

AFUS3 BOU 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 C50  
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 C40 CLASSIFICATION, BETA-TYPE. THIS  
ERUPTIVE REGION PRODUCED FIVE C-LEVEL X-RAY EVENTS WITH  
CORRELATED FLARES. THE LARGEST WAS A C3/0N 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 PROFFER 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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