HFUS 3 BOU 102200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO SDF NUMBER 041

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY. ISSUED 2200Z 10 FEB 1984

ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 09/2100 TO 10/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE THIS PERIOD. TWO M CLASS X-RAY FLARES OCCURRED, THE LARGEST WAS A M4 THAT REACHED MAXIMUM AT 0322 UT. THIS FLARE WAS ACCOMPANIED BY A TYPE IV RADIO SWEEP AND A 18 OPTICAL FLARE. REGION 4408 (513W60) WAS THE POINT OF ORIGIN OF THE FLARE. THIS REGION HAS GROWN SIGNIFICANTLY AND MAINTAINS A BETA GAMMA MAGNETIC CONFIGURATION. REGION 4413 (S13E17) REMAINS AN IMPRESSIVE GROUP AND HAS CONTRIBUTED NUMEROUS C LEVEL X-RAY AND OPTICAL SUBFLARES. THIS GROUP HAS A D TYPE SPOT CLASSIFICATION AND A BETA GAMMA DELTA MAGNETIC CONFIGURATION. REGION 4410 (S11W19) IS ALSO A RESPECTIBLE SPOT GROUP WITH AN E TYPE SPOT CLASSIFICATION. THE REMAINDER OF THE DISK APPEARS STABLE AT THIS TIME. NO NEW REGIONS WERE NUMBERED THIS PERIOD. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY SHOULD BE LOW TO MODERATE THROUGHOUT THE FORECAST PERIOD. SPECIAL ATTENTION SHOULD BE PAID TO REGIONS 4408, 4410 AND 4413, SINCE ANY MODERATE LEVEL ACTIVITY WOULD MOST LIKELY OCCUR IN THESE SPOT GROUPS.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 09/2100Z TO 10/2100Z:
THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED TO ACTIVE ATMIDLATITUDES AND ACTIVE TO STORM LEVELS AT HIGH LATITUDES THIS
PERIOD.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE ACTIVE AT ALL LATITUDES THROUGHOUT THE FORECAST PERIOD. THIS INCREASE IN ACTIVITY IS DUE TO THE RECENT FLARE ACTIVITY AND FILAMENT DISAPPEARANCES ON O8 FEB. THE FILAMENTS WERE LOCATED AT S13E58, NØ5EØ6 AND SO9E13 AT THE TIME THEY DISAPPEARED.

III. EVENT PROBABILITIES 11 FEB-13 FEB

CLASS M 40/40/40

CLASS X Ø5/Ø5/Ø5

PROTON 01/01/01

PCAF GREEN

IV. OTTAWA 10.7 CM FLUX

OBSERVED 10 FEB 147

PREDICTED 11 FEB-13 FEB 148/151/150

90 DAY MEAN 10 FEB 104

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 09 FEB 007/010

ESTIMATED AFR/AP 10 FEB 011/015

PREDICTED AFR/AP 11 FEB-13 FEB 015/020-016/020-016/015 SOLTERWARN

BT