB. REGION 4104 (S20W79) REMAINS THE MOST MAGNETICALLY COMPLEX GROUP ON THE DISK, BUT HAS ONLY MANAGED MINOR PLAGE FLUCTUATIONS AND LIMB SURGING DURING THE PERIOD. NEW REGION 4114 (S08E03) HAS EMERGED NEAR CENTRAL DISK, IS GROWING RAPIDLY, AND DISPLAYS STRONG ARCH FILAMENTS. IT IS A B-TYPE SPOT GROUP IN WHITE LIGHT. MINOR SURGING HAS ALSO BEEN OBSERVED ON THE EAST LIMB NEAR S21.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD REMAIN LOW. TWO OUT OF THE FIVE VISIBLE DISK REGIONS WILL ROTATE OVER THE WEST LIMB DURING THE NEXT 24 HOURS CAUSING THE 10.7CM SOLAR RADIO FLUX TO CONTINUE TO FALL.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 10/2100Z TO 11/2100Z: THE GEOMAGNETIC FIELD WAS QUIET TO UNSETTLED DURING THE FIRST PART OF THE PERIOD (2100Z TO 0900Z), BUT GRADUALLY INCREASED TO ACTIVE LEVELS FOR THE LAST PORTION OF THE PERIOD. MINOR STORM LEVELS ARE NOW BEGINNING TO COMMENCE AT HIGH LATITUDE SITES. THE PROBABLE CAUSE OF THIS ACTIVITY IS THE CORONAL HOLE WHICH HAS MOVED INTO A FAVORABLE LOCATION ON THE SUN.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO REMAIN AT ACTIVE LEVELS FOR MID-LATITUDE STATIONS (OCCASIONAL MINOR STORM FOR HIGH-LATITUDES) FOR THE DURATION OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 12 MAR-14 MAR

CLASS M 10/05/01

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 11 MAR 104

PREDICTED 12 MAR-14 MAR 092/088/085

90 DAY MEAN 11 MAR 145

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 10 MAR 007/009

ESTIMATED AFR/AP 11 MAR 015/015

PREDICTED AFR/AP 12 MAR-14 MAR 025/025-020/025-025/030

SOLTERWARN

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