

HFUS 3 BOU 252200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 056

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 25 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 24/2100 TO 25/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 4423 (S12E37) PRODUCED AN M2/2B FLARE AT 0308Z. STRONG RADIO BURSTS OCCURRED FROM 1415 TO 8800 MHZ WITH 510 FU RECORDED AT 2695 MHZ. REGION 4421 (N16W28) PRODUCED SEVERAL CLASS C FLARES; THE LARGEST WAS A C4/1N FLARE AT 1704Z. REGION 4422 (N11W01) HAS BEEN QUIET. REGIONS 4421 AND 4422 HAVE BOTH SHOWN A SLIGHT DECLINE. THE SUNSPOT STRUCTURE OF REGION 4423 HAS GROWN; HOWEVER, THE INTENSITY OF THE PLAGE HAS DECLINED. CURRENTLY, REGION 4421 HAS THE STEEPEST GRADIENT. THIS MODERATE GRADIENT EXISTS ACROSS THE DELTA IN THE MAIN PENUMBRA.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. HOWEVER, THE FREQUENCY OF CLASS M FLARES IS EXPECTED TO DECREASE AS REGIONS 4421, 4422, AND 4423 CONTINUE TO DECAY AND/OR SIMPLIFY.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 24/2100Z TO 25/2100Z: THE GEOMAGNETIC FIELD HAS BEEN QUIET TO SLIGHTLY UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BECOME ACTIVE ON 26 FEBRUARY AND REMAIN ACTIVE THROUGH THE FORECAST PERIOD. A SHORT-LIVED (FLARE RELATED) MAGSTORM IS POSSIBLE LATE ON 26 FEBRUARY AND EARLY ON 27 FEBRUARY.

III. EVENT PROBABILITIES 26 FEB-28 FEB

CLASS M 70/60/50

CLASS X 05/05/01

PROTON 10/10/05

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 25 FEB 174

PREDICTED 26 FEB-28 FEB 173/171/168

90-DAY MEAN 25 FEB 114

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 24 FEB 008/012

ESTIMATED AFR/AP 25 FEB 007/020

PREDICTED AFR/AP 26 FEB-28 FEB 028/025-025/025-015/020

SOLTERWARN

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