

HFUS 1 BOU 011300

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 032A

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 1300Z 01 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 31/1200Z TO 01/1200Z: SOLAR ACTIVITY REMAINS LOW. THE LARGEST EVENT WAS A LONG-LIVED C5/1N IN REGION 4077 (S18E17) AT 0646Z. MINOR CENTIMETRIC RADIO BURSTS ACCOMPANIED THIS FLARE. CONTINUED GROWTH HAS DEVELOPED A DELTA CONFIGURATION IN REGION 4077. PERSISTENCE OF ARCH FILAMENTS INDICATE THIS GROWTH WILL CONTINUE. REGIONS 4072 (S08W57) AND 4073 (N05W53) ARE EXHIBITING A SLOW DECAY.

IB. SOLAR ACTIVITY FORECAST: THE GROWTH IN REGION 4077 IS EXPECTED TO INCREASE THE MAGNETIC STRESS IN THIS REGION RESULTING IN A HIGHER CHANCE FOR SOLAR ACTIVITY TO TRANSIT TO THE CLASS M LEVEL FOR X-RAY BURSTS.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. THESE CONDITIONS ARE EXPECTED TO CONTINUE THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 02 FEB-04 FEB

CLASS M 40/50/50

CLASS X 02/02/02

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 31 JAN 162

ESTIMATED 01 FEB 165

PREDICTED 02 FEB-04 FEB 170/170/168

90 DAY MEAN 31 JAN 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR 30 JAN 017 AP 31 JAN 013

ESTIMATED AFR 31 JAN 012 AFR/AP 01 FEB 011/010

PREDICTED AFR/AP 02 FEB-04 FEB 010/010-012/010-012/010

SOLTERWARN

BT

HFUS 3 BOU 012200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO

SDF NUMBER 032B

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 01 FEB 1983

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 01/1200Z TO 01/2100Z: SOLAR ACTIVITY HAS REMAINED LOW. THE LARGEST EVENT THIS PERIOD WAS A LONG LIVED C5/SB FROM REGION 4077 (S18E10) THAT WAS ACCOMPANIED BY MINOR CENTIMETRIC RADIO BURSTS. THE XRAY MAXIMUM TIME FOR THIS FLARE WAS 1920Z. REGION 4077 REMAINS THE DOMINANT REGION AND CONTINUES TO GROW IN WHITE LIGHT AREA. MAGNETICALLY IT REMAINS A BETA-DELTA GROUP WITH MODERATE MAGNETIC GRADIENTS. OTHER REGIONS HAVE REMAINED STABLE OR HAD VERY SLIGHT DECAY THIS PERIOD. NO NEW GROUPS WERE NUMBERED THIS PERIOD.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN LOW THROUGHOUT THE FORECAST PERIOD. CONTINUED GROWTH OF REGION 4077 IS EXPECTED TO INCREASE THE CHANCE OF ISOLATED M CATEGORY XRAY FLARES TOWARD THE END OF THE FORECAST PERIOD.

II. GEOPHYSICAL SUMMARY AND FORECAST: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED. IT IS EXPECTED TO REMAIN UNSETTLED. A 14 DEGREE SECTION OF A FILAMENT LOCATED NEAR REGION 4077 DISAPPEARED AT 1830Z, BUT APPEARS TO BE REFORMING. FURTHER ANALYSIS IS BEING HAMPERED BY CLOUDS. THIS EVENT MAY INCREASE GEOMAGNETIC ACTIVITY ON THE LAST DAY OF THE FORECAST PERIOD.

III. EVENT PROBABILITIES 02 FEB-04 FEB

CLASS M 40/50/50

CLASS X 02/02/02

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 01 FEB 168

PREDICTED 02 FEB-04 FEB 170/170/168

90 DAY MEAN 01 FEB 170

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 31 JAN 012/013

ESTIMATED AFR/AP 01 FEB 014/010

PREDICTED AFR/AP 02 FEB-04 FEB 010/010-012/010-012/010

SOLTERWARN

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