

HFUS 3 BOU 212200  
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 052  
JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.  
ISSUED 2200Z 21 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 20/2100 TO 21/2100Z: SOLAR ACTIVITY REMAINS VERY LOW. A SLOW RISE IN X-RAYS BEGAN AT 1850Z AND REACHED A C1 LEVEL AT 1945Z AND THEN BEGAN A SLOW DECAY. NO EMISSION WAS OBSERVED ON THE DISK OR LIMBS. REGION 4094 (N14E51) GREW RAPIDLY TO A D-TYPE GROUP BUT CURRENTLY APPEARS TO HAVE MATURED ALREADY. REGION 4095 (S12E19) EMERGED TODAY AS AN A-TYPE GROUP AND CURRENTLY DOES NOT SHOW A TREND TOWARD SIGNIFICANT GROWTH.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW. TODAYS LONG-LIVED C1 X-RAY EVENT (THE FIRST SINCE 11 FEB) MAY BE ASSOCIATED WITH THE PENDING RETURN OF OLD REGION 4075 ON 22 FEB OR 4077 ON 23 FEB. THE TREND SHOULD BE TOWARD AN INCREASE IN THE LEVEL OF SOLAR ACTIVITY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 20/2100Z TO 21/2100Z: THE GEOMAGNETIC FIELD HAS BEEN ACTIVE AT MID LATITUDES AND AT STORM LEVEL AT HIGH LATITUDES. THIS ACTIVITY IS CORONAL HOLE ASSOCIATED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD ACTIVITY IS EXPECTED TO DECREASE TOWARD UNSETTLED CONDITIONS ON 22 FEBRUARY AS EARTH MOVES OUT OF THE CORONAL HOLE HIGH SPEED STREAM EFFECT.

III. EVENT PROBABILITIES 22 FEB-24 FEB

CLASS M 03/05/05

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 21 FEB 104

PREDICTED 22 FEB-24 FEB 108/114/120

90 DAY MEAN 21 FEB 159

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 20 FEB 028/040

ESTIMATED AFR/AP 21 FEB 024/045

PREDICTED AFR/AP 22 FEB-24 FEB 015/015-010/010-010/010

SOLTERWARN

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