

HFUS 3 BOU 242200

FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 055

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 24 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 23/2100 TO 24/2100Z: SOLAR ACTIVITY HAS BEEN MODERATE. REGION 4421 (N16W15) PRODUCED A LONG-LIVED M1/2B FLARE AT 0202Z (X-RAY MAX). THE FLARE STARTED AS AN IMPULSIVE SB FLARE AT 0106Z, SLOWLY SPREAD TO MAXIMUM WITH SEVERAL CENTERS ALONG AN IRREGULAR LINE FROM NEAR N14W00 TO N06W14. MINOR TO MODERATE RADIO BURSTS OCCURRED SEVERAL TIMES THROUGH THE LIFE OF THIS FLARE. A TYPE II AND LONG-LIVED TYPE IV DEKAMETRIC BURST ACCCOMPANIED THIS FLARE. REGION 4423 (S12E51) PRODUCED AN M2/1B FLARE AT 0357Z (X-RAY MAX) AND WAS ACCCOMPANIED BY MINOR RADIO BURSTS. REGION 4422 (N12E12) PRODUCED AN M1/SB FLARE AT 1751Z (X-RAY MAX). RADIO BURSTS WERE MINOR EXCEPT FOR MAJOR BURSTS AT 245 AND 410 MHZ. REGIONS 4421 AND 4422 CONTINUE A SLIGHT STRUCTURAL REALIGNMENT WITH INDICATIONS OF SLIGHT DECAY ALSO OCCURING. REGION 4423 REMAINS WITH A COMPACT, MODERATELY BRIGHT PLAGE. REGIONS 4420 (S19W56) AND 4424 (N22E54) ARE STABLE.

IB. SOLAR ACTIVITY FORECAST: SOLAR ACTIVITY IS EXPECTED TO REMAIN MODERATE WITH OCCASIONAL CLASS M ACTIVITY POSSIBLE FROM REGIONS 4421, 4422, AND 4423.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 23/2100Z TO 24/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED.

IIB. GEOPHYSICAL ACTIVITY FORECAST: GENERALLY ACTIVE FIELD CONDITIONS ARE EXPECTED THROUGH THE FORECAST PERIOD. A SHORT-LIVED MAGSTORM IS POSSIBLE LATE ON 26 FEBRUARY AND EARLY ON 27 FEBRUARY AS A RESULT OF TODAY'S 2B FLARE IN REGION 4421.

III. EVENT PROBABILITIES 25 FEB-27 FEB

CLASS M 80/70/70

CLASS X 05/05/05

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7 CM FLUX

OBSERVED 24 FEB 172

PREDICTED 25 FEB-27 FEB 173/173/170

90 DAY MEAN 24 FEB 113

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 23 FEB 012/016

ESTIMATED AFR/AP 24 FEB 011/015

PREDICTED AFR/AP 25 FEB-27 FEB 015/020-028/025-025/025

SOLTERWARN

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