

HFUSS BUO 192200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 050

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.
ISSUED 2200Z 19 FEB 1985

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 18/2100 TO 19/2100Z: SOLAR ACTIVITY WAS VERY LOW. NEWLY ASSIGNED REGION 4628 (S09W11) EMERGED AS A BETA-TYPE. IT EVOLVED INTO A CSD CLASSIFICATION IN WHITE LIGHT, BUT BEGAN DECAYING LATE IN THE PERIOD. REGION 4629 (N02E78) WAS ALSO ASSIGNED TODAY. IT ROTATED ONTO THE DISK AS A CAO CLASSIFICATION, BETA-TYPE. THIS ERUPTIVE REGION PRODUCED FIVE C-LEVEL X-RAY EVENTS WITH CORRELATED FLARES. THE LARGEST WAS A C3/ON AT 19/1607Z. NO RADIO EVENTS ACCOMPANIED THE FLARE. BEFORE THE SPOTS WERE VISIBLE PROMINENCES, SURGES, AND LOOPS WERE OBSERVED AT ITS LOCATION.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE VERY LOW. REGION 4629 MAY HAVE REALIZED ITS GROWTH POTENTIAL AND FURTHER COMPLICATIONS IN ITS SPOT CHARACTERISTICS WILL PROBABLY BE DUE TO BETTER VISIBILITY AS IT ROTATES FULLY ONTO THE DISK. THE X-RAY LEVEL APPARENTLY PEAKED VERY EARLY IN THE PERIOD AND EXTRAPOLATION INDICATES A DOWNWARD TREND. NO RETURNING REGIONS PROFER ANY SIGNIFICANT ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 18/2100Z TO 19/2100Z: GEOMAGNETIC ACTIVITY WAS UNSETTLED. AN INCORRECT A-INDEX FOR FREDERICKSBURG (AF) FOR 17 FEB WAS ENCODED AND TRANSMITTED YESTERDAY. THE CORRECT AF FOR 17 FEB WAS 09.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GEOMAGNETIC ACTIVITY IS EXPECTED TO BE AT ACTIVE TO MINOR STORM LEVELS. MAJOR STORM LEVELS ARE POSSIBLE AT HIGH LATITUDES DURING THE FIRST DAY (20 FEB) AND BRIEF MINOR STORM LEVELS ARE POSSIBLE AT MID-LATITUDES DURING LOCAL MIDNIGHT PERIODS. THIS DISTURBANCE IS BASED ON THE 14 DEG LONG DISSAPPEARING FILAMENT FROM S22W35 AT 17/2103Z. THE SECOND AND THIRD DAYS (21-22 FEB) ARE EXPECTED TO RESTABILIZE TO AN UNSETTLED TO ACTIVE LEVEL.

III. EVENT PROBABILITIES 20 FEB-22 FEB

CLASS M 01/01/01
CLASS X 01/01/01
PROTON 01/01/01
PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 19 FEB 078
PREDICTED 20 FEB-22 FEB 084/088/092
90 DAY MEAN 19 FEB 076

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 18 FEB 004/007
ESTIMATED AFR/AP 19 FEB 008/010
PREDICTED AFR/AP 20 FEB-22 FEB 017/025-015/020-012/015
SOLTERWARN

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