

HFUS 3 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO  
SDF NUMBER 032

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 01 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 31/2100 TO 01/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE DURING THE PAST 24 HOURS. THE LARGEST EVENT WAS A SLOW RISE M1 EVENT WHICH BEGAN AT 1914 AND WAS IN PROGRESS AT 2100Z. THIS RADIO-RICH EVENT (1700 FLUX UNITS AT 10 CM AT 1956Z) ORIGINATED WITH A SINGLE RIBBON FILAMENT ACTIVATION IN REGION 4398 (N14W68). THIS REGION HAS REMAINED RELATIVELY STABLE IN WHITE LIGHT AND RETAINS ITS BETA-GAMMA-DELTA MAGNETIC COMPLEXITY. REGION 4399 (N12W47) HAS ALSO REMAINED STABLE IN WHITE LIGHT WITH BETA-GAMMA-DELTA MAGNETIC COMPLEXITY, BUT HAS NOT PRODUCED ANY OPTICAL ACTIVITY IN RECENT HOURS. REGION 4403 (N13W24) DOUBLED IN SIZE AND HAS BECOME MAGNETICALLY COMPLEX (BETA-GAMMA). NEW REGION 4409 (S13E13) IS A SIMPLE A-TYPE SPOT.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE UNTIL REGIONS 4398 AND 4399 ROTATE BEYOND THE WEST LIMB. REGION 4399 WILL BE APPROACHING LIMB PASSAGE ON THE LAST DAY OF THE FORECAST PERIOD. IF DEVELOPMENT CONTINUES IN REGION 4403, ISOLATED MODERATE ACTIVITY COULD ORIGINATE THERE.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 31/2100Z TO 01/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE FOR THE PAST 24 HOURS. GEOMAGNETIC CONDITIONS ARE SLOWLY DECLINING FROM THE NEAR-STORM LEVELS OF THE LAST FEW DAYS.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE UNSETTLED TO QUIET FOR THE NEXT TWO DAYS, INCREASING TOWARD OCCASIONAL ACTIVE PERIODS ON THE LAST DAY OF THE FORECAST PERIOD. GEOMAGNETIC ACTIVITY IS ANTICIPATED IN RESPONSE TO A NEGATIVE POLARITY CORONAL HOLE NEAR NORTH 15 WHICH CROSSED THE SOLAR CENTRAL MERIDIAN ON 31 JANUARY.

III. EVENT PROBABILITIES 02 FEB-04 FEB

CLASS M 70/50/50

CLASS X 05/05/05

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 FEB 159

PREDICTED 02 FEB-04 FEB 140/120/100

90 DAY MEAN 01 FEB 102

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 31 JAN 021/022

ESTIMATED AFR/AP 01 FEB 016/020

PREDICTED AFR/AP 02 FEB-04 FEB 015/020-010/015-015/015

SOLTERWARN

BT

*correction made*