

HFUS 3 BOU 232200
FROM SPACE ENVIRONMENT SERVICES CENTER, BOULDER, COLORADO
SDF NUMBER 054

JOINT USAF/NOAA REPORT OF SOLAR AND GEOPHYSICAL ACTIVITY.

ISSUED 2200Z 23 FEB 1984

IA. ANALYSIS OF SOLAR ACTIVE REGIONS AND ACTIVITY FROM 22/2100 TO 23/2100Z: SOLAR ACTIVITY HAS BEEN LOW. THE LARGEST OF NUMEROUS CLASS C FLARES WAS A C6/SB IN REGION 4423 (S12E64) AT 1311Z. MINOR RADIO BURSTS ACCCOMPANIED THIS FLARE. STRONG GROWTH HAS OCCURRED DURING THE PAST 24 HOURS IN REGIONS 4423 AND 4420 (S19W42). REGION 4423 HAS PRODUCED MOST OF THE FLARES; IT HAS A COMPACT, MODERATELY BRIGHT PLAGE. STRUCTURAL CHANGES ARE OCCURRING IN REGION 4421 (N15W04). ADDITIONAL SPOTS HAVE EMERGED AT THE WESTERN END OF THE GROUP AND NORTH OF THE MAIN PENUMBRA. SLIGHT DECAY IS OCCURRING IN THE SOUTH-CENTRAL PORTION OF THE GROUP. LITTLE CHANGE HAS OCCURRED IN EITHER THE SUNSPOT OR PLAGE STRUCTURE OF REGION 4422 (N11E23). REGION 4424 (N22E68) WAS ADDED TODAY.

IB. SOLAR ACTIVITY FORECAST: THOUGH THE PROBABILITIES HAVE A DOWNWARD TREND, SOLAR ACTIVITY IS EXPECTED TO BE MODERATE. OCCASIONAL CLASS M FLARES ARE POSSIBLE FROM REGIONS 4421, 4422, AND 4423.

IIA. GEOPHYSICAL ACTIVITY SUMMARY FROM 22/2100Z TO 23/2100Z: THE GEOMAGNETIC FIELD HAS BEEN UNSETTLED WITH PERIODS AT ACTIVE LEVEL. THE LOW ENERGY SATELLITE PROTON EVENT WHICH BEGAN 19/1310Z REACHED A MAXIMUM OF 55 P/CM²/SEC/STER (GT 10 MEV) AT 21/1415Z AND ENDED AT 23/1310Z.

IIB. GEOPHYSICAL ACTIVITY FORECAST: THE GEOMAGNETIC FIELD IS EXPECTED TO BE GENERALLY AT ACTIVE LEVELS WITH SHORT PERIODS OF STORM LEVEL AT HIGH LATITUDES THROUGH THE FORECAST PERIOD.

III. EVENT PROBABILITIES 24 FEB-26 FEB

CLASS M 80/70/70

CLASS X 10/05/05

PROTON 10/10/10

PCAF YELLOW

IV. OTTAWA 10.7-CM FLUX

OBSERVED 23 FEB 170

PREDICTED 24 FEB-26 FEB 175/177/177

90 DAY MEAN 23 FEB 112

V. GEOMAGNETIC A INDICES

OBSERVED AFR/AP 22 FEB 007/011

ESTIMATED AFR/AP 23 FEB 011/015

PREDICTED AFR/AP 24 FEB-26 FEB 015/020-015/020-018/025

SOLTERWARN

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