

HFUS 3 BOU 232200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 054

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100 TO 23/2100Z: SOLAR ACTIVITY HAS BEEN VERY LOW SINCE THE M4 AT 22/1920Z. FAINT LOOPS WERE DISCERNABLE AT SE14 UNTIL AFTER 1000Z AND MATERIAL STILL RESIDES IN THE CORONA OVER THE SE LIMB. EXTENSIVE PLAGE STRUCTURE HAS ROTATED ON TO THE DISK FROM OLD REGIONS 4075 AND 4077; HOWEVER, ONLY A SIMPLE SUNSPOT GROUP - REGION 4098 (S16E76) - IS CURRENTLY VISIBLE. THE KITT PEAK MAGNETOGRAM "HINTS" AT MIXED POLARITIES, BUT THE REGION IS TOO CLOSE TO THE LIMB FOR ACCURATE DEFINITION. REGION 4097 (N17E69) ALSO ROTATED ON TO THE DISK TODAY. A FILAMENT NORTH OF THIS REGION IS ACTIVE WITH ENHANCED PLAGE AT ITS BASE. REGION 4094 (N15E25) HAS BEEN ENHANCED TODAY AND APPEARS TO BE REINTENSIFYING.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE LOW WITH A CHANCE FOR AN ISOLATED ENERGETIC FLARE FROM REGION 4098.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH AN OCCASIONAL PERIOD ACTIVE DUE TO SUBSTORMS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED UNTIL THE LATTER PART OF 25 FEBRUARY. SINCE THE CORONAL HOLE IS NO CLOSER THAN 17 DEGREES TO THE ECLIPTIC PLANE, THE EXPECTED RESPONSE WILL VARY BETWEEN PERIODS OF UNSETTLED AND ACTIVE FIELD CONDITIONS.

III. EVENT PROBABILITIES 24 FEB-26 FEB

CLASS M 45/25/25

CLASS X 01/01/01

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 23 FEB 114

PREDICTED 24 FEB-26 FEB 120/125/130

90 DAY MEAN 23 FEB 158

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 FEB 016/024

ESTIMATED AFR/AP 23 FEB 011/015

PREDICTED AFR/AP 24 FEB-26 FEB 010/010-013/010-015/015

SOLTERWARN

BT